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EXPERIMENTAL HEAT TRANSFER DISTRIBUTIONS OVER THE 0.090-SCALE APOLLO COMMAND MODULE MODEL (H-11) WITH PROTUBERANCES AT MACH NUMBER 10 (U)

November 1964

Exhibit 1, Paragraph 5.5

(NASA-CR-117540) EXPERIMENTAL HEAT TRANSFER DISTRIBUTIONS OVER THE 0.090 SCALE APOLLO COMMAND MODULE /H-11/ WITH PROTUBERANCES AT MACH NUMBER 10 (North American Aviation, Inc.) 1069 p

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TECHNICAL REPORT INDEX/ABSTRACT

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ABSTRACT

Wind tunnel tests of the 0.90-scale Apollo command module, model H-11, were conducted to obtain heat transfer distributions over the Apollo command module with protuberances at a Mach number of 10. The investigations were made for a free-stream Reynolds number range of 0.33 to 2.20 million per foot, and over an angle-of-attack range of 143 to 180 degrees.

The model construction, instrumentation, and installation are discussed. A description of the various configurations tested, test procedures, and data reduction also are presented. The results of the tests are presented as plotted and tabulated data. Some qualifications and general observations of the data also are made.

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FOREWORD

The test data in this report were derived from tests conducted from 18 to 25 June 1964 in accordance with the provisions of NASA Apollo Contract NAS9-150, paragraph 5.5. This report was prepared by D. X. Emerson of the Aerodynamic Analysis Group, Space and Information Systems Division of North American Aviation, Inc.

ABSTRACT

Wind tunnel tests of the 0.090-scale Apollo command module, model H-11, were conducted to obtain heat transfer distributions over the Apollo command module with protuberances at a Mach number of 10. The investigations were made for a free-stream Reynolds number range of 0.33 to 2.20 million per foot, and over an angle-of-attack range of 143 to 180 degrees.

The model construction, instrumentation, and installation are discussed. A description of the various configurations tested, test procedures, and data reduction also are presented. The results of the tests are presented as plotted and tabulated data. Some qualifications and general observations of the data also are made.

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INTRODUCTION

Several wind tunnel tests have been conducted to obtain heat transfer distributions over various clean entry configurations of the Apollo spacecraft. With the addition of holes and protuberances to these configurations, additional testing was required.

Heat transfer wind tunnel tests of the 0.090-scale Apollo command module model H-11 were conducted from 18 to 25 June 1964 in the AEDC-VKF Hypersonic Tunnel C. The primary objectives of the test were to determine:

1. Heating rates in and around the holes and protuberances on the command module

2. The effects of the holes and protuberances on heat transfer distributions over the command module

3. The effects of yaw on heating rates in the vicinity of the stagnation point on the command module

These objectives were obtained by testing eight variations of the Apollo command module configuration shown in Figure 1 over the simulated Apollo flight region shown in Figure 2.

Heat transfer data were obtained at Mach number 10 over a Reynolds number per foot range of from 0.33 to 2.2 million. The model was tested at angles of attack from 143 to 180 degrees, with +5 and -5 degree yaw angles at 147 and 154 degrees. The results of the tests are presented as plotted data in Appendix A and tabulated data in Appendix B. No analysis of these results is made in the report.

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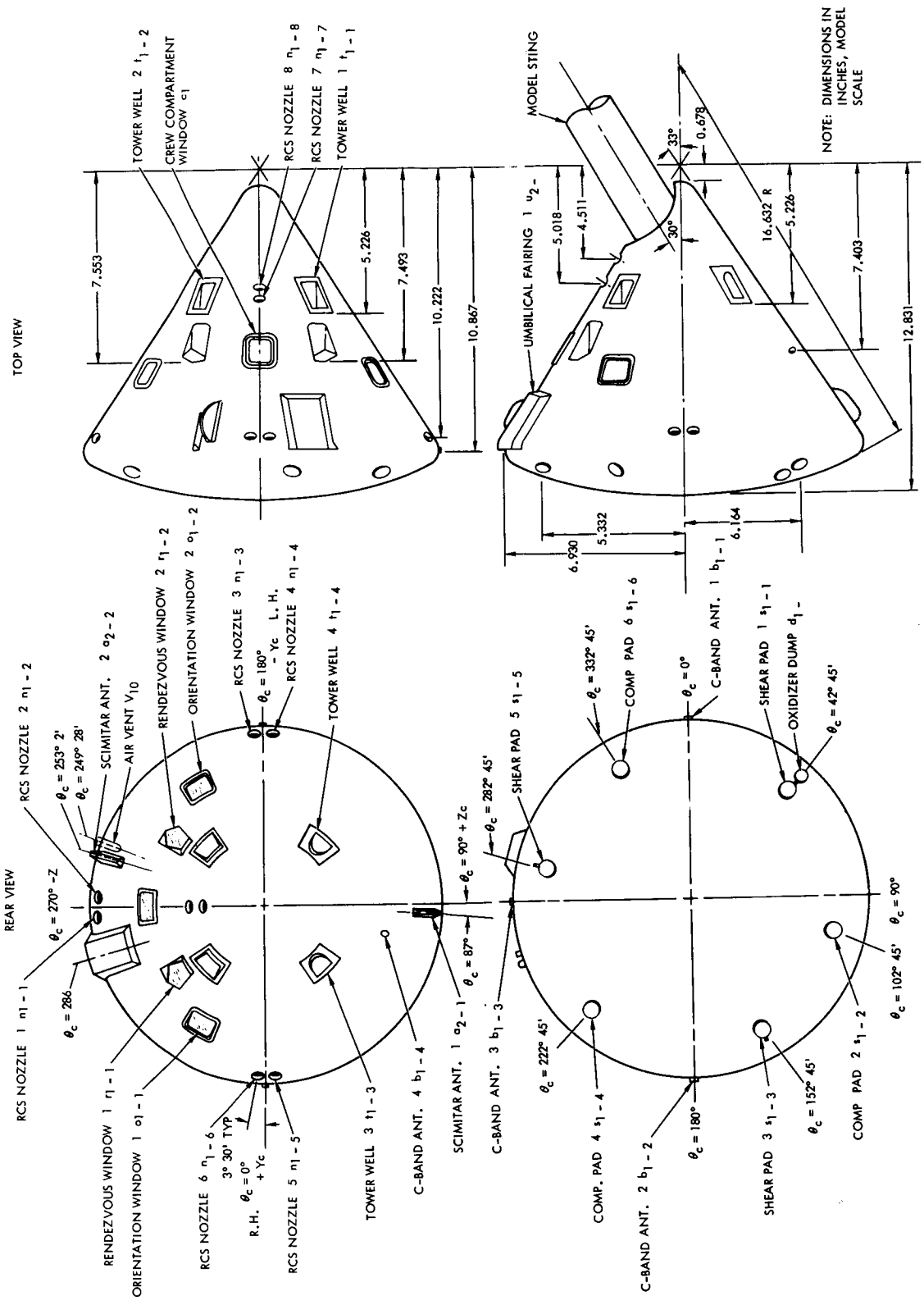

Figure 1. H-11 Heat Transfer Model

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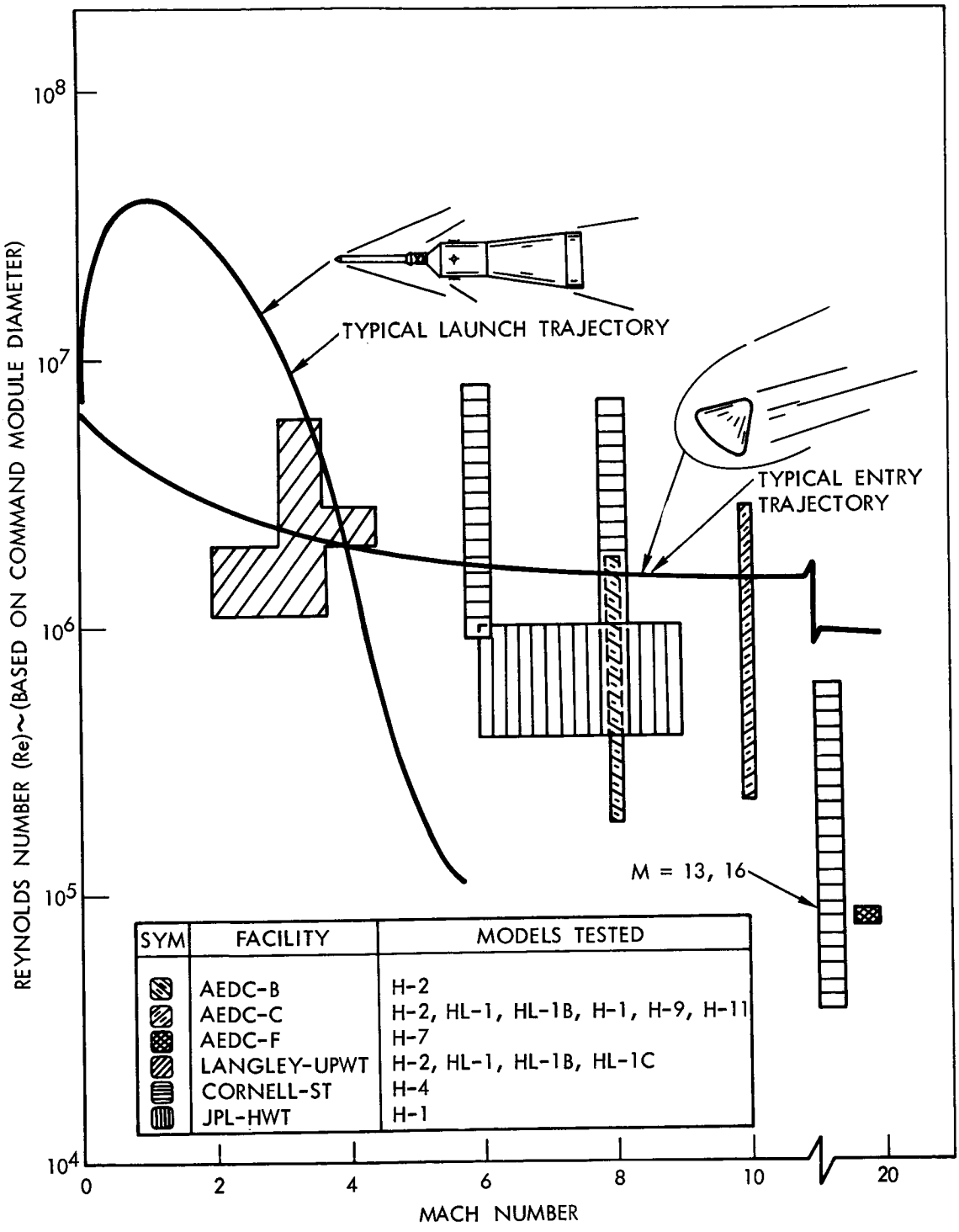

Figure 2. Heat Transfer Wind Tunnel Test Flight Simulation

MODEL DESCRIPTION

The H-11, a 0.090-scale model of the Apollo in the entry configuration, contained all of the holes and protuberances included on Airframe 011, as shown in Figure 1. The location and designation of each of these components is provided in Table 1.

Eight variations of the basic entry configuration were tested to achieve the objectives stated in the introduction to this report. These configurations are as follows:

Configuration			Description of Apollo CM
NAA	AEDC	Figure Number	
C_2	10	3	Without holes or protuberances
C_{55}	11	4	With holes and protuberances as per AF-011
C_{56}	14	5	Configuration C_{55} with umbilical fairing u_3 and intercompartment gap simulators, g_1 and g_2
C_{57}	17	6	Configuration C_{55} with differential ablative protuberances
C_{58}	12	7	Configuration C_{55} with umbilical ramp ρ_1
C_{59}	13	8	Configuration C_{55} with umbilical ramp ρ_2
C_{60}	15	9	Configuration C_{56} with umbilical ramp ρ_1
C_{61}	16	10	Apollo command module configuration C_{56} with umbilical ramp ρ_2

CONSTRUCTION

The body shells of the model were thin-skinned (0.040-inch skin thickness). The sensitivity of the heat transfer-gauges was increased by making

Table 1. Configuration Components

Component	Location	Position	Designation
Crew compartment window	Afterbody	Leeward -Z ℄	c_1
Command module air vent	Afterbody	Leeward θ_c = 249°28'	V_{10}
Oxidizer dump	Entry face	Windward θ_c = 42°45'	d_1
Rendezvous windows			
1	Afterbody	Leeward right	1-1
2	Afterbody	Leeward left	1-2
Orientation windows			
1	Afterbody	Leeward right	o_{1-1}
2	Afterbody	Leeward left	o_{1-2}
Scimitar antennae			
1	Afterbody	Windward θ_c = 87°	a_{2-1}
2	Afterbody	Leeward θ_c = 253°2'	a_{2-2}
Umbilical fairing			
1	Afterbody	Leeward θ_c = 286°	u_2
2	Afterbody	(To replace fairing 1)	u_3
Umbilical fairing ramps			
1	Entry face	Leeward θ_c = 286°	1
2	Entry face	(To replace ramp 1)	2
Intercompartment gap simulators			
1	Afterbody	Windward θ_c = 90°	g_1
2	Afterbody	Windward θ_c = 90°	g_1
C-Band antennae			
1	Toris	$+Y_c$ ℄	b_{1-1}
2	Toris	$-Z_c$ ℄	b_{1-2}
3	Toris	$-Y_c$ ℄	b_{1-3}
4	Afterbody	Windward θ_c = 76°	b_{1-4}
Tower Wells			
1	Afterbody	Leeward right	t_{1-1}
2	Afterbody	Leeward left	t_{1-2}
3	Afterbody	Windward right	t_{1-3}
4	Afterbody	Windward left	t_{1-4}
Shear and compression pads			
1	Entry face	Windward θ_c = 42°45'	s_{1-1}
2	Entry face	Windward θ_c = 102°45'	s_{1-2}
3	Entry face	Windward θ_c = 152°45'	s_{1-3}
4	Entry face	Leeward θ_c = 222°45'	s_{1-4}
5	Entry face	Leeward θ_c = 282°45'	s_{1-5}
6	Entry face	Leeward θ_c = 332°45'	s_{1-6}
Command module RCS nozzles			
1	Afterbody	Leeward θ_c = 273°30'	n_{1-1}
2	Afterbody	Leeward θ_c = 266°30'	n_{1-2}
3	Afterbody	Leeward θ_c = 183°30'	n_{1-3}
4	Afterbody	Windward θ_c = 176°30'	n_{1-4}
5	Afterbody	Windward θ_c = 3°30'	n_{1-5}
6	Afterbody	Leeward θ_c = 356°30'	n_{1-6}
7	Afterbody	Leeward $-Z_c$ ℄	n_{1-7}
8	Afterbody	Leeward $-Z_c$ ℄	n_{1-8}

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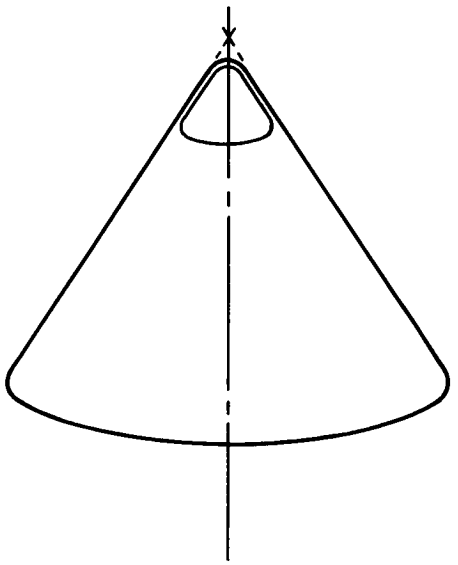

APOLLO COMMAND MODULE CONFIGURATION
WITH NO HOLE OR PROTUBERANCES

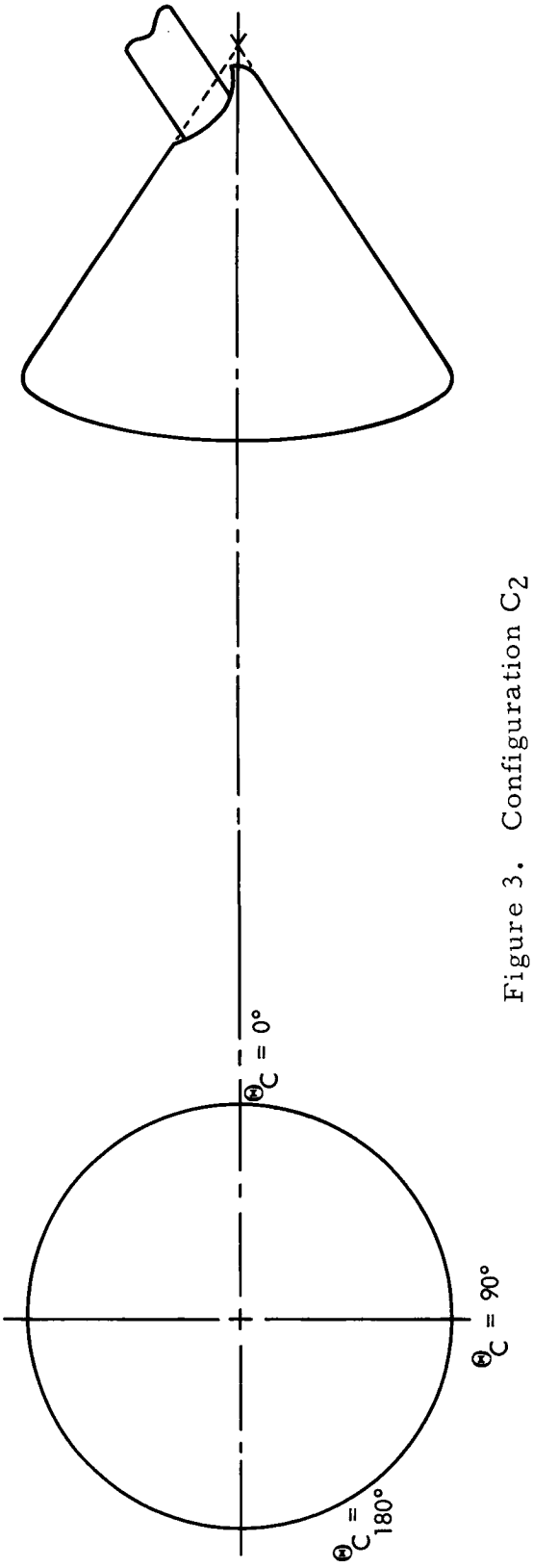

Figure 3. Configuration C_2

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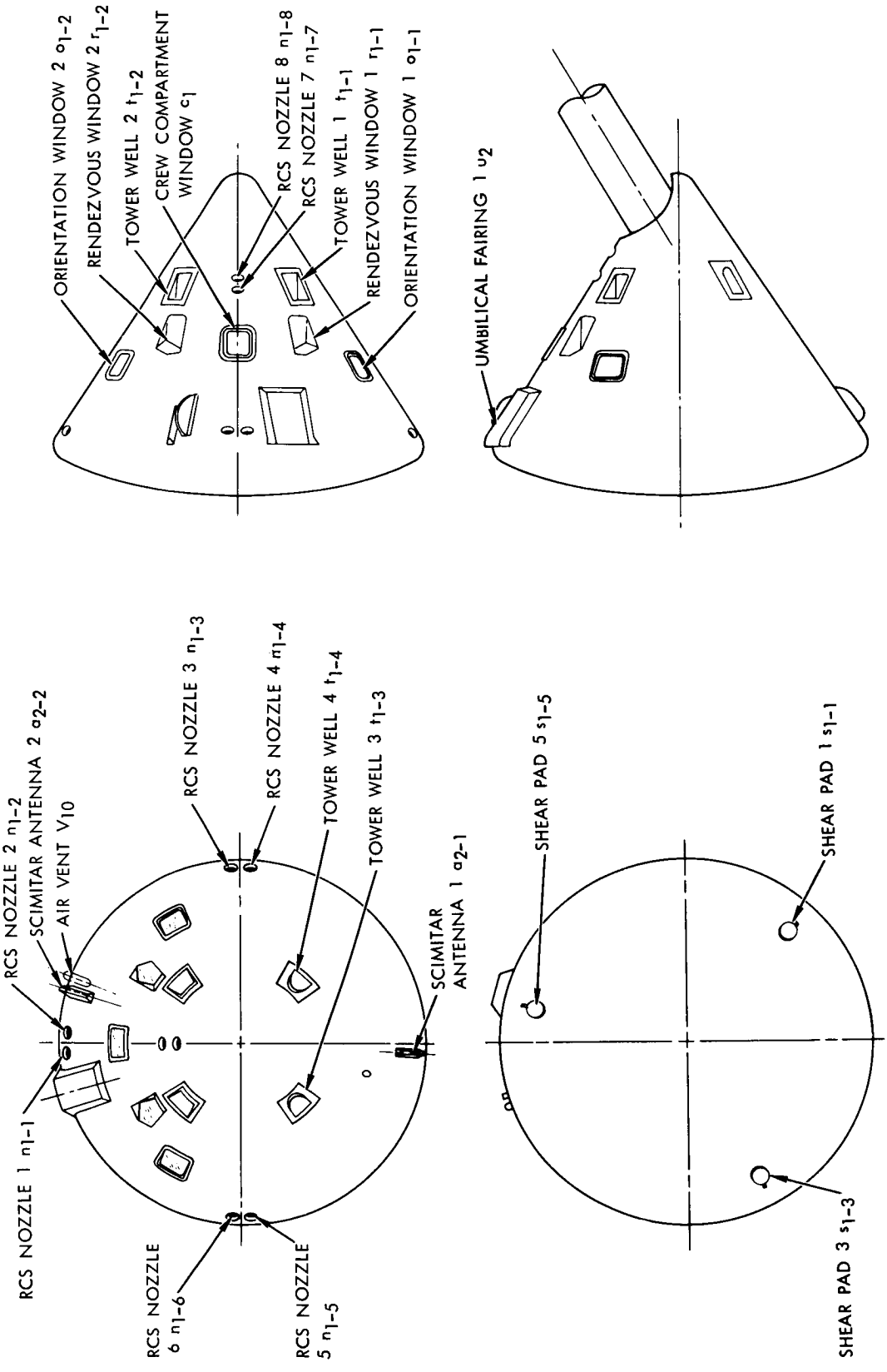

Figure 4. Configuration C_{55}

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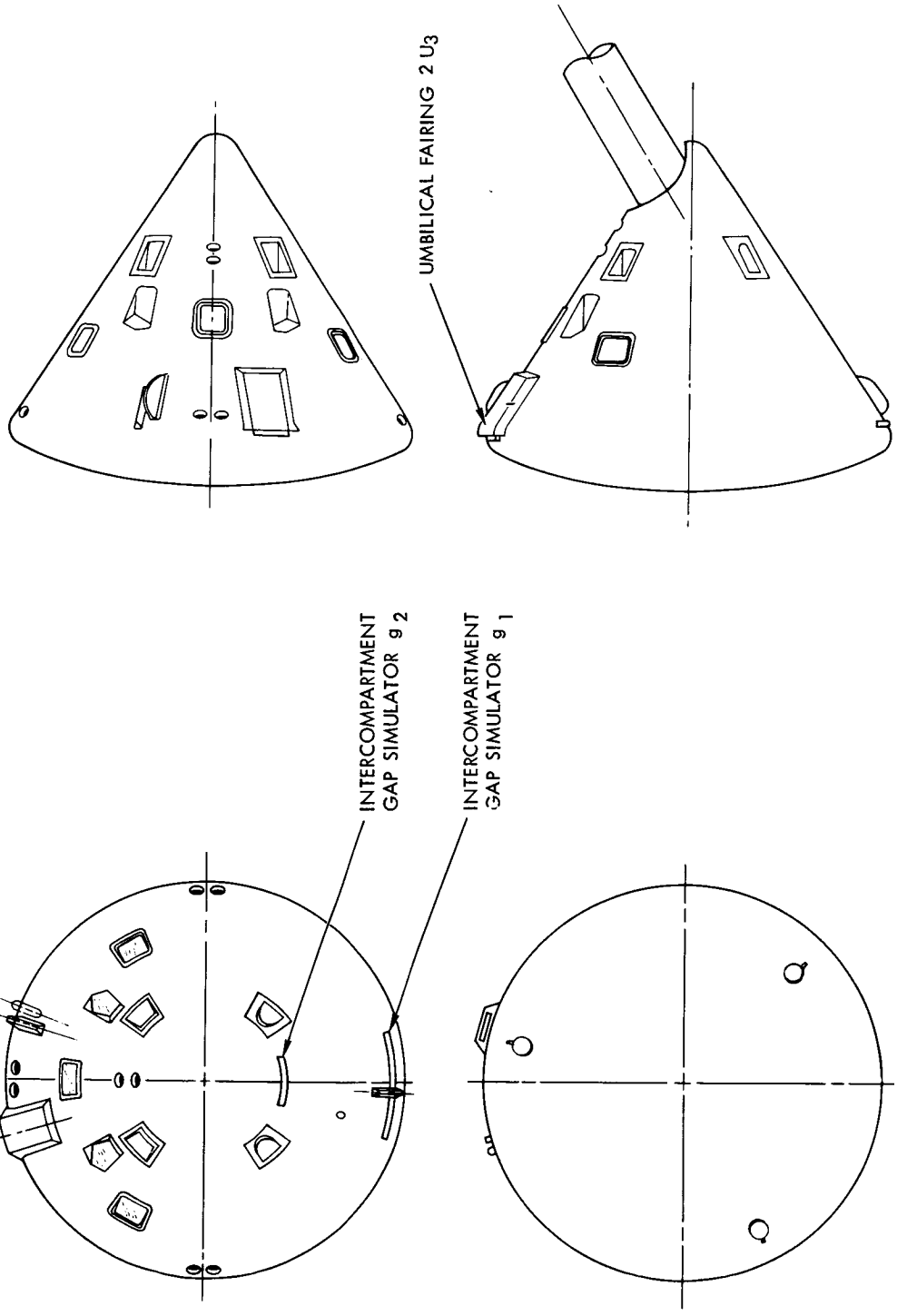

Figure 5. Configuration C_{56}

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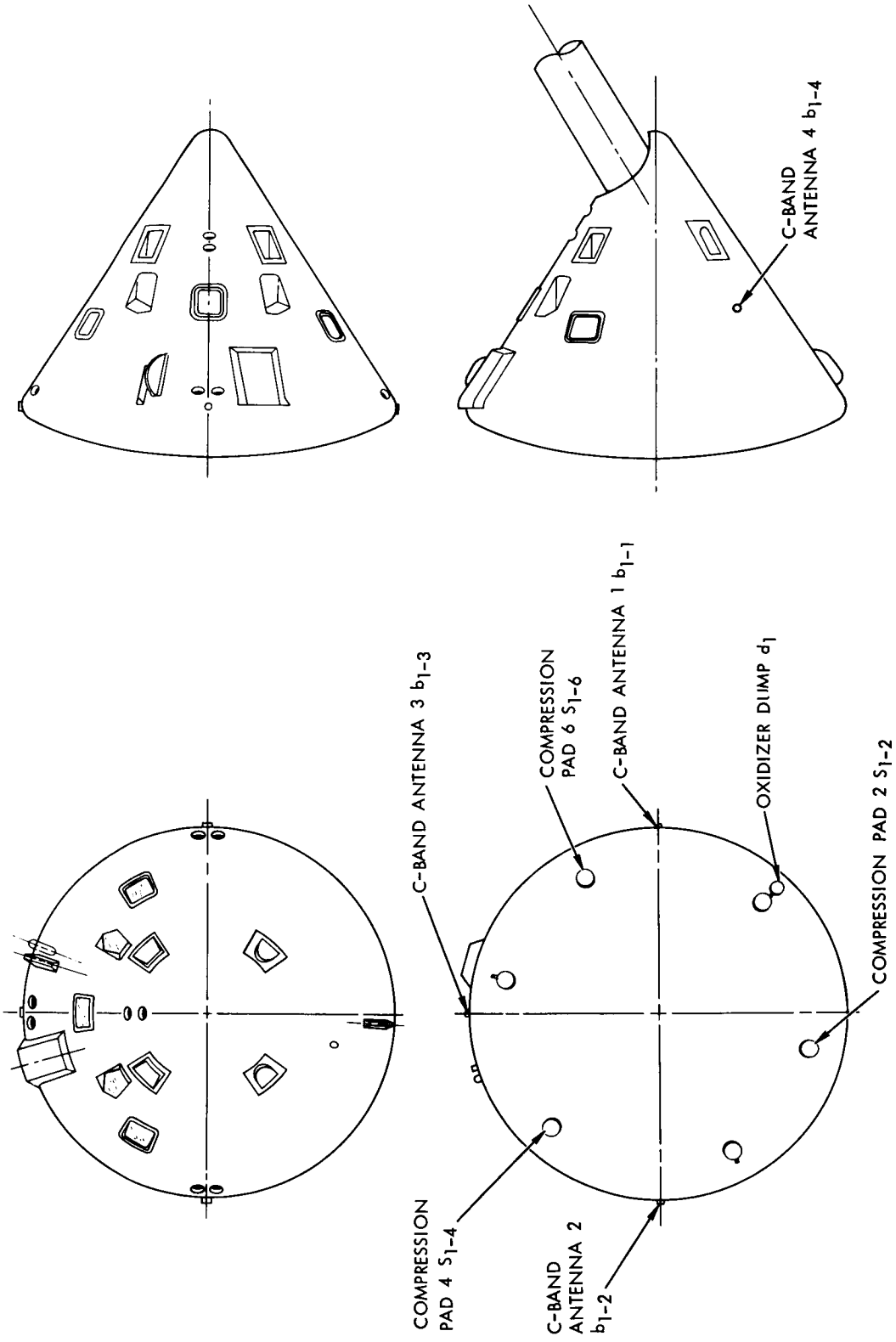

Figure 6. Configuration C_{57}

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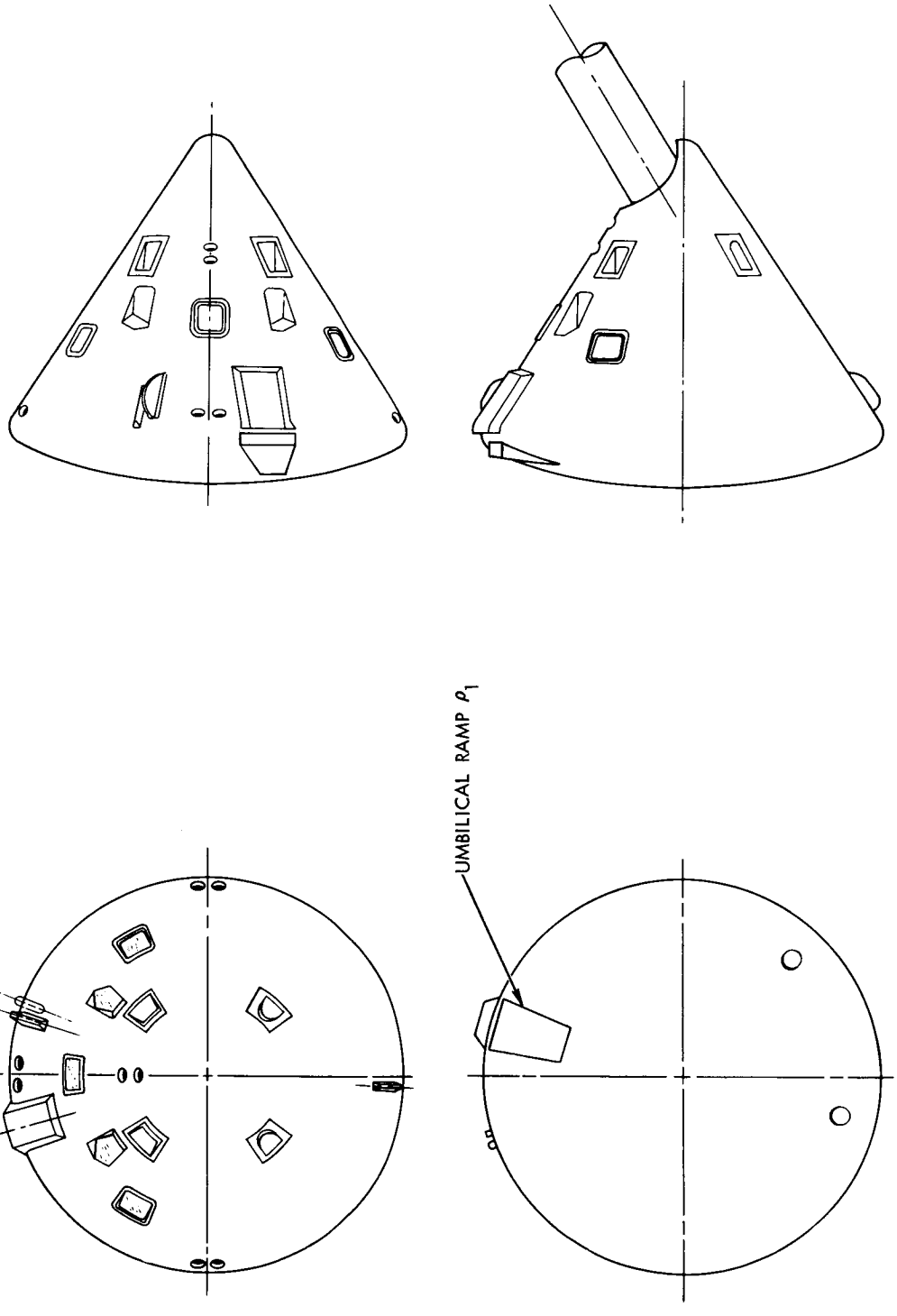

Figure 7. Configuration C58

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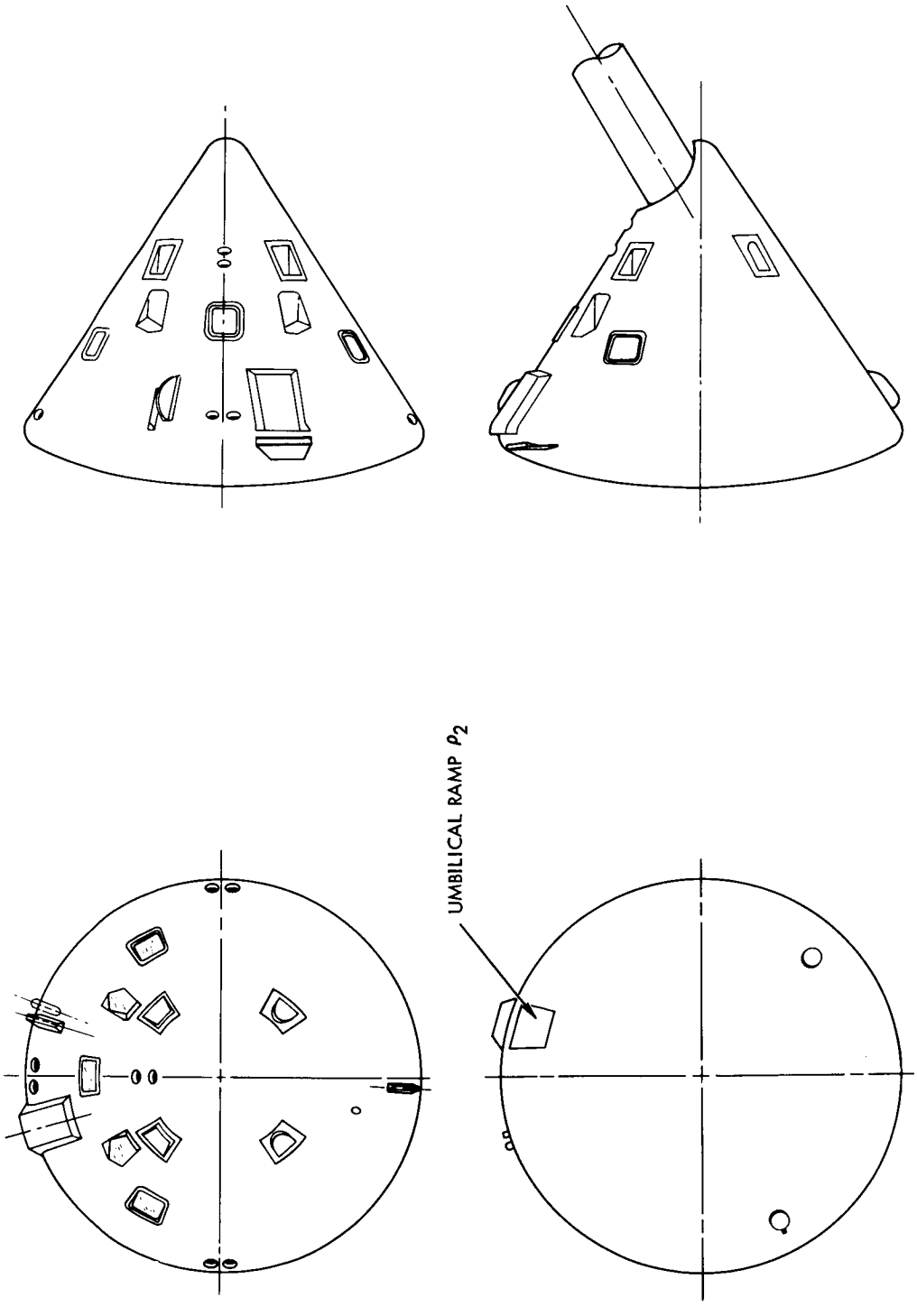

Figure 8. Configuration C_{59}

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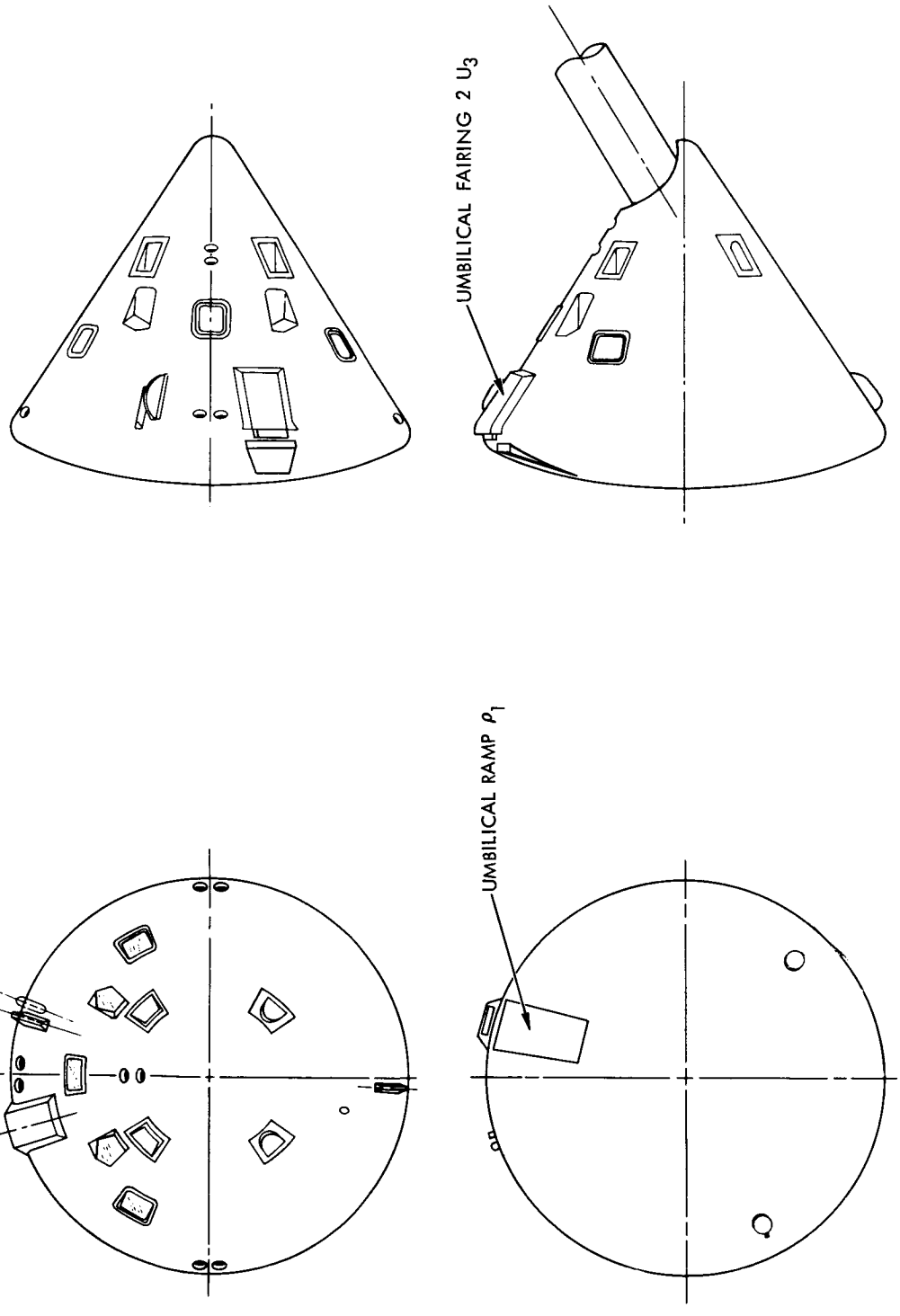

Figure 9. Configuration C60

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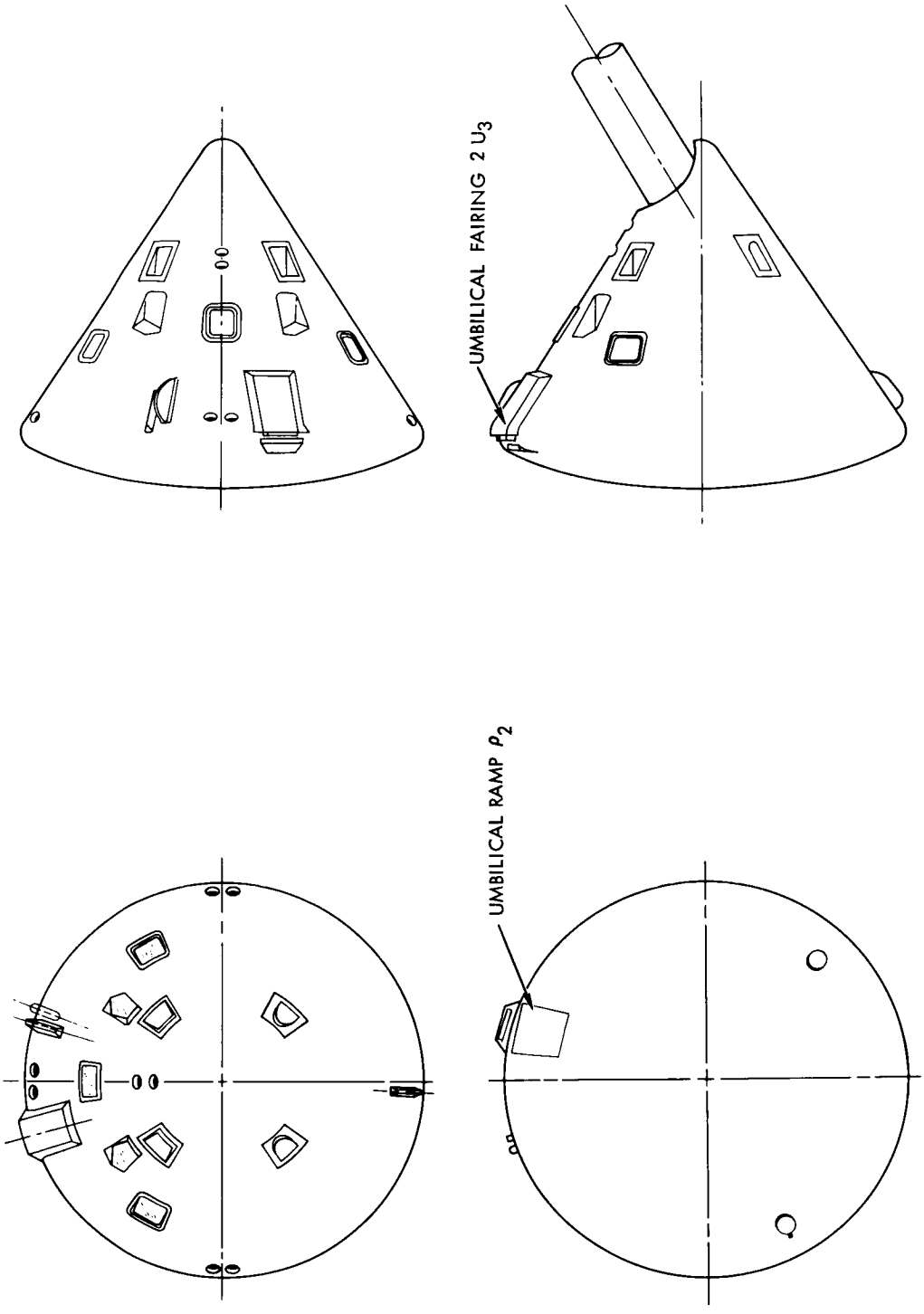

Figure 10. Configuration C61

the model skin 0.020-inches thick in the holes and on the instrumented protuberances. The body shells, holes, and instrumented protuberances were constructed of 310 stainless steel. Protuberances were constructed of either Mykroy ceramoplastic or insulated 310 stainless steel. Mykroy ceramoplastic was used to insulate the model body from its internal support structure. Photographs of the model are shown in Figures 11 and 12.

The locations and dimensions of the umbilical fairing ramps and intercompartment gap simulators that were tested on the model, are shown in Figures 13, 14, and 15. Detailed dimensions of the model and all of its components are provided in NAA S&ID Drawing 7212-01290, (Reference 5).

INSTRUMENTATION

The model was instrumented with 294 30-gauge iron constanton thermocouples that were fusion welded to the inside surface of the model. The instrumentation technique used to install these thermocouples is shown in Figure 16.

A Cunningham crossbar switching unit was used to read out the 294 thermocouples. This unit could select any one of three groups of 98 thermocouples and read the data into the AEDC data reduction system. The locations of the three groups (A, B, and C) are shown in Figures 17, 18, and 19 and are listed below:

Schedule	Thermocouples
A	1-98
B	99-196
C	197-294

Detailed dimensions of the locations of all thermocouples are shown in Drawing 7121-01294 (Reference 6). Figures 20 shows the locations of the cluster of thermocouples around shear pad 1 and the oxidizer dump.

Thermocouple locations were referenced from three different positions on the model as shown in Figure 21. Thermocouples located over the entry face and afterbody, at angles of θ_c, were referenced from the center of the heat shield in terms of s/r. Thermocouple 104, located approximately at the 147 degree stagnation point, was the reference point for thermocouples located in τ rays over the entry face in terms of s*/r. Thermocouples located around the shear and compression pads were

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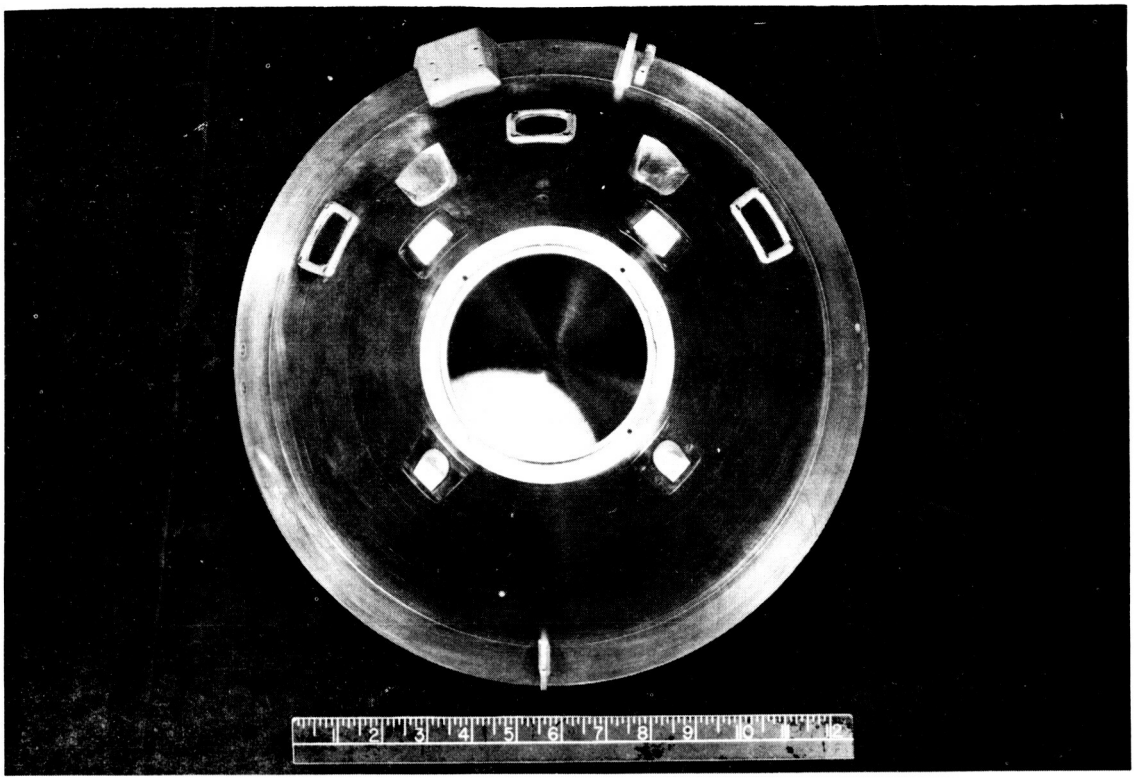
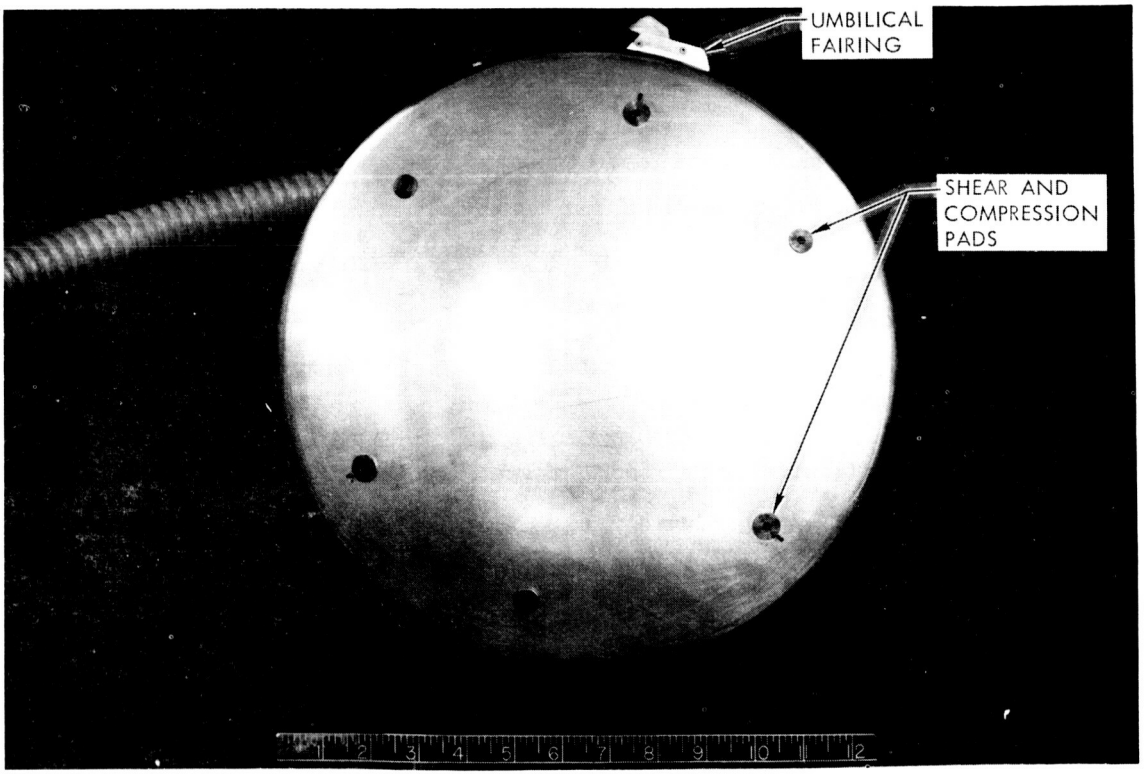


REAR VIEW



FRONT VIEW

Figure 11. Photographs of H-11 Model (Front & Rear Views)

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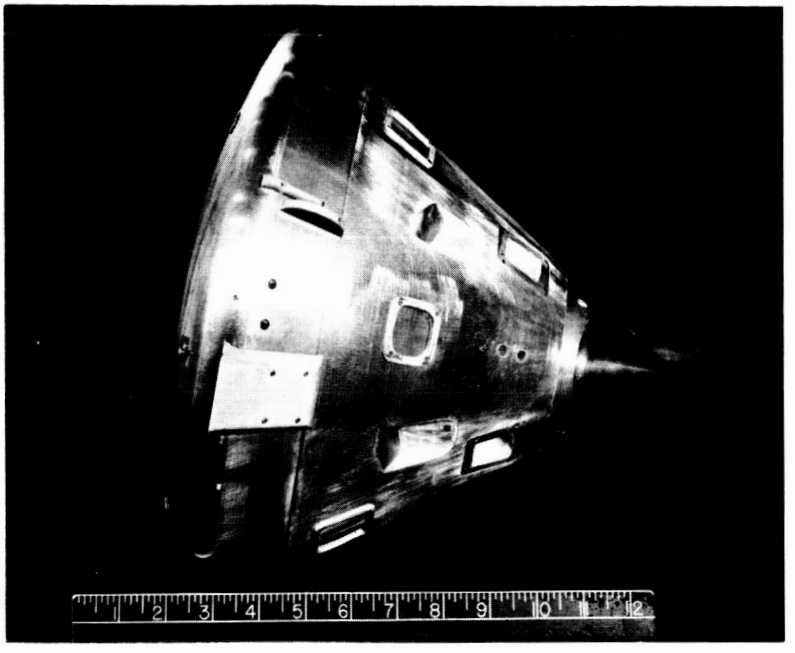
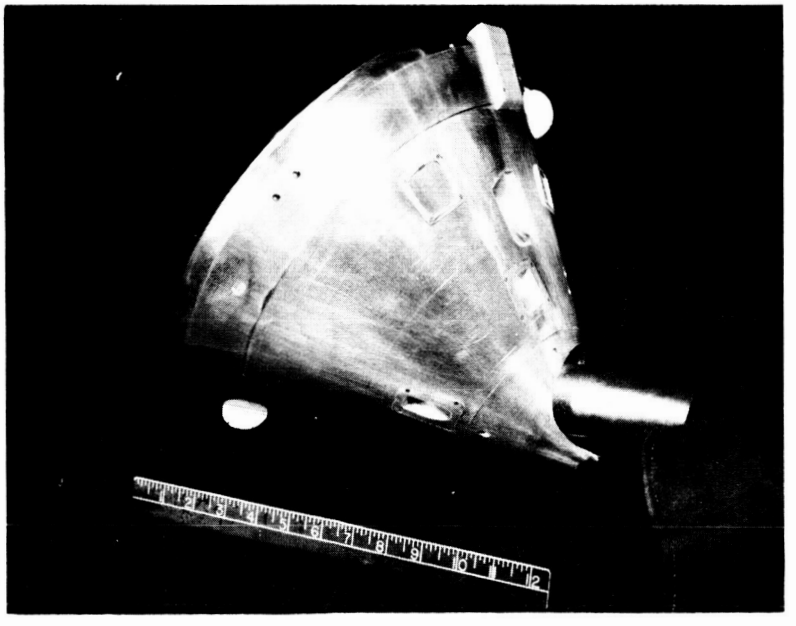


TOP VIEW



SIDE VIEW

Figure 12. Photograhs of H-11 Model (Side & Top Views)

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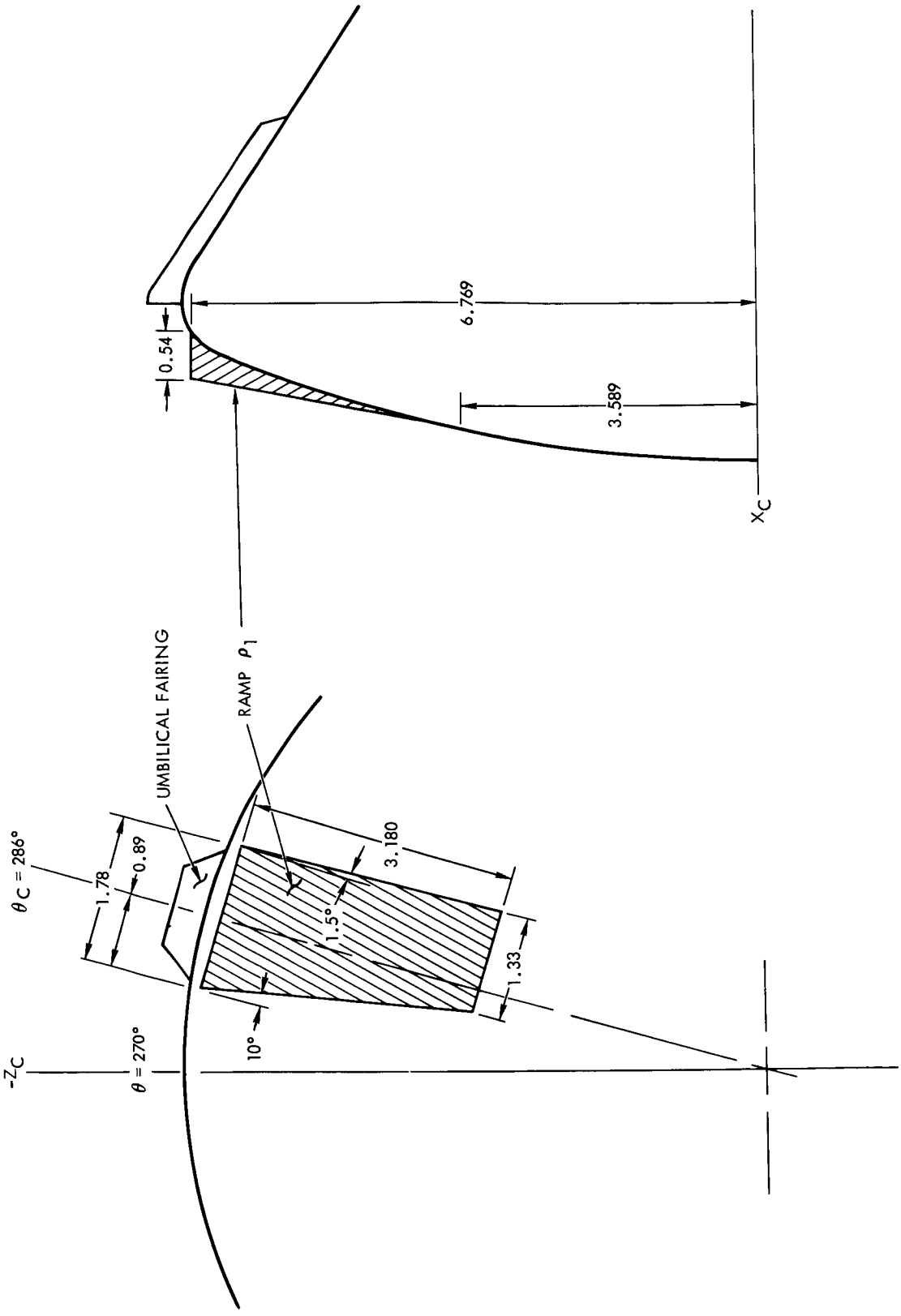

Figure 13. Umbilical Fairing Ramp ρ_1

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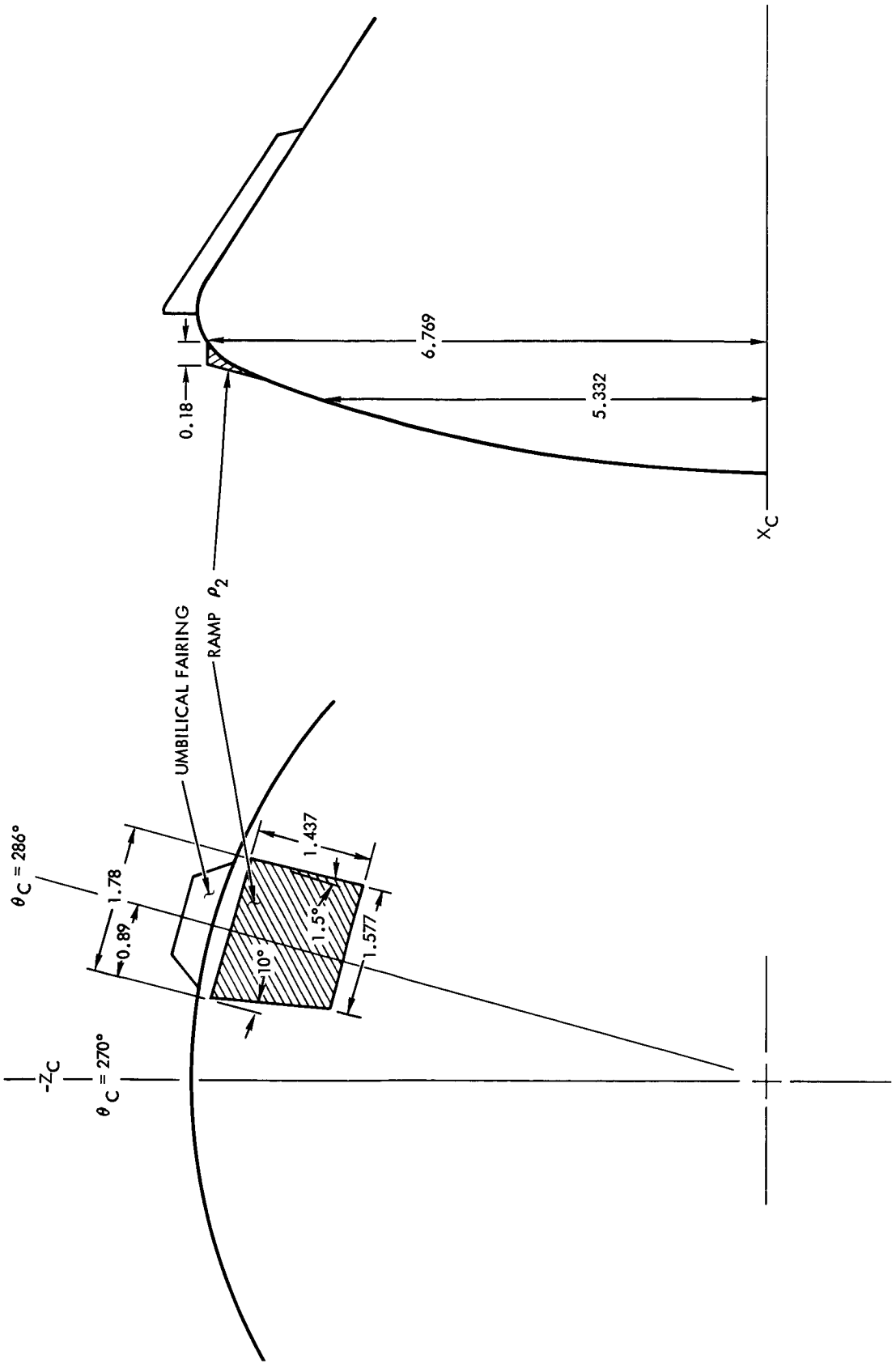

Figure 14. Umbilical Fairing Ramp ρ_2

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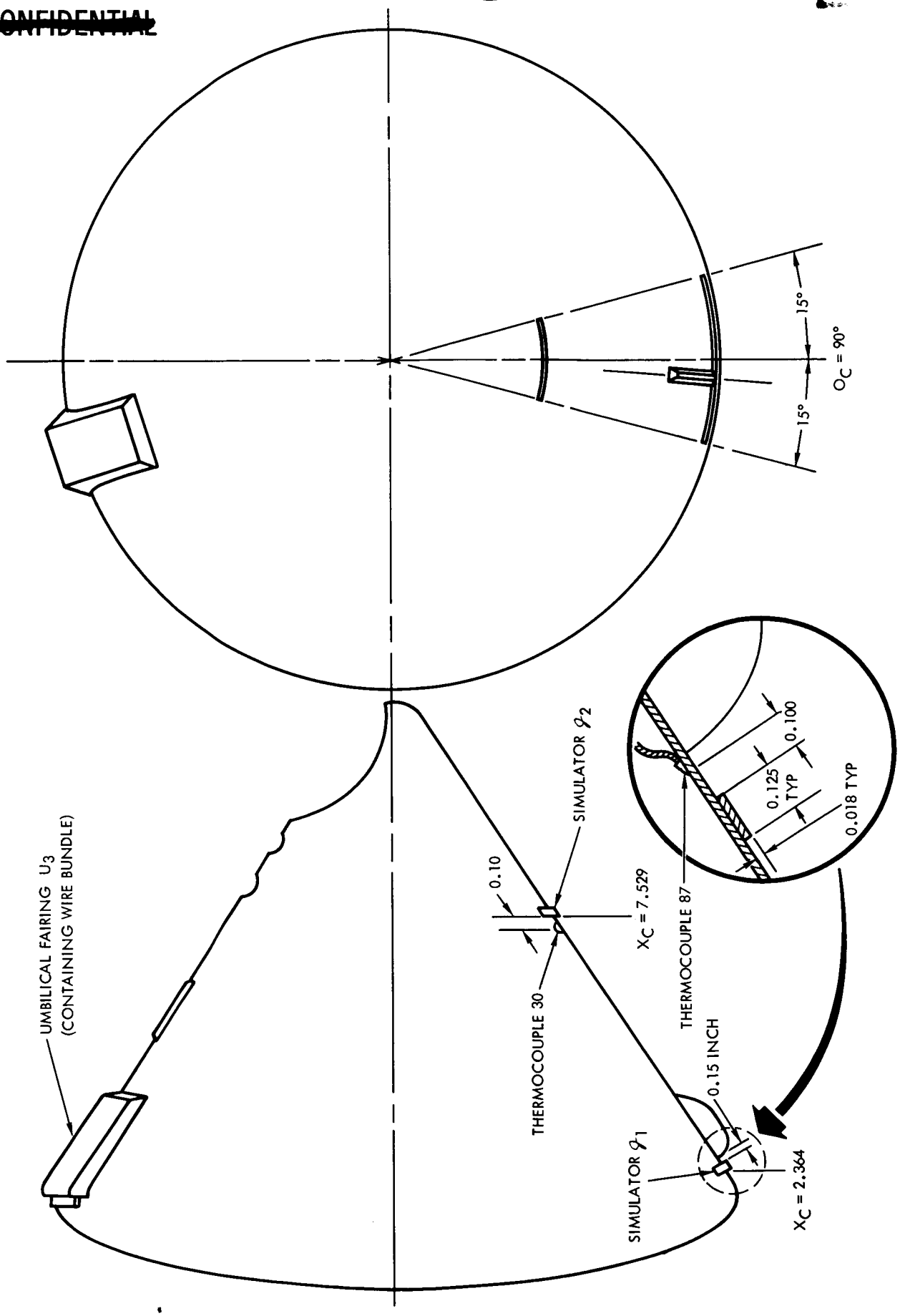

Figure 15. Intercompartment Gap Simulators g_1, g_2

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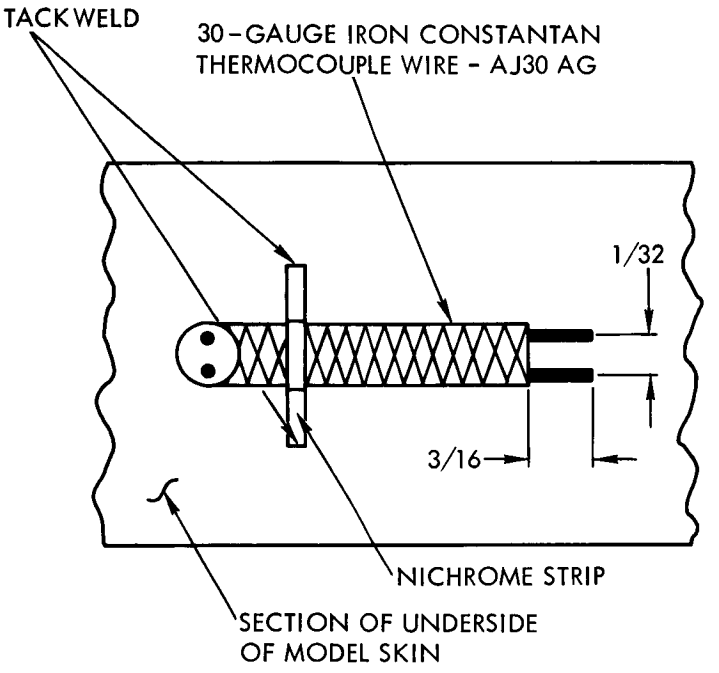

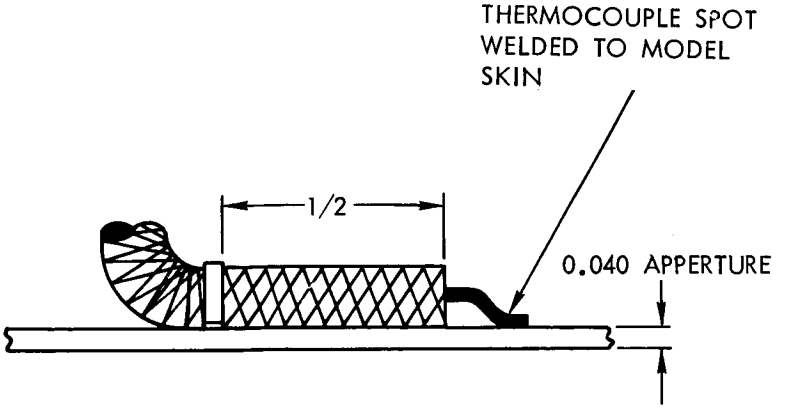

Figure 16. Thermocouple Installation Technique

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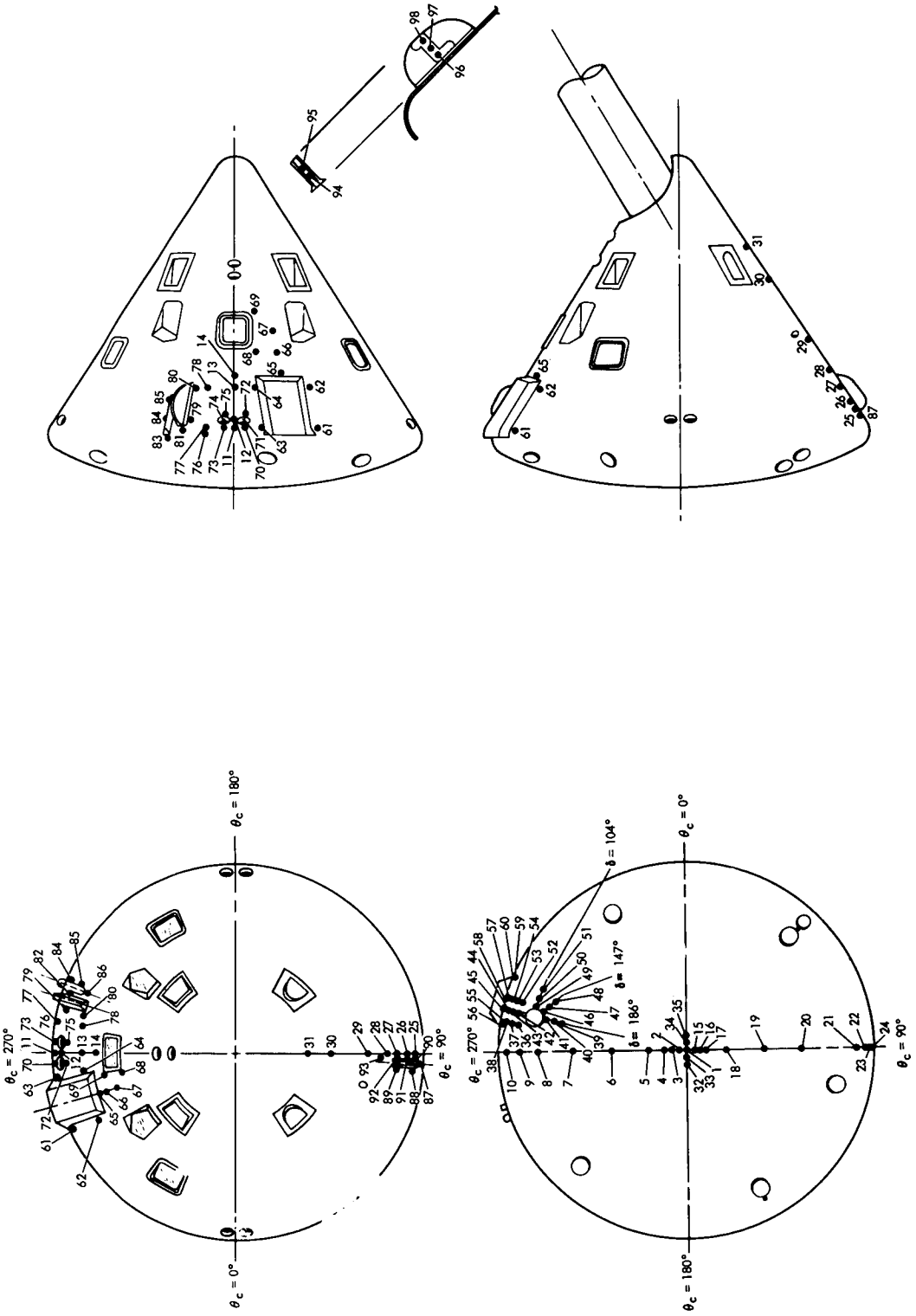

Figure 17. Thermocouple Schedule-A Locations

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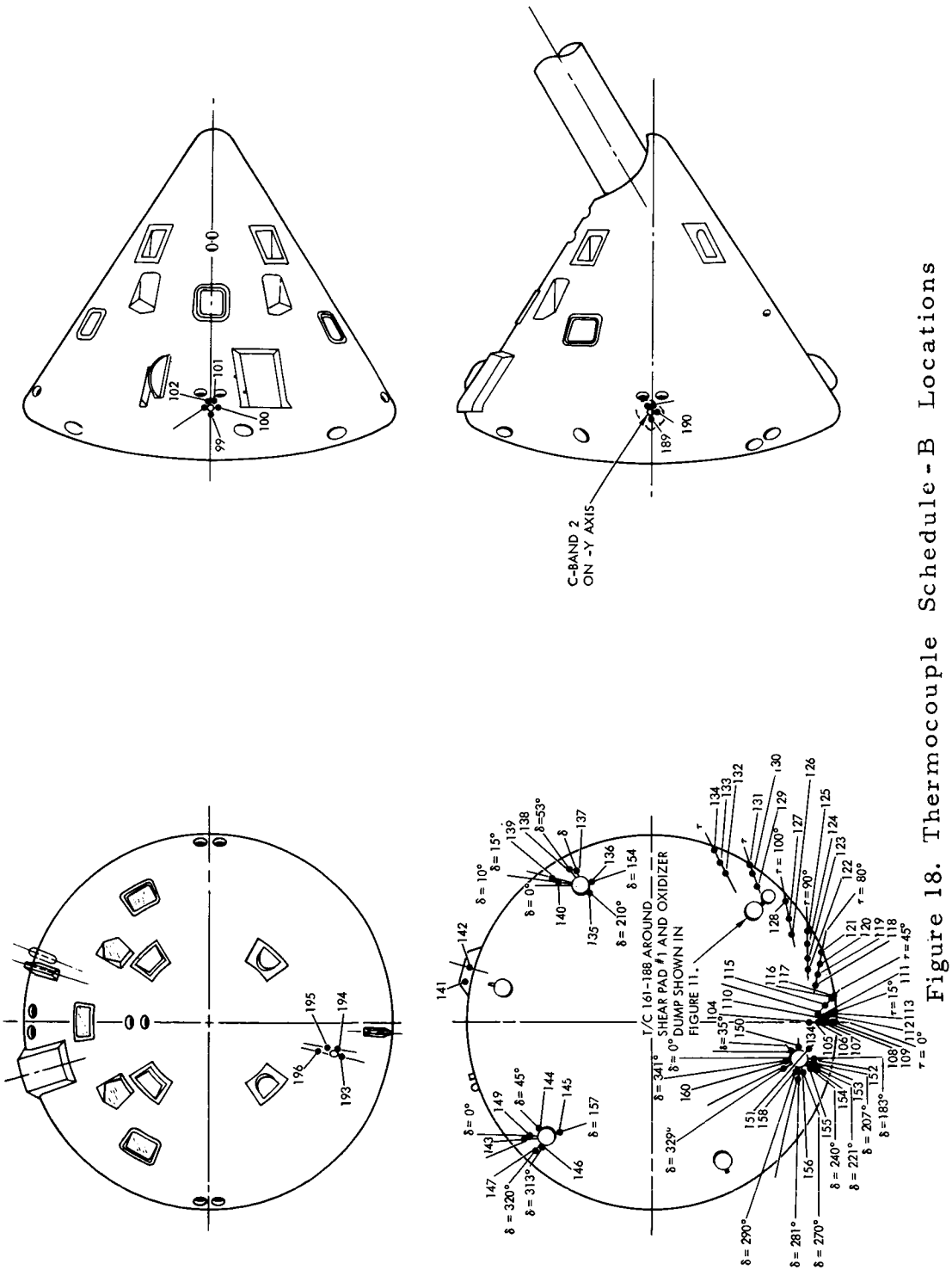

Figure 18. Thermocouple Schedule-B Locations

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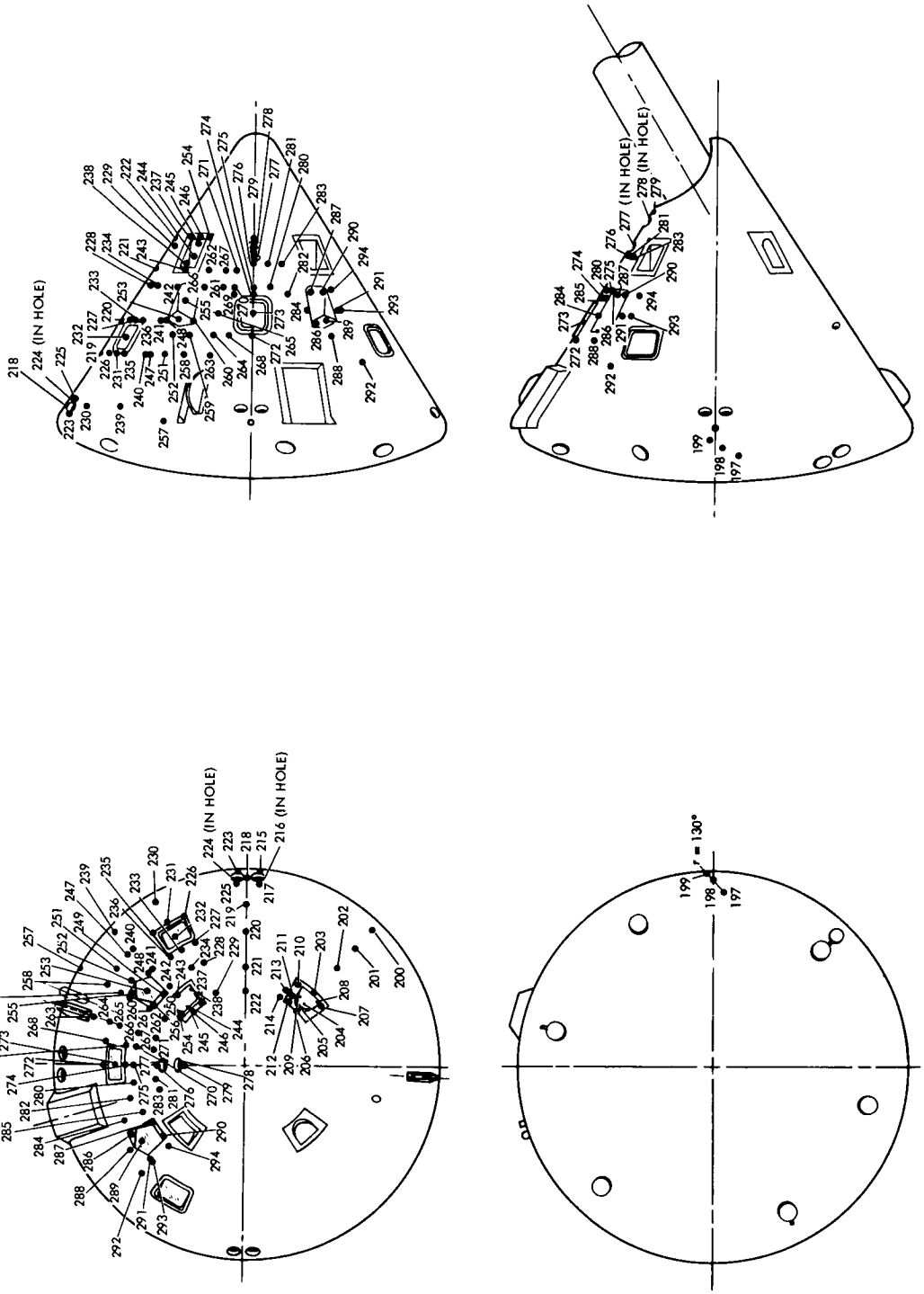

Figure 19. Thermocouple Schedule C Locations

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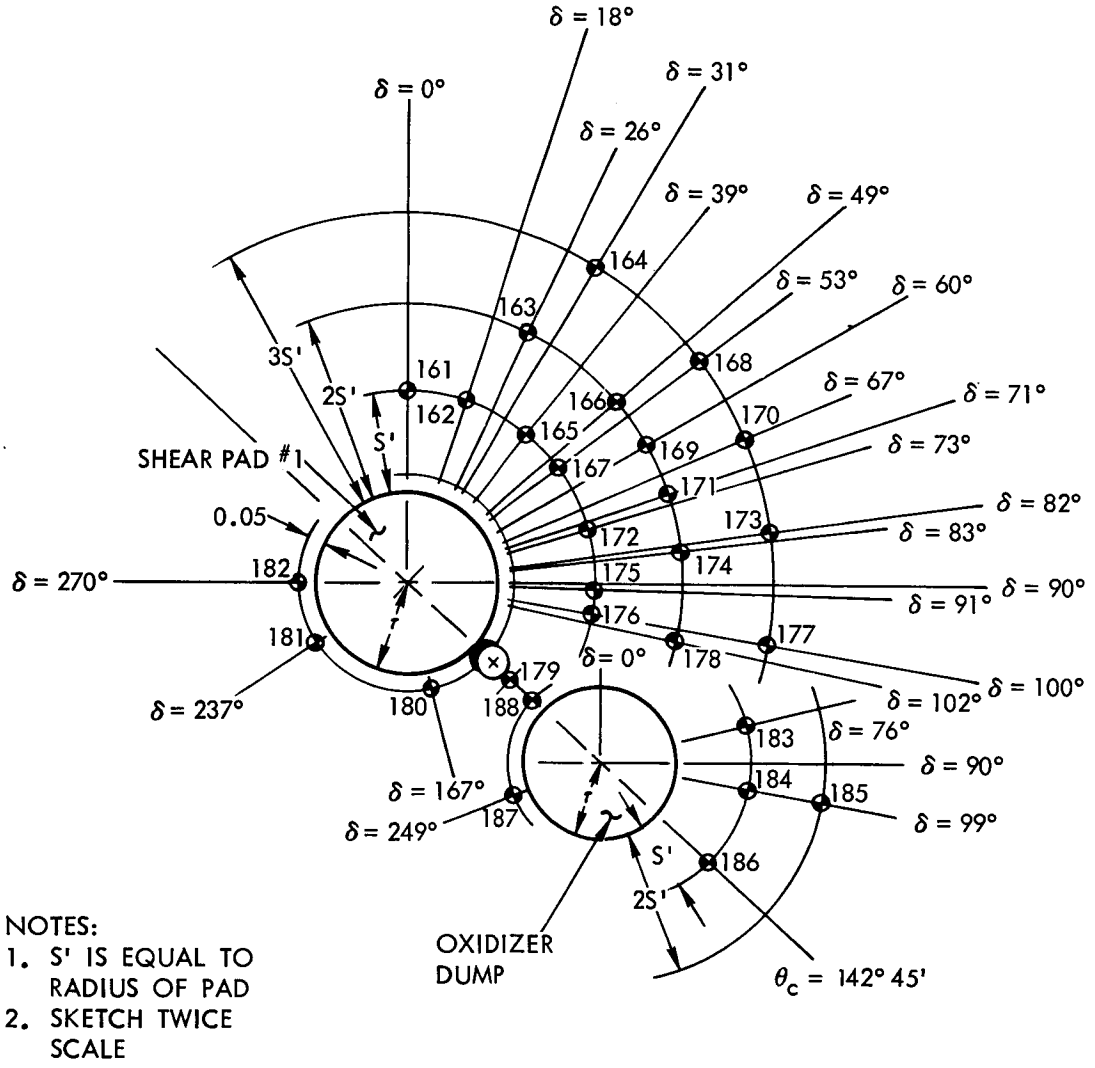

NOTES:
1. S' IS EQUAL TO RADIUS OF PAD
2. SKETCH TWICE SCALE

Figure 20. Instrumentation Locations Around Shear Pad 1 and Oxidizer Dump

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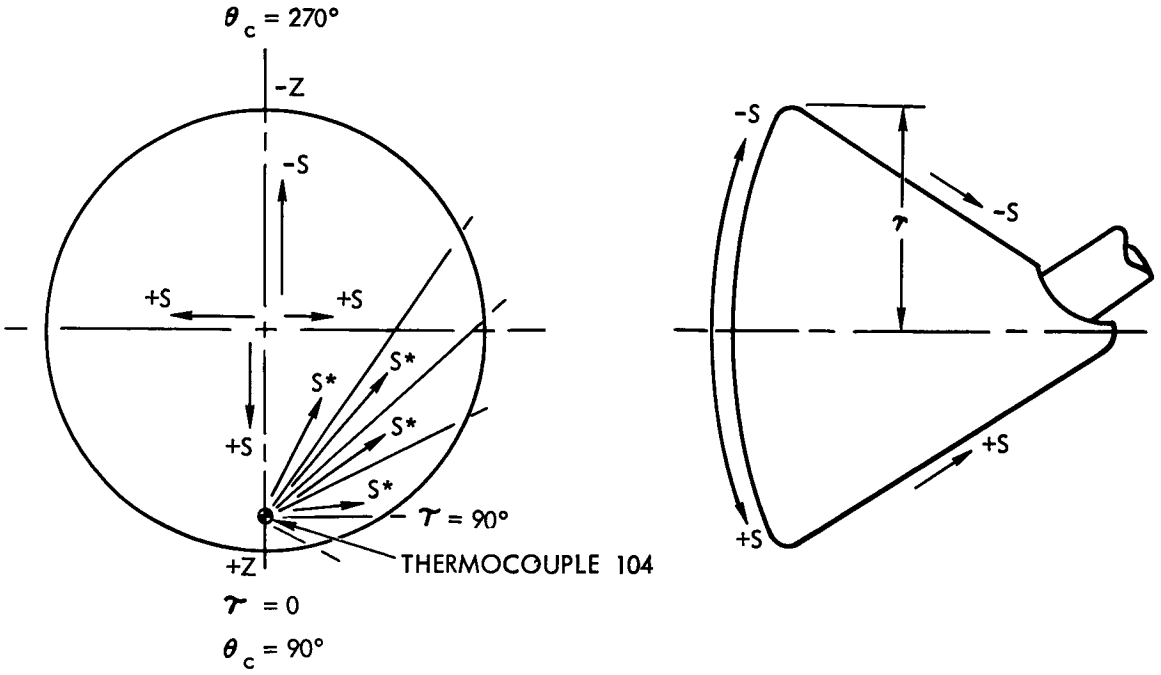

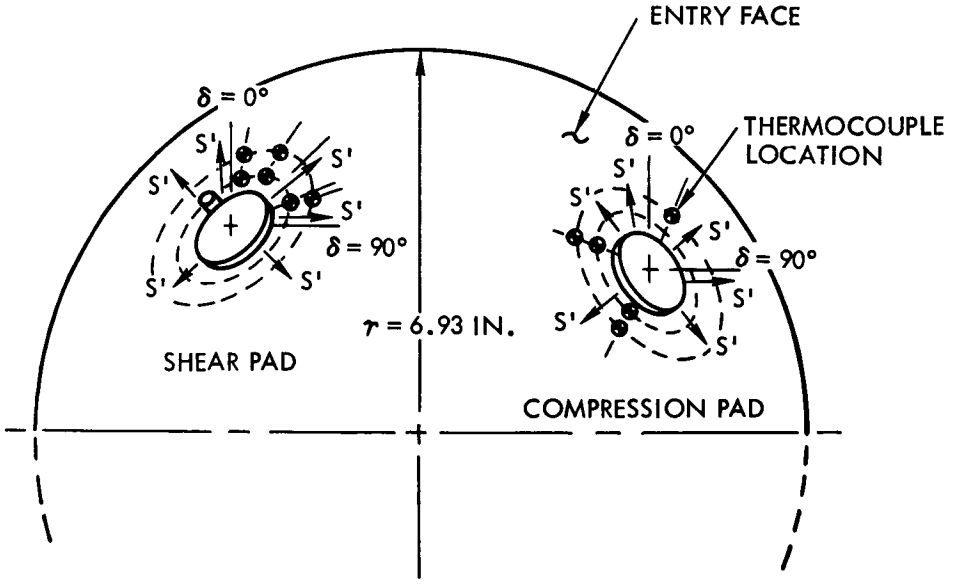

Figure 21. Instrumentation Location Reference System

referenced from the outer edge of each pad in terms of s'/r. The variation of the s/r locations of thermocouples over the entry face with the X-distance from the center of the heat shield is shown in Figure 22.

The s/r, s*/r, and s'/r values for all thermocouples, along with model skin thickness, are presented in Table 2.

INSTALLATION

The H-11 model was installed in Tunnel C using the AEDC 22 degree offset sting (Drawing number 3307053), along with the 12- and 30-degree split sting adapters (Drawing numbers 3302050 and 330252). The 12-degree split sting adapter was used while testing the model from 143 to 162 degrees angle of attack; the 30-degree split sting adapter was required. Figure 23 gives the angle reference system that was used to position the model in the tunnel. The model installation is shown in Figure 24.

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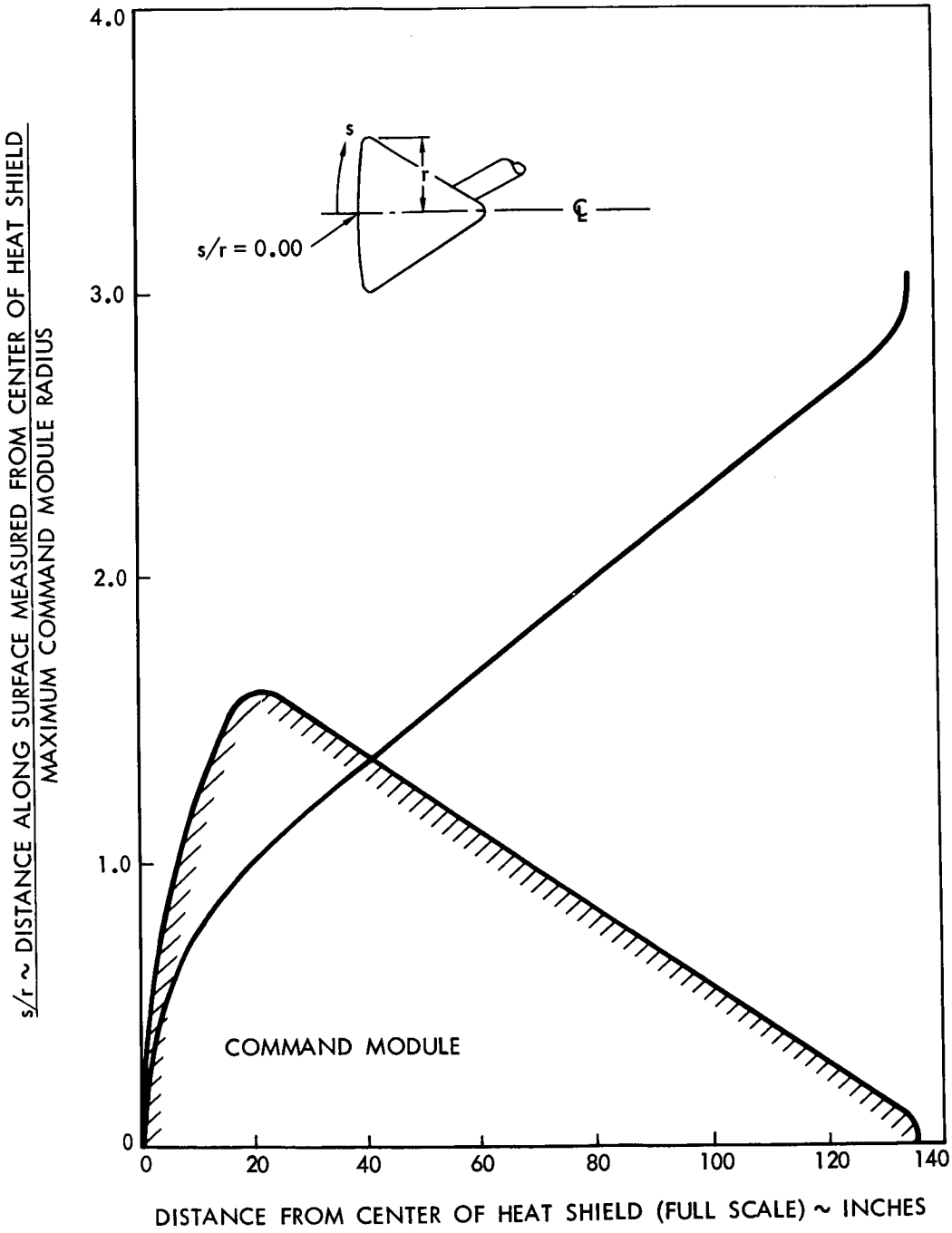

Figure 22. Variation of s/r with Longitudinal Distance Along Command Module

Table 2. H-11 Thermocouple Instrumentation Locations

T/C	s/r	Model Wall Thickness (ft)	T/C	s/r	Model Wall Thickness (ft)
1	0.000	0.00258	40	=0.029	0.00312
2	-0.030	0.00275	41	=0.007	0.00311
3	-0.060	0.00299	42	-0.868	0.00312
4	-0.090	0.00307	43	-0.911	0.00313
5	-0.200	0.00314	44	-0.953	0.00312
6	-0.400	0.00314	45	-1.040	0.00323
7	-0.600	0.00316	46	s'/r = 0.007	0.00312
8	-0.800	0.00316	47	=0.029	0.00313
9	-0.900	0.00311	48	=0.051	0.00314
10	-0.980	0.00315	49	=0.007	0.00312
11	-1.122	0.00342	50	=0.029	0.00313
12	-1.189	0.00292	51	=0.051	0.00312
13	-1.334	0.00300	52	-0.868	0.00314
14	-1.440	0.00342	53	-0.911	0.00314
15	+0.030	0.00275	54	-0.953	0.00312
16	+0.060	0.00299	55	-1.040	0.00323
17	+0.090	0.00307	56	-1.068	0.00333
18	+0.200	0.00314	57	-1.040	0.00323
19	+0.400	0.00314	58	-1.068	0.00350
20	+0.600	0.00316	59	-1.040	0.00323
21	+0.920	0.00297	60	-1.068	0.00333
22	+1.040	0.00297	61	-1.122	0.00329
23	+1.060	0.00298	62	-1.334	0.00300
24	+1.084	0.00312	63	-1.122	0.00342
25	+1.207	0.00292	64	-1.334	0.00300
26	+1.249	0.00308	65	-1.440	0.00342
27	+1.334	0.00303	66	-1.613	0.00325
28	+1.454	0.00337	67	-1.720	0.00139
29	+1.658	0.00327	68	-1.613	0.00327
30	+2.041	0.00332	69	-1.828	0.00319
31	+2.248	0.00332	70	-1.165	0.00292
32	+0.060	0.00299	71	-1.205	0.00167
33	+0.030	0.00275	72	-1.212	0.00287
34	+0.030	0.00299	73	-1.165	0.00292
35	+0.060	0.00307	74	-1.205	0.00167
36	-0.868	0.00314	75	-1.212	0.00286
37	-0.911	0.00306	76	-1.084	0.00299
38	-0.953	0.00312	77	-1.122	0.00321
39	s'/r = 0.051	0.00312	78	-1.334	0.00296

Table 2. H-11 Thermocouple Instrumentation Locations (Cont.)

T/C	s/r	Model Wall Thickness (ft)	T/C	s/r	Model Wall Thickness (ft)
79	-1.189	0.00333	118	=0.100	0.00300
80	-1.334	0.00298	119	=0.150	0.00298
81	-1.147	0.00321	120	=0.200	0.00300
82	-1.189	0.00333	121	=0.250	0.00300
83	-1.084	0.00334	122	=0.300	0.00300
84	-1.189	0.00292	123	=0.350	0.00302
85	-1.309	0.00292	124	=0.380	0.00303
86	-1.334	0.00297	125	=0.450	0.00306
87	+1.199	0.00291	126	=0.610	0.00310
88	+1.207	0.00293	127	=0.700	0.00312
89	+1.334	0.00298	128	=0.750	0.00312
90	+1.207	0.00283	129	=0.700	0.00312
91	+1.249	0.00308	130	=0.800	0.00312
92	+1.334	0.00300	131	=0.900	0.00297
93	+1.490	0.00336	132	=0.900	0.00297
94	--	0.00208	133	=0.960	0.00296
95	--	0.00209	134	=1.000	0.00297
96	--	0.00209	135	s'/r=0.007	0.00310
97	--	0.00208	136	=0.007	0.00304
98	--	0.00209	137	=0.039	0.00309
99	-1.060	0.00323	138	=0.078	0.00307
100	-1.084	0.00333	139	s'/r=0.117	0.00306
101	-1.108	0.00326	140	=0.078	0.00305
102	-1.108	0.00325	141	on	0.00210
103	-1.08	0.00333	142	Umbilical	0.00210
104	+0.850	0.00314	143	s'/r=0.078	0.00303
105	+0.940	0.00297	144	=0.007	0.00304
106	+0.960	0.00295	145	=0.007	0.00302
107	+0.980	0.00295	146	=0.039	0.00304
108	+1.000	0.00297	147	=0.078	0.00303
109	+1.020	0.00297	148	=0.117	0.00306
110	s'/4 = 0.080	0.00297	149	=0.007	0.00316
111	=0.100	0.00295	150	=0.007	0.00317
112	=0.120	0.00297	151	=0.007	0.00317
113	=0.140	0.00297	152	=0.039	0.00306
114	=0.080	0.00297	153	=0.039	0.00306
115	=0.100	0.00297	154	=0.078	0.00304
116	=0.120	0.00298	155	=0.039	0.00317
117	=0.140	0.00297	156	=0.039	0.00317
			157	=0.078	0.00317

Table 2. H-11 Thermocouple Instrumentation Locations (Cont.)

T/C	s/r	Model Wall Thickness (ft)	T/C	s/r	Model Wall Thickness (ft)
158	=0.039	0.00318	197	s'/r = 1.000	0.00307
159	=0.078	0.00318	198	=1.200	0.00397
160	=0.039	0.00317	199	=1.300	0.00313
161	=0.043	0.00310	200	+1.189	0.00390
162	=0.043	0.00311	201	+1.454	0.00329
163	=0.085	0.00311	202	+1.704	0.00327
164	=0.128	0.00310	203	+2.041	0.00327
165	=0.043	0.00311	204	+2.070	0.00152
166	=0.085	0.00310	205	+2.188	0.00173
167	=0.043	0.00310	206	+2.248	0.00327
168	=0.128	0.00313	207	+2.070	0.00321
169	=0.085	0.00312	208	+2.070	0.00177
170	=0.128	0.00311	209	+2.188	0.00161
171	=0.085	0.00310	210	2.070	0.00329
172	=0.043	0.00312	211	+2.188	0.00329
173	=0.128	0.00312	212	2.239	0.00325
174	=0.085	0.00311	213	2.188	0.00325
175	s'/r = 0.043	0.00310	214	2.248	0.00329
176	=0.043	0.00310	215	1.165	0.00298
177	=0.128	0.00311	216	1.205	0.00167
178	=0.085	0.00311	217	1.212	0.00390
179	=0.007	0.00311	218	1.189	0.00292
180	=0.007	0.00312	219	1.454	0.00333
181	=0.007	0.00312	220	1.704	0.00346
182	=0.007	0.00313	221	2.041	0.00332
183	=0.032	0.00312	222	2.248	0.00335
184	=0.032	0.00313	223	1.165	0.00298
185	=0.064	0.00313	224	1.205	0.00167
186	=0.064	0.00312	225	1.212	0.00290
187	=0.007	0.00313	226	1.454	0.00334
188	=0.007	0.00318	227	1.704	0.00321
189	+1.060	0.00325	228	1.878	0.00327
190	+1.084	0.00332	229	2.188	0.00329
191	+1.108	0.00333	230	1.189	0.00293
192	+1.108	0.00332	231	1.454	0.00352
193	+1.658	0.00327	232	1.613	0.00325
194	+1.170	0.00325	233	1.704	0.00327
195	+1.674	0.00327	234	1.878	0.00329
196	+1.695	0.00325	235	1.454	0.00328

Table 2. H-11 Thermocouple Instrumentation Locations (Cont.)

T/C	s/r	Model Wall Thickness (ft)	T/C	s/r	Model Wall Thickness (ft)
236	1.704	0.00325	266	1.878	0.00327
237	2.188	0.00329	267	2.041	0.00334
238	2.070	0.00178	268	1.613	0.00327
239	1.189	0.00290	269	1.828	0.00321
240	1.454	0.00333	270	1.878	0.00326
241	1.704	0.00327	271	2.041	0.00333
242	1.878	0.00329	272	1.613	0.00336
243	2.041	0.00329	273	1.720	0.00330
244	2.070	0.00179	274	1.828	0.00320
245	2.187	0.00163	275	1.878	0.00327
246	2.210	0.00335	276	2.060	0.00333
247	1.454	0.00325	277	2.100	0.00167
248	1.704	0.00329	278	2.187	0.00167
249	1.878	0.00329	279	2.195	0.00335
250	2.188	10.00167	280	1.878	0.00332
251	1.454	0.00335	281	2.060	0.00335
252	1.613	0.00333	282	1.828	0.00323
253	1.706	0.00175	283	2.060	0.00333
254	2.188	0.00329	284	1.720	0.00321
255	1.658	0.00183	285	1.878	0.00327
256	1.792	0.00167	286	1.648	0.00327
257	1.084	0.00334	287	1.792	0.00167
258	1.454	0.00337	288	1.613	0.00327
259	1.613	0.00329	289	1.706	0.00167
260	1.704	0.00324	290	1.878	0.00167
261	1.878	0.00327	291	1.720	0.00325
262	2.041	0.00335	292	1.440	0.00342
263	1.454	0.00336	293	1.720	0.00321
264	1.613	0.00327			
265	1.704	0.00321	294	1.878	0.00328

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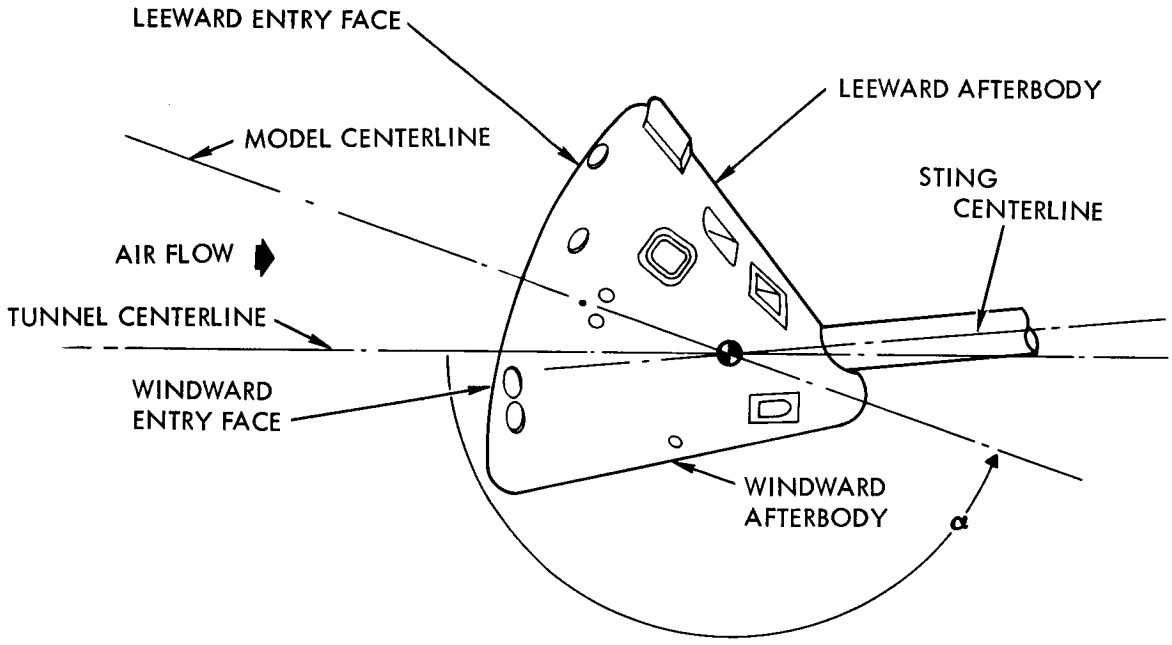

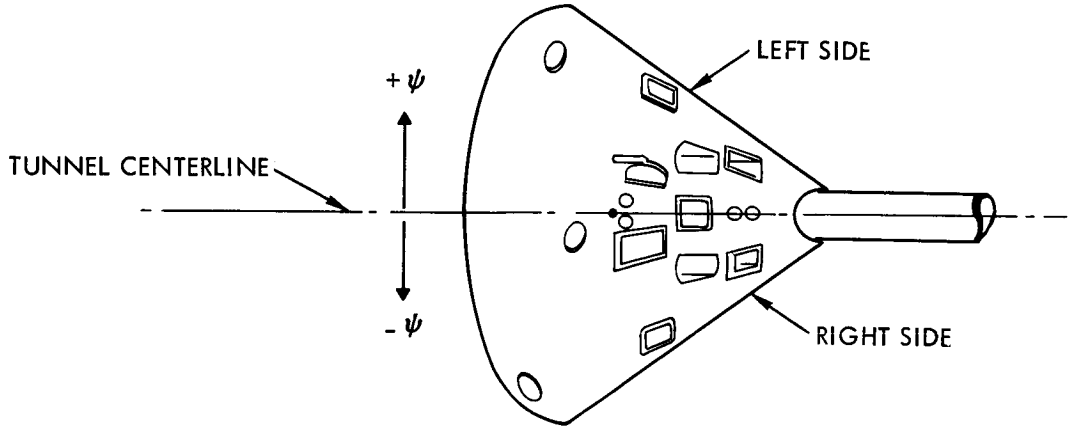

Figure 23. Angle Reference System

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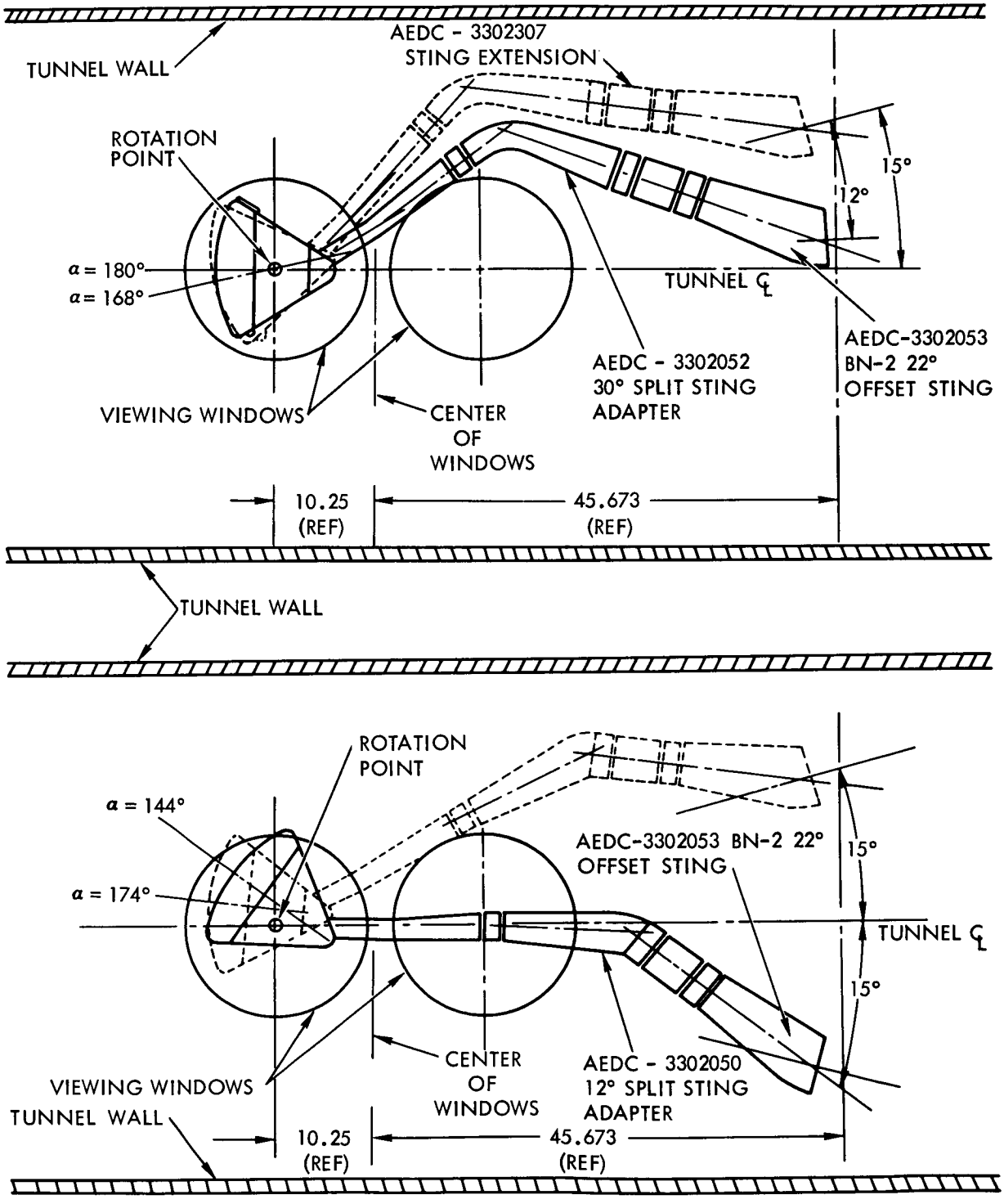

Figure 24. H-11 Model Installation

TEST DESCRIPTION

NOMENCLATURE

The symbols used in the tests are defined as follows:

b	Model skin thickness, in.
c	Specific heat of model material, Btu/(lb_m) (°R)
Cp	Specific heat of air stream, Btu/(slug) (°R)
D	Model characteristic length, ft.
g	Gravitational acceleration, ft/sec^2
H	Enthalpy, Btu/lb
h	Heat transfer coefficient, Btu/(ft^2) (sec) (°R)
h*	Heat transfer coefficient, $lb/ft^2 sec$
J	Joule's constant, ft-lb/Btu
k	Coefficient of conductivity of model skin, Btu/(sec)(ft) (°R)
M	Mach number
Po′	Stagnation pressure behind normal shock, psi
Pr	Prandtl number
$\dot{q}$	Heat transfer rate, Btu/(ft^2) (sec)
r	Radius of command module at maximum section, in.
Re	Reynolds number
s	Distance over surface of model to thermocouple from center of entry face, in.
s*	Distance over surface of model to thermocouple from thermocouple number 104, in.

s'	Distance over surface of model to thermocouple from outer edge of shear or compression pad, in.
S_t	Stanton number
T	Temperature, °R
t	Time, sec
V	Velocity, ft/sec
w	Density of model skin, lb_m/ft^3
α	Angle between model centerline and wind vector, deg
μ	Viscosity of air stream, lb sec/ft^3
ρ	Density of air stream, slug/ft^3
τ	Angle between meridian lines on which thermocouples are located from thermocouple 104, deg
θ_c	Angle between meridian lines on which thermocouples are located, deg
δ	Angle between thermocuples located around shear and compression pads, deg
ψ	Model yaw angle, deg

Subscripts used in the test are as follows:

∞	Tunnel free-stream conditions
o	Tunnel stagnation conditions
stor	Heat losses not accounted for
aero	Aerodynamic
on	Data taken with component on
off	Data taken with component removed
(α = 180)	Data point at α = 180 degrees

t	Theoretical
w	Model wall conditions
AW	Adiabatic wall conditions

FACILITY

The test was conducted in Tunnel C of the von Karman Gas Dynamics facility, at the Arnold Engineering and Development Center. Tunnel C is a 50-inch diameter, continuous, closed-circuit, variable-density wind tunnel, that is equipped with an axisymmetric, contoured nozzle. The tunnel was designed to operate at Mach number 10, through a range of stagnation pressures from 175 to 1400 psi, with stagnation temperatures as high as 1500 F.

The tunnel-model support system was designed so that the model can be retracted from the test section into a cooling tank for model change, modification, or for cooling transient heat transfer models. When the model is in the retracted position, the cooling tank can be sealed from the tunnel, and tunnel airflow can be maintained. When the model is in the test section, the cooling tank can be evacuated to approximately free-stream static pressure. In either the retracted or extended positions, the model can be pitched ±15 degrees with a straight sting, and rolled 180 degrees about the sting axis. Additional information concerning the operation of the tunnel is presented in Reference 1.

PROCEDURES

Transient heat transfer data were obtained by reducing the model wall temperature to approximately 60 F (isothermal conditions); then introducing the model into the hot air-stream and recording the change of skin temperature with time. The model exposure time varied from 7 to 10 seconds. Approximately five minutes were required to cool the model after each run. Cooling was accomplished by retracting the model into the cooling tank and blowing compressed air over it.

Nominal tunnel test conditions follow:

Condition	P_o (psi)	T_o (°R)	RE/FT x 10^{-6}
1	233	1663	0.33
2	580	1315	0.80
3	925	1831	1.20
4	1415	1415	1.73
5	1834	1883	2.20

Table 3 is a complete summary run by configuration, test group, angle of yaw, angle of attack, and Reynolds number.

DATA REDUCTION

The heating rates and heat transfer coefficient data were obtained using the standard AEDC data reduction equations for heat transfer tests. The heat transfer parameters obtained from the model temperature-time data were heat transfer rate, $\dot{q}$, heat transfer coefficient, h, and Stanton number (St). The general equations used to reduce the data were:

$$\dot{q}_{stor} = wbc \frac{d\tau w}{dt} \tag{1}$$

$$h^*_{stor} = \frac{\dot{q}_{stor}}{Ho - Hw} \tag{2}$$

where

$$H_o - H_w = (C_{po} T_o + \frac{V_\infty}{2gJ}) - Cp_w T_w \tag{3}$$

$$St_{stor} = \frac{h_{stor}}{\rho_\infty V_\infty Cp_\infty} \tag{4}$$

Model wall thickness, b, (Table 2) and model material density (493 pounds per cubic foot) can be considered as constants in equation (1). However, the specific heat of the material, c, is a function of temperature. This variation of specific heat, with the temperature for 310 stainless steel, is shown in Figure 25.

The recording of temperature-time data began approximately 1.5 to 3.5 seconds after the initiation of model injection into the air stream (depending upon model injection rate). The first data point was calculated 0.25 to 0.50 seconds later. Since there is a time lapse from the start to the completion of model injection, data were taken while the model was in vertical motion relative to the direction of stream flow. The vertical velocity of the model is small, compared to the vertical velocity of the air-stream, and should have no effect on the heat transfer data.

The least squares parabola was fitted to five consecutive sets of 21 data points which were taken every 0.05 seconds. The derivative, $d\tau_W/dt$, was then evaluated at the center of each time interval to obtain five data points for each thermocouple at that run condition. From comparisons of these five data points, a final data point was chosen.

Table 3. H-11 Test Run Summary, AEDC Hypersonic Tunnel (Mach Number 10)

Configuration		Group			Re/ft x 10^{-6}	α Deg	ψ Deg	Plotted Data Page	Tabulated Data Page	Remarks
NAA	AEDC	A	B	C						
C55	11	1	6	15	0.33	143	0	A1-A9	B1-B6	Command module with holes and plot and per Airframe 011
C55	11	2	7	16	0.33	147	0	A10-A18	B7-B12	
C55	11		8		0.33	147	-5	A19-A24	B13-B14	
C55	11		9		0.33	147	+5	A25-A30	B15-B16	
C55	11	3	10	17	0.33	154	0	A31-A39	B17-B22	
C55	11		11		0.33	154	-5	A40-A45	B23-B24	
C55	11		12		0.33	154	+5	A46-A51	B25-B26	
C55	11	4	13	18	0.33	158	0	A52-A60	B27-B32	
C55	11	5	14	19	0.33	162	0	A61-A69	B33-B38	
C55	11	20	25	31	1.20	143	0	A70-A78	B39-B44	
C55	11	21	26	32	1.20	147	0	A79-A87	B45-B50	
C55	11	22	27	33	1.20	154	0	A88-A96	B51-B56	
C55	11	23	29	34	1.20	158	0	A97-A105	B57-B62	
C55	11	24	30	35	1.20	162	0	A106-A114	B63-B68	
C55	11	36	50	52	2.20	143	0	A115-A123	B69-B74	
C55	11	41	51	53	2.20	147	0	A124-A132	B75-B80	
C55	11		43		2.20	147	-5	A133-A138	B81-B82	
C55	11		44		2.20	147	+5	A139-A144	B83-B84	
C55	11	42	45	54	2.20	154	0	A145-A153	B85-B90	
C55	11		46		2.20	154	-5	A154-A159	B91-B92	
C55	11		47		2.20	154	+5	A160-A165	B93-B94	
C55	11	39	48	55	2.20	158	0	A166-A174	B95-B100	
C55	11	40	49	56	2.20	162	0	A175-A183	B101-B106	
C58	12	60	59		0.33	154	0	A184-A192	B107-B110	Configuration C55 with umbilical ramp 2

Table 3. H-11 Test Run Summary, AEDC Hypersonic Tunnel (Mach Number 10) (Cont.)

Configuration		Group			Re/ft x 10^{-6}	α Deg	ψ Deg	Plotted Data Page	Tabulated Data Page	Remarks
NAA	AEDC	A	B	C						
C_{58}	12	57	58		2.20	154	0	A193-A201	B111-B114	
C_{59}	13	61	62		0.33	154	0	A202-A210	B115-B118	Configuration C_{55} with umbilical ramp 2
C_{56}	14	63			0.33	143	0	A211-A216	B119-B120	Configuration C_{55} with umbilical fairing U_3 and intercompartment gap simulators g_1 and g_2
C_{56}	14	64			0.33	147	0	A217-A222	B121-B122	
C_{56}	14	65			0.33	154	0	A223-A228	B123-B124	
C_{56}	14	66			0.33	158	0	A229-A234	B125-B126	
C_{56}	14	67			0.33	162	0	A235-A240	B127-B128	
C_{56}	14	68			1.20	143	0	A241-A246	B129-B130	
C_{56}	14	69			1.20	147	0	A247-A252	B131-B132	
C_{56}	14	70			1.20	154	0	A253-A258	B133-B134	
C_{56}	14	71			1.20	158	0	A259-A264	B135-B136	
C_{56}	14	72			1.20	162	0	A265-A270	B137-B138	
C_{56}	14	73			2.20	143	0	A271-A276	B139-B140	
C_{56}	14	74			2.20	147	0	A277-A282	B141-B142	
C_{56}	14	75			2.20	154	0	A283-A288	B143-B144	
C_{56}	14	76			2.20	158	0	A289-A294	B145-B146	
C_{56}	14	77			2.20	162	0	A295-A300	B147-B148	
C_{60}	15	81			0.33	154	0	A301-A306	B149-B150	Configuration C_{56} with umbilical ramp 1
C_{60}	15	78			2.20	154	0	A307-A312	B151-B152	
C_{61}	16	80			0.33	154	0	A313-A318	B153-B154	Configuration C_{56} with umbilical ramp 2
C_{61}	16	70			2.20	154	0	A319-A324	B155-B156	

Table 3. H-11 Test Run Summary, AEDC Hypersonic Tunnel (Mach Number 10) (Cont.)

Configuration		Group			Re/ft $\times 10^{-6}$	α Deg	ψ Deg	Plotted Data Page	Tabulated Data Page	Remarks
NAA	AEDC	A	B	C						
C_{57}	17		83		0.33	143	0	A325-A330	B157-B158	Configuration C_{55} with differential ablative peot. oxidizer dump came off
C_{57}	17	9	84		1.20	143	0	A331-A336	B159-B160	Blockage at low Reynolds number
C_{57}	17		85		1.20	147	0	A337-A342	B161-B162	
C_{57}	17		86		1.20	147	-5	A343-A348	B163-B164	
C_{57}	17		87		1.20	147	+5	A349-A354	B165-B166	
C_{57}	17		88		1.20	154	0	A355-A360	B167-B168	
C_{57}	17		89		1.20	154	-5	A361-A366	B169-B170	
C_{57}	17		90		1.20	154	+5	A367-A372	B171-B172	
C_{57}	17		91		1.20	158	0	A373-A378	B173-B174	
C_{57}	17		92		1.20	162	0	A379-A384	B175-B176	
C_{57}	17		93		2.20	143	0	A385-A390	B177-B178	
C_{57}	17		94		2.20	147	0	A391-A396	B179-B180	
C_{57}	17		95		2.20	147	-5	A397-A402	B181-B182	
C_{57}	17		96		2.20	147	+5	A403-A408	B183-B184	
C_{57}	17		97		2.20	154	0	A409-A414	B185-B186	
C_{57}	17		98		2.20	154	-5	A415-A420	B187-B188	
C_{57}	17		99		2.20	154	+5	A421-A426	B189-B190	
C_{57}	17		100		2.20	158	0	A427-A432	B191-B192	
C_{57}	17		101		2.20	162	0	A433-A438	B193-B194	
C_2	10	138	143	152	0.35	143	0	A439-A447	B195-B200	Command module without holes or protuberances
C_2	10	139	144	153	0.35	147	0	A448-A456	B201-B206	
C_2	10		145		0.35	147	-5	A457-A462	B207-B208	Blockage at low Reynolds number

Table 3. H-11 Test Run Summary, AEDC Hypersonic Tunnel (Mach Number 10) (Cont.)

Configuration		Group			Re/ft x 10^{-6}	α Deg	ψ Deg	Plotted Data Page	Tabulated Data Page	Remarks
NAA	AEDC	A	B	C						
C_2	10		146		0.35	147	+5	A463-A468	B209-B210	
C_2	10	140	147	154	0.35	154	0	A469-A477	B211-B216	
C_2	10		148		0.35	154	-5	A478-A483	B217-B218	
C_2	10		149		0.35	154	+5	A484-A489	B219-B220	
C_2	10	141	150	155	0.35	158	0	A490-A498	B221-B226	
C_2	10	142	151	156	0.35	162	0	A499-A507	B227-B232	
C_2	10	128	133	123	1.20	143	0	A508-A516	B233-B238	
C_2	10	129	134	124	1.20	147	0	A517-A525	B239-B244	
C_2	10	130	135	125	1.20	154	0	A526-A534	B245-B250	
C_2	10	131	136	126	1.20	158	0	A535-A543	B251-B256	
C_2	10	132	137	127	1.20	162	0	A544-A552	B257-B262	
C_2	10	107	109	118	2.20	143	0	A553-A561	B263-B268	
C_2	10	108	110	119	2.20	147	0	A562-A570	B269-B274	
C_2	10		111		2.20	147	-5	A571-A576	B275-B276	
C_2	10		112		2.20	147	+5	A577-A582	B277-B278	
C_2	10	104	113	120	2.20	154	0	A583-A591	B279-B284	
C_2	10		114		2.20	154	-5	A592-A597	B285-B286	
C_2	10		115		2.20	154	+5	A598-A603	B287-B288	
C_2	10	105	116	121	2.20	158	0	A604-A612	B289-B294	
C_2	10	106	117	122	2.20	162	0	A613-A621	B295-B300	
C_2	10	159			0.38	177	0	A622-A627	B301-B302	
C_2	10	158			0.38	180	0	A628-A633	B303-B304	
C_2	10	171			0.80	177	0	A634-A639	B305-B306	
C_2	10	170			0.80	180	0	A640-A645	B307-B308	
C_2	10	168			1.20	177	0	A646-A651	B309-B310	
C_2	10	167			1.20	180	0	A652-A657	B311-B312	
C_2	10	165			1.73	177	0	A658-A663	B313-B314	

Table 3. H-11 Test Run Summary, AEDC Hypersonic Tunnel (Mach Number 10) (Cont.)

Configuration		Group			Re/ft x 10^{-6}	α Deg	ψ Deg	Plotted Data Page	Tabulated Data Page	Remarks
NAA	AEDC	A	B	C						
C_2	10	166			1.73	180	0	A664-A669	B315-B316	
C_2	10	162			2.20	177	0	A670-A675	B317-B318	
C_2	10	161			2.20	180	0	A676-A681	B319-B320	

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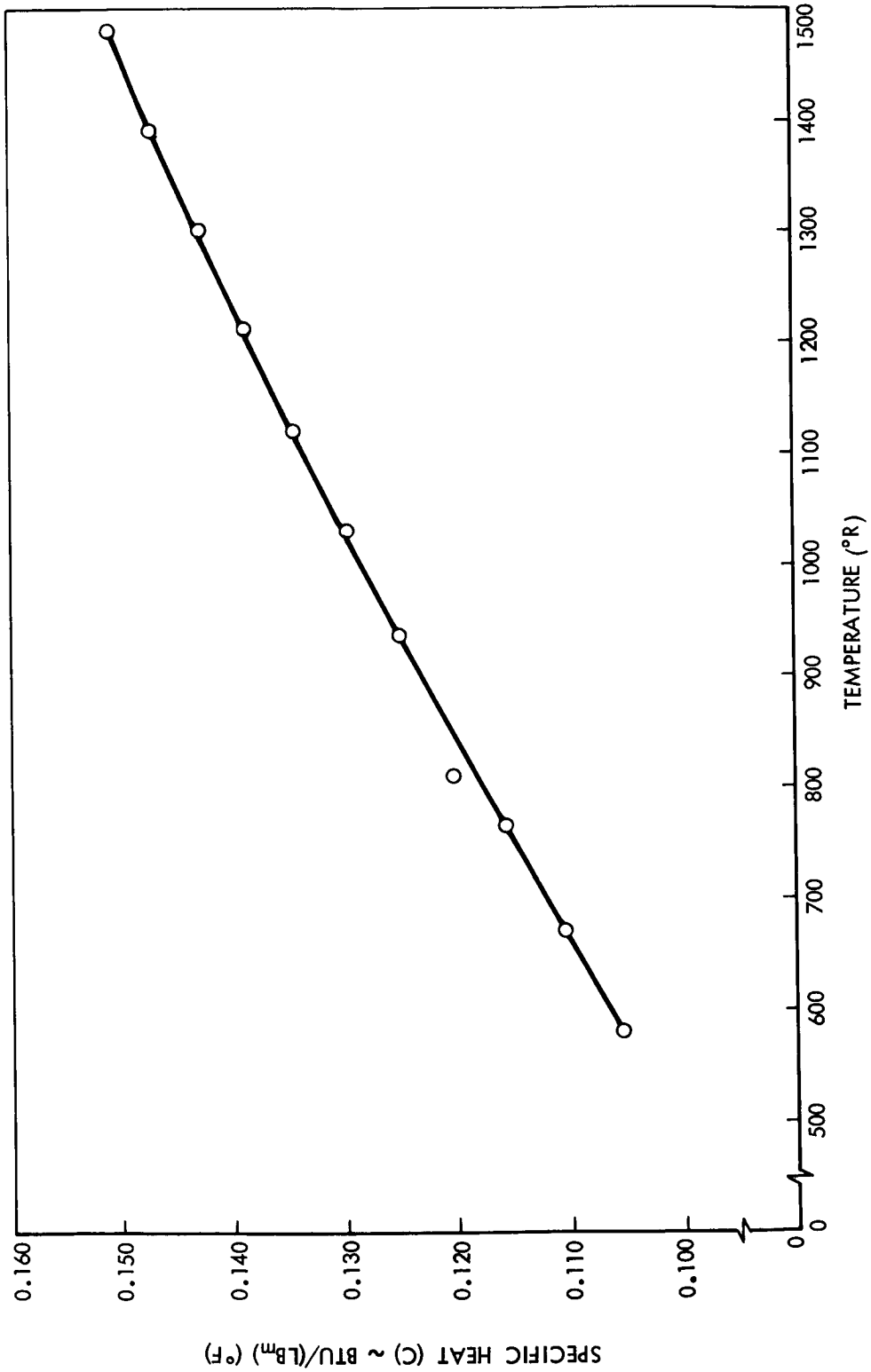

Figure 25. Specific Heat of 310 Stainless Steel

A Beckman 210 data acquisition system was used to record the temperature-time data for each run on magnetic tape. This magnetic tape was then programmed into an IBM 7070 digital computer that reduced the temperature-time data into heat transfer parameters. These values, along with the tunnel operating parameters, were printed on both magnetic tape and tabulated data sheets. The magnetic tapes containing the reduced data were then programmed into an IBM 7070 digital computer for conversion to a machine plotting format. A block diagram of the data reduction system is shown in Figure 26.

DATA ACCURACY

The wind tunnel test conditions and data reduction system have a combined accuracy of ±2.5 percent. The maximum possible error obtainable from model parameters (machine tolerances, skin thickness, material specific heat, and density) is ±3.75 percent.

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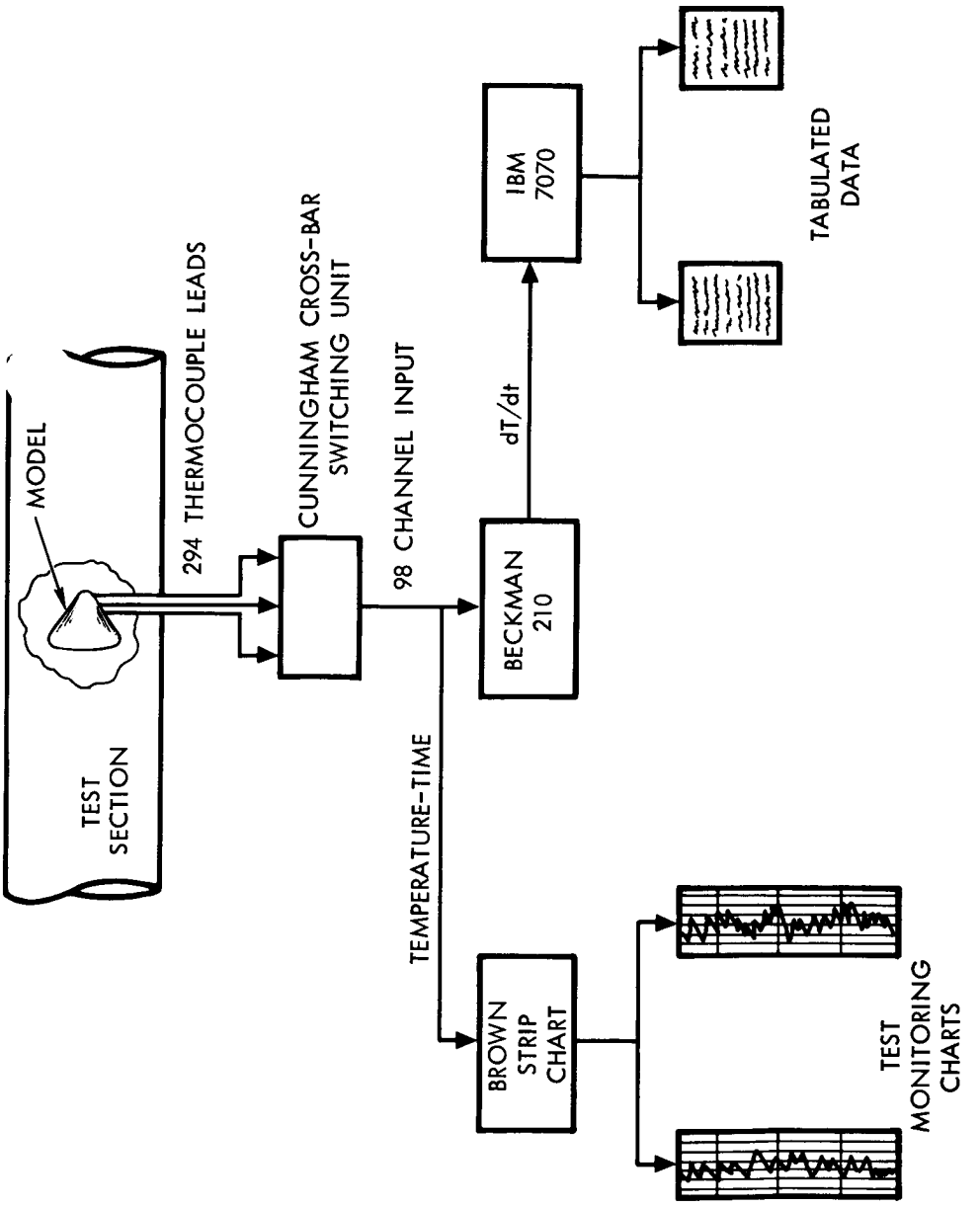

Figure 26. Data Reduction System

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RESULTS AND DISCUSSION

RESULTS

The results of the tests are presented as machine-plotted data in Appendix A and as tabulated data in Appendix B. The data are organized according to configuration, Reynolds number, angle of attack, and angle of yaw. Individual groups of data can be located from the test run summary in Table 3. Also, to simplify location of specific data, data indexes follow the data in both of the appendixes.

The heat transfer data in Appendix A are plots of heat transfer rate $\dot{q}$, heat transfer coefficient h, and heat transfer rate ratio $\dot{q}/\dot{q}_{omeas}$ (where $\dot{q}_{omeas}$ is the stagnation point heat transfer rate obtained on the command module at α = 180 degrees) versus s/r and s*/r. These three parameters are plotted for thermcouples located at angles of θc over the entry face and afterbody, and τ angles over the entry face.

Tabulated data presented in Appendix B includes test run conditions, basic heat transfer parameters, and the ratios; $\dot{q}/\dot{q}_{o(F-R)}$, and $\dot{q}_{on}/\dot{q}_{off}$. The stagnation point heat transfer rate $\dot{q}_{o(F-R)}$ is theoretically calculated for each run condition, using Fay and Reddell's equation (Reference 7):

$$\dot{q}_o = 0.94_g \, (\rho_\omega \mu_\omega)^{0.1} \, (\rho_o \mu_o)^{0.4} \, (H_o - H_\omega) \, (du/dx)_0^{0.5}$$

where

$$(du/dx)_0^2 \; \frac{1}{r} \sqrt{\frac{2 \, (pt_2 - p_1)}{\rho t_2}}$$

The values of $\dot{q}_{on}/\dot{q}_{off}$, the interference effects of protuberances, were obtained by dividing the data obtained over a configuration with a given protuberance by the same data obtained without the protuberance.

DISCUSSION

Heat transfer data obtained from this test were compared with those obtained from H-2 tests (Reference 4) at the same run conditions. This comparison (Figure 27) indicates good repeatability of the data from test to test, regardless of scale.

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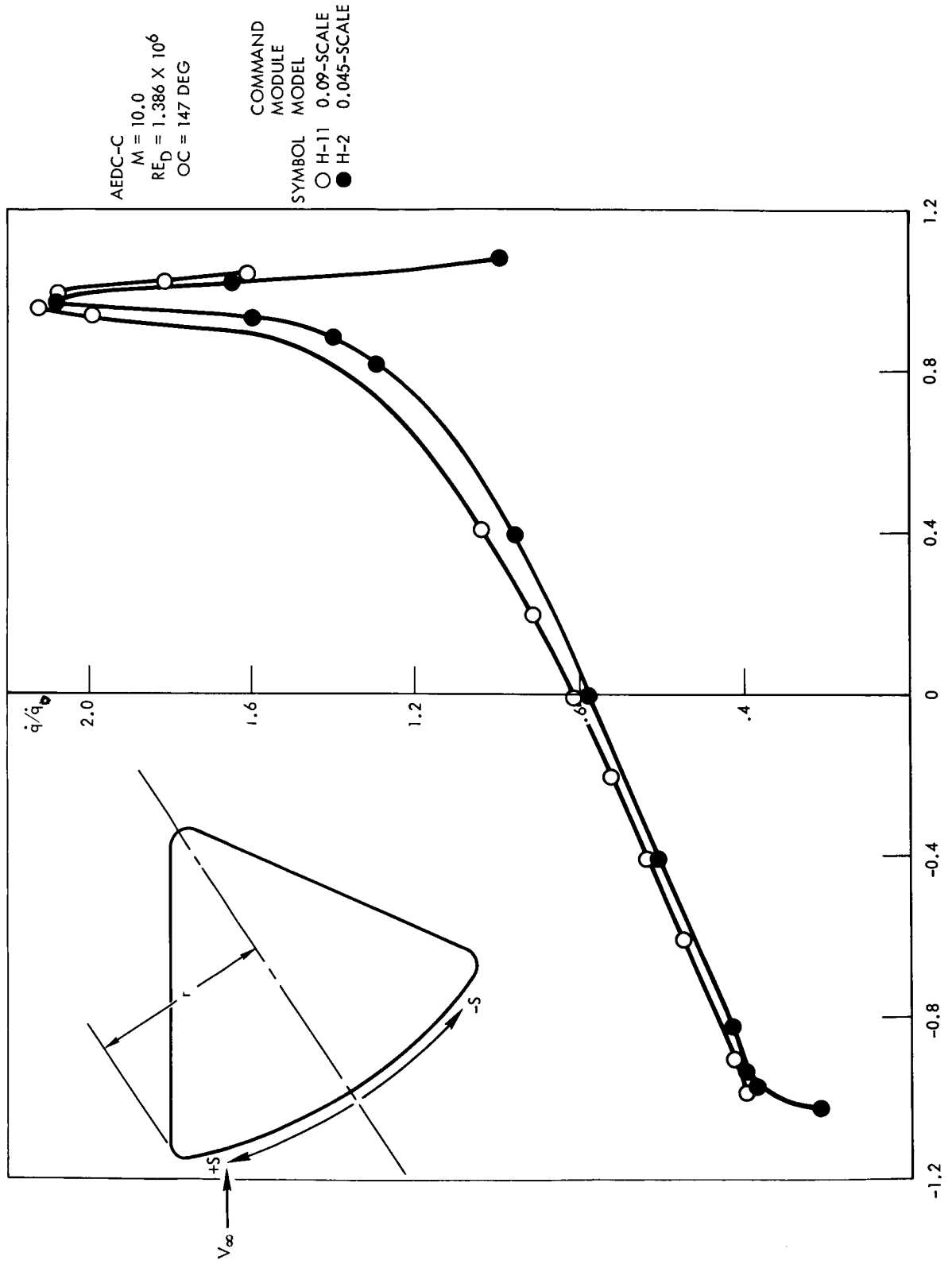

Figure 27. Comparison of Heat Transfer Distributors, Apollo CM Models H-2 and H-11

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During the later part of the test, an unexpected increase in downstream tunnel pressure caused blockage at the low Reynolds number test condition. Therefore, the data obtained over configuration C_2 at the low Reynolds number test condition at angles of attack of 177 and 180 degrees are erroneous. Due to time limitations, no further analysis of the data will be made in this report.

REFERENCES

1. Arnold Center Test Facility Handbook (January 1961)

2. Emerson, D.X., Pretest Report for the Heat Transfer Tests of the 0.090-Scale Apollo Entry Configuration Model H-11 in the AEDC-VKF Hypersonic Tunnel C. NAA/S&ID Report SID 64-1146 (5 June 1964)

3. McClain, C.B., Structural Analysis of the Apollo 0.090-Scale H-11 Heat Transfer Model, NAA/S&ID Report SID 64-816 (30 April 1964)

4. Biss, W.J., Experimental Heat Transfer Distributions Over Launch Configurations and Heat Transfer and Pressure Distributions Over Entry Configurations of 0.045-Scale Apollo Models H-2, HL-1, HL-1B, and PS-3 at Mach Number 10, NAA/S&ID Report SID 64-688 (October 1963)

5. Model Assembly and Installation - Apollo H-11 C/M NAA/S&ID Drawing 7121-01290 (28 January 1964)

6. Model Instrumentation - Apollo H-11 C/M NAA/S&ID Drawing 7121-01294 (28 May 1964)

7. Fay, J.A. and Riddell, F.R., "Theory of Stagnation Point Heat Transfer in Disassociated Air," Journal of Aeronautical Sciences (February 1958)

APPENDIX A

PLOTTED DATA[1] AND DATA INDEX

[1] Pages A-1 through A-681 may be reviewed in the S&ID Technical Information Center.

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

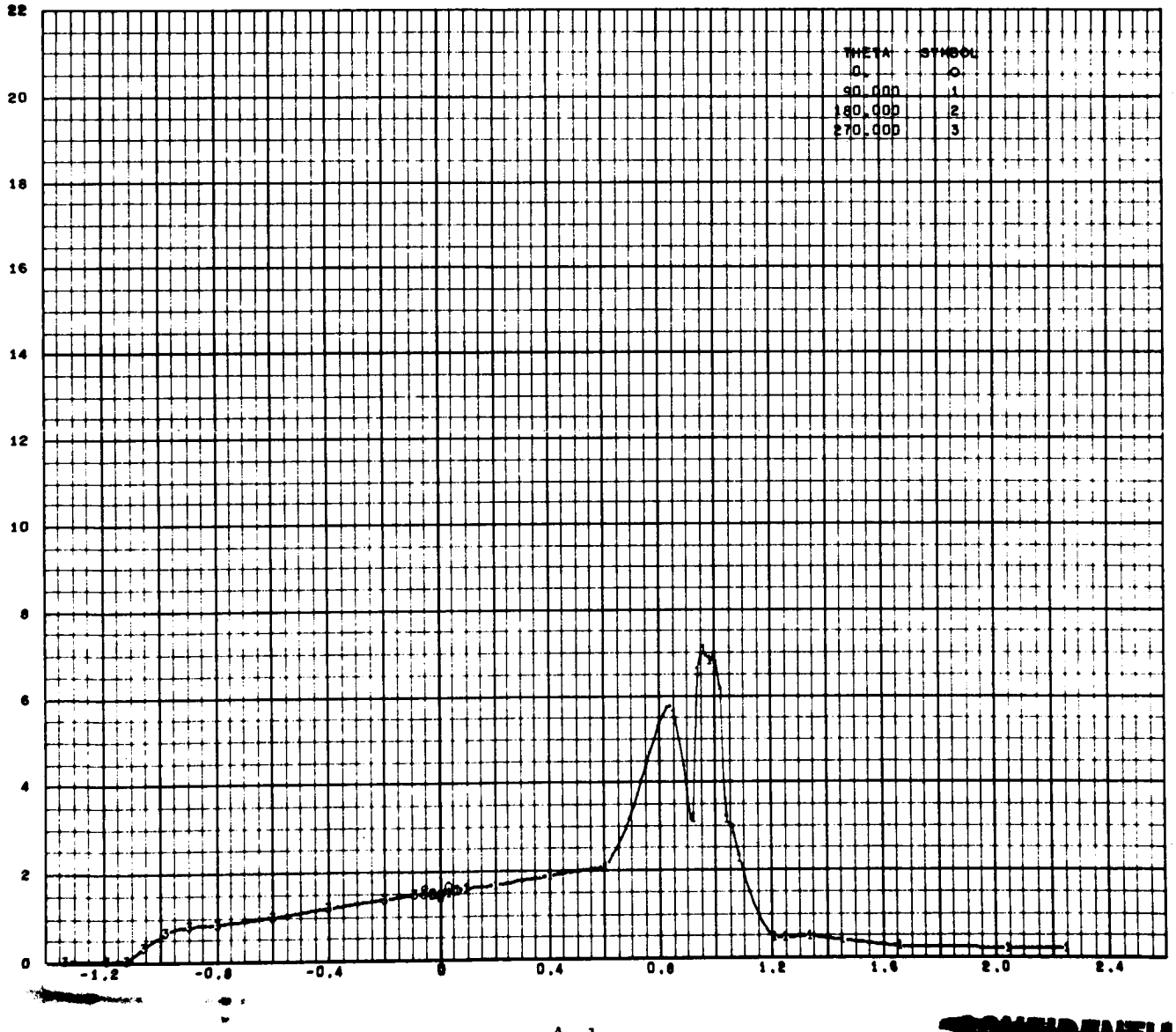
MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 143.39 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 233.00 PSIA
TOTAL TEMPERATURE ---- 1663.50 DEG RANKINE

RE/FT --- 0.3597*10+6
Q(OM) --- 2.0479 BTU/SQ FT SEC

PLOT SERIES NUMBER 1

TEST GROUP	TIME (SEC)
1*	2.90
6	3.00
15	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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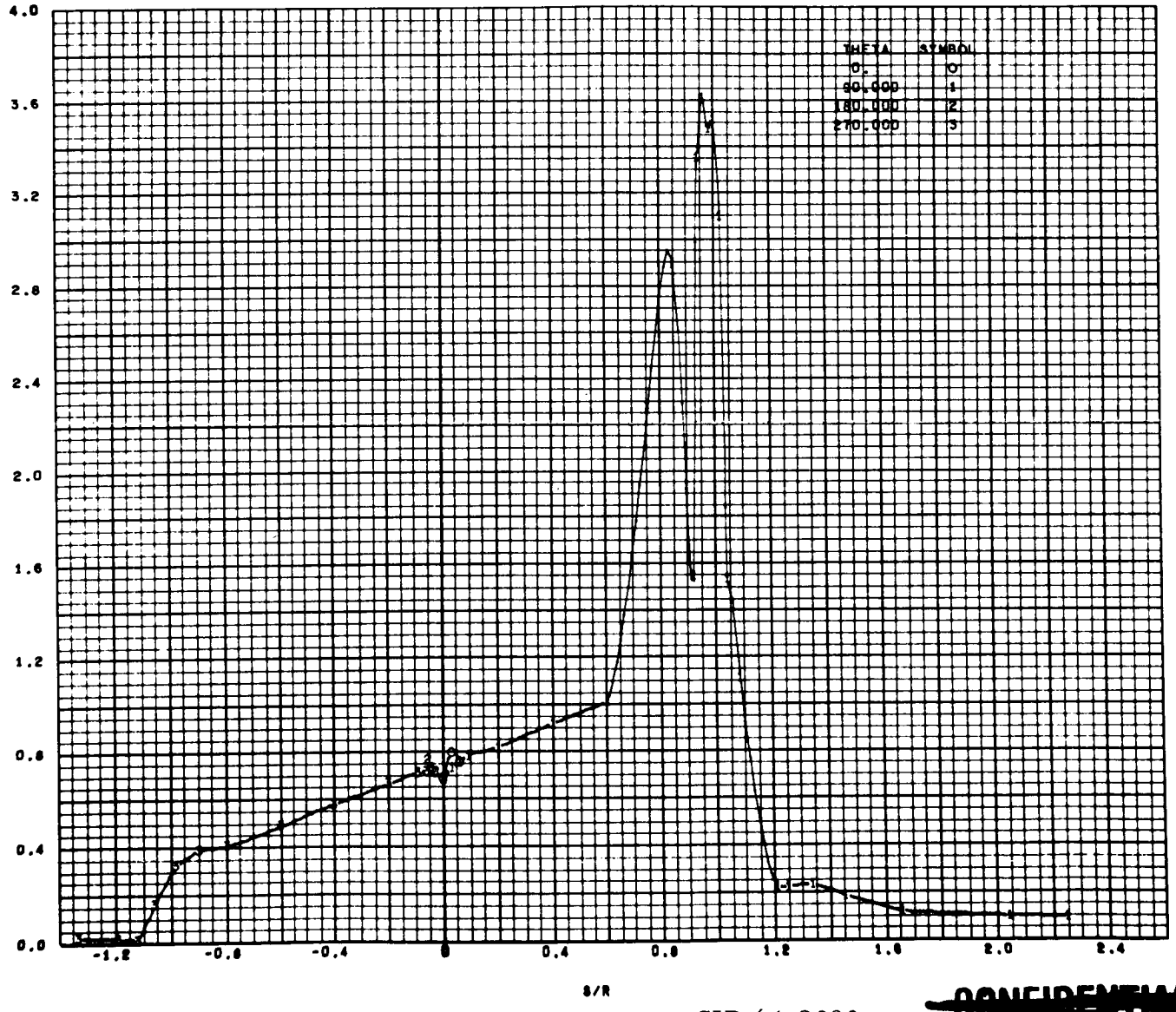
1*	2.90
6	3.00
15	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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1*	2.90
6	3.00
15	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

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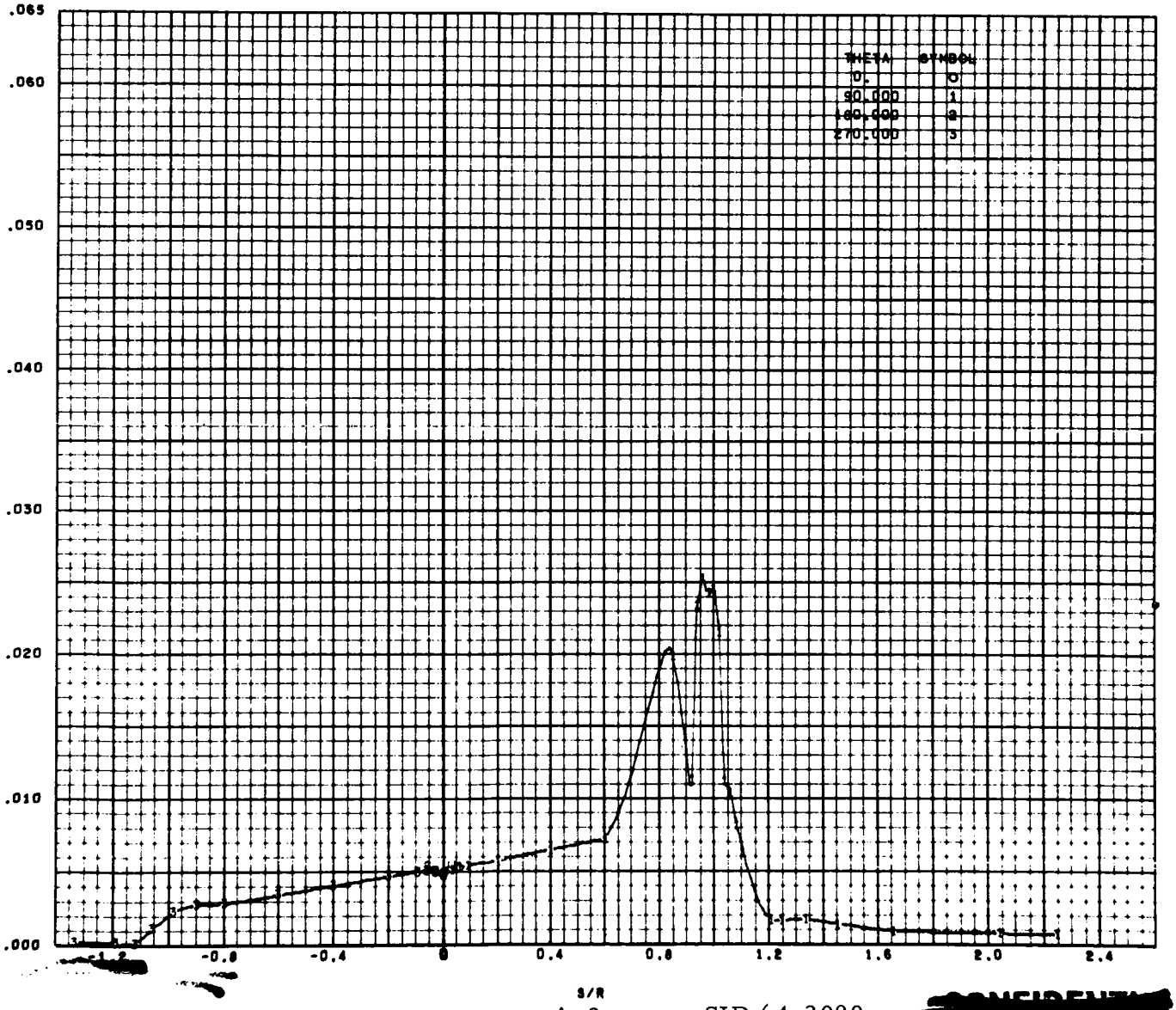

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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15	3.00

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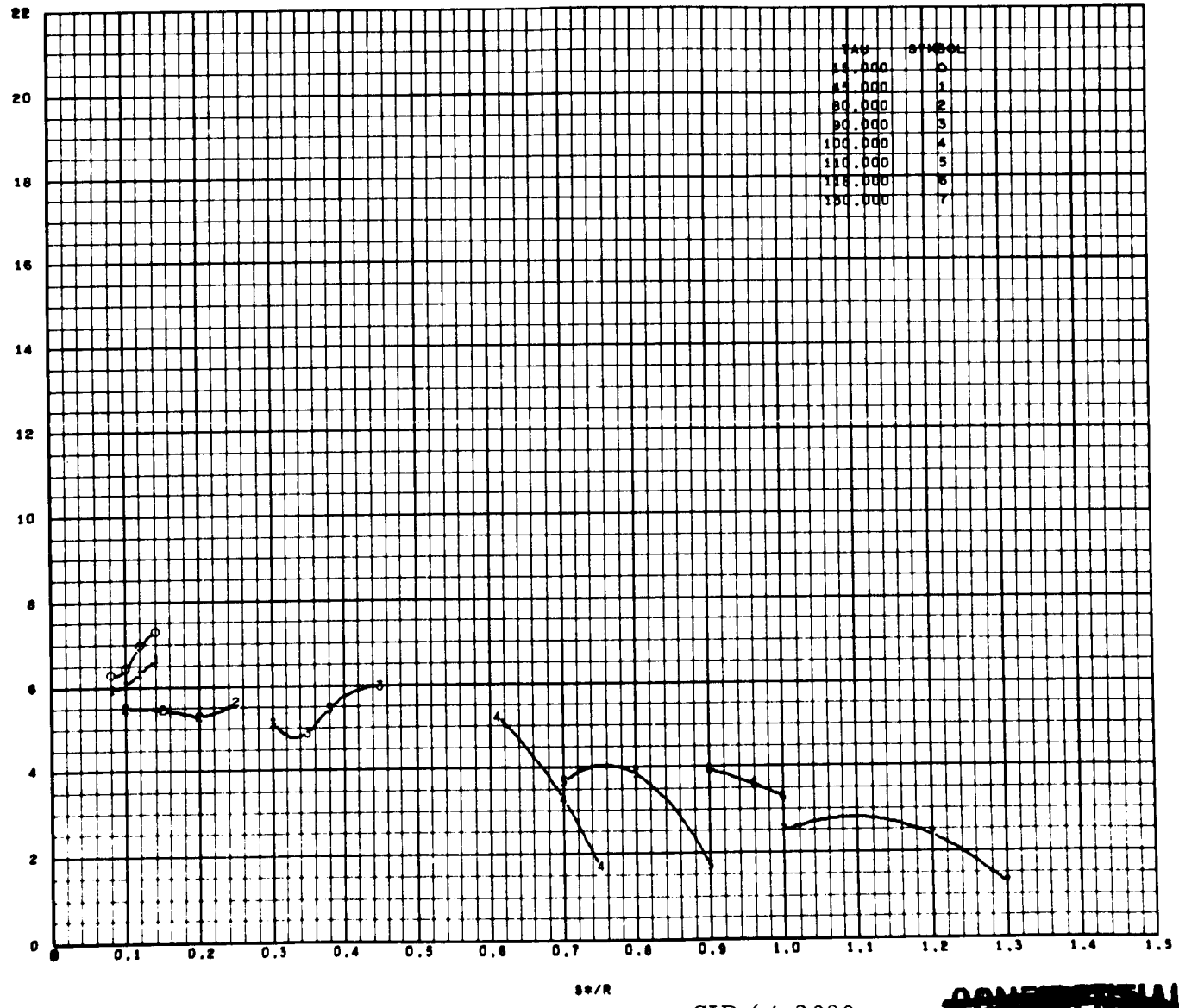

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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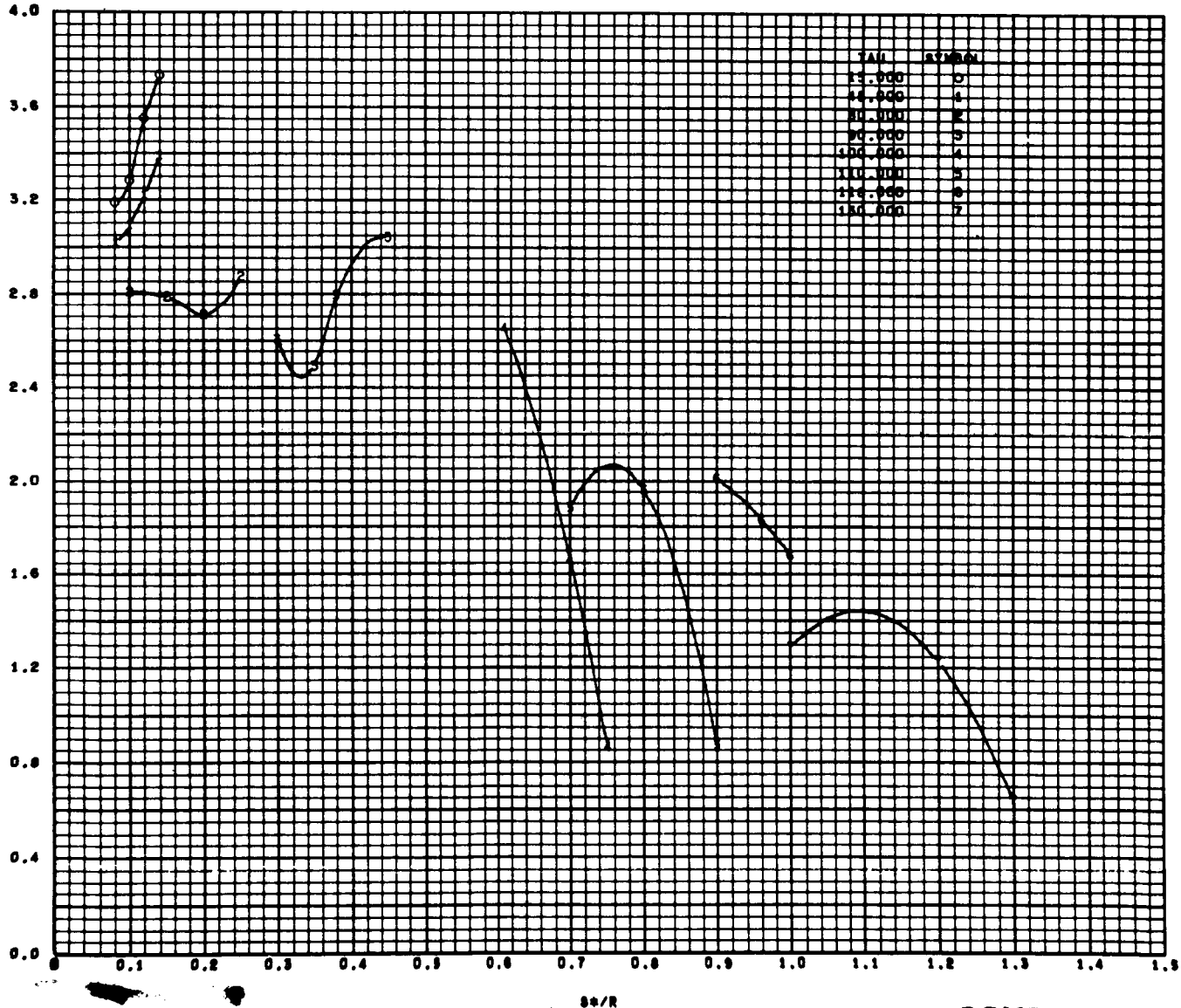

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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15	3.00

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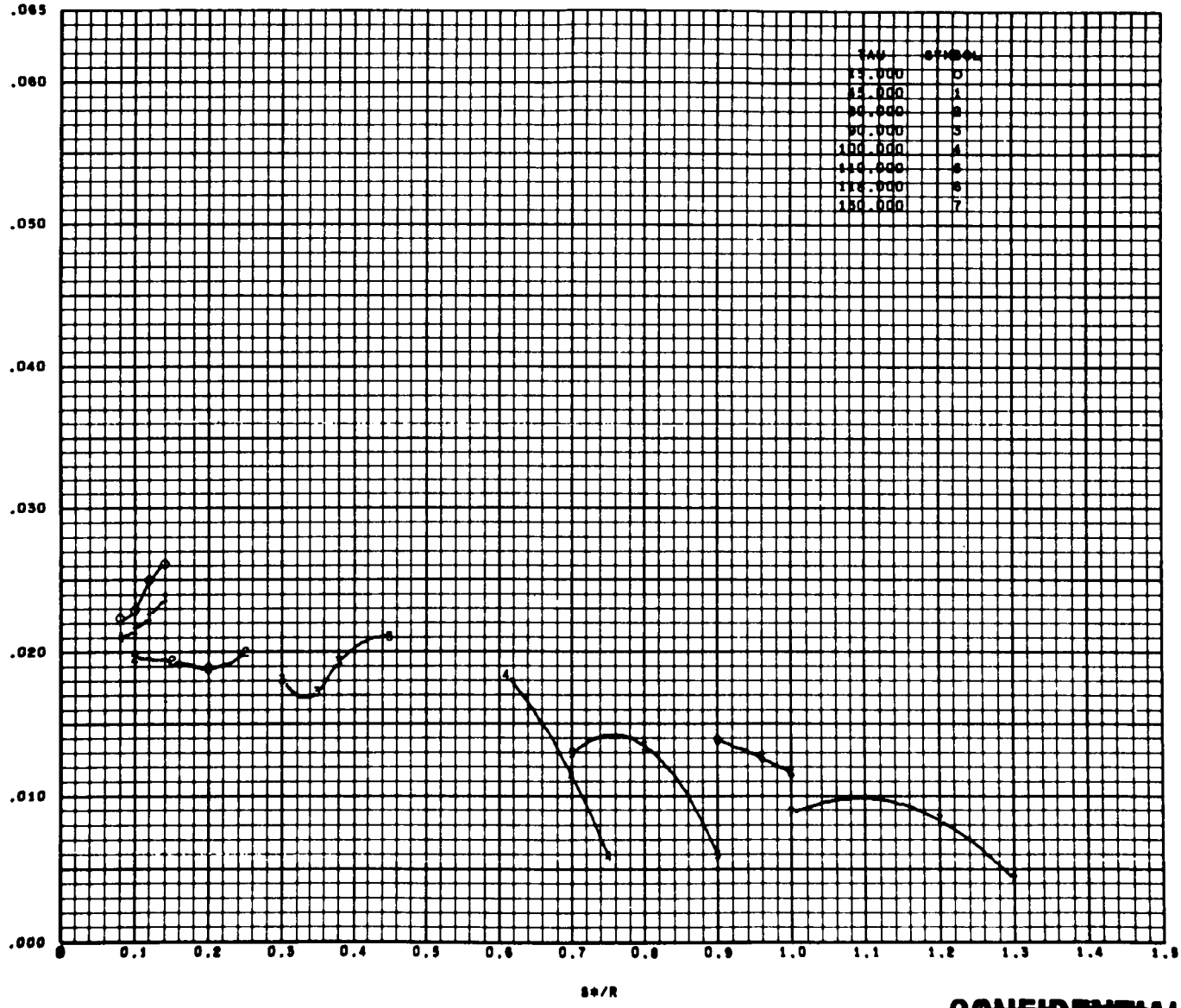

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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15	3.00

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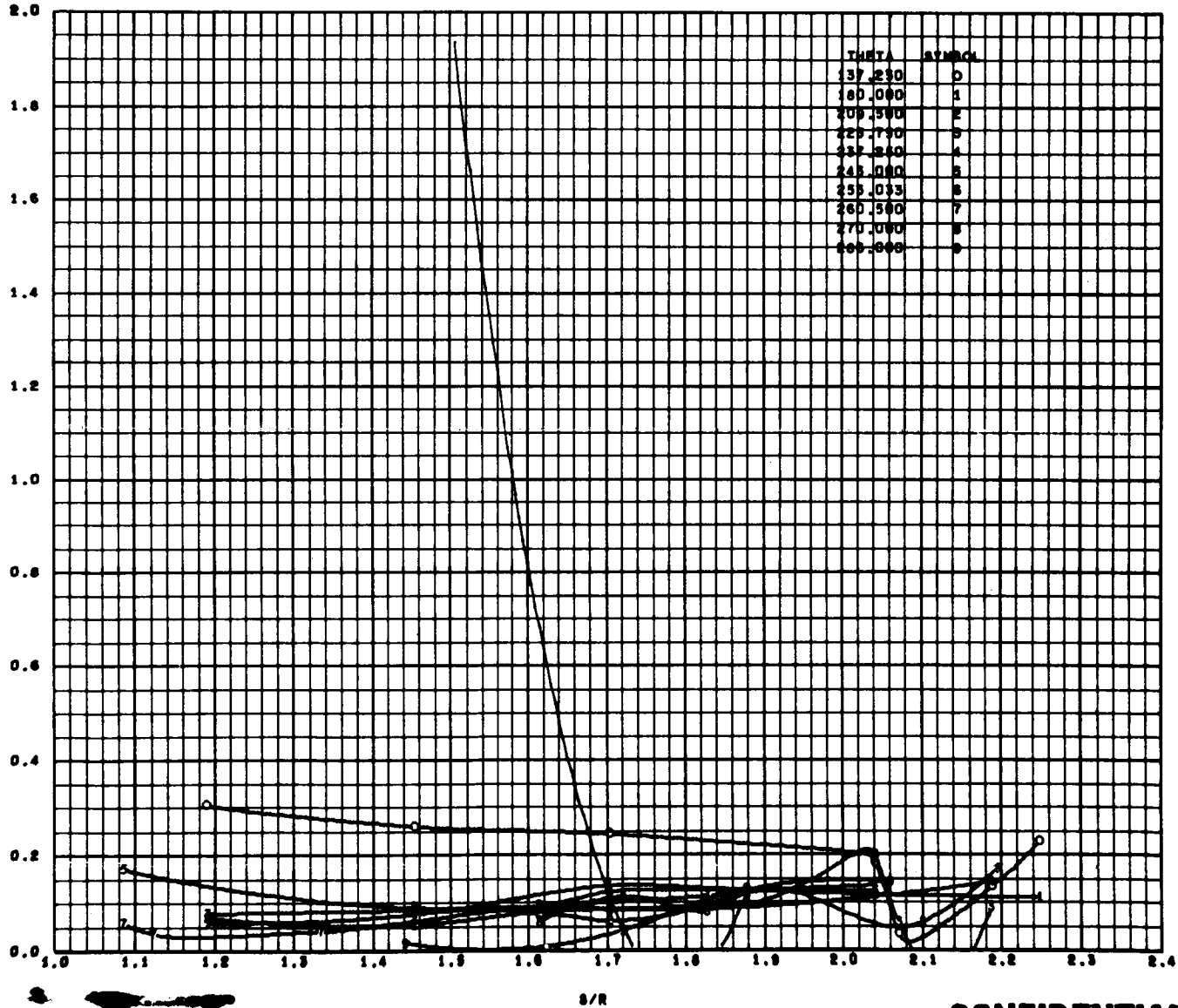

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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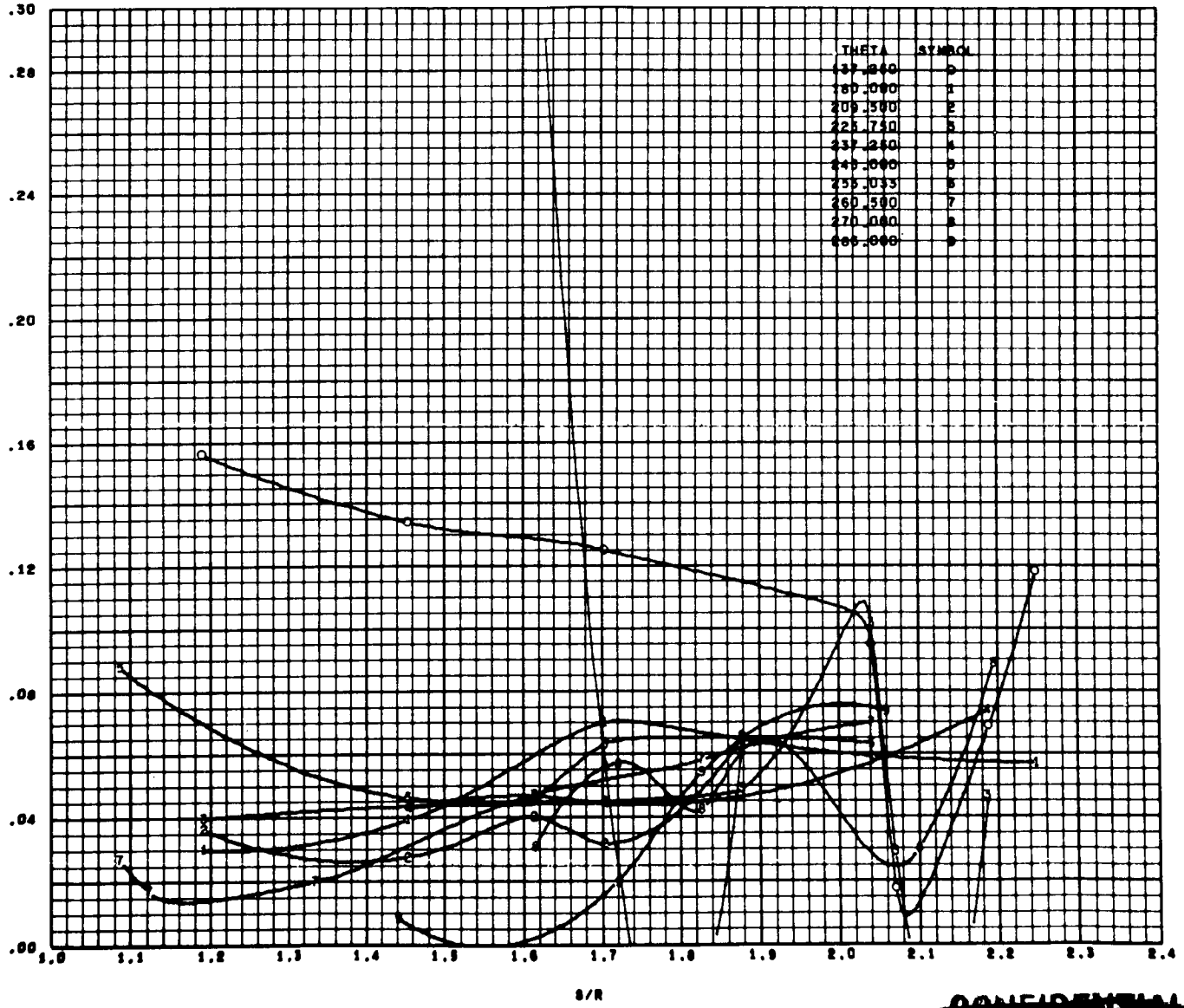

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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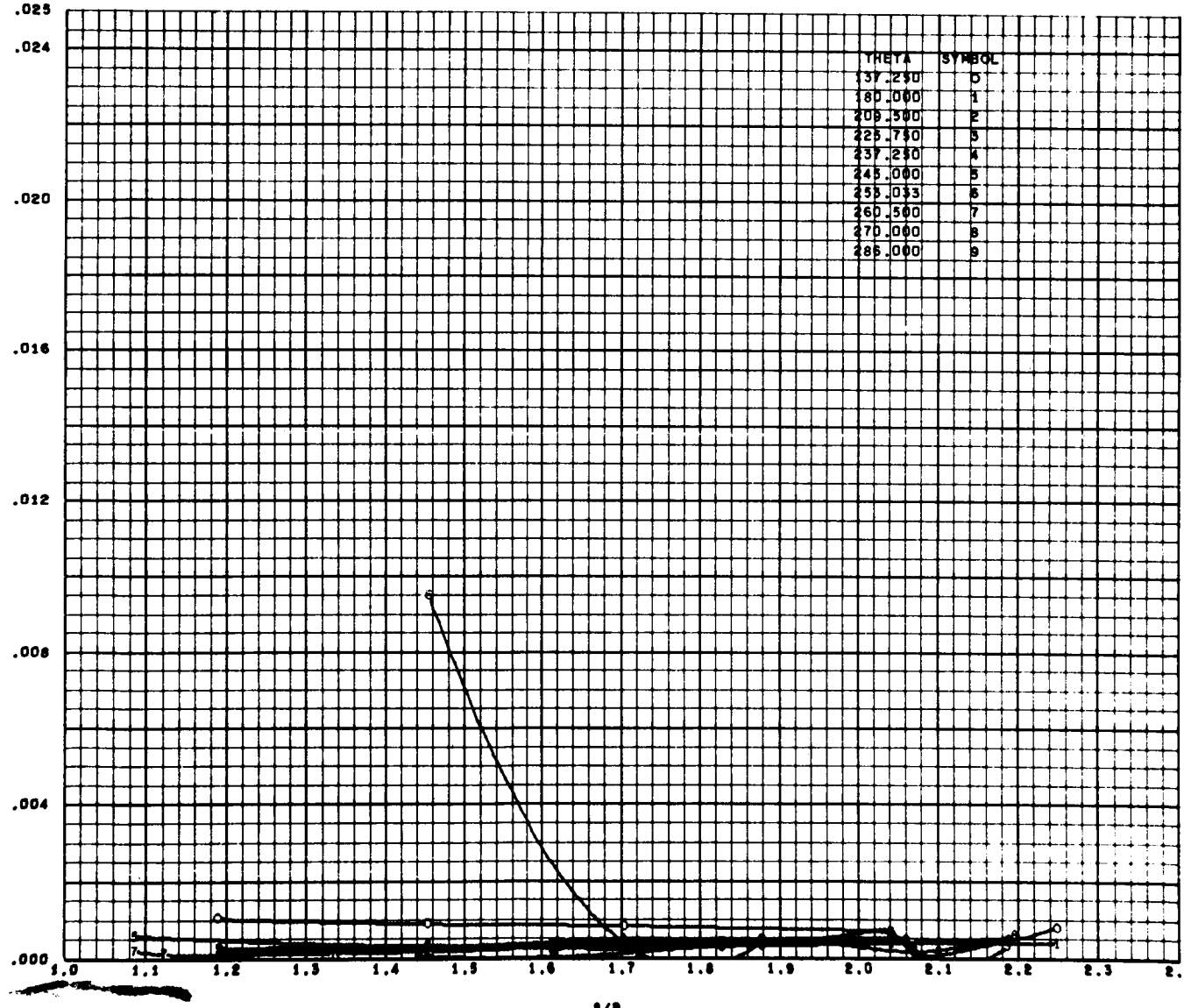

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.40 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 226.40 PSIA
TOTAL TEMPERATURE ---- 1683.30 DEG RANKINE

RE/FT --- 0.3424*10+6
Q(OM) --- 2.0100 BTU/SQ FT SEC

PLOT SERIES NUMBER 2

TEST GROUP	TIME (SEC)
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7	3.00
16	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

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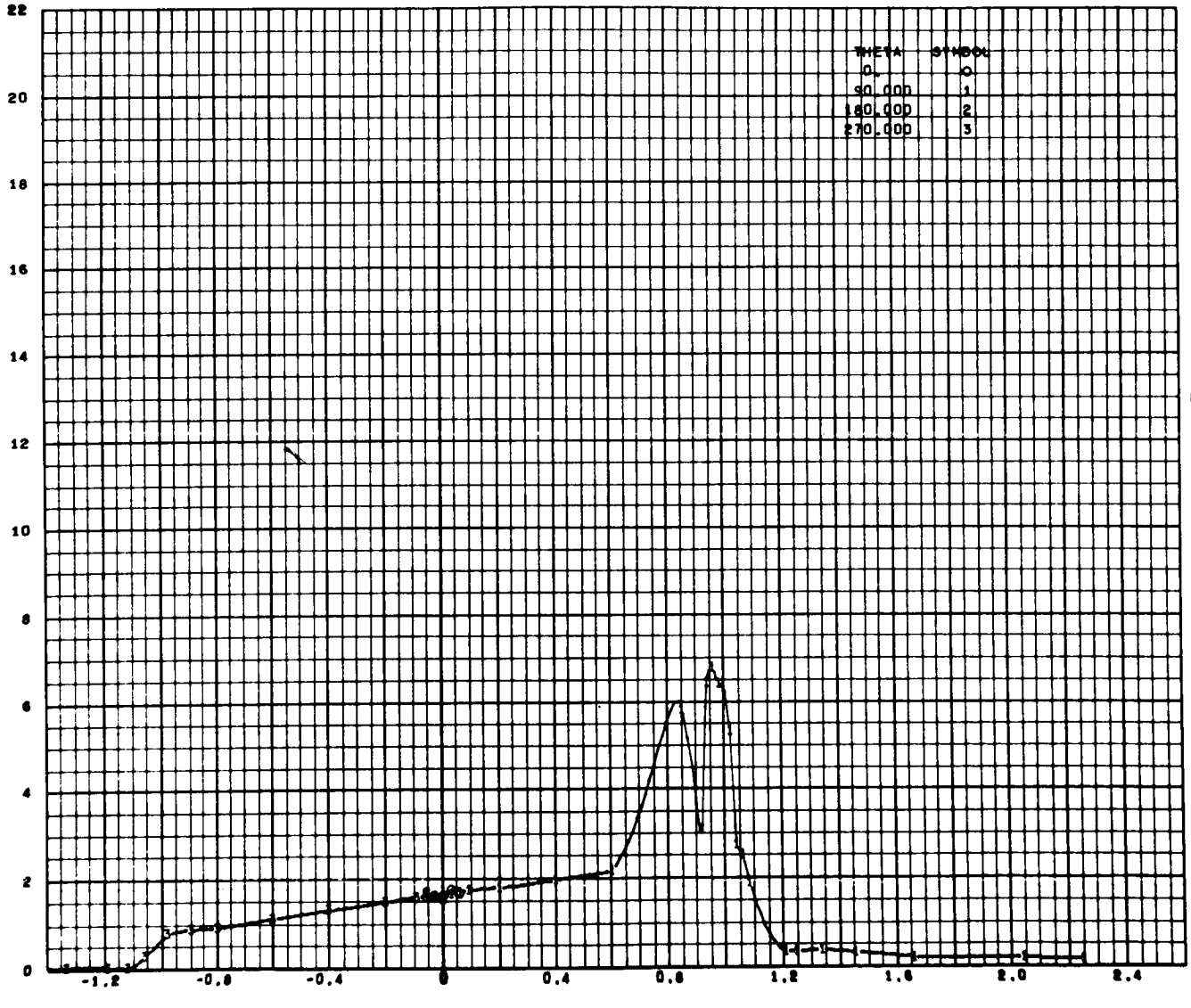

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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RE/FT --- 0.3424*10+6
Q(CM) --- 2.0100 BTU/SQ FT SEC

PLOT SERIES NUMBER 2

TEST GROUP	TIME (SEC)
2*	2.85
7	3.00
16	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

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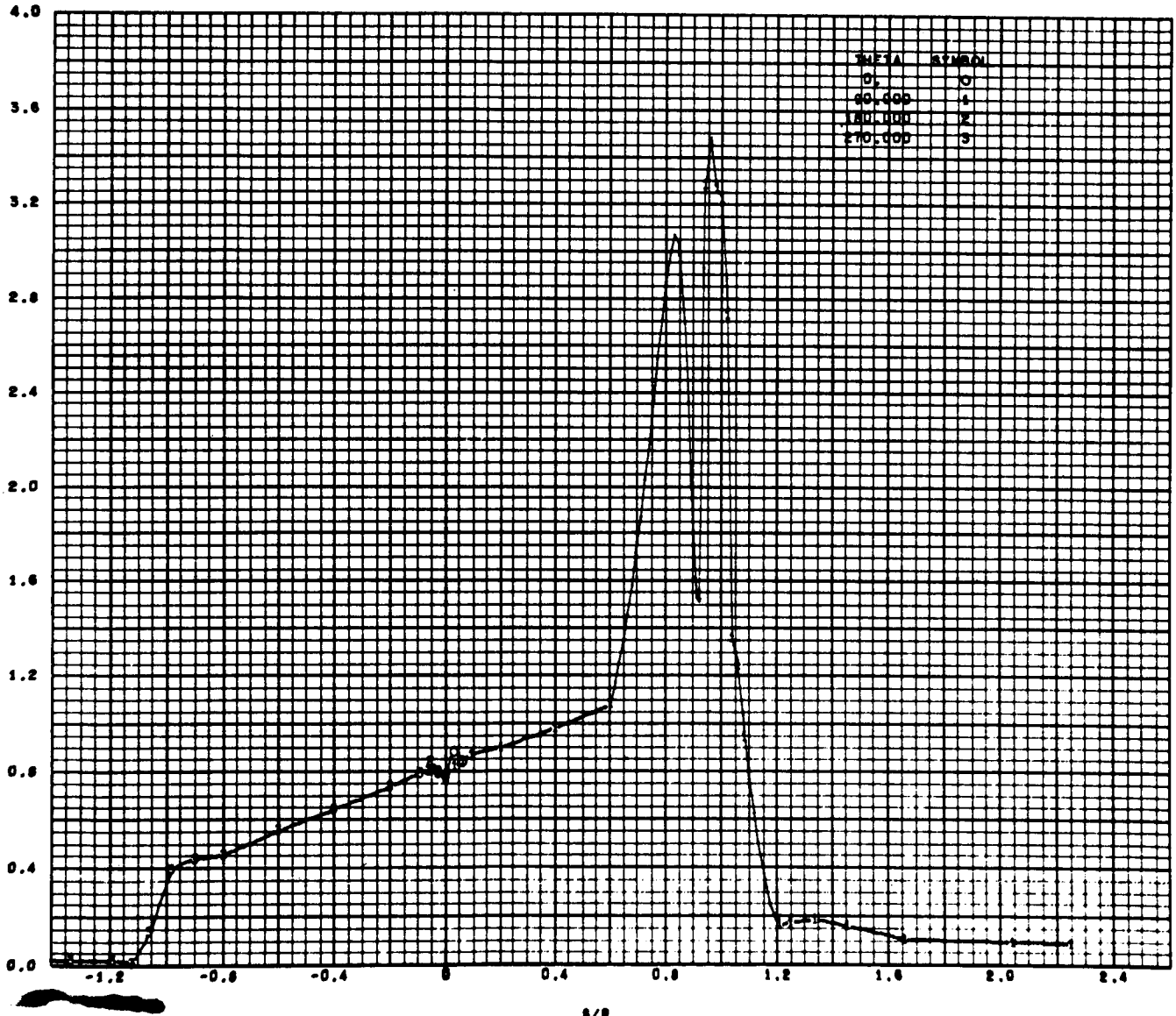

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
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PLOT SERIES NUMBER 2

TEST GROUP	TIME (SEC)
2*	2.85
7	3.00
16	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

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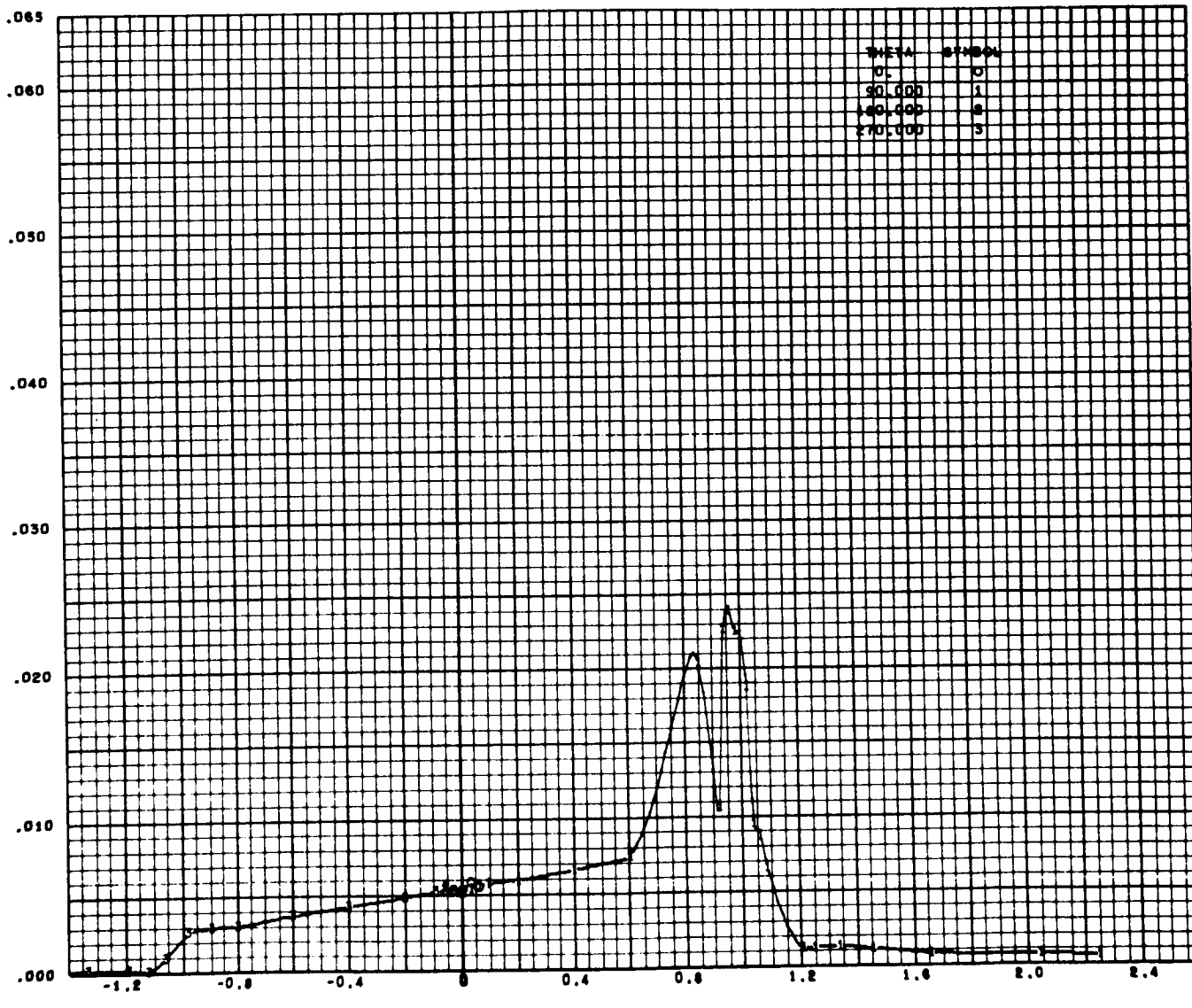

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C5S

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.40 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 226.40 PSIA
TOTAL TEMPERATURE ---- 1683.30 DEG RANKINE

RE/FT --- 0.3424*10+6
Q(OM) --- 2.0100 BTU/SQ FT SEC

PLOT SERIES NUMBER 2

TEST GROUP	TIME (SEC)
2*	2.85
7	3.00
16	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

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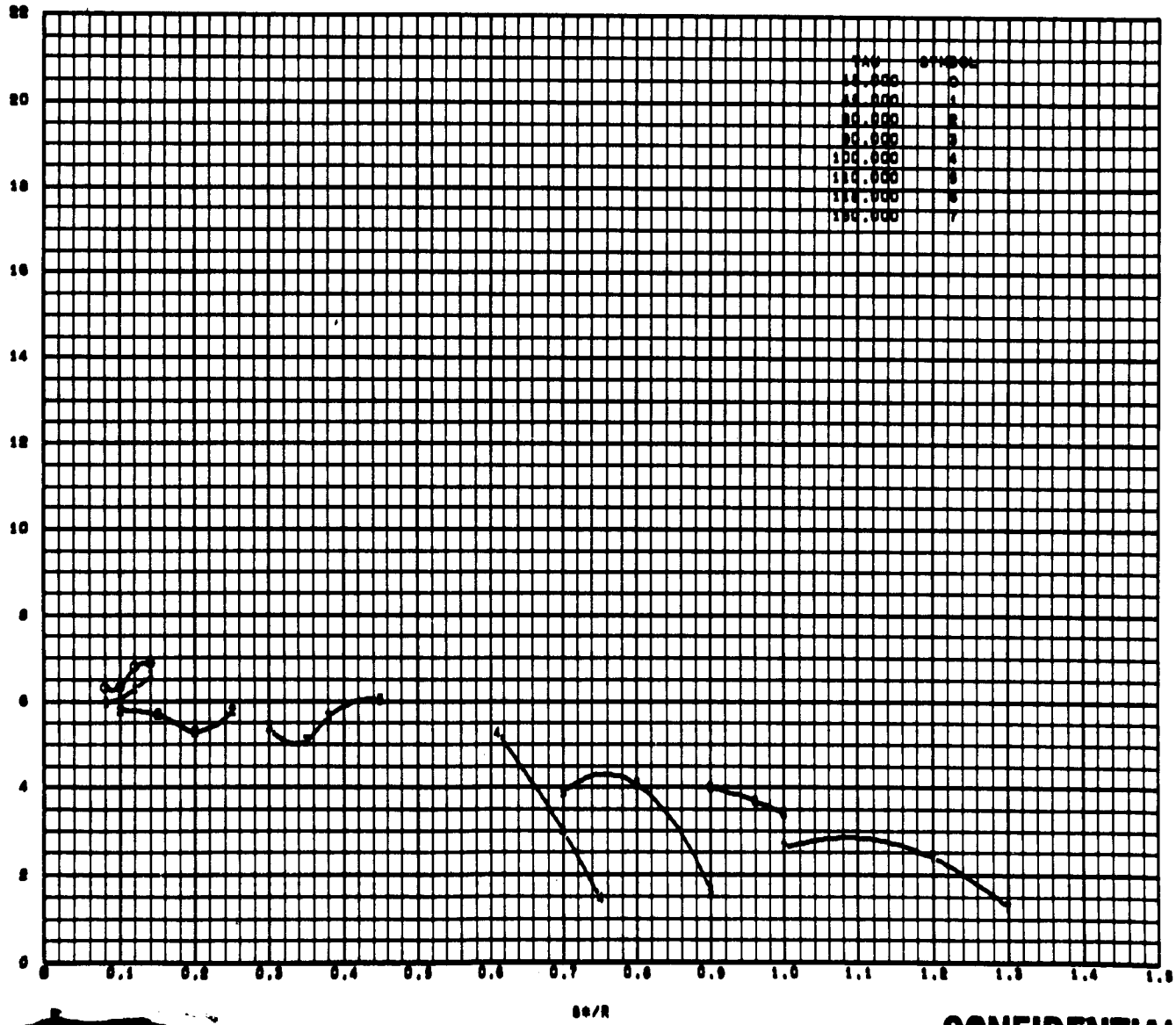

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.40 DEG
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RE/FT --- 0.3424*10+6
Q(OM) --- 2.0100 BTU/SQ FT SEC

PLOT SERIES NUMBER 2

TEST GROUP	TIME (SEC)
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7	3.00
16	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

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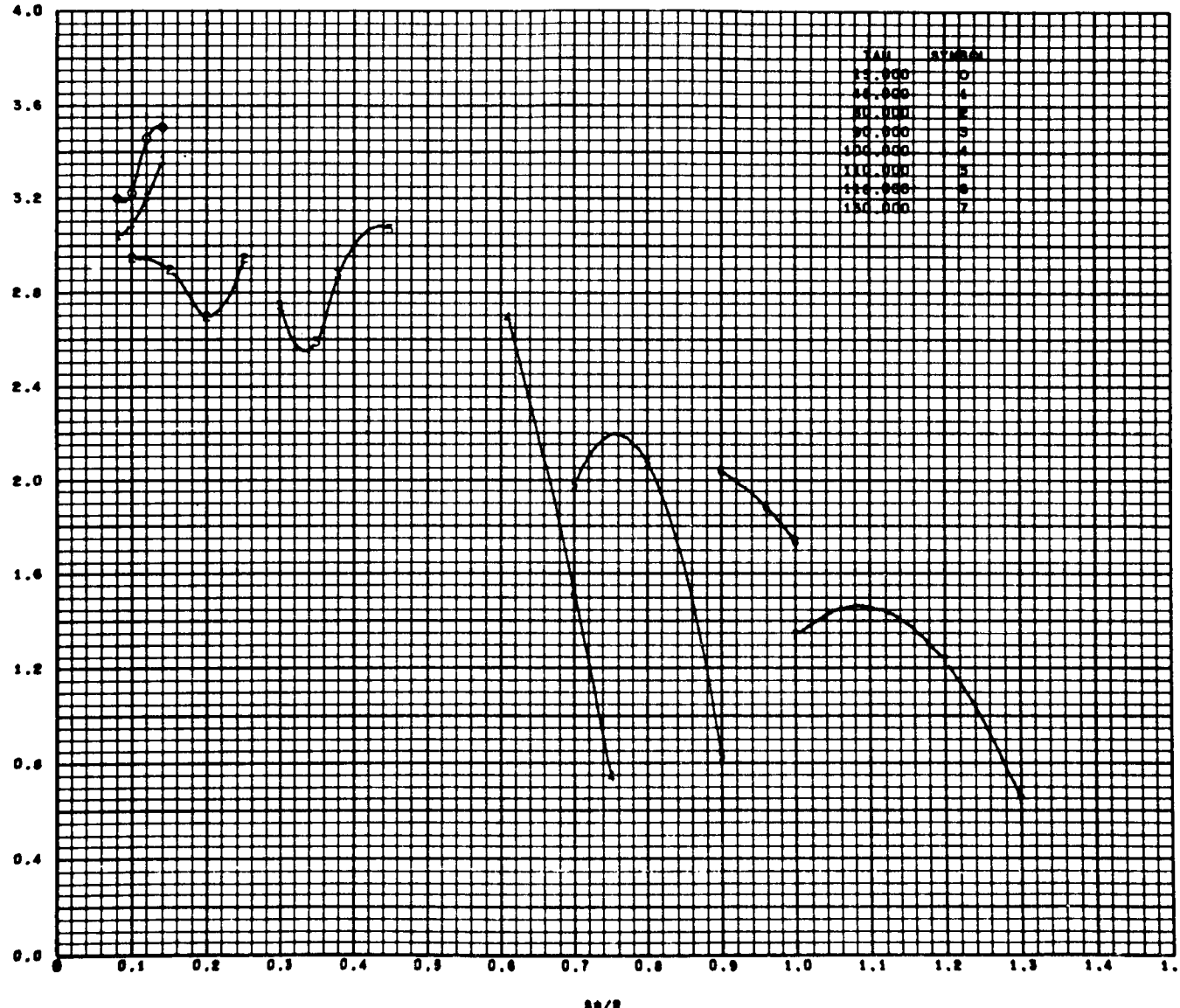

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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TEST GROUP	TIME (SEC)
2*	2.85
7	3.00
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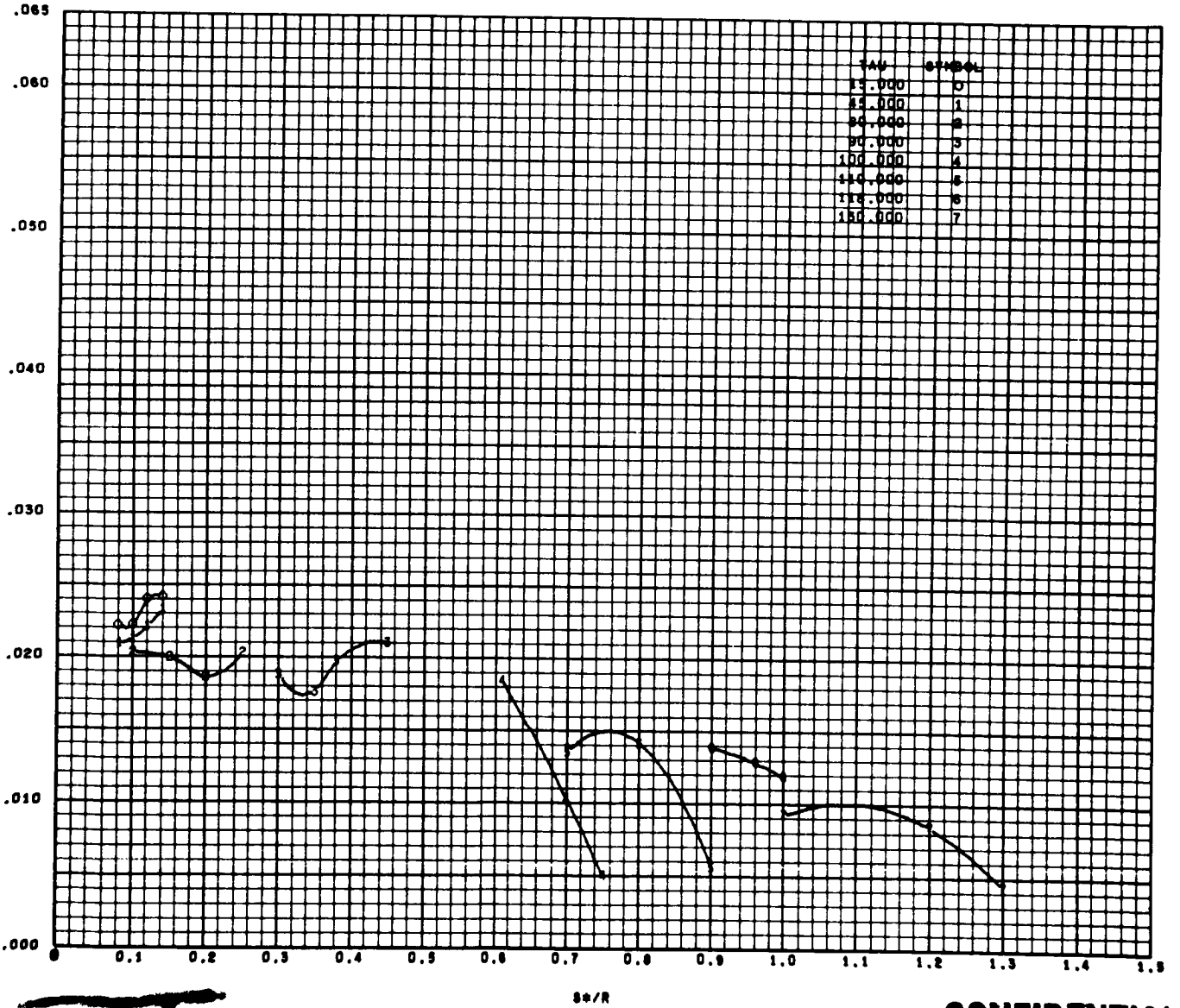
017 000



HEAT TRANSFER | CONFIGURATION C55 | PLOT SERIES NUMBER 2 | 3937-08 012 000

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.04
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ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 226.40 PSIA
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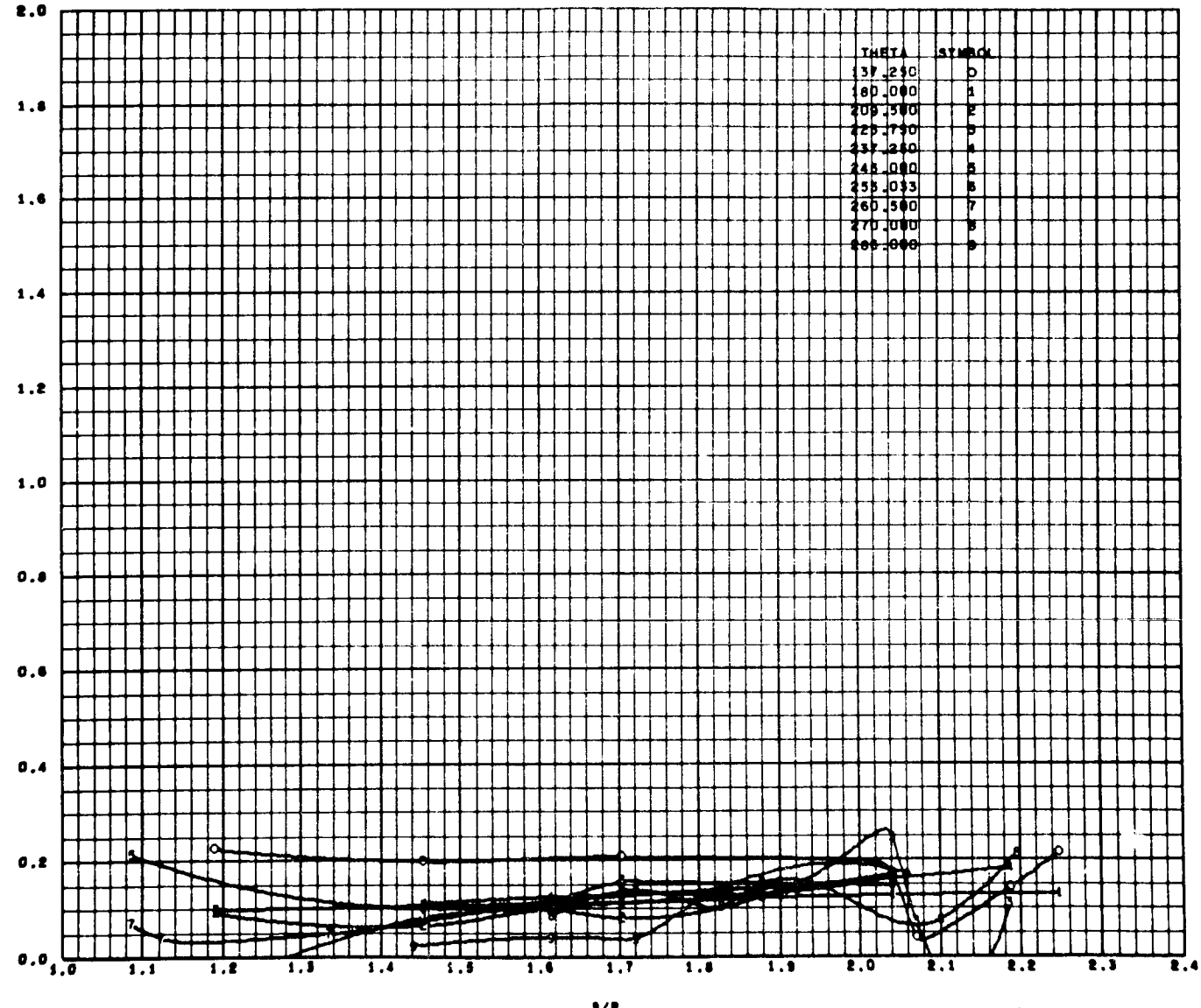
RE/FT --- 0.3424*10+6
Q(OM) --- 2.0100 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
2*	2.85
7	3.00
16	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
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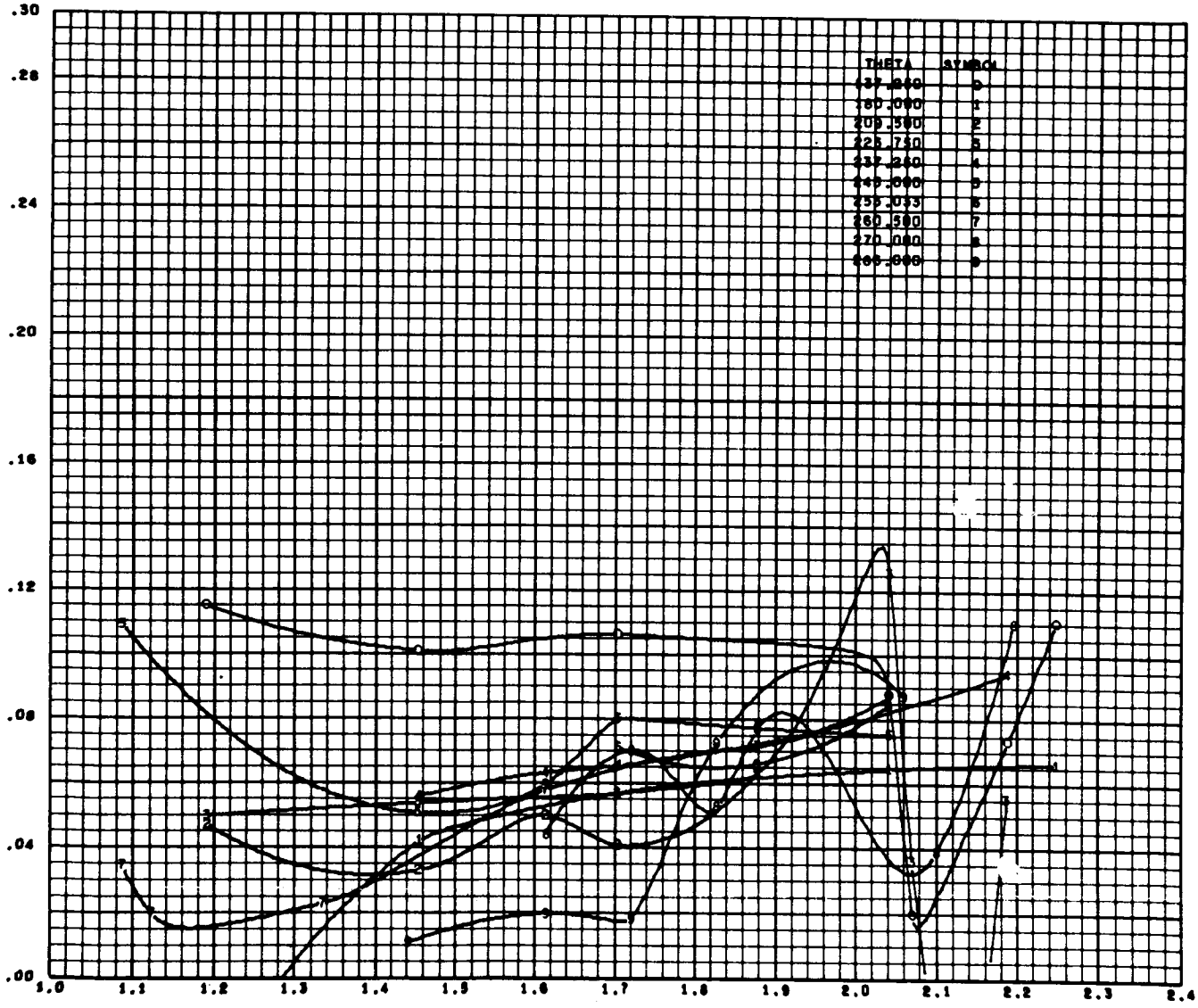
Q(OM) --- 2.0100 BTU/SQ FT SEC

PLOT SERIES NUMBER 2

TEST GROUP	TIME (SEC)
2*	2.85
7	3.00
16	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
015 000



S/R

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.40 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 226.40 PSIA
TOTAL TEMPERATURE ---- 1683.30 DEG RANKINE

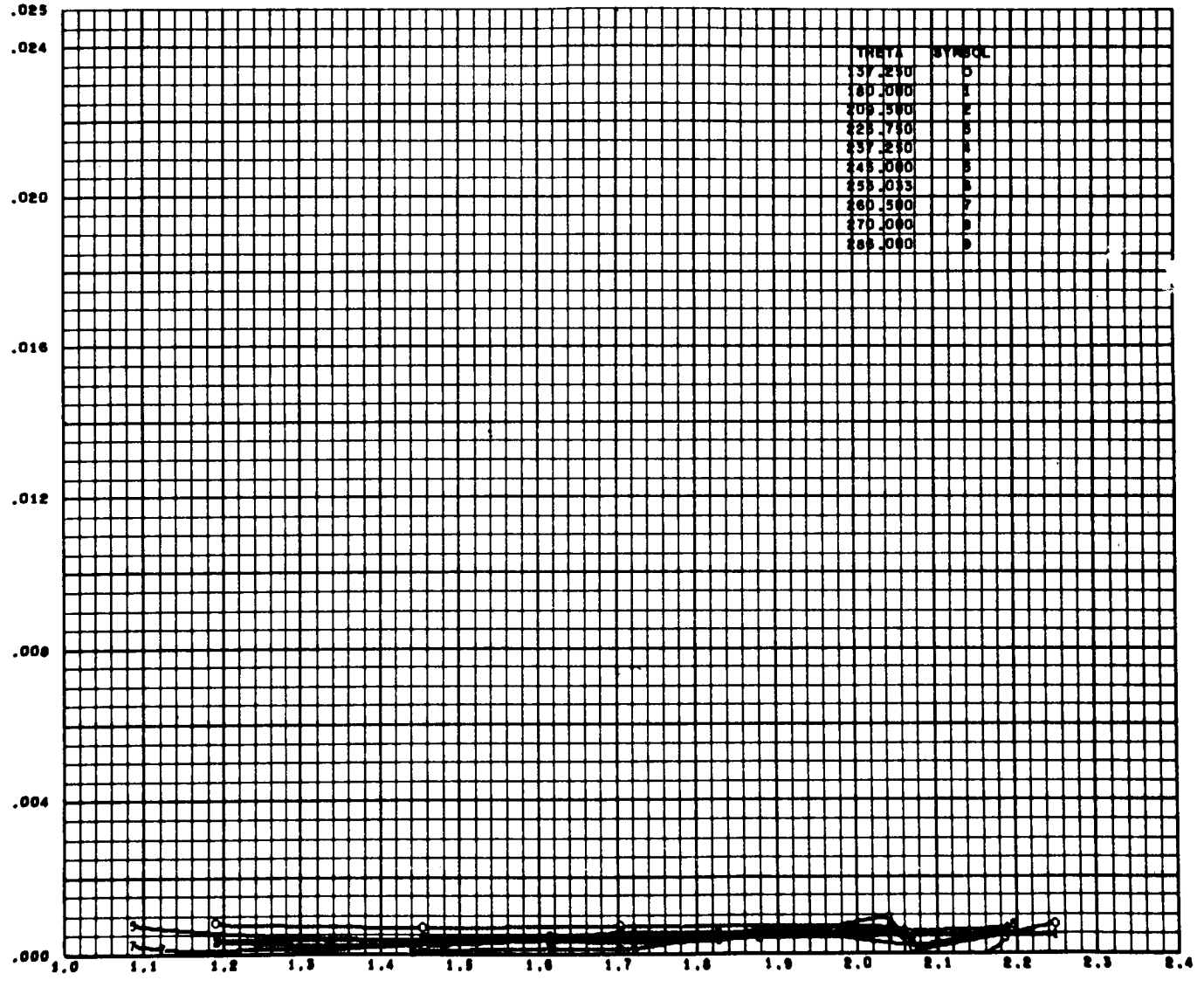
RE/FT --- 0.3424*10+6
Q(OM) --- 2.0100 BTU/SQ FT SEC

PLOT SERIES NUMBER 2

TEST GROUP	TIME (SEC)
2*	2.85
7	3.00
16	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3037-08
018 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.12 DEG
ANGLE OF YAW --------- -4.81 DEG
TOTAL PRESSURE ------- 217.30 PSIA
TOTAL TEMPERATURE ---- 1672.90 DEG RANKINE

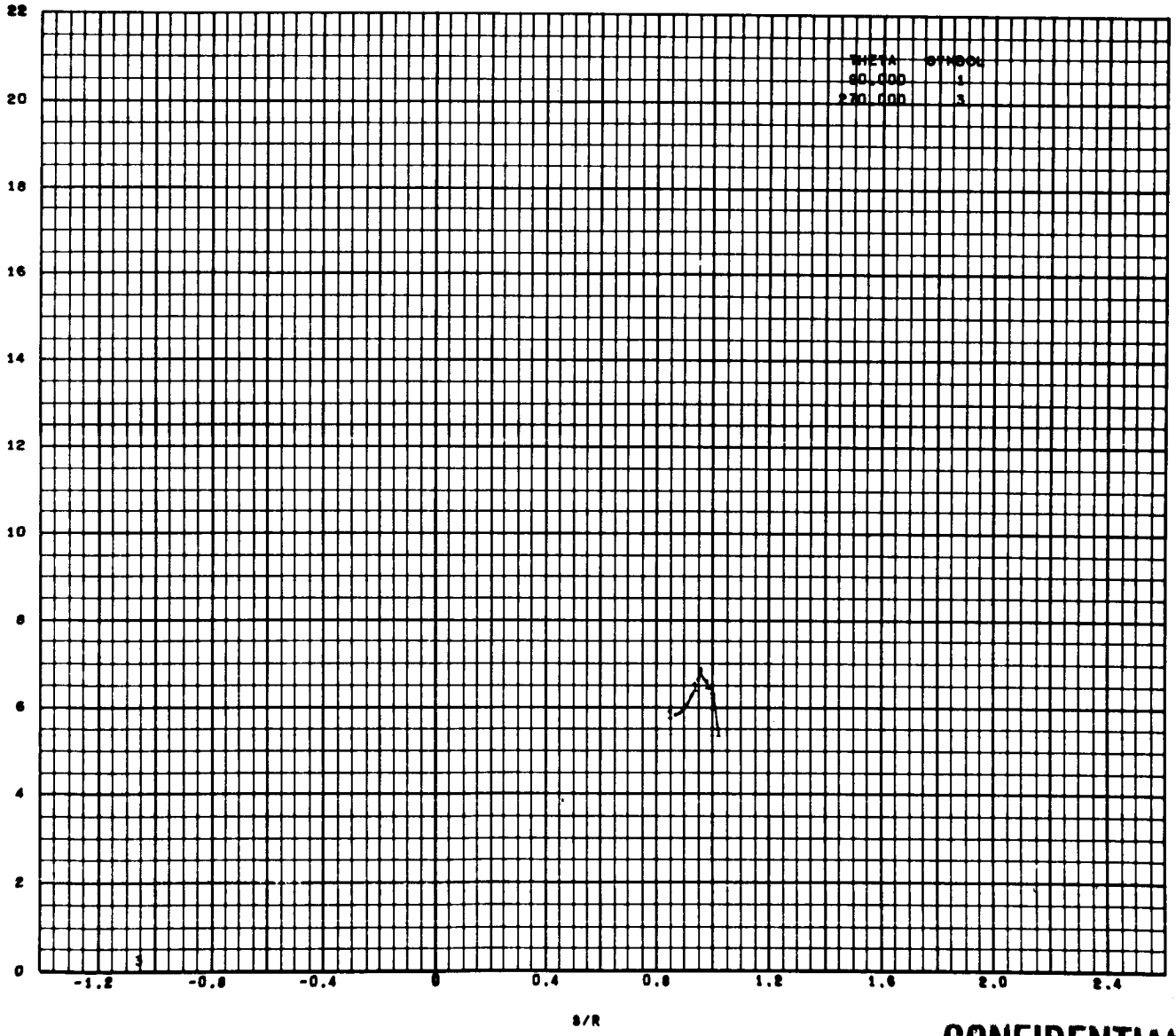
RE/FT --- 0.3325*10+6
Q(OM) --- 1.9578 BTU/SQ FT SEC

PLOT SERIES NUMBER 3

TEST GROUP	TIME (SEC)
8*	3.25

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
019 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.12 DEG
ANGLE OF YAW --------- -4.81 DEG
TOTAL PRESSURE ------- 217.30 PSIA
TOTAL TEMPERATURE ---- 1672.90 DEG RANKINE

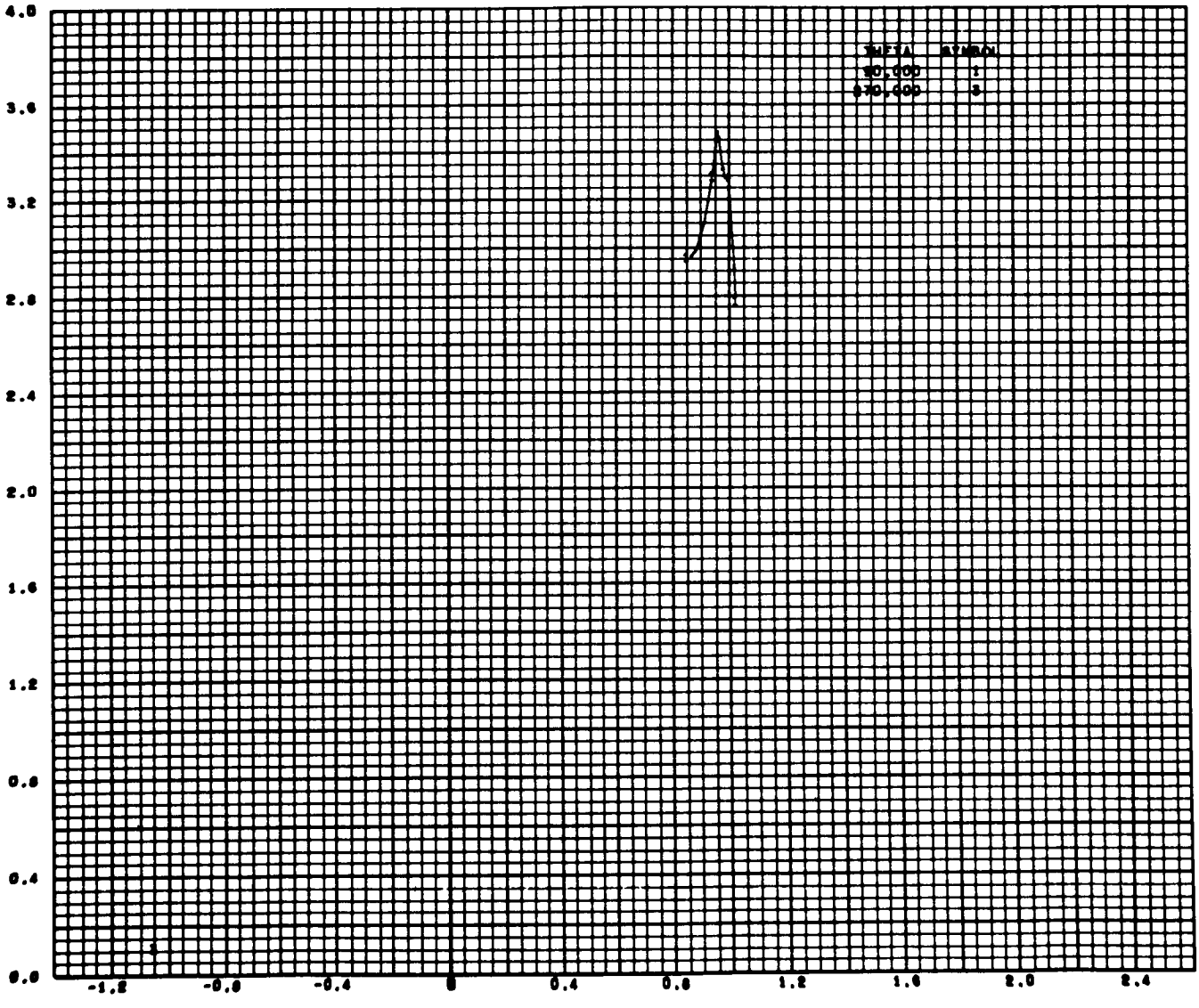
RE/FT --- 0.3325*10+6
Q(OM) --- 1.9578 BTU/SQ FT SEC

PLOT SERIES NUMBER 3

TEST GROUP	TIME (SEC)
8*	3.25

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
021 000



HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.12 DEG
ANGLE OF YAW --------- -4.81 DEG
TOTAL PRESSURE ------- 217.30 PSIA
TOTAL TEMPERATURE ---- 1672.90 DEG RANKINE

RE/FT --- 0.3325*10+6
Q(OM) --- 1.9578 BTU/SQ FT SEC

PLOT SERIES NUMBER 3

TEST GROUP	TIME (SEC)
8*	3.25

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
023 000

HEAT TRANSFER — CONFIGURATION C55 — PLOT SERIES NUMBER 3 — 3937-08 020 000

APOLLO H-11

AEDC, TUNNEL C

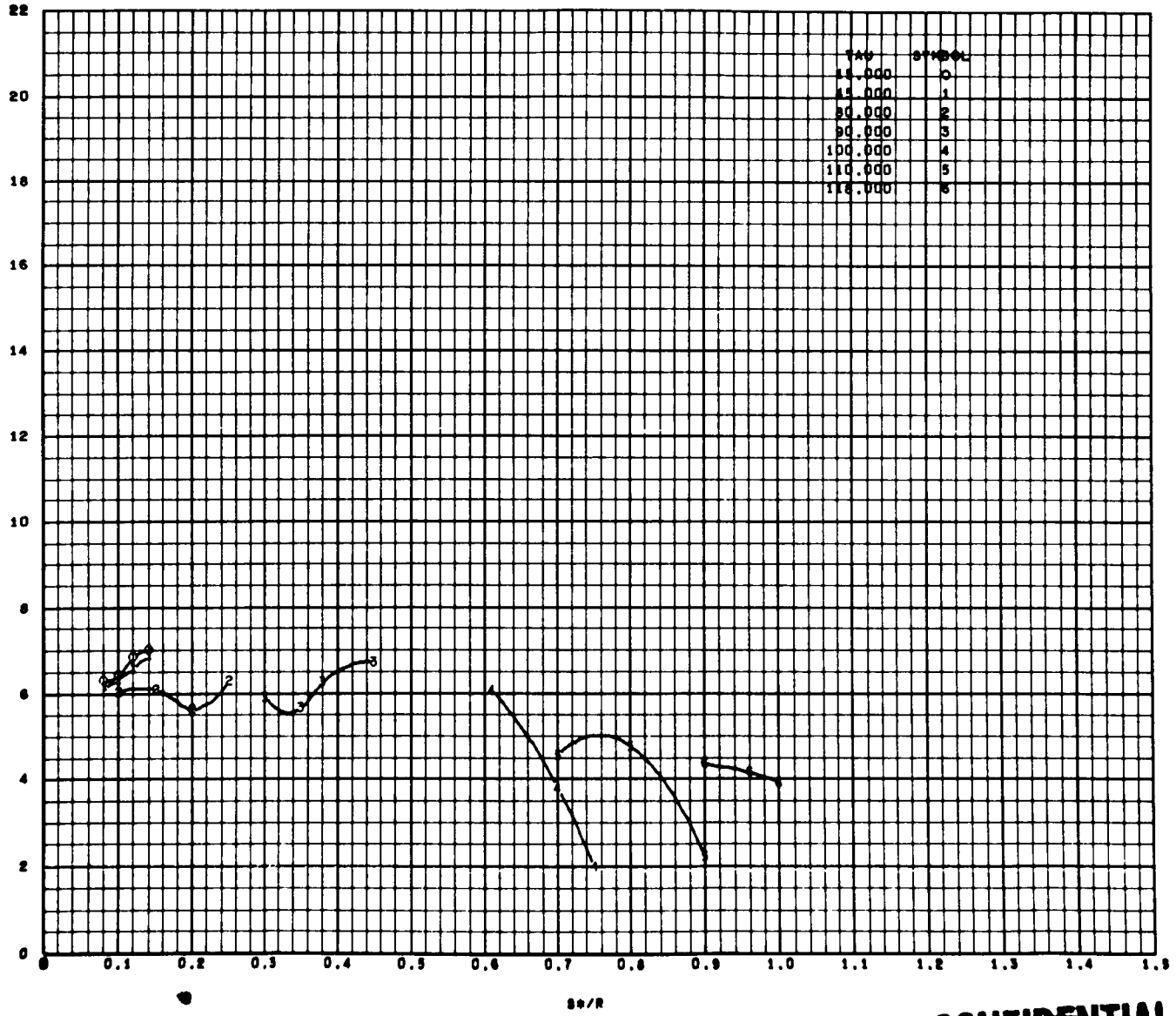
JUNE, 1964

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.12 DEG
ANGLE OF YAW --------- -4.81 DEG
TOTAL PRESSURE ------- 217.30 PSIA
TOTAL TEMPERATURE ---- 1672.90 DEG RANKINE

RE/FT --- 0.3325*10+6
Q(OM) --- 1.9578 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
8*	3.25

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.12 DEG
ANGLE OF YAW --------- -4.81 DEG
TOTAL PRESSURE ------- 217.30 PSIA
TOTAL TEMPERATURE ---- 1672.90 DEG RANKINE

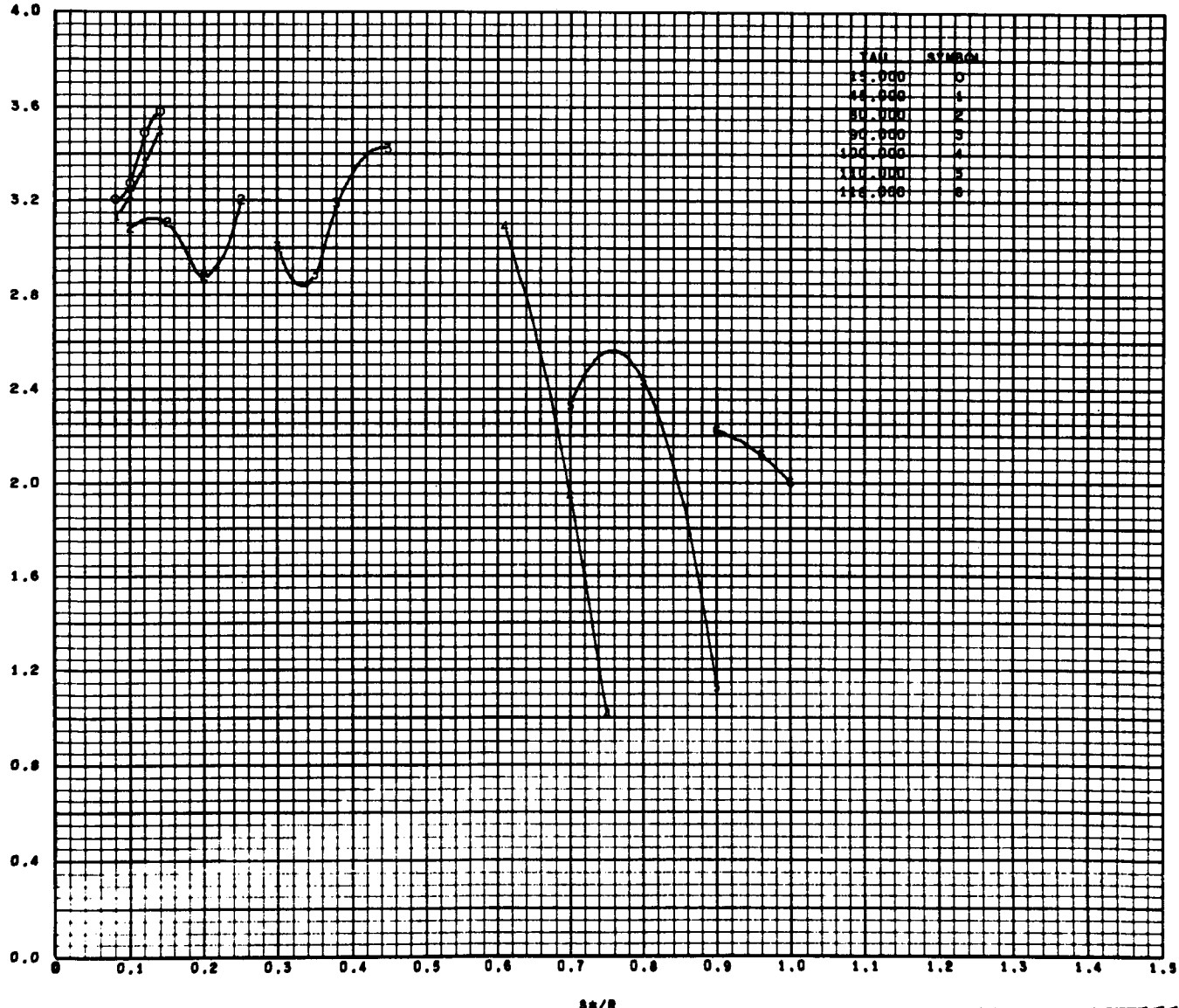
RE/FT --- 0.3325*10+6
Q(OM) --- 1.9578 BTU/SQ FT SEC

PLOT SERIES NUMBER 3

TEST GROUP	TIME (SEC)
8*	3.25

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
022 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.12 DEG
ANGLE OF YAW --------- -4.81 DEG
TOTAL PRESSURE ------- 217.30 PSIA
TOTAL TEMPERATURE ---- 1672.90 DEG RANKINE

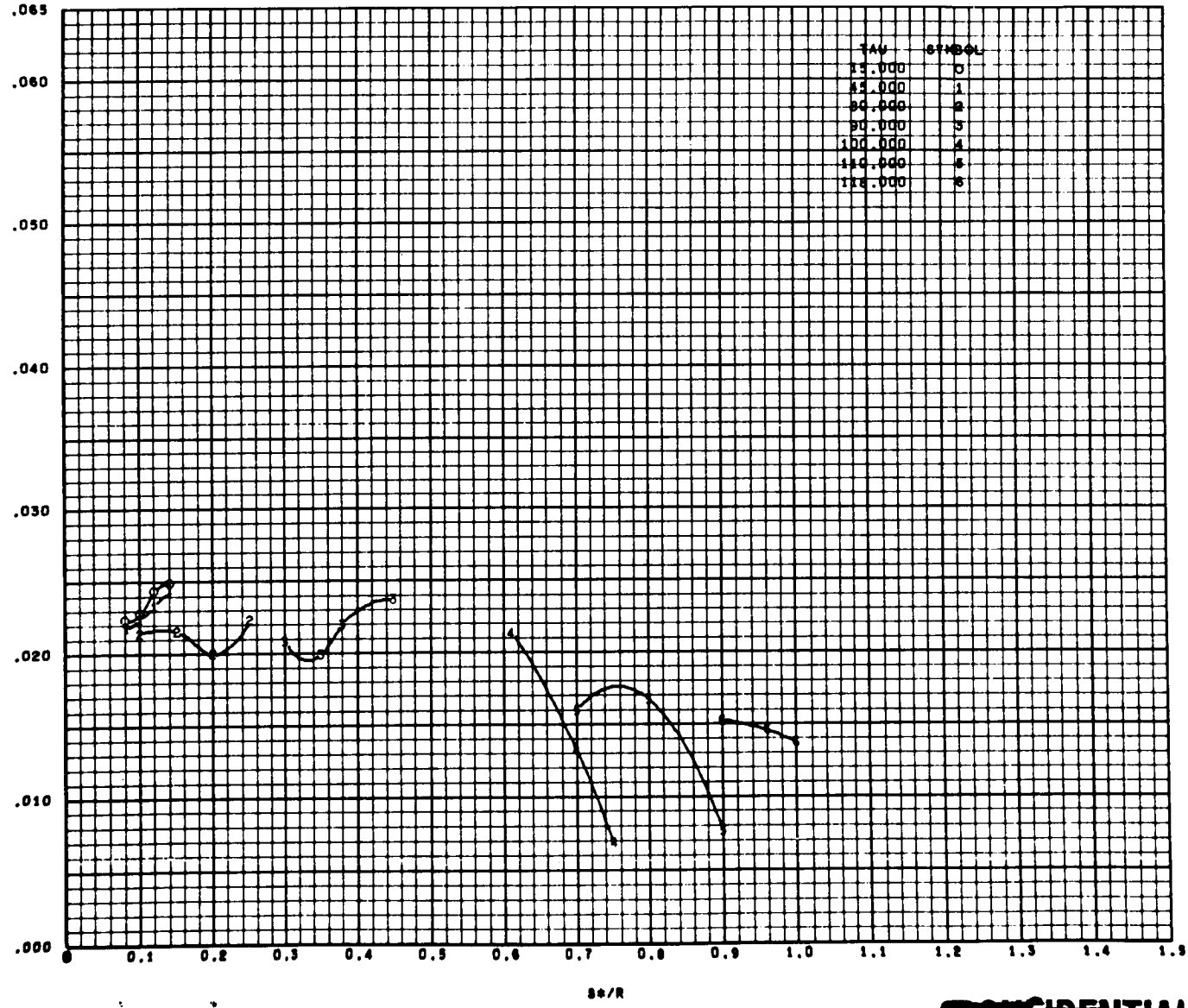
RE/FT --- 0.3325*10+6
Q(OM) --- 1.9578 BTU/SQ FT SEC

PLOT SERIES NUMBER 3

TEST GROUP	TIME (SEC)
8*	3.25

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
024 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.12 DEG
ANGLE OF YAW --------- 4.81 DEG
TOTAL PRESSURE ------- 216.20 PSIA
TOTAL TEMPERATURE ---- 1673.90 DEG RANKINE

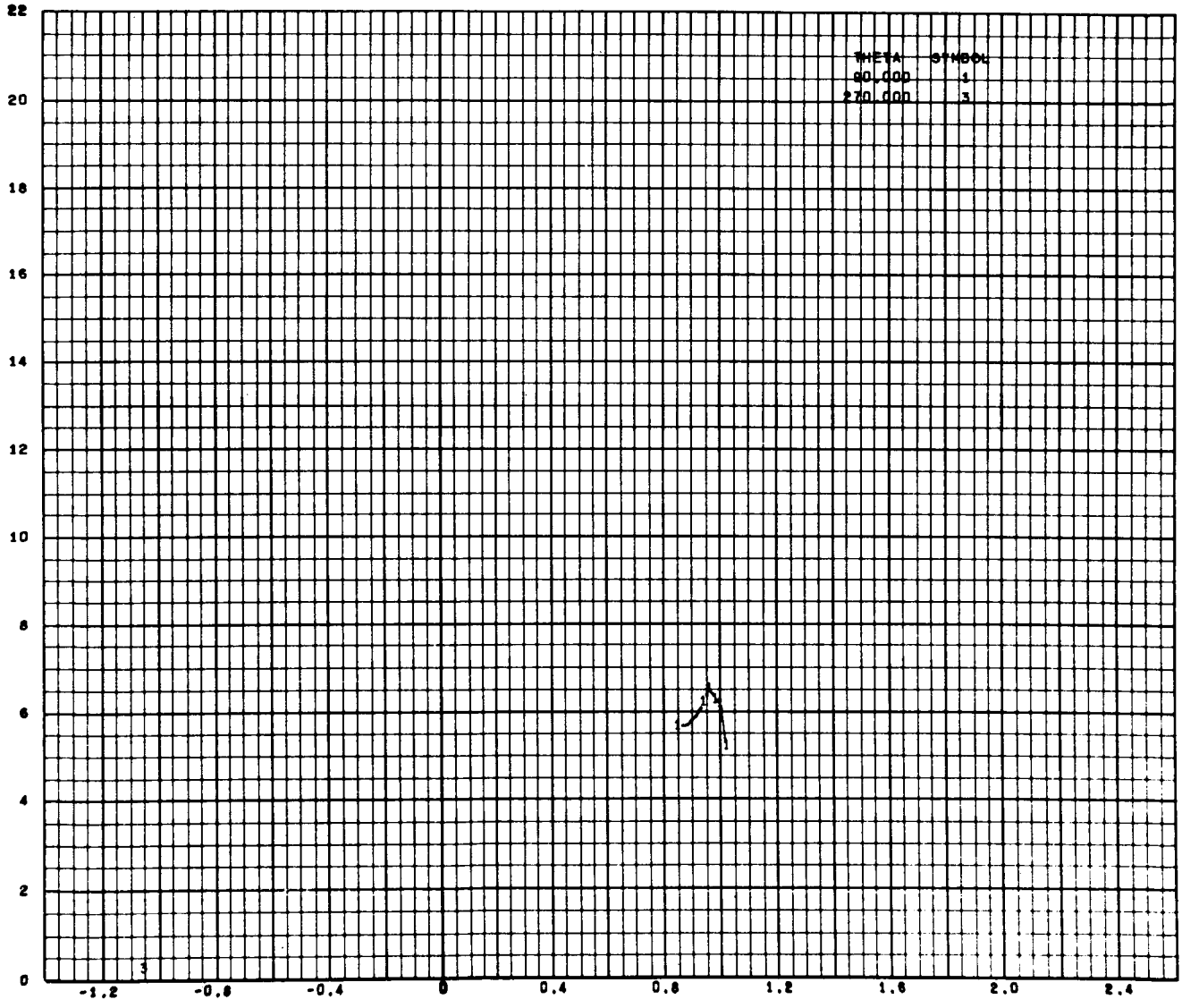
RE/FT --- 0.3304*10+6
Q(OM) --- 1.9512 BTU/SQ FT SEC

PLOT SERIES NUMBER 4

TEST GROUP	TIME (SEC)
9*	3.10

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
025 000



Q BTU/SQ FT SEC

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.12 DEG
ANGLE OF YAW --------- 4.81 DEG
TOTAL PRESSURE ------- 216.20 PSIA
TOTAL TEMPERATURE ---- 1673.90 DEG RANKINE

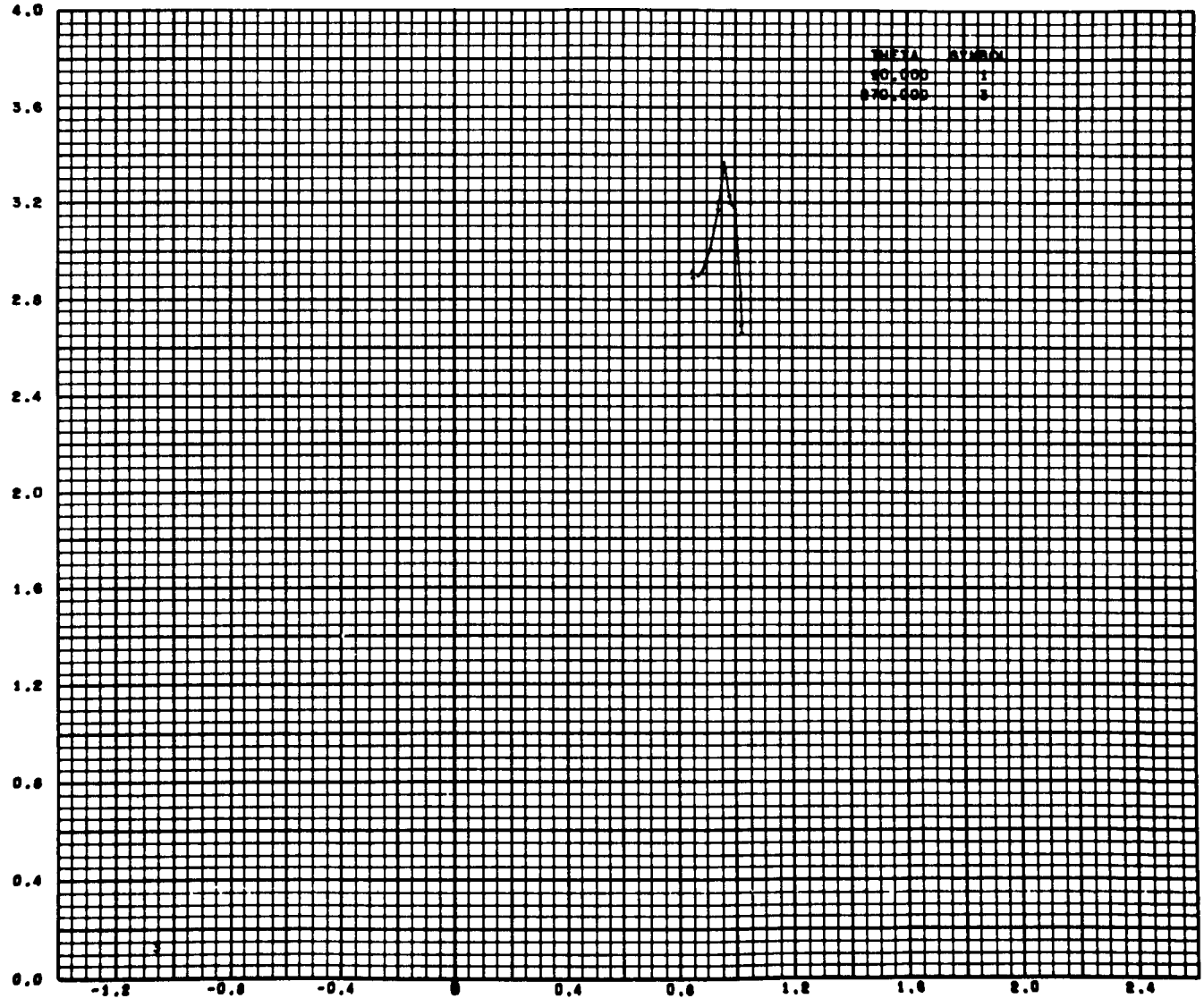
RE/FT --- 0.3304*10+6
Q(CM) --- 1.9512 BTU/SQ FT SEC

PLOT SERIES NUMBER 4

TEST GROUP	TIME (SEC)
9*	3.10

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
027 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.12 DEG
ANGLE OF YAW --------- 4.81 DEG
TOTAL PRESSURE ------- 216.20 PSIA
TOTAL TEMPERATURE ---- 1673.90 DEG RANKINE

RE/FT --- 0.3304*10+6
Q(OM) --- 1.9512 BTU/SQ FT SEC

PLOT SERIES NUMBER 4

TEST GROUP	TIME (SEC)
9*	3.10

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
029 000

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.12 DEG
ANGLE OF YAW --------- 4.81 DEG
TOTAL PRESSURE ------- 216.20 PSIA
TOTAL TEMPERATURE ---- 1673.90 DEG RANKINE

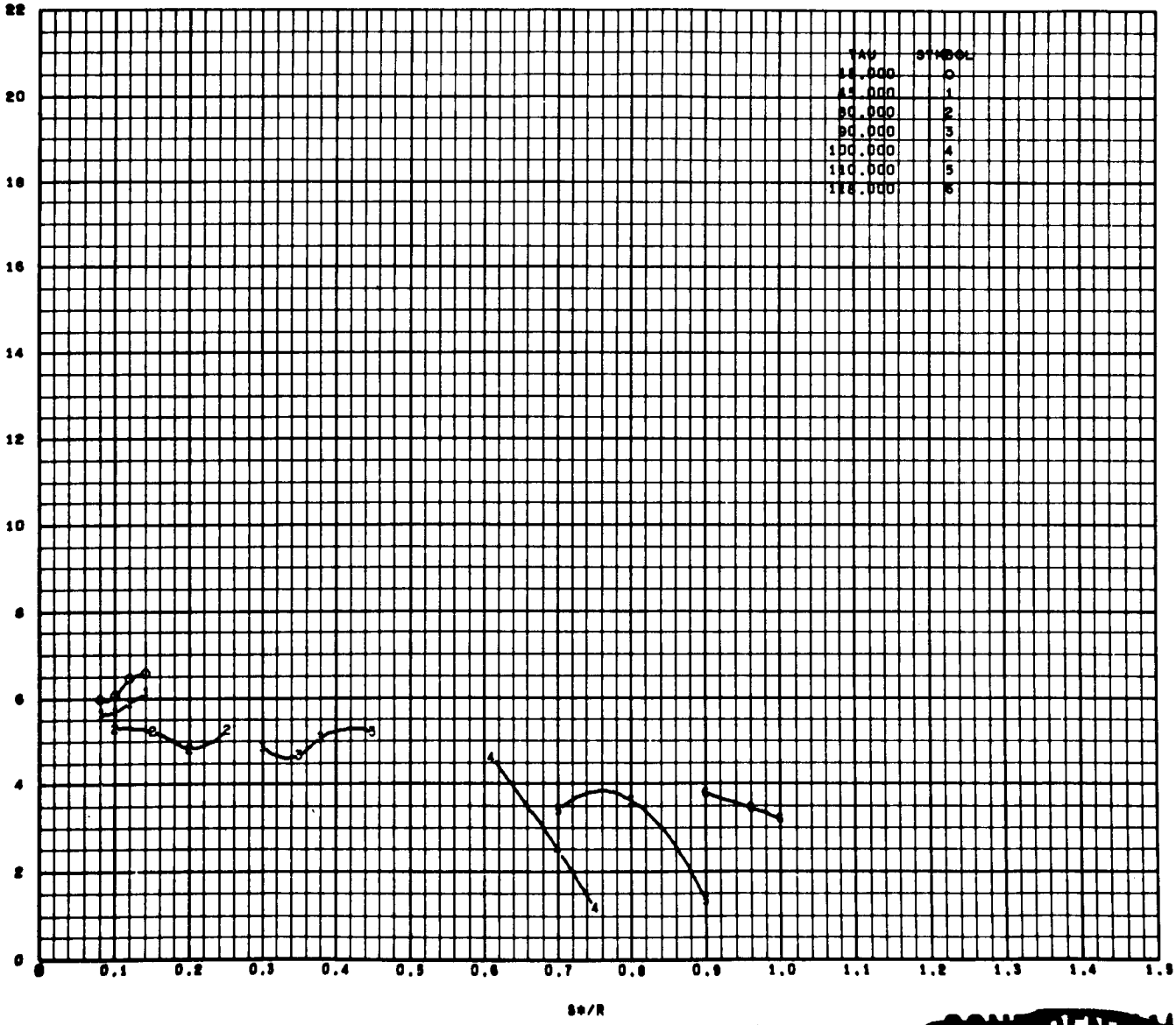
RE/FT --- 0.3304*10+6
Q(OM) --- 1.9512 BTU/SQ FT SEC

PLOT SERIES NUMBER 4

TEST GROUP	TIME (SEC)
9*	3.10

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
026 000



CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.12 DEG
ANGLE OF YAW --------- 4.81 DEG
TOTAL PRESSURE ------- 216.20 PSIA
TOTAL TEMPERATURE ---- 1673.90 DEG RANKINE

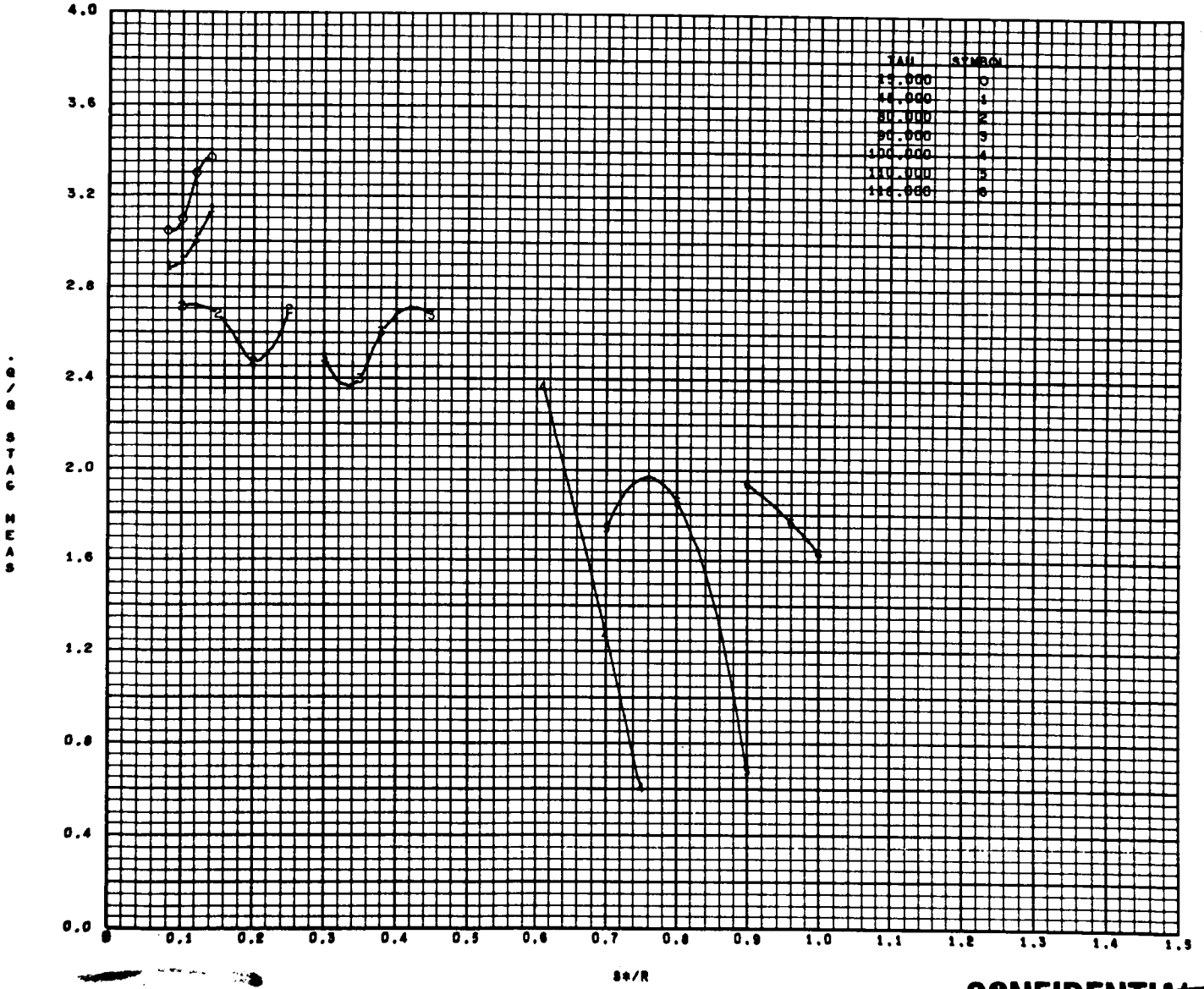
RE/FT --- 0.3304*10+6
Q(OM) --- 1.9512 BTU/SQ FT SEC

PLOT SERIES NUMBER 4

TEST GROUP	TIME (SEC)
9*	3.10

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
028 000



CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.12 DEG
ANGLE OF YAW --------- 4.81 DEG
TOTAL PRESSURE ------- 216.20 PSIA
TOTAL TEMPERATURE ---- 1673.90 DEG RANKINE

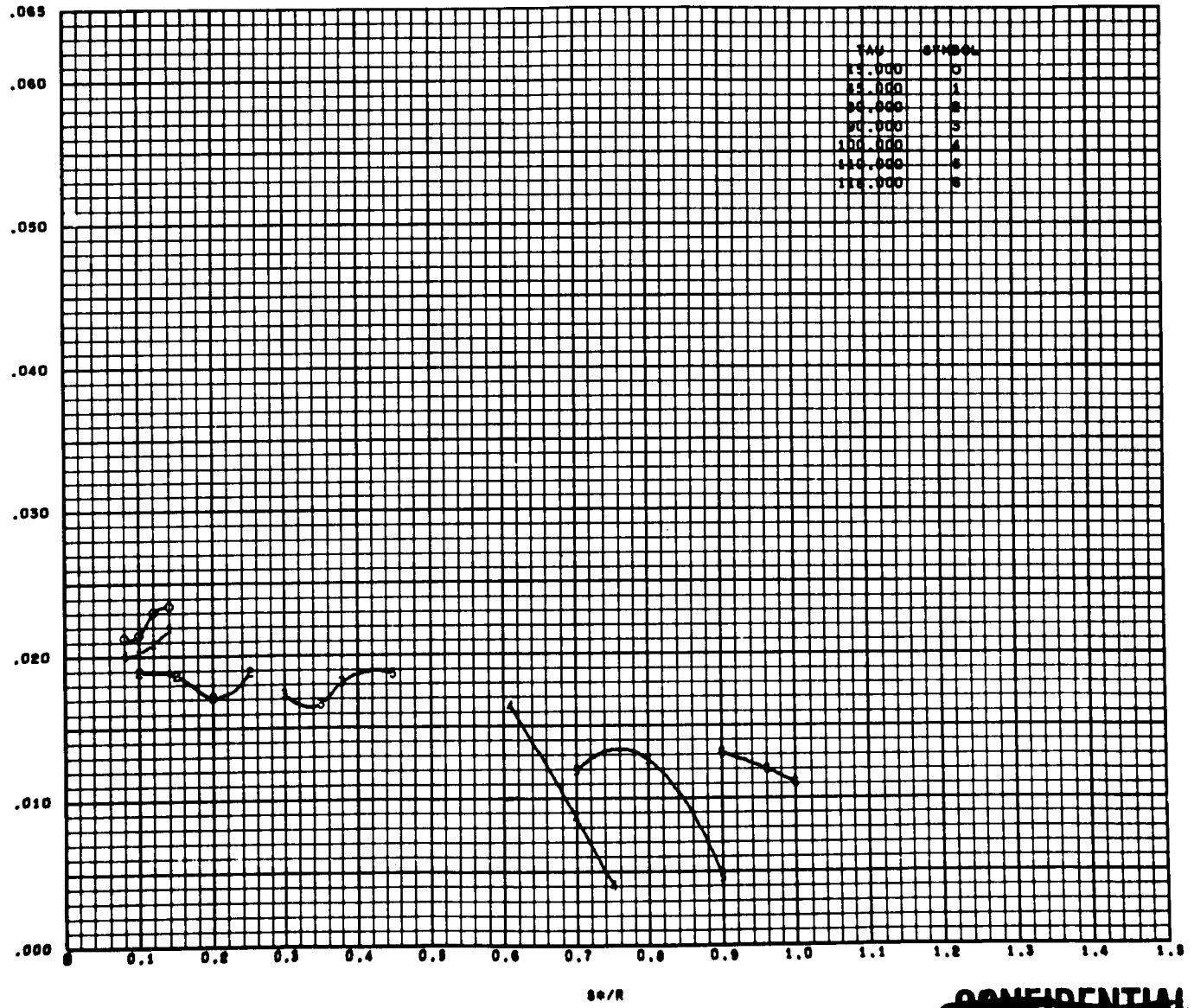
RE/FT --- 0.3304*10+6
Q(OM) --- 1.9512 BTU/SQ FT SEC

PLOT SERIES NUMBER 4

TEST GROUP	TIME (SEC)
9*	3.10

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
030 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 220.60 PSIA
TOTAL TEMPERATURE ---- 1665.70 DEG RANKINE

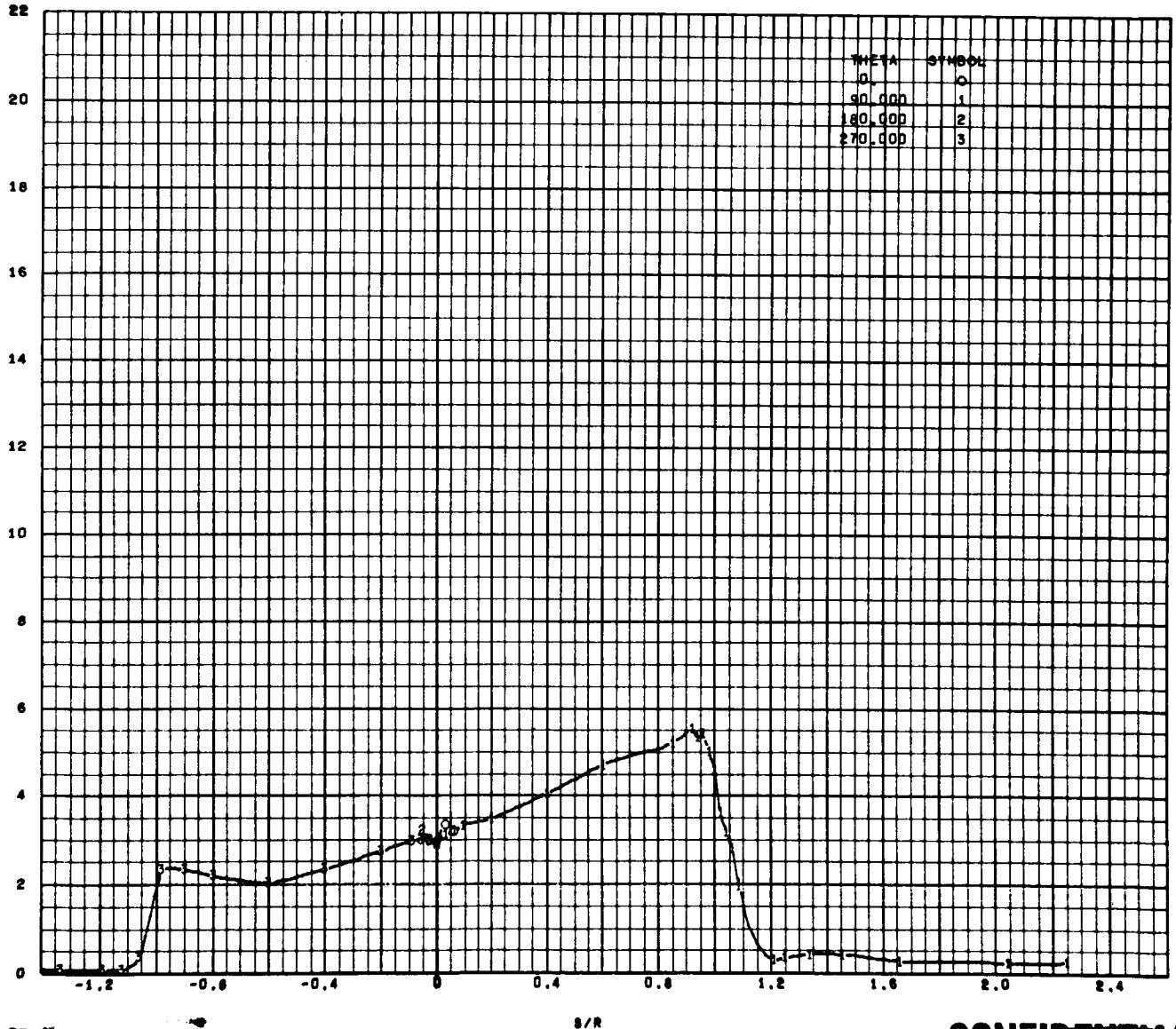
RE/FT --- 0.3400*10+6
Q(OM) --- 1.9765 BTU/SQ FT SEC

PLOT SERIES NUMBER 5

TEST GROUP	TIME (SEC)
3*	2.90
10	3.10
17	3.15

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
031 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 220.60 PSIA
TOTAL TEMPERATURE ---- 1665.70 DEG RANKINE

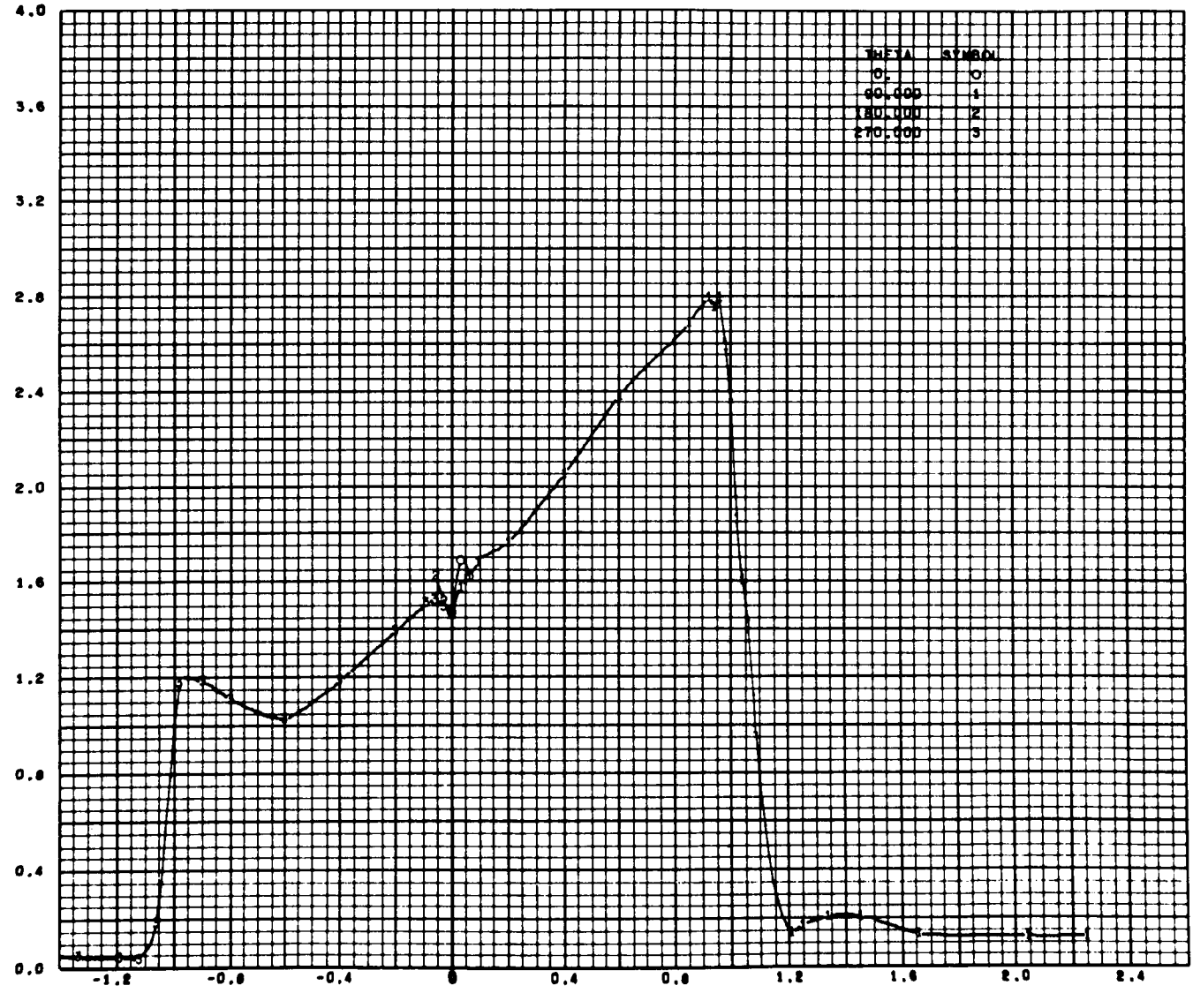
RE/FT --- 0.3400*10+6
Q(OM) --- 1.9765 BTU/SQ FT SEC

PLOT SERIES NUMBER 5

TEST GROUP	TIME (SEC)
3*	2.90
10	3.10
17	3.15

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-06
034 000



SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 220.60 PSIA
TOTAL TEMPERATURE ---- 1665.70 DEG RANKINE

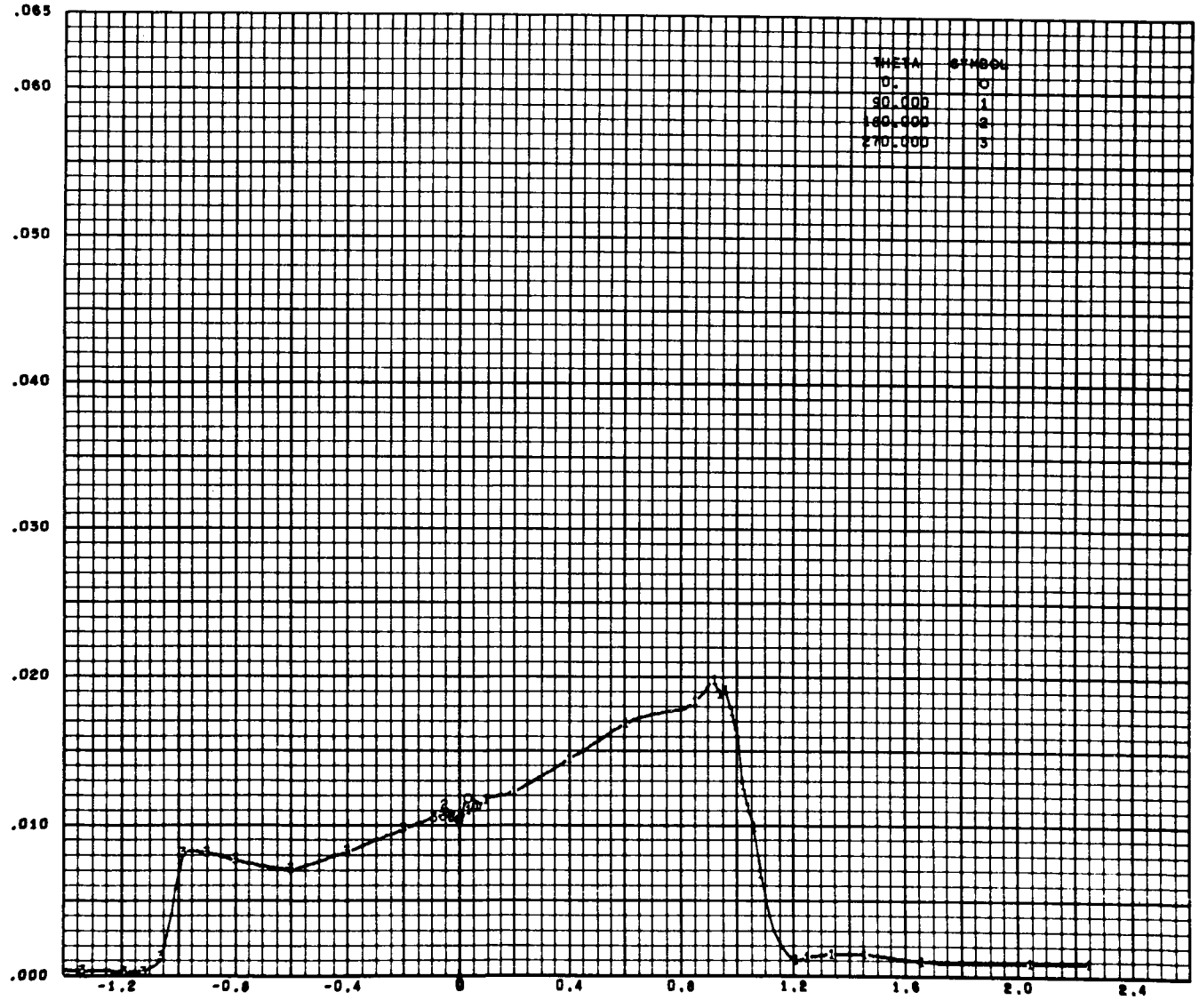
RE/FT --- 0.3400*10+6
Q(OM) --- 1.9765 BTU/SQ FT SEC

PLOT SERIES NUMBER 5

TEST GROUP	TIME (SEC)
3*	2.90
10	3.10
17	3.15

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-06
037 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 220.60 PSIA
TOTAL TEMPERATURE ---- 1665.70 DEG RANKINE

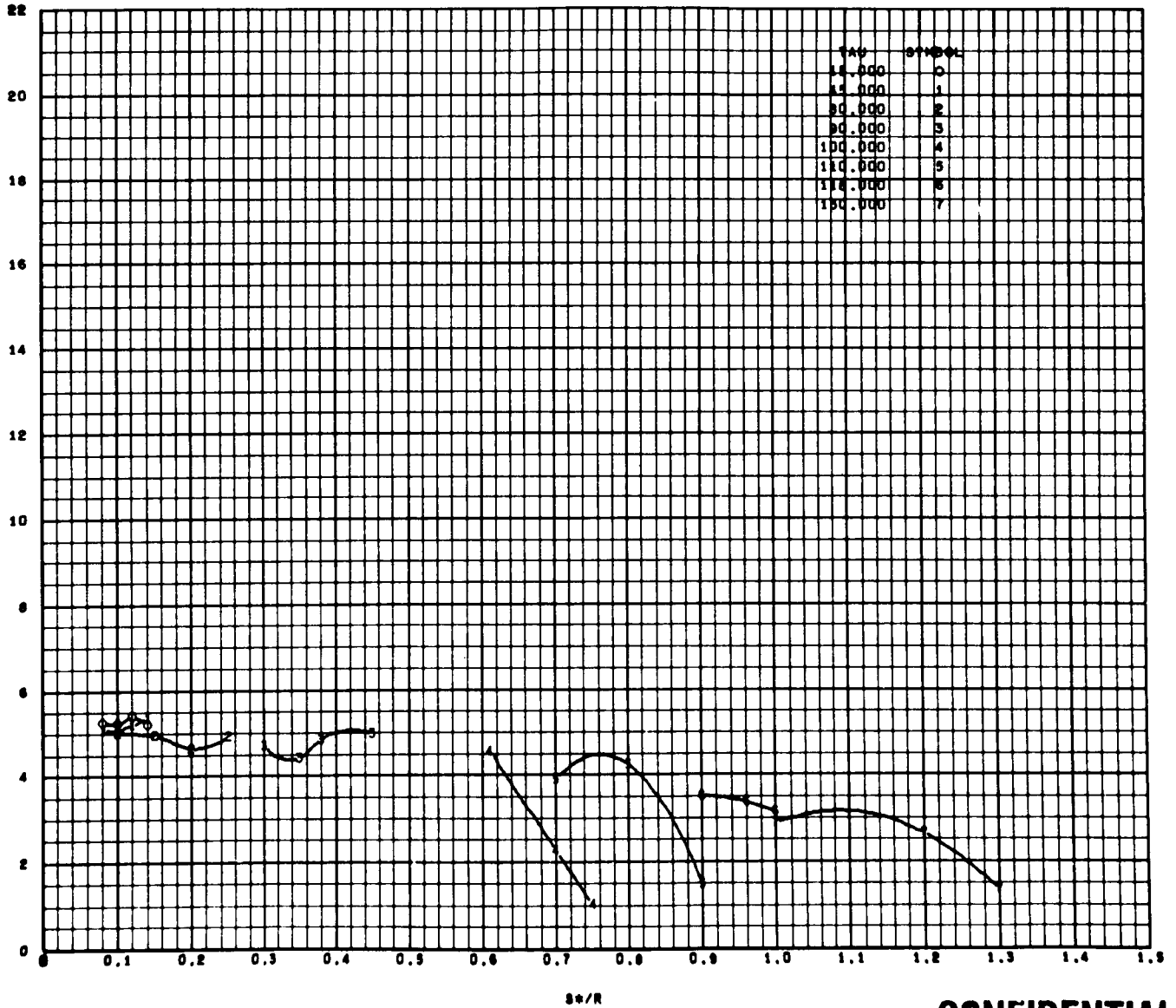
RE/FT --- 0.3400*10+6
Q(OM) --- 1.9765 BTU/SQ FT SEC

PLOT SERIES NUMBER 5

TEST GROUP	TIME (SEC)
3*	2.90
10	3.10
17	3.15

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
032 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 220.60 PSIA
TOTAL TEMPERATURE ---- 1665.70 DEG RANKINE

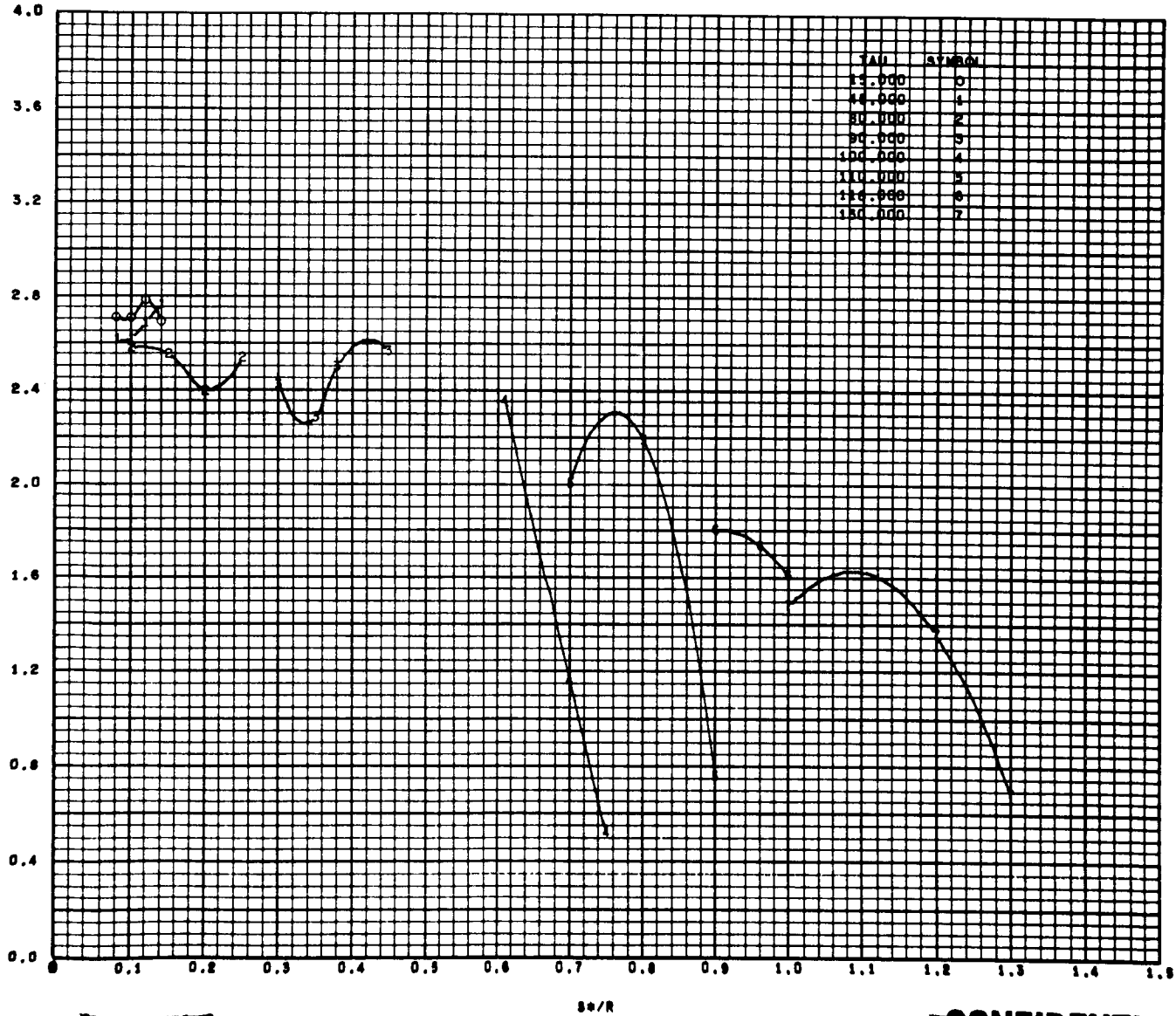
RE/FT --- 0.3400*10+6
Q(OM) --- 1.9765 BTU/SQ FT SEC

PLOT SERIES NUMBER 5

TEST GROUP	TIME (SEC)
3*	2.90
10	3.10
17	3.15

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
035 000



HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 220.60 PSIA
TOTAL TEMPERATURE ---- 1665.70 DEG RANKINE

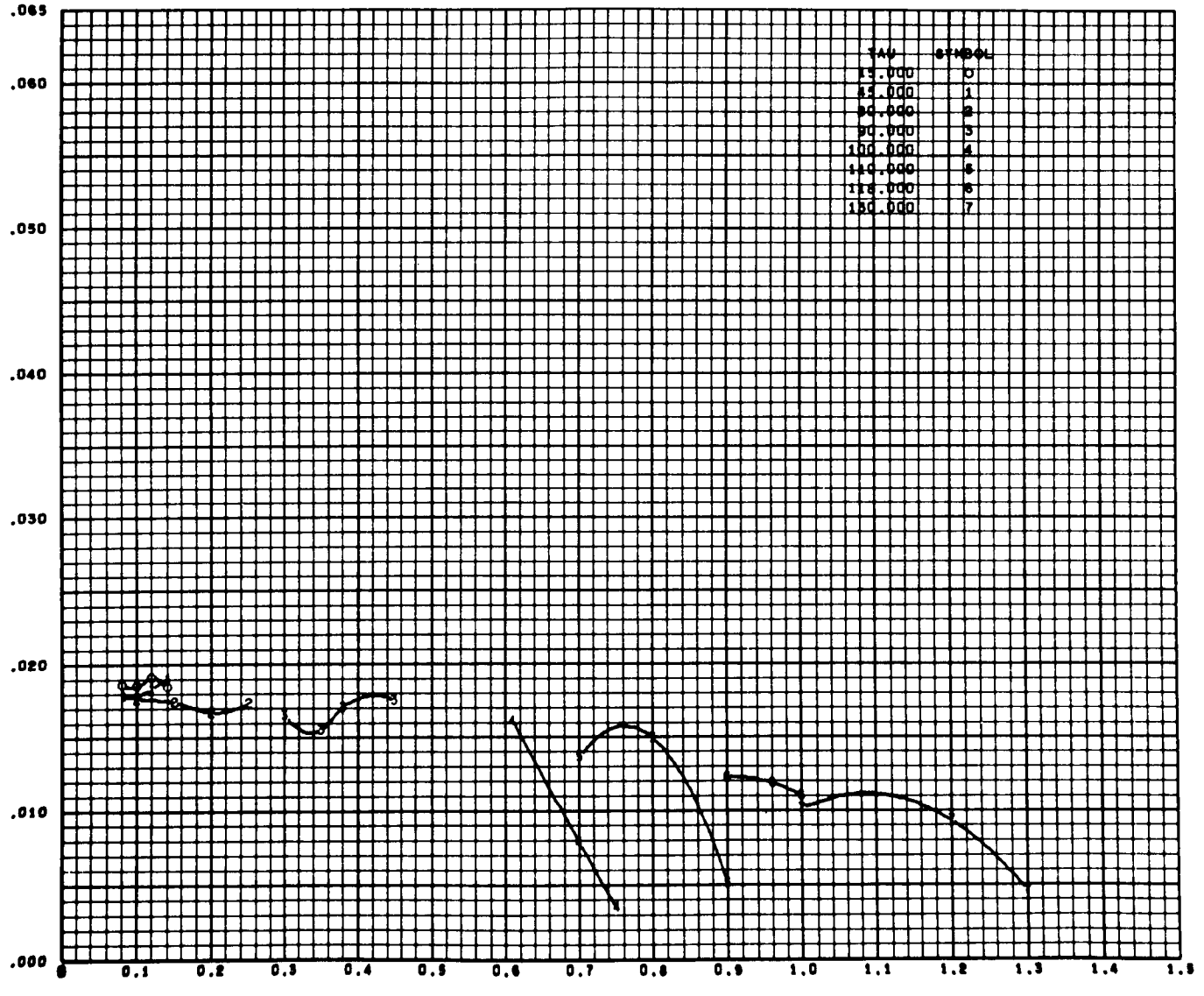
RE/FT --- 0.3400*10+6
Q(OM) --- 1.9765 BTU/SQ FT SEC

PLOT SERIES NUMBER 5

TEST GROUP	TIME (SEC)
3*	2.90
10	3.10
17	3.15

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
038 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 220.60 PSIA
TOTAL TEMPERATURE ---- 1665.70 DEG RANKINE

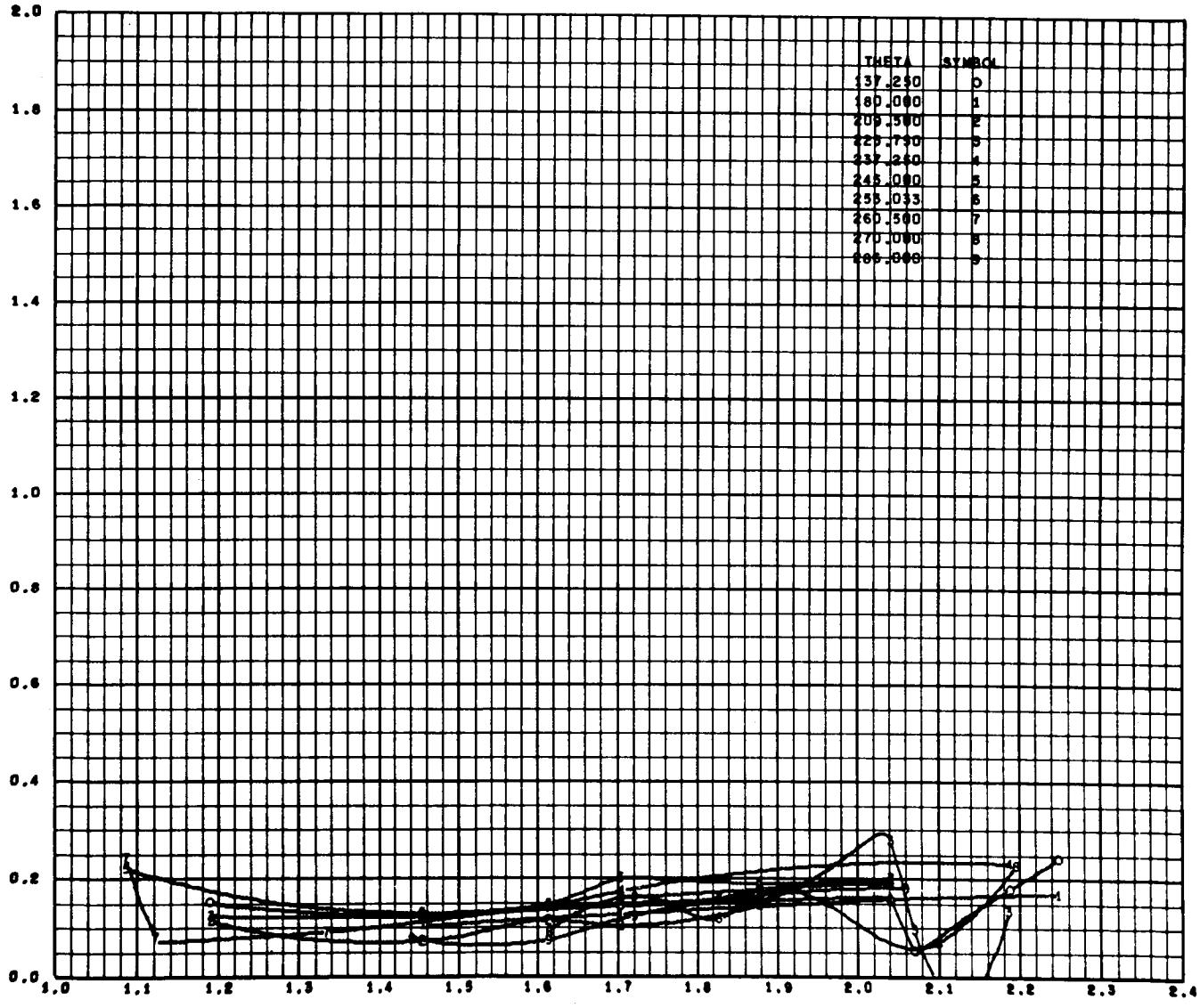
RE/FT --- 0.3400*10+6
Q(OM) --- 1.9765 BTU/SQ FT SEC

PLOT SERIES NUMBER 5

TEST GROUP	TIME (SEC)
3*	2.90
10	3.10
17	3.15

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
033 000



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HEAT TRANSFER

CONFIGURATION C55

PLOT SERIES NUMBER 5

3937-08
036 000

APOLLO H-11

AEDC, TUNNEL C

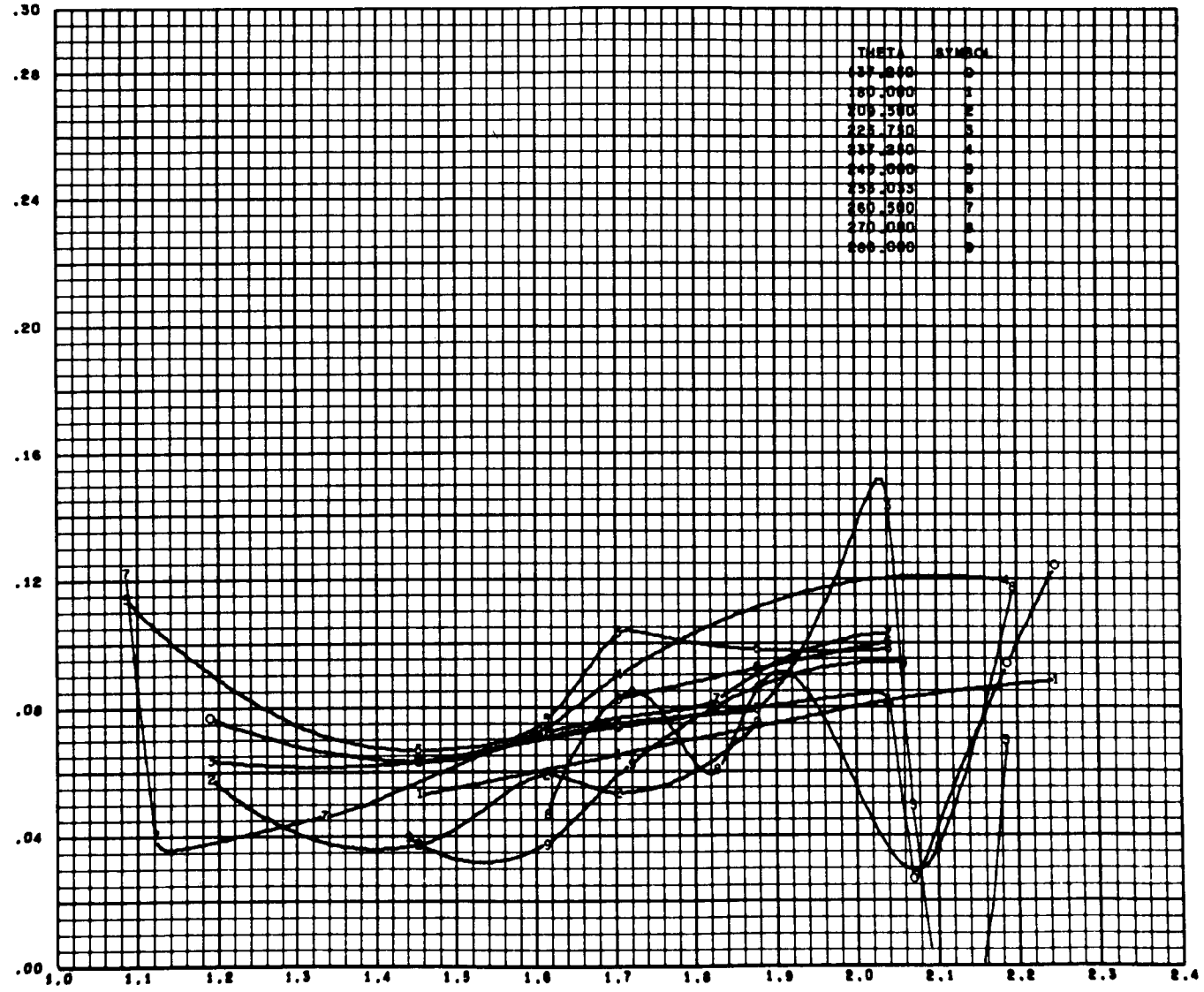
JUNE, 1964

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 220.60 PSIA
TOTAL TEMPERATURE ---- 1665.70 DEG RANKINE

RE/FT --- 0.3400*10+6
Q(OM) --- 1.9765 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
3*	2.90
10	3.10
17	3.15

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



.Q/Q STAG MEAS

S/R

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 220.60 PSIA
TOTAL TEMPERATURE ---- 1665.70 DEG RANKINE

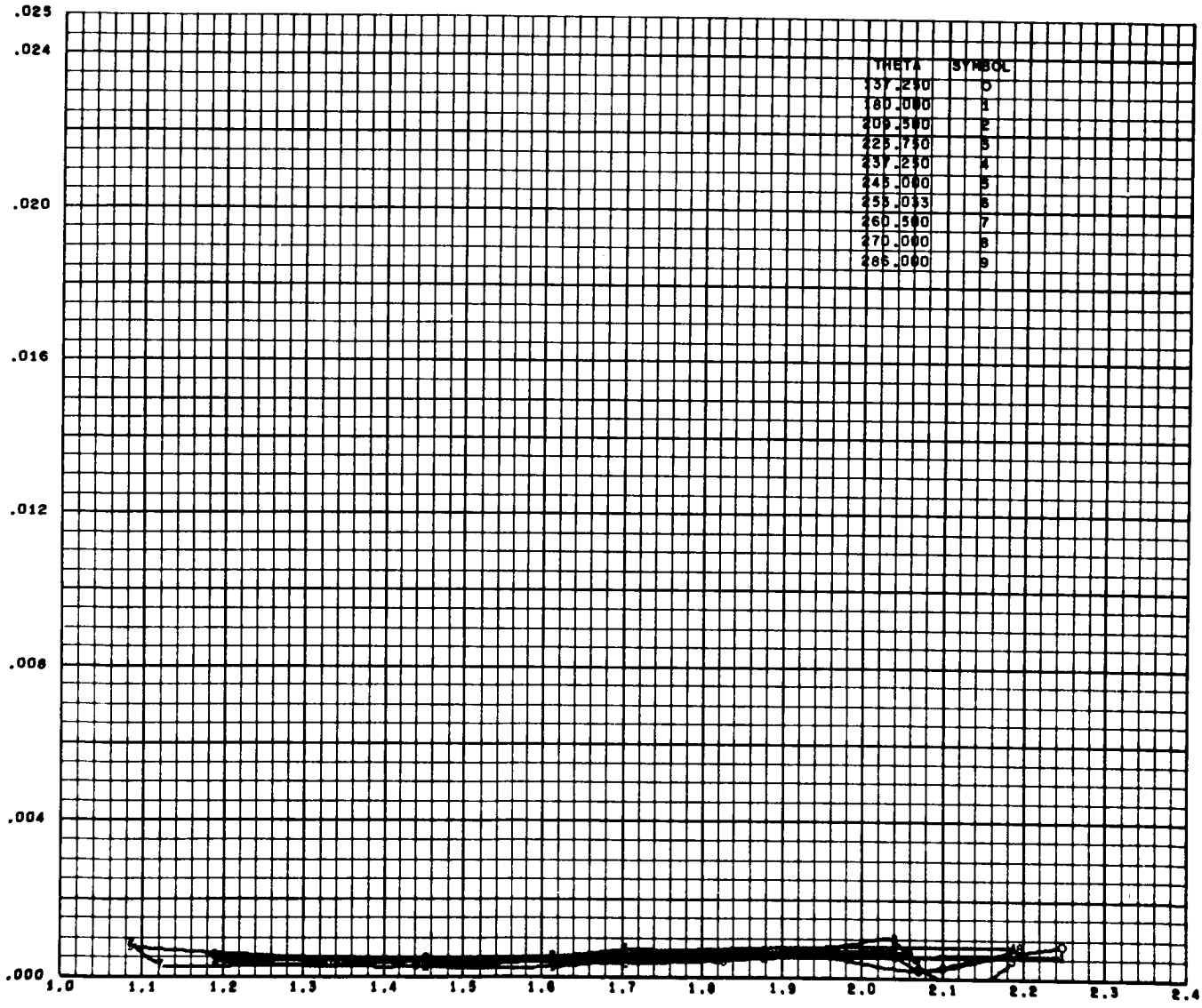
RE/FT --- 0.3400*10+6
Q(OM) --- 1.9765 BTU/SQ FT SEC

PLOT SERIES NUMBER 5

TEST GROUP	TIME (SEC)
3*	2.90
10	3.10
17	3.15

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
039 000



~~CONFIDENTIAL~~

HEAT TRANSFER | CONFIGURATION C55 | PLOT SERIES NUMBER 6 | 3937-08 040 000

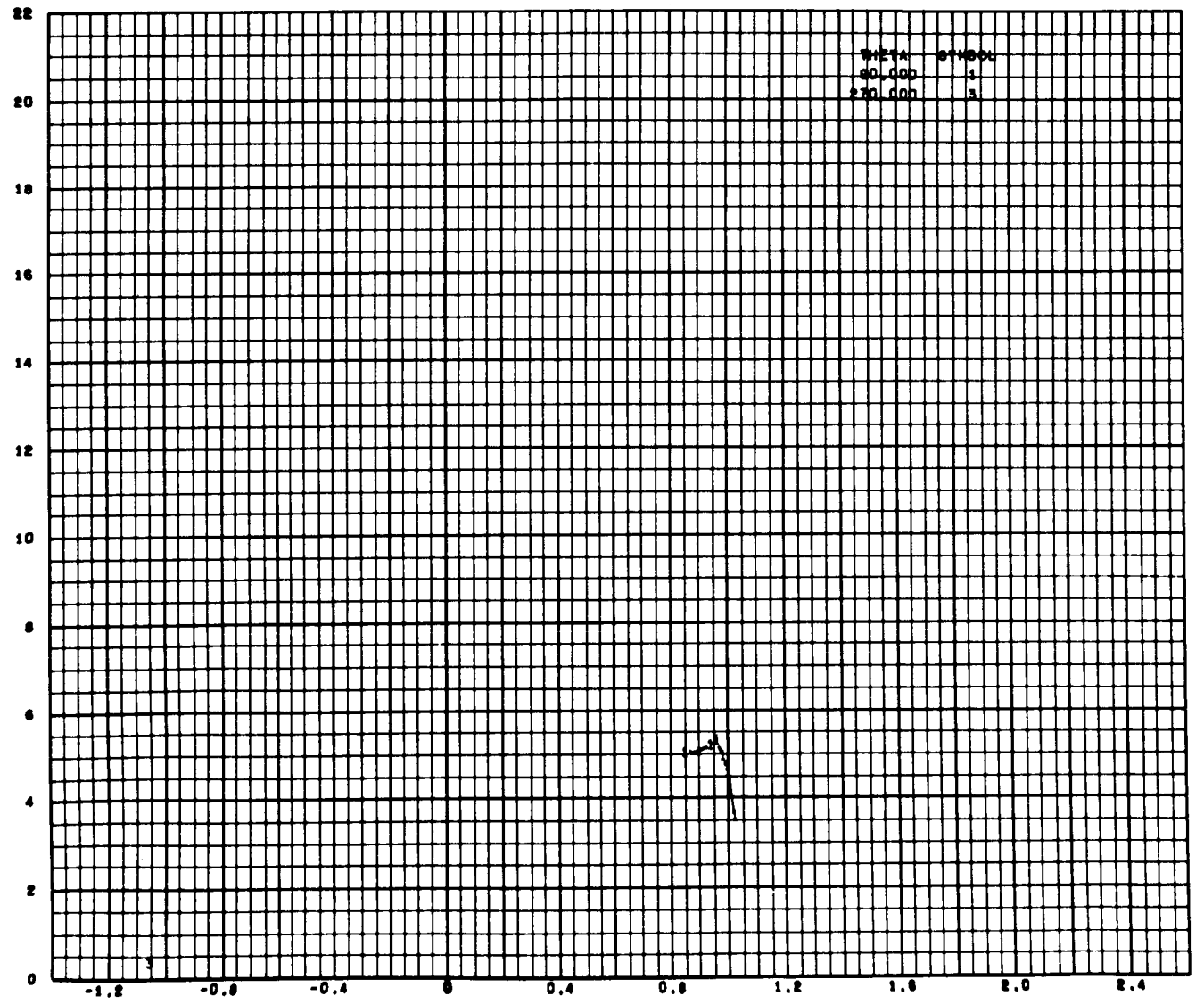
APOLLO H-11
AEDC, TUNNEL C
JUNE, 1964

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 153.99 DEG
ANGLE OF YAW --------- -5.00 DEG
TOTAL PRESSURE ------- 215.40 PSIA
TOTAL TEMPERATURE ---- 1673.70 DEG RANKINE

RE/FT --- 0.3293*10+6
Q(OM) --- 1.9468 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
11*	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 153.99 DEG
ANGLE OF YAW --------- -5.00 DEG
TOTAL PRESSURE ------- 215.40 PSIA
TOTAL TEMPERATURE ---- 1673.70 DEG RANKINE

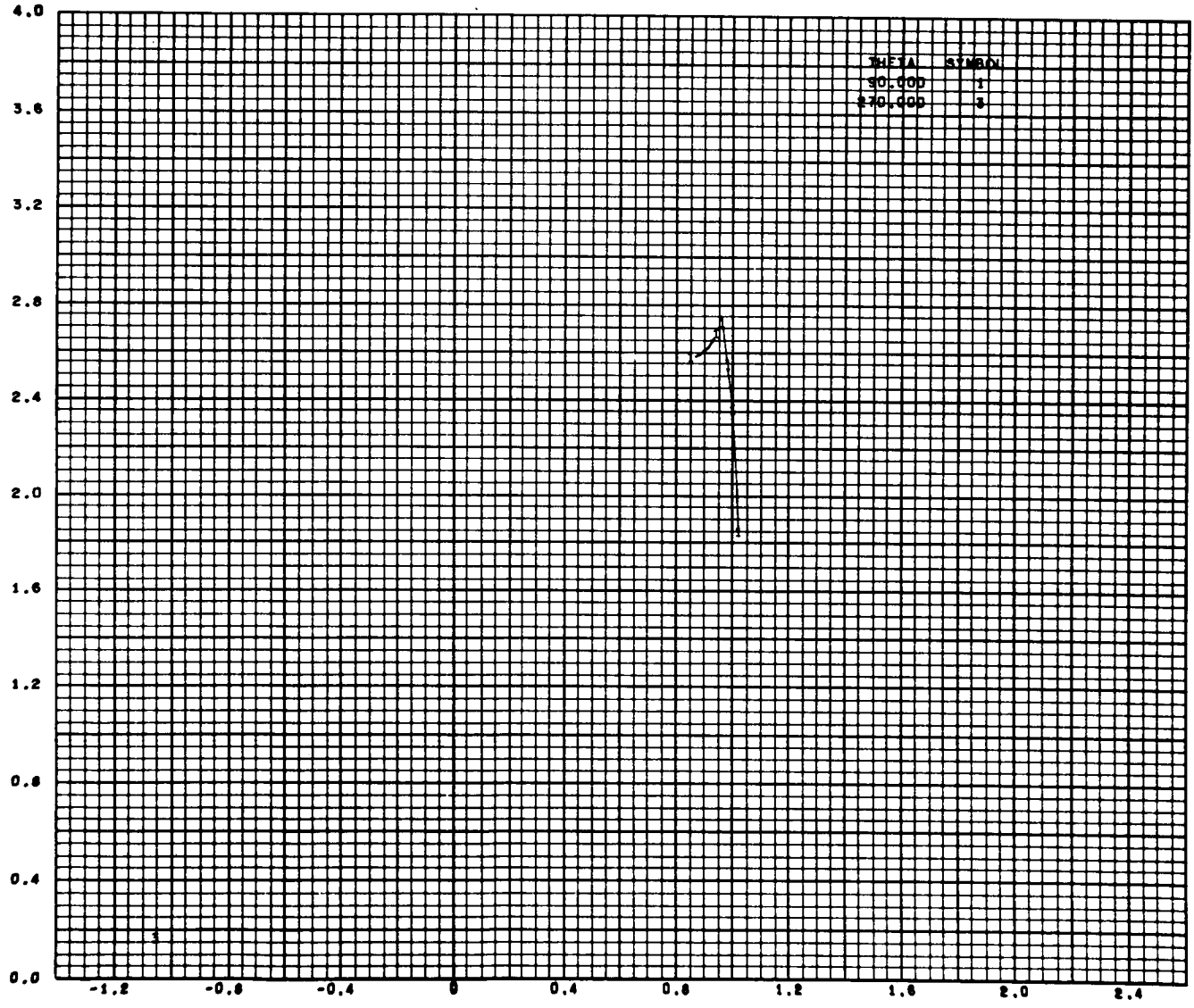
RE/FT --- 0.3293*10+6
Q(OM) --- 1.9468 BTU/SQ FT SEC

PLOT SERIES NUMBER 6

TEST GROUP	TIME (SEC)
11*	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
042 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 153.99 DEG
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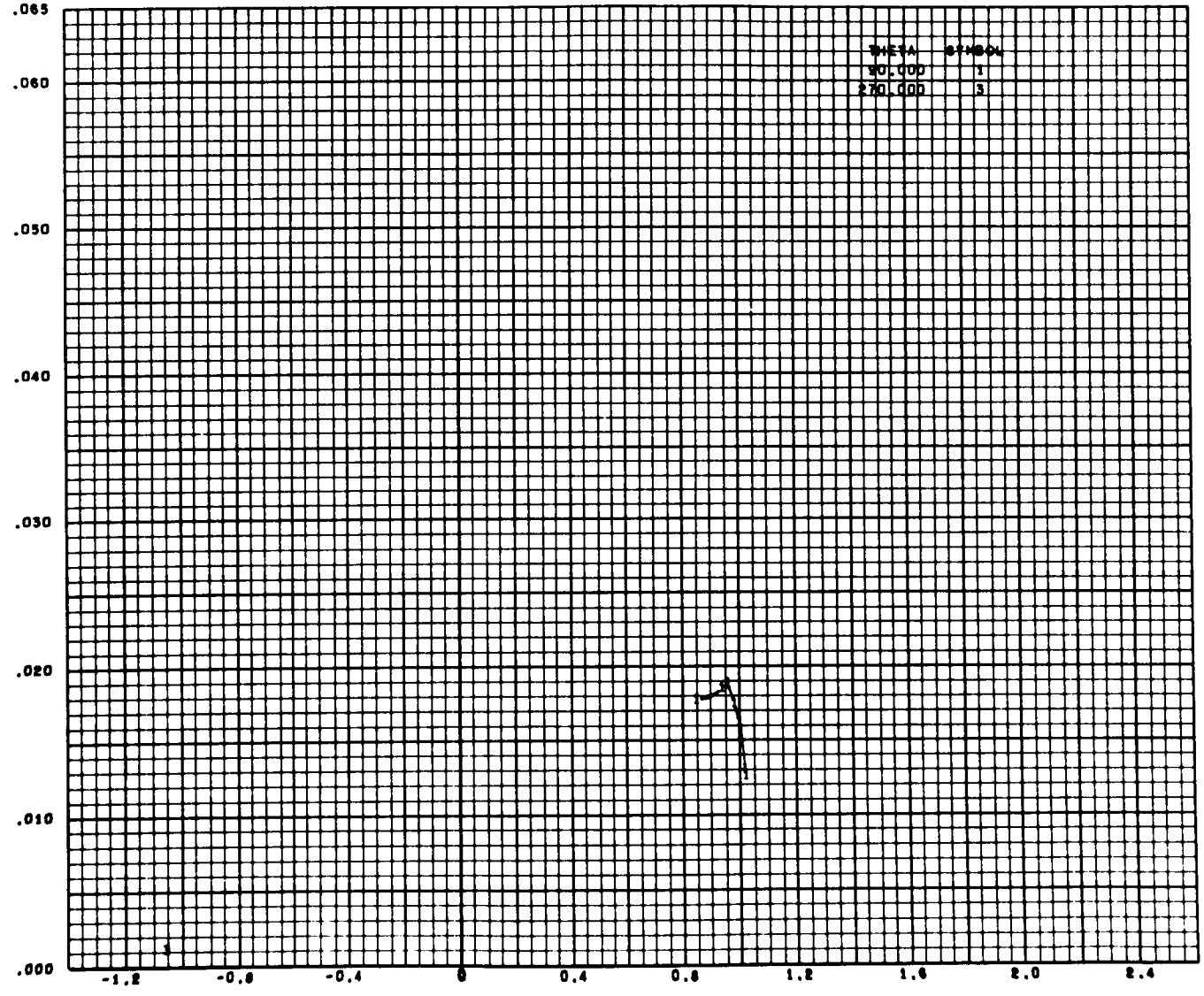
PLOT SERIES NUMBER 6

TEST GROUP	TIME (SEC)
11*	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
044 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 153.99 DEG
ANGLE OF YAW --------- -5.00 DEG
TOTAL PRESSURE ------- 215.40 PSIA
TOTAL TEMPERATURE ---- 1673.70 DEG RANKINE

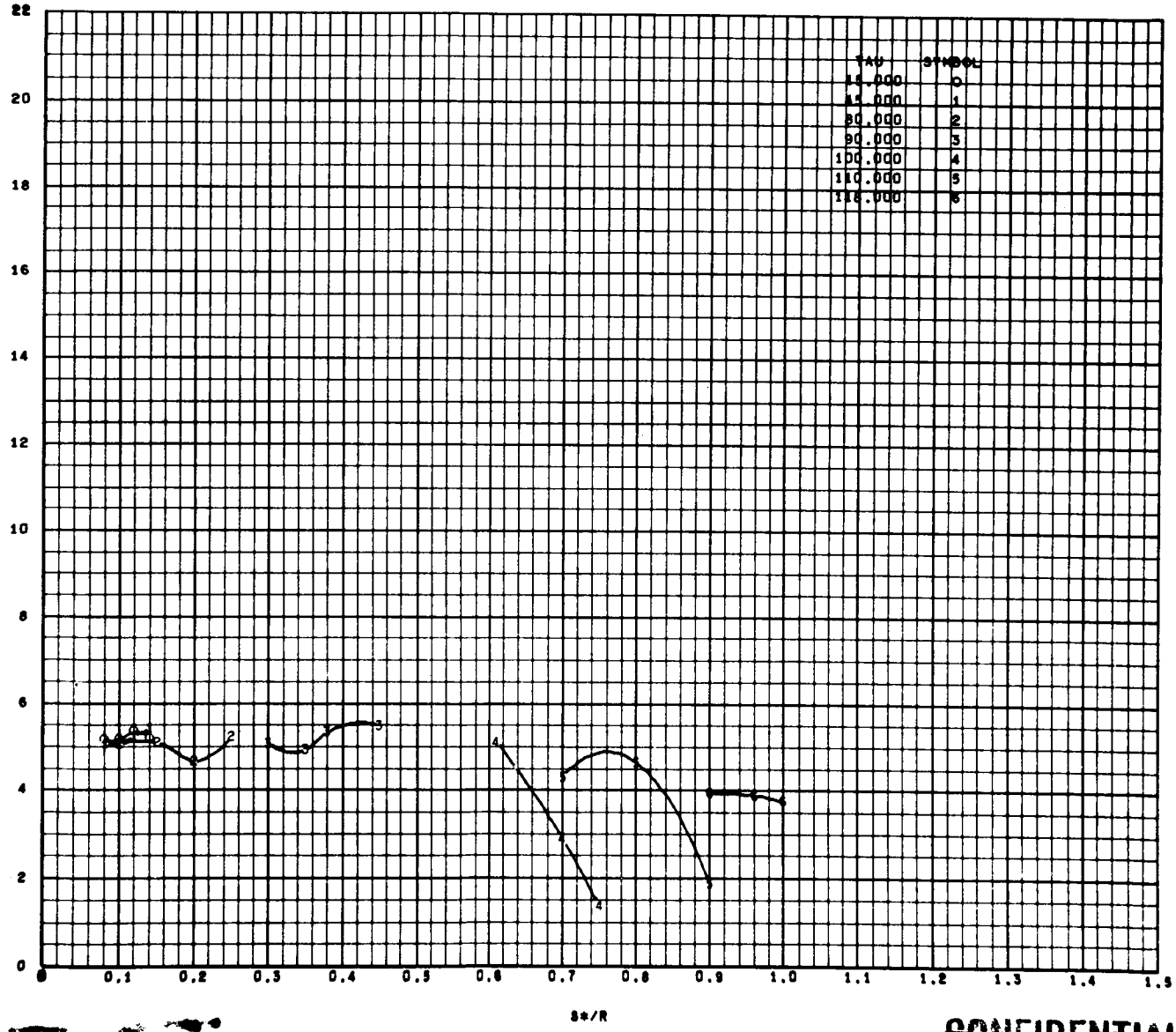
RE/FT --- 0.3293*10+6
Q(OM) --- 1.9468 BTU/SQ FT SEC

PLOT SERIES NUMBER 6

TEST GROUP	TIME (SEC)
11*	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
041 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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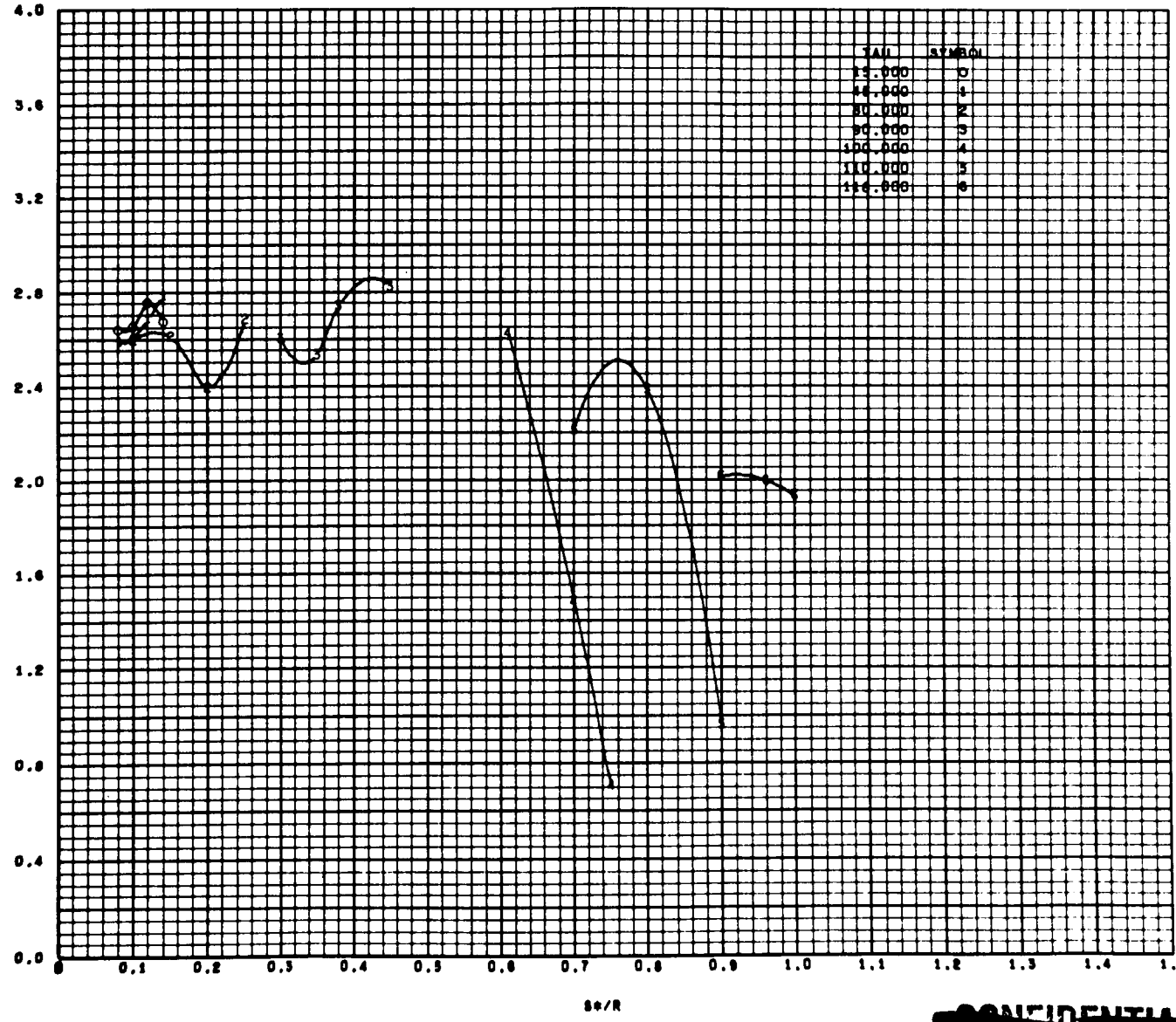
PLOT SERIES NUMBER 6

TEST GROUP	TIME (SEC)
11*	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
043 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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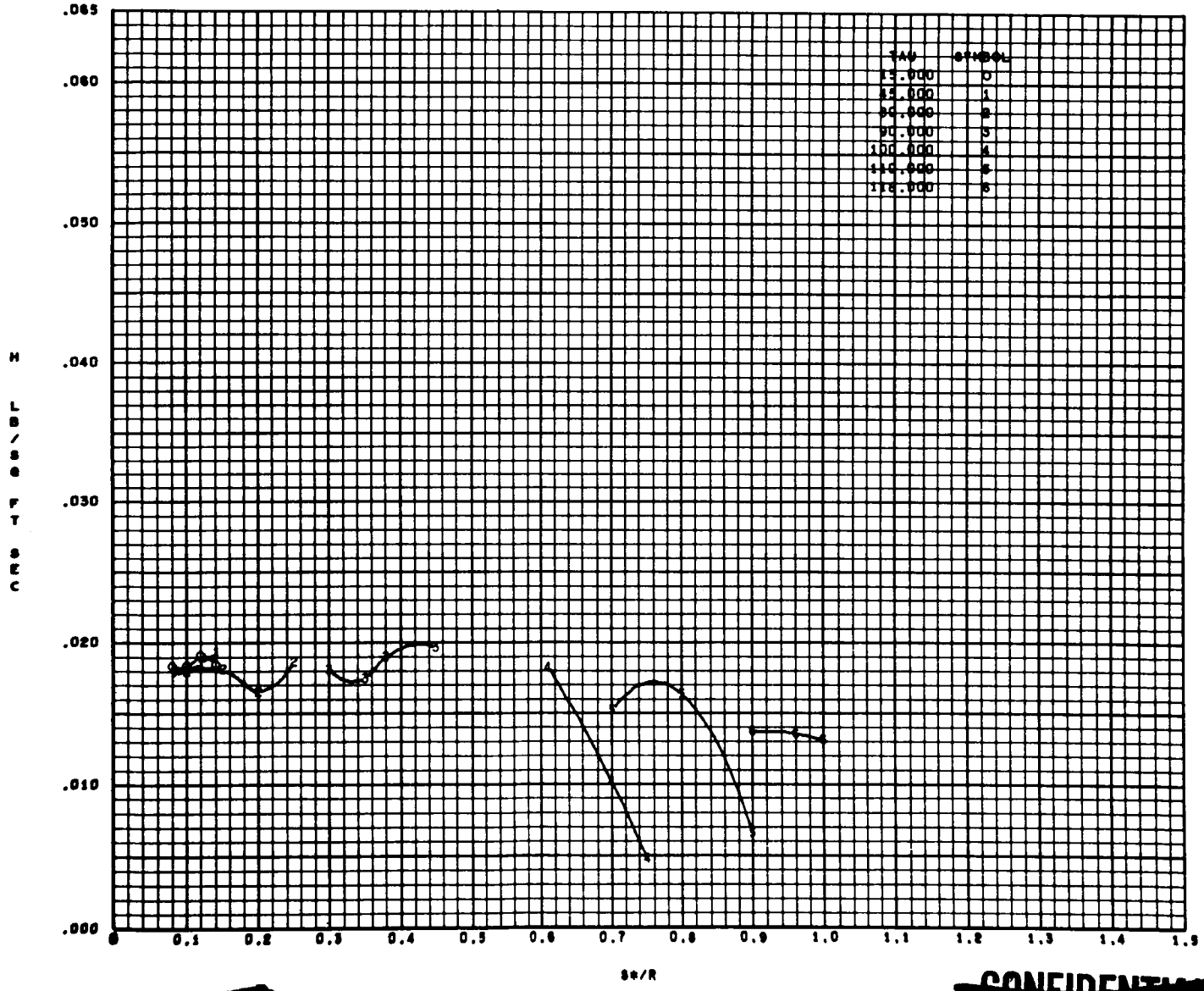
PLOT SERIES NUMBER 6

TEST GROUP	TIME (SEC)
11*	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3y37-08
045 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 153.99 DEG
ANGLE OF YAW --------- 4.99 DEG
TOTAL PRESSURE ------- 214.60 PSIA
TOTAL TEMPERATURE ---- 1674.60 DEG RANKINE

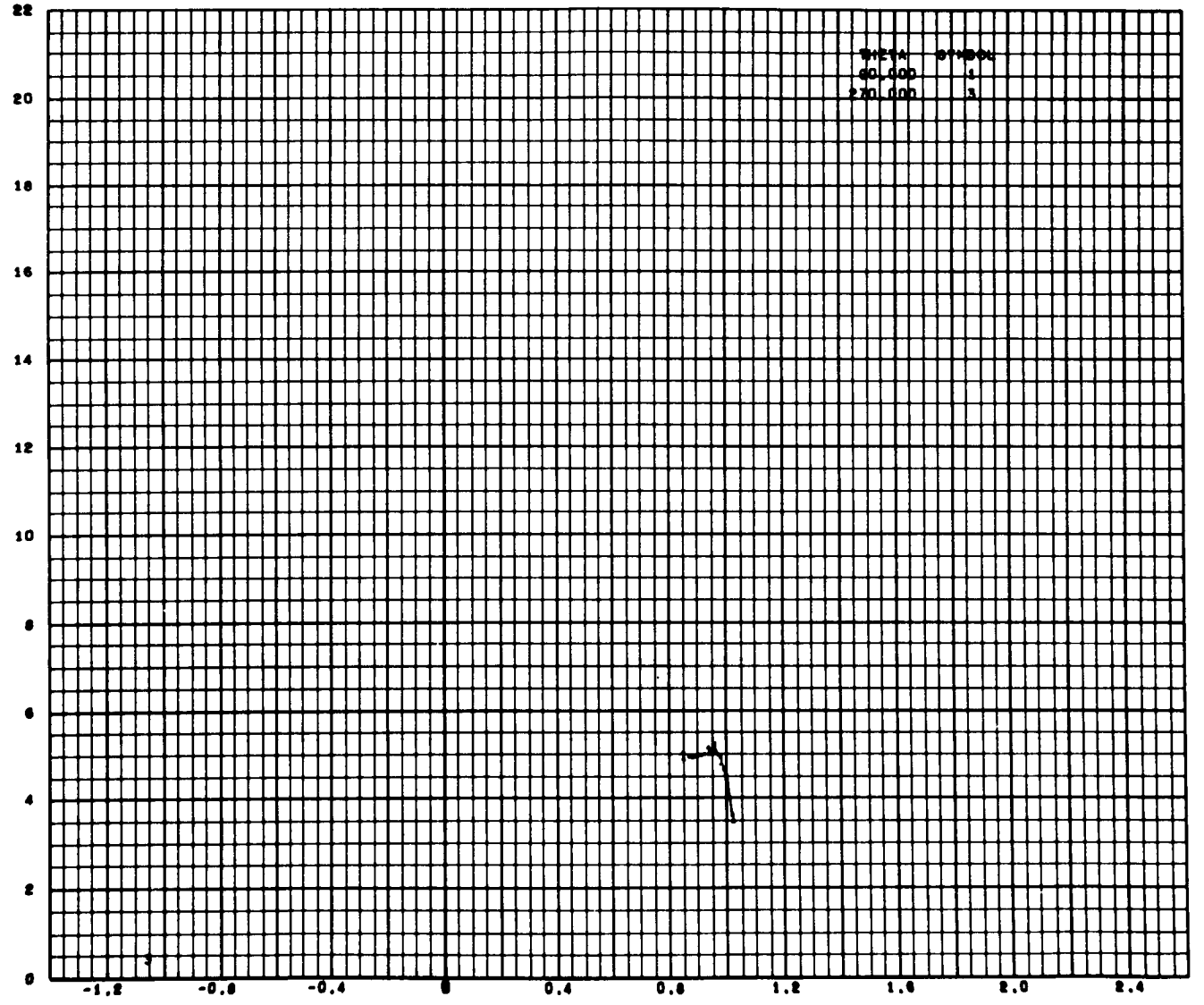
RE/FT --- 0.3277*10+6
Q(OM) --- 1.9419 BTU/SQ FT SEC

PLOT SERIES NUMBER 7

TEST GROUP	TIME (SEC)
12*	3.10

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
046 000



BTU/SQ FT SEC

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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12*	3.10

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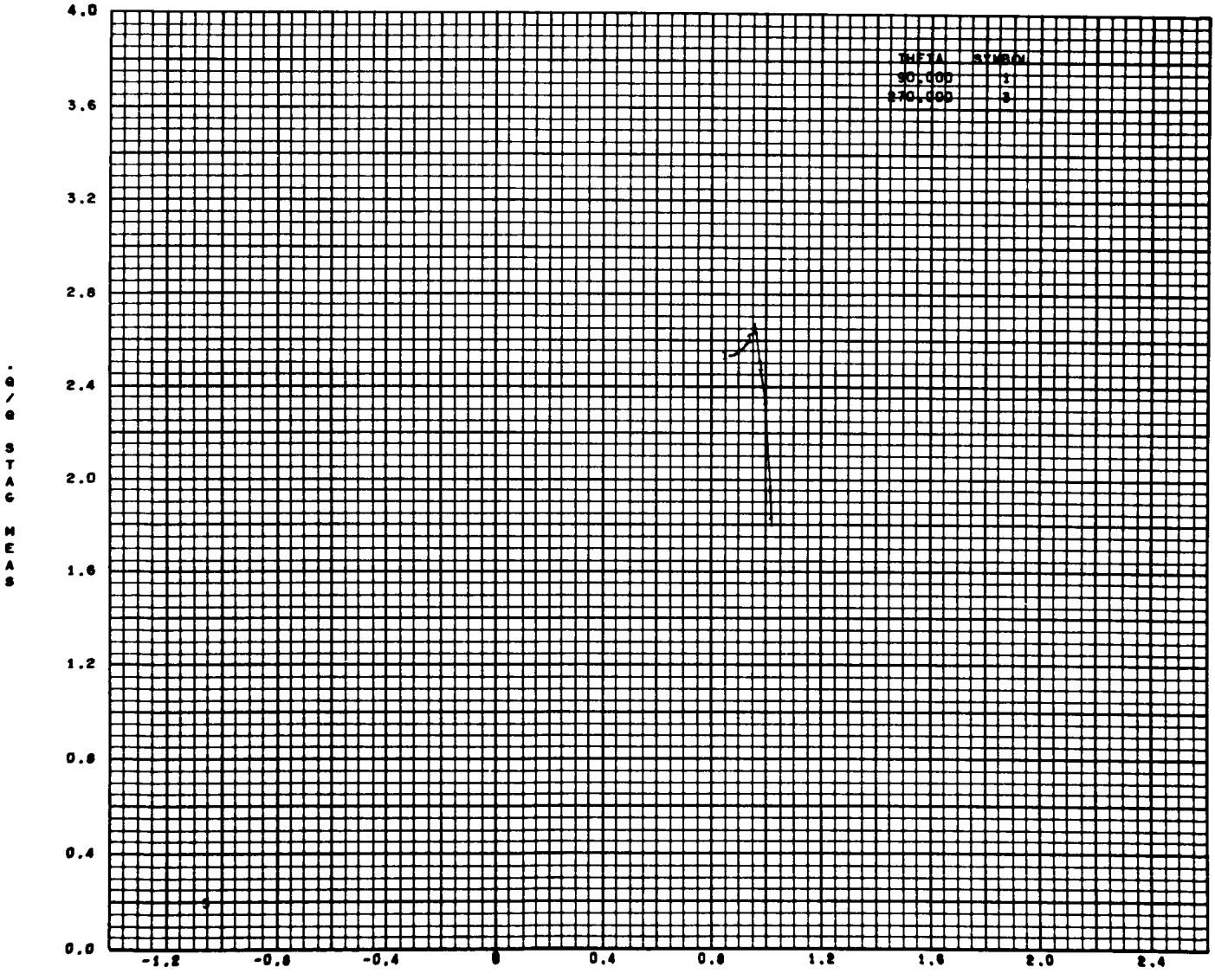
3937-08
048 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

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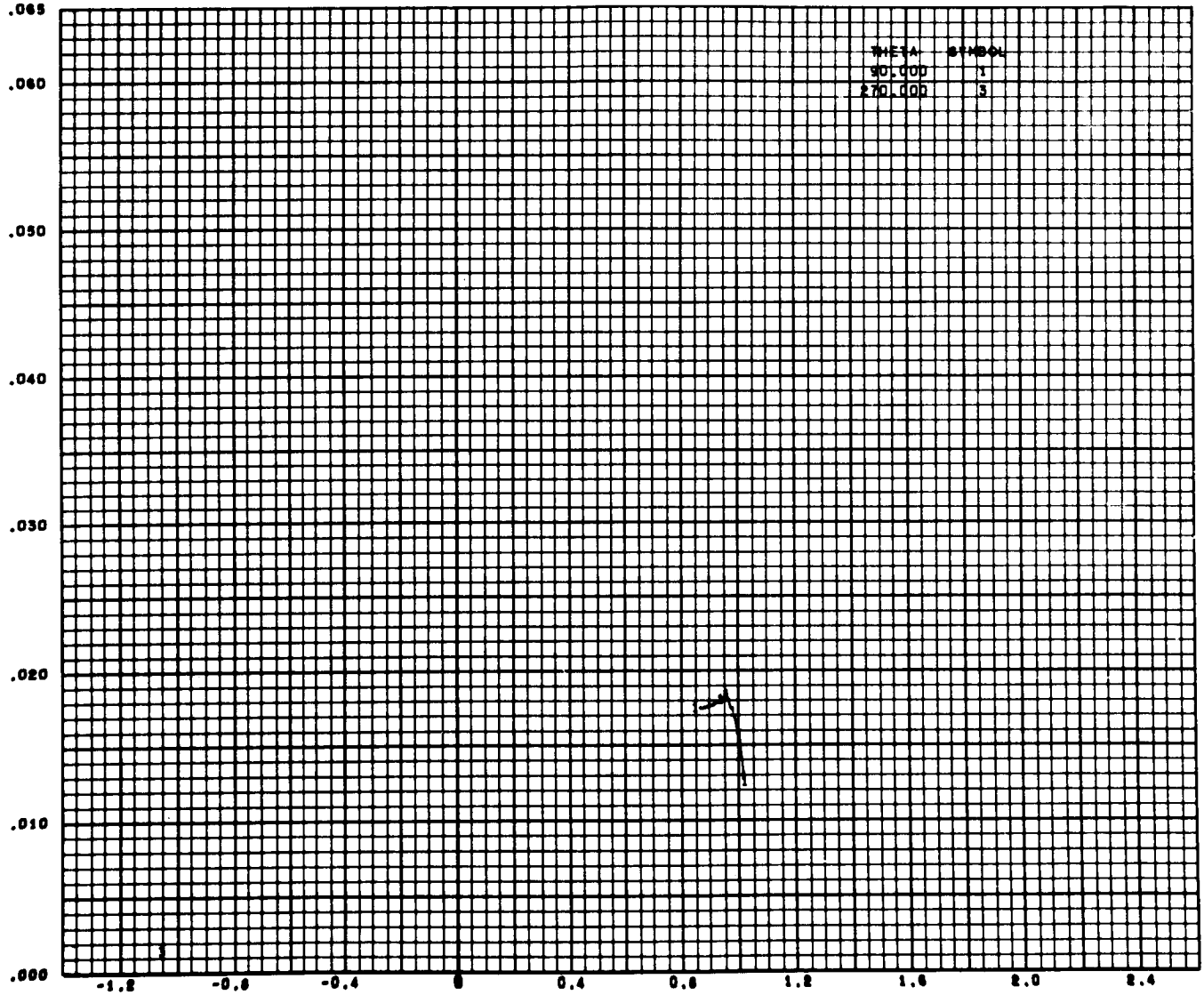

~~CONFIDENTIAL~~

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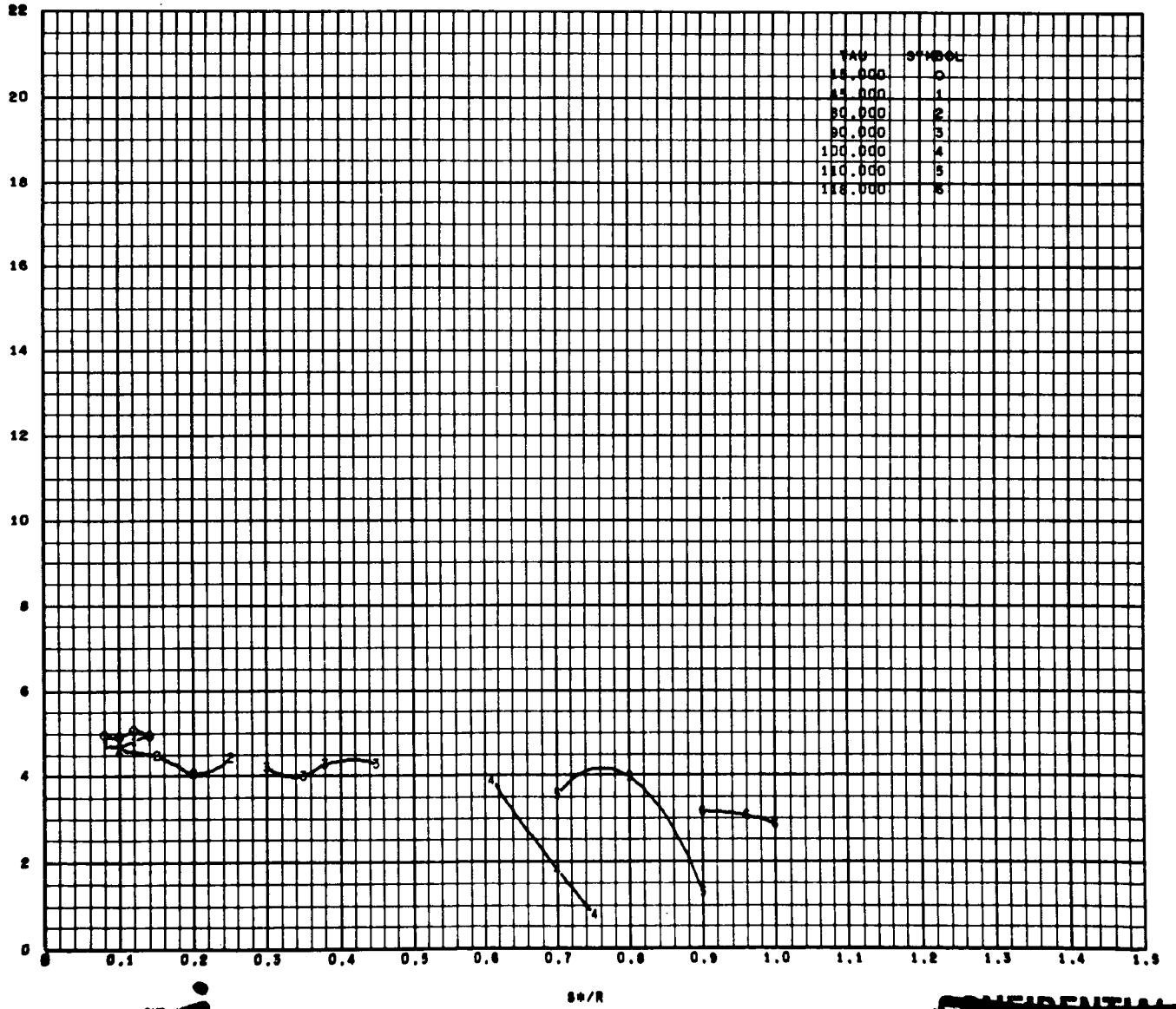
047 000



~~CONFIDENTIAL~~

HEAT TRANSFER

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TEST GROUP	TIME (SEC)
12*	3.10

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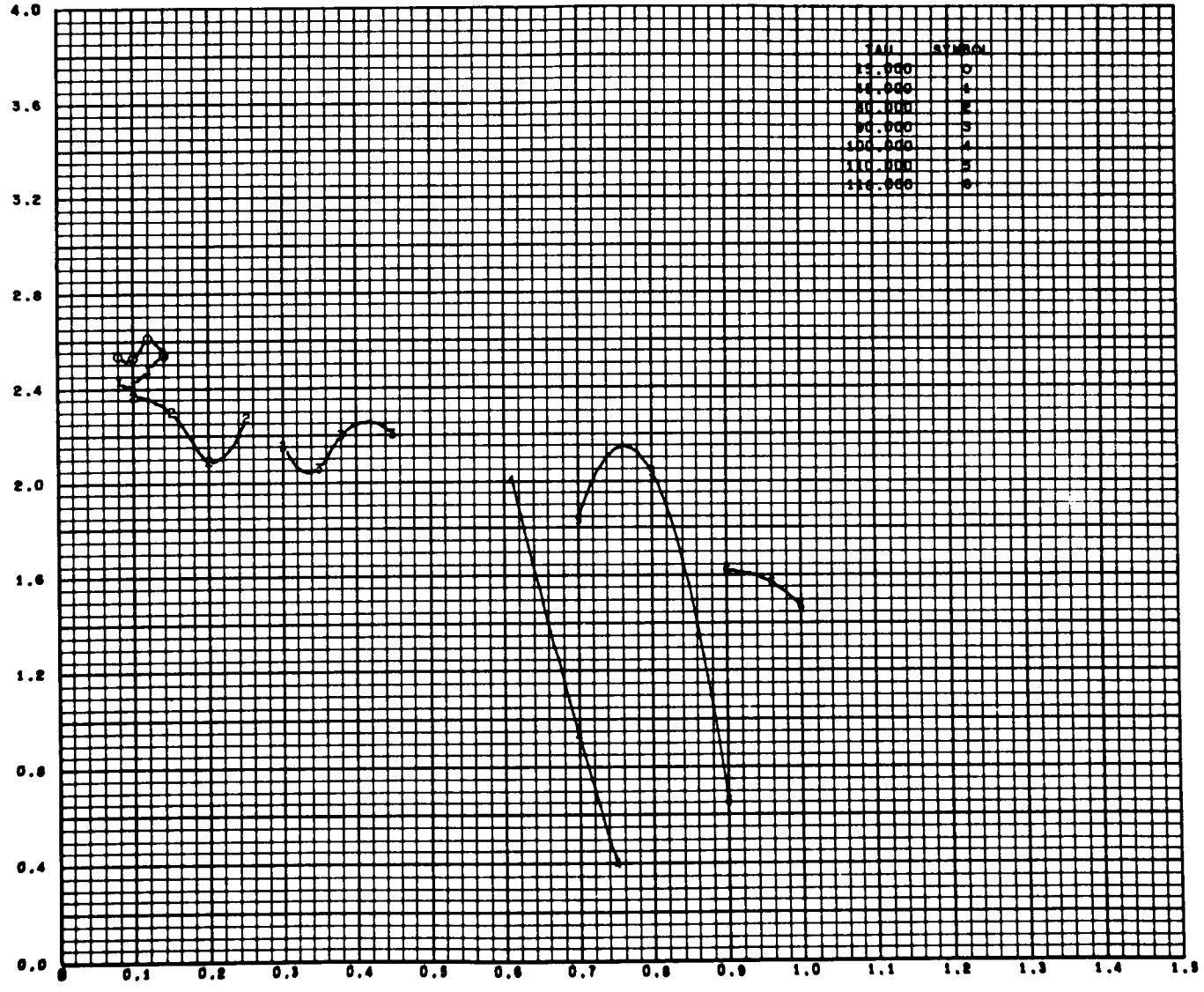
3937-08
049 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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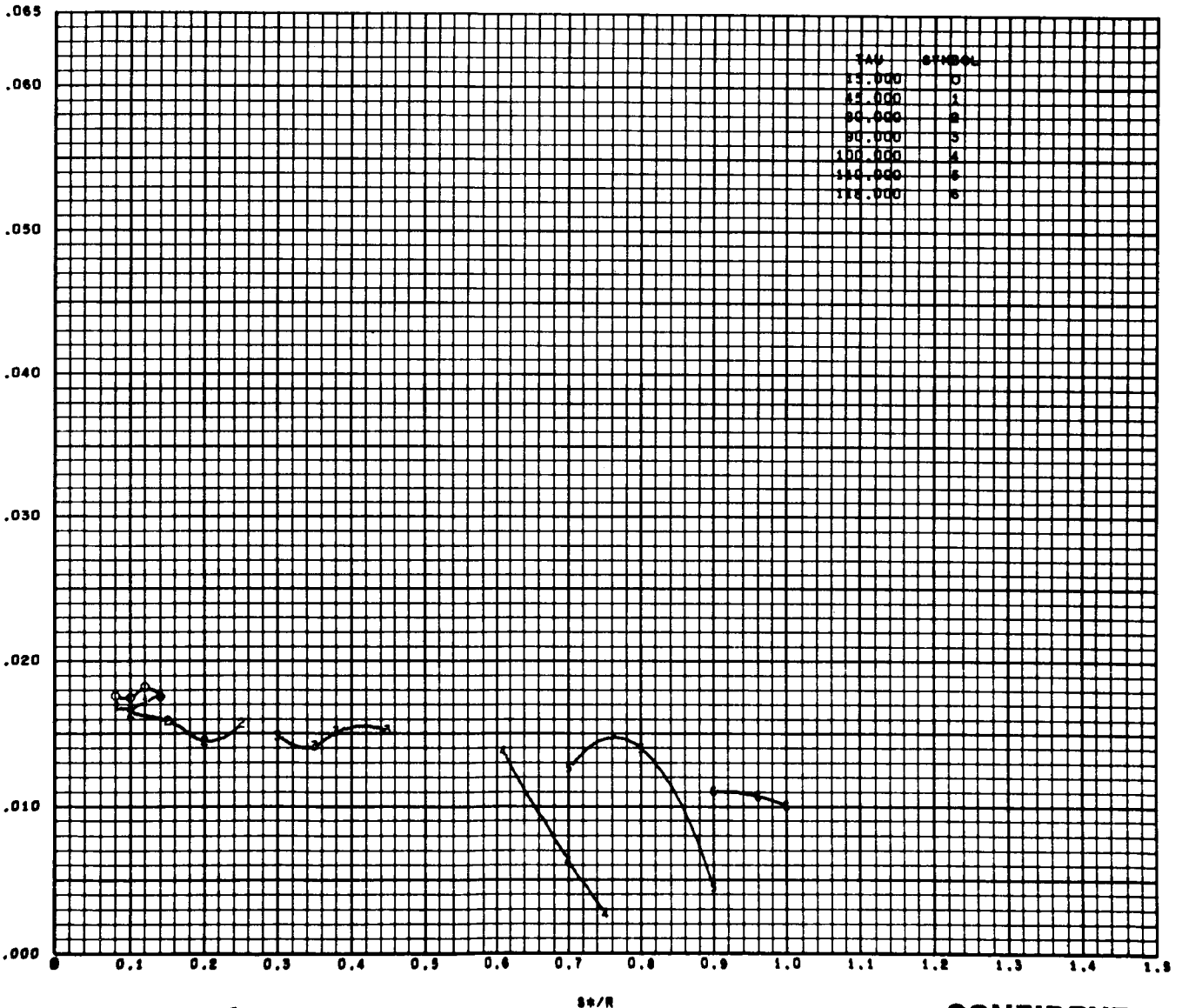
PLOT SERIES NUMBER 7

TEST GROUP	TIME (SEC)
12*	3.10

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
051 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 158.42 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 229.70 PSIA
TOTAL TEMPERATURE ---- 1651.40 DEG RANKINE

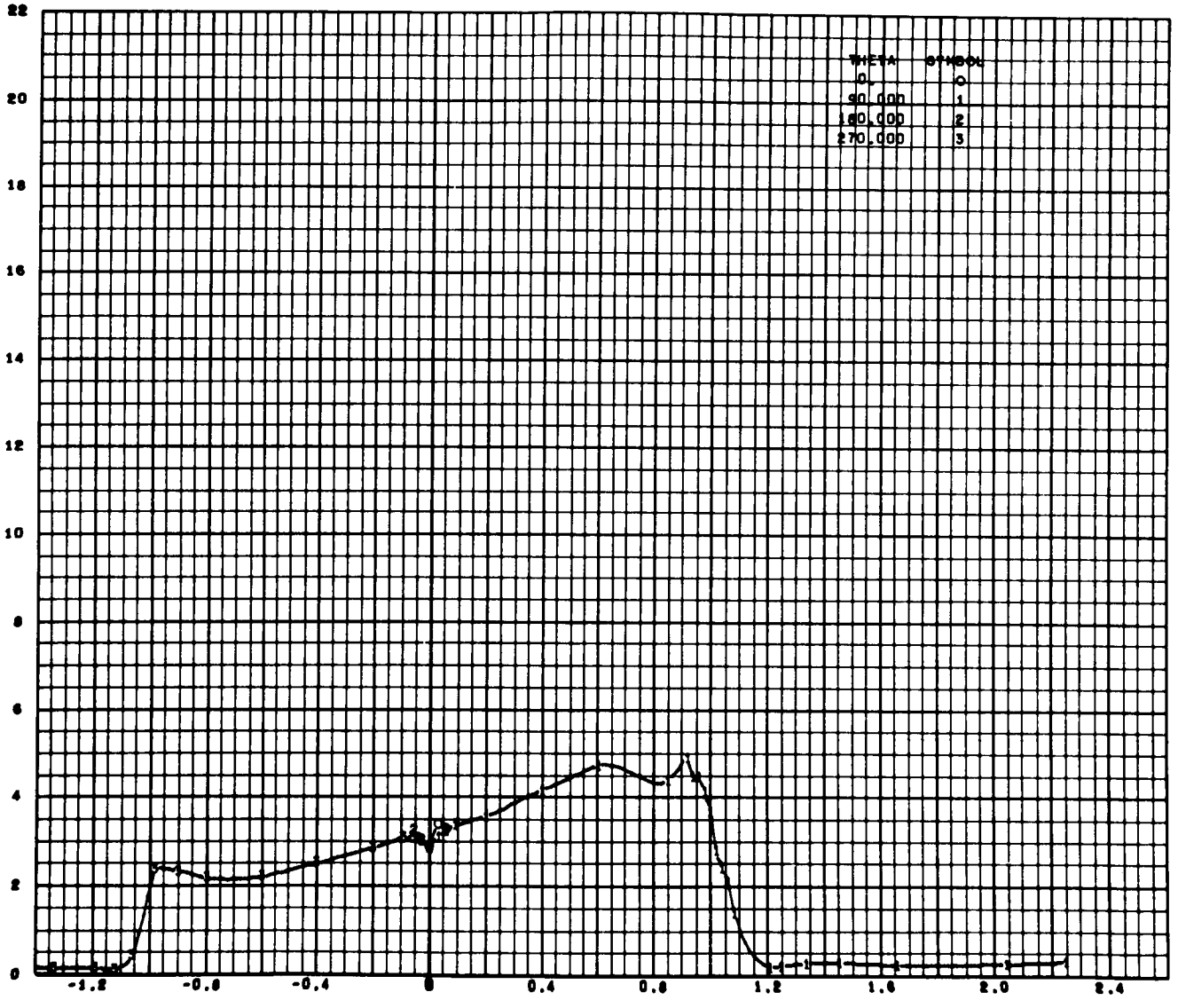
RE/FT --- 0.3593*10+6
Q(OM) --- 2.0290 BTU/SQ FT SEC

PLOT SERIES NUMBER 8

TEST GROUP	TIME (SEC)
4*	3.00
13	3.00
18	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
052 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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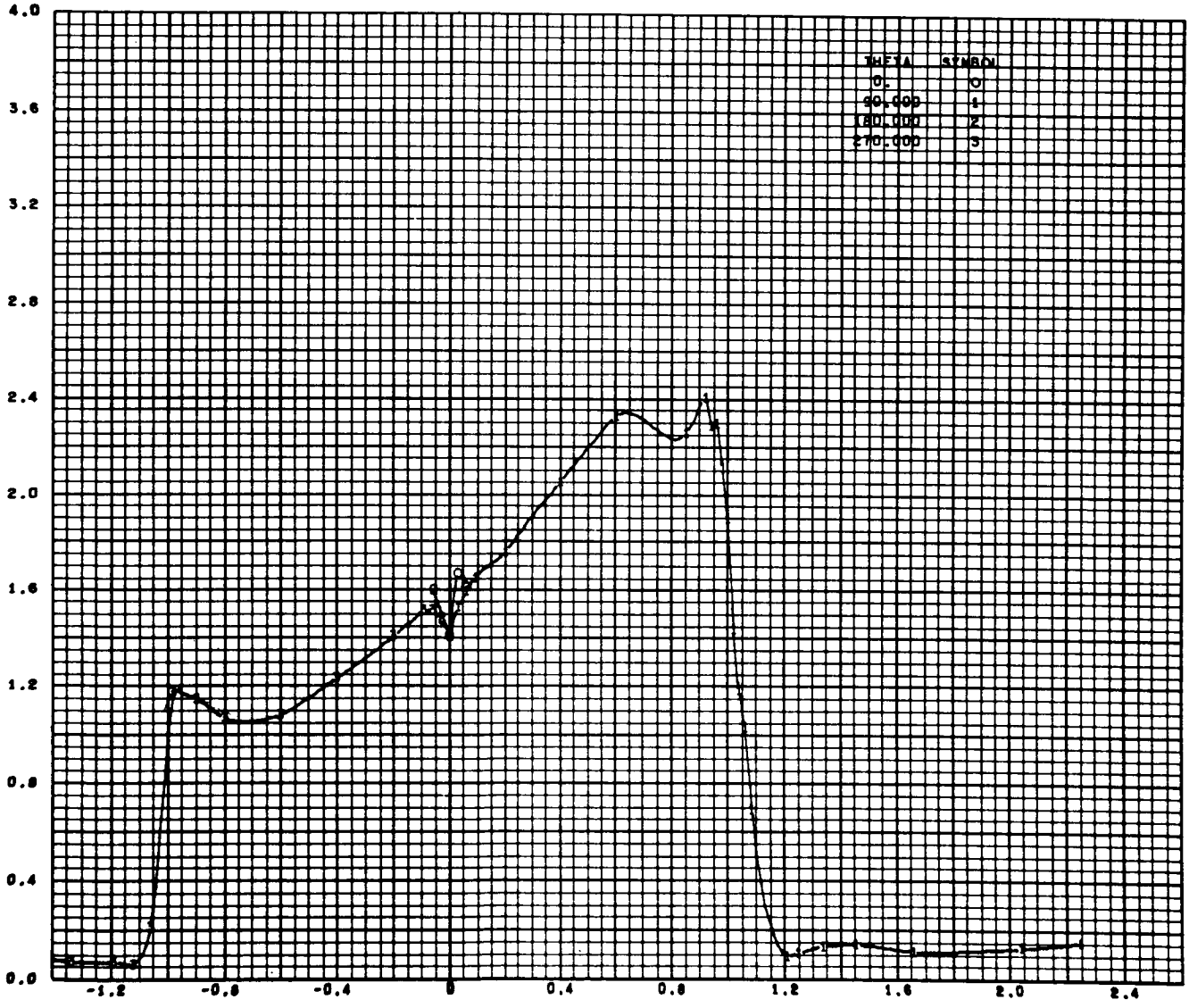
PLOT SERIES NUMBER 8

TEST GROUP	TIME (SEC)
4*	3.00
13	3.00
18	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
055 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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4*	3.00
13	3.00
18	3.20

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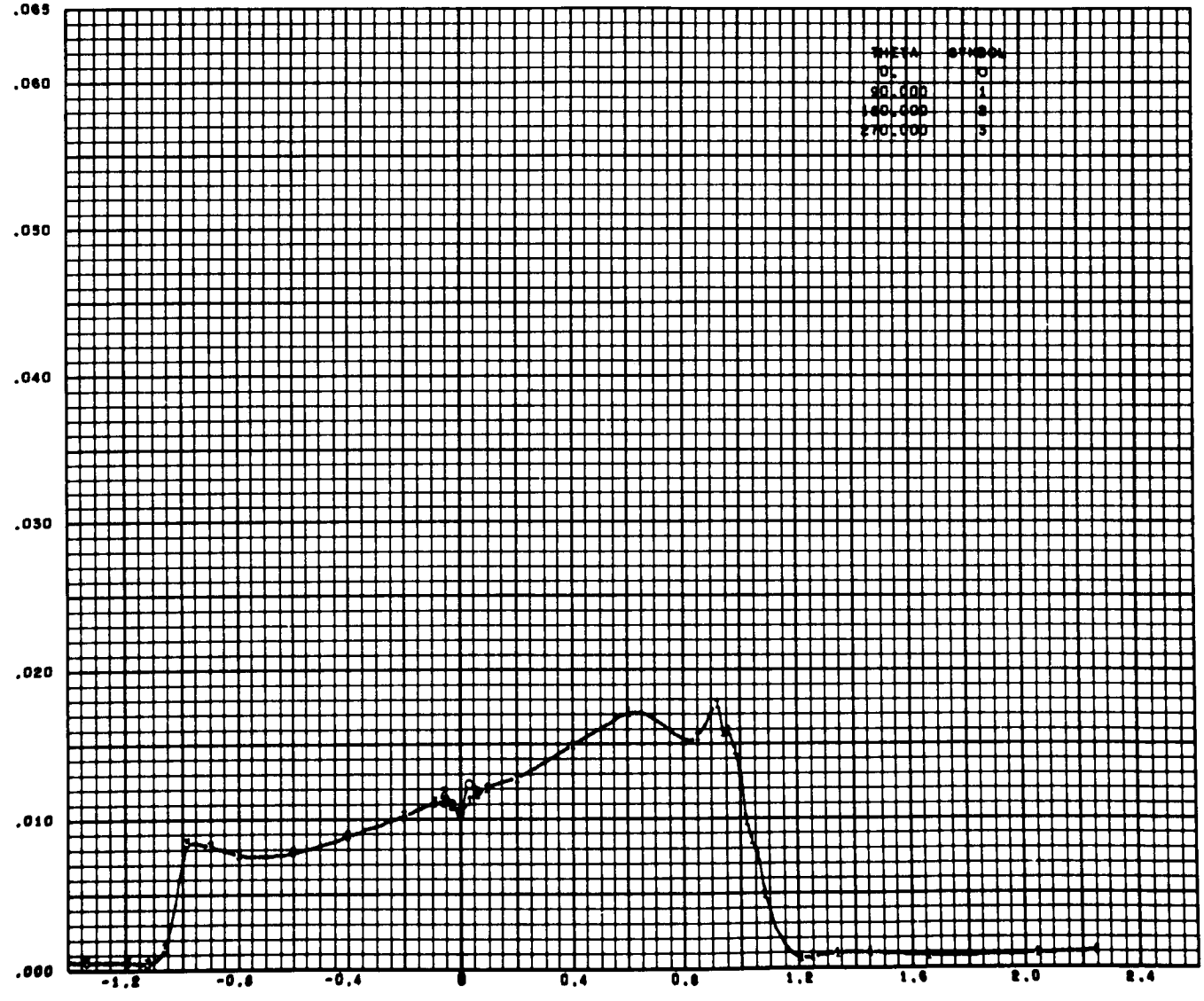
3937-08
050 000



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CONFIDENTIAL

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 158.42 DEG
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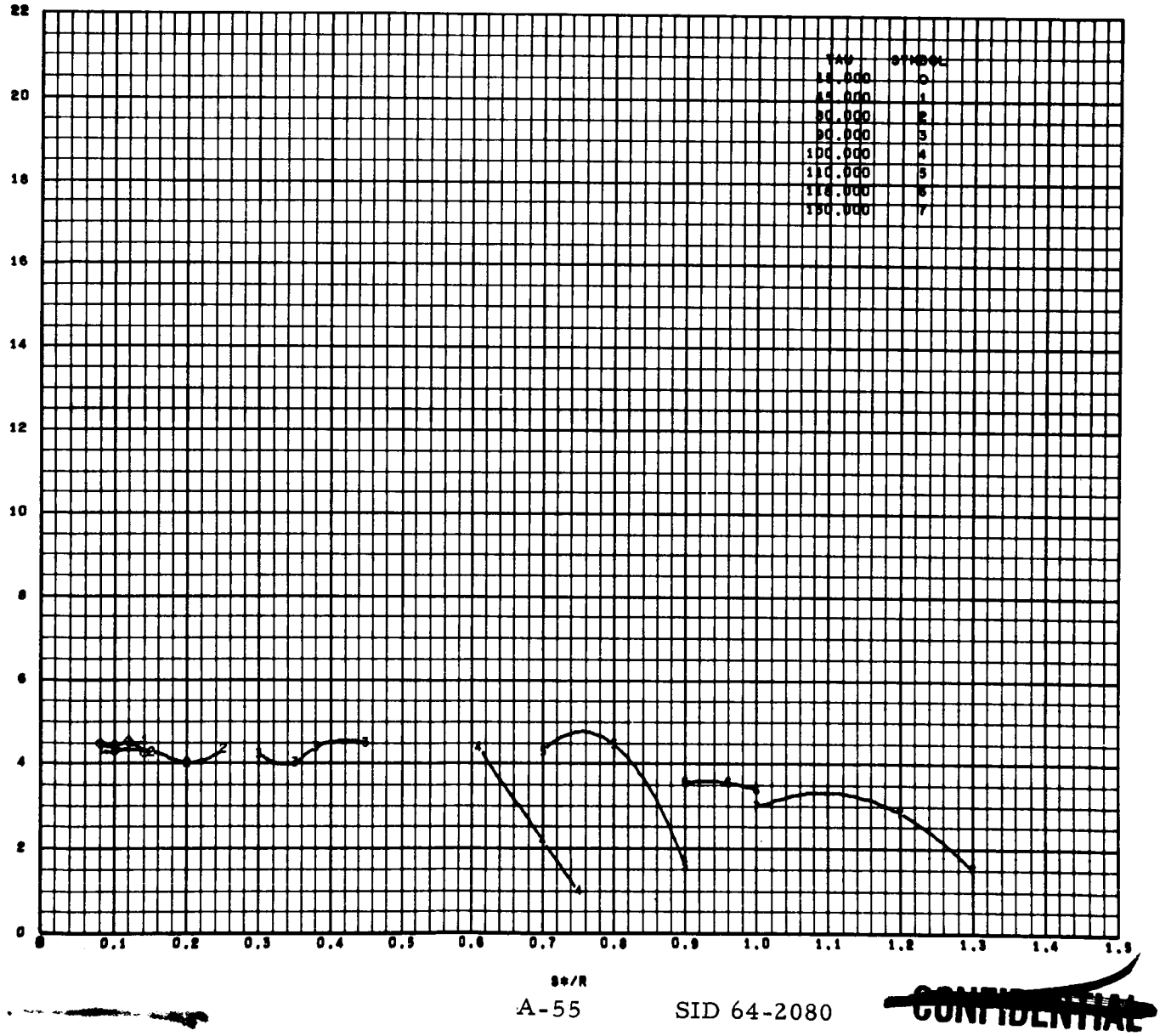
PLOT SERIES NUMBER 8

TEST GROUP	TIME (SEC)
4*	3.00
13	3.00
18	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
033 000



CONFIDENTIAL

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HEAT TRANSFER | CONFIGURATION C55 | PLOT SERIES NUMBER 8 | 3937-08 056 000

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 158.42 DEG
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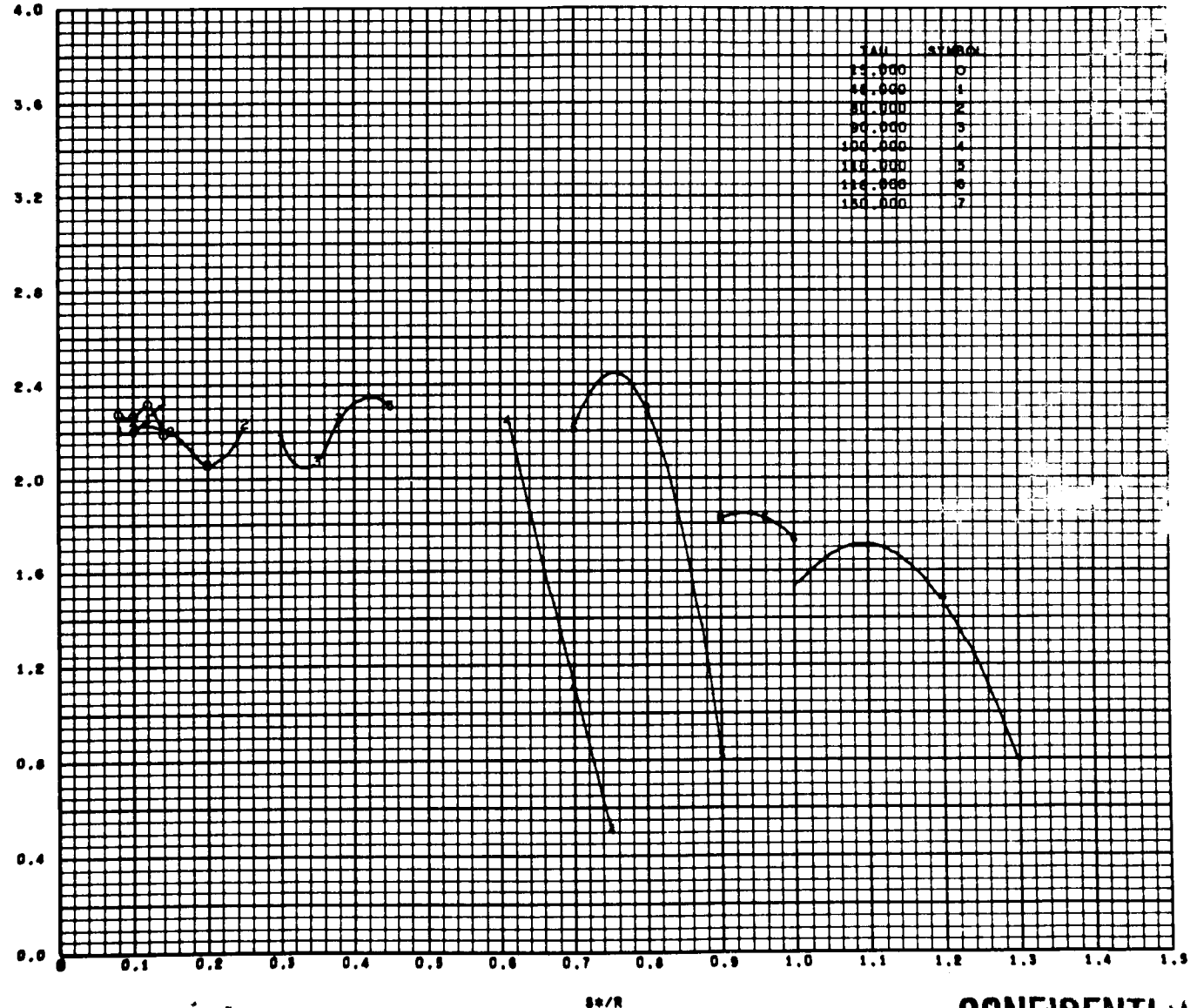
TEST GROUP	TIME (SEC)
4*	3.00
13	3.00
18	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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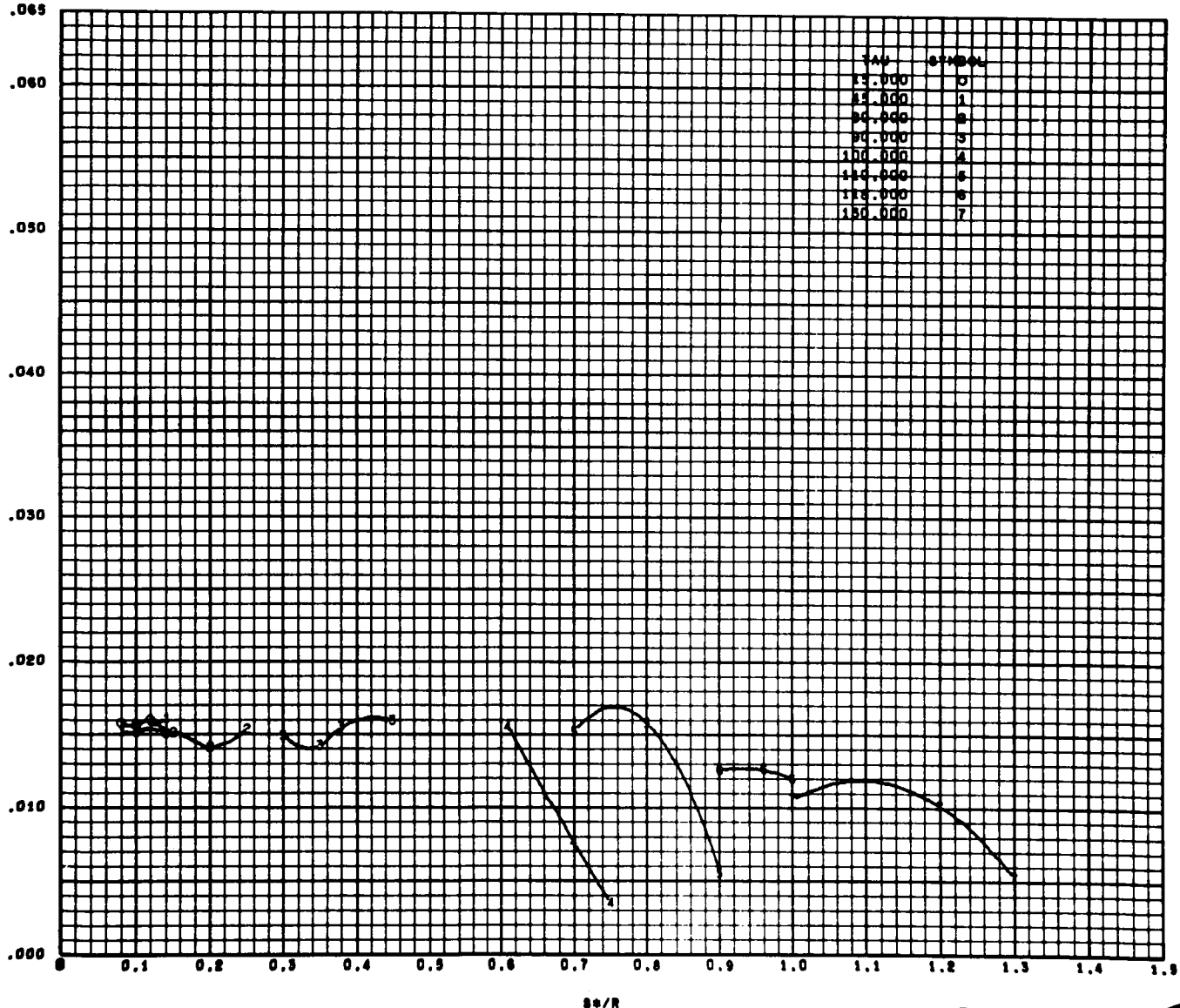
PLOT SERIES NUMBER 8

TEST GROUP	TIME (SEC)
4*	3.00
13	3.00
18	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
059 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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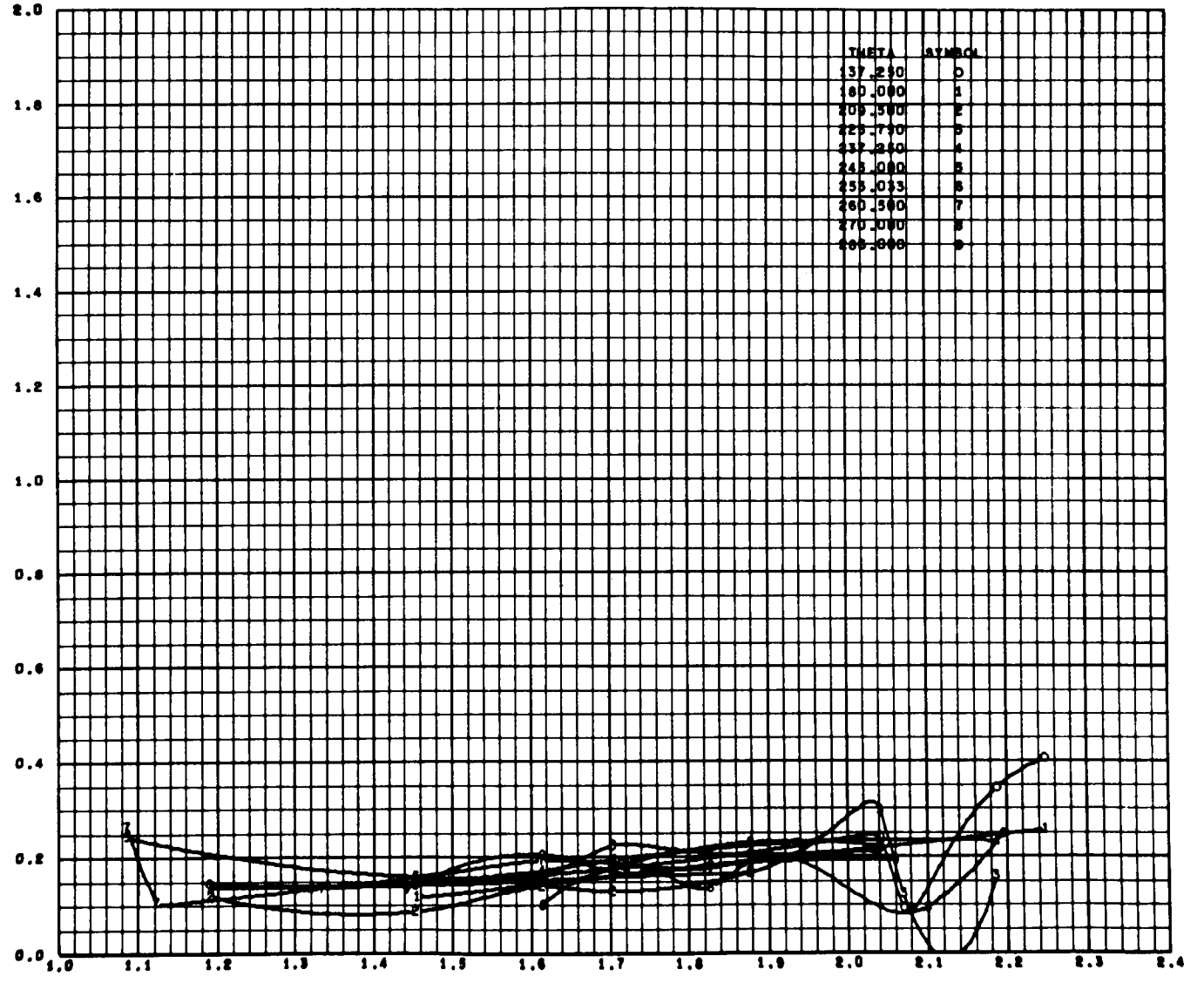
PLOT SERIES NUMBER 8

TEST GROUP	TIME (SEC)
4*	3.00
13	3.00
18	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
054 000



HEAT TRANSFER | CONFIGURATION C55 | PLOT SERIES NUMBER 8 | 3937-08 057 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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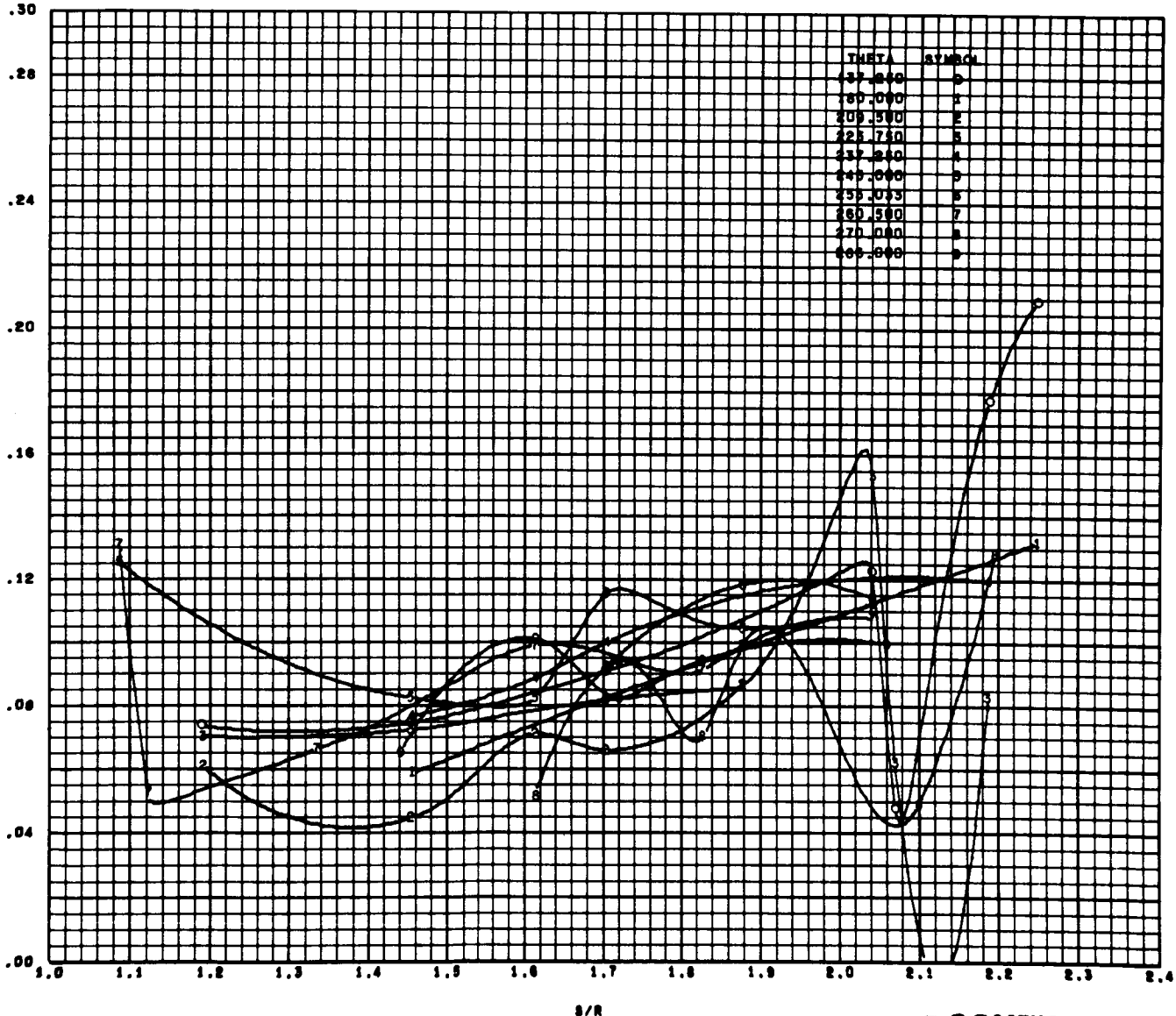
TOTAL TEMPERATURE ---- 1651.40 DEG RANKINE

RE/FT --- 0.3593*10+6
Q(OM) --- 2.0290 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
4*	3.00
13	3.00
18	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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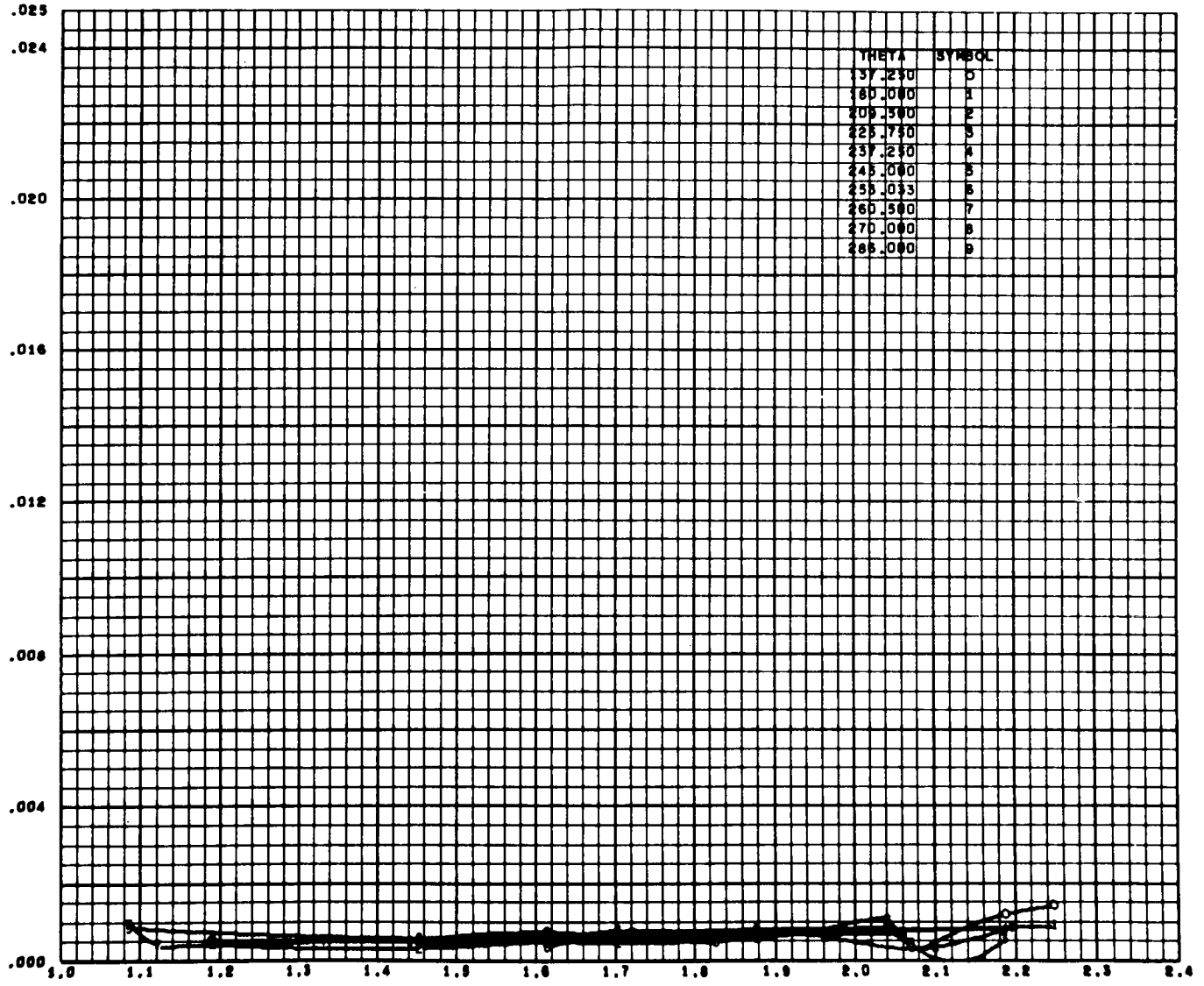
Q(OM) --- 2.0290 BTU/SQ FT SEC

PLOT SERIES NUMBER 8

TEST GROUP	TIME (SEC)
4*	3.00
13	3.00
18	3.20

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
060 006



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 162.50 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 214.30 PSIA
TOTAL TEMPERATURE ---- 1667.80 DEG RANKINE

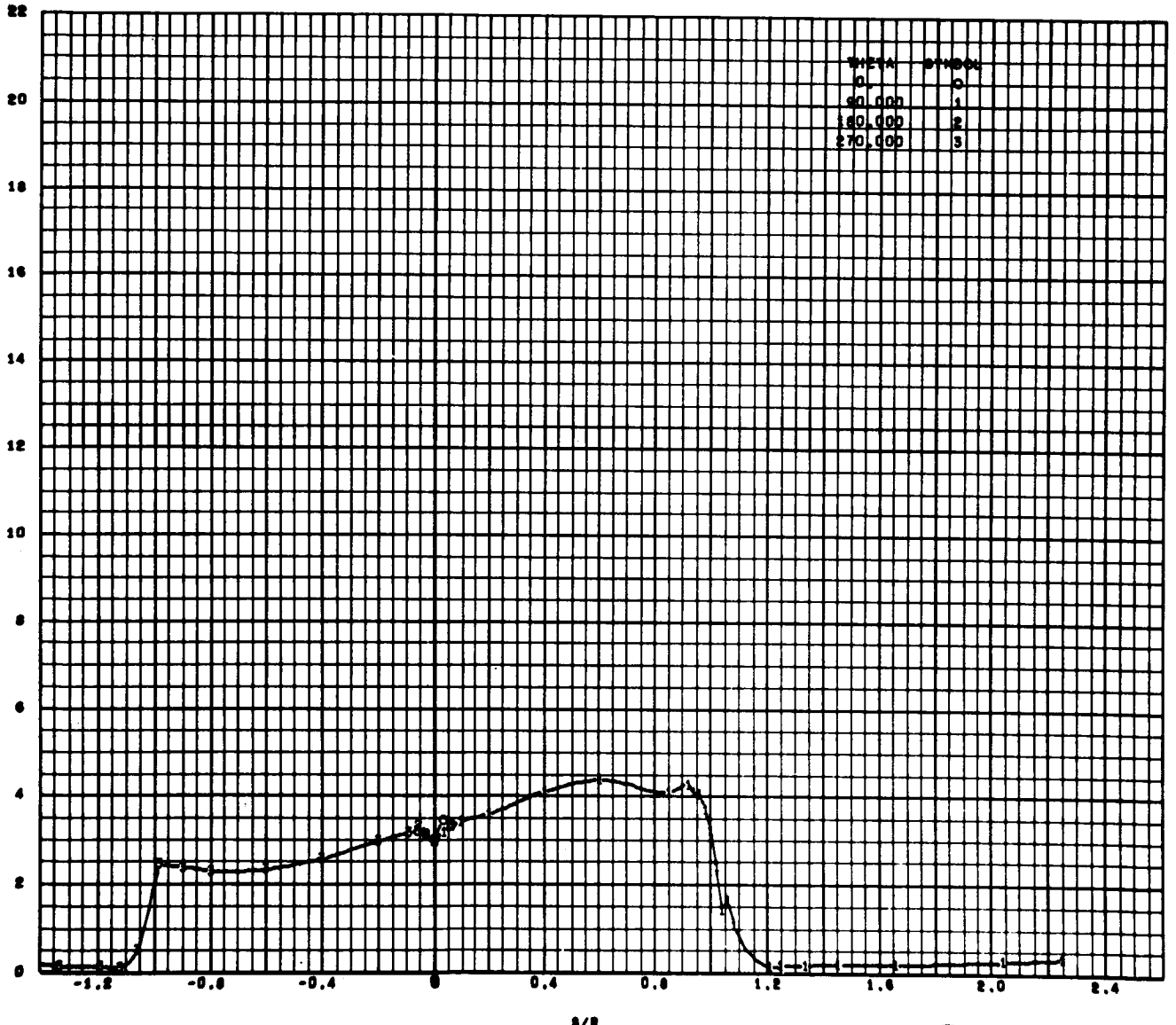
RE/FT --- 0.3297*10+6
Q(OM) --- 1.9405 BTU/SQ FT SEC

PLOT SERIES NUMBER 9

TEST GROUP	TIME (SEC)
5*	2.95
14	3.05
19	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
061 000



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HEAT TRANSFER

APOLLO H-11

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JUNE, 1964

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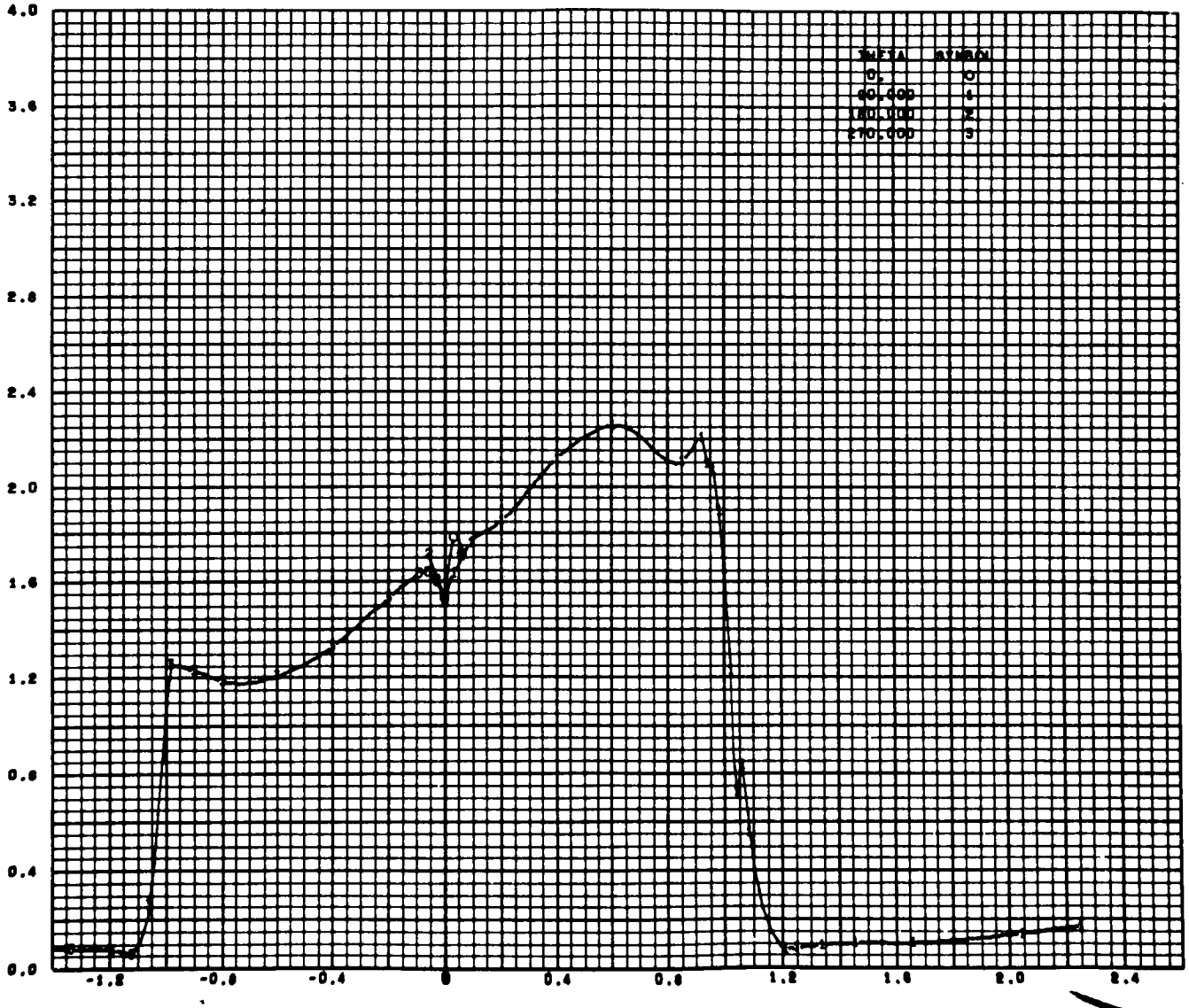
TEST GROUP	TIME (SEC)
5*	2.95
14	3.05
19	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
064 000



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HEAT TRANSFER

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TEST GROUP	TIME (SEC)
5*	2.95
14	3.05
19	3.00

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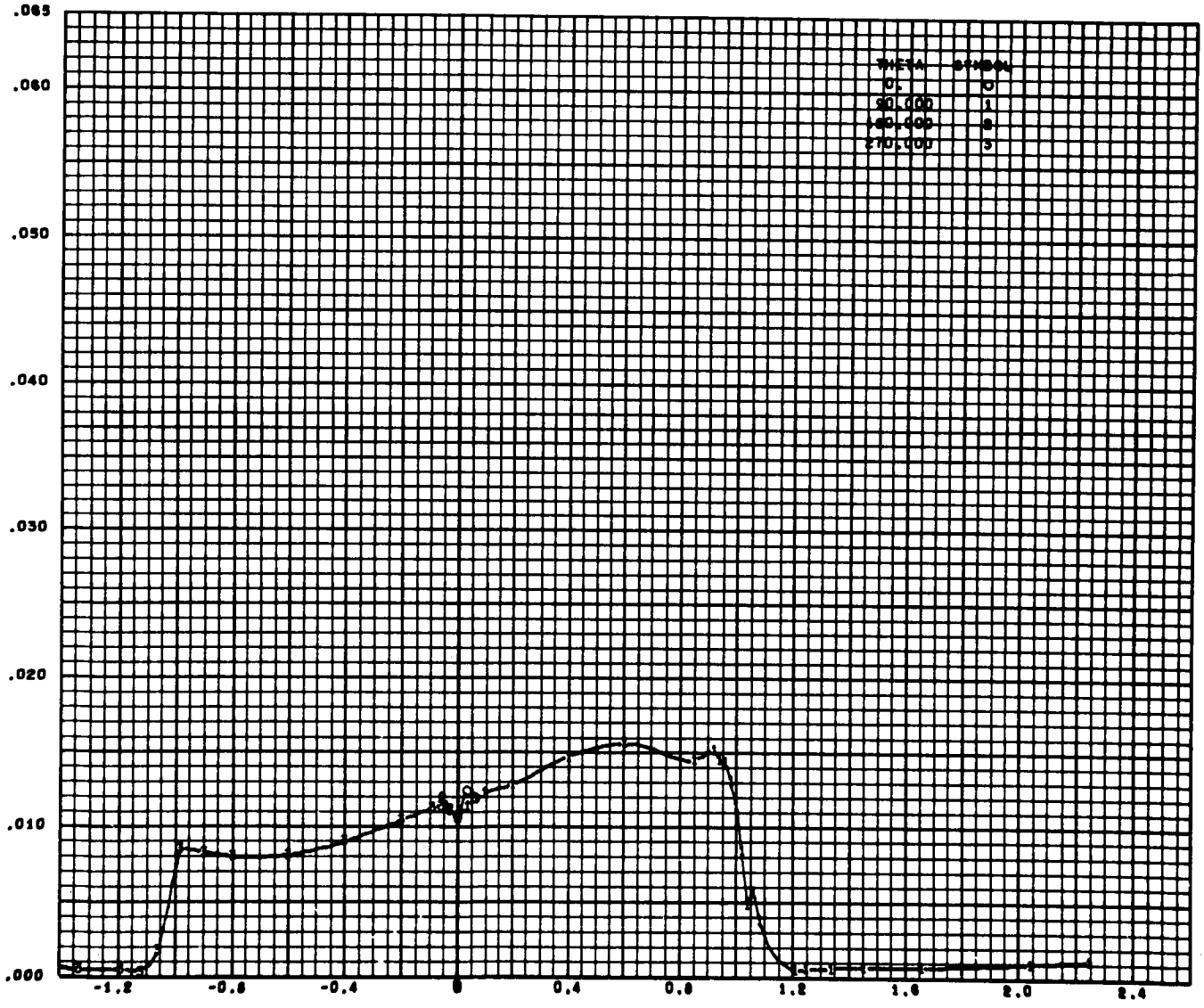
3937-08
067 000



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SID 64-2080

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HEAT TRANSFER

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14	3.05
19	3.00

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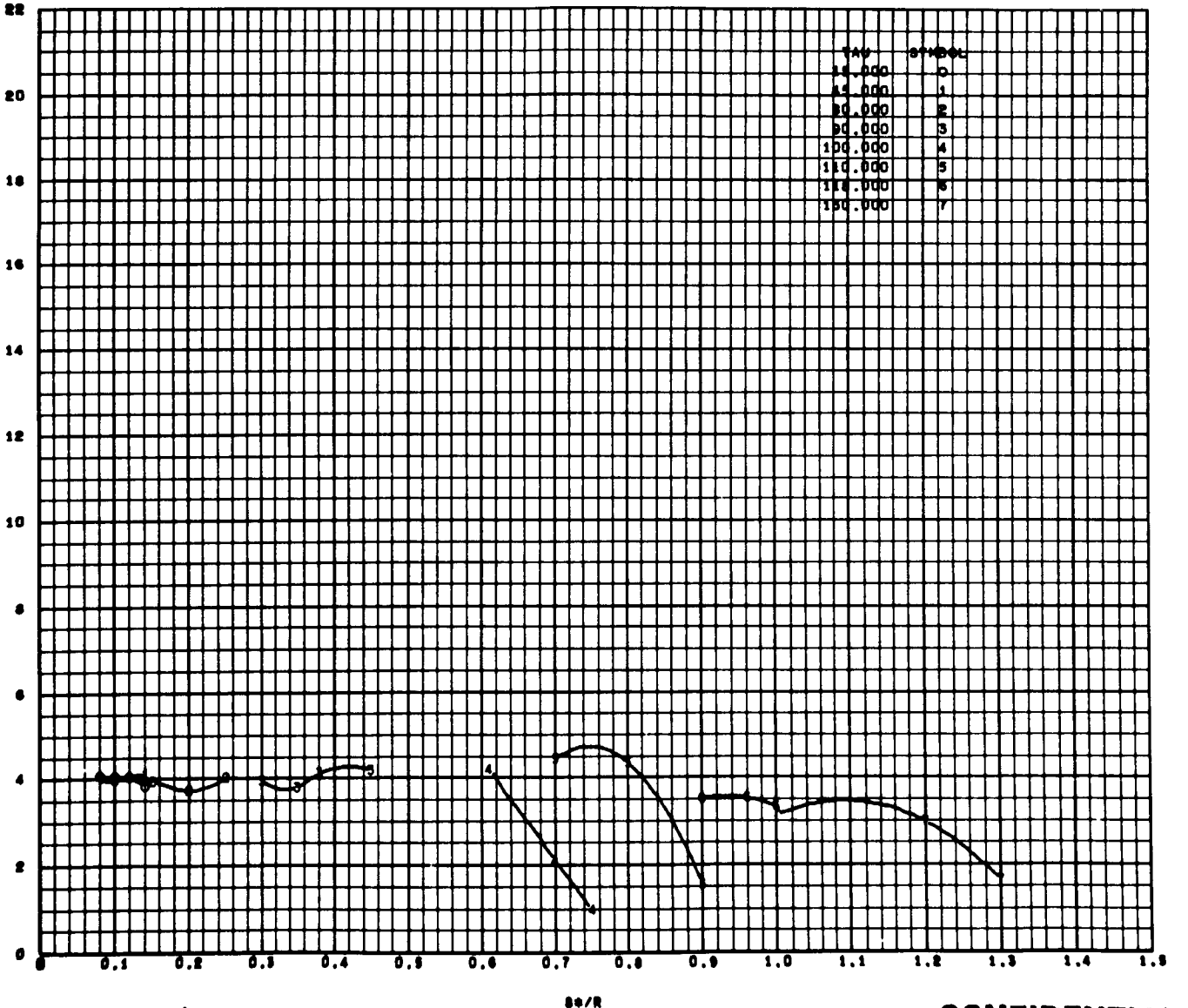
3937-08
062 000



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HEAT TRANSFER

APOLLO M-11

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JUNE, 1964

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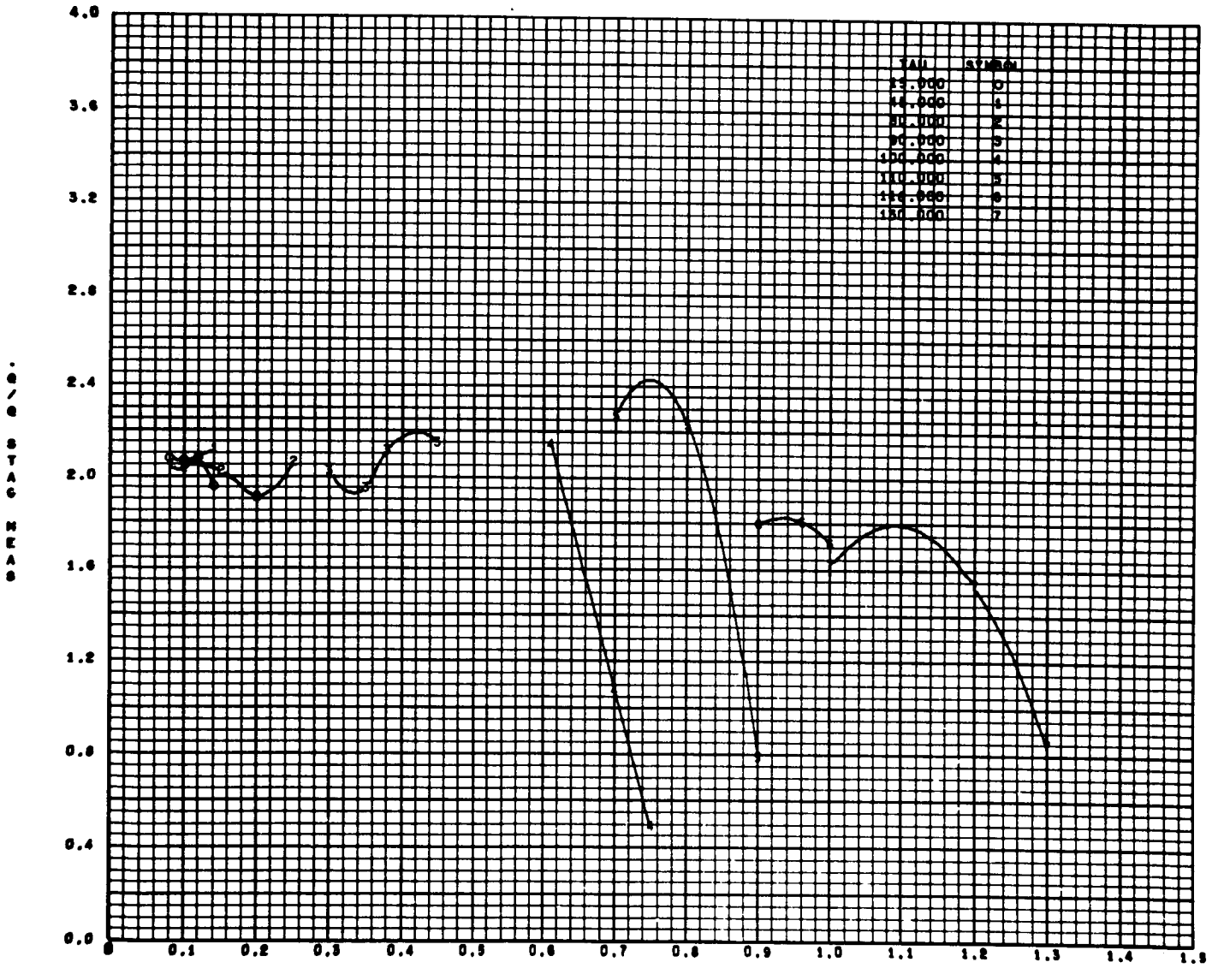
PLOT SERIES NUMBER 9

TEST GROUP	TIME (SEC)
5*	2.95
14	3.05
19	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
065 000



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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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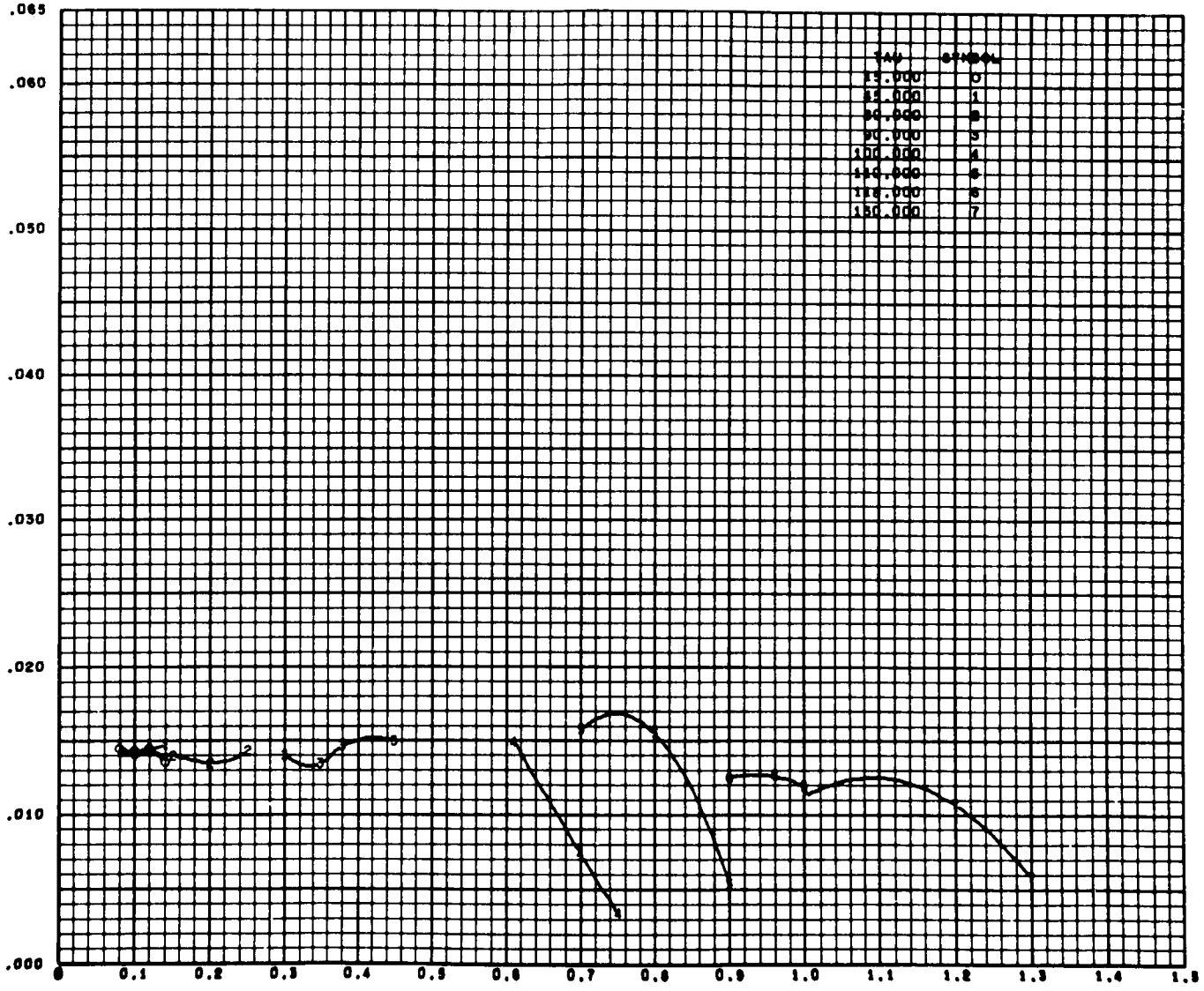
TEST GROUP	TIME (SEC)
5*	2.95
14	3.05
19	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
068 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 162.50 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 214.30 PSIA
TOTAL TEMPERATURE ---- 1667.80 DEG RANKINE

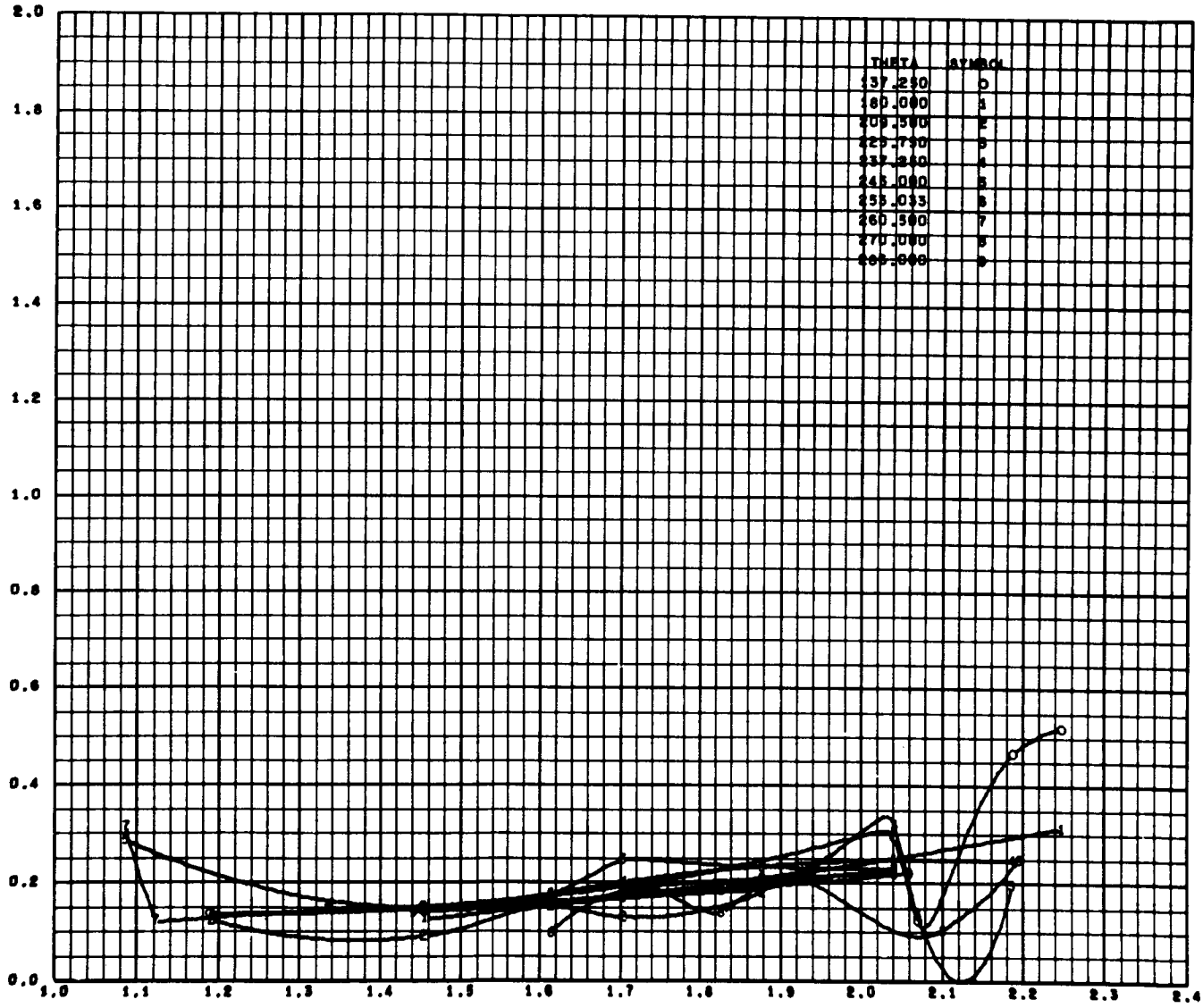
RE/FT --- 0.3297*10+6
Q(OM) --- 1.9405 BTU/SQ FT SEC

PLOT SERIES NUMBER 9

TEST GROUP	TIME (SEC)
5*	2.95
14	3.05
19	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
063 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 162.50 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 214.30 PSIA
TOTAL TEMPERATURE ---- 1667.80 DEG RANKINE

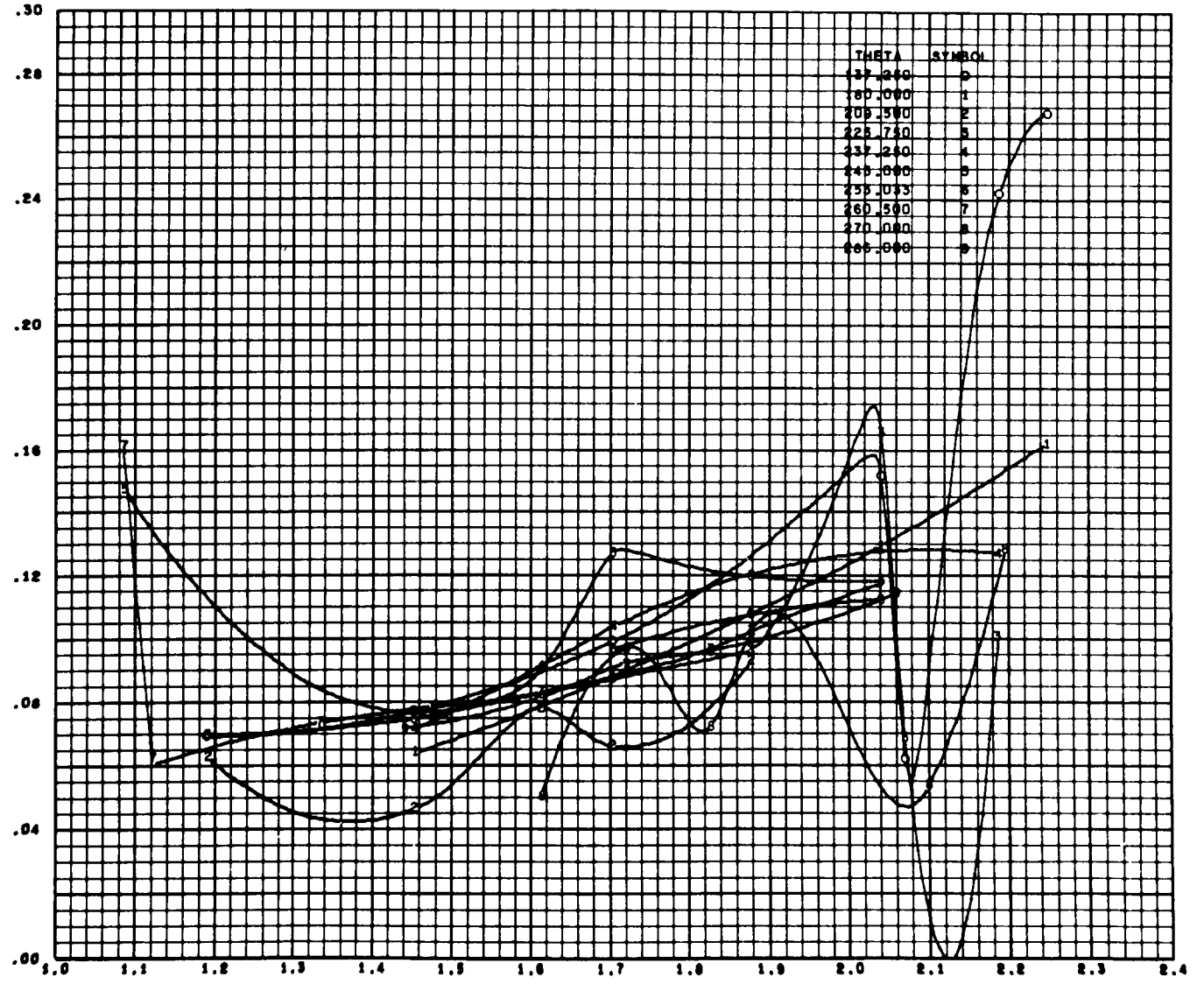
RE/FT --- 0.3297*10+6
Q(OM) --- 1.9405 BTU/SQ FT SEC

PLOT SERIES NUMBER 9

TEST GROUP	TIME (SEC)
5*	2.95
14	3.05
19	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
066 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 162.50 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 214.30 PSIA
TOTAL TEMPERATURE ---- 1667.80 DEG RANKINE

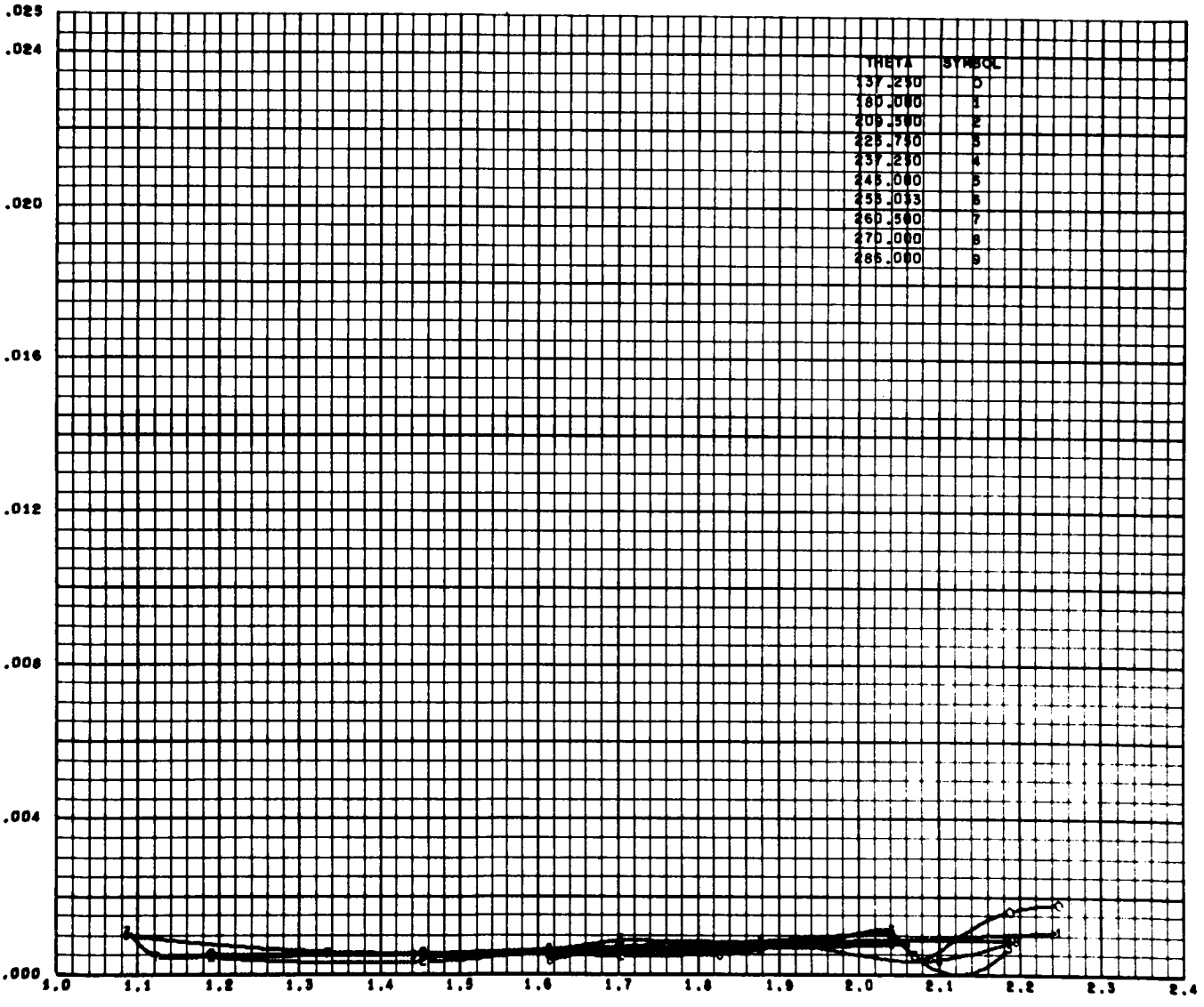
RE/FT --- 0.3297*10+6
Q(OM) --- 1.9405 BTU/SQ FT SEC

PLOT SERIES NUMBER 9

TEST GROUP	TIME (SEC)
5*	2.95
14	3.05
19	3.00

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
069 000



S/R

SID 64-2080

[redacted]

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.14
ANGLE OF ATTACK ------ 143.37 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 925.30 PSIA
TOTAL TEMPERATURE ---- 1831.10 DEG RANKINE

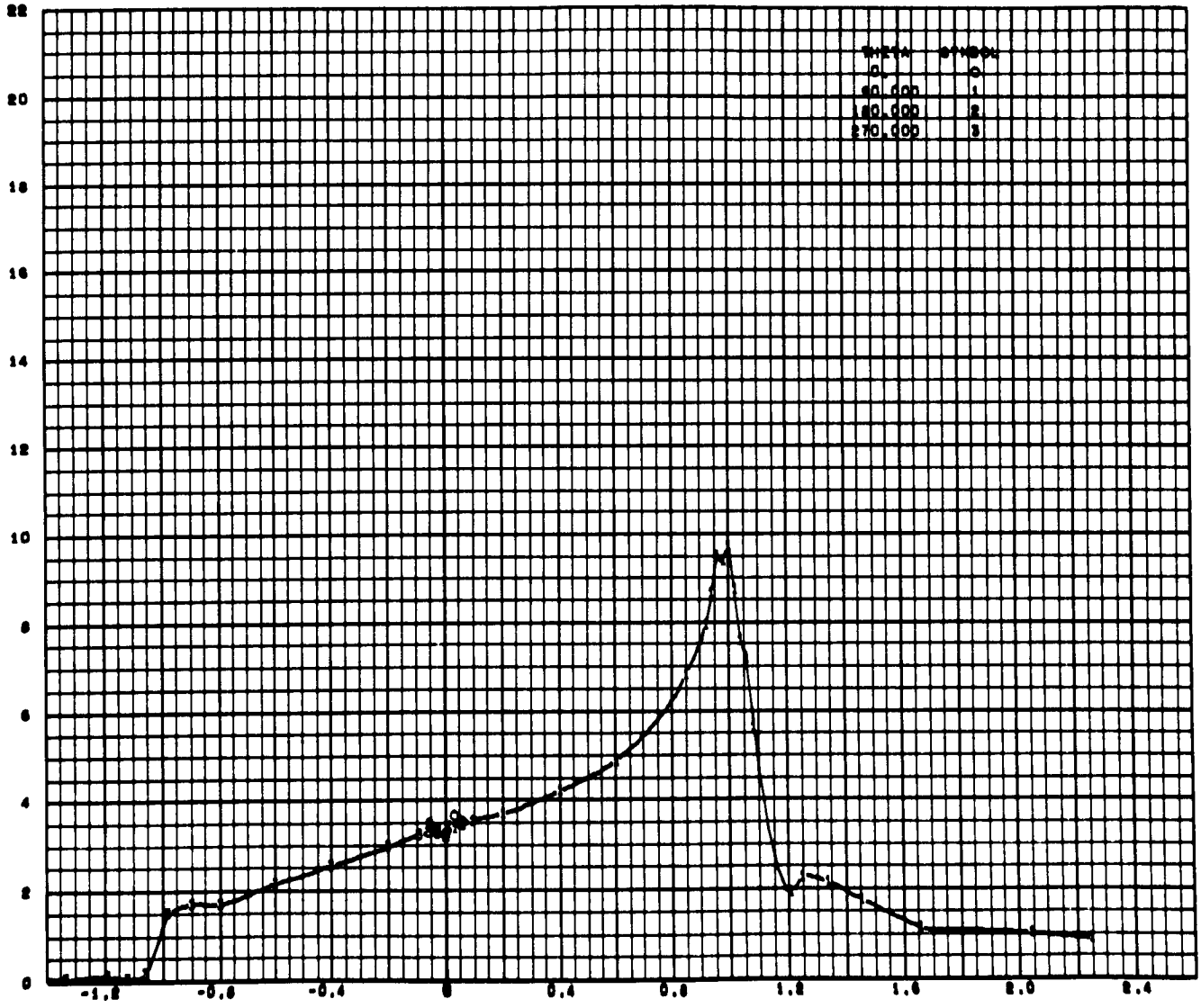
RE/FT --- 1.1863*10+6
Q(OM) --- 5.6384 BTU/SQ FT SEC

PLOT SERIES NUMBER 10

TEST GROUP	TIME (SEC)
20*	2.80
25	2.80
31	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
070 000



SID 64-2080

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.14
ANGLE OF ATTACK ------ 143.37 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 925.30 PSIA
TOTAL TEMPERATURE ---- 1831.10 DEG RANKINE

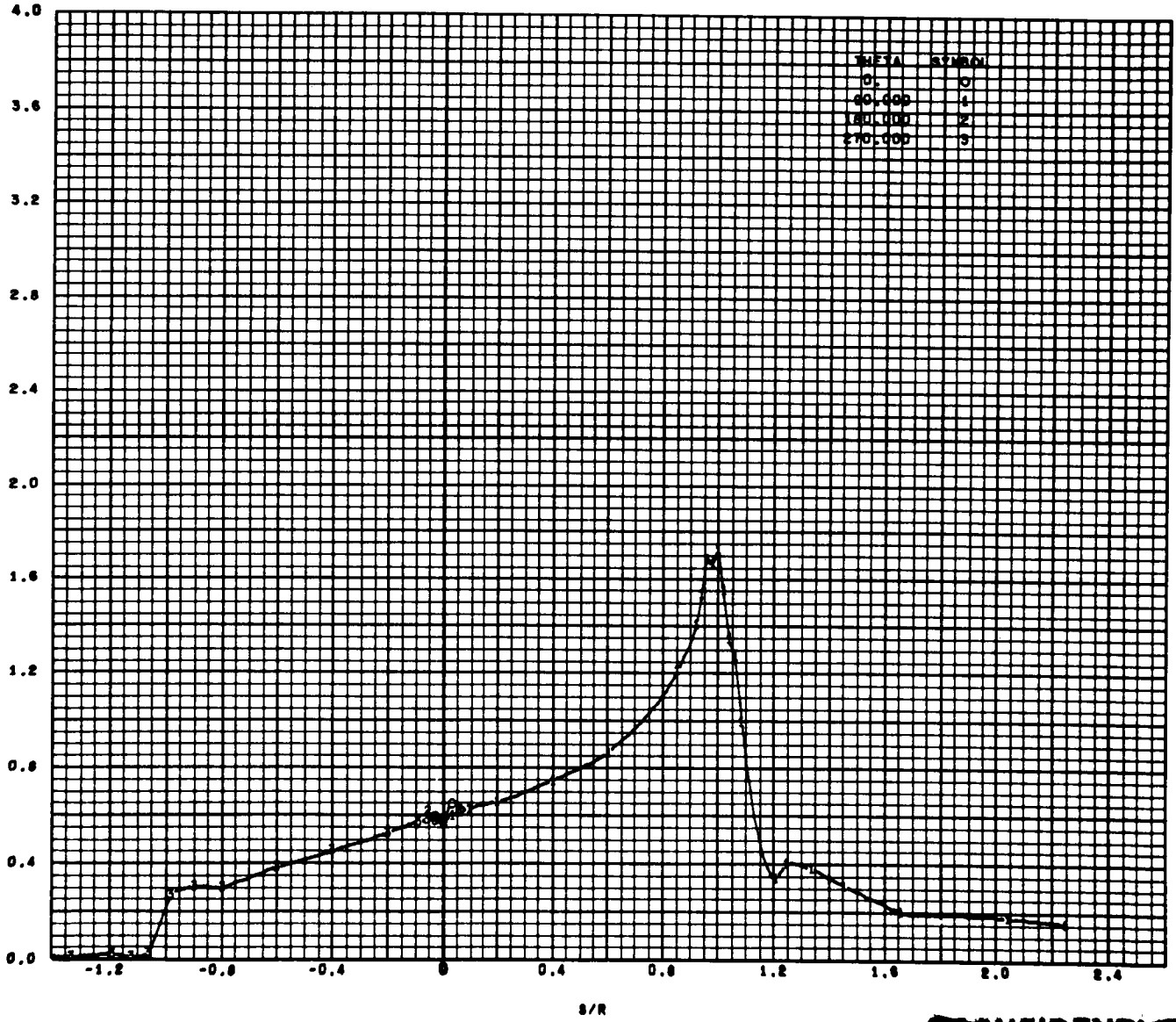
RE/FT --- 1.1863*10+6
Q(OM) --- 5.6384 BTU/SQ FT SEC

PLOT SERIES NUMBER 10

TEST GROUP	TIME (SEC)
20*	2.60
25	2.80
31	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
073 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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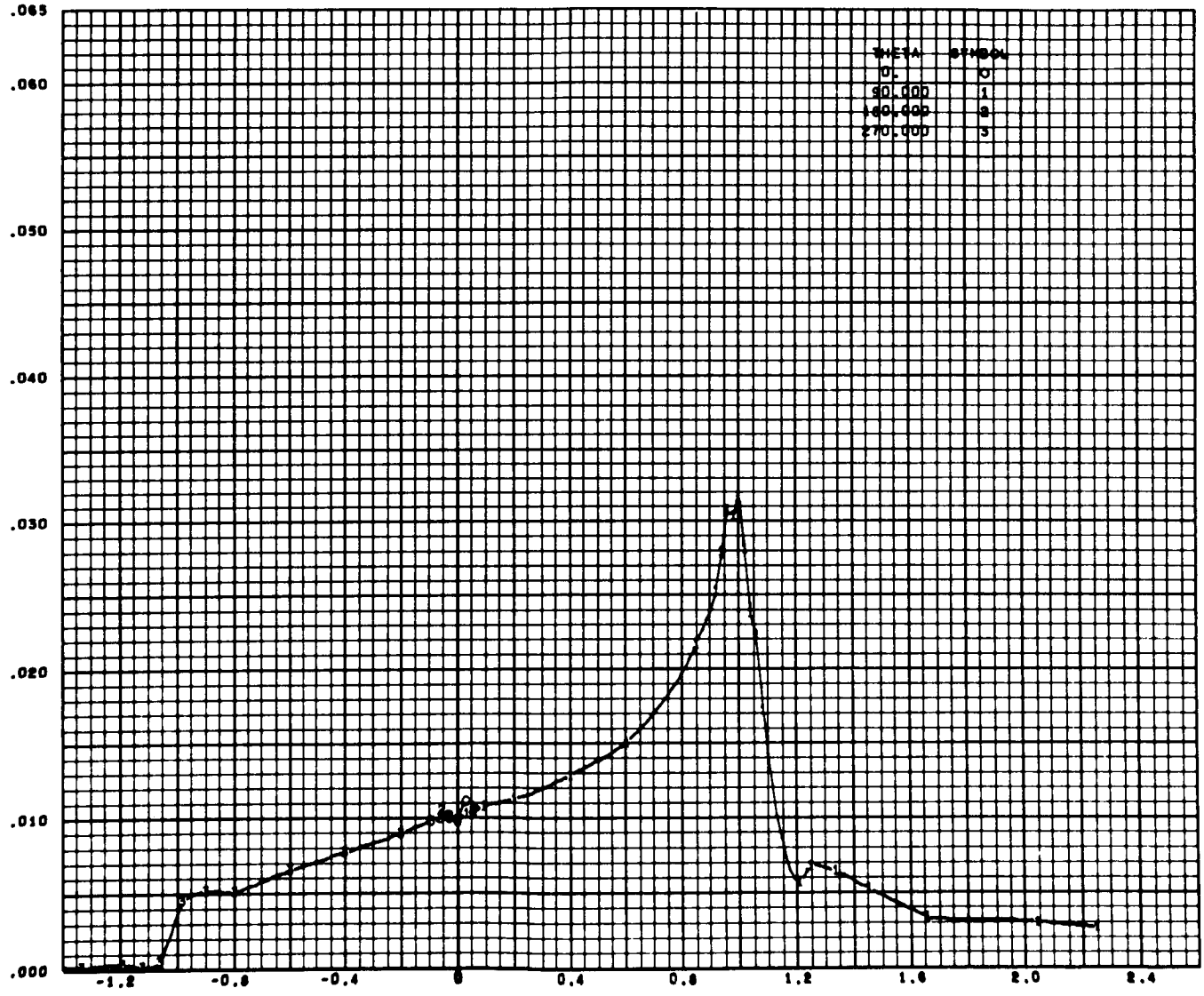
3937-08
076 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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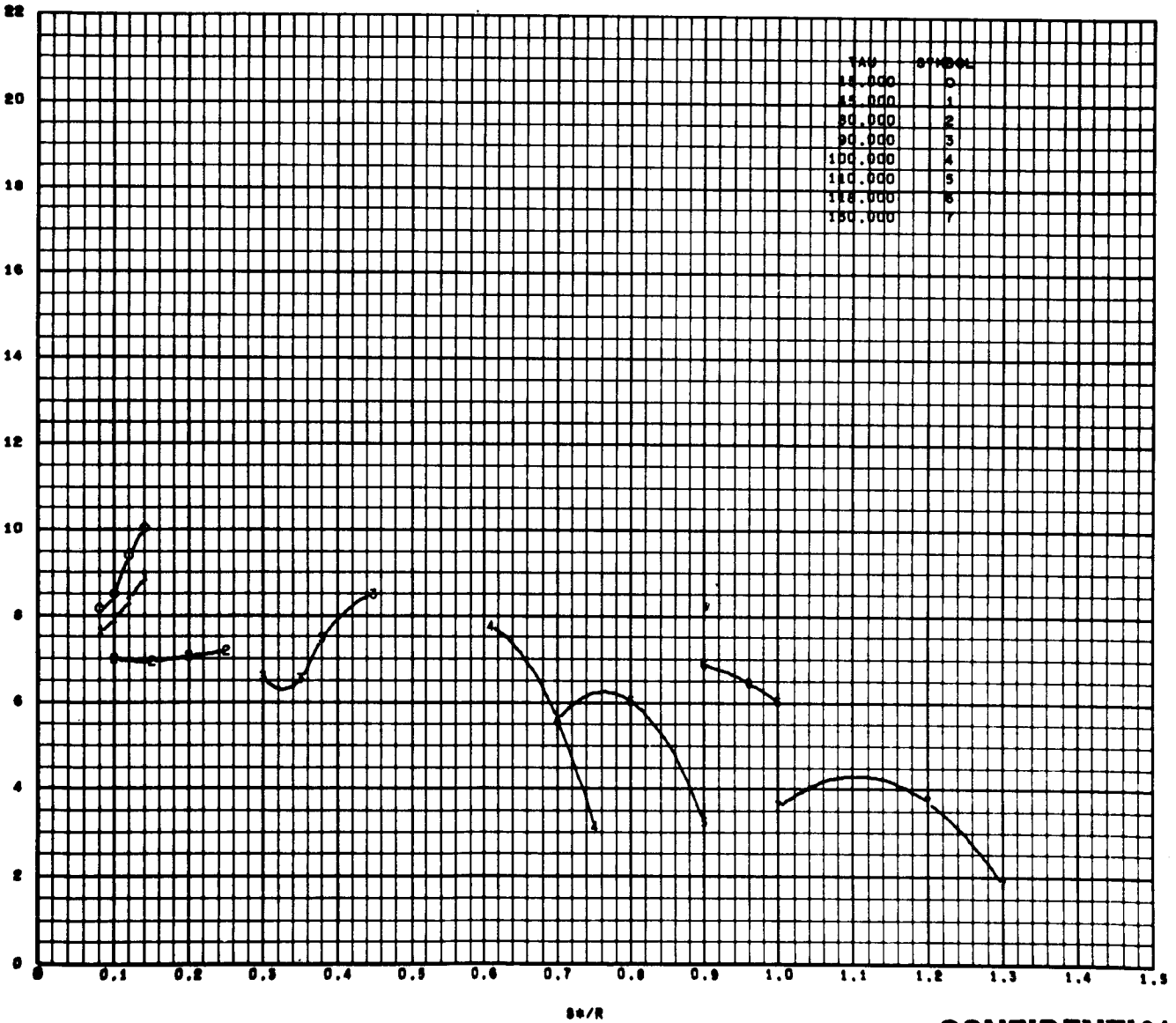
3937-08
071 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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PLOT SERIES NUMBER 10

TEST GROUP	TIME (SEC)
20*	2.80
25	2.80
31	2.75

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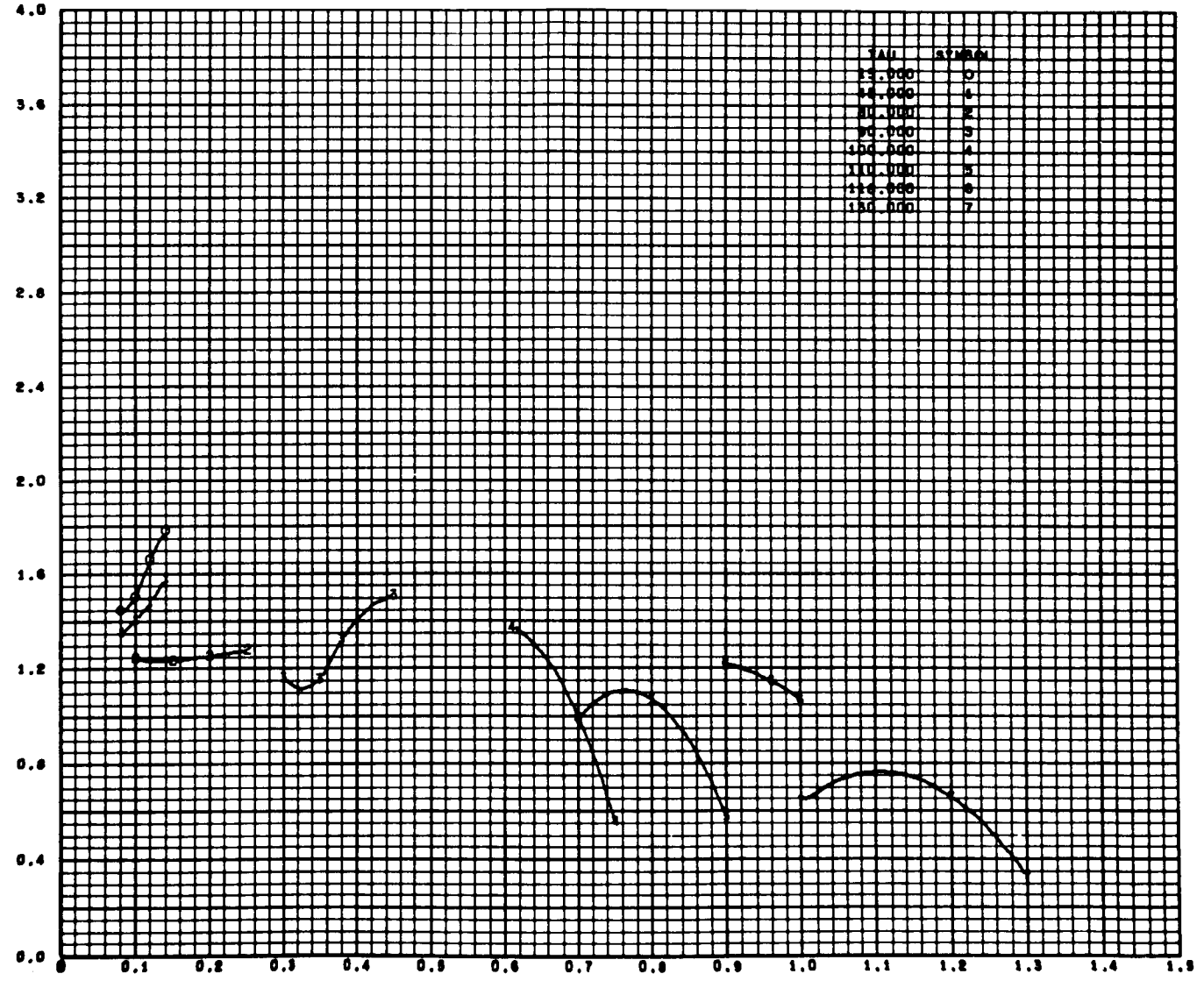
3937-08
074 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.14
ANGLE OF ATTACK ------ 143.37 DEG
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TEST GROUP	TIME (SEC)
20*	2.80
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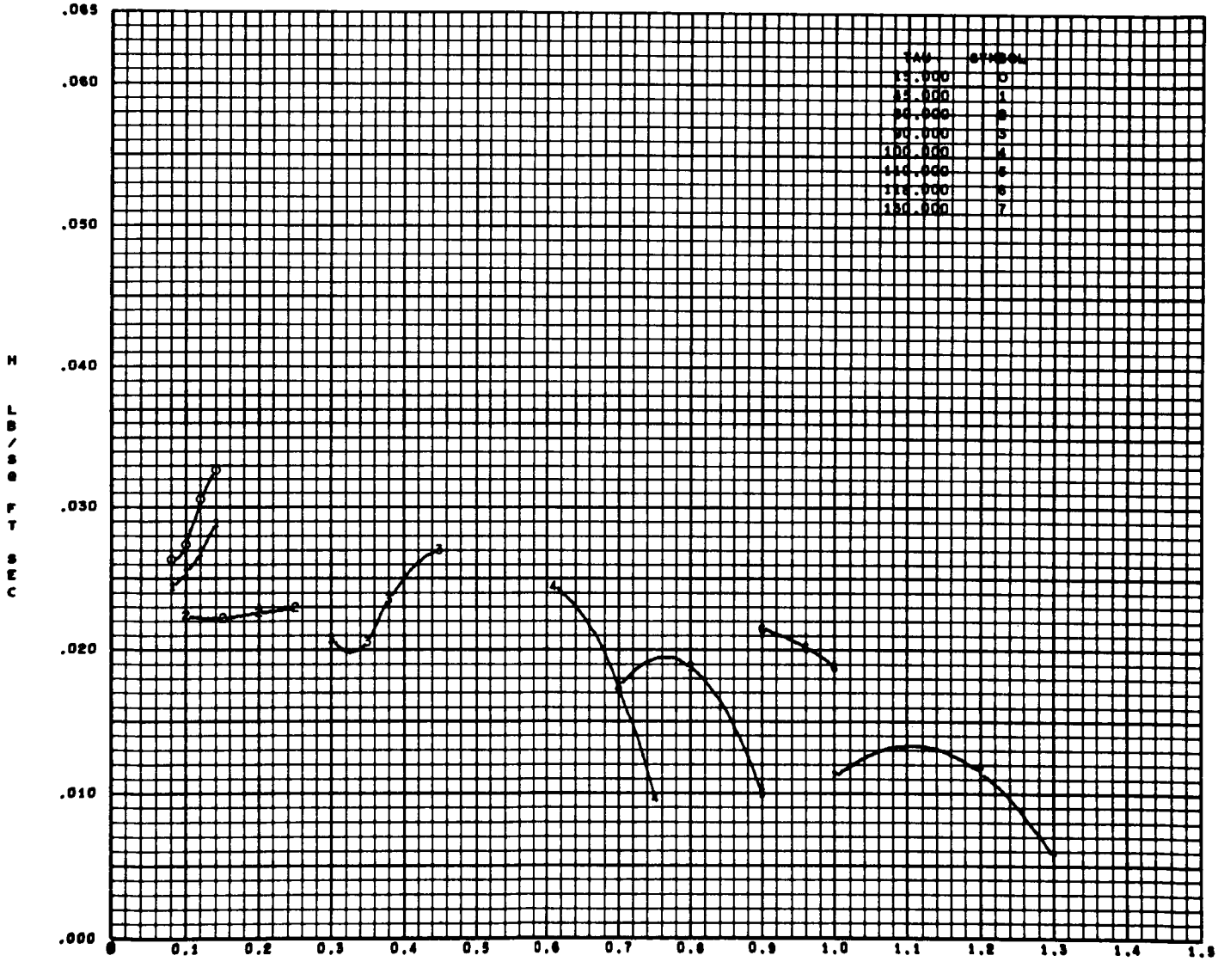
3937-08
077 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.14
ANGLE OF ATTACK ------ 143.37 DEG
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TEST GROUP	TIME (SEC)
20*	2.60
25	2.60
31	2.75

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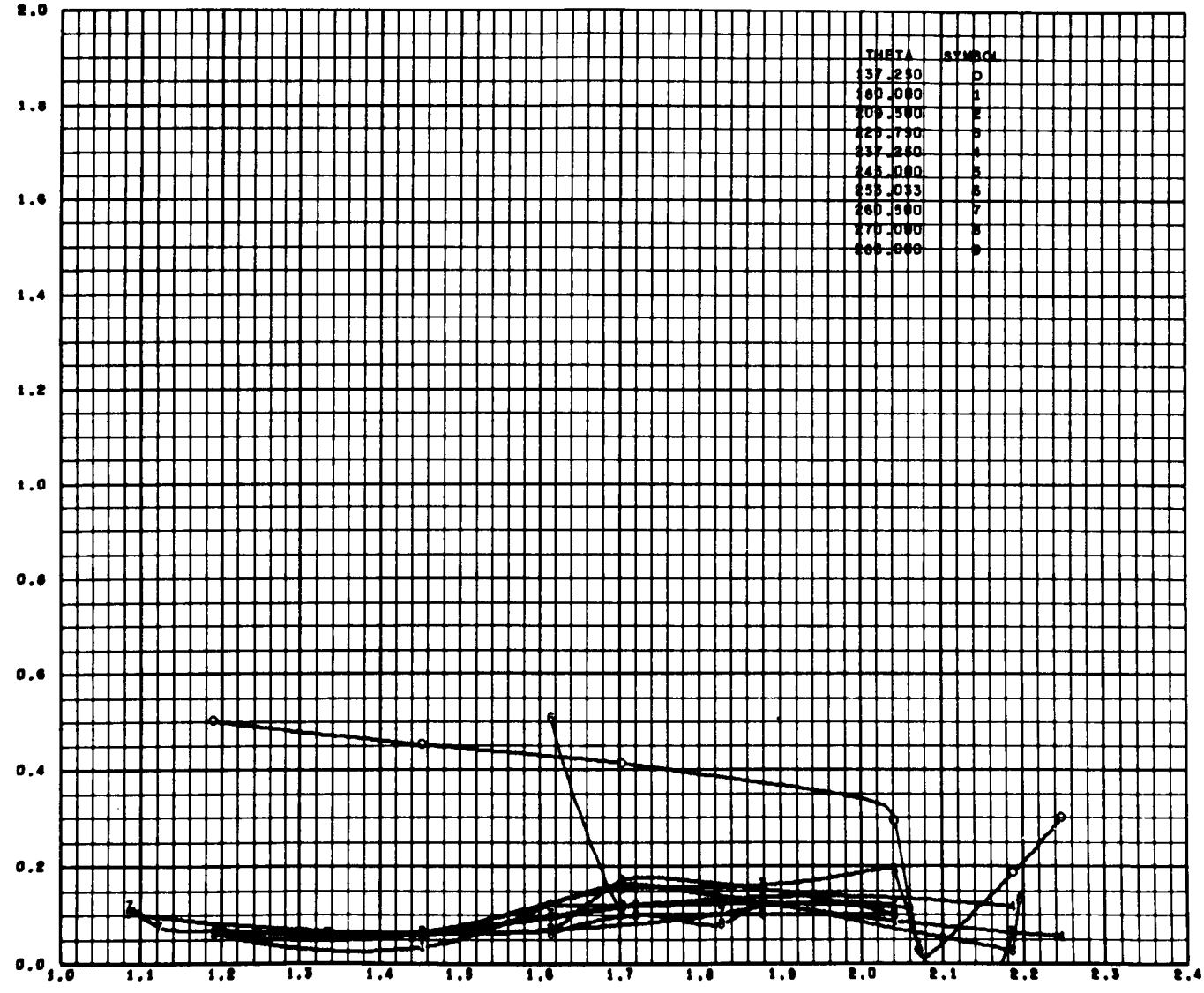
3937-08
072 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.14
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TOTAL TEMPERATURE ---- 1831.10 DEG RANKINE

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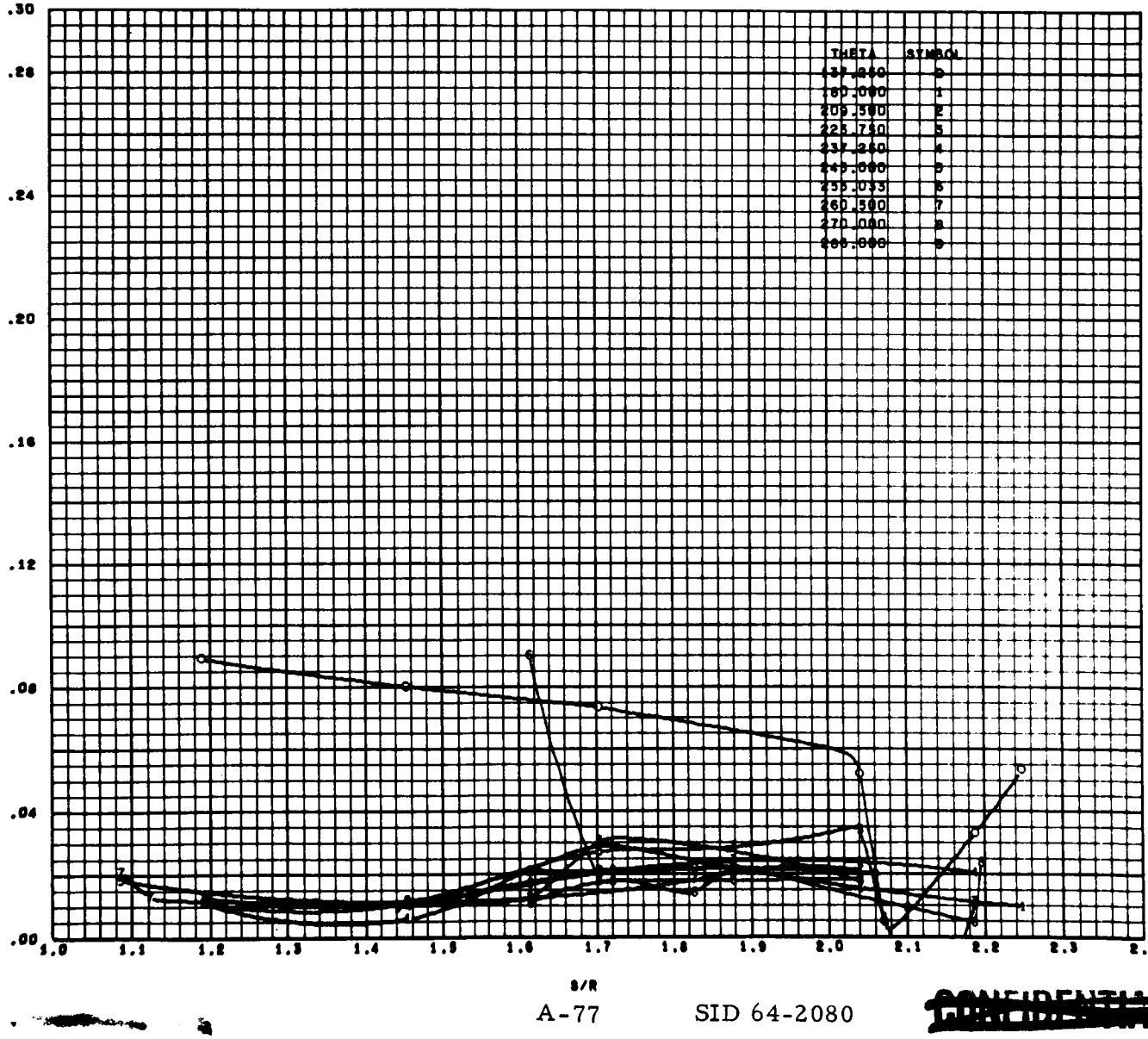
PLOT SERIES NUMBER 10

TEST GROUP	TIME (SEC)
20*	2.80
25	2.80
31	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
075 006



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.14
ANGLE OF ATTACK ------ 143.37 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 925.30 PSIA
TOTAL TEMPERATURE ---- 1831.10 DEG RANKINE

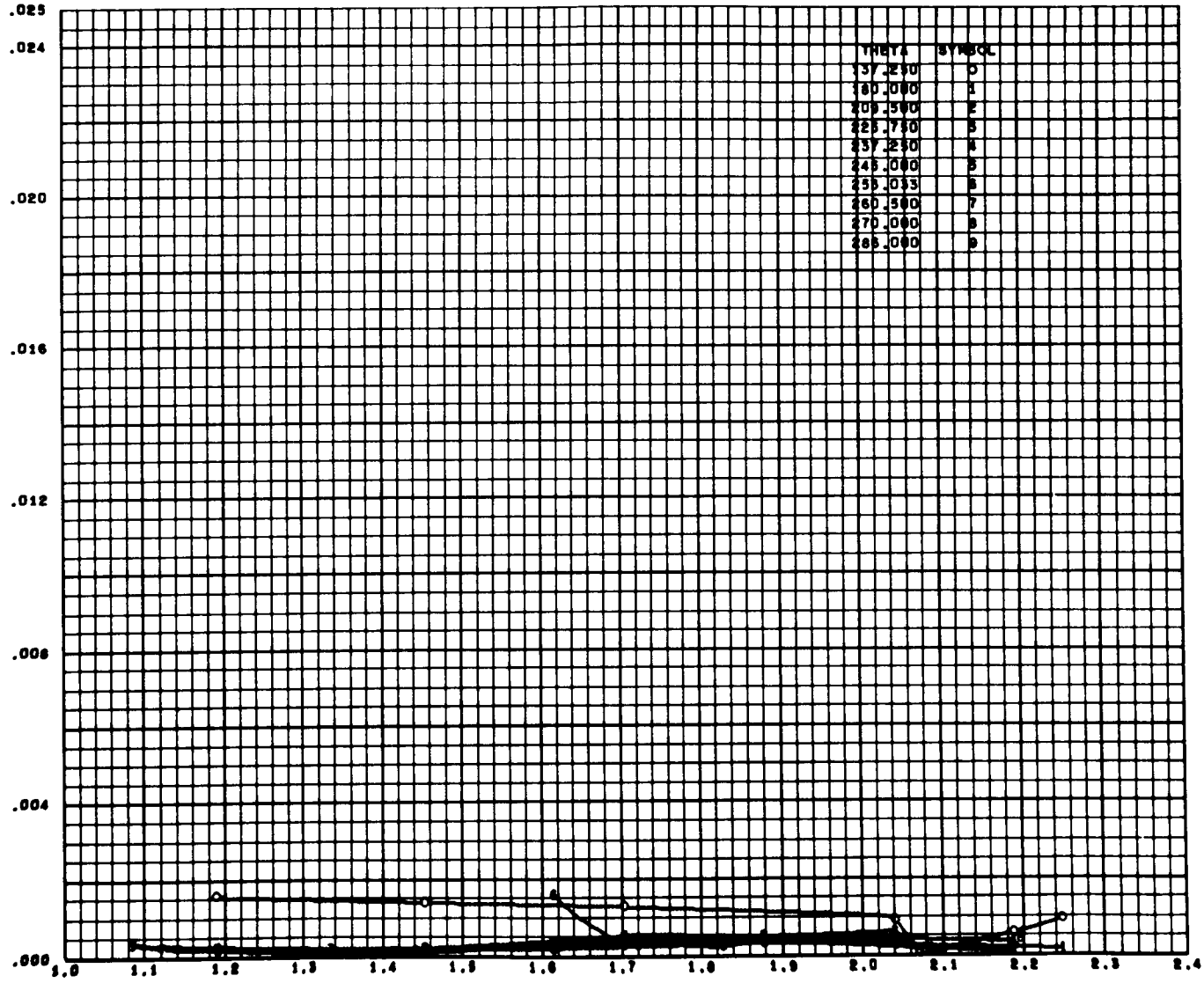
RE/FT --- 1.1863*10+6
Q(OM) --- 5.6384 BTU/SQ FT SEC

PLOT SERIES NUMBER 10

TEST GROUP	TIME (SEC)
20*	2.80
25	2.80
31	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
078 000



HEAT TRANSFER | CONFIGURATION C55 | PLOT SERIES NUMBER 11 | 3937-08 079 000

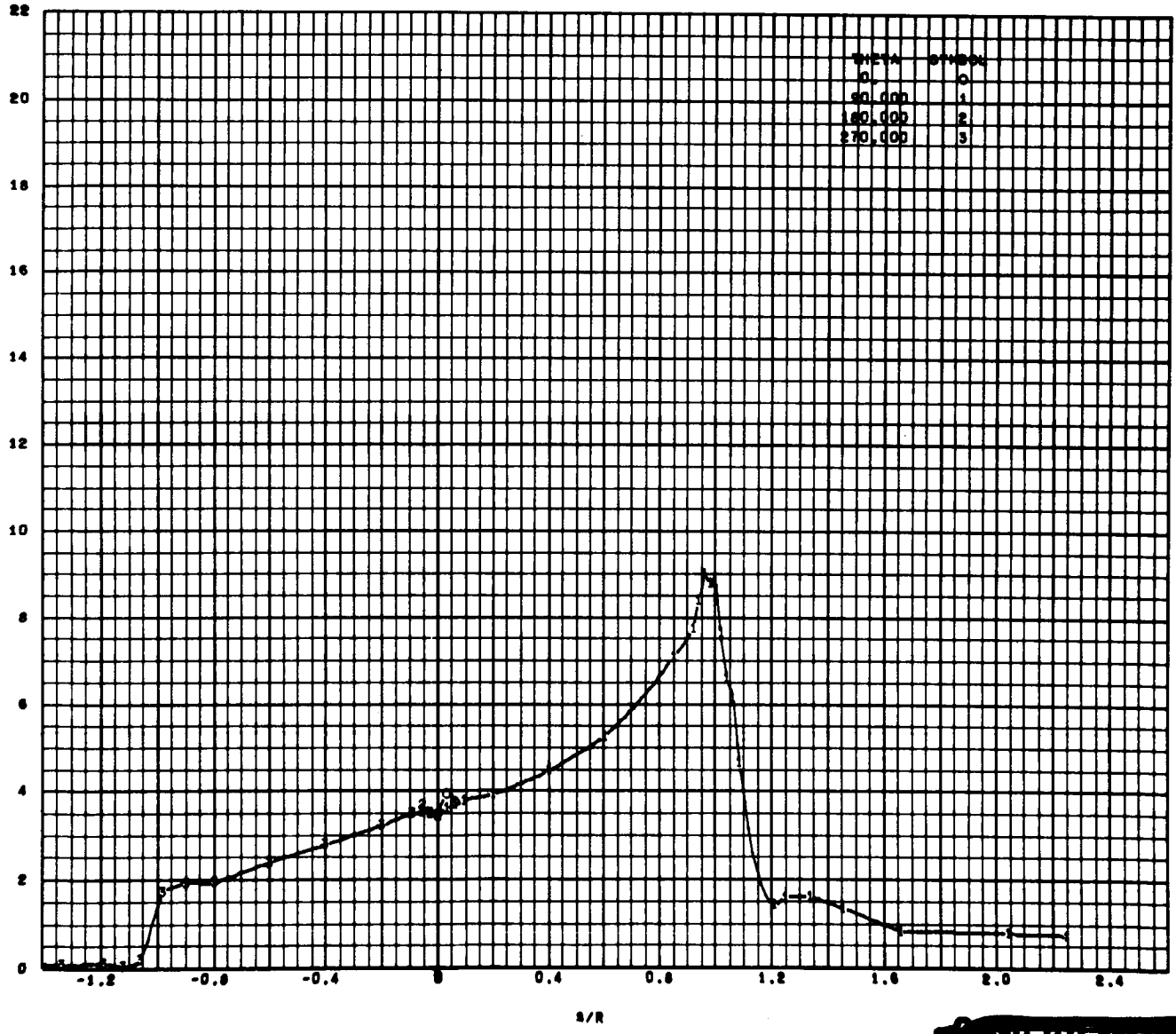
APOLLO H-11
AEDC, TUNNEL C
JUNE, 1964

MACH NUMBER ---------- 10.14
ANGLE OF ATTACK ------ 147.35 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 923.00 PSIA
TOTAL TEMPERATURE ---- 1831.10 DEG RANKINE

RE/FT --- 1.1834*10+6
Q(OM) --- 5.6279 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
21*	2.75
26	2.75
32	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.14
ANGLE OF ATTACK ------ 147.35 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 923.00 PSIA
TOTAL TEMPERATURE ---- 1831.10 DEG RANKINE

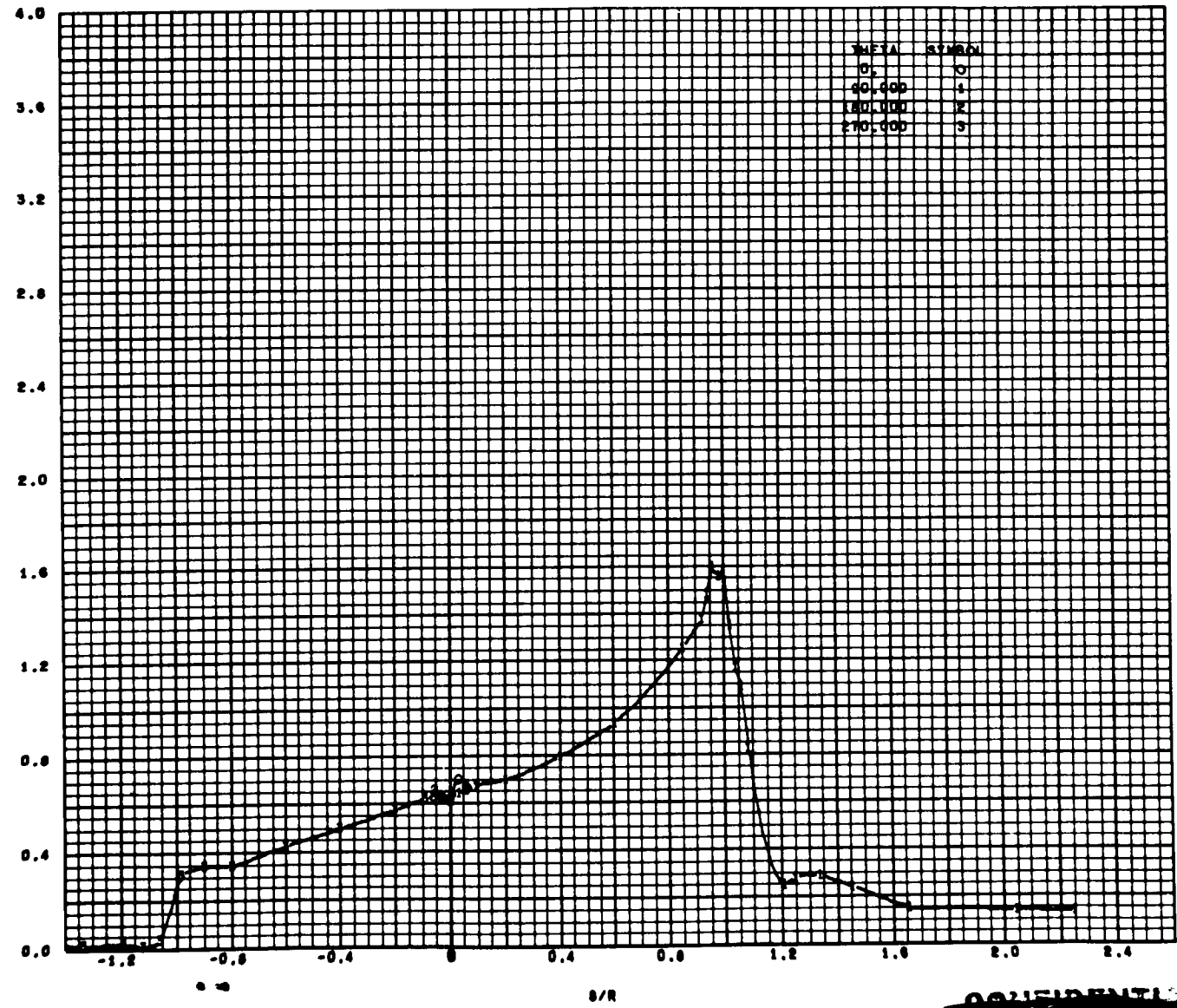
RE/FT --- 1.1834*10+6
Q(OM) --- 5.6279 BTU/SQ FT SEC

PLOT SERIES NUMBER 11

TEST GROUP	TIME (SEC)
21*	2.75
26	2.75
32	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
082 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.14
ANGLE OF ATTACK ------ 147.35 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 923.00 PSIA
TOTAL TEMPERATURE ---- 1831.10 DEG RANKINE

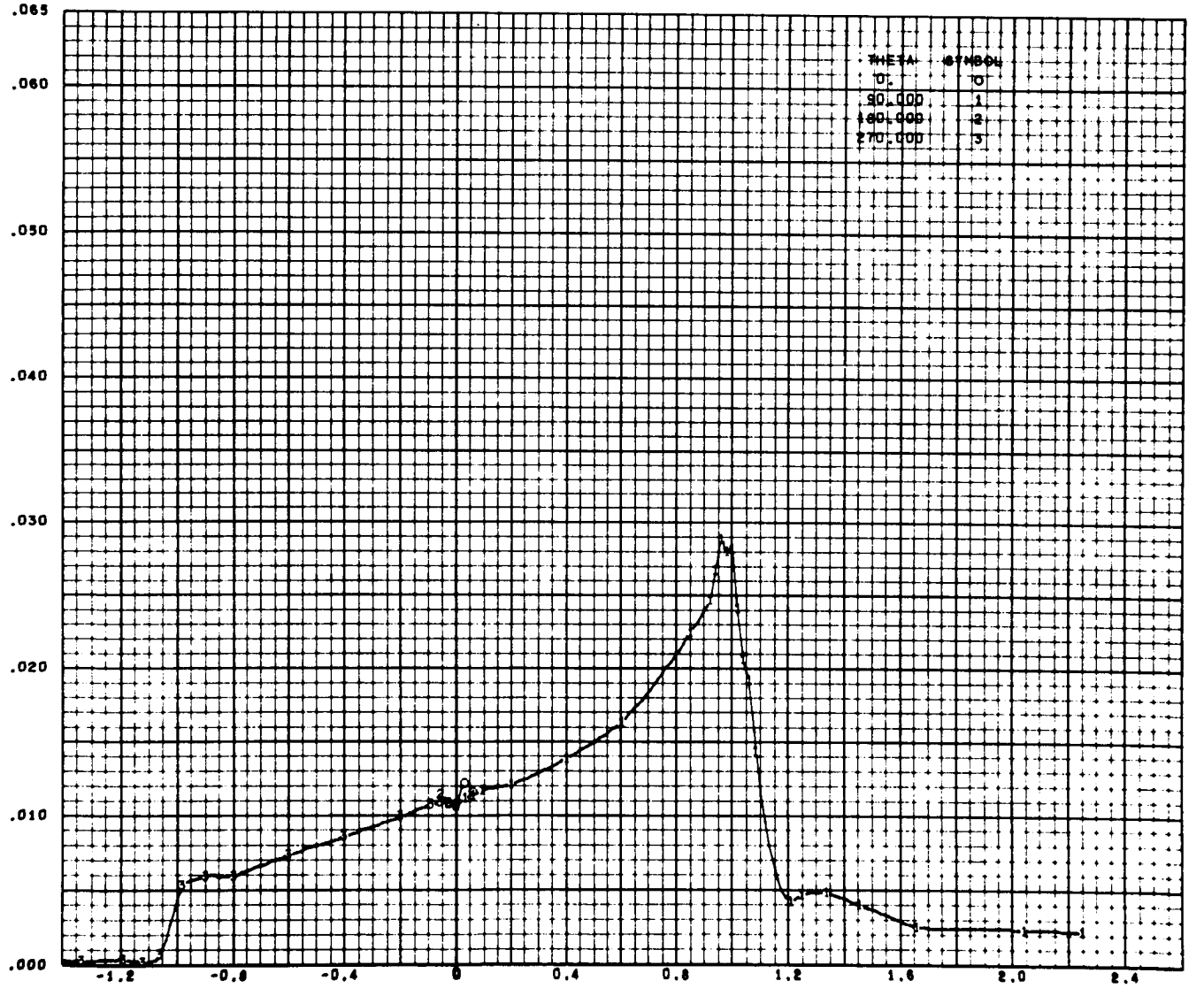
RE/FT --- 1.1834*10+6
Q(OM) --- 5.6279 BTU/SQ FT SEC

PLOT SERIES NUMBER 11

TEST GROUP	TIME (SEC)
21*	2.75
26	2.75
32	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
085 000



HEAT TRANSFER | CONFIGURATION C55 | PLOT SERIES NUMBER 11 | 3937-08 080 000

APOLLO M-11
AEDC, TUNNEL C
JUNE, 1964

MACH NUMBER ---------- 10.14
ANGLE OF ATTACK ------ 147.35 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 923.00 PSIA
TOTAL TEMPERATURE ---- 1831.10 DEG RANKINE

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TEST GROUP	TIME (SEC)
21*	2.75
26	2.75
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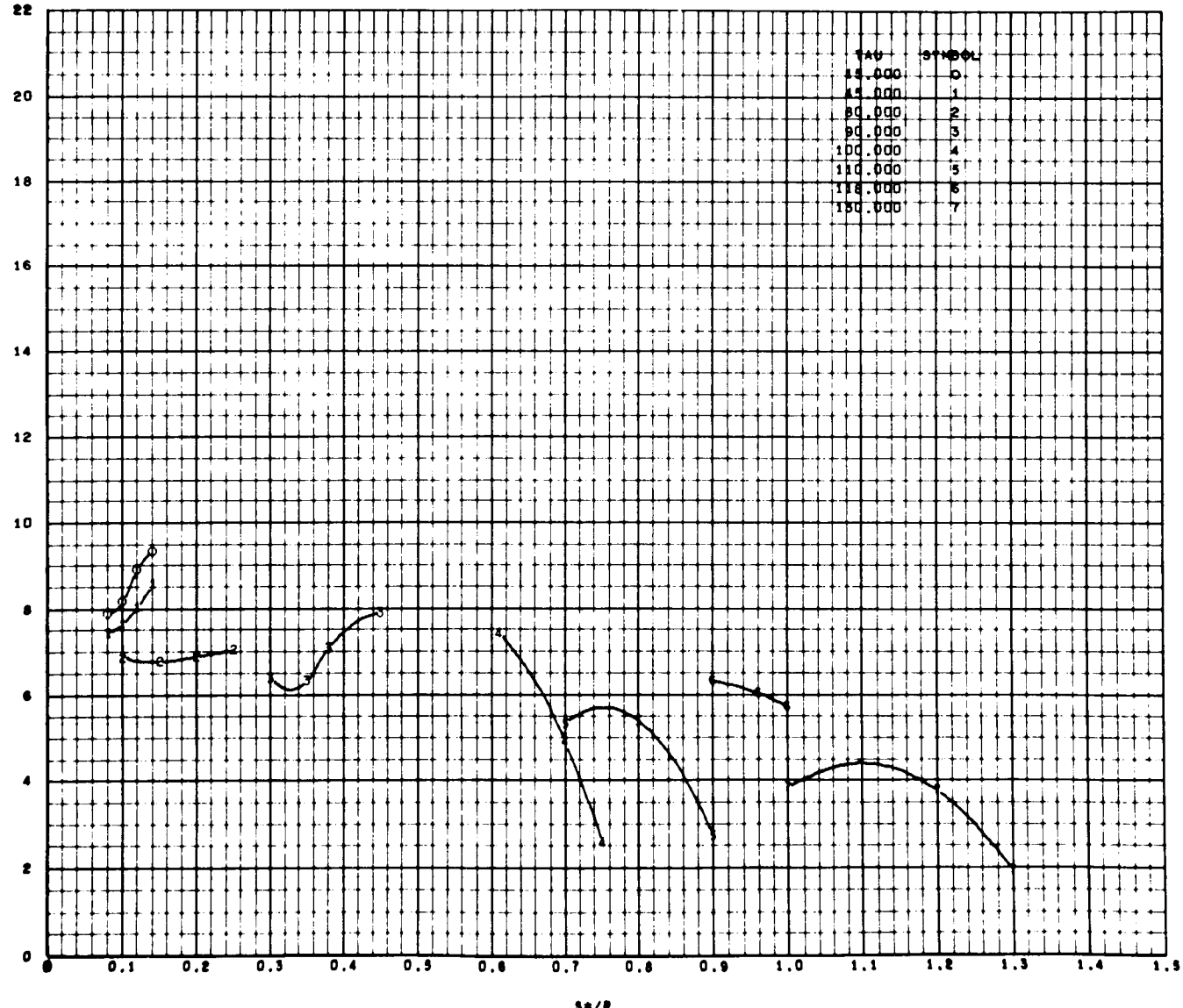

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.14
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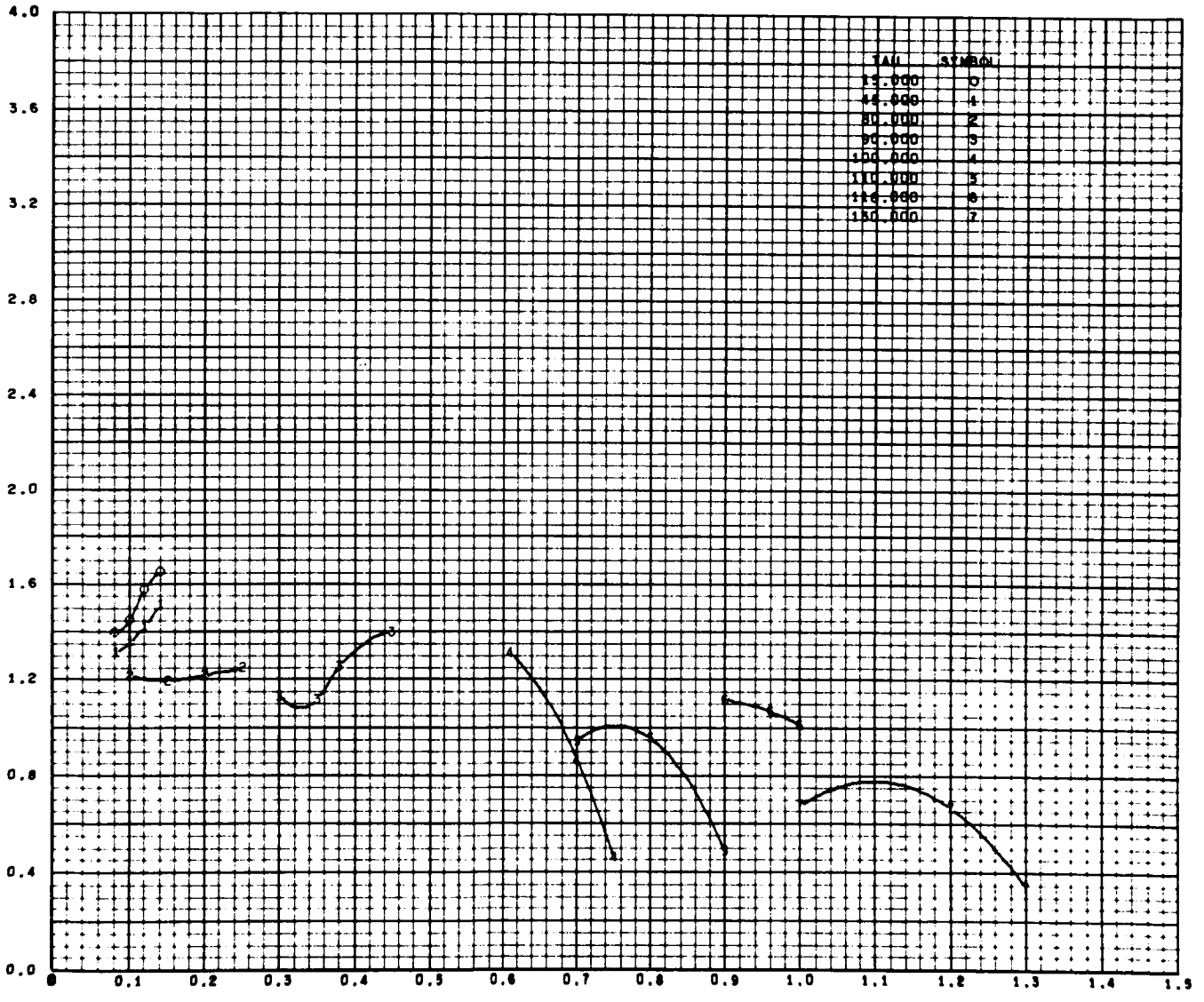
PLOT SERIES NUMBER 11

TEST GROUP	TIME (SEC)
21*	2.75
26	2.75
32	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
083 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.14
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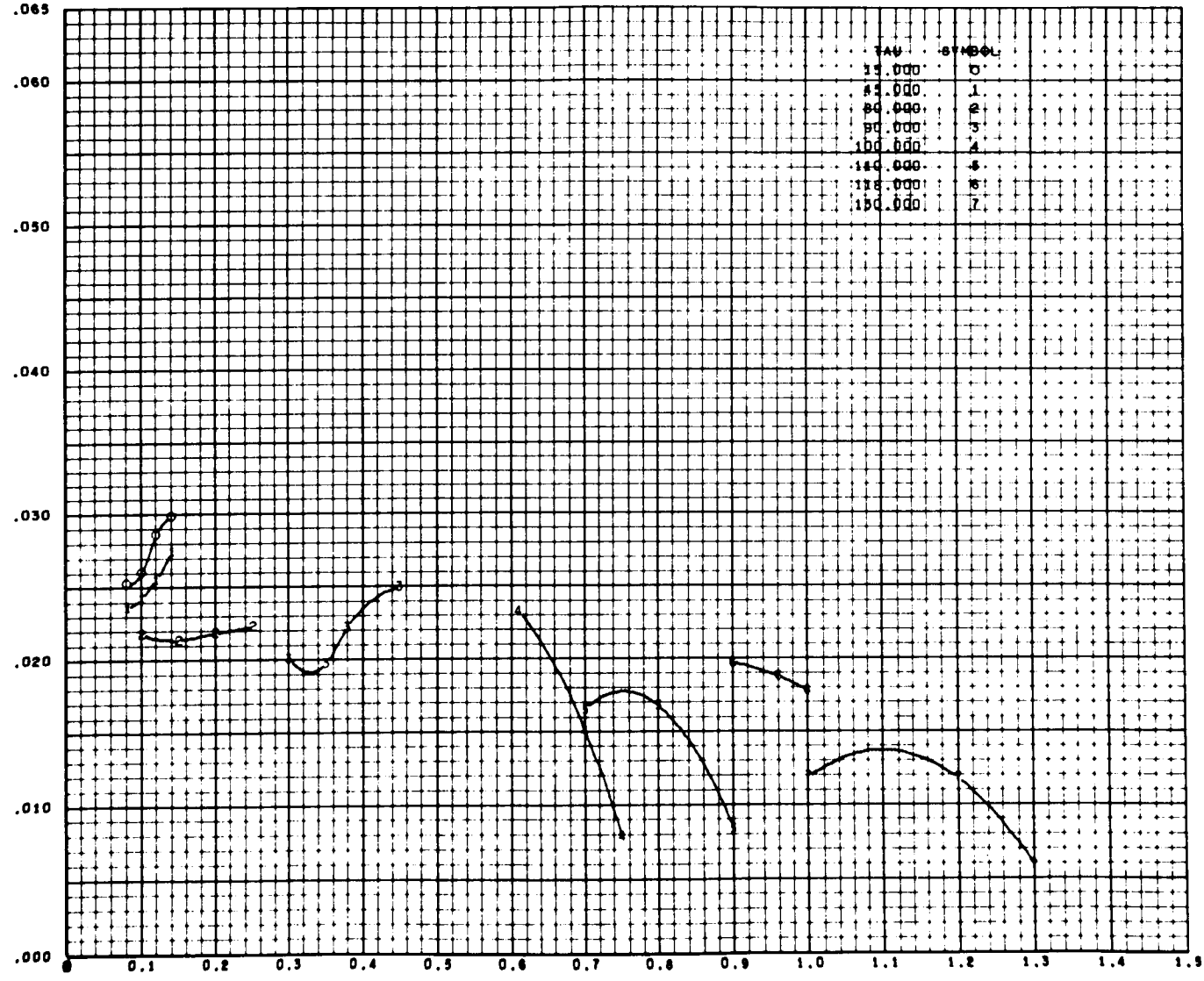
PLOT SERIES NUMBER 11

TEST GROUP	TIME (SEC)
21*	2.75
26	2.75
32	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
086 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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3937-08
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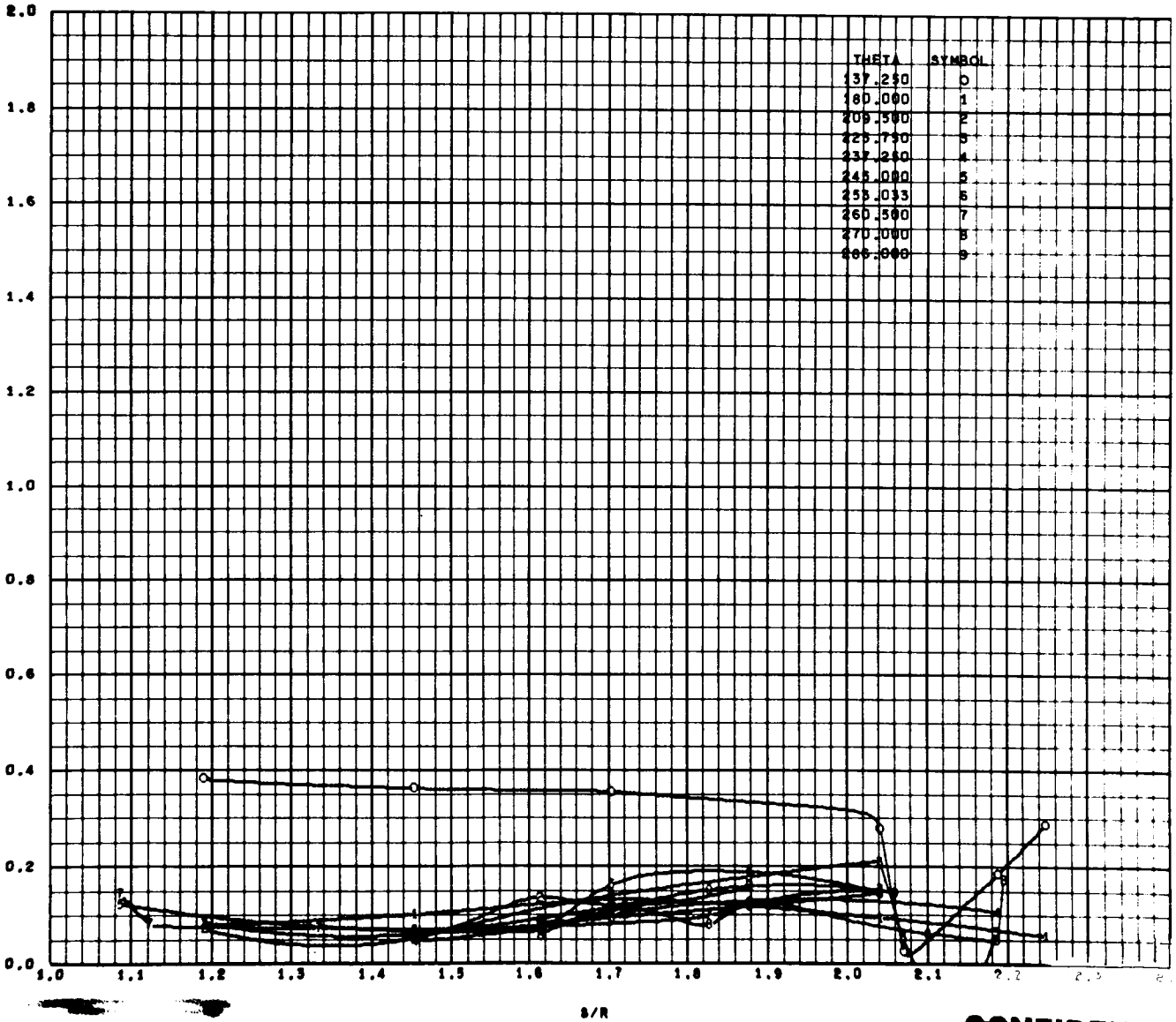

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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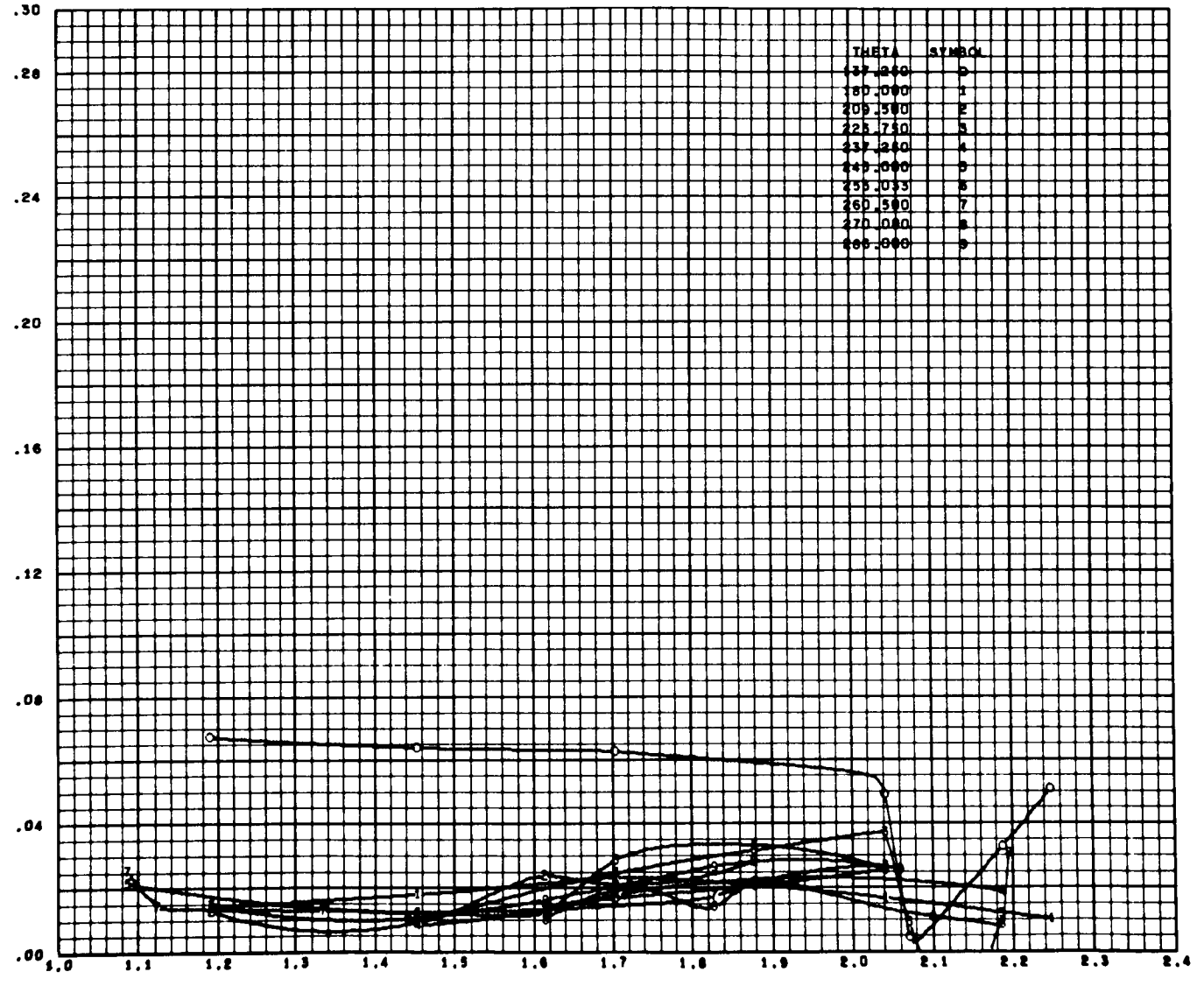
3937-08
084 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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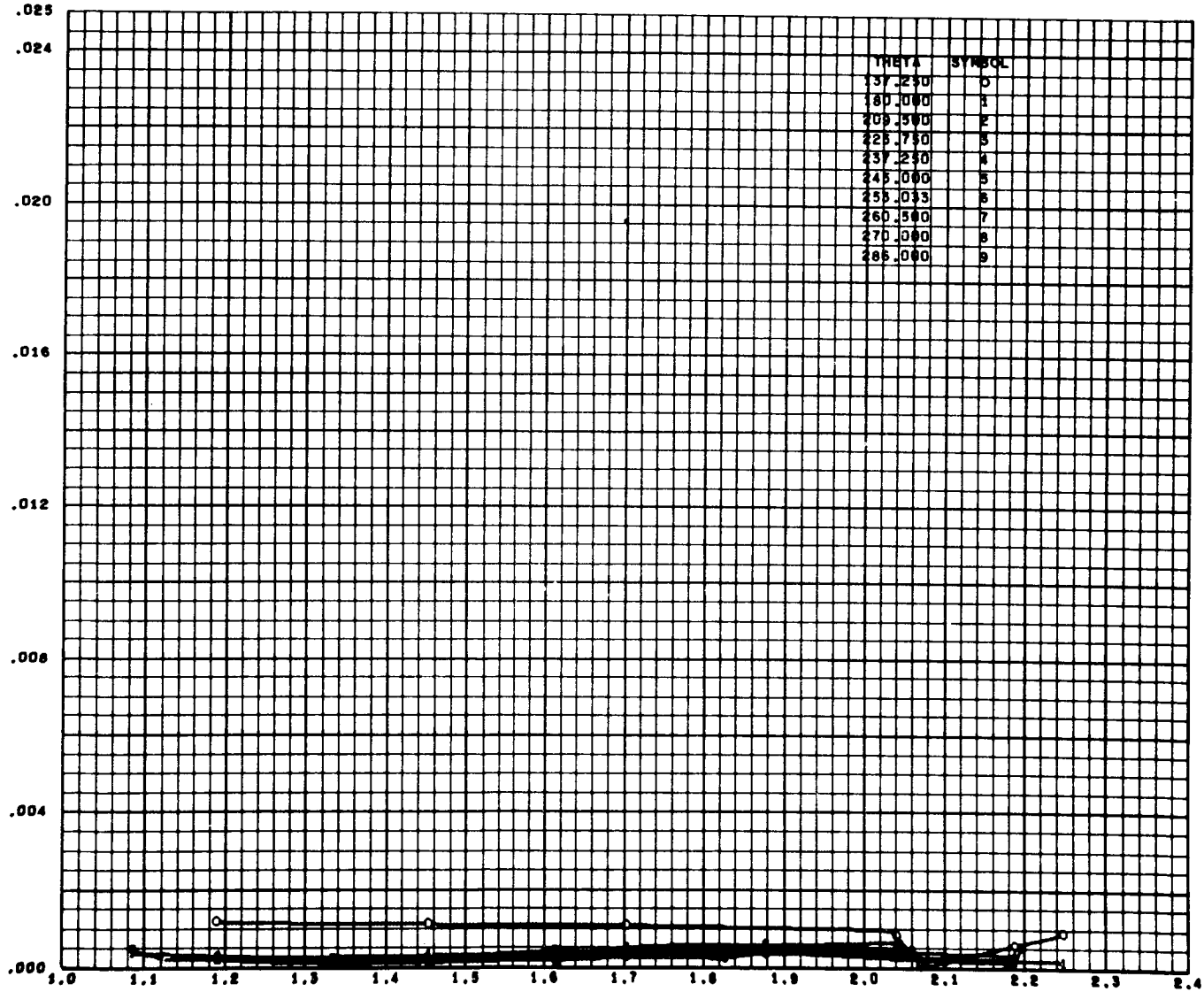


HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.14
ANGLE OF ATTACK ------ 154.33 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 927.60 PSIA
TOTAL TEMPERATURE ---- 1832.50 DEG RANKINE

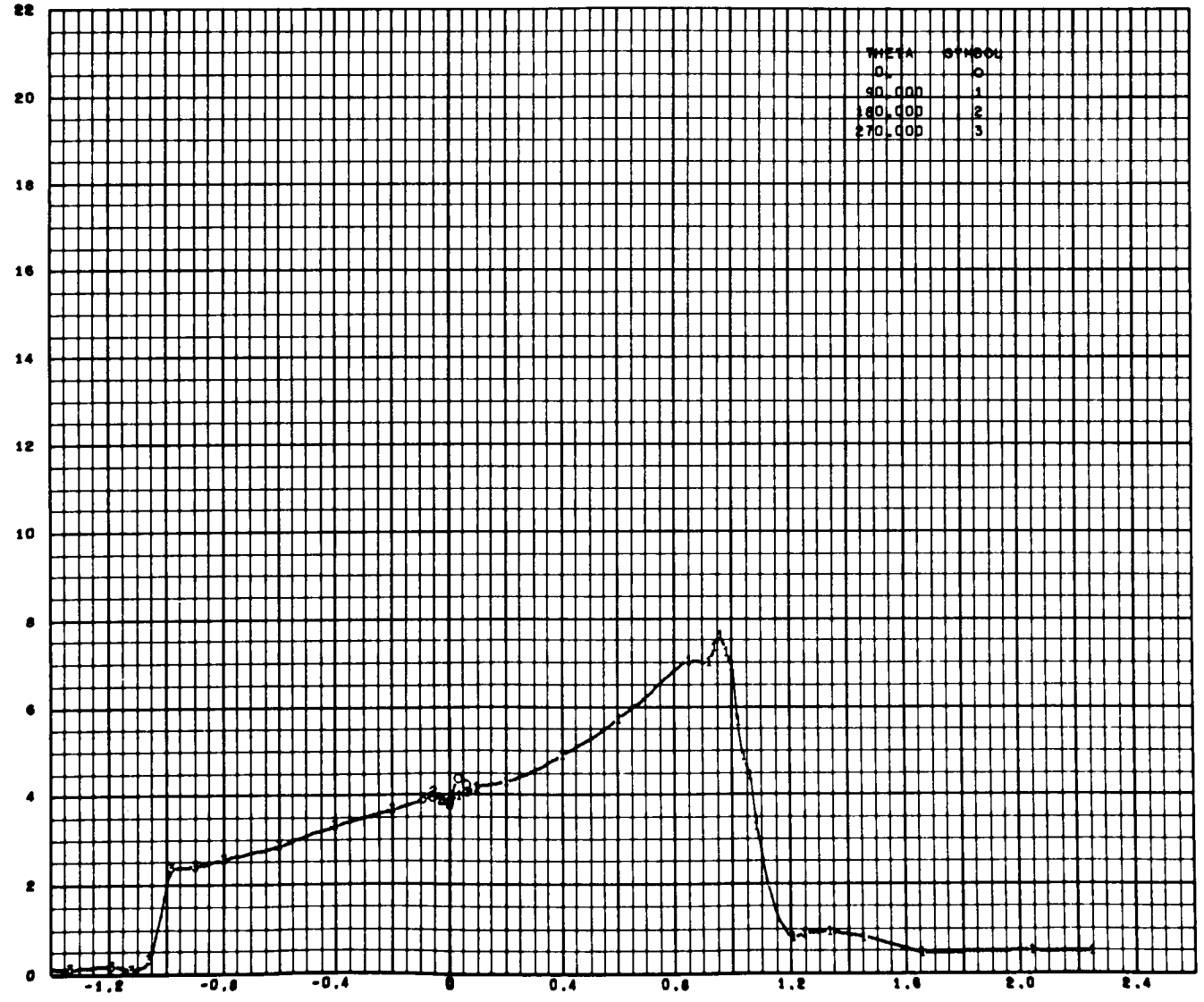
RE/FT --- 1.1875*10+6
Q(OM) --- 5.6489 BTU/SQ FT SEC

PLOT SERIES NUMBER 12

TEST GROUP	TIME (SEC)
22*	2.75
27	2.85
33	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
086 000



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A-88 SID 64-2080

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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RE/FT --- 1.1875*10+6
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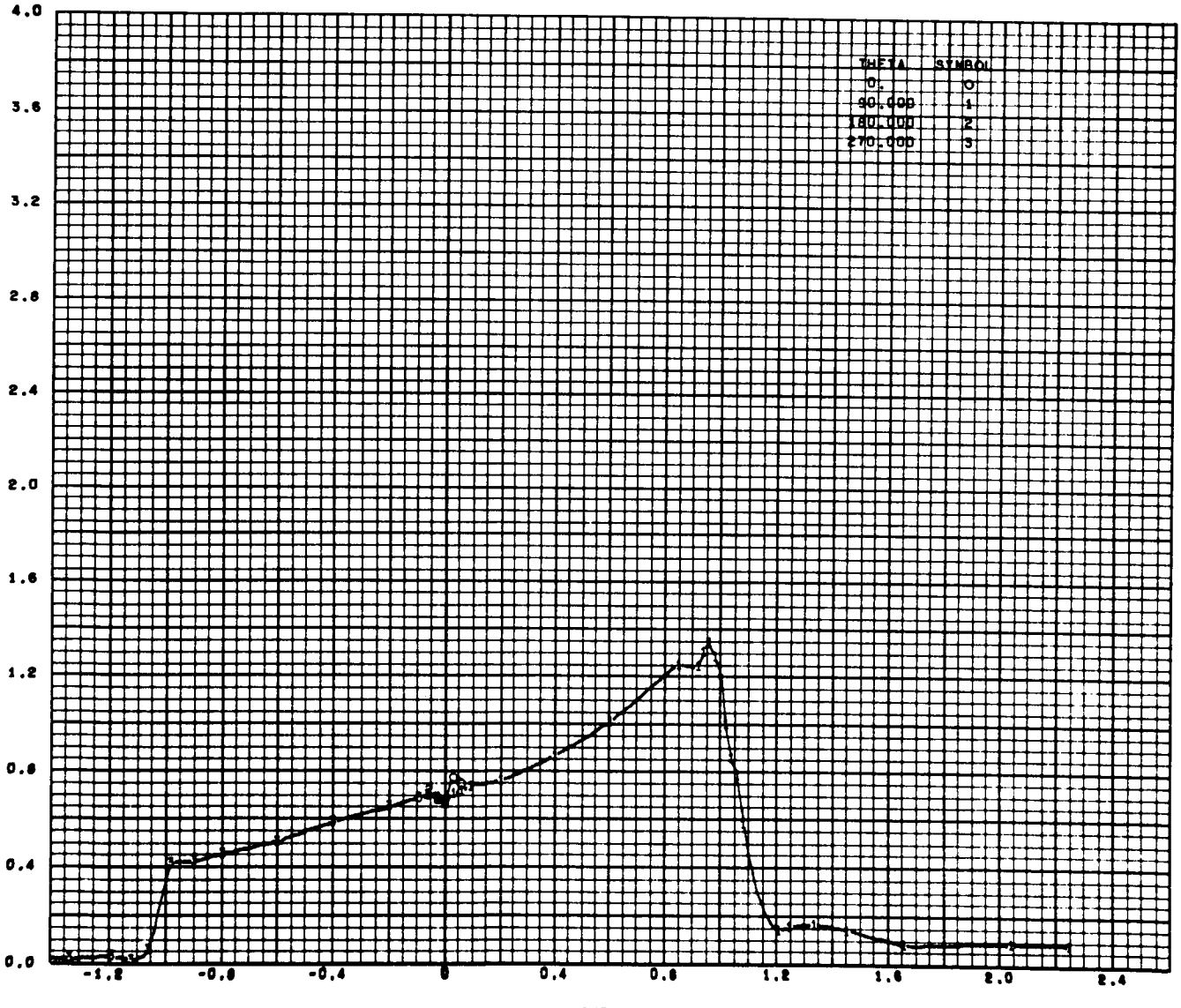
PLOT SERIES NUMBER 12

TEST GROUP	TIME (SEC)
22*	2.75
27	2.85
33	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
091 000



R/R

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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TEST GROUP	TIME (SEC)
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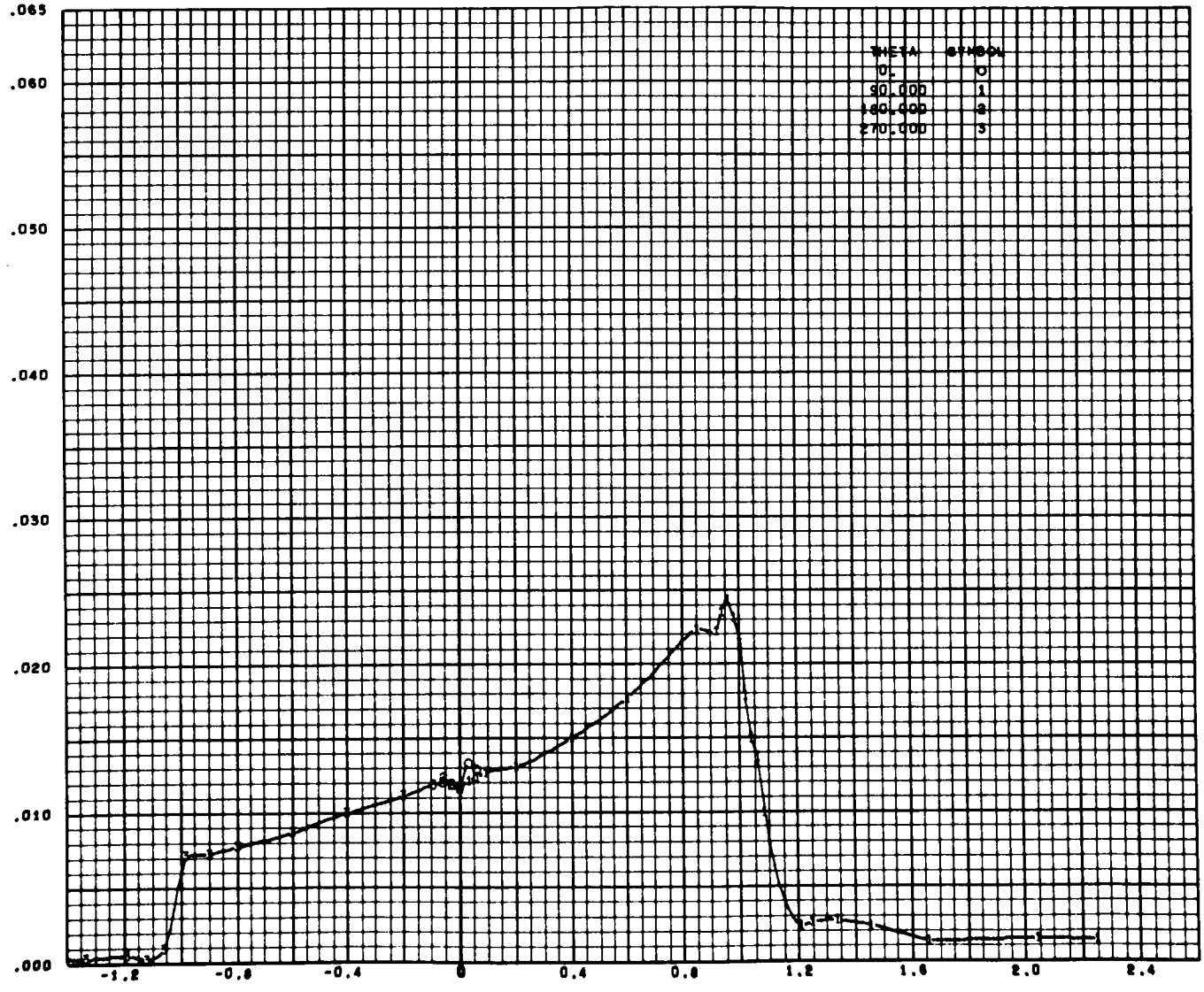
3937-08
094 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.14
ANGLE OF ATTACK ------ 154.33 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 927.60 PSIA
TOTAL TEMPERATURE ---- 1832.50 DEG RANKINE

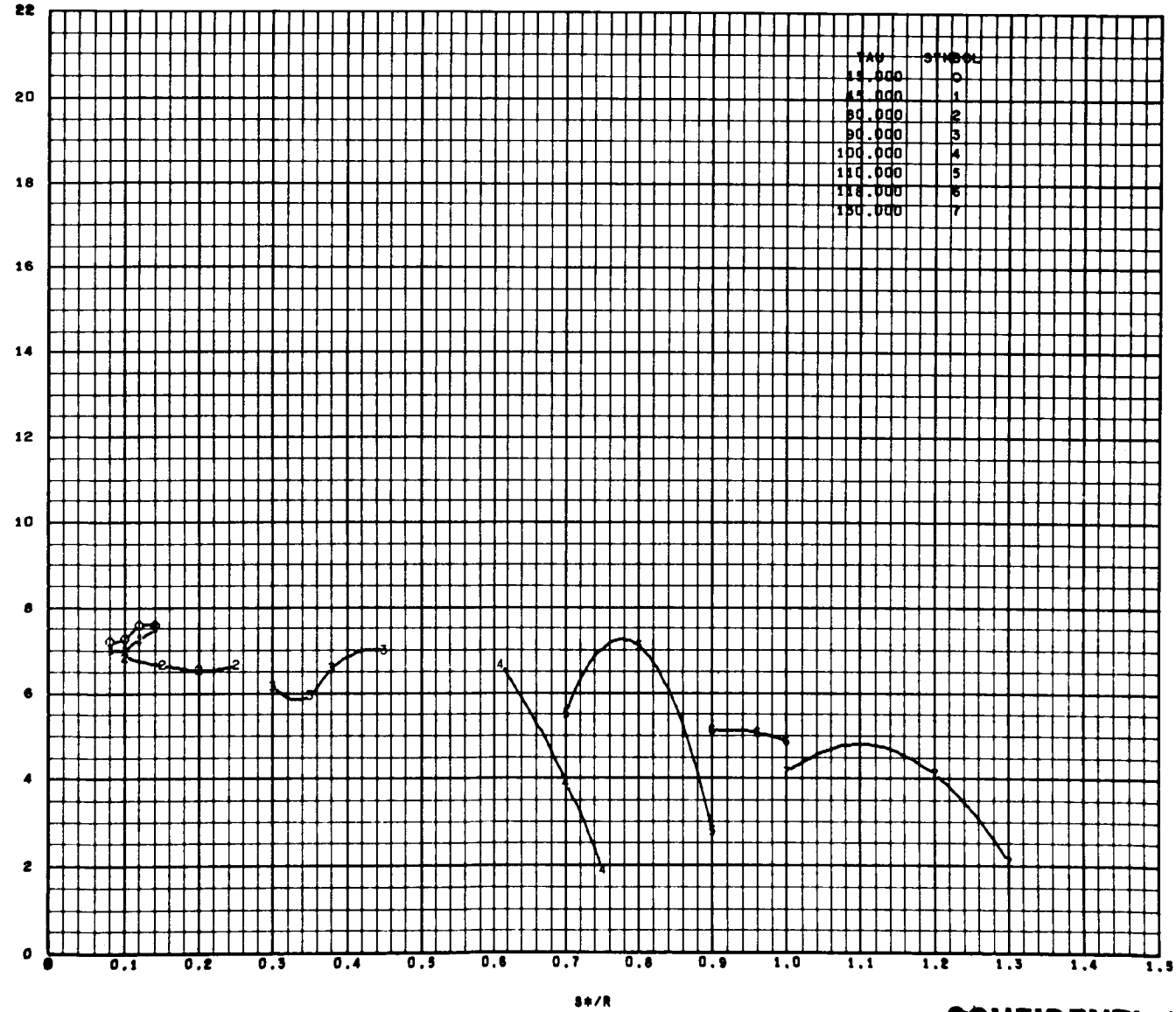
RE/FT --- 1.1875*10+6
Q(OM) --- 5.6489 BTU/SQ FT SEC

PLOT SERIES NUMBER 12

TEST GROUP	TIME (SEC)
22*	2.75
27	2.85
33	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
089 000



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JUNE, 1964

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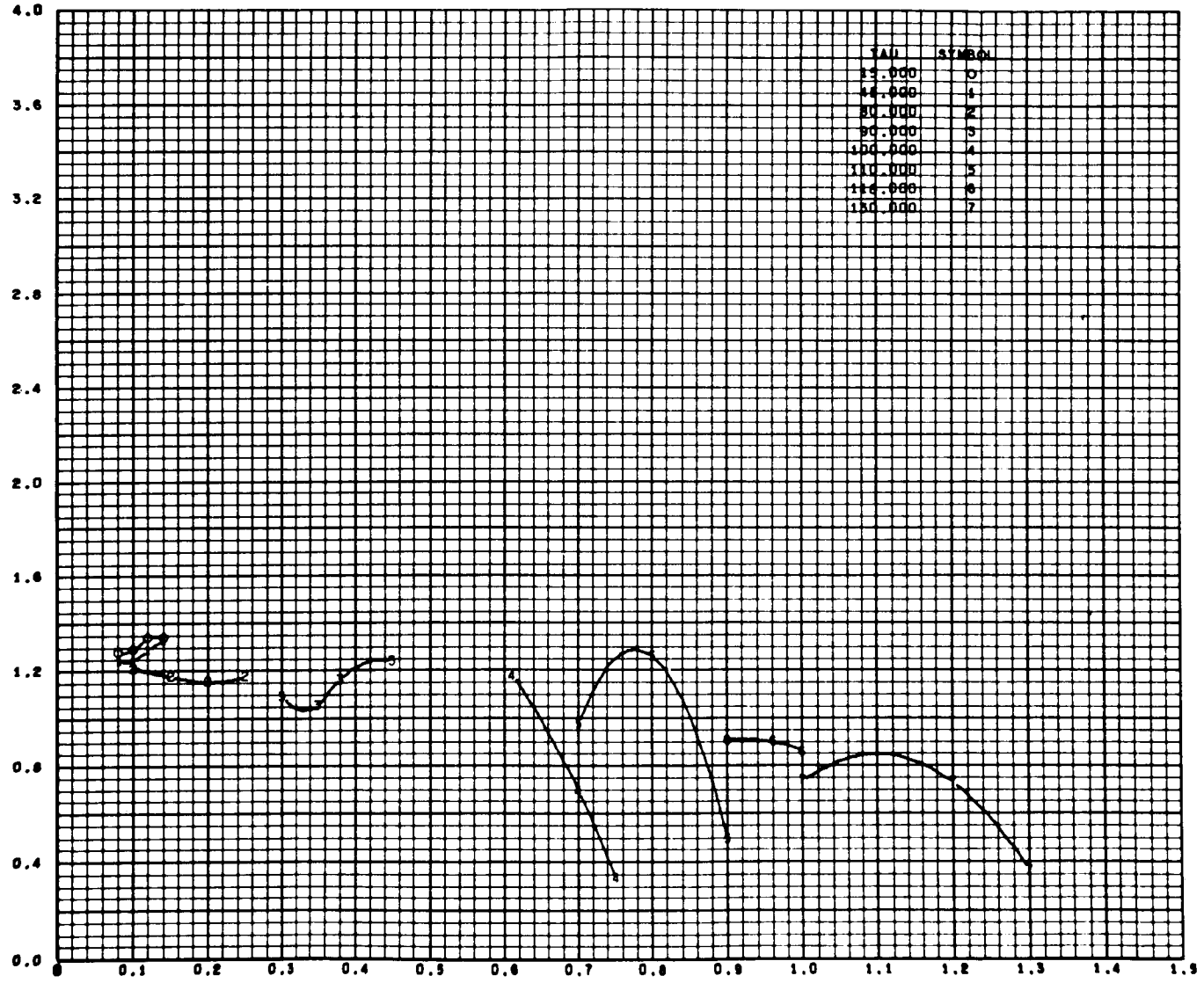

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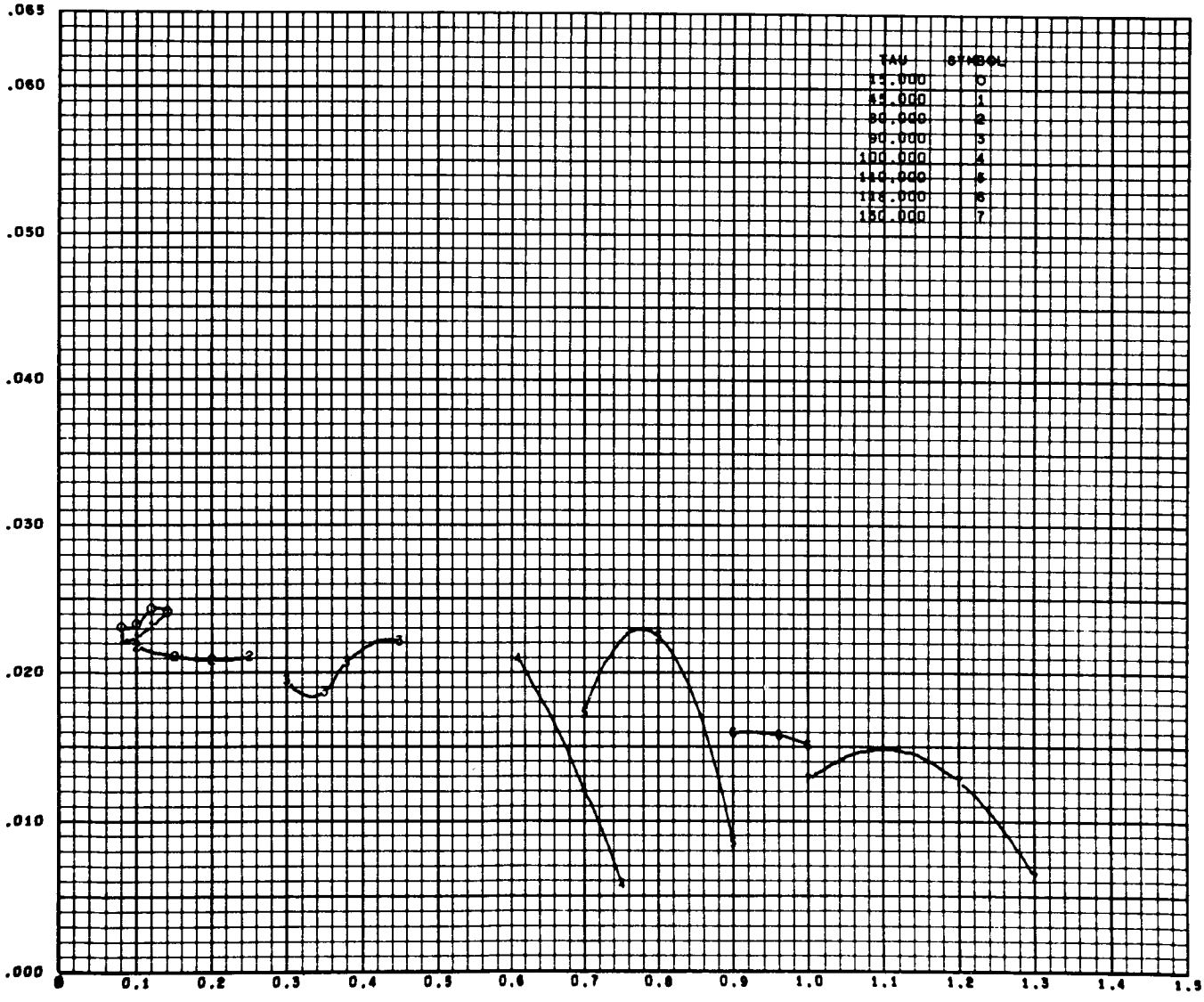

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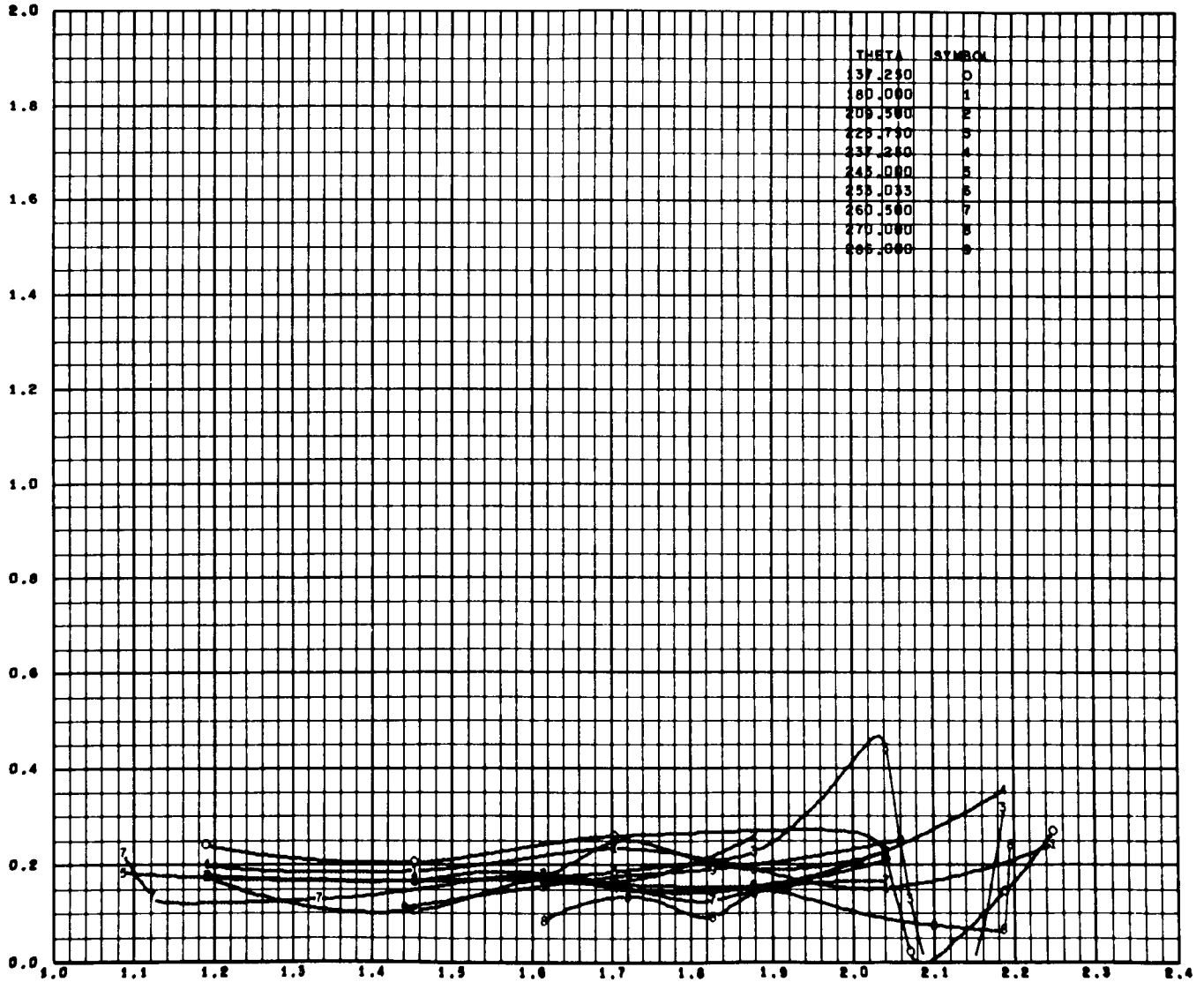

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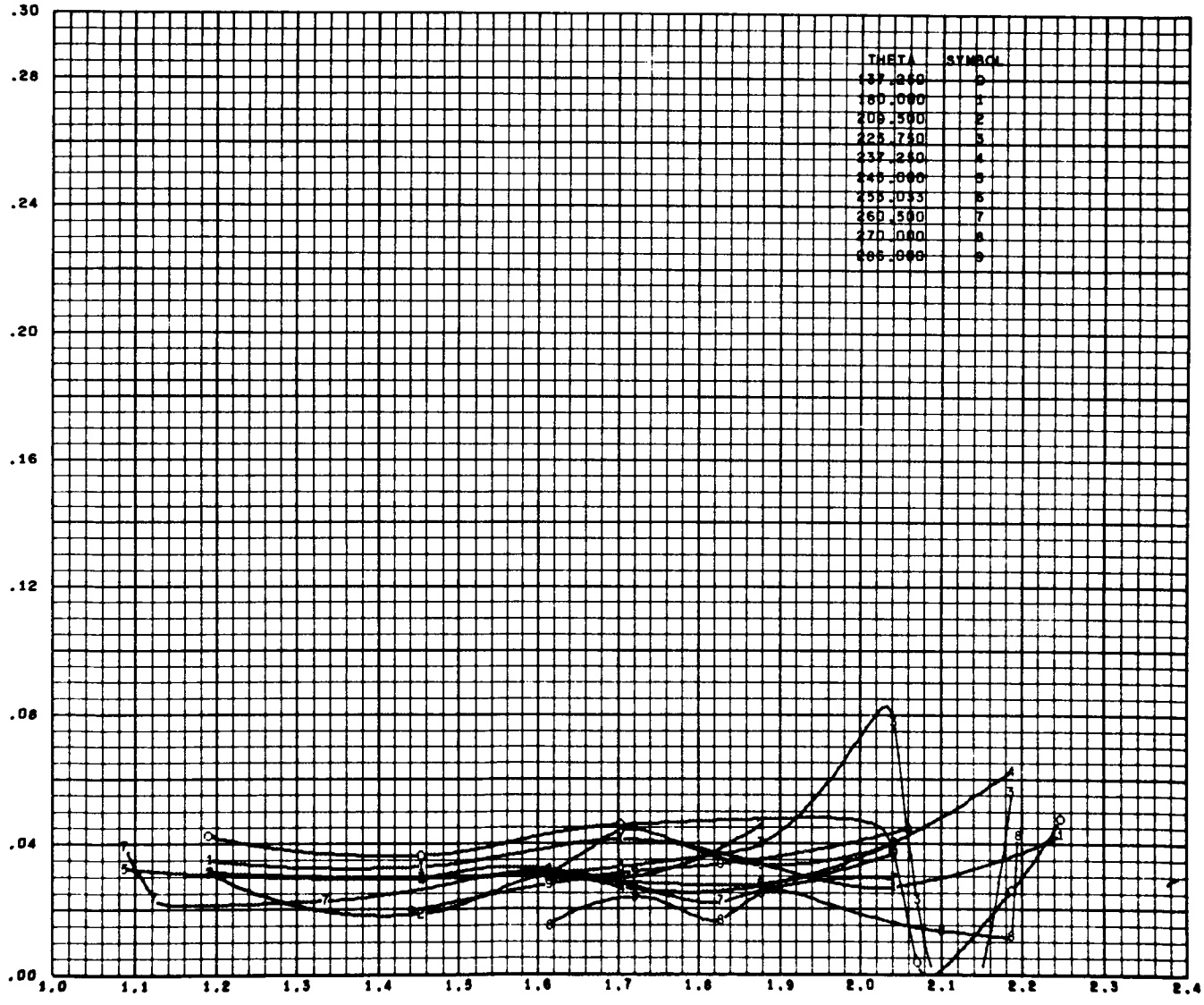

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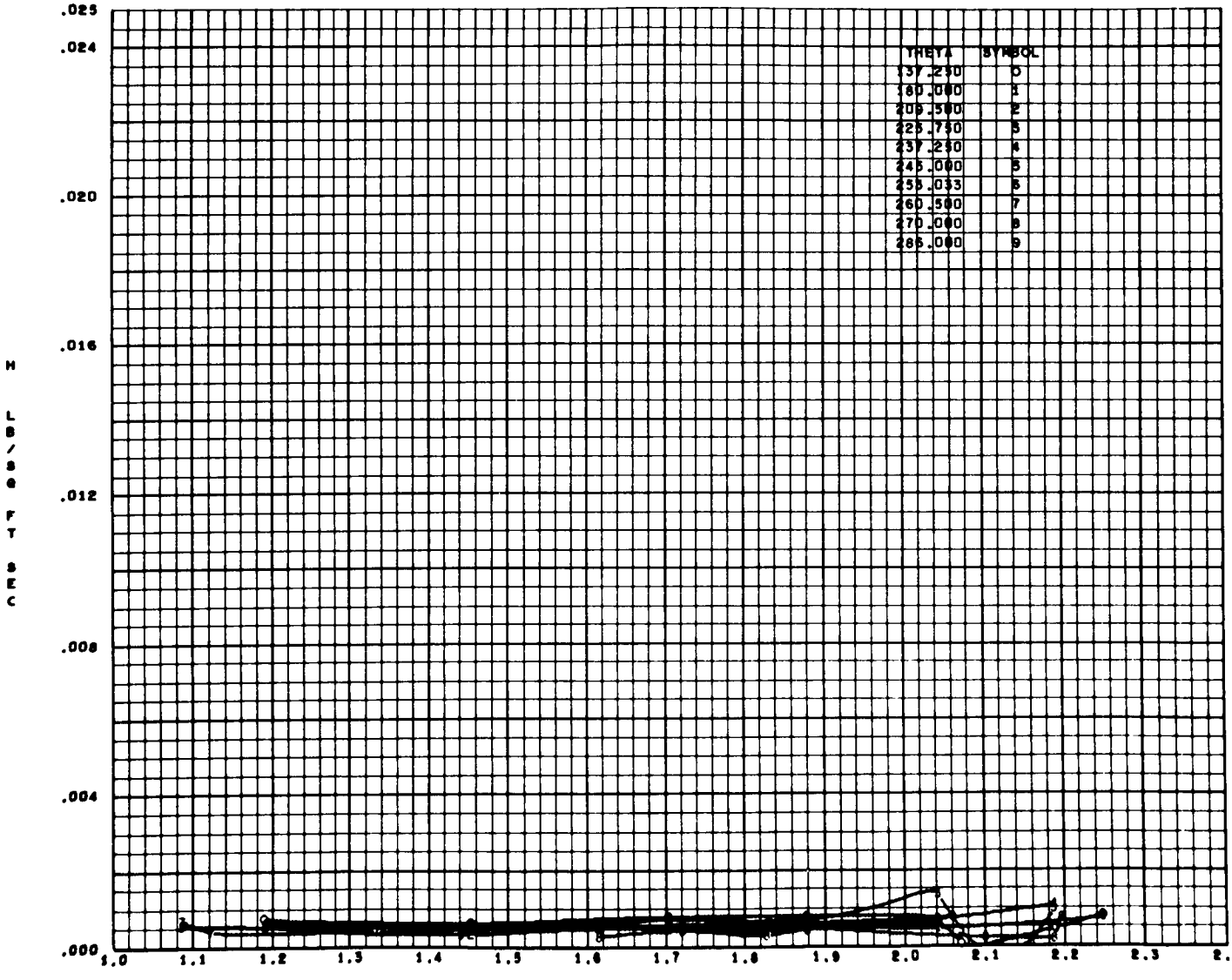

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HEAT TRANSFER

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RE/FT --- 1.1804*10+6
Q(OM) --- 5.6268 BTU/SQ FT SEC

PLOT SERIES NUMBER 13

TEST GROUP	TIME (SEC)
23*	2.75
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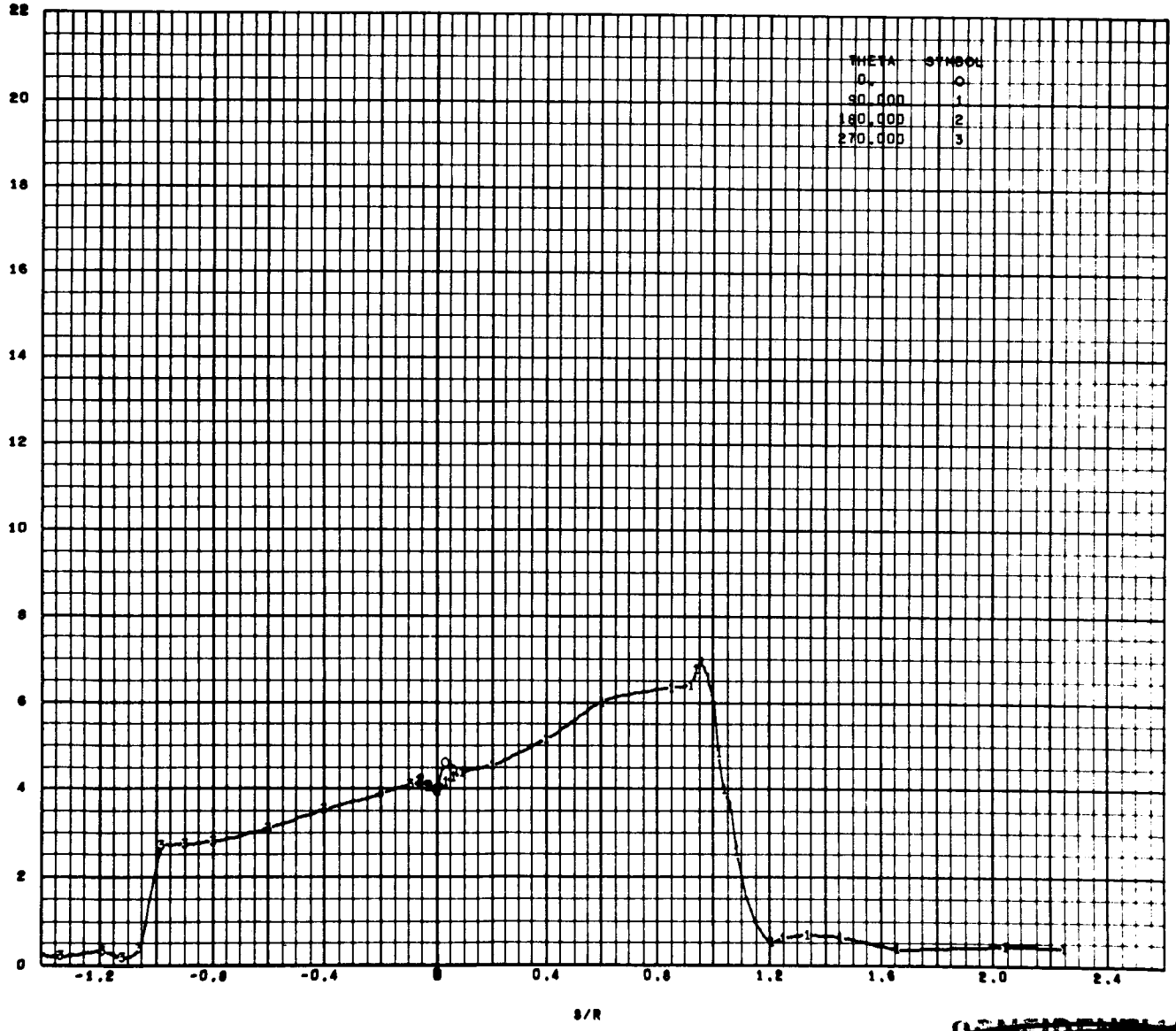

CONFIDENTIAL

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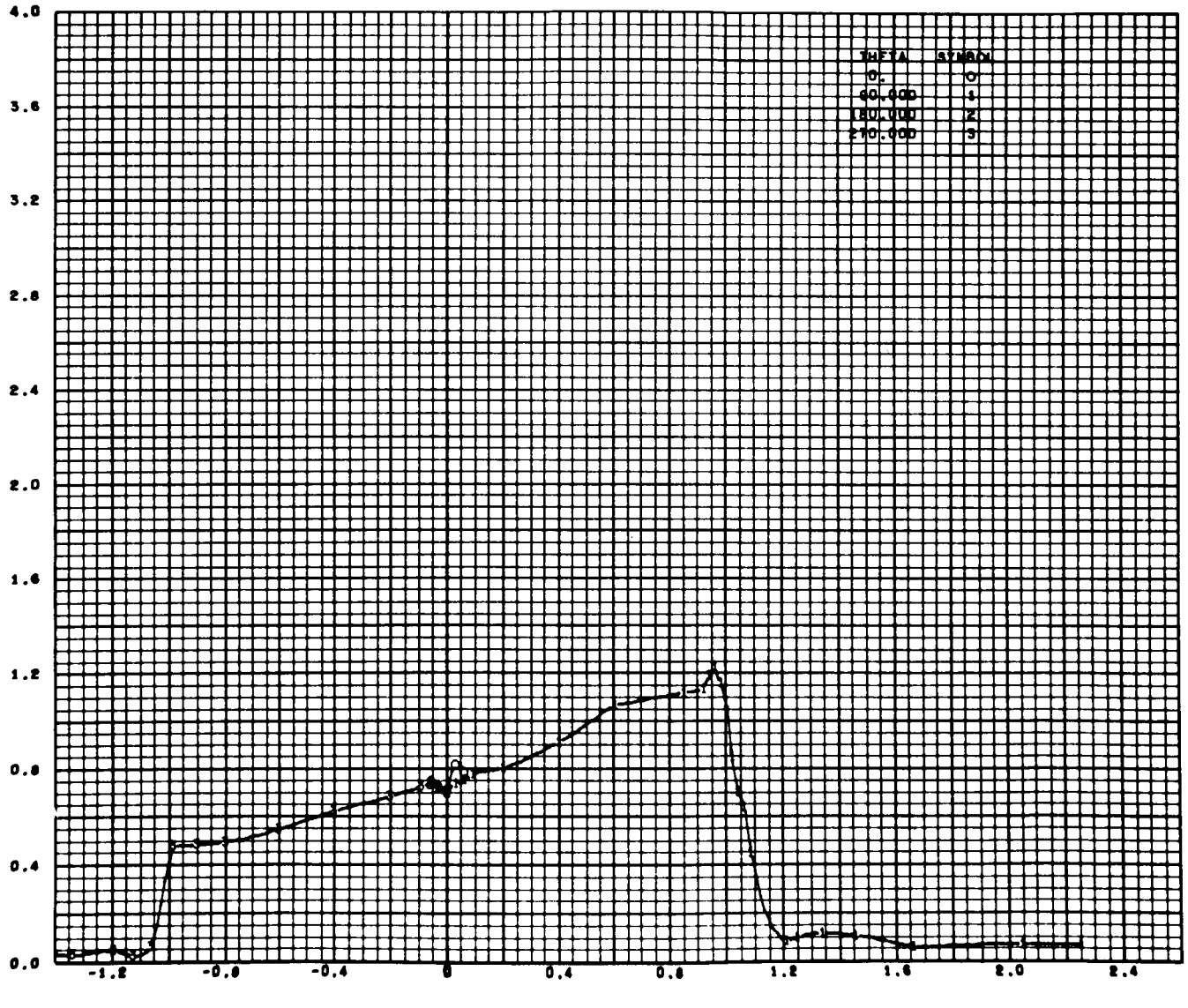
100 000



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AEDC, TUNNEL C

JUNE, 1964

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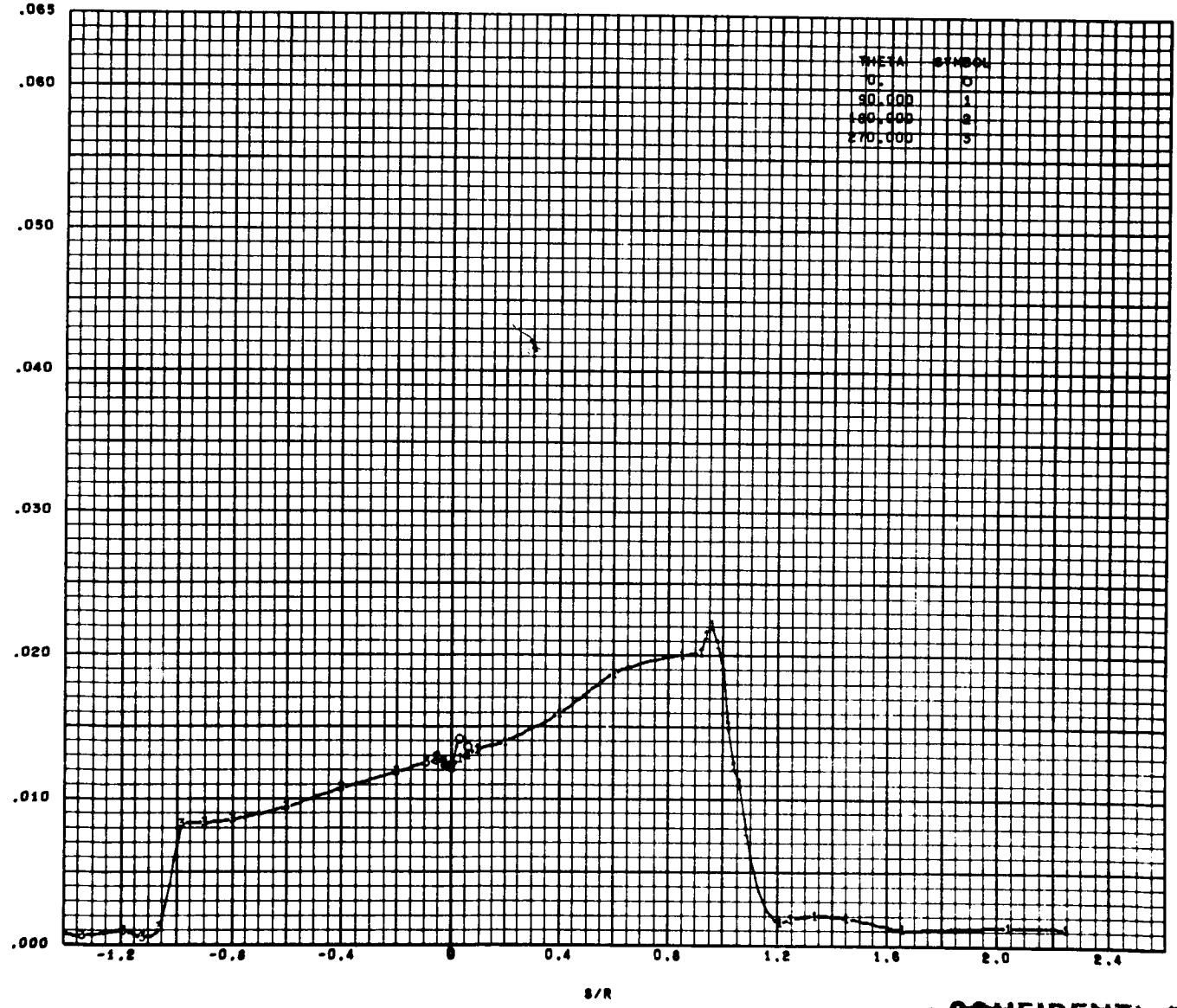
103 000



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HEAT TRANSFER

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JUNE, 1964

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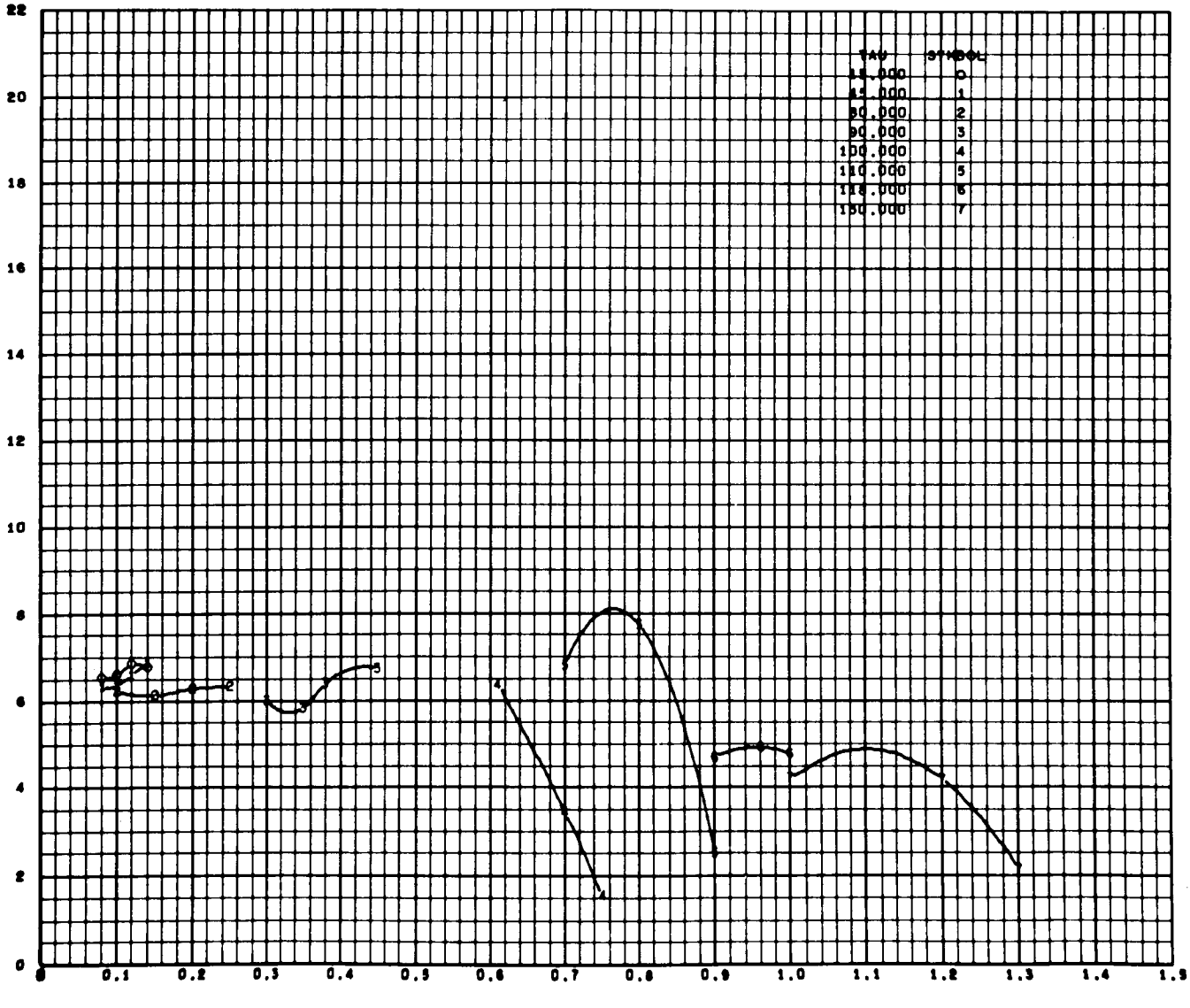

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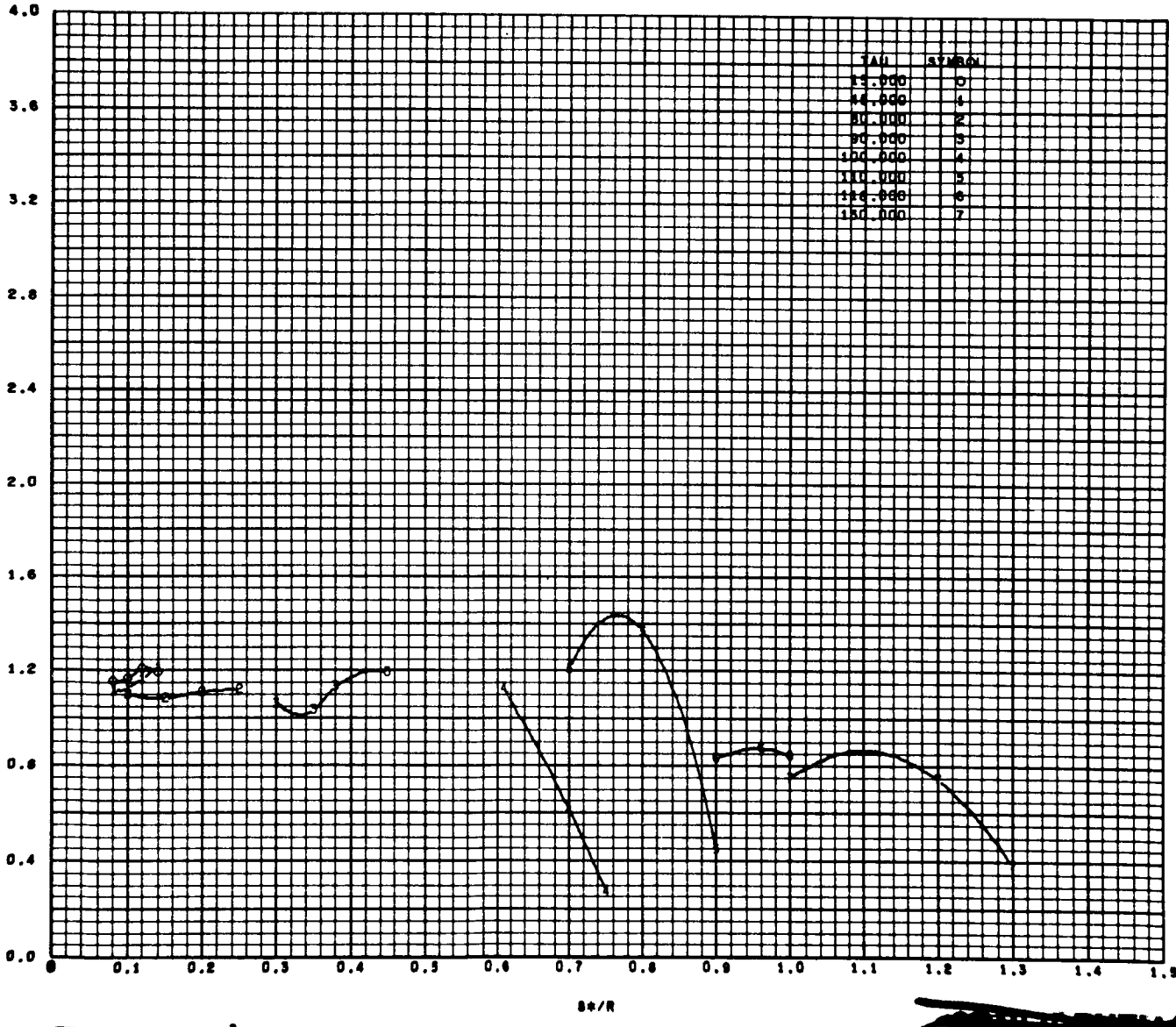

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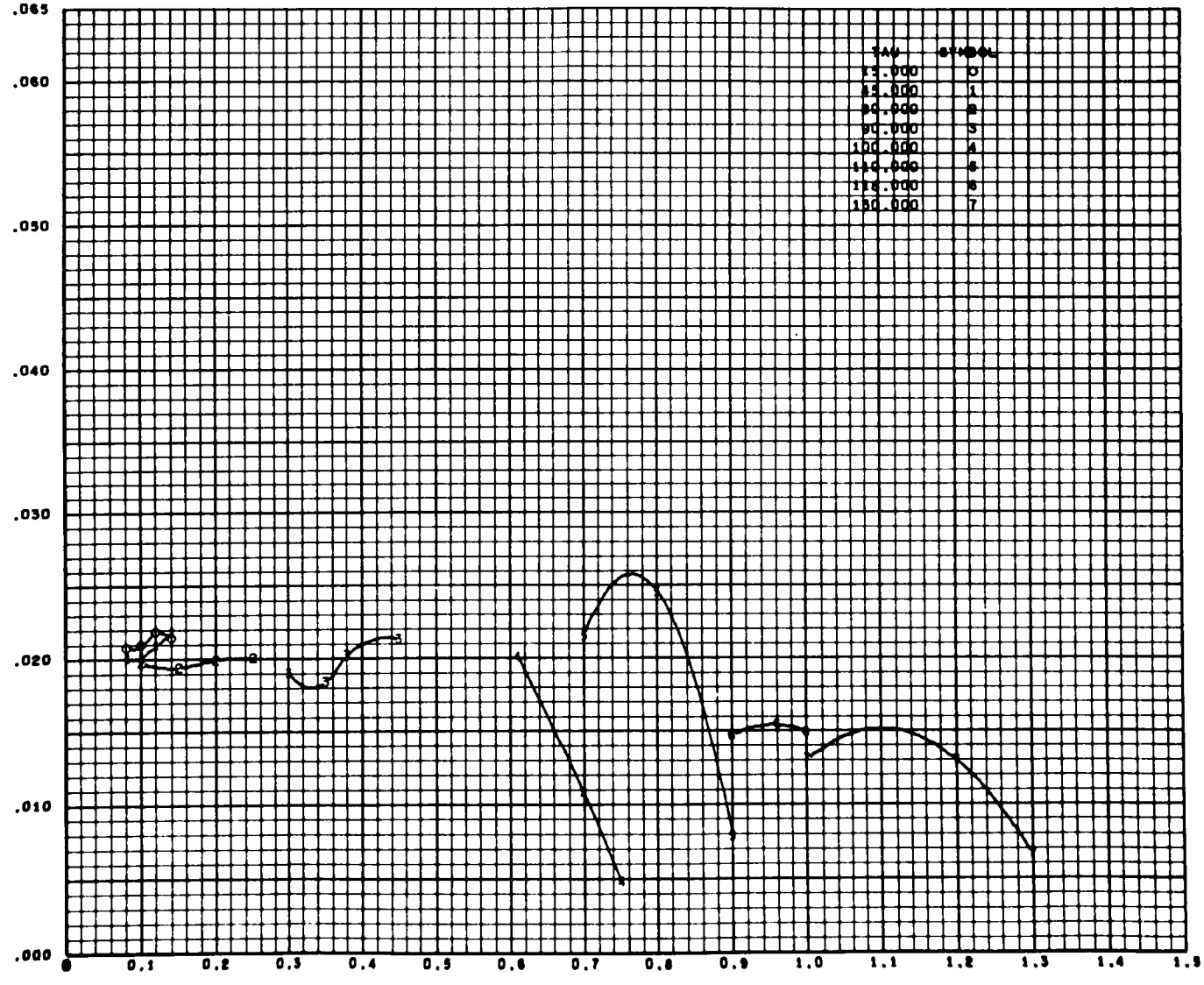

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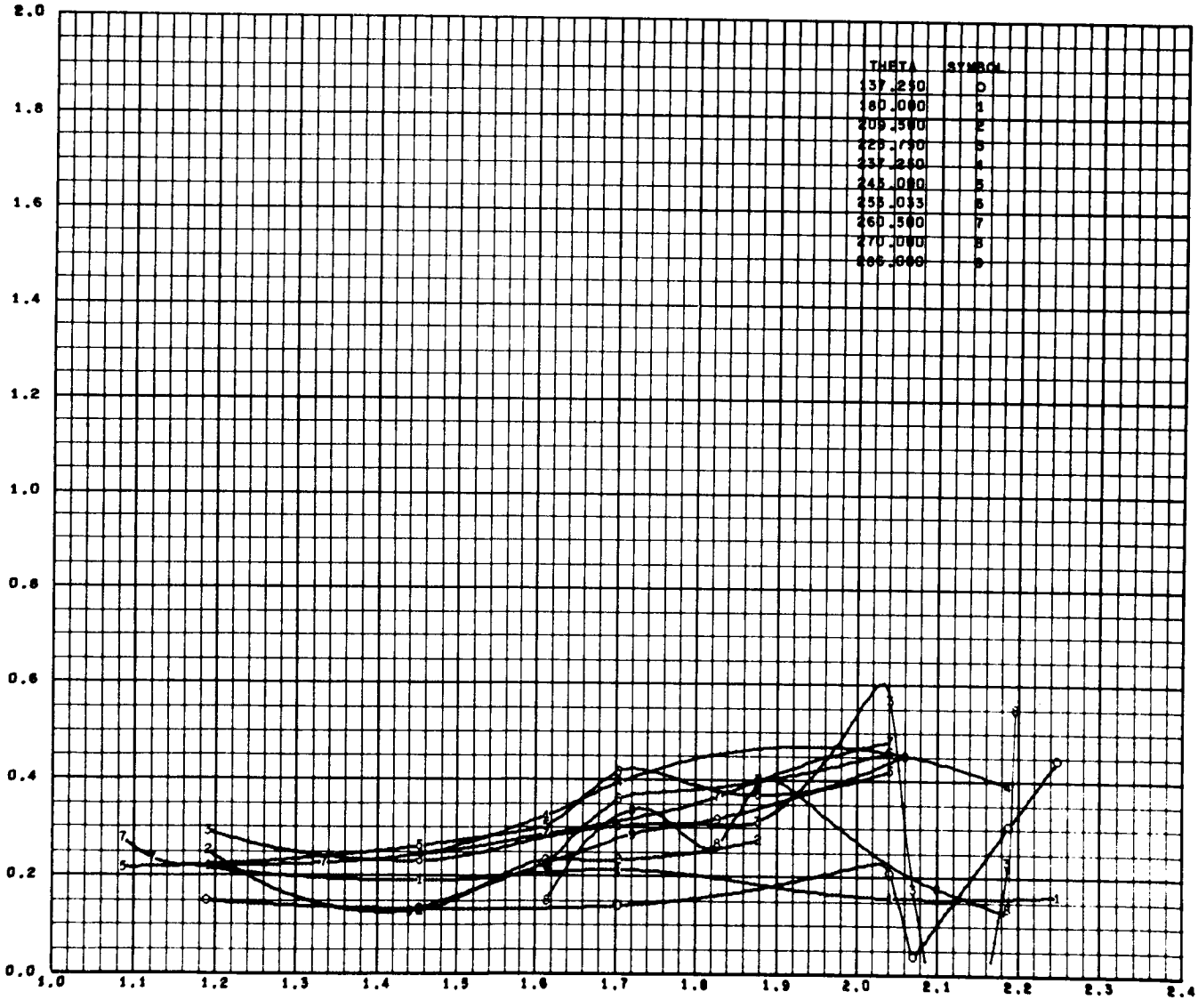

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APOLLO M-11

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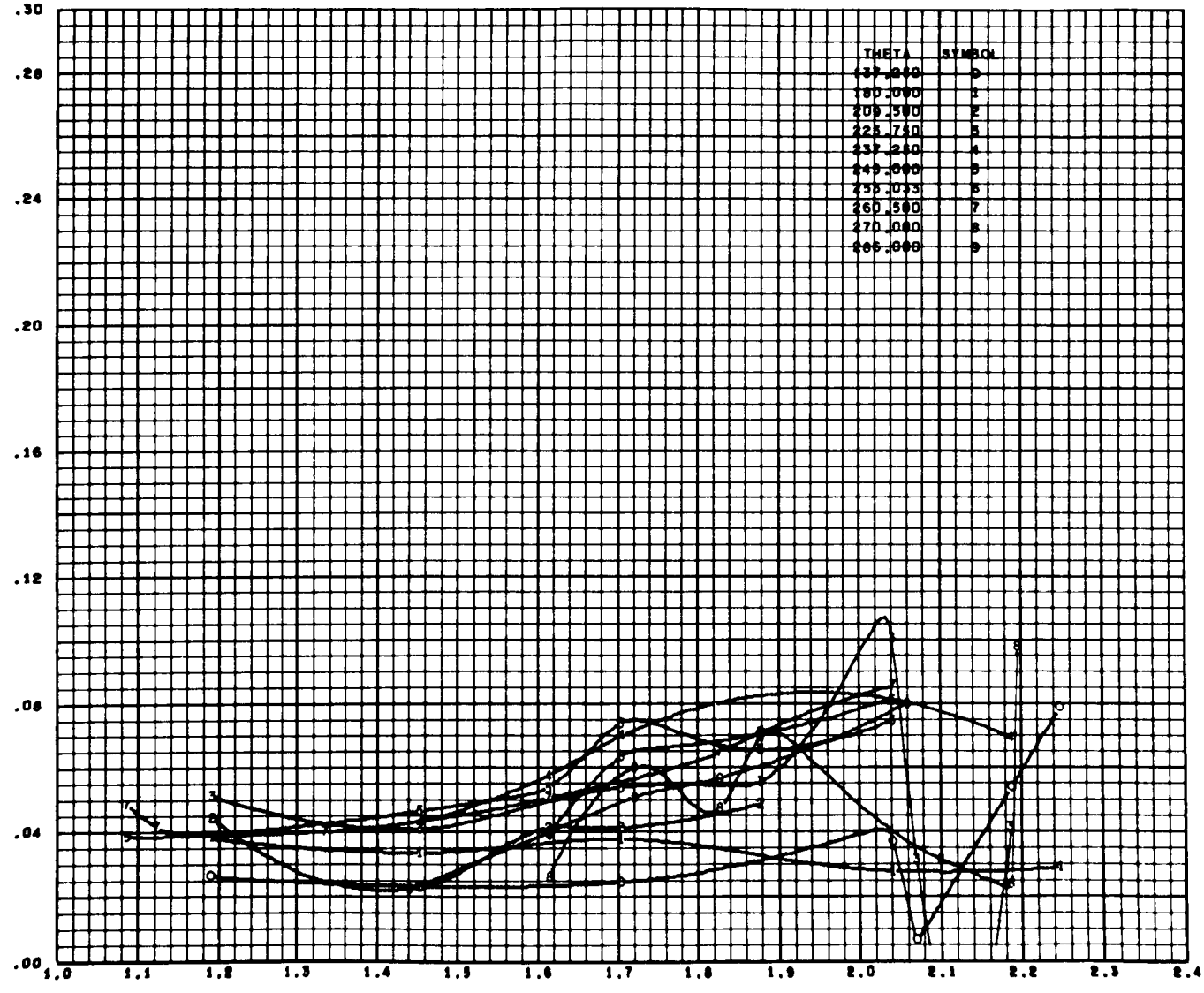

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.14
ANGLE OF ATTACK ------ 162.44 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 924.80 PSIA
TOTAL TEMPERATURE ---- 1818.00 DEG RANKINE

RE/FT --- 1.2012*10+6
Q(OM) --- 5.6361 BTU/SQ FT SEC

PLOT SERIES NUMBER 14

TEST GROUP	TIME (SEC)
24*	2.80
30	2.75
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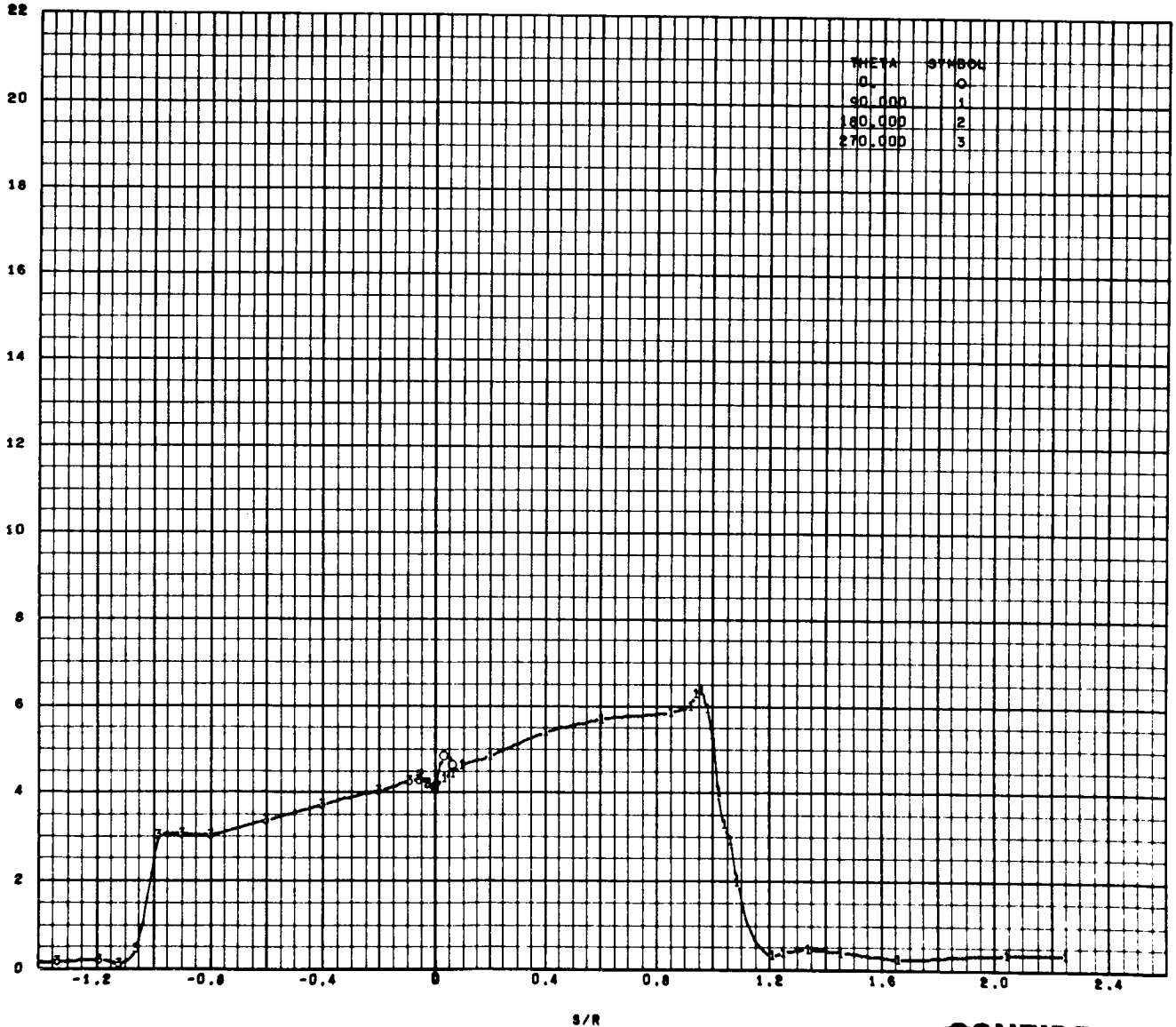
3937-08
106 000



$\dot{q}$ BTU/SQ FT SEC

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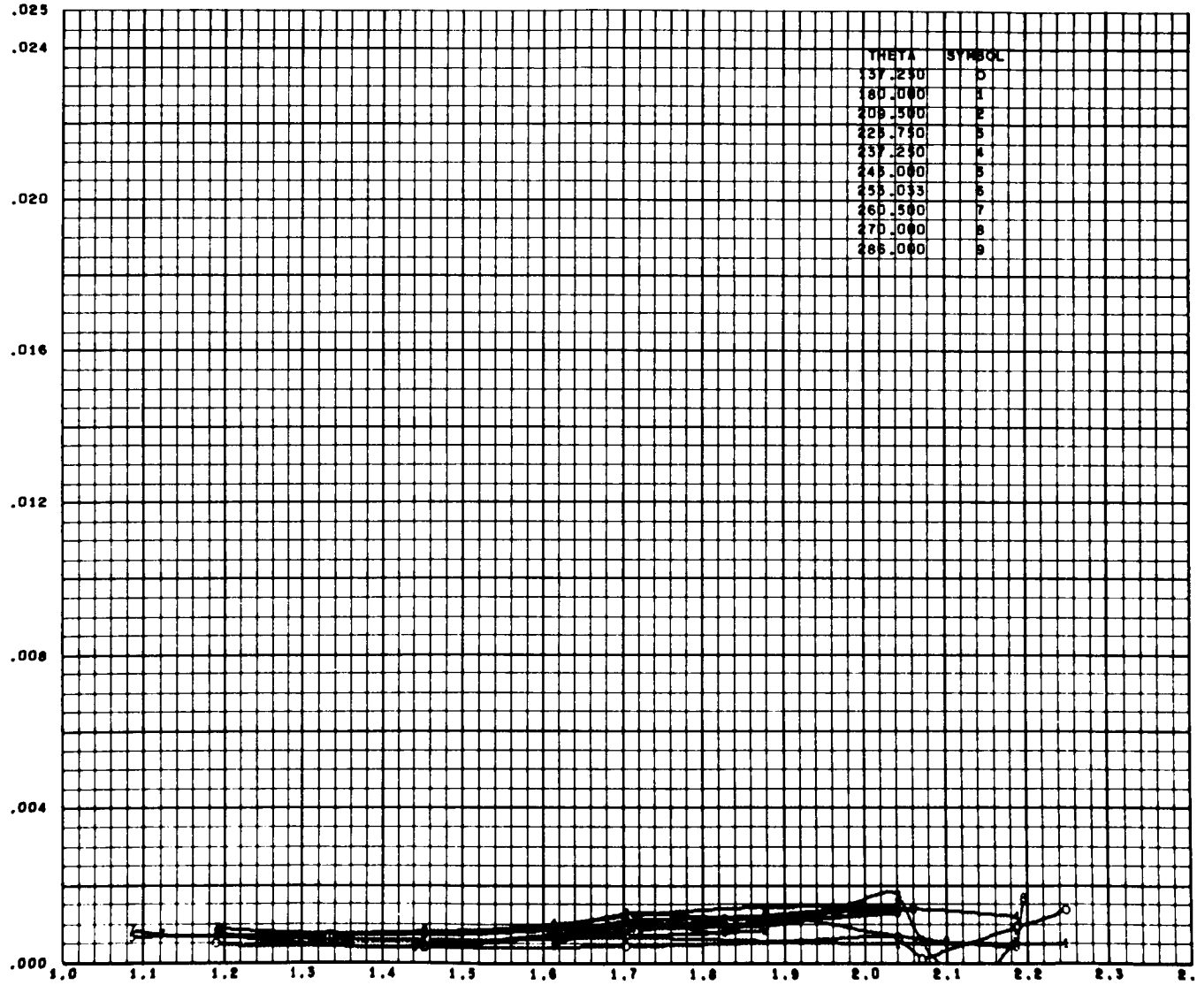

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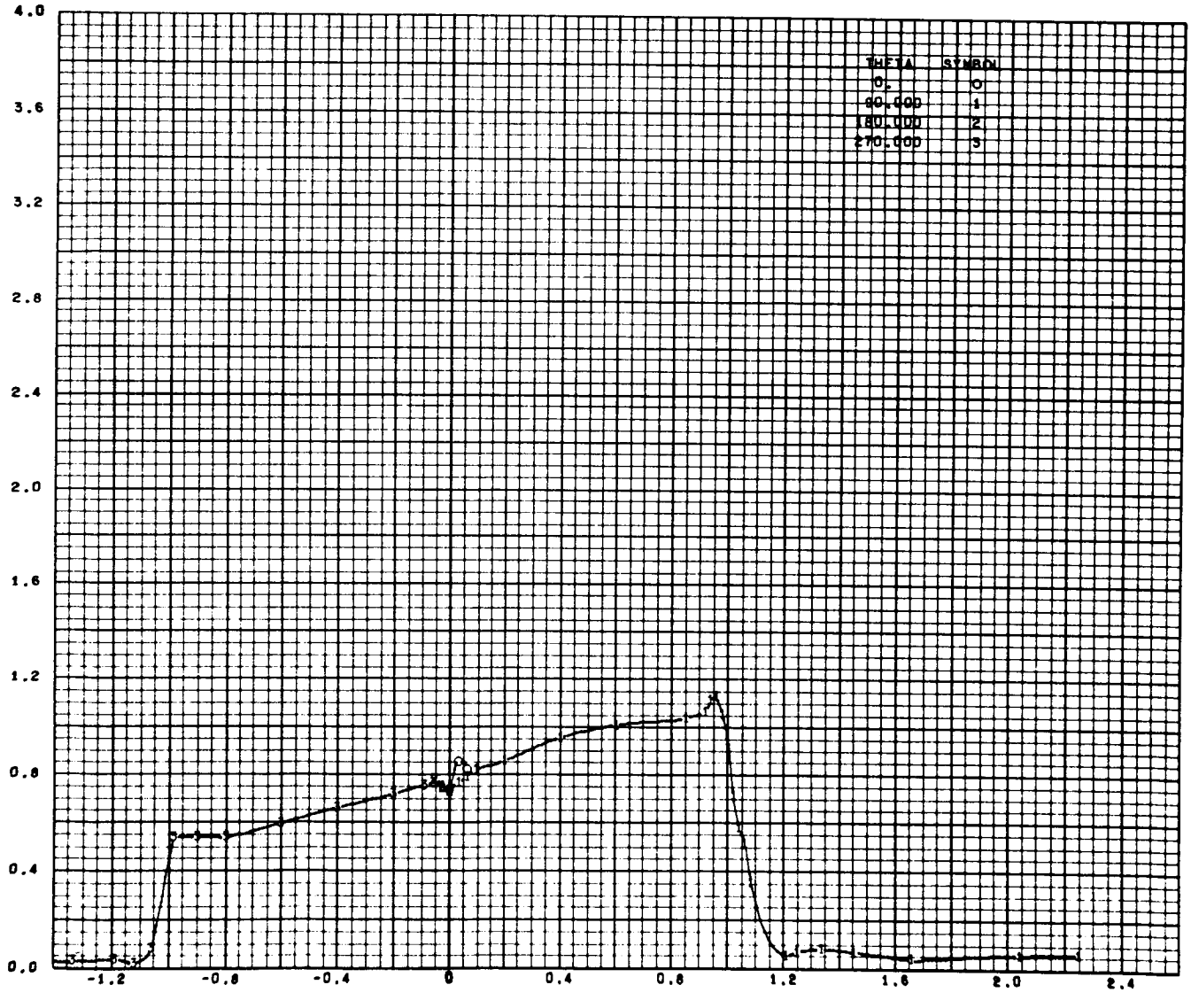

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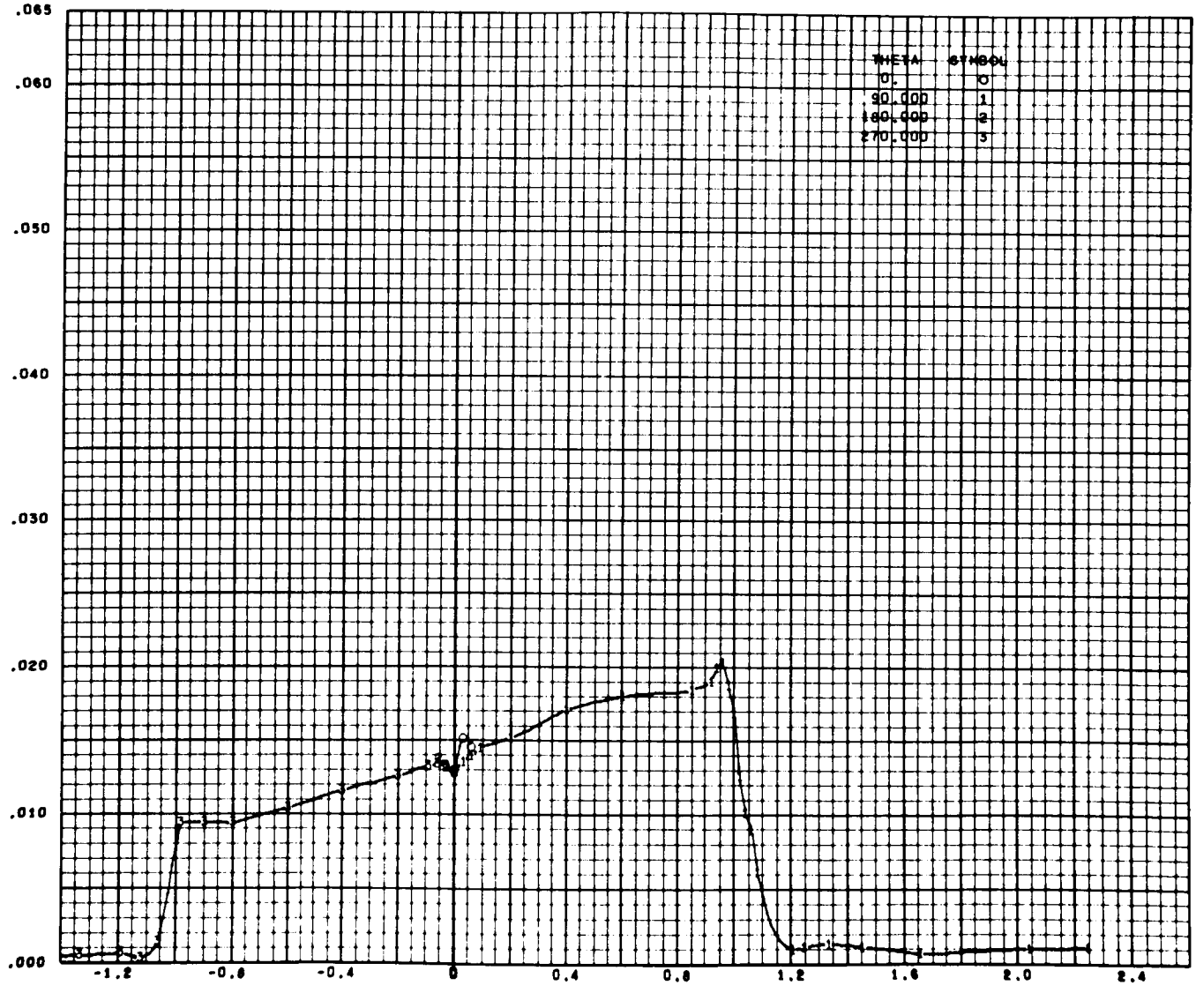

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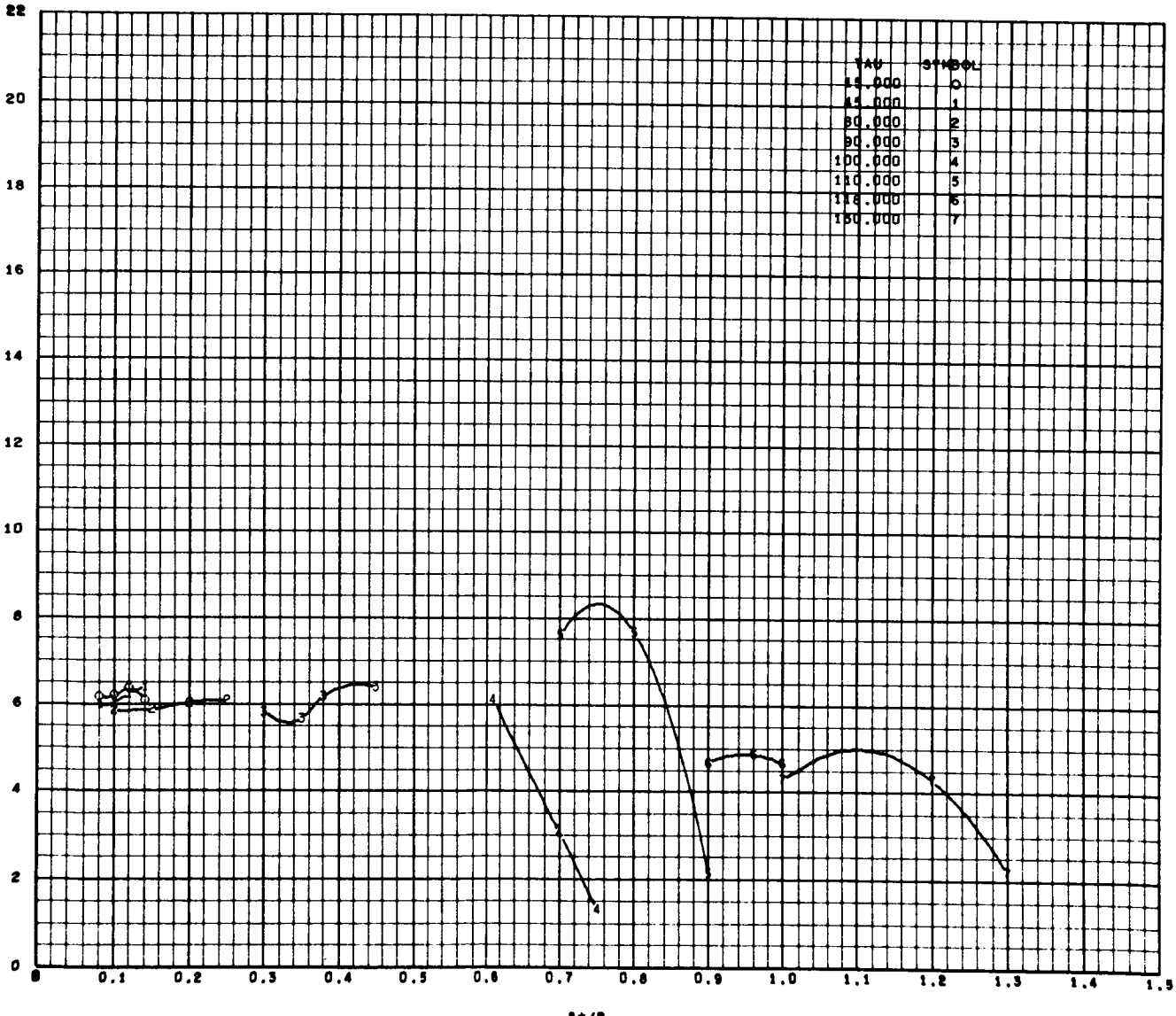

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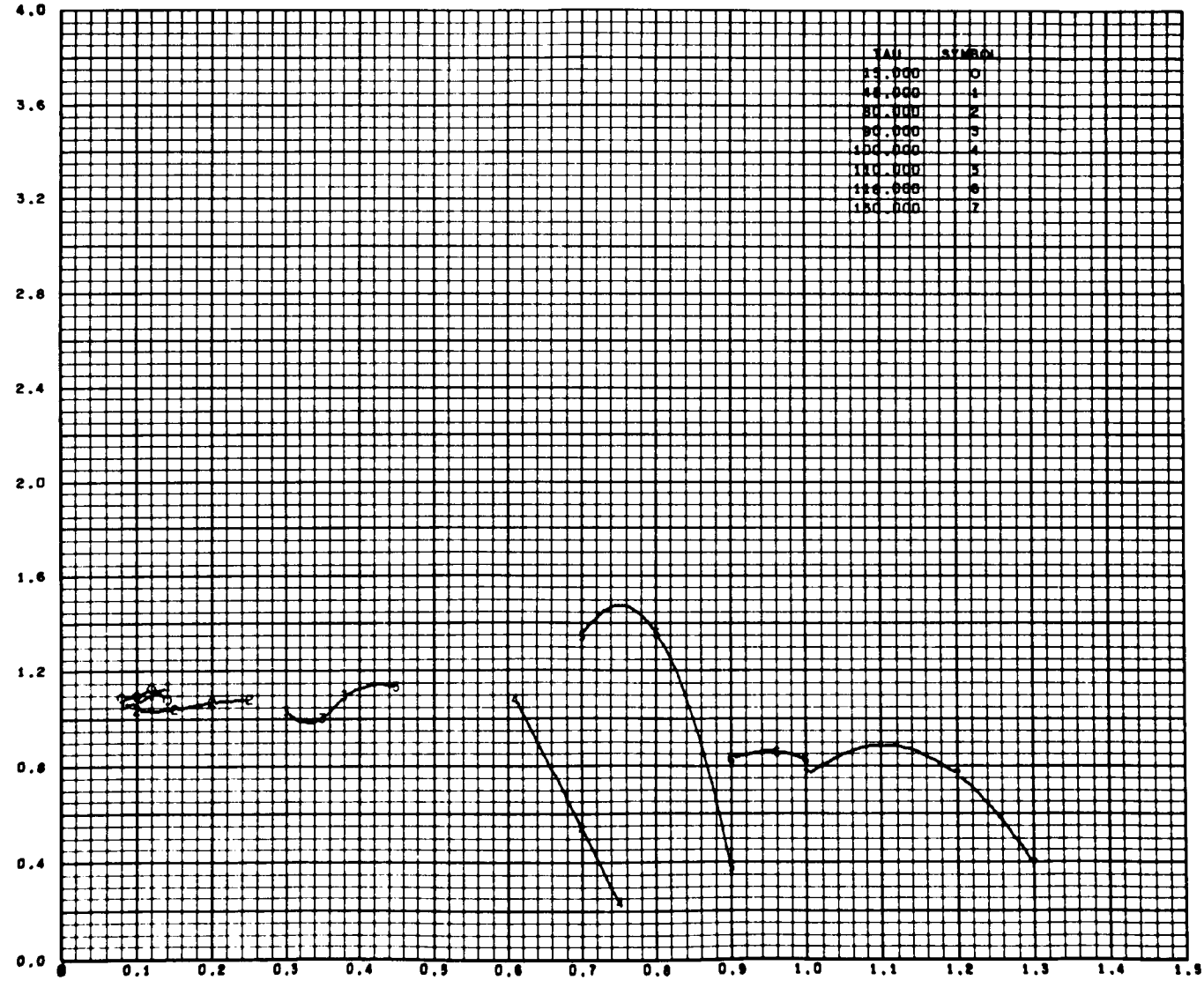

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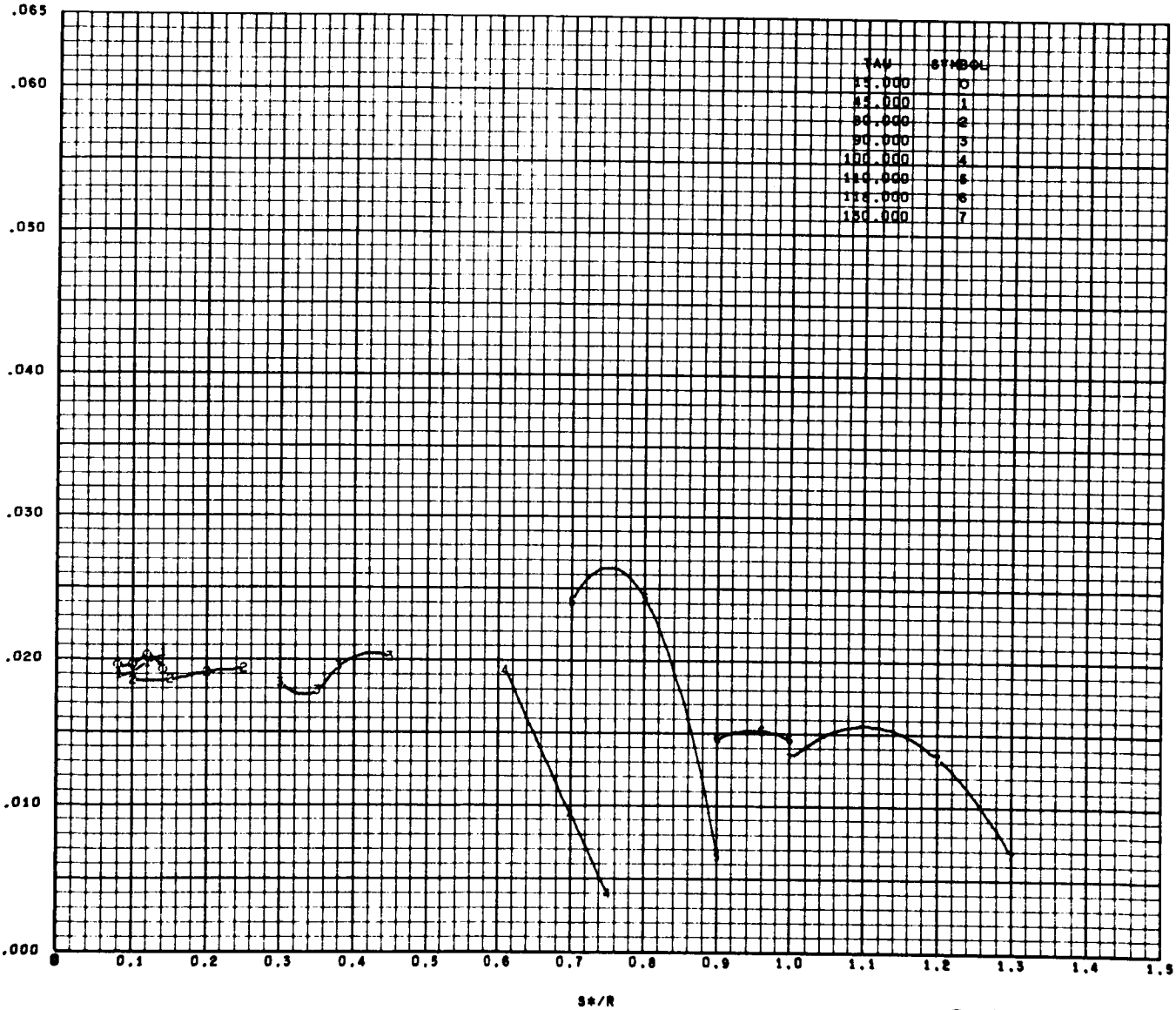

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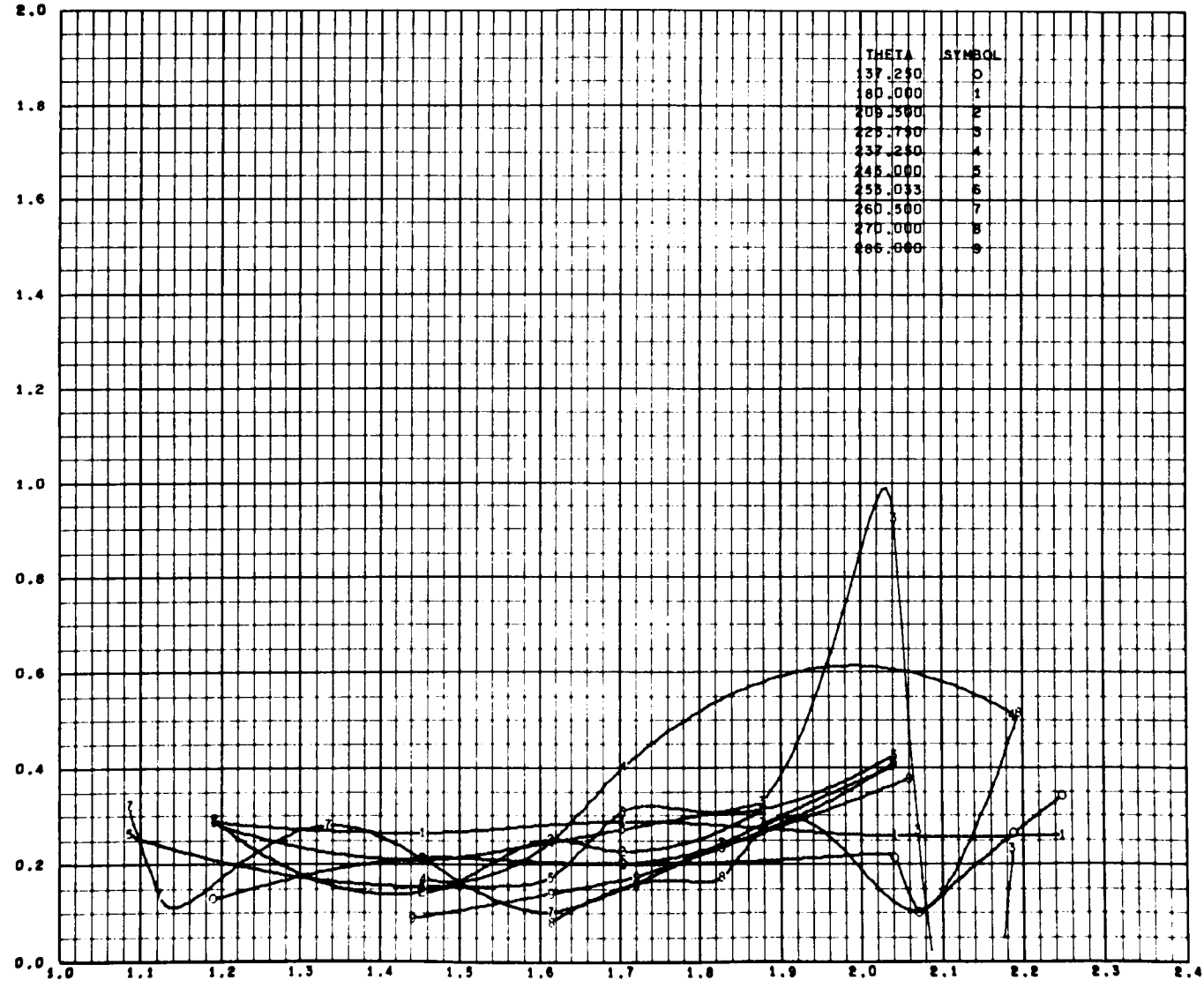

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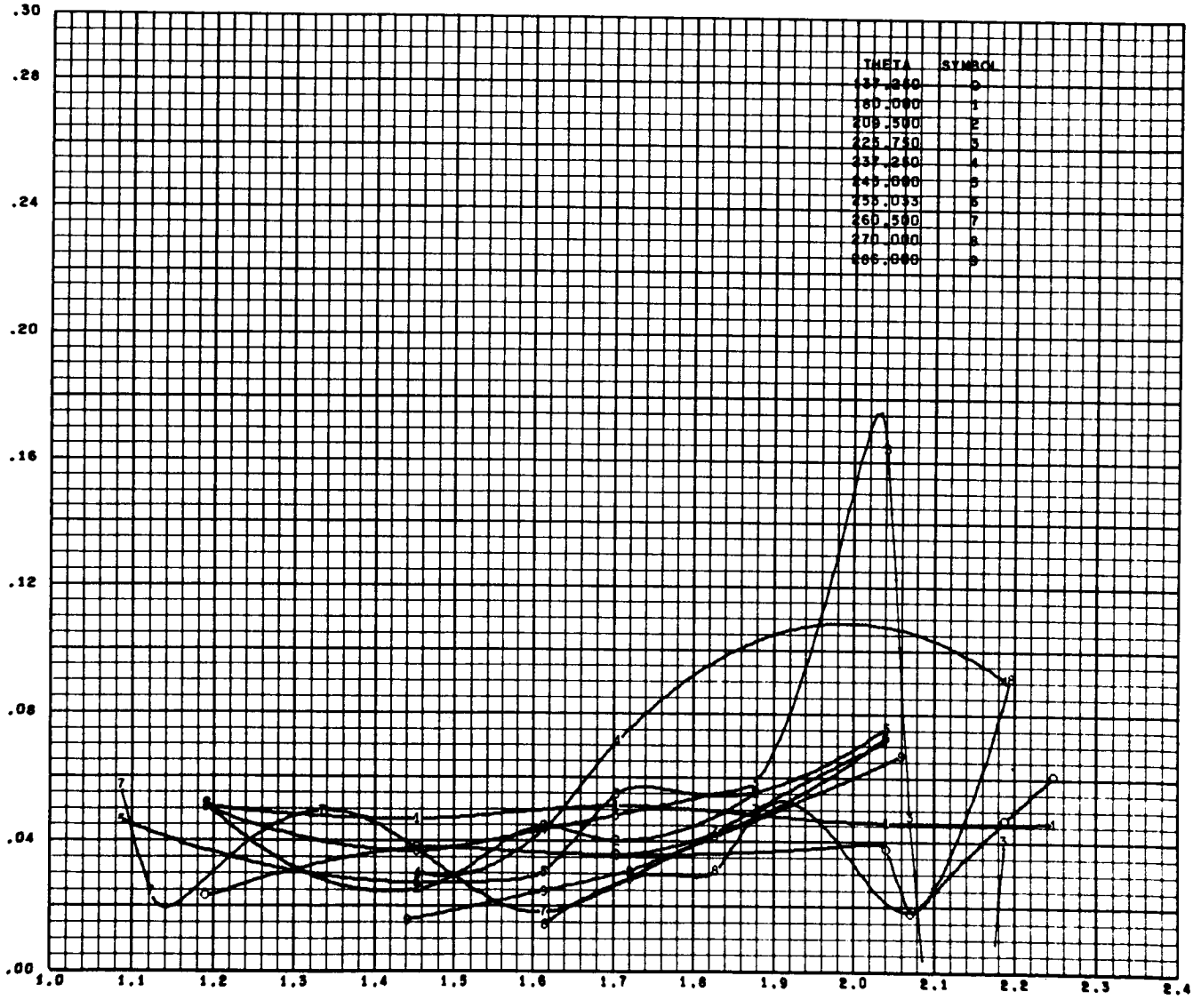

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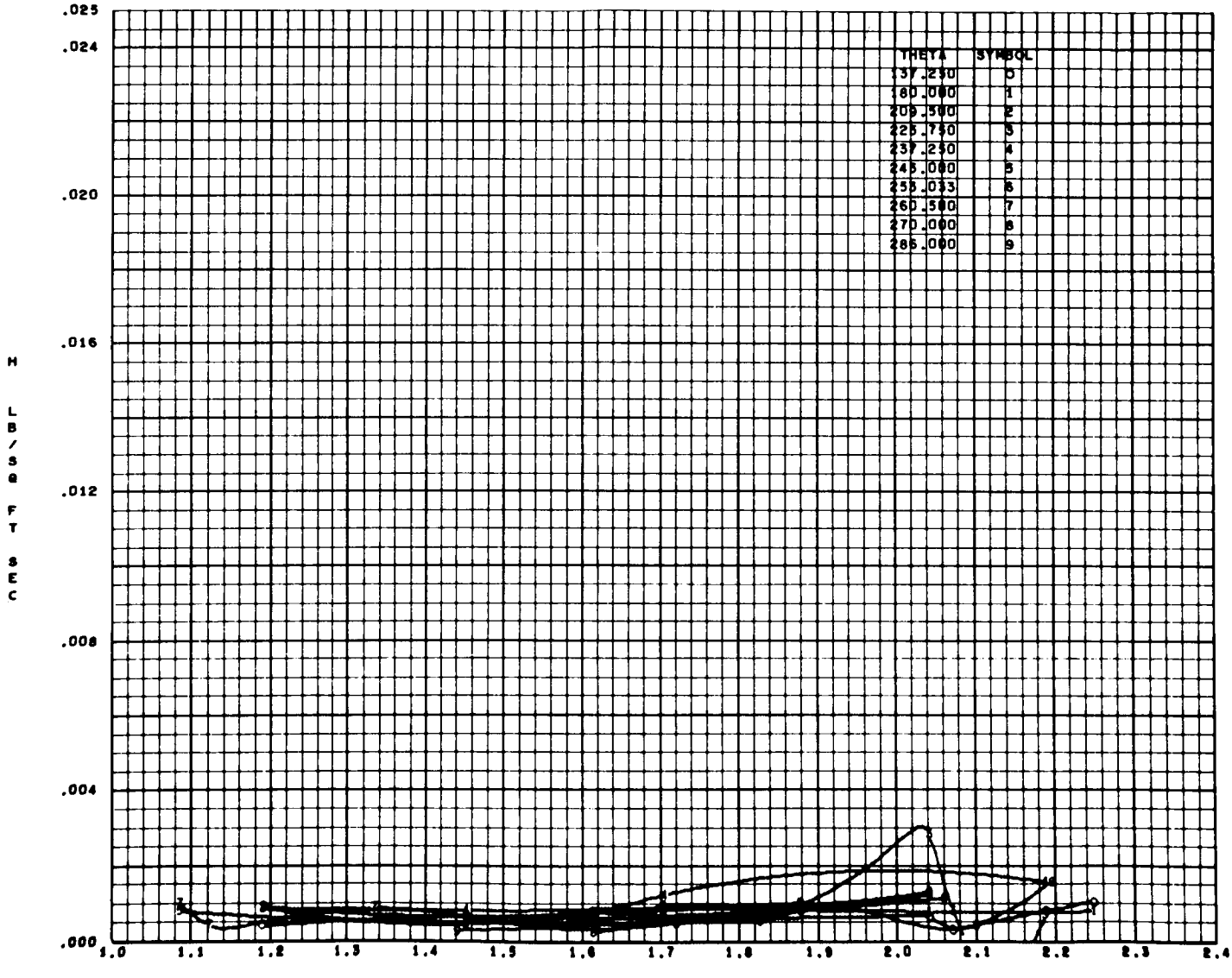
3937-08
114 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 143.38 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 1836.80 PSIA
TOTAL TEMPERATURE ---- 1883.10 DEG RANKINE

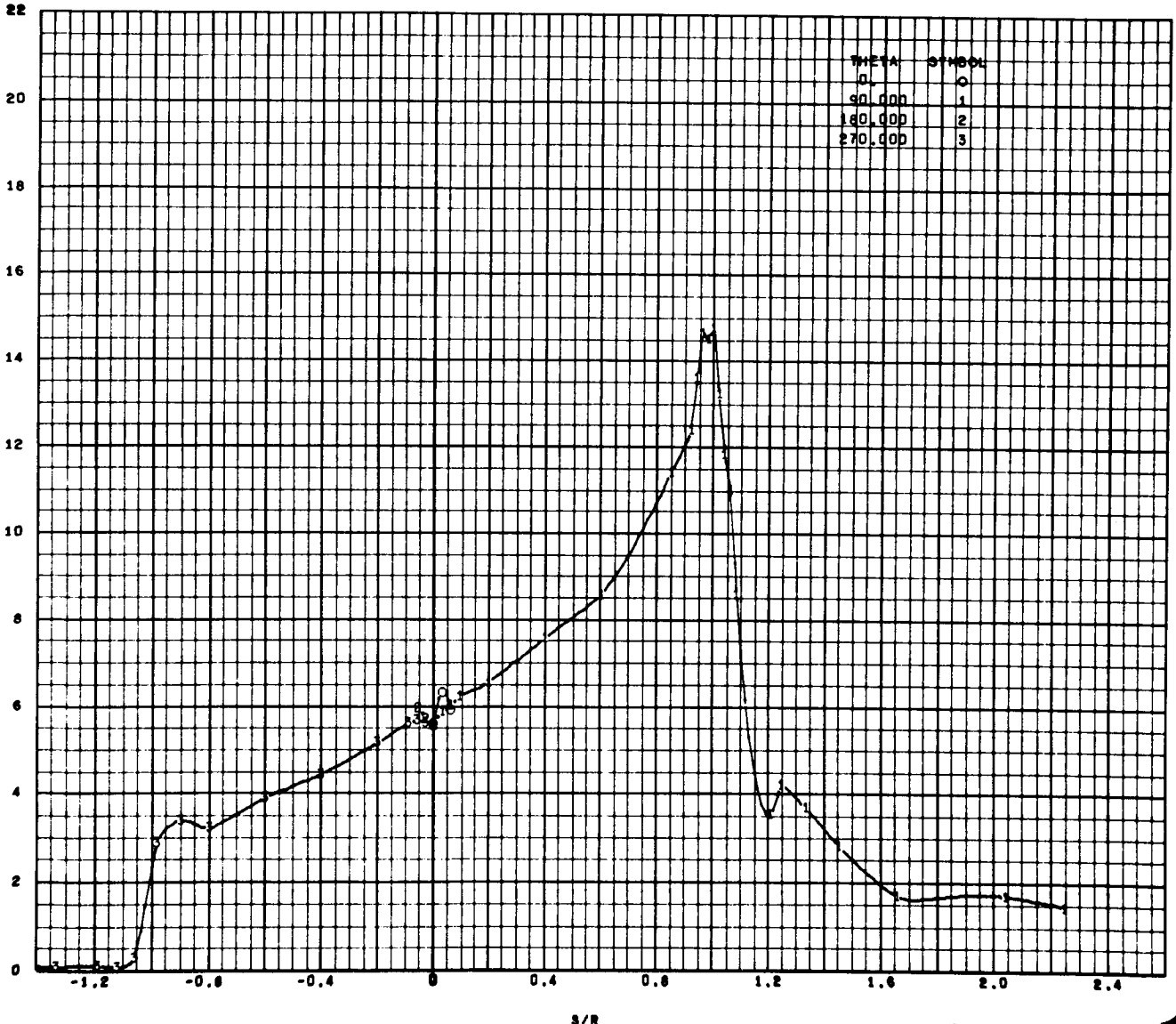
RE/FT --- 2.2499*10+6
Q(OM) --- 9.2062 BTU/SQ FT SEC

PLOT SERIES NUMBER 15

TEST GROUP	TIME (SEC)
36*	2.70
50	2.70
52	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
115 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 143.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1836.80 PSIA
TOTAL TEMPERATURE ---- 1883.10 DEG RANKINE

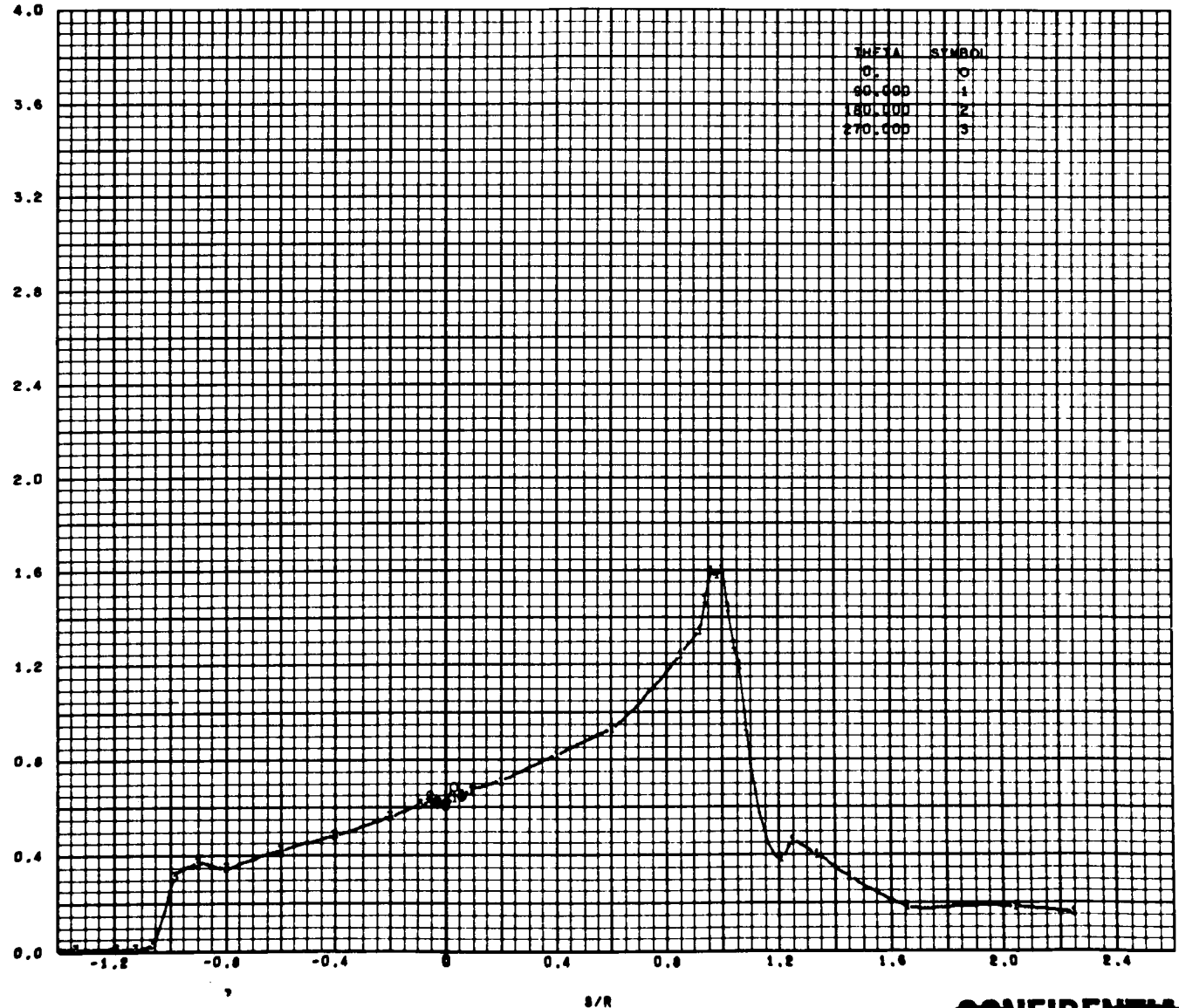
RE/FT --- 2.2499*10+6
Q(OM) --- 9.2062 BTU/SQ FT SEC

PLOT SERIES NUMBER 15

TEST GROUP	TIME (SEC)
36*	2.70
50	2.70
52	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
118 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
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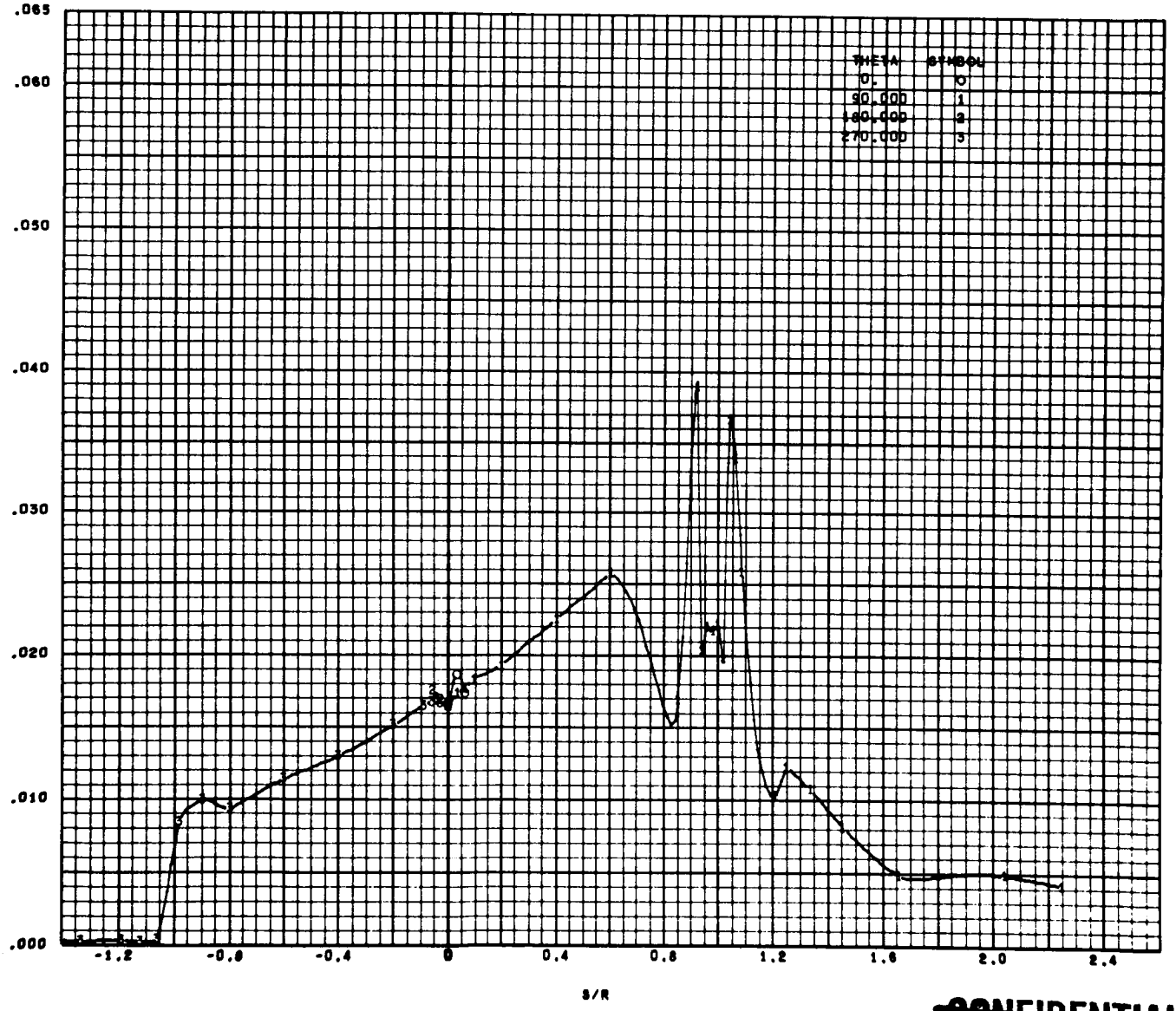
PLOT SERIES NUMBER 15

TEST GROUP	TIME (SEC)
36*	2.70
50	2.70
52	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
121 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
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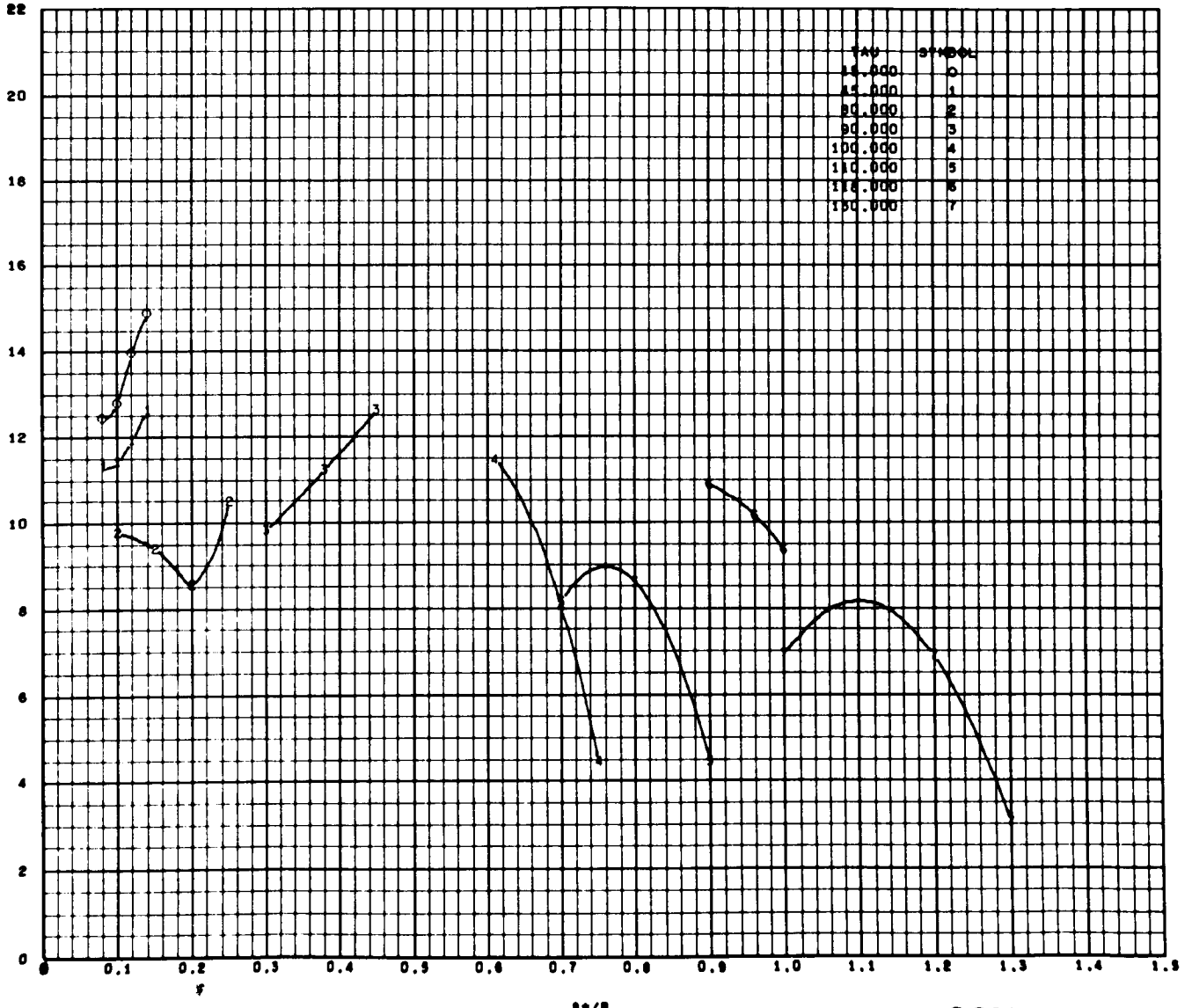
PLOT SERIES NUMBER 15

TEST GROUP	TIME (SEC)
36*	2.70
50	2.70
52	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
116 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
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TEST GROUP	TIME (SEC)
36*	2.70
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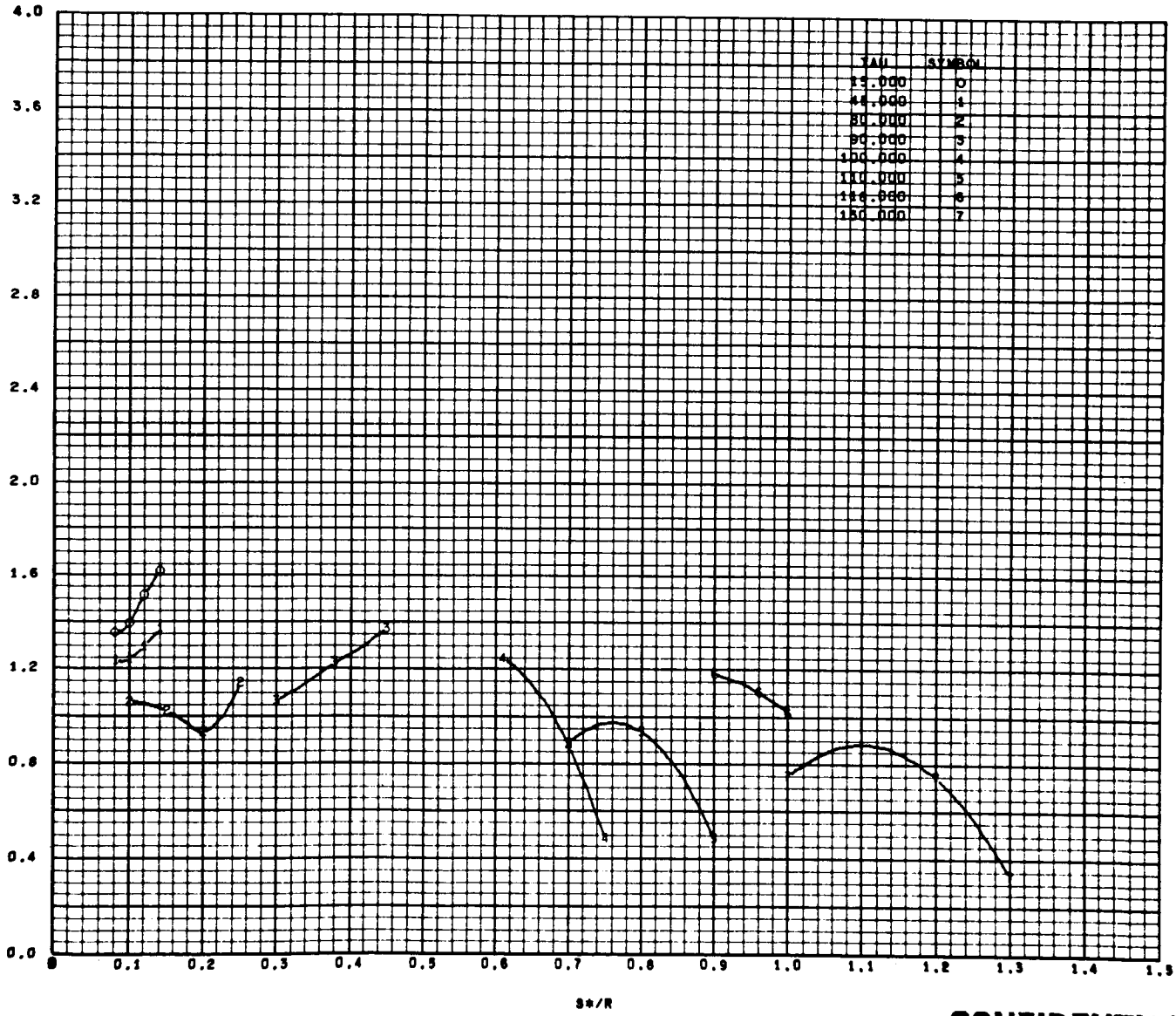
3937-08
119 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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PLOT SERIES NUMBER 15

TEST GROUP	TIME (SEC)
36*	2.70
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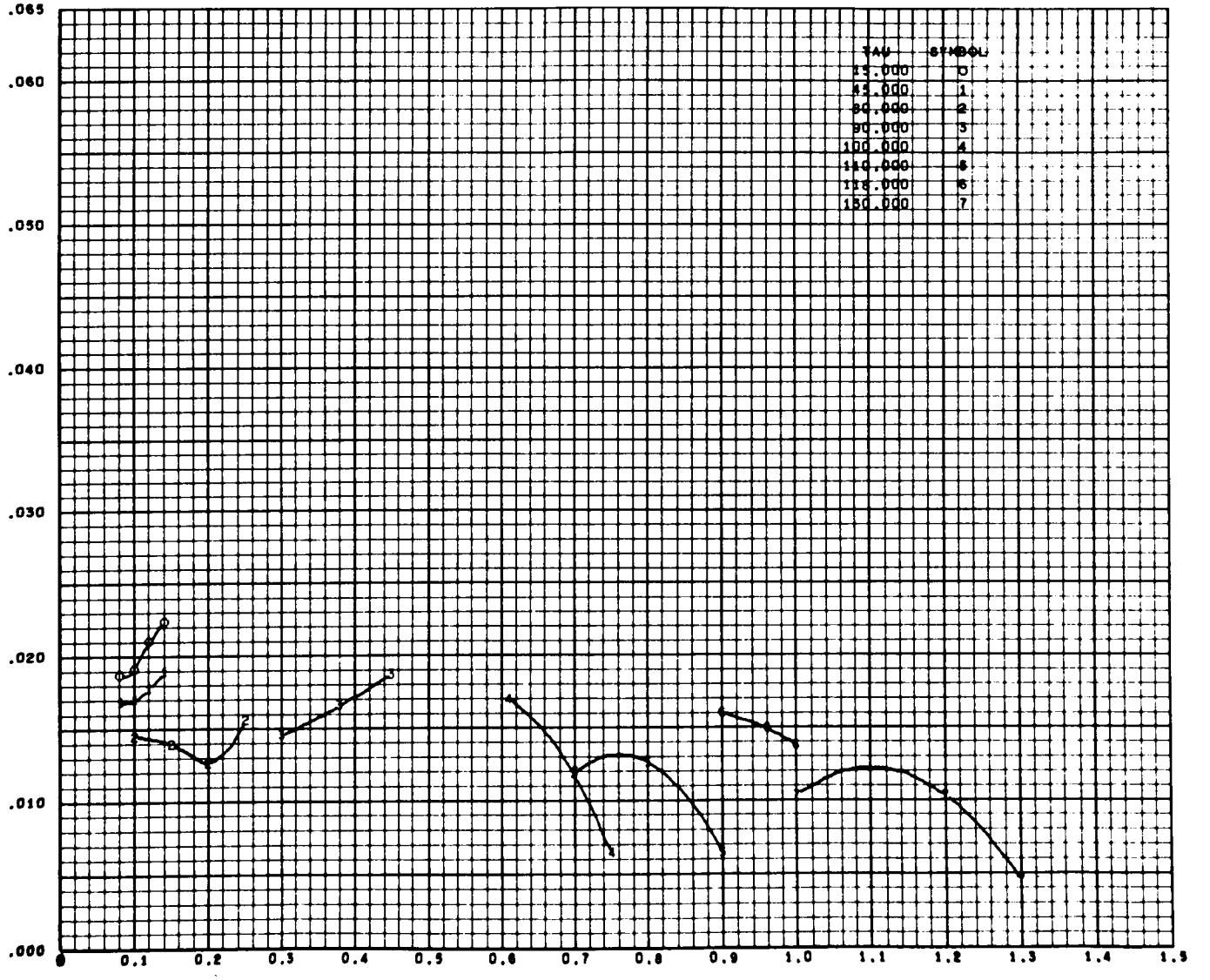
* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
122 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
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TEST GROUP	TIME (SEC)
36*	2.70
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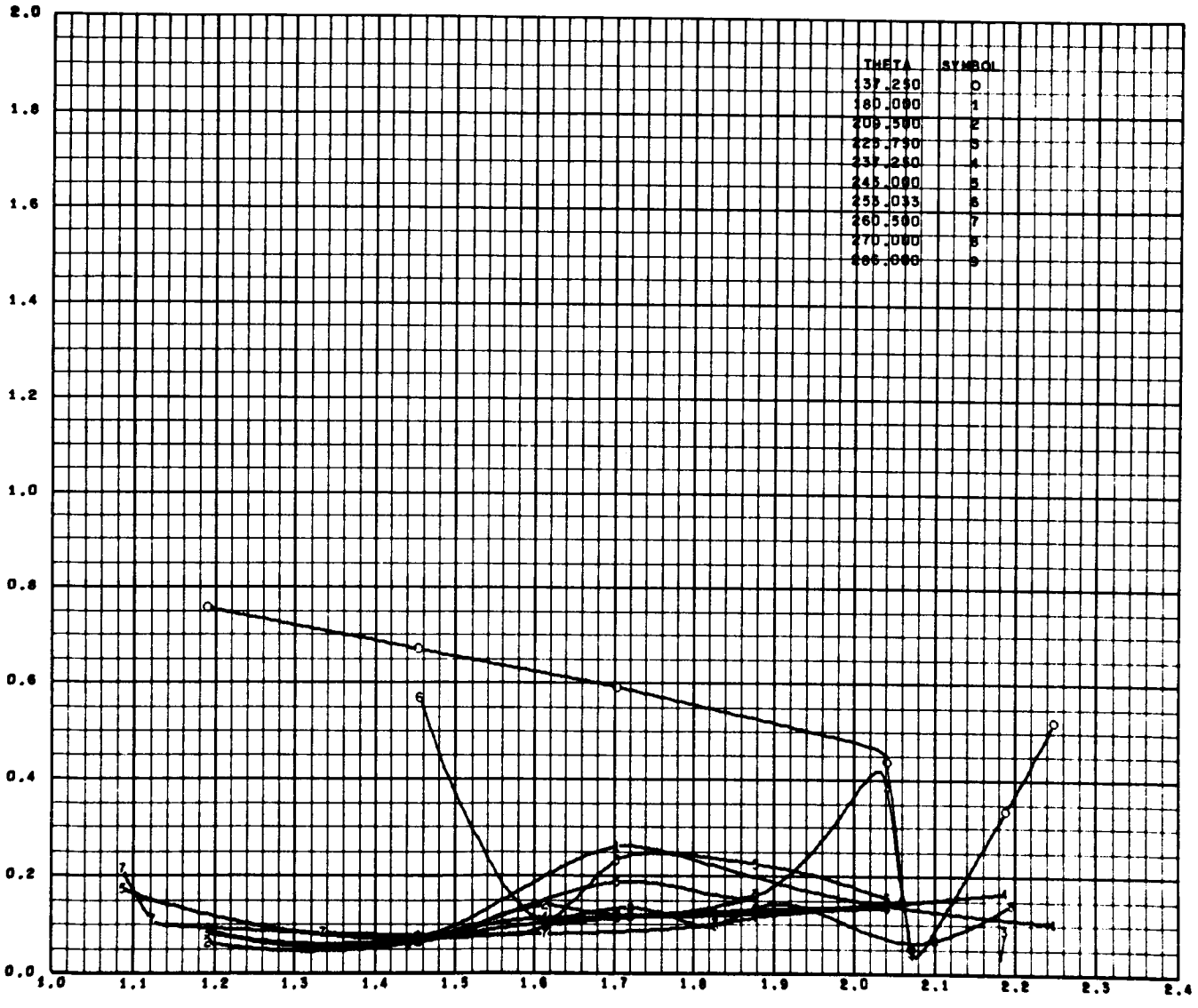
* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
117 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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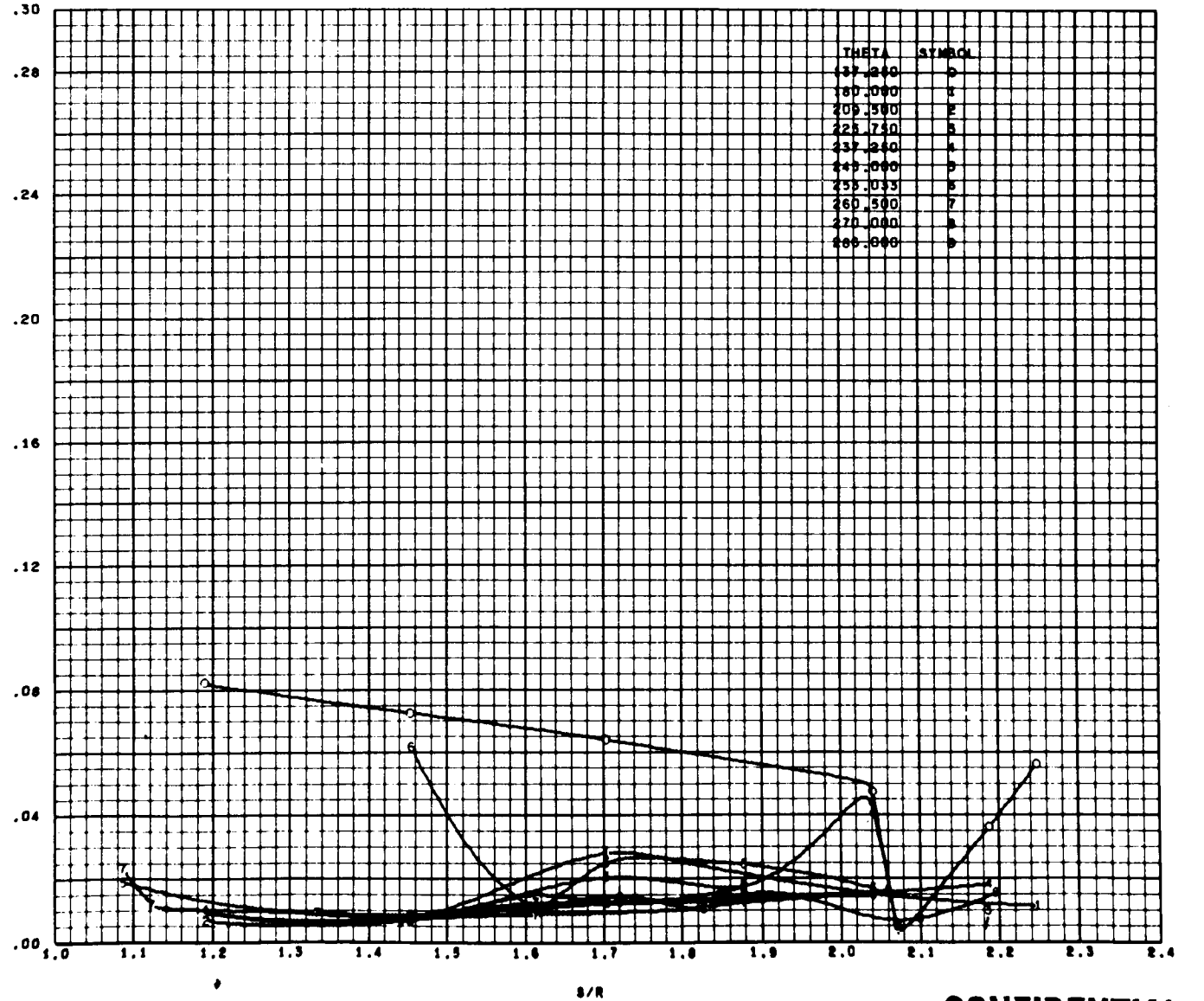
PLOT SERIES NUMBER 15

TEST GROUP	TIME (SEC)
36*	2.70
50	2.70
52	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
120 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 143.38 DEG
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TEST GROUP	TIME (SEC)
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52	2.70

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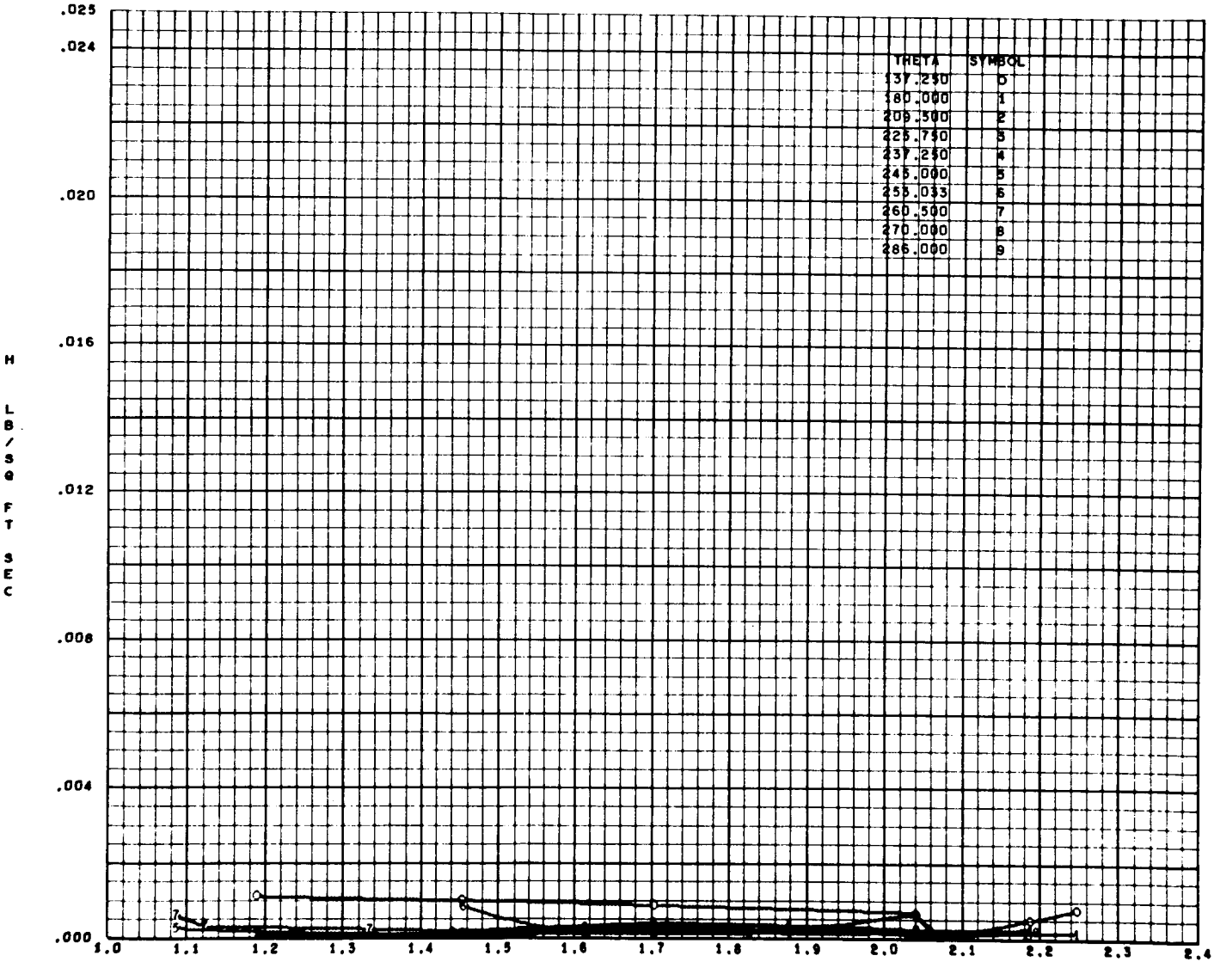
3937-08
123 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.37 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1839.80 PSIA
TOTAL TEMPERATURE ---- 2550.90 DEG RANKINE

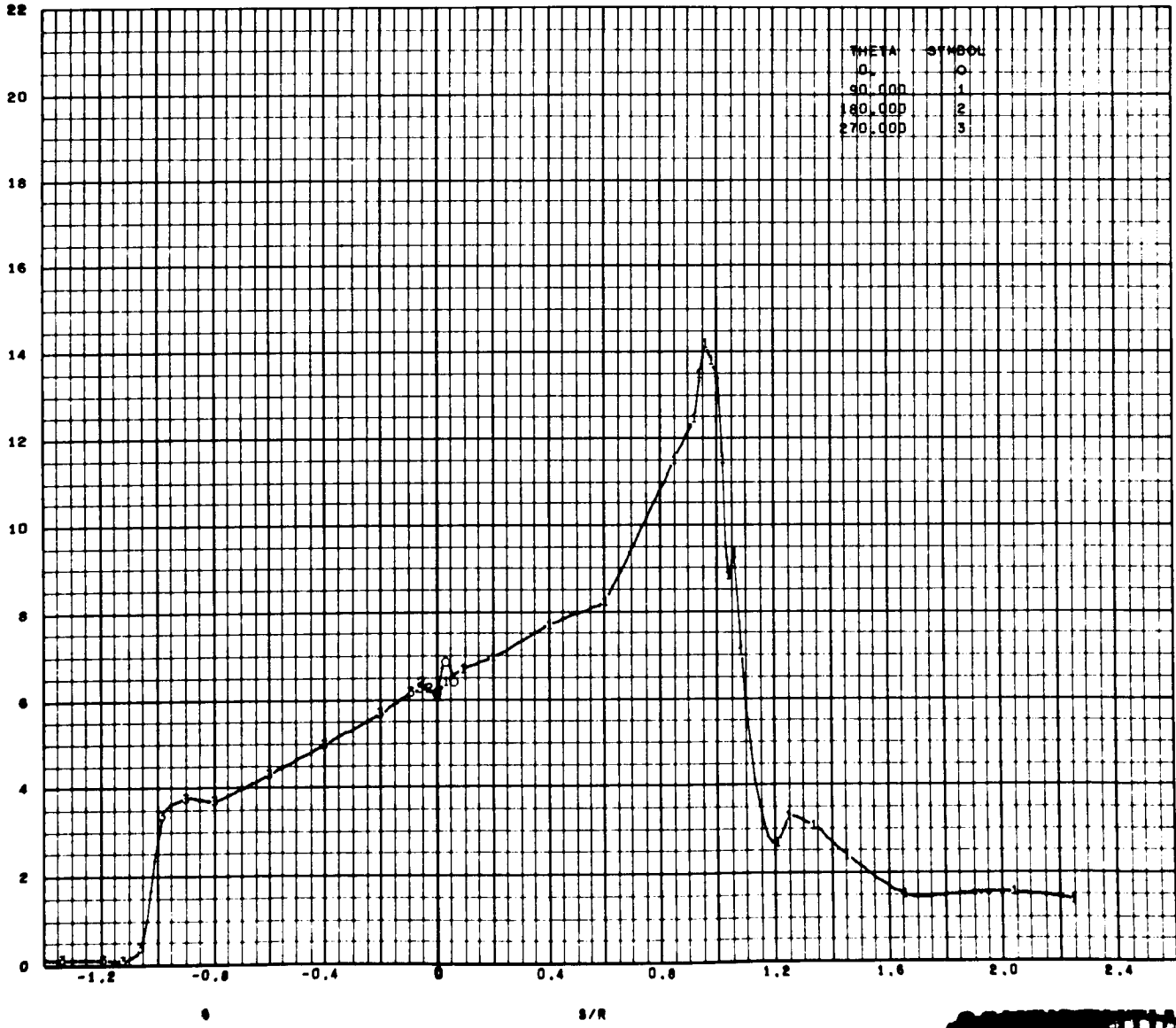
RE/FT --- 1.2623*10+6
Q(OM) --- 9.2158 BTU/SQ FT SEC

PLOT SERIES NUMBER 16

TEST GROUP	TIME (SEC)
41*	2.70
51	2.70
53	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
124 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.37 DEG
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PLOT SERIES NUMBER 16

TEST GROUP	TIME (SEC)
41*	2.70
51	2.70
53	2.70

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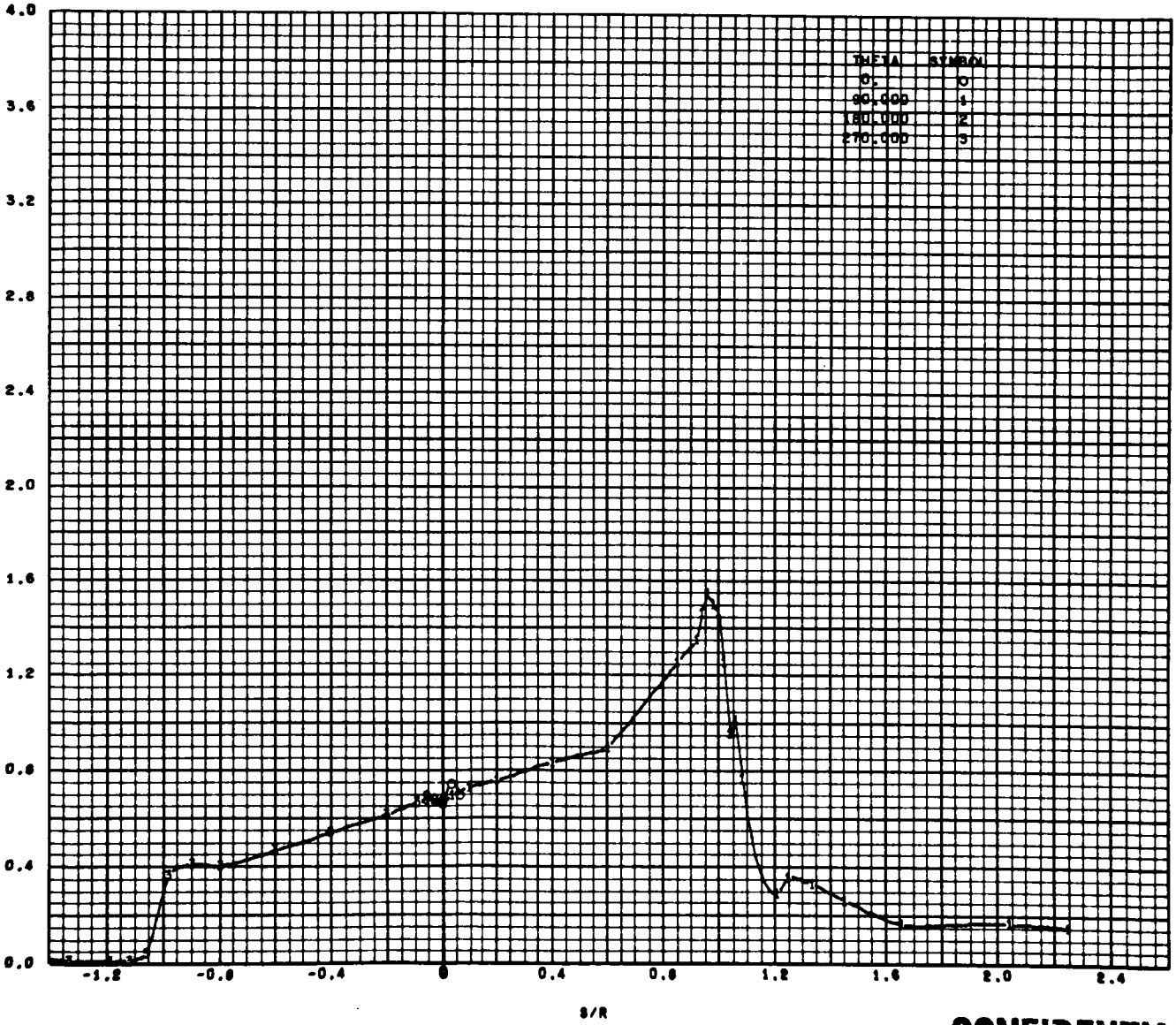
3937-08
127 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.37 DEG
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PLOT SERIES NUMBER 16

TEST GROUP	TIME (SEC)
41*	2.70
51	2.70
53	2.70

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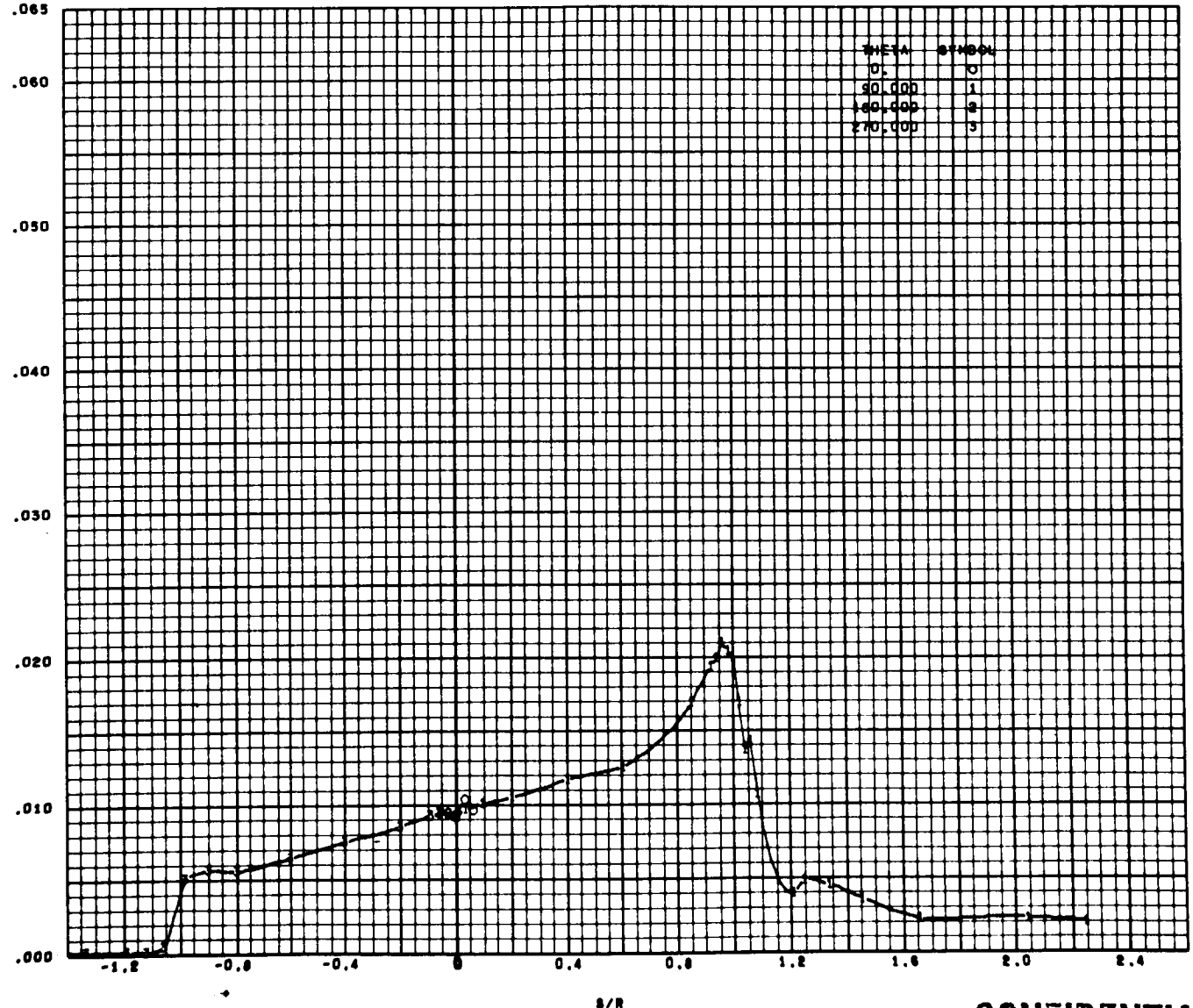
3937-08
130 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.37 DEG
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RE/FT --- 1.2623*10+6
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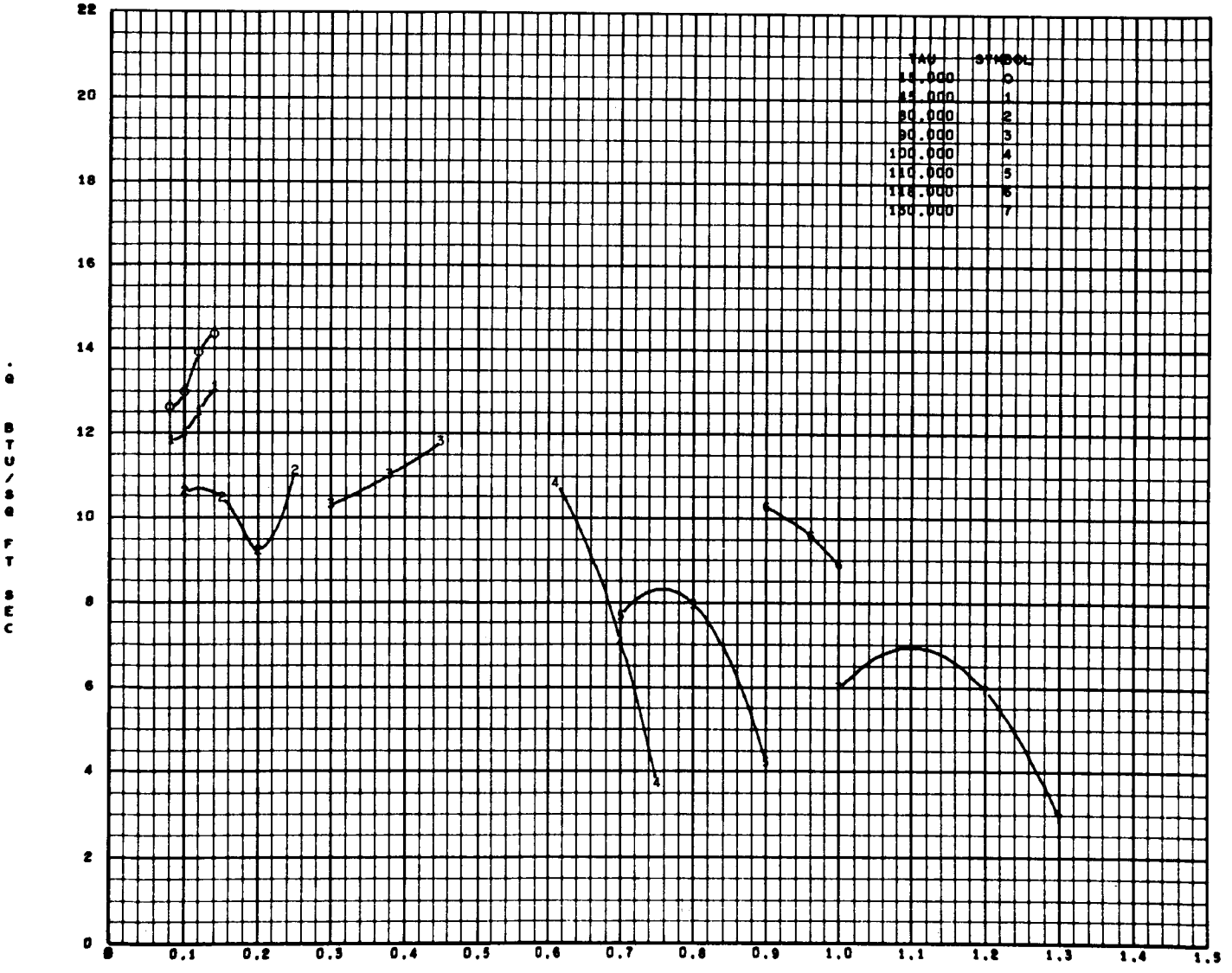
PLOT SERIES NUMBER 16

TEST GROUP	TIME (SEC)
41*	2.70
51	2.70
53	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
125 000



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HEAT TRANSFER | CONFIGURATION C55 | PLOT SERIES NUMBER 16 | 3937-08 128 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.37 DEG
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TOTAL TEMPERATURE ---- 2550.90 DEG RANKINE

RE/FT --- 1.2623*10+6
Q(OM) --- 9.2158 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
41*	2.70
51	2.70
53	2.70

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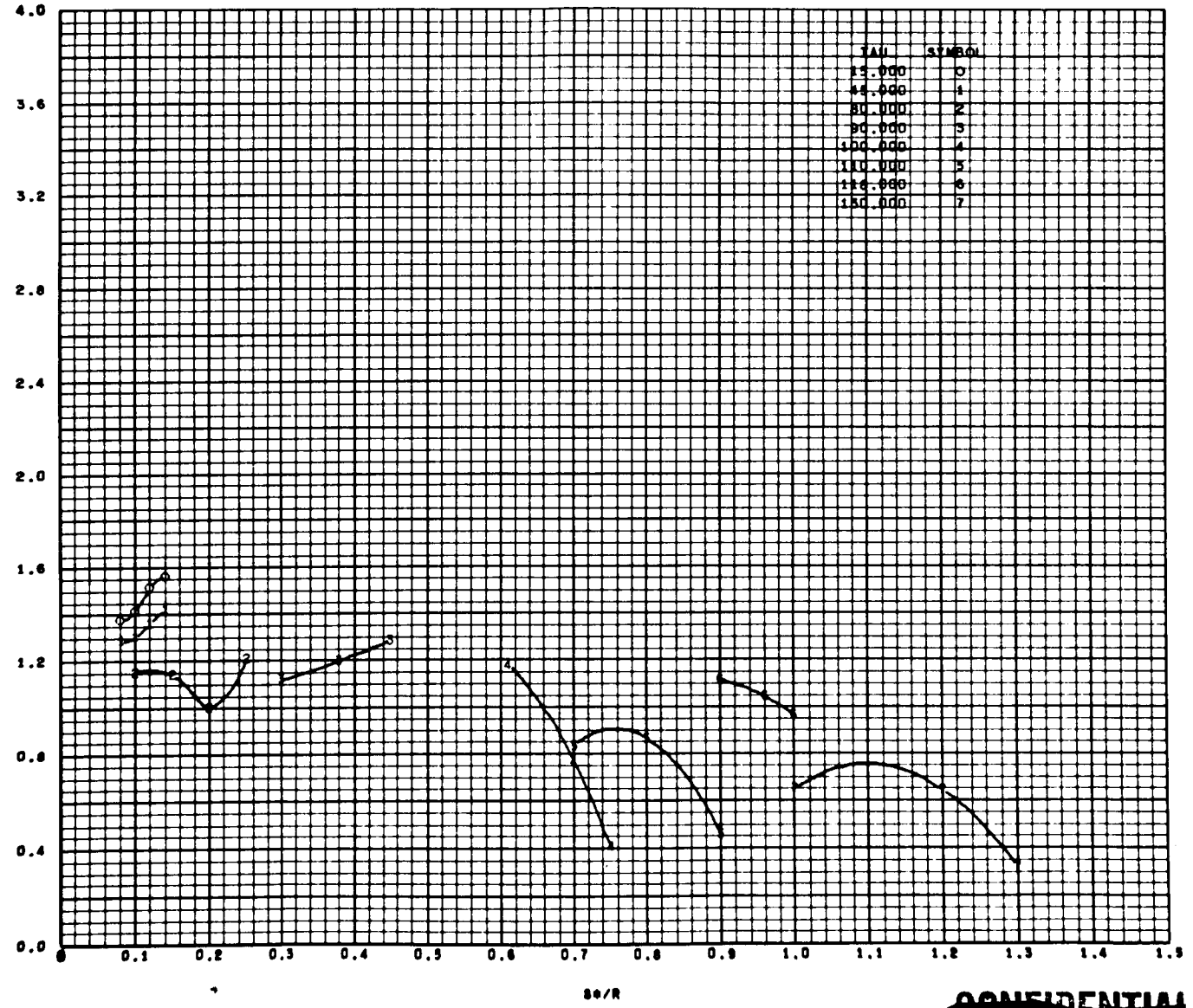

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
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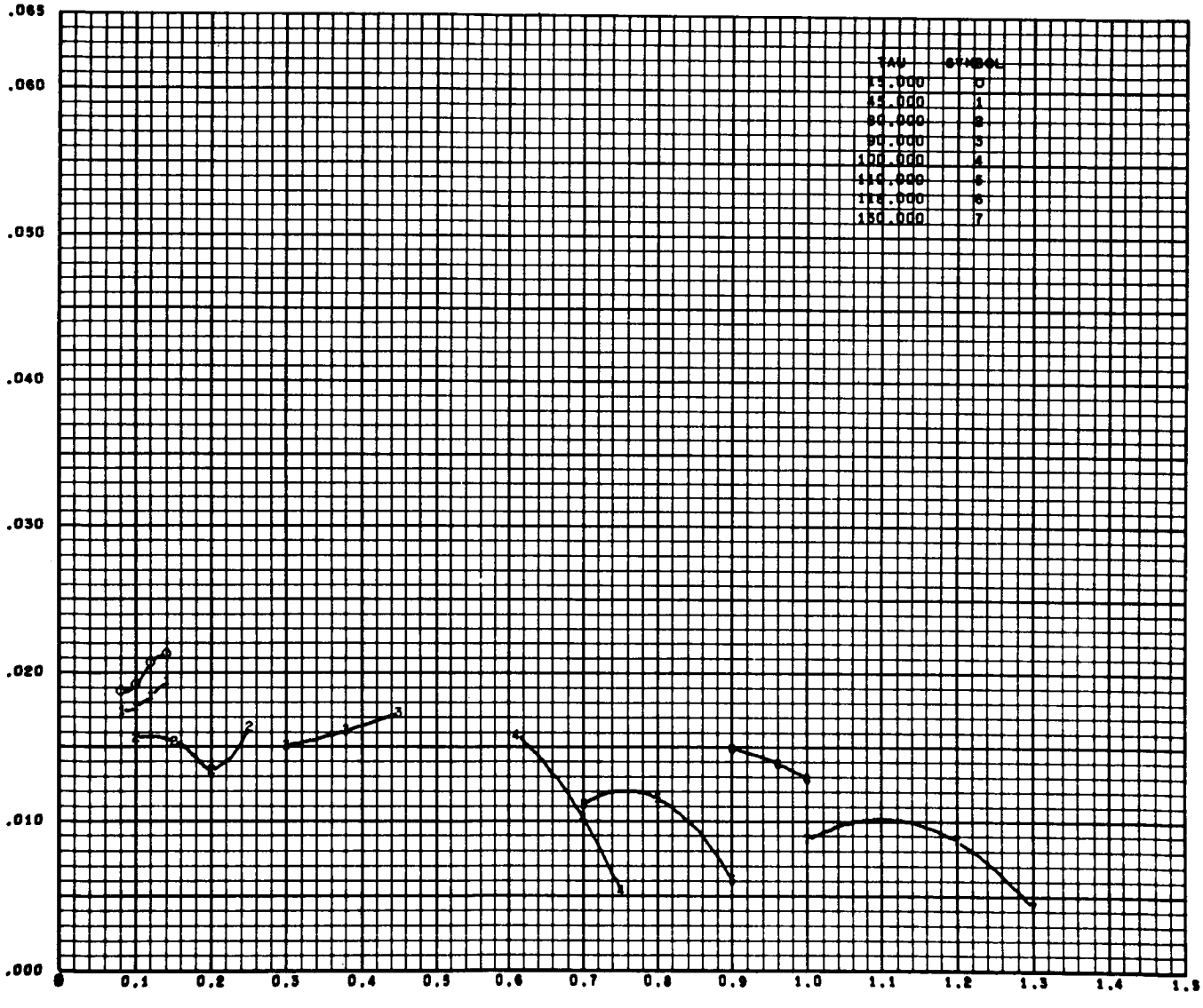
PLOT SERIES NUMBER 16

TEST GROUP	TIME (SEC)
41*	2.70
51	2.70
53	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
131 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
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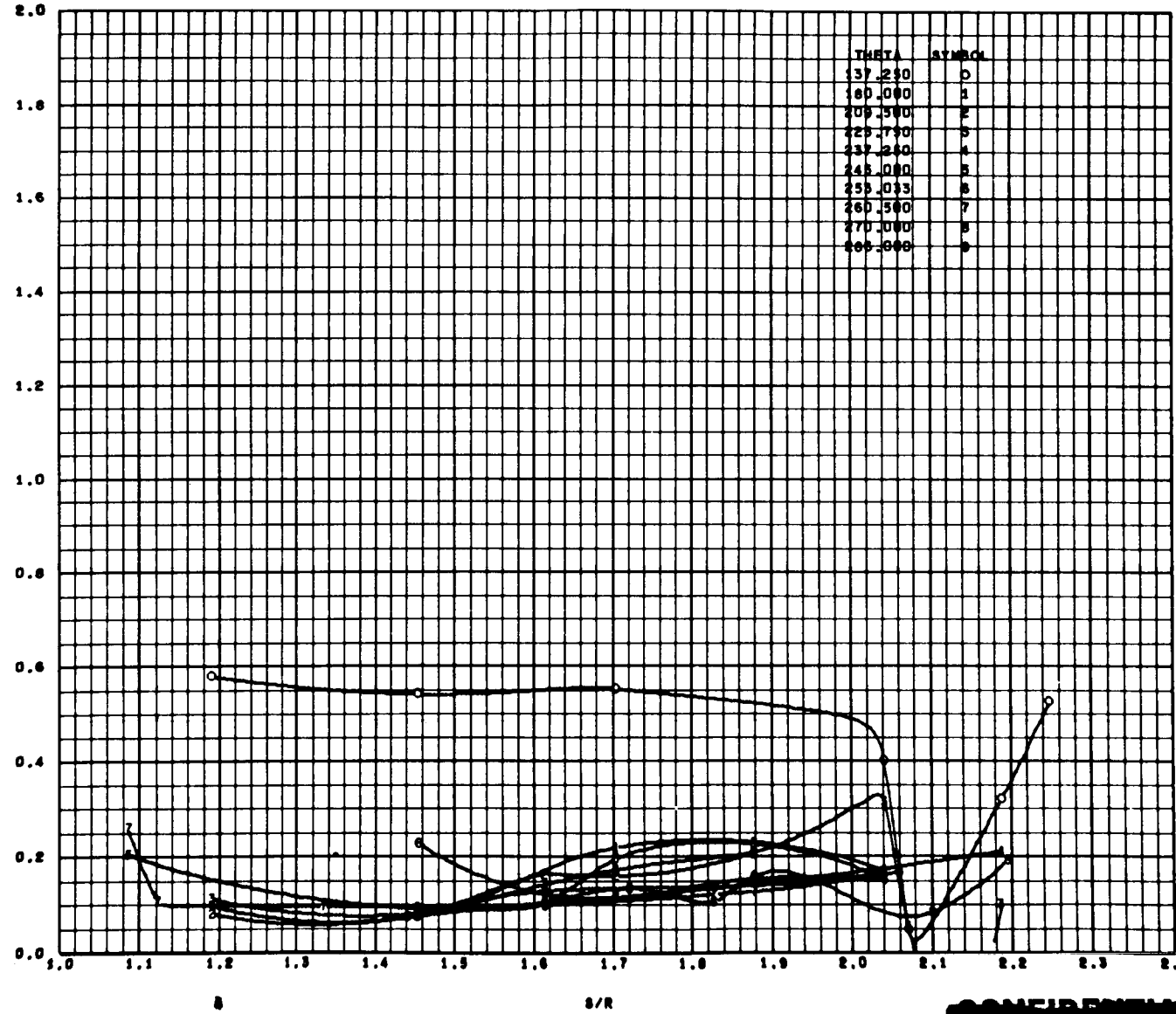
PLOT SERIES NUMBER 16

TEST GROUP	TIME (SEC)
41*	2.70
51	2.70
53	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
126 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.37 DEG
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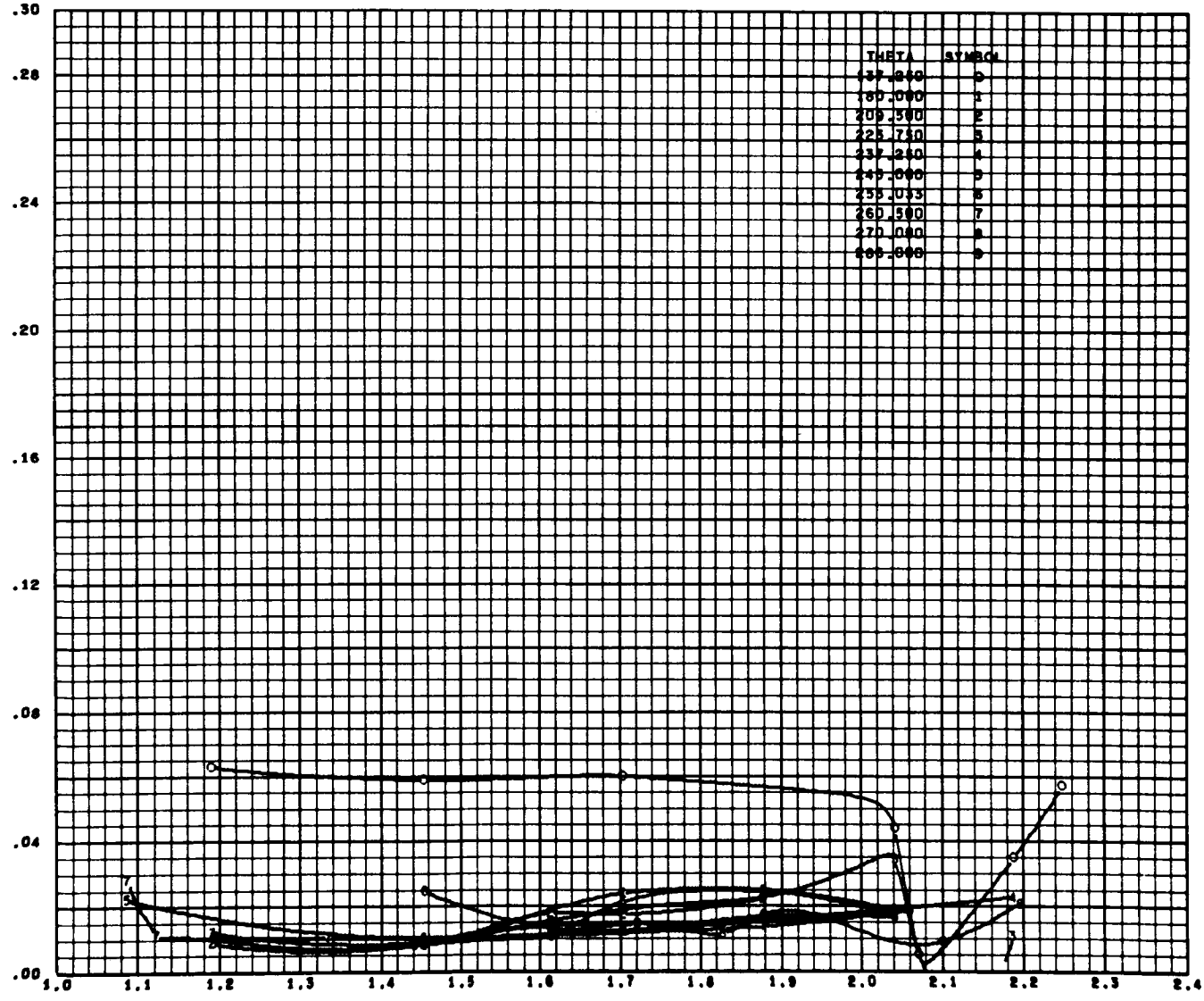
3937-08
129 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.37 DEG
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TOTAL TEMPERATURE ---- 2550.90 DEG RANKINE

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PLOT SERIES NUMBER 16

TEST GROUP	TIME (SEC)
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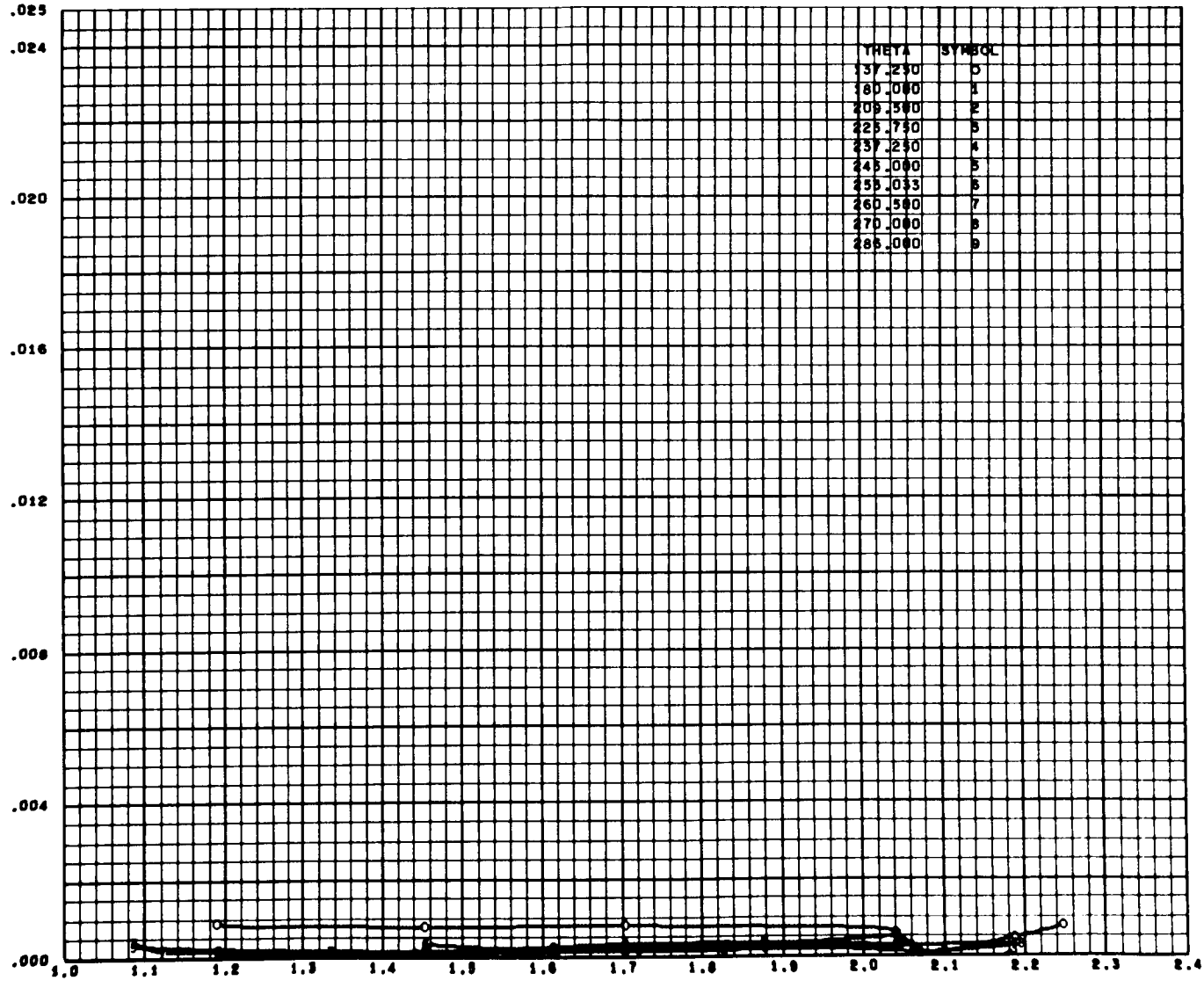
3937-08
132 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.11 DEG
ANGLE OF YAW --------- -4.83 DEG
TOTAL PRESSURE ------- 1816.20 PSIA
TOTAL TEMPERATURE ---- 2561.30 DEG RANKINE

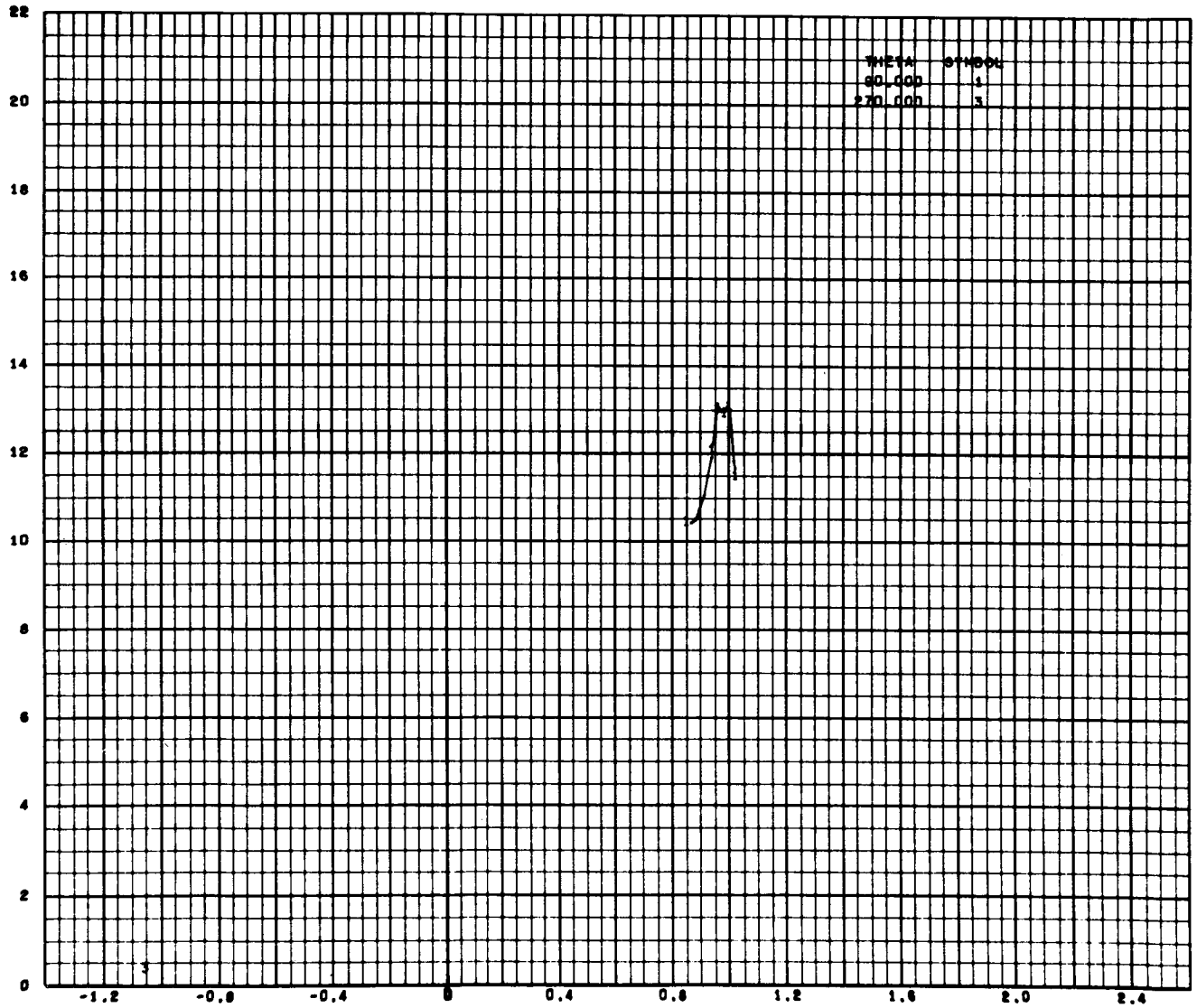
RE/FT --- 1.2358*10+6
Q(OM) --- 9.1403 BTU/SQ FT SEC

PLOT SERIES NUMBER 17

TEST GROUP	TIME (SEC)
43*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
133 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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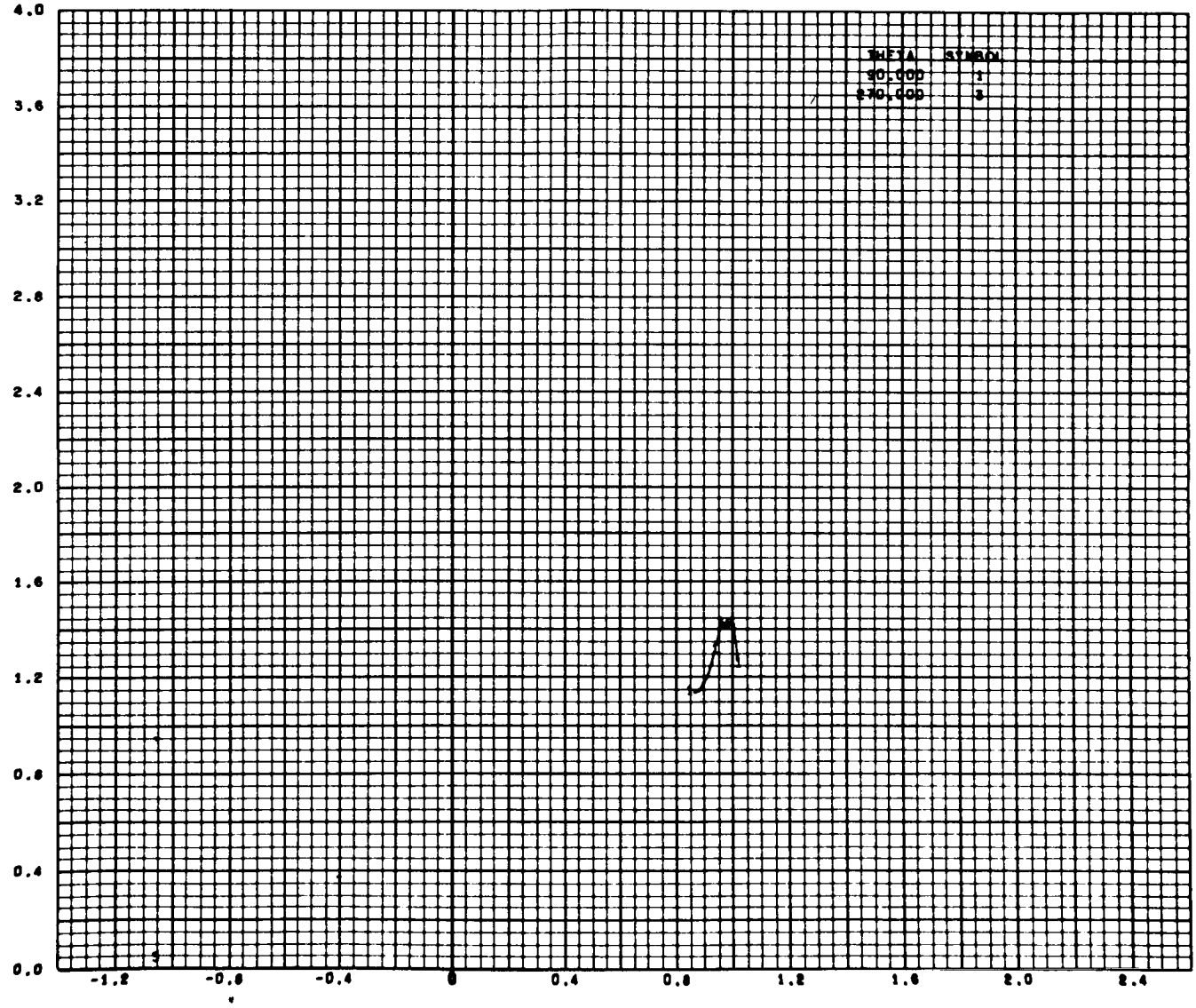
3937-08
135 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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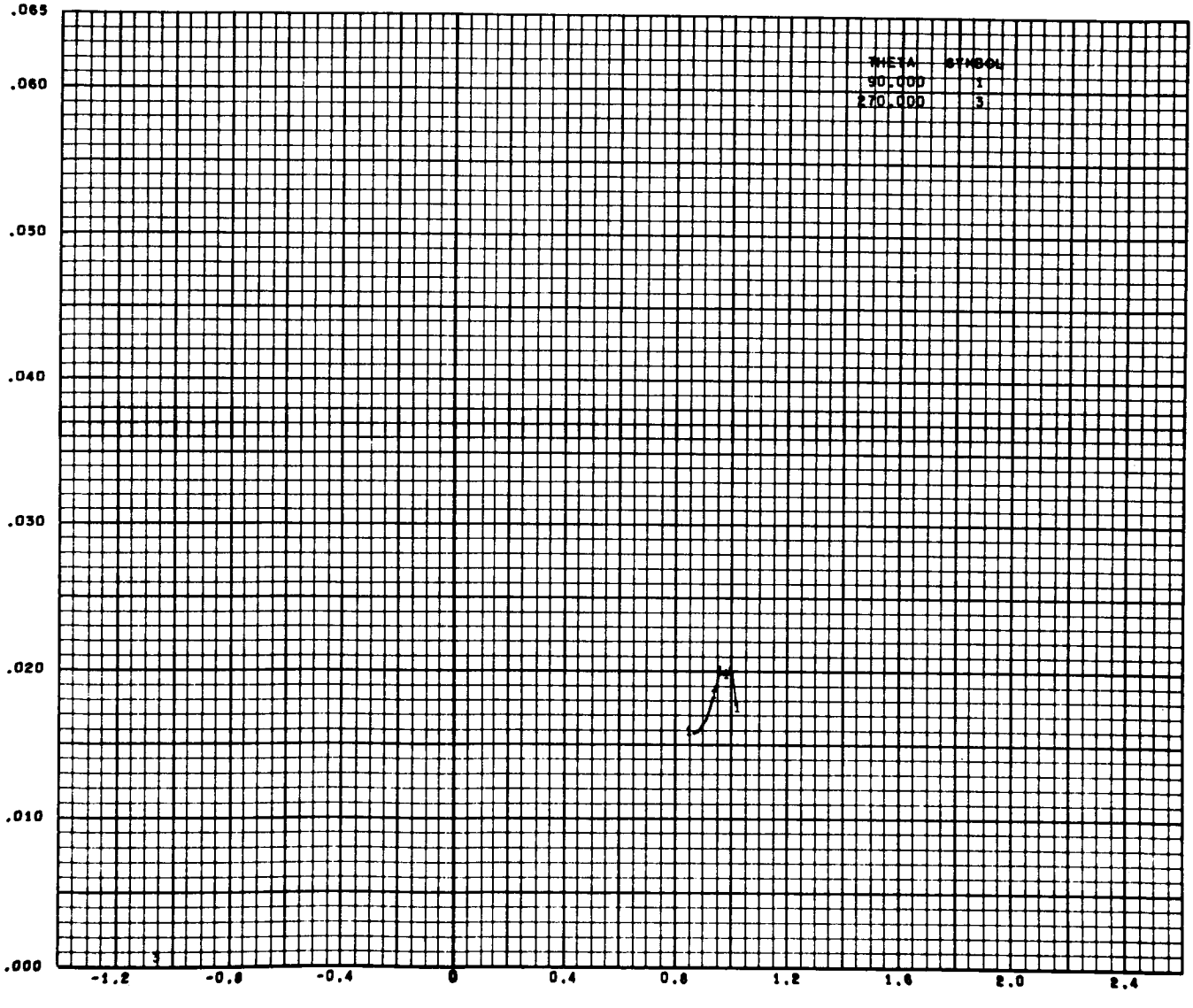
3937-08
137 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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PLOT SERIES NUMBER 17

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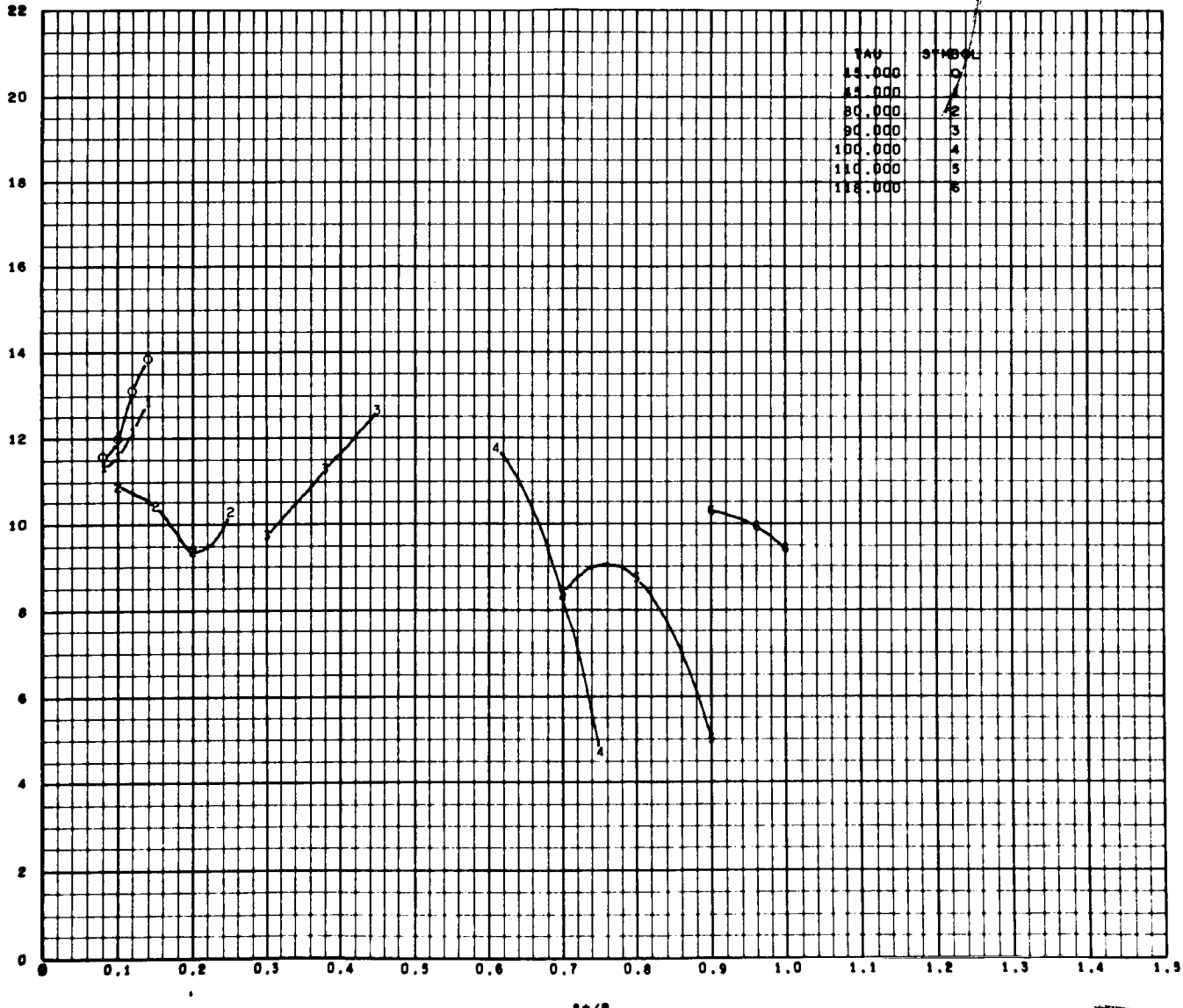
3937-08
134 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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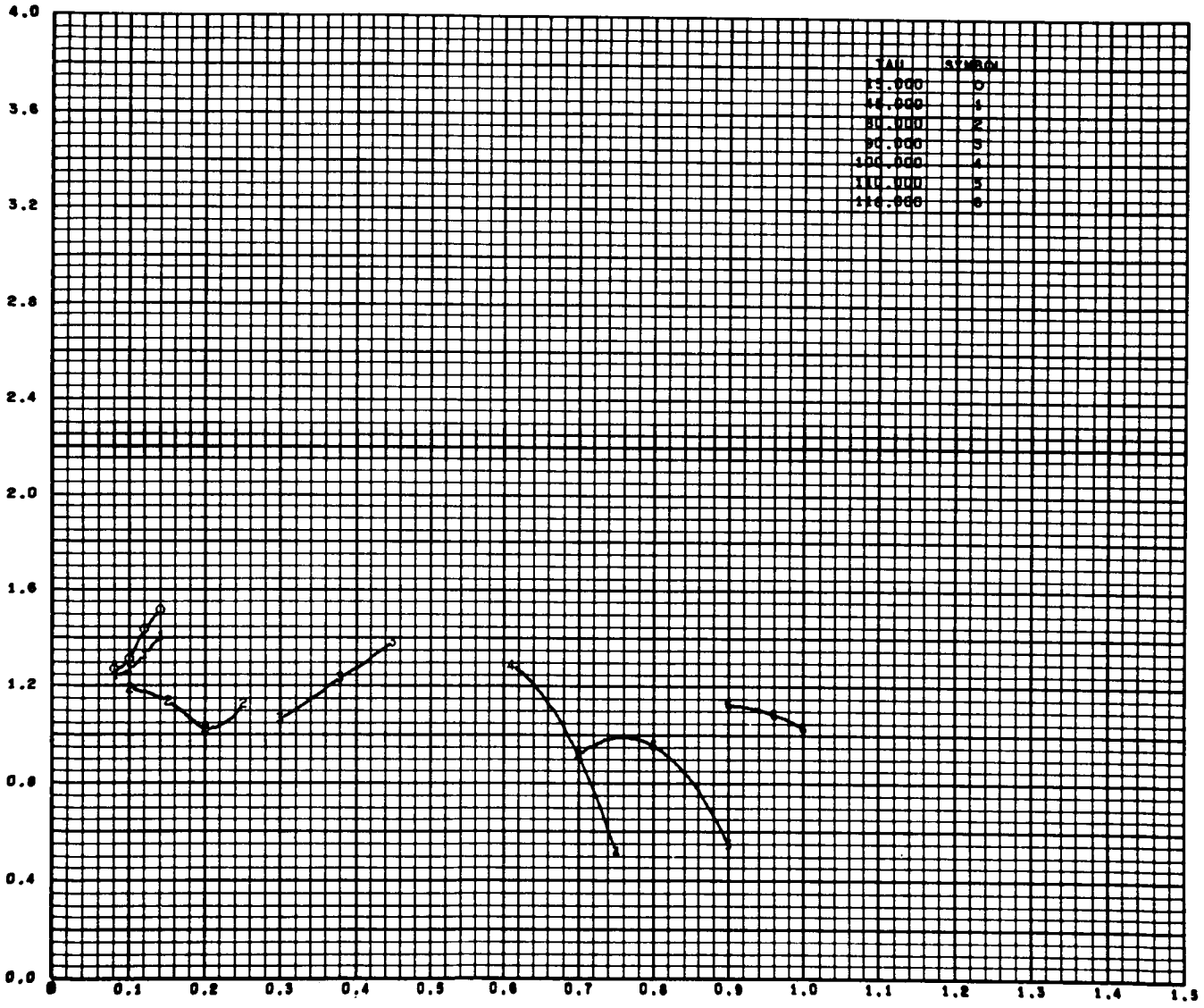
3937-08
136 000



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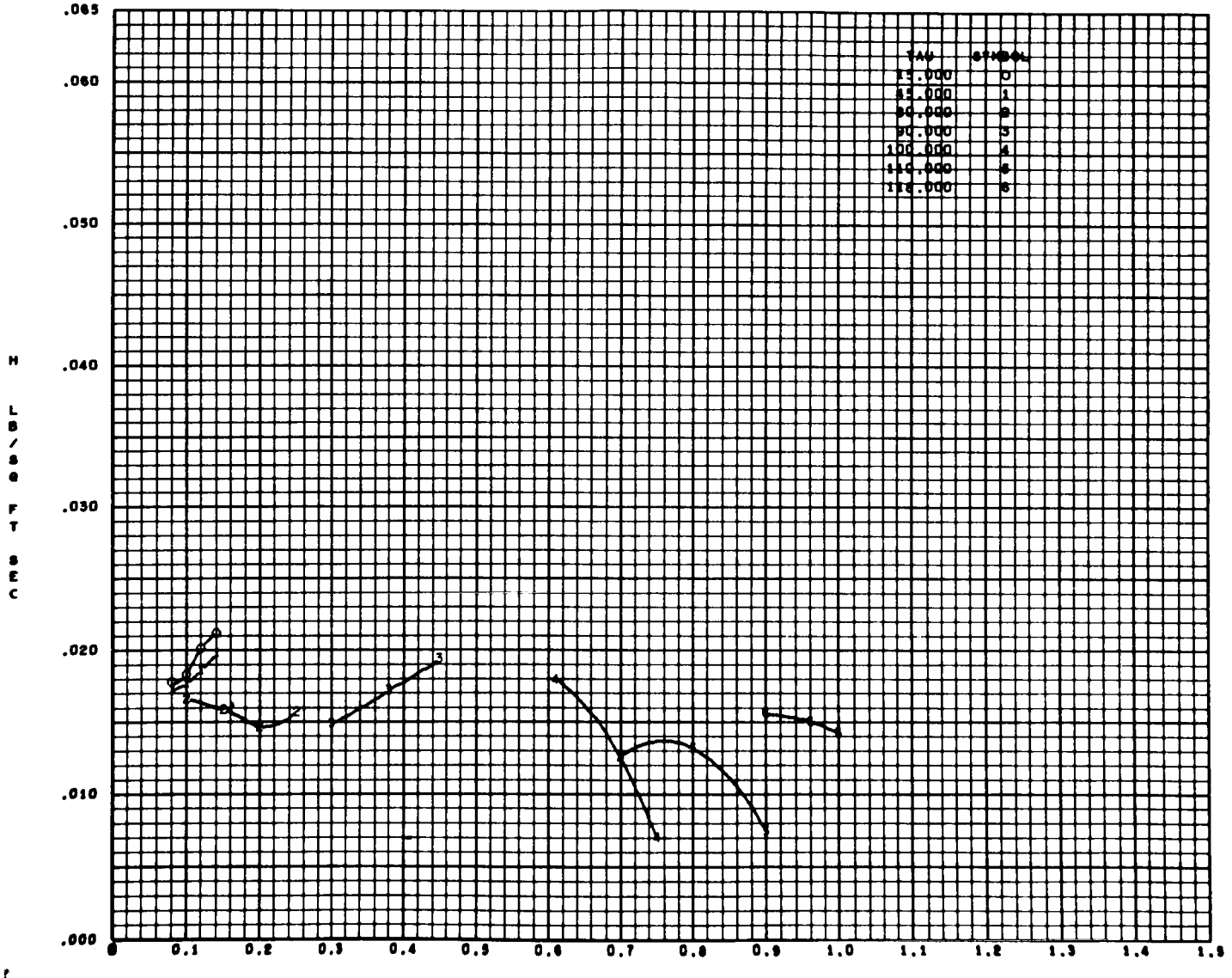
3937-08
138 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.11 DEG
ANGLE OF YAW --------- 4.81 DEG
TOTAL PRESSURE ------- 1813.70 PSIA
TOTAL TEMPERATURE ---- 2587.30 DEG RANKINE

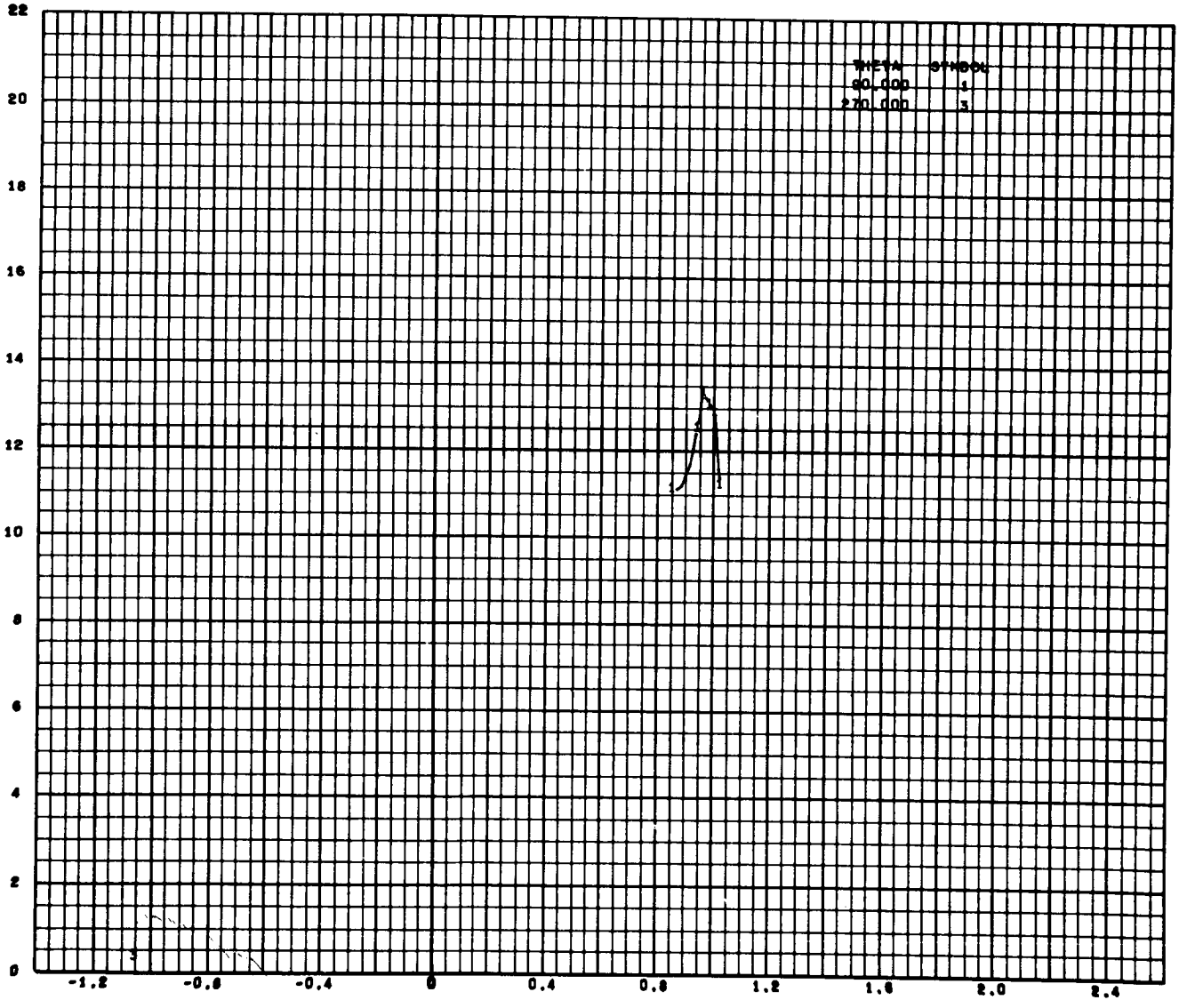
RE/FT --- 1.2096*10+6
Q(OM) --- 9.1322 BTU/SQ FT SEC

PLOT SERIES NUMBER 18

TEST GROUP	TIME (SEC)
44*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
139 000



S/R
A-139 SID 64-2080

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
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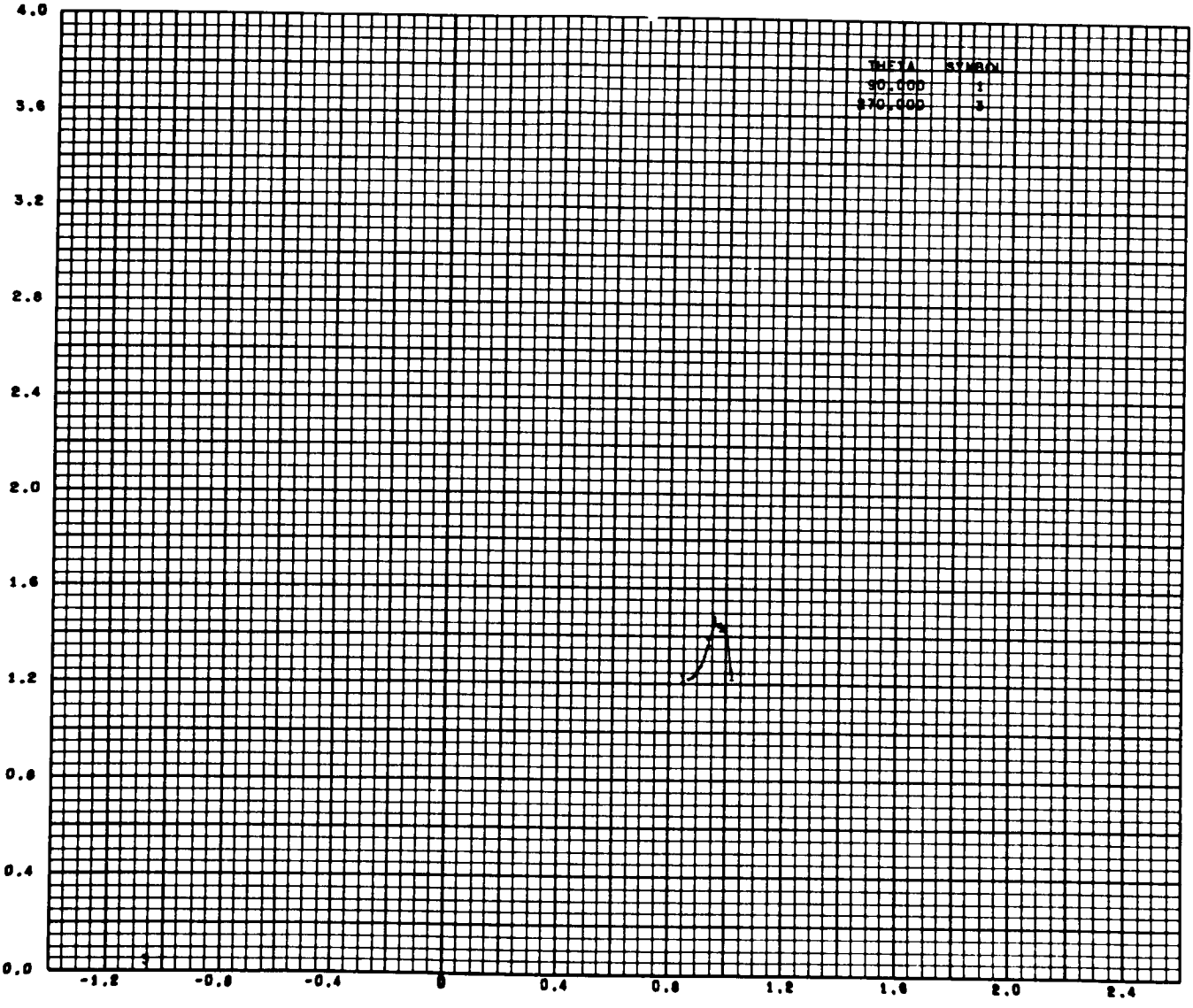
PLOT SERIES NUMBER 18

TEST GROUP	TIME (SEC)
44*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
141 000



~~CONFIDENTIAL~~

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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PLOT SERIES NUMBER 18

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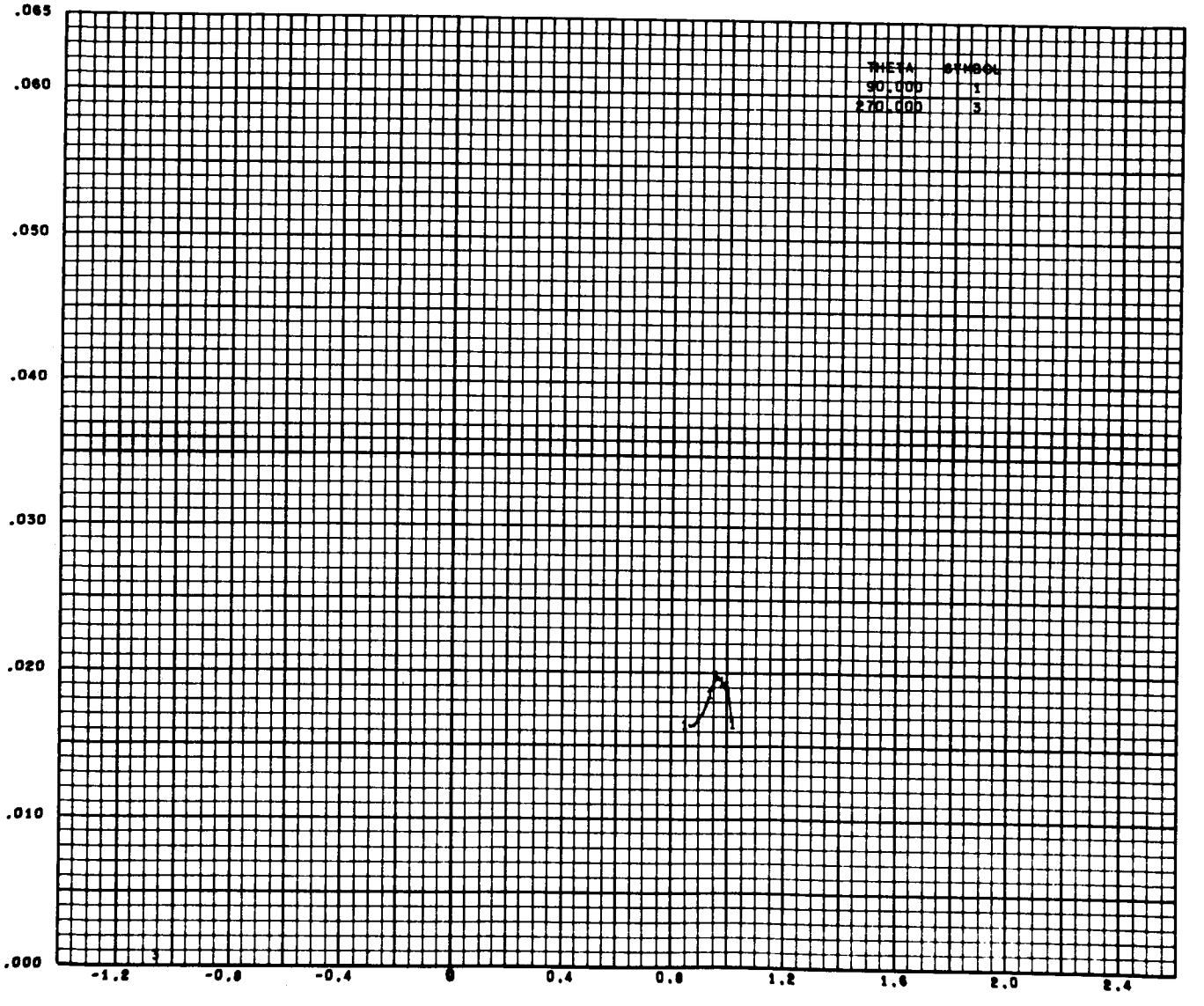
3937-08
143 000



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~~CONFIDENTIAL~~

HEAT TRANSFER

CONFIGURATION C55

PLOT SERIES NUMBER 18

3937-08
140 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.19
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TEST GROUP	TIME (SEC)
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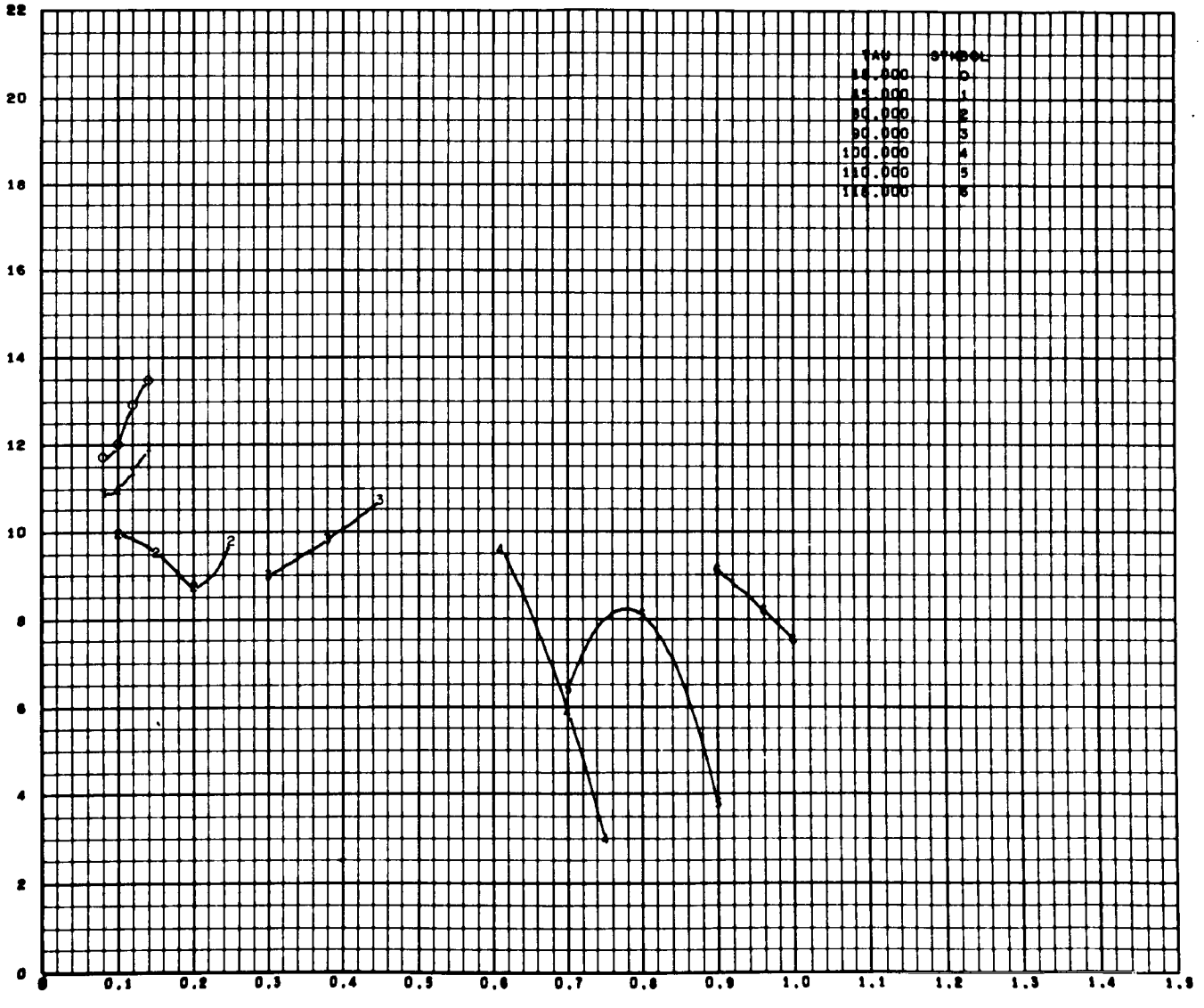

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[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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PLOT SERIES NUMBER 18

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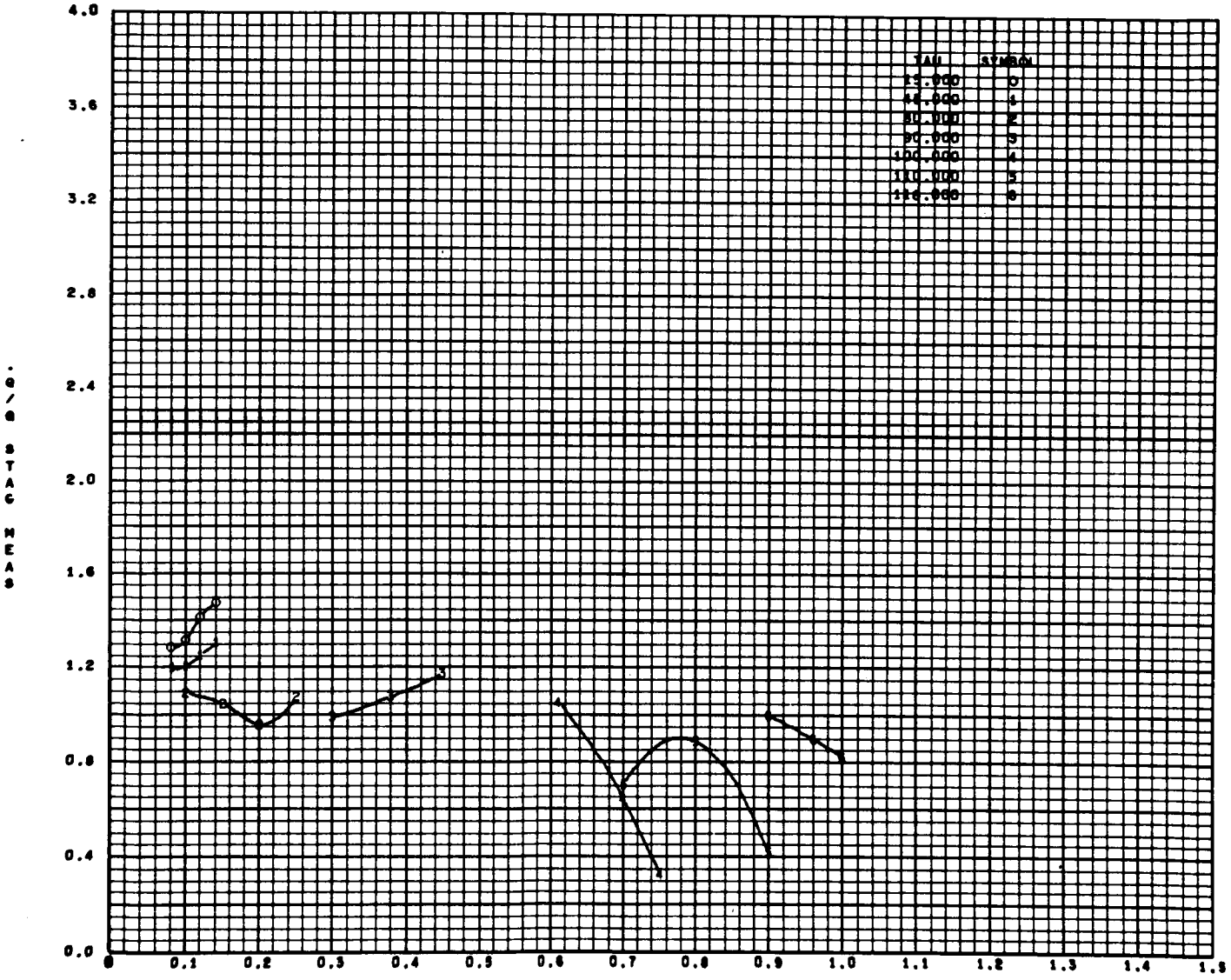
3937-08
142 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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PLOT SERIES NUMBER 18

TEST GROUP	TIME (SEC)
44*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
144 000

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.33 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1828.00 PSIA
TOTAL TEMPERATURE ---- 2541.10 DEG RANKINE

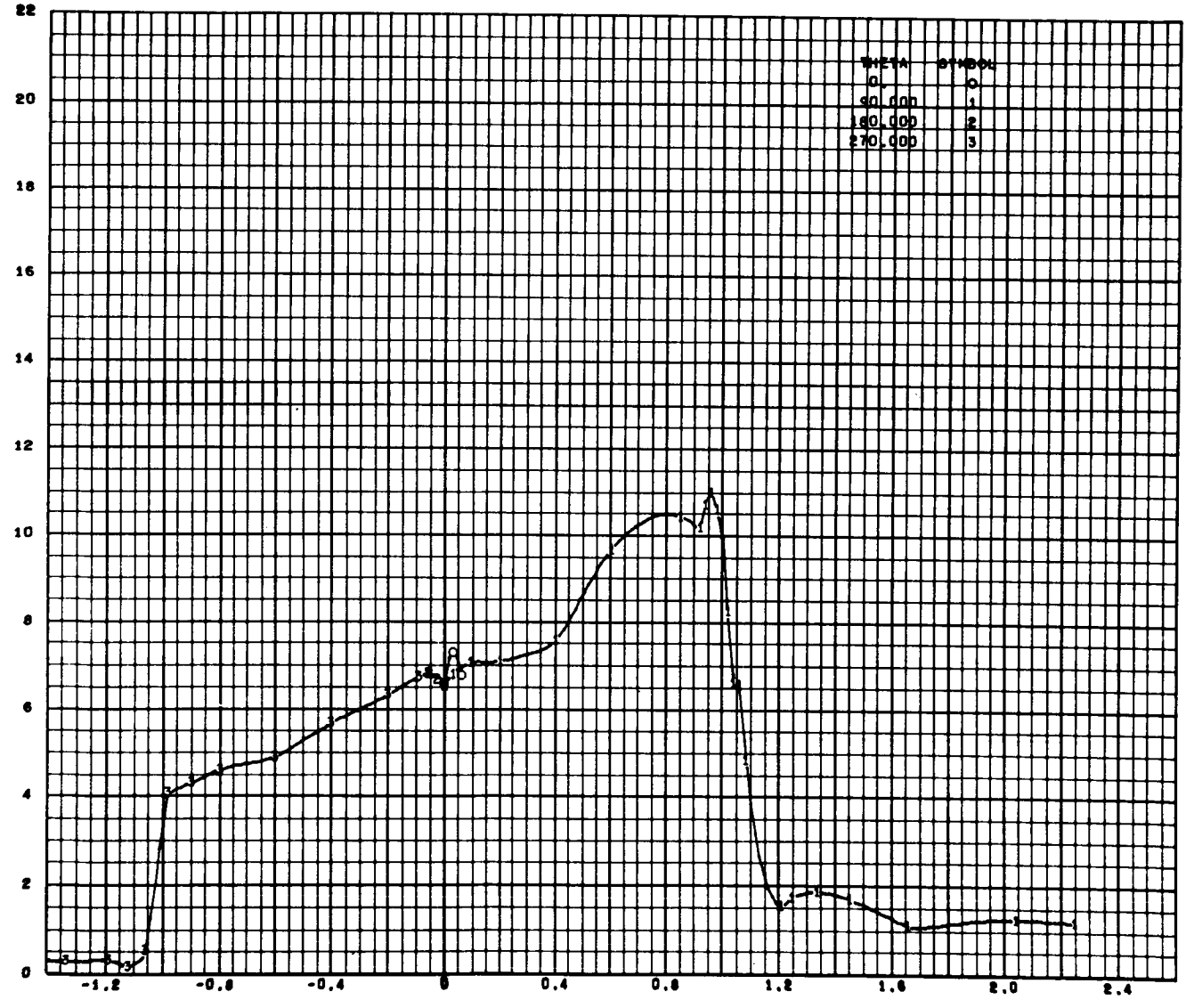
RE/FT --- 1.2637*10+6
Q(OM) --- 9.1782 BTU/SQ FT SEC

PLOT SERIES NUMBER 19

TEST GROUP	TIME (SEC)
42*	2.70
45	2.75
54	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
145 000



[redacted]

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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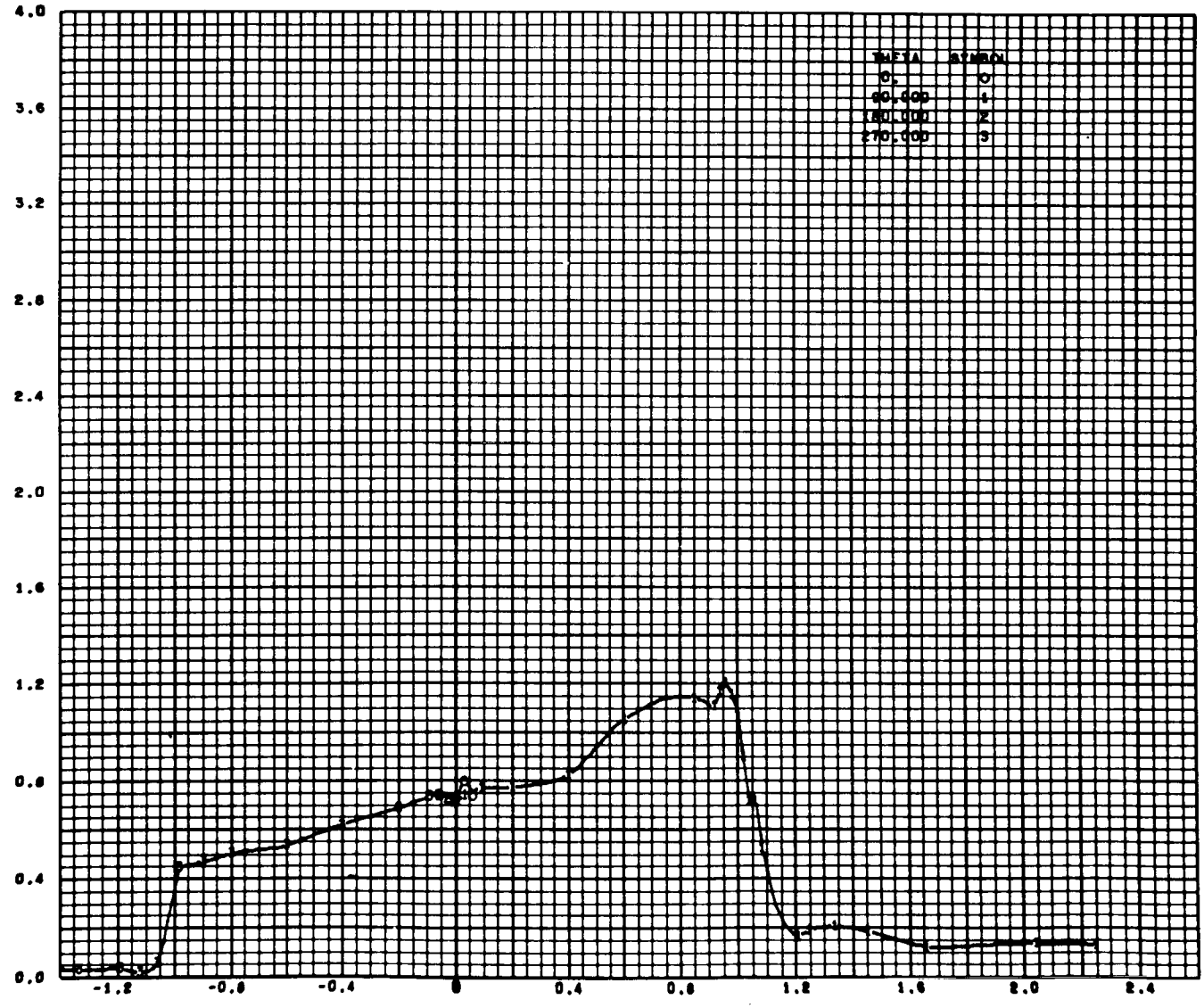
TEST GROUP	TIME (SEC)
42*	2.70
45	2.75
54	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
148 000



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[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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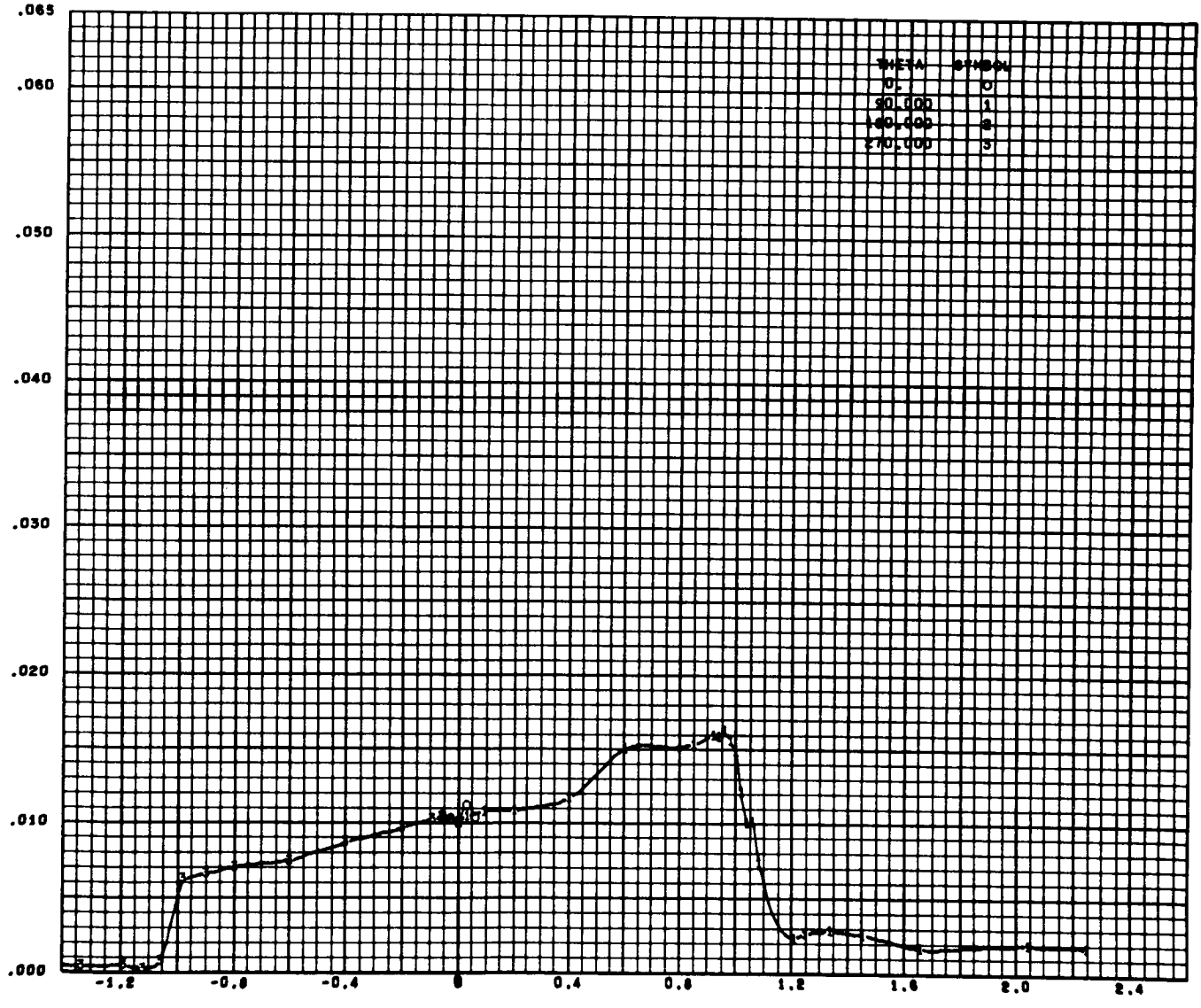
TEST GROUP	TIME (SEC)
42*	2.70
45	2.75
54	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
151 000



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CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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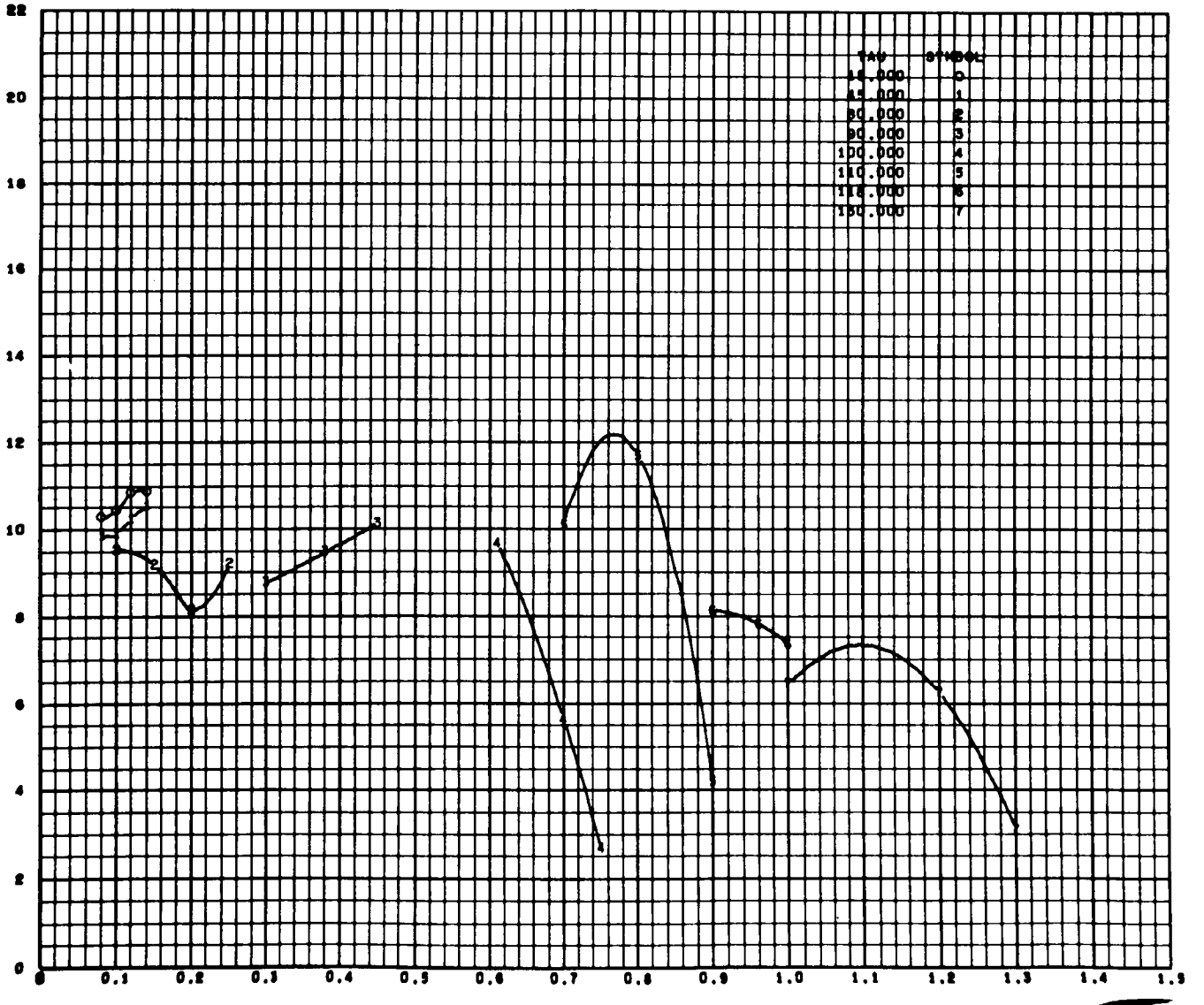
3937-08 :
146 000



CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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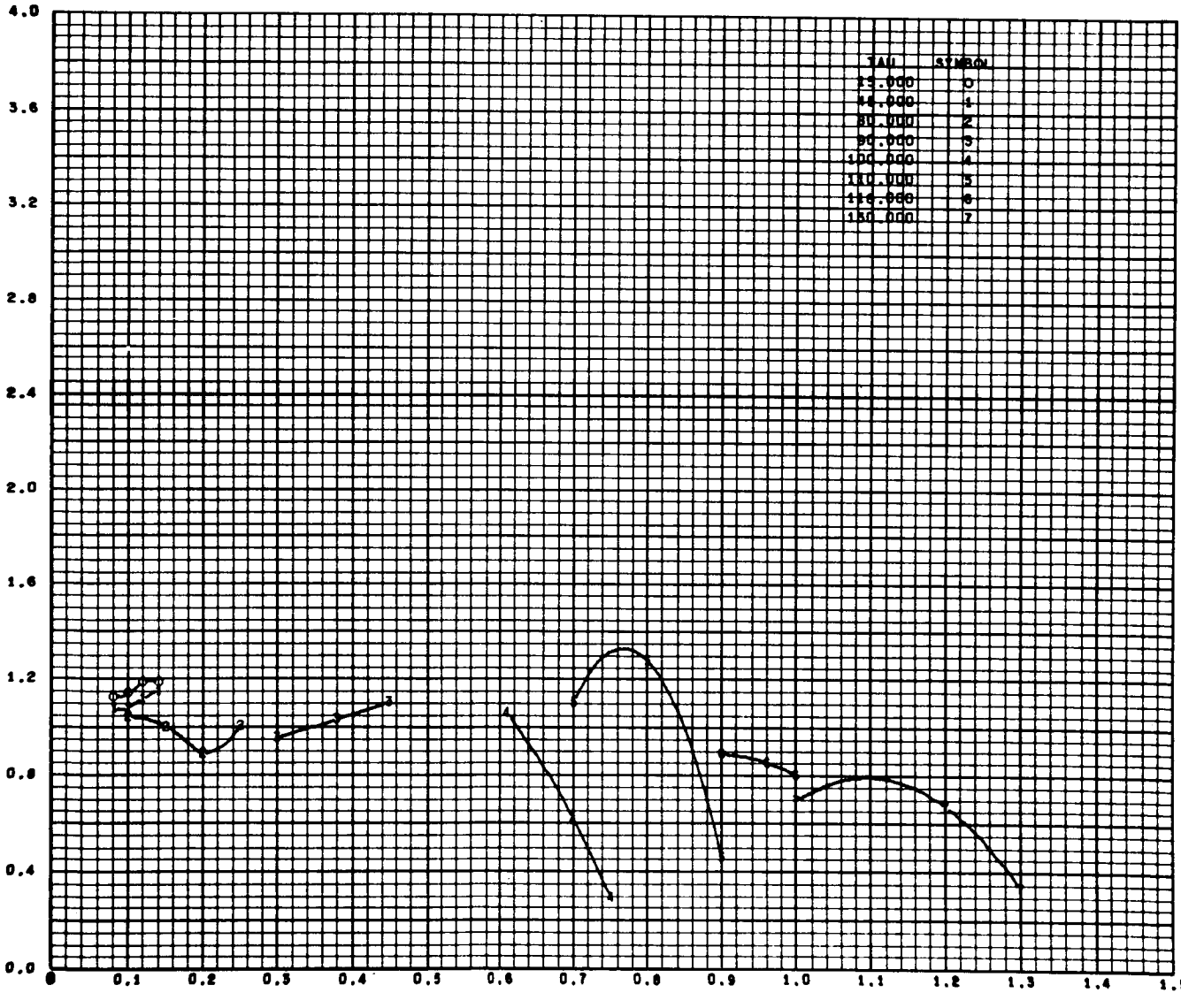
3937-08
149 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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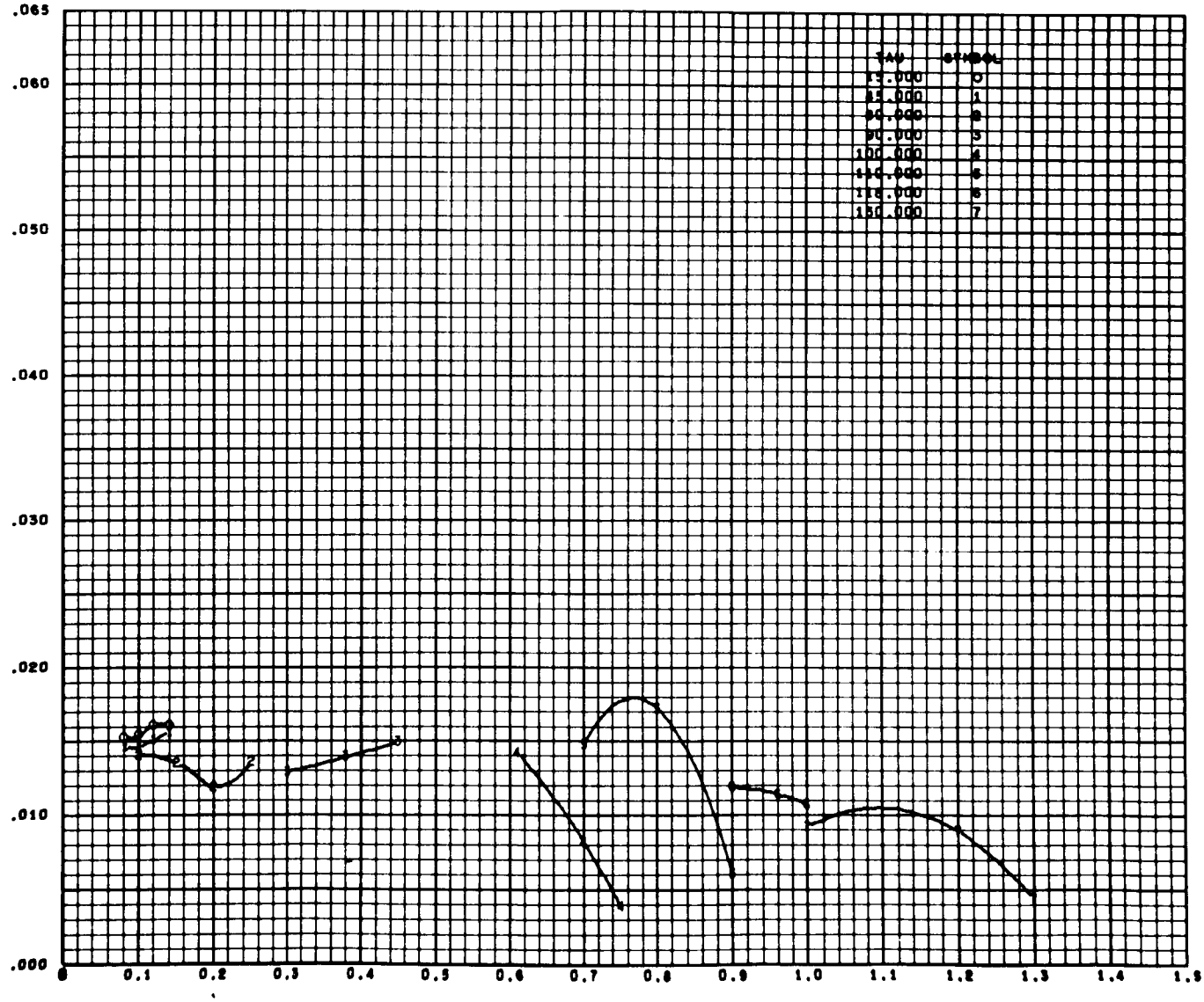
PLOT SERIES NUMBER 19

TEST GROUP	TIME (SEC)
42*	2.70
45	2.75
54	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
152 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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54	2.70

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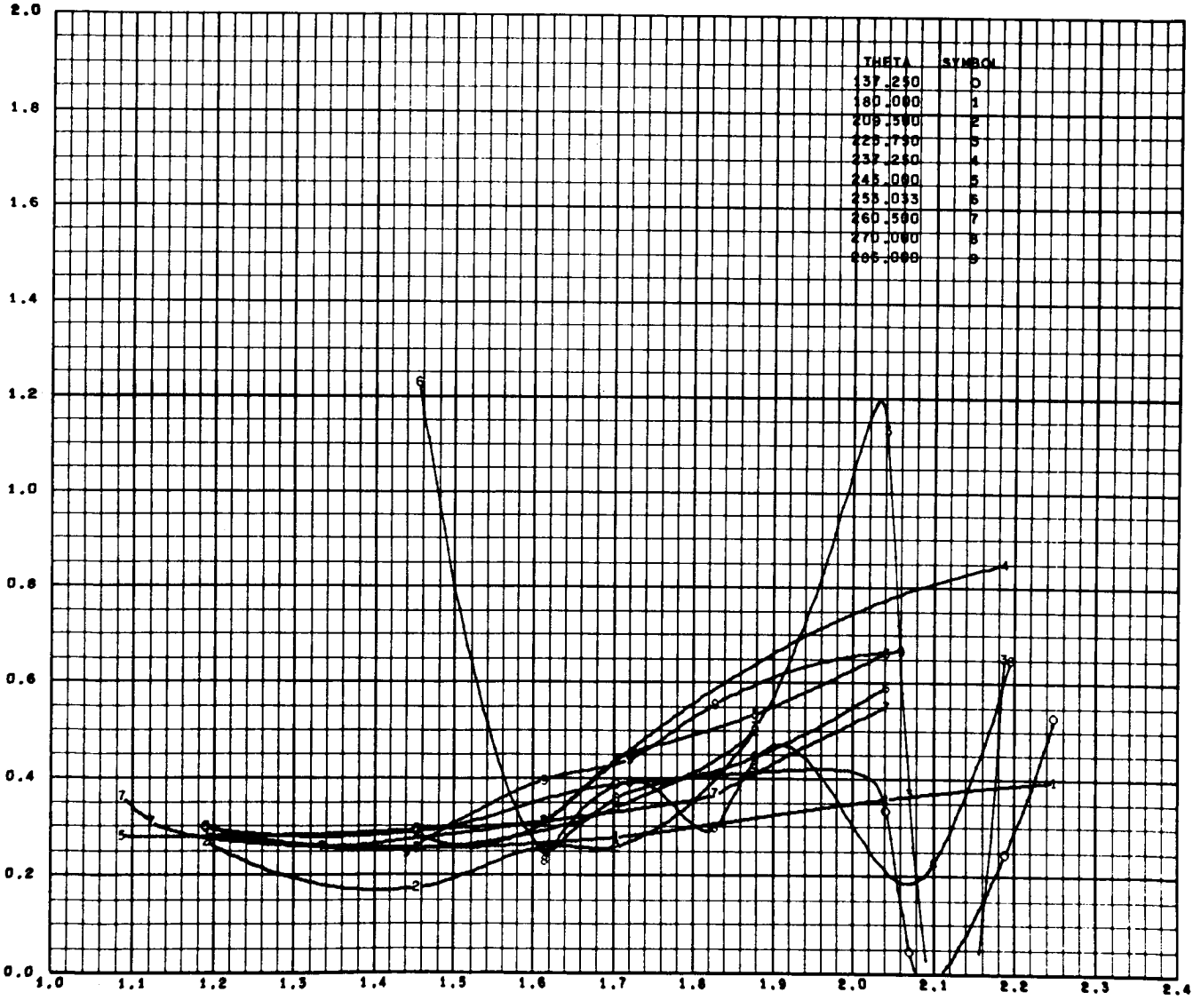
3937-08
147 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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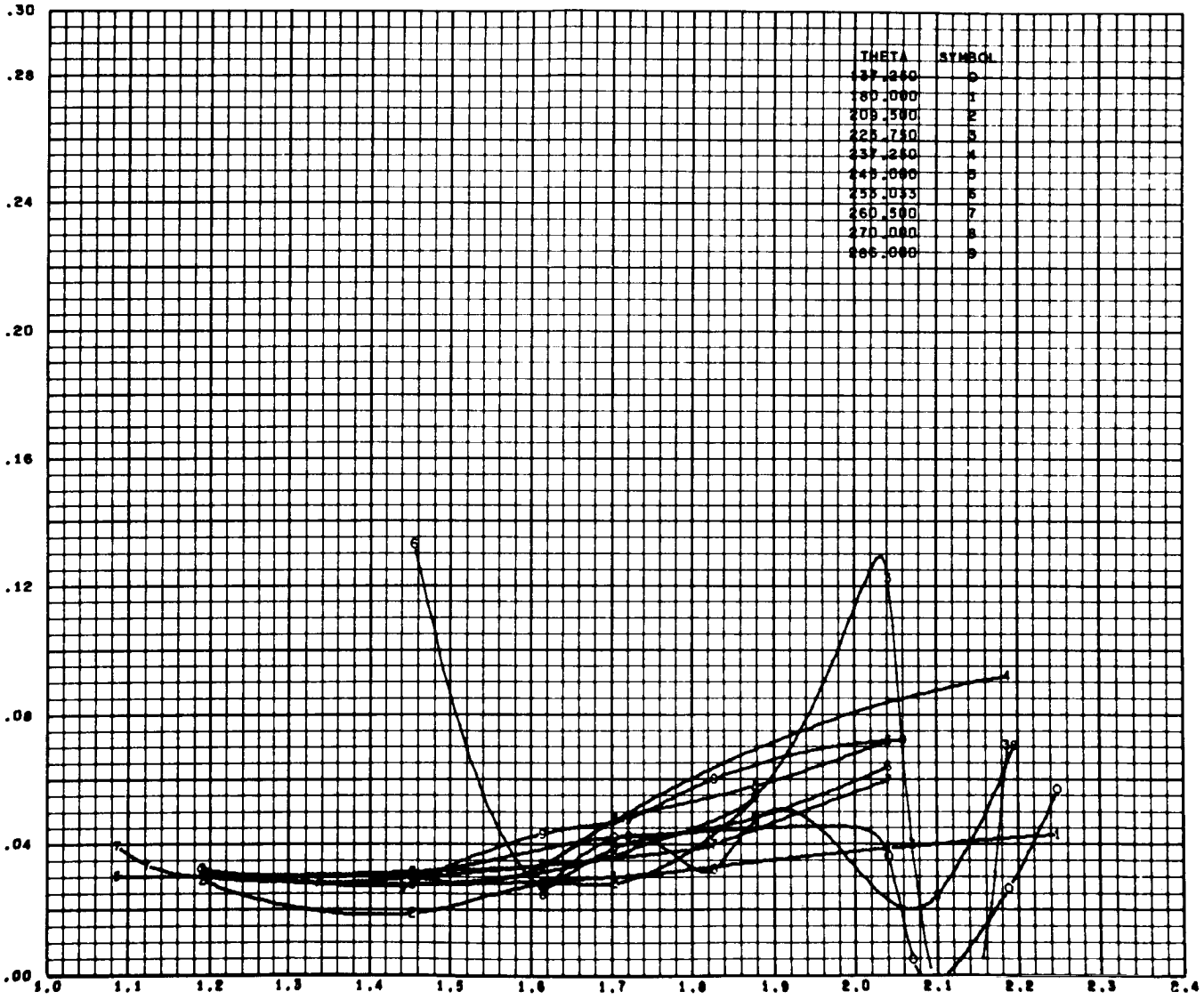
PLOT SERIES NUMBER 19

TEST GROUP	TIME (SEC)
42*	2.70
45	2.75
54	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
150 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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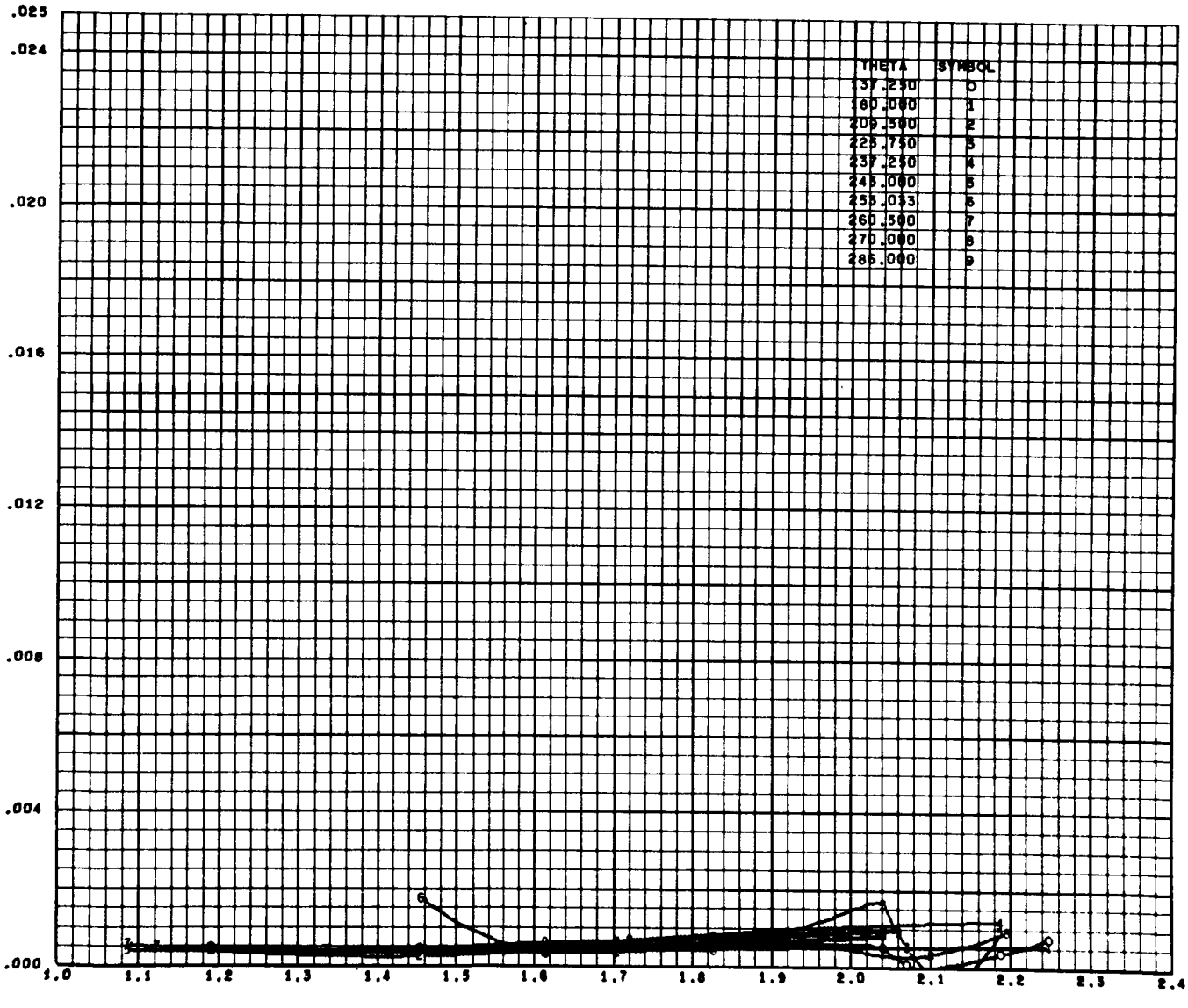
Q(OM) --- 9.1782 BTU/SQ FT SEC

PLOT SERIES NUMBER 19

TEST GROUP	TIME (SEC)
42*	2.70
45	2.75
54	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
193 000



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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 153.99 DEG
ANGLE OF YAW --------- -4.98 DEG
TOTAL PRESSURE ------- 1823.50 PSIA
TOTAL TEMPERATURE ---- 2522.30 DEG RANKINE

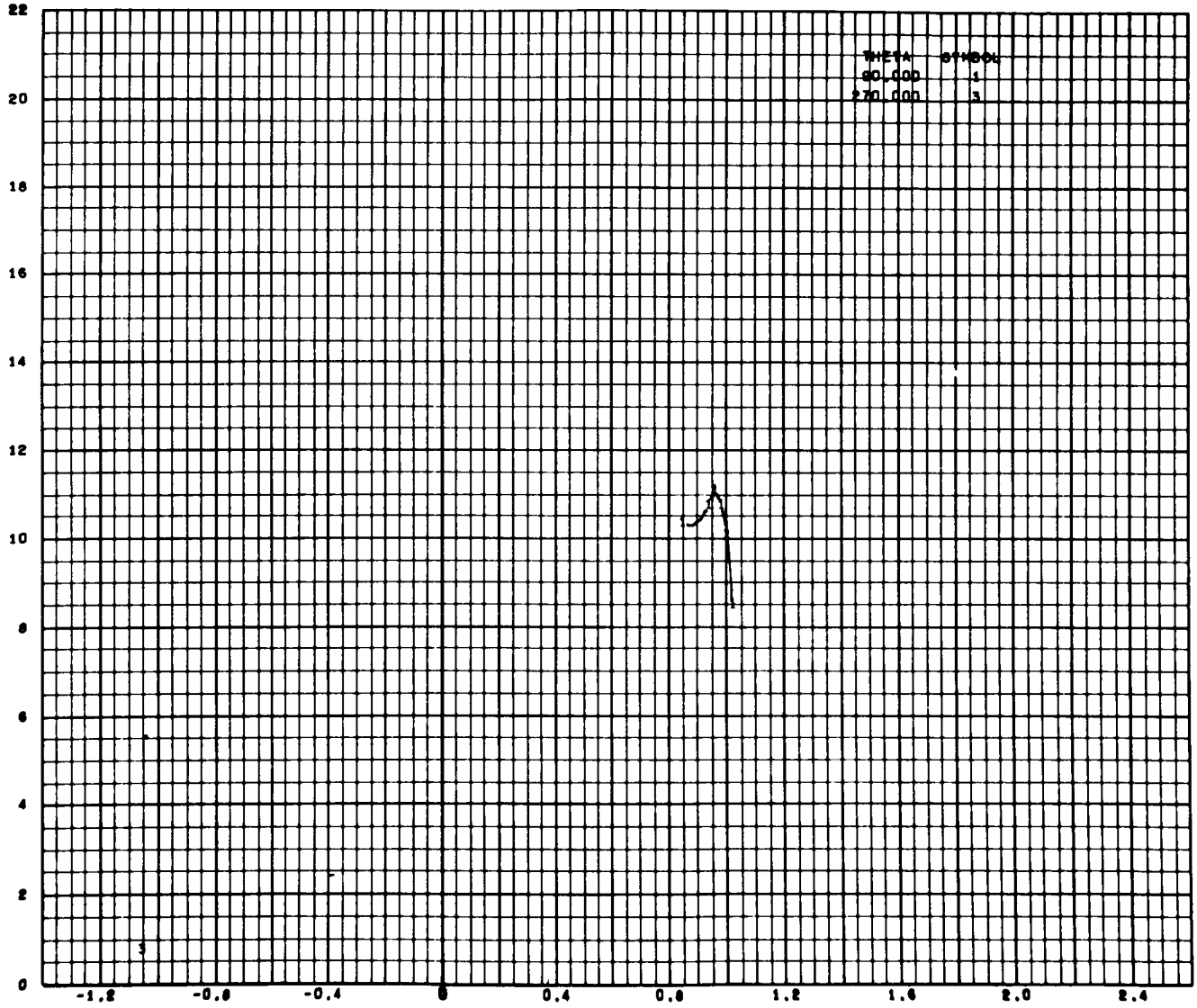
RE/FT --- 1.2793*10+6
Q(OM) --- 9.1637 BTU/SQ FT SEC

PLOT SERIES NUMBER 20

TEST GROUP	TIME (SEC)
46*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
154 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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PLOT SERIES NUMBER 20

TEST GROUP	TIME (SEC)
46*	2.75

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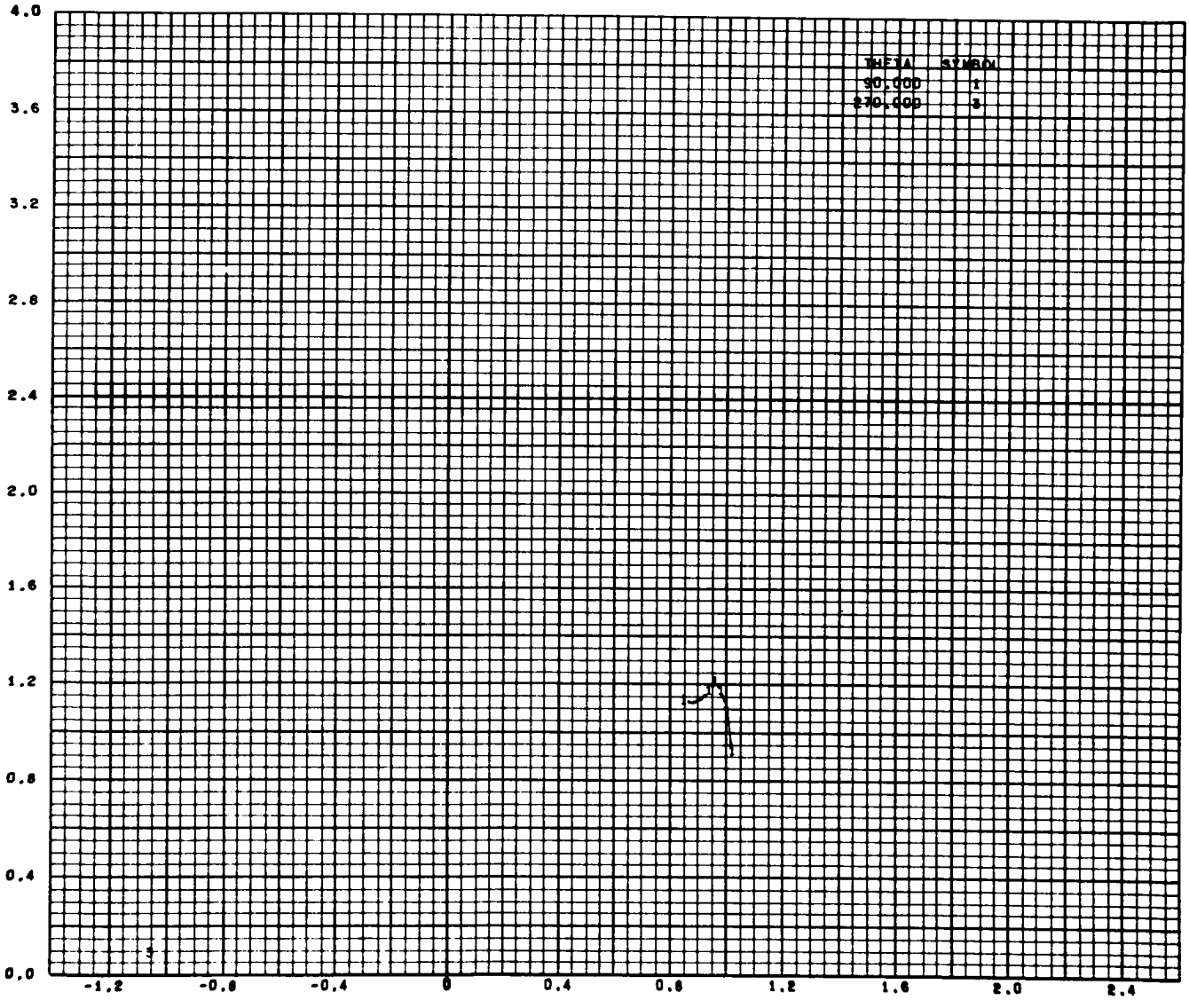
3937-08
156 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

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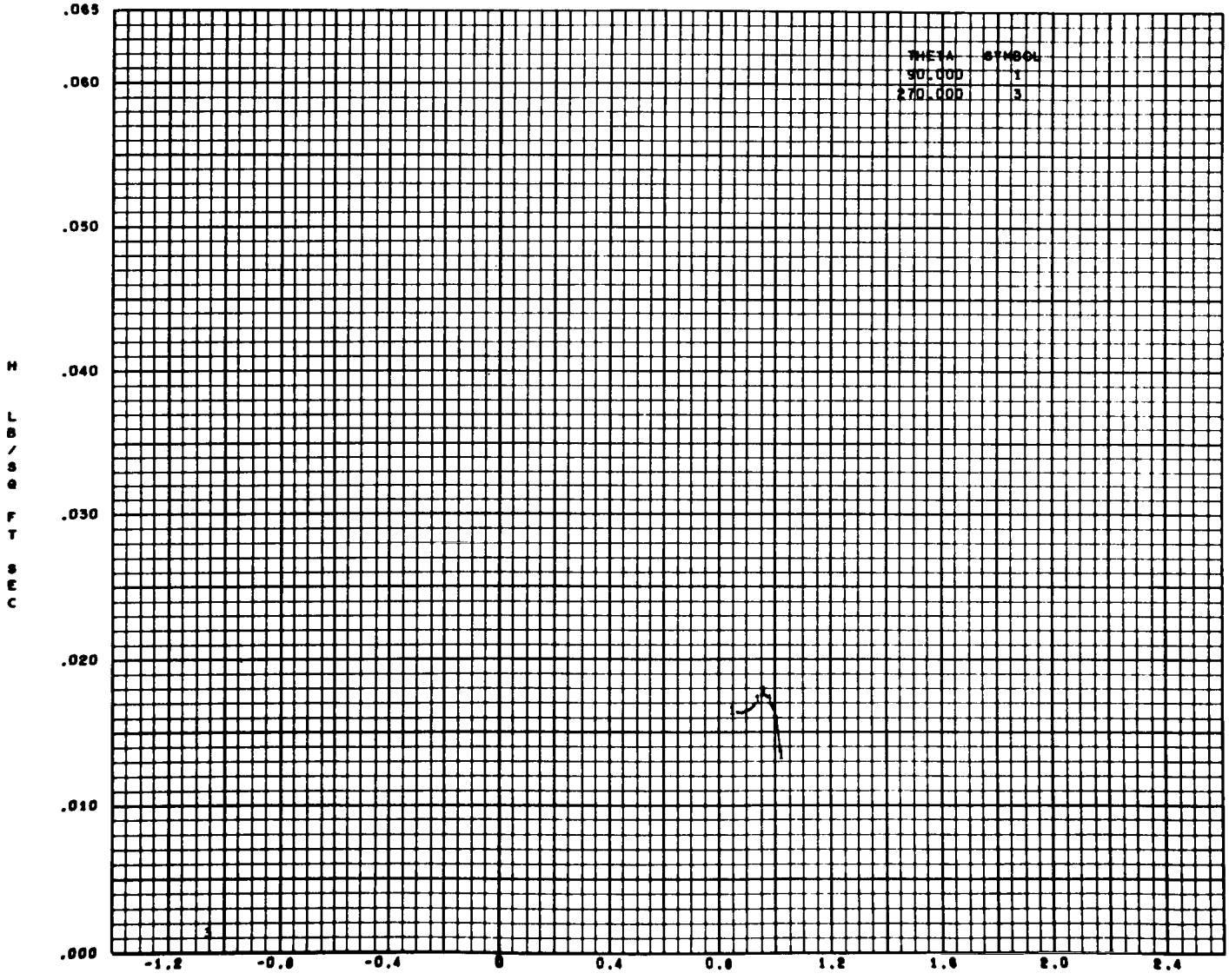
3937-08
158 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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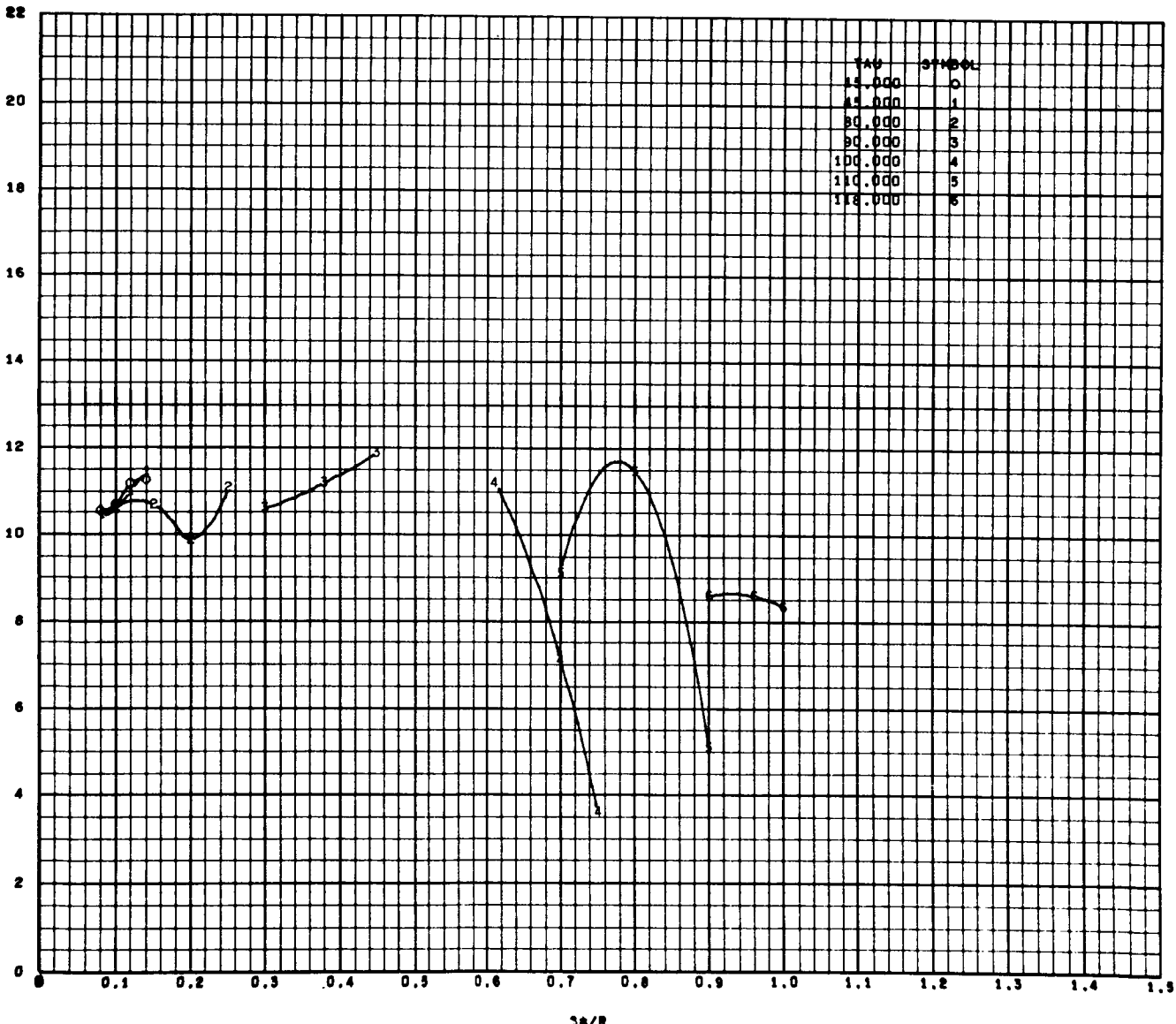
PLOT SERIES NUMBER 20

TEST GROUP	TIME (SEC)
46*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
155 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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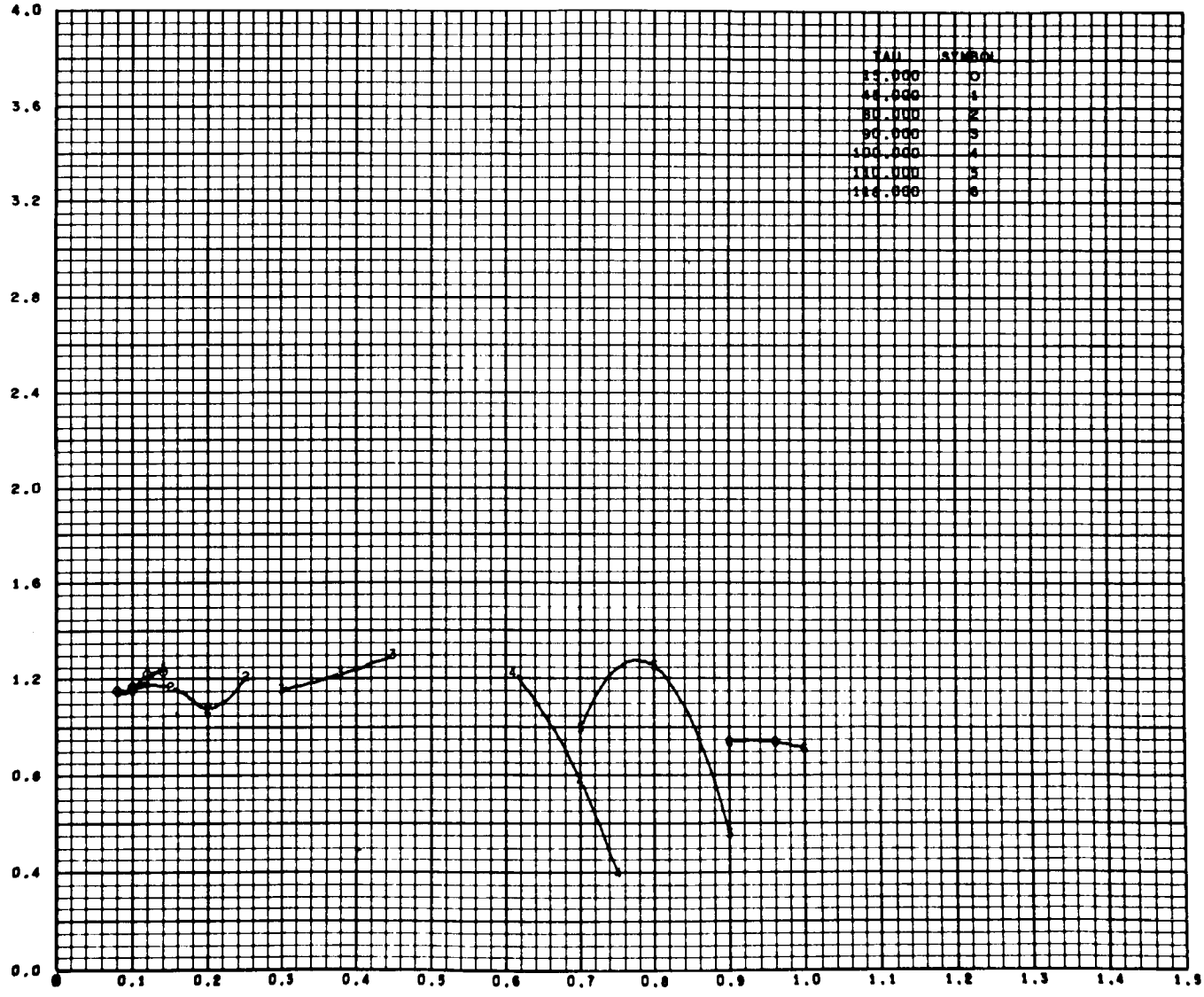
3937-08
157 000



HEAT TRANSFER

APOLLO H-11

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JUNE, 1964

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PLOT SERIES NUMBER 20

TEST GROUP	TIME (SEC)
46*	2.75

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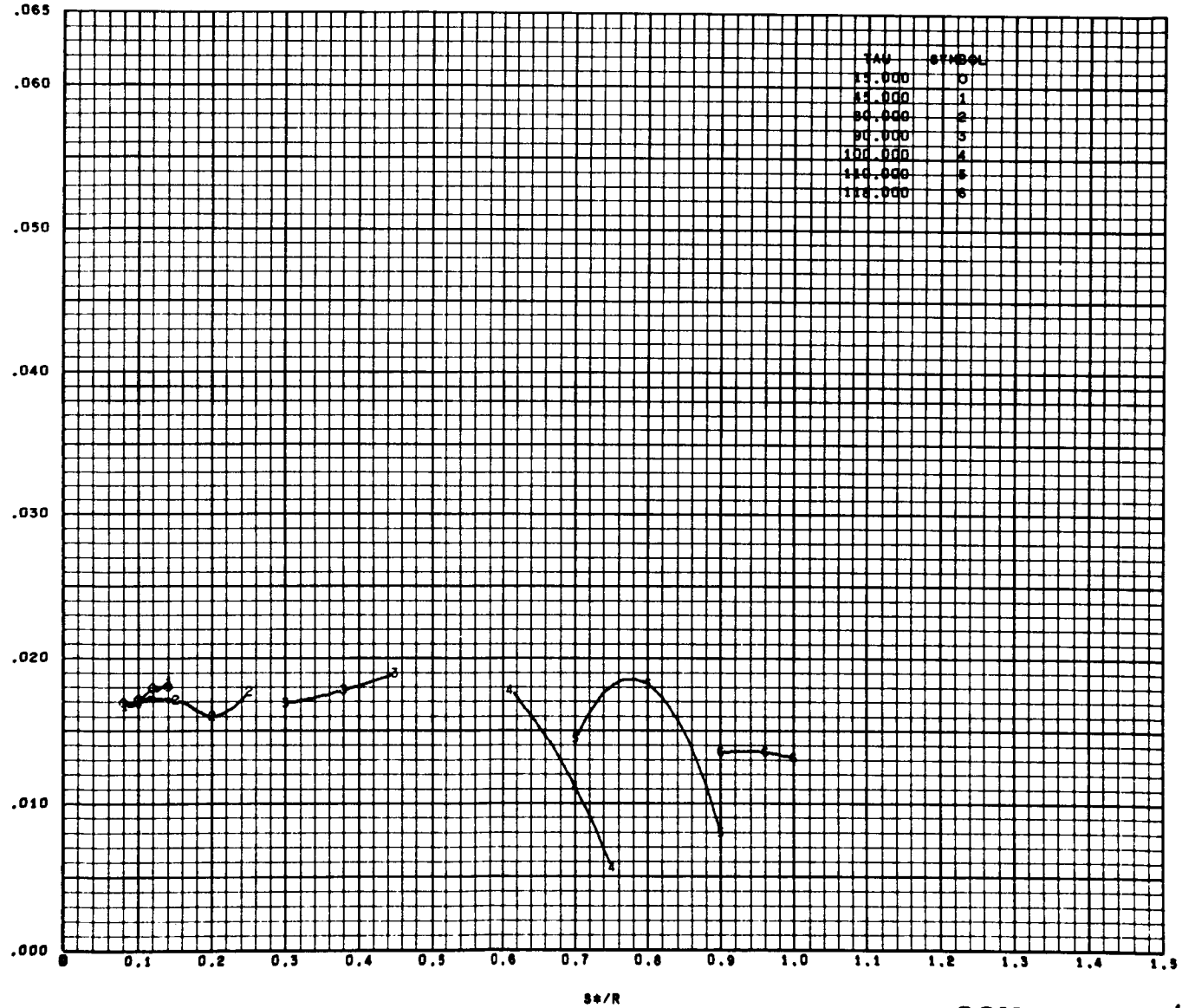
3937-08
159 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 153.95 DEG
ANGLE OF YAW --------- 4.95 DEG
TOTAL PRESSURE ------- 1824.30 PSIA
TOTAL TEMPERATURE ---- 2570.30 DEG RANKINE

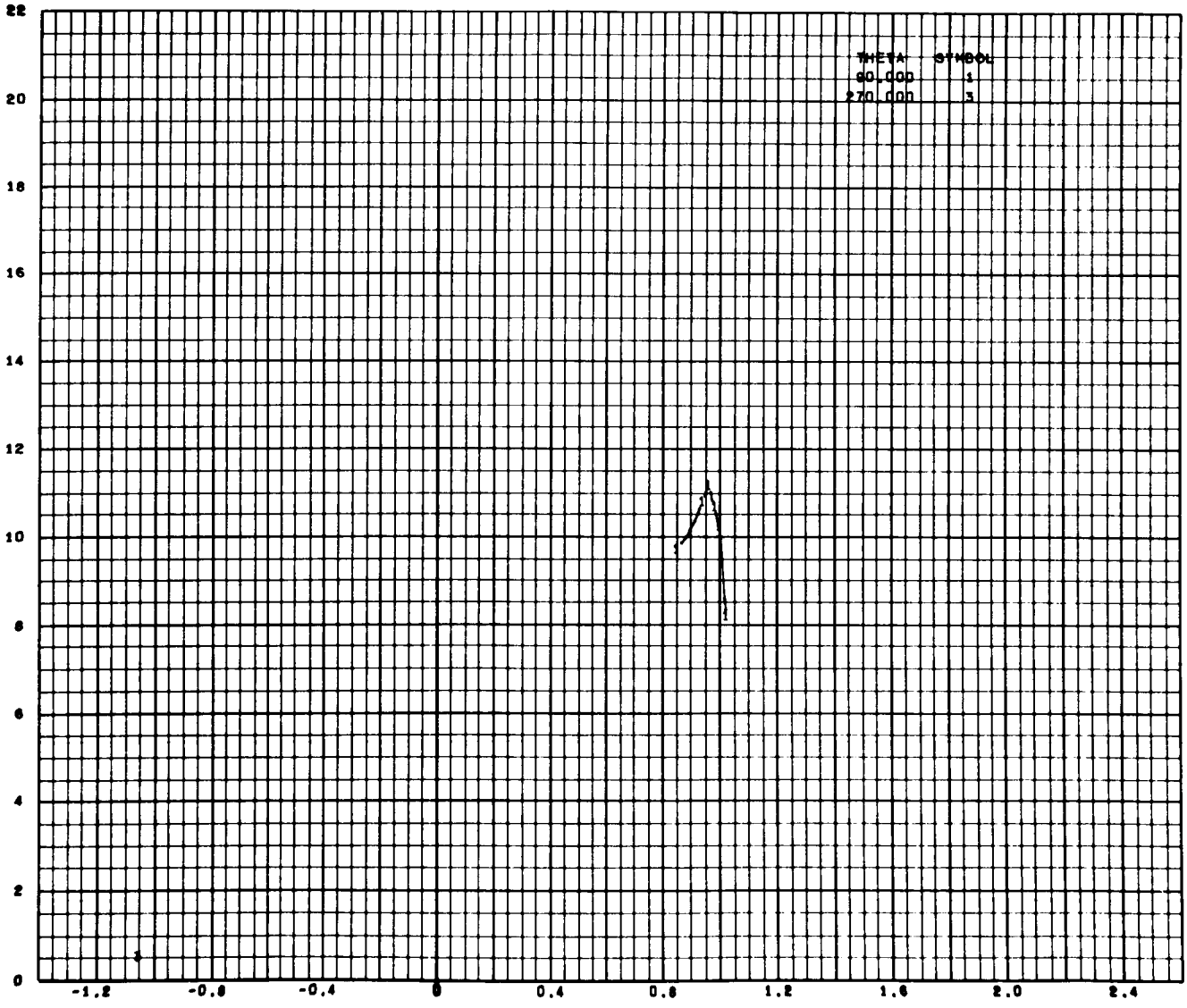
RE/FT --- 1.2328*10+6
Q(OM) --- 9.1661 BTU/SQ FT SEC

PLOT SERIES NUMBER 21

TEST GROUP	TIME (SEC)
47*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
160 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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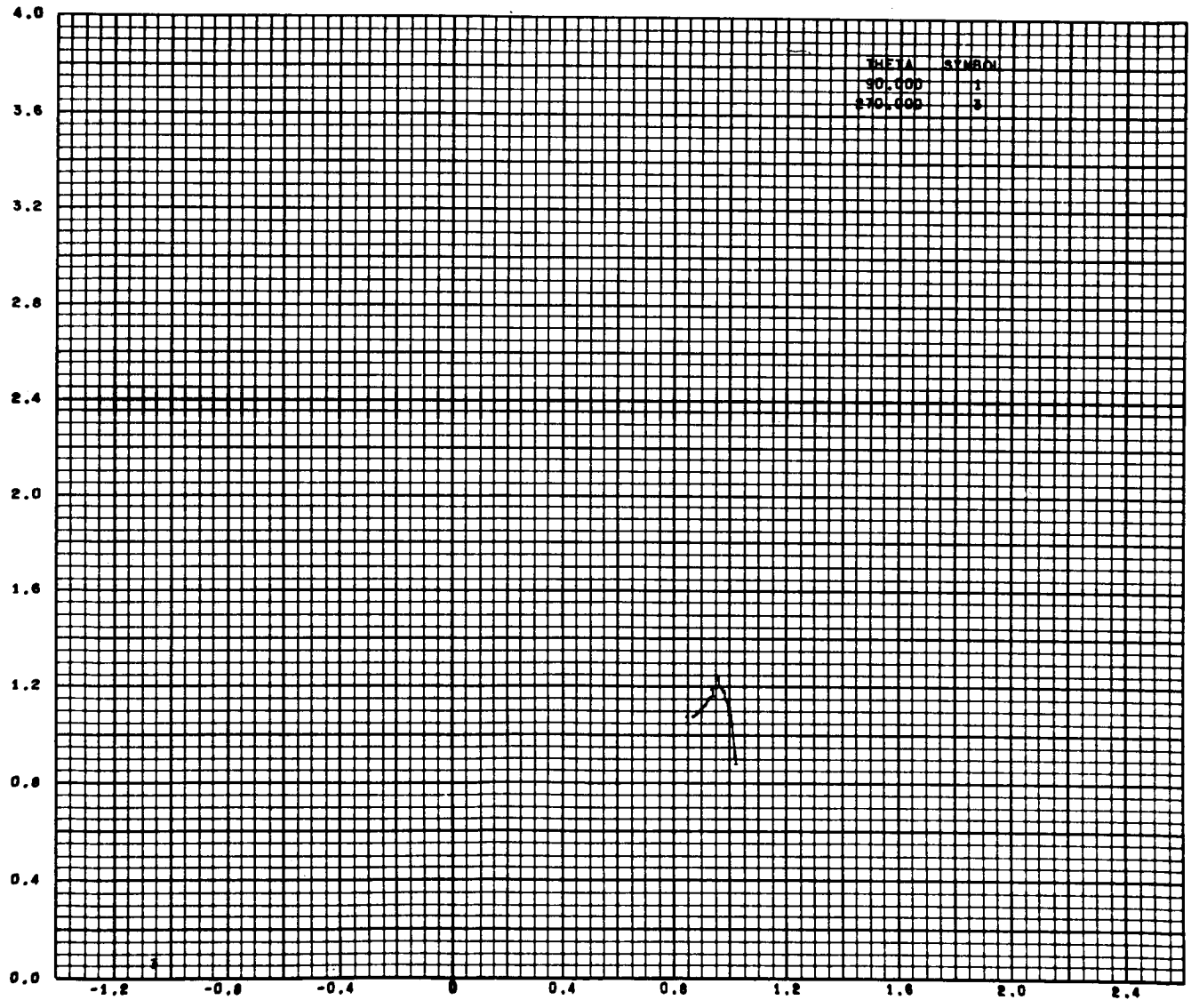
Q(OM) --- 9.1661 BTU/SQ FT SEC

PLOT SERIES NUMBER 21

TEST GROUP	TIME (SEC)
47*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
162 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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PLOT SERIES NUMBER 21

TEST GROUP	TIME (SEC)
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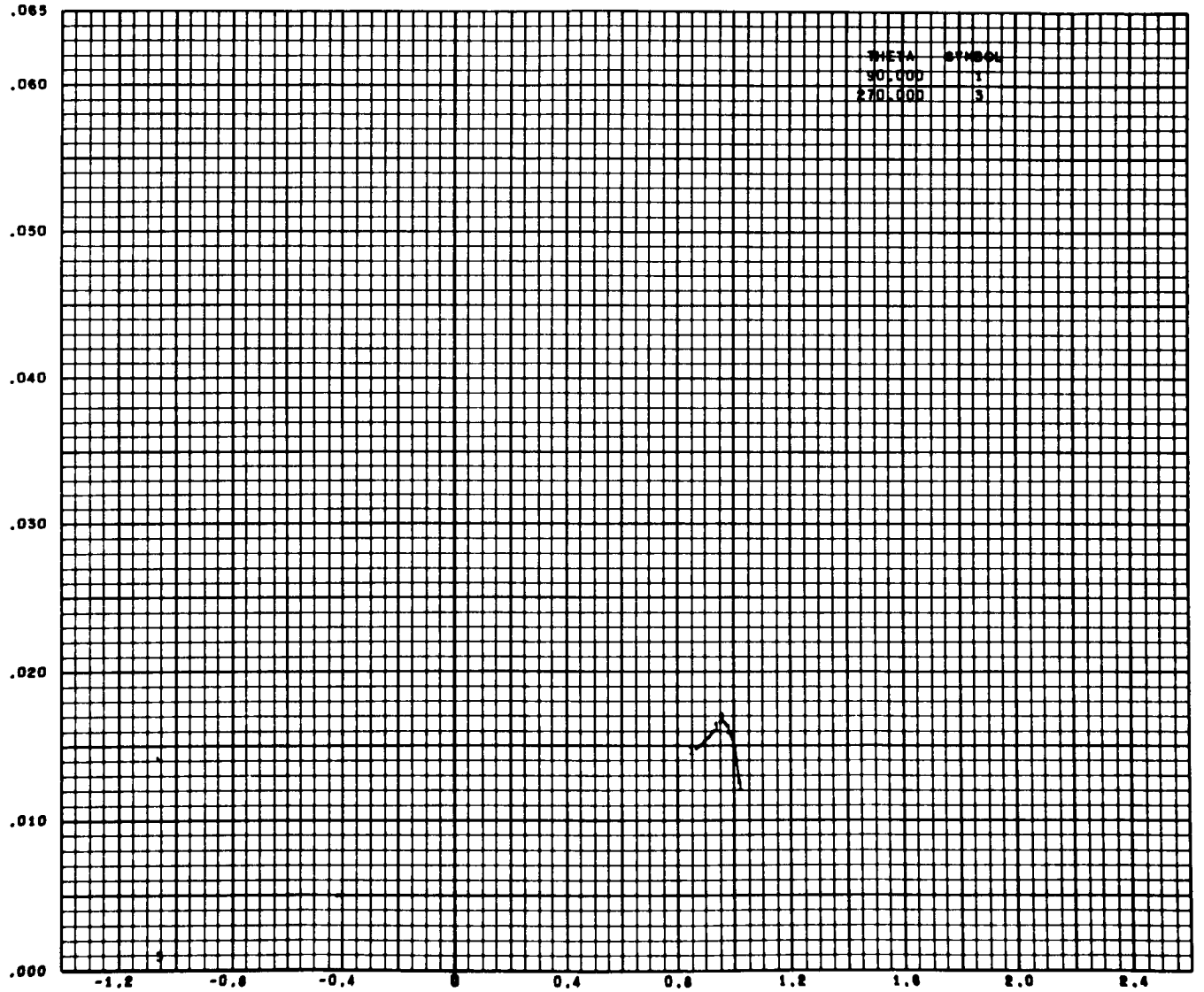
3937-08
164 000



HEAT TRANSFER

APOLLO H-11

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JUNE, 1964

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TOTAL PRESSURE ------- 1824.30 PSIA
TOTAL TEMPERATURE ---- 2570.30 DEG RANKINE

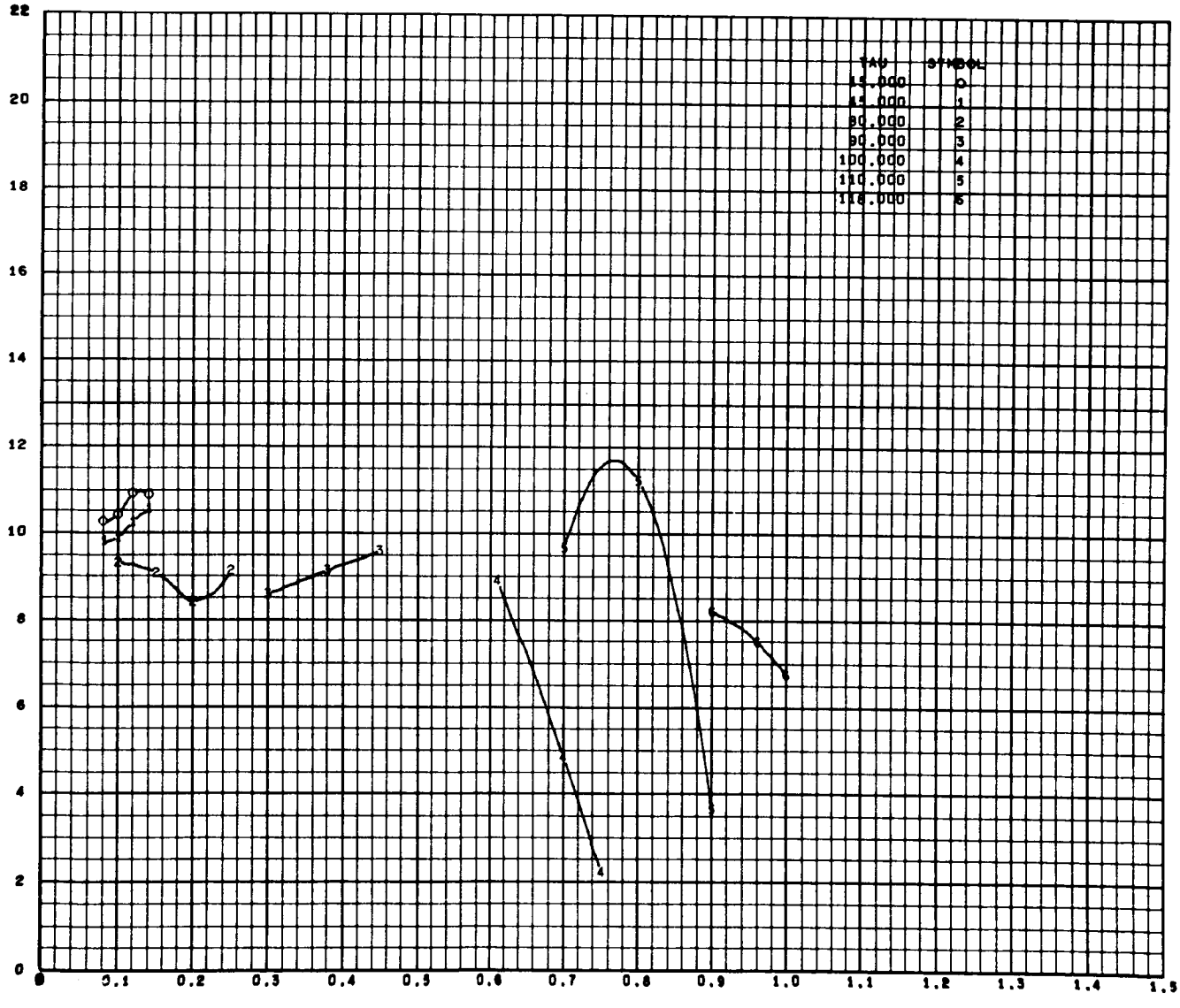
RE/FT --- 1.2328*10+6
Q(OM) --- 9.1661 BTU/SQ FT SEC

PLOT SERIES NUMBER 21

TEST GROUP	TIME (SEC)
47*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
161 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 153.95 DEG
ANGLE OF YAW --------- 4.95 DEG
TOTAL PRESSURE ------- 1824.30 PSIA
TOTAL TEMPERATURE ---- 2570.30 DEG RANKINE

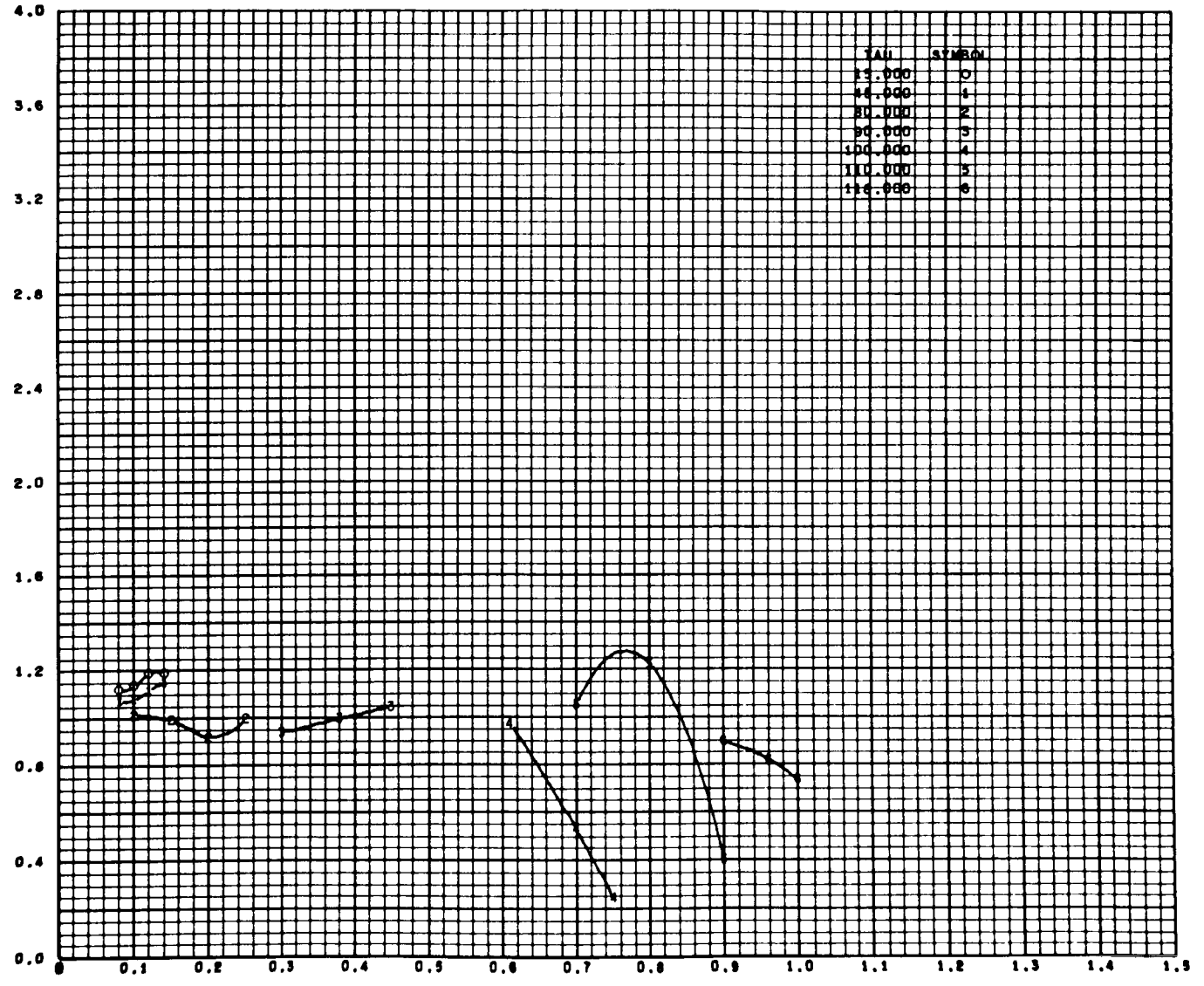
RE/FT --- 1.2328*10+6
Q(OM) --- 9.1661 BTU/SQ FT SEC

PLOT SERIES NUMBER 21

TEST GROUP	TIME (SEC)
47*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
163 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 153.95 DEG
ANGLE OF YAW --------- 4.95 DEG
TOTAL PRESSURE ------- 1824.30 PSIA
TOTAL TEMPERATURE ---- 2570.30 DEG RANKINE

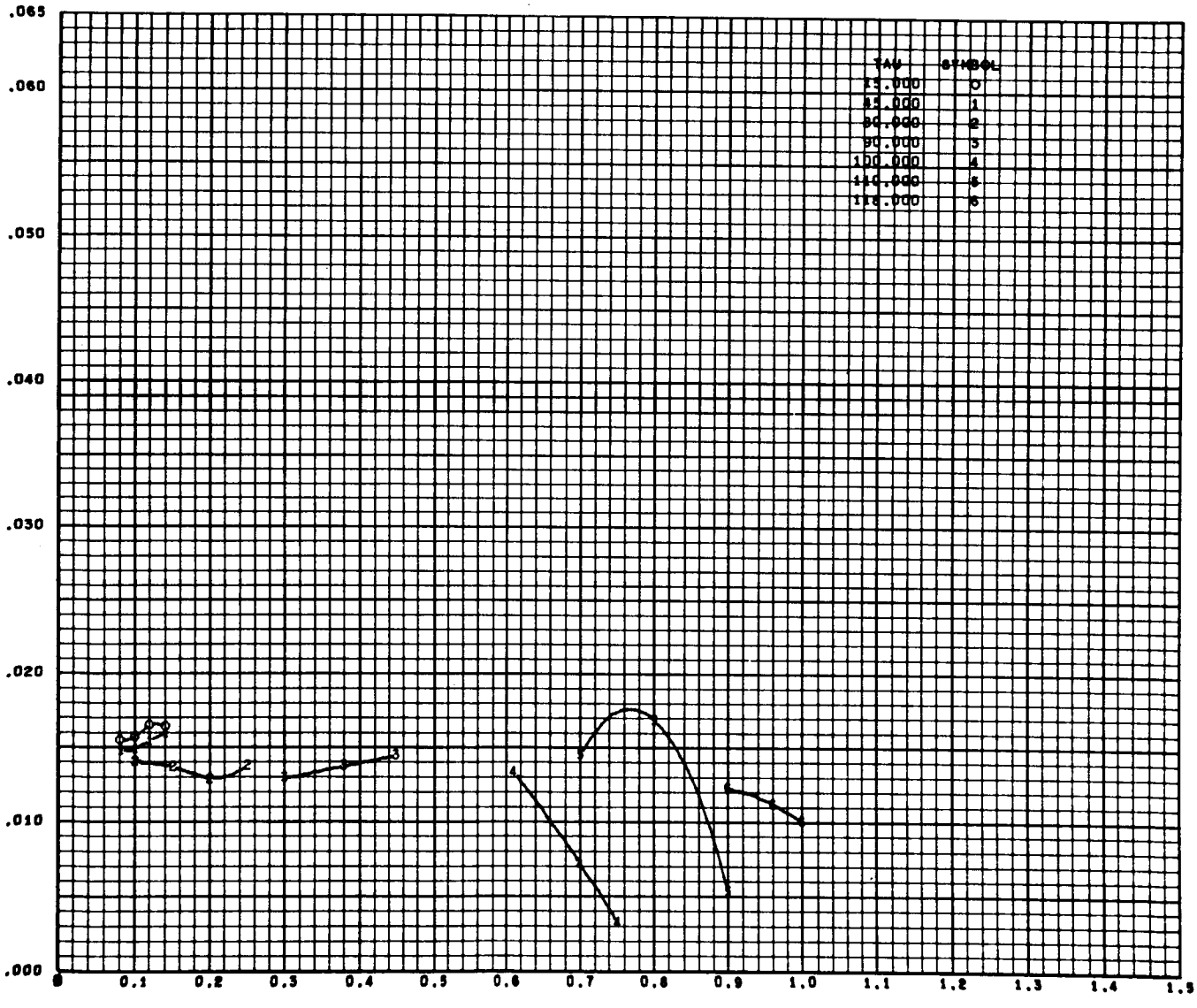
RE/FT --- 1.2328*10+6
Q(OM) --- 9.1661 BTU/SQ FT SEC

PLOT SERIES NUMBER 21

TEST GROUP	TIME (SEC)
47*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
165 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 158.35 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1831.80 PSIA
TOTAL TEMPERATURE ---- 1897.30 DEG RANKINE

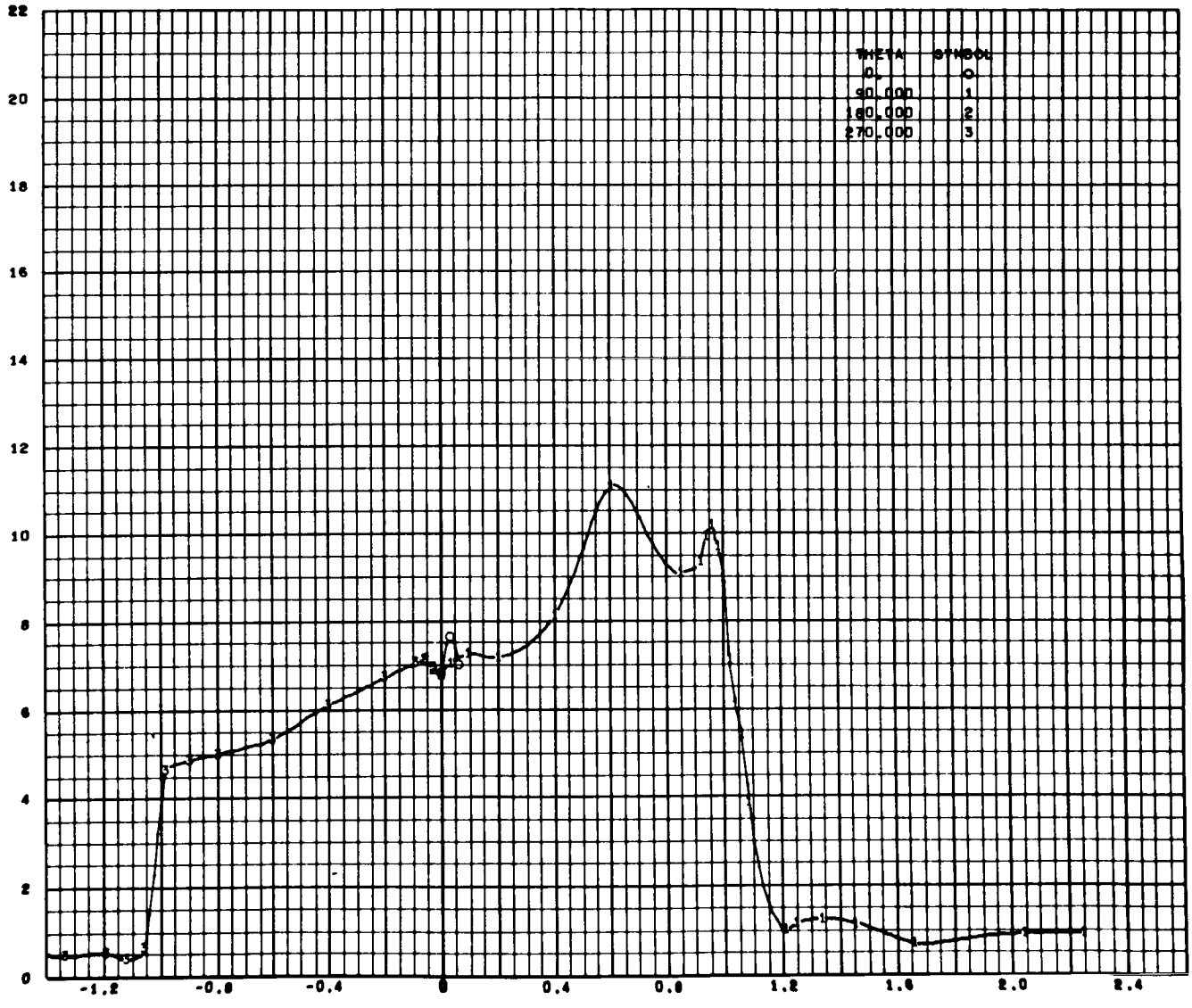
RE/FT --- 2.2128*10+6
Q(OM) --- 9.1902 BTU/SQ FT SEC

PLOT SERIES NUMBER 22

TEST GROUP	TIME (SEC)
39*	2.65
48	2.70
55	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
166 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 158.35 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1831.80 PSIA
TOTAL TEMPERATURE ---- 1897.30 DEG RANKINE

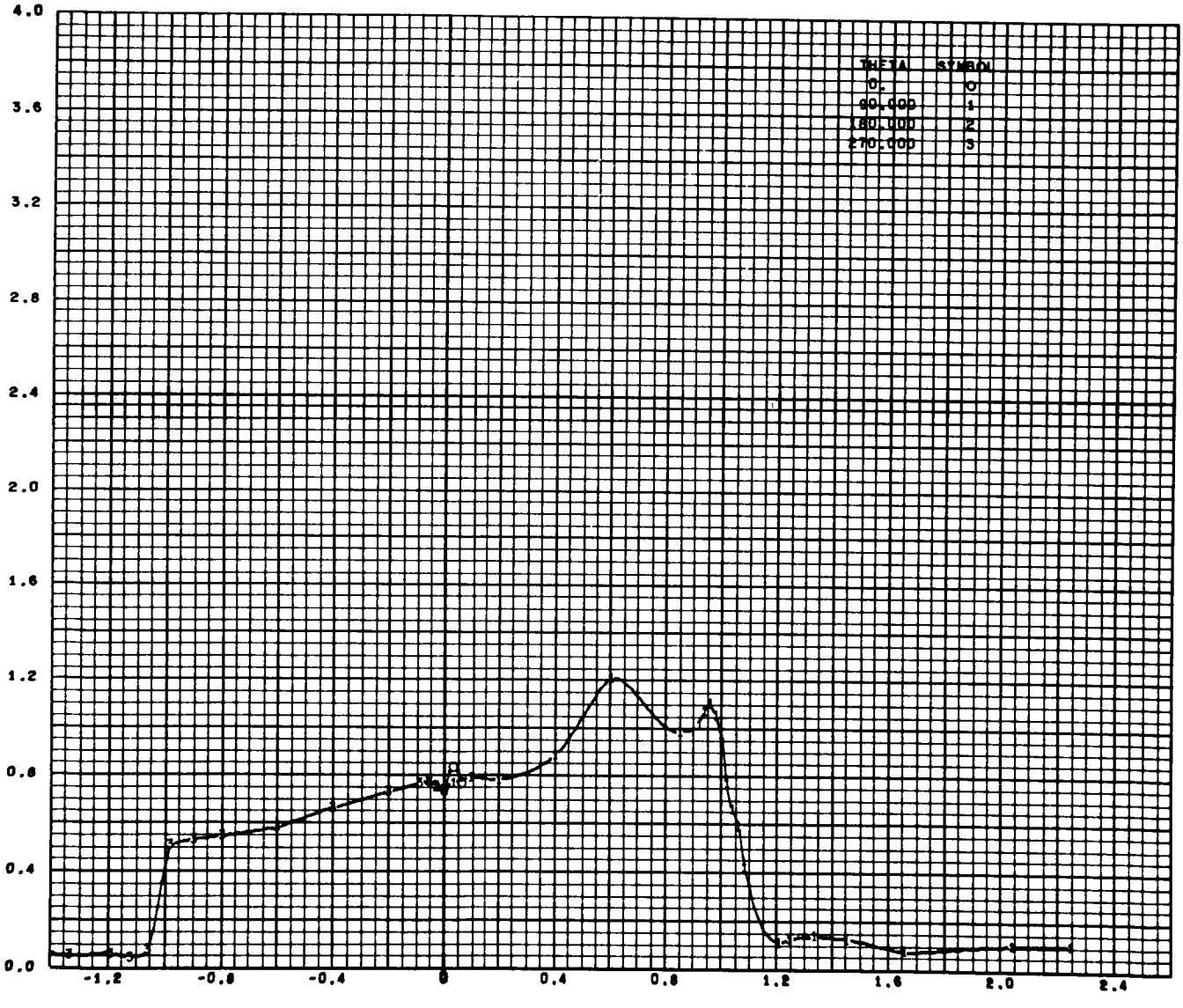
RE/FT --- 2.2128*10+6
Q(OM) --- 9.1902 BTU/SQ FT SEC

PLOT SERIES NUMBER 22

TEST GROUP	TIME (SEC)
39*	2.65
48	2.70
55	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
169 000



[redacted]

HEAT TRANSFER | CONFIGURATION C55 | PLOT SERIES NUMBER 22 | 3937-08 172 000

APOLLO H-11

AEDC, TUNNEL C

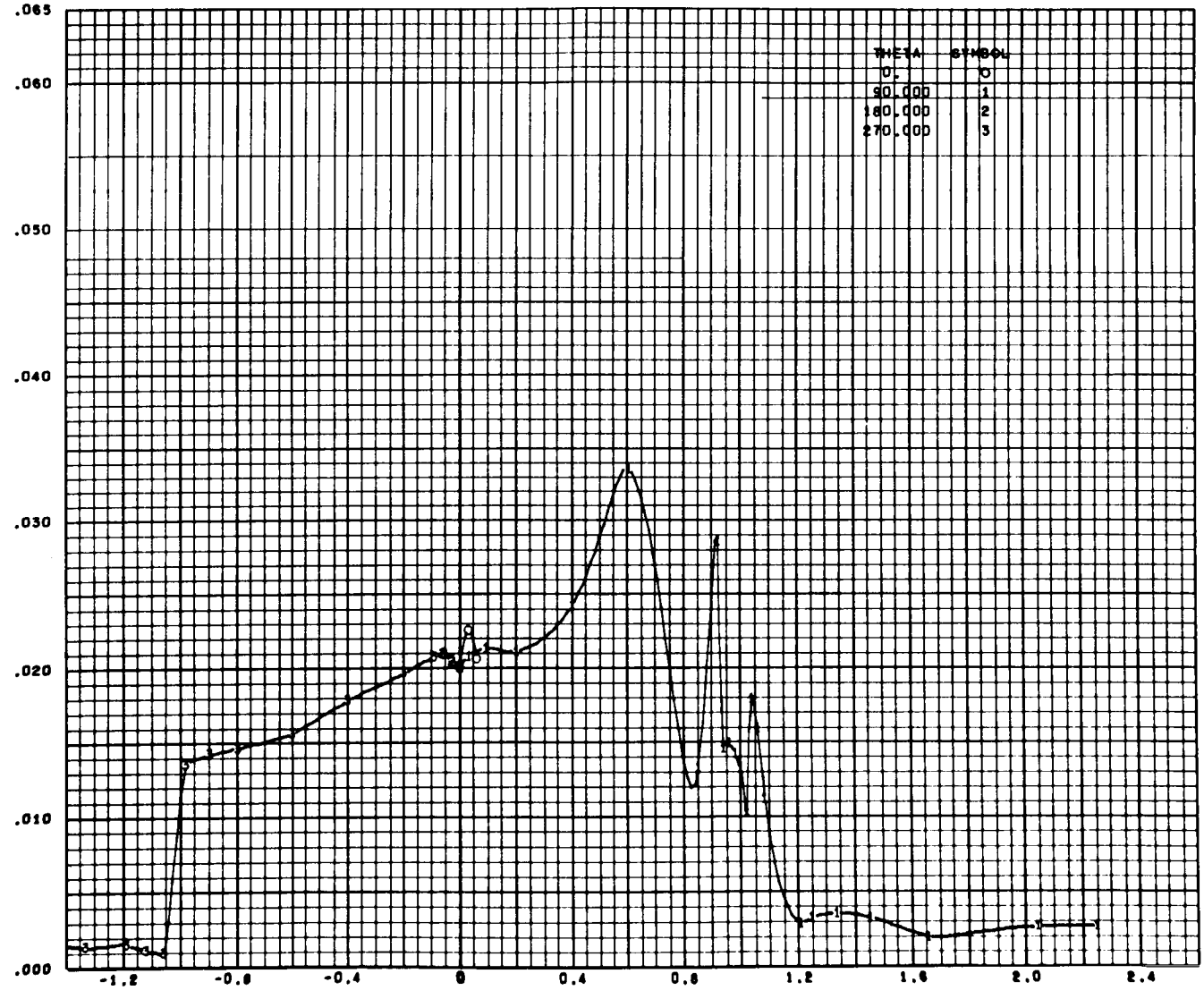
JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 158.35 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1831.80 PSIA
TOTAL TEMPERATURE ---- 1897.30 DEG RANKINE

RE/FT --- 2.2128*10+6
Q(OM) --- 9.1902 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
39*	2.65
48	2.70
55	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 158.35 DEG
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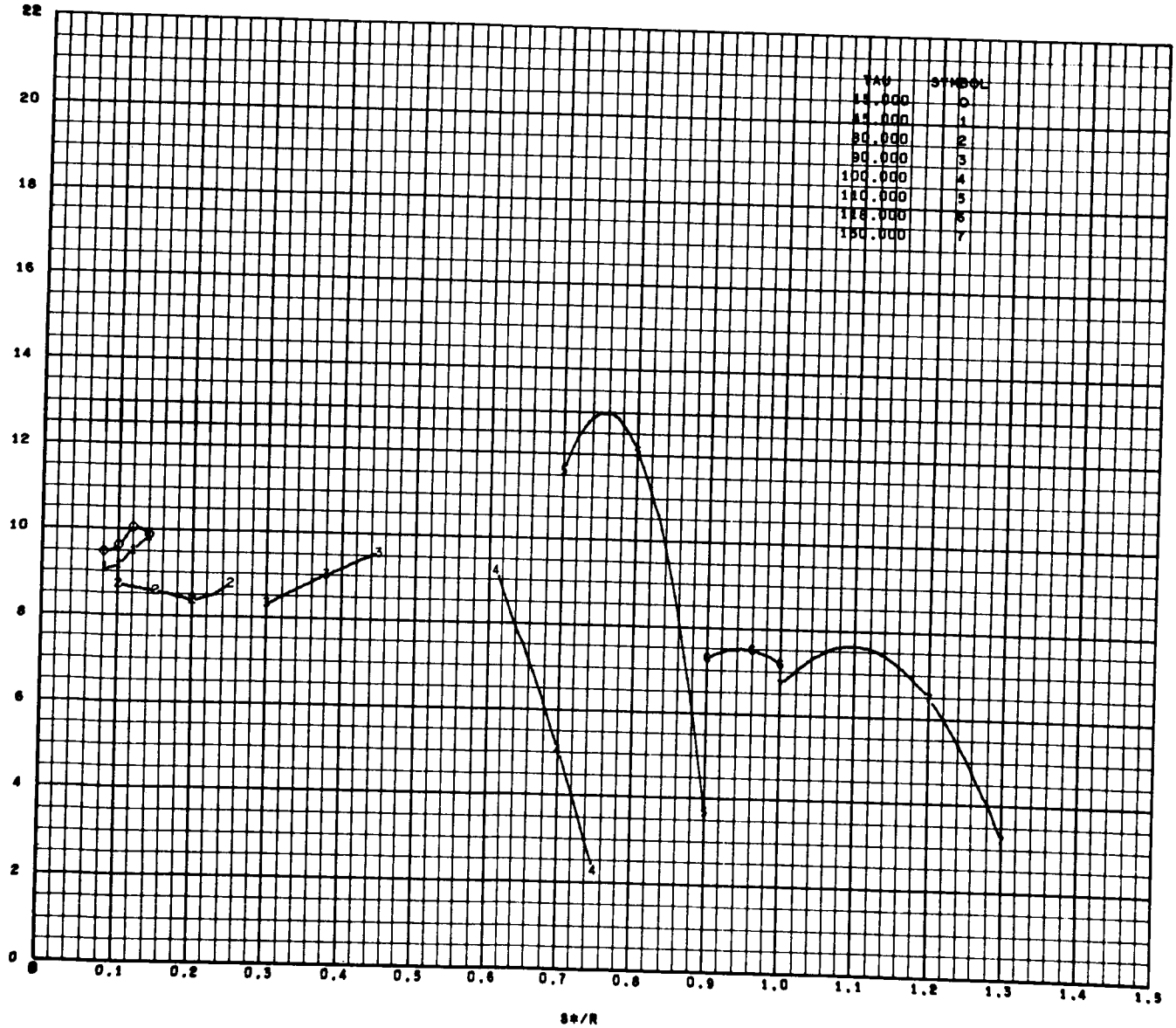
PLOT SERIES NUMBER 22

TEST GROUP	TIME (SEC)
39*	2.65
48	2.70
55	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
167 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 158.35 DEG
ANGLE OF YAW --------- -0. DEG
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TOTAL TEMPERATURE ---- 1897.30 DEG RANKINE

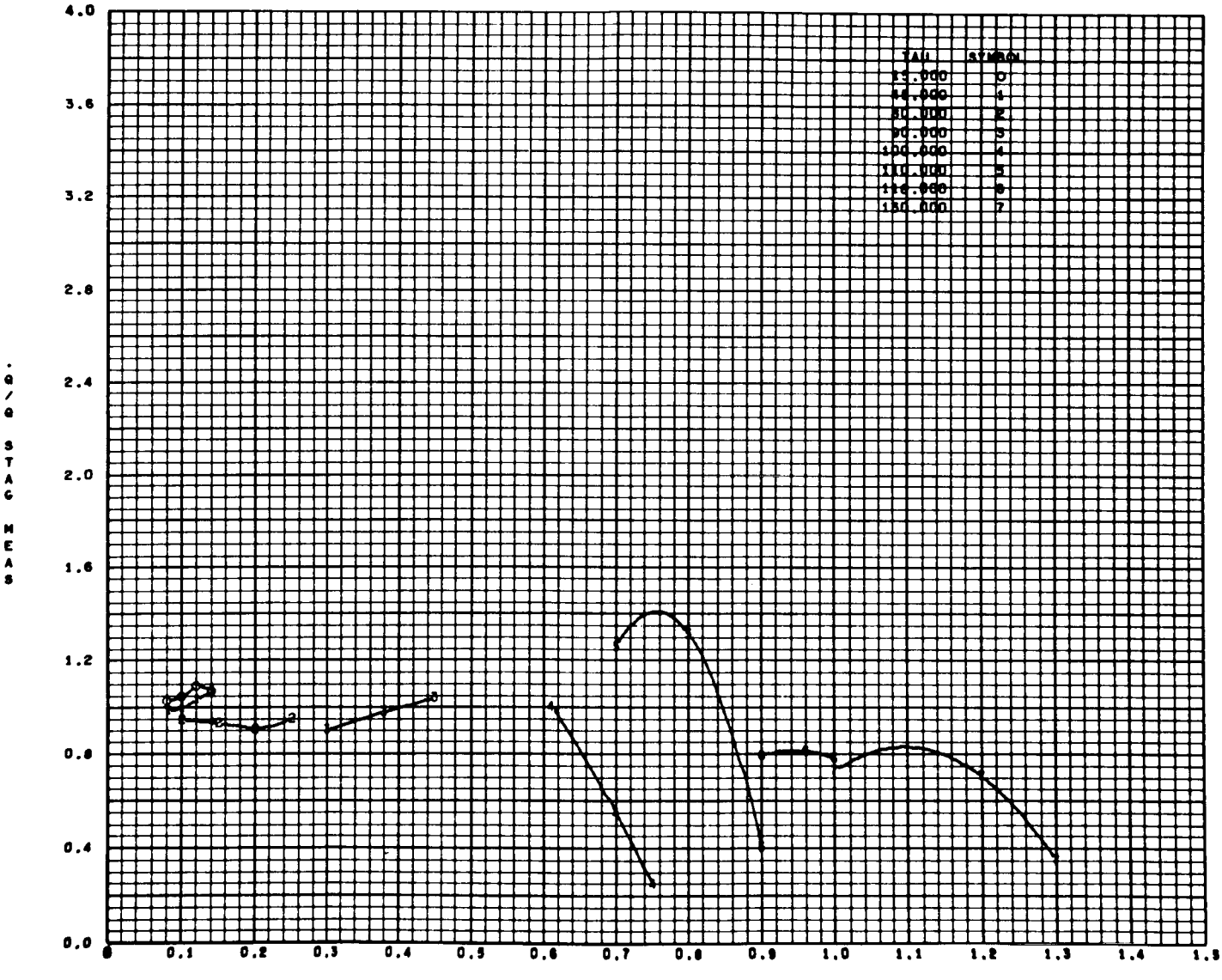
RE/FT --- 2.2128*10+6
Q(OM) --- 9.1902 BTU/SQ FT SEC

PLOT SERIES NUMBER 22

TEST GROUP	TIME (SEC)
39*	2.65
48	2.70
55	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
170 000



~~CONFIDENTIAL~~

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
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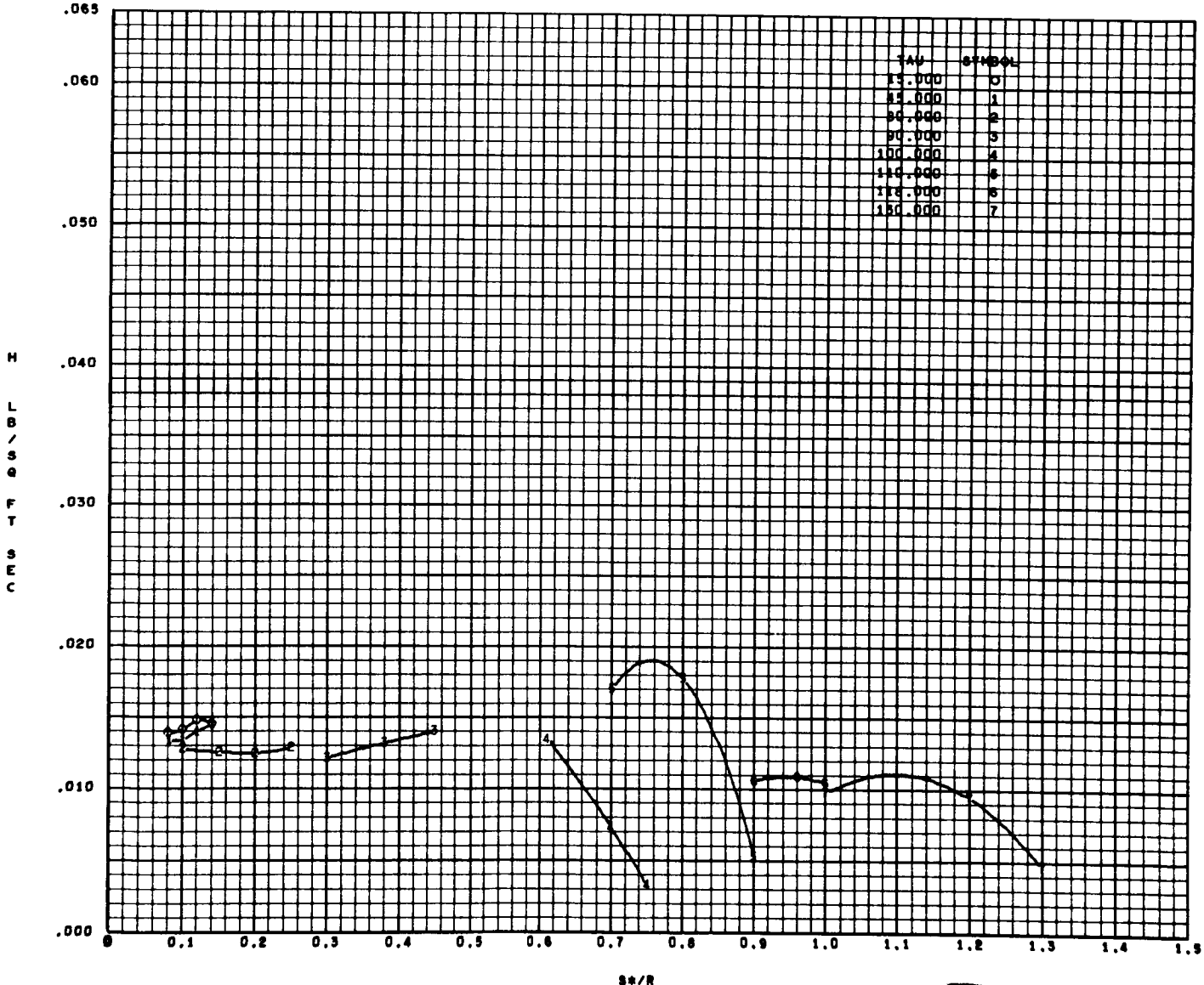
PLOT SERIES NUMBER 22

TEST GROUP	TIME (SEC)
39*	2.65
48	2.70
55	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
173 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
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39*	2.65
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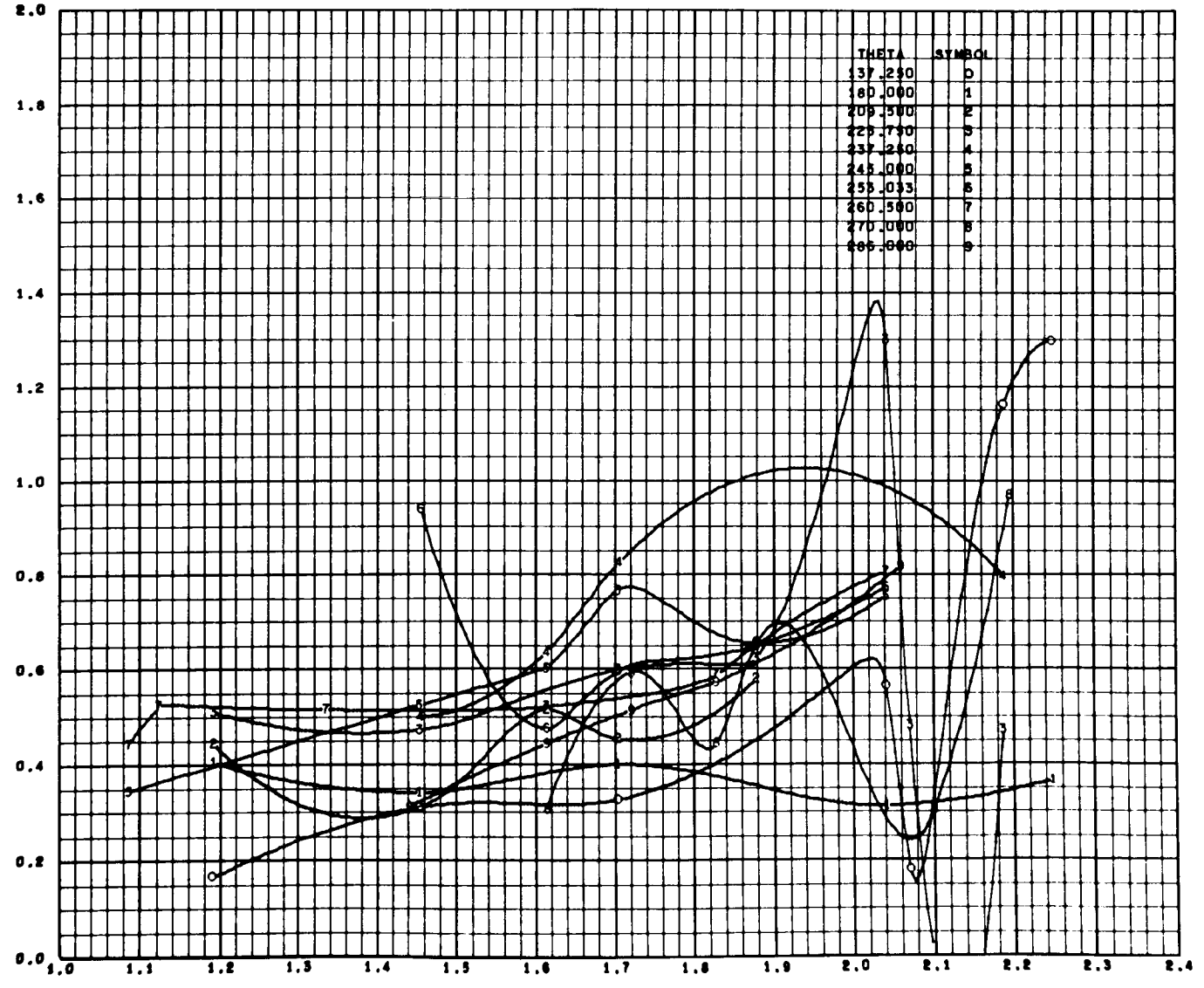
3937-08
168 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 158.35 DEG
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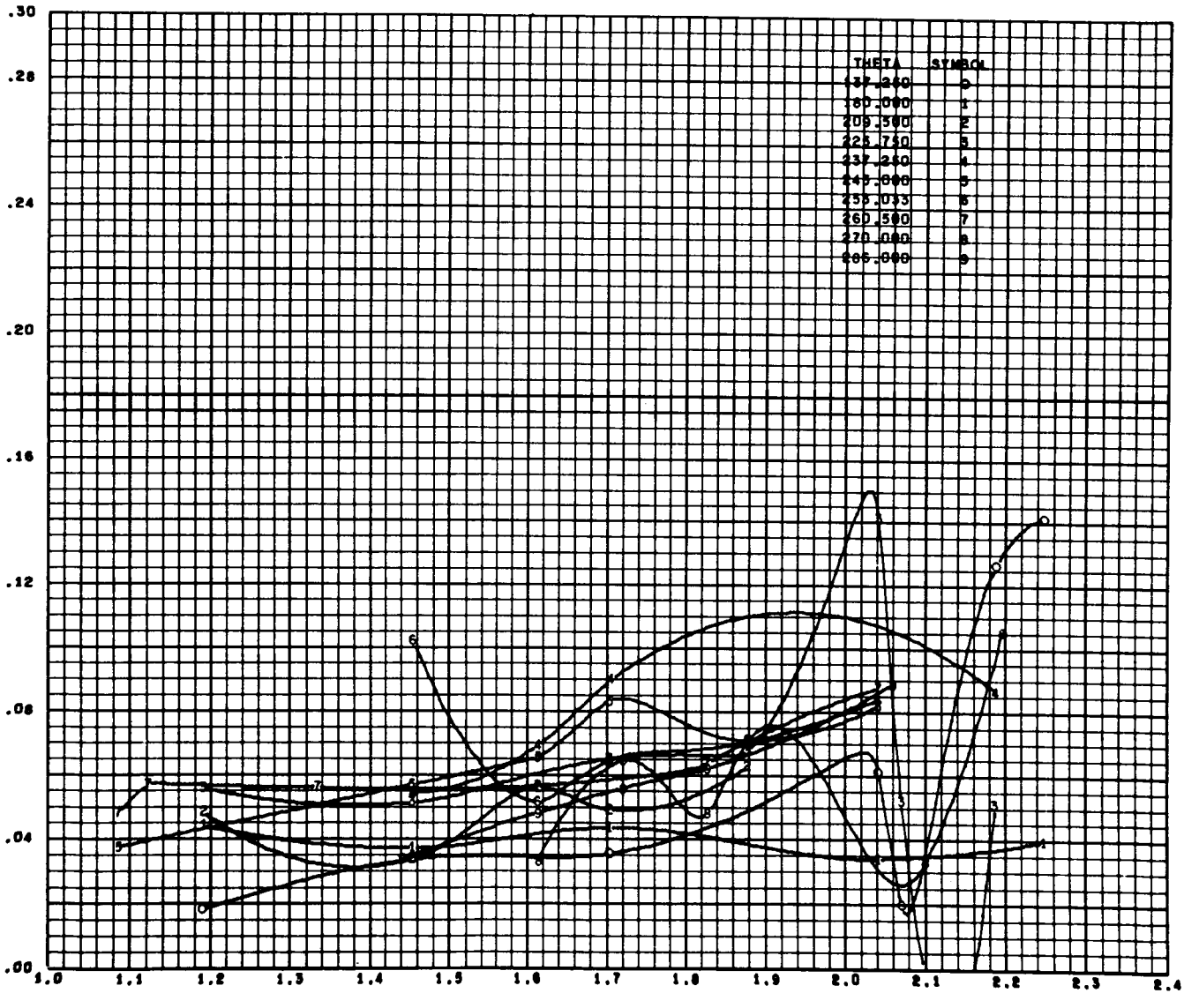
3937-08
171 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

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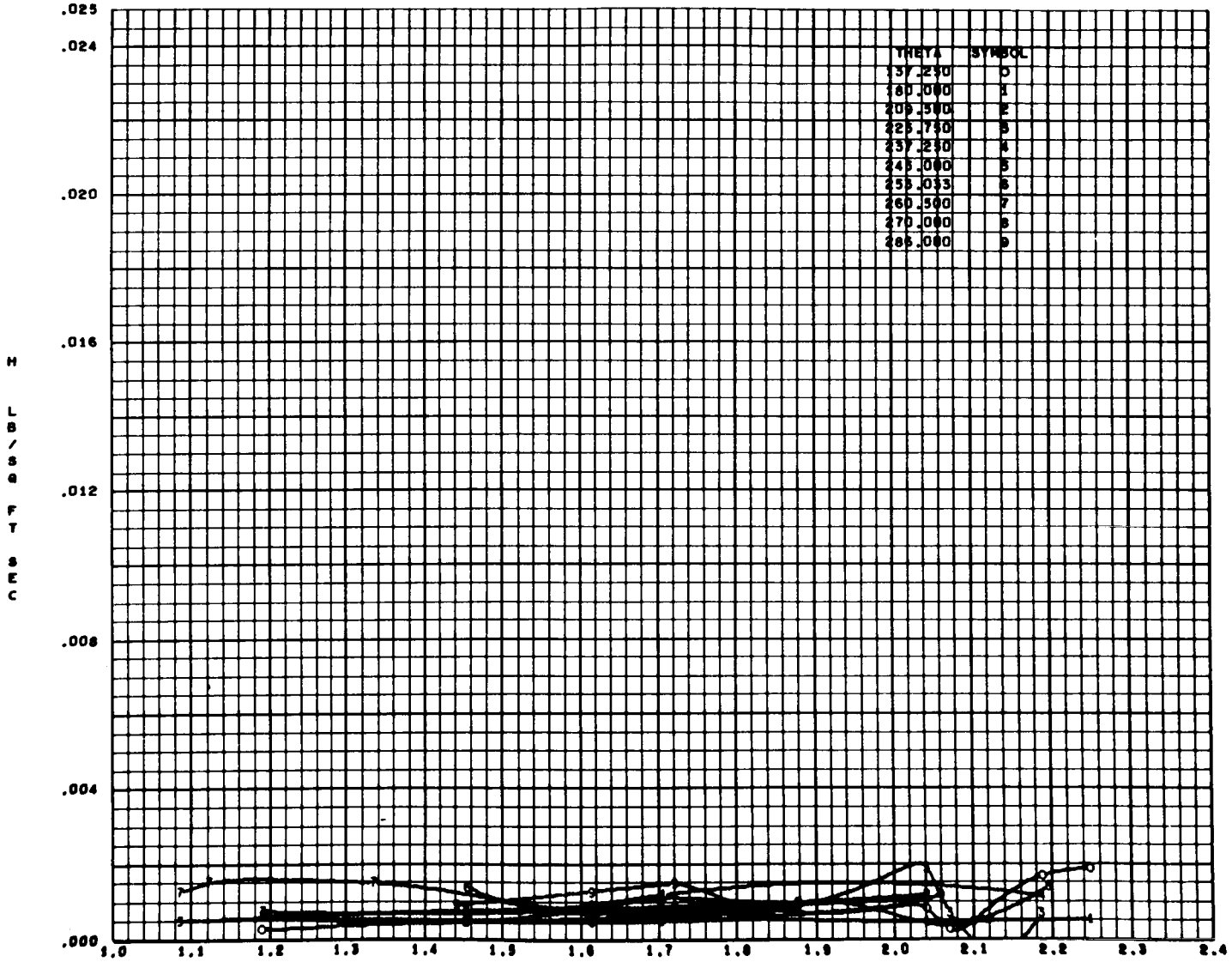
Q(OM) --- 9.1902 BTU/SQ FT SEC

PLOT SERIES NUMBER 22

TEST GROUP	TIME (SEC)
39*	2.65
48	2.70
55	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
174 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 162.50 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1826.30 PSIA
TOTAL TEMPERATURE ---- 1879.00 DEG RANKINE

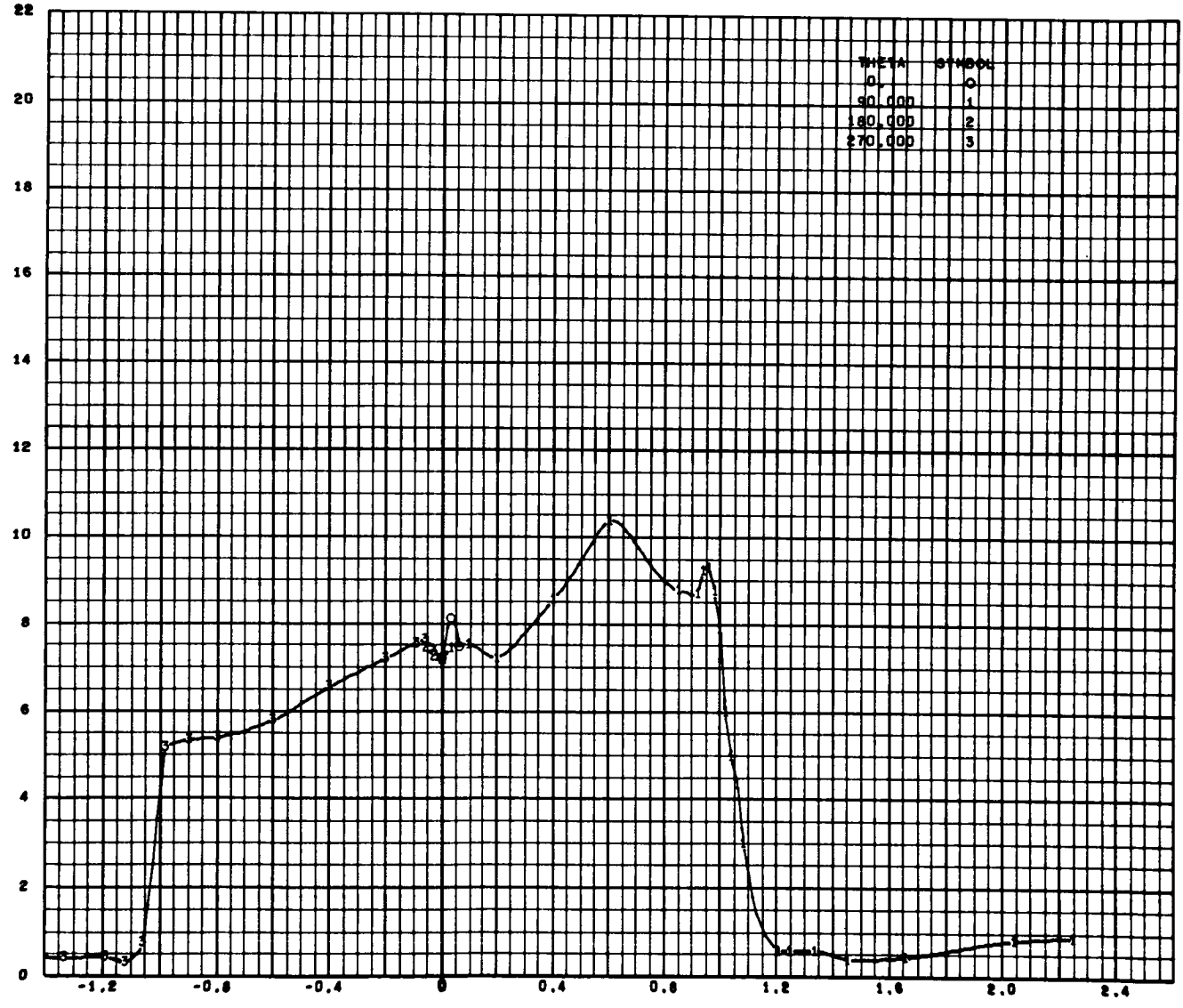
RE/FT --- 2.2459*10+6
Q(OM) --- 9.1726 BTU/SQ FT SEC

PLOT SERIES NUMBER 23

TEST GROUP	TIME (SEC)
40*	2.70
49	2.70
56	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
175 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 162.50 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1826.30 PSIA
TOTAL TEMPERATURE ---- 1879.00 DEG RANKINE

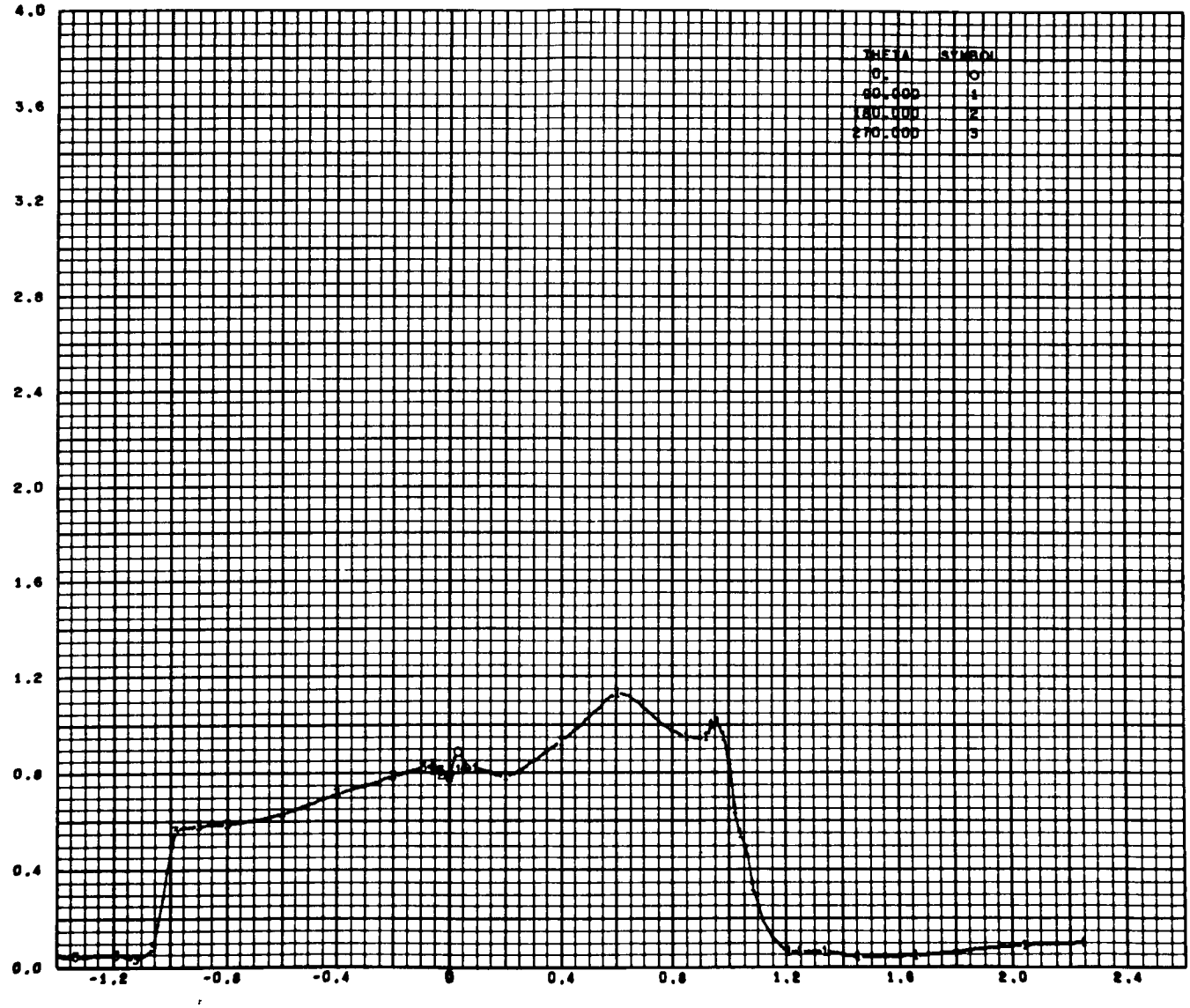
RE/FT --- 2.2459*10+6
Q(OM) --- 9.1726 BTU/SQ FT SEC

PLOT SERIES NUMBER 23

TEST GROUP	TIME (SEC)
40*	2.70
49	2.70
56	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08 L
178 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 162.50 DEG
ANGLE OF YAW --------- -0. DEG
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TOTAL TEMPERATURE ---- 1879.00 DEG RANKINE

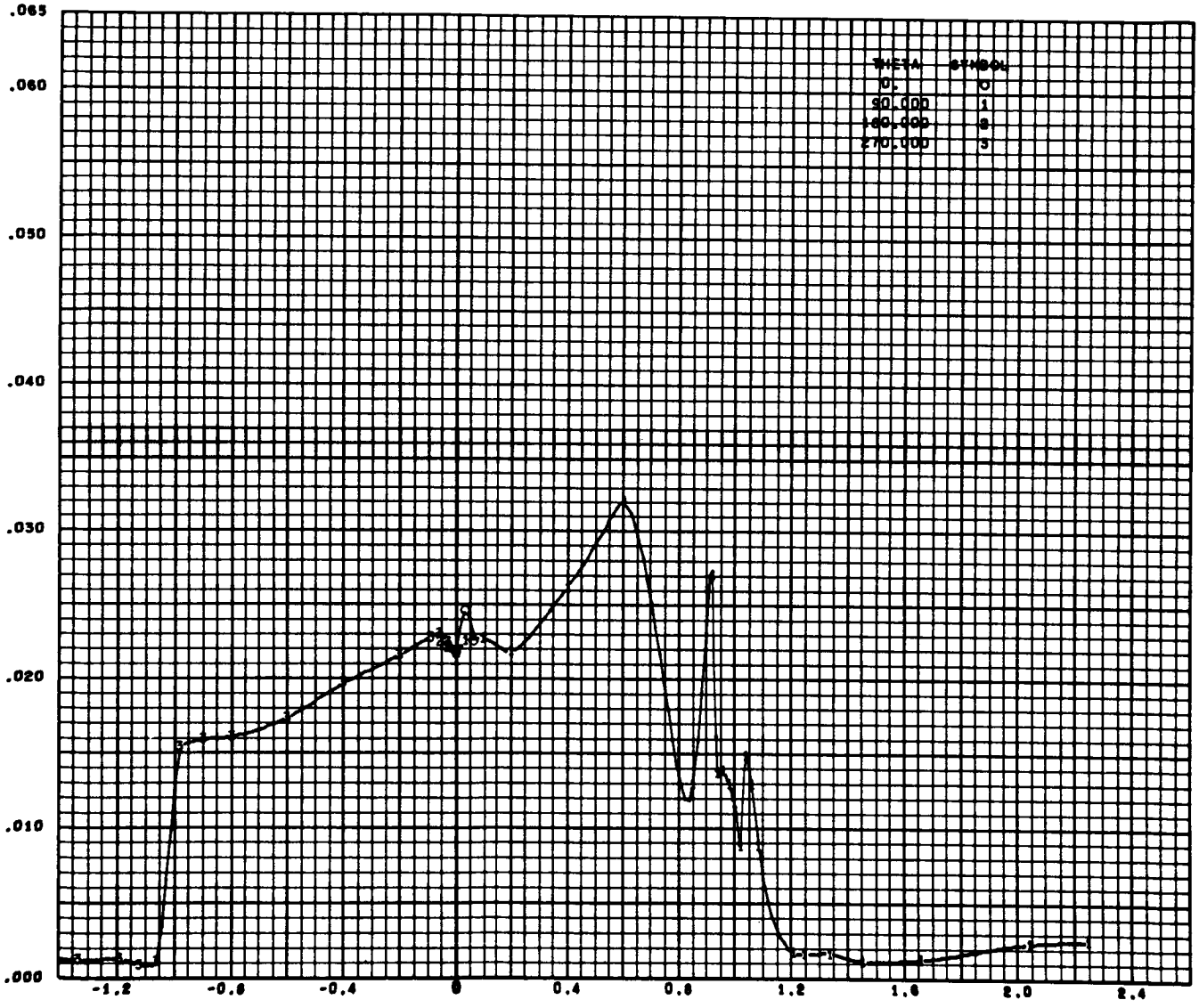
RE/FT --- 2.2459*10+6
Q(OM) --- 9.1726 BTU/SQ FT SEC

PLOT SERIES NUMBER 23

TEST GROUP	TIME (SEC)
40*	2.70
49	2.70
56	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
101 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 162.50 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1826.30 PSIA
TOTAL TEMPERATURE ---- 1879.00 DEG RANKINE

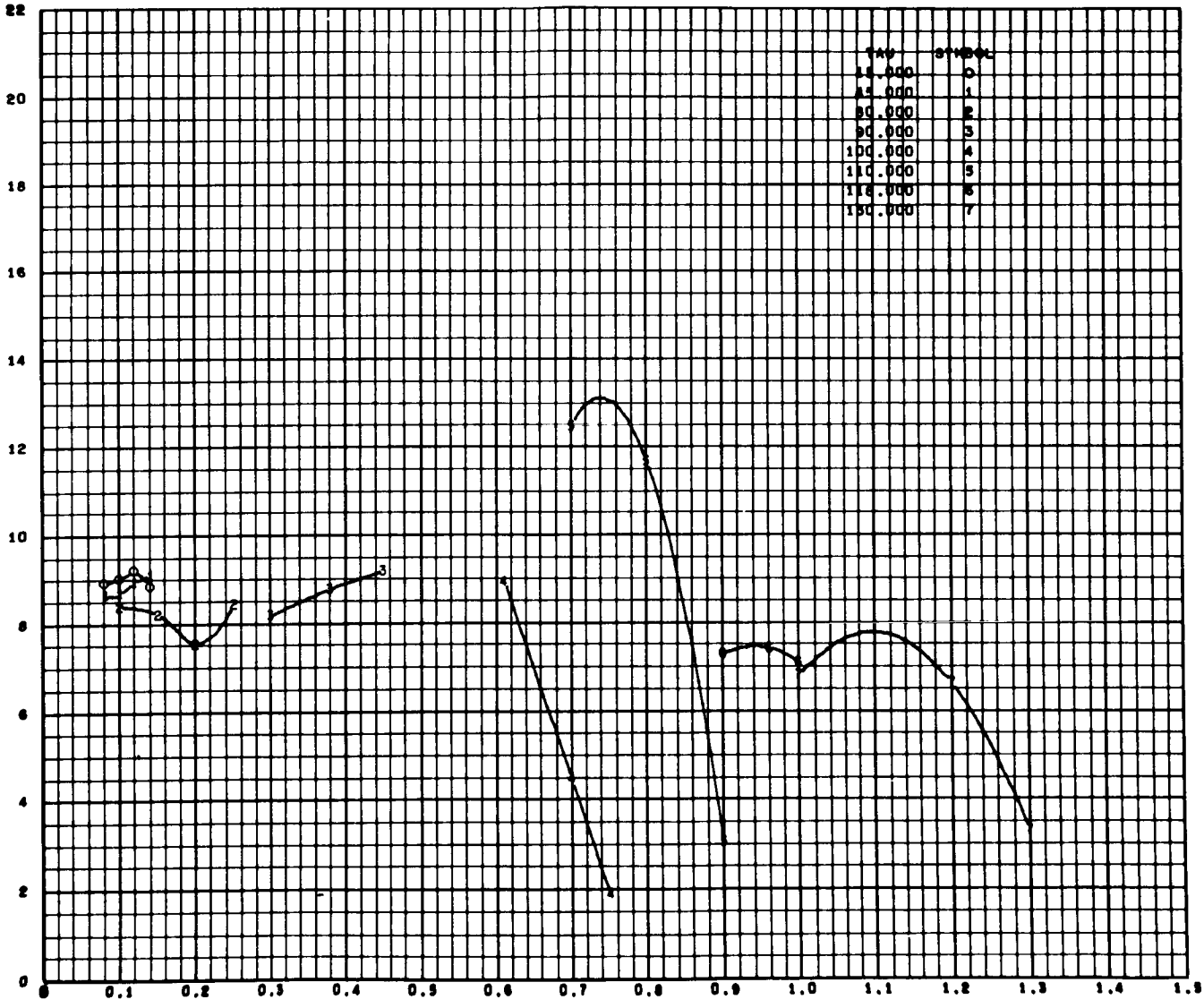
RE/FT --- 2.2459*10+6
Q(OM) --- 9.1726 BTU/SQ FT SEC

PLOT SERIES NUMBER 23

TEST GROUP	TIME (SEC)
40*	2.70
49	2.70
56	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
176 000



HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 162.50 DEG
ANGLE OF YAW --------- -0. DEG
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TOTAL TEMPERATURE ---- 1879.00 DEG RANKINE

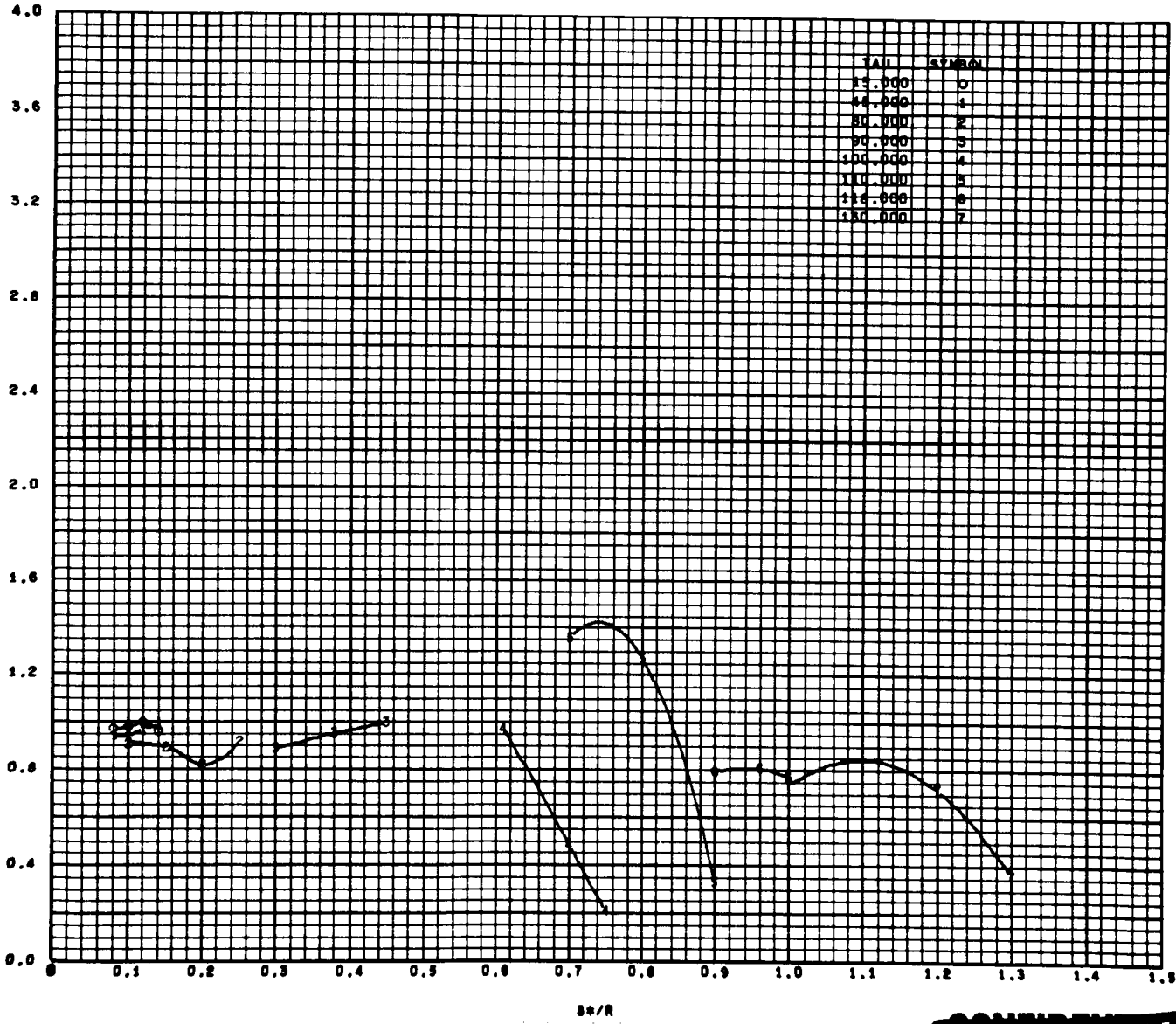
RE/FT --- 2.2459*10+6
Q(OM) --- 9.1726 BTU/SQ FT SEC

PLOT SERIES NUMBER 23

TEST GROUP	TIME (SEC)
40*	2.70
49	2.70
56	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
179 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 162.50 DEG
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TOTAL PRESSURE ------- 1826.30 PSIA
TOTAL TEMPERATURE ---- 1879.00 DEG RANKINE

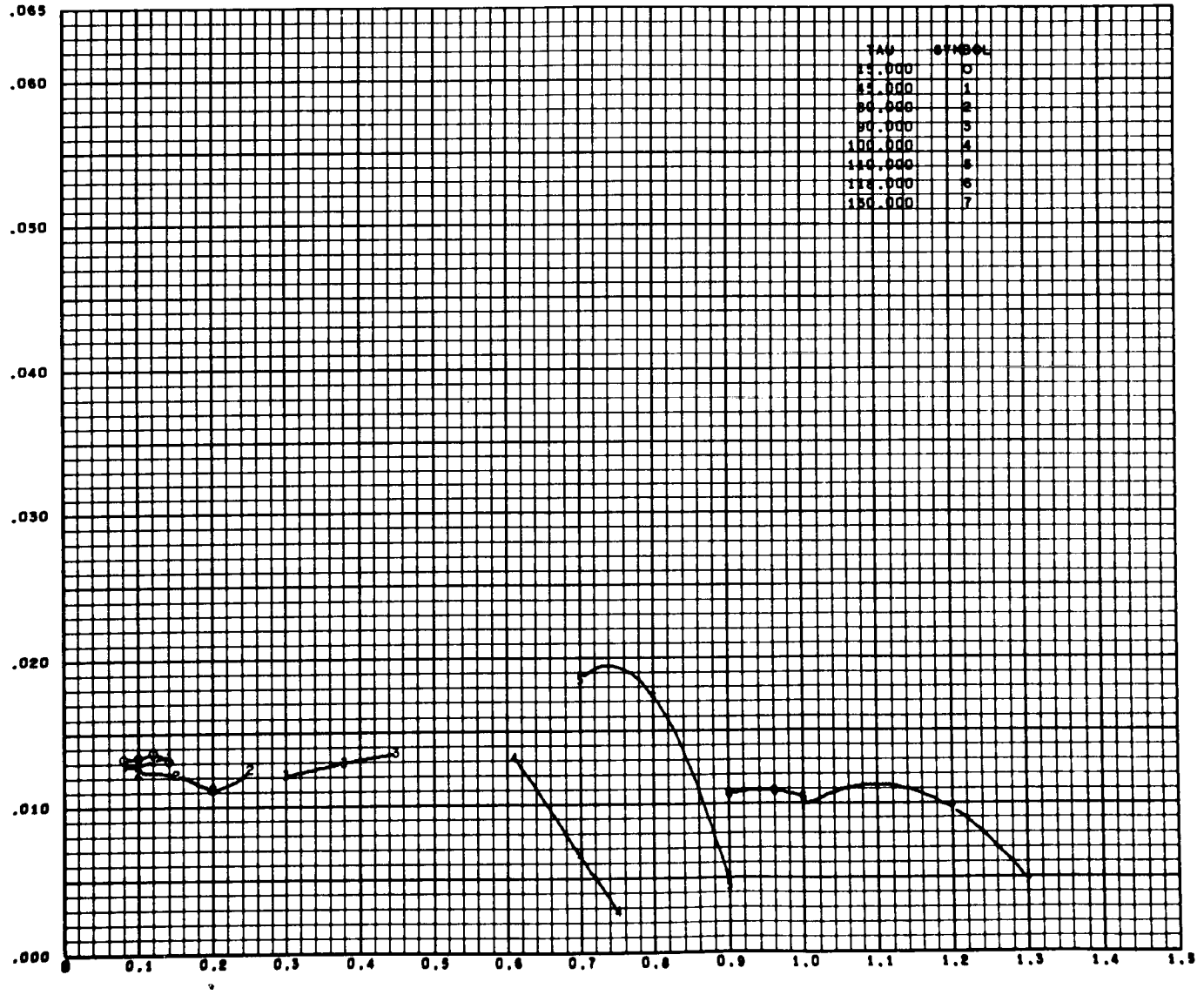
RE/FT --- 2.2459*10+6
Q(OM) --- 9.1726 BTU/SQ FT SEC

PLOT SERIES NUMBER 23

TEST GROUP	TIME (SEC)
40*	2.70
49	2.70
56	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
182 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 162.50 DEG
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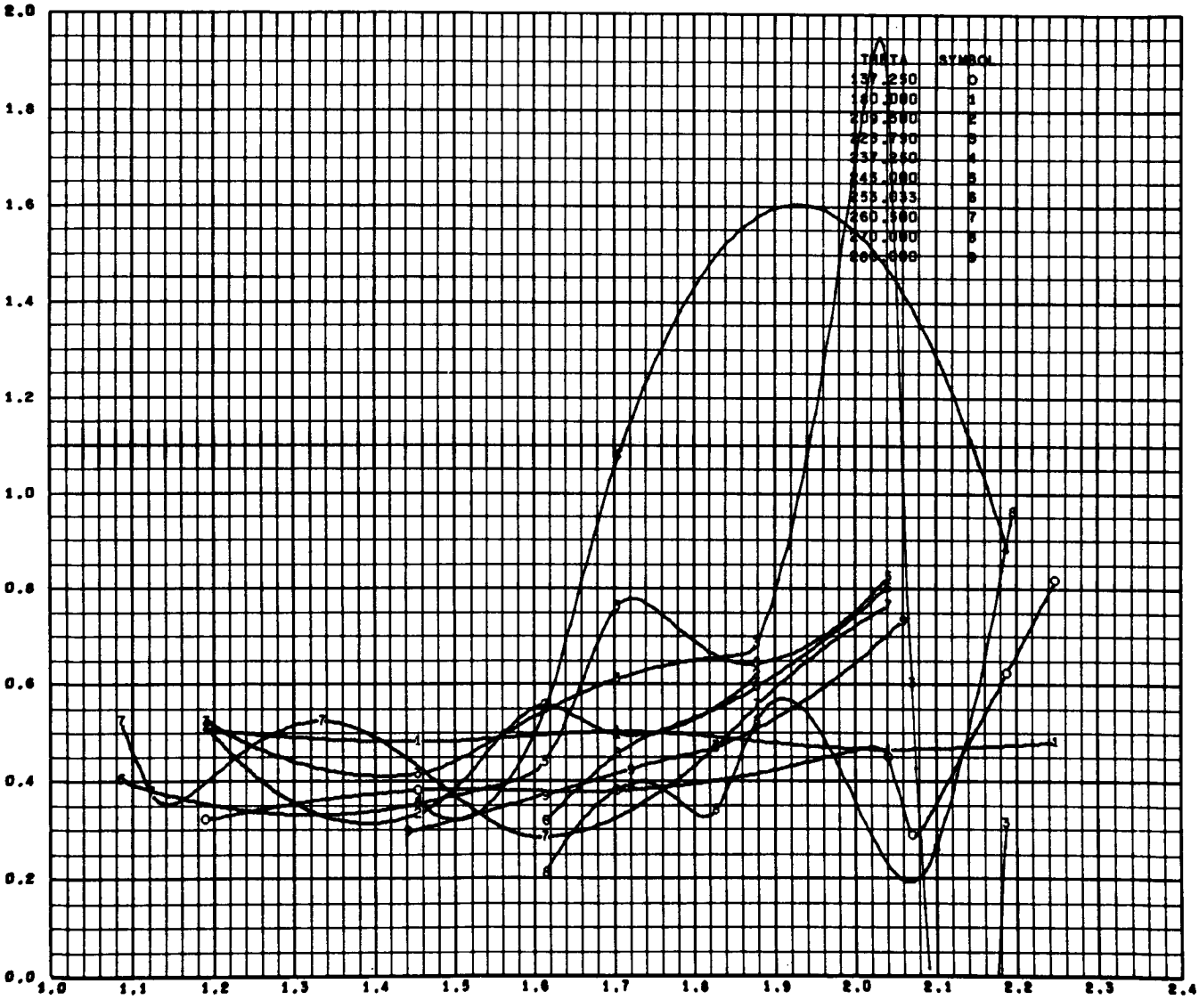
RE/FT --- 2.2459*10+6
Q(OM) --- 9.1726 BTU/SQ FT SEC

PLOT SERIES NUMBER 23

TEST GROUP	TIME (SEC)
40*	2.70
49	2.70
56	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
177 000



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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 162.50 DEG
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TOTAL PRESSURE ------- 1826.30 PSIA
TOTAL TEMPERATURE ---- 1879.00 DEG RANKINE

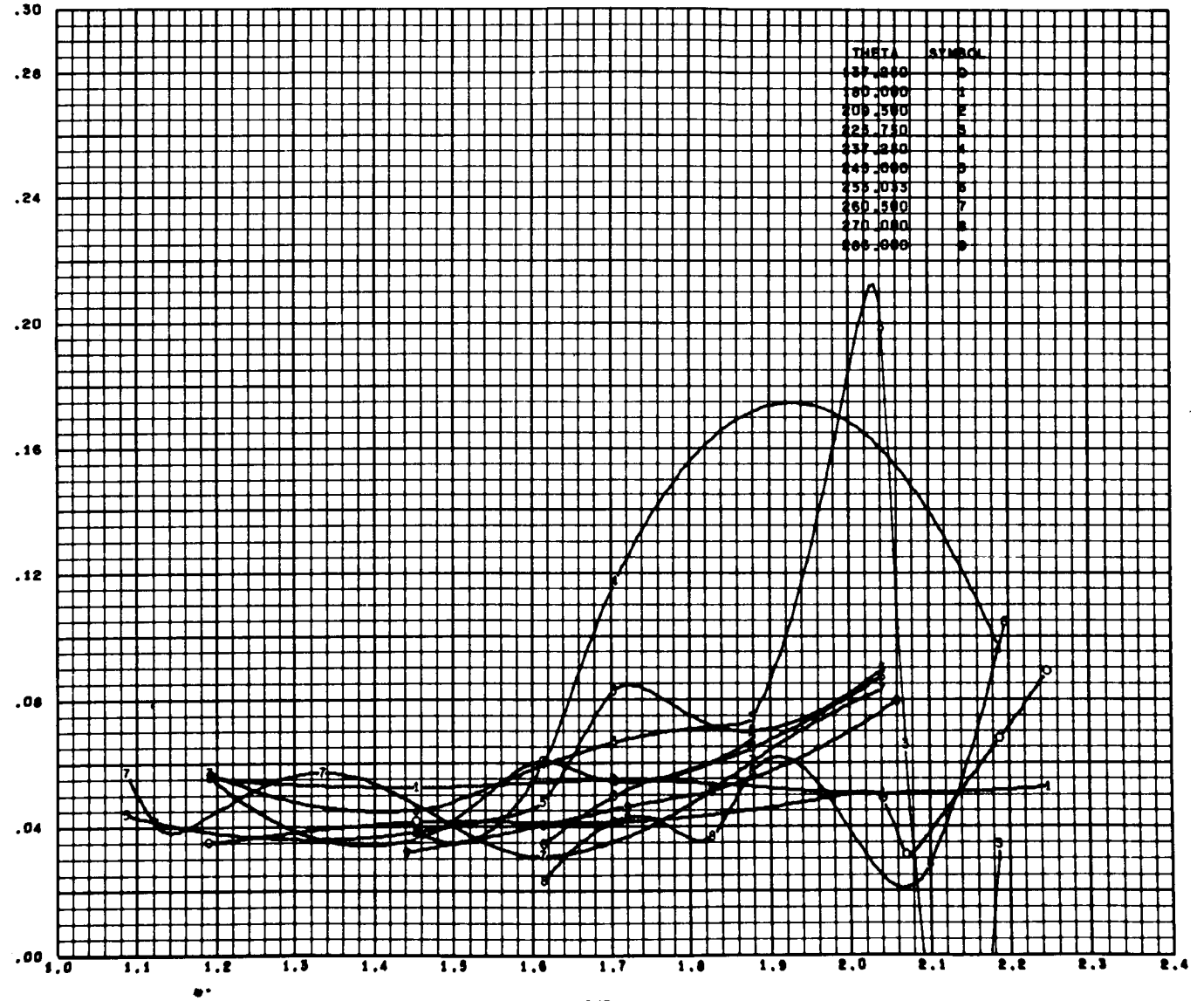
RE/FT --- 2.2459*10+6
Q(OM) --- 9.1726 BTU/SQ FT SEC

PLOT SERIES NUMBER 23

TEST GROUP	TIME (SEC)
40*	2.70
49	2.70
56	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
180 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C55

MACH NUMBER ---------- 10.19
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TOTAL TEMPERATURE ---- 1879.00 DEG RANKINE

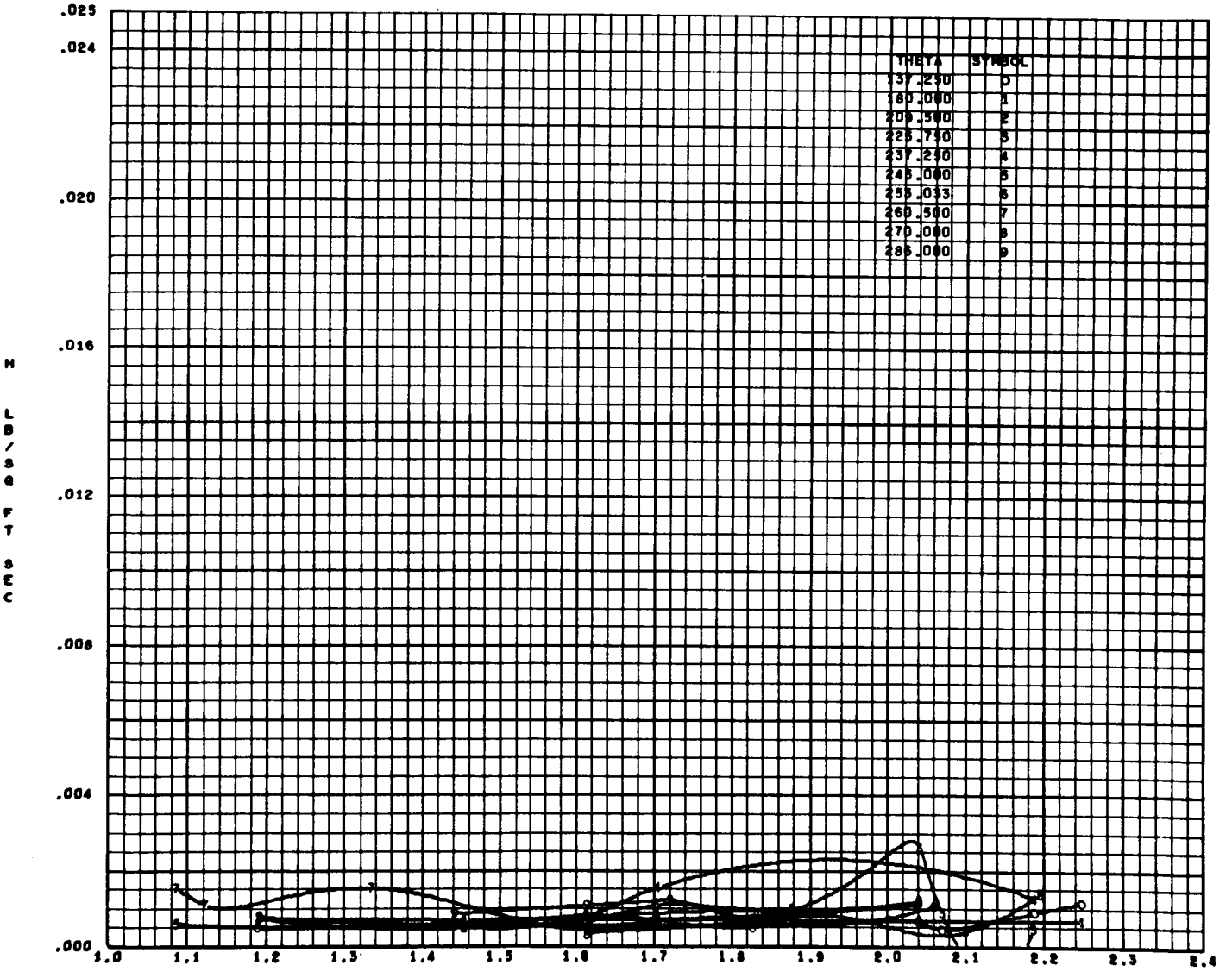
RE/FT --- 2.2459*10+6
Q(OM) --- 9.1726 BTU/SQ FT SEC

PLOT SERIES NUMBER 23

TEST GROUP	TIME (SEC)
40*	2.70
49	2.70
56	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-08
183 000



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A-183

SID 64-2080

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.39 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 215.30 PSIA
TOTAL TEMPERATURE ---- 1671.80 DEG RANKINE

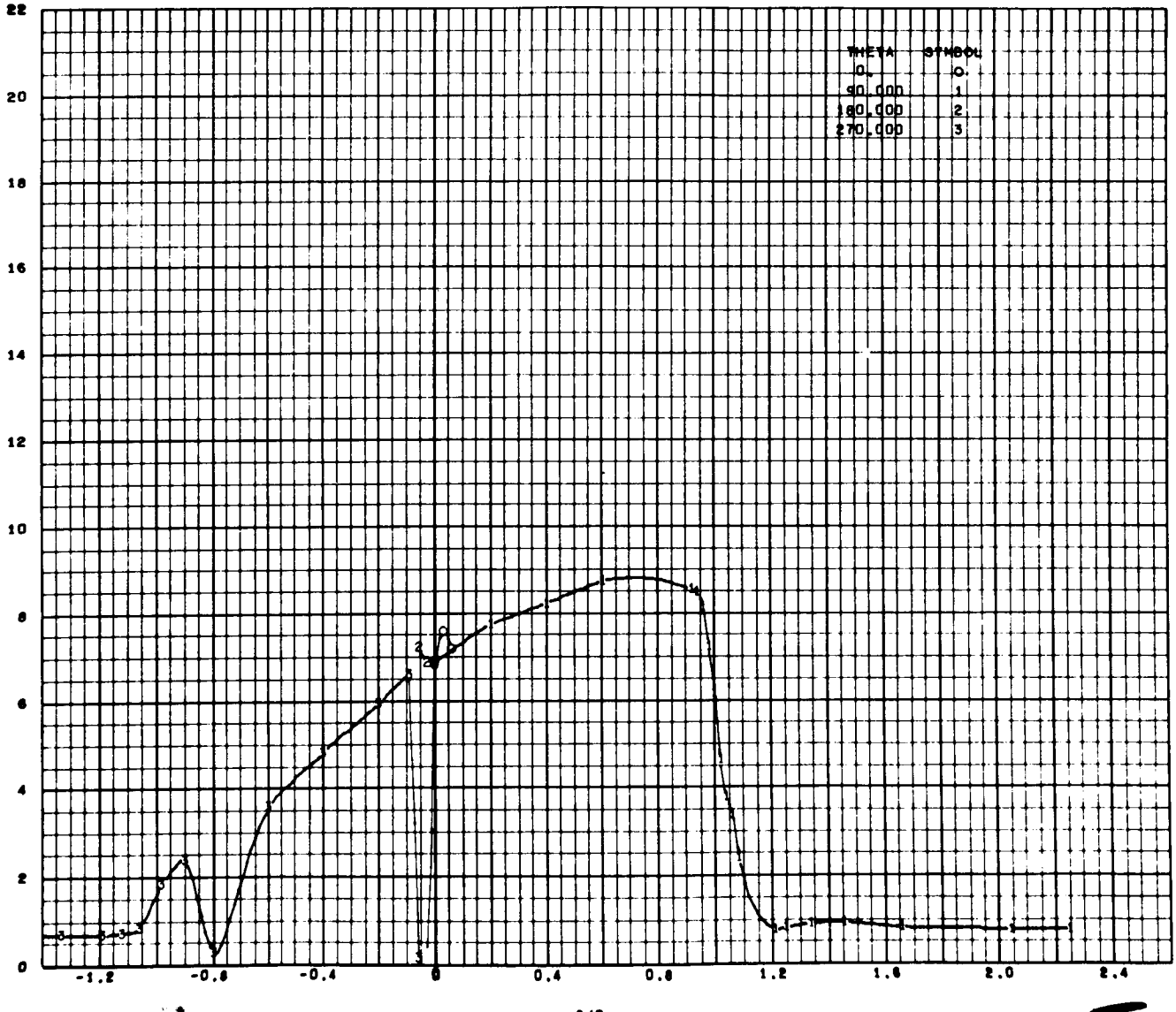
RE/FT --- 0.3298*10+6
Q(OM) --- 1.9462 BTU/SQ FT SEC

PLOT SERIES NUMBER 24

TEST GROUP	TIME (SEC)
60*	2.65
59	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09 L
001 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.39 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 215.30 PSIA
TOTAL TEMPERATURE ---- 1671.80 DEG RANKINE

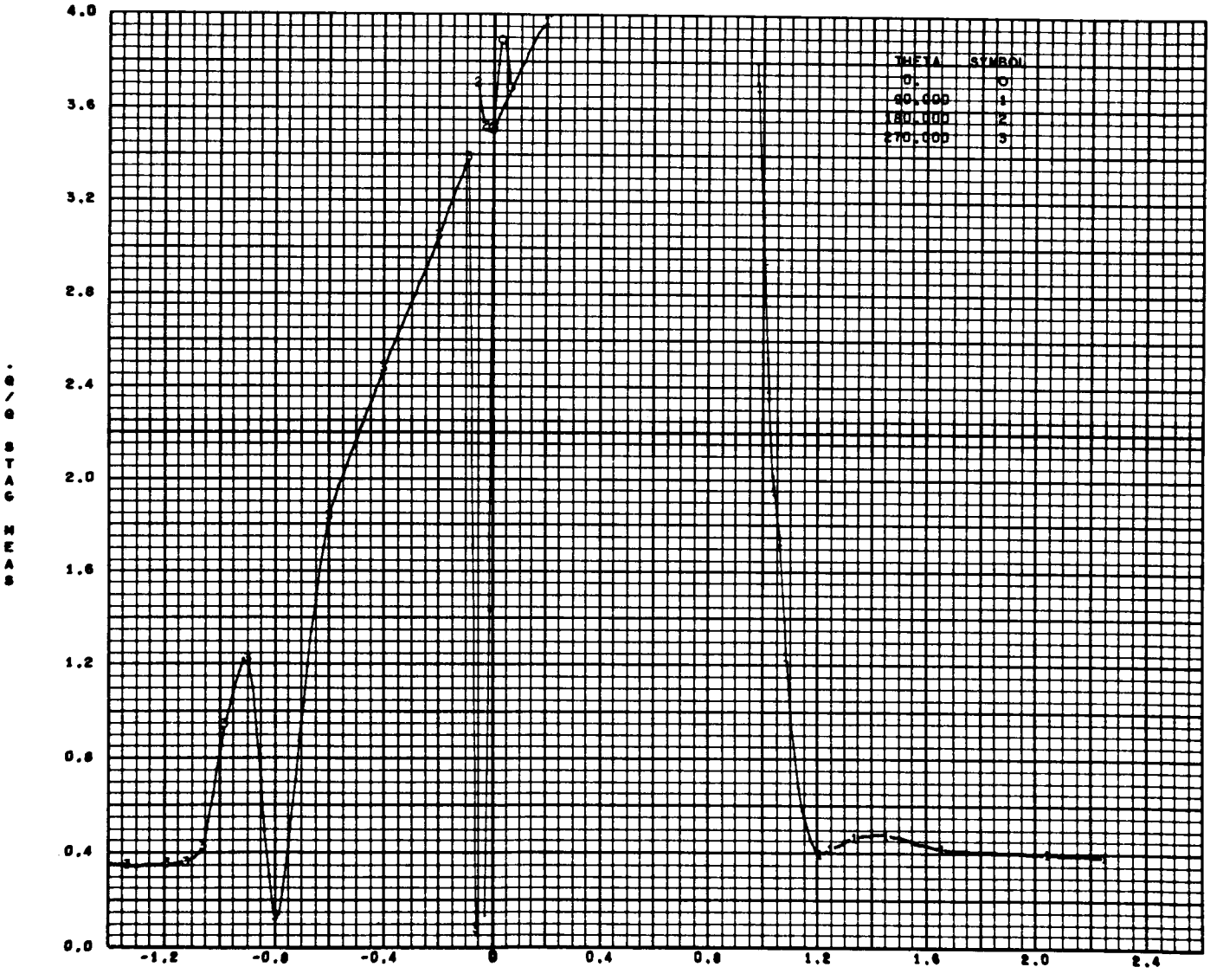
RE/FT --- 0.3298*10+6
Q(OM) --- 1.9462 BTU/SQ FT SEC

PLOT SERIES NUMBER 24

TEST GROUP	TIME (SEC)
60*	2.65
59	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
004 000



~~CONFIDENTIAL~~

HEAT TRANSFER | CONFIGURATION C58 | PLOT SERIES NUMBER 24 | 3937-09 007 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.39 DEG
ANGLE OF YAW --------- -0. DEG
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Q(OM) --- 1.9462 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
60*	2.65
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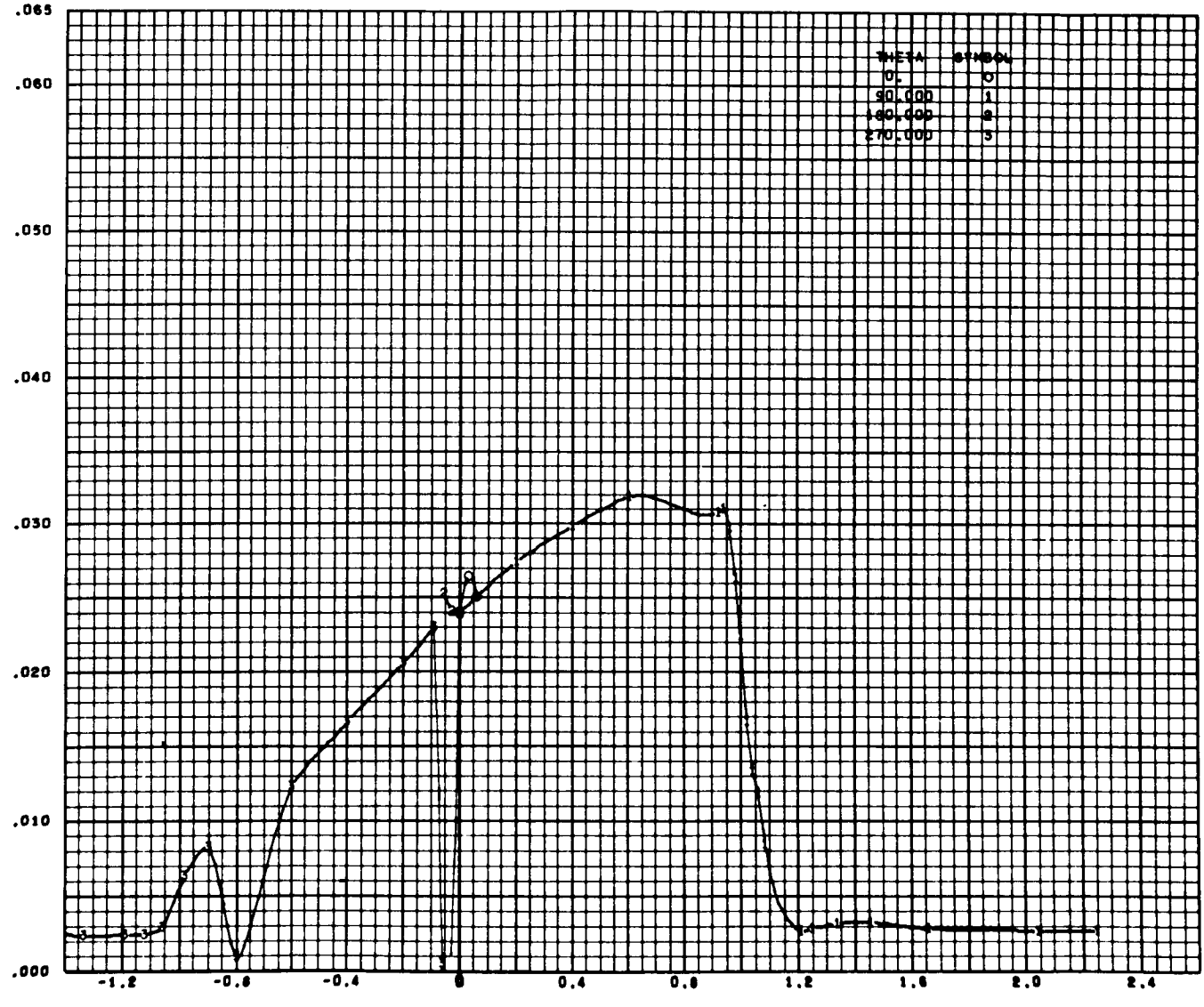
* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



~~CONFIDENTIAL~~

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

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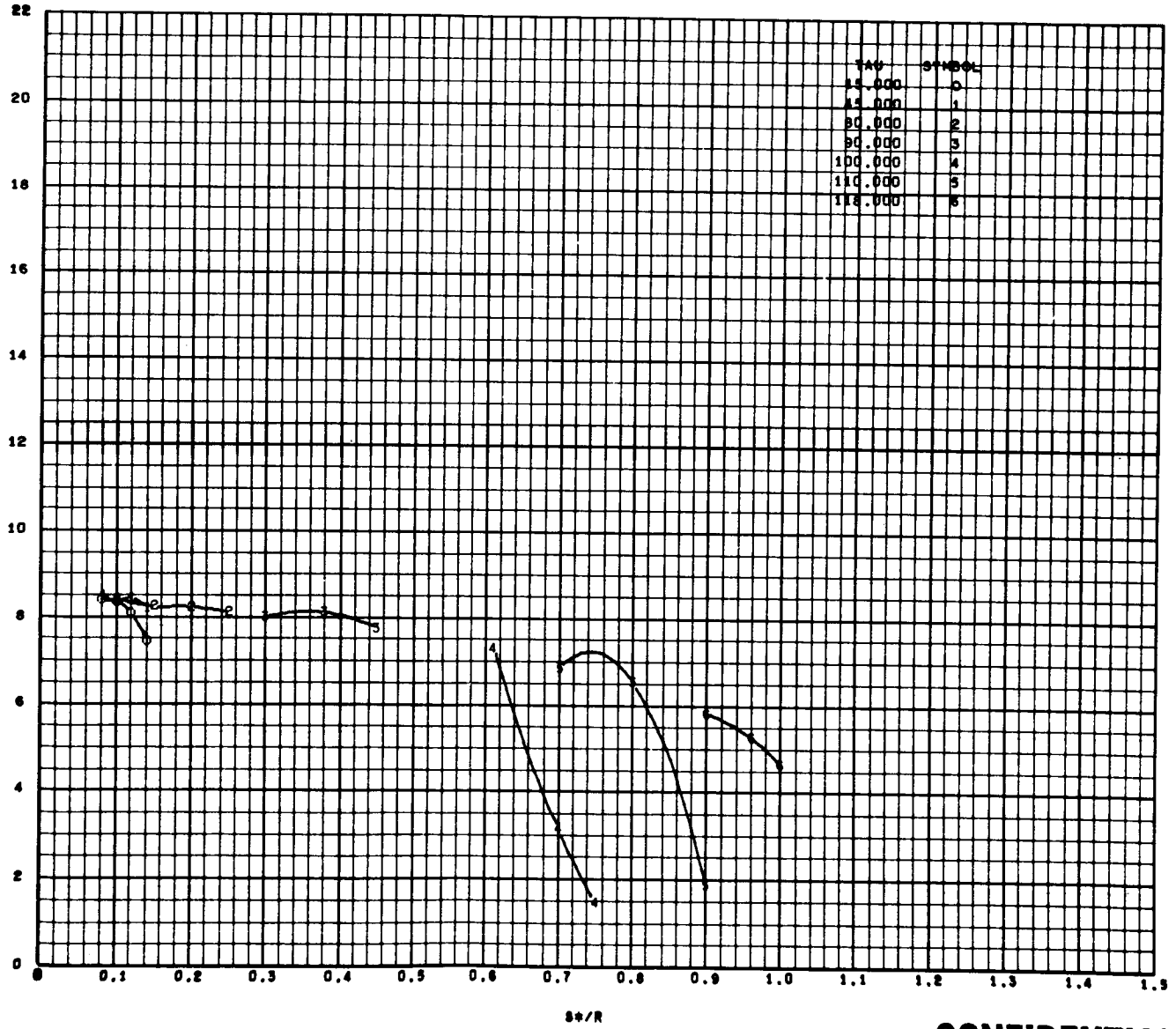
TEST GROUP	TIME (SEC)
60*	2.65
59	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
002 000



[redacted]

CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.39 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 215.30 PSIA
TOTAL TEMPERATURE ---- 1671.80 DEG RANKINE

RE/FT --- 0.3298*10+6
Q(OM) --- 1.9462 BTU/SQ FT SEC

PLOT SERIES NUMBER 24

TEST GROUP	TIME (SEC)
60*	2.65
59	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
005 000

CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.39 DEG
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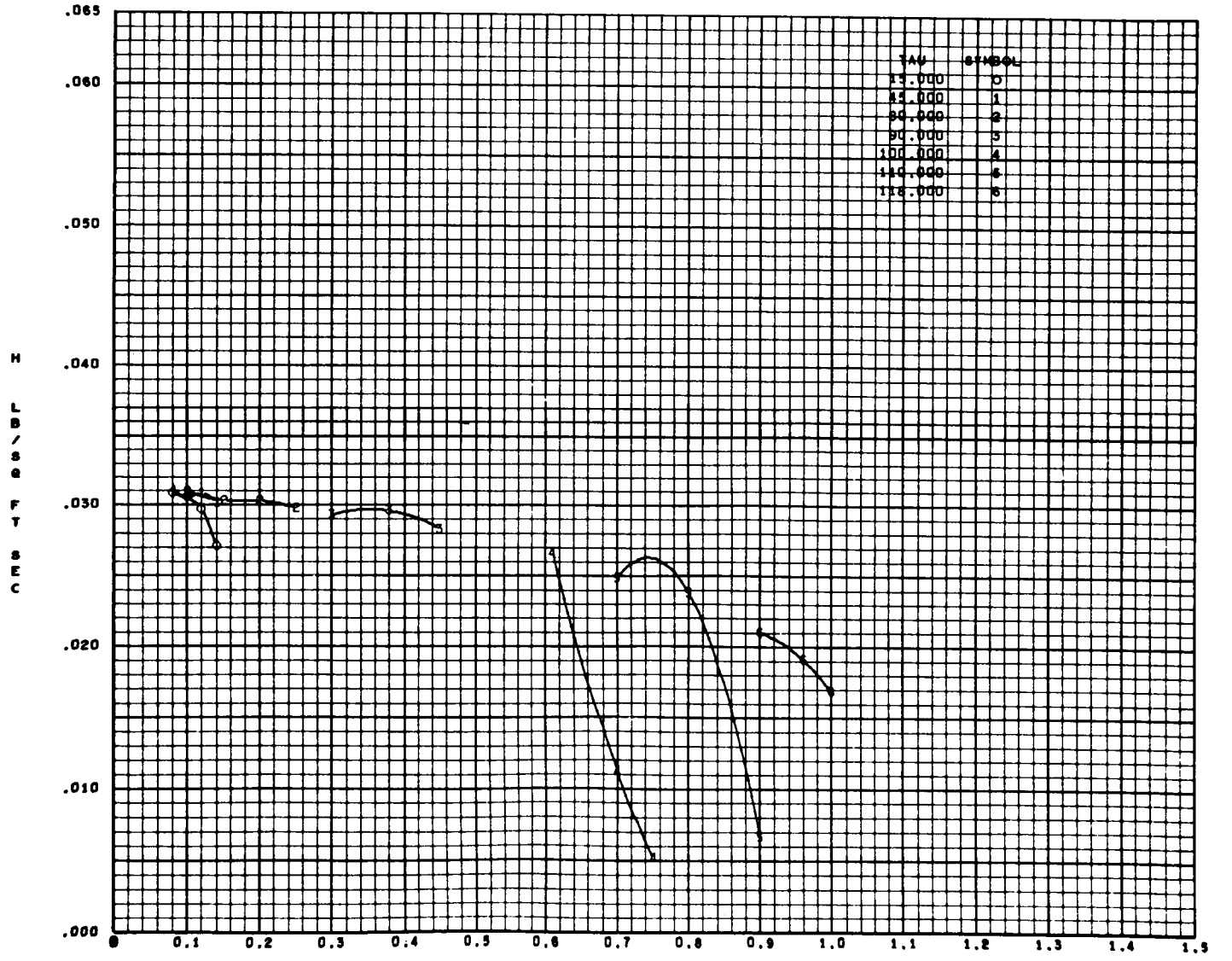
PLOT SERIES NUMBER 24

TEST GROUP	TIME (SEC)
60*	2.65
59	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
008 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

MACH NUMBER ---------- 10.04
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TEST GROUP	TIME (SEC)
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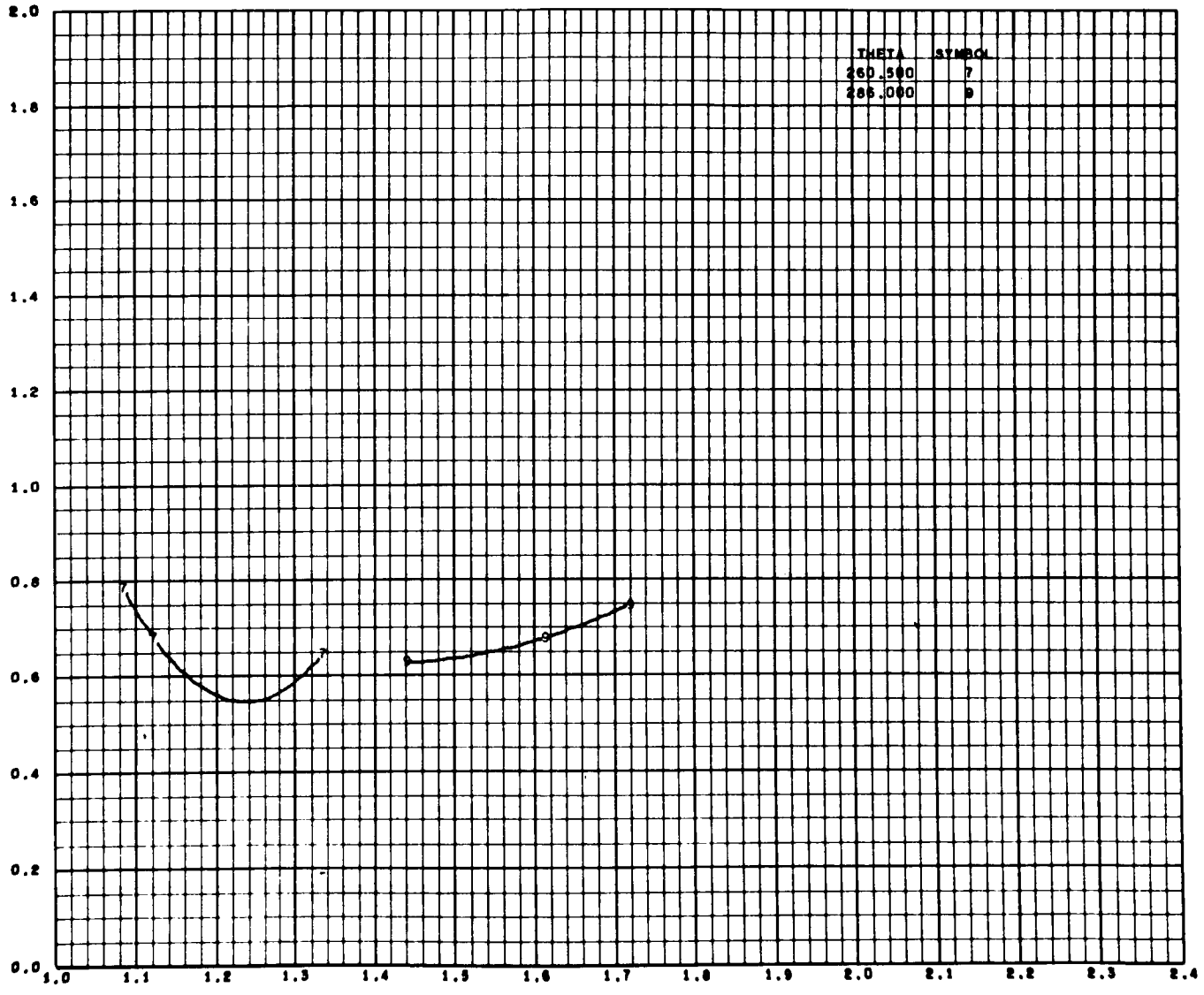
3937-09
003 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

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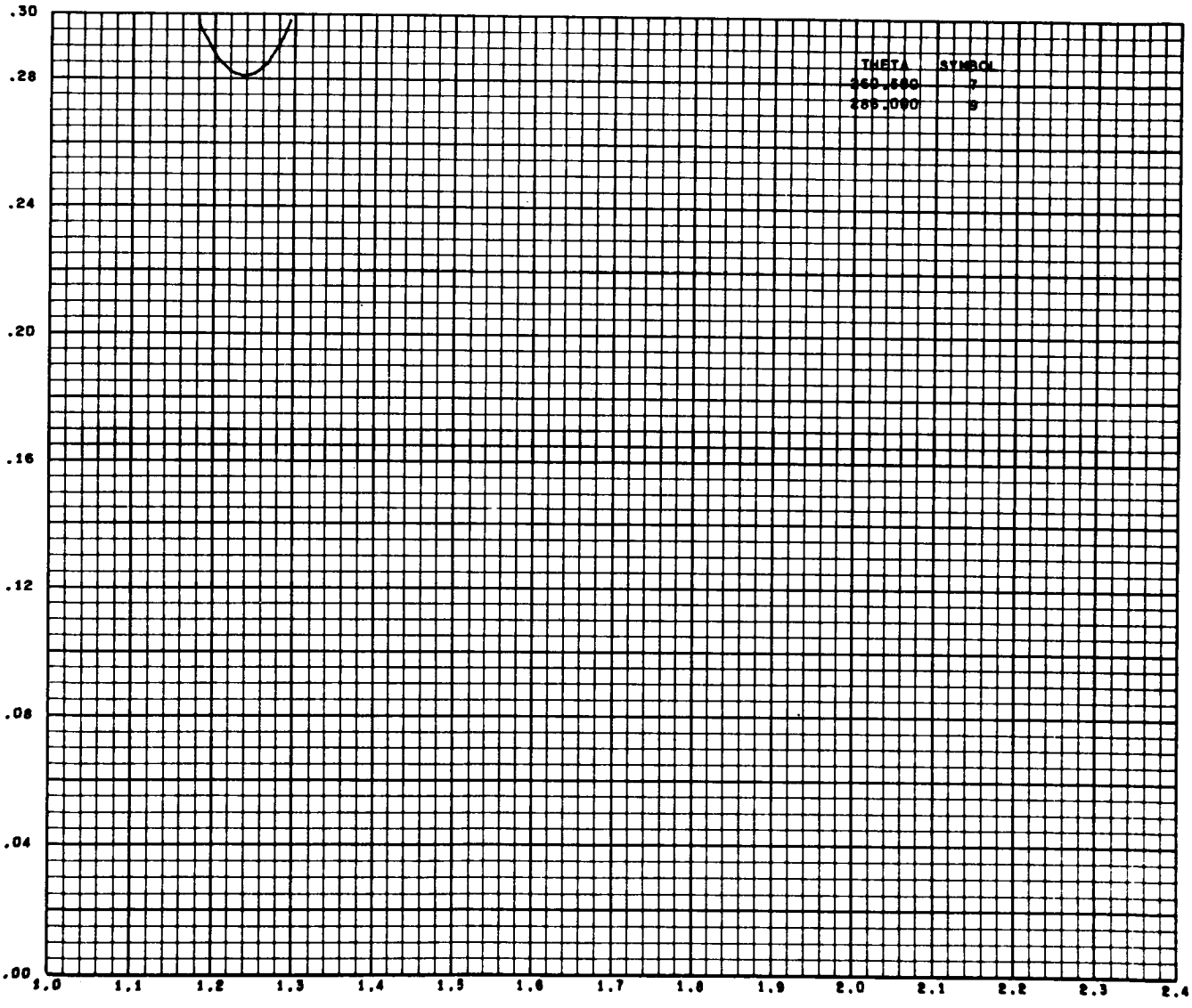
3937-09
006 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

MACH NUMBER ---------- 10.04
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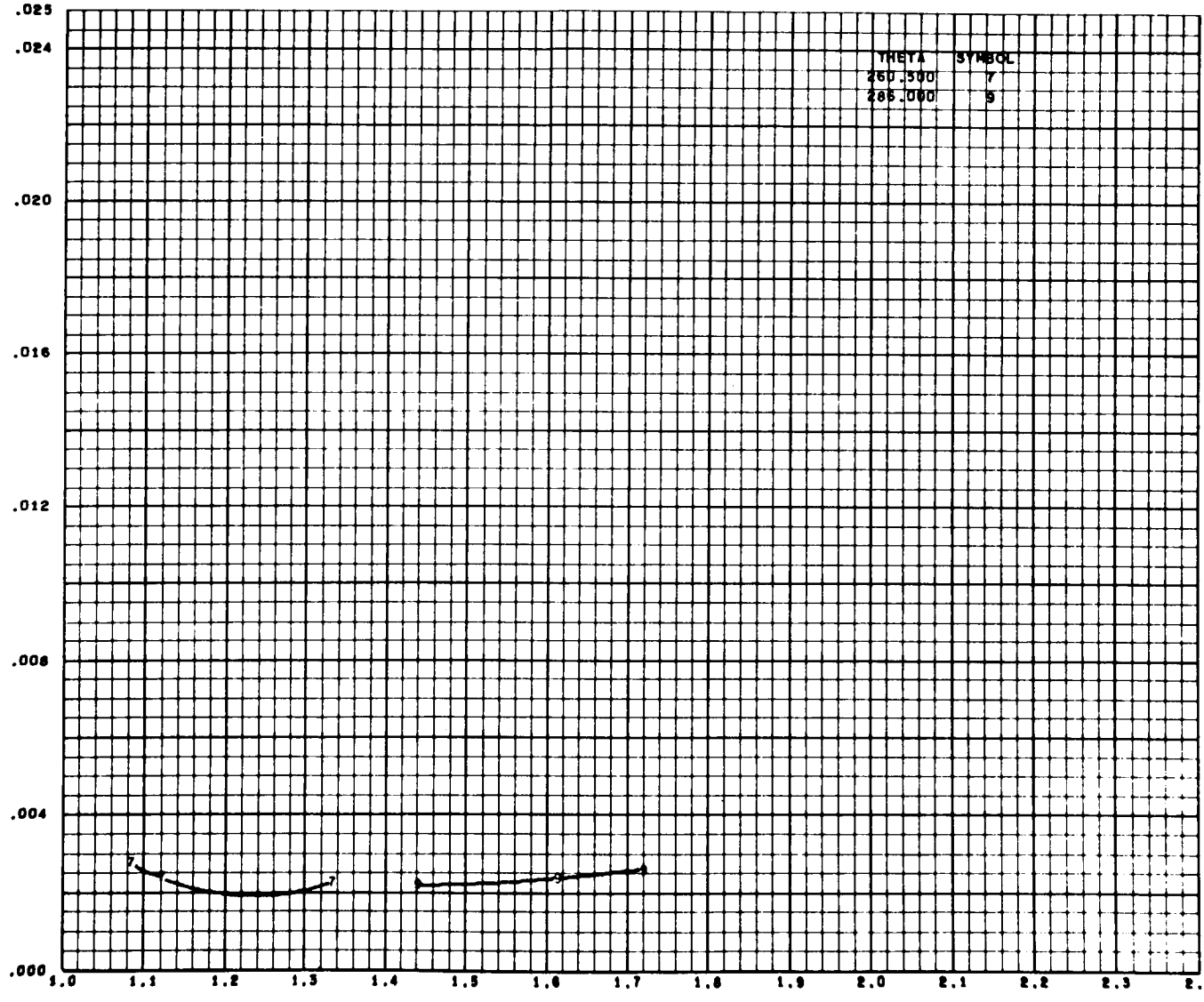
PLOT SERIES NUMBER 24

TEST GROUP	TIME (SEC)
60*	2.65
59	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
009 000



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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.42 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1852.10 PSIA
TOTAL TEMPERATURE ---- 1872.70 DEG RANKINE

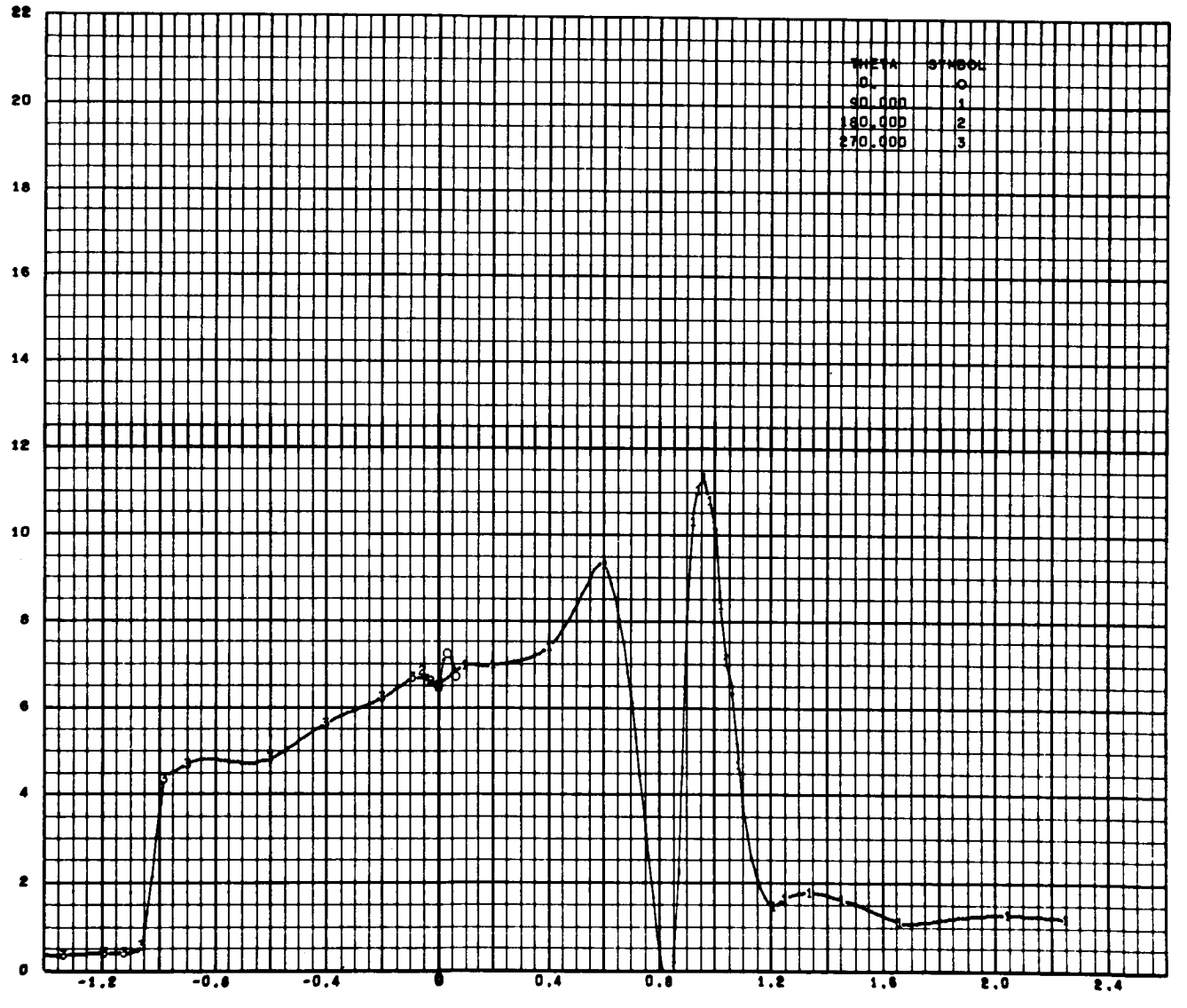
RE/FT --- 2.2922*10+6
Q(OM) --- 9.2548 BTU/SQ FT SEC

PLOT SERIES NUMBER 25

TEST GROUP	TIME (SEC)
57*	2.65
58	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
010 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

MACH NUMBER ---------- 10.19
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PLOT SERIES NUMBER 25

TEST GROUP	TIME (SEC)
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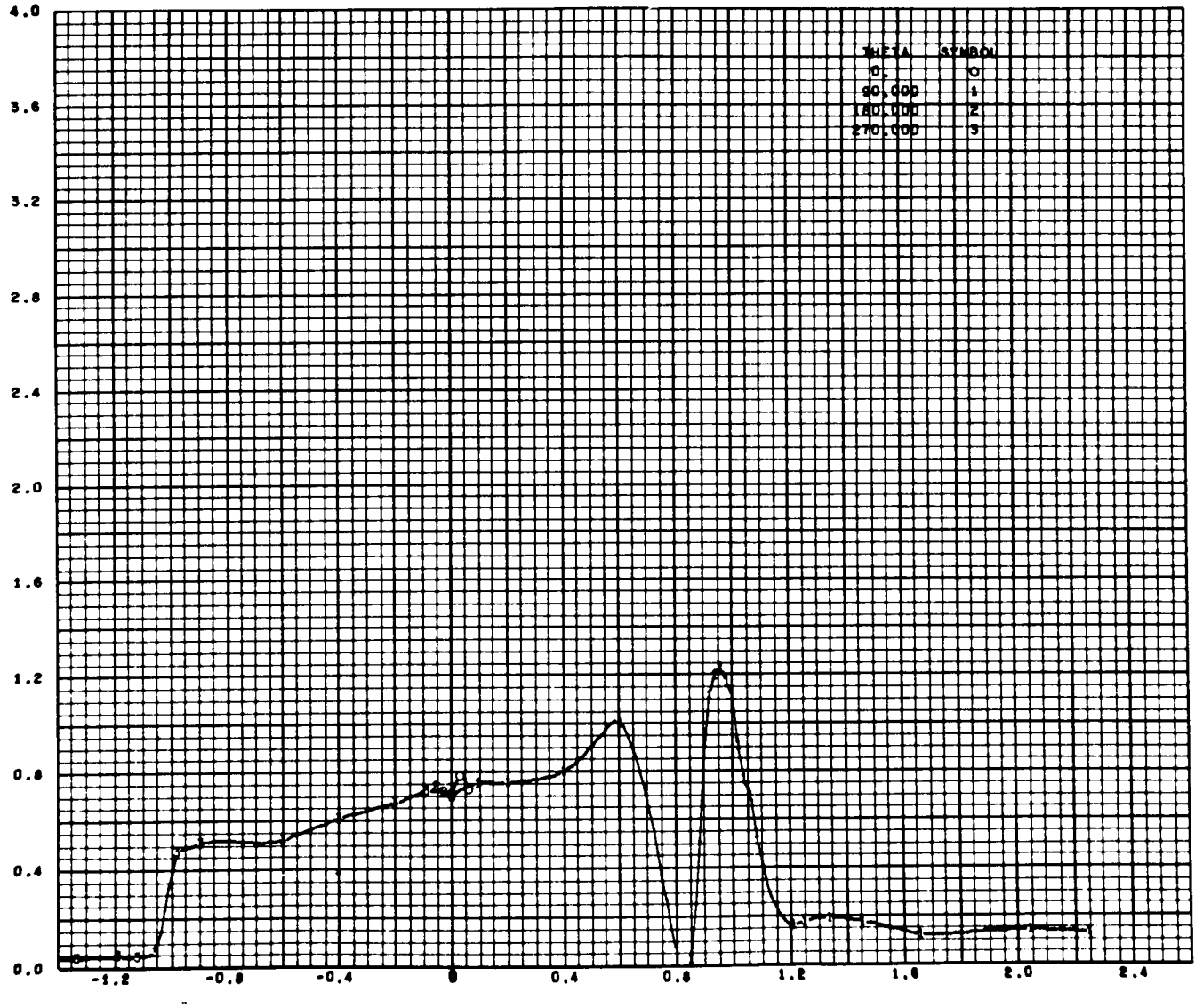
3937-09
013 000



S/R

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

MACH NUMBER ---------- 10.19
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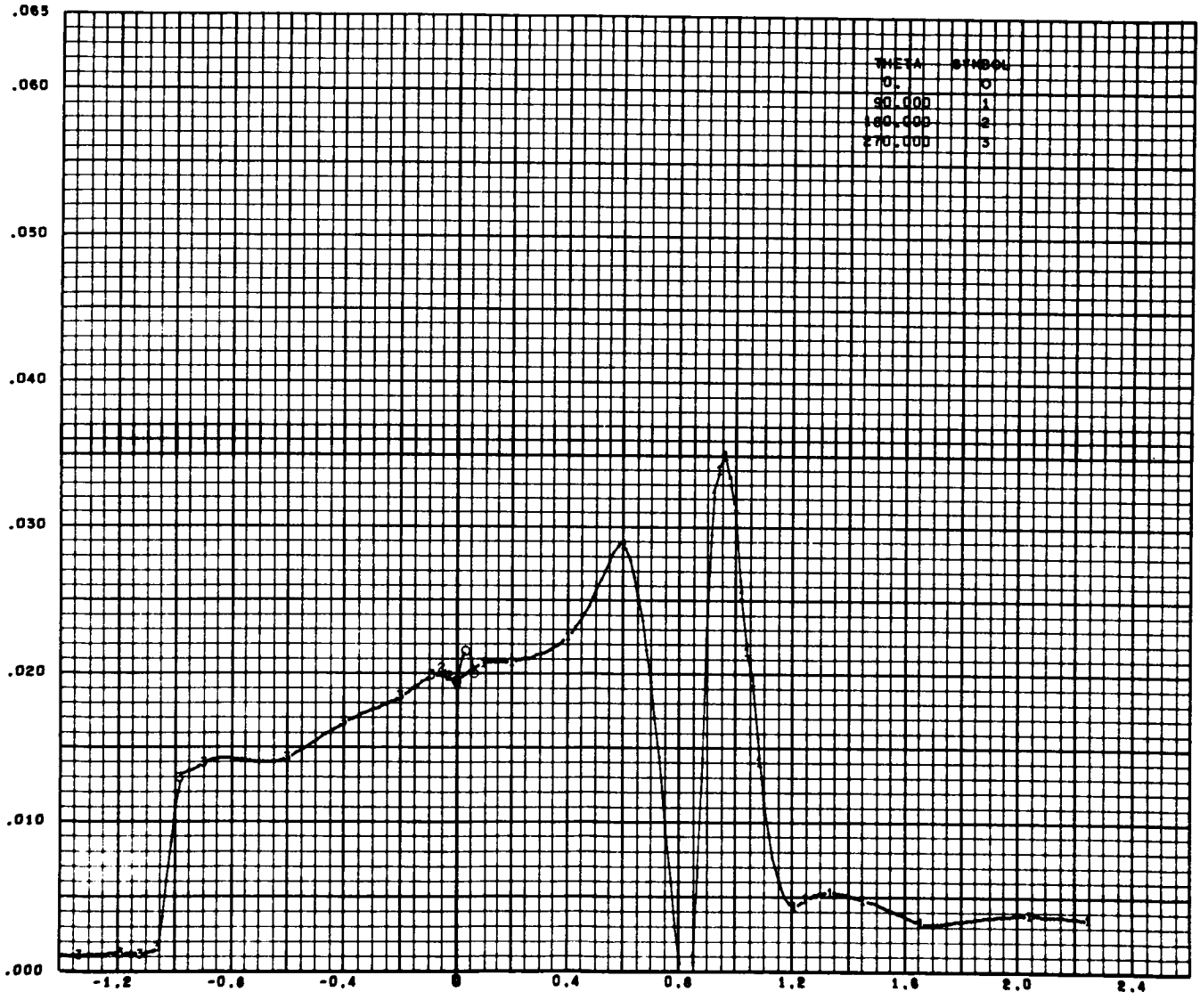
PLOT SERIES NUMBER 25

TEST GROUP	TIME (SEC)
57*	2.65
58	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
016 001



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

MACH NUMBER ---------- 10.19
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RE/FT --- 2.2922*10+6
Q(OM) --- 9.2548 BTU/SQ FT SEC

PLOT SERIES NUMBER 25

TEST GROUP	TIME (SEC)
57*	2.65
58	2.65

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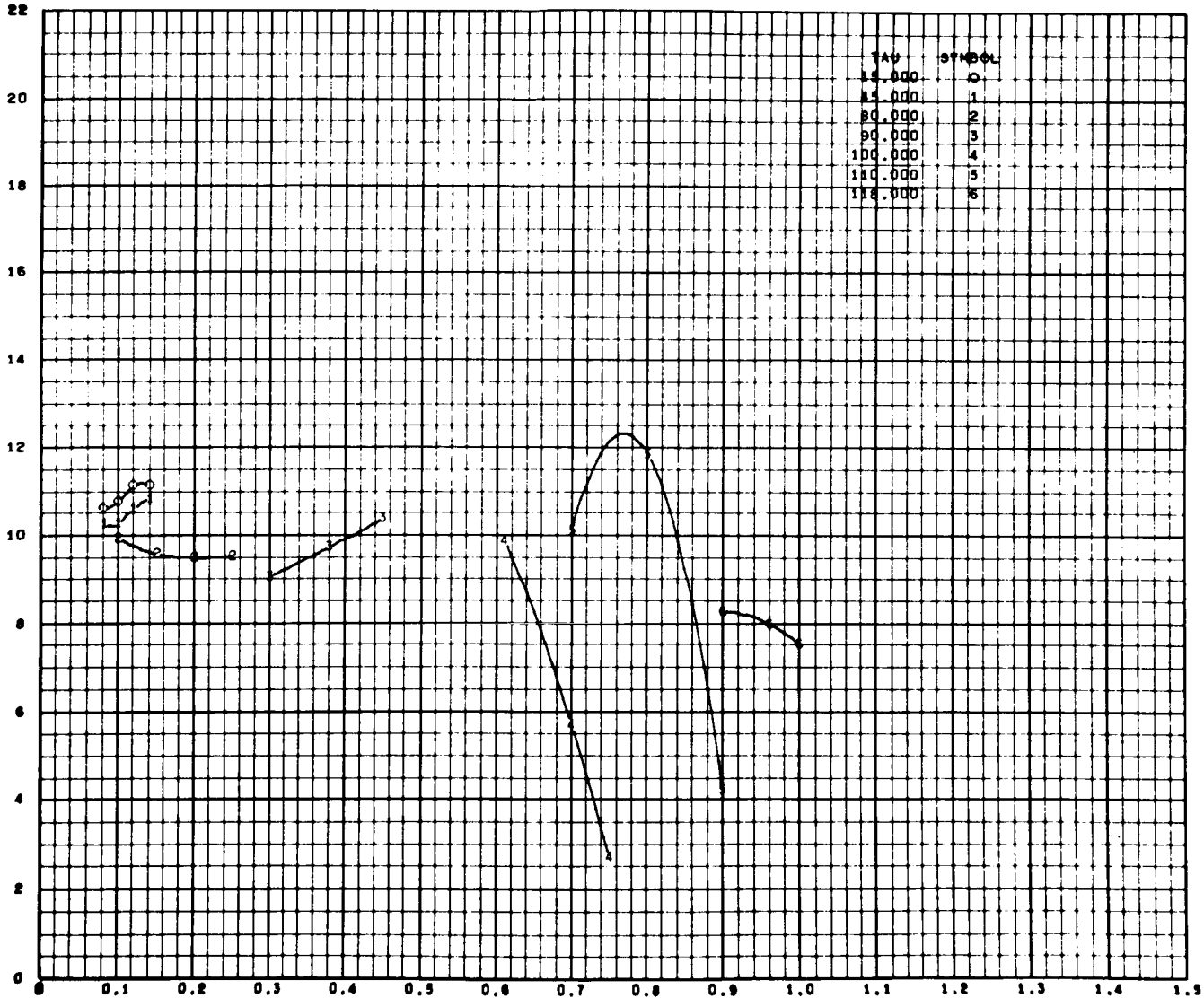
3937-09
011 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.42 DEG
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RE/FT --- 2.2922*10+6
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PLOT SERIES NUMBER 25

TEST GROUP	TIME (SEC)
57*	2.65
58	2.65

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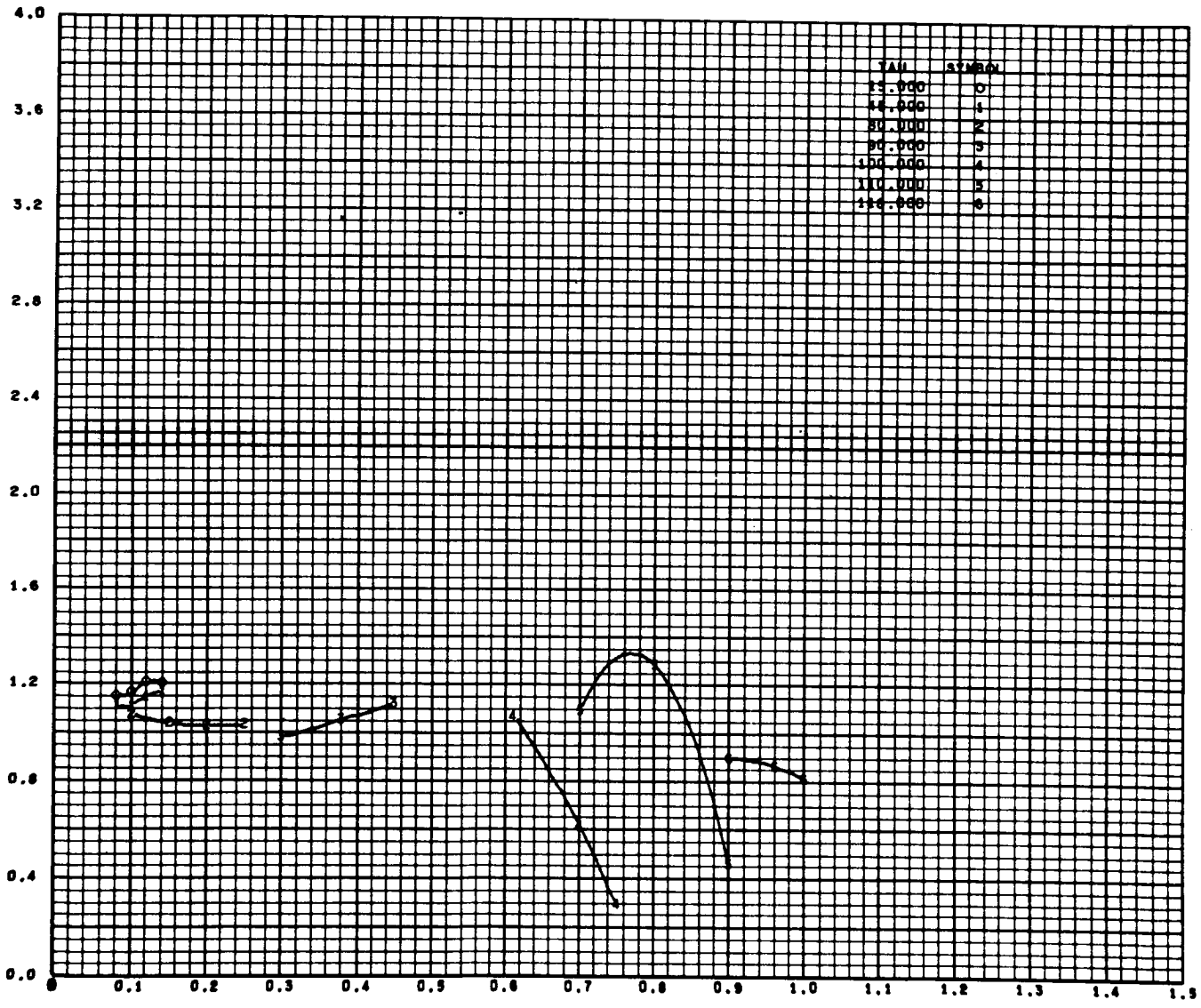
3937-09
014 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

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57*	2.65
58	2.65

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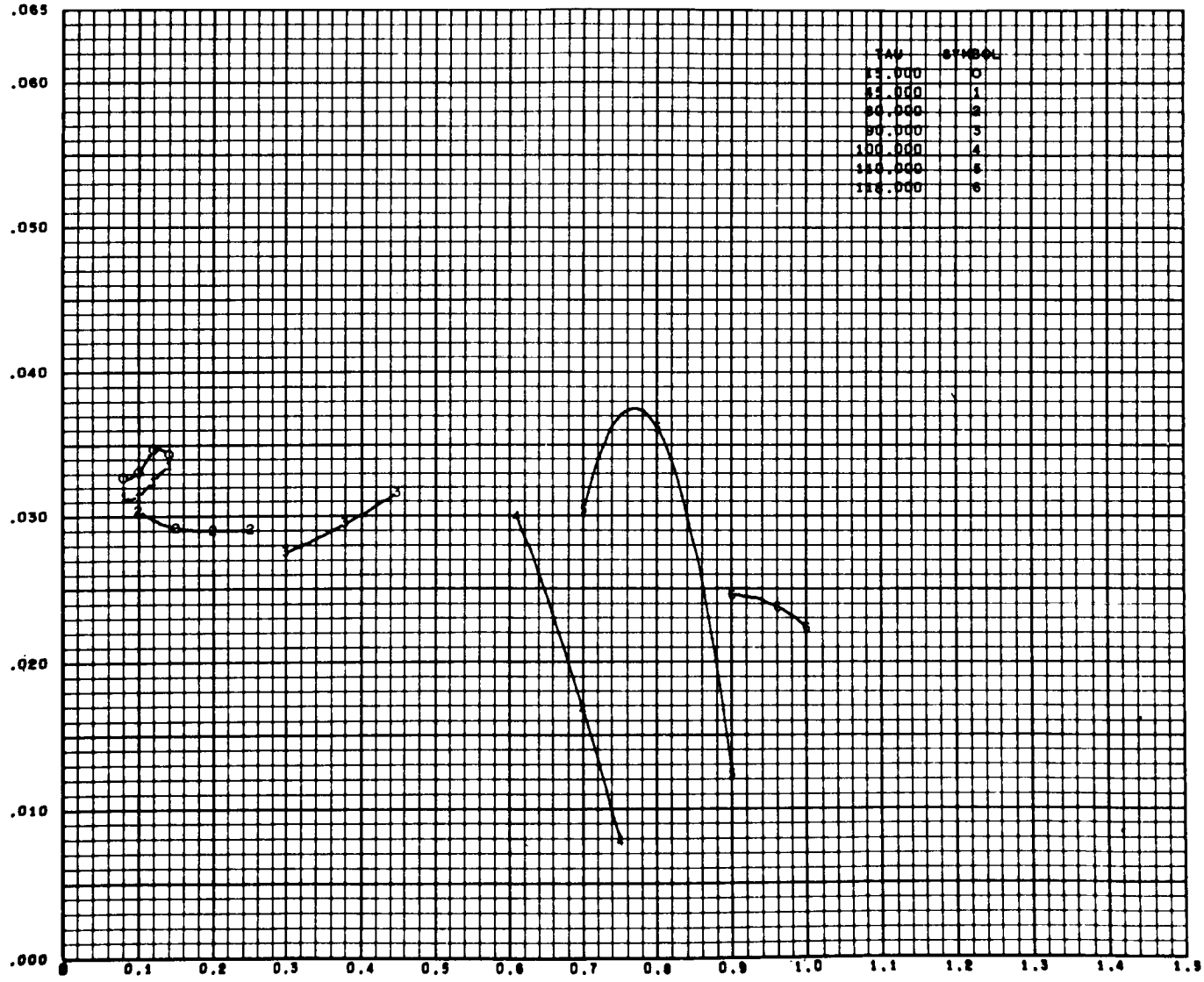
3937-09
017 000



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~~CONFIDENTIAL~~

HEAT TRANSFER — CONFIGURATION C58 — PLOT SERIES NUMBER 25 — 3937-09 012 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.42 DEG
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TEST GROUP	TIME (SEC)
57*	2.65
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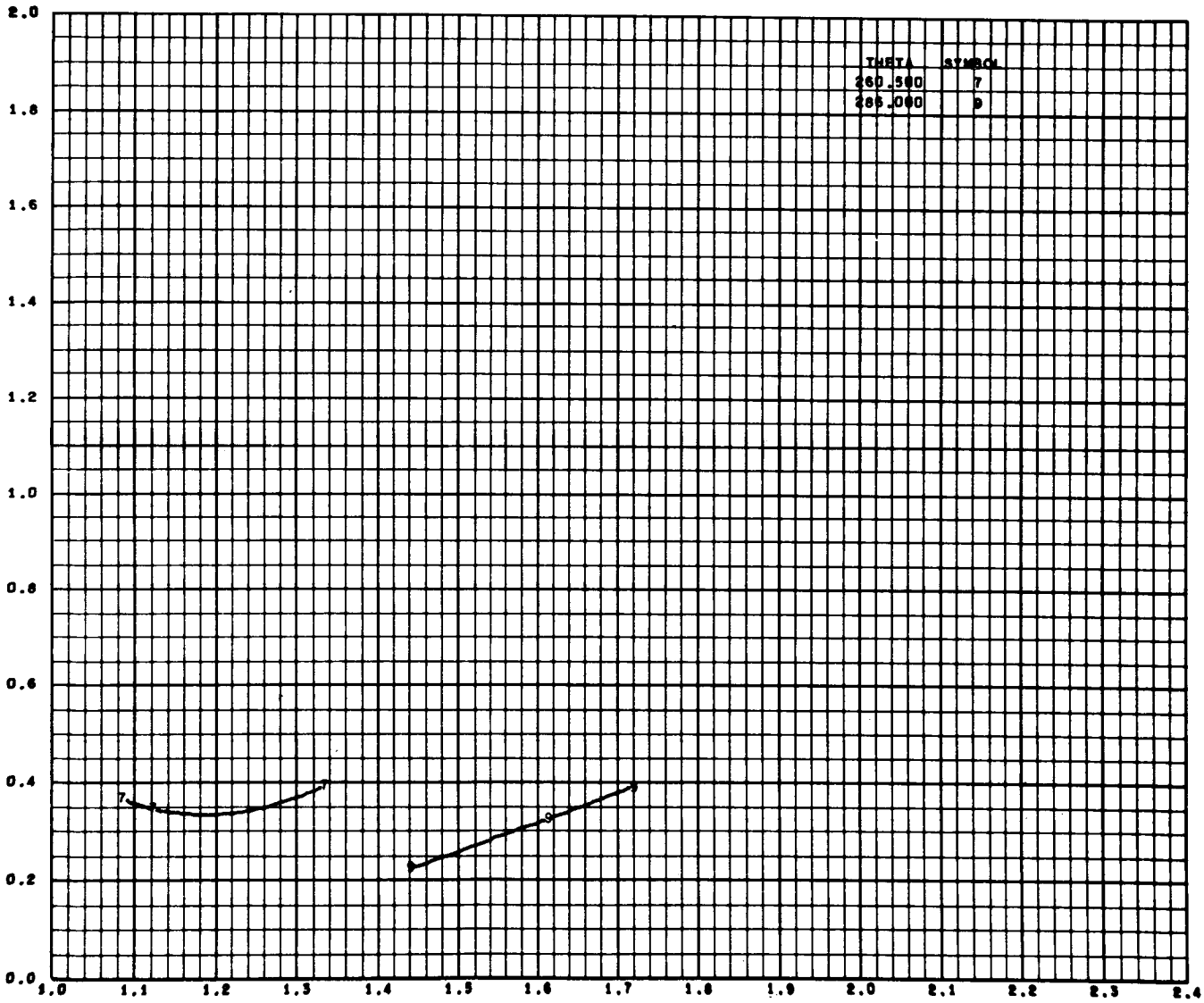

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

MACH NUMBER ---------- 10.19
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RE/FT --- 2.2922*10+6
Q(OM) --- 9.2548 BTU/SQ FT SEC

PLOT SERIES NUMBER 25

TEST GROUP	TIME (SEC)
57*	2.65
58	2.65

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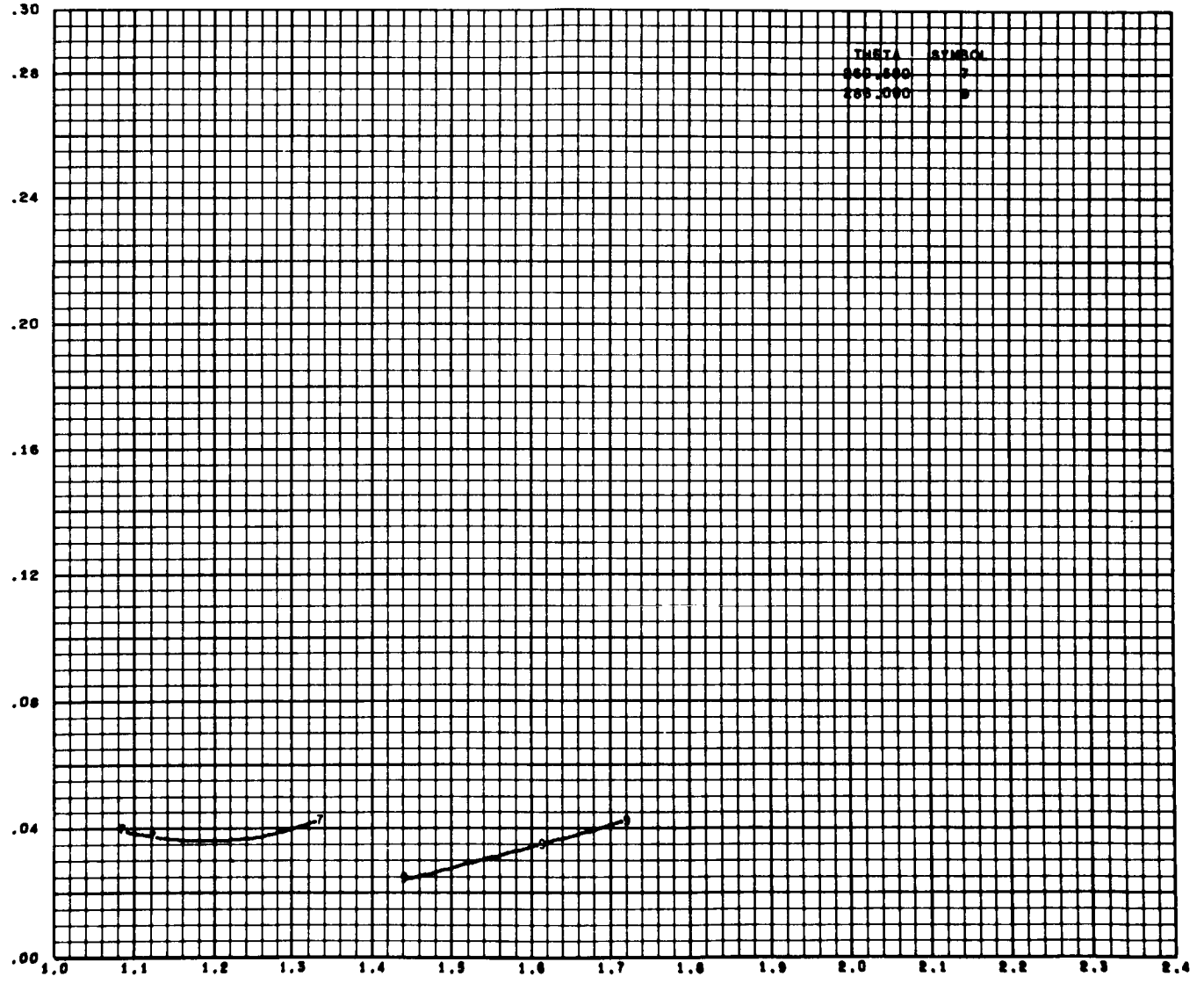
3937-09
013 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C58

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TOTAL TEMPERATURE ---- 1872.70 DEG RANKINE

RE/FT --- 2.2922*10+6
Q(OM) --- 9.2548 BTU/SQ FT SEC

PLOT SERIES NUMBER 25

TEST GROUP	TIME (SEC)
57*	2.65
58	2.65

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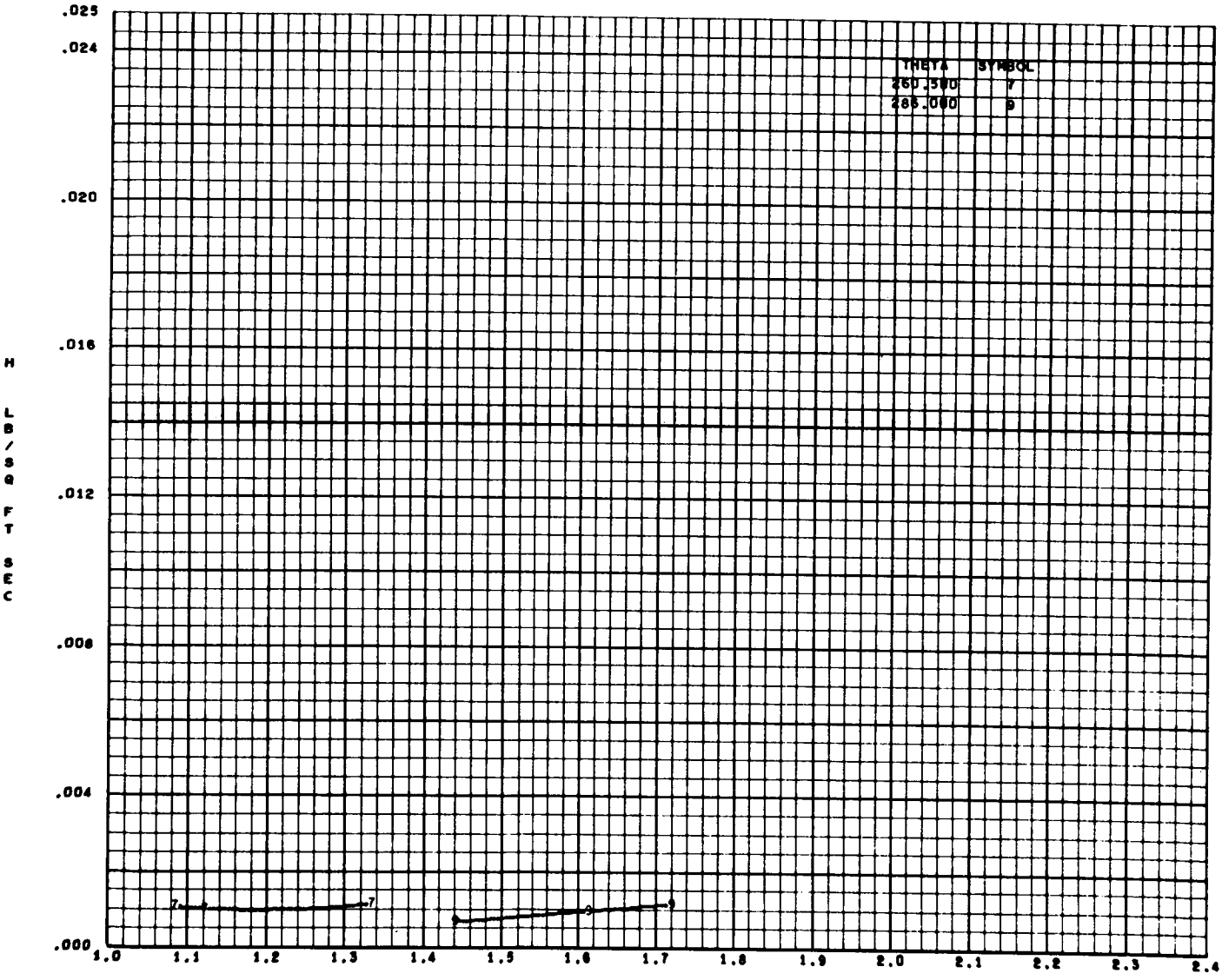
3937-09
018 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C59

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 222.70 PSIA
TOTAL TEMPERATURE ---- 1658.70 DEG RANKINE

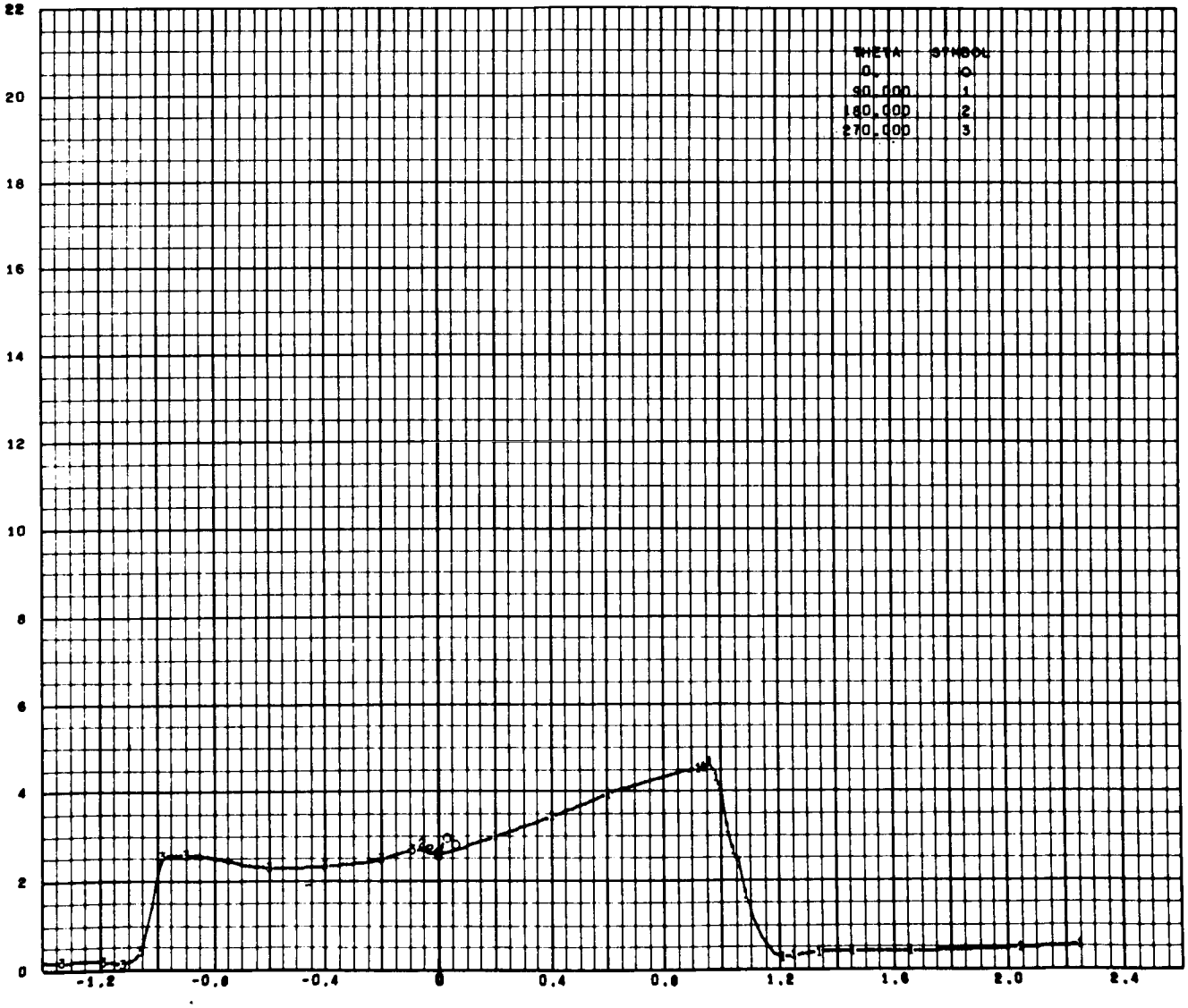
RE/FT --- 0.3458*10+6
Q(OM) --- 1.9889 BTU/SQ FT SEC

PLOT SERIES NUMBER 26

TEST GROUP	TIME (SEC)
61*	2.70
62	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
019 000



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A-202

SID 64-2080

[redacted]

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HEAT TRANSFER

CONFIGURATION C59

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 222.70 PSIA
TOTAL TEMPERATURE ---- 1658.70 DEG RANKINE

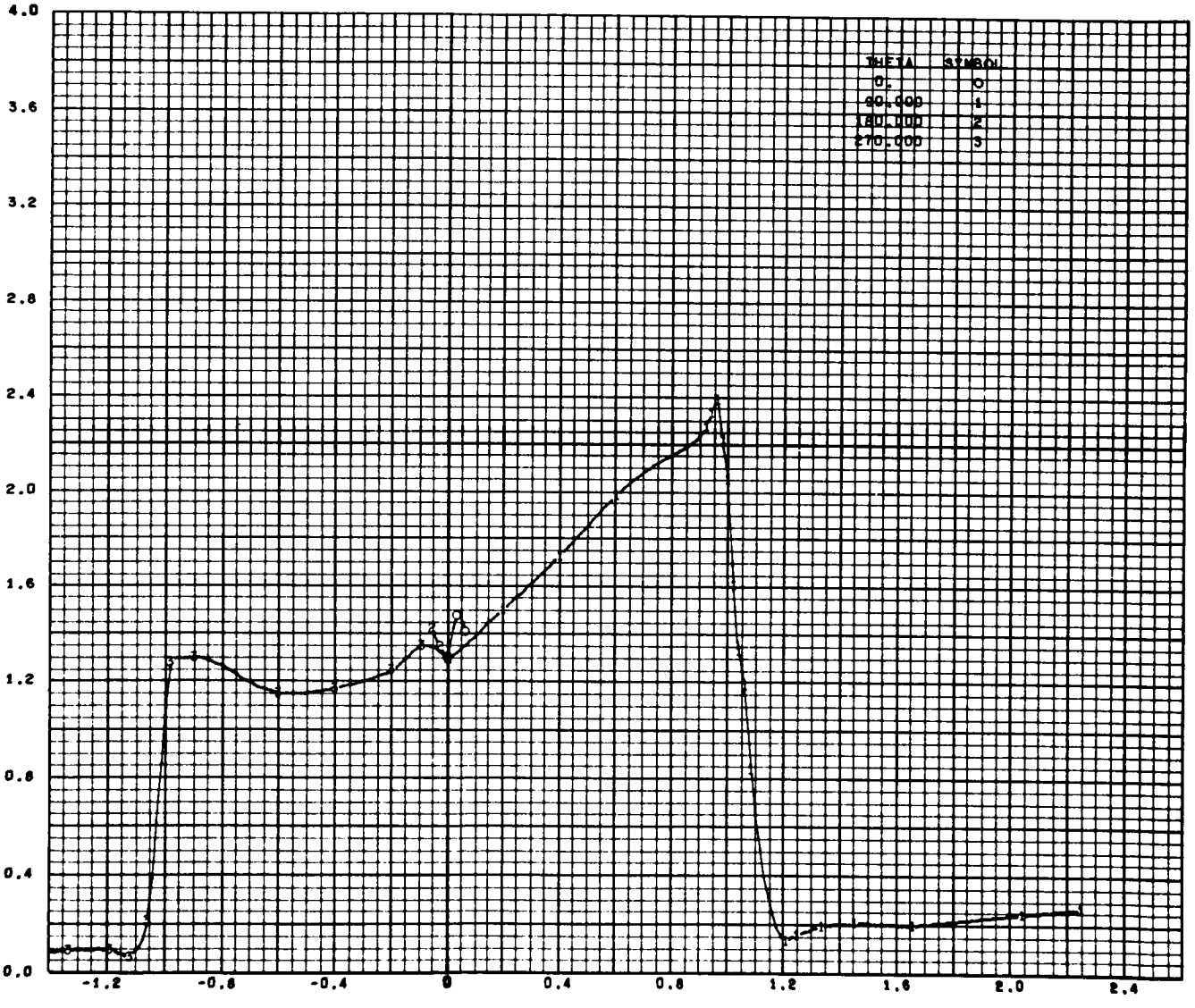
RE/FT --- 0.3458*10+6
Q(OM) --- 1.9889 BTU/SQ FT SEC

PLOT SERIES NUMBER 26

TEST GROUP	TIME (SEC)
61*	2.70
62	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
022 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C59

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TEST GROUP	TIME (SEC)
61*	2.70
62	2.70

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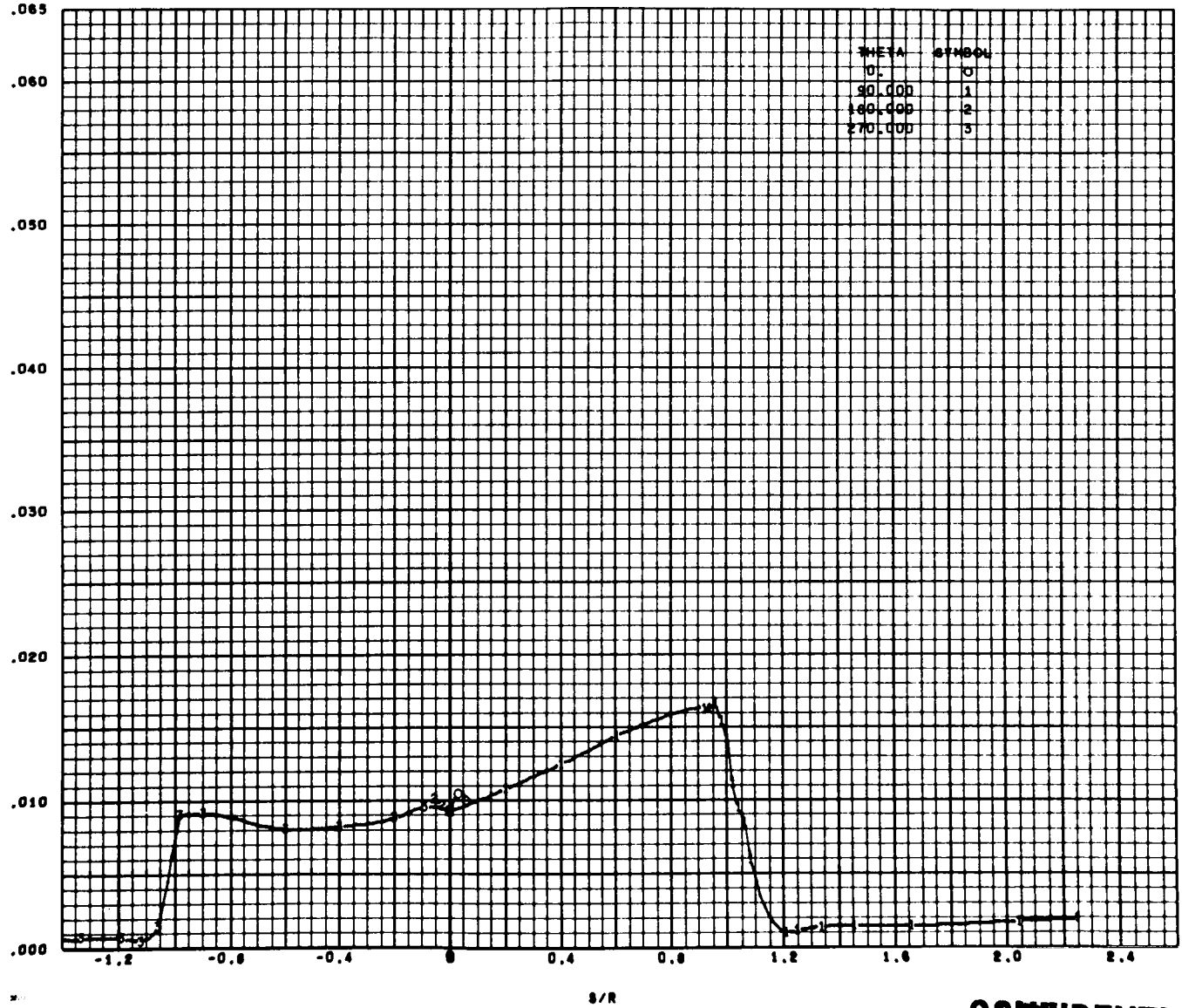
3937-09
025 000



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CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C59

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
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TOTAL TEMPERATURE ---- 1658.70 DEG RANKINE

RE/FT --- 0.3458*10+6
Q(OM) --- 1.9889 BTU/SQ FT SEC

PLOT SERIES NUMBER 26

TEST GROUP	TIME (SEC)
61*	2.70
62	2.70

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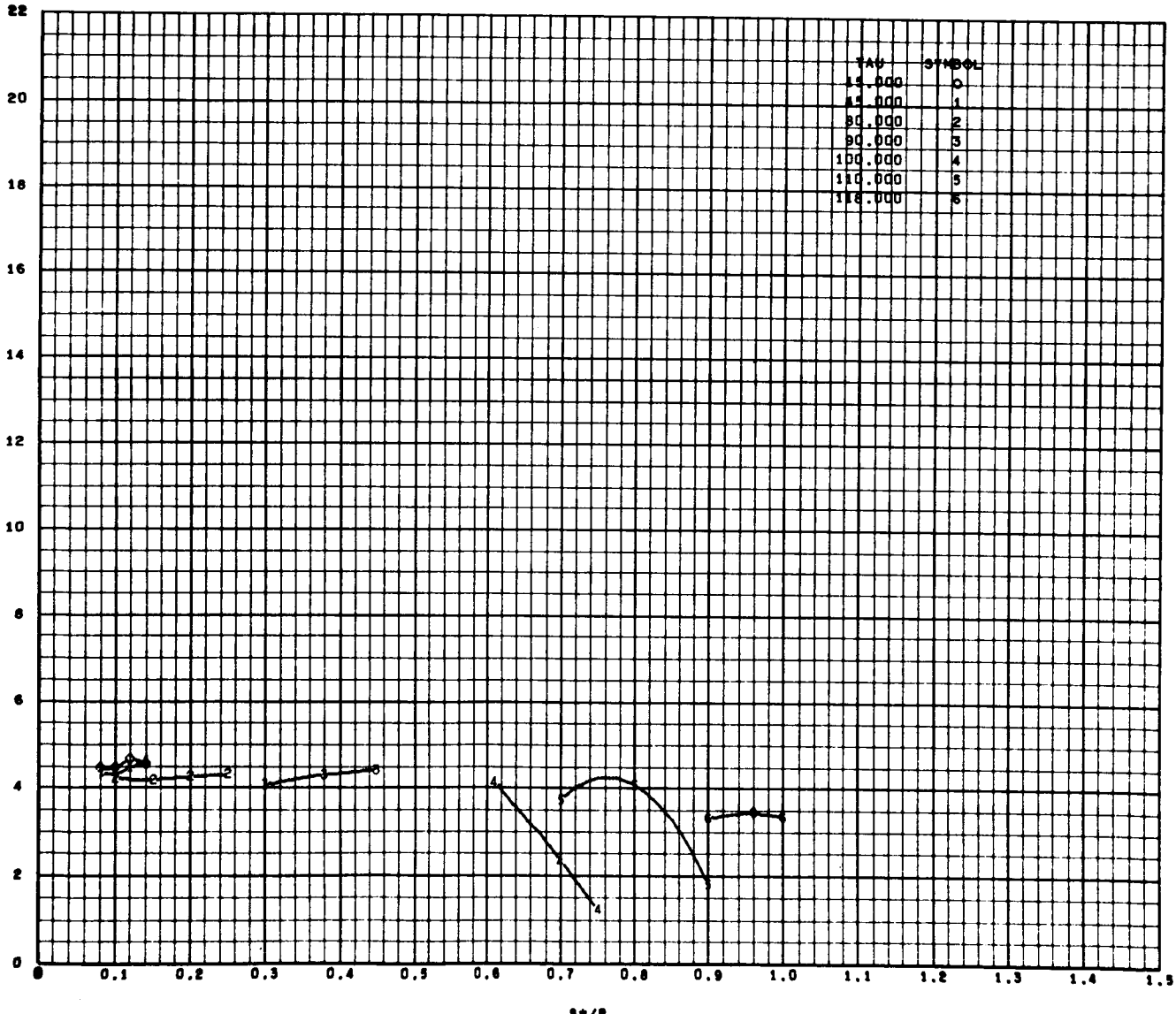
3937-09
020 000



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CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C59

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ANGLE OF ATTACK ------ 154.38 DEG
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TOTAL TEMPERATURE ---- 1658.70 DEG RANKINE

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Q(OM) --- 1.9889 BTU/SQ FT SEC

PLOT SERIES NUMBER 26

TEST GROUP	TIME (SEC)
61*	2.70
62	2.70

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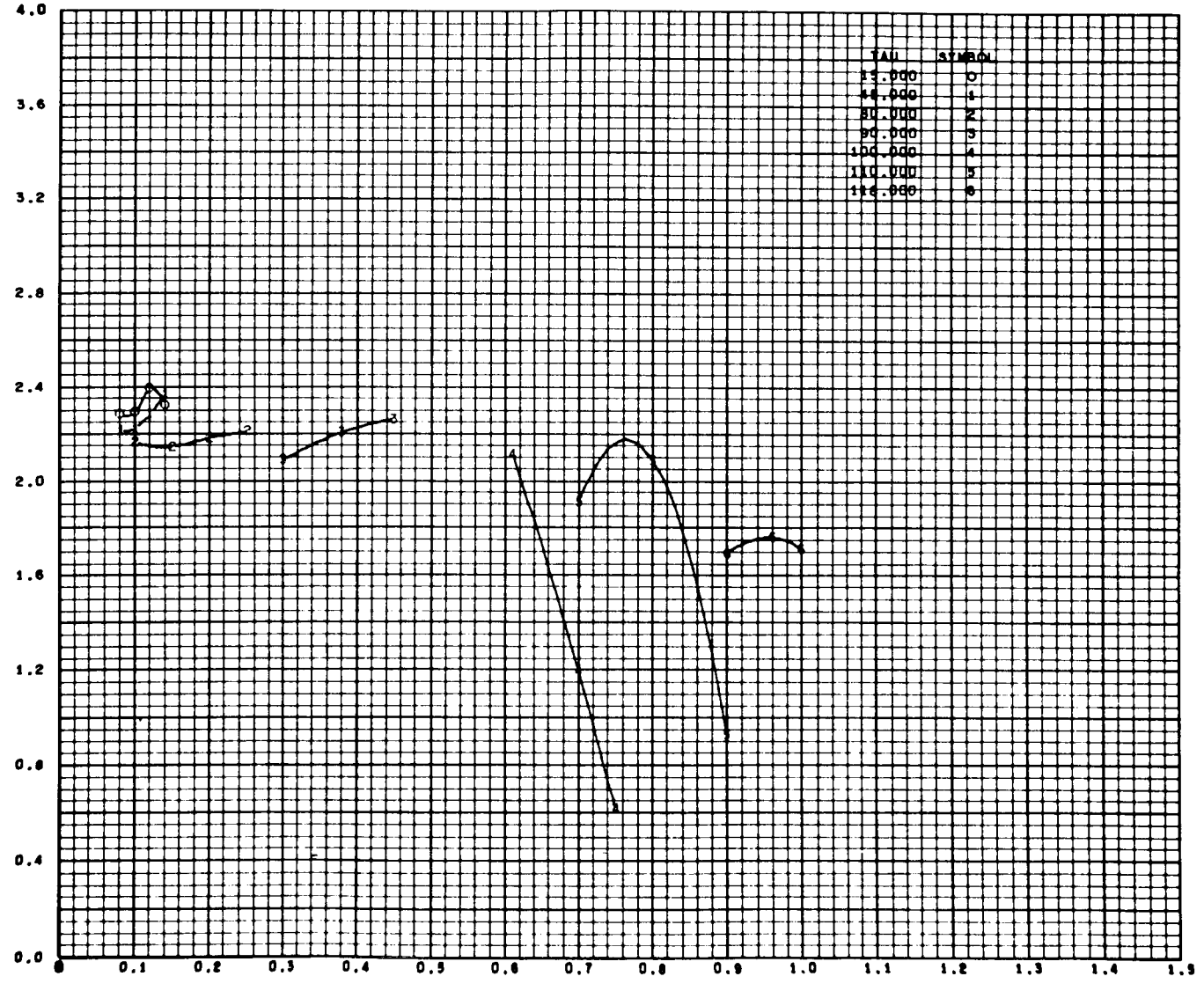
3937-09
023 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C59

MACH NUMBER ---------- 10.04
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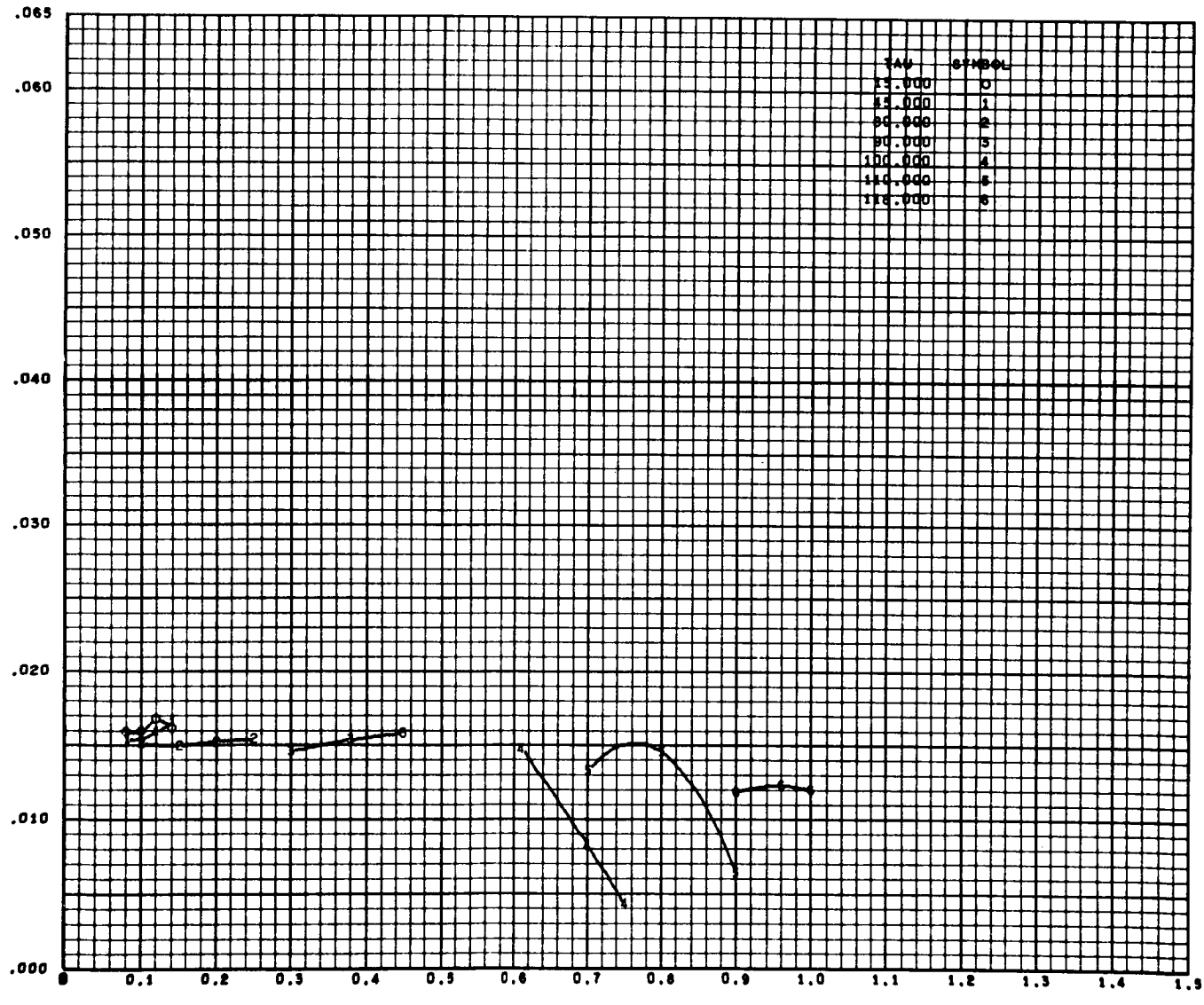
Q(OM) --- 1.9889 BTU/SQ FT SEC

PLOT SERIES NUMBER 26

TEST GROUP	TIME (SEC)
61*	2.70
62	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-05
026 000



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CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C59

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
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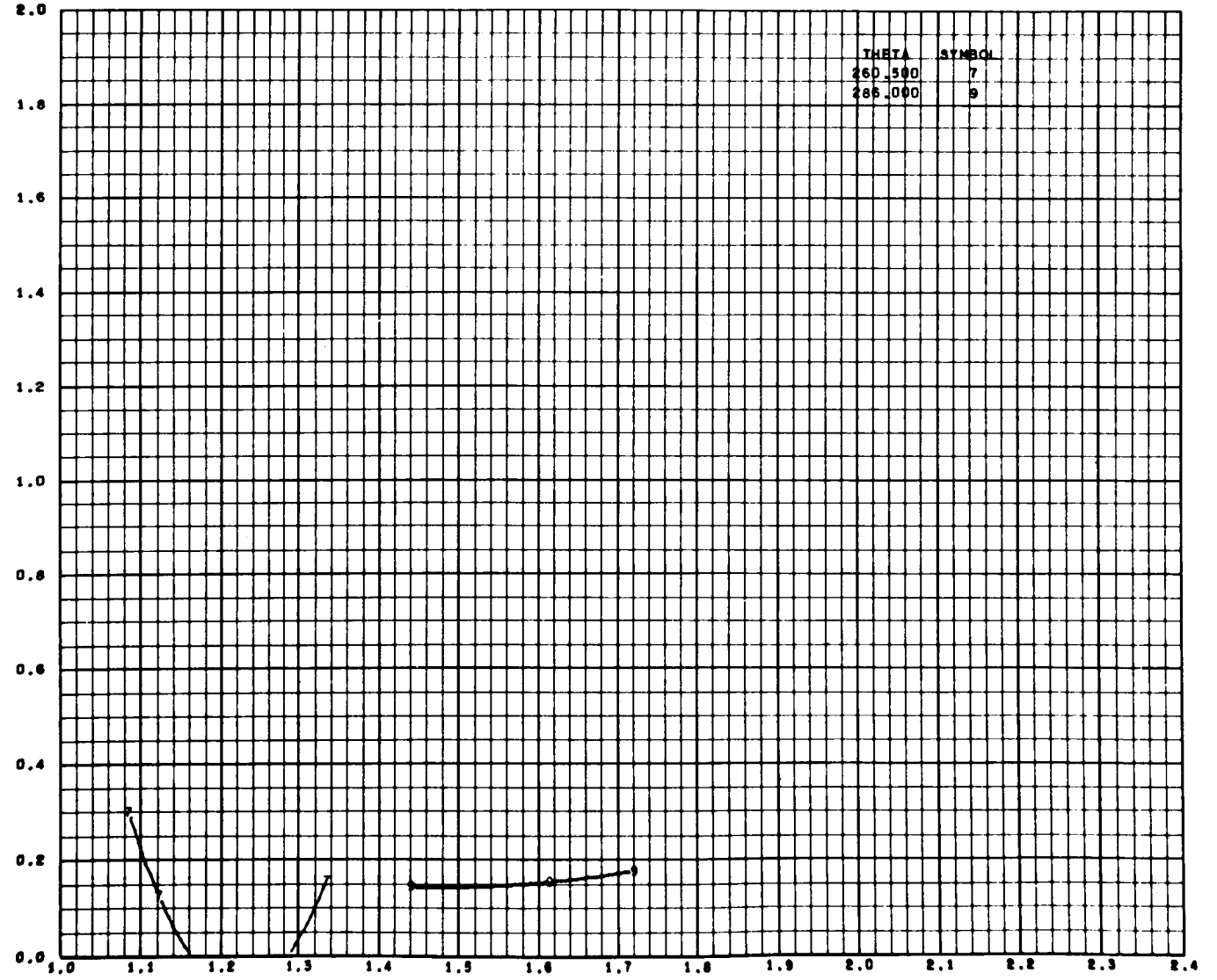
RE/FT --- 0.3458*10+6
Q(OM) --- 1.9889 BTU/SQ FT SEC

PLOT SERIES NUMBER 26

TEST GROUP	TIME (SEC)
61*	2.70
62	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
021 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C59

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 222.70 PSIA
TOTAL TEMPERATURE ---- 1658.70 DEG RANKINE

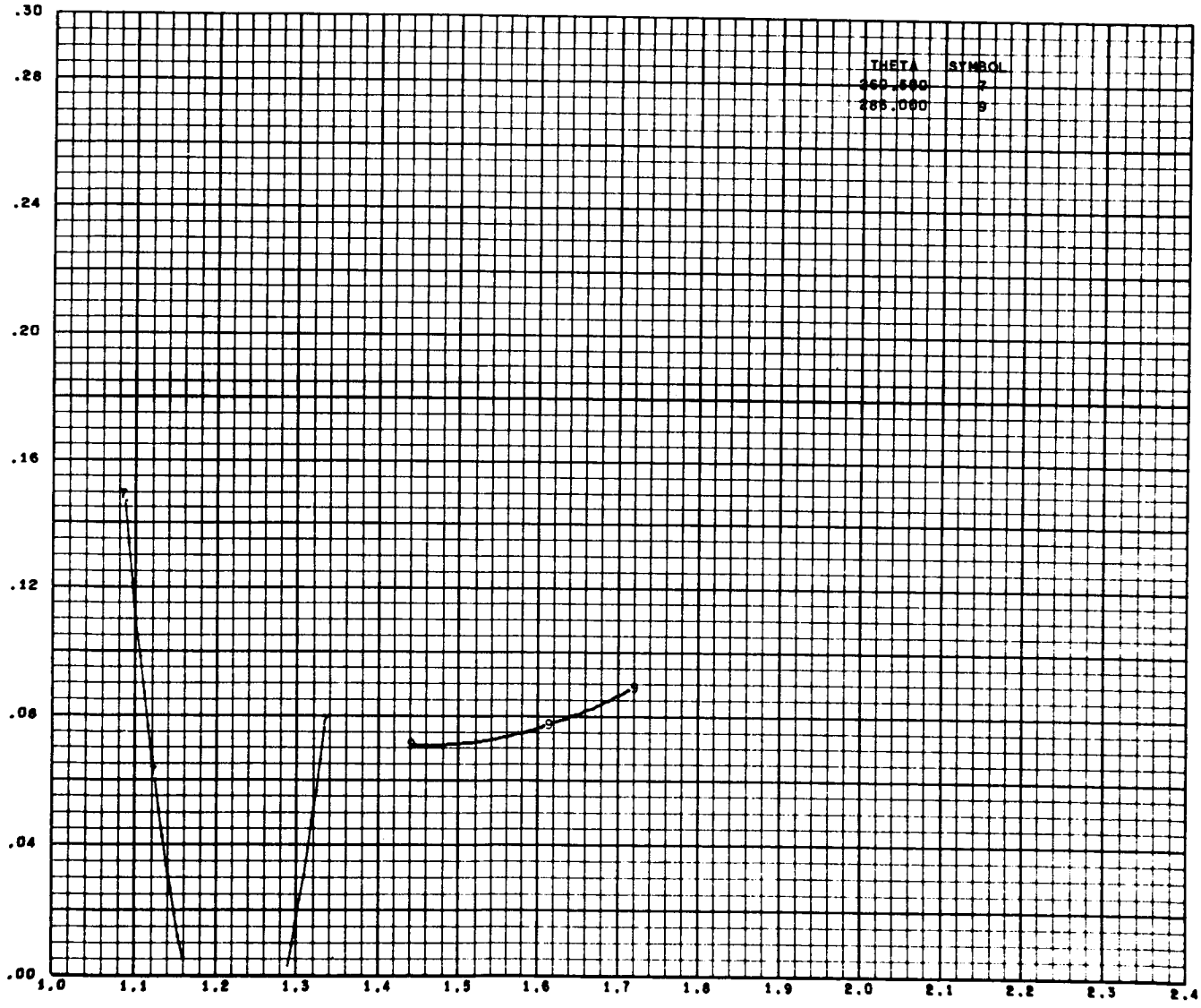
RE/FT --- 0.3458*10+6
Q(OM) --- 1.9889 BTU/SQ FT SEC

PLOT SERIES NUMBER 26

TEST GROUP	TIME (SEC)
61*	2.70
62	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
024 000



.Q/Q STAG MEAS

S/R
A-209

SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C59

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 222.70 PSIA
TOTAL TEMPERATURE ---- 1658.70 DEG RANKINE

RE/FT --- 0.3458*10+6
Q(OM) --- 1.9889 BTU/SQ FT SEC

PLOT SERIES NUMBER 26

TEST GROUP	TIME (SEC)
61*	2.70
62	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
027 000

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 143.42 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 222.90 PSIA
TOTAL TEMPERATURE ---- 1651.40 DEG RANKINE

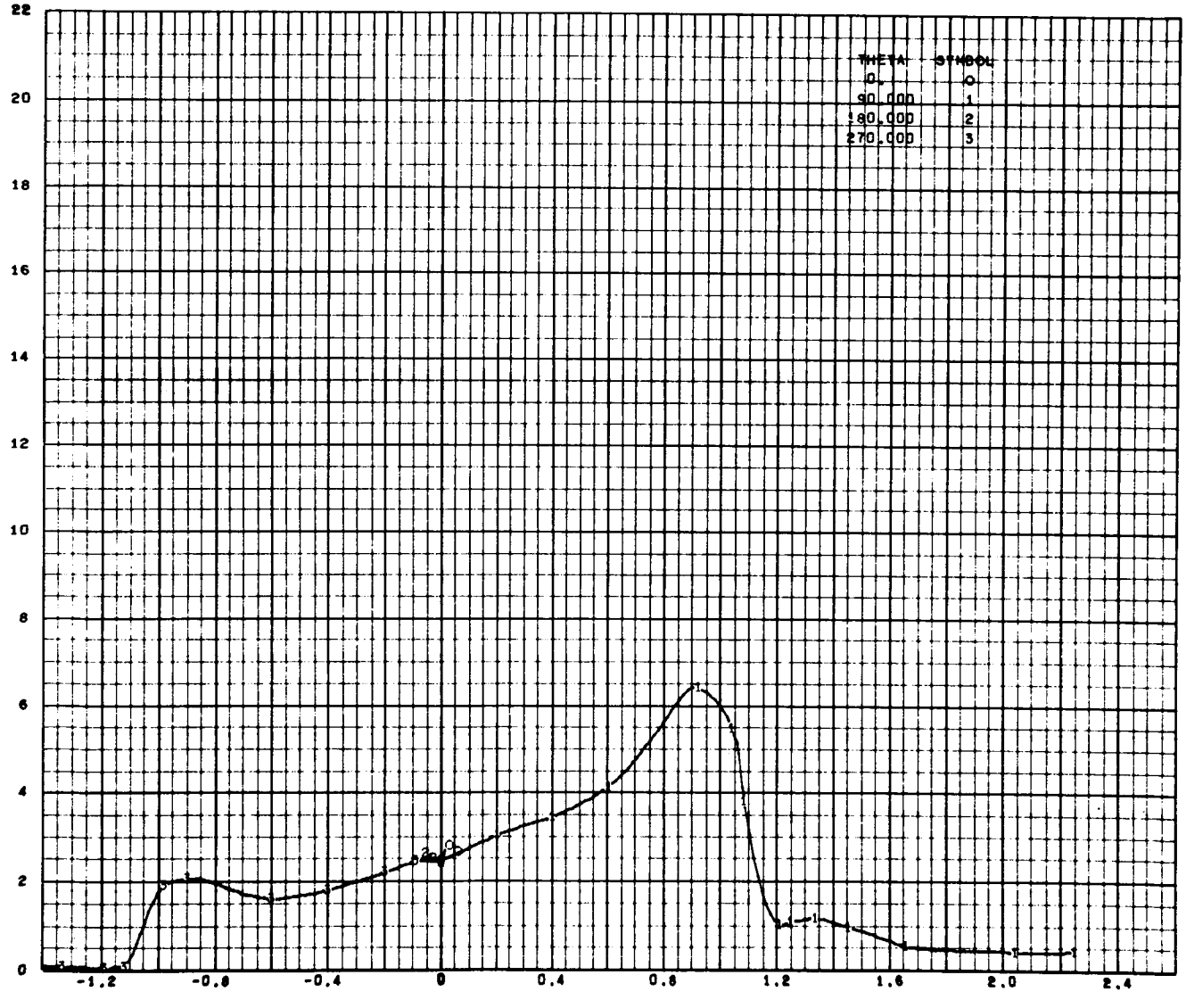
RE/FT --- 0.3488*10+6
Q(OM) --- 1.9901 BTU/SQ FT SEC

PLOT SERIES NUMBER 27

TEST GROUP	TIME (SEC)
63*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
028 000



[redacted]

HEAT TRANSFER

CONFIGURATION C56

PLOT SERIES NUMBER 27

3937-09
030 000

APOLLO H-11

AEDC, TUNNEL C

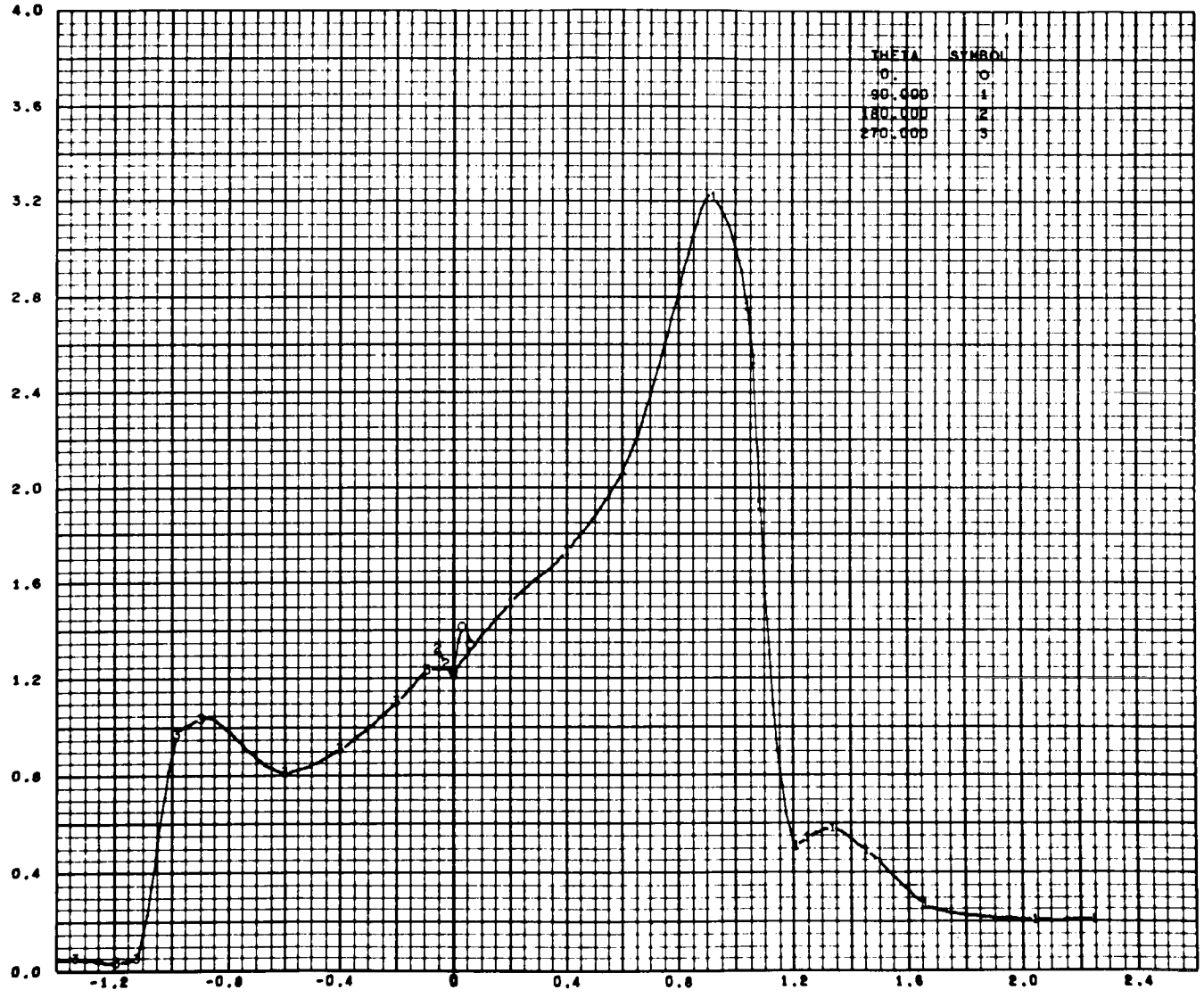
JUNE, 1964

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 143.42 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 222.90 PSIA
TOTAL TEMPERATURE ---- 1651.40 DEG RANKINE

RE/FT --- 0.3488*10+6
Q(OM) --- 1.9901 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
63*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 143.42 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 222.90 PSIA
TOTAL TEMPERATURE ---- 1651.40 DEG RANKINE

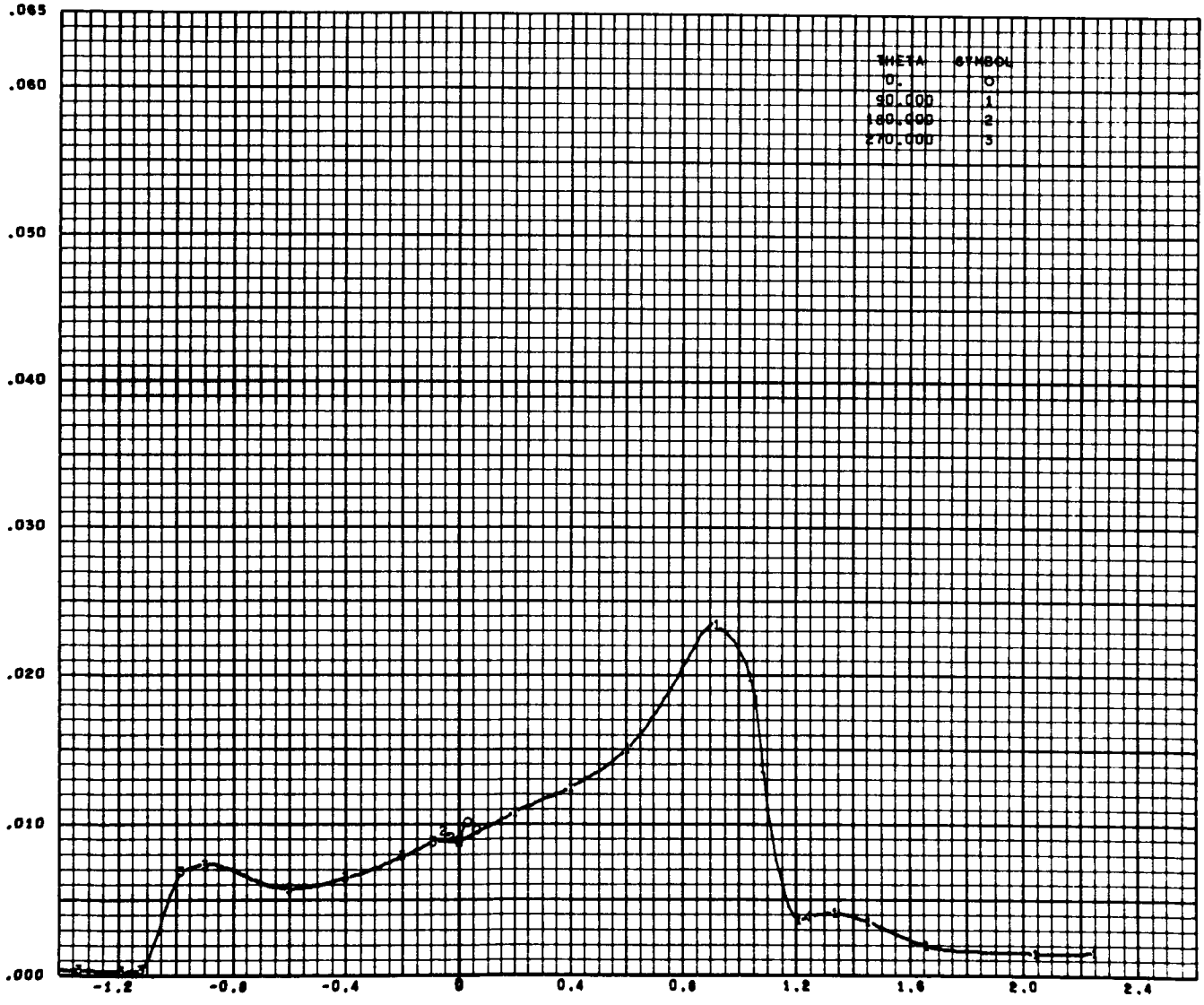
RE/FT --- 0.3488*10+6
Q(OM) --- 1.9901 BTU/SQ FT SEC

PLOT SERIES NUMBER 27

TEST GROUP	TIME (SEC)
63*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
032 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 143.42 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 222.90 PSIA
TOTAL TEMPERATURE ---- 1651.40 DEG RANKINE

RE/FT --- 0.3488*10+6
Q(OM) --- 1.9901 BTU/SQ FT SEC

PLOT SERIES NUMBER 27

TEST GROUP	TIME (SEC)
63*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
029 000

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 143.42 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 222.90 PSIA
TOTAL TEMPERATURE ---- 1651.40 DEG RANKINE

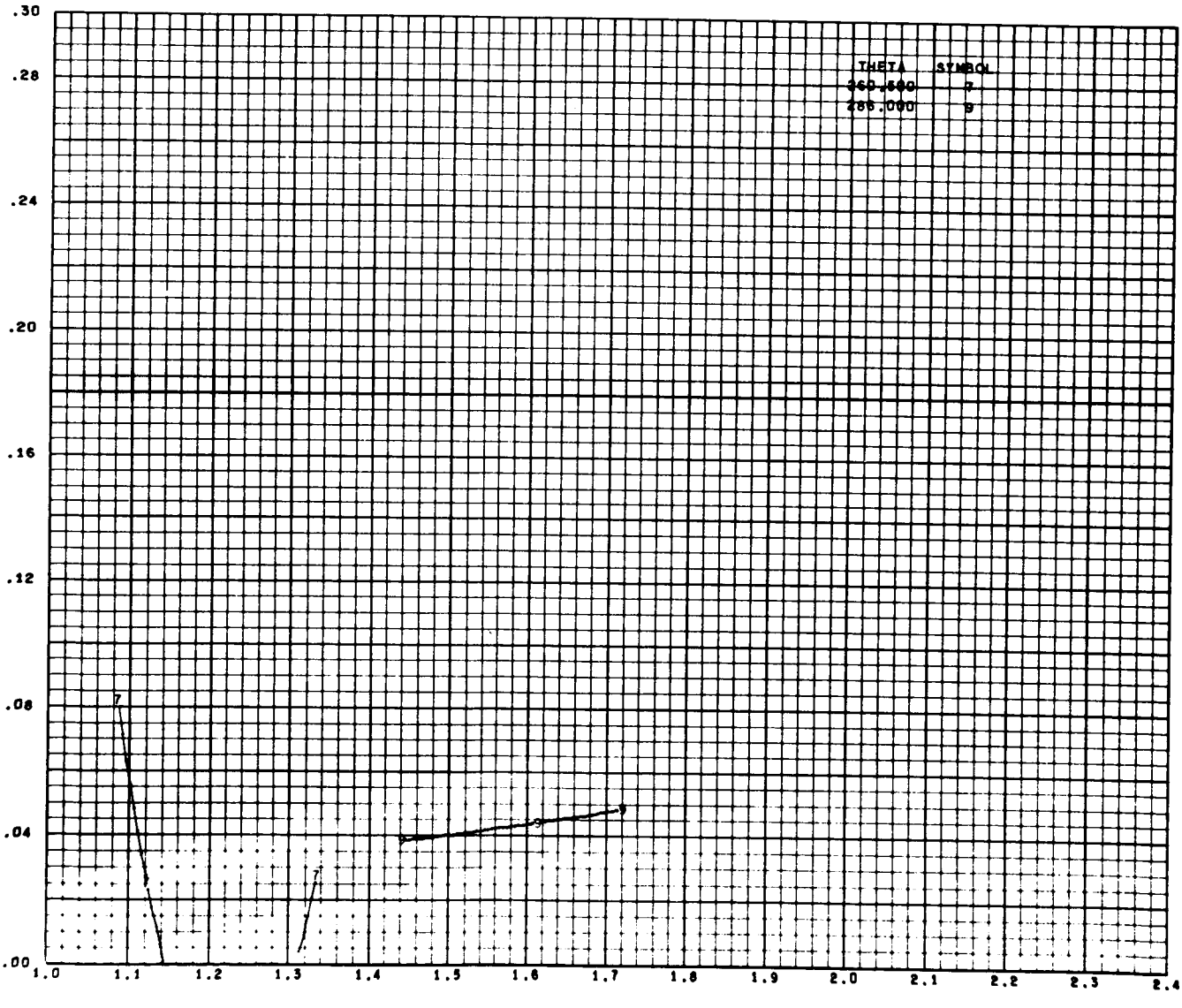
RE/FT --- 0.3488*10+6
Q(OM) --- 1.9901 BTU/SQ FT SEC

PLOT SERIES NUMBER 27

TEST GROUP	TIME (SEC)
63*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
031 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 143.42 DEG
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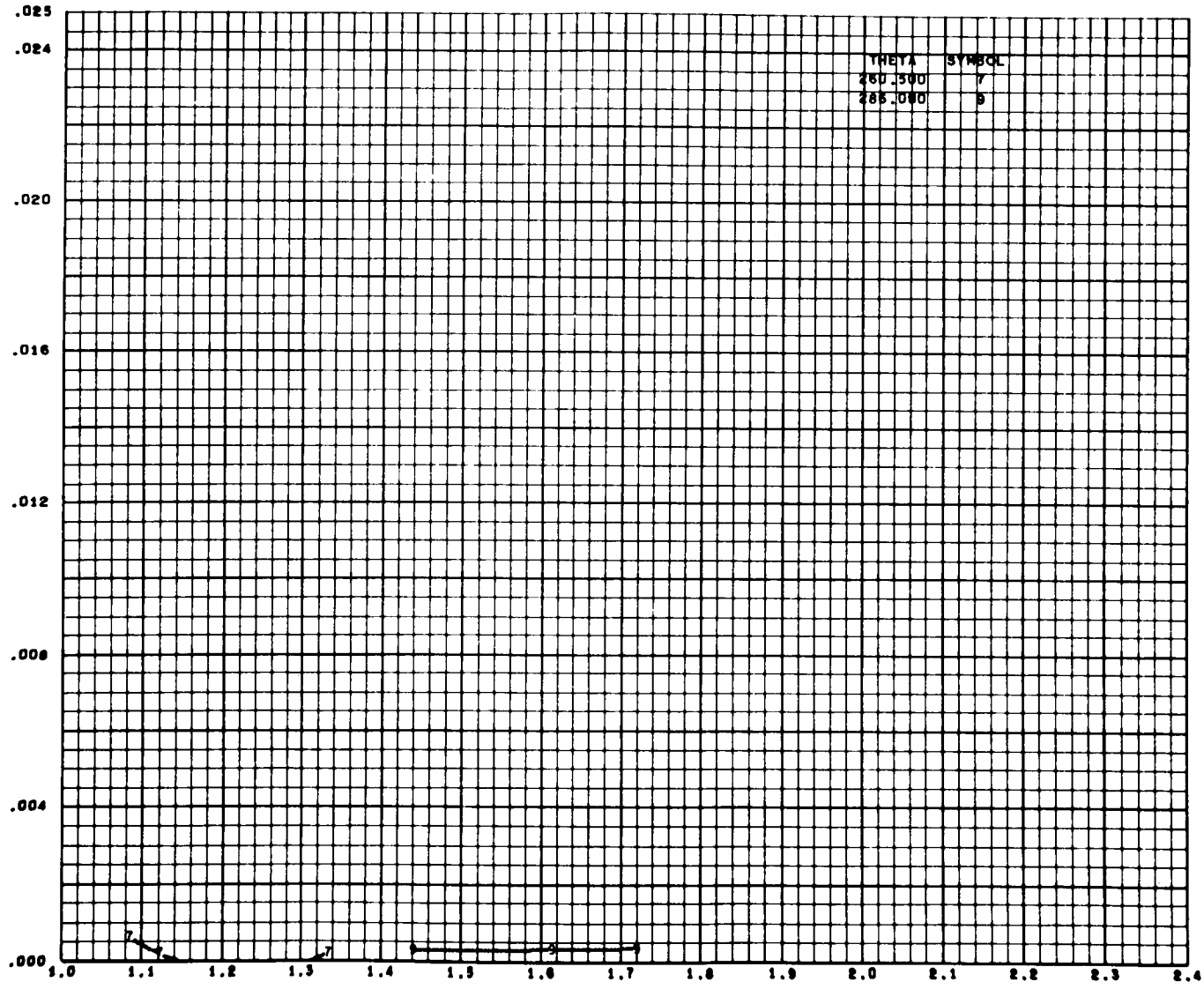
RE/FT --- 0.3488*10+6
Q(OM) --- 1.9901 BTU/SQ FT SEC

PLOT SERIES NUMBER 27

TEST GROUP	TIME (SEC)
63*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
033 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.40 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 221.50 PSIA
TOTAL TEMPERATURE ---- 1650.20 DEG RANKINE

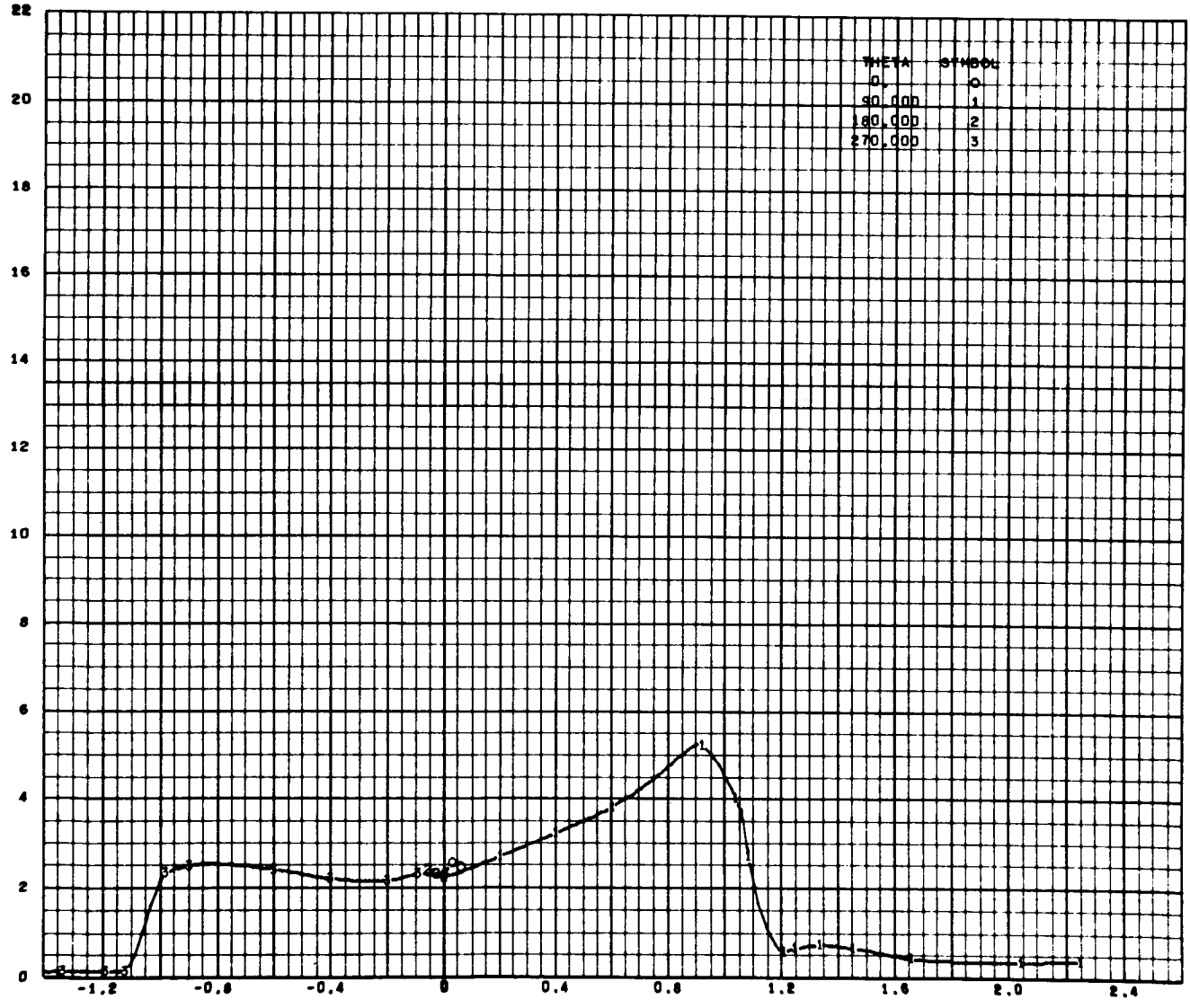
RE/FT --- 0.3471*10+6
Q(OM) --- 1.9820 BTU/SQ FT SEC

PLOT SERIES NUMBER 28

TEST GROUP	TIME (SEC)
64*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
034 000



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HEAT TRANSFER — CONFIGURATION C56 — PLOT SERIES NUMBER 28 — 3937-09 036 000

APOLLO H-11

AEDC, TUNNEL C

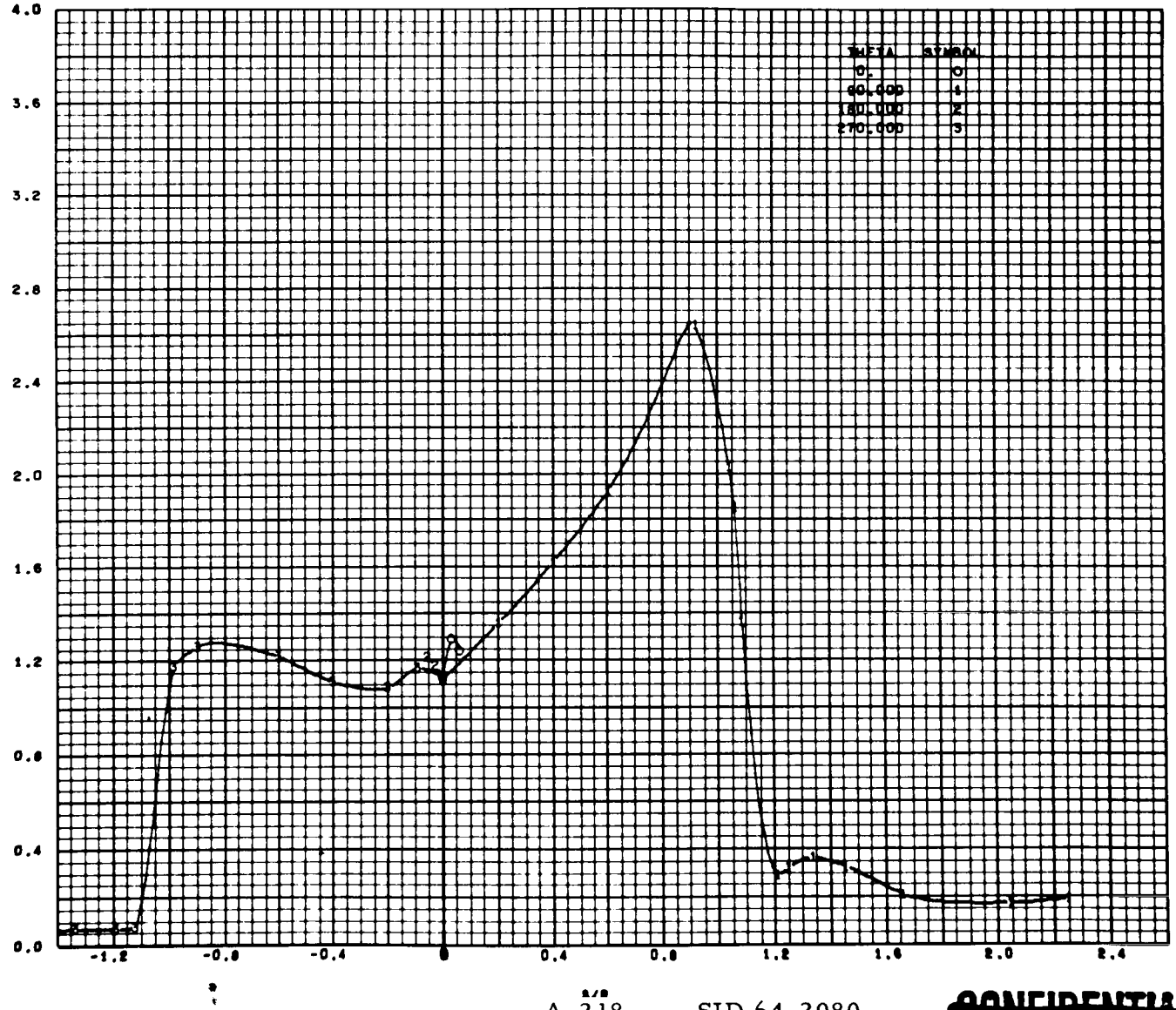
JUNE, 1964

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.40 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 221.50 PSIA
TOTAL TEMPERATURE ---- 1650.20 DEG RANKINE

RE/FT --- 0.3471*10+6
Q(OM) --- 1.9820 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
64*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 147.40 DEG
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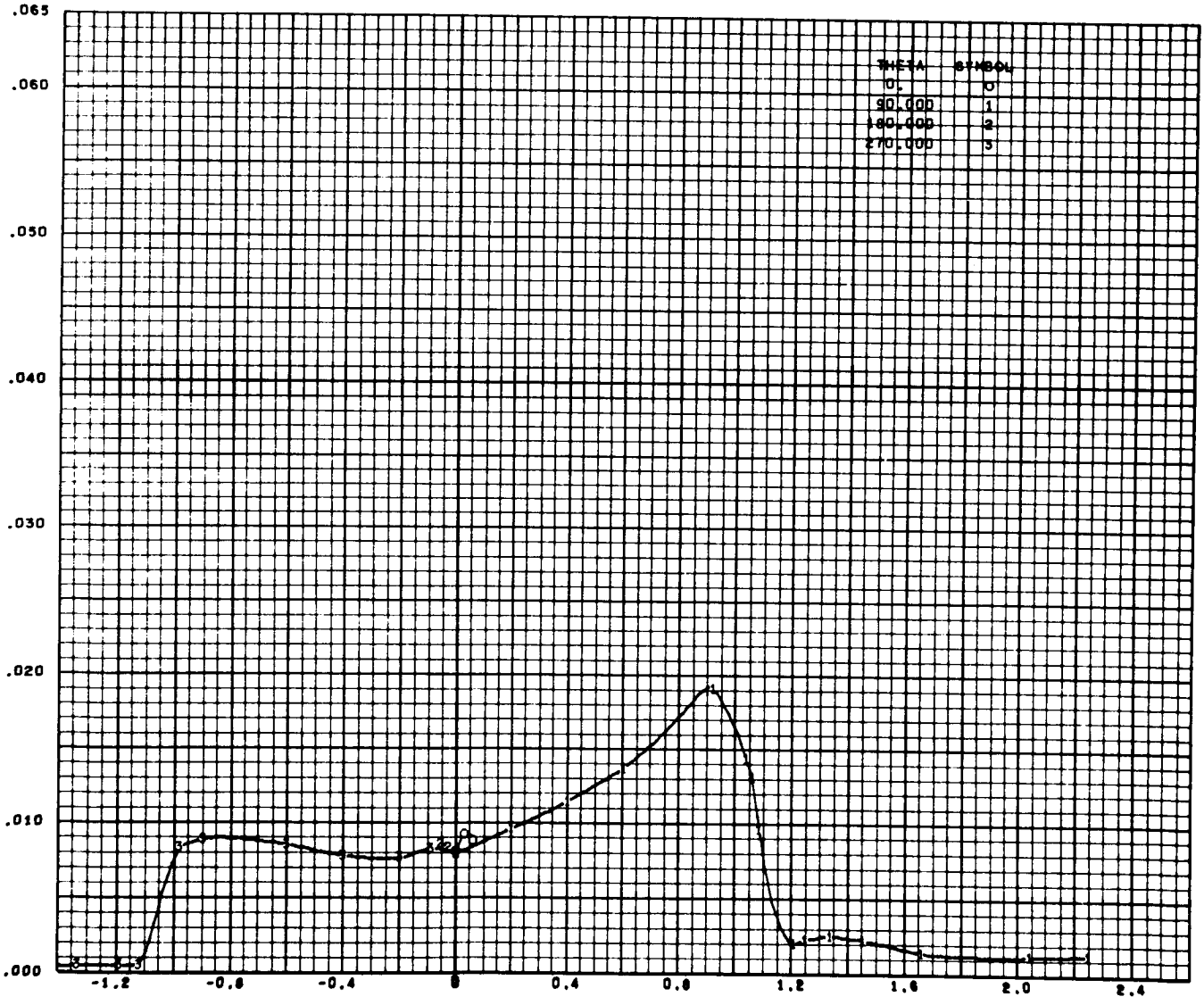
RE/FT --- 0.3471*10+6
Q(OM) --- 1.9820 BTU/SQ FT SEC

PLOT SERIES NUMBER 28

TEST GROUP	TIME (SEC)
64*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
038 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
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PLOT SERIES NUMBER 28

TEST GROUP	TIME (SEC)
64*	2.75

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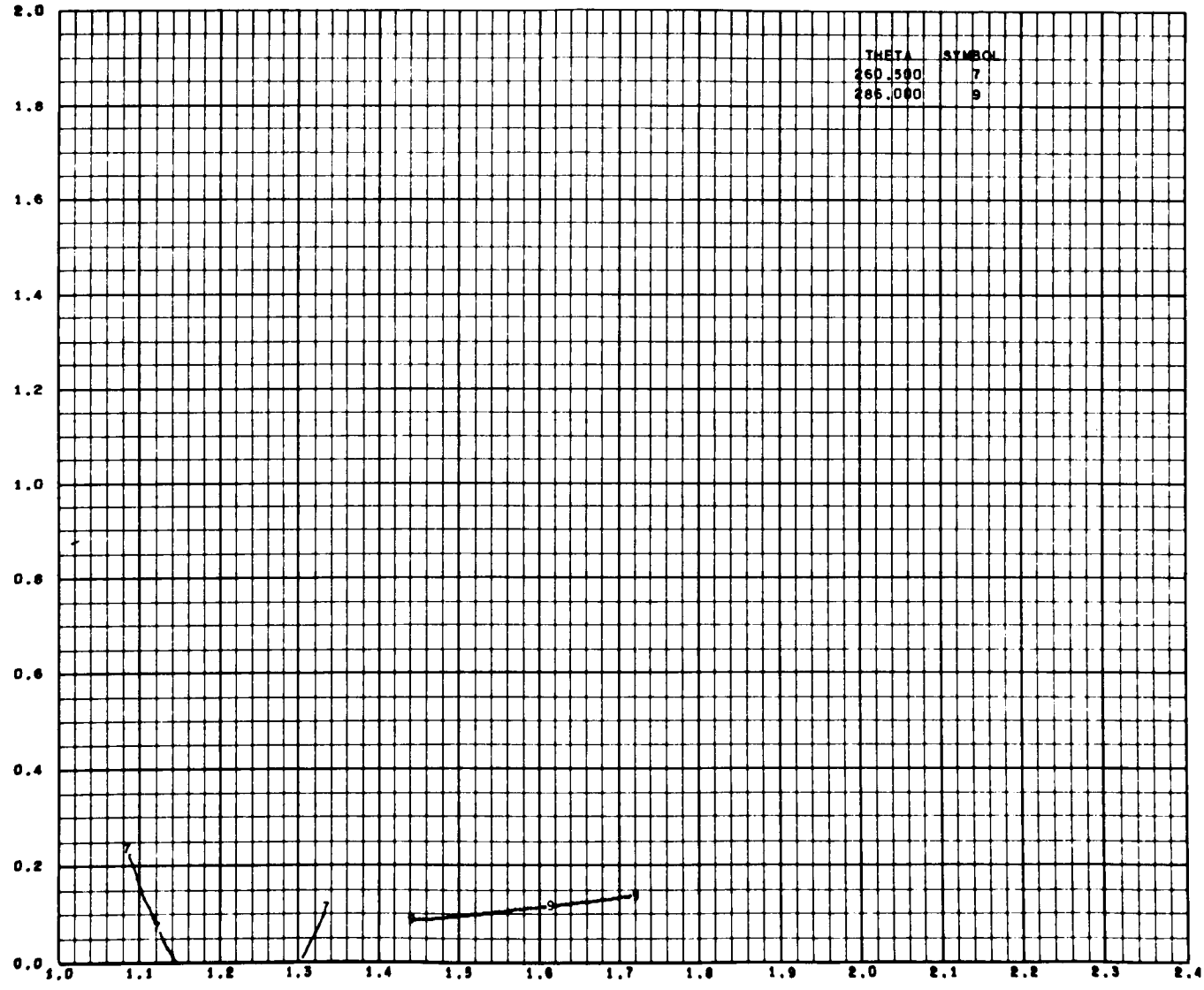
3937-09
035 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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PLOT SERIES NUMBER 28

TEST GROUP	TIME (SEC)
64*	2.75

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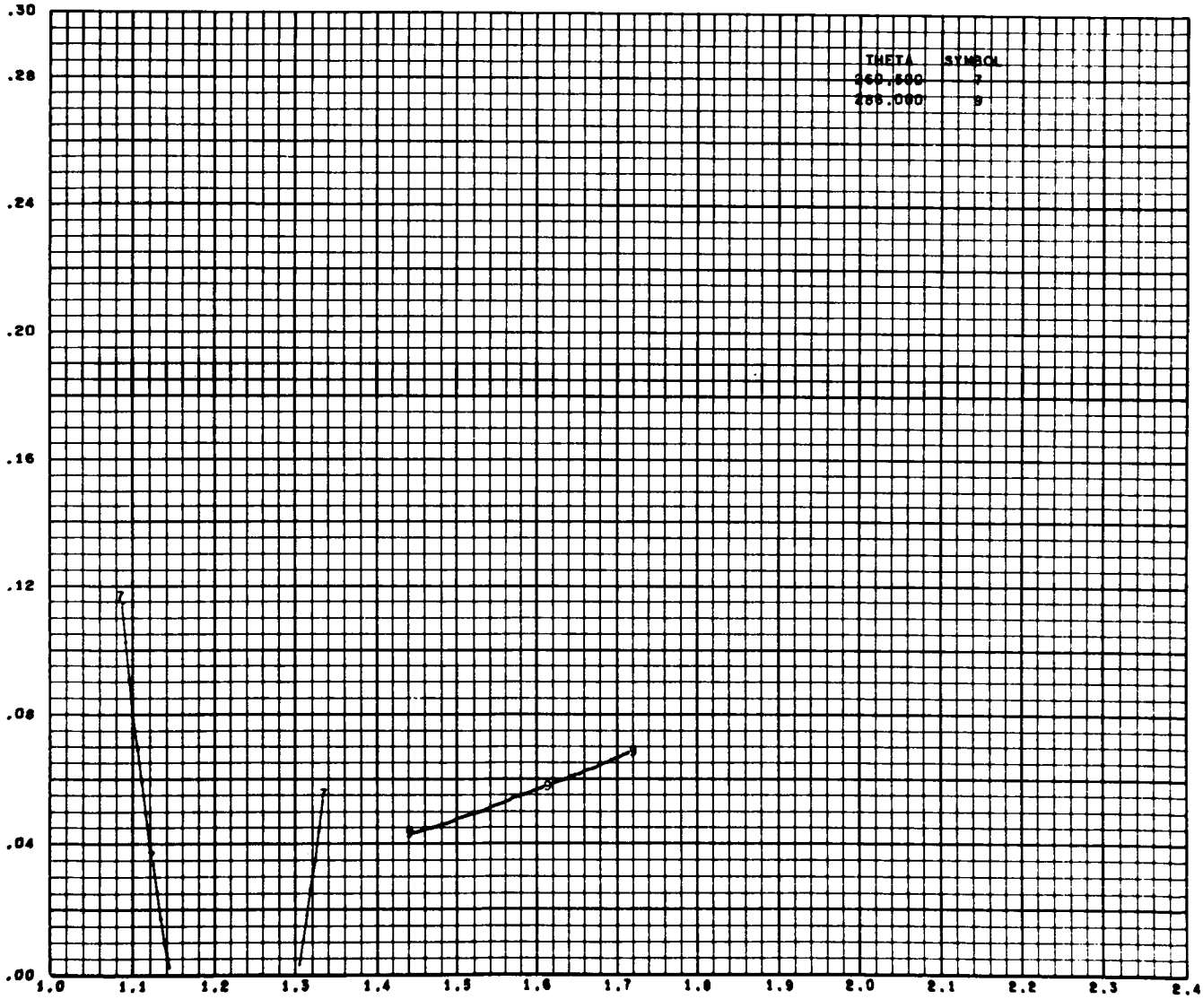
3937-09
037 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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PLOT SERIES NUMBER 28

TEST GROUP	TIME (SEC)
64*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
039 000

~~CONFIDENTIAL~~

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.39 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 218.50 PSIA
TOTAL TEMPERATURE ---- 1652.10 DEG RANKINE

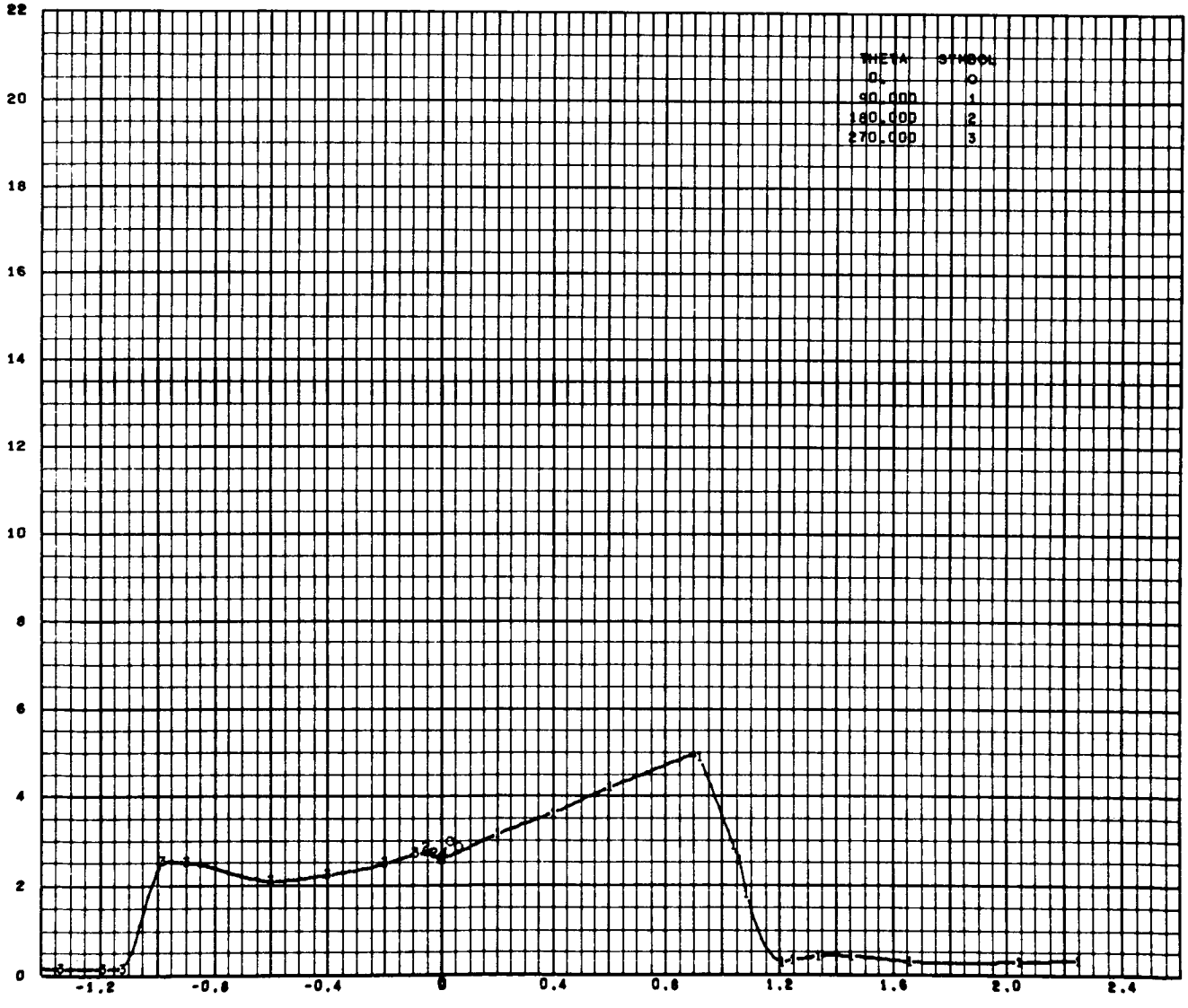
RE/FT --- 0.3417*10+6
Q(OM) --- 1.9647 BTU/SQ FT SEC

PLOT SERIES NUMBER 29

TEST GROUP	TIME (SEC)
65*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
040 000



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HEAT TRANSFER | CONFIGURATION C56 | PLOT SERIES NUMBER 29 | 3937-09 042 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.39 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 218.50 PSIA
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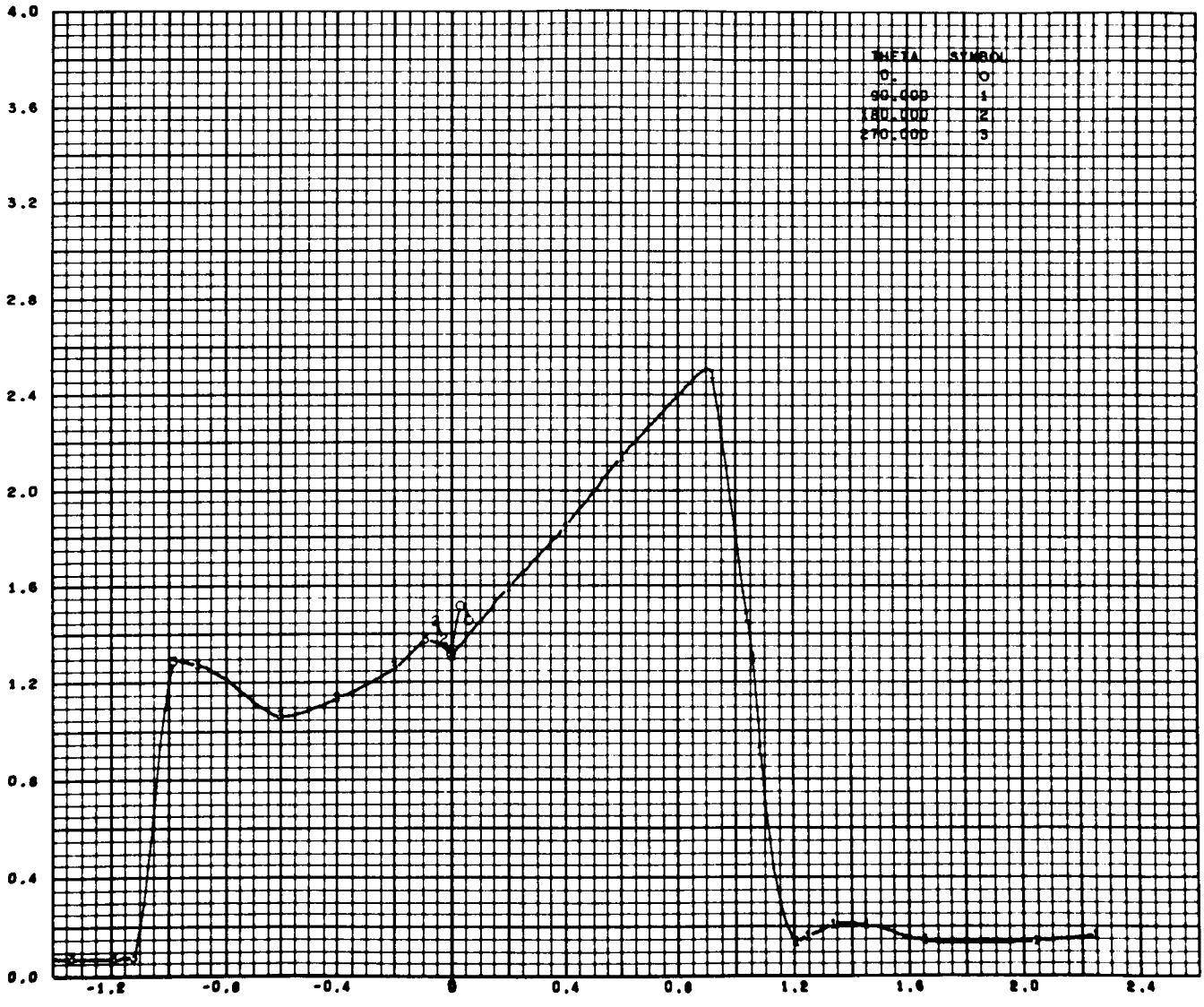
RE/FT --- 0.3417*10+6
Q(OM) --- 1.9647 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
65*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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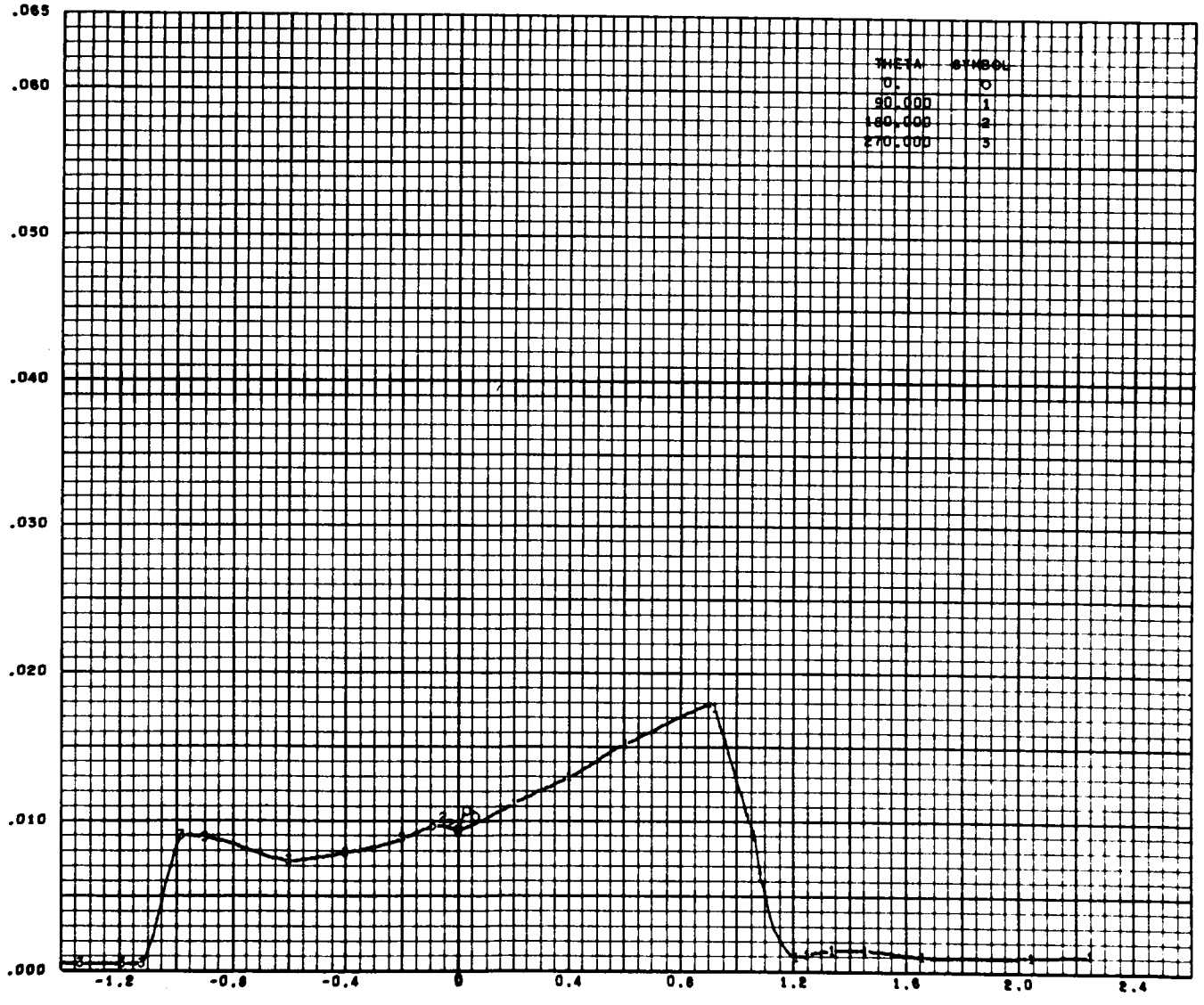
PLOT SERIES NUMBER 29

TEST GROUP	TIME (SEC)
65*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
044 000



S/R
A-225 SID 64-2080

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.39 DEG
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PLOT SERIES NUMBER 29

TEST GROUP	TIME (SEC)
65*	2.75

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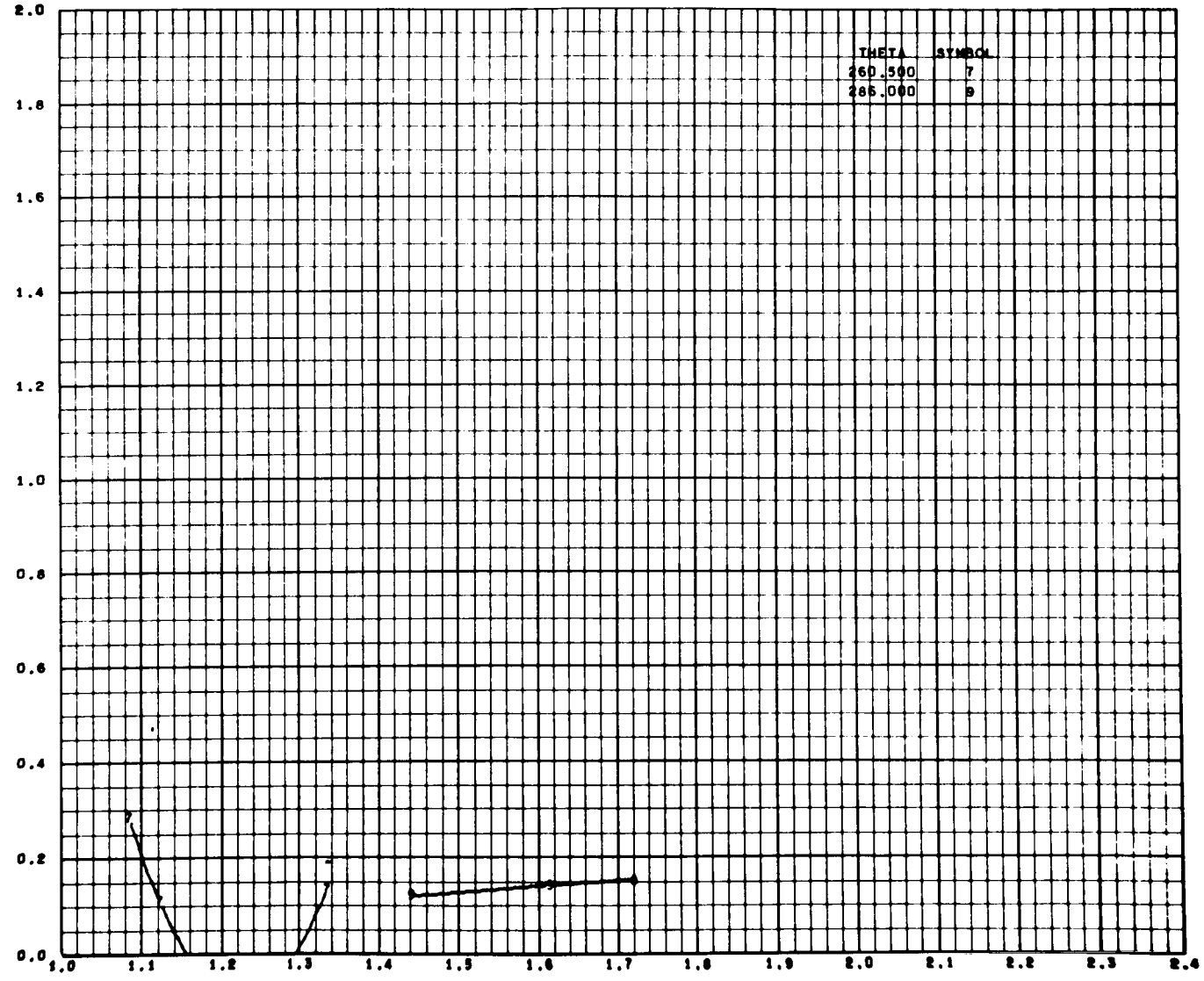
3937-09
041 000



CONFIDENTIAL

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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PLOT SERIES NUMBER 29

TEST GROUP	TIME (SEC)
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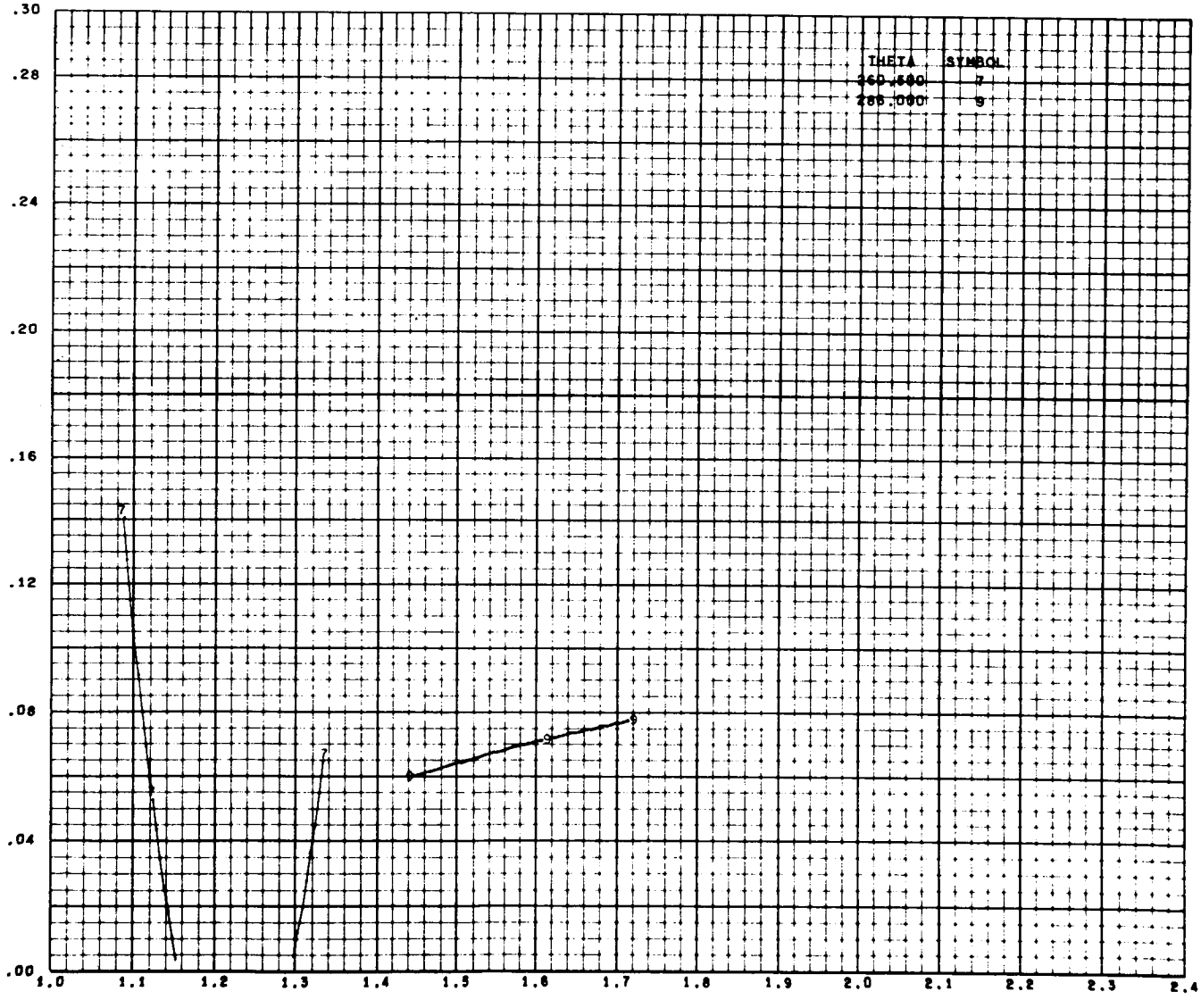
3937-09
043 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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PLOT SERIES NUMBER 29

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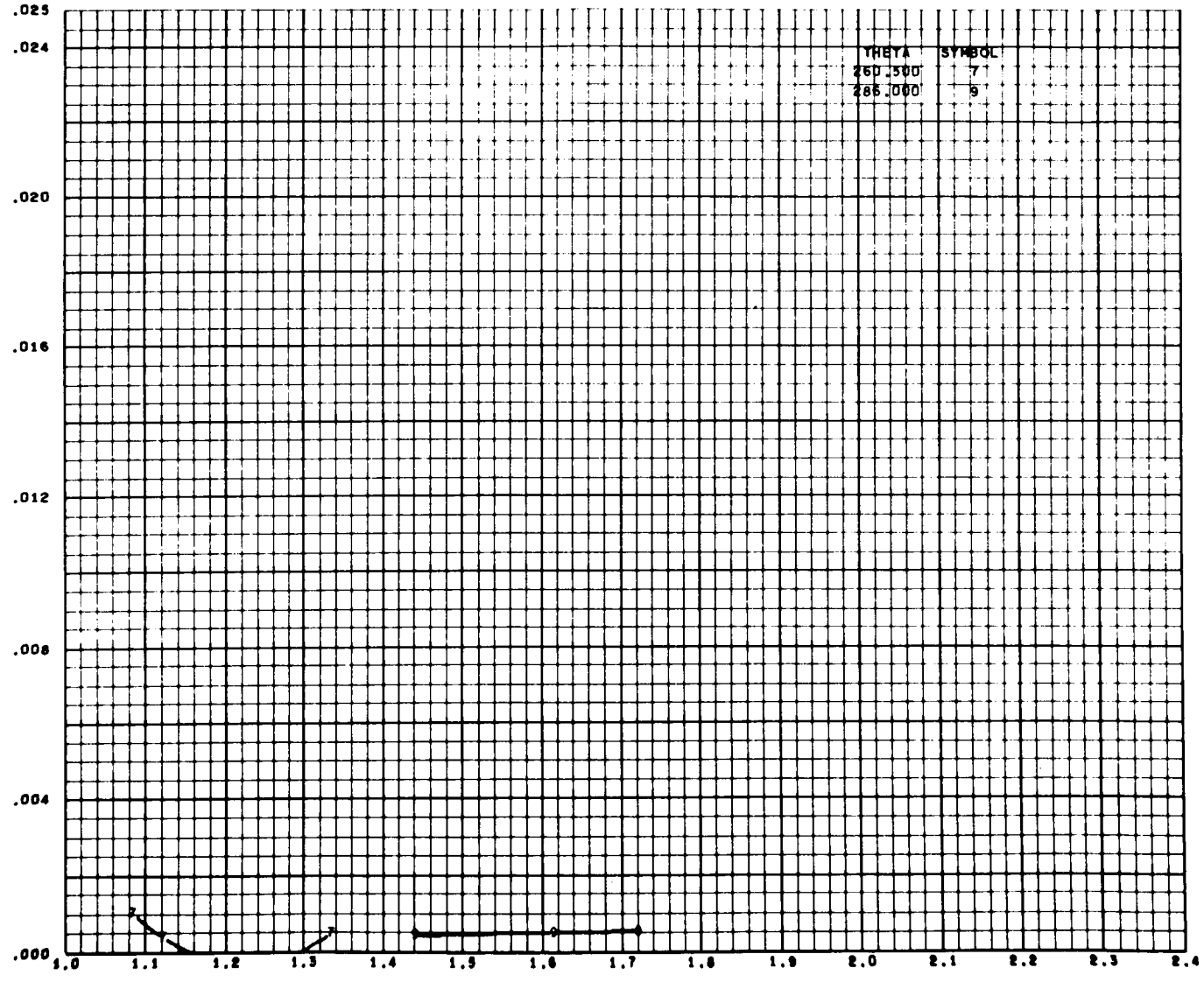
3937-09
045 000



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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 158.40 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 215.60 PSIA
TOTAL TEMPERATURE ---- 1656.00 DEG RANKINE

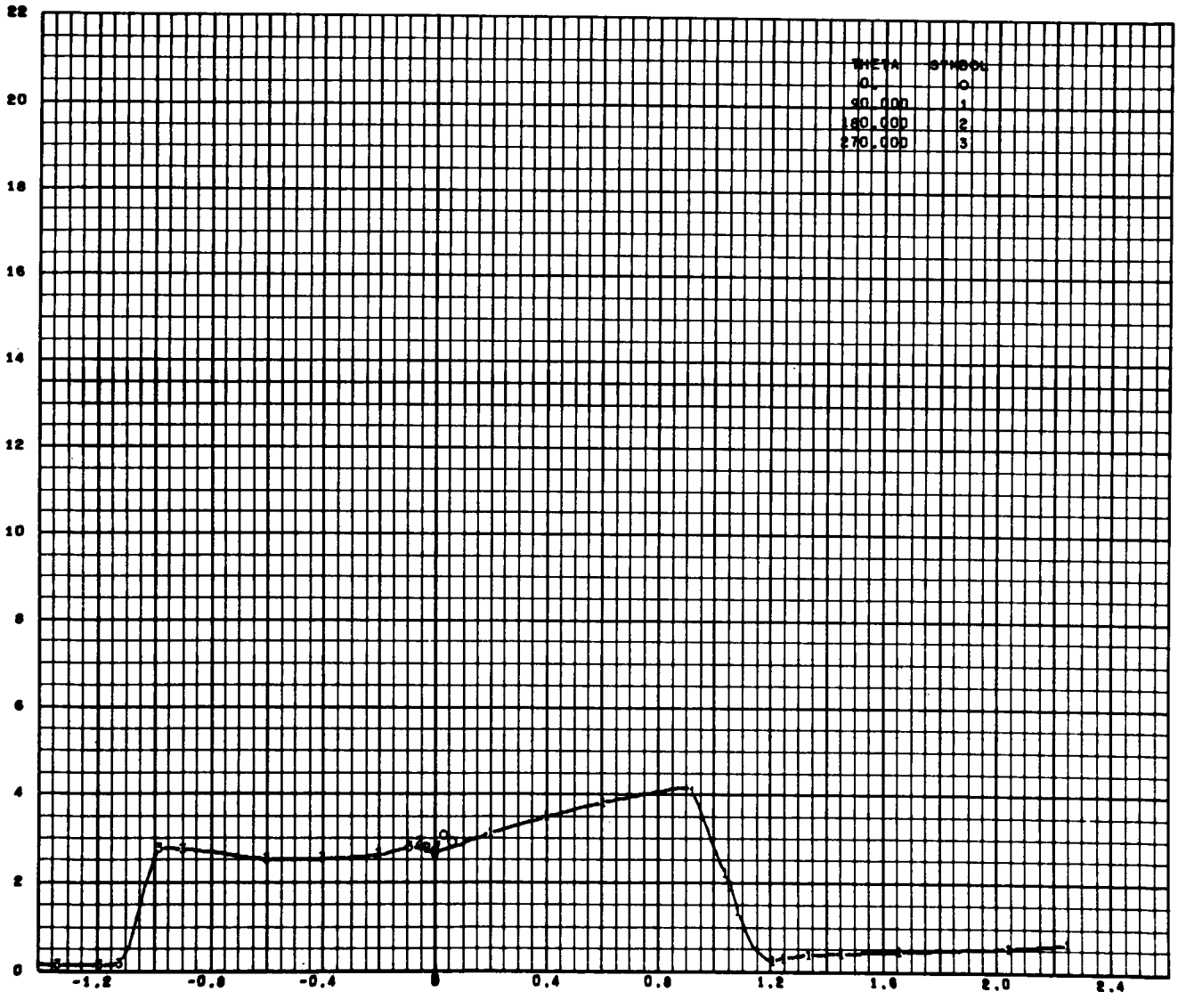
RE/FT --- 0.3359*10+6
Q(OM) --- 1.9482 BTU/SQ FT SEC

PLOT SERIES NUMBER 30

TEST GROUP	TIME (SEC)
66*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
046 000



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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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PLOT SERIES NUMBER 30

TEST GROUP	TIME (SEC)
66*	2.75

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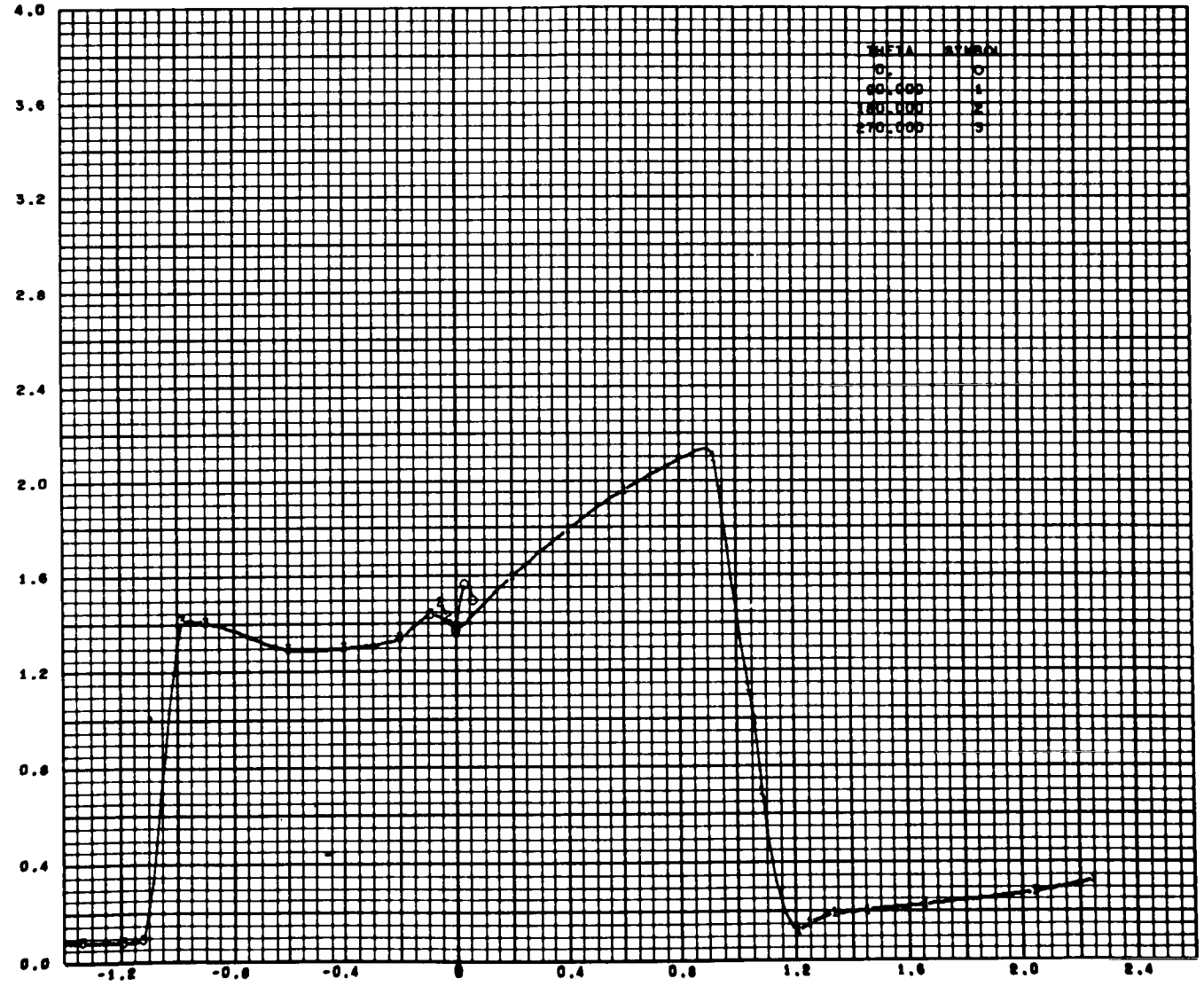
3937-09
048 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

CONFIGURATION C56

PLOT SERIES NUMBER 30

3937-09
050 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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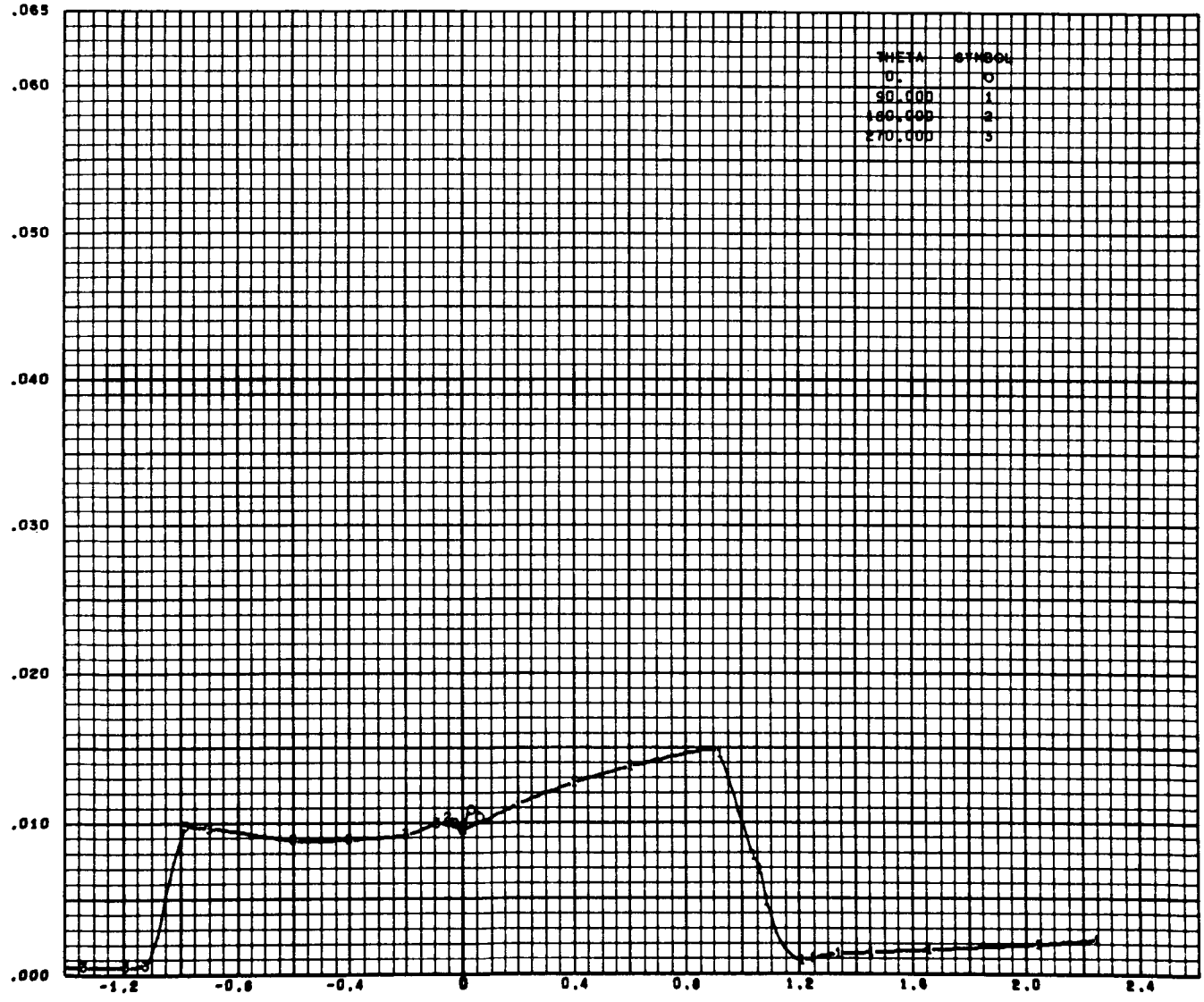

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HEAT TRANSFER

CONFIGURATION C56

PLOT SERIES NUMBER 30

3937-09
047 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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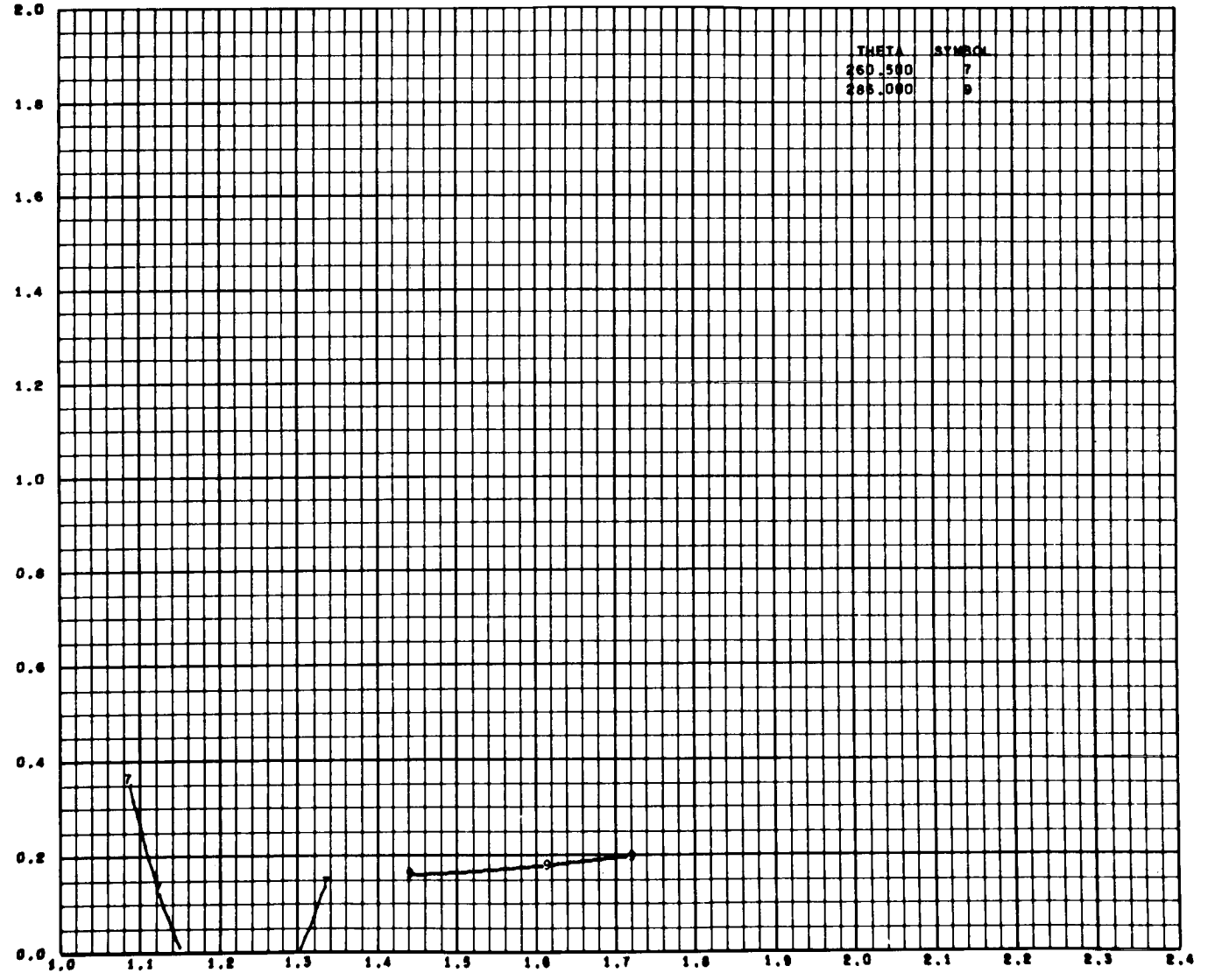

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 158.40 DEG
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PLOT SERIES NUMBER 30

TEST GROUP	TIME (SEC)
66*	2.75

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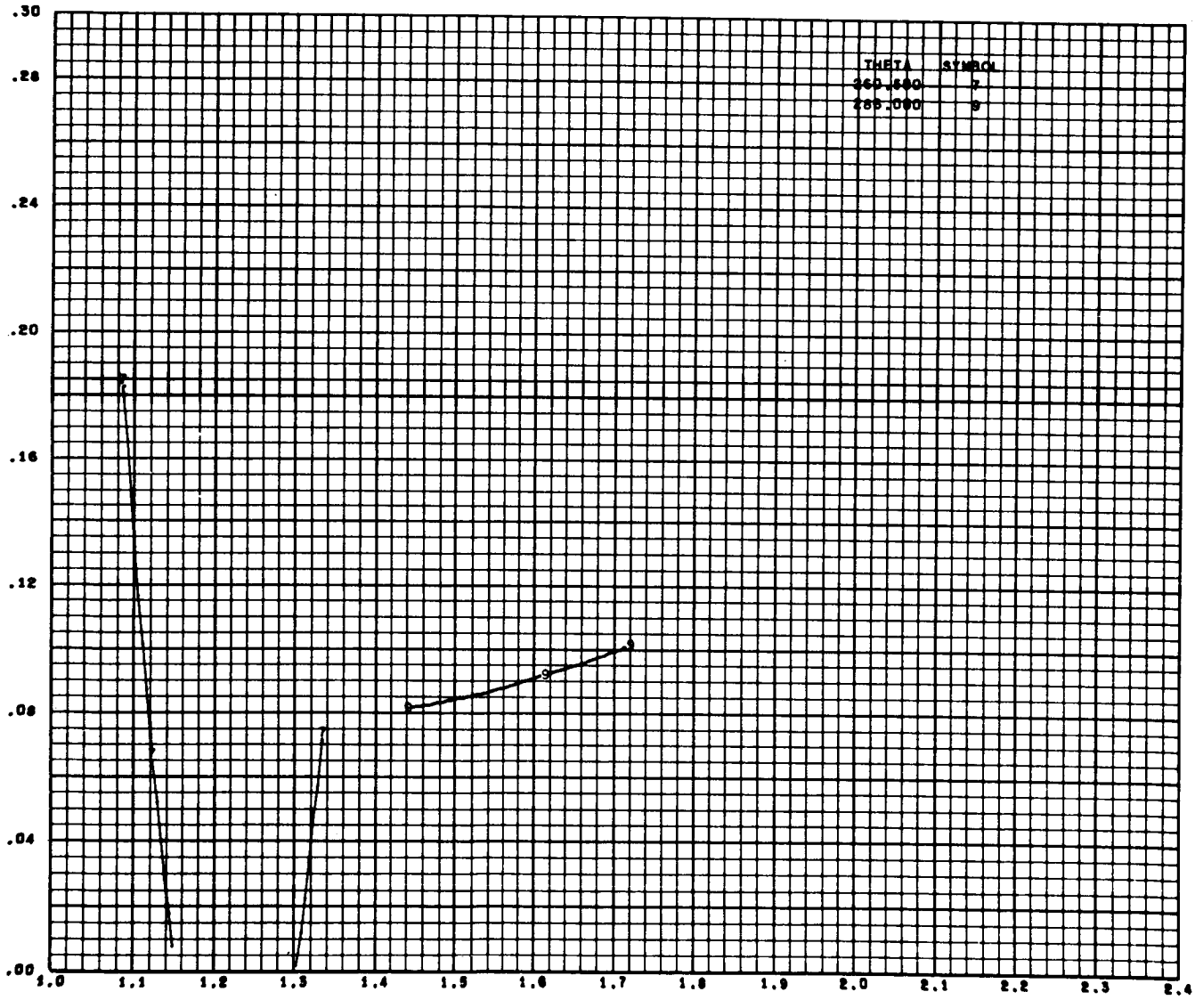
3937-09
049 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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66*	2.75

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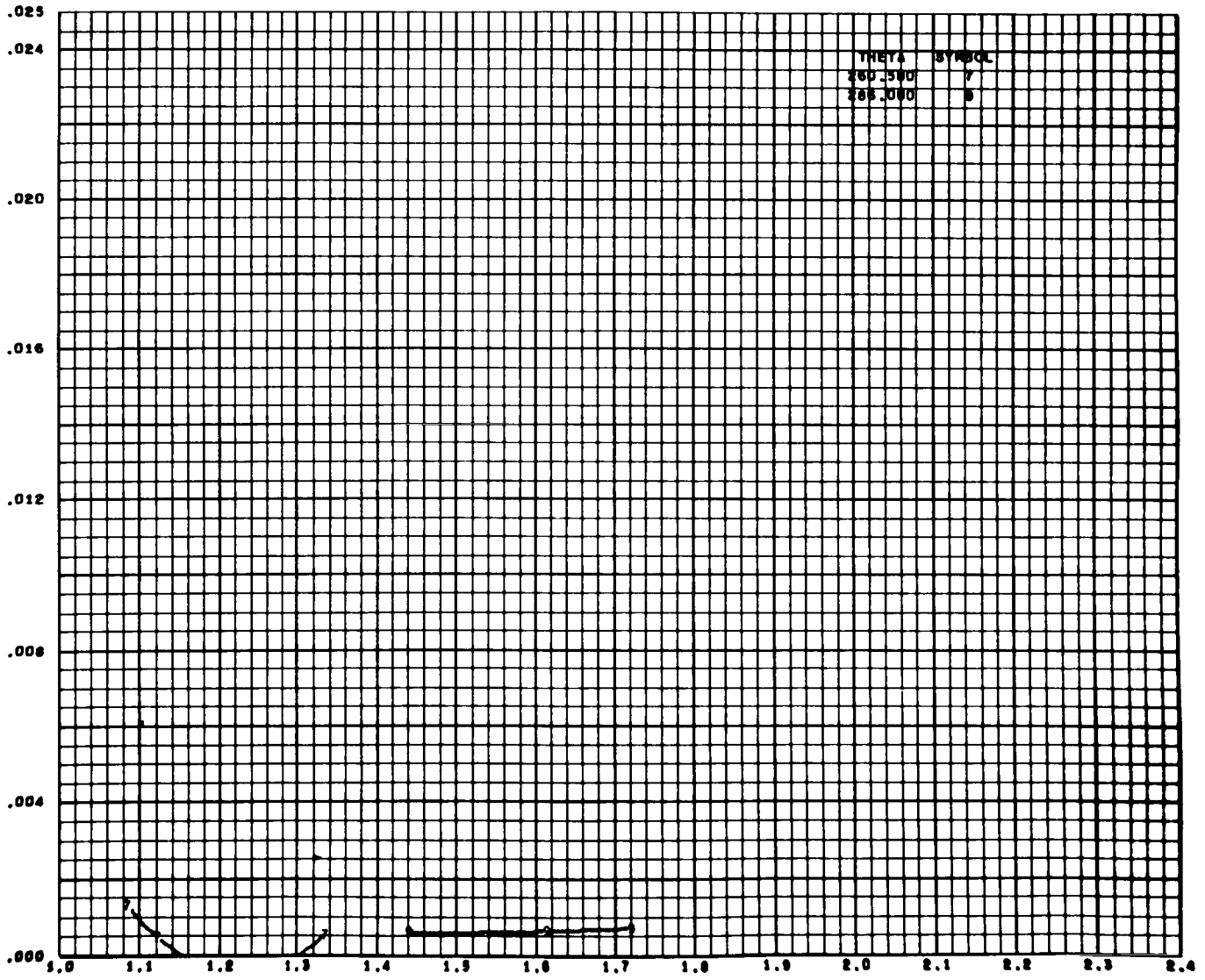
3937-09
051 000



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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 162.49 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 216.00 PSIA
TOTAL TEMPERATURE ---- 1657.90 DEG RANKINE

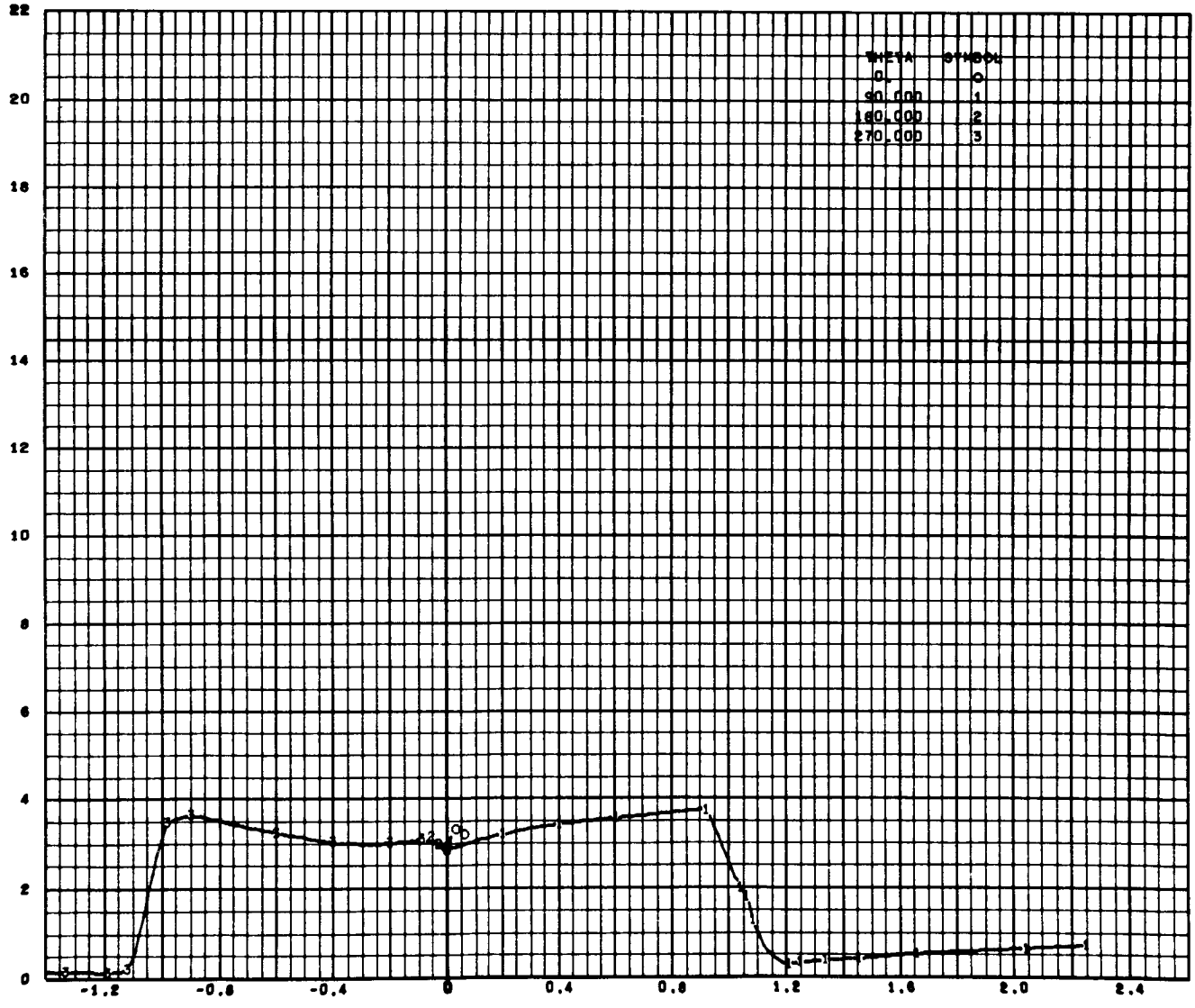
RE/FT --- 0.3358*10+6
Q(OM) --- 1.9502 BTU/SQ FT SEC

PLOT SERIES NUMBER 31

TEST GROUP	TIME (SEC)
67*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
052 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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Q(OM) --- 1.9502 BTU/SQ FT SEC

PLOT SERIES NUMBER 31

TEST GROUP	TIME (SEC)
67*	2.75

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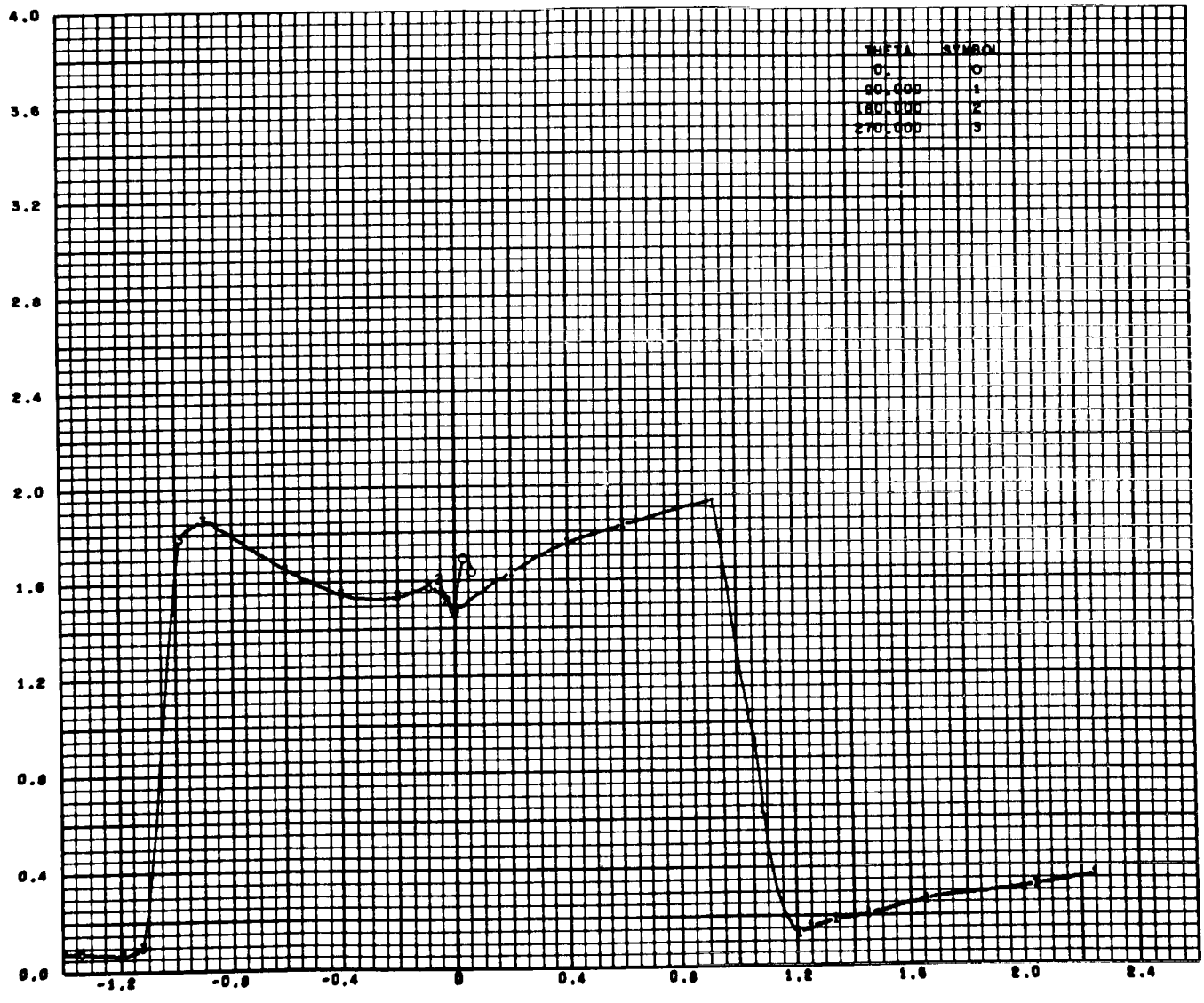
3937-09
054 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 162.49 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 216.00 PSIA
TOTAL TEMPERATURE ---- 1657.90 DEG RANKINE

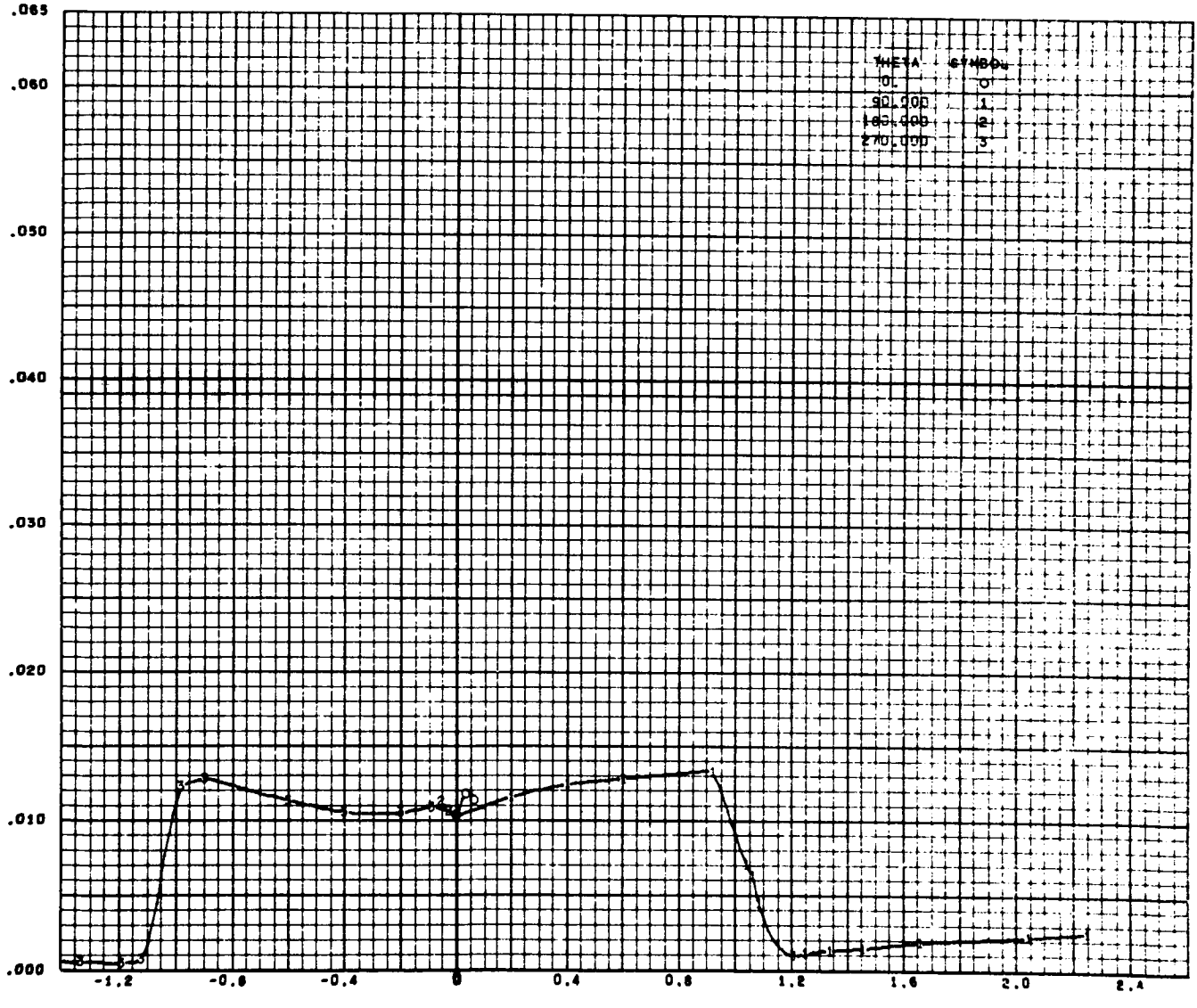
RE/FT --- 0.335R*10+6
Q(CM) --- 1.9502 BTU/SQ FT SEC

PLOT SERIES NUMBER 31

TEST GROUP	TIME (SEC)
67*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
056 000



[redacted]

CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 162.49 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 216.00 PSIA
TOTAL TEMPERATURE ---- 1657.90 DEG RANKINE

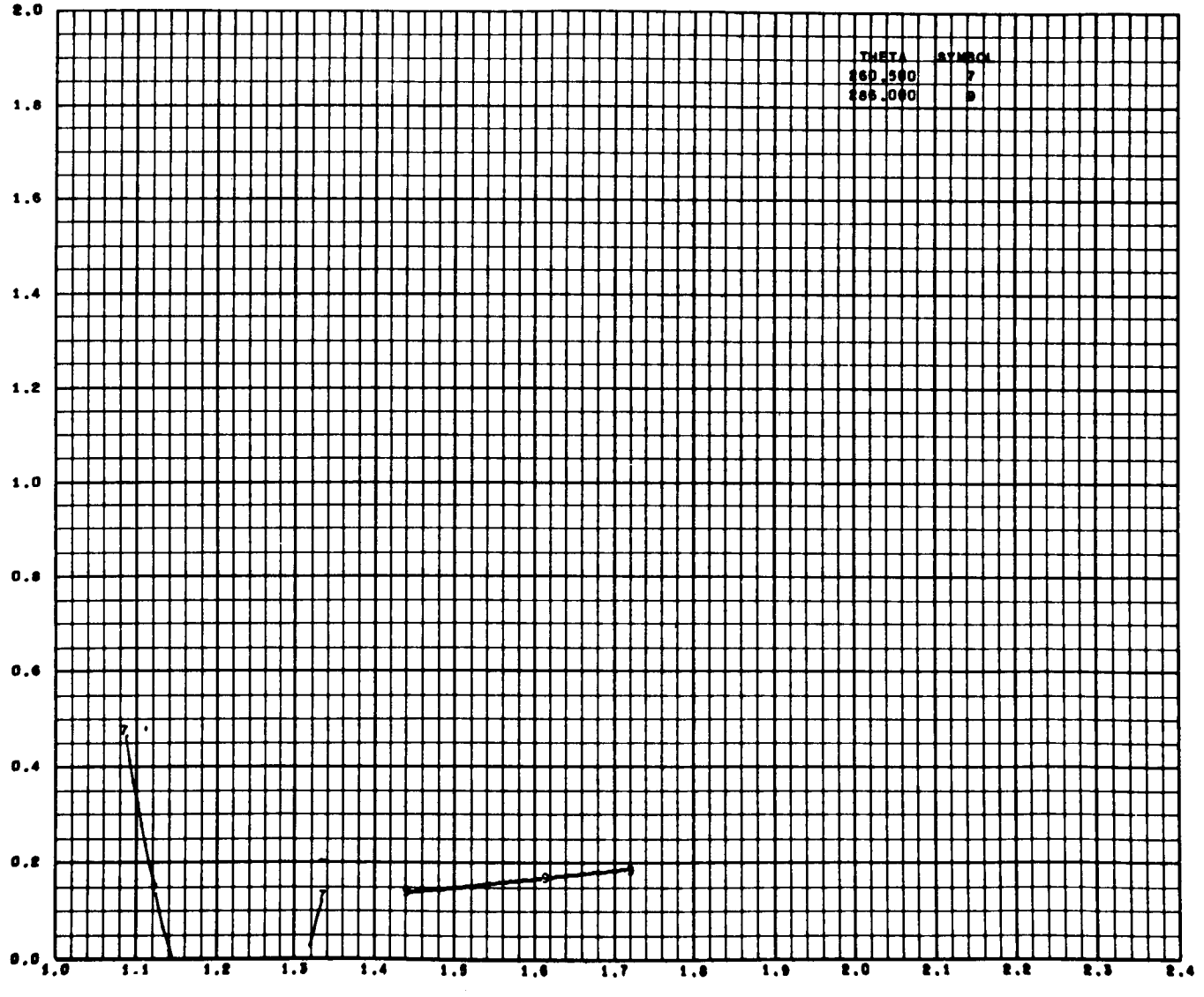
RE/FT --- 0.3358*10+6
Q(OM) --- 1.9502 BTU/SQ FT SEC

PLOT SERIES NUMBER 31

TEST GROUP	TIME (SEC)
67*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3837-09
093 000



CONFIDENTIAL

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
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PLOT SERIES NUMBER 31

TEST GROUP	TIME (SEC)
67*	2.75

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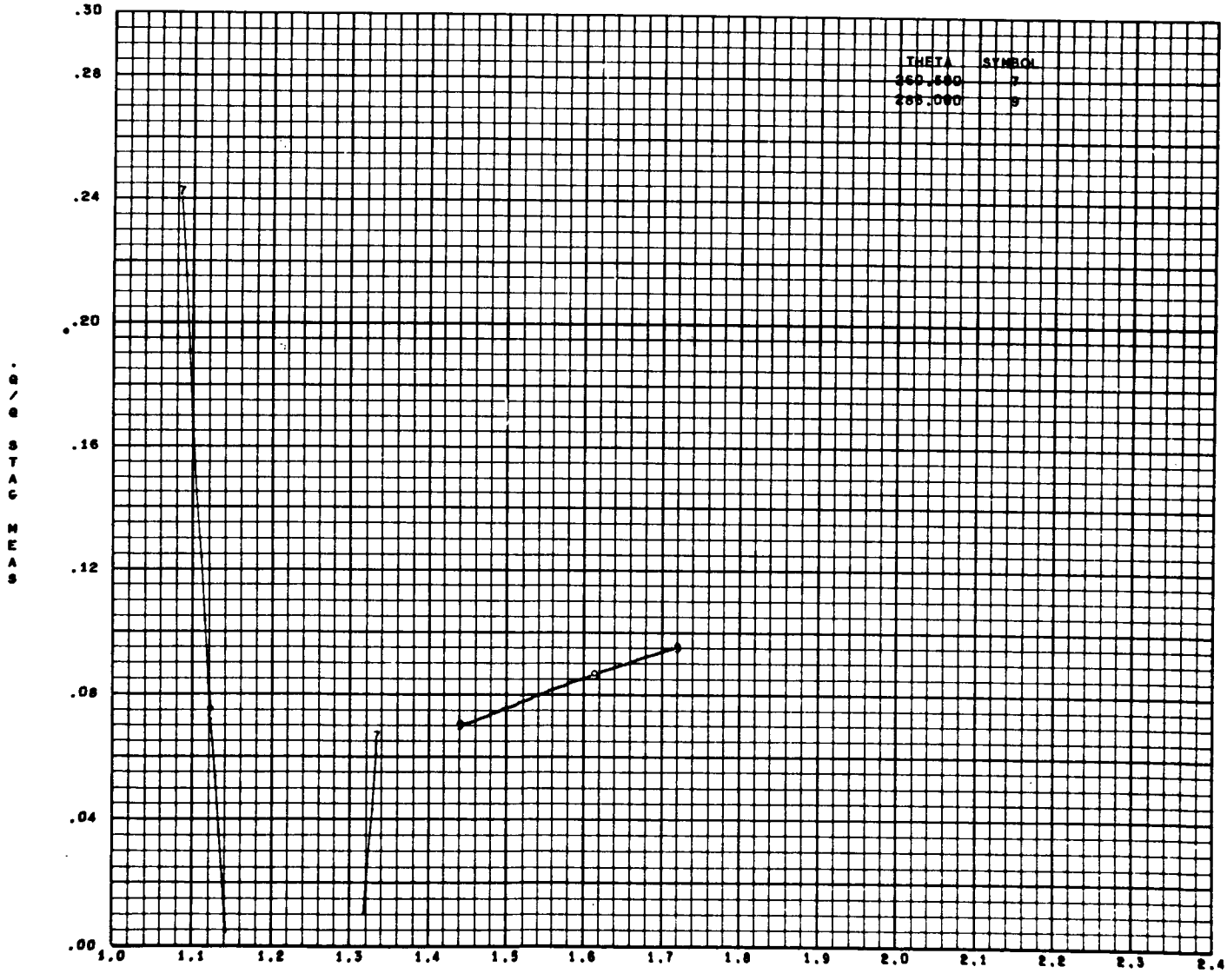
3937-09
055 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.04
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PLOT SERIES NUMBER 31

TEST GROUP	TIME (SEC)
67*	2.75

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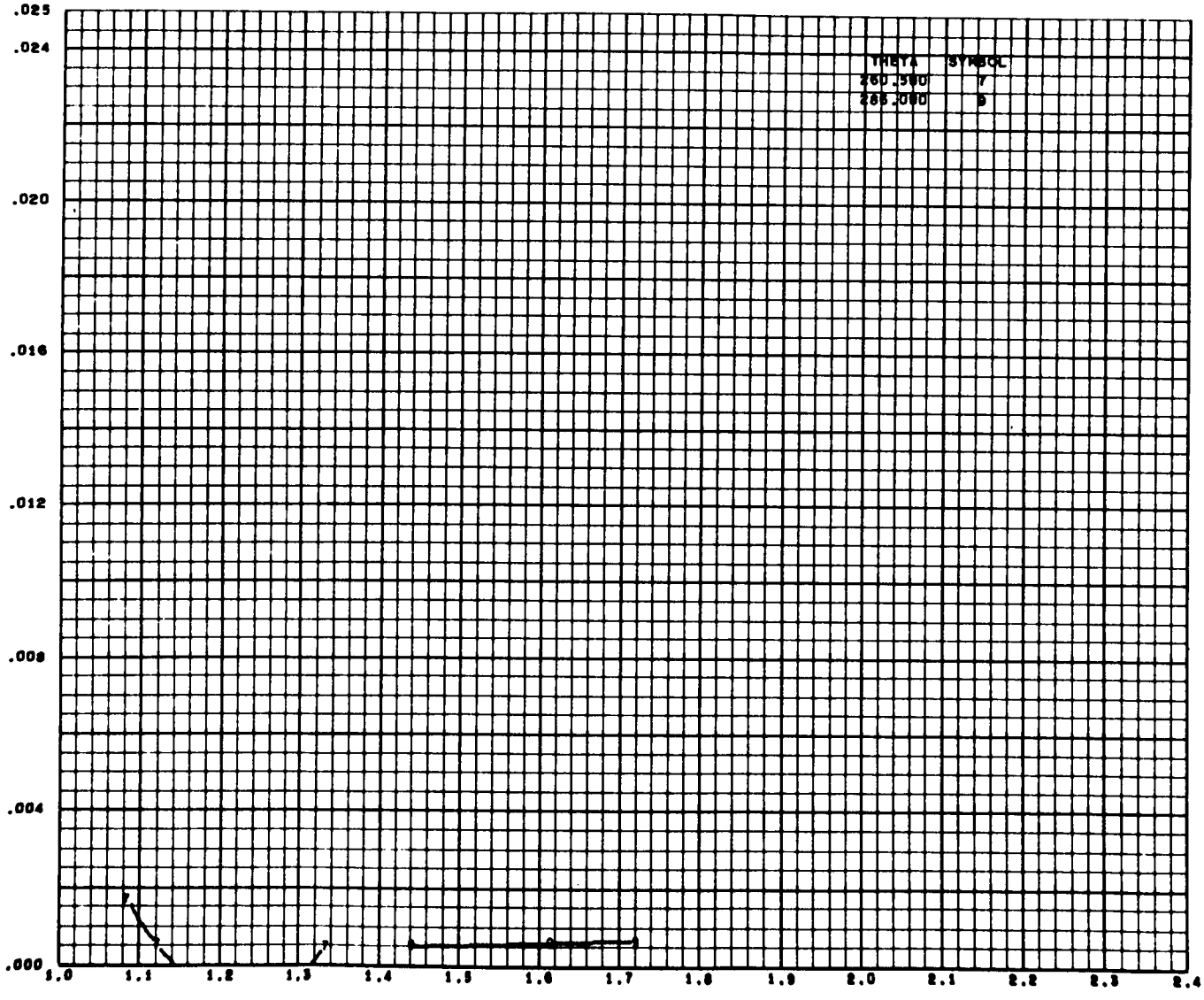
3937-09
057 000



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[redacted]

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 143.40 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 946.20 PSIA
TOTAL TEMPERATURE ---- 1828.40 DEG RANKINE

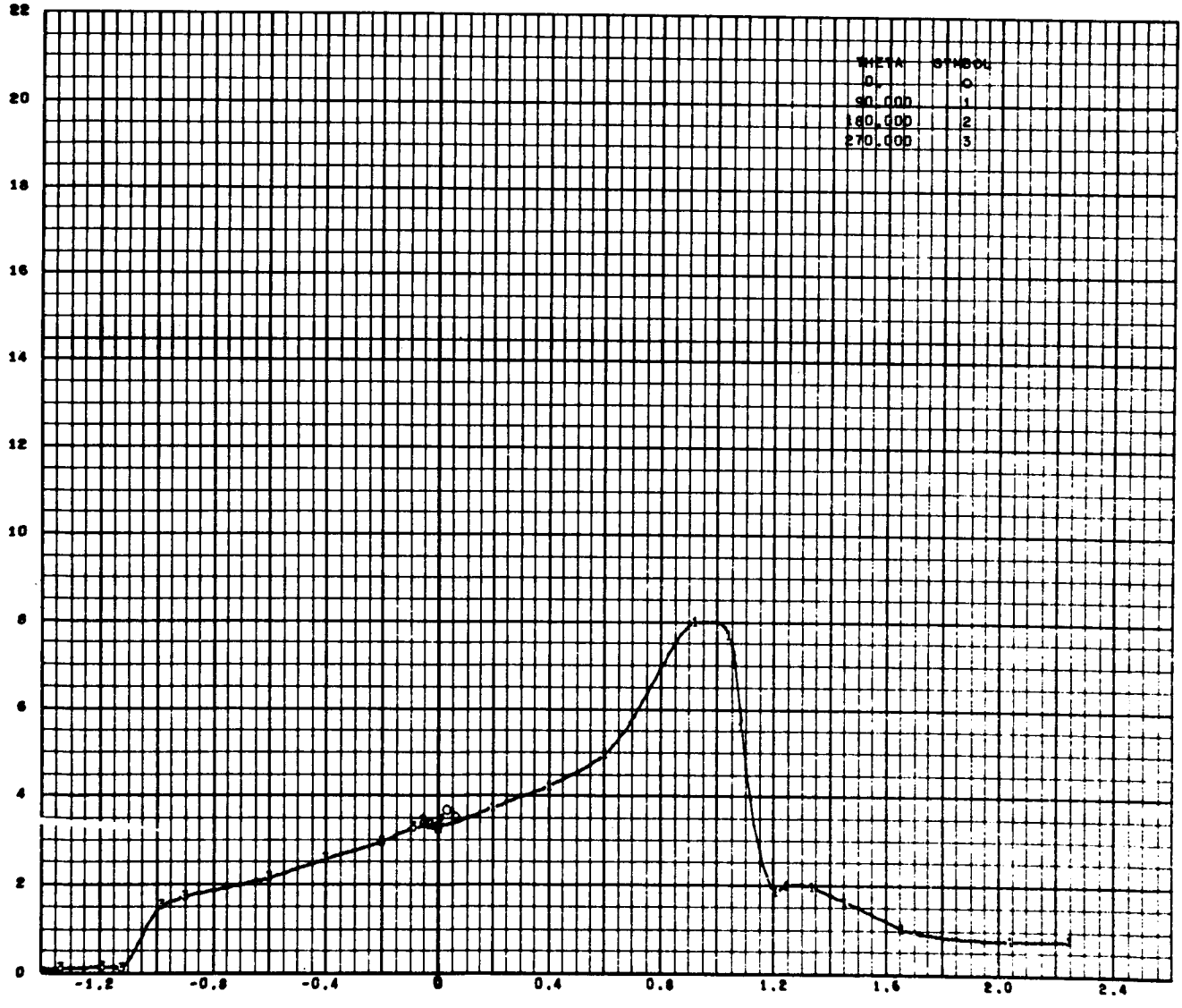
RE/FT --- 1.2164*10+6
Q(OM) --- 5.7351 BTU/SQ FT SEC

PLOT SERIES NUMBER 32

TEST GROUP	TIME (SEC)
68*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
058 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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PLOT SERIES NUMBER 32

TEST GROUP	TIME (SEC)
68*	2.70

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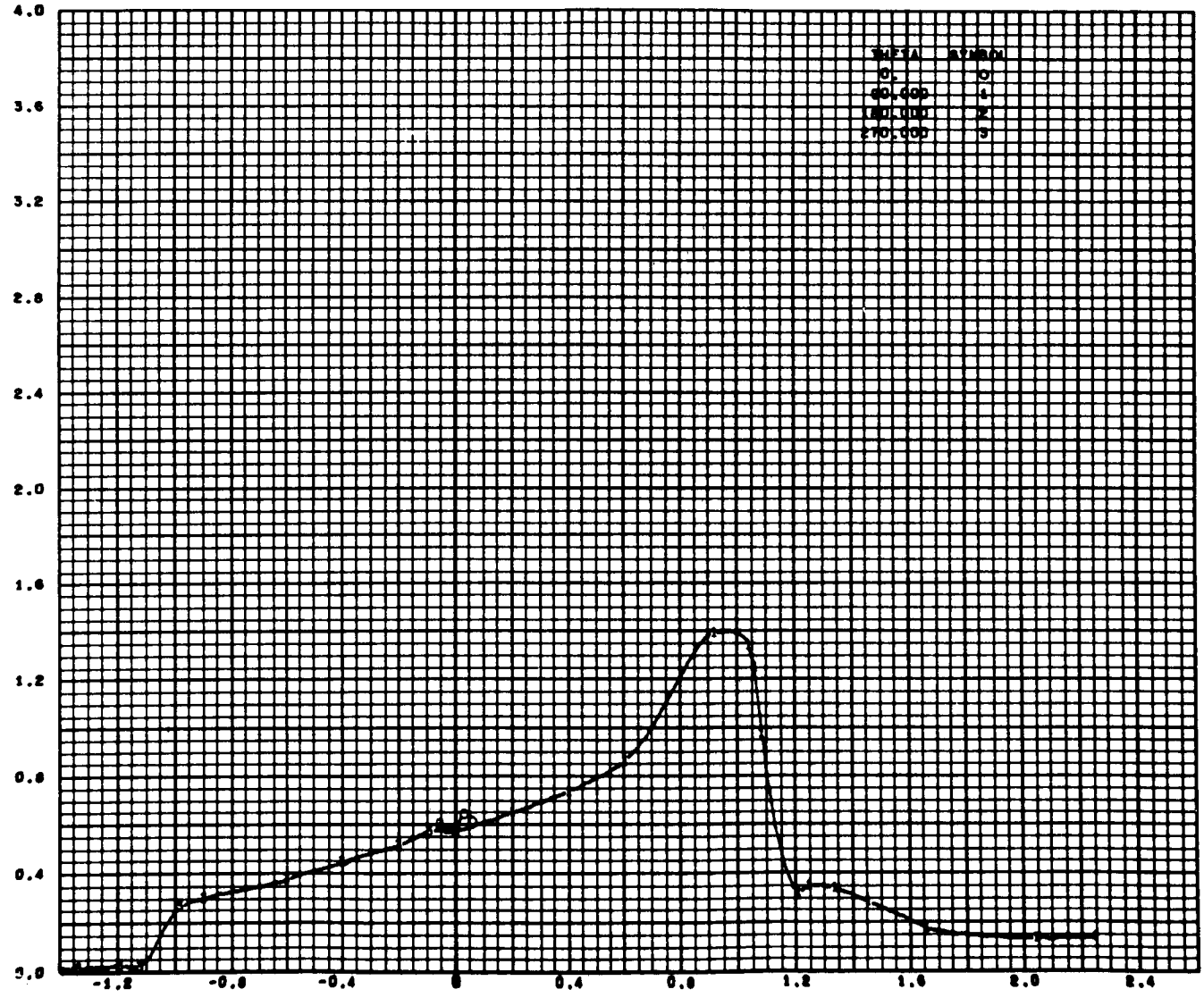
3937-09
060 000



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[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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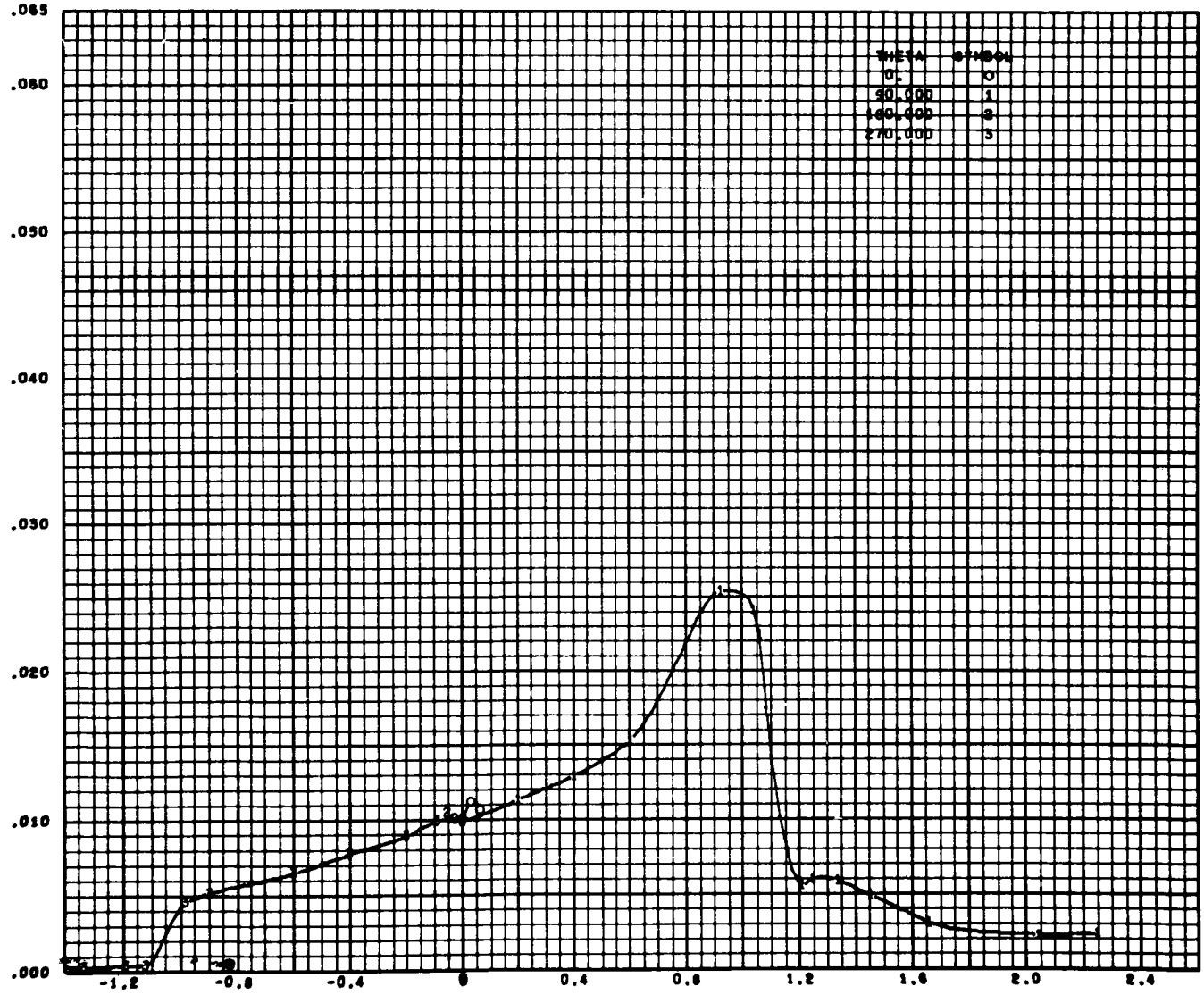
PLOT SERIES NUMBER 32

TEST GROUP	TIME (SEC)
68*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
062 000



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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.15
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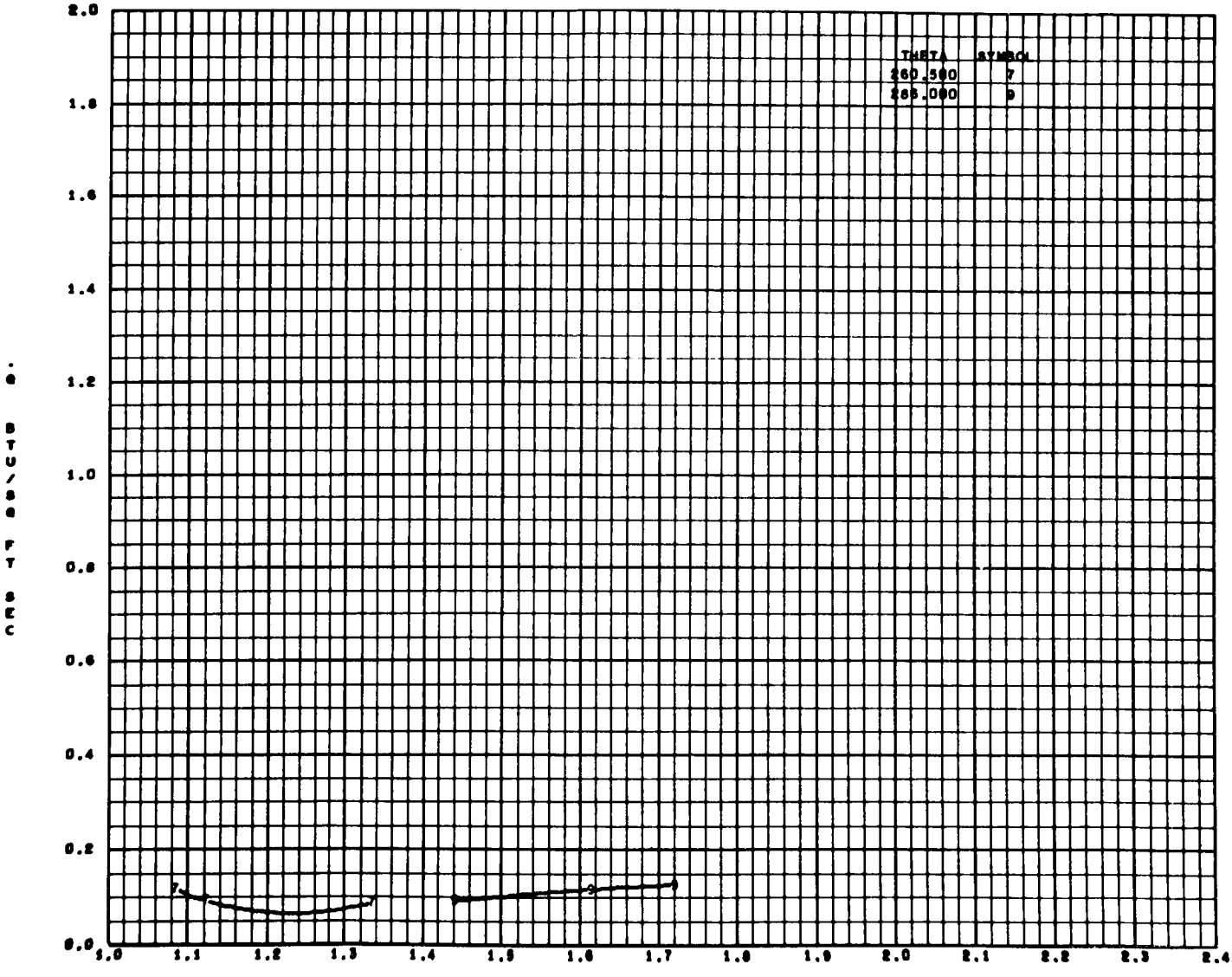
3937-09
059 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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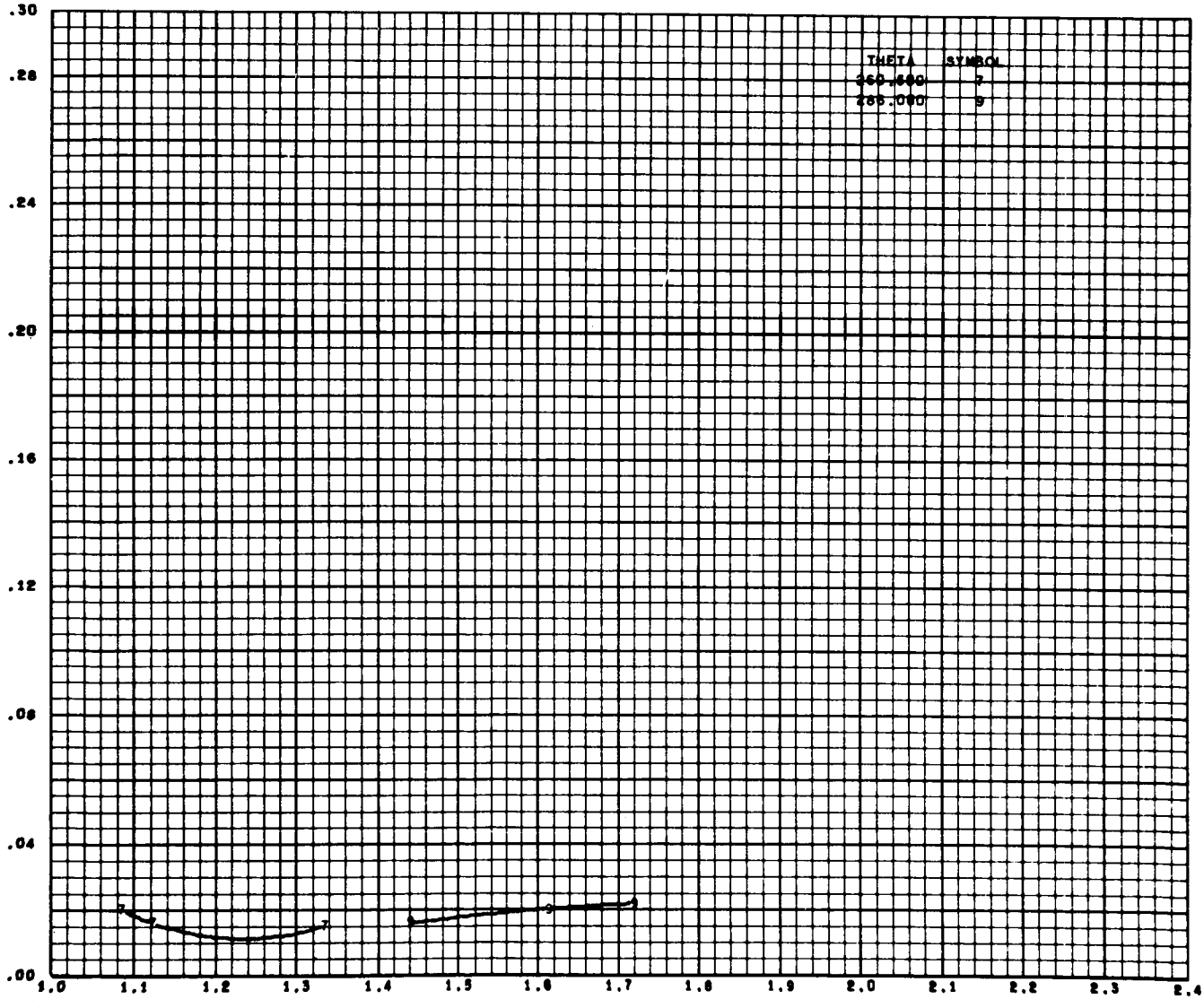
3937-09
061 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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PLOT SERIES NUMBER 32

TEST GROUP	TIME (SEC)
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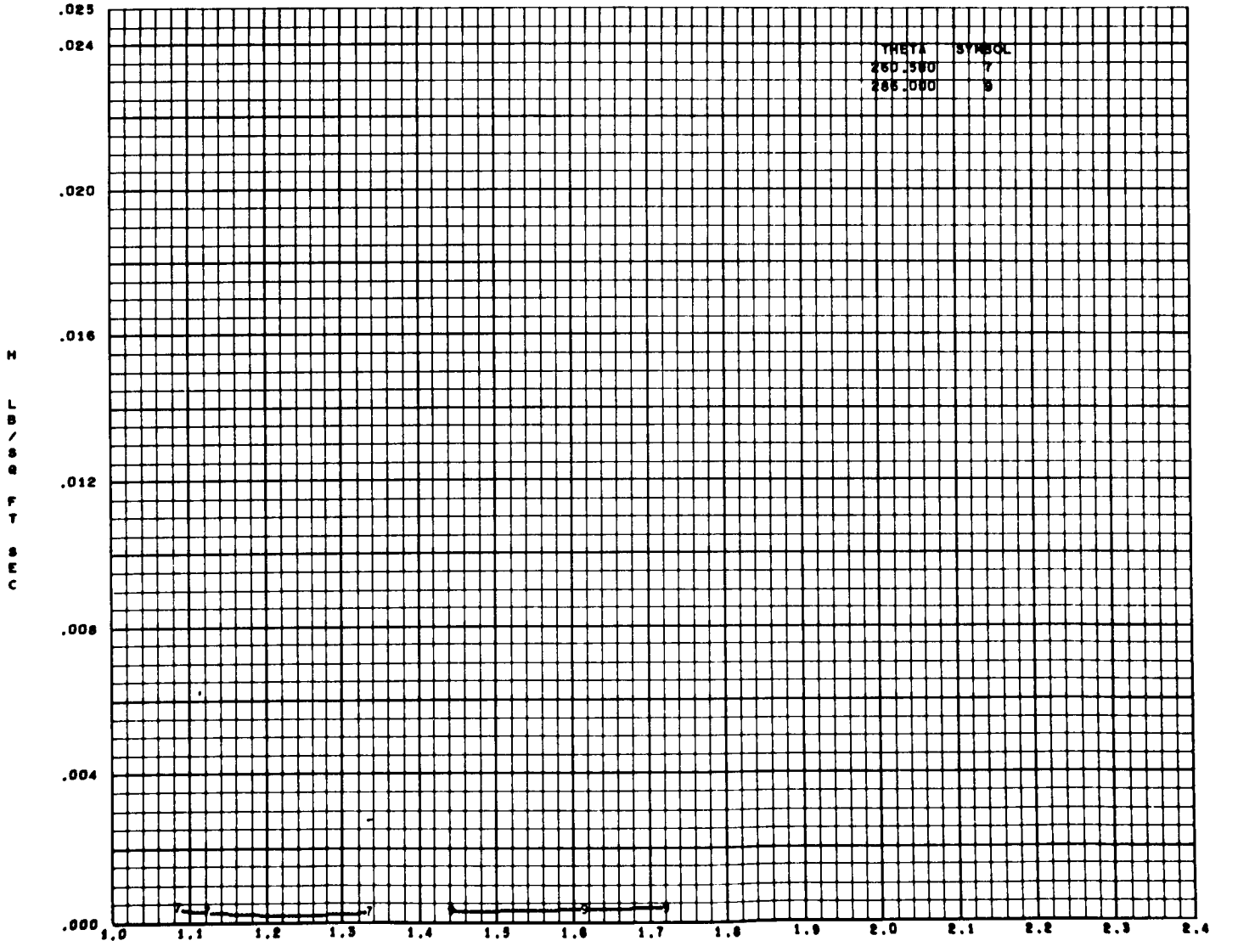
* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09 L
063 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 147.38 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 931.20 PSIA
TOTAL TEMPERATURE ---- 1818.90 DEG RANKINE

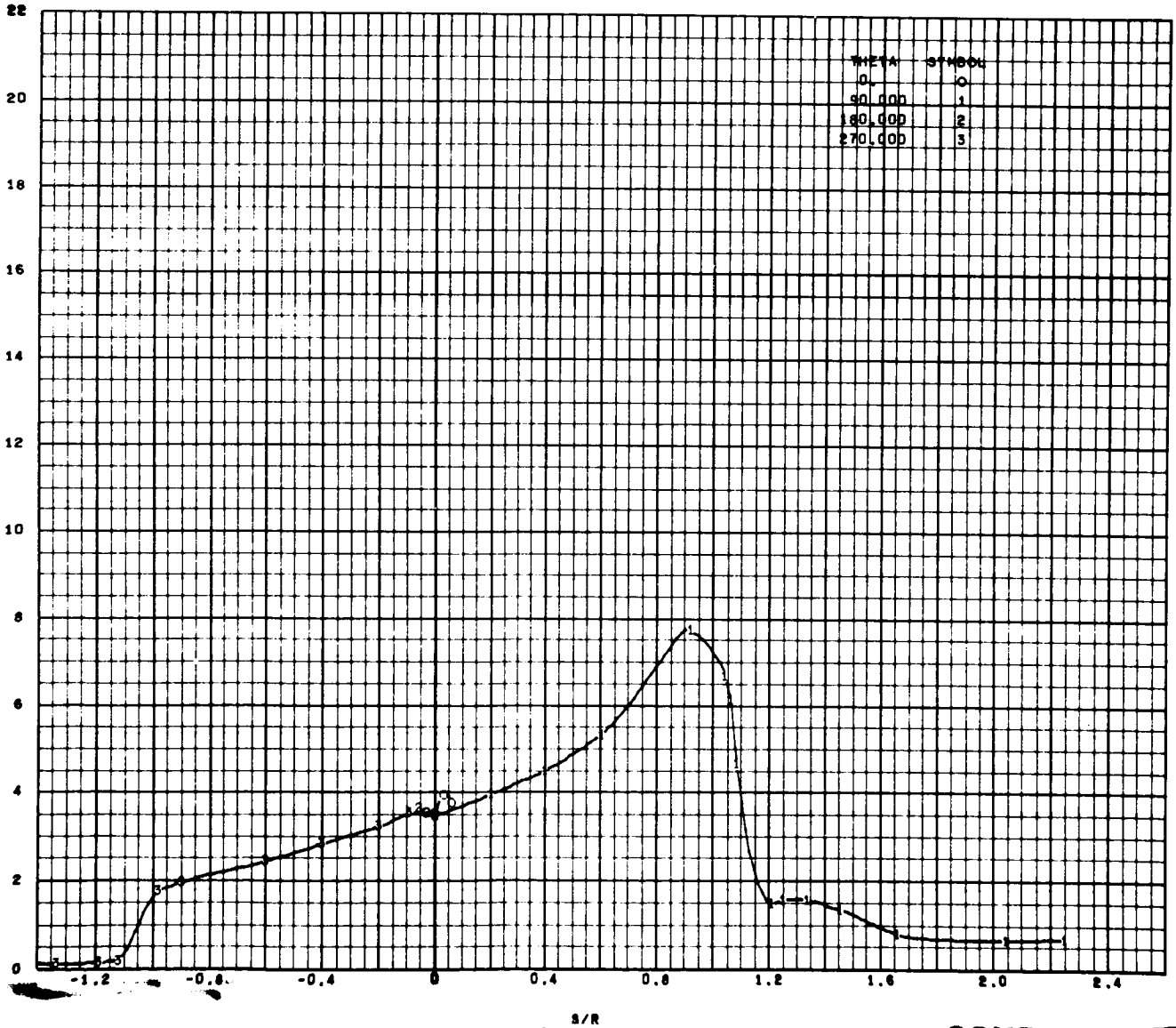
RE/FT --- 1.2084*10+6
Q(OM) --- 5.6656 BTU/SQ FT SEC

PLOT SERIES NUMBER 33

TEST GROUP	TIME (SEC)
69*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
064 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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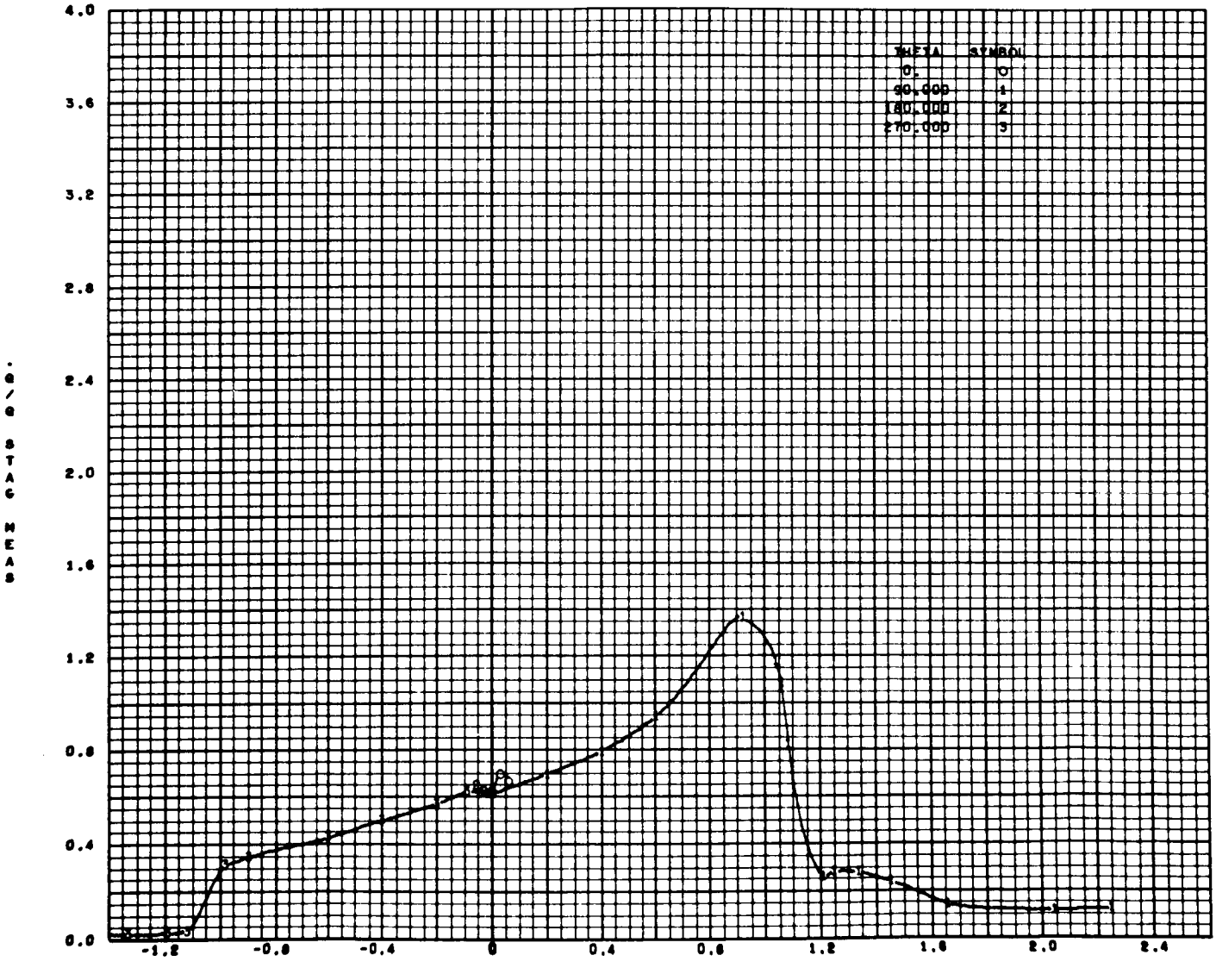
PLOT SERIES NUMBER 33

TEST GROUP	TIME (SEC)
69*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
066 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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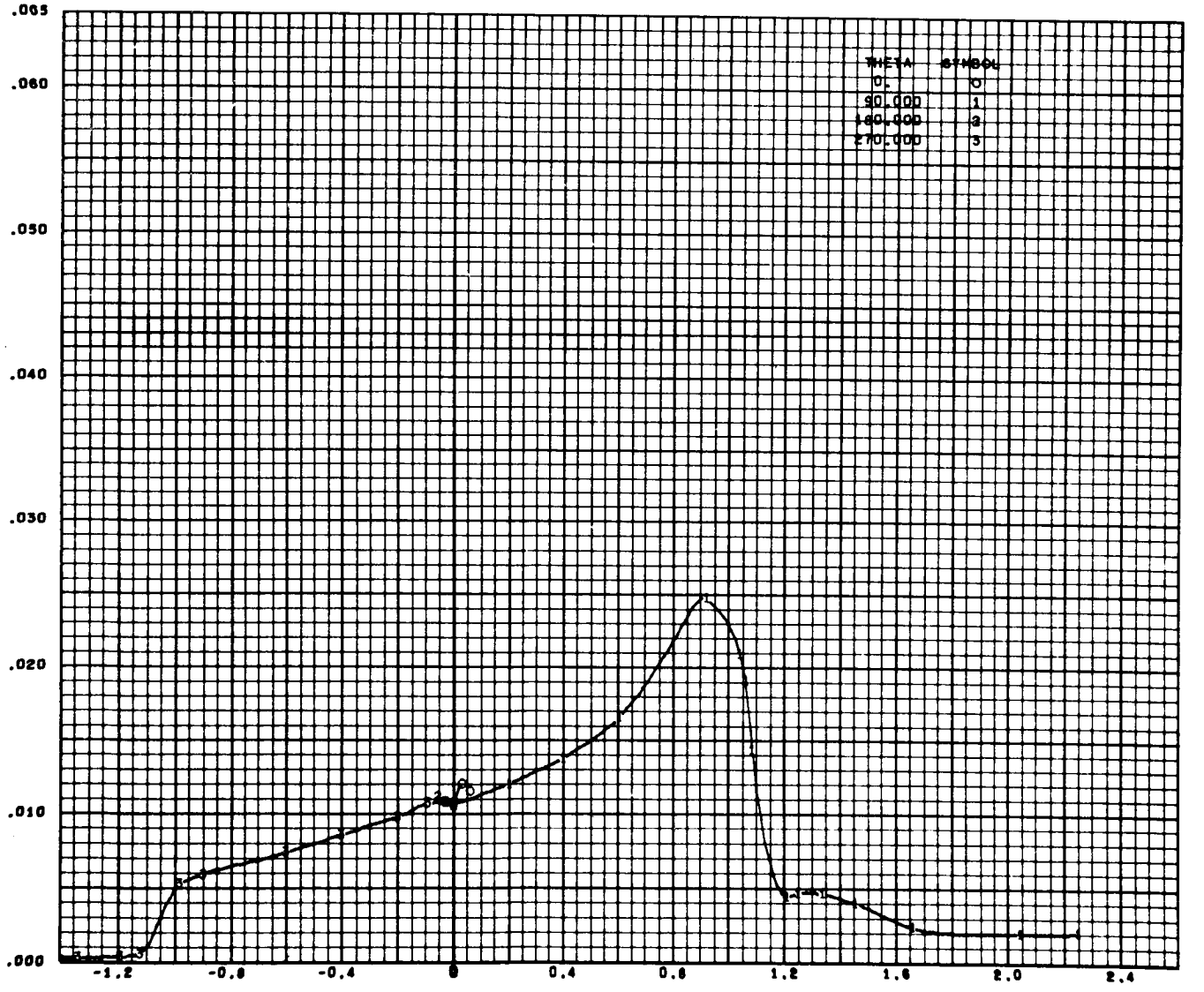
3937-09
068 000



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SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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PLOT SERIES NUMBER 33

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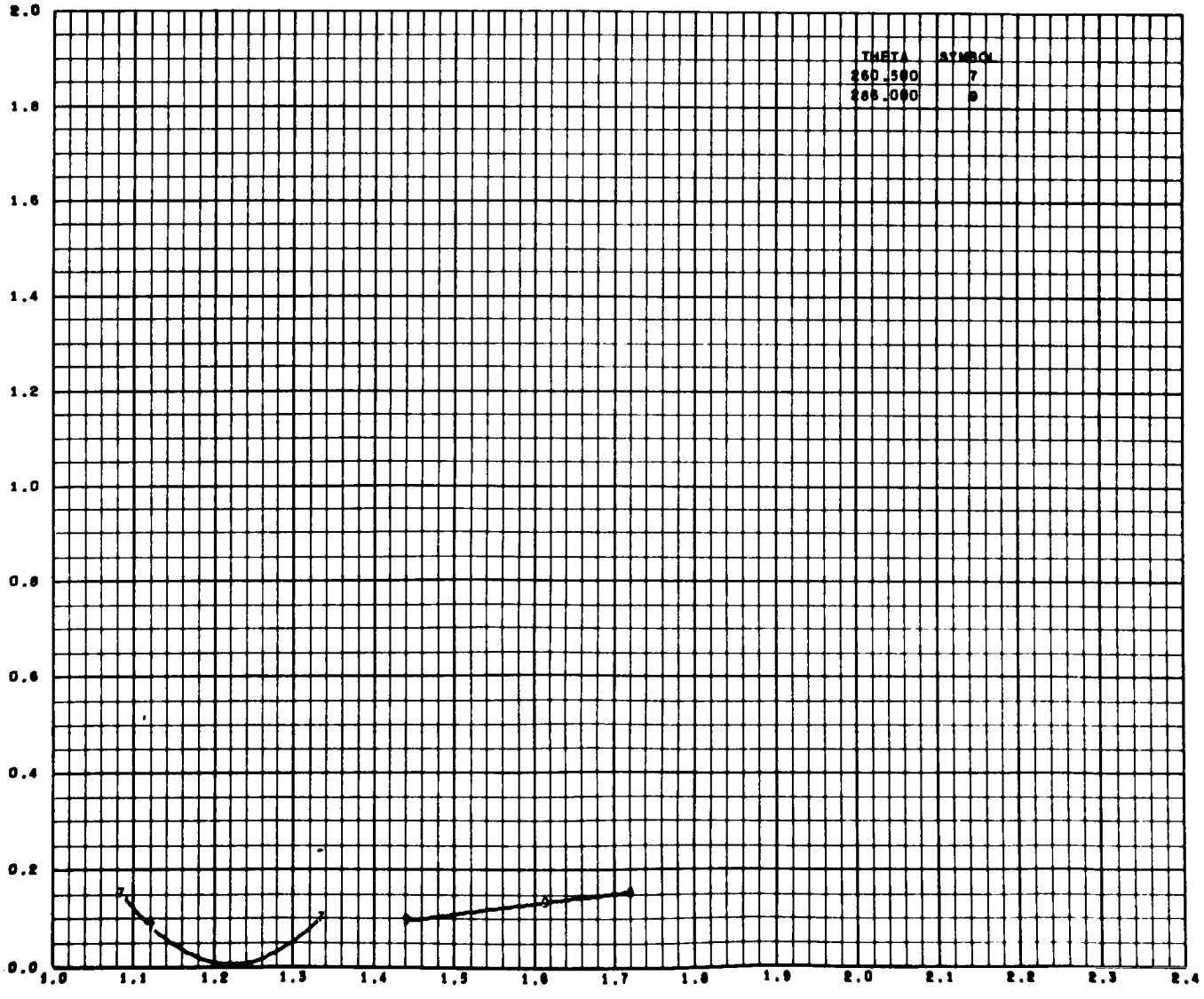
3937-09
065 000



$\dot{Q}$ BTU/SQ FT SEC

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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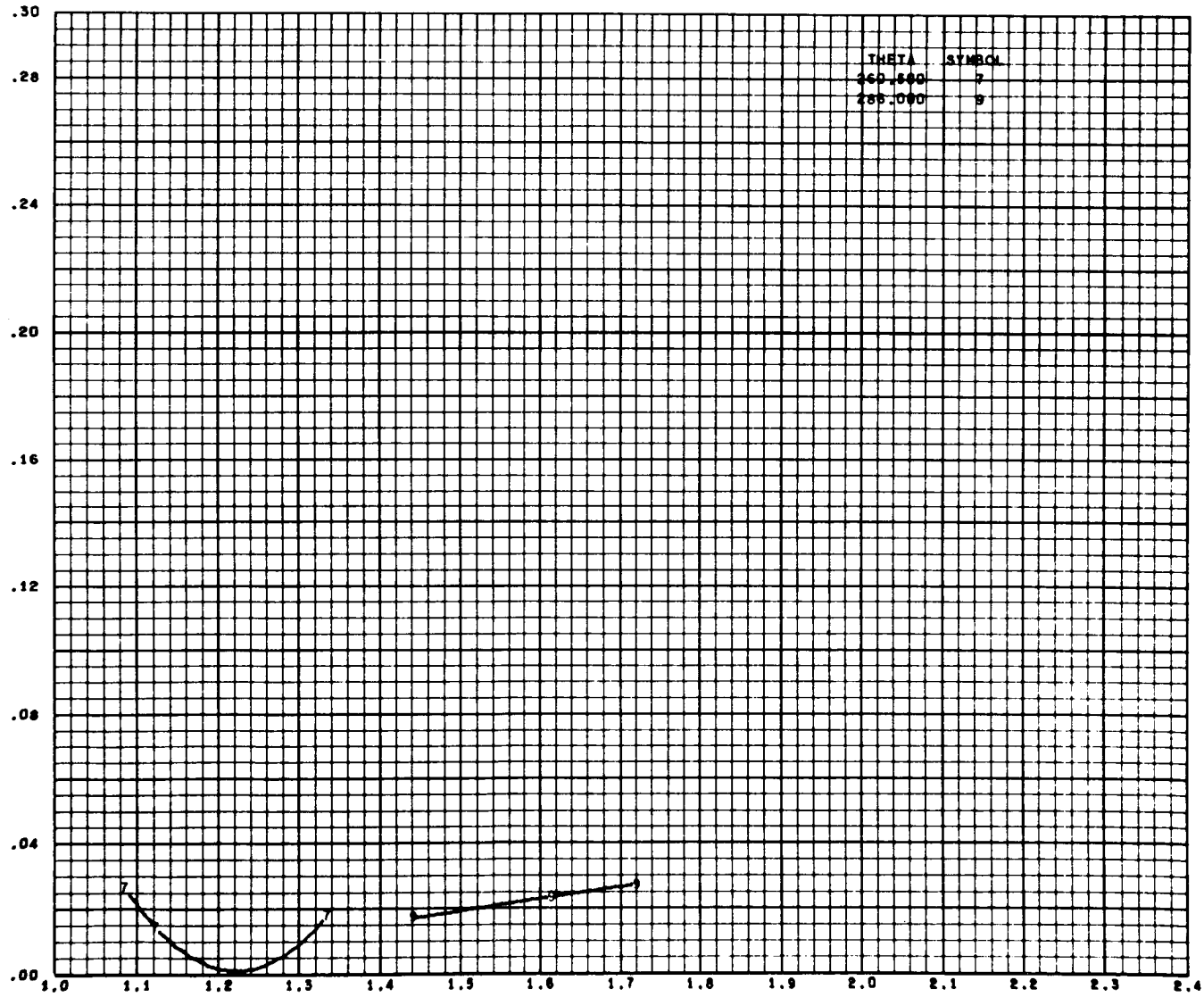
3937-09
067 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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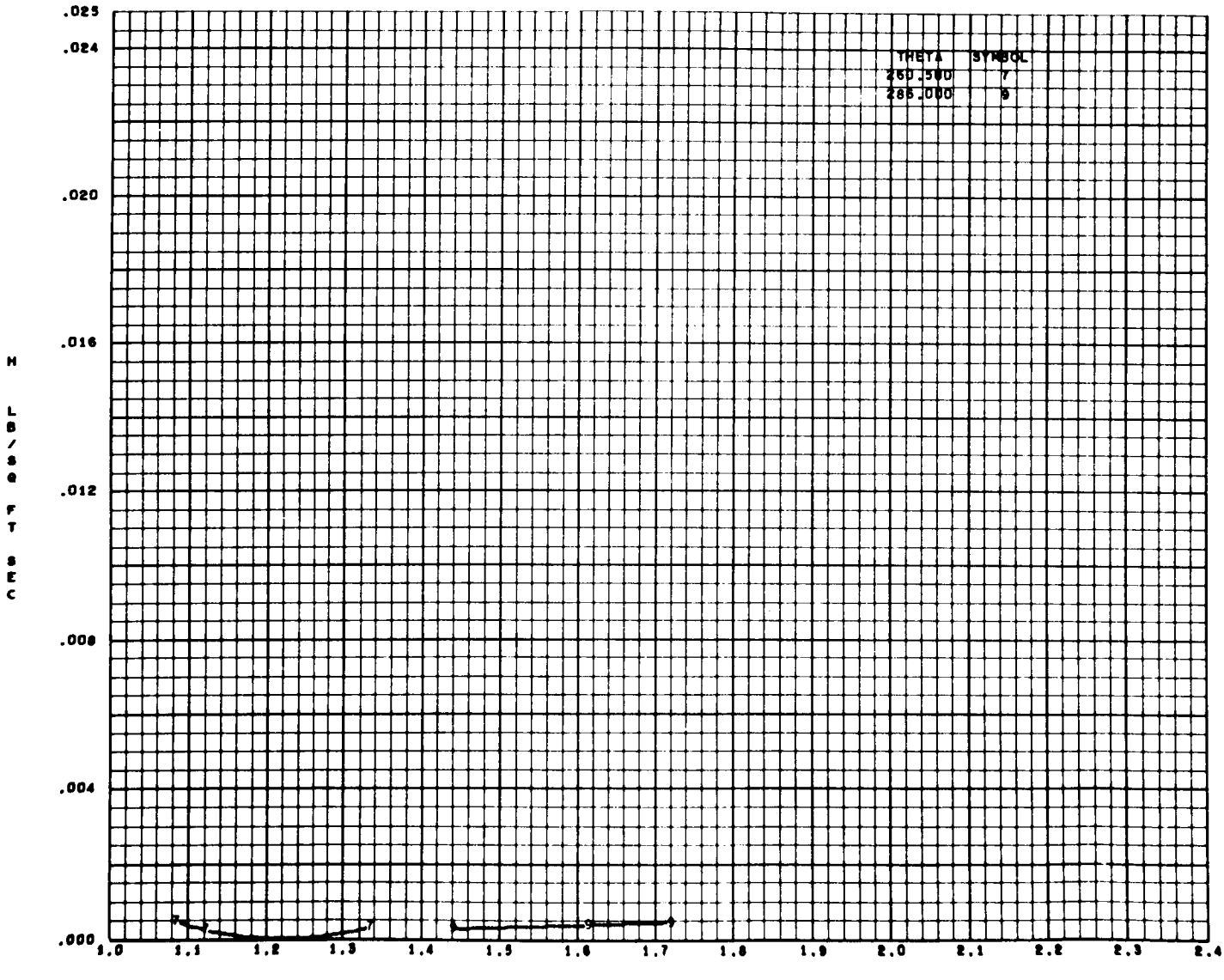
3937-09
069 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 154.35 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 937.20 PSIA
TOTAL TEMPERATURE ---- 1814.40 DEG RANKINE

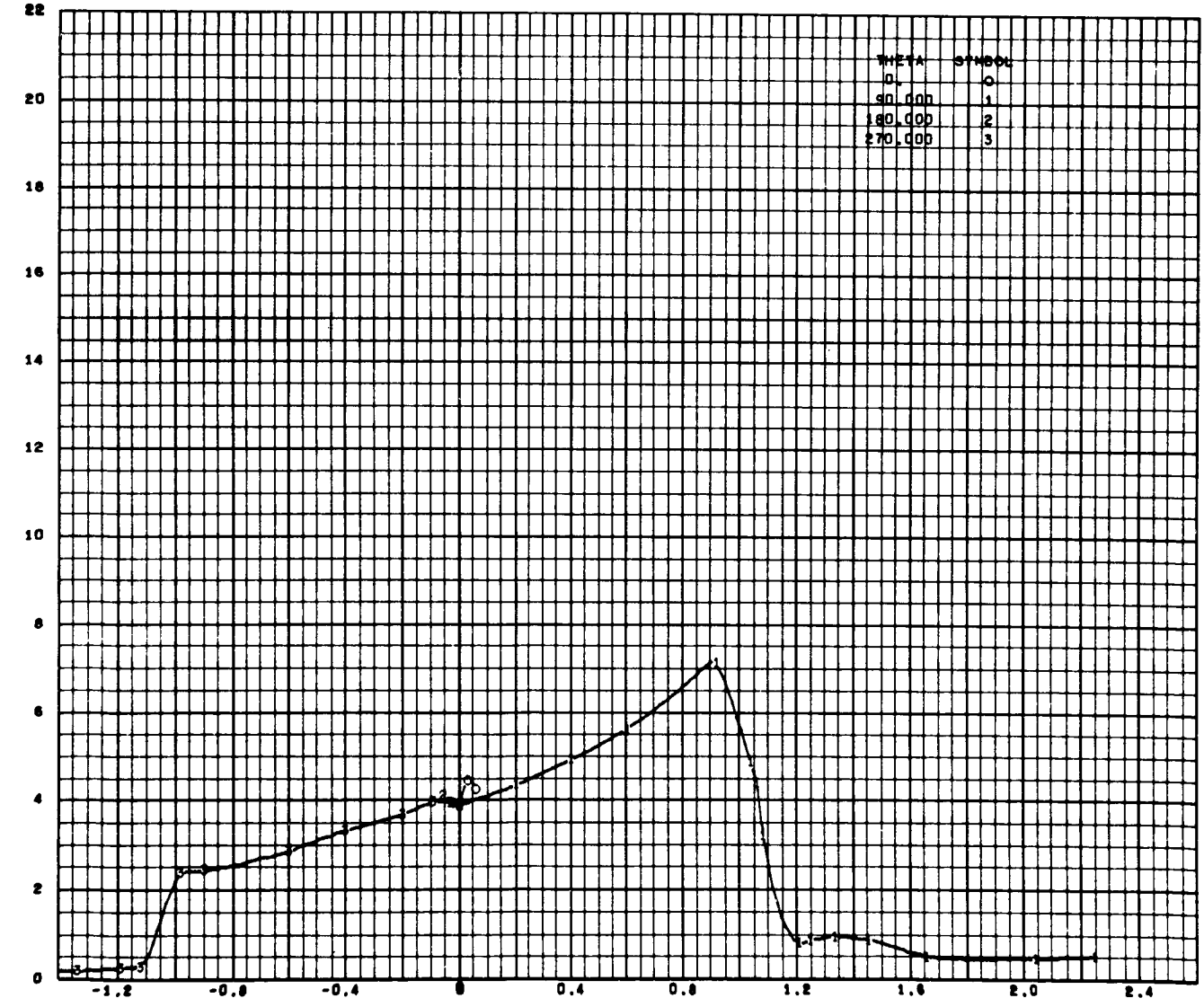
RE/FT --- 1.2217*10+6
Q(OM) --- 5.6935 BTU/SQ FT SEC

PLOT SERIES NUMBER 34

TEST GROUP	TIME (SEC)
70*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
070 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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PLOT SERIES NUMBER 34

TEST GROUP	TIME (SEC)
70*	2.70

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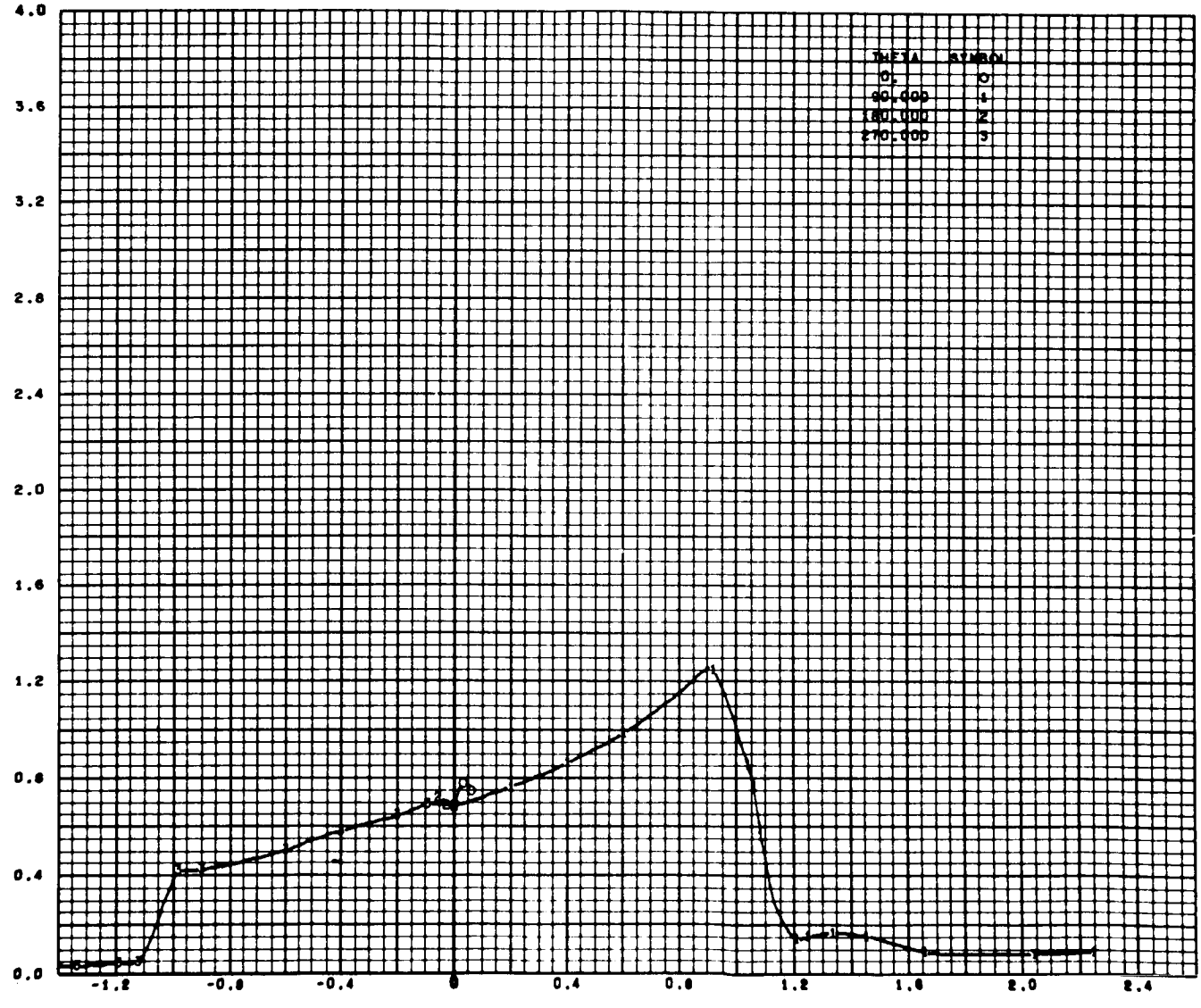
3937-09
072 000



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A-254 SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.15
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PLOT SERIES NUMBER 34

TEST GROUP	TIME (SEC)
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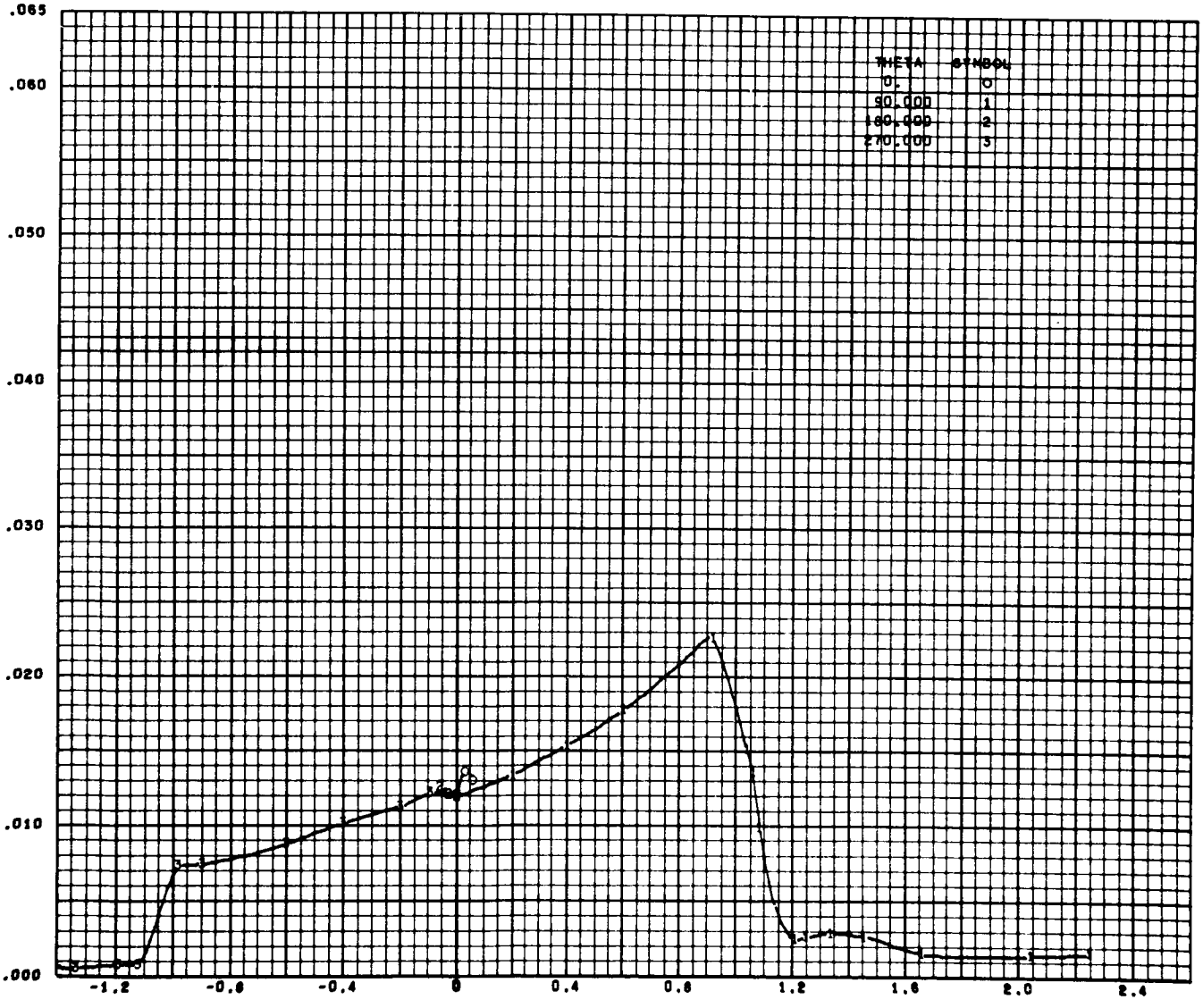
3937-09
074 000



CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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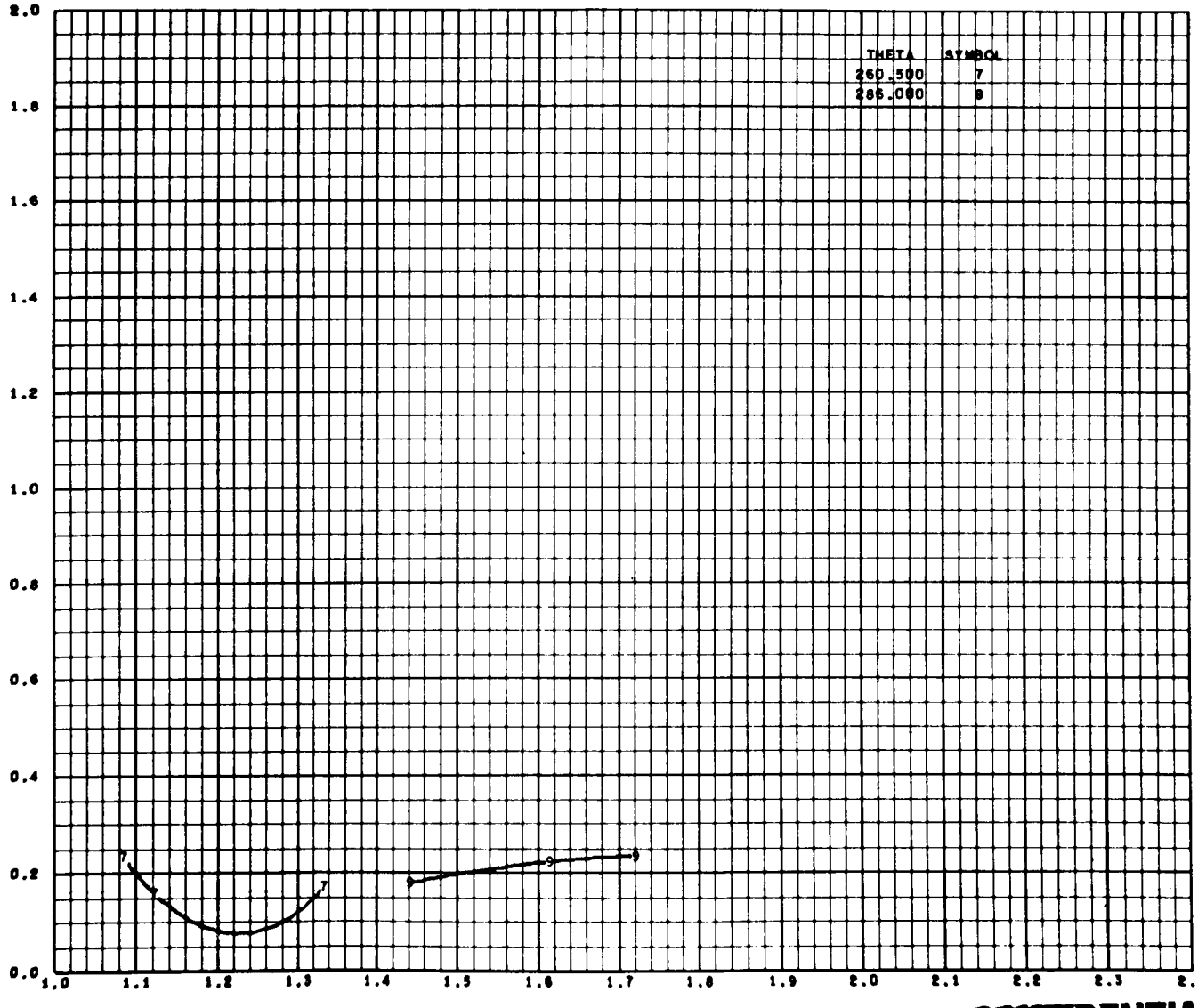
3937-09
071 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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PLOT SERIES NUMBER 34

TEST GROUP	TIME (SEC)
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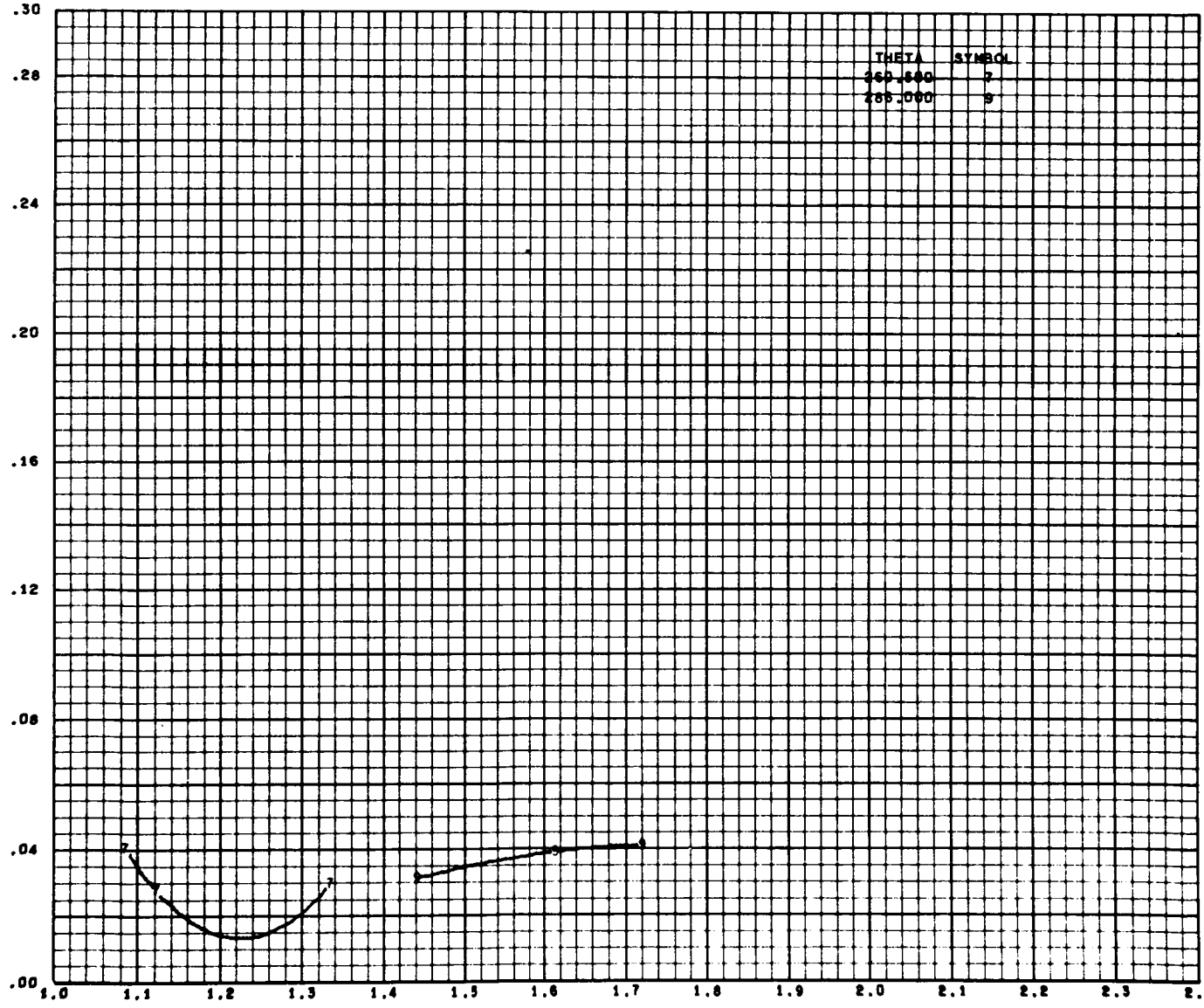
3937-09
073 000



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A-257 SID 64-2080

CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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ANGLE OF ATTACK ------ 154.35 DEG
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Q(OM) --- 5.6935 BTU/SQ FT SEC

PLOT SERIES NUMBER 34

TEST GROUP	TIME (SEC)
70*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
075 000

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HEAT TRANSFER

CONFIGURATION C56

PLOT SERIES NUMBER 35

3937-09
076 000

APOLLO H-11

AEDC, TUNNEL C

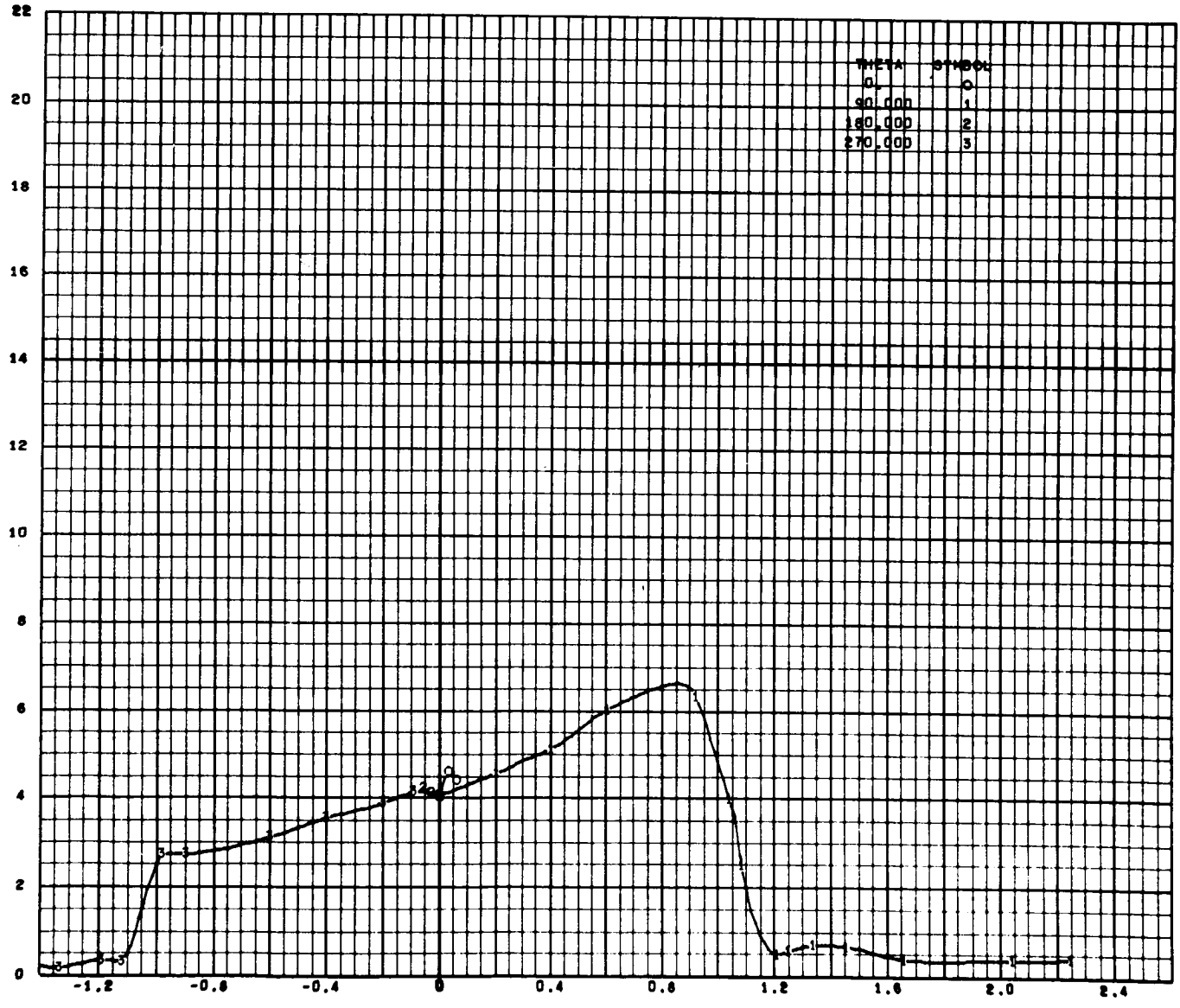
JUNE, 1964

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 158.42 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 933.20 PSIA
TOTAL TEMPERATURE ---- 1811.80 DEG RANKINE

RE/FT --- 1.2196*10+6
Q(OM) --- 5.6749 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
71*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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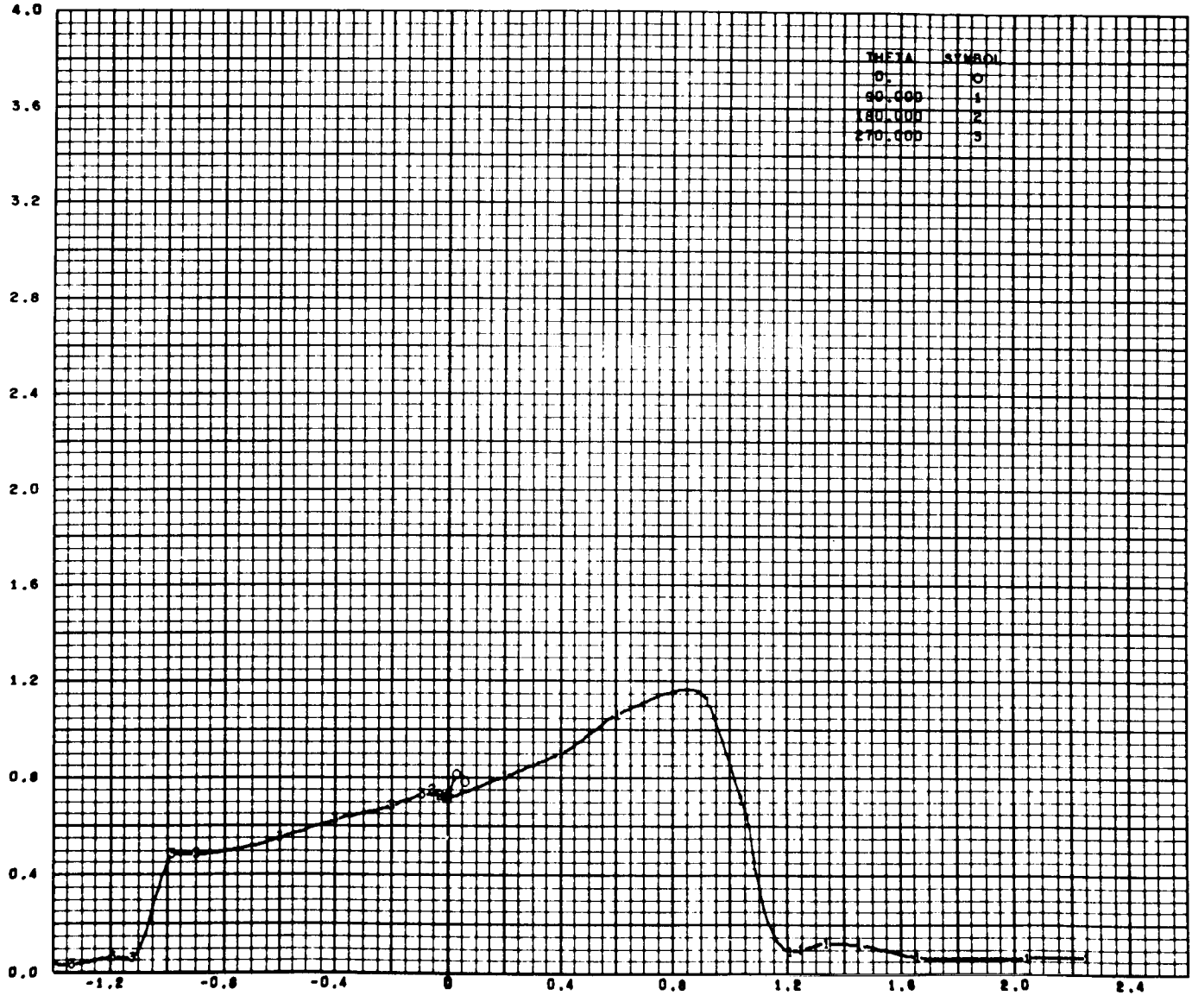
Q(OM) --- 5.6749 BTU/SQ FT SEC

PLOT SERIES NUMBER 35

TEST GROUP	TIME (SEC)
71*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
078 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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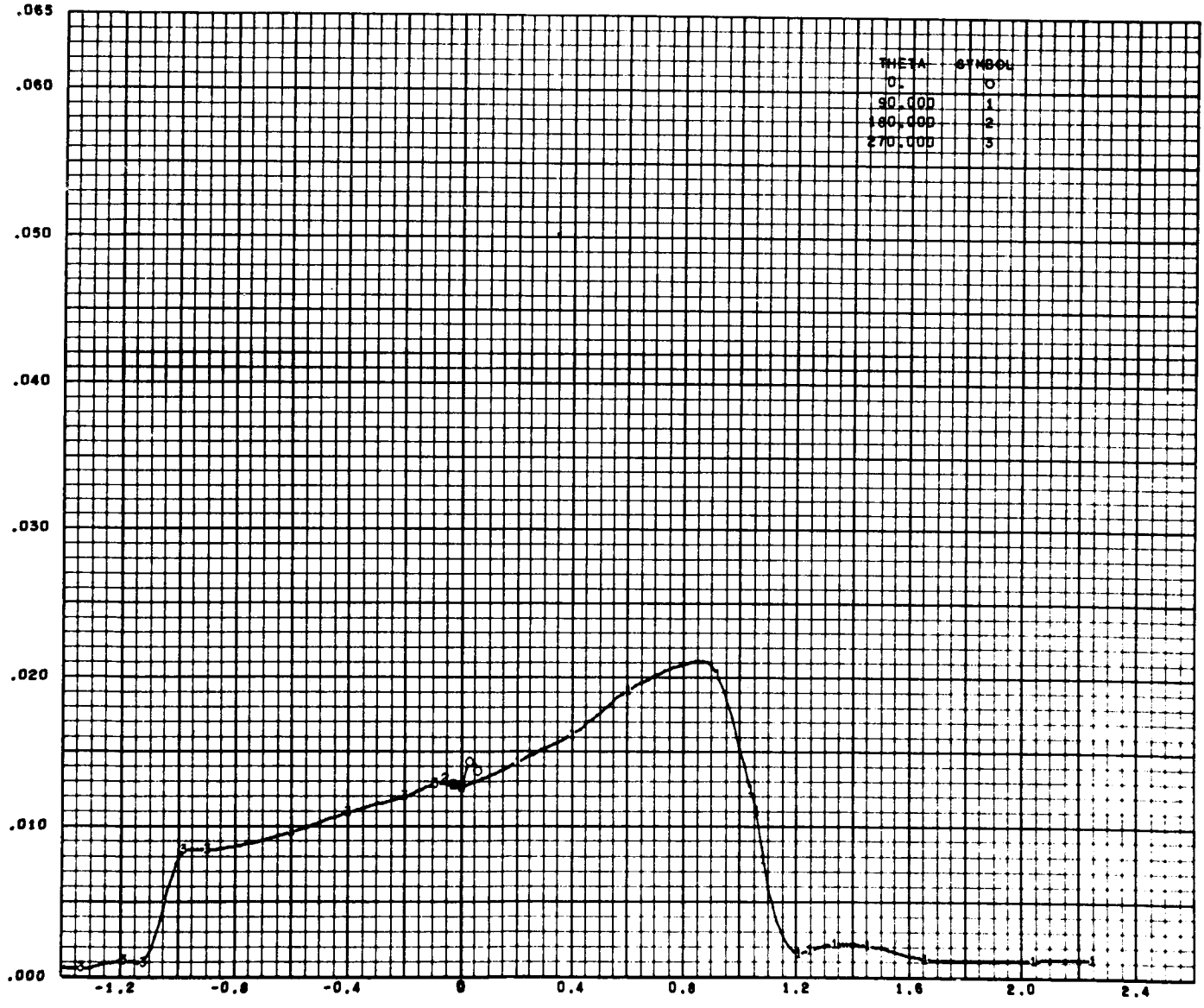
3937-09
080 000



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HEAT TRANSFER

APOLLO H-11

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JUNE, 1964

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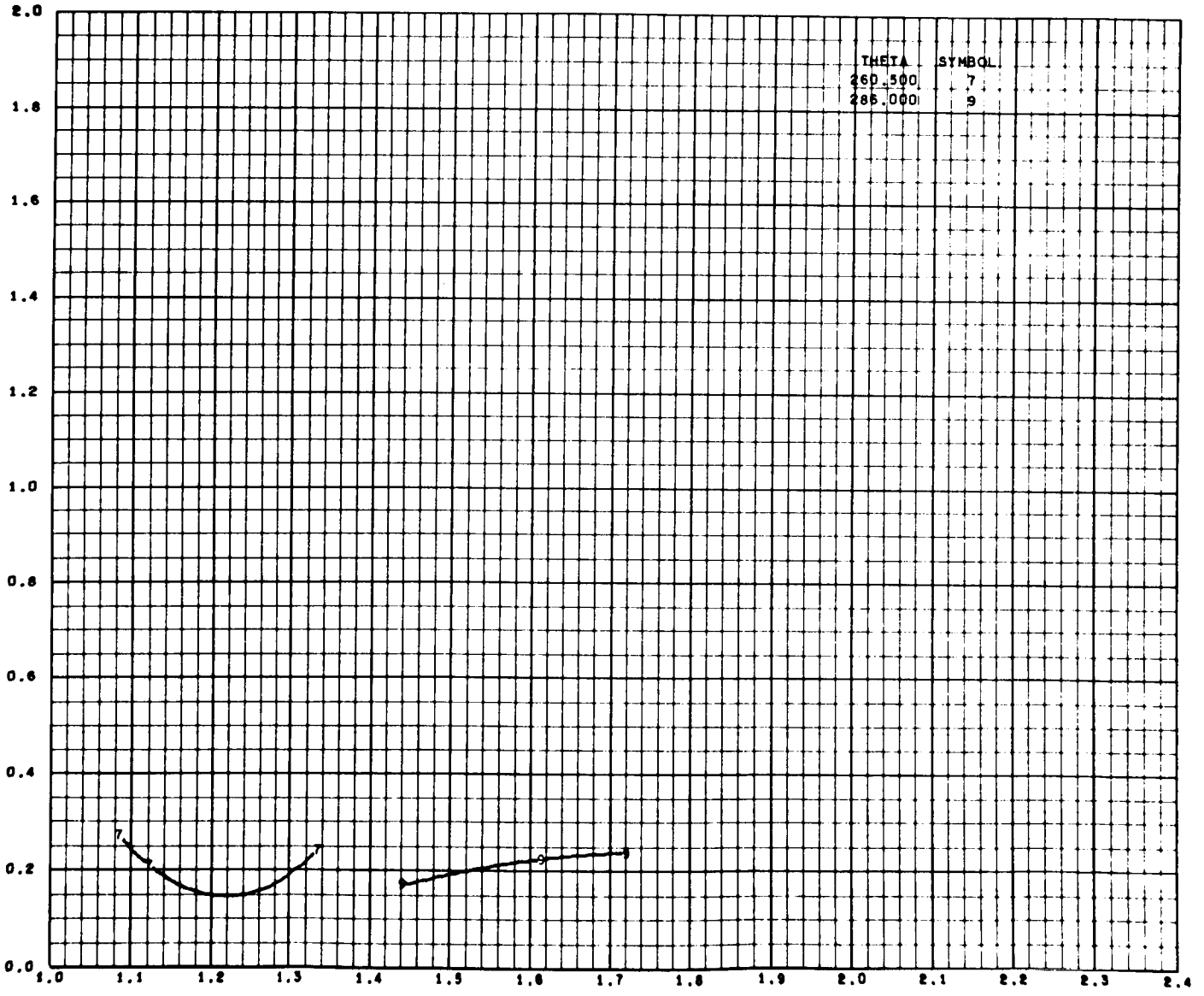
RE/FT --- 1.2196*10+6
Q(OM) --- 5.6749 BTU/SQ FT SEC

PLOT SERIES NUMBER 35

TEST GROUP	TIME (SEC)
71*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
077 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 158.42 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 933.20 PSIA
TOTAL TEMPERATURE ---- 1811.80 DEG RANKINE

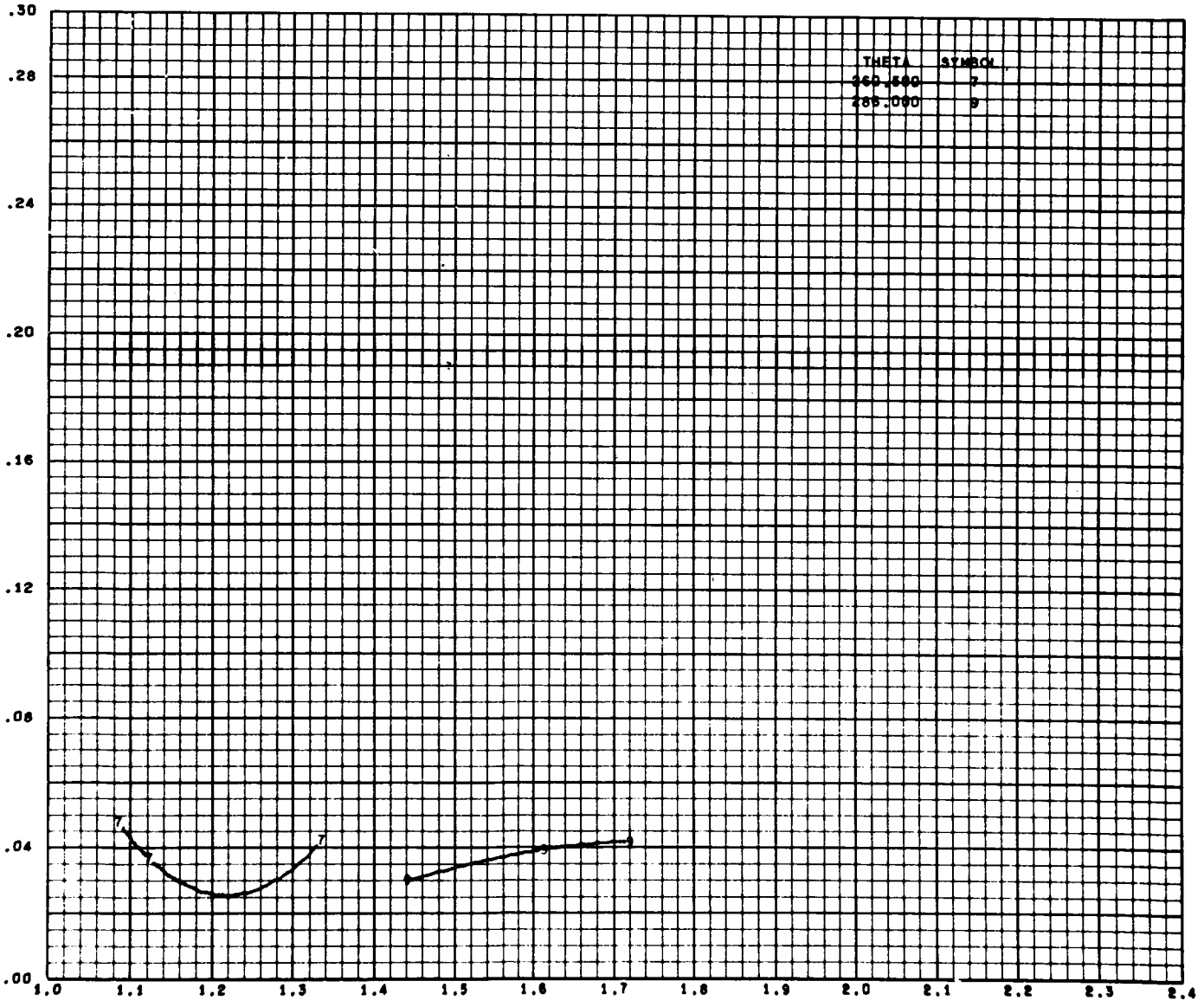
RE/FT --- 1.2196*10+6
Q(OM) --- 5.6749 BTU/SQ FT SEC

PLOT SERIES NUMBER 35

TEST GROUP	TIME (SEC)
71*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
079 000



CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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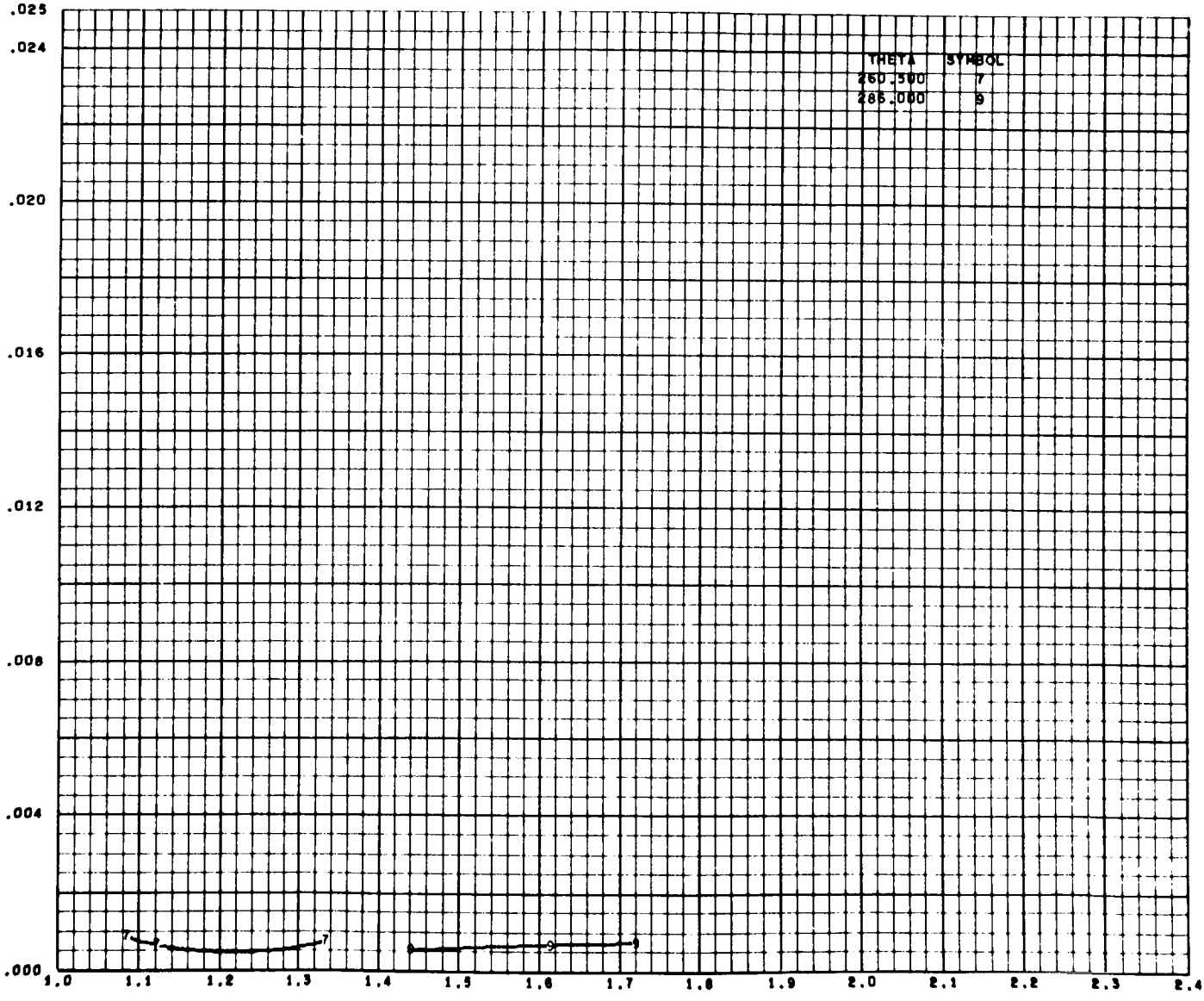
PLOT SERIES NUMBER 35

TEST GROUP	TIME (SEC)
71*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
081 000



CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 162.49 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 938.70 PSIA
TOTAL TEMPERATURE ---- 1803.20 DEG RANKINE

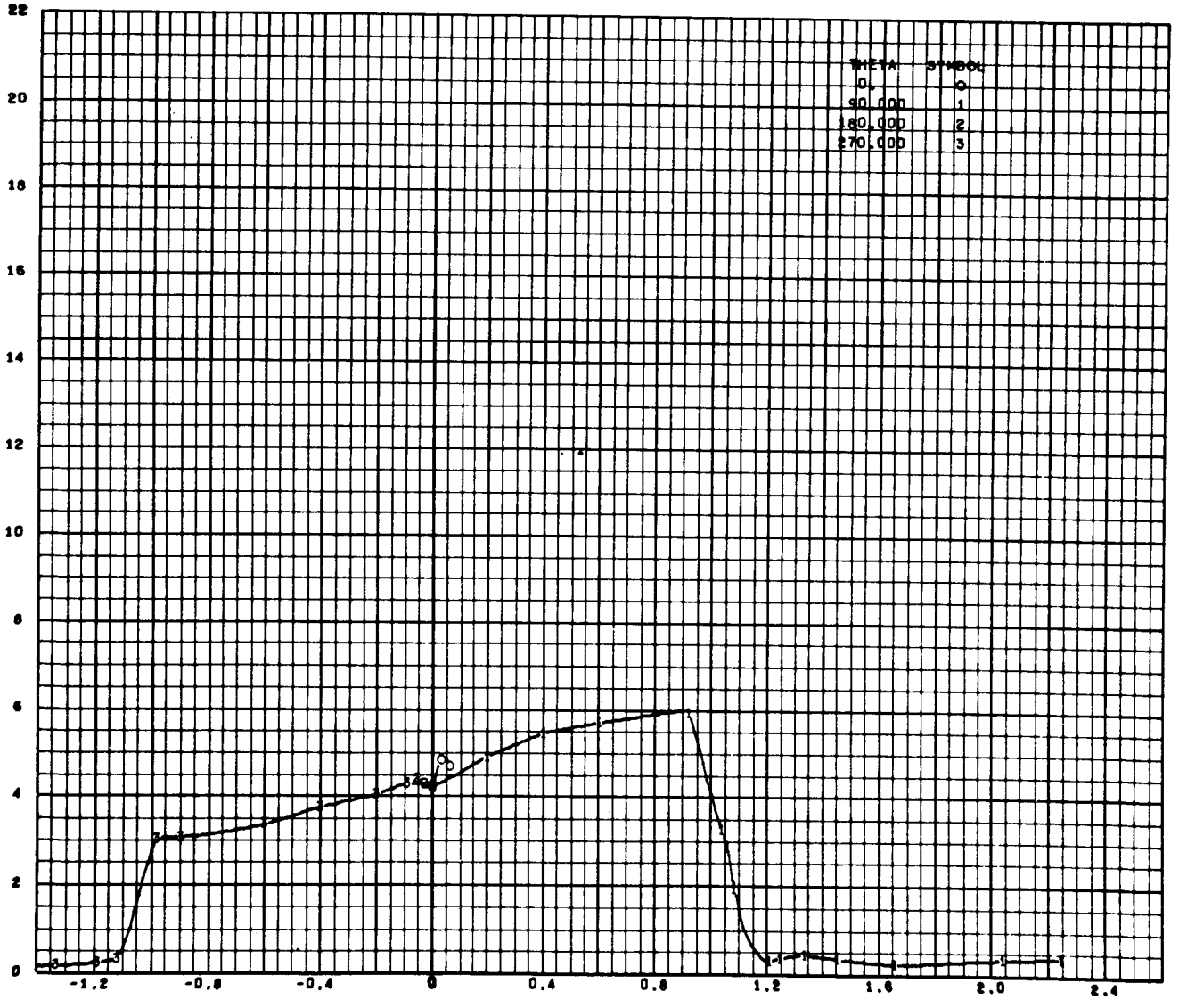
RE/FT --- 1.2374*10+6
Q(OM) --- 5.7004 BTU/SQ FT SEC

PLOT SERIES NUMBER 36

TEST GROUP	TIME (SEC)
72*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
082 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.15
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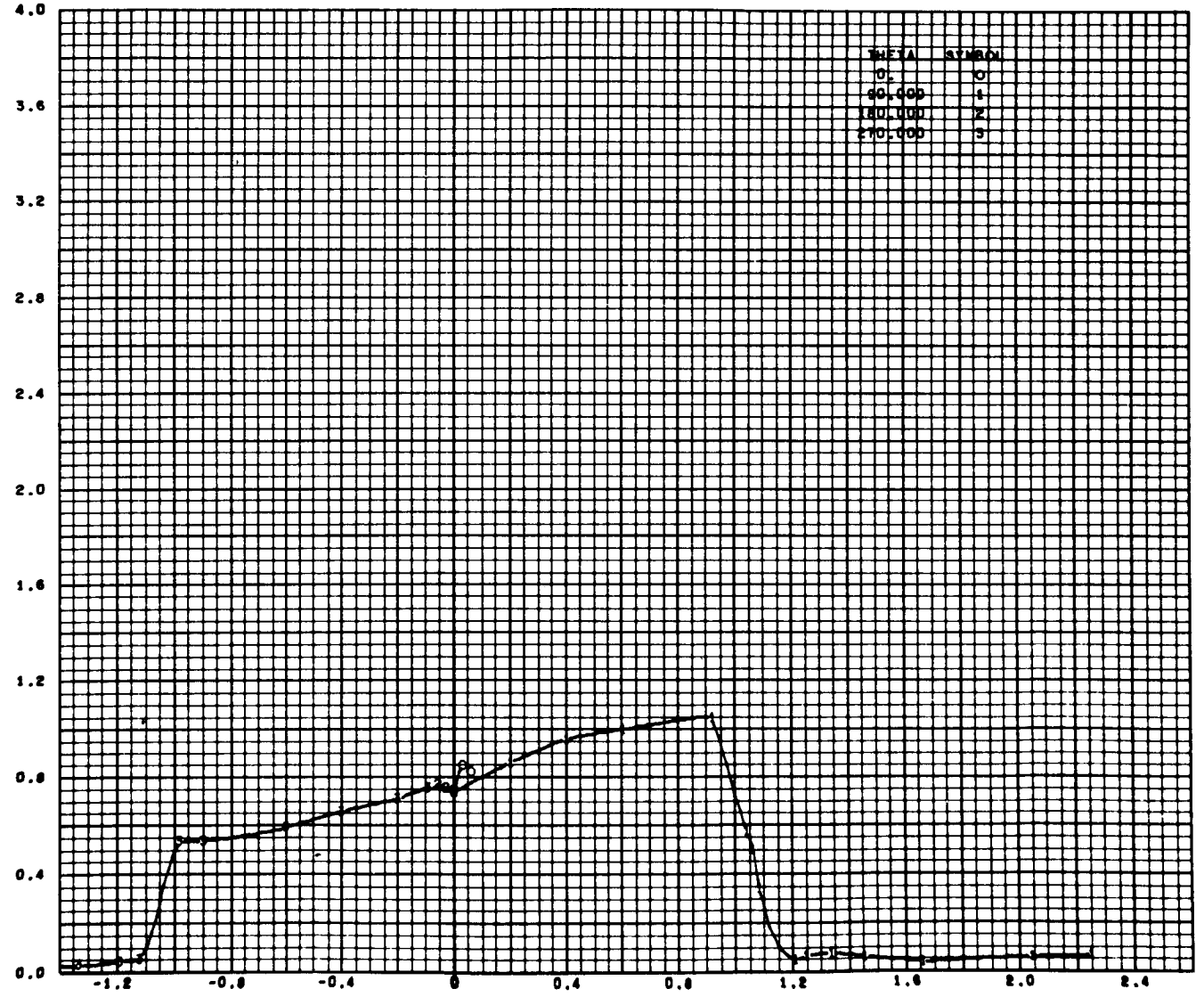
Q(OM) --- 5.7004 BTU/SQ FT SEC

PLOT SERIES NUMBER 36

TEST GROUP	TIME (SEC)
72*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
084 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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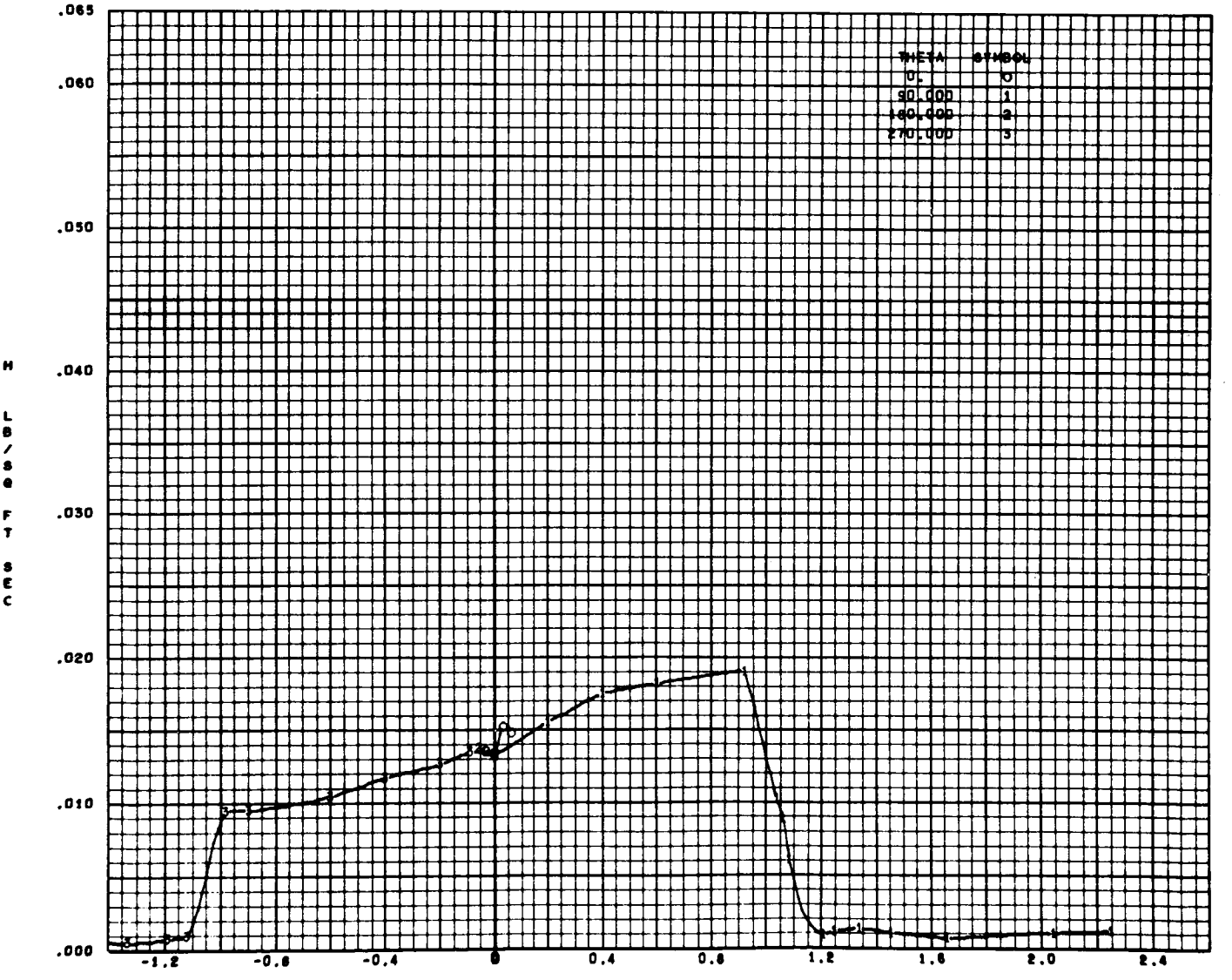
3937-09
086 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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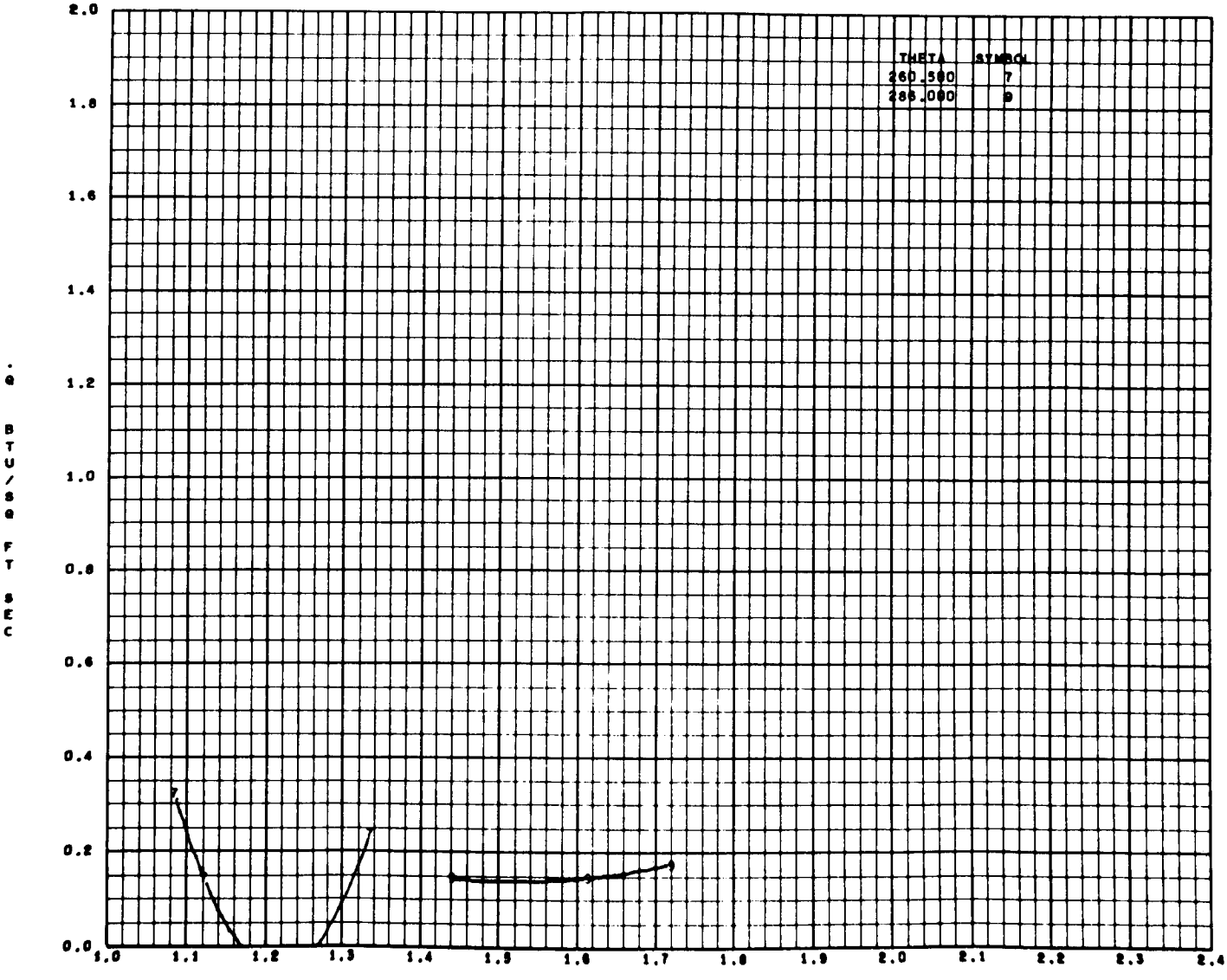
083 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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PLOT SERIES NUMBER 36

TEST GROUP	TIME (SEC)
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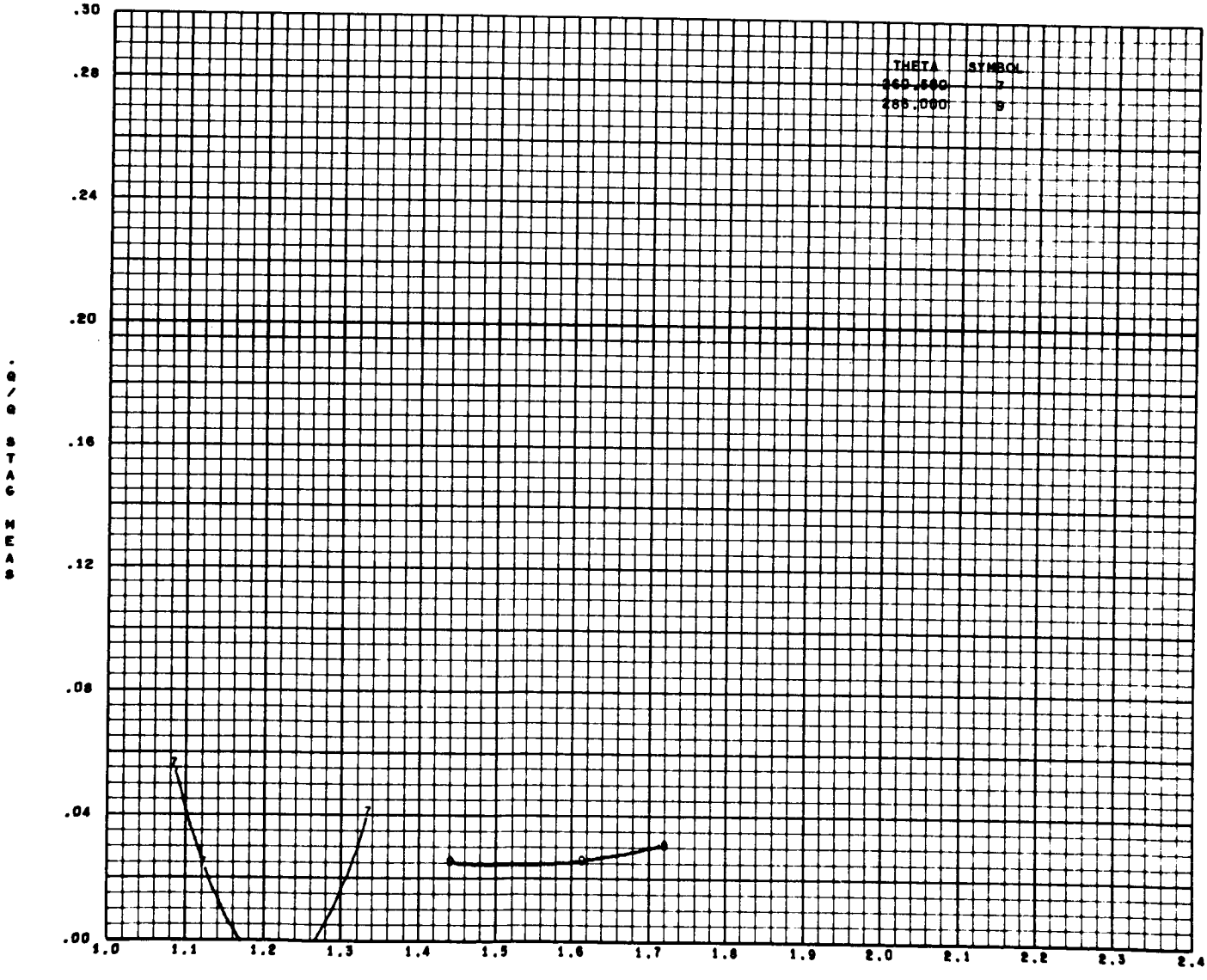
* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09 L
085 000



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SID 64-2080

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HEAT TRANSFER — CONFIGURATION C56 — PLOT SERIES NUMBER 36 — 3937-09 087 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.15
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TEST GROUP	TIME (SEC)
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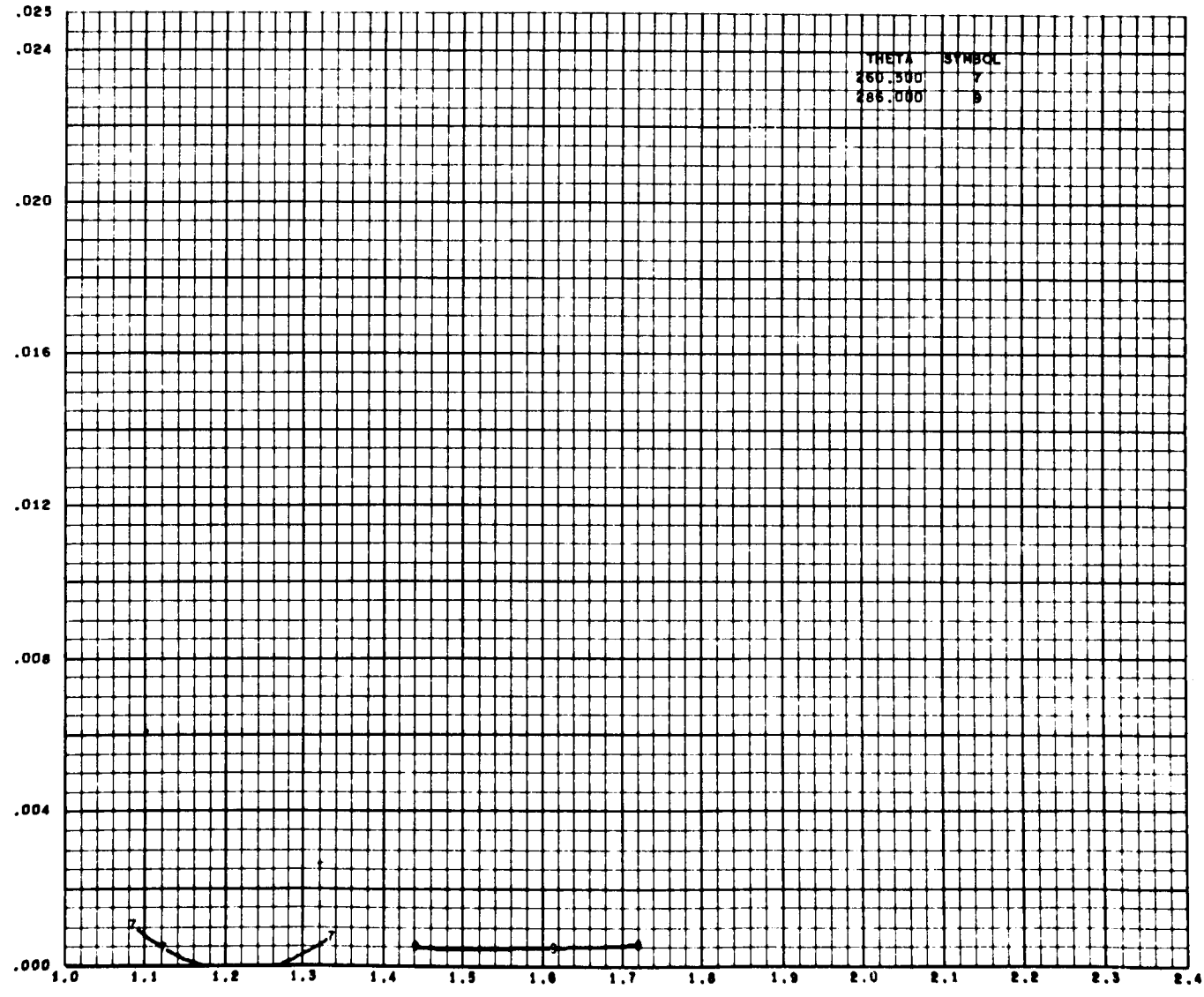

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 143.40 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1845.30 PSIA
TOTAL TEMPERATURE ---- 1880.00 DEG RANKINE

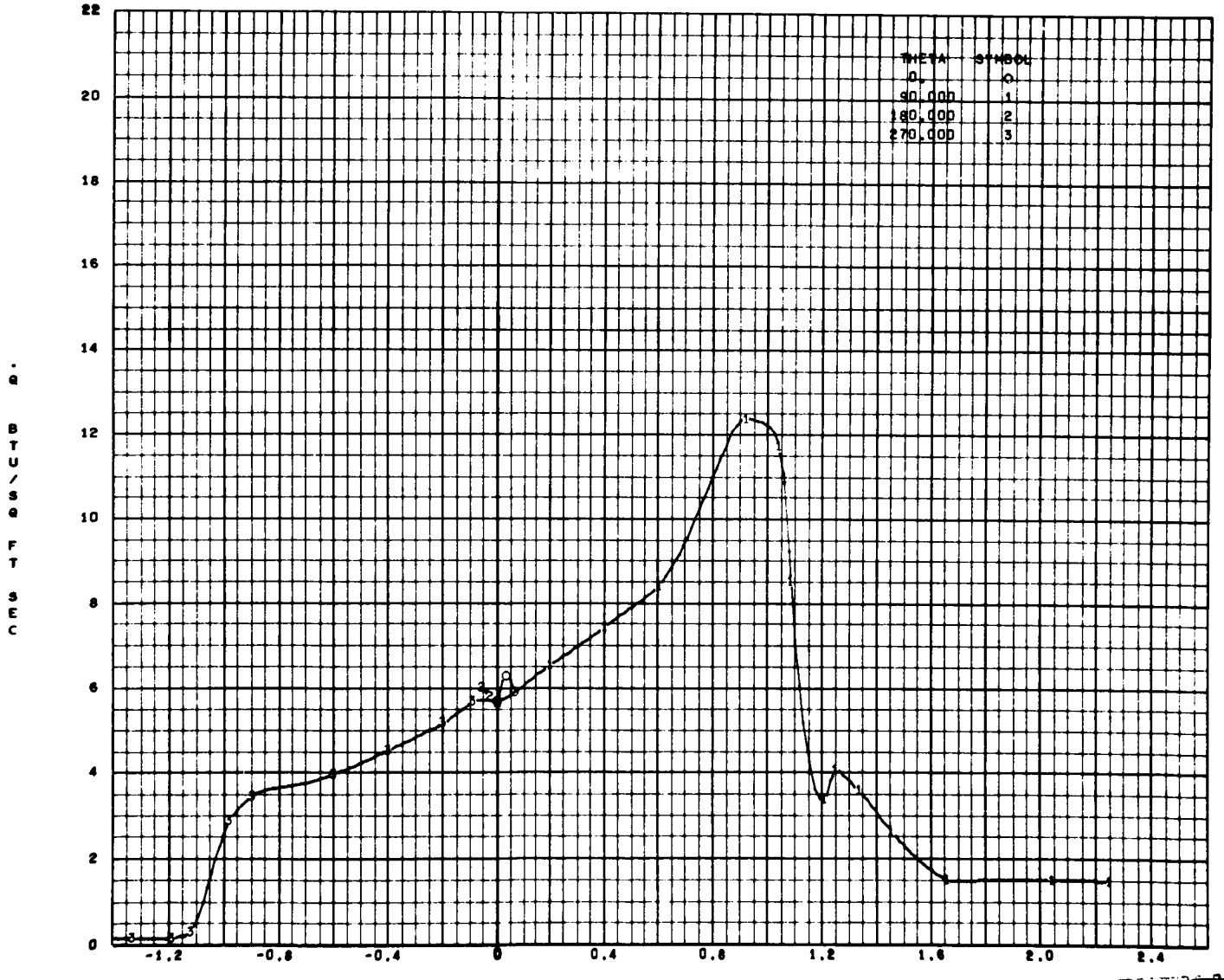
RE/FT --- 2.2674*10+6
Q(OM) --- 9.2333 BTU/SQ FT SEC

PLOT SERIES NUMBER 37

TEST GROUP	TIME (SEC)
73*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
088 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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PLOT SERIES NUMBER 37

TEST GROUP	TIME (SEC)
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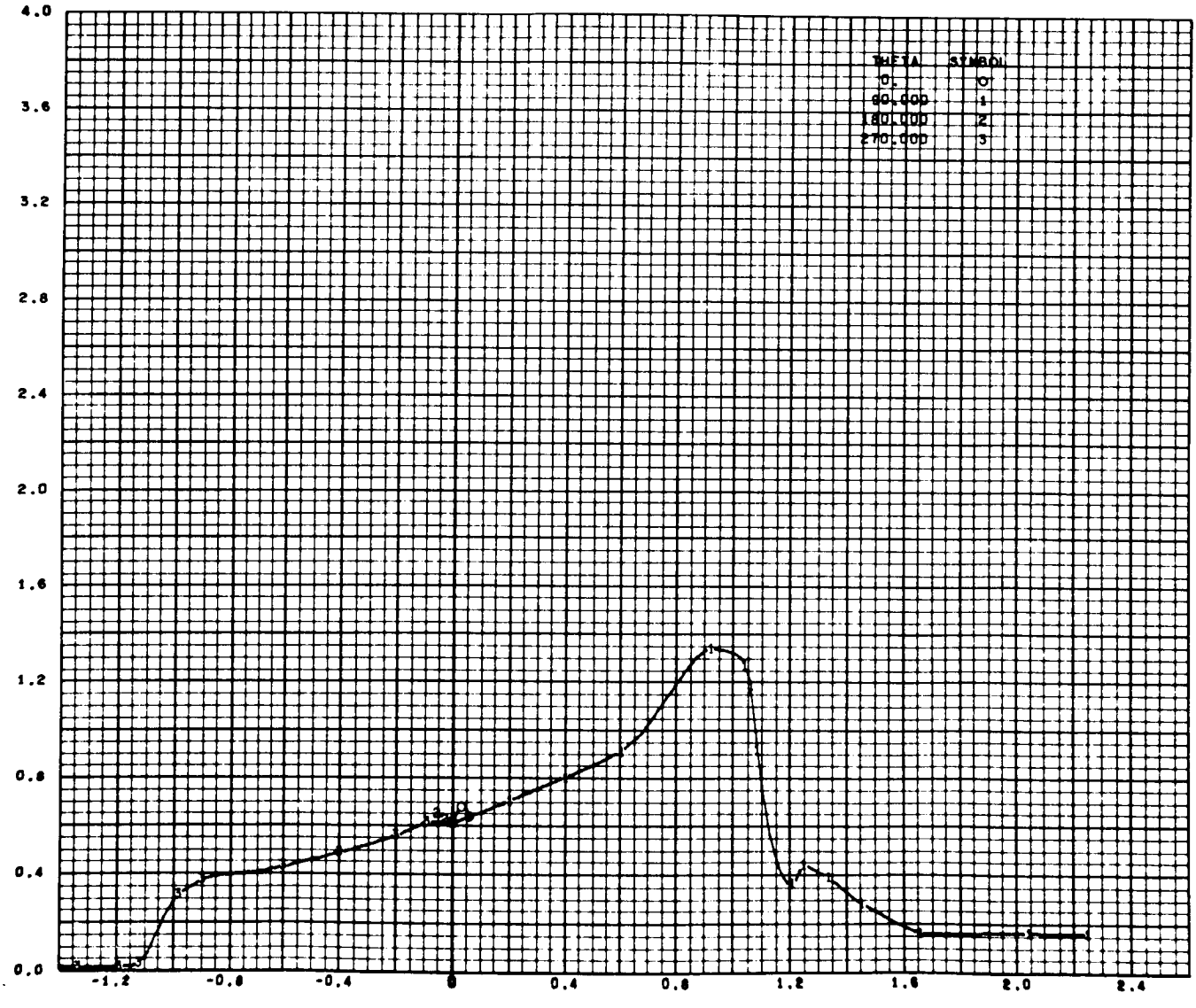
3937-09
090 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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PLOT SERIES NUMBER 37

TEST GROUP	TIME (SEC)
73*	2.70

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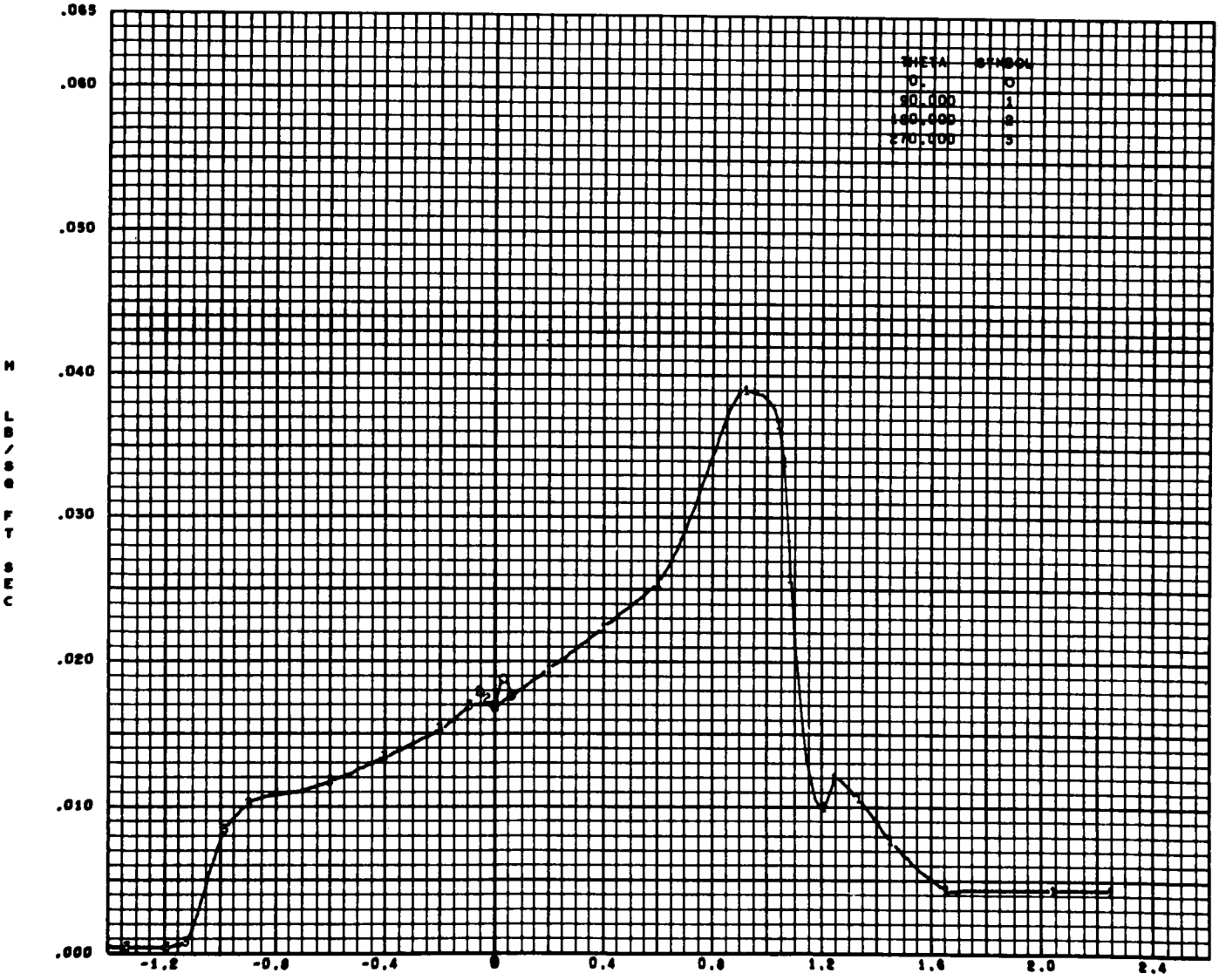
3937-09
092 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
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PLOT SERIES NUMBER 37

TEST GROUP	TIME (SEC)
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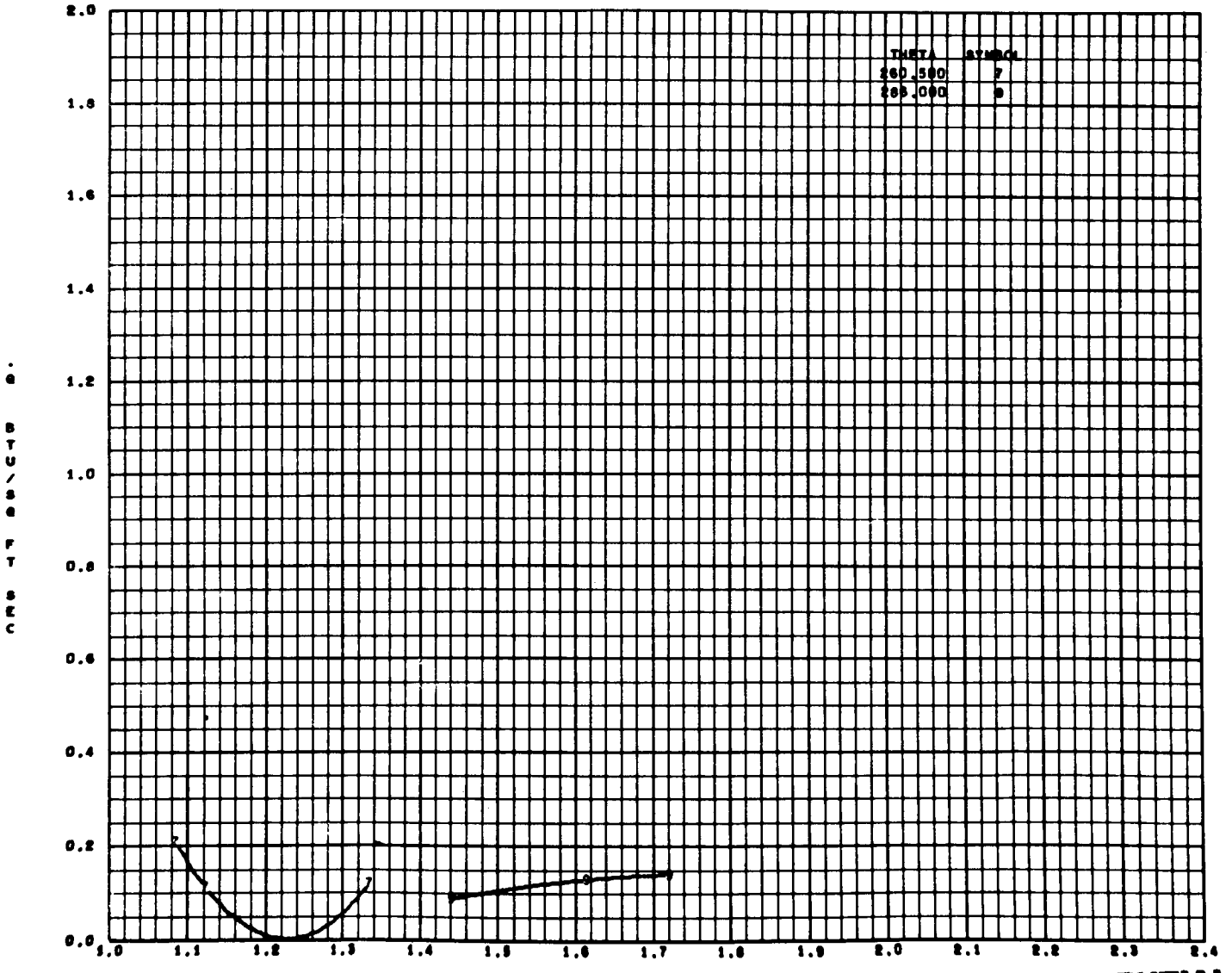
3937-09
089 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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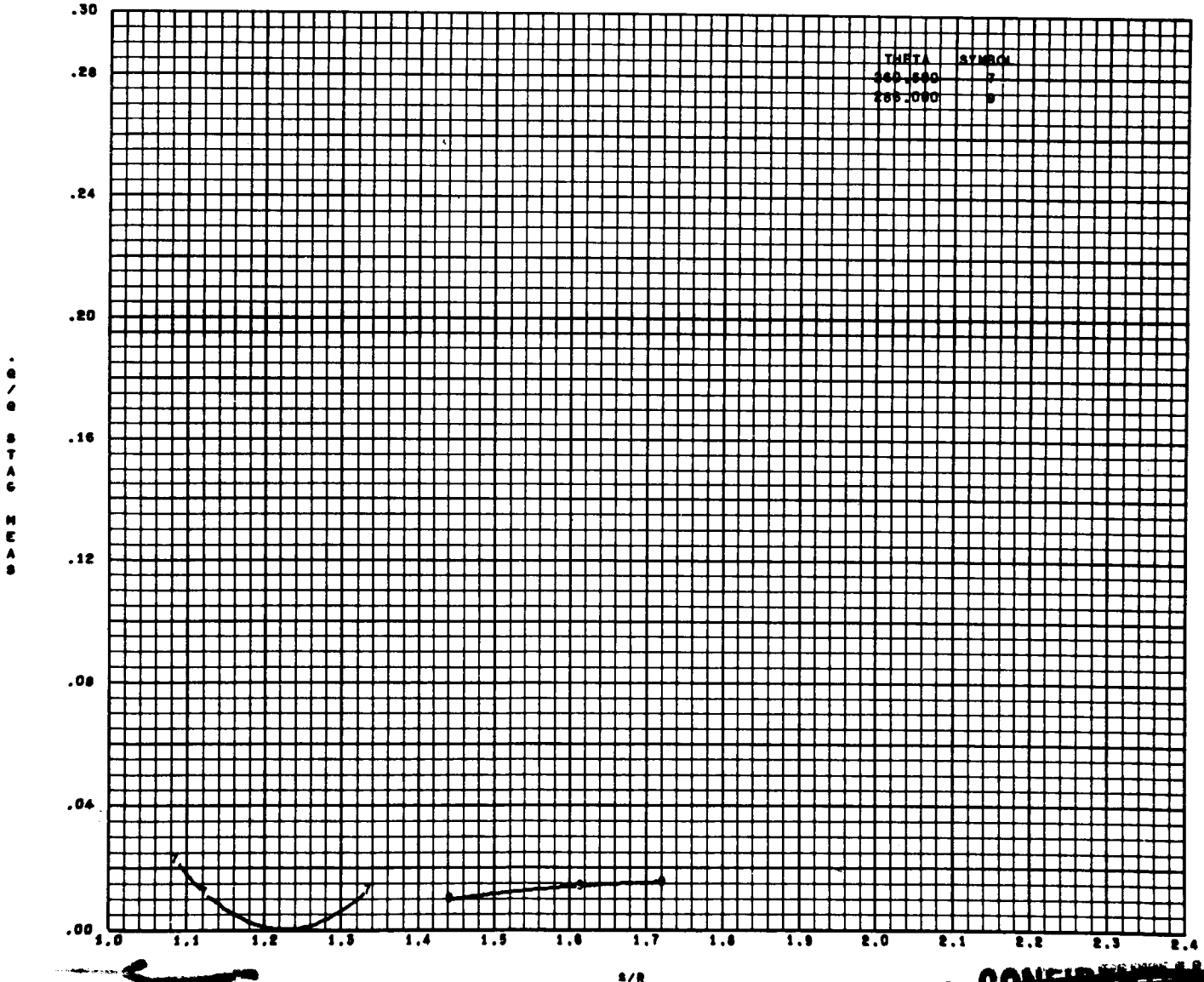
3937-09
091 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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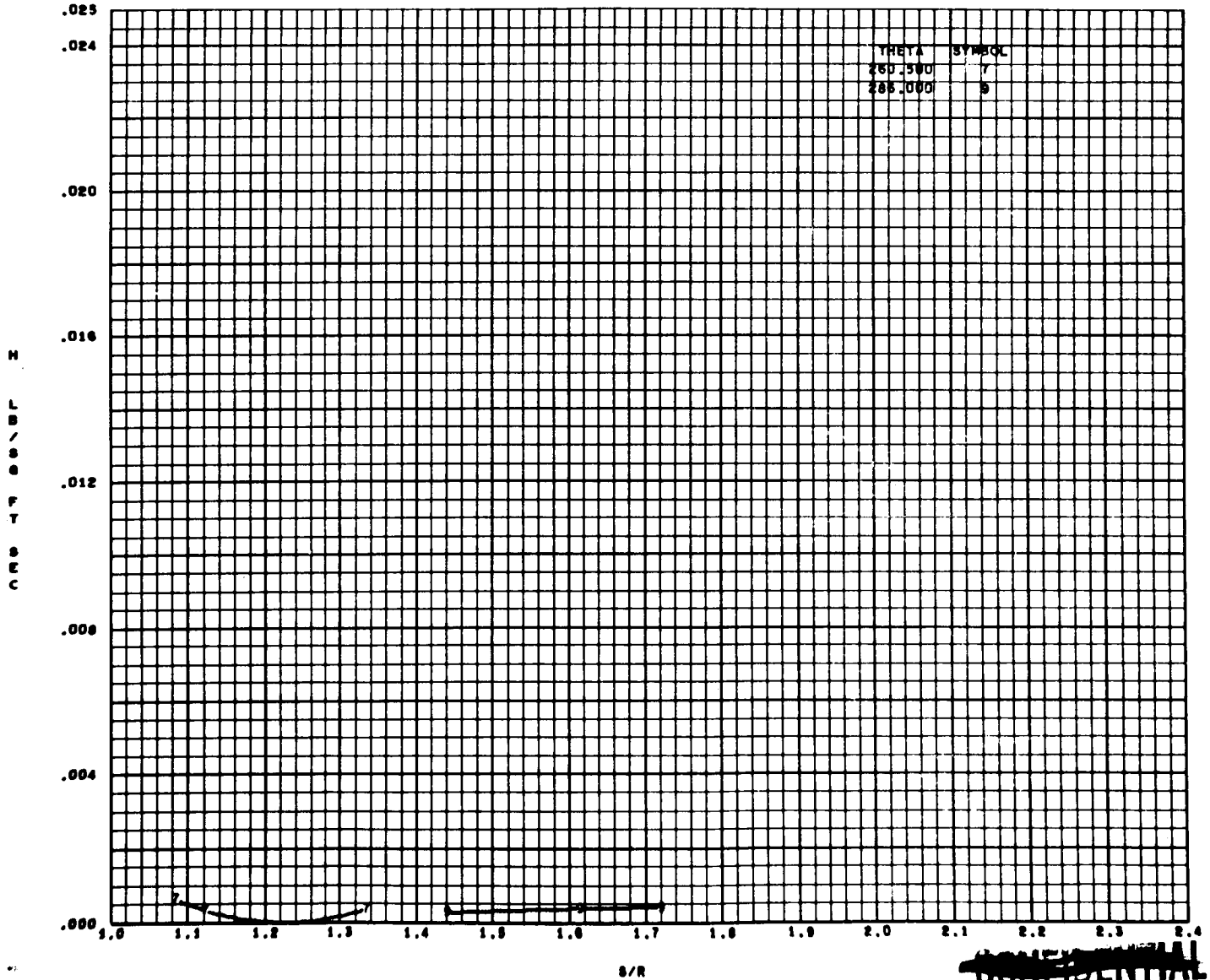
093 000



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CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.39 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 1849.10 PSIA
TOTAL TEMPERATURE ---- 1883.50 DEG RANKINE

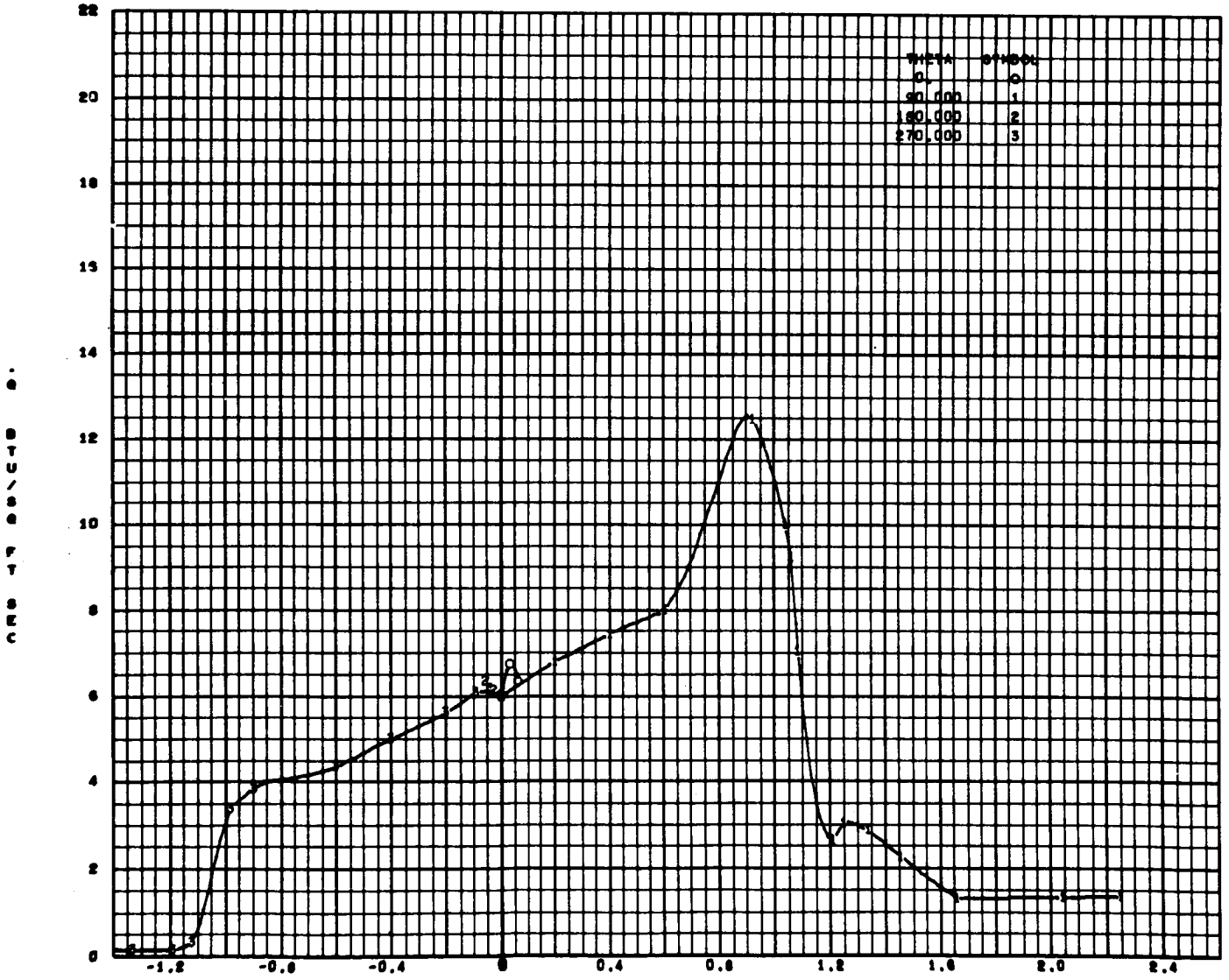
RE/FT --- 2.2644*10+6
Q(OM) --- 9.2453 BTU/SQ FT SEC

PLOT SERIES NUMBER 38

TEST GROUP	TIME (SEC)
74*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
094 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
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PLOT SERIES NUMBER 38

TEST GROUP	TIME (SEC)
74*	2.75

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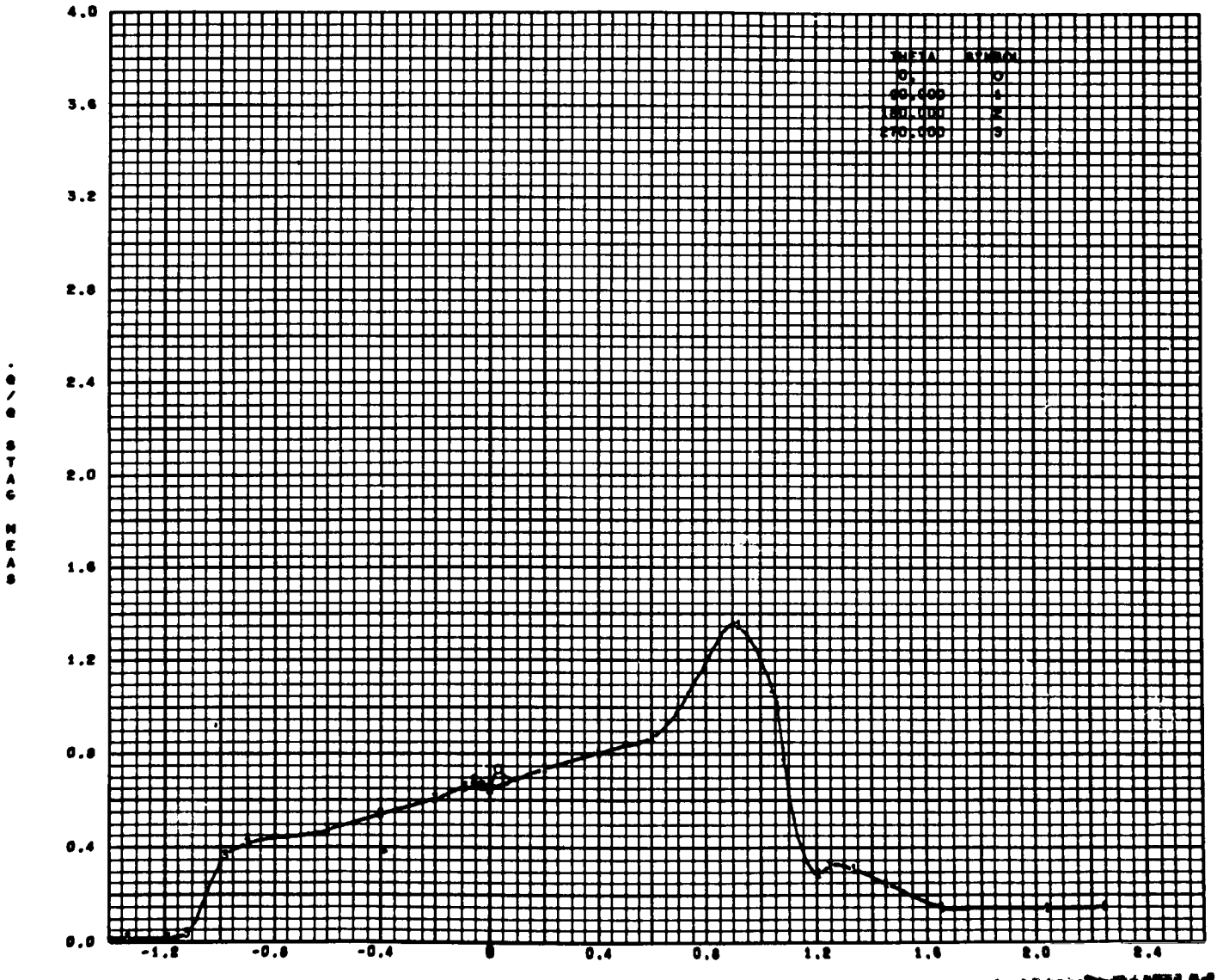
3937-09
096 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.39 DEG
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TOTAL PRESSURE ------- 1849.10 PSIA
TOTAL TEMPERATURE ---- 1883.50 DEG RANKINE

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PLOT SERIES NUMBER 38

TEST GROUP	TIME (SEC)
74*	2.75

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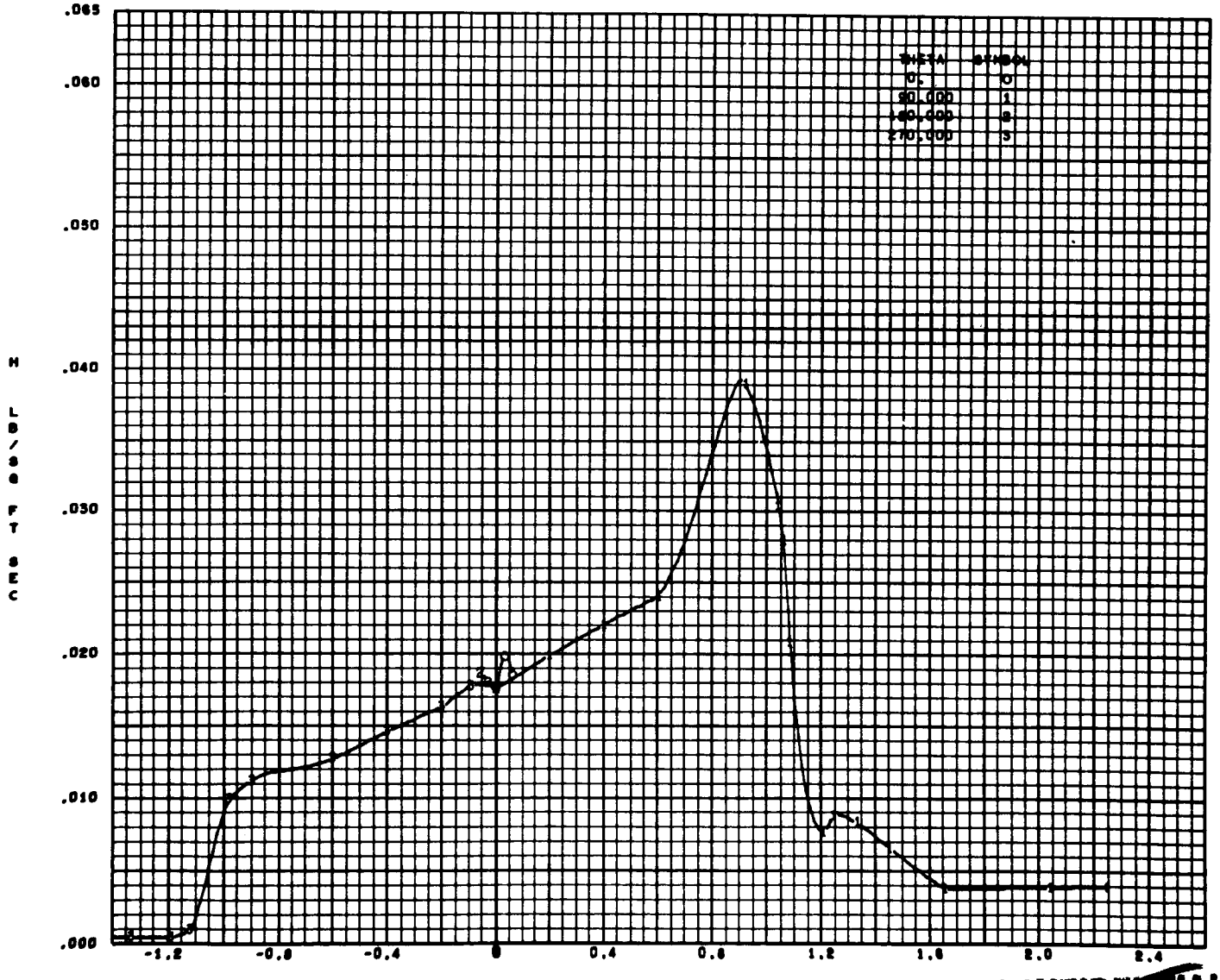
3937-09
098 000



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SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.39 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1849.10 PSIA
TOTAL TEMPERATURE ---- 1883.50 DEG RANKINE

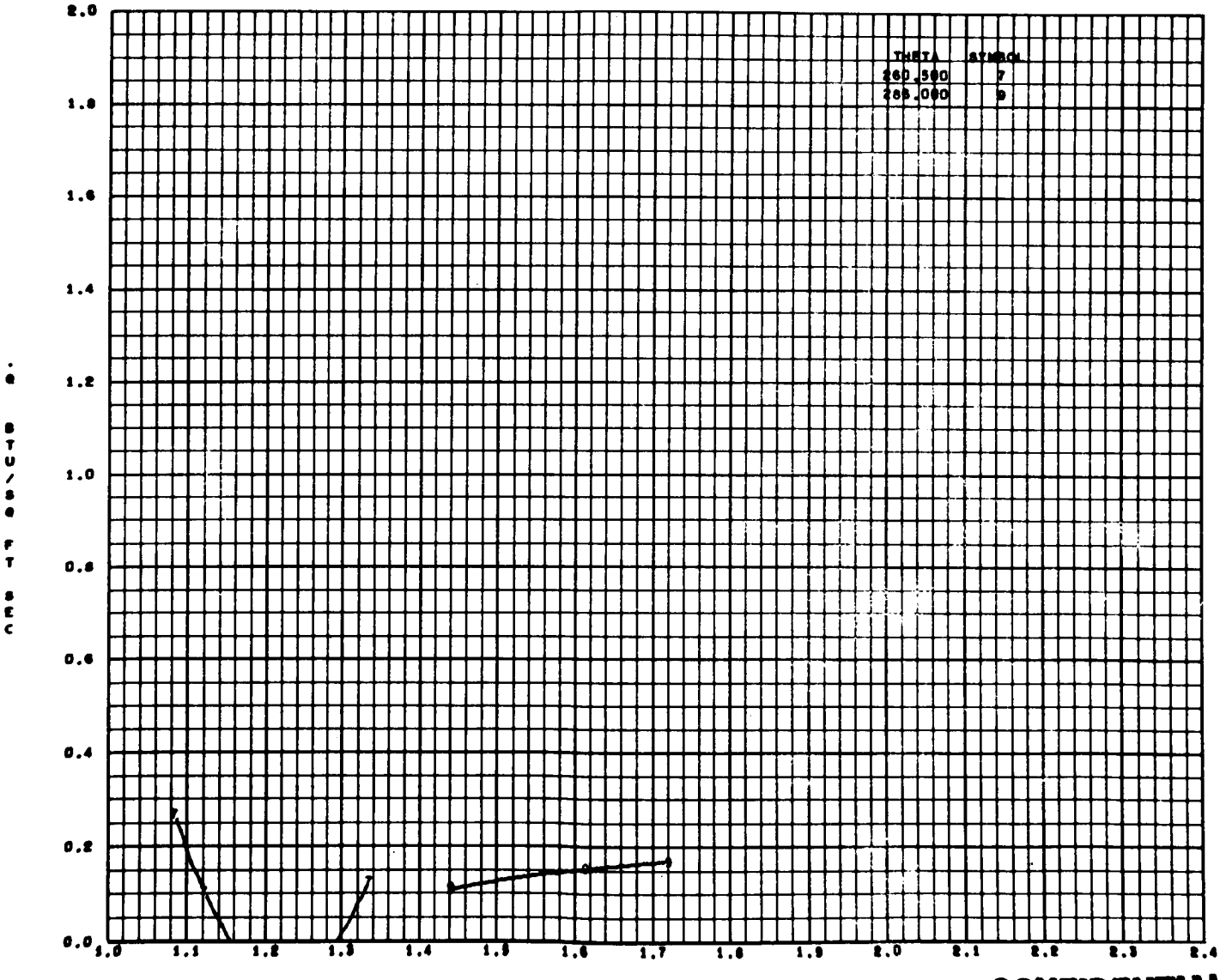
RE/FT --- 2.2644*10+6
Q(OM) --- 9.2453 BTU/SQ FT SEC

PLOT SERIES NUMBER 38

TEST GROUP	TIME (SEC)
74*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
093 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.39 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1849.10 PSIA
TOTAL TEMPERATURE ---- 1883.50 DEG RANKINE

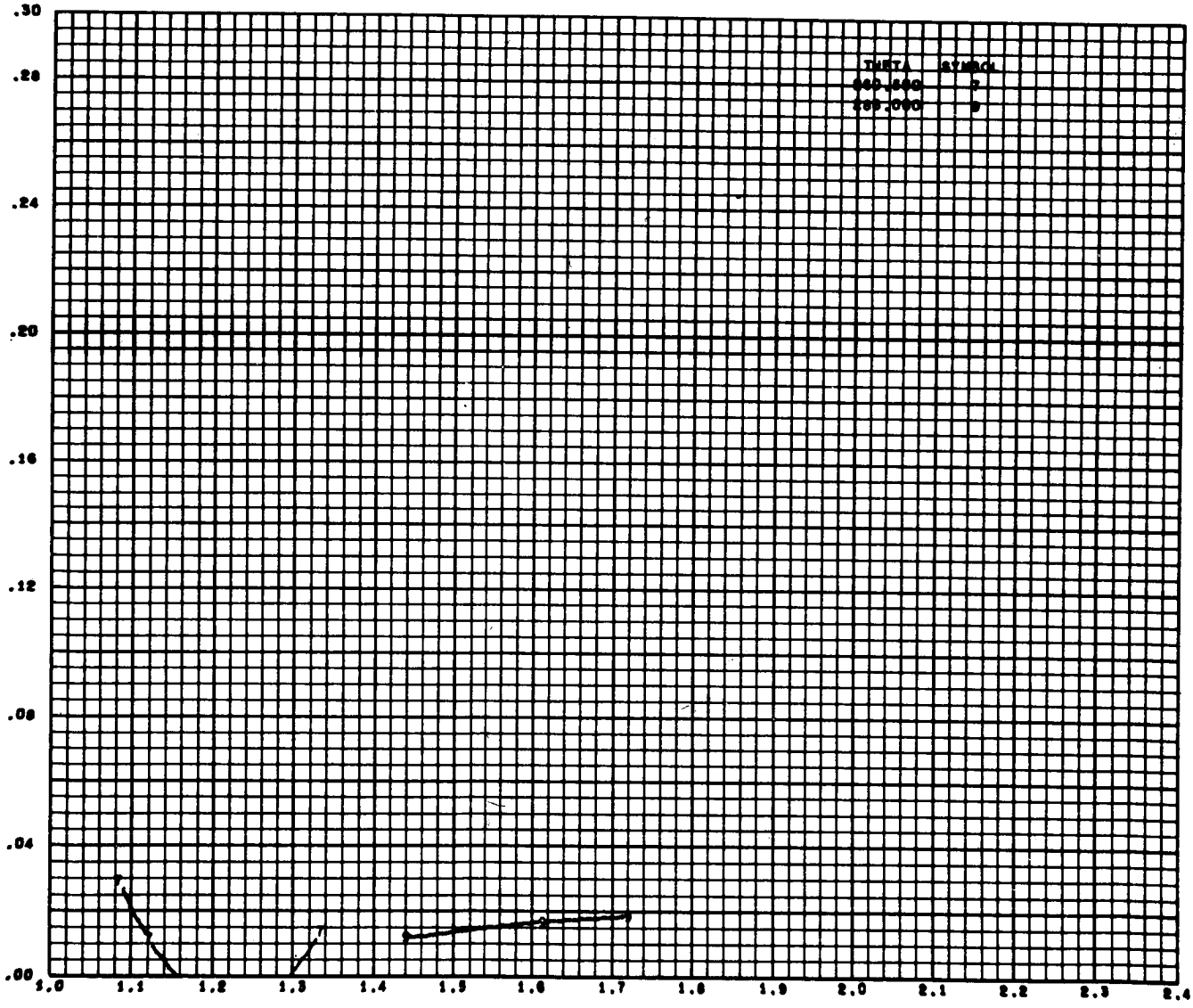
RE/FT --- 2.2644*10+6
Q(OM) --- 9.2453 BTU/SQ FT SEC

PLOT SERIES NUMBER 38

TEST GROUP	TIME (SEC)
74*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
097 001



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.39 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1649.10 PSIA
TOTAL TEMPERATURE ---- 1883.50 DEG RANKINE

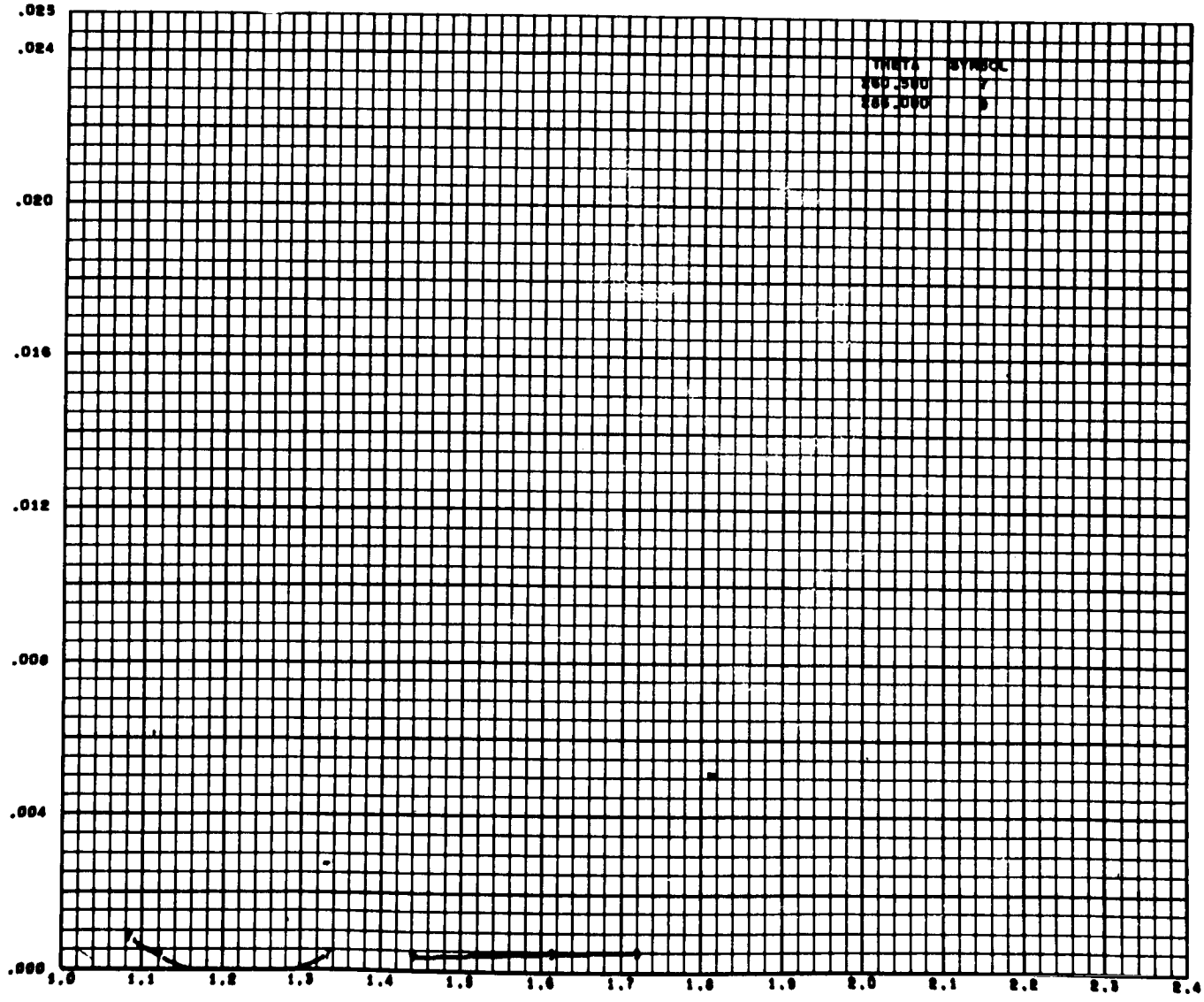
RE/FT --- 2.2644*10+6
Q(OM) --- 9.2453 BTU/SQ FT SEC

PLOT SERIES NUMBER 38

TEST GROUP	TIME (SEC)
74*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
099 000



H LBS/SQ FT SEC

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.36 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1852.60 PSIA
TOTAL TEMPERATURE ---- 1887.80 DEG RANKINE

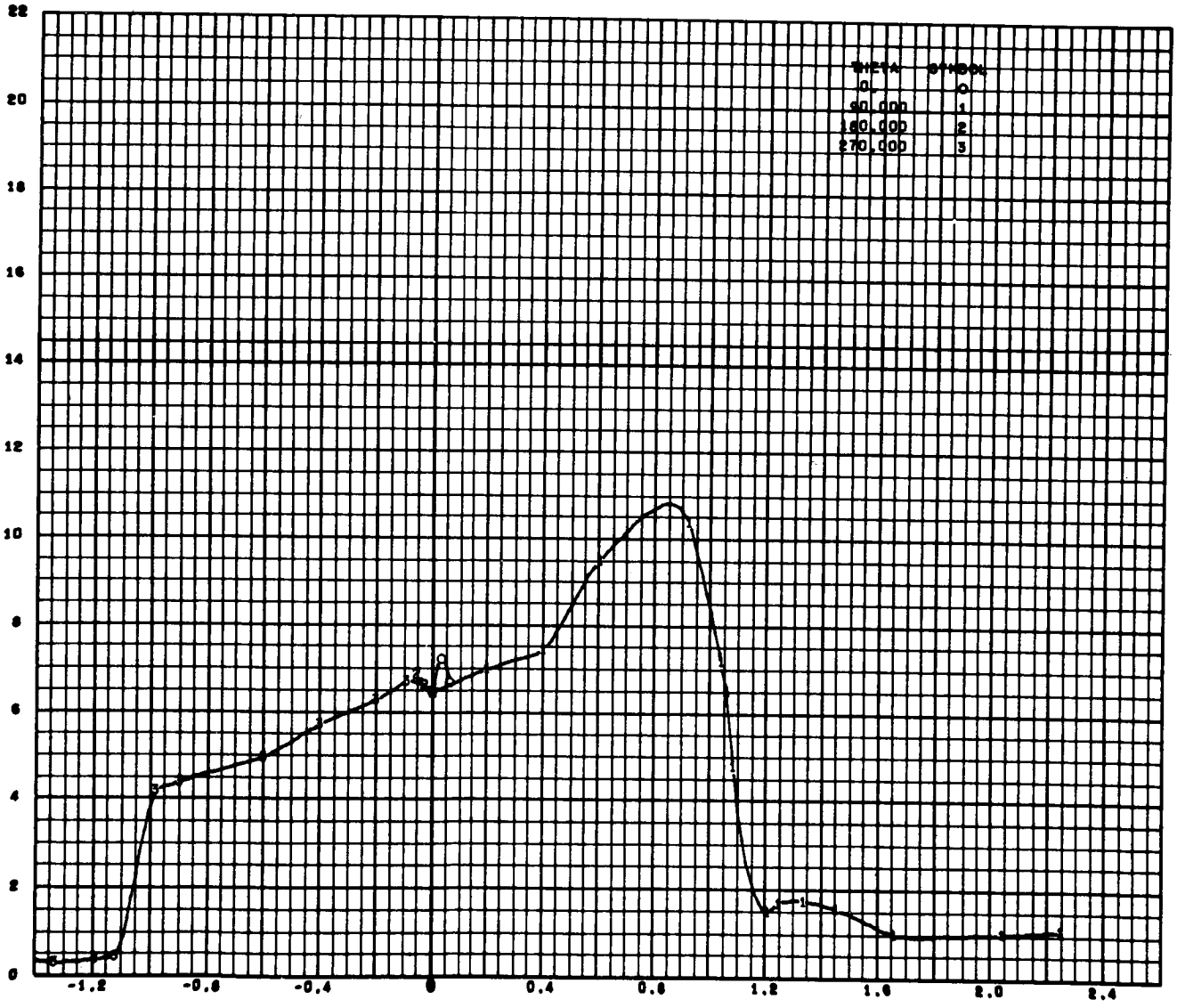
RE/FT --- 2.2592*10+6
Q(OM) --- 9.2564 BTU/SQ FT SEC

PLOT SERIES NUMBER 39

TEST GROUP	TIME (SEC)
75*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3037-09
100 000



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CONFIDENTIAL

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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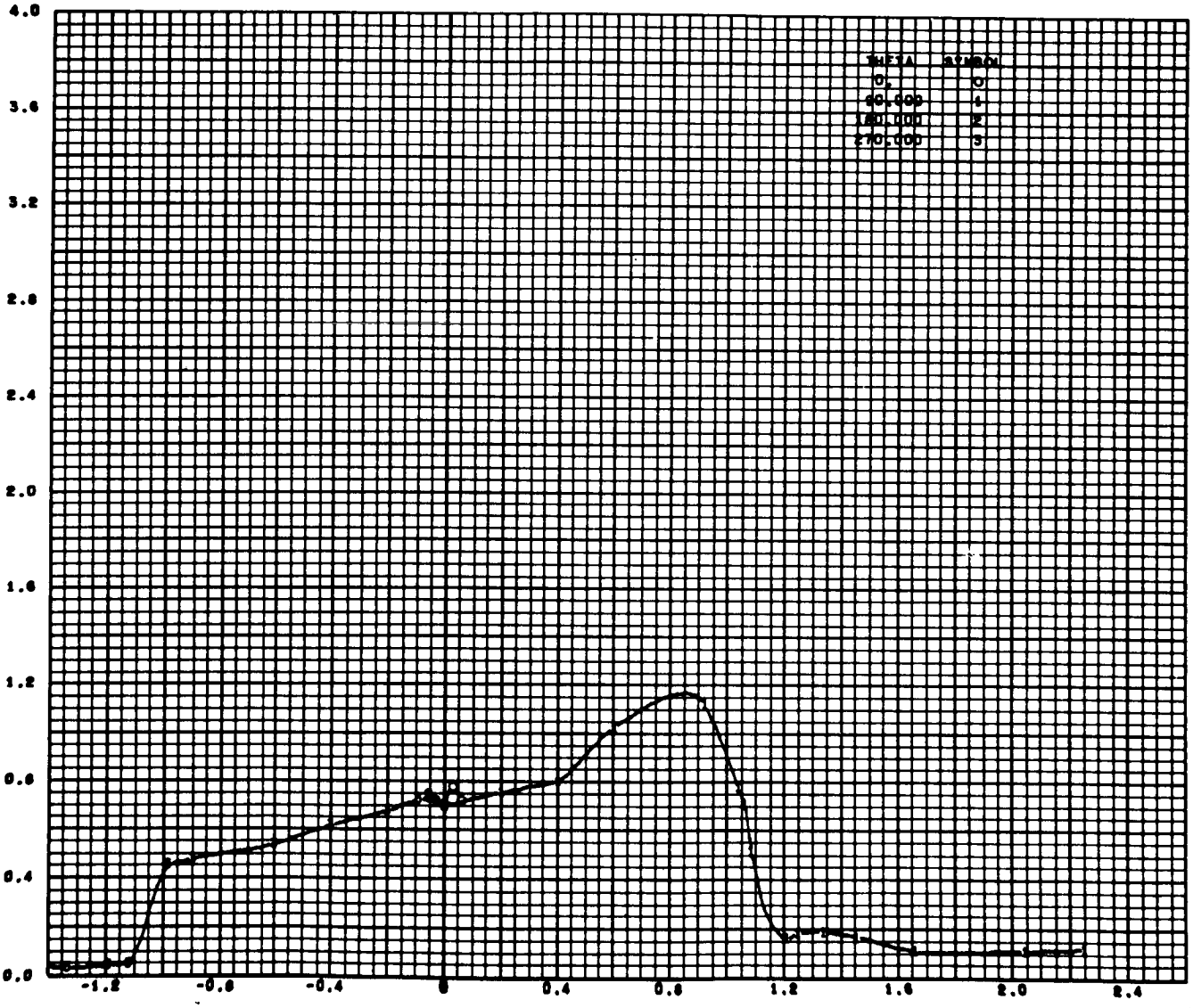
Q(OM) --- 9.2564 BTU/SQ FT SEC

PLOT SERIES NUMBER 39

TEST GROUP	TIME (SEC)
75*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
102 000



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CONFIDENTIAL

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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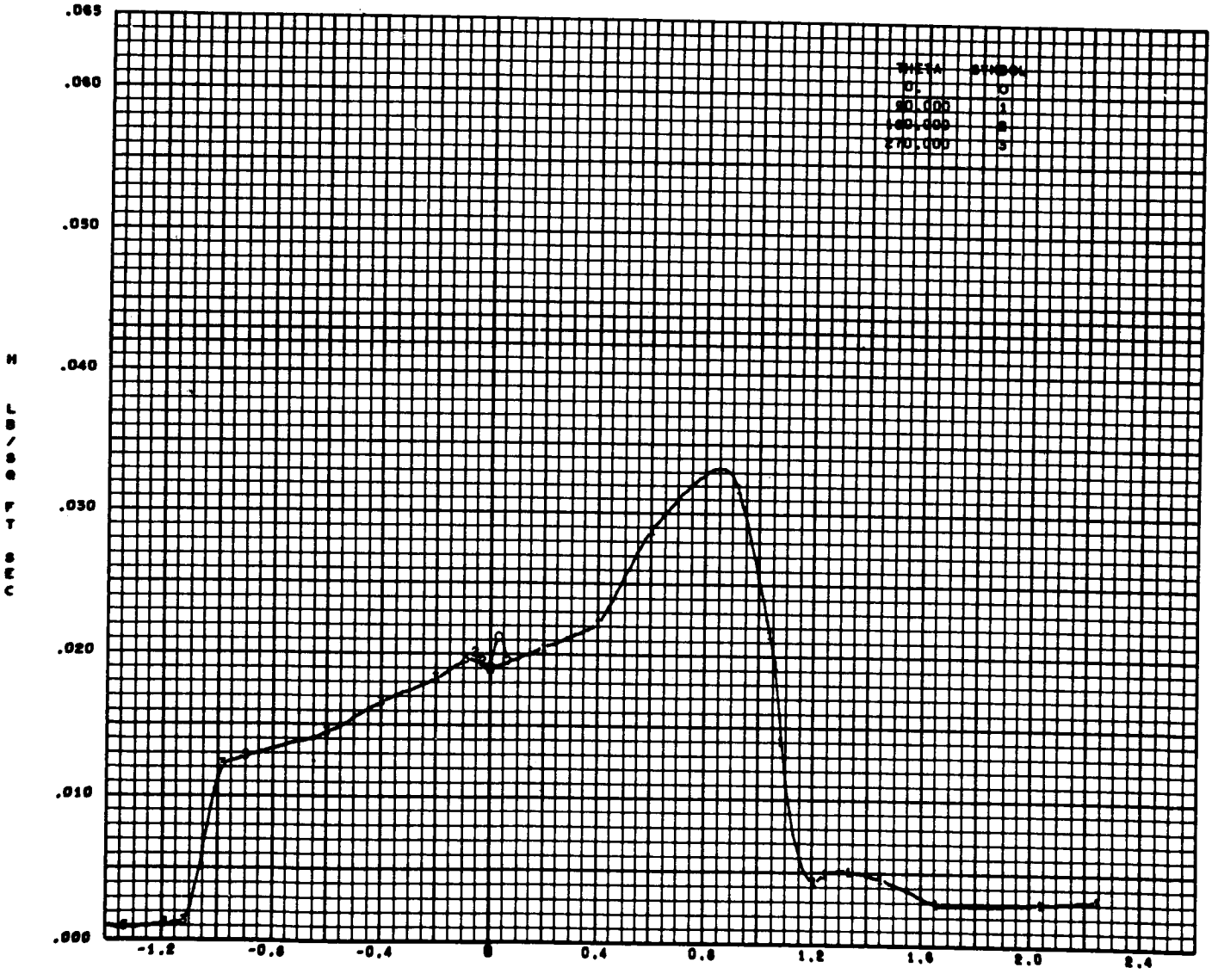
Q(CM) --- 9.2564 BTU/SQ FT SEC

PLOT SERIES NUMBER 39

TEST GROUP	TIME (SEC)
75*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
104 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

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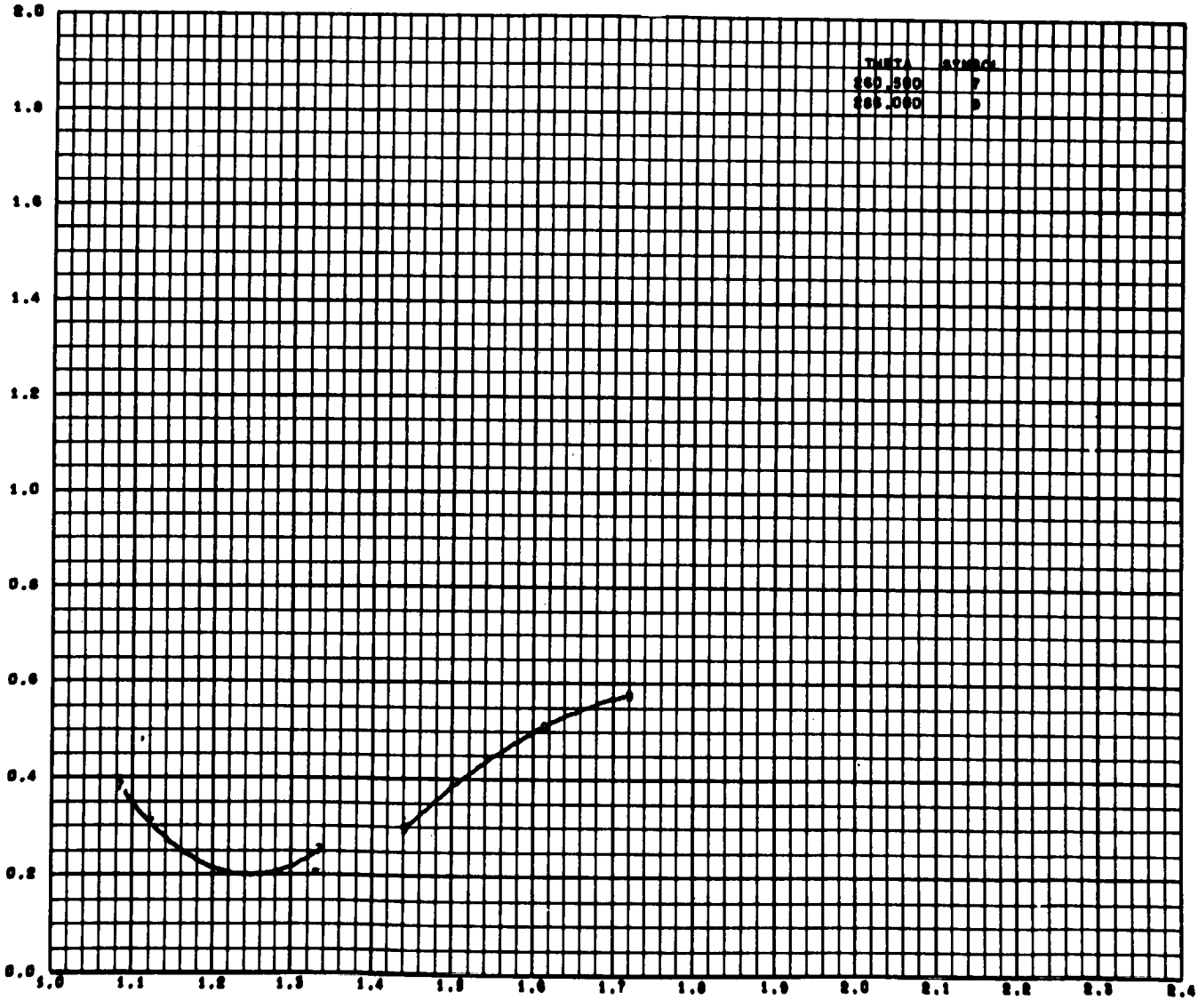

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.36 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1852.60 PSIA
TOTAL TEMPERATURE ---- 1887.80 DEG RANKINE

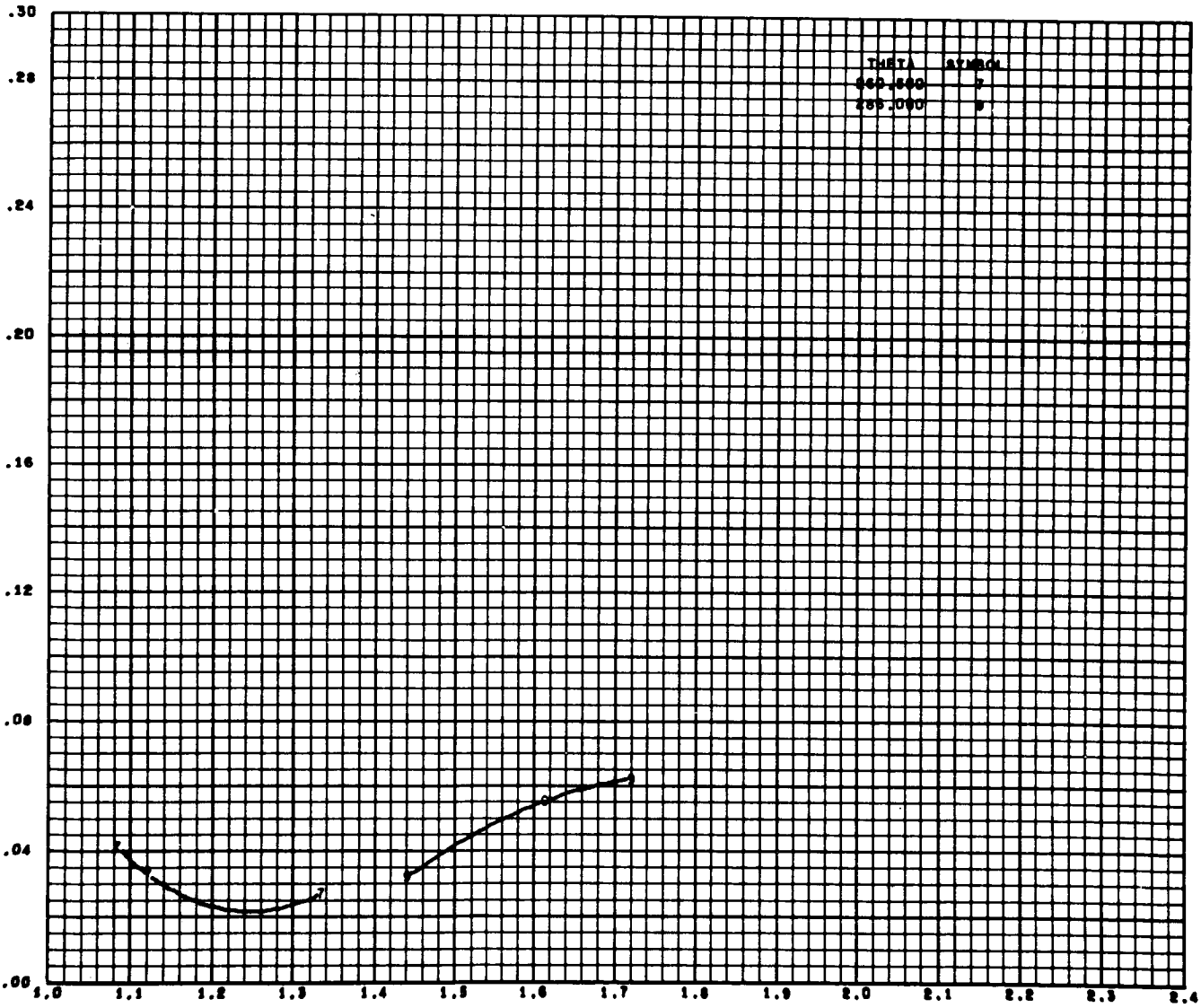
RE/FT --- 2.2592*10+6
Q(OM) --- 9.2564 BTU/SQ FT SEC

PLOT SERIES NUMBER 39

TEST GROUP	TIME (SEC)
75*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
103 000



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[redacted]

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
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TOTAL PRESSURE ------- 1852.60 PSIA
TOTAL TEMPERATURE ---- 1887.80 DEG RANKINE

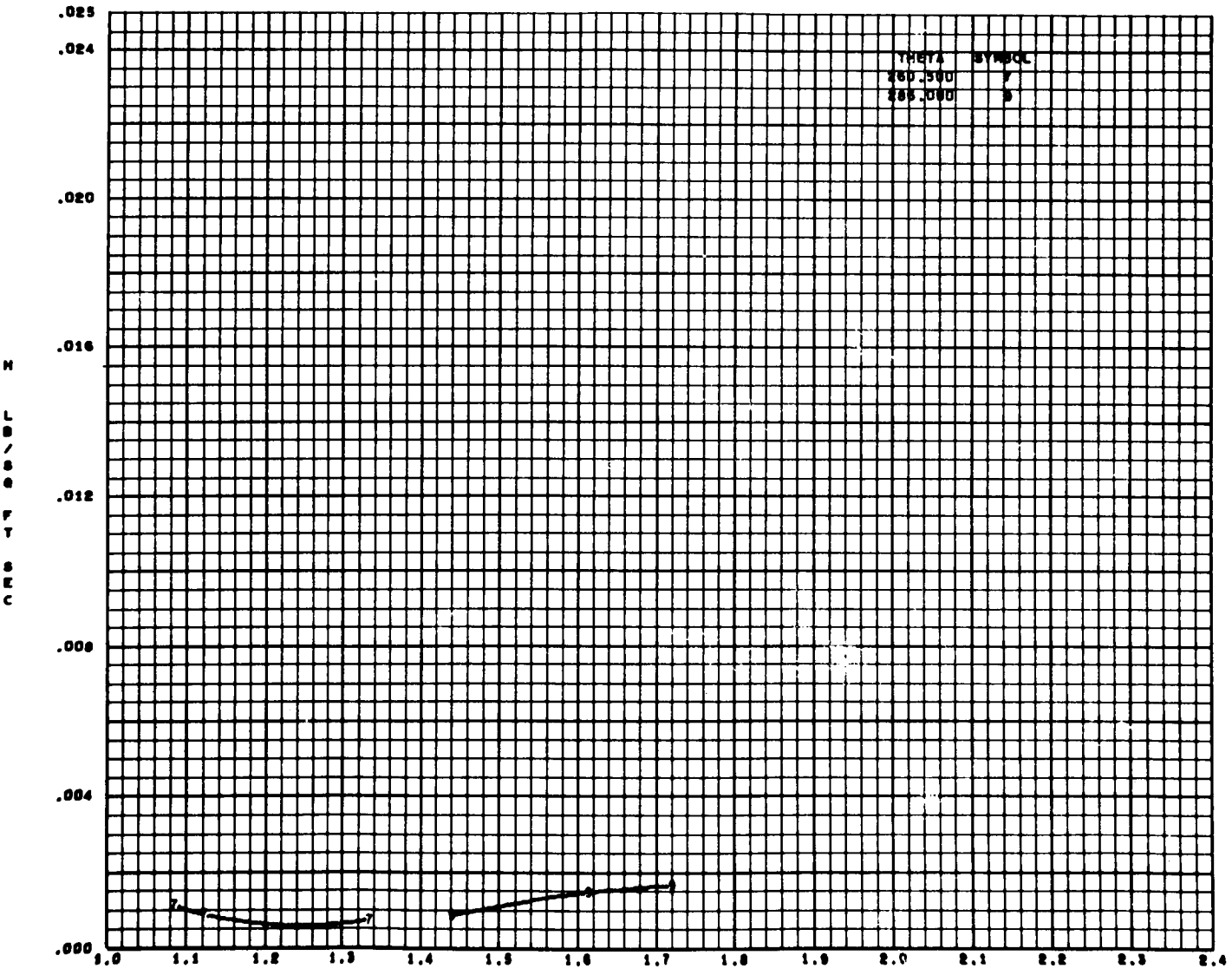
RE/FT --- 2.2592*10+6
Q(OM) --- 9.2564 BTU/SQ FT SEC

PLOT SERIES NUMBER 39

TEST GROUP	TIME (SEC)
75*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
105 000



H LB/SQ FT SEC

S/R

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 158.45 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 1843.80 PSIA
TOTAL TEMPERATURE ---- 1877.10 DEG RANKINE

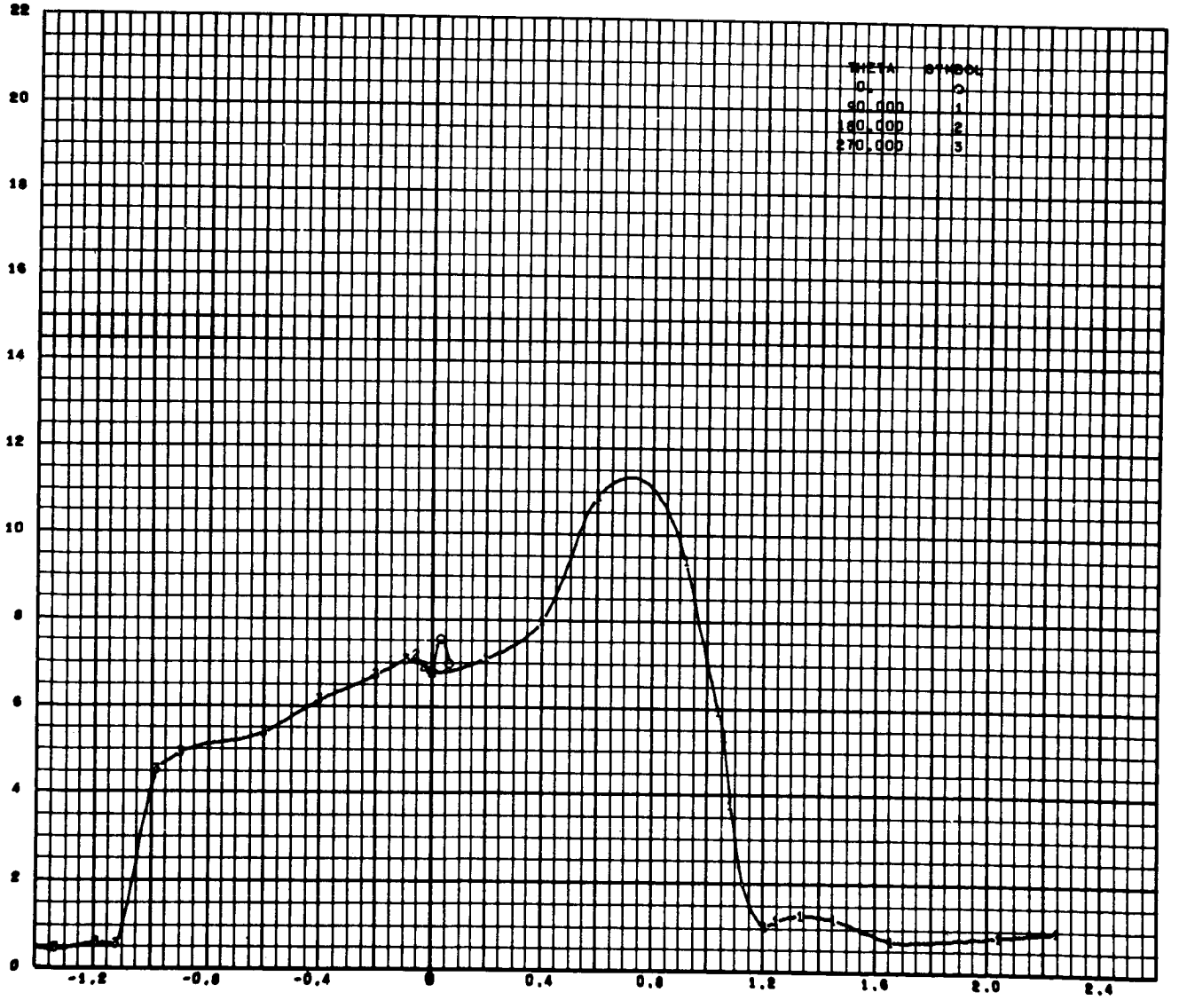
RE/FT --- 2.2721*10+6
Q(OM) --- 9.2285 BTU/SQ FT SEC

PLOT SERIES NUMBER 40

TEST GROUP	TIME (SEC)
76*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
106 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

CONFIGURATION C56

PLOT SERIES NUMBER 40

3937-09
108 000

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.19
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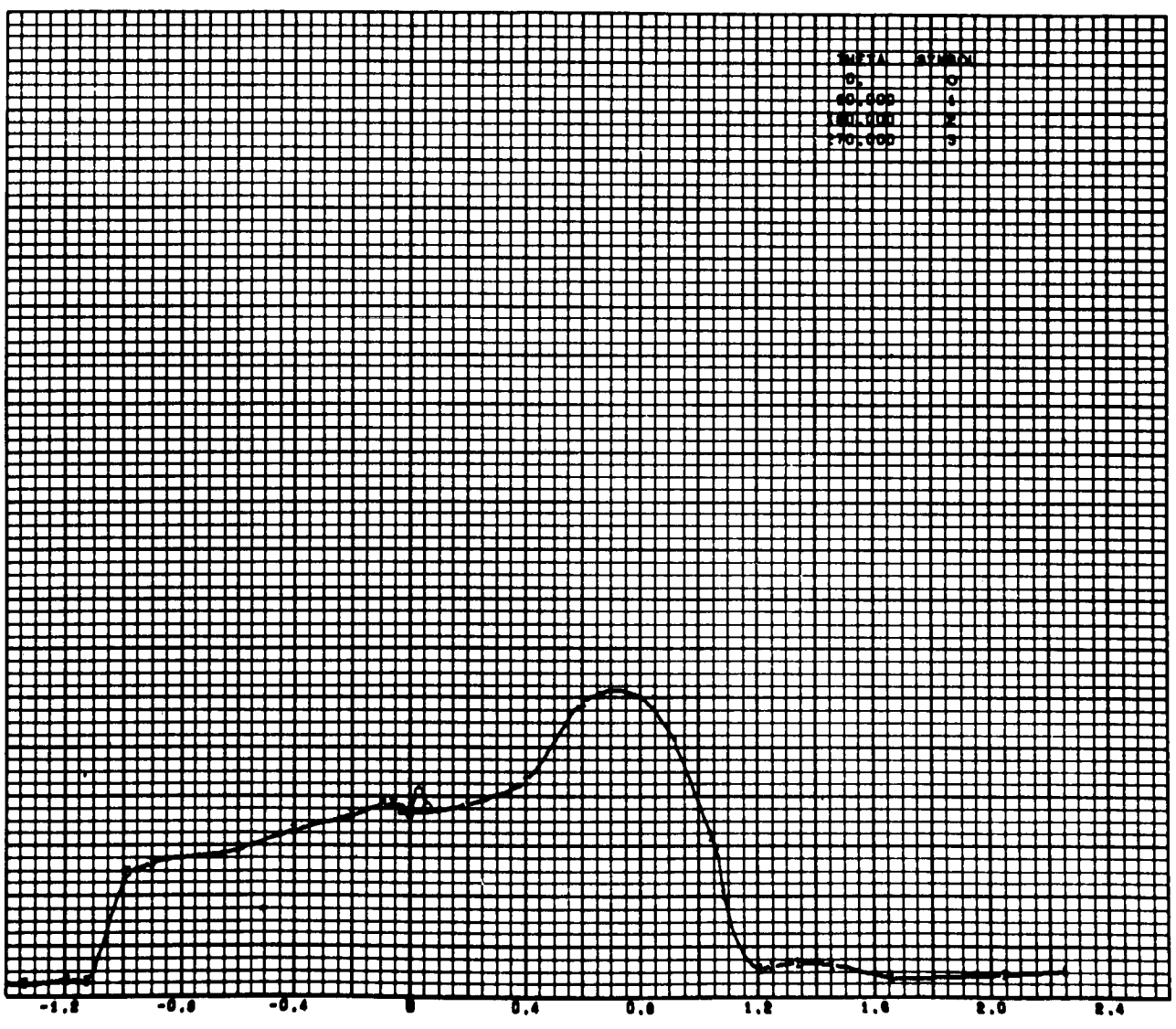
Q(OM) --- 9.2285 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
76*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



~~CONFIDENTIAL~~

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
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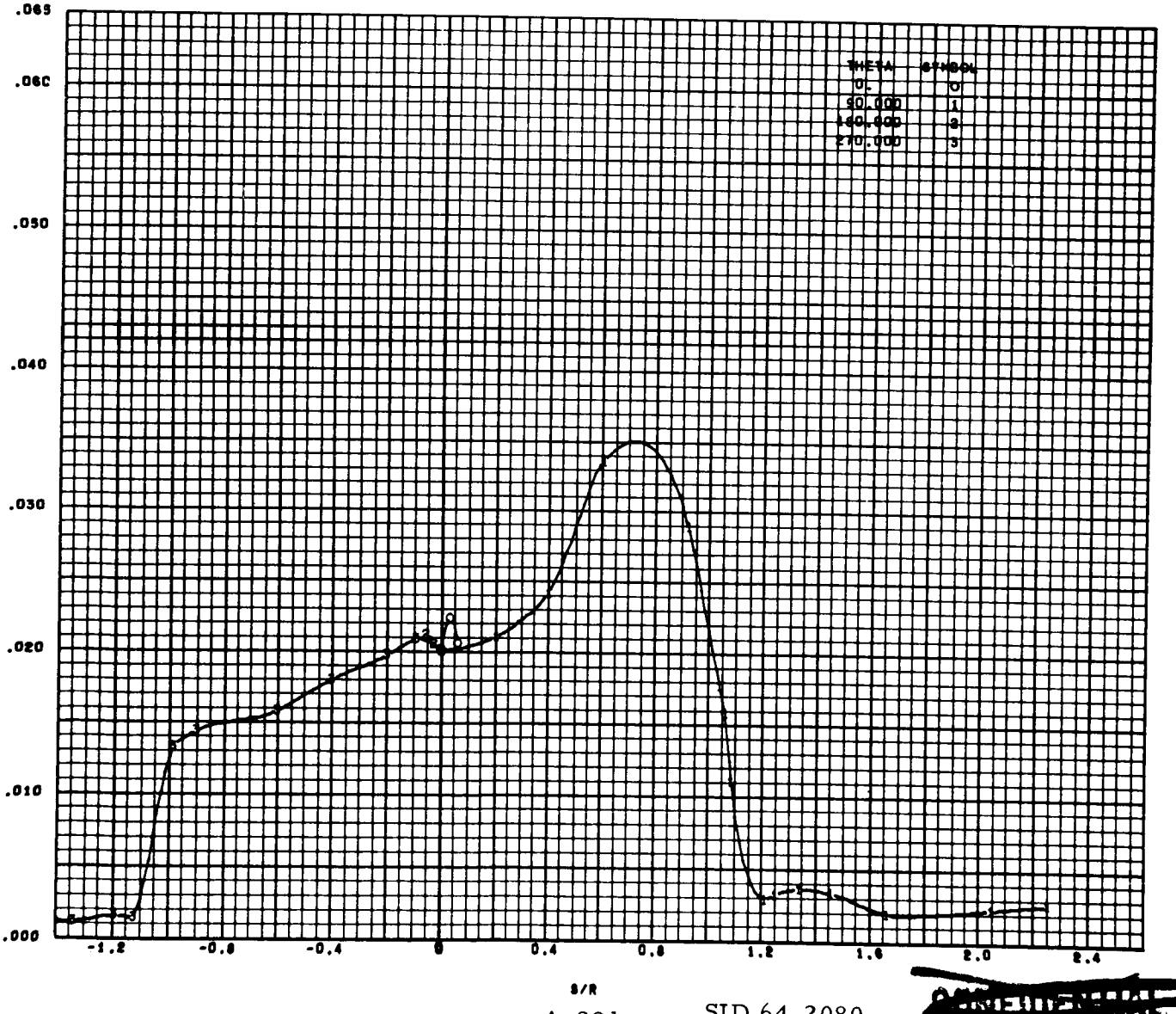
PLOT SERIES NUMBER 40

TEST GROUP	TIME (SEC)
76*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
110 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
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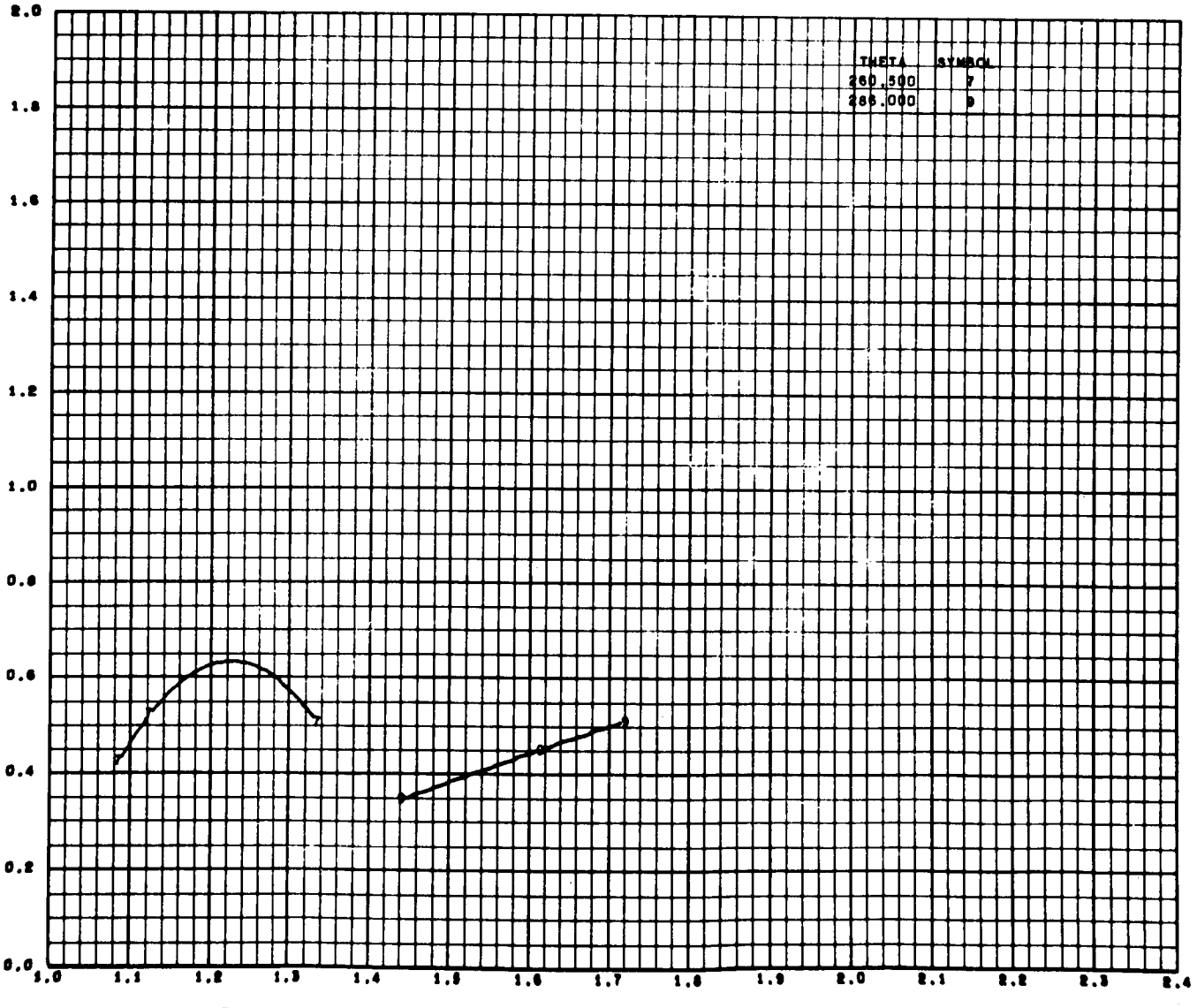
PLOT SERIES NUMBER 40

TEST GROUP	TIME (SEC)
76*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
107 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
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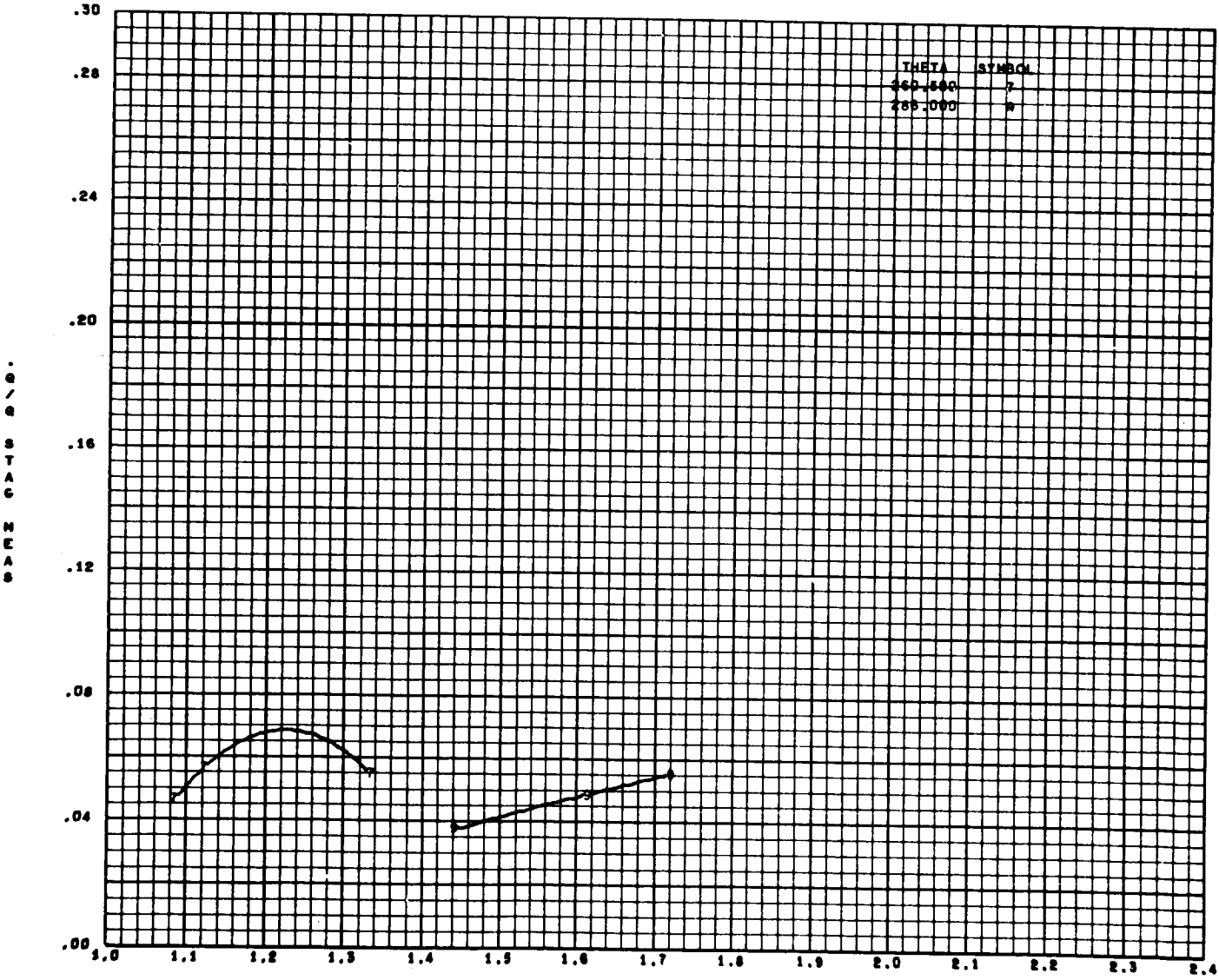
PLOT SERIES NUMBER 40

TEST GROUP	TIME (SEC)
76*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
109 00



[redacted]

~~CONFIDENTIAL~~

HEAT TRANSFER | CONFIGURATION C56 | PLOT SERIES NUMBER 40 | 3937-09 111 000

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.19
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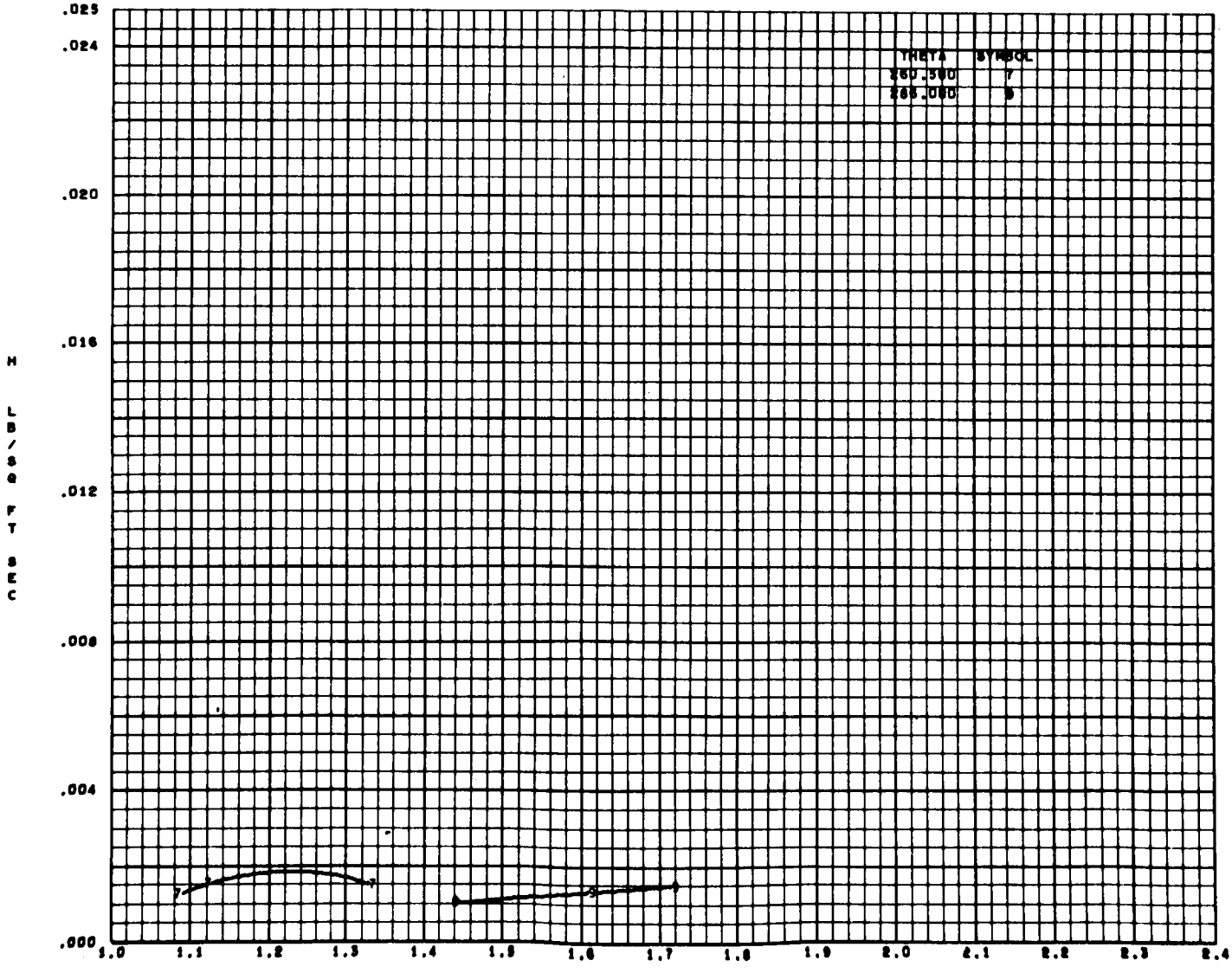
Q(OM) --- 9.2285 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
76*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 162.46 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1842.30 PSIA
TOTAL TEMPERATURE ---- 1888.60 DEG RANKINE

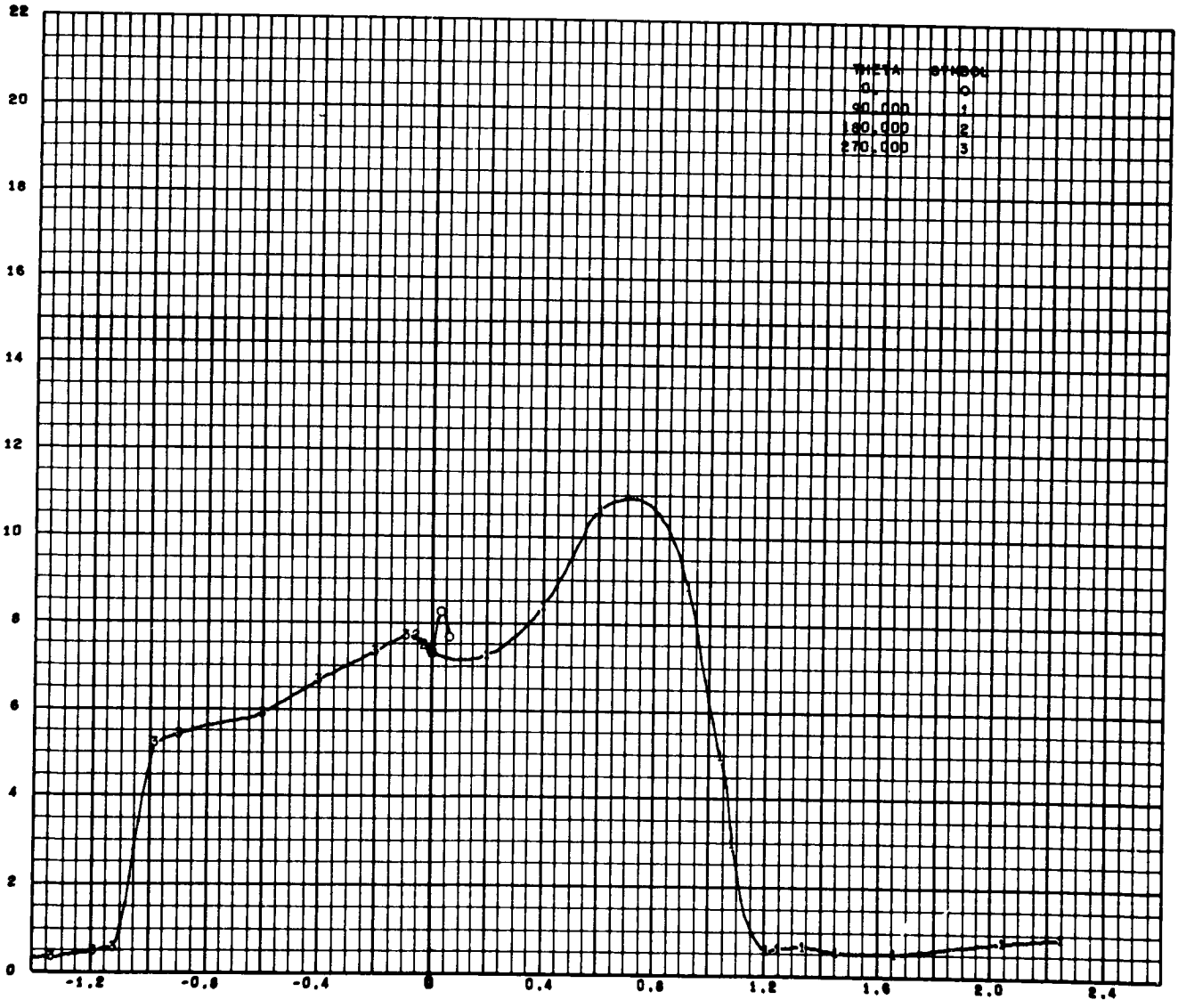
RE/FT --- 2.2446*10+6
Q(OM) --- 9.2238 BTU/SQ FT SEC

PLOT SERIES NUMBER 41

TEST GROUP	TIME (SEC)
77*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
112 000



HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
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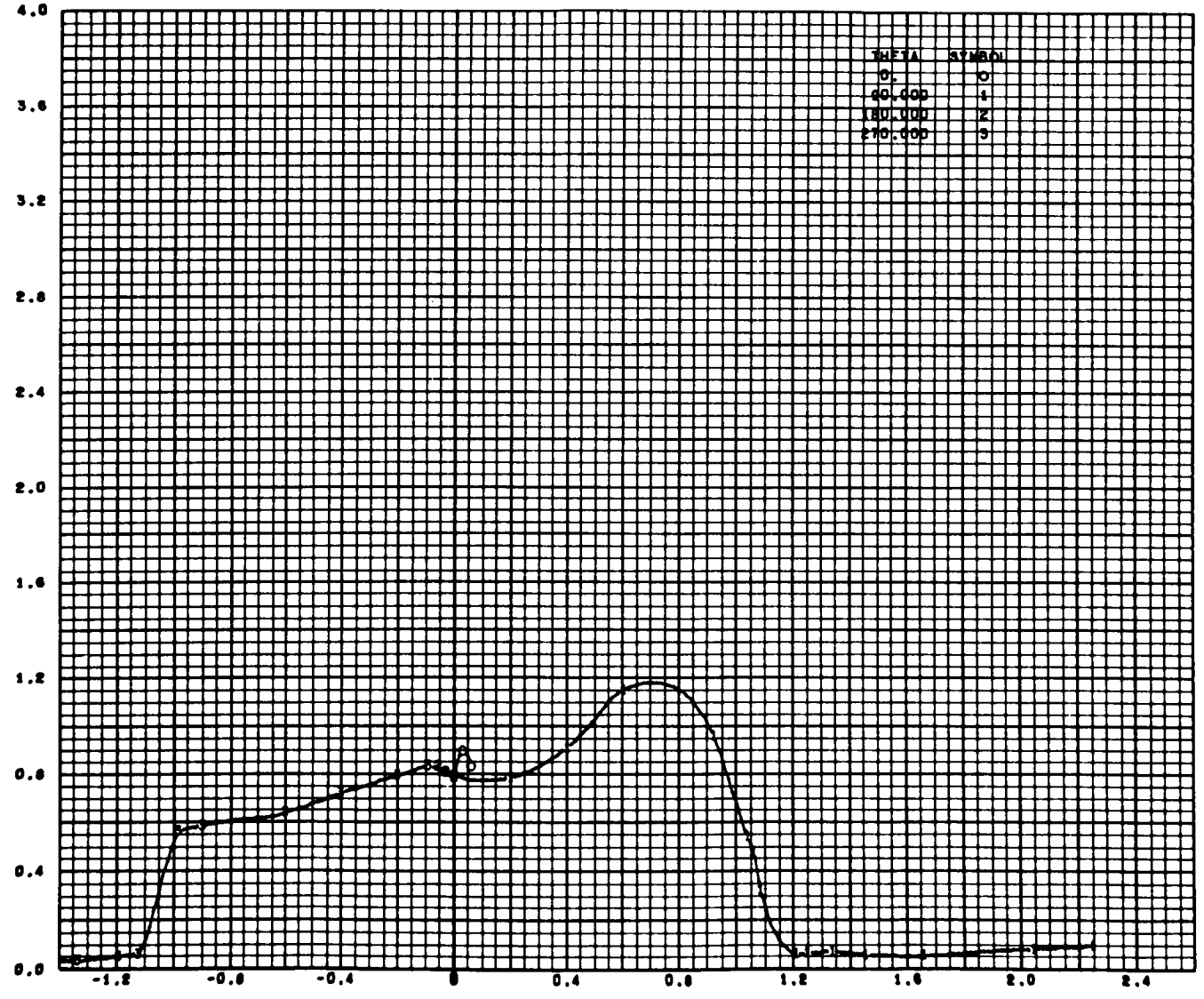
PLOT SERIES NUMBER 41

TEST GROUP	TIME (SEC)
77*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
114 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
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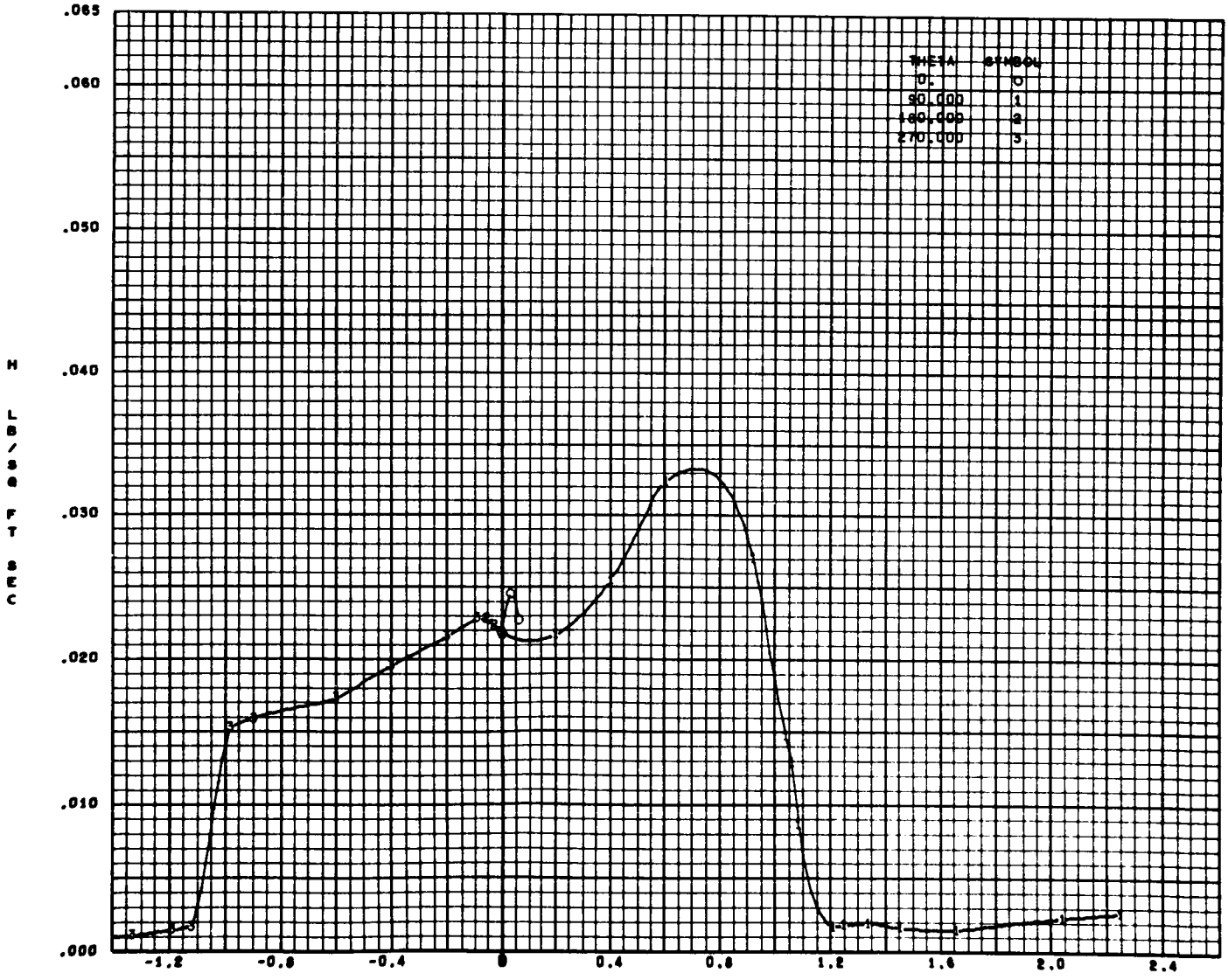
PLOT SERIES NUMBER 41

TEST GROUP	TIME (SEC)
77*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
116 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
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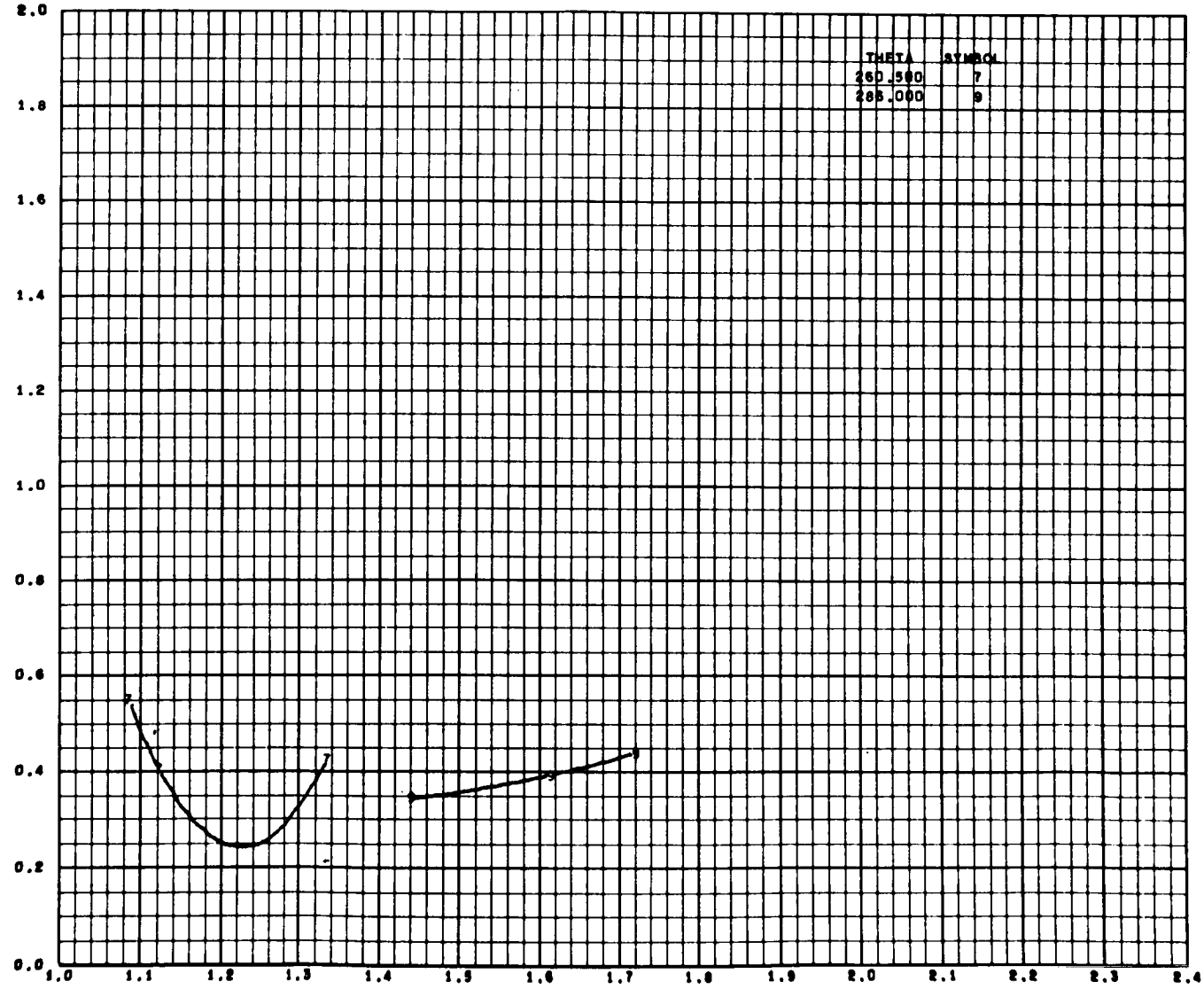
PLOT SERIES NUMBER 41

TEST GROUP	TIME (SEC)
77*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
113 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
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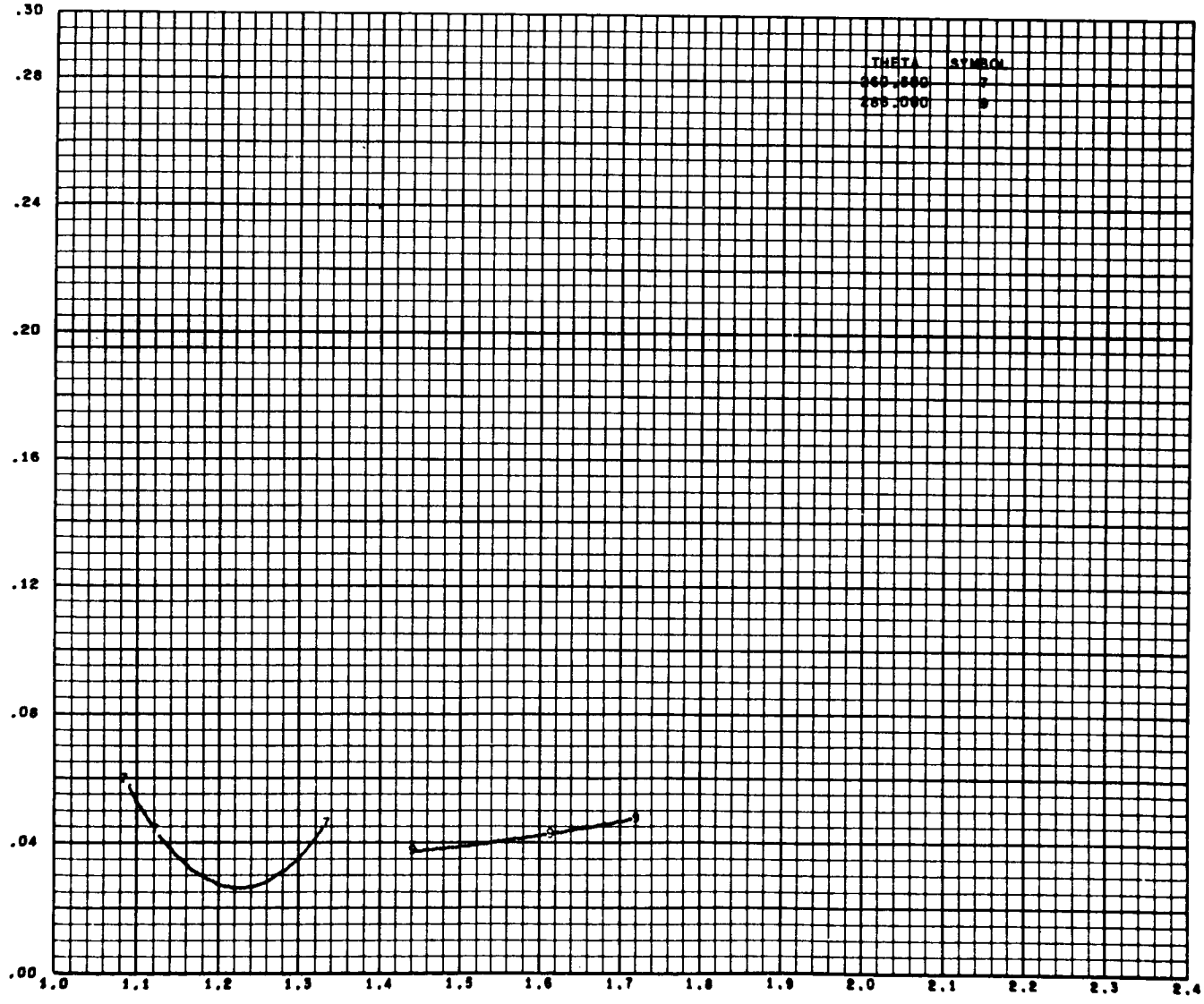
RE/FT --- 2.2446*10+6
Q(OM) --- 9.2238 BTU/SQ FT SEC

PLOT SERIES NUMBER 41

TEST GROUP	TIME (SEC)
77*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
115 00



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C56

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 162.46 DEG
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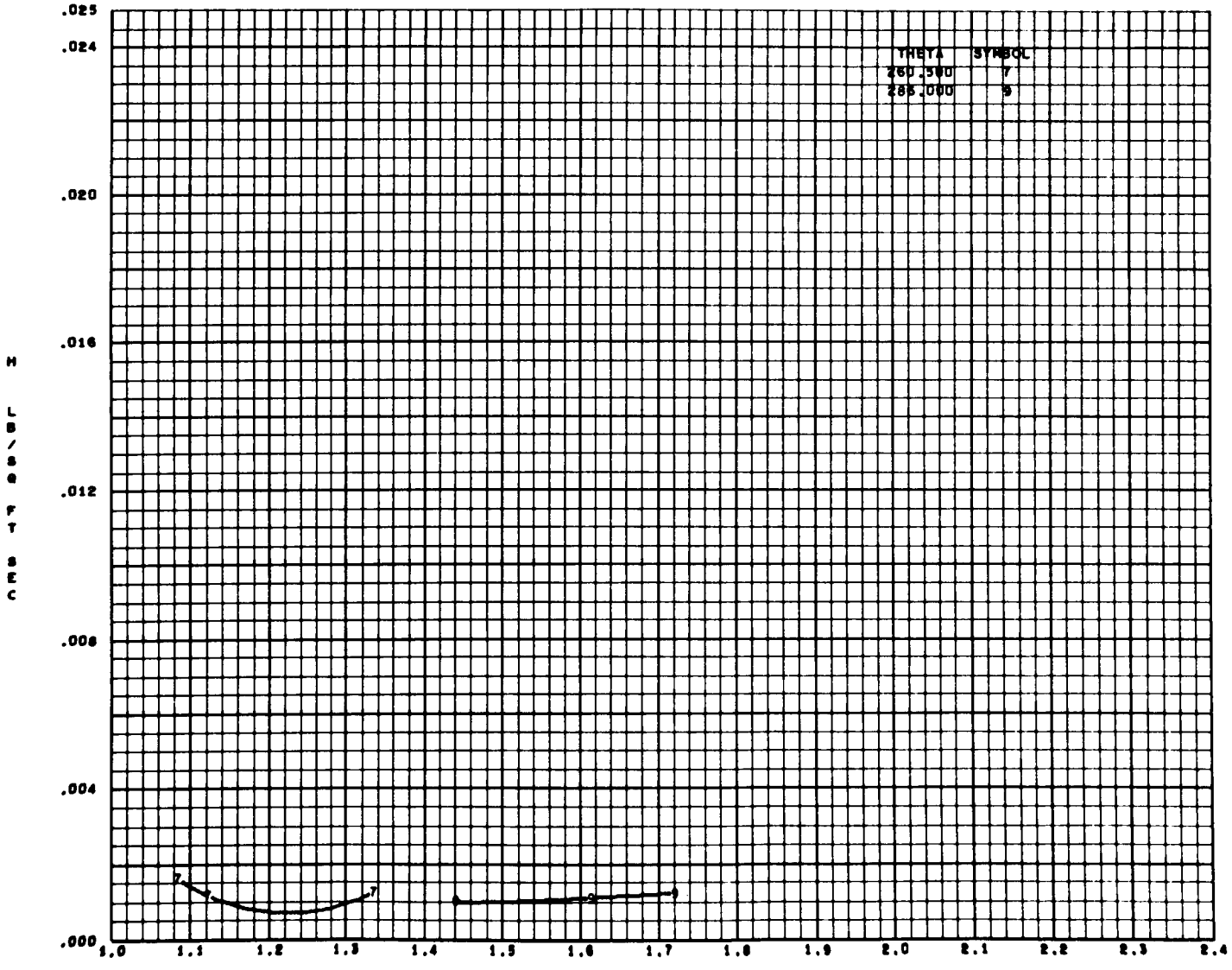
PLOT SERIES NUMBER 41

TEST GROUP	TIME (SEC)
77*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
117 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C60

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 153.60 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 215.30 PSIA
TOTAL TEMPERATURE ---- 1675.30 DEG RANKINE

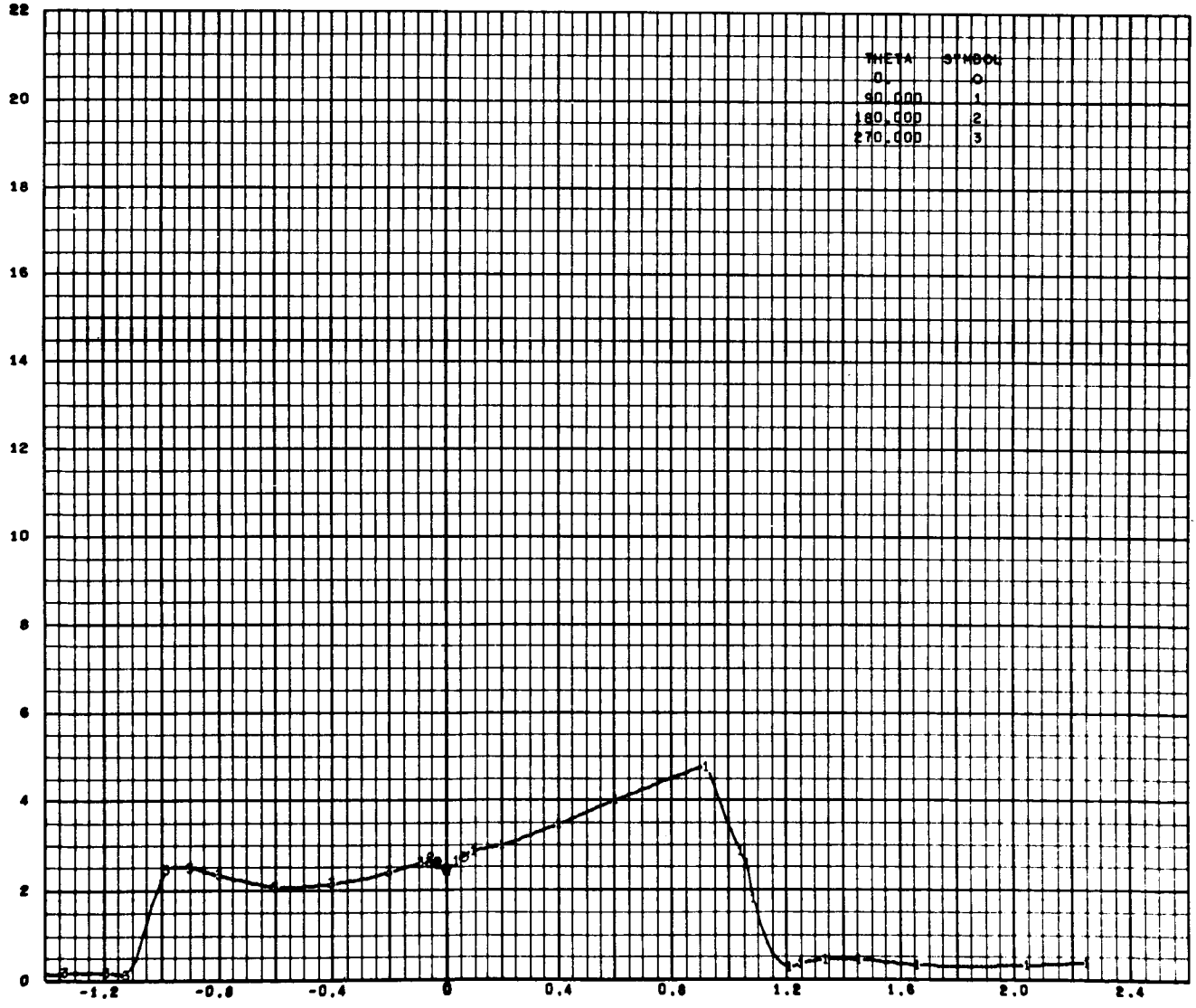
RE/FT --- 0.3285*10+6
Q(OM) --- 1.9459 BTU/SQ FT SEC

PLOT SERIES NUMBER 42

TEST GROUP	TIME (SEC)
81*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
118 000



~~CONFIDENTIAL~~

HEAT TRANSFER — CONFIGURATION C60 — PLOT SERIES NUMBER 42 — 3937-09 120 000

APOLLO H-11

AEDC, TUNNEL C

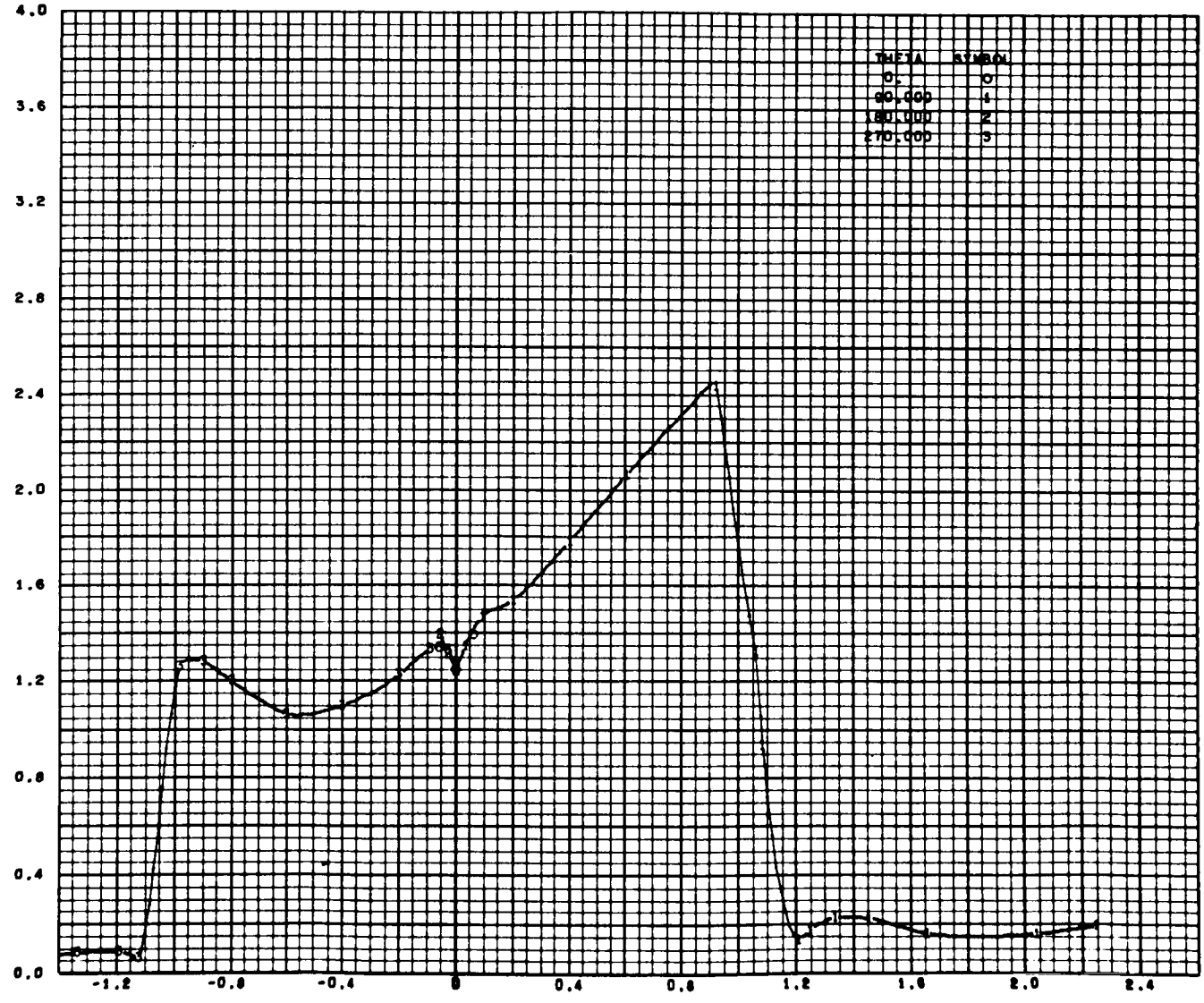
JUNE, 1964

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 153.60 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 215.30 PSIA
TOTAL TEMPERATURE ---- 1675.30 DEG RANKINE

RE/FT --- 0.3285*10+6
Q(OM) --- 1.9459 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
81*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C60

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 153.60 DEG
ANGLE OF YAW --------- -0. DEG
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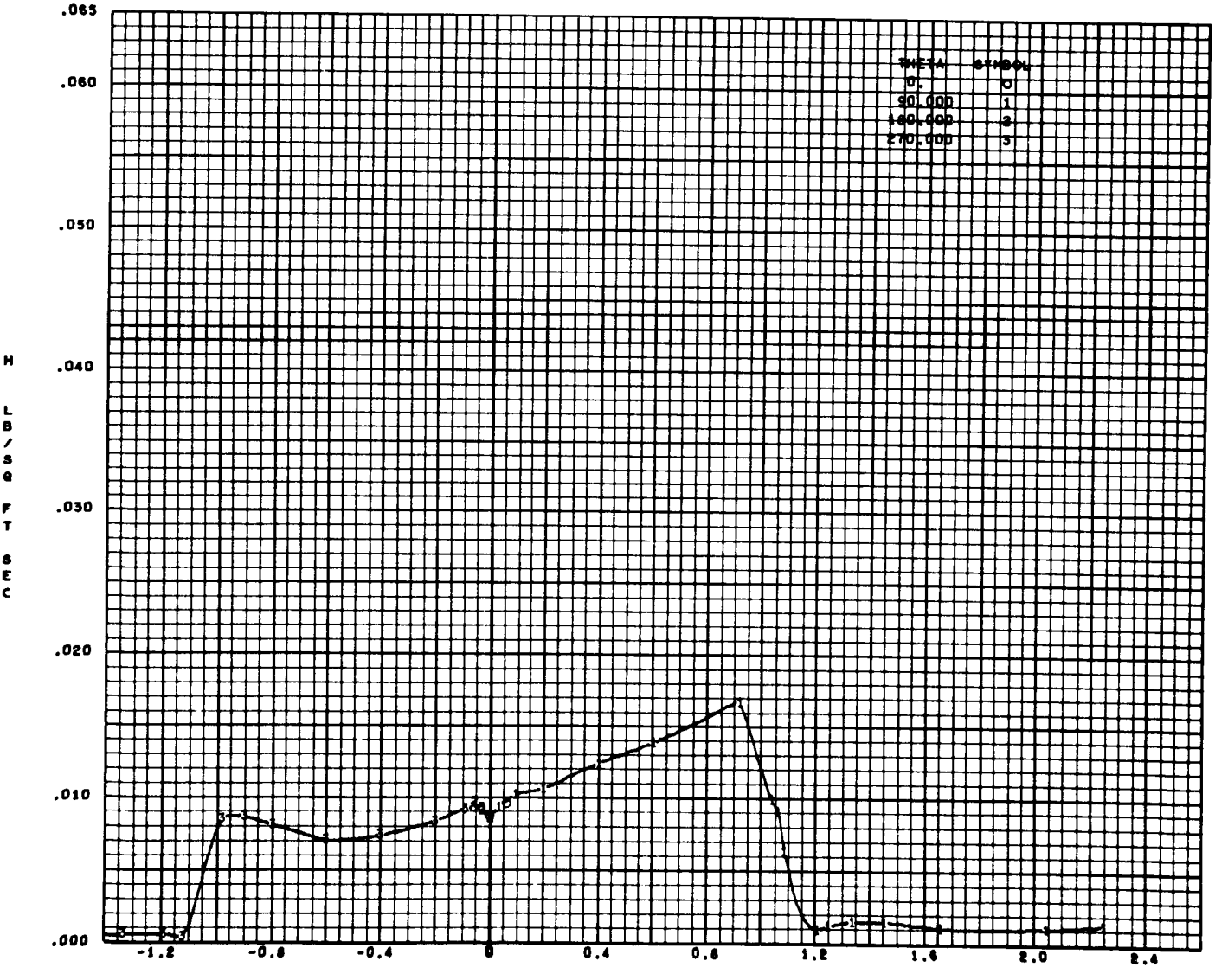
RE/FT --- 0.3285*10+6
Q(OM) --- 1.9459 BTU/SQ FT SEC

PLOT SERIES NUMBER 42

TEST GROUP	TIME (SEC)
81*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
122 000



HEAT TRANSFER — CONFIGURATION C60 — PLOT SERIES NUMBER 42 — 3937-09 119 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 153.60 DEG
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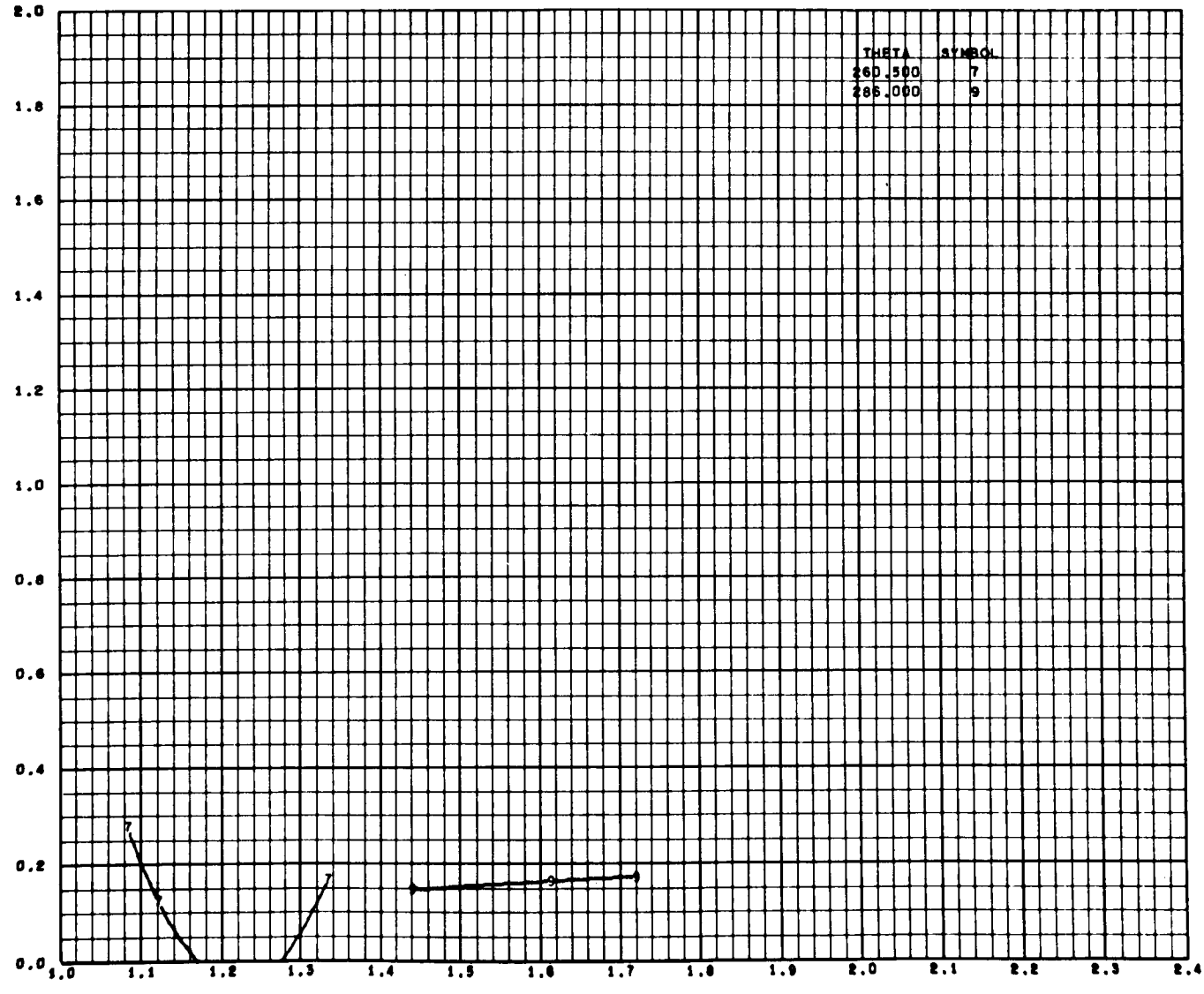
TOTAL TEMPERATURE ---- 1675.30 DEG RANKINE

RE/FT --- 0.3285*10+6
Q(OM) --- 1.9459 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
81*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C60

MACH NUMBER ---------- 10.04
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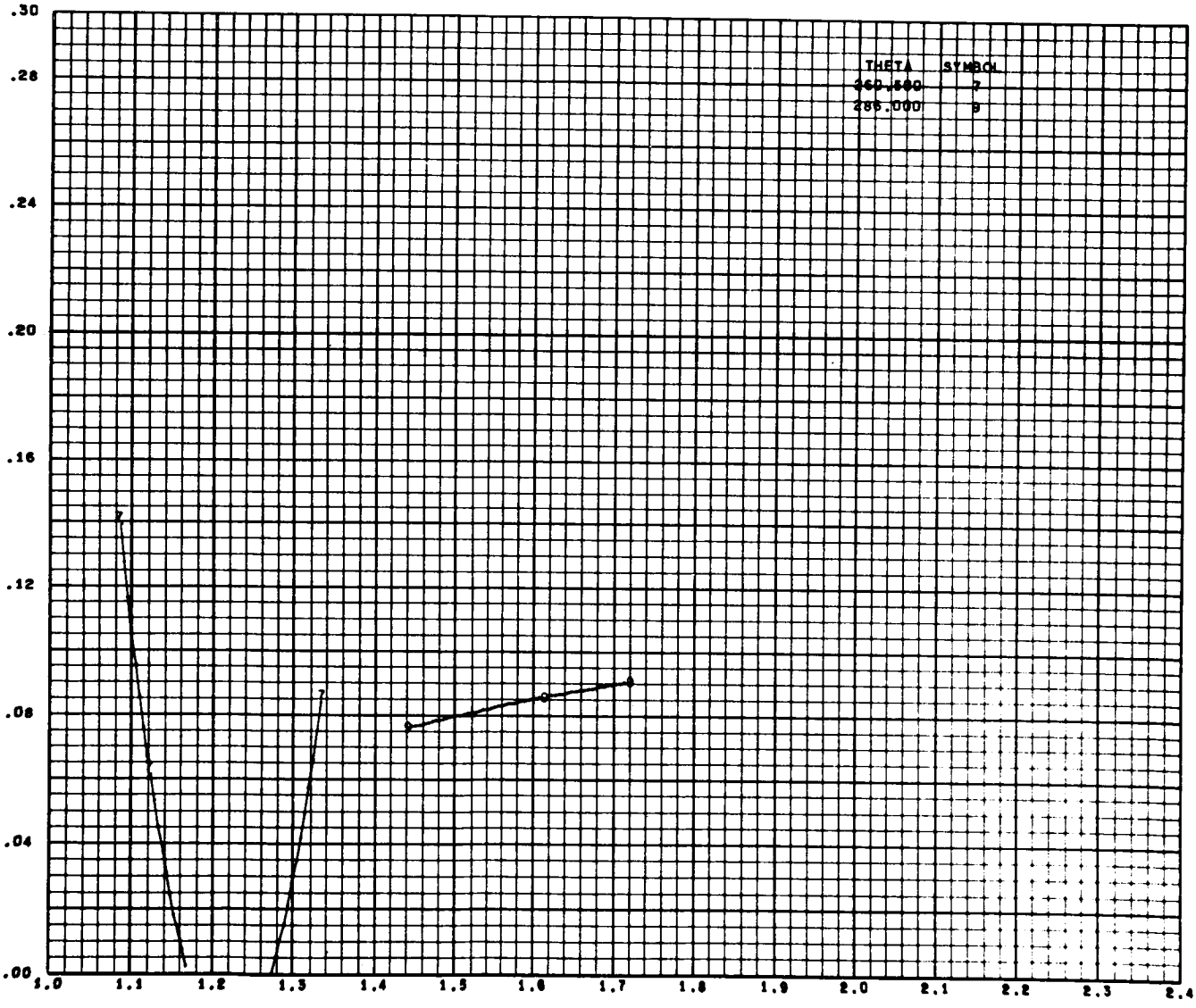
PLOT SERIES NUMBER 42

TEST GROUP	TIME (SEC)
81*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
121 000



HEAT TRANSFER — CONFIGURATION C60 — PLOT SERIES NUMBER 42 — 3937-09 123 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.04
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RE/FT --- 0.3285*10+6
Q(OM) --- 1.9459 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
81*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C6D

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.36 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1848.30 PSIA
TOTAL TEMPERATURE ---- 1877.70 DEG RANKINE

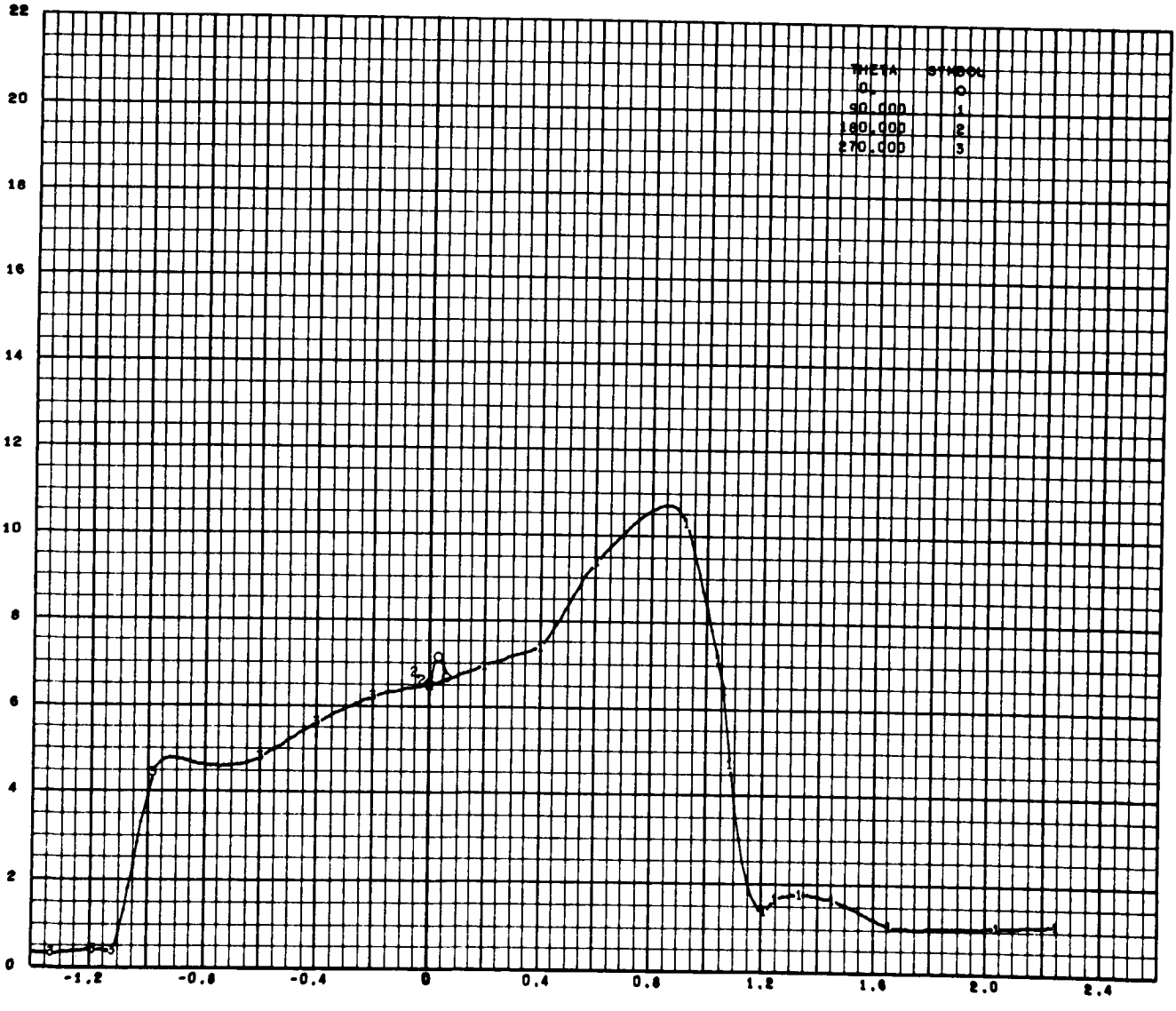
RE/FT --- 2.2762*10+6
Q(OM) --- 9.2429 BTU/SQ FT SEC

PLOT SERIES NUMBER 43

TEST GROUP	TIME (SEC)
78*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
124 000



S/P

SID 64-2080

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C60

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.36 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1848.30 PSIA
TOTAL TEMPERATURE ---- 1877.70 DEG RANKINE

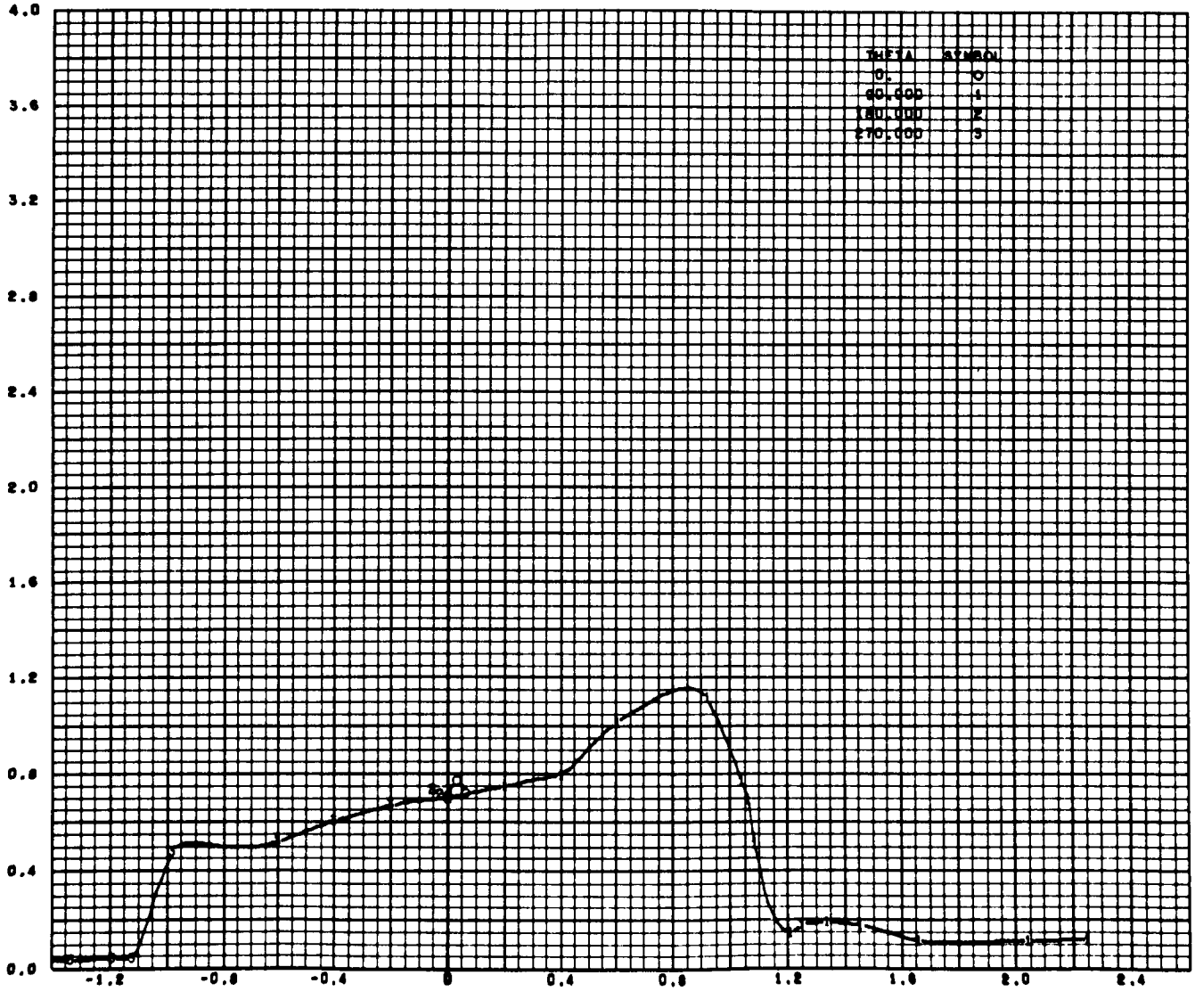
RE/FT --- 2.2762*10+6
Q(OM) --- 9.2429 BTU/SQ FT SEC

PLOT SERIES NUMBER 43

TEST GROUP	TIME (SEC)
78*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3037-09
126 000



CONFIDENTIAL

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C60

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.36 DEG
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TOTAL TEMPERATURE ---- 1877.70 DEG RANKINE

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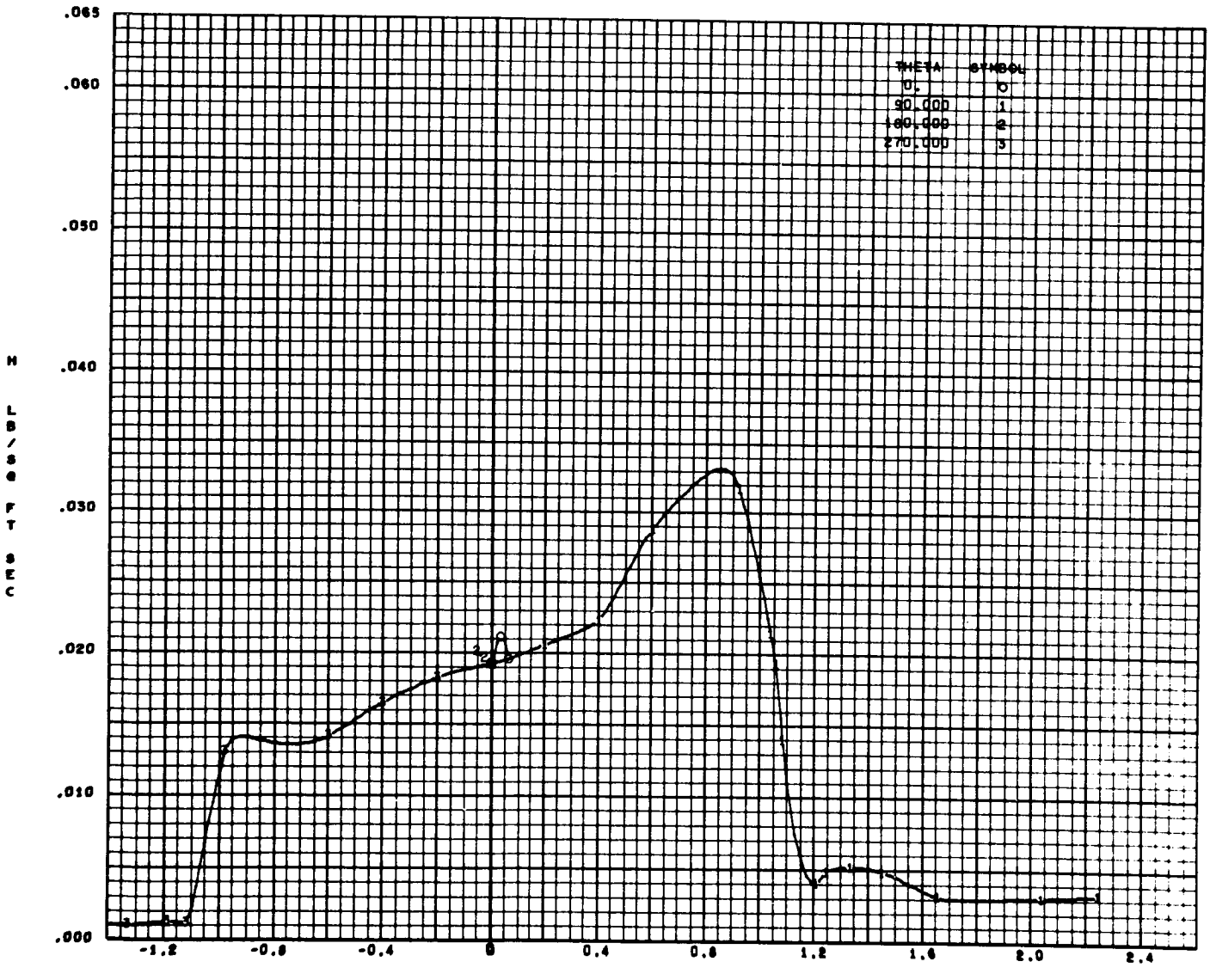
Q(OM) --- 9.2429 BTU/SQ FT SEC

PLOT SERIES NUMBER 43

TEST GROUP	TIME (SEC)
78*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
128 000



CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C6D

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.36 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1848.30 PSIA
TOTAL TEMPERATURE ---- 1877.70 DEG RANKINE

RE/FT --- 2.2762*10+6
Q(OM) --- 9.2429 BTU/SQ FT SEC

PLOT SERIES NUMBER 43

TEST GROUP	TIME (SEC)
78*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
125 000

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C60

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.36 DEG
ANGLE OF YAW --------- -0. DEG
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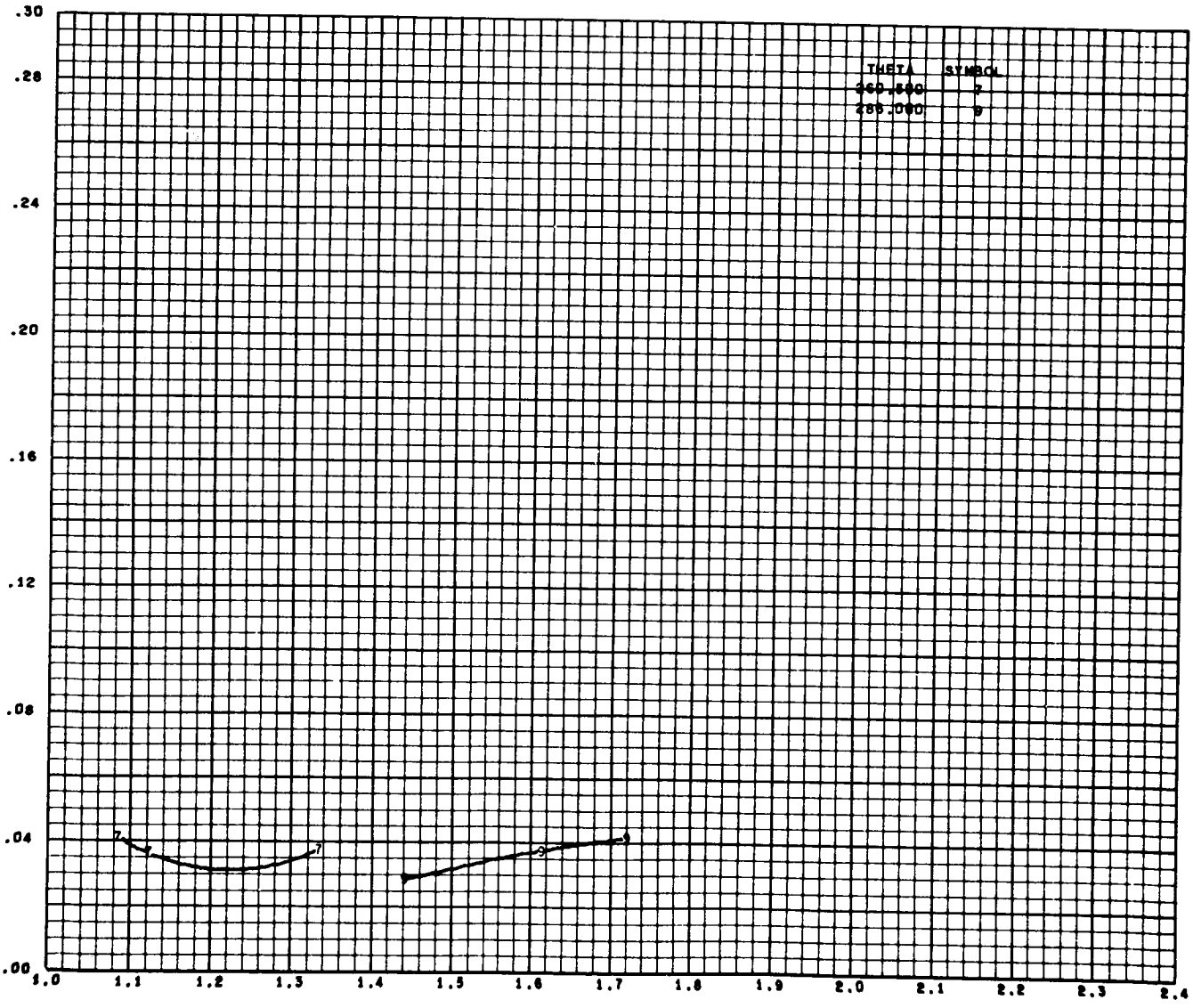
PLOT SERIES NUMBER 43

TEST GROUP	TIME (SEC)
78*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
127 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C60

MACH NUMBER ---------- 10.19
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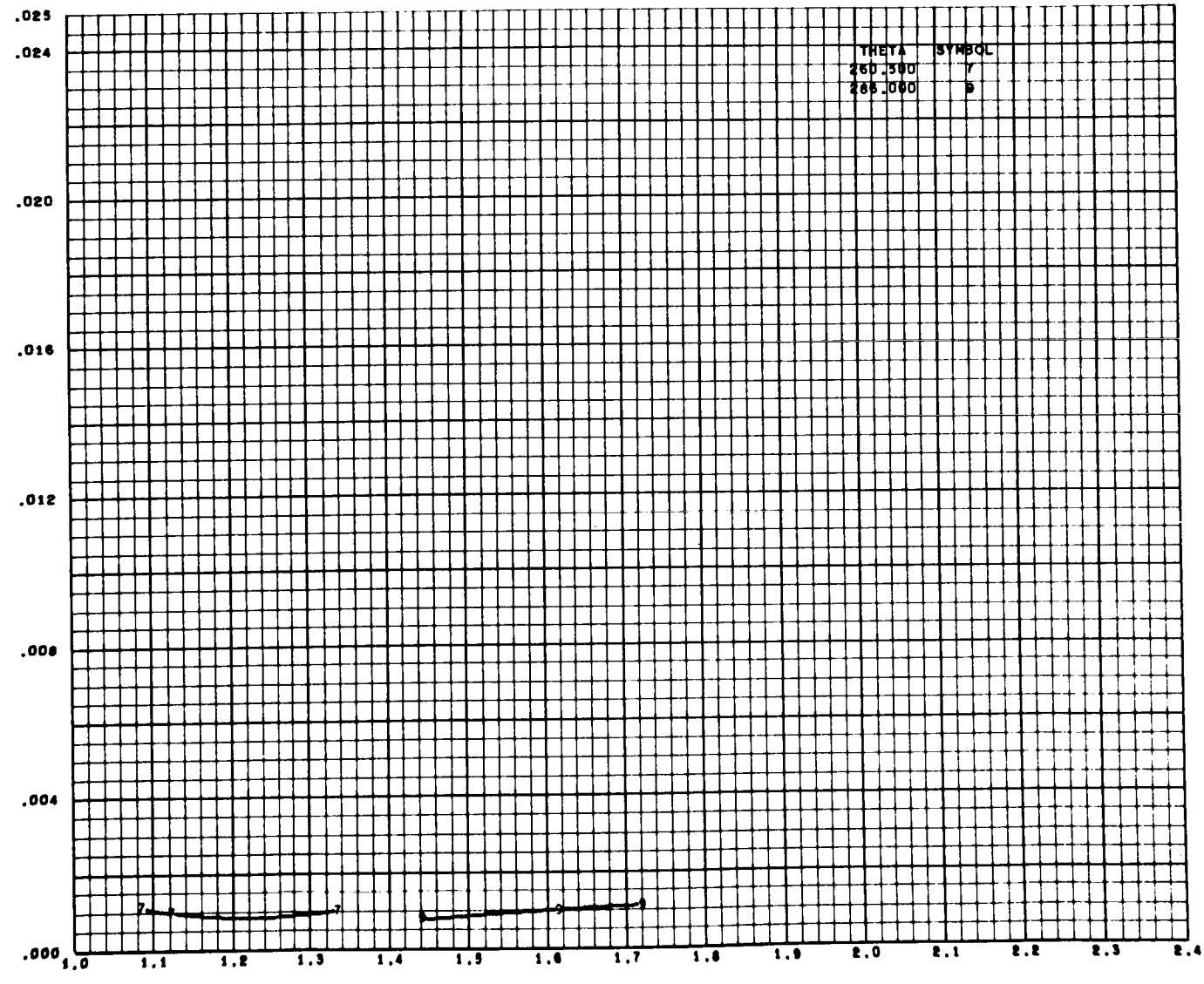
3937-09
129 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C61

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 215.80 PSIA
TOTAL TEMPERATURE ---- 1689.20 DEG RANKINE

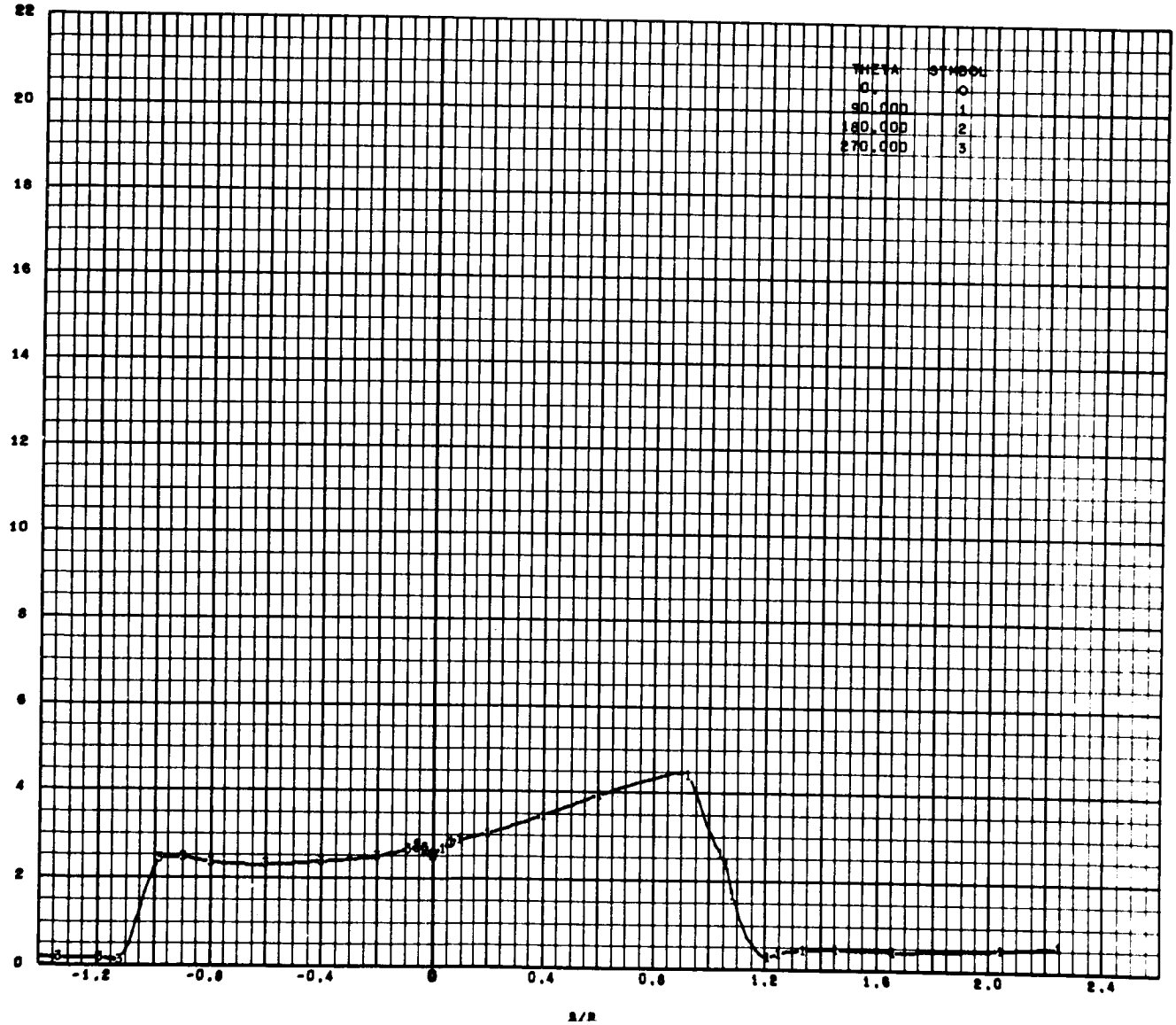
RE/FT --- 0.3245*10+6
Q(OM) --- 1.9491 BTU/SQ FT SEC

PLOT SERIES NUMBER 44

TEST GROUP	TIME (SEC)
80*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
130 000



CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C61

MACH NUMBER ---------- 10.04
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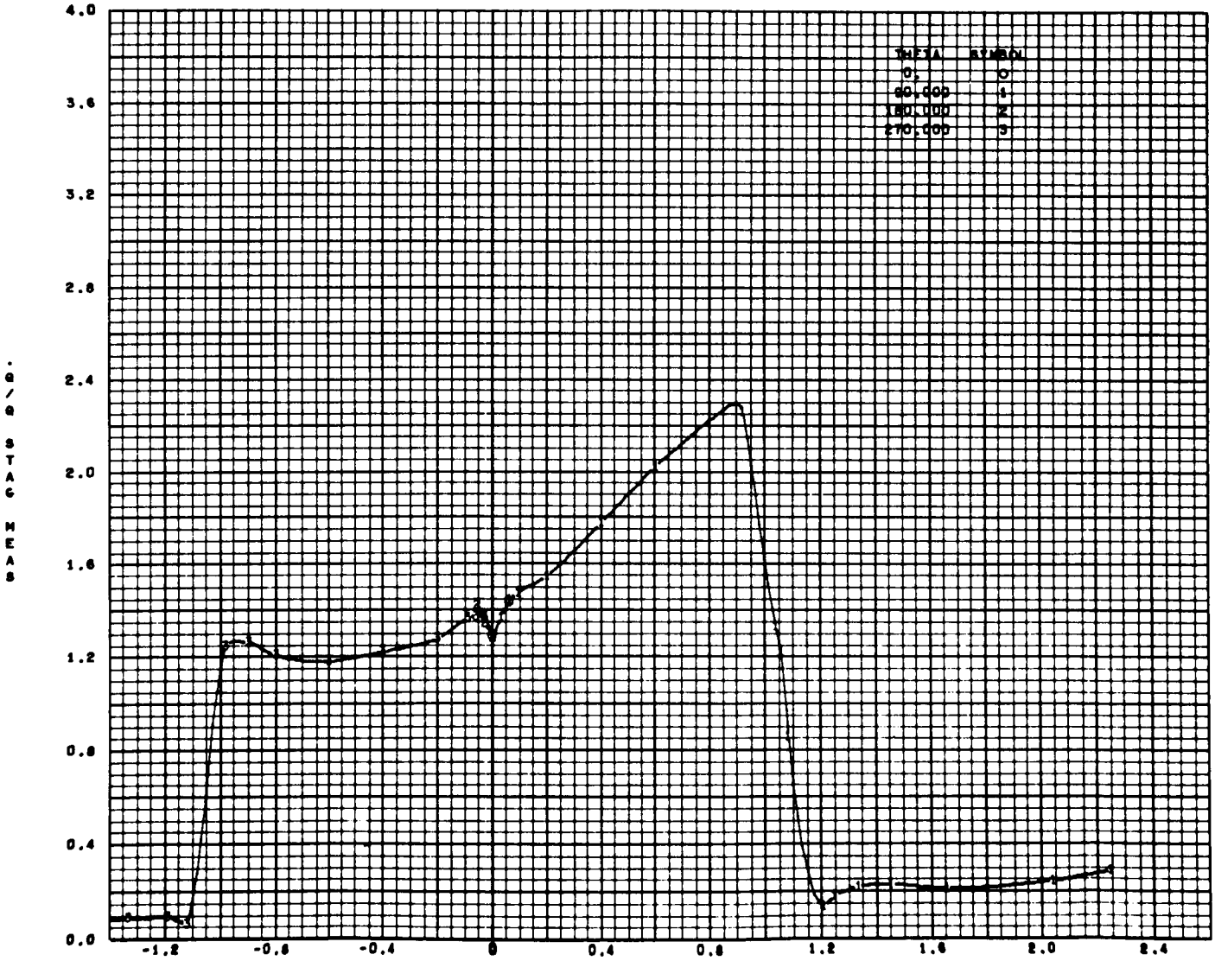
PLOT SERIES NUMBER 44

TEST GROUP	TIME (SEC)
80*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
132 000



CONFIDENTIAL

CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C61

MACH NUMBER ---------- 10.04
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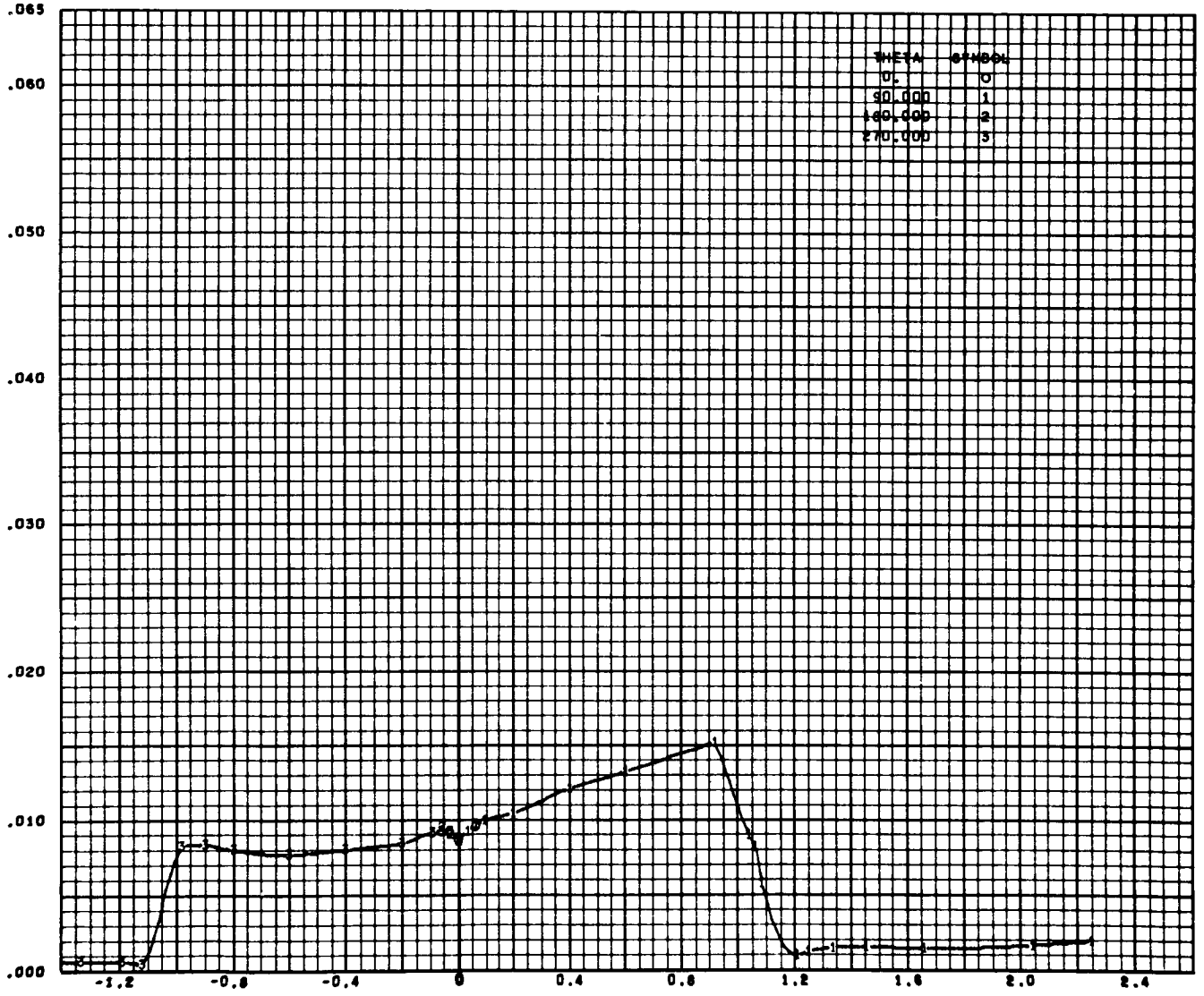
PLOT SERIES NUMBER 44

TEST GROUP	TIME (SEC)
80*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
134 000



CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C61

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 154.58 DEG
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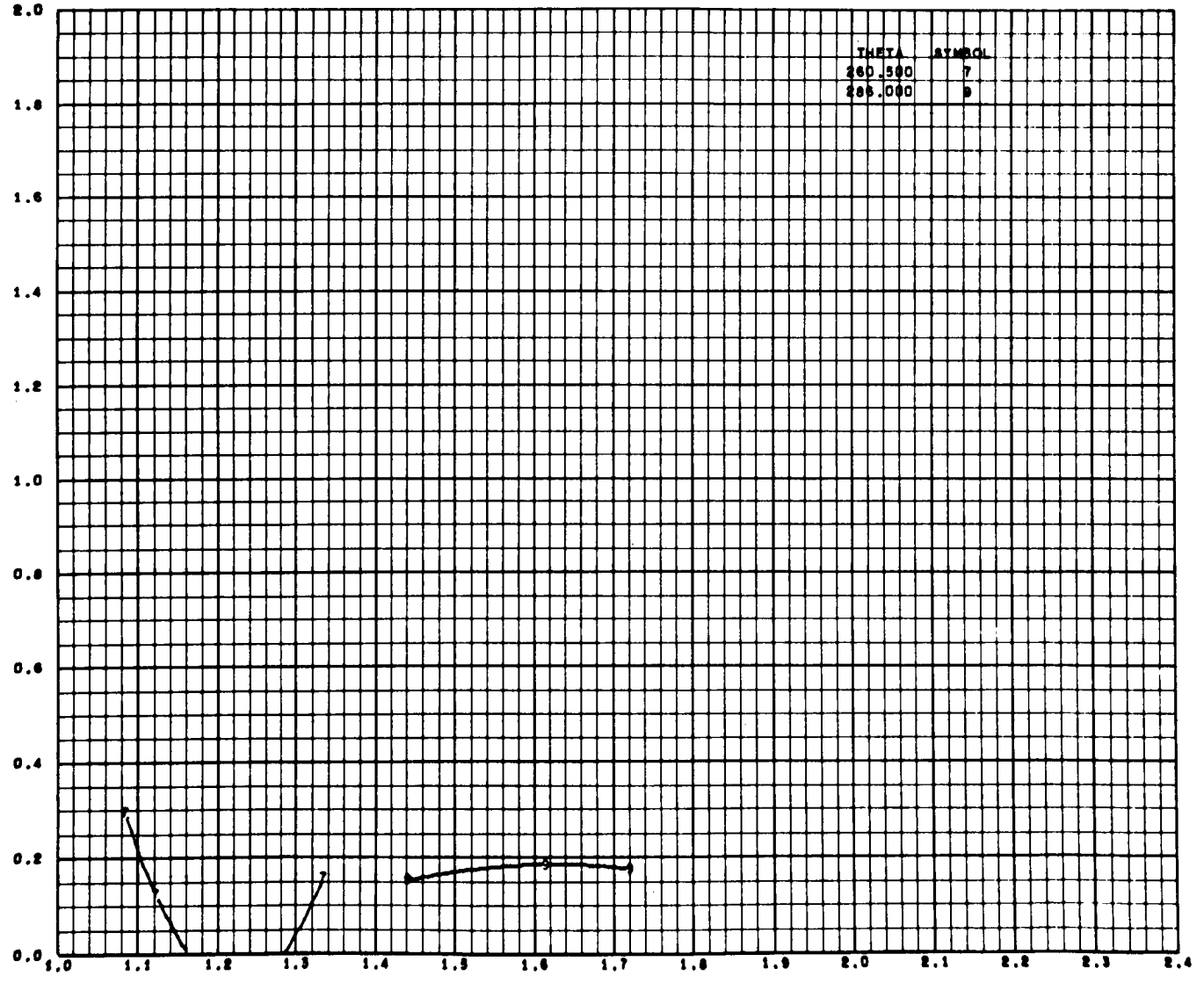
3937-09
131 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C61

MACH NUMBER ---------- 10.04
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PLOT SERIES NUMBER 44

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80*	2.75

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3937-09
133 000

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C61

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PLOT SERIES NUMBER 44

TEST GROUP	TIME (SEC)
80*	2.75

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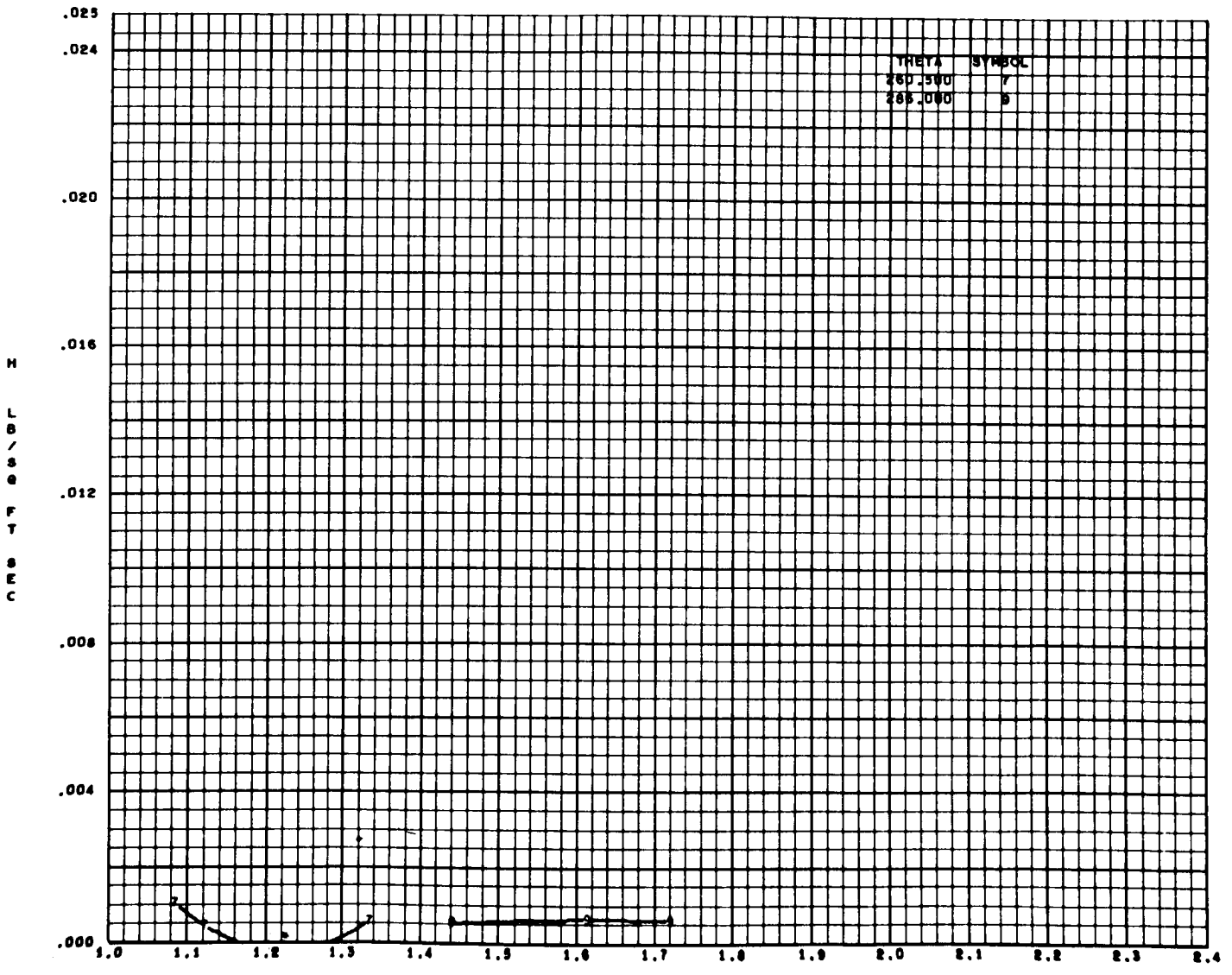
3937-09
135 000



A/R

CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C61

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.35 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1847.30 PSIA
TOTAL TEMPERATURE ---- 1877.60 DEG RANKINE

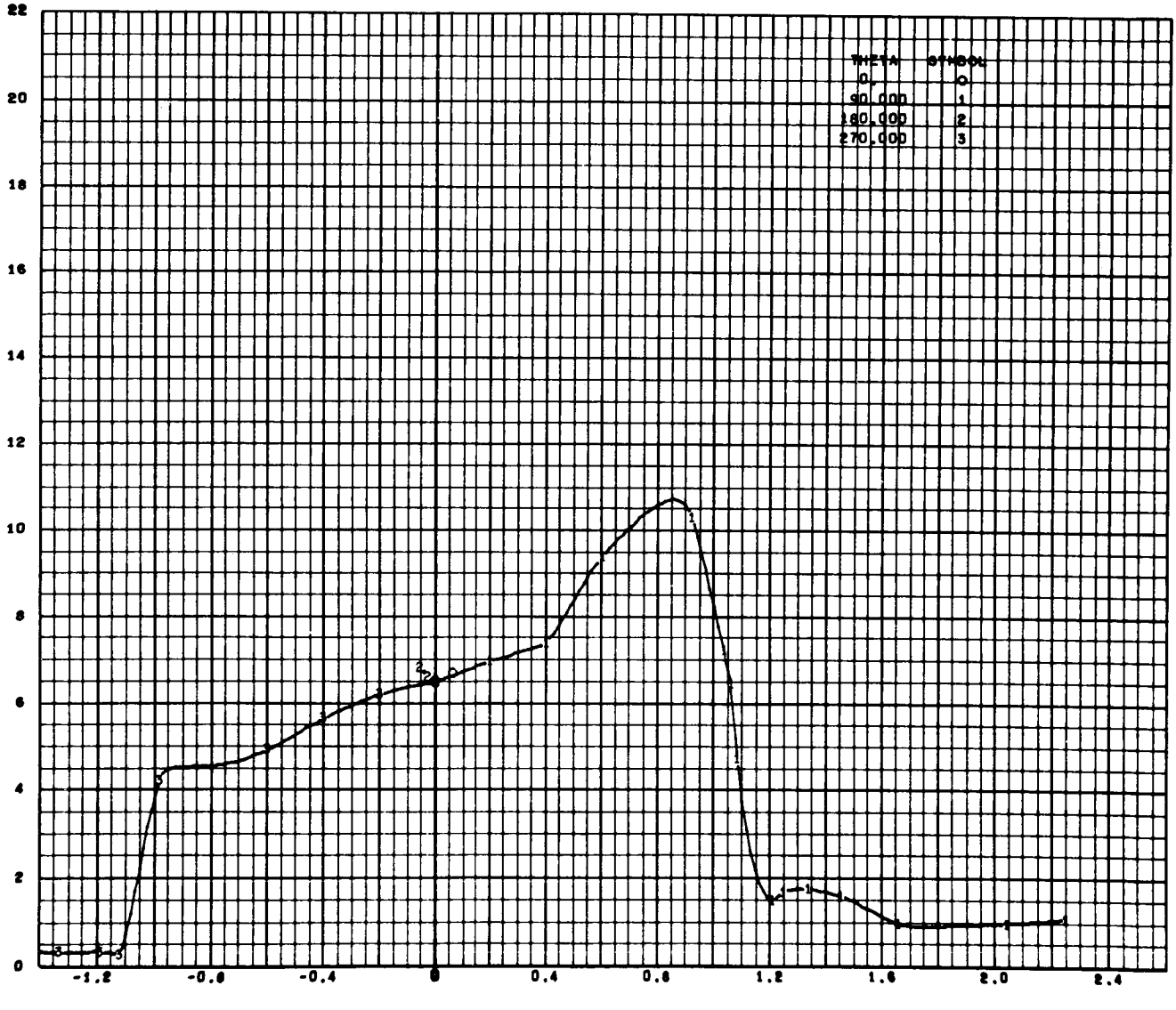
RE/FT --- 2.2753*10+6
Q(OM) --- 9.2397 BTU/SQ FT SEC

PLOT SERIES NUMBER 45

TEST GROUP	TIME (SEC)
79*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
136 000



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CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C61

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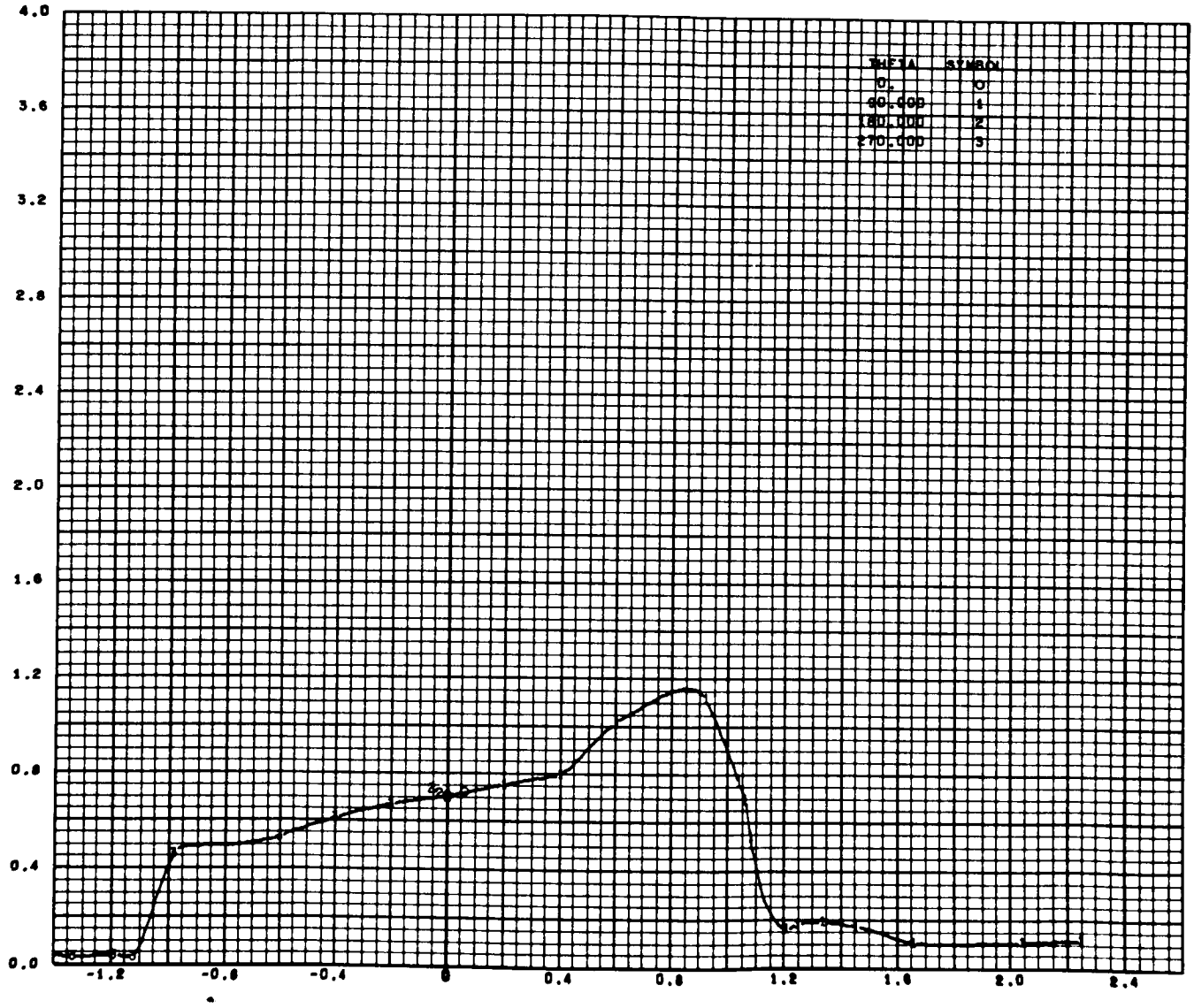
PLOT SERIES NUMBER 45

TEST GROUP	TIME (SEC)
79*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
138 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C61

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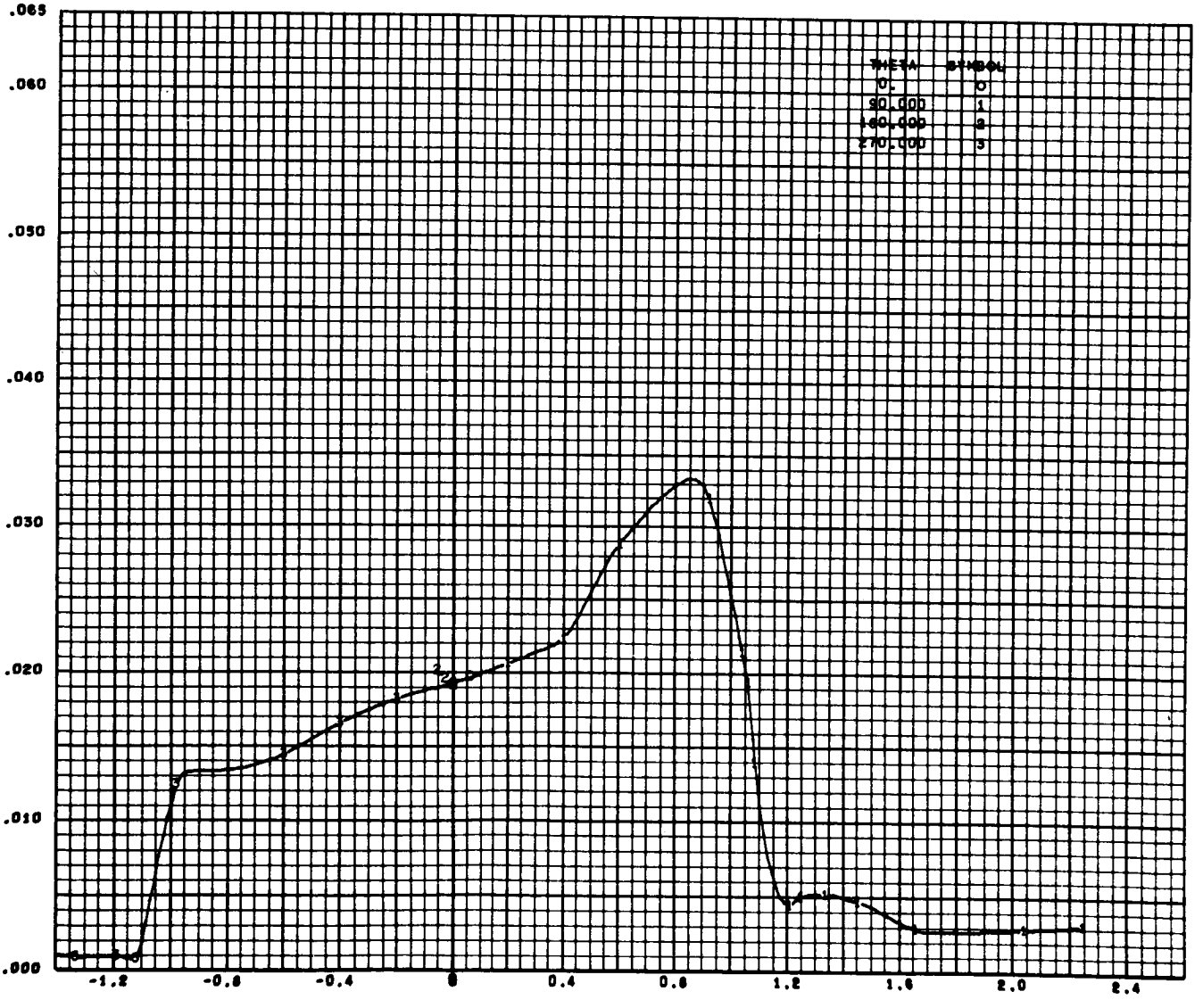
PLOT SERIES NUMBER 45

TEST GROUP	TIME (SEC)
79*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
140 000



CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C61

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.35 DEG
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Q(OM) --- 9.2397 BTU/SQ FT SEC

PLOT SERIES NUMBER 45

TEST GROUP	TIME (SEC)
79*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
137 000

CONFIDENTIAL

[redacted]

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C61

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.35 DEG
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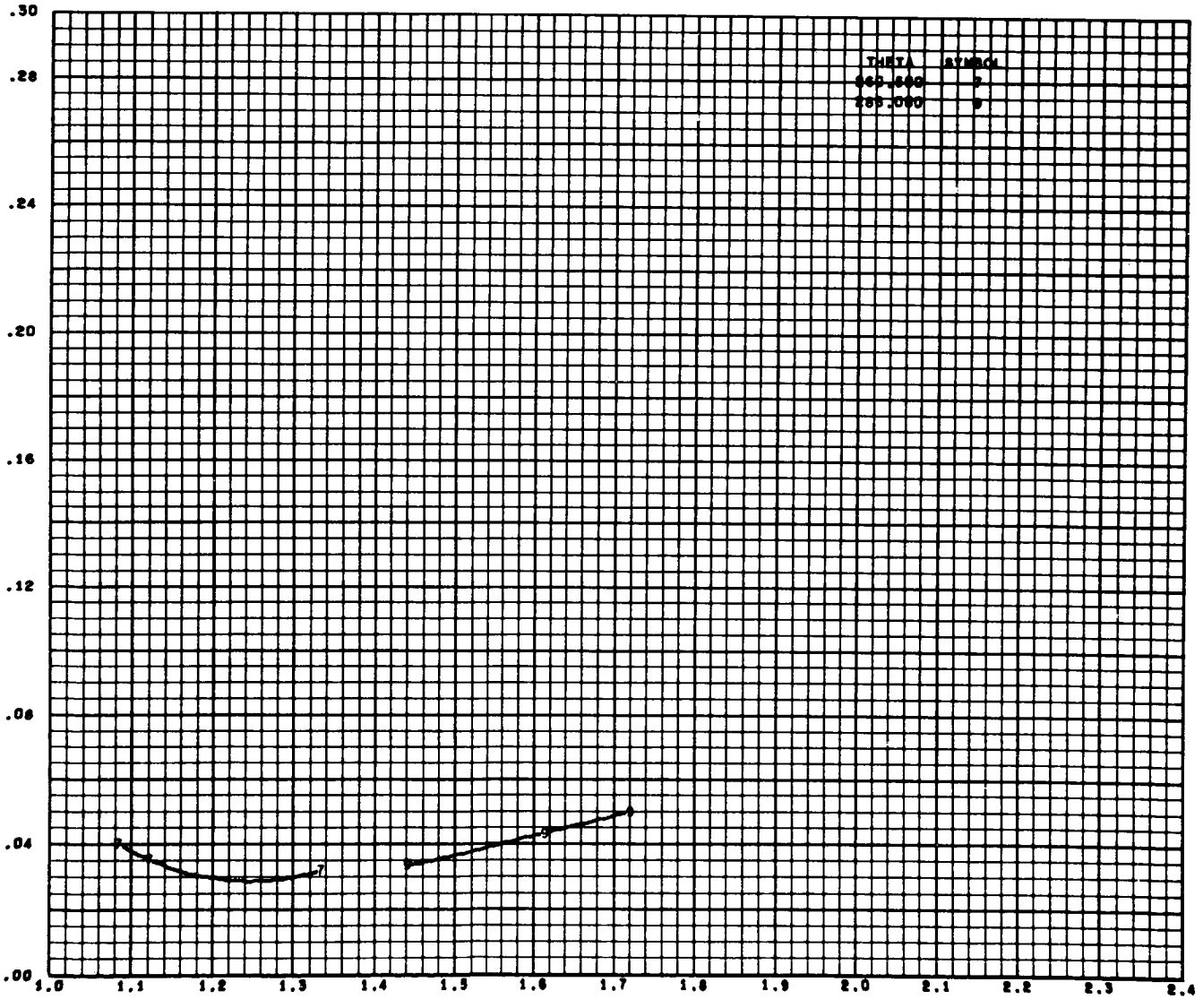
3937-09
139 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C61

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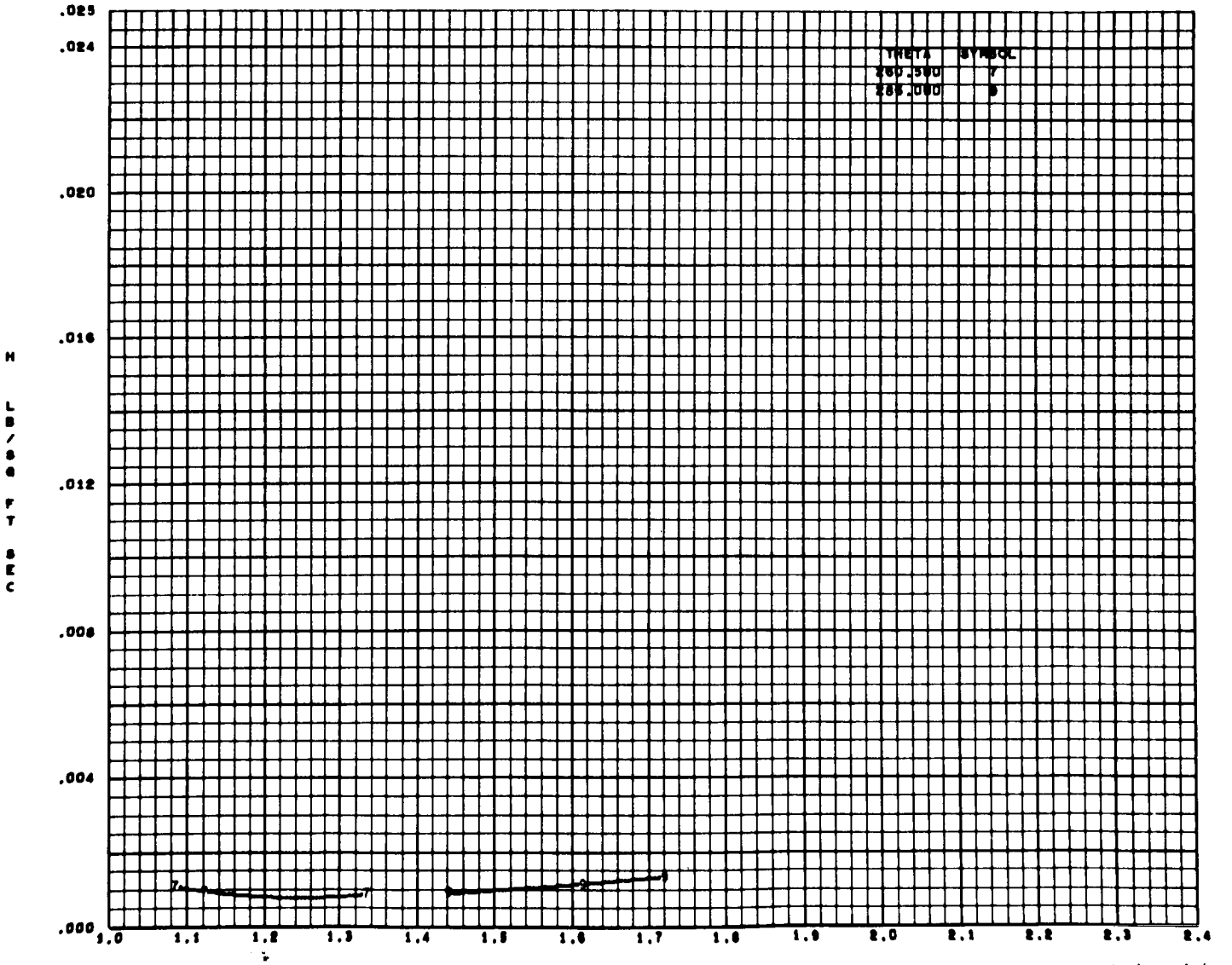
3937-09
141 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 142.54 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 229.20 PSIA
TOTAL TEMPERATURE ---- 1686.50 DEG RANKINE

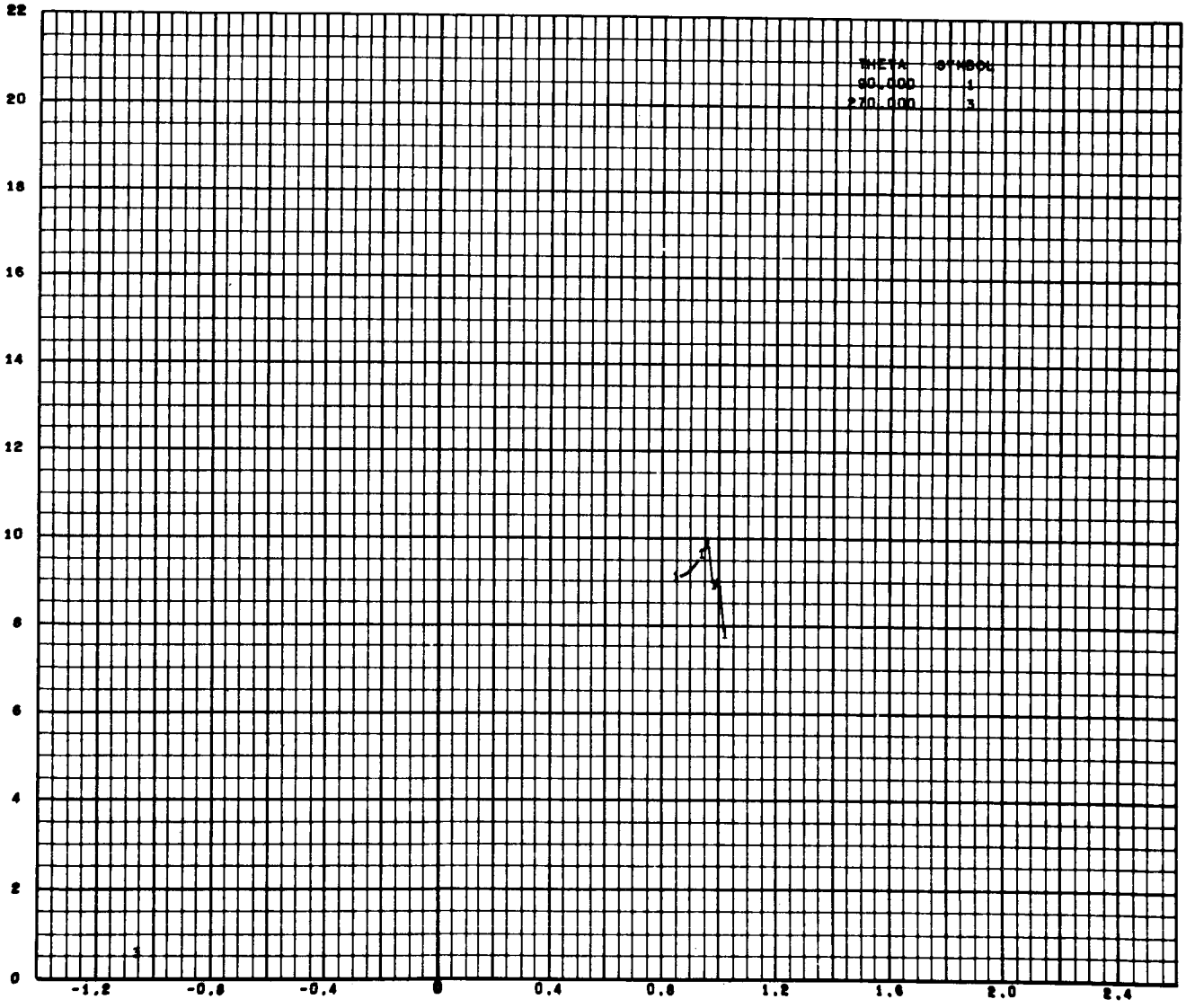
RE/FT --- 0.3455*10+6
Q(OM) --- 2.0264 BTU/SQ FT SEC

PLOT SERIES NUMBER 46

TEST GROUP	TIME (SEC)
83*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
142 000



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A-325 SID 64-2080

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 142.54 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 229.20 PSIA
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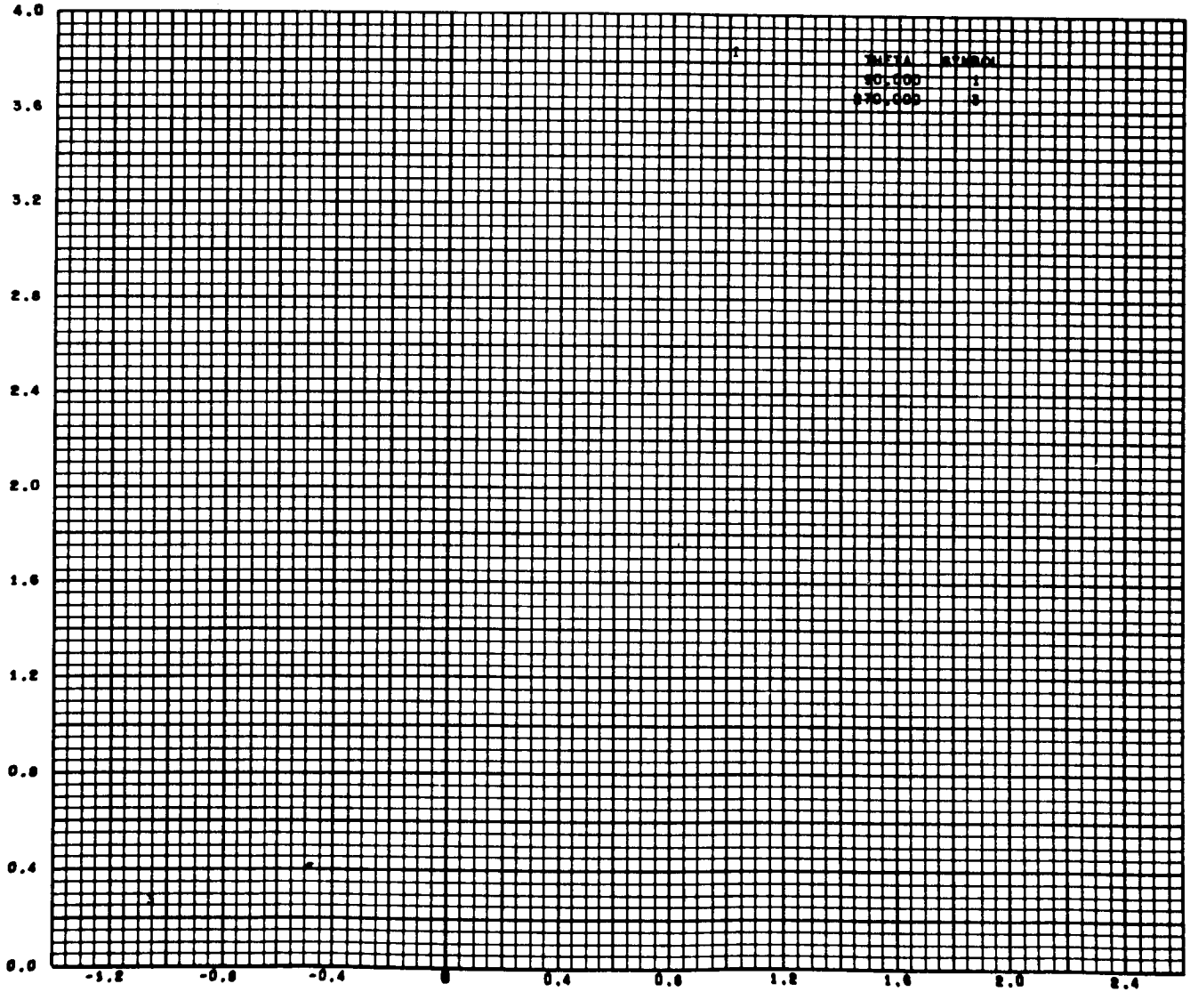
PLOT SERIES NUMBER 46

TEST GROUP	TIME (SEC)
83*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
144 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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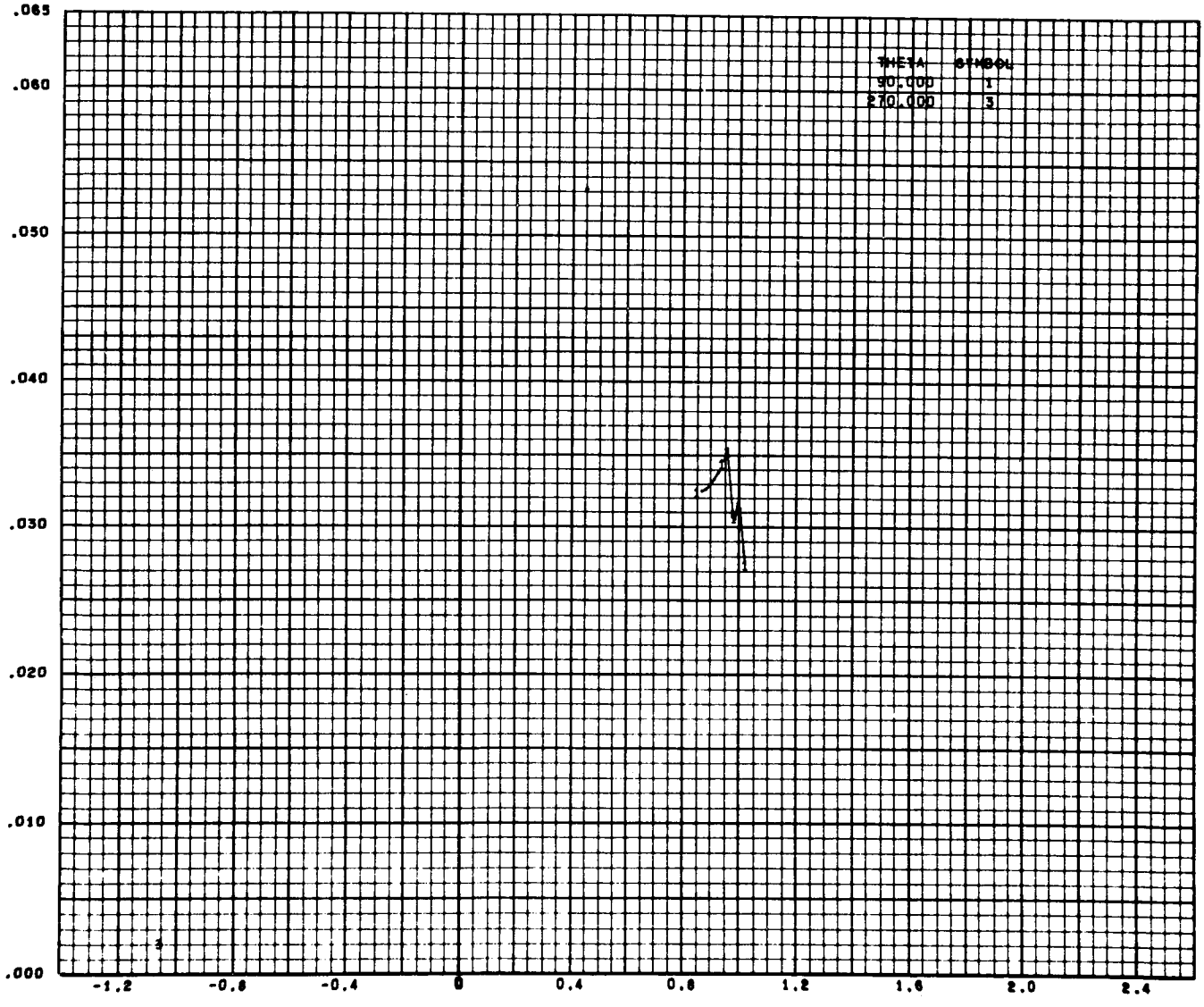
3937-09
146 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.04
ANGLE OF ATTACK ------ 142.54 DEG
ANGLE OF YAW --------- -0. DEG
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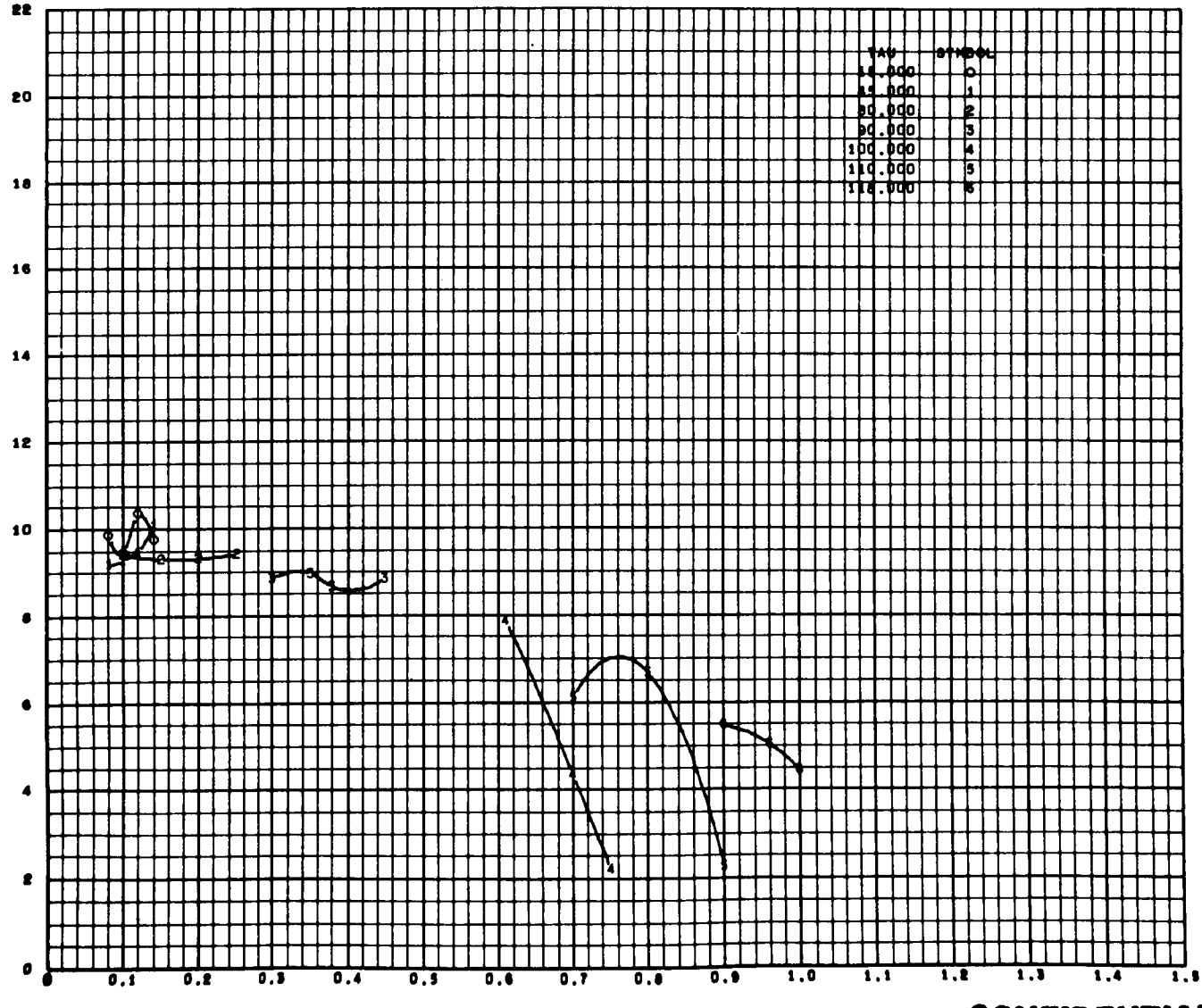
PLOT SERIES NUMBER 46

TEST GROUP	TIME (SEC)
83*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
143 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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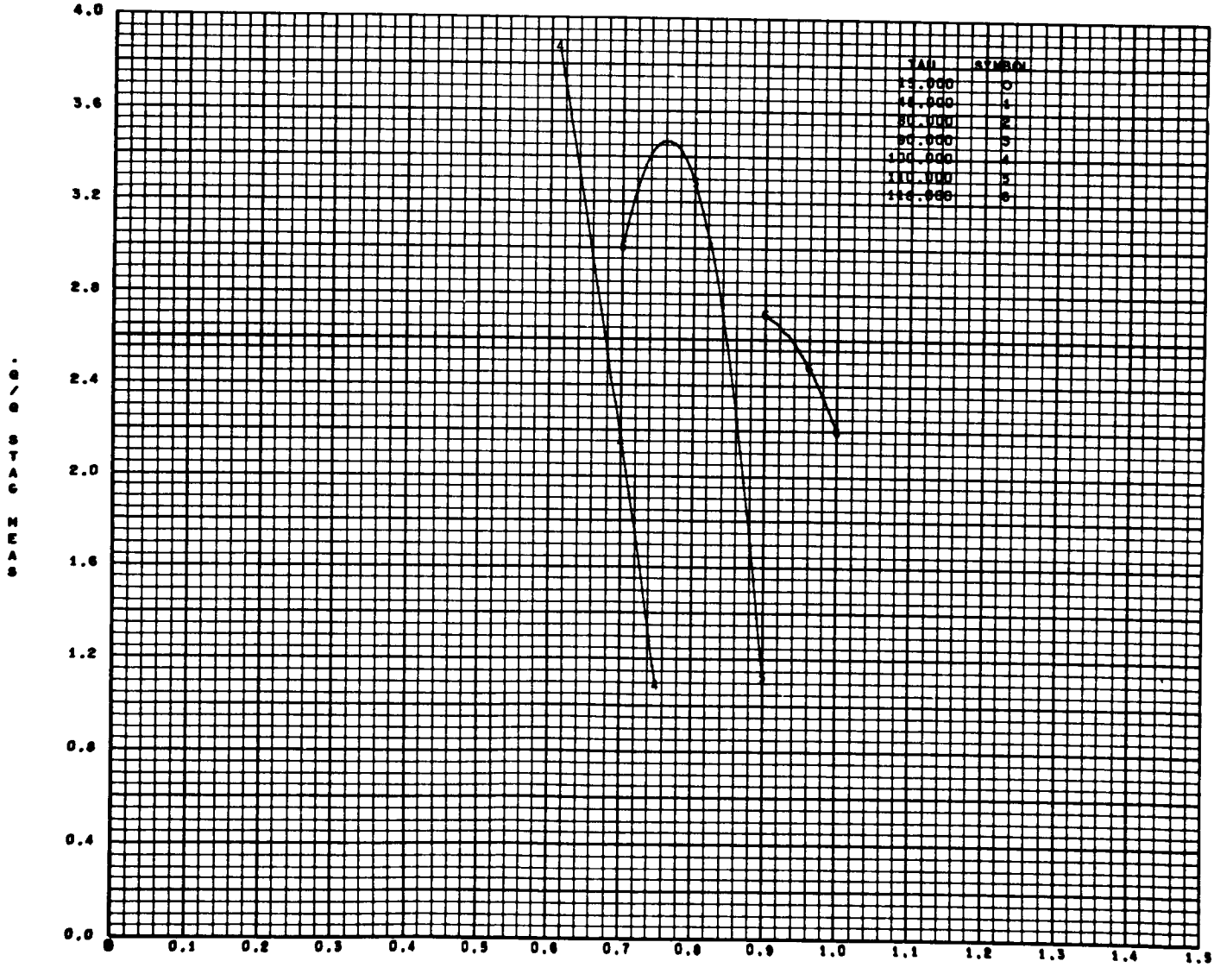
PLOT SERIES NUMBER 46

TEST GROUP	TIME (SEC)
83*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
145 000



HEAT TRANSFER | CONFIGURATION C57 | PLOT SERIES NUMBER 46 | 3937-09 147 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.04
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TEST GROUP	TIME (SEC)
83*	2.75

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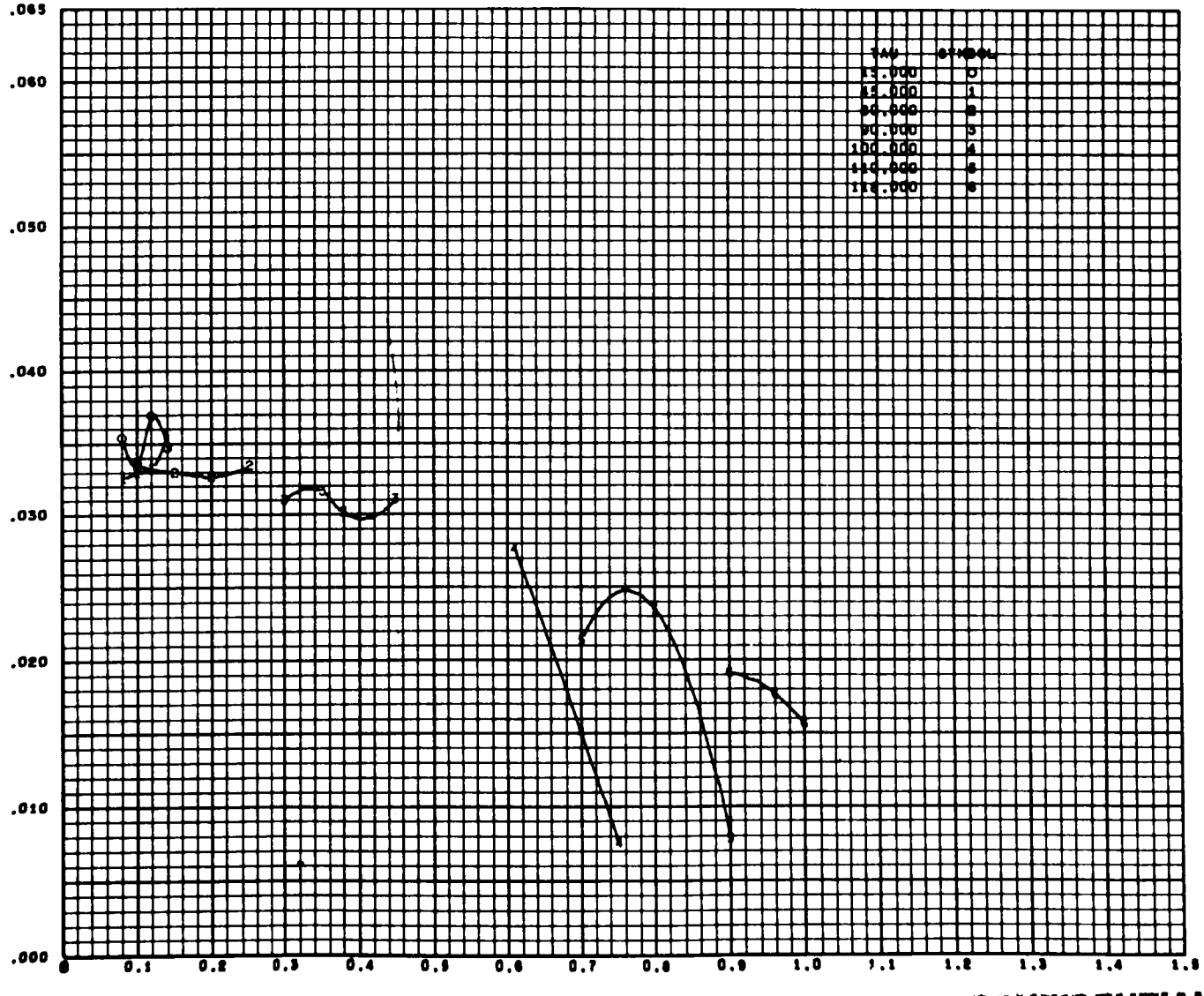


[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 142.60 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 939.80 PSIA
TOTAL TEMPERATURE ---- 1836.30 DEG RANKINE

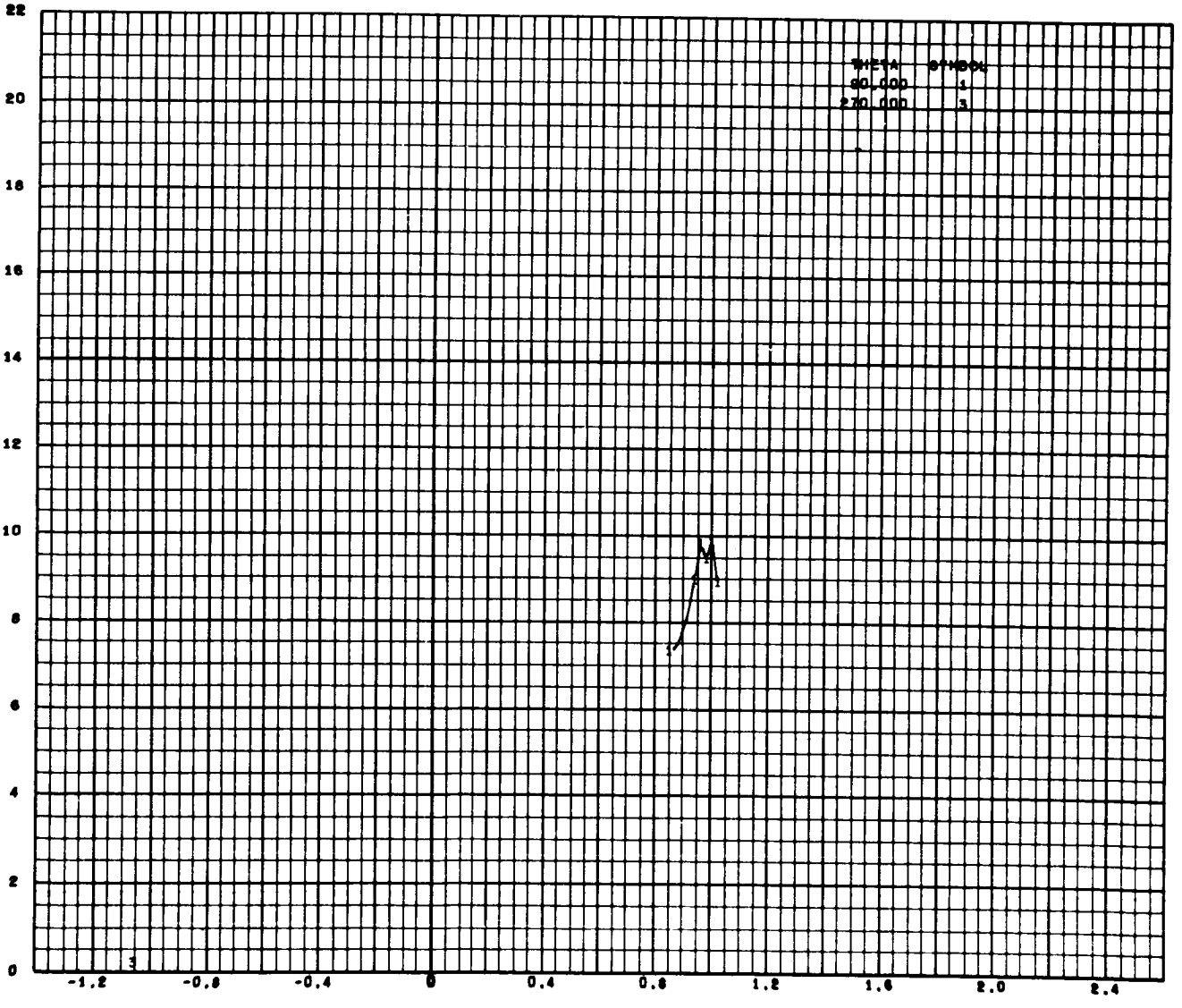
RE/FT --- 1.1987*10+6
Q(OM) --- 5.7055 BTU/SQ FT SEC

PLOT SERIES NUMBER 47

TEST GROUP	TIME (SEC)
84*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
148 00[



BTU/SQ FT SEC

[redacted]

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
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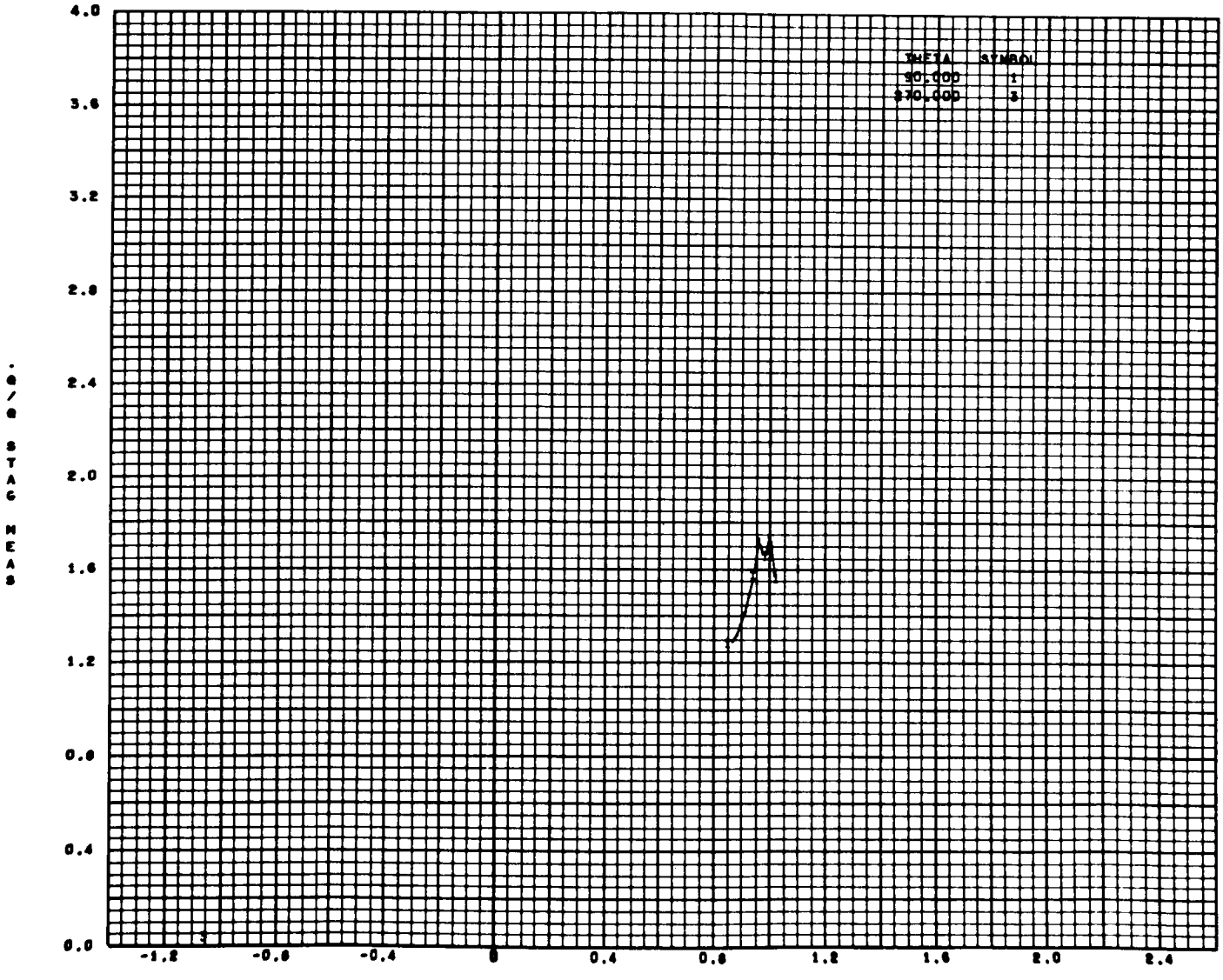
RE/FT --- 1.1987*10+6
Q(OM) --- 5.7055 BTU/SQ FT SEC

PLOT SERIES NUMBER 47

TEST GROUP	TIME (SEC)
84*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
150 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 142.60 DEG
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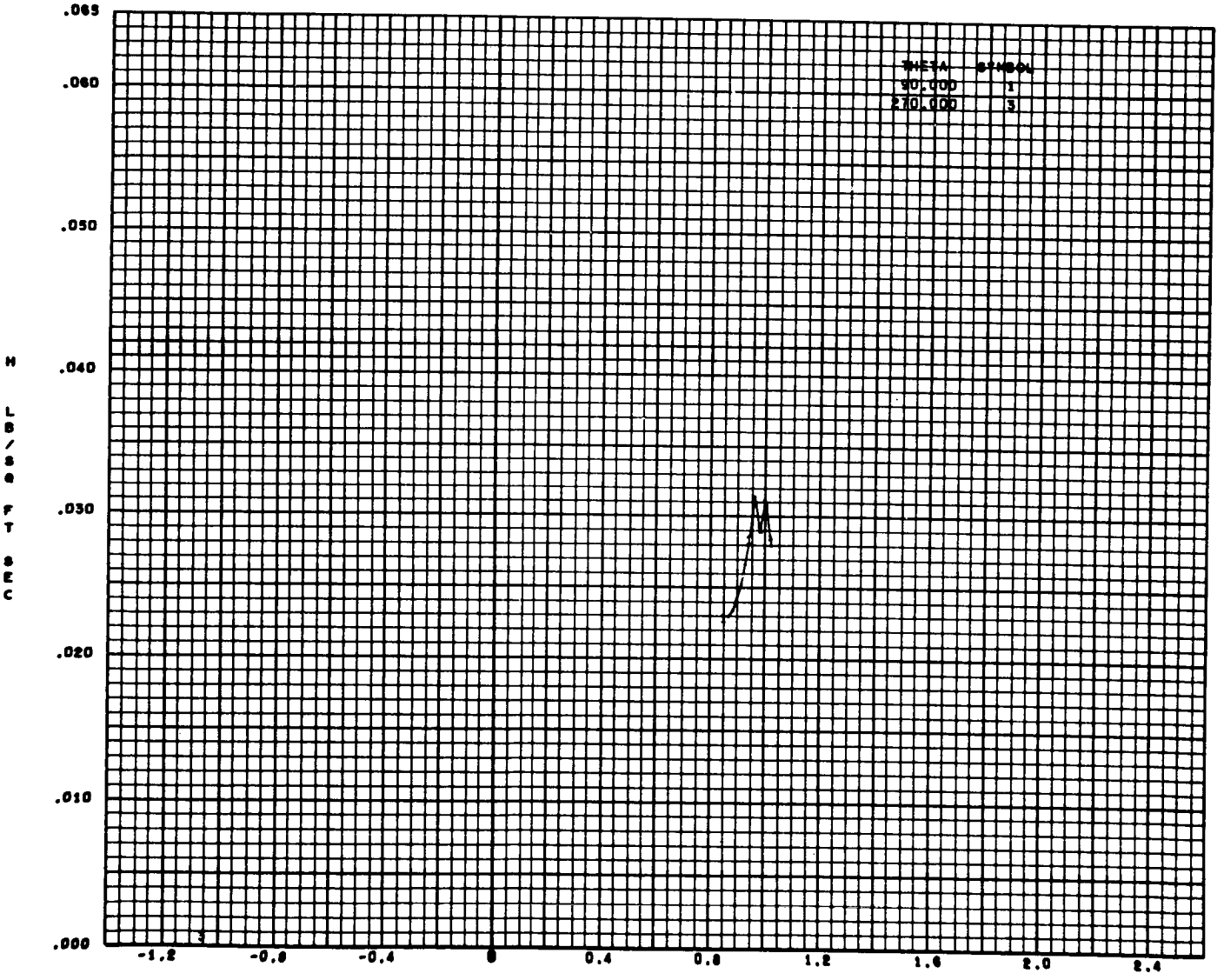
Q(OM) --- 5.7055 BTU/SQ FT SEC

PLOT SERIES NUMBER 47

TEST GROUP	TIME (SEC)
84*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
152 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
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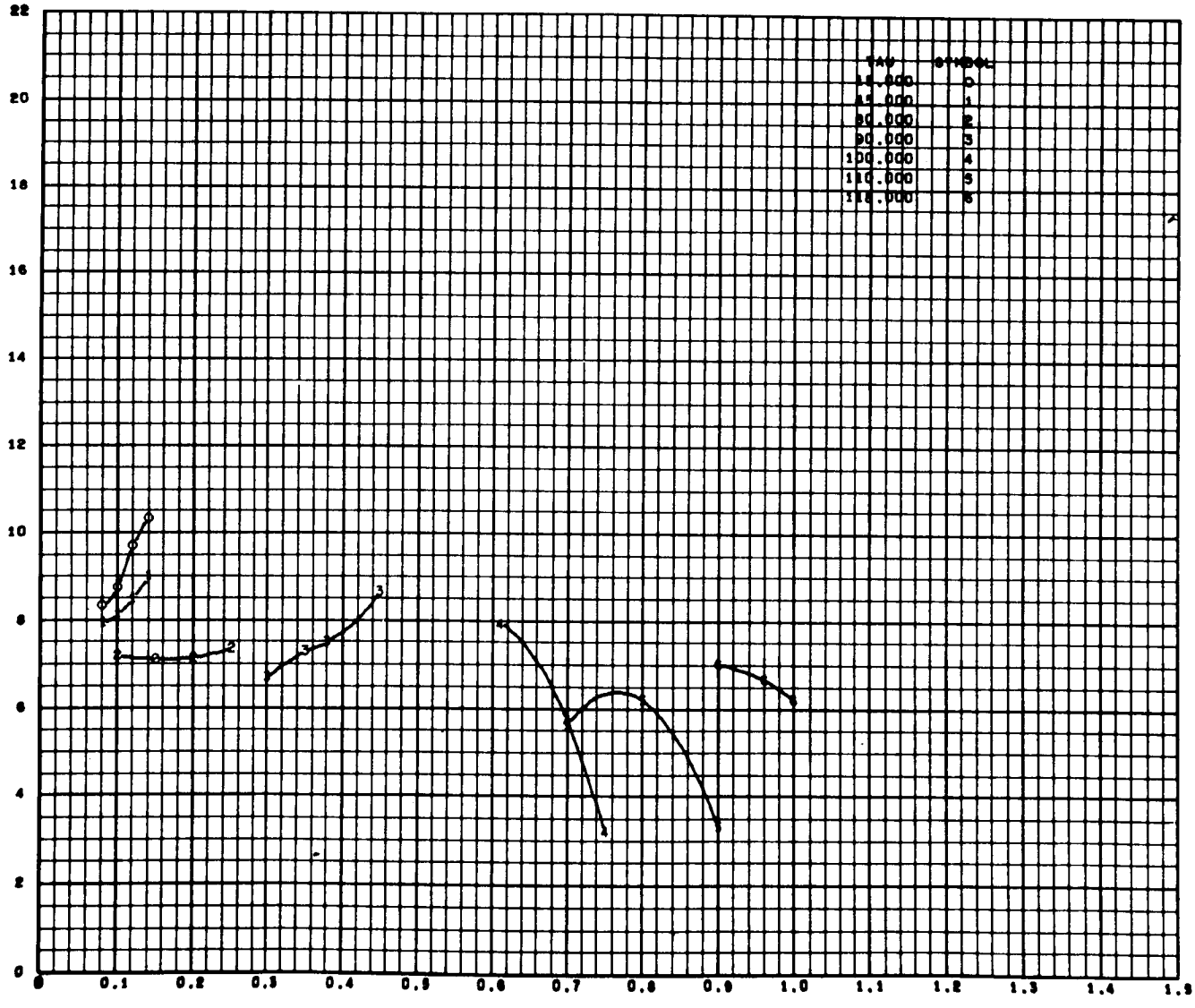
PLOT SERIES NUMBER 47

TEST GROUP	TIME (SEC)
84*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
149 000



BTU/SQ FT SEC

Sa/R

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[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
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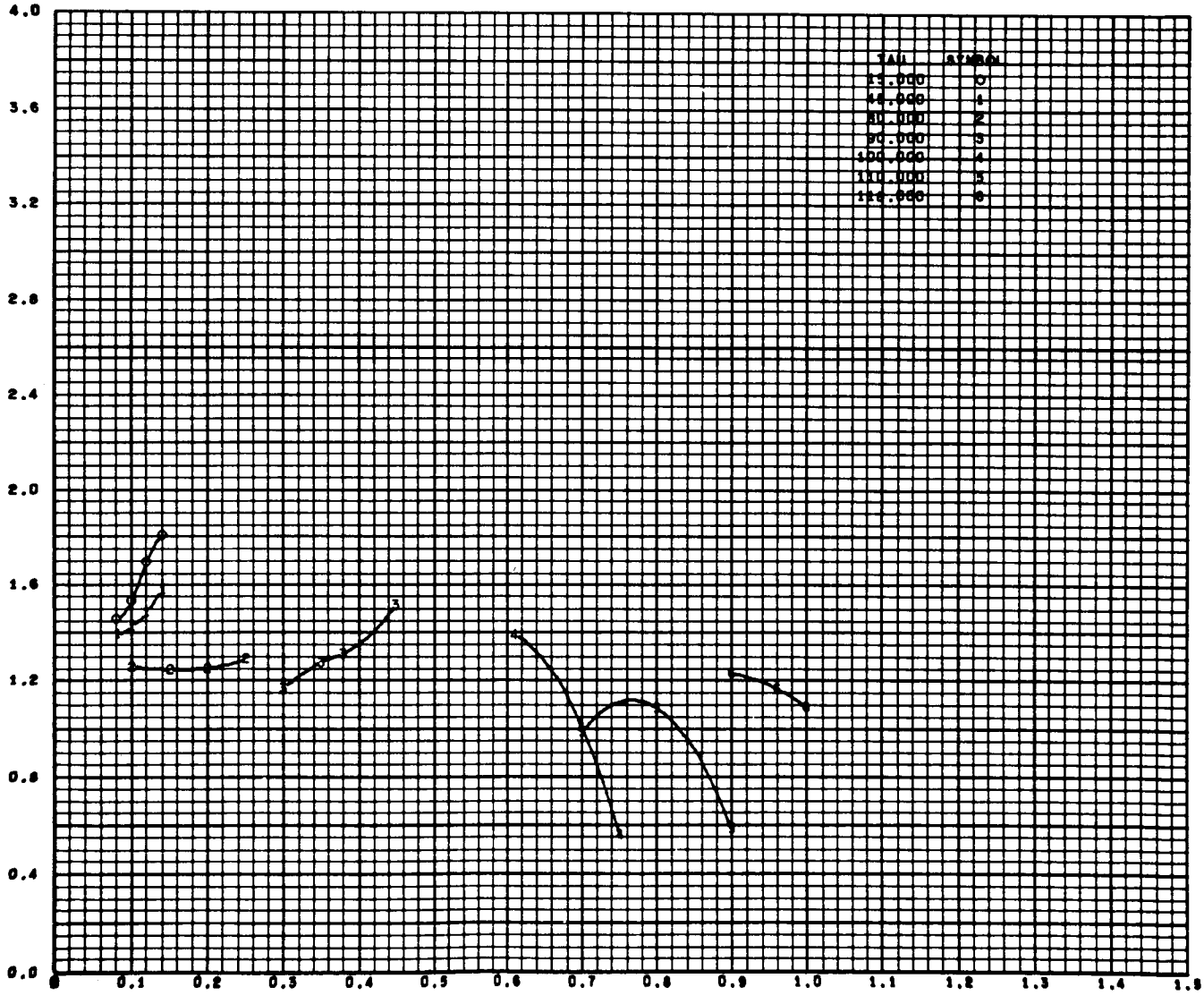
PLOT SERIES NUMBER 47

TEST GROUP	TIME (SEC)
84*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
151 000



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HEAT TRANSFER | CONFIGURATION C57 | PLOT SERIES NUMBER 47 | 3937-09 153 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 142.60 DEG
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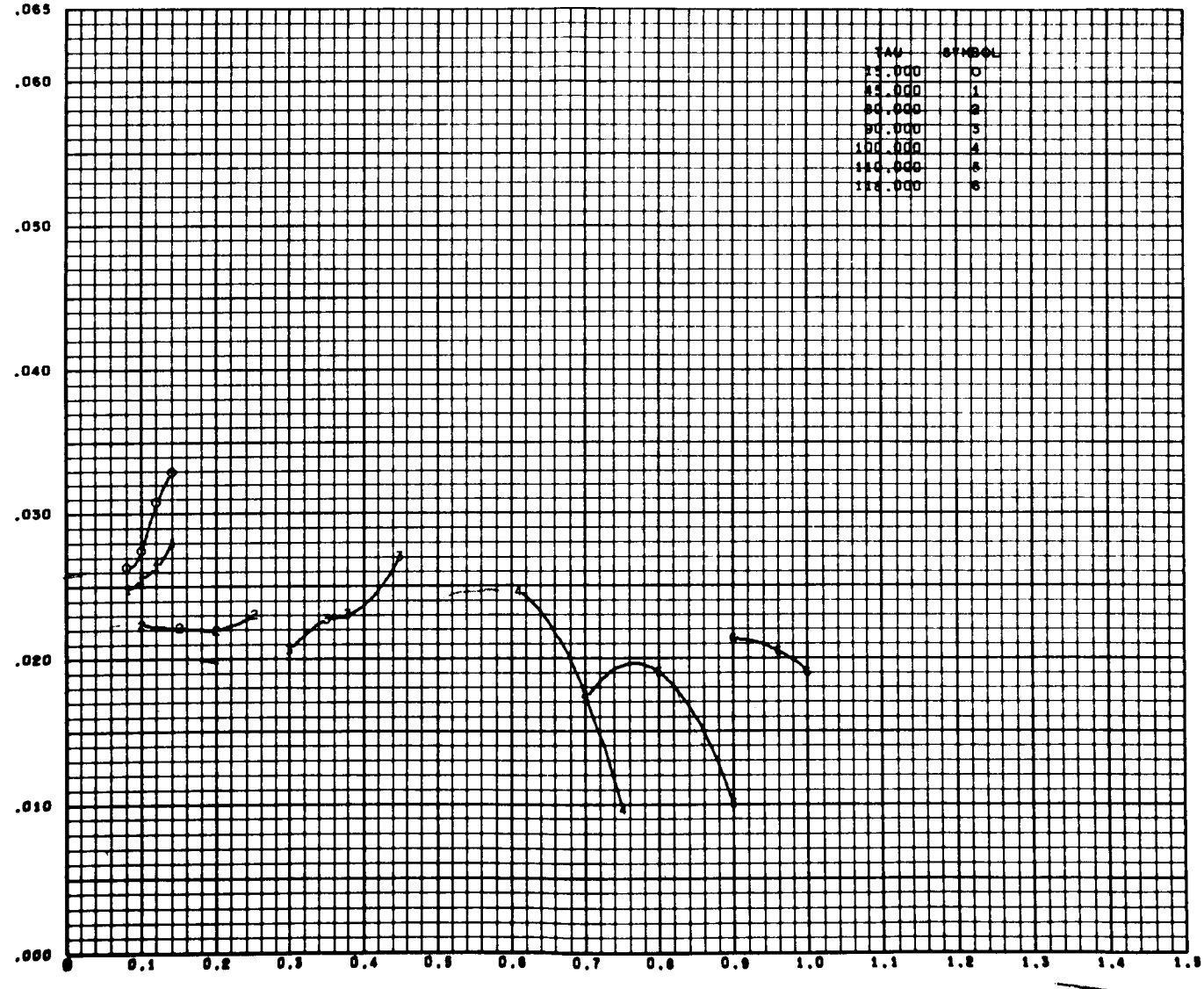
RE/FT --- 1.1987*10+6
Q(OM) --- 5.7055 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
84*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER | CONFIGURATION C57 | PLOT SERIES NUMBER 48 | 3937-09 154 000

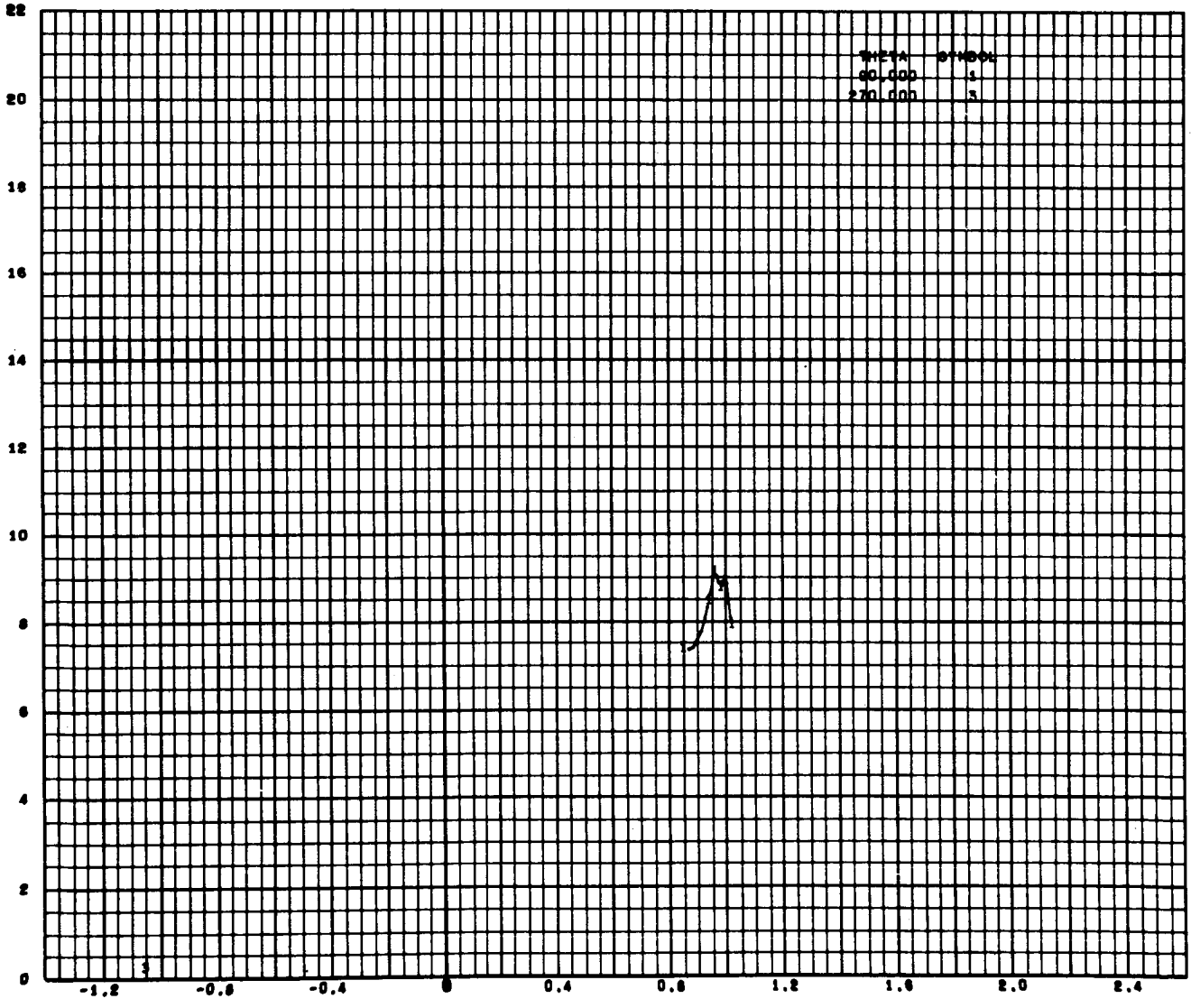
APOLLO H-11
AEDC, TUNNEL C
JUNE, 1964

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 153.43 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 934.50 PSIA
TOTAL TEMPERATURE ---- 1841.00 DEG RANKINE

RE/FT --- 1.1865*10+6
Q(OM) --- 5.6812 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
85*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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A-337 SID 64-2080

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HEAT TRANSFER | CONFIGURATION C57 | PLOT SERIES NUMBER 48 | 3937-09 156 000

APOLLO H-11

AEDC, TUNNEL C

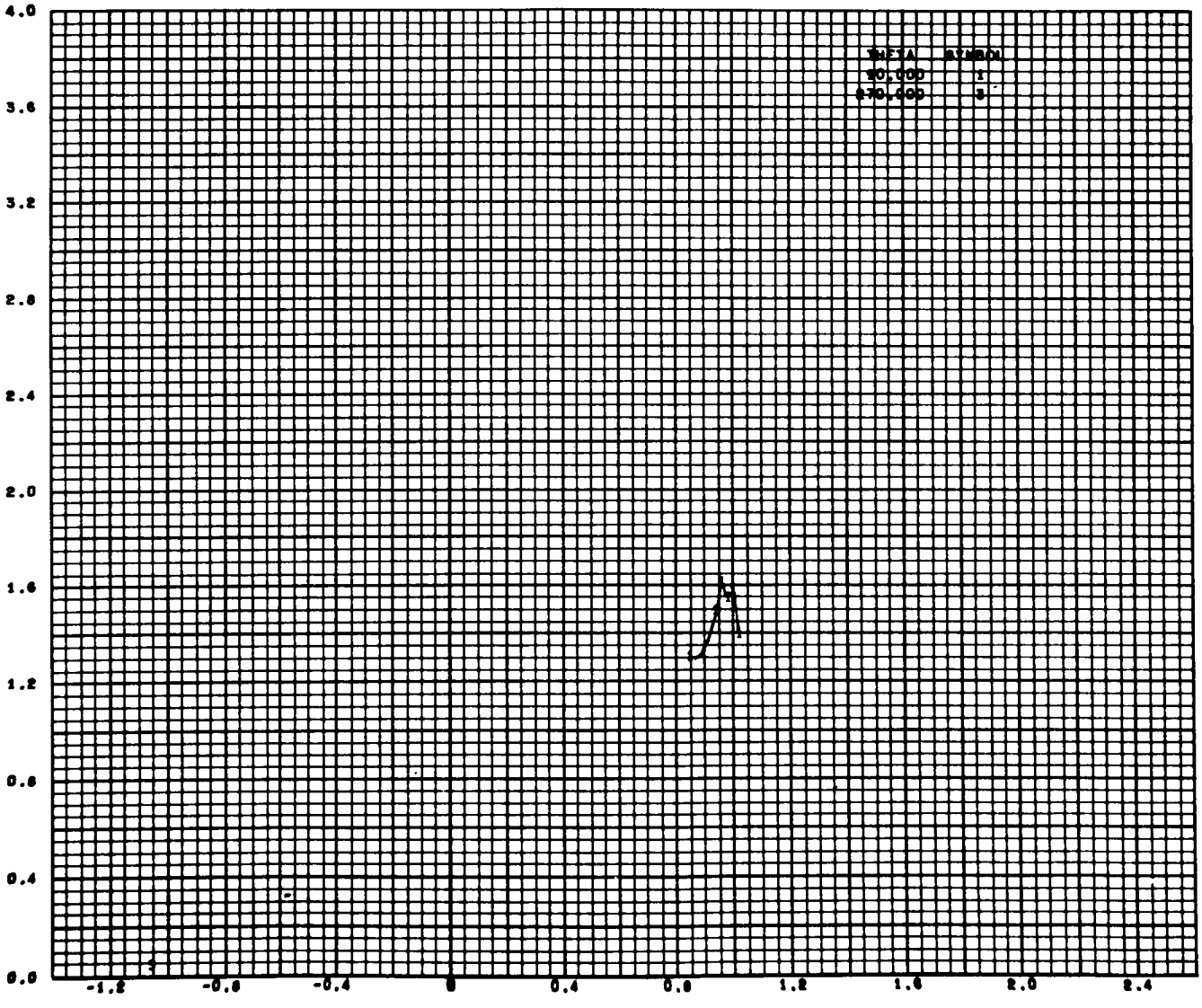
JUNE, 1964

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 153.43 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 934.50 PSIA
TOTAL TEMPERATURE ---- 1841.00 DEG RANKINE

RE/FT --- 1.1865*10+6
Q(OM) --- 5.6812 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
85*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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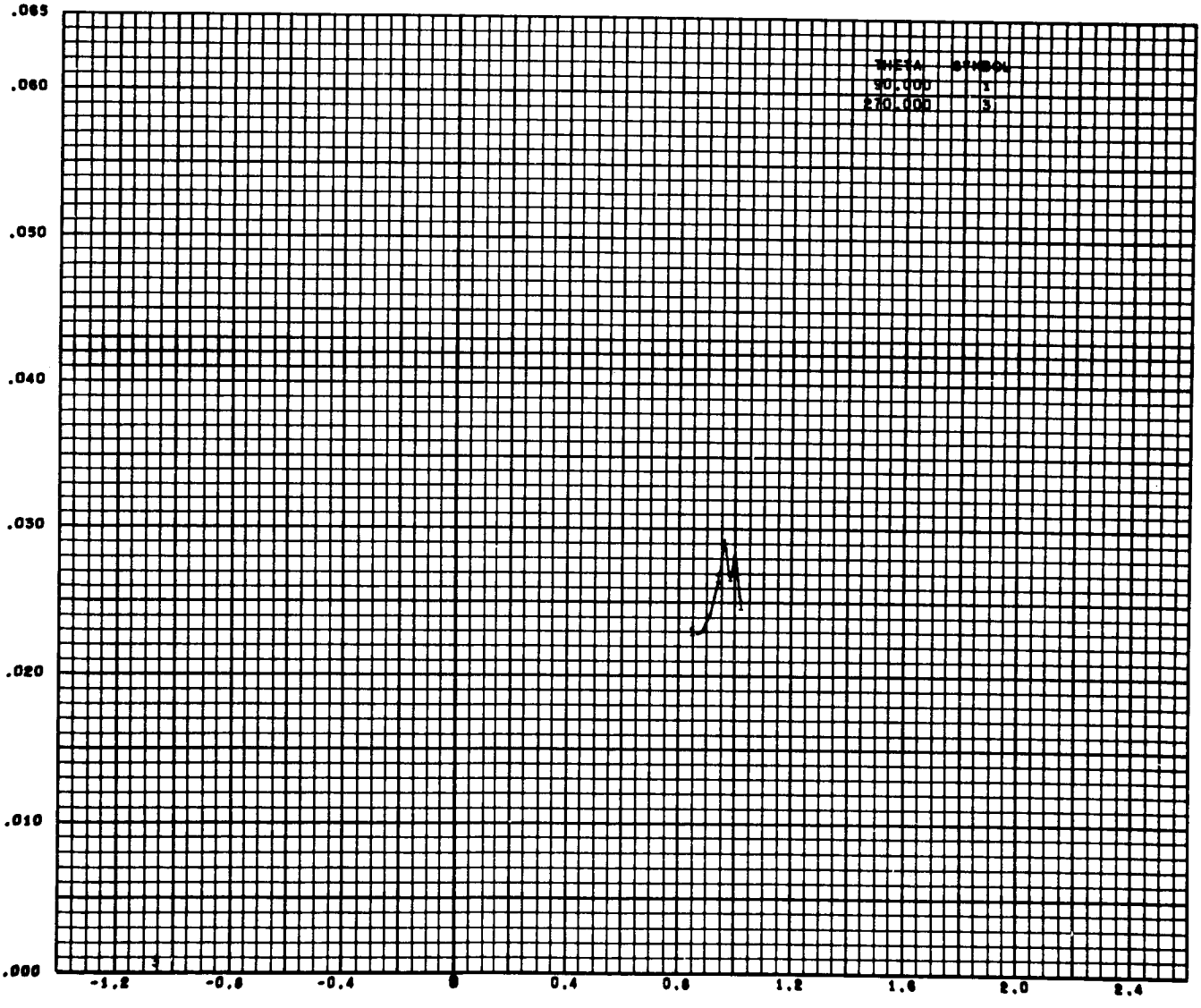
PLOT SERIES NUMBER 48

TEST GROUP	TIME (SEC)
85*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
198 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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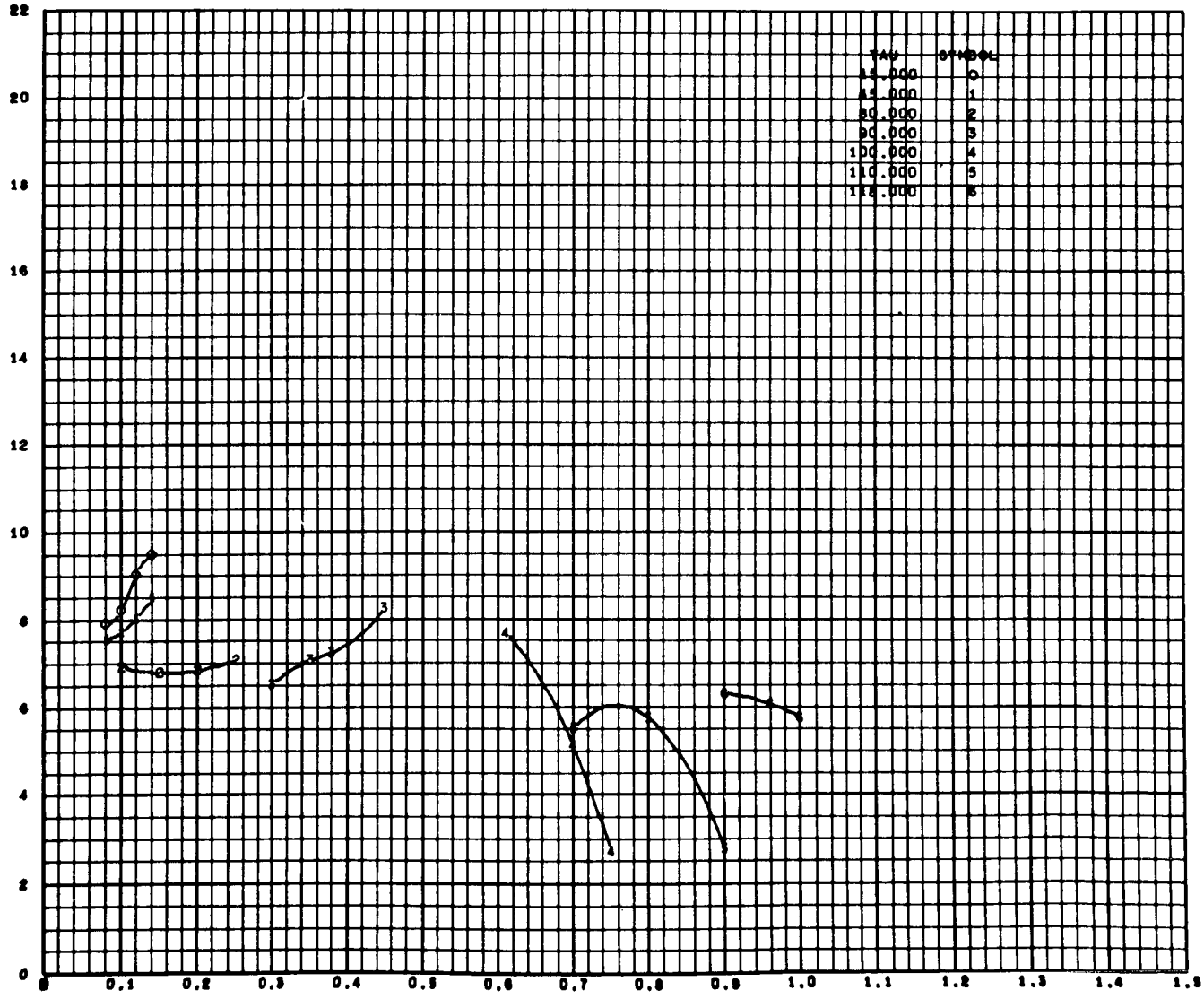
PLOT SERIES NUMBER 48

TEST GROUP	TIME (SEC)
85*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
155 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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PLOT SERIES NUMBER 48

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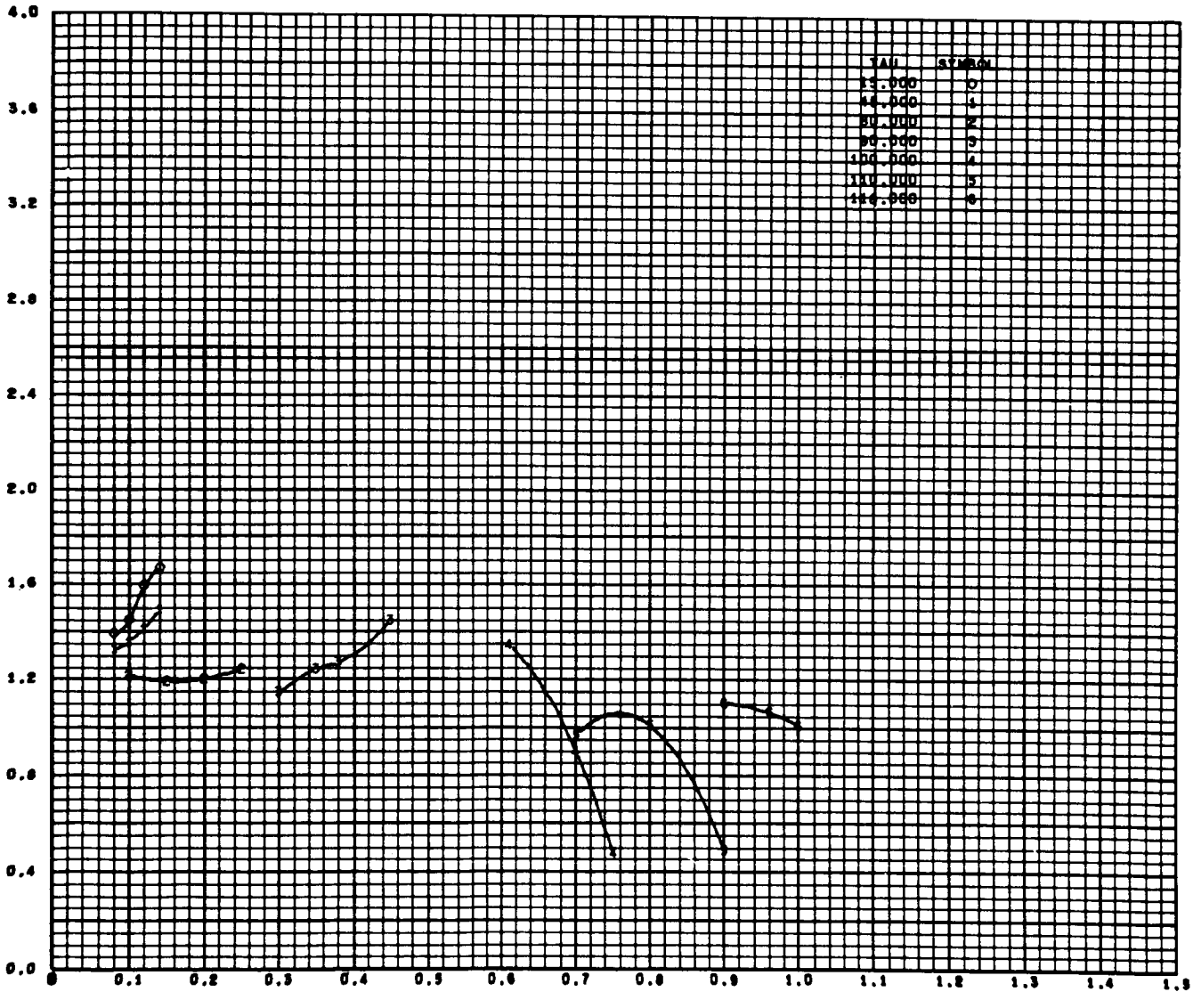
* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
157 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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PLOT SERIES NUMBER 48

TEST GROUP	TIME (SEC)
85*	2.70

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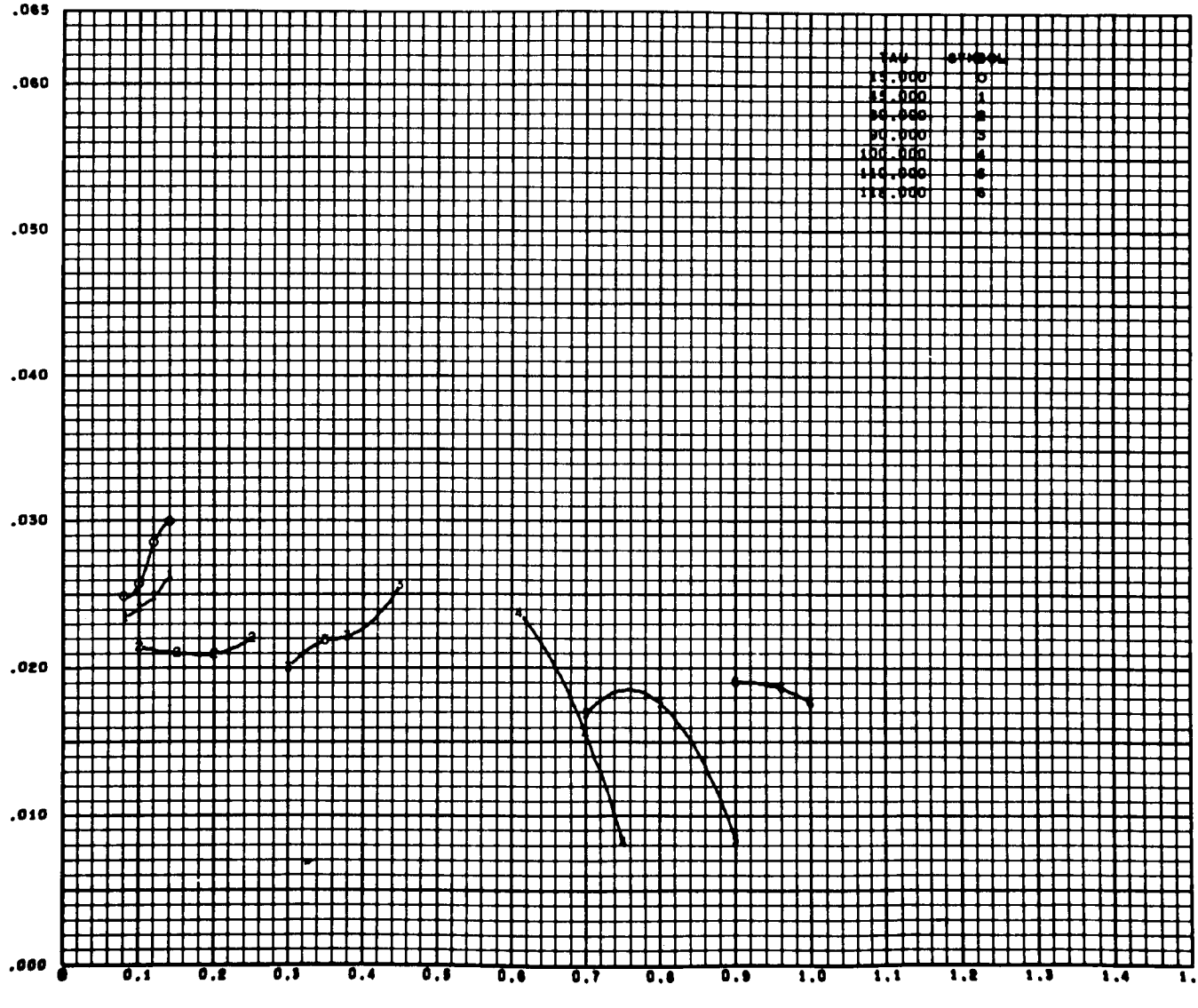
3937-09
159 000



SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.14
ANGLE OF ATTACK ------ 147.22 DEG
ANGLE OF YAW --------- -4.64 DEG
TOTAL PRESSURE ------- 919.30 PSIA
TOTAL TEMPERATURE ---- 1843.00 DEG RANKINE

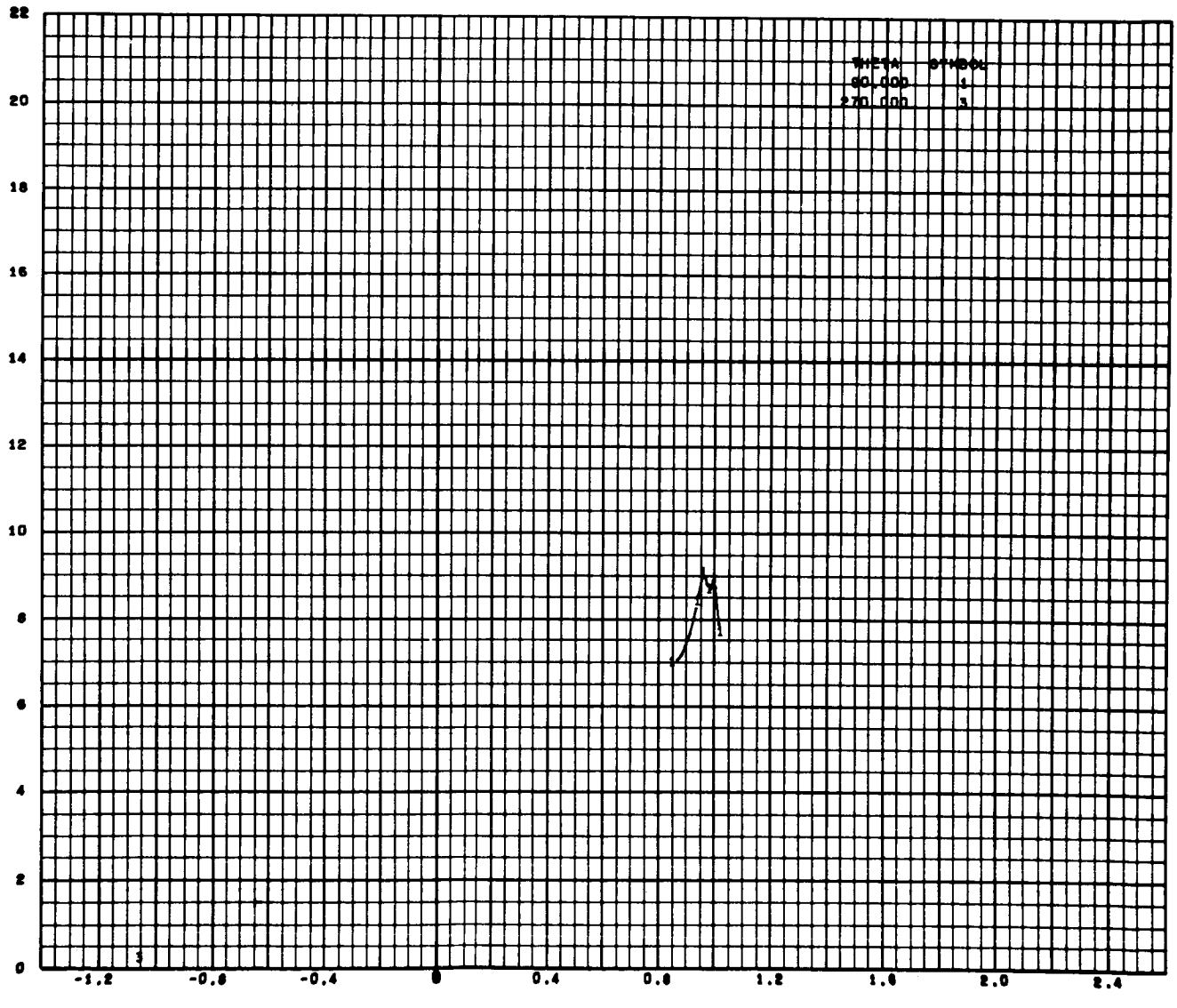
RE/FT --- 1.1648*10+6
Q(OM) --- 5.6104 BTU/SQ FT SEC

PLOT SERIES NUMBER 49

TEST GROUP	TIME (SEC)
86*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
160 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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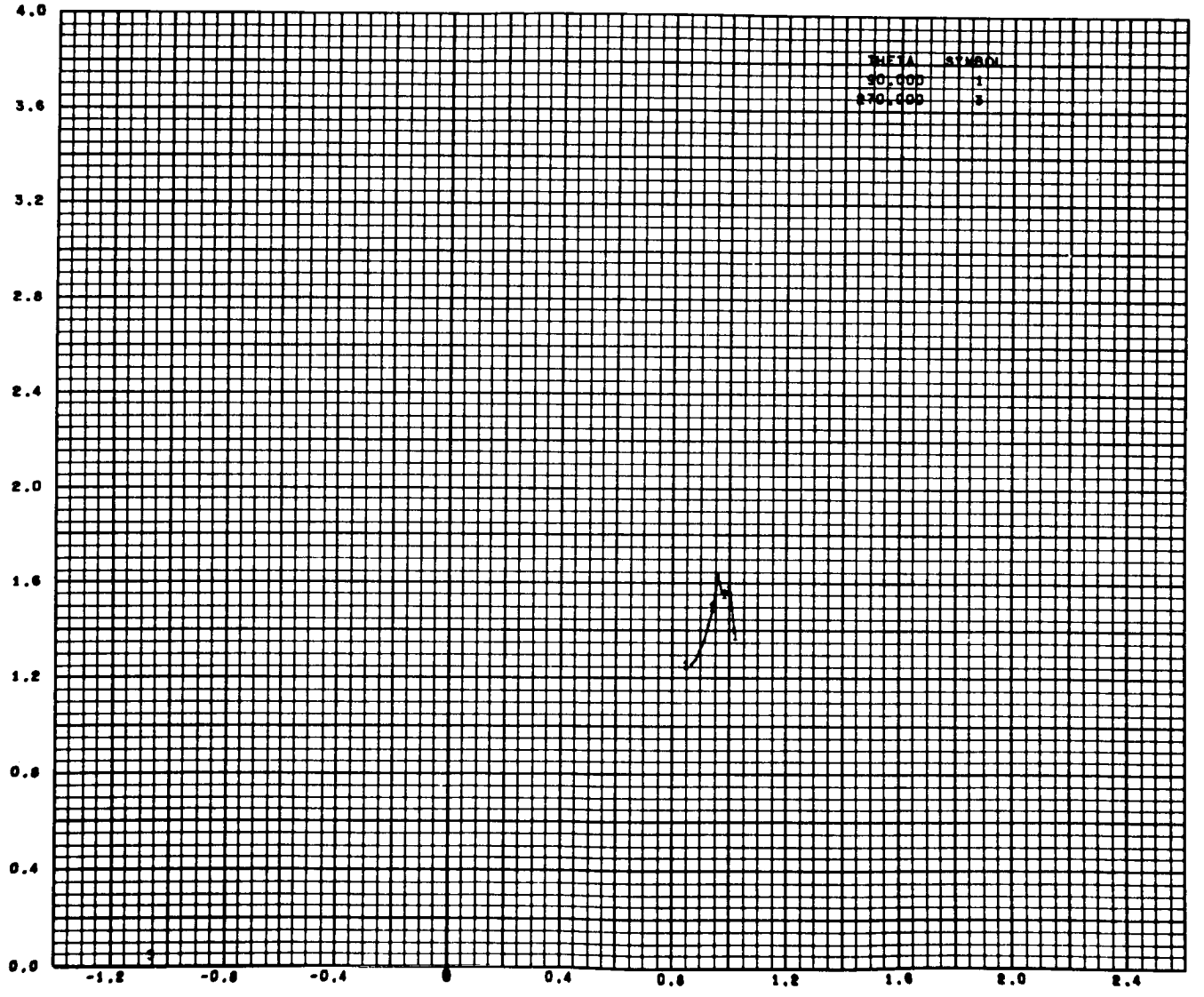
PLOT SERIES NUMBER 49

TEST GROUP	TIME (SEC)
86*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
162 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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PLOT SERIES NUMBER 49

TEST GROUP	TIME (SEC)
86*	2.70

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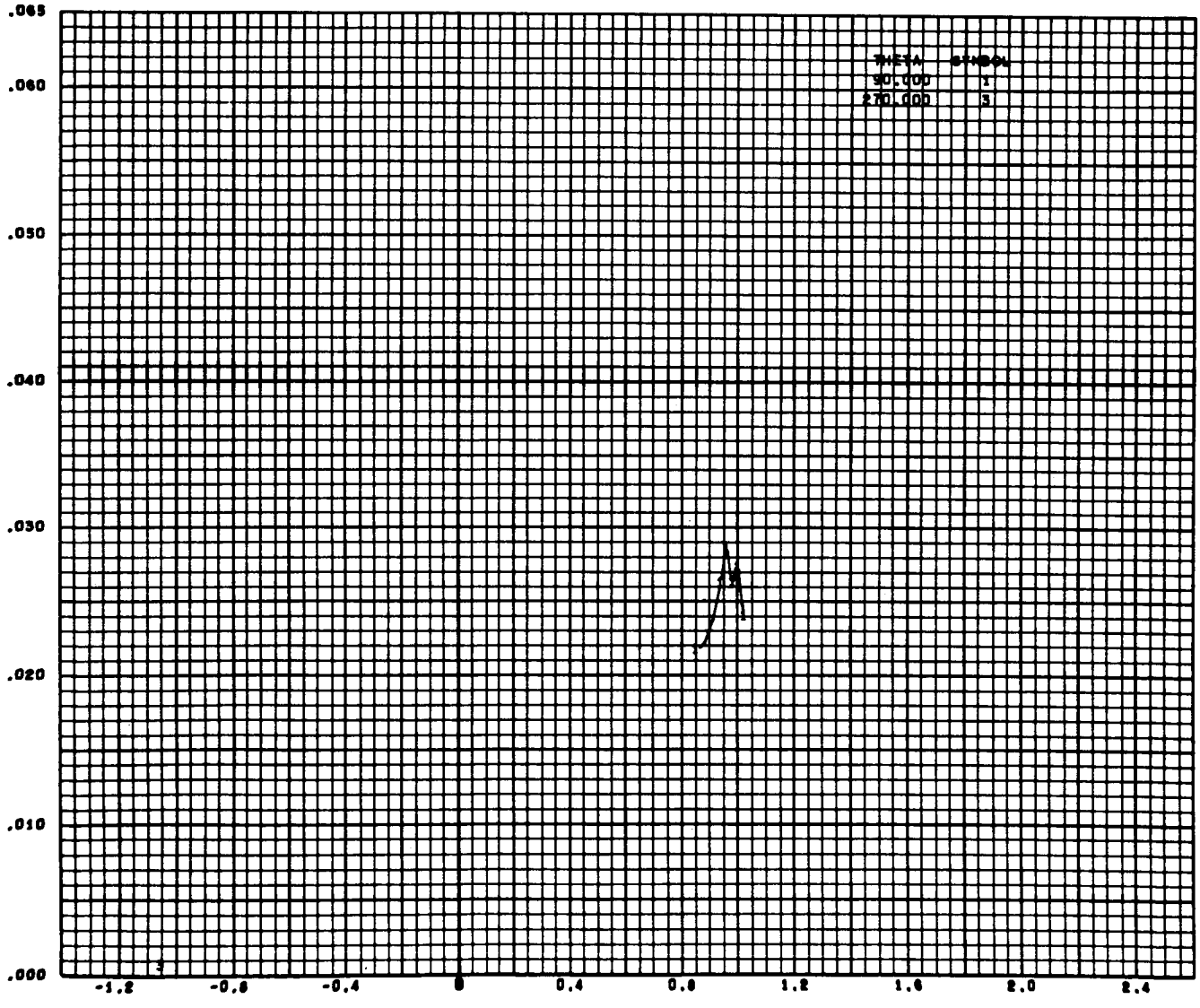
3937-09
164 000



[redacted]

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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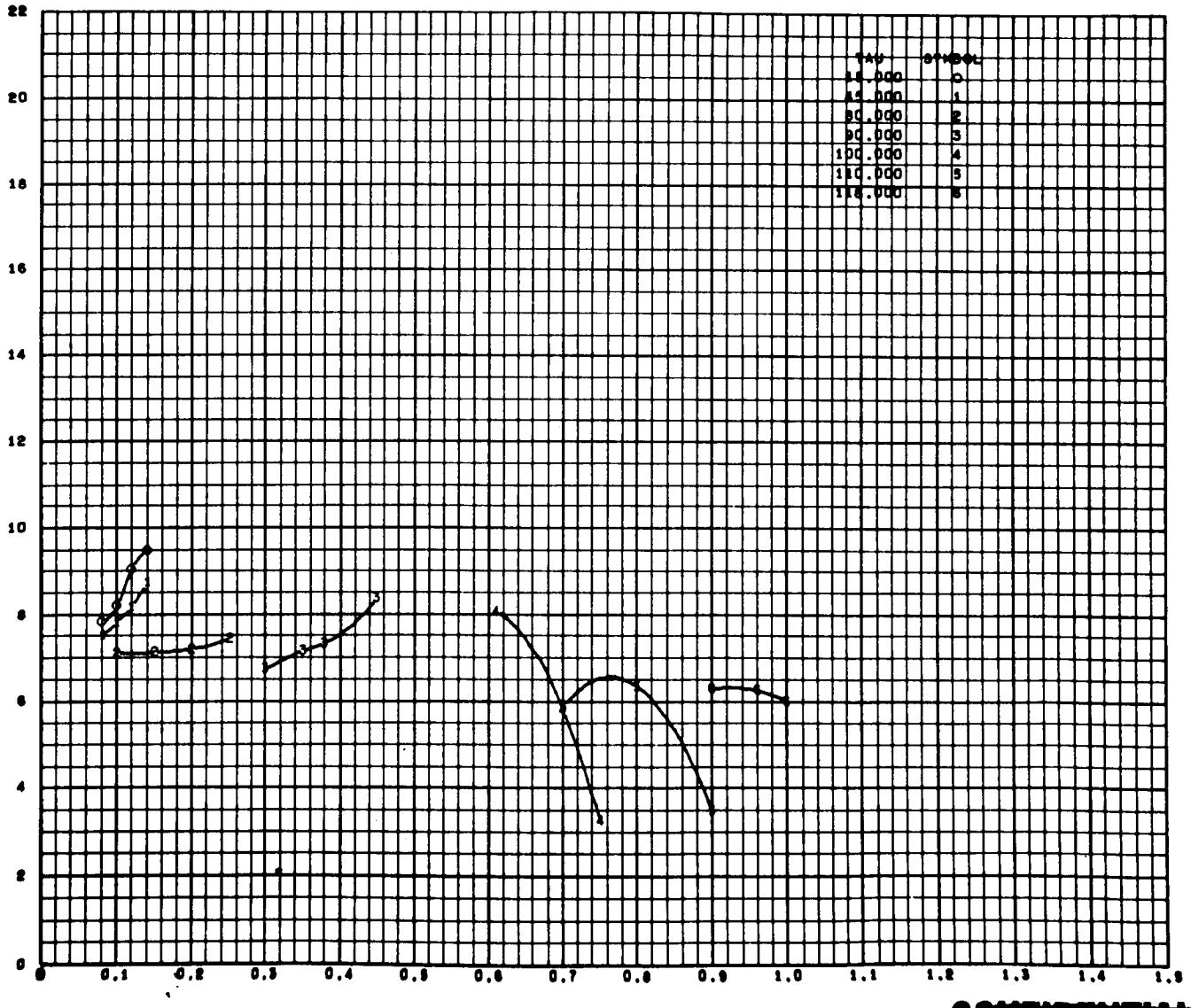
PLOT SERIES NUMBER 49

TEST GROUP	TIME (SEC)
86*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3037-09 L
161 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.14
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PLOT SERIES NUMBER 49

TEST GROUP	TIME (SEC)
86*	2.70

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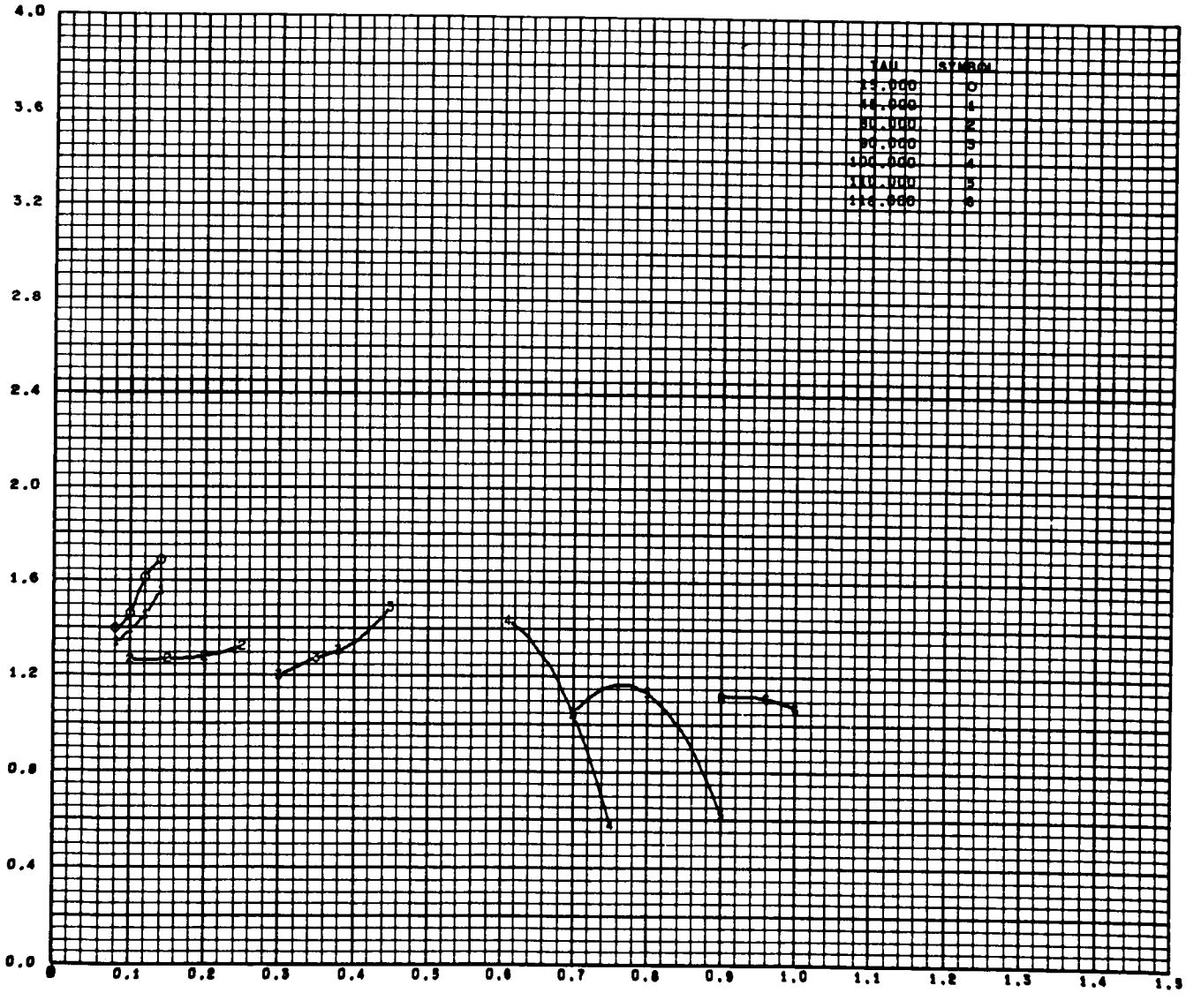
3937-09
163 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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PLOT SERIES NUMBER 49

TEST GROUP	TIME (SEC)
86*	2.70

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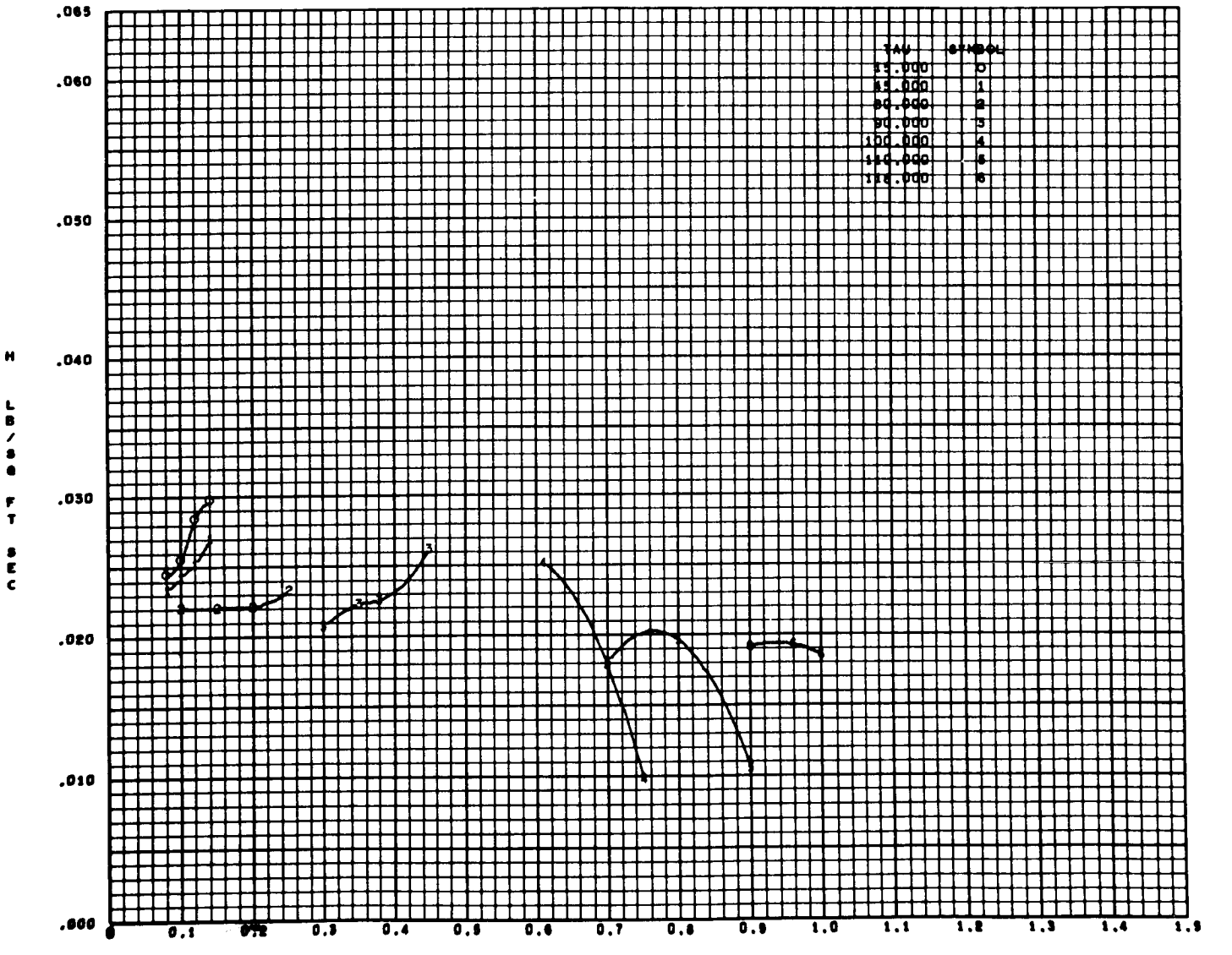
3937-09
165 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 145.14 DEG
ANGLE OF YAW --------- 2.38 DEG
TOTAL PRESSURE ------- 938.80 PSIA
TOTAL TEMPERATURE ---- 1831.50 DEG RANKINE

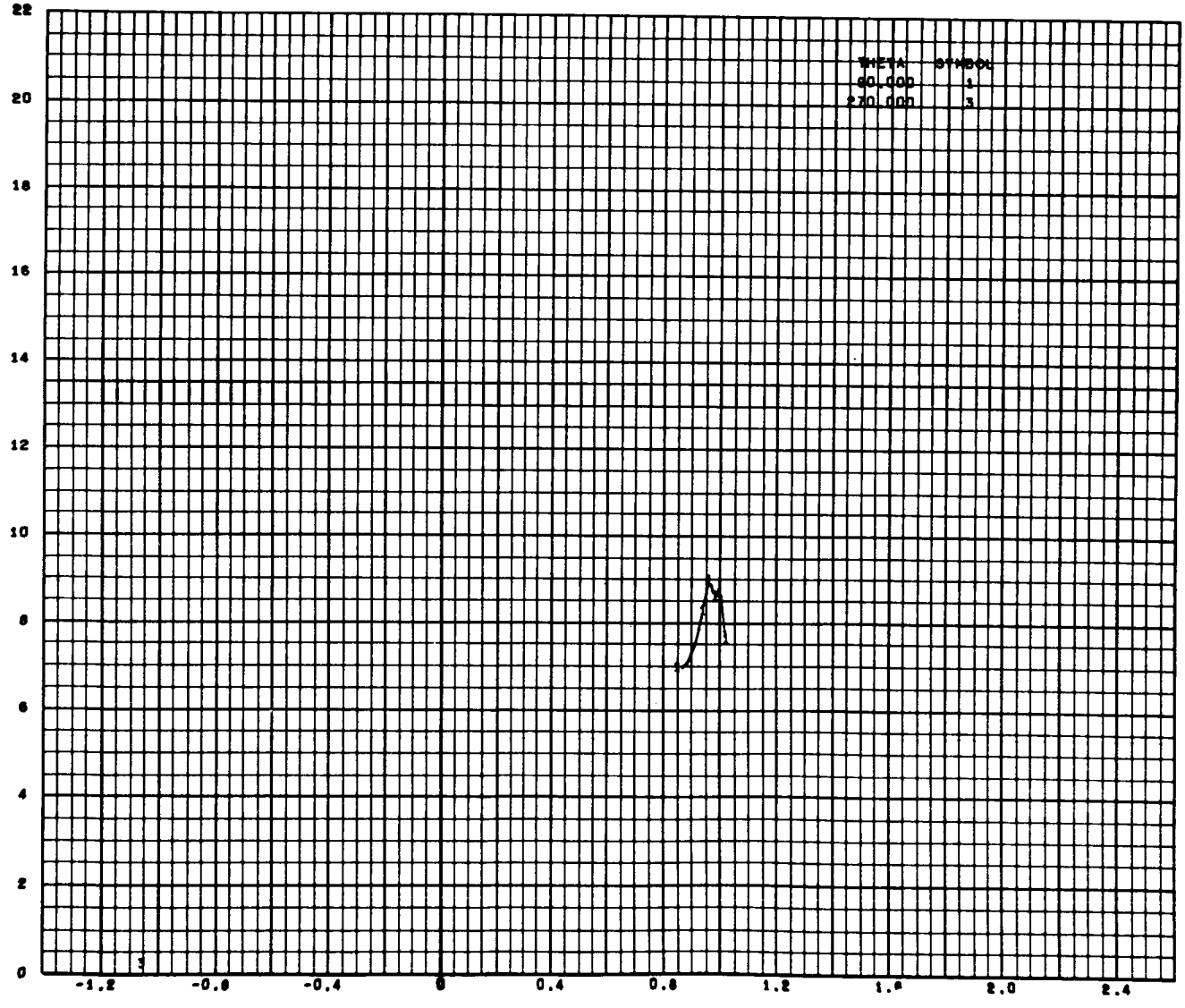
RE/FT --- 1.2032*10+6
Q(OM) --- 5.7008 BTU/SQ FT SEC

PLOT SERIES NUMBER 50

TEST GROUP	TIME (SEC)
87*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
166 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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PLOT SERIES NUMBER 50

TEST GROUP	TIME (SEC)
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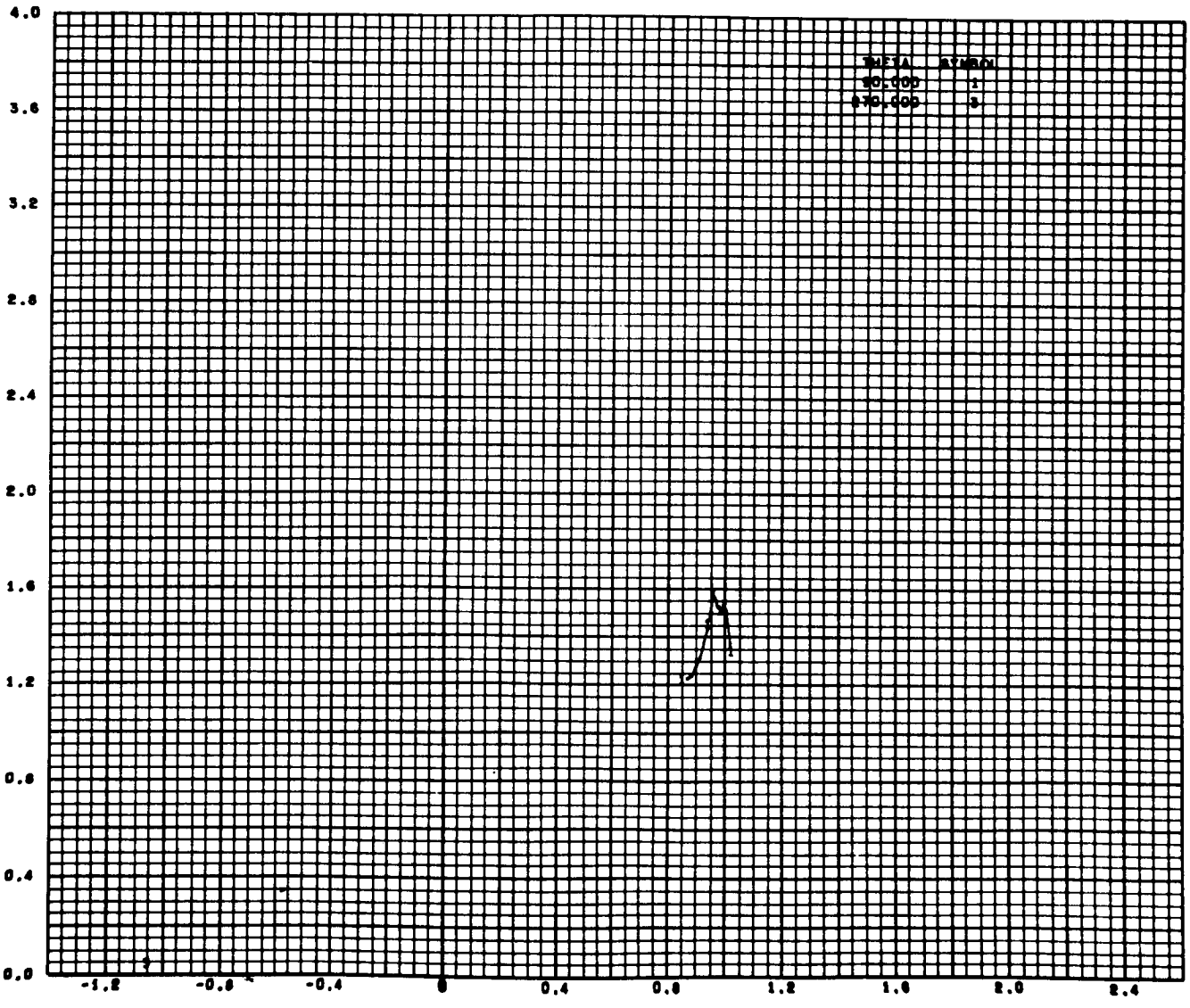
3937-09
168 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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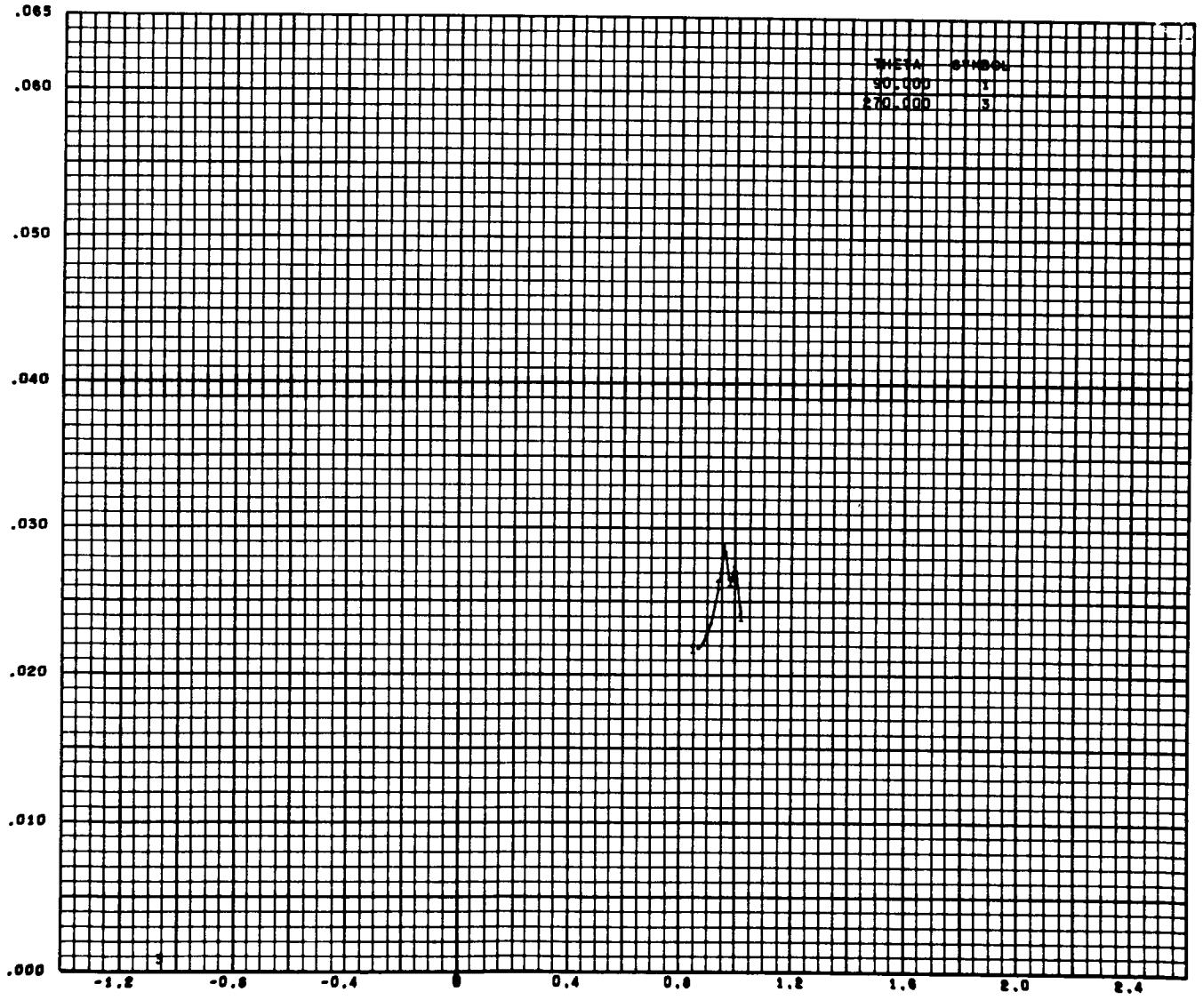
3937-09
170 000



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HEAT TRANSFER | CONFIGURATION C57 | PLOT SERIES NUMBER 50 | 3937-09 167 000

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

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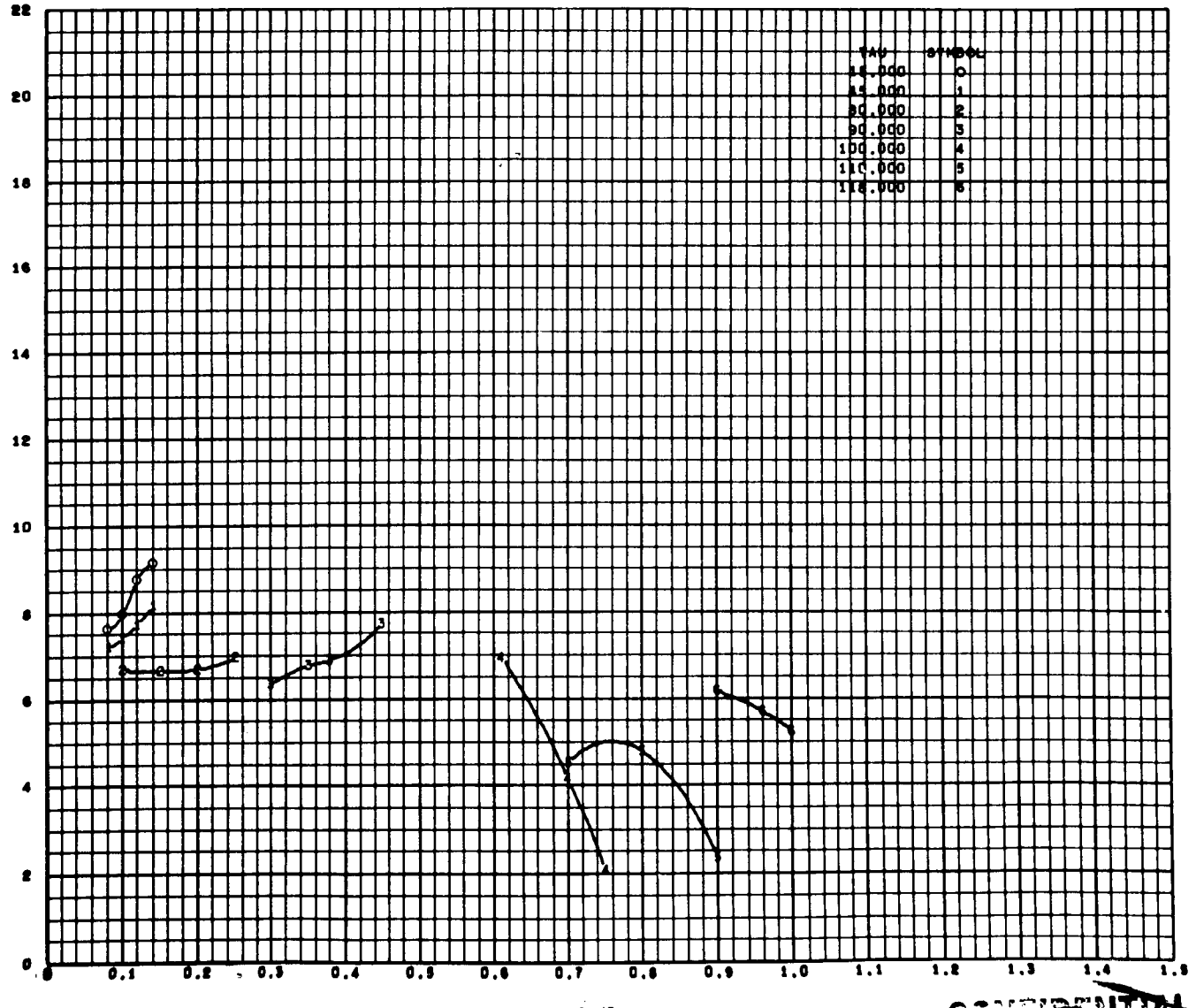

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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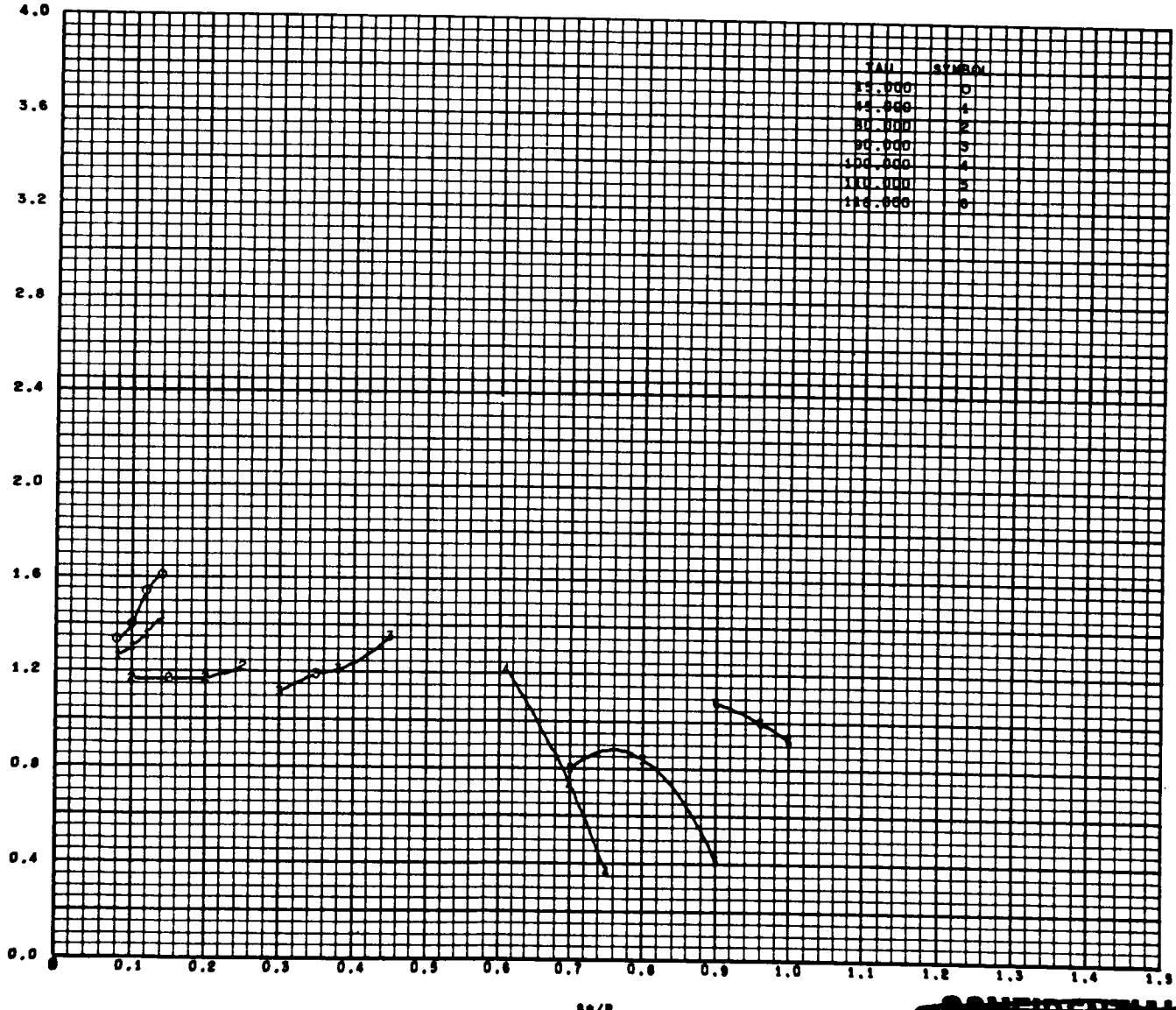
3937-09
169 000



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HEAT TRANSFER

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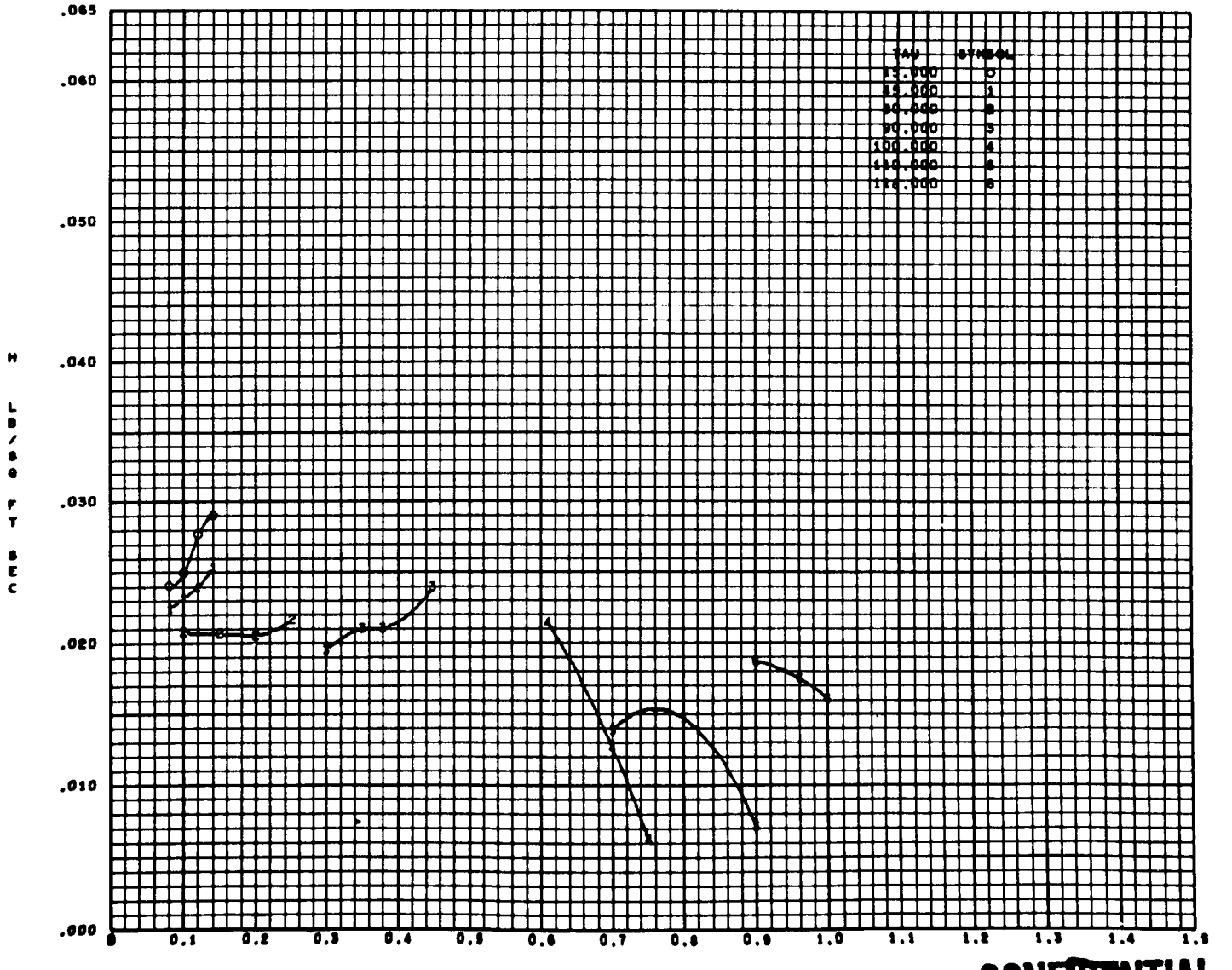
3937-09
171 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 153.63 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 937.30 PSIA
TOTAL TEMPERATURE ---- 1830.80 DEG RANKINE

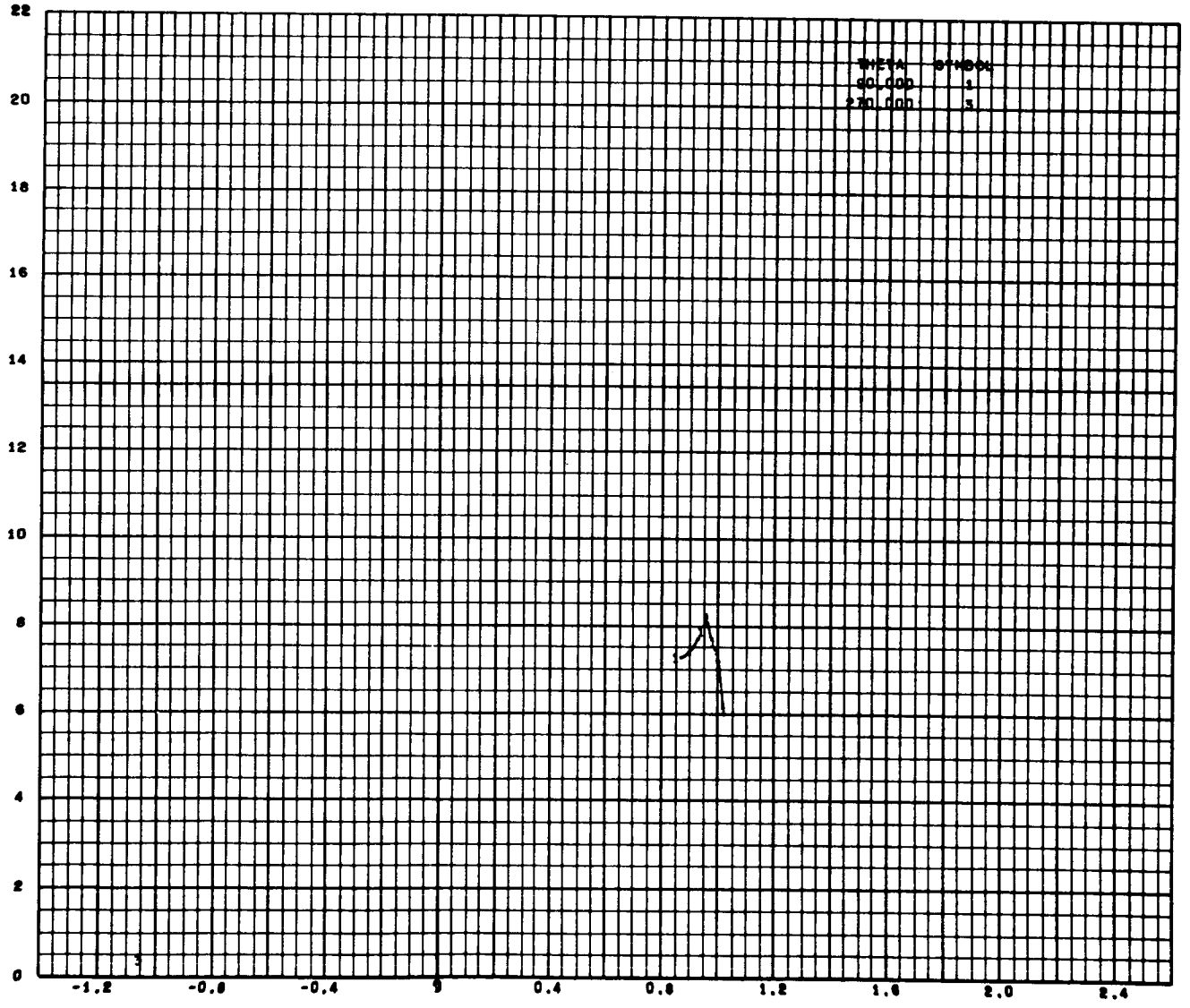
RE/FT --- 1.2021*10+6
Q(OM) --- 5.6939 BTU/SQ FT SEC

PLOT SERIES NUMBER 51

TEST GROUP	TIME (SEC)
88*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
172 000



BTU/SQ FT SEC

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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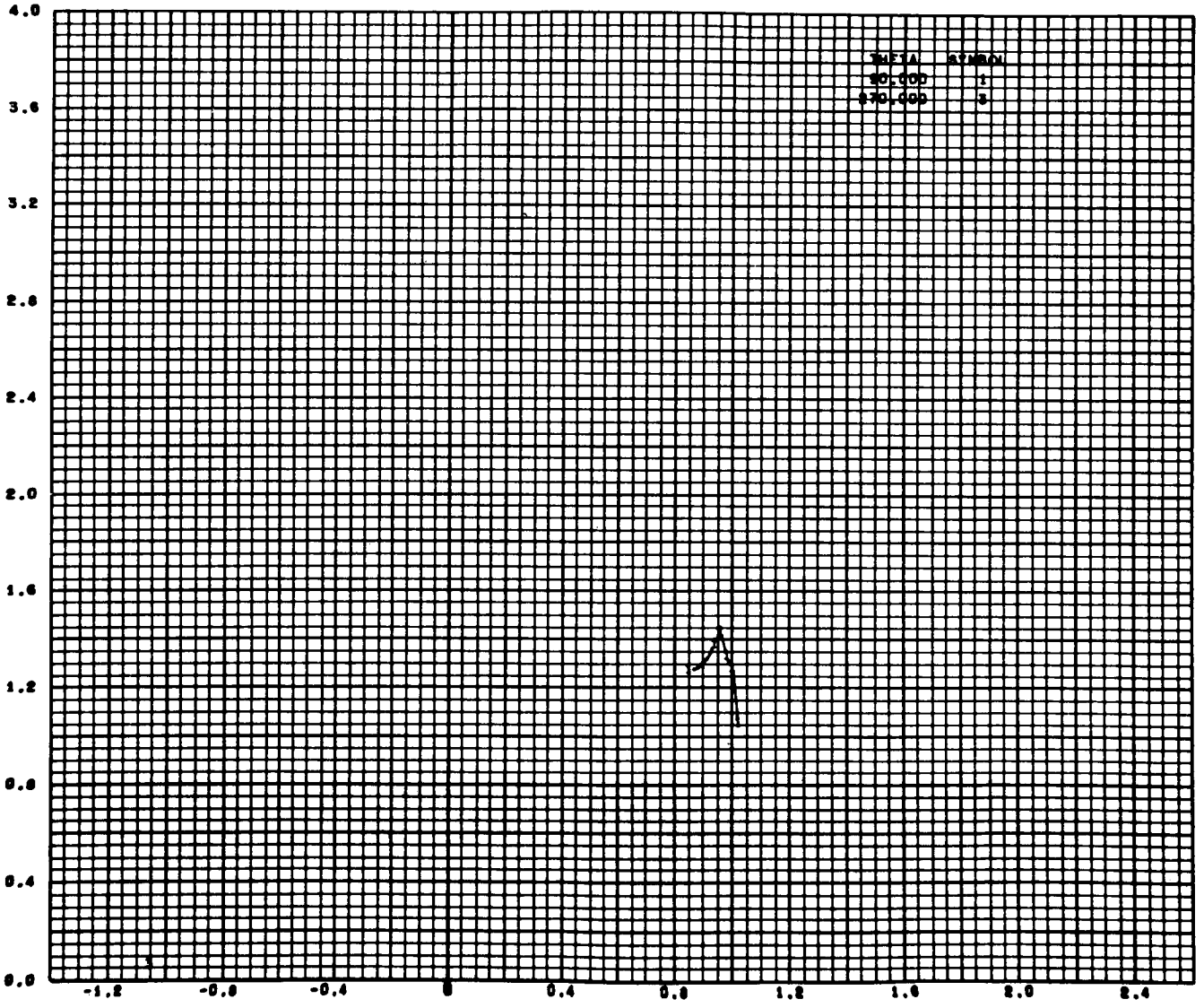
PLOT SERIES NUMBER 51

TEST GROUP	TIME (SEC)
88*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
174 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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TEST GROUP	TIME (SEC)
88*	2.70

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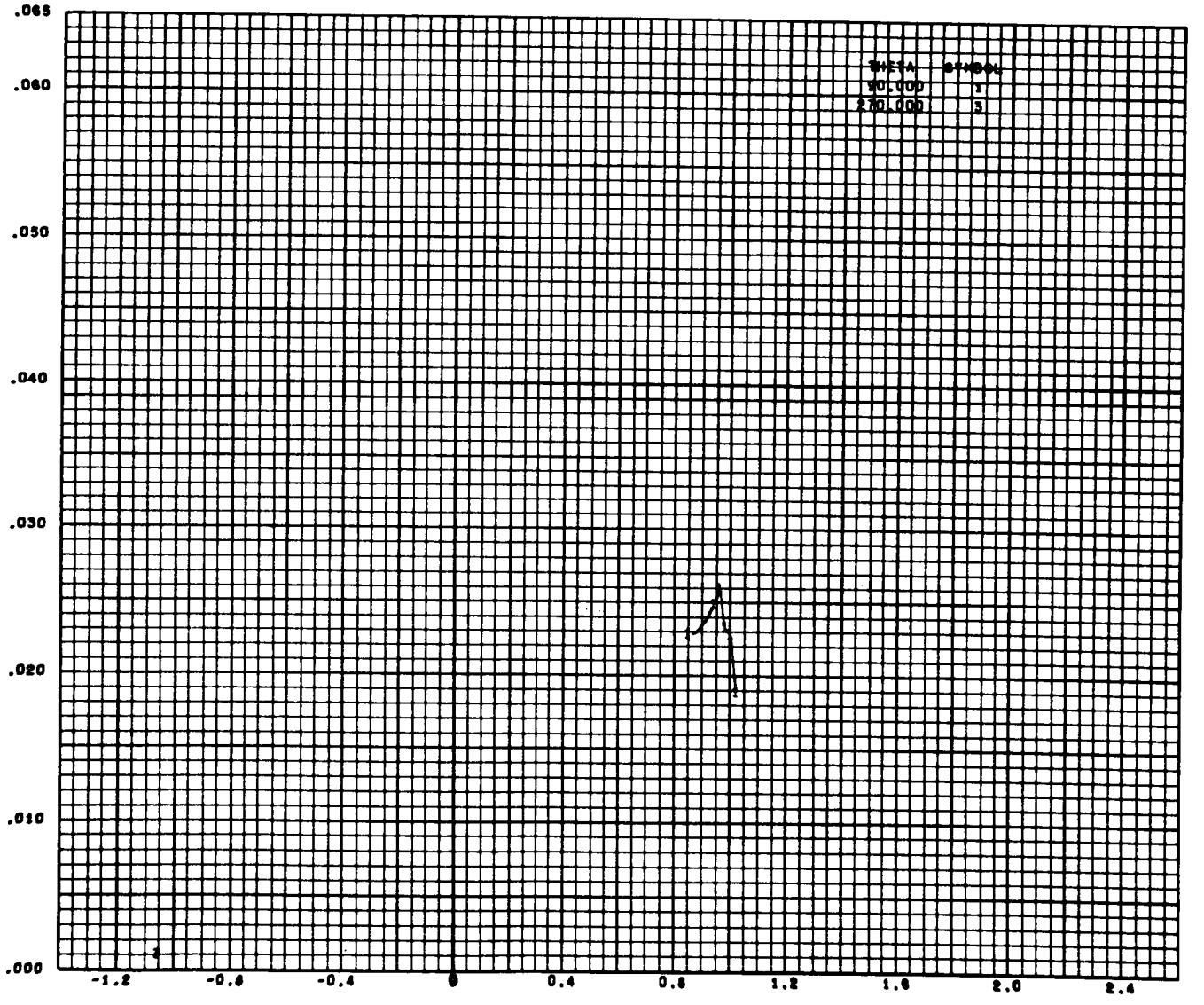
3937-09
176 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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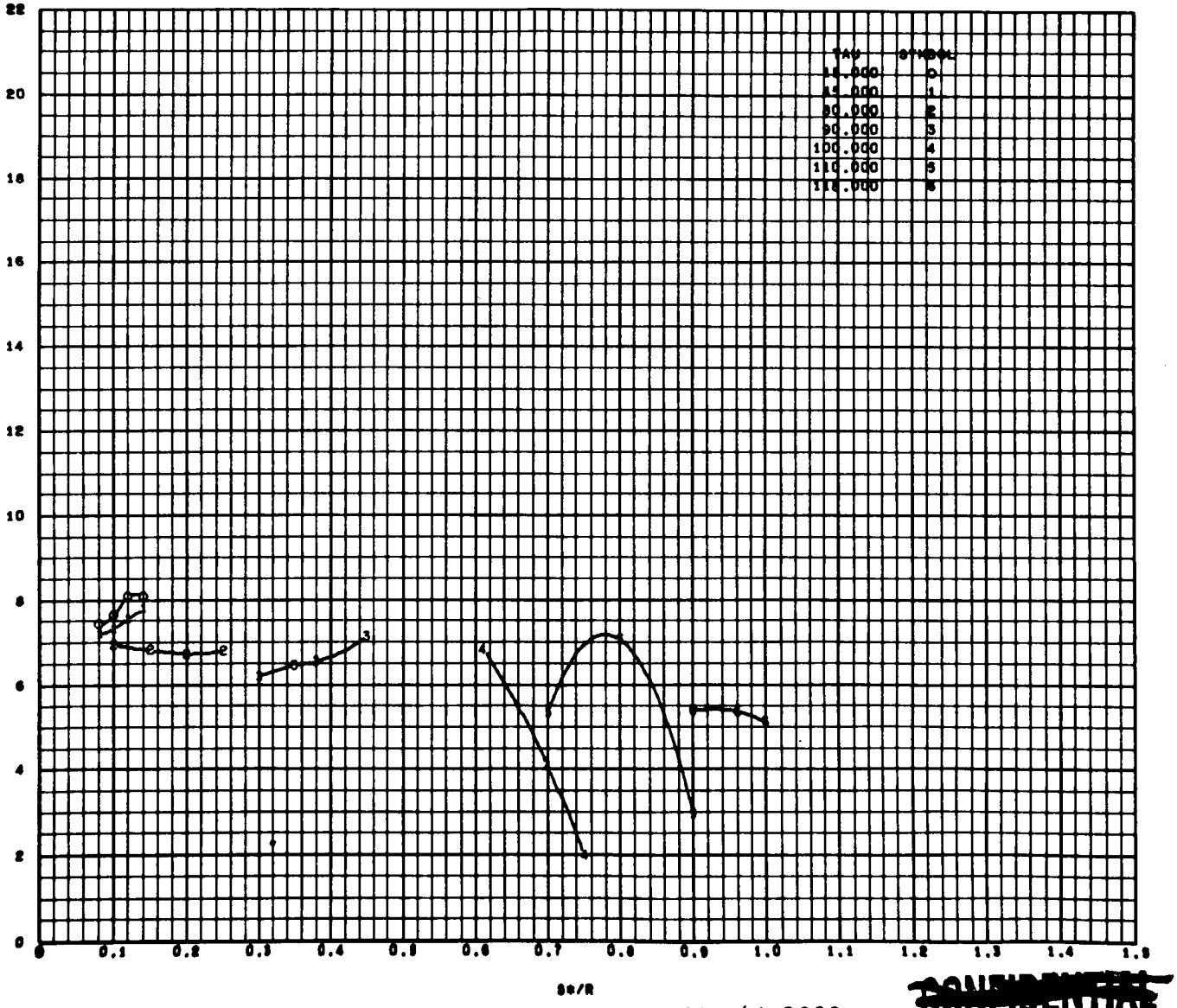
RE/FT --- 1.2021*10+6
Q(OM) --- 5.6939 BTU/SQ FT SEC

PLOT SERIES NUMBER 51

TEST GROUP	TIME (SEC)
88*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
173 000



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HEAT TRANSFER

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AEDC, TUNNEL C

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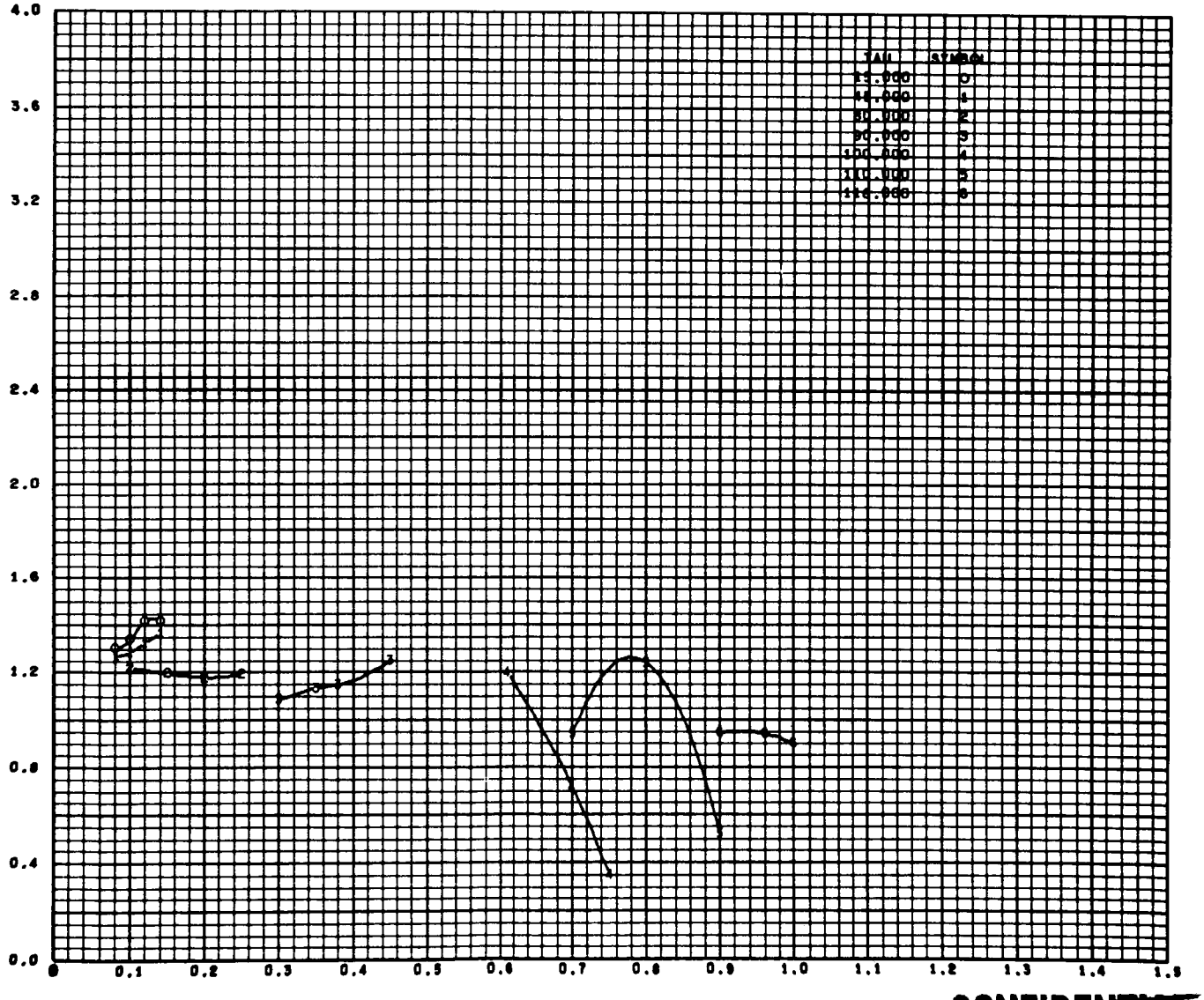
RE/FT --- 1.2021*10+6
Q(OM) --- 5.6939 BTU/SQ FT SEC

PLOT SERIES NUMBER 51

TEST GROUP	TIME (SEC)
88*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
175 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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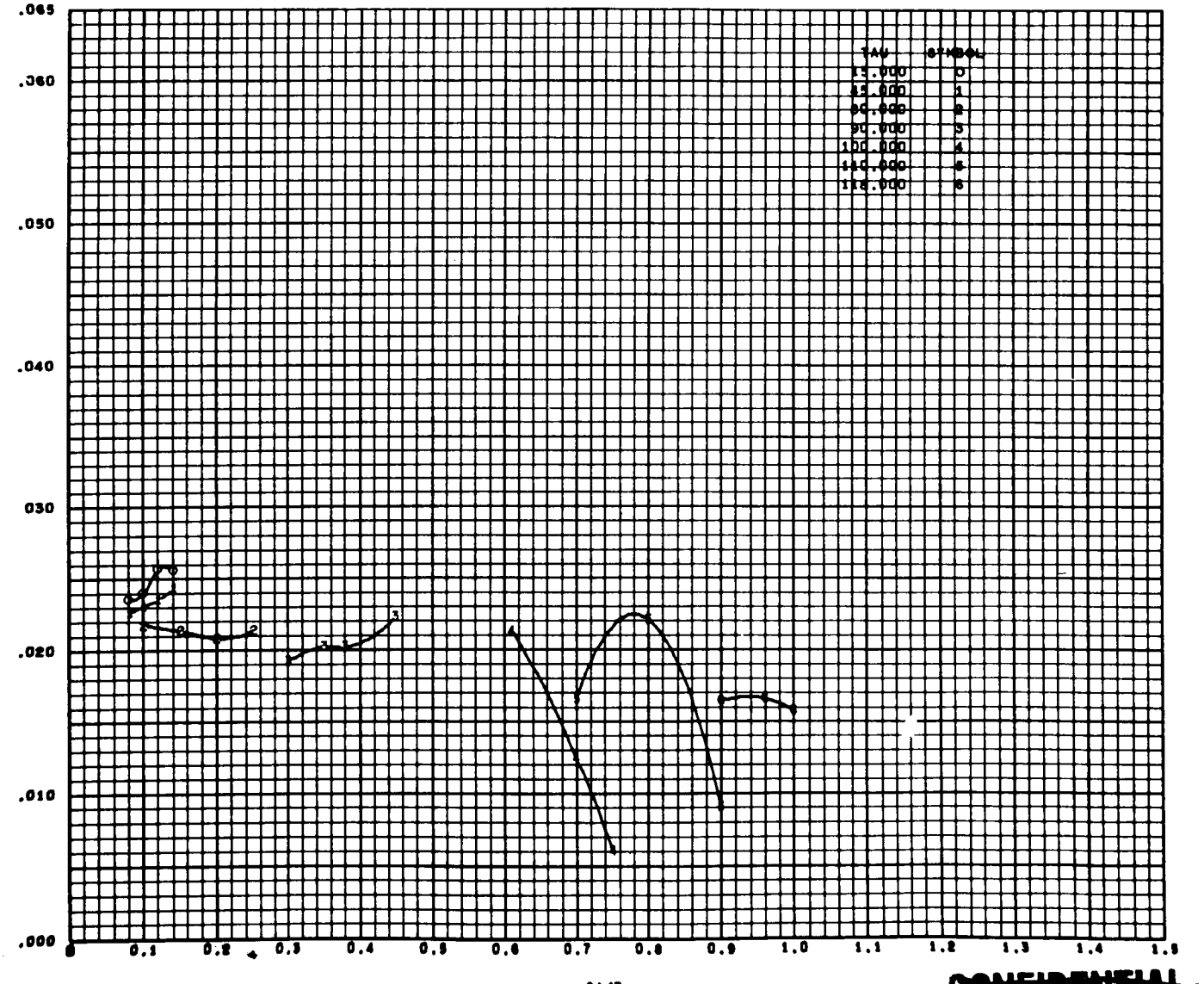
Q(OM) --- 5.6939 BTU/SQ FT SEC

PLOT SERIES NUMBER 51

TEST GROUP	TIME (SEC)
88*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
177 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 154.13 DEG
ANGLE OF YAW --------- -5.17 DEG
TOTAL PRESSURE ------- 936.50 PSIA
TOTAL TEMPERATURE ---- 1826.10 DEG RANKINE

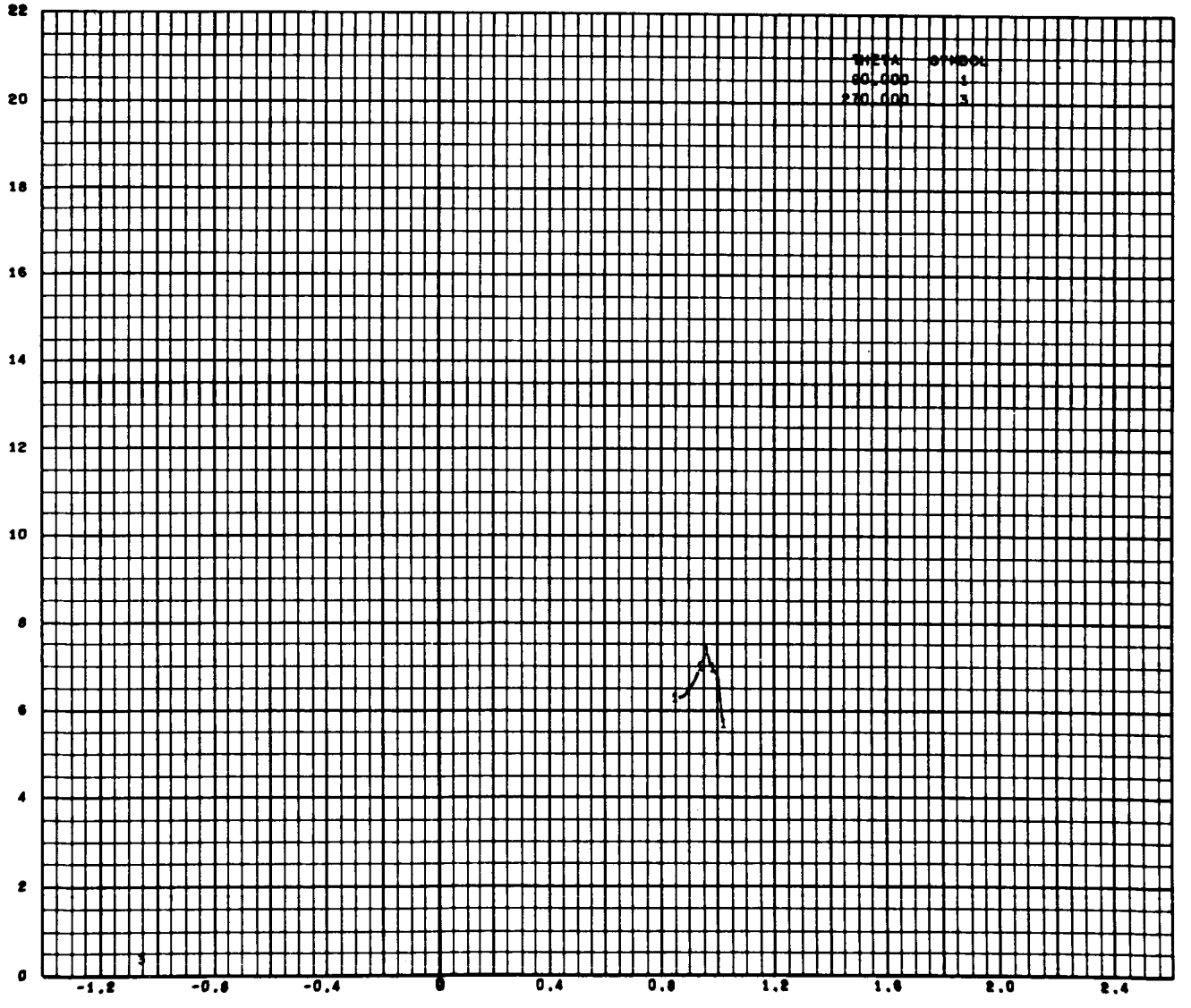
RE/FT --- 1.2067*10+6
Q(OM) --- 5.6904 BTU/SQ FT SEC

PLOT SERIES NUMBER 52

TEST GROUP	TIME (SEC)
89*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
178 000



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HEAT TRANSFER

CONFIGURATION C57

PLOT SERIES NUMBER 52

3937-09
180 000

APOLLO H-11

AEDC, TUNNEL C

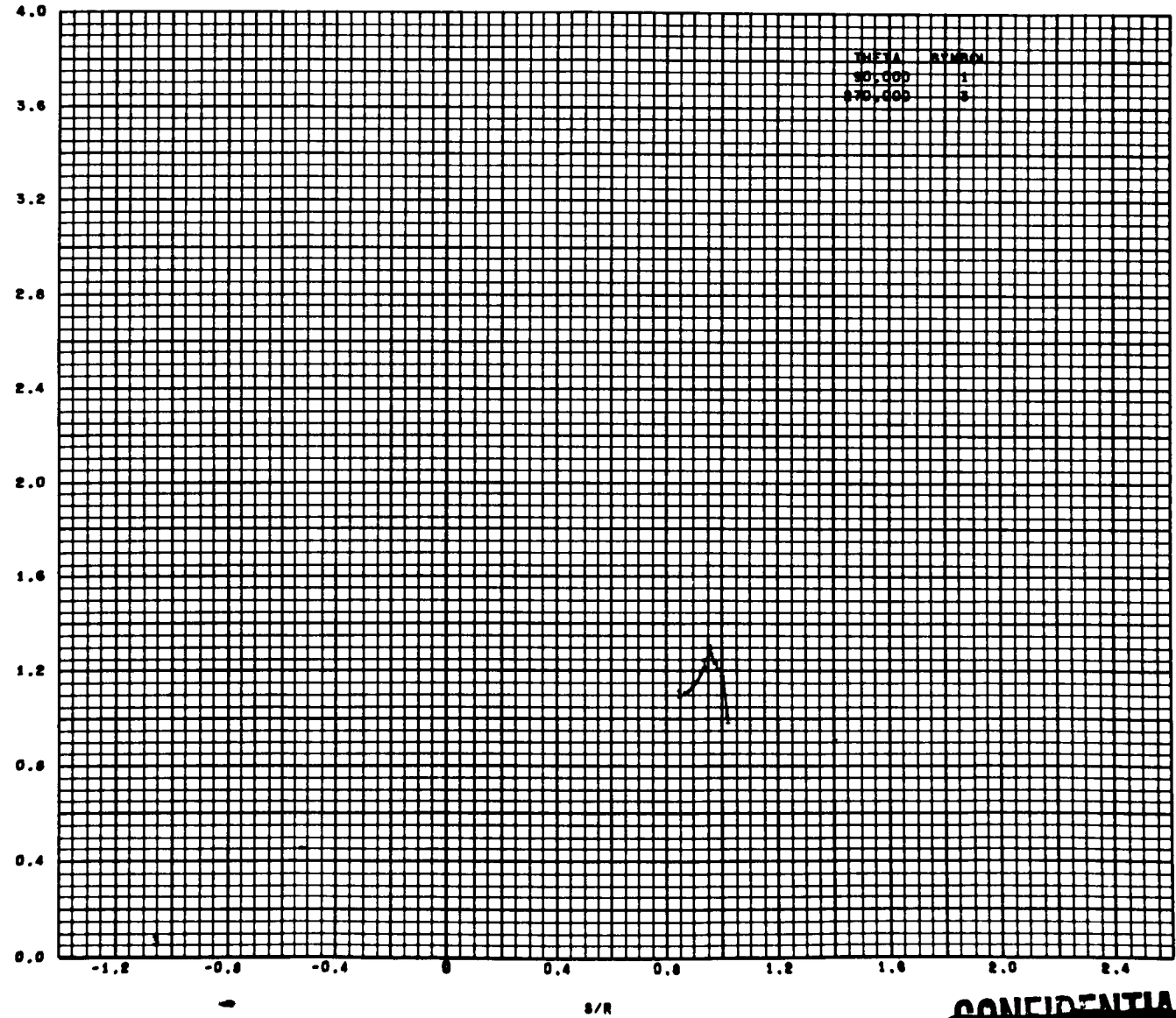
JUNE, 1964

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 154.13 DEG
ANGLE OF YAW --------- -5.17 DEG
TOTAL PRESSURE ------- 936.50 PSIA
TOTAL TEMPERATURE ---- 1826.10 DEG RANKINE

RE/FT --- 1.2067*10+6
Q(OM) --- 5.6904 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
89*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 154.13 DEG
ANGLE OF YAW --------- -5.17 DEG
TOTAL PRESSURE ------- 936.50 PSIA
TOTAL TEMPERATURE ---- 1826.10 DEG RANKINE

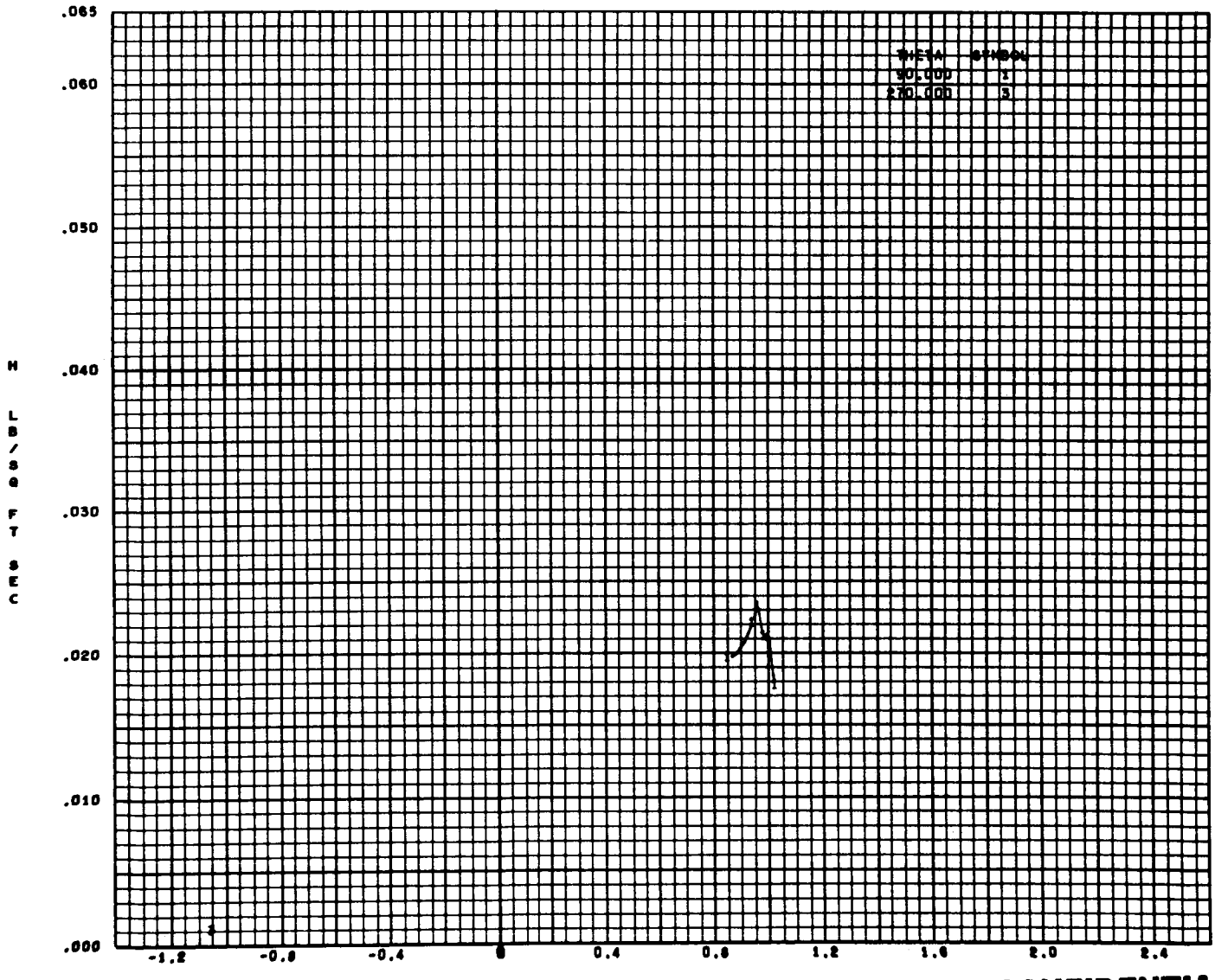
RE/FT --- 1.2067*10+6
Q(OM) --- 5.6904 BTU/SQ FT SEC

PLOT SERIES NUMBER 52

TEST GROUP	TIME (SEC)
89*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
182 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 154.13 DEG
ANGLE OF YAW --------- -5.17 DEG
TOTAL PRESSURE ------- 936.50 PSIA
TOTAL TEMPERATURE ---- 1826.10 DEG RANKINE

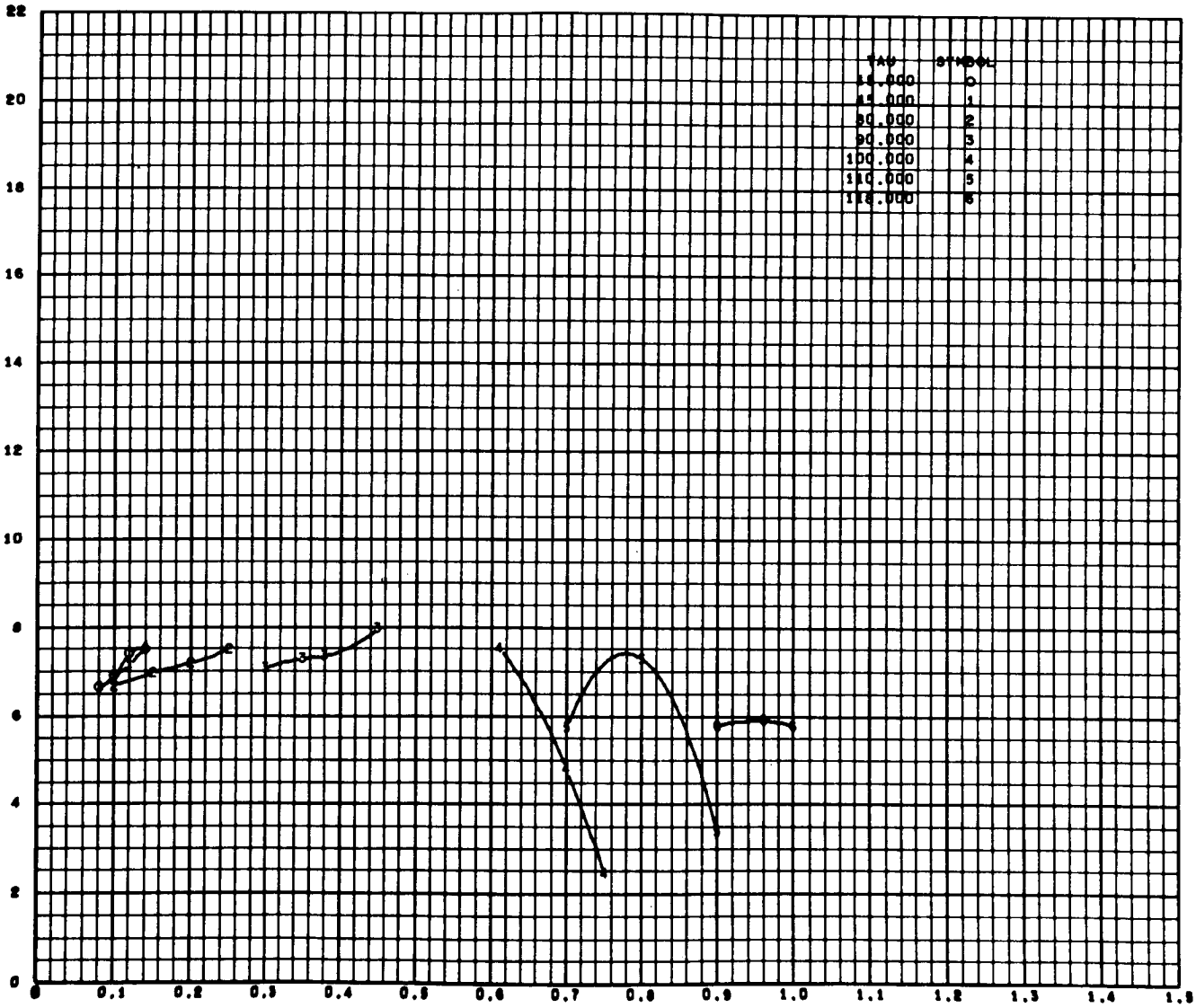
RE/FT --- 1.2067*10+6
Q(OM) --- 5.6904 BTU/SQ FT SEC

PLOT SERIES NUMBER 52

TEST GROUP	TIME (SEC)
89*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
179 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 154.13 DEG
ANGLE OF YAW --------- -5.17 DEG
TOTAL PRESSURE ------- 936.50 PSIA
TOTAL TEMPERATURE ---- 1826.10 DEG RANKINE

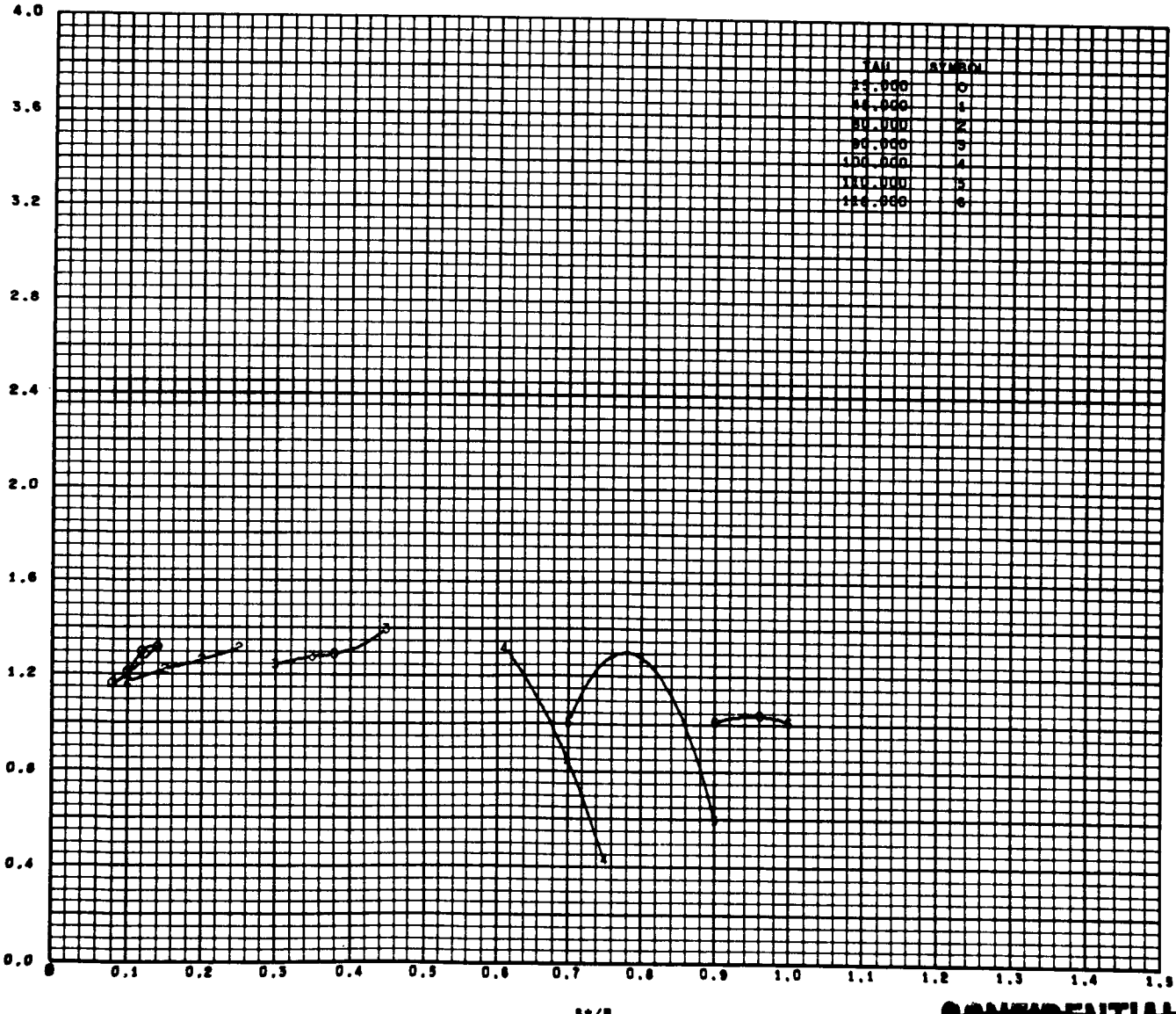
RE/FT --- 1.2067*10+6
Q(OM) --- 5.6904 BTU/SQ FT SEC

PLOT SERIES NUMBER 52

TEST GROUP	TIME (SEC)
89*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
101 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 154.13 DEG
ANGLE OF YAW --------- -5.17 DEG
TOTAL PRESSURE ------- 936.50 PSIA
TOTAL TEMPERATURE ---- 1826.10 DEG RANKINE

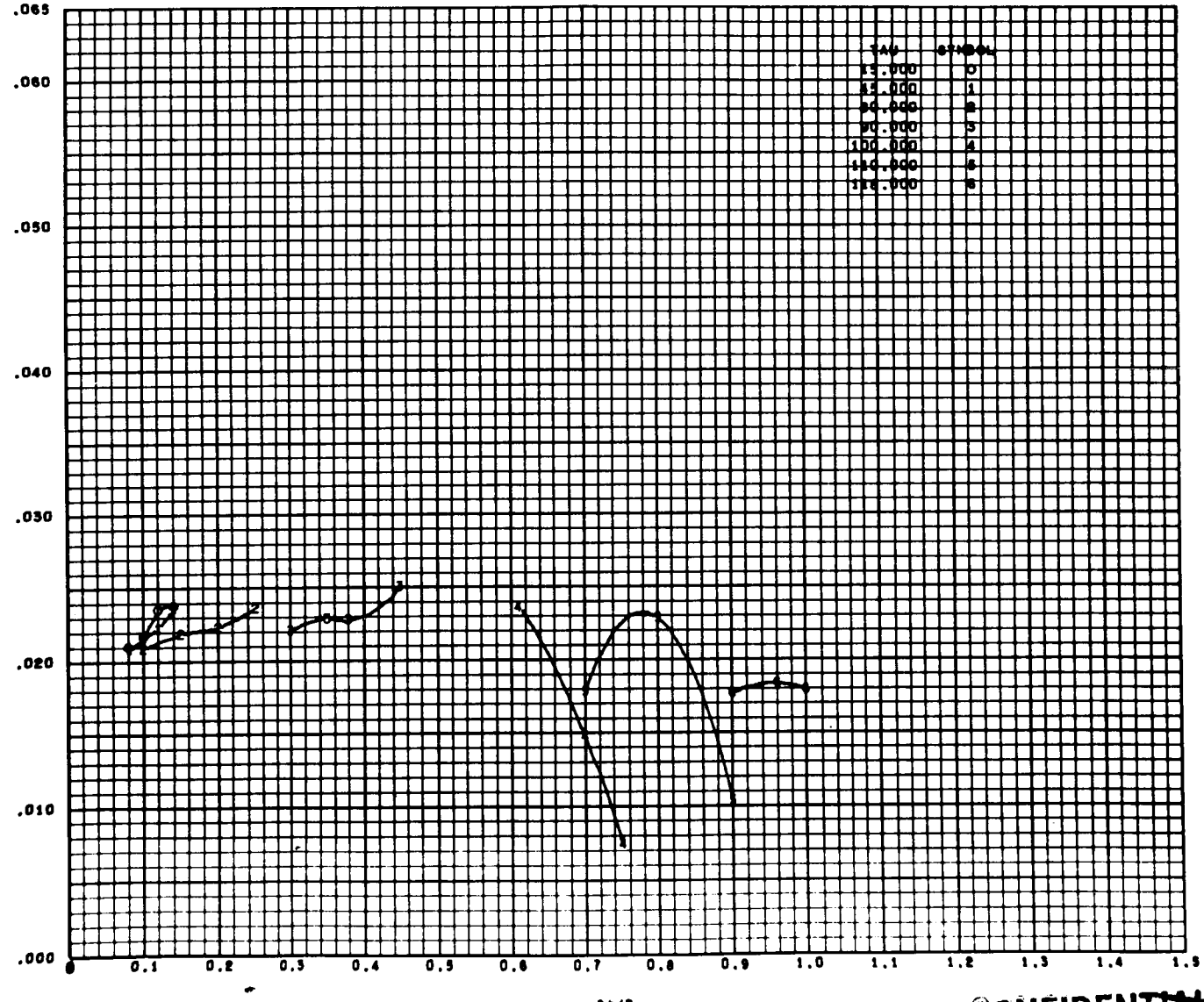
RE/FT --- 1.2067*10+6
Q(OM) --- 5.6904 BTU/SQ FT SEC

PLOT SERIES NUMBER 52

TEST GROUP	TIME (SEC)
89*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
183 006



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 154.12 DEG
ANGLE OF YAW --------- 5.15 DEG
TOTAL PRESSURE ------- 935.00 PSIA
TOTAL TEMPERATURE ---- 1827.30 DEG RANKINE

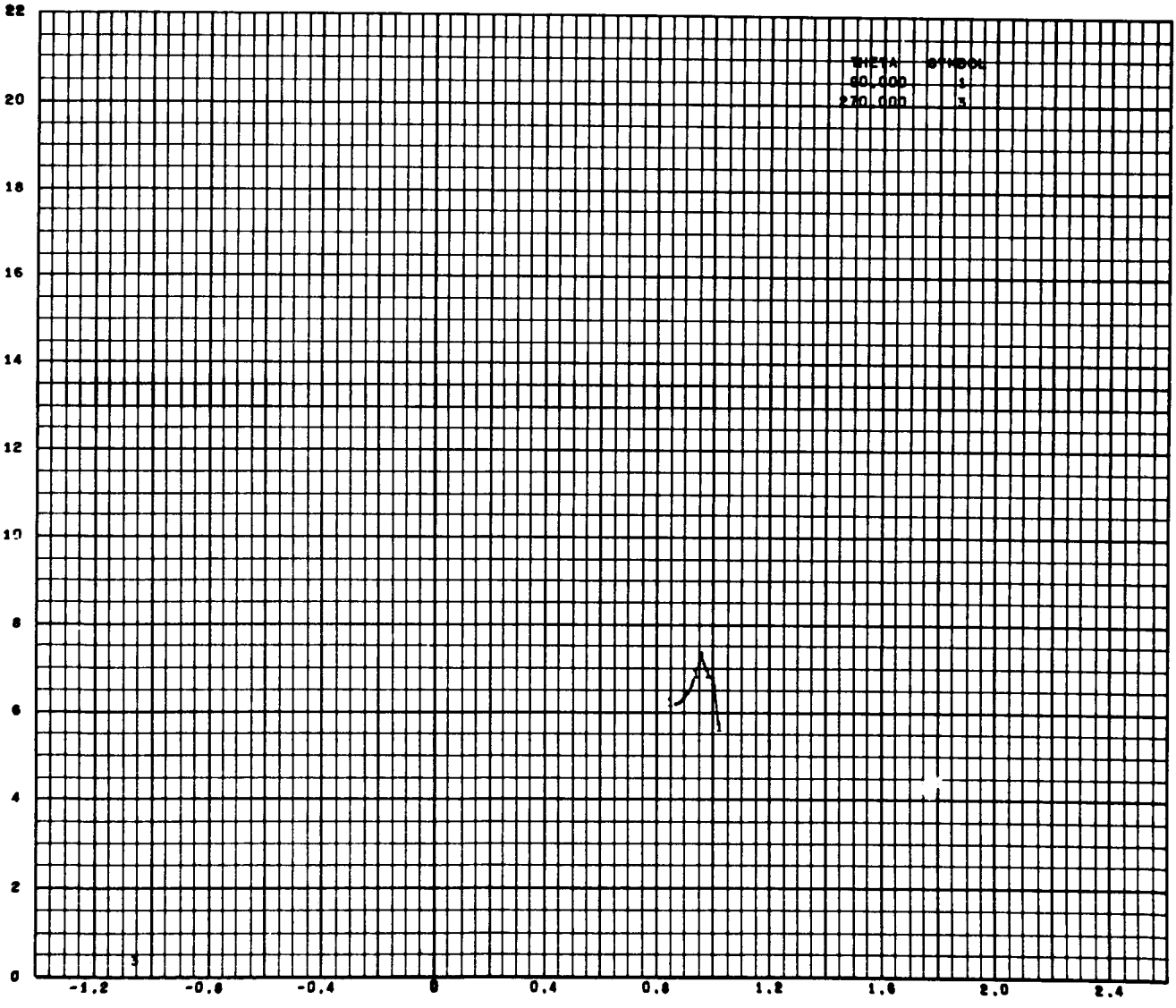
RE/FT --- 1.2033*10+6
Q(OM) --- 5.6835 BTU/SQ FT SEC

PLOT SERIES NUMBER 53

TEST GROUP	TIME (SEC)
90*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
184 000



S/R
A-367 SID 64-2080

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 154.12 DEG
ANGLE OF YAW --------- 5.15 DEG
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TOTAL TEMPERATURE ---- 1827.30 DEG RANKINE

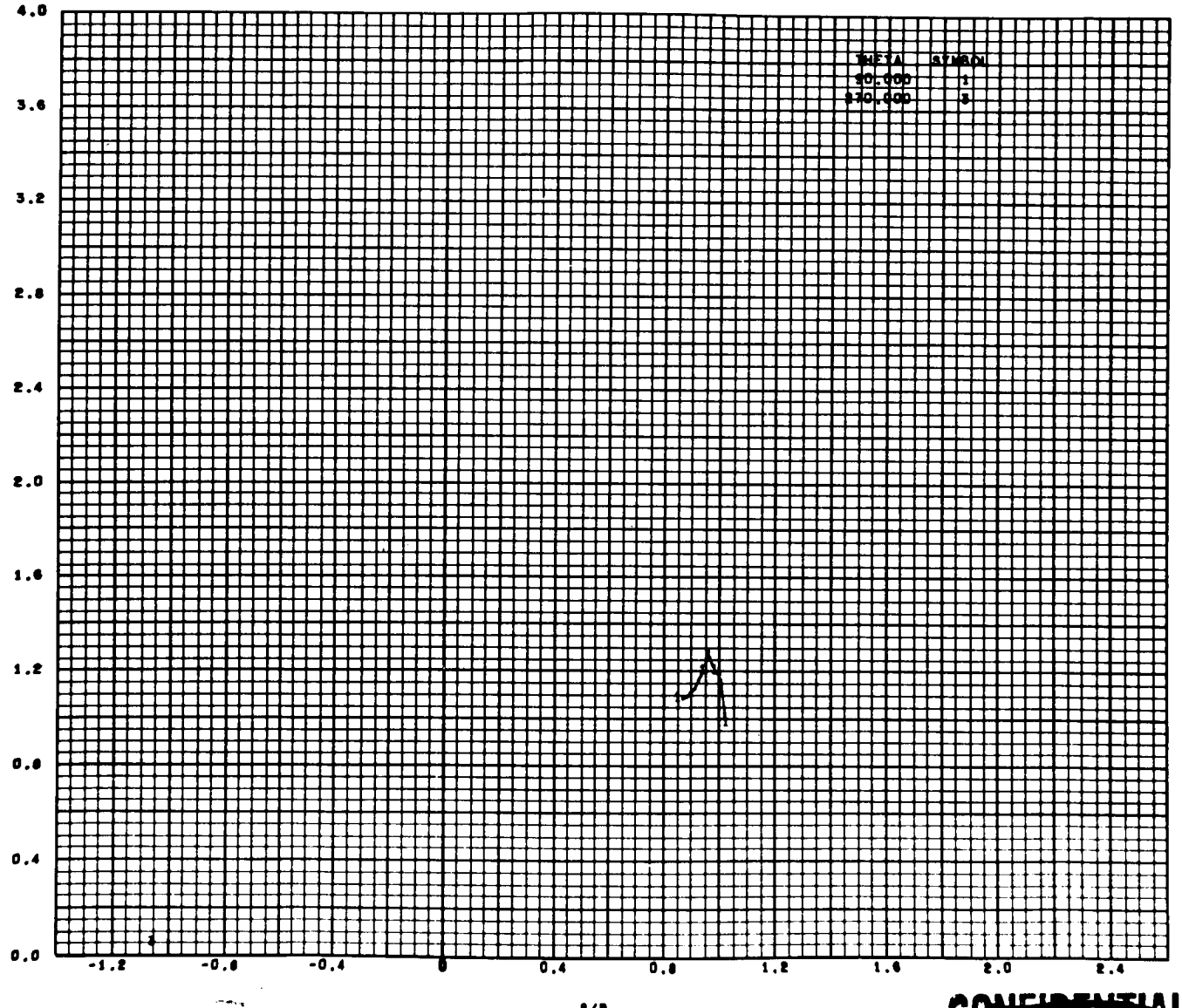
RE/FT --- 1.2033*10+6
Q(OM) --- 5.6835 BTU/SQ FT SEC

PLOT SERIES NUMBER 53

TEST GROUP	TIME (SEC)
90*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
186 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 154.12 DEG
ANGLE OF YAW --------- 5.15 DEG
TOTAL PRESSURE ------- 935.00 PSIA
TOTAL TEMPERATURE ---- 1827.30 DEG RANKINE

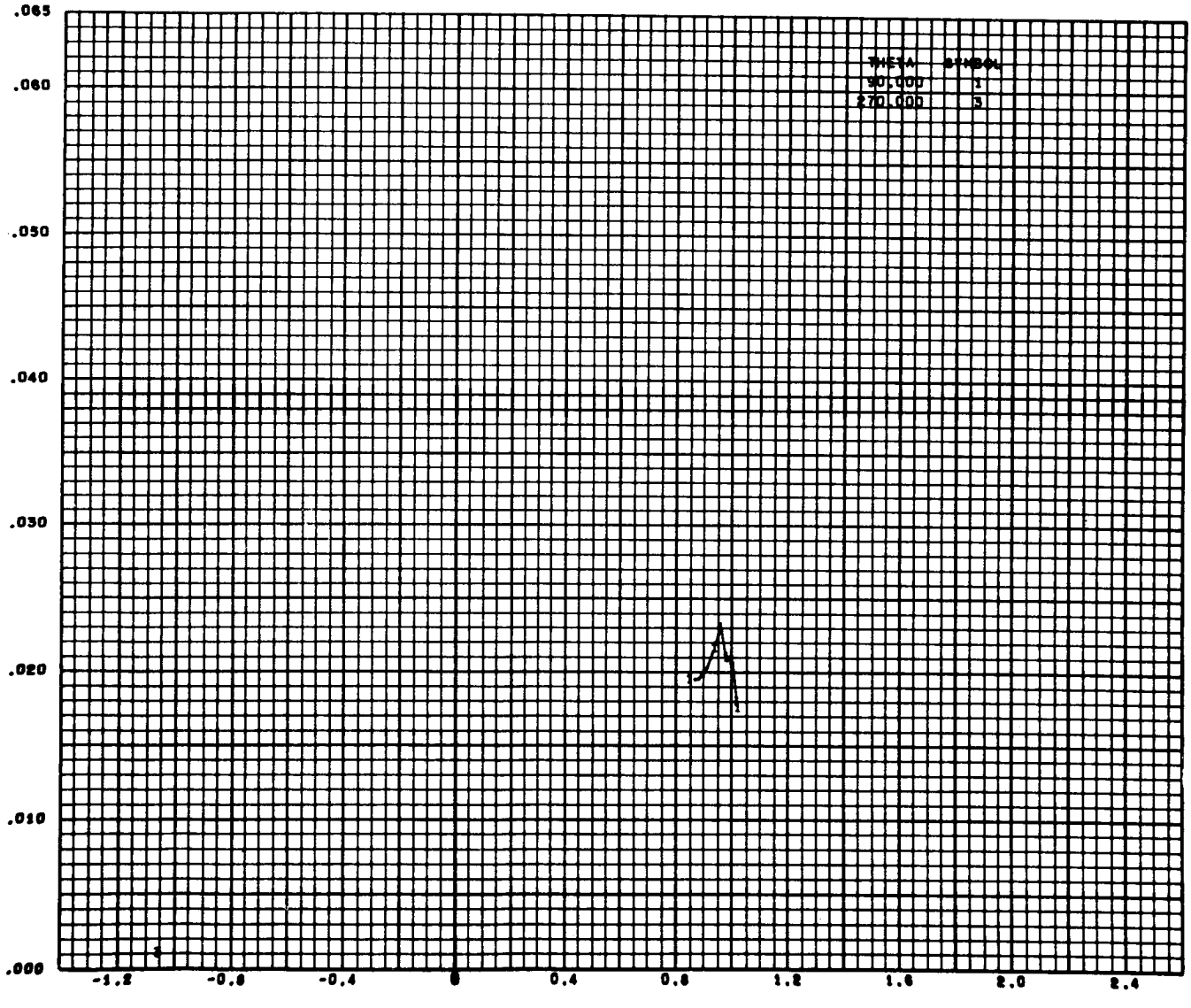
RE/FT --- 1.2033*10+6
Q(OM) --- 5.6835 BTU/SQ FT SEC

PLOT SERIES NUMBER 53

TEST GROUP	TIME (SEC)
90*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
188 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 154.12 DEG
ANGLE OF YAW --------- 5.15 DEG
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TOTAL TEMPERATURE ---- 1827.30 DEG RANKINE

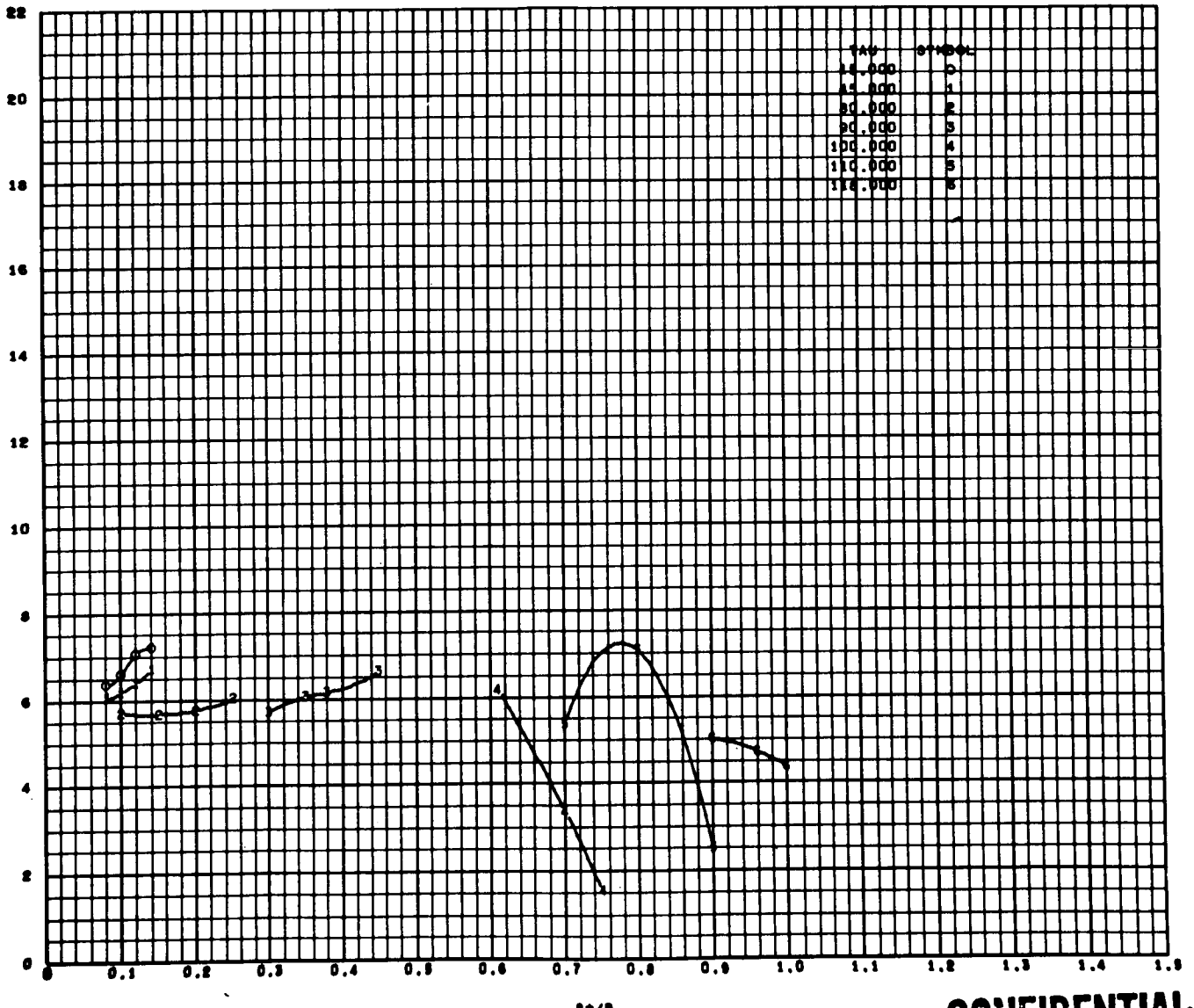
RE/FT --- 1.2033*10+6
Q(OM) --- 5.6835 BTU/SQ FT SEC

PLOT SERIES NUMBER 53

TEST GROUP	TIME (SEC)
90*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
185 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 154.12 DEG
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TOTAL TEMPERATURE ---- 1827.30 DEG RANKINE

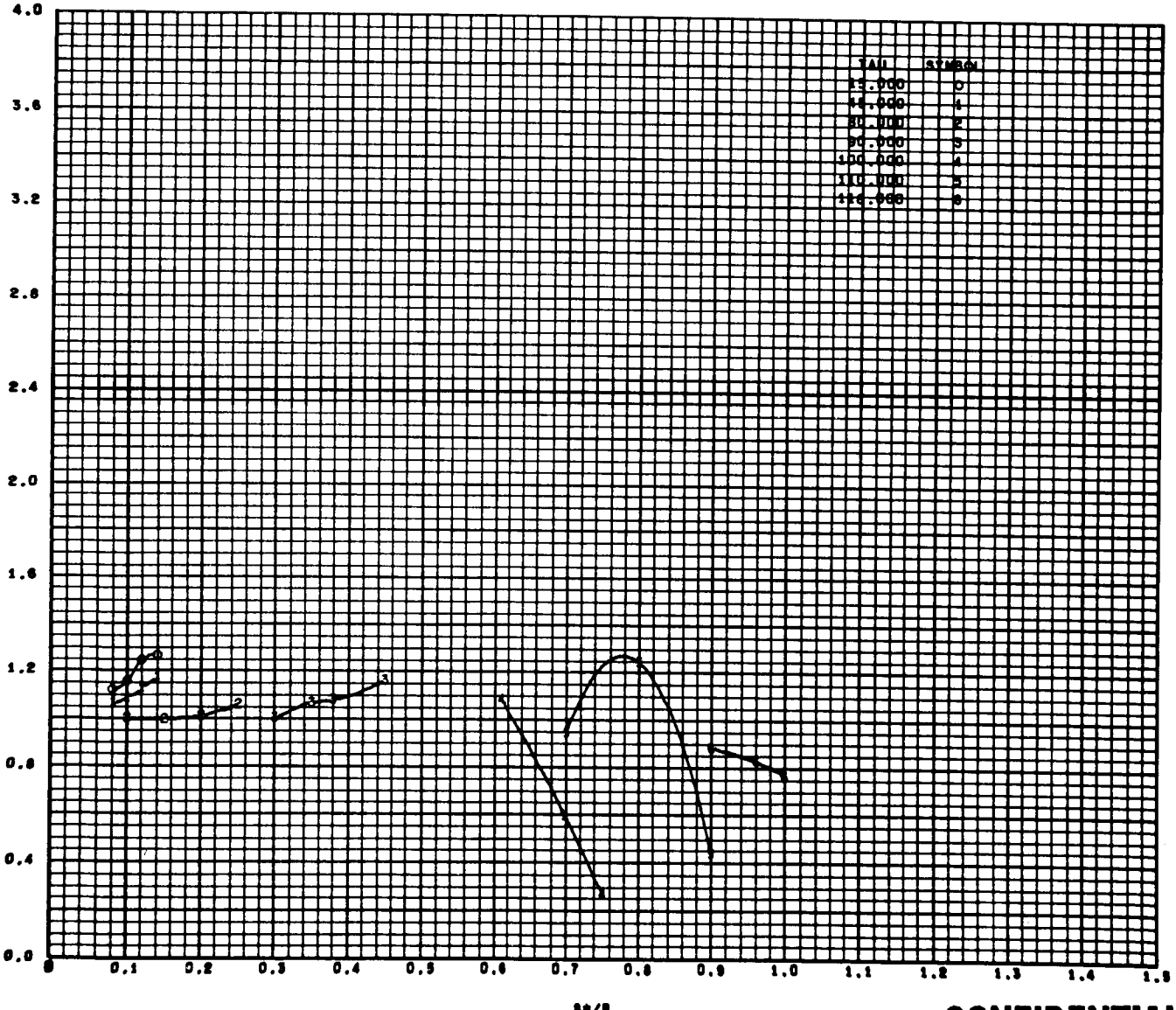
RE/FT --- 1.2033*10+6
Q(OM) --- 5.6835 BTU/SQ FT SEC

PLOT SERIES NUMBER 53

TEST GROUP	TIME (SEC)
90*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3037-09
187 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 154.12 DEG
ANGLE OF YAW --------- 5.15 DEG
TOTAL PRESSURE ------- 935.00 PSIA
TOTAL TEMPERATURE ---- 1827.30 DEG RANKINE

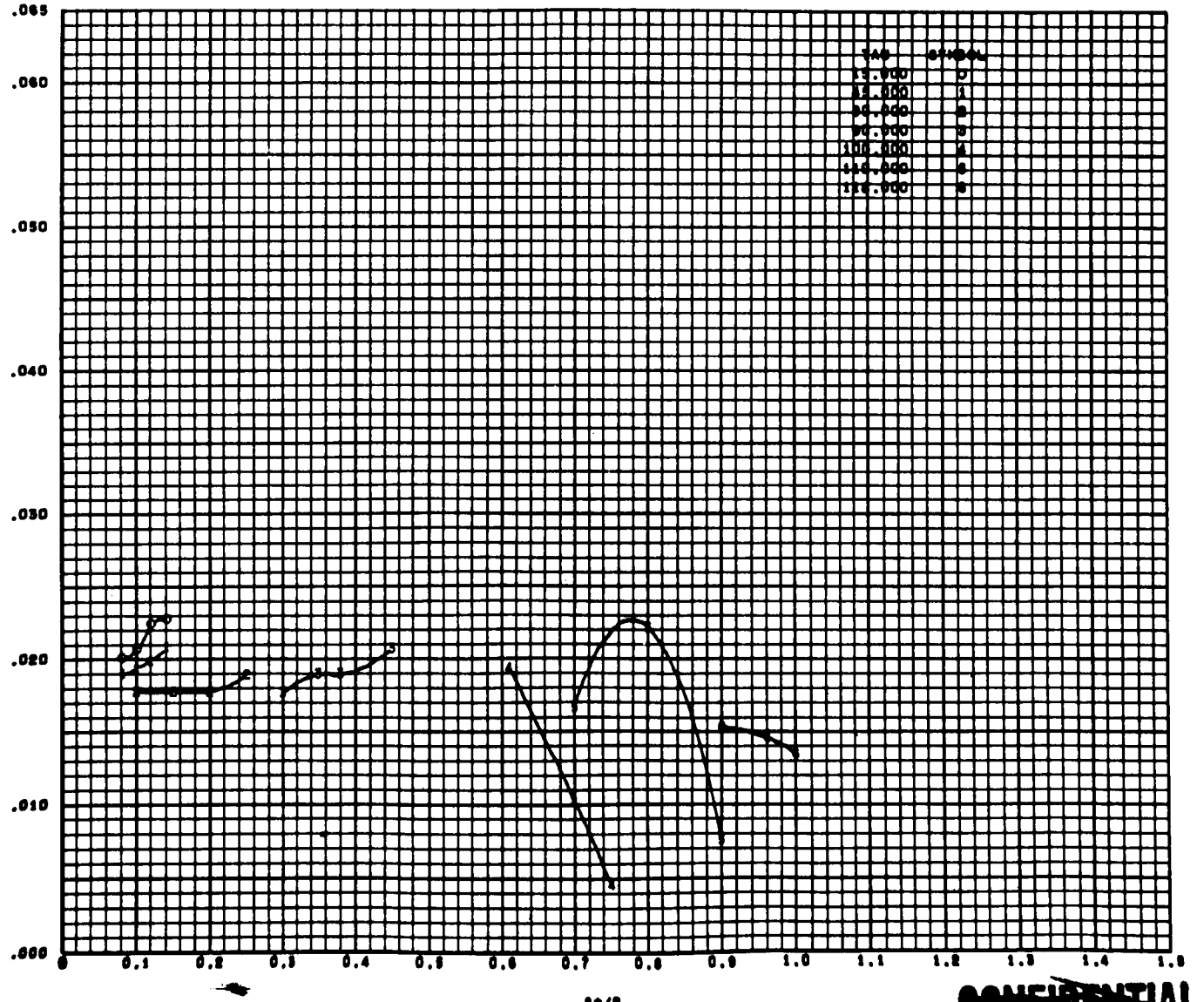
RE/FT --- 1.2033*10+6
Q(CM) --- 5.6835 BTU/SQ FT SEC

PLOT SERIES NUMBER 53

TEST GROUP	TIME (SEC)
90*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3037-09
189 000



SB/R

A=372 SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 157.59 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 936.50 PSIA
TOTAL TEMPERATURE ---- 1825.60 DEG RANKINE

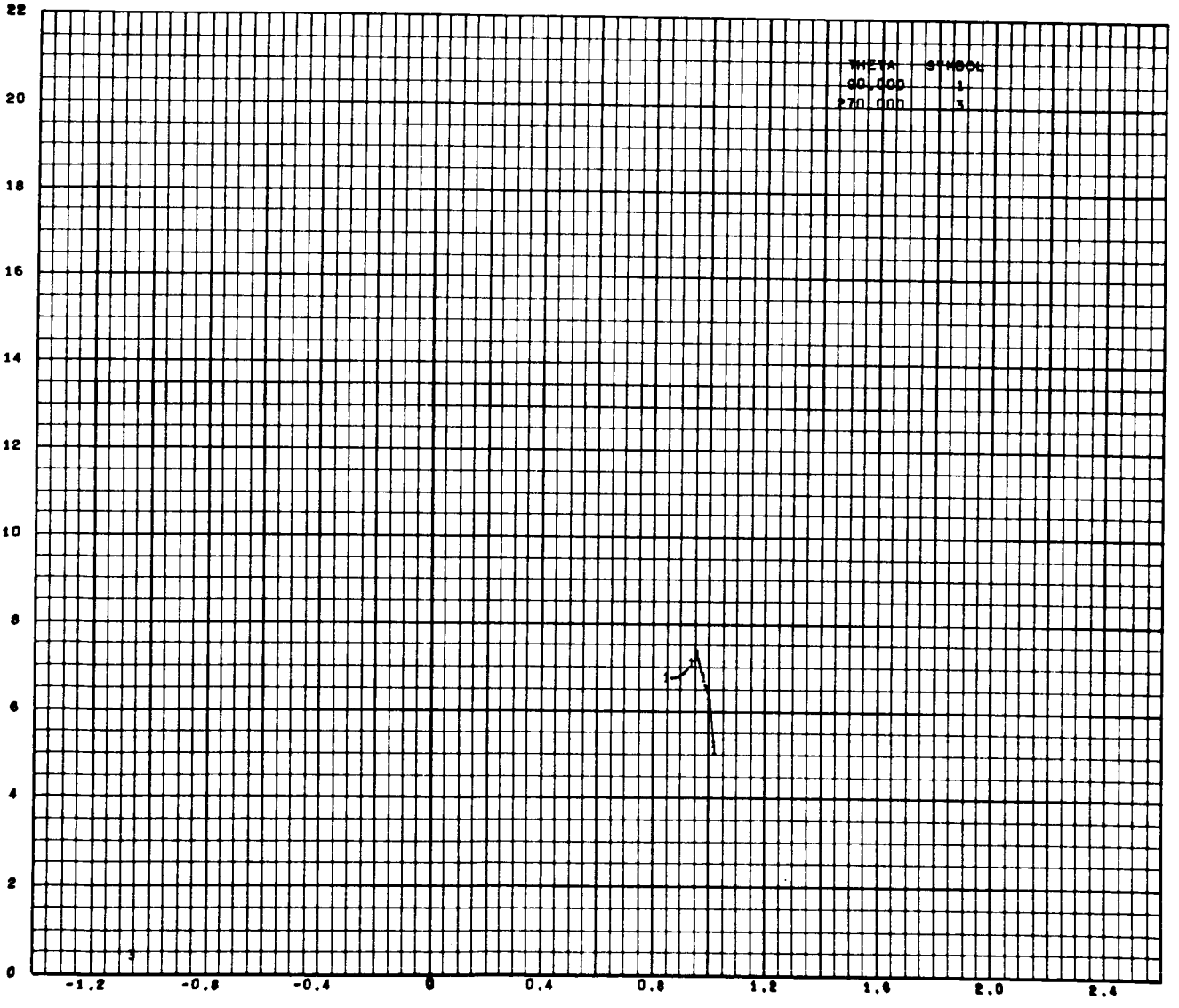
RE/FT --- 1.2073*10+6
Q(OM) --- 5.6904 BTU/SQ FT SEC

PLOT SERIES NUMBER 54

TEST GROUP	TIME (SEC)
91*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-05
190 006



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 157.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 936.50 PSIA
TOTAL TEMPERATURE ---- 1825.60 DEG RANKINE

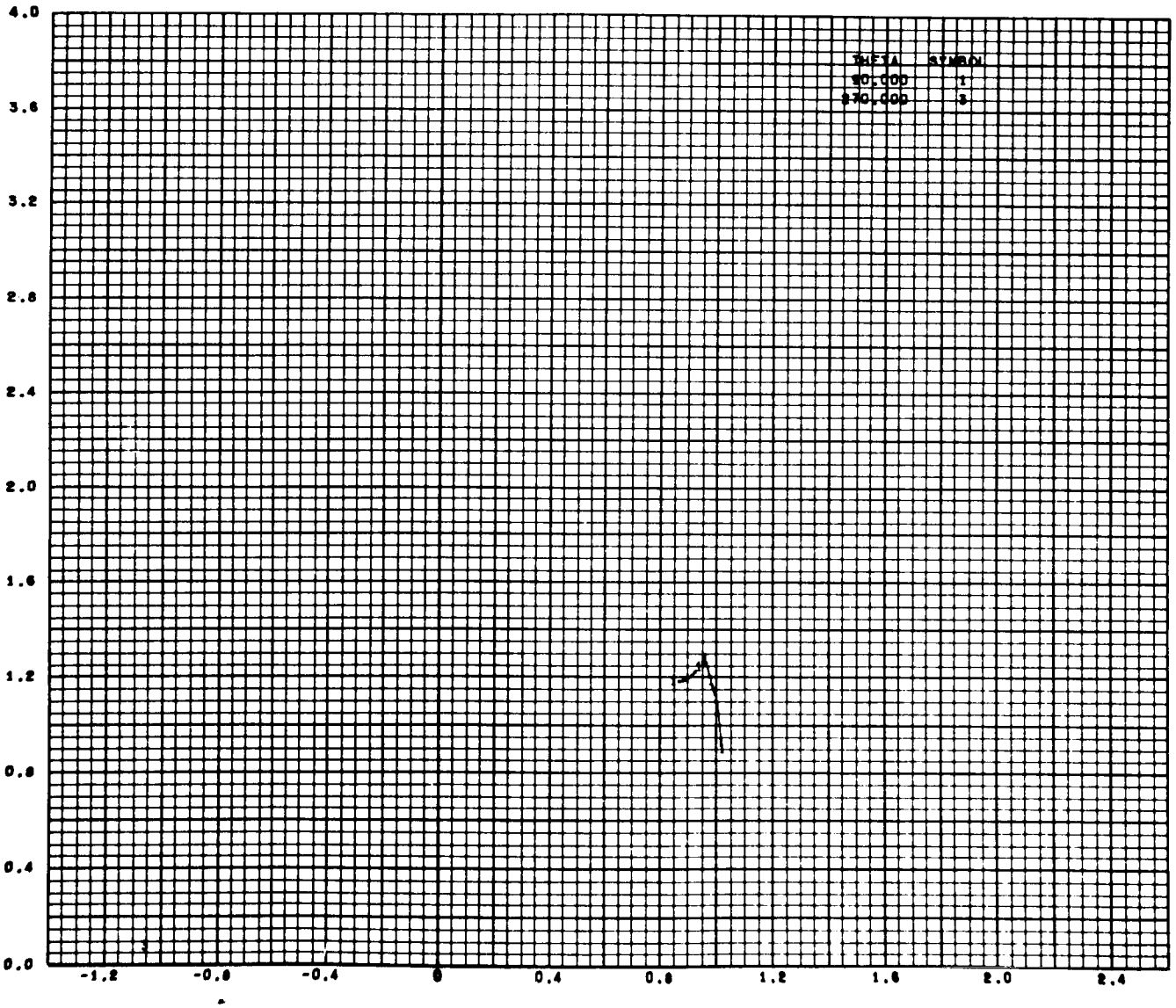
RE/FT --- 1.2073*10+6
Q(OM) --- 5.6904 BTU/SQ FT SEC

PLOT SERIES NUMBER 54

TEST GROUP	TIME (SEC)
91*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
192 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 157.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 936.50 PSIA
TOTAL TEMPERATURE ---- 1825.60 DEG RANKINE

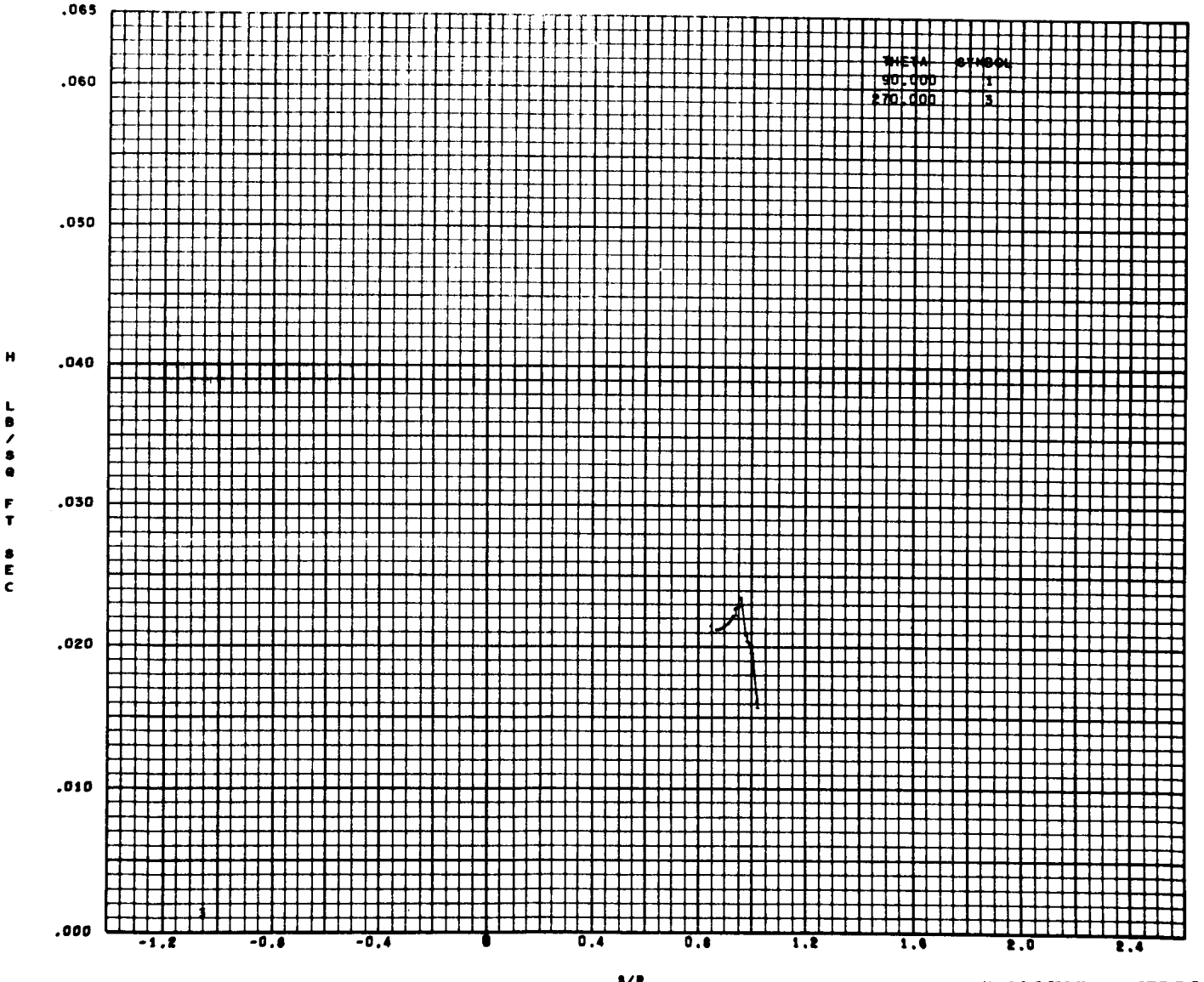
RE/FT --- 1.2073*10+6
Q(OM) --- 5.6904 BTU/SQ FT SEC

PLOT SERIES NUMBER 54

TEST GROUP	TIME (SEC)
91*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
194 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 157.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 936.50 PSIA
TOTAL TEMPERATURE ---- 1825.60 DEG RANKINE

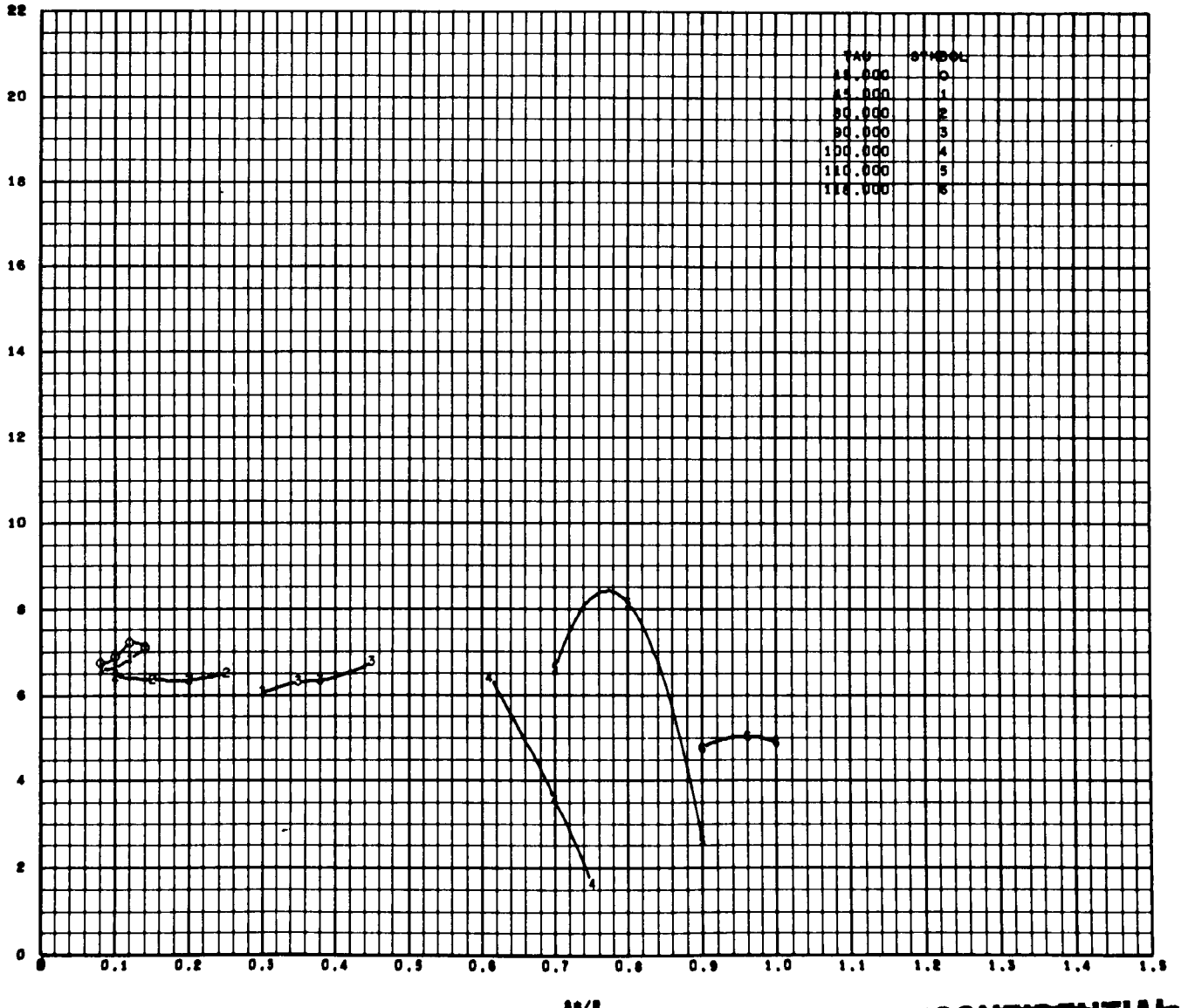
RE/FT --- 1.2073*10+6
Q(CM) --- 5.6904 BTU/SQ FT SEC

PLOT SERIES NUMBER 54

TEST GROUP	TIME (SEC)
91*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
191 000



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CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 157.59 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 936.50 PSIA
TOTAL TEMPERATURE ---- 1825.60 DEG RANKINE

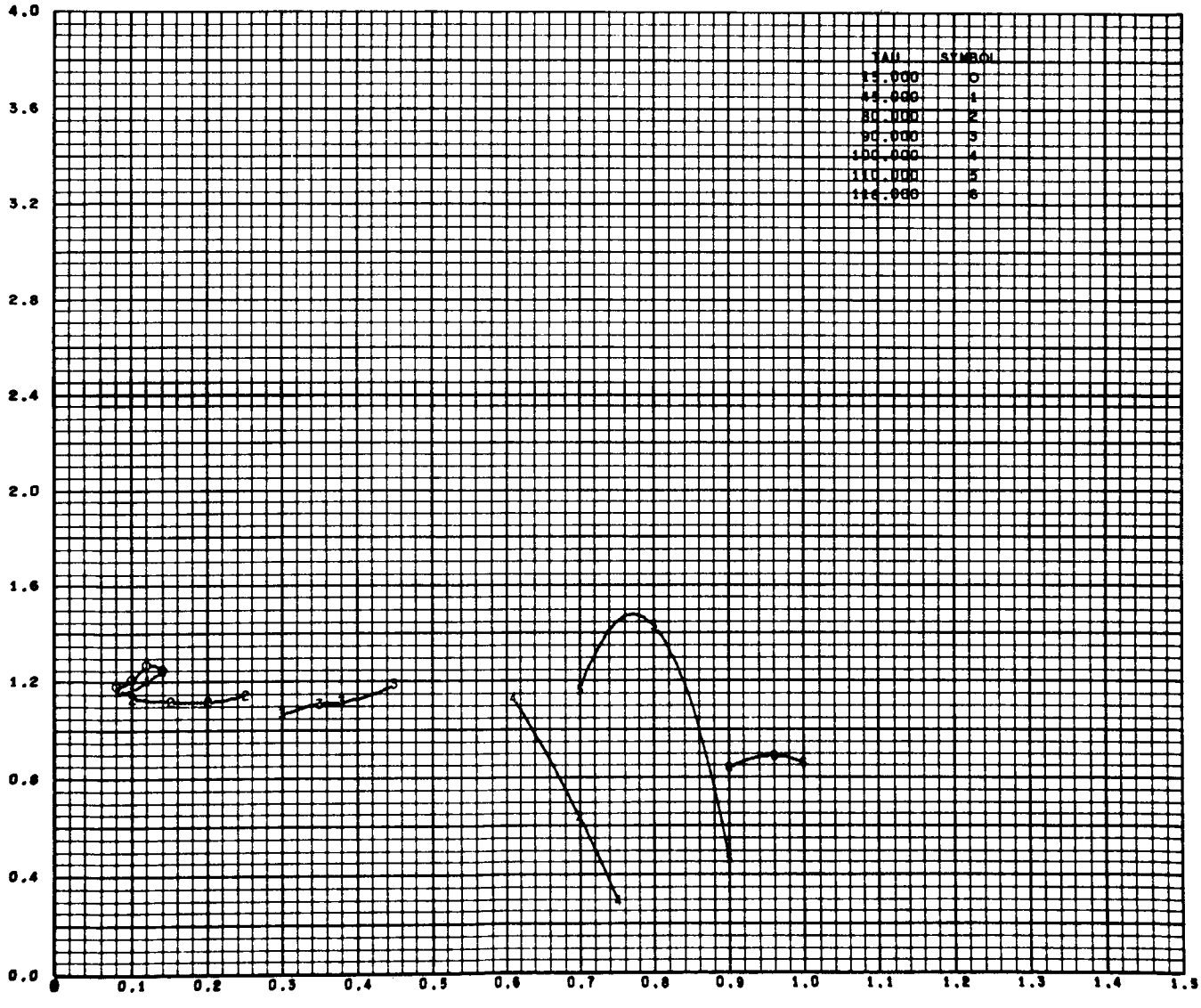
RE/FT --- 1.2073*10+6
Q(OM) --- 5.6904 BTU/SQ FT SEC

PLOT SERIES NUMBER 54

TEST GROUP	TIME (SEC)
91*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
193 000



A-377 SID 64-2080

CONFIDENTIAL

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C97

MACH NUMBER ---------- 10.18
ANGLE OF ATTACK ------ 157.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 956.80 PSIA
TOTAL TEMPERATURE ---- 1825.60 DEG RANKINE

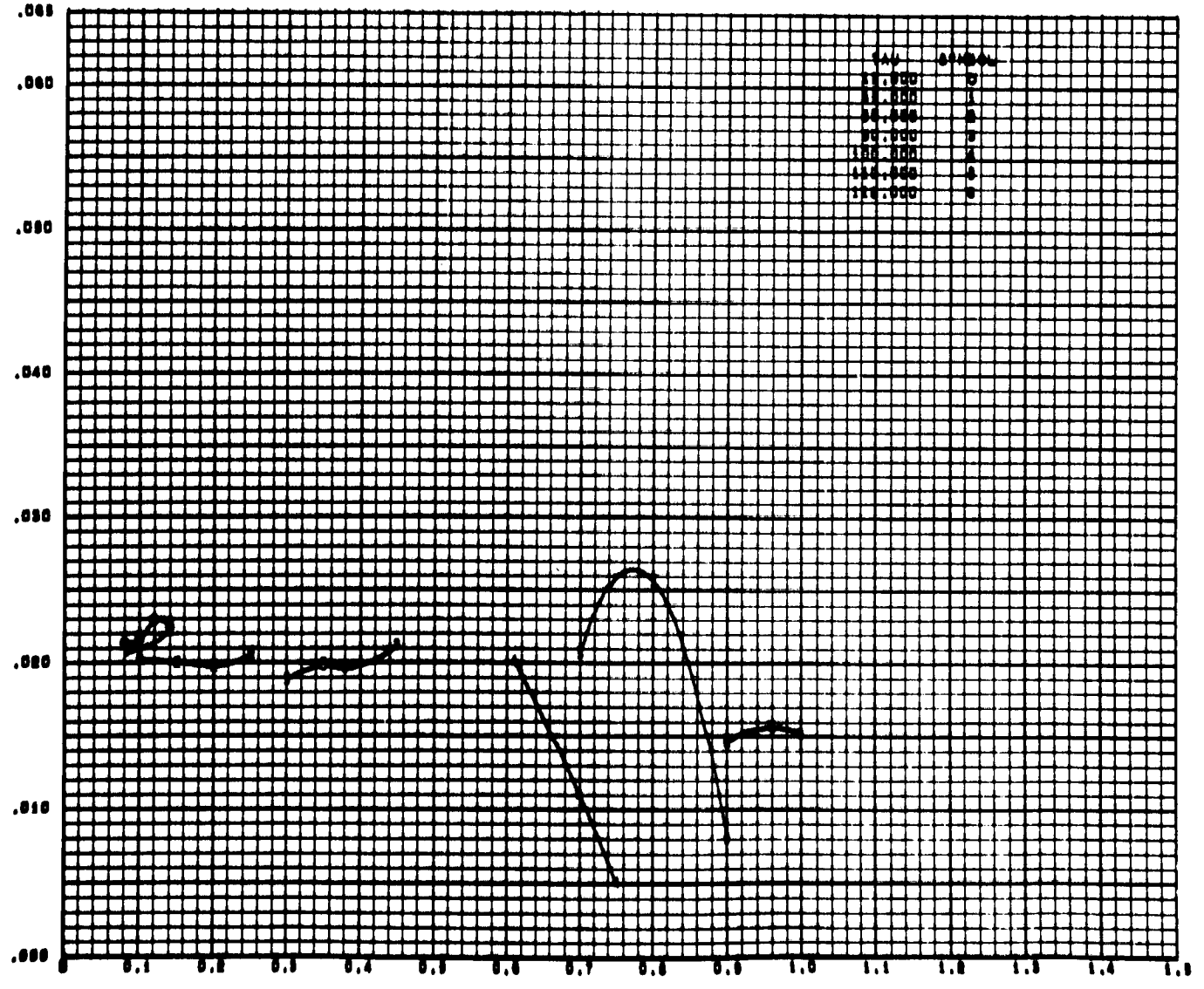
RE/FT --- 1.2073*10+6
Q(OM) --- 5.6904 BTU/SQ FT SEC

PLOT SERIES NUMBER 94

TEST GROUP	TIME (SEC)
91*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
193 000



60/R

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 161.65 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 946.30 PSIA
TOTAL TEMPERATURE ---- 1829.40 DEG RANKINE

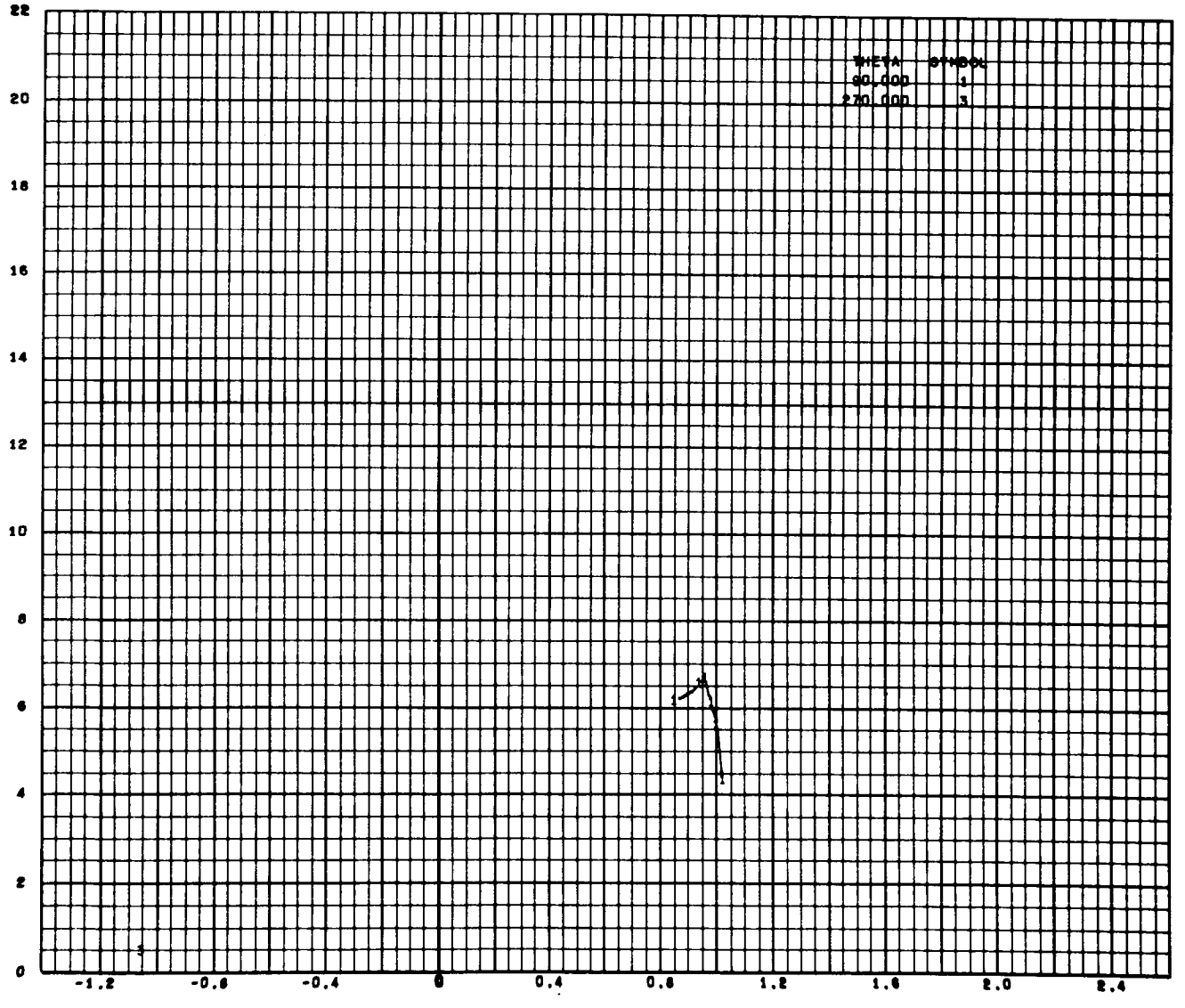
RE/FT --- 1.2153*10+6
Q(OM) --- 5.7355 BTU/SQ FT SEC

PLOT SERIES NUMBER 55

TEST GROUP	TIME (SEC)
92*	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
196 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 161.65 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 946.30 PSIA
TOTAL TEMPERATURE ---- 1829.40 DEG RANKINE

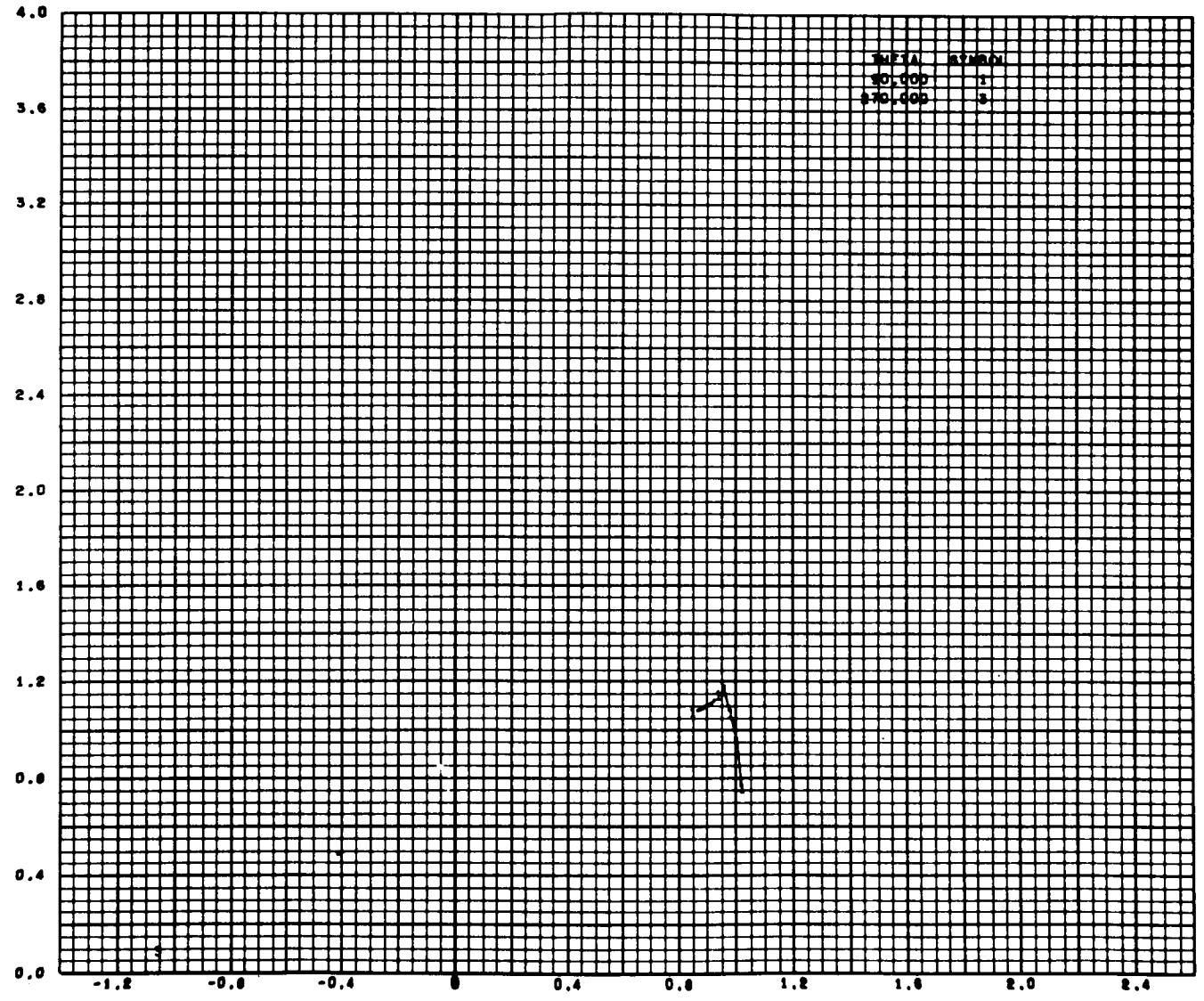
RE/FT --- 1.2153*10+6
Q(OM) --- 5.7355 BTU/SQ FT SEC

PLOT SERIES NUMBER 55

TEST GROUP	TIME (SEC)
92*	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
198 000



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[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 161.65 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 946.30 PSIA
TOTAL TEMPERATURE ---- 1829.40 DEG RANKINE

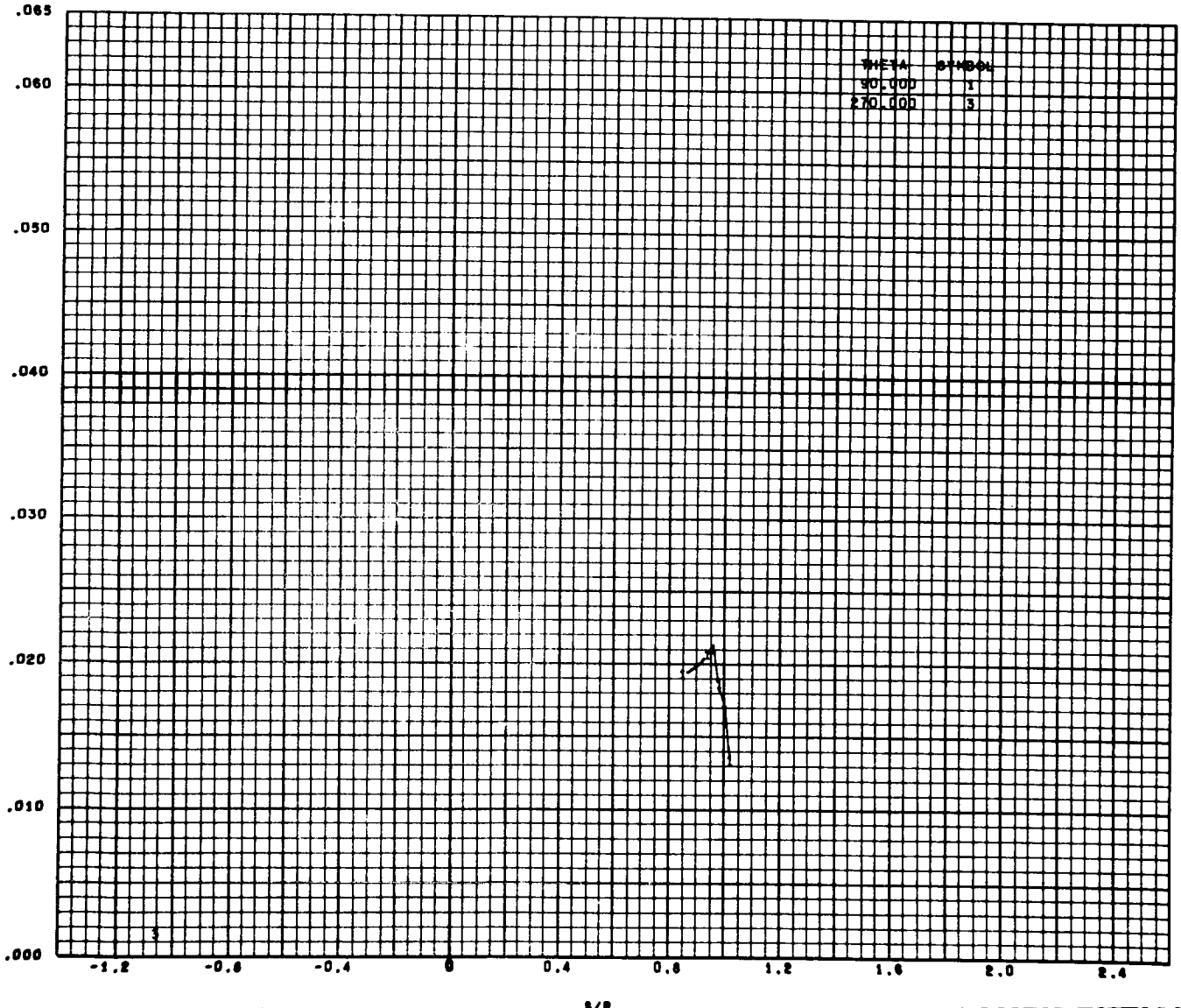
RE/FT --- 1.2153*10+6
Q(OM) --- 5.7355 BTU/SQ FT SEC

PLOT SERIES NUMBER 55

TEST GROUP	TIME (SEC)
92*	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
200 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 161.65 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 946.30 PSIA
TOTAL TEMPERATURE ---- 1829.40 DEG RANKINE

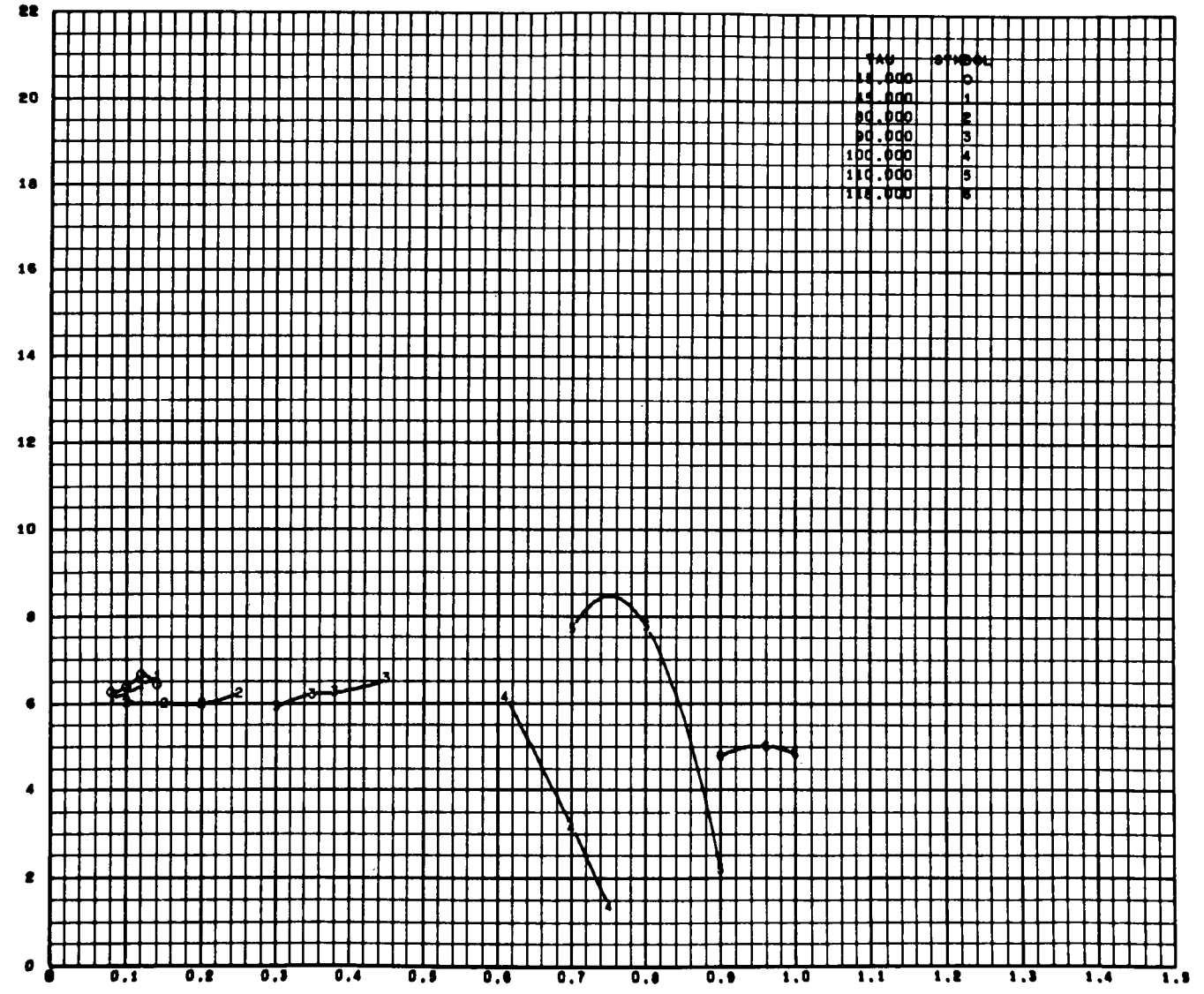
RE/FT --- 1.2153*10+6
Q(CM) --- 5.7355 BTU/SQ FT SE(

PLOT SERIES NUMBER 55

TEST GROUP	TIME (SEC)
92*	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
197 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
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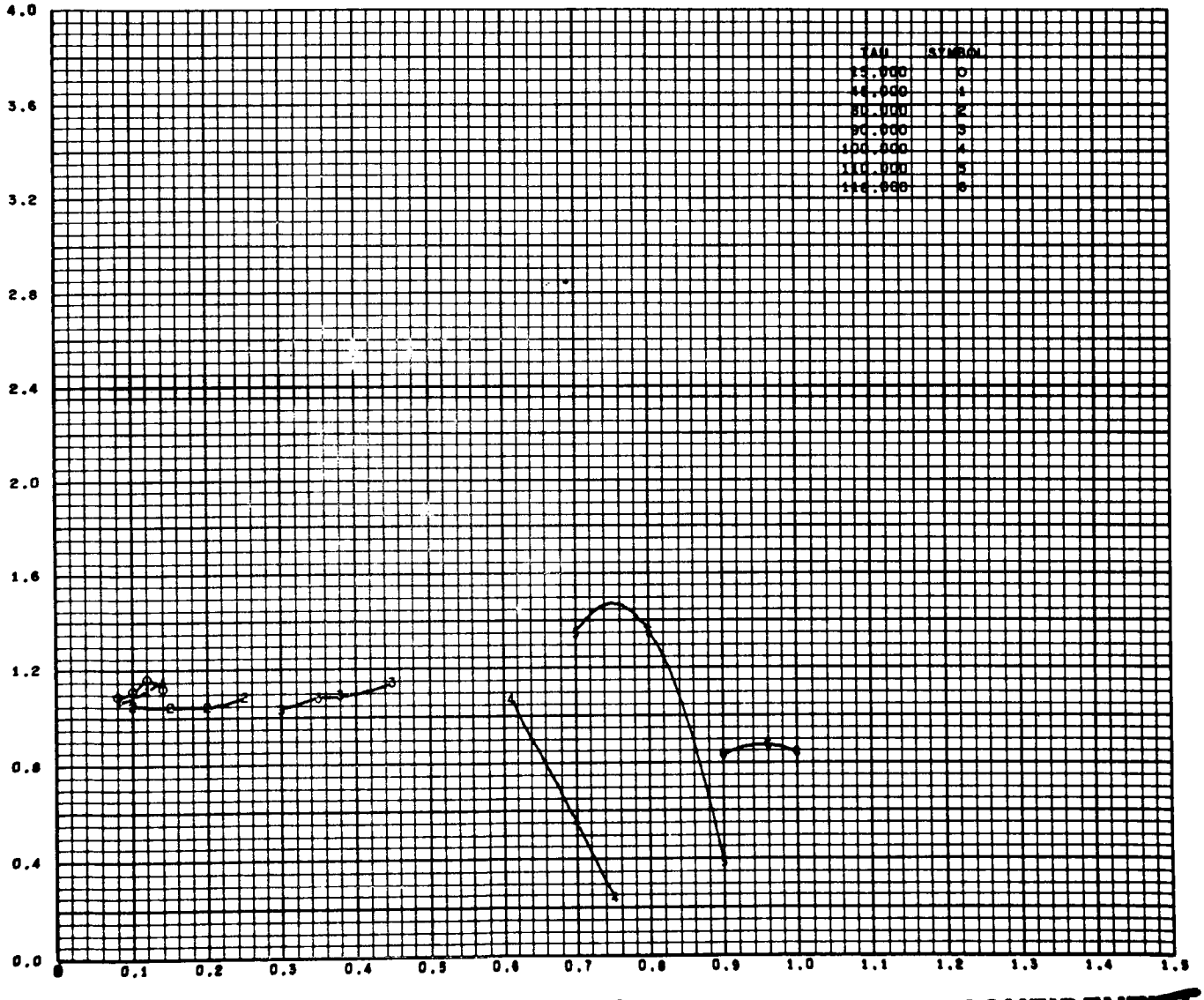
PLOT SERIES NUMBER 55

TEST GROUP	TIME (SEC)
92*	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
199 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 161.65 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 946.30 PSIA
TOTAL TEMPERATURE ---- 1829.40 DEG RANKINE

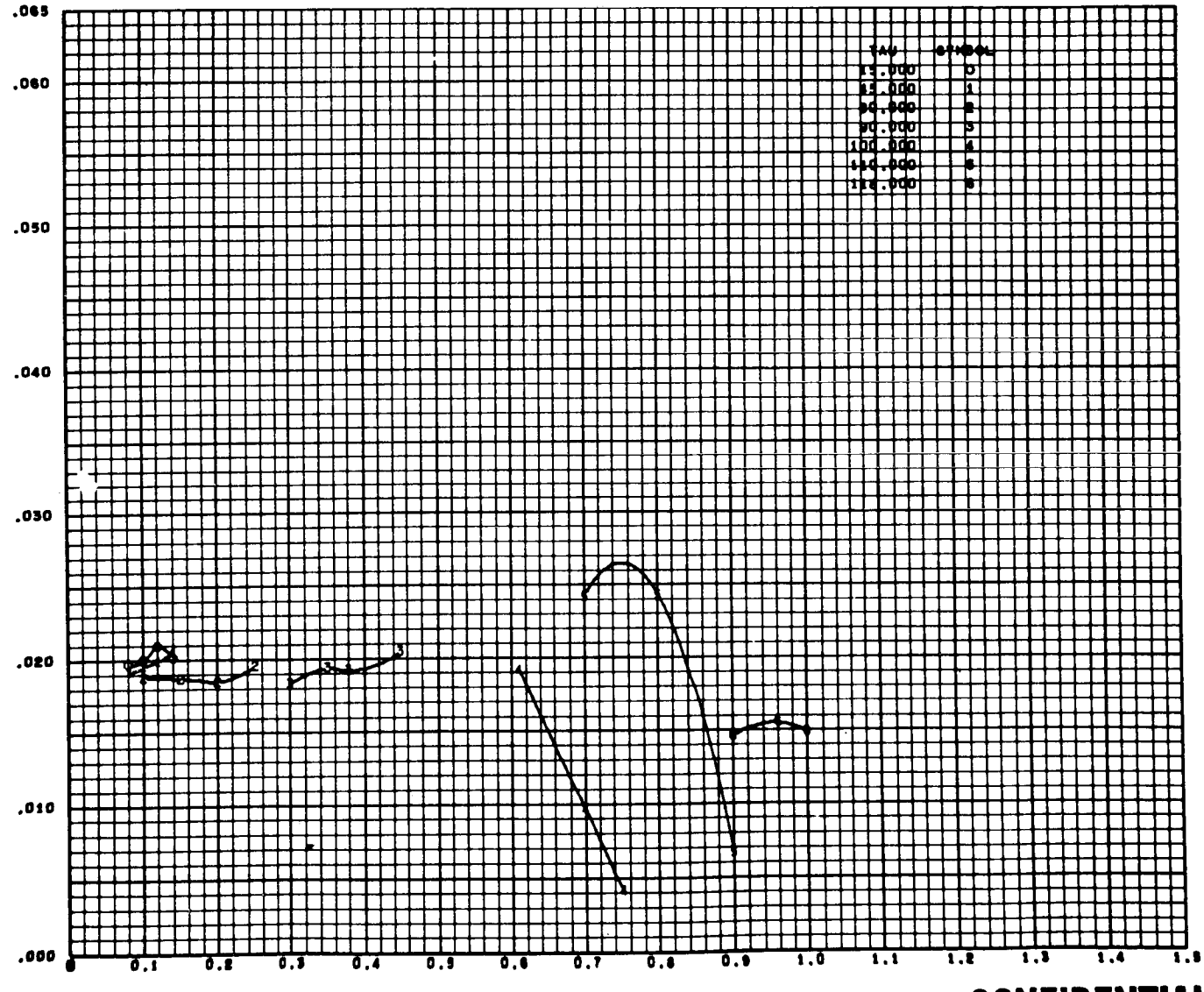
RE/FT --- 1.2153*10+6
Q(OM) --- 5.7355 BTU/SQ FT SEC

PLOT SERIES NUMBER 55

TEST GROUP	TIME (SEC)
92*	2.65

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
201 000



SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 142.64 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1850.00 PSIA
TOTAL TEMPERATURE ---- 1897.00 DEG RANKINE

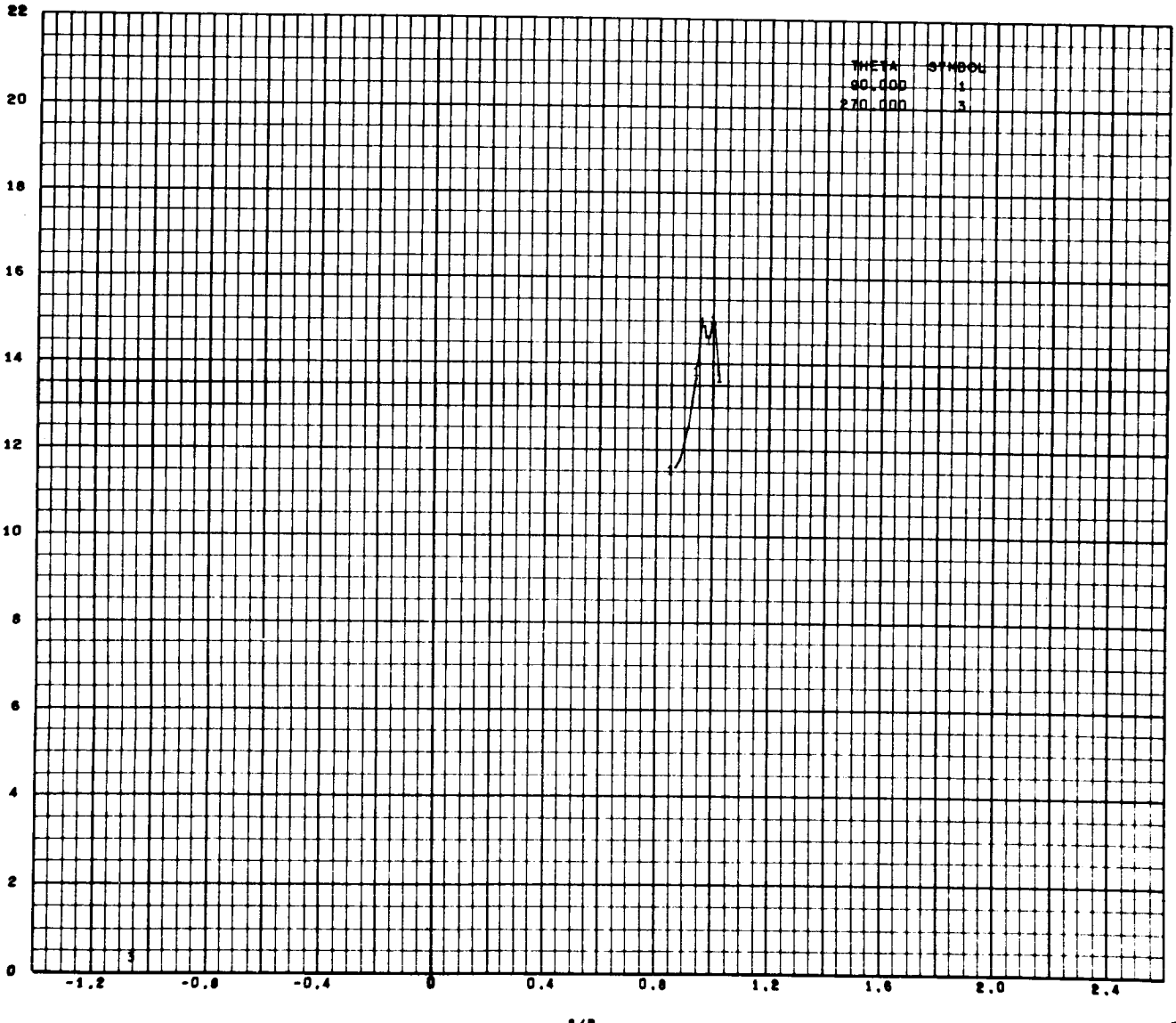
RE/FT --- 2.2360*10+6
Q(OM) --- 9.2484 BTU/SQ FT SEC

PLOT SERIES NUMBER 56

TEST GROUP	TIME (SEC)
93*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
202 000



BTU/SQ FT SEC

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 142.64 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1850.00 PSIA
TOTAL TEMPERATURE ---- 1897.00 DEG RANKINE

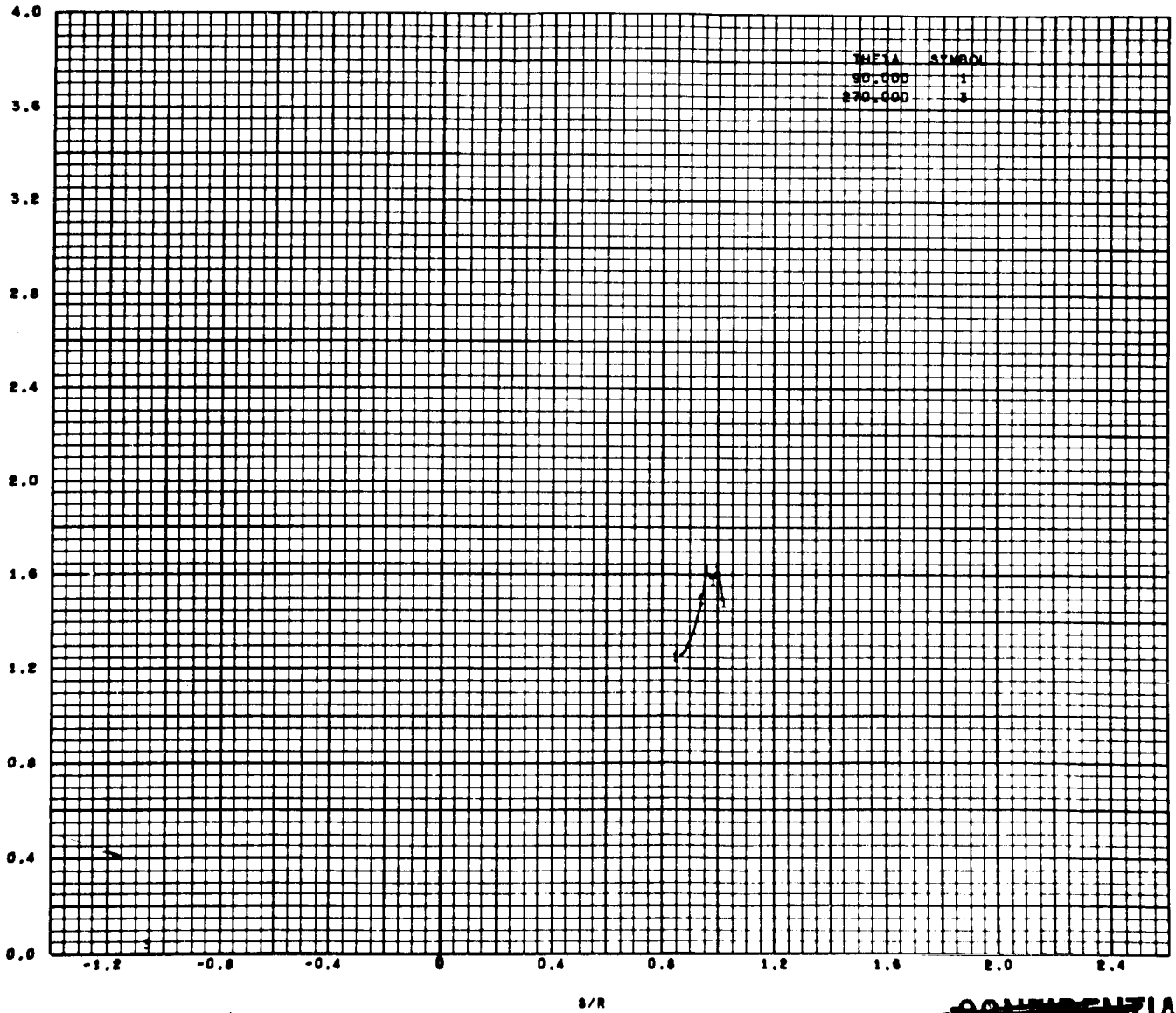
RE/FT --- 2.2360*10+6
Q(OM) --- 9.2484 BTU/SQ FT SEC

PLOT SERIES NUMBER 56

TEST GROUP	TIME (SEC)
93*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
204 000



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CONFIDENTIAL

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 142.64 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1850.00 PSIA
TOTAL TEMPERATURE ---- 1897.00 DEG RANKINE

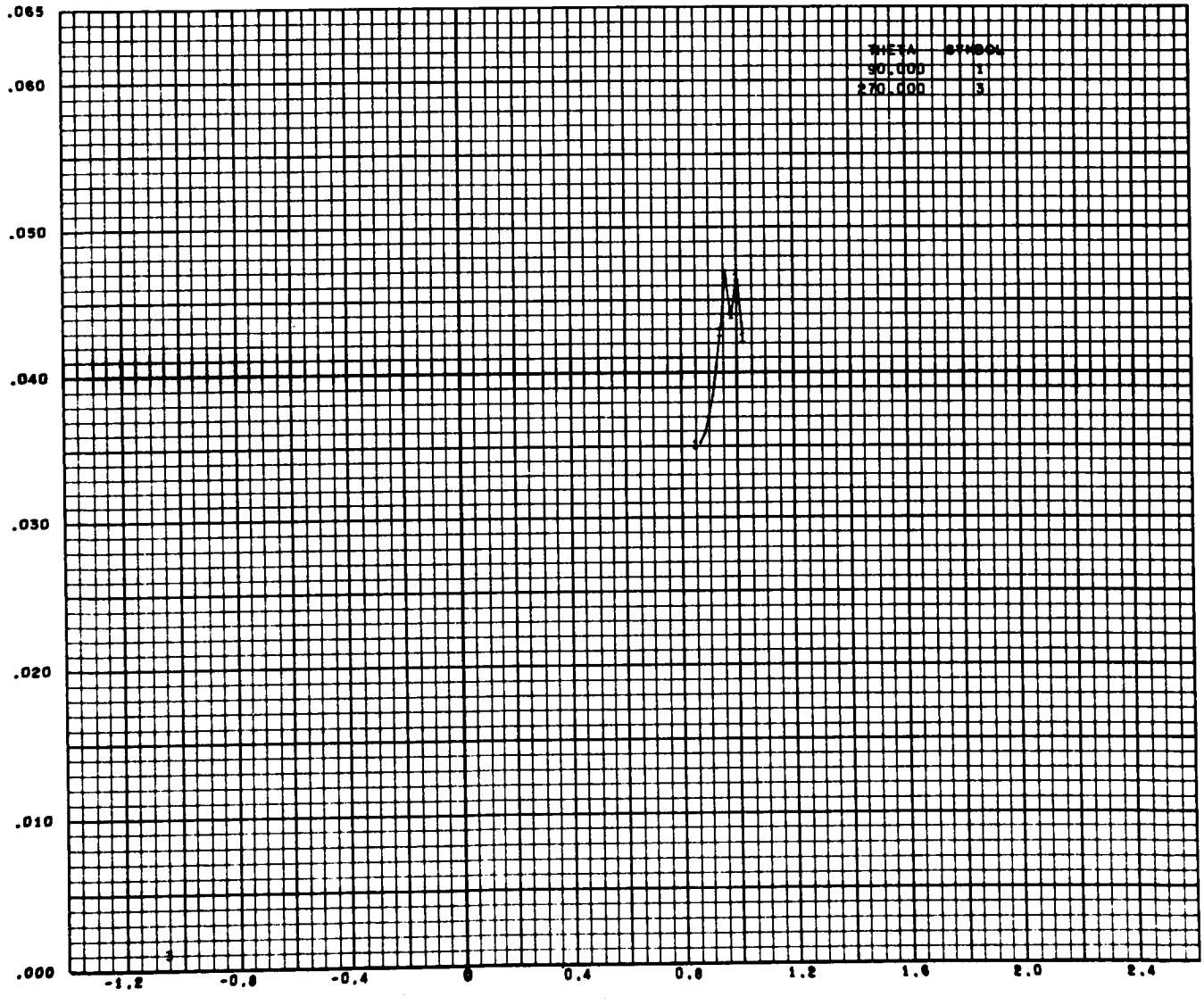
RE/FT --- 2.2360*10+6
Q(OM) --- 9.2484 BTU/SQ FT SEC

PLOT SERIES NUMBER 56

TEST GROUP	TIME (SEC)
93*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
206 000



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A-387 SID 64-2080

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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 142.64 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1850.00 PSIA
TOTAL TEMPERATURE ---- 1897.00 DEG RANKINE

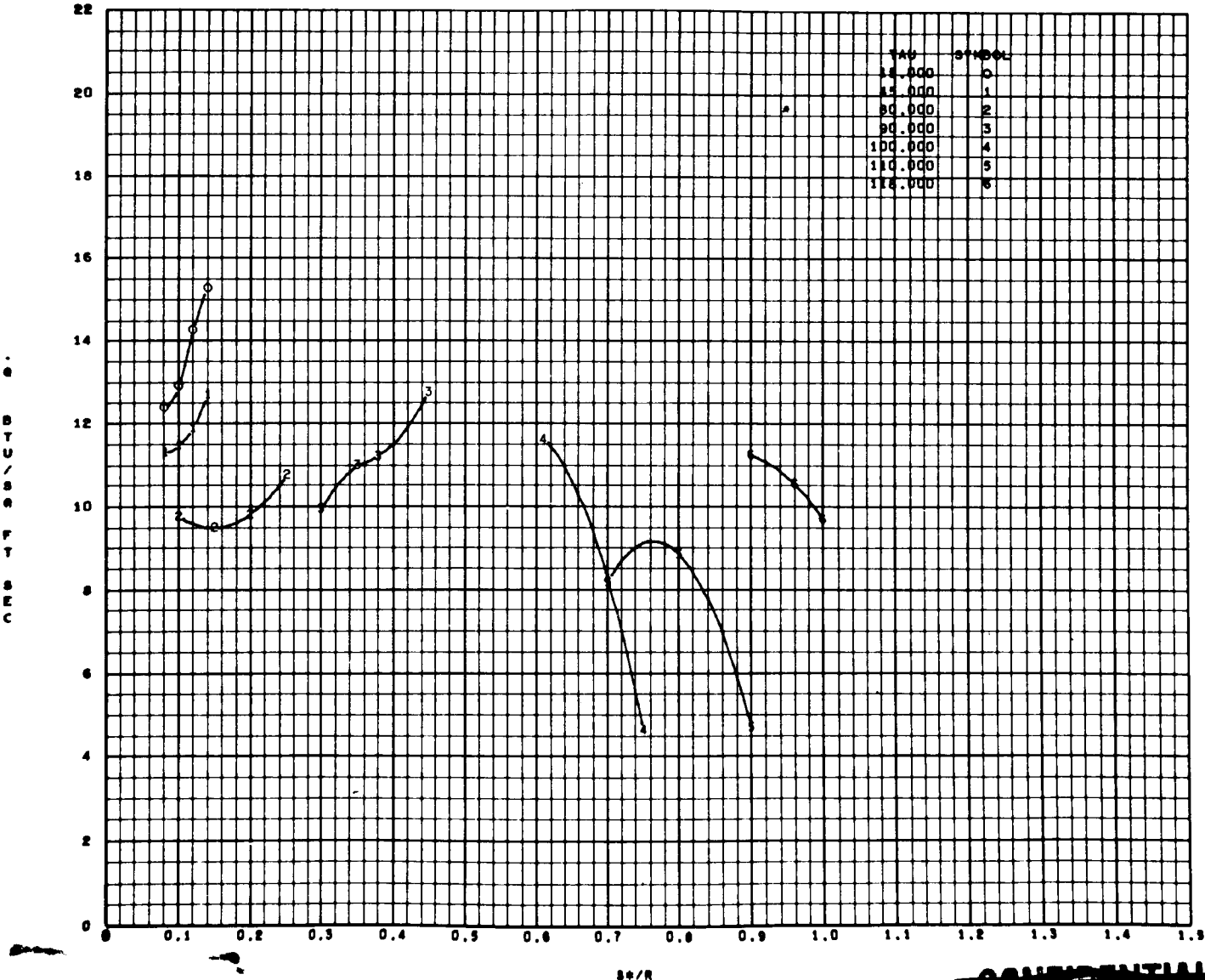
RE/FT --- 2.2360*10+6
Q(OM) --- 9.2484 BTU/SQ FT SEC

PLOT SERIES NUMBER 56

TEST GROUP	TIME (SEC)
93*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
203 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 142.64 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1850.00 PSIA
TOTAL TEMPERATURE ---- 1897.00 DEG RANKINE

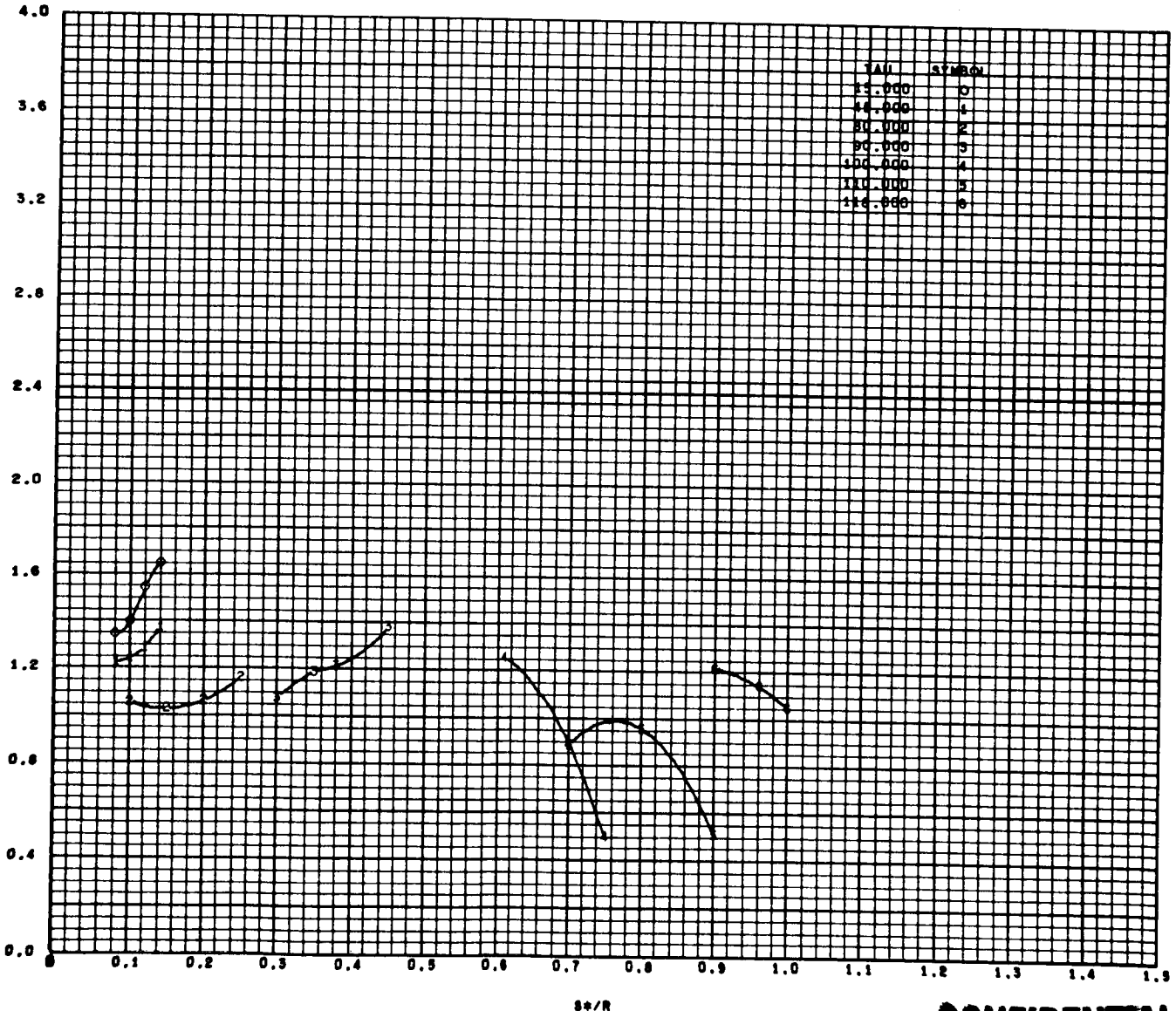
RE/FT --- 2.2360*10+6
Q(OM) --- 9.2484 BTU/SQ FT SEC

PLOT SERIES NUMBER 56

TEST GROUP	TIME (SEC)
93*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
205 000



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HEAT TRANSFER | CONFIGURATION C57 | PLOT SERIES NUMBER 56 | 3937-09 207 000

APOLLO M-11
AEDC, TUNNEL C
JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 142.64 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1850.00 PSIA
TOTAL TEMPERATURE ---- 1897.00 DEG RANKINE
RE/FT --- 2.2360*10+6
Q(OM) --- 9.2484 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
93*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.64 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1851.80 PSIA
TOTAL TEMPERATURE ---- 1896.80 DEG RANKINE

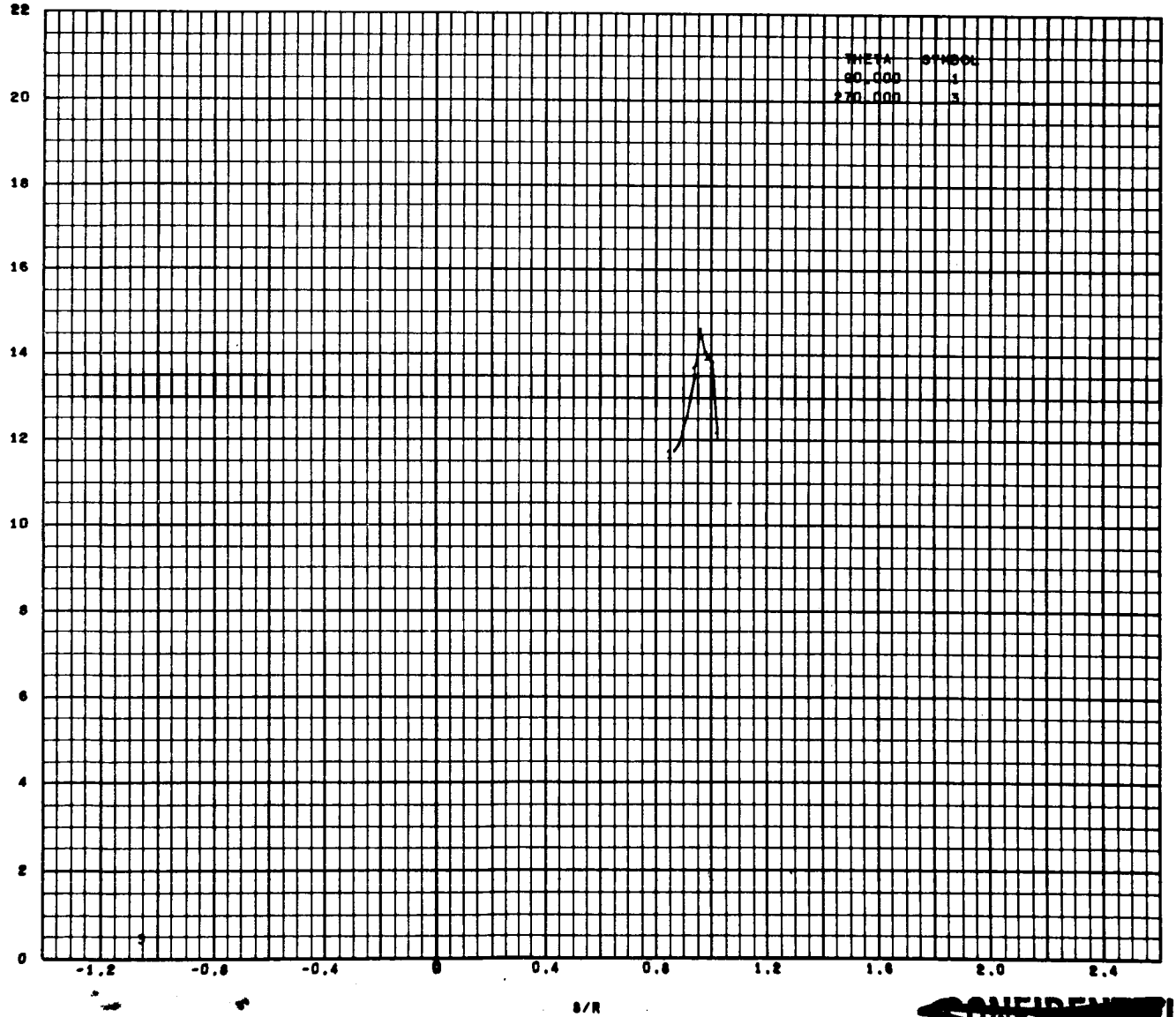
RE/FT --- 2.2385*10+6
Q(OM) --- 9.2539 BTU/SQ FT SEC

PLOT SERIES NUMBER 57

TEST GROUP	TIME (SEC)
94*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
208 000



A-391 SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.64 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1851.80 PSIA
TOTAL TEMPERATURE ---- 1896.80 DEG RANKINE

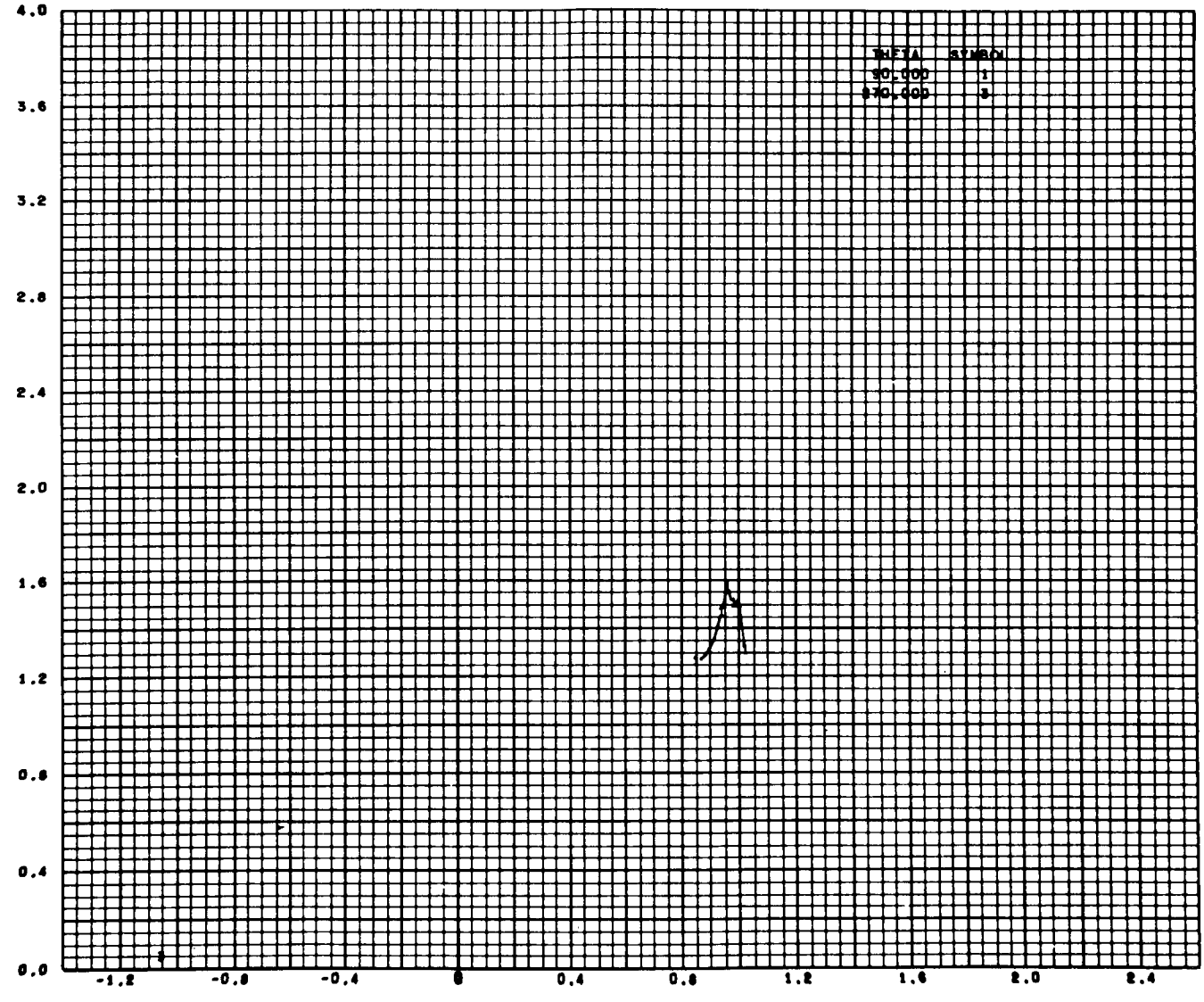
RE/FT --- 2.2385*10+6
Q(OM) --- 9.2539 BTU/SQ FT SEC

PLOT SERIES NUMBER 57

TEST GROUP	TIME (SEC)
94*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
210 000



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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.64 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1851.80 PSIA
TOTAL TEMPERATURE ---- 1896.80 DEG RANKINE

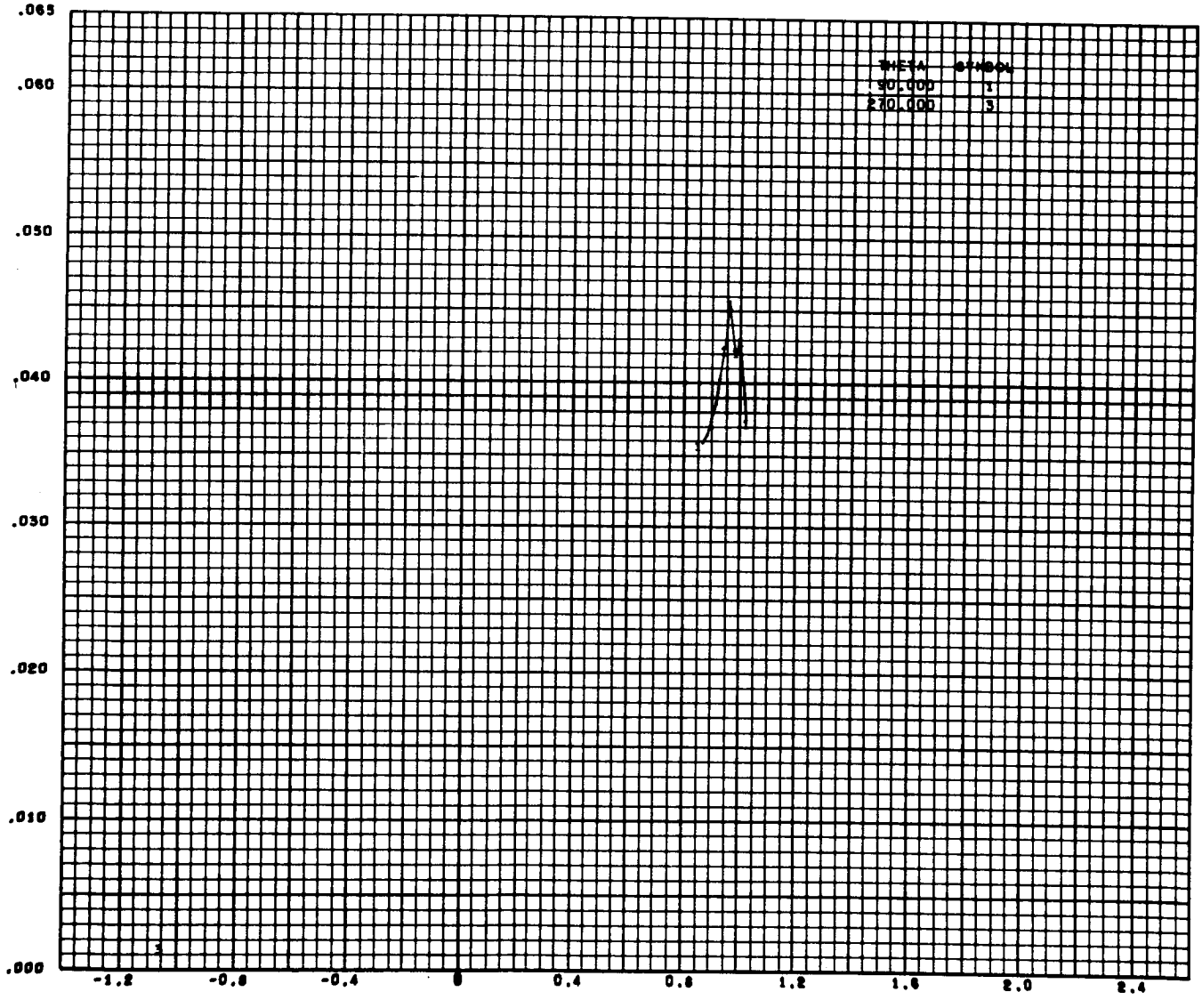
RE/FT --- 2.2385*10+6
Q(OM) --- 9.2539 BTU/SQ FT SEC

PLOT SERIES NUMBER 57

TEST GROUP	TIME (SEC)
94*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
212 000



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~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.64 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1851.80 PSIA
TOTAL TEMPERATURE ---- 1896.80 DEG RANKINE

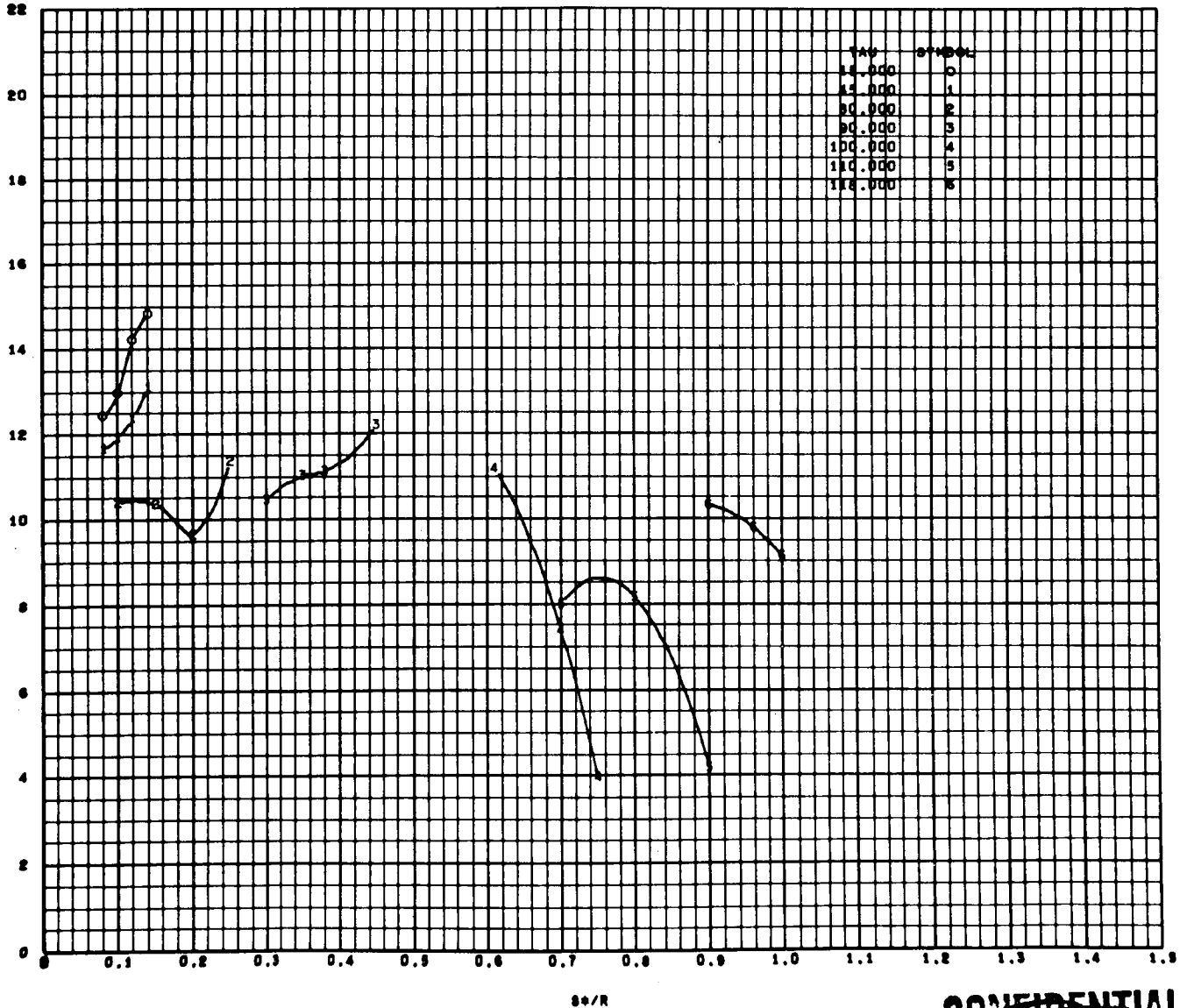
RE/FT --- 2.2385*10+6
Q(OM) --- 9.2539 BTU/SQ FT SEC

PLOT SERIES NUMBER 57

TEST GROUP	TIME (SEC)
94*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
209 000



~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.64 DEG
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TOTAL PRESSURE ------- 1851.80 PSIA
TOTAL TEMPERATURE ---- 1896.80 DEG RANKINE

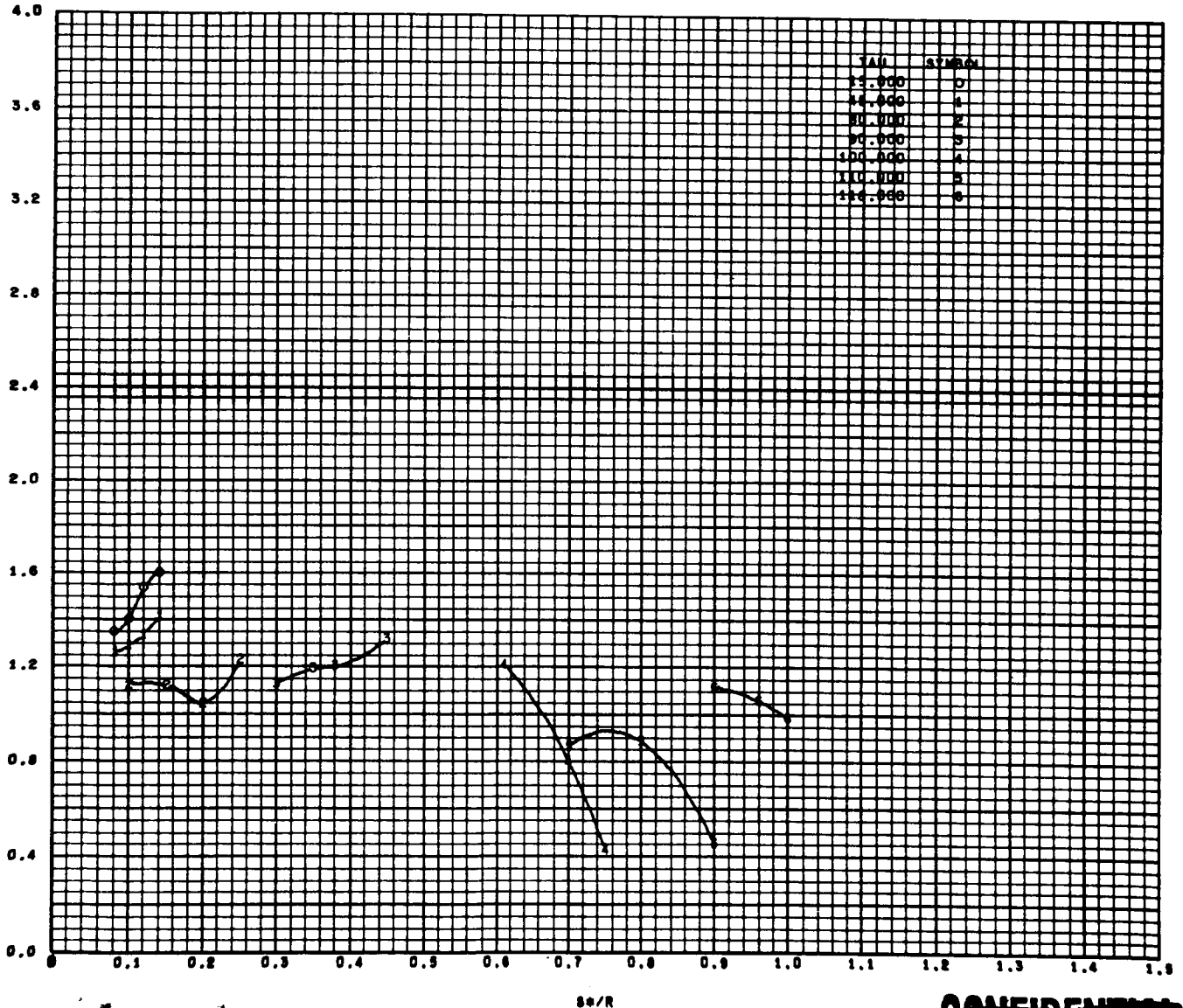
RE/FT --- 2.2385*10+6
Q(OM) --- 9.2539 BTU/SQ FT SEC

PLOT SERIES NUMBER 57

TEST GROUP	TIME (SEC)
94*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
211 000



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~~CONFIDENTIAL~~

HEAT TRANSFER | CONFIGURATION C57 | PLOT SERIES NUMBER 57 | 3937-09 213 000

APOLLO M-11

AEDC, TUNNEL C

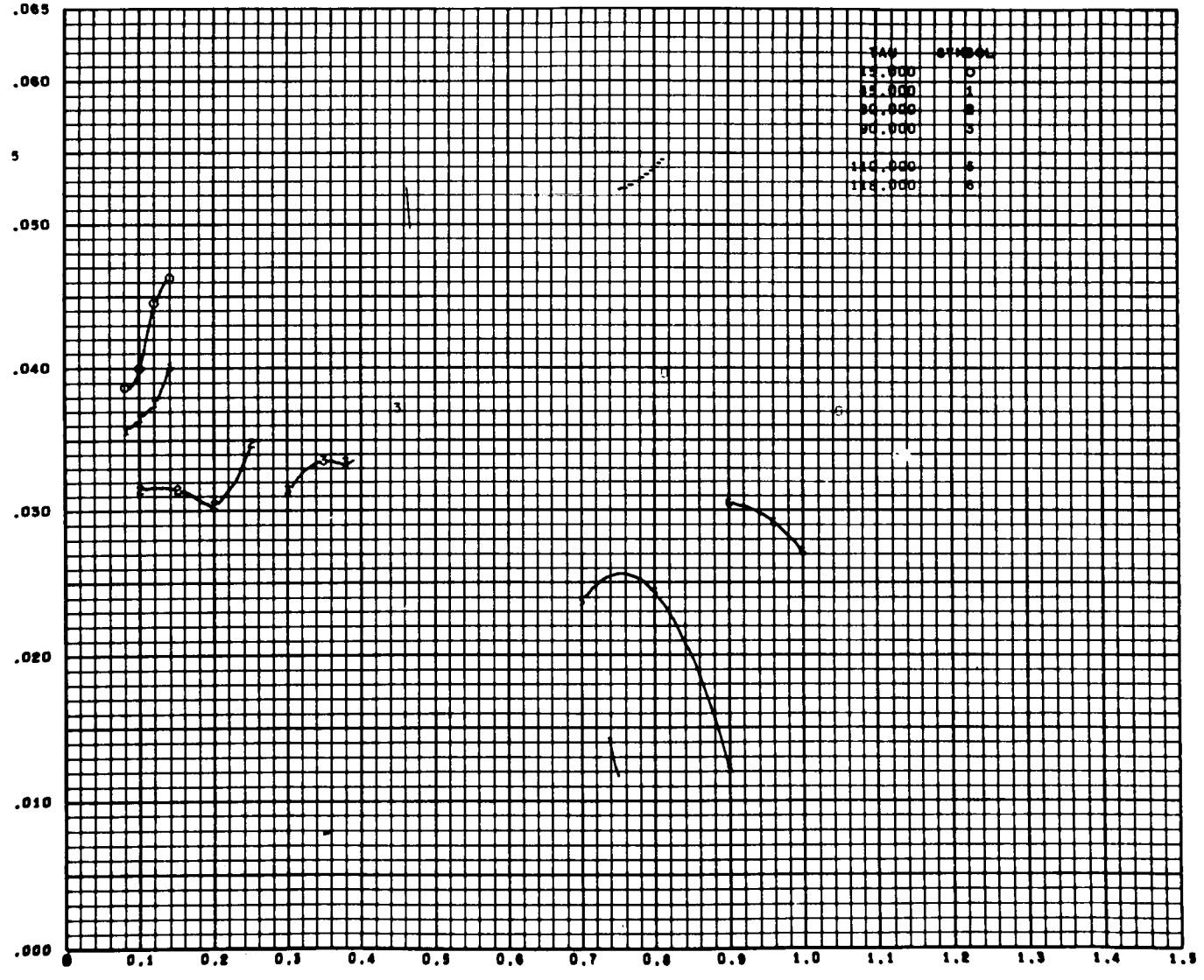
JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.64 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1851.80 PSIA
TOTAL TEMPERATURE ---- 1896.80 DEG RANKINE

RE/FT --- 2.2385*10+6
Q(OM) --- 9.2539 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
94*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



BTU/SQ FT SEC

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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.23 DEG
ANGLE OF YAW --------- -4.63 DEG
TOTAL PRESSURE ------- 1852.30 PSIA
TOTAL TEMPERATURE ---- 1906.00 DEG RANKINE

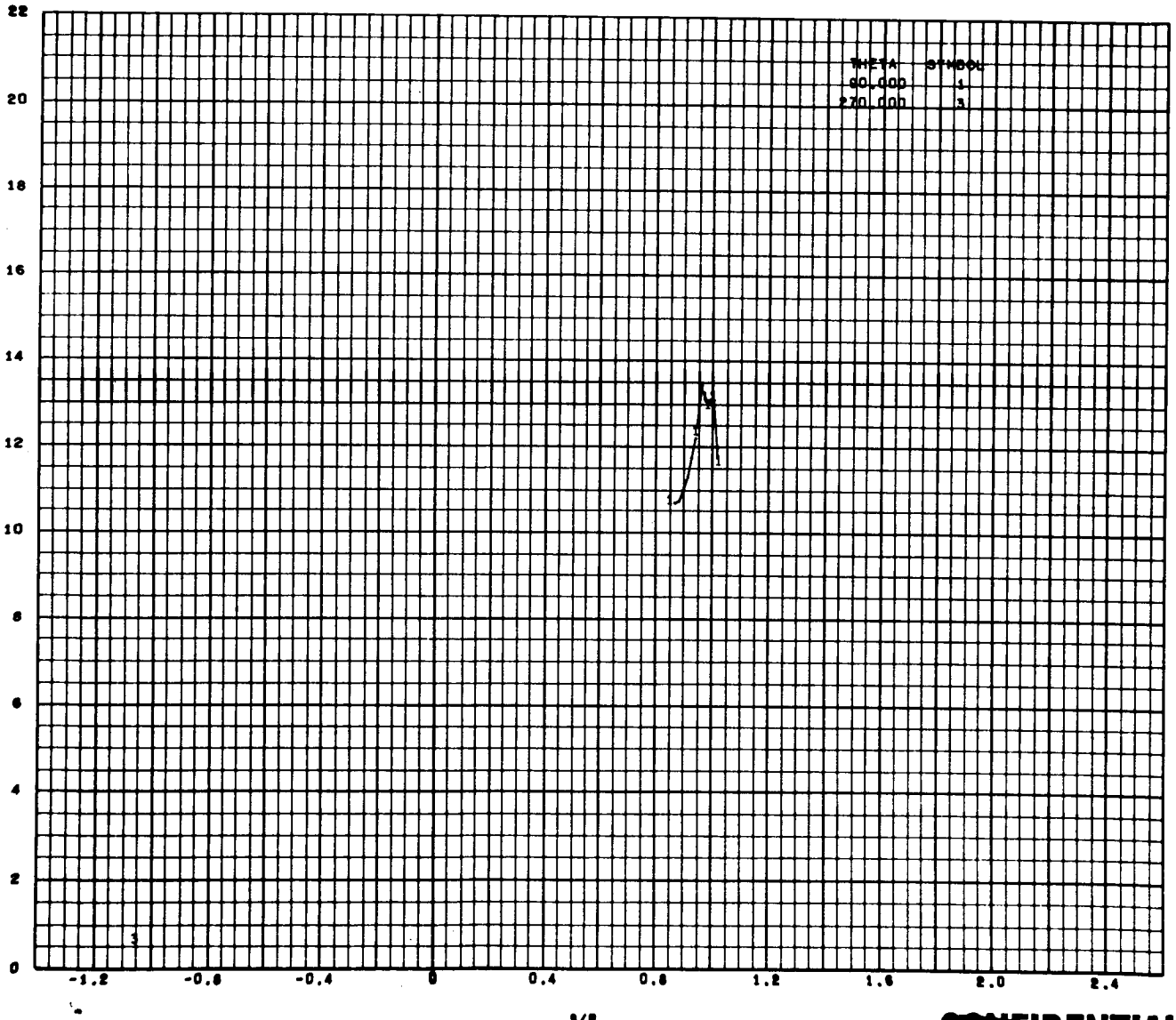
RE/FT --- 2.2193*10+6
Q(OM) --- 9.2555 BTU/SQ FT SEC

PLOT SERIES NUMBER 58

TEST GROUP	TIME (SEC)
95*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
214 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.23 DEG
ANGLE OF YAW --------- -4.63 DEG
TOTAL PRESSURE ------- 1852.30 PSIA
TOTAL TEMPERATURE ---- 1906.00 DEG RANKINE

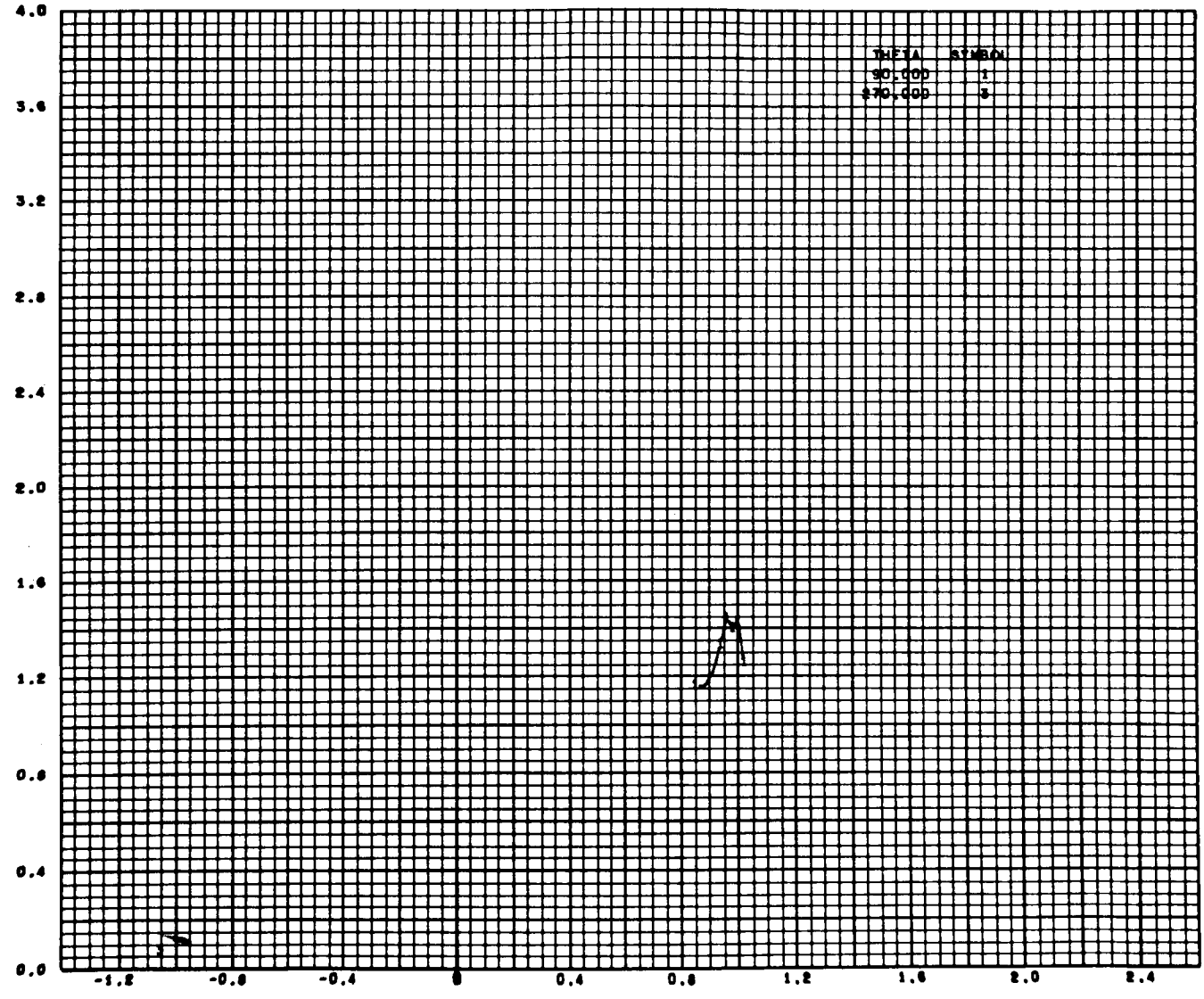
RE/FT --- 2.2193*10+6
Q(OM) --- 9.2555 BTU/SQ FT SEC

PLOT SERIES NUMBER 58

TEST GROUP	TIME (SEC)
95*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
216 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.23 DEG
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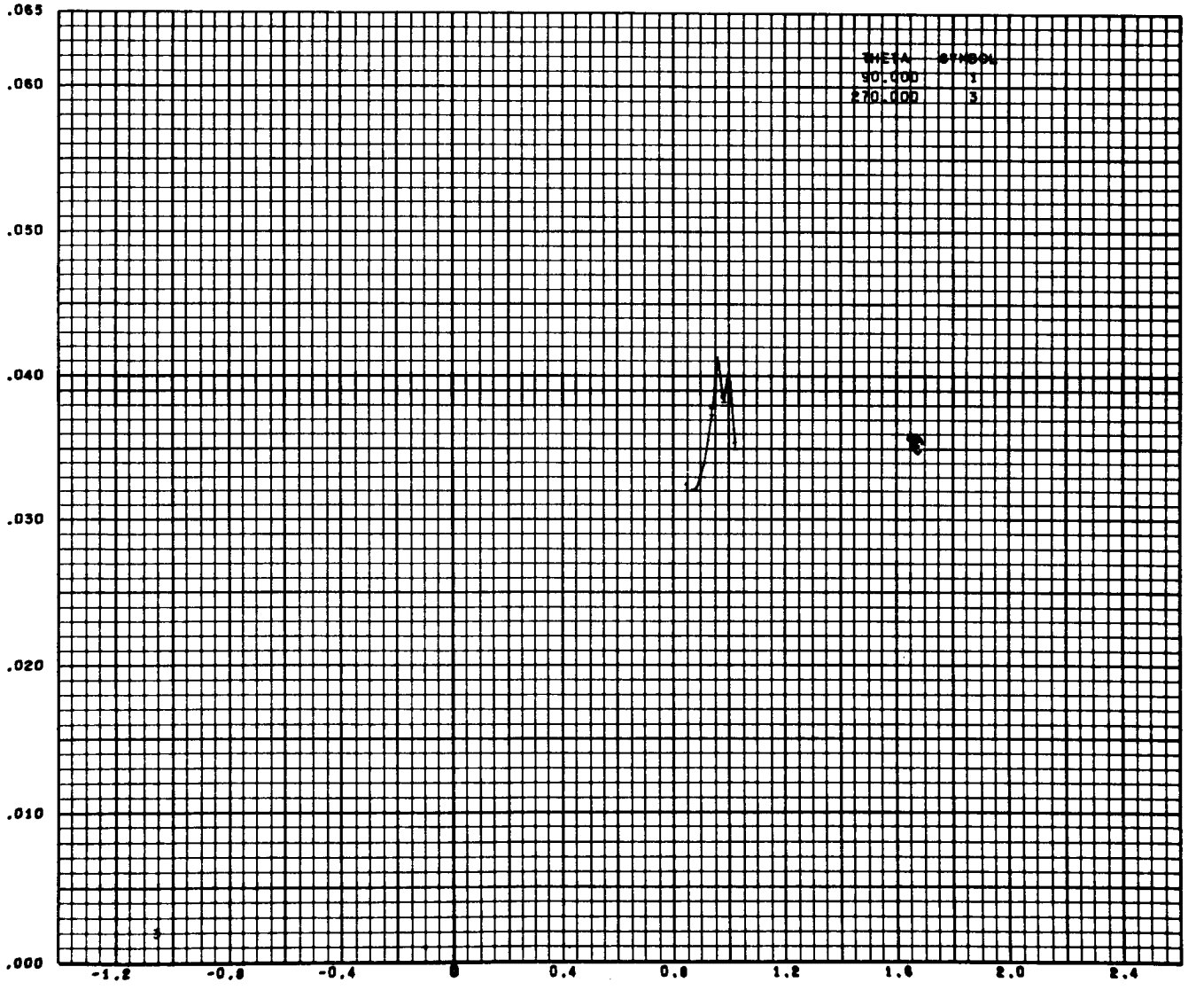
RE/FT --- 2.2193*10+6
Q(OM) --- 9.2555 BTU/SQ FT SEC

PLOT SERIES NUMBER 58

TEST GROUP	TIME (SEC)
95*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
218 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.23 DEG
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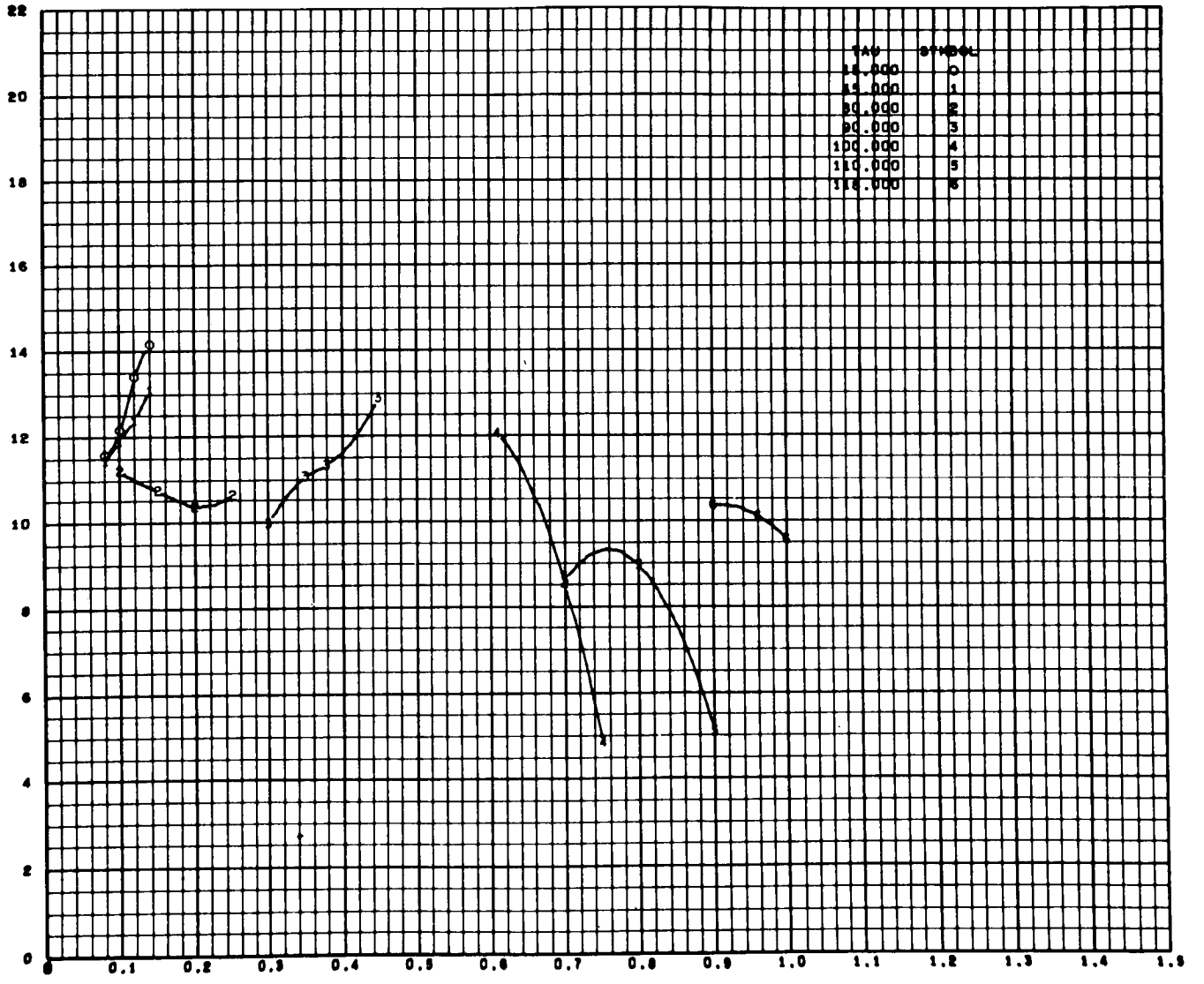
RE/FT --- 2.2193*10+6
Q(OM) --- 9.2555 BTU/SQ FT SEC

PLOT SERIES NUMBER 58

TEST GROUP	TIME (SEC)
95*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
215 000



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[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.23 DEG
ANGLE OF YAW --------- -4.63 DEG
TOTAL PRESSURE ------- 1852.30 PSIA
TOTAL TEMPERATURE ---- 1906.00 DEG RANKINE

RE/FT --- 2.2193*10+6
Q(OM) --- 9.2555 BTU/SQ FT SEC

PLOT SERIES NUMBER 58

TEST GROUP	TIME (SEC)
95*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
217 000

[redacted]

~~CONFIDENTIAL~~

HEAT TRANSFER

CONFIGURATION C57

PLOT SERIES NUMBER 58

3937-09
219 000

APOLLO H-11

AEDC, TUNNEL C

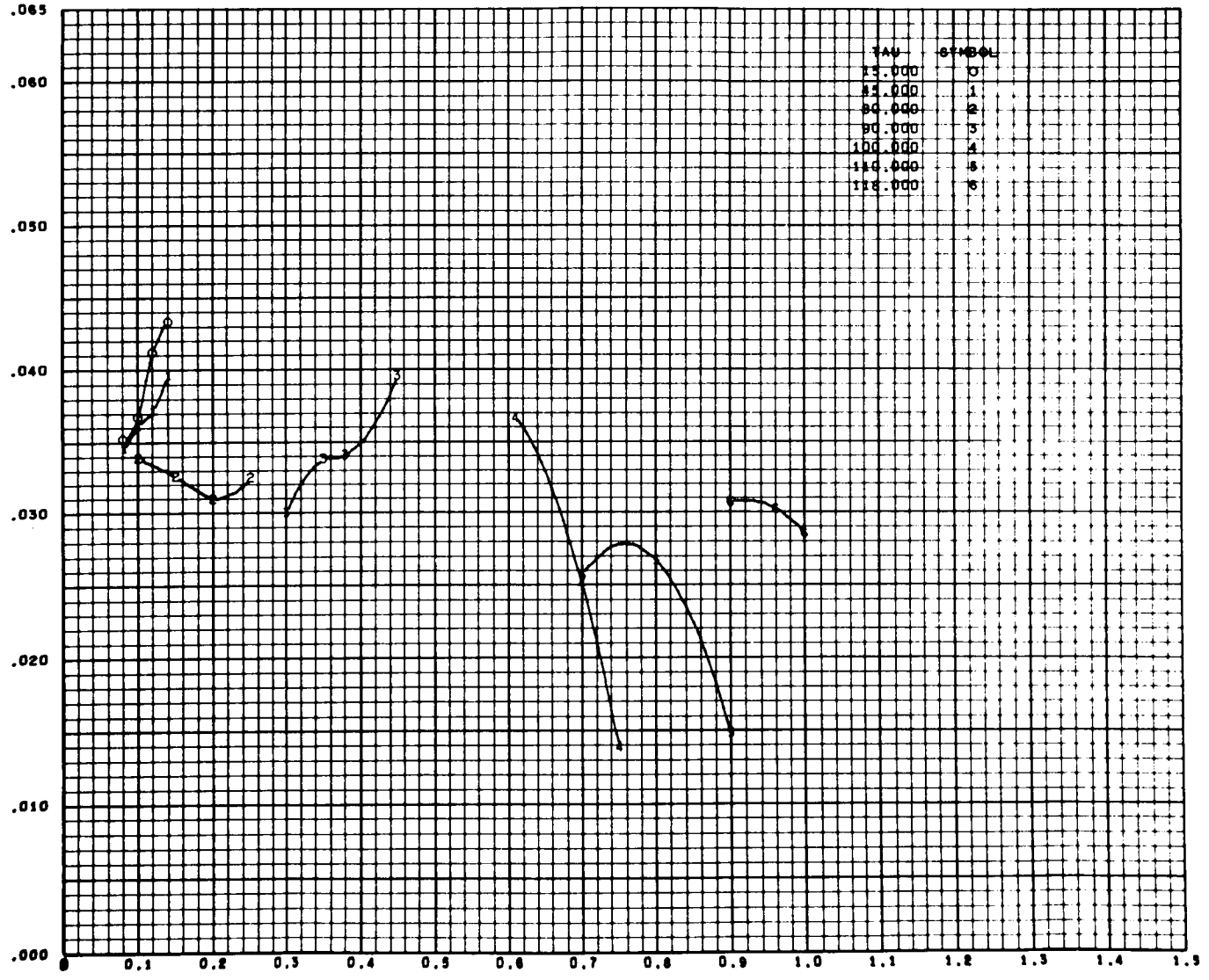
JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.23 DEG
ANGLE OF YAW --------- -4.63 DEG
TOTAL PRESSURE ------- 1852.30 PSIA
TOTAL TEMPERATURE ---- 1906.00 DEG RANKINE

RE/FT --- 2.2193*10+6
Q(OM) --- 9.2555 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
95*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.24 DEG
ANGLE OF YAW --------- 4.60 DEG
TOTAL PRESSURE ------- 1845.30 PSIA
TOTAL TEMPERATURE ---- 1896.80 DEG RANKINE

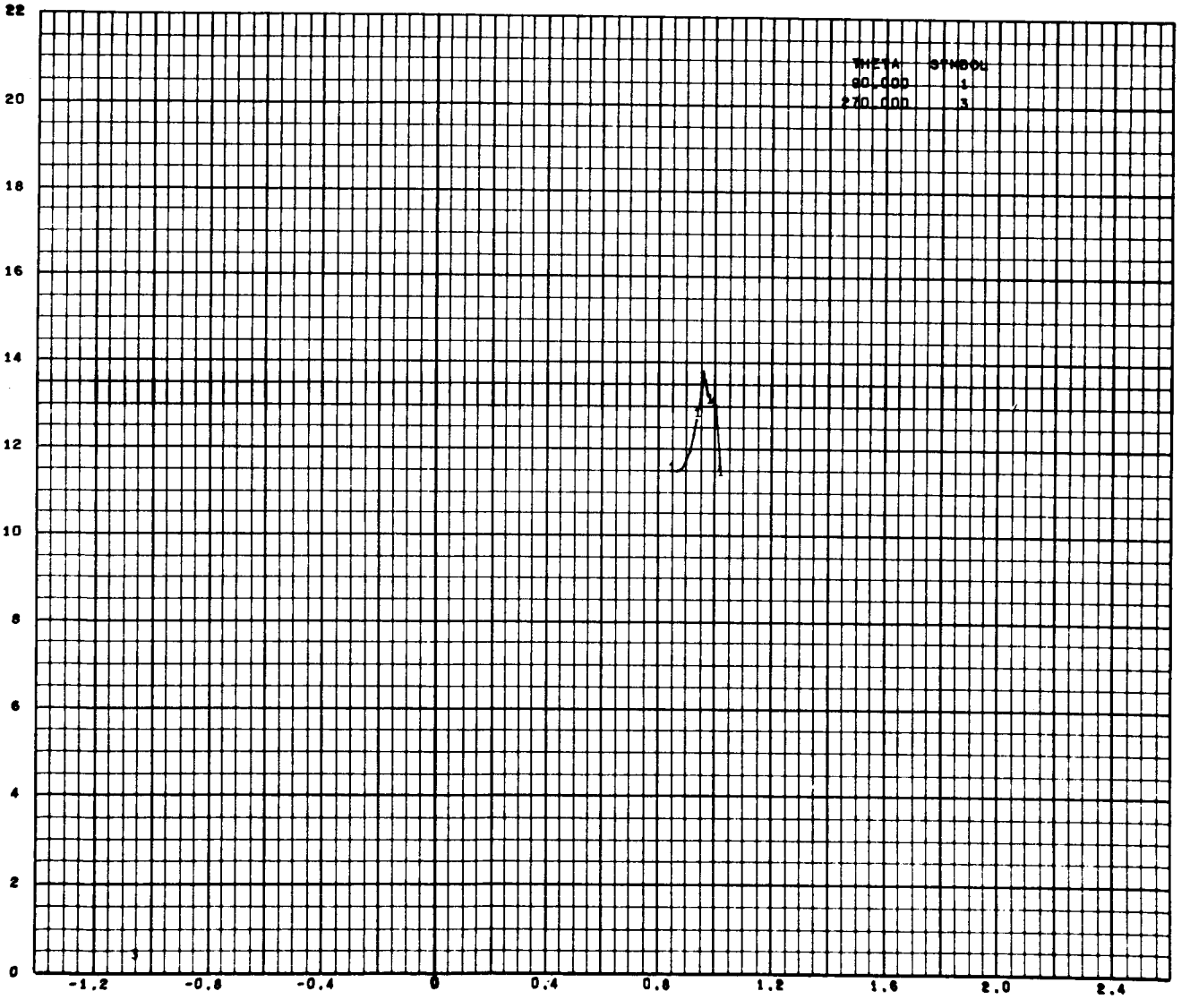
RE/FT --- 2.2305*10+6
Q(OM) --- 9.2333 BTU/SQ FT SEC

PLOT SERIES NUMBER 59

TEST GROUP	TIME (SEC)
96*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
220 000



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A-403 SID 64-2080

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.24 DEG
ANGLE OF YAW --------- 4.60 DEG
TOTAL PRESSURE ------- 1845.30 PSIA
TOTAL TEMPERATURE ---- 1896.80 DEG RANKINE

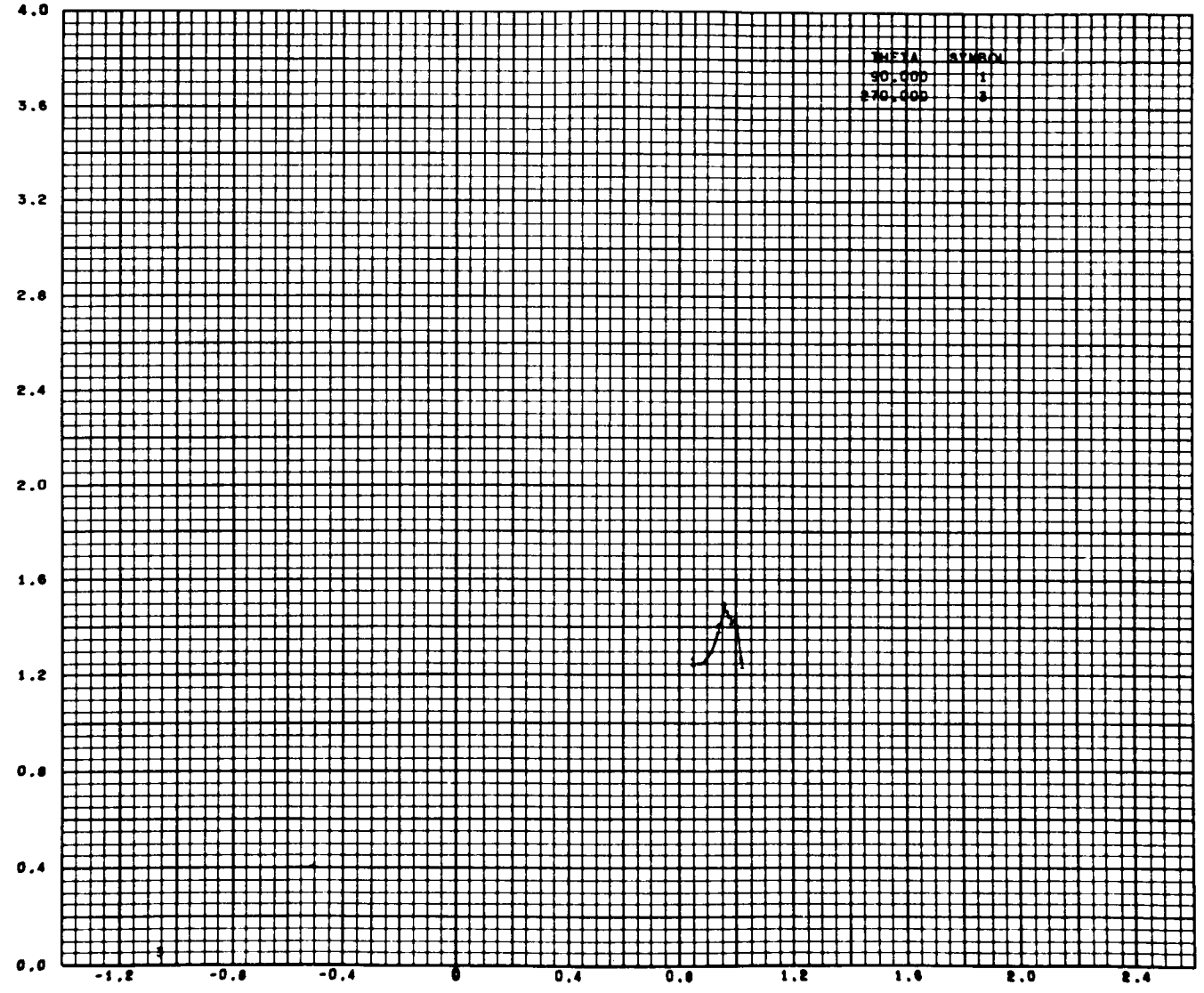
RE/FT --- 2.2305*10+6
Q(OM) --- 9.2333 BTU/SQ FT SEC

PLOT SERIES NUMBER 59

TEST GROUP	TIME (SEC)
96*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
222 000



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A-404

SID 64-2080

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.24 DEG
ANGLE OF YAW --------- 4.60 DEG
TOTAL PRESSURE -------- 1845.30 PSIA
TOTAL TEMPERATURE ---- 1896.80 DEG RANKINE

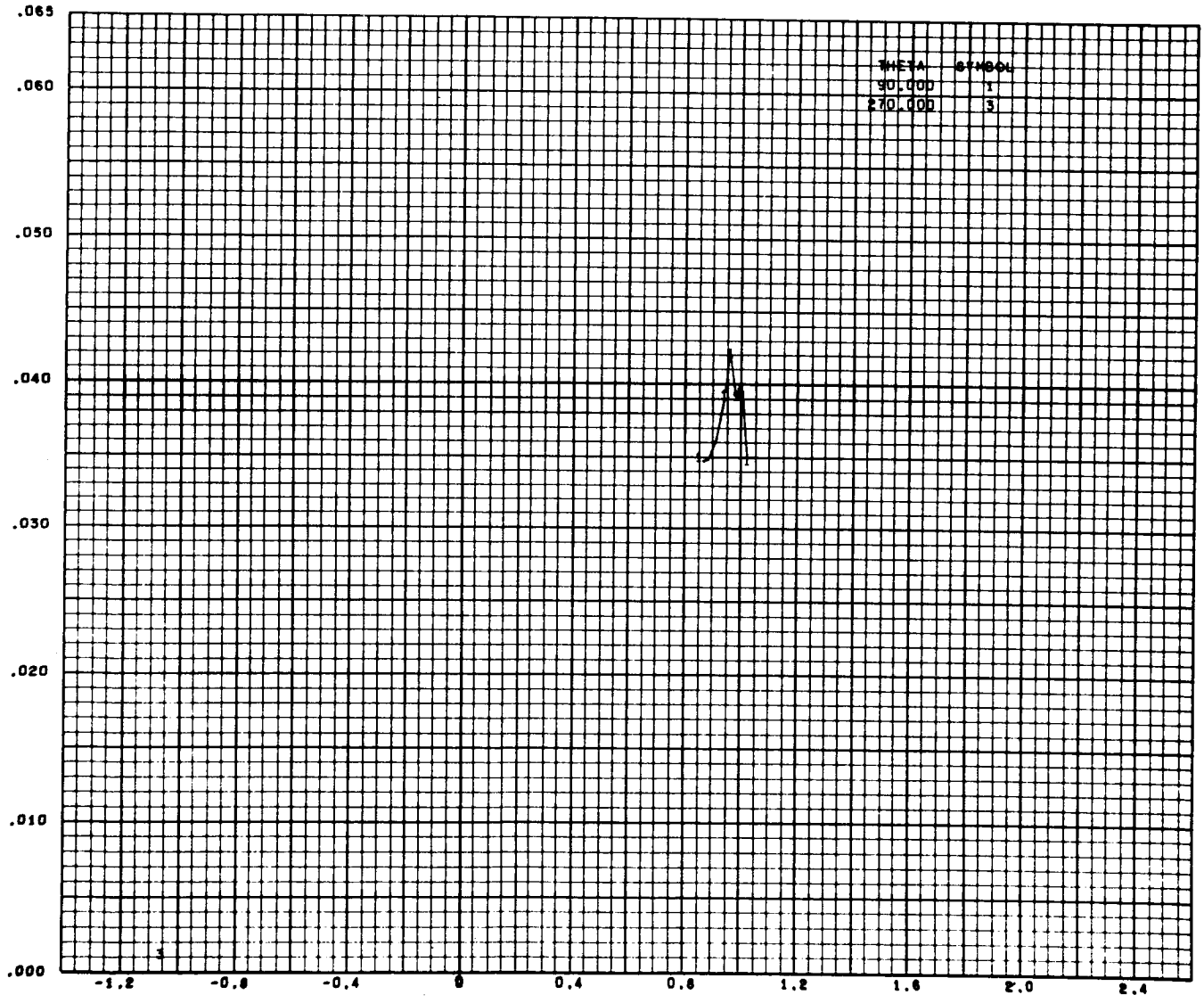
RE/FT --- 2.2305*10+6
Q(OM) --- 9.2333 BTU/SQ FT SEC

PLOT SERIES NUMBER 59

TEST GROUP	TIME (SEC)
96*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
224 000



A-405 SID 64-2080

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.24 DEG
ANGLE OF YAW --------- 4.60 DEG
TOTAL PRESSURE ------- 1845.30 PSIA
TOTAL TEMPERATURE ---- 1896.80 DEG RANKINE

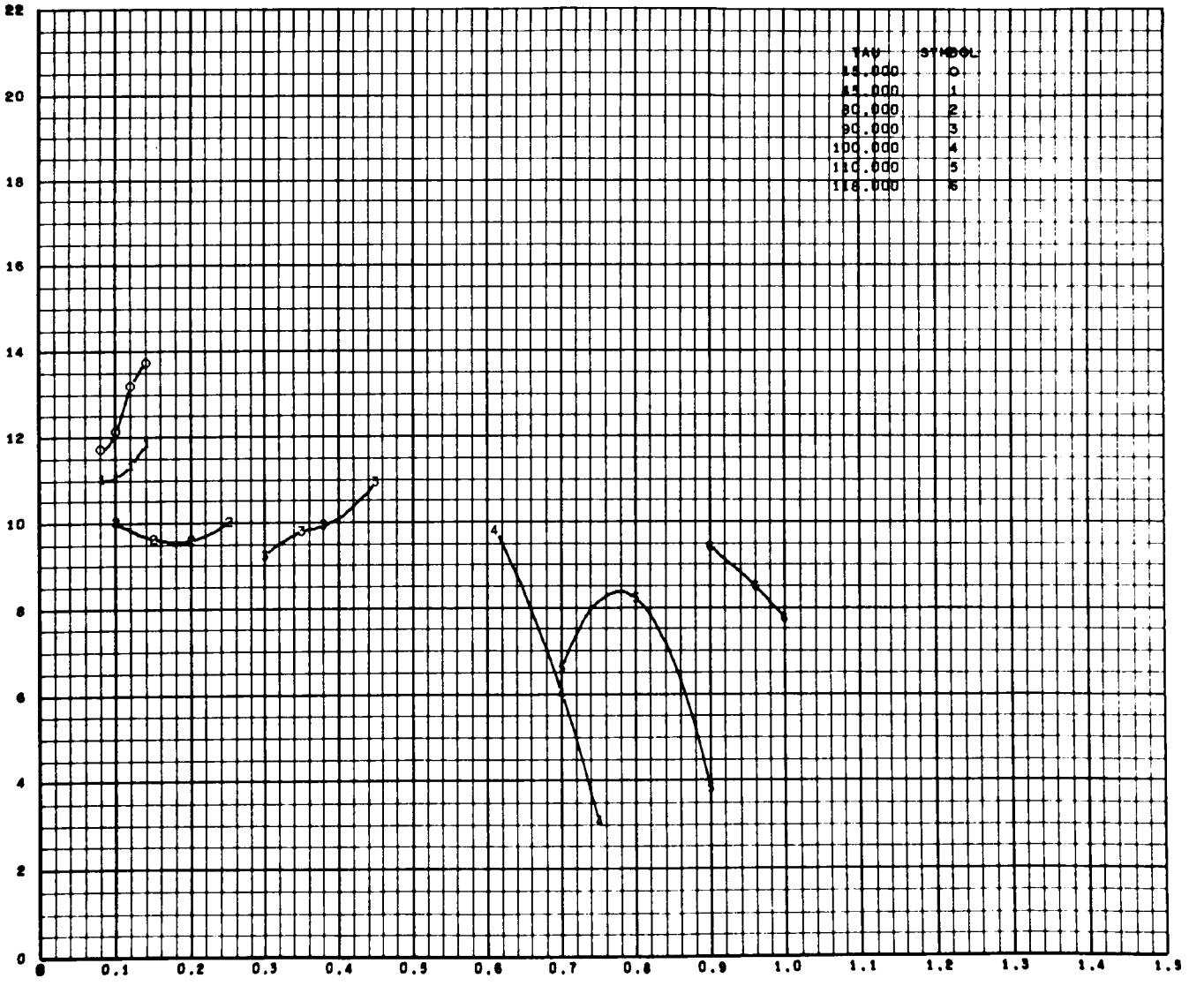
RE/FT --- 2.2305*10+6
Q(OM) --- 9.2333 BTU/SQ FT SEC

PLOT SERIES NUMBER 59

TEST GROUP	TIME (SEC)
96*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
221 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.24 DEG
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TOTAL PRESSURE ------- 1845.30 PSIA
TOTAL TEMPERATURE ---- 1896.80 DEG RANKINE

RE/FT --- 2.2305*10+6
Q(OM) --- 9.2333 BTU/SQ FT SEC

PLOT SERIES NUMBER 59

TEST GROUP	TIME (SEC)
96*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
223 000

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.24 DEG
ANGLE OF YAW --------- 4.60 DEG
TOTAL PRESSURE ------- 1845.30 PSIA
TOTAL TEMPERATURE ---- 1896.80 DEG RANKINE

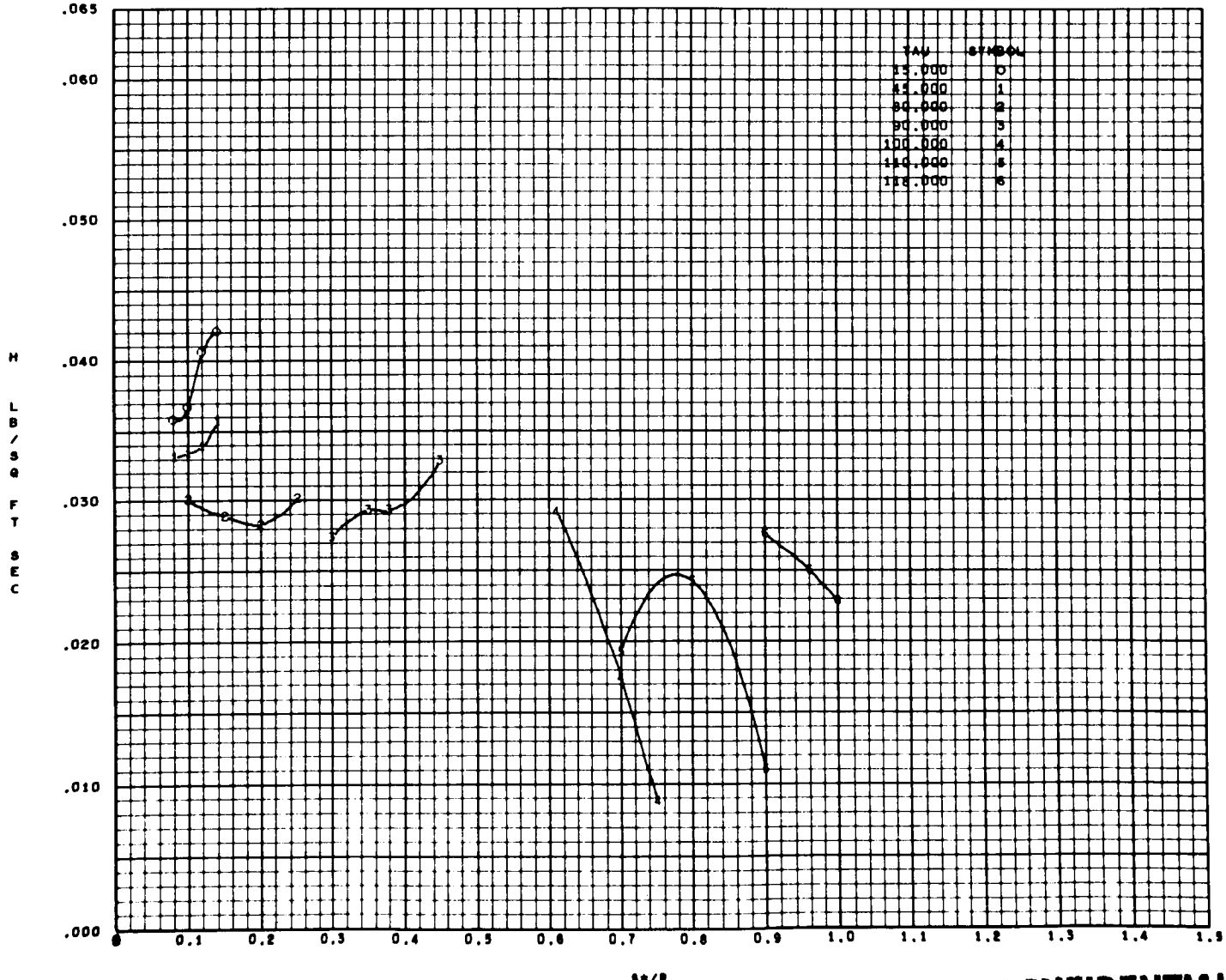
RE/FT --- 2.2305*10+6
Q(OM) --- 9.2333 BTU/SQ FT SEC

PLOT SERIES NUMBER 59

TEST GROUP	TIME (SEC)
96*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
225 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 153.65 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1844.80 PSIA
TOTAL TEMPERATURE ---- 1896.30 DEG RANKINE

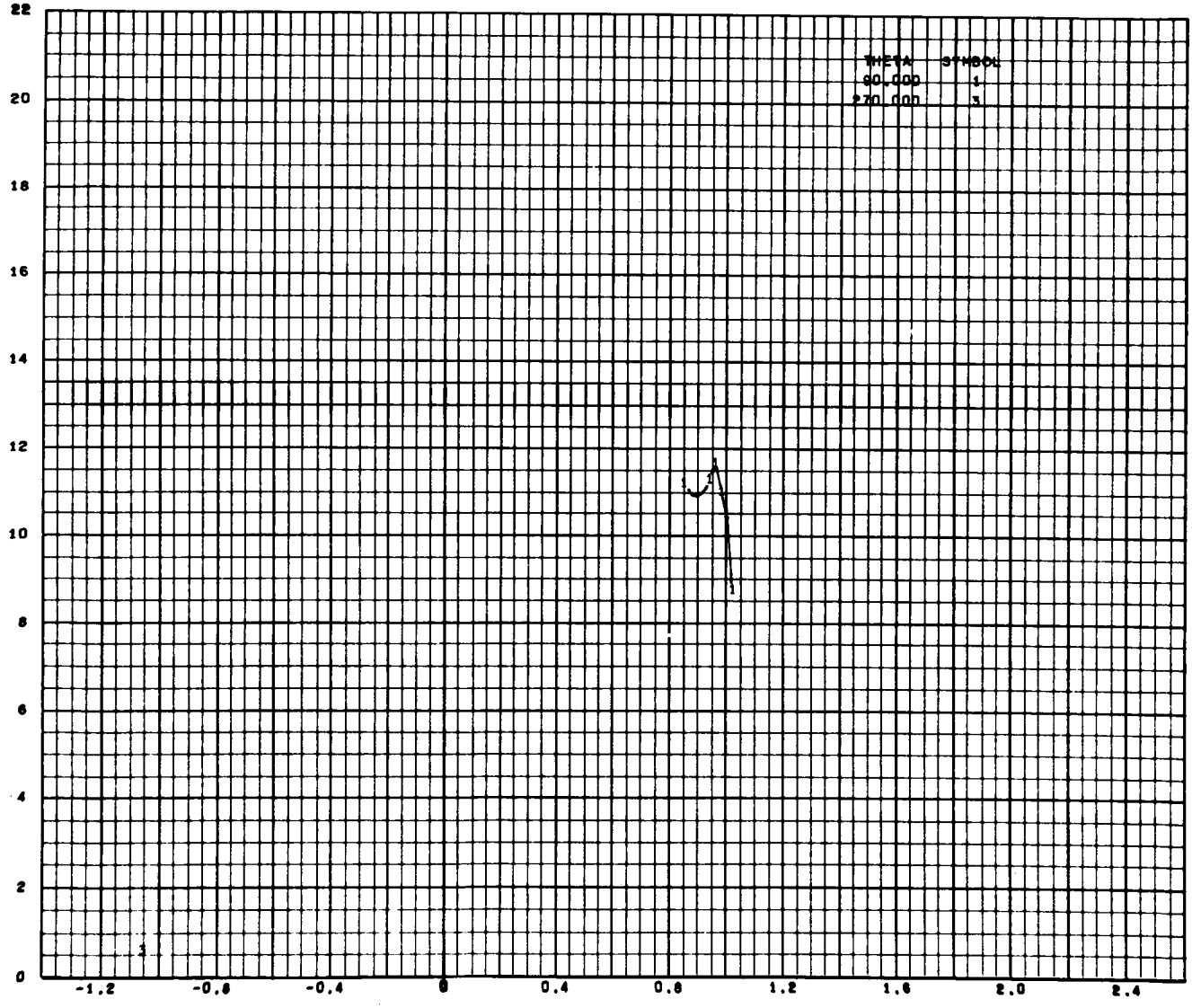
RE/FT --- 2.2310*10+6
Q(OM) --- 9.2317 BTU/SQ FT SEC

PLOT SERIES NUMBER 60

TEST GROUP	TIME (SEC)
97*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
226 000



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SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 153.65 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1844.80 PSIA
TOTAL TEMPERATURE ---- 1896.30 DEG RANKINE

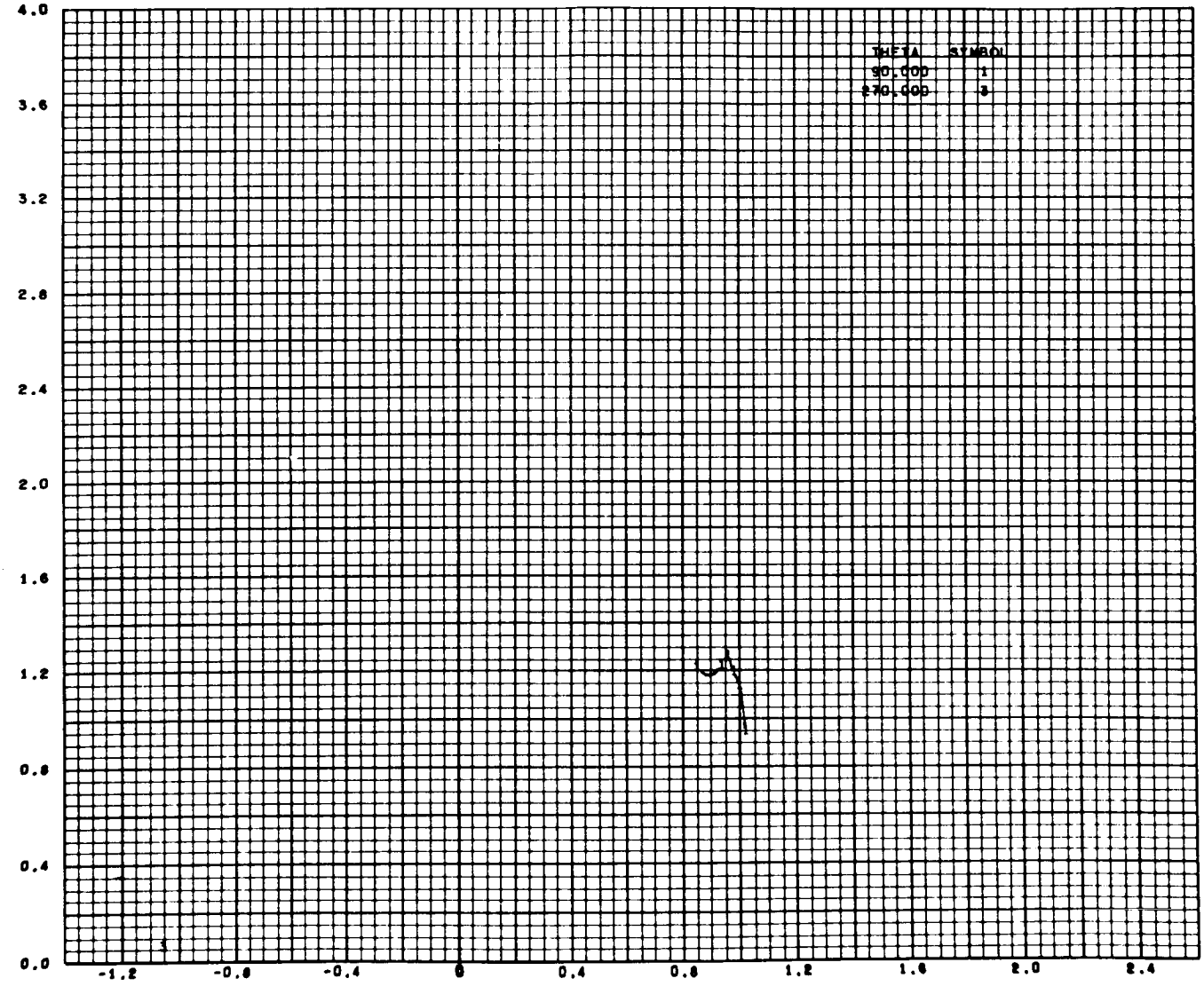
RE/FT --- 2.2310*10+6
Q(OM) --- 9.2317 BTU/SQ FT SEC

PLOT SERIES NUMBER 60

TEST GROUP	TIME (SEC)
97*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
228 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 153.65 DEG
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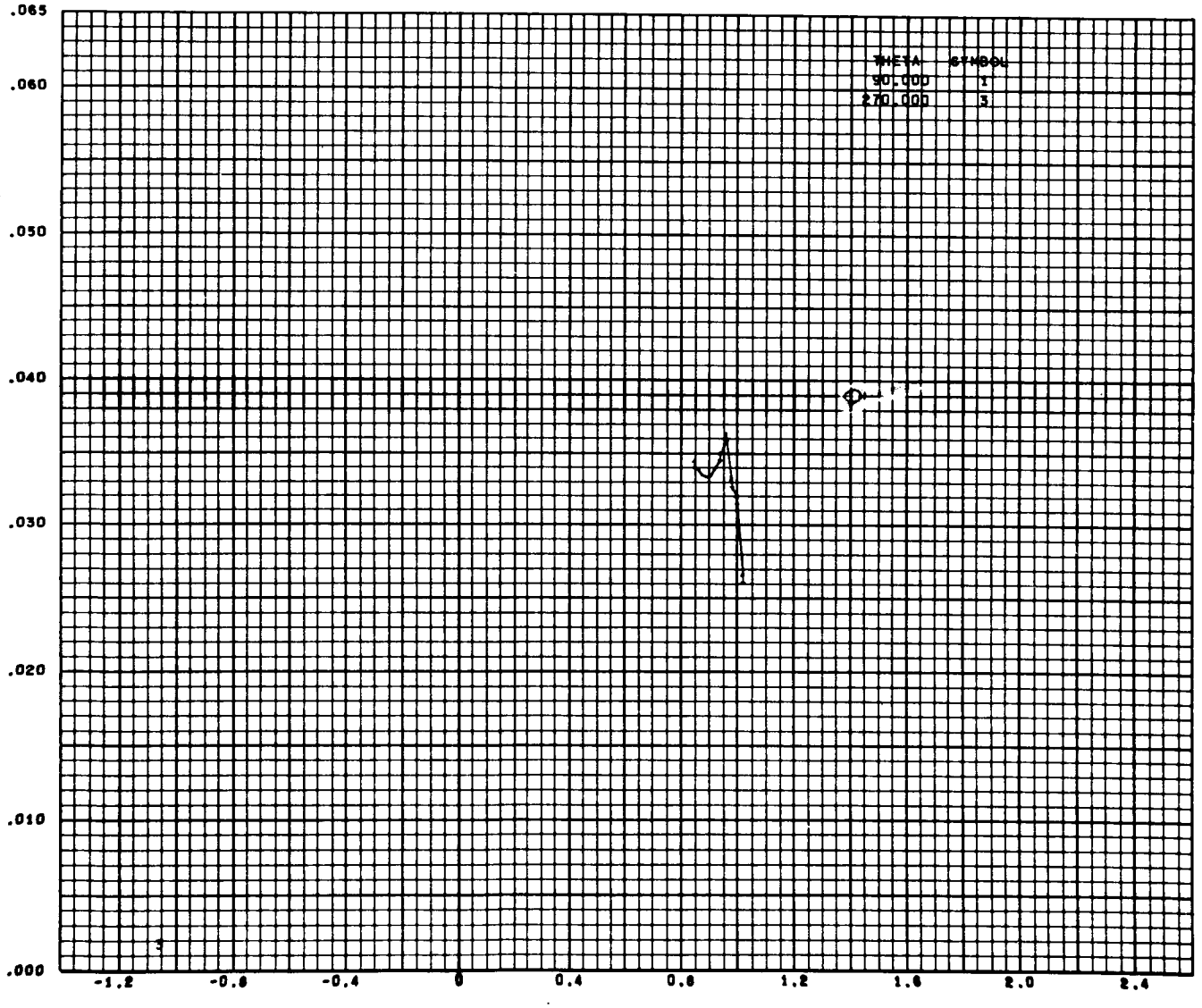
RE/FT --- 2.2310*10+6
Q(OM) --- 9.2317 BTU/SQ FT SEC

PLOT SERIES NUMBER 60

TEST GROUP	TIME (SEC)
97*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
230 000



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SID 64-2080

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HEAT TRANSFER

CONFIGURATION C57

PLOT SERIES NUMBER 60

3937-09
227 000

APOLLO H-11

AEDC, TUNNEL C

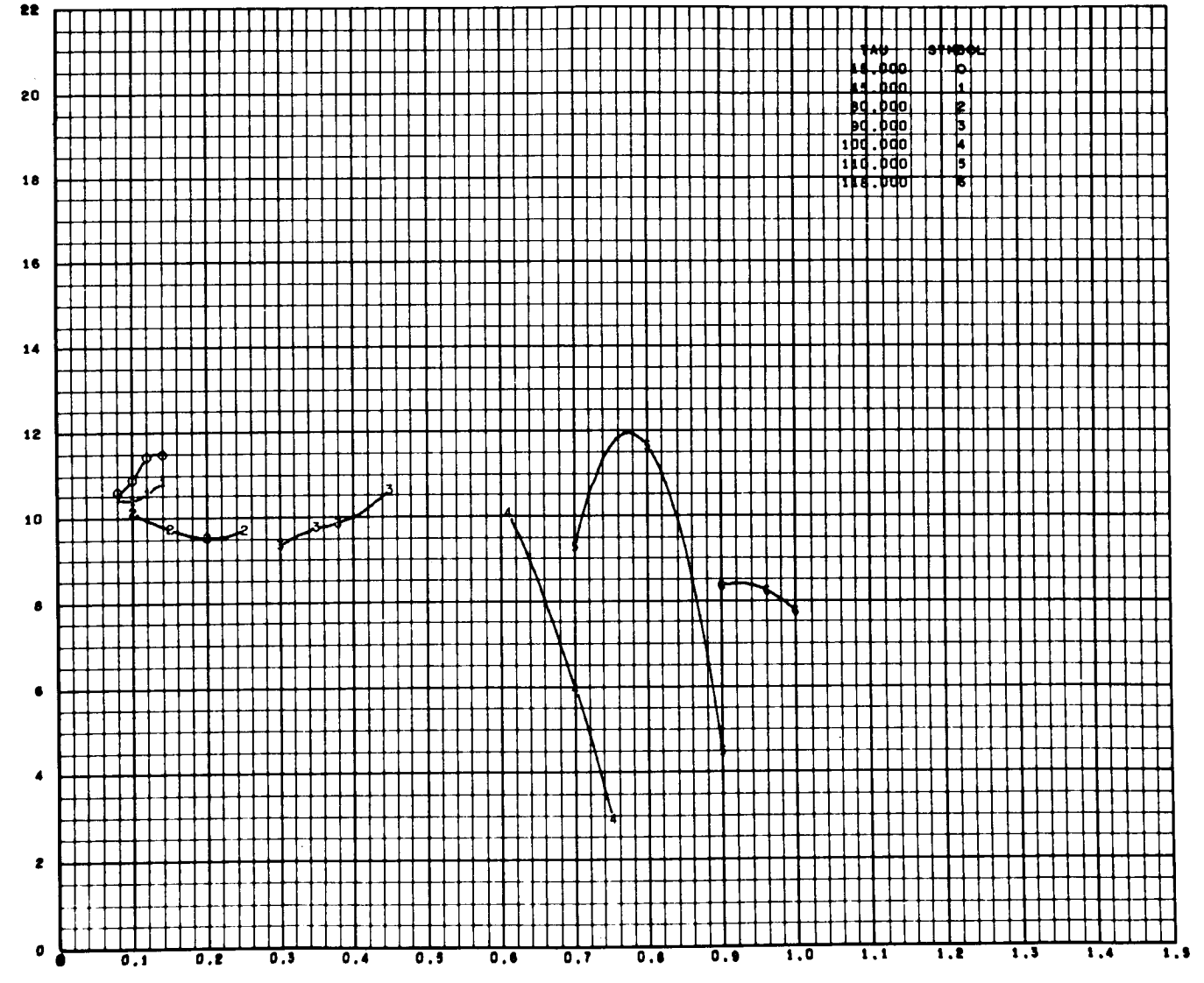
JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 153.65 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1844.80 PSIA
TOTAL TEMPERATURE ---- 1896.30 DEG RANKINE

RE/FT --- 2.2310*10+6
Q(OM) --- 9.2317 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
97*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 153.65 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1844.80 PSIA
TOTAL TEMPERATURE ---- 1896.30 DEG RANKINE

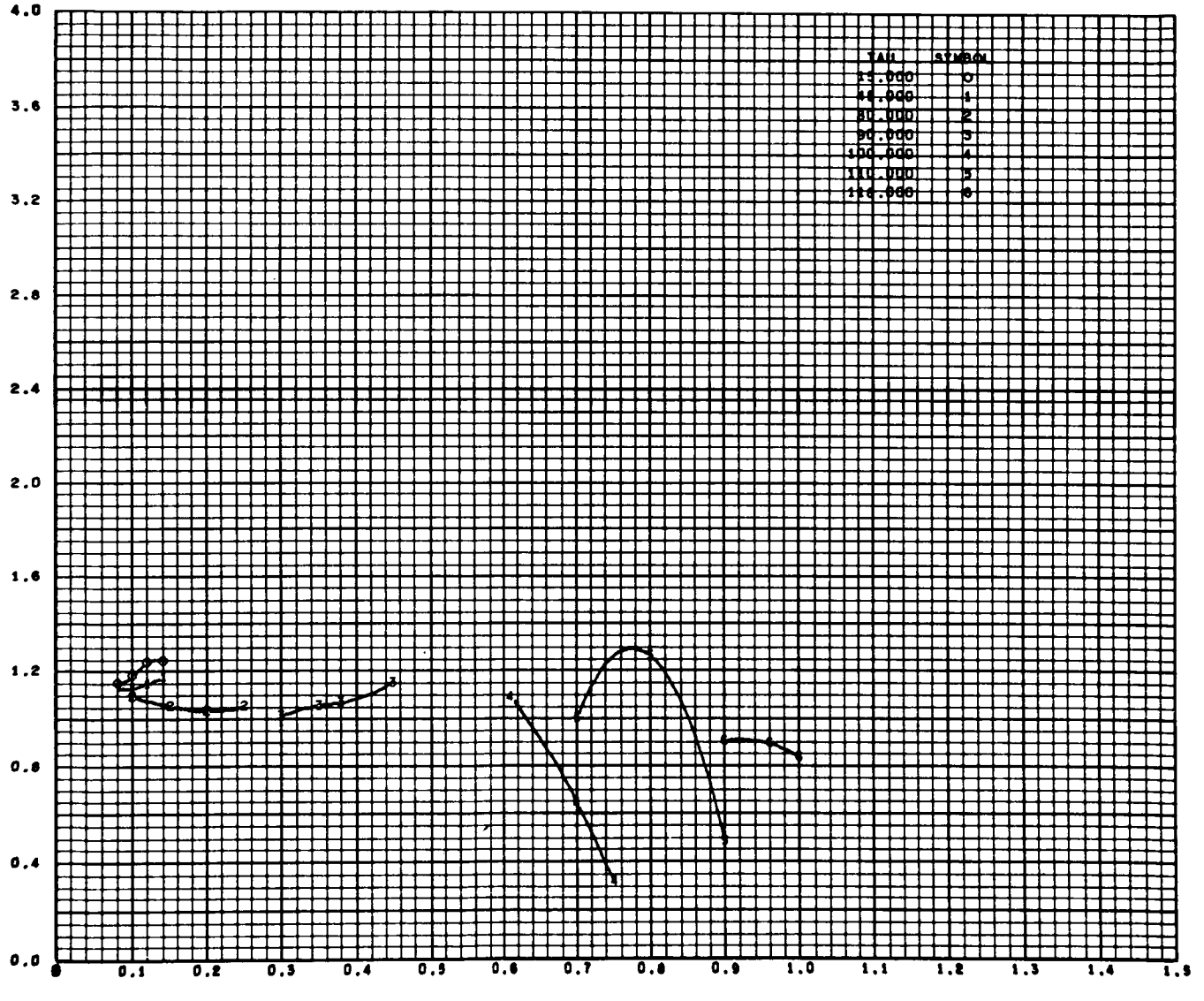
RE/FT --- 2.2310*10+6
Q(OM) --- 9.2317 BTU/SQ FT SEC

PLOT SERIES NUMBER 60

TEST GROUP	TIME (SEC)
97*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
229 000



~~CONFIDENTIAL~~

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 153.65 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1844.80 PSIA
TOTAL TEMPERATURE ---- 1896.30 DEG RANKINE

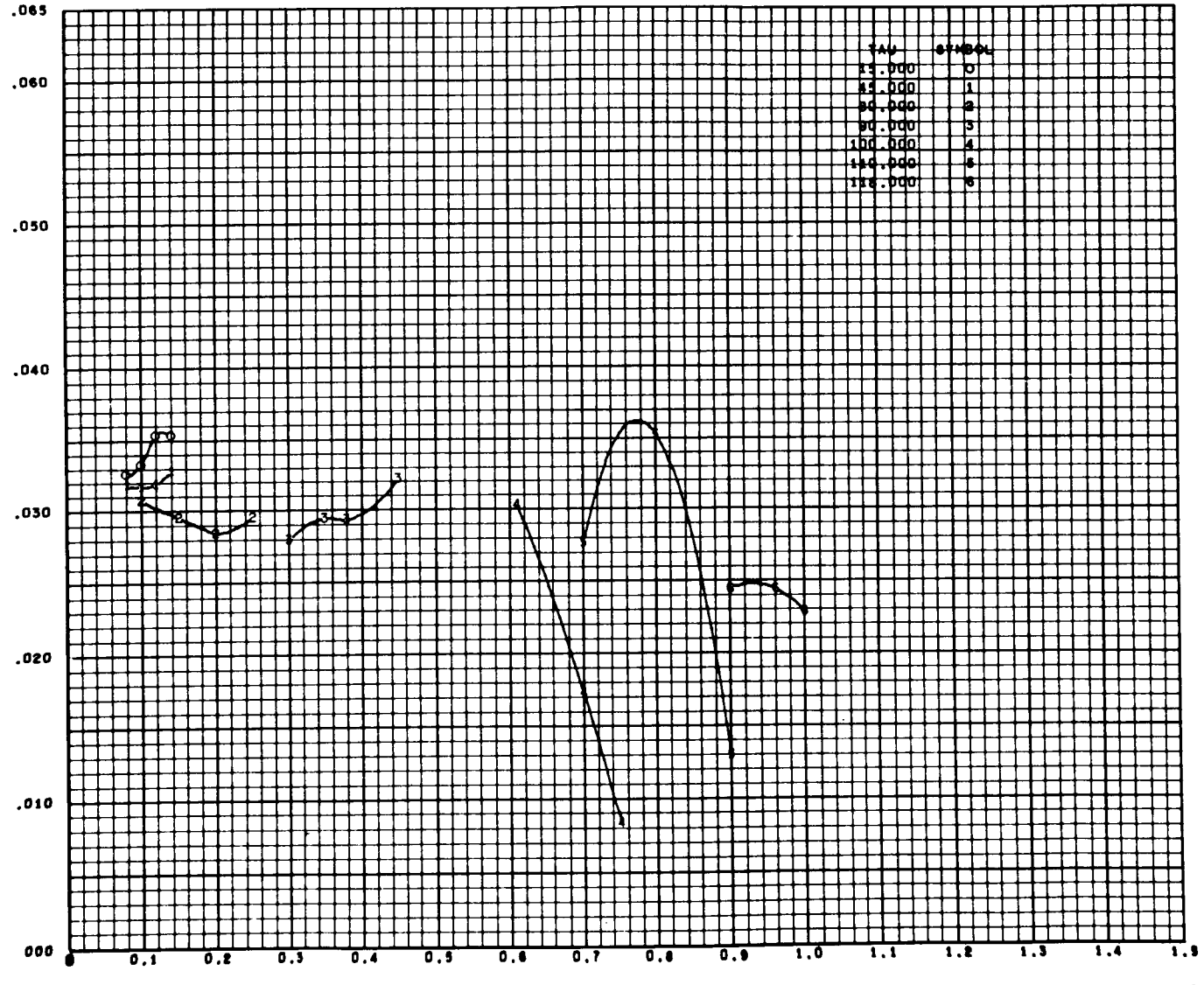
RE/FT --- 2.2310*10+6
Q(OM) --- 9.2317 BTU/SQ FT SEC

PLOT SERIES NUMBER 60

TEST GROUP	TIME (SEC)
97*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
231 000



~~CONFIDENTIAL~~

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.14 DEG
ANGLE OF YAW --------- -5.18 DEG
TOTAL PRESSURE ------- 1847.50 PSIA
TOTAL TEMPERATURE ---- 1901.50 DEG RANKINE

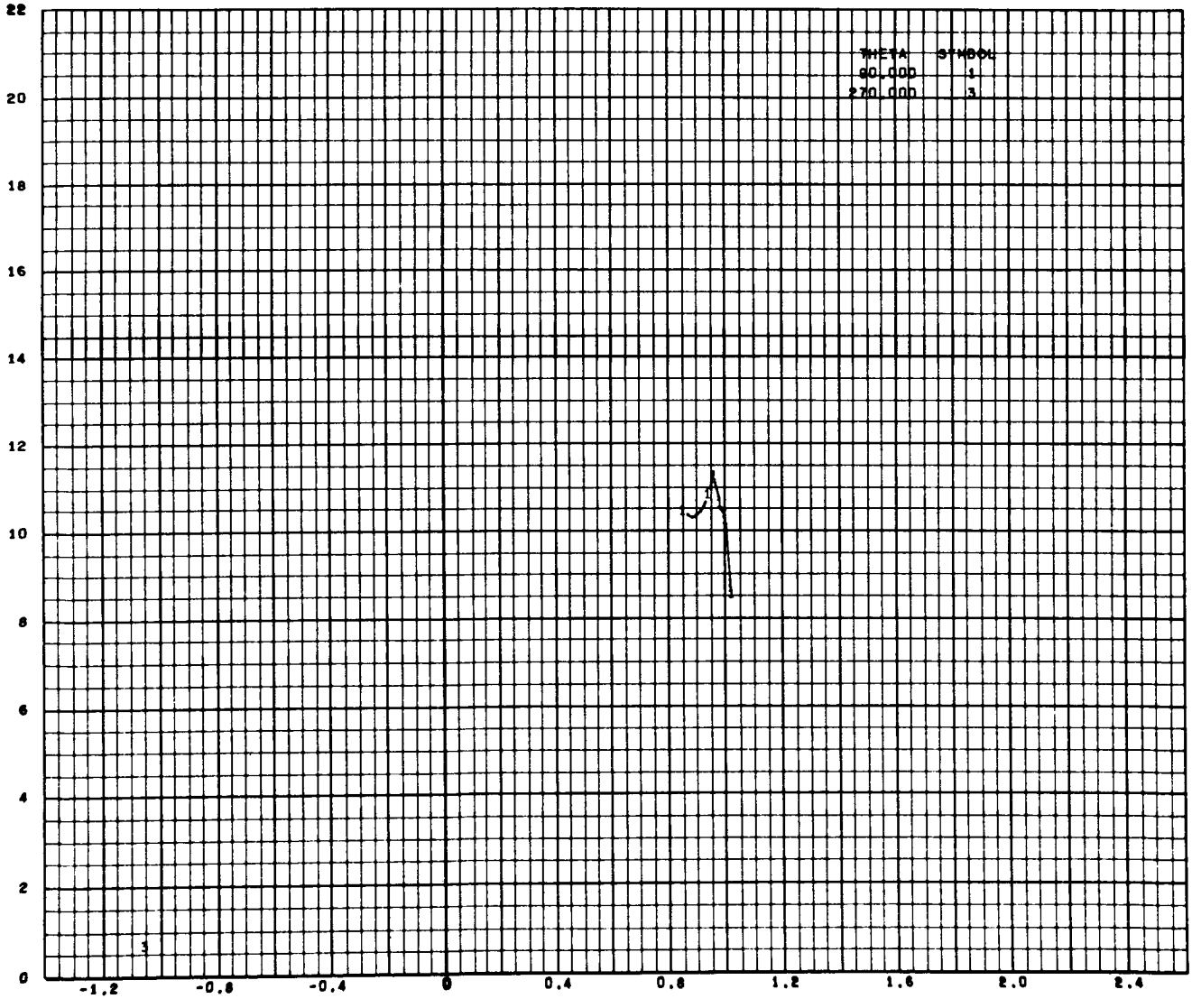
RE/FT --- 2.2232*10+6
Q(OM) --- 9.2404 BTU/SQ FT SEC

PLOT SERIES NUMBER 61

TEST GROUP	TIME (SEC)
98*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
232 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.14 DEG
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TOTAL PRESSURE ------- 1847.50 PSIA
TOTAL TEMPERATURE ---- 1901.50 DEG RANKINE

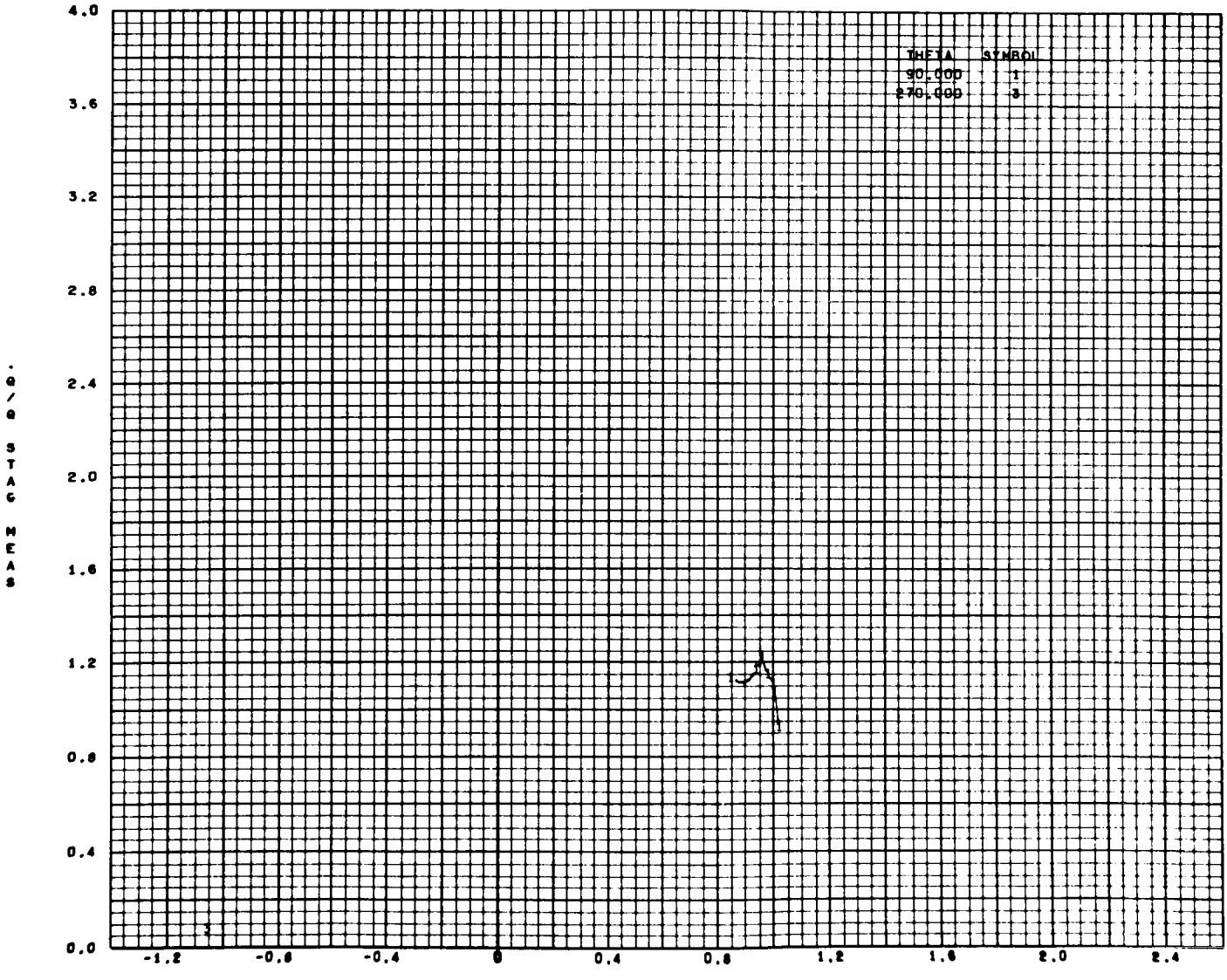
RE/FT --- 2.2232*10+6
Q(OM) --- 9.2404 BTU/SQ FT SEC

PLOT SERIES NUMBER 61

TEST GROUP	TIME (SEC)
98*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
234 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.14 DEG
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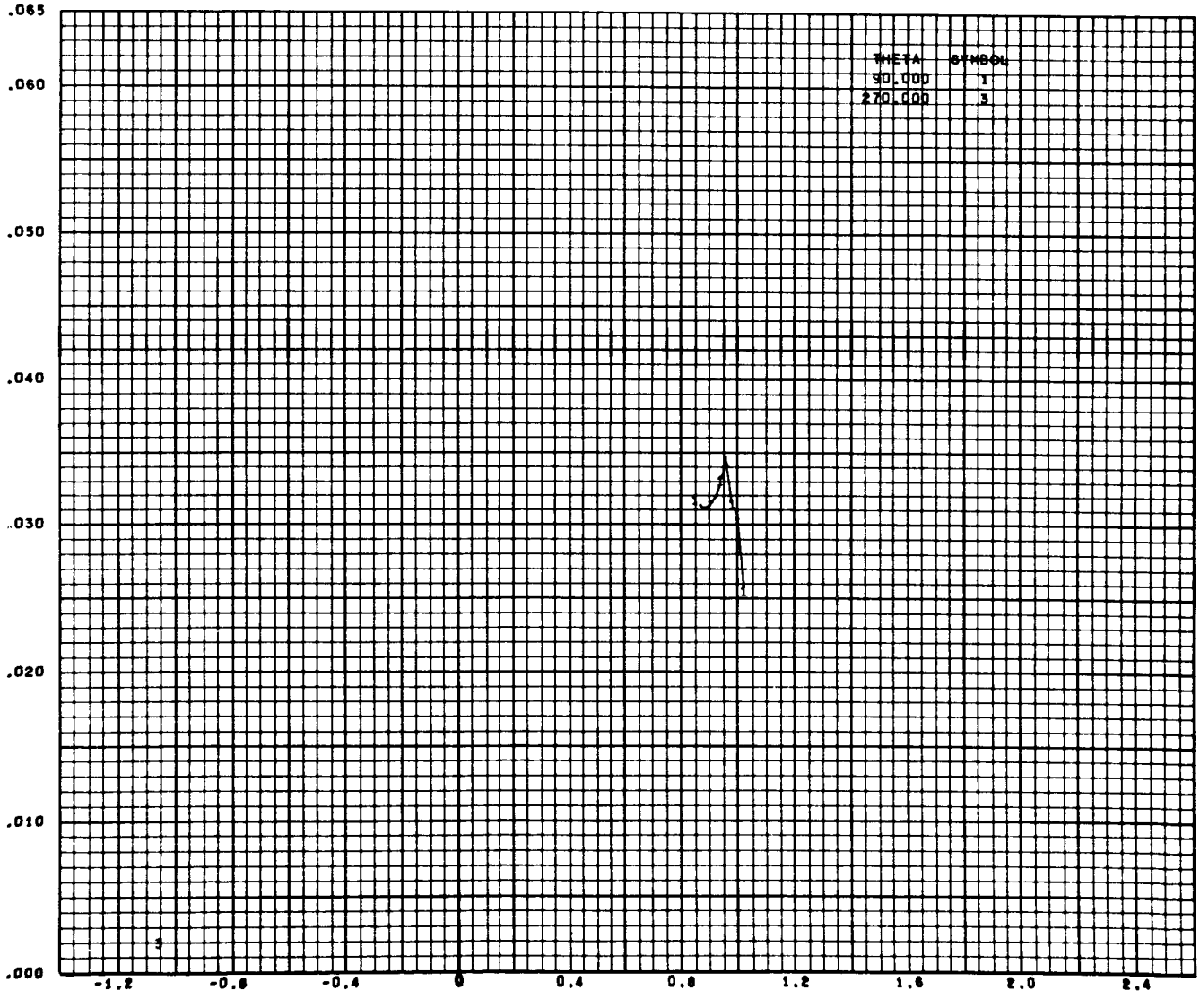
RE/FT --- 2.2232*10+6
Q(OM) --- 9.2404 BTU/SQ FT SEC

PLOT SERIES NUMBER 61

TEST GROUP	TIME (SEC)
98*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
236 000



CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.14 DEG
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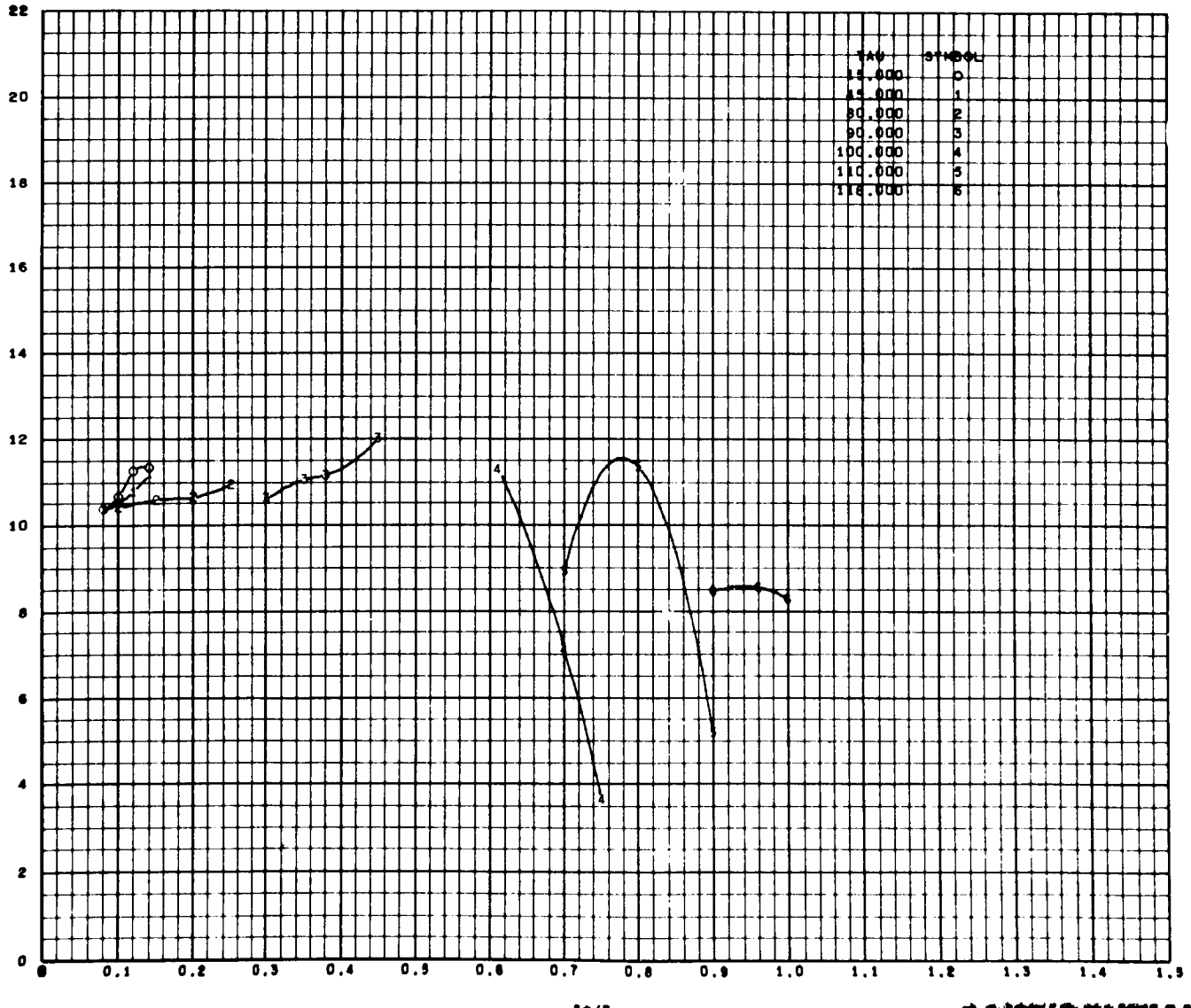
PLOT SERIES NUMBER 61

TEST GROUP	TIME (SEC)
98*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
233 000



CONFIDENTIAL

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
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RE/FT --- 2.2232*10+6
Q(OM) --- 9.2404 BTU/SQ FT SEC

PLOT SERIES NUMBER 61

TEST GROUP	TIME (SEC)
98*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
235 000

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[redacted]

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
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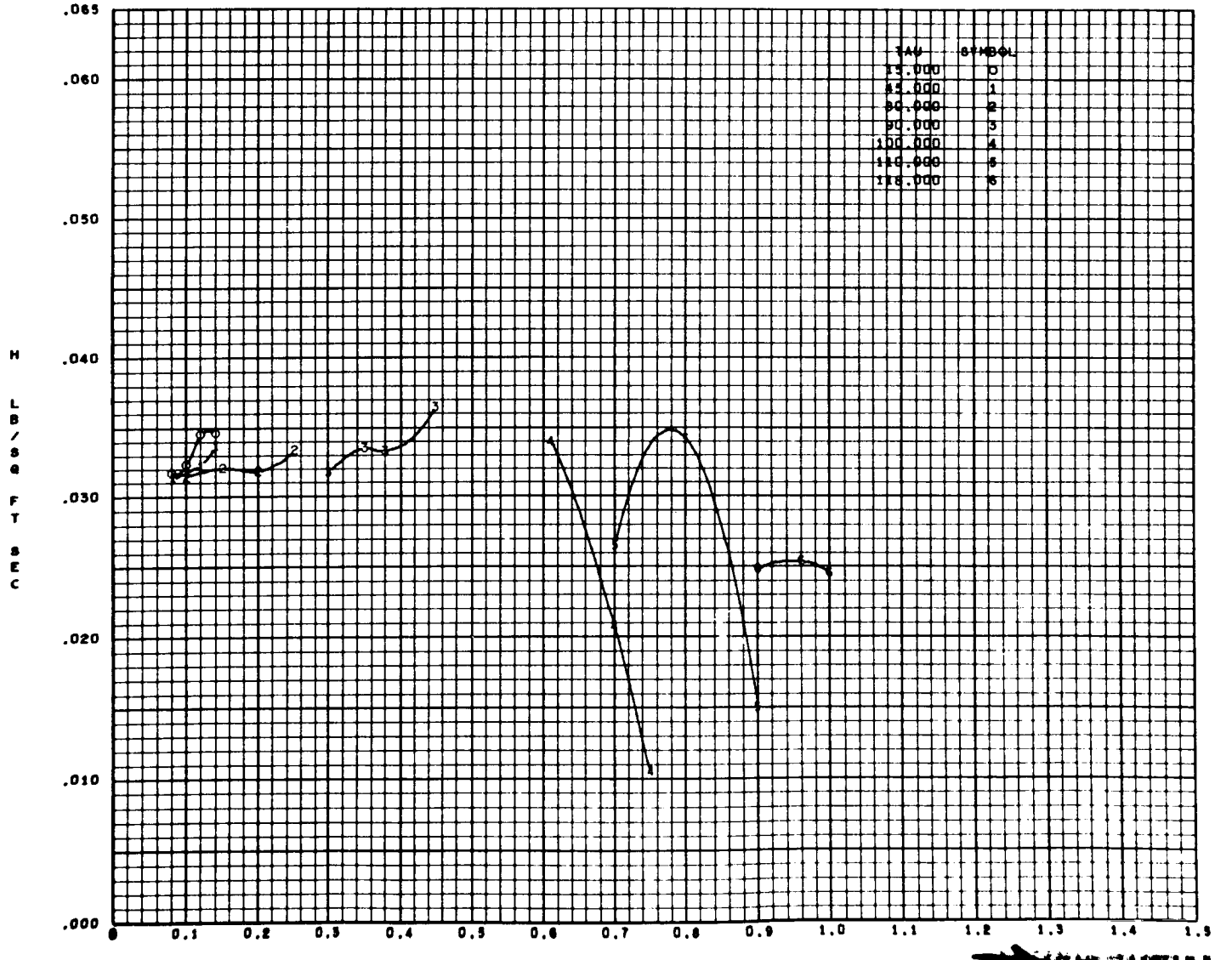
RE/FT --- 2.2232*10+6
Q(OM) --- 9.2404 BTU/SQ FT SEC

PLOT SERIES NUMBER 61

TEST GROUP	TIME (SEC)
98*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
237 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.10 DEG
ANGLE OF YAW --------- 5.14 DEG
TOTAL PRESSURE ------- 1851.00 PSIA
TOTAL TEMPERATURE ---- 1904.70 DEG RANKINE

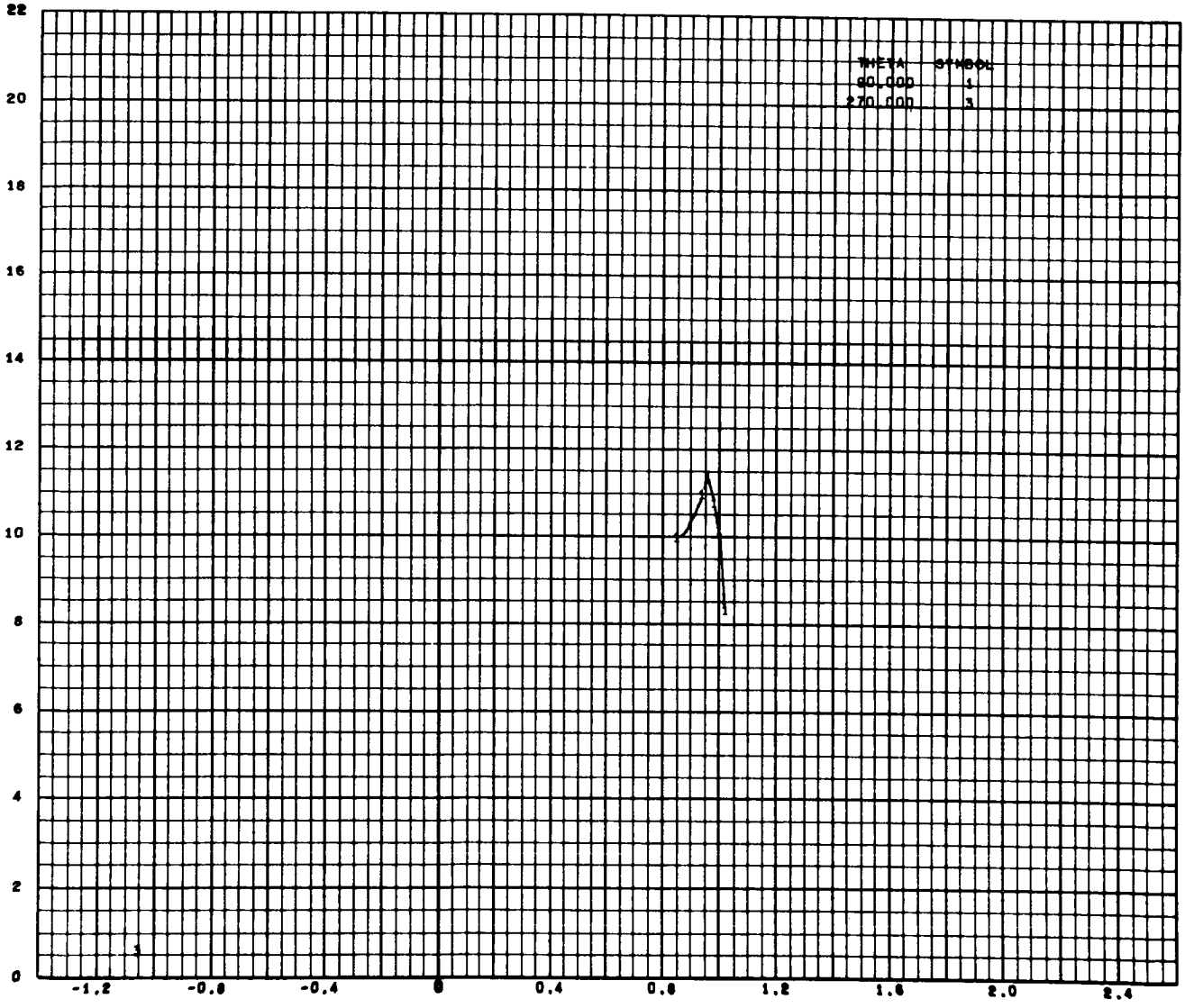
RE/FT --- 2.2204*10+6
Q(OM) --- 9.2515 BTU/SQ FT SEC

PLOT SERIES NUMBER 62

TEST GROUP	TIME (SEC)
99*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
230 000



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HEAT TRANSFER | CONFIGURATION C57 | PLOT SERIES NUMBER 62 | 3937-09 240 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.10 DEG
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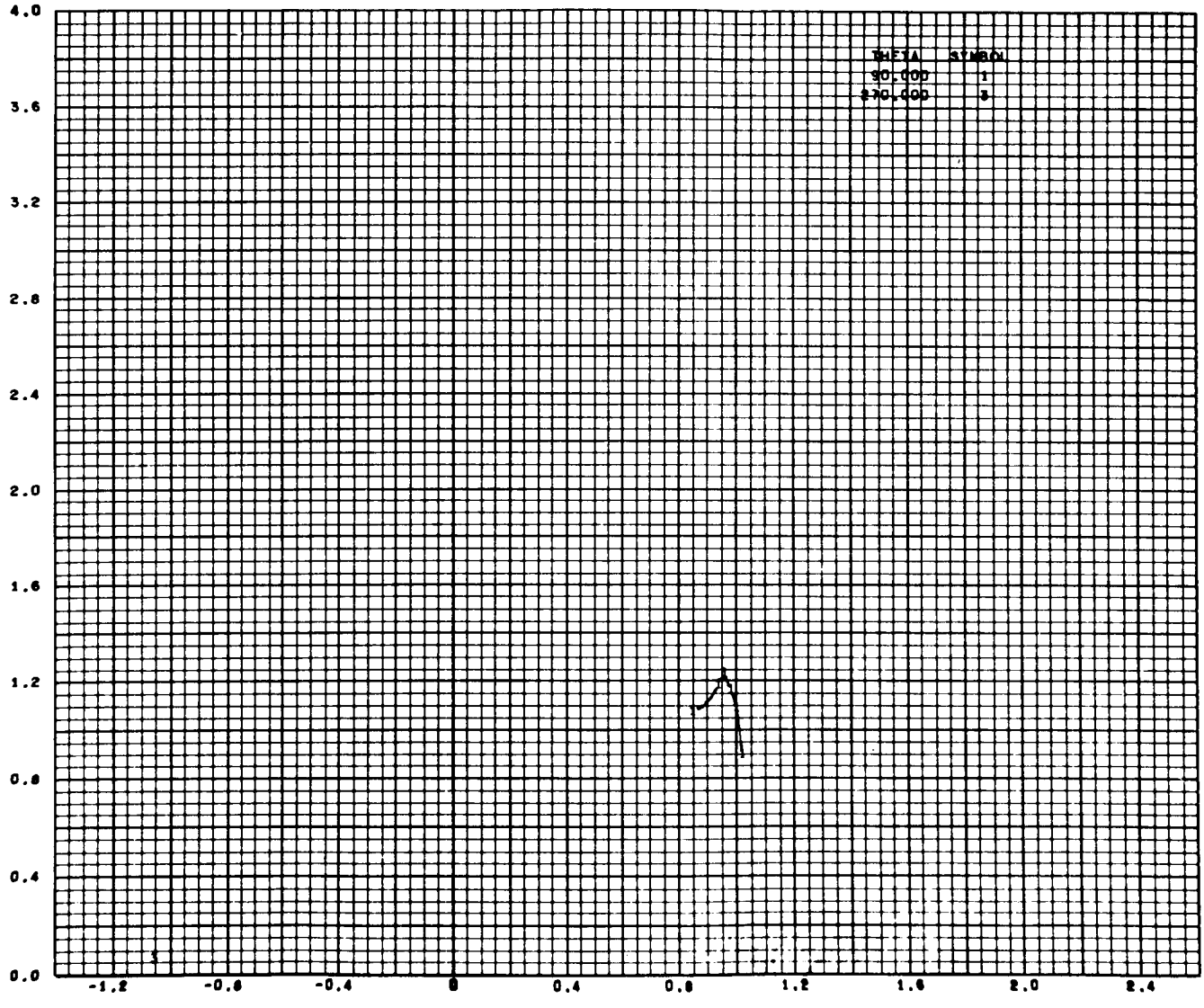
Q(OM) --- 9.2515 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
99*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
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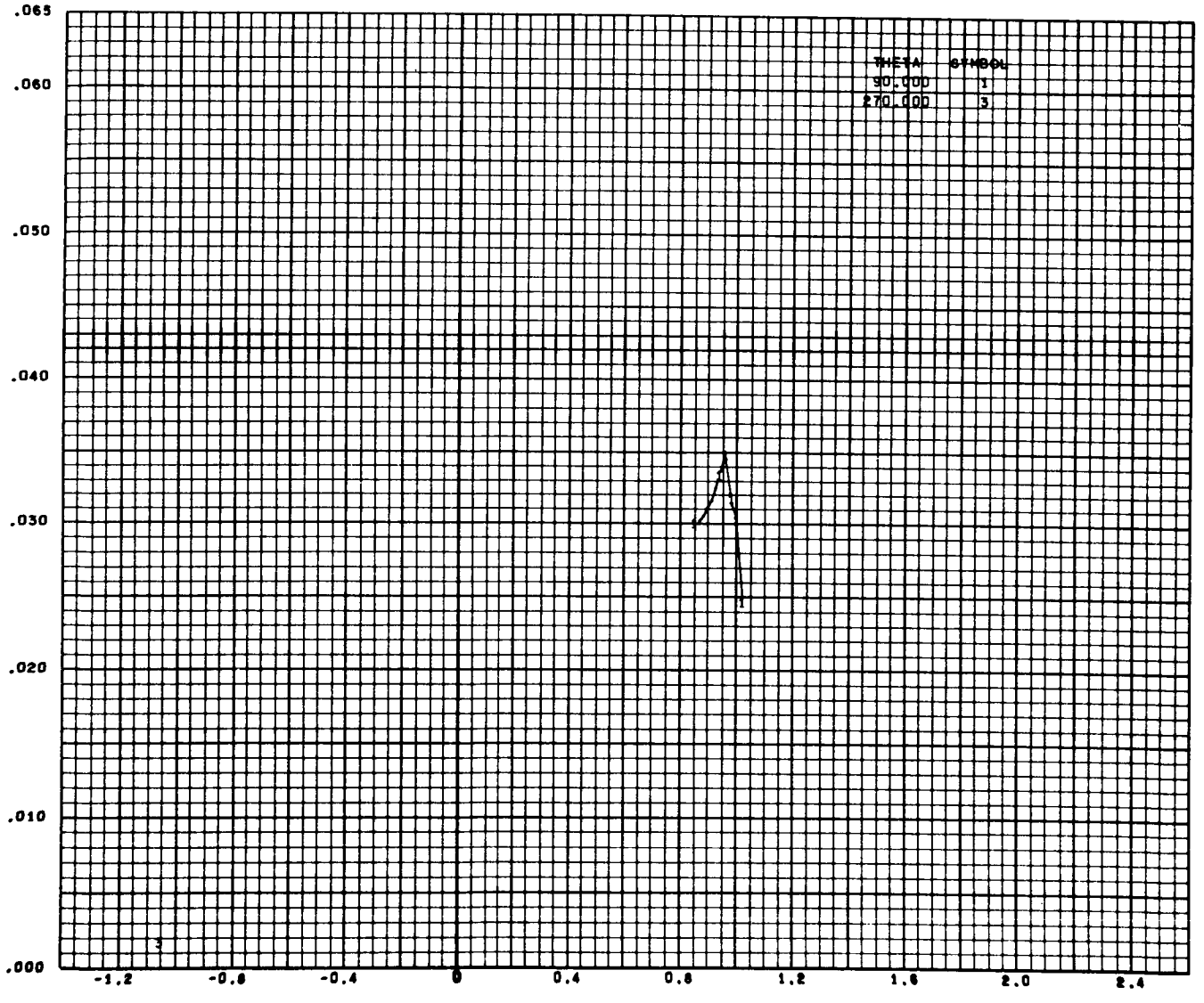
PLOT SERIES NUMBER 62

TEST GROUP	TIME (SEC)
99*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
242 00C



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[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.10 DEG
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TOTAL TEMPERATURE ---- 1904.70 DEG RANKINE

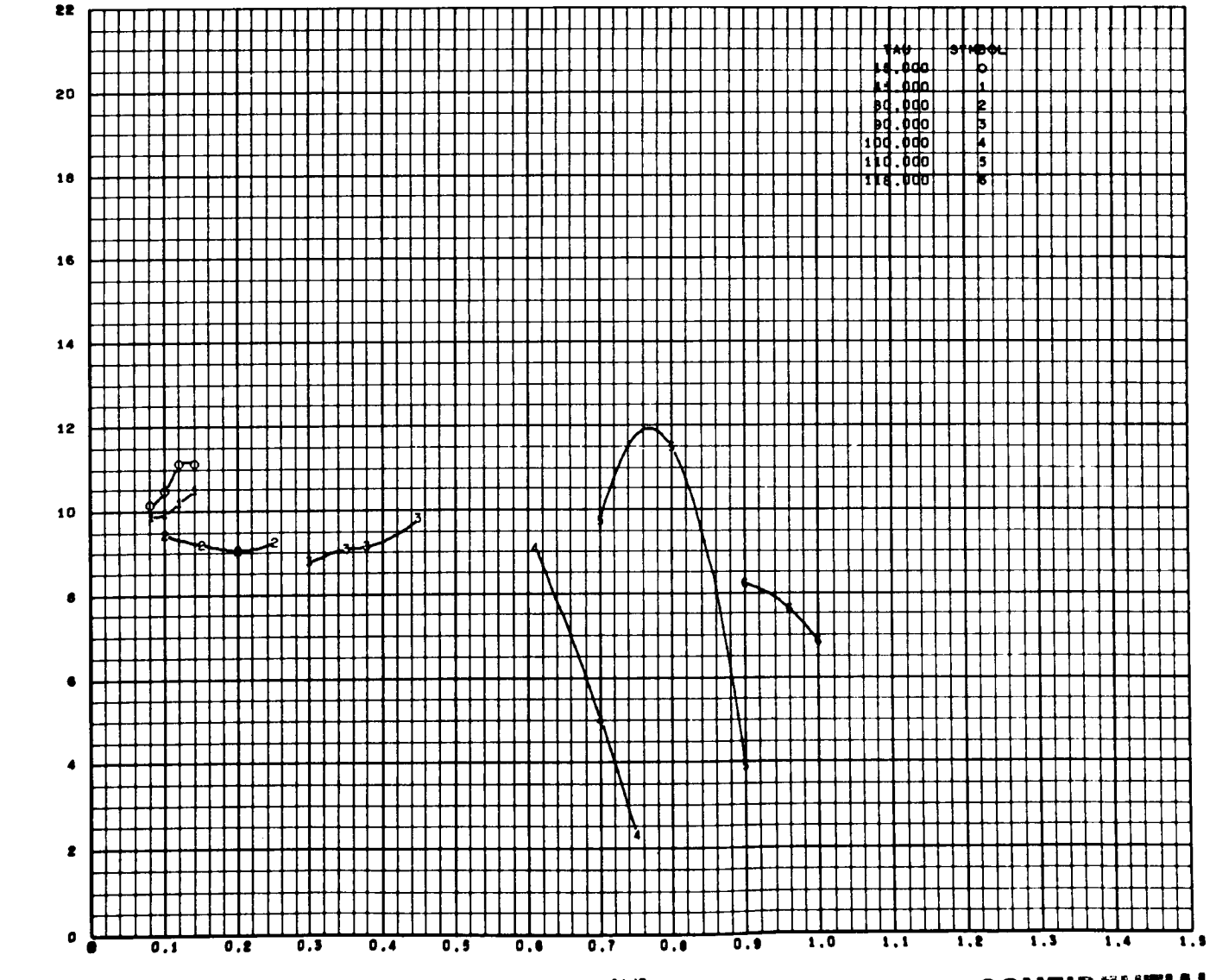
RE/FT --- 2.2204*10+6
Q(OM) --- 9.2515 BTU/SQ FT SEC

PLOT SERIES NUMBER 62

TEST GROUP	TIME (SEC)
99*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
239 000



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[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.10 DEG
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RE/FT --- 2.2204*10+6
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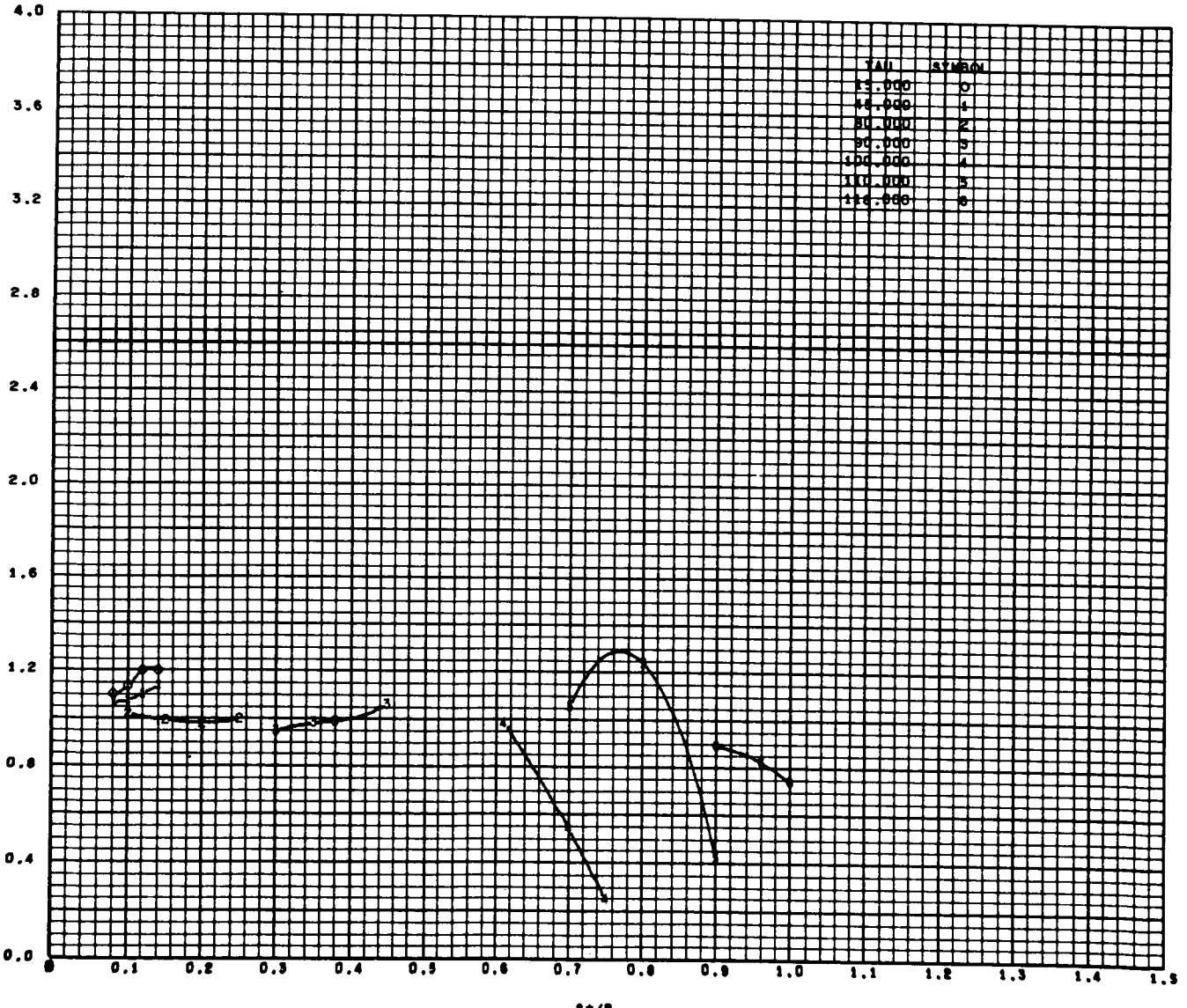
PLOT SERIES NUMBER 62

TEST GROUP	TIME (SEC)
99*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
241 000



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HEAT TRANSFER — CONFIGURATION C57 — PLOT SERIES NUMBER 62 — 3937-09 243 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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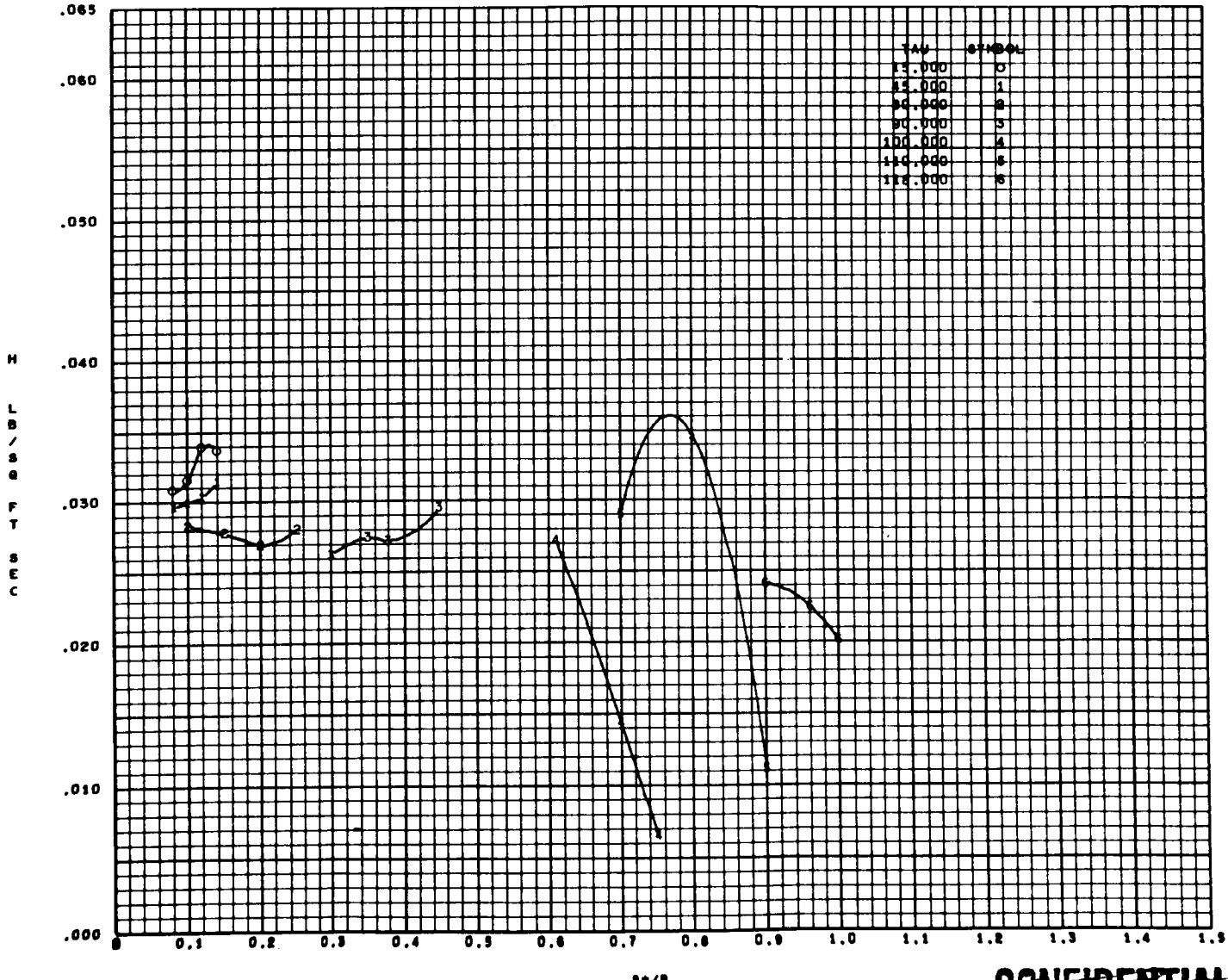
TEST GROUP	TIME (SEC)
99*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 157.60 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1857.80 PSIA
TOTAL TEMPERATURE ---- 1900.90 DEG RANKINE

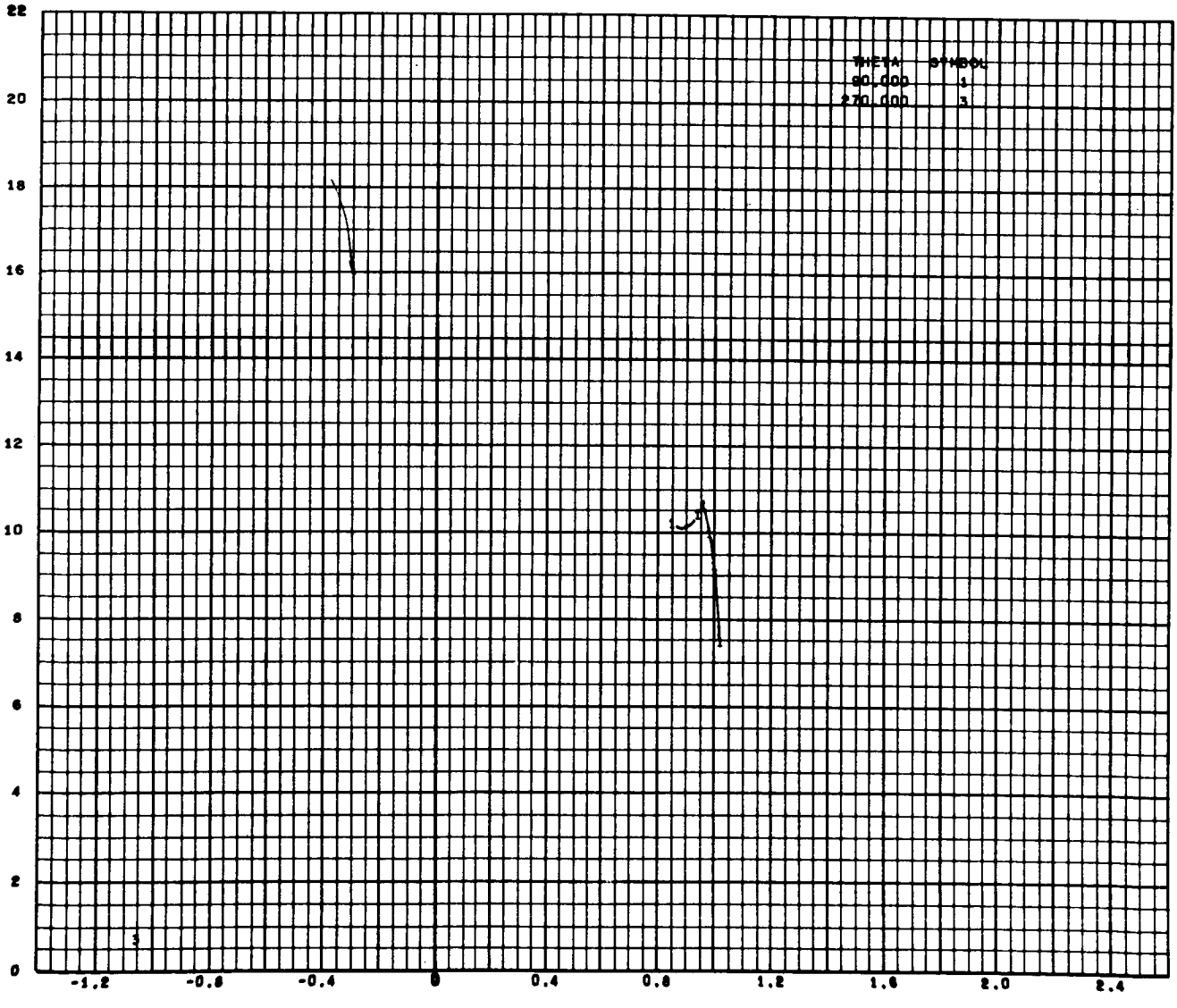
RE/FT --- 2.2369*10+6
Q(OM) --- 9.2729 BTU/SQ FT SEC

PLOT SERIES NUMBER 63

TEST GROUP	TIME (SEC)
100*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
244 000



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[redacted]

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 157.60 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1857.80 PSIA
TOTAL TEMPERATURE ---- 1900.90 DEG RANKINE

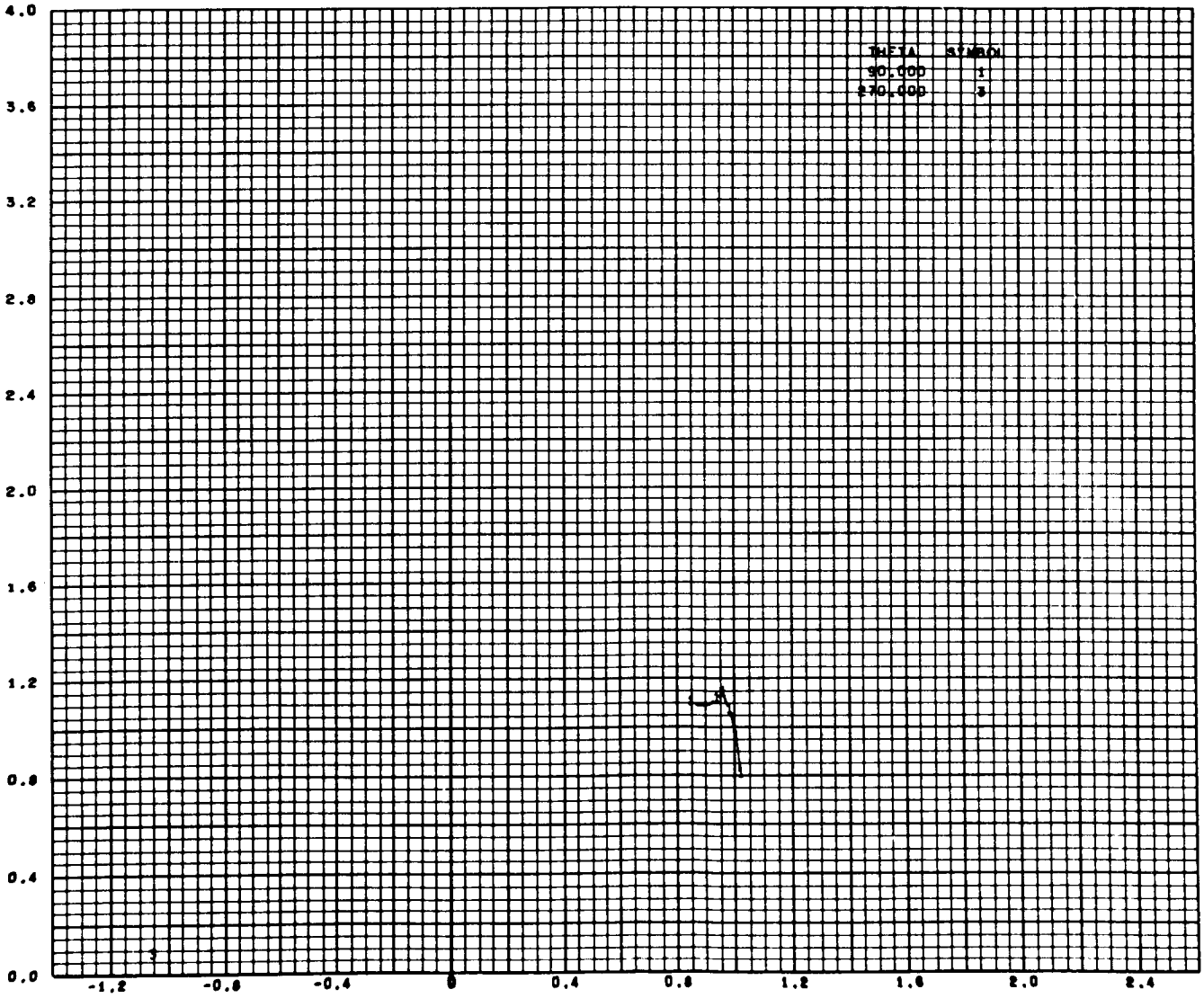
RE/FT --- 2.2369*10+6
Q(OM) --- 9.2729 BTU/SQ FT SEC

PLOT SERIES NUMBER 63

TEST GROUP	TIME (SEC)
100*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
246 000



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[redacted]

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
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PLOT SERIES NUMBER 63

TEST GROUP	TIME (SEC)
100*	2.70

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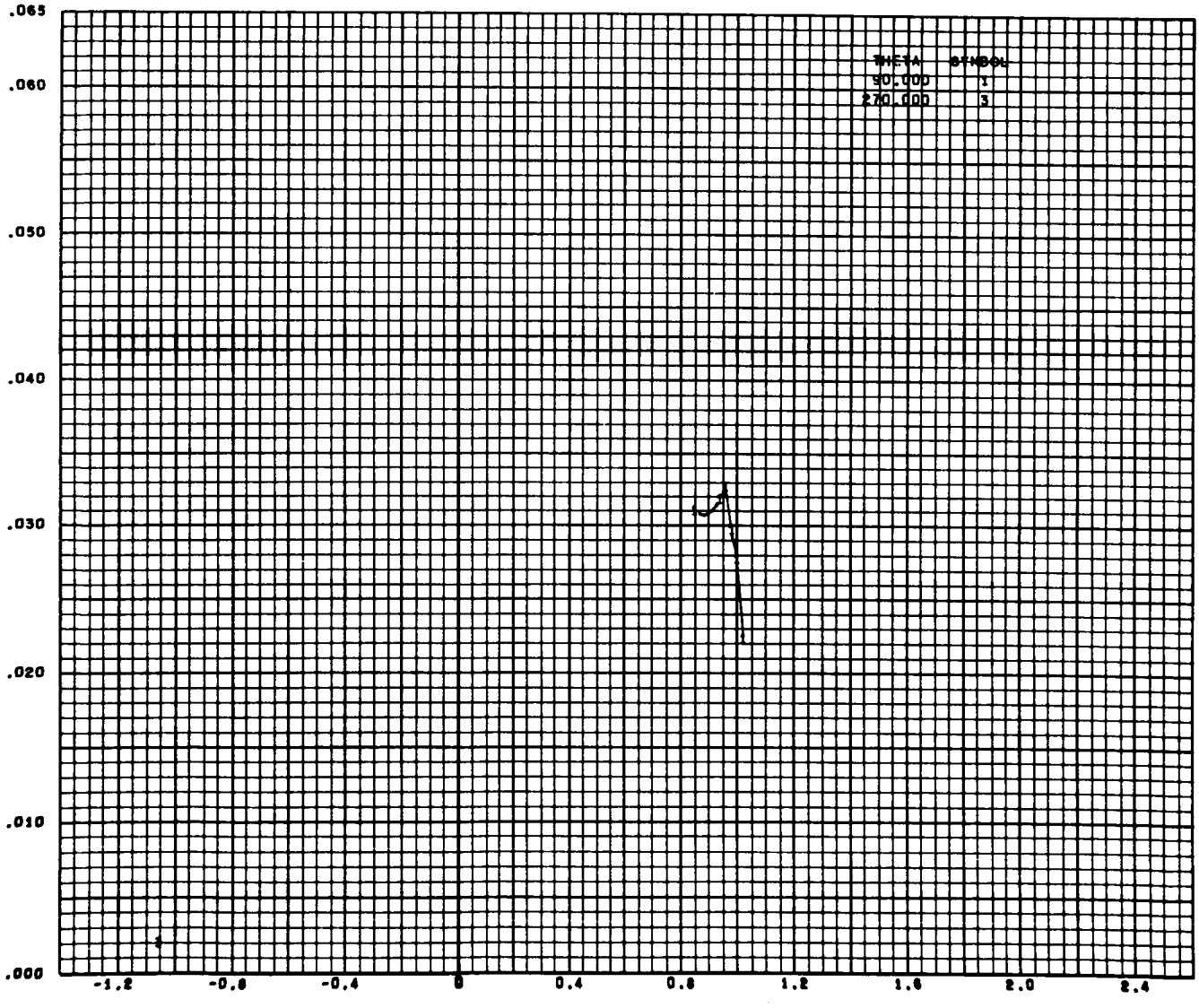
3937-09
248 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 157.60 DEG
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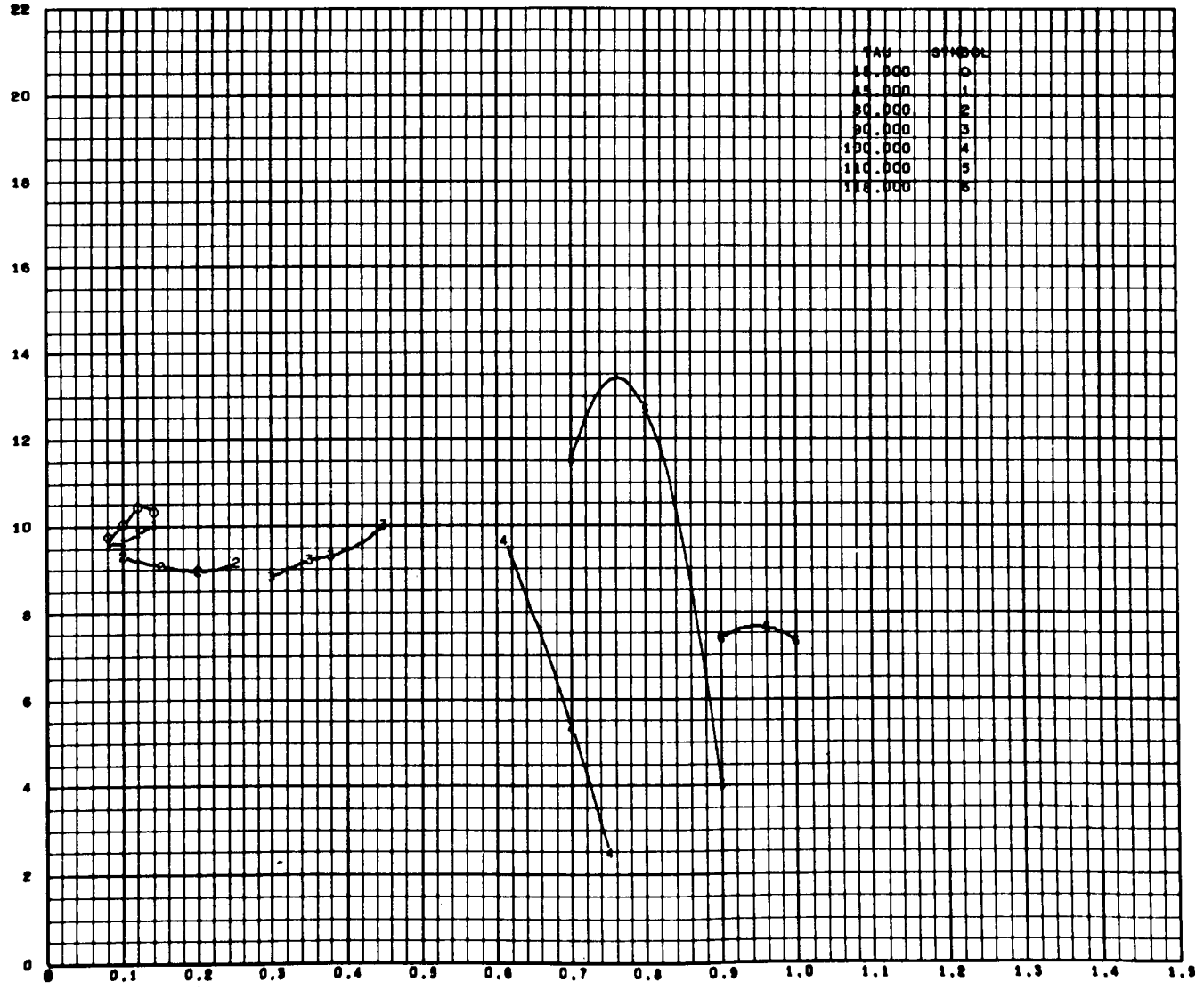
RE/FT --- 2.2369*10+6
Q(OM) --- 9.2729 BTU/SQ FT SEC

PLOT SERIES NUMBER 63

TEST GROUP	TIME (SEC)
100*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
245 000



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[redacted]

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
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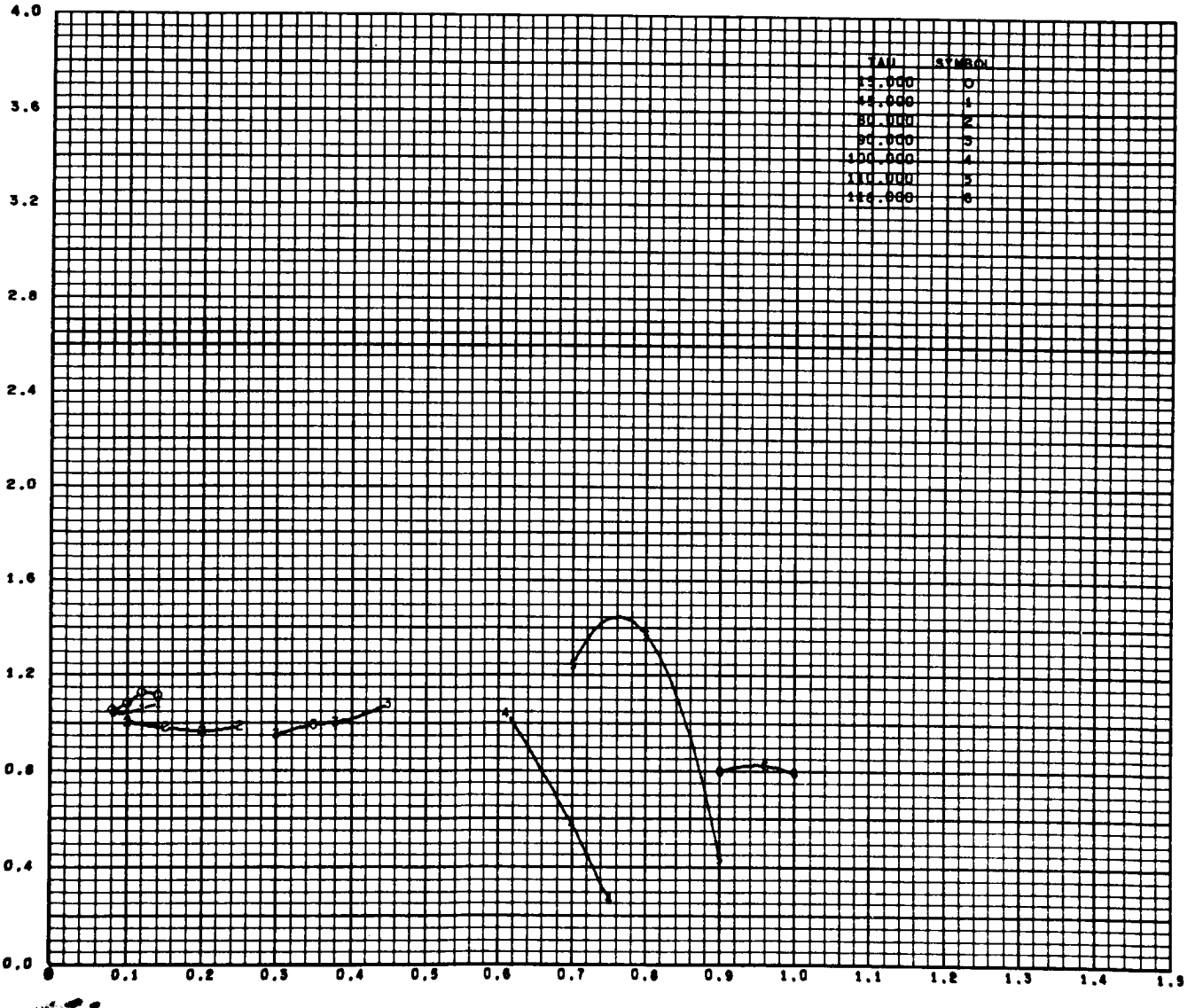
PLOT SERIES NUMBER 63

TEST GROUP	TIME (SEC)
100*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
247 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

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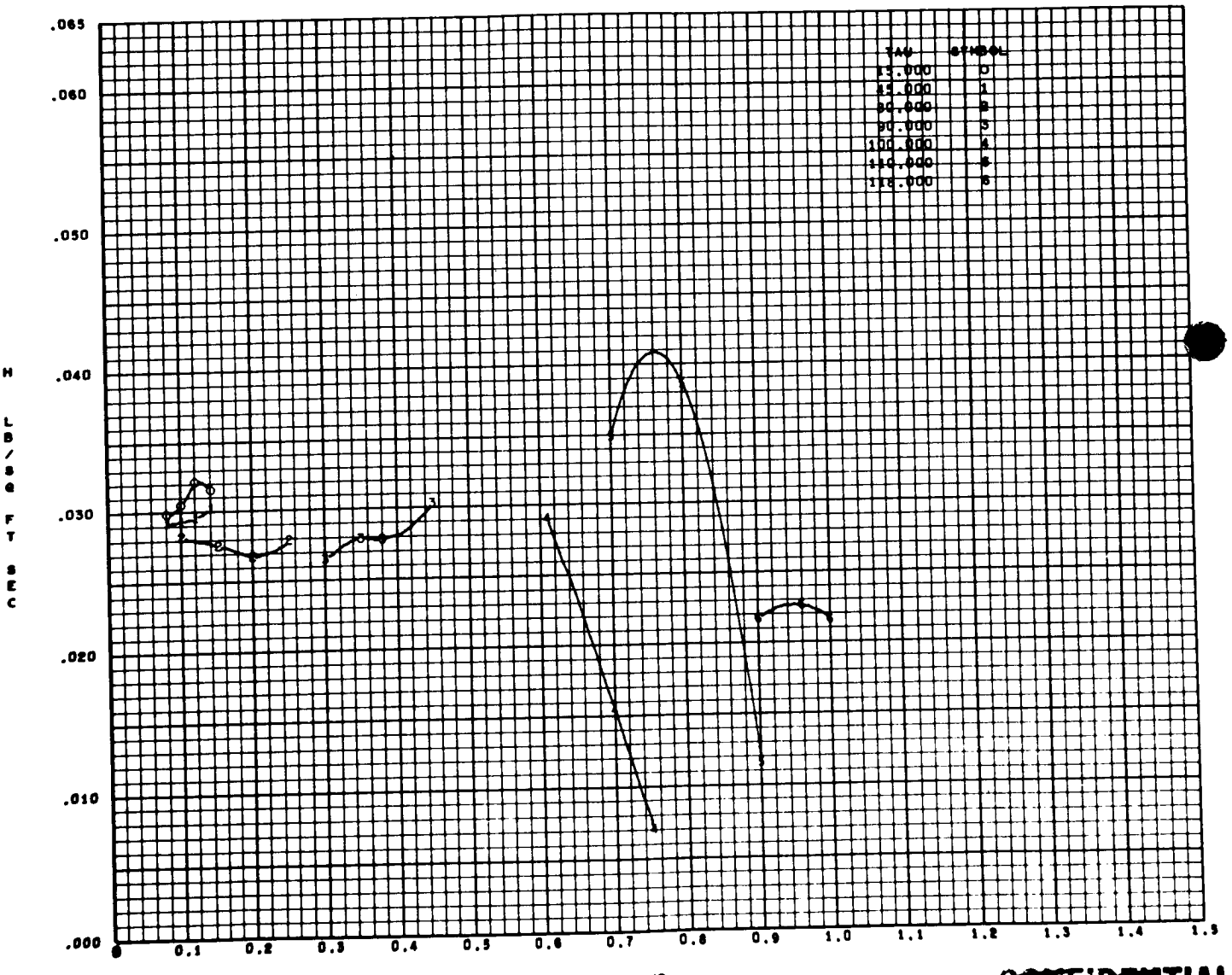
PLOT SERIES NUMBER 63

TEST GROUP	TIME (SEC)
100*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
249 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 161.65 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1848.00 PSIA
TOTAL TEMPERATURE ---- 1900.40 DEG RANKINE

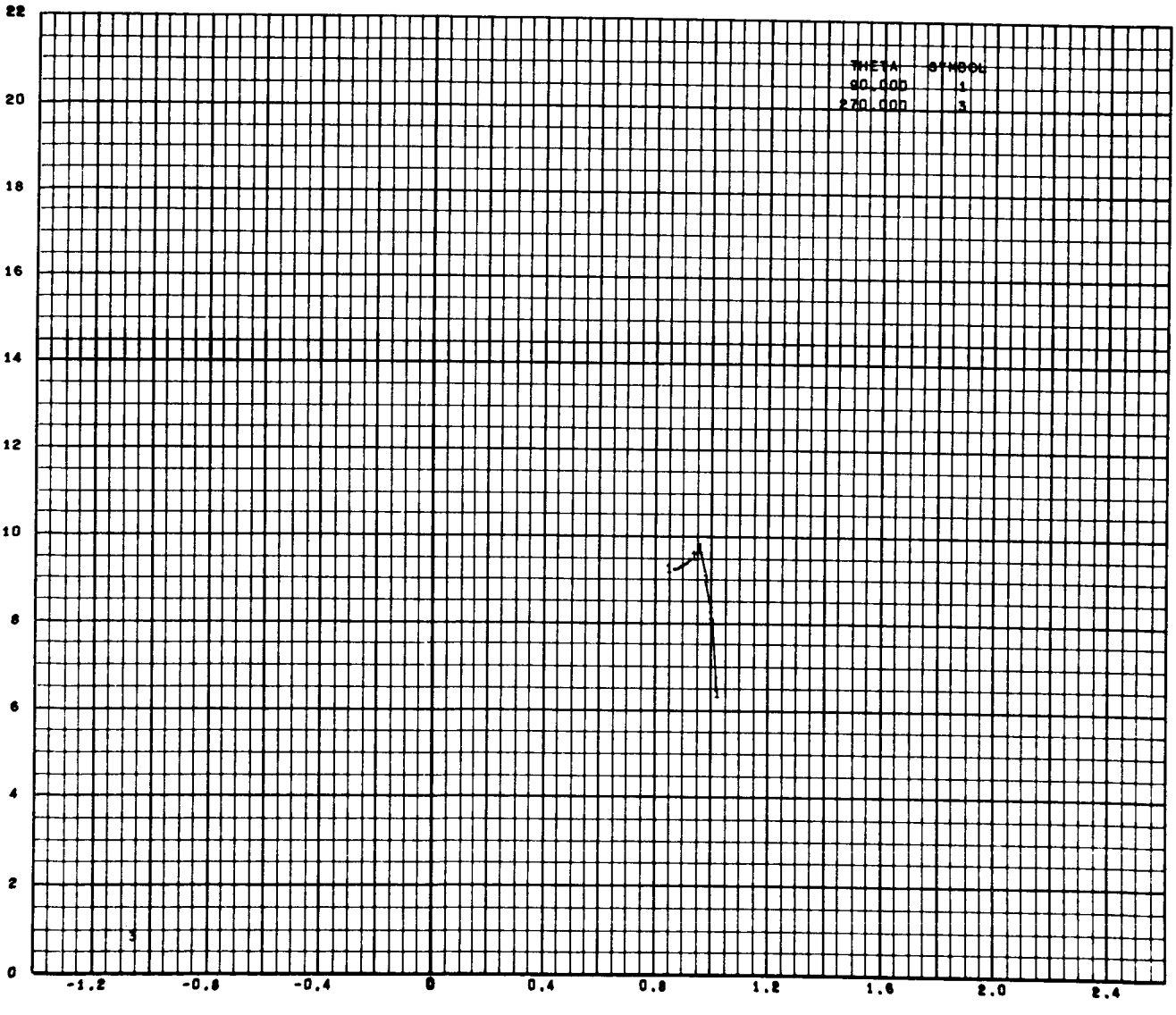
RE/FT --- 2.2260*10+6
Q(OM) --- 9.2420 BTU/SQ FT SEC

PLOT SERIES NUMBER 64

TEST GROUP	TIME (SEC)
101*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
250 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
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ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1848.00 PSIA
TOTAL TEMPERATURE ---- 1900.40 DEG RANKINE

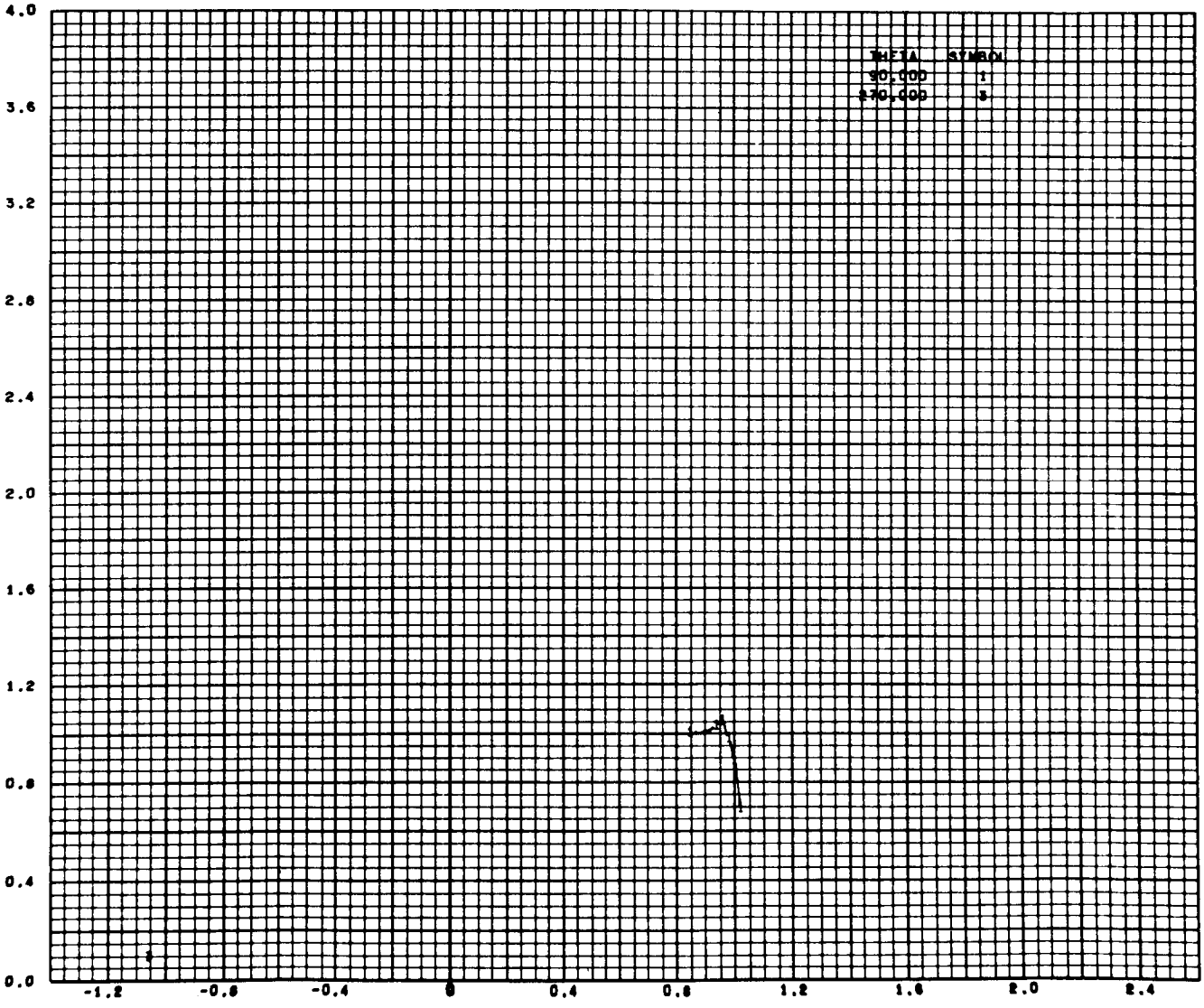
RE/FT --- 2.2260*10+6
Q(OM) --- 9.2420 BTU/SQ FT SEC

PLOT SERIES NUMBER 64

TEST GROUP	TIME (SEC)
101*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
252 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 161.65 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1848.00 PSIA
TOTAL TEMPERATURE ---- 1900.40 DEG RANKINE

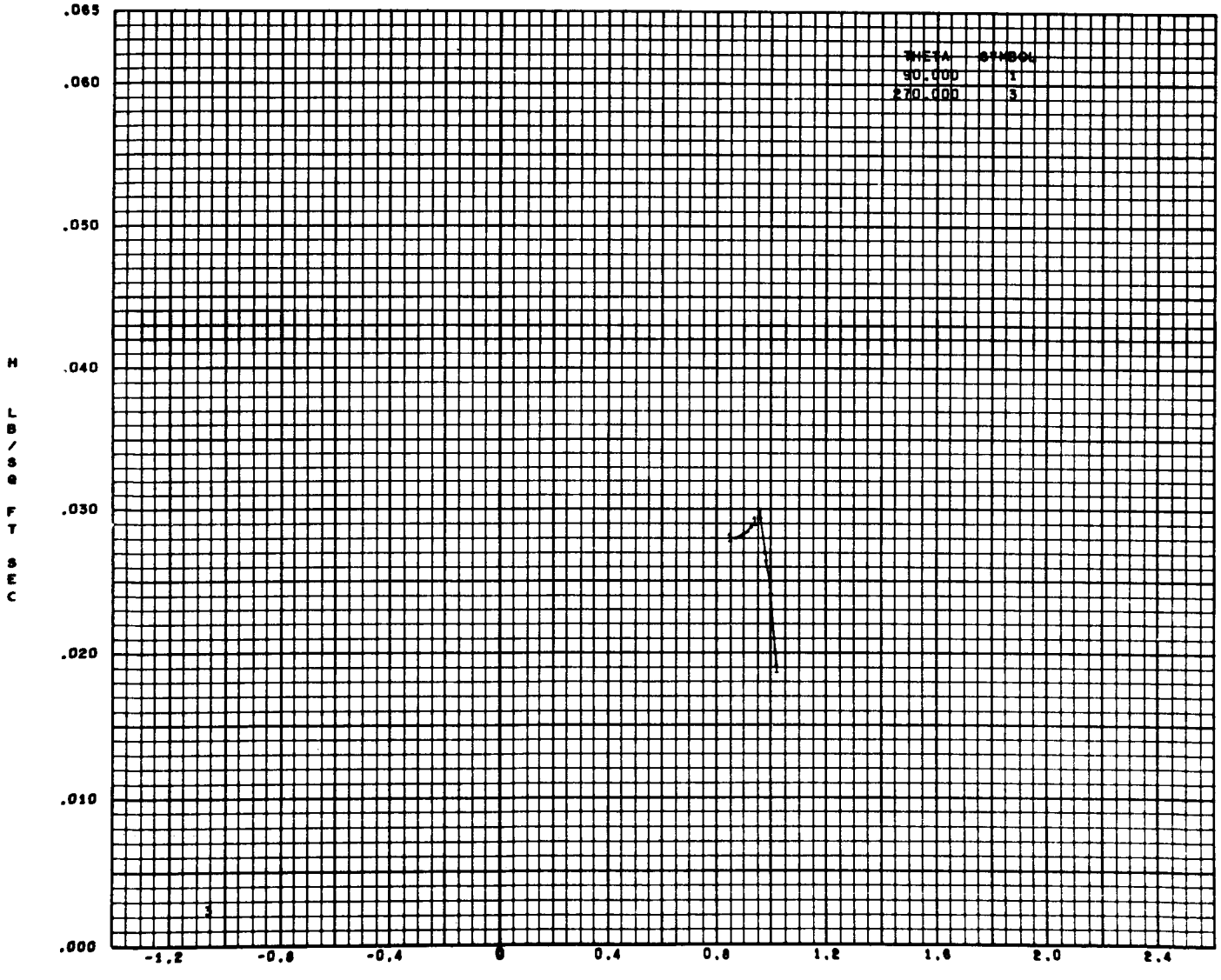
RE/FT --- 2.2260*10+6
Q(OM) --- 9.2420 BTU/SQ FT SEC

PLOT SERIES NUMBER 64

TEST GROUP	TIME (SEC)
101*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
254 000



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SID 64-2080

HEAT TRANSFER | CONFIGURATION C57 | PLOT SERIES NUMBER 64 | 3937-09 251 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 161.65 DEG
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TOTAL PRESSURE ------- 1848.00 PSIA
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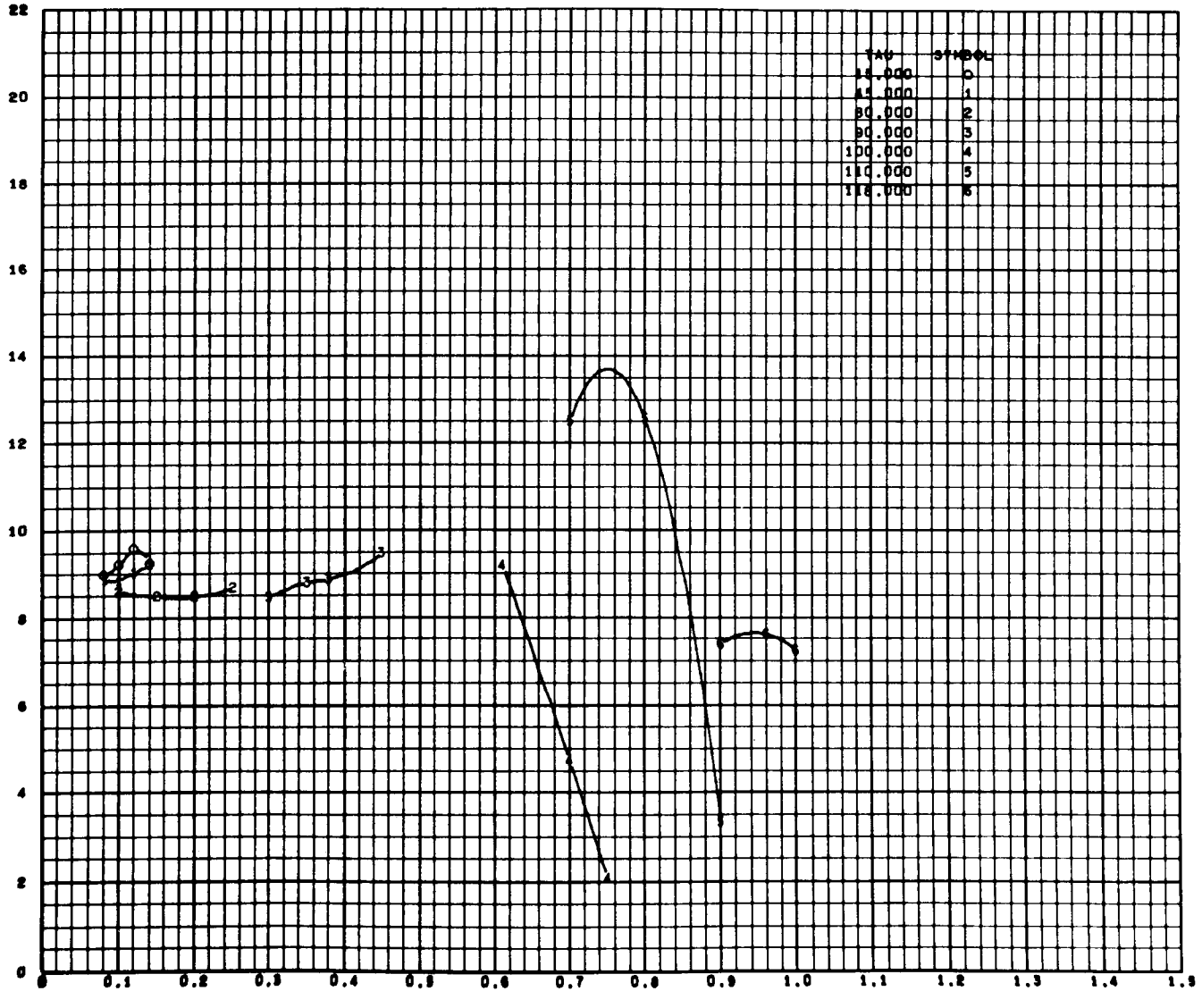
RE/FT --- 2.2260*10+6
Q(OM) --- 9.2420 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
101*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
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TOTAL TEMPERATURE ---- 1900.40 DEG RANKINE

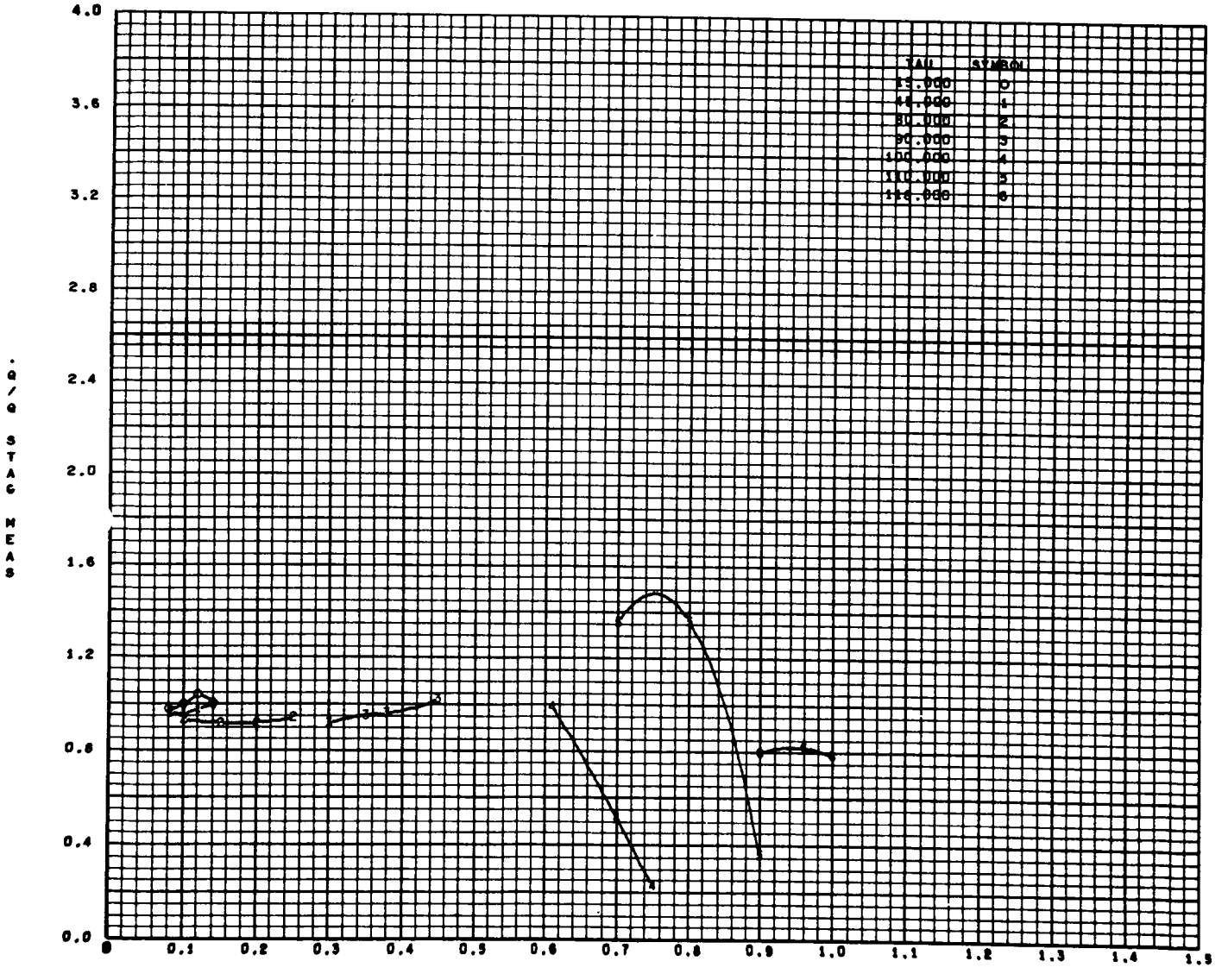
RE/FT --- 2.2260*10+6
Q(OM) --- 9.2420 BTU/SQ FT SEC

PLOT SERIES NUMBER 64

TEST GROUP	TIME (SEC)
101*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
253 000



[redacted]

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C57

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 161.65 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1848.00 PSIA
TOTAL TEMPERATURE ---- 1900.40 DEG RANKINE

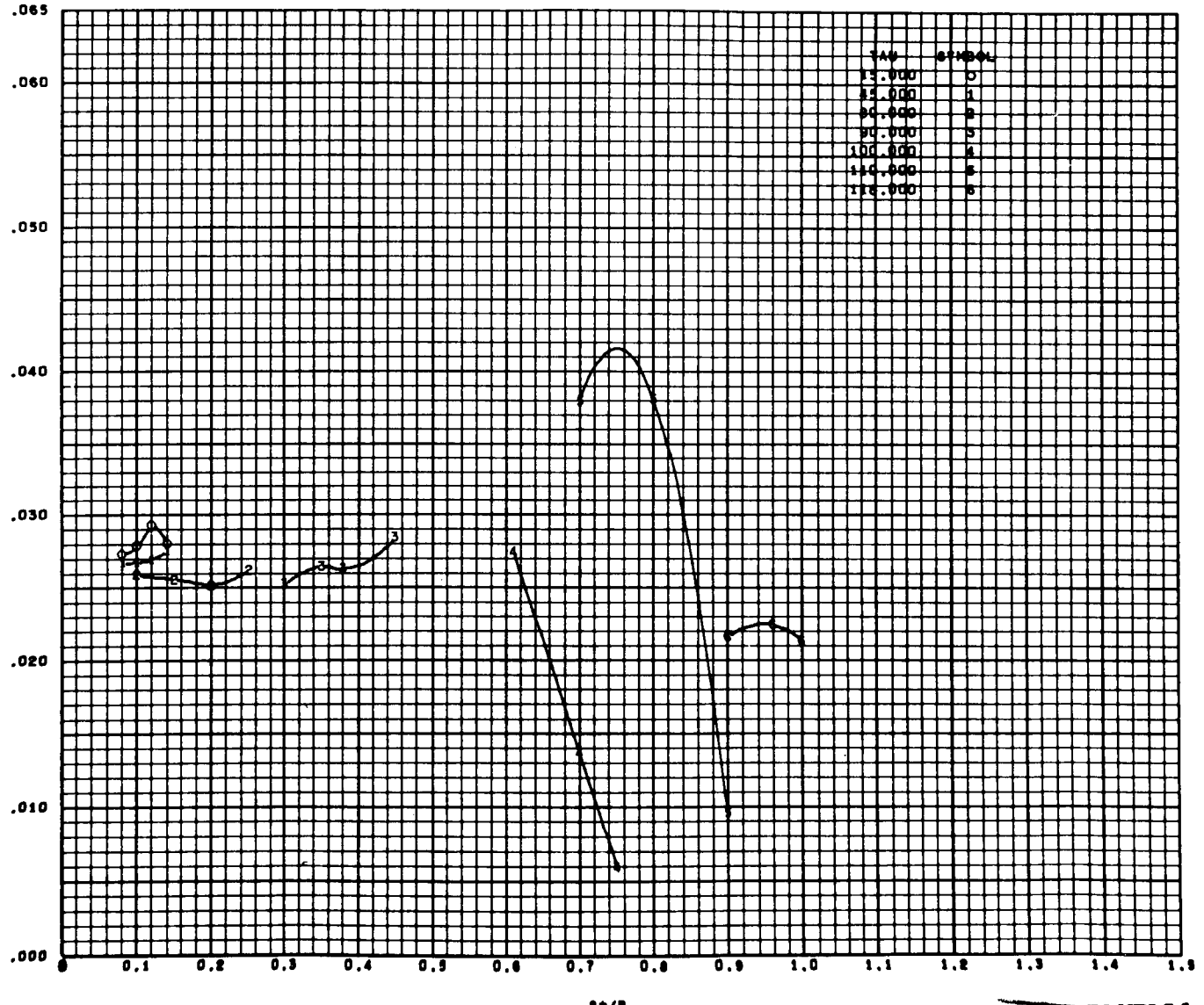
RE/FT --- 2.2260*10+6
Q(OM) --- 9.2420 BTU/SQ FT SEC

PLOT SERIES NUMBER 64

TEST GROUP	TIME (SEC)
101*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-09
255 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 142.58 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1670.70 DEG RANKINE

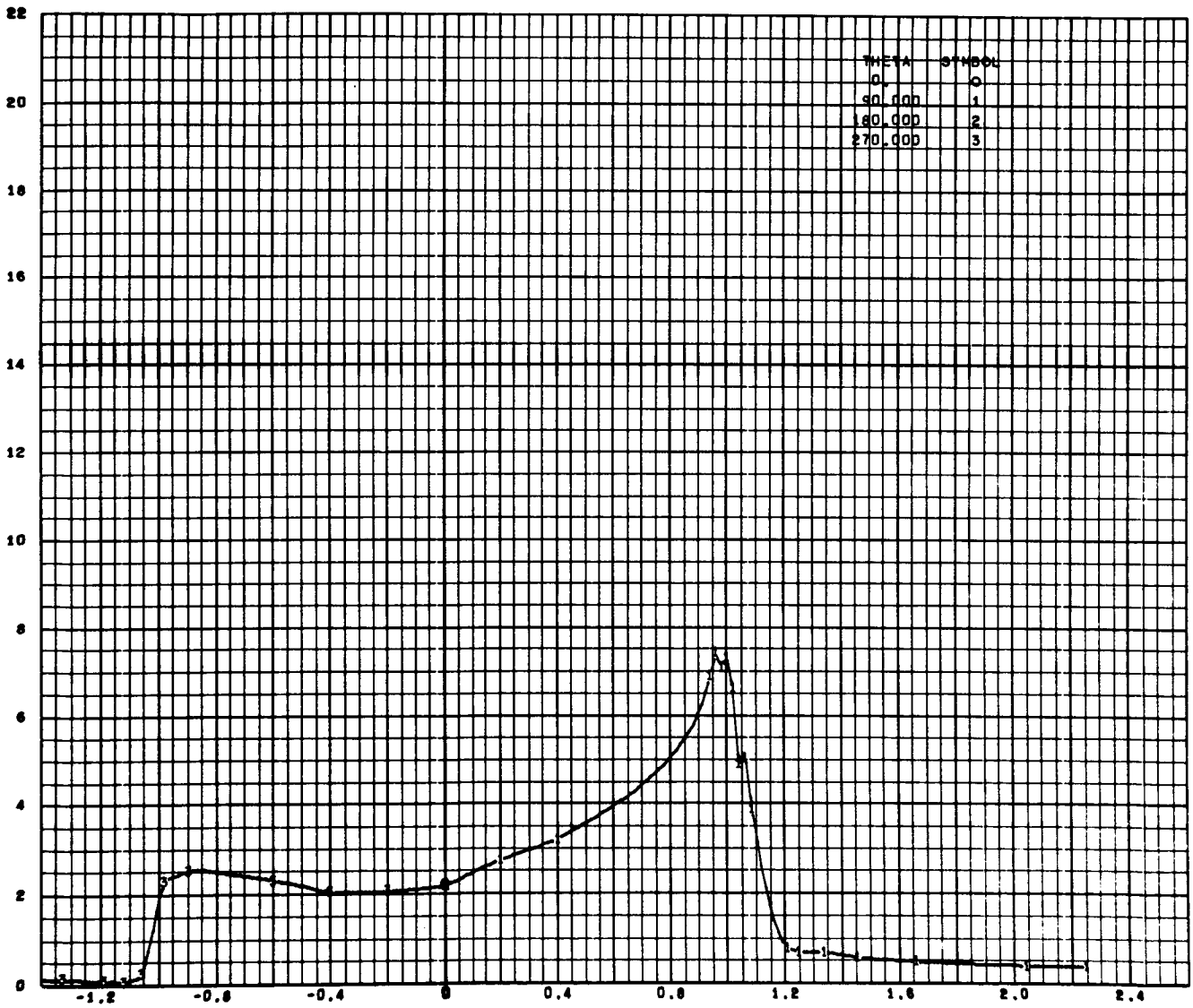
RE/FT --- 0.3600*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 65

TEST GROUP	TIME (SEC)
138*	2.70
143	2.70
152	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
001 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 142.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1670.70 DEG RANKINE

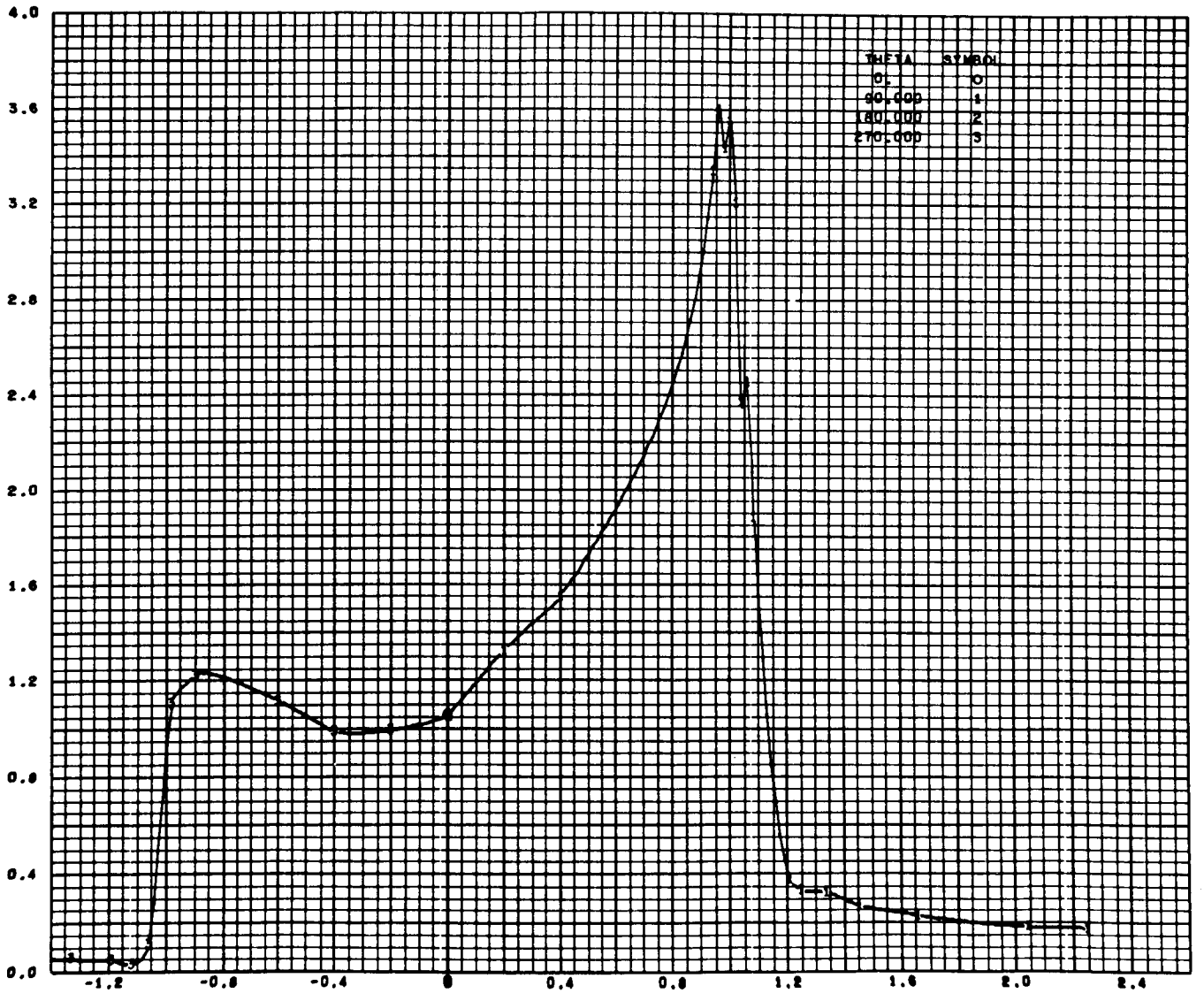
RE/FT --- 0.3600*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 65

TEST GROUP	TIME (SEC)
138*	2.70
143	2.70
152	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
004 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 142.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1670.70 DEG RANKINE

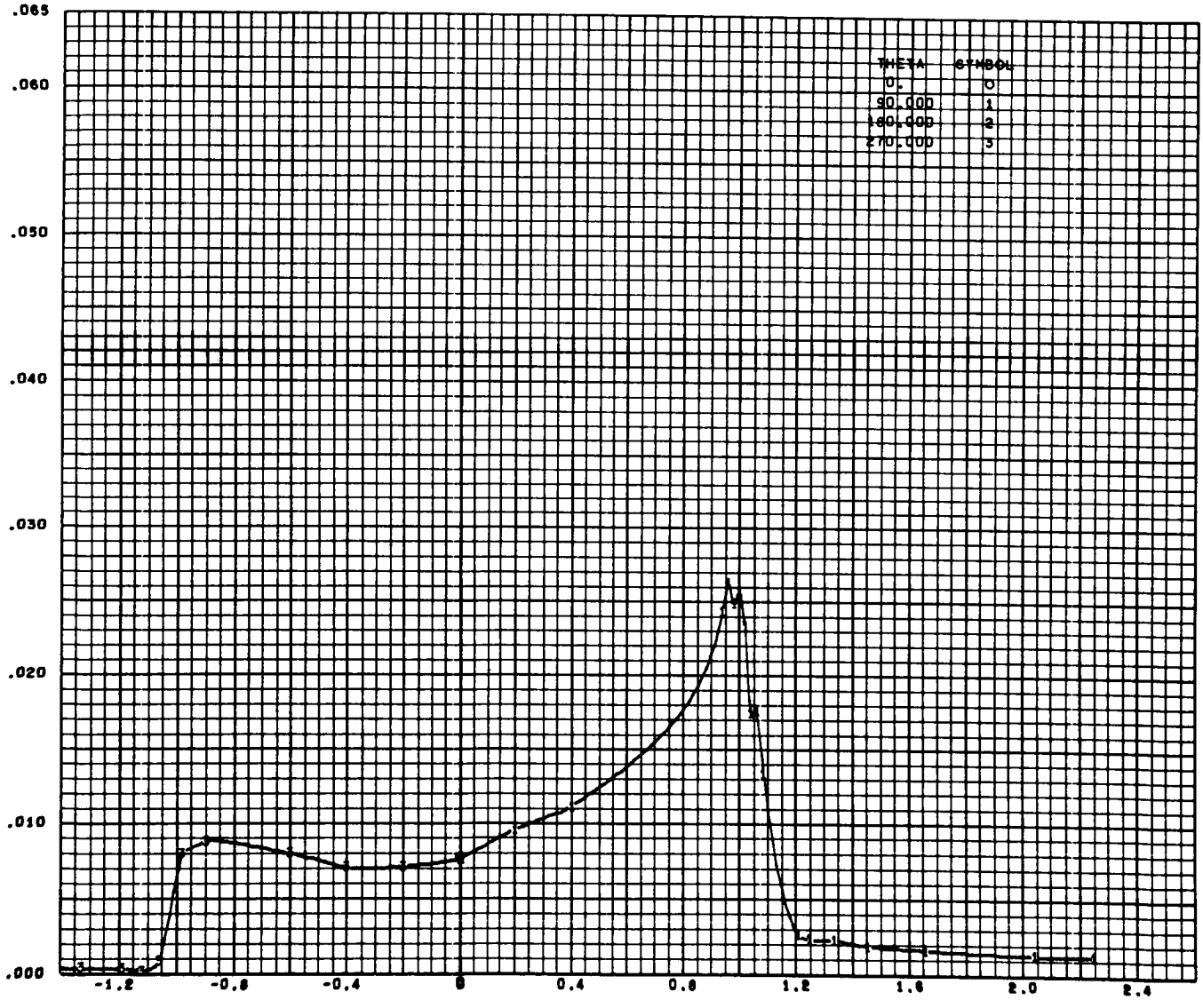
RE/FT --- 0.3600*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 65

TEST GROUP	TIME (SEC)
138*	2.70
143	2.70
152	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
007 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 142.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1670.70 DEG RANKINE

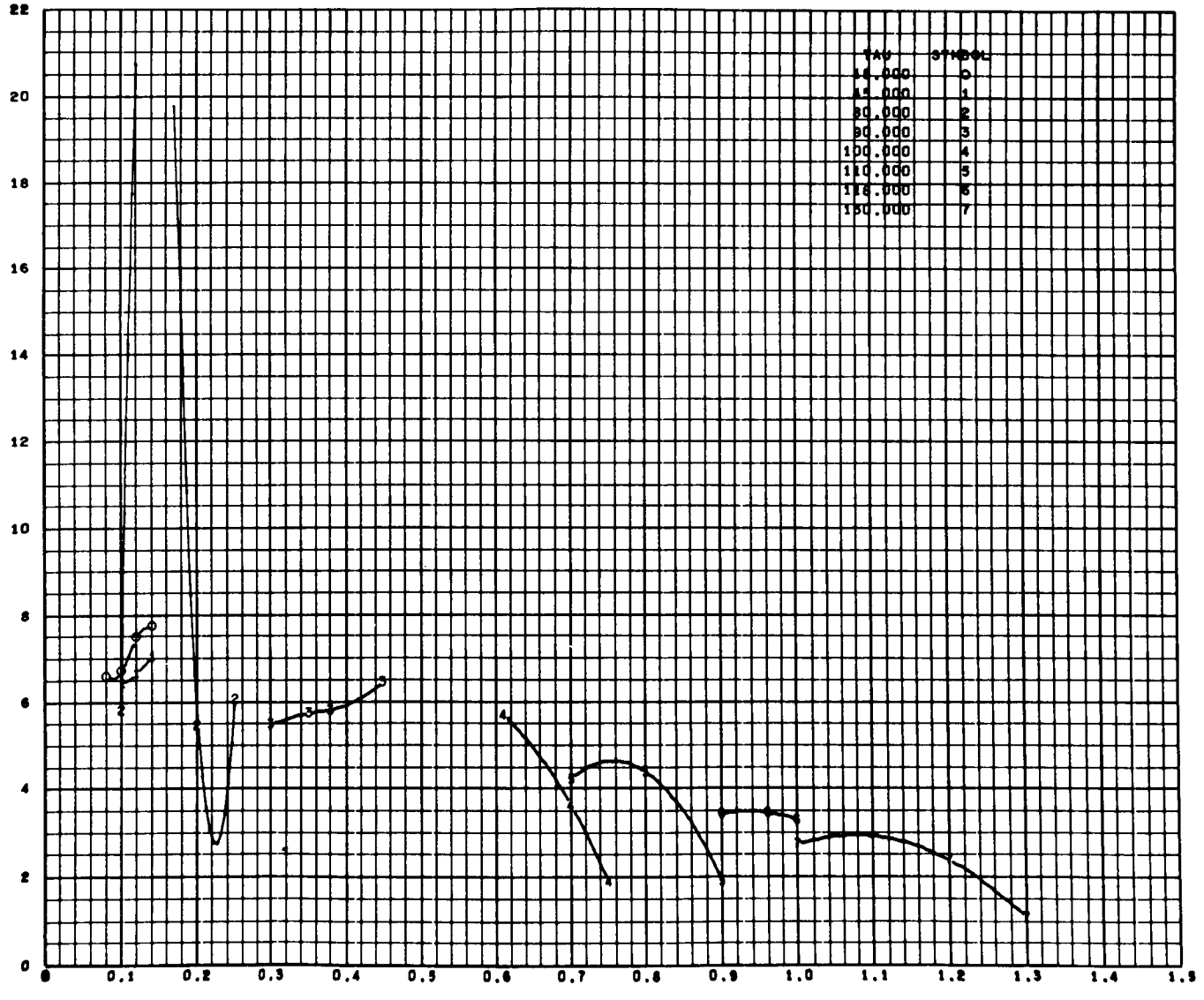
RE/FT --- 0.3600*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 65

TEST GROUP	TIME (SEC)
138*	2.70
143	2.70
152	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
002 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 142.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1670.70 DEG RANKINE

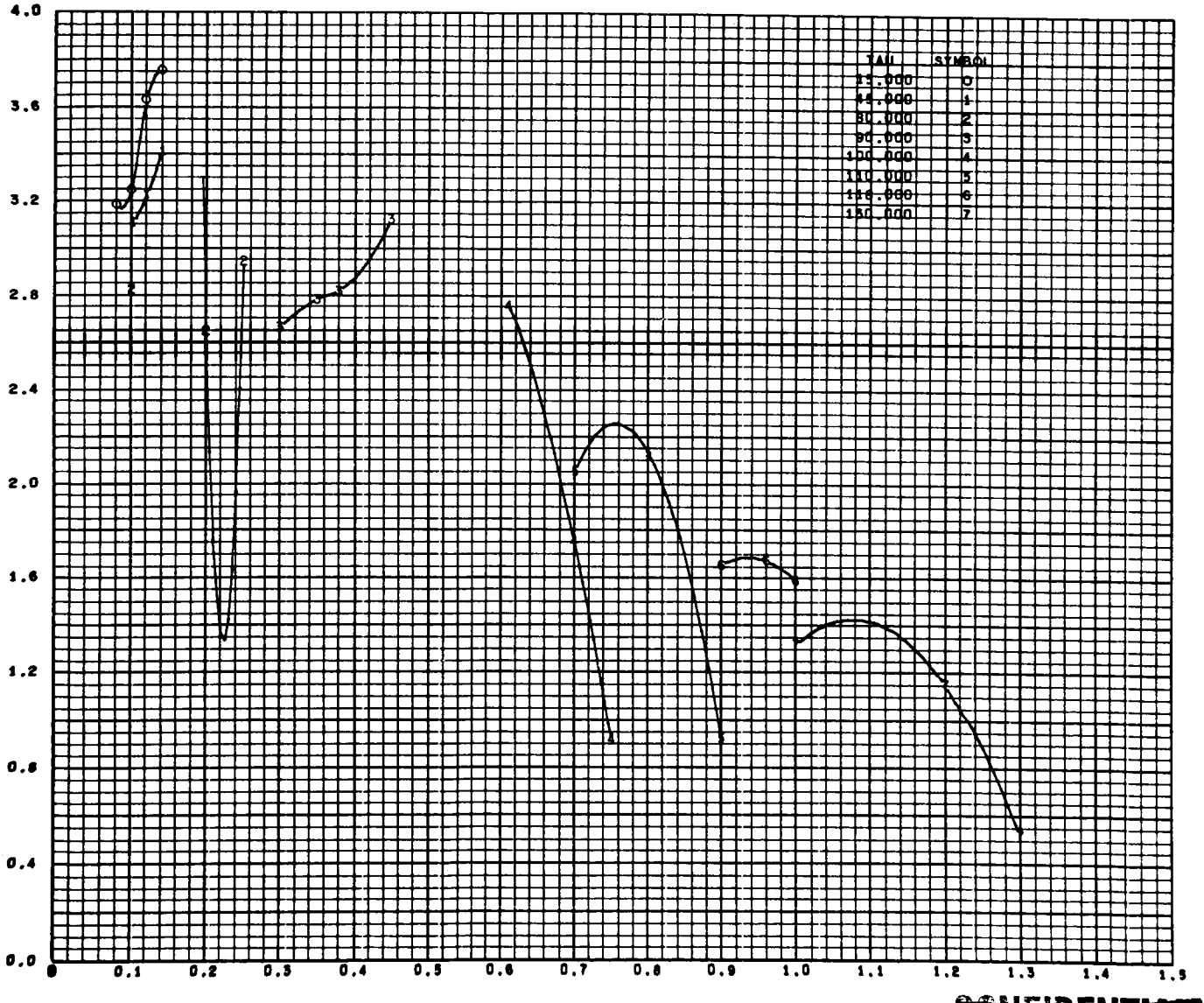
RE/FT --- 0.3600*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 65

TEST GROUP	TIME (SEC)
138*	2.70
143	2.70
152	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
005 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

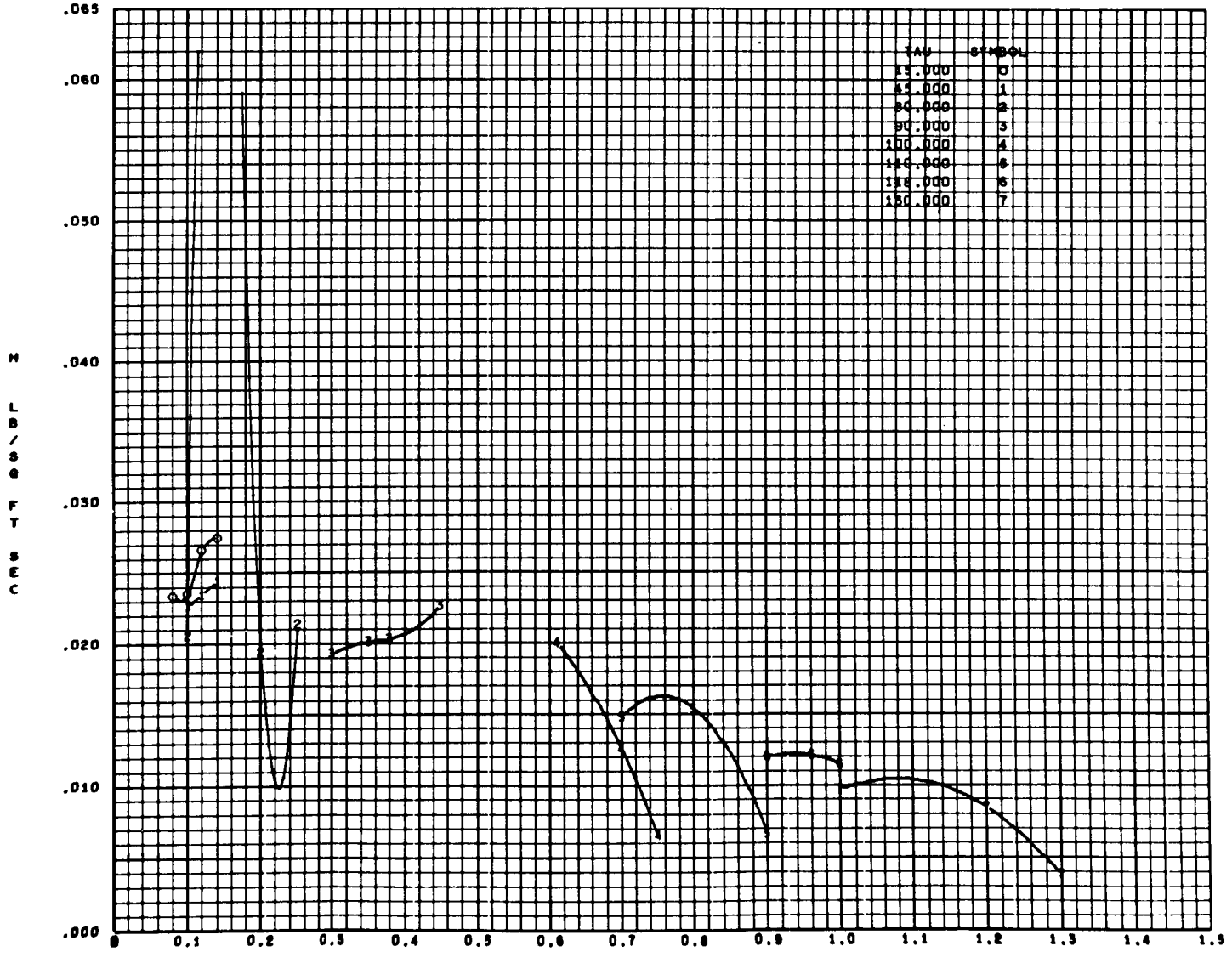
MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 142.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1670.70 DEG RANKINE

RE/FT --- 0.3600*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 65

TEST GROUP	TIME (SEC)
138*	2.70
143	2.70
152	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 142.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1670.70 DEG RANKINE

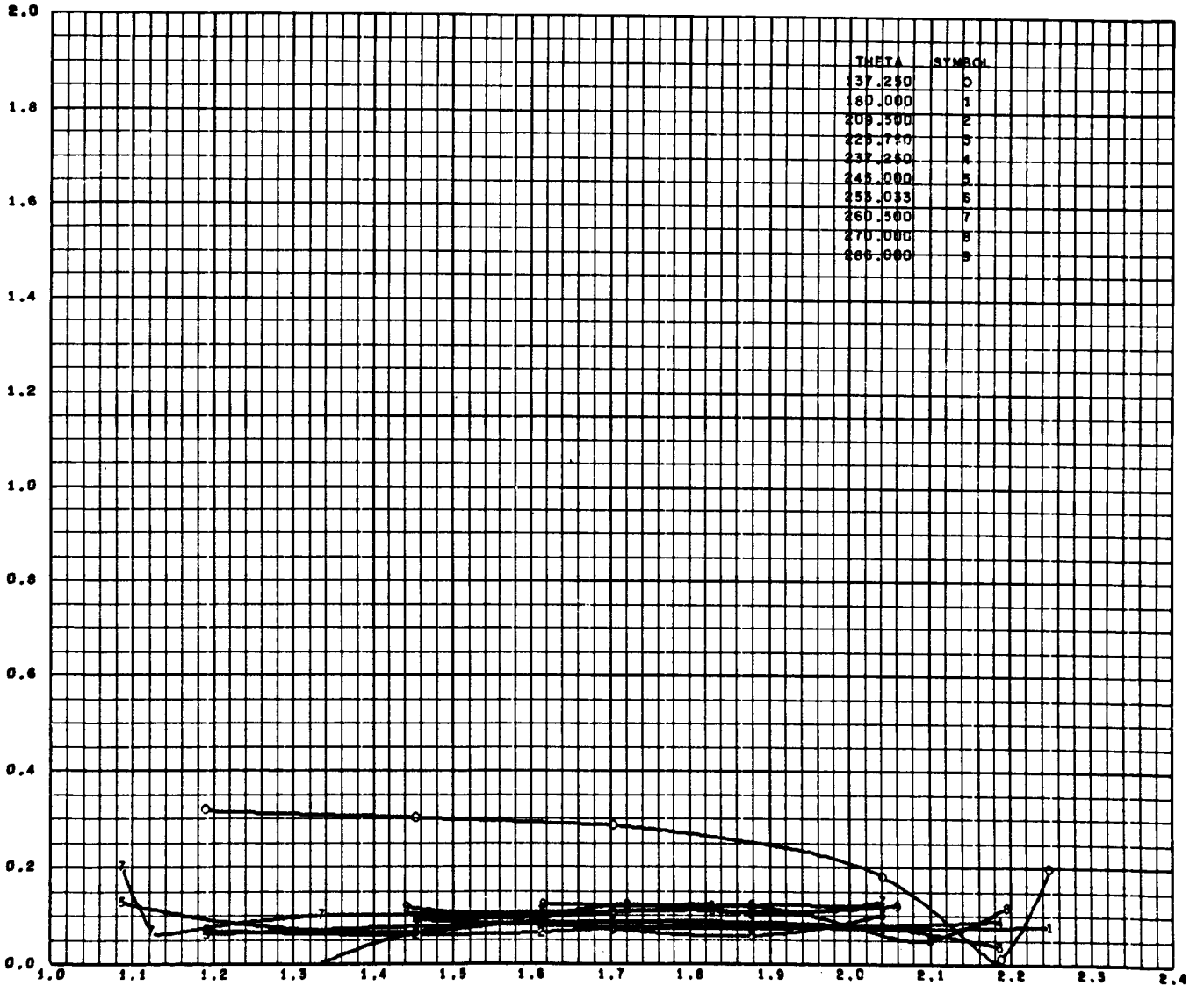
RE/FT --- 0.3600*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 65

TEST GROUP	TIME (SEC)
138*	2.70
143	2.70
152	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
003 000



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CONFIDENTIAL

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 142.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1670.70 DEG RANKINE

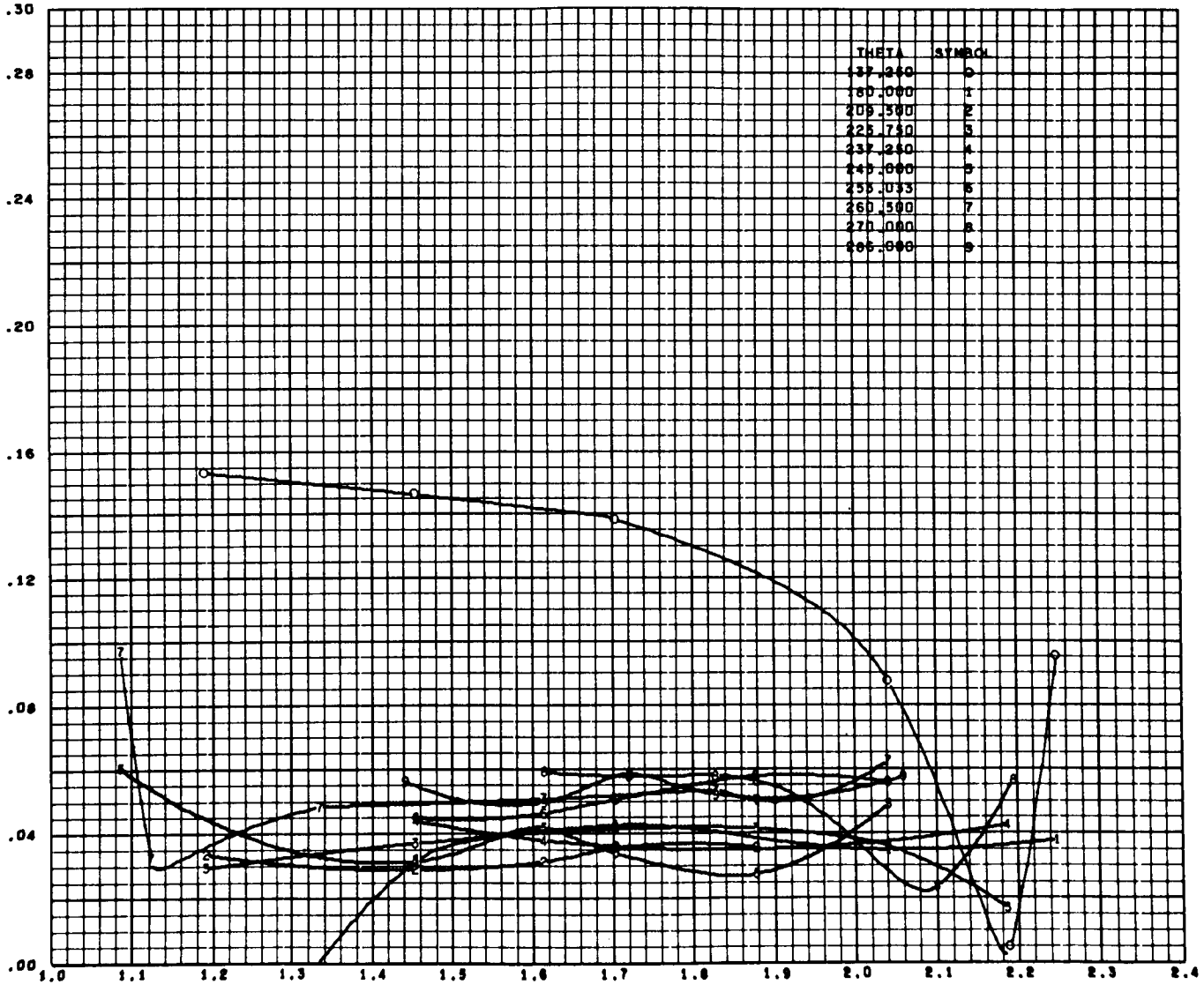
RE/FT --- 0.3600*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 65

TEST GROUP	TIME (SEC)
138*	2.70
143	2.70
152	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
006 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 142.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1670.70 DEG RANKINE

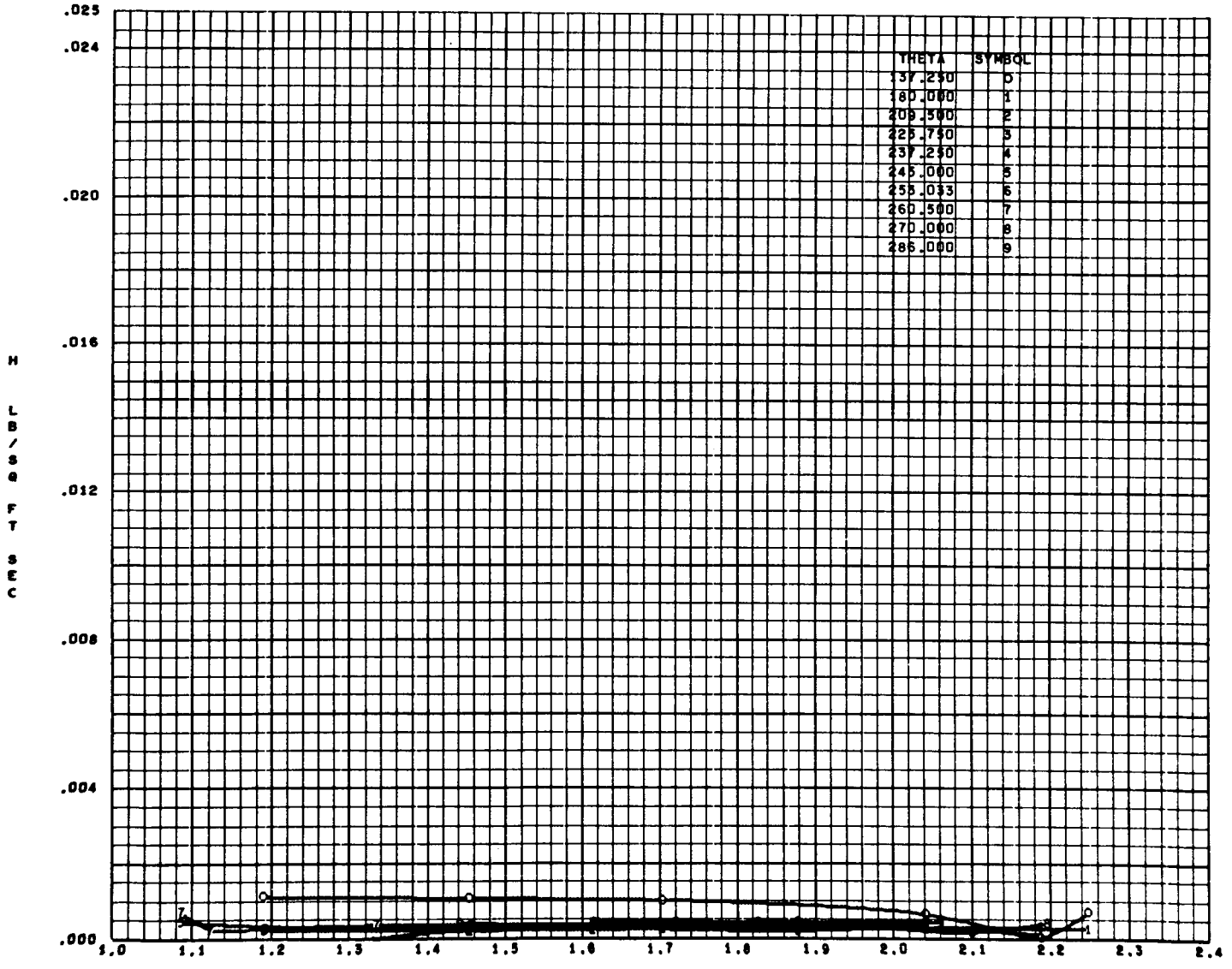
RE/FT --- 0.3600*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 65

TEST GROUP	TIME (SEC)
138*	2.70
143	2.70
152	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
009 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 146.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.80 DEG RANKINE

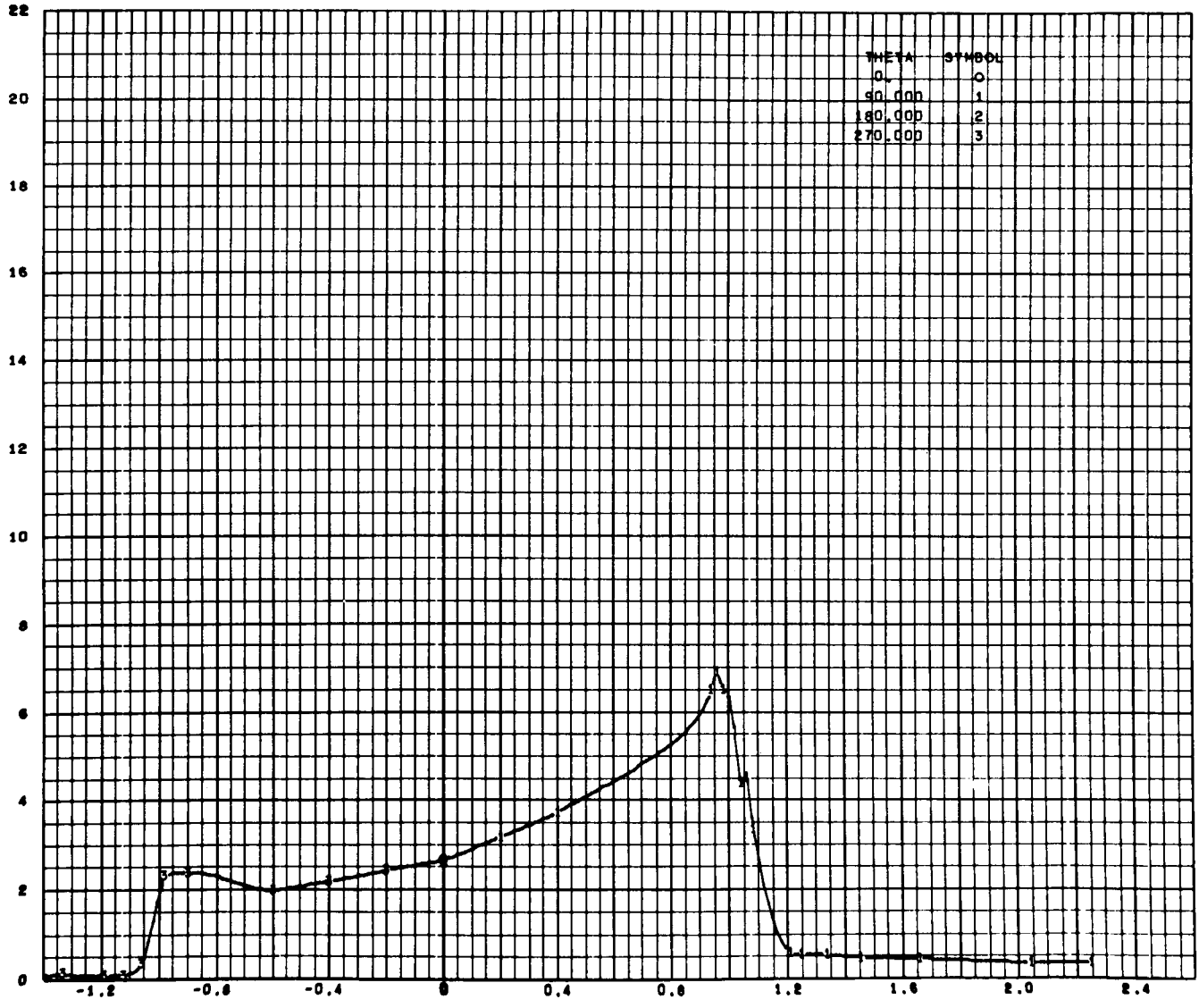
RE/FT --- 0.3569*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 66

TEST GROUP	TIME (SEC)
139*	2.70
144	2.75
153	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
010 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 146.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.80 DEG RANKINE

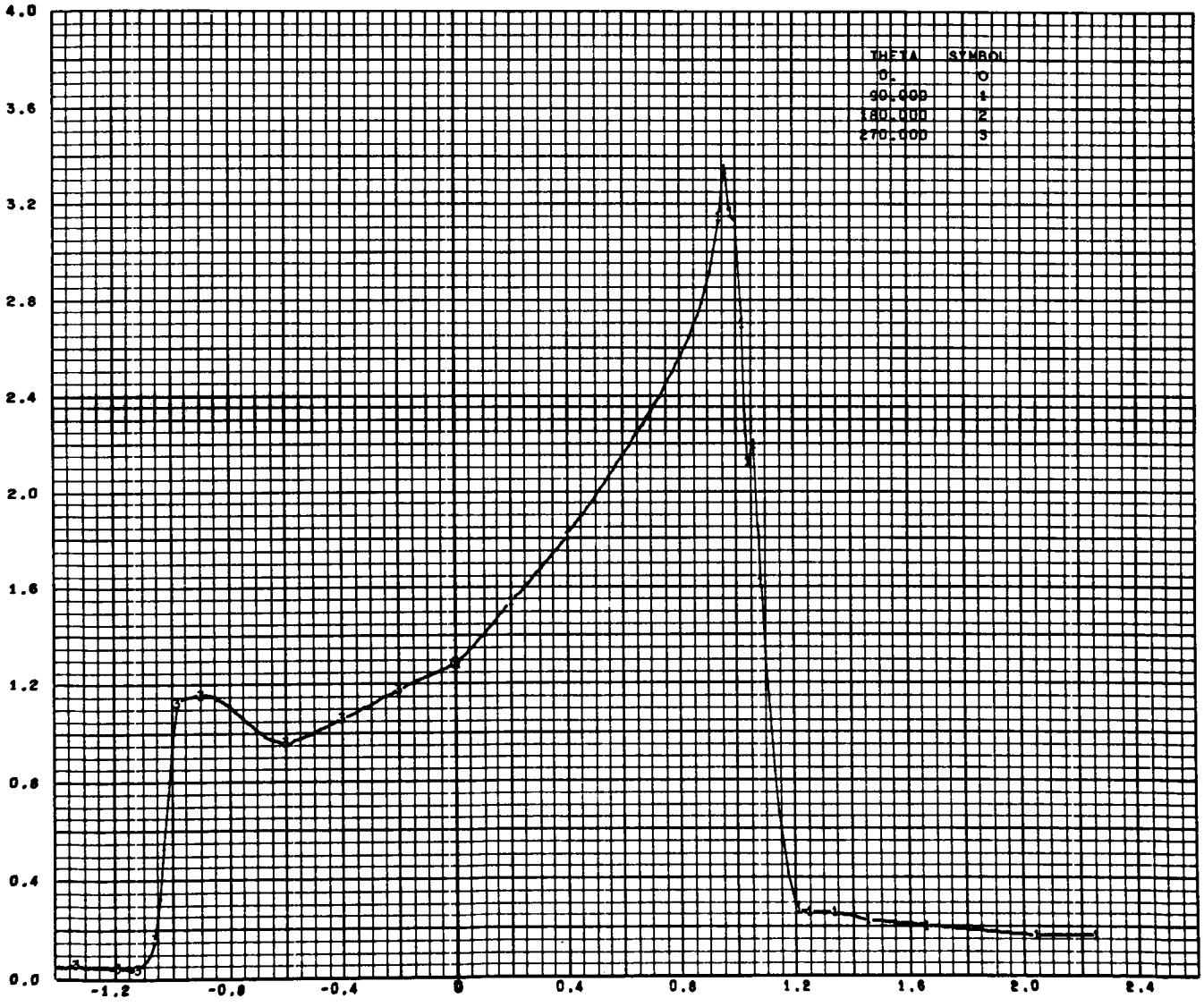
RE/FT --- 0.3569*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 66

TEST GROUP	TIME (SEC)
139*	2.70
144	2.75
153	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
013 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 146.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.80 DEG RANKINE

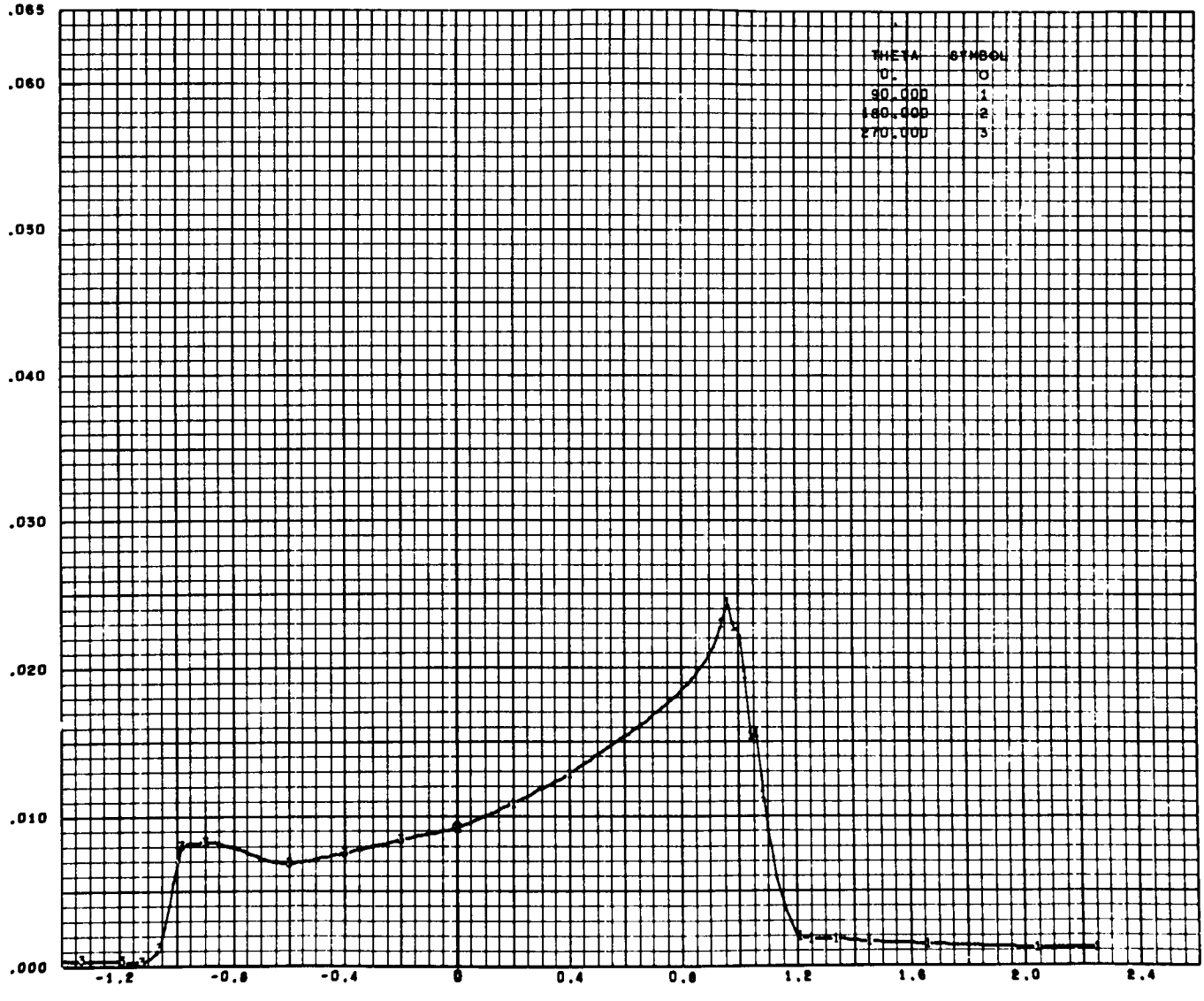
RE/FT --- 0.3569*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 66

TEST GROUP	TIME (SEC)
139*	2.70
144	2.75
153	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
016 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 146.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.80 DEG RANKINE

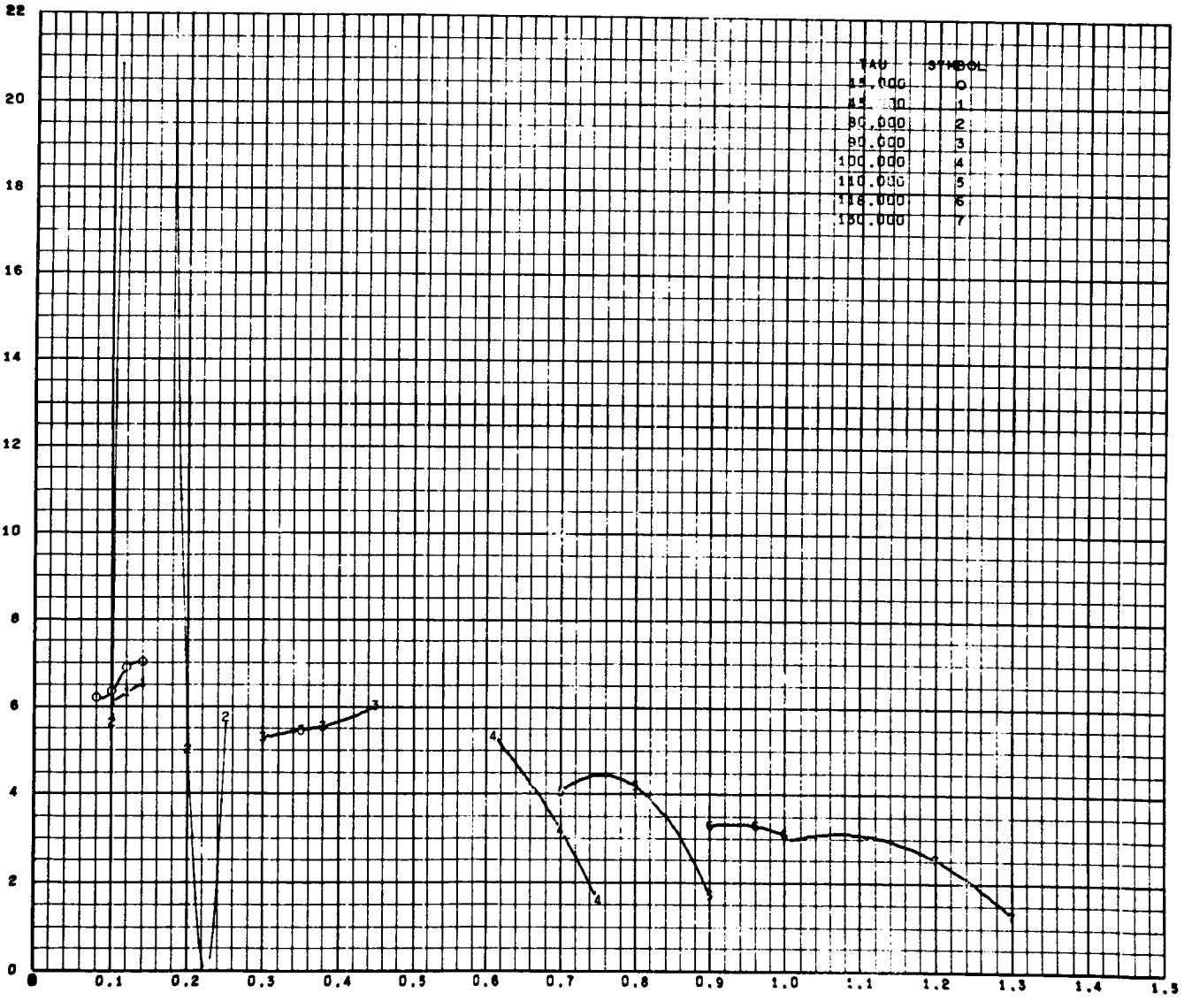
RE/FT --- 0.3569*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 66

TEST GROUP	TIME (SEC)
139*	2.70
144	2.75
153	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
011 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 146.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.80 DEG RANKINE

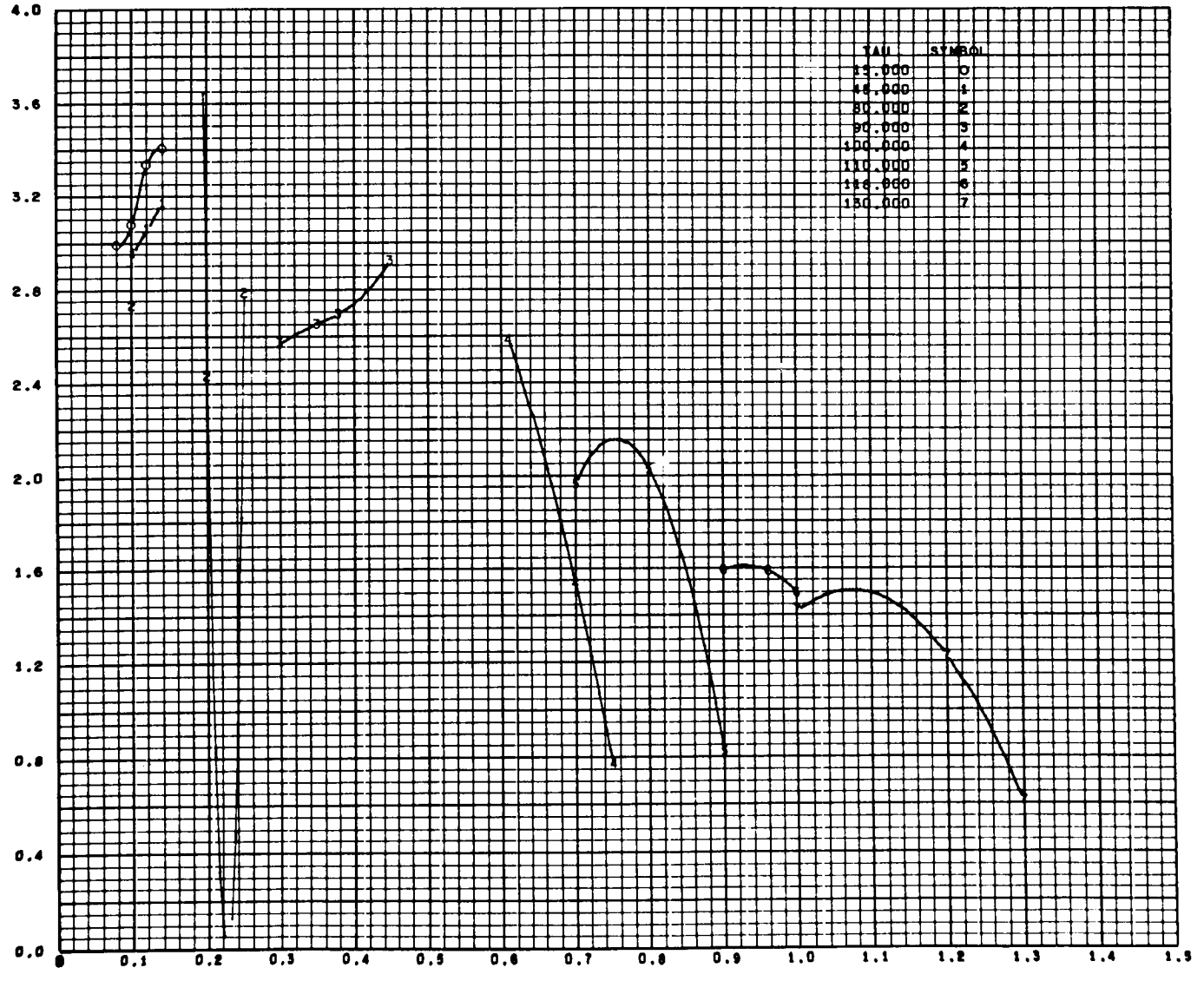
RE/FT --- 0.3569*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 66

TEST GROUP	TIME (SEC)
139*	2.70
144	2.75
153	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
014 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 146.59 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.80 DEG RANKINE

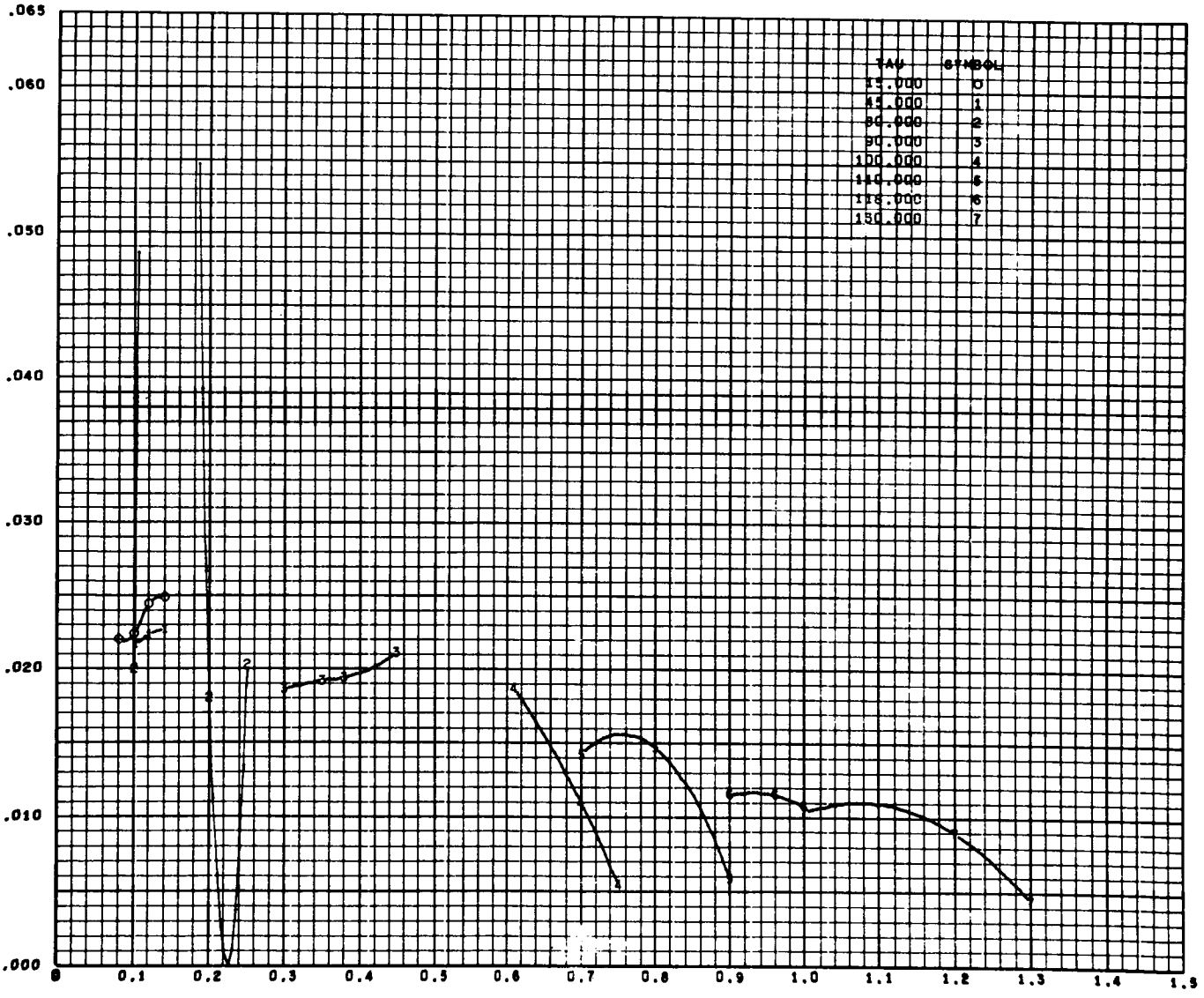
RE/FT --- 0.3569*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 66

TEST GROUP	TIME (SEC)
139*	2.70
144	2.75
153	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
017 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 146.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.80 DEG RANKINE

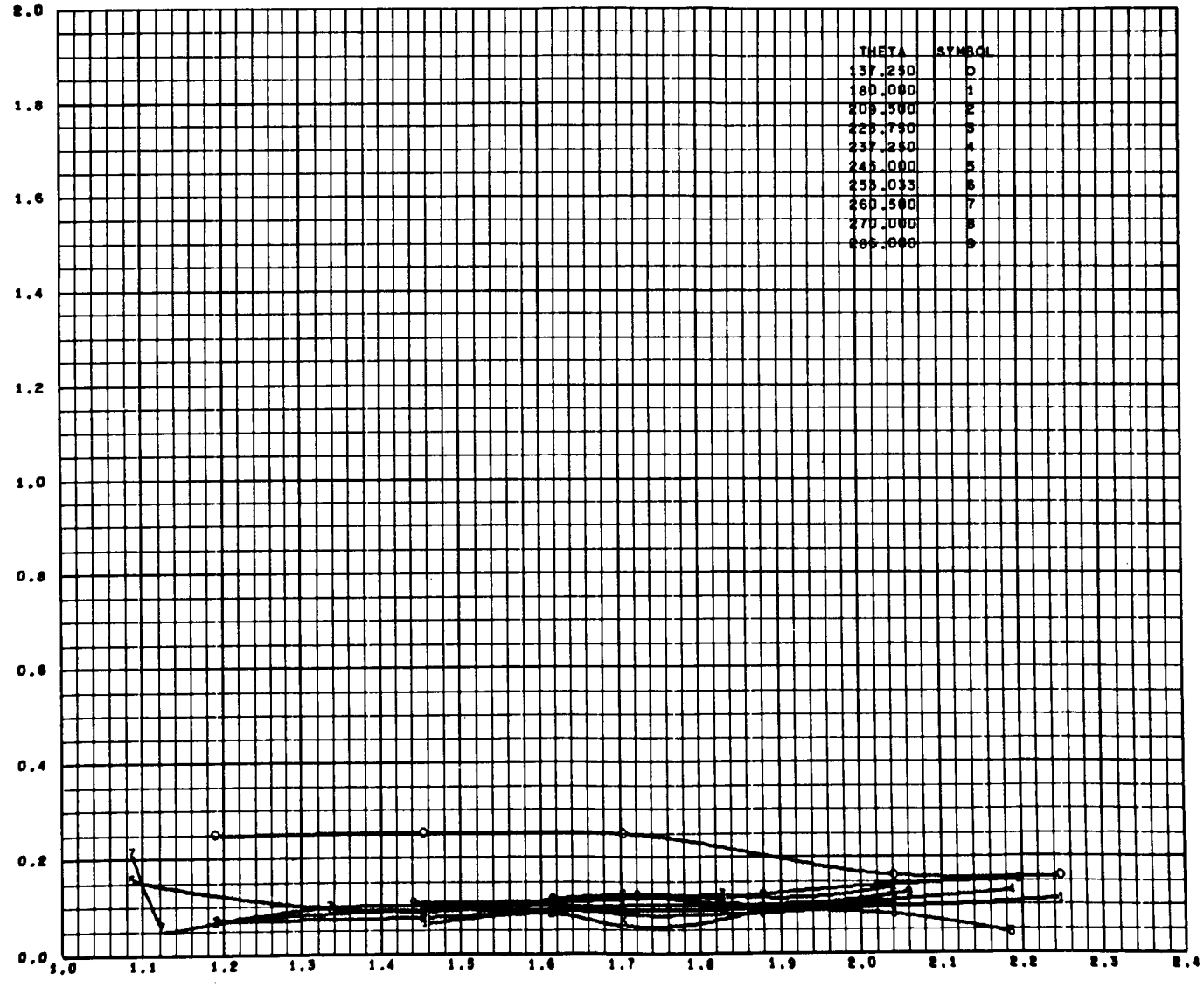
RE/FT --- 0.3569*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 66

TEST GROUP	TIME (SEC)
139*	2.70
144	2.75
153	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
012 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 146.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.80 DEG RANKINE

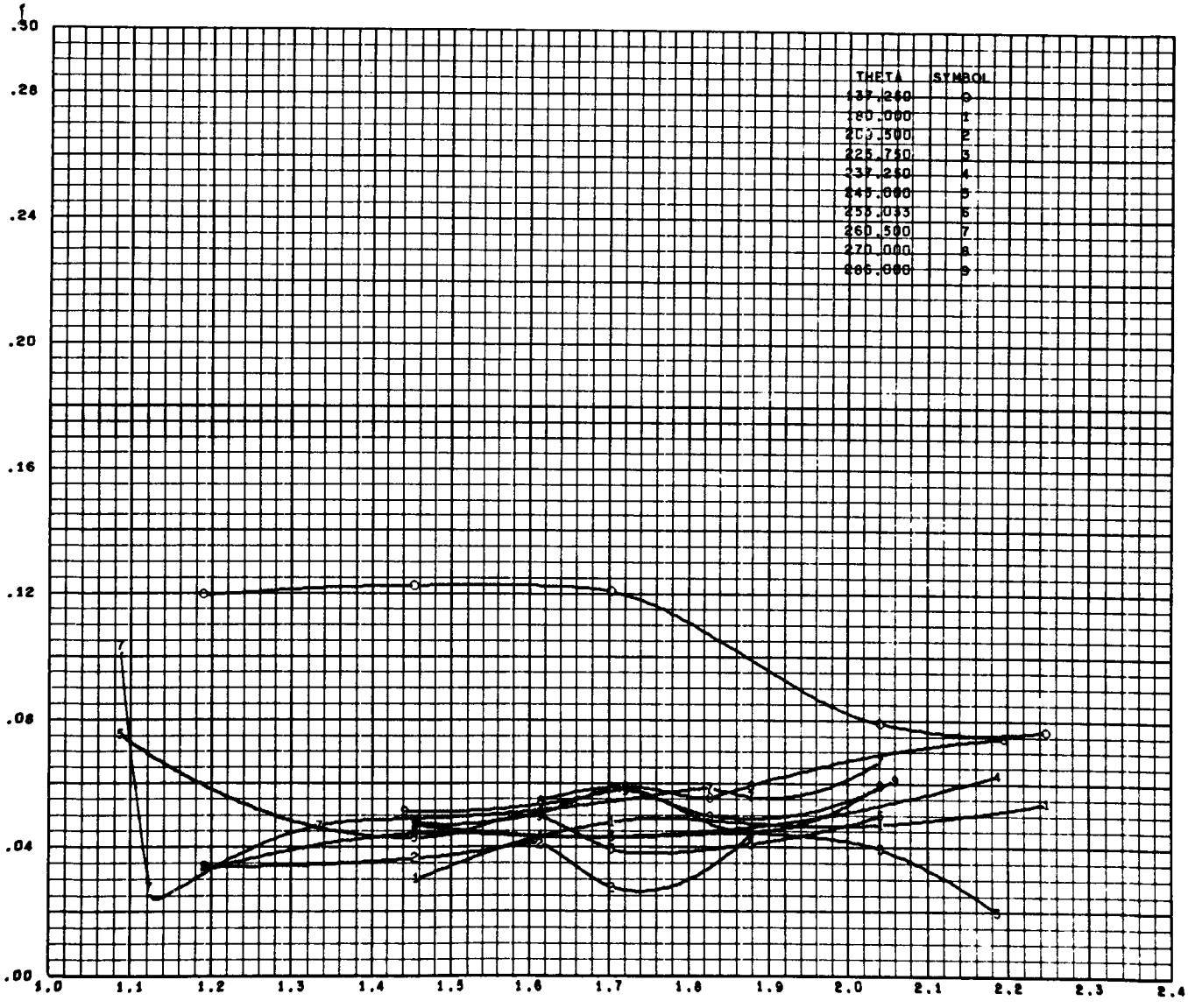
RE/FT --- 0.3569*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 66

TEST GROUP	TIME (SEC)
139*	2.70
144	2.75
153	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
015 000



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SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 146.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.80 DEG RANKINE

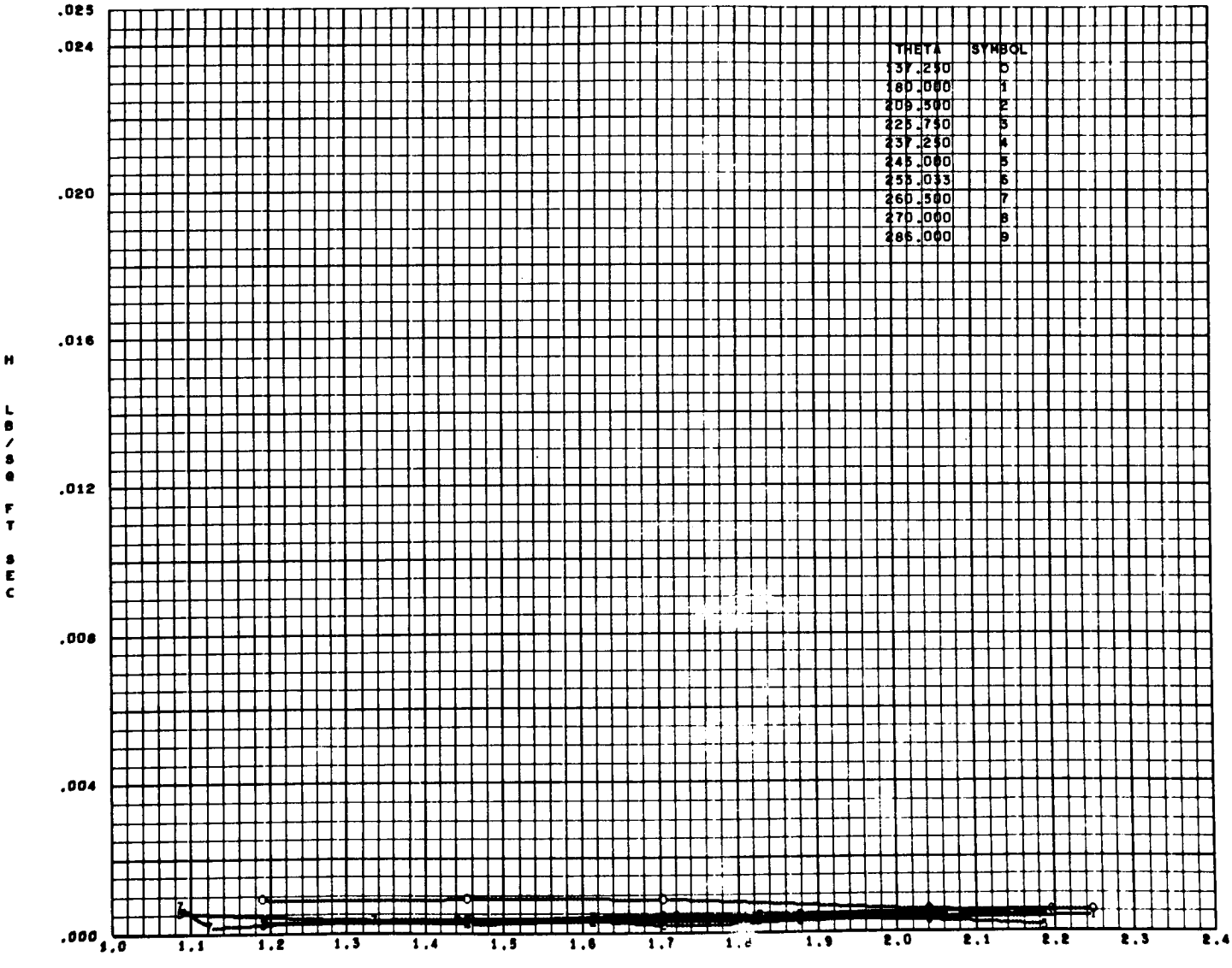
RE/FT --- 0.3569*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 66

TEST GROUP	TIME (SEC)
139*	2.70
144	2.75
153	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
018 000



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A-456 SID 64-2080

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 147.21 DEG
ANGLE OF YAW ---------- -4.65 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1673.50 DEG RANKINE

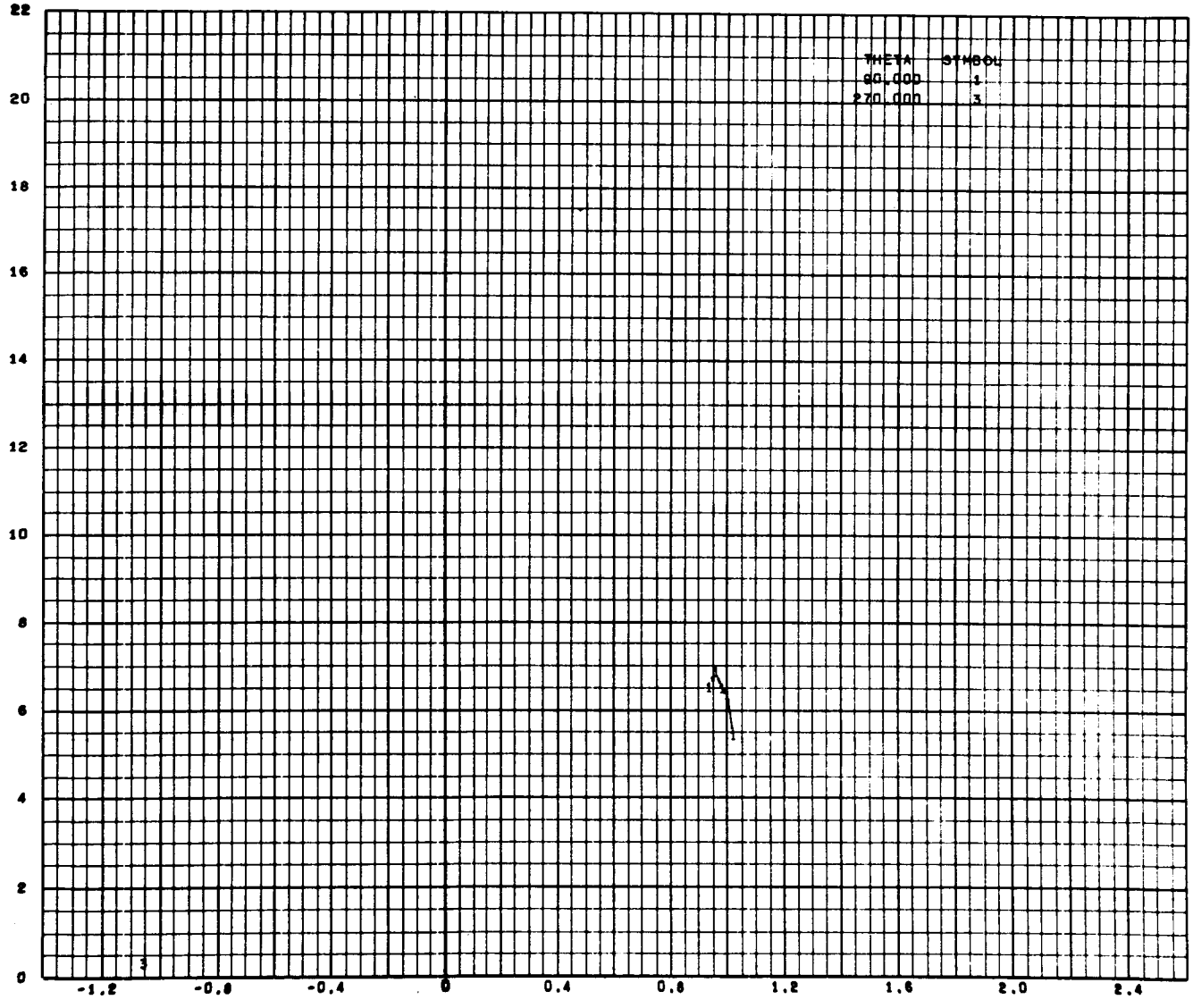
RE/FT --- 0.3589*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 67

TEST GROUP	TIME (SEC)
145*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
019 000



CONFIDENTIAL

HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 67 | 3937-10 021 000

APOLLO H-11

AEDC, TUNNEL C

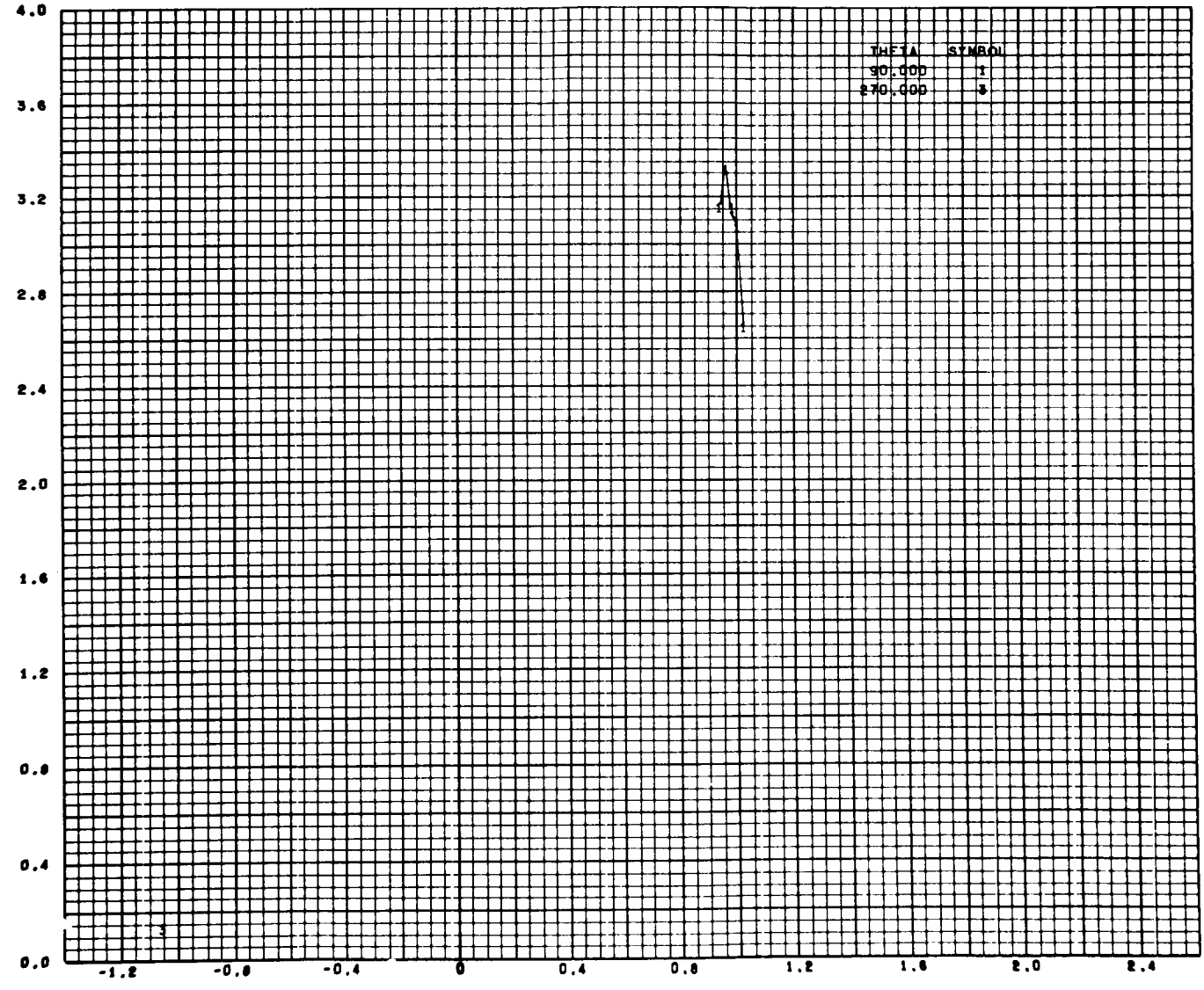
JUNE, 1964

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 147.21 DEG
ANGLE OF YAW --------- -4.65 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1673.50 DEG RANKINE

RE/FT --- 0.3589*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
145*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 147.21 DEG
ANGLE OF YAW --------- -4.65 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1673.50 DEG RANKINE

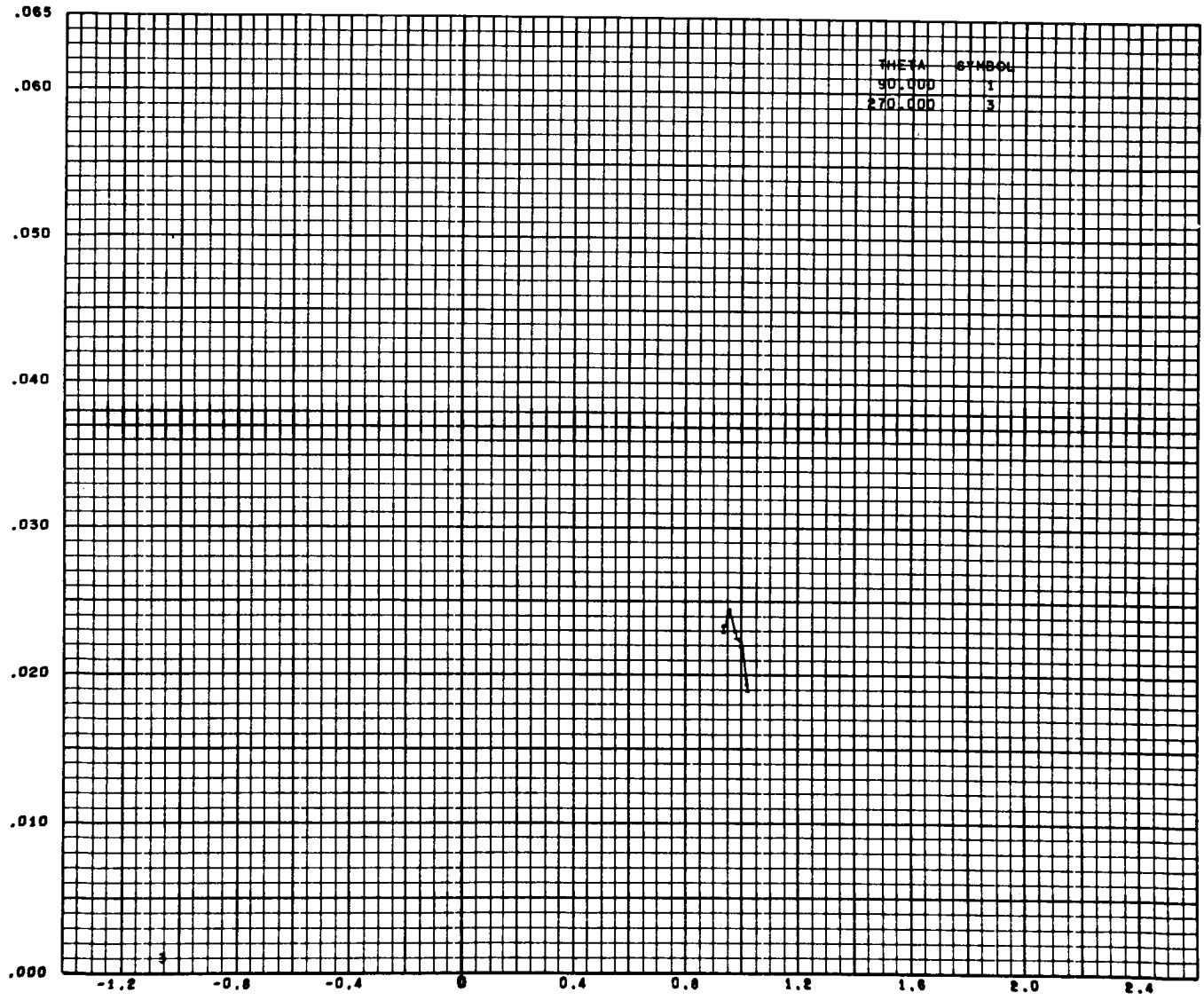
RE/FT --- 0.3589*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 67

TEST GROUP	TIME (SEC)
145*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
023 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 147.21 DEG
ANGLE OF YAW --------- -4.65 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1673.50 DEG RANKINE

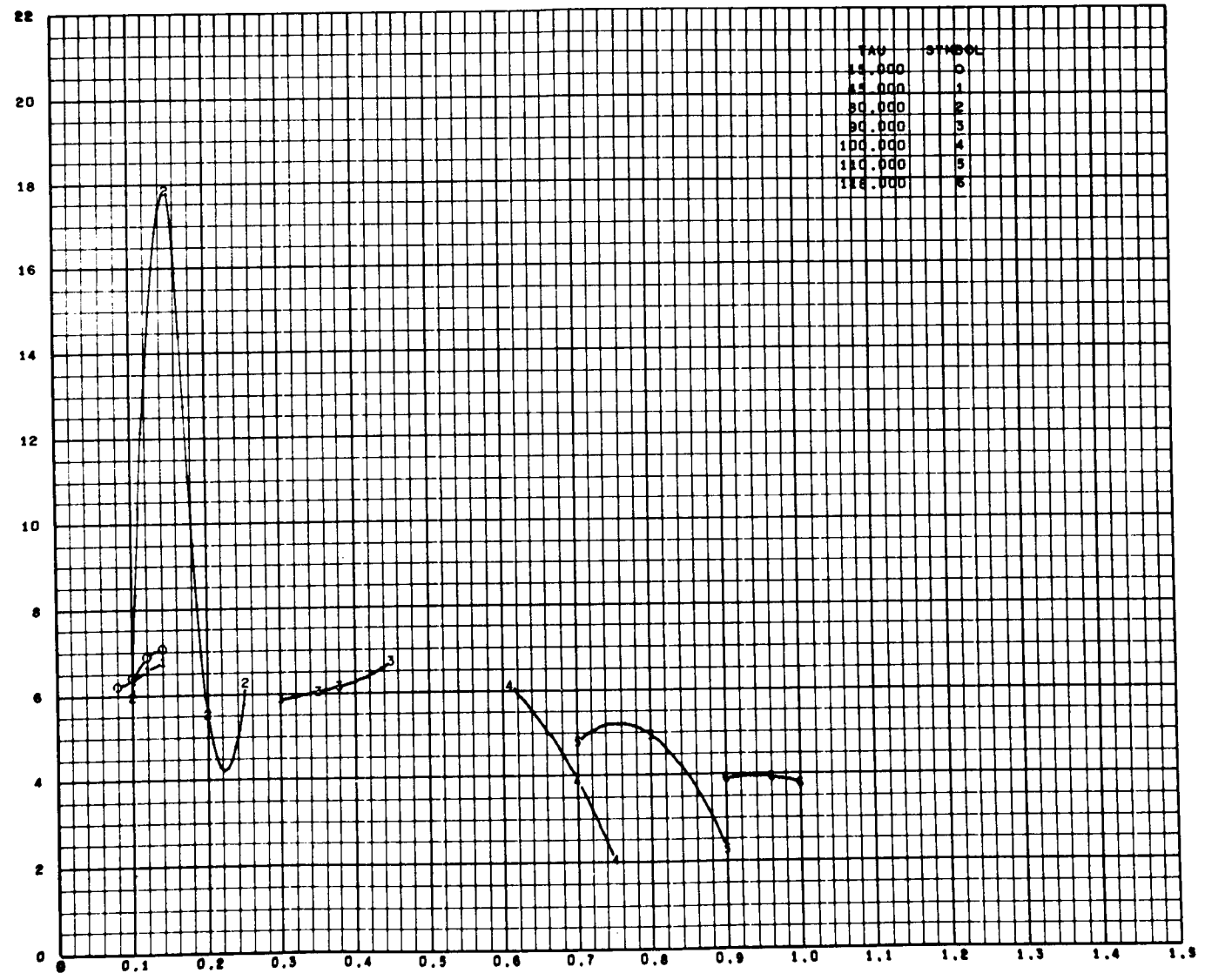
RE/FT --- 0.3589*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 67

TEST GROUP	TIME (SEC)
145*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
020 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 147.21 DEG
ANGLE OF YAW --------- -4.65 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1673.50 DEG RANKINE

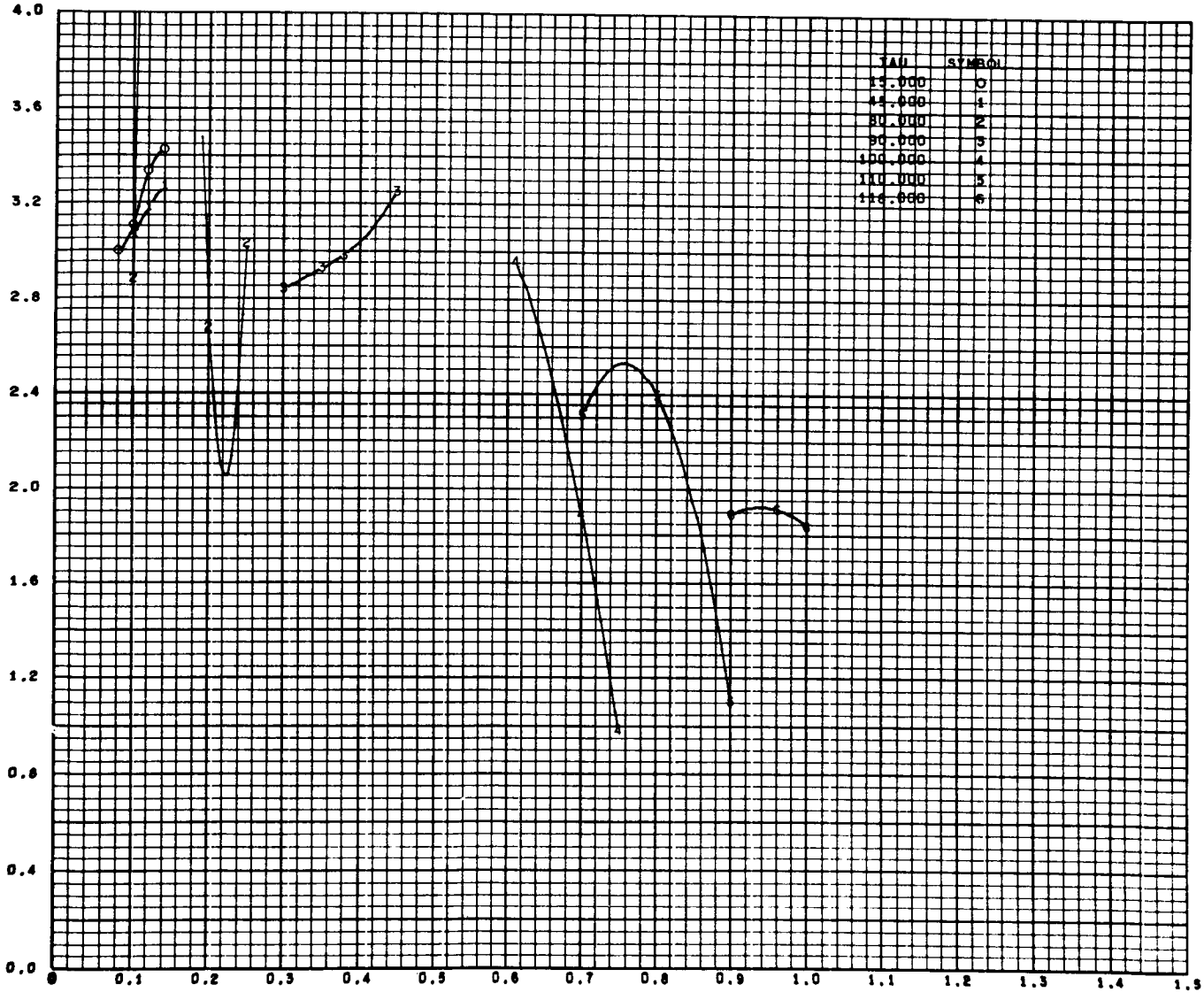
RE/FT --- 0.3589*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 67

TEST GROUP	TIME (SEC)
145*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
022 000



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 147.21 DEG
ANGLE OF YAW --------- -4.65 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1673.50 DEG RANKINE

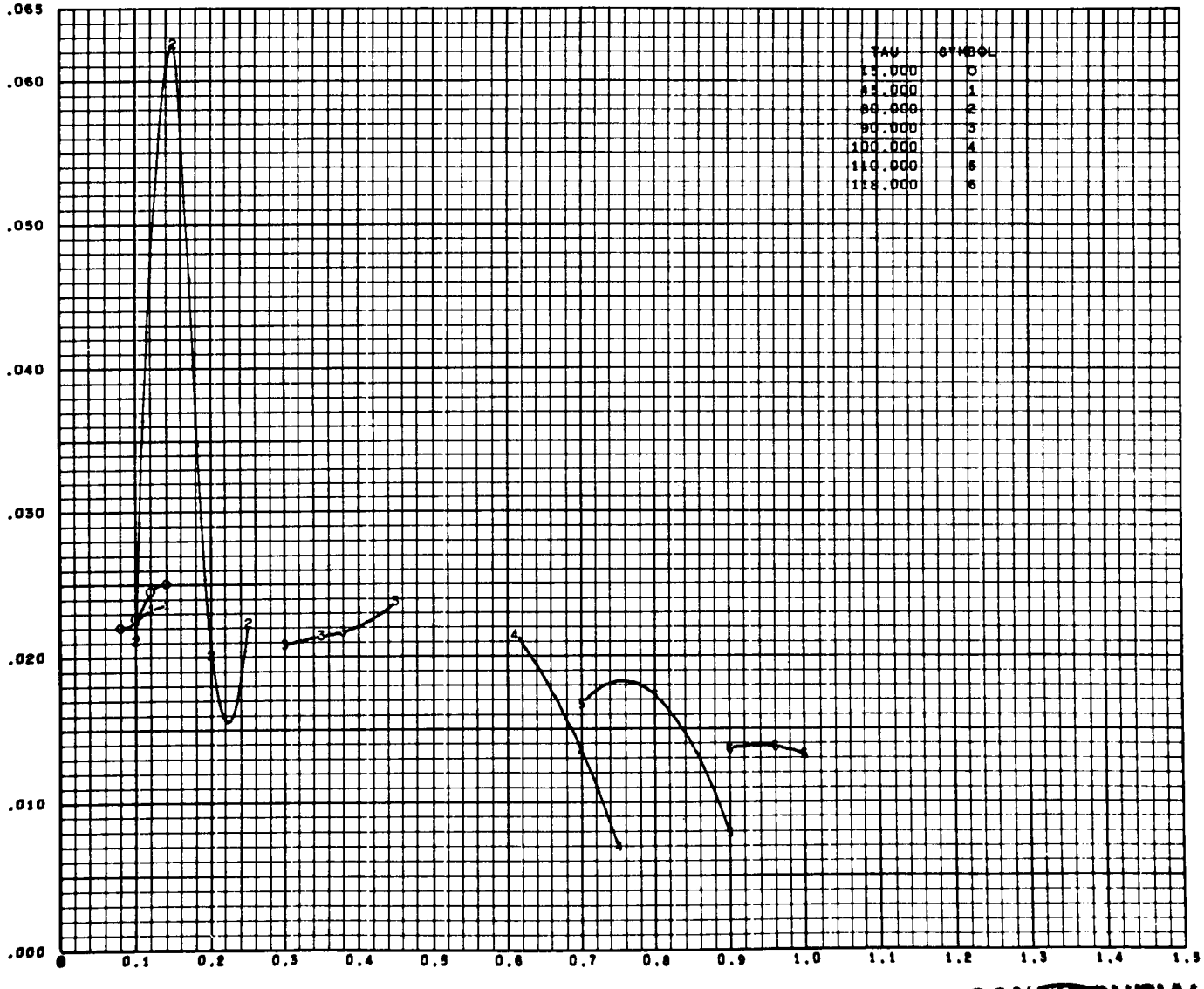
RE/FT --- 0.3589*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 67

TEST GROUP	TIME (SEC)
145*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
024 000



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 147.21 DEG
ANGLE OF YAW --------- 4.65 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1675.80 DEG RANKINE

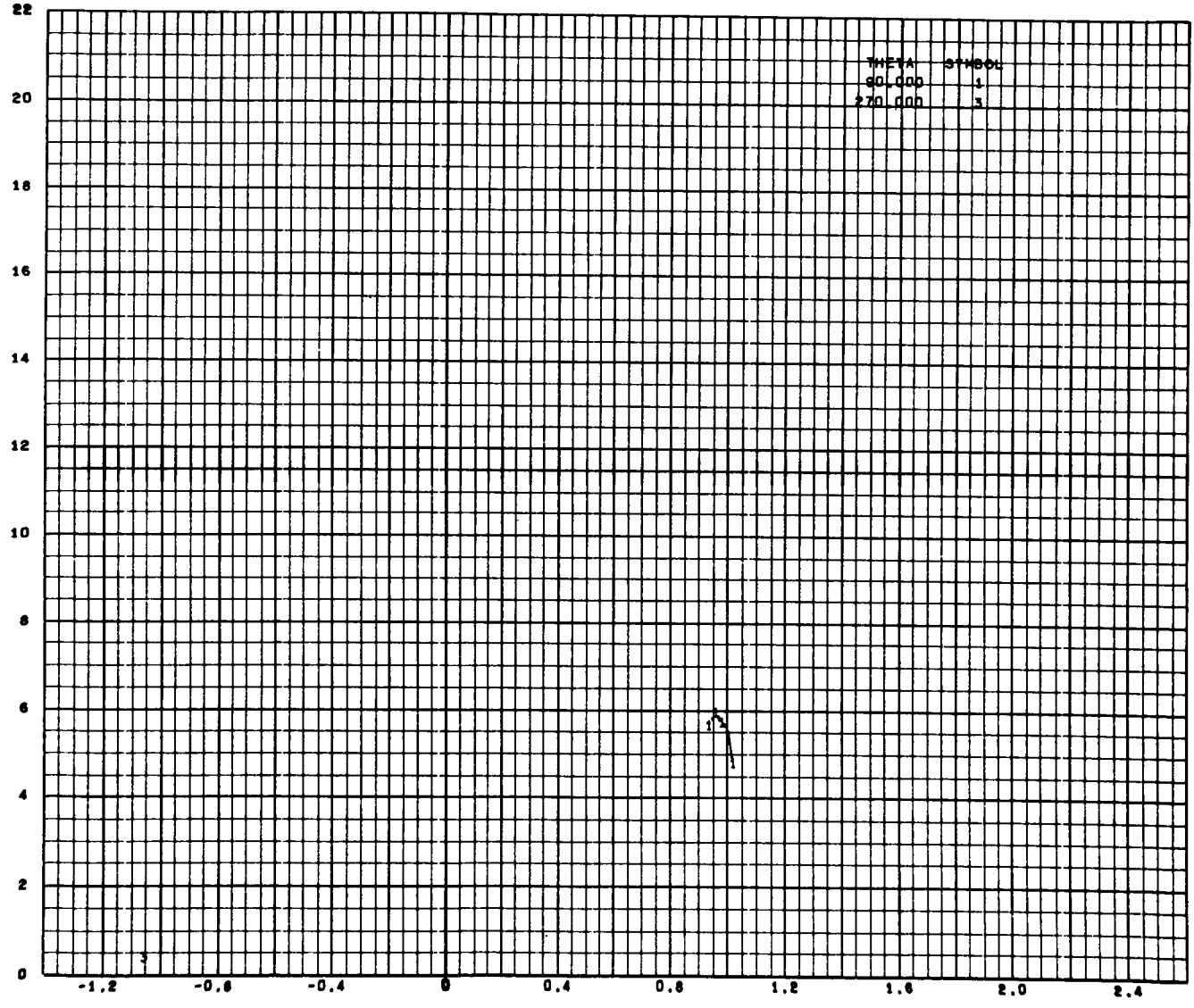
RE/FT --- 0.3581*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 68

TEST GROUP	TIME (SEC)
146*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
025 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 147.21 DEG
ANGLE OF YAW --------- 4.65 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1675.80 DEG RANKINE

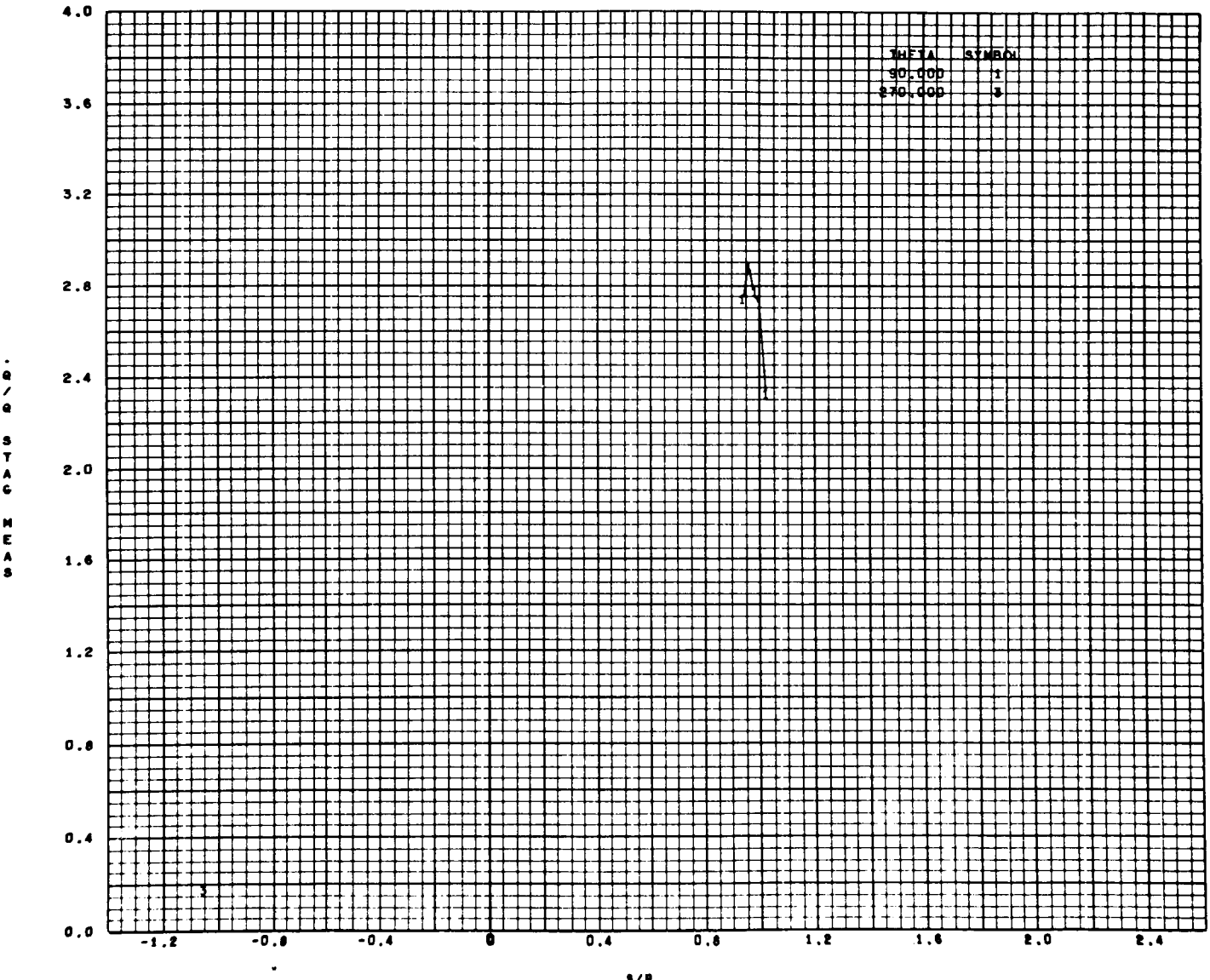
RE/FT --- 0.3581*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 68

TEST GROUP	TIME (SEC)
146*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
027 000



~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 147.21 DEG
ANGLE OF YAW --------- 4.65 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1675.80 DEG RANKINE

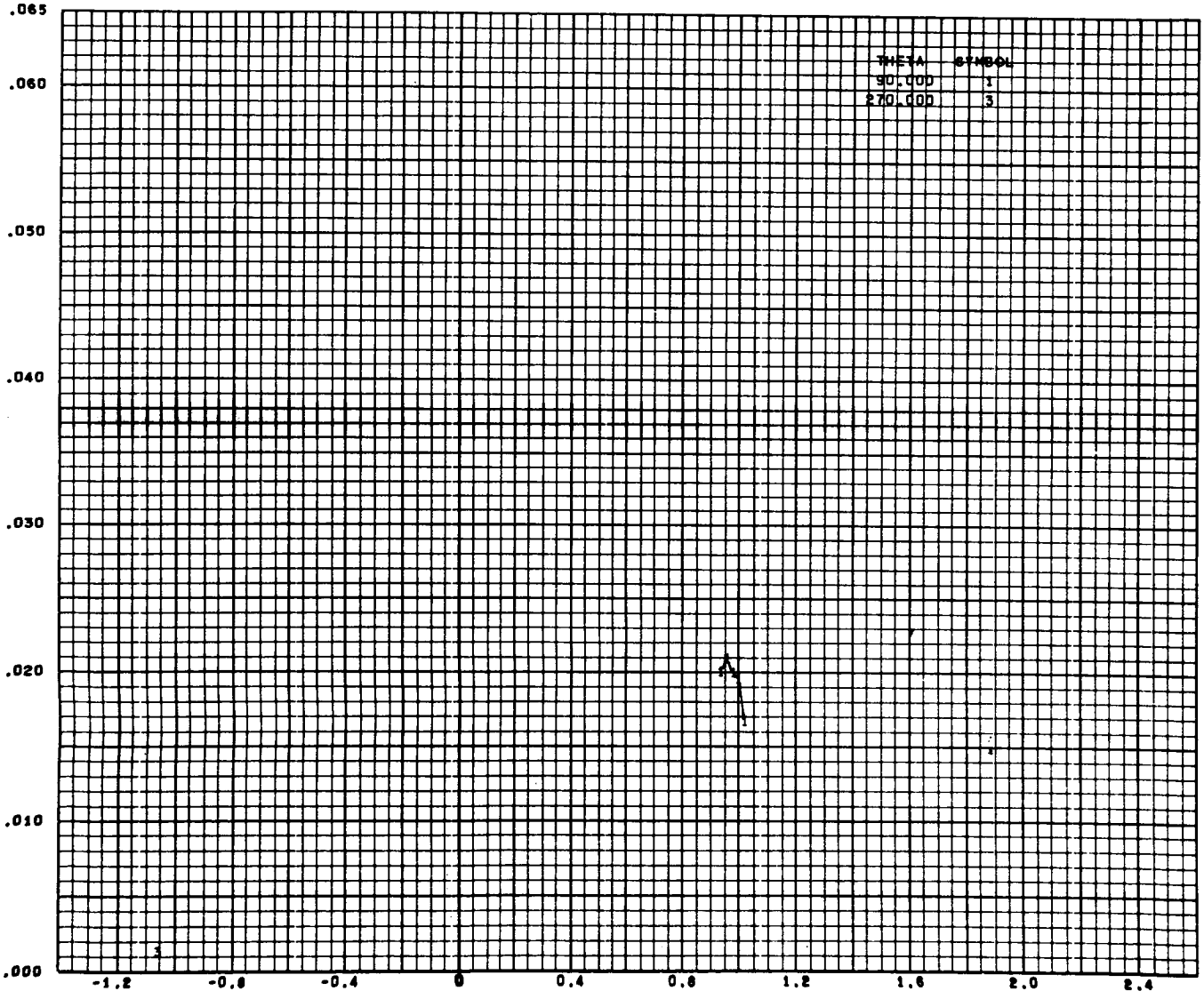
RE/FT --- 0.3581*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 68

TEST GROUP	TIME (SEC)
146*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
029 000



S/R
A-465

SID 64-2080

HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 68 | 3937-10 026 000

APOLLO H-11

AEDC, TUNNEL C

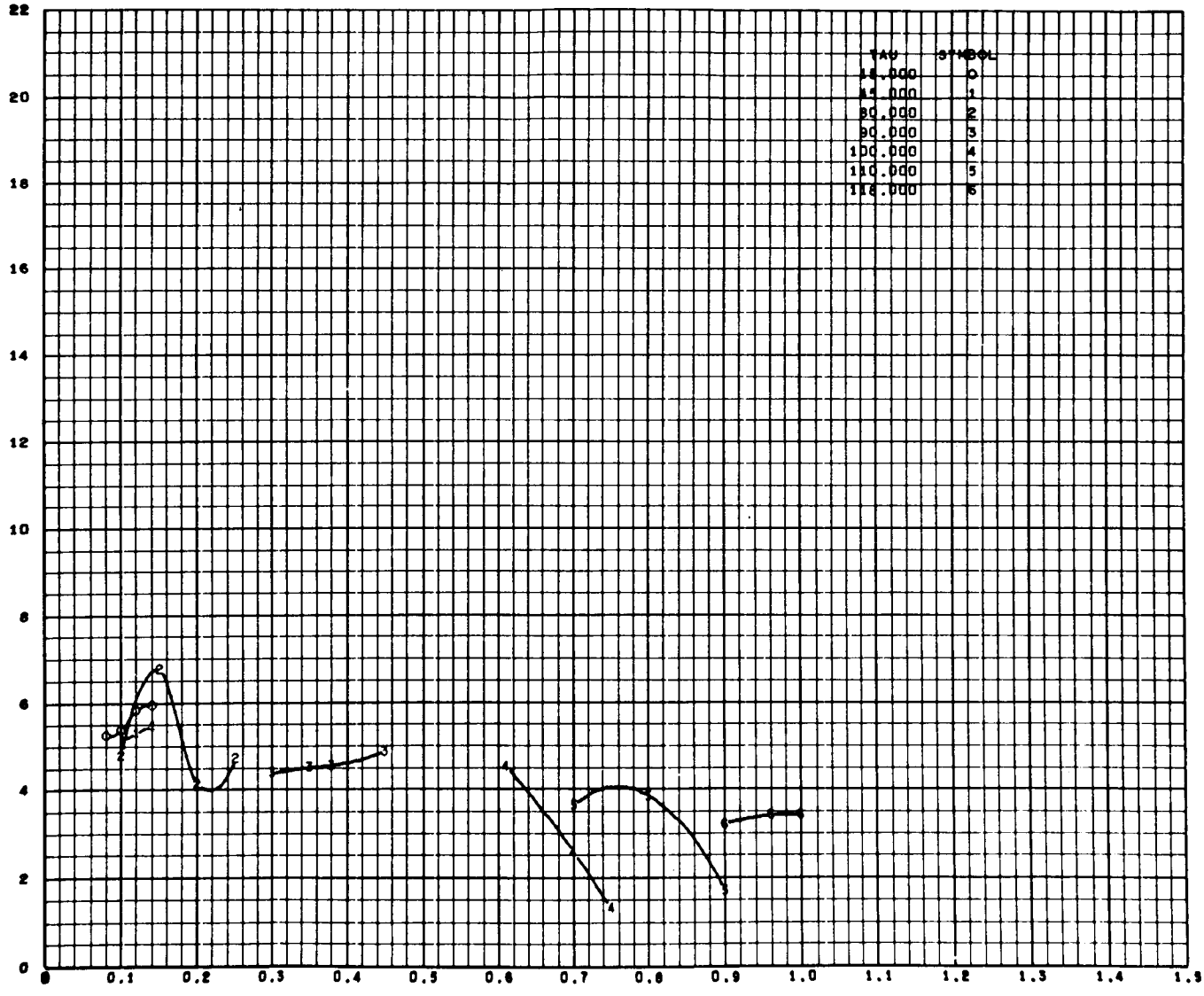
JUNE, 1964

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 147.21 DEG
ANGLE OF YAW ---------- 4.65 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1675.80 DEG RANKINE

RE/FT --- 0.3581*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
146*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 147.21 DEG
ANGLE OF YAW --------- 4.65 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1675.80 DEG RANKINE

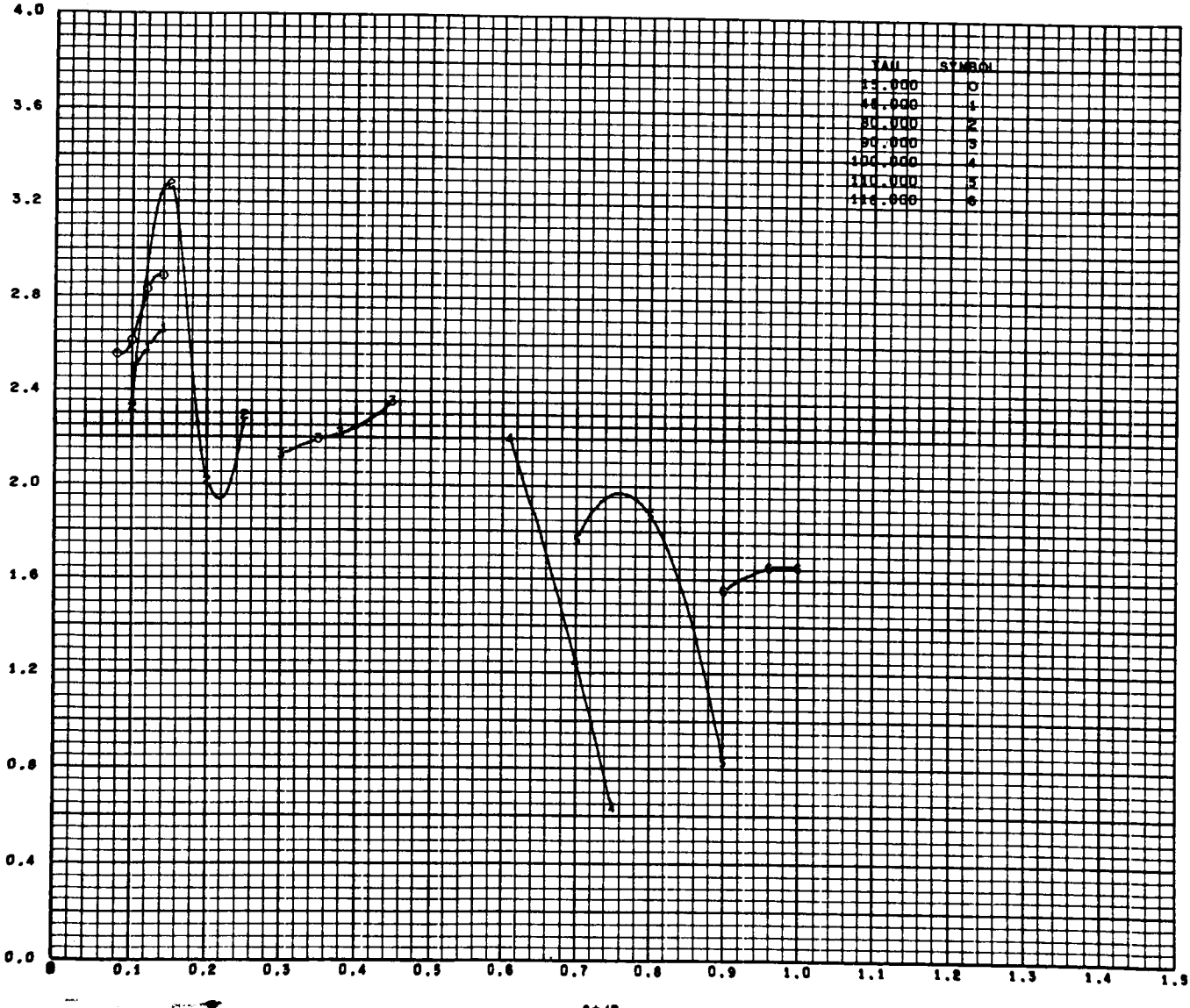
RE/FT --- 0.3581*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 68

TEST GROUP	TIME (SEC)
146*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
028 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 147.21 DEG
ANGLE OF YAW --------- 4.65 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1675.80 DEG RANKINE

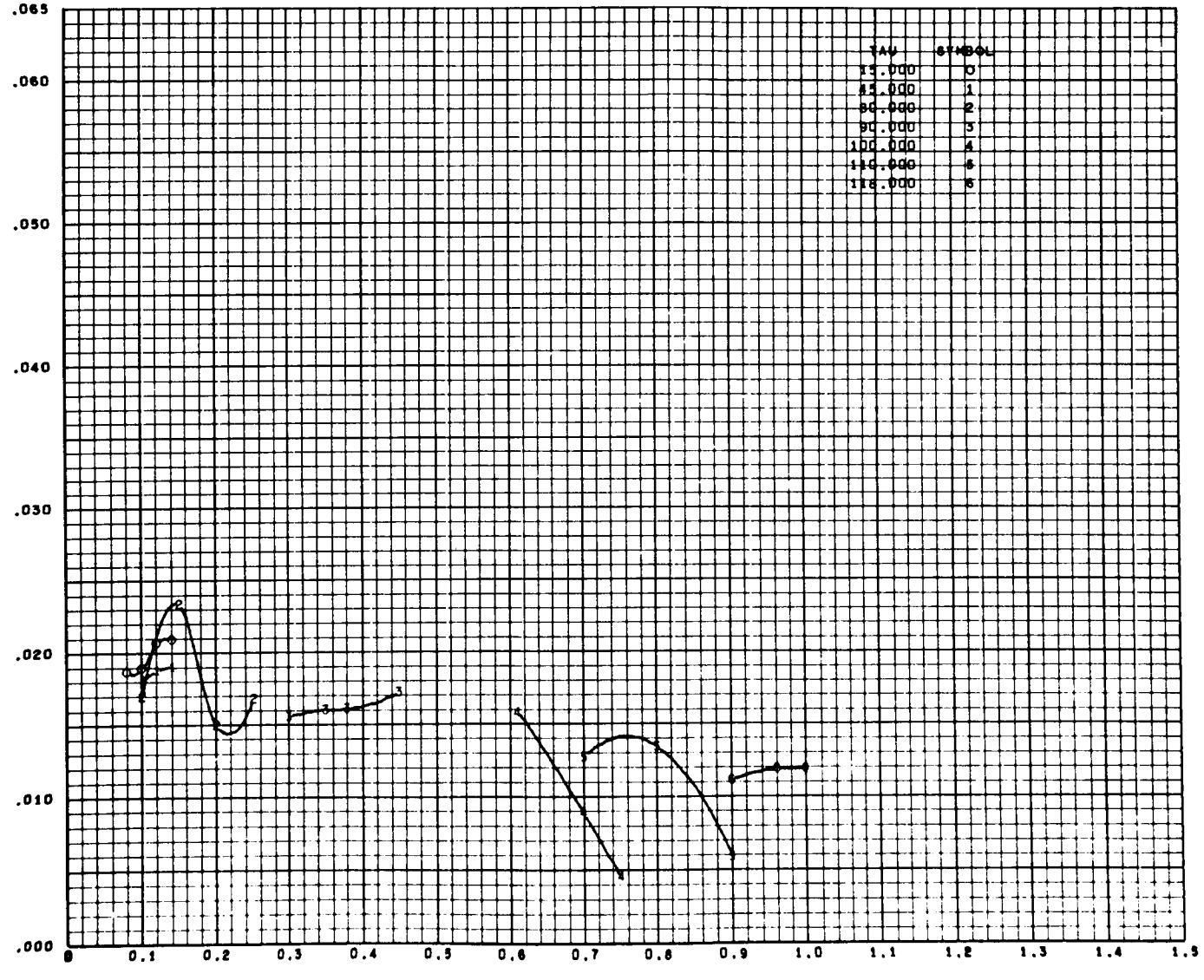
RE/FT --- 0.3581*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 68

TEST GROUP	TIME (SEC)
146*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
030 000



[redacted]

[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 153.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.00 DEG RANKINE

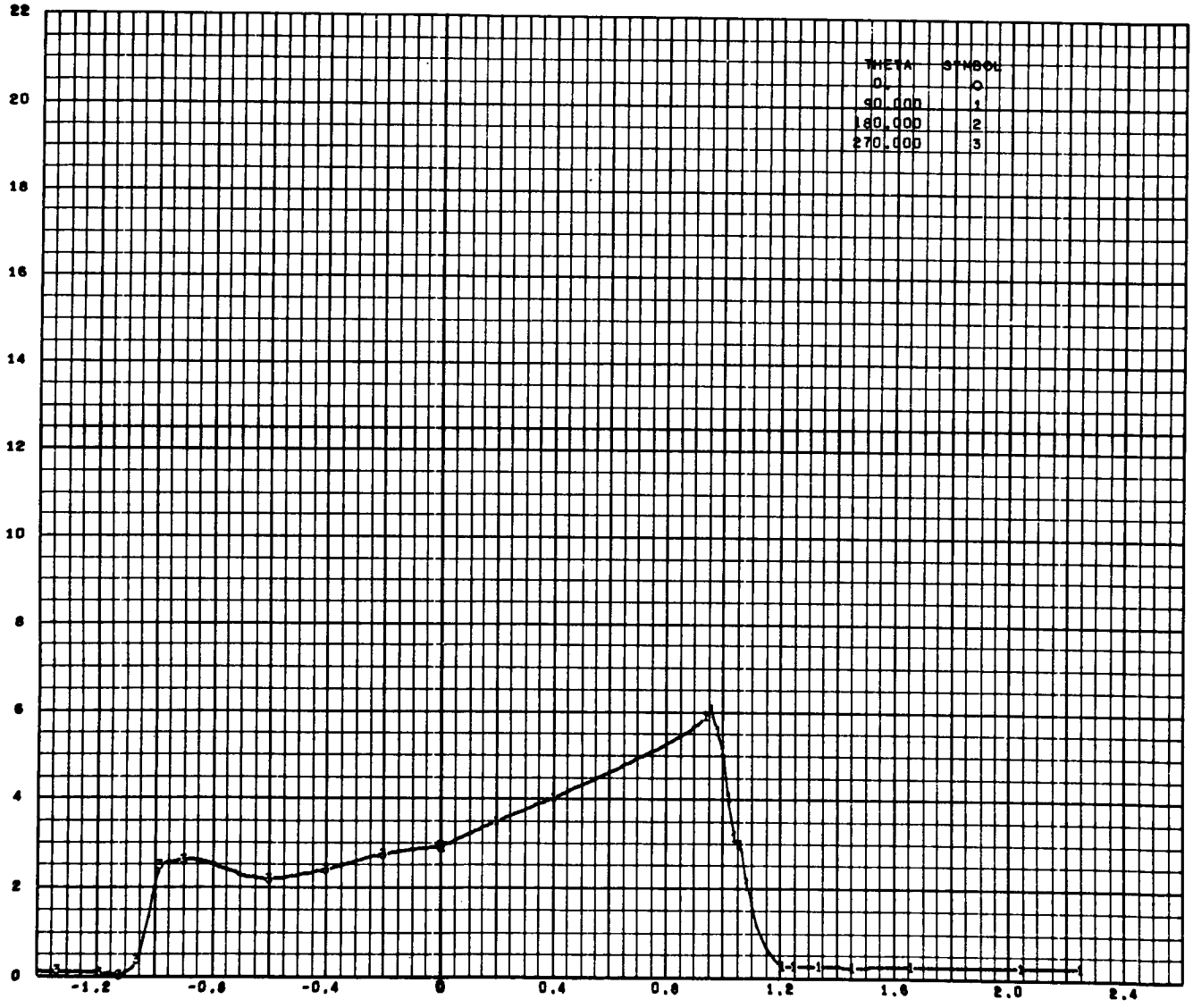
RE/FT --- 0.3572*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 69

TEST GROUP	TIME (SEC)
140*	2.75
147	2.70
154	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
031 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 153.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.00 DEG RANKINE

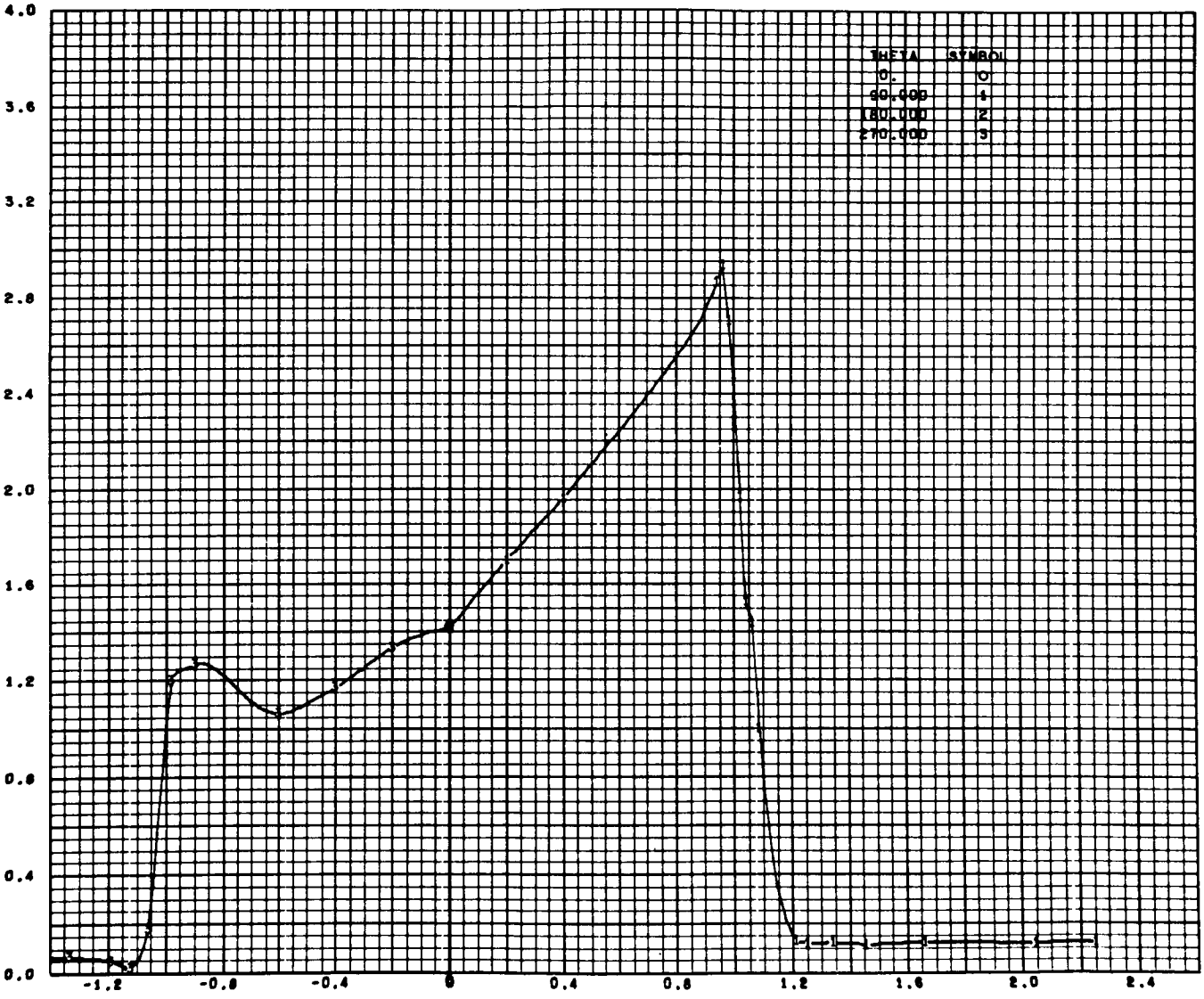
RE/FT --- 0.3572*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 69

TEST GROUP	TIME (SEC)
140*	2.75
147	2.70
154	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
034 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 153.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.00 DEG RANKINE

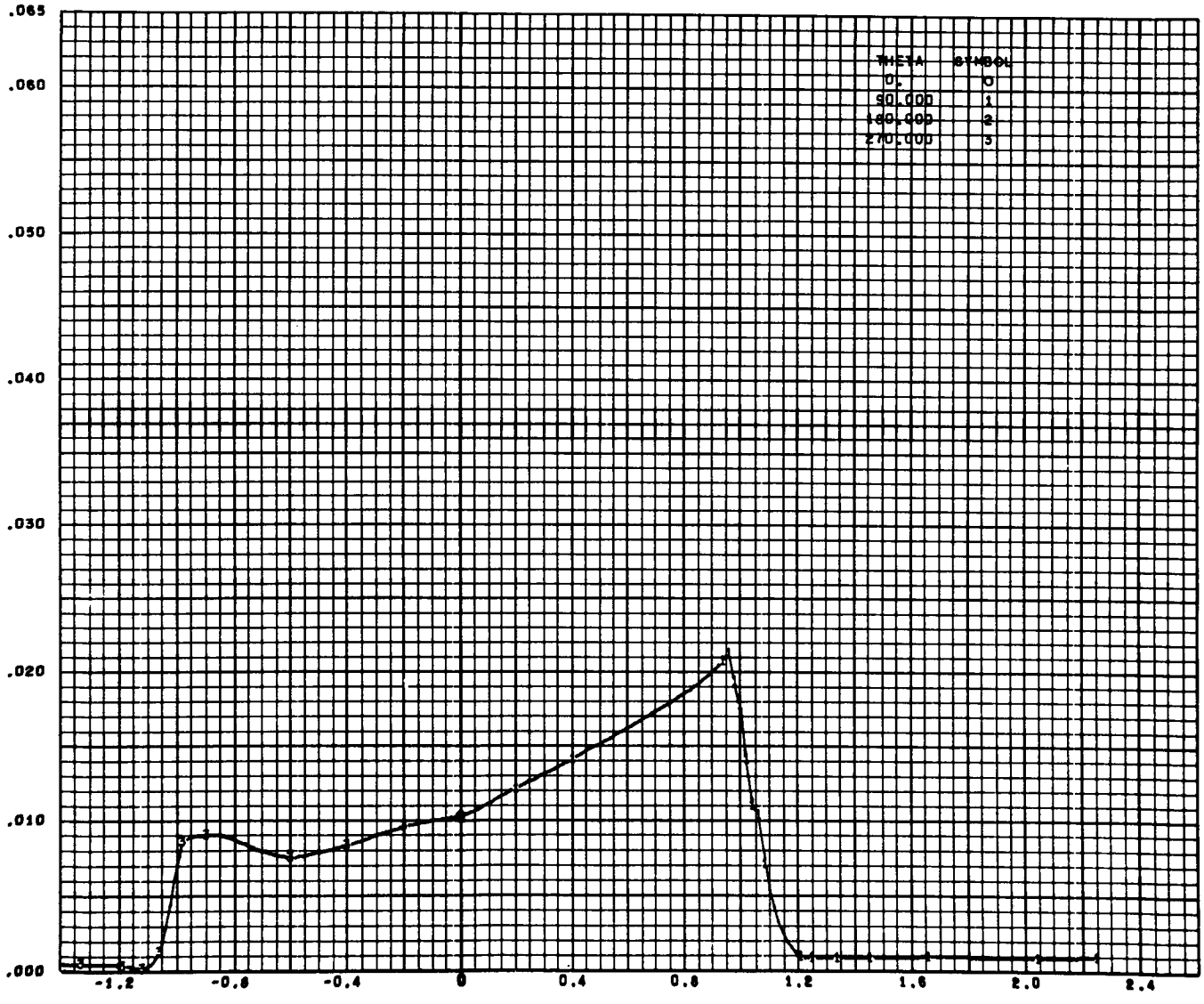
RE/FT --- 0.3572*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 69

TEST GROUP	TIME (SEC)
140*	2.75
147	2.70
154	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
037 000



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A-471

SID 64-2080

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 153.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.00 DEG RANKINE

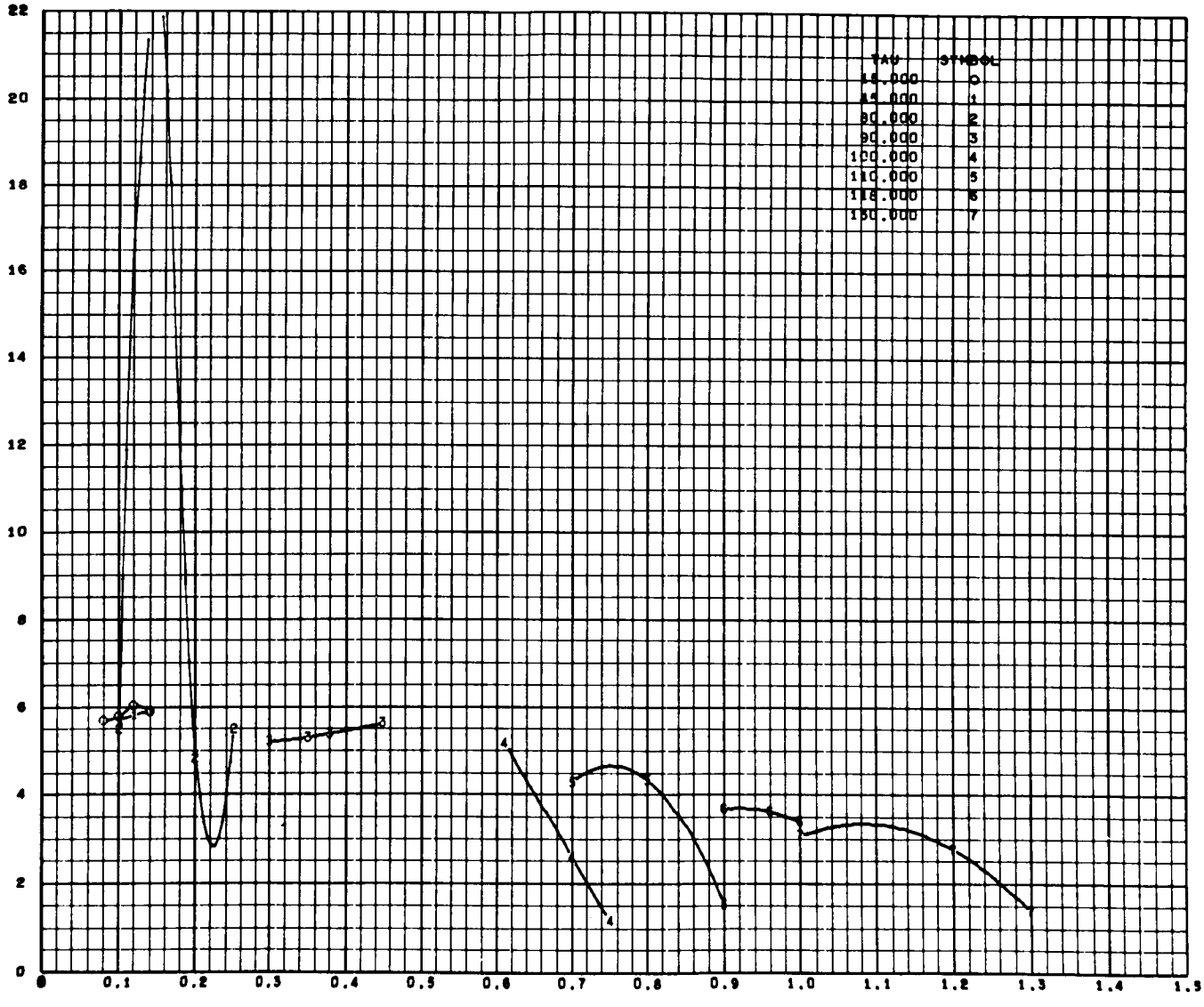
RE/FT --- 0.3572*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 69

TEST GROUP	TIME (SEC)
140*	2.75
147	2.70
154	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
032 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 153.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.00 DEG RANKINE

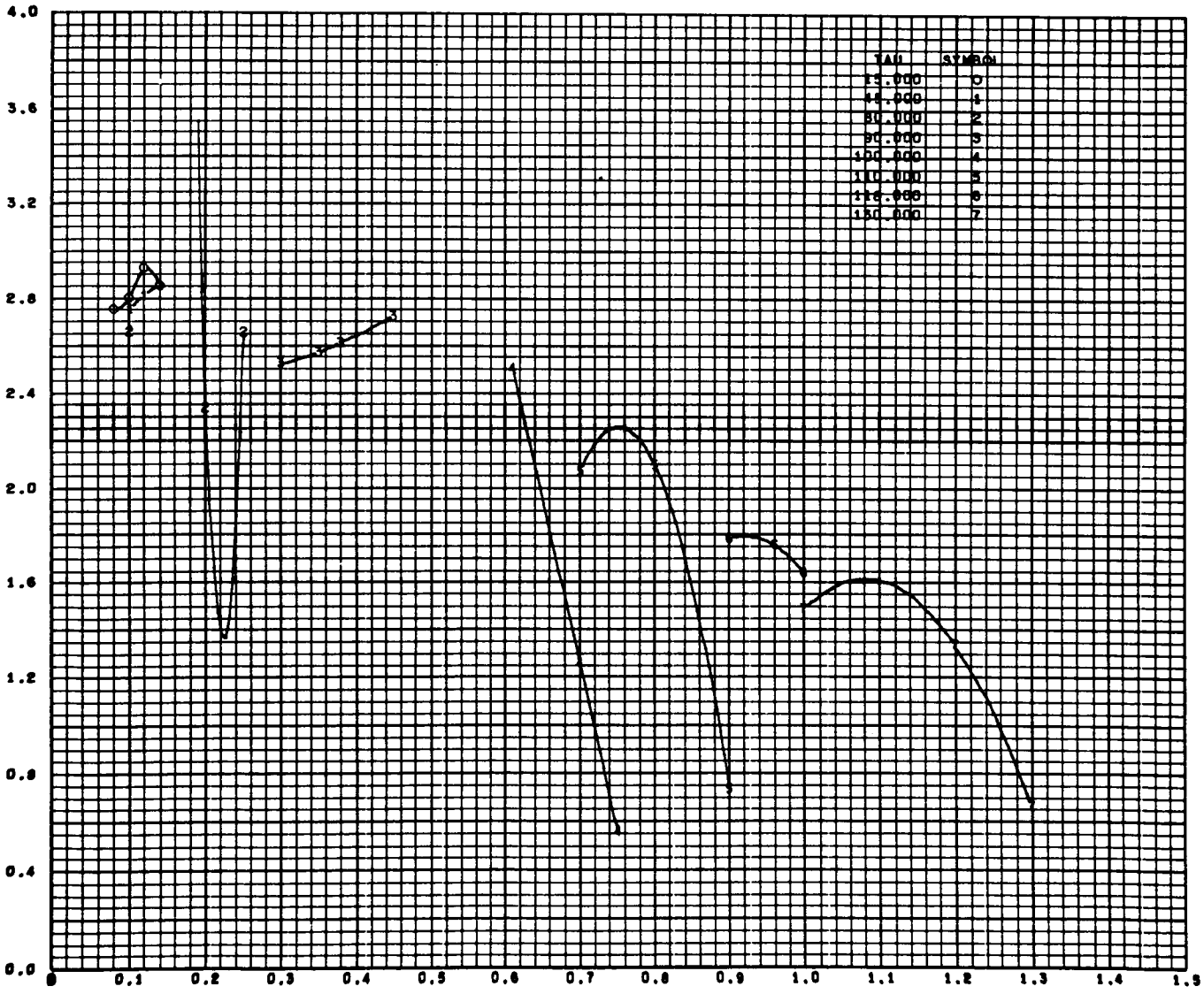
RE/FT --- 0.3572*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 69

TEST GROUP	TIME (SEC)
140*	2.75
147	2.70
154	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
035 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 153.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.00 DEG RANKINE

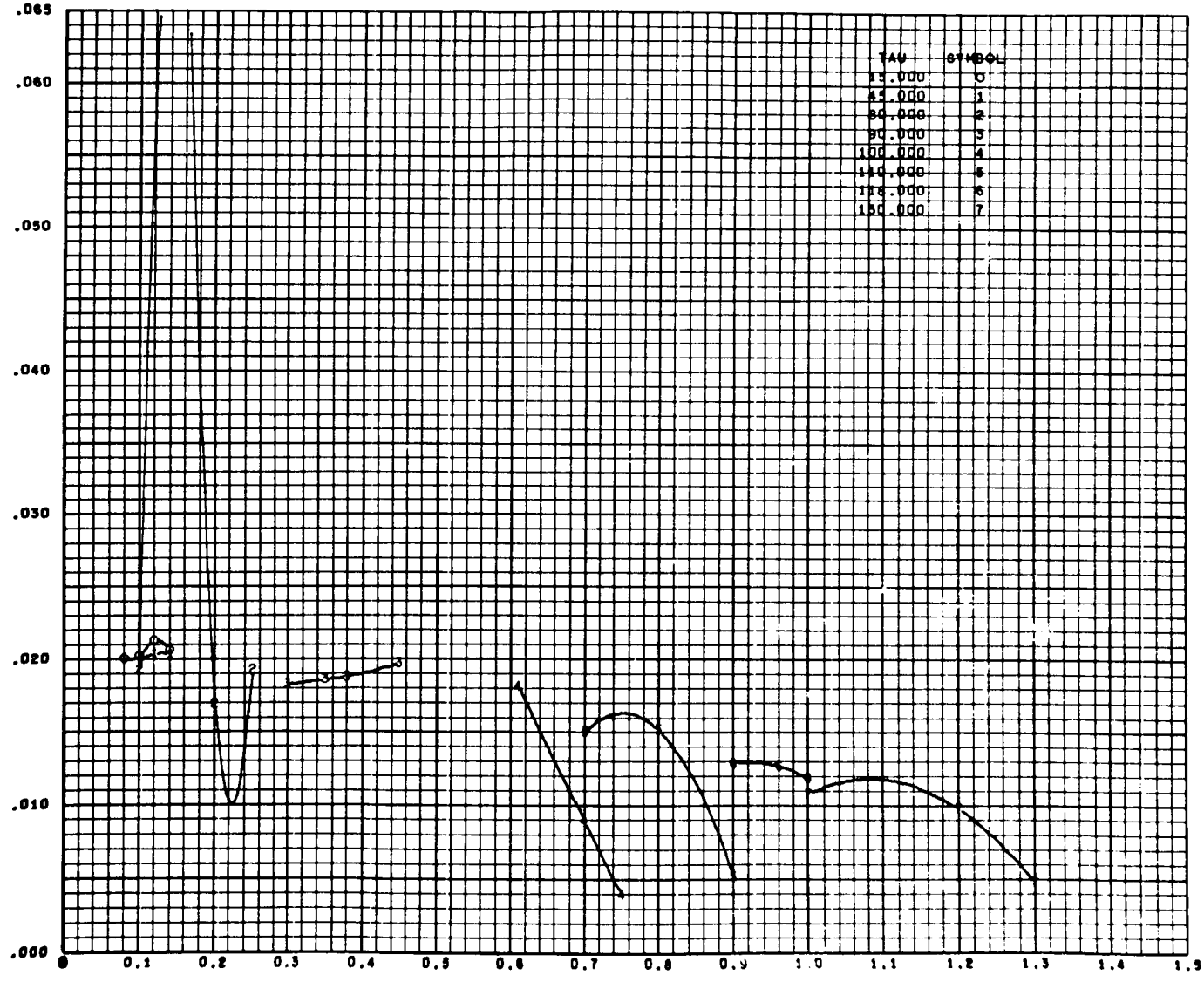
RE/FT --- 0.3572*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

DT SERIES NUMBER 69

TEST GROUP	TIME (SEC)
140*	2.75
147	2.70
154	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
038 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 153.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.00 DEG RANKINE

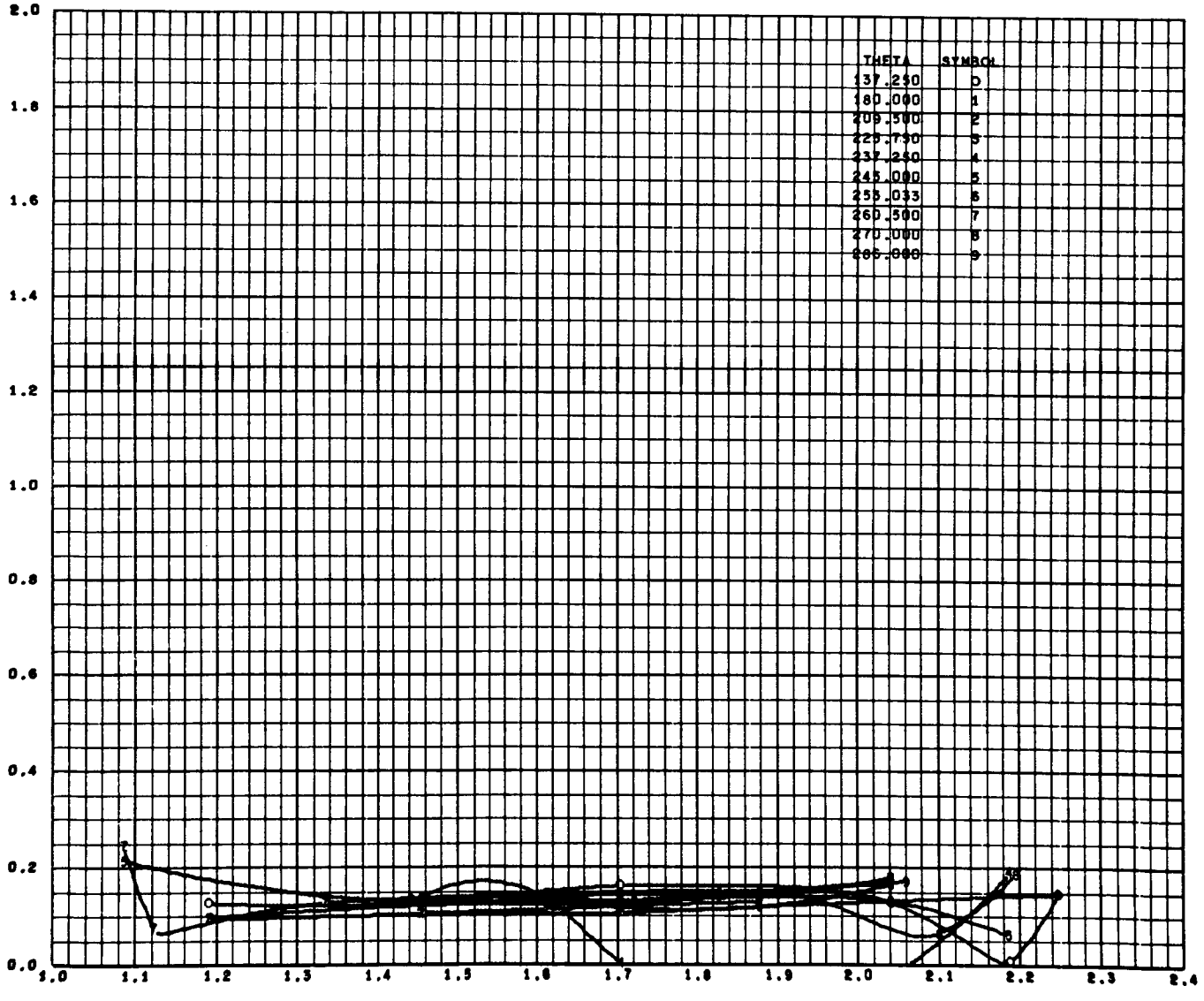
RE/FT --- 0.3572*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 69

TEST GROUP	TIME (SEC)
140*	2.75
147	2.70
154	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
033 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 153.58 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.00 DEG RANKINE

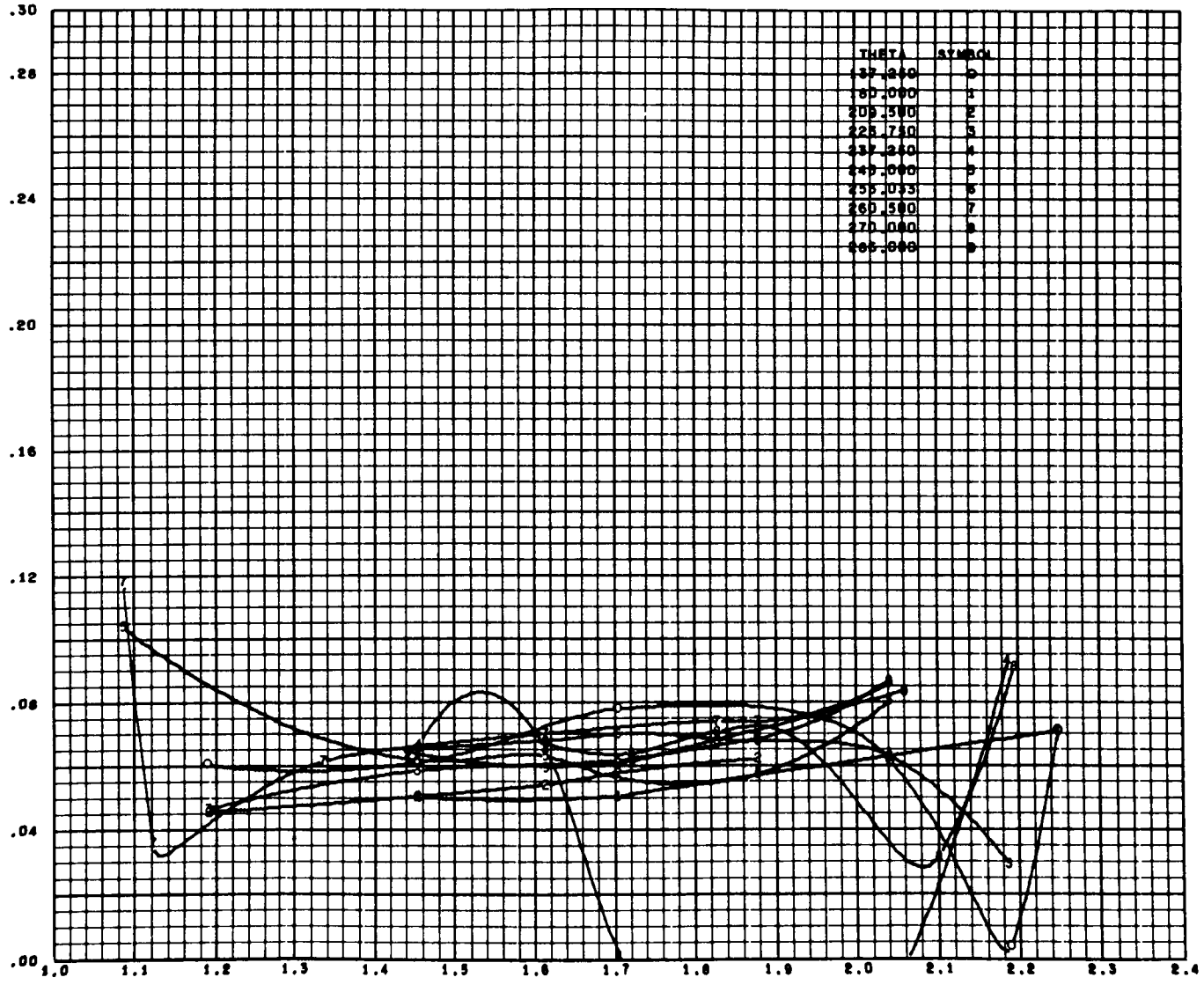
RE/FT --- 0.3572*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 69

TEST GROUP	TIME (SEC)
140*	2.75
147	2.70
154	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
036 000



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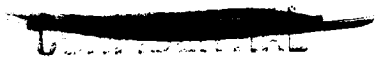


HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 153.58 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1678.00 DEG RANKINE

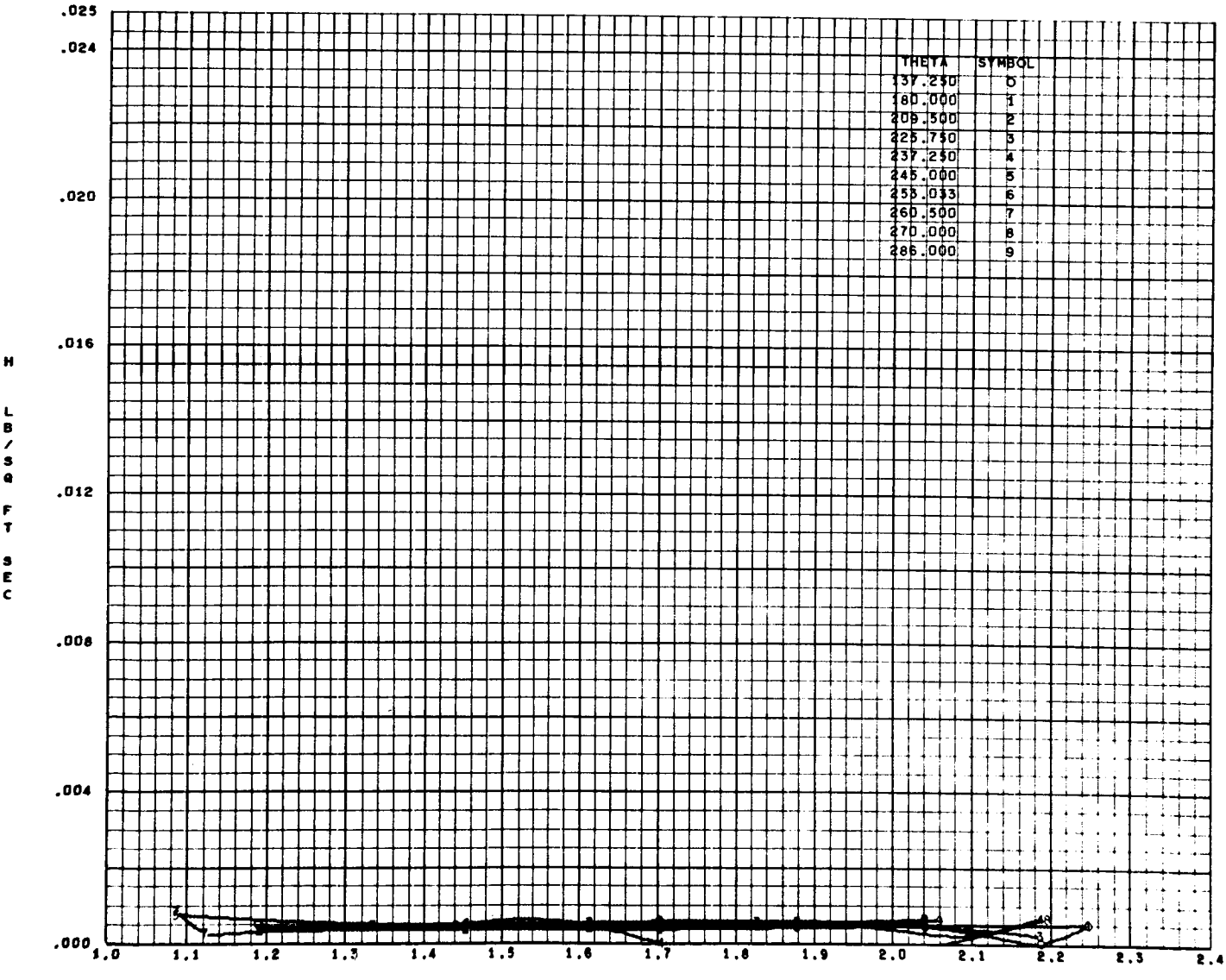
RE/FT --- 0.3572*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

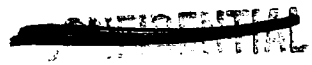
PLOT SERIES NUMBER 69

TEST GROUP	TIME (SEC)
140*	2.75
147	2.70
154	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
039 000





[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

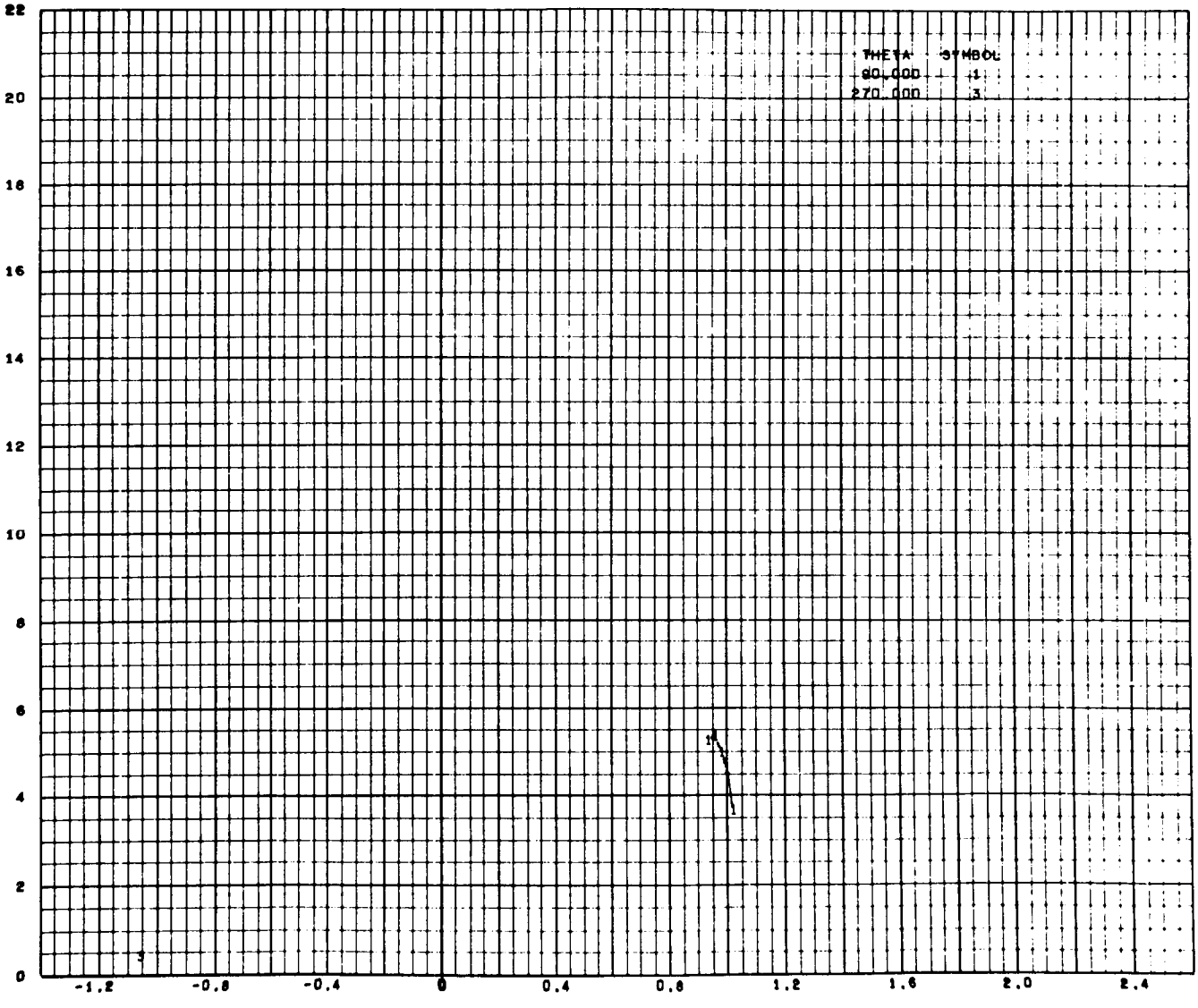
MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW ---------- -5.14 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1668.60 DEG RANKINE

RE/FT --- 0.3608*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 70

TEST GROUP	TIME (SEC)
148*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW --------- -5.14 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1668.60 DEG RANKINE

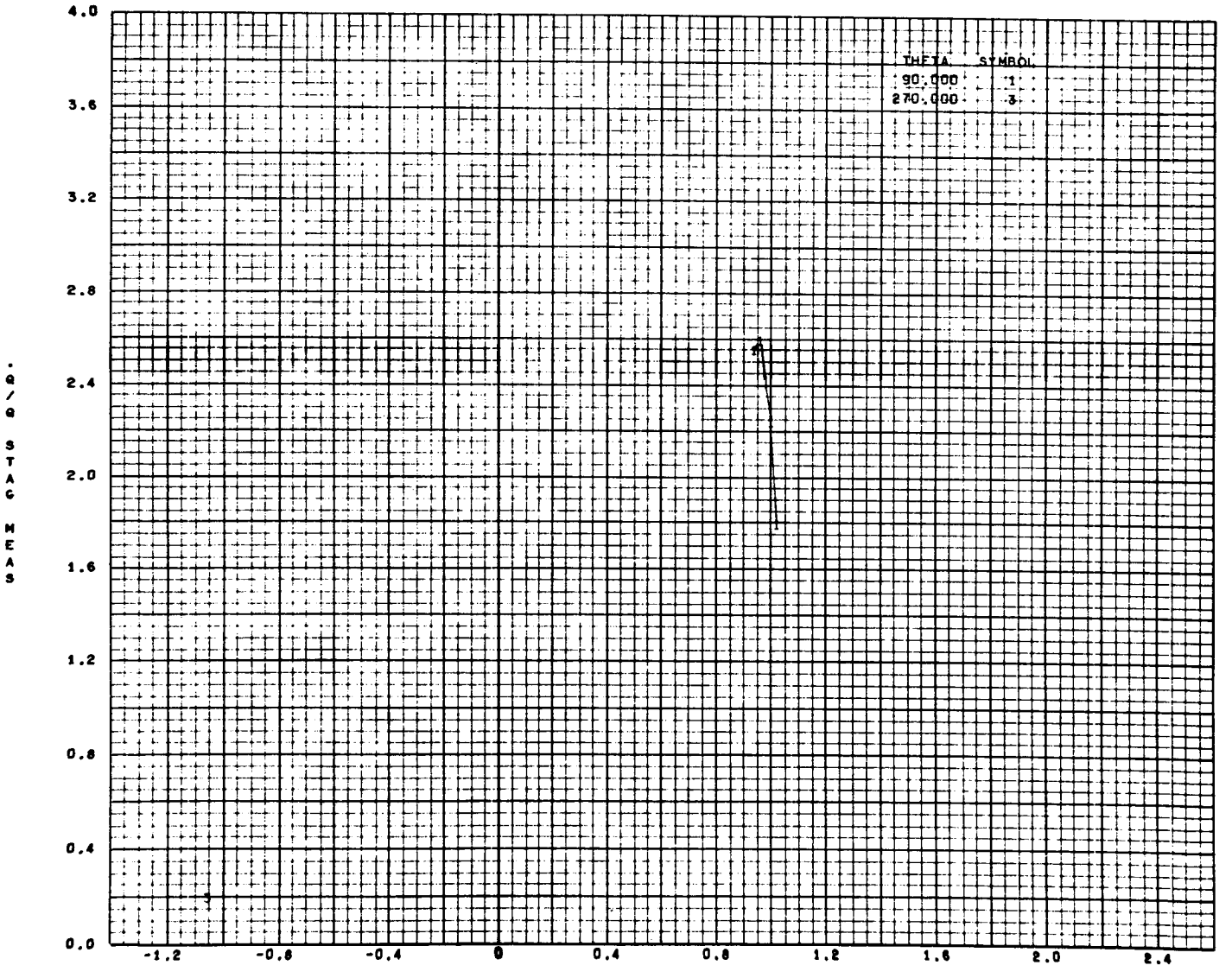
RE/FT --- 0.3608*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 70

TEST GROUP	TIME (SEC)
148*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
042 000



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[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW --------- -5.14 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1668.60 DEG RANKINE

RE/FT --- 0.3608*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 70

TEST GROUP	TIME (SEC)
148*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
044 000

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW --------- -5.14 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1668.60 DEG RANKINE

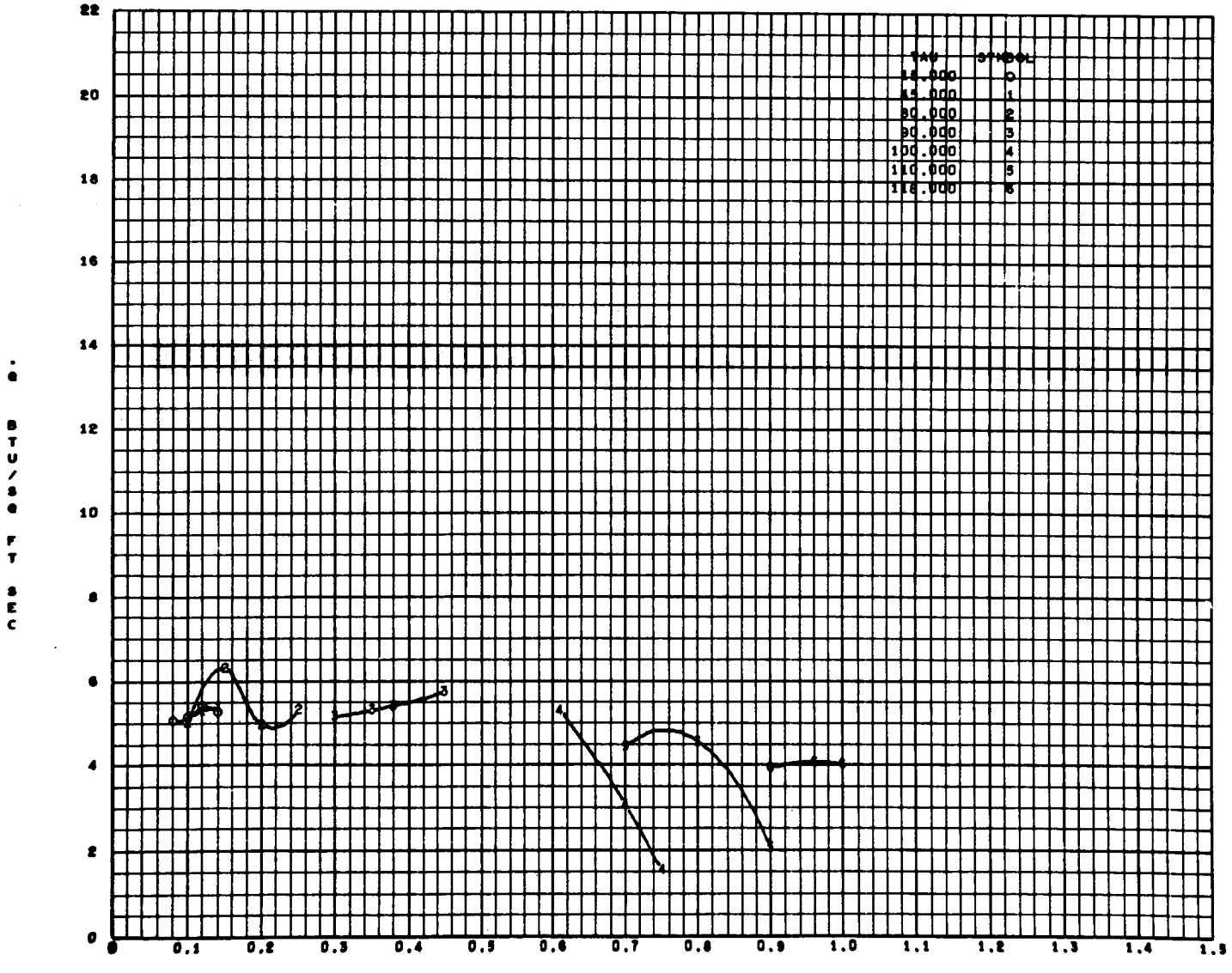
RE/FT --- 0.3608*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 70

TEST GROUP	TIME (SEC)
148*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
041 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW --------- -5.14 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1668.60 DEG RANKINE

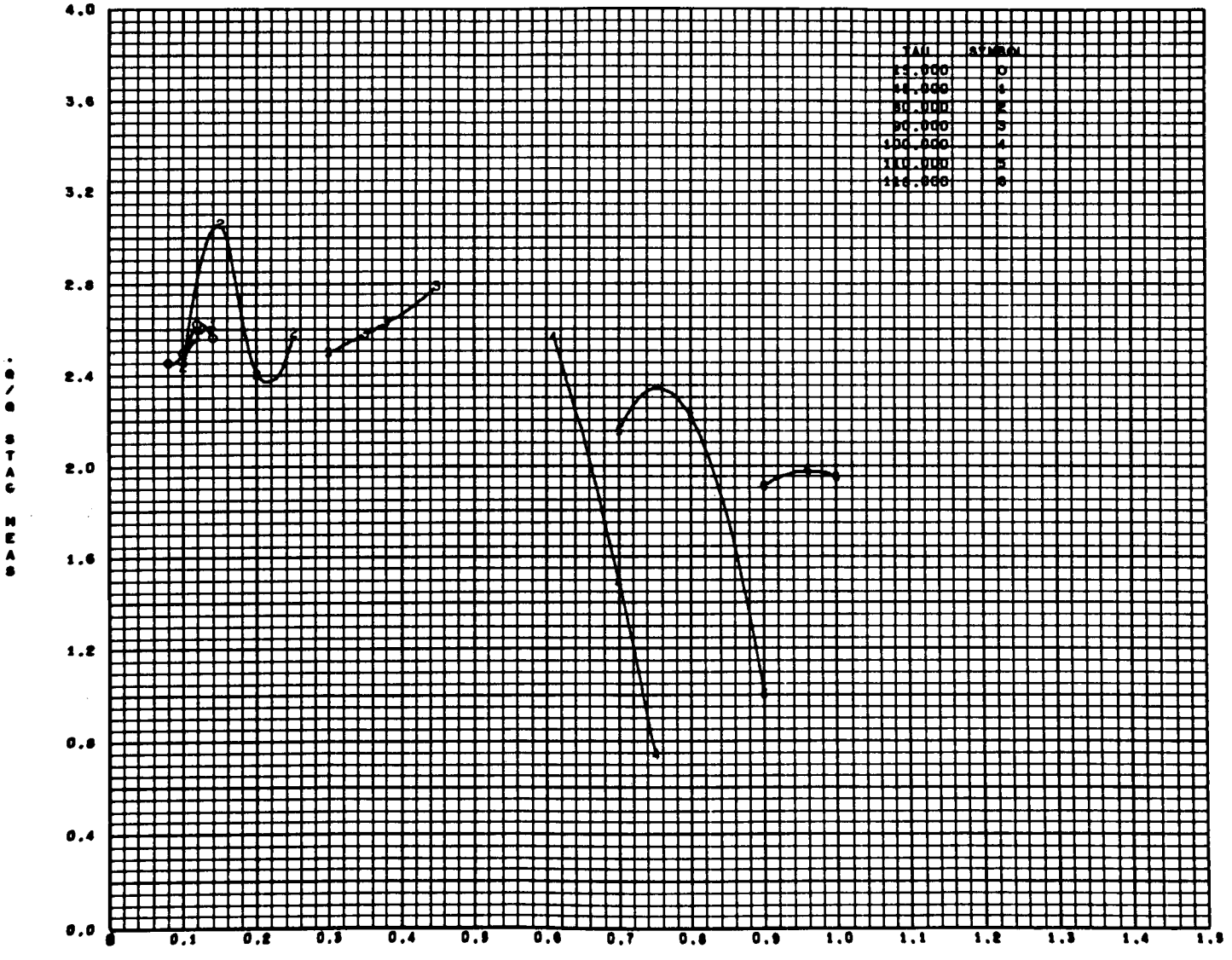
RE/FT --- 0.3608*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 70

TEST GROUP	TIME (SEC)
148*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
043 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW --------- -5.14 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1668.60 DEG RANKINE

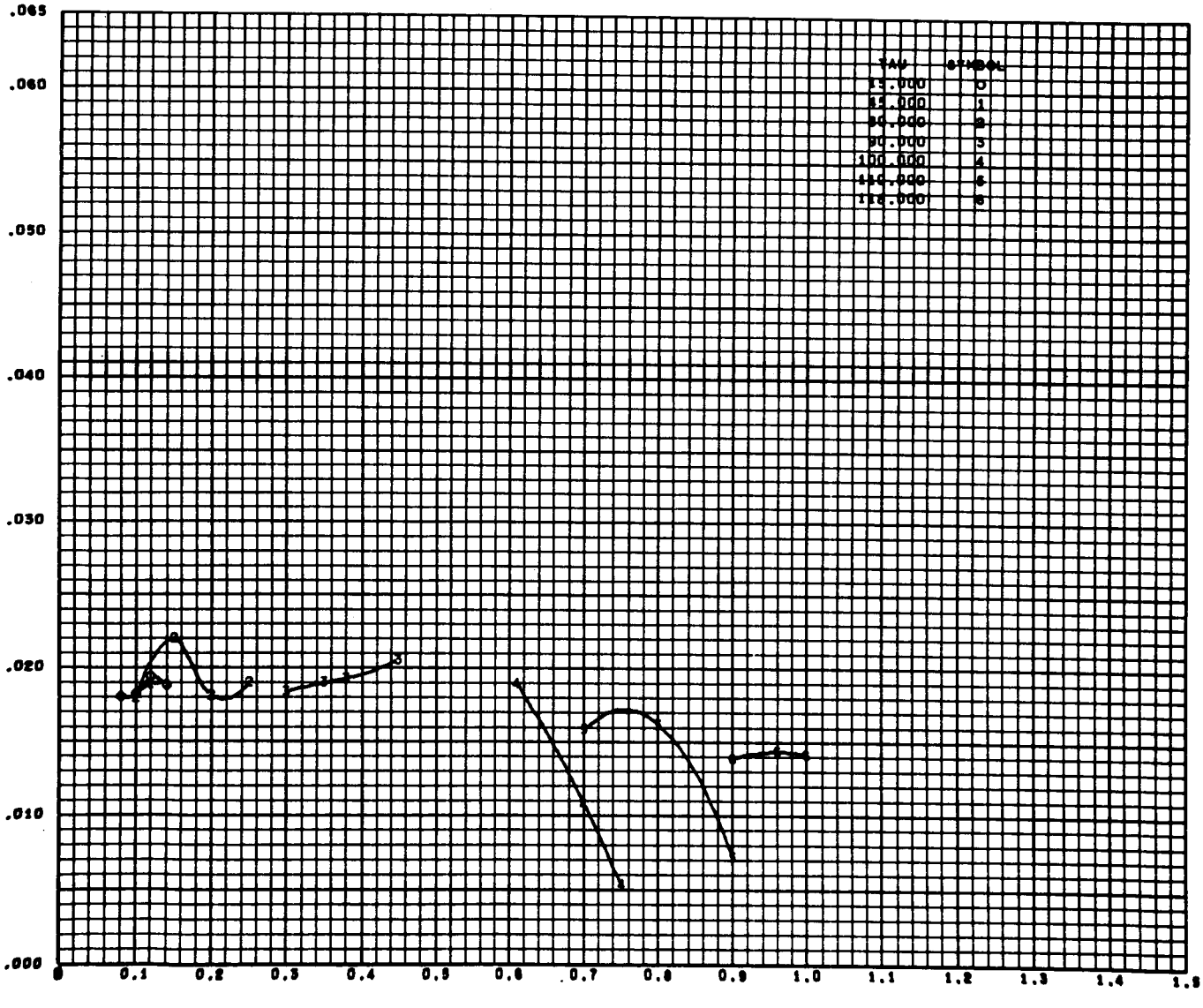
RE/FT --- 0.3608*10+6
Q(CM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 70

TEST GROUP	TIME (SEC)
148*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
045 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW --------- 5.14 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1670.70 DEG RANKINE

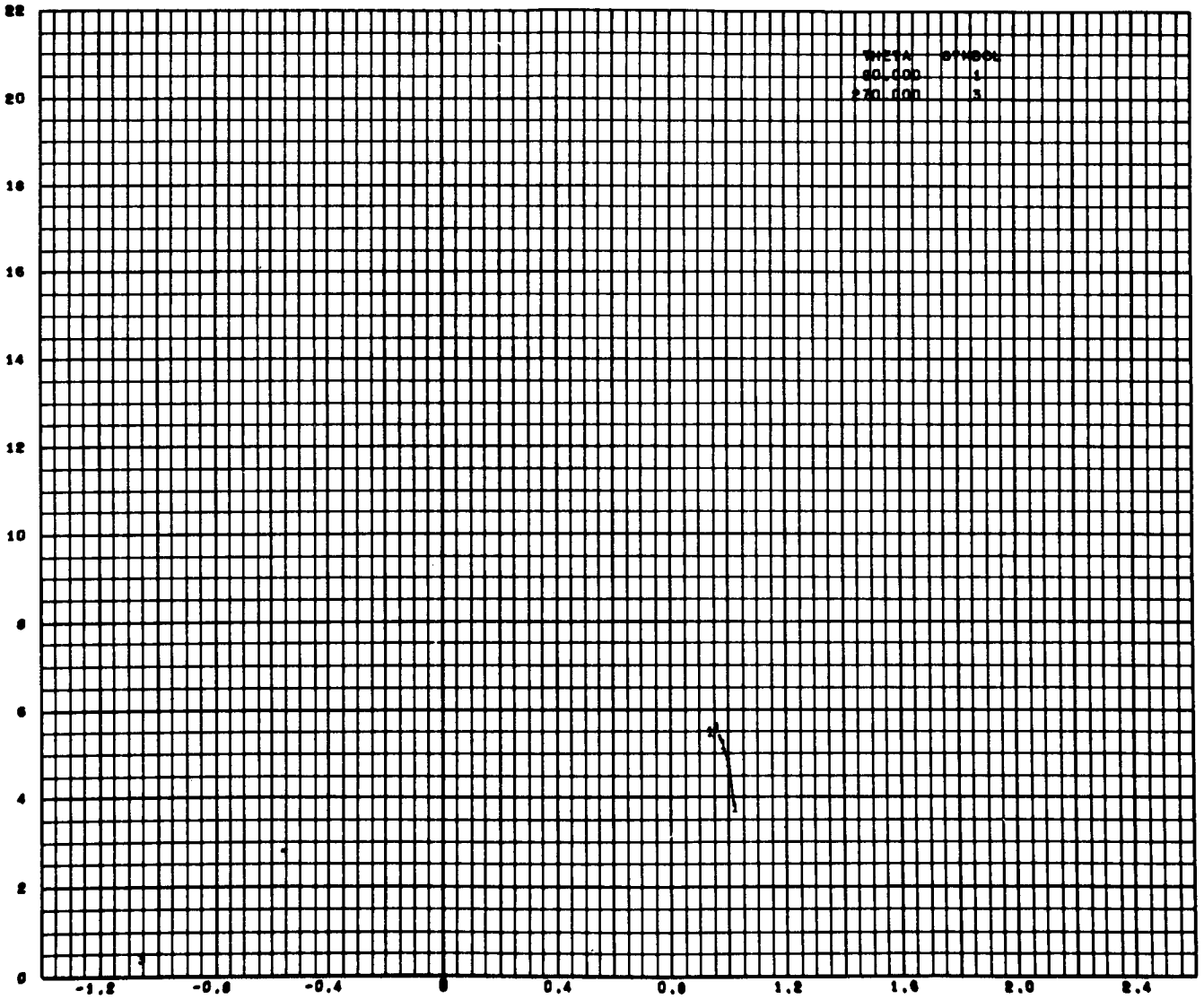
RE/FT --- 0.3600*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 71

TEST GROUP	TIME (SEC)
149*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
046 000



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SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW --------- 5.14 DEG
TOTAL PRESSURE ------- 235.00 PSIA
TOTAL TEMPERATURE ---- 1670.70 DEG RANKINE

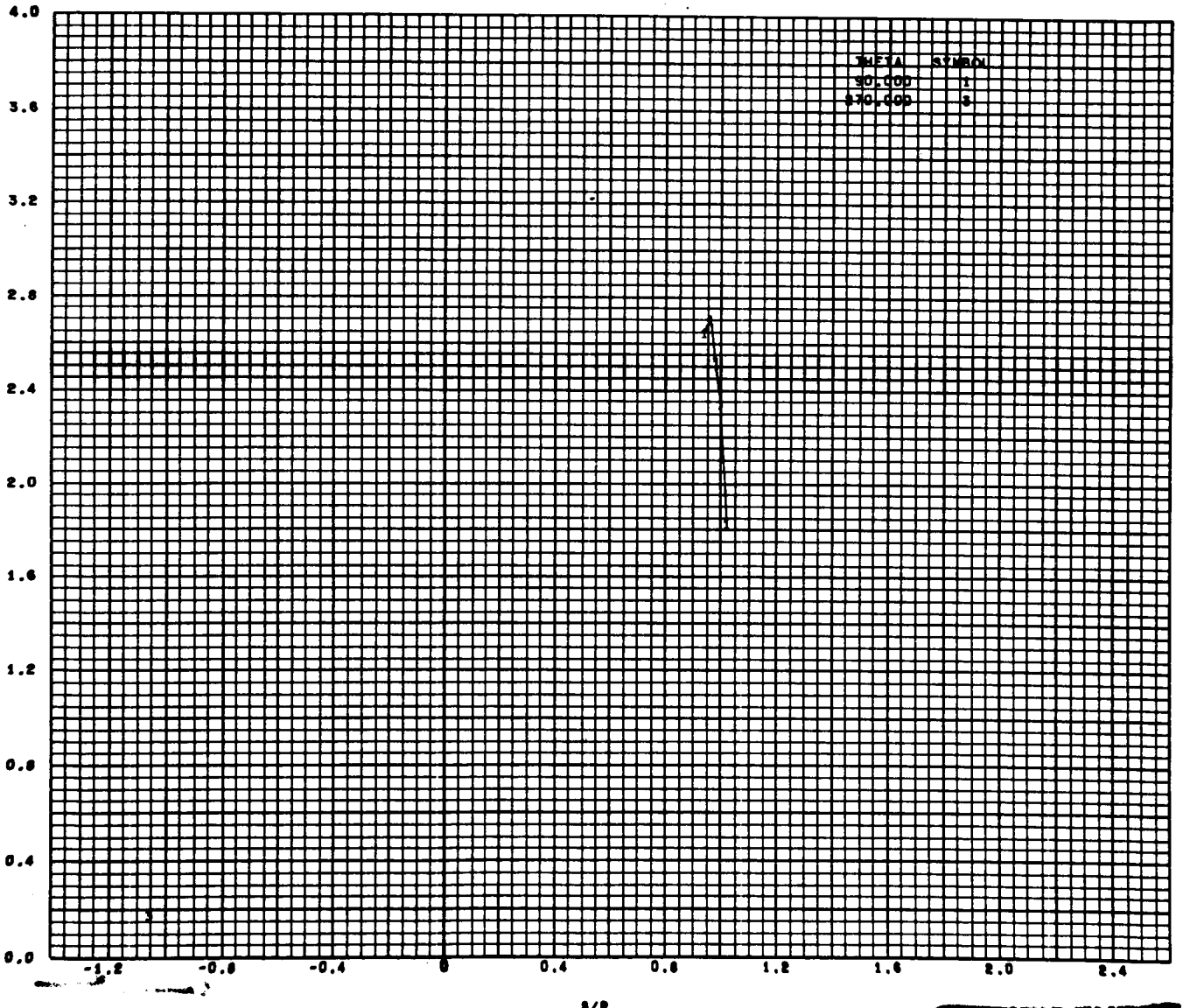
RE/FT --- 0.3600*10+6
Q(OM) --- 2.0594 BTU/SQ FT SEC

PLOT SERIES NUMBER 71

TEST GROUP	TIME (SEC)
149*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
048 000



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AEDC, TUNNEL C

JUNE, 1964

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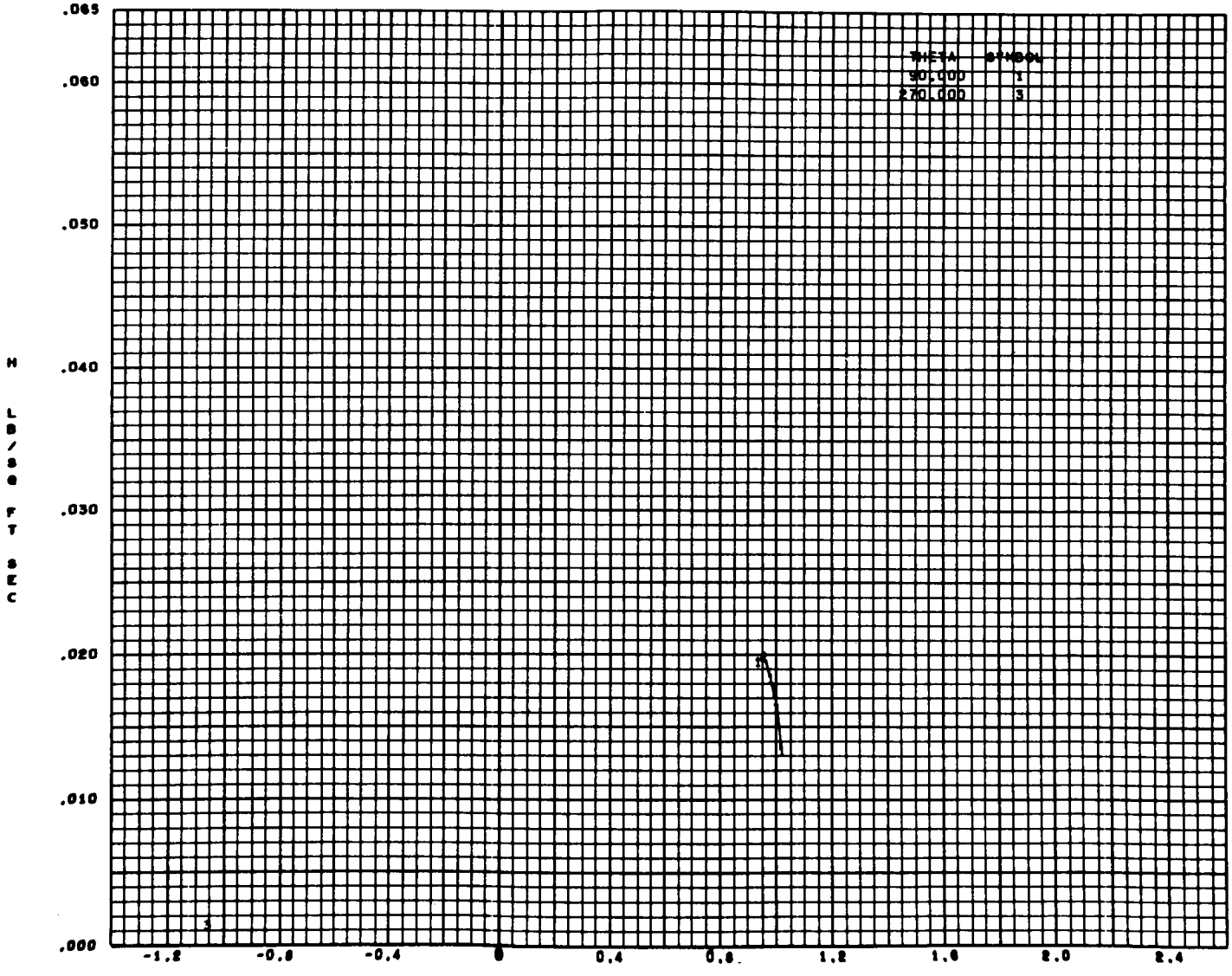

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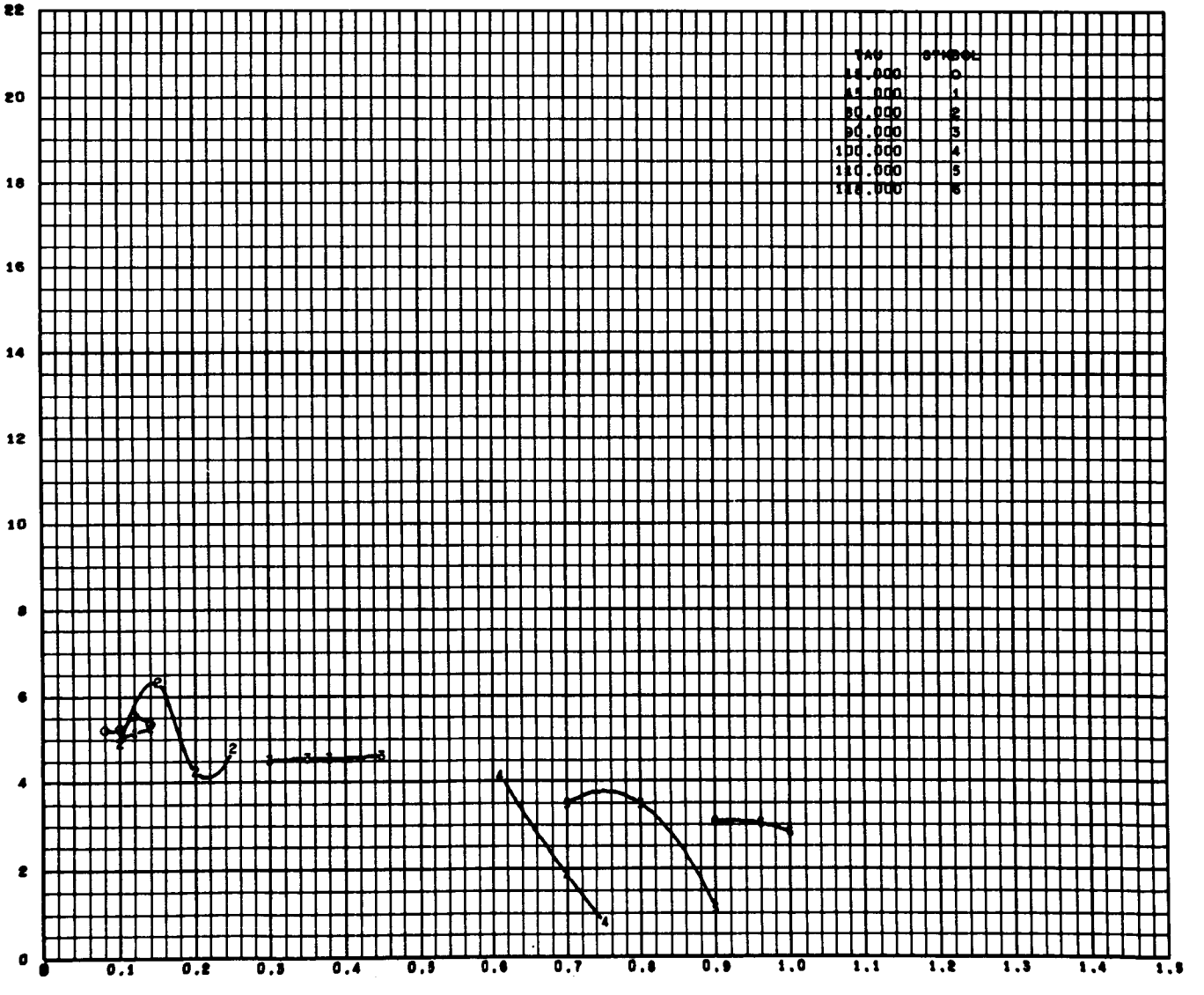

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HEAT TRANSFER

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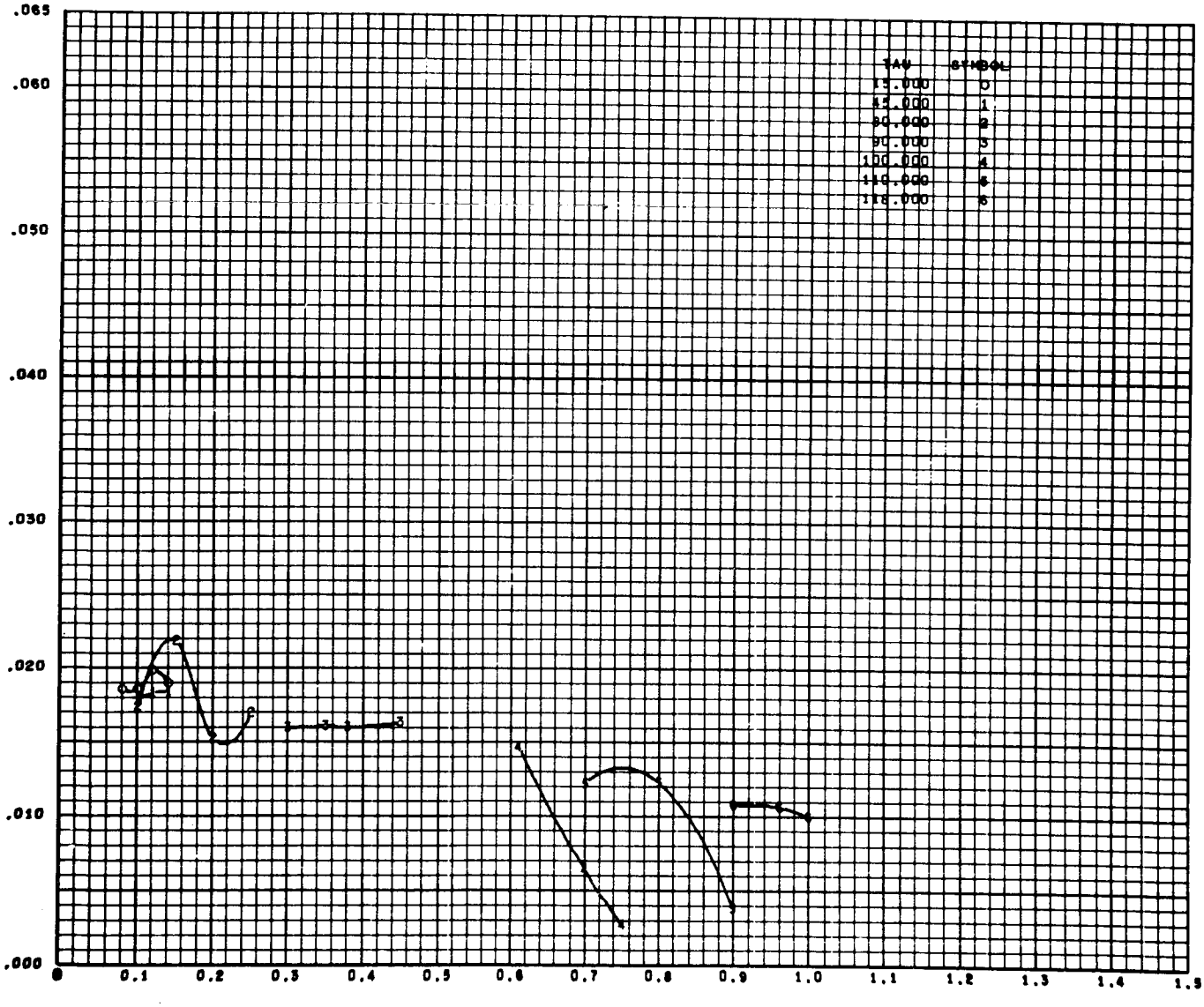

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HEAT TRANSFER

APOLLO H-11

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JUNE, 1964

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RE/FT --- 0.3572*10+6
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PLOT SERIES NUMBER 72

TEST GROUP	TIME (SEC)
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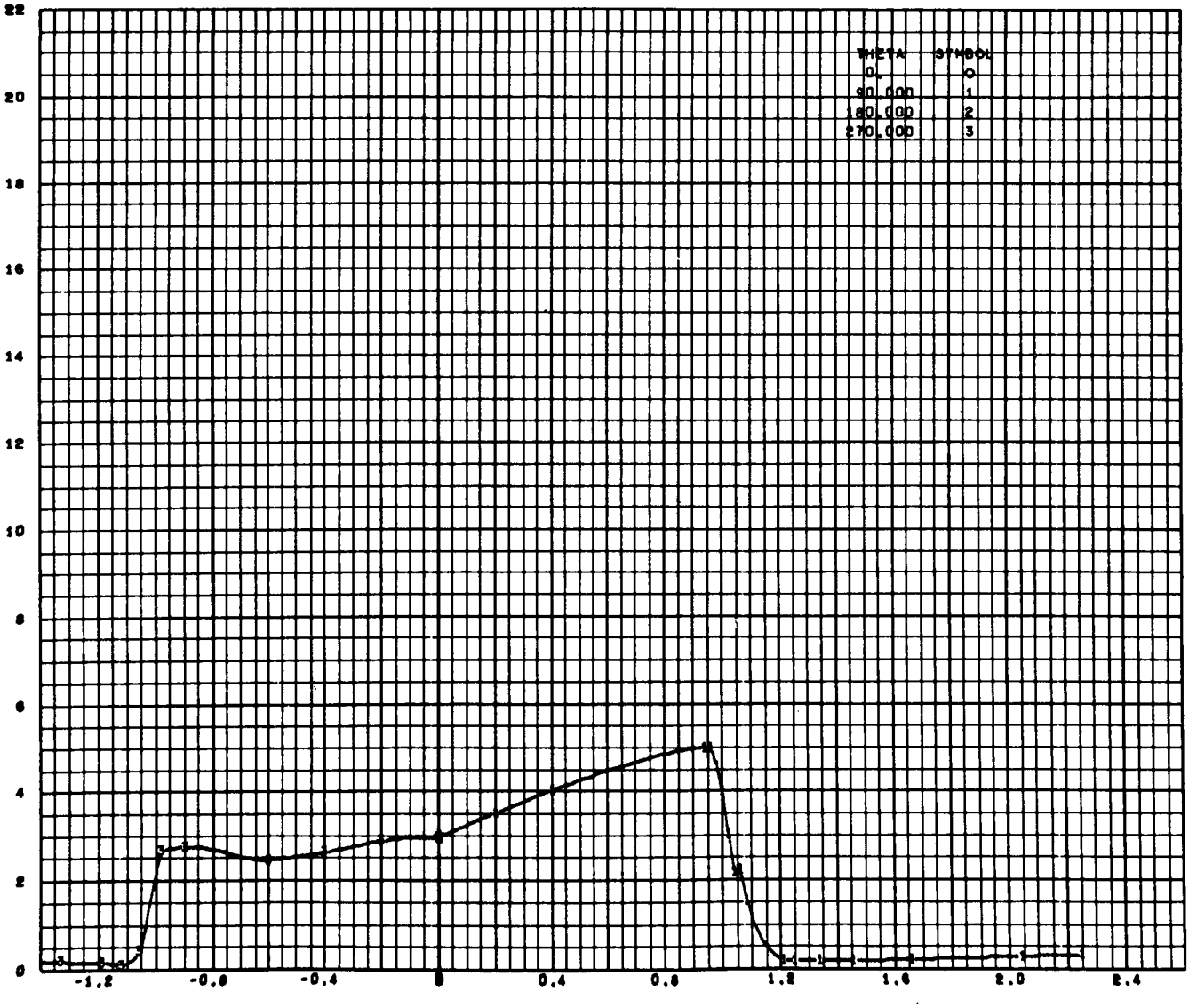

BTU/SQ FT SEC

A-490

SID 64-2080

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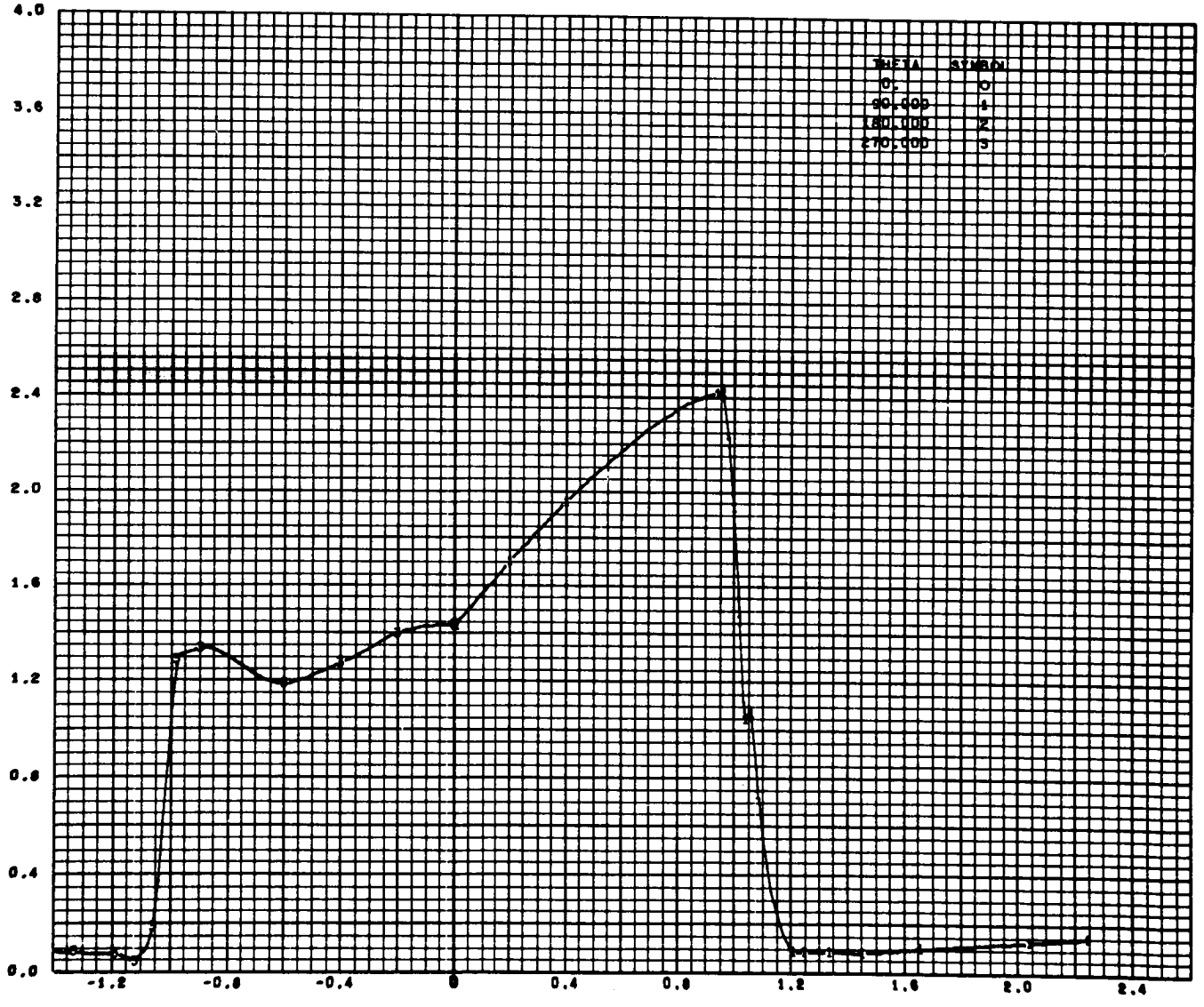

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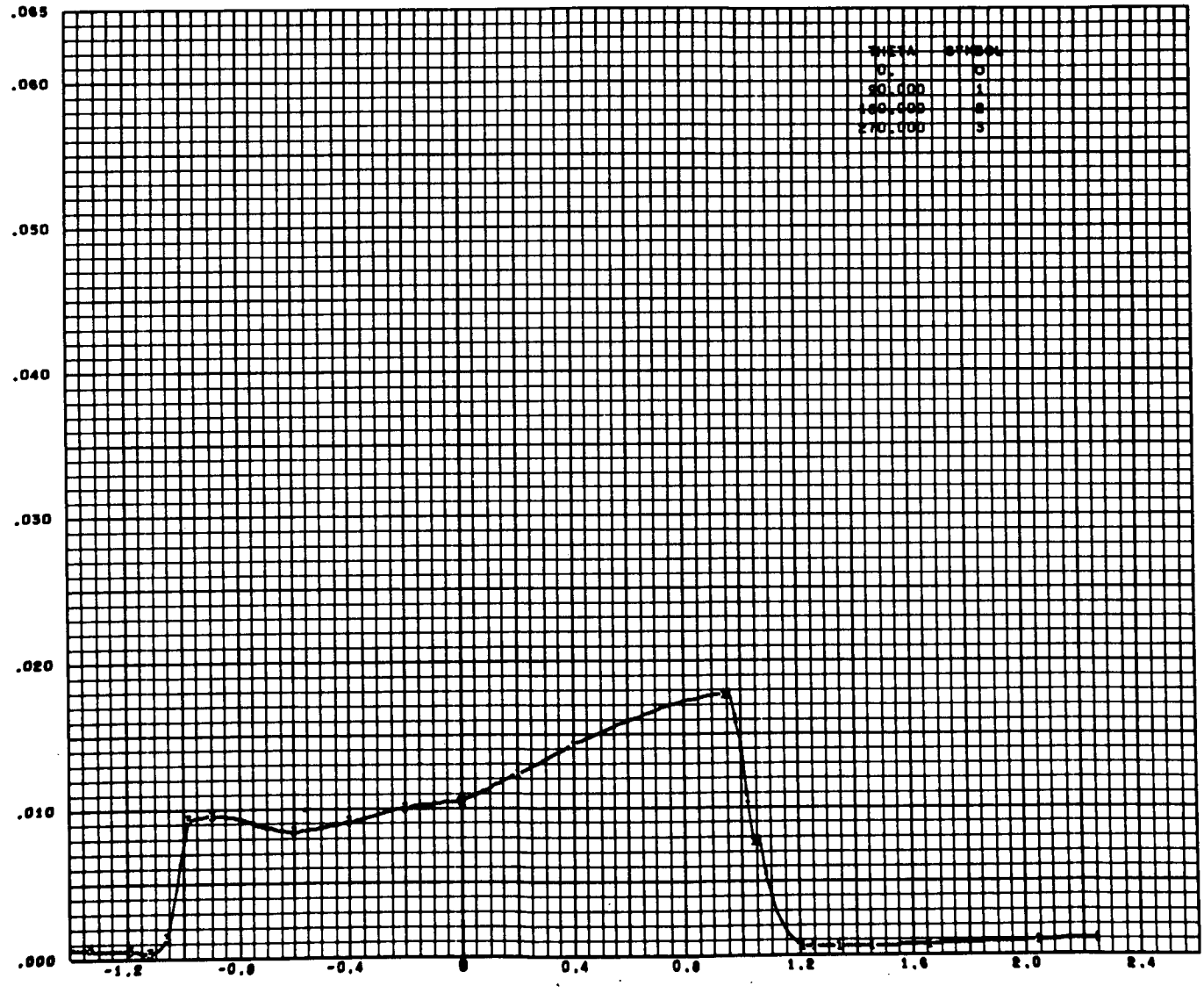

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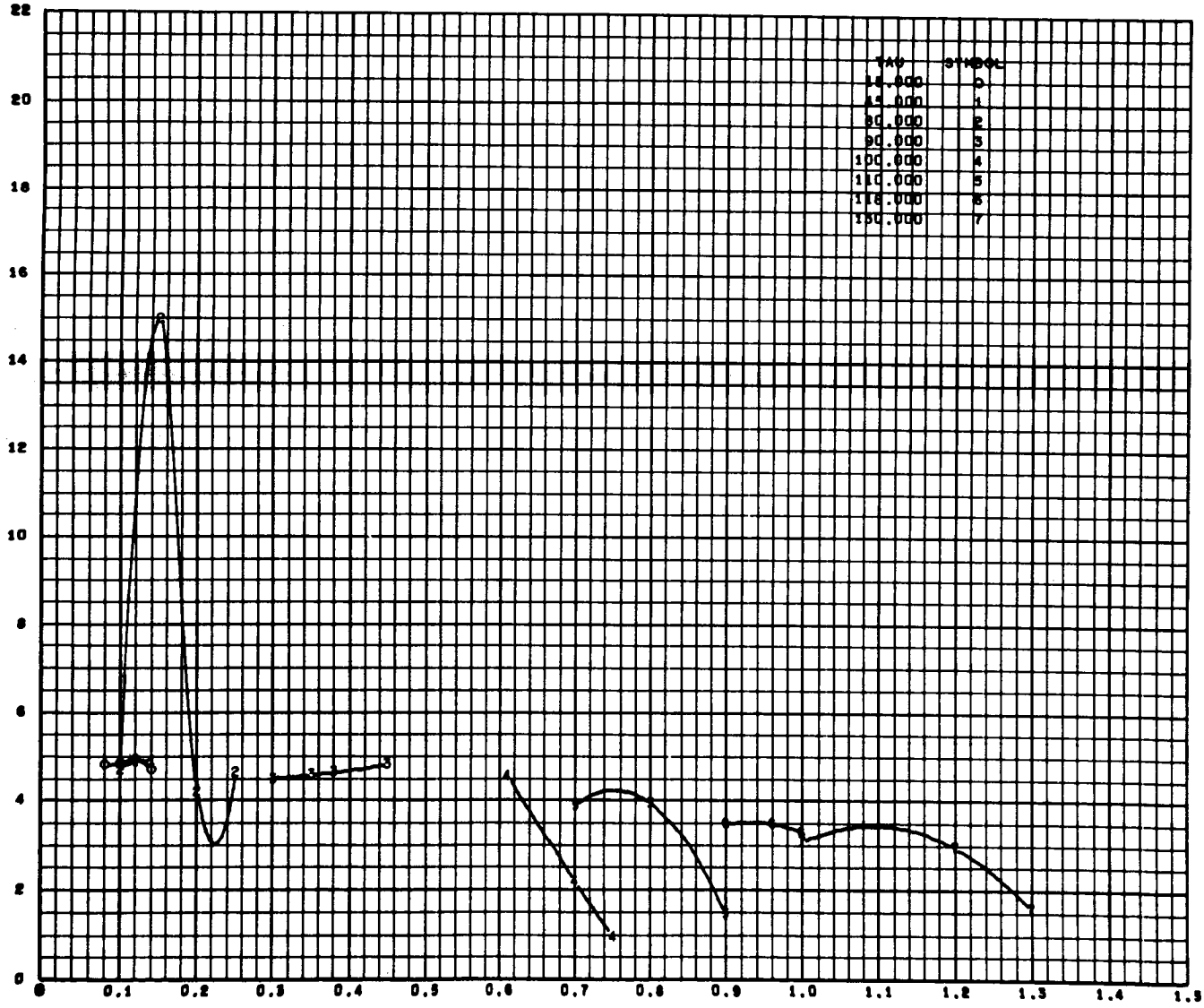

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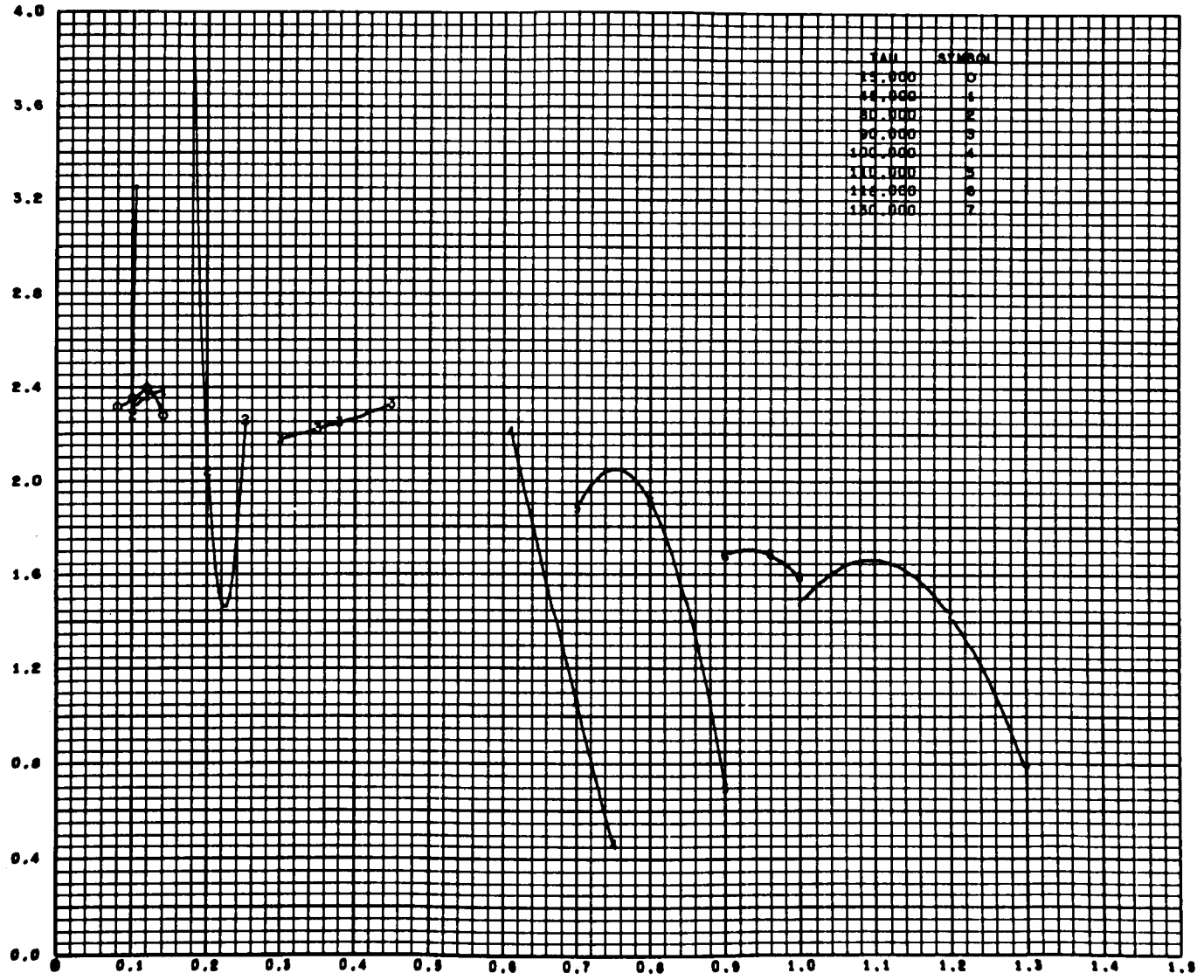

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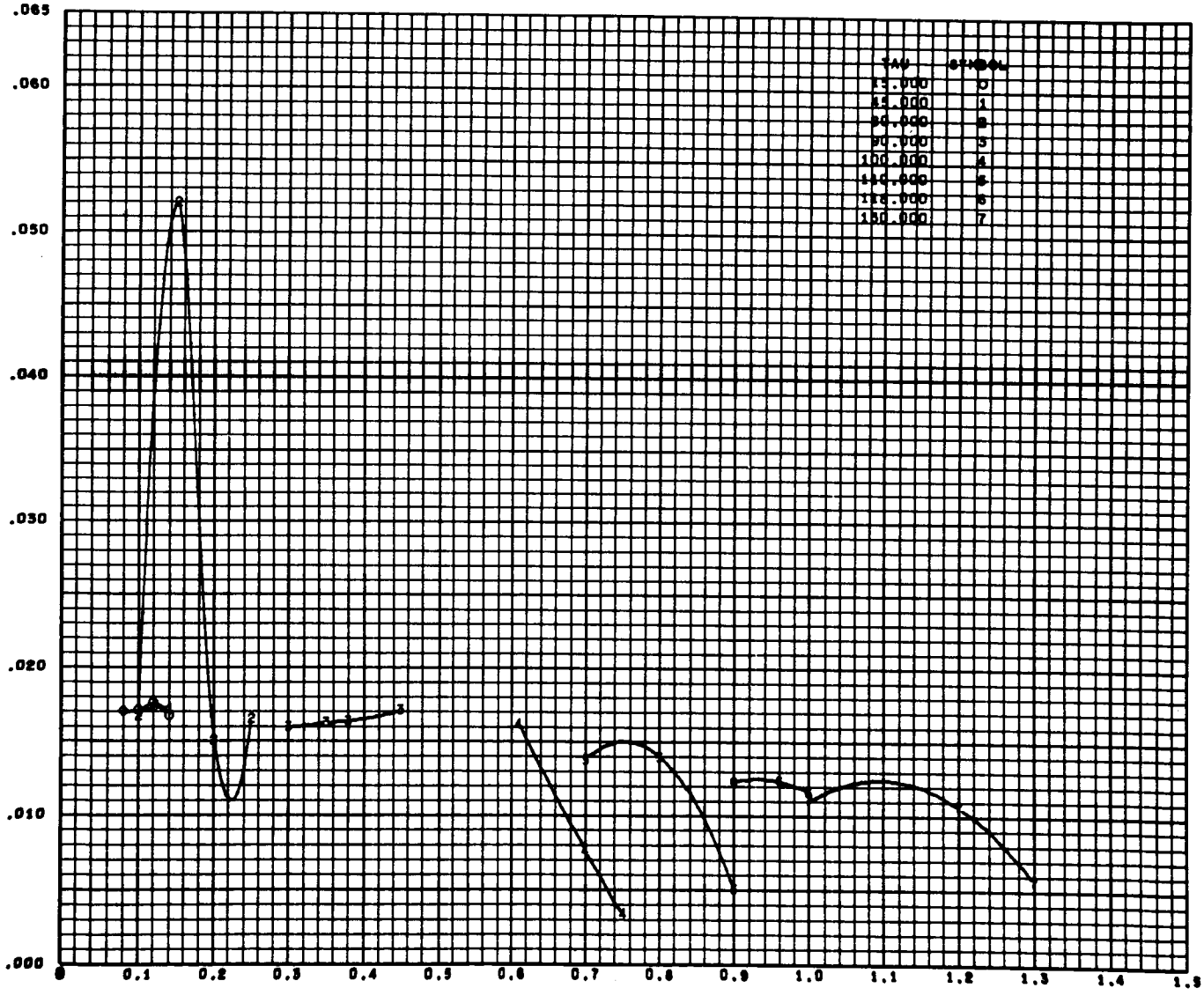

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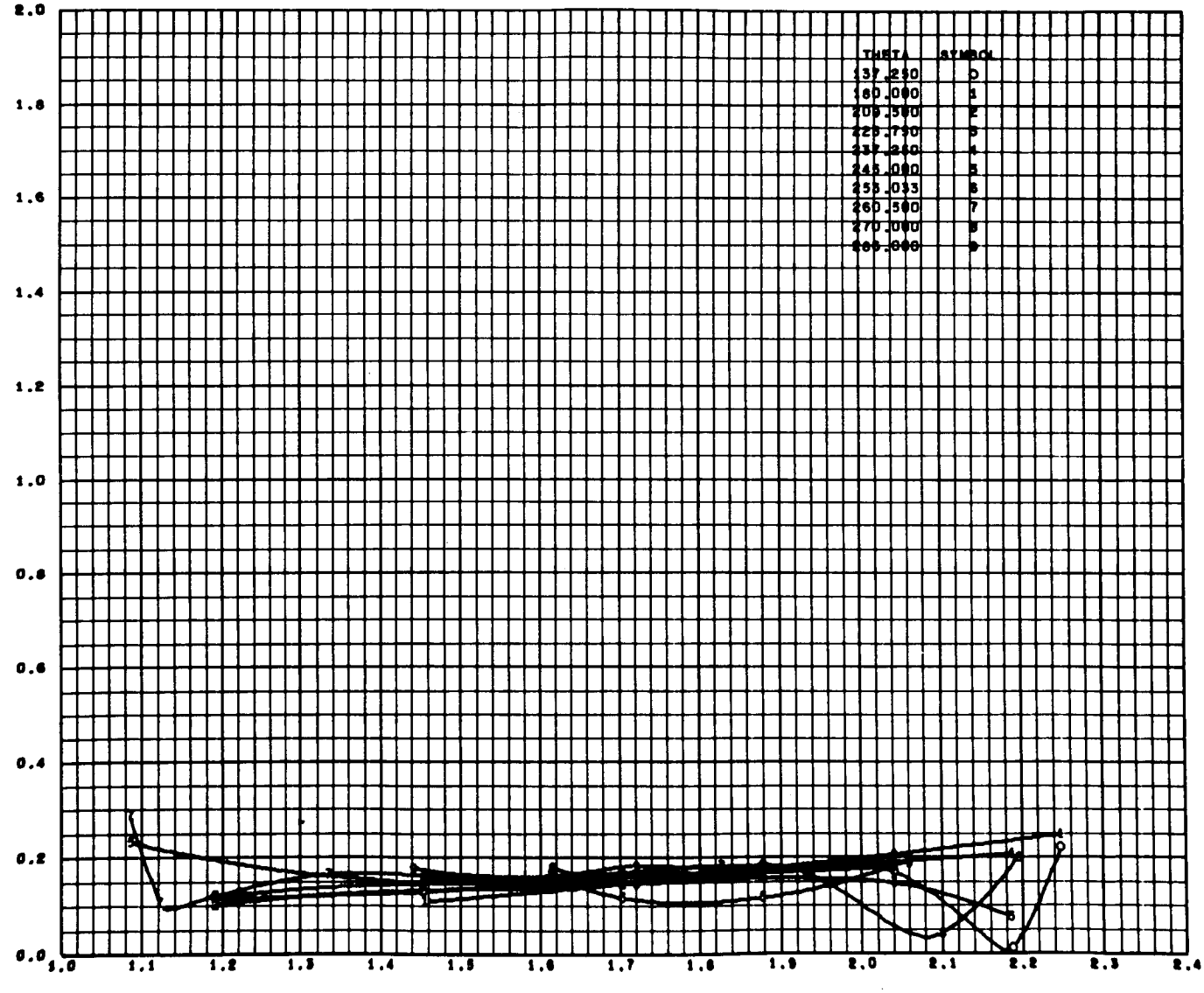

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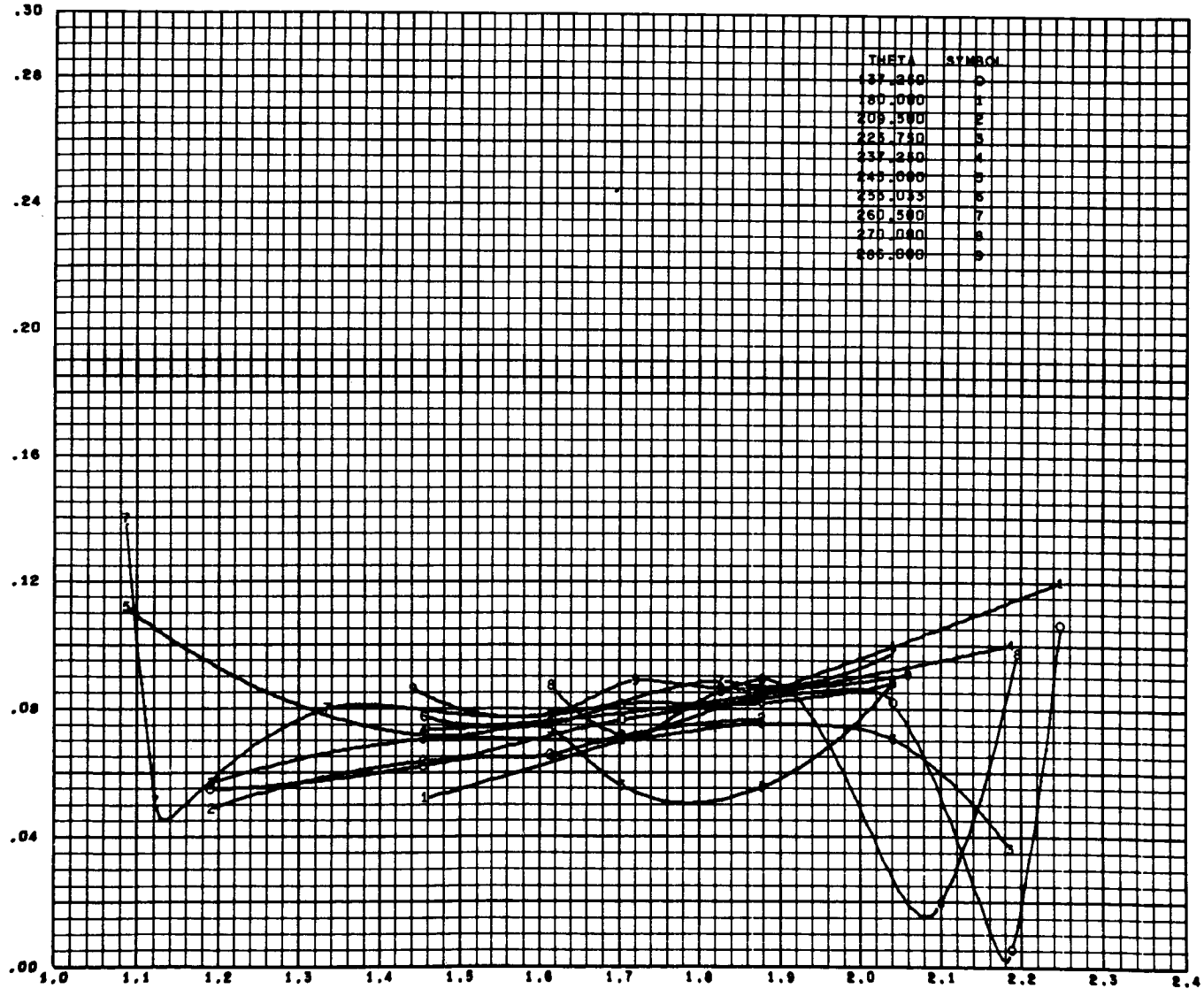

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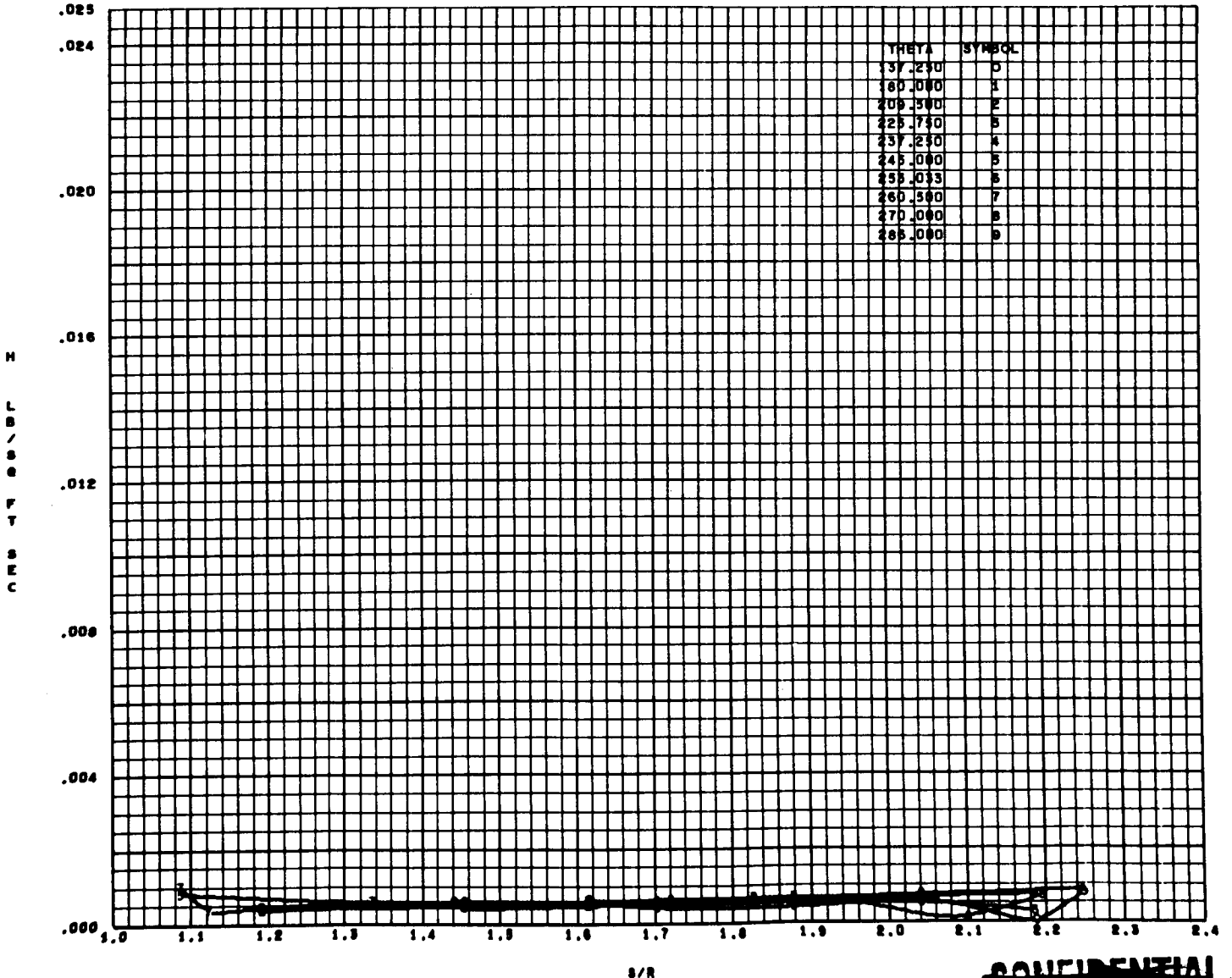

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TEST GROUP	TIME (SEC)
142*	2.70
151	2.70
156	2.70

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3037-10
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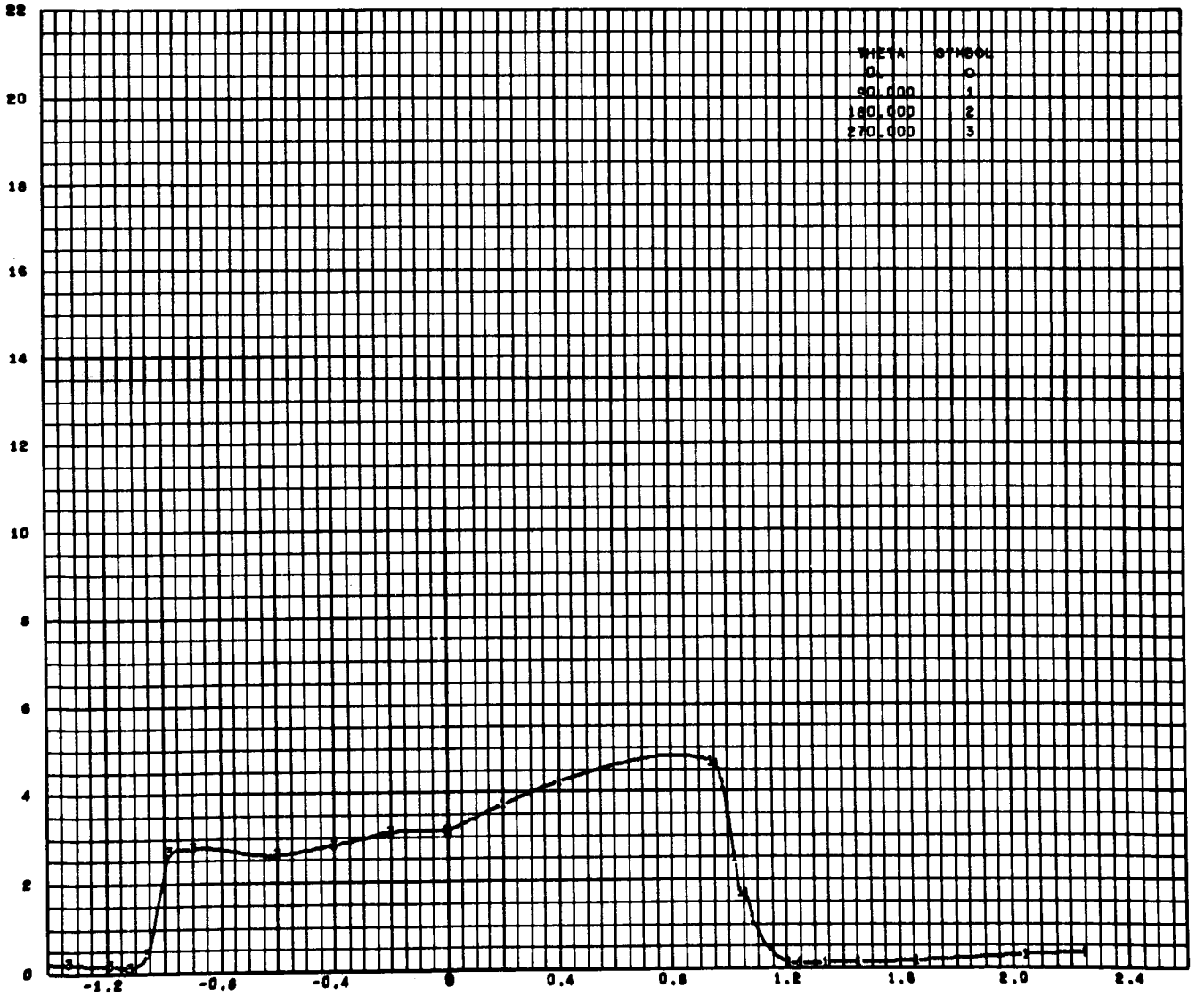

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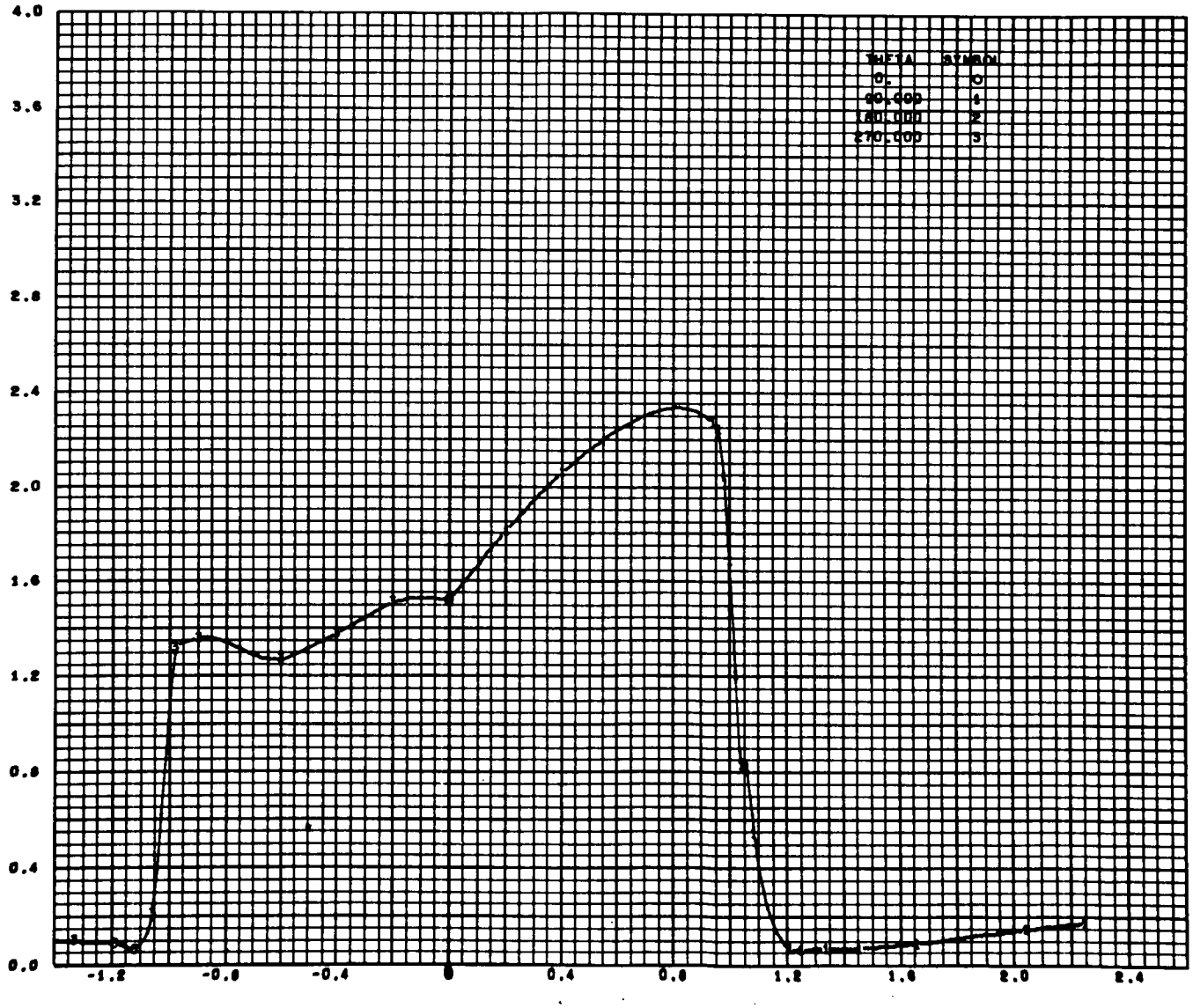

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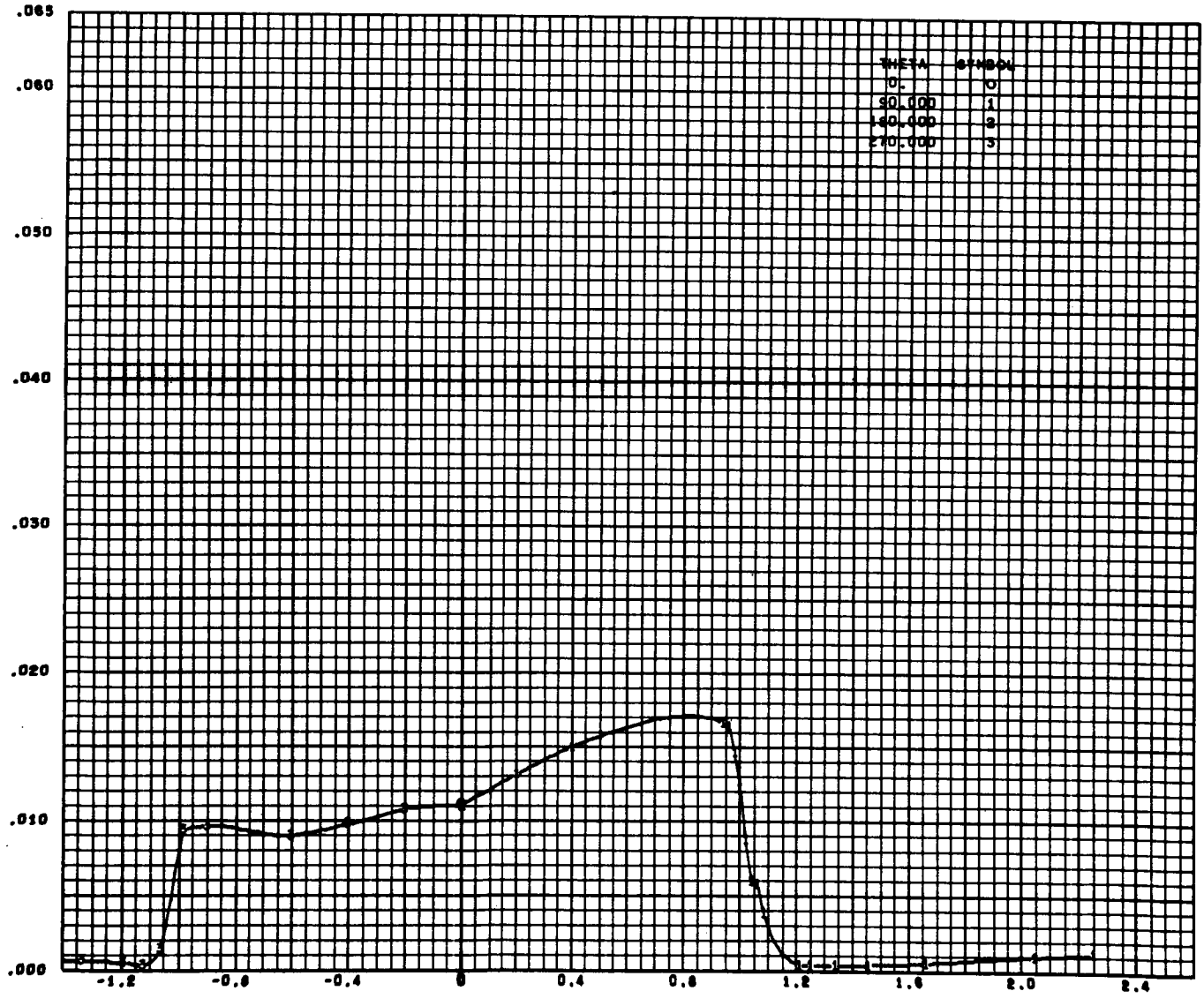

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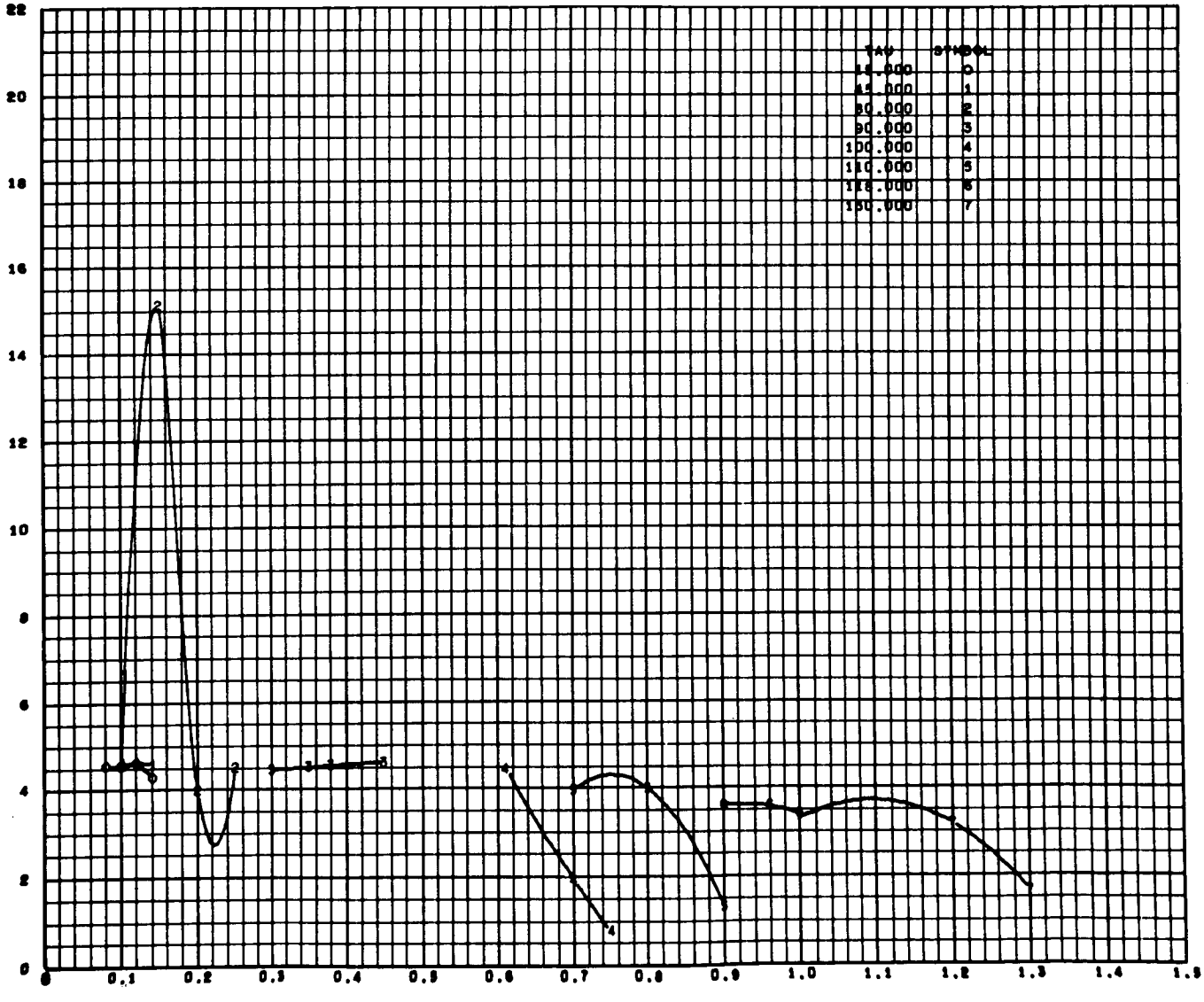

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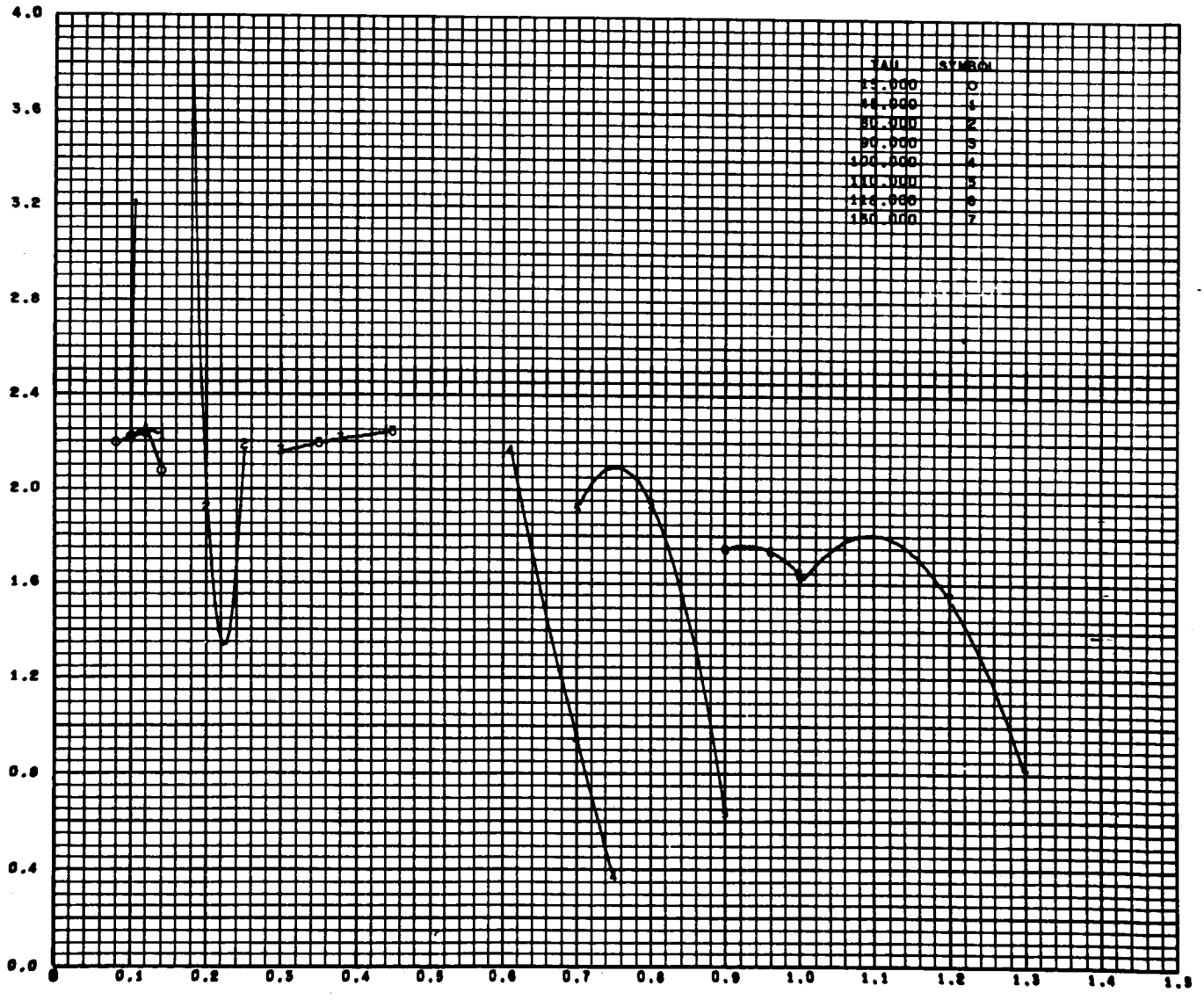

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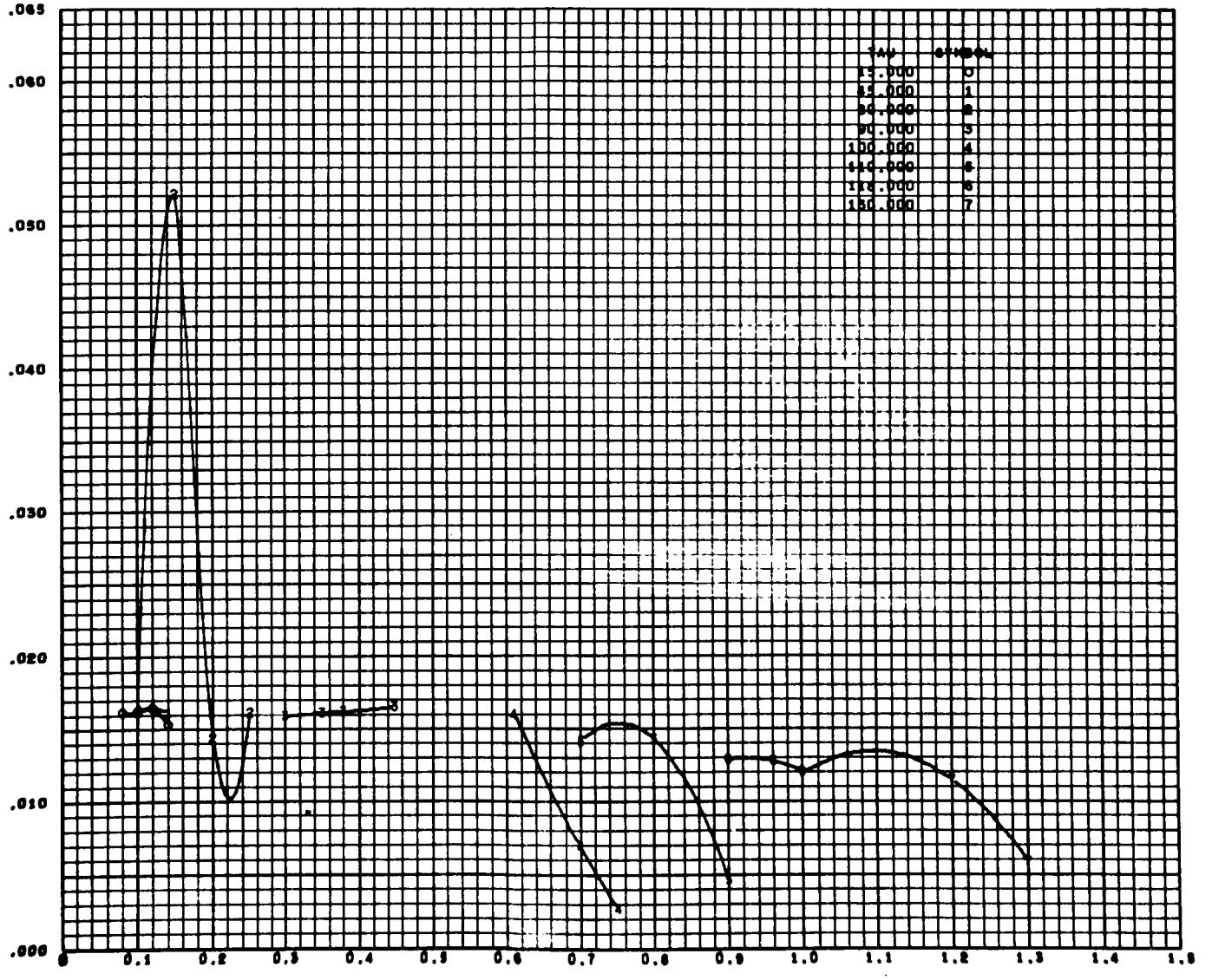

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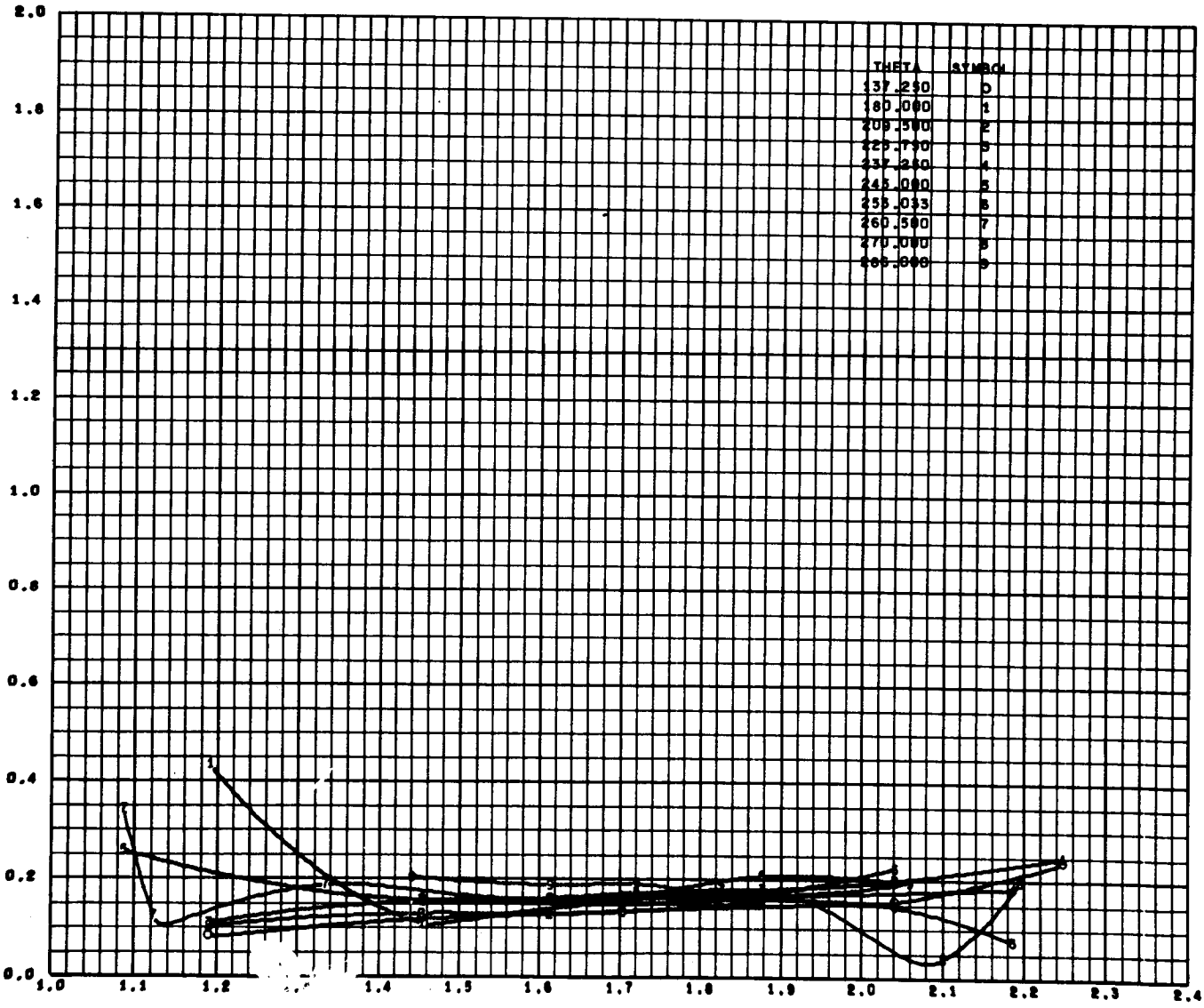

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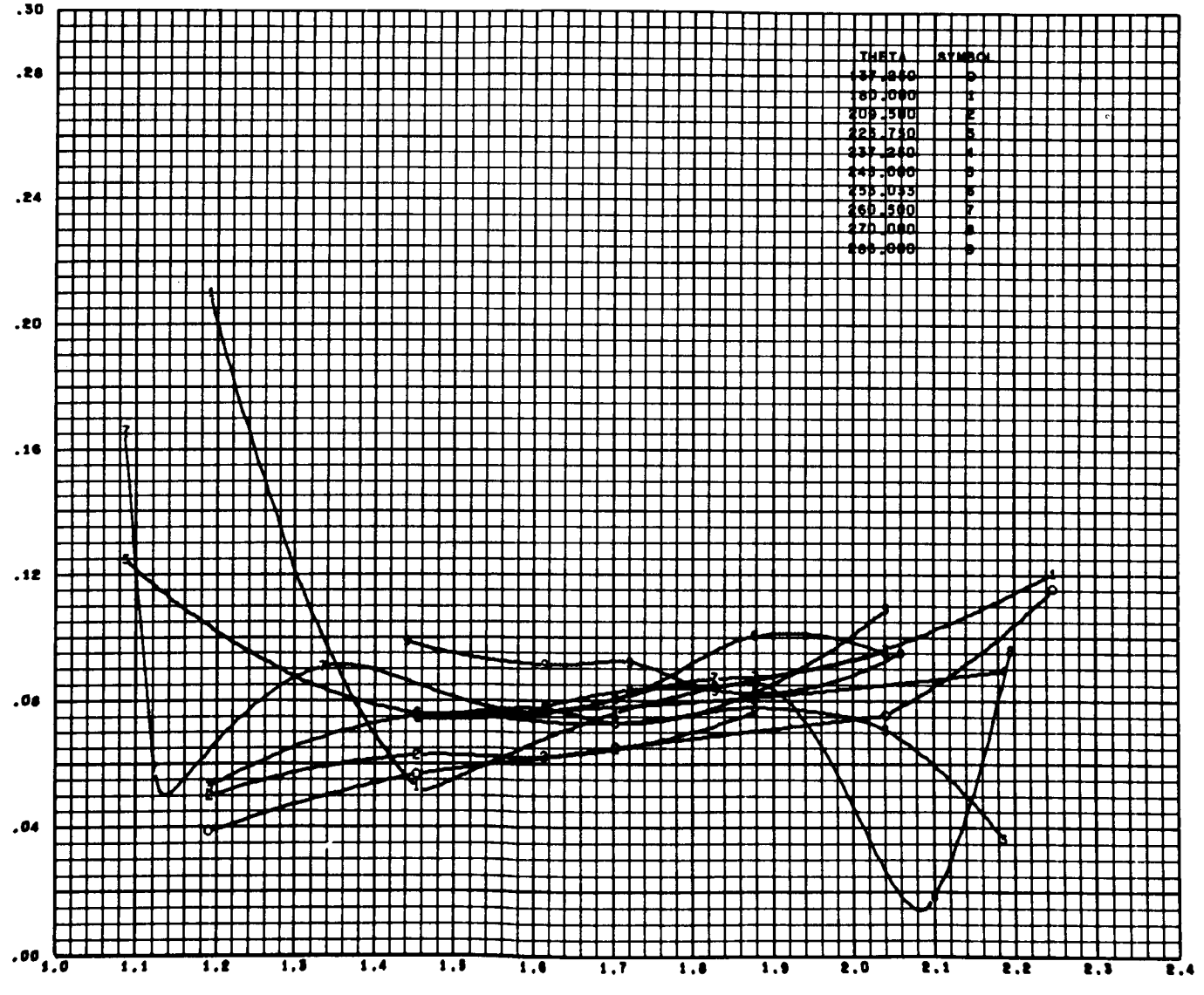

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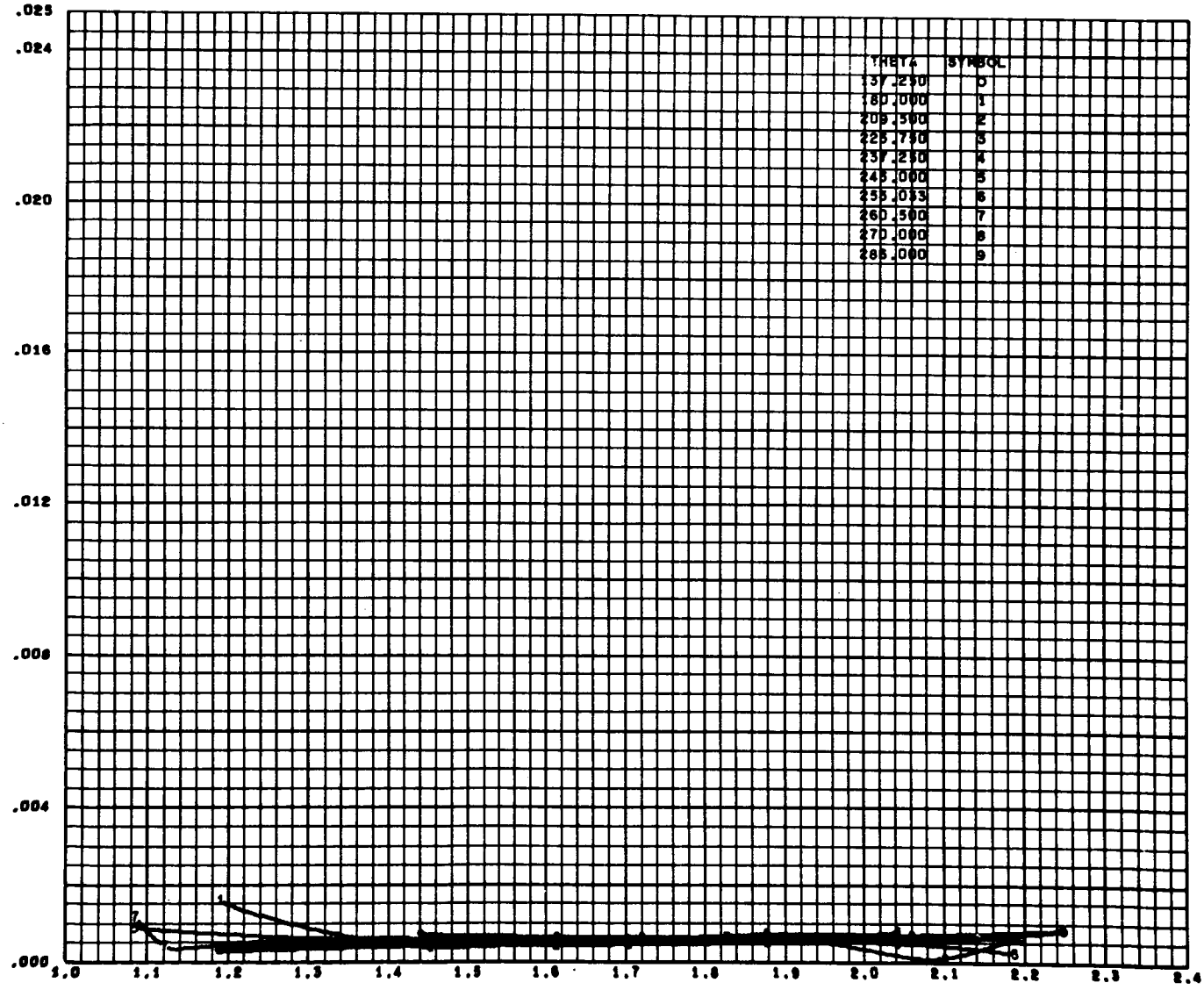

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 142.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 940.50 PSIA
TOTAL TEMPERATURE ---- 1829.60 DEG RANKINE

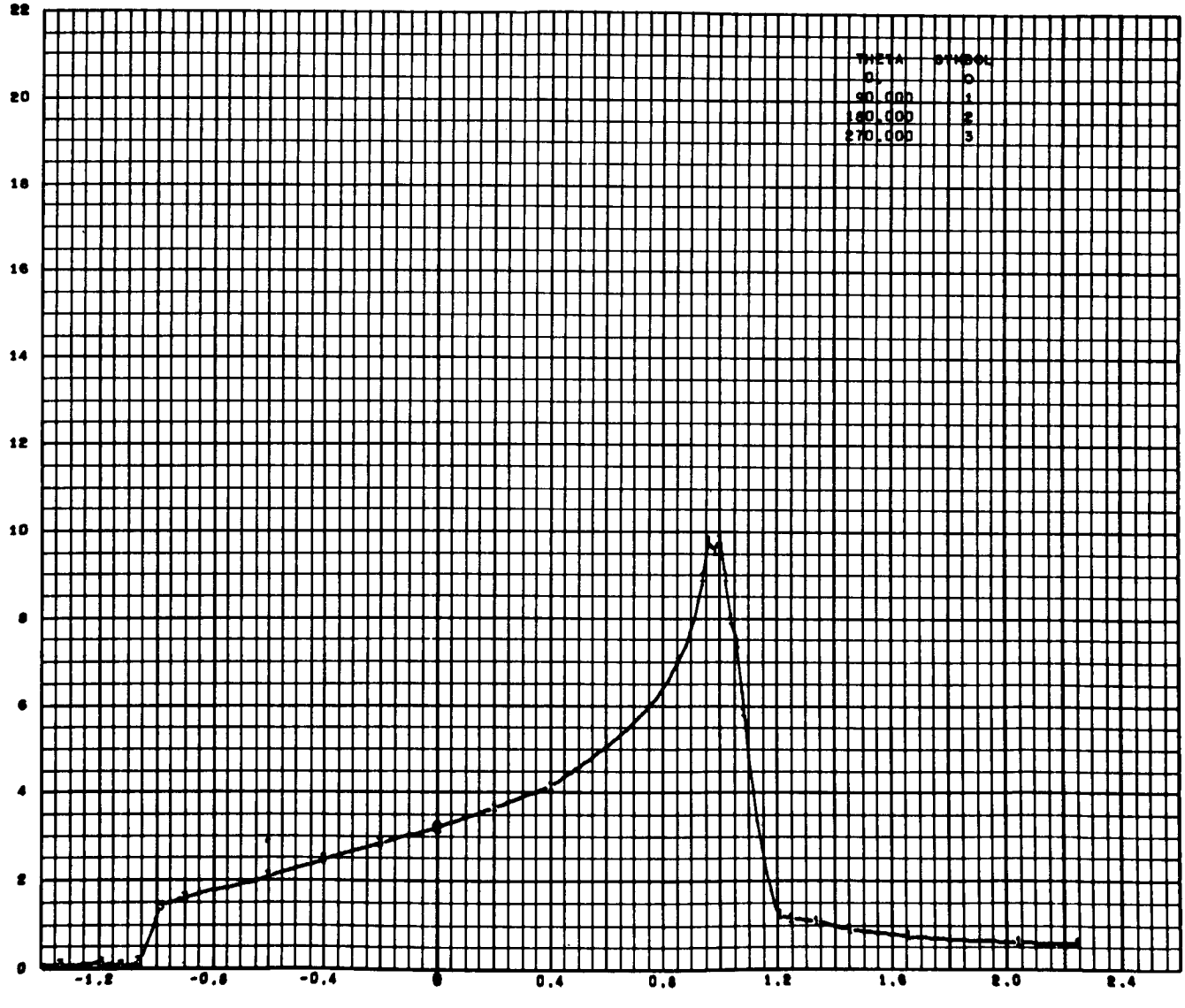
RE/FT --- 1.2076*10+6
Q(OM) --- 5.7085 BTU/SQ FT SEC

PLOT SERIES NUMBER 74

TEST GROUP	TIME (SEC)
128*	2.75
133	2.70
123	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
070 000



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ANGLE OF ATTACK ------ 142.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 940.50 PSIA
TOTAL TEMPERATURE ---- 1829.60 DEG RANKINE

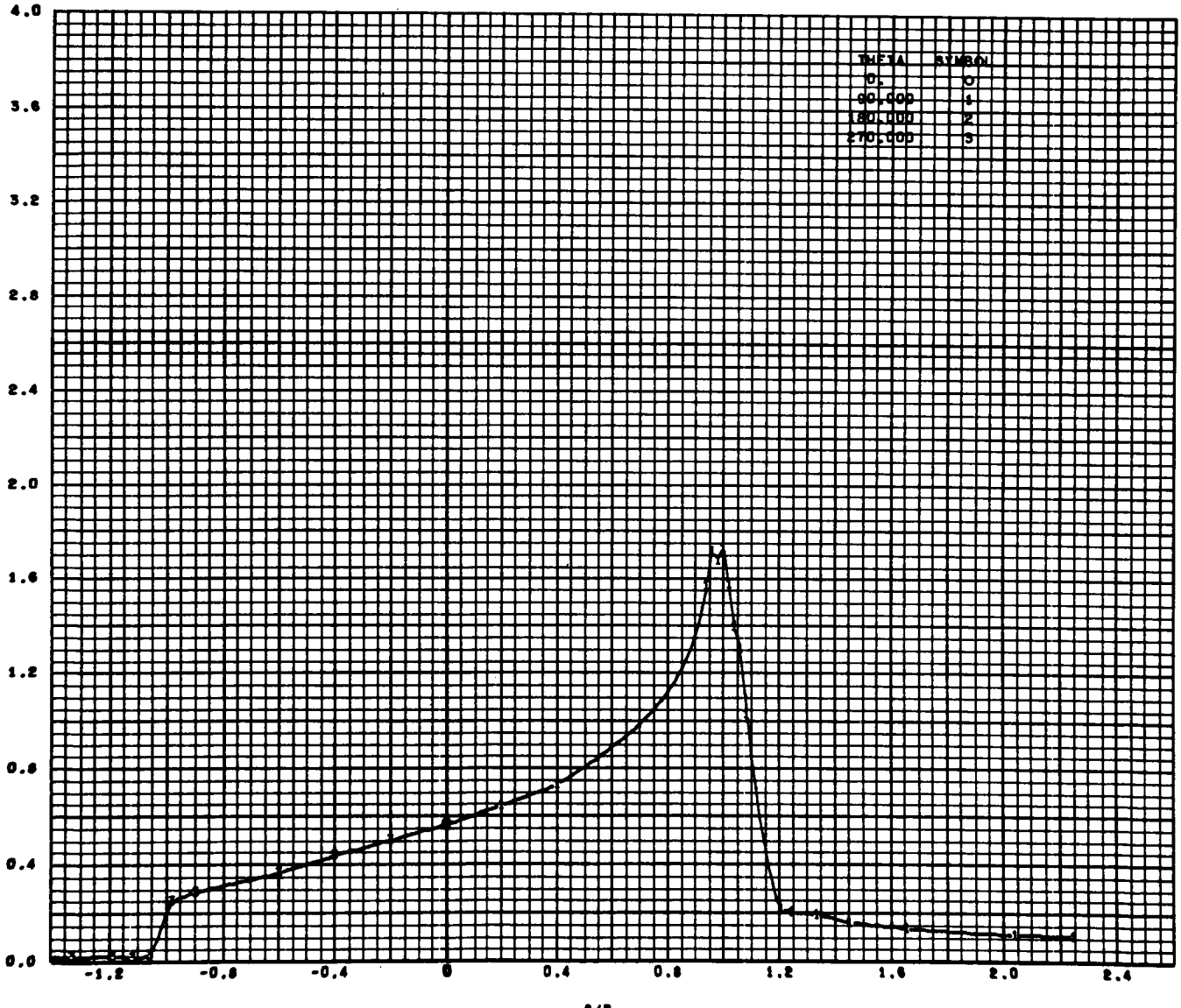
RE/FT --- 1.2076*10+6
Q(OM) --- 5.7085 BTU/SQ FT SEC

PLOT SERIES NUMBER 74

TEST GROUP	TIME (SEC)
128*	2.75
133	2.70
123	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
073 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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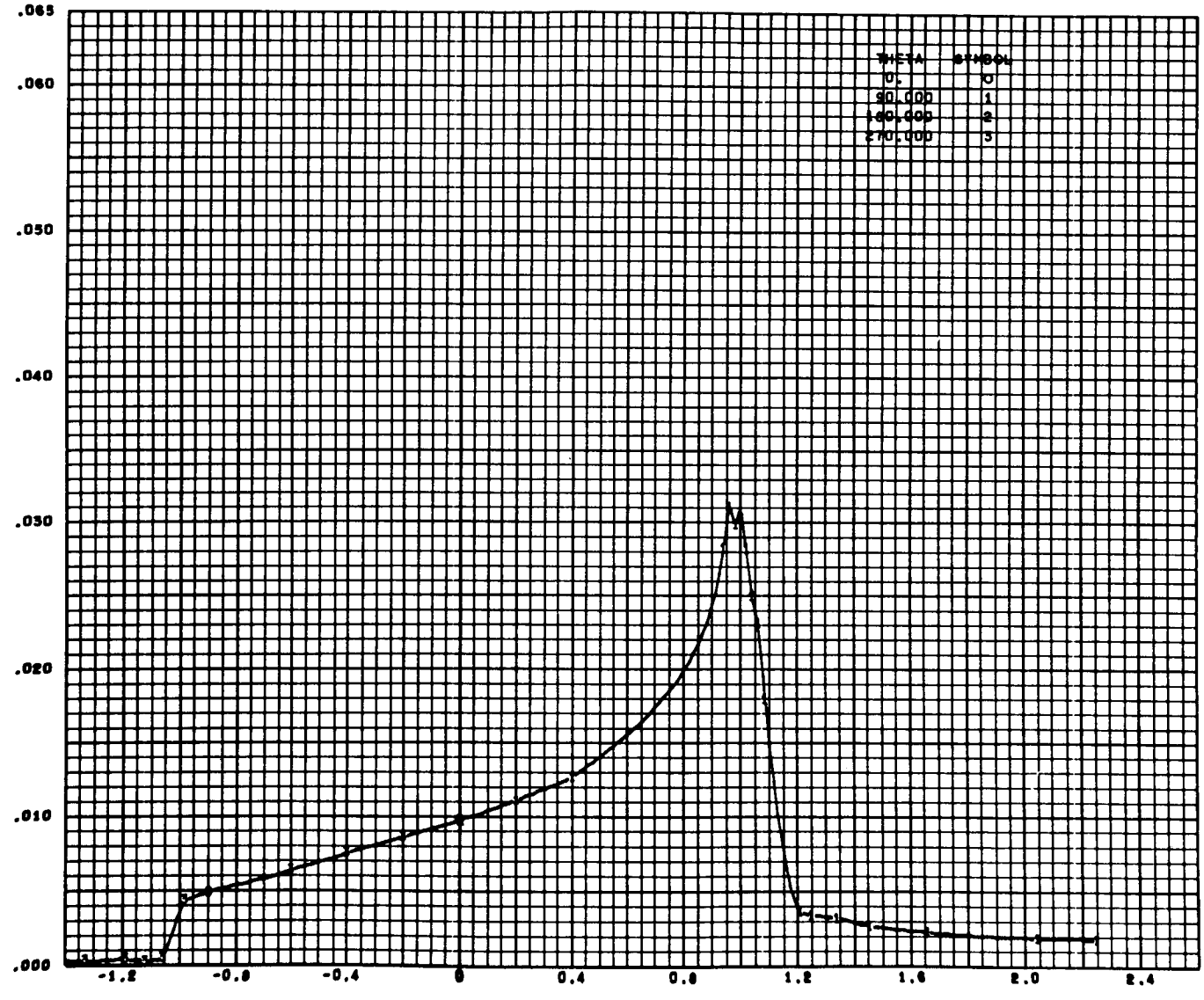

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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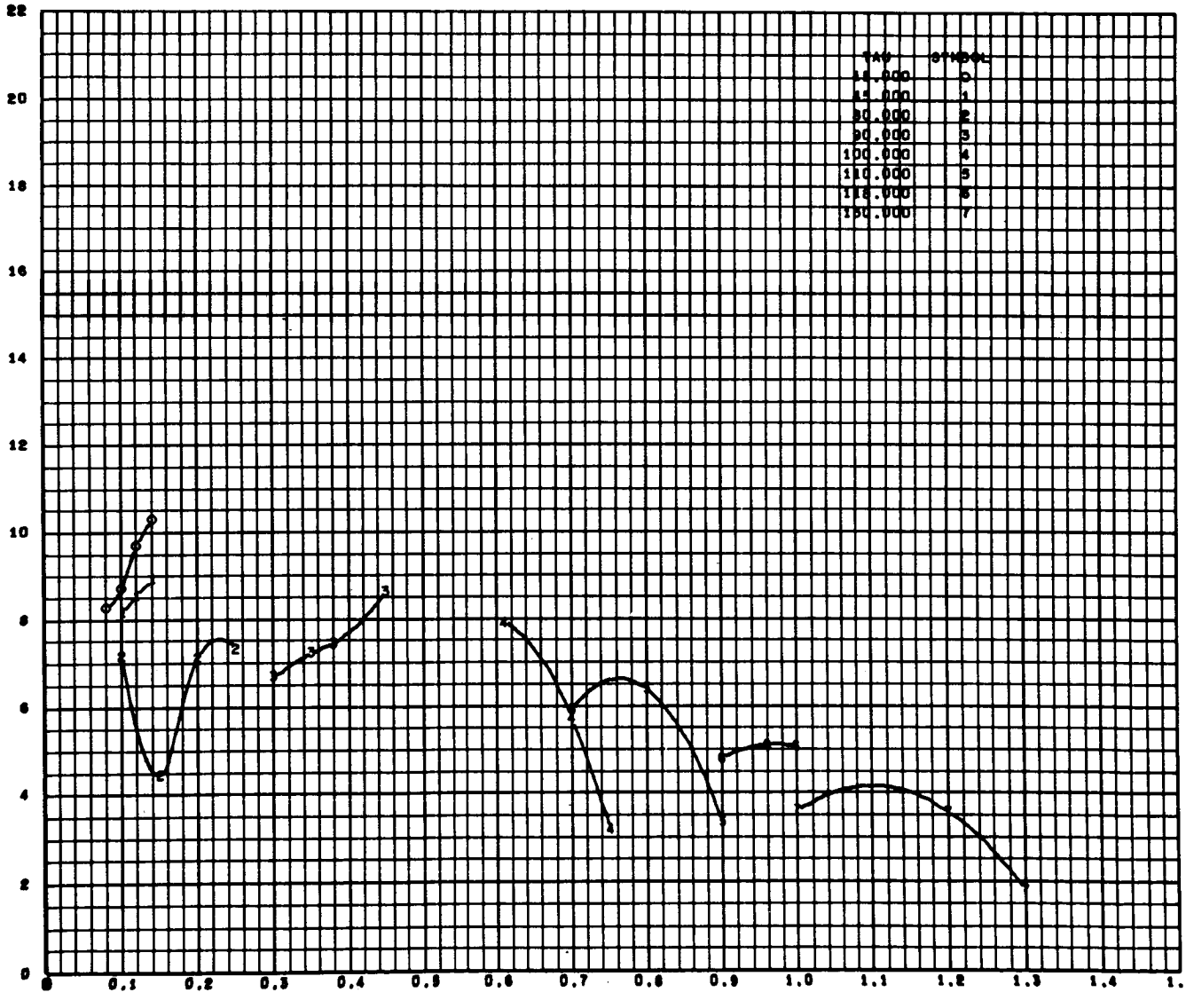

BTU/SQ FT SEC

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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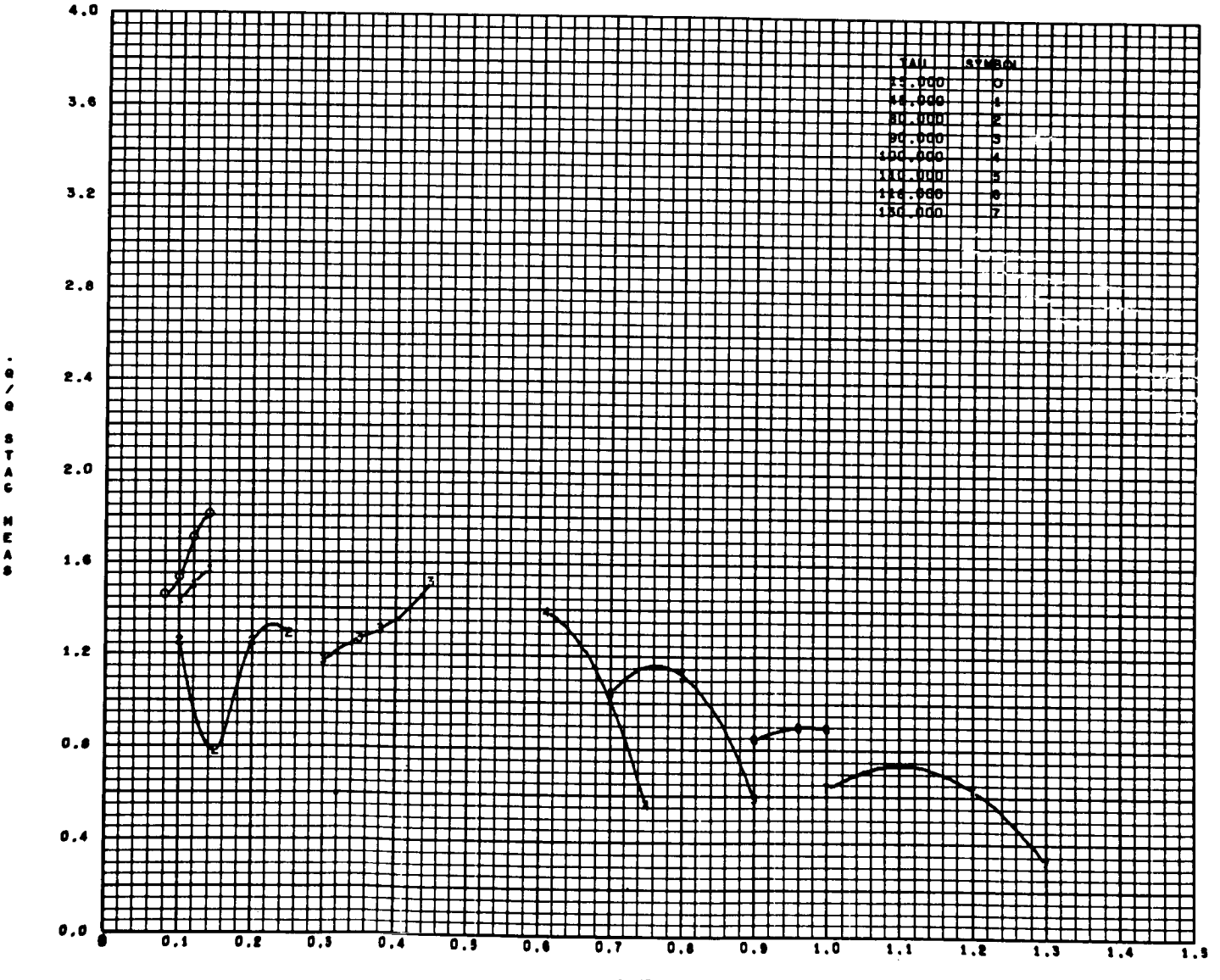

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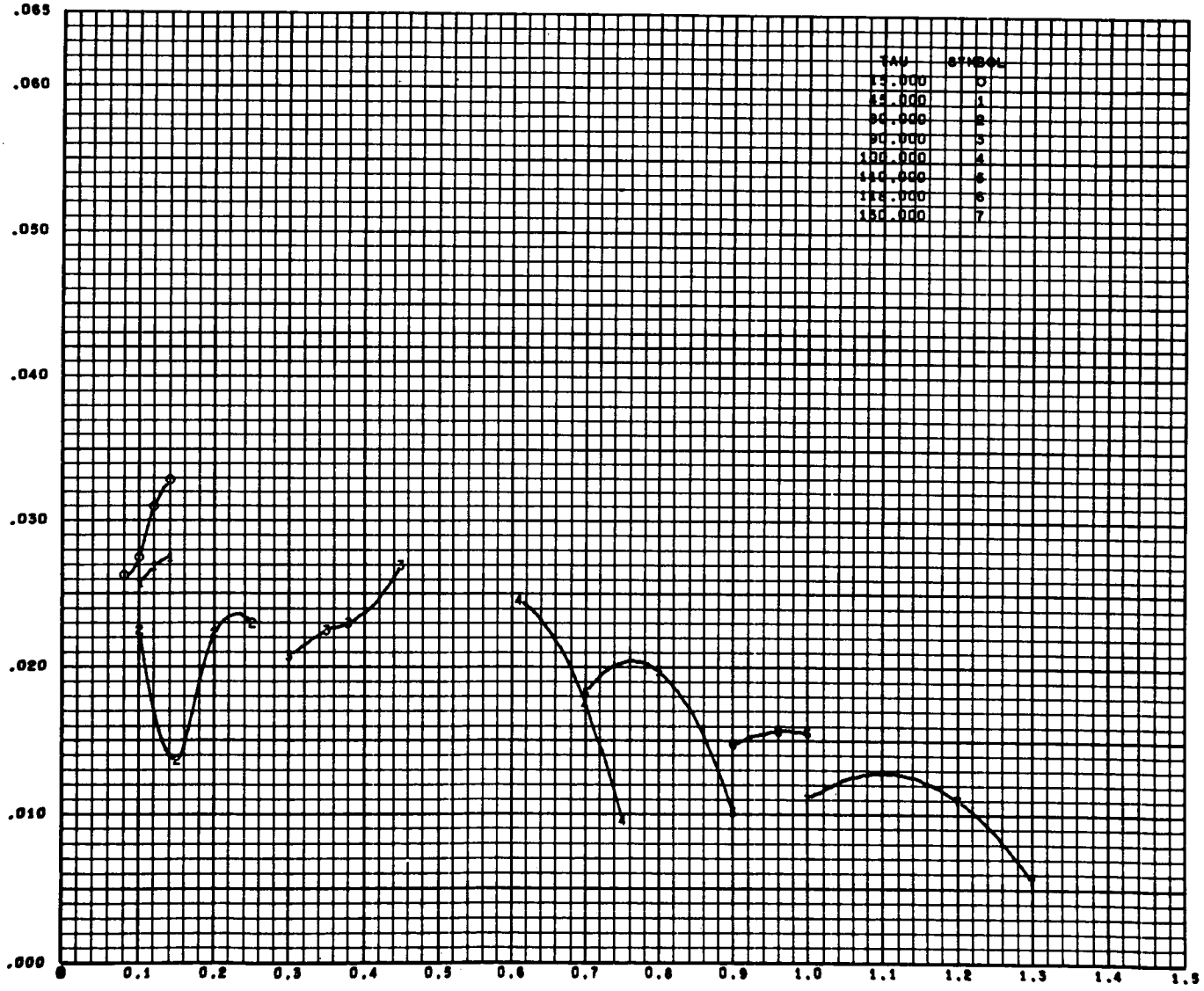

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

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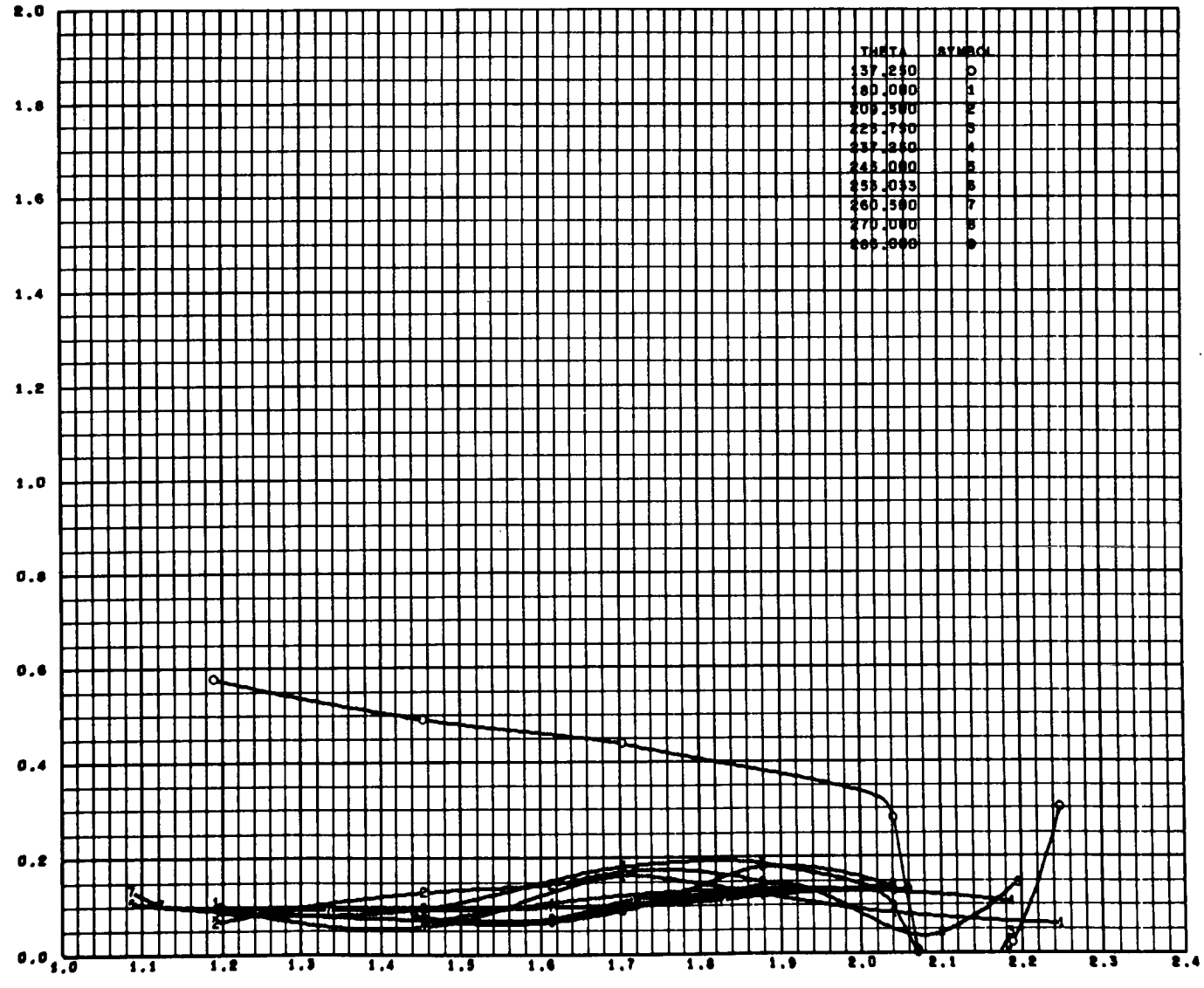

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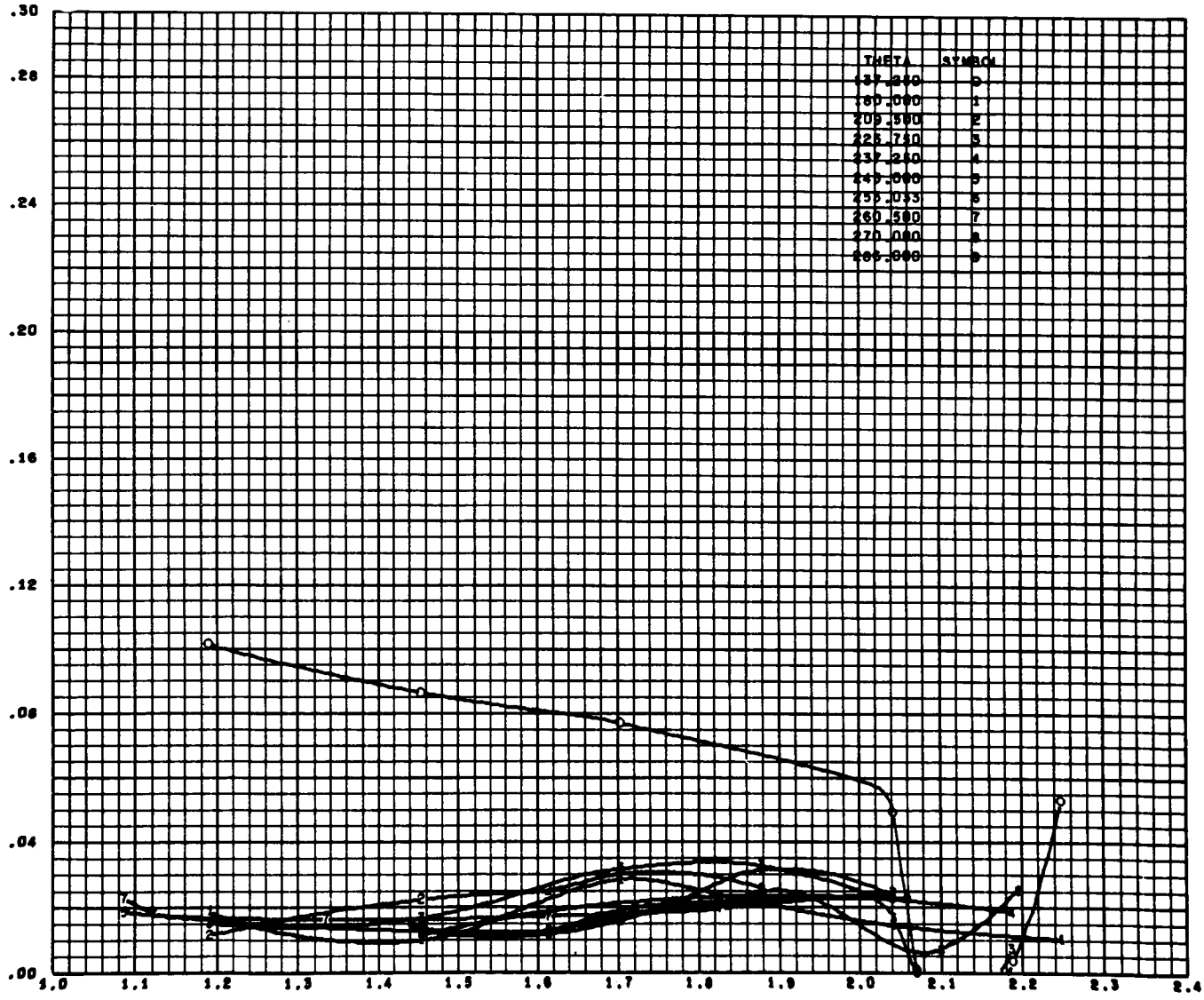

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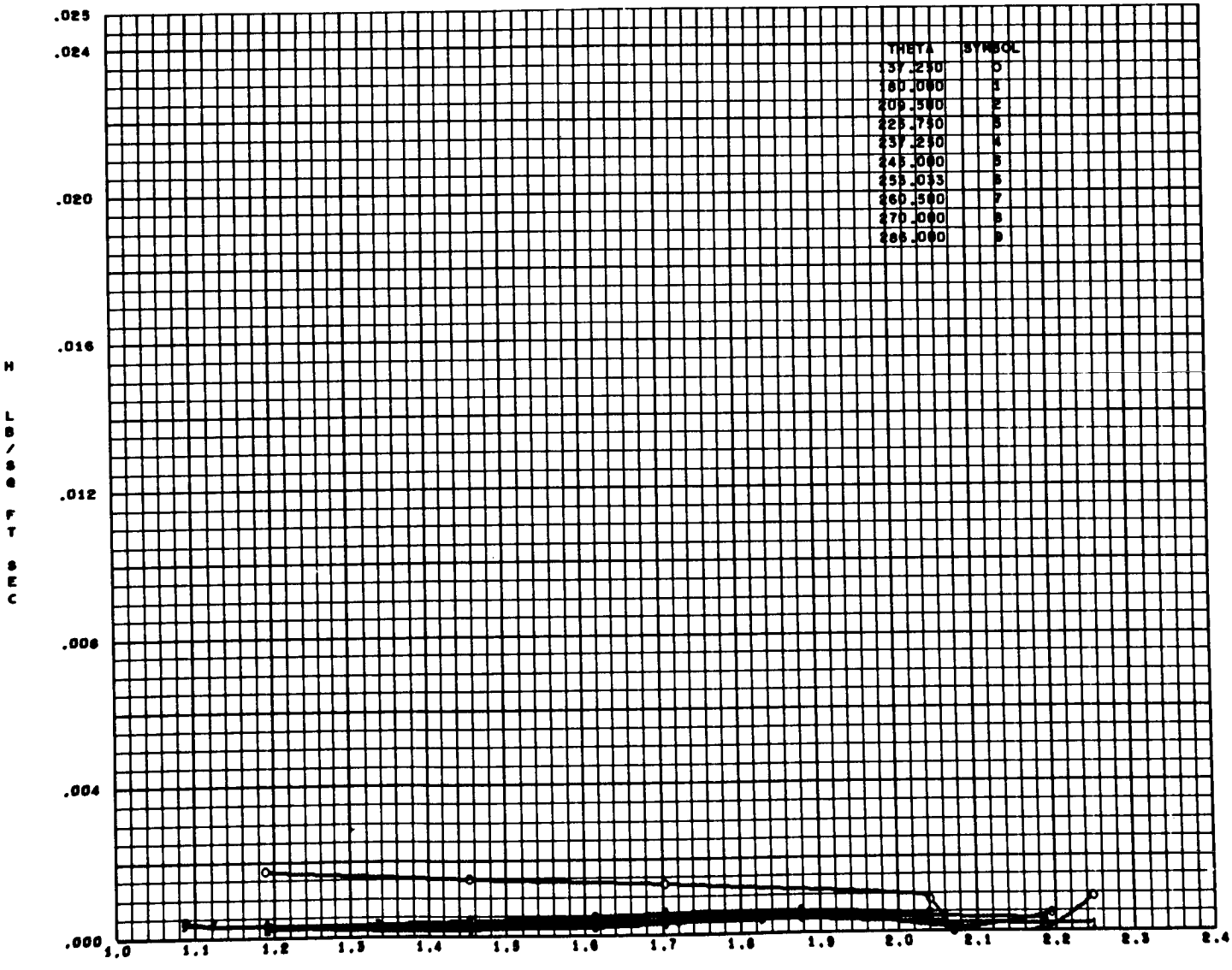

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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PLOT SERIES NUMBER 750

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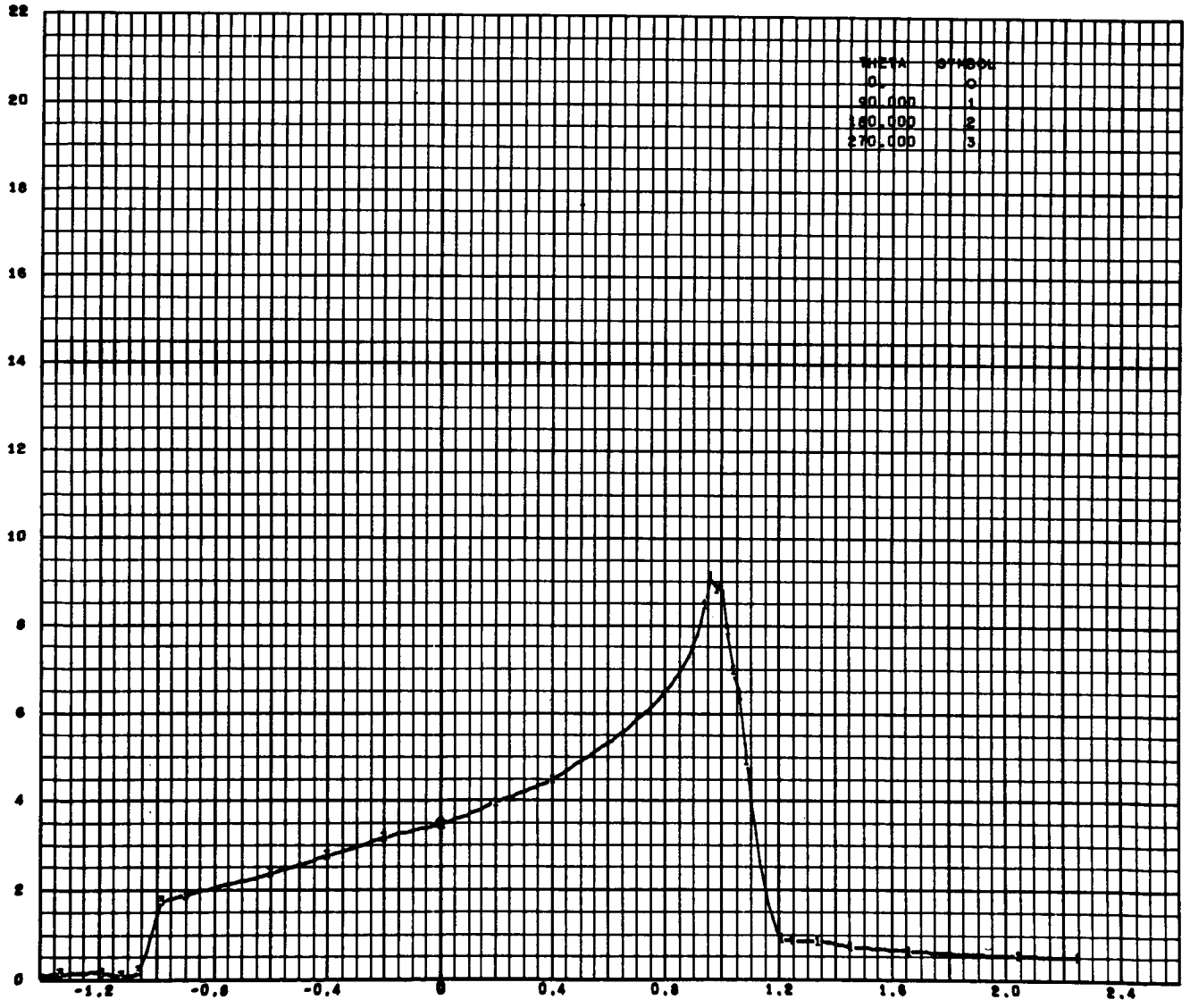

Q BTU/SQ FT SEC

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HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 750 | 3937-10 002 000

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

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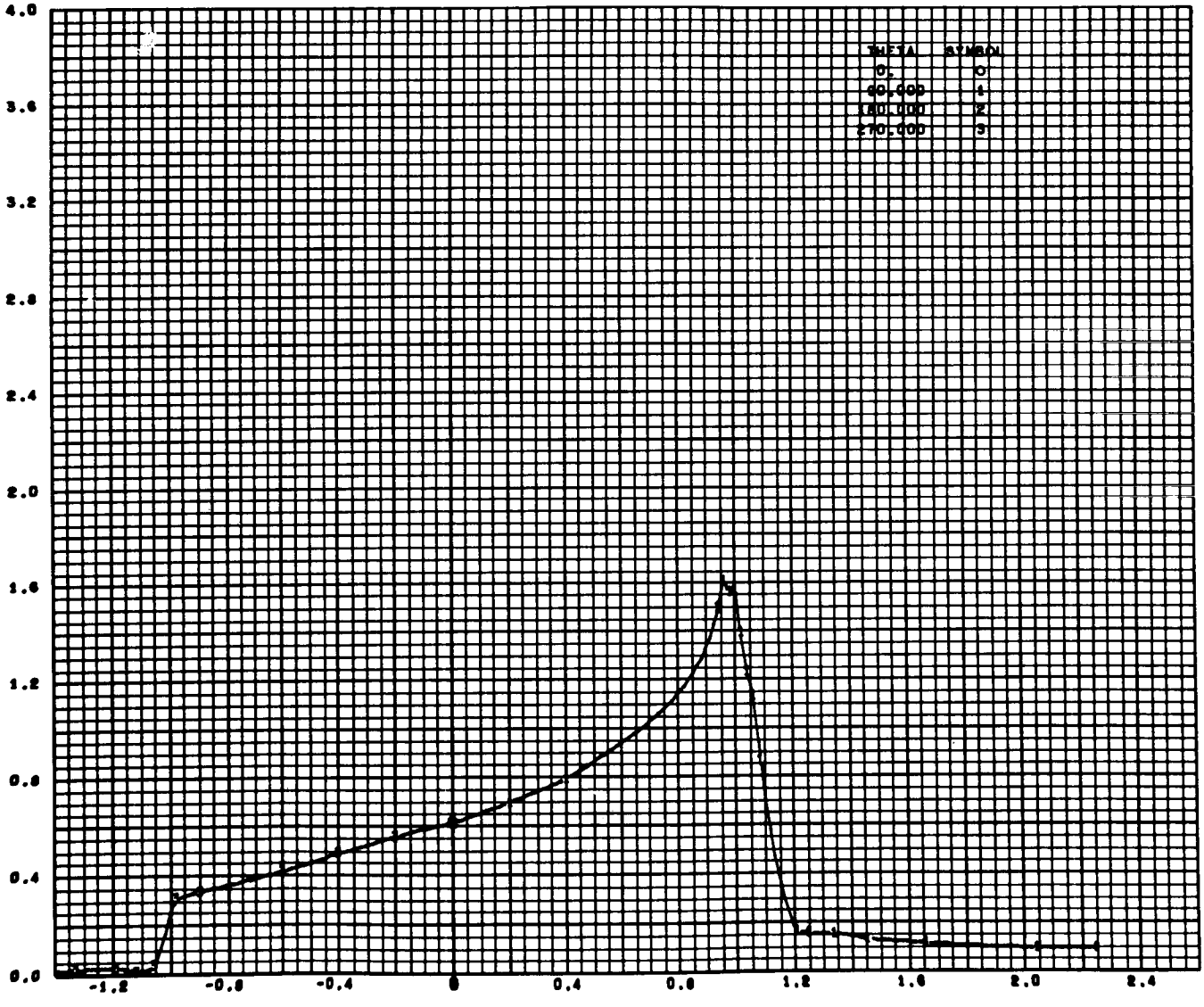

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HEAT TRANSFER

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AEDC, TUNNEL C

JUNE, 1964

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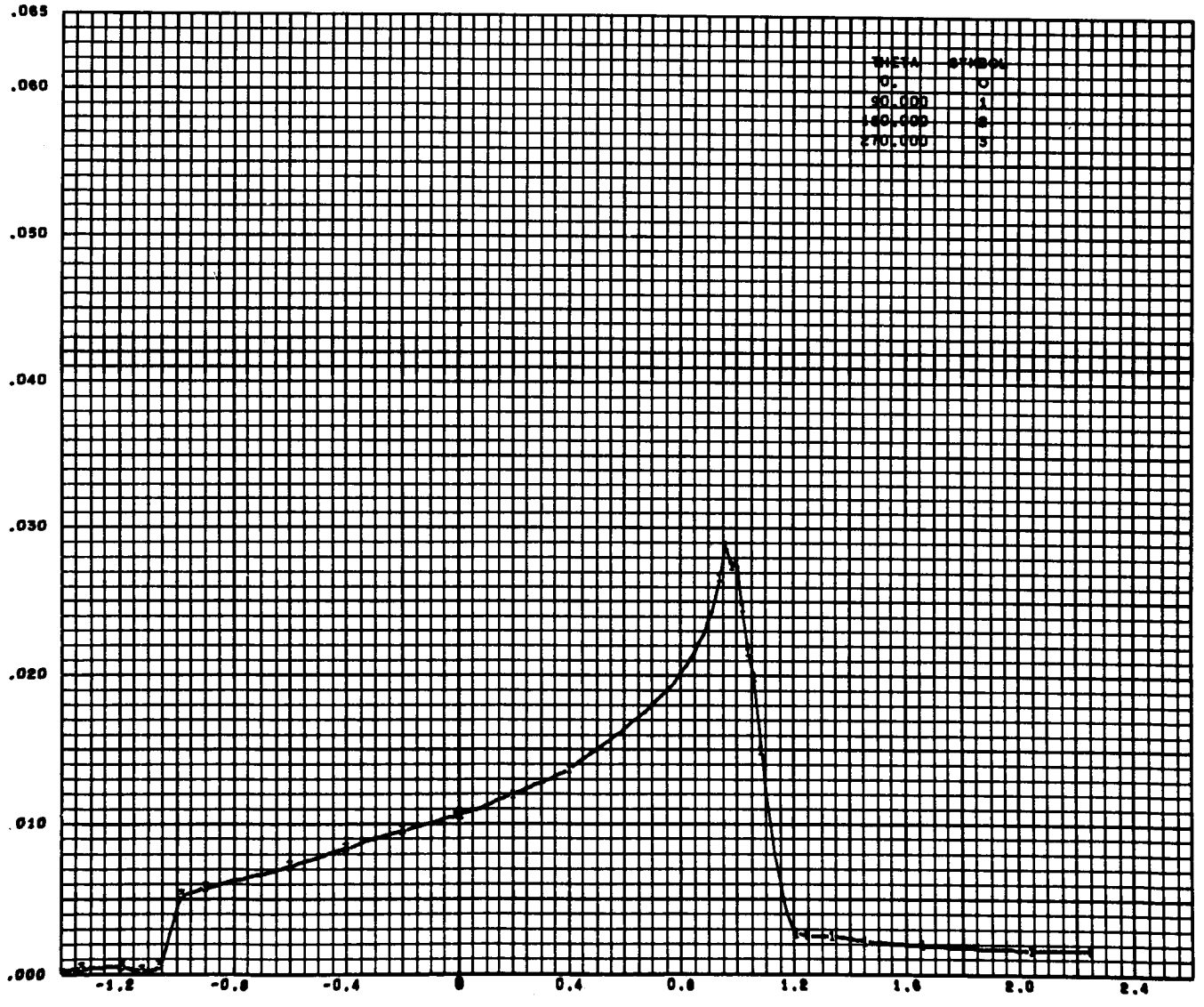

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HEAT TRANSFER

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AEDC, TUNNEL C

JUNE, 1964

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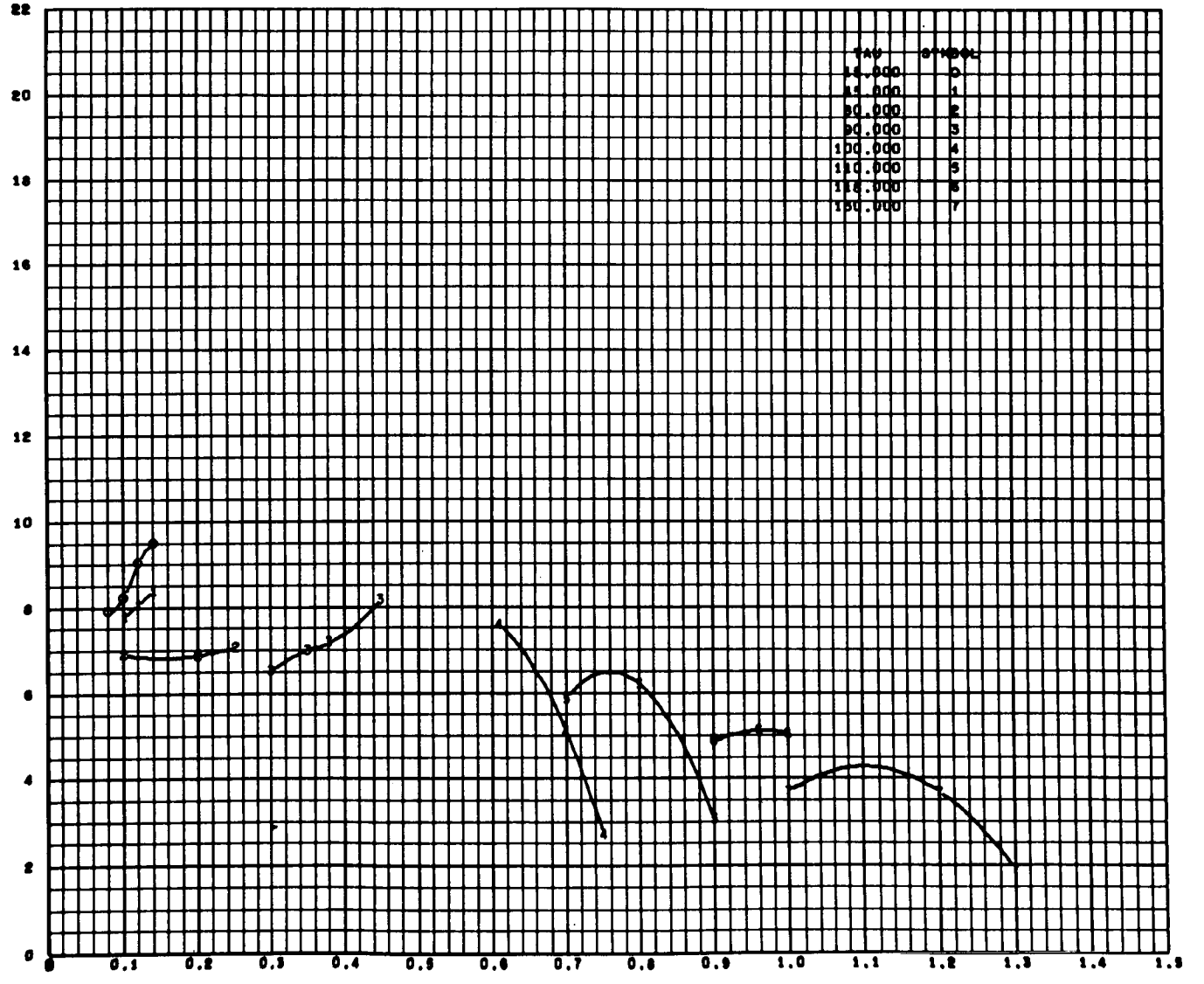

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HEAT TRANSFER

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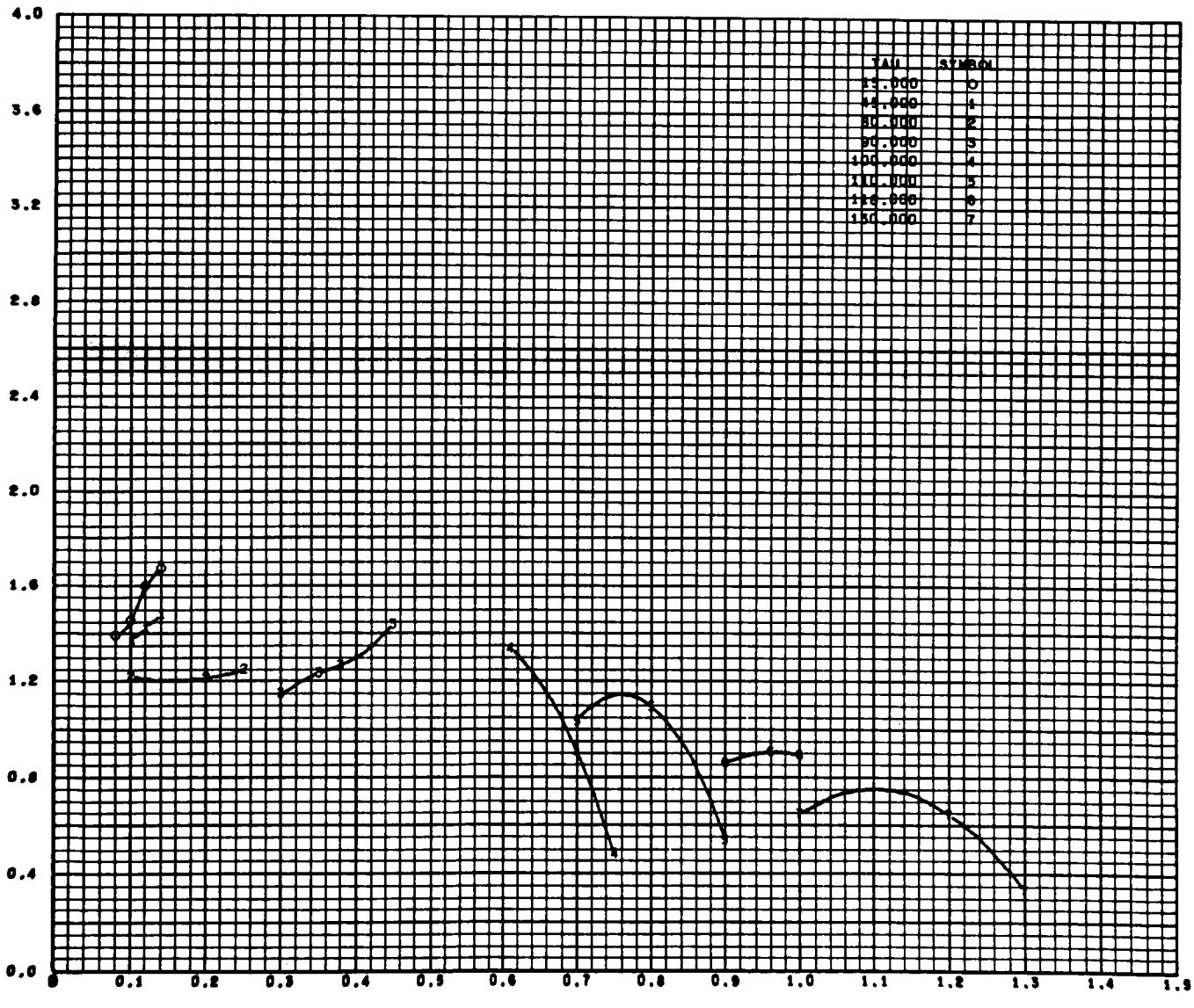

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HEAT TRANSFER

APOLLO M-11

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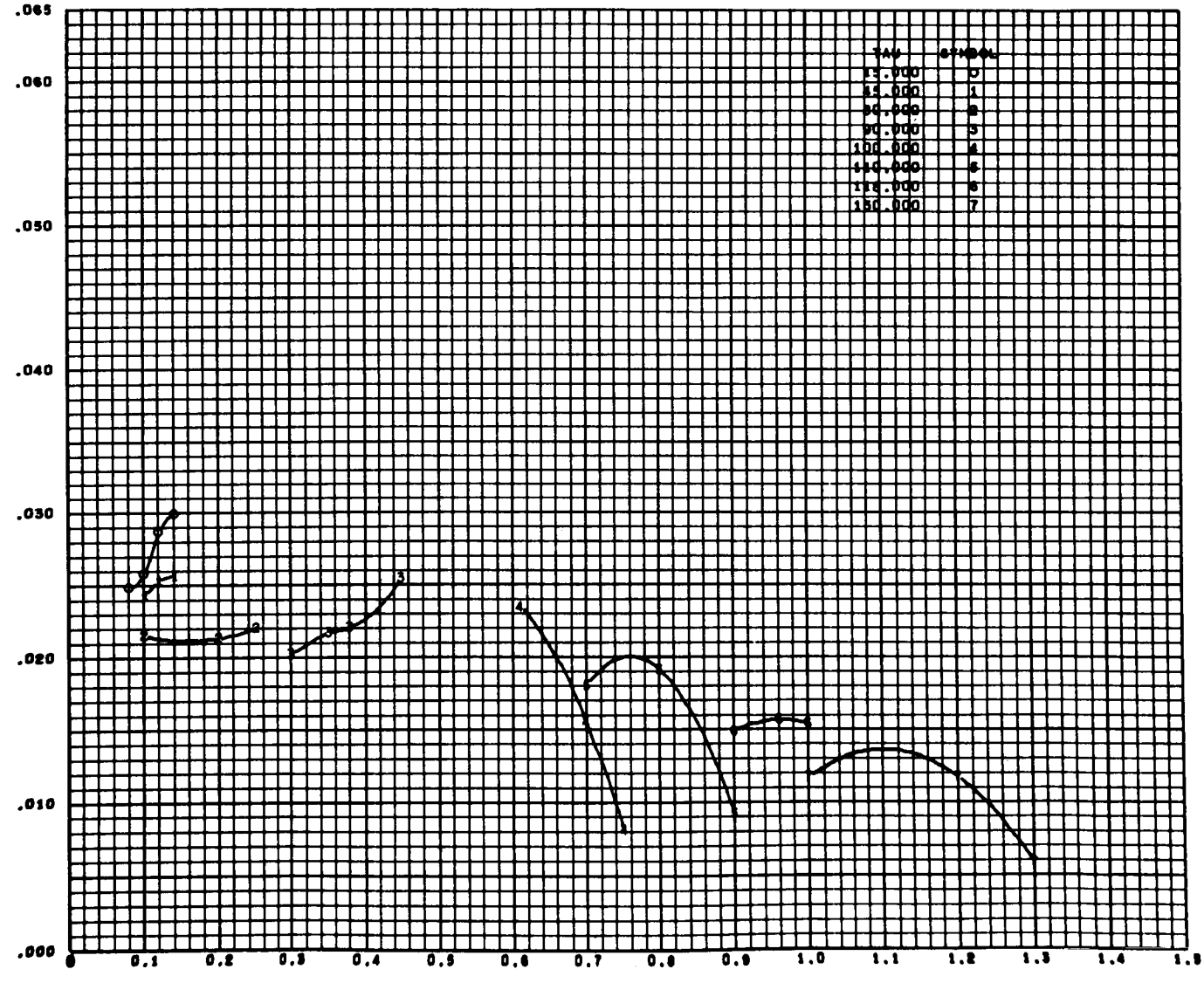

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HEAT TRANSFER

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JUNE, 1964

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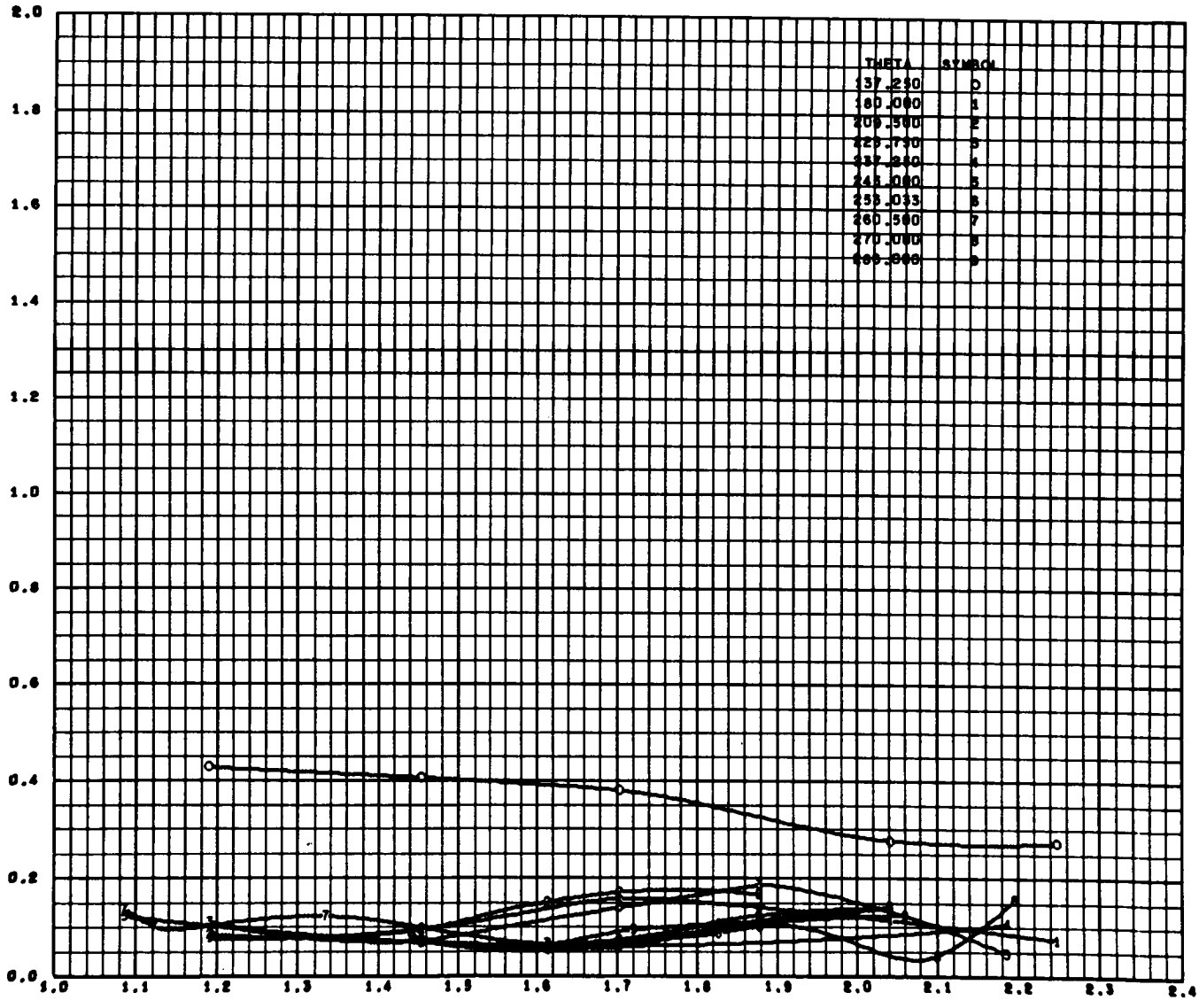

HEAT TRANSFER

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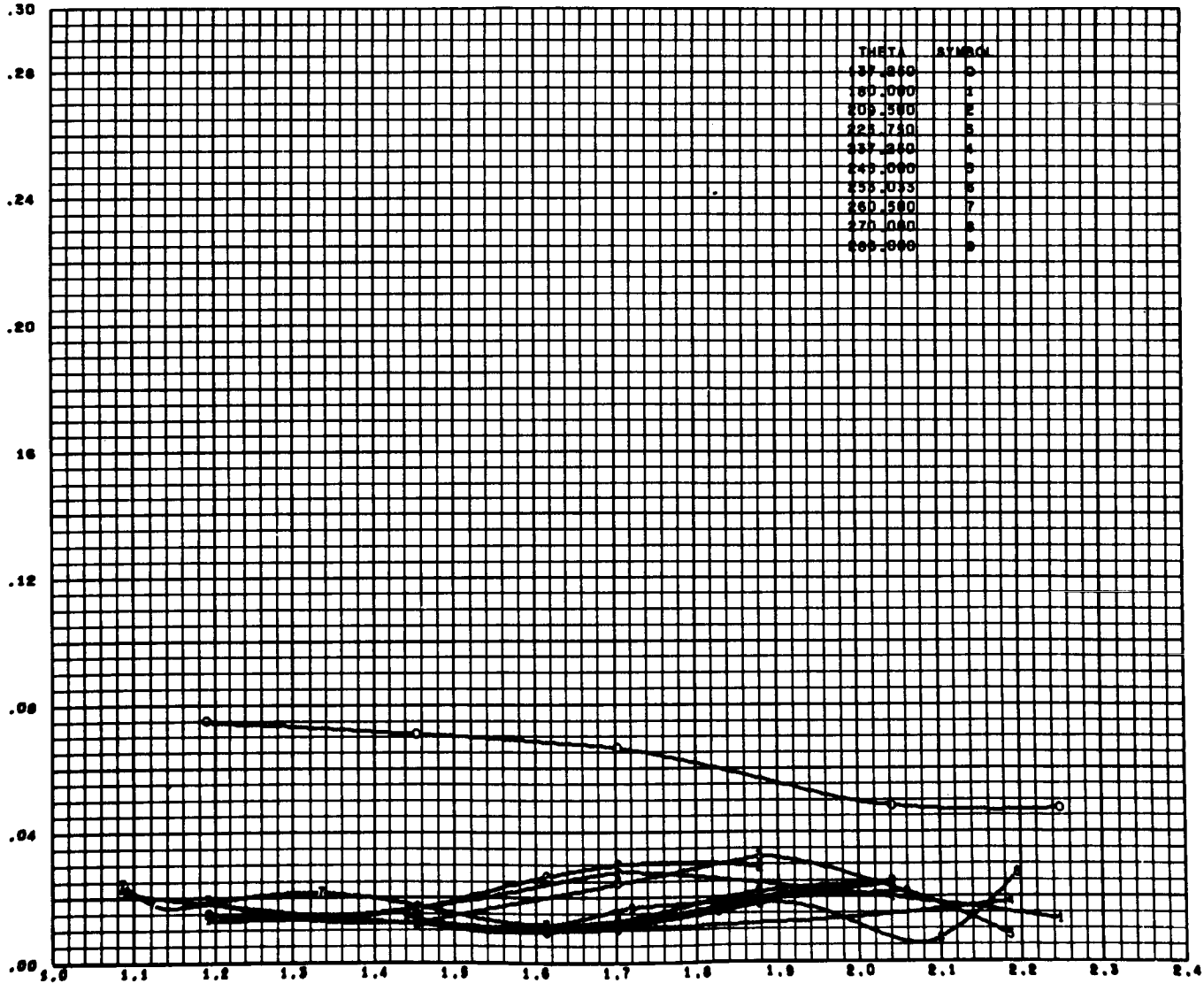

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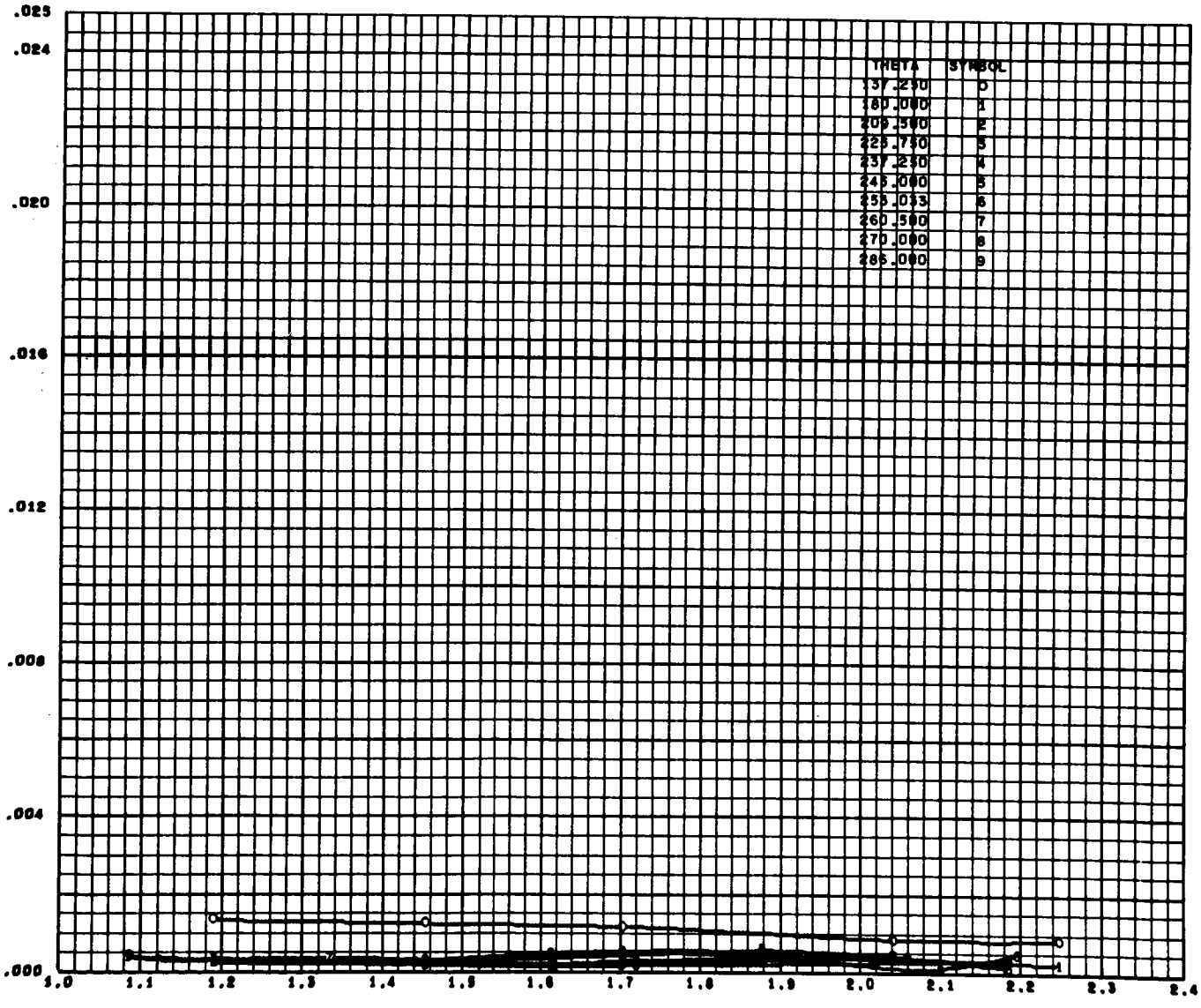

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 153.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 936.50 PSIA
TOTAL TEMPERATURE ---- 1824.40 DEG RANKINE

RE/FT --- 1.2086*10+6
Q(OM) --- 5.6900 BTU/SQ FT SEC

PLOT SERIES NUMBER 76

TEST GROUP	TIME (SEC)
130*	2.75
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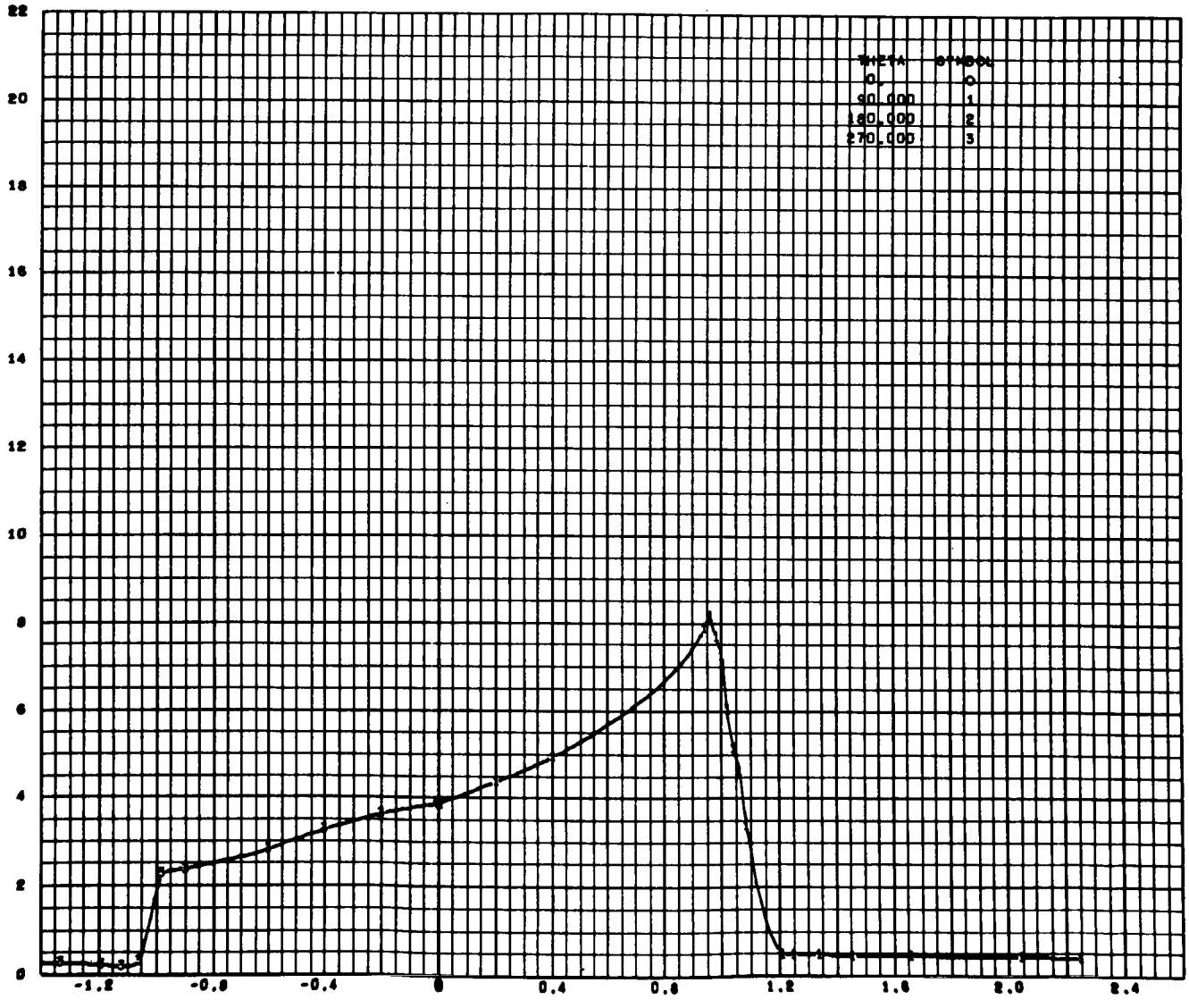
3937-10
088 000



BTU/SQ FT SEC

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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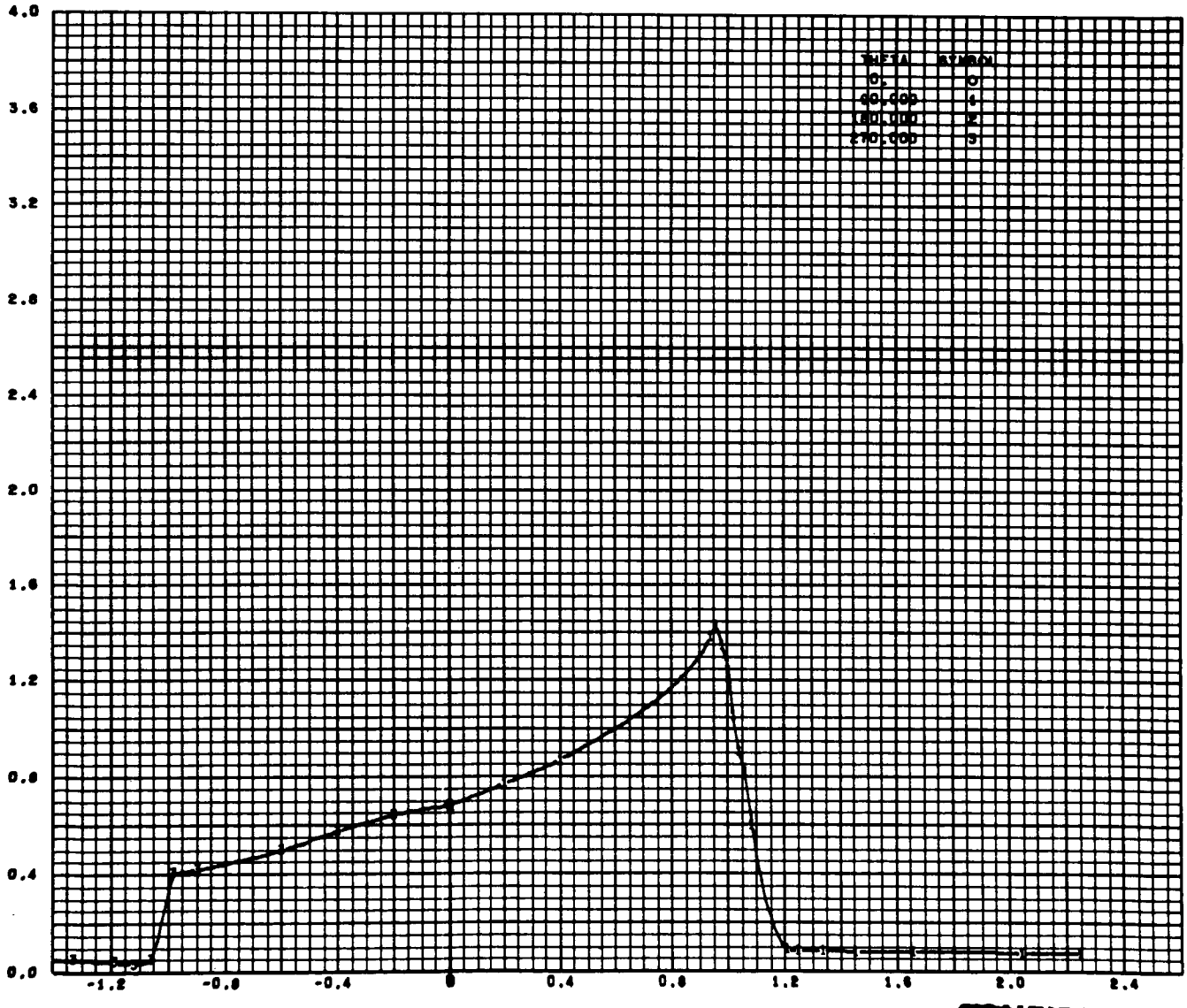
3037-16
091 000



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SID 64-2080

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APOLLO H-11

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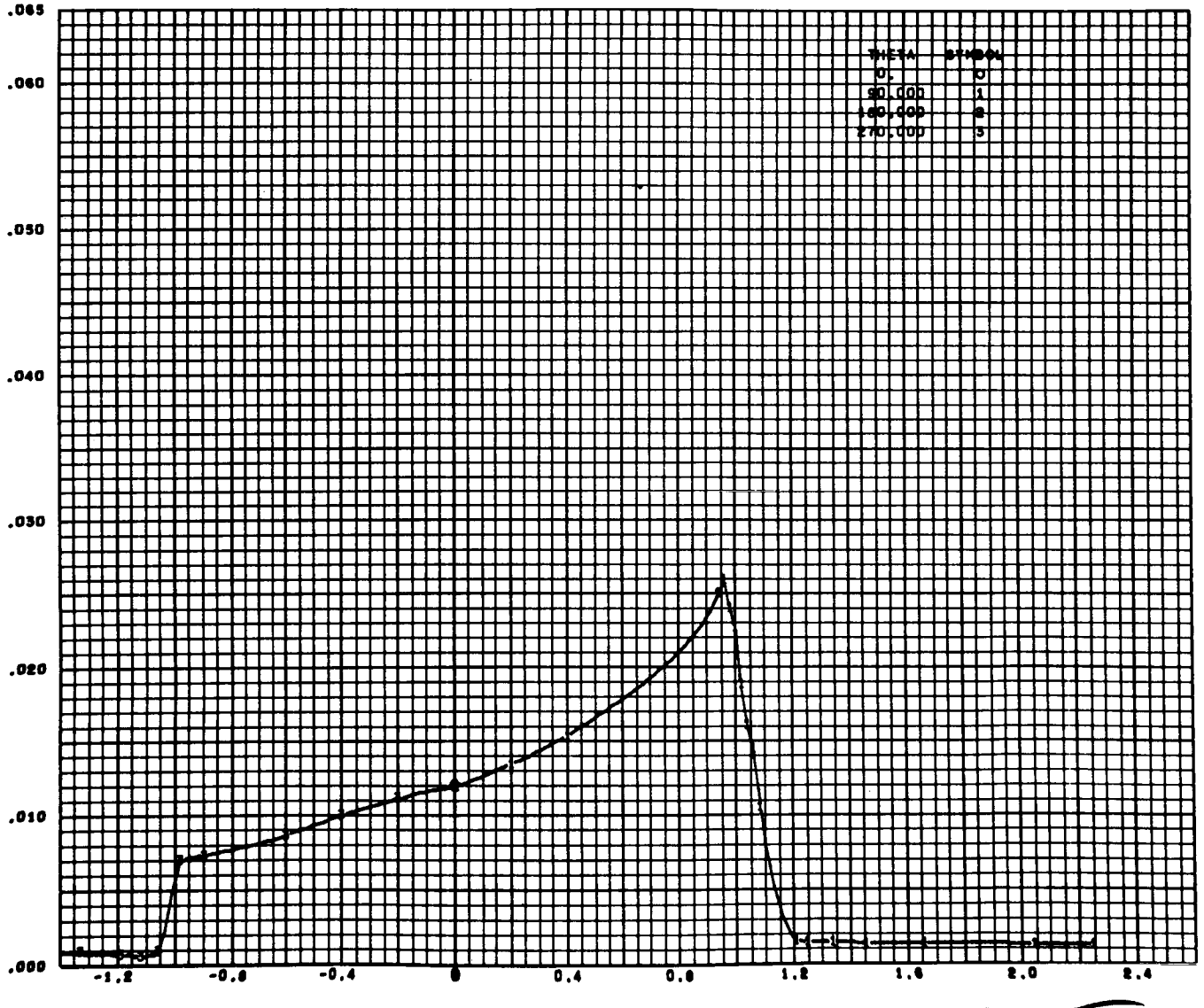

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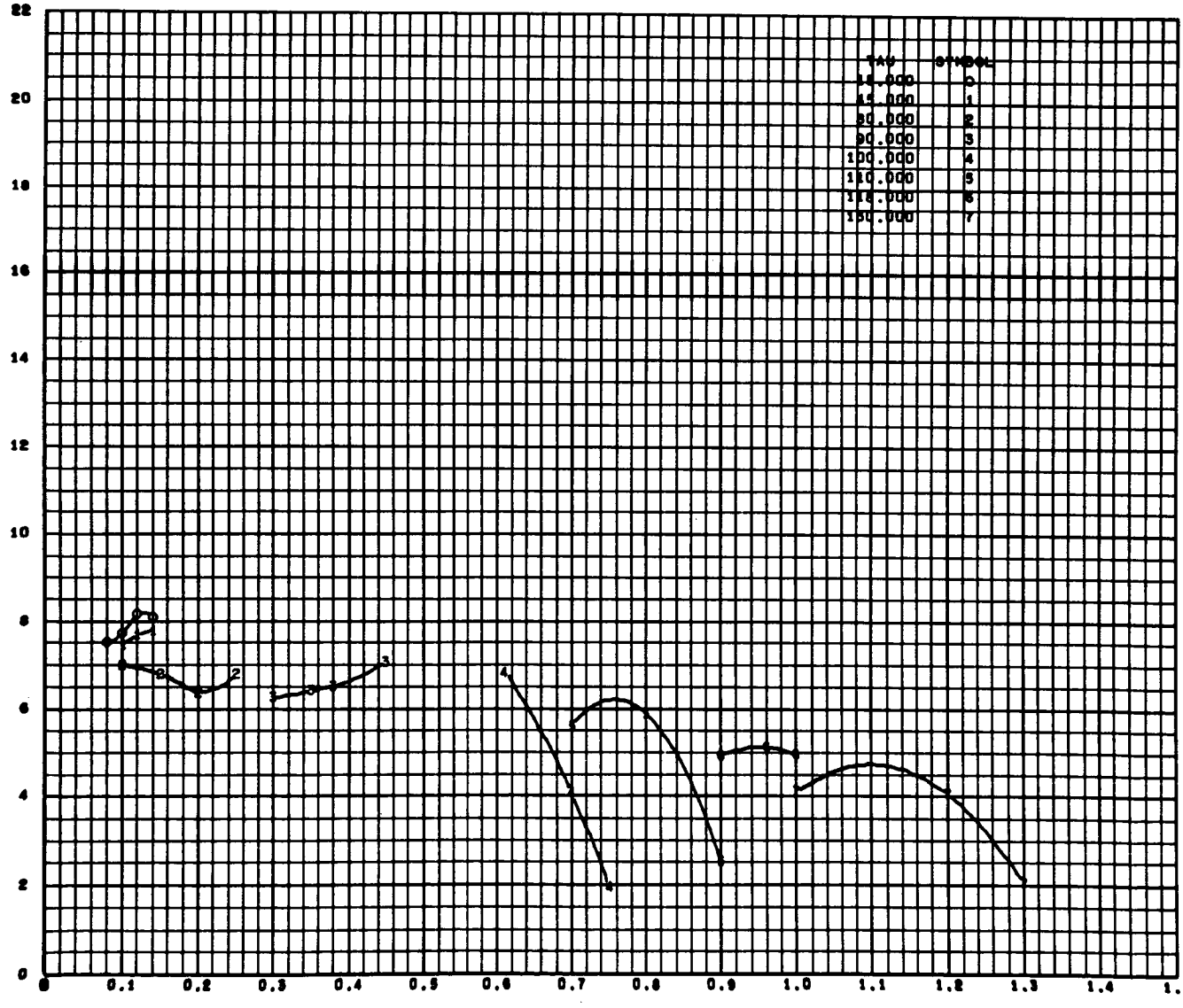

Q BTU/SQ FT SEC

ISO/R

A-529

SID 64-2080

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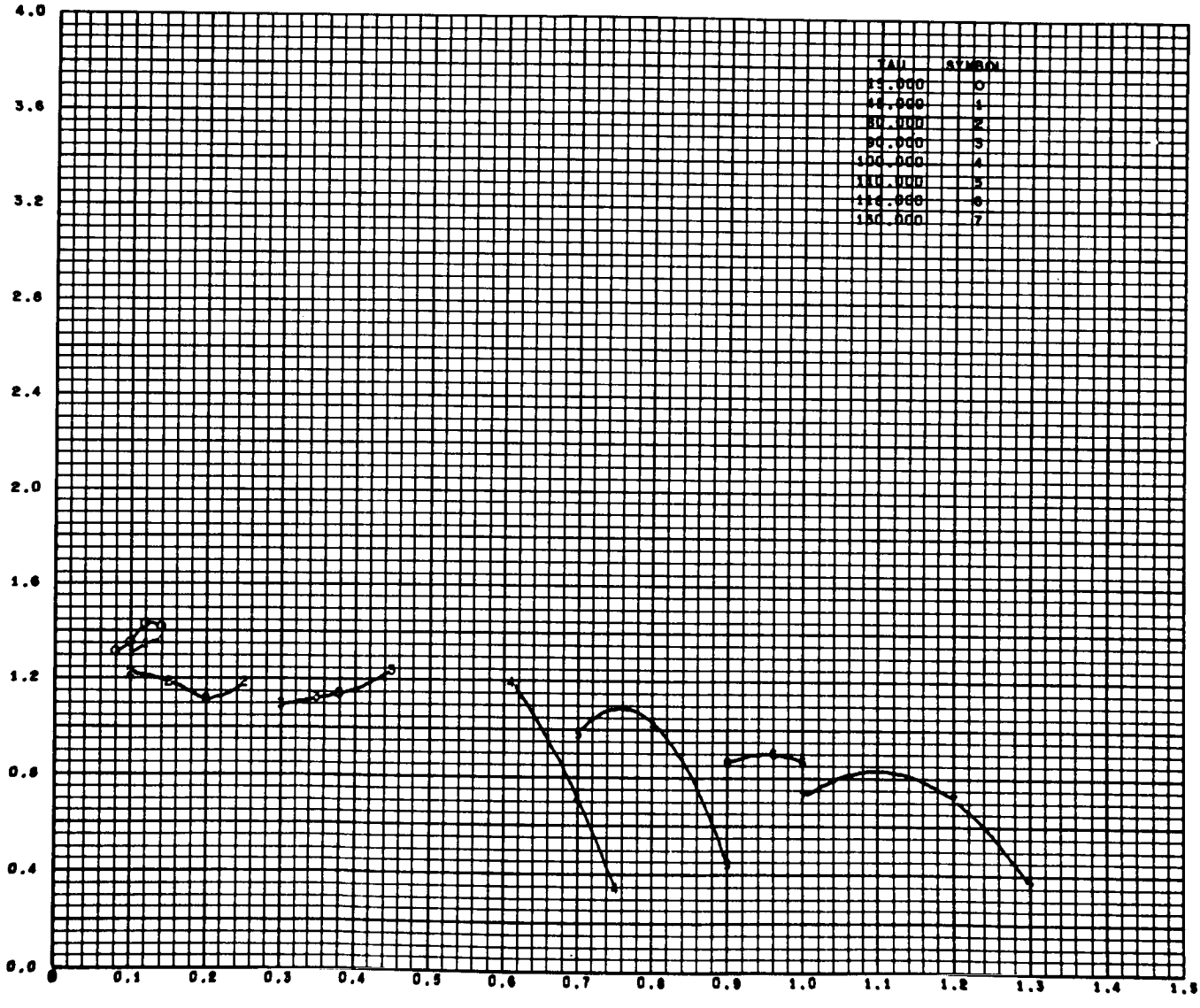

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HEAT TRANSFER

APOLLO M-11

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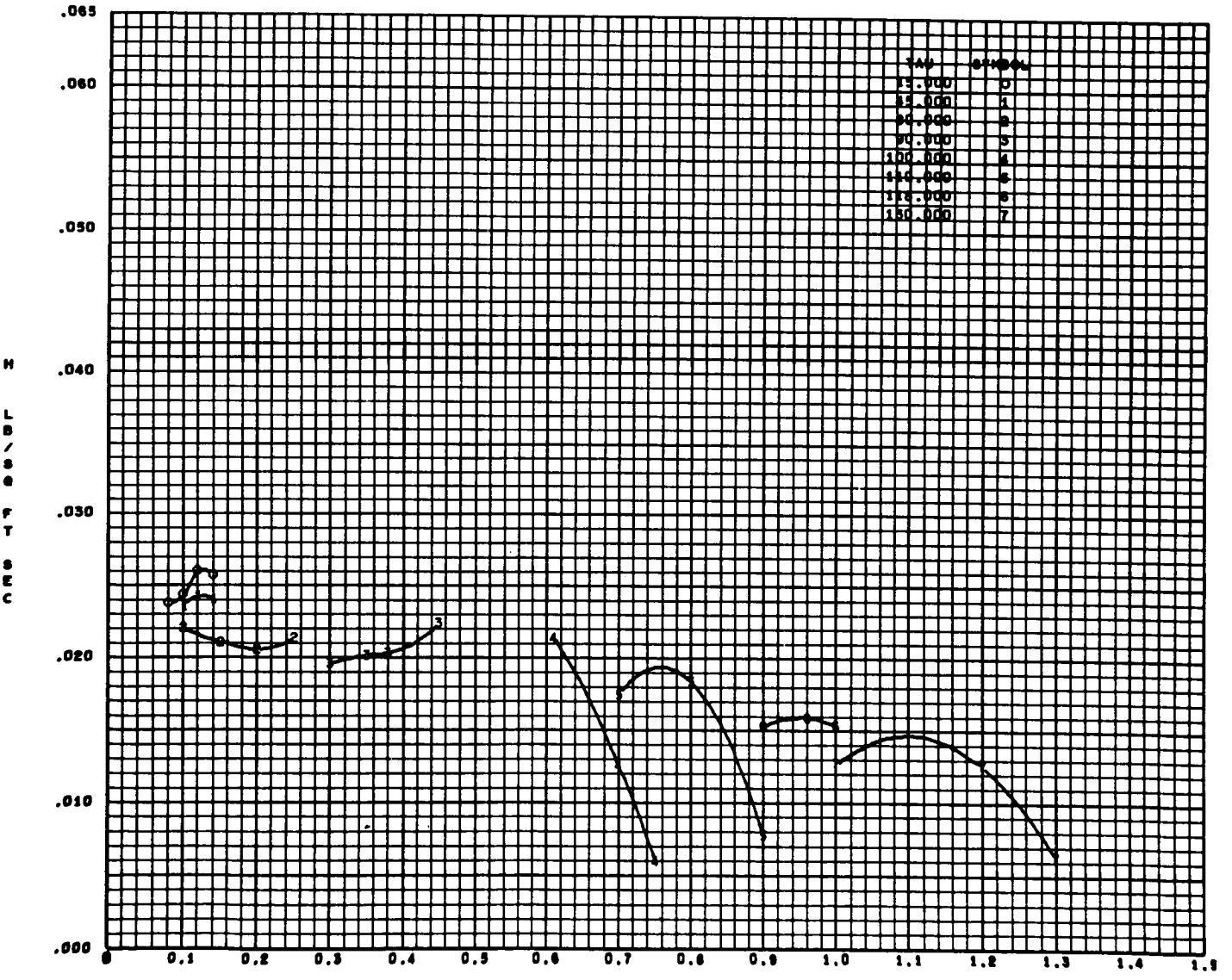

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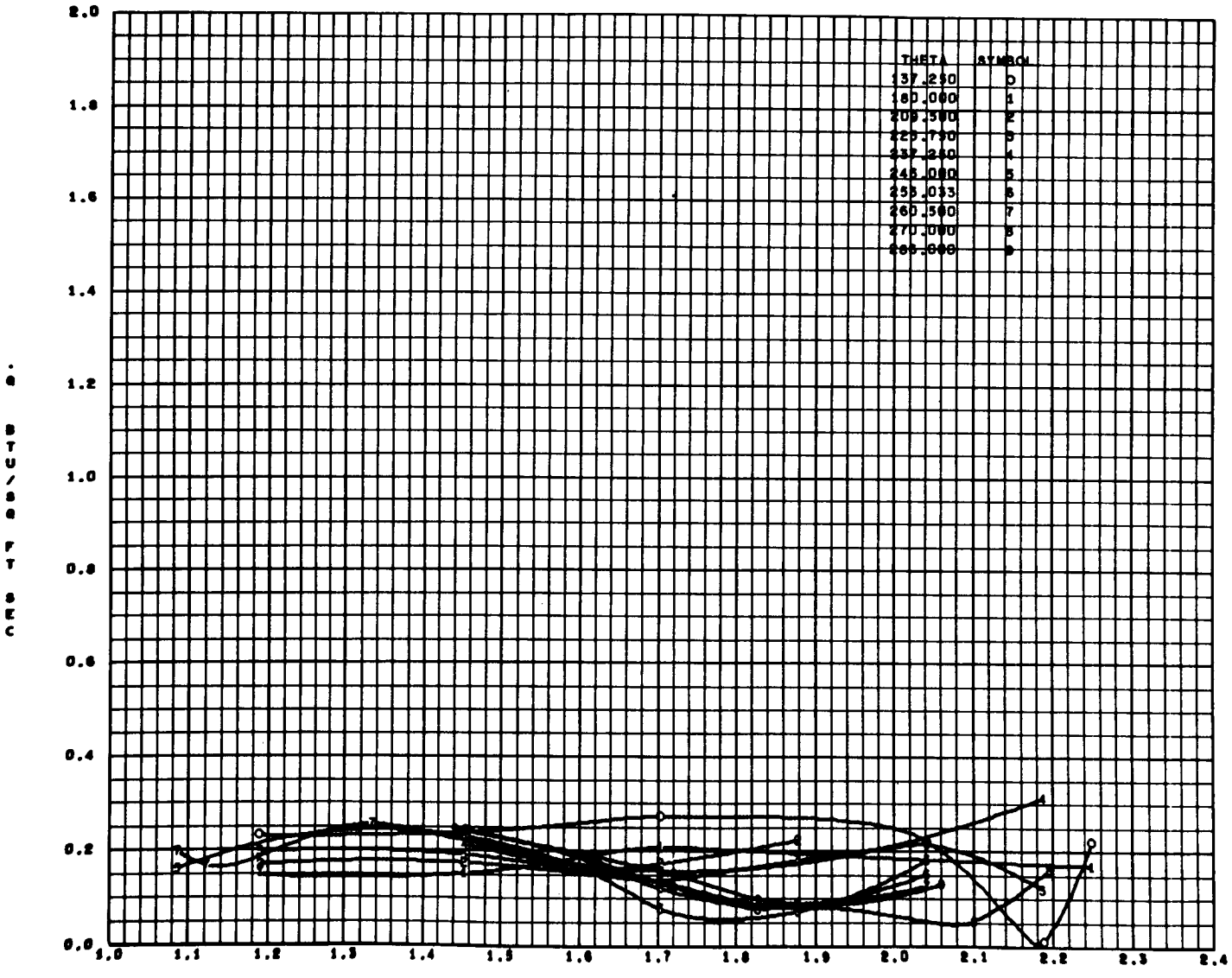
PLOT SERIES NUMBER 76

TEST GROUP	TIME (SEC)
130*	2.75
135	2.75
125	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
090 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 153.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 936.50 PSIA
TOTAL TEMPERATURE ---- 1824.40 DEG RANKINE

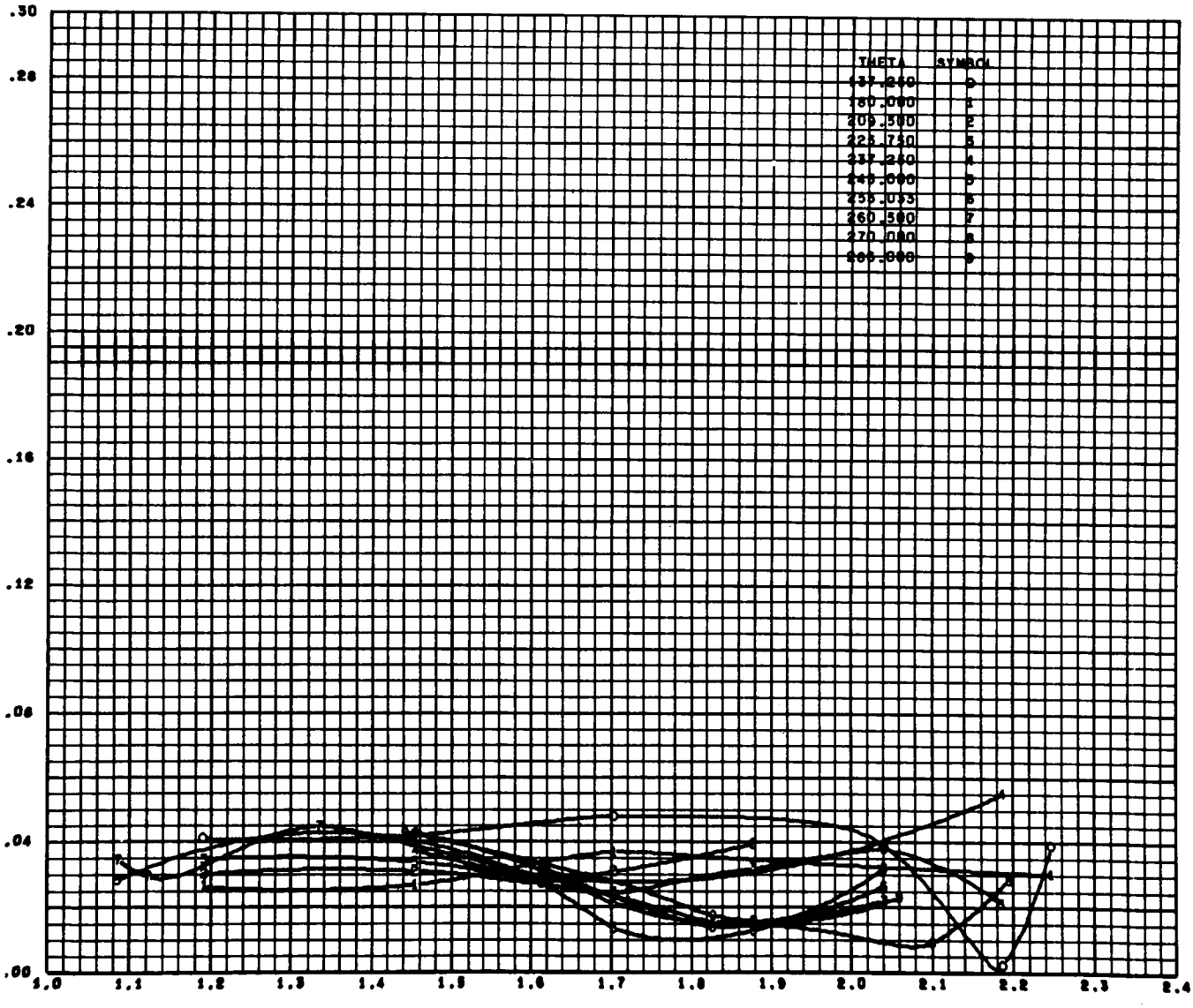
RE/FT --- 1.2086*10+6
Q(OM) --- 5.6900 BTU/SQ FT SEC

PLOT SERIES NUMBER 76

TEST GROUP	TIME (SEC)
130*	2.75
135	2.75
125	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
093 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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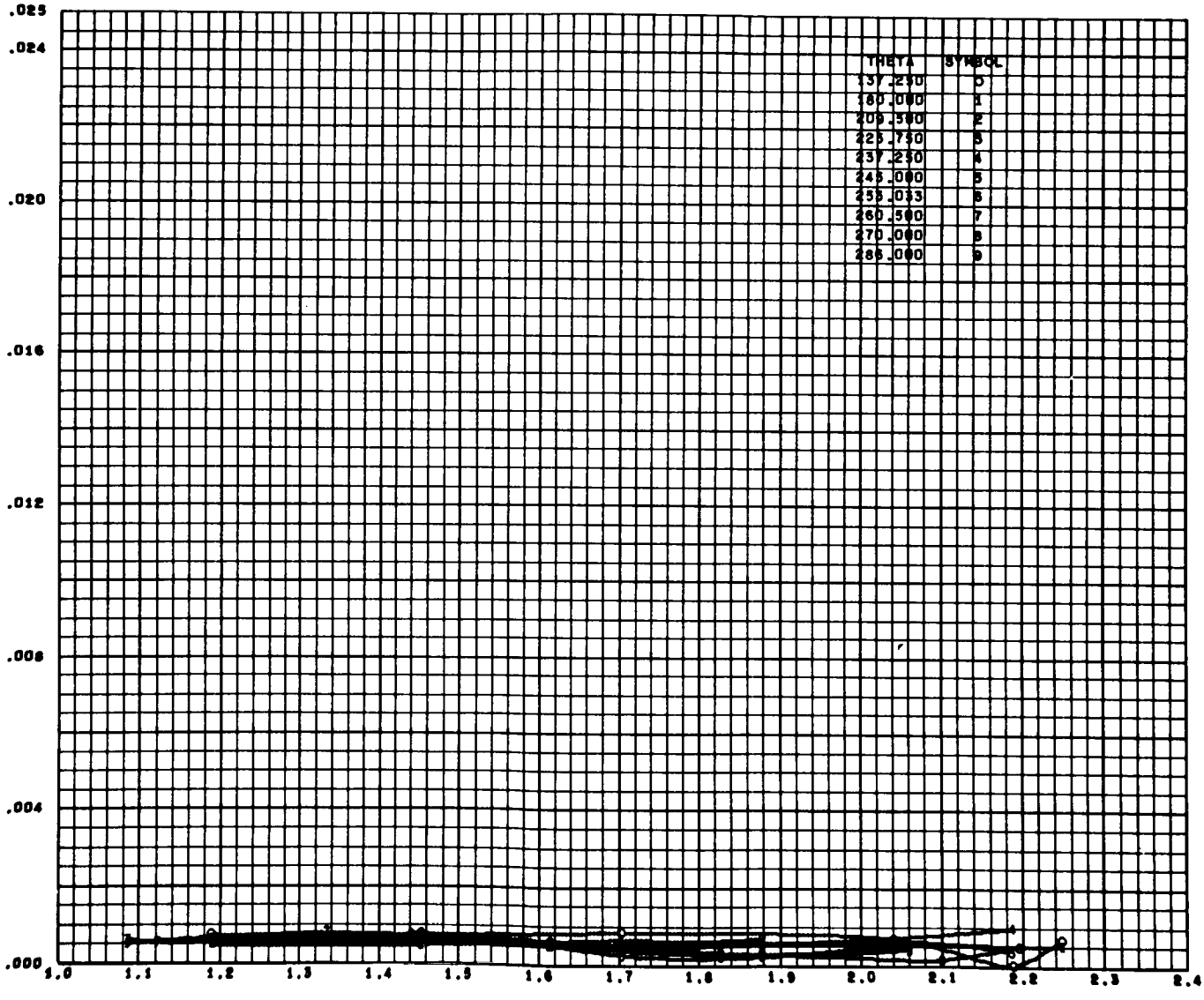
3937-10
096 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 157.59 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 933.50 PSIA
TOTAL TEMPERATURE ---- 1825.80 DEG RANKINE

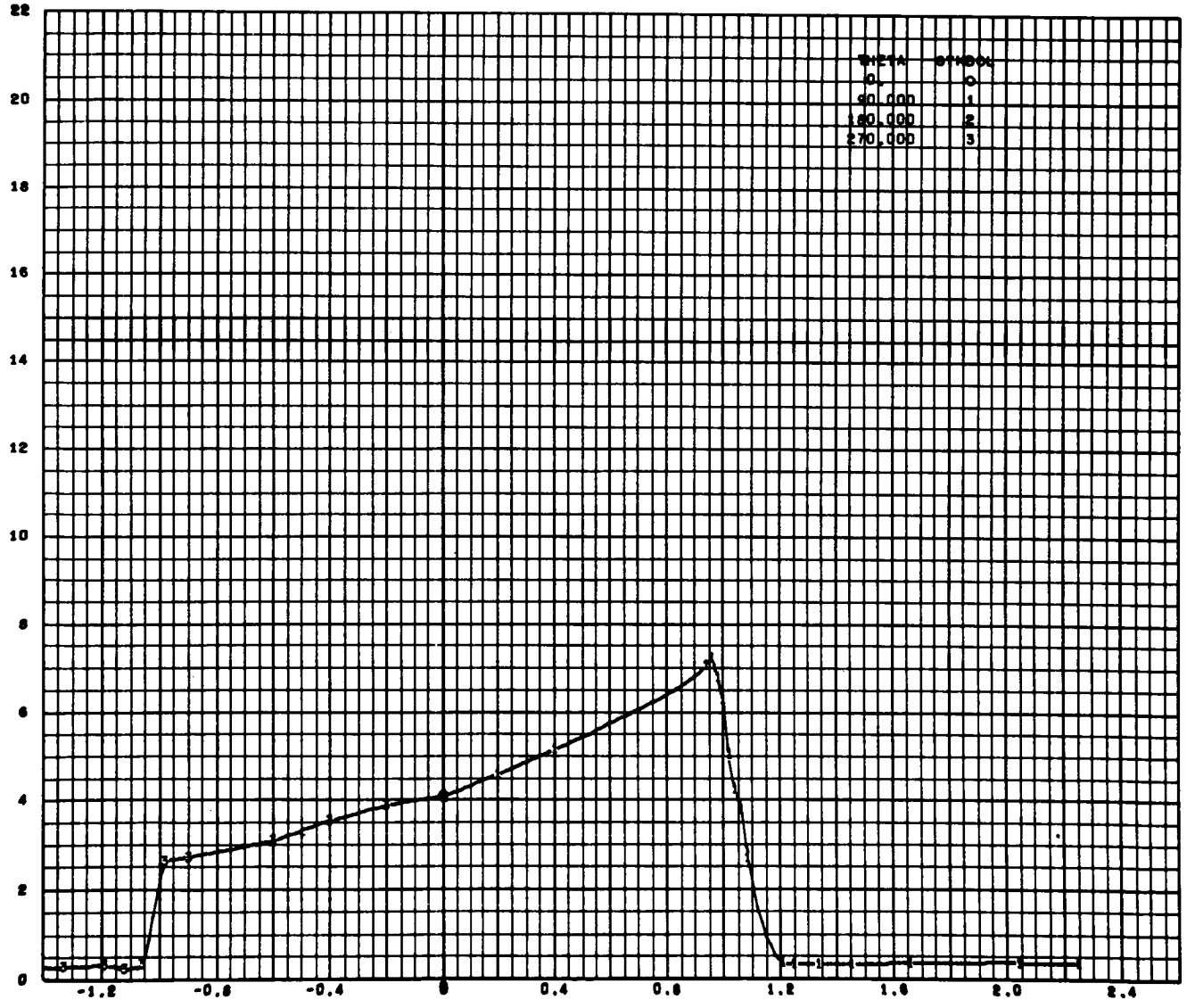
RE/FT --- 1.2031*10+6
Q(OM) --- 5.6762 BTU/SQ FT SEC

PLOT SERIES NUMBER 77

TEST GROUP	TIME (SEC)
131*	2.70
136	2.70
126	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
097 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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PLOT SERIES NUMBER 77

TEST GROUP	TIME (SEC)
131*	2.70
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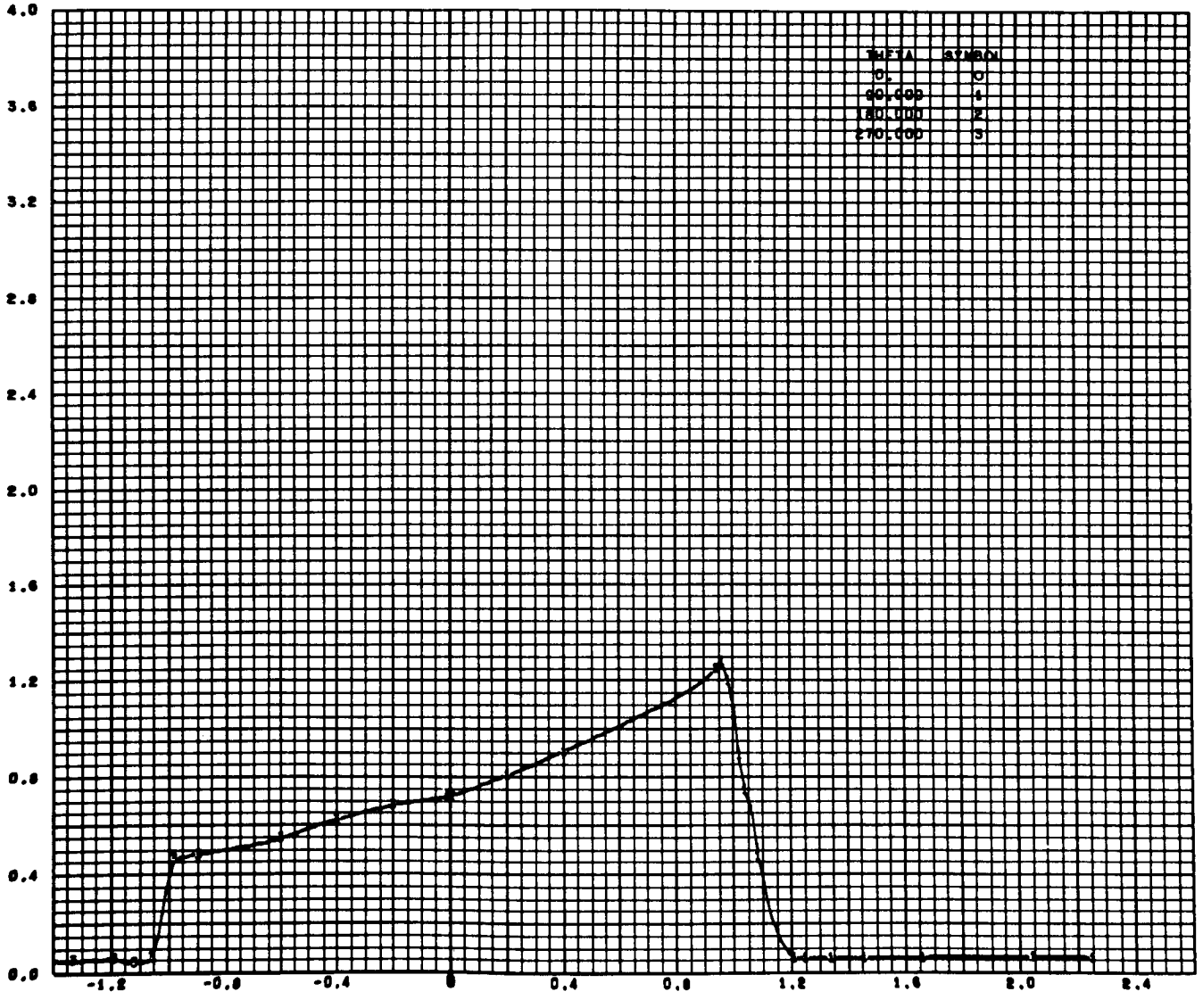
3037-10
100 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.15
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PLOT SERIES NUMBER 77

TEST GROUP	TIME (SEC)
131*	2.70
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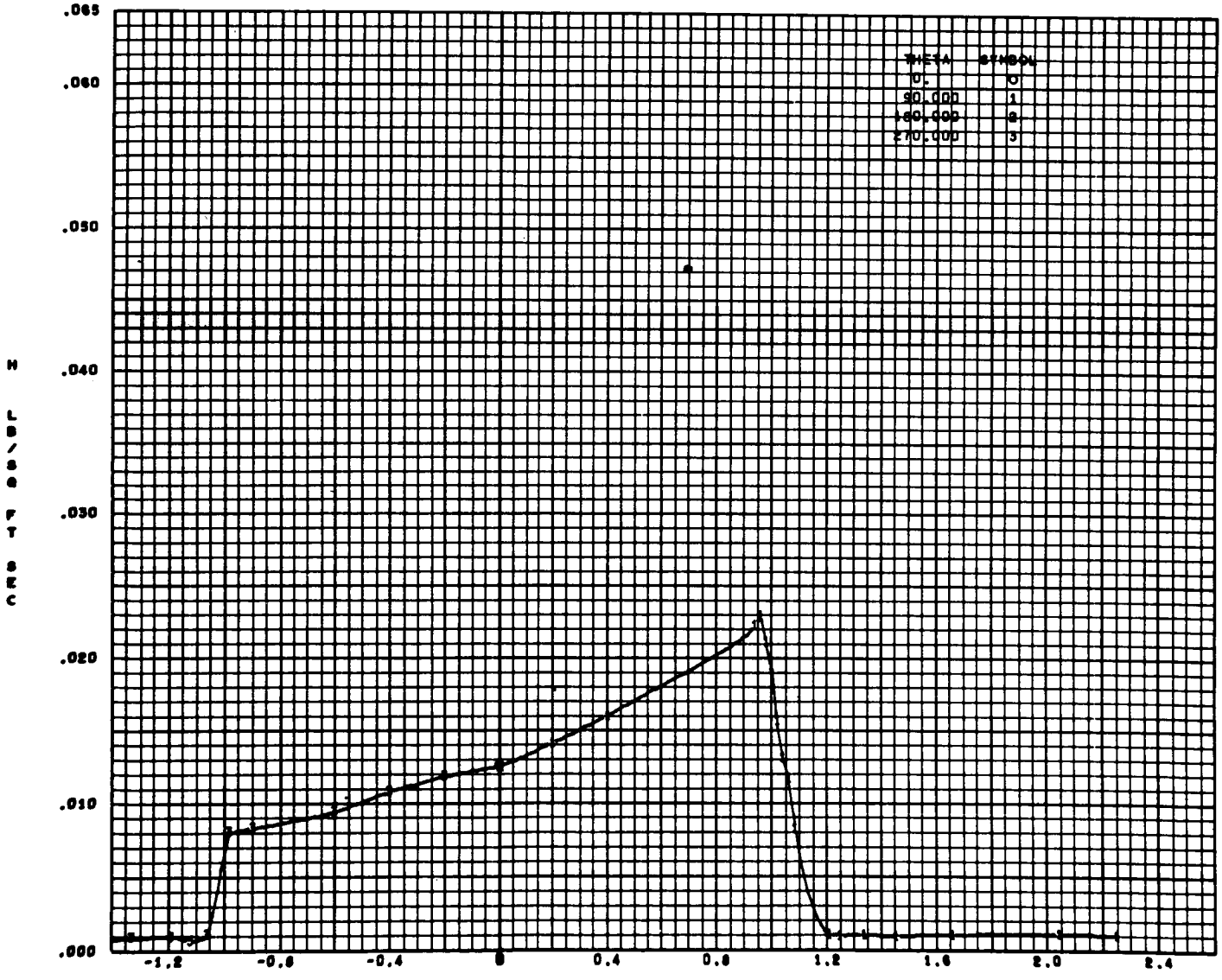
* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
103 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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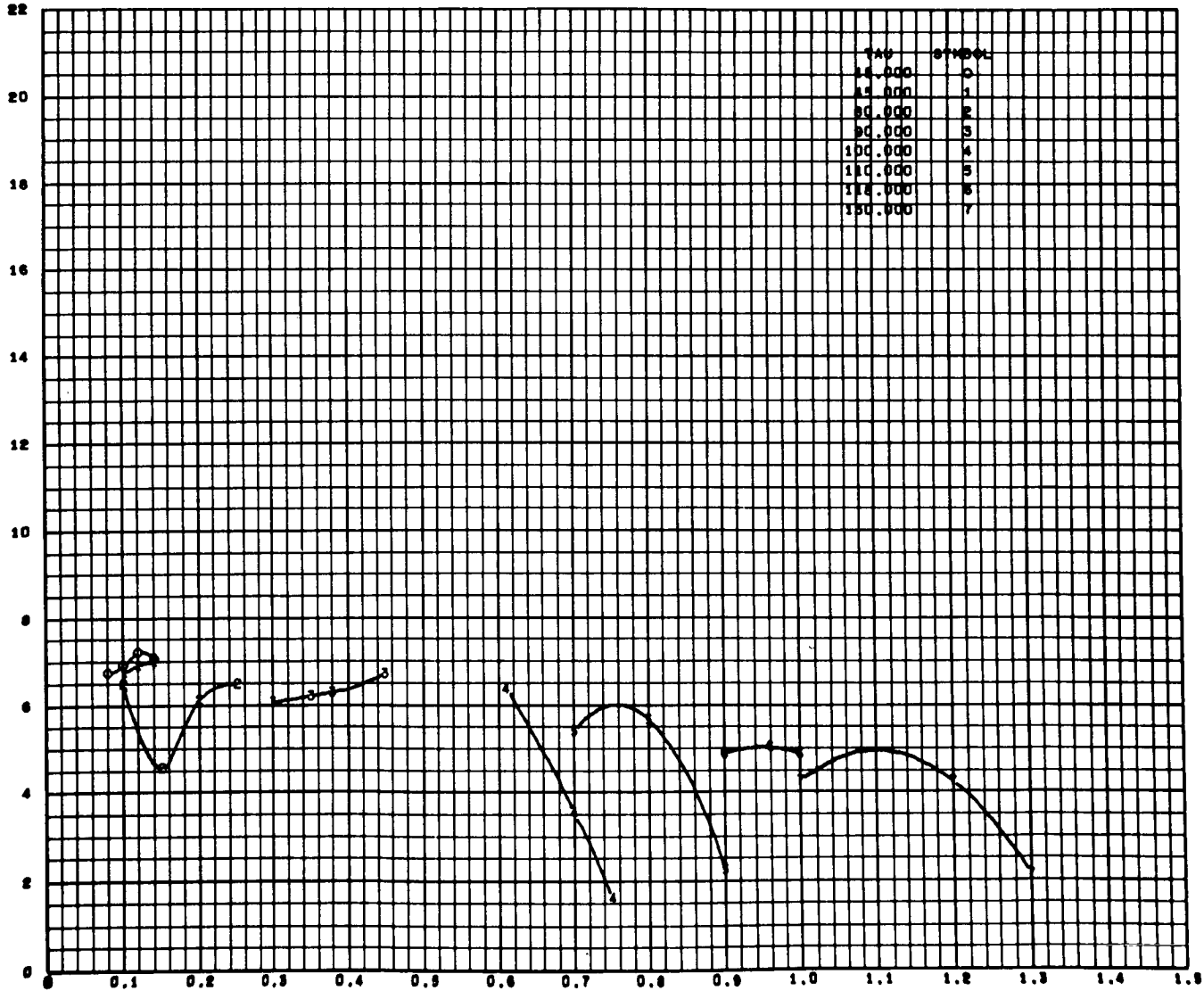
3937-10
098 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

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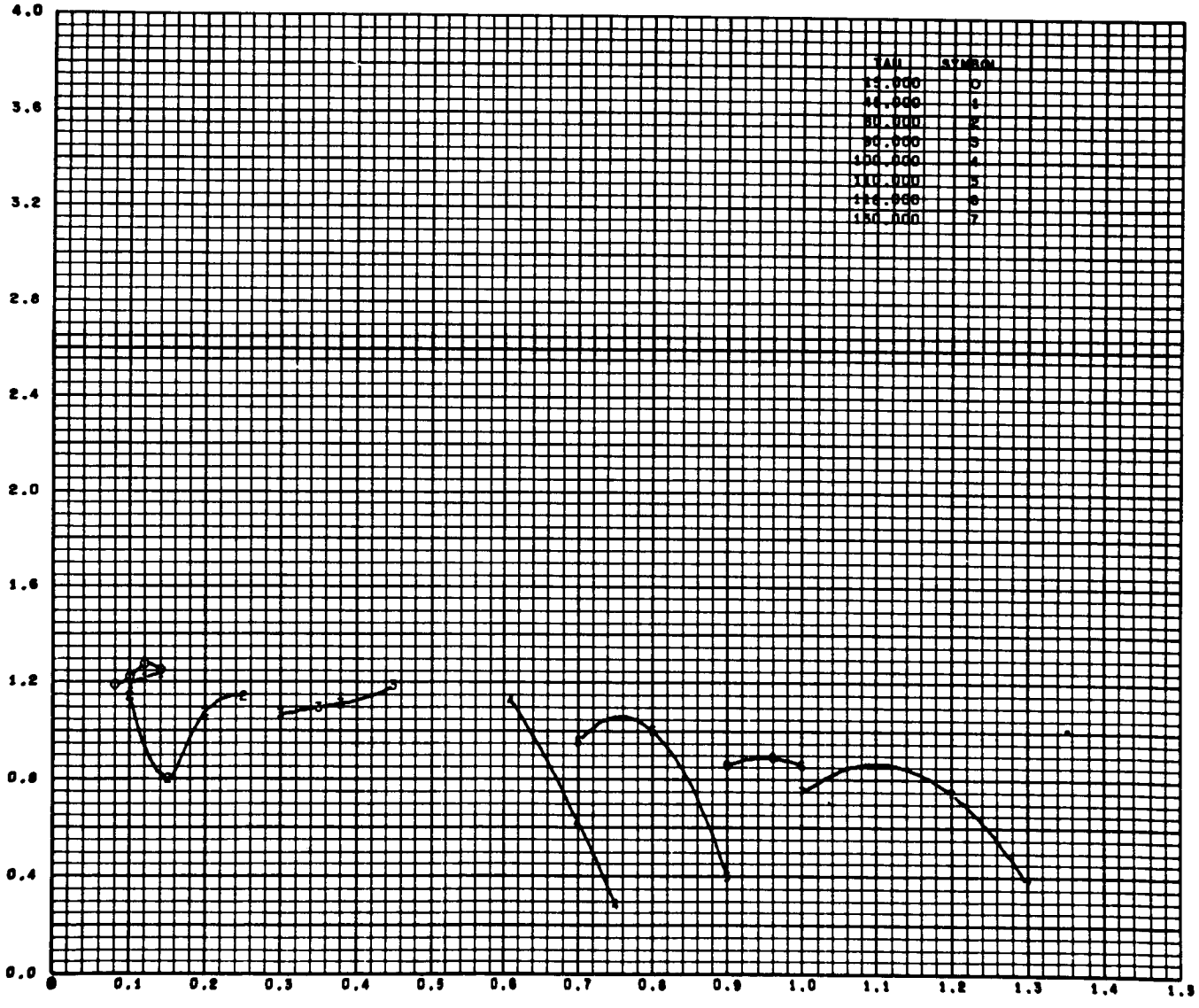
3937-10
101 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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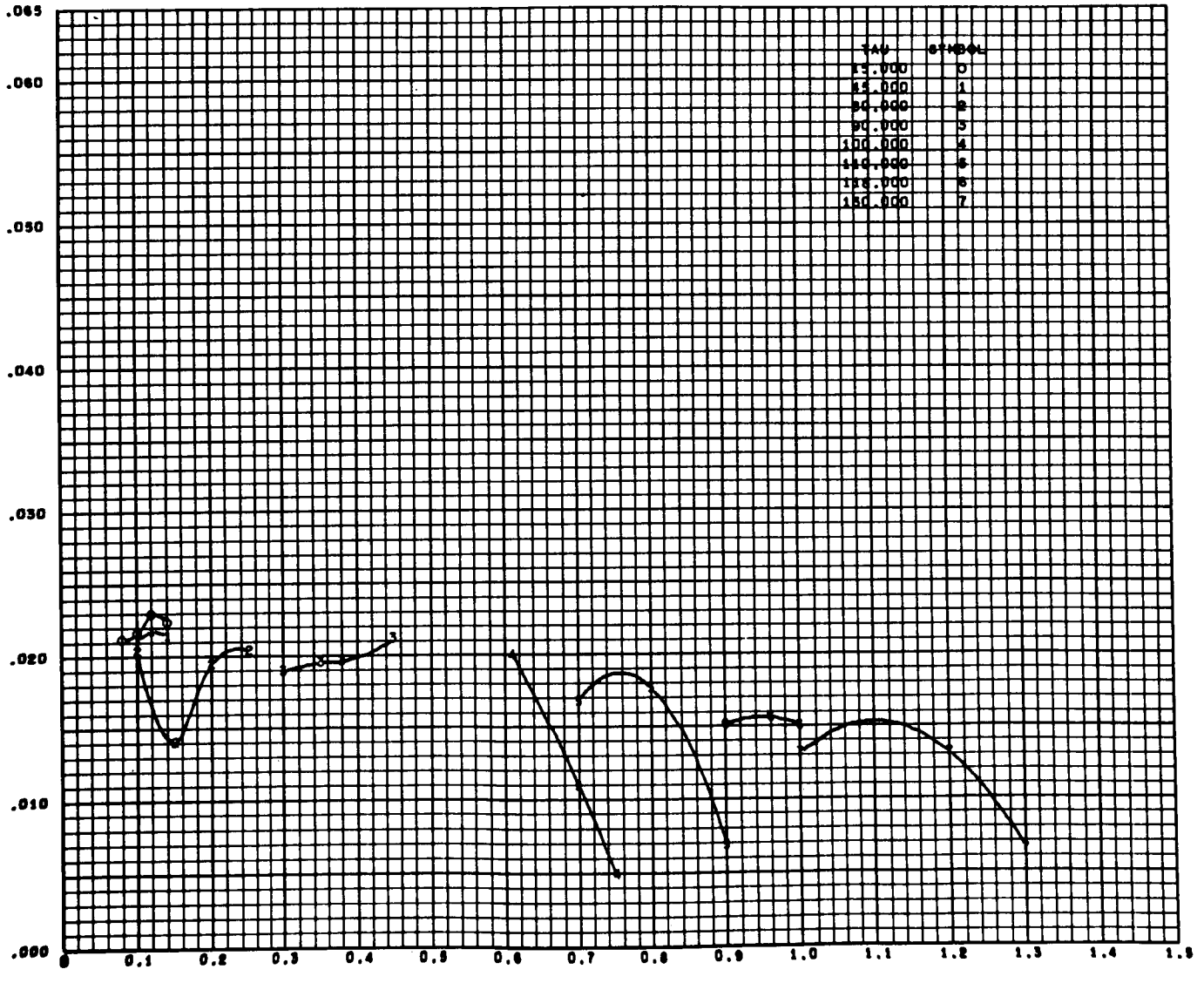
3937-10
104 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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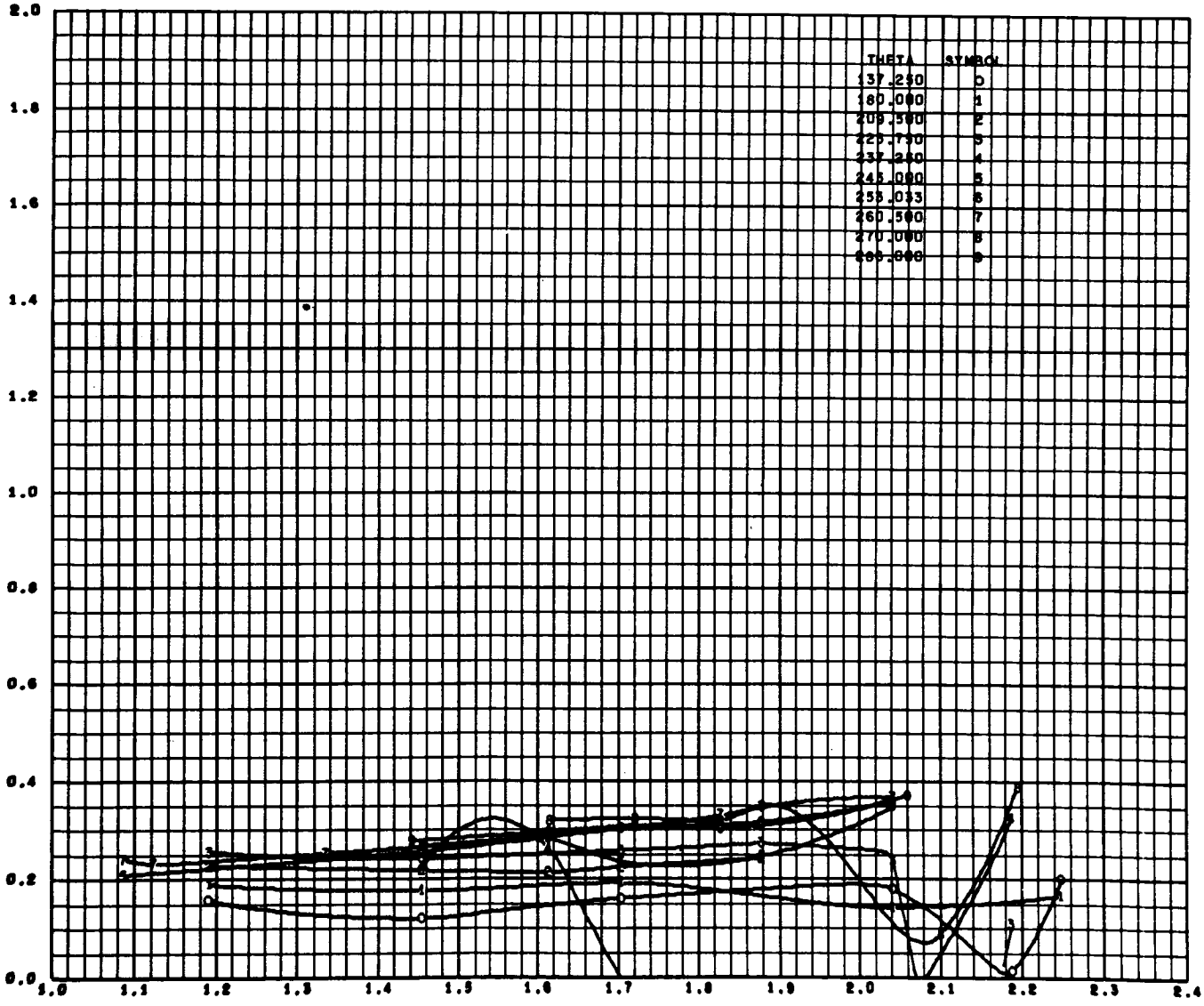
099 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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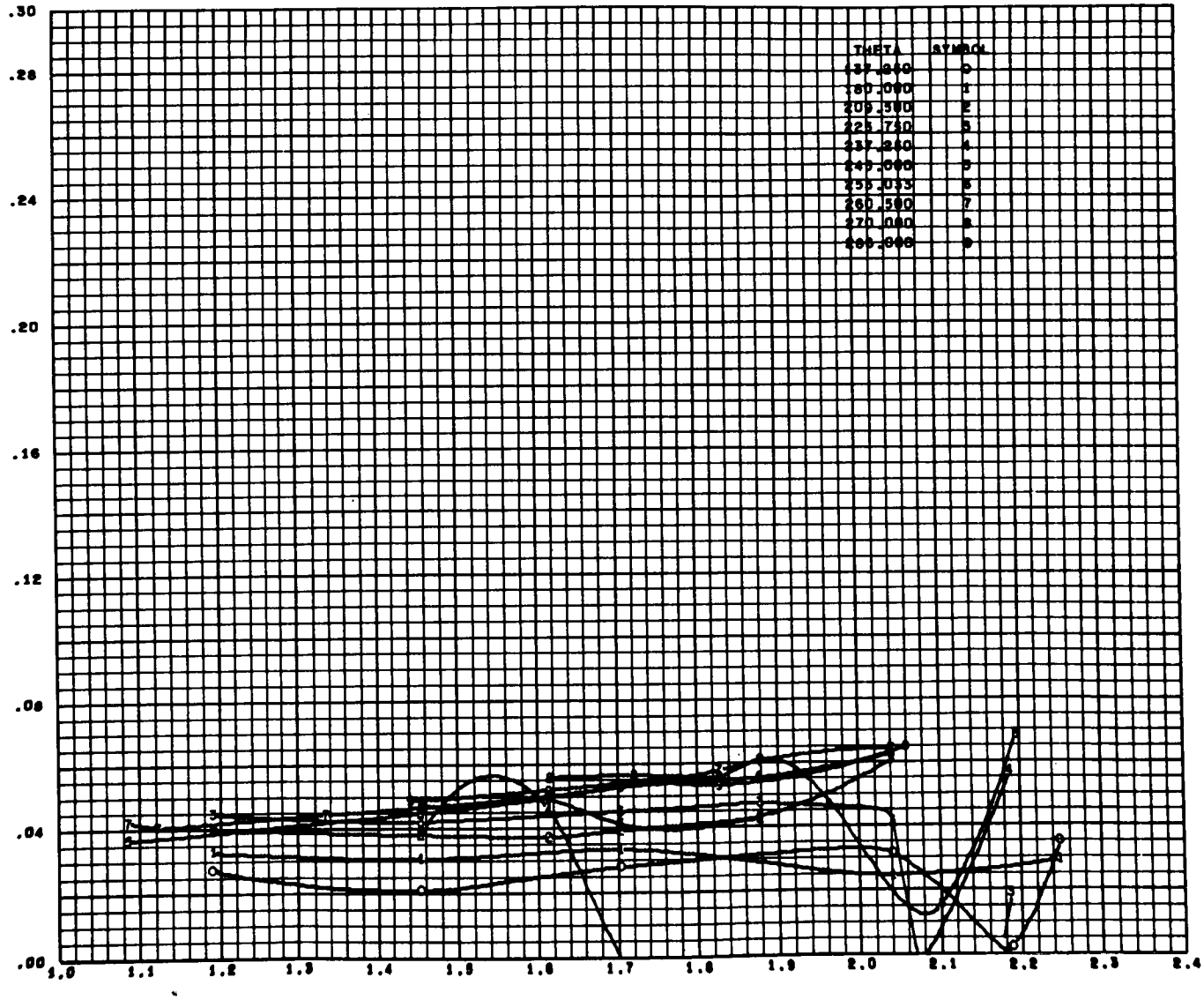
3937-10
102 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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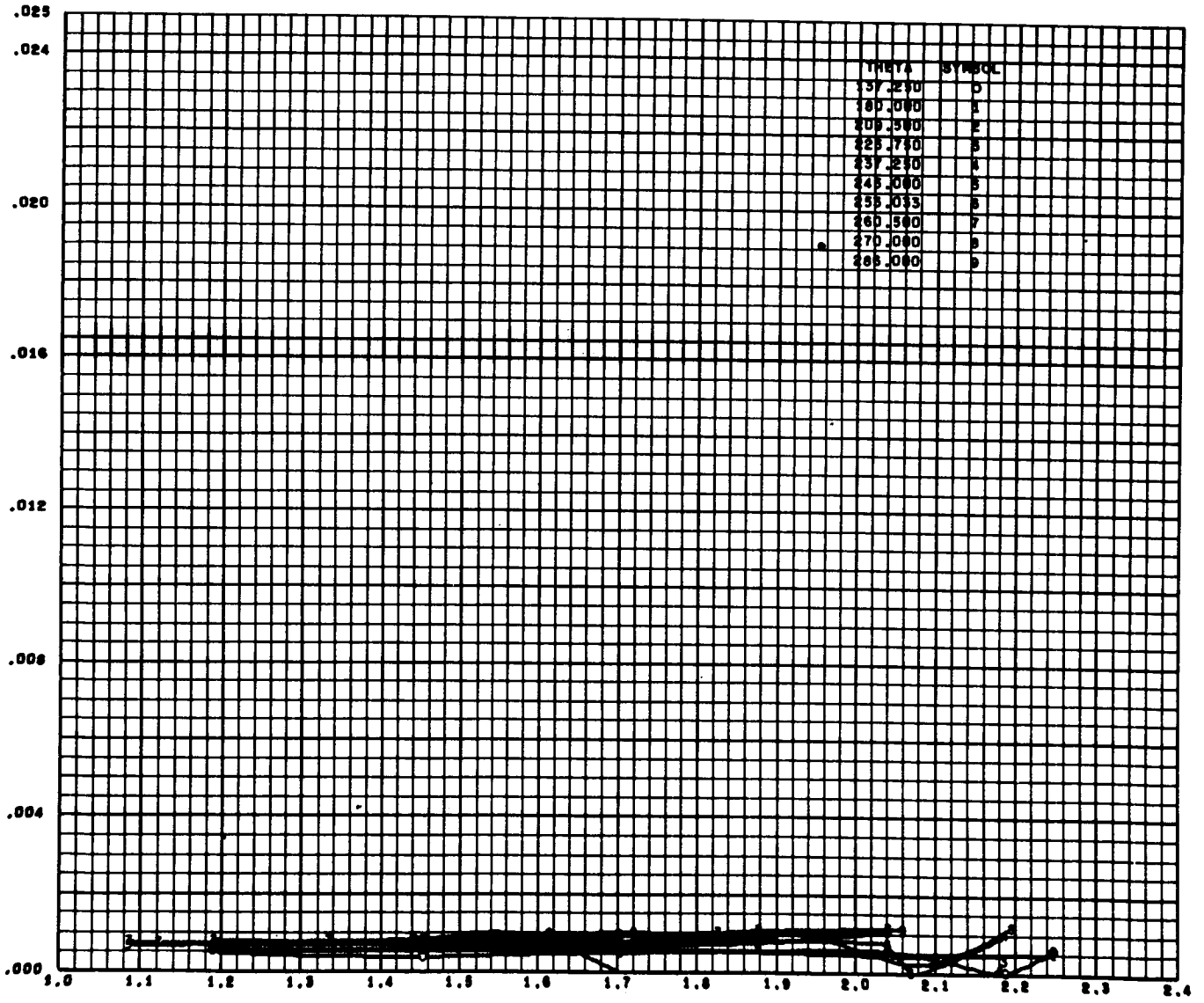

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.15
ANGLE OF ATTACK ------ 161.66 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 939.50 PSIA
TOTAL TEMPERATURE ---- 1829.10 DEG RANKINE

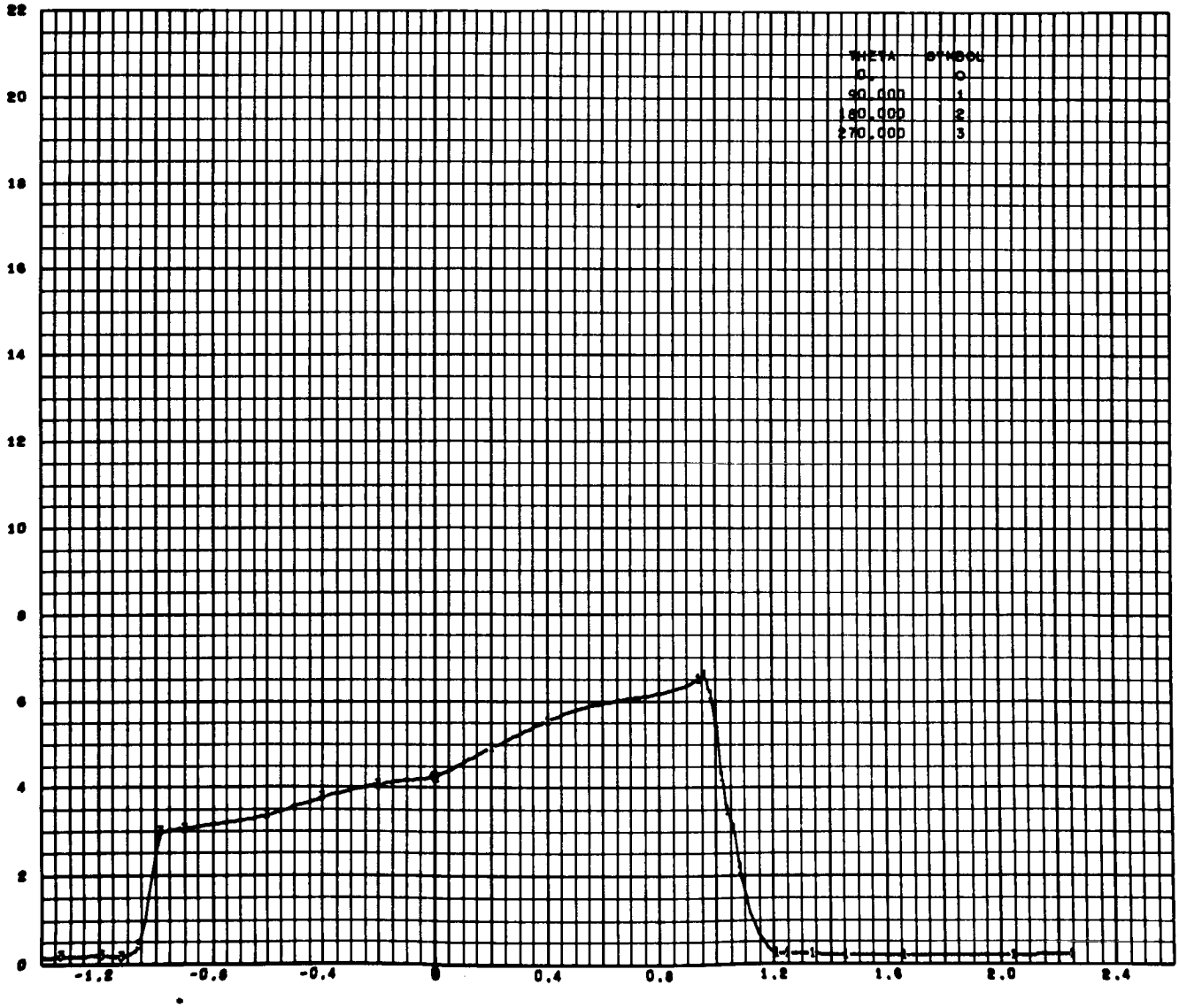
RE/FT --- 1.2069*10+6
Q(OM) --- 5.7039 BTU/SQ FT SEC

PLOT SERIES NUMBER 780

TEST GROUP	TIME (SEC)
132*	2.70
137	2.70
127	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-10
106 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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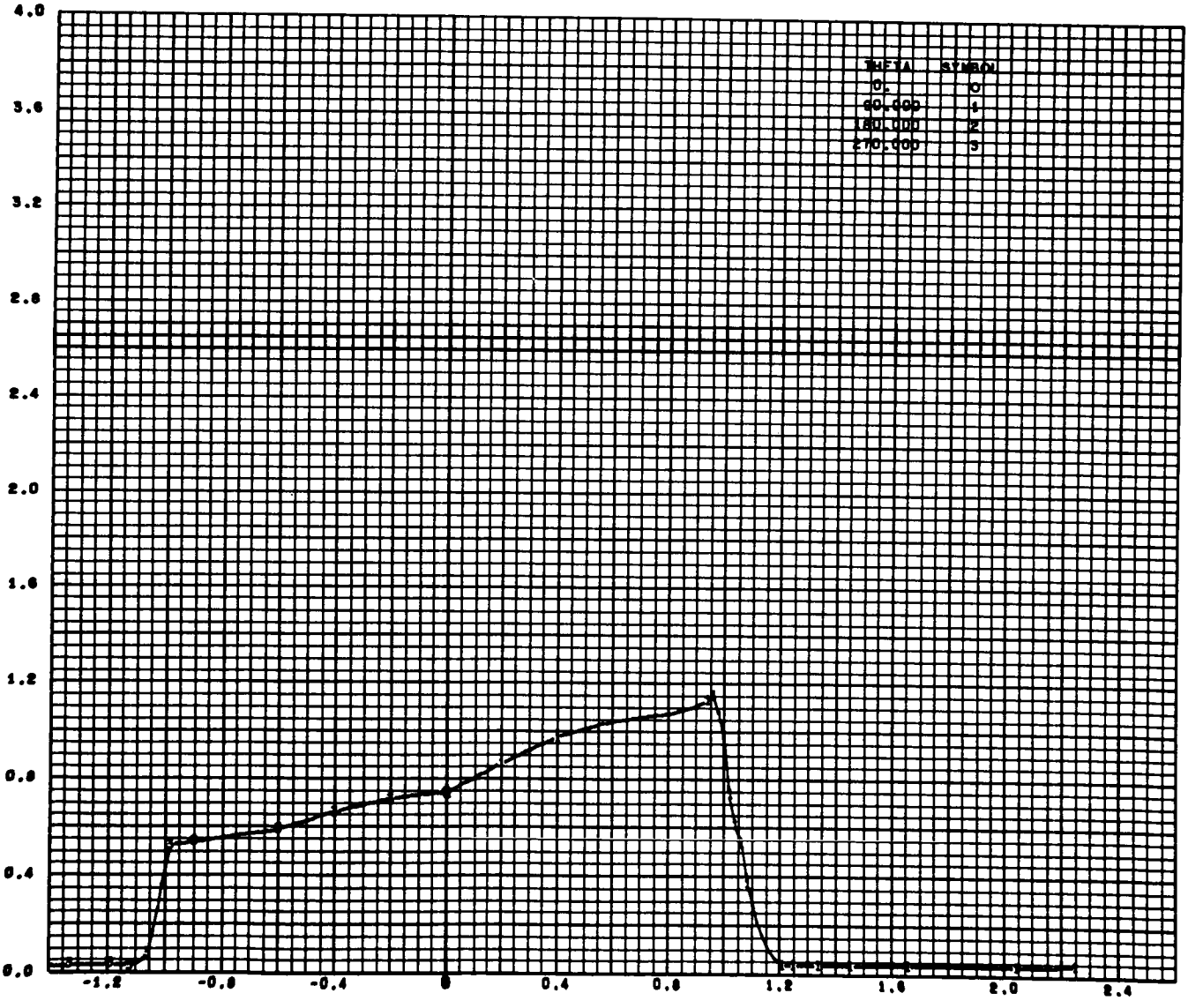

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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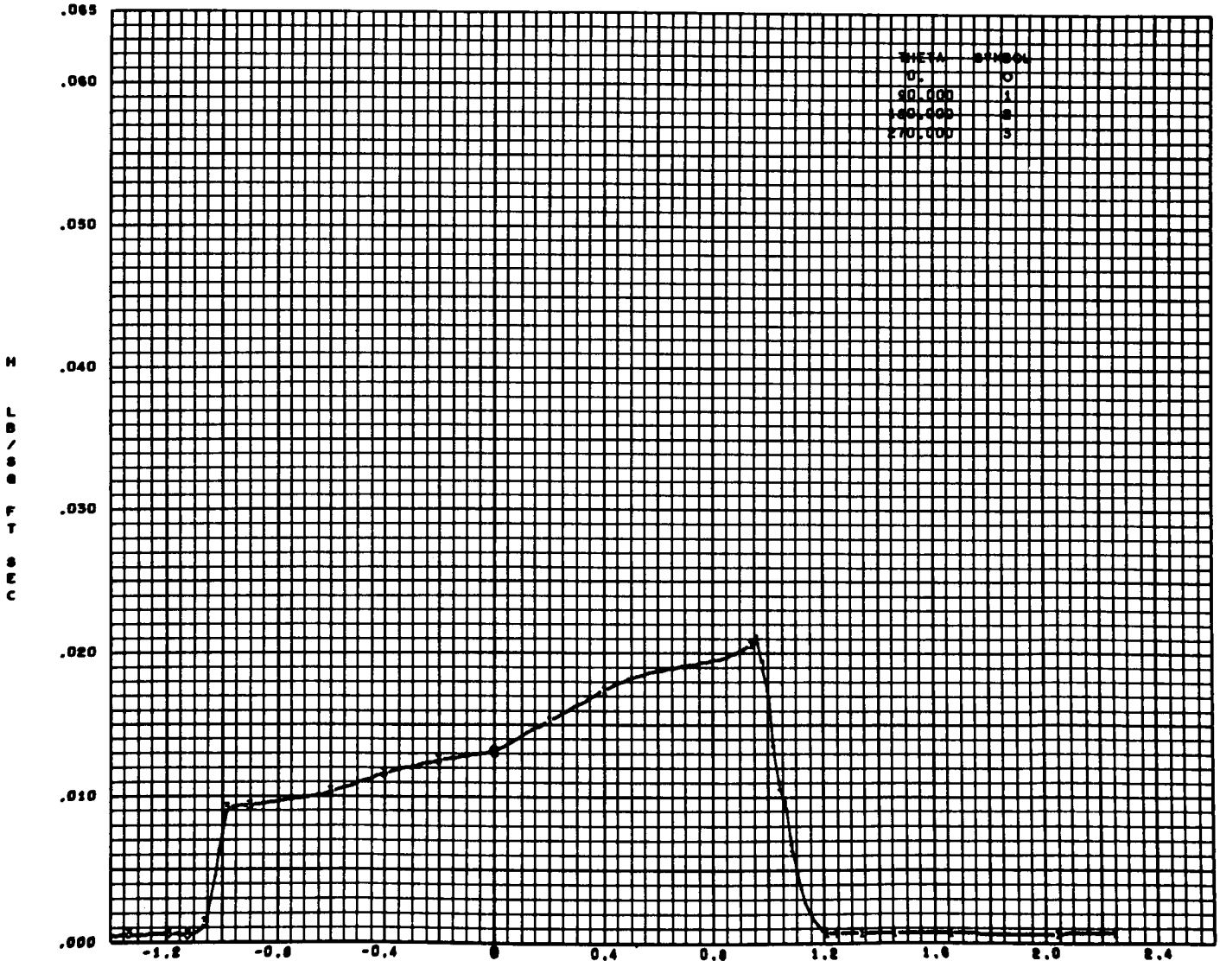
3937-10
112 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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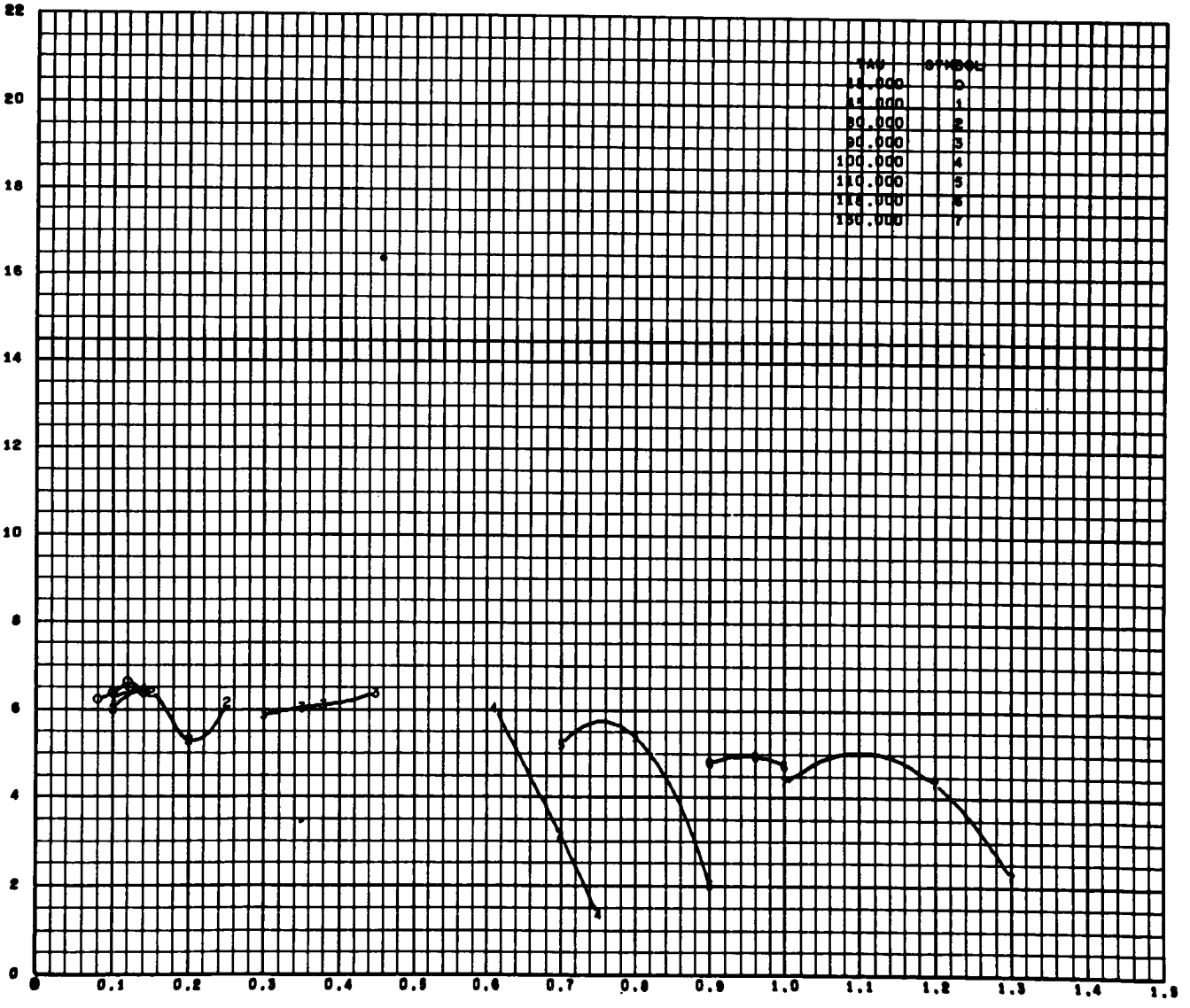
3037-10
107 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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132*	2.70
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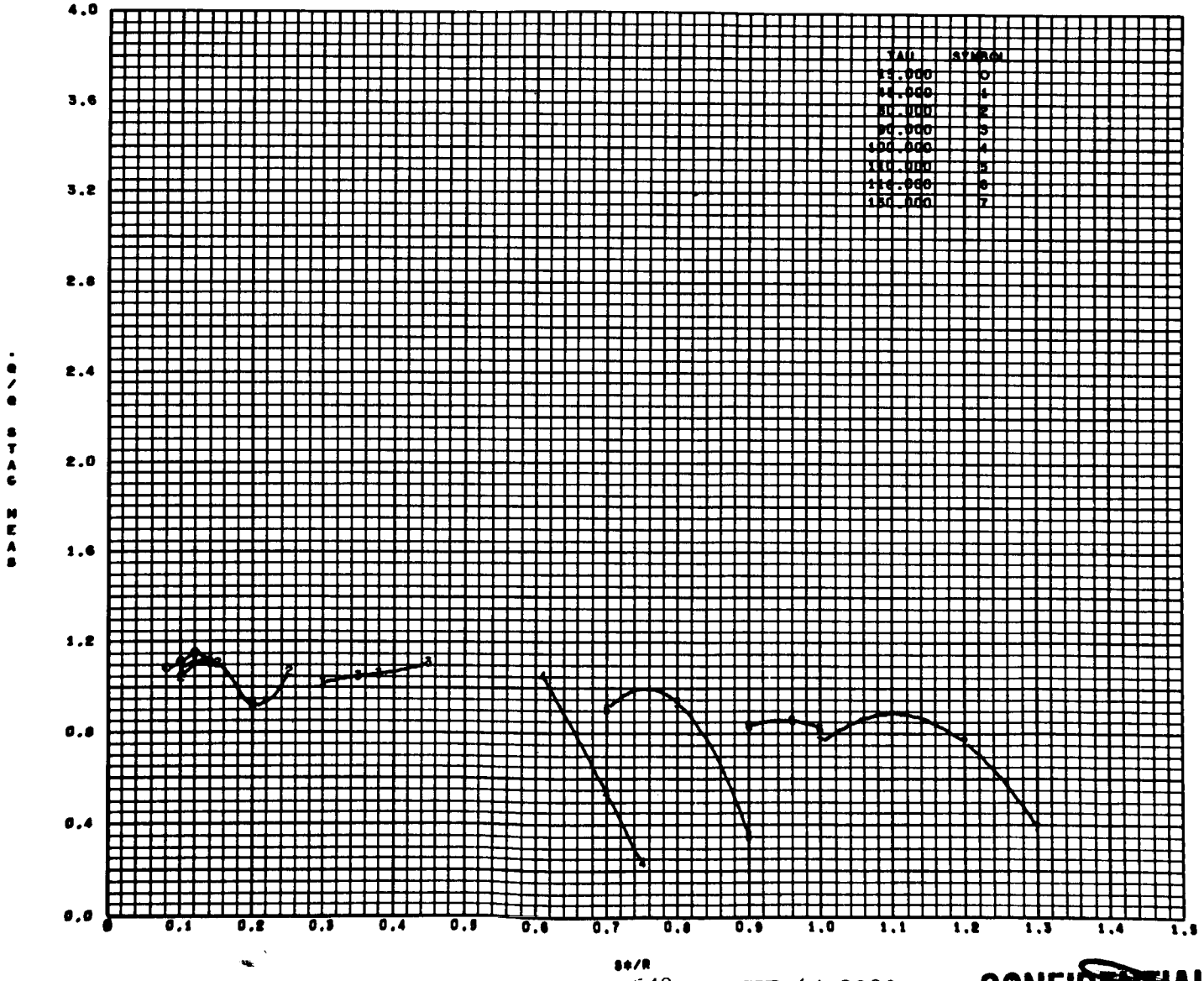
3937-10
110 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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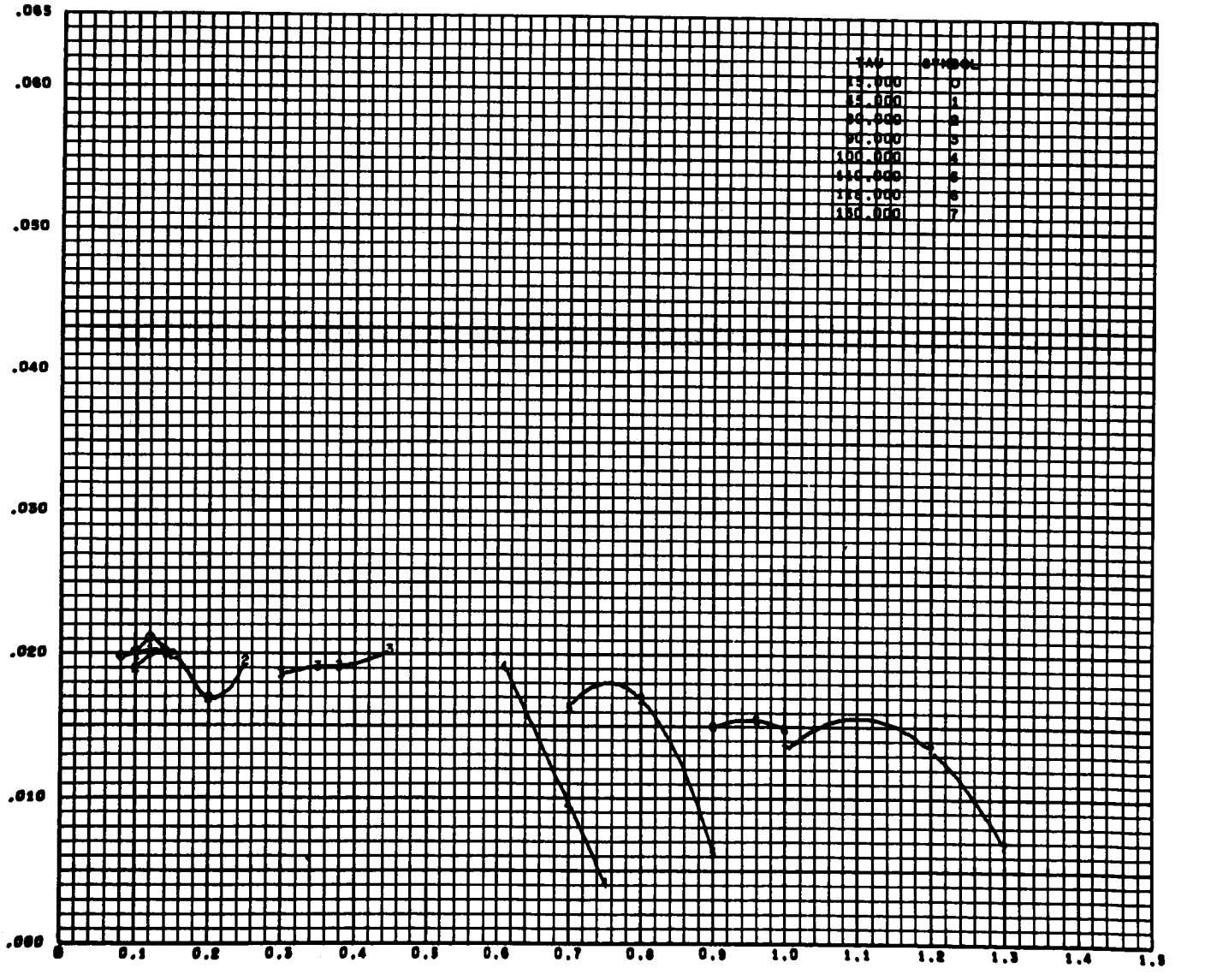
3937-10
113 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

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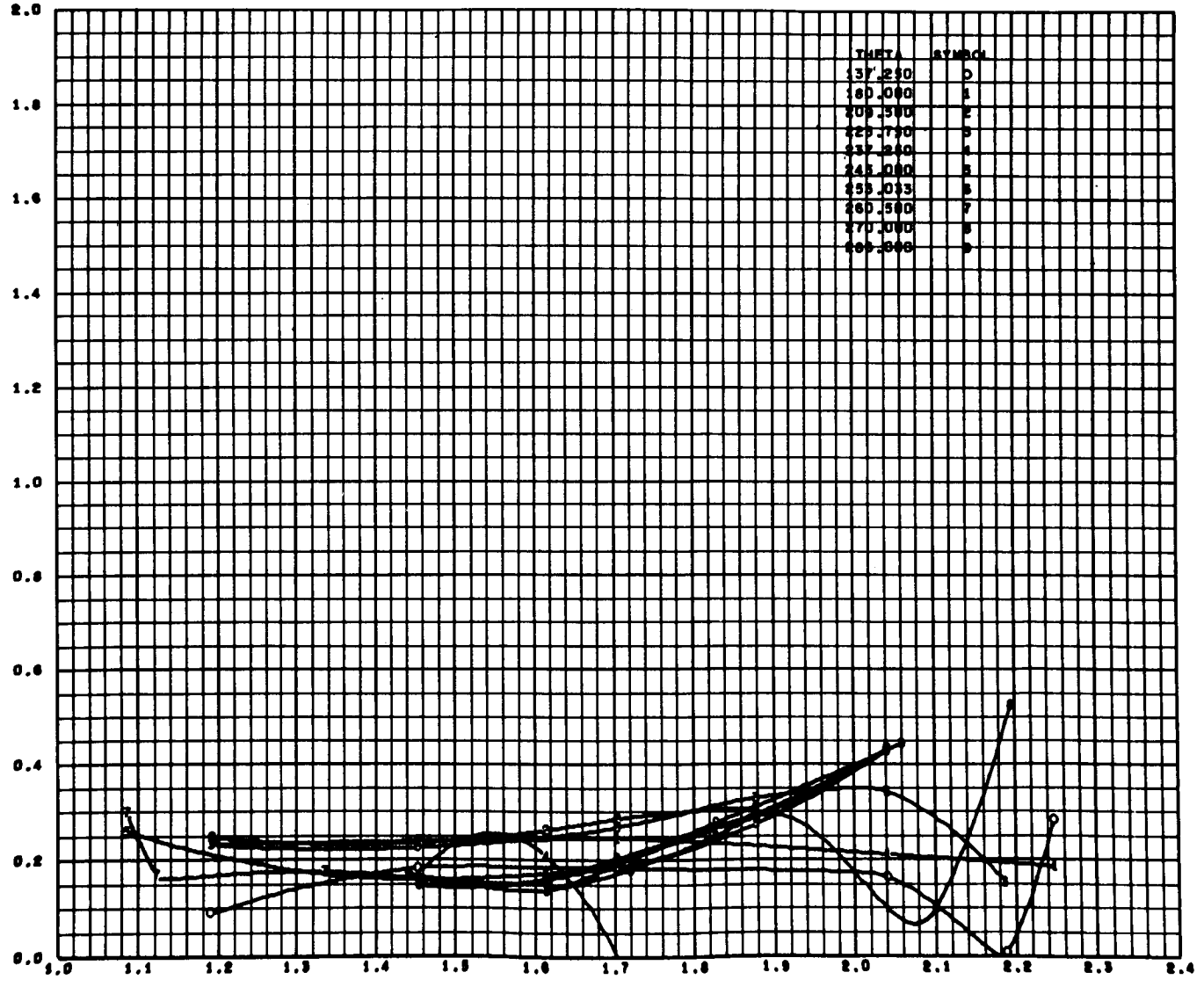
3937-10
108 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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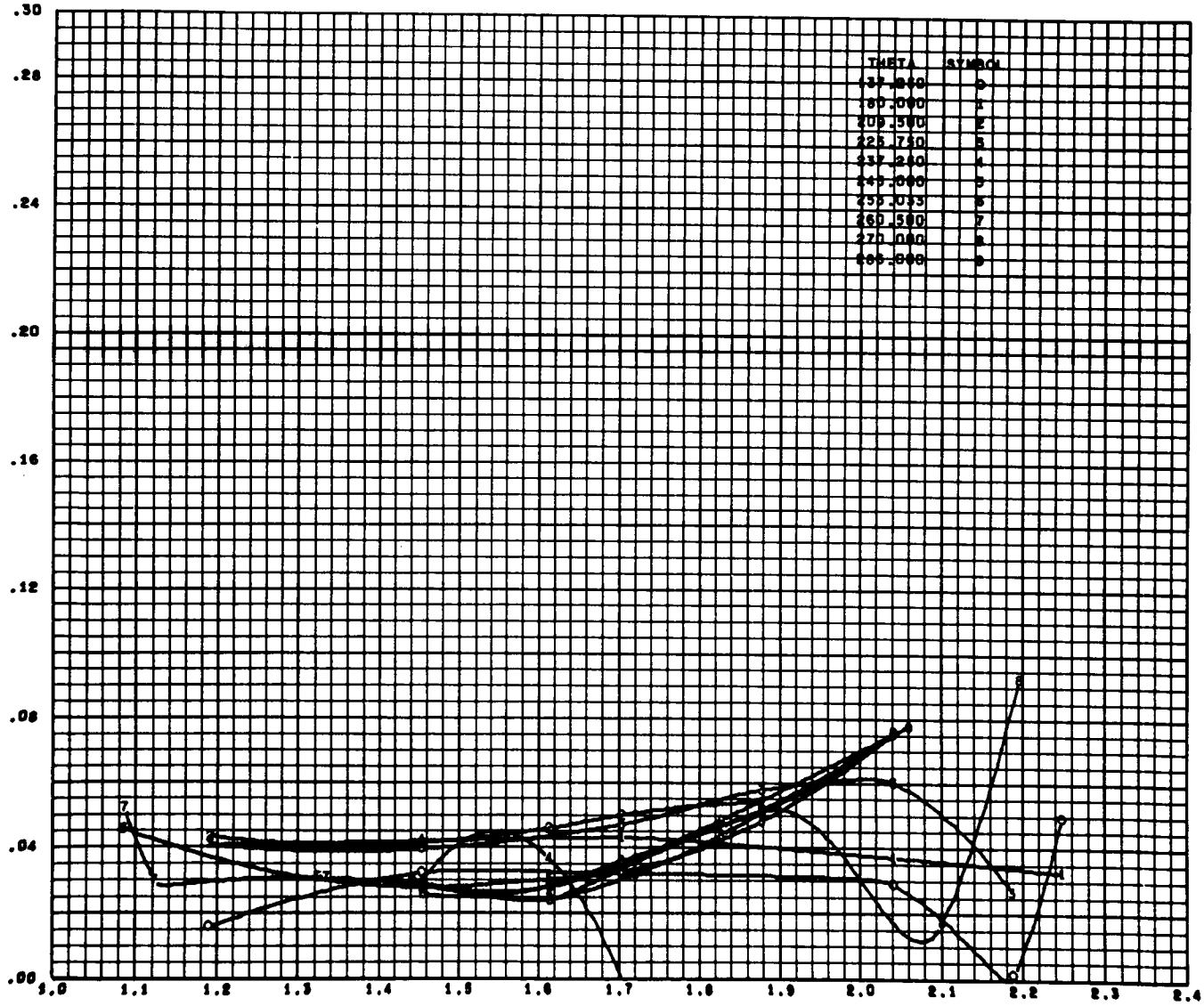

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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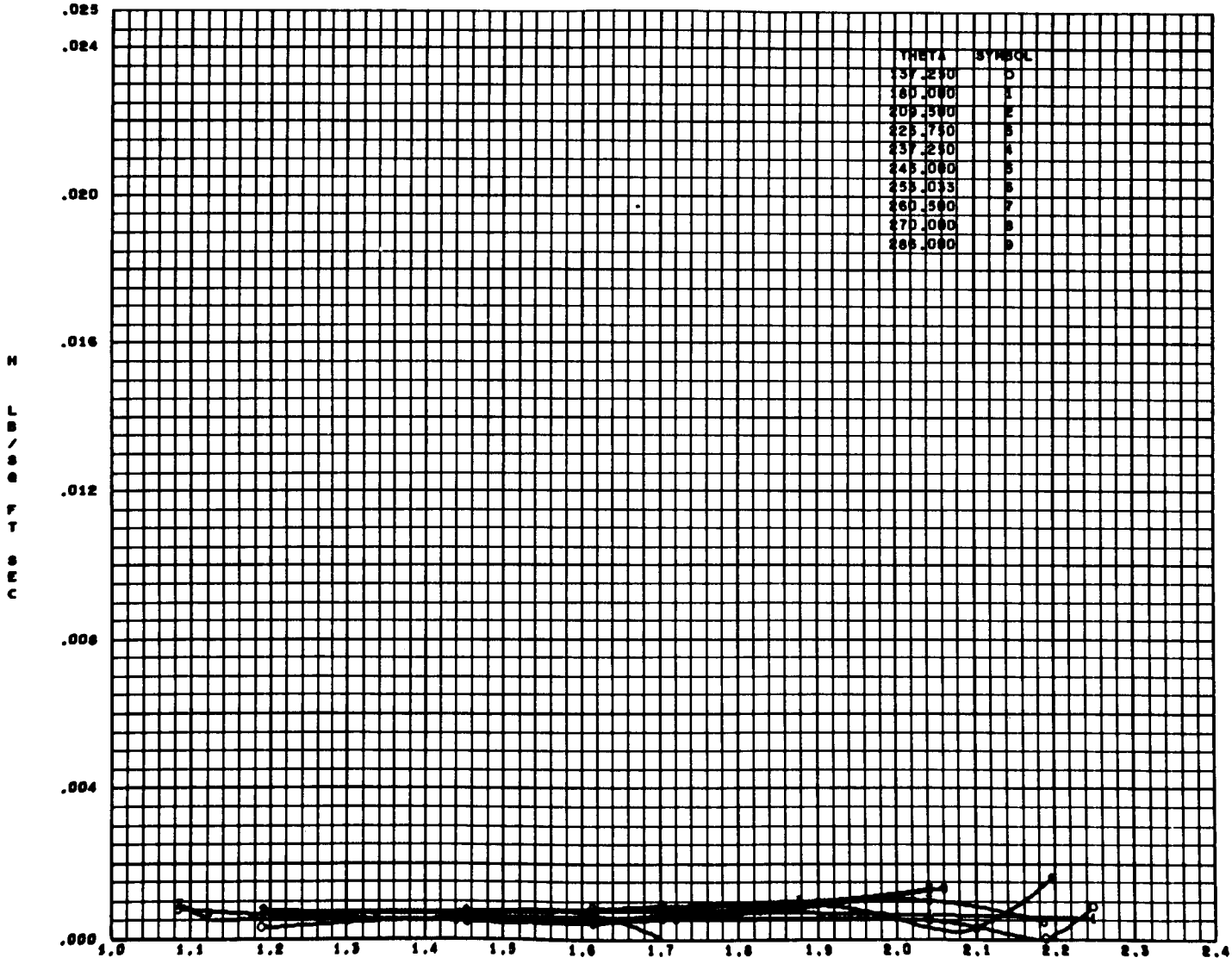
3937-10
114 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 142.63 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1851.30 PSIA
TOTAL TEMPERATURE ---- 1893.80 DEG RANKINE

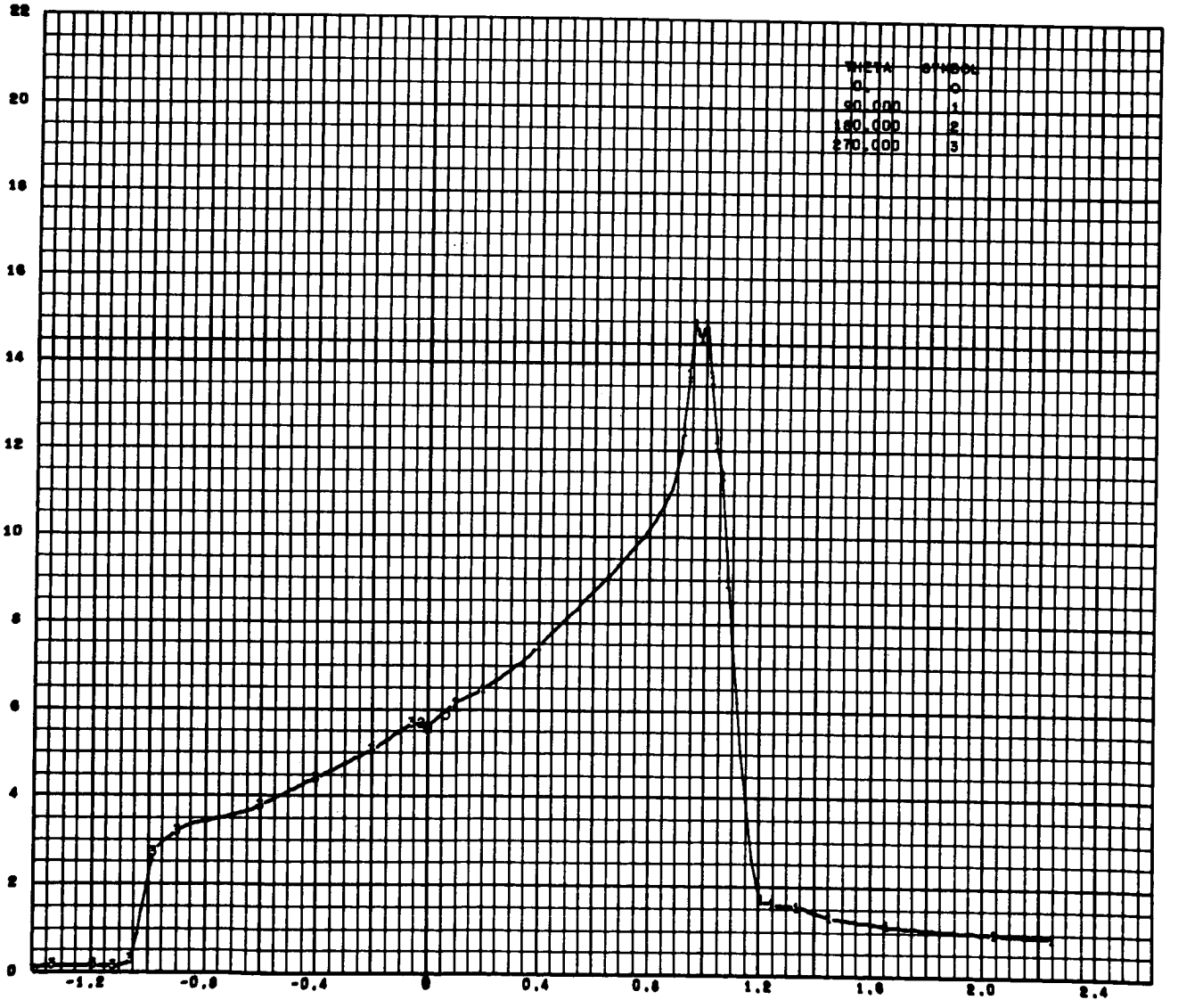
RE/FT --- 2.2443*10+6
Q(OM) --- 9.2523 BTU/SQ FT SEC

PLOT SERIES NUMBER 79

TEST GROUP	TIME (SEC)
107*	2.70
109	2.75
118	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
001 000



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APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

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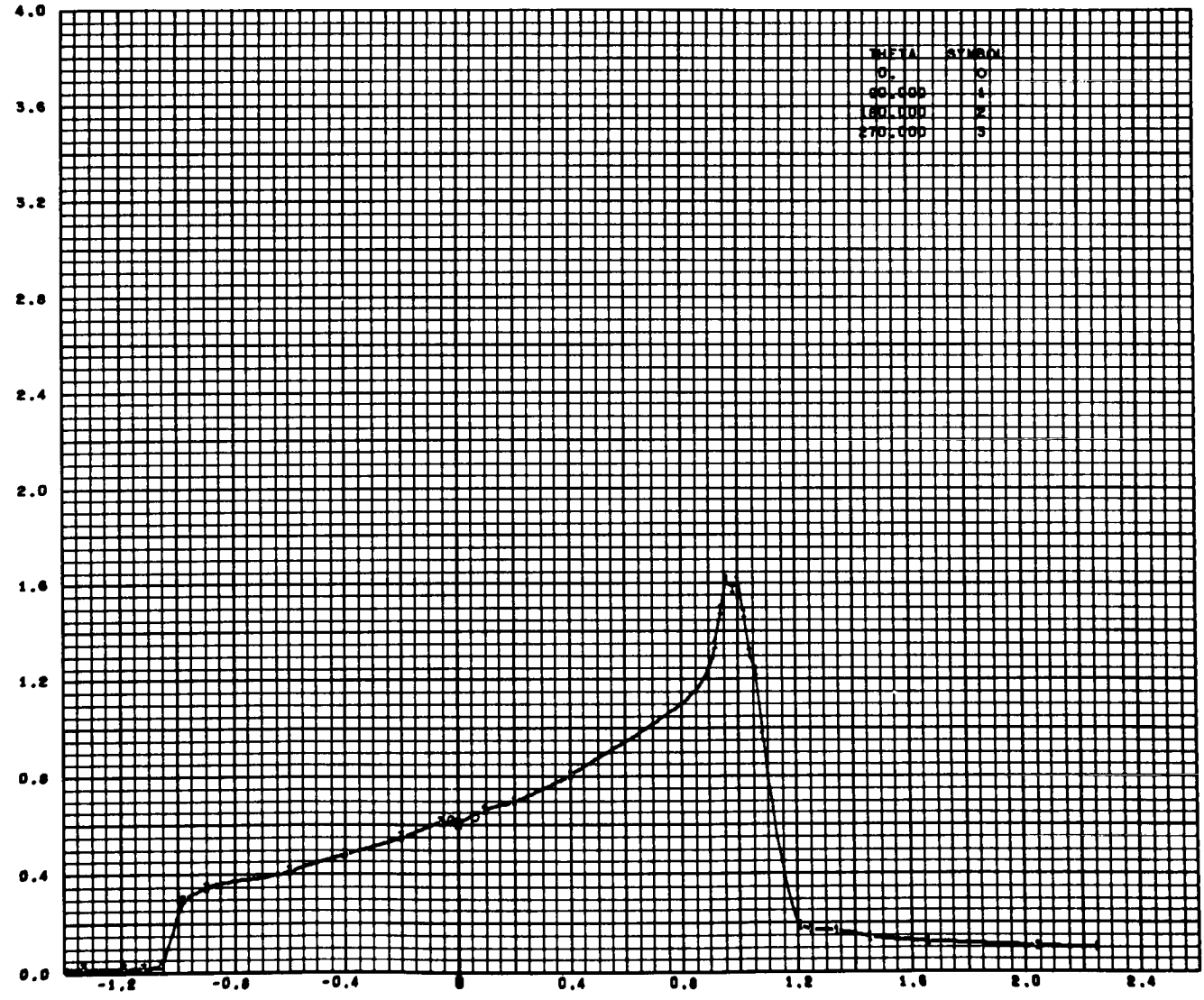

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HEAT TRANSFER

APOLLO H-11

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JUNE, 1964

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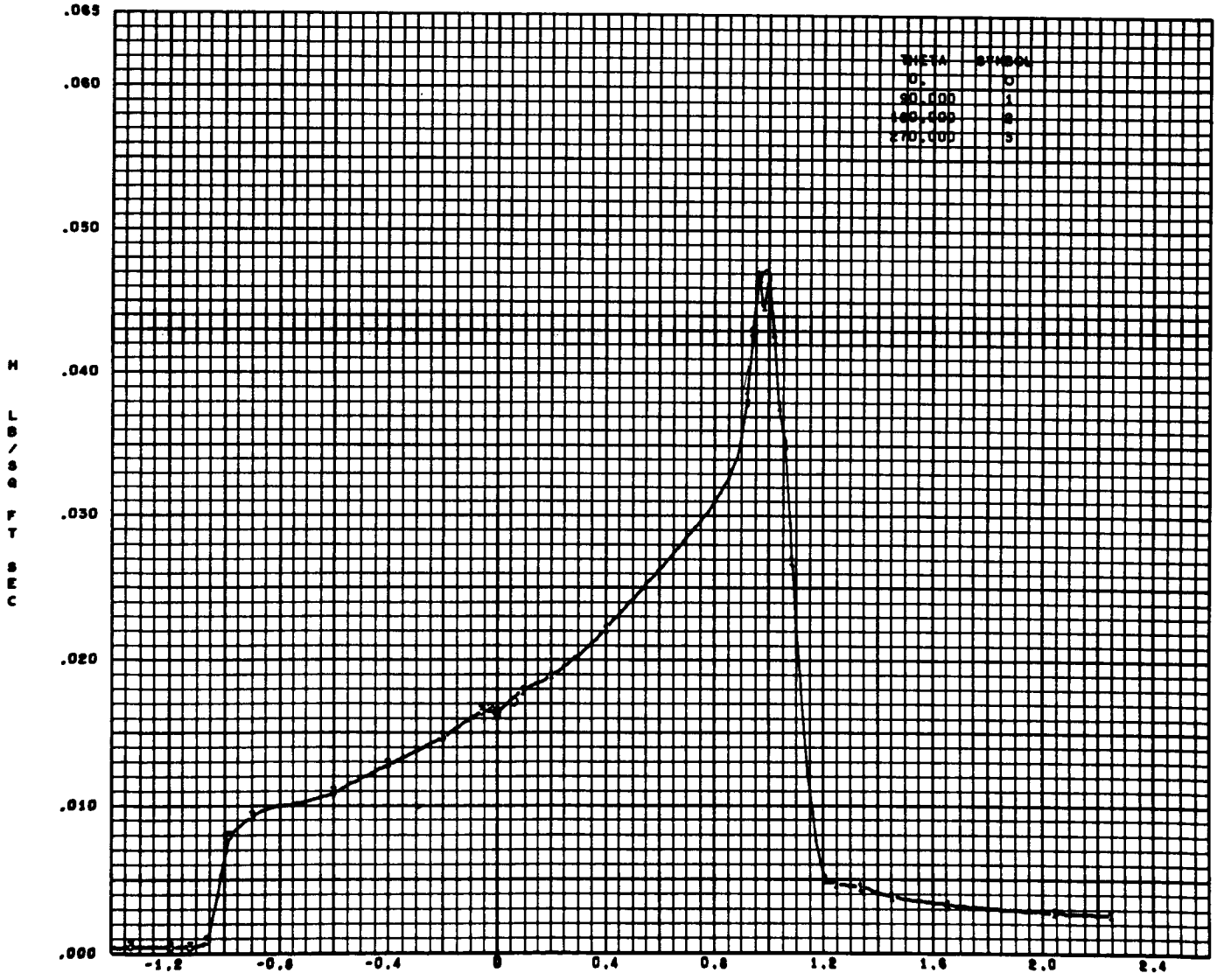
3937-11
007 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

0

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 142.63 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 1851.30 PSIA
TOTAL TEMPERATURE ---- 1893.80 DEG RANKINE

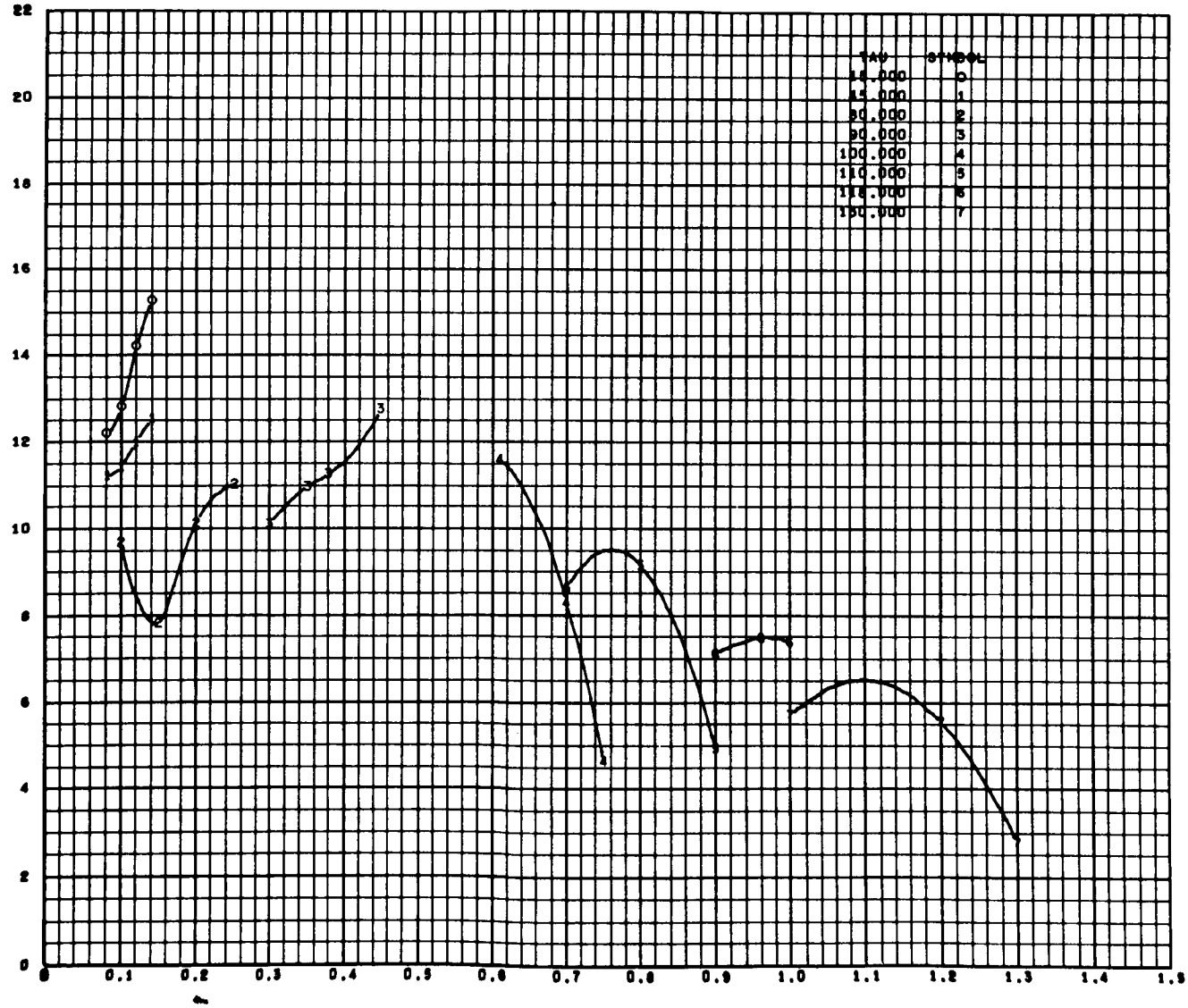
RE/FT --- 2.2443*10+6
Q(OM) --- 9.2523 BTU/SQ FT SEC

PLOT SERIES NUMBER 79

TEST GROUP	TIME (SEC)
107*	2.70
109	2.75
118	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
002 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1984

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 142.63 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1851.30 PSIA
TOTAL TEMPERATURE ---- 1893.80 DEG RANKINE

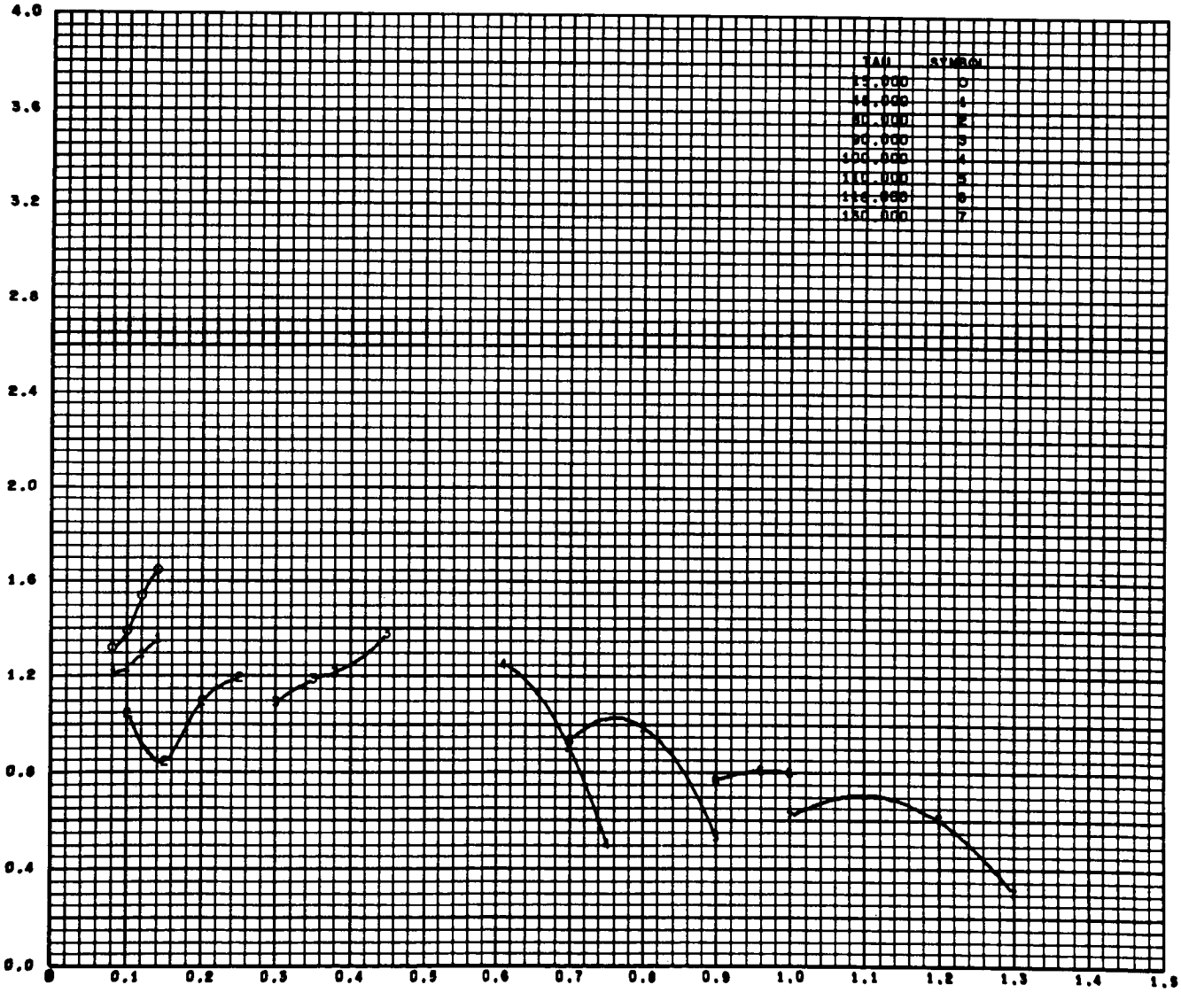
RE/FT --- 2.2443*10+6
Q(OM) --- 9.2523 BTU/SQ FT SEC

PLOT SERIES NUMBER 79

TEST GROUP	TIME (SEC)
107*	2.70
109	2.75
118	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
005 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 142.63 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 1851.30 PSIA
TOTAL TEMPERATURE ---- 1893.80 DEG RANKINE

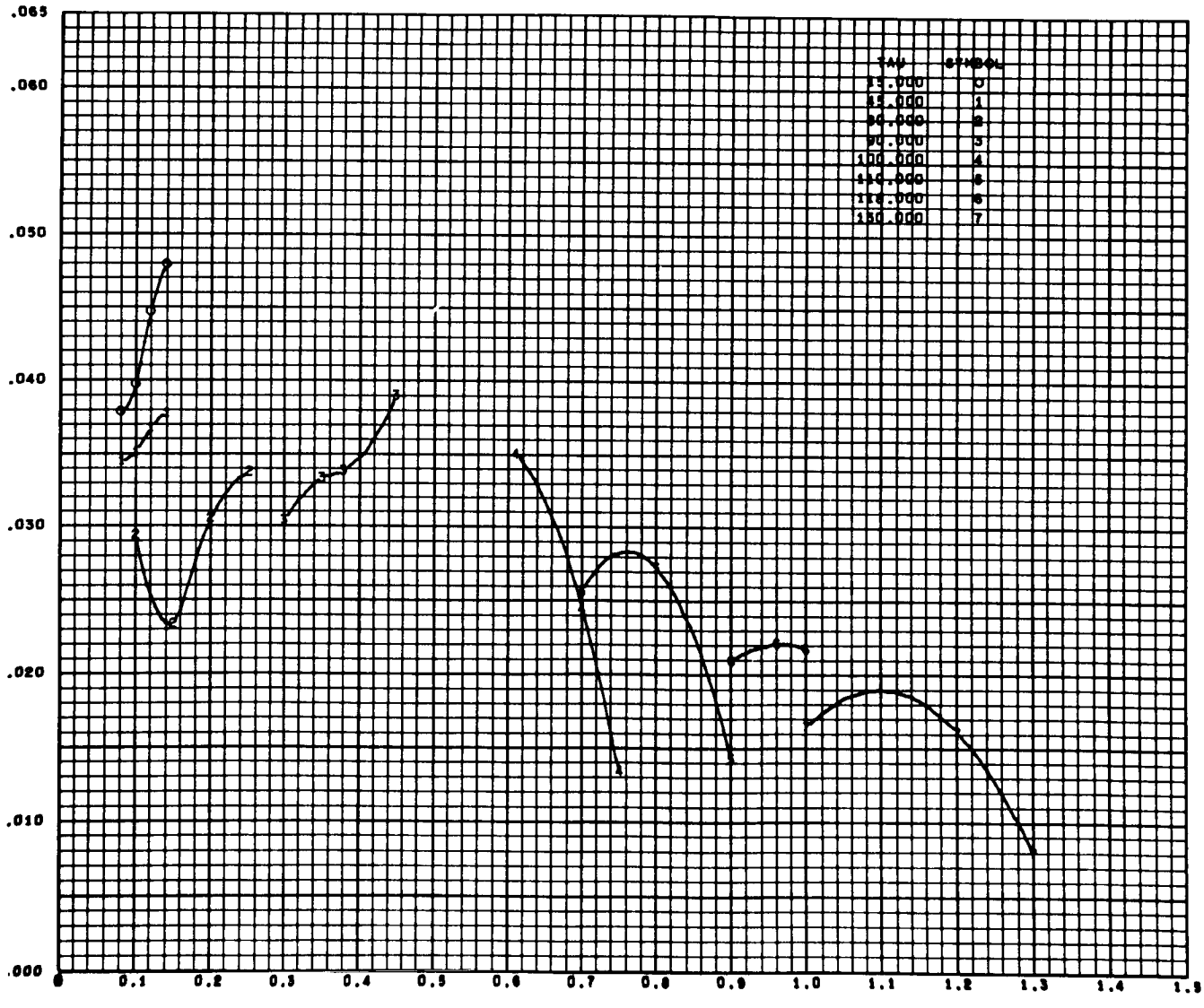
RE/FT --- 2.2443*10+6
Q(OM) --- 9.2523 BTU/SQ FT SEC

PLOT SERIES NUMBER 79

TEST GROUP	TIME (SEC)
107*	2.70
109	2.75
118	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
008 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 142.63 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1851.30 PSIA
TOTAL TEMPERATURE ---- 1893.80 DEG RANKINE

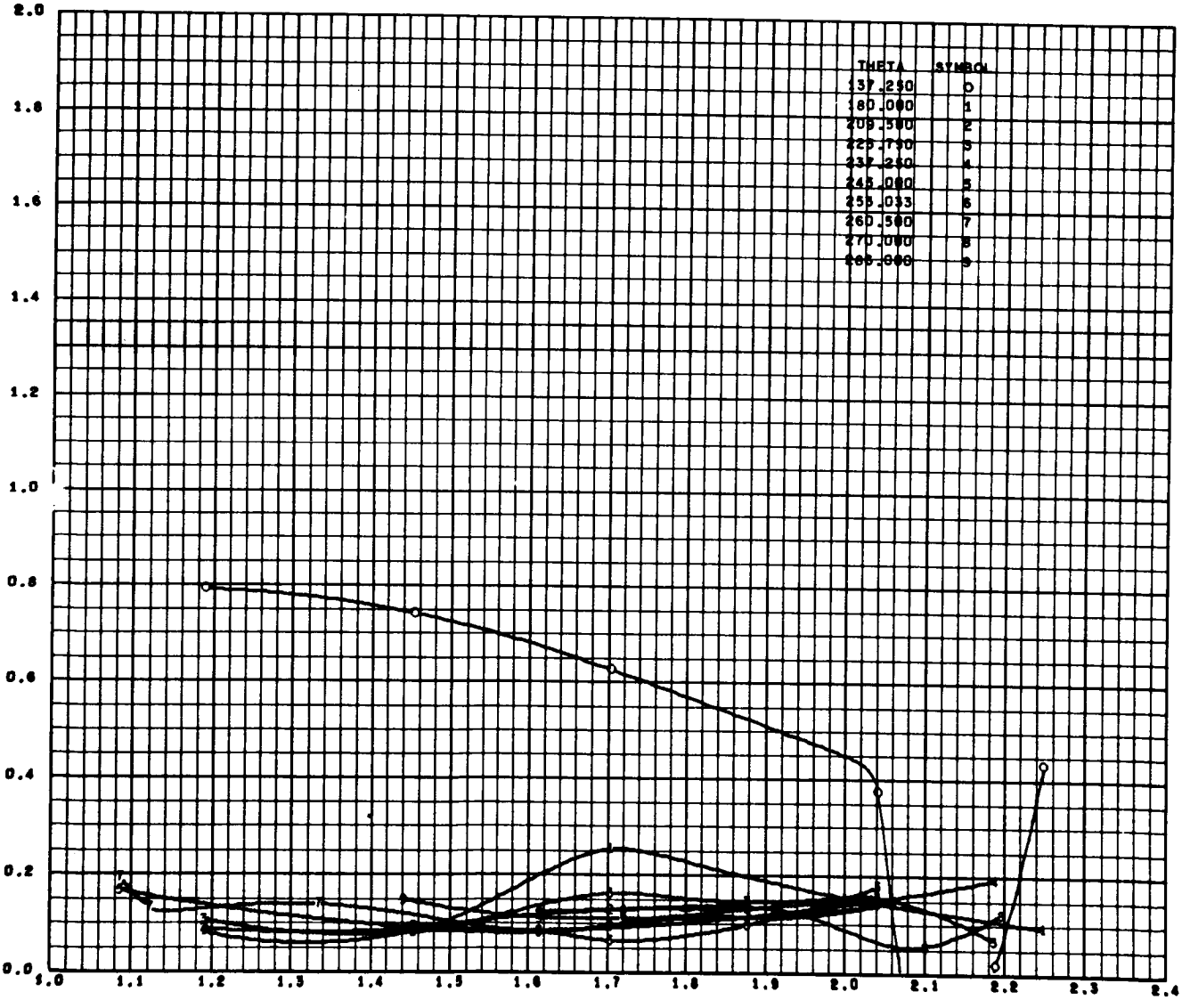
RE/FT --- 2.2443*10+6
Q(OM) --- 9.2523 BTU/SQ FT SEC

PLOT SERIES NUMBER 79

TEST GROUP	TIME (SEC)
107*	2.70
109	2.75
118	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
003 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 142.63 DEG
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TOTAL TEMPERATURE ---- 1893.80 DEG RANKINE

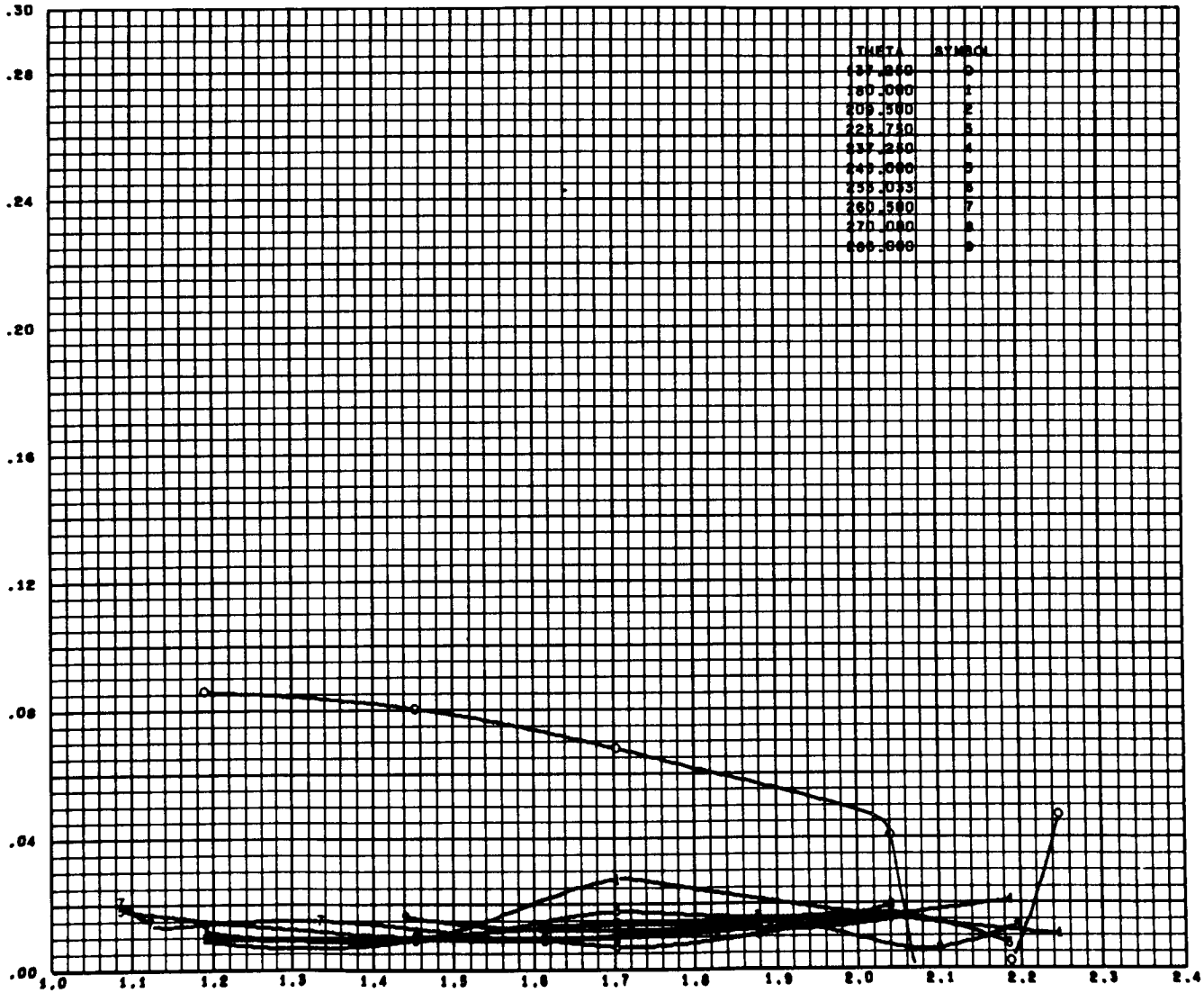
RE/FT --- 2.2443*10+6
Q(OM) --- 9.2523 BTU/SQ FT SEC

PLOT SERIES NUMBER 79

TEST GROUP	TIME (SEC)
107*	2.70
109	2.75
118	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
006 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 142.63 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1851.30 PSIA
TOTAL TEMPERATURE ---- 1893.80 DEG RANKINE

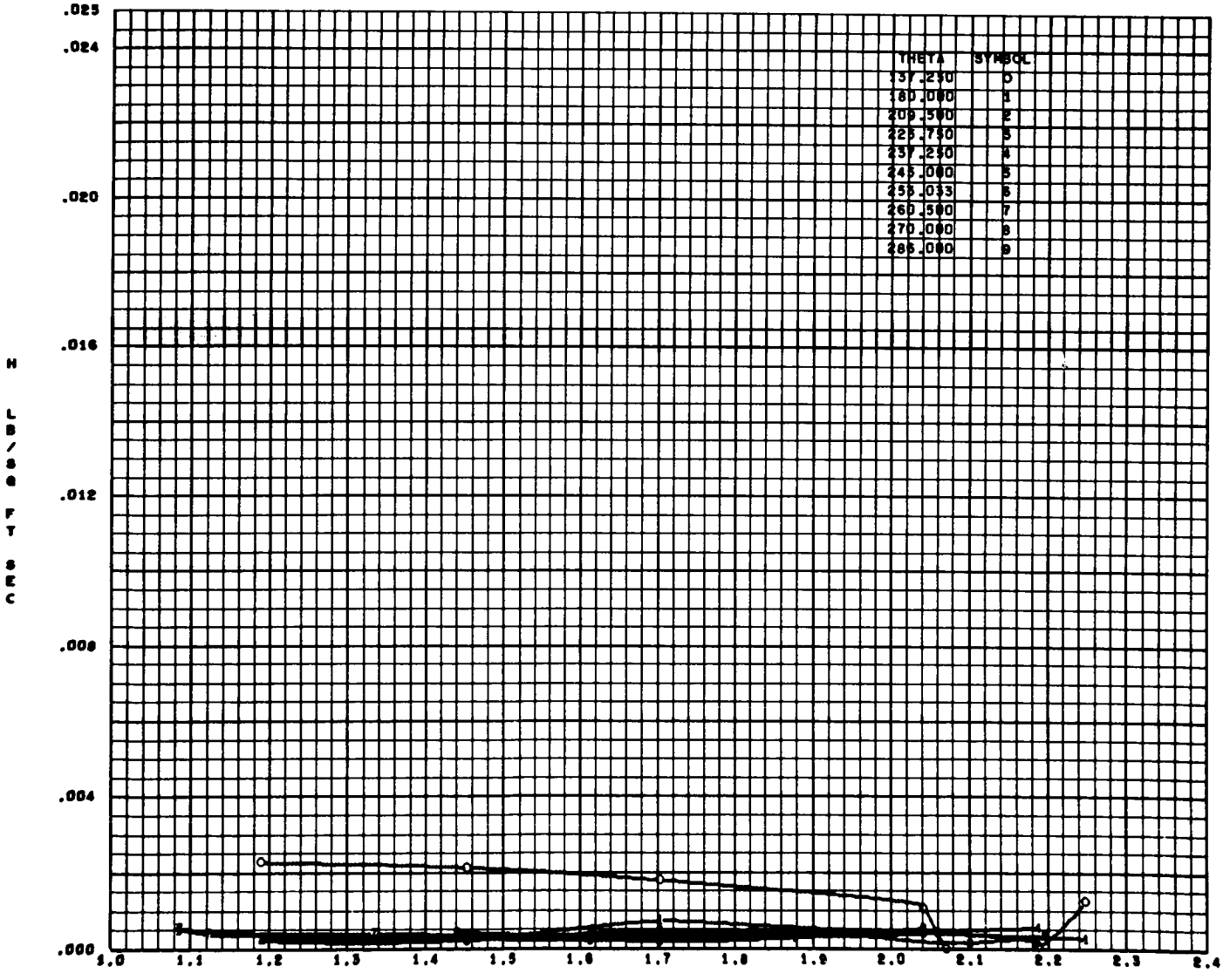
RE/FT --- 2.2443*10+6
Q(OM) --- 9.2523 BTU/SQ FT SEC

PLOT SERIES NUMBER 79

TEST GROUP	TIME (SEC)
107*	2.70
109	2.75
118	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
009 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.62 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1853.80 PSIA
TOTAL TEMPERATURE ---- 1893.50 DEG RANKINE

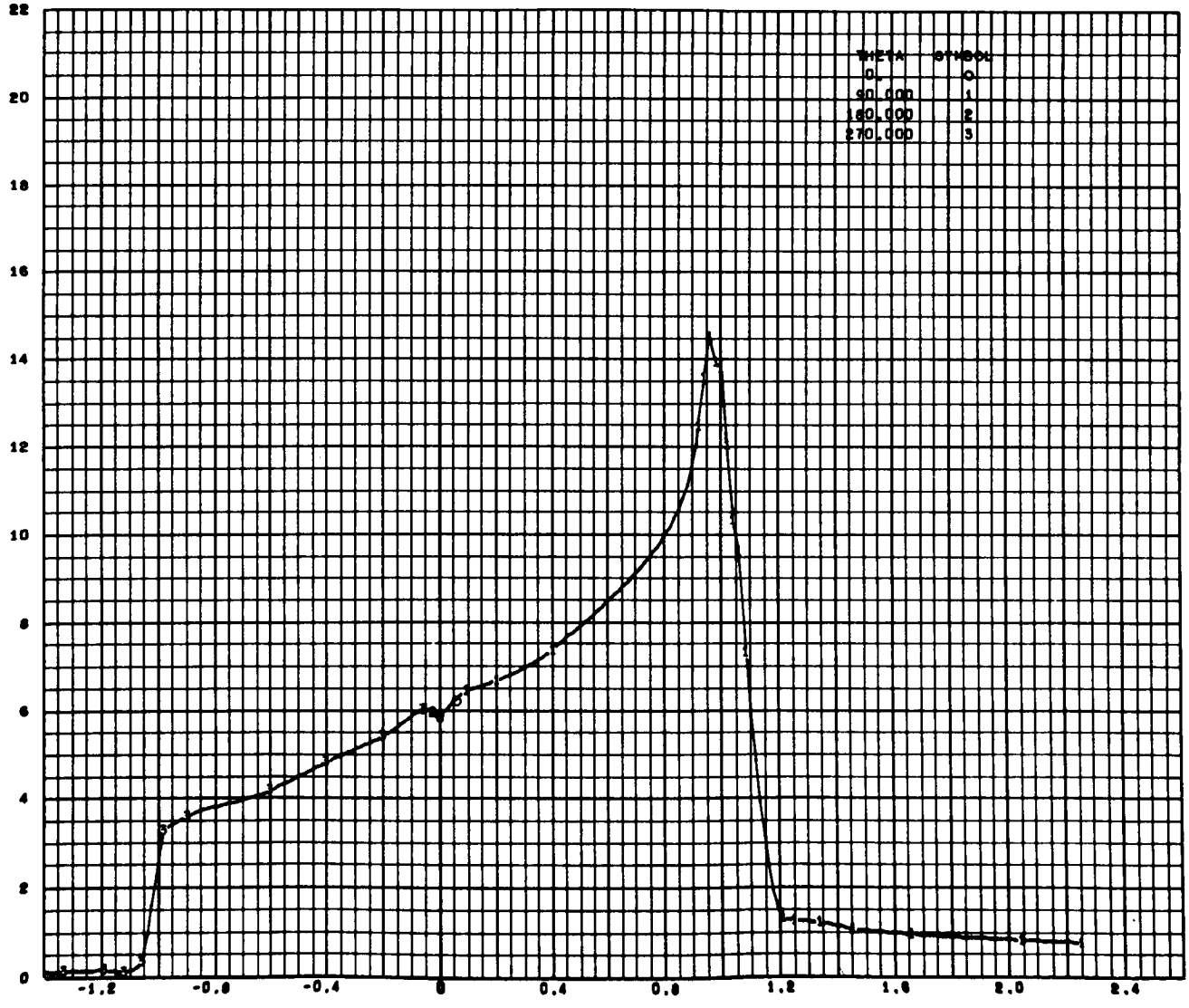
RE/FT --- 2.2482*10+6
Q(OM) --- 9.2603 BTU/SQ FT SEC

PLOT SERIES NUMBER 80

TEST GROUP	TIME (SEC)
108*	2.75
110	2.70
119	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
010 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.62 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1853.80 PSIA
TOTAL TEMPERATURE ---- 1893.50 DEG RANKINE

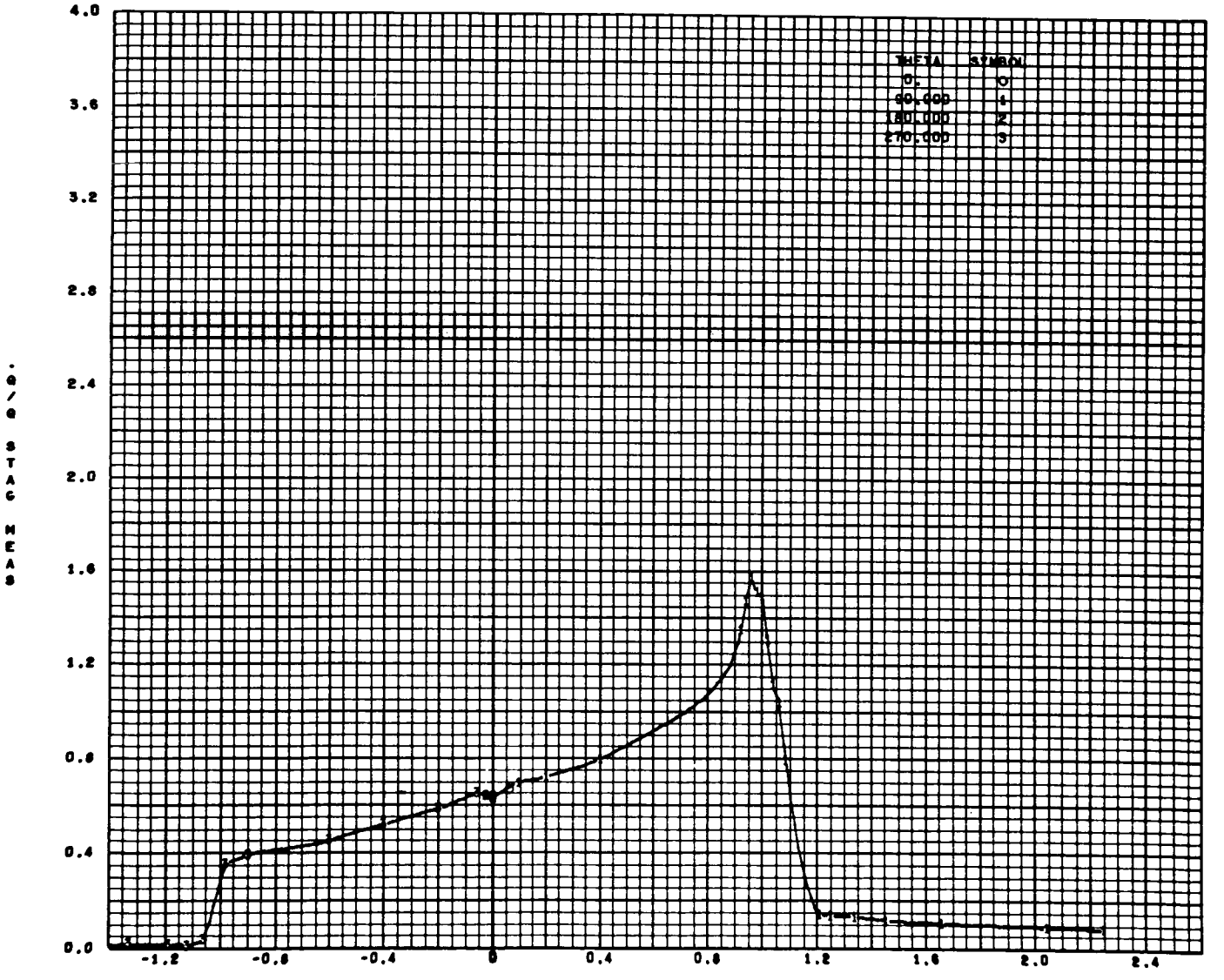
RE/FT --- 2.2482*10+6
Q(OM) --- 9.2603 BTU/SQ FT SEC

PLOT SERIES NUMBER 80

TEST GROUP	TIME (SEC)
108*	2.75
110	2.70
119	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
013 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.62 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1853.80 PSIA
TOTAL TEMPERATURE ---- 1893.50 DEG RANKINE

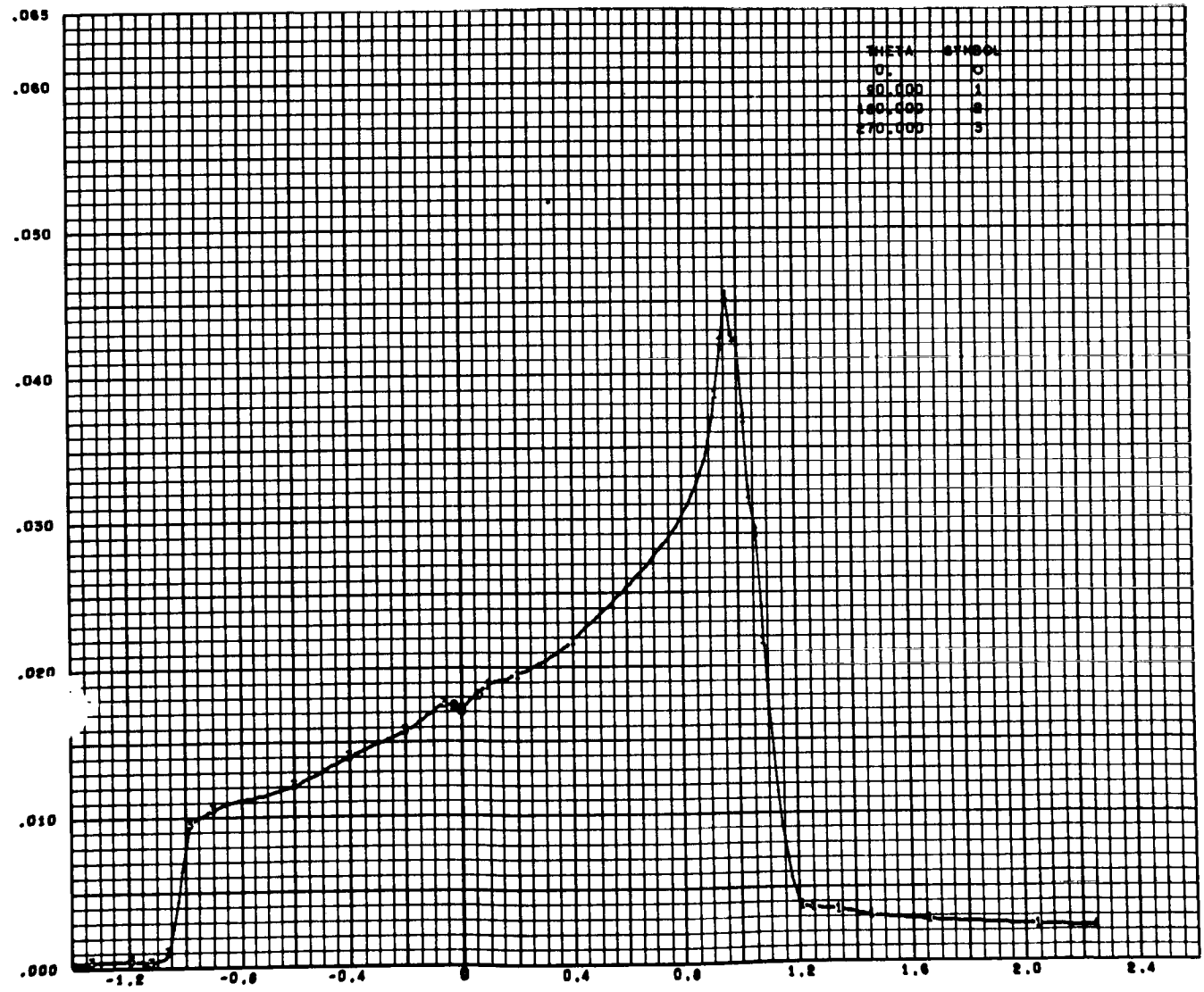
RE/FT --- 2.2482*10+6
Q(OM) --- 9.2603 BTU/SQ FT SEC

PLOT SERIES NUMBER 80

TEST GROUP	TIME (SEC)
108*	2.75
110	2.70
119	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
016 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.62 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 1853.80 PSIA
TOTAL TEMPERATURE ---- 1893.50 DEG RANKINE

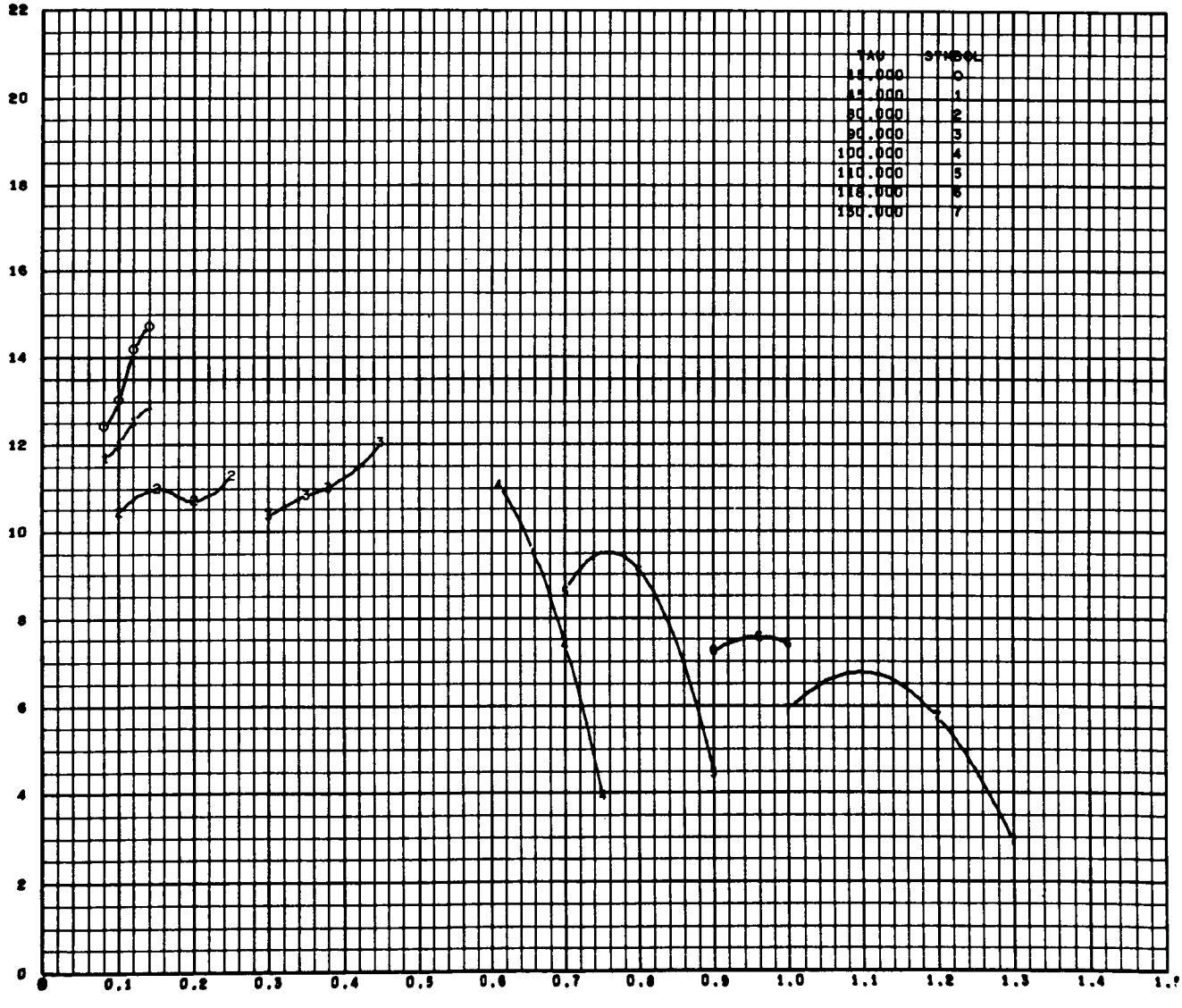
RE/FT --- 2.2482*10+6
Q(OM) --- 9.2603 BTU/SQ FT SEC

PLOT SERIES NUMBER 80

TEST GROUP	TIME (SEC)
108*	2.75
110	2.70
119	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
011 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.62 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1853.80 PSIA
TOTAL TEMPERATURE ---- 1893.50 DEG RANKINE

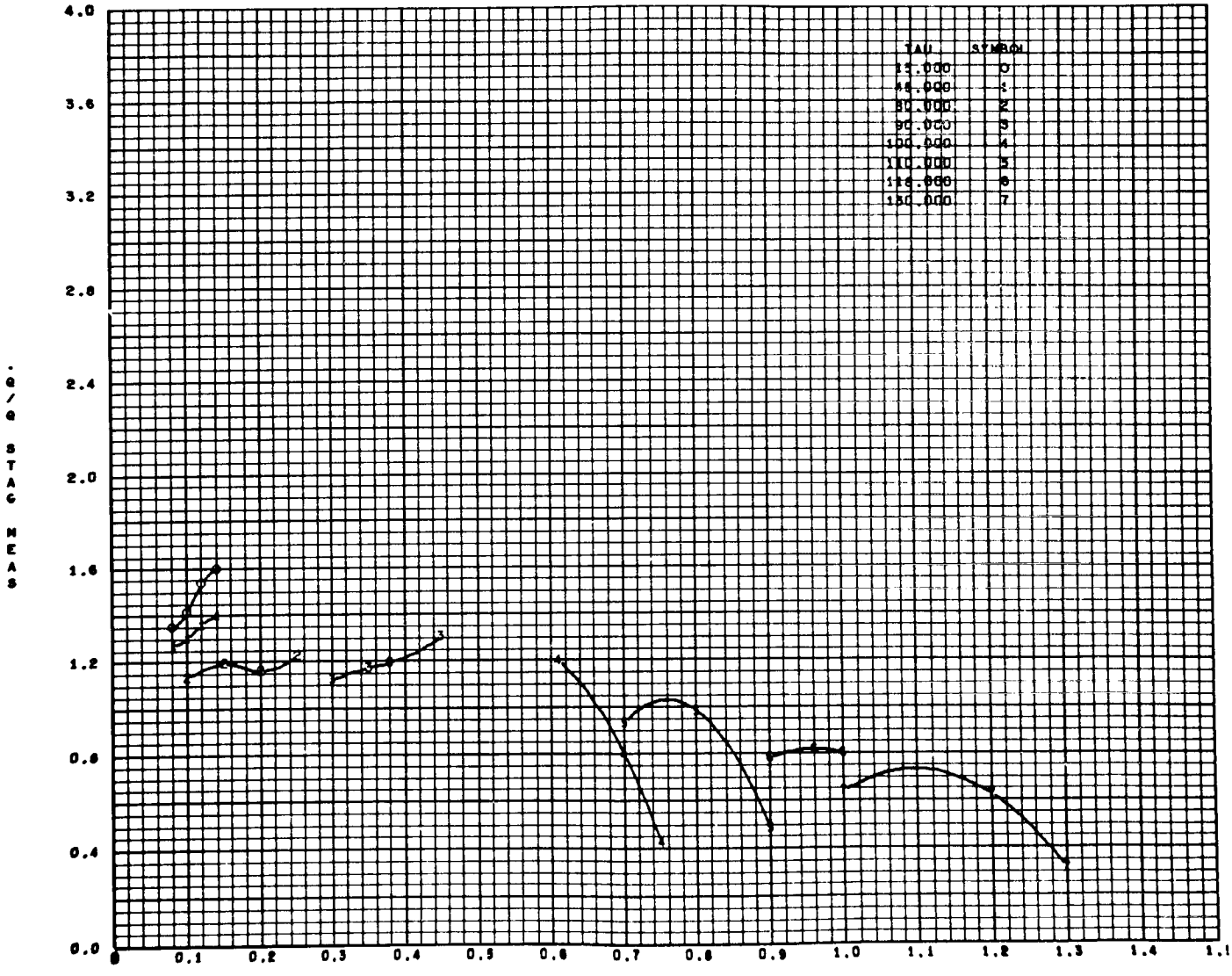
RE/FT --- 2.2482*10+6
Q(OM) --- 9.2603 BTU/SQ FT SEC

PLOT SERIES NUMBER 80

TEST GROUP	TIME (SEC)
108*	2.75
110	2.70
119	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
014 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.62 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1853.80 PSIA
TOTAL TEMPERATURE ---- 1893.50 DEG RANKINE

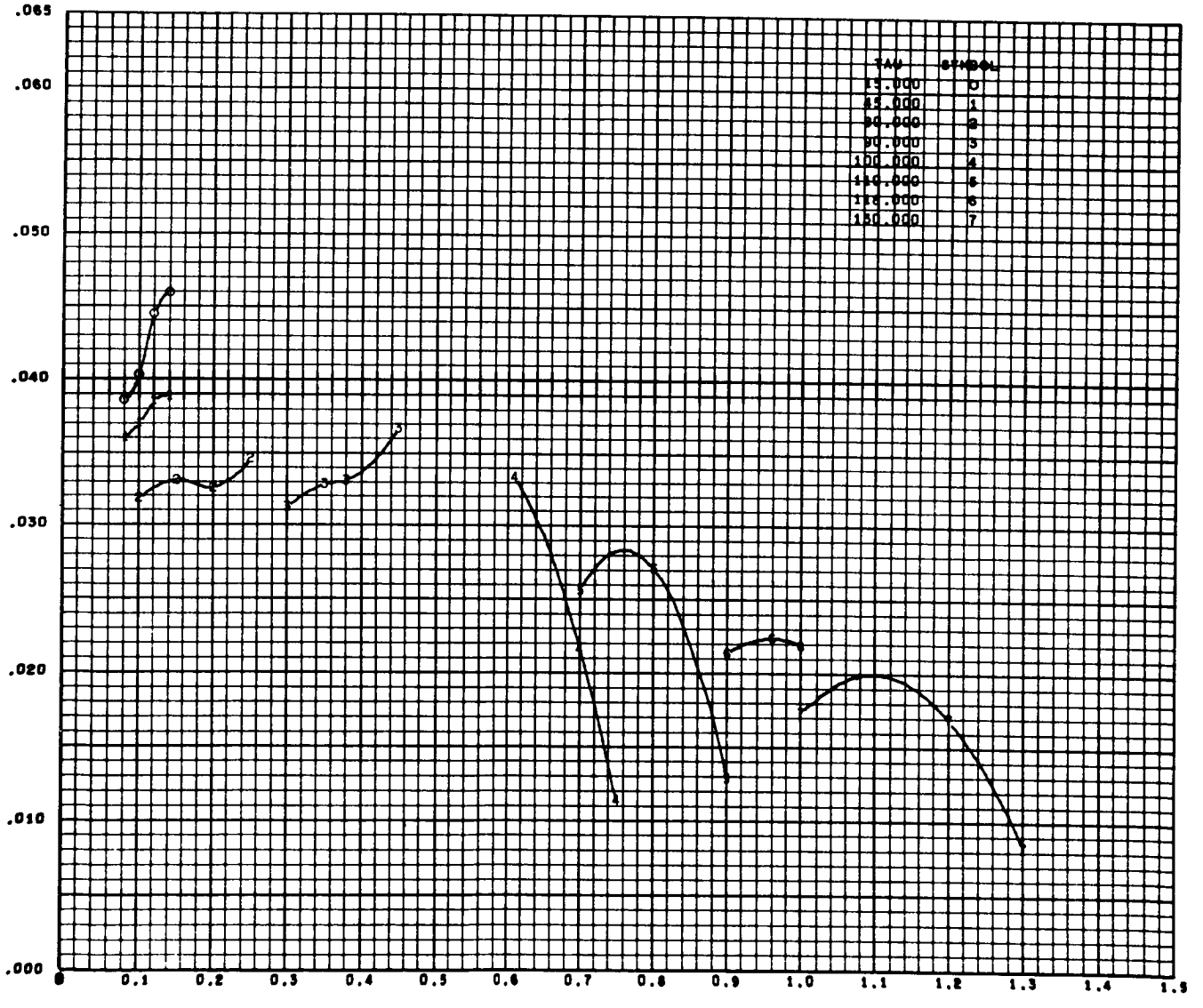
RE/FT --- 2.2482*10+6
Q(OM) --- 9.2603 BTU/SQ FT SEC

PLOT SERIES NUMBER 80

TEST GROUP	TIME (SEC)
108*	2.75
110	2.70
119	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3037-11
017 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.62 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1853.80 PSIA
TOTAL TEMPERATURE ---- 1893.50 DEG RANKINE

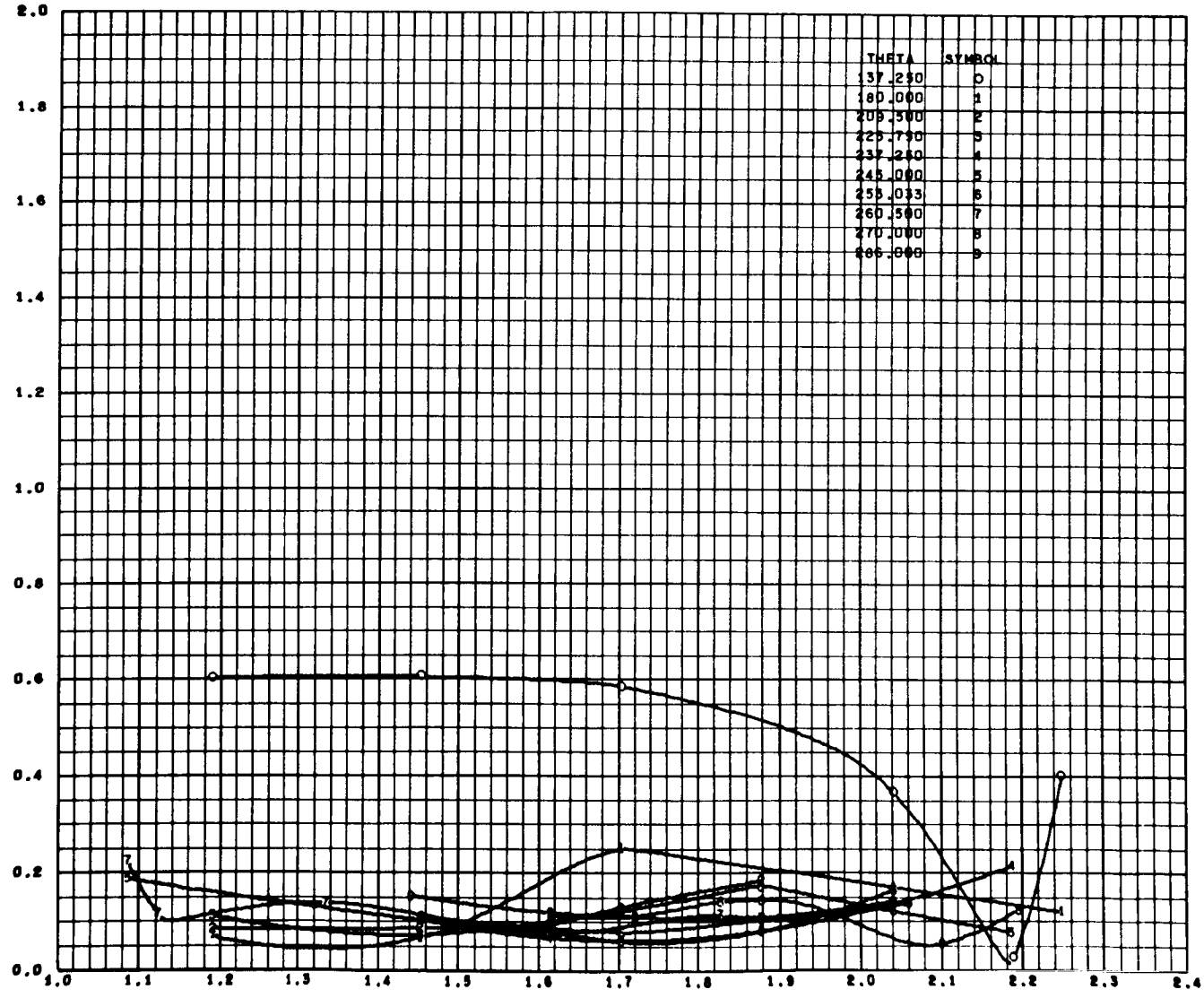
RE/FT --- 2.2482*10+6
Q(OM) --- 9.2603 BTU/SQ FT SEC

PLOT SERIES NUMBER 80

TEST GROUP	TIME (SEC)
108*	2.75
110	2.70
119	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
012 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.62 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1853.80 PSIA
TOTAL TEMPERATURE ---- 1893.50 DEG RANKINE

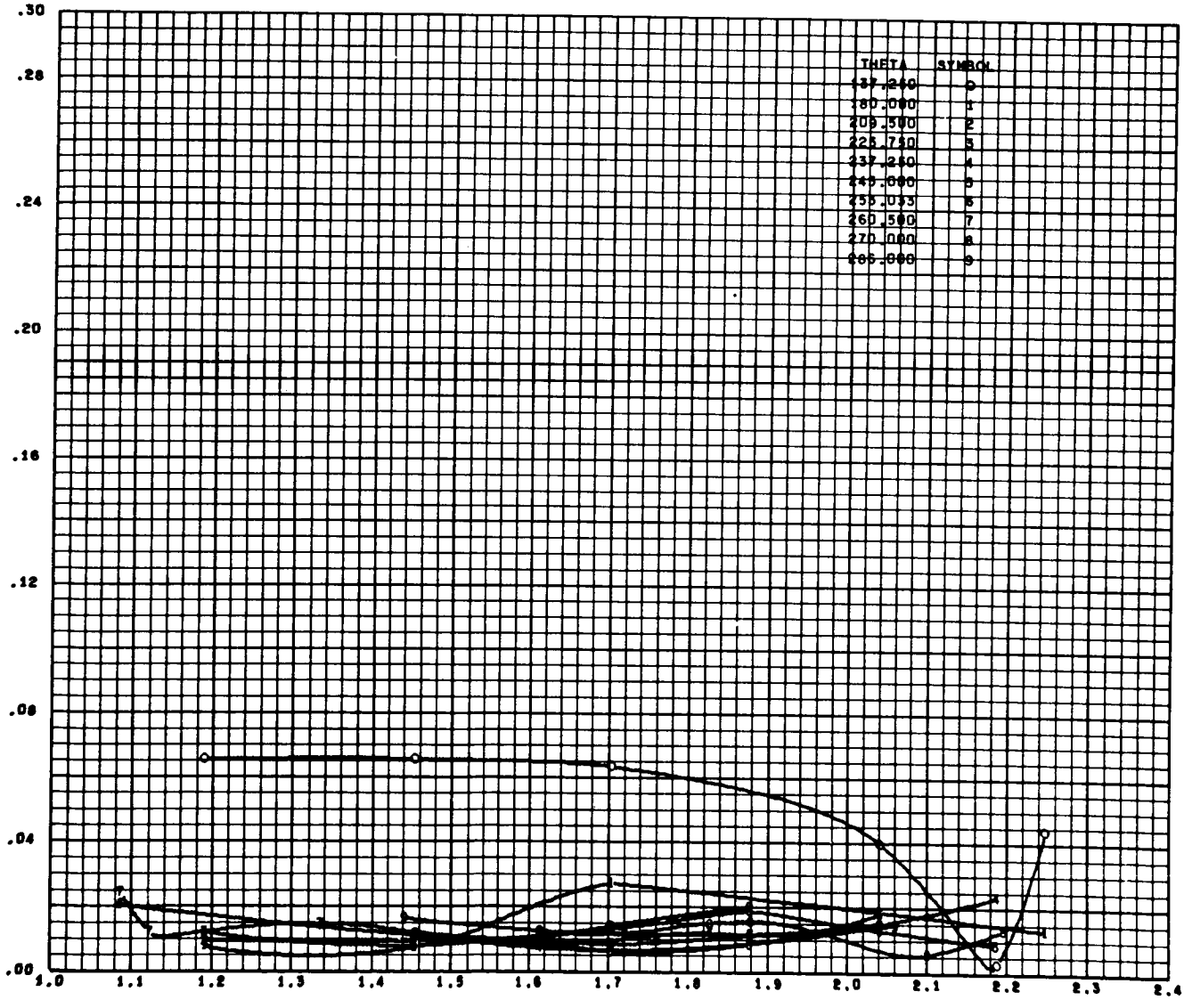
RE/FT --- 2.2482*10+6
Q(OM) --- 9.2603 BTU/SQ FT SEC

PLOT SERIES NUMBER 80

TEST GROUP	TIME (SEC)
108*	2.75
110	2.70
119	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
015 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 146.62 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1853.80 PSIA
TOTAL TEMPERATURE ---- 1893.50 DEG RANKINE

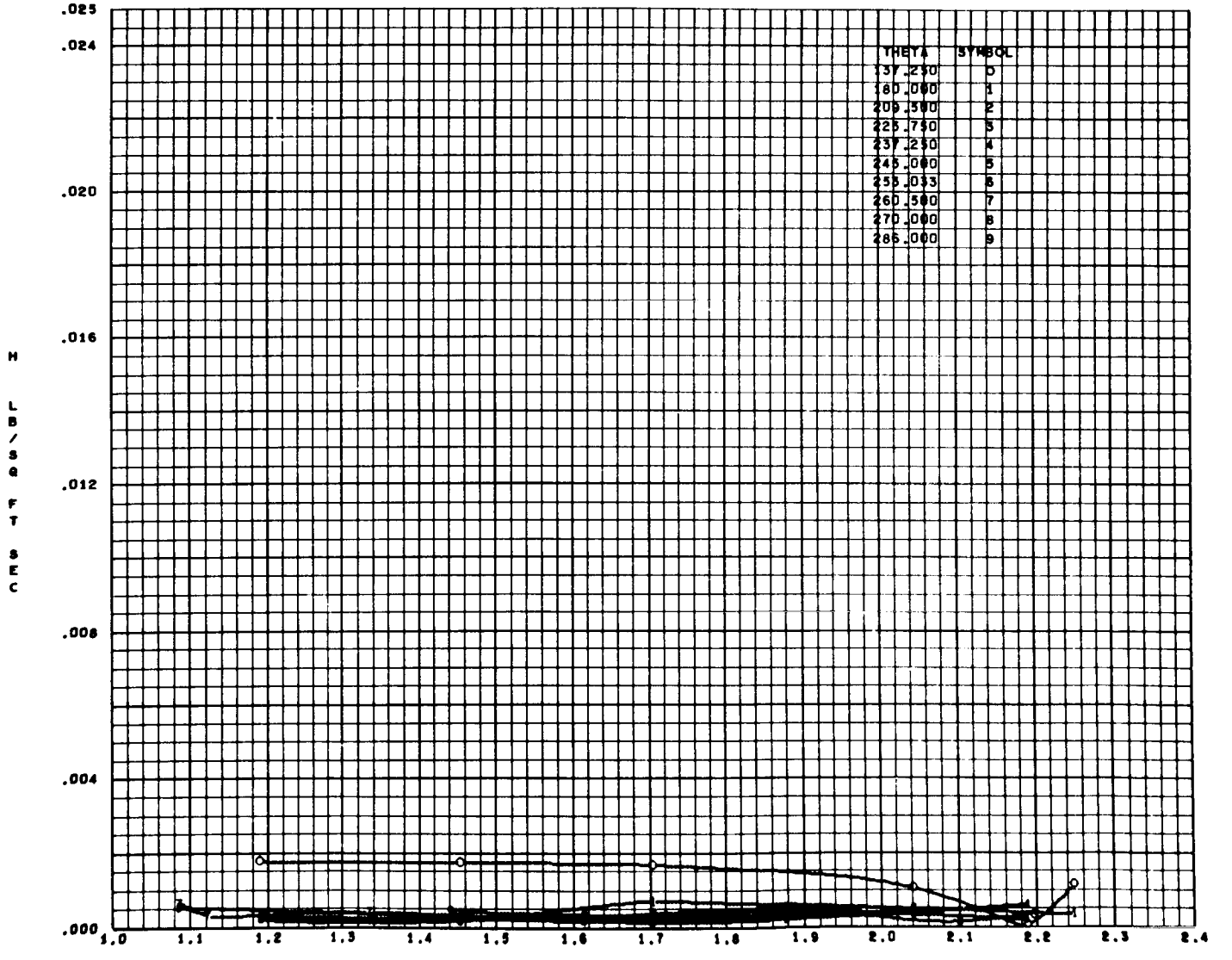
RE/FT --- 2.2482*10+6
Q(OM) --- 9.2603 BTU/SQ FT SEC

PLOT SERIES NUMBER 80

TEST GROUP	TIME (SEC)
108*	2.75
110	2.70
119	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
018 000



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SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.22 DEG
ANGLE OF YAW --------- -4.64 DEG
TOTAL PRESSURE ------- 1846.30 PSIA
TOTAL TEMPERATURE ---- 1889.50 DEG RANKINE

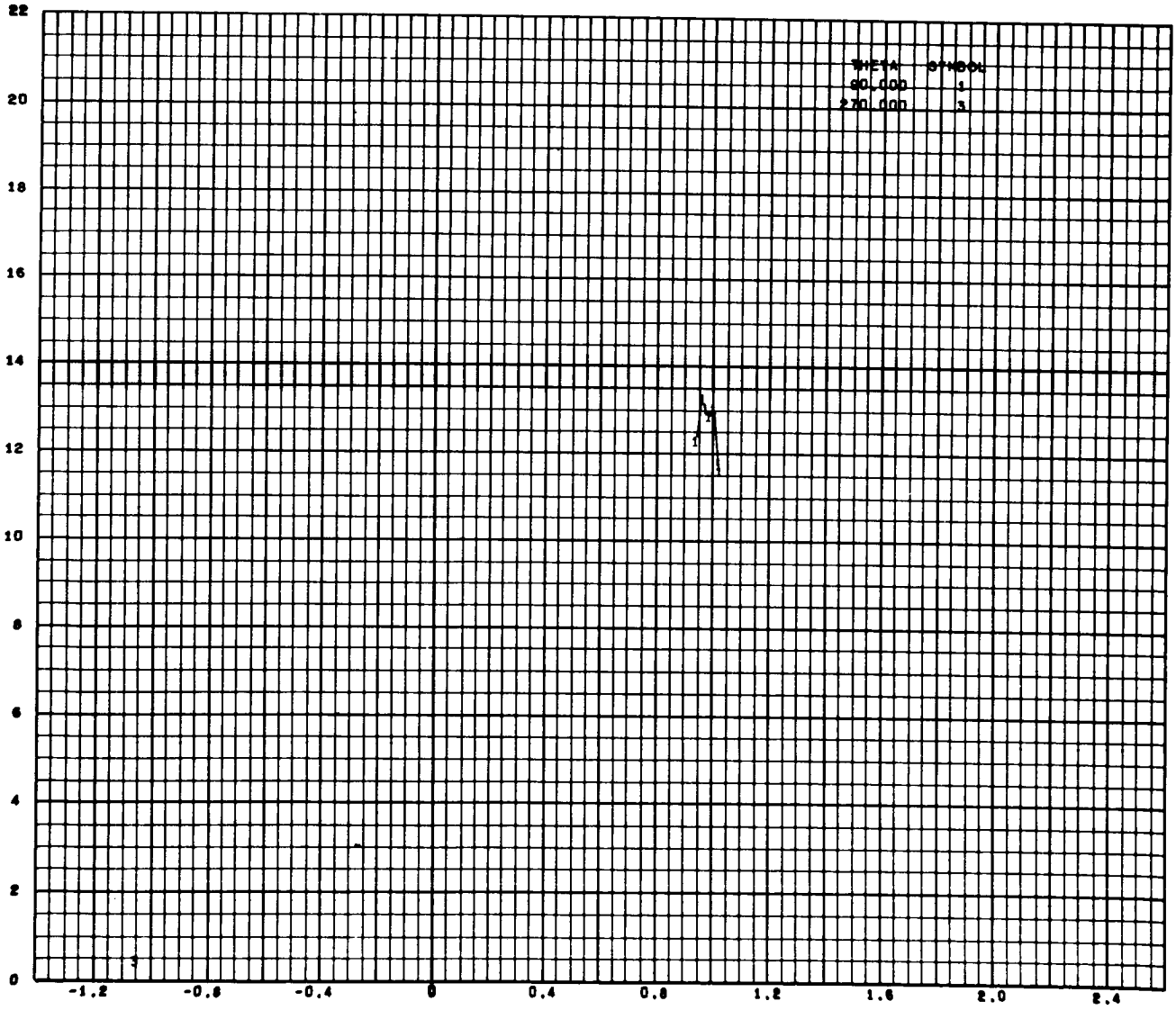
RE/FT --- 2.2476*10+6
Q(OM) --- 9.2364 BTU/SQ FT SEC

PLOT SERIES NUMBER 81

TEST GROUP	TIME (SEC)
111*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
019 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.22 DEG
ANGLE OF YAW --------- -4.64 DEG
TOTAL PRESSURE ------- 1846.30 PSIA
TOTAL TEMPERATURE ---- 1889.50 DEG RANKINE

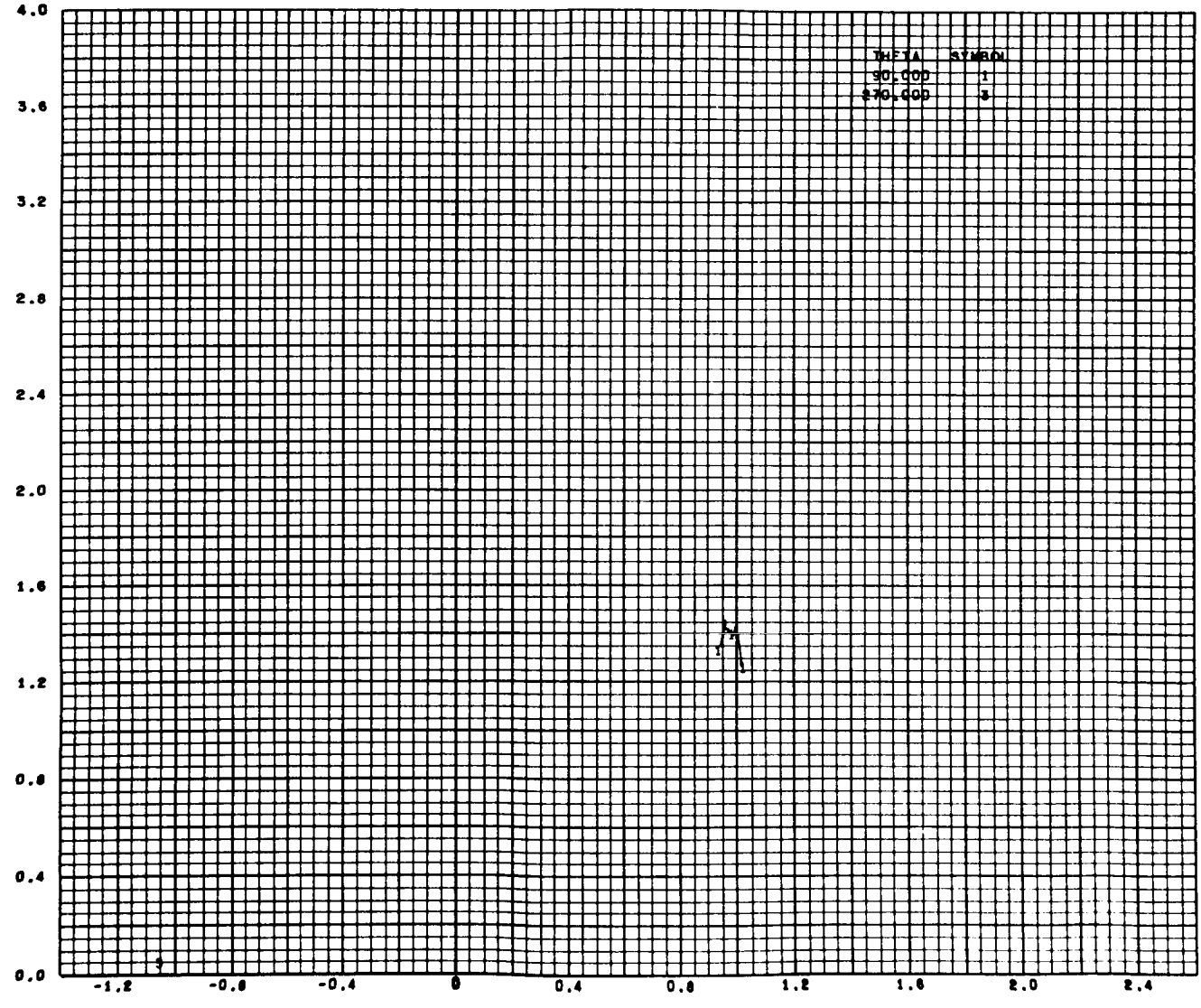
RE/FT --- 2.2476*10+6
Q(OM) --- 9.2364 BTU/SQ FT SEC

PLOT SERIES NUMBER 81

TEST GROUP	TIME (SEC)
111*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
021 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.22 DEG
ANGLE OF YAW --------- -4.64 DEG
TOTAL PRESSURE ------- 1846.30 PSIA
TOTAL TEMPERATURE ---- 1889.50 DEG RANKINE

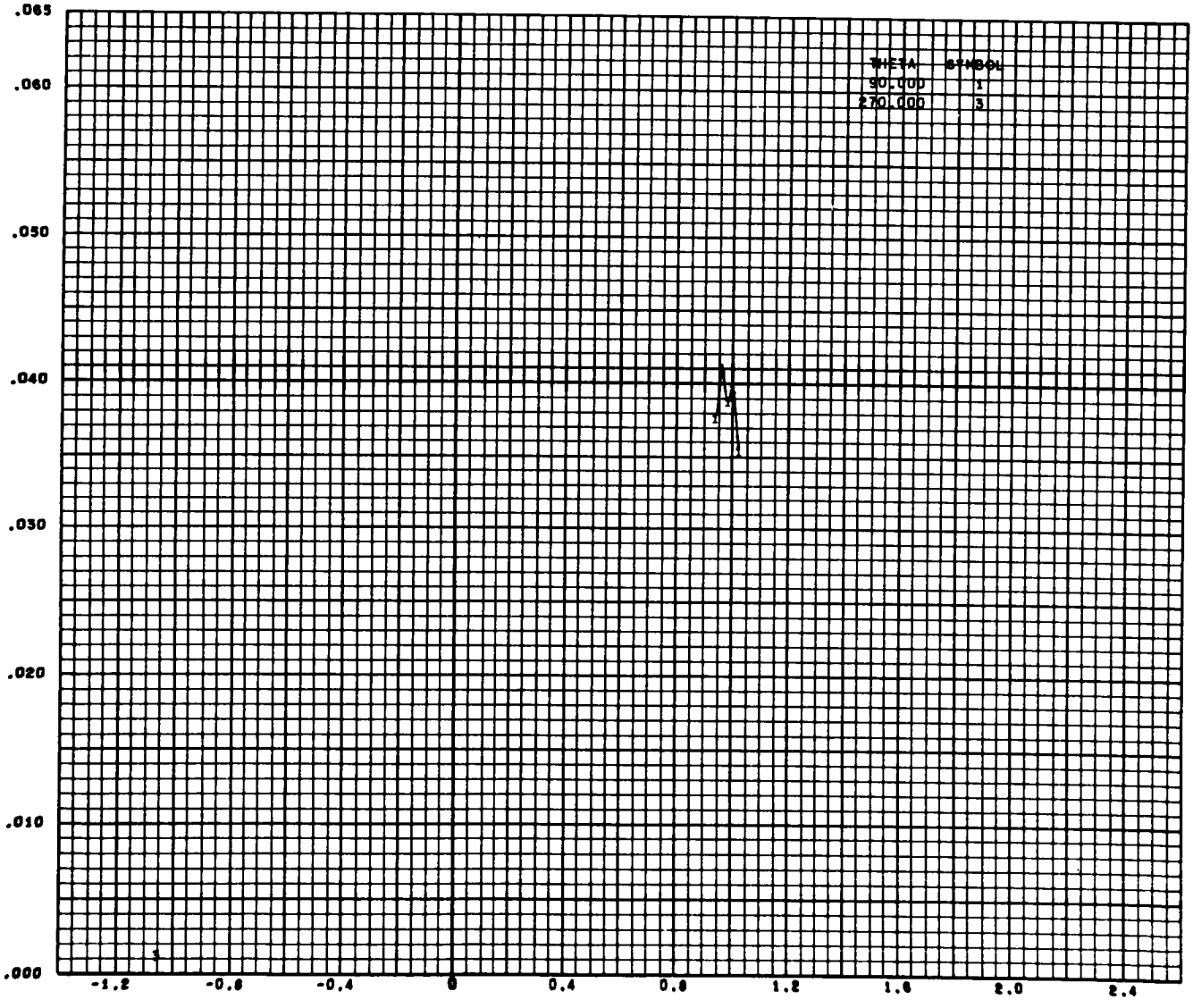
RE/FT --- 2.2476*10+6
Q(CM) --- 9.2364 BTU/SQ FT SEC

PLOT SERIES NUMBER 81

TEST GROUP	TIME (SEC)
111*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
023 000



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A-573 SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.22 DEG
ANGLE OF YAW --------- -4.64 DEG
TOTAL PRESSURE ------- 1846.30 PSIA
TOTAL TEMPERATURE ---- 1889.50 DEG RANKINE

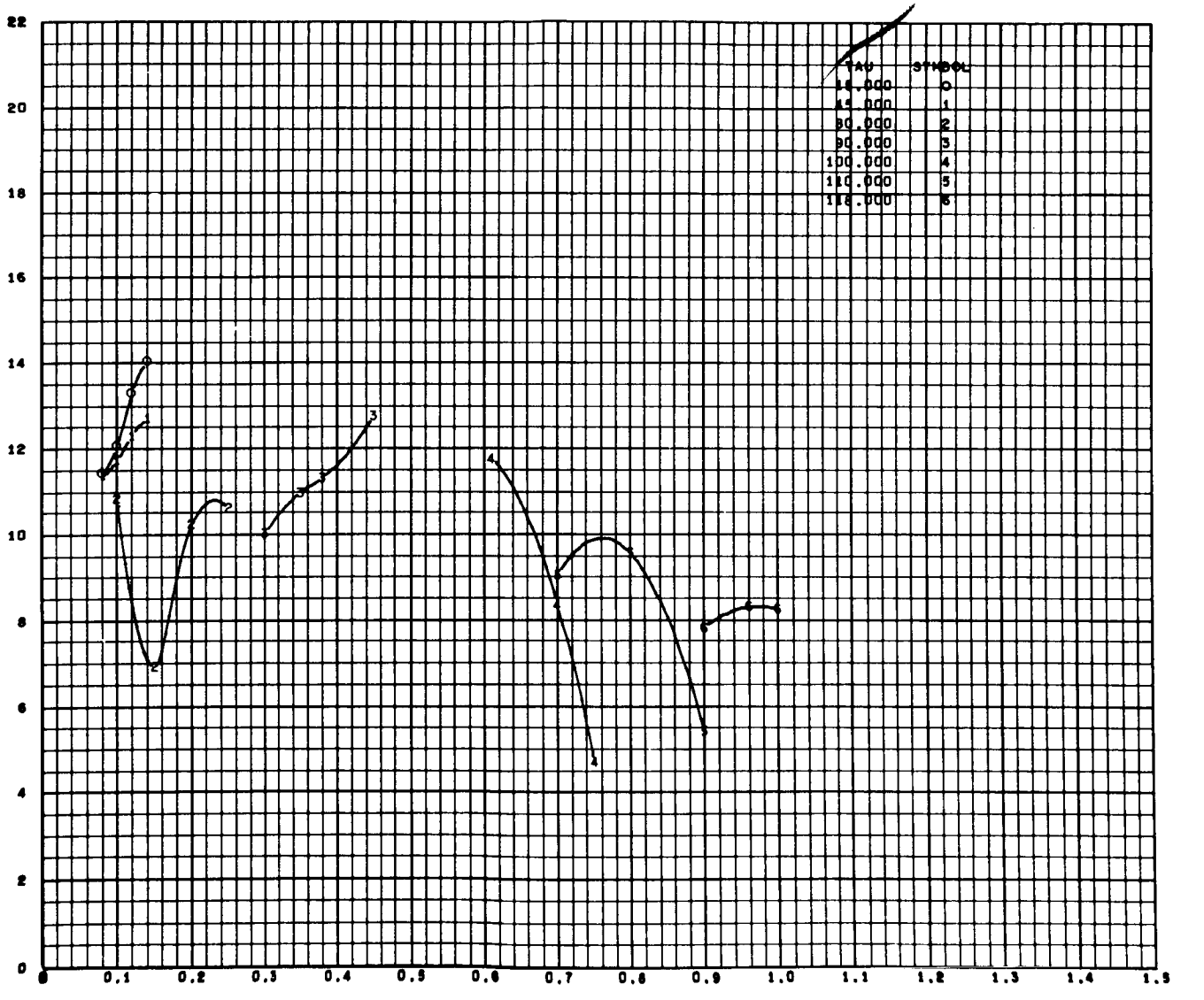
RE/FT --- 2.2476*10+6
Q(OM) --- 9.2364 BTU/SQ FT SEC

PLOT SERIES NUMBER 81

TEST GROUP	TIME (SEC)
111*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
020 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.22 DEG
ANGLE OF YAW --------- -4.64 DEG
TOTAL PRESSURE ------- 1846.30 PSIA
TOTAL TEMPERATURE ---- 1889.50 DEG RANKINE

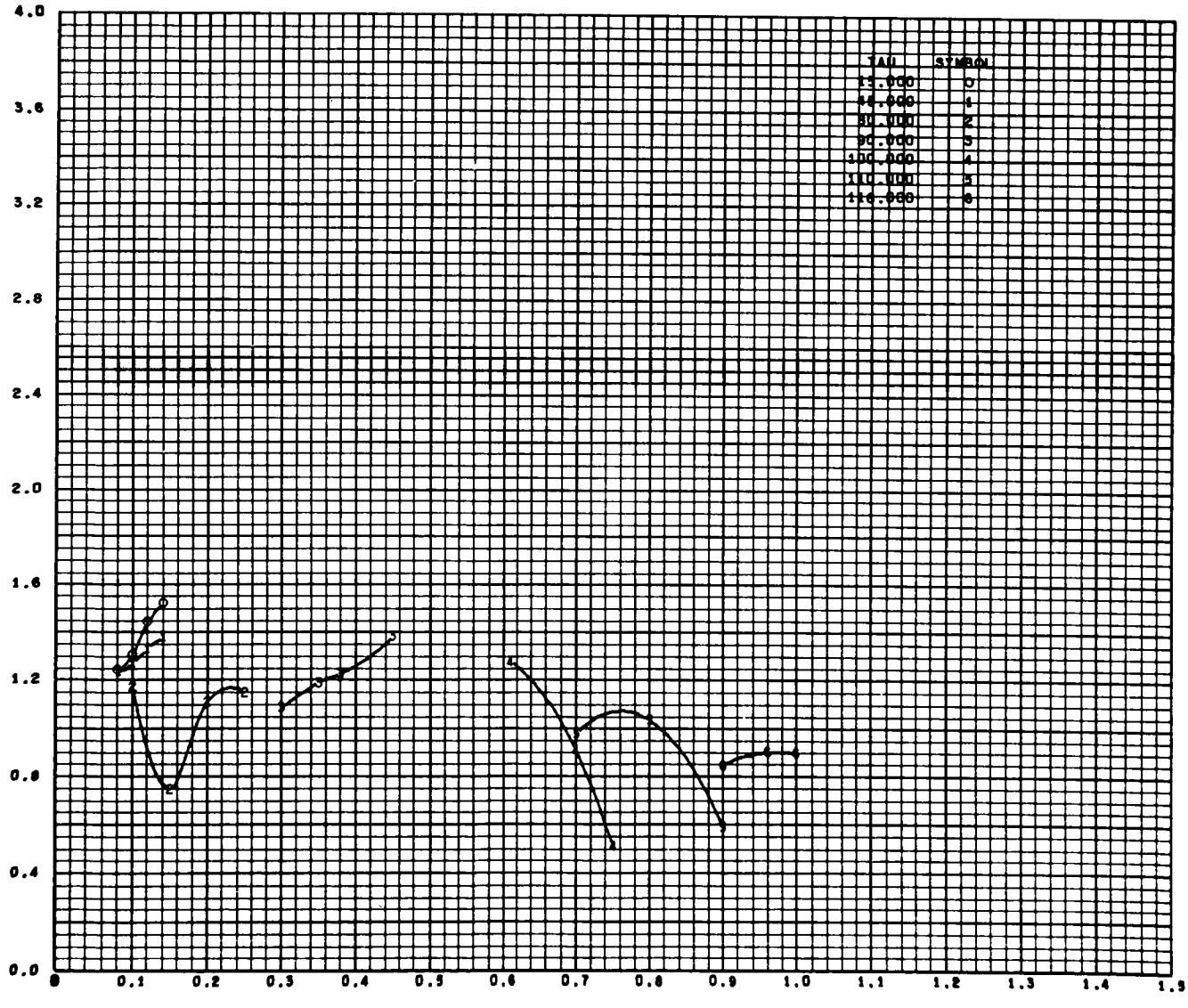
RE/FT --- 2.2476*10+6
Q(OM) --- 9.2364 BTU/SQ FT SEC

PLOT SERIES NUMBER 81

TEST GROUP	TIME (SEC)
111*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
022 000



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HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 81 | 3937-11 024 000

APOLLO H-11

AEDC, TUNNEL C

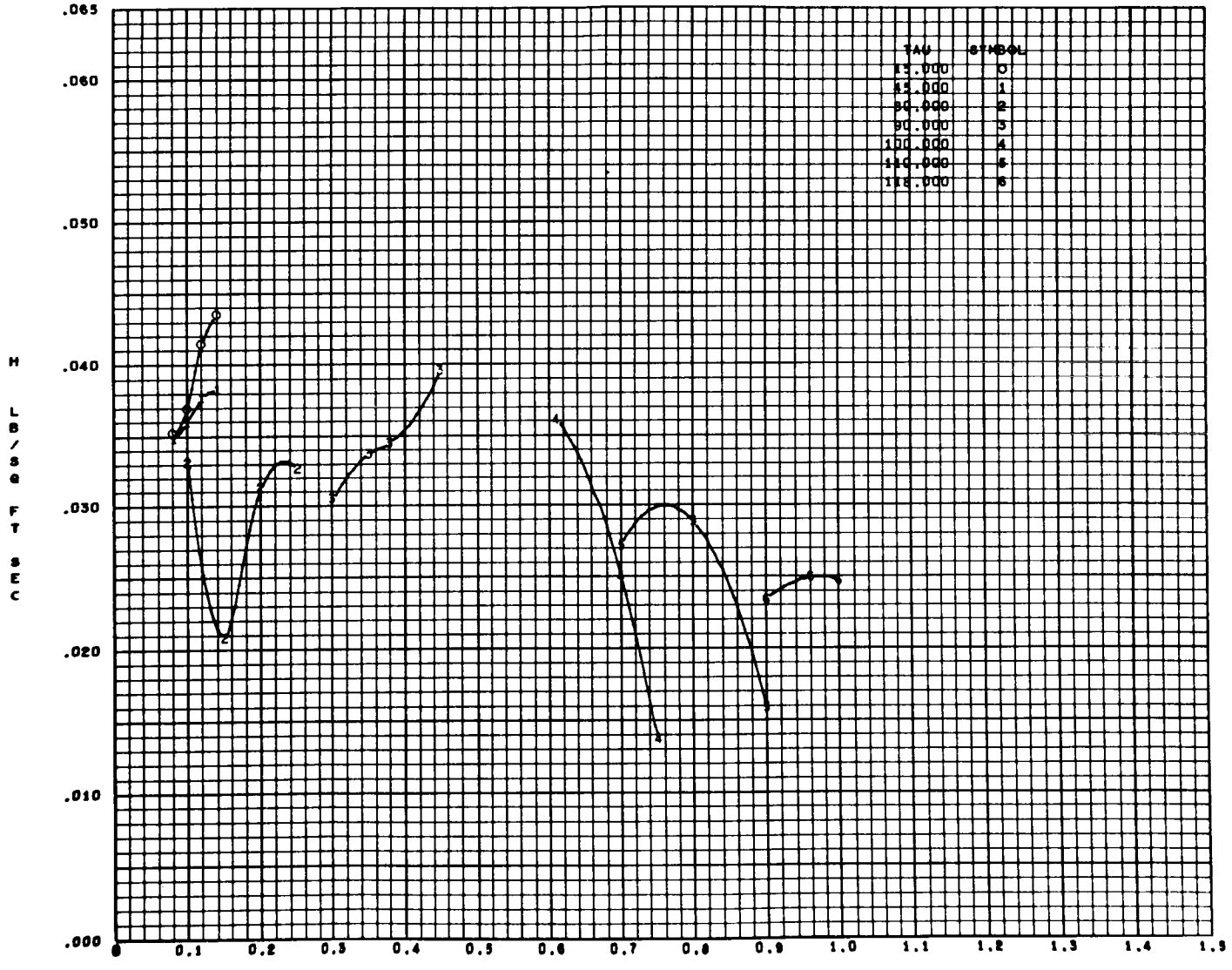
JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.22 DEG
ANGLE OF YAW --------- -4.64 DEG
TOTAL PRESSURE ------- 1846.30 PSIA
TOTAL TEMPERATURE ---- 1889.50 DEG RANKINE

RE/FT --- 2.2476*10+6
Q(OM) --- 9.2364 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
111*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.22 DEG
ANGLE OF YAW --------- 4.64 DEG
TOTAL PRESSURE -------- 1849.80 PSIA
TOTAL TEMPERATURE ---- 1894.70 DEG RANKINE

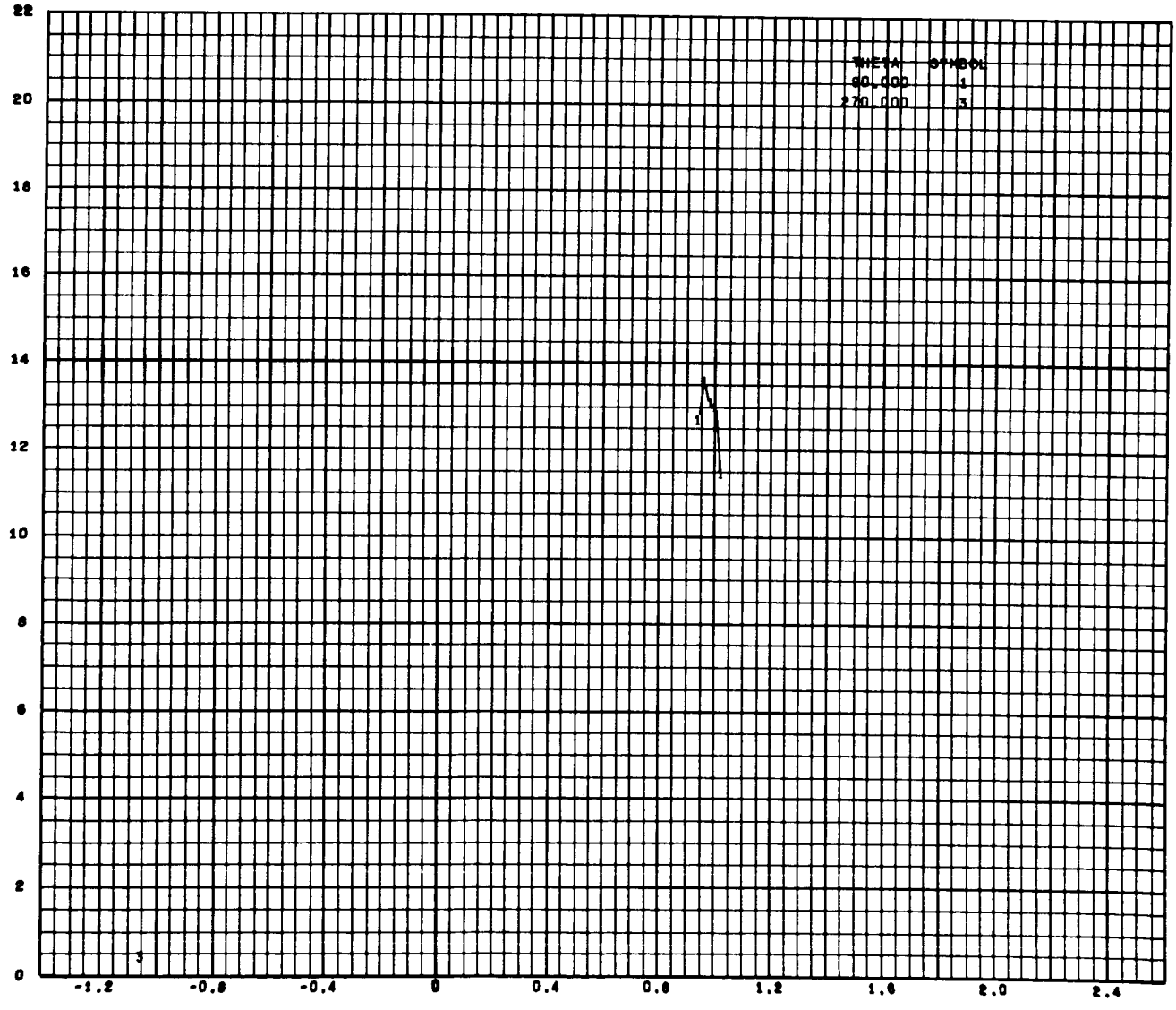
RE/FT --- 2.2406*10+6
Q(OM) --- 9.2476 BTU/SQ FT SEC

PLOT SERIES NUMBER 82

TEST GROUP	TIME (SEC)
112*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
025 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.22 DEG
ANGLE OF YAW --------- 4.64 DEG
TOTAL PRESSURE ------- 1849.80 PSIA
TOTAL TEMPERATURE ---- 1894.70 DEG RANKINE

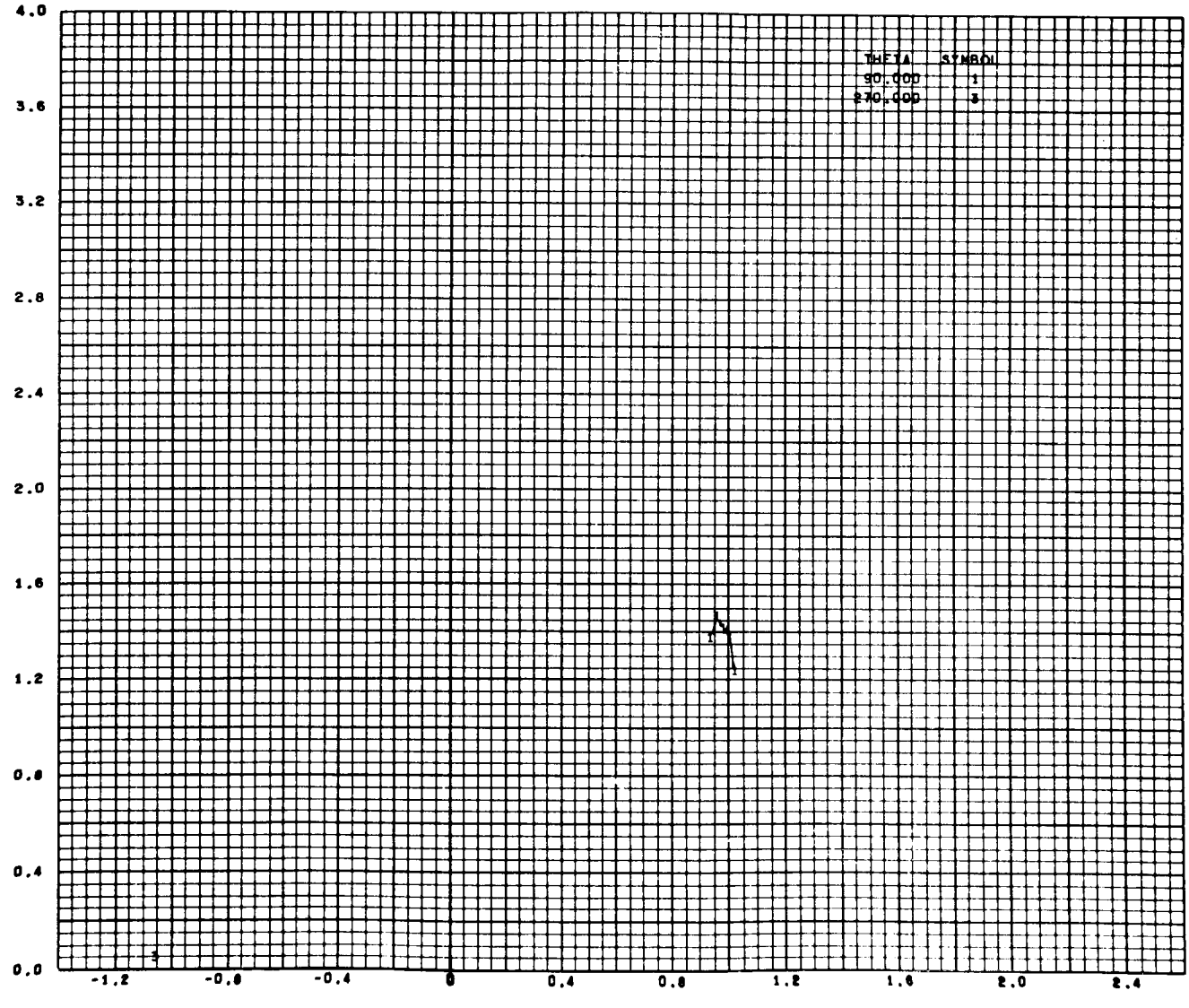
RE/FT --- 2.2406*10+6
Q(OM) --- 9.2476 BTU/SQ FT SEC

PLOT SERIES NUMBER 82

TEST GROUP	TIME (SEC)
112*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
027 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.22 DEG
ANGLE OF YAW --------- 4.64 DEG
TOTAL PRESSURE ------- 1849.80 PSIA
TOTAL TEMPERATURE ---- 1894.70 DEG RANKINE

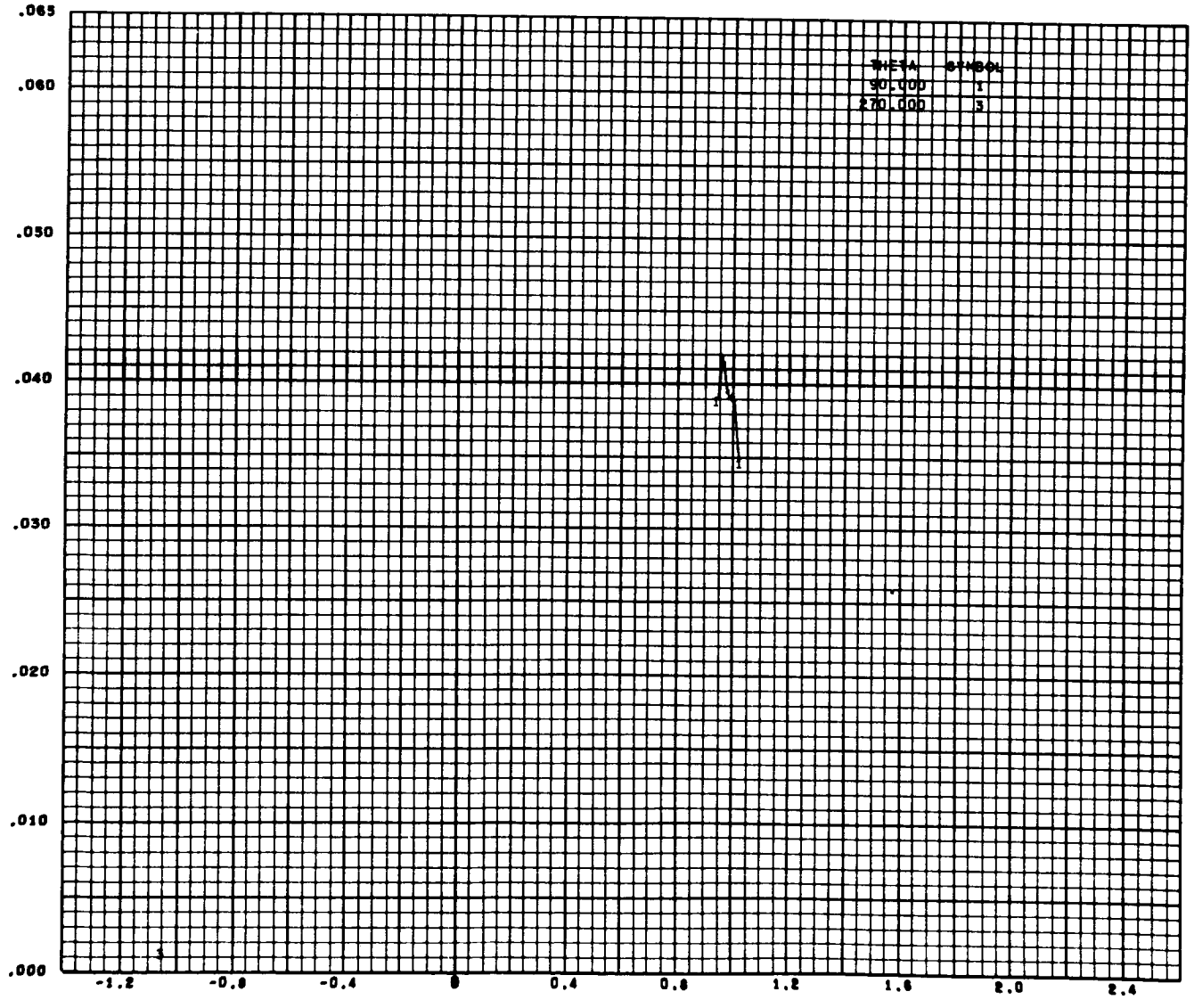
RE/FT --- 2.2406*10+6
Q(OM) --- 9.2476 BTU/SQ FT SEC

PLOT SERIES NUMBER 82

TEST GROUP	TIME (SEC)
112*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
029 000



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A-579 SID 64-2080

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.22 DEG
ANGLE OF YAW --------- 4.64 DEG
TOTAL PRESSURE ------- 1849.80 PSIA
TOTAL TEMPERATURE ---- 1894.70 DEG RANKINE

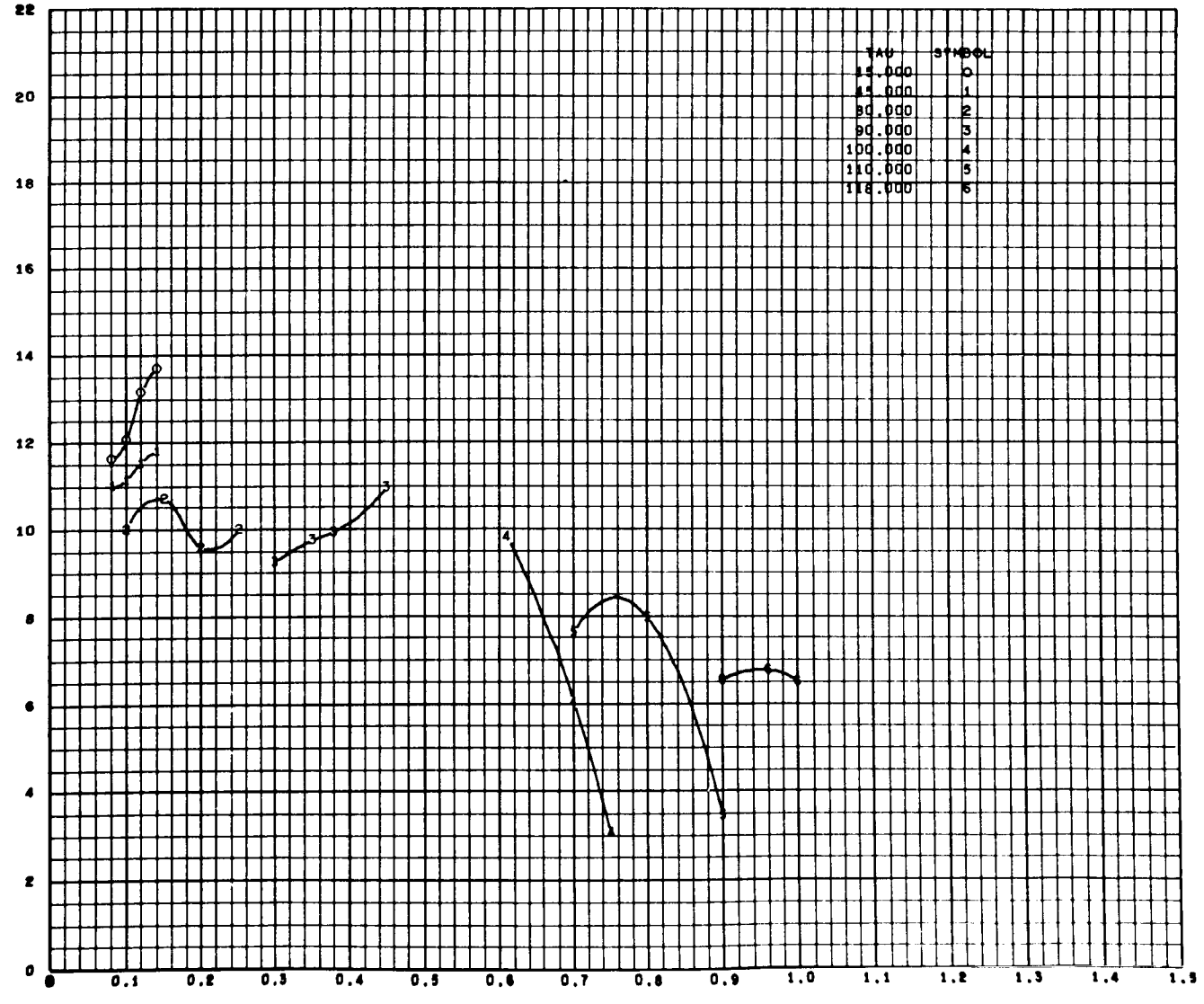
RE/FT --- 2.2406*10+6
Q(OM) --- 9.2476 BTU/SQ FT SEC

PLOT SERIES NUMBER 82

TEST GROUP	TIME (SEC)
112*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
026 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.22 DEG
ANGLE OF YAW --------- 4.64 DEG
TOTAL PRESSURE ------- 1849.80 PSIA
TOTAL TEMPERATURE ---- 1894.70 DEG RANKINE

RE/FT --- 2.2406*10+6
Q(OM) --- 9.2476 BTU/SQ FT SEC

PLOT SERIES NUMBER 82

TEST GROUP	TIME (SEC)
112*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
028 000

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 147.22 DEG
ANGLE OF YAW --------- 4.64 DEG
TOTAL PRESSURE ------- 1849.80 PSIA
TOTAL TEMPERATURE ---- 1894.70 DEG RANKINE

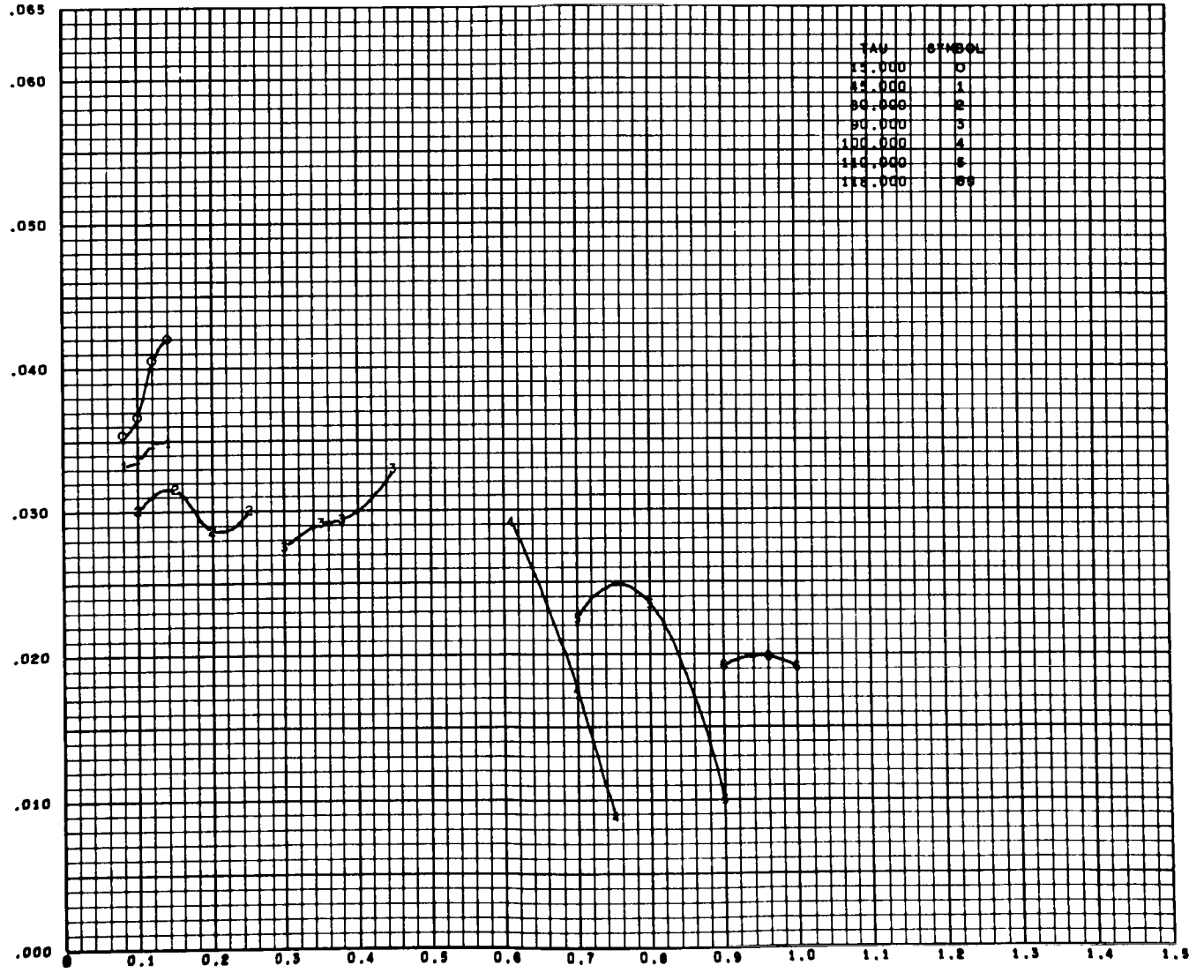
RE/FT --- 2.2406*10+6
Q(OM) --- 9.2476 BTU/SQ FT SEC

PLOT SERIES NUMBER 82

TEST GROUP	TIME (SEC)
112*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
030 000



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[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.55 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 1849.50 PSIA
TOTAL TEMPERATURE ---- 1893.10 DEG RANKINE

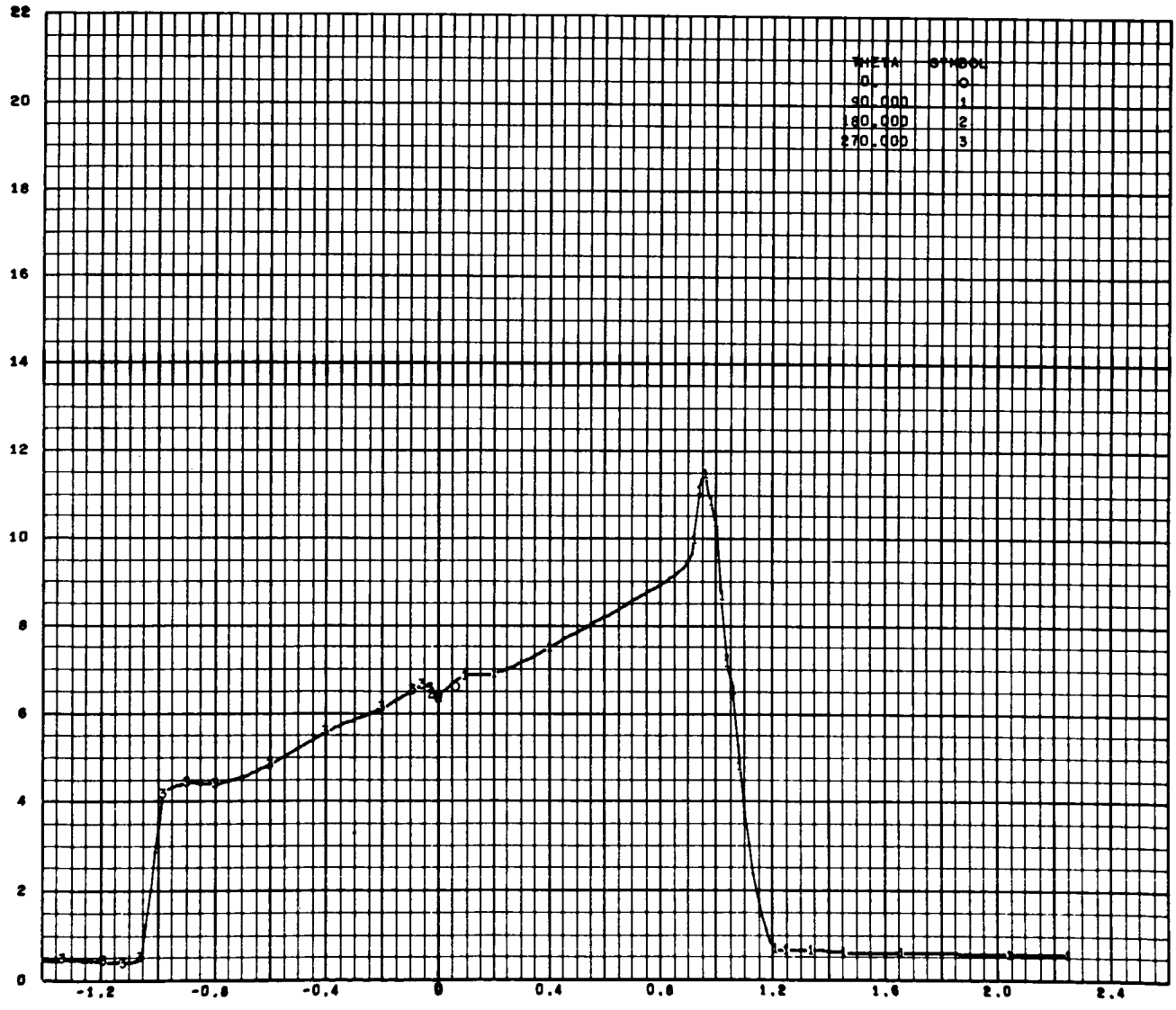
RE/FT --- 2.2437*10+6
Q(OM) --- 9.2468 BTU/SQ FT SEC

PLOT SERIES NUMBER 83

TEST GROUP	TIME (SEC)
104*	2.70
113	2.75
120	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
031 000



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[redacted]

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.55 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1849.50 PSIA
TOTAL TEMPERATURE ---- 1893.10 DEG RANKINE

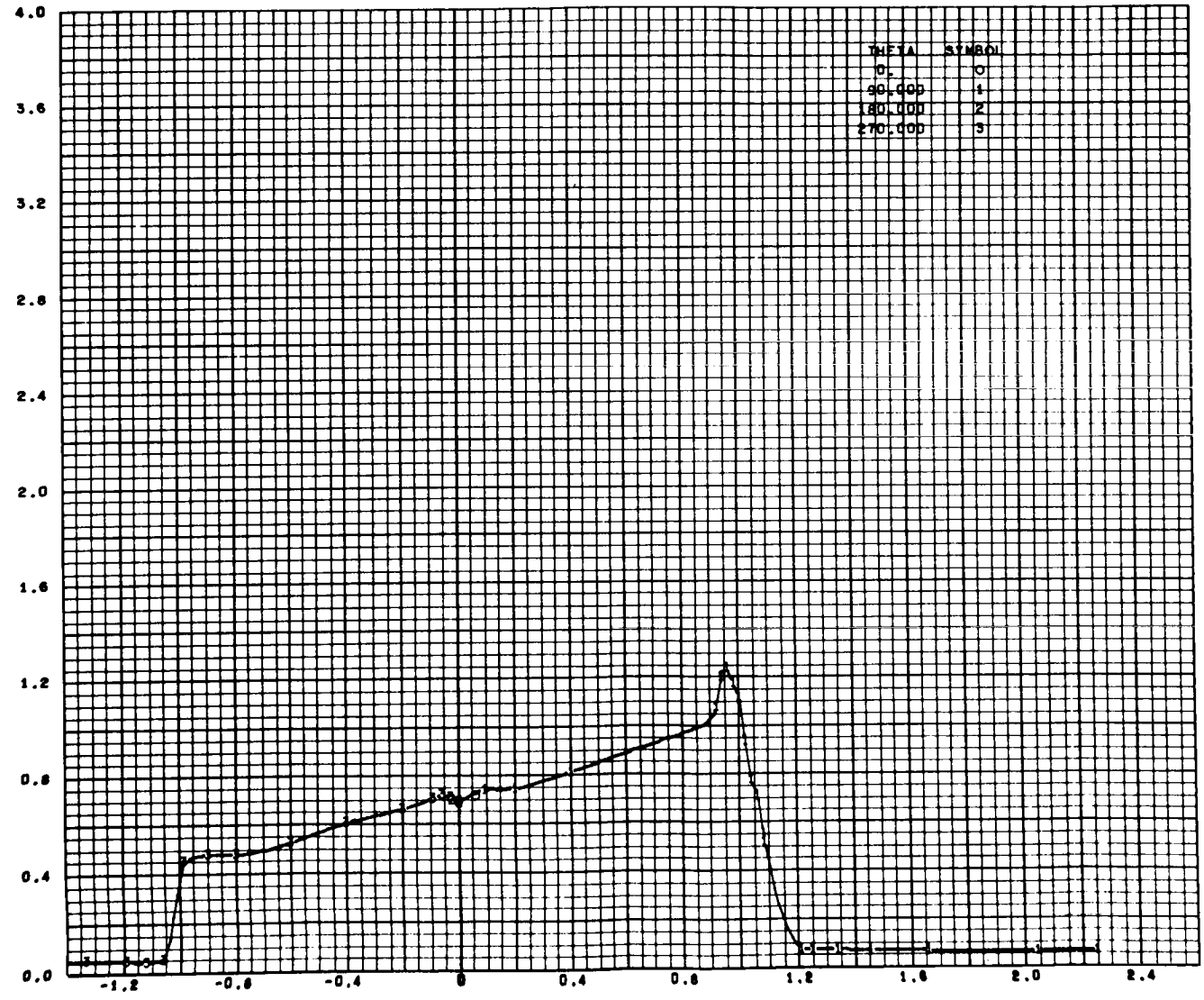
RE/FT --- 2.2437*10+6
Q(OM) --- 9.2468 BTU/SQ FT SEC

PLOT SERIES NUMBER 83

TEST GROUP	TIME (SEC)
104*	2.70
113	2.75
120	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
034 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.55 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1849.50 PSIA
TOTAL TEMPERATURE ---- 1893.10 DEG RANKINE

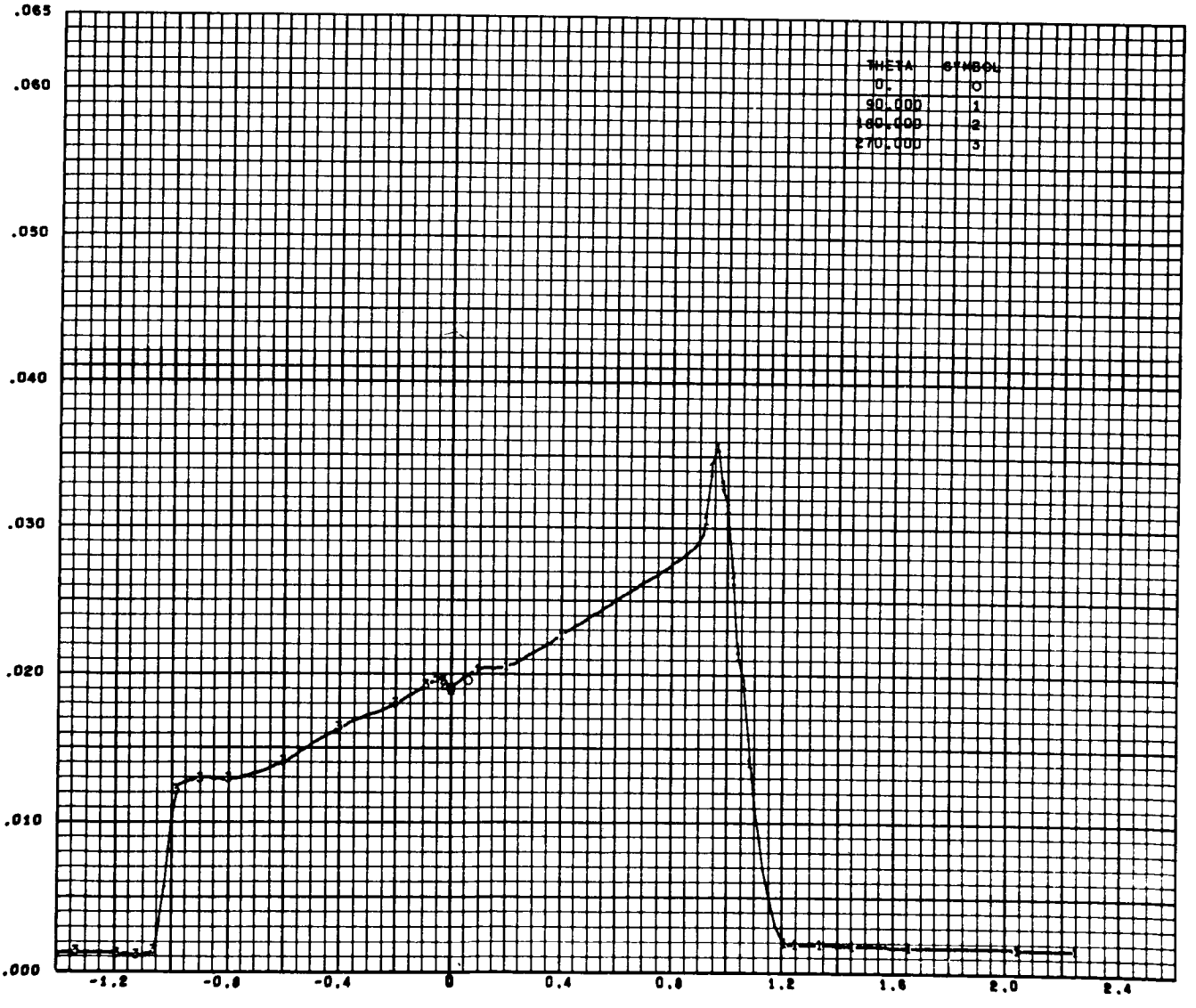
RE/FT --- 2.2437*10+6
Q(OM) --- 9.2468 BTU/SQ FT SEC

PLOT SERIES NUMBER 83

TEST GROUP	TIME (SEC)
104*	2.70
113	2.75
120	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
037 000



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A-585 SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.55 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1849.50 PSIA
TOTAL TEMPERATURE ---- 1893.10 DEG RANKINE

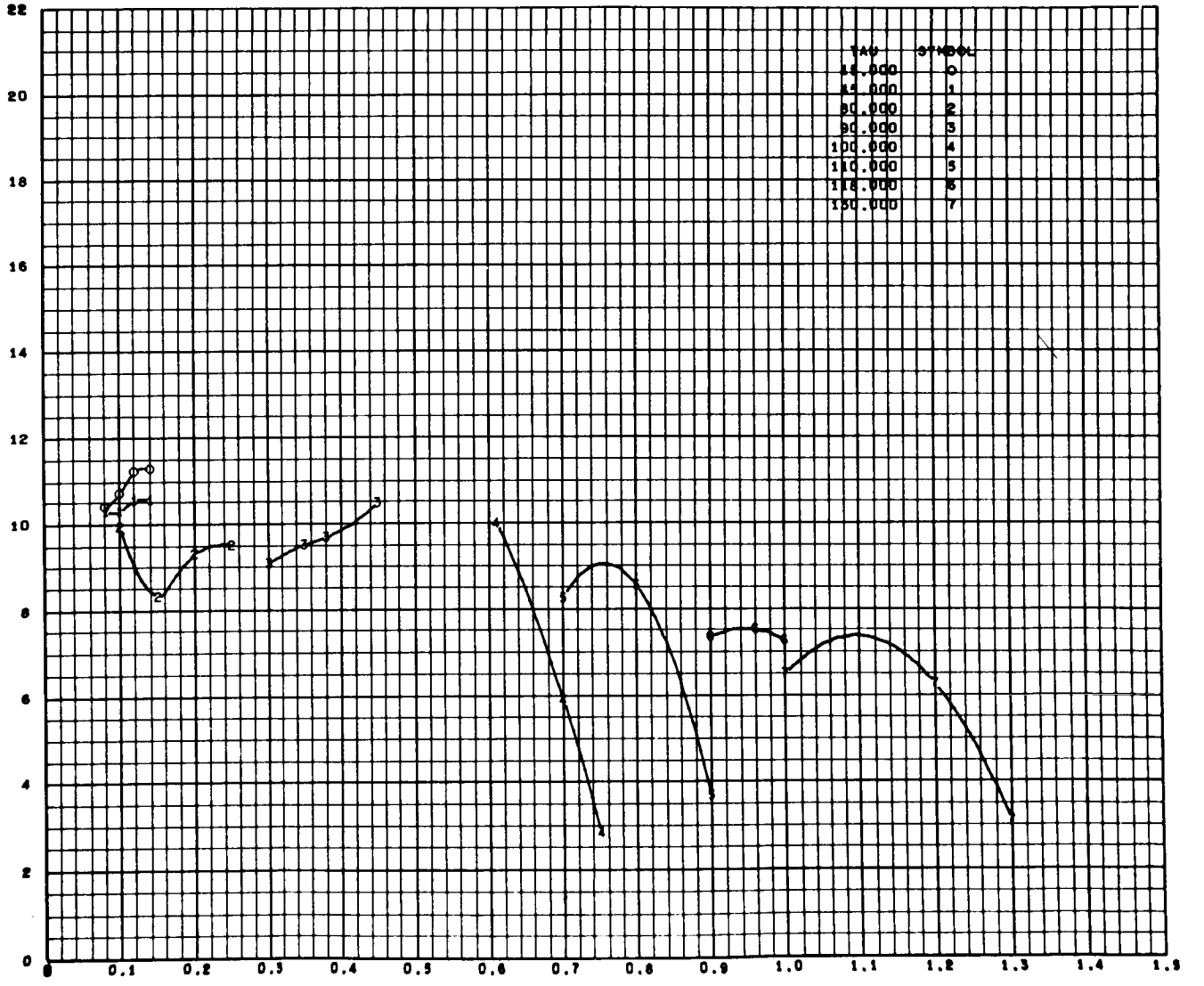
RE/FT --- 2.2437*10+6
Q(OM) --- 9.2468 BTU/SQ FT SEC

PLOT SERIES NUMBER 83

TEST GROUP	TIME (SEC)
104*	2.70
113	2.75
120	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
032 000



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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.55 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1849.50 PSIA
TOTAL TEMPERATURE ---- 1893.10 DEG RANKINE

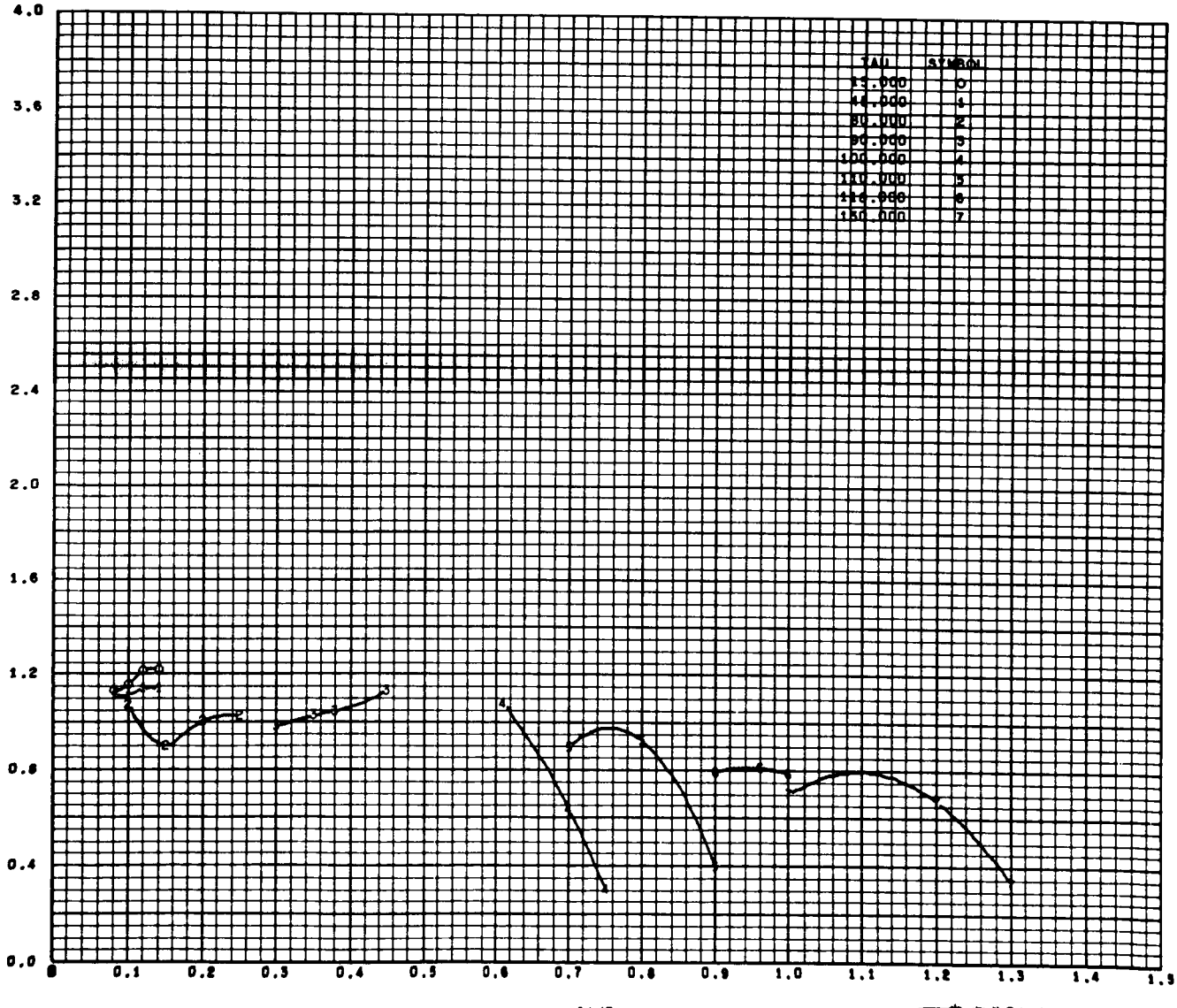
RE/FT --- 2.2437*10+6
Q(OM) --- 9.2468 BTU/SQ FT SEC

PLOT SERIES NUMBER 83

TEST GROUP	TIME (SEC)
104*	2.70
113	2.75
120	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
035 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.55 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1849.50 PSIA
TOTAL TEMPERATURE ---- 1893.10 DEG RANKINE

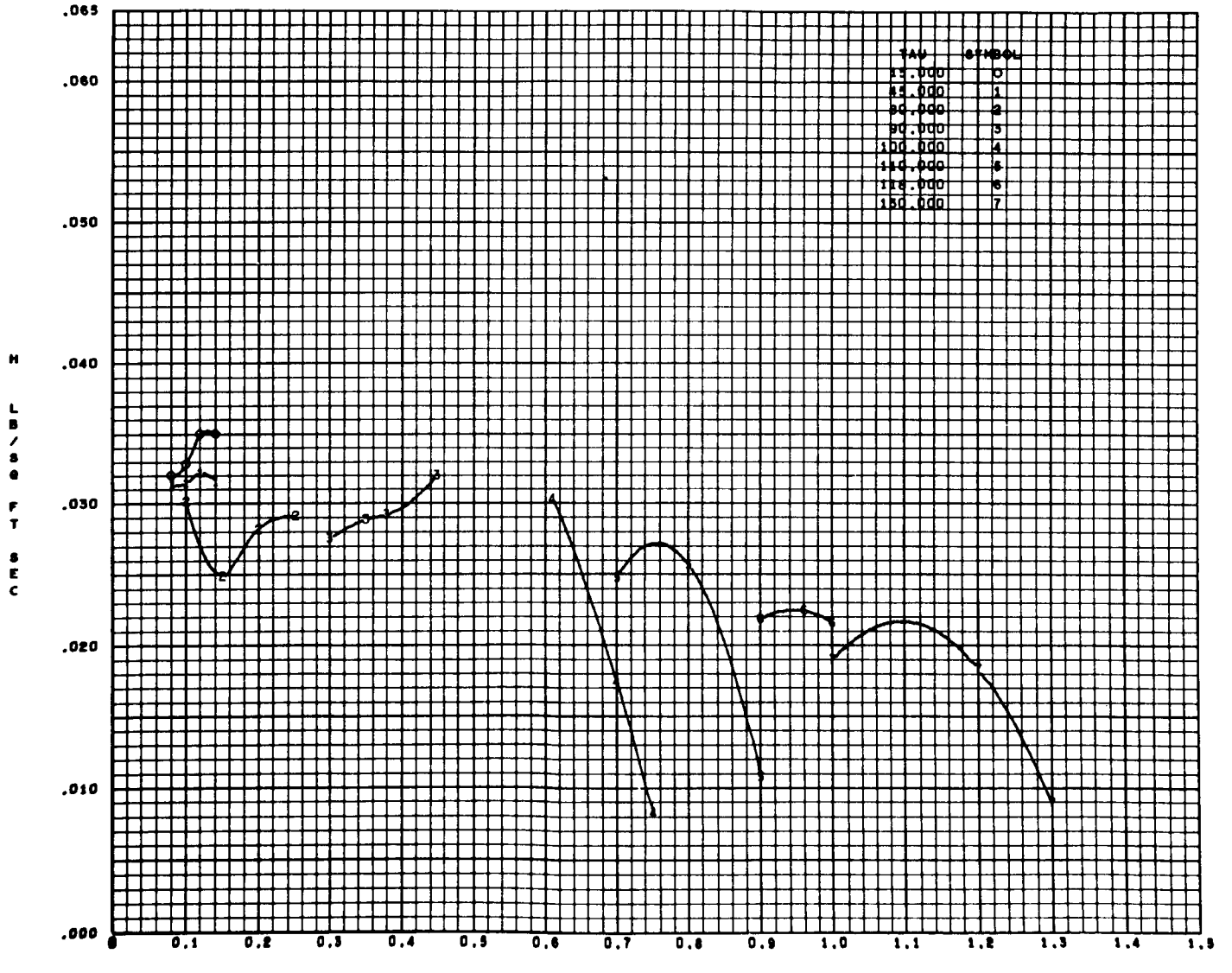
RE/FT --- 2.2437*10+6
Q(OM) --- 9.2468 BTU/SQ FT SEC

PLOT SERIES NUMBER 83

TEST GROUP	TIME (SEC)
104*	2.70
113	2.75
120	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
030 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.55 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1849.50 PSIA
TOTAL TEMPERATURE ---- 1893.10 DEG RANKINE

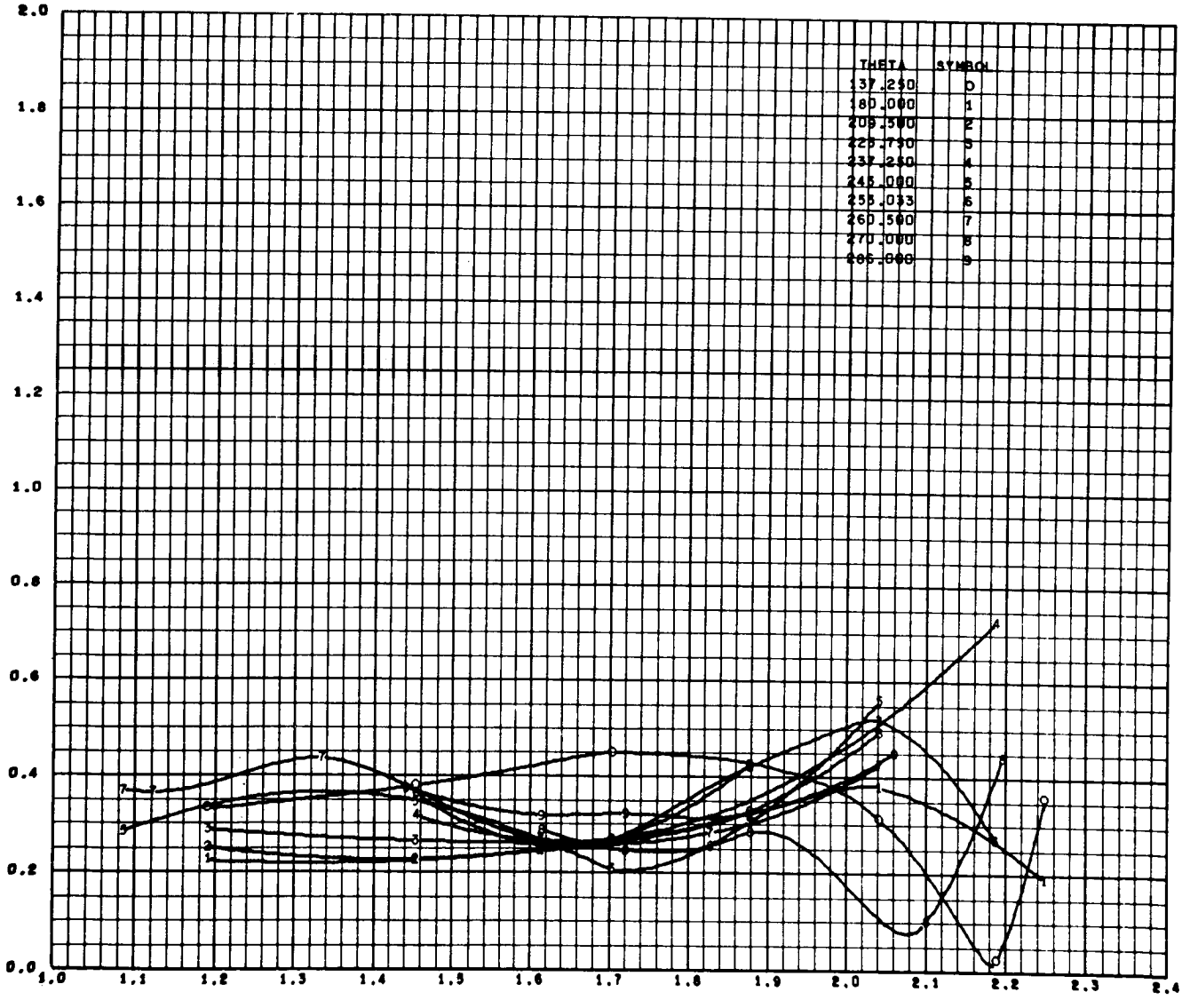
RE/FT --- 2.2437*10+6
Q(OM) --- 9.2468 BTU/SQ FT SEC

PLOT SERIES NUMBER 83

TEST GROUP	TIME (SEC)
104*	2.70
113	2.75
120	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
033 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.55 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1849.50 PSIA
TOTAL TEMPERATURE ---- 1893.10 DEG RANKINE

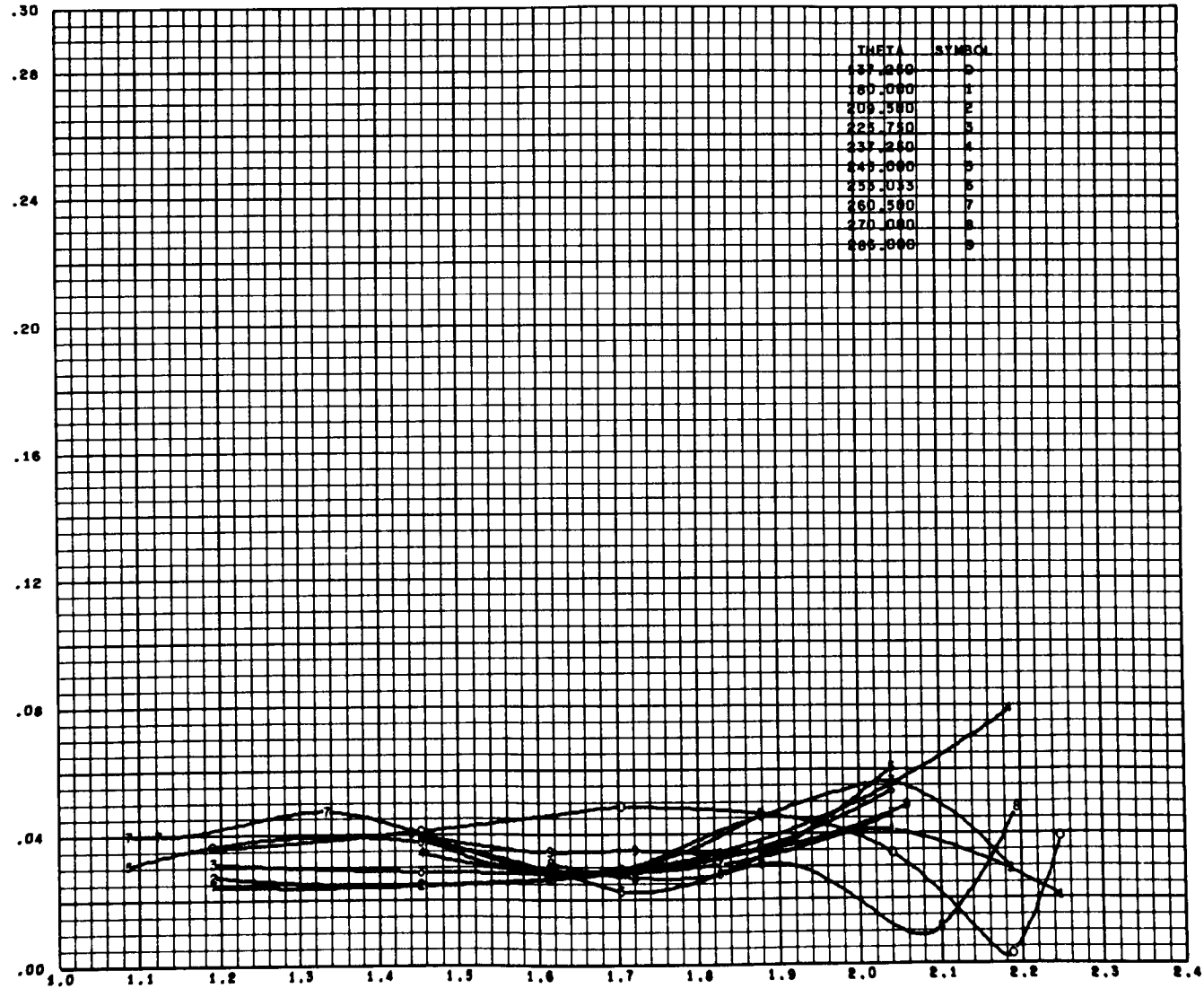
RE/FT --- 2.2437*10+6
Q(OM) --- 9.2468 BTU/SQ FT SEC

PLOT SERIES NUMBER 83

TEST GROUP	TIME (SEC)
104*	2.70
113	2.75
120	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
036 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.55 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1849.50 PSIA
TOTAL TEMPERATURE ---- 1893.10 DEG RANKINE

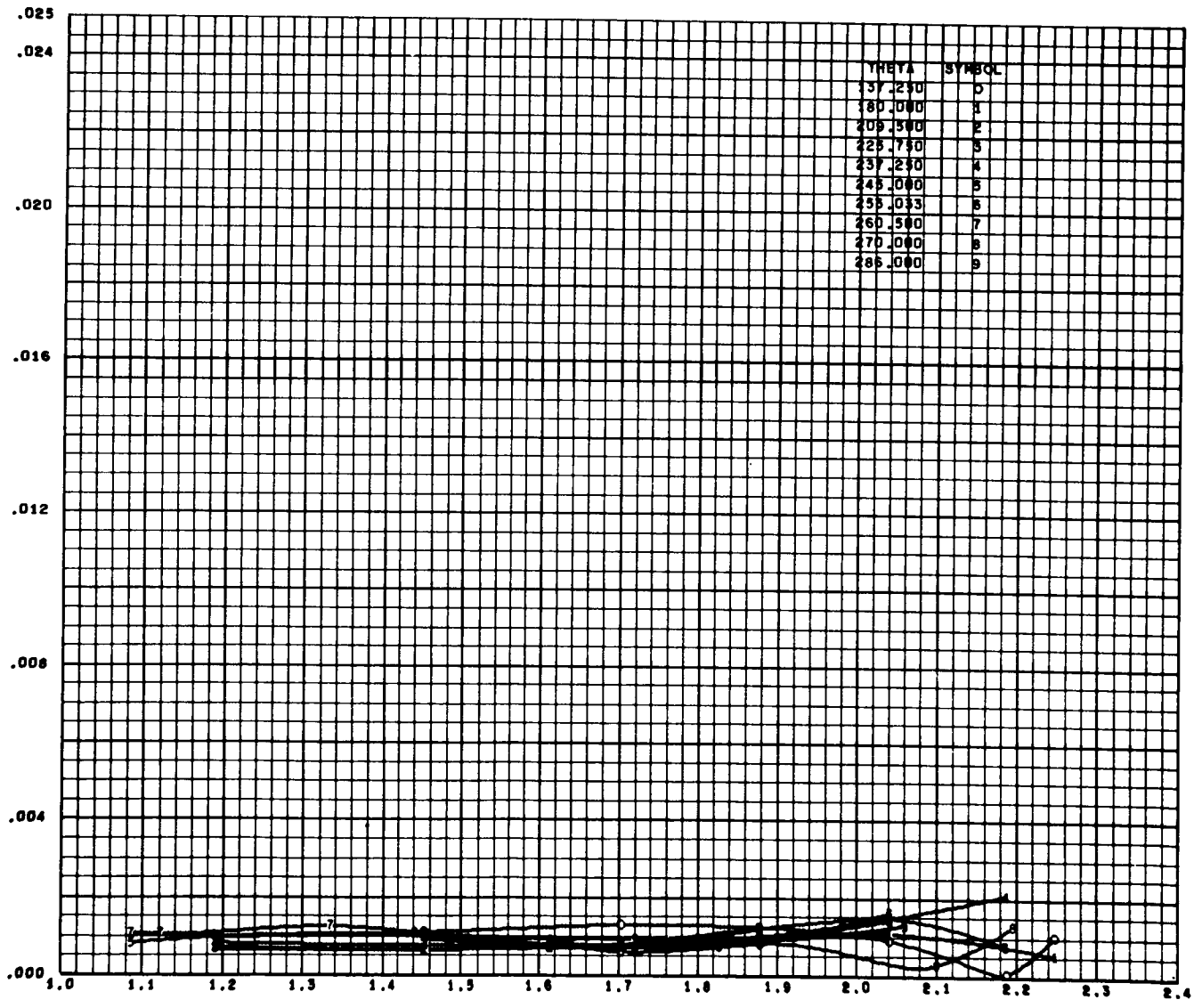
RE/FT --- 2.2437*10+6
Q(OM) --- 9.2468 BTU/SQ FT SEC

PLOT SERIES NUMBER 83

TEST GROUP	TIME (SEC)
104*	2.70
113	2.75
120	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
039 000



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HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 84 | 3937-11 040 000

APOLLO H-11

AEDC, TUNNEL C

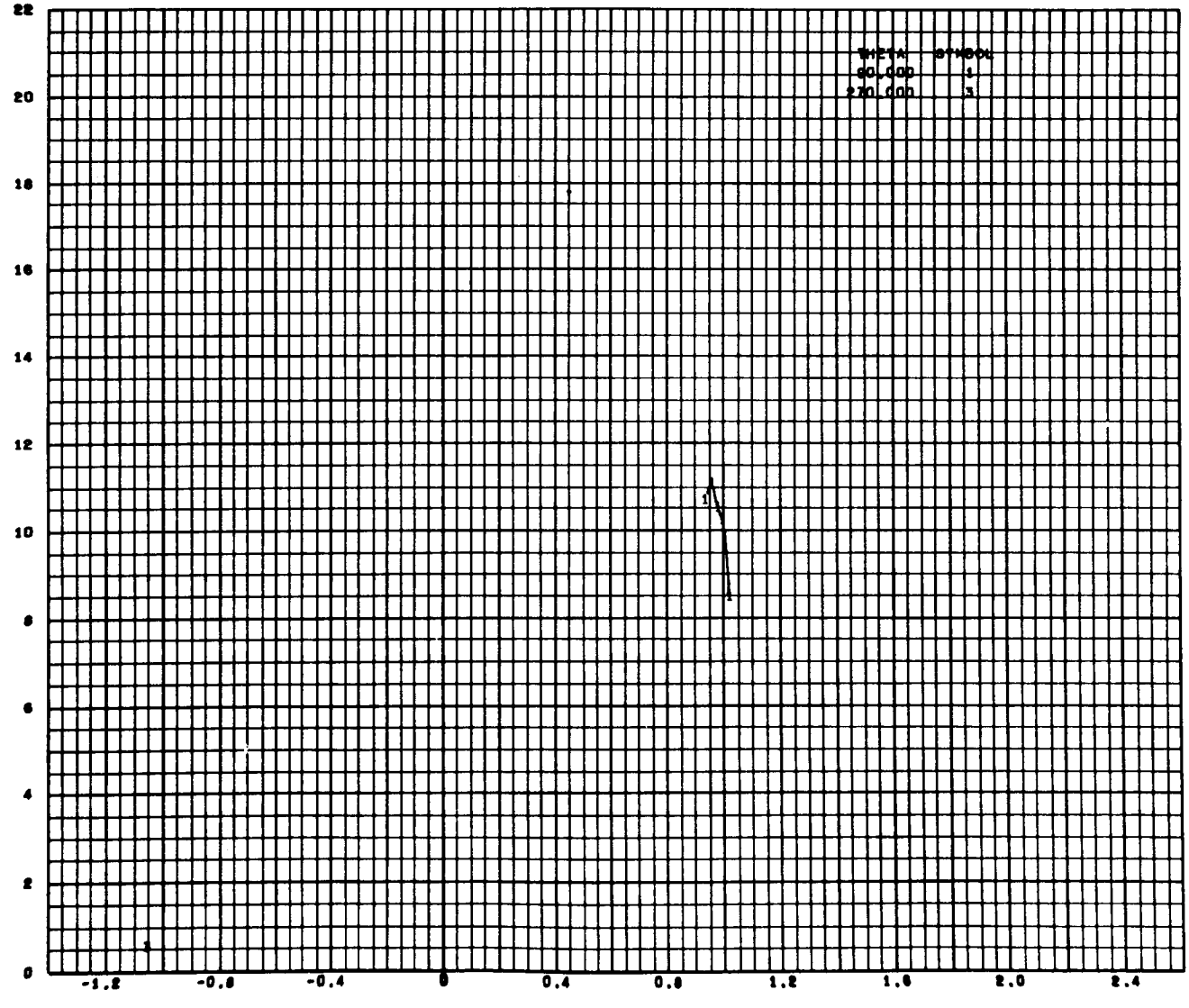
JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.14 DEG
ANGLE OF YAW --------- -5.17 DEG
TOTAL PRESSURE ------- 1851.80 PSIA
TOTAL TEMPERATURE ---- 1889.50 DEG RANKINE

RE/FT --- 2.2545*10+6
Q(CM) --- 9.2539 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
114*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.14 DEG
ANGLE OF YAW --------- -5.17 DEG
TOTAL PRESSURE ------- 1851.80 PSIA
TOTAL TEMPERATURE ---- 1889.50 DEG RANKINE

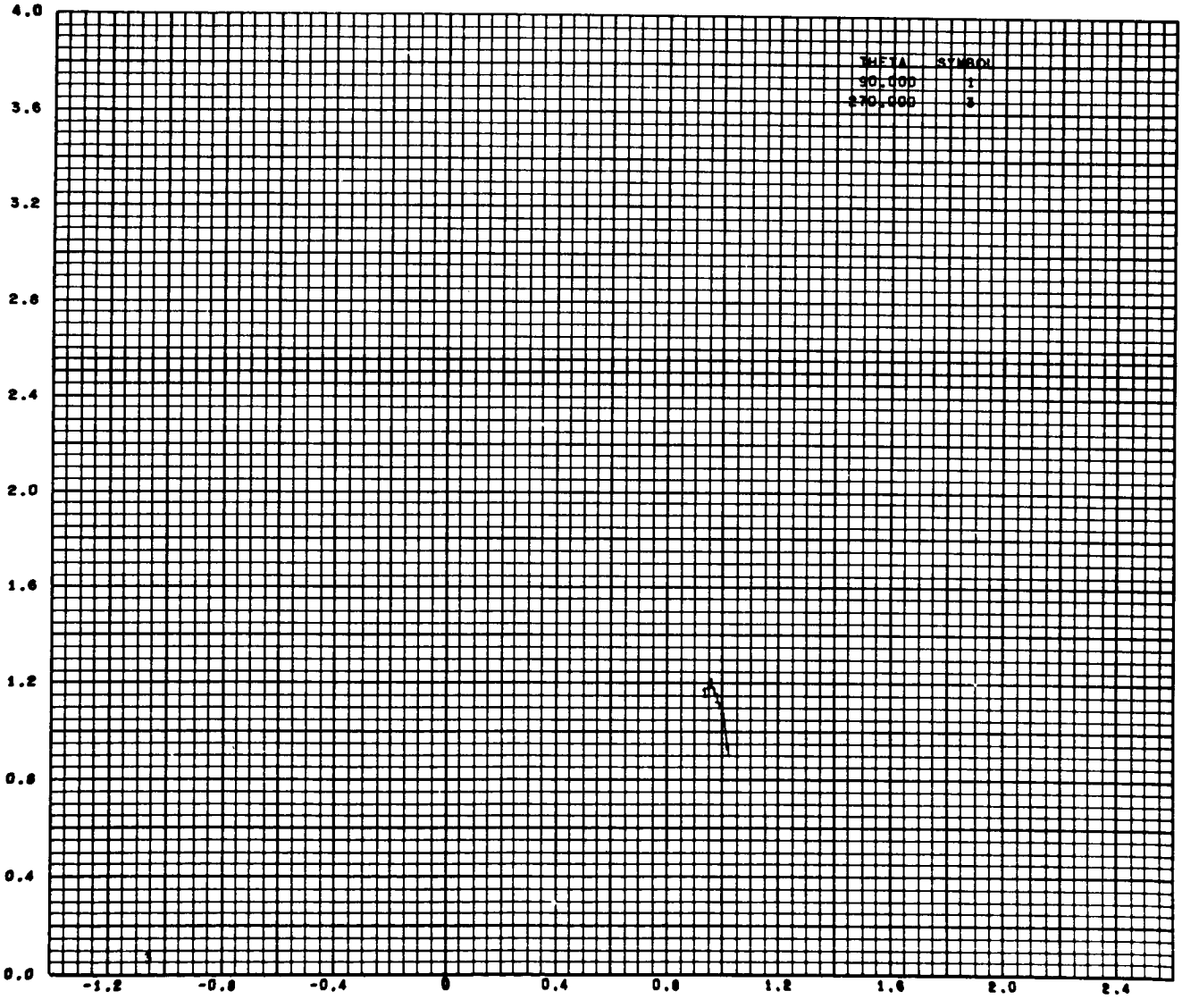
RE/FT --- 2.2545*10+6
Q(OM) --- 9.2539 BTU/SQ FT SEC

PLOT SERIES NUMBER 84

TEST GROUP	TIME (SEC)
114*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
042 000



A-593 SID 64-2080

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HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 84 | 3937-11 044 000

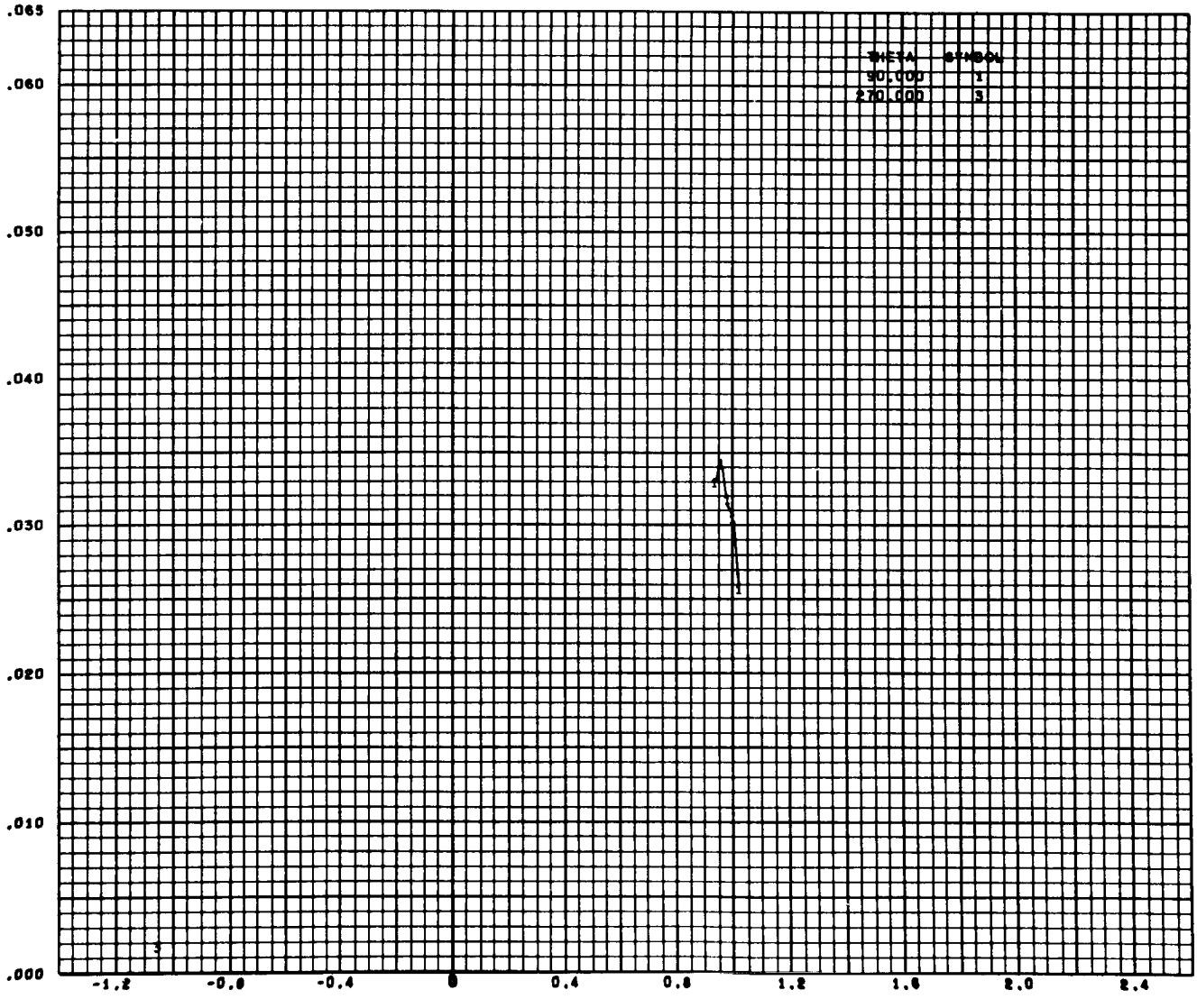
APOLLO H-11
AEDC, TUNNEL C
JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.14 DEG
ANGLE OF YAW --------- -5.17 DEG
TOTAL PRESSURE ------- 1851.80 PSIA
TOTAL TEMPERATURE ---- 1889.50 DEG RANKINE

RE/FT --- 2.2545*10+6
Q(OM) --- 9.2539 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
114*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.14 DEG
ANGLE OF YAW --------- -5.17 DEG
TOTAL PRESSURE ------- 1851.80 PSIA
TOTAL TEMPERATURE ---- 1889.50 DEG RANKINE

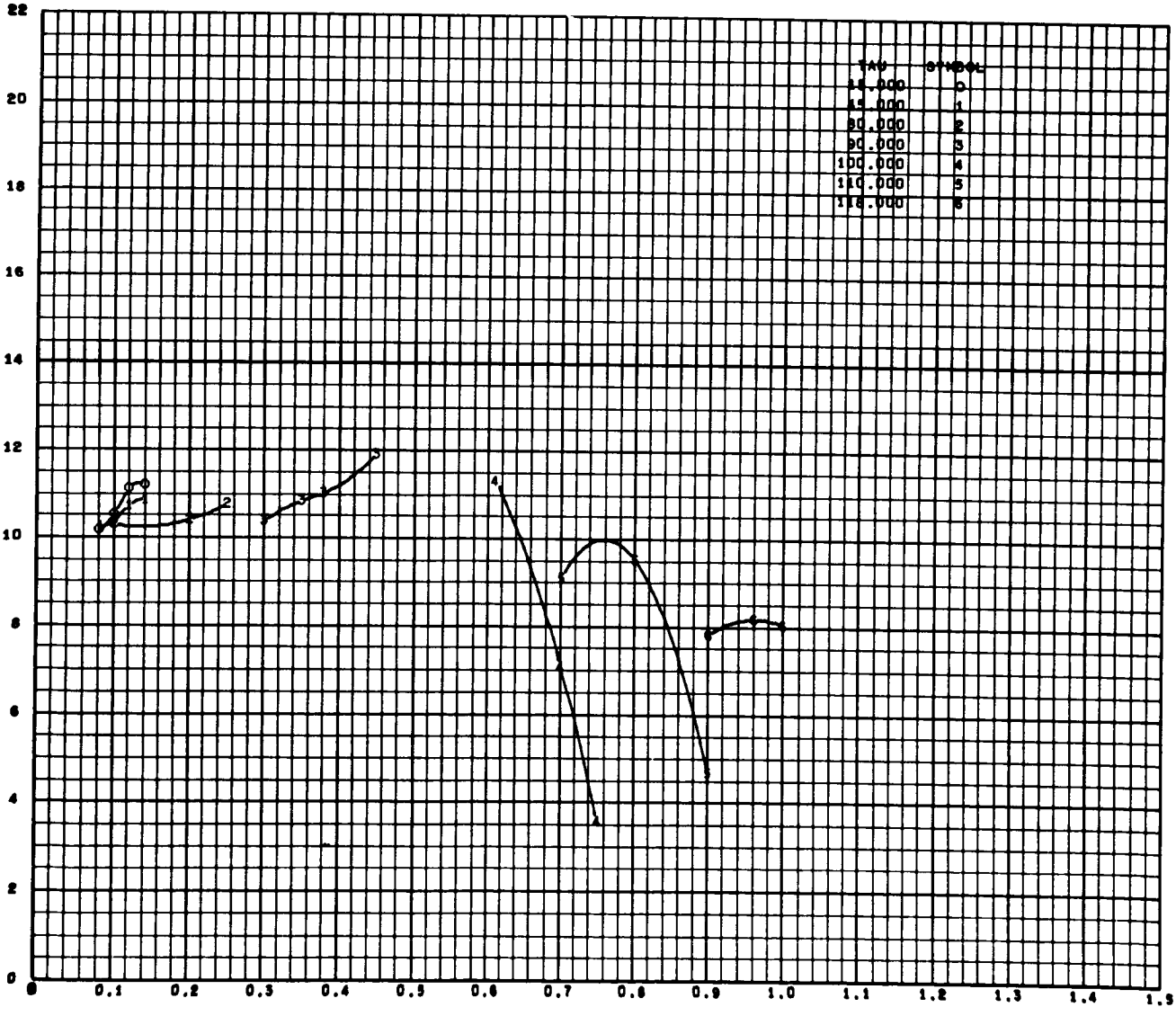
RE/FT --- 2.2545*10+6
Q(OM) --- 9.2539 BTU/SQ FT SEC

PLOT SERIES NUMBER 84

TEST GROUP	TIME (SEC)
114*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
041 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.14 DEG
ANGLE OF YAW --------- -5.17 DEG
TOTAL PRESSURE ------- 1851.80 PSIA
TOTAL TEMPERATURE ---- 1889.50 DEG RANKINE

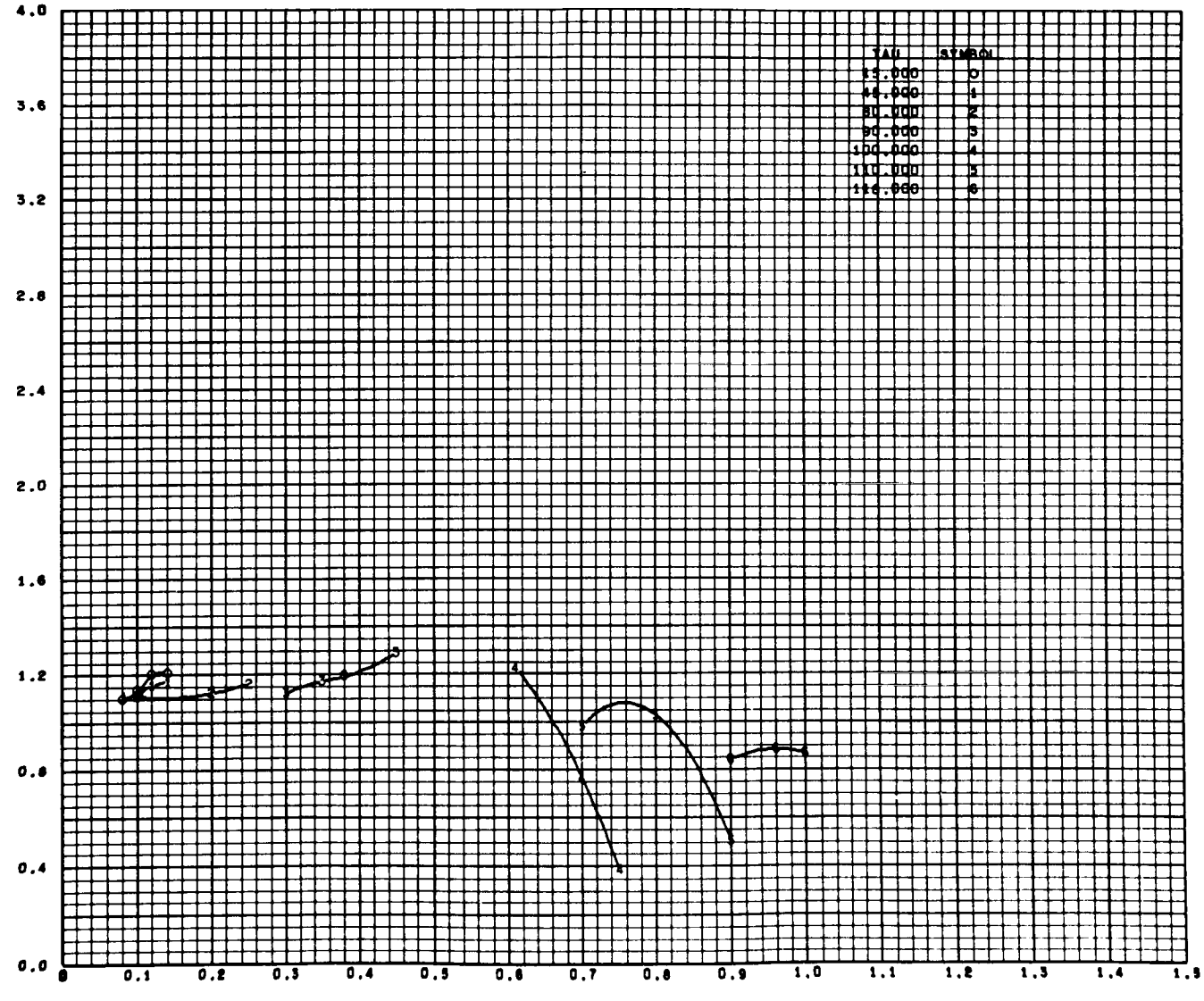
RE/FT --- 2.2545*10+6
Q(OM) --- 9.2539 BTU/SQ FT SEC

PLOT SERIES NUMBER 84

TEST GROUP	TIME (SEC)
114*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
043 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.14 DEG
ANGLE OF YAW --------- -5.17 DEG
TOTAL PRESSURE ------- 1851.80 PSIA
TOTAL TEMPERATURE ---- 1889.50 DEG RANKINE

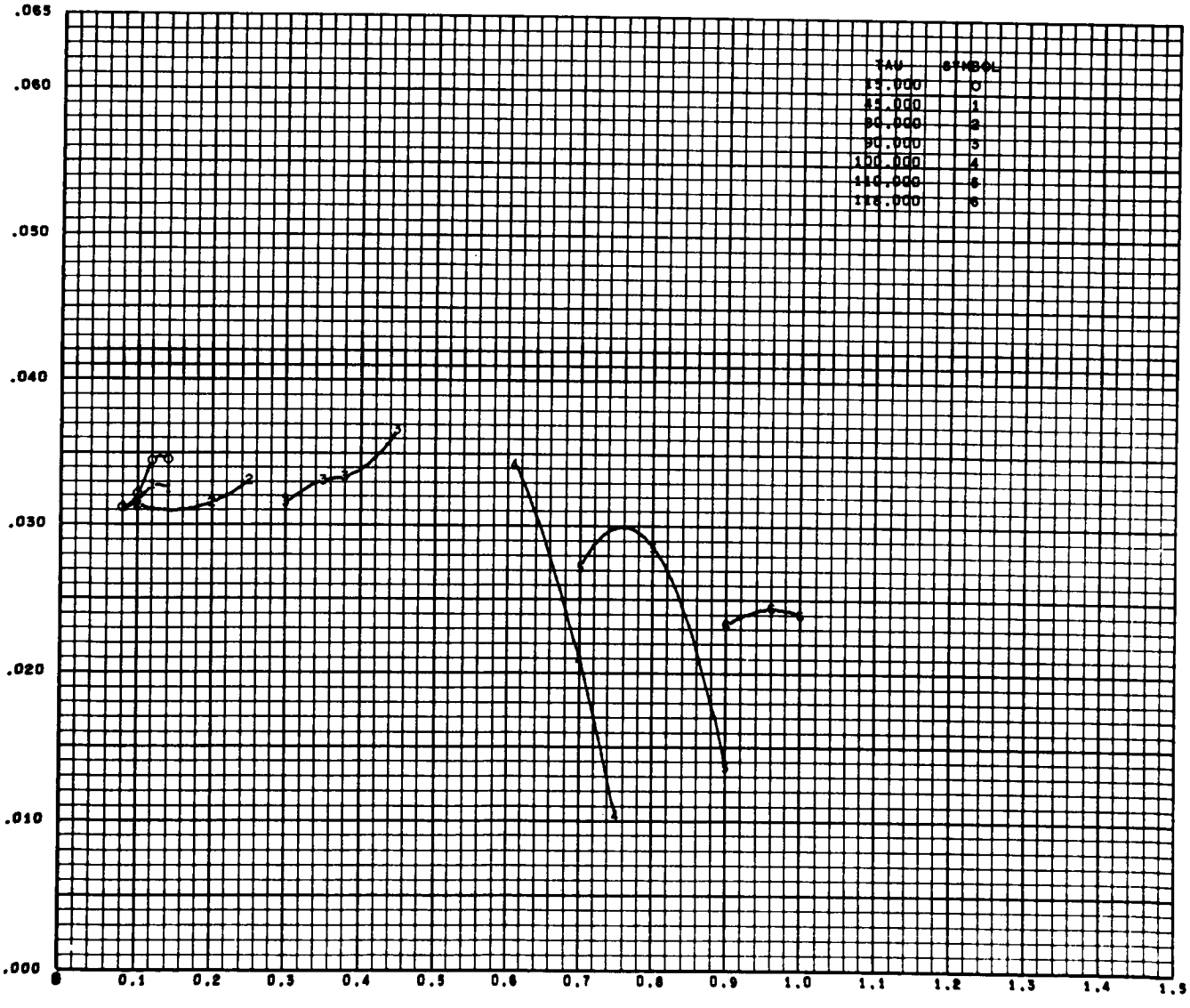
RE/FT --- 2.2545*10+6
Q(OM) --- 9.2539 BTU/SQ FT SEC

PLOT SERIES NUMBER 84

TEST GROUP	TIME (SEC)
114*	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
045 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW --------- 5.16 DEG
TOTAL PRESSURE ------- 1859.10 PSIA
TOTAL TEMPERATURE ---- 1891.10 DEG RANKINE

RE/FT --- 2.2600*10+6
Q(OM) --- 9.2769 BTU/SQ FT SEC

PLOT SERIES NUMBER 85

TEST GROUP	TIME (SEC)
115*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
046 000

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW --------- 5.16 DEG
TOTAL PRESSURE ------- 1859.10 PSIA
TOTAL TEMPERATURE ---- 1891.10 DEG RANKINE

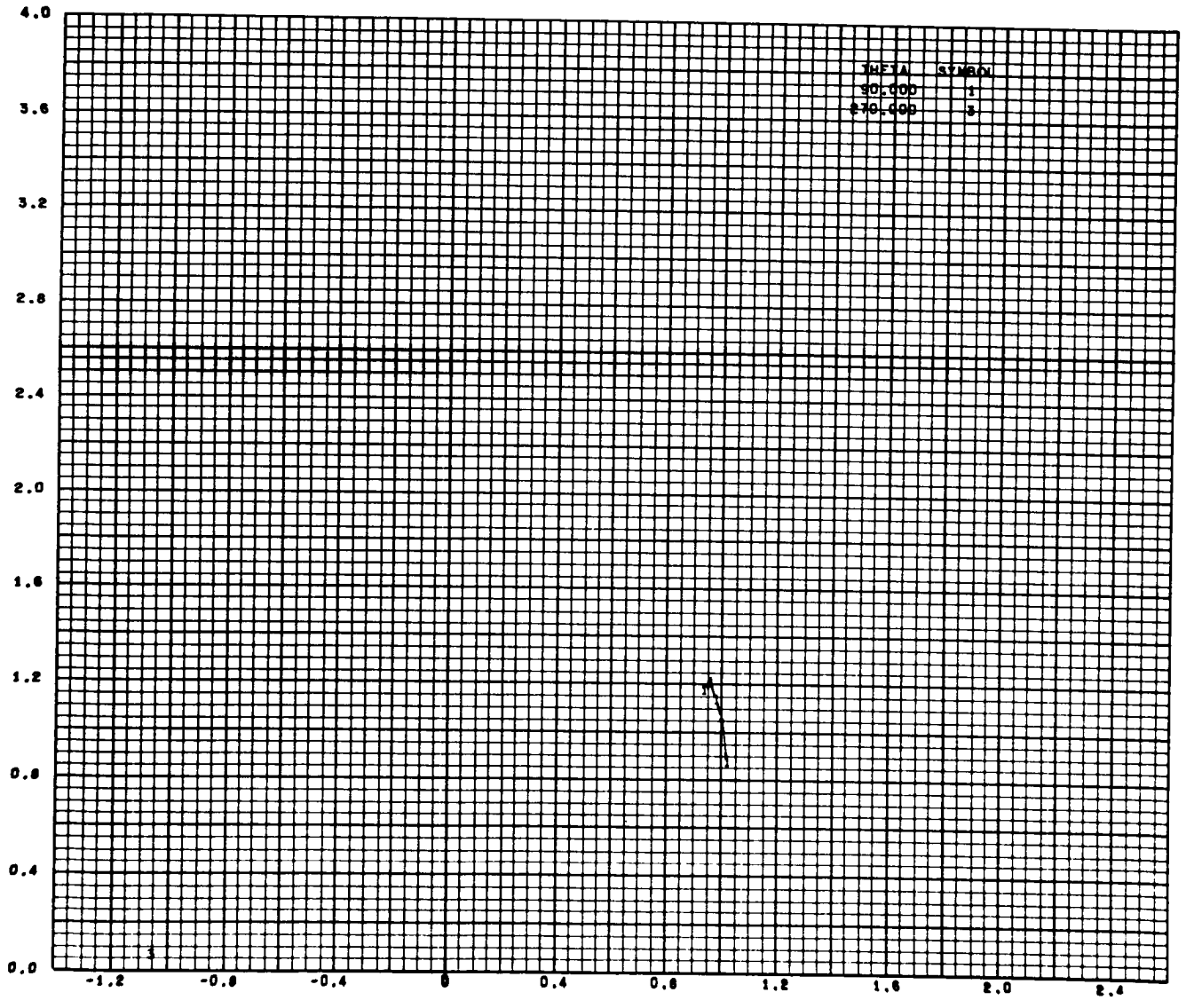
RE/FT --- 2.2600*10+6
Q(OM) --- 9.2769 BTU/SQ FT SEC

PLOT SERIES NUMBER 65

TEST GROUP	TIME (SEC)
115*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
048 000



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HEAT TRANSFER — CONFIGURATION C2 — PLOT SERIES NUMBER 85 — 3937-11 050 000

APOLLO H-11

AEDC, TUNNEL C

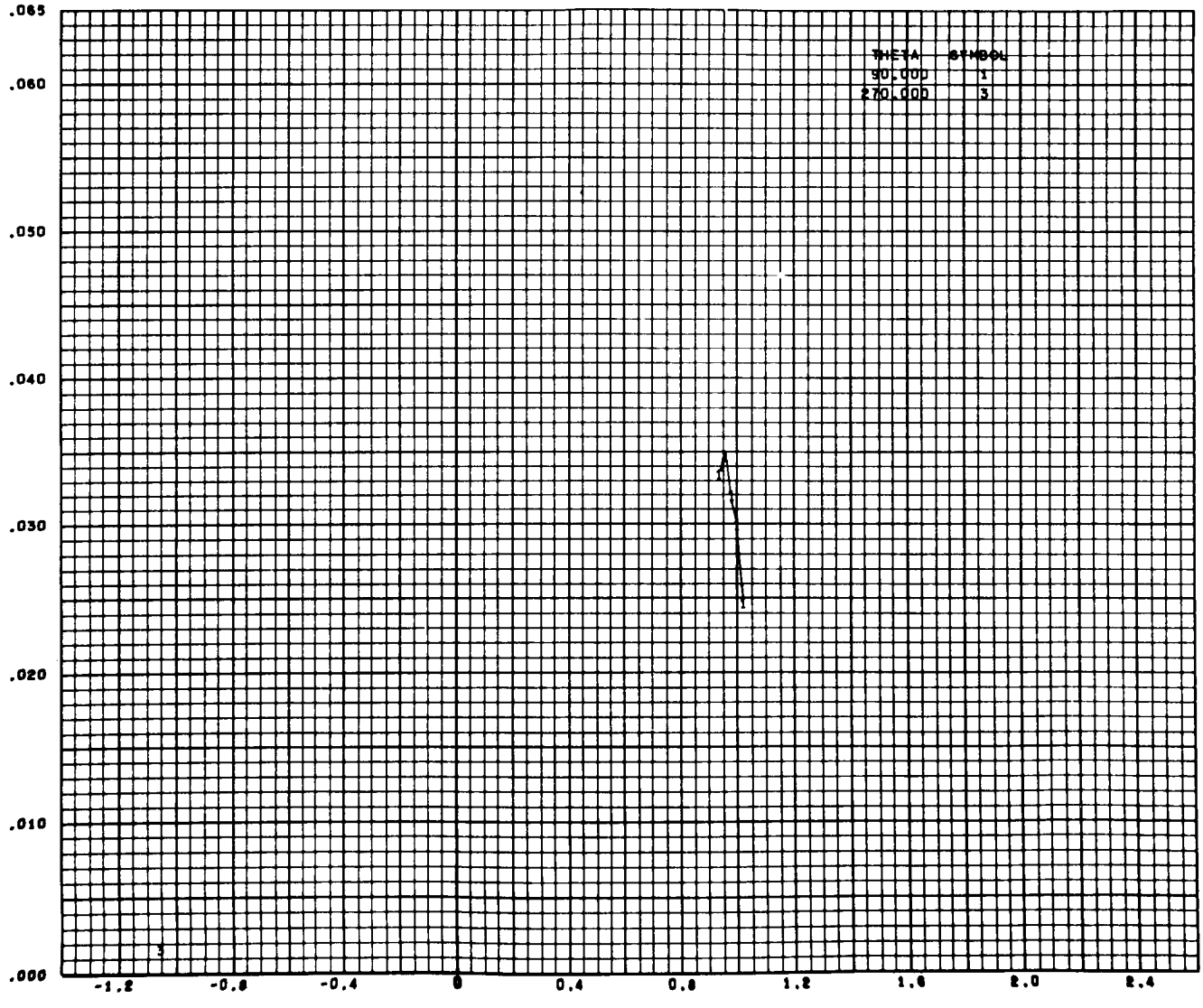
JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW --------- 5.16 DEG
TOTAL PRESSURE ------- 1859.10 PSIA
TOTAL TEMPERATURE ---- 1891.10 DEG RANKINE

RE/FT --- 2.2600*10+6
Q(OM) --- 9.2769 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
115*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW --------- 5.16 DEG
TOTAL PRESSURE ------- 1859.10 PSIA
TOTAL TEMPERATURE ---- 1891.10 DEG RANKINE

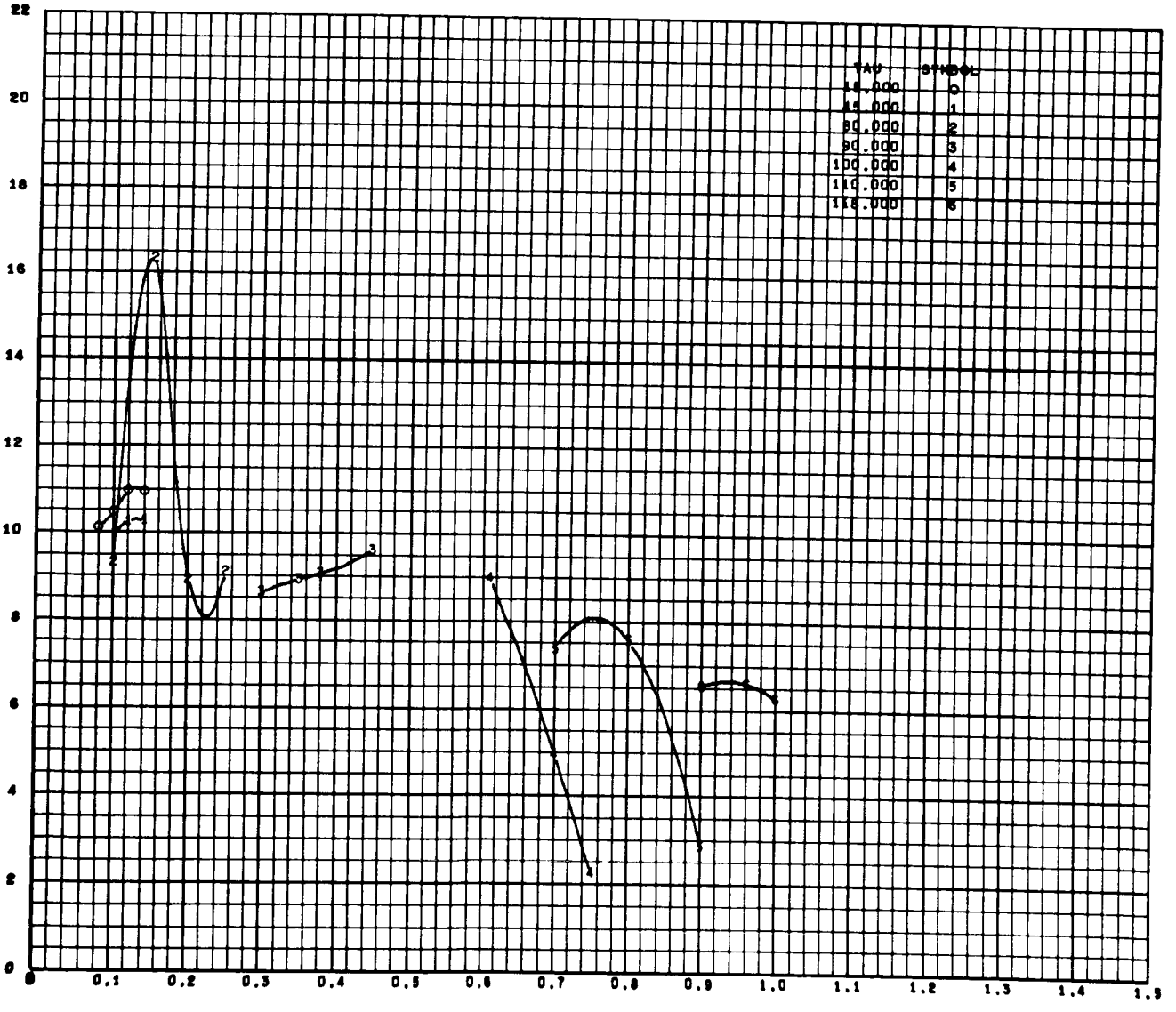
RE/FT --- 2.2600*10+6
Q(OM) --- 9.2769 BTU/SQ FT SEC

PLOT SERIES NUMBER 85

TEST GROUP	TIME (SEC)
115*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
047 000



HEAT TRANSFER — CONFIGURATION C2 — PLOT SERIES NUMBER 85 — 3937-11 049 000

APOLLO H-11

AEDC, TUNNEL C

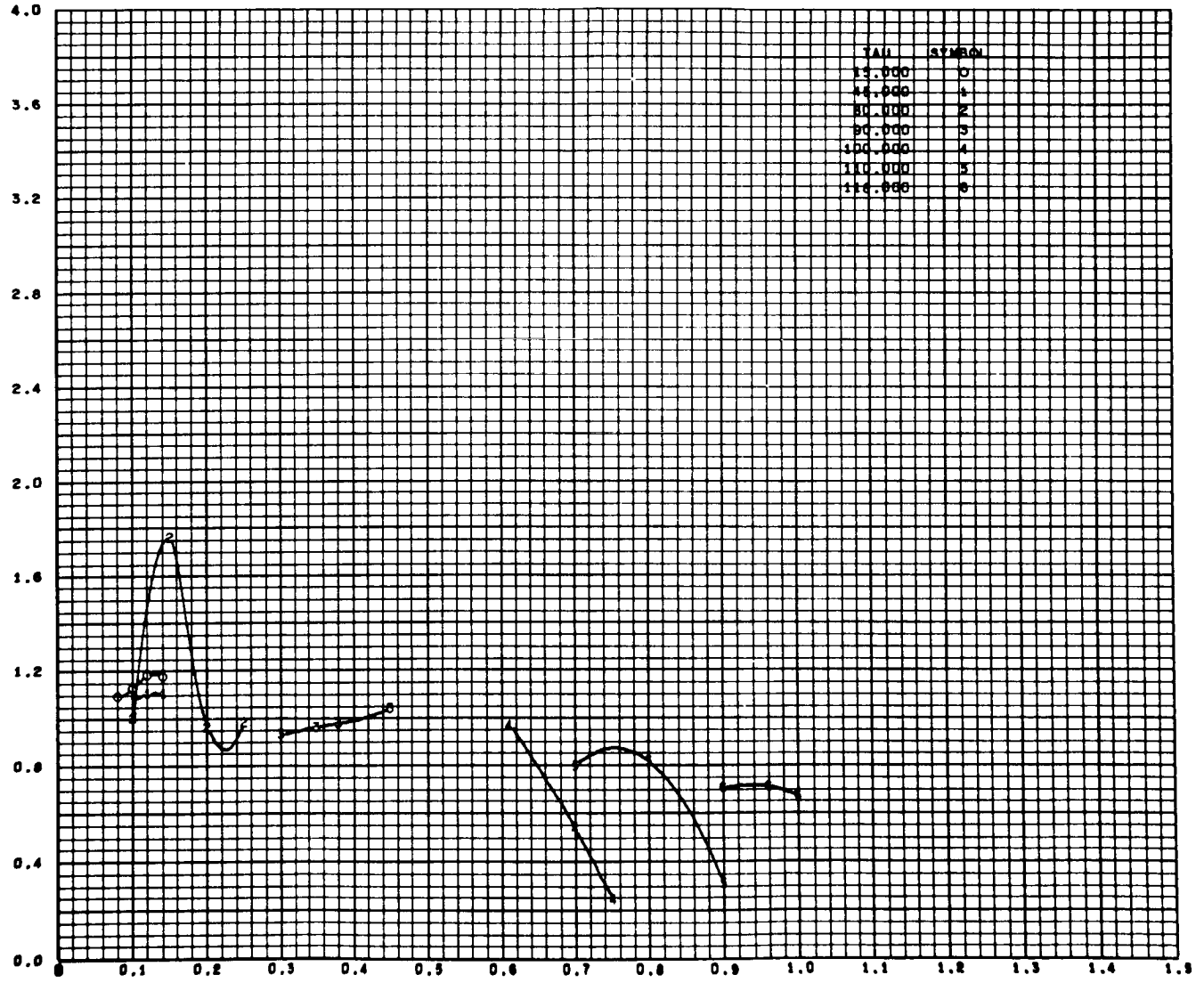
JUNE, 1964

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW --------- 5.16 DEG
TOTAL PRESSURE ------- 1859.10 PSIA
TOTAL TEMPERATURE ---- 1891.10 DEG RANKINE

RE/FT --- 2.2600*10+6
Q(OM) --- 9.2769 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
115*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 154.11 DEG
ANGLE OF YAW --------- 5.16 DEG
TOTAL PRESSURE ------- 1859.10 PSIA
TOTAL TEMPERATURE ---- 1891.10 DEG RANKINE

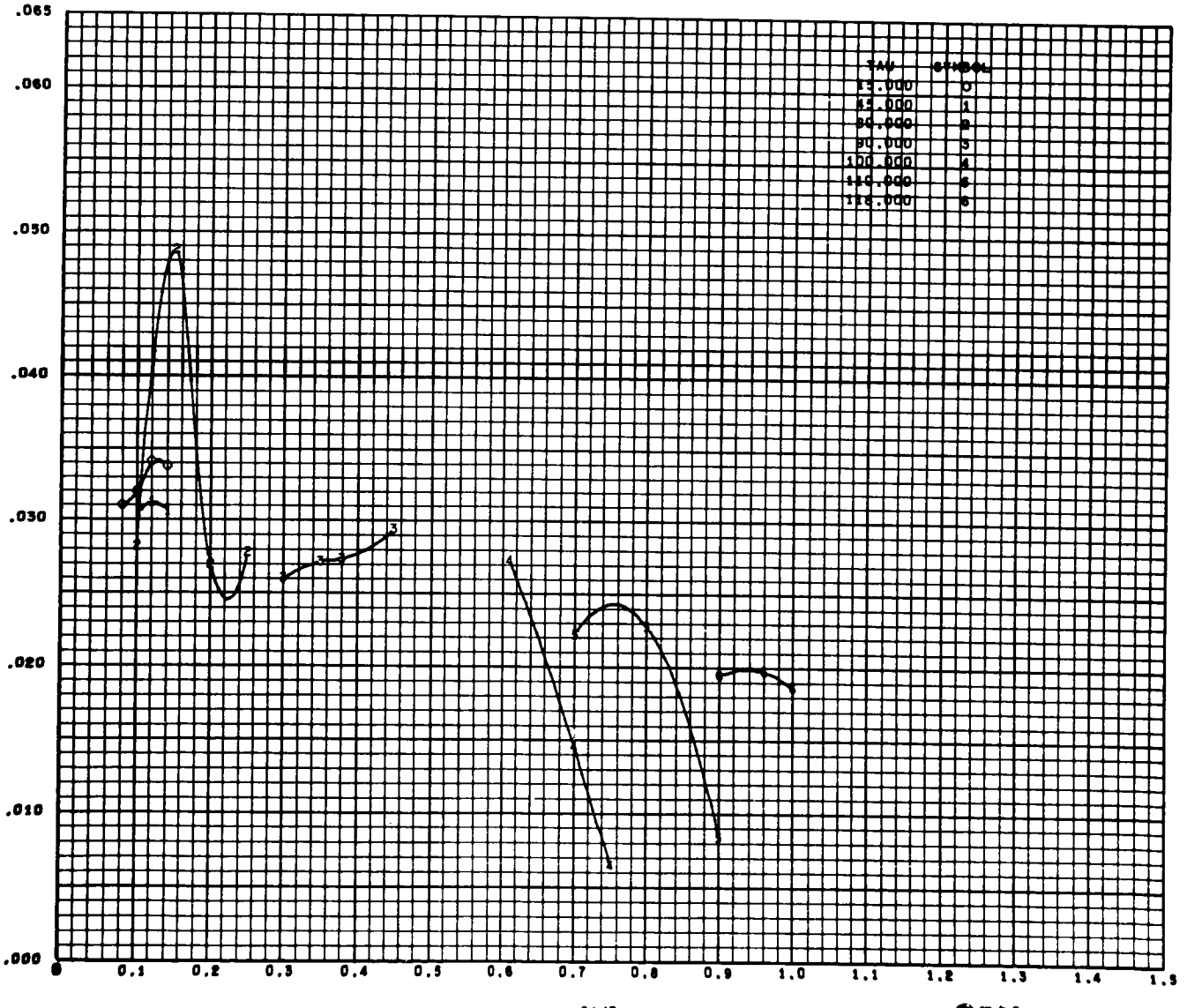
RE/FT --- 2.2600*10+6
Q(OM) --- 9.2769 BTU/SQ FT SEC

PLOT SERIES NUMBER 85

TEST GROUP	TIME (SEC)
115*	2.75

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
051 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 158.65 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 1852.00 PSIA
TOTAL TEMPERATURE ---- 1890.50 DEG RANKINE

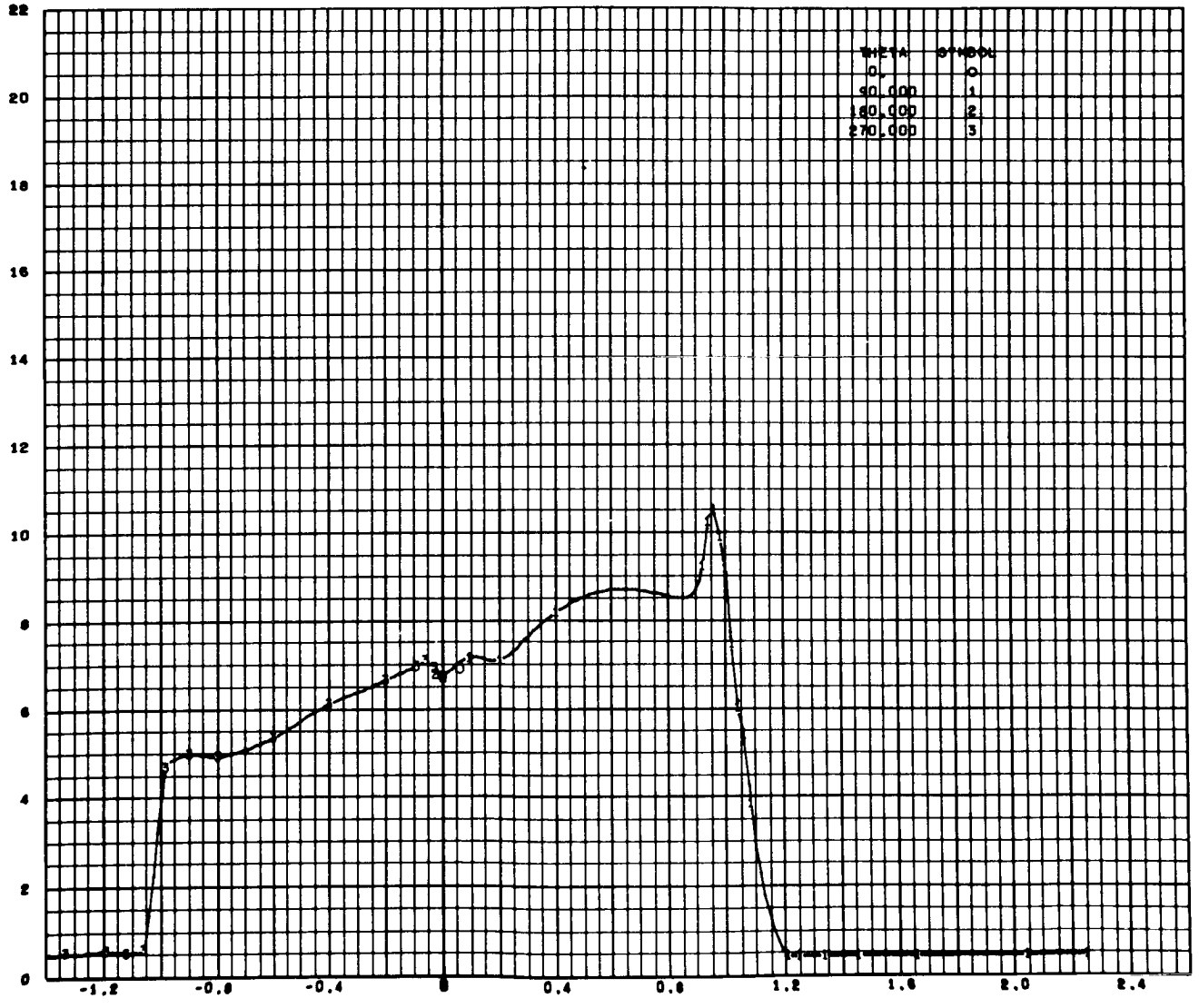
RE/FT --- 2.2525*10+6
Q(OM) --- 9.2547 BTU/SQ FT SEC

PLOT SERIES NUMBER 86

TEST GROUP	TIME (SEC)
105*	2.75
116	2.70
121	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
052 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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PLOT SERIES NUMBER 86

TEST GROUP	TIME (SEC)
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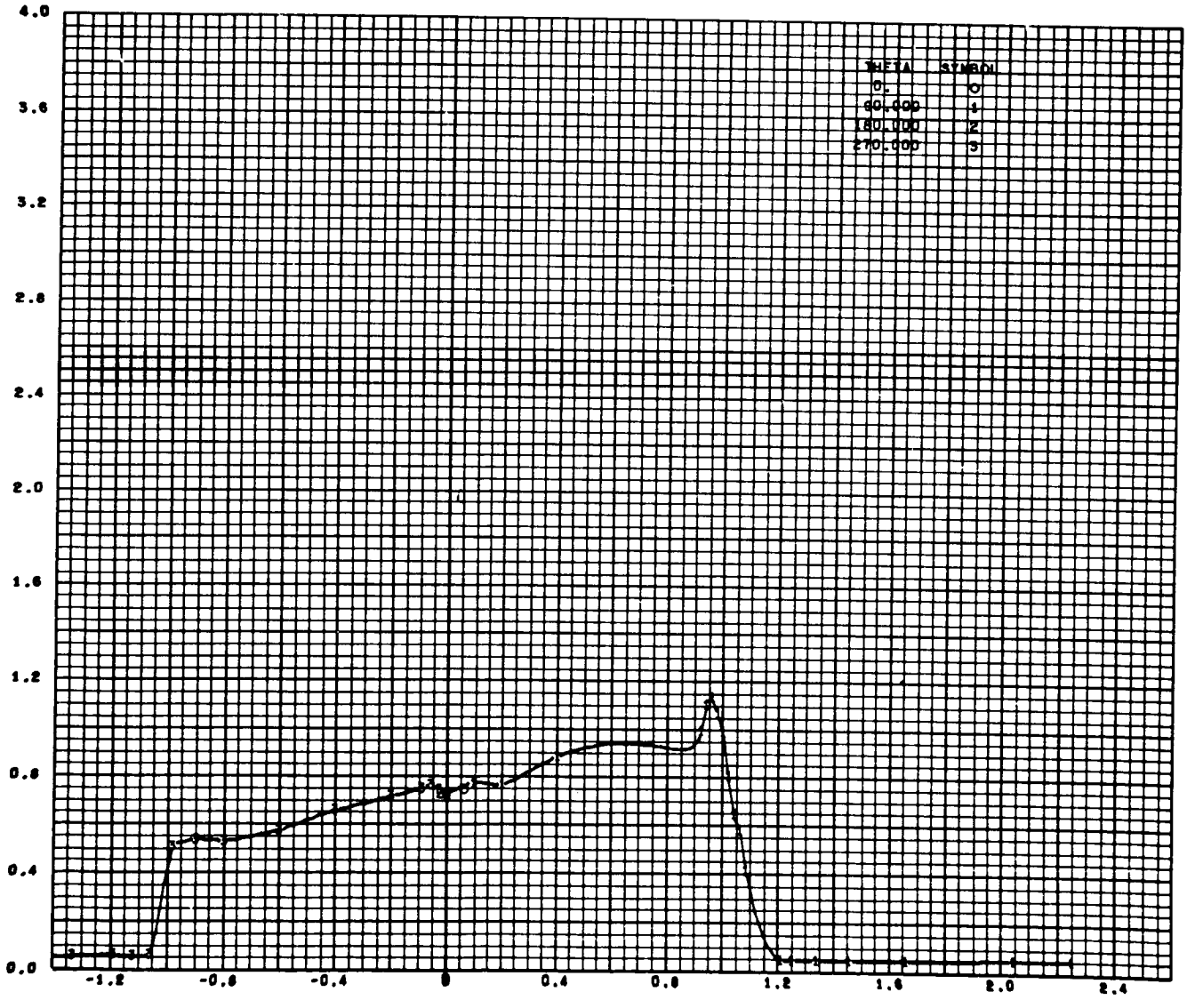
121	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
055 000



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A-605

SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
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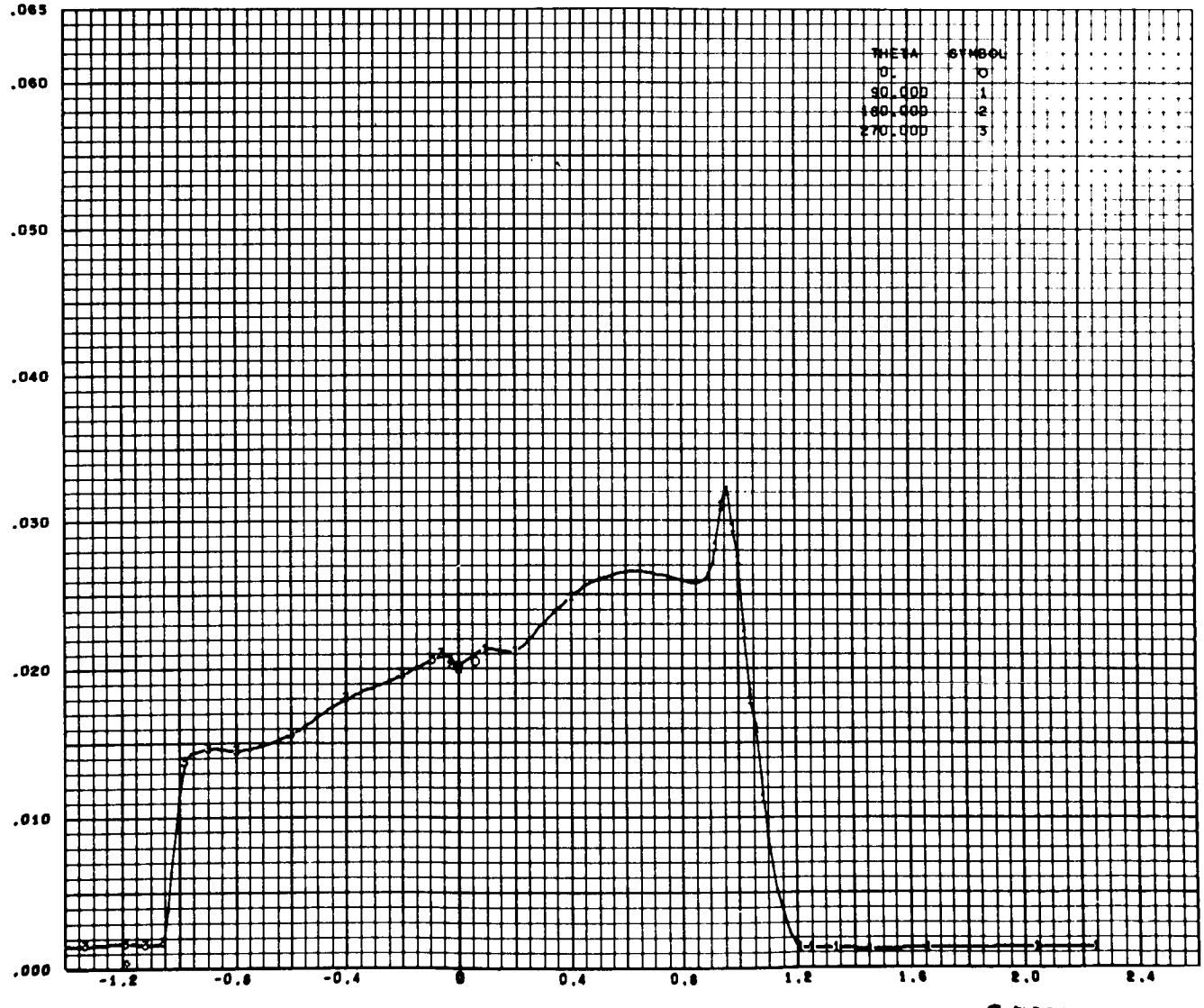
3937-11
058 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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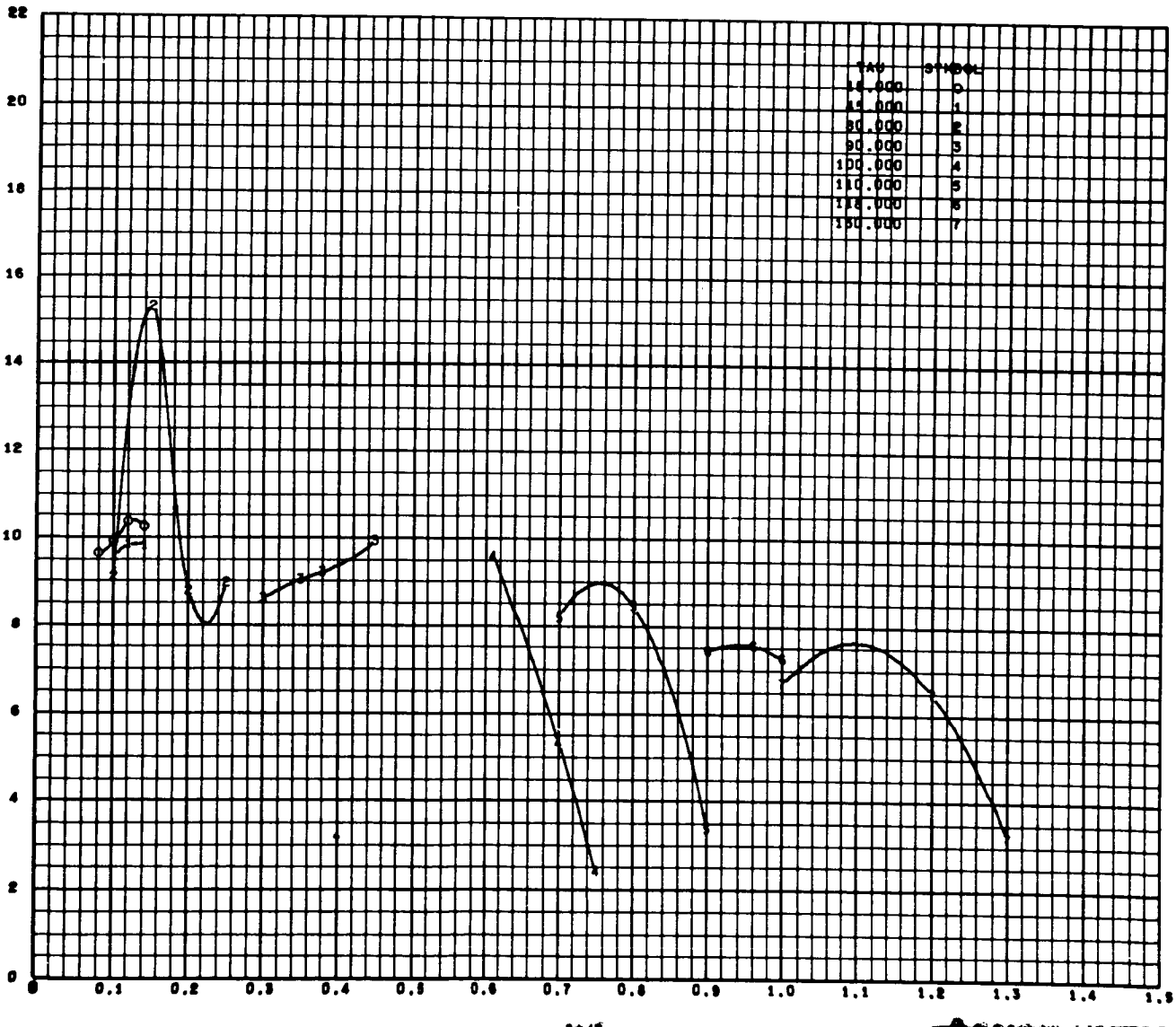
3937-11
053 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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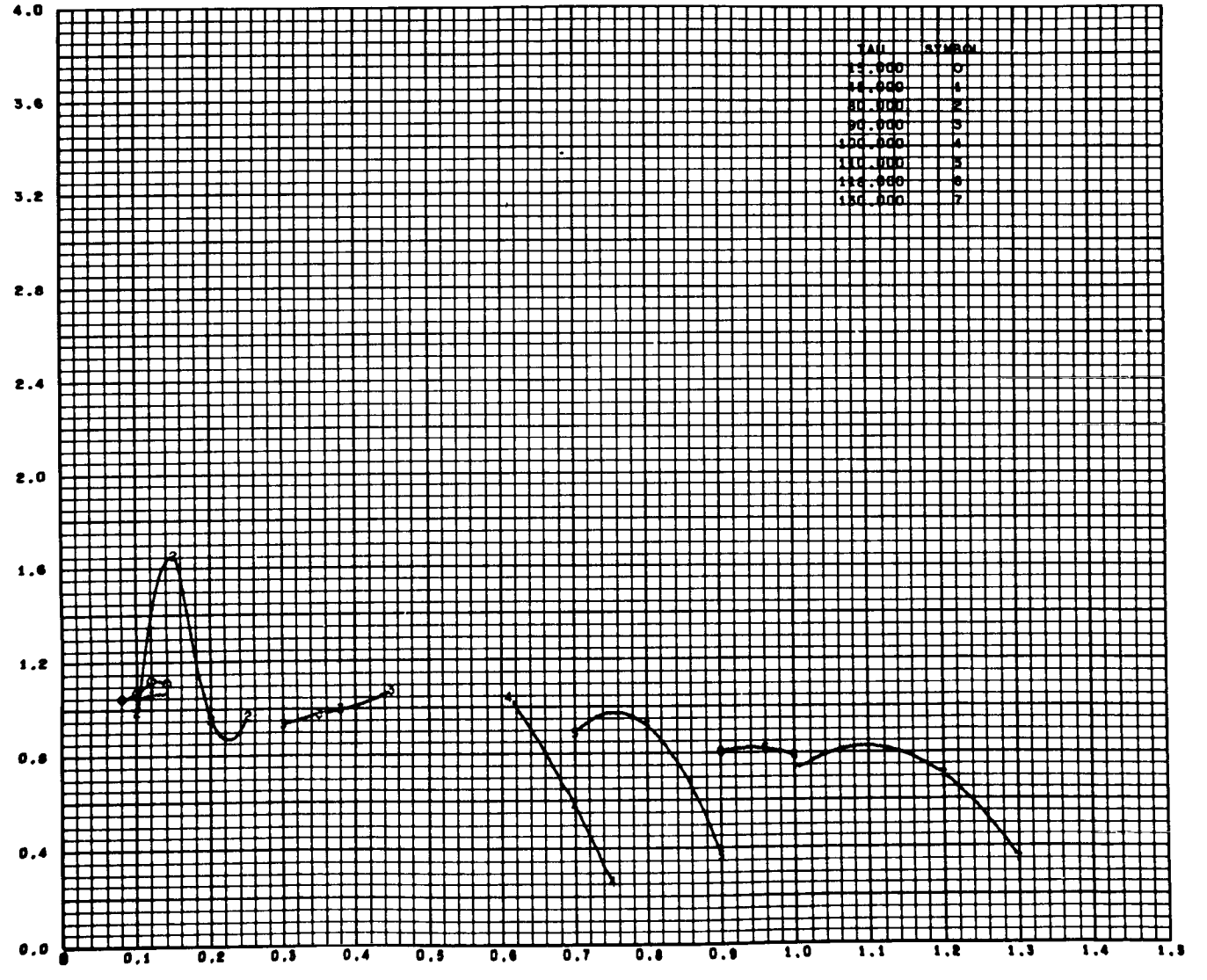
3937-11
036 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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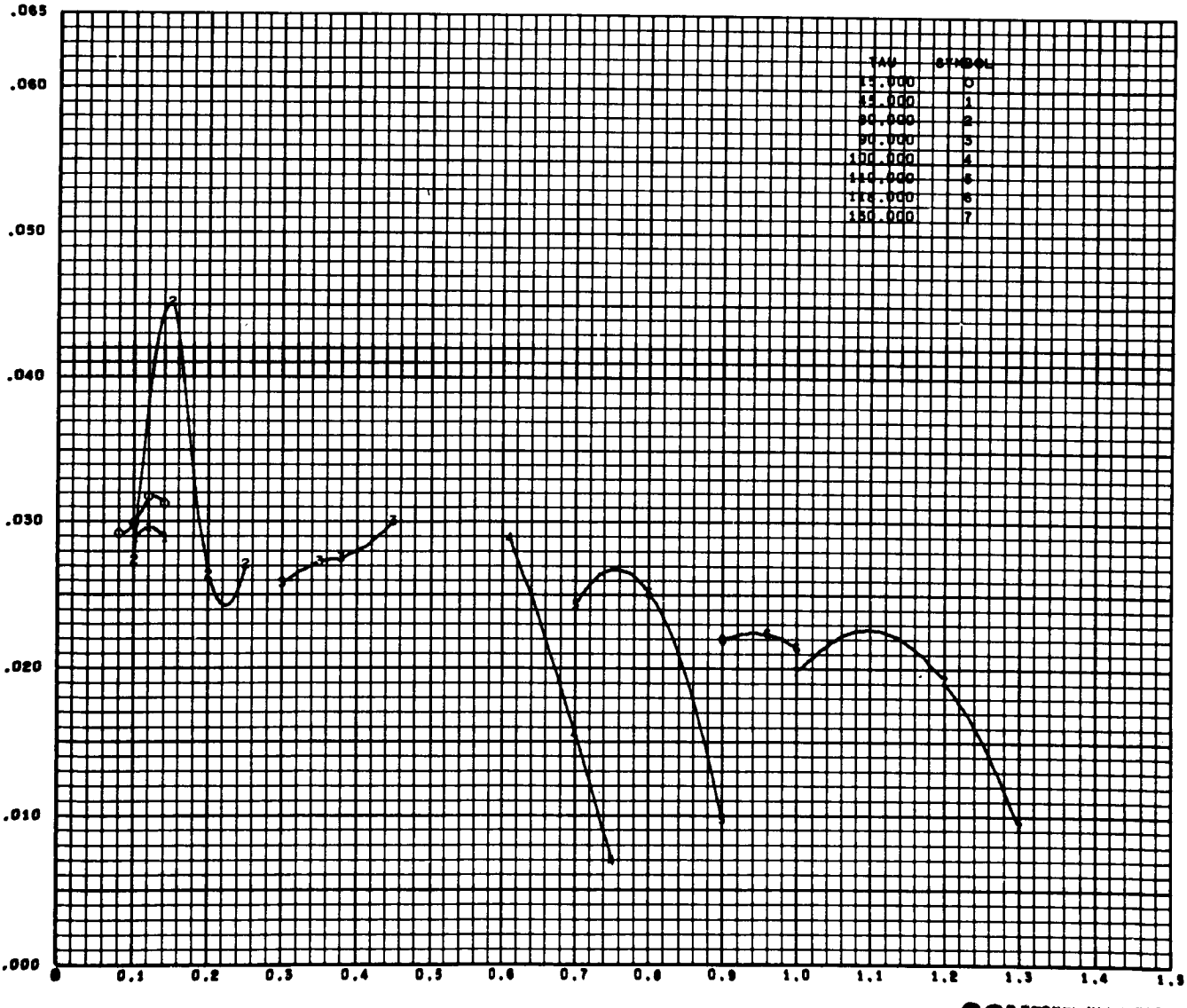
3937-11
059 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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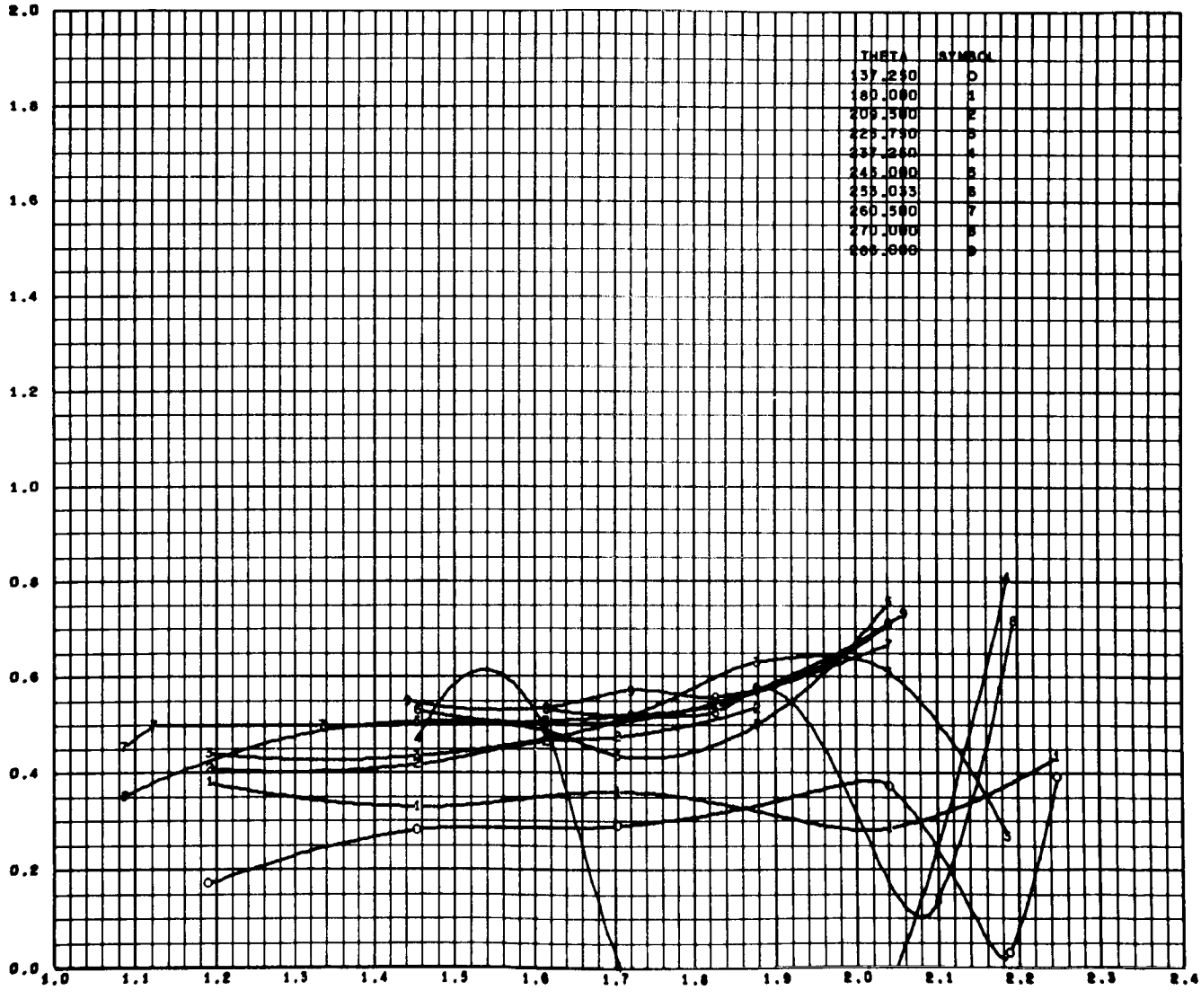
3937-11 ~
054 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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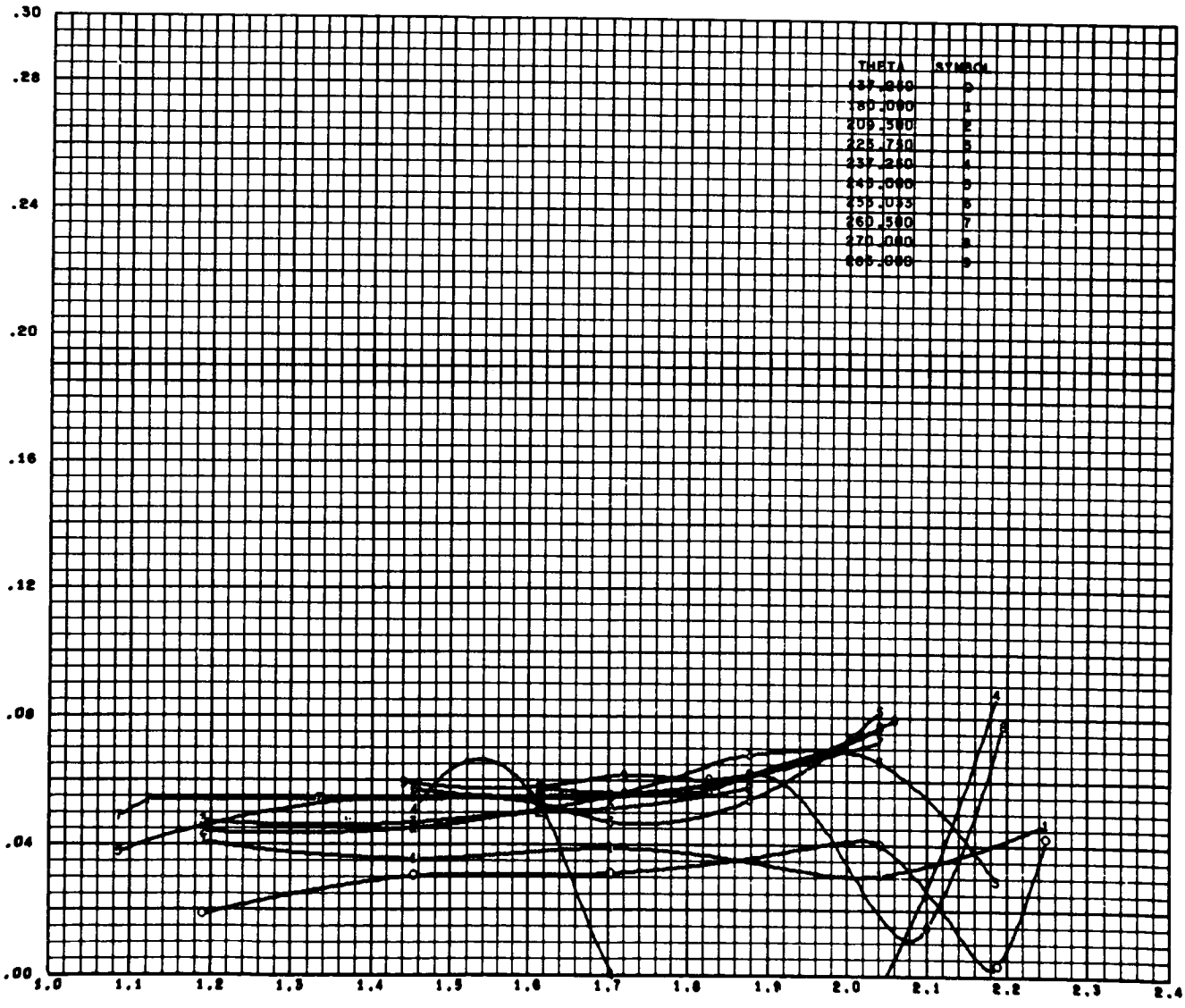
3937-11
057 000



HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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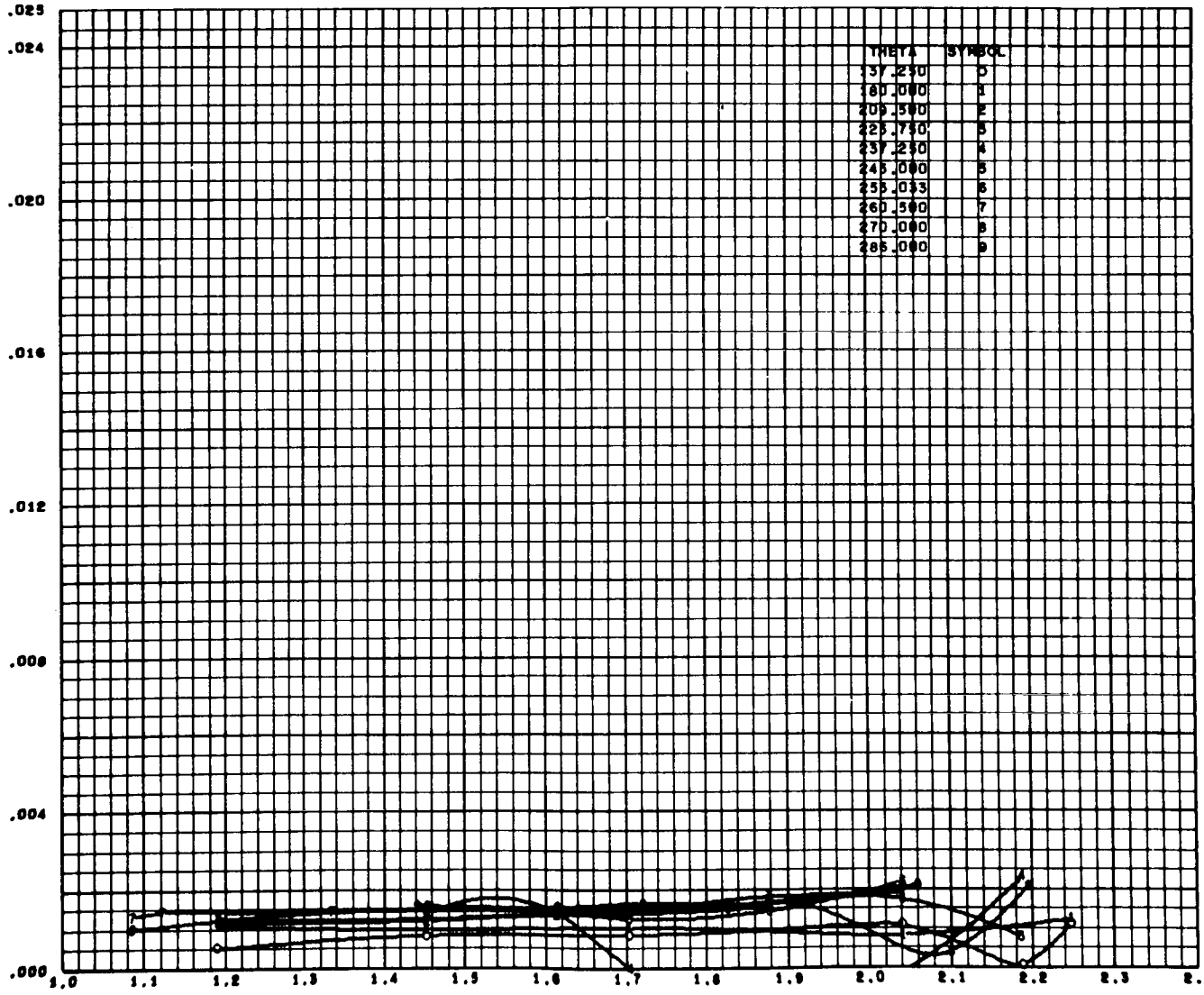
3937-11
060 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
ANGLE OF ATTACK ------ 161.65 DEG
ANGLE OF YAW --------- 0.01 DEG
TOTAL PRESSURE ------- 1851.00 PSIA
TOTAL TEMPERATURE ---- 1892.10 DEG RANKINE

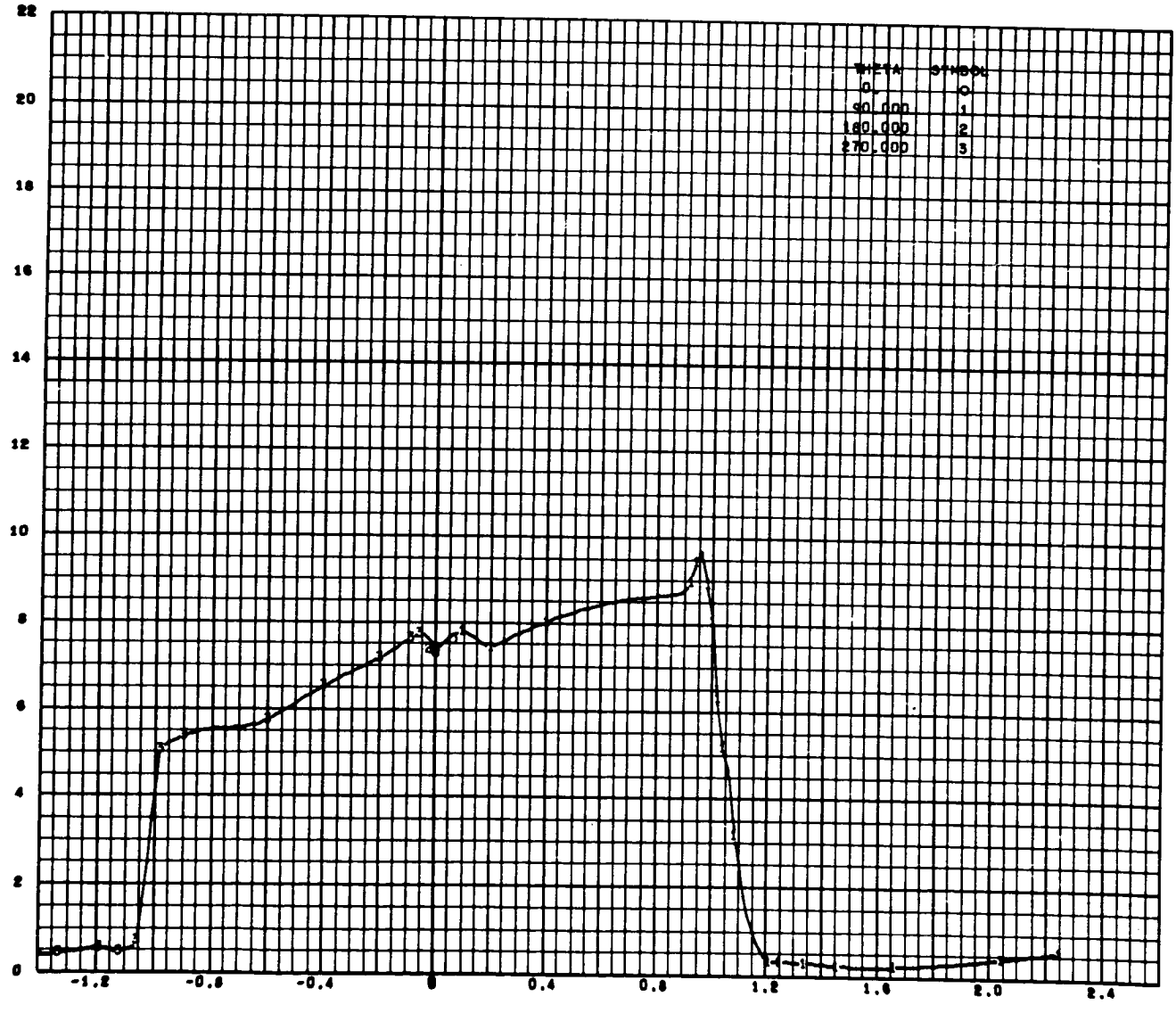
RE/FT --- 2.2478*10+6
Q(OM) --- 9.2515 BTU/SQ FT SEC

PLOT SERIES NUMBER 870

TEST GROUP	TIME (SEC)
106*	2.75
117	2.75
122	2.70

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
061 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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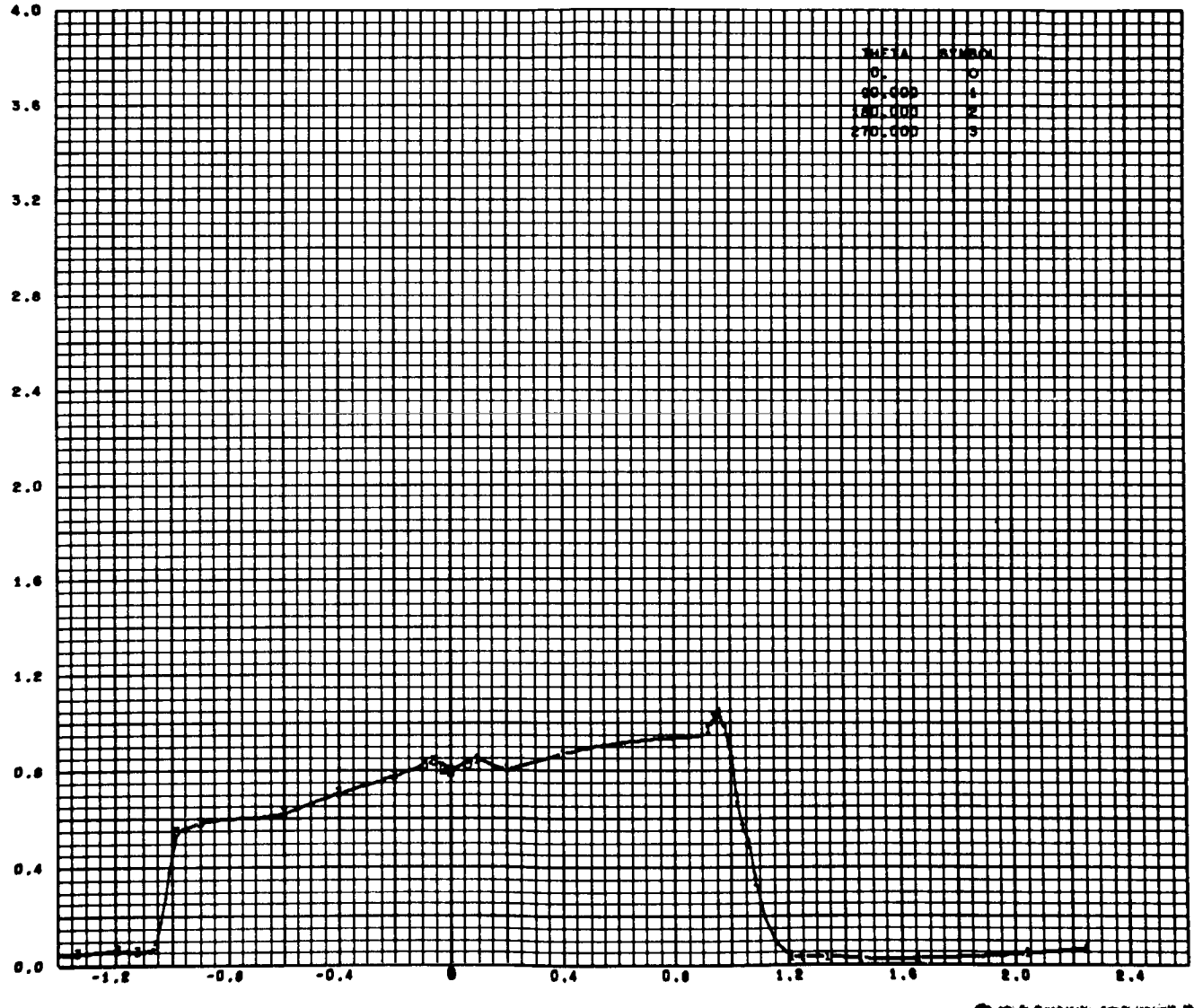
3937-11
064 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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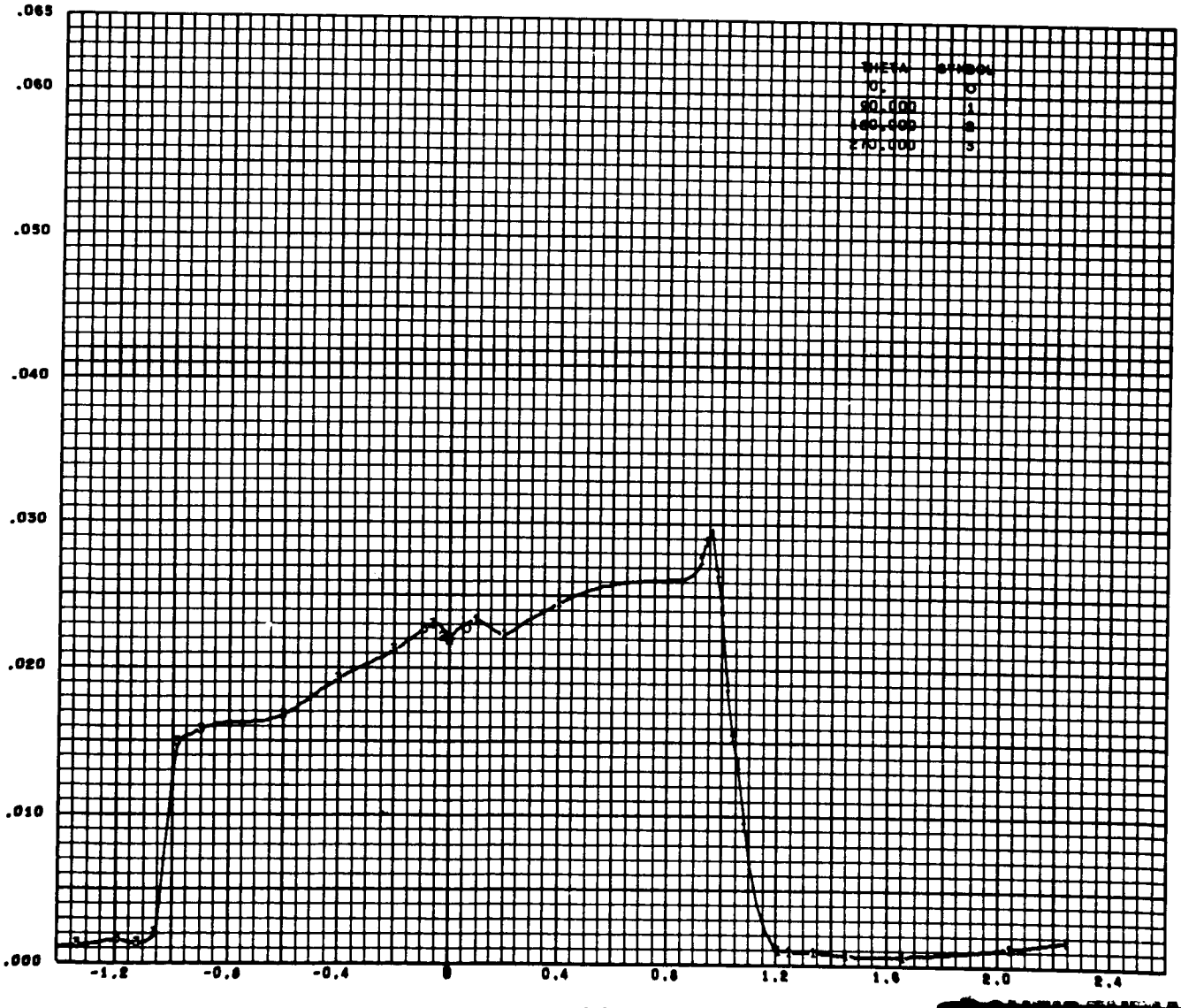
3937-11
067 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.19
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TEST GROUP	TIME (SEC)
106*	2.75
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122	2.70

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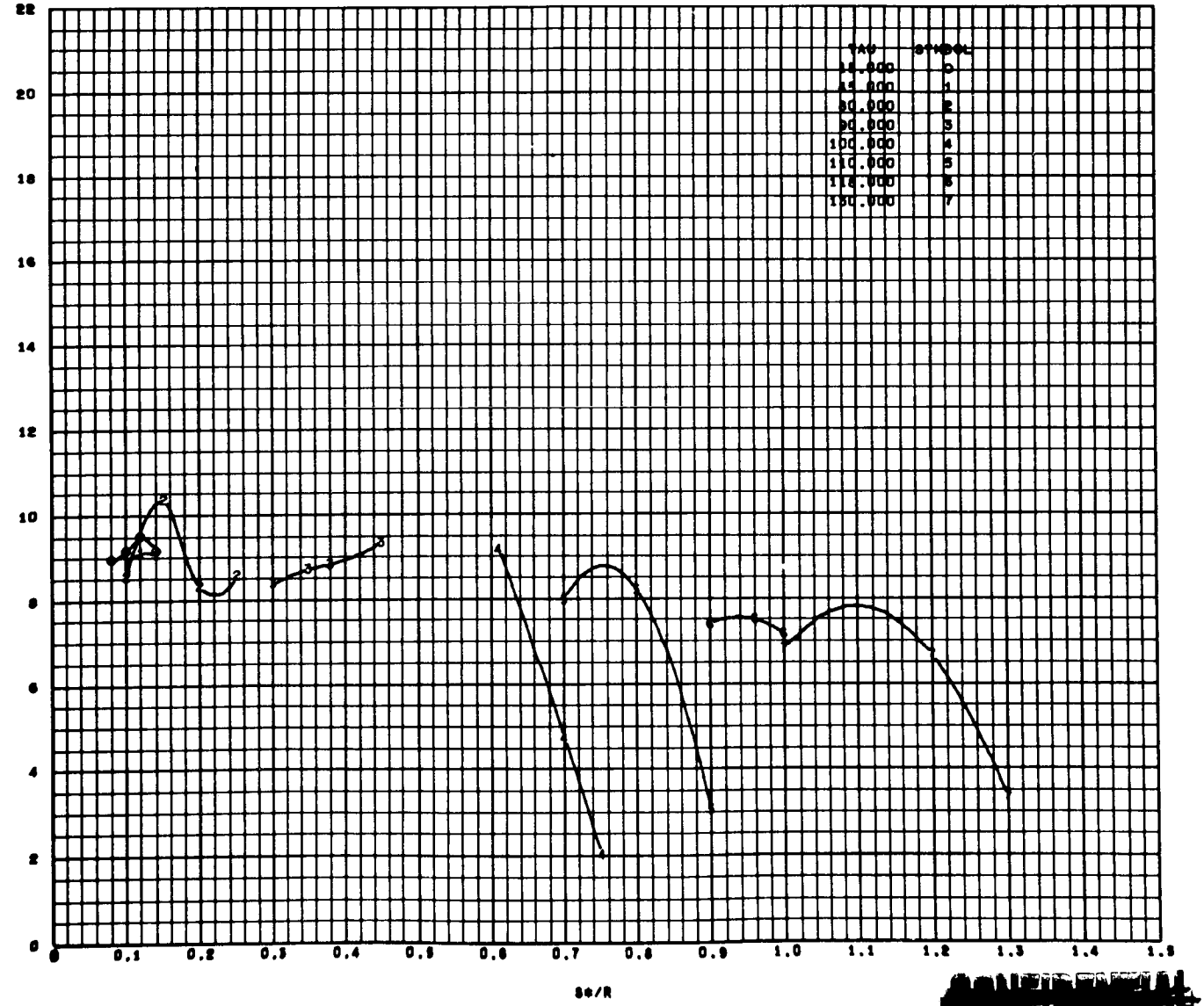
3937-11 - 062 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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106*	2.75
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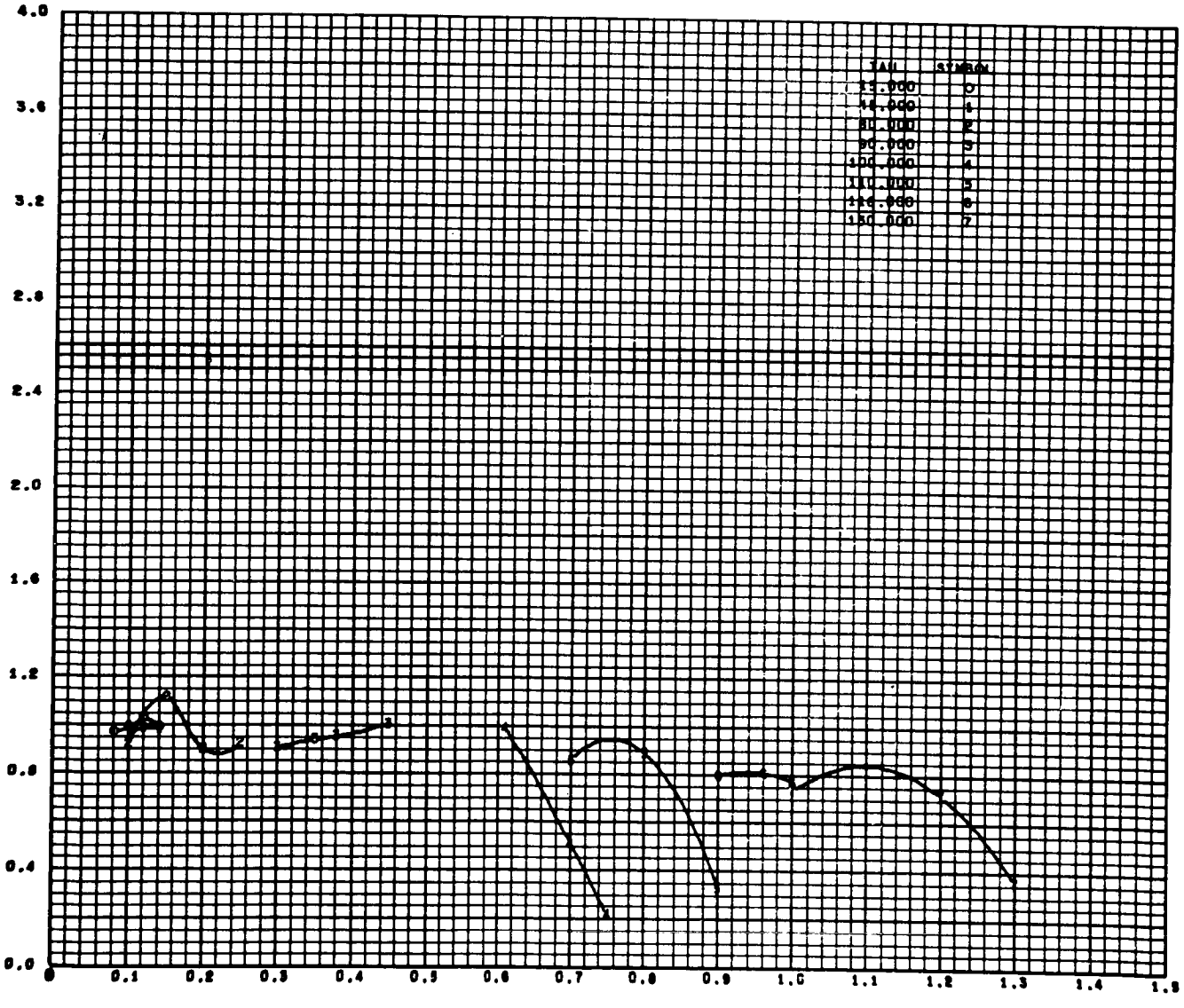
3937-11
065 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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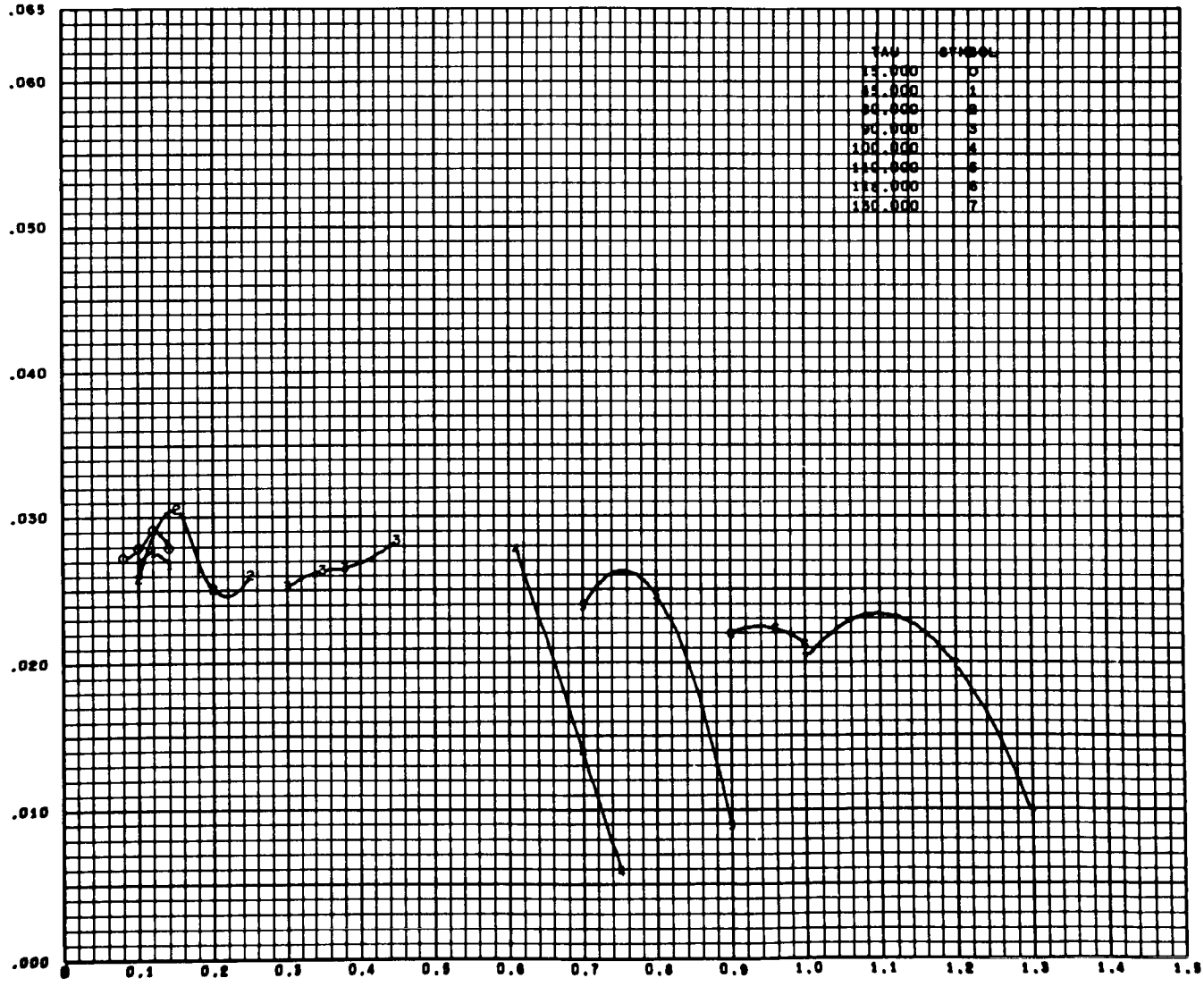
3937-11
068 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

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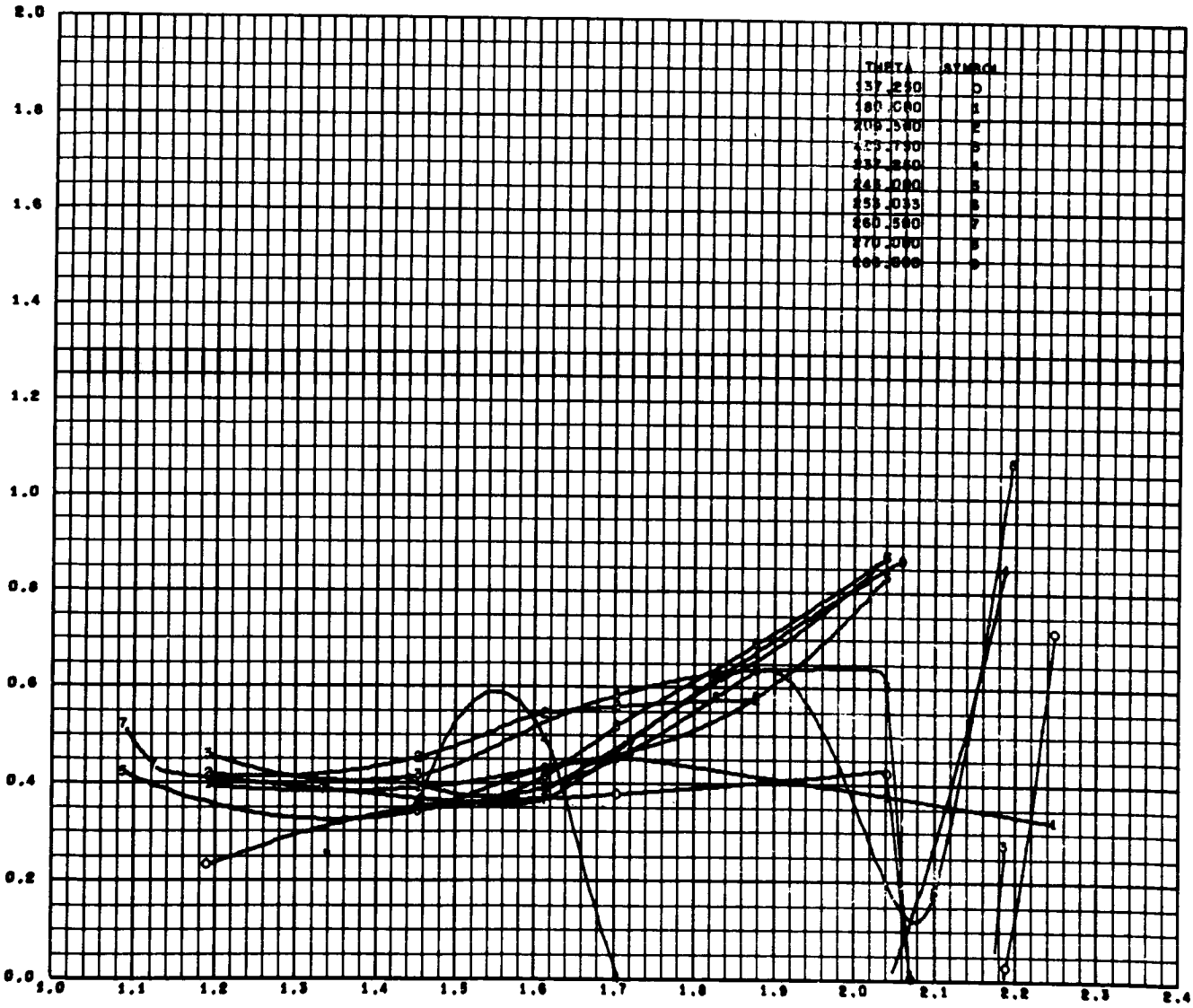
3937-11
063 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

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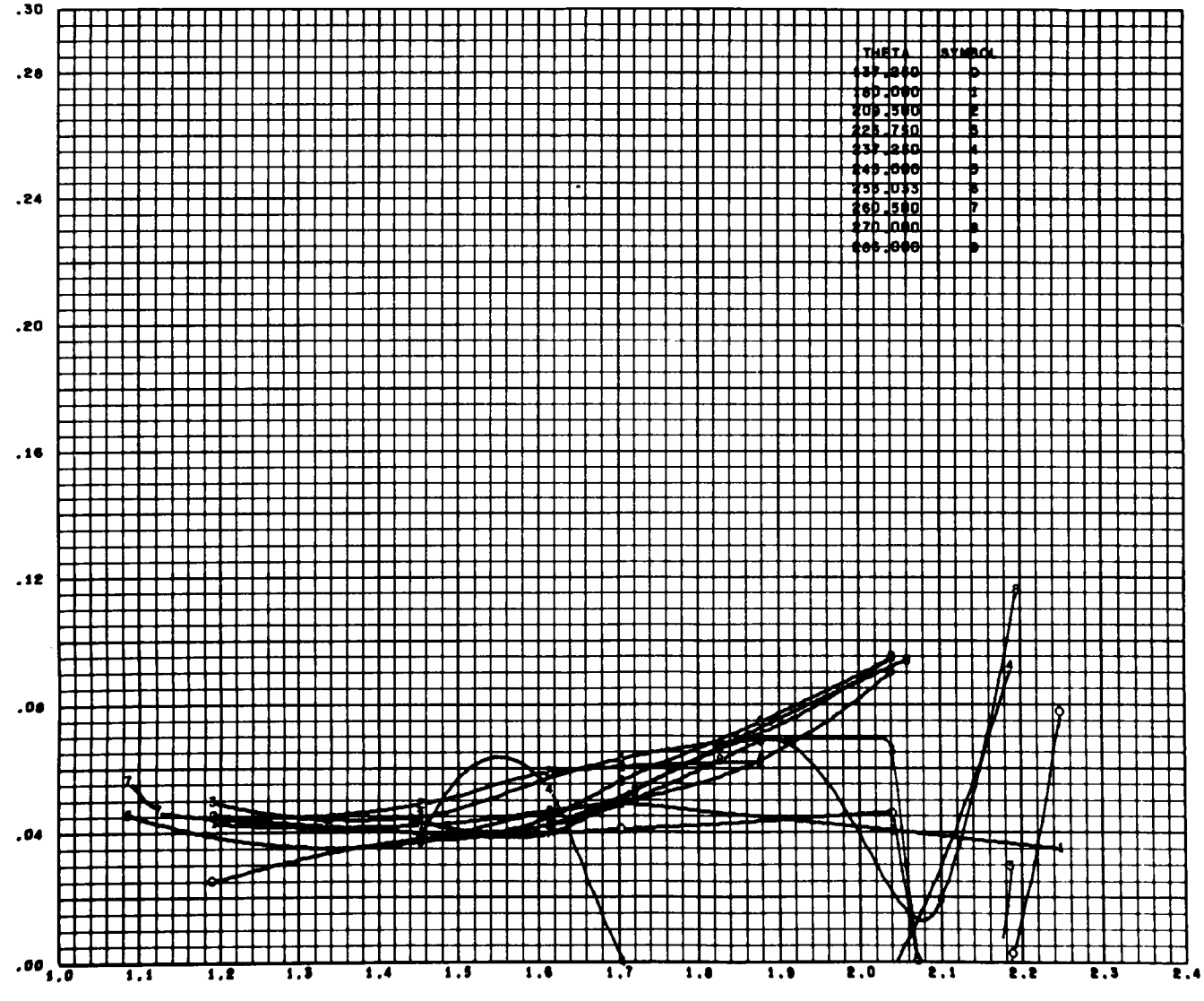
3937-11
066 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

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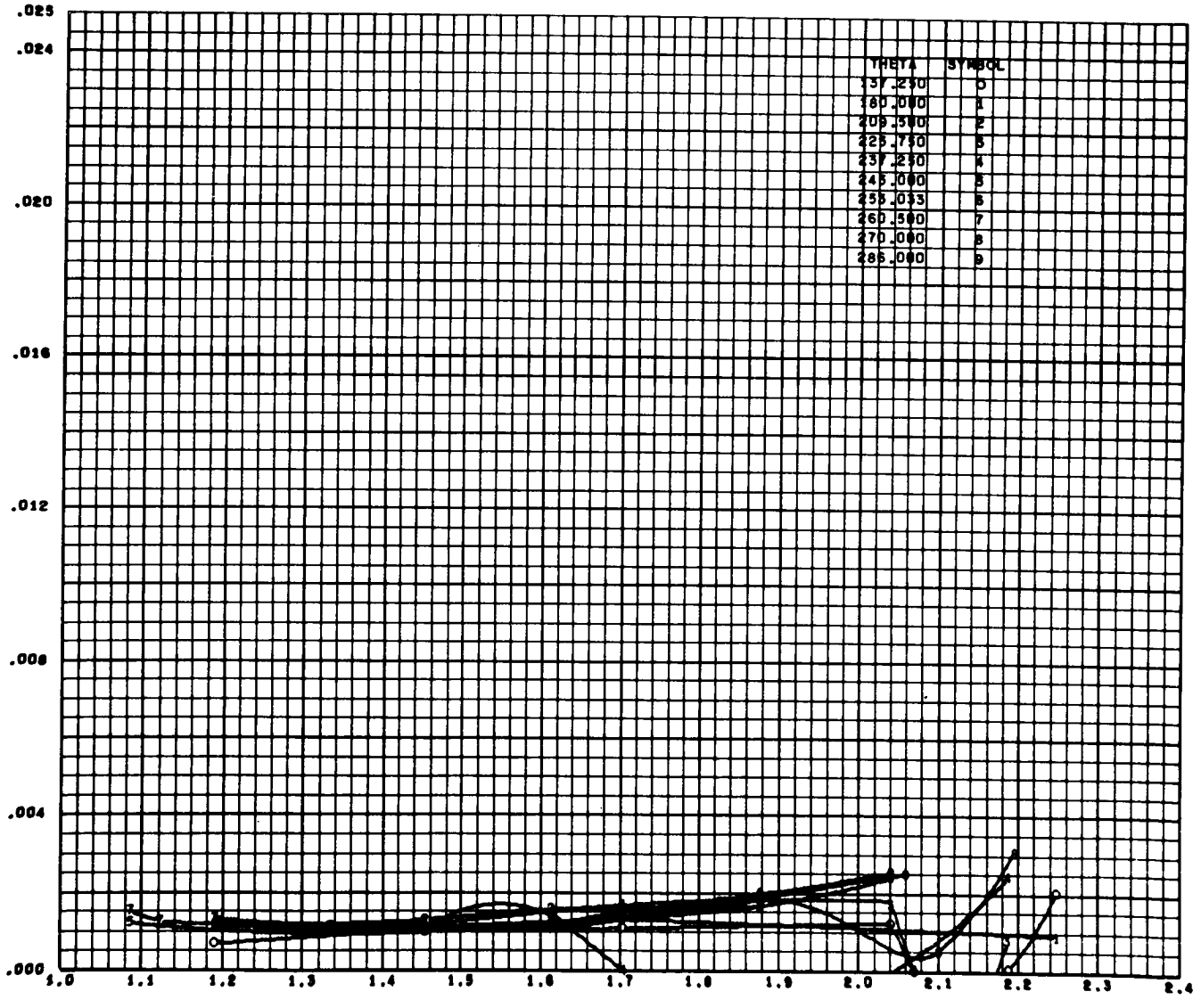

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 176.75 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 249.90 PSIA
TOTAL TEMPERATURE ---- 1685.00 DEG RANKINE

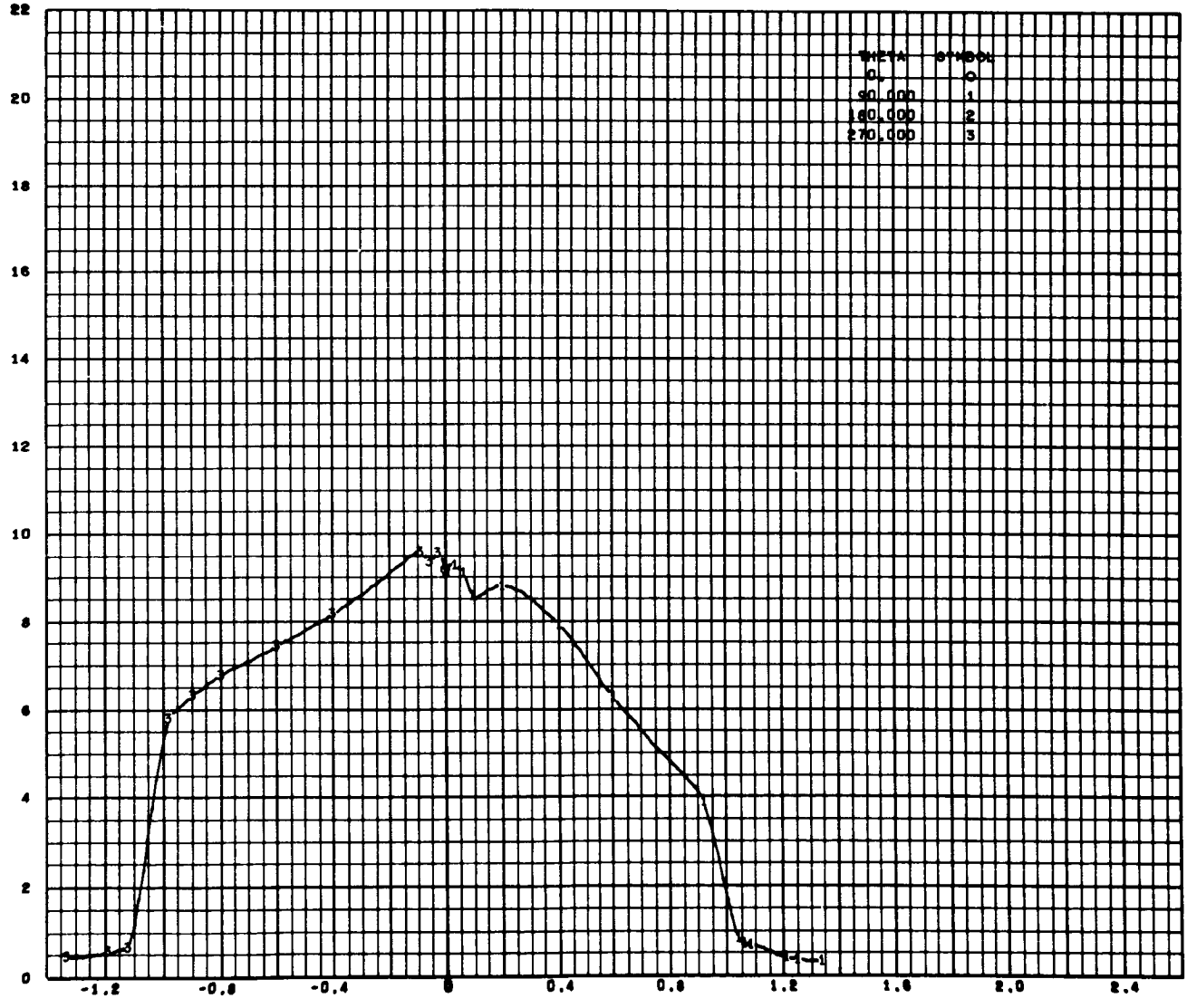
RE/FT --- 0.3767*10+6
Q(OM) --- 2.1445 BTU/SQ FT SEC

PLOT SERIES NUMBER 88

TEST GROUP	TIME (SEC)
159*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
070 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

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PLOT SERIES NUMBER 88

TEST GROUP	TIME (SEC)
159*	2.90

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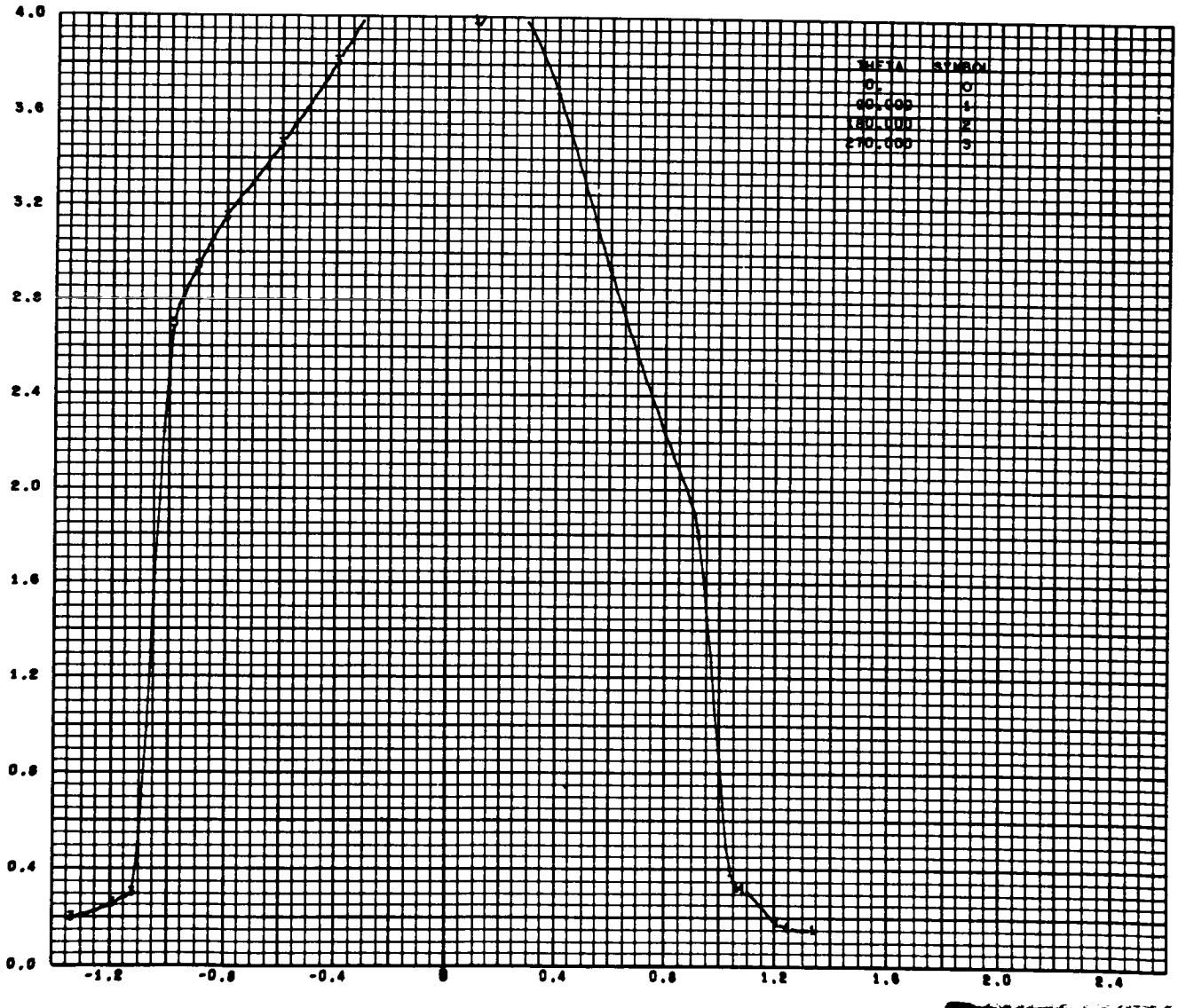
3937-11
072 000



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HEAT TRANSFER

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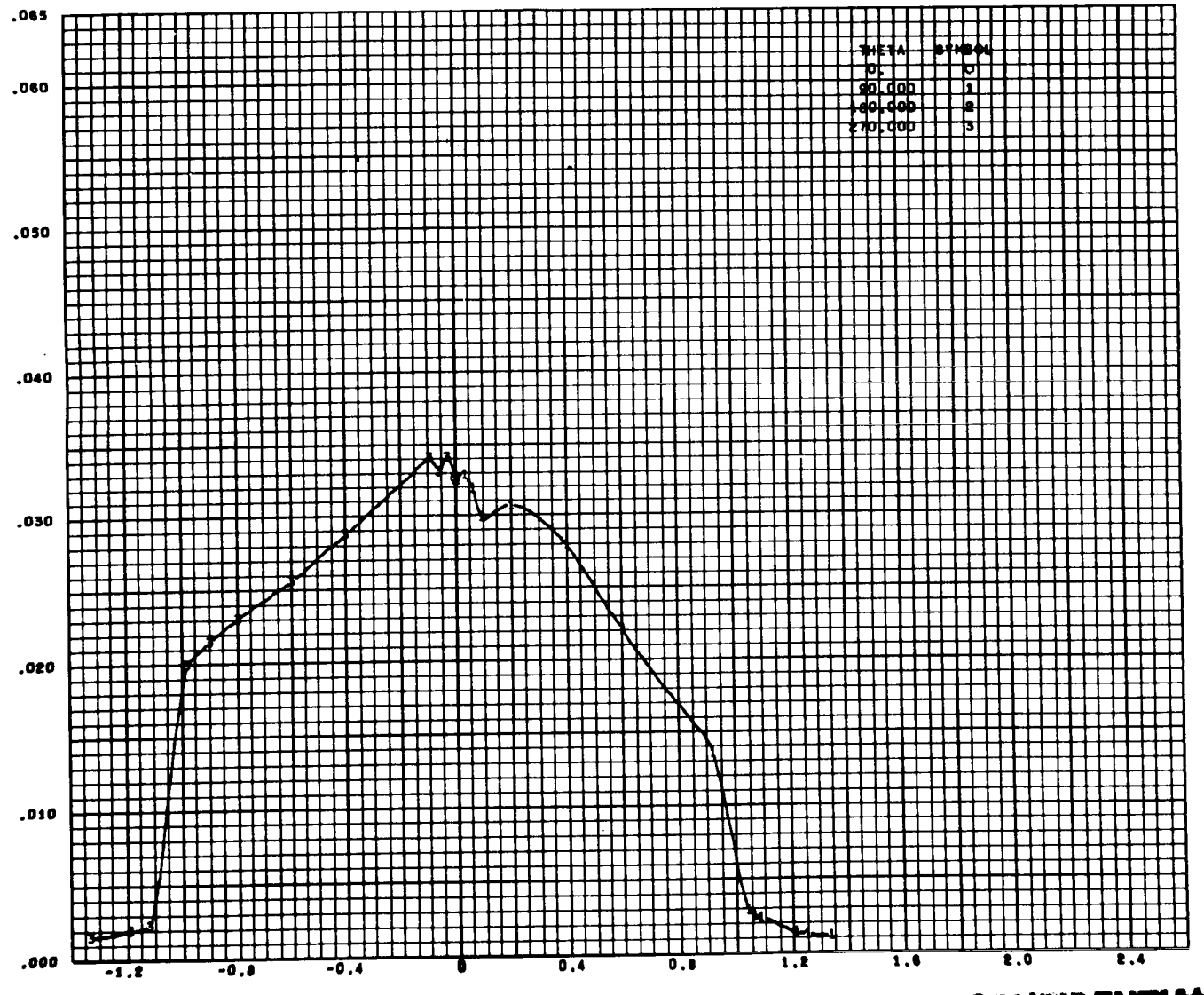

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

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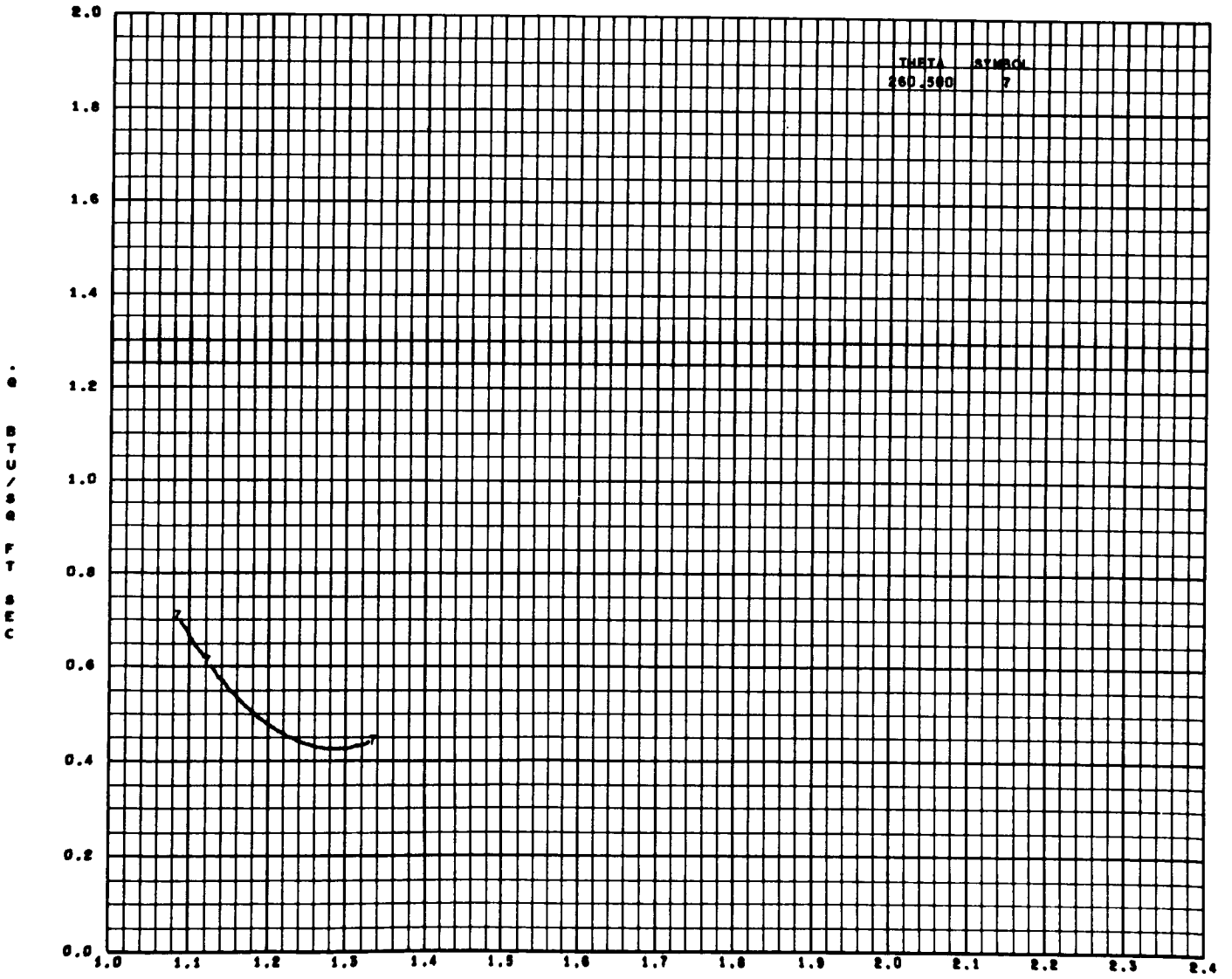
PLOT SERIES NUMBER 88

TEST GROUP	TIME (SEC)
159*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
071 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 176.75 DEG
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TOTAL PRESSURE ------- 249.90 PSIA
TOTAL TEMPERATURE ---- 1685.00 DEG RANKINE

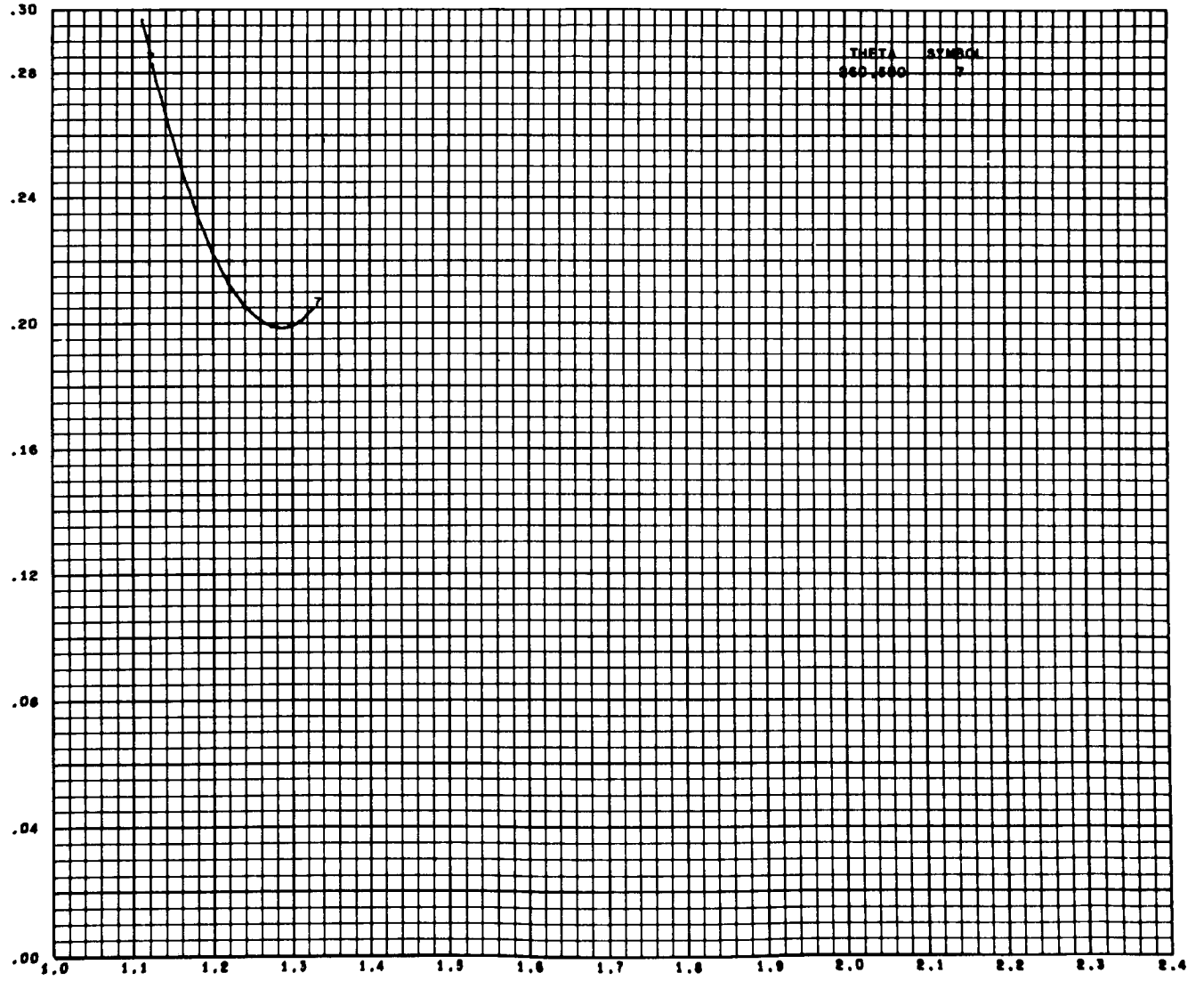
RE/FT --- 0.3767*10+6
Q(OM) --- 2.1445 BTU/SQ FT SEC

PLOT SERIES NUMBER 88

TEST GROUP	TIME (SEC)
159*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
073 000



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HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 68 | 3937-11 075 000

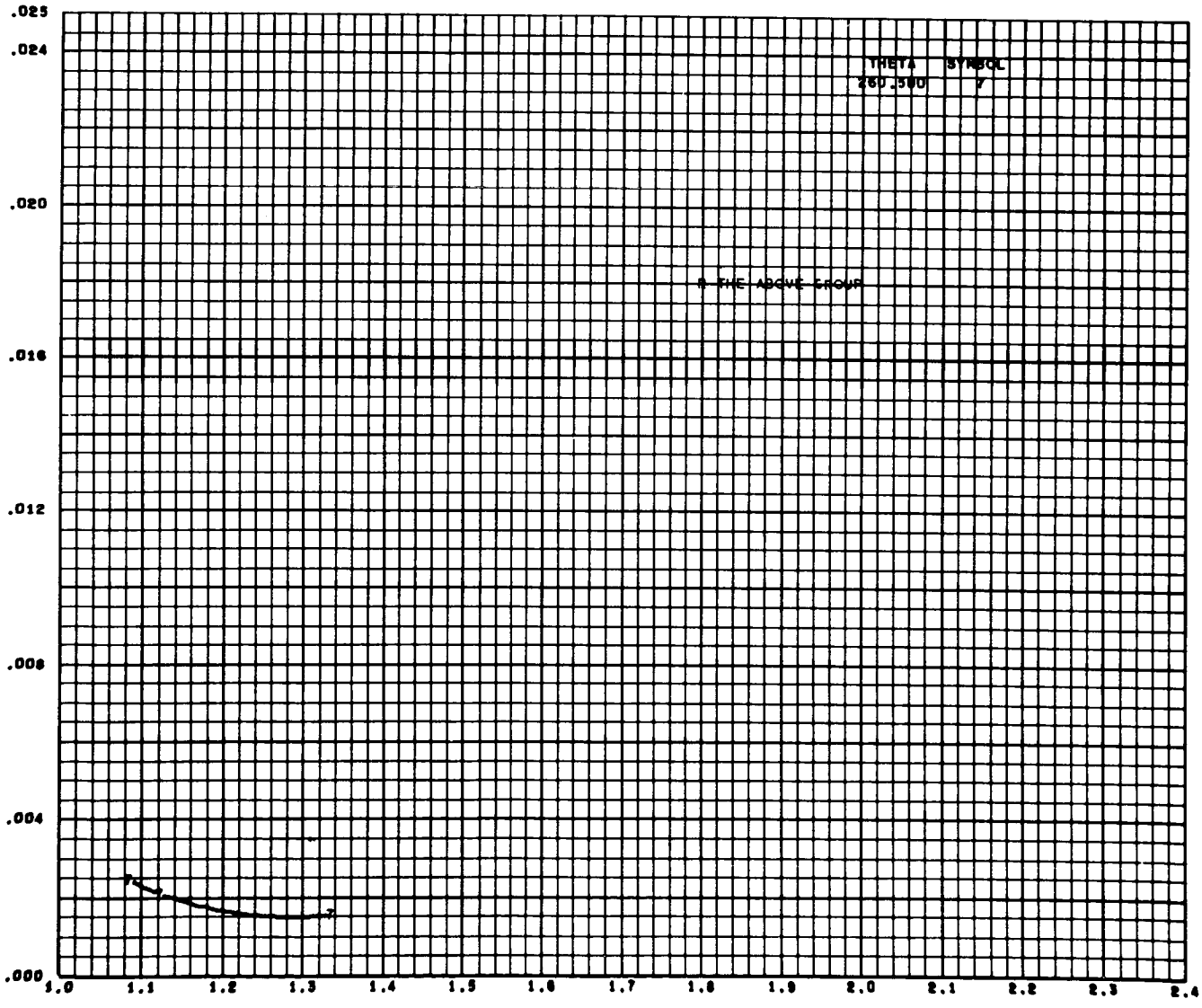
APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 176.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 249.90 PSIA
TOTAL TEMPERATURE ---- [illegible]
RE/FT --- 0.3767*10+6
Q(OM) --- 2.1445 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
159*	2.90



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A-627 SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 178.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 252.90 PSIA
TOTAL TEMPERATURE ---- 1675.30 DEG RANKINE

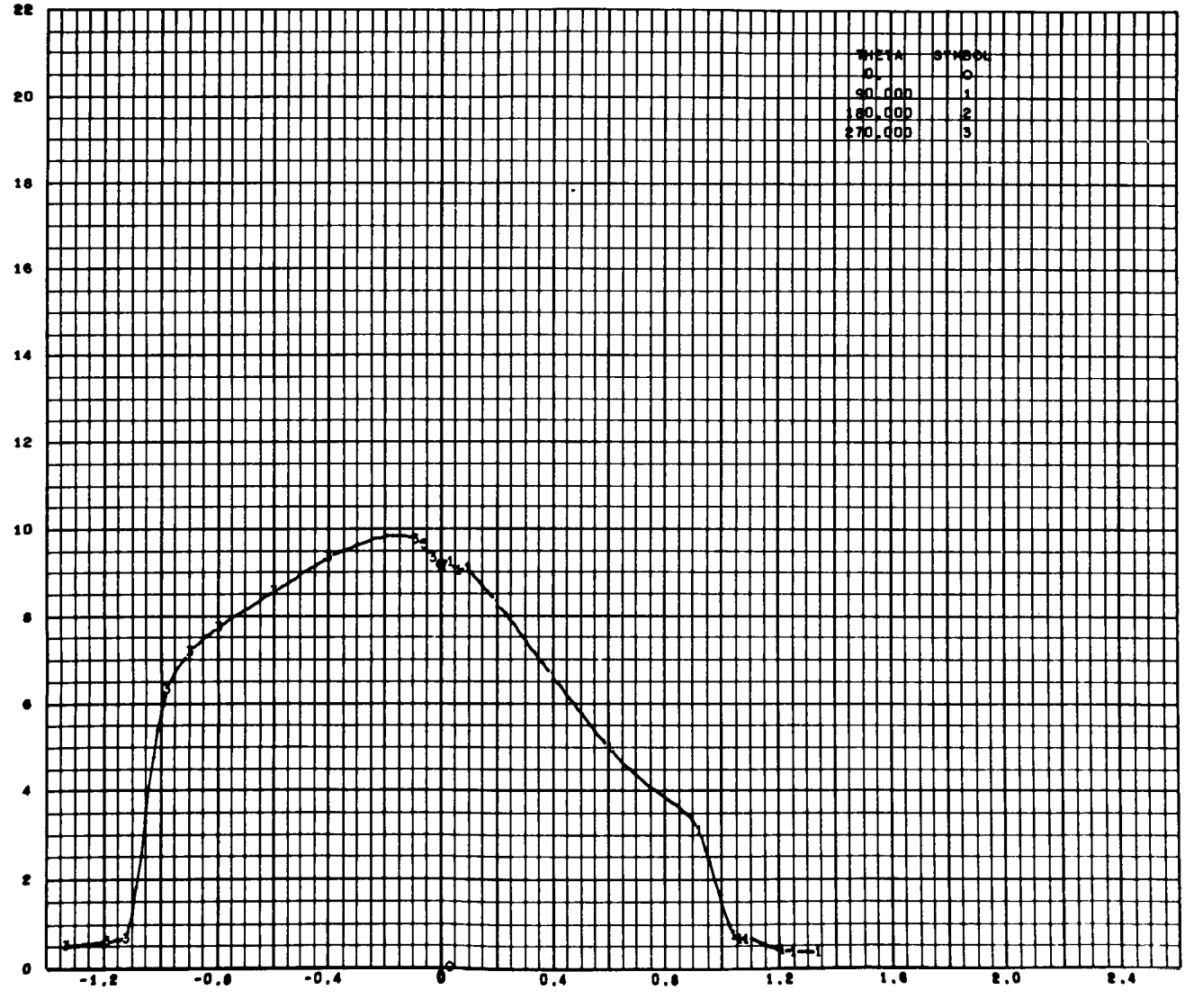
RE/FT --- 0.3852*10+6
Q(OM) --- 2.1619 BTU/SQ FT SEC

PLOT SERIES NUMBER 89

TEST GROUP	TIME (SEC)
158*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
076 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 178.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 252.90 PSIA
TOTAL TEMPERATURE ---- 1675.30 DEG RANKINE

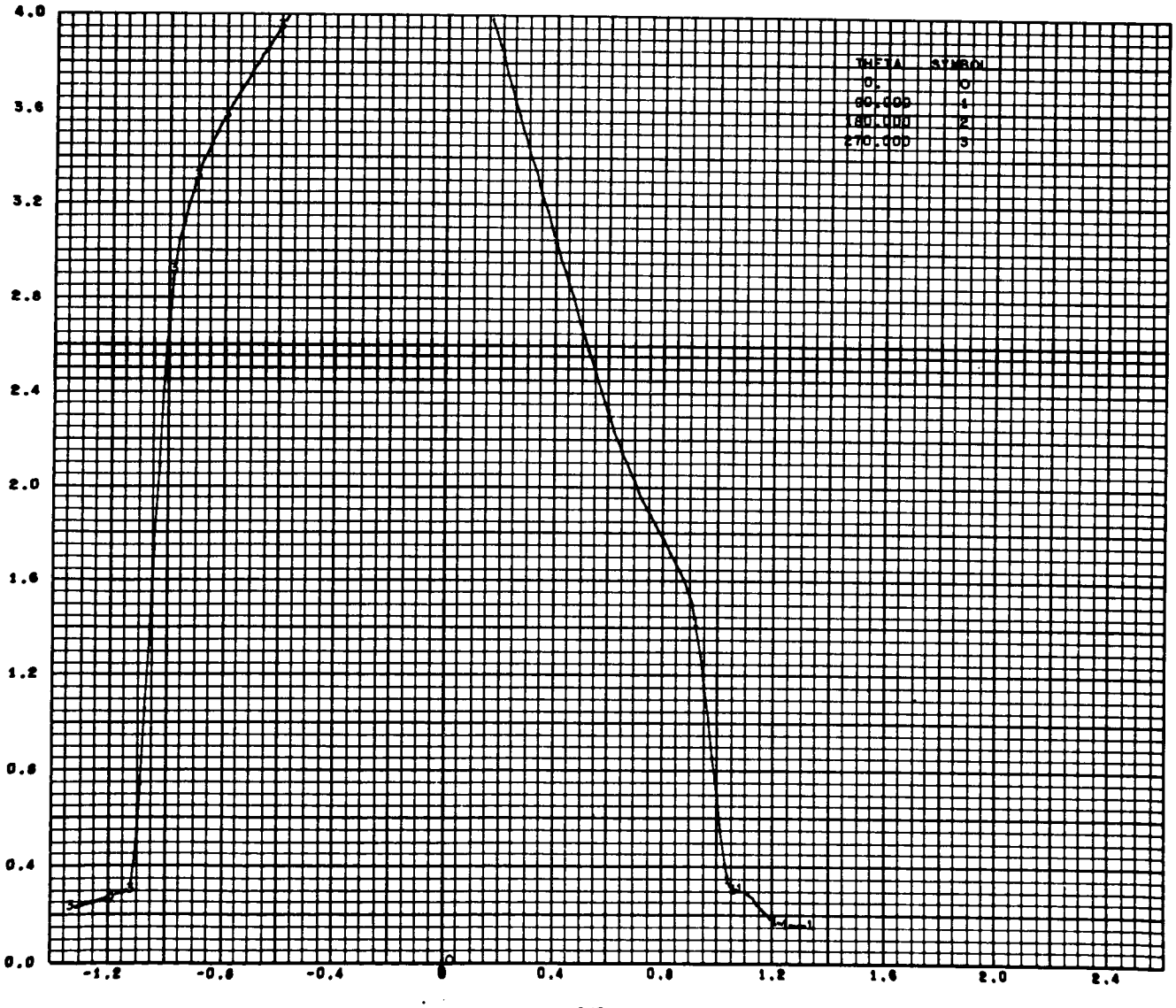
RE/FT --- 0.3852*10+6
Q(OM) --- 2.1619 BTU/SQ FT SEC

PLOT SERIES NUMBER 89

TEST GROUP	TIME (SEC)
158*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
078 000



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HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 89 | 3937-11 080 000

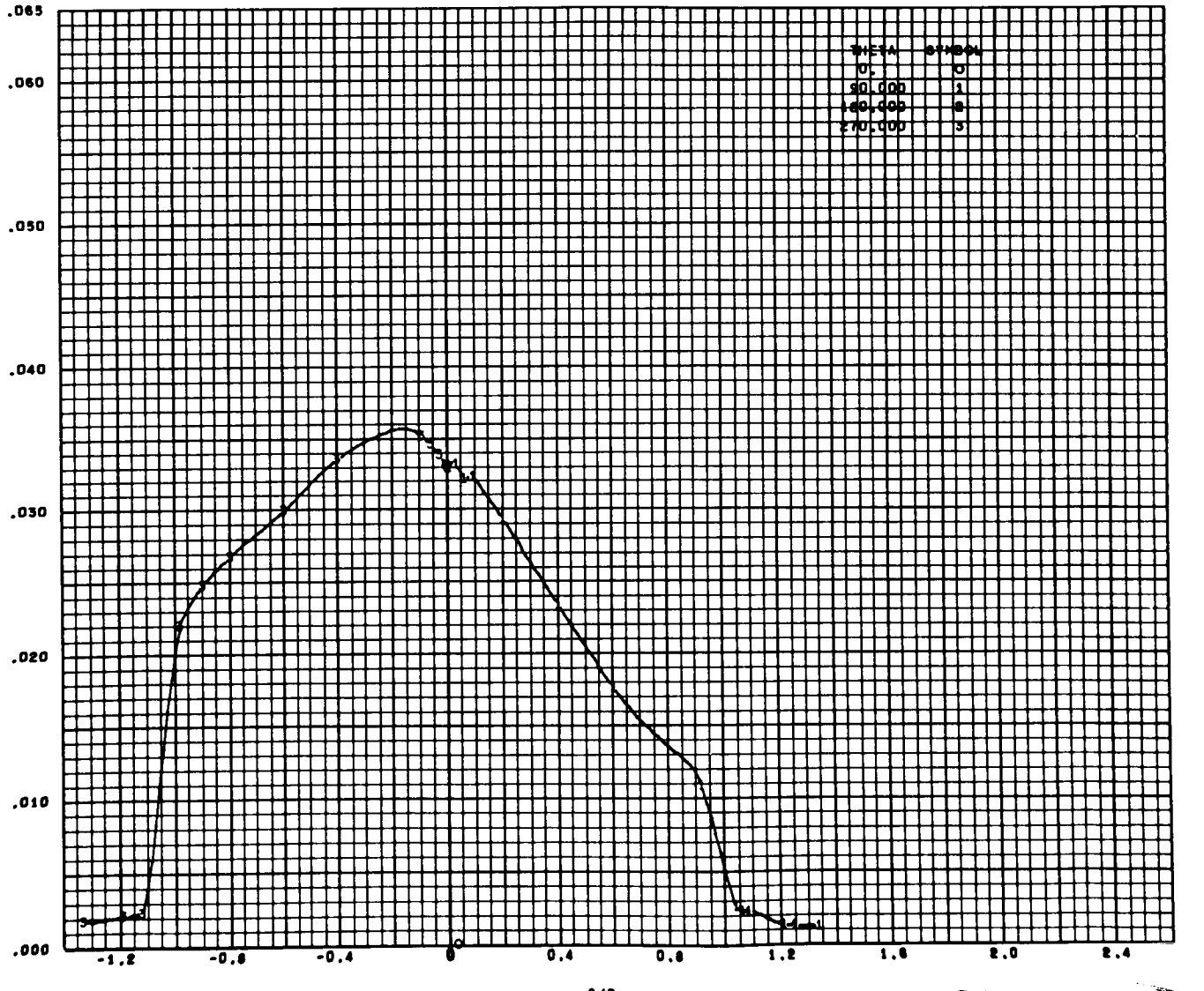
APOLLO M-11
AEDC, TUNNEL C
JUNE, 1964

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 178.75 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE -------- 252.90 PSIA
TOTAL TEMPERATURE ---- 1675.30 DEG RANKINE

RE/FT --- 0.3852*10+6
Q(OM) --- 2.1619 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
158*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



~~CONFIDENTIAL~~

HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 89 | 3937-11 077 000

APOLLO H-11

AEDC, TUNNEL C

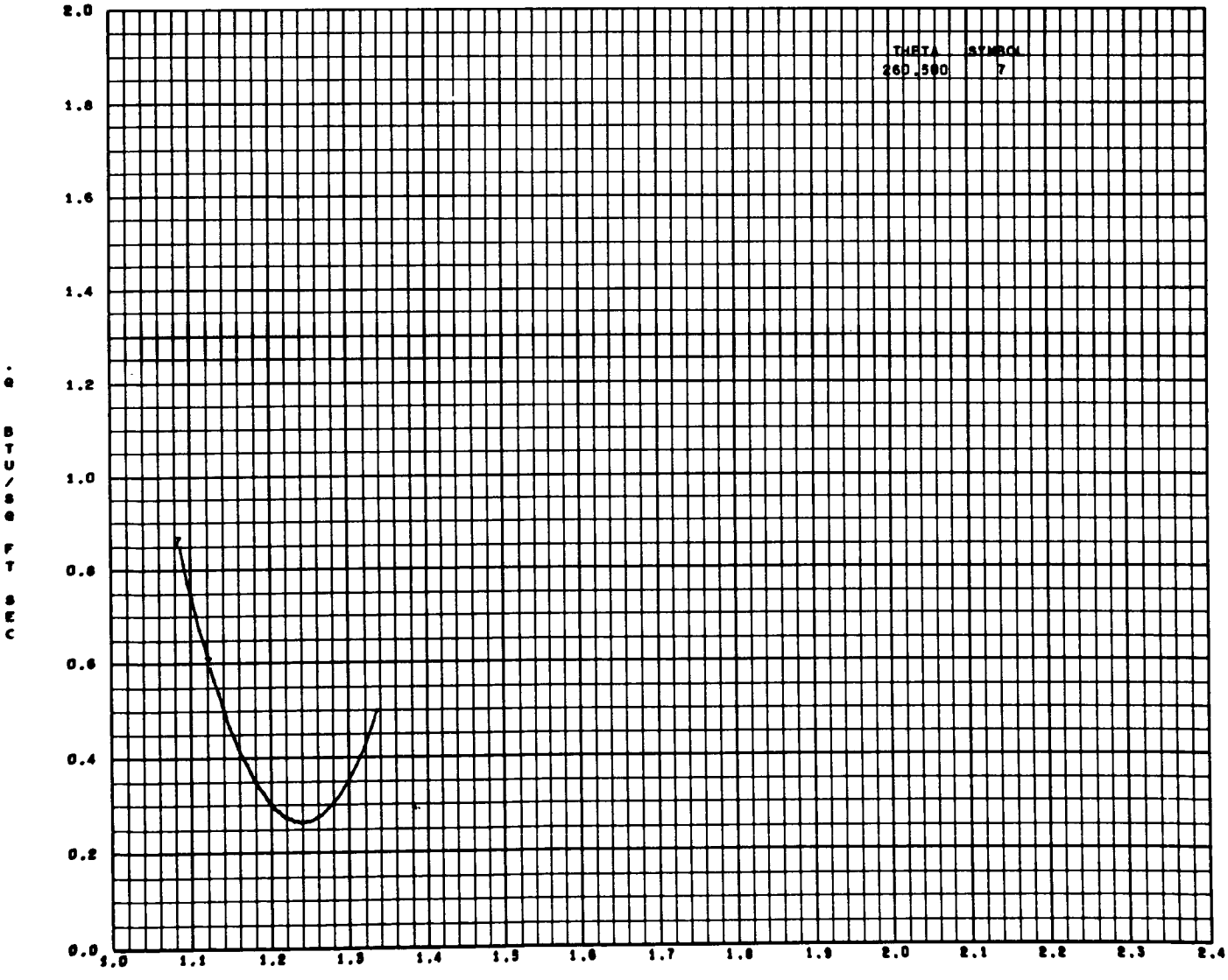
JUNE, 1964

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 178.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 252.90 PSIA
TOTAL TEMPERATURE ---- 1675.30 DEG RANKINE

RE/FT --- 0.3852*10+6
Q(OM) --- 2.1619 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
158*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 89 | 3937-11 079 000

APOLLO M-11

AEDC, TUNNEL C

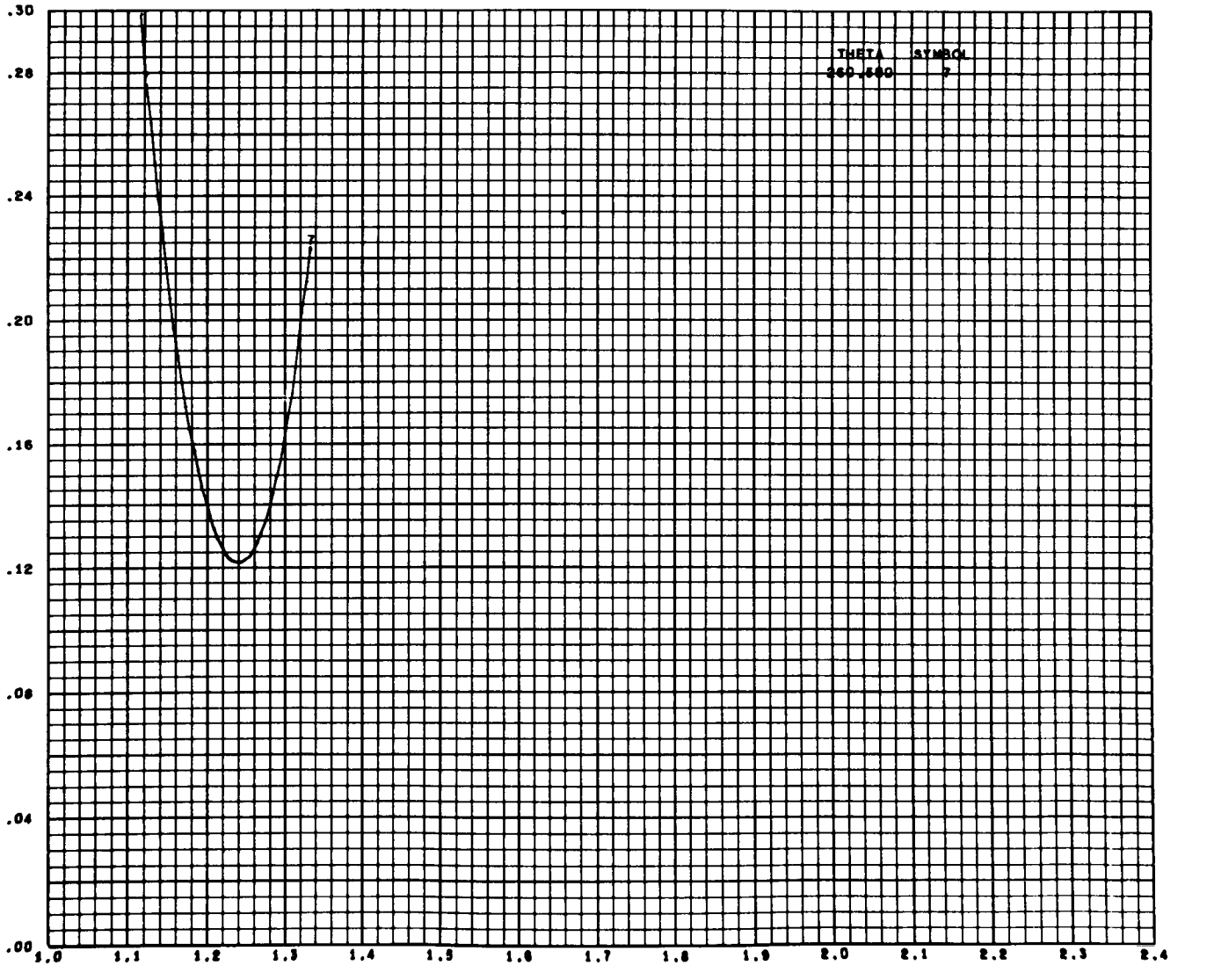
JUNE, 1964

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 178.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 252.90 PSIA
TOTAL TEMPERATURE ---- 1675.30 DEG RANKINE

RE/FT --- 0.3852*10+6
Q(OM) --- 2.1619 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
158*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER CONFIGURATION C2 PLOT SERIES NUMBER 89 3937-11 001 000

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.05
ANGLE OF ATTACK ------ 178.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 252.90 PSIA
TOTAL TEMPERATURE ---- 1675.30 DEG RANGE OF PARAMETERS LISTED

RE/FT --- 0.3852*10+6
Q(OM) --- 2.1619 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
158*	2.85

THETA SYMBOL
260.500 7

* THE ABOVE GROUP

H LB/SQ FT SEC

.025
.024
.020
.016
.012
.008
.004
.000

1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3 2.4

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HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 90 | 3937-11 082 000

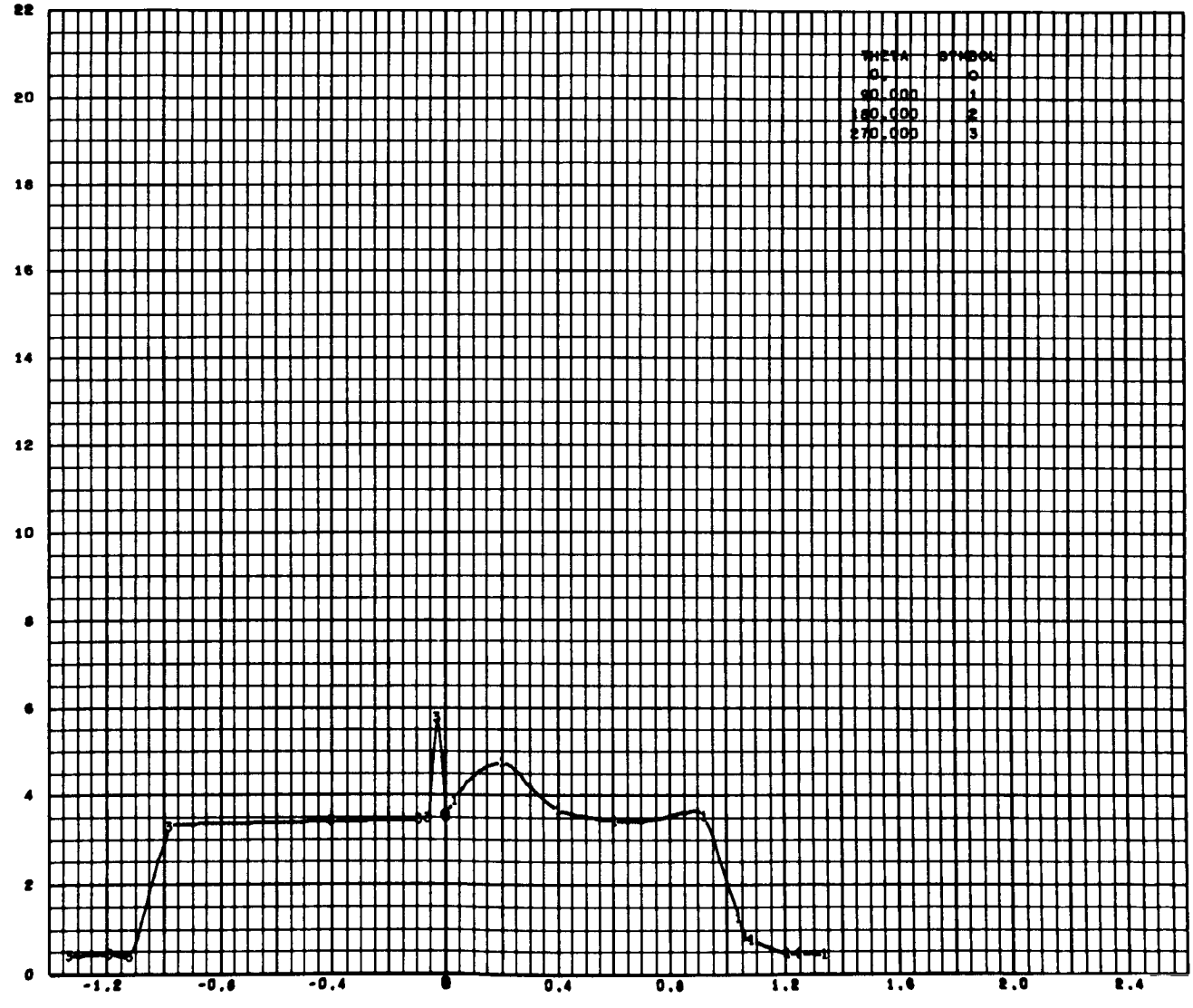
APOLLO H-11
AEDC, TUNNEL C
JUNE, 1964

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 176.76 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2398.40 PSIA
TOTAL TEMPERATURE ---- 1757.20 DEG RANKINE

RE/FT --- 3.3594*10+6
Q(OM) --- 10.7484 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
171*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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A-634 SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 176.76 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2398.40 PSIA
TOTAL TEMPERATURE ---- 1757.20 DEG RANKINE

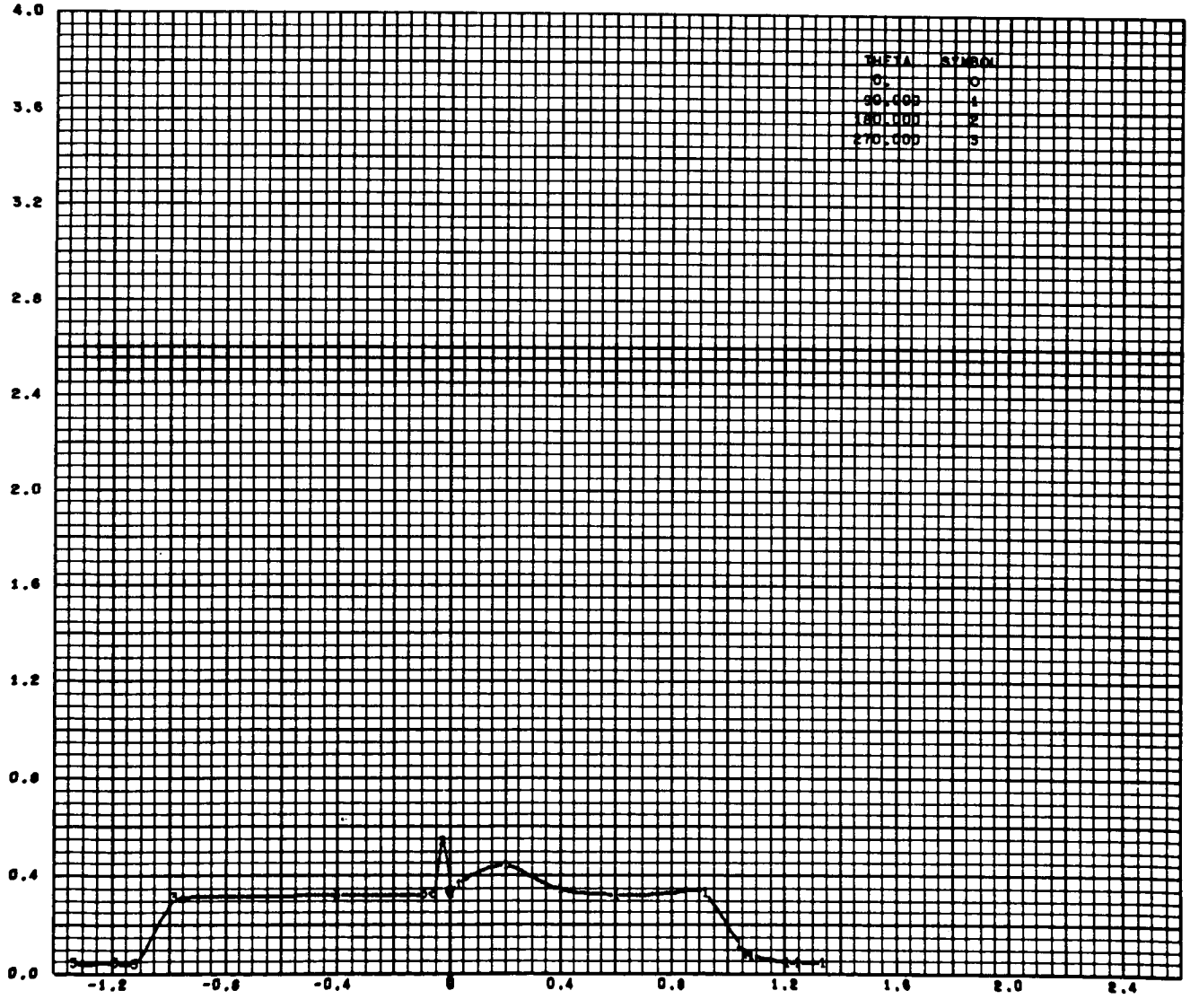
RE/FT --- 3.3594*10+6
Q(OM) --- 10.7484 BTU/SQ FT SEC

PLOT SERIES NUMBER 90

TEST GROUP	TIME (SEC)
171*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
084 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 176.76 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2398.40 PSIA
TOTAL TEMPERATURE ---- 1757.20 DEG RANKINE

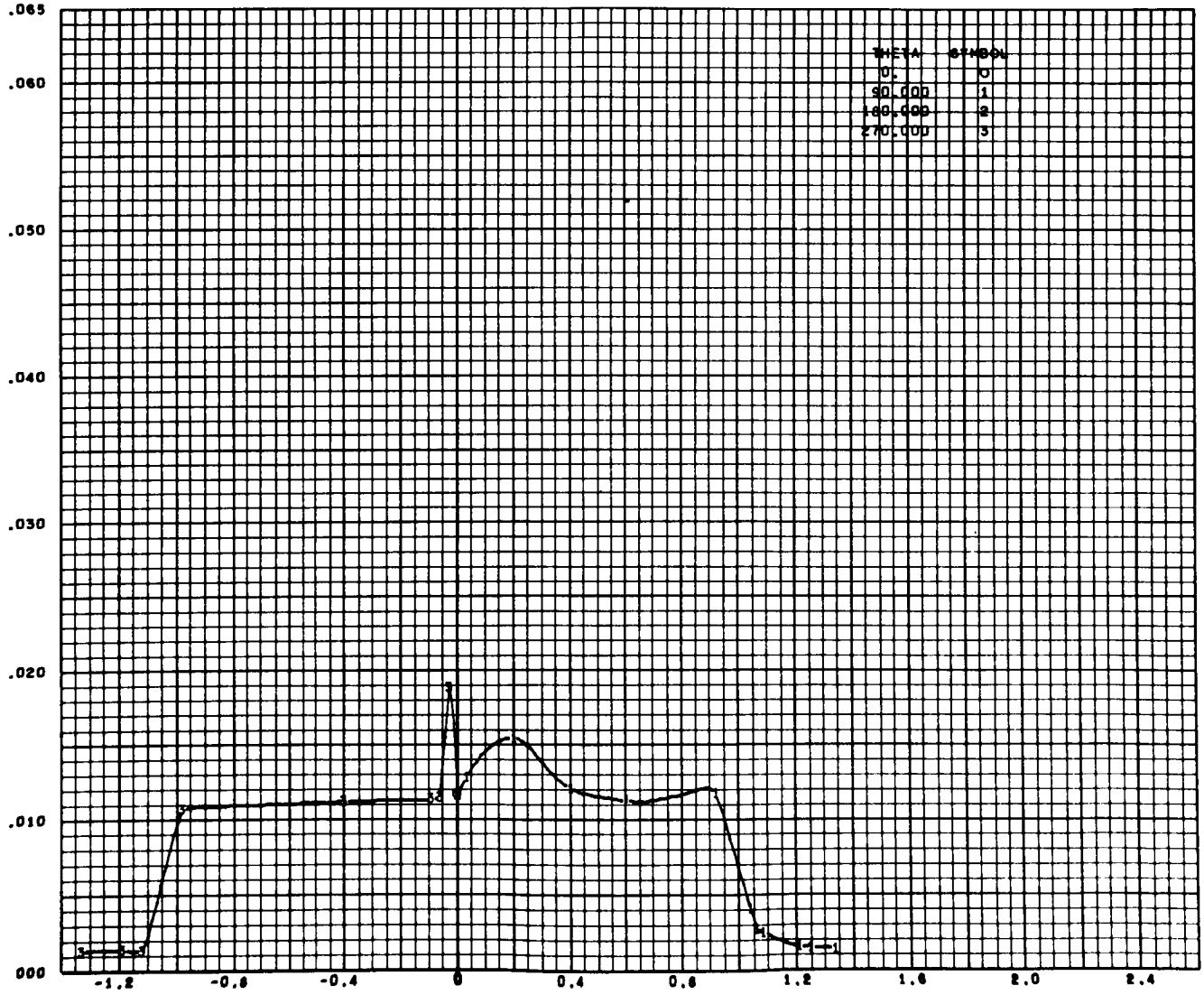
RE/FT --- 3.3594*10+6
Q(OM) --- 10.7484 BTU/SQ FT SEC

PLOT SERIES NUMBER 90

TEST GROUP	TIME (SEC)
171*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
086 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 176.76 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 2398.40 PSIA
TOTAL TEMPERATURE ---- 1757.20 DEG RANKINE

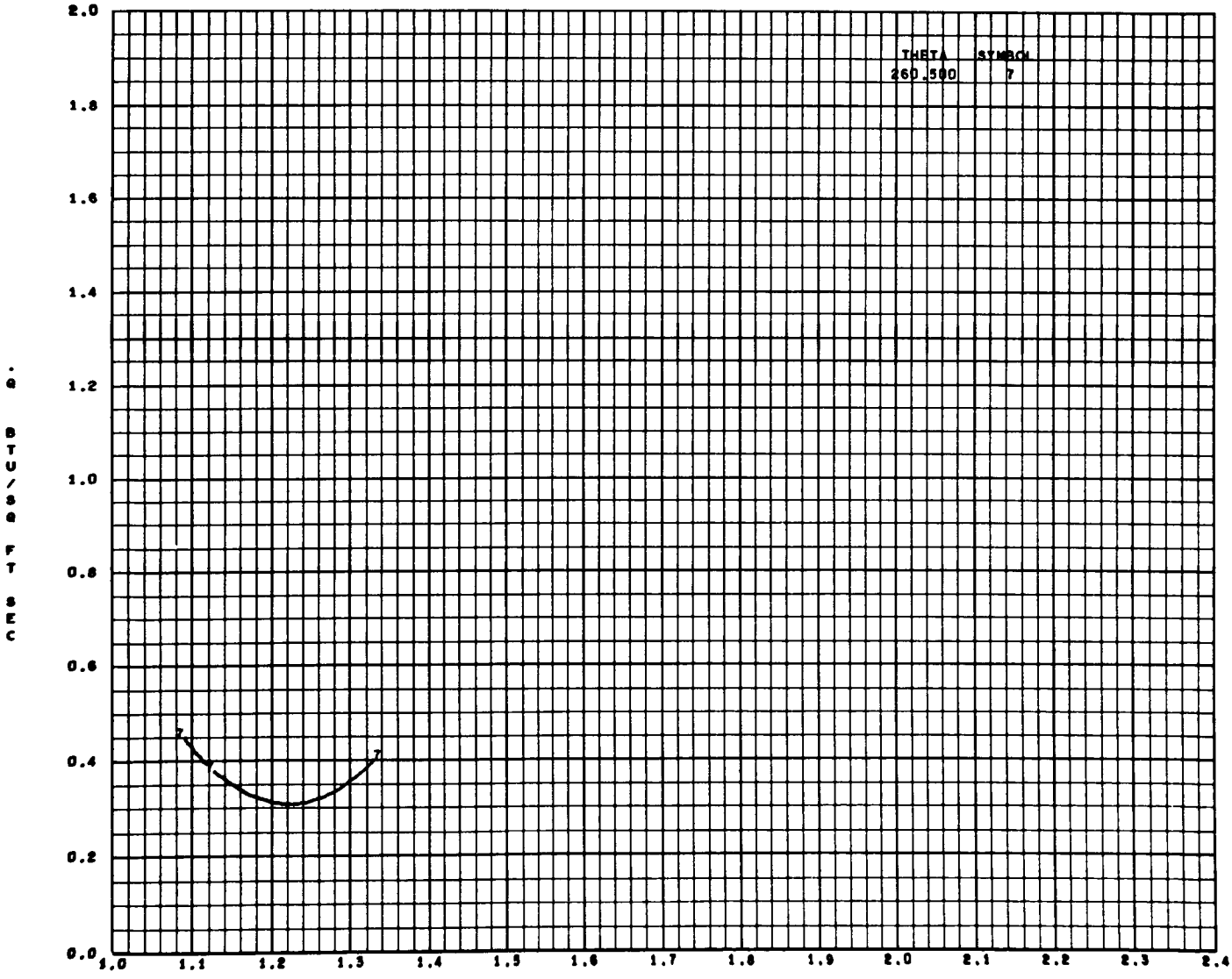
RE/FT --- 3.3594*10+6
Q(OM) --- 10.7484 BTU/SQ FT SEC

PLOT SERIES NUMBER 90

TEST GROUP	TIME (SEC)
171*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
083 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 176.76 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2398.40 PSIA
TOTAL TEMPERATURE ---- 1757.20 DEG RANKINE

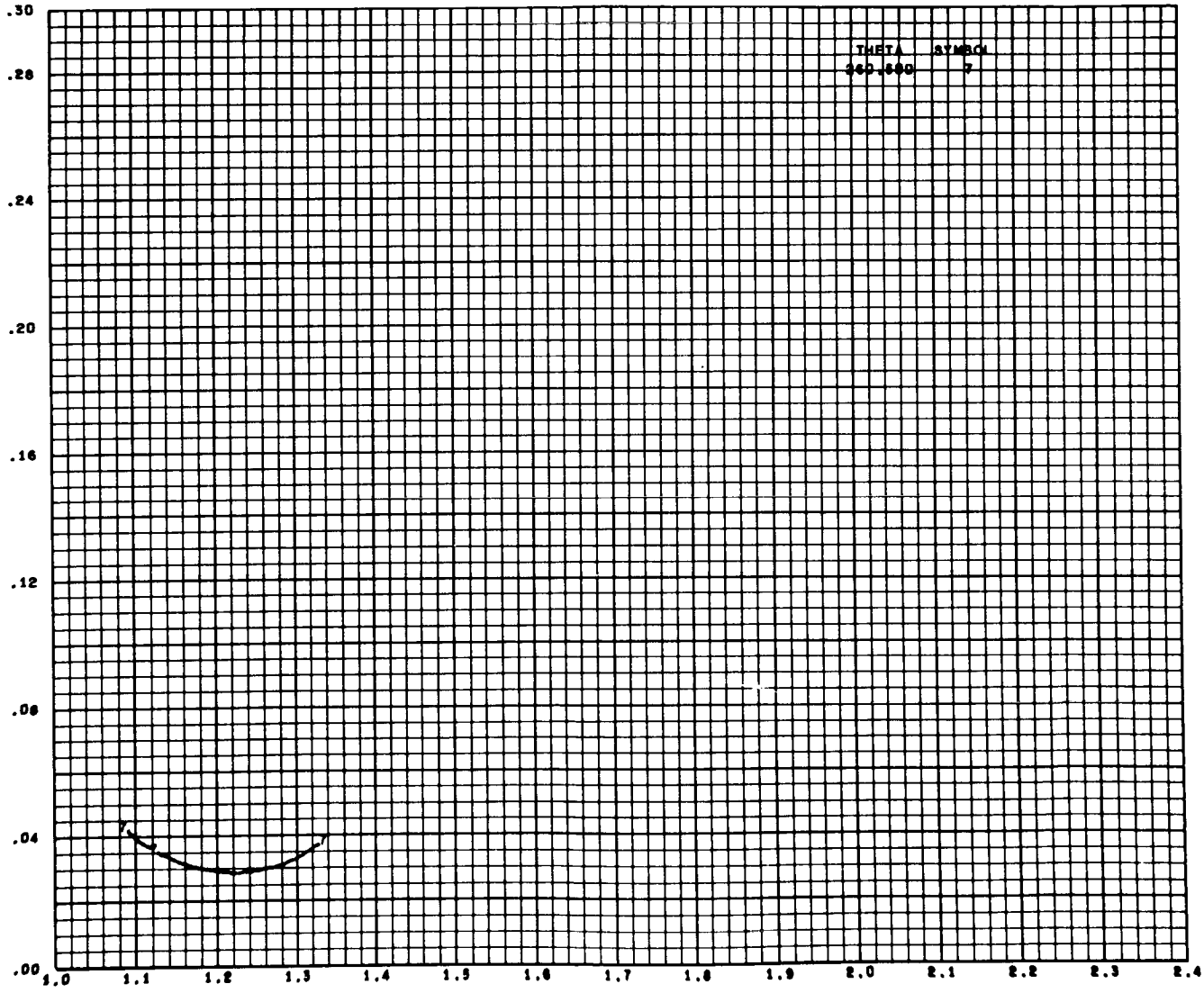
RE/FT --- 3.3594*10+6
Q(OM) --- 10.7484 BTU/SQ FT SEC

PLOT SERIES NUMBER 90

TEST GROUP	TIME (SEC)
171*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
085 000



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HEAT TRANSFER — CONFIGURATION C2 — PLOT SERIES NUMBER 90 — 3937-11 087 000

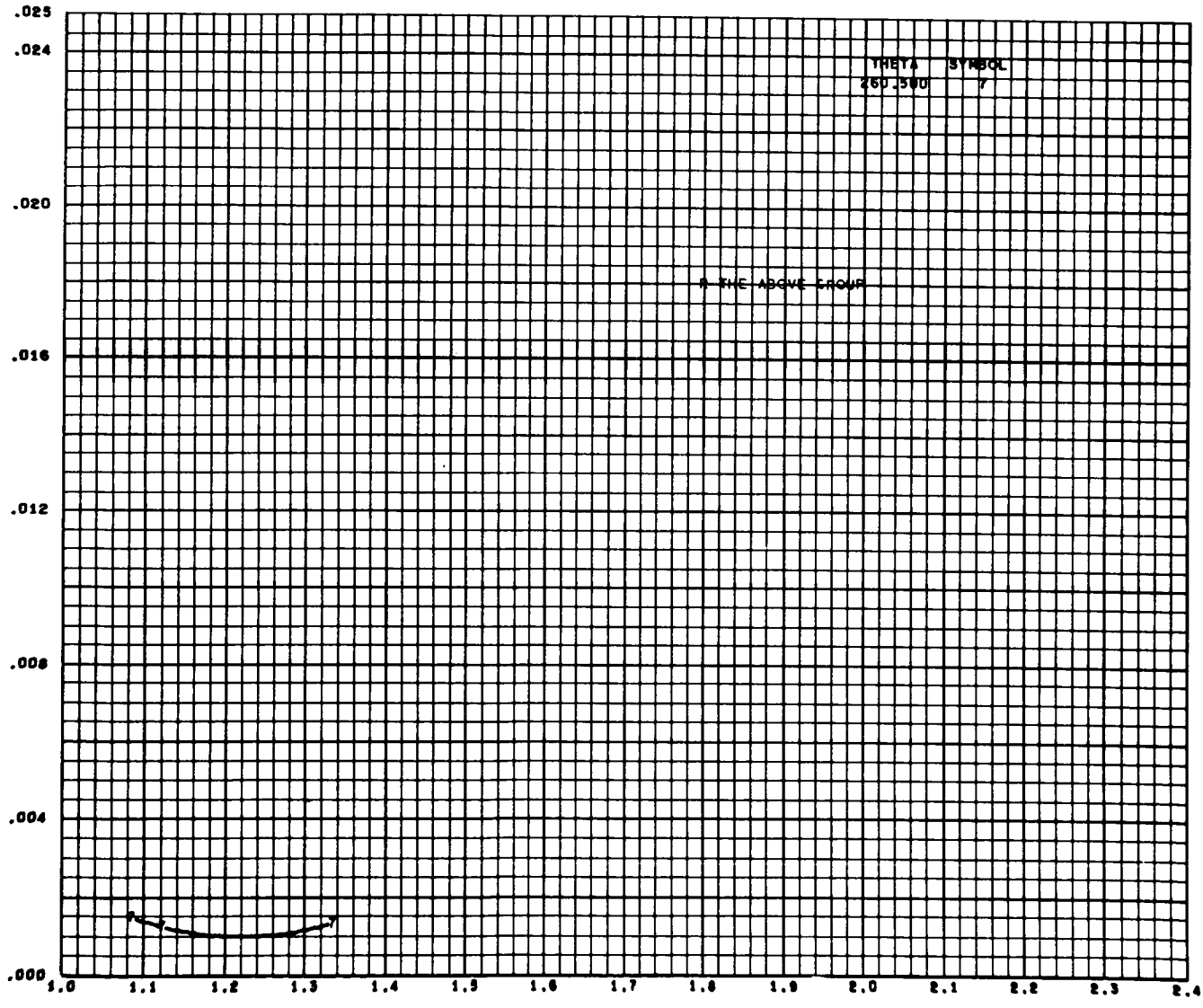
APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 176.76 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2398.40 PSIA
TOTAL TEMPERATURE ---- 1757.20 DEG RANGES OF PARAMETERS LISTED
RE/FT --- 3.3594*10+6
Q(OM) --- 10.7484 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
171*	2.85



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2398.20 PSIA
TOTAL TEMPERATURE ---- 1764.50 DEG RANKINE

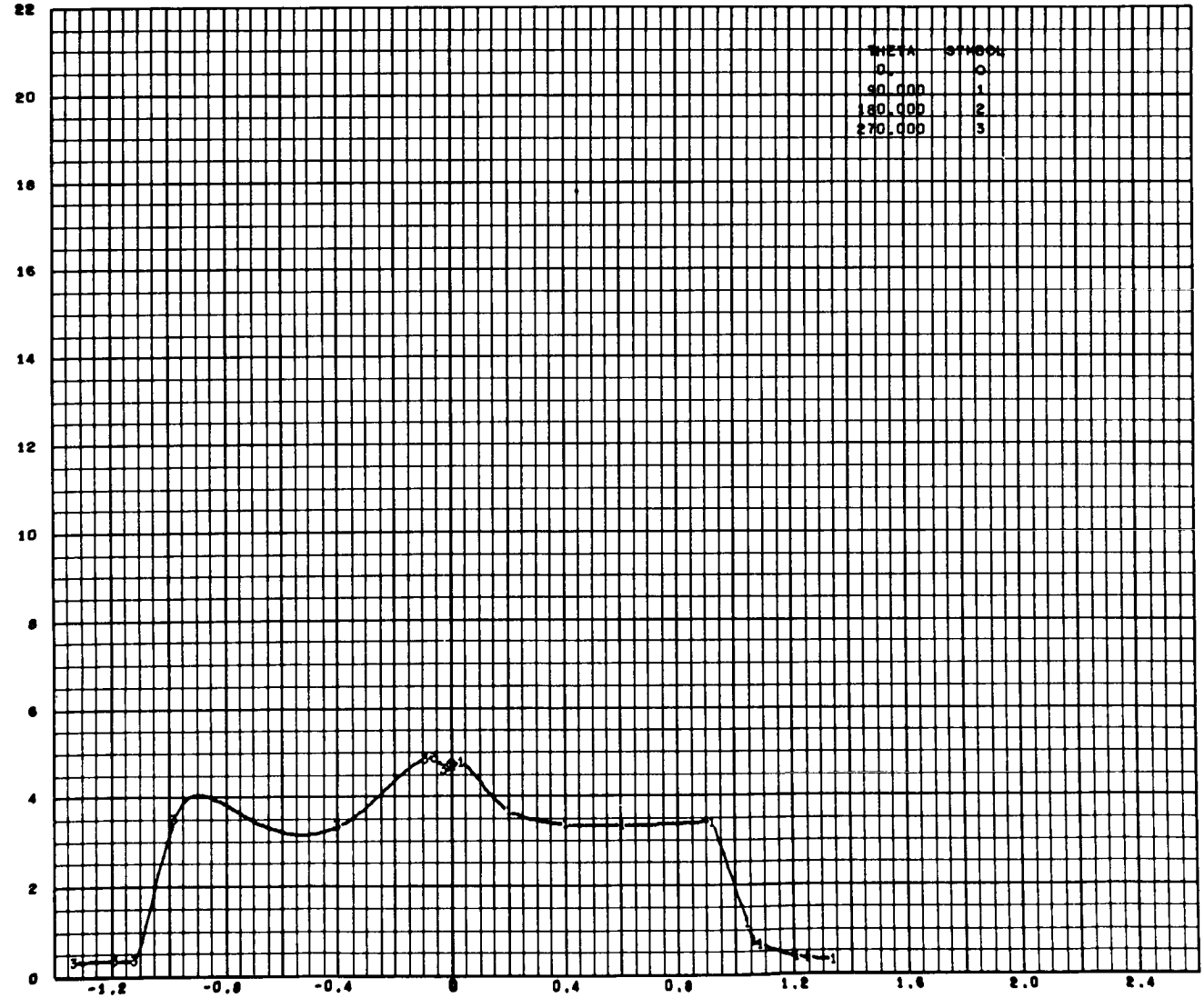
RE/FT --- 3.3334*10+6
Q(OM) --- 10.7478 BTU/SQ FT SEC

PLOT SERIES NUMBER 91

TEST GROUP	TIME (SEC)
170*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
088 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2398.20 PSIA
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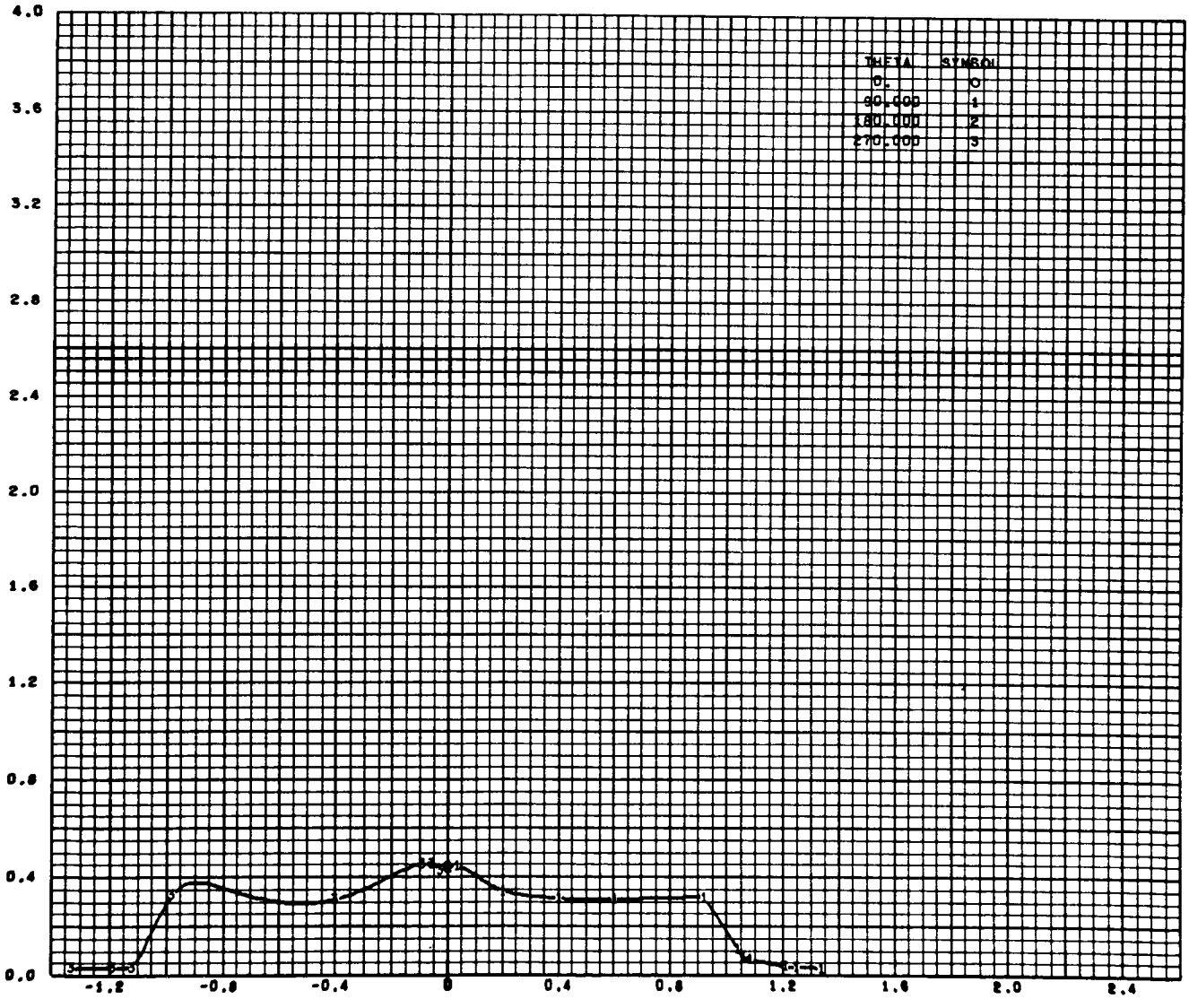
RE/FT --- 3.3334*10+6
Q(OM) --- 10.7478 BTU/SQ FT SEC

PLOT SERIES NUMBER 91

TEST GROUP	TIME (SEC)
170*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
090 000



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A-641 SID 64-2080

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2398.20 PSIA
TOTAL TEMPERATURE ---- 1764.50 DEG RANKINE

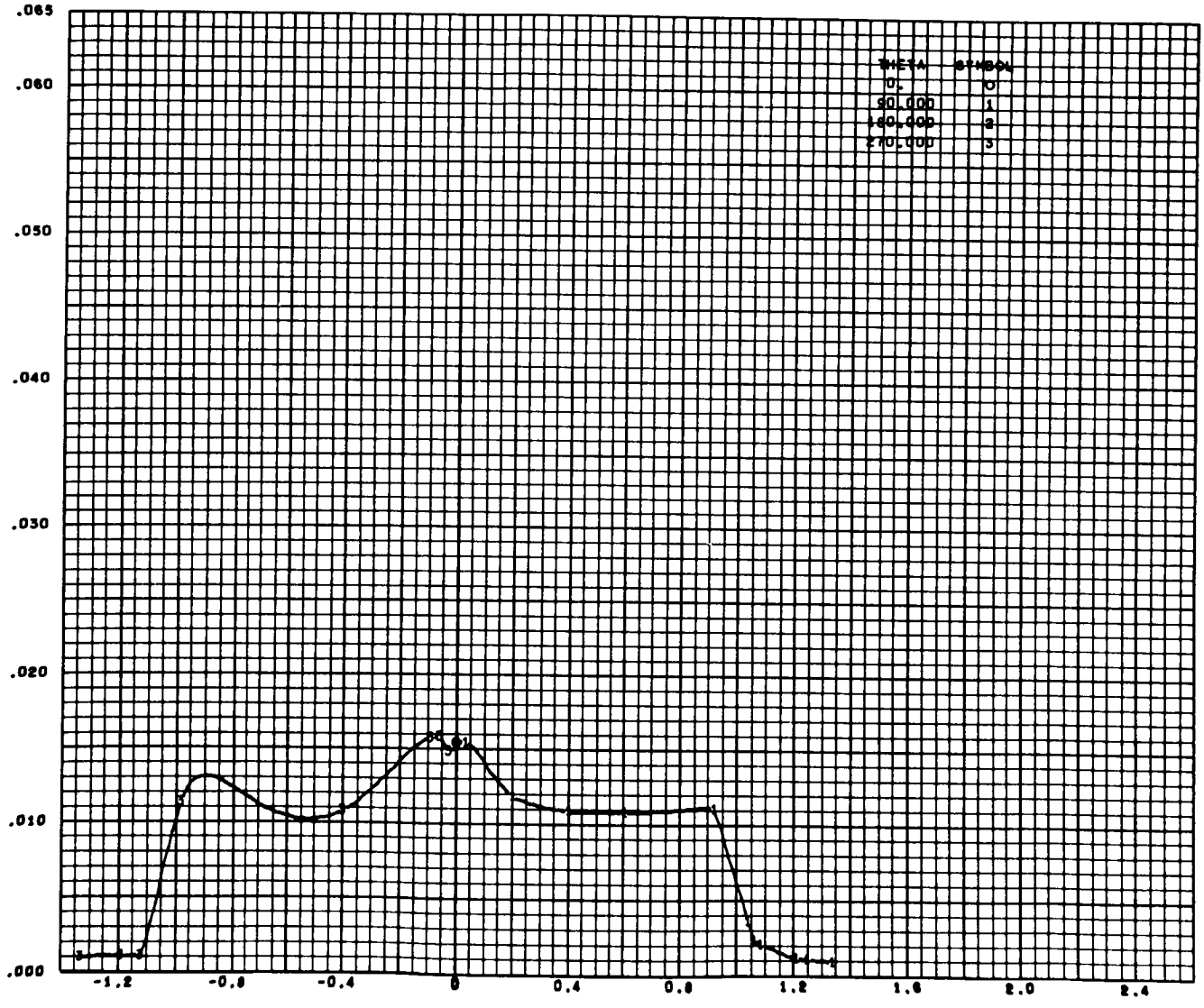
RE/FT --- 3.3334*10+6
Q(OM) --- 10.7478 BTU/SQ FT SEC

PLOT SERIES NUMBER 91

TEST GROUP	TIME (SEC)
170*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
092 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2398.20 PSIA
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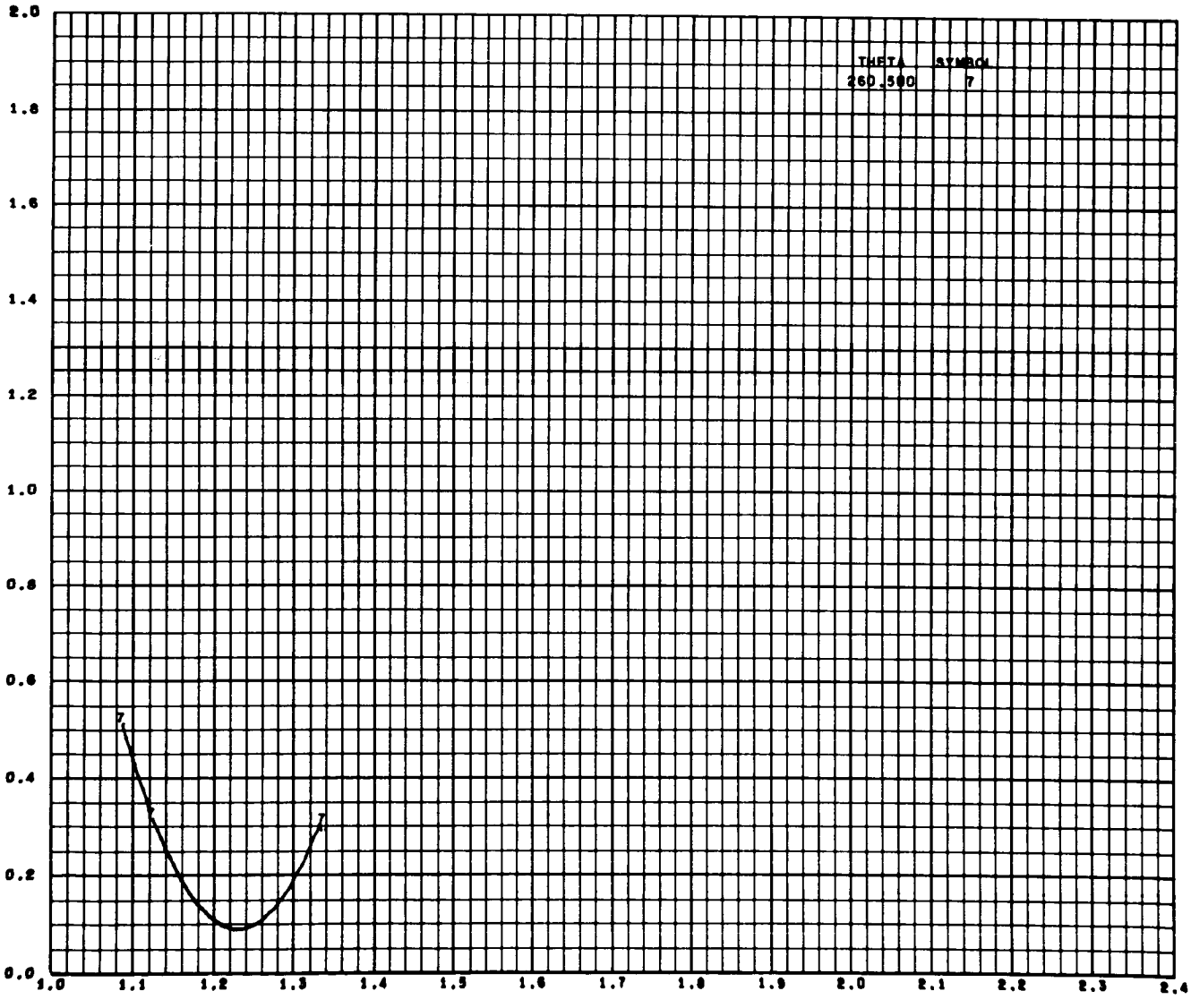
RE/FT --- 3.3334*10+6
Q(OM) --- 10.7478 BTU/SQ FT SEC

PLOT SERIES NUMBER 91

TEST GROUP	TIME (SEC)
170*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
069 000



BTU/SQ FT SEC

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
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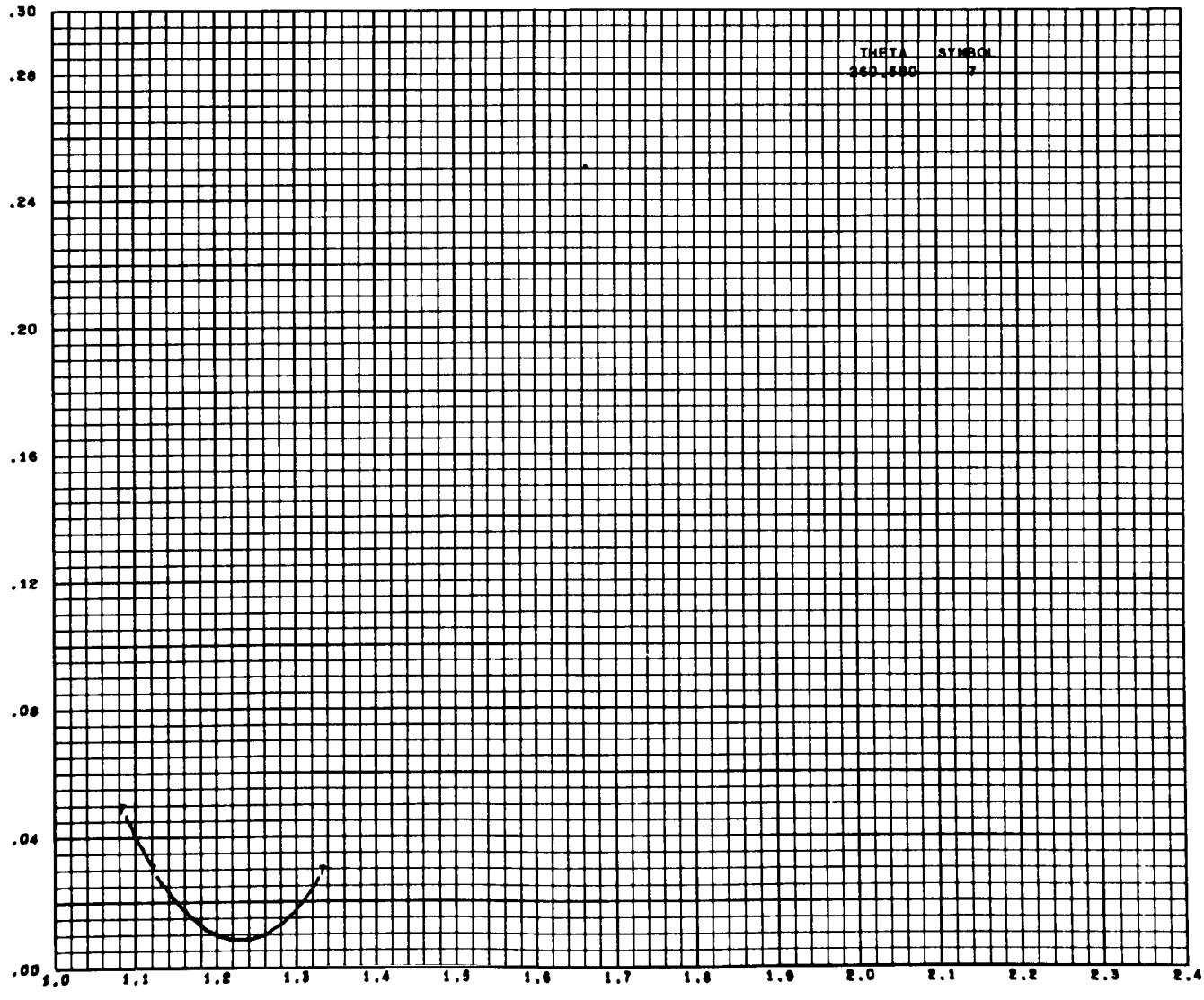
PLOT SERIES NUMBER 91

TEST GROUP	TIME (SEC)
170*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
091 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2398.20 PSIA
TOTAL TEMPERATURE ---- 1764.50 DEG RANKINE

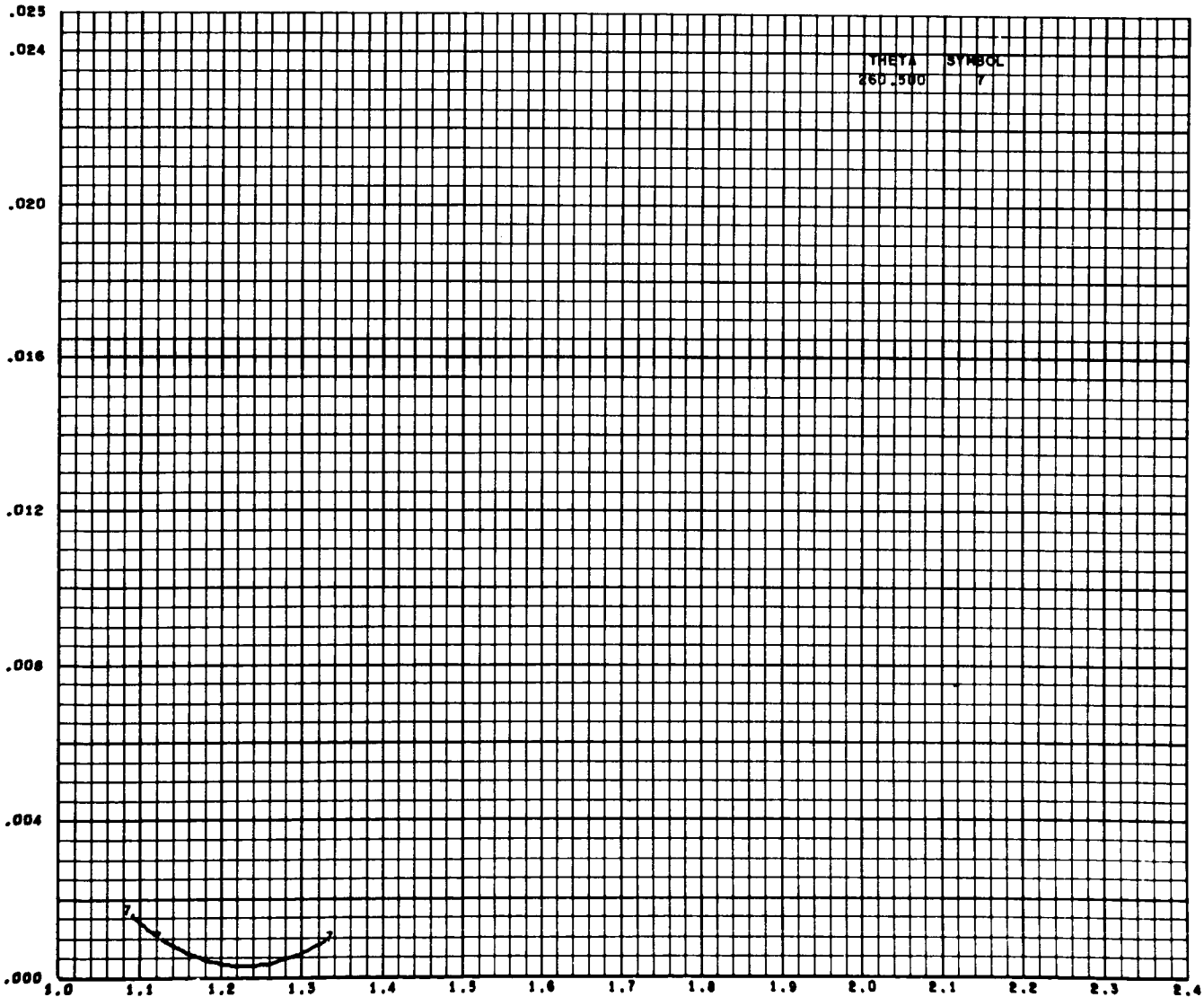
RE/FT --- 3.3334*10+6
Q(OM) --- 10.7478 BTU/SQ FT SEC

PLOT SERIES NUMBER 91

TEST GROUP	TIME (SEC)
170*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
093 000



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A-645 SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 176.78 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2747.30 PSIA
TOTAL TEMPERATURE ---- 1816.10 DEG RANKINE

RE/FT --- 3.6397*10+6
Q(OM) --- 11.4544 BTU/SQ FT SEC

PLOT SERIES NUMBER 92

TEST GROUP	TIME (SEC)
168*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
094 000

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 176.78 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2747.30 PSIA
TOTAL TEMPERATURE ---- 1816.10 DEG RANKINE

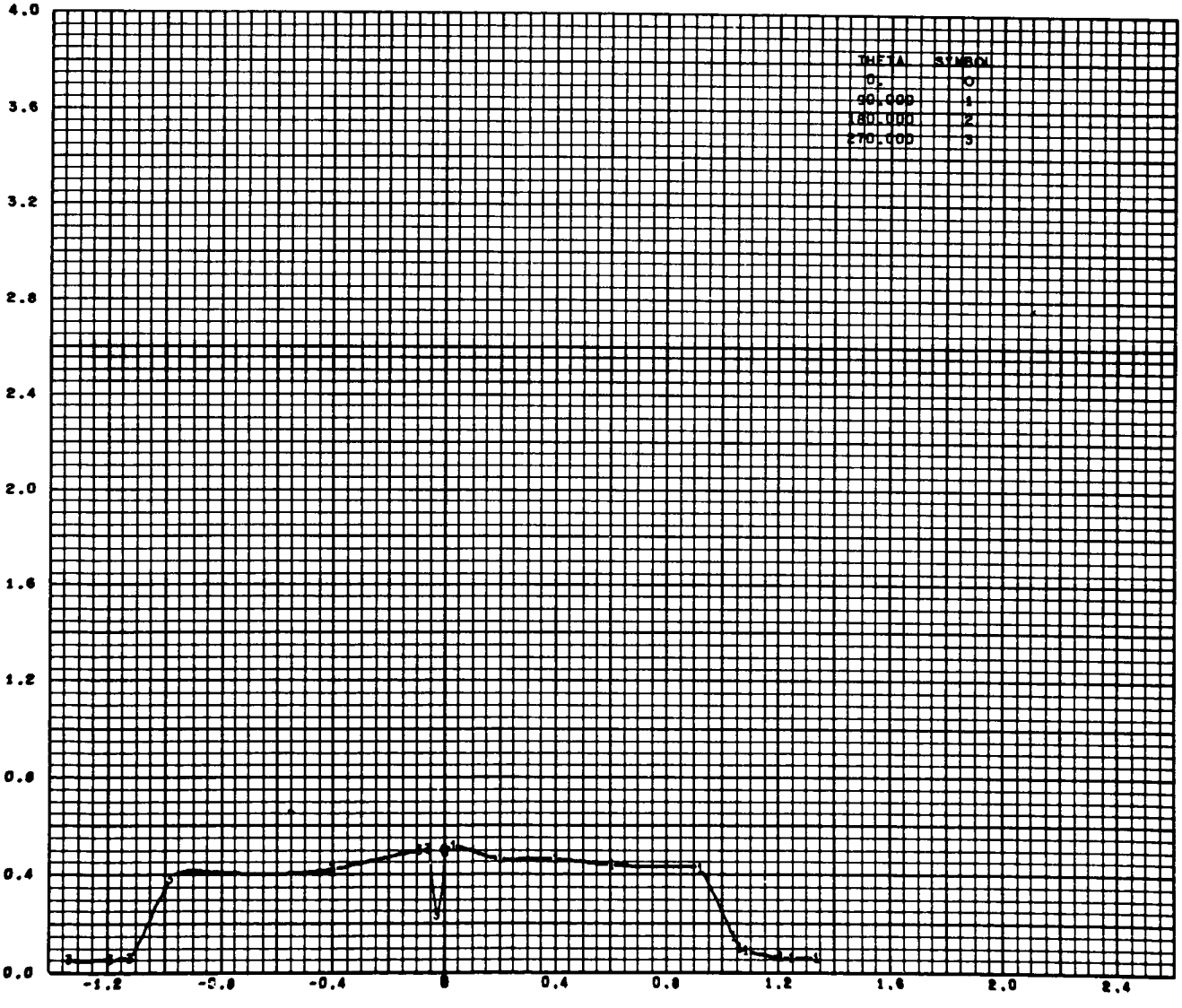
RE/FT --- 3.6397*10+6
Q(OM) --- 11.4544 BTU/SQ FT SEC

PLOT SERIES NUMBER 92

TEST GROUP	TIME (SEC)
168*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
096 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 176.78 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2747.30 PSIA
TOTAL TEMPERATURE ---- 1816.10 DEG RANKINE

RE/FT --- 3.6397*10+6
Q(OM) --- 11.4544 BTU/SQ FT SEC

PLOT SERIES NUMBER 92

TEST GROUP	TIME (SEC)
168*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
098 000

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 176.78 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2747.30 PSIA
TOTAL TEMPERATURE ---- 1816.10 DEG RANKINE

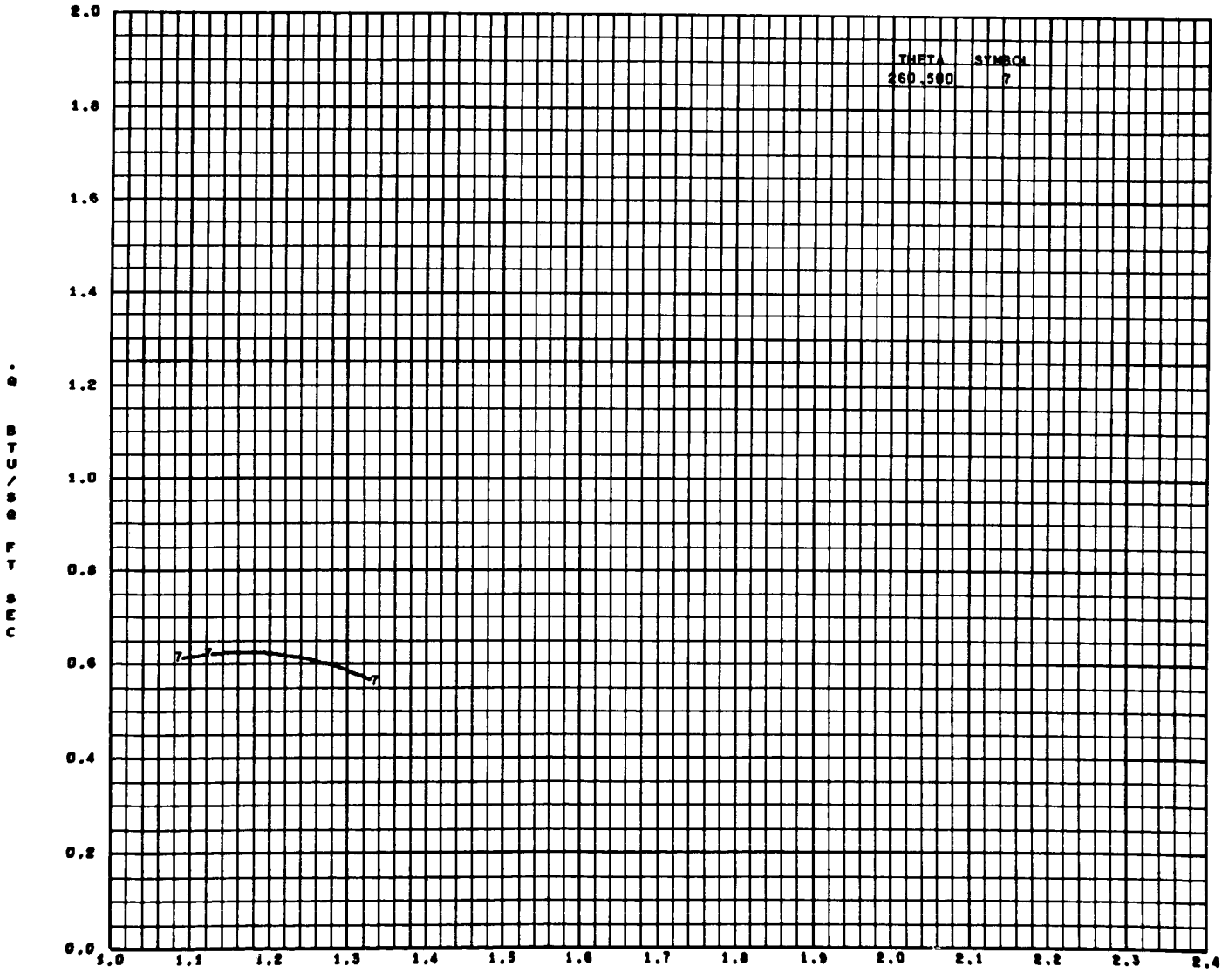
RE/FT --- 3.6397*10+6
Q(OM) --- 11.4544 BTU/SQ FT SEC

PLOT SERIES NUMBER 92

TEST GROUP	TIME (SEC)
168*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
095 000



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A-649 SID 64-2080

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 176.78 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2747.30 PSIA
TOTAL TEMPERATURE ---- 1816.10 DEG RANKINE

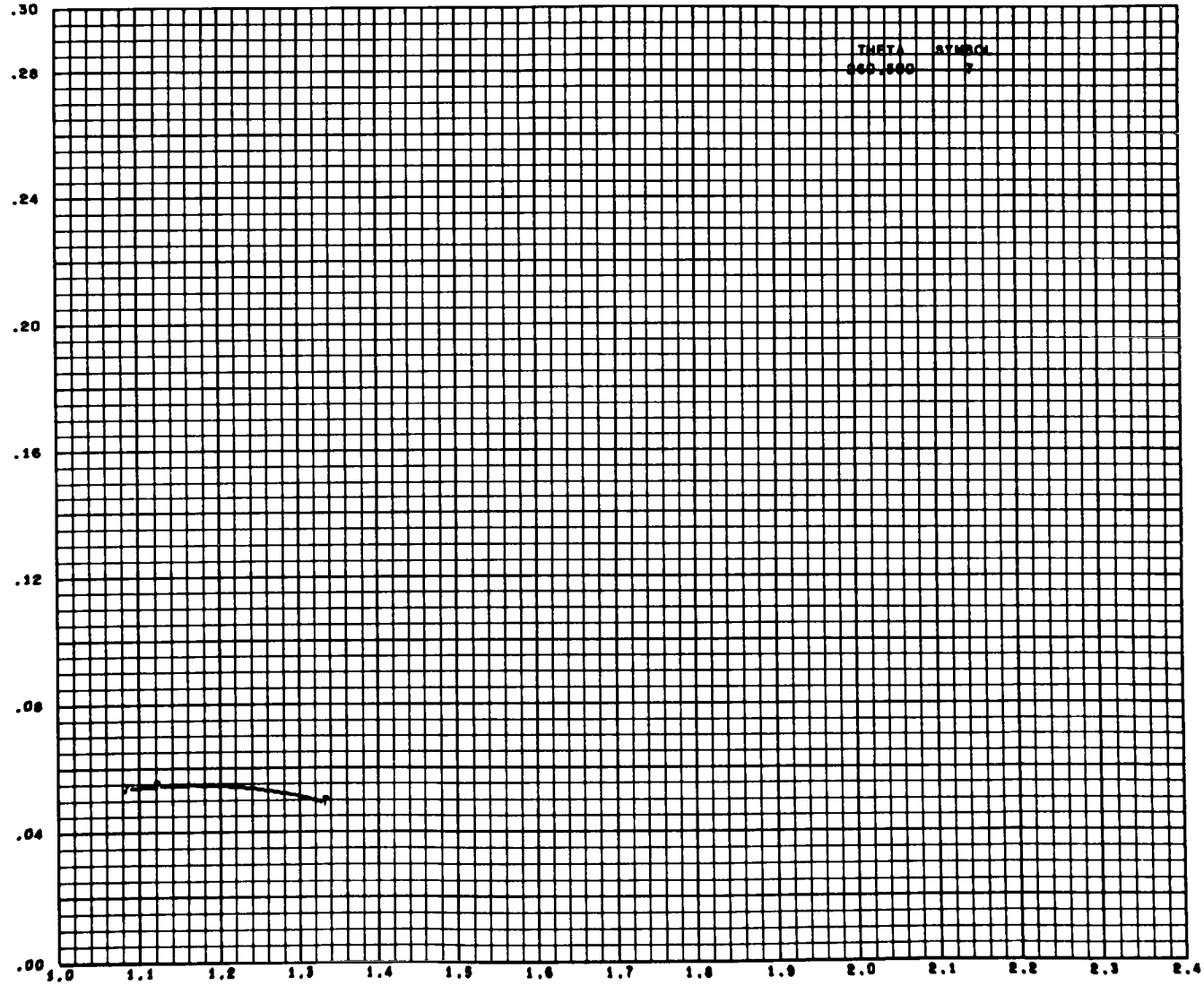
RE/FT --- 3.6397*10+6
Q(CM) --- 11.4544 BTU/SQ FT SEC

PLOT SERIES NUMBER 92

TEST GROUP	TIME (SEC)
168*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
097 000



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 196<

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 176.78 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2747.30 PSIA
TOTAL TEMPERATURE ---- 1816.10 DEG RANKINE

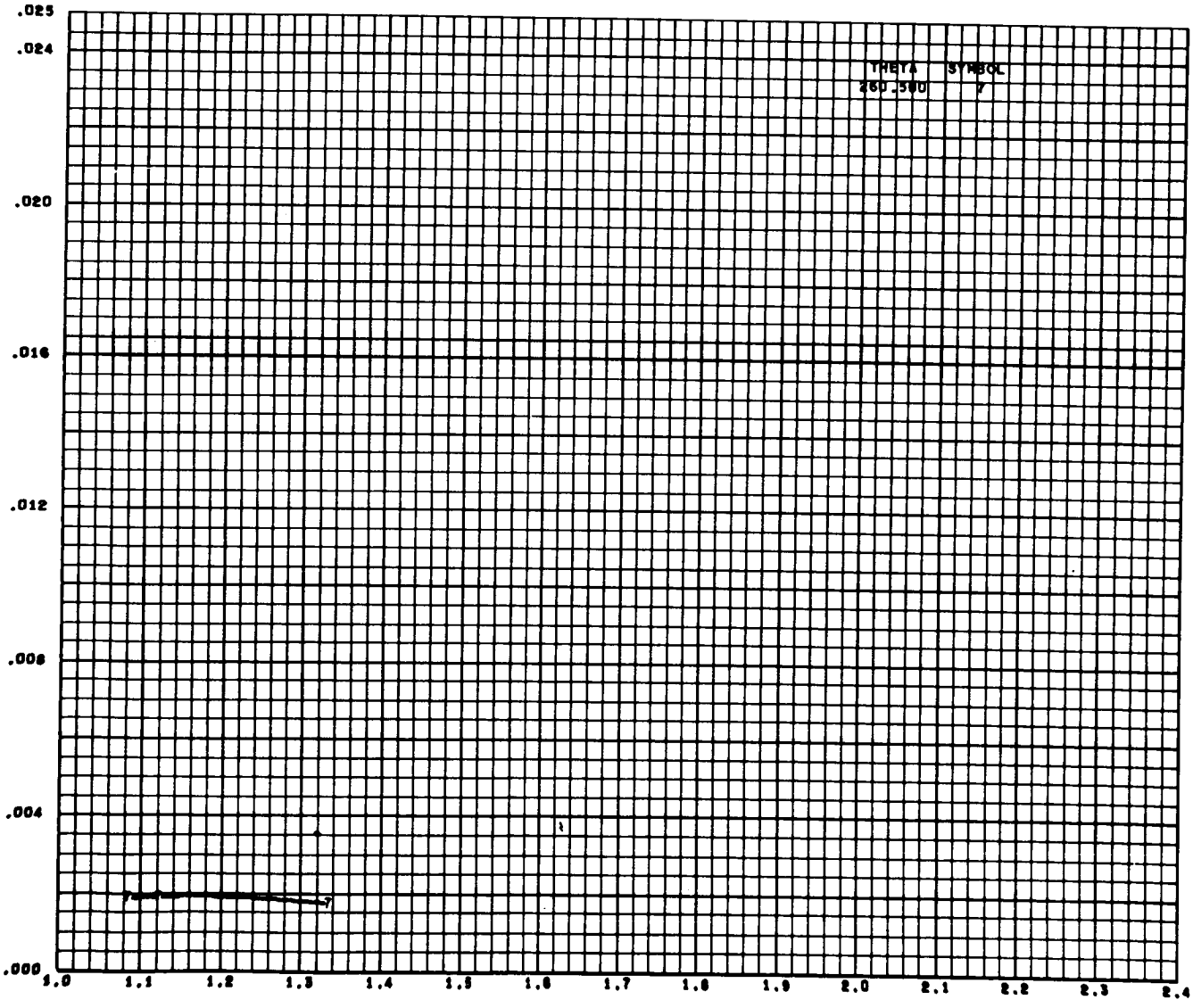
RE/FT --- 3.6397*10+6
Q(OM) --- 11.4544 BTU/SQ FT SEC

PLOT SERIES NUMBER 92

TEST GROUP	TIME (SEC)
168*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
099 000



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A-651 SID 64-2080

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2750.30 PSIA
TOTAL TEMPERATURE ---- 1807.90 DEG RANKINE

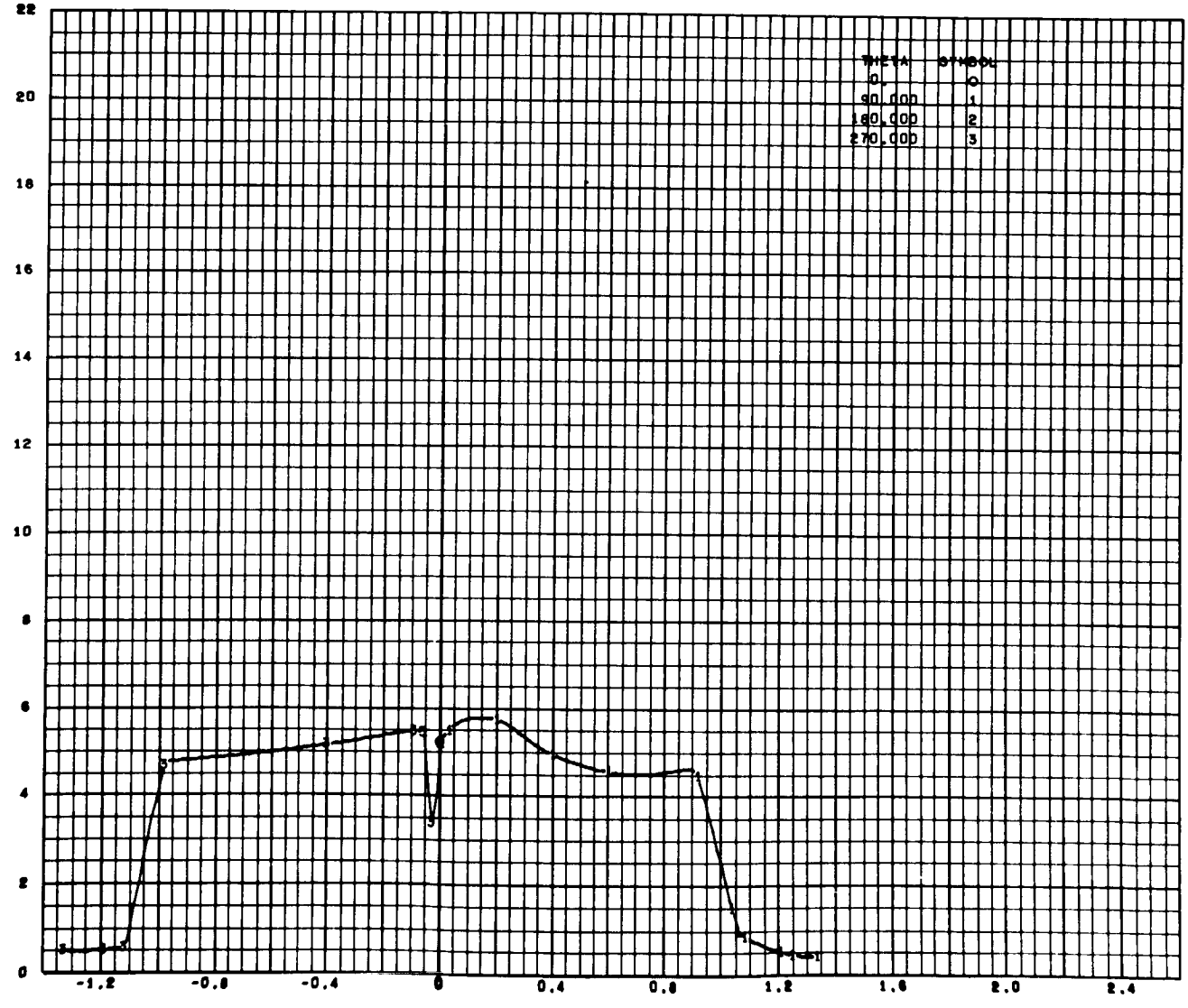
RE/FT --- 3.6746*10+6
Q(OM) --- 11.4596 BTU/SQ FT SEC

PLOT SERIES NUMBER 93

TEST GROUP	TIME (SEC)
167*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
100 000



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A-652 SID 64-2080

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[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 2750.30 PSIA
TOTAL TEMPERATURE ---- 1807.90 DEG RANKINE

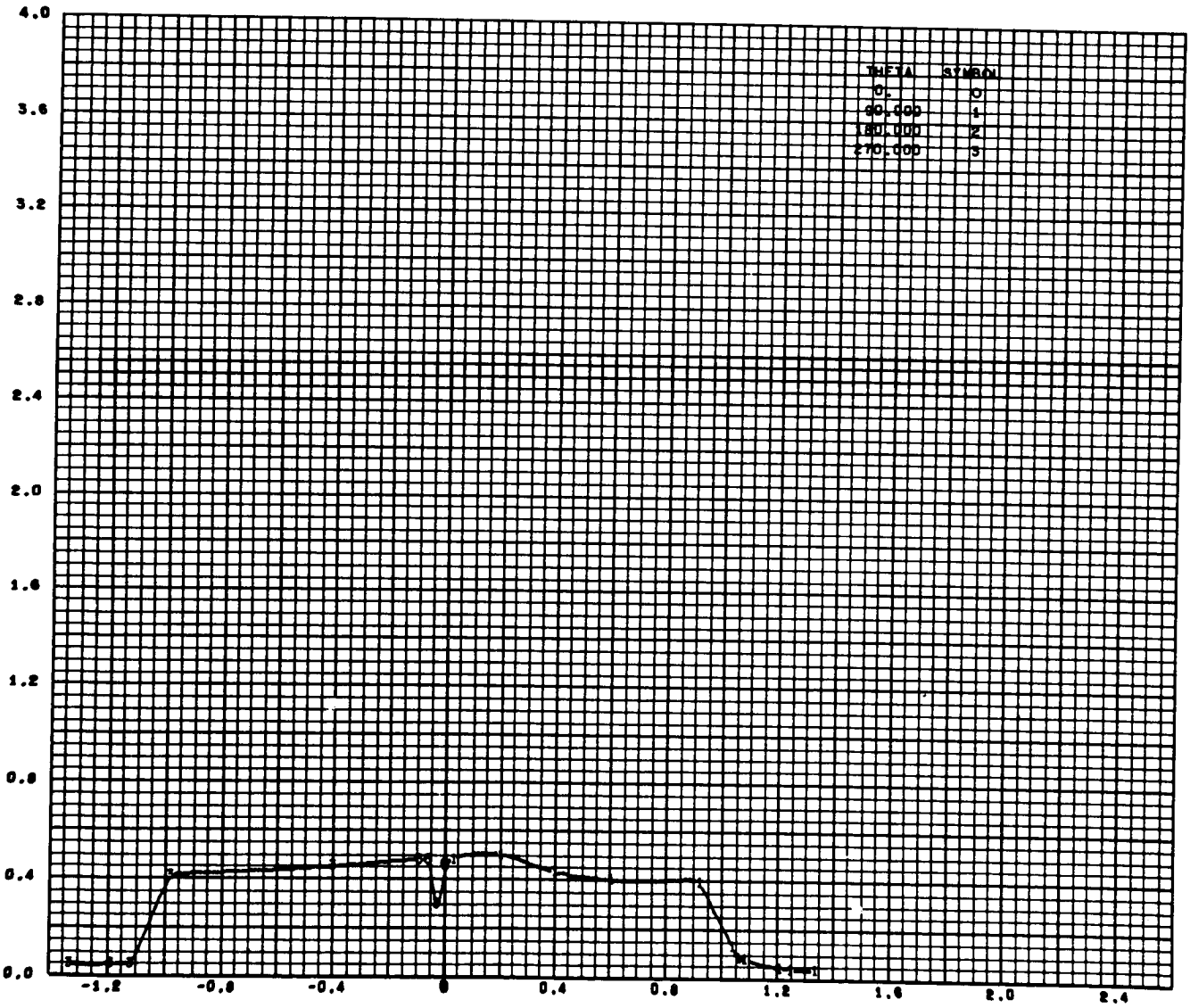
RE/FT --- 3.6746*10+6
Q(OM) --- 11.4596 BTU/SQ FT SEC

PLOT SERIES NUMBER 93

TEST GROUP	TIME (SEC)
167*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
102 000



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A-653 SID 64-2080

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HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 93 | 3937-11 104 000

APOLLO H-11

AEDC, TUNNEL C

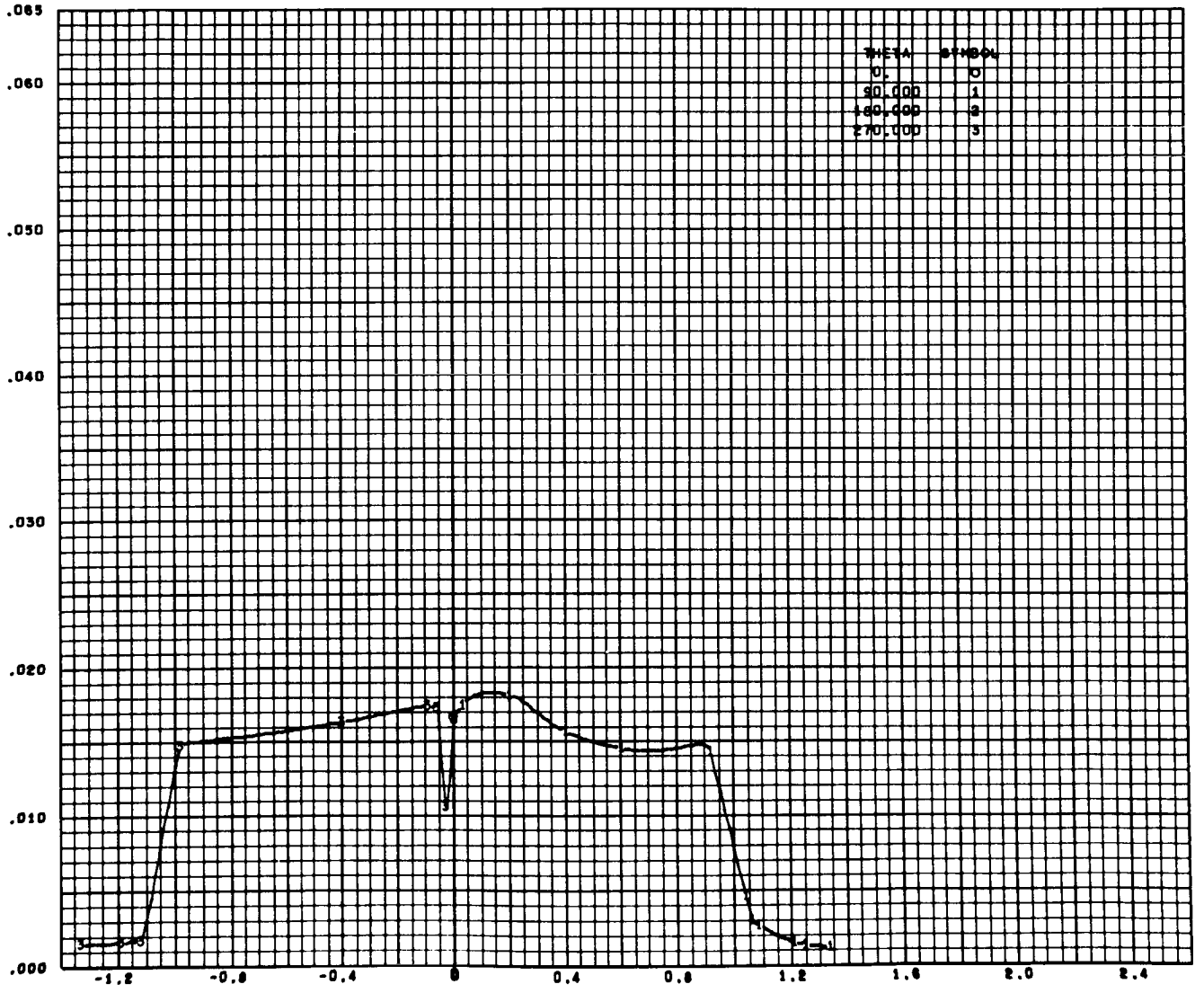
JUNE, 1964

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2750.30 PSIA
TOTAL TEMPERATURE ---- 1807.90 DEG RANKINE

RE/FT --- 3.6746*10+6
Q(OM) --- 11.4596 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
167*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 2750.30 PSIA
TOTAL TEMPERATURE ---- 1807.90 DEG RANKINE

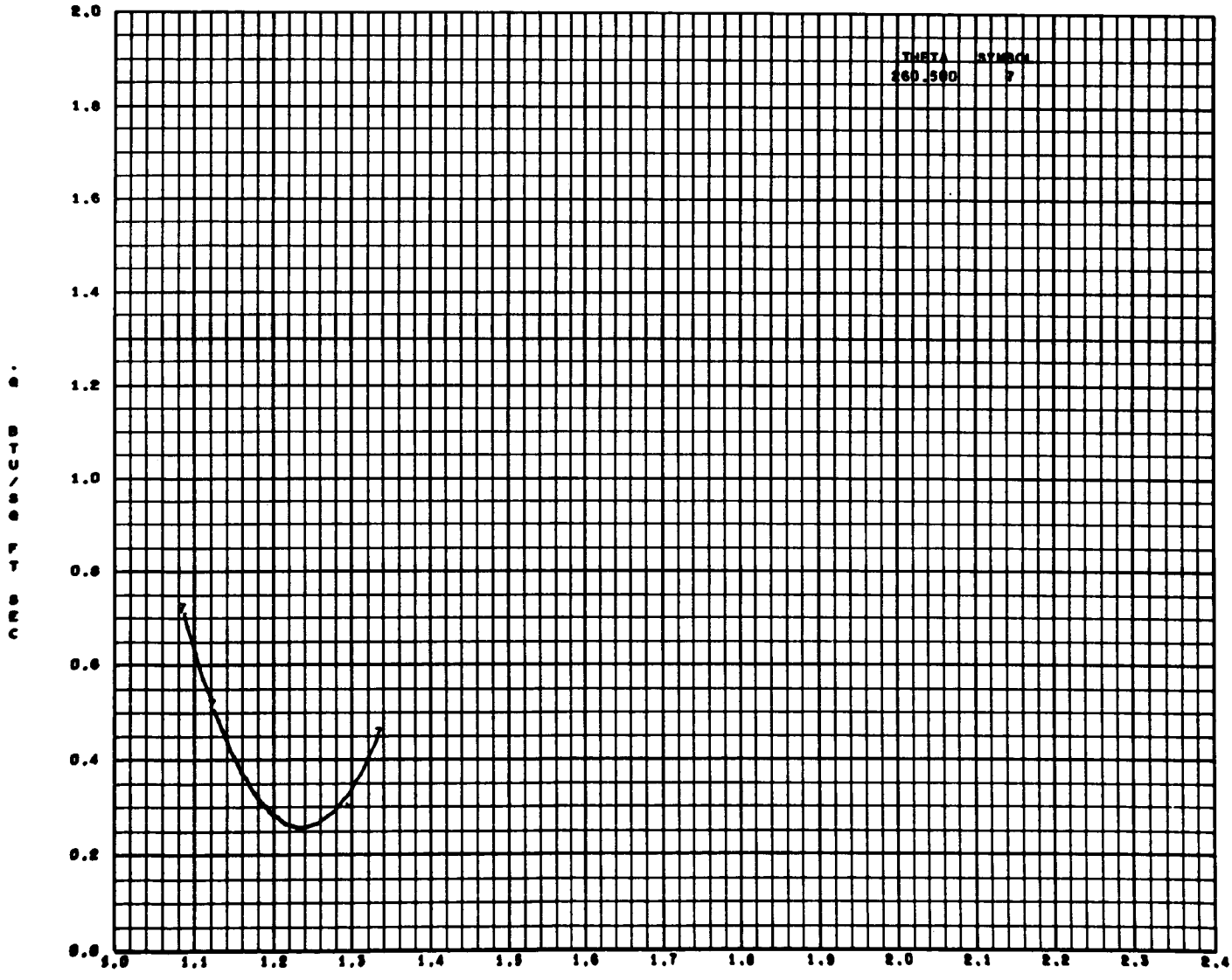
RE/FT --- 3.6746*10+6
Q(OM) --- 11.4596 BTU/SQ FT SEC

PLOT SERIES NUMBER 93

TEST GROUP	TIME (SEC)
167*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
101 000



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A-655 SID 64-2080

CONFIDENTIAL

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2750.30 PSIA
TOTAL TEMPERATURE ---- 1807.90 DEG RANKINE

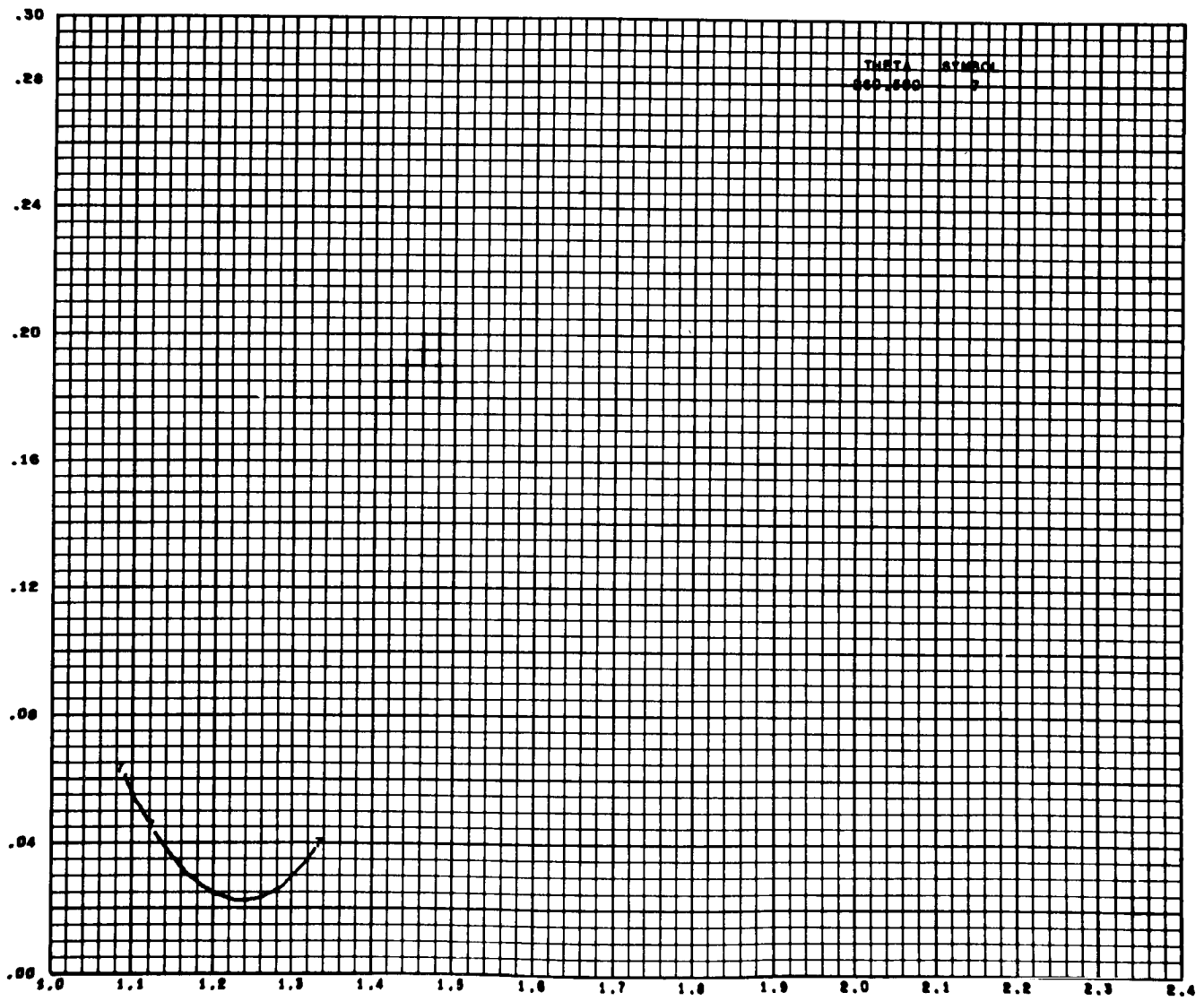
RE/FT --- 3.6746*10+6
Q(OM) --- 11.4596 BTU/SQ FT SEC

PLOT SERIES NUMBER 93

TEST GROUP	TIME (SEC)
167*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
103 000



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HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 93 | 3937-11 105 000

APOLLO M-11

AEDC, TUNNEL C

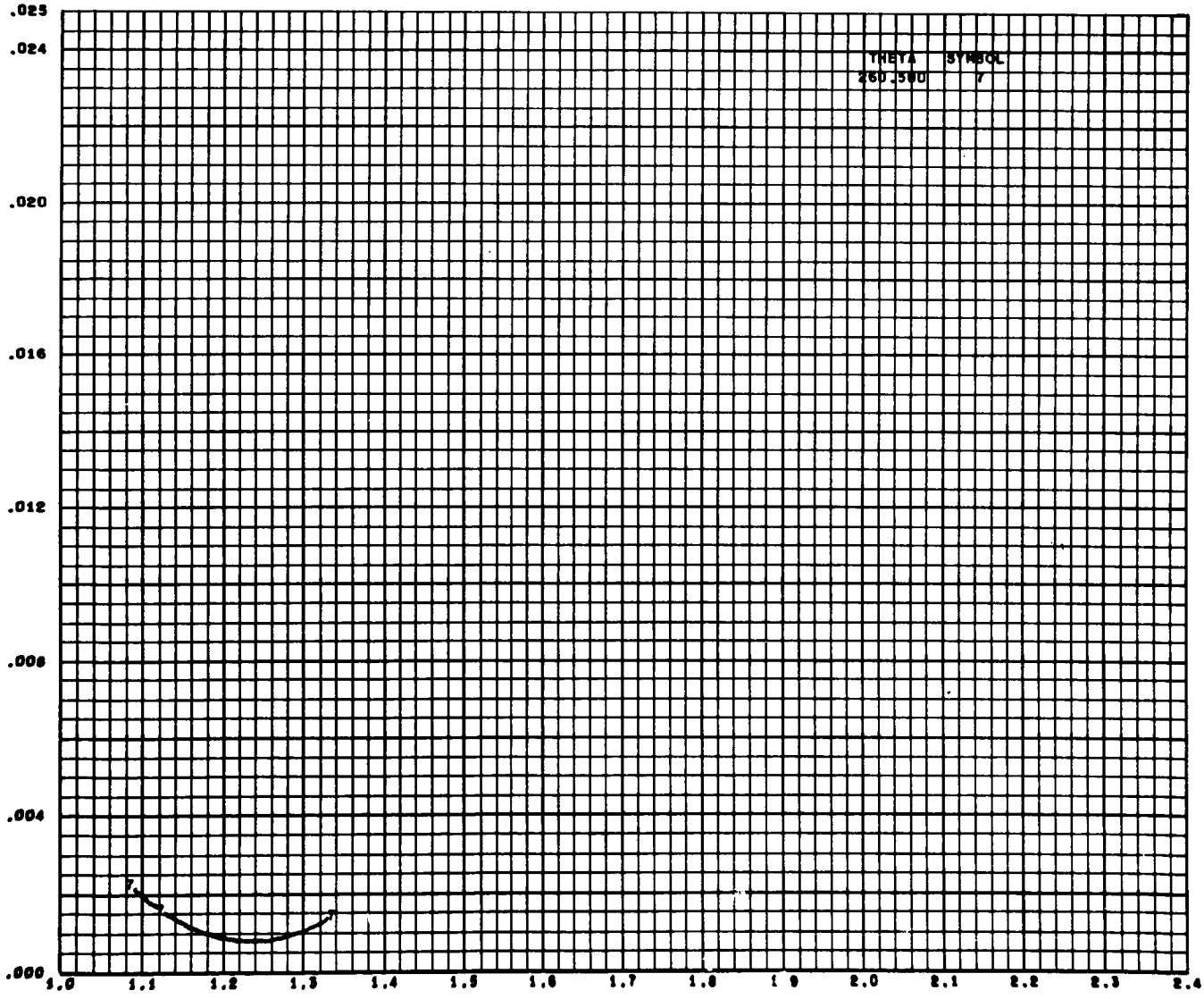
JUNE, 1964

MACH NUMBER ---------- 10.20
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 2750.30 PSIA
TOTAL TEMPERATURE ---- 1807.90 DEG RANKINE

TEST GROUP 167* | TIME (SEC) 2.80

TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

RE/FT --- 3.6746*10+6
Q(CM) --- 11.4596 BTU/SQ FT SEC



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A-657 SID 64-2080

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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 176.78 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3227.10 PSIA
TOTAL TEMPERATURE ---- 1863.10 DEG RANKINE

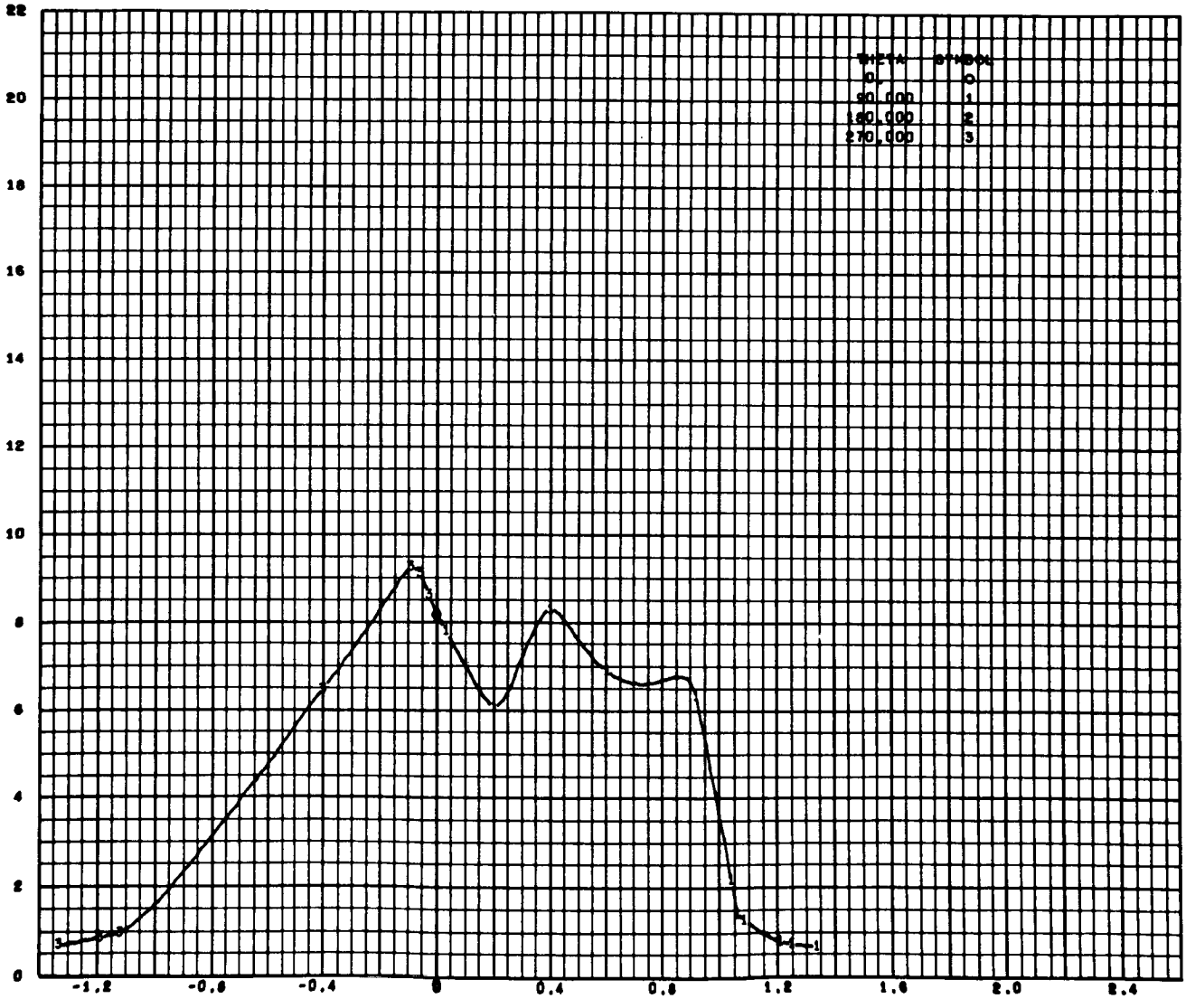
RE/FT --- 4.1063*10+6
Q(OM) --- 12.1100 BTU/SQ FT SEC

PLOT SERIES NUMBER 94

TEST GROUP	TIME (SEC)
165*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
106 000



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[redacted]

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 176.78 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3227.10 PSIA
TOTAL TEMPERATURE ---- 1863.10 DEG RANKINE

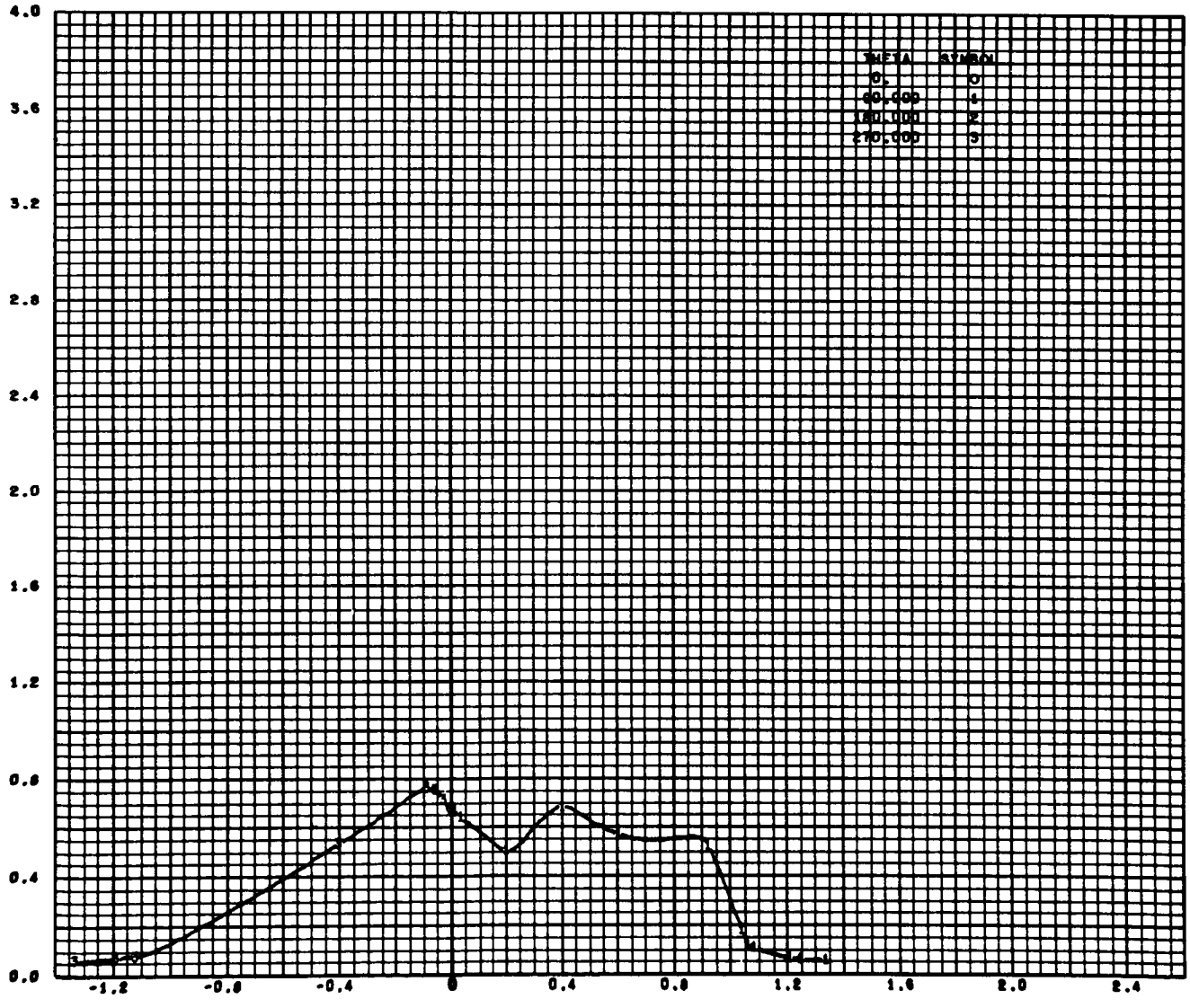
RE/FT --- 4.1063*10+6
Q(OM) --- 12.1100 BTU/SQ FT SEC

PLOT SERIES NUMBER 94

TEST GROUP	TIME (SEC)
165*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11 L
108 000



[redacted]

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HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 94 | 3937-11 110 000

APOLLO M-11

AEDC, TUNNEL C

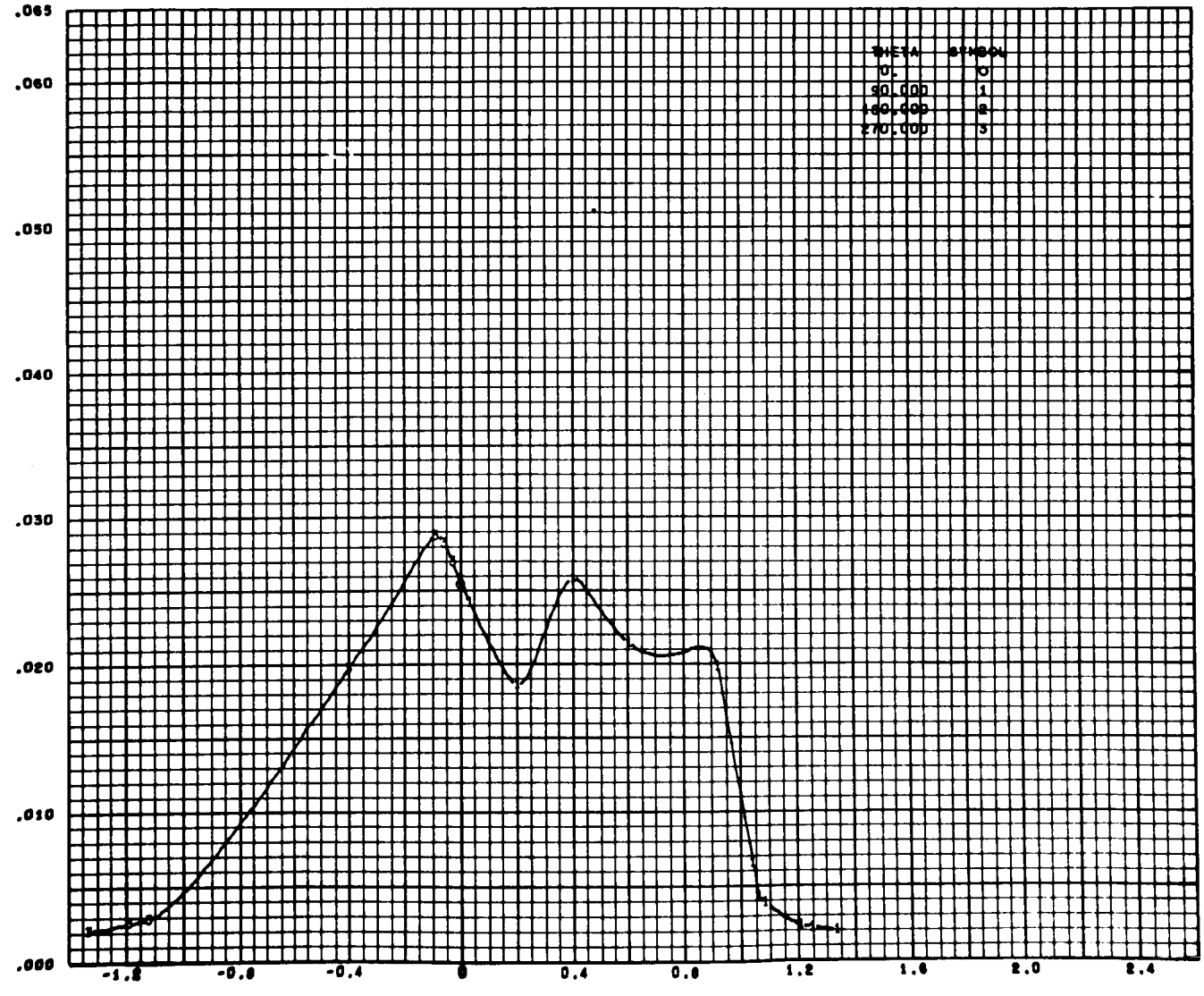
JUNE, 1964

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 176.78 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3227.10 PSIA
TOTAL TEMPERATURE ---- 1863.10 DEG RANKINE

RE/FT --- 4.1063*10+6
Q(OM) --- 12.1100 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
165*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 176.78 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3227.10 PSIA
TOTAL TEMPERATURE ---- 1863.10 DEG RANKINE

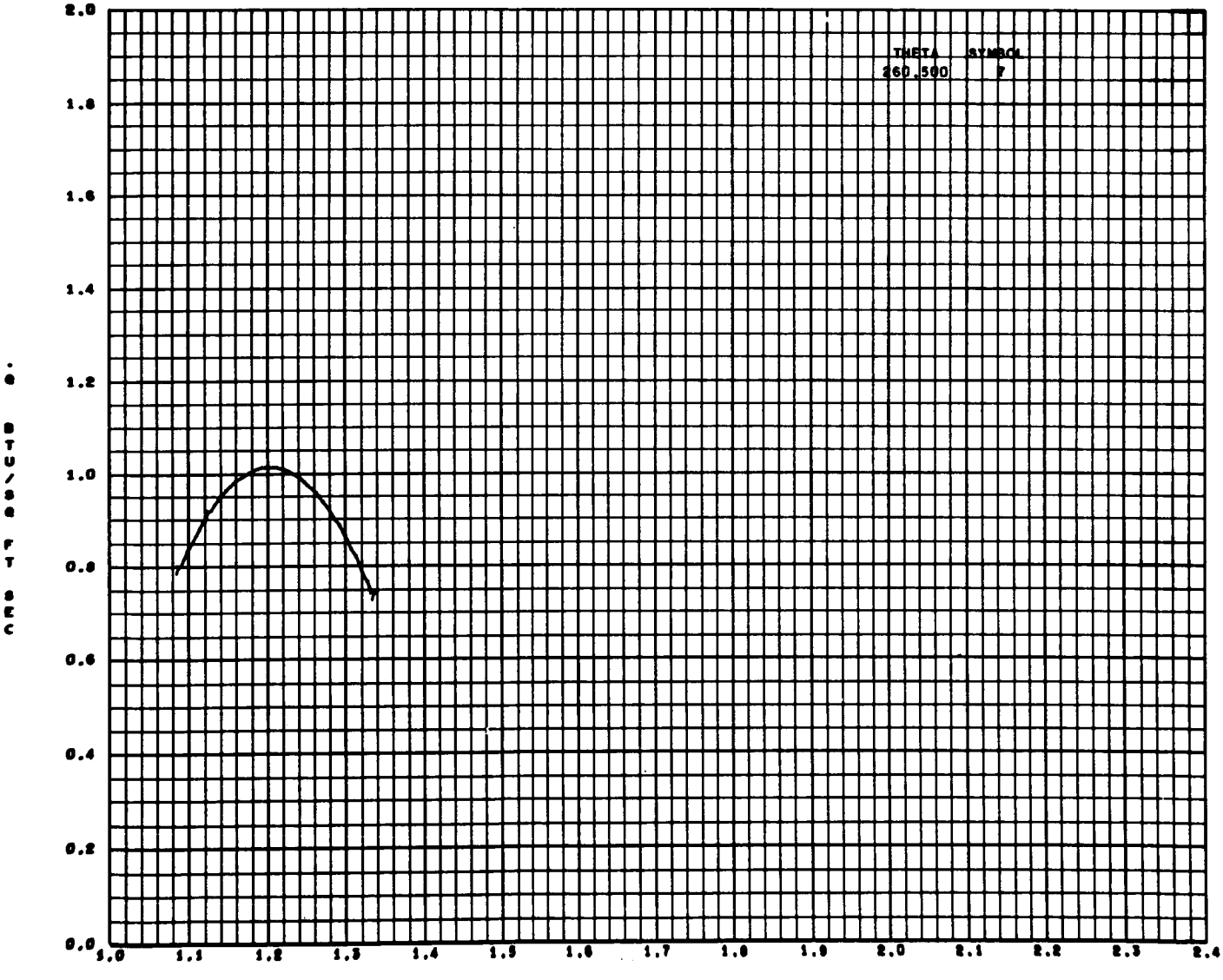
RE/FT --- 4.1063*10+6
Q(OM) --- 12.1100 BTU/SQ FT SEC

PLOT SERIES NUMBER 94

TEST GROUP	TIME (SEC)
165*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
107 000



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A-661 SID 64-2080

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HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 94 | 3937-11 · 109 000

APOLLO H-11

AEDC, TUNNEL C

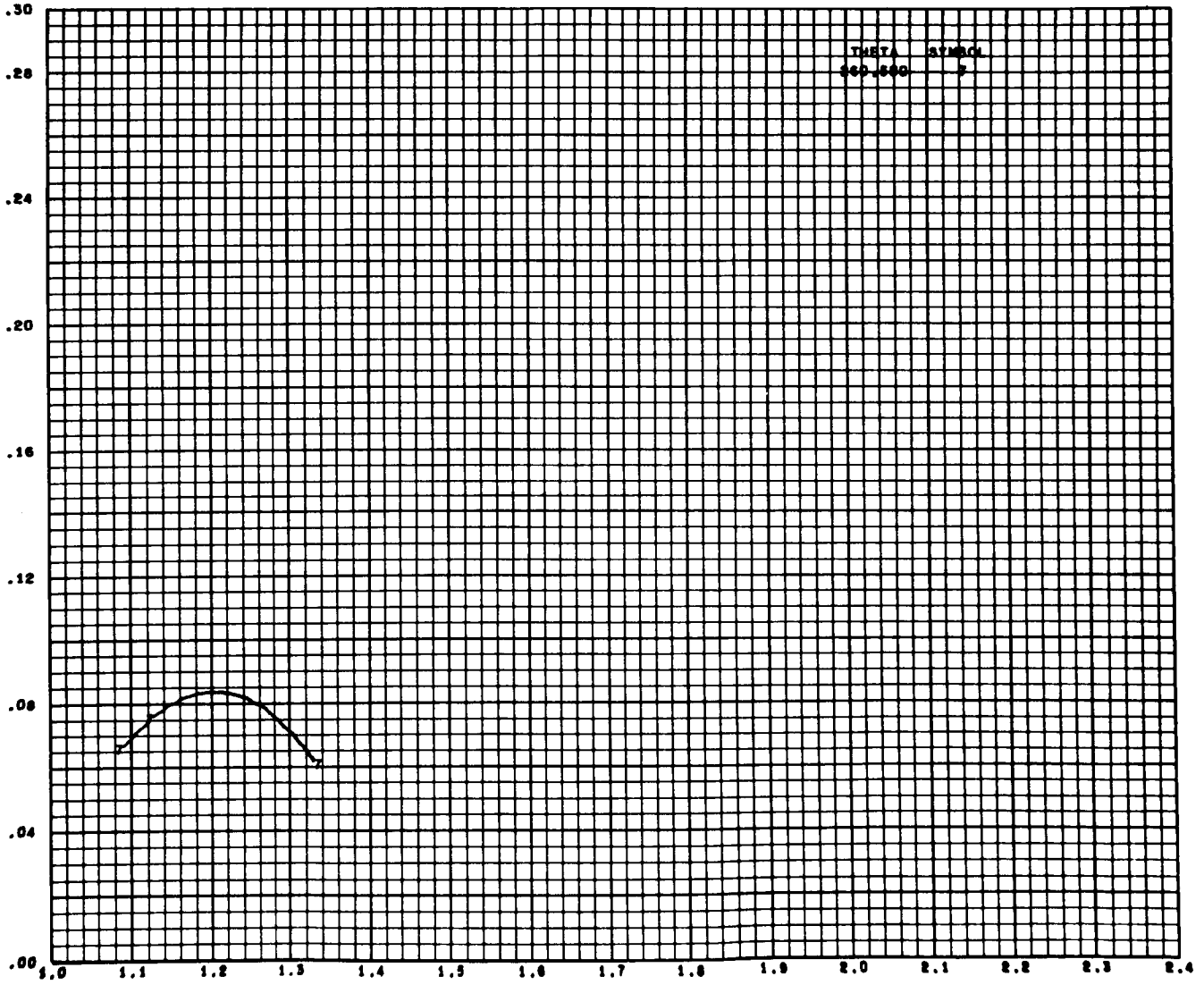
JUNE, 1964

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 176.78 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3227.10 PSIA
TOTAL TEMPERATURE ---- 1863.10 DEG RANKINE

RE/FT --- 4.1063*10+6
Q(OM) --- 12.1100 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
165*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



HEAT TRANSFER | CONFIGURATION C2 | PLOT SERIES NUMBER 94 | 3937-11 111 000

APOLLO H-11

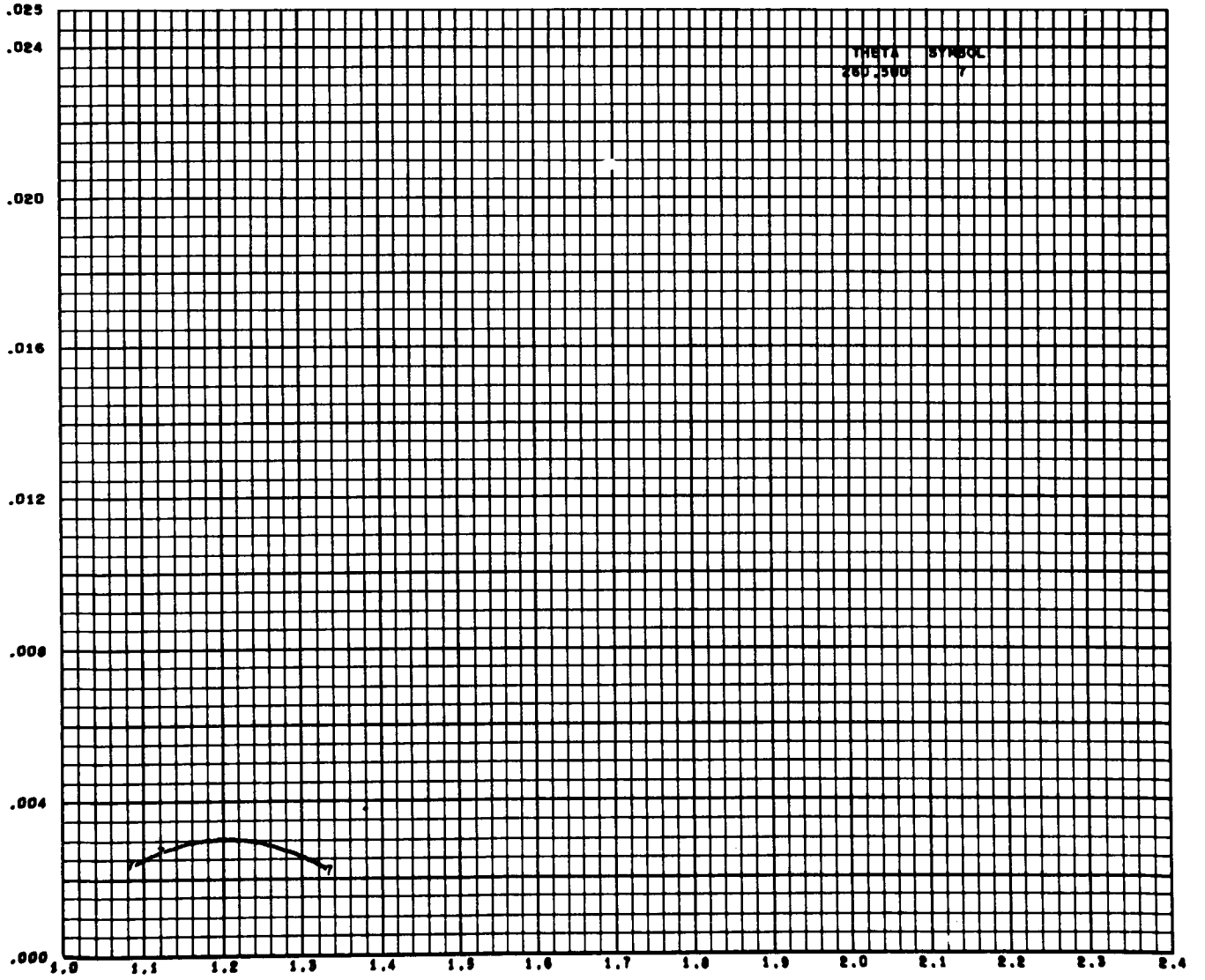
AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 176.78 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 3227.10 PSIA
TOTAL TEMPERATURE ---- 1863.10 DEG RANKINE
RE/FT --- 4.1063*10+6
Q(OM) --- 12.1100 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
165*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3224.90 PSIA
TOTAL TEMPERATURE ---- 1855.10 DEG RANKINE

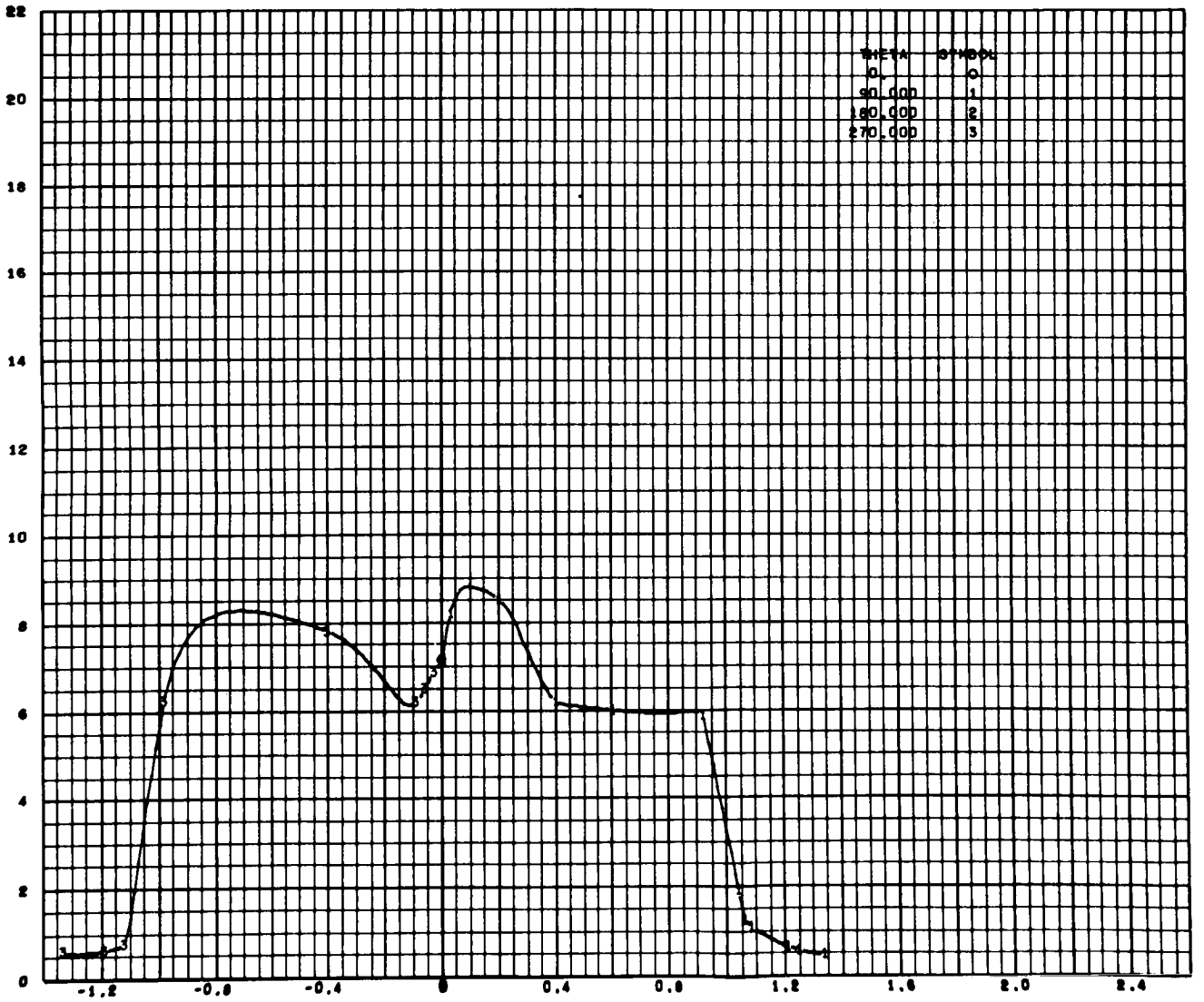
RE/FT --- 4.1361*10+6
Q(OM) --- 12.1078 BTU/SQ FT SEC

PLOT SERIES NUMBER 95

TEST GROUP	TIME (SEC)
164*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
112 000



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HEAT TRANSFER — CONFIGURATION C2 — PLOT SERIES NUMBER 95 — 3937-11 114 000

APOLLO H-11

AEDC, TUNNEL C

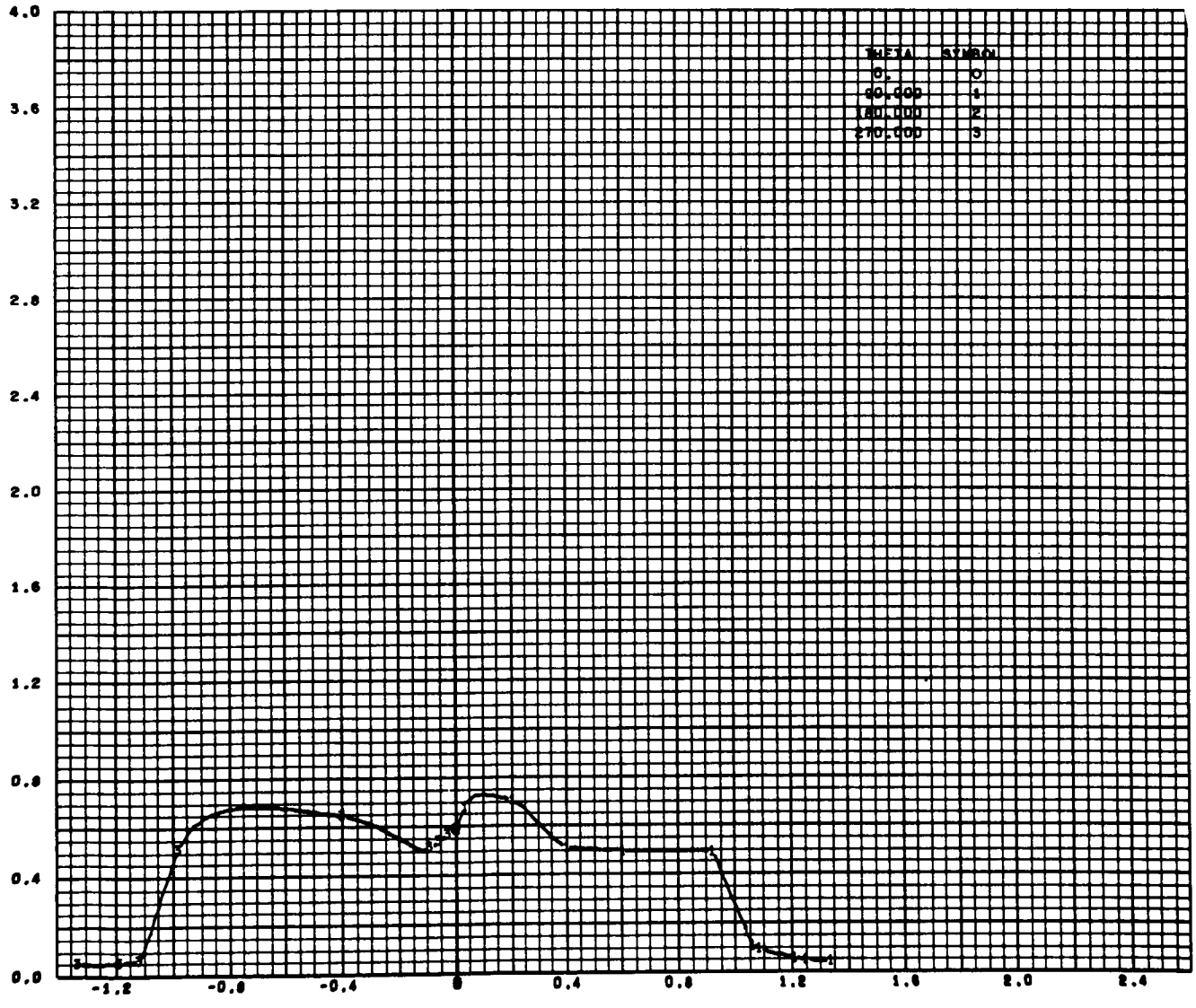
JUNE, 1964

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3224.90 PSIA
TOTAL TEMPERATURE ---- 1855.10 DEG RANKINE

RE/FT --- 4.1361*10+6
Q(OM) --- 12.1078 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
164*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3224.90 PSIA
TOTAL TEMPERATURE ---- 1855.10 DEG RANKINE

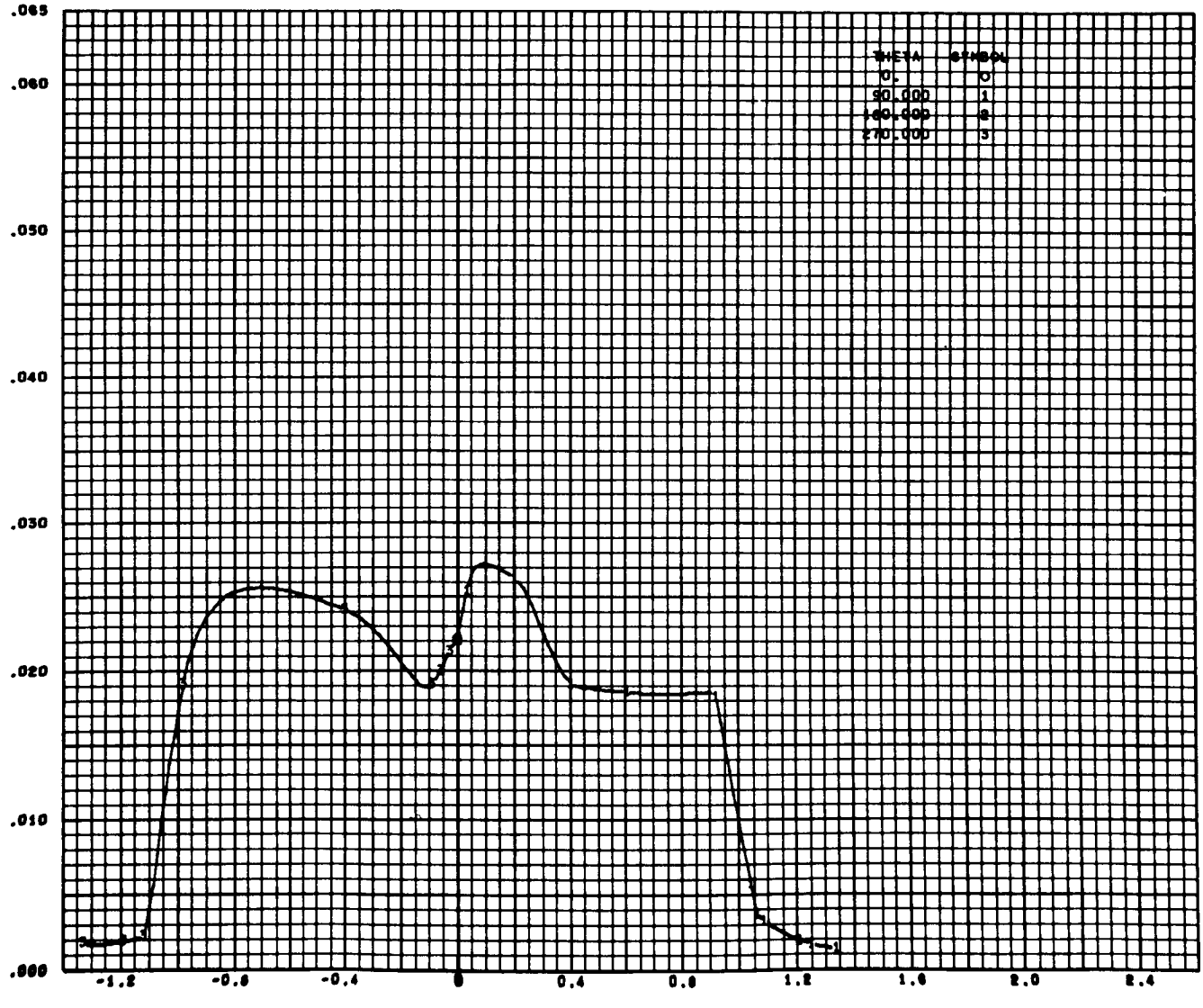
RE/FT --- 4.1361*10+6
Q(OM) --- 12.1078 BTU/SQ FT SEC

PLOT SERIES NUMBER 95

TEST GROUP	TIME (SEC)
164*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
116 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3224.90 PSIA
TOTAL TEMPERATURE ---- 1855.10 DEG RANKINE

RE/FT --- 4.1361*10+6
Q(CM) --- 12.1078 BTU/SQ FT SEC

PLOT SERIES NUMBER 95

TEST GROUP	TIME (SEC)
164*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
113 000

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3224.90 PSIA
TOTAL TEMPERATURE ---- 1855.10 DEG RANKINE

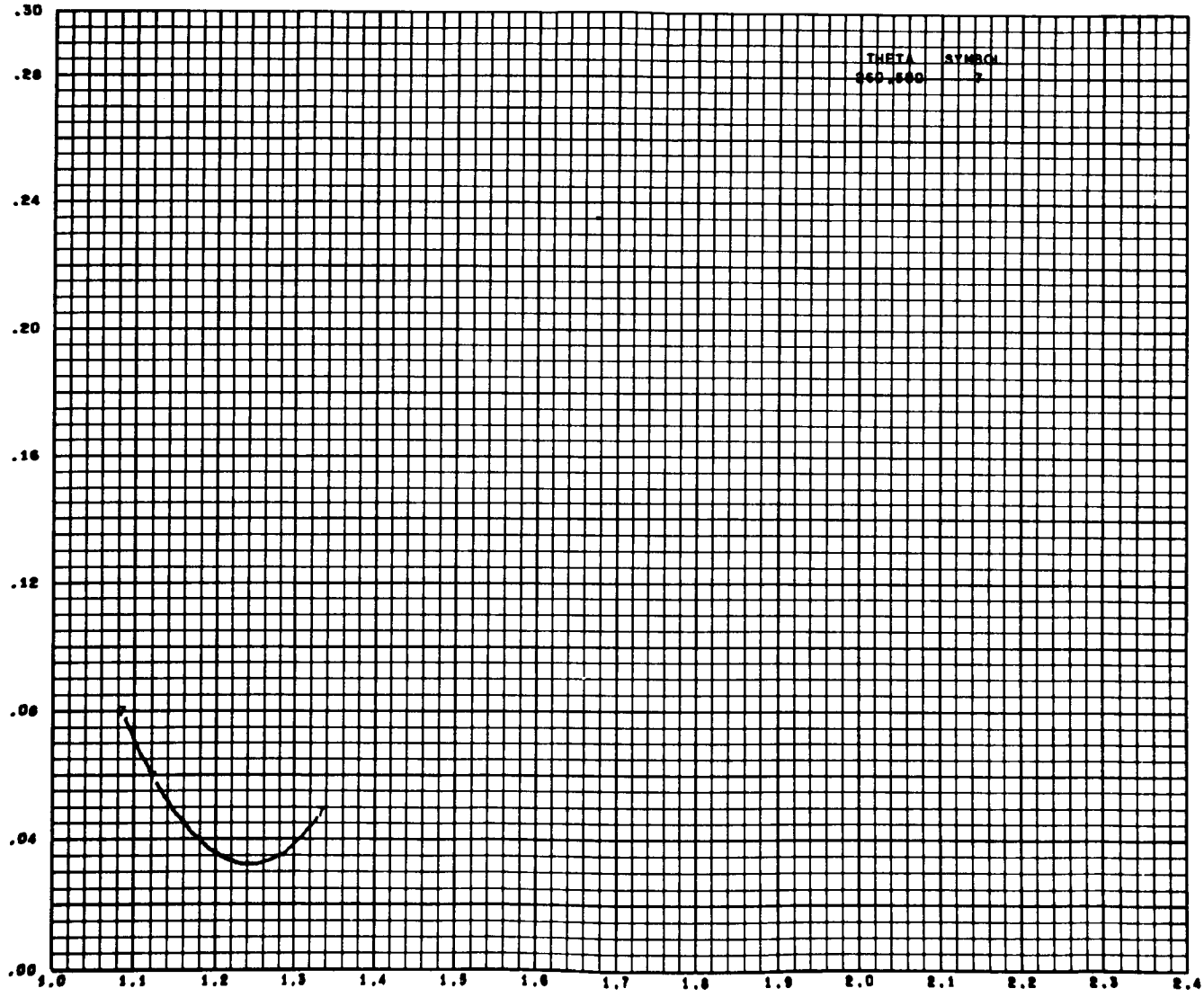
RE/FT --- 4.1361*10+6
Q(OM) --- 12.1078 BTU/SQ FT SEC

PLOT SERIES NUMBER 95

TEST GROUP	TIME (SEC)
164*	2.80

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
115 000



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HEAT TRANSFER — CONFIGURATION C2 — PLOT SERIES NUMBER 95 — 3937-11 117 000

APOLLO M-11

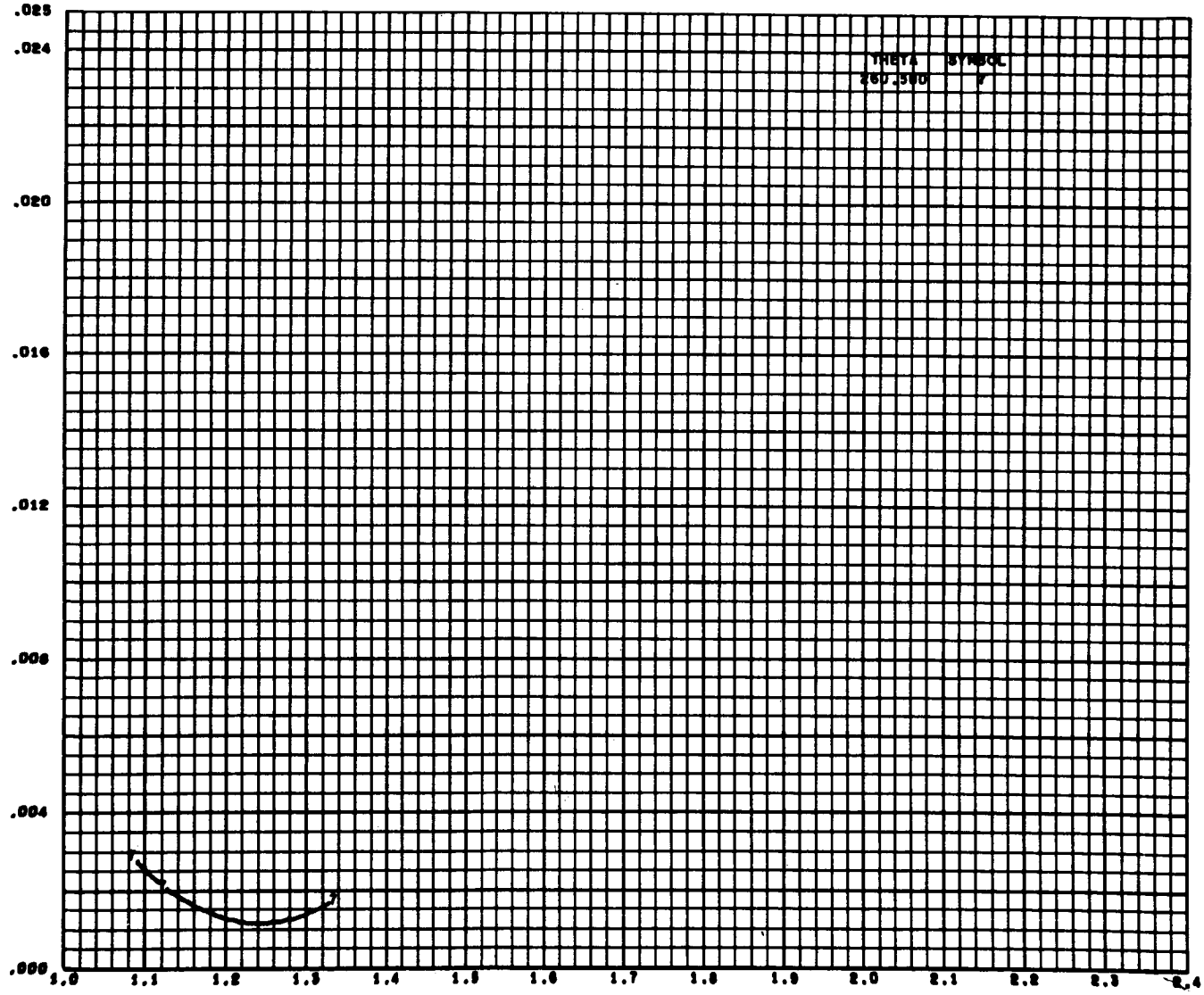
AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 179.74 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3224.90 PSIA
TOTAL TEMPERATURE ---- 1855.10 DEG REMAINING PARAMETERS LISTED

RE/FT --- 4.1361*10+6
Q(OM) --- 12.1078 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
164*	2.80



[redacted]

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HEAT TRANSFER — CONFIGURATION C2 — PLOT SERIES NUMBER 96 — 3937-11 118 000

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 177.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3670.70 PSIA
TOTAL TEMPERATURE ---- 1873.40 DEG RANKINE

RE/FT --- 4.6529*10+6
Q(OM) --- 12.3912 BTU/SQ FT SEC

TEST GROUP	TIME (SEC)
162*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 177.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3670.70 PSIA
TOTAL TEMPERATURE ---- 1873.40 DEG RANKINE

RE/FT --- 4.6529*10+6
Q(OM) --- 12.3912 BTU/SQ FT SEC

PLOT SERIES NUMBER 96

TEST GROUP	TIME (SEC)
162*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
120 006

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 177.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3670.70 PSIA
TOTAL TEMPERATURE ---- 1873.40 DEG RANKINE

RE/FT --- 4.6529*10+6
Q(OM) --- 12.3912 BTU/SQ FT SEC

PLOT SERIES NUMBER 96

TEST GROUP	TIME (SEC)
162*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
122 000

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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 177.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3670.70 PSIA
TOTAL TEMPERATURE ---- 1873.40 DEG RANKINE

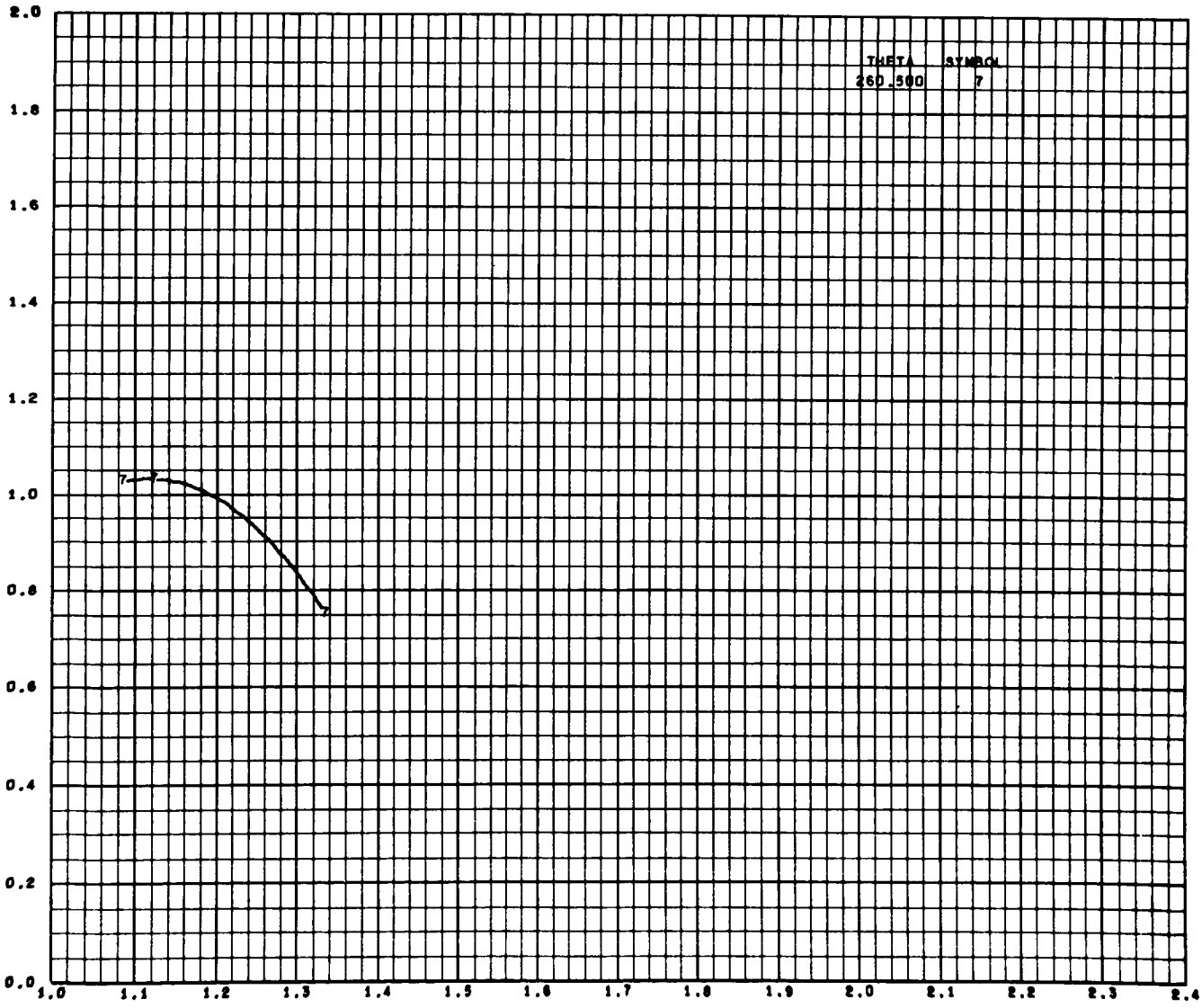
RE/FT --- 4.6529*10+6
Q(OM) --- 12.3912 BTU/SQ FT SEC

PLOT SERIES NUMBER 96

TEST GROUP	TIME (SEC)
162*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
119 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 177.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3670.70 PSIA
TOTAL TEMPERATURE ---- 1873.40 DEG RANKINE

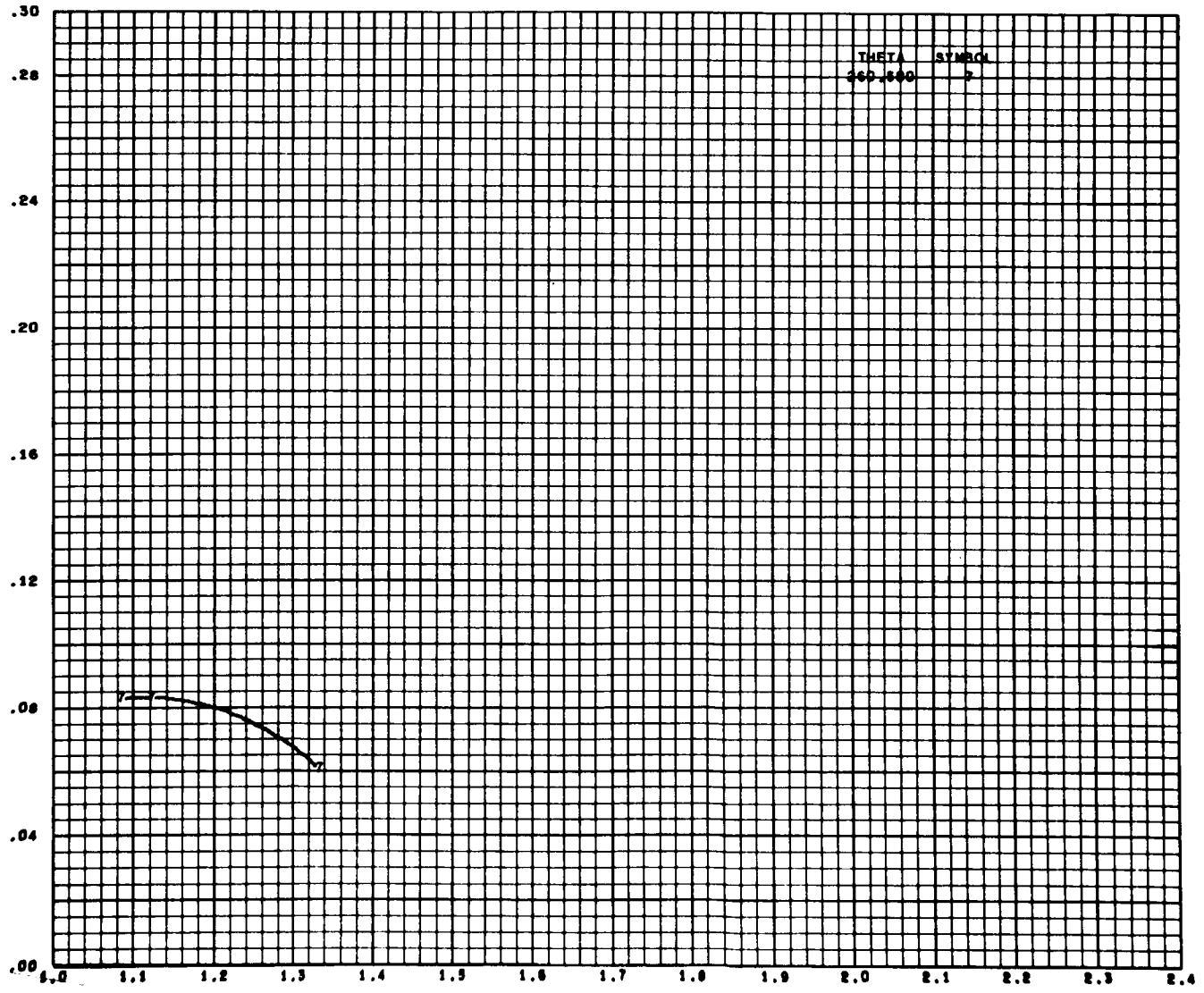
RE/FT --- 4.6529*10+6
Q(OM) --- 12.3912 BTU/SQ FT SEC

PLOT SERIES NUMBER 96

TEST GROUP	TIME (SEC)
162*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
121 000



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~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 177.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3670.70 PSIA
TOTAL TEMPERATURE ---- 1873.40 DEG RANKINE

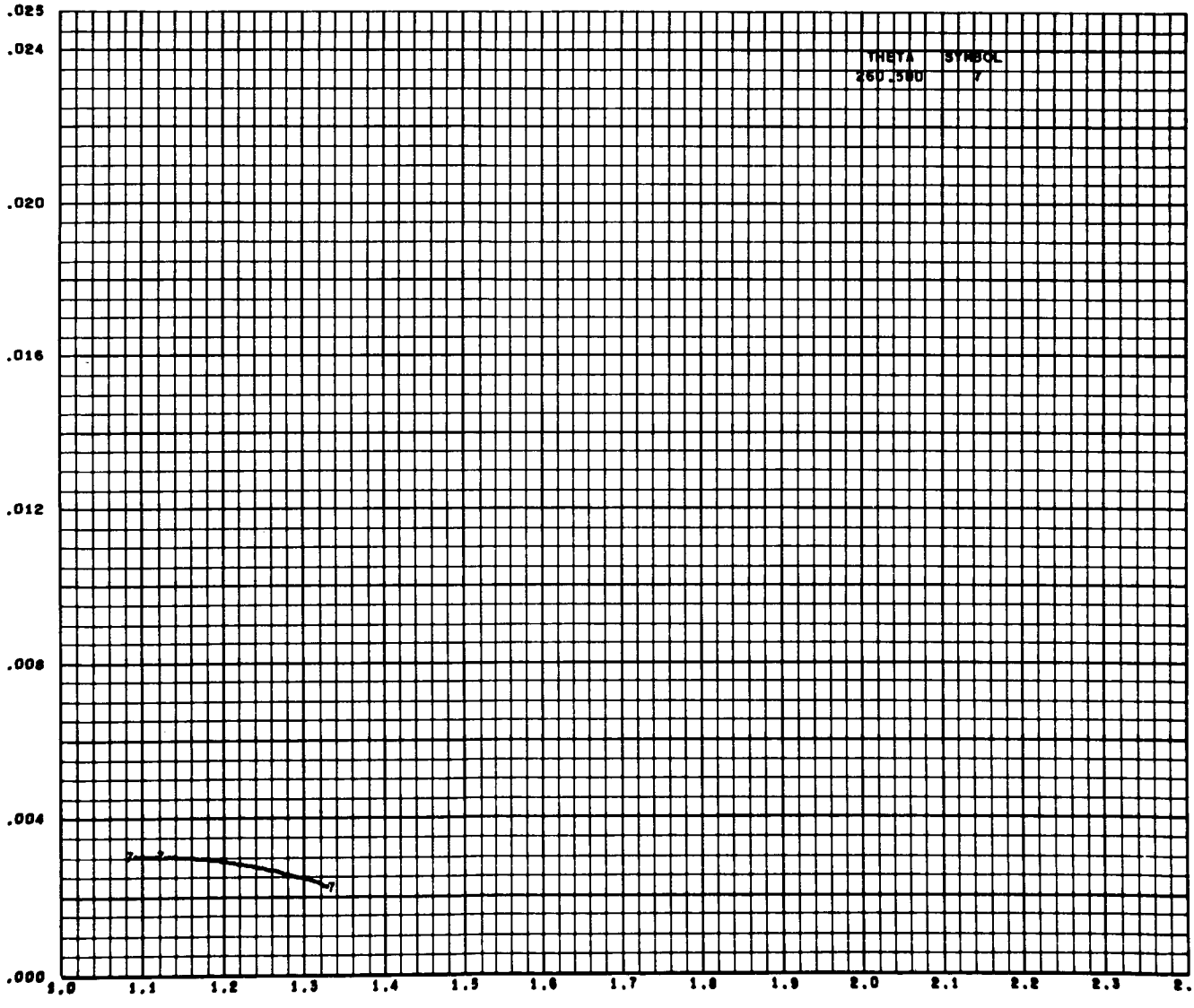
RE/FT --- 4.6529*10+6
Q(OM) --- 12.3912 BTU/SQ FT SEC

PLOT SERIES NUMBER 96

TEST GROUP	TIME (SEC)
162*	2.85

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
123 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 179.75 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 3653.60 PSIA
TOTAL TEMPERATURE ---- 1871.90 DEG RANKINE

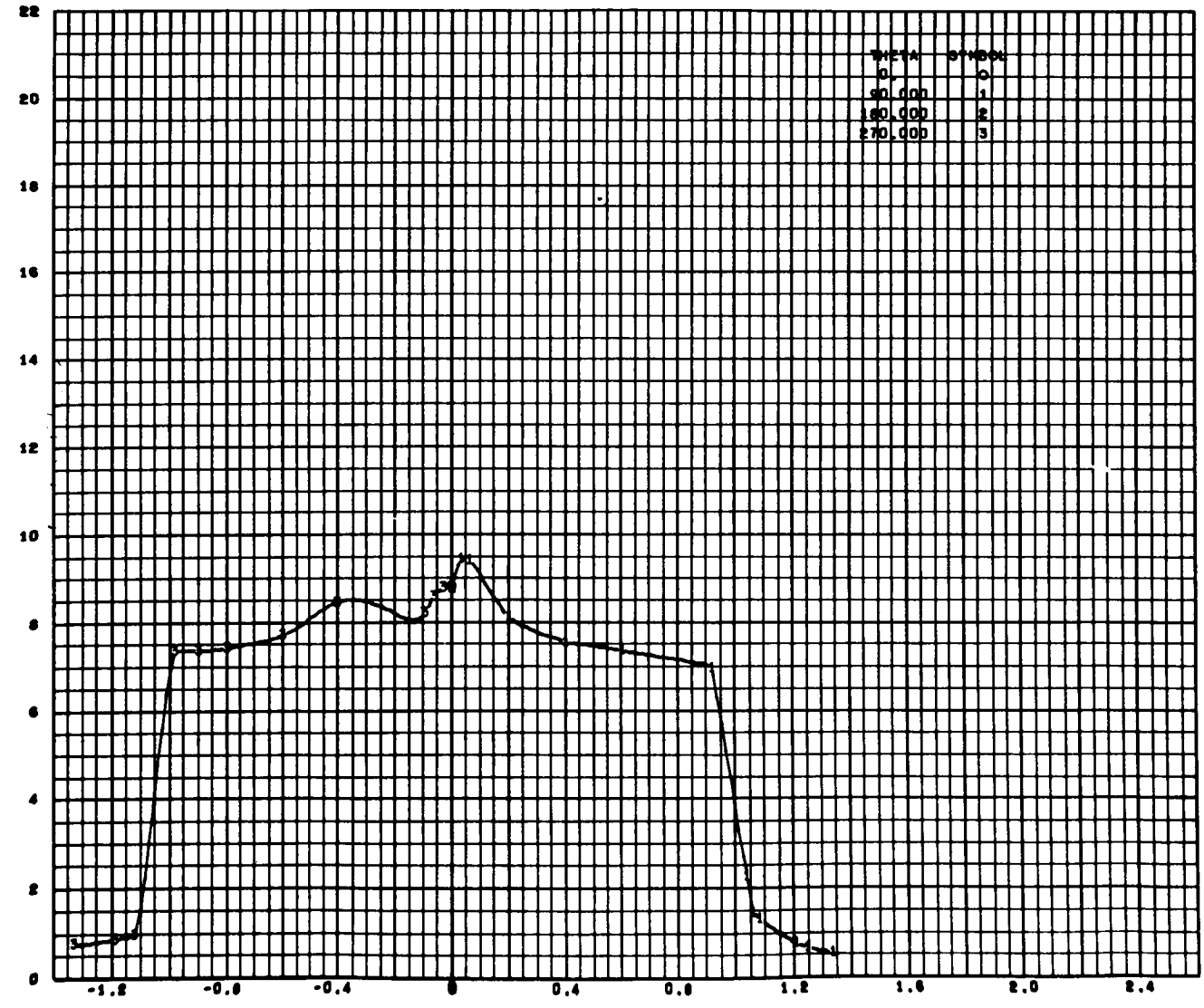
RE/FT --- 4.6373*10+6
Q(ON) --- 12.3862 BTU/SQ FT SEC

PLOT SERIES NUMBER 97

TEST GROUP	TIME (SEC)
161*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
124 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 179.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3653.60 PSIA
TOTAL TEMPERATURE ---- 1871.90 DEG RANKINE

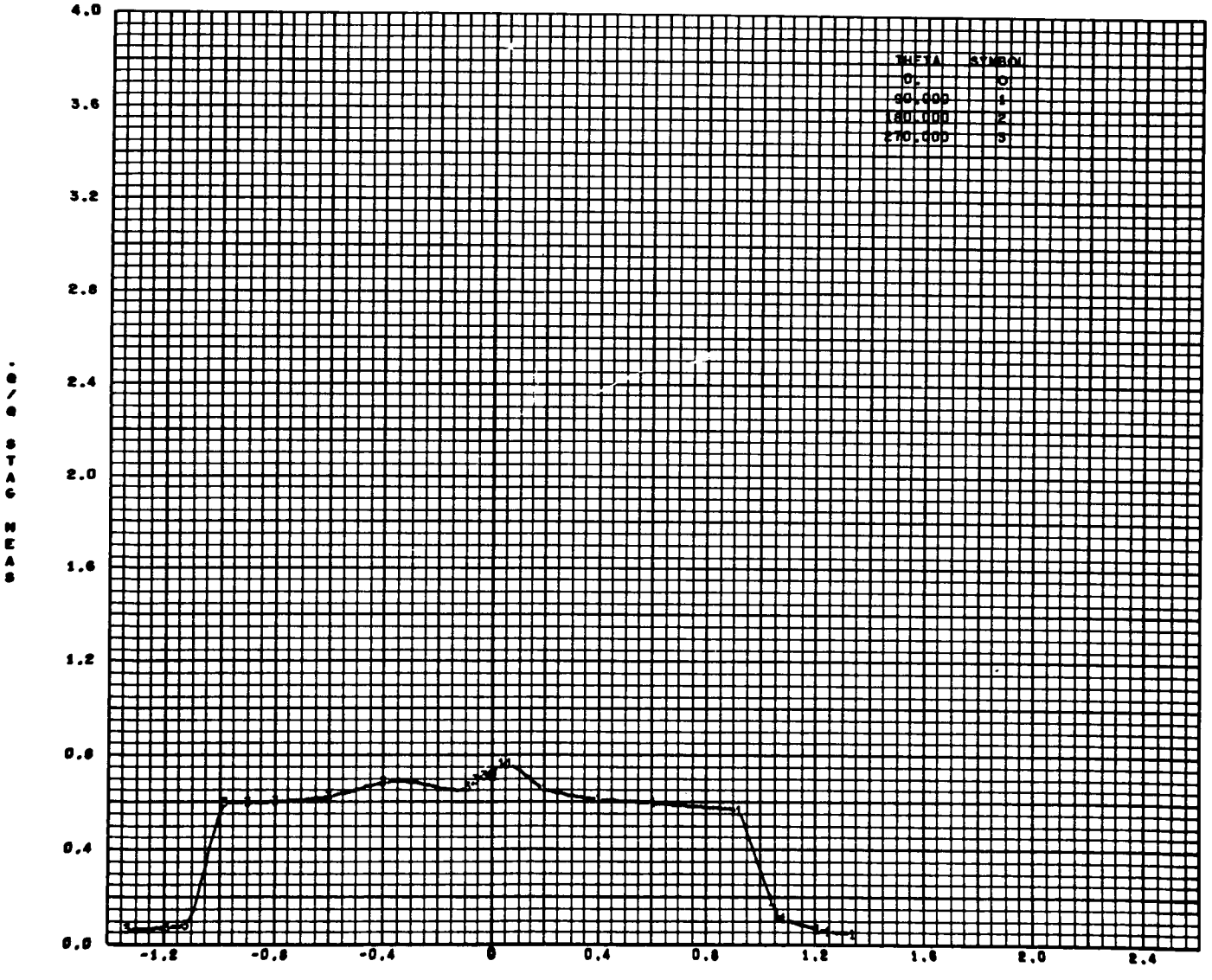
RE/FT --- 4.6373*10+6
Q(OM) --- 12.3862 BTU/SQ FT SEC

PLOT SERIES NUMBER 97

TEST GROUP	TIME (SEC)
161*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
126 000



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HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 179.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3653.60 PSIA
TOTAL TEMPERATURE ---- 1871.90 DEG RANKINE

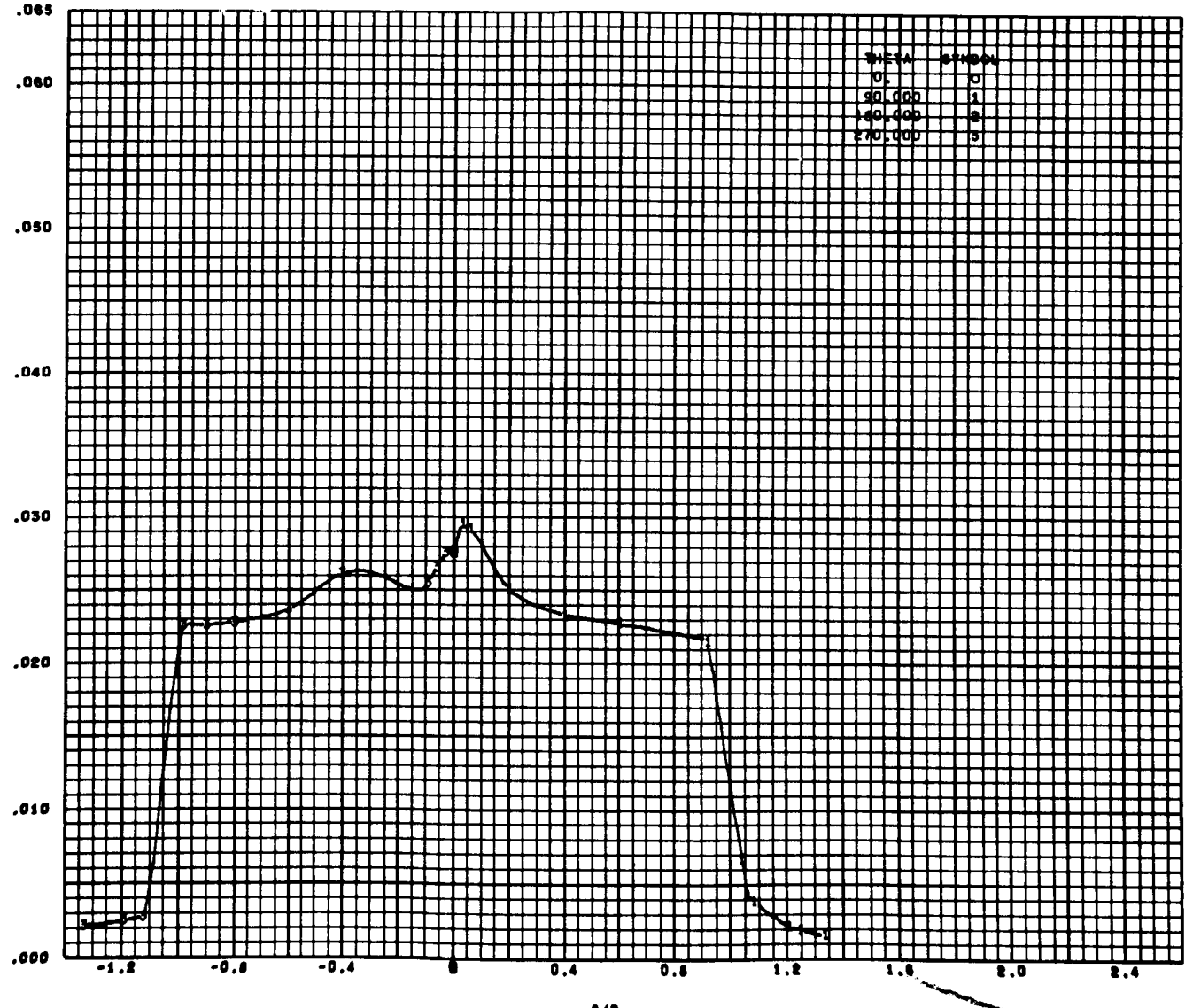
RE/FT --- 4.6373*10+6
Q(OM) --- 12.3862 BTU/SQ FT SEC

PLOT SERIES NUMBER 97

TEST GROUP	TIME (SEC)
161*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3037-11
128 000



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CONFIDENTIAL

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 179.75 DEG
ANGLE OF YAW --------- -0. DEG
TOTAL PRESSURE ------- 3653.60 PSIA
TOTAL TEMPERATURE ---- 1871.90 DEG RANKINE

RE/FT --- 4.6373*10+6
Q(OM) --- 12.3862 BTU/SQ FT SEC

PLOT SERIES NUMBER 97

TEST GROUP	TIME (SEC)
161*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
125 000

9/R

A-679 SID 64-2080

CONFIDENTIAL

~~CONFIDENTIAL~~

HEAT TRANSFER

APOLLO H-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 179.75 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 3653.60 PSIA
TOTAL TEMPERATURE ---- 1871.90 DEG RANKINE

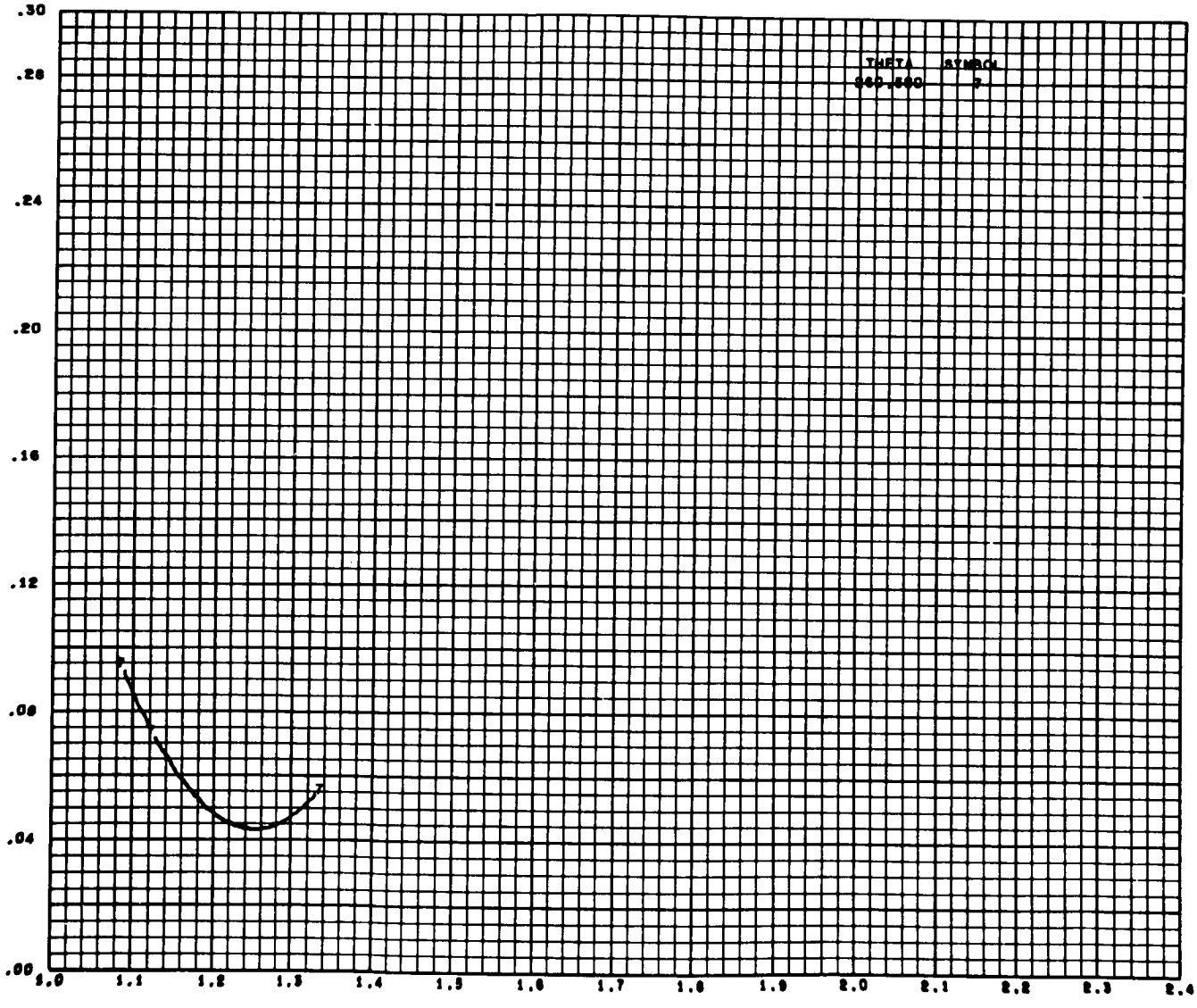
RE/FT --- 4.6373*10+6
Q(CM) --- 12.3862 BTU/SQ FT SEC

PLOT SERIES NUMBER 97

TEST GROUP	TIME (SEC)
161*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
127 000



A-680 SID 64-2080

~~CONFIDENTIAL~~

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HEAT TRANSFER

APOLLO M-11

AEDC, TUNNEL C

JUNE, 1964

CONFIGURATION C2

MACH NUMBER ---------- 10.21
ANGLE OF ATTACK ------ 179.75 DEG
ANGLE OF YAW ---------- -0. DEG
TOTAL PRESSURE ------- 3653.60 PSIA
TOTAL TEMPERATURE ---- 1871.90 DEG RANKINE

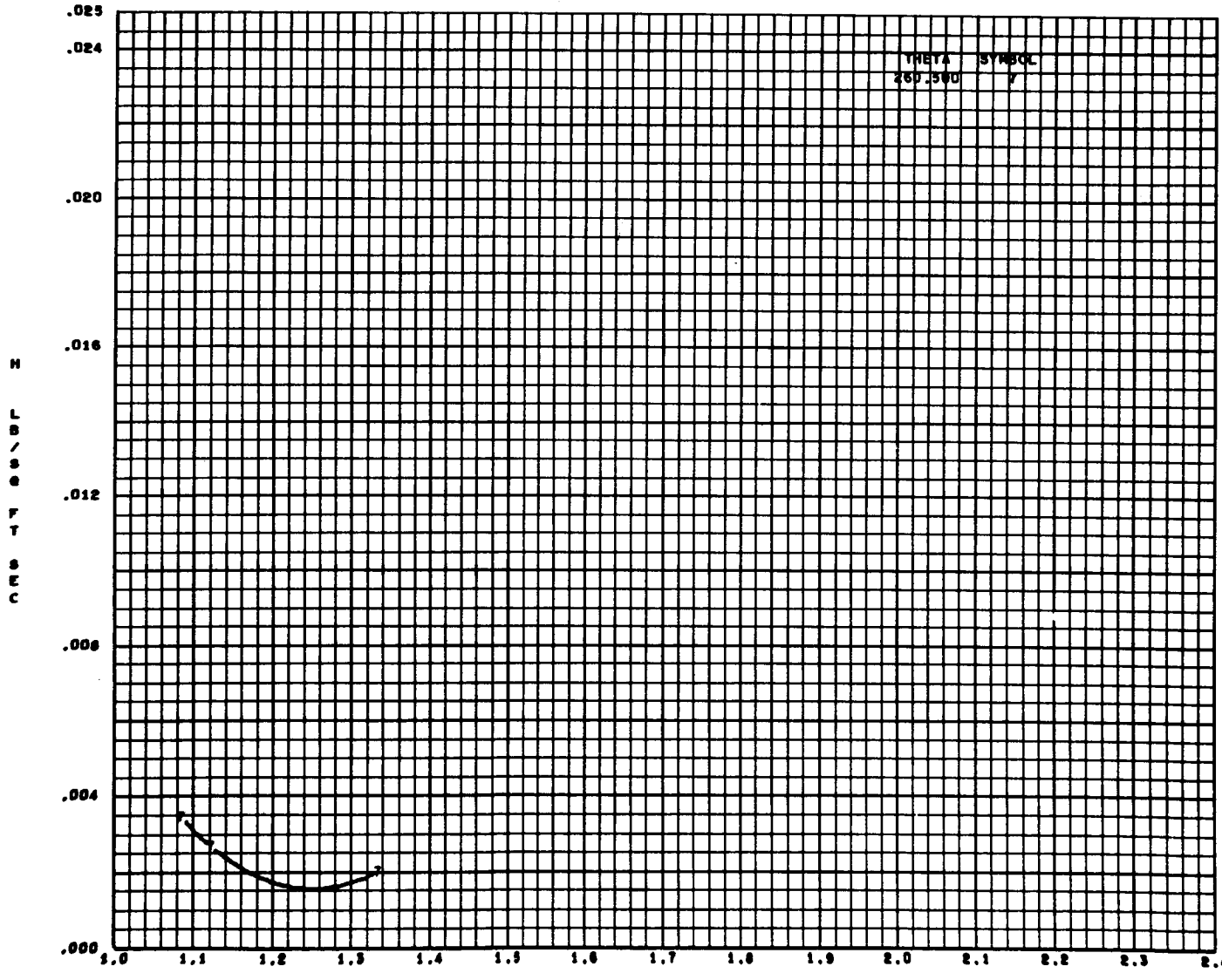
RE/FT --- 4.6373*10+6
Q(OM) --- 12.3862 BTU/SQ FT SEC

PLOT SERIES NUMBER 97

TEST GROUP	TIME (SEC)
161*	2.90

* TEST PARAMETERS LISTED ARE FOR THE ABOVE GROUP

3937-11
129 000



A-681 SID 64-2080

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CONFIDENTIAL

Plotted Data Index
M = 10.0

Configuration		Group			Re/Ft X10^{-6}	α Deg	ψ Deg	Page
NAA	AEDC	A	B	C				
C_{55}	11	1	6	15	0.33	143	0	A1-A9
C_{55}	11	2	7	16	0.33	147	0	A10-A18
C_{55}	11		8		0.33	147	-5	A19-A24
C_{55}	11		9		0.33	147	5	A25-A30
C_{55}	11	3	10	17	0.33	154	0	A31-A39
C_{55}	11		11		0.33	154	-5	A40-A45
C_{55}	11		12		0.33	154	5	A46-A51
C_{55}	11	4	13	18	0.33	158	0	A52-A60
C_{55}	11	5	14	19	0.33	162	0	A61-A69
C_{55}	11	20	25	31	1.20	143	0	A70-A78
C_{55}	11	21	26	32	1.20	147	0	A79-A87
C_{55}	11	22	27	33	1.20	154	0	A88-A96
C_{55}	11	23	29	34	1.20	158	0	A97-A105
C_{55}	11	24	30	35	1.20	162	0	A106-A114
C_{55}	11	36	50	52	2.20	143	0	A115-A123
C_{55}	11	41	51	53	2.20	147	0	A124-A132
C_{55}	11		43		2.20	147	-5	A133-A138
C_{55}	11		44		2.20	147	5	A139-A144
C_{55}	11	42	45	54	2.20	154	0	A145-A153
C_{55}	11		46		2.20	154	-5	A154-A159
C_{55}	11		47		2.20	154	5	A160-A165
C_{55}	11	39	48	55	2.20	158	0	A166-A174
C_{55}	11	40	49	56	2.20	162	0	A175-A183
C_{58}	12	60	59		0.33	154	0	A183-A192
C_{58}	12	57	58		2.20	154	0	A193-A201

Plotted Data Index (Cont.)
M = 10.0

Configuration		Group			Re/Ft X10^{-6}	α Deg	ψ Deg	Page
NAA	AEDC	A	B	C				
C_{59}	13	61	62		0.33	154	0	A202-A210
C_{56}	14	63			0.33	143	0	A211-A216
C_{56}	14	64			0.33	147	0	A217-A222
C_{56}	14	65			0.33	154	0	A223-A228
C_{56}	14	66			0.33	158	0	A229-A234
C_{56}	14	67			0.33	162	0	A235-A240
C_{56}	14	68			1.20	143	0	A241-A246
C_{56}	14	69			1.20	147	0	A247-A252
C_{56}	14	70			1.20	154	0	A253-A258
C_{56}	14	71			1.20	158	0	A259-A264
C_{56}	14	72			1.20	162	0	A265-A270
C_{56}	14	73			2.20	143	0	A271-A276
C_{56}	14	74			2.20	147	0	A277-A282
C_{56}	14	75			2.20	154	0	A283-A288
C_{56}	14	76			2.20	158	0	A289-A294
C_{56}	14	77			2.20	162	0	A295-A300
C_{60}	15	81			0.33	154	0	A301-A306
C_{60}	15	78			2.20	154	0	A307-A312
C_{61}	16	80			0.33	154	0	A313-A318
C_{61}	16	79			2.20	154	0	A319-A324
C_{57}	17		83		0.33	143	0	A325-A330
C_{57}	17		84		1.20	143	0	A331-A336
C_{57}	17		85		1.20	147	0	A337-A342
C_{57}	17		86		1.20	147	-5	A343-A348
C_{57}	17		87		1.20	147	5	A349-A354
C_{57}	17		88		1.20	154	0	A355-A360

Plotted Data Index (Cont.)
M = 10.0

Configuration		Group			Re/Ft $X10^{-6}$	α Deg	ψ Deg	Page
NAA	AEDC	A	B	C				
C_{57}	17		89		1.20	154	-5	A361-A366
C_{57}	17		90		1.20	154	5	A367-A372
C_{57}	17		91		1.20	158	0	A373-A378
C_{57}	17		92		1.20	162	0	A379-A384
C_{57}	17		93		2.20	143	0	A385-A390
C_{57}	17		94		2.20	147	0	A391-A396
C_{57}	17		95		2.20	147	-5	A397-A402
C_{57}	17		96		2.20	147	5	A403-A408
C_{57}	17		97		2.20	154	0	A409-A414
C_{57}	17		98		2.20	154	-5	A415-A420
C_{57}	17		99		2.20	154	5	A421-A426
C_{57}	17		100		2.20	158	0	A427-A532
C_{57}	17		101		2.20	162	0	A433-A438
C_2	10	138	143	152	0.35	143	0	A439-A447
C_2	10	139	144	153	0.35	147	0	A448-A456
C_2	10		145		0.35	147	-5	A457-A462
C_2	10		146		0.35	147	5	A463-A468
C_2	10	140	147	154	0.35	154	0	A469-A477
C_2	10		148		0.35	154	-5	A478-A483
C_2	10		149		0.35	154	5	A483-A489
C_2	10	141	150		0.35	158	0	A490-A498
C_2	10	142	151		0.35	162	0	A499-A507
C_2	10	128	133	123	1.20	143	0	A508-A516
C_2	10	129	134	123	1.20	147	0	A517-A525
C_2	10	130	135	125	1.20	154	0	A526-A534
C_2	10	131	136	126	1.20	158	0	A535-A543

Plotted Data Index (Cont.)
M = 10.0

Configuration		Group			Re/Ft X10^{-6}	α Deg	ψ Deg	Page
NAA	AEDC	A	B	C				
C_2	10	132	137	127	1.20	162	0	A544-A552
C_2	10	107	109	118	2.20	143	0	A553-A561
C_2	10	108	110	119	147	147	0	A562-A570
C_2	10		111		147	147	-5	A571-A576
C_2	10		112		147	147	5	A577-A582
C_2	10	104	113	120	147	154	0	A583-A591
C_2	10		114		147	154	-5	A592-A597
C_2	10		115		147	154	5	A598-A603
C_2	10	105	116	121	147	158	0	A604-A612
C_2	10	106	117	122	2.20	162	0	A613-A621
C_2	10	159			0.38	177	0	A622-A627
C_2	10	158			0.38	180	0	A628-A633
C_2	10	171			0.80	177	0	A634-A639
C_2	10	170			0.80	180	0	A640-A645
C_2	10	168			1.20	177	0	A646-A651
C_2	10	167			1.20	180	0	A652-A657
C_2	10	165			1.73	177	0	A658-A663
C_2	10	166			1.73	177	0	A664-A669
C_2	10	162			2.20	177	0	A670-A675
C_2	10	161			2.20	180	0	A676-A681

APPENDIX B

TABULATED DATA AND DATA INDEX

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG,R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
1	1	-6.61	143.39	-0.	-0.	1	C55	2.90	2	10.05	233.00	1663.50	138	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.813443E 02	0.514135E-02	0.443941E 04	0.530289E-05	0.658889E-07	0.359700E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725797E 00	0.181254E 01	0.204794E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	504.73	0.10995E 02	0.14027E 01	0.47823E-02	0.63139E-02	0.77387E 00	0.68492E 00	-0.	0.64760E 00
2	504.91	0.10720E 02	0.14550E 01	0.49614E-02	0.65503E-02	0.80273E 00	0.71046E 00	-0.30000E-01	0.
3	503.04	0.99429E 01	0.14657E 01	0.49903E-02	0.65884E-02	0.80864E 00	0.71569E 00	-0.60000E-01	0.
4	503.95	0.96203E 01	0.14554E 01	0.49590E-02	0.65472E-02	0.80298E 00	0.71068E 00	-0.90000E-01	0.
5	502.94	0.87917E 01	0.13631E 01	0.46406E-02	0.61267E-02	0.75204E 00	0.66560E 00	-0.20000E-00	0.66483E 00
6	499.14	0.76384E 01	0.11817E 01	0.40105E-02	0.52949E-02	0.65196E 00	0.57702E 00	-0.40000E-00	0.57980E 00
7	498.62	0.64192E 01	0.99751E 00	0.33840E-02	0.44677E-02	0.55034E 00	0.48708E-00	-0.60000E 00	0.43393E-00
8	505.49	0.53008E 01	0.82700E 00	0.28213E-02	0.37249E-02	0.45626E-00	0.40382E-00	-0.80000E 00	0.
9	511.80	0.51350E 01	0.79133E 00	0.27138E-02	0.35828E-02	0.43659E-00	0.38640E-00	-0.90000E 00	0.31442E-00
10	519.61	0.42177E 01	0.66127E 00	0.22824E-02	0.30134E-02	0.36483E-00	0.32289E-00	-0.98000E 00	0.28887E-00
11	527.26	0.14649E-00	0.25009E-01	0.86875E-04	0.11470E-03	0.13798E-01	0.12212E-01	-0.11220E 01	0.42896E-00
12	532.05	0.25195E-00	0.36751E-01	0.12818E-03	0.16923E-03	0.20276E-01	0.17945E-01	-0.11890E 01	0.38514E-00
13	539.06	0.25870E-00	0.39057E-01	0.13703E-03	0.18092E-03	0.21548E-01	0.19071E-01	-0.13340E 01	0.38378E-00
14	540.70	0.16208E-00	0.27881E-01	0.97955E-04	0.12933E-03	0.15382E-01	0.13614E-01	-0.14400E 01	0.
15	504.18	0.11042E 02	0.14981E 01	0.51053E-02	0.67403E-02	0.82651E 00	0.73150E 00	0.30000E-01	0.
16	501.87	0.10512E 02	0.15485E 01	0.52671E-02	0.69540E-02	0.85433E 00	0.75613E 00	0.60000E-01	0.
17	501.75	0.10610E 02	0.16032E 01	0.54526E-02	0.71988E-02	0.88449E 00	0.78283E 00	0.90000E-01	0.
18	503.16	0.10805E 02	0.16755E 01	0.57051E-02	0.75322E-02	0.92439E 00	0.81814E 00	0.20000E-00	0.61419E 00
19	512.37	0.12055E 02	0.18792E 01	0.64473E-02	0.85121E-02	0.10368E 01	0.91759E 00	0.40000E-00	0.58856E 00
20	526.67	0.13113E 02	0.20708E 01	0.71900E-02	0.94926E-02	0.11425E 01	0.10112E 01	0.60000E 00	0.
21	556.89	0.20908E 02	0.31616E 01	0.11262E-01	0.14869E-01	0.17443E 01	0.15438E 01	0.92000E 00	0.
22	560.79	0.20688E 02	0.31351E 01	0.11206E-01	0.14794E-01	0.17297E 01	0.15308E 01	0.10400E 01	0.64319E 00
23	559.49	0.19128E 02	0.29044E 01	0.10369E-01	0.13690E-01	0.16024E 01	0.14182E 01	0.10600E 01	0.57625E 00
24	553.97	0.14325E 02	0.22717E 01	0.80722E-02	0.10657E-01	0.12533E 01	0.11093E 01	0.10840E 01	0.58674E 00
25	546.03	0.30795E 01	0.45508E-00	0.16061E-02	0.21205E-02	0.25107E-00	0.22221E-00	0.12070E 01	0.59265E 00
26	547.43	0.29288E 01	0.45685E-00	0.16143E-02	0.21312E-02	0.25205E-00	0.22308E-00	0.12490E 01	0.66802E 00
27	548.69	0.31096E 01	0.47752E-00	0.16891E-02	0.22301E-02	0.26345E-00	0.23317E-00	0.13340E 01	0.71275E 00
28	547.71	0.22369E 01	0.38178E-00	0.13493E-02	0.17815E-02	0.21063E-00	0.18642E-00	0.14540E 01	0.69052E 00
29	545.69	0.14800E 01	0.24484E-00	0.86384E-03	0.11405E-02	0.13508E-00	0.11955E-00	0.16580E 01	0.52218E 00
30	544.77	0.12099E 01	0.20249E-00	0.71387E-03	0.94249E-03	0.11171E-00	0.98874E-01	0.20410E 01	0.53728E 00
31	544.24	0.11278E 01	0.18869E-00	0.66494E-03	0.87789E-03	0.10410E-00	0.92138E-01	0.22480E 01	0.51730E 00
32	502.29	0.10595E 02	0.15628E 01	0.53175E-02	0.70204E-02	0.86220E 00	0.76309E 00	-0.60000E-01	0.
33	505.28	0.10783E 02	0.14639E 01	0.49933E-02	0.65924E-02	0.80765E 00	0.71481E 00	-0.30000E-01	0.
34	504.60	0.11001E 02	0.16247E 01	0.55387E-02	0.73125E-02	0.89637E 00	0.79333E 00	0.30000E-01	0.
35	503.45	0.10215E 02	0.15450E 01	0.52619E-02	0.69471E-02	0.85238E 00	0.75440E 00	0.60000E-01	0.
36	510.84	0.79309E 01	0.12353E 01	0.42326E-02	0.55883E-02	0.68151E 00	0.60317E 00	-0.86800E 00	0.46529E-00
37	514.98	0.80218E 01	0.12185E 01	0.41898E-02	0.55316E-02	0.67229E 00	0.59501E 00	-0.91100E 00	0.47719E-00
38	517.91	0.75854E 01	0.11749E 01	0.40497E-02	0.53467E-02	0.64823E 00	0.57372E 00	-0.95300E 00	0.47850E-00
39	919.72	0.11421E-01	0.21663E-02	0.11272E-04	0.14881E-04	0.11951E-02	0.10578E-02	0.51000E-01	0.
40	498.85	0.54893E 01	0.84368E 00	0.28627E-02	0.37794E-02	0.46547E-00	0.41197E-00	0.29000E-01	0.
41	506.89	0.76182E 01	0.11695E 01	0.39946E-02	0.52736E-02	0.64525E 00	0.57108E 00	0.70000E-02	0.
42	510.62	0.53423E 01	0.82669E 00	0.28322E-02	0.37393E-02	0.45609E-00	0.40367E-00	-0.86800E 00	0.30389E-00
43	513.94	0.57200E 01	0.88909E 00	0.30544E-02	0.40326E-02	0.49052E-00	0.43414E-00	-0.91100E 00	0.34469E-00
44	518.37	0.70587E 01	0.10936E 01	0.37709E-02	0.49765E-02	0.60337E 00	0.53401E 00	-0.95300E 00	0.33496E-00
45	520.80	0.16966E 01	0.27320E-00	0.94392E-03	0.12462E-02	0.15073E-00	0.13340E-00	-0.10400E 01	0.37161E-00
46	506.00	0.72166E 01	0.11166E 01	0.38109E-02	0.50314E-02	0.61604E 00	0.54523E 00	0.70000E-02	0.
47	499.86	0.50083E 01	0.77217E 00	0.26222E-02	0.34619E-02	0.42602E-00	0.37705E-00	0.29000E-01	0.
48	499.67	0.51028E 01	0.78967E 00	0.26812E-02	0.35398E-02	0.43567E-00	0.38559E-00	0.51000E-01	0.32121E-00
49	505.33	0.49787E 01	0.76562E 00	0.26116E-02	0.34480E-02	0.42240E-00	0.37389E-00	0.70000E-02	0.29716E-00
50	503.57	0.44831E 01	0.69092E 00	0.23534E-02	0.31070E-02	0.38119E-00	0.33737E-00	0.29000E-01	0.27272E-00
51	503.58	0.48914E 01	0.75143E 00	0.25595E-02	0.33792E-02	0.41457E-00	0.36692E-00	0.51000E-01	0.
52	509.70	0.48410E 01	0.75064E 00	0.25697E-02	0.33927E-02	0.41414E-00	0.36653E-00	-0.86800E 00	0.
53	512.75	0.42057E 01	0.65577E 00	0.22506E-02	0.29714E-02	0.36180E-00	0.32021E-00	-0.91100E 00	0.24647E-00
54	515.87	0.45101E 01	0.69776E 00	0.24010E-02	0.31699E-02	0.38497E-00	0.34072E-00	-0.95300E 00	0.27302E-00

GROUP 1
PAGE 2 OF 2

3937-07
002 002

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	521.50	0.97143E 00	0.15649E-00	0.54099E-03	0.71425E-03	0.86337E-01	0.76413E-01	-0.10400E 01	0.30651E-00
56	524.28	0.59896E 00	0.99689E-01	0.34543E-03	0.45606E-03	0.55000E-01	0.48678E-01	-0.10680E 01	0.37606E-00
57	522.92	0.56415E 00	0.90953E-01	0.31480E-03	0.41562E-03	0.50180E-01	0.44412E-01	-0.10400E 01	0.43198E-00
58	521.55	0.69922E 00	0.12194E-00	0.42158E-03	0.55660E-03	0.67278E-01	0.59544E-01	-0.10680E 01	0.23915E-00
59	519.46	0.16229E 01	0.26112E-00	0.90118E-03	0.11898E-02	0.14406E-00	0.12751E-00	-0.10400E 01	0.32063E-00
60	522.55	0.89921E 00	0.14951E-00	0.51733E-03	0.68301E-03	0.82489E-01	0.73007E-01	-0.10680E 01	0.34744E-00
61	527.42	0.13351E-00	0.21973E-01	0.76339E-04	0.10079E-03	0.12123E-01	0.10729E-01	-0.11220E 01	0.24733E-00
62	539.55	0.72207E-01	0.10904E-01	0.38273E-04	0.50530E-04	0.60161E-02	0.53246E-02	-0.13340E 01	0.10290E-00
63	527.61	0.19117E-00	0.32643E-01	0.11343E-03	0.14975E-03	0.18009E-01	0.15939E-01	-0.11220E 01	0.41274E-00
64	538.85	0.42079E-01	0.63521E-02	0.22282E-04	0.29418E-04	0.35045E-02	0.31017E-02	-0.13340E 01	0.
65	540.61	0.94546E-01	0.16263E-01	0.57132E-04	0.75429E-04	0.89724E-02	0.79410E-02	0.14400E 01	0.14062E-00
66	541.60	0.51794E 00	0.84833E-01	0.29827E-03	0.39379E-03	0.46803E-01	0.41423E-01	0.16130E 01	0.
67	541.91	0.25195E-00	0.40512E-01	0.14248E-03	0.18811E-03	0.22351E-01	0.19782E-01	0.17200E 01	0.33578E-00
68	541.72	0.18234E-00	0.30097E-01	0.10583E-03	0.13973E-03	0.16605E-01	0.14696E-01	-0.16130E 01	0.27309E-00
69	542.19	0.23844E-00	0.38346E-01	0.13489E-03	0.17809E-03	0.21156E-01	0.18724E-01	-0.18280E 01	0.30872E-00
70	529.08	0.17403E-00	0.25386E-01	0.88319E-04	0.11660E-03	0.14006E-01	0.12396E-01	-0.11650E 01	0.
71	533.50	0.15429E-00	0.12903E-01	0.45057E-04	0.59487E-04	0.71187E-02	0.63004E-02	-0.12050E 01	0.43323E-00
72	535.04	0.12208E-00	0.17623E-01	0.61619E-04	0.81353E-04	0.97227E-02	0.86051E-02	-0.12120E 01	0.20067E-00
73	531.58	0.21403E-00	0.31265E-01	0.10900E-03	0.14391E-03	0.17249E-01	0.15266E-01	-0.11650E 01	0.39956E-00
74	534.16	0.92468E-01	0.77359E-02	0.27029E-04	0.35685E-04	0.42680E-02	0.37774E-02	-0.12050E 01	0.36147E-00
75	919.72	0.11421E-01	0.19826E-02	0.10316E-04	0.13619E-04	0.10938E-02	0.96807E-03	-0.12120E 01	0.
76	525.35	0.37143E-00	0.55458E-01	0.19234E-03	0.25394E-03	0.30597E-01	0.27080E-01	0.10840E 01	0.27696E-00
77	528.66	0.21507E-00	0.34539E-01	0.12012E-03	0.15859E-03	0.19056E-01	0.16865E-01	0.11220E 01	0.52127E 00
78	540.13	0.27169E-00	0.40428E-01	0.14197E-03	0.18743E-03	0.22304E-01	0.19741E-01	0.13340E 01	0.40733E-00
79	535.03	0.20784E-02	0.34782E-03	0.12162E-05	0.16056E-05	0.19190E-03	0.16984E-03	-0.11890E 01	0.
80	540.58	0.88312E-02	0.13278E-02	0.46644E-05	0.61582E-05	0.73254E-03	0.64834E-03	-0.13340E 01	0.13286E-01
81	532.62	-0.97652E-01	-0.15718E-01	-0.54846E-04	-0.72410E-04	-0.86717E-02	-0.76749E-02	-0.11470E 01	0.
82	535.26	-0.32727E-01	-0.54727E-02	-0.19139E-04	-0.25268E-04	-0.30194E-02	-0.26723E-02	-0.11890E 01	0.
83	527.97	0.31689E-00	0.52773E-01	0.18343E-03	0.24217E-03	0.29116E-01	0.25769E-01	-0.10840E 01	0.22267E-00
84	535.49	0.94027E-01	0.13766E-01	0.48151E-04	0.63571E-04	0.75948E-02	0.67218E-02	-0.11890E 01	0.15271E-00
85	540.29	0.10649E-00	0.15633E-01	0.54905E-04	0.72488E-04	0.86249E-02	0.76335E-02	-0.13090E 01	0.16179E-00
86	540.88	0.94024E-01	0.13997E-01	0.49182E-04	0.64933E-04	0.77221E-02	0.68345E-02	-0.13340E 01	0.15028E-00
87	550.60	0.99132E 01	0.14677E 01	0.52360E-02	0.69128E-02	0.80973E 00	0.71666E 00	0.11990E 01	0.19055E 01
88	551.43	0.61875E 01	0.92027E 00	0.32629E-02	0.43079E-02	0.50773E 00	0.44937E-00	0.12070E 01	0.12469E 01
89	552.16	0.30187E 01	0.45681E-00	0.16207E-02	0.21397E-02	0.25203E-00	0.22306E-00	0.13340E 01	0.72558E 00
90	554.44	0.80623E 01	0.11602E 01	0.41243E-02	0.54451E-02	0.64010E 00	0.56652E 00	0.12070E 01	0.15285E 01
91	552.82	0.41745E 01	0.65312E 00	0.23184E-02	0.30609E-02	0.36033E-00	0.31891E-00	0.12490E 01	0.91859E 00
92	552.50	0.35964E 01	0.54706E 00	0.19414E-02	0.25632E-02	0.30182E-00	0.26713E-00	0.13340E 01	0.82970E 00
93	549.39	0.21277E 01	0.36133E-00	0.12789E-02	0.16885E-02	0.19935E-00	0.17644E-00	0.14900E 01	0.67082E 00
94	540.53	0.84675E-01	0.88921E-02	0.31236E-04	0.41240E-04	0.49059E-02	0.43420E-02	-0.	0.
95	542.71	0.51376E 00	0.54406E-01	0.19147E-03	0.25279E-03	0.30017E-01	0.26566E-01	-0.	0.
96	541.38	0.11013E-00	0.11571E-01	0.40675E-04	0.53701E-04	0.63836E-02	0.56498E-02	-0.	0.
97	541.47	0.13195E-00	0.13864E-01	0.48741E-04	0.64351E-04	0.76490E-02	0.67698E-02	-0.	0.
98	540.07	0.10338E-00	0.10932E-01	0.38387E-04	0.50680E-04	0.60312E-02	0.53380E-02	-0.	0.

GROUP 6
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011 011

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
6	1	-6.59	143.41	-0.02	-0.	2	C55	3.00	2	10.04	217.00	1672.00	143	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.818625E 02	0.479762E-02	0.445150E 04	0.491703E-05	0.663086E-07	0.332318E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726147E 00	0.172108E 01	0.195607E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	530.98	0.19044E 01	0.30863E-00	0.10667E-02	0.15148E-02	0.17932E-00	0.15778E-00	-0.10600E 01	0.13290E 01
100	531.55	0.99637E 00	0.16642E-00	0.57548E-03	0.81718E-03	0.96694E-01	0.85078E-01	-0.10840E 01	0.12870E 01
101	531.18	0.68935E 00	0.11259E-00	0.38923E-03	0.55270E-03	0.65420E-01	0.57561E-01	-0.11080E 01	0.12725E 01
102	531.20	0.79117E 00	0.12883E-00	0.44536E-03	0.63241E-03	0.74853E-01	0.65861E-01	-0.11080E 01	0.14550E 01
103	531.22	0.11818E 01	0.19736E-00	0.68227E-03	0.96882E-03	0.11467E-00	0.10089E-00	-0.10800E 01	0.13037E 01
104	561.77	0.34935E 02	0.55997E 01	0.19865E-01	0.28209E-01	0.32536E 01	0.28627E 01	0.85000E 00	0.
105	569.40	0.43107E 02	0.69637E 01	0.23438E-01	0.33282E-01	0.38137E 01	0.33555E 01	0.94000E 00	0.95418E 00
106	572.33	0.46671E 02	0.70579E 01	0.25267E-01	0.35879E-01	0.41008E 01	0.36082E 01	0.96000E 00	0.95174E 00
107	568.52	0.45075E 02	0.68024E 01	0.24272E-01	0.34466E-01	0.39524E 01	0.34776E 01	0.98000E 00	0.96124E 00
108	571.37	0.45282E 02	0.68790E 01	0.24606E-01	0.34941E-01	0.39969E 01	0.35168E 01	0.10000E 01	0.94058E 00
109	564.25	0.39916E 02	0.60606E 01	0.21546E-01	0.30595E-01	0.35214E 01	0.30984E 01	0.10200E 01	0.91900E 00
110	572.19	0.40851E 02	0.62297E 01	0.22300E-01	0.31665E-01	0.36197E 01	0.31848E 01	0.80000E-01	0.95180E 00
111	568.85	0.42509E 02	0.64163E 01	0.22901E-01	0.32519E-01	0.37280E 01	0.32802E 01	0.10000E-00	0.96032E 00
112	576.28	0.45557E 02	0.69396E 01	0.24929E-01	0.35399E-01	0.40321E 01	0.35477E 01	0.12000E-00	0.92867E 00
113	572.31	0.47869E 02	0.73003E 01	0.26134E-01	0.37111E-01	0.42417E 01	0.37321E 01	0.14000E-00	0.94379E 00
114	565.53	0.38806E 02	0.58961E 01	0.20984E-01	0.29798E-01	0.34258E 01	0.30143E 01	0.80000E-01	0.
115	566.69	0.39917E 02	0.60484E 01	0.21548E-01	0.30598E-01	0.35143E 01	0.30921E 01	0.10000E-00	0.94719E 00
116	567.63	0.41272E 02	0.62993E 01	0.22460E-01	0.31893E-01	0.36600E 01	0.32204E 01	0.12000E-00	0.94849E 00
117	573.79	0.43462E 02	0.66337E 01	0.23779E-01	0.33765E-01	0.38544E 01	0.33914E 01	0.14000E-00	0.94442E 00
118	565.37	0.35784E 02	0.54822E 01	0.19509E-01	0.27702E-01	0.31853E 01	0.28027E 01	0.10000E-00	0.94488E 00
119	564.75	0.35704E 02	0.54408E 01	0.19351E-01	0.27478E-01	0.31613E 01	0.27815E 01	0.15000E-00	0.18820E-00
120	566.29	0.34615E 02	0.52882E 01	0.18833E-01	0.26743E-01	0.30726E 01	0.27035E 01	0.20000E-00	0.97085E 00
121	563.26	0.36686E 02	0.56139E 01	0.19941E-01	0.28316E-01	0.32618E 01	0.28700E 01	0.25000E-00	0.92726E 00
122	558.79	0.33292E 02	0.50819E 01	0.17982E-01	0.25535E-01	0.29527E 01	0.25980E 01	0.30000E-00	0.92700E 00
123	554.08	0.31797E 02	0.48653E 01	0.17147E-01	0.24349E-01	0.28269E 01	0.24873E 01	0.35000E-00	0.84982E 00
124	557.05	0.35361E 02	0.54555E 01	0.19276E-01	0.27371E-01	0.31698E 01	0.27890E 01	0.38000E-00	0.94075E 00
125	560.25	0.38156E 02	0.59457E 01	0.21065E-01	0.29913E-01	0.34546E 01	0.30396E 01	0.45000E-00	0.92438E 00
126	558.45	0.32891E 02	0.51872E 01	0.18350E-01	0.26056E-01	0.30139E 01	0.26518E 01	0.61000E 00	0.91437E 00
127	543.62	0.20651E 02	0.32457E 01	0.11338E-01	0.16100E-01	0.18858E 01	0.16593E 01	0.70000E 00	0.90096E 00
128	534.05	0.10745E 02	0.16850E 01	0.58391E-02	0.82915E-02	0.97906E 00	0.86145E 00	0.75000E 00	0.89580E 00
129	551.24	0.23193E 02	0.36725E 01	0.12912E-01	0.18335E-01	0.21338E 01	0.18775E 01	0.70000E 00	0.87051E 00
130	552.29	0.24165E 02	0.38286E 01	0.13473E-01	0.19131E-01	0.22245E 01	0.19573E 01	0.80000E 00	0.87279E 00
131	536.42	0.11418E 02	0.17011E 01	0.59066E-02	0.83873E-02	0.98841E 00	0.86967E 00	0.90000E 00	0.89702E 00
132	552.07	0.26073E 02	0.39321E 01	0.13834E-01	0.19645E-01	0.22847E 01	0.20102E 01	0.90000E 00	0.11534E 01
133	551.08	0.23871E 02	0.35799E 01	0.12585E-01	0.17870E-01	0.20800E 01	0.18302E 01	0.96000E 00	0.10397E 01
134	550.30	0.21859E 02	0.32822E 01	0.11530E-01	0.16373E-01	0.19071E 01	0.16780E 01	0.10000E 01	0.10045E 01
135	543.30	0.12316E 02	0.19260E 01	0.67263E-02	0.95513E-02	0.11191E 01	0.98465E 00	0.70000E-02	0.
136	812.58	0.24504E 01	0.43171E-00	0.19547E-02	0.27757E-02	0.25083E-00	0.22070E-00	0.70000E-02	0.
137	540.39	0.13670E 02	0.21274E 01	0.74111E-02	0.10524E-01	0.12361E 01	0.10876E 01	0.39000E-01	0.88590E 00
138	539.17	0.13721E 02	0.21234E 01	0.73897E-02	0.10493E-01	0.12337E 01	0.10855E 01	0.78000E-01	0.
139	538.17	0.14371E 02	0.22119E 01	0.76914E-02	0.10922E-01	0.12852E 01	0.11308E 01	0.11700E-00	0.
140	538.81	0.14226E 02	0.21833E 01	0.75958E-02	0.10786E-01	0.12685E 01	0.11161E 01	0.78000E-01	0.90623E 00
141	553.14	0.35394E 02	0.37701E 01	0.13276E-01	0.18852E-01	0.21905E 01	0.19274E 01	-0.	0.
142	552.58	0.34041E 02	0.36249E 01	0.12759E-01	0.18118E-01	0.21062E 01	0.18532E 01	-0.	0.
143	537.77	0.13597E 02	0.20753E 01	0.72140E-02	0.10244E-01	0.12058E 01	0.10610E 01	0.78000E-01	0.91002E 00
144	538.88	0.12264E 02	0.18760E 01	0.65273E-02	0.92687E-02	0.10900E 01	0.95909E 00	0.70000E-02	0.82011E 00
145	539.86	0.11447E 02	0.17434E 01	0.60709E-02	0.86207E-02	0.10130E 01	0.89130E 00	0.70000E-02	0.83273E 00
146	538.07	0.12919E 02	0.19753E 01	0.68681E-02	0.97527E-02	0.11477E 01	0.10099E 01	0.39000E-01	0.87302E 00
147	539.08	0.13459E 02	0.20557E 01	0.71535E-02	0.10158E-01	0.11944E 01	0.10509E 01	0.78000E-01	0.
148	538.93	0.14000E 02	0.21558E 01	0.75009E-02	0.10651E-01	0.12526E 01	0.11021E 01	0.11700E-00	0.
149	554.47	0.27884E 02	0.44726E 01	0.15768E-01	0.22391E-01	0.25987E 01	0.22865E 01	0.70000E-02	0.95896E 00
150	556.69	0.28562E 02	0.46088E 01	0.16279E-01	0.23116E-01	0.26778E 01	0.23562E 01	0.70000E-02	0.95446E 00
151	557.41	0.29148E 02	0.47052E 01	0.16630E-01	0.23614E-01	0.27339E 01	0.24055E 01	0.70000E-02	0.94108E 00
152	564.11	0.33747E 02	0.52699E 01	0.18733E-01	0.26600E-01	0.30620E 01	0.26941E 01	0.39000E-01	0.94605E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	561.43	0.32964E 02	0.51399E 01	0.18229E-01	0.25885E-01	0.29865E 01	0.26277E 01	0.39000E-01	0.
154	560.20	0.33146E 02	0.51312E 01	0.18179E-01	0.25813E-01	0.29814E 01	0.26232E 01	0.78000E-01	0.94443E 00
155	558.78	0.31262E 02	0.50504E 01	0.17871E-01	0.25376E-01	0.29344E 01	0.25819E 01	0.39000E-01	0.
156	553.79	0.28434E 02	0.45664E 01	0.16089E-01	0.22847E-01	0.26532E 01	0.23345E 01	0.39000E-01	0.
157	551.90	0.26975E 02	0.43412E 01	0.15271E-01	0.21685E-01	0.25224E 01	0.22194E 01	0.78000E-01	0.93819E 00
158	550.14	0.27682E 02	0.44646E 01	0.15682E-01	0.22268E-01	0.25940E 01	0.22824E 01	0.39000E-01	0.
159	547.39	0.25492E 02	0.41052E 01	0.14386E-01	0.20428E-01	0.23852E 01	0.20987E 01	0.78000E-01	0.
160	551.83	0.26578E 02	0.42772E 01	0.15045E-01	0.21364E-01	0.24852E 01	0.21866E 01	0.39000E-01	0.
161	553.42	0.23071E 02	0.36283E 01	0.12780E-01	0.18148E-01	0.21081E 01	0.18549E 01	0.43000E-01	0.10274E 01
162	563.03	0.35386E 02	0.56128E 01	0.19933E-01	0.28305E-01	0.32612E 01	0.28694E 01	0.43000E-01	0.15582E 01
163	557.07	0.27593E 02	0.43692E 01	0.15438E-01	0.21922E-01	0.25387E 01	0.22337E 01	0.85000E-01	0.12593E 01
164	555.06	0.24305E 02	0.38259E 01	0.13495E-01	0.19163E-01	0.22230E 01	0.19559E 01	0.12800E-00	0.11523E 01
165	565.25	0.41865E 02	0.66477E 01	0.23654E-01	0.33568E-01	0.38625E 01	0.33985E 01	0.43000E-01	0.
166	559.94	0.36064E 02	0.56923E 01	0.20162E-01	0.28630E-01	0.33074E 01	0.29100E 01	0.85000E-01	0.16299E 01
167	564.58	0.42578E 02	0.67375E 01	0.23959E-01	0.34022E-01	0.39147E 01	0.34444E 01	0.43000E-01	0.
168	557.87	0.30111E 02	0.48008E 01	0.16974E-01	0.24103E-01	0.27894E 01	0.24543E 01	0.12800E-00	0.19246E 01
169	563.83	0.36322E 02	0.57916E 01	0.20582E-01	0.29227E-01	0.33651E 01	0.29608E 01	0.85000E-01	0.16082E 01
170	560.50	0.32726E 02	0.51836E 01	0.18369E-01	0.26084E-01	0.30118E 01	0.26500E 01	0.12800E-00	0.14390E 01
171	560.13	0.36721E 02	0.57965E 01	0.20535E-01	0.29159E-01	0.33679E 01	0.29634E 01	0.85000E-01	0.15838E 01
172	569.94	0.40755E 02	0.64994E 01	0.23220E-01	0.32972E-01	0.37764E 01	0.33227E 01	0.43000E-01	0.
173	558.75	0.28829E 02	0.45839E 01	0.16229E-01	0.23032E-01	0.26634E 01	0.23435E 01	0.12800E-00	0.11961E 01
174	561.82	0.35314E 02	0.55977E 01	0.19859E-01	0.28199E-01	0.32524E 01	0.28617E 01	0.85000E-01	0.
175	570.23	0.38441E 02	0.61020E 01	0.21805E-01	0.30963E-01	0.35454E 01	0.31195E 01	0.43000E-01	0.15497E 01
176	563.76	0.31833E 02	0.50351E 01	0.17893E-01	0.25408E-01	0.29255E 01	0.25741E 01	0.43000E-01	0.12659E 01
177	554.13	0.22877E 02	0.36166E 01	0.12747E-01	0.18100E-01	0.21013E 01	0.18489E 01	0.12800E-00	0.87218E 00
178	554.28	0.22255E 02	0.35129E 01	0.12383E-01	0.17583E-01	0.20411E 01	0.17959E 01	0.85000E-01	0.87095E 00
179	561.54	0.28746E 02	0.45559E 01	0.16159E-01	0.22946E-01	0.26471E 01	0.23291E 01	0.70000E-02	0.11024E 01
180	549.48	0.21220E 02	0.33567E 01	0.11784E-01	0.16733E-01	0.19503E 01	0.17165E 01	0.70000E-02	0.
181	560.51	0.29665E 02	0.47215E 01	0.16732E-01	0.23759E-01	0.27433E 01	0.24138E 01	0.70000E-02	0.11845E 01
182	557.15	0.27601E 02	0.43988E 01	0.15543E-01	0.22072E-01	0.25558E 01	0.22488E 01	0.70000E-02	0.
183	554.82	0.22524E 02	0.35622E 01	0.12562E-01	0.17838E-01	0.20697E 01	0.18211E 01	0.32000E-01	0.85314E 00
184	559.72	0.27587E 02	0.44028E 01	0.15592E-01	0.22140E-01	0.25582E 01	0.22509E 01	0.32000E-01	0.89655E 00
185	559.58	0.24529E 02	0.38949E 01	0.13686E-01	0.19434E-01	0.22631E 01	0.19912E 01	0.64000E-01	0.90564E 00
186	558.06	0.29000E 02	0.46094E 01	0.16300E-01	0.23147E-01	0.26782E 01	0.23565E 01	0.64000E-01	0.89681E 00
187	557.53	0.24781E 02	0.39502E 01	0.13963E-01	0.19827E-01	0.22952E 01	0.20194E 01	0.70000E-02	0.87677E 00
188	554.37	0.22285E 02	0.36026E 01	0.12700E-01	0.18034E-01	0.20932E 01	0.18418E 01	0.70000E-02	0.83742E 00
189	528.98	0.32197E 01	0.52362E 00	0.18068E-02	0.25657E-02	0.30424E-00	0.26769E-00	0.10600E 01	0.98064E 00
190	526.51	0.19636E 01	0.32527E-00	0.11201E-02	0.15905E-02	0.18899E-00	0.16629E-00	0.10840E 01	0.98316E 00
191	524.42	0.98546E 00	0.16393E-00	0.56353E-03	0.80021E-03	0.95249E-01	0.83807E-01	0.11080E 01	0.97432E 00
192	524.80	0.11480E 01	0.18999E-00	0.65331E-03	0.92769E-03	0.11039E-00	0.97128E-01	0.11080E 01	0.99383E 00
193	522.31	0.25216E 01	0.41041E-00	0.14084E-02	0.19999E-02	0.23846E-00	0.20981E-00	0.16580E 01	0.80521E 00
194	523.34	0.22218E 01	0.36017E-00	0.12370E-02	0.17566E-02	0.20927E-00	0.18413E-00	0.11700E 01	0.80896E 00
195	522.53	0.24691E 01	0.40192E-00	0.13795E-02	0.19588E-02	0.23353E-00	0.20547E-00	0.16740E 01	0.85341E 00
196	522.66	0.23953E 01	0.38815E-00	0.13324E-02	0.18920E-02	0.22553E-00	0.19844E-00	0.16950E 01	0.86990E 00

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
15	1	-6.59	143.41	0.03	-0.	3	C55	3.00	2	10.04	214.00	1672.90	152	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.819207E 02	0.473321E-02	0.445269E 04	0.484757E-05	0.663557E-07	0.327479E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726186E 00	0.170362E 01	0.193874E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	551.28	0.15999E 02	0.24928E 01	0.87575E-02	0.12610E-01	0.14633E 01	0.12858E 01	0.10000E 01	0.91989E 00
198	548.13	0.15784E 02	0.23752E 01	0.83218E-02	0.11983E-01	0.13942E 01	0.12251E 01	0.12000E 01	0.10038E 01
199	526.80	0.78582E 01	0.12312E 01	0.42374E-02	0.61016E-02	0.72271E 00	0.63506E 00	0.13000E 01	0.11550E 01
200	503.79	0.21133E 01	0.30227E-00	0.10208E-02	0.14699E-02	0.17743E-00	0.15591E-00	0.11890E 01	0.95944E 00
201	518.59	0.15870E 01	0.25973E-00	0.88783E-03	0.12784E-02	0.15246E-00	0.13397E-00	0.14540E 01	0.86260E 00
202	521.02	0.14919E 01	0.24265E-00	0.83112E-03	0.11968E-02	0.14243E-00	0.12516E-00	0.17040E 01	0.85116E 00
203	527.19	0.11242E 01	0.18348E-00	0.63166E-03	0.90956E-03	0.10770E-00	0.94637E-01	0.20410E 01	0.10183E 01
204	527.33	0.44675E-00	0.33881E-01	0.11666E-03	0.16798E-03	0.19888E-01	0.17476E-01	0.20700E 01	0.
205	530.91	0.15382E 01	0.13353E-00	0.46114E-03	0.66402E-03	0.78382E-01	0.68876E-01	0.21880E 01	0.13939E 02
206	528.54	0.14021E 01	0.22901E-00	0.78931E-03	0.11366E-02	0.13443E-00	0.11812E-00	0.22480E 01	0.11644E 01
207	526.72	0.12821E 01	0.20567E-00	0.70780E-03	0.10192E-02	0.12073E-00	0.10609E-00	0.20700E 01	0.94884E 00
208	526.66	0.64987E 00	0.57386E-01	0.19748E-03	0.28436E-03	0.33685E-01	0.29600E-01	0.20700E 01	0.15116E 01
209	532.45	0.18010E 01	0.14448E-00	0.49958E-03	0.71938E-03	0.84807E-01	0.74522E-01	0.21880E 01	0.57104E 01
210	527.33	0.13184E 01	0.21685E-00	0.74665E-03	0.10751E-02	0.12729E-00	0.11185E-00	0.20700E 01	0.13219E 01
211	530.13	0.22893E 01	0.37714E-00	0.13016E-02	0.18742E-02	0.22137E-00	0.19453E-00	0.21880E 01	0.24361E 01
212	529.18	0.11917E 01	0.19382E-00	0.66839E-03	0.96244E-03	0.11377E-00	0.99974E-01	0.22390E 01	0.11187E 01
213	527.53	0.10036E 01	0.16308E-00	0.56162E-03	0.80870E-03	0.95728E-01	0.84119E-01	0.21880E 01	0.10614E 01
214	529.09	0.94753E 00	0.15600E-00	0.53792E-03	0.77457E-03	0.91570E-01	0.80465E-01	0.22480E 01	0.10992E 01
215	513.73	0.56519E 00	0.83691E-01	0.28494E-03	0.41030E-03	0.49125E-01	0.43168E-01	0.11650E 01	0.16541E 01
216	514.45	0.40104E-00	0.33177E-01	0.11302E-03	0.16275E-03	0.19474E-01	0.17113E-01	0.12050E 01	0.
217	515.39	0.51948E 00	0.74803E-01	0.25503E-03	0.36723E-03	0.43908E-01	0.38583E-01	0.12120E 01	0.16062E 01
218	531.95	0.39533E-00	0.57762E-01	0.19965E-03	0.28748E-03	0.33905E-01	0.29794E-01	0.11890E 01	-0.47556E-00
219	519.51	0.45714E-00	0.75833E-01	0.25942E-03	0.37355E-03	0.44512E-01	0.39114E-01	0.14540E 01	0.11642E 01
220	523.11	0.78597E 00	0.13563E-00	0.46535E-03	0.67008E-03	0.79611E-01	0.69956E-01	0.17040E 01	0.15501E 01
221	525.95	0.69454E 00	0.11501E-00	0.39555E-03	0.56958E-03	0.67511E-01	0.59324E-01	0.20410E 01	0.16034E 01
222	529.85	0.65818E 00	0.11039E-00	0.38087E-03	0.54843E-03	0.64795E-01	0.56937E-01	0.22480E 01	0.14138E 01
223	516.13	0.53402E 00	0.79184E-01	0.27013E-03	0.38897E-03	0.46480E-01	0.40843E-01	0.11650E 01	0.13750E 01
224	516.42	0.42857E-00	0.35495E-01	0.12112E-03	0.17440E-03	0.20835E-01	0.18308E-01	0.12050E 01	0.16145E 01
225	517.26	0.46338E-00	0.66795E-01	0.22808E-03	0.32842E-03	0.39208E-01	0.34453E-01	0.12120E 01	0.15973E 01
226	524.20	0.35637E-00	0.59487E-01	0.20429E-03	0.29417E-03	0.34918E-01	0.30684E-01	0.14540E 01	0.11111E 01
227	526.37	0.56779E 00	0.91067E-01	0.31331E-03	0.45115E-03	0.53455E-01	0.46972E-01	0.17040E 01	0.15177E 01
228	527.47	0.69299E 00	0.11347E-00	0.39073E-03	0.56263E-03	0.66604E-01	0.58527E-01	0.18780E 01	0.14505E 01
229	529.85	0.81922E 00	0.13493E-00	0.46557E-03	0.67040E-03	0.79204E-01	0.69599E-01	0.21880E 01	0.17296E 01
230	524.57	0.47792E-00	0.70015E-01	0.24052E-03	0.34633E-03	0.41097E-01	0.36113E-01	0.11890E 01	0.10117E 01
231	525.76	0.30338E-00	0.53339E-01	0.18341E-03	0.26411E-03	0.31309E-01	0.27512E-01	0.14540E 01	0.89860E 00
232	526.87	0.47740E-00	0.77546E-01	0.26690E-03	0.38432E-03	0.45518E-01	0.39998E-01	0.16130E 01	0.12018E 01
233	526.92	0.37507E-00	0.61394E-01	0.21131E-03	0.30428E-03	0.36037E-01	0.31667E-01	0.17040E 01	0.83680E 00
234	528.40	0.76935E 00	0.12662E-00	0.43634E-03	0.62831E-03	0.74321E-01	0.65308E-01	0.18780E 01	0.17326E 01
235	528.72	0.42857E-00	0.70438E-01	0.24281E-03	0.34963E-03	0.41346E-01	0.36332E-01	0.14540E 01	0.93774E 00
236	528.60	0.46493E-00	0.75595E-01	0.26056E-03	0.37519E-03	0.44373E-01	0.38992E-01	0.17040E 01	0.12581E 01
237	532.53	0.98805E 00	0.16299E-00	0.56363E-03	0.81159E-03	0.95672E-01	0.84070E-01	0.21880E 01	0.20389E 01
238	532.31	0.74493E 00	0.65991E-01	0.22816E-03	0.32854E-03	0.38736E-01	0.34038E-01	0.20700E 01	0.29093E 01
239	528.76	0.52987E 00	0.76882E-01	0.26503E-03	0.38163E-03	0.45129E-01	0.39656E-01	0.11890E 01	0.12784E 01
240	532.15	0.50441E 00	0.84278E-01	0.29135E-03	0.41952E-03	0.49470E-01	0.43470E-01	0.14540E 01	0.11037E 01
241	530.40	0.52935E 00	0.86555E-01	0.29878E-03	0.43023E-03	0.50806E-01	0.44645E-01	0.17040E 01	0.10148E 01
242	530.93	0.57351E 00	0.94521E-01	0.32642E-03	0.47003E-03	0.55482E-01	0.48754E-01	0.18780E 01	0.11099E 01
243	532.84	0.11953E 01	0.19722E-00	0.68216E-03	0.98228E-03	0.11576E-00	0.10172E-00	0.20410E 01	0.26673E 01
244	532.84	0.62441E 00	0.56114E-01	0.19410E-03	0.27949E-03	0.32938E-01	0.28944E-01	0.20700E 01	0.
245	534.79	0.11070E 01	0.90312E-01	0.31290E-03	0.45056E-03	0.53012E-01	0.46583E-01	0.21870E 01	0.26476E 01
246	534.09	0.11055E 01	0.18585E-00	0.64350E-03	0.92661E-03	0.10909E-00	0.95859E-01	0.22100E 01	0.25140E 01
247	533.84	0.49195E-00	0.80225E-01	0.27773E-03	0.39991E-03	0.47091E-01	0.41380E-01	0.14540E 01	0.11876E 01
248	531.94	0.63844E 00	0.10528E-00	0.36390E-03	0.52399E-03	0.61799E-01	0.54305E-01	0.17040E 01	0.16276E 01
249	532.58	0.65818E 00	0.55015E-01	0.19025E-03	0.27395E-03	0.32293E-01	0.28376E-01	0.18780E 01	0.45191E 01
250	534.57	0.11096E 01	0.90512E-01	0.31353E-03	0.45147E-03	0.53129E-01	0.46686E-01	0.21880E 01	0.60726E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	534.55	0.49091E-00	0.82552E-01	0.28595E-03	0.41176E-03	0.48456E-01	0.42580E-01	0.14540E 01	0.91703E 00
252	532.39	0.54234E 00	0.90625E-01	0.31334E-03	0.45119E-03	0.53195E-01	0.46744E-01	0.16130E 01	0.11601E 01
253	536.17	0.97298E 00	0.85550E-01	0.29674E-03	0.42729E-03	0.50217E-01	0.44127E-01	0.17060E 01	0.
254	534.93	0.86857E 00	0.14347E-00	0.49714E-03	0.71586E-03	0.84217E-01	0.74004E-01	0.21880E 01	0.16384E 01
255	534.78	0.72727E 00	0.66926E-01	0.23187E-03	0.33388E-03	0.39285E-01	0.34520E-01	0.16580E 01	0.
256	533.62	0.87117E 00	0.72860E-01	0.25218E-03	0.36313E-03	0.42768E-01	0.37581E-01	0.17920E 01	0.
257	528.02	0.10223E 01	0.17077E-00	0.58833E-03	0.84717E-03	0.10024E-00	0.88084E-01	0.10840E 01	0.13711E 01
258	533.53	0.52727E 00	0.89276E-01	0.30898E-03	0.44492E-03	0.52404E-01	0.46049E-01	0.14540E 01	0.13775E 01
259	533.01	0.54701E 00	0.90260E-01	0.31225E-03	0.44963E-03	0.52981E-01	0.46556E-01	0.16130E 01	0.10495E 01
260	533.88	0.75429E 00	0.12263E-00	0.42454E-03	0.61132E-03	0.71982E-01	0.63252E-01	0.17040E 01	0.17587E 01
261	533.76	0.76883E 00	0.12634E-00	0.43733E-03	0.62973E-03	0.74157E-01	0.65164E-01	0.18780E 01	0.22397E 01
262	533.07	0.73039E 00	0.12272E-00	0.42456E-03	0.61135E-03	0.72035E-01	0.63299E-01	0.20410E 01	0.12149E 01
263	548.36	0.15954E 02	0.27118E 01	0.95032E-02	0.13684E-01	0.15918E 01	0.13988E 01	0.14540E 01	0.29471E 02
264	919.73	0.12458E-01	0.24765E-02	0.12715E-04	0.18309E-04	0.14536E-02	0.12774E-02	0.16130E 01	0.
265	533.31	0.67376E 00	0.10849E-00	0.37541E-03	0.54057E-03	0.63682E-01	0.55959E-01	0.17040E 01	0.10408E 01
266	532.61	0.75896E 00	0.12463E-00	0.43102E-03	0.62064E-03	0.73158E-01	0.64286E-01	0.18780E 01	0.10467E 01
267	533.34	0.75325E 00	0.12620E-00	0.43671E-03	0.62885E-03	0.74079E-01	0.65095E-01	0.20410E 01	0.
268	532.42	0.55532E 00	0.91183E-01	0.31529E-03	0.45400E-03	0.53523E-01	0.47032E-01	0.16130E 01	0.87123E 00
269	533.41	0.69922E 00	0.11260E-00	0.38965E-03	0.56107E-03	0.66092E-01	0.58076E-01	0.18280E 01	0.10265E 01
270	533.30	0.73403E 00	0.12003E-00	0.41535E-03	0.59809E-03	0.70458E-01	0.61913E-01	0.18780E 01	0.11616E 01
271	533.85	0.80883E 00	0.13527E-00	0.46829E-03	0.67431E-03	0.79401E-01	0.69772E-01	0.20410E 01	0.10504E 01
272	532.65	0.35325E-00	0.59516E-01	0.20583E-03	0.29638E-03	0.34935E-01	0.30698E-01	0.16130E 01	0.48868E-00
273	533.51	0.66961E 00	0.11086E-00	0.38366E-03	0.55246E-03	0.65071E-01	0.57180E-01	0.17200E 01	0.93372E 00
274	533.28	0.51325E 00	0.82385E-01	0.28507E-03	0.41049E-03	0.48359E-01	0.42494E-01	0.18280E 01	0.69040E 00
275	533.35	0.72052E 00	0.11801E-00	0.40836E-03	0.58802E-03	0.69269E-01	0.60869E-01	0.18780E 01	0.10186E 01
276	919.73	0.12458E-01	0.25203E-02	0.12940E-04	0.18634E-04	0.14794E-02	0.13000E-02	0.20600E 01	0.
277	533.51	0.69507E 00	0.58128E-01	0.20118E-03	0.28968E-03	0.34120E-01	0.29982E-01	0.21000E 01	0.12083E 01
278	919.73	0.12458E-01	0.12605E-02	0.64722E-05	0.93196E-05	0.73992E-03	0.65018E-03	0.21870E 01	0.
279	535.21	0.10260E 01	0.17259E-00	0.59817E-03	0.86134E-03	0.10131E-00	0.89023E-01	0.21950E 01	0.14789E 01
280	533.52	0.73351E 00	0.12199E-00	0.42219E-03	0.60793E-03	0.71605E-01	0.62921E-01	0.18780E 01	0.94934E 00
281	533.75	0.86493E 00	0.14538E-00	0.50325E-03	0.72466E-03	0.85337E-01	0.74988E-01	0.20600E 01	0.11159E 01
282	533.38	0.64883E 00	0.10529E-00	0.36437E-03	0.52467E-03	0.61805E-01	0.54310E-01	0.18280E 01	0.98282E 00
283	533.85	0.85403E 00	0.14283E-00	0.49445E-03	0.71199E-03	0.83838E-01	0.73671E-01	0.20600E 01	0.12010E 01
284	533.69	0.71636E 00	0.11537E-00	0.39935E-03	0.57505E-03	0.67722E-01	0.59509E-01	0.17200E 01	0.15293E 01
285	533.91	0.85818E 00	0.14060E-00	0.48676E-03	0.70092E-03	0.82530E-01	0.72521E-01	0.18780E 01	0.17013E 01
286	533.47	0.65403E 00	0.60141E-01	0.20814E-03	0.29971E-03	0.35302E-01	0.31021E-01	0.16580E 01	0.17852E 01
287	919.73	0.12458E-01	0.12605E-02	0.64722E-05	0.93196E-05	0.73992E-03	0.65018E-03	0.17920E 01	0.
288	532.58	0.48571E-00	0.79517E-01	0.27499E-03	0.39597E-03	0.46675E-01	0.41015E-01	0.16130E 01	0.98545E 00
289	534.45	0.91377E 00	0.76459E-01	0.26482E-03	0.38133E-03	0.44880E-01	0.39437E-01	0.17060E 01	0.64807E 02
290	532.47	0.61818E 00	0.51668E-01	0.17866E-03	0.25727E-03	0.30328E-01	0.26650E-01	0.18780E 01	0.
291	532.41	0.62753E 00	0.10225E-00	0.35356E-03	0.50911E-03	0.60021E-01	0.52742E-01	0.17200E 01	0.18571E 01
292	533.28	0.46805E-00	0.80178E-01	0.27743E-03	0.39949E-03	0.47063E-01	0.41355E-01	0.14400E 01	0.10606E 01
293	531.30	0.51585E 00	0.82968E-01	0.28661E-03	0.41271E-03	0.48701E-01	0.42795E-01	0.17200E 01	0.11228E 01
294	531.38	0.56468E 00	0.92947E-01	0.32111E-03	0.46238E-03	0.54559E-01	0.47942E-01	0.18780E 01	0.10347E 01

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3937-05
003 003

APOLLO M-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
2	1	-2.60	147.40	-0.	-0.	1	C55	2.85	2	10.04	226.40	1683.30	139	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.824201E 02	0.499212E-02	0.446784E 04	0.508175E-05	0.667603E-07	0.342379E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726519E 00	0.177498E 01	0.200997E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	486.23	0.12345E 02	0.15581E 01	0.51388E-02	0.70347E-02	0.87779E 00	0.77516E 00	-0.	0.59035E 00
2	486.21	0.11815E 02	0.15862E 01	0.52315E-02	0.71616E-02	0.89365E 00	0.78916E 00	-0.30000E-01	0.
3	484.47	0.11067E 02	0.16139E 01	0.53154E-02	0.72765E-02	0.90923E 00	0.80293E 00	-0.60000E-01	0.
4	485.64	0.10633E 02	0.15916E 01	0.52471E-02	0.71829E-02	0.89671E 00	0.79187E 00	-0.90000E-01	0.
5	485.66	0.96275E 01	0.14778E 01	0.48717E-02	0.66691E-02	0.83255E 00	0.73521E 00	-0.20000E-00	0.60915E 00
6	484.04	0.84255E 01	0.12920E 01	0.42540E-02	0.58234E-02	0.72791E 00	0.64281E 00	-0.40000E-00	0.59312E 00
7	484.22	0.72052E 01	0.11103E 01	0.36561E-02	0.50050E-02	0.62552E 00	0.55239E 00	-0.60000E 00	0.56229E 00
8	490.67	0.58971E 01	0.91216E 00	0.30191E-02	0.41330E-02	0.51390E 00	0.45382E-00	-0.80000E 00	0.
9	497.01	0.57548E 01	0.87930E 00	0.29251E-02	0.40043E-02	0.49539E-00	0.43747E-00	-0.90000E 00	0.36886E-00
10	506.39	0.50868E 01	0.79150E 00	0.26530E-02	0.36318E-02	0.44592E-00	0.39379E-00	-0.98000E 00	0.34214E-00
11	518.54	0.13039E-00	0.22150E-01	0.74979E-04	0.10264E-03	0.12479E-01	0.11020E-01	-0.11220E 01	0.29611E-00
12	525.84	0.28416E-00	0.41304E-01	0.14065E-03	0.19255E-03	0.23270E-01	0.20549E-01	-0.11890E 01	0.48754E-00
13	536.07	0.28000E-00	0.42202E-01	0.14493E-03	0.19840E-03	0.23776E-01	0.20996E-01	-0.13340E 01	0.41310E-00
14	538.95	0.17299E-00	0.29728E-01	0.10234E-03	0.14009E-03	0.16748E-01	0.14790E-01	-0.14400E 01	0.34963E-00
15	485.88	0.12309E 02	0.16522E 01	0.54478E-02	0.74576E-02	0.93083E 00	0.82200E 00	0.30000E-01	0.
16	483.88	0.11642E 02	0.16971E 01	0.55868E-02	0.76480E-02	0.95610E 00	0.84432E 00	0.60000E-01	0.
17	484.05	0.11670E 02	0.17451E 01	0.57458E-02	0.78657E-02	0.98318E 00	0.86824E 00	0.90000E-01	0.
18	487.27	0.11758E 02	0.18065E 01	0.59632E-02	0.81633E-02	0.10178E 01	0.89879E 00	0.20000E-00	0.56996E 00
19	503.81	0.12705E 02	0.19709E 01	0.65925E-02	0.90247E-02	0.11104E 01	0.98056E 00	0.40000E-00	0.52836E 00
20	528.27	0.13796E 02	0.21806E 01	0.74406E-02	0.10186E-01	0.12285E 01	0.10849E 01	0.60000E 00	0.
21	550.40	0.20472E 02	0.30845E 01	0.10720E-01	0.14675E-01	0.17378E 01	0.15346E 01	0.92000E 00	0.
22	552.49	0.18082E 02	0.27276E 01	0.94966E-02	0.13000E-01	0.15367E 01	0.13570E 01	0.10400E 01	0.62477E 00
23	551.64	0.16535E 02	0.24998E 01	0.86971E-02	0.11906E-01	0.14083E 01	0.12437E 01	0.10600E 01	0.55413E 00
24	548.34	0.12026E 02	0.19012E 01	0.65963E-02	0.90300E-02	0.10711E 01	0.94589E 00	0.10840E 01	0.57141E 00
25	553.30	0.22286E 01	0.33067E-00	0.11521E-02	0.15771E-02	0.18630E-00	0.16452E-00	0.12070E 01	0.59625E 00
26	556.86	0.21844E 01	0.34253E-00	0.11970E-02	0.16386E-02	0.19298E-00	0.17041E-00	0.12490E 01	0.64941E 00
27	558.48	0.23881E 01	0.36872E-00	0.12903E-02	0.17663E-02	0.20773E-00	0.18344E-00	0.13340E 01	0.70196E 00
28	556.20	0.18390E 01	0.31535E-00	0.11014E-02	0.15077E-02	0.17766E-00	0.15689E-00	0.14540E 01	0.68351E 00
29	551.23	0.12722E 01	0.21111E-00	0.73424E-03	0.10051E-02	0.11894E-00	0.10503E-00	0.16580E 01	0.50541E 00
30	546.80	0.11153E 01	0.18688E-00	0.64754E-03	0.88644E-03	0.10528E-00	0.92974E-01	0.20410E 01	0.55341E 00
31	545.33	0.10488E 01	0.17559E-00	0.60769E-03	0.83189E-03	0.98926E-01	0.87360E-01	0.22480E 01	0.51999E 00
32	483.88	0.11565E 02	0.16876E 01	0.55557E-02	0.76055E-02	0.95078E 00	0.83962E 00	-0.60000E-01	0.
33	487.02	0.11953E 02	0.16055E 01	0.52986E-02	0.72535E-02	0.90453E 00	0.79877E 00	-0.30000E-01	0.
34	486.03	0.12071E 02	0.17637E 01	0.58160E-02	0.79618E-02	0.99363E 00	0.87746E 00	0.30000E-01	0.
35	484.91	0.11210E 02	0.16773E 01	0.55263E-02	0.75651E-02	0.94497E 00	0.83449E 00	0.60000E-01	0.
36	496.46	0.87771E 01	0.13558E 01	0.45082E-02	0.61714E-02	0.76981E 00	0.67451E 00	-0.86800E 00	0.53906E 00
37	500.72	0.88099E 01	0.13273E 01	0.44287E-02	0.60626E-02	0.74779E 00	0.66036E 00	-0.91100E 00	0.53641E 00
38	504.08	0.81990E 01	0.12599E 01	0.42152E-02	0.57703E-02	0.70982E 00	0.62683E 00	-0.95300E 00	0.50739E 00
39	919.72	0.10901E-01	0.20677E-02	0.10463E-04	0.14323E-04	0.11649E-02	0.10287E-02	0.51000E-01	0.
40	484.99	0.60405E 01	0.92092E 00	0.30344E-02	0.41539E-02	0.51883E 00	0.45817E-00	0.29000E-01	0.
41	493.98	0.87932E 01	0.13399E 01	0.44466E-02	0.60871E-02	0.75488E 00	0.66662E 00	0.70000E-02	0.
42	496.31	0.60073E 01	0.92193E 00	0.30652E-02	0.41961E-02	0.51940E 00	0.45868E-00	-0.86800E 00	0.35866E-00
43	500.14	0.73060E 01	0.11266E 01	0.37573E-02	0.51435E-02	0.63472E 00	0.56051E 00	-0.91100E 00	0.44258E-00
44	505.41	0.89273E 01	0.13729E 01	0.45981E-02	0.62945E-02	0.77347E 00	0.68304E 00	-0.95300E 00	0.41293E-00
45	508.76	0.20244E 01	0.32374E-00	0.10872E-02	0.14883E-02	0.18239E-00	0.16107E-00	-0.10400E 01	0.41835E-00
46	492.80	0.82192E 01	0.12620E 01	0.41843E-02	0.57280E-02	0.71101E 00	0.62789E 00	0.70000E-02	0.
47	486.05	0.55039E 01	0.84178E 00	0.27760E-02	0.38001E-02	0.47425E-00	0.41880E-00	0.29000E-01	0.
48	486.02	0.56945E 01	0.87426E 00	0.28830E-02	0.39466E-02	0.49255E-00	0.43496E-00	0.51000E-01	0.42753E-00
49	491.50	0.57953E 01	0.88407E 00	0.29281E-02	0.40084E-02	0.49808E-00	0.43984E-00	0.70000E-02	0.38980E-00
50	489.60	0.51886E 01	0.79317E 00	0.26231E-02	0.35908E-02	0.44686E-00	0.39462E-00	0.29000E-01	0.35957E-00
51	489.08	0.55652E 01	0.84777E 00	0.28024E-02	0.38364E-02	0.47762E-00	0.42178E-00	0.51000E-01	0.
52	495.38	0.54348E 01	0.83575E 00	0.27766E-02	0.38011E-02	0.47085E-00	0.41580E-00	-0.86800E 00	0.
53	498.48	0.50177E 01	0.77596E 00	0.25844E-02	0.35379E-02	0.43716E-00	0.38605E-00	-0.91100E 00	0.30352E-00
54	502.51	0.52307E 01	0.80305E 00	0.26833E-02	0.36733E-02	0.45243E-00	0.39953E-00	-0.95300E 00	0.31581E-00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	509.97	0.12670E 01	0.20276E-00	0.68160E-03	0.93307E-03	0.11423E-00	0.10088E-00	-0.10400E 01	0.37265E-00
56	512.86	0.85455E 00	0.14130E-00	0.47612E-03	0.65178E-03	0.79608E-01	0.70301E-01	-0.10680E 01	0.50060E 00
57	513.17	0.67688E 00	0.10852E-00	0.36575E-03	0.50069E-03	0.61140E-01	0.53991E-01	-0.10400E 01	0.49707E-00
58	510.46	0.11855E 01	0.20543E-00	0.69086E-03	0.94574E-03	0.11574E-00	0.10221E-00	-0.10680E 01	0.38870E-00
59	508.36	0.19226E 01	0.30739E-00	0.10320E-02	0.14127E-02	0.17318E-00	0.15293E-00	-0.10400E 01	0.36542E-00
60	512.29	0.10229E 01	0.16908E-00	0.56944E-03	0.77953E-03	0.95257E-01	0.84120E-01	-0.10680E 01	0.38260E-00
61	519.48	0.12260E-00	0.20087E-01	0.68047E-04	0.93152E-04	0.11317E-01	0.99935E-02	-0.11220E 01	0.25766E-00
62	537.43	0.76883E-01	0.11597E-01	0.39871E-04	0.54581E-04	0.65335E-02	0.57696E-02	-0.13340E 01	0.11578E-00
63	518.96	0.15013E-00	0.25509E-01	0.86381E-04	0.11825E-03	0.14372E-01	0.12691E-01	-0.11220E 01	0.35929E-00
64	536.46	0.98701E-01	0.14880E-01	0.51117E-04	0.69976E-04	0.83830E-02	0.74029E-02	-0.13340E 01	0.15740E-00
65	539.26	0.12623E-00	0.21697E-01	0.74710E-04	0.10227E-03	0.12224E-01	0.10795E-01	0.14400E 01	0.20504E-00
66	540.16	0.24106E-00	0.39451E-01	0.13595E-03	0.18610E-03	0.22226E-01	0.19628E-01	0.16130E 01	0.35979E-00
67	540.69	0.22598E-00	0.36311E-01	0.12518E-03	0.17136E-03	0.20457E-01	0.18065E-01	0.17200E 01	0.30483E-00
68	540.43	0.16312E-00	0.26904E-01	0.92732E-04	0.12694E-03	0.15158E-01	0.13385E-01	-0.16130E 01	0.23563E-00
69	540.98	0.26545E-00	0.42661E-01	0.14711E-03	0.20138E-03	0.24035E-01	0.21225E-01	-0.18280E 01	0.34192E-00
70	522.44	0.14130E-00	0.20534E-01	0.69732E-04	0.95459E-04	0.11569E-01	0.10216E-01	-0.11650E 01	0.46259E-00
71	528.24	0.17611E-00	0.14684E-01	0.50103E-04	0.68588E-04	0.82727E-02	0.73055E-02	-0.12050E 01	0.73051E 00
72	530.65	0.31065E-00	0.44734E-01	0.15294E-03	0.20937E-03	0.25202E-01	0.22256E-01	-0.12120E 01	0.57159E 00
73	524.38	0.24935E-00	0.36277E-01	0.12339E-03	0.16891E-03	0.20438E-01	0.18048E-01	-0.11650E 01	0.62911E 00
74	528.91	0.14286E-00	0.11916E-01	0.40682E-04	0.55691E-04	0.67135E-02	0.59285E-02	-0.12050E 01	0.69336E 00
75	919.72	0.10901E-01	0.18923E-02	0.95755E-05	0.13108E-04	0.10661E-02	0.94148E-03	-0.12120E 01	0.
76	515.46	0.46338E-00	0.68797E-01	0.23230E-03	0.31801E-03	0.38760E-01	0.34228E-01	0.10840E 01	0.32415E-00
77	520.23	0.24779E-00	0.39605E-01	0.13425E-03	0.18378E-03	0.22313E-01	0.19704E-01	0.11220E 01	0.70808E 00
78	537.16	0.30961E-00	0.45993E-01	0.15810E-03	0.21642E-03	0.25912E-01	0.22883E-01	0.13340E 01	0.47746E-00
79	529.52	0.73248E-01	0.12220E-01	0.41741E-04	0.57140E-04	0.68847E-02	0.60797E-02	-0.11890E 01	0.16776E-00
80	537.85	0.12260E-00	0.18404E-01	0.63297E-04	0.86650E-04	0.10369E-01	0.91564E-02	-0.13340E 01	0.19225E-00
81	526.03	0.49355E-01	0.79144E-02	0.26956E-04	0.36901E-04	0.44589E-02	0.39376E-02	-0.11470E 01	0.13800E-00
82	529.69	-0.35844E-01	-0.59752E-02	-0.20412E-04	-0.27943E-04	-0.33663E-02	-0.29728E-02	-0.11890E 01	0.
83	518.53	0.45663E-00	0.75637E-01	0.25604E-03	0.35050E-03	0.42613E-01	0.37631E-01	-0.10840E 01	0.33032E-00
84	530.15	0.36882E-01	0.53834E-02	0.18398E-04	0.25185E-04	0.30329E-02	0.26783E-02	-0.11890E 01	0.80463E-01
85	536.53	0.13818E-00	0.20242E-01	0.69544E-04	0.95201E-04	0.11404E-01	0.10071E-01	-0.13090E 01	0.23510E-00
86	537.48	0.44676E-01	0.66379E-02	0.22823E-04	0.31243E-04	0.37397E-02	0.33025E-02	-0.13340E 01	0.75374E-01
87	561.68	0.70374E 01	0.10437E 01	0.36621E-02	0.50131E-02	0.58800E 00	0.51925E 00	0.11990E 01	0.18704E 01
88	557.17	0.43106E 01	0.64317E 00	0.22482E-02	0.30776E-02	0.36236E-00	0.31999E-00	0.12070E 01	0.11986E 01
89	561.06	0.24343E 01	0.37019E-00	0.12982E-02	0.17772E-02	0.20856E-00	0.18418E-00	0.13340E 01	0.76566E 00
90	559.83	0.57455E 01	0.82927E 00	0.29052E-02	0.39770E-02	0.46720E-00	0.41258E-00	0.12070E 01	0.15145E 01
91	561.25	0.31060E 01	0.48822E-00	0.17124E-02	0.23442E-02	0.27505E-00	0.24290E-00	0.12490E 01	0.92378E 00
92	561.25	0.26675E 01	0.40775E-00	0.14302E-02	0.19578E-02	0.22972E-00	0.20286E-00	0.13340E 01	0.80791E 00
93	556.86	0.16774E 01	0.28604E-00	0.99958E-03	0.13684E-02	0.16115E-00	0.14231E-00	0.14900E 01	0.63034E 00
94	536.08	0.14650E-00	0.15346E-01	0.52703E-04	0.72147E-04	0.86457E-02	0.76349E-02	-0.	0.
95	538.33	0.56156E 00	0.59322E-01	0.20411E-03	0.27941E-03	0.33421E-01	0.29514E-01	-0.	0.
96	537.18	0.17091E-00	0.17914E-01	0.61579E-04	0.84298E-04	0.10093E-01	0.89127E-02	-0.	0.
97	538.01	0.16935E-00	0.17759E-01	0.61087E-04	0.83625E-04	0.10005E-01	0.88355E-02	-0.	0.
98	540.55	0.39689E-00	0.41979E-01	0.14471E-03	0.19809E-03	0.23651E-01	0.20885E-01	-0.	0.

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
7	1	-2.60	147.40	-0.02	-0.	2	C55	3.00	2	10.04	217.70	1677.60	144	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.821583E 02	0.480914E-02	0.445962E 04	0.491109E-05	0.665482E-07	0.331325E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726345E 00	0.172486E 01	0.195982E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	529.88	0.16644E 01	0.26957E-00	0.92594E-03	0.13140E-02	0.15628E-00	0.13755E-00	-0.10600E 01	0.80952E 00
100	530.49	0.83533E 00	0.13944E-00	0.47919E-03	0.68002E-03	0.80839E-01	0.71147E-01	-0.10840E 01	0.78013E 00
101	530.74	0.59169E 00	0.96617E-01	0.33211E-03	0.47130E-03	0.56015E-01	0.49299E-01	-0.11080E 01	0.85874E 00
102	530.57	0.65767E 00	0.10705E-00	0.36792E-03	0.52212E-03	0.62064E-01	0.54623E-01	-0.11080E 01	0.90820E 00
103	530.31	0.10971E 01	0.18312E-00	0.62922E-03	0.89294E-03	0.10617E-00	0.93438E-01	-0.10800E 01	0.81553E 00
104	552.97	0.36540E 02	0.58284E 01	0.20411E-01	0.28965E-01	0.33791E 01	0.29740E 01	0.85000E 00	0.
105	560.01	0.42487E 02	0.64359E 01	0.22673E-01	0.32176E-01	0.37313E 01	0.32839E 01	0.94000E 00	0.99289E 00
106	562.42	0.45135E 02	0.67885E 01	0.23964E-01	0.34008E-01	0.39357E 01	0.34638E 01	0.96000E 00	0.98591E 00
107	558.53	0.42709E 02	0.64098E 01	0.22553E-01	0.32005E-01	0.37161E 01	0.32706E 01	0.98000E 00	0.98479E 00
108	560.97	0.41815E 02	0.63160E 01	0.22269E-01	0.31603E-01	0.36618E 01	0.32228E 01	0.10000E 01	0.98472E 00
109	553.63	0.35430E 02	0.53479E 01	0.18738E-01	0.26592E-01	0.31005E 01	0.27288E 01	0.10200E 01	0.96279E 00
110	563.30	0.41249E 02	0.62597E 01	0.22114E-01	0.31383E-01	0.36291E 01	0.31940E 01	0.80000E-01	0.10176E 01
111	559.69	0.42028E 02	0.63117E 01	0.22230E-01	0.31546E-01	0.36593E 01	0.32205E 01	0.10000E-00	0.99720E 00
112	566.97	0.44676E 02	0.67707E 01	0.23995E-01	0.34051E-01	0.39253E 01	0.34547E 01	0.12000E-00	0.98623E 00
113	561.93	0.45236E 02	0.68596E 01	0.24205E-01	0.34350E-01	0.39769E 01	0.35001E 01	0.14000E-00	0.97880E 00
114	556.58	0.39315E 02	0.59441E 01	0.20880E-01	0.29631E-01	0.34461E 01	0.30330E 01	0.80000E-01	0.
115	557.77	0.40203E 02	0.60619E 01	0.21315E-01	0.30248E-01	0.35144E 01	0.30931E 01	0.10000E-00	0.99632E 00
116	558.70	0.41318E 02	0.62752E 01	0.22082E-01	0.31337E-01	0.36381E 01	0.32019E 01	0.12000E-00	0.99641E 00
117	565.23	0.43411E 02	0.65949E 01	0.23337E-01	0.33118E-01	0.38234E 01	0.33650E 01	0.14000E-00	0.10116E 01
118	558.16	0.37797E 02	0.57677E 01	0.20287E-01	0.28790E-01	0.33438E 01	0.29430E 01	0.10000E-00	0.10268E 01
119	557.41	0.37336E 02	0.56663E 01	0.19918E-01	0.28266E-01	0.32851E 01	0.28913E 01	0.15000E-00	0.11955E-00
120	561.81	0.34590E 02	0.52712E 01	0.18599E-01	0.26394E-01	0.30560E 01	0.26896E 01	0.20000E-00	0.10568E 01
121	555.41	0.37878E 02	0.57712E 01	0.20252E-01	0.28740E-01	0.33459E 01	0.29448E 01	0.25000E-00	0.10060E 01
122	551.14	0.35264E 02	0.53602E 01	0.18742E-01	0.26597E-01	0.31076E 01	0.27350E 01	0.30000E-00	0.10147E 01
123	546.45	0.33253E 02	0.50664E 01	0.17645E-01	0.25040E-01	0.29373E 01	0.25851E 01	0.35000E-00	0.92791E 00
124	549.21	0.36649E 02	0.56296E 01	0.19652E-01	0.27889E-01	0.32638E 01	0.28725E 01	0.38000E-00	0.10161E 01
125	551.96	0.38757E 02	0.60116E 01	0.21034E-01	0.29850E-01	0.34853E 01	0.30674E 01	0.45000E-00	0.99955E 00
126	551.75	0.33503E 02	0.52640E 01	0.18415E-01	0.26134E-01	0.30519E 01	0.26860E 01	0.61000E 00	0.99102E 00
127	536.55	0.18962E 02	0.29683E 01	0.10252E-01	0.14549E-01	0.17209E 01	0.15146E 01	0.70000E 00	0.94002E 00
128	527.98	0.92940E 01	0.14525E 01	0.49813E-02	0.70691E-02	0.84210E 00	0.74115E 00	0.75000E 00	0.91364E 00
129	546.43	0.24531E 02	0.38739E 01	0.13492E-01	0.19146E-01	0.22459E 01	0.19767E 01	0.70000E 00	0.95858E 00
130	548.25	0.25647E 02	0.40543E 01	0.14141E-01	0.20068E-01	0.23505E 01	0.20687E 01	0.80000E 00	0.97193E 00
131	533.18	0.10895E 02	0.16203E 01	0.55808E-02	0.79199E-02	0.93939E 00	0.82677E 00	0.90000E 00	0.95944E 00
132	546.56	0.26485E 02	0.39819E 01	0.13869E-01	0.19682E-01	0.23085E 01	0.20318E 01	0.90000E 00	0.12156E 01
133	546.75	0.24630E 02	0.36847E 01	0.12836E-01	0.18216E-01	0.21362E 01	0.18801E 01	0.96000E 00	0.11266E 01
134	546.34	0.22673E 02	0.33969E 01	0.11830E-01	0.16787E-01	0.19694E 01	0.17333E 01	0.10000E 01	0.11049E 01
135	542.39	0.12837E 02	0.20064E 01	0.69640E-02	0.98827E-02	0.11632E 01	0.10238E 01	0.70000E-02	0.
136	919.73	0.12458E-01	0.23025E-02	0.11743E-04	0.16665E-04	0.13349E-02	0.11749E-02	0.70000E-02	0.
137	538.83	0.13380E 02	0.20803E 01	0.71991E-02	0.10216E-01	0.12061E 01	0.10615E 01	0.39000E-01	0.85878E 00
138	537.12	0.13263E 02	0.20503E 01	0.70849E-02	0.10054E-01	0.11887E 01	0.10461E 01	0.78000E-01	0.
139	535.37	0.13419E 02	0.20621E 01	0.71154E-02	0.10098E-01	0.11955E 01	0.10522E 01	0.11700E-00	0.
140	536.25	0.13471E 02	0.20644E 01	0.71285E-02	0.10116E-01	0.11968E 01	0.10533E 01	0.78000E-01	0.82539E 00
141	555.11	0.34522E 02	0.36812E 01	0.12915E-01	0.18328E-01	0.21342E 01	0.18784E 01	-0.	0.
142	553.27	0.31042E 02	0.33068E 01	0.11583E-01	0.16438E-01	0.19172E 01	0.16873E 01	-0.	0.
143	534.45	0.12255E 02	0.18669E 01	0.64370E-02	0.91349E-02	0.10824E 01	0.95260E 00	0.78000E-01	0.74640E 00
144	536.45	0.11821E 02	0.18059E 01	0.62369E-02	0.88509E-02	0.10470E 01	0.92144E 00	0.70000E-02	0.76051E 00
145	538.25	0.11628E 02	0.17694E 01	0.61200E-02	0.86851E-02	0.10258E 01	0.90282E 00	0.70000E-02	0.82919E 00
146	535.20	0.11975E 02	0.18281E 01	0.63070E-02	0.89504E-02	0.10598E 01	0.93277E 00	0.39000E-01	0.75021E 00
147	535.45	0.11821E 02	0.18018E 01	0.62176E-02	0.88235E-02	0.10446E 01	0.91936E 00	0.78000E-01	0.
148	534.68	0.11938E 02	0.18339E 01	0.63243E-02	0.89749E-02	0.10632E 01	0.93574E 00	0.11700E-00	0.
149	545.77	0.30153E 02	0.48133E 01	0.16754E-01	0.23775E-01	0.27905E 01	0.24560E 01	0.70000E-02	0.10418E 01
150	547.90	0.31023E 02	0.49816E 01	0.17371E-01	0.24651E-01	0.28881E 01	0.25419E 01	0.70000E-02	0.10435E 01
151	548.84	0.31188E 02	0.50107E 01	0.17486E-01	0.24815E-01	0.29050E 01	0.25567E 01	0.70000E-02	0.10294E 01
152	553.17	0.35116E 02	0.54506E 01	0.19091E-01	0.27092E-01	0.31600E 01	0.27812E 01	0.39000E-01	0.10303E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	551.09	0.34366E 02	0.53279E 01	0.18628E-01	0.26436E-01	0.30889E 01	0.27186E 01	0.39000E-01	0.
154	550.29	0.34594E 02	0.53259E 01	0.18609E-01	0.26408E-01	0.30877E 01	0.27176E 01	0.78000E-01	0.10305E 01
155	548.29	0.32868E 02	0.52790E 01	0.18414E-01	0.26131E-01	0.30605E 01	0.26936E 01	0.39000E-01	0.
156	543.94	0.30025E 02	0.47954E 01	0.16666E-01	0.23651E-01	0.27802E 01	0.24469E 01	0.39000E-01	0.
157	542.17	0.28791E 02	0.46083E 01	0.15992E-01	0.22694E-01	0.26717E 01	0.23514E 01	0.78000E-01	0.10304E 01
158	541.16	0.29422E 02	0.47214E 01	0.16371E-01	0.23232E-01	0.27373E 01	0.24091E 01	0.39000E-01	0.
159	537.72	0.27399E 02	0.43883E 01	0.15172E-01	0.21531E-01	0.25442E 01	0.22392E 01	0.78000E-01	0.
160	542.92	0.28753E 02	0.46042E 01	0.15988E-01	0.22689E-01	0.26693E 01	0.23493E 01	0.39000E-01	0.
161	544.49	0.24321E 02	0.38058E 01	0.13233E-01	0.18779E-01	0.22065E 01	0.19419E 01	0.43000E-01	0.10886E 01
162	551.15	0.32794E 02	0.51675E 01	0.18069E-01	0.25641E-01	0.29959E 01	0.26367E 01	0.43000E-01	0.14645E 01
163	547.85	0.26680E 02	0.42031E 01	0.14655E-01	0.20798E-01	0.24368E 01	0.21446E 01	0.85000E-01	0.12230E 01
164	547.13	0.24317E 02	0.38109E 01	0.13280E-01	0.18846E-01	0.22094E 01	0.19445E 01	0.12800E-00	0.11514E 01
165	553.00	0.38838E 02	0.61262E 01	0.21454E-01	0.30446E-01	0.35517E 01	0.31259E 01	0.43000E-01	0.
166	550.37	0.34444E 02	0.54077E 01	0.18896E-01	0.26815E-01	0.31352E 01	0.27593E 01	0.85000E-01	0.15779E 01
167	556.82	0.45111E 02	0.71078E 01	0.24972E-01	0.35439E-01	0.41208E 01	0.36268E 01	0.43000E-01	0.
168	551.23	0.29960E 02	0.47591E 01	0.16641E-01	0.23616E-01	0.27591E 01	0.24283E 01	0.12800E-00	0.17915E 01
169	556.98	0.37003E 02	0.58778E 01	0.20654E-01	0.29310E-01	0.34077E 01	0.29991E 01	0.85000E-01	0.16669E 01
170	554.41	0.33131E 02	0.52300E 01	0.18338E-01	0.26023E-01	0.30322E 01	0.26686E 01	0.12800E-00	0.14792E 01
171	552.76	0.36767E 02	0.57800E 01	0.20238E-01	0.28720E-01	0.33510E 01	0.29493E 01	0.85000E-01	0.16148E 01
172	563.45	0.43498E 02	0.69121E 01	0.24422E-01	0.34658E-01	0.40074E 01	0.35269E 01	0.43000E-01	0.
173	555.53	0.33055E 02	0.52465E 01	0.18413E-01	0.26130E-01	0.30417E 01	0.26770E 01	0.12800E-00	0.14138E 01
174	556.75	0.38824E 02	0.61367E 01	0.21559E-01	0.30595E-01	0.35578E 01	0.31313E 01	0.85000E-01	0.
175	563.44	0.42351E 02	0.66975E 01	0.23664E-01	0.33582E-01	0.38829E 01	0.34174E 01	0.43000E-01	0.17508E 01
176	560.56	0.38483E 02	0.60761E 01	0.21416E-01	0.30391E-01	0.35227E 01	0.31003E 01	0.43000E-01	0.15780E 01
177	551.16	0.25127E 02	0.39657E 01	0.13866E-01	0.19678E-01	0.22992E 01	0.20235E 01	0.12800E-00	0.10020E 01
178	551.38	0.26546E 02	0.41835E 01	0.14631E-01	0.20763E-01	0.24254E 01	0.21346E 01	0.85000E-01	0.10745E 01
179	554.78	0.30566E 02	0.48261E 01	0.16926E-01	0.24021E-01	0.27980E 01	0.24625E 01	0.70000E-02	0.12141E 01
180	541.58	0.22312E 02	0.35138E 01	0.12188E-01	0.17296E-01	0.20372E 01	0.17929E 01	0.70000E-02	0.
181	549.47	0.30752E 02	0.48645E 01	0.16985E-01	0.24103E-01	0.28202E 01	0.24821E 01	0.70000E-02	0.12320E 01
182	547.28	0.29296E 02	0.46434E 01	0.16183E-01	0.22965E-01	0.26920E 01	0.23693E 01	0.70000E-02	0.
183	549.73	0.24285E 02	0.38298E 01	0.13375E-01	0.18981E-01	0.22204E 01	0.19542E 01	0.32000E-01	0.95193E 00
184	554.42	0.28731E 02	0.45720E 01	0.16031E-01	0.22749E-01	0.26507E 01	0.23329E 01	0.32000E-01	0.99523E 00
185	545.12	0.24288E 02	0.38450E 01	0.13376E-01	0.18982E-01	0.22292E 01	0.19619E 01	0.64000E-01	0.97256E 00
186	551.74	0.29647E 02	0.46956E 01	0.16427E-01	0.23312E-01	0.27223E 01	0.23960E 01	0.64000E-01	0.98339E 00
187	551.37	0.26713E 02	0.42437E 01	0.14841E-01	0.21061E-01	0.24603E 01	0.21653E 01	0.70000E-02	0.97720E 00
188	547.77	0.24315E 02	0.39164E 01	0.13655E-01	0.19378E-01	0.22706E 01	0.19983E 01	0.70000E-02	0.94335E 00
189	524.48	0.32784E 01	0.53181E 00	0.18186E-02	0.25808E-02	0.30832E-00	0.27136E-00	0.10600E 01	0.90640E 00
190	522.29	0.19538E 01	0.32286E-00	0.11021E-02	0.15640E-02	0.18718E-00	0.16474E-00	0.10840E 01	0.89788E 00
191	521.02	0.10348E 01	0.17181E-00	0.58584E-03	0.83137E-03	0.99606E-01	0.87665E-01	0.11080E 01	0.92020E 00
192	521.15	0.11574E 01	0.19114E-00	0.65182E-03	0.92501E-03	0.11081E-00	0.97529E-01	0.11080E 01	0.87929E 00
193	511.00	0.21865E 01	0.35358E-00	0.11958E-02	0.16970E-02	0.20499E-00	0.18041E-00	0.16580E 01	0.92652E 00
194	511.77	0.19953E 01	0.32133E-00	0.10874E-02	0.15432E-02	0.18629E-00	0.16396E-00	0.11700E 01	0.89689E 00
195	511.07	0.20618E 01	0.33343E-00	0.11277E-02	0.16004E-02	0.19331E-00	0.17013E-00	0.16740E 01	0.86704E 00
196	513.01	0.21210E 01	0.34181E-00	0.11579E-02	0.16432E-02	0.19817E-00	0.17441E-00	0.16950E 01	0.92092E 00

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
16	1	-2.60	147.40	0.03	-0.	3	C55	3.20	2	10.04	215.20	1668.60	153	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.816894E 02	0.476060E-02	0.444656E 04	0.488943E-05	0.661684E-07	0.330785E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726030E 00	0.171062E 01	0.194567E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	551.01	0.16672E 02	0.25973E 01	0.91602E-02	0.13095E-01	0.15184E 01	0.13349E 01	0.10000E 01	0.89135E 00
198	550.51	0.15843E 02	0.23872E 01	0.84156E-02	0.12031E-01	0.13955E 01	0.12269E 01	0.12000E 01	0.94696E 00
199	527.97	0.79797E 01	0.12511E 01	0.43274E-02	0.61864E-02	0.73137E 00	0.64301E 00	0.13000E 01	0.99745E 00
200	512.65	0.15553E 01	0.22361E-00	0.76368E-03	0.10917E-02	0.13072E-00	0.11493E-00	0.11890E 01	0.90983E 00
201	523.94	0.11974E 01	0.19656E-00	0.67762E-03	0.96872E-03	0.11491E-00	0.10103E-00	0.14540E 01	0.77836E 00
202	526.21	0.12675E 01	0.20676E-00	0.71413E-03	0.10209E-02	0.12087E-00	0.10627E-00	0.17040E 01	0.83043E 00
203	531.94	0.10442E 01	0.17088E-00	0.59302E-03	0.84778E-03	0.99893E-01	0.87825E-01	0.20410E 01	0.10498E 01
204	531.91	0.49818E-00	0.37880E-01	0.13146E-03	0.18793E-03	0.22144E-01	0.19469E-01	0.20700E 01	0.
205	535.27	0.16431E 01	0.14300E-00	0.49765E-03	0.71143E-03	0.83593E-01	0.73495E-01	0.21880E 01	0.
206	534.48	0.13143E 01	0.21540E-00	0.74911E-03	0.10709E-02	0.12592E-00	0.11071E-00	0.22480E 01	0.13617E 01
207	532.81	0.11574E 01	0.18631E-00	0.64706E-03	0.92503E-03	0.10892E-00	0.95758E-01	0.20700E 01	0.10371E 01
208	531.42	0.63273E 00	0.56023E-01	0.19434E-03	0.27783E-03	0.32750E-01	0.28794E-01	0.20700E 01	0.18112E 01
209	536.47	0.21210E 01	0.17054E-00	0.59409E-03	0.84930E-03	0.99693E-01	0.87650E-01	0.21880E 01	0.68020E 01
210	532.06	0.11875E 01	0.19584E-00	0.67972E-03	0.97173E-03	0.11449E-00	0.10066E-00	0.20700E 01	0.14068E 01
211	534.31	0.21361E 01	0.35273E-00	0.12265E-02	0.17535E-02	0.20620E-00	0.18129E-00	0.21880E 01	0.23580E 01
212	533.61	0.12083E 01	0.19702E-00	0.68470E-03	0.97885E-03	0.11518E-00	0.10126E-00	0.22390E 01	0.12602E 01
213	532.29	0.97143E 00	0.15828E-00	0.54945E-03	0.78550E-03	0.92527E-01	0.81349E-01	0.21880E 01	0.10214E 01
214	533.65	0.93299E 00	0.15400E-00	0.53522E-03	0.76515E-03	0.90028E-01	0.79152E-01	0.22480E 01	0.10439E 01
215	522.49	0.51740E 00	0.76999E-01	0.26512E-03	0.37902E-03	0.45012E-01	0.39574E-01	0.11650E 01	0.15421E 01
216	524.05	0.37870E-00	0.31501E-01	0.10861E-03	0.15526E-03	0.18415E-01	0.16190E-01	0.12050E 01	0.
217	524.79	0.52935E 00	0.76634E-01	0.26437E-03	0.37794E-03	0.44799E-01	0.39387E-01	0.12120E 01	0.14485E 01
218	521.09	-0.45819E-00	-0.66534E-01	-0.22882E-03	-0.32712E-03	-0.38895E-01	-0.34196E-01	0.11890E 01	0.
219	526.26	0.48727E-00	0.81143E-01	0.28027E-03	0.40067E-03	0.47435E-01	0.41704E-01	0.14540E 01	0.13305E 01
220	527.83	0.64000E 00	0.11074E-00	0.38298E-03	0.54751E-03	0.64734E-01	0.56914E-01	0.17040E 01	0.11217E 01
221	530.84	0.75636E 00	0.12560E-00	0.43548E-03	0.62255E-03	0.73423E-01	0.64553E-01	0.20410E 01	0.12939E 01
222	534.27	0.76675E 00	0.12892E-00	0.44627E-03	0.64085E-03	0.75363E-01	0.66259E-01	0.22480E 01	0.11615E 01
223	523.94	0.53974E 00	0.80389E-01	0.27713E-03	0.39618E-03	0.46994E-01	0.41317E-01	0.11650E 01	0.15124E 01
224	525.02	0.40260E-00	0.33508E-01	0.11562E-03	0.16528E-03	0.19588E-01	0.17222E-01	0.12050E 01	0.13949E 01
225	525.98	0.53403E 00	0.77363E-01	0.26715E-03	0.38191E-03	0.45225E-01	0.39761E-01	0.12120E 01	0.15969E 01
226	531.11	0.41558E-00	0.69645E-01	0.24153E-03	0.34529E-03	0.40713E-01	0.35795E-01	0.14540E 01	0.98394E 00
227	532.02	0.60052E 00	0.96625E-01	0.33535E-03	0.47942E-03	0.56486E-01	0.49662E-01	0.17040E 01	0.13762E 01
228	532.75	0.85195E 00	0.13992E-00	0.48590E-03	0.69463E-03	0.81792E-01	0.71911E-01	0.18780E 01	0.13700E 01
229	534.66	0.91377E 00	0.15092E-00	0.52494E-03	0.75045E-03	0.88224E-01	0.77566E-01	0.21880E 01	0.12889E 01
230	529.81	0.62130E 00	0.91291E-01	0.31625E-03	0.45211E-03	0.53367E-01	0.46920E-01	0.11890E 01	0.13014E 01
231	532.06	0.36468E-00	0.64345E-01	0.22333E-03	0.31927E-03	0.37615E-01	0.33071E-01	0.14540E 01	0.85729E 00
232	532.78	0.59636E 00	0.97194E-01	0.33754E-03	0.48255E-03	0.56818E-01	0.49954E-01	0.16130E 01	0.11537E 01
233	533.27	0.48260E-00	0.79280E-01	0.27544E-03	0.39377E-03	0.46346E-01	0.40747E-01	0.17040E 01	0.14025E 01
234	533.68	0.74597E 00	0.12314E-00	0.42796E-03	0.61180E-03	0.71983E-01	0.63287E-01	0.18780E 01	0.13507E 01
235	534.00	0.53558E 00	0.88289E-01	0.30693E-03	0.43878E-03	0.51613E-01	0.45377E-01	0.14540E 01	0.10959E 01
236	534.13	0.61195E 00	0.99811E-01	0.34702E-03	0.49610E-03	0.58348E-01	0.51299E-01	0.17040E 01	0.13293E 01
237	536.38	0.10748E 01	0.17769E-00	0.61895E-03	0.88484E-03	0.10387E-00	0.91324E-01	0.21880E 01	0.16875E 01
238	536.89	0.95896E 00	0.85171E-01	0.29681E-03	0.42432E-03	0.49790E-01	0.43775E-01	0.20700E 01	0.26511E 01
239	531.84	0.66597E 00	0.96799E-01	0.33590E-03	0.48021E-03	0.56587E-01	0.49751E-01	0.11890E 01	0.14401E 01
240	535.81	0.62442E 00	0.10454E-00	0.36399E-03	0.52036E-03	0.61115E-01	0.53731E-01	0.14540E 01	0.11472E 01
241	535.46	0.67221E 00	0.11023E-00	0.38367E-03	0.54849E-03	0.64437E-01	0.56653E-01	0.17040E 01	0.12458E 01
242	535.87	0.74390E 00	0.12295E-00	0.42808E-03	0.61198E-03	0.71872E-01	0.63189E-01	0.18780E 01	0.13452E 01
243	537.14	0.14810E 01	0.24495E-00	0.85380E-03	0.12206E-02	0.14319E-00	0.12590E-00	0.20410E 01	0.30268E 01
244	537.01	0.77091E 00	0.69442E-01	0.24202E-03	0.34599E-03	0.40595E-01	0.35691E-01	0.20700E 01	0.
245	537.96	0.13205E 01	0.10792E-00	0.37643E-03	0.53815E-03	0.63090E-01	0.55468E-01	0.21870E 01	0.26852E 01
246	537.03	0.12452E 01	0.20969E-00	0.73082E-03	0.10448E-02	0.12258E-00	0.10777E-00	0.22100E 01	0.20778E 01
247	536.01	0.57766E 00	0.94318E-01	0.32844E-03	0.46954E-03	0.55137E-01	0.48476E-01	0.14540E 01	0.10767E 01
248	535.69	0.86961E 00	0.14371E-00	0.50030E-03	0.71522E-03	0.84009E-01	0.73860E-01	0.17040E 01	0.20657E 01
249	536.81	0.89039E 00	0.74602E-01	0.25996E-03	0.37164E-03	0.43611E-01	0.38343E-01	0.18780E 01	0.66342E 01
250	537.15	0.12597E 01	0.10291E-00	0.35870E-03	0.51279E-03	0.60158E-01	0.52891E-01	0.21880E 01	0.94865E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	536.37	0.64519E 00	0.10861E-00	0.37832E-03	0.54084E-03	0.63491E-01	0.55820E-01	0.14540E 01	0.11250E 01
252	535.82	0.73506E 00	0.12307E-00	0.42850E-03	0.61258E-03	0.71945E-01	0.63253E-01	0.16130E 01	0.13759E 01
253	539.13	0.14452E 01	0.12728E-00	0.44439E-03	0.63530E-03	0.74407E-01	0.65418E-01	0.17060E 01	0.
254	536.99	0.11091E 01	0.18342E-00	0.63923E-03	0.91385E-03	0.10722E-00	0.94269E-01	0.21880E 01	0.14183E 01
255	536.68	0.98078E 00	0.90352E-01	0.31481E-03	0.45004E-03	0.52818E-01	0.46437E-01	0.16580E 01	0.
256	537.27	0.11013E 01	0.92297E-01	0.32174E-03	0.45996E-03	0.53955E-01	0.47437E-01	0.17920E 01	0.86275E 01
257	529.70	0.12681E 01	0.21202E-00	0.73441E-03	0.10499E-02	0.12394E-00	0.10897E-00	0.10840E 01	0.13644E 01
258	536.59	0.58390E 00	0.99035E-01	0.34503E-03	0.49326E-03	0.57894E-01	0.50900E-01	0.14540E 01	0.11228E 01
259	536.04	0.69922E 00	0.11557E-00	0.40247E-03	0.57536E-03	0.67562E-01	0.59400E-01	0.16130E 01	0.11329E 01
260	537.41	0.95532E 00	0.15562E-00	0.54256E-03	0.77564E-03	0.90975E-01	0.79984E-01	0.17040E 01	0.19267E 01
261	537.14	0.91325E 00	0.15035E-00	0.52407E-03	0.74921E-03	0.87895E-01	0.77276E-01	0.18780E 01	0.17889E 01
262	537.05	0.87169E 00	0.14679E-00	0.51161E-03	0.73140E-03	0.85812E-01	0.75445E-01	0.20410E 01	0.14275E 01
263	686.06	-0.33825E 02	-0.61855E 01	-0.24663E-01	-0.35258E-01	-0.36160E 01	-0.31791E 01	0.14540E 01	0.
264	919.74	0.12991E-01	0.25823E-02	0.13339E-04	0.19069E-04	0.15096E-02	0.13272E-02	0.16130E 01	0.
265	536.65	0.85714E 00	0.13828E-00	0.48178E-03	0.68875E-03	0.80835E-01	0.71070E-01	0.17040E 01	0.11503E 01
266	537.02	0.78026E 00	0.12845E-00	0.44768E-03	0.64000E-03	0.75090E-01	0.66019E-01	0.18780E 01	0.13957E 01
267	537.27	0.98026E 00	0.16460E-00	0.57380E-03	0.82030E-03	0.96223E-01	0.84599E-01	0.20410E 01	0.13466E 01
268	536.65	0.68156E 00	0.11218E-00	0.39085E-03	0.55875E-03	0.65578E-01	0.57655E-01	0.16130E 01	0.10561E 01
269	536.60	0.84779E 00	0.13677E-00	0.47649E-03	0.68119E-03	0.79951E-01	0.70292E-01	0.18280E 01	0.11395E 01
270	537.02	0.84935E 00	0.13918E-00	0.48509E-03	0.69348E-03	0.81365E-01	0.71535E-01	0.18780E 01	0.12144E 01
271	537.26	0.10125E 01	0.16965E-00	0.59140E-03	0.84546E-03	0.99176E-01	0.87195E-01	0.20410E 01	0.12261E 01
272	535.49	0.50546E 00	0.85297E-01	0.29690E-03	0.42444E-03	0.49863E-01	0.43839E-01	0.16130E 01	0.76356E 00
273	536.52	0.82286E 00	0.13646E-00	0.47539E-03	0.67962E-03	0.79771E-01	0.70134E-01	0.17200E 01	0.11229E 01
274	536.10	0.63688E 00	0.10239E-00	0.35659E-03	0.50978E-03	0.59857E-01	0.52626E-01	0.18280E 01	0.89549E 00
275	536.91	0.91273E 00	0.14979E-00	0.52200E-03	0.74625E-03	0.87565E-01	0.76986E-01	0.18780E 01	0.12249E 01
276	919.74	0.12991E-01	0.26280E-02	0.13575E-04	0.19407E-04	0.15363E-02	0.13507E-02	0.20600E 01	0.
277	537.21	0.90286E 00	0.75663E-01	0.26375E-03	0.37705E-03	0.44232E-01	0.38888E-01	0.21000E 01	0.
278	920.63	0.42515E 01	0.43034E-00	0.22255E-02	0.31815E-02	0.25157E-00	0.22118E-00	0.21870E 01	0.
279	538.08	0.12712E 01	0.21419E-00	0.74716E-03	0.10681E-02	0.12521E-00	0.11008E-00	0.21950E 01	0.13953E 01
280	536.58	0.86805E 00	0.14461E-00	0.50382E-03	0.72026E-03	0.84538E-01	0.74325E-01	0.18780E 01	0.12557E 01
281	537.34	0.96312E 00	0.16221E-00	0.56551E-03	0.80845E-03	0.94828E-01	0.83372E-01	0.20600E 01	0.12066E 01
282	536.11	0.87065E 00	0.14151E-00	0.49281E-03	0.70452E-03	0.82723E-01	0.72729E-01	0.18280E 01	0.13794E 01
283	536.66	0.10166E 01	0.17029E-00	0.59332E-03	0.84821E-03	0.99549E-01	0.87523E-01	0.20600E 01	0.13513E 01
284	536.05	0.86805E 00	0.13999E-00	0.48750E-03	0.69693E-03	0.81836E-01	0.71950E-01	0.17200E 01	0.16232E 01
285	536.52	0.99377E 00	0.16305E-00	0.56804E-03	0.81207E-03	0.95319E-01	0.83803E-01	0.18780E 01	0.17972E 01
286	536.11	0.86805E 00	0.79941E-01	0.27840E-03	0.39800E-03	0.46732E-01	0.41087E-01	0.16580E 01	0.26315E 01
287	919.74	0.12991E-01	0.13144E-02	0.67897E-05	0.97065E-05	0.76838E-03	0.67555E-03	0.17920E 01	0.
288	534.62	0.72156E 00	0.11826E-00	0.41135E-03	0.58806E-03	0.69135E-01	0.60783E-01	0.16130E 01	0.10907E 01
289	537.44	0.10068E 01	0.84382E-01	0.29420E-03	0.42058E-03	0.49328E-01	0.43369E-01	0.17060E 01	-0.11305E 02
290	535.70	0.74078E 00	0.62028E-01	0.21594E-03	0.30871E-03	0.36260E-01	0.31880E-01	0.18780E 01	0.
291	534.60	0.84571E 00	0.13797E-00	0.47990E-03	0.68606E-03	0.80658E-01	0.70914E-01	0.17200E 01	0.23195E 01
292	534.22	0.59325E 00	0.10168E-00	0.35354E-03	0.50542E-03	0.59439E-01	0.52258E-01	0.14400E 01	0.92152E 00
293	533.63	0.73091E 00	0.11771E-00	0.40909E-03	0.58484E-03	0.68813E-01	0.60500E-01	0.17200E 01	0.15165E 01
294	536.21	0.75844E 00	0.12518E-00	0.43600E-03	0.62330E-03	0.73180E-01	0.64339E-01	0.18780E 01	0.15214E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
8	1	-5.60	147.12	-59.13	-4.81	2	C55	3.25	2	10.04	217.30	1672.90	145	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.819065E 02	0.480367E-02	0.445274E 04	0.492059E-05	0.663442E-07	0.332472E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726176E 00	0.172283E 01	0.195780E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	526.67	0.11558E 01	0.18686E-00	0.64303E-03	0.91218E-03	0.10846E-00	0.95444E-01	-0.10600E 01	0.77781E 00
100	527.09	0.60831E 00	0.10135E-00	0.34888E-03	0.49491E-03	0.58825E-01	0.51765E-01	-0.10840E 01	0.73469E 00
101	527.57	0.37922E-00	0.61812E-01	0.21287E-03	0.30197E-03	0.35878E-01	0.31572E-01	-0.11080E 01	0.
102	527.61	0.51429E 00	0.83572E-01	0.28782E-03	0.40829E-03	0.48509E-01	0.42687E-01	-0.11080E 01	0.89046E 00
103	527.25	0.75169E 00	0.12524E-00	0.43120E-03	0.61169E-03	0.72697E-01	0.63972E-01	-0.10800E 01	0.85053E 00
104	558.58	0.36121E 02	0.57795E 01	0.20430E-01	0.28982E-01	0.33547E 01	0.29521E 01	0.85000E 00	0.
105	564.12	0.42497E 02	0.64519E 01	0.22916E-01	0.32508E-01	0.37450E 01	0.32955E 01	0.94000E 00	0.99577E 00
106	566.03	0.45041E 02	0.67878E 01	0.24149E-01	0.34256E-01	0.39399E 01	0.34671E 01	0.96000E 00	0.99458E 00
107	561.13	0.43146E 02	0.64848E 01	0.22973E-01	0.32589E-01	0.37640E 01	0.33123E 01	0.98000E 00	0.10011E 01
108	563.25	0.42258E 02	0.63911E 01	0.22683E-01	0.32177E-01	0.37096E 01	0.32644E 01	0.10000E 01	0.10116E 01
109	555.08	0.35944E 02	0.54298E 01	0.19137E-01	0.27147E-01	0.31517E 01	0.27734E 01	0.10200E 01	0.99893E 00
110	567.76	0.41138E 02	0.62582E 01	0.22297E-01	0.31630E-01	0.36325E 01	0.31966E 01	0.80000E-01	0.10144E 01
111	563.84	0.42555E 02	0.64055E 01	0.22745E-01	0.32266E-01	0.37180E 01	0.32718E 01	0.10000E-00	0.10026E 01
112	570.86	0.44916E 02	0.68217E 01	0.24370E-01	0.34571E-01	0.39596E 01	0.34844E 01	0.12000E-00	0.99392E 00
113	565.30	0.46097E 02	0.70031E 01	0.24899E-01	0.35320E-01	0.40649E 01	0.35770E 01	0.14000E-00	0.99336E 00
114	561.61	0.40404E 02	0.61256E 01	0.21710E-01	0.30797E-01	0.35556E 01	0.31288E 01	0.80000E-01	0.
115	562.35	0.41725E 02	0.63073E 01	0.22368E-01	0.31731E-01	0.36610E 01	0.32216E 01	0.10000E-00	0.99973E 00
116	563.19	0.43155E 02	0.65705E 01	0.23318E-01	0.33078E-01	0.38138E 01	0.33561E 01	0.12000E-00	0.10040E 01
117	569.85	0.44980E 02	0.68505E 01	0.24452E-01	0.34687E-01	0.39763E 01	0.34991E 01	0.14000E-00	0.10165E 01
118	564.31	0.39332E 02	0.60224E 01	0.21394E-01	0.30348E-01	0.34956E 01	0.30761E 01	0.10000E-00	0.10173E 01
119	564.12	0.39844E 02	0.60696E 01	0.21558E-01	0.30581E-01	0.35230E 01	0.31002E 01	0.15000E-00	0.34026E-00
120	561.96	0.36846E 02	0.56156E 01	0.19908E-01	0.28241E-01	0.32595E 01	0.28683E 01	0.20000E-00	0.10222E 01
121	563.29	0.40956E 02	0.62674E 01	0.22244E-01	0.31555E-01	0.36378E 01	0.32012E 01	0.25000E-00	0.10051E 01
122	558.78	0.38432E 02	0.58665E 01	0.20741E-01	0.29423E-01	0.34051E 01	0.29965E 01	0.30000E-00	0.10049E 01
123	552.57	0.36885E 02	0.56390E 01	0.19832E-01	0.28133E-01	0.32731E 01	0.28803E 01	0.35000E-00	0.93606E 00
124	555.78	0.40399E 02	0.62283E 01	0.21964E-01	0.31158E-01	0.36152E 01	0.31813E 01	0.38000E-00	0.10148E 01
125	557.87	0.43031E 02	0.66965E 01	0.23658E-01	0.33560E-01	0.38870E 01	0.34204E 01	0.45000E-00	0.99994E 00
126	554.80	0.38398E 02	0.60433E 01	0.21294E-01	0.30207E-01	0.35078E 01	0.30868E 01	0.61000E 00	0.99266E 00
127	537.87	0.24211E 02	0.37928E 01	0.13175E-01	0.18689E-01	0.22015E 01	0.19373E 01	0.70000E 00	0.97864E 00
128	526.15	0.12684E 02	0.19803E 01	0.68117E-02	0.96629E-02	0.11494E 01	0.10115E 01	0.75000E 00	0.97851E 00
129	546.33	0.28837E 02	0.45598E 01	0.15975E-01	0.22662E-01	0.26461E 01	0.23285E 01	0.70000E 00	0.95753E 00
130	550.70	0.30059E 02	0.47582E 01	0.16708E-01	0.23701E-01	0.27619E 01	0.24304E 01	0.80000E 00	0.96582E 00
131	533.22	0.14801E 02	0.22013E 01	0.76164E-02	0.10804E-01	0.12777E 01	0.11244E 01	0.90000E 00	0.97145E 00
132	549.39	0.28822E 02	0.43401E 01	0.15223E-01	0.21594E-01	0.25192E 01	0.22169E 01	0.90000E 00	0.11151E 01
133	549.14	0.27624E 02	0.41382E 01	0.14511E-01	0.20586E-01	0.24020E 01	0.21137E 01	0.96000E 00	0.10522E 01
134	548.50	0.26055E 02	0.39083E 01	0.13698E-01	0.19431E-01	0.22686E 01	0.19963E 01	0.10000E 01	0.10316E 01
135	539.00	0.13060E 02	0.20373E 01	0.70835E-02	0.10048E-01	0.11826E 01	0.10406E 01	0.70000E-02	0.
136	919.74	0.12991E-01	0.24010E-02	0.12328E-04	0.17488E-04	0.13936E-02	0.12264E-02	0.70000E-02	0.
137	537.13	0.12529E 02	0.19462E 01	0.67561E-02	0.95841E-02	0.11297E 01	0.99410E 00	0.39000E-01	0.92268E 00
138	536.32	0.12044E 02	0.18609E 01	0.64554E-02	0.91575E-02	0.10801E 01	0.95049E 00	0.78000E-01	0.
139	537.20	0.11485E 02	0.17668E 01	0.61336E-02	0.87009E-02	0.10255E 01	0.90244E 00	0.11700E-00	0.
140	537.55	0.11820E 02	0.18127E 01	0.62947E-02	0.89295E-02	0.10522E 01	0.92588E 00	0.78000E-01	0.90812E 00
141	553.29	0.22497E 02	0.23965E 01	0.84334E-02	0.11963E-01	0.13910E 01	0.12241E 01	-0.	0.
142	557.25	0.17184E 02	0.18346E 01	0.64778E-02	0.91892E-02	0.10649E 01	0.93707E 00	-0.	0.
143	528.33	0.10773E 02	0.16355E 01	0.56359E-02	0.79949E-02	0.94931E 00	0.83537E 00	0.78000E-01	0.74561E 00
144	527.85	0.10469E 02	0.15915E 01	0.54822E-02	0.77769E-02	0.92379E 00	0.81292E 00	0.70000E-02	0.75295E 00
145	527.72	0.10476E 02	0.15847E 01	0.54580E-02	0.77425E-02	0.91980E 00	0.80941E 00	0.70000E-02	0.80056E 00
146	527.92	0.10865E 02	0.16518E 01	0.56900E-02	0.80717E-02	0.95876E 00	0.84369E 00	0.39000E-01	0.75743E 00
147	529.27	0.11058E 02	0.16797E 01	0.57927E-02	0.82173E-02	0.97496E 00	0.85794E 00	0.78000E-01	0.
148	529.49	0.10809E 02	0.16556E 01	0.57107E-02	0.81010E-02	0.96098E 00	0.84565E 00	0.11700E-00	0.
149	554.99	0.29189E 02	0.46833E 01	0.16505E-01	0.23413E-01	0.27184E 01	0.23921E 01	0.70000E-02	0.10046E 01
150	555.83	0.29690E 02	0.47886E 01	0.16888E-01	0.23957E-01	0.27795E 01	0.24459E 01	0.70000E-02	0.10009E 01
151	556.59	0.29657E 02	0.47852E 01	0.16887E-01	0.23955E-01	0.27775E 01	0.24442E 01	0.70000E-02	0.99621E 00
152	561.69	0.33199E 02	0.51774E 01	0.18351E-01	0.26031E-01	0.30052E 01	0.26445E 01	0.39000E-01	0.10016E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	561.71	0.32569E 02	0.50793E 01	0.18003E-01	0.25539E-01	0.29482E 01	0.25944E 01	0.39000E-01	0.
154	562.07	0.32498E 02	0.50359E 01	0.17855E-01	0.25329E-01	0.29231E 01	0.25722E 01	0.78000E-01	0.10038E 01
155	561.14	0.31141E 02	0.50375E 01	0.17846E-01	0.25316E-01	0.29240E 01	0.25730E 01	0.39000E-01	0.
156	557.96	0.28845E 02	0.46432E 01	0.16405E-01	0.23271E-01	0.26951E 01	0.23716E 01	0.39000E-01	0.
157	558.07	0.27297E 02	0.44081E 01	0.15576E-01	0.22095E-01	0.25587E 01	0.22516E 01	0.78000E-01	0.99488E 00
158	555.83	0.28319E 02	0.45819E 01	0.16159E-01	0.22922E-01	0.26595E 01	0.23403E 01	0.39000E-01	0.
159	553.24	0.26668E 02	0.43085E 01	0.15161E-01	0.21507E-01	0.25008E 01	0.22007E 01	0.78000E-01	0.
160	555.69	0.27638E 02	0.44574E 01	0.15718E-01	0.22297E-01	0.25872E 01	0.22767E 01	0.39000E-01	0.
161	549.65	0.29085E 02	0.45645E 01	0.16013E-01	0.22716E-01	0.26494E 01	0.23314E 01	0.43000E-01	0.11324E 01
162	559.74	0.38240E 02	0.60544E 01	0.21423E-01	0.30390E-01	0.35142E 01	0.30925E 01	0.43000E-01	0.14778E 01
163	553.38	0.31255E 02	0.49390E 01	0.17382E-01	0.24658E-01	0.28668E 01	0.25227E 01	0.85000E-01	0.12387E 01
164	551.26	0.27969E 02	0.43933E 01	0.15433E-01	0.21893E-01	0.25500E 01	0.22440E 01	0.12800E-00	0.11333E 01
165	560.09	0.41441E 02	0.65624E 01	0.23228E-01	0.32950E-01	0.38091E 01	0.33519E 01	0.43000E-01	0.
166	554.67	0.35943E 02	0.56565E 01	0.19929E-01	0.28271E-01	0.32833E 01	0.28892E 01	0.85000E-01	0.14116E 01
167	561.88	0.42910E 02	0.67800E 01	0.24035E-01	0.34095E-01	0.39354E 01	0.34631E 01	0.43000E-01	0.
168	554.85	0.31502E 02	0.50141E 01	0.17668E-01	0.25064E-01	0.29104E 01	0.25611E 01	0.12800E-00	0.17412E 01
169	560.73	0.36687E 02	0.58397E 01	0.20681E-01	0.29338E-01	0.33896E 01	0.29828E 01	0.85000E-01	0.14148E 01
170	558.03	0.33905E 02	0.53631E 01	0.18949E-01	0.26881E-01	0.31130E 01	0.27394E 01	0.12800E-00	0.12846E 01
171	556.65	0.37255E 02	0.58695E 01	0.20714E-01	0.29385E-01	0.34069E 01	0.29980E 01	0.85000E-01	0.14076E 01
172	570.29	0.44297E 02	0.70657E 01	0.25229E-01	0.35790E-01	0.41012E 01	0.36090E 01	0.43000E-01	0.
173	557.42	0.32361E 02	0.51417E 01	0.18158E-01	0.25758E-01	0.29844E 01	0.26262E 01	0.12800E-00	0.11633E 01
174	559.50	0.37465E 02	0.59310E 01	0.20982E-01	0.29765E-01	0.34426E 01	0.30294E 01	0.85000E-01	0.
175	569.82	0.43648E 02	0.69269E 01	0.24724E-01	0.35072E-01	0.40206E 01	0.35381E 01	0.43000E-01	0.15576E 01
176	563.41	0.38185E 02	0.60386E 01	0.21435E-01	0.30407E-01	0.35051E 01	0.30844E 01	0.43000E-01	0.13418E 01
177	553.39	0.28844E 02	0.45580E 01	0.16041E-01	0.22756E-01	0.26457E 01	0.23281E 01	0.12800E-00	0.97250E 00
178	553.40	0.28898E 02	0.45592E 01	0.16046E-01	0.22762E-01	0.26464E 01	0.23287E 01	0.85000E-01	0.99411E 00
179	555.71	0.31390E 02	0.49587E 01	0.17486E-01	0.24805E-01	0.28783E 01	0.25328E 01	0.70000E-02	0.10691E 01
180	541.70	0.24874E 02	0.39177E 01	0.13652E-01	0.19366E-01	0.22740E 01	0.20011E 01	0.70000E-02	0.
181	550.26	0.28856E 02	0.45666E 01	0.16029E-01	0.22738E-01	0.26507E 01	0.23325E 01	0.70000E-02	0.10192E 01
182	548.20	0.27901E 02	0.44245E 01	0.15503E-01	0.21992E-01	0.25682E 01	0.22599E 01	0.70000E-02	0.
183	551.94	0.27932E 02	0.44104E 01	0.15503E-01	0.21991E-01	0.25600E 01	0.22527E 01	0.32000E-01	0.93828E 00
184	558.46	0.33243E 02	0.53018E 01	0.18739E-01	0.26583E-01	0.30774E 01	0.27080E 01	0.32000E-01	0.97286E 00
185	548.36	0.29602E 02	0.46946E 01	0.16452E-01	0.23338E-01	0.27250E 01	0.23979E 01	0.64000E-01	0.97867E 00
186	555.39	0.34732E 02	0.55123E 01	0.19433E-01	0.27567E-01	0.31996E 01	0.28156E 01	0.64000E-01	0.97226E 00
187	552.64	0.30066E 02	0.47797E 01	0.16811E-01	0.23847E-01	0.27743E 01	0.24413E 01	0.70000E-02	0.95510E 00
188	549.94	0.27706E 02	0.44680E 01	0.15678E-01	0.22241E-01	0.25934E 01	0.22822E 01	0.70000E-02	0.92780E 00
189	519.72	0.26286E 01	0.42523E-00	0.14549E-02	0.20639E-02	0.24682E-00	0.21720E-00	0.10600E 01	0.82705E 00
190	518.98	0.14712E 01	0.24265E-00	0.82973E-03	0.11770E-02	0.14085E-00	0.12394E-00	0.10840E 01	0.77578E 00
191	519.21	0.68104E 00	0.11295E-00	0.38631E-03	0.54801E-03	0.65564E-01	0.57695E-01	0.11080E 01	0.74550E 00
192	519.24	0.77455E 00	0.12777E-00	0.43700E-03	0.61991E-03	0.74164E-01	0.65263E-01	0.11080E 01	0.71070E 00
193	523.18	0.25917E 01	0.42203E-00	0.14481E-02	0.20543E-02	0.24497E-00	0.21557E-00	0.16580E 01	0.10523E 01
194	524.14	0.23761E 01	0.38536E-00	0.13233E-02	0.18772E-02	0.22368E-00	0.19683E-00	0.11700E 01	0.10142E 01
195	524.00	0.26312E 01	0.42866E-00	0.14719E-02	0.20880E-02	0.24881E-00	0.21895E-00	0.16740E 01	0.99809E 00
196	526.51	0.24203E 01	0.39305E-00	0.13524E-02	0.19185E-02	0.22814E-00	0.20076E-00	0.16950E 01	0.98674E 00

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
9	1	-5.60	147.12	59.14	4.81	2	C55	3.10	2	10.04	216.20	1673.90	146	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.819657E 02	0.477870E-02	0.445420E 04	0.489147E-05	0.663922E-07	0.330374E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726216E 00	0.171615E 01	0.195116E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	531.42	0.14421E 01	0.23376E-00	0.80684E-03	0.11510E-02	0.13621E-00	0.11981E-00	-0.10600E 01	0.69145E 00
100	531.58	0.81559E 00	0.13623E-00	0.47025E-03	0.67083E-03	0.79379E-01	0.69818E-01	-0.10840E 01	0.78302E 00
101	532.43	0.57923E 00	0.94673E-01	0.32704E-03	0.46654E-03	0.55166E-01	0.48522E-01	-0.11080E 01	0.72741E 00
102	532.37	0.61923E 00	0.10090E-00	0.34852E-03	0.49718E-03	0.58793E-01	0.51711E-01	-0.11080E 01	0.62578E 00
103	532.00	0.93299E 00	0.15587E-00	0.53825E-03	0.76784E-03	0.90827E-01	0.79887E-01	-0.10800E 01	0.66860E 00
104	561.22	0.35246E 02	0.56478E 01	0.19990E-01	0.28516E-01	0.32910E 01	0.28946E 01	0.85000E 00	0.
105	567.78	0.40849E 02	0.62143E 01	0.22119E-01	0.31554E-01	0.36211E 01	0.31849E 01	0.94000E 00	0.11045E 01
106	570.45	0.43221E 02	0.65294E 01	0.23294E-01	0.33231E-01	0.38047E 01	0.33464E 01	0.96000E 00	0.11025E 01
107	566.21	0.41564E 02	0.62645E 01	0.22268E-01	0.31766E-01	0.36503E 01	0.32106E 01	0.98000E 00	0.10992E 01
108	569.04	0.40692E 02	0.61740E 01	0.21999E-01	0.31383E-01	0.35976E 01	0.31643E 01	0.10000E 01	0.11044E 01
109	562.20	0.34375E 02	0.52133E 01	0.18467E-01	0.26345E-01	0.30378E 01	0.26719E 01	0.10200E 01	0.10914E 01
110	570.79	0.38902E 02	0.59280E 01	0.21155E-01	0.30178E-01	0.34542E 01	0.30382E 01	0.80000E-01	0.11333E 01
111	567.81	0.40000E 02	0.60341E 01	0.21478E-01	0.30640E-01	0.35161E 01	0.30926E 01	0.10000E-00	0.11245E 01
112	575.48	0.42253E 02	0.64335E 01	0.23052E-01	0.32885E-01	0.37488E 01	0.32973E 01	0.12000E-00	0.11055E 01
113	571.04	0.43060E 02	0.65624E 01	0.23424E-01	0.33415E-01	0.38239E 01	0.33633E 01	0.14000E-00	0.11060E 01
114	565.67	0.36987E 02	0.56202E 01	0.19968E-01	0.28486E-01	0.32749E 01	0.28805E 01	0.80000E-01	0.
115	567.38	0.37451E 02	0.56770E 01	0.20200E-01	0.28816E-01	0.33080E 01	0.29096E 01	0.10000E-00	0.11125E 01
116	568.70	0.38407E 02	0.58654E 01	0.20894E-01	0.29806E-01	0.34178E 01	0.30061E 01	0.12000E-00	0.11061E 01
117	575.17	0.40104E 02	0.61258E 01	0.21944E-01	0.31304E-01	0.35695E 01	0.31396E 01	0.14000E-00	0.11195E 01
118	568.81	0.34409E 02	0.52816E 01	0.18816E-01	0.26842E-01	0.30776E 01	0.27069E 01	0.10000E-00	0.11049E 01
119	571.04	0.34107E 02	0.52154E 01	0.18616E-01	0.26557E-01	0.30390E 01	0.26730E 01	0.15000E-00	0.77375E 00
120	563.73	0.31545E 02	0.48124E 01	0.17070E-01	0.24351E-01	0.28042E 01	0.24664E 01	0.20000E-00	0.11636E 01
121	574.17	0.34161E 02	0.52590E 01	0.18822E-01	0.26851E-01	0.30644E 01	0.26953E 01	0.25000E-00	0.11158E 01
122	572.82	0.31442E 02	0.48368E 01	0.17291E-01	0.24667E-01	0.28184E 01	0.24789E 01	0.30000E-00	0.11065E 01
123	568.73	0.30292E 02	0.46728E 01	0.16646E-01	0.23746E-01	0.27228E 01	0.23949E 01	0.35000E-00	0.10370E 01
124	572.84	0.32562E 02	0.50675E 01	0.18116E-01	0.25843E-01	0.29528E 01	0.25972E 01	0.38000E-00	0.11126E 01
125	575.78	0.33146E 02	0.52093E 01	0.18671E-01	0.26635E-01	0.30355E 01	0.26699E 01	0.45000E-00	0.10750E 01
126	564.65	0.29116E 02	0.46076E 01	0.16356E-01	0.23333E-01	0.26848E 01	0.23615E 01	0.61000E 00	0.10203E 01
127	536.78	0.15820E 02	0.24768E 01	0.85871E-02	0.12250E-01	0.14433E 01	0.12694E 01	0.70000E 00	0.96720E 00
128	526.78	0.74914E 01	0.11700E 01	0.40227E-02	0.57385E-02	0.68176E 00	0.59964E 00	0.75000E 00	0.89813E 00
129	545.81	0.21530E 02	0.33988E 01	0.11873E-01	0.16938E-01	0.19805E 01	0.17419E 01	0.70000E 00	0.93312E 00
130	542.81	0.22972E 02	0.36203E 01	0.12615E-01	0.17996E-01	0.21096E 01	0.18555E 01	0.80000E 00	0.93965E 00
131	523.83	0.89475E 01	0.13236E 01	0.45399E-02	0.64763E-02	0.77129E 00	0.67839E 00	0.90000E 00	0.77530E 00
132	540.85	0.25181E 02	0.37738E 01	0.13128E-01	0.18728E-01	0.21990E 01	0.19341E 01	0.90000E 00	0.11834E 01
133	537.17	0.23151E 02	0.34449E 01	0.11947E-01	0.17043E-01	0.20073E 01	0.17656E 01	0.96000E 00	0.10119E 01
134	535.48	0.21400E 02	0.31867E 01	0.11036E-01	0.15744E-01	0.18569E 01	0.16333E 01	0.10000E 01	0.93600E 00
135	533.60	0.11468E 02	0.17836E 01	0.61673E-02	0.87980E-02	0.10393E 01	0.91413E 00	0.70000E-02	0.
136	919.73	0.12458E-01	0.23024E-02	0.11805E-04	0.16840E-04	0.13416E-02	0.11800E-02	0.70000E-02	0.
137	531.51	0.12665E 02	0.19612E 01	0.67695E-02	0.96570E-02	0.11428E 01	0.10051E 01	0.39000E-01	0.71713E 00
138	530.99	0.12757E 02	0.19651E 01	0.67803E-02	0.96724E-02	0.11451E 01	0.10072E 01	0.78000E-01	0.
139	531.32	0.12772E 02	0.19582E 01	0.67583E-02	0.96411E-02	0.11411E 01	0.10036E 01	0.11700E-00	0.
140	531.31	0.12684E 02	0.19383E 01	0.66895E-02	0.95430E-02	0.11295E 01	0.99343E 00	0.78000E-01	0.71715E 00
141	554.05	0.29521E 02	0.31461E 01	0.11067E-01	0.15788E-01	0.18332E 01	0.16124E 01	-0.	0.
142	551.91	0.27223E 02	0.28978E 01	0.10175E-01	0.14516E-01	0.16886E 01	0.14852E 01	-0.	0.
143	542.17	0.11198E 02	0.17133E 01	0.59670E-02	0.85122E-02	0.99836E 00	0.87811E 00	0.78000E-01	0.68960E 00
144	542.34	0.11229E 02	0.17210E 01	0.59946E-02	0.85515E-02	0.10028E 01	0.88204E 00	0.70000E-02	0.72785E 00
145	542.37	0.11290E 02	0.17219E 01	0.59978E-02	0.85562E-02	0.10033E 01	0.88250E 00	0.70000E-02	0.81669E 00
146	542.00	0.11474E 02	0.17583E 01	0.61228E-02	0.87345E-02	0.10246E 01	0.90117E 00	0.39000E-01	0.73122E 00
147	543.21	0.11555E 02	0.17690E 01	0.61664E-02	0.87967E-02	0.10308E 01	0.90666E 00	0.78000E-01	0.
148	542.96	0.10996E 02	0.16970E 01	0.59141E-02	0.84367E-02	0.98885E 00	0.86974E 00	0.11700E-00	0.
149	556.42	0.30483E 02	0.48948E 01	0.17254E-01	0.24614E-01	0.28522E 01	0.25087E 01	0.70000E-02	0.11238E 01
150	557.59	0.31099E 02	0.50208E 01	0.17716E-01	0.25272E-01	0.29256E 01	0.25732E 01	0.70000E-02	0.11321E 01
151	558.63	0.31567E 02	0.50993E 01	0.18009E-01	0.25690E-01	0.29714E 01	0.26135E 01	0.70000E-02	0.11164E 01
152	563.27	0.36181E 02	0.56473E 01	0.20023E-01	0.28564E-01	0.32907E 01	0.28943E 01	0.39000E-01	0.11164E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	562.50	0.35771E 02	0.55811E 01	0.19775E-01	0.28210E-01	0.32521E 01	0.28604E 01	0.39000E-01	0.
154	562.09	0.35770E 02	0.55432E 01	0.19634E-01	0.28009E-01	0.32300E 01	0.28410E 01	0.78000E-01	0.11119E 01
155	559.99	0.33992E 02	0.54952E 01	0.19429E-01	0.27717E-01	0.32020E 01	0.28164E 01	0.39000E-01	0.
156	556.03	0.31077E 02	0.49970E 01	0.17608E-01	0.25119E-01	0.29118E 01	0.25611E 01	0.39000E-01	0.
157	554.09	0.29622E 02	0.47731E 01	0.16791E-01	0.23954E-01	0.27813E 01	0.24463E 01	0.78000E-01	0.11115E 01
158	553.36	0.30628E 02	0.49486E 01	0.17398E-01	0.24820E-01	0.28836E 01	0.25363E 01	0.39000E-01	0.
159	550.02	0.28202E 02	0.45482E 01	0.15945E-01	0.22747E-01	0.26502E 01	0.23310E 01	0.78000E-01	0.
160	555.00	0.29114E 02	0.46935E 01	0.16524E-01	0.23573E-01	0.27349E 01	0.24055E 01	0.39000E-01	0.
161	556.42	0.20845E 02	0.32837E 01	0.11575E-01	0.16512E-01	0.19134E 01	0.16830E 01	0.43000E-01	0.10714E 01
162	560.62	0.26933E 02	0.42664E 01	0.15093E-01	0.21530E-01	0.24860E 01	0.21866E 01	0.43000E-01	0.13587E 01
163	553.82	0.22383E 02	0.35379E 01	0.12443E-01	0.17751E-01	0.20616E 01	0.18133E 01	0.85000E-01	0.11512E 01
164	549.35	0.20906E 02	0.32803E 01	0.11494E-01	0.16397E-01	0.19115E 01	0.16812E 01	0.12800E-00	0.10875E 01
165	563.21	0.34280E 02	0.54380E 01	0.19280E-01	0.27504E-01	0.31687E 01	0.27870E 01	0.43000E-01	0.
166	556.56	0.32710E 02	0.51531E 01	0.18166E-01	0.25915E-01	0.30027E 01	0.26410E 01	0.85000E-01	0.16686E 01
167	569.53	0.44342E 02	0.70358E 01	0.25081E-01	0.35779E-01	0.40998E 01	0.36060E 01	0.43000E-01	0.
168	551.73	0.28188E 02	0.44788E 01	0.15725E-01	0.22432E-01	0.26098E 01	0.22954E 01	0.12800E-00	0.20116E 01
169	562.88	0.36404E 02	0.58016E 01	0.20563E-01	0.29334E-01	0.33806E 01	0.29734E 01	0.85000E-01	0.17861E 01
170	555.92	0.32171E 02	0.50828E 01	0.17909E-01	0.25548E-01	0.29617E 01	0.26050E 01	0.12800E-00	0.15305E 01
171	557.79	0.36642E 02	0.57765E 01	0.20386E-01	0.29081E-01	0.33660E 01	0.29606E 01	0.85000E-01	0.17756E 01
172	570.17	0.38443E 02	0.61315E 01	0.21869E-01	0.31198E-01	0.35728E 01	0.31425E 01	0.43000E-01	0.
173	555.43	0.32403E 02	0.51427E 01	0.18113E-01	0.25839E-01	0.29967E 01	0.26357E 01	0.12800E-00	0.14682E 01
174	561.09	0.38148E 02	0.60444E 01	0.21391E-01	0.30516E-01	0.35221E 01	0.30979E 01	0.85000E-01	0.
175	569.94	0.36317E 02	0.57638E 01	0.20554E-01	0.29321E-01	0.33586E 01	0.29540E 01	0.43000E-01	0.16640E 01
176	568.01	0.33915E 02	0.53769E 01	0.19142E-01	0.27307E-01	0.31331E 01	0.27557E 01	0.43000E-01	0.15347E 01
177	547.44	0.22313E 02	0.35143E 01	0.12294E-01	0.17538E-01	0.20478E 01	0.18012E 01	0.12800E-00	0.94971E 00
178	553.08	0.24577E 02	0.38769E 01	0.13627E-01	0.19439E-01	0.22591E 01	0.19870E 01	0.85000E-01	0.10848E 01
179	569.64	0.27141E 02	0.43207E 01	0.15404E-01	0.21974E-01	0.25177E 01	0.22144E 01	0.70000E-02	0.12136E 01
180	560.23	0.21685E 02	0.34508E 01	0.12203E-01	0.17409E-01	0.20108E 01	0.17686E 01	0.70000E-02	0.
181	576.75	0.24678E 02	0.39630E 01	0.14216E-01	0.20279E-01	0.23093E 01	0.20311E 01	0.70000E-02	0.11747E 01
182	572.91	0.24591E 02	0.39533E 01	0.14134E-01	0.20162E-01	0.23036E 01	0.20261E 01	0.70000E-02	0.
183	551.46	0.20533E 02	0.32412E 01	0.11377E-01	0.16230E-01	0.18887E 01	0.16612E 01	0.32000E-01	0.88725E 00
184	552.01	0.24732E 02	0.39303E 01	0.13802E-01	0.19690E-01	0.22902E 01	0.20143E 01	0.32000E-01	0.92637E 00
185	539.47	0.20935E 02	0.33036E 01	0.11479E-01	0.16376E-01	0.19250E 01	0.16931E 01	0.64000E-01	0.94109E 00
186	551.84	0.25878E 02	0.40990E 01	0.14393E-01	0.20532E-01	0.23885E 01	0.21008E 01	0.64000E-01	0.95901E 00
187	561.48	0.23566E 02	0.37647E 01	0.13328E-01	0.19013E-01	0.21937E 01	0.19295E 01	0.70000E-02	0.98380E 00
188	559.66	0.21458E 02	0.34792E 01	0.12298E-01	0.17544E-01	0.20273E 01	0.17831E 01	0.70000E-02	0.93761E 00
189	533.72	0.42457E 01	0.69233E 00	0.23942E-02	0.34154E-02	0.40342E-00	0.35483E-00	0.10600E 01	0.76785E 00
190	531.45	0.26255E 01	0.43612E-00	0.15053E-02	0.21474E-02	0.25413E-00	0.22352E-00	0.10840E 01	0.73286E 00
191	529.80	0.13081E 01	0.21826E-00	0.75231E-03	0.10732E-02	0.12718E-00	0.11186E-00	0.11080E 01	0.62083E 00
192	530.50	0.14790E 01	0.24554E-00	0.84684E-03	0.12081E-02	0.14308E-00	0.12584E-00	0.11080E 01	0.63109E 00
193	532.68	0.18171E 01	0.29750E-00	0.10279E-02	0.14664E-02	0.17336E-00	0.15248E-00	0.16580E 01	0.78848E 00
194	533.14	0.19293E 01	0.31451E-00	0.10871E-02	0.15508E-02	0.18326E-00	0.16119E-00	0.11700E 01	0.86620E 00
195	533.16	0.17875E 01	0.29274E-00	0.10110E-02	0.14435E-02	0.17058E-00	0.15003E-00	0.16740E 01	0.78193E 00
196	534.91	0.17642E 01	0.28787E-00	0.99647E-03	0.14215E-02	0.16774E-00	0.14754E-00	0.16950E 01	0.77704E 00

~~CONFIDENTIAL~~

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
3	1	4.38	154.38	-0.	-0.	1	C55	2.90	2	10.04	220.60	1665.70	140	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.815130E 02	0.487605E-02	0.444245E 04	0.501884E-05	0.660255E-07	0.339960E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725911E 00	0.174164E 01	0.197655E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	552.58	0.22086E 02	0.28950E 01	0.10253E-01	0.14292E-01	0.16622E 01	0.14647E 01	-0.	0.99246E 00
2	553.38	0.21186E 02	0.29556E 01	0.10474E-01	0.14601E-01	0.16970E 01	0.14953E 01	-0.30000E-01	0.
3	550.23	0.19836E 02	0.30035E 01	0.10616E-01	0.14798E-01	0.17246E 01	0.15196E 01	-0.60000E-01	0.
4	551.96	0.19162E 02	0.29789E 01	0.10544E-01	0.14699E-01	0.17104E 01	0.15071E 01	-0.90000E-01	0.
5	551.33	0.17254E 02	0.27496E 01	0.97273E-02	0.13560E-01	0.15788E 01	0.13911E 01	-0.20000E-00	0.99945E 00
6	544.62	0.14741E 02	0.23403E 01	0.82321E-02	0.11476E-01	0.13438E 01	0.11841E 01	-0.40000E-00	0.97003E 00
7	534.13	0.12828E 02	0.20343E 01	0.70923E-02	0.98869E-02	0.11680E 01	0.10292E 01	-0.60000E 00	0.93056E 00
8	532.19	0.13854E 02	0.21946E 01	0.76387E-02	0.10649E-01	0.12601E 01	0.11103E 01	-0.80000E 00	0.
9	533.62	0.14995E 02	0.23397E 01	0.81539E-02	0.11367E-01	0.13434E 01	0.11837E 01	-0.90000E 00	0.89599E 00
10	537.13	0.14742E 02	0.23344E 01	0.81593E-02	0.11374E-01	0.13403E 01	0.11810E 01	-0.98000E 00	0.94194E 00
11	531.71	0.43637E-00	0.74684E-01	0.25985E-03	0.36224E-03	0.42881E-01	0.37785E-01	-0.11220E 01	0.19187E 01
12	533.51	0.55740E 00	0.81374E-01	0.28356E-03	0.39529E-03	0.46723E-01	0.41170E-01	-0.11890E 01	0.82530E 00
13	536.40	0.57870E 00	0.87239E-01	0.30474E-03	0.42481E-03	0.50090E-01	0.44137E-01	-0.13340E 01	0.69580E 00
14	537.11	0.58234E 00	0.99971E-01	0.34942E-03	0.48710E-03	0.57400E-01	0.50578E-01	-0.14400E 01	0.83177E 00
15	550.31	0.22327E 02	0.31094E 01	0.10991E-01	0.15321E-01	0.17853E 01	0.15732E 01	0.30000E-01	0.
16	546.47	0.21084E 02	0.31857E 01	0.11223E-01	0.15646E-01	0.18291E 01	0.16118E 01	0.60000E-01	0.
17	545.63	0.21417E 02	0.33179E 01	0.11681E-01	0.16283E-01	0.19050E 01	0.16786E 01	0.90000E-01	0.
18	545.76	0.21923E 02	0.34828E 01	0.12263E-01	0.17094E-01	0.19997E 01	0.17621E 01	0.20000E-00	0.99617E 00
19	560.10	0.25264E 02	0.40458E 01	0.14421E-01	0.20103E-01	0.23230E 01	0.20469E 01	0.40000E-00	0.10030E 01
20	565.80	0.29105E 02	0.46979E 01	0.16828E-01	0.23458E-01	0.26974E 01	0.23768E 01	0.60000E 00	0.
21	563.26	0.36395E 02	0.55229E 01	0.19739E-01	0.27517E-01	0.31711E 01	0.27942E 01	0.92000E 00	0.
22	547.20	0.21066E 02	0.31684E 01	0.11169E-01	0.15570E-01	0.18192E 01	0.16030E 01	0.10400E 01	0.10095E 01
23	544.47	0.18597E 02	0.28003E 01	0.98488E-02	0.13730E-01	0.16079E 01	0.14168E 01	0.10600E 01	0.94417E 00
24	537.80	0.12367E 02	0.19436E 01	0.67971E-02	0.94754E-02	0.11159E 01	0.98331E 00	0.10840E 01	0.94336E 00
25	530.26	0.18925E 01	0.27719E-00	0.96328E-03	0.13428E-02	0.15916E-00	0.14024E-00	0.12070E 01	0.10537E 01
26	531.25	0.21584E 01	0.33363E-00	0.11604E-02	0.16176E-02	0.19156E-00	0.16879E-00	0.12490E 01	0.13577E 01
27	532.45	0.26561E 01	0.40417E-00	0.14071E-02	0.19616E-02	0.23206E-00	0.20448E-00	0.13340E 01	0.16264E 01
28	533.43	0.23948E 01	0.40546E-00	0.14128E-02	0.19694E-02	0.23280E-00	0.20514E-00	0.14540E 01	0.17115E 01
29	534.59	0.16047E 01	0.26381E-00	0.92011E-03	0.12827E-02	0.15147E-00	0.13347E-00	0.16580E 01	0.10357E 01
30	536.89	0.14332E 01	0.23881E-00	0.83454E-03	0.11634E-02	0.13712E-00	0.12082E-00	0.20410E 01	0.96555E 00
31	539.10	0.14421E 01	0.24058E-00	0.84230E-03	0.11742E-02	0.13814E-00	0.12172E-00	0.22480E 01	0.94043E 00
32	549.52	0.21175E 02	0.32081E 01	0.11332E-01	0.15797E-01	0.18420E 01	0.16231E 01	-0.60000E-01	0.
33	553.74	0.21463E 02	0.29949E 01	0.10617E-01	0.14800E-01	0.17196E 01	0.15152E 01	-0.30000E-01	0.
34	551.18	0.21940E 02	0.33271E 01	0.11769E-01	0.16406E-01	0.19103E 01	0.16833E 01	0.30000E-01	0.
35	548.51	0.20582E 02	0.31937E 01	0.11271E-01	0.15712E-01	0.18337E 01	0.16158E 01	0.60000E-01	0.
36	540.27	0.24547E 02	0.38878E 01	0.13625E-01	0.18993E-01	0.22322E 01	0.19669E 01	-0.86800E 00	0.14182E 01
37	540.57	0.21830E 02	0.33645E 01	0.11794E-01	0.16441E-01	0.19318E 01	0.17022E 01	-0.91100E 00	0.12783E 01
38	538.19	0.20260E 02	0.31745E 01	0.11106E-01	0.15481E-01	0.18227E 01	0.16061E 01	-0.95300E 00	0.11993E 01
39	919.72	0.11421E-01	0.21663E-02	0.11236E-04	0.15663E-04	0.12438E-02	0.10960E-02	0.51000E-01	0.
40	531.11	0.13469E 02	0.21087E 01	0.73334E-02	0.10223E-01	0.12108E 01	0.10669E 01	0.29000E-01	0.
41	546.45	0.27160E 02	0.42644E 01	0.15023E-01	0.20943E-01	0.24485E 01	0.21575E 01	0.70000E-02	0.
42	540.86	0.24307E 02	0.38265E 01	0.13417E-01	0.18703E-01	0.21971E 01	0.19360E 01	-0.86800E 00	0.13624E 01
43	540.82	0.24450E 02	0.38589E 01	0.13530E-01	0.18861E-01	0.22156E 01	0.19523E 01	-0.91100E 00	0.14096E 01
44	540.36	0.22636E 02	0.35510E 01	0.12446E-01	0.17350E-01	0.20389E 01	0.17966E 01	-0.95300E 00	0.95986E 00
45	532.21	0.79403E 01	0.12869E 01	0.44795E-02	0.62445E-02	0.73890E 00	0.65109E 00	-0.10400E 01	0.14752E 01
46	543.54	0.25198E 02	0.39629E 01	0.13997E-01	0.19512E-01	0.22869E 01	0.20151E 01	0.70000E-02	0.
47	531.47	0.13234E 02	0.20777E 01	0.72277E-02	0.10076E-01	0.11930E 01	0.10512E 01	0.29000E-01	0.
48	532.01	0.12421E 02	0.19581E 01	0.68145E-02	0.94996E-02	0.11243E 01	0.99065E 00	0.51000E-01	0.83590E 00
49	541.00	0.20237E 02	0.31759E 01	0.11137E-01	0.15525E-01	0.18235E 01	0.16068E 01	0.70000E-02	0.12306E 01
50	533.97	0.13744E 02	0.21552E 01	0.75131E-02	0.10473E-01	0.12375E 01	0.10904E 01	0.29000E-01	0.85338E 00
51	533.64	0.13375E 02	0.20903E 01	0.72848E-02	0.10155E-01	0.12002E 01	0.10576E 01	0.51000E-01	0.
52	540.57	0.21271E 02	0.33566E 01	0.11767E-01	0.16403E-01	0.19273E 01	0.16982E 01	-0.86800E 00	0.
53	539.71	0.19343E 02	0.30626E 01	0.10728E-01	0.14955E-01	0.17584E 01	0.15494E 01	-0.91100E 00	0.11171E 01
54	538.95	0.19037E 02	0.29842E 01	0.10446E-01	0.14563E-01	0.17134E 01	0.15098E 01	-0.95300E 00	0.11062E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	532.80	0.67044E 01	0.10870E 01	0.37854E-02	0.52770E-02	0.62411E 00	0.54993E 00	-0.10400E 01	0.18155E 01
56	533.28	0.56462E 01	0.94454E 00	0.32907E-02	0.45873E-02	0.54233E 00	0.47787E-00	-0.10680E 01	0.30500E 01
57	531.05	0.48369E 01	0.78342E 00	0.27243E-02	0.37977E-02	0.44982E-00	0.39636E-00	-0.10400E 01	0.30946E 01
58	533.70	0.88057E 01	0.15463E 01	0.53893E-02	0.75128E-02	0.88786E 00	0.78234E 00	-0.10680E 01	0.24886E 01
59	530.37	0.52109E 01	0.84367E 00	0.29322E-02	0.40875E-02	0.48441E-00	0.42684E-00	-0.10400E 01	0.88098E 00
60	531.85	0.52940E 01	0.88491E 00	0.30793E-02	0.42926E-02	0.50809E 00	0.44771E-00	-0.10680E 01	0.17648E 01
61	531.36	0.47948E-00	0.79091E-01	0.27510E-03	0.38350E-03	0.45412E-01	0.40015E-01	-0.11220E 01	0.91786E 00
62	536.29	0.44208E-00	0.66639E-01	0.23276E-03	0.32447E-03	0.38262E-01	0.33715E-01	-0.13340E 01	0.50150E 00
63	531.64	0.62130E 00	0.10633E-00	0.36994E-03	0.51571E-03	0.61052E-01	0.53796E-01	-0.11220E 01	0.13668E 01
64	536.06	0.33247E-00	0.50110E-01	0.17499E-03	0.24394E-03	0.28772E-01	0.25352E-01	-0.13340E 01	0.38469E-00
65	536.98	0.45506E-00	0.78116E-01	0.27300E-03	0.38057E-03	0.44852E-01	0.39521E-01	0.14400E 01	0.58893E 00
66	537.48	0.45350E-00	0.74107E-01	0.25910E-03	0.36119E-03	0.42550E-01	0.37493E-01	0.16130E 01	0.60108E 00
67	538.15	0.76779E 00	0.12320E-00	0.43097E-03	0.60079E-03	0.70735E-01	0.62329E-01	0.17200E 01	0.97468E 00
68	537.96	0.62909E 00	0.10362E-00	0.36243E-03	0.50523E-03	0.59495E-01	0.52424E-01	-0.16130E 01	0.88045E 00
69	538.34	0.81455E 00	0.13071E-00	0.45734E-03	0.63754E-03	0.75051E-01	0.66131E-01	-0.18280E 01	0.10147E 01
70	532.33	0.43585E-00	0.63696E-01	0.22174E-03	0.30910E-03	0.36572E-01	0.32226E-01	-0.11650E 01	0.12315E 01
71	534.13	0.41091E-00	0.34376E-01	0.11985E-03	0.16707E-03	0.19738E-01	0.17392E-01	-0.12050E 01	0.12138E 01
72	535.39	0.54078E 00	0.78081E-01	0.27251E-03	0.37989E-03	0.44832E-01	0.39504E-01	-0.12120E 01	0.76221E 00
73	533.83	0.43844E-00	0.64129E-01	0.22352E-03	0.31160E-03	0.36821E-01	0.32445E-01	-0.11650E 01	0.10593E 01
74	534.59	0.34078E-00	0.28517E-01	0.99460E-04	0.13865E-03	0.16373E-01	0.14427E-01	-0.12050E 01	0.11706E 01
75	919.72	0.11421E-01	0.19826E-02	0.10283E-04	0.14335E-04	0.11383E-02	0.10030E-02	-0.12120E 01	0.
76	531.37	0.16114E 01	0.24142E-00	0.83976E-03	0.11706E-02	0.13862E-00	0.12214E-00	0.10840E 01	0.99248E 00
77	532.23	0.49351E-00	0.79416E-01	0.27644E-03	0.38536E-03	0.45599E-01	0.40179E-01	0.11220E 01	0.10818E 01
78	537.17	0.61247E 00	0.90984E-01	0.31802E-03	0.44333E-03	0.52240E-01	0.46032E-01	0.13340E 01	0.71896E 00
79	534.93	0.27896E-00	0.46682E-01	0.16286E-03	0.22703E-03	0.26803E-01	0.23618E-01	-0.11890E 01	0.43559E-00
80	537.67	0.29922E-00	0.44914E-01	0.15706E-03	0.21894E-03	0.25788E-01	0.22723E-01	-0.13340E 01	0.35980E-00
81	533.63	0.72780E 00	0.11721E-00	0.40848E-03	0.56943E-03	0.67300E-01	0.59301E-01	-0.11470E 01	0.14617E 01
82	534.29	-0.19221E-01	-0.32125E-02	-0.11202E-04	-0.15615E-04	-0.18445E-02	-0.16253E-02	-0.11890E 01	-0.40620E-01
83	532.70	0.24000E 01	0.40076E-00	0.13955E-02	0.19454E-02	0.23010E-00	0.20276E-00	-0.10840E 01	0.15129E 01
84	534.45	0.22078E-00	0.32304E-01	0.11266E-03	0.15704E-03	0.18548E-01	0.16343E-01	-0.11890E 01	0.36927E-00
85	537.24	0.36987E-00	0.54204E-01	0.18947E-03	0.26413E-03	0.31122E-01	0.27423E-01	-0.13090E 01	0.57593E 00
86	537.29	0.29403E-00	0.43681E-01	0.15270E-03	0.21286E-03	0.25081E-01	0.22100E-01	-0.13340E 01	0.35763E-00
87	538.79	0.77205E 01	0.11305E 01	0.39568E-02	0.55159E-02	0.64908E 00	0.57194E 00	0.11990E 01	0.44424E 01
88	533.73	0.40416E 01	0.59516E 00	0.20743E-02	0.28916E-02	0.34173E-00	0.30111E-00	0.12070E 01	0.23377E 01
89	535.57	0.29683E 01	0.44502E-00	0.15534E-02	0.21655E-02	0.25552E-00	0.22515E-00	0.13340E 01	0.20545E 01
90	535.80	0.54779E 01	0.78011E 00	0.27236E-02	0.37968E-02	0.44792E-00	0.39468E-00	0.12070E 01	0.31070E 01
91	535.20	0.31844E 01	0.49332E-00	0.17215E-02	0.23998E-02	0.28325E-00	0.24958E-00	0.12490E 01	0.19591E 01
92	535.04	0.29299E 01	0.44134E-00	0.15399E-02	0.21466E-02	0.25340E-00	0.22329E-00	0.13340E 01	0.18538E 01
93	534.63	0.15772E 01	0.26563E-00	0.92648E-03	0.12915E-02	0.15251E-00	0.13439E-00	0.14900E 01	0.11354E 01
94	540.47	0.55397E 01	0.58173E 00	0.20391E-02	0.28425E-02	0.33401E-00	0.29432E-00	-0.	0.
95	542.39	0.78608E 01	0.83230E 00	0.29221E-02	0.40734E-02	0.47788E-00	0.42109E-00	-0.	0.
96	537.88	0.43117E-00	0.45212E-01	0.15813E-03	0.22043E-03	0.25959E-01	0.22874E-01	-0.	0.
97	538.29	0.39168E-00	0.41080E-01	0.14373E-03	0.20036E-03	0.23587E-01	0.20784E-01	-0.	0.
98	539.20	0.73974E 00	0.78184E-01	0.27375E-03	0.38162E-03	0.44891E-01	0.39556E-01	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
10	1	4.38	154.38	-0.02	-0.	2	C55	3.10	2	10.04	213.90	1675.80	147	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE#10-6/FT	CP(INF)
0.820749E 02	0.472987E-02	0.445687E 04	0.483505E-05	0.664807E-07	0.326324E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726289E 00	0.170304E 01	0.193816E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	536.31	0.22327E 01	0.36293E-00	0.12555E-02	0.18109E-02	0.21311E-00	0.18725E-00	-0.10600E 01	0.97809E 00
100	537.29	0.11616E 01	0.19464E-00	0.67389E-03	0.97198E-03	0.11429E-00	0.10042E-00	-0.10840E 01	0.11085E 01
101	537.65	0.78338E 00	0.12842E-00	0.44475E-03	0.64148E-03	0.75405E-01	0.66258E-01	-0.11080E 01	0.97339E 00
102	537.37	0.92312E 00	0.15084E-00	0.52228E-03	0.75329E-03	0.88570E-01	0.77825E-01	-0.11080E 01	0.10729E 01
103	536.88	0.14535E 01	0.24350E-00	0.84278E-03	0.12156E-02	0.14298E-00	0.12564E-00	-0.10800E 01	0.97439E 00
104	556.01	0.32595E 02	0.52080E 01	0.18318E-01	0.26421E-01	0.30580E 01	0.26871E 01	0.85000E 00	0.
105	560.84	0.35167E 02	0.53295E 01	0.18823E-01	0.27149E-01	0.31294E 01	0.27498E 01	0.94000E 00	0.90355E 00
106	563.16	0.35956E 02	0.54102E 01	0.19146E-01	0.27615E-01	0.31768E 01	0.27914E 01	0.96000E 00	0.89519E 00
107	559.57	0.33370E 02	0.50112E 01	0.17680E-01	0.25500E-01	0.29425E 01	0.25855E 01	0.98000E 00	0.90042E 00
108	559.60	0.30506E 02	0.46045E 01	0.16245E-01	0.23430E-01	0.27037E 01	0.23757E 01	0.10000E 01	0.90256E 00
109	553.36	0.23878E 02	0.36036E 01	0.12647E-01	0.18241E-01	0.21160E 01	0.18593E 01	0.10200E 01	0.88943E 00
110	563.09	0.34525E 02	0.52387E 01	0.18538E-01	0.26738E-01	0.30761E 01	0.27029E 01	0.80000E-01	0.92625E 00
111	560.32	0.34860E 02	0.52370E 01	0.18488E-01	0.26666E-01	0.30751E 01	0.27020E 01	0.10000E-00	0.90832E 00
112	567.08	0.35535E 02	0.53857E 01	0.19123E-01	0.27582E-01	0.31624E 01	0.27787E 01	0.12000E-00	0.89340E 00
113	562.39	0.34317E 02	0.52051E 01	0.18408E-01	0.26550E-01	0.30563E 01	0.26856E 01	0.14000E-00	0.88756E 00
114	557.52	0.33399E 02	0.50522E 01	0.17793E-01	0.25663E-01	0.29666E 01	0.26067E 01	0.80000E-01	0.
115	558.70	0.33603E 02	0.50693E 01	0.17871E-01	0.25776E-01	0.29766E 01	0.26155E 01	0.10000E-00	0.89578E 00
116	559.74	0.34215E 02	0.51994E 01	0.18346E-01	0.26461E-01	0.30530E 01	0.26826E 01	0.12000E-00	0.89854E 00
117	565.71	0.35263E 02	0.53584E 01	0.19004E-01	0.27410E-01	0.31464E 01	0.27647E 01	0.14000E-00	0.91235E 00
118	559.84	0.32638E 02	0.49850E 01	0.17591E-01	0.25372E-01	0.29271E 01	0.25720E 01	0.10000E-00	0.91207E 00
119	560.14	0.32450E 02	0.49323E 01	0.17410E-01	0.25110E-01	0.28962E 01	0.25448E 01	0.15000E-00	0.21628E-00
120	582.96	0.30104E 02	0.46412E 01	0.16708E-01	0.24098E-01	0.27253E 01	0.23947E 01	0.20000E-00	0.96487E 00
121	561.30	0.32118E 02	0.49096E 01	0.17347E-01	0.25020E-01	0.28828E 01	0.25331E 01	0.25000E-00	0.89778E 00
122	559.48	0.30673E 02	0.46839E 01	0.16524E-01	0.23832E-01	0.27503E 01	0.24167E 01	0.30000E-00	0.90283E 00
123	555.44	0.28832E 02	0.44149E 01	0.15521E-01	0.22386E-01	0.25923E 01	0.22779E 01	0.35000E-00	0.83497E 00
124	558.69	0.31341E 02	0.48396E 01	0.17061E-01	0.24608E-01	0.28418E 01	0.24970E 01	0.38000E-00	0.90022E 00
125	561.34	0.31826E 02	0.49624E 01	0.17534E-01	0.25289E-01	0.29138E 01	0.25604E 01	0.45000E-00	0.88463E 00
126	560.69	0.28842E 02	0.45542E 01	0.16083E-01	0.23196E-01	0.26742E 01	0.23497E 01	0.61000E 00	0.88512E 00
127	542.53	0.14338E 02	0.22521E 01	0.78316E-02	0.11296E-01	0.13224E 01	0.11620E 01	0.70000E 00	0.87247E 00
128	534.66	0.64379E 01	0.10100E 01	0.34891E-02	0.50324E-02	0.59303E 00	0.52109E 00	0.75000E 00	0.88519E 00
129	556.71	0.24455E 02	0.38840E 01	0.13669E-01	0.19716E-01	0.22806E 01	0.20039E 01	0.70000E 00	0.91043E 00
130	558.77	0.26641E 02	0.42360E 01	0.14934E-01	0.21540E-01	0.24873E 01	0.21856E 01	0.80000E 00	0.98224E 00
131	538.87	0.98016E 01	0.14624E 01	0.50698E-02	0.73123E-02	0.85868E 00	0.75451E 00	0.90000E 00	0.97202E 00
132	556.29	0.23139E 02	0.34978E 01	0.12306E-01	0.17749E-01	0.20538E 01	0.18047E 01	0.90000E 00	0.95342E 00
133	557.19	0.22358E 02	0.33644E 01	0.11845E-01	0.17085E-01	0.19755E 01	0.17359E 01	0.96000E 00	0.93158E 00
134	556.30	0.20718E 02	0.31213E 01	0.10981E-01	0.15839E-01	0.18328E 01	0.16105E 01	0.10000E 01	0.92480E 00
135	539.49	0.14462E 02	0.22567E 01	0.78277E-02	0.11290E-01	0.13251E 01	0.11643E 01	0.70000E-02	0.
136	919.73	0.12458E-01	0.23024E-02	0.11774E-04	0.16981E-04	0.13520E-02	0.11879E-02	0.70000E-02	0.
137	538.65	0.15041E 02	0.23383E 01	0.81051E-02	0.11690E-01	0.13730E 01	0.12065E 01	0.39000E-01	0.90632E 00
138	537.99	0.14869E 02	0.22995E 01	0.79663E-02	0.11490E-01	0.13502E 01	0.11864E 01	0.78000E-01	0.
139	537.17	0.14766E 02	0.22715E 01	0.78638E-02	0.11342E-01	0.13338E 01	0.11720E 01	0.11700E-00	0.
140	536.95	0.14847E 02	0.22761E 01	0.78784E-02	0.11363E-01	0.13365E 01	0.11744E 01	0.78000E-01	0.89869E 00
141	571.80	0.44849E 02	0.48268E 01	0.17208E-01	0.24820E-01	0.28342E 01	0.24904E 01	-0.	0.
142	570.50	0.42310E 02	0.45502E 01	0.16204E-01	0.23372E-01	0.26718E 01	0.23477E 01	-0.	0.
143	536.40	0.13874E 02	0.21159E 01	0.73203E-02	0.10558E-01	0.12424E 01	0.10917E 01	0.78000E-01	0.87376E 00
144	536.67	0.13167E 02	0.20116E 01	0.69612E-02	0.10040E-01	0.11812E 01	0.10379E 01	0.70000E-02	0.85944E 00
145	537.49	0.12991E 02	0.19759E 01	0.68421E-02	0.98686E-02	0.11602E 01	0.10195E 01	0.70000E-02	0.91693E 00
146	536.43	0.13505E 02	0.20631E 01	0.71379E-02	0.10295E-01	0.12114E 01	0.10645E 01	0.39000E-01	0.85563E 00
147	538.44	0.13902E 02	0.21227E 01	0.73563E-02	0.10610E-01	0.12464E 01	0.10952E 01	0.78000E-01	0.
148	538.69	0.14090E 02	0.21693E 01	0.75195E-02	0.10846E-01	0.12738E 01	0.11193E 01	0.11700E-00	0.
149	559.03	0.29696E 02	0.47754E 01	0.16840E-01	0.24289E-01	0.28041E 01	0.24639E 01	0.70000E-02	0.95567E 00
150	559.49	0.29763E 02	0.48101E 01	0.16969E-01	0.24474E-01	0.28244E 01	0.24818E 01	0.70000E-02	0.93656E 00
151	556.47	0.29088E 02	0.46931E 01	0.16514E-01	0.23818E-01	0.27557E 01	0.24214E 01	0.70000E-02	0.92262E 00
152	559.00	0.31773E 02	0.49476E 01	0.17447E-01	0.25164E-01	0.29052E 01	0.25527E 01	0.39000E-01	0.92638E 00

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
17	1	4.38	154.38	0.03	-0.	3	C55	3.15	2	10.04	213.40	1675.60	154	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.820680E 02	0.471927E-02	0.445662E 04	0.482461E-05	0.664751E-07	0.325630E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726284E 00	0.170012E 01	0.193527E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	559.77	0.18290E 02	0.28632E 01	0.10105E-01	0.14607E-01	0.16841E 01	0.14795E 01	0.10000E 01	0.93740E 00
198	561.26	0.17369E 02	0.26329E 01	0.93038E-02	0.13449E-01	0.15486E 01	0.13605E 01	0.12000E 01	0.95836E 00
199	532.77	0.84852E 01	0.13340E 01	0.46019E-02	0.66522E-02	0.78463E 00	0.68929E 00	0.13000E 01	0.97679E 00
200	514.60	0.10327E 01	0.14864E-00	0.50514E-03	0.73020E-03	0.87429E-01	0.76806E-01	0.11890E 01	0.11954E 01
201	525.11	0.74494E 00	0.12237E-00	0.41947E-03	0.60636E-03	0.71977E-01	0.63231E-01	0.14540E 01	0.97050E 00
202	527.25	0.87740E 00	0.14321E-00	0.49178E-03	0.71089E-03	0.84234E-01	0.73999E-01	0.17040E 01	0.89116E 00
203	533.05	0.95792E 00	0.15686E-00	0.54128E-03	0.78243E-03	0.92267E-01	0.81055E-01	0.20410E 01	0.12346E 01
204	533.48	0.67896E 00	0.51671E-01	0.17836E-03	0.25783E-03	0.30393E-01	0.26700E-01	0.20700E 01	0.
205	536.79	0.20758E 01	0.18081E-00	0.62586E-03	0.90469E-03	0.10635E-00	0.93429E-01	0.21880E 01	0.22383E 02
206	535.79	0.14660E 01	0.24043E-00	0.83153E-03	0.12020E-02	0.14142E-00	0.12424E-00	0.22480E 01	0.16290E 01
207	533.49	0.10218E 01	0.16455E-00	0.56801E-03	0.82108E-03	0.96788E-01	0.85027E-01	0.20700E 01	0.12408E 01
208	532.97	0.70182E 00	0.62195E-01	0.21460E-03	0.31020E-03	0.36583E-01	0.32137E-01	0.20700E 01	0.17319E 01
209	537.25	0.24665E 01	0.19840E-00	0.68701E-03	0.99309E-03	0.11670E-00	0.10252E-00	0.21880E 01	0.58207E 01
210	532.92	0.10722E 01	0.17691E-00	0.61039E-03	0.88233E-03	0.10406E-00	0.91414E-01	0.20700E 01	0.18140E 01
211	535.46	0.18582E 01	0.30703E-00	0.10616E-02	0.15346E-02	0.18060E-00	0.15865E-00	0.21880E 01	0.23620E 01
212	535.28	0.12618E 01	0.20594E-00	0.71194E-03	0.10291E-02	0.12113E-00	0.10641E-00	0.22390E 01	0.13635E 01
213	534.01	0.96883E 00	0.15801E-00	0.54566E-03	0.78876E-03	0.92939E-01	0.81646E-01	0.21880E 01	0.10674E 01
214	535.45	0.99948E 00	0.16515E-00	0.57100E-03	0.82540E-03	0.97138E-01	0.85335E-01	0.22480E 01	0.11063E 01
215	525.15	0.63896E 00	0.95233E-01	0.32646E-03	0.47191E-03	0.56015E-01	0.49209E-01	0.11650E 01	0.17258E 01
216	526.36	0.45039E-00	0.37514E-01	0.12873E-03	0.18608E-03	0.22065E-01	0.19384E-01	0.12050E 01	0.
217	527.02	0.64987E 00	0.94201E-01	0.32343E-03	0.46752E-03	0.55408E-01	0.48676E-01	0.12120E 01	0.11336E 01
218	530.86	0.96883E 00	0.14147E-00	0.48726E-03	0.70435E-03	0.83211E-01	0.73100E-01	0.11890E 01	0.
219	528.19	0.61091E 00	0.10184E-00	0.35000E-03	0.50594E-03	0.59903E-01	0.52624E-01	0.14540E 01	0.98520E 00
220	529.91	0.72883E 00	0.12625E-00	0.43452E-03	0.62811E-03	0.74262E-01	0.65238E-01	0.17040E 01	0.12120E 01
221	532.72	0.95636E 00	0.15898E-00	0.54842E-03	0.79276E-03	0.93510E-01	0.82148E-01	0.20410E 01	0.12230E 01
222	536.09	0.10140E 01	0.17067E-00	0.59040E-03	0.85344E-03	0.10039E-00	0.88188E-01	0.22480E 01	0.11694E 01
223	527.28	0.60000E 00	0.89534E-01	0.30747E-03	0.44446E-03	0.52664E-01	0.46264E-01	0.11650E 01	0.12098E 01
224	528.02	0.43169E-00	0.35990E-01	0.12367E-03	0.17877E-03	0.21169E-01	0.18597E-01	0.12050E 01	0.14519E 01
225	528.89	0.64883E 00	0.94150E-01	0.32375E-03	0.46800E-03	0.55378E-01	0.48649E-01	0.12120E 01	0.12406E 01
226	532.90	0.51584E 00	0.86535E-01	0.29856E-03	0.43158E-03	0.50899E-01	0.44714E-01	0.14540E 01	0.80266E 00
227	533.53	0.72052E 00	0.11603E-00	0.40054E-03	0.57900E-03	0.68250E-01	0.59957E-01	0.17040E 01	0.10698E 01
228	534.12	0.10888E 01	0.17896E-00	0.61806E-03	0.89342E-03	0.10526E-00	0.92471E-01	0.18780E 01	0.12428E 01
229	536.22	0.11106E 01	0.18360E-00	0.63519E-03	0.91819E-03	0.10799E-00	0.94868E-01	0.21880E 01	0.10797E 01
230	532.94	0.76052E 00	0.11194E-00	0.38624E-03	0.55832E-03	0.65845E-01	0.57844E-01	0.11890E 01	0.11938E 01
231	533.91	0.41091E-00	0.72579E-01	0.25062E-03	0.36228E-03	0.42691E-01	0.37503E-01	0.14540E 01	0.69734E 00
232	534.34	0.69922E 00	0.11406E-00	0.39399E-03	0.56953E-03	0.67088E-01	0.58936E-01	0.16130E 01	0.10241E 01
233	534.64	0.62701E 00	0.10308E-00	0.35617E-03	0.51486E-03	0.60633E-01	0.53266E-01	0.17040E 01	0.86542E 00
234	535.00	0.87844E 00	0.14511E-00	0.50153E-03	0.72498E-03	0.85353E-01	0.74982E-01	0.18780E 01	0.11324E 01
235	535.81	0.61299E 00	0.10115E-00	0.34984E-03	0.50571E-03	0.59497E-01	0.52268E-01	0.14540E 01	0.93346E 00
236	535.48	0.76000E 00	0.12405E-00	0.42892E-03	0.62002E-03	0.72967E-01	0.64101E-01	0.17040E 01	0.10218E 01
237	537.90	0.12675E 01	0.20973E-00	0.72662E-03	0.10504E-02	0.12336E-00	0.10837E-00	0.21880E 01	0.14181E 01
238	538.39	0.11148E 01	0.99096E-01	0.34347E-03	0.49650E-03	0.58288E-01	0.51205E-01	0.20700E 01	0.29712E 01
239	535.44	0.84468E 00	0.12302E-00	0.42535E-03	0.61486E-03	0.72361E-01	0.63569E-01	0.11890E 01	0.12839E 01
240	537.44	0.72935E 00	0.12222E-00	0.42330E-03	0.61189E-03	0.71892E-01	0.63156E-01	0.14540E 01	0.10144E 01
241	536.63	0.88312E 00	0.14491E-00	0.50151E-03	0.72495E-03	0.85234E-01	0.74877E-01	0.17040E 01	0.11366E 01
242	536.96	0.93039E 00	0.15386E-00	0.53265E-03	0.76996E-03	0.90500E-01	0.79504E-01	0.18780E 01	0.11029E 01
243	538.50	0.16712E 01	0.27661E-00	0.95882E-03	0.13860E-02	0.16270E-00	0.14293E-00	0.20410E 01	0.21357E 01
244	538.12	0.10535E 01	0.94957E-01	0.32905E-03	0.47565E-03	0.55853E-01	0.49067E-01	0.20700E 01	0.
245	539.93	0.16374E 01	0.13397E-00	0.46494E-03	0.67209E-03	0.78800E-01	0.69225E-01	0.21870E 01	0.22136E 01
246	539.11	0.14416E 01	0.24304E-00	0.84288E-03	0.12184E-02	0.14295E-00	0.12558E-00	0.22100E 01	0.16894E 01
247	538.64	0.69195E 00	0.11315E-00	0.39225E-03	0.56700E-03	0.66551E-01	0.58465E-01	0.14540E 01	0.96520E 00
248	538.17	0.11226E 01	0.18577E-00	0.64378E-03	0.93060E-03	0.10927E-00	0.95994E-01	0.17040E 01	0.15172E 01
249	538.08	0.11766E 01	0.98655E-01	0.34185E-03	0.49415E-03	0.58028E-01	0.50977E-01	0.18780E 01	0.52490E 01
250	540.43	0.17657E 01	0.14451E-00	0.50173E-03	0.72526E-03	0.84999E-01	0.74671E-01	0.21880E 01	0.45577E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	558.01	0.31262E 02	0.48654E 01	0.17142E-01	0.24725E-01	0.28569E 01	0.25103E 01	0.39000E-01	0.
154	556.98	0.30869E 02	0.47700E 01	0.16792E-01	0.24219E-01	0.28009E 01	0.24611E 01	0.78000E-01	0.92081E 00
155	556.44	0.30283E 02	0.48858E 01	0.17191E-01	0.24796E-01	0.28689E 01	0.25209E 01	0.39000E-01	0.
156	553.79	0.28546E 02	0.45845E 01	0.16095E-01	0.23214E-01	0.26919E 01	0.23654E 01	0.39000E-01	0.
157	552.92	0.27374E 02	0.44078E 01	0.15463E-01	0.22303E-01	0.25882E 01	0.22742E 01	0.78000E-01	0.92134E 00
158	551.50	0.28631E 02	0.46211E 01	0.16192E-01	0.23354E-01	0.27135E 01	0.23843E 01	0.39000E-01	0.
159	552.07	0.27571E 02	0.44516E 01	0.15605E-01	0.22508E-01	0.26139E 01	0.22968E 01	0.78000E-01	0.
160	557.01	0.28631E 02	0.46208E 01	0.16267E-01	0.23462E-01	0.27133E 01	0.23841E 01	0.39000E-01	0.
161	553.24	0.22716E 02	0.35721E 01	0.12535E-01	0.18079E-01	0.20975E 01	0.18430E 01	0.43000E-01	0.90191E 00
162	556.21	0.24634E 02	0.38927E 01	0.13694E-01	0.19751E-01	0.22857E 01	0.20084E 01	0.43000E-01	0.97593E 00
163	556.00	0.22882E 02	0.36212E 01	0.12737E-01	0.18370E-01	0.21263E 01	0.18683E 01	0.85000E-01	0.92792E 00
164	556.26	0.21975E 02	0.34614E 01	0.12177E-01	0.17564E-01	0.20325E 01	0.17859E 01	0.12800E-00	0.91042E 00
165	556.88	0.27314E 02	0.43177E 01	0.15198E-01	0.21920E-01	0.25353E 01	0.22277E 01	0.43000E-01	0.
166	556.19	0.25771E 02	0.40591E 01	0.14279E-01	0.20596E-01	0.23835E 01	0.20943E 01	0.85000E-01	0.10469E 01
167	563.11	0.35936E 02	0.56820E 01	0.20107E-01	0.29001E-01	0.33364E 01	0.29316E 01	0.43000E-01	0.
168	558.57	0.24174E 02	0.38557E 01	0.13591E-01	0.19603E-01	0.22640E 01	0.19893E 01	0.12800E-00	0.13434E 01
169	562.98	0.29665E 02	0.47280E 01	0.16729E-01	0.24129E-01	0.27762E 01	0.24394E 01	0.85000E-01	0.11982E 01
170	561.33	0.27353E 02	0.43345E 01	0.15315E-01	0.22089E-01	0.25452E 01	0.22364E 01	0.12800E-00	0.10922E 01
171	560.98	0.30853E 02	0.48725E 01	0.17211E-01	0.24824E-01	0.28611E 01	0.25140E 01	0.85000E-01	0.12267E 01
172	572.65	0.38928E 02	0.62174E 01	0.22182E-01	0.31994E-01	0.36508E 01	0.32079E 01	0.43000E-01	0.
173	564.11	0.29429E 02	0.46932E 01	0.16622E-01	0.23974E-01	0.27558E 01	0.24214E 01	0.12800E-00	0.11565E 01
174	565.19	0.33837E 02	0.53735E 01	0.19049E-01	0.27475E-01	0.31552E 01	0.27725E 01	0.85000E-01	0.
175	571.45	0.36210E 02	0.57516E 01	0.20499E-01	0.29567E-01	0.33773E 01	0.29676E 01	0.43000E-01	0.13662E 01
176	571.51	0.35895E 02	0.57018E 01	0.20323E-01	0.29312E-01	0.33480E 01	0.29419E 01	0.43000E-01	0.13478E 01
177	562.17	0.27017E 02	0.42901E 01	0.15169E-01	0.21879E-01	0.25191E 01	0.22135E 01	0.12800E-00	0.10204E 01
178	565.50	0.30533E 02	0.48497E 01	0.17197E-01	0.24803E-01	0.28477E 01	0.25022E 01	0.85000E-01	0.11503E 01
179	565.63	0.28641E 02	0.45494E 01	0.16133E-01	0.23270E-01	0.26713E 01	0.23473E 01	0.70000E-02	0.10469E 01
180	551.42	0.21882E 02	0.34652E 01	0.12141E-01	0.17511E-01	0.20347E 01	0.17879E 01	0.70000E-02	0.
181	554.30	0.23685E 02	0.37568E 01	0.13195E-01	0.19031E-01	0.22059E 01	0.19383E 01	0.70000E-02	0.86528E 00
182	553.33	0.24073E 02	0.38284E 01	0.13435E-01	0.19378E-01	0.22480E 01	0.19753E 01	0.70000E-02	0.
183	559.02	0.23211E 02	0.36794E 01	0.12975E-01	0.18714E-01	0.21605E 01	0.18984E 01	0.32000E-01	0.86668E 00
184	562.55	0.25095E 02	0.40113E 01	0.14188E-01	0.20464E-01	0.23554E 01	0.20697E 01	0.32000E-01	0.86549E 00
185	551.95	0.20601E 02	0.32736E 01	0.11475E-01	0.16551E-01	0.19222E 01	0.16890E 01	0.64000E-01	0.87623E 00
186	559.88	0.25616E 02	0.40756E 01	0.14382E-01	0.20744E-01	0.23931E 01	0.21028E 01	0.64000E-01	0.87143E 00
187	560.92	0.24519E 02	0.39158E 01	0.13831E-01	0.19949E-01	0.22993E 01	0.20204E 01	0.70000E-02	0.85563E 00
188	559.57	0.24477E 02	0.39684E 01	0.14001E-01	0.20194E-01	0.23302E 01	0.20475E 01	0.70000E-02	0.88701E 00
189	537.49	0.34790E 01	0.56850E 00	0.19686E-02	0.28394E-02	0.33382E-00	0.29332E-00	0.10600E 01	0.93073E 00
190	536.11	0.20327E 01	0.33855E-00	0.11710E-02	0.16890E-02	0.19879E-00	0.17468E-00	0.10840E 01	0.88656E 00
191	535.68	0.11449E 01	0.19168E-00	0.66276E-03	0.95591E-03	0.11255E-00	0.98897E-01	0.11080E 01	0.10443E 01
192	534.99	0.12073E 01	0.20095E-00	0.69440E-03	0.10015E-02	0.11799E-00	0.10368E-00	0.11080E 01	0.94157E 00
193	536.41	0.14327E 01	0.23506E-00	0.81325E-03	0.11730E-02	0.13803E-00	0.12128E-00	0.16580E 01	0.97285E 00
194	537.01	0.13558E 01	0.22150E-00	0.76672E-03	0.11059E-02	0.13006E-00	0.11428E-00	0.11700E 01	0.10542E 01
195	536.77	0.14919E 01	0.24483E-00	0.84730E-03	0.12221E-02	0.14376E-00	0.12632E-00	0.16740E 01	0.
196	536.63	0.14000E 01	0.22867E-00	0.79127E-03	0.11413E-02	0.13427E-00	0.11798E-00	0.16950E 01	0.96298E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	539.16	0.72468E 00	0.12218E-00	0.42375E-03	0.61255E-03	0.71865E-01	0.63133E-01	0.14540E 01	0.89059E 00
252	538.03	0.85039E 00	0.14256E-00	0.49395E-03	0.71402E-03	0.83850E-01	0.73662E-01	0.16130E 01	0.10617E 01
253	541.08	0.19787E 01	0.17446E-00	0.60605E-03	0.87606E-03	0.10262E-00	0.90147E-01	0.17060E 01	0.13127E 03
254	539.04	0.13953E 01	0.23102E-00	0.80116E-03	0.11581E-02	0.13588E-00	0.11937E-00	0.21880E 01	0.12041E 01
255	538.71	0.12062E 01	0.11125E-00	0.38569E-03	0.55753E-03	0.65435E-01	0.57484E-01	0.16580E 01	0.31250E 01
256	538.55	0.13174E 01	0.11049E-00	0.38300E-03	0.55364E-03	0.64988E-01	0.57091E-01	0.17920E 01	0.68191E 01
257	534.55	0.13169E 01	0.22079E-00	0.76281E-03	0.11027E-02	0.12987E-00	0.11409E-00	0.10840E 01	0.10314E 01
258	538.72	0.75948E 00	0.12897E-00	0.44714E-03	0.64636E-03	0.75860E-01	0.66642E-01	0.14540E 01	0.10133E 01
259	538.09	0.88987E 00	0.14725E-00	0.51026E-03	0.73760E-03	0.86614E-01	0.76090E-01	0.16130E 01	0.11336E 01
260	538.66	0.12239E 01	0.19951E-00	0.69168E-03	0.99984E-03	0.11735E-00	0.10309E-00	0.17040E 01	0.17244E 01
261	538.44	0.11517E 01	0.18975E-00	0.65770E-03	0.95072E-03	0.11161E-00	0.98047E-01	0.18780E 01	0.16068E 01
262	538.54	0.11268E 01	0.18990E-00	0.65829E-03	0.95157E-03	0.11170E-00	0.98127E-01	0.20410E 01	0.11476E 01
263	669.02	-0.10125E 01	-0.18355E-00	-0.71457E-03	-0.10329E-02	-0.10797E-00	-0.94846E-01	0.14540E 01	0.
264	621.10	-0.27485E 03	-0.47373E 02	-0.17643E-00	-0.25504E-00	-0.27865E 02	-0.24479E 02	0.16130E 01	0.
265	538.83	0.98909E 00	0.15976E-00	0.55394E-03	0.80074E-03	0.93970E-01	0.82552E-01	0.17040E 01	0.11098E 01
266	538.23	0.10810E 01	0.17809E-00	0.61718E-03	0.89215E-03	0.10475E-00	0.92022E-01	0.18780E 01	0.12648E 01
267	539.00	0.11569E 01	0.19445E-00	0.67431E-03	0.97473E-03	0.11437E-00	0.10048E-00	0.20410E 01	0.10873E 01
268	538.50	0.84727E 00	0.13960E-00	0.48390E-03	0.69949E-03	0.82111E-01	0.72134E-01	0.16130E 01	0.96596E 00
269	539.13	0.98649E 00	0.15937E-00	0.55272E-03	0.79897E-03	0.93739E-01	0.82349E-01	0.18280E 01	0.10461E 01
270	538.89	0.10696E 01	0.17546E-00	0.60842E-03	0.87948E-03	0.10321E-00	0.90666E-01	0.18780E 01	0.11539E 01
271	539.41	0.11870E 01	0.19914E-00	0.69082E-03	0.99860E-03	0.11713E-00	0.10290E-00	0.20410E 01	0.11291E 01
272	538.24	0.53558E 00	0.90521E-01	0.31371E-03	0.45347E-03	0.53244E-01	0.46774E-01	0.16130E 01	0.65743E 00
273	539.29	0.98545E 00	0.16368E-00	0.56774E-03	0.82069E-03	0.96274E-01	0.84576E-01	0.17200E 01	0.12448E 01
274	538.87	0.72675E 00	0.11702E-00	0.40577E-03	0.58656E-03	0.68833E-01	0.60469E-01	0.18280E 01	0.80277E 00
275	538.99	0.10135E 01	0.16652E-00	0.57747E-03	0.83475E-03	0.97948E-01	0.86047E-01	0.18780E 01	0.11152E 01
276	919.73	0.12468E-01	0.25222E-02	0.12901E-04	0.18648E-04	0.14835E-02	0.13033E-02	0.20600E 01	0.
277	538.97	0.83377E 00	0.69943E-01	0.24254E-03	0.35060E-03	0.41140E-01	0.36141E-01	0.21000E 01	0.10749E 01
278	919.73	0.12468E-01	0.12615E-02	0.64522E-05	0.93269E-05	0.74199E-03	0.65184E-03	0.21870E 01	0.
279	540.10	0.13475E 01	0.22731E-00	0.78900E-03	0.11405E-02	0.13370E-00	0.11746E-00	0.21950E 01	0.12071E 01
280	539.07	0.99325E 00	0.16570E-00	0.57465E-03	0.83068E-03	0.97465E-01	0.85622E-01	0.18780E 01	0.11156E 01
281	539.64	0.11164E 01	0.18827E-00	0.65322E-03	0.94425E-03	0.11074E-00	0.97282E-01	0.20600E 01	0.10740E 01
282	538.67	0.95688E 00	0.15575E-00	0.53995E-03	0.78051E-03	0.91610E-01	0.80478E-01	0.18280E 01	0.11103E 01
283	539.05	0.10816E 01	0.18141E-00	0.62913E-03	0.90942E-03	0.10671E-00	0.93740E-01	0.20600E 01	0.10539E 01
284	538.11	0.10358E 01	0.16724E-00	0.57954E-03	0.83774E-03	0.98372E-01	0.86419E-01	0.17200E 01	0.13095E 01
285	538.93	0.11725E 01	0.19264E-00	0.66798E-03	0.96559E-03	0.11331E-00	0.99539E-01	0.18780E 01	0.15438E 01
286	538.04	0.99792E 00	0.92001E-01	0.31878E-03	0.46081E-03	0.54114E-01	0.47539E-01	0.16580E 01	0.21569E 01
287	919.73	0.12468E-01	0.12615E-02	0.64522E-05	0.93269E-05	0.74199E-03	0.65184E-03	0.17920E 01	0.
288	537.15	0.89195E 00	0.14640E-00	0.50690E-03	0.73273E-03	0.86111E-01	0.75648E-01	0.16130E 01	0.10997E 01
289	538.80	0.15216E 01	0.12763E-00	0.44252E-03	0.63967E-03	0.75070E-01	0.65948E-01	0.17060E 01	0.
290	537.32	0.10852E 01	0.90950E-01	0.31495E-03	0.45528E-03	0.53496E-01	0.46996E-01	0.18780E 01	0.60136E 01
291	536.56	0.11969E 01	0.19548E-00	0.67651E-03	0.97792E-03	0.11498E-00	0.10101E-00	0.17200E 01	0.18838E 01
292	536.46	0.79844E 00	0.13702E-00	0.47415E-03	0.68539E-03	0.80594E-01	0.70801E-01	0.14400E 01	0.10582E 01
293	535.52	0.87013E 00	0.14028E-00	0.48506E-03	0.70117E-03	0.82514E-01	0.72488E-01	0.17200E 01	0.10865E 01
294	535.58	0.92779E 00	0.15308E-00	0.52933E-03	0.76517E-03	0.90040E-01	0.79100E-01	0.18780E 01	0.10374E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
11	1	6.39	153.99	51.48	-5.00	2	C55	3.00	2	10.04	215.40	1673.70	148	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.819598E 02	0.476275E-02	0.445394E 04	0.487550E-05	0.663875E-07	0.329299E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726212E 00	0.171178E 01	0.194683E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	534.60	0.18400E 01	0.29880E-00	0.10342E-02	0.14803E-02	0.17456E-00	0.15348E-00	-0.10600E 01	0.78582E 00
100	535.66	0.94597E 00	0.15837E-00	0.54864E-03	0.78526E-03	0.92516E-01	0.81347E-01	-0.10840E 01	0.76774E 00
101	536.44	0.77403E 00	0.12680E-00	0.43956E-03	0.62914E-03	0.74075E-01	0.65131E-01	-0.11080E 01	0.83438E 00
102	536.07	0.85351E 00	0.13936E-00	0.48295E-03	0.69125E-03	0.81413E-01	0.71584E-01	-0.11080E 01	0.84374E 00
103	535.31	0.12322E 01	0.20625E-00	0.71430E-03	0.10224E-02	0.12049E-00	0.10594E-00	-0.10800E 01	0.82573E 00
104	560.53	0.31243E 02	0.50044E 01	0.17705E-01	0.25341E-01	0.29235E 01	0.25705E 01	0.85000E 00	0.
105	564.67	0.34293E 02	0.52081E 01	0.18491E-01	0.26467E-01	0.30425E 01	0.26752E 01	0.94000E 00	0.99516E 00
106	566.32	0.35154E 02	0.52987E 01	0.18840E-01	0.26965E-01	0.30954E 01	0.27217E 01	0.96000E 00	0.99409E 00
107	562.11	0.32885E 02	0.49452E 01	0.17519E-01	0.25075E-01	0.28889E 01	0.25401E 01	0.98000E 00	0.99443E 00
108	562.58	0.30330E 02	0.45854E 01	0.16251E-01	0.23260E-01	0.26787E 01	0.23553E 01	0.10000E 01	0.99570E 00
109	555.99	0.23715E 02	0.35843E 01	0.12632E-01	0.18080E-01	0.20939E 01	0.18411E 01	0.10200E 01	0.97495E 00
110	567.74	0.33736E 02	0.51321E 01	0.18270E-01	0.26149E-01	0.29981E 01	0.26361E 01	0.80000E-01	0.10203E 01
111	564.91	0.34261E 02	0.51601E 01	0.18325E-01	0.26228E-01	0.30144E 01	0.26505E 01	0.10000E-00	0.10062E 01
112	570.90	0.35255E 02	0.53544E 01	0.19113E-01	0.27356E-01	0.31280E 01	0.27503E 01	0.12000E-00	0.99268E 00
113	565.81	0.34211E 02	0.51989E 01	0.18477E-01	0.26446E-01	0.30371E 01	0.26704E 01	0.14000E-00	0.98735E 00
114	563.30	0.33114E 02	0.50252E 01	0.17821E-01	0.25507E-01	0.29356E 01	0.25812E 01	0.80000E-01	0.
115	564.67	0.33476E 02	0.50668E 01	0.17990E-01	0.25749E-01	0.29600E 01	0.26026E 01	0.10000E-00	0.99188E 00
116	565.78	0.34260E 02	0.52237E 01	0.18564E-01	0.26571E-01	0.30516E 01	0.26832E 01	0.12000E-00	0.98885E 00
117	571.69	0.35528E 02	0.54165E 01	0.19348E-01	0.27692E-01	0.31642E 01	0.27822E 01	0.14000E-00	0.10041E 01
118	567.18	0.32888E 02	0.50436E 01	0.17946E-01	0.25686E-01	0.29464E 01	0.25907E 01	0.10000E-00	0.10073E 01
119	568.08	0.33240E 02	0.50746E 01	0.18070E-01	0.25864E-01	0.29645E 01	0.26066E 01	0.15000E-00	0.80529E 00
120	563.09	0.30554E 02	0.46596E 01	0.16521E-01	0.23647E-01	0.27220E 01	0.23934E 01	0.20000E-00	0.94269E 00
121	570.00	0.33964E 02	0.52166E 01	0.18607E-01	0.26632E-01	0.30475E 01	0.26796E 01	0.25000E-00	0.98308E 00
122	567.84	0.33000E 02	0.50627E 01	0.18024E-01	0.25798E-01	0.29575E 01	0.26005E 01	0.30000E-00	0.98653E 00
123	563.68	0.32004E 02	0.49231E 01	0.17465E-01	0.24997E-01	0.28760E 01	0.25288E 01	0.35000E-00	0.92903E 00
124	567.75	0.34330E 02	0.53278E 01	0.18966E-01	0.27147E-01	0.31124E 01	0.27366E 01	0.38000E-00	0.98637E 00
125	572.59	0.34991E 02	0.54897E 01	0.19625E-01	0.28089E-01	0.32070E 01	0.28198E 01	0.45000E-00	0.95718E 00
126	572.33	0.32068E 02	0.50962E 01	0.18214E-01	0.26069E-01	0.29771E 01	0.26177E 01	0.61000E 00	0.96719E 00
127	547.04	0.18279E 02	0.28784E 01	0.10067E-01	0.14410E-01	0.16815E 01	0.14785E 01	0.70000E 00	0.94041E 00
128	536.70	0.87210E 01	0.13697E 01	0.47492E-02	0.67975E-02	0.80016E 00	0.70356E 00	0.75000E 00	0.89999E 00
129	555.73	0.27109E 02	0.43032E 01	0.15162E-01	0.21701E-01	0.25138E 01	0.22103E 01	0.70000E 00	0.97155E 00
130	553.95	0.29262E 02	0.46403E 01	0.16325E-01	0.23366E-01	0.27108E 01	0.23835E 01	0.80000E 00	0.10211E 01
131	535.52	0.12537E 02	0.18669E 01	0.64668E-02	0.92560E-02	0.10906E 01	0.95895E 00	0.90000E 00	0.90714E 00
132	545.74	0.26055E 02	0.39155E 01	0.13680E-01	0.19580E-01	0.22874E 01	0.20112E 01	0.90000E 00	0.99804E 00
133	544.74	0.25968E 02	0.38806E 01	0.13546E-01	0.19389E-01	0.22670E 01	0.19933E 01	0.96000E 00	0.95431E 00
134	544.22	0.25042E 02	0.37475E 01	0.13076E-01	0.18716E-01	0.21892E 01	0.19249E 01	0.10000E 01	0.93454E 00
135	534.64	0.14832E 02	0.23081E 01	0.79892E-02	0.11435E-01	0.13484E 01	0.11856E 01	0.70000E-02	0.
136	919.73	0.12458E-01	0.23025E-02	0.11808E-04	0.16901E-04	0.13451E-02	0.11827E-02	0.70000E-02	0.
137	533.89	0.15085E 02	0.23390E 01	0.80910E-02	0.11581E-01	0.13664E 01	0.12014E 01	0.39000E-01	0.87870E 00
138	533.72	0.14867E 02	0.22937E 01	0.79333E-02	0.11355E-01	0.13400E 01	0.11782E 01	0.78000E-01	0.
139	533.39	0.14405E 02	0.22112E 01	0.76456E-02	0.10943E-01	0.12917E 01	0.11358E 01	0.11700E-00	0.
140	532.88	0.14554E 02	0.22262E 01	0.76943E-02	0.11013E-01	0.13005E 01	0.11435E 01	0.78000E-01	0.85964E 00
141	565.00	0.34649E 02	0.37151E 01	0.13194E-01	0.18885E-01	0.21703E 01	0.19083E 01	-0.	0.
142	565.38	0.35320E 02	0.37879E 01	0.13457E-01	0.19261E-01	0.22128E 01	0.19457E 01	-0.	0.
143	542.48	0.12519E 02	0.19158E 01	0.66749E-02	0.95539E-02	0.11192E 01	0.98405E 00	0.78000E-01	0.80597E 00
144	543.58	0.11859E 02	0.18189E 01	0.63433E-02	0.90792E-02	0.10626E 01	0.93430E 00	0.70000E-02	0.78638E 00
145	544.21	0.11629E 02	0.17754E 01	0.61948E-02	0.88666E-02	0.10372E 01	0.91194E 00	0.70000E-02	0.84055E 00
146	543.25	0.12470E 02	0.19122E 01	0.66668E-02	0.95422E-02	0.11171E 01	0.98221E 00	0.39000E-01	0.76719E 00
147	544.62	0.12965E 02	0.19865E 01	0.69337E-02	0.99242E-02	0.11605E 01	0.10204E 01	0.78000E-01	0.
148	543.32	0.12881E 02	0.19884E 01	0.69327E-02	0.99228E-02	0.11616E 01	0.10213E 01	0.11700E-00	0.
149	556.20	0.27406E 02	0.44002E 01	0.15510E-01	0.22200E-01	0.25705E 01	0.22602E 01	0.70000E-02	0.10390E 01
150	557.15	0.27479E 02	0.44352E 01	0.15646E-01	0.22394E-01	0.25910E 01	0.22782E 01	0.70000E-02	0.10240E 01
151	555.25	0.26698E 02	0.43047E 01	0.15161E-01	0.21700E-01	0.25147E 01	0.22111E 01	0.70000E-02	0.10115E 01
152	557.54	0.29138E 02	0.45337E 01	0.15999E-01	0.22899E-01	0.26485E 01	0.23287E 01	0.39000E-01	0.10249E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	556.33	0.28769E 02	0.44732E 01	0.15769E-01	0.22571E-01	0.26132E 01	0.22977E 01	0.39000E-01	0.
154	555.37	0.28531E 02	0.44049E 01	0.15516E-01	0.22208E-01	0.25733E 01	0.22626E 01	0.78000E-01	0.10301E 01
155	554.06	0.27850E 02	0.44875E 01	0.15789E-01	0.22599E-01	0.26215E 01	0.23050E 01	0.39000E-01	0.
156	550.62	0.26372E 02	0.42279E 01	0.14832E-01	0.21229E-01	0.24699E 01	0.21717E 01	0.39000E-01	0.
157	548.86	0.25172E 02	0.40442E 01	0.14167E-01	0.20277E-01	0.23625E 01	0.20773E 01	0.78000E-01	0.10242E 01
158	548.82	0.26206E 02	0.42235E 01	0.14794E-01	0.21175E-01	0.24673E 01	0.21694E 01	0.39000E-01	0.
159	548.15	0.25451E 02	0.41003E 01	0.14355E-01	0.20546E-01	0.23953E 01	0.21061E 01	0.78000E-01	0.
160	553.27	0.26254E 02	0.42283E 01	0.14867E-01	0.21279E-01	0.24701E 01	0.21719E 01	0.39000E-01	0.
161	558.38	0.25535E 02	0.40269E 01	0.14220E-01	0.20354E-01	0.23524E 01	0.20684E 01	0.43000E-01	0.10184E 01
162	561.57	0.28643E 02	0.45395E 01	0.16075E-01	0.23008E-01	0.26519E 01	0.23317E 01	0.43000E-01	0.11427E 01
163	554.84	0.25849E 02	0.40880E 01	0.14393E-01	0.20601E-01	0.23882E 01	0.20998E 01	0.85000E-01	0.10417E 01
164	550.61	0.24565E 02	0.38571E 01	0.13531E-01	0.19368E-01	0.22533E 01	0.19812E 01	0.12800E-00	0.10065E 01
165	560.62	0.31157E 02	0.49354E 01	0.17462E-01	0.24994E-01	0.28832E 01	0.25351E 01	0.43000E-01	0.
166	554.16	0.28929E 02	0.45514E 01	0.16015E-01	0.22923E-01	0.26589E 01	0.23378E 01	0.85000E-01	0.11646E 01
167	564.24	0.35770E 02	0.56593E 01	0.20086E-01	0.28749E-01	0.33061E 01	0.29069E 01	0.43000E-01	0.
168	552.03	0.26614E 02	0.42295E 01	0.14856E-01	0.21263E-01	0.24708E 01	0.21725E 01	0.12800E-00	0.14305E 01
169	560.01	0.30500E 02	0.48530E 01	0.17162E-01	0.24564E-01	0.28350E 01	0.24928E 01	0.85000E-01	0.12164E 01
170	556.08	0.28872E 02	0.45620E 01	0.16079E-01	0.23014E-01	0.26651E 01	0.23433E 01	0.12800E-00	0.11171E 01
171	556.81	0.31123E 02	0.49038E 01	0.17294E-01	0.24754E-01	0.28648E 01	0.25189E 01	0.85000E-01	0.12007E 01
172	572.54	0.36486E 02	0.58269E 01	0.20829E-01	0.29813E-01	0.34040E 01	0.29930E 01	0.43000E-01	0.
173	557.84	0.30170E 02	0.47948E 01	0.16925E-01	0.24224E-01	0.28011E 01	0.24629E 01	0.12800E-00	0.11358E 01
174	561.18	0.33291E 02	0.52751E 01	0.18673E-01	0.26727E-01	0.30817E 01	0.27096E 01	0.85000E-01	0.
175	573.63	0.36046E 02	0.57325E 01	0.20511E-01	0.29357E-01	0.33488E 01	0.29445E 01	0.43000E-01	0.13555E 01
176	573.23	0.35575E 02	0.56563E 01	0.20231E-01	0.28957E-01	0.33043E 01	0.29054E 01	0.43000E-01	0.13306E 01
177	558.60	0.28717E 02	0.45512E 01	0.16075E-01	0.23008E-01	0.26587E 01	0.23377E 01	0.12800E-00	0.10403E 01
178	562.83	0.30767E 02	0.48796E 01	0.17298E-01	0.24758E-01	0.28506E 01	0.25064E 01	0.85000E-01	0.11322E 01
179	569.92	0.27252E 02	0.43391E 01	0.15476E-01	0.22150E-01	0.25348E 01	0.22288E 01	0.70000E-02	0.10097E 01
180	559.56	0.22390E 02	0.35617E 01	0.12591E-01	0.18021E-01	0.20807E 01	0.18295E 01	0.70000E-02	0.
181	566.15	0.22578E 02	0.36047E 01	0.12815E-01	0.18342E-01	0.21058E 01	0.18516E 01	0.70000E-02	0.82584E 00
182	564.47	0.23412E 02	0.37463E 01	0.13299E-01	0.19035E-01	0.21886E 01	0.19243E 01	0.70000E-02	0.
183	561.42	0.25765E 02	0.40897E 01	0.14480E-01	0.20725E-01	0.23891E 01	0.21007E 01	0.32000E-01	0.94542E 00
184	564.35	0.29136E 02	0.46619E 01	0.16548E-01	0.23685E-01	0.27234E 01	0.23946E 01	0.32000E-01	0.95918E 00
185	551.36	0.25284E 02	0.40166E 01	0.14100E-01	0.20181E-01	0.23464E 01	0.20632E 01	0.64000E-01	0.95025E 00
186	564.16	0.29797E 02	0.47521E 01	0.16865E-01	0.24139E-01	0.27761E 01	0.24409E 01	0.64000E-01	0.96906E 00
187	568.88	0.27299E 02	0.43789E 01	0.15604E-01	0.22334E-01	0.25581E 01	0.22493E 01	0.70000E-02	0.94306E 00
188	565.96	0.25758E 02	0.41909E 01	0.14896E-01	0.21321E-01	0.24483E 01	0.21527E 01	0.70000E-02	0.93804E 00
189	534.93	0.33938E 01	0.55378E 00	0.19173E-02	0.27442E-02	0.32351E-00	0.28445E-00	0.10600E 01	0.86439E 00
190	534.38	0.19533E 01	0.32500E-00	0.11247E-02	0.16098E-02	0.18986E-00	0.16694E-00	0.10840E 01	0.83103E 00
191	534.73	0.94079E 00	0.15742E-00	0.54491E-03	0.77993E-03	0.91960E-01	0.80858E-01	0.11080E 01	0.71888E 00
192	534.77	0.11964E 01	0.19911E-00	0.68925E-03	0.98653E-03	0.11631E-00	0.10227E-00	0.11080E 01	0.83790E 00
193	539.82	0.15631E 01	0.25695E-00	0.89325E-03	0.12785E-02	0.15011E-00	0.13198E-00	0.16580E 01	0.81244E 00
194	539.56	0.16504E 01	0.27001E-00	0.93845E-03	0.13432E-02	0.15774E-00	0.13869E-00	0.11700E 01	0.83252E 00
195	540.25	0.17403E 01	0.28614E-00	0.99508E-03	0.14243E-02	0.16716E-00	0.14698E-00	0.16740E 01	0.83067E 00
196	542.23	0.16182E 01	0.26514E-00	0.92359E-03	0.13219E-02	0.15489E-00	0.13619E-00	0.16950E 01	0.87263E 00

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
12	1	6.39	153.99	-51.47	4.99	2	C55	3.10	2	10.04	214.60	1674.60	149	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.820088E 02	0.474425E-02	0.445516E 04	0.485366E-05	0.664271E-07	0.327719E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726245E 00	0.170683E 01	0.194192E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	535.15	0.21969E 01	0.35687E-00	0.12348E-02	0.17748E-02	0.20908E-00	0.18377E-00	-0.10600E 01	0.10525E 01
100	536.33	0.11574E 01	0.19384E-00	0.67134E-03	0.96495E-03	0.11357E-00	0.99817E-01	-0.10840E 01	0.11158E 01
101	536.91	0.75897E 00	0.12436E-00	0.43094E-03	0.61941E-03	0.72863E-01	0.64042E-01	-0.11080E 01	0.10548E 01
102	536.63	0.92208E 00	0.15061E-00	0.52175E-03	0.74993E-03	0.88237E-01	0.77555E-01	-0.11080E 01	0.11260E 01
103	535.89	0.14499E 01	0.24276E-00	0.84047E-03	0.12081E-02	0.14223E-00	0.12501E-00	-0.10800E 01	0.10728E 01
104	567.47	0.30480E 02	0.49010E 01	0.17428E-01	0.25051E-01	0.28714E 01	0.25238E 01	0.85000E 00	0.
105	572.76	0.33144E 02	0.50560E 01	0.18062E-01	0.25961E-01	0.29622E 01	0.26036E 01	0.94000E 00	0.92998E 00
106	574.76	0.33946E 02	0.51405E 01	0.18395E-01	0.26440E-01	0.30117E 01	0.26471E 01	0.96000E 00	0.92628E 00
107	570.53	0.31949E 02	0.48268E 01	0.17210E-01	0.24736E-01	0.28279E 01	0.24856E 01	0.98000E 00	0.93403E 00
108	570.77	0.29516E 02	0.44825E 01	0.15985E-01	0.22977E-01	0.26262E 01	0.23083E 01	0.10000E 01	0.94146E 00
109	563.67	0.23187E 02	0.35194E 01	0.12475E-01	0.17930E-01	0.20620E 01	0.18123E 01	0.10200E 01	0.93828E 00
110	574.47	0.32140E 02	0.49075E 01	0.17557E-01	0.25236E-01	0.28752E 01	0.25271E 01	0.80000E-01	0.94705E 00
111	571.77	0.32383E 02	0.48957E 01	0.17474E-01	0.25116E-01	0.28683E 01	0.25211E 01	0.10000E-00	0.93560E 00
112	577.80	0.33219E 02	0.50643E 01	0.18170E-01	0.26117E-01	0.29671E 01	0.26079E 01	0.12000E-00	0.91696E 00
113	572.95	0.32218E 02	0.49152E 01	0.17561E-01	0.25242E-01	0.28797E 01	0.25311E 01	0.14000E-00	0.92325E 00
114	568.61	0.30952E 02	0.47108E 01	0.16768E-01	0.24102E-01	0.27600E 01	0.24258E 01	0.80000E-01	0.
115	569.55	0.30882E 02	0.46868E 01	0.16696E-01	0.23999E-01	0.27459E 01	0.24135E 01	0.10000E-00	0.93055E 00
116	570.56	0.31471E 02	0.48111E 01	0.17154E-01	0.24657E-01	0.28187E 01	0.24775E 01	0.12000E-00	0.93521E 00
117	576.09	0.32355E 02	0.49447E 01	0.17715E-01	0.25462E-01	0.28970E 01	0.25463E 01	0.14000E-00	0.94294E 00
118	569.60	0.29897E 02	0.45910E 01	0.16356E-01	0.23509E-01	0.26898E 01	0.23642E 01	0.10000E-00	0.94147E 00
119	569.13	0.29156E 02	0.44537E 01	0.15860E-01	0.22797E-01	0.26093E 01	0.22934E 01	0.15000E-00	0.70845E 00
120	569.32	0.26469E 02	0.40504E 01	0.14427E-01	0.20736E-01	0.23731E 01	0.20858E 01	0.20000E-00	0.95707E 00
121	568.98	0.28712E 02	0.44075E 01	0.15694E-01	0.22557E-01	0.25823E 01	0.22697E 01	0.25000E-00	0.92472E 00
122	565.47	0.27216E 02	0.41698E 01	0.14803E-01	0.21277E-01	0.24430E 01	0.21472E 01	0.30000E-00	0.92761E 00
123	561.63	0.25976E 02	0.39913E 01	0.14122E-01	0.20299E-01	0.23384E 01	0.20553E 01	0.35000E-00	0.87785E 00
124	564.71	0.27496E 02	0.42601E 01	0.15113E-01	0.21723E-01	0.24959E 01	0.21938E 01	0.38000E-00	0.93629E 00
125	566.28	0.27310E 02	0.42698E 01	0.15168E-01	0.21802E-01	0.25016E 01	0.21988E 01	0.45000E-00	0.92472E 00
126	562.83	0.24554E 02	0.38817E 01	0.13749E-01	0.19762E-01	0.22742E 01	0.19989E 01	0.61000E 00	0.93877E 00
127	543.24	0.11423E 02	0.17950E 01	0.62529E-02	0.89876E-02	0.10516E 01	0.92433E 00	0.70000E 00	0.98383E 00
128	536.77	0.49013E 01	0.76981E 00	0.26672E-02	0.38337E-02	0.45102E-00	0.39642E-00	0.75000E 00	0.10082E 01
129	559.19	0.22398E 02	0.35622E 01	0.12578E-01	0.18079E-01	0.20870E 01	0.18344E 01	0.70000E 00	0.10271E 01
130	561.14	0.24803E 02	0.39489E 01	0.13967E-01	0.20075E-01	0.23136E 01	0.20335E 01	0.80000E 00	0.11374E 01
131	540.97	0.84784E 01	0.12665E 01	0.44034E-02	0.63292E-02	0.74199E 00	0.65217E 00	0.90000E 00	0.11825E 01
132	555.15	0.20776E 02	0.31386E 01	0.11044E-01	0.15874E-01	0.18389E 01	0.16163E 01	0.90000E 00	0.10279E 01
133	555.52	0.20230E 02	0.30413E 01	0.10705E-01	0.15387E-01	0.17818E 01	0.15661E 01	0.96000E 00	0.10094E 01
134	554.76	0.18966E 02	0.28550E 01	0.10043E-01	0.14435E-01	0.16727E 01	0.14702E 01	0.10000E 01	0.10081E 01
135	551.95	0.14214E 02	0.22335E 01	0.78381E-02	0.11266E-01	0.13086E 01	0.11502E 01	0.70000E-02	0.
136	919.73	0.12458E-01	0.23024E-02	0.11793E-04	0.16951E-04	0.13490E-02	0.11856E-02	0.70000E-02	0.
137	550.72	0.15768E 02	0.24680E 01	0.86519E-02	0.12436E-01	0.14460E 01	0.12709E 01	0.39000E-01	0.10037E 01
138	549.94	0.15696E 02	0.24438E 01	0.85614E-02	0.12306E-01	0.14318E 01	0.12585E 01	0.78000E-01	0.
139	550.12	0.15841E 02	0.24545E 01	0.86002E-02	0.12361E-01	0.14380E 01	0.12640E 01	0.11700E-00	0.
140	550.58	0.15865E 02	0.24510E 01	0.85912E-02	0.12349E-01	0.14360E 01	0.12621E 01	0.78000E-01	0.10134E 01
141	573.48	0.45095E 02	0.48577E 01	0.17364E-01	0.24958E-01	0.28460E 01	0.25015E 01	-0.	0.
142	572.06	0.40950E 02	0.44078E 01	0.15736E-01	0.22619E-01	0.25824E 01	0.22698E 01	-0.	0.
143	534.94	0.14822E 02	0.22587E 01	0.78136E-02	0.11231E-01	0.13233E 01	0.11631E 01	0.78000E-01	0.88995E 00
144	533.90	0.13931E 02	0.21251E 01	0.73452E-02	0.10558E-01	0.12450E 01	0.10943E 01	0.70000E-02	0.87525E 00
145	533.81	0.13607E 02	0.20653E 01	0.71379E-02	0.10260E-01	0.12100E 01	0.10635E 01	0.70000E-02	0.91365E 00
146	534.53	0.14440E 02	0.22035E 01	0.76203E-02	0.10953E-01	0.12910E 01	0.11347E 01	0.39000E-01	0.89399E 00
147	536.83	0.14748E 02	0.22497E 01	0.77951E-02	0.11204E-01	0.13181E 01	0.11585E 01	0.78000E-01	0.
148	536.96	0.14960E 02	0.23010E 01	0.79737E-02	0.11461E-01	0.13481E 01	0.11849E 01	0.11700E-00	0.
149	572.56	0.28995E 02	0.46976E 01	0.16778E-01	0.24116E-01	0.27522E 01	0.24190E 01	0.70000E-02	0.95443E 00
150	572.03	0.28902E 02	0.47034E 01	0.16791E-01	0.24135E-01	0.27556E 01	0.24220E 01	0.70000E-02	0.94117E 00
151	570.29	0.28533E 02	0.46389E 01	0.16536E-01	0.23769E-01	0.27178E 01	0.23888E 01	0.70000E-02	0.93182E 00
152	574.51	0.31350E 02	0.49236E 01	0.17615E-01	0.25320E-01	0.28846E 01	0.25354E 01	0.39000E-01	0.93067E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	574.71	0.31375E 02	0.49281E 01	0.17635E-01	0.25347E-01	0.28873E 01	0.25378E 01	0.39000E-01	0.
154	574.41	0.31655E 02	0.49387E 01	0.17668E-01	0.25395E-01	0.28935E 01	0.25432E 01	0.78000E-01	0.93185E 00
155	573.99	0.30999E 02	0.50500E 01	0.18060E-01	0.25958E-01	0.29587E 01	0.26005E 01	0.39000E-01	0.
156	571.35	0.29403E 02	0.47680E 01	0.17012E-01	0.24452E-01	0.27935E 01	0.24553E 01	0.39000E-01	0.
157	571.11	0.28256E 02	0.45959E 01	0.16394E-01	0.23565E-01	0.26926E 01	0.23667E 01	0.78000E-01	0.93083E 00
158	569.99	0.29278E 02	0.47742E 01	0.17014E-01	0.24455E-01	0.27971E 01	0.24585E 01	0.39000E-01	0.
159	569.88	0.27771E 02	0.45283E 01	0.16136E-01	0.23194E-01	0.26530E 01	0.23319E 01	0.78000E-01	0.
160	573.36	0.28545E 02	0.46487E 01	0.16615E-01	0.23882E-01	0.27236E 01	0.23939E 01	0.39000E-01	0.
161	555.32	0.19503E 02	0.30704E 01	0.10806E-01	0.15532E-01	0.17989E 01	0.15811E 01	0.43000E-01	0.91026E 00
162	557.59	0.20504E 02	0.32426E 01	0.11434E-01	0.16434E-01	0.18998E 01	0.16698E 01	0.43000E-01	0.95214E 00
163	556.72	0.19635E 02	0.31086E 01	0.10953E-01	0.15744E-01	0.18213E 01	0.16008E 01	0.85000E-01	0.93551E 00
164	556.25	0.19078E 02	0.30051E 01	0.10584E-01	0.15213E-01	0.17606E 01	0.15475E 01	0.12800E-00	0.93017E 00
165	558.44	0.22874E 02	0.36189E 01	0.12770E-01	0.18355E-01	0.21203E 01	0.18636E 01	0.43000E-01	0.
166	557.12	0.22073E 02	0.34784E 01	0.12261E-01	0.17623E-01	0.20380E 01	0.17912E 01	0.85000E-01	0.10744E 01
167	567.08	0.32430E 02	0.51389E 01	0.18268E-01	0.26258E-01	0.30108E 01	0.26463E 01	0.43000E-01	0.
168	558.23	0.20824E 02	0.33208E 01	0.11716E-01	0.16840E-01	0.19456E 01	0.17101E 01	0.12800E-00	0.13369E 01
169	565.58	0.27279E 02	0.43540E 01	0.15458E-01	0.22218E-01	0.25509E 01	0.22421E 01	0.85000E-01	0.13099E 01
170	563.00	0.24843E 02	0.39404E 01	0.13959E-01	0.20063E-01	0.23086E 01	0.20291E 01	0.12800E-00	0.11845E 01
171	564.41	0.29351E 02	0.46441E 01	0.16471E-01	0.23675E-01	0.27209E 01	0.23915E 01	0.85000E-01	0.14041E 01
172	580.48	0.36463E 02	0.58487E 01	0.21034E-01	0.30233E-01	0.34266E 01	0.30118E 01	0.43000E-01	0.
173	567.12	0.28386E 02	0.45344E 01	0.16120E-01	0.23170E-01	0.26566E 01	0.23350E 01	0.12800E-00	0.13409E 01
174	570.67	0.33202E 02	0.52886E 01	0.18859E-01	0.27106E-01	0.30985E 01	0.27234E 01	0.85000E-01	0.
175	575.41	0.32290E 02	0.51401E 01	0.18404E-01	0.26453E-01	0.30115E 01	0.26469E 01	0.43000E-01	0.14457E 01
176	575.65	0.32269E 02	0.51375E 01	0.18399E-01	0.26445E-01	0.30099E 01	0.26456E 01	0.43000E-01	0.14508E 01
177	565.67	0.25538E 02	0.40632E 01	0.14427E-01	0.20736E-01	0.23805E 01	0.20924E 01	0.12800E-00	0.11799E 01
178	570.31	0.29382E 02	0.46791E 01	0.16680E-01	0.23975E-01	0.27414E 01	0.24095E 01	0.85000E-01	0.13469E 01
179	574.02	0.28137E 02	0.44900E 01	0.16057E-01	0.23080E-01	0.26306E 01	0.23121E 01	0.70000E-02	0.12367E 01
180	556.46	0.21409E 02	0.33999E 01	0.11977E-01	0.17215E-01	0.19919E 01	0.17508E 01	0.70000E-02	0.
181	562.14	0.21589E 02	0.34392E 01	0.12174E-01	0.17499E-01	0.20150E 01	0.17710E 01	0.70000E-02	0.92733E 00
182	562.80	0.21957E 02	0.35102E 01	0.12433E-01	0.17870E-01	0.20566E 01	0.18076E 01	0.70000E-02	0.
183	561.32	0.20257E 02	0.32151E 01	0.11373E-01	0.16347E-01	0.18837E 01	0.16557E 01	0.32000E-01	0.91721E 00
184	562.56	0.21343E 02	0.34116E 01	0.12081E-01	0.17365E-01	0.19988E 01	0.17568E 01	0.32000E-01	0.91510E 00
185	552.17	0.17349E 02	0.27573E 01	0.96779E-02	0.13911E-01	0.16155E 01	0.14199E 01	0.64000E-01	0.95733E 00
186	559.96	0.21594E 02	0.34358E 01	0.12140E-01	0.17449E-01	0.20130E 01	0.17693E 01	0.64000E-01	0.92137E 00
187	561.88	0.21146E 02	0.33790E 01	0.11959E-01	0.17189E-01	0.19797E 01	0.17400E 01	0.70000E-02	0.88073E 00
188	563.84	0.22937E 02	0.37276E 01	0.13214E-01	0.18994E-01	0.21839E 01	0.19195E 01	0.70000E-02	0.99389E 00
189	535.84	0.45746E 01	0.74684E 00	0.25856E-02	0.37164E-02	0.43756E-00	0.38459E-00	0.10600E 01	0.98072E 00
190	535.59	0.27543E 01	0.45859E-00	0.15873E-02	0.22816E-02	0.26868E-00	0.23616E-00	0.10840E 01	0.98226E 00
191	536.10	0.14130E 01	0.23661E-00	0.81932E-03	0.11777E-02	0.13863E-00	0.12184E-00	0.11080E 01	0.94765E 00
192	535.79	0.16218E 01	0.27007E-00	0.93494E-03	0.13438E-02	0.15823E-00	0.13907E-00	0.11080E 01	0.97137E 00
193	544.46	0.11039E 01	0.18193E-00	0.63443E-03	0.91189E-03	0.10659E-00	0.93687E-01	0.16580E 01	0.92698E 00
194	544.01	0.11371E 01	0.18651E-00	0.65012E-03	0.93446E-03	0.10927E-00	0.96042E-01	0.11700E 01	0.97440E 00
195	544.93	0.13055E 01	0.21521E-00	0.75076E-03	0.10791E-02	0.12609E-00	0.11082E-00	0.16740E 01	0.11773E 01
196	546.63	0.13096E 01	0.21511E-00	0.75148E-03	0.10801E-02	0.12603E-00	0.11077E-00	0.16950E 01	0.11800E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
4	1	8.42	158.42	-0.02	-0.	1	C55	3.00	2	10.04	229.70	1651.40	141	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.807174E 02	0.507638E-02	0.442186E 04	0.527653E-05	0.653811E-07	0.359266E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725368E 00	0.179381E 01	0.202897E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	563.68	0.21672E 02	0.28583E 01	0.10365E-01	0.13808E-01	0.15934E 01	0.14087E 01	-0.	0.96951E 00
2	563.96	0.21278E 02	0.29859E 01	0.10831E-01	0.14428E-01	0.16646E 01	0.14717E 01	-0.30000E-01	0.
3	558.45	0.20179E 02	0.30694E 01	0.11080E-01	0.14760E-01	0.17111E 01	0.15128E 01	-0.60000E-01	0.
4	558.37	0.19696E 02	0.30730E 01	0.11092E-01	0.14776E-01	0.17131E 01	0.15146E 01	-0.90000E-01	0.
5	548.54	0.17940E 02	0.28545E 01	0.10216E-01	0.13609E-01	0.15913E 01	0.14069E 01	-0.20000E-00	0.99070E 00
6	534.79	0.15841E 02	0.25011E 01	0.88463E-02	0.11784E-01	0.13943E 01	0.12327E 01	-0.40000E-00	0.95407E 00
7	530.55	0.13856E 02	0.21929E 01	0.77284E-02	0.10295E-01	0.12225E 01	0.10808E 01	-0.60000E 00	0.89947E 00
8	530.93	0.13672E 02	0.21643E 01	0.76299E-02	0.10164E-01	0.12065E 01	0.10667E 01	-0.80000E 00	0.
9	532.62	0.14897E 02	0.23231E 01	0.82016E-02	0.10926E-01	0.12951E 01	0.11450E 01	-0.90000E 00	0.84649E 00
10	537.23	0.15033E 02	0.23807E 01	0.84380E-02	0.11240E-01	0.13272E 01	0.11733E 01	-0.98000E 00	0.89797E 00
11	531.48	0.64312E 00	0.11005E-00	0.38816E-03	0.51708E-03	0.61352E-01	0.54242E-01	-0.11220E 01	0.12426E 01
12	533.74	0.94545E 00	0.13804E-00	0.48782E-03	0.64983E-03	0.76955E-01	0.68036E-01	-0.11890E 01	0.96653E 00
13	536.00	0.92312E 00	0.13913E-00	0.49260E-03	0.65620E-03	0.77560E-01	0.68571E-01	-0.13340E 01	0.88567E 00
14	536.21	0.88468E 00	0.15180E-00	0.53755E-03	0.71608E-03	0.84622E-01	0.74815E-01	-0.14400E 01	0.89373E 00
15	560.69	0.22057E 02	0.30895E 01	0.11175E-01	0.14886E-01	0.17223E 01	0.15227E 01	0.30000E-01	0.
16	554.63	0.21302E 02	0.32334E 01	0.11633E-01	0.15497E-01	0.18025E 01	0.15936E 01	0.60000E-01	0.
17	552.19	0.21533E 02	0.33481E 01	0.12021E-01	0.16013E-01	0.18665E 01	0.16501E 01	0.90000E-01	0.
18	544.49	0.22463E 02	0.35662E 01	0.12719E-01	0.16943E-01	0.19881E 01	0.17576E 01	0.20000E-00	0.10180E 01
19	552.53	0.26082E 02	0.41592E 01	0.14937E-01	0.19898E-01	0.23187E 01	0.20499E 01	0.40000E-00	0.10350E 01
20	561.95	0.29330E 02	0.47242E 01	0.17106E-01	0.22787E-01	0.26336E 01	0.23284E 01	0.60000E 00	0.
21	562.10	0.32155E 02	0.48764E 01	0.17660E-01	0.23525E-01	0.27184E 01	0.24034E 01	0.92000E 00	0.
22	542.31	0.15955E 02	0.23932E 01	0.85192E-02	0.11349E-01	0.13341E 01	0.11795E 01	0.10400E 01	0.11158E 01
23	539.62	0.13864E 02	0.20819E 01	0.73940E-02	0.98497E-02	0.11606E 01	0.10261E 01	0.10600E 01	0.94516E 00
24	533.54	0.89143E 01	0.13976E 01	0.49378E-02	0.65778E-02	0.77910E 00	0.68880E 00	0.10840E 01	0.92784E 00
25	527.79	0.12405E 01	0.18145E-00	0.63796E-03	0.84984E-03	0.10115E-00	0.89428E-01	0.12070E 01	0.10438E 01
26	528.34	0.13709E 01	0.21155E-00	0.74416E-03	0.99131E-03	0.11794E-00	0.10427E-00	0.12490E 01	0.12863E 01
27	528.88	0.17413E 01	0.26443E-00	0.93061E-03	0.12397E-02	0.14742E-00	0.13033E-00	0.13340E 01	0.16035E 01
28	529.02	0.16488E 01	0.27847E-00	0.98010E-03	0.13056E-02	0.15524E-00	0.13724E-00	0.14540E 01	0.16990E 01
29	530.60	0.13652E 01	0.22393E-00	0.78922E-03	0.10513E-02	0.12484E-00	0.11037E-00	0.16580E 01	0.11288E 01
30	534.79	0.15413E 01	0.25651E-00	0.90727E-03	0.12086E-02	0.14300E-00	0.12642E-00	0.20410E 01	0.98768E 00
31	536.58	0.18358E 01	0.30584E-00	0.10834E-02	0.14432E-02	0.17050E-00	0.15074E-00	0.22480E 01	0.10229E 01
32	560.36	0.21341E 02	0.32528E 01	0.11762E-01	0.15668E-01	0.18134E 01	0.16032E 01	-0.60000E-01	0.
33	564.76	0.21476E 02	0.30150E 01	0.10944E-01	0.14579E-01	0.16808E 01	0.14860E 01	-0.30000E-01	0.
34	560.94	0.22203E 02	0.33854E 01	0.12247E-01	0.16315E-01	0.18872E 01	0.16685E 01	0.30000E-01	0.
35	556.90	0.20961E 02	0.32676E 01	0.11780E-01	0.15692E-01	0.18216E 01	0.16105E 01	0.60000E-01	0.
36	540.59	0.25823E 02	0.40906E 01	0.14541E-01	0.19370E-01	0.22804E 01	0.20161E 01	-0.86800E 00	0.14133E 01
37	540.70	0.22881E 02	0.35267E 01	0.12537E-01	0.16701E-01	0.19661E 01	0.17382E 01	-0.91100E 00	0.12714E 01
38	538.33	0.21435E 02	0.33588E 01	0.11916E-01	0.15873E-01	0.18724E 01	0.16554E 01	-0.95300E 00	0.11786E 01
39	919.73	0.12458E-01	0.23630E-02	0.12512E-04	0.16668E-04	0.13173E-02	0.11646E-02	0.51000E-01	0.
40	529.90	0.13032E 02	0.20389E 01	0.71815E-02	0.95665E-02	0.11366E 01	0.10049E 01	0.29000E-01	0.
41	544.53	0.28601E 02	0.44858E 01	0.15999E-01	0.21313E-01	0.25007E 01	0.22109E 01	0.70000E-02	0.
42	541.94	0.26464E 02	0.41686E 01	0.14835E-01	0.19762E-01	0.23239E 01	0.20545E 01	-0.86800E 00	0.14217E 01
43	541.78	0.26317E 02	0.41557E 01	0.14787E-01	0.19698E-01	0.23167E 01	0.20482E 01	-0.91100E 00	0.14297E 01
44	540.71	0.24080E 02	0.37783E 01	0.13432E-01	0.17893E-01	0.21063E 01	0.18622E 01	-0.95300E 00	0.92801E 00
45	532.35	0.98348E 01	0.15940E 01	0.56261E-02	0.74946E-02	0.88864E 00	0.78564E 00	-0.10400E 01	0.15263E 01
46	542.07	0.26327E 02	0.41580E 01	0.14799E-01	0.19713E-01	0.23180E 01	0.20493E 01	0.70000E-02	0.
47	530.58	0.13033E 02	0.20450E 01	0.72074E-02	0.96010E-02	0.11401E 01	0.10079E 01	0.29000E-01	0.
48	531.05	0.12870E 02	0.20277E 01	0.71492E-02	0.95235E-02	0.11304E 01	0.99939E 00	0.51000E-01	0.79071E 00
49	539.76	0.20553E 02	0.32232E 01	0.11449E-01	0.15251E-01	0.17969E 01	0.15886E 01	0.70000E-02	0.11708E 01
50	533.20	0.13604E 02	0.21324E 01	0.75320E-02	0.10033E-01	0.11888E 01	0.10510E 01	0.29000E-01	0.78989E 00
51	532.93	0.13591E 02	0.21231E 01	0.74976E-02	0.99877E-02	0.11836E 01	0.10464E 01	0.51000E-01	0.
52	540.23	0.21313E 02	0.33626E 01	0.11949E-01	0.15917E-01	0.18745E 01	0.16573E 01	-0.86800E 00	0.
53	538.96	0.19543E 02	0.30929E 01	0.10979E-01	0.14625E-01	0.17242E 01	0.15244E 01	-0.91100E 00	0.10780E 01
54	539.58	0.19851E 02	0.31129E 01	0.11055E-01	0.14727E-01	0.17353E 01	0.15342E 01	-0.95300E 00	0.10903E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	533.15	0.82639E 01	0.13401E 01	0.47332E-02	0.63051E-02	0.74705E 00	0.66047E 00	-0.10400E 01	0.19881E 01
56	533.26	0.68966E 01	0.11537E 01	0.40753E-02	0.54288E-02	0.64316E 00	0.56862E 00	-0.10680E 01	0.32033E 01
57	531.10	0.65387E 01	0.10591E 01	0.37342E-02	0.49743E-02	0.59041E 00	0.52198E 00	-0.10400E 01	0.38177E 01
58	534.27	0.10977E 02	0.19283E 01	0.68172E-02	0.90813E-02	0.10750E 01	0.95037E 00	-0.10680E 01	0.28689E 01
59	529.89	0.64509E 01	0.10442E 01	0.36778E-02	0.48992E-02	0.58209E 00	0.51462E 00	-0.10400E 01	0.97660E 00
60	532.00	0.68826E 01	0.11505E 01	0.40598E-02	0.54081E-02	0.64140E 00	0.56706E 00	-0.10680E 01	0.19256E 01
61	530.53	0.66078E 00	0.10895E-00	0.38394E-03	0.51146E-03	0.60735E-01	0.53695E-01	-0.11220E 01	0.96229E 00
62	535.81	0.55481E 00	0.83609E-01	0.29598E-03	0.39428E-03	0.46610E-01	0.41208E-01	-0.13340E 01	0.50966E 00
63	531.21	0.80416E 00	0.13759E-00	0.48517E-03	0.64631E-03	0.76704E-01	0.67814E-01	-0.11220E 01	0.14397E 01
64	535.88	0.48623E-00	0.73278E-01	0.25942E-03	0.34558E-03	0.40851E-01	0.36116E-01	-0.13340E 01	0.43535E-00
65	536.34	0.77091E 00	0.13229E-00	0.46851E-03	0.62411E-03	0.73746E-01	0.65199E-01	0.14400E 01	0.74576E 00
66	536.80	0.12571E 01	0.20534E-00	0.72754E-03	0.96917E-03	0.11447E-00	0.10121E-00	0.16130E 01	0.12751E 01
67	536.93	0.10416E 01	0.16701E-00	0.59179E-03	0.78833E-03	0.93103E-01	0.82312E-01	0.17200E 01	0.91272E 00
68	536.77	0.84468E 00	0.13904E-00	0.49260E-03	0.65619E-03	0.77508E-01	0.68525E-01	-0.16130E 01	0.87353E 00
69	537.02	0.10982E 01	0.17610E-00	0.62404E-03	0.83129E-03	0.98169E-01	0.86791E-01	-0.18280E 01	0.10744E 01
70	533.42	0.78286E 00	0.11448E-00	0.40444E-03	0.53876E-03	0.63819E-01	0.56422E-01	-0.11650E 01	0.13132E 01
71	534.64	0.64624E 00	0.54079E-01	0.19125E-03	0.25477E-03	0.30148E-01	0.26654E-01	-0.12050E 01	0.14639E 01
72	535.90	0.10629E 01	0.15351E-00	0.54346E-03	0.72395E-03	0.85576E-01	0.75657E-01	-0.12120E 01	0.11304E 01
73	533.76	0.74545E 00	0.10903E-00	0.38530E-03	0.51326E-03	0.60781E-01	0.53737E-01	-0.11650E 01	0.11230E 01
74	534.89	0.54701E 00	0.45782E-01	0.16194E-03	0.21573E-03	0.25522E-01	0.22564E-01	-0.12050E 01	0.16801E 01
75	919.73	0.12458E-01	0.21626E-02	0.11451E-04	0.15254E-04	0.12056E-02	0.10659E-02	-0.12120E 01	0.
76	530.92	0.17730E 01	0.26556E-00	0.93619E-03	0.12471E-02	0.14804E-00	0.13089E-00	0.10840E 01	0.92202E 00
77	531.90	0.65870E 00	0.10598E-00	0.37392E-03	0.49811E-03	0.59081E-01	0.52233E-01	0.11220E 01	0.10053E 01
78	536.75	0.90338E 00	0.13417E-00	0.47534E-03	0.63320E-03	0.74794E-01	0.66126E-01	0.13340E 01	0.81468E 00
79	534.76	0.48883E-00	0.81795E-01	0.28930E-03	0.38538E-03	0.45599E-01	0.40314E-01	-0.11890E 01	0.53468E 00
80	537.11	0.65351E 00	0.98062E-01	0.34753E-03	0.46295E-03	0.54667E-01	0.48331E-01	-0.13340E 01	0.64194E 00
81	533.86	0.46180E-00	0.74382E-01	0.26288E-03	0.35018E-03	0.41466E-01	0.36660E-01	-0.11470E 01	0.67854E 00
82	533.90	0.76883E-01	0.12847E-01	0.45405E-04	0.60484E-04	0.71618E-02	0.63317E-02	-0.11890E 01	0.80064E-01
83	532.09	0.27023E 01	0.45109E-00	0.15918E-02	0.21205E-02	0.25147E-00	0.22232E-00	-0.10840E 01	0.14300E 01
84	534.47	0.33507E-00	0.49026E-01	0.17336E-03	0.23093E-03	0.27331E-01	0.24163E-01	-0.11890E 01	0.36049E-00
85	537.13	0.51325E 00	0.75211E-01	0.26655E-03	0.35508E-03	0.41928E-01	0.37068E-01	-0.13090E 01	0.50859E 00
86	536.71	0.43948E-00	0.65269E-01	0.23123E-03	0.30803E-03	0.36386E-01	0.32168E-01	-0.13340E 01	0.39915E-00
87	533.30	0.42067E 01	0.61406E 00	0.21691E-02	0.28895E-02	0.34232E-00	0.30265E-00	0.11990E 01	0.33666E 01
88	530.06	0.22867E 01	0.33605E-00	0.11838E-02	0.15770E-02	0.18734E-00	0.16563E-00	0.12070E 01	0.20717E 01
89	530.96	0.16561E 01	0.24764E-00	0.87305E-03	0.11630E-02	0.13806E-00	0.12205E-00	0.13340E 01	0.15635E 01
90	531.15	0.32078E 01	0.45562E-00	0.16065E-02	0.21401E-02	0.25400E-00	0.22456E-00	0.12070E 01	0.26982E 01
91	530.76	0.17984E 01	0.27791E-00	0.97958E-03	0.13049E-02	0.15493E-00	0.13697E-00	0.12490E 01	0.17066E 01
92	530.73	0.15964E 01	0.23988E-00	0.84552E-03	0.11263E-02	0.13373E-00	0.11823E-00	0.13340E 01	0.14919E 01
93	530.10	0.17663E 01	0.29671E-00	0.10453E-02	0.13924E-02	0.16541E-00	0.14624E-00	0.14900E 01	0.
94	541.54	0.59267E 01	0.62275E 00	0.22154E-02	0.29512E-02	0.34716E-00	0.30693E-00	-0.	0.
95	543.81	0.91662E 01	0.97129E 00	0.34621E-02	0.46119E-02	0.54147E 00	0.47871E-00	-0.	0.
96	537.21	0.63117E 00	0.66158E-01	0.23449E-03	0.31236E-03	0.36882E-01	0.32607E-01	-0.	0.
97	538.39	0.10566E 01	0.11083E-00	0.39320E-03	0.52378E-03	0.61783E-01	0.54622E-01	-0.	0.
98	540.78	0.14748E 01	0.15601E-00	0.55465E-03	0.73885E-03	0.86972E-01	0.76892E-01	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
13	1	8.43	158.43	0.02	-0.	2	C55	3.00	2	10.04	215.50	1671.30	150	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.818330E 02	0.476481E-02	0.445050E 04	0.488516E-05	0.662847E-07	0.330209E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726127E 00	0.171207E 01	0.194712E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	532.82	0.25564E 01	0.41472E-00	0.14366E-02	0.20537E-02	0.24223E-00	0.21299E-00	-0.10600E 01	0.10750E 01
100	533.89	0.14062E 01	0.23519E-00	0.81540E-03	0.11657E-02	0.13737E-00	0.12079E-00	-0.10840E 01	0.11237E 01
101	534.73	0.97819E 00	0.16009E-00	0.55543E-03	0.79403E-03	0.93506E-01	0.82219E-01	-0.11080E 01	0.11677E 01
102	534.40	0.10431E 01	0.17016E-00	0.59021E-03	0.84375E-03	0.99389E-01	0.87392E-01	-0.11080E 01	0.10362E 01
103	533.61	0.16909E 01	0.28275E-00	0.98009E-03	0.14011E-02	0.16515E-00	0.14522E-00	-0.10800E 01	0.11195E 01
104	554.21	0.27503E 02	0.43901E 01	0.15484E-01	0.22136E-01	0.25642E 01	0.22547E 01	0.85000E 00	0.
105	558.05	0.29432E 02	0.44534E 01	0.15759E-01	0.22529E-01	0.26012E 01	0.22872E 01	0.94000E 00	0.89523E 00
106	559.55	0.29769E 02	0.44704E 01	0.15839E-01	0.22643E-01	0.26111E 01	0.22959E 01	0.96000E 00	0.89751E 00
107	555.89	0.27438E 02	0.41119E 01	0.14524E-01	0.20763E-01	0.24017E 01	0.21118E 01	0.98000E 00	0.90517E 00
108	555.44	0.24471E 02	0.36849E 01	0.13011E-01	0.18600E-01	0.21523E 01	0.18925E 01	0.10000E 01	0.92606E 00
109	549.36	0.18525E 02	0.27895E 01	0.97982E-02	0.14007E-01	0.16293E 01	0.14326E 01	0.10200E 01	0.92801E 00
110	560.19	0.29197E 02	0.44231E 01	0.15680E-01	0.22416E-01.	0.25835E 01	0.22716E 01	0.80000E-01	0.92891E 00
111	557.89	0.29386E 02	0.44087E 01	0.15599E-01	0.22300E-01	0.25751E 01	0.22642E 01	0.10000E-00	0.91219E 00
112	562.90	0.29837E 02	0.45117E 01	0.16032E-01	0.22919E-01	0.26352E 01	0.23171E 01	0.12000E-00	0.91588E 00
113	558.38	0.28064E 02	0.42473E 01	0.15034E-01	0.21492E-01	0.24808E 01	0.21813E 01	0.14000E-00	0.90580E 00
114	555.83	0.28319E 02	0.42798E 01	0.15116E-01	0.21609E-01	0.24998E 01	0.21980E 01	0.80000E-01	0.
115	556.75	0.28401E 02	0.42798E 01	0.15128E-01	0.21627E-01	0.24998E 01	0.21980E 01	0.10000E-00	0.90086E 00
116	557.63	0.28937E 02	0.43922E 01	0.15537E-01	0.22211E-01	0.25654E 01	0.22557E 01	0.12000E-00	0.90430E 00
117	562.47	0.29943E 02	0.45418E 01	0.16133E-01	0.23063E-01	0.26528E 01	0.23326E 01	0.14000E-00	0.92731E 00
118	558.35	0.28260E 02	0.43128E 01	0.15265E-01	0.21823E-01	0.25190E 01	0.22150E 01	0.10000E-00	0.92028E 00
119	558.93	0.28148E 02	0.42755E 01	0.15141E-01	0.21645E-01	0.24973E 01	0.21958E 01	0.15000E-00	0.28522E-00
120	553.42	0.26353E 02	0.39973E 01	0.14089E-01	0.20142E-01	0.23348E 01	0.20529E 01	0.20000E-00	0.95449E 00
121	559.95	0.28415E 02	0.43403E 01	0.15384E-01	0.21992E-01	0.25351E 01	0.22291E 01	0.25000E-00	0.93559E 00
122	558.54	0.27550E 02	0.42048E 01	0.14885E-01	0.21280E-01	0.24560E 01	0.21595E 01	0.30000E-00	0.94059E 00
123	555.89	0.26253E 02	0.40210E 01	0.14203E-01	0.20304E-01	0.23486E 01	0.20651E 01	0.35000E-00	0.88002E 00
124	558.88	0.28326E 02	0.43746E 01	0.15491E-01	0.22146E-01	0.25551E 01	0.22467E 01	0.38000E-00	0.94631E 00
125	561.43	0.28769E 02	0.44860E 01	0.15920E-01	0.22759E-01	0.26202E 01	0.23039E 01	0.45000E-00	0.93558E 00
126	560.80	0.27635E 02	0.43639E 01	0.15479E-01	0.22128E-01	0.25489E 01	0.22412E 01	0.61000E 00	0.96219E 00
127	543.99	0.13757E 02	0.21626E 01	0.75618E-02	0.10810E-01	0.12632E 01	0.11107E 01	0.70000E 00	0.10003E 01
128	538.85	0.62909E 01	0.98922E 00	0.34440E-02	0.49234E-02	0.57779E 00	0.50805E 00	0.75000E 00	0.10467E 01
129	559.06	0.27010E 02	0.42955E 01	0.15213E-01	0.21749E-01	0.25089E 01	0.22061E 01	0.70000E 00	0.11108E 01
130	560.53	0.28001E 02	0.44567E 01	0.15804E-01	0.22593E-01	0.26031E 01	0.22888E 01	0.80000E 00	0.11368E 01
131	542.23	0.10607E 02	0.15855E 01	0.55356E-02	0.79136E-02	0.92606E 00	0.81428E 00	0.90000E 00	0.11109E 01
132	557.47	0.23460E 02	0.35486E 01	0.12551E-01	0.17943E-01	0.20727E 01	0.18225E 01	0.90000E 00	0.10255E 01
133	559.33	0.23558E 02	0.35493E 01	0.12573E-01	0.17974E-01	0.20731E 01	0.18228E 01	0.96000E 00	0.10240E 01
134	558.95	0.22377E 02	0.33763E 01	0.11956E-01	0.17093E-01	0.19720E 01	0.17340E 01	0.10000E 01	0.10335E 01
135	536.45	0.16482E 02	0.25675E 01	0.89207E-02	0.12753E-01	0.14996E 01	0.13186E 01	0.70000E-02	0.
136	919.73	0.12458E-01	0.23025E-02	0.11848E-04	0.16938E-04	0.13449E-02	0.11825E-02	0.70000E-02	0.
137	534.75	0.17598E 02	0.27299E 01	0.94716E-02	0.13540E-01	0.15945E 01	0.14020E 01	0.39000E-01	0.97552E 00
138	534.33	0.17553E 02	0.27091E 01	0.93959E-02	0.13432E-01	0.15823E 01	0.13913E 01	0.78000E-01	0.
139	533.56	0.17337E 02	0.26615E 01	0.92250E-02	0.13188E-01	0.15545E 01	0.13669E 01	0.11700E-00	0.
140	533.23	0.17339E 02	0.26526E 01	0.91916E-02	0.13140E-01	0.15494E 01	0.13623E 01	0.78000E-01	0.96133E 00
141	573.86	0.50813E 02	0.54748E 01	0.19639E-01	0.28075E-01	0.31978E 01	0.28118E 01	-0.	0.
142	572.70	0.49647E 02	0.53457E 01	0.19157E-01	0.27386E-01	0.31224E 01	0.27455E 01	-0.	0.
143	533.18	0.15954E 02	0.24287E 01	0.84153E-02	0.12030E-01	0.14186E 01	0.12473E 01	0.78000E-01	0.94994E 00
144	533.55	0.14963E 02	0.22820E 01	0.79095E-02	0.11307E-01	0.13329E 01	0.11720E 01	0.70000E-02	0.91000E 00
145	534.26	0.14752E 02	0.22396E 01	0.77673E-02	0.11104E-01	0.13081E 01	0.11502E 01	0.70000E-02	0.94983E 00
146	533.46	0.15829E 02	0.24140E 01	0.83665E-02	0.11961E-01	0.14100E 01	0.12398E 01	0.39000E-01	0.89560E 00
147	535.32	0.16215E 02	0.24713E 01	0.85785E-02	0.12264E-01	0.14435E 01	0.12692E 01	0.78000E-01	0.
148	534.87	0.16243E 02	0.24955E 01	0.86590E-02	0.12379E-01	0.14576E 01	0.12816E 01	0.11700E-00	0.
149	556.07	0.26260E 02	0.42160E 01	0.14894E-01	0.21291E-01	0.24625E 01	0.21652E 01	0.70000E-02	0.92729E 00
150	555.62	0.25966E 02	0.41874E 01	0.14787E-01	0.21139E-01	0.24458E 01	0.21506E 01	0.70000E-02	0.91448E 00
151	553.58	0.24786E 02	0.39927E 01	0.14075E-01	0.20121E-01	0.23321E 01	0.20506E 01	0.70000E-02	0.89918E 00
152	555.63	0.26903E 02	0.41815E 01	0.14766E-01	0.21109E-01	0.24423E 01	0.21475E 01	0.39000E-01	0.90995E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	555.54	0.26785E 02	0.41630E 01	0.14700E-01	0.21014E-01	0.24315E 01	0.21380E 01	0.39000E-01	0.
154	554.83	0.26661E 02	0.41150E 01	0.14521E-01	0.20759E-01	0.24035E 01	0.21134E 01	0.78000E-01	0.91554E 00
155	554.48	0.26385E 02	0.42524E 01	0.15002E-01	0.21446E-01	0.24837E 01	0.21839E 01	0.39000E-01	0.
156	552.37	0.25023E 02	0.40154E 01	0.14140E-01	0.20215E-01	0.23453E 01	0.20622E 01	0.39000E-01	0.
157	551.62	0.24258E 02	0.39033E 01	0.13737E-01	0.19638E-01	0.22799E 01	0.20046E 01	0.78000E-01	0.89969E 00
158	551.28	0.25214E 02	0.40692E 01	0.14316E-01	0.20466E-01	0.23768E 01	0.20898E 01	0.39000E-01	0.
159	551.90	0.25292E 02	0.40832E 01	0.14373E-01	0.20548E-01	0.23849E 01	0.20970E 01	0.78000E-01	0.
160	555.52	0.25488E 02	0.41102E 01	0.14513E-01	0.20748E-01	0.24007E 01	0.21109E 01	0.39000E-01	0.
161	555.74	0.22603E 02	0.35592E 01	0.12570E-01	0.17970E-01	0.20789E 01	0.18279E 01	0.43000E-01	0.97350E 00
162	557.45	0.23254E 02	0.36770E 01	0.13005E-01	0.18591E-01	0.21477E 01	0.18884E 01	0.43000E-01	0.10041E 01
163	557.73	0.22549E 02	0.35719E 01	0.12636E-01	0.18064E-01	0.20863E 01	0.18345E 01	0.85000E-01	0.98603E 00
164	558.86	0.22132E 02	0.34912E 01	0.12363E-01	0.17673E-01	0.20392E 01	0.17930E 01	0.12800E-00	0.98471E 00
165	557.24	0.24048E 02	0.38022E 01	0.13445E-01	0.19221E-01	0.22208E 01	0.19527E 01	0.43000E-01	0.
166	556.56	0.23259E 02	0.36642E 01	0.12950E-01	0.18513E-01	0.21402E 01	0.18819E 01	0.85000E-01	0.10235E 01
167	559.91	0.28466E 02	0.44929E 01	0.15924E-01	0.22765E-01	0.26242E 01	0.23075E 01	0.43000E-01	0.
168	559.18	0.23232E 02	0.37066E 01	0.13129E-01	0.18769E-01	0.21650E 01	0.19036E 01	0.12800E-00	0.13416E 01
169	561.16	0.25399E 02	0.40440E 01	0.14348E-01	0.20512E-01	0.23621E 01	0.20769E 01	0.85000E-01	0.11068E 01
170	561.15	0.24873E 02	0.39412E 01	0.13984E-01	0.19991E-01	0.23020E 01	0.20241E 01	0.12800E-00	0.10599E 01
171	559.09	0.26481E 02	0.41776E 01	0.14796E-01	0.21152E-01	0.24401E 01	0.21455E 01	0.85000E-01	0.11356E 01
172	571.59	0.35652E 02	0.56908E 01	0.20374E-01	0.29126E-01	0.33239E 01	0.29227E 01	0.43000E-01	0.
173	562.91	0.27283E 02	0.43480E 01	0.15450E-01	0.22087E-01	0.25396E 01	0.22331E 01	0.12800E-00	0.11484E 01
174	563.34	0.30360E 02	0.48164E 01	0.17121E-01	0.24476E-01	0.28132E 01	0.24736E 01	0.85000E-01	0.
175	570.77	0.34190E 02	0.54288E 01	0.19422E-01	0.27765E-01	0.31709E 01	0.27881E 01	0.43000E-01	0.13968E 01
176	570.32	0.33657E 02	0.53427E 01	0.19106E-01	0.27314E-01	0.31206E 01	0.27439E 01	0.43000E-01	0.13738E 01
177	564.43	0.28294E 02	0.44986E 01	0.16006E-01	0.22882E-01	0.26276E 01	0.23104E 01	0.12800E-00	0.11619E 01
178	566.39	0.30999E 02	0.49261E 01	0.17557E-01	0.25099E-01	0.28772E 01	0.25299E 01	0.85000E-01	0.12724E 01
179	567.49	0.28731E 02	0.45684E 01	0.16297E-01	0.23298E-01	0.26683E 01	0.23462E 01	0.70000E-02	0.11617E 01
180	553.51	0.22630E 02	0.35878E 01	0.12647E-01	0.18080E-01	0.20956E 01	0.18426E 01	0.70000E-02	0.
181	553.83	0.21338E 02	0.33835E 01	0.11930E-01	0.17055E-01	0.19763E 01	0.17377E 01	0.70000E-02	0.84836E 00
182	554.30	0.22040E 02	0.35070E 01	0.12370E-01	0.17684E-01	0.20484E 01	0.18011E 01	0.70000E-02	0.
183	561.85	0.25294E 02	0.40159E 01	0.14257E-01	0.20381E-01	0.23456E 01	0.20625E 01	0.32000E-01	0.10377E 01
184	563.54	0.25830E 02	0.41311E 01	0.14687E-01	0.20997E-01	0.24129E 01	0.21216E 01	0.32000E-01	0.98444E 00
185	552.81	0.21230E 02	0.33753E 01	0.11891E-01	0.16999E-01	0.19715E 01	0.17335E 01	0.64000E-01	0.10045E 01
186	560.11	0.25587E 02	0.40715E 01	0.14433E-01	0.20633E-01	0.23781E 01	0.20910E 01	0.64000E-01	0.97530E 00
187	562.12	0.24727E 02	0.39517E 01	0.14032E-01	0.20060E-01	0.23081E 01	0.20295E 01	0.70000E-02	0.95034E 00
188	563.06	0.25868E 02	0.42021E 01	0.14934E-01	0.21349E-01	0.24544E 01	0.21581E 01	0.70000E-02	0.10343E 01
189	538.35	0.45465E 01	0.74331E 00	0.25868E-02	0.36980E-02	0.43416E-00	0.38175E-00	0.10600E 01	0.10709E 01
190	537.34	0.27605E 01	0.46008E-00	0.15998E-02	0.22870E-02	0.26873E-00	0.23629E-00	0.10840E 01	0.11206E 01
191	536.98	0.14717E 01	0.24656E-00	0.85706E-03	0.12252E-02	0.14401E-00	0.12663E-00	0.11080E 01	0.12027E 01
192	537.00	0.17797E 01	0.29657E-00	0.10309E-02	0.14737E-02	0.17322E-00	0.15231E-00	0.11080E 01	0.12034E 01
193	543.91	0.17662E 01	0.29100E-00	0.10175E-02	0.14545E-02	0.16997E-00	0.14945E-00	0.16580E 01	0.15293E 01
194	543.52	0.18057E 01	0.29608E-00	0.10349E-02	0.14794E-02	0.17293E-00	0.15206E-00	0.11700E 01	0.15339E 01
195	544.26	0.17745E 01	0.29243E-00	0.10227E-02	0.14621E-02	0.17080E-00	0.15019E-00	0.16740E 01	0.14216E 01
196	546.25	0.18758E 01	0.30805E-00	0.10792E-02	0.15428E-02	0.17993E-00	0.15821E-00	0.16950E 01	0.14753E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
18	1	8.42	158.42	0.03	-0.	3	C55	3.20	2	10.04	213.50	1671.80	155	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.818686E 02	0.472294E-02	0.445121E 04	0.484014E-05	0.663135E-07	0.327076E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726151E 00	0.170071E 01	0.193585E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	570.30	0.18751E 02	0.29526E 01	0.10553E-01	0.15225E-01	0.17361E 01	0.15252E 01	0.10000E 01	0.96915E 00
198	570.10	0.18571E 02	0.28289E 01	0.10109E-01	0.14584E-01	0.16633E 01	0.14613E 01	0.12000E 01	0.96251E 00
199	542.89	0.95247E 01	0.15059E 01	0.52582E-02	0.75857E-02	0.88547E 00	0.77792E 00	0.13000E 01	0.95087E 00
200	517.74	0.98545E 00	0.14209E-00	0.48584E-03	0.70089E-03	0.83548E-01	0.73400E-01	0.11890E 01	0.12676E 01
201	522.41	0.88104E 00	0.14450E-00	0.49600E-03	0.71556E-03	0.84968E-01	0.74647E-01	0.14540E 01	0.11292E 01
202	522.02	0.10810E 01	0.17592E-00	0.60364E-03	0.87084E-03	0.10344E-00	0.90875E-01	0.17040E 01	0.11158E 01
203	527.96	0.14545E 01	0.23750E-00	0.81898E-03	0.11815E-02	0.13965E-00	0.12269E-00	0.20410E 01	0.14059E 01
204	528.61	0.12151E 01	0.92216E-01	0.31816E-03	0.45899E-03	0.54222E-01	0.47636E-01	0.20700E 01	0.
205	531.44	0.39590E 01	0.34379E-00	0.11889E-02	0.17152E-02	0.20215E-00	0.17759E-00	0.21880E 01	0.33485E 02
206	530.08	0.24779E 01	0.40509E-00	0.13993E-02	0.20187E-02	0.23819E-00	0.20926E-00	0.22480E 01	0.18436E 01
207	527.84	0.16275E 01	0.26126E-00	0.90079E-03	0.12995E-02	0.15362E-00	0.13496E-00	0.20700E 01	0.14764E 01
208	528.17	0.10301E 01	0.91042E-01	0.31399E-03	0.45298E-03	0.53532E-01	0.47029E-01	0.20700E 01	0.28558E 01
209	531.90	0.44774E 01	0.35907E-00	0.12422E-02	0.17921E-02	0.21113E-00	0.18548E-00	0.21880E 01	0.13037E 02
210	528.25	0.16473E 01	0.27108E-00	0.93497E-03	0.13488E-02	0.15939E-00	0.14003E-00	0.20700E 01	0.15358E 01
211	529.84	0.26545E 01	0.43723E-00	0.15101E-02	0.21785E-02	0.25709E-00	0.22586E-00	0.21880E 01	0.20165E 01
212	529.98	0.18608E 01	0.30279E-00	0.10458E-02	0.15088E-02	0.17804E-00	0.15641E-00	0.22390E 01	0.12926E 01
213	528.49	0.16197E 01	0.26333E-00	0.90836E-03	0.13104E-02	0.15484E-00	0.13603E-00	0.21880E 01	0.10943E 01
214	530.49	0.16234E 01	0.26748E-00	0.92430E-03	0.13334E-02	0.15728E-00	0.13817E-00	0.22480E 01	0.11187E 01
215	528.14	0.79065E 00	0.11804E-00	0.40710E-03	0.58730E-03	0.69407E-01	0.60976E-01	0.11650E 01	0.15289E 01
216	528.23	0.63792E 00	0.53190E-01	0.18345E-03	0.26466E-03	0.31275E-01	0.27476E-01	0.12050E 01	0.
217	528.67	0.81402E 00	0.11811E-00	0.40750E-03	0.58788E-03	0.69445E-01	0.61010E-01	0.12120E 01	0.12681E 01
218	554.10	0.84623E 00	0.12519E-00	0.44128E-03	0.63662E-03	0.73609E-01	0.64668E-01	0.11890E 01	0.
219	529.21	0.67948E 00	0.11334E-00	0.39123E-03	0.56441E-03	0.66643E-01	0.58548E-01	0.14540E 01	0.10660E 01
220	528.83	0.92364E 00	0.15990E-00	0.55178E-03	0.79602E-03	0.94020E-01	0.82600E-01	0.17040E 01	0.11075E 01
221	527.89	0.13143E 01	0.21788E-00	0.75127E-03	0.10838E-02	0.12811E-00	0.11255E-00	0.20410E 01	0.10617E 01
222	531.95	0.15221E 01	0.25558E-00	0.88423E-03	0.12756E-02	0.15028E-00	0.13202E-00	0.22480E 01	0.10329E 01
223	529.46	0.67896E 00	0.10144E-00	0.35024E-03	0.50527E-03	0.59647E-01	0.52402E-01	0.11650E 01	0.11670E 01
224	529.15	0.57766E 00	0.48191E-01	0.16634E-03	0.23997E-03	0.28336E-01	0.24894E-01	0.12050E 01	0.17454E 01
225	529.83	0.69247E 00	0.10054E-00	0.34721E-03	0.50090E-03	0.59114E-01	0.51933E-01	0.12120E 01	0.12878E 01
226	532.61	0.60987E 00	0.10229E-00	0.35410E-03	0.51083E-03	0.60146E-01	0.52840E-01	0.14540E 01	0.84106E 00
227	532.17	0.82078E 00	0.13208E-00	0.45704E-03	0.65934E-03	0.77660E-01	0.68227E-01	0.17040E 01	0.10145E 01
228	531.21	0.10623E 01	0.17431E-00	0.60271E-03	0.86950E-03	0.10250E-00	0.90045E-01	0.18780E 01	0.12249E 01
229	531.62	0.14151E 01	0.23331E-00	0.80697E-03	0.11642E-02	0.13718E-00	0.12052E-00	0.21880E 01	0.10703E 01
230	533.40	0.80156E 00	0.11802E-00	0.40880E-03	0.58975E-03	0.69392E-01	0.60963E-01	0.11890E 01	0.11780E 01
231	533.59	0.48831E-00	0.86235E-01	0.29876E-03	0.43101E-03	0.50706E-01	0.44546E-01	0.14540E 01	0.65818E 00
232	533.54	0.84519E 00	0.13781E-00	0.47741E-03	0.68874E-03	0.81030E-01	0.71187E-01	0.16130E 01	0.10218E 01
233	532.56	0.77662E 00	0.12753E-00	0.44145E-03	0.63685E-03	0.74987E-01	0.65878E-01	0.17040E 01	0.86667E 00
234	532.15	0.10171E 01	0.16775E-00	0.58048E-03	0.83742E-03	0.98637E-01	0.86656E-01	0.18780E 01	0.10600E 01
235	535.46	0.70961E 00	0.11707E-00	0.40624E-03	0.58606E-03	0.68838E-01	0.60477E-01	0.14540E 01	0.81873E 00
236	533.84	0.86909E 00	0.14173E-00	0.49112E-03	0.70850E-03	0.83335E-01	0.73212E-01	0.17040E 01	0.10316E 01
237	533.79	0.14971E 01	0.24715E-00	0.85638E-03	0.12355E-02	0.14532E-00	0.12767E-00	0.21880E 01	0.14055E 01
238	534.56	0.12187E 01	0.10810E-00	0.37480E-03	0.54071E-03	0.63560E-01	0.55840E-01	0.20700E 01	0.24313E 01
239	536.93	0.92987E 00	0.13554E-00	0.47091E-03	0.67935E-03	0.79699E-01	0.70018E-01	0.11890E 01	0.11587E 01
240	537.41	0.83636E 00	0.14016E-00	0.48713E-03	0.70275E-03	0.82410E-01	0.72400E-01	0.14540E 01	0.96609E 00
241	534.83	0.96519E 00	0.15821E-00	0.54870E-03	0.79158E-03	0.93029E-01	0.81729E-01	0.17040E 01	0.10904E 01
242	534.22	0.10114E 01	0.16700E-00	0.57889E-03	0.83513E-03	0.98197E-01	0.86270E-01	0.18780E 01	0.10719E 01
243	535.08	0.17948E 01	0.29650E-00	0.10285E-02	0.14838E-02	0.17434E-00	0.15316E-00	0.20410E 01	0.20379E 01
244	534.46	0.13309E 01	0.11971E-00	0.41505E-03	0.59877E-03	0.70391E-01	0.61841E-01	0.20700E 01	0.
245	536.32	0.19605E 01	0.16008E-00	0.55586E-03	0.80191E-03	0.94126E-01	0.82692E-01	0.21870E 01	0.21507E 01
246	535.53	0.16597E 01	0.27926E-00	0.96906E-03	0.13980E-02	0.16420E-00	0.14426E-00	0.22100E 01	0.15182E 01
247	538.58	0.84468E 00	0.13811E-00	0.48030E-03	0.69319E-03	0.81210E-01	0.71346E-01	0.14540E 01	0.10430E 01
248	536.27	0.12738E 01	0.21057E-00	0.73114E-03	0.10548E-02	0.12381E-00	0.10877E-00	0.17040E 01	0.13995E 01
249	535.79	0.13423E 01	0.11240E-00	0.39014E-03	0.56284E-03	0.66093E-01	0.58064E-01	0.18780E 01	0.53089E 01
250	536.35	0.20764E 01	0.16954E-00	0.58873E-03	0.84933E-03	0.99689E-01	0.87580E-01	0.21880E 01	0.65882E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	539.37	0.88104E 00	0.14856E-00	0.51718E-03	0.74611E-03	0.87352E-01	0.76741E-01	0.14540E 01	0.98325E 00
252	537.19	0.10234E 01	0.17147E-00	0.59586E-03	0.85962E-03	0.10082E-00	0.88578E-01	0.16130E 01	0.10926E 01
253	539.28	0.22016E 01	0.19391E-00	0.67502E-03	0.97381E-03	0.11402E-00	0.10017E-00	0.17060E 01	0.
254	536.01	0.14016E 01	0.23166E-00	0.80420E-03	0.11602E-02	0.13621E-00	0.11967E-00	0.21880E 01	0.11201E 01
255	538.39	0.12675E 01	0.11688E-00	0.40656E-03	0.58652E-03	0.68725E-01	0.60377E-01	0.16580E 01	0.31903E 01
256	536.35	0.15371E 01	0.12876E-00	0.44711E-03	0.64502E-03	0.75708E-01	0.66512E-01	0.17920E 01	0.83200E 01
257	538.98	0.14447E 01	0.24282E-00	0.84505E-03	0.12191E-02	0.14278E-00	0.12543E-00	0.10840E 01	0.10514E 01
258	538.87	0.93974E 00	0.15959E-00	0.55537E-03	0.80120E-03	0.93840E-01	0.82442E-01	0.14540E 01	0.10801E 01
259	537.83	0.96312E 00	0.15935E-00	0.55404E-03	0.79928E-03	0.93698E-01	0.82316E-01	0.16130E 01	0.10495E 01
260	537.92	0.13719E 01	0.22356E-00	0.77733E-03	0.11214E-02	0.13145E-00	0.11548E-00	0.17040E 01	0.19474E 01
261	537.44	0.12281E 01	0.20222E-00	0.70284E-03	0.10139E-02	0.11890E-00	0.10446E-00	0.18780E 01	0.17658E 01
262	536.77	0.12956E 01	0.21814E-00	0.75775E-03	0.10932E-02	0.12826E-00	0.11268E-00	0.20410E 01	0.11957E 01
263	616.00	0.23974E 01	0.42279E-00	0.15734E-02	0.22698E-02	0.24860E-00	0.21840E-00	0.14540E 01	0.
264	769.55	-0.32374E 03	-0.60117E 02	-0.25987E-00	-0.37489E-00	-0.35348E 02	-0.31054E 02	0.16130E 01	0.
265	537.84	0.11055E 01	0.17846E-00	0.62047E-03	0.89511E-03	0.10493E-00	0.92185E-01	0.17040E 01	0.10660E 01
266	537.76	0.13912E 01	0.22912E-00	0.79655E-03	0.11491E-02	0.13472E-00	0.11835E-00	0.18780E 01	0.13575E 01
267	536.65	0.13164E 01	0.22096E-00	0.76749E-03	0.11072E-02	0.12992E-00	0.11414E-00	0.20410E 01	0.12175E 01
268	538.37	0.11636E 01	0.19171E-00	0.66684E-03	0.96201E-03	0.11272E-00	0.99031E-01	0.16130E 01	0.11927E 01
269	537.88	0.10966E 01	0.17703E-00	0.61555E-03	0.88801E-03	0.10409E-00	0.91451E-01	0.18280E 01	0.96886E 00
270	537.56	0.11709E 01	0.19194E-00	0.66717E-03	0.96249E-03	0.11286E-00	0.99148E-01	0.18780E 01	0.10684E 01
271	537.25	0.12462E 01	0.20882E-00	0.72568E-03	0.10469E-02	0.12279E-00	0.10787E-00	0.20410E 01	0.10375E 01
272	537.94	0.59325E 00	0.10025E-00	0.34858E-03	0.50288E-03	0.58946E-01	0.51786E-01	0.16130E 01	0.55738E 00
273	538.62	0.10951E 01	0.18182E-00	0.63256E-03	0.91256E-03	0.10691E-00	0.93920E-01	0.17200E 01	0.12374E 01
274	537.85	0.84571E 00	0.13610E-00	0.47321E-03	0.68267E-03	0.80026E-01	0.70305E-01	0.18280E 01	0.77281E 00
275	537.64	0.11694E 01	0.19198E-00	0.66739E-03	0.96280E-03	0.11288E-00	0.99173E-01	0.18780E 01	0.10437E 01
276	919.74	0.12991E-01	0.26280E-02	0.13513E-04	0.19495E-04	0.15452E-02	0.13575E-02	0.20600E 01	0.
277	536.53	0.11382E 01	0.95348E-01	0.33115E-03	0.47773E-03	0.56064E-01	0.49254E-01	0.21000E 01	0.23671E 01
278	919.74	0.12991E-01	0.13144E-02	0.67586E-05	0.97502E-05	0.77286E-03	0.67898E-03	0.21870E 01	0.
279	538.41	0.14764E 01	0.24881E-00	0.86548E-03	0.12486E-02	0.14630E-00	0.12853E-00	0.21950E 01	0.12352E 01
280	537.43	0.10618E 01	0.17698E-00	0.61511E-03	0.88739E-03	0.10406E-00	0.91421E-01	0.18780E 01	0.97909E 00
281	537.13	0.12088E 01	0.20357E-00	0.70738E-03	0.10205E-02	0.11970E-00	0.10516E-00	0.20600E 01	0.10545E 01
282	537.41	0.11236E 01	0.18276E-00	0.63520E-03	0.91636E-03	0.10746E-00	0.94408E-01	0.18280E 01	0.10250E 01
283	536.97	0.11543E 01	0.19338E-00	0.67188E-03	0.96928E-03	0.11371E-00	0.99896E-01	0.20600E 01	0.10352E 01
284	537.33	0.11745E 01	0.18956E-00	0.65878E-03	0.95038E-03	0.11146E-00	0.97918E-01	0.17200E 01	0.13642E 01
285	536.96	0.13060E 01	0.21433E-00	0.74465E-03	0.10743E-02	0.12603E-00	0.11072E-00	0.18780E 01	0.15146E 01
286	536.94	0.11023E 01	0.10156E-00	0.35286E-03	0.50905E-03	0.59719E-01	0.52465E-01	0.16580E 01	0.16379E 01
287	919.74	0.12991E-01	0.13144E-02	0.67586E-05	0.97502E-05	0.77286E-03	0.67898E-03	0.17920E 01	0.
288	536.48	0.10478E 01	0.17191E-00	0.59703E-03	0.86131E-03	0.10108E-00	0.88805E-01	0.16130E 01	0.10758E 01
289	538.34	0.18556E 01	0.15561E-00	0.54125E-03	0.78082E-03	0.91495E-01	0.80381E-01	0.17060E 01	0.
290	535.20	0.11865E 01	0.99321E-01	0.34456E-03	0.49708E-03	0.58400E-01	0.51306E-01	0.18780E 01	0.62200E 01
291	535.82	0.12561E 01	0.20507E-00	0.71178E-03	0.10268E-02	0.12058E-00	0.10593E-00	0.17200E 01	0.16679E 01
292	537.23	0.86701E 00	0.14885E-00	0.51727E-03	0.74624E-03	0.87523E-01	0.76892E-01	0.14400E 01	0.87251E 00
293	534.93	0.10130E 01	0.16326E-00	0.56625E-03	0.81690E-03	0.95996E-01	0.84336E-01	0.17200E 01	0.11375E 01
294	533.84	0.97454E 00	0.16064E-00	0.55664E-03	0.80304E-03	0.94453E-01	0.82980E-01	0.18780E 01	0.92593E 00

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
5	1	12.50	162.50	-0.02	-0.	1	C55	2.95 2	10.04	214.30	1667.80	142	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.816481E 02	0.474172E-02	0.444532E 04	0.487250E-05	0.661349E-07	0.329714E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726003E 00	0.170537E 01	0.194047E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	570.80	0.22350E 02	0.29593E 01	0.10625E-01	0.15246E-01	0.17353E 01	0.15250E 01	-0.	0.94871E 00
2	568.86	0.21993E 02	0.30946E 01	0.11092E-01	0.15916E-01	0.18146E 01	0.15948E 01	-0.30000E-01	0.
3	561.76	0.20857E 02	0.31783E 01	0.11322E-01	0.16247E-01	0.18637E 01	0.16379E 01	-0.60000E-01	0.
4	560.01	0.20302E 02	0.31704E 01	0.11277E-01	0.16182E-01	0.18590E 01	0.16338E 01	-0.90000E-01	0.
5	546.42	0.18689E 02	0.29702E 01	0.10443E-01	0.14985E-01	0.17417E 01	0.15307E 01	-0.20000E-00	0.95656E 00
6	534.37	0.16344E 02	0.25800E 01	0.89791E-02	0.12885E-01	0.15128E 01	0.13295E 01	-0.40000E-00	0.90970E 00
7	530.93	0.14777E 02	0.23392E 01	0.81178E-02	0.11649E-01	0.13717E 01	0.12055E 01	-0.60000E 00	0.89525E 00
8	531.81	0.14523E 02	0.23001E 01	0.79880E-02	0.11463E-01	0.13488E 01	0.11853E 01	-0.80000E 00	0.
9	533.70	0.15273E 02	0.23832E 01	0.82897E-02	0.11895E-01	0.13975E 01	0.12282E 01	-0.90000E 00	0.85392E 00
10	538.21	0.15435E 02	0.24456E 01	0.85390E-02	0.12253E-01	0.14341E 01	0.12603E 01	-0.98000E 00	0.90087E 00
11	531.15	0.61247E 00	0.10479E-00	0.36372E-03	0.52193E-03	0.61447E-01	0.54003E-01	-0.11220E 01	0.92407E 00
12	533.06	0.98805E 00	0.14421E-00	0.50134E-03	0.71940E-03	0.84560E-01	0.74315E-01	-0.11890E 01	0.86214E 00
13	536.06	0.10099E 01	0.15221E-00	0.53049E-03	0.76123E-03	0.89252E-01	0.78439E-01	-0.13340E 01	0.81895E 00
14	537.15	0.96208E 00	0.16517E-00	0.57617E-03	0.82679E-03	0.96850E-01	0.85116E-01	-0.14400E 01	0.90469E 00
15	570.68	0.22513E 02	0.31709E 01	0.11383E-01	0.16334E-01	0.18593E 01	0.16341E 01	0.30000E-01	0.
16	566.93	0.21634E 02	0.33062E 01	0.11831E-01	0.16976E-01	0.19387E 01	0.17038E 01	0.60000E-01	0.
17	566.62	0.21812E 02	0.34187E 01	0.12230E-01	0.17549E-01	0.20047E 01	0.17618E 01	0.90000E-01	0.
18	565.10	0.22391E 02	0.35957E 01	0.12846E-01	0.18434E-01	0.21084E 01	0.18530E 01	0.20000E-00	0.96620E 00
19	569.50	0.25508E 02	0.41061E 01	0.14725E-01	0.21130E-01	0.24078E 01	0.21160E 01	0.40000E-00	0.96940E 00
20	566.10	0.27104E 02	0.43757E 01	0.15646E-01	0.22452E-01	0.25658E 01	0.22550E 01	0.60000E 00	0.
21	558.93	0.28219E 02	0.42720E 01	0.15181E-01	0.21785E-01	0.25050E 01	0.22015E 01	0.92000E 00	0.
22	529.52	0.94327E 01	0.14047E 01	0.48688E-02	0.69866E-02	0.82366E 00	0.72387E 00	0.10400E 01	0.82717E 00
23	536.49	0.10860E 02	0.16279E 01	0.56757E-02	0.81444E-02	0.95457E 00	0.83892E 00	0.10600E 01	0.96985E 00
24	531.65	0.68998E 01	0.10806E 01	0.37521E-02	0.53842E-02	0.63362E 00	0.55686E 00	0.10840E 01	0.97220E 00
25	528.36	0.96884E 00	0.14175E-00	0.49087E-03	0.70439E-03	0.83122E-01	0.73051E-01	0.12070E 01	0.11592E 01
26	529.65	0.10260E 01	0.15844E-00	0.54925E-03	0.78815E-03	0.92907E-01	0.81651E-01	0.12490E 01	0.13351E 01
27	530.91	0.11787E 01	0.17920E-00	0.62188E-03	0.89238E-03	0.10508E-00	0.92351E-01	0.13340E 01	0.14176E 01
28	532.80	0.11507E 01	0.19475E-00	0.67689E-03	0.97131E-03	0.11420E-00	0.10036E-00	0.14540E 01	0.14914E 01
29	534.29	0.11839E 01	0.19460E-00	0.67722E-03	0.97179E-03	0.11411E-00	0.10028E-00	0.16580E 01	0.11282E 01
30	537.73	0.16296E 01	0.27166E-00	0.94814E-03	0.13605E-02	0.15930E-00	0.14000E-00	0.20410E 01	0.92821E 00
31	538.91	0.19771E 01	0.32981E-00	0.11523E-02	0.16534E-02	0.19340E-00	0.16997E-00	0.22480E 01	0.94301E 00
32	566.97	0.21763E 02	0.33293E 01	0.11914E-01	0.17096E-01	0.19523E 01	0.17157E 01	-0.60000E-01	0.
33	571.88	0.22095E 02	0.31141E 01	0.11191E-01	0.16059E-01	0.18260E 01	0.16048E 01	-0.30000E-01	0.
34	568.42	0.22554E 02	0.34531E 01	0.12372E-01	0.17753E-01	0.20248E 01	0.17795E 01	0.30000E-01	0.
35	564.10	0.21259E 02	0.33274E 01	0.11877E-01	0.17043E-01	0.19511E 01	0.17147E 01	0.60000E-01	0.
36	539.36	0.24849E 02	0.39335E 01	0.13748E-01	0.19727E-01	0.23066E 01	0.20271E 01	-0.86800E 00	0.13575E 01
37	540.31	0.21927E 02	0.33790E 01	0.11819E-01	0.16960E-01	0.19814E 01	0.17413E 01	-0.91100E 00	0.12360E 01
38	538.75	0.20879E 02	0.32725E 01	0.11432E-01	0.16404E-01	0.19190E 01	0.16865E 01	-0.95300E 00	0.11272E 01
39	919.72	0.11937E-01	0.22641E-02	0.11710E-04	0.16803E-04	0.13276E-02	0.11668E-02	0.51000E-01	0.
40	529.26	0.13582E 02	0.21242E 01	0.73613E-02	0.10563E-01	0.12456E 01	0.10947E 01	0.29000E-01	0.
41	541.59	0.26454E 02	0.41422E 01	0.14504E-01	0.20813E-01	0.24289E 01	0.21346E 01	0.70000E-02	0.
42	541.44	0.26297E 02	0.41411E 01	0.14498E-01	0.20805E-01	0.24283E 01	0.21341E 01	-0.86800E 00	0.14122E 01
43	541.81	0.25848E 02	0.40817E 01	0.14295E-01	0.20512E-01	0.23934E 01	0.21034E 01	-0.91100E 00	0.13960E 01
44	541.20	0.23388E 02	0.36708E 01	0.12849E-01	0.18438E-01	0.21525E 01	0.18917E 01	-0.95300E 00	0.89260E 00
45	534.16	0.10586E 02	0.17176E 01	0.59768E-02	0.85764E-02	0.10072E 01	0.88514E 00	-0.10400E 01	0.15389E 01
46	539.18	0.24165E 02	0.38103E 01	0.13315E-01	0.19106E-01	0.22343E 01	0.19636E 01	0.70000E-02	0.
47	530.13	0.13595E 02	0.21328E 01	0.73964E-02	0.10614E-01	0.12506E 01	0.10991E 01	0.29000E-01	0.
48	531.04	0.14063E 02	0.22158E 01	0.76902E-02	0.11035E-01	0.12993E 01	0.11419E 01	0.51000E-01	0.84428E 00
49	537.27	0.18881E 02	0.29568E 01	0.10316E-01	0.14802E-01	0.17338E 01	0.15237E 01	0.70000E-02	0.10967E 01
50	532.91	0.13879E 02	0.21752E 01	0.75612E-02	0.10850E-01	0.12755E 01	0.11210E 01	0.29000E-01	0.82814E 00
51	533.08	0.14382E 02	0.22469E 01	0.78116E-02	0.11209E-01	0.13176E 01	0.11579E 01	0.51000E-01	0.
52	540.20	0.21461E 02	0.33859E 01	0.11842E-01	0.16993E-01	0.19854E 01	0.17449E 01	-0.86800E 00	0.
53	540.01	0.19806E 02	0.31365E 01	0.10968E-01	0.15738E-01	0.18392E 01	0.16163E 01	-0.91100E 00	0.11101E 01
54	540.45	0.19890E 02	0.31205E 01	0.10916E-01	0.15664E-01	0.18298E 01	0.16081E 01	-0.95300E 00	0.10890E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	534.59	0.89792E 01	0.14573E 01	0.50727E-02	0.72791E-02	0.85451E 00	0.75098E 00	-0.10400E 01	0.19298E 01
56	534.61	0.73418E 01	0.12291E 01	0.42786E-02	0.61396E-02	0.72073E 00	0.63341E 00	-0.10680E 01	0.30073E 01
57	533.00	0.70774E 01	0.11476E 01	0.39893E-02	0.57245E-02	0.67291E 00	0.59139E 00	-0.10400E 01	0.36817E 01
58	536.76	0.11957E 02	0.21033E 01	0.73350E-02	0.10525E-01	0.12334E 01	0.10839E 01	-0.10680E 01	0.28151E 01
59	531.60	0.70104E 01	0.11358E 01	0.39438E-02	0.56592E-02	0.66602E 00	0.58533E 00	-0.10400E 01	0.10105E 01
60	533.59	0.77018E 01	0.12886E 01	0.44820E-02	0.64315E-02	0.75564E 00	0.66409E 00	-0.10680E 01	0.19792E 01
61	531.26	0.71845E 00	0.11850E-00	0.41135E-03	0.59027E-03	0.69487E-01	0.61069E-01	-0.11220E 01	0.88525E 00
62	536.37	0.61558E 00	0.92797E-01	0.32351E-03	0.46422E-03	0.54414E-01	0.47822E-01	-0.13340E 01	0.47530E-00
63	531.51	0.87429E 00	0.14962E-00	0.51946E-03	0.74541E-03	0.87732E-01	0.77103E-01	-0.11220E 01	0.12018E 01
64	535.88	0.52780E 00	0.79541E-01	0.27718E-03	0.39774E-03	0.46642E-01	0.40991E-01	-0.13340E 01	0.42638E-00
65	537.13	0.81143E 00	0.13930E-00	0.48594E-03	0.69730E-03	0.81683E-01	0.71787E-01	0.14400E 01	0.68442E 00
66	537.84	0.96883E 00	0.15835E-00	0.55272E-03	0.79313E-03	0.92853E-01	0.81603E-01	0.16130E 01	0.84260E 00
67	538.21	0.11164E 01	0.17913E-00	0.62545E-03	0.89750E-03	0.10504E-00	0.92314E-01	0.17200E 01	0.94478E 00
68	537.96	0.92208E 00	0.15188E-00	0.53018E-03	0.76079E-03	0.89059E-01	0.78269E-01	-0.16130E 01	0.79473E 00
69	538.38	0.12208E 01	0.19591E-00	0.68412E-03	0.98168E-03	0.11488E-00	0.10096E-00	-0.18280E 01	0.99145E 00
70	532.41	0.65559E 00	0.95813E-01	0.33291E-03	0.47772E-03	0.56183E-01	0.49376E-01	-0.11650E 01	0.86116E 00
71	533.87	0.66649E 00	0.55750E-01	0.19395E-03	0.27831E-03	0.32691E-01	0.28730E-01	-0.12050E 01	0.15409E 01
72	535.38	0.99221E 00	0.14326E-00	0.49901E-03	0.71606E-03	0.84005E-01	0.73827E-01	-0.12120E 01	0.82728E 00
73	533.07	0.79741E 00	0.11658E-00	0.40531E-03	0.58160E-03	0.68362E-01	0.60080E-01	-0.11650E 01	0.11079E 01
74	534.04	0.55948E 00	0.46803E-01	0.16285E-03	0.23368E-03	0.27445E-01	0.24120E-01	-0.12050E 01	0.20252E 01
75	919.72	0.11937E-01	0.20721E-02	0.10717E-04	0.15378E-04	0.12151E-02	0.10678E-02	-0.12120E 01	0.
76	531.00	0.20888E 01	0.31288E-00	0.10859E-02	0.15582E-02	0.18347E-00	0.16124E-00	0.10840E 01	0.91643E 00
77	531.46	0.75065E 00	0.12074E-00	0.41921E-03	0.60154E-03	0.70802E-01	0.62224E-01	0.11220E 01	0.10108E 01
78	536.75	0.96156E 00	0.14281E-00	0.49801E-03	0.71463E-03	0.83740E-01	0.73594E-01	0.13340E 01	0.76545E 00
79	534.15	0.43014E-00	0.71949E-01	0.25036E-03	0.35925E-03	0.42189E-01	0.37078E-01	-0.11890E 01	0.43706E-00
80	537.29	0.69039E 00	0.10361E-00	0.36147E-03	0.51870E-03	0.60753E-01	0.53393E-01	-0.13340E 01	0.51427E 00
81	533.01	0.55897E 00	0.89991E-01	0.31284E-03	0.44891E-03	0.52769E-01	0.46376E-01	-0.11470E 01	0.84491E 00
82	533.24	0.94029E-01	0.15706E-01	0.54610E-04	0.78363E-04	0.92097E-02	0.80939E-02	-0.11890E 01	0.
83	532.48	0.31325E 01	0.52300E 00	0.18173E-02	0.26078E-02	0.30668E-00	0.26952E-00	-0.10840E 01	0.14545E 01
84	533.62	0.37559E-00	0.54929E-01	0.19105E-03	0.27415E-03	0.32209E-01	0.28307E-01	-0.11890E 01	0.34190E-00
85	536.50	0.58130E 00	0.85152E-01	0.29689E-03	0.42602E-03	0.49932E-01	0.43882E-01	-0.13090E 01	0.49034E-00
86	536.67	0.53611E 00	0.79617E-01	0.27763E-03	0.39839E-03	0.46686E-01	0.41030E-01	-0.13340E 01	0.42462E-00
87	531.62	0.29242E 01	0.42644E-00	0.14807E-02	0.21248E-02	0.25005E-00	0.21976E-00	0.11990E 01	0.34826E 01
88	529.93	0.15782E 01	0.23191E-00	0.80411E-03	0.11539E-02	0.13599E-00	0.11951E-00	0.12070E 01	0.17753E 01
89	532.69	0.12670E 01	0.18965E-00	0.65911E-03	0.94580E-03	0.11121E-00	0.97733E-01	0.13340E 01	0.17155E 01
90	531.22	0.21039E 01	0.29884E-00	0.10373E-02	0.14885E-02	0.17524E-00	0.15400E-00	0.12070E 01	0.26857E 01
91	531.96	0.12675E 01	0.19600E-00	0.68077E-03	0.97688E-03	0.11493E-00	0.10101E-00	0.12490E 01	0.16762E 01
92	532.48	0.11340E 01	0.17058E-00	0.59272E-03	0.85053E-03	0.10002E-00	0.87905E-01	0.13340E 01	0.14963E 01
93	534.21	0.10400E 01	0.17512E-00	0.60937E-03	0.87443E-03	0.10268E-00	0.90244E-01	0.14900E 01	0.12426E 01
94	542.44	0.68649E 01	0.72169E 00	0.25289E-02	0.36288E-02	0.42319E-00	0.37191E-00	-0.	0.
95	545.23	0.10699E 02	0.11346E 01	0.39851E-02	0.57184E-02	0.66530E 00	0.58469E 00	-0.	0.
96	537.42	0.80885E 00	0.84792E-01	0.29586E-03	0.42455E-03	0.49721E-01	0.43697E-01	-0.	0.
97	538.60	0.11647E 01	0.12218E-00	0.42673E-03	0.61234E-03	0.71642E-01	0.62962E-01	-0.	0.
98	541.28	0.13792E 01	0.14594E-00	0.51089E-03	0.73310E-03	0.85577E-01	0.75209E-01	-0.	0.

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
14	1	12.50	162.50	0.03	-0.01	2	C55	3.05 2	10.04	216.00	1671.20	151	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.818216E 02	0.477663E-02	0.445026E 04	0.489796E-05	0.662755E-07	0.331102E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726119E 00	0.171527E 01	0.195029E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	533.63	0.31231E 01	0.50689E 00	0.17573E-02	0.25058E-02	0.29552E-00	0.25991E-00	-0.10600E 01	0.11969E 01
100	534.72	0.17314E 01	0.28971E-00	0.10053E-02	0.14335E-02	0.16890E-00	0.14855E-00	-0.10840E 01	0.12980E 01
101	535.14	0.12213E 01	0.19992E-00	0.69398E-03	0.98956E-03	0.11656E-00	0.10251E-00	-0.11080E 01	0.14164E 01
102	534.90	0.12930E 01	0.21098E-00	0.73222E-03	0.10441E-02	0.12300E-00	0.10818E-00	-0.11080E 01	0.14893E 01
103	534.19	0.20104E 01	0.33629E-00	0.11664E-02	0.16632E-02	0.19605E-00	0.17243E-00	-0.10800E 01	0.12825E 01
104	557.35	0.25690E 02	0.41078E 01	0.14530E-01	0.20718E-01	0.23949E 01	0.21063E 01	0.85000E 00	0.
105	560.91	0.26941E 02	0.40830E 01	0.14486E-01	0.20656E-01	0.23804E 01	0.20935E 01	0.94000E 00	0.87429E 00
106	561.74	0.26846E 02	0.40363E 01	0.14330E-01	0.20434E-01	0.23531E 01	0.20696E 01	0.96000E 00	0.87455E 00
107	557.70	0.24633E 02	0.36953E 01	0.13075E-01	0.18643E-01	0.21543E 01	0.18947E 01	0.98000E 00	0.89067E 00
108	555.17	0.21447E 02	0.32291E 01	0.11400E-01	0.16256E-01	0.18826E 01	0.16557E 01	0.10000E 01	0.93084E 00
109	548.67	0.15872E 02	0.23892E 01	0.83885E-02	0.11961E-01	0.13929E 01	0.12250E 01	0.10200E 01	0.96596E 00
110	562.84	0.26630E 02	0.40402E 01	0.14358E-01	0.20473E-01	0.23554E 01	0.20716E 01	0.80000E-01	0.89691E 00
111	560.48	0.26807E 02	0.40275E 01	0.14284E-01	0.20368E-01	0.23480E 01	0.20651E 01	0.10000E-00	0.88340E 00
112	565.05	0.26728E 02	0.40464E 01	0.14407E-01	0.20544E-01	0.23590E 01	0.20748E 01	0.12000E-00	0.88067E 00
113	559.75	0.25108E 02	0.38027E 01	0.13478E-01	0.19218E-01	0.22169E 01	0.19498E 01	0.14000E-00	0.89192E 00
114	558.77	0.26245E 02	0.39728E 01	0.14069E-01	0.20062E-01	0.23161E 01	0.20370E 01	0.80000E-01	0.
115	559.71	0.26209E 02	0.39560E 01	0.14021E-01	0.19993E-01	0.23064E 01	0.20284E 01	0.10000E-00	0.86941E 00
116	560.47	0.26646E 02	0.40508E 01	0.14367E-01	0.20485E-01	0.23616E 01	0.20770E 01	0.12000E-00	0.87640E 00
117	565.02	0.27147E 02	0.41236E 01	0.14682E-01	0.20935E-01	0.24040E 01	0.21143E 01	0.14000E-00	0.90325E 00
118	561.51	0.26047E 02	0.39820E 01	0.14135E-01	0.20156E-01	0.23215E 01	0.20418E 01	0.10000E-00	0.87532E 00
119	561.49	0.25865E 02	0.39344E 01	0.13966E-01	0.19914E-01	0.22938E 01	0.20173E 01	0.15000E-00	0.25997E-00
120	585.87	0.24068E 02	0.37165E 01	0.13474E-01	0.19213E-01	0.21667E 01	0.19056E 01	0.20000E-00	0.94148E 00
121	562.74	0.26239E 02	0.40141E 01	0.14264E-01	0.20339E-01	0.23402E 01	0.20582E 01	0.25000E-00	0.89307E 00
122	561.93	0.25729E 02	0.39343E 01	0.13971E-01	0.19921E-01	0.22937E 01	0.20173E 01	0.30000E-00	0.88672E 00
123	558.99	0.24740E 02	0.37958E 01	0.13445E-01	0.19171E-01	0.22130E 01	0.19463E 01	0.35000E-00	0.84213E 00
124	562.11	0.26594E 02	0.41144E 01	0.14612E-01	0.20836E-01	0.23987E 01	0.21096E 01	0.38000E-00	0.90532E 00
125	564.39	0.26805E 02	0.41864E 01	0.14898E-01	0.21243E-01	0.24407E 01	0.21466E 01	0.45000E-00	0.90792E 00
126	565.51	0.26393E 02	0.41786E 01	0.14884E-01	0.21223E-01	0.24361E 01	0.21426E 01	0.61000E 00	0.93952E 00
127	546.62	0.13317E 02	0.20965E 01	0.73480E-02	0.10478E-01	0.12222E 01	0.10749E 01	0.70000E 00	0.10845E 01
128	540.86	0.60639E 01	0.95461E 00	0.33296E-02	0.47478E-02	0.55653E 00	0.48947E-00	0.75000E 00	0.12464E 01
129	564.42	0.27748E 02	0.44258E 01	0.15750E-01	0.22458E-01	0.25802E 01	0.22693E 01	0.70000E 00	0.11232E 01
130	564.64	0.27265E 02	0.43495E 01	0.15481E-01	0.22075E-01	0.25357E 01	0.22302E 01	0.80000E 00	0.10905E 01
131	544.04	0.10265E 02	0.15360E 01	0.53718E-02	0.76597E-02	0.89546E 00	0.78755E 00	0.90000E 00	0.11845E 01
132	563.74	0.23087E 02	0.35043E 01	0.12463E-01	0.17772E-01	0.20430E 01	0.17968E 01	0.90000E 00	0.97431E 00
133	566.48	0.23329E 02	0.35286E 01	0.12579E-01	0.17937E-01	0.20571E 01	0.18092E 01	0.96000E 00	0.98644E 00
134	565.86	0.22057E 02	0.33406E 01	0.11903E-01	0.16972E-01	0.19476E 01	0.17129E 01	0.10000E 01	0.98817E 00
135	540.31	0.17950E 02	0.28023E 01	0.97698E-02	0.13931E-01	0.16337E 01	0.14369E 01	0.70000E-02	0.
136	919.73	0.11936E-01	0.22061E-02	0.11354E-04	0.16190E-04	0.12861E-02	0.11311E-02	0.70000E-02	0.
137	538.95	0.19235E 02	0.29910E 01	0.10416E-01	0.14852E-01	0.17437E 01	0.15336E 01	0.39000E-01	0.10323E 01
138	538.29	0.19084E 02	0.29519E 01	0.10274E-01	0.14650E-01	0.17210E 01	0.15136E 01	0.78000E-01	0.
139	537.76	0.18968E 02	0.29189E 01	0.10154E-01	0.14479E-01	0.17017E 01	0.14966E 01	0.11700E-00	0.
140	537.80	0.19088E 02	0.29278E 01	0.10186E-01	0.14524E-01	0.17069E 01	0.15012E 01	0.78000E-01	0.10354E 01
141	579.68	0.55172E 02	0.59634E 01	0.21504E-01	0.30663E-01	0.34766E 01	0.30577E 01	-0.	0.
142	579.57	0.54302E 02	0.58690E 01	0.21161E-01	0.30174E-01	0.34216E 01	0.30093E 01	-0.	0.
143	536.23	0.17251E 02	0.26306E 01	0.91399E-02	0.13033E-01	0.15337E 01	0.13488E 01	0.78000E-01	0.96532E 00
144	536.84	0.16409E 02	0.25072E 01	0.87156E-02	0.12428E-01	0.14617E 01	0.12856E 01	0.70000E-02	0.90953E 00
145	537.42	0.16025E 02	0.24374E 01	0.84769E-02	0.12087E-01	0.14210E 01	0.12497E 01	0.70000E-02	0.92804E 00
146	536.53	0.17085E 02	0.26101E 01	0.90708E-02	0.12934E-01	0.15217E 01	0.13383E 01	0.39000E-01	0.89399E 00
147	538.56	0.17446E 02	0.26638E 01	0.92734E-02	0.13223E-01	0.15530E 01	0.13659E 01	0.78000E-01	0.
148	538.38	0.17392E 02	0.26773E 01	0.93188E-02	0.13288E-01	0.15608E 01	0.13728E 01	0.11700E-00	0.
149	560.37	0.24695E 02	0.39742E 01	0.14093E-01	0.20096E-01	0.23169E 01	0.20377E 01	0.70000E-02	0.87213E 00
150	560.27	0.24358E 02	0.39383E 01	0.13965E-01	0.19913E-01	0.22960E 01	0.20193E 01	0.70000E-02	0.86777E 00
151	557.71	0.23428E 02	0.37826E 01	0.13383E-01	0.19084E-01	0.22052E 01	0.19395E 01	0.70000E-02	0.84288E 00
152	560.55	0.25223E 02	0.39310E 01	0.13943E-01	0.19881E-01	0.22918E 01	0.20156E 01	0.39000E-01	0.86657E 00

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	560.31	0.25256E 02	0.39357E 01	0.13956E-01	0.19900E-01	0.22945E 01	0.20180E 01	0.39000E-01	0.
154	559.22	0.24942E 02	0.38591E 01	0.13672E-01	0.19495E-01	0.22498E 01	0.19787E 01	0.78000E-01	0.88390E 00
155	559.57	0.24830E 02	0.40131E 01	0.14222E-01	0.20279E-01	0.23396E 01	0.20577E 01	0.39000E-01	0.
156	557.80	0.23677E 02	0.38110E 01	0.13485E-01	0.19228E-01	0.22218E 01	0.19541E 01	0.39000E-01	0.
157	557.67	0.23048E 02	0.37211E 01	0.13166E-01	0.18773E-01	0.21694E 01	0.19080E 01	0.78000E-01	0.87535E 00
158	555.98	0.23774E 02	0.38468E 01	0.13591E-01	0.19379E-01	0.22427E 01	0.19724E 01	0.39000E-01	0.
159	556.79	0.23855E 02	0.38617E 01	0.13653E-01	0.19467E-01	0.22513E 01	0.19800E 01	0.78000E-01	0.
160	559.91	0.24342E 02	0.39350E 01	0.13949E-01	0.19890E-01	0.22941E 01	0.20176E 01	0.39000E-01	0.
161	562.38	0.22351E 02	0.35326E 01	0.12549E-01	0.17894E-01	0.20595E 01	0.18113E 01	0.43000E-01	0.88973E 00
162	563.44	0.22507E 02	0.35708E 01	0.12696E-01	0.18104E-01	0.20818E 01	0.18309E 01	0.43000E-01	0.90395E 00
163	564.80	0.22434E 02	0.35676E 01	0.12700E-01	0.18109E-01	0.20799E 01	0.18292E 01	0.85000E-01	0.91168E 00
164	566.36	0.21948E 02	0.34764E 01	0.12392E-01	0.17670E-01	0.20267E 01	0.17825E 01	0.12800E-00	0.90191E 00
165	562.34	0.22901E 02	0.36311E 01	0.12899E-01	0.18392E-01	0.21169E 01	0.18618E 01	0.43000E-01	0.
166	561.91	0.22444E 02	0.35463E 01	0.12593E-01	0.17956E-01	0.20675E 01	0.18183E 01	0.85000E-01	0.93454E 00
167	563.25	0.25179E 02	0.39815E 01	0.14154E-01	0.20183E-01	0.23212E 01	0.20415E 01	0.43000E-01	0.
168	565.82	0.22767E 02	0.36458E 01	0.12990E-01	0.18522E-01	0.21255E 01	0.18694E 01	0.12800E-00	0.12744E 01
169	565.22	0.23217E 02	0.37048E 01	0.13193E-01	0.18812E-01	0.21599E 01	0.18996E 01	0.85000E-01	0.95736E 00
170	565.62	0.23489E 02	0.37310E 01	0.13291E-01	0.18952E-01	0.21752E 01	0.19131E 01	0.12800E-00	0.95802E 00
171	563.04	0.23953E 02	0.37871E 01	0.13461E-01	0.19194E-01	0.22079E 01	0.19418E 01	0.85000E-01	0.98190E 00
172	573.87	0.32043E 02	0.51211E 01	0.18373E-01	0.26199E-01	0.29856E 01	0.26258E 01	0.43000E-01	0.
173	566.45	0.24931E 02	0.39810E 01	0.14192E-01	0.20236E-01	0.23209E 01	0.20412E 01	0.12800E-00	0.10162E 01
174	566.73	0.27565E 02	0.43811E 01	0.15622E-01	0.22275E-01	0.25542E 01	0.22464E 01	0.85000E-01	0.
175	576.09	0.33787E 02	0.53804E 01	0.19341E-01	0.27578E-01	0.31368E 01	0.27588E 01	0.43000E-01	0.13136E 01
176	575.59	0.33174E 02	0.52813E 01	0.18977E-01	0.27059E-01	0.30790E 01	0.27080E 01	0.43000E-01	0.12958E 01
177	567.96	0.27441E 02	0.43714E 01	0.15604E-01	0.22250E-01	0.25485E 01	0.22414E 01	0.12800E-00	0.11143E 01
178	570.79	0.29915E 02	0.47654E 01	0.17051E-01	0.24314E-01	0.27782E 01	0.24434E 01	0.85000E-01	0.11971E 01
179	572.95	0.28142E 02	0.44883E 01	0.16090E-01	0.22943E-01	0.26166E 01	0.23013E 01	0.70000E-02	0.10841E 01
180	559.72	0.23380E 02	0.37196E 01	0.13183E-01	0.18798E-01	0.21685E 01	0.19072E 01	0.70000E-02	0.
181	558.79	0.20027E 02	0.31844E 01	0.11277E-01	0.16080E-01	0.18565E 01	0.16328E 01	0.70000E-02	0.75727E 00
182	559.79	0.21207E 02	0.33848E 01	0.11997E-01	0.17107E-01	0.19733E 01	0.17355E 01	0.70000E-02	0.
183	567.10	0.26430E 02	0.42084E 01	0.15011E-01	0.21404E-01	0.24535E 01	0.21578E 01	0.32000E-01	0.10627E 01
184	568.61	0.26169E 02	0.41970E 01	0.14990E-01	0.21374E-01	0.24469E 01	0.21520E 01	0.32000E-01	0.10043E 01
185	556.84	0.21507E 02	0.34270E 01	0.12116E-01	0.17277E-01	0.19979E 01	0.17572E 01	0.64000E-01	0.10590E 01
186	564.69	0.25278E 02	0.40326E 01	0.14354E-01	0.20467E-01	0.23510E 01	0.20677E 01	0.64000E-01	0.97727E 00
187	568.11	0.24271E 02	0.38916E 01	0.13893E-01	0.19810E-01	0.22688E 01	0.19954E 01	0.70000E-02	0.91226E 00
188	568.72	0.26327E 02	0.42900E 01	0.15323E-01	0.21849E-01	0.25011E 01	0.21997E 01	0.70000E-02	0.10137E 01
189	538.41	0.48109E 01	0.78657E 00	0.27379E-02	0.39040E-02	0.45857E-00	0.40331E-00	0.10600E 01	0.10924E 01
190	537.76	0.29683E 01	0.49483E-00	0.17215E-02	0.24547E-02	0.28849E-00	0.25372E-00	0.10840E 01	0.11623E 01
191	538.03	0.15735E 01	0.26378E-00	0.91785E-03	0.13088E-02	0.15378E-00	0.13525E-00	0.11080E 01	0.12394E 01
192	537.01	0.18447E 01	0.30739E-00	0.10687E-02	0.15239E-02	0.17921E-00	0.15761E-00	0.11080E 01	0.11730E 01
193	543.13	0.16639E 01	0.27402E-00	0.95761E-03	0.13655E-02	0.15976E-00	0.14050E-00	0.16580E 01	0.19360E 01
194	542.93	0.17683E 01	0.28985E-00	0.10127E-02	0.14441E-02	0.16898E-00	0.14862E-00	0.11700E 01	0.20161E 01
195	543.45	0.17475E 01	0.28785E-00	0.10062E-02	0.14348E-02	0.16781E-00	0.14759E-00	0.16740E 01	0.22338E 01
196	543.07	0.19127E 01	0.31355E-00	0.10957E-02	0.15623E-02	0.18280E-00	0.16077E-00	0.16950E 01	0.24635E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
19	1	12.51	162.51	0.03	-0.01	3	C55	3.00	2	10.04	212.70	1674.60	156	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.820168E 02	0.470473E-02	0.445513E 04	0.481276E-05	0.664336E-07	0.324924E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726250E 00	0.169603E 01	0.193123E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	579.40	0.19757E 02	0.31265E 01	0.11233E-01	0.16284E-01	0.18434E 01	0.16189E 01	0.10000E 01	0.94834E 00
198	579.94	0.19366E 02	0.29658E 01	0.10661E-01	0.15454E-01	0.17487E 01	0.15357E 01	0.12000E 01	0.93629E 00
199	554.04	0.10258E 02	0.16320E 01	0.57371E-02	0.83164E-02	0.96222E 00	0.84503E 00	0.13000E 01	0.99119E 00
200	522.68	0.92260E 00	0.13340E-00	0.45682E-03	0.66220E-03	0.78657E-01	0.69077E-01	0.11890E 01	0.16913E 01
201	523.33	0.90805E 00	0.14901E-00	0.51055E-03	0.74008E-03	0.87860E-01	0.77160E-01	0.14540E 01	0.12742E 01
202	523.35	0.11761E 01	0.19154E-00	0.65625E-03	0.95129E-03	0.11293E-00	0.99178E-01	0.17040E 01	0.14314E 01
203	529.92	0.17917E 01	0.29288E-00	0.10090E-02	0.14626E-02	0.17268E-00	0.15165E-00	0.20410E 01	0.18800E 01
204	530.75	0.15745E 01	0.11964E-00	0.41245E-03	0.59788E-03	0.70543E-01	0.61952E-01	0.20700E 01	0.
205	533.98	0.53776E 01	0.46766E-00	0.16165E-02	0.23433E-02	0.27574E-00	0.24216E-00	0.21880E 01	0.
206	531.50	0.31626E 01	0.51744E 00	0.17849E-02	0.25873E-02	0.30509E-00	0.26793E-00	0.22480E 01	0.21763E 01
207	529.41	0.17927E 01	0.28803E-00	0.99183E-03	0.14377E-02	0.16982E-00	0.14914E-00	0.20700E 01	0.15684E 01
208	530.24	0.12971E 01	0.11477E-00	0.39550E-03	0.57331E-03	0.67673E-01	0.59431E-01	0.20700E 01	0.33818E 01
209	534.25	0.55667E 01	0.44702E-00	0.15455E-02	0.22404E-02	0.26357E-00	0.23147E-00	0.21880E 01	0.16853E 02
210	529.95	0.20753E 01	0.34185E-00	0.11777E-02	0.17071E-02	0.20156E-00	0.17701E-00	0.20700E 01	0.17460E 01
211	531.79	0.32322E 01	0.53296E 00	0.18389E-02	0.26656E-02	0.31424E-00	0.27597E-00	0.21880E 01	0.27143E 01
212	531.92	0.23636E 01	0.38503E-00	0.13286E-02	0.19260E-02	0.22702E-00	0.19937E-00	0.22390E 01	0.16613E 01
213	530.61	0.20629E 01	0.33579E-00	0.11574E-02	0.16778E-02	0.19798E-00	0.17387E-00	0.21880E 01	0.14330E 01
214	532.49	0.21777E 01	0.35922E-00	0.12402E-02	0.17977E-02	0.21180E-00	0.18601E-00	0.22480E 01	0.14830E 01
215	534.38	0.76831E 00	0.11511E-00	0.39803E-03	0.57698E-03	0.67871E-01	0.59606E-01	0.11650E 01	0.11314E 01
216	532.93	0.62441E 00	0.52202E-01	0.18029E-03	0.26134E-03	0.30779E-01	0.27031E-01	0.12050E 01	0.
217	533.27	0.84156E 00	0.12242E-00	0.42291E-03	0.61304E-03	0.72180E-01	0.63389E-01	0.12120E 01	0.13582E 01
218	548.07	0.85872E 00	0.12661E-00	0.44285E-03	0.64194E-03	0.74651E-01	0.65559E-01	0.11890E 01	0.
219	531.42	0.73870E 00	0.12337E-00	0.42554E-03	0.61686E-03	0.72742E-01	0.63883E-01	0.14540E 01	0.11467E 01
220	530.81	0.98286E 00	0.17034E-00	0.58727E-03	0.85129E-03	0.10044E-00	0.88206E-01	0.17040E 01	0.10859E 01
221	530.56	0.15060E 01	0.25003E-00	0.86182E-03	0.12493E-02	0.14742E-00	0.12947E-00	0.20410E 01	0.12590E 01
222	533.94	0.18644E 01	0.31341E-00	0.10833E-02	0.15704E-02	0.18479E-00	0.16229E-00	0.22480E 01	0.12615E 01
223	536.41	0.75792E 00	0.11369E-00	0.39377E-03	0.57080E-03	0.67030E-01	0.58867E-01	0.11650E 01	0.16272E 01
224	534.47	0.60104E 00	0.50292E-01	0.17391E-03	0.25210E-03	0.29653E-01	0.26042E-01	0.12050E 01	0.21994E 01
225	534.67	0.82338E 00	0.11987E-00	0.41458E-03	0.60096E-03	0.70676E-01	0.62069E-01	0.12120E 01	0.15414E 01
226	535.09	0.57455E 00	0.96502E-01	0.33388E-03	0.48398E-03	0.56899E-01	0.49969E-01	0.14540E 01	0.88428E 00
227	534.83	0.93506E 00	0.15069E-00	0.52127E-03	0.75561E-03	0.88851E-01	0.78030E-01	0.17040E 01	0.11033E 01
228	534.26	0.12135E 01	0.19946E-00	0.68962E-03	0.99966E-03	0.11760E-00	0.10328E-00	0.18780E 01	0.11875E 01
229	534.11	0.15912E 01	0.26271E-00	0.90821E-03	0.13165E-02	0.15490E-00	0.13604E-00	0.21880E 01	0.12342E 01
230	539.02	0.82078E 00	0.12123E-00	0.42082E-03	0.61001E-03	0.71479E-01	0.62774E-01	0.11890E 01	0.11892E 01
231	535.89	0.50753E 00	0.89746E-01	0.31072E-03	0.45040E-03	0.52915E-01	0.46471E-01	0.14540E 01	0.69393E 00
232	536.01	0.92416E 00	0.15089E-00	0.52247E-03	0.75735E-03	0.88968E-01	0.78133E-01	0.16130E 01	0.11774E 01
233	535.46	0.77558E 00	0.12757E-00	0.44151E-03	0.63999E-03	0.75216E-01	0.66056E-01	0.17040E 01	0.95888E 00
234	535.09	0.10873E 01	0.17962E-00	0.62144E-03	0.90083E-03	0.10590E-00	0.93006E-01	0.18780E 01	0.11395E 01
235	537.56	0.71896E 00	0.11876E-00	0.41173E-03	0.59683E-03	0.70020E-01	0.61493E-01	0.14540E 01	0.90477E 00
236	536.52	0.98338E 00	0.16061E-00	0.55634E-03	0.80646E-03	0.94696E-01	0.83163E-01	0.17040E 01	0.10757E 01
237	536.23	0.17122E 01	0.28304E-00	0.98019E-03	0.14209E-02	0.16688E-00	0.14656E-00	0.21880E 01	0.15892E 01
238	537.22	0.13247E 01	0.11767E-00	0.40786E-03	0.59122E-03	0.69382E-01	0.60932E-01	0.20700E 01	0.26783E 01
239	543.06	0.91896E 00	0.13442E-00	0.46818E-03	0.67866E-03	0.79254E-01	0.69602E-01	0.11890E 01	0.12451E 01
240	539.04	0.86182E 00	0.14455E-00	0.50179E-03	0.72738E-03	0.85231E-01	0.74851E-01	0.14540E 01	0.92970E 00
241	537.42	0.10270E 01	0.16859E-00	0.58445E-03	0.84720E-03	0.99405E-01	0.87299E-01	0.17040E 01	0.11248E 01
242	536.96	0.11221E 01	0.18556E-00	0.64302E-03	0.93210E-03	0.10941E-00	0.96085E-01	0.18780E 01	0.11596E 01
243	537.82	0.19309E 01	0.31948E-00	0.11079E-02	0.16059E-02	0.18837E-00	0.16543E-00	0.20410E 01	0.21954E 01
244	537.02	0.14738E 01	0.13276E-00	0.46005E-03	0.66688E-03	0.78274E-01	0.68741E-01	0.20700E 01	0.
245	538.97	0.23803E 01	0.19464E-00	0.67563E-03	0.97937E-03	0.11476E-00	0.10079E-00	0.21870E 01	0.26046E 01
246	537.81	0.19491E 01	0.32836E-00	0.11387E-02	0.16506E-02	0.19361E-00	0.17003E-00	0.22100E 01	0.17858E 01
247	540.10	0.83325E 00	0.13636E-00	0.47378E-03	0.68678E-03	0.80402E-01	0.70610E-01	0.14540E 01	0.95853E 00
248	538.53	0.13387E 01	0.22158E-00	0.76885E-03	0.11145E-02	0.13065E-00	0.11474E-00	0.17040E 01	0.14244E 01
249	538.04	0.14005E 01	0.11742E-00	0.40727E-03	0.59037E-03	0.69235E-01	0.60803E-01	0.18780E 01	0.
250	539.14	0.22322E 01	0.18255E-00	0.63375E-03	0.91867E-03	0.10764E-00	0.94528E-01	0.21880E 01	0.64610E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	540.82	0.81818E 00	0.13807E-00	0.48000E-03	0.69580E-03	0.81409E-01	0.71495E-01	0.14540E 01	0.89118E 00
252	539.03	0.10520E 01	0.17644E-00	0.61248E-03	0.88784E-03	0.10403E-00	0.91364E-01	0.16130E 01	0.11181E 01
253	542.49	0.22774E 01	0.20096E-00	0.69960E-03	0.10141E-02	0.11849E-00	0.10406E-00	0.17060E 01	0.
254	538.90	0.14816E 01	0.24528E-00	0.85134E-03	0.12341E-02	0.14462E-00	0.12701E-00	0.21880E 01	0.13322E 01
255	541.37	0.13496E 01	0.12466E-00	0.43357E-03	0.62850E-03	0.73500E-01	0.64549E-01	0.16580E 01	0.47134E 01
256	538.96	0.16322E 01	0.13692E-00	0.47526E-03	0.68892E-03	0.80730E-01	0.70898E-01	0.17920E 01	0.
257	548.81	0.16842E 01	0.28463E-00	0.99620E-03	0.14441E-02	0.16782E-00	0.14738E-00	0.10840E 01	0.11088E 01
258	540.67	0.87221E 00	0.14828E-00	0.51541E-03	0.74713E-03	0.87425E-01	0.76778E-01	0.14540E 01	0.94772E 00
259	539.89	0.10514E 01	0.17417E-00	0.60502E-03	0.87701E-03	0.10269E-00	0.90184E-01	0.16130E 01	0.10938E 01
260	540.02	0.15065E 01	0.24577E-00	0.85385E-03	0.12377E-02	0.14491E-00	0.12726E-00	0.17040E 01	0.16392E 01
261	539.38	0.14021E 01	0.23112E-00	0.80253E-03	0.11633E-02	0.13627E-00	0.11968E-00	0.18780E 01	0.13565E 01
262	538.52	0.13548E 01	0.22834E-00	0.79228E-03	0.11485E-02	0.13463E-00	0.11823E-00	0.20410E 01	0.10182E 01
263	555.00	0.99424E 01	0.16962E 01	0.59679E-02	0.86510E-02	0.10001E 01	0.87831E 00	0.14540E 01	0.
264	919.73	0.12458E-01	0.24765E-02	0.12685E-04	0.18387E-04	0.14601E-02	0.12823E-02	0.16130E 01	0.
265	540.31	0.11543E 01	0.18660E-00	0.64843E-03	0.93995E-03	0.11002E-00	0.96622E-01	0.17040E 01	0.11276E 01
266	539.01	0.12613E 01	0.20787E-00	0.72157E-03	0.10460E-02	0.12256E-00	0.10764E-00	0.18780E 01	0.10042E 01
267	539.11	0.12940E 01	0.21751E-00	0.75510E-03	0.10946E-02	0.12825E-00	0.11263E-00	0.20410E 01	0.11132E 01
268	540.44	0.97195E 00	0.16032E-00	0.55716E-03	0.80764E-03	0.94524E-01	0.83012E-01	0.16130E 01	0.10210E 01
269	540.49	0.11569E 01	0.18704E-00	0.65005E-03	0.94230E-03	0.11028E-00	0.96849E-01	0.18280E 01	0.10435E 01
270	540.16	0.12047E 01	0.19776E-00	0.68713E-03	0.99605E-03	0.11660E-00	0.10240E-00	0.18780E 01	0.10971E 01
271	539.77	0.13496E 01	0.22647E-00	0.78661E-03	0.11402E-02	0.13353E-00	0.11726E-00	0.20410E 01	0.11480E 01
272	540.42	0.57506E 00	0.97313E-01	0.33819E-03	0.49024E-03	0.57377E-01	0.50389E-01	0.16130E 01	0.60707E 00
273	541.13	0.11273E 01	0.18743E-00	0.65175E-03	0.94476E-03	0.11051E-00	0.97051E-01	0.17200E 01	0.10918E 01
274	540.38	0.86650E 00	0.13964E-00	0.48529E-03	0.70346E-03	0.82336E-01	0.72308E-01	0.18280E 01	0.80207E 00
275	540.25	0.12005E 01	0.19739E-00	0.68589E-03	0.99425E-03	0.11638E-00	0.10221E-00	0.18780E 01	0.11166E 01
276	919.73	0.12458E-01	0.25203E-02	0.12909E-04	0.18713E-04	0.14860E-02	0.13050E-02	0.20600E 01	0.
277	539.21	0.12390E 01	0.10395E-00	0.36088E-03	0.52313E-03	0.61289E-01	0.53825E-01	0.21000E 01	0.27442E 01
278	919.73	0.12458E-01	0.12605E-02	0.64566E-05	0.93594E-05	0.74323E-03	0.65271E-03	0.21870E 01	0.
279	540.43	0.14722E 01	0.24839E-00	0.86324E-03	0.12513E-02	0.14645E-00	0.12862E-00	0.21950E 01	0.12508E 01
280	540.07	0.11922E 01	0.19901E-00	0.69140E-03	0.10022E-02	0.11734E-00	0.10305E-00	0.18780E 01	0.11351E 01
281	539.67	0.12478E 01	0.21044E-00	0.73087E-03	0.10594E-02	0.12408E-00	0.10896E-00	0.20600E 01	0.10800E 01
282	539.82	0.11423E 01	0.18605E-00	0.64627E-03	0.93682E-03	0.10970E-00	0.96340E-01	0.18280E 01	0.10852E 01
283	539.54	0.13195E 01	0.22138E-00	0.76880E-03	0.11144E-02	0.13053E-00	0.11463E-00	0.20600E 01	0.11297E 01
284	539.74	0.13060E 01	0.21105E-00	0.73306E-03	0.10626E-02	0.12444E-00	0.10928E-00	0.17200E 01	0.14637E 01
285	539.79	0.13865E 01	0.22791E-00	0.79164E-03	0.11475E-02	0.13438E-00	0.11801E-00	0.18780E 01	0.16944E 01
286	539.99	0.11371E 01	0.10495E-00	0.36461E-03	0.52853E-03	0.61881E-01	0.54344E-01	0.16580E 01	0.23532E 01
287	919.73	0.12458E-01	0.12605E-02	0.64566E-05	0.93594E-05	0.74323E-03	0.65271E-03	0.17920E 01	0.
288	539.23	0.10488E 01	0.17235E-00	0.59838E-03	0.86739E-03	0.10162E-00	0.89245E-01	0.16130E 01	0.11998E 01
289	540.45	0.19210E 01	0.16129E-00	0.56054E-03	0.81254E-03	0.95096E-01	0.83515E-01	0.17060E 01	0.21724E 02
290	537.75	0.13403E 01	0.11235E-00	0.38959E-03	0.56474E-03	0.66245E-01	0.58178E-01	0.18780E 01	0.
291	538.28	0.13465E 01	0.22013E-00	0.76365E-03	0.11070E-02	0.12979E-00	0.11398E-00	0.17200E 01	0.17462E 01
292	539.27	0.90130E 00	0.15492E-00	0.53786E-03	0.77967E-03	0.91340E-01	0.80216E-01	0.14400E 01	0.10162E 01
293	537.43	0.30806E 00	0.14656E-00	0.50805E-03	0.73646E-03	0.86411E-01	0.75887E-01	0.17200E 01	0.97156E 00
294	536.90	0.10935E 01	0.18056E-00	0.62564E-03	0.90691E-03	0.10646E-00	0.93493E-01	0.18780E 01	0.11772E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
20	1	-6.63	143.37	-0.	-0.	1	C55	2.80	2	10.14	925.30	1831.10	128	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.888138E 02	0.191550E-01	0.468466E 04	0.180952E-04	0.719392E-07	0.118629E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730472E 00	0.431500E 01	0.563840E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	552.59	0.24413E 02	0.32000E 01	0.97429E-02	0.35722E-02	0.74160E 00	0.56754E 00	-0.	0.10015E 01
2	553.16	0.23274E 02	0.32465E 01	0.98884E-02	0.36256E-02	0.75236E 00	0.57578E 00	-0.30000E-01	0.
3	548.06	0.21572E 02	0.32625E 01	0.99000E-02	0.36298E-02	0.75607E 00	0.57861E 00	-0.60000E-01	0.
4	548.99	0.20779E 02	0.32250E 01	0.97930E-02	0.35906E-02	0.74740E 00	0.57197E 00	-0.90000E-01	0.
5	545.01	0.18656E 02	0.29625E 01	0.89698E-02	0.32888E-02	0.68656E 00	0.52542E 00	-0.20000E-00	0.10374E 01
6	543.31	0.16028E 02	0.25428E 01	0.76894E-02	0.28193E-02	0.58929E 00	0.45098E-00	-0.40000E-00	0.10255E 01
7	542.05	0.13492E 02	0.21492E 01	0.64931E-02	0.23807E-02	0.49807E-00	0.38117E-00	-0.60000E 00	0.10304E 01
8	541.06	0.10623E 02	0.16912E 01	0.51058E-02	0.18721E-02	0.39194E-00	0.29995E-00	-0.80000E 00	0.
9	542.02	0.10892E 02	0.17076E 01	0.51590E-02	0.18915E-02	0.39574E-00	0.30286E-00	-0.90000E 00	0.10586E 01
10	542.67	0.94062E 01	0.14941E 01	0.45161E-02	0.16558E-02	0.34626E-00	0.26499E-00	-0.98000E 00	0.10515E 01
11	534.94	0.26026E-00	0.44625E-01	0.13412E-03	0.49177E-04	0.10342E-01	0.79144E-02	-0.11220E 01	0.51568E 00
12	537.18	0.81143E 00	0.11871E-00	0.35737E-03	0.13103E-03	0.27510E-01	0.21053E-01	-0.11890E 01	0.91393E 00
13	538.12	0.39948E-00	0.60280E-01	0.18160E-03	0.66583E-04	0.13970E-01	0.10691E-01	-0.13340E 01	0.78440E 00
14	538.20	0.38442E-00	0.66034E-01	0.19894E-03	0.72943E-04	0.15303E-01	0.11711E-01	-0.14400E 01	0.79756E 00
15	552.17	0.24167E 02	0.33692E 01	0.10255E-01	0.37600E-02	0.78082E 00	0.59755E 00	0.30000E-01	0.
16	549.34	0.22739E 02	0.34414E 01	0.10453E-01	0.38325E-02	0.79754E 00	0.61035E 00	0.60000E-01	0.
17	549.15	0.22816E 02	0.35415E 01	0.10755E-01	0.39434E-02	0.82073E 00	0.62810E 00	0.90000E-01	0.
18	549.94	0.23217E 02	0.36971E 01	0.11234E-01	0.41191E-02	0.85680E 00	0.65570E 00	0.20000E-00	0.10093E 01
19	559.51	0.26242E 02	0.42010E 01	0.12856E-01	0.47136E-02	0.97357E 00	0.74507E 00	0.40000E-00	0.10123E 01
20	571.91	0.30072E 02	0.48704E 01	0.15042E-01	0.55153E-02	0.11287E 01	0.86379E 00	0.60000E 00	0.
21	610.20	0.51004E 02	0.79395E 01	0.25244E-01	0.92559E-02	0.18400E 01	0.14081E 01	0.92000E 00	0.
22	593.21	0.49143E 02	0.75804E 01	0.23791E-01	0.87231E-02	0.17568E 01	0.13444E 01	0.10400E 01	0.95103E 00
23	582.58	0.46599E 02	0.71659E 01	0.22310E-01	0.81801E-02	0.16607E 01	0.12709E 01	0.10600E 01	0.96321E 00
24	562.03	0.35251E 02	0.56152E 01	0.17216E-01	0.63122E-02	0.13013E 01	0.99589E 00	0.10840E 01	0.95837E 00
25	525.04	0.13074E 02	0.19093E 01	0.56978E-02	0.20891E-02	0.44249E-00	0.33863E-00	0.12070E 01	0.15795E 01
26	528.61	0.14647E 02	0.22606E 01	0.67636E-02	0.24799E-02	0.52390E 00	0.40094E-00	0.12490E 01	0.19785E 01
27	529.96	0.14125E 02	0.21464E 01	0.64280E-02	0.23568E-02	0.49742E-00	0.38067E-00	0.13340E 01	0.19883E 01
28	530.39	0.10350E 02	0.17493E 01	0.52403E-02	0.19214E-02	0.40539E-00	0.31024E-00	0.14540E 01	0.19459E 01
29	533.08	0.68104E 01	0.11187E 01	0.33578E-02	0.12311E-02	0.25925E-00	0.19840E-00	0.16580E 01	0.14828E 01
30	538.66	0.60265E 01	0.10052E 01	0.30293E-02	0.11107E-02	0.23294E-00	0.17827E-00	0.20410E 01	0.16266E 01
31	541.13	0.52140E 01	0.87085E 00	0.26293E-02	0.96403E-03	0.20182E-00	0.15445E-00	0.22480E 01	0.14728E 01
32	549.54	0.22916E 02	0.34720E 01	0.10547E-01	0.38672E-02	0.80464E 00	0.61579E 00	-0.60000E-01	0.
33	554.00	0.23794E 02	0.33206E 01	0.10120E-01	0.37107E-02	0.76955E 00	0.58893E 00	-0.30000E-01	0.
34	551.72	0.24101E 02	0.36560E 01	0.11124E-01	0.40787E-02	0.84728E 00	0.64842E 00	0.30000E-01	0.
35	549.32	0.22483E 02	0.34901E 01	0.10601E-01	0.38867E-02	0.80883E 00	0.61899E 00	0.60000E-01	0.
36	563.66	0.38110E 02	0.61149E 01	0.18771E-01	0.68823E-02	0.14171E 01	0.10845E 01	-0.86800E 00	0.34182E 01
37	559.27	0.31064E 02	0.48380E 01	0.14803E-01	0.54275E-02	0.11212E 01	0.85805E 00	-0.91100E 00	0.28822E 01
38	554.20	0.26129E 02	0.41308E 01	0.12592E-01	0.46168E-02	0.95732E 00	0.73263E 00	-0.95300E 00	0.24871E 01
39	919.72	0.10902E-01	0.20677E-02	0.86560E-05	0.31738E-05	0.47919E-03	0.36672E-03	0.51000E-01	0.
40	541.29	0.14854E 02	0.23390E 01	0.70626E-02	0.25895E-02	0.54205E 00	0.41483E-00	0.29000E-01	0.
41	572.09	0.38954E 02	0.62036E 01	0.19163E-01	0.70260E-02	0.14377E 01	0.11003E 01	0.70000E-02	0.
42	566.85	0.36696E 02	0.58609E 01	0.18033E-01	0.66120E-02	0.13583E 01	0.10395E 01	-0.86800E 00	0.26494E 01
43	564.08	0.36919E 02	0.59028E 01	0.18125E-01	0.66455E-02	0.13680E 01	0.10469E 01	-0.91100E 00	0.27941E 01
44	562.82	0.34579E 02	0.54930E 01	0.16851E-01	0.61784E-02	0.12730E 01	0.97421E 00	-0.95300E 00	0.18932E 01
45	539.98	0.72047E 01	0.11728E 01	0.35380E-02	0.12972E-02	0.27180E-00	0.20800E-00	-0.10400E 01	0.22740E 01
46	568.28	0.37691E 02	0.60401E 01	0.18605E-01	0.68214E-02	0.13998E 01	0.10712E 01	0.70000E-02	0.
47	541.22	0.13380E 02	0.21122E 01	0.63776E-02	0.23384E-02	0.48950E-00	0.37461E-00	0.29000E-01	0.
48	540.34	0.93527E 01	0.14813E 01	0.44699E-02	0.16389E-02	0.34330E-00	0.26272E-00	0.51000E-01	0.77494E 00
49	563.81	0.30644E 02	0.48706E 01	0.14953E-01	0.54824E-02	0.11288E 01	0.86382E 00	0.70000E-02	0.27005E 01
50	542.70	0.12931E 02	0.20378E 01	0.61597E-02	0.22585E-02	0.47227E-00	0.36142E-00	0.29000E-01	0.11514E 01
51	541.11	0.88504E 01	0.13890E 01	0.41936E-02	0.15376E-02	0.32190E-00	0.24635E-00	0.51000E-01	0.
52	561.33	0.29473E 02	0.47051E 01	0.14418E-01	0.52864E-02	0.10904E 01	0.83447E 00	-0.86800E 00	0.
53	556.04	0.24551E 02	0.39228E 01	0.11974E-01	0.43902E-02	0.90911E 00	0.69573E 00	-0.91100E 00	0.22364E 01
54	555.37	0.22828E 02	0.36114E 01	0.11018E-01	0.40397E-02	0.83693E 00	0.64049E 00	-0.95300E 00	0.20852E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	539.71	0.50888E 01	0.82826E 00	0.24981E-02	0.91593E-03	0.19195E-00	0.14690E-00	-0.10400E 01	0.28410E 01
56	538.85	0.37127E 01	0.62305E 00	0.18780E-02	0.68856E-03	0.14439E-00	0.11050E-00	-0.10680E 01	0.44182E 01
57	537.12	0.22223E 01	0.36118E-00	0.10873E-02	0.39866E-03	0.83704E-01	0.64057E-01	-0.10400E 01	0.33875E 01
58	539.79	0.39049E 01	0.68809E 00	0.20754E-02	0.76097E-03	0.15946E-00	0.12204E-00	-0.10680E 01	0.22563E 01
59	536.92	0.37226E 01	0.60494E 00	0.18208E-02	0.66762E-03	0.14019E-00	0.10729E-00	-0.10400E 01	0.10839E 01
60	536.98	0.30535E 01	0.51188E 00	0.15408E-02	0.56494E-03	0.11863E-00	0.90785E-01	-0.10680E 01	0.20315E 01
61	534.94	0.45766E-00	0.75645E-01	0.22736E-03	0.83362E-04	0.17531E-01	0.13416E-01	-0.11220E 01	0.81454E 00
62	537.61	0.22130E-00	0.33383E-01	0.10053E-03	0.36861E-04	0.77366E-02	0.59207E-02	-0.13340E 01	0.42036E-00
63	536.26	0.44883E-00	0.77015E-01	0.23170E-03	0.84953E-04	0.17848E-01	0.13659E-01	-0.11220E 01	0.70033E 00
64	538.53	0.22442E-00	0.33871E-01	0.10207E-03	0.37424E-04	0.78496E-02	0.60072E-02	-0.13340E 01	0.34668E-00
65	538.53	0.31325E-00	0.53819E-01	0.16218E-03	0.59464E-04	0.12473E-01	0.95451E-02	0.14400E 01	0.66356E 00
66	538.12	0.59844E 00	0.97827E-01	0.29471E-03	0.10806E-03	0.22671E-01	0.17350E-01	0.16130E 01	0.13434E 01
67	538.03	0.74961E 00	0.12027E-00	0.36230E-03	0.13284E-03	0.27873E-01	0.21331E-01	0.17200E 01	0.10614E 01
68	538.13	0.55481E 00	0.91392E-01	0.27533E-03	0.10095E-03	0.21180E-01	0.16209E-01	-0.16130E 01	0.10262E 01
69	538.36	0.75948E 00	0.12188E-00	0.36723E-03	0.13465E-03	0.28245E-01	0.21616E-01	-0.18280E 01	0.11143E 01
70	537.56	0.54701E 00	0.80177E-01	0.24144E-03	0.88525E-04	0.18581E-01	0.14220E-01	-0.11650E 01	0.72776E 00
71	537.63	0.45455E-00	0.38102E-01	0.11474E-03	0.42071E-04	0.88301E-02	0.67576E-02	-0.12050E 01	0.97715E 00
72	538.91	0.57663E 00	0.83421E-01	0.25146E-03	0.92197E-04	0.19333E-01	0.14795E-01	-0.12120E 01	0.72033E 00
73	537.04	0.54286E 00	0.79545E-01	0.23945E-03	0.87794E-04	0.18435E-01	0.14108E-01	-0.11650E 01	0.79595E 00
74	537.40	0.33819E-00	0.28344E-01	0.85345E-04	0.31292E-04	0.65688E-02	0.50270E-02	-0.12050E 01	0.95890E 00
75	114.53	0.14013E-02	0.15151E-03	0.34989E-06	0.12829E-06	0.35111E-04	0.26870E-04	-0.12120E 01	0.
76	534.63	0.77922E 00	0.11696E-00	0.35145E-03	0.12886E-03	0.27105E-01	0.20743E-01	0.10840E 01	0.89707E 00
77	535.56	0.46234E-00	0.74540E-01	0.22414E-03	0.82182E-04	0.17275E-01	0.13220E-01	0.11220E 01	0.72566E 00
78	538.54	0.41507E-00	0.61707E-01	0.18595E-03	0.68180E-04	0.14300E-01	0.10944E-01	0.13340E 01	0.67263E 00
79	537.03	0.28312E-00	0.47434E-01	0.14279E-03	0.52353E-04	0.10993E-01	0.84128E-02	-0.11890E 01	0.33790E-00
80	538.23	0.10130E-00	0.15211E-01	0.45827E-04	0.16802E-04	0.35250E-02	0.26977E-02	-0.13340E 01	0.
81	535.86	0.17818E-00	0.28732E-01	0.86416E-04	0.31685E-04	0.66587E-02	0.50958E-02	-0.11470E 01	0.21640E-00
82	535.96	-0.38962E-01	-0.65180E-02	-0.19605E-04	-0.71882E-05	-0.15105E-02	-0.11560E-02	-0.11890E 01	-0.55515E-01
83	535.35	0.77922E 00	0.13031E-00	0.39178E-03	0.14365E-03	0.30200E-01	0.23111E-01	-0.10840E 01	0.10562E 01
84	536.26	0.27844E-00	0.40782E-01	0.12269E-03	0.44986E-04	0.94513E-02	0.72330E-02	-0.11890E 01	0.40575E-00
85	537.81	0.24987E-00	0.36630E-01	0.11032E-03	0.40451E-04	0.84889E-02	0.64965E-02	-0.13090E 01	0.37902E-00
86	538.72	0.17922E-00	0.26647E-01	0.80313E-04	0.29447E-04	0.61755E-02	0.47261E-02	-0.13340E 01	0.
87	576.05	0.39751E 02	0.59421E 01	0.18409E-01	0.67498E-02	0.13771E 01	0.10539E 01	0.11990E 01	0.48762E 01
88	543.98	0.26234E 02	0.38856E 01	0.11756E-01	0.43103E-02	0.90049E 00	0.68914E 00	0.12070E 01	0.32854E 01
89	527.44	0.10120E 02	0.15103E 01	0.45148E-02	0.16553E-02	0.35001E-00	0.26786E-00	0.13340E 01	0.15360E 01
90	554.59	0.33466E 02	0.48163E 01	0.14685E-01	0.53844E-02	0.11162E 01	0.85419E 00	0.12070E 01	0.41320E 01
91	531.85	0.13911E 02	0.21509E 01	0.64504E-02	0.23650E-02	0.49847E-00	0.38147E-00	0.12490E 01	0.18936E 01
92	529.30	0.10979E 02	0.16485E 01	0.49345E-02	0.18092E-02	0.38203E-00	0.29237E-00	0.13340E 01	0.15642E 01
93	530.27	0.80265E 01	0.13485E 01	0.40394E-02	0.14810E-02	0.31251E-00	0.23916E-00	0.14900E 01	0.15535E 01
94	539.75	0.53039E 00	0.55674E-01	0.16792E-03	0.61568E-04	0.12902E-01	0.98740E-02	-0.	0.
95	541.86	0.10977E 01	0.11619E-00	0.35098E-03	0.12869E-03	0.26926E-01	0.20606E-01	-0.	0.
96	538.69	0.19792E-00	0.20762E-01	0.62574E-04	0.22943E-04	0.48117E-02	0.36823E-02	-0.	0.
97	539.35	0.53923E 00	0.56589E-01	0.17063E-03	0.62562E-04	0.13114E-01	0.10036E-01	-0.	0.
98	539.96	0.96312E 00	0.10184E-00	0.30720E-03	0.11264E-03	0.23601E-01	0.18061E-01	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
25	1	-7.60	142.40	-0.	-0.	2	C55	2.80	2	10.14	923.30	1820.60	133	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.882598E 02	0.191342E-01	0.466996E 04	0.181890E-04	0.714904E-07	0.119616E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730151E 00	0.431013E 01	0.562909E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	534.87	0.96572E 00	0.15685E-00	0.47573E-03	0.17407E-03	0.36391E-01	0.27864E-01	-0.10600E 01	0.99147E 00
100	535.44	0.49714E-00	0.83216E-01	0.25251E-03	0.92394E-04	0.19308E-01	0.14784E-01	-0.10840E 01	0.97867E 00
101	535.33	0.32312E-00	0.52899E-01	0.16050E-03	0.58727E-04	0.12273E-01	0.93975E-02	-0.11080E 01	0.71441E 00
102	536.62	0.26951E 01	0.44020E-00	0.13368E-02	0.48916E-03	0.10213E-00	0.78200E-01	-0.11080E 01	0.52547E 01
103	535.25	0.60312E 00	0.10095E-00	0.30625E-03	0.11206E-03	0.23421E-01	0.17933E-01	-0.10800E 01	0.10090E 01
104	601.71	0.41572E 02	0.68101E 01	0.21720E-01	0.79474E-02	0.15800E 01	0.12098E 01	0.85000E 00	0.
105	617.56	0.55368E 02	0.86527E 01	0.27939E-01	0.10223E-01	0.20075E 01	0.15371E 01	0.94000E 00	0.96755E 00
106	624.47	0.60954E 02	0.94802E 01	0.30777E-01	0.11262E-01	0.21995E 01	0.16841E 01	0.96000E 00	0.97029E 00
107	619.60	0.60501E 02	0.93855E 01	0.30353E-01	0.11106E-01	0.21775E 01	0.16673E 01	0.98000E 00	0.98243E 00
108	625.00	0.62101E 02	0.97104E 01	0.31537E-01	0.11540E-01	0.22529E 01	0.17250E 01	0.10000E 01	0.98776E 00
109	614.41	0.55961E 02	0.87308E 01	0.28121E-01	0.10290E-01	0.20256E 01	0.15510E 01	0.10200E 01	0.97444E 00
110	619.96	0.51910E 02	0.81226E 01	0.26276E-01	0.96147E-02	0.18845E 01	0.14430E 01	0.80000E-01	0.98359E 00
111	616.72	0.54738E 02	0.84786E 01	0.27358E-01	0.10011E-01	0.19671E 01	0.15062E 01	0.10000E-00	0.97363E 00
112	629.42	0.59777E 02	0.93688E 01	0.30534E-01	0.11173E-01	0.21737E 01	0.16644E 01	0.12000E-00	0.96669E 00
113	626.53	0.63869E 02	0.10029E 02	0.32610E-01	0.11932E-01	0.23268E 01	0.17816E 01	0.14000E-00	0.97464E 00
114	610.04	0.48823E 02	0.75995E 01	0.24394E-01	0.89260E-02	0.17632E 01	0.13500E 01	0.80000E-01	0.
115	612.00	0.50941E 02	0.79107E 01	0.25432E-01	0.93057E-02	0.18354E 01	0.14053E 01	0.10000E-00	0.97310E 00
116	614.09	0.53304E 02	0.83428E 01	0.26865E-01	0.98301E-02	0.19356E 01	0.14821E 01	0.12000E-00	0.97739E 00
117	623.90	0.56819E 02	0.89094E 01	0.28911E-01	0.10579E-01	0.20671E 01	0.15827E 01	0.14000E-00	0.99952E 00
118	607.46	0.44537E 02	0.69808E 01	0.22364E-01	0.81830E-02	0.16196E 01	0.12401E 01	0.10000E-00	0.97811E 00
119	605.71	0.44478E 02	0.69303E 01	0.22172E-01	0.81128E-02	0.16079E 01	0.12312E 01	0.15000E-00	0.15674E 01
120	607.10	0.45129E 02	0.70487E 01	0.22575E-01	0.82603E-02	0.16354E 01	0.12522E 01	0.20000E-00	0.98958E 00
121	602.60	0.45959E 02	0.71852E 01	0.22932E-01	0.83909E-02	0.16670E 01	0.12764E 01	0.25000E-00	0.98124E 00
122	593.27	0.42030E 02	0.65379E 01	0.20717E-01	0.75804E-02	0.15169E 01	0.11615E 01	0.30000E-00	0.98268E 00
123	586.40	0.41846E 02	0.65176E 01	0.20544E-01	0.75172E-02	0.15122E 01	0.11578E 01	0.35000E-00	0.90241E 00
124	592.25	0.47329E 02	0.74440E 01	0.23569E-01	0.86241E-02	0.17271E 01	0.13224E 01	0.38000E-00	0.10003E 01
125	599.66	0.53291E 02	0.84846E 01	0.27017E-01	0.98859E-02	0.19685E 01	0.15073E 01	0.45000E-00	0.98416E 00
126	589.94	0.48145E 02	0.77249E 01	0.24415E-01	0.89338E-02	0.17923E 01	0.13723E 01	0.61000E 00	0.97994E 00
127	569.45	0.34968E 02	0.55751E 01	0.17349E-01	0.63481E-02	0.12935E 01	0.99041E 00	0.70000E 00	0.97845E 00
128	552.94	0.19616E 02	0.31089E 01	0.95559E-02	0.34966E-02	0.72130E 00	0.55229E 00	0.75000E 00	0.98676E 00
129	570.58	0.34843E 02	0.55764E 01	0.17368E-01	0.63550E-02	0.12938E 01	0.99064E 00	0.70000E 00	0.94450E 00
130	574.13	0.37528E 02	0.60179E 01	0.18793E-01	0.68765E-02	0.13962E 01	0.10691E 01	0.80000E 00	0.94495E 00
131	554.90	0.21432E 02	0.32264E 01	0.99315E-02	0.36340E-02	0.74857E 00	0.57317E 00	0.90000E 00	0.96793E 00
132	578.30	0.44813E 02	0.68569E 01	0.21481E-01	0.78599E-02	0.15909E 01	0.12181E 01	0.90000E 00	0.14341E 01
133	576.11	0.42368E 02	0.64423E 01	0.20148E-01	0.73725E-02	0.14947E 01	0.11445E 01	0.96000E 00	0.12641E 01
134	574.75	0.39472E 02	0.60076E 01	0.18770E-01	0.68679E-02	0.13938E 01	0.10672E 01	0.10000E 01	0.11882E 01
135	548.67	0.15770E 02	0.24735E 01	0.75788E-02	0.27731E-02	0.57388E 00	0.43941E-00	0.70000E-02	0.
136	919.72	0.10902E-01	0.20148E-02	0.85424E-05	0.31258E-05	0.46745E-03	0.35792E-03	0.70000E-02	0.
137	547.66	0.15600E 02	0.24376E 01	0.74631E-02	0.27308E-02	0.56555E 00	0.43303E-00	0.39000E-01	0.98286E 00
138	546.94	0.15252E 02	0.23708E 01	0.72547E-02	0.26545E-02	0.55004E 00	0.42116E-00	0.78000E-01	0.
139	546.44	0.14398E 02	0.22265E 01	0.68106E-02	0.24921E-02	0.51657E 00	0.39553E-00	0.11700E-00	0.
140	546.70	0.14755E 02	0.22745E 01	0.69587E-02	0.25462E-02	0.52770E 00	0.40405E-00	0.78000E-01	0.98310E 00
141	587.51	0.46459E 02	0.50430E 01	0.15909E-01	0.58214E-02	0.11700E 01	0.89589E 00	-0.	0.
142	564.24	0.14833E 02	0.15897E 01	0.49276E-02	0.18030E-02	0.36883E-00	0.28241E-00	-0.	0.
143	545.28	0.12434E 02	0.19057E 01	0.58245E-02	0.21312E-02	0.44215E-00	0.33855E-00	0.78000E-01	0.88072E 00
144	545.90	0.13180E 02	0.20241E 01	0.61891E-02	0.22646E-02	0.46961E-00	0.35958E-00	0.70000E-02	0.86128E 00
145	546.50	0.13713E 02	0.20963E 01	0.64126E-02	0.23464E-02	0.48636E-00	0.37240E-00	0.70000E-02	0.97434E 00
146	545.76	0.12992E 02	0.19951E 01	0.60999E-02	0.22320E-02	0.46289E-00	0.35443E-00	0.39000E-01	0.97284E 00
147	547.32	0.13076E 02	0.20064E 01	0.61415E-02	0.22472E-02	0.46552E-00	0.35644E-00	0.78000E-01	0.
148	546.69	0.12407E 02	0.19188E 01	0.58707E-02	0.21481E-02	0.44519E-00	0.34088E-00	0.11700E-00	0.10395E 02
149	584.35	0.34624E 02	0.56459E 01	0.17768E-01	0.65016E-02	0.13099E 01	0.10030E 01	0.70000E-02	0.97550E 00
150	588.17	0.34756E 02	0.57061E 01	0.18010E-01	0.65901E-02	0.13239E 01	0.10137E 01	0.70000E-02	0.97205E 00
151	589.76	0.35614E 02	0.58519E 01	0.18493E-01	0.67668E-02	0.13577E 01	0.10396E 01	0.70000E-02	0.96353E 00
152	597.99	0.41045E 02	0.65289E 01	0.20763E-01	0.75974E-02	0.15148E 01	0.11599E 01	0.39000E-01	0.97096E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	593.24	0.40181E 02	0.63752E 01	0.20200E-01	0.73915E-02	0.14791E 01	0.11325E 01	0.39000E-01	0.
154	591.94	0.41626E 02	0.65567E 01	0.20755E-01	0.75944E-02	0.15212E 01	0.11648E 01	0.78000E-01	0.98354E 00
155	588.35	0.38093E 02	0.62549E 01	0.19745E-01	0.72250E-02	0.14512E 01	0.11112E 01	0.39000E-01	0.
156	580.56	0.34615E 02	0.56415E 01	0.17704E-01	0.64779E-02	0.13089E 01	0.10022E 01	0.39000E-01	0.
157	577.08	0.32935E 02	0.53746E 01	0.16821E-01	0.61551E-02	0.12470E 01	0.95478E 00	0.78000E-01	0.97199E 00
158	575.06	0.33719E 02	0.55138E 01	0.17231E-01	0.63049E-02	0.12793E 01	0.97952E 00	0.39000E-01	0.
159	570.80	0.31426E 02	0.51268E 01	0.15970E-01	0.58435E-02	0.11895E 01	0.91076E 00	0.78000E-01	0.
160	578.18	0.32988E 02	0.53864E 01	0.16872E-01	0.61738E-02	0.12497E 01	0.95688E 00	0.39000E-01	0.
161	564.38	0.28175E 02	0.44579E 01	0.13820E-01	0.50567E-02	0.10343E 01	0.79194E 00	0.43000E-01	0.10230E 01
162	594.90	0.58027E 02	0.93656E 01	0.29714E-01	0.10873E-01	0.21729E 01	0.16638E 01	0.43000E-01	0.21030E 01
163	581.09	0.44190E 02	0.70904E 01	0.22259E-01	0.81448E-02	0.16450E 01	0.12596E 01	0.85000E-01	0.16193E 01
164	575.08	0.39009E 02	0.62085E 01	0.19402E-01	0.70994E-02	0.14404E 01	0.11029E 01	0.12800E-00	0.14536E 01
165	605.95	0.70946E 02	0.11519E 02	0.36858E-01	0.13487E-01	0.26725E 01	0.20463E 01	0.43000E-01	0.
166	595.63	0.60670E 02	0.97645E 01	0.30996E-01	0.11342E-01	0.22655E 01	0.17346E 01	0.85000E-01	0.21789E 01
167	612.38	0.71928E 02	0.11681E 02	0.37564E-01	0.13745E-01	0.27101E 01	0.20751E 01	0.43000E-01	0.
168	586.74	0.49113E 02	0.79554E 01	0.25082E-01	0.91779E-02	0.18457E 01	0.14133E 01	0.12800E-00	0.27367E 01
169	599.76	0.56042E 02	0.91126E 01	0.29019E-01	0.10618E-01	0.21142E 01	0.16188E 01	0.85000E-01	0.19269E 01
170	592.20	0.51738E 02	0.83383E 01	0.26399E-01	0.96598E-02	0.19346E 01	0.14813E 01	0.12800E-00	0.17024E 01
171	593.61	0.57074E 02	0.91757E 01	0.29082E-01	0.10641E-01	0.21289E 01	0.16301E 01	0.85000E-01	0.18989E 01
172	615.08	0.62592E 02	0.10229E 02	0.32963E-01	0.12061E-01	0.23731E 01	0.18171E 01	0.43000E-01	0.
173	587.52	0.41922E 02	0.67717E 01	0.21363E-01	0.78169E-02	0.15711E 01	0.12030E 01	0.12800E-00	0.12682E 01
174	600.54	0.55903E 02	0.90502E 01	0.28838E-01	0.10552E-01	0.20998E 01	0.16078E 01	0.85000E-01	0.
175	616.61	0.57953E 02	0.94324E 01	0.30433E-01	0.11136E-01	0.21884E 01	0.16756E 01	0.43000E-01	0.18308E 01
176	600.62	0.46440E 02	0.74944E 01	0.23882E-01	0.87386E-02	0.17388E 01	0.13314E 01	0.43000E-01	0.14308E 01
177	575.39	0.34369E 02	0.54975E 01	0.17184E-01	0.62878E-02	0.12755E 01	0.97662E 00	0.12800E-00	0.92854E 00
178	571.39	0.29612E 02	0.47186E 01	0.14705E-01	0.53807E-02	0.10948E 01	0.83825E 00	0.85000E-01	0.84908E 00
179	584.74	0.37891E 02	0.60821E 01	0.19147E-01	0.70060E-02	0.14111E 01	0.10805E 01	0.70000E-02	0.11395E 01
180	565.99	0.30029E 02	0.47938E 01	0.14879E-01	0.54443E-02	0.11122E 01	0.85161E 00	0.70000E-02	-0.10249E 04
181	576.11	0.31950E 02	0.51290E 01	0.16041E-01	0.58695E-02	0.11900E 01	0.91116E 00	0.70000E-02	0.10494E 01
182	572.98	0.31618E 02	0.50831E 01	0.15860E-01	0.58034E-02	0.11793E 01	0.90301E 00	0.70000E-02	0.
183	574.14	0.33153E 02	0.52994E 01	0.16549E-01	0.60555E-02	0.12295E 01	0.94143E 00	0.32000E-01	0.91820E 00
184	588.13	0.42609E 02	0.69070E 01	0.21800E-01	0.79768E-02	0.16025E 01	0.12270E 01	0.32000E-01	0.96438E 00
185	577.19	0.40168E 02	0.64726E 01	0.20260E-01	0.74132E-02	0.15017E 01	0.11499E 01	0.64000E-01	0.97887E 00
186	586.55	0.44955E 02	0.72579E 01	0.22880E-01	0.83720E-02	0.16839E 01	0.12894E 01	0.64000E-01	0.97044E 00
187	576.93	0.34321E 02	0.55297E 01	0.17305E-01	0.63321E-02	0.12830E 01	0.98235E 00	0.70000E-02	0.93041E 00
188	569.89	0.30876E 02	0.50346E 01	0.15672E-01	0.57345E-02	0.11681E 01	0.89438E 00	0.70000E-02	0.89301E 00
189	540.08	0.63590E 01	0.10406E 01	0.31684E-02	0.11593E-02	0.24144E-00	0.18487E-00	0.10600E 01	0.10487E 01
190	537.48	0.38847E 01	0.64749E 00	0.19676E-02	0.71997E-03	0.15023E-00	0.11503E-00	0.10840E 01	0.10497E 01
191	535.25	0.19564E 01	0.32744E-00	0.99342E-03	0.36350E-03	0.75971E-01	0.58170E-01	0.11080E 01	0.10457E 01
192	535.40	0.21761E 01	0.36229E-00	0.10992E-02	0.40222E-03	0.84055E-01	0.64360E-01	0.11080E 01	0.10556E 01
193	541.63	0.39470E 01	0.64948E 00	0.19797E-02	0.72438E-03	0.15069E-00	0.11538E-00	0.16580E 01	0.88545E 00
194	542.02	0.36727E 01	0.60170E 00	0.18346E-02	0.67128E-03	0.13960E-00	0.10689E-00	0.11700E 01	0.87389E 00
195	542.63	0.43517E 01	0.71646E 00	0.21855E-02	0.79968E-03	0.16623E-00	0.12728E-00	0.16740E 01	0.95176E 00
196	543.36	0.45299E 01	0.74268E 00	0.22667E-02	0.82939E-03	0.17231E-00	0.13194E-00	0.16950E 01	0.10314E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
31	1	-6.63	143.37	0.02	-0.	3	C55	2.75	2	10.14	924.80	1816.00	123	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.880126E 02	0.191734E-01	0.466346E 04	0.182775E-04	0.712902E-07	0.120367E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730006E 00	0.431379E 01	0.563607E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	554.01	0.22965E 02	0.35837E 01	0.11069E-01	0.40363E-02	0.83075E 00	0.63585E 00	0.10000E 01	0.10013E 01
198	556.11	0.24582E 02	0.37155E 01	0.11494E-01	0.41914E-02	0.86132E 00	0.65924E 00	0.12000E 01	0.10403E 01
199	540.38	0.11564E 02	0.18257E 01	0.55825E-02	0.20356E-02	0.42323E-00	0.32394E-00	0.13000E 01	0.10050E 01
200	538.91	0.34353E 01	0.50132E 00	0.15312E-02	0.55835E-03	0.11621E-00	0.88948E-01	0.11890E 01	0.87100E 00
201	543.64	0.27184E 01	0.45125E-00	0.13831E-02	0.50434E-03	0.10461E-00	0.80064E-01	0.14540E 01	0.91829E 00
202	542.54	0.25148E 01	0.41402E-00	0.12680E-02	0.46235E-03	0.95976E-01	0.73459E-01	0.17040E 01	0.94510E 00
203	542.08	0.17818E 01	0.29327E-00	0.89785E-03	0.32740E-03	0.67984E-01	0.52034E-01	0.20410E 01	0.10477E 01
204	539.95	0.34494E-00	0.26347E-01	0.80534E-04	0.29366E-04	0.61075E-02	0.46746E-02	0.20700E 01	0.61269E 01
205	542.17	0.21481E 01	0.18767E-00	0.57458E-03	0.20952E-03	0.43504E-01	0.33297E-01	0.21880E 01	0.93915E 00
206	542.36	0.18270E 01	0.30076E-00	0.92096E-03	0.33582E-03	0.69720E-01	0.53363E-01	0.22480E 01	0.99583E 00
207	543.37	0.24031E 01	0.38915E-00	0.11925E-02	0.43484E-03	0.90210E-01	0.69046E-01	0.20700E 01	0.11164E 01
208	540.27	0.78182E 00	0.69570E-01	0.21271E-03	0.77562E-04	0.16127E-01	0.12344E-01	0.20700E 01	0.13890E 01
209	545.36	0.37683E 01	0.30450E-00	0.93449E-03	0.34076E-03	0.70587E-01	0.54027E-01	0.21880E 01	0.74432E 01
210	542.35	0.19979E 01	0.33141E-00	0.10148E-02	0.37004E-03	0.76825E-01	0.58801E-01	0.20700E 01	0.12041E 01
211	544.49	0.38338E 01	0.63669E 00	0.19527E-02	0.71205E-03	0.14759E-00	0.11297E-00	0.21880E 01	0.26640E 01
212	542.08	0.20930E 01	0.34290E-00	0.10498E-02	0.38281E-03	0.79490E-01	0.60841E-01	0.22390E 01	0.13576E 01
213	541.30	0.16592E 01	0.27172E-00	0.83139E-03	0.30316E-03	0.62988E-01	0.48211E-01	0.21880E 01	0.12363E 01
214	541.45	0.15548E 01	0.25777E-00	0.78881E-03	0.28763E-03	0.59756E-01	0.45736E-01	0.22480E 01	0.12336E 01
215	536.82	0.53039E 00	0.79575E-01	0.24268E-03	0.88491E-04	0.18447E-01	0.14119E-01	0.11650E 01	0.84296E 00
216	538.64	0.18650E-00	0.15642E-01	0.47766E-04	0.17418E-04	0.36260E-02	0.27753E-02	0.12050E 01	0.
217	539.29	0.43065E-00	0.62858E-01	0.19205E-03	0.70028E-04	0.14571E-01	0.11153E-01	0.12120E 01	0.65487E 00
218	538.27	0.42390E-00	0.62157E-01	0.18976E-03	0.69195E-04	0.14409E-01	0.11028E-01	0.11890E 01	0.59663E 00
219	540.22	0.19636E-00	0.32958E-01	0.10076E-03	0.36743E-04	0.76402E-02	0.58477E-02	0.14540E 01	0.58383E 00
220	540.71	0.93247E 00	0.16252E-00	0.49704E-03	0.18124E-03	0.37674E-01	0.28835E-01	0.17040E 01	0.10003E 01
221	540.45	0.51948E 00	0.86732E-01	0.26521E-03	0.96708E-04	0.20106E-01	0.15389E-01	0.20410E 01	0.10482E 01
222	540.84	0.32416E-00	0.54704E-01	0.16732E-03	0.61014E-04	0.12681E-01	0.97061E-02	0.22480E 01	0.92340E 00
223	536.06	0.41351E-00	0.62012E-01	0.18901E-03	0.68921E-04	0.14375E-01	0.11003E-01	0.11650E 01	0.80043E 00
224	537.66	0.18078E-00	0.15154E-01	0.46243E-04	0.16862E-04	0.35129E-02	0.26888E-02	0.12050E 01	0.48645E-00
225	538.57	0.47221E-00	0.68896E-01	0.21038E-03	0.76714E-04	0.15971E-01	0.12224E-01	0.12120E 01	0.84737E 00
226	540.36	0.43169E-00	0.72722E-01	0.22236E-03	0.81081E-04	0.16858E-01	0.12903E-01	0.14540E 01	0.68826E 00
227	540.50	0.58286E 00	0.94233E-01	0.28816E-03	0.10508E-03	0.21845E-01	0.16720E-01	0.17040E 01	0.69647E 00
228	540.79	0.49040E-00	0.80903E-01	0.24745E-03	0.90231E-04	0.18755E-01	0.14355E-01	0.18780E 01	0.51511E 00
229	541.51	0.49715E-00	0.82426E-01	0.25224E-03	0.91978E-04	0.19107E-01	0.14625E-01	0.21880E 01	0.82393E 00
230	537.28	0.41974E-00	0.61935E-01	0.18895E-03	0.68898E-04	0.14358E-01	0.10989E-01	0.11890E 01	0.95731E 00
231	540.32	0.34338E-00	0.60870E-01	0.18611E-03	0.67865E-04	0.14111E-01	0.10800E-01	0.14540E 01	0.47506E-00
232	540.77	0.72000E 00	0.11787E-00	0.36052E-03	0.13146E-03	0.27325E-01	0.20914E-01	0.16130E 01	0.81633E 00
233	540.80	0.71480E 00	0.11793E-00	0.36069E-03	0.13152E-03	0.27337E-01	0.20923E-01	0.17040E 01	0.68640E 00
234	540.84	0.75221E 00	0.12467E-00	0.38132E-03	0.13905E-03	0.28900E-01	0.22120E-01	0.18780E 01	0.84896E 00
235	541.19	0.32623E-00	0.53997E-01	0.16520E-03	0.60240E-04	0.12517E-01	0.95806E-02	0.14540E 01	0.65404E 00
236	540.68	0.86545E 00	0.14168E-00	0.43330E-03	0.15800E-03	0.32843E-01	0.25138E-01	0.17040E 01	0.82757E 00
237	541.88	0.74130E 00	0.12293E-00	0.37630E-03	0.13722E-03	0.28497E-01	0.21811E-01	0.21880E 01	0.11443E 01
238	541.94	0.57091E 00	0.50850E-01	0.15566E-03	0.56761E-04	0.11788E-01	0.90222E-02	0.20700E 01	0.14955E 01
239	537.44	0.49403E-00	0.72034E-01	0.21978E-03	0.80140E-04	0.16698E-01	0.12781E-01	0.11890E 01	0.83908E 00
240	542.06	0.38961E-00	0.65461E-01	0.20041E-03	0.73078E-04	0.15175E-01	0.11615E-01	0.14540E 01	0.68963E 00
241	541.14	0.93143E 00	0.15322E-00	0.46877E-03	0.17093E-03	0.35519E-01	0.27186E-01	0.17040E 01	0.84521E 00
242	540.99	0.96831E 00	0.16050E-00	0.49097E-03	0.17903E-03	0.37206E-01	0.28477E-01	0.18780E 01	0.86467E 00
243	542.06	0.11465E 01	0.19014E-00	0.58212E-03	0.21227E-03	0.44078E-01	0.33737E-01	0.20410E 01	0.20105E 01
244	541.06	0.35844E-00	0.32362E-01	0.99001E-04	0.36100E-04	0.75019E-02	0.57419E-02	0.20700E 01	0.32975E 02
245	542.60	0.76935E 00	0.63042E-01	0.19308E-03	0.70404E-04	0.14614E-01	0.11185E-01	0.21870E 01	0.15123E 01
246	541.99	0.94856E 00	0.16018E-00	0.49036E-03	0.17881E-03	0.37132E-01	0.28421E-01	0.22100E 01	0.15375E 01
247	541.91	0.34753E-00	0.56932E-01	0.17428E-03	0.63549E-04	0.13198E-01	0.10101E-01	0.14540E 01	0.90469E 00
248	540.89	0.10421E 01	0.17271E-00	0.52830E-03	0.19264E-03	0.40038E-01	0.30644E-01	0.17040E 01	0.10134E 01
249	541.09	0.82286E 00	0.69110E-01	0.21143E-03	0.77096E-04	0.16021E-01	0.12262E-01	0.18780E 01	0.35065E 01
250	541.23	0.64572E 00	0.52870E-01	0.16176E-03	0.58985E-04	0.12256E-01	0.93806E-02	0.21880E 01	0.26958E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	541.71	0.32935E-00	0.55608E-01	0.17020E-03	0.62061E-04	0.12891E-01	0.98664E-02	0.14540E 01	0.85460E 00
252	540.74	0.55948E 00	0.93933E-01	0.28729E-03	0.10476E-03	0.21775E-01	0.16666E-01	0.16130E 01	0.88708E 00
253	541.92	0.13039E 01	0.11502E-00	0.35208E-03	0.12839E-03	0.26663E-01	0.20407E-01	0.17060E 01	0.
254	540.72	0.69195E 00	0.11467E-00	0.35072E-03	0.12789E-03	0.26583E-01	0.20346E-01	0.21880E 01	0.11007E 01
255	540.51	0.74701E 00	0.68965E-01	0.21089E-03	0.76901E-04	0.15987E-01	0.12236E-01	0.16580E 01	0.39672E 01
256	540.93	0.11512E 01	0.96675E-01	0.29572E-03	0.10783E-03	0.22411E-01	0.17153E-01	0.17920E 01	0.48335E 01
257	532.54	0.61091E 00	0.10231E-00	0.31103E-03	0.11341E-03	0.23717E-01	0.18152E-01	0.10840E 01	0.97318E 00
258	541.45	0.36467E-00	0.62022E-01	0.18979E-03	0.69207E-04	0.14378E-01	0.11004E-01	0.14540E 01	0.86048E 00
259	540.78	0.42130E-00	0.69822E-01	0.21355E-03	0.77871E-04	0.16186E-01	0.12388E-01	0.16130E 01	0.97521E 00
260	541.34	0.10452E 01	0.17064E-00	0.52214E-03	0.19039E-03	0.39557E-01	0.30277E-01	0.17040E 01	0.17935E 01
261	541.18	0.92312E 00	0.15232E-00	0.46603E-03	0.16994E-03	0.35311E-01	0.27027E-01	0.18780E 01	0.12253E 01
262	541.00	0.58494E 00	0.98721E-01	0.30200E-03	0.11012E-03	0.22885E-01	0.17516E-01	0.20410E 01	0.76784E 00
263	919.71	0.10383E-01	0.21175E-02	0.90286E-05	0.32922E-05	0.49086E-03	0.37570E-03	0.14540E 01	0.
264	550.24	0.30649E 01	0.50831E 00	0.15657E-02	0.57091E-03	0.11783E-00	0.90189E-01	0.16130E 01	0.76543E 01
265	540.70	0.61351E 00	0.99199E-01	0.30339E-03	0.11063E-03	0.22996E-01	0.17601E-01	0.17040E 01	0.11034E 01
266	540.94	0.61039E 00	0.10071E-00	0.30806E-03	0.11233E-03	0.23345E-01	0.17868E-01	0.18780E 01	0.56125E 00
267	540.96	0.60000E 00	0.10096E-00	0.30883E-03	0.11261E-03	0.23404E-01	0.17913E-01	0.20410E 01	0.75091E 00
268	540.81	0.42078E-00	0.69419E-01	0.21233E-03	0.77424E-04	0.16092E-01	0.12317E-01	0.16130E 01	0.71563E 00
269	540.45	0.62753E 00	0.10145E-00	0.31023E-03	0.11312E-03	0.23518E-01	0.18001E-01	0.18280E 01	0.91710E 00
270	540.89	0.70494E 00	0.11577E-00	0.35412E-03	0.12913E-03	0.26837E-01	0.20541E-01	0.18780E 01	0.97614E 00
271	540.78	0.71325E 00	0.11975E-00	0.36627E-03	0.13356E-03	0.27760E-01	0.21247E-01	0.20410E 01	0.86331E 00
272	539.52	0.36104E-00	0.61065E-01	0.18660E-03	0.68041E-04	0.14156E-01	0.10835E-01	0.16130E 01	0.87036E 00
273	540.45	0.59636E 00	0.99117E-01	0.30308E-03	0.11052E-03	0.22977E-01	0.17586E-01	0.17200E 01	0.96137E 00
274	539.98	0.50234E 00	0.80939E-01	0.24741E-03	0.90217E-04	0.18763E-01	0.14361E-01	0.18280E 01	0.67658E 00
275	540.68	0.75688E 00	0.12448E-00	0.38069E-03	0.13882E-03	0.28856E-01	0.22086E-01	0.18780E 01	0.88034E 00
276	919.71	0.10383E-01	0.21005E-02	0.89561E-05	0.32658E-05	0.48692E-03	0.37268E-03	0.20600E 01	0.
277	540.66	0.62442E 00	0.52431E-01	0.16035E-03	0.58471E-04	0.12154E-01	0.93027E-02	0.21000E 01	0.13044E 01
278	539.34	0.31428E-00	0.26370E-01	0.80569E-04	0.29379E-04	0.61129E-02	0.46788E-02	0.21870E 01	0.
279	541.23	0.79689E 00	0.13451E-00	0.41154E-03	0.15007E-03	0.31181E-01	0.23866E-01	0.21950E 01	0.92396E 00
280	540.55	0.79688E 00	0.13305E-00	0.40688E-03	0.14837E-03	0.30844E-01	0.23607E-01	0.18780E 01	0.10546E 01
281	540.96	0.81974E 00	0.13835E-00	0.42320E-03	0.15432E-03	0.32071E-01	0.24547E-01	0.20600E 01	0.99318E 00
282	540.21	0.75844E 00	0.12356E-00	0.37775E-03	0.13774E-03	0.28642E-01	0.21922E-01	0.18280E 01	0.10010E 01
283	540.37	0.67532E 00	0.11336E-00	0.34661E-03	0.12639E-03	0.26278E-01	0.20113E-01	0.20600E 01	0.87281E 00
284	540.45	0.11465E 01	0.18535E-00	0.56678E-03	0.20667E-03	0.42968E-01	0.32887E-01	0.17200E 01	0.16473E 01
285	540.91	0.13335E 01	0.21934E-00	0.67092E-03	0.24465E-03	0.50846E-01	0.38917E-01	0.18780E 01	0.16719E 01
286	539.96	0.10753E 01	0.99244E-01	0.30336E-03	0.11062E-03	0.23006E-01	0.17609E-01	0.16580E 01	0.34083E 01
287	919.71	0.10383E-01	0.10505E-02	0.44794E-05	0.16334E-05	0.24353E-03	0.18640E-03	0.17920E 01	0.
288	540.04	0.78182E 00	0.12853E-00	0.39291E-03	0.14327E-03	0.29796E-01	0.22805E-01	0.16130E 01	0.11904E 01
289	542.05	0.12925E 01	0.10861E-00	0.33250E-03	0.12124E-03	0.25177E-01	0.19270E-01	0.17060E 01	0.14924E 02
290	540.68	0.72779E 00	0.61112E-01	0.18690E-03	0.68152E-04	0.14167E-01	0.10843E-01	0.18780E 01	0.32969E 01
291	540.37	0.12343E 01	0.20202E-00	0.61772E-03	0.22525E-03	0.46832E-01	0.35845E-01	0.17200E 01	0.12155E 01
292	540.79	0.52104E 00	0.89633E-01	0.27415E-03	0.99968E-04	0.20778E-01	0.15903E-01	0.14400E 01	0.90445E 00
293	539.88	0.11153E 01	0.18026E-00	0.55096E-03	0.20091E-03	0.41786E-01	0.31983E-01	0.17200E 01	0.89713E 00
294	541.25	0.97455E 00	0.16131E-00	0.49354E-03	0.17997E-03	0.37394E-01	0.28621E-01	0.18780E 01	0.80090E 00

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
21	1	-2.65	147.35	-0.	-0.	1	C55	2.75	2	10.14	923.00	1831.10	129	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.888159E 02	0.191093E-01	0.468464E 04	0.180516E-04	0.719409E-07	0.118340E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730473E 00	0.430952E 01	0.562793E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	574.05	0.25955E 02	0.34427E 01	0.10650E-01	0.39142E-02	0.79886E 00	0.61171E 00	-0.	0.99116E 00
2	574.52	0.24845E 02	0.35068E 01	0.10852E-01	0.39885E-02	0.81372E 00	0.62310E 00	-0.30000E-01	0.
3	569.91	0.23094E 02	0.35350E 01	0.10902E-01	0.40069E-02	0.82029E 00	0.62812E 00	-0.60000E-01	0.
4	571.51	0.22215E 02	0.34911E 01	0.10779E-01	0.39618E-02	0.81010E 00	0.62032E 00	-0.90000E-01	0.
5	567.76	0.20054E 02	0.32251E 01	0.99300E-02	0.36496E-02	0.74836E 00	0.57305E 00	-0.20000E-00	0.10206E 01
6	567.94	0.17344E 02	0.27896E 01	0.85903E-02	0.31573E-02	0.64731E 00	0.49567E-00	-0.40000E-00	0.10077E 01
7	568.04	0.14749E 02	0.23836E 01	0.73407E-02	0.26980E-02	0.55311E 00	0.42354E-00	-0.60000E 00	0.10080E 01
8	568.11	0.11972E 02	0.19349E 01	0.59590E-02	0.21902E-02	0.44898E-00	0.34380E-00	-0.80000E 00	0.
9	568.19	0.12146E 02	0.19320E 01	0.59506E-02	0.21871E-02	0.44832E-00	0.34329E-00	-0.90000E 00	0.10217E 01
10	566.98	0.10704E 02	0.17234E 01	0.53033E-02	0.19491E-02	0.39990E-00	0.30622E-00	-0.98000E 00	0.99074E 00
11	550.87	0.28571E-00	0.49428E-01	0.15030E-03	0.55241E-04	0.11470E-01	0.87826E-02	-0.11220E 01	0.68067E 00
12	547.98	0.83844E 00	0.12340E-00	0.37444E-03	0.13762E-03	0.28635E-01	0.21927E-01	-0.11890E 01	0.80892E 00
13	542.31	0.55325E 00	0.83680E-01	0.25286E-03	0.92936E-04	0.19417E-01	0.14869E-01	-0.13340E 01	0.71872E 00
14	540.50	0.48416E-00	0.83274E-01	0.25131E-03	0.92364E-04	0.19323E-01	0.14797E-01	-0.14400E 01	0.15453E 01
15	573.38	0.25633E 02	0.36157E 01	0.11179E-01	0.41088E-02	0.83899E 00	0.64245E 00	0.30000E-01	0.
16	570.33	0.24090E 02	0.36884E 01	0.11378E-01	0.41820E-02	0.85587E 00	0.65537E 00	0.60000E-01	0.
17	570.12	0.24147E 02	0.37919E 01	0.11696E-01	0.42987E-02	0.87989E 00	0.67377E 00	0.90000E-01	0.
18	570.82	0.24388E 02	0.39287E 01	0.12124E-01	0.44560E-02	0.91163E 00	0.69807E 00	0.20000E-00	0.99471E 00
19	578.08	0.27678E 02	0.44764E 01	0.13890E-01	0.51050E-02	0.10387E 01	0.79539E 00	0.40000E-00	0.99793E 00
20	582.84	0.32267E 02	0.52571E 01	0.16371E-01	0.60168E-02	0.12199E 01	0.93412E 00	0.60000E 00	0.
21	611.97	0.49748E 02	0.77514E 01	0.24680E-01	0.90707E-02	0.17987E 01	0.13773E 01	0.92000E 00	0.
22	589.86	0.42784E 02	0.65876E 01	0.20623E-01	0.75797E-02	0.15286E 01	0.11705E 01	0.10400E 01	0.94598E 00
23	587.20	0.39809E 02	0.61372E 01	0.19174E-01	0.70472E-02	0.14241E 01	0.10905E 01	0.10600E 01	0.95653E 00
24	570.11	0.29037E 02	0.46461E 01	0.14330E-01	0.52670E-02	0.10781E 01	0.82554E 00	0.10840E 01	0.94816E 00
25	535.46	0.95236E 01	0.13990E 01	0.42066E-02	0.15461E-02	0.32464E-00	0.24859E-00	0.12070E 01	0.15378E 01
26	531.63	0.10144E 02	0.15683E 01	0.47024E-02	0.17283E-02	0.36391E-00	0.27866E-00	0.12490E 01	0.18184E 01
27	530.99	0.10585E 02	0.16094E 01	0.48233E-02	0.17728E-02	0.37344E-00	0.28596E-00	0.13340E 01	0.18961E 01
28	529.33	0.78816E 01	0.13313E 01	0.39853E-02	0.14647E-02	0.30893E-00	0.23656E-00	0.14540E 01	0.19215E 01
29	532.96	0.50577E 01	0.83072E 00	0.24932E-02	0.91636E-03	0.19276E-00	0.14761E-00	0.16580E 01	0.13167E 01
30	543.29	0.46597E 01	0.77922E 00	0.23563E-02	0.86604E-03	0.18081E-00	0.13846E-00	0.20410E 01	0.14668E 01
31	546.68	0.44462E 01	0.74493E 00	0.22582E-02	0.82998E-03	0.17286E-00	0.13236E-00	0.22480E 01	0.14476E 01
32	570.12	0.24171E 02	0.37041E 01	0.11425E-01	0.41991E-02	0.85951E 00	0.65816E 00	-0.60000E-01	0.
33	575.78	0.24792E 02	0.35016E 01	0.10846E-01	0.39864E-02	0.81253E 00	0.62218E 00	-0.30000E-01	0.
34	574.00	0.25588E 02	0.39296E 01	0.12156E-01	0.44676E-02	0.91183E 00	0.69822E 00	0.30000E-01	0.
35	571.21	0.23860E 02	0.37491E 01	0.11573E-01	0.42536E-02	0.86997E 00	0.66617E 00	0.60000E-01	0.
36	592.09	0.41472E 02	0.67586E 01	0.21194E-01	0.77895E-02	0.15683E 01	0.12009E 01	-0.86800E 00	0.32412E 01
37	586.85	0.32744E 02	0.51773E 01	0.16171E-01	0.59433E-02	0.12014E 01	0.91992E 00	-0.91100E 00	0.26477E 01
38	581.68	0.28629E 02	0.45951E 01	0.14297E-01	0.52545E-02	0.10663E 01	0.81648E 00	-0.95300E 00	0.23285E 01
39	919.71	0.10383E-01	0.19694E-02	0.82443E-05	0.30301E-05	0.45698E-03	0.34993E-03	0.51000E-01	0.
40	569.43	0.16411E 02	0.26248E 01	0.80919E-02	0.29741E-02	0.60908E 00	0.46639E-00	0.29000E-01	0.
41	603.27	0.43723E 02	0.70818E 01	0.22397E-01	0.82319E-02	0.16433E 01	0.12583E 01	0.70000E-02	0.
42	595.71	0.41253E 02	0.66932E 01	0.21047E-01	0.77354E-02	0.15531E 01	0.11893E 01	-0.86800E 00	0.25562E 01
43	593.48	0.42084E 02	0.68373E 01	0.21463E-01	0.78886E-02	0.15866E 01	0.12149E 01	-0.91100E 00	0.27403E 01
44	590.38	0.37624E 02	0.60674E 01	0.19002E-01	0.69838E-02	0.14079E 01	0.10781E 01	-0.95300E 00	0.17377E 01
45	566.48	0.93434E 01	0.15436E 01	0.47481E-02	0.17451E-02	0.35817E-00	0.27427E-00	-0.10400E 01	0.24457E 01
46	598.87	0.41573E 02	0.67739E 01	0.21352E-01	0.78476E-02	0.15719E 01	0.12036E 01	0.70000E-02	0.
47	569.78	0.14637E 02	0.23476E 01	0.72392E-02	0.26607E-02	0.54475E 00	0.41714E-00	0.29000E-01	0.
48	567.87	0.10009E 02	0.16097E 01	0.49567E-02	0.18218E-02	0.37353E-00	0.28602E-00	0.51000E-01	0.74565E 00
49	593.53	0.32773E 02	0.52942E 01	0.16620E-01	0.61085E-02	0.12285E 01	0.94070E 00	0.70000E-02	0.25525E 01
50	572.00	0.13784E 02	0.22079E 01	0.68195E-02	0.25064E-02	0.51232E 00	0.39230E-00	0.29000E-01	0.10955E 01
51	570.43	0.10124E 02	0.16149E 01	0.49822E-02	0.18312E-02	0.37473E-00	0.28695E-00	0.51000E-01	0.
52	590.48	0.32782E 02	0.53174E 01	0.16654E-01	0.61210E-02	0.12339E 01	0.94482E 00	-0.86800E 00	0.
53	583.38	0.26035E 02	0.42229E 01	0.13155E-01	0.48350E-02	0.97989E 00	0.75034E 00	-0.91100E 00	0.20629E 01
54	582.64	0.25962E 02	0.41691E 01	0.12981E-01	0.47709E-02	0.96742E 00	0.74079E 00	-0.95300E 00	0.20766E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	565.01	0.69579E 01	0.11485E 01	0.35291E-02	0.12971E-02	0.26651E-00	0.20408E-00	-0.10400E 01	0.30203E 01
56	563.23	0.52494E 01	0.89297E 00	0.27402E-02	0.10071E-02	0.20721E-00	0.15867E-00	-0.10680E 01	0.31141E 01
57	560.86	0.28670E 01	0.47217E-00	0.14464E-02	0.53160E-03	0.10956E-00	0.83898E-01	-0.10400E 01	0.33799E 01
58	564.57	0.51003E 01	0.91121E 00	0.27990E-02	0.10287E-02	0.21144E-00	0.16191E-00	-0.10680E 01	0.24361E 01
59	557.00	0.44722E 01	0.73496E 00	0.22450E-02	0.82511E-03	0.17054E-00	0.13059E-00	-0.10400E 01	0.10885E 01
60	557.45	0.36306E 01	0.61564E 00	0.18811E-02	0.69138E-03	0.14286E-00	0.10939E-00	-0.10680E 01	0.16990E 01
61	551.81	0.47740E-00	0.79658E-01	0.24239E-03	0.89088E-04	0.18484E-01	0.14154E-01	-0.11220E 01	0.83090E 00
62	541.74	0.31948E-00	0.48307E-01	0.14591E-03	0.53628E-04	0.11209E-01	0.85834E-02	-0.13340E 01	0.38882E-00
63	555.42	0.49040E-00	0.85054E-01	0.25950E-03	0.95375E-04	0.19736E-01	0.15113E-01	-0.11220E 01	0.75725E 00
64	542.56	0.21351E-00	0.32298E-01	0.97615E-04	0.35877E-04	0.74946E-02	0.57389E-02	-0.13340E 01	0.24262E-00
65	540.93	0.32156E-00	0.55321E-01	0.16700E-03	0.61380E-04	0.12837E-01	0.98298E-02	0.14400E 01	0.68829E 00
66	540.61	0.55481E 00	0.90821E-01	0.27410E-03	0.10074E-03	0.21075E-01	0.16138E-01	0.16130E 01	0.14471E 01
67	541.13	0.74026E 00	0.11898E-00	0.35922E-03	0.13203E-03	0.27608E-01	0.21141E-01	0.17200E 01	0.12628E 01
68	541.15	0.52416E 00	0.86490E-01	0.26113E-03	0.95977E-04	0.20070E-01	0.15368E-01	-0.16130E 01	0.14361E 01
69	541.57	0.79013E 00	0.12702E-00	0.38363E-03	0.14100E-03	0.29475E-01	0.22570E-01	-0.18280E 01	0.14124E 01
70	551.54	0.45766E-00	0.67608E-01	0.20568E-03	0.75596E-04	0.15688E-01	0.12013E-01	-0.11650E 01	0.62191E 00
71	548.44	0.45922E-00	0.38728E-01	0.11755E-03	0.43206E-04	0.89866E-02	0.68814E-02	-0.12050E 01	0.95204E 00
72	548.32	0.57766E 00	0.84013E-01	0.25499E-03	0.93718E-04	0.19495E-01	0.14928E-01	-0.12120E 01	0.62389E 00
73	548.36	0.54857E 00	0.80895E-01	0.24553E-03	0.90242E-04	0.18771E-01	0.14374E-01	-0.11650E 01	0.80533E 00
74	546.25	0.38078E-00	0.32074E-01	0.97199E-04	0.35724E-04	0.74425E-02	0.56990E-02	-0.12050E 01	0.79820E 00
75	114.53	0.14012E-02	0.15150E-03	0.34987E-06	0.12859E-06	0.35154E-04	0.26919E-04	-0.12120E 01	0.
76	548.34	0.95221E 00	0.14403E-00	0.43714E-03	0.16067E-03	0.33421E-01	0.25592E-01	0.10840E 01	0.10631E 01
77	547.22	0.49974E-00	0.81100E-01	0.24595E-03	0.90395E-04	0.18819E-01	0.14410E-01	0.11220E 01	0.80313E 00
78	542.02	0.47948E-00	0.71423E-01	0.21578E-03	0.79307E-04	0.16573E-01	0.12691E-01	0.13340E 01	0.59460E 00
79	544.92	0.27169E-00	0.45721E-01	0.13842E-03	0.50876E-04	0.10609E-01	0.81239E-02	-0.11890E 01	0.28868E-00
80	542.15	0.19584E-00	0.29471E-01	0.89044E-04	0.32727E-04	0.68385E-02	0.52365E-02	-0.13340E 01	0.23522E-00
81	545.15	0.16780E-00	0.27199E-01	0.82360E-04	0.30271E-04	0.63114E-02	0.48329E-02	-0.11470E 01	0.
82	543.49	-0.32205E-01	-0.54104E-02	-0.16363E-04	-0.60140E-05	-0.12554E-02	-0.96134E-03	-0.11890E 01	0.
83	547.68	0.12083E 01	0.20347E-00	0.61727E-03	0.22687E-03	0.47215E-01	0.36154E-01	-0.10840E 01	0.14617E 01
84	543.43	0.25455E-00	0.37433E-01	0.11321E-03	0.41608E-04	0.86862E-02	0.66513E-02	-0.11890E 01	0.33461E-00
85	542.33	0.37819E-00	0.55581E-01	0.16796E-03	0.61731E-04	0.12897E-01	0.98759E-02	-0.13090E 01	0.41509E-00
86	541.53	0.30234E-00	0.45023E-01	0.13597E-03	0.49975E-04	0.10447E-01	0.79999E-02	-0.13340E 01	0.30582E-00
87	578.16	0.30696E 02	0.45937E 01	0.14254E-01	0.52390E-02	0.10659E 01	0.81623E 00	0.11990E 01	0.50362E 01
88	549.54	0.19565E 02	0.29068E 01	0.88303E-02	0.32455E-02	0.67451E 00	0.51649E 00	0.12070E 01	0.32981E 01
89	530.19	0.82203E 01	0.12287E 01	0.36803E-02	0.13526E-02	0.28511E-00	0.21832E-00	0.13340E 01	0.16341E 01
90	559.36	0.25794E 02	0.37220E 01	0.11389E-01	0.41859E-02	0.86368E 00	0.66135E 00	0.12070E 01	0.42299E 01
91	537.60	0.11454E 02	0.17768E 01	0.53508E-02	0.19666E-02	0.41230E-00	0.31571E-00	0.12490E 01	0.20723E 01
92	532.46	0.92348E 01	0.13890E 01	0.41675E-02	0.15317E-02	0.32232E-00	0.24681E-00	0.13340E 01	0.17072E 01
93	529.66	0.64369E 01	0.10811E 01	0.32369E-02	0.11897E-02	0.25085E-00	0.19209E-00	0.14900E 01	0.15265E 01
94	545.19	0.77714E 00	0.81825E-01	0.24778E-03	0.91068E-04	0.18987E-01	0.14539E-01	-0.	0.
95	546.58	0.24021E 01	0.25493E-00	0.77275E-03	0.28402E-03	0.59155E-01	0.45297E-01	-0.	0.
96	542.45	0.34234E-00	0.35989E-01	0.10876E-03	0.39974E-04	0.83511E-02	0.63947E-02	-0.	0.
97	542.55	0.32623E-00	0.34298E-01	0.10366E-03	0.38099E-04	0.79587E-02	0.60943E-02	-0.	0.
98	544.36	0.55688E 00	0.59028E-01	0.17864E-03	0.65656E-04	0.13697E-01	0.10488E-01	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
26	1	-2.64	147.36	-0.	-0.	2	C55	2.75	2	10.14	926.30	1821.60	134	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.883116E 02	0.191932E-01	0.467143E 04	0.182344E-04	0.715324E-07	0.119882E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730181E 00	0.431744E 01	0.564305E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	539.57	0.12810E 01	0.20861E-00	0.63434E-03	0.23146E-03	0.48319E-01	0.36968E-01	-0.10600E 01	0.10962E 01
100	540.24	0.61714E 00	0.10358E-00	0.31513E-03	0.11498E-03	0.23992E-01	0.18356E-01	-0.10840E 01	0.10361E 01
101	540.06	0.43481E-00	0.71374E-01	0.21711E-03	0.79219E-04	0.16532E-01	0.12648E-01	-0.11080E 01	0.88311E 00
102	546.07	0.62229E 01	0.10218E 01	0.31219E-02	0.11391E-02	0.23667E-00	0.18107E-00	-0.11080E 01	0.12303E 02
103	539.69	0.79896E 00	0.13406E-00	0.40768E-03	0.14875E-03	0.31051E-01	0.23757E-01	-0.10800E 01	0.10398E 01
104	597.64	0.43285E 02	0.70752E 01	0.22473E-01	0.82001E-02	0.16387E 01	0.12538E 01	0.85000E 00	0.
105	604.54	0.53971E 02	0.83760E 01	0.26747E-01	0.97595E-02	0.19400E 01	0.14843E 01	0.94000E 00	0.98708E 00
106	608.97	0.58401E 02	0.90087E 01	0.28866E-01	0.10533E-01	0.20866E 01	0.15964E 01	0.96000E 00	0.98810E 00
107	602.73	0.57164E 02	0.87885E 01	0.28025E-01	0.10226E-01	0.20356E 01	0.15574E 01	0.98000E 00	0.99515E 00
108	604.55	0.57160E 02	0.88412E 01	0.28233E-01	0.10302E-01	0.20478E 01	0.15667E 01	0.10000E 01	0.99327E 00
109	591.85	0.49504E 02	0.76306E 01	0.24130E-01	0.88046E-02	0.17674E 01	0.13522E 01	0.10200E 01	0.96894E 00
110	607.74	0.50585E 02	0.78640E 01	0.25174E-01	0.91857E-02	0.18215E 01	0.13936E 01	0.80000E-01	0.99947E 00
111	603.10	0.53068E 02	0.81604E 01	0.26029E-01	0.94977E-02	0.18901E 01	0.14461E 01	0.10000E-00	0.99136E 00
112	613.69	0.57300E 02	0.89062E 01	0.28643E-01	0.10451E-01	0.20628E 01	0.15783E 01	0.12000E-00	0.98487E 00
113	607.79	0.60019E 02	0.93309E 01	0.29871E-01	0.10900E-01	0.21612E 01	0.16535E 01	0.14000E-00	0.98334E 00
114	598.91	0.47801E 02	0.73960E 01	0.23515E-01	0.85803E-02	0.17131E 01	0.13106E 01	0.80000E-01	0.
115	599.50	0.49513E 02	0.76377E 01	0.24295E-01	0.88647E-02	0.17690E 01	0.13535E 01	0.10000E-00	0.98875E 00
116	600.69	0.51639E 02	0.80245E 01	0.25548E-01	0.93222E-02	0.18586E 01	0.14220E 01	0.12000E-00	0.99558E 00
117	609.18	0.54980E 02	0.85539E 01	0.27413E-01	0.10003E-01	0.19812E 01	0.15158E 01	0.14000E-00	0.10226E 01
118	598.87	0.43866E 02	0.68442E 01	0.21760E-01	0.79399E-02	0.15852E 01	0.12129E 01	0.10000E-00	0.99370E 00
119	596.53	0.43448E 02	0.67365E 01	0.21379E-01	0.78009E-02	0.15603E 01	0.11938E 01	0.15000E-00	0.
120	600.55	0.44106E 02	0.68649E 01	0.21854E-01	0.79742E-02	0.15900E 01	0.12165E 01	0.20000E-00	0.10005E 01
121	593.44	0.45210E 02	0.70332E 01	0.22268E-01	0.81252E-02	0.16290E 01	0.12464E 01	0.25000E-00	0.99644E 00
122	586.84	0.41018E 02	0.63584E 01	0.20030E-01	0.73086E-02	0.14727E 01	0.11268E 01	0.30000E-00	0.97805E 00
123	580.25	0.40488E 02	0.62850E 01	0.19700E-01	0.71881E-02	0.14557E 01	0.11138E 01	0.35000E-00	0.89963E 00
124	585.03	0.45113E 02	0.70678E 01	0.22234E-01	0.81129E-02	0.16370E 01	0.12525E 01	0.38000E-00	0.98690E 00
125	590.51	0.49779E 02	0.78864E 01	0.24913E-01	0.90905E-02	0.18266E 01	0.13976E 01	0.45000E-00	0.96705E 00
126	585.34	0.46167E 02	0.73891E 01	0.23250E-01	0.84836E-02	0.17114E 01	0.13094E 01	0.61000E 00	0.97675E 00
127	558.98	0.30784E 02	0.48797E 01	0.15053E-01	0.54924E-02	0.11302E 01	0.86473E 00	0.70000E 00	0.95923E 00
128	541.19	0.16337E 02	0.25723E 01	0.78309E-02	0.28573E-02	0.59578E 00	0.45583E-00	0.75000E 00	0.95313E 00
129	571.42	0.33203E 02	0.53164E 01	0.16553E-01	0.60399E-02	0.12314E 01	0.94211E 00	0.70000E 00	0.90815E 00
130	573.17	0.33562E 02	0.53791E 01	0.16770E-01	0.61192E-02	0.12459E 01	0.95322E 00	0.80000E 00	0.86848E 00
131	548.33	0.18167E 02	0.27248E 01	0.83392E-02	0.30428E-02	0.63113E 00	0.48287E-00	0.90000E 00	0.89750E 00
132	575.79	0.41160E 02	0.62892E 01	0.19647E-01	0.71687E-02	0.14567E 01	0.11145E 01	0.90000E 00	0.12974E 01
133	573.73	0.39601E 02	0.60137E 01	0.18757E-01	0.68441E-02	0.13929E 01	0.10657E 01	0.96000E 00	0.11761E 01
134	572.26	0.37508E 02	0.57008E 01	0.17761E-01	0.64807E-02	0.13204E 01	0.10102E 01	0.10000E 01	0.11327E 01
135	550.38	0.17644E 02	0.27700E 01	0.84904E-02	0.30980E-02	0.64159E 00	0.49088E-00	0.70000E-02	0.
136	919.71	0.10383E-01	0.19190E-02	0.81259E-05	0.29650E-05	0.44447E-03	0.34006E-03	0.70000E-02	0.
137	549.84	0.17521E 02	0.27410E 01	0.83980E-02	0.30643E-02	0.63487E 00	0.48573E-00	0.39000E-01	0.10103E 01
138	548.95	0.17143E 02	0.26676E 01	0.81677E-02	0.29803E-02	0.61787E 00	0.47272E-00	0.78000E-01	0.
139	548.73	0.16449E 02	0.25468E 01	0.77965E-02	0.28448E-02	0.58988E 00	0.45131E-00	0.11700E-00	0.
140	548.90	0.16797E 02	0.25925E 01	0.79375E-02	0.28963E-02	0.60048E 00	0.45942E-00	0.78000E-01	0.
141	608.34	0.64814E 02	0.71148E 01	0.22787E-01	0.83144E-02	0.16479E 01	0.12608E 01	-0.	0.
142	580.16	0.25056E 02	0.27090E 01	0.84904E-02	0.30980E-02	0.62744E 00	0.48005E-00	-0.	0.
143	547.43	0.14456E 02	0.22183E 01	0.67844E-02	0.24755E-02	0.51380E 00	0.39310E-00	0.78000E-01	0.95071E 00
144	547.78	0.15021E 02	0.23093E 01	0.70645E-02	0.25777E-02	0.53487E 00	0.40922E-00	0.70000E-02	0.89362E 00
145	548.09	0.15580E 02	0.23838E 01	0.72941E-02	0.26615E-02	0.55213E 00	0.42243E-00	0.70000E-02	0.99499E 00
146	547.46	0.15108E 02	0.23223E 01	0.71025E-02	0.25916E-02	0.53788E 00	0.41153E-00	0.39000E-01	0.99401E 00
147	549.47	0.15227E 02	0.23393E 01	0.71654E-02	0.26145E-02	0.54183E 00	0.41455E-00	0.78000E-01	0.
148	549.33	0.14435E 02	0.22357E 01	0.68473E-02	0.24985E-02	0.51783E 00	0.39619E-00	0.11700E-00	0.
149	588.19	0.33498E 02	0.54736E 01	0.17261E-01	0.62981E-02	0.12678E 01	0.96997E 00	0.70000E-02	0.97677E 00
150	591.32	0.33832E 02	0.55638E 01	0.17587E-01	0.64172E-02	0.12887E 01	0.98595E 00	0.70000E-02	0.98283E 00
151	591.09	0.33687E 02	0.55393E 01	0.17507E-01	0.63878E-02	0.12830E 01	0.98162E 00	0.70000E-02	0.95920E 00
152	595.89	0.38552E 02	0.61255E 01	0.19431E-01	0.70899E-02	0.14188E 01	0.10855E 01	0.39000E-01	0.95847E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	592.90	0.38233E 02	0.60651E 01	0.19195E-01	0.70039E-02	0.14048E 01	0.10748E 01	0.39000E-01	0.
154	590.49	0.39682E 02	0.62456E 01	0.19730E-01	0.71991E-02	0.14466E 01	0.11068E 01	0.78000E-01	0.96538E 00
155	589.14	0.36936E 02	0.60671E 01	0.19146E-01	0.69861E-02	0.14053E 01	0.10752E 01	0.39000E-01	0.
156	583.29	0.34310E 02	0.56002E 01	0.17594E-01	0.64198E-02	0.12971E 01	0.99241E 00	0.39000E-01	0.
157	579.96	0.33083E 02	0.54071E 01	0.16944E-01	0.61828E-02	0.12524E 01	0.95819E 00	0.78000E-01	0.95944E 00
158	578.72	0.33937E 02	0.55605E 01	0.17409E-01	0.63522E-02	0.12879E 01	0.98537E 00	0.39000E-01	0.
159	574.22	0.32287E 02	0.52772E 01	0.16466E-01	0.60081E-02	0.12223E 01	0.93516E 00	0.78000E-01	0.
160	582.11	0.33024E 02	0.54038E 01	0.16962E-01	0.61891E-02	0.12516E 01	0.95761E 00	0.39000E-01	0.
161	566.84	0.26952E 02	0.42702E 01	0.13250E-01	0.48347E-02	0.98905E 00	0.75671E 00	0.43000E-01	0.95511E 00
162	577.27	0.39018E 02	0.62375E 01	0.19507E-01	0.71178E-02	0.14447E 01	0.11053E 01	0.43000E-01	0.13642E 01
163	570.76	0.31403E 02	0.50102E 01	0.15592E-01	0.56893E-02	0.11605E 01	0.88786E 00	0.85000E-01	0.11083E 01
164	567.98	0.29322E 02	0.46487E 01	0.14437E-01	0.52677E-02	0.10767E 01	0.82379E 00	0.12800E-00	0.10487E 01
165	591.28	0.55176E 02	0.88880E 01	0.28094E-01	0.10251E-01	0.20586E 01	0.15750E 01	0.43000E-01	0.
166	586.51	0.51659E 02	0.82733E 01	0.26056E-01	0.95073E-02	0.19163E 01	0.14661E 01	0.85000E-01	0.17925E 01
167	615.20	0.74348E 02	0.12092E 02	0.38934E-01	0.14206E-01	0.28007E 01	0.21428E 01	0.43000E-01	0.
168	583.96	0.45096E 02	0.72936E 01	0.22926E-01	0.83653E-02	0.16893E 01	0.12925E 01	0.12800E-00	0.25405E 01
169	601.41	0.56786E 02	0.92418E 01	0.29441E-01	0.10742E-01	0.21406E 01	0.16377E 01	0.85000E-01	0.19180E 01
170	592.15	0.49872E 02	0.80374E 01	0.25422E-01	0.92761E-02	0.18616E 01	0.14243E 01	0.12800E-00	0.16206E 01
171	594.89	0.55317E 02	0.88993E 01	0.28208E-01	0.10292E-01	0.20613E 01	0.15770E 01	0.85000E-01	0.18127E 01
172	625.30	0.67232E 02	0.11046E 02	0.35850E-01	0.13081E-01	0.25585E 01	0.19575E 01	0.43000E-01	0.
173	598.93	0.52504E 02	0.85336E 01	0.27132E-01	0.99002E-02	0.19765E 01	0.15122E 01	0.12800E-00	0.15898E 01
174	603.44	0.58866E 02	0.95447E 01	0.30453E-01	0.11112E-01	0.22107E 01	0.16914E 01	0.85000E-01	0.
175	617.43	0.60848E 02	0.99079E 01	0.31958E-01	0.11661E-01	0.22949E 01	0.17558E 01	0.43000E-01	0.19097E 01
176	611.52	0.53834E 02	0.87383E 01	0.28056E-01	0.10237E-01	0.20240E 01	0.15485E 01	0.43000E-01	0.16551E 01
177	575.66	0.31395E 02	0.50226E 01	0.15688E-01	0.57244E-02	0.11633E 01	0.89004E 00	0.12800E-00	0.85761E 00
178	579.61	0.33684E 02	0.53917E 01	0.16892E-01	0.61635E-02	0.12488E 01	0.95546E 00	0.85000E-01	0.97213E 00
179	587.07	0.37115E 02	0.59651E 01	0.18794E-01	0.68577E-02	0.13816E 01	0.10571E 01	0.70000E-02	0.11088E 01
180	566.89	0.28444E 02	0.45430E 01	0.14097E-01	0.51438E-02	0.10523E 01	0.80507E 00	0.70000E-02	0.
181	575.54	0.30819E 02	0.49459E 01	0.15448E-01	0.56365E-02	0.11456E 01	0.87646E 00	0.70000E-02	0.99112E 00
182	573.31	0.31278E 02	0.50295E 01	0.15682E-01	0.57221E-02	0.11649E 01	0.89127E 00	0.70000E-02	0.
183	575.44	0.32235E 02	0.51562E 01	0.16103E-01	0.58758E-02	0.11943E 01	0.91373E 00	0.32000E-01	0.89997E 00
184	586.20	0.40937E 02	0.66290E 01	0.20872E-01	0.76159E-02	0.15354E 01	0.11747E 01	0.32000E-01	0.95817E 00
185	572.41	0.37379E 02	0.60074E 01	0.18719E-01	0.68301E-02	0.13914E 01	0.10646E 01	0.64000E-01	0.96461E 00
186	583.54	0.42809E 02	0.69000E 01	0.21682E-01	0.79113E-02	0.15982E 01	0.12228E 01	0.64000E-01	0.96664E 00
187	579.26	0.33983E 02	0.54822E 01	0.17171E-01	0.62653E-02	0.12698E 01	0.97149E 00	0.70000E-02	0.92478E 00
188	573.22	0.30710E 02	0.50166E 01	0.15641E-01	0.57071E-02	0.11619E 01	0.88899E 00	0.70000E-02	0.88982E 00
189	535.60	0.60784E 01	0.99223E 00	0.30083E-02	0.10977E-02	0.22982E-00	0.17583E-00	0.10600E 01	0.10195E 01
190	532.86	0.37231E 01	0.61895E 00	0.18728E-02	0.68337E-03	0.14336E-00	0.10968E-00	0.10840E 01	0.10243E 01
191	531.04	0.18566E 01	0.31001E-00	0.93680E-03	0.34182E-03	0.71805E-01	0.54937E-01	0.11080E 01	0.10266E 01
192	531.03	0.19995E 01	0.33206E-00	0.10034E-02	0.36613E-03	0.76911E-01	0.58844E-01	0.11080E 01	0.99188E 00
193	531.36	0.34727E 01	0.56813E 00	0.17172E-02	0.62658E-03	0.13159E-00	0.10068E-00	0.16560E 01	0.92344E 00
194	531.79	0.28218E 01	0.45964E-00	0.13897E-02	0.50708E-03	0.10646E-00	0.81452E-01	0.11700E 01	0.78178E 00
195	531.28	0.30234E 01	0.49460E-00	0.14949E-02	0.54545E-03	0.11456E-00	0.87648E-01	0.16740E 01	0.81984E 00
196	531.82	0.29465E 01	0.47995E-00	0.14512E-02	0.52950E-03	0.11117E-00	0.85052E-01	0.16950E 01	0.89705E 00

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
32	1	-2.65	147.35	0.02	-0.	3	C55	2.80	2	10.14	927.60	1812.00	124	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.878008E 02	0.192368E-01	0.465794E 04	0.183822E-04	0.711186E-07	0.121205E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.729881E 00	0.432048E 01	0.564886E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	559.07	0.24296E 02	0.38020E 01	0.11830E-01	0.42941E-02	0.88001E 00	0.67307E 00	0.10000E 01	0.10318E 01
198	561.57	0.24812E 02	0.37617E 01	0.11726E-01	0.42565E-02	0.87067E 00	0.66592E 00	0.12000E 01	0.10208E 01
199	544.23	0.12071E 02	0.19100E 01	0.58772E-02	0.21334E-02	0.44208E-00	0.33812E-00	0.13000E 01	0.10123E 01
200	537.42	0.26010E 01	0.37925E-00	0.11611E-02	0.42148E-03	0.87780E-01	0.67138E-01	0.11890E 01	0.88899E 00
201	539.65	0.21813E 01	0.36128E-00	0.11079E-02	0.40216E-03	0.83619E-01	0.63956E-01	0.14540E 01	0.89025E 00
202	538.72	0.21564E 01	0.35425E-00	0.10856E-02	0.39407E-03	0.81992E-01	0.62711E-01	0.17040E 01	0.93480E 00
203	540.32	0.16816E 01	0.27649E-00	0.84832E-03	0.30794E-03	0.63996E-01	0.48947E-01	0.20410E 01	0.10025E 01
204	538.46	0.29974E-00	0.22875E-01	0.70088E-04	0.25442E-04	0.52946E-02	0.40496E-02	0.20700E 01	0.
205	540.92	0.21242E 01	0.18545E-00	0.56923E-03	0.20663E-03	0.42923E-01	0.32829E-01	0.21880E 01	0.
206	540.25	0.17501E 01	0.28776E-00	0.88284E-03	0.32047E-03	0.66603E-01	0.50941E-01	0.22480E 01	0.10616E 01
207	540.62	0.20021E 01	0.32371E-00	0.99339E-03	0.36060E-03	0.74924E-01	0.57305E-01	0.20700E 01	0.10314E 01
208	538.81	0.75065E 00	0.66741E-01	0.20454E-03	0.74248E-04	0.15448E-01	0.11815E-01	0.20700E 01	0.14818E 01
209	543.90	0.36836E 01	0.29741E-00	0.91493E-03	0.33212E-03	0.68838E-01	0.52650E-01	0.21880E 01	0.72658E 01
210	540.60	0.18332E 01	0.30379E-00	0.93227E-03	0.33841E-03	0.70314E-01	0.53779E-01	0.20700E 01	0.11405E 01
211	542.93	0.36140E 01	0.59967E 00	0.18434E-02	0.66917E-03	0.13880E-00	0.10616E-00	0.21880E 01	0.25072E 01
212	540.81	0.20997E 01	0.34376E-00	0.10551E-02	0.38300E-03	0.79566E-01	0.60855E-01	0.22390E 01	0.14639E 01
213	539.44	0.15351E 01	0.25112E-00	0.76998E-03	0.27950E-03	0.58124E-01	0.44456E-01	0.21880E 01	0.11535E 01
214	540.01	0.15745E 01	0.26084E-00	0.80009E-03	0.29043E-03	0.60372E-01	0.46175E-01	0.22480E 01	0.12716E 01
215	537.43	0.46286E-00	0.69468E-01	0.21268E-03	0.77203E-04	0.16079E-01	0.12298E-01	0.11650E 01	0.87819E 00
216	538.53	0.31948E-00	0.26794E-01	0.82098E-04	0.29802E-04	0.62016E-02	0.47433E-02	0.12050E 01	0.
217	538.84	0.49143E-00	0.71712E-01	0.21978E-03	0.79780E-04	0.16598E-01	0.12695E-01	0.12120E 01	0.79556E 00
218	538.44	0.53766E 00	0.78846E-01	0.24157E-03	0.87691E-04	0.18249E-01	0.13958E-01	0.11890E 01	0.10746E 01
219	538.05	0.59792E 00	0.10024E-00	0.30702E-03	0.11145E-03	0.23200E-01	0.17744E-01	0.14540E 01	0.10616E 01
220	537.95	0.75065E 00	0.13063E-00	0.40007E-03	0.14523E-03	0.30234E-01	0.23124E-01	0.17040E 01	0.83024E 00
221	539.00	0.56052E 00	0.93507E-01	0.28661E-03	0.10404E-03	0.21643E-01	0.16553E-01	0.20410E 01	0.83362E 00
222	539.70	0.33455E-00	0.56421E-01	0.17303E-03	0.62809E-04	0.13059E-01	0.99881E-02	0.22480E 01	0.77236E 00
223	536.97	0.40208E-00	0.60330E-01	0.18464E-03	0.67024E-04	0.13964E-01	0.10680E-01	0.11650E 01	0.84483E 00
224	537.78	0.23792E-00	0.19945E-01	0.61080E-04	0.22172E-04	0.46164E-02	0.35309E-02	0.12050E 01	0.65082E 00
225	538.48	0.46805E-00	0.68286E-01	0.20923E-03	0.75949E-04	0.15805E-01	0.12089E-01	0.12120E 01	0.76380E 00
226	538.95	0.37507E-00	0.63134E-01	0.19351E-03	0.70242E-04	0.14613E-01	0.11176E-01	0.14540E 01	0.66264E 00
227	539.38	0.79896E 00	0.12909E-00	0.39579E-03	0.14367E-03	0.29879E-01	0.22853E-01	0.17040E 01	0.93004E 00
228	539.28	0.82443E 00	0.13589E-00	0.41662E-03	0.15123E-03	0.31453E-01	0.24057E-01	0.18780E 01	0.10067E 01
229	539.58	0.60468E 00	0.10014E-00	0.30709E-03	0.11147E-03	0.23179E-01	0.17728E-01	0.21880E 01	0.11320E 01
230	537.93	0.48000E-00	0.70853E-01	0.21700E-03	0.78771E-04	0.16399E-01	0.12543E-01	0.11890E 01	0.83598E 00
231	539.41	0.28883E-00	0.51175E-01	0.15691E-03	0.56956E-04	0.11845E-01	0.90593E-02	0.14540E 01	0.54522E 00
232	539.82	0.82078E 00	0.13430E-00	0.41190E-03	0.14952E-03	0.31085E-01	0.23775E-01	0.16130E 01	0.89474E 00
233	539.24	0.71532E 00	0.11791E-00	0.36147E-03	0.13121E-03	0.27290E-01	0.20873E-01	0.17040E 01	0.69322E 00
234	539.80	0.95948E 00	0.15893E-00	0.48742E-03	0.17693E-03	0.36784E-01	0.28134E-01	0.18780E 01	0.95914E 00
235	540.59	0.32156E-00	0.53205E-01	0.16327E-03	0.59268E-04	0.12315E-01	0.94188E-02	0.14540E 01	0.10038E 01
236	539.92	0.83221E 00	0.13618E-00	0.41769E-03	0.15162E-03	0.31519E-01	0.24107E-01	0.17040E 01	0.82125E 00
237	540.97	0.59896E 00	0.99276E-01	0.30474E-03	0.11062E-03	0.22978E-01	0.17575E-01	0.21880E 01	0.12680E 01
238	541.05	0.42909E-00	0.38199E-01	0.11726E-03	0.42567E-04	0.88415E-02	0.67623E-02	0.20700E 01	0.13189E 01
239	538.69	0.56987E 00	0.83151E-01	0.25481E-03	0.92496E-04	0.19246E-01	0.14720E-01	0.11890E 01	0.77472E 00
240	541.73	0.35221E-00	0.59166E-01	0.18172E-03	0.65964E-04	0.13694E-01	0.10474E-01	0.14540E 01	0.85519E 00
241	540.68	0.84364E 00	0.13875E-00	0.42580E-03	0.15457E-03	0.32113E-01	0.24562E-01	0.17040E 01	0.10069E 01
242	540.51	0.10764E 01	0.17836E-00	0.54730E-03	0.19867E-03	0.41282E-01	0.31574E-01	0.18780E 01	0.96022E 00
243	541.41	0.12535E 01	0.20782E-00	0.63812E-03	0.23164E-03	0.48100E-01	0.36789E-01	0.20410E 01	0.15907E 01
244	540.43	0.56104E 00	0.50635E-01	0.15537E-03	0.56397E-04	0.11720E-01	0.89637E-02	0.20700E 01	0.
245	541.88	0.78805E 00	0.64548E-01	0.19827E-03	0.71971E-04	0.14940E-01	0.11427E-01	0.21870E 01	0.14676E 01
246	541.16	0.68156E 00	0.11504E-00	0.35318E-03	0.12820E-03	0.26626E-01	0.20365E-01	0.22100E 01	0.12390E 01
247	541.96	0.26286E-00	0.43062E-01	0.13228E-03	0.48018E-04	0.99670E-02	0.76232E-02	0.14540E 01	0.56608E 00
248	540.88	0.89351E 00	0.14809E-00	0.45455E-03	0.16500E-03	0.34276E-01	0.26216E-01	0.17040E 01	0.11377E 01
249	541.17	0.83585E 00	0.70204E-01	0.21553E-03	0.78237E-04	0.16249E-01	0.12428E-01	0.18780E 01	0.
250	541.91	0.12234E 01	0.10021E-00	0.30781E-03	0.11173E-03	0.23193E-01	0.17739E-01	0.21880E 01	0.51008E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	542.43	0.26442E-00	0.44662E-01	0.13724E-03	0.49819E-04	0.10337E-01	0.79064E-02	0.14540E 01	0.66504E 00
252	540.99	0.43585E-00	0.73185E-01	0.22465E-03	0.81548E-04	0.16939E-01	0.12956E-01	0.16130E 01	0.12170E 01
253	543.14	0.11309E 01	0.99826E-01	0.30692E-03	0.11141E-03	0.23105E-01	0.17672E-01	0.17060E 01	0.
254	541.29	0.63273E 00	0.10489E-00	0.32205E-03	0.11690E-03	0.24278E-01	0.18569E-01	0.21880E 01	0.10087E 01
255	542.05	0.65974E 00	0.60961E-01	0.18728E-03	0.67981E-04	0.14110E-01	0.10792E-01	0.16580E 01	0.31561E 01
256	540.94	0.12062E 01	0.10130E-00	0.31094E-03	0.11287E-03	0.23446E-01	0.17933E-01	0.17920E 01	0.62915E 01
257	534.83	0.72416E 00	0.12143E-00	0.37106E-03	0.13469E-03	0.28106E-01	0.21497E-01	0.10840E 01	0.10044E 01
258	541.58	0.39117E-00	0.66533E-01	0.20432E-03	0.74169E-04	0.15399E-01	0.11778E-01	0.14540E 01	0.99232E 00
259	541.15	0.41507E-00	0.68803E-01	0.21123E-03	0.76675E-04	0.15925E-01	0.12180E-01	0.16130E 01	0.12522E 01
260	541.58	0.98961E 00	0.16159E-00	0.49624E-03	0.18013E-03	0.37400E-01	0.28605E-01	0.17040E 01	0.27751E 01
261	541.45	0.11345E 01	0.18724E-00	0.57496E-03	0.20871E-03	0.43338E-01	0.33147E-01	0.18780E 01	0.16736E 01
262	541.01	0.85922E 00	0.14501E-00	0.44515E-03	0.16159E-03	0.33564E-01	0.25671E-01	0.20410E 01	0.10370E 01
263	540.71	0.43636E-00	0.73854E-01	0.22666E-03	0.82277E-04	0.17094E-01	0.13074E-01	0.14540E 01	0.
264	540.83	0.49455E-00	0.81590E-01	0.25042E-03	0.90903E-04	0.18884E-01	0.14444E-01	0.16130E 01	0.15198E 01
265	540.95	0.57558E 00	0.93081E-01	0.28572E-03	0.10371E-03	0.21544E-01	0.16478E-01	0.17040E 01	0.12917E 01
266	541.40	0.70286E 00	0.11599E-00	0.35617E-03	0.12929E-03	0.26847E-01	0.20534E-01	0.18780E 01	0.93972E 00
267	540.82	0.85662E 00	0.14413E-00	0.44237E-03	0.16058E-03	0.33359E-01	0.25515E-01	0.20410E 01	0.10569E 01
268	541.56	0.45195E-00	0.74592E-01	0.22907E-03	0.83152E-04	0.17265E-01	0.13205E-01	0.16130E 01	0.11493E 01
269	540.66	0.60104E 00	0.97182E-01	0.29824E-03	0.10826E-03	0.22493E-01	0.17204E-01	0.18280E 01	0.10293E 01
270	541.02	0.72935E 00	0.11979E-00	0.36772E-03	0.13348E-03	0.27726E-01	0.21206E-01	0.18780E 01	0.11306E 01
271	540.83	0.90026E 00	0.15115E-00	0.46393E-03	0.16841E-03	0.34985E-01	0.26758E-01	0.20410E 01	0.10936E 01
272	539.92	0.33247E-00	0.56245E-01	0.17252E-03	0.62623E-04	0.13018E-01	0.99569E-02	0.16130E 01	0.10670E 01
273	540.87	0.66545E 00	0.11063E-00	0.33955E-03	0.12326E-03	0.25605E-01	0.19584E-01	0.17200E 01	0.16333E 01
274	540.32	0.49403E-00	0.79614E-01	0.24427E-03	0.88668E-04	0.18427E-01	0.14094E-01	0.18280E 01	0.91155E 00
275	540.51	0.75740E 00	0.12455E-00	0.38220E-03	0.13874E-03	0.28828E-01	0.22049E-01	0.18780E 01	0.12298E 01
276	919.72	0.10902E-01	0.22053E-02	0.94489E-05	0.34299E-05	0.51044E-03	0.39041E-03	0.20600E 01	0.
277	540.05	0.72727E 00	0.61046E-01	0.18726E-03	0.67975E-04	0.14129E-01	0.10807E-01	0.21000E 01	0.15367E 01
278	539.98	0.56623E 00	0.47527E-01	0.14578E-03	0.52919E-04	0.11000E-01	0.84136E-02	0.21870E 01	0.
279	541.89	0.10291E 01	0.17377E-00	0.53377E-03	0.19376E-03	0.40220E-01	0.30762E-01	0.21950E 01	0.11178E 01
280	540.31	0.90493E 00	0.15107E-00	0.46351E-03	0.16825E-03	0.34967E-01	0.26744E-01	0.18780E 01	0.14345E 01
281	540.39	0.93403E 00	0.15758E-00	0.48351E-03	0.17551E-03	0.36474E-01	0.27897E-01	0.20600E 01	0.10781E 01
282	540.95	0.92675E 00	0.15104E-00	0.46362E-03	0.16829E-03	0.34958E-01	0.26738E-01	0.18280E 01	0.14366E 01
283	540.50	0.86961E 00	0.14598E-00	0.44795E-03	0.16260E-03	0.33788E-01	0.25843E-01	0.20600E 01	0.11849E 01
284	540.75	0.11642E 01	0.18824E-00	0.57773E-03	0.20972E-03	0.43569E-01	0.33324E-01	0.17200E 01	0.25905E 01
285	541.22	0.17003E 01	0.27971E-00	0.85877E-03	0.31173E-03	0.64741E-01	0.49517E-01	0.18780E 01	0.25468E 01
286	540.11	0.86909E 00	0.80217E-01	0.24608E-03	0.89326E-04	0.18567E-01	0.14201E-01	0.16580E 01	0.34620E 01
287	919.72	0.10902E-01	0.11030E-02	0.47259E-05	0.17155E-05	0.25530E-03	0.19526E-03	0.17920E 01	0.
288	539.98	0.68520E 00	0.11264E-00	0.34552E-03	0.12542E-03	0.26072E-01	0.19941E-01	0.16130E 01	0.
289	541.87	0.14130E 01	0.11873E-00	0.36469E-03	0.13238E-03	0.27480E-01	0.21018E-01	0.17060E 01	0.
290	540.42	0.12255E 01	0.10288E-00	0.31568E-03	0.11459E-03	0.23813E-01	0.18213E-01	0.18780E 01	0.47858E 01
291	540.30	0.10997E 01	0.17999E-00	0.55224E-03	0.20046E-03	0.41661E-01	0.31864E-01	0.17200E 01	0.17775E 01
292	540.98	0.37247E-00	0.64082E-01	0.19671E-03	0.71405E-04	0.14832E-01	0.11344E-01	0.14400E 01	0.92776E 00
293	539.74	0.10816E 01	0.17479E-00	0.53603E-03	0.19458E-03	0.40455E-01	0.30942E-01	0.17200E 01	0.14018E 01
294	540.55	0.11725E 01	0.19399E-00	0.59530E-03	0.21609E-03	0.44901E-01	0.34342E-01	0.18780E 01	0.10343E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
22	1	4.33	154.33	-0.	-0.	1	C55	2.75	2	10.14	927.60	1832.50	130	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.888847E 02	0.191980E-01	0.468660E 04	0.181214E-04	0.719966E-07	0.118755E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730513E 00	0.432048E 01	0.564886E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	560.12	0.28747E 02	0.37839E 01	0.11571E-01	0.42345E-02	0.87581E 00	0.66985E 00	-0.	0.97821E 00
2	560.31	0.27725E 02	0.38828E 01	0.11875E-01	0.43457E-02	0.89869E 00	0.68735E 00	-0.30000E-01	0.
3	554.92	0.25912E 02	0.39337E 01	0.11983E-01	0.43853E-02	0.91048E 00	0.69637E 00	-0.60000E-01	0.
4	555.91	0.24977E 02	0.38916E 01	0.11863E-01	0.43415E-02	0.90074E 00	0.68892E 00	-0.90000E-01	0.
5	551.21	0.23079E 02	0.36778E 01	0.11173E-01	0.40888E-02	0.85124E 00	0.65106E 00	-0.20000E-00	0.10080E 01
6	549.97	0.20732E 02	0.33015E 01	0.10020E-01	0.36672E-02	0.76415E 00	0.58445E 00	-0.40000E-00	0.10108E 01
7	549.19	0.17850E 02	0.28549E 01	0.86599E-02	0.31692E-02	0.66077E 00	0.50539E 00	-0.60000E 00	0.10110E 01
8	549.70	0.15923E 02	0.25473E 01	0.77300E-02	0.28289E-02	0.58960E 00	0.45095E-00	-0.80000E 00	0.
9	550.14	0.15238E 02	0.23997E 01	0.72844E-02	0.26659E-02	0.55543E 00	0.42482E-00	-0.90000E 00	0.10060E 01
10	552.31	0.14796E 02	0.23630E 01	0.71844E-02	0.26293E-02	0.54694E 00	0.41832E-00	-0.98000E 00	0.10286E 01
11	536.93	0.45040E-00	0.77312E-01	0.23243E-03	0.85062E-04	0.17894E-01	0.13686E-01	-0.11220E 01	0.41619E-00
12	538.22	0.11917E 01	0.17444E-00	0.52491E-03	0.19210E-03	0.40374E-01	0.30880E-01	-0.11890E 01	0.79108E 00
13	537.93	0.80779E 00	0.12188E-00	0.36668E-03	0.13419E-03	0.28209E-01	0.21576E-01	-0.13340E 01	0.46861E-00
14	536.24	0.74753E 00	0.12827E-00	0.38542E-03	0.14105E-03	0.29688E-01	0.22707E-01	-0.14400E 01	0.50391E 00
15	559.52	0.28336E 02	0.39665E 01	0.12124E-01	0.44369E-02	0.91807E 00	0.70218E 00	0.30000E-01	0.
16	556.15	0.26630E 02	0.40455E 01	0.12335E-01	0.45141E-02	0.93636E 00	0.71617E 00	0.60000E-01	0.
17	555.97	0.26698E 02	0.41598E 01	0.12681E-01	0.46410E-02	0.96282E 00	0.73640E 00	0.90000E-01	0.
18	556.60	0.26865E 02	0.42938E 01	0.13096E-01	0.47927E-02	0.99383E 00	0.76012E 00	0.20000E-00	0.98238E 00
19	568.35	0.30355E 02	0.48833E 01	0.15024E-01	0.54983E-02	0.11303E 01	0.86448E 00	0.40000E-00	0.99009E 00
20	579.77	0.35089E 02	0.57074E 01	0.17710E-01	0.64812E-02	0.13210E 01	0.10104E 01	0.60000E 00	0.
21	605.77	0.45128E 02	0.70083E 01	0.22180E-01	0.81171E-02	0.16221E 01	0.12407E 01	0.92000E 00	0.
22	571.38	0.31814E 02	0.48493E 01	0.14953E-01	0.54724E-02	0.11224E 01	0.85846E 00	0.10400E 01	0.94333E 00
23	567.95	0.29142E 02	0.44457E 01	0.13674E-01	0.50041E-02	0.10290E 01	0.78701E 00	0.10600E 01	0.95833E 00
24	551.33	0.20713E 02	0.32799E 01	0.99647E-02	0.36468E-02	0.75914E 00	0.58062E 00	0.10840E 01	0.96578E 00
25	517.81	0.53891E 01	0.78378E 00	0.23241E-02	0.85055E-03	0.18141E-00	0.13875E-00	0.12070E 01	0.15956E 01
26	515.33	0.57008E 01	0.87322E 00	0.25847E-02	0.94594E-03	0.20211E-00	0.15458E-00	0.12490E 01	0.18587E 01
27	515.33	0.61221E 01	0.92255E 00	0.27308E-02	0.99937E-03	0.21353E-00	0.16332E-00	0.13340E 01	0.19519E 01
28	515.34	0.47595E 01	0.79757E 00	0.23608E-02	0.86400E-03	0.18460E-00	0.14119E-00	0.14540E 01	0.17969E 01
29	518.54	0.28239E 01	0.46004E-00	0.13648E-02	0.49949E-03	0.10648E-00	0.81439E-01	0.16580E 01	0.10363E 01
30	526.65	0.29901E 01	0.49535E-00	0.14782E-02	0.54097E-03	0.11465E-00	0.87690E-01	0.20410E 01	0.11879E 01
31	531.83	0.28613E 01	0.47540E-00	0.14240E-02	0.52113E-03	0.11003E-00	0.84159E-01	0.22480E 01	0.11858E 01
32	556.34	0.26656E 02	0.40539E 01	0.12362E-01	0.45240E-02	0.93830E 00	0.71765E 00	-0.60000E-01	0.
33	561.91	0.27524E 02	0.38580E 01	0.11813E-01	0.43232E-02	0.89296E 00	0.68297E 00	-0.30000E-01	0.
34	559.28	0.28570E 02	0.43522E 01	0.13300E-01	0.48674E-02	0.10073E 01	0.77045E 00	0.30000E-01	0.
35	556.48	0.26955E 02	0.42012E 01	0.12812E-01	0.46888E-02	0.97238E 00	0.74372E 00	0.60000E-01	0.
36	573.05	0.45875E 02	0.73991E 01	0.22844E-01	0.83601E-02	0.17126E 01	0.13098E 01	-0.86800E 00	0.28365E 01
37	569.50	0.37103E 02	0.58113E 01	0.17894E-01	0.65487E-02	0.13450E 01	0.10287E 01	-0.91100E 00	0.23640E 01
38	564.62	0.34012E 02	0.54083E 01	0.16593E-01	0.60726E-02	0.12518E 01	0.95742E 00	-0.95300E 00	0.21450E 01
39	919.71	0.10383E-01	0.19694E-02	0.82306E-05	0.30121E-05	0.45582E-03	0.34863E-03	0.51000E-01	0.
40	538.65	0.61309E 01	0.96396E 00	0.29016E-02	0.10619E-02	0.22311E-00	0.17065E-00	0.29000E-01	0.
41	569.97	0.54920E 02	0.88319E 01	0.27617E-01	0.10107E-01	0.20442E 01	0.15635E 01	0.70000E-02	0.
42	579.43	0.49848E 02	0.80166E 01	0.24869E-01	0.91012E-02	0.18555E 01	0.14192E 01	-0.86800E 00	0.24378E 01
43	582.07	0.53319E 02	0.86092E 01	0.26760E-01	0.97933E-02	0.19926E 01	0.15241E 01	-0.91100E 00	0.27647E 01
44	574.69	0.44429E 02	0.71039E 01	0.21959E-01	0.80364E-02	0.16442E 01	0.12576E 01	-0.95300E 00	0.15545E 01
45	549.90	0.14245E 02	0.23317E 01	0.70767E-02	0.25899E-02	0.53969E 00	0.41278E-00	-0.10400E 01	0.24722E 01
46	582.95	0.50195E 02	0.81087E 01	0.25221E-01	0.92302E-02	0.18768E 01	0.14355E 01	0.70000E-02	0.
47	548.29	0.17793E 02	0.28200E 01	0.85484E-02	0.31285E-02	0.65270E 00	0.49921E-00	0.29000E-01	0.
48	547.76	0.13798E 02	0.21946E 01	0.66500E-02	0.24337E-02	0.50795E 00	0.38850E-00	0.51000E-01	0.83991E 00
49	574.06	0.36554E 02	0.58427E 01	0.18052E-01	0.66066E-02	0.13523E 01	0.10343E 01	0.70000E-02	0.23094E 01
50	550.31	0.16211E 02	0.25656E 01	0.77889E-02	0.28505E-02	0.59383E 00	0.45418E-00	0.29000E-01	0.10312E 01
51	550.73	0.15335E 02	0.24197E 01	0.73483E-02	0.26892E-02	0.56006E 00	0.42836E-00	0.51000E-01	0.
52	573.86	0.38053E 02	0.61168E 01	0.18896E-01	0.69154E-02	0.14158E 01	0.10828E 01	-0.86800E 00	0.
53	566.88	0.30479E 02	0.48987E 01	0.15055E-01	0.55096E-02	0.11338E 01	0.86720E 00	-0.91100E 00	0.19163E 01
54	568.24	0.33173E 02	0.52854E 01	0.16260E-01	0.59505E-02	0.12233E 01	0.93565E 00	-0.95300E 00	0.20491E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	548.20	0.10659E 02	0.17431E 01	0.52836E-02	0.19336E-02	0.40345E-00	0.30857E-00	-0.10400E 01	0.32095E 01
56	548.33	0.89532E 01	0.15105E 01	0.45790E-02	0.16758E-02	0.34961E-00	0.26740E-00	-0.10680E 01	0.57056E 01
57	543.63	0.50031E 01	0.81610E 00	0.24655E-02	0.90229E-03	0.18889E-00	0.14447E-00	-0.10400E 01	0.40870E 01
58	548.21	0.81771E 01	0.14477E 01	0.43883E-02	0.16060E-02	0.33508E-00	0.25628E-00	-0.10680E 01	0.27754E 01
59	540.91	0.64888E 01	0.10568E 01	0.31865E-02	0.11662E-02	0.24461E-00	0.18709E-00	-0.10400E 01	0.11391E 01
60	543.08	0.62483E 01	0.10510E 01	0.31740E-02	0.11616E-02	0.24327E-00	0.18606E-00	-0.10680E 01	0.23316E 01
61	537.81	0.83377E 00	0.13803E-00	0.41524E-03	0.15197E-03	0.31948E-01	0.24435E-01	-0.11220E 01	0.78395E 00
62	538.04	0.67845E 00	0.10237E-00	0.30801E-03	0.11272E-03	0.23694E-01	0.18122E-01	-0.13340E 01	0.42398E-00
63	539.08	0.95585E 00	0.16427E-00	0.49464E-03	0.18102E-03	0.38022E-01	0.29081E-01	-0.11220E 01	0.93761E 00
64	538.46	0.29766E-00	0.44925E-01	0.13521E-03	0.49483E-04	0.10398E-01	0.79529E-02	-0.13340E 01	0.16944E-00
65	536.71	0.63637E 00	0.10922E-00	0.32831E-03	0.12015E-03	0.25280E-01	0.19335E-01	0.14400E 01	0.44871E-00
66	535.27	0.95844E 00	0.15643E-00	0.46971E-03	0.17190E-03	0.36205E-01	0.27691E-01	0.16130E 01	0.82680E 00
67	535.33	0.11112E 01	0.17801E-00	0.53454E-03	0.19563E-03	0.41201E-01	0.31512E-01	0.17200E 01	0.11815E 01
68	535.83	0.84831E 00	0.13956E-00	0.41923E-03	0.15343E-03	0.32302E-01	0.24706E-01	-0.16130E 01	0.76167E 00
69	535.01	0.10052E 01	0.16100E-00	0.48336E-03	0.17690E-03	0.37265E-01	0.28502E-01	-0.18280E 01	0.16820E 01
70	538.39	0.10764E 01	0.15784E-00	0.47503E-03	0.17385E-03	0.36533E-01	0.27942E-01	-0.11650E 01	0.78885E 00
71	538.73	0.67948E 00	0.56992E-01	0.17156E-03	0.62787E-04	0.13191E-01	0.10089E-01	-0.12050E 01	0.10067E 01
72	539.96	0.93195E 00	0.13491E-00	0.40647E-03	0.14876E-03	0.31225E-01	0.23882E-01	-0.12120E 01	0.59681E 00
73	537.82	0.76883E 00	0.11271E-00	0.33906E-03	0.12409E-03	0.26087E-01	0.19952E-01	-0.11650E 01	0.57476E 00
74	537.44	0.47740E-00	0.40014E-01	0.12034E-03	0.44041E-04	0.92614E-02	0.70835E-02	-0.12050E 01	0.95029E 00
75	114.53	0.14012E-02	0.15150E-03	0.34955E-06	0.12793E-06	0.35065E-04	0.26819E-04	-0.12120E 01	0.
76	535.99	0.14795E 01	0.22224E-00	0.66767E-03	0.24435E-03	0.51438E-01	0.39342E-01	0.10840E 01	0.11444E 01
77	536.08	0.82494E 00	0.13304E-00	0.39972E-03	0.14629E-03	0.30793E-01	0.23552E-01	0.11220E 01	0.79693E 00
78	537.62	0.86130E 00	0.12798E-00	0.38495E-03	0.14088E-03	0.29622E-01	0.22656E-01	0.13340E 01	0.50172E 00
79	536.58	0.22494E-00	0.37677E-01	0.11324E-03	0.41443E-04	0.87205E-02	0.66698E-02	-0.11890E 01	0.13814E-00
80	537.26	0.39325E-00	0.59014E-01	0.17746E-03	0.64945E-04	0.13659E-01	0.10447E-01	-0.13340E 01	0.23024E-00
81	535.44	0.82079E-01	0.13232E-01	0.39739E-04	0.14543E-04	0.30627E-02	0.23425E-02	-0.11470E 01	0.51657E-01
82	535.07	-0.59219E-01	-0.99017E-02	-0.29728E-04	-0.10880E-04	-0.22918E-02	-0.17529E-02	-0.11890E 01	0.
83	537.21	0.19979E 01	0.33447E-00	0.10057E-02	0.36807E-03	0.77415E-01	0.59210E-01	-0.10840E 01	0.14710E 01
84	535.43	0.39429E-00	0.57723E-01	0.17335E-03	0.63440E-04	0.13360E-01	0.10218E-01	-0.11890E 01	0.27337E-00
85	537.16	0.50546E 00	0.74070E-01	0.22272E-03	0.81509E-04	0.17144E-01	0.13112E-01	-0.13090E 01	0.33904E-00
86	536.84	0.41870E-00	0.62188E-01	0.18695E-03	0.68417E-04	0.14394E-01	0.11009E-01	-0.13340E 01	0.20977E-00
87	546.75	0.18392E 02	0.27050E 01	0.81907E-02	0.29976E-02	0.62609E 00	0.47886E-00	0.11990E 01	0.54969E 01
88	527.14	0.11025E 02	0.16176E 01	0.48287E-02	0.17672E-02	0.37439E-00	0.28635E-00	0.12070E 01	0.35535E 01
89	519.11	0.63086E 01	0.93702E 00	0.27811E-02	0.10178E-02	0.21688E-00	0.16588E-00	0.13340E 01	0.21370E 01
90	534.29	0.15131E 02	0.21530E 01	0.64604E-02	0.23643E-02	0.49833E-00	0.38114E-00	0.12070E 01	0.45190E 01
91	523.11	0.77631E 01	0.11944E 01	0.35552E-02	0.13011E-02	0.27645E-00	0.21144E-00	0.12490E 01	0.25238E 01
92	520.29	0.66831E 01	0.99831E 00	0.29655E-02	0.10853E-02	0.23106E-00	0.17673E-00	0.13340E 01	0.22156E 01
93	516.93	0.44047E 01	0.73441E 00	0.21763E-02	0.79647E-03	0.16998E-00	0.13001E-00	0.14900E 01	0.16093E 01
94	540.75	0.10166E 01	0.10677E-00	0.32189E-03	0.11780E-03	0.24713E-01	0.18902E-01	-0.	0.
95	544.87	0.41205E 01	0.43689E-00	0.13211E-02	0.48347E-03	0.10112E-00	0.77341E-01	-0.	0.
96	537.43	0.49871E-00	0.52280E-01	0.15723E-03	0.57542E-04	0.12101E-01	0.92550E-02	-0.	0.
97	538.09	0.82651E 00	0.86676E-01	0.26080E-03	0.95445E-04	0.20062E-01	0.15344E-01	-0.	0.
98	538.87	0.10317E 01	0.10902E-00	0.32822E-03	0.12012E-03	0.25233E-01	0.19300E-01	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
27	1	4.33	154.33	0.02	-0.	2	C55	2.85	2	10.14	925.50	1820.60	135	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.882577E 02	0.191799E-01	0.466998E 04	0.182329E-04	0.714887E-07	0.119908E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730149E 00	0.431561E 01	0.563956E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	539.99	0.19179E 01	0.31240E-00	0.95109E-03	0.34717E-03	0.72389E-01	0.55395E-01	-0.10600E 01	0.10500E 01
100	540.16	0.10109E 01	0.16967E-00	0.51661E-03	0.18858E-03	0.39315E-01	0.30085E-01	-0.10840E 01	0.11480E 01
101	539.73	0.64260E 00	0.10546E-00	0.32101E-03	0.11718E-03	0.24438E-01	0.18701E-01	-0.11080E 01	0.85303E 00
102	546.60	0.61709E 01	0.10136E 01	0.31008E-02	0.11319E-02	0.23486E-00	0.17972E-00	-0.11080E 01	0.71255E 01
103	539.77	0.12130E 01	0.20354E-00	0.61956E-03	0.22616E-03	0.47164E-01	0.36091E-01	-0.10800E 01	0.11278E 01
104	596.59	0.43024E 02	0.70287E 01	0.22328E-01	0.81504E-02	0.16287E 01	0.12463E 01	0.85000E 00	0.
105	606.51	0.47343E 02	0.73552E 01	0.23546E-01	0.85948E-02	0.17043E 01	0.13042E 01	0.94000E 00	0.93228E 00
106	610.00	0.49209E 02	0.75950E 01	0.24379E-01	0.88990E-02	0.17599E 01	0.13467E 01	0.96000E 00	0.93115E 00
107	603.24	0.47071E 02	0.72387E 01	0.23114E-01	0.84372E-02	0.16773E 01	0.12836E 01	0.98000E 00	0.94178E 00
108	601.43	0.44582E 02	0.68842E 01	0.21951E-01	0.80128E-02	0.15952E 01	0.12207E 01	0.10000E 01	0.94740E 00
109	587.08	0.36762E 02	0.56519E 01	0.17824E-01	0.65063E-02	0.13096E 01	0.10022E 01	0.10200E 01	0.94034E 00
110	609.15	0.46115E 02	0.71746E 01	0.23014E-01	0.84009E-02	0.16625E 01	0.12722E 01	0.80000E-01	0.95886E 00
111	605.42	0.47212E 02	0.72689E 01	0.23250E-01	0.84867E-02	0.16843E 01	0.12889E 01	0.10000E-00	0.94175E 00
112	614.69	0.48656E 02	0.75666E 01	0.24377E-01	0.88982E-02	0.17533E 01	0.13417E 01	0.12000E-00	0.92752E 00
113	607.51	0.48633E 02	0.75597E 01	0.24219E-01	0.88405E-02	0.17517E 01	0.13405E 01	0.14000E-00	0.93468E 00
114	600.85	0.45123E 02	0.69891E 01	0.22276E-01	0.81312E-02	0.16195E 01	0.12393E 01	0.80000E-01	0.
115	602.32	0.45380E 02	0.70108E 01	0.22370E-01	0.81657E-02	0.16245E 01	0.12431E 01	0.10000E-00	0.94371E 00
116	603.95	0.46604E 02	0.72547E 01	0.23178E-01	0.84604E-02	0.16810E 01	0.12864E 01	0.12000E-00	0.94527E 00
117	612.34	0.48135E 02	0.75014E 01	0.24123E-01	0.88054E-02	0.17382E 01	0.13301E 01	0.14000E-00	0.96528E 00
118	601.80	0.43636E 02	0.68190E 01	0.21749E-01	0.79391E-02	0.15801E 01	0.12091E 01	0.10000E-00	0.97719E 00
119	600.47	0.42648E 02	0.66265E 01	0.21114E-01	0.77071E-02	0.15355E 01	0.11750E 01	0.15000E-00	0.97736E 00
120	606.01	0.41702E 02	0.65098E 01	0.20831E-01	0.76039E-02	0.15084E 01	0.11543E 01	0.20000E-00	0.10223E 01
121	598.08	0.42501E 02	0.66284E 01	0.21081E-01	0.76952E-02	0.15359E 01	0.11753E 01	0.25000E-00	0.97890E 00
122	590.97	0.39512E 02	0.61385E 01	0.19417E-01	0.70876E-02	0.14224E 01	0.10885E 01	0.30000E-00	0.98542E 00
123	584.91	0.38149E 02	0.59369E 01	0.18692E-01	0.68231E-02	0.13757E 01	0.10527E 01	0.35000E-00	0.92682E 00
124	589.84	0.41718E 02	0.65529E 01	0.20709E-01	0.75595E-02	0.15184E 01	0.11620E 01	0.38000E-00	0.10076E 01
125	593.57	0.44033E 02	0.69876E 01	0.22146E-01	0.80840E-02	0.16191E 01	0.12390E 01	0.45000E-00	0.98777E 00
126	589.93	0.41378E 02	0.66391E 01	0.20983E-01	0.76594E-02	0.15384E 01	0.11772E 01	0.61000E 00	0.97475E 00
127	559.98	0.24631E 02	0.39065E 01	0.12070E-01	0.44060E-02	0.90520E 00	0.69270E 00	0.70000E 00	0.96378E 00
128	542.71	0.11962E 02	0.18851E 01	0.57504E-02	0.20991E-02	0.43680E-00	0.33426E-00	0.75000E 00	0.96518E 00
129	581.05	0.34227E 02	0.55093E 01	0.17295E-01	0.63131E-02	0.12766E 01	0.97689E 00	0.70000E 00	0.98303E 00
130	591.16	0.43846E 02	0.70965E 01	0.22450E-01	0.81949E-02	0.16444E 01	0.12583E 01	0.80000E 00	0.12084E 01
131	553.15	0.18429E 02	0.27716E 01	0.85205E-02	0.31102E-02	0.64223E 00	0.49146E-00	0.90000E 00	0.11055E 01
132	574.00	0.33436E 02	0.51039E 01	0.15937E-01	0.58175E-02	0.11827E 01	0.90503E 00	0.90000E 00	0.10371E 01
133	574.17	0.33299E 02	0.50579E 01	0.15795E-01	0.57657E-02	0.11720E 01	0.89685E 00	0.96000E 00	0.98891E 00
134	573.34	0.31887E 02	0.48494E 01	0.15135E-01	0.55246E-02	0.11237E 01	0.85989E 00	0.10000E 01	0.98023E 00
135	557.59	0.19741E 02	0.31118E 01	0.95979E-02	0.35035E-02	0.72106E 00	0.55179E 00	0.70000E-02	0.
136	919.72	0.10901E-01	0.20148E-02	0.85423E-05	0.31182E-05	0.46685E-03	0.35725E-03	0.70000E-02	0.
137	556.96	0.20020E 02	0.31445E 01	0.96942E-02	0.35386E-02	0.72864E 00	0.55758E 00	0.39000E-01	0.10079E 01
138	556.09	0.19617E 02	0.30647E 01	0.94420E-02	0.34466E-02	0.71014E 00	0.54343E 00	0.78000E-01	0.
139	556.26	0.19026E 02	0.29582E 01	0.91150E-02	0.33272E-02	0.68546E 00	0.52454E 00	0.11700E-00	0.
140	556.61	0.19338E 02	0.29974E 01	0.92383E-02	0.33722E-02	0.69455E 00	0.53150E 00	0.78000E-01	0.10056E 01
141	643.68	0.89241E 02	0.99805E 01	0.32899E-01	0.12009E-01	0.23127E 01	0.17697E 01	-0.	0.
142	602.71	0.35790E 02	0.39170E 01	0.12502E-01	0.45636E-02	0.90762E 00	0.69455E 00	-0.	0.
143	553.26	0.17497E 02	0.26937E 01	0.82816E-02	0.30230E-02	0.62417E 00	0.47764E-00	0.78000E-01	0.10032E 01
144	553.90	0.17824E 02	0.27496E 01	0.84575E-02	0.30872E-02	0.63714E 00	0.48756E-00	0.70000E-02	0.90522E 00
145	554.22	0.18136E 02	0.27843E 01	0.85663E-02	0.31269E-02	0.64518E 00	0.49372E-00	0.70000E-02	0.97928E 00
146	553.28	0.18057E 02	0.27845E 01	0.85609E-02	0.31249E-02	0.64522E 00	0.49375E-00	0.39000E-01	0.98525E 00
147	554.89	0.18212E 02	0.28063E 01	0.86383E-02	0.31532E-02	0.65028E 00	0.49762E-00	0.78000E-01	0.
148	554.13	0.17512E 02	0.27196E 01	0.83665E-02	0.30540E-02	0.63018E 00	0.48224E-00	0.11700E-00	0.
149	587.59	0.35779E 02	0.58443E 01	0.18438E-01	0.67305E-02	0.13542E 01	0.10363E 01	0.70000E-02	0.10234E 01
150	590.08	0.36391E 02	0.59807E 01	0.18905E-01	0.69007E-02	0.13858E 01	0.10605E 01	0.70000E-02	0.10033E 01
151	589.55	0.35855E 02	0.58908E 01	0.18613E-01	0.67942E-02	0.13650E 01	0.10445E 01	0.70000E-02	0.97409E 00
152	596.66	0.38901E 02	0.61836E 01	0.19645E-01	0.71708E-02	0.14328E 01	0.10965E 01	0.39000E-01	0.95816E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	594.12	0.38156E 02	0.60568E 01	0.19205E-01	0.70102E-02	0.14035E 01	0.10740E 01	0.39000E-01	0.
154	592.62	0.38148E 02	0.60111E 01	0.19038E-01	0.69493E-02	0.13929E 01	0.10659E 01	0.78000E-01	0.97513E 00
155	589.98	0.36515E 02	0.60007E 01	0.18966E-01	0.69232E-02	0.13905E 01	0.10640E 01	0.39000E-01	0.
156	583.15	0.33790E 02	0.55149E 01	0.17340E-01	0.63297E-02	0.12779E 01	0.97789E 00	0.39000E-01	0.
157	579.97	0.31946E 02	0.52214E 01	0.16378E-01	0.59783E-02	0.12099E 01	0.92584E 00	0.78000E-01	0.99097E 00
158	578.64	0.33390E 02	0.54706E 01	0.17142E-01	0.62574E-02	0.12676E 01	0.97005E 00	0.39000E-01	0.
159	575.23	0.32165E 02	0.52600E 01	0.16440E-01	0.60010E-02	0.12188E 01	0.93270E 00	0.78000E-01	0.
160	582.63	0.33610E 02	0.55013E 01	0.17291E-01	0.63116E-02	0.12747E 01	0.97548E 00	0.39000E-01	0.
161	572.42	0.28047E 02	0.44573E 01	0.13902E-01	0.50744E-02	0.10328E 01	0.79037E 00	0.43000E-01	0.96330E 00
162	574.68	0.28448E 02	0.45414E 01	0.14188E-01	0.51789E-02	0.10523E 01	0.80527E 00	0.43000E-01	0.96776E 00
163	573.83	0.28560E 02	0.45644E 01	0.14251E-01	0.52019E-02	0.10576E 01	0.80935E 00	0.85000E-01	0.97515E 00
164	572.67	0.28571E 02	0.45413E 01	0.14166E-01	0.51709E-02	0.10523E 01	0.80525E 00	0.12800E-00	0.98441E 00
165	575.49	0.32330E 02	0.51633E 01	0.16141E-01	0.58918E-02	0.11964E 01	0.91555E 00	0.43000E-01	0.
166	574.16	0.31776E 02	0.50547E 01	0.15785E-01	0.57621E-02	0.11713E 01	0.89630E 00	0.85000E-01	0.10682E 01
167	598.42	0.56124E 02	0.90464E 01	0.28779E-01	0.10505E-01	0.20962E 01	0.16041E 01	0.43000E-01	0.
168	576.01	0.30522E 02	0.49151E 01	0.15371E-01	0.56108E-02	0.11389E 01	0.87153E 00	0.12800E-00	0.15169E 01
169	592.10	0.44347E 02	0.71812E 01	0.22735E-01	0.82987E-02	0.16640E 01	0.12734E 01	0.85000E-01	0.14605E 01
170	587.80	0.40466E 02	0.65062E 01	0.20530E-01	0.74939E-02	0.15076E 01	0.11537E 01	0.12800E-00	0.12826E 01
171	591.75	0.48571E 02	0.78009E 01	0.24690E-01	0.90124E-02	0.18076E 01	0.13832E 01	0.85000E-01	0.15633E 01
172	634.19	0.68276E 02	0.11270E 02	0.36871E-01	0.13459E-01	0.26115E 01	0.19984E 01	0.43000E-01	0.
173	599.13	0.48314E 02	0.78534E 01	0.24997E-01	0.91247E-02	0.18198E 01	0.13926E 01	0.12800E-00	0.14763E 01
174	606.12	0.56126E 02	0.91135E 01	0.29165E-01	0.10646E-01	0.21118E 01	0.16160E 01	0.85000E-01	0.
175	622.06	0.57832E 02	0.94399E 01	0.30588E-01	0.11165E-01	0.21874E 01	0.16739E 01	0.43000E-01	0.18175E 01
176	620.43	0.57378E 02	0.93577E 01	0.30283E-01	0.11054E-01	0.21683E 01	0.16593E 01	0.43000E-01	0.17871E 01
177	598.41	0.44708E 02	0.72411E 01	0.23036E-01	0.84087E-02	0.16779E 01	0.12840E 01	0.12800E-00	0.12897E 01
178	607.16	0.50479E 02	0.82011E 01	0.26266E-01	0.95879E-02	0.19003E 01	0.14542E 01	0.85000E-01	0.15162E 01
179	601.54	0.42526E 02	0.68882E 01	0.21966E-01	0.80181E-02	0.15961E 01	0.12214E 01	0.70000E-02	0.13009E 01
180	574.48	0.31795E 02	0.50995E 01	0.15929E-01	0.58146E-02	0.11816E 01	0.90424E 00	0.70000E-02	0.
181	576.66	0.28982E 02	0.46539E 01	0.14561E-01	0.53152E-02	0.10784E 01	0.82522E 00	0.70000E-02	0.92107E 00
182	575.81	0.30430E 02	0.48997E 01	0.15321E-01	0.55924E-02	0.11354E 01	0.86882E 00	0.70000E-02	0.
183	579.87	0.30029E 02	0.48150E 01	0.15102E-01	0.55126E-02	0.11157E 01	0.85379E 00	0.32000E-01	0.87646E 00
184	589.23	0.35629E 02	0.57789E 01	0.18255E-01	0.66635E-02	0.13391E 01	0.10247E 01	0.32000E-01	0.90933E 00
185	573.62	0.31103E 02	0.50021E 01	0.15615E-01	0.56998E-02	0.11591E 01	0.88697E 00	0.64000E-01	0.91525E 00
186	587.30	0.38158E 02	0.61630E 01	0.19440E-01	0.70959E-02	0.14281E 01	0.10928E 01	0.64000E-01	0.95773E 00
187	583.99	0.32422E 02	0.52439E 01	0.16499E-01	0.60225E-02	0.12151E 01	0.92985E 00	0.70000E-02	0.91677E 00
188	582.82	0.33617E 02	0.55203E 01	0.17353E-01	0.63343E-02	0.12791E 01	0.97885E 00	0.70000E-02	0.10004E 01
189	534.89	0.62836E 01	0.10253E 01	0.31098E-02	0.11352E-02	0.23758E-00	0.18181E-00	0.10600E 01	0.10200E 01
190	531.87	0.36935E 01	0.61369E 00	0.18572E-02	0.67794E-03	0.14220E-00	0.10882E-00	0.10840E 01	0.10439E 01
191	530.04	0.17413E 01	0.29059E-00	0.87826E-03	0.32059E-03	0.67335E-01	0.51527E-01	0.11080E 01	0.10185E 01
192	529.89	0.21216E 01	0.35211E-00	0.10641E-02	0.38841E-03	0.81589E-01	0.62435E-01	0.11080E 01	0.10679E 01
193	523.98	0.27236E 01	0.44372E-00	0.13352E-02	0.48737E-03	0.10282E-00	0.78680E-01	0.16580E 01	0.10530E 01
194	524.60	0.23231E 01	0.37687E-00	0.11345E-02	0.41413E-03	0.87326E-01	0.66825E-01	0.11700E 01	0.92277E 00
195	523.89	0.22608E 01	0.36830E-00	0.11081E-02	0.40450E-03	0.85340E-01	0.65306E-01	0.16740E 01	0.85462E 00
196	524.77	0.21382E 01	0.34690E-00	0.10444E-02	0.38124E-03	0.80382E-01	0.61512E-01	0.16950E 01	0.79603E 00

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
33	1	4.32	154.32	0.02	-0.	3	C55	2.75	2	10.14	928.10	1824.20	125	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.884466E 02	0.192239E-01	0.467506E 04	0.182356E-04	0.716418E-07	0.119800E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730259E 00	0.432170E 01	0.565118E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	561.49	0.26391E 02	0.41353E 01	0.12751E-01	0.46487E-02	0.95688E 00	0.73177E 00	0.10000E 01	0.10121E 01
198	563.52	0.27072E 02	0.41088E 01	0.12688E-01	0.46259E-02	0.95074E 00	0.72707E 00	0.12000E 01	0.10147E 01
199	543.11	0.13075E 02	0.20675E 01	0.62889E-02	0.22928E-02	0.47840E-00	0.36585E-00	0.13000E 01	0.10150E 01
200	523.55	0.16468E 01	0.23823E-00	0.71439E-03	0.26045E-03	0.55125E-01	0.42156E-01	0.11890E 01	0.10375E 01
201	530.14	0.12473E 01	0.20547E-00	0.61911E-03	0.22571E-03	0.47545E-01	0.36359E-01	0.14540E 01	0.86205E 00
202	527.64	0.15875E 01	0.25917E-00	0.77949E-03	0.28418E-03	0.59970E-01	0.45862E-01	0.17040E 01	0.95241E 00
203	532.74	0.13044E 01	0.21357E-00	0.64472E-03	0.23505E-03	0.49418E-01	0.37792E-01	0.20410E 01	0.96446E 00
204	531.98	0.26546E-00	0.20185E-01	0.60901E-04	0.22203E-04	0.46706E-02	0.35718E-02	0.20700E 01	0.
205	535.07	0.16779E 01	0.14601E-00	0.44152E-03	0.16097E-03	0.33785E-01	0.25837E-01	0.21880E 01	0.13618E 02
206	534.01	0.16494E 01	0.27024E-00	0.81655E-03	0.29769E-03	0.62530E-01	0.47820E-01	0.22480E 01	0.12184E 01
207	532.53	0.15694E 01	0.25259E-00	0.76239E-03	0.27795E-03	0.58446E-01	0.44696E-01	0.20700E 01	0.10362E 01
208	531.67	0.60884E 00	0.53915E-01	0.16263E-03	0.59292E-04	0.12475E-01	0.95405E-02	0.20700E 01	0.14767E 01
209	537.08	0.30010E 01	0.24137E-00	0.73098E-03	0.26650E-03	0.55852E-01	0.42712E-01	0.21880E 01	0.67883E 01
210	533.00	0.15371E 01	0.25363E-00	0.76582E-03	0.27920E-03	0.58689E-01	0.44882E-01	0.20700E 01	0.12128E 01
211	535.18	0.29148E 01	0.48155E-00	0.14563E-02	0.53093E-03	0.11143E-00	0.85212E-01	0.21880E 01	0.23096E 01
212	534.19	0.19205E 01	0.31325E-00	0.94665E-03	0.34512E-03	0.72484E-01	0.55431E-01	0.22390E 01	0.15047E 01
213	532.18	0.12052E 01	0.19635E-00	0.59251E-03	0.21602E-03	0.45434E-01	0.34746E-01	0.21880E 01	0.96071E 00
214	533.73	0.11797E 01	0.19474E-00	0.58832E-03	0.21449E-03	0.45062E-01	0.34461E-01	0.22480E 01	0.10620E 01
215	529.61	0.93039E 00	0.13902E-00	0.41872E-03	0.15265E-03	0.32168E-01	0.24600E-01	0.11650E 01	0.16597E 01
216	530.38	0.79481E 00	0.66352E-01	0.19996E-03	0.72900E-04	0.15353E-01	0.11741E-01	0.12050E 01	0.
217	530.98	0.13081E 01	0.19003E-00	0.57293E-03	0.20888E-03	0.43972E-01	0.33627E-01	0.12120E 01	0.12781E 01
218	530.90	0.13475E 01	0.19677E-00	0.59322E-03	0.21627E-03	0.45531E-01	0.34820E-01	0.11890E 01	0.13296E 01
219	532.26	0.11195E 01	0.18706E-00	0.56449E-03	0.20580E-03	0.43283E-01	0.33100E-01	0.14540E 01	0.12301E 01
220	532.22	0.13423E 01	0.23283E-00	0.70261E-03	0.25615E-03	0.53875E-01	0.41201E-01	0.17040E 01	0.11144E 01
221	531.48	0.91481E 00	0.15196E-00	0.45833E-03	0.16709E-03	0.35163E-01	0.26891E-01	0.20410E 01	0.83020E 00
222	534.84	0.14353E 01	0.24141E-00	0.72988E-03	0.26609E-03	0.55859E-01	0.42718E-01	0.22480E 01	0.14171E 01
223	530.04	0.97507E 00	0.14573E-00	0.43907E-03	0.16007E-03	0.33721E-01	0.25788E-01	0.11650E 01	0.14642E 01
224	530.19	0.56156E 00	0.46875E-01	0.14124E-03	0.51494E-04	0.10846E-01	0.82947E-02	0.12050E 01	0.12629E 01
225	531.33	0.12416E 01	0.18041E-00	0.54406E-03	0.19835E-03	0.41745E-01	0.31924E-01	0.12120E 01	0.12695E 01
226	534.98	0.79948E 00	0.13427E-00	0.40601E-03	0.14802E-03	0.31070E-01	0.23760E-01	0.14540E 01	0.88551E 00
227	534.90	0.12525E 01	0.20186E-00	0.61032E-03	0.22251E-03	0.46707E-01	0.35719E-01	0.17040E 01	0.11383E 01
228	534.33	0.16255E 01	0.26718E-00	0.80751E-03	0.29440E-03	0.61824E-01	0.47280E-01	0.18780E 01	0.10896E 01
229	534.68	0.18145E 01	0.29969E-00	0.90600E-03	0.33030E-03	0.69346E-01	0.53032E-01	0.21880E 01	0.13498E 01
230	534.01	0.11912E 01	0.17544E-00	0.53011E-03	0.19326E-03	0.40595E-01	0.31045E-01	0.11890E 01	0.10330E 01
231	535.71	0.59377E 00	0.10498E-00	0.31761E-03	0.11579E-03	0.24292E-01	0.18577E-01	0.14540E 01	0.59838E 00
232	535.89	0.10462E 01	0.17081E-00	0.51684E-03	0.18843E-03	0.39525E-01	0.30226E-01	0.16130E 01	0.10978E 01
233	535.12	0.10057E 01	0.16539E-00	0.50015E-03	0.18234E-03	0.38269E-01	0.29266E-01	0.17040E 01	0.94828E 00
234	535.13	0.15699E 01	0.25935E-00	0.78429E-03	0.28593E-03	0.60011E-01	0.45893E-01	0.18780E 01	0.11585E 01
235	537.67	0.81818E 00	0.13515E-00	0.40947E-03	0.14928E-03	0.31273E-01	0.23916E-01	0.14540E 01	0.75309E 00
236	536.10	0.10852E 01	0.17720E-00	0.53623E-03	0.19550E-03	0.41001E-01	0.31355E-01	0.17040E 01	0.12573E 01
237	537.25	0.26639E 01	0.44061E-00	0.13345E-02	0.48653E-03	0.10195E-00	0.77968E-01	0.21880E 01	0.15116E 01
238	537.60	0.16281E 01	0.14465E-00	0.43823E-03	0.15977E-03	0.33472E-01	0.25597E-01	0.20700E 01	0.29921E 01
239	536.37	0.12166E 01	0.17729E-00	0.53662E-03	0.19564E-03	0.41023E-01	0.31372E-01	0.11890E 01	0.90528E 00
240	539.87	0.10005E 01	0.16790E-00	0.50950E-03	0.18575E-03	0.38850E-01	0.29710E-01	0.14540E 01	0.87791E 00
241	537.27	0.11309E 01	0.18563E-00	0.56225E-03	0.20498E-03	0.42954E-01	0.32849E-01	0.17040E 01	0.13525E 01
242	536.67	0.13652E 01	0.22573E-00	0.68339E-03	0.24915E-03	0.52232E-01	0.39944E-01	0.18780E 01	0.12444E 01
243	537.98	0.26629E 01	0.44062E-00	0.13352E-02	0.48679E-03	0.10195E-00	0.77969E-01	0.20410E 01	0.20445E 01
244	537.32	0.14338E 01	0.12917E-00	0.39126E-03	0.14264E-03	0.29890E-01	0.22858E-01	0.20700E 01	0.
245	540.34	0.38826E 01	0.31774E-00	0.96454E-03	0.35165E-03	0.73522E-01	0.56226E-01	0.21870E 01	0.26847E 01
246	538.65	0.29642E 01	0.49961E-00	0.15148E-02	0.55224E-03	0.11560E-00	0.88408E-01	0.22100E 01	0.15280E 01
247	540.90	0.89662E 00	0.14680E-00	0.44581E-03	0.16253E-03	0.33968E-01	0.25977E-01	0.14540E 01	0.75991E 00
248	538.52	0.13475E 01	0.22304E-00	0.67617E-03	0.24651E-03	0.51610E-01	0.39468E-01	0.17040E 01	0.19301E 01
249	538.22	0.10260E 01	0.86030E-01	0.26075E-03	0.95062E-04	0.19906E-01	0.15223E-01	0.18780E 01	0.46689E 01
250	539.27	0.23808E 01	0.19472E-00	0.59063E-03	0.21533E-03	0.45056E-01	0.34456E-01	0.21880E 01	0.58702E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	541.37	0.97143E 00	0.16399E-00	0.49817E-03	0.18162E-03	0.37945E-01	0.29018E-01	0.14540E 01	0.77212E 00
252	538.98	0.10847E 01	0.18193E-00	0.55172E-03	0.20114E-03	0.42097E-01	0.32193E-01	0.16130E 01	0.10895E 01
253	541.49	0.17096E 01	0.15077E-00	0.45806E-03	0.16700E-03	0.34887E-01	0.26679E-01	0.17060E 01	0.
254	538.45	0.21465E 01	0.35527E-00	0.10770E-02	0.39264E-03	0.82206E-01	0.62867E-01	0.21880E 01	0.11308E 01
255	539.84	0.12140E 01	0.11204E-00	0.33998E-03	0.12395E-03	0.25924E-01	0.19826E-01	0.16580E 01	0.27331E 01
256	537.89	0.12816E 01	0.10744E-00	0.32557E-03	0.11869E-03	0.24861E-01	0.19012E-01	0.17920E 01	0.56110E 01
257	534.89	0.10909E 01	0.18294E-00	0.55312E-03	0.20165E-03	0.42330E-01	0.32371E-01	0.10840E 01	0.11462E 01
258	539.91	0.97870E 00	0.16631E-00	0.50469E-03	0.18400E-03	0.38482E-01	0.29429E-01	0.14540E 01	0.72707E 00
259	538.86	0.10566E 01	0.17492E-00	0.53043E-03	0.19338E-03	0.40476E-01	0.30954E-01	0.16130E 01	0.11255E 01
260	539.20	0.15231E 01	0.24837E-00	0.75333E-03	0.27464E-03	0.57470E-01	0.43950E-01	0.17040E 01	0.32164E 01
261	538.50	0.11486E 01	0.18924E-00	0.57369E-03	0.20915E-03	0.43789E-01	0.33487E-01	0.18780E 01	0.25981E 01
262	537.87	0.13434E 01	0.22633E-00	0.68580E-03	0.25002E-03	0.52370E-01	0.40049E-01	0.20410E 01	0.12411E 01
263	538.69	0.91117E 00	0.15404E-00	0.46704E-03	0.17027E-03	0.35643E-01	0.27258E-01	0.14540E 01	0.
264	538.38	0.10109E 01	0.16655E-00	0.50485E-03	0.18406E-03	0.38538E-01	0.29472E-01	0.16130E 01	0.93969E 00
265	538.40	0.98701E 00	0.15939E-00	0.48315E-03	0.17614E-03	0.36880E-01	0.28204E-01	0.17040E 01	0.13296E 01
266	538.77	0.94805E 00	0.15623E-00	0.47370E-03	0.17270E-03	0.36150E-01	0.27645E-01	0.18780E 01	0.18285E 01
267	537.59	0.12405E 01	0.20834E-00	0.63117E-03	0.23011E-03	0.48208E-01	0.36867E-01	0.20410E 01	0.13714E 01
268	539.06	0.10878E 01	0.17928E-00	0.54373E-03	0.19823E-03	0.41485E-01	0.31725E-01	0.16130E 01	0.10805E 01
269	537.86	0.77818E 00	0.12563E-00	0.38066E-03	0.13878E-03	0.29069E-01	0.22230E-01	0.18280E 01	0.14328E 01
270	537.75	0.88624E 00	0.14529E-00	0.44020E-03	0.16049E-03	0.33618E-01	0.25709E-01	0.18780E 01	0.16512E 01
271	537.70	0.98909E 00	0.16578E-00	0.50226E-03	0.18311E-03	0.38359E-01	0.29335E-01	0.20410E 01	0.13211E 01
272	537.59	0.49870E-00	0.84257E-01	0.25526E-03	0.93060E-04	0.19496E-01	0.14910E-01	0.16130E 01	0.46080E-00
273	538.39	0.80675E 00	0.13393E-00	0.40598E-03	0.14801E-03	0.30990E-01	0.23699E-01	0.17200E 01	0.10906E 01
274	537.55	0.58078E 00	0.93450E-01	0.28310E-03	0.10321E-03	0.21623E-01	0.16536E-01	0.18280E 01	0.11968E 01
275	537.43	0.86390E 00	0.14182E-00	0.42959E-03	0.15662E-03	0.32815E-01	0.25095E-01	0.18780E 01	0.17513E 01
276	919.71	0.10383E-01	0.21005E-02	0.88666E-05	0.32325E-05	0.48602E-03	0.37168E-03	0.20600E 01	0.
277	536.88	0.89819E 00	0.75258E-01	0.22788E-03	0.83078E-04	0.17414E-01	0.13317E-01	0.21000E 01	0.14601E 01
278	537.87	0.80520E 00	0.67504E-01	0.20455E-03	0.74572E-04	0.15620E-01	0.11945E-01	0.21870E 01	0.
279	539.13	0.14281E 01	0.24076E-00	0.73022E-03	0.26622E-03	0.55710E-01	0.42604E-01	0.21950E 01	0.14801E 01
280	537.46	0.10140E 01	0.16902E-00	0.51199E-03	0.18666E-03	0.39109E-01	0.29908E-01	0.18780E 01	0.19061E 01
281	537.53	0.12239E 01	0.20616E-00	0.62453E-03	0.22769E-03	0.47703E-01	0.36481E-01	0.20600E 01	0.17383E 01
282	538.04	0.11725E 01	0.19077E-00	0.57813E-03	0.21077E-03	0.44142E-01	0.33757E-01	0.18280E 01	0.19455E 01
283	537.54	0.15023E 01	0.25178E-00	0.76273E-03	0.27807E-03	0.58259E-01	0.44553E-01	0.20600E 01	0.19298E 01
284	538.39	0.16649E 01	0.26886E-00	0.81499E-03	0.29712E-03	0.62211E-01	0.47576E-01	0.17200E 01	0.23669E 01
285	538.51	0.21943E 01	0.36043E-00	0.10927E-02	0.39836E-03	0.83401E-01	0.63780E-01	0.18780E 01	0.36590E 01
286	538.00	0.13169E 01	0.12140E-00	0.36791E-03	0.13413E-03	0.28092E-01	0.21483E-01	0.16580E 01	0.19773E 01
287	919.71	0.10383E-01	0.10505E-02	0.44346E-05	0.16168E-05	0.24309E-03	0.18590E-03	0.17920E 01	0.
288	537.66	0.13590E 01	0.22312E-00	0.67597E-03	0.24644E-03	0.51627E-01	0.39481E-01	0.16130E 01	0.14158E 01
289	540.45	0.22483E 01	0.18876E-00	0.57305E-03	0.20892E-03	0.43678E-01	0.33402E-01	0.17060E 01	0.
290	537.18	0.16920E 01	0.14179E-00	0.42943E-03	0.15656E-03	0.32809E-01	0.25090E-01	0.18780E 01	0.63133E 01
291	537.66	0.19408E 01	0.31718E-00	0.96094E-03	0.35033E-03	0.73392E-01	0.56126E-01	0.17200E 01	0.29257E 01
292	539.61	0.11797E 01	0.20281E-00	0.61533E-03	0.22433E-03	0.46929E-01	0.35889E-01	0.14400E 01	0.97707E 00
293	536.89	0.19143E 01	0.30886E-00	0.93523E-03	0.34096E-03	0.71468E-01	0.54655E-01	0.17200E 01	0.19568E 01
294	536.61	0.22410E 01	0.36997E-00	0.11200E-02	0.40834E-03	0.85608E-01	0.65468E-01	0.18780E 01	0.21397E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
23	1	8.39	158.39	-0.	-0.	1	C55	2.75	2	10.14	922.80	1833.40	131	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.889347E 02	0.191000E-01	0.468776E 04	0.180188E-04	0.720371E-07	0.118045E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730542E 00	0.430891E 01	0.562677E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	568.21	0.29881E 02	0.39507E 01	0.12144E-01	0.44686E-02	0.91687E 00	0.70213E 00	-0.	0.97136E 00
2	569.11	0.28928E 02	0.40709E 01	0.12522E-01	0.46076E-02	0.94476E 00	0.72349E 00	-0.30000E-01	0.
3	562.48	0.27145E 02	0.41383E 01	0.12667E-01	0.46609E-02	0.96041E 00	0.73547E 00	-0.60000E-01	0.
4	563.31	0.26168E 02	0.40939E 01	0.12539E-01	0.46137E-02	0.95010E 00	0.72757E 00	-0.90000E-01	0.
5	558.84	0.24266E 02	0.38834E 01	0.11855E-01	0.43620E-02	0.90124E 00	0.69016E 00	-0.20000E-00	0.10028E 01
6	558.20	0.22076E 02	0.35315E 01	0.10776E-01	0.39650E-02	0.81959E 00	0.62763E 00	-0.40000E-00	0.99735E 00
7	558.04	0.19241E 02	0.30924E 01	0.94344E-02	0.34715E-02	0.71767E 00	0.54958E 00	-0.60000E 00	0.10028E 01
8	557.85	0.17458E 02	0.28055E 01	0.85581E-02	0.31491E-02	0.65110E 00	0.49860E-00	-0.80000E 00	0.
9	558.34	0.17289E 02	0.27353E 01	0.83467E-02	0.30713E-02	0.63479E 00	0.48611E-00	-0.90000E 00	0.10058E 01
10	559.31	0.16930E 02	0.27144E 01	0.82890E-02	0.30500E-02	0.62995E 00	0.48240E-00	-0.98000E 00	0.10326E 01
11	539.64	0.97351E 00	0.16736E-00	0.50377E-03	0.18537E-03	0.38841E-01	0.29744E-01	-0.11220E 01	0.75208E 00
12	541.84	0.20244E 01	0.29693E-00	0.89520E-03	0.32940E-03	0.68911E-01	0.52771E-01	-0.11890E 01	0.95396E 00
13	541.04	0.13668E 01	0.20657E-00	0.62243E-03	0.22903E-03	0.47941E-01	0.36713E-01	-0.13340E 01	0.77350E 00
14	539.12	0.13896E 01	0.23883E-00	0.71860E-03	0.26442E-03	0.55426E-01	0.42445E-01	-0.14400E 01	0.96830E 00
15	567.80	0.29489E 02	0.41469E 01	0.12743E-01	0.46890E-02	0.96239E 00	0.73699E 00	0.30000E-01	0.
16	564.41	0.27879E 02	0.42547E 01	0.13042E-01	0.47988E-02	0.98741E 00	0.75615E 00	0.60000E-01	0.
17	564.48	0.27990E 02	0.43818E 01	0.13432E-01	0.49425E-02	0.10169E 01	0.77874E 00	0.90000E-01	0.
18	567.08	0.28282E 02	0.45465E 01	0.13964E-01	0.51382E-02	0.10551E 01	0.80802E 00	0.20000E-00	0.99336E 00
19	581.23	0.31749E 02	0.51437E 01	0.15966E-01	0.58748E-02	0.11937E 01	0.91415E 00	0.40000E-00	0.10024E 01
20	589.81	0.36662E 02	0.59958E 01	0.18731E-01	0.68925E-02	0.13915E 01	0.10656E 01	0.60000E 00	0.
21	604.56	0.41156E 02	0.63873E 01	0.20180E-01	0.74254E-02	0.14823E 01	0.11352E 01	0.92000E 00	0.
22	572.87	0.26025E 02	0.39703E 01	0.12247E-01	0.45063E-02	0.92141E 00	0.70561E 00	0.10400E 01	0.93810E 00
23	565.62	0.23664E 02	0.36054E 01	0.11061E-01	0.40702E-02	0.83673E 00	0.64076E 00	0.10600E 01	0.95555E 00
24	551.71	0.16143E 02	0.25568E 01	0.77644E-02	0.28570E-02	0.59339E 00	0.45441E-00	0.10840E 01	0.95027E 00
25	524.34	0.34452E 01	0.50293E 00	0.14972E-02	0.55092E-03	0.11672E-00	0.89382E-01	0.12070E 01	0.15373E 01
26	521.51	0.38395E 01	0.59020E 00	0.17534E-02	0.64520E-03	0.13697E-00	0.10489E-00	0.12490E 01	0.18878E 01
27	521.11	0.44343E 01	0.67043E 00	0.19912E-02	0.73270E-03	0.15559E-00	0.11915E-00	0.13340E 01	0.21062E 01
28	520.94	0.36504E 01	0.61368E 00	0.18224E-02	0.67059E-03	0.14242E-00	0.10906E-00	0.14540E 01	0.20048E 01
29	523.46	0.21761E 01	0.35550E-00	0.10576E-02	0.38917E-03	0.82504E-01	0.63180E-01	0.16580E 01	0.10659E 01
30	529.62	0.24868E 01	0.41265E-00	0.12331E-02	0.45375E-03	0.95768E-01	0.73338E-01	0.20410E 01	0.11704E 01
31	533.76	0.23990E 01	0.39902E-00	0.11960E-02	0.44007E-03	0.92603E-01	0.70915E-01	0.22480E 01	0.12026E 01
32	564.16	0.27595E 02	0.42149E 01	0.12918E-01	0.47532E-02	0.97819E 00	0.74909E 00	-0.60000E-01	0.
33	569.54	0.28678E 02	0.40367E 01	0.12421E-01	0.45704E-02	0.93682E 00	0.71741E 00	-0.30000E-01	0.
34	567.13	0.30084E 02	0.46026E 01	0.14137E-01	0.52018E-02	0.10682E 01	0.81799E 00	0.30000E-01	0.
35	563.90	0.28302E 02	0.44292E 01	0.13572E-01	0.49938E-02	0.10279E 01	0.78716E 00	0.60000E-01	0.
36	577.47	0.43336E 02	0.70065E 01	0.21687E-01	0.79799E-02	0.16261E 01	0.12452E 01	-0.86800E 00	0.23922E 01
37	576.88	0.38021E 02	0.59792E 01	0.18499E-01	0.68068E-02	0.13876E 01	0.10626E 01	-0.91100E 00	0.21392E 01
38	572.53	0.35359E 02	0.56471E 01	0.17414E-01	0.64079E-02	0.13106E 01	0.10036E 01	-0.95300E 00	0.19540E 01
39	919.71	0.10383E-01	0.19694E-02	0.82220E-05	0.30254E-05	0.45705E-03	0.35000E-03	0.51000E-01	0.
40	586.48	0.87221E 01	0.14081E 01	0.43880E-02	0.16146E-02	0.32679E-00	0.25025E-00	0.29000E-01	0.
41	596.45	0.54431E 02	0.87840E 01	0.27581E-01	0.10149E-01	0.20386E 01	0.15611E 01	0.70000E-02	0.
42	592.18	0.57594E 02	0.93268E 01	0.29190E-01	0.10741E-01	0.21645E 01	0.16576E 01	-0.86800E 00	0.25824E 01
43	591.54	0.55913E 02	0.90746E 01	0.28387E-01	0.10445E-01	0.21060E 01	0.16128E 01	-0.91100E 00	0.26375E 01
44	582.46	0.45516E 02	0.73086E 01	0.22707E-01	0.83552E-02	0.16962E 01	0.12989E 01	-0.95300E 00	0.14242E 01
45	558.23	0.17059E 02	0.28053E 01	0.85599E-02	0.31497E-02	0.65106E 00	0.49857E-00	-0.10400E 01	0.24515E 01
46	587.94	0.48013E 02	0.77772E 01	0.24263E-01	0.89277E-02	0.18049E 01	0.13822E 01	0.70000E-02	0.
47	555.54	0.18642E 02	0.29665E 01	0.90336E-02	0.33240E-02	0.68845E 00	0.52721E 00	0.29000E-01	0.
48	556.59	0.17021E 02	0.27205E 01	0.82911E-02	0.30508E-02	0.63137E 00	0.48350E-00	0.51000E-01	0.92745E 00
49	578.90	0.34484E 02	0.55265E 01	0.17124E-01	0.63010E-02	0.12826E 01	0.98218E 00	0.70000E-02	0.18964E 01
50	558.68	0.17158E 02	0.27281E 01	0.83269E-02	0.30640E-02	0.63313E 00	0.48484E-00	0.29000E-01	0.96820E 00
51	559.96	0.17761E 02	0.28168E 01	0.86059E-02	0.31667E-02	0.65372E 00	0.50061E 00	0.51000E-01	0.
52	581.81	0.38105E 02	0.61519E 01	0.19103E-01	0.70294E-02	0.14277E 01	0.10933E 01	-0.86800E 00	0.
53	576.89	0.33081E 02	0.53467E 01	0.16542E-01	0.60869E-02	0.12409E 01	0.95023E 00	-0.91100E 00	0.18501E 01
54	580.53	0.35813E 02	0.57446E 01	0.17822E-01	0.65577E-02	0.13332E 01	0.10209E 01	-0.95300E 00	0.19337E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	556.49	0.12165E 02	0.19987E 01	0.60906E-02	0.22411E-02	0.46384E-00	0.35520E-00	-0.10400E 01	0.29673E 01
56	555.40	0.10797E 02	0.18288E 01	0.55686E-02	0.20490E-02	0.42442E-00	0.32502E-00	-0.10680E 01	0.56846E 01
57	552.59	0.64312E 01	0.10543E 01	0.32037E-02	0.11788E-02	0.24468E-00	0.18737E-00	-0.10400E 01	0.36511E 01
58	558.14	0.10244E 02	0.18236E 01	0.55640E-02	0.20473E-02	0.42322E-00	0.32410E-00	-0.10680E 01	0.27468E 01
59	549.66	0.76395E 01	0.12504E 01	0.37912E-02	0.13950E-02	0.29018E-00	0.22222E-00	-0.10400E 01	0.11150E 01
60	550.15	0.77117E 01	0.13023E 01	0.39503E-02	0.14536E-02	0.30224E-00	0.23146E-00	-0.10680E 01	0.23545E 01
61	541.79	0.13086E 01	0.21712E-00	0.65458E-03	0.24086E-03	0.50389E-01	0.38588E-01	-0.11220E 01	0.81200E 00
62	540.66	0.44832E-00	0.67745E-01	0.20407E-03	0.75090E-04	0.15722E-01	0.12040E-01	-0.13340E 01	0.24795E-00
63	543.20	0.13990E 01	0.24099E-00	0.72726E-03	0.26761E-03	0.55927E-01	0.42829E-01	-0.11220E 01	0.94870E 00
64	540.92	0.53247E 00	0.80473E-01	0.24245E-03	0.89214E-04	0.18676E-01	0.14302E-01	-0.13340E 01	0.30683E-00
65	539.27	0.72987E 00	0.12545E-00	0.37751E-03	0.13891E-03	0.29114E-01	0.22295E-01	0.14400E 01	0.45277E-00
66	538.28	0.13730E 01	0.22446E-00	0.67498E-03	0.24837E-03	0.52093E-01	0.39892E-01	0.16130E 01	0.76055E 00
67	538.52	0.17823E 01	0.28604E-00	0.86030E-03	0.31656E-03	0.66384E-01	0.50836E-01	0.17200E 01	0.92813E 00
68	538.90	0.14031E 01	0.23123E-00	0.69565E-03	0.25597E-03	0.53664E-01	0.41095E-01	-0.16130E 01	0.80027E 00
69	538.42	0.21107E 01	0.33871E-00	0.10186E-02	0.37482E-03	0.78608E-01	0.60197E-01	-0.18280E 01	0.10290E 01
70	542.07	0.15096E 01	0.22183E-00	0.66890E-03	0.24613E-03	0.51482E-01	0.39424E-01	-0.11650E 01	0.81477E 00
71	541.83	0.10639E 01	0.89391E-01	0.26950E-03	0.99166E-04	0.20746E-01	0.15887E-01	-0.12050E 01	0.12512E 01
72	542.78	0.18068E 01	0.26196E-00	0.79030E-03	0.29080E-03	0.60794E-01	0.46555E-01	-0.12120E 01	0.97109E 00
73	541.58	0.17345E 01	0.25481E-00	0.76808E-03	0.28263E-03	0.59136E-01	0.45286E-01	-0.11650E 01	0.96176E 00
74	540.36	0.80208E 00	0.67337E-01	0.20279E-03	0.74621E-04	0.15627E-01	0.11967E-01	-0.12050E 01	0.13712E 01
75	505.88	-0.73823E 01	-0.10426E 01	-0.30633E-02	-0.11272E-02	-0.24197E-00	-0.18530E-00	-0.12120E 01	0.
76	540.21	0.18177E 01	0.27368E-00	0.82414E-03	0.30326E-03	0.63516E-01	0.48640E-01	0.10840E 01	0.11456E 01
77	539.79	0.14478E 01	0.23398E-00	0.70436E-03	0.25918E-03	0.54301E-01	0.41583E-01	0.11220E 01	0.10147E 01
78	540.79	0.15153E 01	0.22556E-00	0.67953E-03	0.25004E-03	0.52348E-01	0.40088E-01	0.13340E 01	0.89561E 00
79	539.08	0.10161E 01	0.17044E-00	0.51281E-03	0.18870E-03	0.39554E-01	0.30290E-01	-0.11890E 01	0.51429E 00
80	539.79	0.94805E 00	0.14247E-00	0.42890E-03	0.15782E-03	0.33065E-01	0.25321E-01	-0.13340E 01	0.52175E 00
81	538.25	0.40312E-00	0.65091E-01	0.19573E-03	0.72021E-04	0.15106E-01	0.11568E-01	-0.11470E 01	0.20948E-00
82	537.25	0.58703E-01	0.98276E-02	0.29530E-04	0.10866E-04	0.22808E-02	0.17466E-02	-0.11890E 01	0.
83	541.31	0.25117E 01	0.42145E-00	0.12701E-02	0.46736E-03	0.97808E-01	0.74900E-01	-0.10840E 01	0.15647E 01
84	538.08	0.64104E 00	0.93987E-01	0.28259E-03	0.10398E-03	0.21812E-01	0.16704E-01	-0.11890E 01	0.35910E-00
85	539.28	0.10047E 01	0.14740E-00	0.44357E-03	0.16322E-03	0.34209E-01	0.26196E-01	-0.13090E 01	0.54751E 00
86	539.06	0.76520E 00	0.11379E-00	0.34238E-03	0.12598E-03	0.26409E-01	0.20224E-01	-0.13340E 01	0.39231E-00
87	544.34	0.11762E 02	0.17275E 01	0.52178E-02	0.19199E-02	0.40092E-00	0.30702E-00	0.11990E 01	0.52149E 01
88	530.86	0.69475E 01	0.10214E 01	0.30551E-02	0.11242E-02	0.23705E-00	0.18153E-00	0.12070E 01	0.33186E 01
89	525.38	0.51403E 01	0.76622E 00	0.22827E-02	0.83995E-03	0.17782E-00	0.13617E-00	0.13340E 01	0.26725E 01
90	534.92	0.96514E 01	0.13738E 01	0.41210E-02	0.15164E-02	0.31882E-00	0.24415E-00	0.12070E 01	0.44588E 01
91	527.80	0.55257E 01	0.85244E 00	0.25440E-02	0.93610E-03	0.19783E-00	0.15150E-00	0.12490E 01	0.26610E 01
92	525.57	0.50488E 01	0.75645E 00	0.22539E-02	0.82936E-03	0.17556E-00	0.13444E-00	0.13340E 01	0.24275E 01
93	522.51	0.34722E 01	0.58078E 00	0.17267E-02	0.63537E-03	0.13479E-00	0.10322E-00	0.14900E 01	0.18769E 01
94	545.52	0.13766E 01	0.14497E-00	0.43824E-03	0.16126E-03	0.33644E-01	0.25765E-01	-0.	0.
95	551.02	0.54379E 01	0.57855E 00	0.17560E-02	0.64615E-03	0.13427E-00	0.10282E-00	-0.	0.
96	540.26	0.10566E 01	0.11094E-00	0.33410E-03	0.12294E-03	0.25748E-01	0.19717E-01	-0.	0.
97	542.03	0.17055E 01	0.17925E-00	0.54048E-03	0.19888E-03	0.41599E-01	0.31856E-01	-0.	0.
98	543.01	0.22509E 01	0.23841E-00	0.71938E-03	0.26471E-03	0.55329E-01	0.42371E-01	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
29	1	8.40	158.40	0.02	-0.	2	C55	2.75	2	10.14	928.30	1818.50	136	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.881459E 02	0.192397E-01	0.466711E 04	0.183129E-04	0.713982E-07	0.120512E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730084E 00	0.432231E 01	0.565234E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	534.47	0.23252E 01	0.37757E-00	0.11469E-02	0.41707E-03	0.87353E-01	0.66798E-01	-0.10600E 01	0.10698E 01
100	534.47	0.12016E 01	0.20102E-00	0.61061E-03	0.22205E-03	0.46508E-01	0.35564E-01	-0.10840E 01	0.11121E 01
101	534.51	0.82442E 00	0.13491E-00	0.40980E-03	0.14903E-03	0.31212E-01	0.23868E-01	-0.11080E 01	0.93609E 00
102	542.22	0.54462E 01	0.89234E 00	0.27260E-02	0.99133E-03	0.20645E-00	0.15787E-00	-0.11080E 01	0.56700E 01
103	534.54	0.14312E 01	0.23945E-00	0.72737E-03	0.26451E-03	0.55398E-01	0.42362E-01	-0.10800E 01	0.10849E 01
104	586.12	0.39001E 02	0.63353E 01	0.20002E-01	0.72739E-02	0.14657E 01	0.11208E 01	0.85000E 00	0.
105	594.24	0.43705E 02	0.67454E 01	0.21430E-01	0.77931E-02	0.15606E 01	0.11934E 01	0.94000E 00	0.95475E 00
106	597.49	0.45222E 02	0.69330E 01	0.22081E-01	0.80300E-02	0.16040E 01	0.12266E 01	0.96000E 00	0.95814E 00
107	591.05	0.42847E 02	0.65461E 01	0.20746E-01	0.75444E-02	0.15145E 01	0.11581E 01	0.98000E 00	0.96513E 00
108	588.75	0.39767E 02	0.60989E 01	0.19295E-01	0.70166E-02	0.14110E 01	0.10790E 01	0.10000E 01	0.97472E 00
109	575.63	0.31522E 02	0.48160E 01	0.15085E-01	0.54856E-02	0.11142E 01	0.85204E 00	0.10200E 01	0.96013E 00
110	596.74	0.42062E 02	0.65006E 01	0.20692E-01	0.75248E-02	0.15040E 01	0.11501E 01	0.80000E-01	0.97118E 00
111	593.48	0.43064E 02	0.65879E 01	0.20917E-01	0.76067E-02	0.15242E 01	0.11655E 01	0.10000E-00	0.95692E 00
112	602.21	0.44234E 02	0.68332E 01	0.21843E-01	0.79433E-02	0.15809E 01	0.12089E 01	0.12000E-00	0.94703E 00
113	595.11	0.43637E 02	0.67381E 01	0.21421E-01	0.77899E-02	0.15589E 01	0.11921E 01	0.14000E-00	0.95366E 00
114	589.40	0.40870E 02	0.62913E 01	0.19913E-01	0.72416E-02	0.14555E 01	0.11130E 01	0.80000E-01	0.
115	590.94	0.41355E 02	0.63499E 01	0.20123E-01	0.73177E-02	0.14691E 01	0.11234E 01	0.10000E-00	0.94811E 00
116	592.61	0.42609E 02	0.65925E 01	0.20918E-01	0.76070E-02	0.15252E 01	0.11663E 01	0.12000E-00	0.95574E 00
117	600.25	0.44269E 02	0.68545E 01	0.21878E-01	0.79559E-02	0.15858E 01	0.12127E 01	0.14000E-00	0.98415E 00
118	591.03	0.39969E 02	0.62098E 01	0.19680E-01	0.71567E-02	0.14367E 01	0.10986E 01	0.10000E-00	0.96072E 00
119	591.11	0.39581E 02	0.61191E 01	0.19394E-01	0.70526E-02	0.14157E 01	0.10826E 01	0.15000E-00	0.13497E 01
120	592.25	0.40484E 02	0.62730E 01	0.19899E-01	0.72363E-02	0.14513E 01	0.11098E 01	0.20000E-00	0.10299E 01
121	592.47	0.40673E 02	0.63242E 01	0.20064E-01	0.72965E-02	0.14631E 01	0.11189E 01	0.25000E-00	0.97984E 00
122	587.98	0.38596E 02	0.59866E 01	0.18928E-01	0.68834E-02	0.13851E 01	0.10591E 01	0.30000E-00	0.99201E 00
123	582.05	0.37470E 02	0.58222E 01	0.18325E-01	0.66641E-02	0.13470E 01	0.10300E 01	0.35000E-00	0.93955E 00
124	587.31	0.40688E 02	0.63824E 01	0.20169E-01	0.73347E-02	0.14766E 01	0.11292E 01	0.38000E-00	0.10167E 01
125	591.11	0.42434E 02	0.67249E 01	0.21313E-01	0.77507E-02	0.15559E 01	0.11898E 01	0.45000E-00	0.10038E 01
126	587.37	0.39601E 02	0.63451E 01	0.20052E-01	0.72922E-02	0.14680E 01	0.11226E 01	0.61000E 00	0.99888E 00
127	559.38	0.21721E 02	0.34439E 01	0.10656E-01	0.38750E-02	0.79677E 00	0.60929E 00	0.70000E 00	0.97719E 00
128	545.06	0.98358E 01	0.15521E 01	0.47514E-02	0.17279E-02	0.35908E-00	0.27459E-00	0.75000E 00	0.97091E 00
129	588.34	0.42138E 02	0.68097E 01	0.21537E-01	0.78318E-02	0.15755E 01	0.12048E 01	0.70000E 00	0.12630E 01
130	593.04	0.47737E 02	0.77341E 01	0.24548E-01	0.89272E-02	0.17894E 01	0.13683E 01	0.80000E 00	0.13683E 01
131	552.71	0.16719E 02	0.25138E 01	0.77395E-02	0.28145E-02	0.58159E 00	0.44474E-00	0.90000E 00	0.11243E 01
132	571.36	0.30762E 02	0.46889E 01	0.14639E-01	0.53236E-02	0.10848E 01	0.82956E 00	0.90000E 00	0.96666E 00
133	573.18	0.32445E 02	0.49255E 01	0.15399E-01	0.55999E-02	0.11395E 01	0.87140E 00	0.96000E 00	0.98119E 00
134	572.75	0.31318E 02	0.47614E 01	0.14881E-01	0.54115E-02	0.11016E 01	0.84237E 00	0.10000E 01	0.98297E 00
135	555.97	0.21228E 02	0.33432E 01	0.10318E-01	0.37521E-02	0.77347E 00	0.59147E 00	0.70000E-02	0.
136	919.71	0.10383E-01	0.19190E-02	0.81565E-05	0.29662E-05	0.44397E-03	0.33950E-03	0.70000E-02	0.
137	554.77	0.21589E 02	0.33868E 01	0.10443E-01	0.37977E-02	0.78357E 00	0.59919E 00	0.39000E-01	0.10101E 01
138	553.77	0.21196E 02	0.33071E 01	0.10190E-01	0.37056E-02	0.76513E 00	0.58509E 00	0.78000E-01	0.
139	553.12	0.20834E 02	0.32337E 01	0.99588E-02	0.36215E-02	0.74814E 00	0.57210E 00	0.11700E-00	0.
140	553.68	0.21059E 02	0.32589E 01	0.10041E-01	0.36513E-02	0.75397E 00	0.57655E 00	0.78000E-01	0.10092E 01
141	650.85	0.10259E 03	0.11516E 02	0.38254E-01	0.13911E-01	0.26643E 01	0.20374E 01	-0.	0.
142	607.61	0.43061E 02	0.47250E 01	0.15167E-01	0.55157E-02	0.10932E 01	0.83595E 00	-0.	0.
143	551.20	0.19371E 02	0.29788E 01	0.91607E-02	0.33313E-02	0.68917E 00	0.52701E 00	0.78000E-01	0.10150E 01
144	552.47	0.19594E 02	0.30202E 01	0.92967E-02	0.33808E-02	0.69874E 00	0.53433E 00	0.70000E-02	0.91908E 00
145	553.37	0.19784E 02	0.30361E 01	0.93519E-02	0.34009E-02	0.70242E 00	0.53713E 00	0.70000E-02	0.98915E 00
146	551.63	0.19901E 02	0.30661E 01	0.94321E-02	0.34300E-02	0.70936E 00	0.54244E 00	0.39000E-01	0.98795E 00
147	553.84	0.20172E 02	0.31066E 01	0.95724E-02	0.34810E-02	0.71873E 00	0.54961E 00	0.78000E-01	0.
148	553.22	0.19471E 02	0.30223E 01	0.93084E-02	0.33850E-02	0.69923E 00	0.53470E 00	0.11700E-00	0.
149	584.39	0.35059E 02	0.57168E 01	0.18026E-01	0.65551E-02	0.13226E 01	0.10114E 01	0.70000E-02	0.97478E 00
150	585.32	0.35090E 02	0.57519E 01	0.18149E-01	0.66001E-02	0.13308E 01	0.10176E 01	0.70000E-02	0.96194E 00
151	583.03	0.33776E 02	0.55297E 01	0.17418E-01	0.63340E-02	0.12793E 01	0.97831E 00	0.70000E-02	0.94055E 00
152	589.14	0.36901E 02	0.58419E 01	0.18487E-01	0.67229E-02	0.13516E 01	0.10335E 01	0.39000E-01	0.95548E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	588.03	0.36797E 02	0.58218E 01	0.18408E-01	0.66941E-02	0.13469E 01	0.10300E 01	0.39000E-01	0.
154	587.45	0.36936E 02	0.58039E 01	0.18343E-01	0.66705E-02	0.13428E 01	0.10268E 01	0.78000E-01	0.97732E 00
155	585.35	0.35250E 02	0.57783E 01	0.18233E-01	0.66304E-02	0.13368E 01	0.10223E 01	0.39000E-01	0.
156	580.14	0.32684E 02	0.53257E 01	0.16738E-01	0.60869E-02	0.12321E 01	0.94221E 00	0.39000E-01	0.
157	578.20	0.31084E 02	0.50755E 01	0.15928E-01	0.57924E-02	0.11743E 01	0.89795E 00	0.78000E-01	0.96652E 00
158	576.80	0.32569E 02	0.53307E 01	0.16712E-01	0.60772E-02	0.12333E 01	0.94310E 00	0.39000E-01	0.
159	576.80	0.32058E 02	0.52470E 01	0.16449E-01	0.59818E-02	0.12139E 01	0.92829E 00	0.78000E-01	0.
160	582.20	0.33180E 02	0.54297E 01	0.17092E-01	0.62155E-02	0.12562E 01	0.96061E 00	0.39000E-01	0.
161	572.71	0.27856E 02	0.44276E 01	0.13838E-01	0.50321E-02	0.10244E 01	0.78333E 00	0.43000E-01	0.96041E 00
162	574.24	0.27726E 02	0.44249E 01	0.13845E-01	0.50348E-02	0.10237E 01	0.78285E 00	0.43000E-01	0.95346E 00
163	574.11	0.28609E 02	0.45730E 01	0.14307E-01	0.52028E-02	0.10580E 01	0.80904E 00	0.85000E-01	0.98093E 00
164	572.88	0.28557E 02	0.45395E 01	0.14189E-01	0.51599E-02	0.10503E 01	0.80313E 00	0.12800E-00	0.98122E 00
165	573.01	0.28992E 02	0.46239E 01	0.14454E-01	0.52564E-02	0.10698E 01	0.81806E 00	0.43000E-01	0.
166	571.17	0.28313E 02	0.44966E 01	0.14037E-01	0.51045E-02	0.10403E 01	0.79553E 00	0.85000E-01	0.96170E 00
167	580.64	0.39646E 02	0.63292E 01	0.19900E-01	0.72365E-02	0.14643E 01	0.11197E 01	0.43000E-01	0.
168	573.64	0.28967E 02	0.46586E 01	0.14570E-01	0.52984E-02	0.10778E 01	0.82420E 00	0.12800E-00	0.14496E 01
169	578.86	0.33138E 02	0.53276E 01	0.16728E-01	0.60832E-02	0.12326E 01	0.94255E 00	0.85000E-01	0.11029E 01
170	576.96	0.31632E 02	0.50558E 01	0.15852E-01	0.57646E-02	0.11697E 01	0.89447E 00	0.12800E-00	0.10149E 01
171	581.00	0.38715E 02	0.61818E 01	0.19441E-01	0.70699E-02	0.14302E 01	0.10937E 01	0.85000E-01	0.12693E 01
172	626.77	0.67236E 02	0.11056E 02	0.36025E-01	0.13101E-01	0.25578E 01	0.19559E 01	0.43000E-01	0.
173	590.46	0.42941E 02	0.69474E 01	0.22008E-01	0.80033E-02	0.16073E 01	0.12291E 01	0.12800E-00	0.13407E 01
174	598.65	0.52294E 02	0.84573E 01	0.26960E-01	0.98042E-02	0.19567E 01	0.14962E 01	0.85000E-01	0.
175	625.80	0.60691E 02	0.99263E 01	0.32321E-01	0.11754E-01	0.22965E 01	0.17561E 01	0.43000E-01	0.19613E 01
176	618.30	0.57994E 02	0.94476E 01	0.30581E-01	0.11121E-01	0.21858E 01	0.16715E 01	0.43000E-01	0.18495E 01
177	599.68	0.48127E 02	0.78002E 01	0.24885E-01	0.90496E-02	0.18046E 01	0.13800E 01	0.12800E-00	0.14399E 01
178	607.14	0.53382E 02	0.86726E 01	0.27829E-01	0.10120E-01	0.20065E 01	0.15343E 01	0.85000E-01	0.16523E 01
179	605.32	0.46483E 02	0.75445E 01	0.24175E-01	0.87913E-02	0.17455E 01	0.13348E 01	0.70000E-02	0.14758E 01
180	574.04	0.31555E 02	0.50599E 01	0.15829E-01	0.57564E-02	0.11706E 01	0.89518E 00	0.70000E-02	0.
181	573.78	0.27585E 02	0.44227E 01	0.13833E-01	0.50305E-02	0.10232E 01	0.78245E 00	0.70000E-02	0.89938E 00
182	576.02	0.29425E 02	0.47385E 01	0.14846E-01	0.53989E-02	0.10963E 01	0.83832E 00	0.70000E-02	0.
183	584.94	0.34936E 02	0.56174E 01	0.17720E-01	0.64438E-02	0.12996E 01	0.99381E 00	0.32000E-01	0.10690E 01
184	584.63	0.32777E 02	0.53032E 01	0.16724E-01	0.60819E-02	0.12269E 01	0.93822E 00	0.32000E-01	0.88472E 00
185	570.78	0.27895E 02	0.44792E 01	0.13978E-01	0.50832E-02	0.10363E 01	0.79244E 00	0.64000E-01	0.88727E 00
186	584.09	0.35850E 02	0.57802E 01	0.18221E-01	0.66263E-02	0.13373E 01	0.10226E 01	0.64000E-01	0.95634E 00
187	580.62	0.31620E 02	0.51048E 01	0.16050E-01	0.58366E-02	0.11810E 01	0.90314E 00	0.70000E-02	0.93421E 00
188	588.04	0.37652E 02	0.62006E 01	0.19606E-01	0.71297E-02	0.14346E 01	0.10970E 01	0.70000E-02	0.11643E 01
189	539.17	0.63086E 01	0.10319E 01	0.31452E-02	0.11438E-02	0.23873E-00	0.18256E-00	0.10600E 01	0.10191E 01
190	536.55	0.36218E 01	0.60337E 00	0.18356E-02	0.66751E-03	0.13959E-00	0.10675E-00	0.10840E 01	0.10294E 01
191	535.33	0.17668E 01	0.29572E-00	0.89884E-03	0.32687E-03	0.68417E-01	0.52318E-01	0.11080E 01	0.10193E 01
192	534.65	0.20572E 01	0.34234E-00	0.10400E-02	0.37820E-03	0.79202E-01	0.60566E-01	0.11080E 01	0.10087E 01
193	537.37	0.19751E 01	0.32422E-00	0.98692E-03	0.35890E-03	0.75010E-01	0.57360E-01	0.16580E 01	0.10063E 01
194	537.72	0.18447E 01	0.30148E-00	0.91796E-03	0.33382E-03	0.69750E-01	0.53337E-01	0.11700E 01	0.93236E 00
195	537.53	0.18649E 01	0.30617E-00	0.93209E-03	0.33896E-03	0.70834E-01	0.54166E-01	0.16740E 01	0.94989E 00
196	537.43	0.17091E 01	0.27928E-00	0.85016E-03	0.30916E-03	0.64613E-01	0.49409E-01	0.16950E 01	0.83392E 00

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
34	1	8.39	158.39	0.02	-0.	3	C55	2.75	2	10.14	924.80	1823.70	126	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.884223E 02	0.191588E-01	0.467431E 04	0.181790E-04	0.716221E-07	0.119441E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730245E 00	0.431379E 01	0.563607E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	564.02	0.26789E 02	0.42036E 01	0.12992E-01	0.47521E-02	0.97447E 00	0.74585E 00	0.10000E 01	0.98990E 00
198	567.64	0.27509E 02	0.41846E 01	0.12968E-01	0.47434E-02	0.97005E 00	0.74247E 00	0.12000E 01	0.98815E 00
199	545.17	0.13485E 02	0.21348E 01	0.65063E-02	0.23798E-02	0.49487E-00	0.37877E-00	0.13000E 01	0.10052E 01
200	517.53	0.10239E 01	0.14762E-00	0.44094E-03	0.16128E-03	0.34220E-01	0.26192E-01	0.11890E 01	0.95436E 00
201	524.17	0.79792E 00	0.13100E-00	0.39319E-03	0.14382E-03	0.30368E-01	0.23244E-01	0.14540E 01	0.10984E 01
202	521.73	0.85039E 00	0.13836E-00	0.41456E-03	0.15163E-03	0.32075E-01	0.24550E-01	0.17040E 01	0.86491E 00
203	528.39	0.12800E 01	0.20905E-00	0.62938E-03	0.23021E-03	0.48462E-01	0.37092E-01	0.20410E 01	0.11631E 01
204	528.23	0.47481E-00	0.36027E-01	0.10845E-03	0.39668E-04	0.83516E-02	0.63922E-02	0.20700E 01	0.
205	532.62	0.35044E 01	0.30452E-00	0.91962E-03	0.33637E-03	0.70593E-01	0.54031E-01	0.21880E 01	0.22326E 02
206	530.99	0.27143E 01	0.44396E-00	0.13391E-02	0.48981E-03	0.10292E-00	0.78772E-01	0.22480E 01	0.22117E 01
207	528.17	0.13320E 01	0.21385E-00	0.64372E-03	0.23545E-03	0.49573E-01	0.37943E-01	0.20700E 01	0.99939E 00
208	527.89	0.61610E 00	0.54442E-01	0.16384E-03	0.59930E-04	0.12620E-01	0.96596E-02	0.20700E 01	0.13301E 01
209	533.56	0.41351E 01	0.33192E-00	0.10031E-02	0.36689E-03	0.76945E-01	0.58893E-01	0.21880E 01	0.76361E 01
210	528.66	0.15917E 01	0.26199E-00	0.78891E-03	0.28856E-03	0.60734E-01	0.46485E-01	0.20700E 01	0.11437E 01
211	530.76	0.27325E 01	0.45030E-00	0.13580E-02	0.49672E-03	0.10439E-00	0.79896E-01	0.21880E 01	0.19808E 01
212	530.31	0.20644E 01	0.33599E-00	0.10129E-02	0.37050E-03	0.77887E-01	0.59614E-01	0.22390E 01	0.14834E 01
213	528.39	0.18218E 01	0.29618E-00	0.89168E-03	0.32615E-03	0.68659E-01	0.52551E-01	0.21880E 01	0.10232E 01
214	530.24	0.18410E 01	0.30331E-00	0.91437E-03	0.33445E-03	0.70311E-01	0.53815E-01	0.22480E 01	0.11358E 01
215	527.87	0.11481E 01	0.17137E-00	0.51575E-03	0.18864E-03	0.39727E-01	0.30407E-01	0.11650E 01	0.11467E 01
216	528.17	0.87117E 00	0.72636E-01	0.21864E-03	0.79974E-04	0.16838E-01	0.12888E-01	0.12050E 01	0.
217	528.65	0.13657E 01	0.19815E-00	0.59666E-03	0.21824E-03	0.45934E-01	0.35157E-01	0.12120E 01	0.10231E 01
218	529.19	0.14717E 01	0.21469E-00	0.64673E-03	0.23656E-03	0.49769E-01	0.38093E-01	0.11890E 01	0.11460E 01
219	529.11	0.11340E 01	0.18915E-00	0.56975E-03	0.20840E-03	0.43848E-01	0.33560E-01	0.14540E 01	0.10722E 01
220	528.13	0.12327E 01	0.21333E-00	0.64213E-03	0.23487E-03	0.49452E-01	0.37850E-01	0.17040E 01	0.11151E 01
221	527.08	0.94546E 00	0.15666E-00	0.47121E-03	0.17235E-03	0.36317E-01	0.27797E-01	0.20410E 01	0.11057E 01
222	530.91	0.96831E 00	0.16250E-00	0.49012E-03	0.17927E-03	0.37669E-01	0.28832E-01	0.22480E 01	0.97346E 00
223	528.91	0.12052E 01	0.18001E-00	0.54215E-03	0.19830E-03	0.41729E-01	0.31939E-01	0.11650E 01	0.11366E 01
224	528.52	0.61091E 00	0.50946E-01	0.15339E-03	0.56107E-04	0.11810E-01	0.90393E-02	0.12050E 01	0.12648E 01
225	529.56	0.13725E 01	0.19923E-00	0.60031E-03	0.21958E-03	0.46184E-01	0.35349E-01	0.12120E 01	0.11420E 01
226	532.84	0.88727E 00	0.14884E-00	0.44955E-03	0.16443E-03	0.34503E-01	0.26408E-01	0.14540E 01	0.72071E 00
227	532.08	0.14130E 01	0.22736E-00	0.68634E-03	0.25104E-03	0.52706E-01	0.40340E-01	0.17040E 01	0.10954E 01
228	531.08	0.15912E 01	0.26107E-00	0.78751E-03	0.28805E-03	0.60519E-01	0.46321E-01	0.18780E 01	0.11067E 01
229	531.69	0.14556E 01	0.24000E-00	0.72428E-03	0.26492E-03	0.55636E-01	0.42583E-01	0.21880E 01	0.10786E 01
230	533.50	0.17013E 01	0.25050E-00	0.75697E-03	0.27688E-03	0.58070E-01	0.44446E-01	0.11890E 01	0.11045E 01
231	533.65	0.73195E 00	0.12927E-00	0.39066E-03	0.14289E-03	0.29966E-01	0.22935E-01	0.14540E 01	0.59508E 00
232	533.69	0.14229E 01	0.23201E-00	0.70121E-03	0.25648E-03	0.53784E-01	0.41166E-01	0.16130E 01	0.10917E 01
233	532.65	0.14151E 01	0.23238E-00	0.70178E-03	0.25669E-03	0.53870E-01	0.41231E-01	0.17040E 01	0.10381E 01
234	532.07	0.16618E 01	0.27406E-00	0.82732E-03	0.30261E-03	0.63532E-01	0.48627E-01	0.18780E 01	0.11348E 01
235	536.26	0.11984E 01	0.19781E-00	0.59896E-03	0.21908E-03	0.45856E-01	0.35097E-01	0.14540E 01	0.93891E 00
236	533.96	0.16514E 01	0.26933E-00	0.81413E-03	0.29779E-03	0.62434E-01	0.47786E-01	0.17040E 01	0.11434E 01
237	533.97	0.18447E 01	0.30455E-00	0.92061E-03	0.33673E-03	0.70599E-01	0.54035E-01	0.21880E 01	0.13133E 01
238	535.81	0.27849E 01	0.24720E-00	0.74824E-03	0.27368E-03	0.57304E-01	0.43859E-01	0.20700E 01	0.50326E 01
239	537.28	0.19865E 01	0.28962E-00	0.87761E-03	0.32100E-03	0.67139E-01	0.51387E-01	0.11890E 01	0.11343E 01
240	539.14	0.13709E 01	0.22996E-00	0.69776E-03	0.25522E-03	0.53307E-01	0.40801E-01	0.14540E 01	0.95757E 00
241	535.39	0.18447E 01	0.30248E-00	0.91529E-03	0.33479E-03	0.70118E-01	0.53668E-01	0.17040E 01	0.11729E 01
242	534.41	0.18956E 01	0.31303E-00	0.94655E-03	0.34622E-03	0.72565E-01	0.55540E-01	0.18780E 01	0.11532E 01
243	536.04	0.34281E 01	0.56662E 00	0.17154E-02	0.62744E-03	0.13135E-00	0.10053E-00	0.20410E 01	0.24041E 01
244	535.24	0.19486E 01	0.17535E-00	0.53055E-03	0.19406E-03	0.40649E-01	0.31112E-01	0.20700E 01	-0.37185E 02
245	536.75	0.28369E 01	0.23169E-00	0.70180E-03	0.25670E-03	0.53710E-01	0.41109E-01	0.21870E 01	0.21700E 01
246	535.06	0.22873E 01	0.38474E-00	0.11639E-02	0.42573E-03	0.89188E-01	0.68264E-01	0.22100E 01	0.14471E 01
247	540.14	0.14094E 01	0.23065E-00	0.70037E-03	0.25618E-03	0.53468E-01	0.40924E-01	0.14540E 01	0.10632E 01
248	535.96	0.24213E 01	0.40019E-00	0.12115E-02	0.44313E-03	0.92771E-01	0.71006E-01	0.17040E 01	0.18359E 01
249	535.75	0.19460E 01	0.16295E-00	0.49321E-03	0.18040E-03	0.37774E-01	0.28912E-01	0.18780E 01	0.
250	535.46	0.19335E 01	0.15780E-00	0.47752E-03	0.17466E-03	0.36580E-01	0.27998E-01	0.21880E 01	0.53464E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	540.20	0.14431E 01	0.24345E-00	0.73928E-03	0.27041E-03	0.56435E-01	0.43195E-01	0.14540E 01	0.10918E 01
252	537.43	0.19361E 01	0.32445E-00	0.98325E-03	0.35965E-03	0.75213E-01	0.57567E-01	0.16130E 01	0.12368E 01
253	540.96	0.44831E 01	0.39525E-00	0.12009E-02	0.43925E-03	0.91624E-01	0.70128E-01	0.17060E 01	-0.49597E 02
254	535.88	0.23600E 01	0.39004E-00	0.11807E-02	0.43186E-03	0.90418E-01	0.69205E-01	0.21880E 01	0.11952E 01
255	539.26	0.26353E 01	0.24312E-00	0.73778E-03	0.26986E-03	0.56360E-01	0.43137E-01	0.16580E 01	0.42356E 01
256	536.38	0.18312E 01	0.15339E-00	0.46449E-03	0.16990E-03	0.35558E-01	0.27216E-01	0.17920E 01	0.60638E 01
257	537.37	0.12868E 01	0.21608E-00	0.65480E-03	0.23951E-03	0.50090E-01	0.38339E-01	0.10840E 01	0.10356E 01
258	539.98	0.15397E 01	0.26166E-00	0.79443E-03	0.29058E-03	0.60656E-01	0.46425E-01	0.14540E 01	0.10207E 01
259	538.26	0.18275E 01	0.30245E-00	0.91713E-03	0.33546E-03	0.70112E-01	0.53663E-01	0.16130E 01	0.10746E 01
260	538.68	0.25584E 01	0.41707E-00	0.12651E-02	0.46274E-03	0.96684E-01	0.74001E-01	0.17040E 01	0.17763E 01
261	537.53	0.22400E 01	0.36887E-00	0.11179E-02	0.40891E-03	0.85509E-01	0.65447E-01	0.18780E 01	0.14988E 01
262	536.66	0.25023E 01	0.42130E-00	0.12760E-02	0.46674E-03	0.97663E-01	0.74750E-01	0.20410E 01	0.12099E 01
263	612.26	0.89828E 01	0.15810E 01	0.50693E-02	0.18542E-02	0.36650E-00	0.28052E-00	0.14540E 01	0.
264	537.90	0.13299E 01	0.21904E-00	0.66404E-03	0.24289E-03	0.50777E-01	0.38864E-01	0.16130E 01	0.76652E 00
265	537.97	0.22218E 01	0.35870E-00	0.10875E-02	0.39777E-03	0.83152E-01	0.63644E-01	0.17040E 01	0.11888E 01
266	537.74	0.24104E 01	0.39697E-00	0.12033E-02	0.44013E-03	0.92024E-01	0.70434E-01	0.18780E 01	0.12546E 01
267	537.20	0.27309E 01	0.45855E-00	0.13894E-02	0.50820E-03	0.10630E-00	0.81359E-01	0.20410E 01	0.12785E 01
268	539.13	0.17268E 01	0.28461E-00	0.86358E-03	0.31587E-03	0.65976E-01	0.50497E-01	0.16130E 01	0.99493E 00
269	537.64	0.22597E 01	0.36475E-00	0.11056E-02	0.40438E-03	0.84555E-01	0.64718E-01	0.18280E 01	0.11055E 01
270	537.98	0.24364E 01	0.39947E-00	0.12111E-02	0.44298E-03	0.92602E-01	0.70877E-01	0.18780E 01	0.11543E 01
271	537.54	0.28727E 01	0.48144E-00	0.14591E-02	0.53371E-03	0.11161E-00	0.85421E-01	0.20410E 01	0.13098E 01
272	537.42	0.87741E 00	0.14823E-00	0.44919E-03	0.16430E-03	0.34361E-01	0.26299E-01	0.16130E 01	0.46407E-00
273	538.52	0.20332E 01	0.33756E-00	0.10238E-02	0.37448E-03	0.78252E-01	0.59893E-01	0.17200E 01	0.10452E 01
274	537.34	0.16535E 01	0.26602E-00	0.80613E-03	0.29486E-03	0.61668E-01	0.47200E-01	0.18280E 01	0.83499E 00
275	538.02	0.23958E 01	0.39343E-00	0.11928E-02	0.43630E-03	0.91204E-01	0.69806E-01	0.18780E 01	0.11251E 01
276	919.71	0.10383E-01	0.21005E-02	0.88722E-05	0.32452E-05	0.48692E-03	0.37268E-03	0.20600E 01	0.
277	536.87	0.21148E 01	0.17720E-00	0.53678E-03	0.19634E-03	0.41077E-01	0.31440E-01	0.21000E 01	0.20176E 01
278	536.36	0.16187E 01	0.13559E-00	0.41059E-03	0.15018E-03	0.31432E-01	0.24058E-01	0.21870E 01	0.
279	539.18	0.32784E 01	0.55275E 00	0.16773E-02	0.61349E-03	0.12813E-00	0.98073E-01	0.21950E 01	0.14132E 01
280	537.63	0.22436E 01	0.37400E-00	0.11336E-02	0.41463E-03	0.86698E-01	0.66358E-01	0.18780E 01	0.11024E 01
281	537.35	0.28701E 01	0.48341E-00	0.14649E-02	0.53581E-03	0.11206E-00	0.85770E-01	0.20600E 01	0.12712E 01
282	537.87	0.19636E 01	0.31947E-00	0.96846E-03	0.35424E-03	0.74057E-01	0.56683E-01	0.18280E 01	0.10522E 01
283	537.03	0.27008E 01	0.45249E-00	0.13709E-02	0.50143E-03	0.10489E-00	0.80285E-01	0.20600E 01	0.12167E 01
284	537.74	0.18177E 01	0.29341E-00	0.88940E-03	0.32531E-03	0.68018E-01	0.52060E-01	0.17200E 01	0.11591E 01
285	538.05	0.21813E 01	0.35821E-00	0.10860E-02	0.39724E-03	0.83038E-01	0.63556E-01	0.18780E 01	0.12226E 01
286	537.42	0.17642E 01	0.16259E-00	0.49271E-03	0.18022E-03	0.37690E-01	0.28847E-01	0.16580E 01	0.26941E 01
287	919.71	0.10383E-01	0.10505E-02	0.44374E-05	0.16231E-05	0.24353E-03	0.18640E-03	0.17920E 01	0.
288	537.42	0.14613E 01	0.23989E-00	0.72697E-03	0.26590E-03	0.55609E-01	0.42563E-01	0.16130E 01	0.94672E 00
289	540.35	0.35366E 01	0.29691E-00	0.90171E-03	0.32982E-03	0.68828E-01	0.52680E-01	0.17060E 01	0.14722E 03
290	536.58	0.19984E 01	0.16742E-00	0.50705E-03	0.18546E-03	0.38810E-01	0.29705E-01	0.18780E 01	0.47333E 01
291	536.58	0.21413E 01	0.34973E-00	0.10592E-02	0.38743E-03	0.81074E-01	0.62053E-01	0.17200E 01	0.17596E 01
292	539.14	0.10416E 01	0.17901E-00	0.54317E-03	0.19868E-03	0.41497E-01	0.31762E-01	0.14400E 01	0.92857E 00
293	535.65	0.17330E 01	0.27942E-00	0.84567E-03	0.30932E-03	0.64773E-01	0.49576E-01	0.17200E 01	0.10705E 01
294	535.49	0.21496E 01	0.35466E-00	0.10733E-02	0.39257E-03	0.82214E-01	0.62926E-01	0.18780E 01	0.11729E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
24	1	12.44	162.44	-0.	-0.	1	C55	2.80	2	10.14	924.80	1818.00	132	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.881218E 02	0.191695E-01	0.466636E 04	0.182512E-04	0.713787E-07	0.120120E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730070E 00	0.431379E 01	0.563607E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	576.95	0.30858E 02	0.40996E 01	0.12859E-01	0.46930E-02	0.95034E 00	0.72738E 00	-0.	0.96881E 00
2	577.21	0.29859E 02	0.42206E 01	0.13242E-01	0.48325E-02	0.97840E 00	0.74886E 00	-0.30000E-01	0.
3	569.83	0.28111E 02	0.43029E 01	0.13425E-01	0.48993E-02	0.99748E 00	0.76346E 00	-0.60000E-01	0.
4	570.24	0.27123E 02	0.42596E 01	0.13294E-01	0.48514E-02	0.98743E 00	0.75577E 00	-0.90000E-01	0.
5	564.82	0.25226E 02	0.40503E 01	0.12589E-01	0.45943E-02	0.93891E 00	0.71863E 00	-0.20000E-00	0.99311E 00
6	565.06	0.23271E 02	0.37368E 01	0.11617E-01	0.42394E-02	0.86625E 00	0.66302E 00	-0.40000E-00	0.98923E 00
7	564.45	0.20804E 02	0.33555E 01	0.10426E-01	0.38051E-02	0.77785E 00	0.59536E 00	-0.60000E 00	0.99896E 00
8	562.82	0.18771E 02	0.30249E 01	0.93877E-02	0.34260E-02	0.70121E 00	0.53670E 00	-0.80000E 00	0.
9	563.16	0.19150E 02	0.30377E 01	0.94300E-02	0.34414E-02	0.70419E 00	0.53898E 00	-0.90000E 00	0.99249E 00
10	564.08	0.18856E 02	0.30310E 01	0.94157E-02	0.34362E-02	0.70264E 00	0.53779E 00	-0.98000E 00	0.10142E 01
11	541.30	0.60624E 00	0.10432E-00	0.31861E-03	0.11628E-03	0.24183E-01	0.18509E-01	-0.11220E 01	0.65548E 00
12	542.79	0.14109E 01	0.20706E-00	0.63309E-03	0.23104E-03	0.47999E-01	0.36738E-01	-0.11890E 01	0.10754E 01
13	542.01	0.10675E 01	0.16144E-00	0.49333E-03	0.18004E-03	0.37424E-01	0.28644E-01	-0.13340E 01	0.10003E 01
14	540.18	0.77507E 00	0.13329E-00	0.40675E-03	0.14844E-03	0.30898E-01	0.23649E-01	-0.14400E 01	0.10072E 01
15	577.29	0.30530E 02	0.43156E 01	0.13541E-01	0.49416E-02	0.10004E 01	0.76572E 00	0.30000E-01	0.
16	574.42	0.28955E 02	0.44432E 01	0.13911E-01	0.50766E-02	0.10300E 01	0.78836E 00	0.60000E-01	0.
17	575.15	0.29325E 02	0.46177E 01	0.14465E-01	0.52789E-02	0.10705E 01	0.81931E 00	0.90000E-01	0.
18	579.61	0.29831E 02	0.48286E 01	0.15177E-01	0.55387E-02	0.11193E 01	0.85673E 00	0.20000E-00	0.98250E 00
19	593.43	0.33000E 02	0.53819E 01	0.17096E-01	0.62389E-02	0.12476E 01	0.95490E 00	0.40000E-00	0.97118E 00
20	590.42	0.34730E 02	0.56817E 01	0.18006E-01	0.65714E-02	0.13171E 01	0.10081E 01	0.60000E 00	0.
21	595.99	0.38764E 02	0.59884E 01	0.19060E-01	0.69558E-02	0.13882E 01	0.10625E 01	0.92000E 00	0.
22	562.62	0.21516E 02	0.32639E 01	0.10128E-01	0.36961E-02	0.75661E 00	0.57910E 00	0.10400E 01	0.93734E 00
23	553.67	0.19197E 02	0.29055E 01	0.89557E-02	0.32683E-02	0.67353E 00	0.51551E 00	0.10600E 01	0.95063E 00
24	541.40	0.12641E 02	0.19905E 01	0.60800E-02	0.22189E-02	0.46144E-00	0.35318E-00	0.10840E 01	0.94350E 00
25	520.53	0.20655E 01	0.30086E-00	0.90505E-03	0.33029E-03	0.69744E-01	0.53382E-01	0.12070E 01	0.14026E 01
26	518.56	0.24151E 01	0.37061E-00	0.11133E-02	0.40629E-03	0.85914E-01	0.65757E-01	0.12490E 01	0.17225E 01
27	518.32	0.29818E 01	0.45011E-00	0.13518E-02	0.49335E-03	0.10434E-00	0.79862E-01	0.13340E 01	0.21175E 01
28	518.60	0.22322E 01	0.37476E-00	0.11258E-02	0.41085E-03	0.86875E-01	0.66493E-01	0.14540E 01	0.17945E 01
29	522.26	0.13491E 01	0.22024E-00	0.66337E-03	0.24209E-03	0.51056E-01	0.39078E-01	0.16580E 01	0.10665E 01
30	529.61	0.19777E 01	0.32817E-00	0.99375E-03	0.36266E-03	0.76075E-01	0.58227E-01	0.20410E 01	0.16091E 01
31	534.41	0.20862E 01	0.34713E-00	0.10549E-02	0.38497E-03	0.80470E-01	0.61591E-01	0.22480E 01	0.15162E 01
32	572.53	0.28754E 02	0.44123E 01	0.13794E-01	0.50341E-02	0.10228E 01	0.78287E 00	-0.60000E-01	0.
33	578.43	0.29652E 02	0.41942E 01	0.13171E-01	0.48067E-02	0.97227E 00	0.74417E 00	-0.30000E-01	0.
34	576.01	0.31332E 02	0.48171E 01	0.15099E-01	0.55104E-02	0.11167E 01	0.85469E 00	0.30000E-01	0.
35	572.22	0.29462E 02	0.46319E 01	0.14477E-01	0.52834E-02	0.10737E 01	0.82183E 00	0.60000E-01	0.
36	577.85	0.40665E 02	0.65761E 01	0.20642E-01	0.75331E-02	0.15244E 01	0.11668E 01	-0.86800E 00	0.19926E 01
37	578.68	0.37608E 02	0.59200E 01	0.18594E-01	0.67858E-02	0.13724E 01	0.10504E 01	-0.91100E 00	0.18736E 01
38	575.06	0.35353E 02	0.56539E 01	0.17709E-01	0.64630E-02	0.13107E 01	0.10032E 01	-0.95300E 00	0.17143E 01
39	919.72	0.10902E-01	0.20677E-02	0.87944E-05	0.32095E-05	0.47933E-03	0.36687E-03	0.51000E-01	0.
40	620.88	0.96940E 01	0.15941E 01	0.51731E-02	0.18879E-02	0.36954E-00	0.28284E-00	0.29000E-01	0.
41	598.06	0.50939E 02	0.82276E 01	0.26229E-01	0.95720E-02	0.19073E 01	0.14598E 01	0.70000E-02	0.
42	597.99	0.62511E 02	0.10155E 02	0.32370E-01	0.11813E-01	0.23540E 01	0.18017E 01	-0.86800E 00	0.26186E 01
43	592.99	0.56100E 02	0.91121E 01	0.28935E-01	0.10560E-01	0.21123E 01	0.16167E 01	-0.91100E 00	0.24470E 01
44	584.11	0.45309E 02	0.72818E 01	0.22966E-01	0.83814E-02	0.16880E 01	0.12920E 01	-0.95300E 00	0.12827E 01
45	562.81	0.19399E 02	0.31983E 01	0.99259E-02	0.36224E-02	0.74141E 00	0.56747E 00	-0.10400E 01	0.22932E 01
46	589.31	0.44861E 02	0.72721E 01	0.23027E-01	0.84036E-02	0.16858E 01	0.12903E 01	0.70000E-02	0.
47	560.88	0.19708E 02	0.31453E 01	0.97473E-02	0.35572E-02	0.72913E 00	0.55807E 00	0.29000E-01	0.
48	562.37	0.19582E 02	0.31399E 01	0.97413E-02	0.35550E-02	0.72787E 00	0.55710E 00	0.51000E-01	0.94812E 00
49	581.06	0.34512E 02	0.55375E 01	0.17424E-01	0.63589E-02	0.12837E 01	0.98251E 00	0.70000E-02	0.16737E 01
50	562.71	0.18348E 02	0.29237E 01	0.90731E-02	0.33112E-02	0.67777E 00	0.51875E 00	0.29000E-01	0.91038E 00
51	564.09	0.19292E 02	0.30667E 01	0.95266E-02	0.34767E-02	0.71091E 00	0.54412E 00	0.51000E-01	0.
52	584.26	0.39369E 02	0.63644E 01	0.20075E-01	0.73262E-02	0.14754E 01	0.11292E 01	-0.86800E 00	0.
53	581.12	0.35716E 02	0.57861E 01	0.18207E-01	0.66446E-02	0.13413E 01	0.10266E 01	-0.91100E 00	0.17766E 01
54	582.82	0.37382E 02	0.60037E 01	0.18916E-01	0.69035E-02	0.13917E 01	0.10652E 01	-0.95300E 00	0.17965E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	560.62	0.14782E 02	0.24341E 01	0.75418E-02	0.27523E-02	0.56426E 00	0.43188E-00	-0.10400E 01	0.30315E 01
56	559.82	0.12419E 02	0.21086E 01	0.65292E-02	0.23828E-02	0.48880E-00	0.37412E-00	-0.10680E 01	0.50325E 01
57	555.98	0.81538E 01	0.13392E 01	-0.41351E-02	0.15091E-02	0.31045E-00	0.23762E-00	-0.10400E 01	0.44656E 01
58	564.01	0.13259E 02	0.23681E 01	0.73561E-02	0.26846E-02	0.54897E 00	0.42017E-00	-0.10680E 01	0.30054E 01
59	552.74	0.89756E 01	0.14716E 01	0.45327E-02	0.16542E-02	0.34113E-00	0.26110E-00	-0.10400E 01	0.11518E 01
60	553.90	0.89231E 01	0.15101E 01	0.46554E-02	0.16990E-02	0.35006E-00	0.26793E-00	-0.10680E 01	0.22901E 01
61	543.19	0.93611E 00	0.15544E-00	0.47543E-03	0.17350E-03	0.36034E-01	0.27580E-01	-0.11220E 01	0.70832E 00
62	542.19	0.53507E 00	0.80924E-01	0.24732E-03	0.90259E-04	0.18759E-01	0.14358E-01	-0.13340E 01	0.36672E-00
63	545.13	0.11797E 01	0.20344E-00	0.62312E-03	0.22741E-03	0.47161E-01	0.36097E-01	-0.11220E 01	0.11470E 01
64	542.94	0.41663E-00	0.63037E-01	0.19276E-03	0.70348E-04	0.14613E-01	0.11185E-01	-0.13340E 01	0.38456E-00
65	541.02	0.51065E 00	0.87857E-01	0.26828E-03	0.97907E-04	0.20367E-01	0.15588E-01	0.14400E 01	0.51514E 00
66	539.50	0.85143E 00	0.13929E-00	0.42486E-03	0.15505E-03	0.32290E-01	0.24714E-01	0.16130E 01	0.87637E 00
67	538.96	0.10862E 01	0.17437E-00	0.53165E-03	0.19402E-03	0.40422E-01	0.30938E-01	0.17200E 01	0.84465E 00
68	539.34	0.66909E 00	0.11029E-00	0.33637E-03	0.12276E-03	0.25568E-01	0.19569E-01	-0.16130E 01	0.78627E 00
69	538.71	0.13797E 01	0.22146E-00	0.67509E-03	0.24637E-03	0.51337E-01	0.39293E-01	-0.18280E 01	0.90729E 00
70	544.49	0.10800E 01	0.15892E-00	0.48652E-03	0.17755E-03	0.36839E-01	0.28196E-01	-0.11650E 01	0.95042E 00
71	543.71	0.71948E 00	0.60516E-01	0.18516E-03	0.67573E-04	0.14029E-01	0.10737E-01	-0.12050E 01	0.13383E 01
72	545.06	0.10265E 01	0.14902E-00	0.45640E-03	0.16656E-03	0.34545E-01	0.26440E-01	-0.12120E 01	0.82318E 00
73	542.40	0.11901E 01	0.17492E-00	0.53467E-03	0.19512E-03	0.40548E-01	0.31035E-01	-0.11650E 01	0.98242E 00
74	542.12	0.57714E 00	0.48501E-01	0.14822E-03	0.54093E-04	0.11243E-01	0.86055E-02	-0.12050E 01	0.14500E 01
75	761.11	-0.37195E-00	-0.60074E-01	-0.21922E-03	-0.80004E-04	-0.13926E-01	-0.10659E-01	-0.12120E 01	0.
76	541.55	0.21314E 01	0.32117E-00	0.98110E-03	0.35805E-03	0.74452E-01	0.56984E-01	0.10840E 01	0.10819E 01
77	540.36	0.84727E 00	0.13697E-00	0.41805E-03	0.15257E-03	0.31752E-01	0.24303E-01	0.11220E 01	0.80784E 00
78	542.05	0.18722E 01	0.27888E-00	0.85225E-03	0.31102E-03	0.64650E-01	0.49482E-01	0.13340E 01	0.15958E 01
79	540.08	0.43117E-00	0.72363E-01	0.22081E-03	0.80585E-04	0.16775E-01	0.12839E-01	-0.11890E 01	0.32542E-00
80	540.76	0.95845E 00	0.14412E-00	0.43998E-03	0.16057E-03	0.33408E-01	0.25570E-01	-0.13340E 01	0.79978E 00
81	539.74	-0.14022E-01	-0.22660E-02	-0.69131E-05	-0.25229E-05	-0.52530E-03	-0.40206E-03	-0.11470E 01	0.
82	538.21	0.16519E-00	0.27670E-01	0.84320E-04	0.30772E-04	0.64144E-02	0.49095E-02	-0.11890E 01	0.11120E-00
83	544.35	0.29881E 01	0.50223E 00	0.15374E-02	0.56106E-03	0.11643E-00	0.89111E-01	-0.10840E 01	0.15019E 01
84	538.65	0.65351E 00	0.95846E-01	0.29216E-03	0.10662E-03	0.22218E-01	0.17006E-01	-0.11890E 01	0.38702E-00
85	539.80	0.80935E 00	0.11878E-00	0.36238E-03	0.13225E-03	0.27535E-01	0.21075E-01	-0.13090E 01	0.56473E 00
86	540.23	0.40468E-00	0.60219E-01	0.18378E-03	0.67069E-04	0.13960E-01	0.10685E-01	-0.13340E 01	0.27082E-00
87	533.61	0.73938E 01	0.10795E 01	0.32784E-02	0.11964E-02	0.25024E-00	0.19153E-00	0.11990E 01	0.48097E 01
88	525.24	0.42130E 01	0.61743E 00	0.18637E-02	0.68015E-03	0.14313E-00	0.10955E-00	0.12070E 01	0.30085E 01
89	522.07	0.35506E 01	0.52827E 00	0.15909E-02	0.58060E-03	0.12246E-00	0.93731E-01	0.13340E 01	0.26570E 01
90	526.70	0.58436E 01	0.82792E 00	0.25017E-02	0.91299E-03	0.19192E-00	0.14690E-00	0.12070E 01	0.40891E 01
91	522.50	0.36519E 01	0.56169E 00	0.16921E-02	0.61751E-03	0.13021E-00	0.99659E-01	0.12490E 01	0.27347E 01
92	521.53	0.35247E 01	0.52688E 00	0.15861E-02	0.57884E-03	0.12214E-00	0.93484E-01	0.13340E 01	0.24796E 01
93	520.77	0.21714E 01	0.36285E-00	0.10917E-02	0.39841E-03	0.84113E-01	0.64379E-01	0.14900E 01	0.16794E 01
94	551.02	0.14483E 01	0.15299E-00	0.47064E-03	0.17176E-03	0.35465E-01	0.27145E-01	-0.	0.
95	557.32	0.93366E 01	0.99683E 00	0.30810E-02	0.11244E-02	0.23108E-00	0.17687E-00	-0.	0.
96	540.78	0.59013E 00	0.61981E-01	0.18923E-03	0.69059E-04	0.14368E-01	0.10997E-01	-0.	0.
97	542.18	0.83741E 00	0.88022E-01	0.26901E-03	0.98175E-04	0.20405E-01	0.15618E-01	-0.	0.
98	543.13	0.98026E 00	0.10383E-00	0.31756E-03	0.11589E-03	0.24070E-01	0.18423E-01	-0.	0.

APOLLO M-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
30	1	12.48	162.48	0.02	-0.	2	C55	2.75	2	10.14	926.00	1819.90	137	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.882208E 02	0.191914E-01	0.466902E 04	0.182514E-04	0.714588E-07	0.120055E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730128E 00	0.431683E 01	0.564188E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	538.80	0.28068E 01	0.45688E-00	0.13905E-02	0.50718E-03	0.10584E-00	0.80980E-01	-0.10600E 01	0.10675E 01
100	538.67	0.14909E 01	0.25002E-00	0.76088E-03	0.27752E-03	0.57918E-01	0.44315E-01	-0.10840E 01	0.11758E 01
101	538.34	0.93299E 00	0.15300E-00	0.46552E-03	0.16979E-03	0.35444E-01	0.27119E-01	-0.11080E 01	0.10408E 01
102	540.89	0.41867E-00	0.68546E-01	0.20895E-03	0.76209E-04	0.15879E-01	0.12150E-01	-0.11080E 01	0.40388E-00
103	538.48	0.17221E 01	0.28876E-00	0.87864E-03	0.32047E-03	0.66891E-01	0.51181E-01	-0.10800E 01	0.10977E 01
104	587.97	0.35980E 02	0.58505E 01	0.18475E-01	0.67383E-02	0.13553E 01	0.10370E 01	0.85000E 00	0.
105	596.24	0.40665E 02	0.62829E 01	0.19966E-01	0.72824E-02	0.14554E 01	0.11136E 01	0.94000E 00	0.96645E 00
106	598.62	0.41478E 02	0.63629E 01	0.20258E-01	0.73887E-02	0.14740E 01	0.11278E 01	0.96000E 00	0.96504E 00
107	592.13	0.38791E 02	0.59298E 01	0.18785E-01	0.68515E-02	0.13737E 01	0.10510E 01	0.98000E 00	0.96941E 00
108	587.80	0.34843E 02	0.53409E 01	0.16863E-01	0.61506E-02	0.12372E 01	0.94665E 00	0.10000E 01	0.97005E 00
109	575.29	0.26321E 02	0.40207E 01	0.12575E-01	0.45864E-02	0.93140E 00	0.71265E 00	0.10200E 01	0.94814E 00
110	598.76	0.39553E 02	0.61195E 01	0.19485E-01	0.71067E-02	0.14176E 01	0.10846E 01	0.80000E-01	0.98719E 00
111	595.60	0.40381E 02	0.61845E 01	0.19644E-01	0.71648E-02	0.14326E 01	0.10962E 01	0.10000E-00	0.97184E 00
112	603.16	0.41072E 02	0.63481E 01	0.20282E-01	0.73973E-02	0.14705E 01	0.11252E 01	0.12000E-00	0.96201E 00
113	595.39	0.39336E 02	0.60748E 01	0.19293E-01	0.70366E-02	0.14072E 01	0.10767E 01	0.14000E-00	0.95797E 00
114	591.92	0.38619E 02	0.59530E 01	0.18855E-01	0.68771E-02	0.13790E 01	0.10551E 01	0.80000E-01	0.
115	593.66	0.39123E 02	0.60159E 01	0.19080E-01	0.69591E-02	0.13936E 01	0.10663E 01	0.10000E-00	0.96982E 00
116	595.31	0.40103E 02	0.62138E 01	0.19733E-01	0.71972E-02	0.14394E 01	0.11014E 01	0.12000E-00	0.97273E 00
117	602.76	0.41200E 02	0.63880E 01	0.20403E-01	0.74416E-02	0.14798E 01	0.11323E 01	0.14000E-00	0.99384E 00
118	594.21	0.37485E 02	0.58339E 01	0.18511E-01	0.67514E-02	0.13514E 01	0.10340E 01	0.10000E-00	0.97425E 00
119	594.51	0.37861E 02	0.58639E 01	0.18610E-01	0.67877E-02	0.13584E 01	0.10394E 01	0.15000E-00	0.92397E 00
120	596.01	0.38811E 02	0.60260E 01	0.19147E-01	0.69834E-02	0.13959E 01	0.10681E 01	0.20000E-00	0.11433E 01
121	596.20	0.39037E 02	0.60820E 01	0.19327E-01	0.70493E-02	0.14089E 01	0.10780E 01	0.25000E-00	0.99369E 00
122	591.59	0.37328E 02	0.58012E 01	0.18370E-01	0.67001E-02	0.13439E 01	0.10282E 01	0.30000E-00	0.99235E 00
123	586.66	0.36340E 02	0.56608E 01	0.17858E-01	0.65134E-02	0.13113E 01	0.10034E 01	0.35000E-00	0.93918E 00
124	591.65	0.39173E 02	0.61592E 01	0.19504E-01	0.71138E-02	0.14268E 01	0.10917E 01	0.38000E-00	0.10125E 01
125	594.45	0.40126E 02	0.63706E 01	0.20217E-01	0.73739E-02	0.14758E 01	0.11292E 01	0.45000E-00	0.10006E 01
126	590.41	0.37929E 02	0.60873E 01	0.19258E-01	0.70241E-02	0.14101E 01	0.10789E 01	0.61000E 00	0.10103E 01
127	560.69	0.19078E 02	0.30270E 01	0.93637E-02	0.34152E-02	0.70121E 00	0.53653E 00	0.70000E 00	0.98410E 00
128	548.04	0.81584E 01	0.12895E 01	0.39516E-02	0.14413E-02	0.29872E-00	0.22856E-00	0.75000E 00	0.97556E 00
129	597.94	0.46686E 02	0.75838E 01	0.24132E-01	0.88017E-02	0.17568E 01	0.13442E 01	0.70000E 00	0.14624E 01
130	595.47	0.47220E 02	0.76604E 01	0.24330E-01	0.88738E-02	0.17746E 01	0.13578E 01	0.80000E 00	0.14268E 01
131	554.28	0.14024E 02	0.21104E 01	0.64973E-02	0.23698E-02	0.48889E-00	0.37407E-00	0.90000E 00	0.10554E 01
132	575.12	0.30588E 02	0.46721E 01	0.14610E-01	0.53288E-02	0.10823E 01	0.82811E 00	0.90000E 00	0.97962E 00
133	576.49	0.31898E 02	0.48512E 01	0.15186E-01	0.55388E-02	0.11238E 01	0.85985E 00	0.96000E 00	0.98488E 00
134	575.84	0.30584E 02	0.46576E 01	0.14573E-01	0.53151E-02	0.10789E 01	0.82554E 00	0.10000E 01	0.98538E 00
135	562.53	0.22739E 02	0.35942E 01	0.11133E-01	0.40607E-02	0.83260E 00	0.63706E 00	0.70000E-02	0.
136	919.71	0.10383E-01	0.19190E-02	0.81429E-05	0.29700E-05	0.44453E-03	0.34013E-03	0.70000E-02	0.
137	561.09	0.23014E 02	0.36230E 01	0.11211E-01	0.40889E-02	0.83928E 00	0.64217E 00	0.39000E-01	0.10101E 01
138	559.84	0.22665E 02	0.35484E 01	0.10969E-01	0.40009E-02	0.82199E 00	0.62893E 00	0.78000E-01	0.
139	559.21	0.22572E 02	0.35153E 01	0.10862E-01	0.39617E-02	0.81432E 00	0.62307E 00	0.11700E-00	0.
140	559.92	0.22845E 02	0.35475E 01	0.10967E-01	0.40002E-02	0.82179E 00	0.62878E 00	0.78000E-01	0.10090E 01
141	667.73	0.11227E 03	0.12713E 02	0.42758E-01	0.15595E-01	0.29450E 01	0.22533E 01	-0.	0.
142	624.11	0.50924E 02	0.56371E 01	0.18307E-01	0.66771E-02	0.13058E 01	0.99915E 00	-0.	0.
143	558.10	0.21214E 02	0.32747E 01	0.10110E-01	0.36875E-02	0.75859E 00	0.58043E 00	0.78000E-01	0.10086E 01
144	559.54	0.21288E 02	0.32943E 01	0.10162E-01	0.37136E-02	0.76313E 00	0.58390E 00	0.70000E-02	0.91937E 00
145	560.42	0.21255E 02	0.32745E 01	0.10127E-01	0.36937E-02	0.75855E 00	0.58039E 00	0.70000E-02	0.98363E 00
146	558.69	0.21324E 02	0.32982E 01	0.10187E-01	0.37156E-02	0.76404E 00	0.58460E 00	0.39000E-01	0.96326E 00
147	560.38	0.21706E 02	0.33550E 01	0.10376E-01	0.37844E-02	0.77720E 00	0.59467E 00	0.78000E-01	0.
148	558.91	0.21259E 02	0.33103E 01	0.10226E-01	0.37298E-02	0.76683E 00	0.58673E 00	0.11700E-00	0.
149	584.94	0.32289E 02	0.52668E 01	0.16593E-01	0.60520E-02	0.12201E 01	0.93351E 00	0.70000E-02	0.95141E 00
150	584.99	0.32201E 02	0.52774E 01	0.16627E-01	0.60644E-02	0.12225E 01	0.93539E 00	0.70000E-02	0.94718E 00
151	583.91	0.31596E 02	0.51752E 01	0.16292E-01	0.59421E-02	0.11988E 01	0.91729E 00	0.70000E-02	0.95134E 00
152	591.10	0.35144E 02	0.55696E 01	0.17630E-01	0.64302E-02	0.12902E 01	0.98718E 00	0.39000E-01	0.96335E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	590.36	0.35199E 02	0.55761E 01	0.17640E-01	0.64340E-02	0.12917E 01	0.98834E 00	0.39000E-01	0.
154	590.00	0.35572E 02	0.55973E 01	0.17703E-01	0.64567E-02	0.12966E 01	0.99210E 00	0.78000E-01	0.98112E 00
155	588.29	0.33823E 02	0.55533E 01	0.17540E-01	0.63975E-02	0.12864E 01	0.98429E 00	0.39000E-01	0.
156	583.42	0.31566E 02	0.51527E 01	0.16215E-01	0.59141E-02	0.11936E 01	0.91330E 00	0.39000E-01	0.
157	582.06	0.30121E 02	0.49286E 01	0.15494E-01	0.56510E-02	0.11417E 01	0.87358E 00	0.78000E-01	0.96615E 00
158	579.86	0.31428E 02	0.51525E 01	0.16170E-01	0.58978E-02	0.11936E 01	0.91326E 00	0.39000E-01	0.
159	578.35	0.30830E 02	0.50504E 01	0.15832E-01	0.57743E-02	0.11699E 01	0.89516E 00	0.78000E-01	0.
160	583.42	0.31514E 02	0.51605E 01	0.16239E-01	0.59230E-02	0.11954E 01	0.91468E 00	0.39000E-01	0.
161	575.75	0.27055E 02	0.43075E 01	0.13476E-01	0.49153E-02	0.99784E 00	0.76349E 00	0.43000E-01	0.95523E 00
162	577.50	0.27030E 02	0.43216E 01	0.13539E-01	0.49379E-02	0.10011E 01	0.76599E 00	0.43000E-01	0.95055E 00
163	577.12	0.27980E 02	0.44797E 01	0.14030E-01	0.51171E-02	0.10377E 01	0.79401E 00	0.85000E-01	0.97627E 00
164	576.18	0.28027E 02	0.44634E 01	0.13969E-01	0.50948E-02	0.10339E 01	0.79111E 00	0.12800E-00	0.97263E 00
165	576.15	0.27894E 02	0.44564E 01	0.13946E-01	0.50867E-02	0.10323E 01	0.78987E 00	0.43000E-01	0.
166	574.92	0.28133E 02	0.44772E 01	0.13999E-01	0.51057E-02	0.10371E 01	0.79356E 00	0.85000E-01	0.97596E 00
167	577.60	0.30627E 02	0.48811E 01	0.15292E-01	0.55776E-02	0.11307E 01	0.86516E 00	0.43000E-01	0.
168	577.92	0.28879E 02	0.46554E 01	0.14589E-01	0.53210E-02	0.10784E 01	0.82515E 00	0.12800E-00	0.15251E 01
169	579.23	0.28387E 02	0.45648E 01	0.14319E-01	0.52226E-02	0.10574E 01	0.80909E 00	0.85000E-01	0.97037E 00
170	580.29	0.29429E 02	0.47123E 01	0.14794E-01	0.53958E-02	0.10916E 01	0.83524E 00	0.12800E-00	0.96925E 00
171	577.42	0.30012E 02	0.47828E 01	0.14983E-01	0.54646E-02	0.11079E 01	0.84774E 00	0.85000E-01	0.10014E 01
172	616.56	0.58801E 02	0.96166E 01	0.31047E-01	0.11324E-01	0.22277E 01	0.17045E 01	0.43000E-01	0.
173	586.58	0.35260E 02	0.56927E 01	0.17958E-01	0.65497E-02	0.13187E 01	0.10090E 01	0.12800E-00	0.11303E 01
174	593.23	0.44382E 02	0.71567E 01	0.22691E-01	0.82760E-02	0.16579E 01	0.12685E 01	0.85000E-01	0.
175	634.36	0.63318E 02	0.10403E 02	0.34059E-01	0.12422E-01	0.24098E 01	0.18438E 01	0.43000E-01	0.21014E 01
176	628.12	0.59851E 02	0.98009E 01	0.31930E-01	0.11646E-01	0.22704E 01	0.17372E 01	0.43000E-01	0.19796E 01
177	602.62	0.47966E 02	0.77863E 01	0.24866E-01	0.90695E-02	0.18037E 01	0.13801E 01	0.12800E-00	0.15008E 01
178	611.13	0.53797E 02	0.87587E 01	0.28157E-01	0.10270E-01	0.20290E 01	0.15524E 01	0.85000E-01	0.17300E 01
179	611.12	0.48437E 02	0.78860E 01	0.25351E-01	0.92464E-02	0.18268E 01	0.13978E 01	0.70000E-02	0.15970E 01
180	583.34	0.32097E 02	0.51730E 01	0.16278E-01	0.59370E-02	0.11983E 01	0.91689E 00	0.70000E-02	0.
181	576.18	0.26183E 02	0.42034E 01	0.13155E-01	0.47980E-02	0.97372E 00	0.74504E 00	0.70000E-02	0.88283E 00
182	579.53	0.28655E 02	0.46233E 01	0.14506E-01	0.52907E-02	0.10710E 01	0.81946E 00	0.70000E-02	0.
183	598.23	0.40825E 02	0.66116E 01	0.21043E-01	0.76751E-02	0.15316E 01	0.11719E 01	0.32000E-01	0.13059E 01
184	594.05	0.35311E 02	0.57424E 01	0.18218E-01	0.66446E-02	0.13302E 01	0.10178E 01	0.32000E-01	0.10133E 01
185	577.64	0.29770E 02	0.47984E 01	0.15034E-01	0.54832E-02	0.11115E 01	0.85049E 00	0.64000E-01	0.10265E 01
186	586.61	0.33280E 02	0.53732E 01	0.16950E-01	0.61821E-02	0.12447E 01	0.95238E 00	0.64000E-01	0.94662E 00
187	585.82	0.31042E 02	0.50256E 01	0.15844E-01	0.57787E-02	0.11642E 01	0.89077E 00	0.70000E-02	0.95209E 00
188	600.34	0.41197E 02	0.68296E 01	0.21772E-01	0.79411E-02	0.15821E 01	0.12105E 01	0.70000E-02	0.13283E 01
189	544.59	0.63818E 01	0.10470E 01	0.32003E-02	0.11673E-02	0.24255E-00	0.18558E-00	0.10600E 01	0.10046E 01
190	542.31	0.36779E 01	0.61470E 00	0.18757E-02	0.68414E-03	0.14240E-00	0.10895E-00	0.10840E 01	0.10307E 01
191	540.88	0.17371E 01	0.29167E-00	0.88909E-03	0.32428E-03	0.67567E-01	0.51698E-01	0.11080E 01	0.99563E 00
192	540.62	0.20961E 01	0.34999E-00	0.10667E-02	0.38904E-03	0.81077E-01	0.62035E-01	0.11080E 01	0.10515E 01
193	542.59	0.84364E 00	0.13889E-00	0.42391E-03	0.15461E-03	0.32175E-01	0.24618E-01	0.16580E 01	0.90713E 00
194	542.36	0.84000E 00	0.13764E-00	0.42002E-03	0.15320E-03	0.31885E-01	0.24397E-01	0.11700E 01	0.89586E 00
195	542.87	0.86650E 00	0.14268E-00	0.43556E-03	0.15886E-03	0.33052E-01	0.25289E-01	0.16740E 01	0.82546E 00
196	543.31	0.76831E 00	0.12596E-00	0.38465E-03	0.14029E-03	0.29179E-01	0.22326E-01	0.16950E 01	0.80962E 00

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
35	1	12.46	162.46	0.02	-0.	3	C55	2.65 2	10.14	923.80	1821.30	127	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.882957E 02	0.191431E-01	0.467092E 04	0.181900E-04	0.715195E-07	0.119598E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730171E 00	0.431135E 01	0.563142E 01

T/C	TEMP.	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	570.03	0.27122E 02	0.42699E 01	0.13285E-01	0.48598E-02	0.99039E 00	0.75823E 00	0.10000E 01	0.98950E 00
198	572.57	0.28139E 02	0.42920E 01	0.13379E-01	0.48942E-02	0.99551E 00	0.76215E 00	0.12000E 01	0.99090E 00
199	549.45	0.13764E 02	0.21841E 01	0.66919E-02	0.24480E-02	0.50660E 00	0.38785E-00	0.13000E 01	0.99731E 00
200	524.22	0.87688E 00	0.12690E-00	0.38170E-03	0.13963E-03	0.29435E-01	0.22535E-01	0.11890E 01	0.14473E 01
201	528.10	0.12987E 01	0.21370E-00	0.64457E-03	0.23579E-03	0.49567E-01	0.37948E-01	0.14540E 01	0.11683E 01
202	527.82	0.12348E 01	0.20161E-00	0.60798E-03	0.22241E-03	0.46762E-01	0.35801E-01	0.17040E 01	0.11009E 01
203	534.45	0.12930E 01	0.21190E-00	0.64211E-03	0.23489E-03	0.49149E-01	0.37628E-01	0.20410E 01	0.12898E 01
204	534.78	0.13018E 01	0.99145E-01	0.30051E-03	0.10993E-03	0.22996E-01	0.17606E-01	0.20700E 01	0.
205	537.79	0.30249E 01	0.26363E-00	0.80081E-03	0.29295E-03	0.61147E-01	0.46813E-01	0.21880E 01	0.31748E 02
206	536.40	0.20878E 01	0.34253E-00	0.10394E-02	0.38024E-03	0.79449E-01	0.60825E-01	0.22480E 01	0.12103E 01
207	534.80	0.14057E 01	0.22654E-00	0.68665E-03	0.25119E-03	0.52545E-01	0.40228E-01	0.20700E 01	0.11097E 01
208	534.19	0.11751E 01	0.10421E-00	0.31571E-03	0.11549E-03	0.24170E-01	0.18504E-01	0.20700E 01	0.33009E 01
209	537.54	0.27216E 01	0.21895E-00	0.66499E-03	0.24326E-03	0.50785E-01	0.38881E-01	0.21880E 01	0.56306E 01
210	533.94	0.10982E 01	0.18130E-00	0.54918E-03	0.20090E-03	0.42052E-01	0.32195E-01	0.20700E 01	0.11664E 01
211	535.34	0.17236E 01	0.28478E-00	0.86353E-03	0.31589E-03	0.66055E-01	0.50571E-01	0.21880E 01	0.13829E 01
212	534.66	0.13860E 01	0.22612E-00	0.68532E-03	0.25070E-03	0.52448E-01	0.40154E-01	0.22390E 01	0.85415E 00
213	533.09	0.12852E 01	0.20950E-00	0.63419E-03	0.23200E-03	0.48592E-01	0.37201E-01	0.21880E 01	0.94891E 00
214	534.21	0.12971E 01	0.21418E-00	0.64891E-03	0.23738E-03	0.49678E-01	0.38033E-01	0.22480E 01	0.95098E 00
215	532.54	0.15268E 01	0.22851E-00	0.69147E-03	0.25295E-03	0.53001E-01	0.40577E-01	0.11650E 01	0.13837E 01
216	532.46	0.11423E 01	0.95477E-01	0.28890E-03	0.10568E-03	0.22146E-01	0.16954E-01	0.12050E 01	0.
217	533.40	0.18379E 01	0.26738E-00	0.80960E-03	0.29616E-03	0.62017E-01	0.47479E-01	0.12120E 01	0.11965E 01
218	533.53	0.19579E 01	0.28633E-00	0.86706E-03	0.31718E-03	0.66413E-01	0.50845E-01	0.11890E 01	0.12423E 01
219	532.54	0.15855E 01	0.26496E-00	0.80177E-03	0.29330E-03	0.61456E-01	0.47050E-01	0.14540E 01	0.11128E 01
220	532.13	0.16629E 01	0.28842E-00	0.87250E-03	0.31917E-03	0.66897E-01	0.51215E-01	0.17040E 01	0.11786E 01
221	532.41	0.15569E 01	0.25876E-00	0.78294E-03	0.28641E-03	0.60018E-01	0.45949E-01	0.20410E 01	0.12290E 01
222	535.04	0.15449E 01	0.25987E-00	0.78781E-03	0.28819E-03	0.60276E-01	0.46146E-01	0.22480E 01	0.14030E 01
223	533.61	0.15345E 01	0.22981E-00	0.69596E-03	0.25459E-03	0.53304E-01	0.40809E-01	0.11650E 01	0.13828E 01
224	532.84	0.85507E 00	0.71482E-01	0.21635E-03	0.79145E-04	0.16580E-01	0.12693E-01	0.12050E 01	0.17885E 01
225	534.06	0.19132E 01	0.27844E-00	0.84350E-03	0.30856E-03	0.64583E-01	0.49444E-01	0.12120E 01	0.13150E 01
226	536.19	0.10790E 01	0.18134E-00	0.55020E-03	0.20127E-03	0.42060E-01	0.32201E-01	0.14540E 01	0.75672E 00
227	535.81	0.16270E 01	0.26235E-00	0.79579E-03	0.29111E-03	0.60852E-01	0.46587E-01	0.17040E 01	0.95310E 00
228	535.37	0.15548E 01	0.25572E-00	0.77542E-03	0.28366E-03	0.59313E-01	0.45410E-01	0.18780E 01	0.90694E 00
229	536.24	0.21678E 01	0.35835E-00	0.10873E-02	0.39775E-03	0.83118E-01	0.63634E-01	0.21880E 01	0.11033E 01
230	537.39	0.19761E 01	0.29160E-00	0.88554E-03	0.32394E-03	0.67636E-01	0.51782E-01	0.11890E 01	0.11863E 01
231	536.67	0.80312E 00	0.14208E-00	0.43123E-03	0.15775E-03	0.32954E-01	0.25229E-01	0.14540E 01	0.60411E 00
232	536.88	0.15361E 01	0.25093E-00	0.76174E-03	0.27865E-03	0.58202E-01	0.44559E-01	0.16130E 01	0.96201E 00
233	536.87	0.13761E 01	0.22652E-00	0.68764E-03	0.25155E-03	0.52541E-01	0.40225E-01	0.17040E 01	0.79523E 00
234	536.29	0.18899E 01	0.31242E-00	0.94798E-03	0.34678E-03	0.72464E-01	0.55477E-01	0.18780E 01	0.10174E 01
235	538.82	0.11714E 01	0.19363E-00	0.58864E-03	0.21533E-03	0.44912E-01	0.34384E-01	0.14540E 01	0.84389E 00
236	537.28	0.15995E 01	0.26134E-00	0.79358E-03	0.29030E-03	0.60618E-01	0.46408E-01	0.17040E 01	0.90989E 00
237	538.29	0.25974E 01	0.42986E-00	0.13063E-02	0.47785E-03	0.99705E-01	0.76333E-01	0.21880E 01	0.12353E 01
238	541.11	0.48083E 01	0.42807E-00	0.13035E-02	0.47684E-03	0.99289E-01	0.76014E-01	0.20700E 01	0.60531E 01
239	540.05	0.19444E 01	0.28393E-00	0.86393E-03	0.31604E-03	0.65857E-01	0.50419E-01	0.11890E 01	0.12285E 01
240	540.89	0.12410E 01	0.20838E-00	0.63443E-03	0.23208E-03	0.48332E-01	0.37003E-01	0.14540E 01	0.92725E 00
241	538.38	0.16556E 01	0.27193E-00	0.82639E-03	0.30230E-03	0.63072E-01	0.48288E-01	0.17040E 01	0.10138E 01
242	538.09	0.19886E 01	0.32907E-00	0.99982E-03	0.36575E-03	0.76326E-01	0.58434E-01	0.18780E 01	0.99882E 00
243	541.01	0.55709E 01	0.92338E 00	0.28116E-02	0.10285E-02	0.21417E-00	0.16397E-00	0.20410E 01	0.26969E 01
244	539.87	0.29719E 01	0.26814E-00	0.81576E-03	0.29842E-03	0.62194E-01	0.47615E-01	0.20700E 01	0.
245	540.45	0.28151E 01	0.23039E-00	0.70122E-03	0.25651E-03	0.53438E-01	0.40912E-01	0.21870E 01	0.15183E 01
246	539.22	0.27039E 01	0.45589E-00	0.13863E-02	0.50713E-03	0.10574E-00	0.80954E-01	0.22100E 01	0.11908E 01
247	541.34	0.11065E 01	0.18121E-00	0.55188E-03	0.20188E-03	0.42030E-01	0.32178E-01	0.14540E 01	0.96780E 00
248	538.55	0.20919E 01	0.34626E-00	0.10524E-02	0.38499E-03	0.80315E-01	0.61488E-01	0.17040E 01	0.14754E 01
249	539.12	0.16842E 01	0.14129E-00	0.42962E-03	0.15716E-03	0.32772E-01	0.25090E-01	0.18780E 01	0.73531E 01
250	539.71	0.28421E 01	0.23251E-00	0.70727E-03	0.25873E-03	0.53929E-01	0.41287E-01	0.21880E 01	0.63179E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	541.61	0.10052E 01	0.16971E-00	0.51697E-03	0.18911E-03	0.39363E-01	0.30136E-01	0.14540E 01	0.99618E 00
252	539.57	0.14566E 01	0.24439E-00	0.74336E-03	0.27193E-03	0.56686E-01	0.43398E-01	0.16130E 01	0.11742E 01
253	543.38	0.45694E 01	0.40339E-00	0.12304E-02	0.45011E-03	0.93566E-01	0.71633E-01	0.17060E 01	-0.56024E 02
254	539.46	0.30904E 01	0.51179E 00	0.15566E-02	0.56941E-03	0.11871E-00	0.90881E-01	0.21880E 01	0.
255	540.81	0.23449E 01	0.21652E-00	0.65919E-03	0.24114E-03	0.50222E-01	0.38449E-01	0.16580E 01	0.43805E 01
256	539.39	0.15044E 01	0.12623E-00	0.38390E-03	0.14044E-03	0.29279E-01	0.22416E-01	0.17920E 01	0.40082E 01
257	540.76	0.15507E 01	0.26089E-00	0.79424E-03	0.29054E-03	0.60513E-01	0.46328E-01	0.10840E 01	0.10105E 01
258	541.40	0.90494E 00	0.15390E-00	0.46875E-03	0.17147E-03	0.35697E-01	0.27329E-01	0.14540E 01	0.97516E 00
259	539.83	0.10405E 01	0.17235E-00	0.52434E-03	0.19181E-03	0.39976E-01	0.30605E-01	0.16130E 01	0.10017E 01
260	540.51	0.18883E 01	0.30815E-00	0.93791E-03	0.34310E-03	0.71473E-01	0.54719E-01	0.17040E 01	0.16636E 01
261	539.55	0.18977E 01	0.31285E-00	0.95156E-03	0.34809E-03	0.72564E-01	0.55554E-01	0.18780E 01	0.11399E 01
262	539.43	0.25335E 01	0.42721E-00	0.12993E-02	0.47529E-03	0.99089E-01	0.75862E-01	0.20410E 01	0.99578E 00
263	573.65	0.10132E 02	0.17465E 01	0.54488E-02	0.19933E-02	0.40510E-00	0.31014E-00	0.14540E 01	0.
264	540.26	0.45041E-00	0.74284E-01	0.22606E-03	0.82695E-04	0.17230E-01	0.13191E-01	0.16130E 01	0.
265	540.12	0.12306E 01	0.19892E-00	0.60530E-03	0.22142E-03	0.46139E-01	0.35324E-01	0.17040E 01	0.97548E 00
266	539.50	0.16203E 01	0.26711E-00	0.81241E-03	0.29719E-03	0.61955E-01	0.47432E-01	0.18780E 01	0.90629E 00
267	539.84	0.24400E 01	0.41031E-00	0.12483E-02	0.45663E-03	0.95169E-01	0.72860E-01	0.20410E 01	0.95284E 00
268	540.88	0.61299E 00	0.10113E-00	0.30790E-03	0.11264E-03	0.23457E-01	0.17959E-01	0.16130E 01	0.73635E 00
269	539.96	0.14971E 01	0.24198E-00	0.73621E-03	0.26932E-03	0.56125E-01	0.42969E-01	0.18280E 01	0.91224E 00
270	540.27	0.17179E 01	0.28203E-00	0.85828E-03	0.31397E-03	0.65416E-01	0.50082E-01	0.18780E 01	0.96928E 00
271	540.20	0.23969E 01	0.40230E-00	0.12242E-02	0.44783E-03	0.93311E-01	0.71438E-01	0.20410E 01	0.93365E 00
272	539.60	0.46805E-00	0.79168E-01	0.24081E-03	0.88091E-04	0.18363E-01	0.14058E-01	0.16130E 01	0.58058E 00
273	540.40	0.95948E 00	0.15946E-00	0.48533E-03	0.17754E-03	0.36987E-01	0.28317E-01	0.17200E 01	0.88202E 00
274	539.49	0.10852E 01	0.17480E-00	0.53166E-03	0.19449E-03	0.40545E-01	0.31041E-01	0.18280E 01	0.70004E 00
275	540.31	0.16587E 01	0.27273E-00	0.83001E-03	0.30363E-03	0.63260E-01	0.48431E-01	0.18780E 01	0.93961E 00
276	919.71	0.98644E-02	0.19955E-02	0.84537E-05	0.30925E-05	0.46286E-03	0.35436E-03	0.20600E 01	0.
277	539.82	0.16935E 01	0.14213E-00	0.43240E-03	0.15818E-03	0.32967E-01	0.25239E-01	0.21000E 01	0.14529E 01
278	658.65	0.52424E 02	0.46903E 01	0.15638E-01	0.57205E-02	0.10879E 01	0.83288E 00	0.21870E 01	0.
279	541.77	0.30582E 01	0.51636E 00	0.15731E-02	0.57547E-03	0.11977E-00	0.91693E-01	0.21950E 01	0.97884E 00
280	540.14	0.15678E 01	0.26171E-00	0.79637E-03	0.29132E-03	0.60703E-01	0.46473E-01	0.18780E 01	0.91699E 00
281	540.57	0.21953E 01	0.37042E-00	0.11275E-02	0.41246E-03	0.85918E-01	0.65778E-01	0.20600E 01	0.88994E 00
282	540.02	0.14384E 01	0.23431E-00	0.71291E-03	0.26079E-03	0.54346E-01	0.41607E-01	0.18280E 01	0.84683E 00
283	539.81	0.22462E 01	0.37693E-00	0.11467E-02	0.41947E-03	0.87427E-01	0.66933E-01	0.20600E 01	0.85015E 00
284	540.18	0.16987E 01	0.27459E-00	0.83558E-03	0.30566E-03	0.63689E-01	0.48760E-01	0.17200E 01	0.14079E 01
285	540.54	0.17652E 01	0.29028E-00	0.88357E-03	0.32322E-03	0.67330E-01	0.51547E-01	0.18780E 01	0.10674E 01
286	540.97	0.19803E 01	0.18287E-00	0.55679E-03	0.20368E-03	0.42415E-01	0.32473E-01	0.16580E 01	0.31778E 01
287	919.71	0.98644E-02	0.99807E-03	0.42281E-05	0.15467E-05	0.23150E-03	0.17723E-03	0.17920E 01	0.
288	539.52	0.16587E 01	0.27261E-00	0.82917E-03	0.30332E-03	0.63232E-01	0.48409E-01	0.16130E 01	0.12267E 01
289	542.27	0.34571E 01	0.29055E-00	0.88550E-03	0.32393E-03	0.67392E-01	0.51594E-01	0.17060E 01	0.
290	539.35	0.16369E 01	0.13734E-00	0.41769E-03	0.15279E-03	0.31856E-01	0.24389E-01	0.18780E 01	0.36982E 01
291	538.85	0.21242E 01	0.34738E-00	0.10560E-02	0.38631E-03	0.80573E-01	0.61686E-01	0.17200E 01	0.16030E 01
292	540.76	0.14265E 01	0.24539E-00	0.74705E-03	0.27328E-03	0.56918E-01	0.43575E-01	0.14400E 01	0.11540E 01
293	538.02	0.15273E 01	0.24658E-00	0.74915E-03	0.27405E-03	0.57192E-01	0.43786E-01	0.17200E 01	0.89532E 00
294	539.77	0.16036E 01	0.26521E-00	0.80681E-03	0.29514E-03	0.61515E-01	0.47096E-01	0.18780E 01	0.82014E 00

APOLLO M-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
36	1	-6.62	143.38	0.02	-0.	1	C55	2.70	2	10.19	1836.80	1883.10	107	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.911520E 02	0.376207E-01	0.476513E 04	0.346277E-04	0.738331E-07	0.224989E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731789E 00	0.620073E 01	0.920625E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	577.00	0.41958E 02	0.55744E 01	0.16501E-01	0.31083E-02	0.89899E 00	0.60550E 00	-0.	0.10006E 01
2	577.71	0.39804E 02	0.56279E 01	0.16668E-01	0.31397E-02	0.90762E 00	0.61132E 00	-0.30000E-01	0.
3	569.71	0.37127E 02	0.56826E 01	0.16734E-01	0.31522E-02	0.91645E 00	0.61726E 00	-0.60000E-01	0.10035E 01
4	571.17	0.35723E 02	0.56130E 01	0.16547E-01	0.31168E-02	0.90522E 00	0.60970E 00	-0.90000E-01	0.
5	565.19	0.32155E 02	0.51638E 01	0.15158E-01	0.28552E-02	0.83278E 00	0.56090E 00	-0.20000E-00	0.10201E 01
6	563.00	0.27722E 02	0.44465E 01	0.13032E-01	0.24547E-02	0.71709E 00	0.48299E-00	-0.40000E-00	0.10063E 01
7	560.07	0.24206E 02	0.38948E 01	0.11392E-01	0.21457E-02	0.62813E 00	0.42306E-00	-0.60000E 00	0.10284E 01
8	557.22	0.19953E 02	0.32054E 01	0.93561E-02	0.17623E-02	0.51693E 00	0.34817E-00	-0.80000E 00	0.
9	558.11	0.21432E 02	0.33902E 01	0.99020E-02	0.18652E-02	0.54675E 00	0.36826E-00	-0.90000E 00	0.10617E 01
10	556.70	0.18041E 02	0.28883E 01	0.84274E-02	0.15874E-02	0.46579E-00	0.31373E-00	-0.98000E 00	0.10646E 01
11	535.91	0.42701E-00	0.73257E-01	0.21066E-03	0.39682E-04	0.11814E-01	0.79573E-02	-0.11220E 01	0.54792E 00
12	537.93	0.80416E 00	0.11769E-00	0.33892E-03	0.63840E-04	0.18980E-01	0.12784E-01	-0.11890E 01	0.75249E 00
13	538.52	0.62078E 00	0.93694E-01	0.26992E-03	0.50844E-04	0.15110E-01	0.10177E-01	-0.13340E 01	0.70579E 00
14	538.73	0.59688E 00	0.10256E-00	0.29551E-03	0.55664E-04	0.16540E-01	0.11140E-01	-0.14400E 01	0.85939E 00
15	576.20	0.41553E 02	0.58703E 01	0.17367E-01	0.32714E-02	0.94672E 00	0.63765E 00	0.30000E-01	0.
16	572.06	0.39217E 02	0.60102E 01	0.17729E-01	0.33394E-02	0.96927E 00	0.65284E 00	0.60000E-01	0.
17	571.87	0.39455E 02	0.62018E 01	0.18292E-01	0.34455E-02	0.10002E 01	0.67365E 00	0.90000E-01	0.10133E 01
18	573.32	0.40515E 02	0.65355E 01	0.19296E-01	0.36346E-02	0.10540E 01	0.70990E 00	0.20000E-00	0.10124E 01
19	587.04	0.46501E 02	0.75574E 01	0.22534E-01	0.42445E-02	0.12188E 01	0.82090E 00	0.40000E-00	0.10137E 01
20	601.13	0.51960E 02	0.85498E 01	0.25754E-01	0.48512E-02	0.13788E 01	0.92869E 00	0.60000E 00	0.
21	657.22	0.77762E 02	0.12407E 02	0.38970E-01	0.73406E-02	0.20009E 01	0.13477E 01	0.92000E 00	0.99647E 00
22	638.11	0.74896E 02	0.11832E 02	0.36630E-01	0.68998E-02	0.19081E 01	0.12852E 01	0.10400E 01	0.97616E 00
23	628.46	0.69962E 02	0.11026E 02	0.33890E-01	0.63837E-02	0.17782E 01	0.11977E 01	0.10600E 01	0.96635E 00
24	599.77	0.52844E 02	0.85926E 01	0.25858E-01	0.48707E-02	0.13857E 01	0.93334E 00	0.10840E 01	0.96150E 00
25	549.34	0.23824E 02	0.35272E 01	0.10239E-01	0.19286E-02	0.56884E 00	0.38313E-00	0.12070E 01	0.20704E 01
26	553.53	0.26896E 02	0.42096E 01	0.12256E-01	0.23085E-02	0.67889E 00	0.45726E-00	0.12490E 01	0.26343E 01
27	549.18	0.24078E 02	0.36985E 01	0.10735E-01	0.20220E-02	0.59646E 00	0.40174E-00	0.13340E 01	0.24055E 01
28	539.28	0.16590E 02	0.28181E 01	0.81231E-02	0.15301E-02	0.45448E-00	0.30611E-00	0.14540E 01	0.21608E 01
29	534.14	0.10326E 02	0.16972E 01	0.48747E-02	0.91821E-03	0.27371E-00	0.18435E-00	0.16580E 01	0.15125E 01
30	539.46	0.10163E 02	0.16958E 01	0.48886E-02	0.92083E-03	0.27348E-00	0.18420E-00	0.20410E 01	0.17811E 01
31	542.00	0.86649E 01	0.14479E 01	0.41815E-02	0.78764E-03	0.23351E-00	0.15728E-00	0.22480E 01	0.16310E 01
32	572.26	0.38805E 02	0.59537E 01	0.17565E-01	0.33086E-02	0.96017E 00	0.64671E 00	-0.60000E-01	0.
33	579.02	0.40392E 02	0.57151E 01	0.16942E-01	0.31913E-02	0.92168E 00	0.62078E 00	-0.30000E-01	0.10054E 01
34	575.32	0.40972E 02	0.62968E 01	0.18618E-01	0.35069E-02	0.10155E 01	0.68397E 00	0.30000E-01	0.
35	571.14	0.37514E 02	0.58943E 01	0.17376E-01	0.32729E-02	0.95059E 00	0.64025E 00	0.60000E-01	0.10063E 01
36	593.05	0.63597E 02	0.10370E 02	0.31053E-01	0.58493E-02	0.16723E 01	0.11264E 01	-0.86800E 00	0.29500E 01
37	582.74	0.49933E 02	0.78775E 01	0.23415E-01	0.44106E-02	0.12704E 01	0.85567E 00	-0.91100E 00	0.24062E 01
38	574.53	0.43024E 02	0.68787E 01	0.20326E-01	0.38287E-02	0.11093E 01	0.74718E 00	-0.95300E 00	0.21595E 01
39	919.71	0.98663E-02	0.18714E-02	0.73634E-05	0.13870E-05	0.30180E-03	0.20327E-03	0.51000E-01	0.
40	919.71	0.98663E-02	0.18714E-02	0.73634E-05	0.13870E-05	0.30180E-03	0.20327E-03	0.29000E-01	0.
41	919.71	0.98663E-02	0.18606E-02	0.73210E-05	0.13790E-05	0.30006E-03	0.20210E-03	0.70000E-02	0.
42	600.76	0.69976E 02	0.11384E 02	0.34284E-01	0.64578E-02	0.18360E 01	0.12366E 01	-0.86800E 00	0.31847E 01
43	593.85	0.63994E 02	0.10399E 02	0.31160E-01	0.58694E-02	0.16771E 01	0.11296E 01	-0.91100E 00	0.29601E 01
44	586.80	0.55038E 02	0.88585E 01	0.26408E-01	0.49744E-02	0.14286E 01	0.96223E 00	-0.95300E 00	0.17787E 01
45	550.48	0.15207E 02	0.24900E 01	0.72337E-02	0.13626E-02	0.40157E-00	0.27047E-00	-0.10400E 01	0.28116E 01
46	613.66	0.75951E 02	0.12474E 02	0.37922E-01	0.71430E-02	0.20117E 01	0.13549E 01	0.70000E-02	0.
47	562.52	0.31058E 02	0.49614E 01	0.14536E-01	0.27381E-02	0.80013E 00	0.53891E 00	0.29000E-01	0.
48	555.60	0.17385E 02	0.27772E 01	0.80971E-02	0.15252E-02	0.44788E-00	0.30166E-00	0.51000E-01	0.81938E 00
49	605.49	0.62590E 02	0.10176E 02	0.30751E-01	0.57923E-02	0.16411E 01	0.11053E 01	0.70000E-02	0.30237E 01
50	570.05	0.32562E 02	0.52098E 01	0.15346E-01	0.28906E-02	0.84019E 00	0.56590E 00	0.29000E-01	0.15767E 01
51	558.33	0.18640E 02	0.29537E 01	0.86282E-02	0.16252E-02	0.47634E-00	0.32083E-00	0.51000E-01	0.
52	594.88	0.56050E 02	0.91132E 01	0.27327E-01	0.51474E-02	0.14697E 01	0.98989E 00	-0.86800E 00	0.
53	582.22	0.44351E 02	0.71891E 01	0.21361E-01	0.40237E-02	0.11594E 01	0.78090E 00	-0.91100E 00	0.21365E 01
54	578.29	0.40223E 02	0.64441E 01	0.19093E-01	0.35965E-02	0.10392E 01	0.69997E 00	-0.95300E 00	0.19771E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	549.32	0.10782E 02	0.17644E 01	0.51216E-02	0.96472E-03	0.28455E-00	0.19165E-00	-0.10400E 01	0.33683E 01
56	547.48	0.88639E 01	0.14947E 01	0.43331E-02	0.81620E-03	0.24105E-00	0.16236E-00	-0.10680E 01	0.61556E 01
57	543.81	0.59366E 01	0.96847E 00	0.28004E-02	0.52749E-03	0.15619E-00	0.10520E-00	-0.10400E 01	0.55981E 01
58	548.90	0.90966E 01	0.16111E 01	0.46752E-02	0.88064E-03	0.25983E-00	0.17500E-00	-0.10680E 01	0.31259E 01
59	543.33	0.72956E 01	0.11898E 01	0.34394E-02	0.64785E-03	0.19189E-00	0.12924E-00	-0.10400E 01	0.12364E 01
60	543.65	0.66296E 01	0.11155E 01	0.32253E-02	0.60753E-03	0.17991E-00	0.12117E-00	-0.10680E 01	0.25615E 01
61	536.26	0.72052E 00	0.11918E-00	0.34281E-03	0.64574E-04	0.19221E-01	0.12946E-01	-0.11220E 01	0.92718E 00
62	538.20	0.13819E-00	0.20853E-01	0.60061E-04	0.11313E-04	0.33629E-02	0.22650E-02	-0.13340E 01	0.
63	538.26	0.11096E 01	0.19061E-00	0.54904E-03	0.10342E-03	0.30740E-01	0.20705E-01	-0.11220E 01	0.13996E 01
64	538.45	0.22390E-00	0.33791E-01	0.97345E-04	0.18336E-04	0.54496E-02	0.36705E-02	-0.13340E 01	0.23925E-00
65	539.14	0.33299E-00	0.57230E-01	0.16494E-03	0.31070E-04	0.92295E-02	0.62164E-02	0.14400E 01	0.38471E-00
66	538.95	0.63013E 00	0.10306E-00	0.29698E-03	0.55941E-04	0.16620E-01	0.11194E-01	0.16130E 01	0.92298E 00
67	538.71	0.72000E 00	0.11556E-00	0.33297E-03	0.62720E-04	0.18637E-01	0.12553E-01	0.17200E 01	0.10419E 01
68	538.98	0.60052E 00	0.98970E-01	0.28522E-03	0.53725E-04	0.15961E-01	0.10750E-01	-0.16130E 01	0.10612E 01
69	538.48	0.81299E 00	0.13047E-00	0.37587E-03	0.70800E-04	0.21041E-01	0.14172E-01	-0.18280E 01	0.10490E 01
70	538.94	0.87376E 00	0.12817E-00	0.36935E-03	0.69573E-04	0.20670E-01	0.13922E-01	-0.11650E 01	0.96115E 00
71	537.93	0.64104E 00	0.53744E-01	0.15477E-03	0.29153E-04	0.86674E-02	0.58378E-02	-0.12050E 01	0.91574E 00
72	539.30	0.78234E 00	0.11321E-00	0.32632E-03	0.61467E-04	0.18257E-01	0.12297E-01	-0.12120E 01	0.77915E 00
73	538.52	0.57922E 00	0.84944E-01	0.24472E-03	0.46096E-04	0.13699E-01	0.92268E-02	-0.11650E 01	0.65817E 00
74	537.69	0.52052E 00	0.43634E-01	0.12563E-03	0.23665E-04	0.70369E-02	0.47396E-02	-0.12050E 01	0.10837E 01
75	919.71	0.98663E-02	0.17127E-02	0.67390E-05	0.12694E-05	0.27621E-03	0.18603E-03	-0.12120E 01	0.
76	537.34	0.14171E 01	0.21303E-00	0.61323E-03	0.11551E-03	0.34356E-01	0.23140E-01	0.10840E 01	0.11127E 01
77	537.17	0.66701E 00	0.10764E-00	0.30980E-03	0.58356E-04	0.17359E-01	0.11692E-01	0.11220E 01	0.82124E 00
78	539.20	0.55221E 00	0.82126E-01	0.23671E-03	0.44588E-04	0.13245E-01	0.89207E-02	0.13340E 01	0.59395E 00
79	537.32	0.24987E-00	0.41871E-01	0.12053E-03	0.22703E-04	0.67526E-02	0.45481E-02	-0.11890E 01	0.24144E-00
80	539.08	0.14961E-00	0.22475E-01	0.64774E-04	0.12201E-04	0.36246E-02	0.24413E-02	-0.13340E 01	0.
81	536.39	0.14753E-00	0.23797E-01	0.68457E-04	0.12895E-04	0.38378E-02	0.25849E-02	-0.11470E 01	0.
82	535.81	-0.53502E-01	-0.89495E-02	-0.25734E-04	-0.48474E-05	-0.14433E-02	-0.97211E-03	-0.11890E 01	0.
83	538.86	0.17766E 01	0.29770E-00	0.85785E-03	0.16159E-03	0.48010E-01	0.32337E-01	-0.10840E 01	0.15173E 01
84	536.55	0.33558E-00	0.49160E-01	0.14143E-03	0.26641E-04	0.79281E-02	0.53398E-02	-0.11890E 01	0.32747E-00
85	538.49	0.44312E-00	0.64984E-01	0.18721E-03	0.35263E-04	0.10480E-01	0.70586E-02	-0.13090E 01	0.46167E-00
86	538.55	0.37507E-00	0.55760E-01	0.16064E-03	0.30260E-04	0.89926E-02	0.60568E-02	-0.13340E 01	0.42568E-00
87	627.53	0.60246E 02	0.92579E 01	0.28436E-01	0.53563E-02	0.14930E 01	0.10056E 01	0.11990E 01	0.54966E 01
88	582.71	0.44093E 02	0.66720E 01	0.19832E-01	0.37356E-02	0.10760E 01	0.72473E 00	0.12070E 01	0.41456E 01
89	539.78	0.14312E 02	0.21508E 01	0.62018E-02	0.11682E-02	0.34687E-00	0.23363E-00	0.13340E 01	0.15598E 01
90	602.37	0.55148E 02	0.81465E 01	0.24562E-01	0.46266E-02	0.13138E 01	0.88489E 00	0.12070E 01	0.50362E 01
91	553.74	0.23358E 02	0.36563E 01	0.10646E-01	0.20054E-02	0.58965E 00	0.39715E-00	0.12490E 01	0.23007E 01
92	543.67	0.16910E 02	0.25596E 01	0.74006E-02	0.13940E-02	0.41280E-00	0.27803E-00	0.13340E 01	0.17149E 01
93	536.83	0.12787E 02	0.21563E 01	0.62047E-02	0.11687E-02	0.34774E-00	0.23422E-00	0.14900E 01	0.16681E 01
94	542.76	0.10395E 01	0.10930E-00	0.31581E-03	0.59486E-04	0.17626E-01	0.11872E-01	-0.	0.
95	547.34	0.31875E 01	0.33843E-00	0.98102E-03	0.18479E-03	0.54580E-01	0.36761E-01	-0.	0.
96	540.13	0.26545E-00	0.27870E-01	0.80382E-04	0.15141E-04	0.44947E-02	0.30273E-02	-0.	0.
97	541.52	0.73195E 00	0.76908E-01	0.22203E-03	0.41822E-04	0.12403E-01	0.83539E-02	-0.	0.
98	541.85	0.11766E 01	0.12454E-00	0.35964E-03	0.67742E-04	0.20085E-01	0.13528E-01	-0.	0.

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
50	1	-6.62	143.38	-0.02	-0.	2	C55	2.70	2	10.19	1833.00	2580.70	109	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.128878E 03	0.345426E-01	0.566599E 04	0.224874E-04	0.104391E-06	~~0.133076E 01~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.746756E 00	0.619469E 01	0.919423E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	540.01	0.17813E 01	0.29015E-00	0.41795E-03	0.10196E-03	0.46839E-01	0.31558E-01	-0.10600E 01	0.10224E 01
100	541.79	0.98441E 00	0.16537E-00	0.23836E-03	0.58145E-04	0.26696E-01	0.17987E-01	-0.10840E 01	0.11406E 01
101	541.51	0.58754E 00	0.96523E-01	0.13911E-03	0.33934E-04	0.15582E-01	0.10498E-01	-0.11080E 01	0.94491E 00
102	572.67	0.33167E 02	0.55269E 01	0.80528E-02	0.19644E-02	0.89220E 00	0.60113E 00	-0.11080E 01	0.42502E 02
103	571.60	0.34402E 02	0.58756E 01	0.85577E-02	0.20875E-02	0.94850E 00	0.63906E 00	-0.10800E 01	0.34384E 02
104	628.28	0.68701E 02	0.11414E 02	0.16964E-01	0.41381E-02	0.18426E 01	0.12415E 01	0.85000E 00	0.
105	649.95	0.85589E 02	0.13605E 02	0.20378E-01	0.49710E-02	0.21962E 01	0.14797E 01	0.94000E 00	0.98651E 00
106	659.44	0.92573E 02	0.14663E 02	0.22039E-01	0.53763E-02	0.23670E 01	0.15948E 01	0.96000E 00	0.98225E 00
107	652.90	0.92028E 02	0.14527E 02	0.21784E-01	0.53139E-02	0.23451E 01	0.15801E 01	0.98000E 00	0.99582E 00
108	660.94	0.92639E 02	0.14759E 02	0.22196E-01	0.54145E-02	0.23826E 01	0.16053E 01	0.10000E 01	0.98861E 00
109	644.97	0.83599E 02	0.13254E 02	0.19817E-01	0.48342E-02	0.21396E 01	0.14416E 01	0.10200E 01	0.97127E 00
110	651.07	0.78149E 02	0.12429E 02	0.18625E-01	0.45434E-02	0.20064E 01	0.13518E 01	0.80000E-01	0.10214E 01
111	645.94	0.81348E 02	0.12795E 02	0.19138E-01	0.46685E-02	0.20655E 01	0.13917E 01	0.10000E-00	0.99852E 00
112	664.35	0.87339E 02	0.13938E 02	0.20987E-01	0.51196E-02	0.22500E 01	0.15159E 01	0.12000E-00	0.98127E 00
113	659.42	0.93232E 02	0.14892E 02	0.22384E-01	0.54603E-02	0.24040E 01	0.16197E 01	0.14000E-00	0.97505E 00
114	634.18	0.71573E 02	0.11284E 02	0.16805E-01	0.40995E-02	0.18215E 01	0.12273E 01	0.80000E-01	0.10081E 01
115	635.95	0.72466E 02	0.11397E 02	0.16984E-01	0.41432E-02	0.18397E 01	0.12395E 01	0.10000E-00	0.99877E 00
116	638.52	0.75158E 02	0.11916E 02	0.17775E-01	0.43359E-02	0.19235E 01	0.12960E 01	0.12000E-00	0.99557E 00
117	652.25	0.79252E 02	0.12612E 02	0.18908E-01	0.46123E-02	0.20360E 01	0.13718E 01	0.14000E-00	0.10052E 01
118	628.43	0.61442E 02	0.97384E 01	0.14474E-01	0.35307E-02	0.15721E 01	0.10592E 01	0.10000E-00	0.10086E 01
119	624.73	0.59631E 02	0.93858E 01	0.13931E-01	0.33984E-02	0.15151E 01	0.10208E 01	0.15000E-00	0.12047E 01
120	614.37	0.54482E 02	0.85426E 01	0.12633E-01	0.30816E-02	0.13790E 01	0.92913E 00	0.20000E-00	0.84380E 00
121	625.18	0.66285E 02	0.10488E 02	0.15570E-01	0.37980E-02	0.16931E 01	0.11407E 01	0.25000E-00	0.95224E 00
122	614.90	0.62243E 02	0.97949E 01	0.14487E-01	0.35340E-02	0.15812E 01	0.10653E 01	0.30000E-00	0.97278E 00
123	1085.37	-0.31174E-02	-0.61052E-03	-0.10890E-05	-0.26565E-06	-0.98556E-04	-0.66403E-04	0.35000E-00	0.
124	614.21	0.70464E 02	0.11214E 02	0.16582E-01	0.40450E-02	0.18103E 01	0.12197E 01	0.38000E-00	0.99858E 00
125	622.56	0.78326E 02	0.12624E 02	0.18722E-01	0.45671E-02	0.20378E 01	0.13730E 01	0.45000E-00	0.98988E 00
126	611.85	0.70474E 02	0.11441E 02	0.16904E-01	0.41235E-02	0.18470E 01	0.12444E 01	0.61000E 00	0.98894E 00
127	576.62	0.50028E 02	0.80075E 01	0.11683E-01	0.28500E-02	0.12926E 01	0.87093E 00	0.70000E 00	0.96684E 00
128	550.35	0.28048E 02	0.44389E 01	0.64172E-02	0.15654E-02	0.71657E 00	0.48280E-00	0.75000E 00	0.95960E 00
129	586.67	0.50349E 02	0.81292E 01	0.11903E-01	0.29036E-02	0.13123E 01	0.88417E 00	0.70000E 00	0.94406E 00
130	591.47	0.53056E 02	0.85886E 01	0.12597E-01	0.30730E-02	0.13864E 01	0.93413E 00	0.80000E 00	0.93911E 00
131	557.80	0.29346E 02	0.44250E 01	0.64137E-02	0.15645E-02	0.71431E 00	0.48128E-00	0.90000E 00	0.90256E 00
132	601.35	0.70161E 02	0.10870E 02	0.16000E-01	0.39029E-02	0.17547E 01	0.11823E 01	0.90000E 00	0.15339E 01
133	597.37	0.65897E 02	0.10136E 02	0.14898E-01	0.36343E-02	0.16363E 01	0.11025E 01	0.96000E 00	0.13570E 01
134	594.09	0.60852E 02	0.93594E 01	0.13741E-01	0.33519E-02	0.15109E 01	0.10180E 01	0.10000E 01	0.12679E 01
135	1085.37	-0.31174E-02	-0.62773E-03	-0.11197E-05	-0.27314E-06	-0.10133E-03	-0.68275E-04	0.70000E-02	0.
136	1085.37	-0.31174E-02	-0.61660E-03	-0.10999E-05	-0.26830E-06	-0.99536E-04	-0.67064E-04	0.70000E-02	0.
137	560.70	0.26704E 02	0.42031E 01	0.60983E-02	0.14876E-02	0.67850E 00	0.45714E-00	0.39000E-01	0.10555E 01
138	559.33	0.26206E 02	0.41015E 01	0.59481E-02	0.14510E-02	0.66210E 00	0.44610E-00	0.78000E-01	0.10608E 01
139	558.59	0.25435E 02	0.39598E 01	0.57410E-02	0.14004E-02	0.63922E 00	0.43068E-00	0.11700E-00	0.
140	559.90	0.25988E 02	0.40355E 01	0.58535E-02	0.14279E-02	0.65145E 00	0.43892E-00	0.78000E-01	0.10597E 01
141	642.59	0.92452E 02	0.10334E 02	0.15438E-01	0.37658E-02	0.16682E 01	0.11239E 01	-0.	0.
142	623.97	0.57253E 02	0.63372E 01	0.94036E-02	0.22939E-02	0.10230E 01	0.68926E 00	-0.	0.
143	556.56	0.25420E 02	0.39208E 01	0.56804E-02	0.13857E-02	0.63292E 00	0.42644E-00	0.78000E-01	0.10559E 01
144	558.32	0.26401E 02	0.40827E 01	0.59187E-02	0.14438E-02	0.65907E 00	0.44405E-00	0.70000E-02	0.10196E 01
145	558.50	0.23843E 02	0.36693E 01	0.53198E-02	0.12977E-02	0.59234E 00	0.39909E-00	0.70000E-02	0.10319E 01
146	556.58	0.22719E 02	0.35100E 01	0.50853E-02	0.12405E-02	0.56661E 00	0.38176E-00	0.39000E-01	0.10373E 01
147	558.34	0.22611E 02	0.34910E 01	0.50609E-02	0.12345E-02	0.56354E 00	0.37969E-00	0.78000E-01	0.
148	1085.37	-0.31174E-02	-0.61964E-03	-0.11053E-05	-0.26962E-06	-0.10003E-03	-0.67394E-04	0.11700E-00	0.
149	608.11	0.58992E 02	0.97432E 01	0.14376E-01	0.35068E-02	0.15728E 01	0.10597E 01	0.70000E-02	0.10694E 01
150	613.08	0.59325E 02	0.98708E 01	0.14590E-01	0.35590E-02	0.15934E 01	0.10736E 01	0.70000E-02	0.10564E 01
151	615.77	0.58607E 02	0.97653E 01	0.14448E-01	0.35244E-02	0.15764E 01	0.10621E 01	0.70000E-02	0.10293E 01
152	626.24	0.62373E 02	0.10072E 02	0.14958E-01	0.36488E-02	0.16259E 01	0.10955E 01	0.39000E-01	0.99822E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	620.53	0.60377E 02	0.97203E 01	0.14406E-01	0.35141E-02	0.15691E 01	0.10572E 01	0.39000E-01	0.
154	619.69	0.60572E 02	0.96838E 01	0.14347E-01	0.34999E-02	0.15632E 01	0.10532E 01	0.78000E-01	0.10056E 01
155	612.66	0.57209E 02	0.95167E 01	0.14064E-01	0.34308E-02	0.15363E 01	0.10351E 01	0.39000E-01	0.
156	975.47	-0.10270E-02	-0.20200E-03	-0.34363E-06	-0.83824E-07	-0.32609E-04	-0.21971E-04	0.39000E-01	0.
157	596.99	0.50805E 02	0.83807E 01	0.12316E-01	0.30044E-02	0.13529E 01	0.91151E 00	0.78000E-01	0.10241E 01
158	595.64	0.53175E 02	0.87929E 01	0.12916E-01	0.31507E-02	0.14194E 01	0.95635E 00	0.39000E-01	0.10358E 01
159	589.79	0.53039E 02	0.87427E 01	0.12816E-01	0.31262E-02	0.14113E 01	0.95089E 00	0.78000E-01	0.10678E 01
160	602.09	0.56676E 02	0.93748E 01	0.13803E-01	0.33670E-02	0.15134E 01	0.10196E 01	0.39000E-01	0.10948E 01
161	585.10	0.50920E 02	0.81486E 01	0.11925E-01	0.29090E-02	0.13154E 01	0.88627E 00	0.43000E-01	0.12095E 01
162	628.32	0.90724E 02	0.14906E 02	0.22153E-01	0.54040E-02	0.24062E 01	0.16212E 01	0.43000E-01	0.21779E 01
163	606.82	0.68842E 02	0.11200E 02	0.16518E-01	0.40294E-02	0.18081E 01	0.12182E 01	0.85000E-01	0.16708E 01
164	597.97	0.60307E 02	0.97183E 01	0.14287E-01	0.34852E-02	0.15688E 01	0.10570E 01	0.12800E-00	0.14844E 01
165	637.22	0.10331E 03	0.17053E 02	0.25425E-01	0.62022E-02	0.27528E 01	0.18547E 01	0.43000E-01	0.24710E 01
166	626.10	0.92432E 02	0.15120E 02	0.22454E-01	0.54773E-02	0.24408E 01	0.16445E 01	0.85000E-01	0.22217E 01
167	655.38	0.11550E 03	0.19183E 02	0.28792E-01	0.70234E-02	0.30968E 01	0.20865E 01	0.43000E-01	0.
168	618.09	0.77915E 02	0.12835E 02	0.19005E-01	0.46361E-02	0.20719E 01	0.13960E 01	0.12800E-00	0.18416E 01
169	637.08	0.89022E 02	0.14765E 02	0.22013E-01	0.53698E-02	0.23834E 01	0.16059E 01	0.85000E-01	0.20906E 01
170	625.07	0.80973E 02	0.13281E 02	0.19715E-01	0.48093E-02	0.21440E 01	0.14445E 01	0.12800E-00	0.18250E 01
171	626.45	0.88935E 02	0.14551E 02	0.21611E-01	0.52716E-02	0.23489E 01	0.15826E 01	0.85000E-01	0.20218E 01
172	672.19	0.10836E 03	0.18242E 02	0.27547E-01	0.67198E-02	0.29447E 01	0.19840E 01	0.43000E-01	0.
173	628.09	0.77699E 02	0.12826E 02	0.19060E-01	0.46496E-02	0.20705E 01	0.13950E 01	0.12800E-00	0.16342E 01
174	643.31	0.95391E 02	0.15796E 02	0.23604E-01	0.57579E-02	0.25499E 01	0.17180E 01	0.85000E-01	0.
175	670.29	0.10368E 03	0.17354E 02	0.26188E-01	0.63882E-02	0.28014E 01	0.18874E 01	0.43000E-01	0.22608E 01
176	659.01	0.89242E 02	0.14851E 02	0.22318E-01	0.54443E-02	0.23973E 01	0.16152E 01	0.43000E-01	0.19005E 01
177	594.47	0.48207E 02	0.77913E 01	0.11440E-01	0.27906E-02	0.12577E 01	0.84741E 00	0.12800E-00	0.90435E 00
178	593.63	0.45948E 02	0.74108E 01	0.10878E-01	0.26536E-02	0.11963E 01	0.80603E 00	0.85000E-01	0.90629E 00
179	626.40	0.64953E 02	0.10661E 02	0.15833E-01	0.38623E-02	0.17210E 01	0.11595E 01	0.70000E-02	0.13341E 01
180	603.66	0.59547E 02	0.97027E 01	0.14293E-01	0.34867E-02	0.15663E 01	0.10553E 01	0.70000E-02	0.
181	616.71	0.63452E 02	0.10411E 02	0.15409E-01	0.37588E-02	0.16807E 01	0.11324E 01	0.70000E-02	0.13913E 01
182	606.64	0.61622E 02	0.10089E 02	0.14878E-01	0.36294E-02	0.16287E 01	0.10973E 01	0.70000E-02	0.42059E 01
183	593.58	0.48390E 02	0.78171E 01	0.11474E-01	0.27990E-02	0.12619E 01	0.85022E 00	0.32000E-01	0.92664E 00
184	610.62	0.61332E 02	0.10063E 02	0.14861E-01	0.36252E-02	0.16245E 01	0.10945E 01	0.32000E-01	0.97208E 00
185	591.84	0.57487E 02	0.93375E 01	0.13697E-01	0.33413E-02	0.15073E 01	0.10156E 01	0.64000E-01	0.97312E 00
186	607.01	0.64768E 02	0.10573E 02	0.15593E-01	0.38038E-02	0.17067E 01	0.11499E 01	0.64000E-01	0.97645E 00
187	598.70	0.50832E 02	0.82871E 01	0.12186E-01	0.29727E-02	0.13378E 01	0.90134E 00	0.70000E-02	0.93825E 00
188	592.73	0.50917E 02	0.84063E 01	0.12335E-01	0.30091E-02	0.13570E 01	0.91430E 00	0.70000E-02	0.10005E 01
189	536.63	0.93351E 01	0.15247E 01	0.21937E-02	0.53513E-03	0.24613E-00	0.16583E-00	0.10600E 01	0.11057E 01
190	532.75	0.58026E 01	0.96459E 00	0.13860E-02	0.33809E-03	0.15571E-00	0.10491E-00	0.10840E 01	0.11421E 01
191	529.66	0.28629E 01	0.47765E-00	0.68557E-03	0.16724E-03	0.77107E-01	0.51952E-01	0.11080E 01	0.11328E 01
192	529.93	0.31932E 01	0.52998E 00	0.76076E-03	0.18558E-03	0.85555E-01	0.57643E-01	0.11080E 01	0.11112E 01
193	535.36	0.72109E 01	0.11824E 01	0.17004E-02	0.41479E-03	0.19087E-00	0.12860E-00	0.16580E 01	0.11257E 01
194	538.52	0.79122E 01	0.12937E 01	0.18626E-02	0.45435E-03	0.20884E-00	0.14071E-00	0.11700E 01	0.12985E 01
195	539.26	0.92478E 01	0.15197E 01	0.21885E-02	0.53385E-03	0.24532E-00	0.16529E-00	0.16740E 01	0.13680E 01
196	539.37	0.98499E 01	0.16113E 01	0.23205E-02	0.56605E-03	0.26011E-00	0.17525E-00	0.16950E 01	0.16121E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
52	1	-6.63	143.37	-0.02	-0.	3	C55	2.70	2	10.19	1845.80	2560.30	118	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.127749E 03	0.348778E-01	0.564132E 04	0.229062E-04	0.103476E-06	~~0.134720E 01~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.746430E 00	0.621507E 01	0.923498E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	572.82	0.43744E 02	0.68975E 01	0.10294E-01	0.24759E-02	0.11098E 01	0.74689E 00	0.10000E 01	0.12167E 01
198	577.89	0.44906E 02	0.68694E 01	0.10271E-01	0.24703E-02	0.11053E 01	0.74385E 00	0.12000E 01	0.12394E 01
199	541.00	0.19195E 02	0.30316E 01	0.44730E-02	0.10759E-02	0.48779E-00	0.32828E-00	0.13000E 01	0.10964E 01
200	515.57	0.52488E 01	0.75588E 00	0.11053E-02	0.26584E-03	0.12162E-00	0.81850E-01	0.11890E 01	0.95607E 00
201	529.59	0.40707E 01	0.67038E 00	0.98511E-03	0.23694E-03	0.10786E-00	0.72592E-01	0.14540E 01	0.90388E 00
202	530.08	0.36192E 01	0.59167E 00	0.86959E-03	0.20916E-03	0.95199E-01	0.64069E-01	0.17040E 01	0.94549E 00
203	533.87	0.26675E 01	0.43702E-00	0.64317E-03	0.15470E-03	0.70317E-01	0.47323E-01	0.20410E 01	0.11656E 01
204	531.67	0.64052E 00	0.48696E-01	0.71610E-04	0.17224E-04	0.78351E-02	0.52730E-02	0.20700E 01	-0.24475E 02
205	536.55	0.38525E 01	0.33551E-00	0.49424E-03	0.11888E-03	0.53984E-01	0.36331E-01	0.21880E 01	0.17464E 02
206	534.81	0.31745E 01	0.52037E 00	0.76608E-03	0.18426E-03	0.83726E-01	0.56347E-01	0.22480E 01	0.12004E 01
207	534.20	0.35184E 01	0.56683E 00	0.83430E-03	0.20067E-03	0.91202E-01	0.61378E-01	0.20700E 01	0.12130E 01
208	531.57	0.12265E 01	0.10861E-00	0.15970E-03	0.38413E-04	0.17475E-01	0.11760E-01	0.20700E 01	0.16527E 01
209	542.37	0.64208E 01	0.51796E 00	0.76459E-03	0.18390E-03	0.83340E-01	0.56087E-01	0.21880E 01	0.86701E 01
210	534.30	0.28914E 01	0.47745E-00	0.70277E-03	0.16903E-03	0.76821E-01	0.51700E-01	0.20700E 01	0.13712E 01
211	540.39	0.64447E 01	0.10678E 01	0.15752E-02	0.37887E-03	0.17181E-00	0.11563E-00	0.21880E 01	0.31064E 01
212	536.62	0.37792E 01	0.61727E 00	0.90932E-03	0.21871E-03	0.99318E-01	0.66840E-01	0.22390E 01	0.17220E 01
213	533.57	0.24592E 01	0.40098E-00	0.59006E-03	0.14192E-03	0.64517E-01	0.43420E-01	0.21880E 01	0.13703E 01
214	535.27	0.25325E 01	0.41841E-00	0.61608E-03	0.14818E-03	0.67321E-01	0.45307E-01	0.22480E 01	0.14566E 01
215	520.39	0.10161E 01	0.15103E-00	0.22122E-03	0.53208E-04	0.24301E-01	0.16355E-01	0.11650E 01	0.14697E 01
216	1085.37	-0.31174E-02	-0.33756E-03	-0.62006E-06	-0.14914E-06	-0.54313E-04	-0.36552E-04	0.12050E 01	0.
217	522.07	0.40000E-00	0.57818E-01	0.84736E-04	0.20381E-04	0.93029E-02	0.62608E-02	0.12120E 01	0.
218	525.89	0.60208E 00	0.87668E-01	0.12866E-03	0.30945E-04	0.14106E-01	0.94931E-02	0.11890E 01	0.10860E 01
219	525.86	0.44156E-00	0.73513E-01	0.10788E-03	0.25948E-04	0.11828E-01	0.79603E-02	0.14540E 01	0.88147E 00
220	530.42	0.14987E 01	0.25969E-00	0.38172E-03	0.91814E-04	0.41784E-01	0.28120E-01	0.17040E 01	0.10214E 01
221	531.59	0.83740E 00	0.13911E-00	0.20457E-03	0.49204E-04	0.22383E-01	0.15064E-01	0.20410E 01	0.96685E 00
222	534.82	0.61662E 00	0.10371E-00	0.15268E-03	0.36723E-04	0.16686E-01	0.11230E-01	0.22480E 01	0.10955E 01
223	522.33	0.59377E 00	0.88355E-01	0.12950E-03	0.31148E-04	0.14216E-01	0.95674E-02	0.11650E 01	0.12428E 01
224	522.89	0.14441E-00	0.12005E-01	0.17598E-04	0.42329E-05	0.19315E-02	0.12999E-02	0.12050E 01	0.30116E-00
225	523.83	0.31637E-00	0.45775E-01	0.67128E-04	0.16146E-04	0.73652E-02	0.49567E-02	0.12120E 01	0.96905E 00
226	530.21	0.49195E-00	0.82400E-01	0.12111E-03	0.29130E-04	0.13258E-01	0.89226E-02	0.14540E 01	0.95637E 00
227	531.55	0.79844E 00	0.12844E-00	0.18887E-03	0.45427E-04	0.20666E-01	0.13908E-01	0.17040E 01	0.85122E 00
228	532.61	0.92520E 00	0.15193E-00	0.22350E-03	0.53757E-04	0.24446E-01	0.16452E-01	0.18780E 01	0.12001E 01
229	535.10	0.10488E 01	0.17327E-00	0.25511E-03	0.61360E-04	0.27879E-01	0.18762E-01	0.21880E 01	0.10041E 01
230	530.21	0.42234E-00	0.62070E-01	0.91230E-04	0.21943E-04	0.99870E-02	0.67212E-02	0.11890E 01	0.69893E 00
231	531.56	0.36779E-00	0.64877E-01	0.95402E-04	0.22947E-04	0.10439E-01	0.70252E-02	0.14540E 01	0.72405E 00
232	532.62	0.84623E 00	0.13791E-00	0.20287E-03	0.48794E-04	0.22189E-01	0.14933E-01	0.16130E 01	0.11780E 01
233	531.96	0.72104E 00	0.11836E-00	0.17408E-03	0.41870E-04	0.19044E-01	0.12817E-01	0.17040E 01	0.92912E 00
234	533.17	0.95532E 00	0.15765E-00	0.23195E-03	0.55791E-04	0.25365E-01	0.17071E-01	0.18780E 01	0.11360E 01
235	534.59	0.38182E-00	0.62963E-01	0.92686E-04	0.22293E-04	0.10131E-01	0.68179E-02	0.14540E 01	0.69437E 00
236	533.67	0.11164E 01	0.18203E-00	0.26788E-03	0.64432E-04	0.29289E-01	0.19711E-01	0.17040E 01	0.10604E 01
237	537.41	0.10945E 01	0.18106E-00	0.26679E-03	0.64171E-04	0.29132E-01	0.19605E-01	0.21880E 01	0.11537E 01
238	537.44	0.10577E 01	0.93966E-01	0.13847E-03	0.33304E-04	0.15119E-01	0.10175E-01	0.20700E 01	0.16209E 01
239	534.02	0.56312E 00	0.81949E-01	0.12061E-03	0.29010E-04	0.13186E-01	0.88738E-02	0.11890E 01	0.77281E 00
240	538.44	0.43065E-00	0.72209E-01	0.10644E-03	0.25602E-04	0.11618E-01	0.78191E-02	0.14540E 01	0.88265E 00
241	535.30	0.11392E 01	0.18679E-00	0.27504E-03	0.66154E-04	0.30054E-01	0.20226E-01	0.17040E 01	0.11519E 01
242	535.15	0.97247E 00	0.16066E-00	0.23655E-03	0.56895E-04	0.25850E-01	0.17397E-01	0.18780E 01	0.11031E 01
243	538.29	0.23205E 01	0.38404E-00	0.56608E-03	0.13616E-03	0.61792E-01	0.41585E-01	0.20410E 01	0.24546E 01
244	536.89	0.46494E-00	0.41878E-01	0.61698E-04	0.14840E-04	0.67381E-02	0.45347E-02	0.20700E 01	0.
245	539.71	0.10722E 01	0.87715E-01	0.12936E-03	0.31114E-04	0.14113E-01	0.94982E-02	0.21870E 01	0.13038E 01
246	539.04	0.12203E 01	0.20572E-00	0.30332E-03	0.72955E-04	0.33100E-01	0.22276E-01	0.22100E 01	0.13552E 01
247	540.23	0.39792E-00	0.65126E-01	0.96063E-04	0.23105E-04	0.10479E-01	0.70521E-02	0.14540E 01	0.76899E 00
248	536.95	0.12894E 01	0.21322E-00	0.31415E-03	0.75560E-04	0.34307E-01	0.23089E-01	0.17040E 01	0.12841E 01
249	537.00	0.78234E 00	0.65555E-01	0.96585E-04	0.23231E-04	0.10548E-01	0.70986E-02	0.18780E 01	0.22166E 01
250	539.06	0.73714E 00	0.60282E-01	0.88881E-04	0.21378E-04	0.96993E-02	0.65276E-02	0.21880E 01	0.12092E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	540.70	0.38130E-00	0.64342E-01	0.94922E-04	0.22831E-04	0.10353E-01	0.69672E-02	0.14540E 01	0.75429E 00
252	537.14	0.67688E 00	0.11341E-00	0.16710E-03	0.40193E-04	0.18248E-01	0.12281E-01	0.16130E 01	0.13278E 01
253	540.50	0.12914E 01	0.11383E-00	0.16791E-03	0.40388E-04	0.18315E-01	0.12326E-01	0.17060E 01	0.
254	538.75	0.10021E 01	0.16588E-00	0.24456E-03	0.58822E-04	0.26691E-01	0.17963E-01	0.21880E 01	0.85864E 00
255	539.05	0.83065E 00	0.76624E-01	0.11298E-03	0.27173E-04	0.12329E-01	0.82971E-02	0.16580E 01	0.23824E 01
256	537.45	0.13699E 01	0.11482E-00	0.16919E-03	0.40695E-04	0.18474E-01	0.12433E-01	0.17920E 01	0.47027E 01
257	532.45	0.10260E 01	0.17181E-00	0.25273E-03	0.60787E-04	0.27644E-01	0.18604E-01	0.10840E 01	0.10265E 01
258	538.71	0.41403E-00	0.70307E-01	0.10365E-03	0.24930E-04	0.11312E-01	0.76132E-02	0.14540E 01	0.76834E 00
259	537.34	0.58494E 00	0.96754E-01	0.14257E-03	0.34291E-04	0.15568E-01	0.10477E-01	0.16130E 01	0.11638E 01
260	538.24	0.14208E 01	0.23156E-00	0.34131E-03	0.82093E-04	0.37257E-01	0.25074E-01	0.17040E 01	0.35916E 01
261	537.78	0.13621E 01	0.22433E-00	0.33060E-03	0.79518E-04	0.36094E-01	0.24291E-01	0.18780E 01	0.22815E 01
262	536.93	0.91376E 00	0.15387E-00	0.22669E-03	0.54525E-04	0.24757E-01	0.16661E-01	0.20410E 01	0.86071E 00
263	543.21	0.33522E 01	0.56815E 00	0.83894E-03	0.20179E-03	0.91415E-01	0.61522E-01	0.14540E 01	0.60960E 01
264	536.84	0.60052E 00	0.98851E-01	0.14563E-03	0.35028E-04	0.15905E-01	0.10704E-01	0.16130E 01	0.12120E 01
265	537.26	0.69507E 00	0.11217E-00	0.16528E-03	0.39754E-04	0.18048E-01	0.12146E-01	0.17040E 01	0.11942E 01
266	536.51	0.78597E 00	0.12935E-00	0.19055E-03	0.45832E-04	0.20813E-01	0.14007E-01	0.18780E 01	0.99088E 00
267	536.87	0.80052E 00	0.13439E-00	0.19799E-03	0.47622E-04	0.21623E-01	0.14552E-01	0.20410E 01	0.89035E 00
268	536.37	0.48364E-00	0.79590E-01	0.11724E-03	0.28198E-04	0.12806E-01	0.86183E-02	0.16130E 01	0.96122E 00
269	537.15	0.62130E 00	0.10026E-00	0.14772E-03	0.35531E-04	0.16132E-01	0.10856E-01	0.18280E 01	0.85175E 00
270	537.07	0.69299E 00	0.11356E-00	0.16732E-03	0.40245E-04	0.18272E-01	0.12297E-01	0.18780E 01	0.10101E 01
271	537.56	0.79636E 00	0.13346E-00	0.19668E-03	0.47306E-04	0.21474E-01	0.14452E-01	0.20410E 01	0.95444E 00
272	535.96	0.55689E 00	0.94001E-01	0.13844E-03	0.33299E-04	0.15125E-01	0.10179E-01	0.16130E 01	0.76096E 00
273	537.53	0.80260E 00	0.13317E-00	0.19625E-03	0.47203E-04	0.21428E-01	0.14421E-01	0.17200E 01	0.10305E 01
274	536.77	0.60052E 00	0.96583E-01	0.14229E-03	0.34224E-04	0.15540E-01	0.10458E-01	0.18280E 01	0.74124E 00
275	537.18	0.82078E 00	0.13472E-00	0.19850E-03	0.47745E-04	0.21677E-01	0.14588E-01	0.18780E 01	0.99859E 00
276	1085.37	-0.31174E-02	-0.67492E-03	-0.12397E-05	-0.29819E-06	-0.10859E-03	-0.73083E-04	0.20600E 01	0.
277	537.39	0.80883E 00	0.67791E-01	0.99893E-04	0.24027E-04	0.10907E-01	0.73406E-02	0.21000E 01	0.12111E 01
278	1085.37	-0.31174E-02	-0.33756E-03	-0.62006E-06	-0.14914E-06	-0.54313E-04	-0.36552E-04	0.21870E 01	0.
279	539.35	0.84208E 00	0.14199E-00	0.20937E-03	0.50359E-04	0.22846E-01	0.15375E-01	0.21950E 01	0.11639E 01
280	537.14	0.69351E 00	0.11557E-00	0.17028E-03	0.40958E-04	0.18595E-01	0.12515E-01	0.18780E 01	0.91927E 00
281	537.42	0.85610E 00	0.14420E-00	0.21248E-03	0.51107E-04	0.23201E-01	0.15614E-01	0.20600E 01	0.11004E 01
282	537.07	0.72260E 00	0.11751E-00	0.17313E-03	0.41643E-04	0.18907E-01	0.12724E-01	0.18280E 01	0.10685E 01
283	537.56	0.88467E 00	0.14826E-00	0.21849E-03	0.52552E-04	0.23856E-01	0.16055E-01	0.20600E 01	0.10257E 01
284	537.57	0.11761E 01	0.18983E-00	0.27974E-03	0.67286E-04	0.30544E-01	0.20556E-01	0.17200E 01	0.18281E 01
285	537.98	0.14436E 01	0.23706E-00	0.34939E-03	0.84038E-04	0.38143E-01	0.25670E-01	0.18780E 01	0.21136E 01
286	537.38	0.94649E 00	0.87228E-01	0.12853E-03	0.30916E-04	0.14035E-01	0.94453E-02	0.16580E 01	0.13918E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.62006E-06	-0.14914E-06	-0.54313E-04	-0.36552E-04	0.17920E 01	0.
288	536.64	0.67844E 00	0.11132E-00	0.16400E-03	0.39445E-04	0.17912E-01	0.12055E-01	0.16130E 01	0.11855E 01
289	539.04	0.12109E 01	0.10158E-00	0.14978E-03	0.36025E-04	0.16345E-01	0.11000E-01	0.17060E 01	0.10825E 02
290	536.40	0.52935E 00	0.44342E-01	0.65317E-04	0.15710E-04	0.71346E-02	0.48015E-02	0.18780E 01	0.22521E 01
291	536.72	0.10223E 01	0.16699E-00	0.24601E-03	0.59171E-04	0.26868E-01	0.18082E-01	0.17200E 01	0.13865E 01
292	538.64	0.42442E-00	0.72923E-01	0.10750E-03	0.25857E-04	0.11733E-01	0.78964E-02	0.14400E 01	0.83151E 00
293	535.47	0.87793E 00	0.14154E-00	0.20842E-03	0.50130E-04	0.22773E-01	0.15326E-01	0.17200E 01	0.85621E 00
294	535.22	0.62286E 00	0.10275E-00	0.15129E-03	0.36388E-04	0.16532E-01	0.11126E-01	0.18780E 01	0.77047E 00

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
41	1	-2.63	147.37	0.02	-0.	1	C55	2.70	2	10.19	1839.80	2550.90	108	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.127233E 03	0.348067E-01	0.562982E 04	0.229523E-04	0.103059E-06	~~0.126327E 01~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.746279E 00	0.620553E 01	0.921584E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	578.58	0.45834E 02	0.60945E 01	0.92146E-02	0.22164E-02	0.98211E 00	0.66131E 00	-0.	0.10440E 01
2	1085.37	-0.31174E-02	-0.55686E-03	-0.10368E-05	-0.24938E-06	-0.89736E-04	-0.60424E-04	-0.30000E-01	0.
3	570.56	0.40684E 02	0.62299E 01	0.93917E-02	0.22590E-02	0.10039E 01	0.67599E 00	-0.60000E-01	0.10344E 01
4	571.94	0.39090E 02	0.61447E 01	0.92680E-02	0.22293E-02	0.99020E 00	0.66676E 00	-0.90000E-01	0.
5	564.96	0.35385E 02	0.56819E 01	0.85482E-02	0.20561E-02	0.91562E 00	0.61654E 00	-0.20000E-00	0.10486E 01
6	564.08	0.31028E 02	0.49797E 01	0.74894E-02	0.18014E-02	0.80246E 00	0.54034E 00	-0.40000E-00	0.10337E 01
7	562.57	0.26666E 02	0.42966E 01	0.64584E-02	0.15535E-02	0.69238E 00	0.46622E-00	-0.60000E 00	0.10301E 01
8	559.92	0.22984E 02	0.36979E 01	0.55532E-02	0.13357E-02	0.59591E 00	0.40126E-00	-0.80000E 00	0.
9	560.44	0.23779E 02	0.37664E 01	0.56571E-02	0.13607E-02	0.60694E 00	0.40868E-00	-0.90000E 00	0.10466E 01
10	559.02	0.21051E 02	0.33745E 01	0.50658E-02	0.12185E-02	0.54378E 00	0.36616E-00	-0.98000E 00	0.10339E 01
11	535.29	0.51377E 00	0.88109E-01	0.13114E-03	0.31544E-04	0.14198E-01	0.95606E-02	-0.11220E 01	0.80245E 00
12	537.17	0.71169E 00	0.10411E-00	0.15507E-03	0.37299E-04	0.16777E-01	0.11297E-01	-0.11890E 01	0.64661E 00
13	537.65	0.77091E 00	0.11630E-00	0.17324E-03	0.41670E-04	0.18741E-01	0.12619E-01	-0.13340E 01	0.91683E 00
14	537.58	0.75689E 00	0.12997E-00	0.19361E-03	0.46569E-04	0.20944E-01	0.14103E-01	-0.14400E 01	0.12245E 01
15	577.82	0.45144E 02	0.63834E 01	0.96487E-02	0.23208E-02	0.10287E 01	0.69265E 00	0.30000E-01	0.
16	-4157.09	0.10379E-01	-0.44754E-02	-0.26965E-05	-0.64861E-06	-0.72119E-03	-0.48562E-03	0.60000E-01	0.
17	573.08	0.42406E 02	0.66700E 01	0.10065E-01	0.24208E-02	0.10749E 01	0.72376E 00	0.90000E-01	0.10377E 01
18	573.96	0.43059E 02	0.69484E 01	0.10488E-01	0.25227E-02	0.11197E 01	0.75396E 00	0.20000E-00	0.10431E 01
19	587.72	0.47294E 02	0.76892E 01	0.11665E-01	0.28057E-02	0.12391E 01	0.83435E 00	0.40000E-00	0.10425E 01
20	602.99	0.49951E 02	0.82273E 01	0.12551E-01	0.30190E-02	0.13258E 01	0.89274E 00	0.60000E 00	0.
21	655.05	0.78204E 02	0.12464E 02	0.19388E-01	0.46634E-02	0.20085E 01	0.13524E 01	0.92000E 00	0.99824E 00
22	659.75	0.55074E 02	0.87985E 01	0.13711E-01	0.32979E-02	0.14179E 01	0.95472E 00	0.10400E 01	0.85331E 00
23	613.01	0.59657E 02	0.93255E 01	0.14280E-01	0.34347E-02	0.15028E 01	0.10119E 01	0.10600E 01	0.97078E 00
24	585.37	0.43725E 02	0.70548E 01	0.10693E-01	0.25720E-02	0.11369E 01	0.76551E 00	0.10840E 01	0.96607E 00
25	535.51	0.18036E 02	0.26497E 01	0.39441E-02	0.94869E-03	0.42699E-00	0.28751E-00	0.12070E 01	0.20539E 01
26	538.86	0.21061E 02	0.32694E 01	0.48724E-02	0.11720E-02	0.52685E 00	0.35476E-00	0.12490E 01	0.26126E 01
27	537.12	0.19996E 02	0.30508E 01	0.45438E-02	0.10929E-02	0.49162E-00	0.33103E-00	0.13340E 01	0.25194E 01
28	530.36	0.14081E 02	0.23799E 01	0.35360E-02	0.85053E-03	0.38351E-00	0.25824E-00	0.14540E 01	0.22255E 01
29	528.70	0.91200E 01	0.14943E 01	0.22189E-02	0.53373E-03	0.24081E-00	0.16215E-00	0.16580E 01	0.15634E 01
30	536.84	0.92447E 01	0.15403E 01	0.22939E-02	0.55177E-03	0.24822E-00	0.16714E-00	0.20410E 01	0.18673E 01
31	540.11	0.82010E 01	0.13690E 01	0.20411E-02	0.49096E-03	0.22060E-00	0.14855E-00	0.22480E 01	0.17858E 01
32	573.36	0.41532E 02	0.63760E 01	0.96219E-02	0.23144E-02	0.10275E 01	0.69186E 00	-0.60000E-01	0.
33	581.27	0.44003E 02	0.62337E 01	0.94344E-02	0.22693E-02	0.10045E 01	0.67642E 00	-0.30000E-01	0.10484E 01
34	576.80	0.44429E 02	0.68336E 01	0.10325E-01	0.24836E-02	0.11012E 01	0.74150E 00	0.30000E-01	0.
35	572.14	0.40595E 02	0.63820E 01	0.96265E-02	0.23155E-02	0.10284E 01	0.69250E 00	0.60000E-01	0.10317E 01
36	595.57	0.69172E 02	0.11294E 02	0.17183E-01	0.41331E-02	0.18200E 01	0.12255E 01	-0.86800E 00	0.28839E 01
37	587.98	0.56370E 02	0.89184E 01	0.13531E-01	0.32546E-02	0.14372E 01	0.96773E 00	-0.91100E 00	0.24364E 01
38	578.93	0.49572E 02	0.79447E 01	0.12014E-01	0.28896E-02	0.12803E 01	0.86207E 00	-0.95300E 00	0.22281E 01
39	1085.37	-0.31174E-02	-0.63280E-03	-0.11781E-05	-0.28338E-06	-0.10197E-03	-0.68664E-04	0.51000E-01	0.
40	1112.05	-0.31740E-00	-0.65095E-01	-0.12271E-03	-0.29516E-04	-0.10490E-01	-0.70634E-02	0.29000E-01	0.
41	1085.37	-0.31174E-02	-0.62915E-03	-0.11714E-05	-0.28175E-06	-0.10139E-03	-0.68269E-04	0.70000E-02	0.
42	614.93	0.83666E 02	0.13715E 02	0.21016E-01	0.50551E-02	0.22101E 01	0.14882E 01	-0.86800E 00	0.34142E 01
43	597.56	0.70112E 02	0.11416E 02	0.17381E-01	0.41807E-02	0.18397E 01	0.12387E 01	-0.91100E 00	0.28762E 01
44	591.80	0.61096E 02	0.98602E 01	0.14981E-01	0.36033E-02	0.15889E 01	0.10699E 01	-0.95300E 00	0.17201E 01
45	553.90	0.21261E 02	0.34880E 01	0.52265E-02	0.12571E-02	0.56208E 00	0.37848E-00	-0.10400E 01	0.31988E 01
46	1085.37	-0.31174E-02	-0.63442E-03	-0.11812E-05	-0.28411E-06	-0.10223E-03	-0.68840E-04	0.70000E-02	0.
47	563.09	0.31052E 02	0.49619E 01	0.74599E-02	0.17944E-02	0.79960E 00	0.53841E 00	0.29000E-01	0.
48	1085.37	-0.31174E-02	-0.63685E-03	-0.11857E-05	-0.28520E-06	-0.10263E-03	-0.69104E-04	0.51000E-01	0.
49	598.66	0.57967E 02	0.93899E 01	0.14302E-01	0.34401E-02	0.15132E 01	0.10189E 01	0.70000E-02	0.24955E 01
50	568.19	0.32237E 02	0.51527E 01	0.77611E-02	0.18668E-02	0.83033E 00	0.55911E 00	0.29000E-01	0.14047E 01
51	1085.37	-0.31174E-02	-0.63077E-03	-0.11744E-05	-0.28248E-06	-0.10165E-03	-0.68444E-04	0.51000E-01	0.
52	598.81	0.62433E 02	0.10173E 02	0.15495E-01	0.37271E-02	0.16393E 01	0.11038E 01	-0.86800E 00	0.
53	585.01	0.49488E 02	0.80341E 01	0.12176E-01	0.29287E-02	0.12947E 01	0.87177E 00	-0.91100E 00	0.21234E 01
54	584.32	0.47916E 02	0.77018E 01	0.11669E-01	0.28068E-02	0.12411E 01	0.83571E 00	-0.95300E 00	0.20830E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	550.80	0.14650E 02	0.23993E 01	0.35911E-02	0.86378E-03	0.38663E-00	0.26034E-00	-0.10400E 01	0.36089E 01
56	549.42	0.12220E 02	0.20629E 01	0.30861E-02	0.74231E-03	0.33243E-00	0.22384E-00	-0.10680E 01	0.67380E 01
57	545.89	0.81532E 01	0.13316E 01	0.19896E-02	0.47856E-03	0.21459E-00	0.14449E-00	-0.10400E 01	0.59555E 01
58	551.22	0.12684E 02	0.22493E 01	0.33672E-02	0.80992E-03	0.36247E-00	0.24407E-00	-0.10680E 01	0.35306E 01
59	543.83	0.86888E 01	0.14175E 01	0.21163E-02	0.50903E-03	0.22842E-00	0.15381E-00	-0.10400E 01	0.12308E 01
60	544.08	0.82764E 01	0.13930E 01	0.20799E-02	0.50028E-03	0.22447E-00	0.15115E-00	-0.10680E 01	0.25578E 01
61	535.03	0.65922E 00	0.10897E-00	0.16217E-03	0.39007E-04	0.17559E-01	0.11824E-01	-0.11220E 01	0.81975E 00
62	537.10	0.20727E-00	0.31258E-01	0.46556E-04	0.11198E-04	0.50372E-02	0.33918E-02	-0.13340E 01	0.18800E-00
63	536.78	0.11184E 01	0.19197E-00	0.28588E-03	0.68764E-04	0.30935E-01	0.20830E-01	-0.11220E 01	0.16640E 01
64	537.28	0.32883E-00	0.49596E-01	0.73872E-04	0.17769E-04	0.79922E-02	0.53816E-02	-0.13340E 01	0.37431E-00
65	537.97	0.43636E-00	0.74947E-01	0.11166E-03	0.26858E-04	0.12078E-01	0.81324E-02	0.14400E 01	0.49447E-00
66	538.06	0.78494E 00	0.12831E-00	0.19117E-03	0.45982E-04	0.20677E-01	0.13923E-01	0.16130E 01	0.10896E 01
67	537.86	0.83948E 00	0.13468E-00	0.20064E-03	0.48260E-04	0.21703E-01	0.14614E-01	0.17200E 01	0.12472E 01
68	537.90	0.75637E 00	0.12458E-00	0.18560E-03	0.44642E-04	0.20075E-01	0.13518E-01	-0.16130E 01	0.11218E 01
69	537.47	0.90701E 00	0.14548E-00	0.21670E-03	0.52124E-04	0.23443E-01	0.15786E-01	-0.18280E 01	0.11088E 01
70	538.05	0.80779E 00	0.11843E-00	0.17645E-03	0.42443E-04	0.19085E-01	0.12851E-01	-0.11650E 01	0.99479E 00
71	537.44	0.72571E 00	0.60826E-01	0.90604E-04	0.21793E-04	0.98019E-02	0.66001E-02	-0.12050E 01	0.10384E 01
72	539.37	0.90390E 00	0.13080E-00	0.19497E-03	0.46898E-04	0.21079E-01	0.14193E-01	-0.12120E 01	0.84327E 00
73	537.70	0.47636E-00	0.69828E-01	0.10402E-03	0.25021E-04	0.11253E-01	0.75769E-02	-0.11650E 01	0.61795E 00
74	537.26	0.40364E-00	0.33828E-01	0.50385E-04	0.12119E-04	0.54512E-02	0.36706E-02	-0.12050E 01	0.73213E 00
75	1057.97	-0.11806E 02	-0.21697E 01	-0.39891E-02	-0.95950E-03	-0.34964E-00	-0.23543E-00	-0.12120E 01	0.
76	536.40	0.17195E 01	0.25835E-00	0.38468E-03	0.92528E-04	0.41632E-01	0.28033E-01	0.10840E 01	0.11540E 01
77	536.24	0.64779E 00	0.10448E-00	0.15556E-03	0.37418E-04	0.16837E-01	0.11337E-01	0.11220E 01	0.93020E 00
78	538.22	0.63636E 00	0.94589E-01	0.14094E-03	0.33900E-04	0.15243E-01	0.10264E-01	0.13340E 01	0.68998E 00
79	536.90	0.18909E-00	0.31679E-01	0.47178E-04	0.11348E-04	0.51049E-02	0.34374E-02	-0.11890E 01	0.20635E-00
80	537.91	0.24520E-00	0.36810E-01	0.54839E-04	0.13191E-04	0.59317E-02	0.39942E-02	-0.13340E 01	0.27034E-00
81	535.85	0.24987E-00	0.40292E-01	0.59984E-04	0.14428E-04	0.64930E-02	0.43721E-02	-0.11470E 01	0.32126E-00
82	534.91	0.54027E-01	0.90329E-02	0.13443E-04	0.32334E-05	0.14556E-02	0.98015E-03	-0.11890E 01	0.54112E-01
83	539.37	0.26488E 01	0.44398E-00	0.66179E-03	0.15918E-03	0.71545E-01	0.48175E-01	-0.10840E 01	0.17955E 01
84	535.80	0.40000E-00	0.58572E-01	0.87195E-04	0.20973E-04	0.94386E-02	0.63555E-02	-0.11890E 01	0.38854E-00
85	537.67	0.44675E-00	0.65486E-01	0.97554E-04	0.23465E-04	0.10553E-01	0.71058E-02	-0.13090E 01	0.42059E-00
86	538.29	0.48779E-00	0.72508E-01	0.10804E-03	0.25987E-04	0.11684E-01	0.78678E-02	-0.13340E 01	0.51725E 00
87	604.00	0.49369E 02	0.74923E 01	0.11434E-01	0.27503E-02	0.12074E 01	0.81298E 00	0.11990E 01	0.58415E 01
88	563.08	0.34820E 02	0.52123E 01	0.78363E-02	0.18849E-02	0.83995E 00	0.56558E 00	0.12070E 01	0.42256E 01
89	531.39	0.12787E 02	0.19126E 01	0.28427E-02	0.68376E-03	0.30820E-00	0.20753E-00	0.13340E 01	0.17207E 01
90	580.41	0.45063E 02	0.65781E 01	0.99524E-02	0.23939E-02	0.10600E 01	0.71378E 00	0.12070E 01	0.52790E 01
91	542.95	0.20057E 02	0.31206E 01	0.46576E-02	0.11203E-02	0.50288E 00	0.33862E-00	0.12490E 01	0.24973E 01
92	534.80	0.14852E 02	0.22370E 01	0.33290E-02	0.80072E-03	0.36048E-00	0.24273E-00	0.13340E 01	0.18982E 01
93	528.71	0.10980E 02	0.18431E 01	0.27368E-02	0.65830E-03	0.29701E-00	0.19999E-00	0.14900E 01	0.17416E 01
94	543.53	0.19070E 01	0.20060E-00	0.29946E-03	0.72031E-04	0.32326E-01	0.21767E-01	-0.	0.
95	549.14	0.62727E 01	0.66667E 00	0.99725E-03	0.23987E-03	0.10743E-00	0.72340E-01	-0.	0.
96	539.24	0.33247E-00	0.34889E-01	0.52003E-04	0.12508E-04	0.56222E-02	0.37858E-02	-0.	0.
97	540.57	0.70183E 00	0.73704E-01	0.10991E-03	0.26437E-04	0.11877E-01	0.79975E-02	-0.	0.
98	541.71	0.12997E 01	0.13757E-00	0.20523E-03	0.49364E-04	0.22168E-01	0.14927E-01	-0.	0.

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
51	1	-2.62	147.38	-0.02	-0.	2	C55	2.70	2	10.19	1832.80	2590.60	110	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.129421E 03	0.344928E-01	0.567792E 04	0.223607E-04	0.104831E-06	~~0.1210265E 04~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.746911E 00	0.619429E 01	0.919343E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	536.30	0.22956E 01	0.37315E-00	0.53070E-03	0.12992E-03	0.60240E-01	0.40588E-01	-0.10600E 01	0.10635E 01
100	536.90	0.11543E 01	0.19338E-00	0.27509E-03	0.67342E-04	0.31219E-01	0.21034E-01	-0.10840E 01	0.11046E 01
101	537.06	0.66702E 00	0.10931E-00	0.15550E-03	0.38067E-04	0.17646E-01	0.11890E-01	-0.11080E 01	0.10861E 01
102	573.65	0.30450E 02	0.50769E 01	0.73144E-02	0.17906E-02	0.81961E 00	0.55223E 00	-0.11080E 01	0.34807E 02
103	574.28	0.32504E 02	0.55597E 01	0.80118E-02	0.19613E-02	0.89755E 00	0.60475E 00	-0.10800E 01	0.24439E 02
104	632.98	0.69055E 02	0.11502E 02	0.16921E-01	0.41423E-02	0.18568E 01	0.12511E 01	0.85000E 00	0.
105	648.28	0.84757E 02	0.13461E 02	0.19912E-01	0.48746E-02	0.21731E 01	0.14642E 01	0.94000E 00	0.99000E 00
106	655.85	0.89757E 02	0.14190E 02	0.21049E-01	0.51528E-02	0.22909E 01	0.15435E 01	0.96000E 00	0.97842E 00
107	648.14	0.87598E 02	0.13794E 02	0.20404E-01	0.49950E-02	0.22269E 01	0.15004E 01	0.98000E 00	0.99052E 00
108	652.05	0.85091E 02	0.13495E 02	0.19990E-01	0.48935E-02	0.21786E 01	0.14679E 01	0.10000E 01	0.97953E 00
109	634.35	0.72943E 02	0.11501E 02	0.16928E-01	0.41440E-02	0.18566E 01	0.12510E 01	0.10200E 01	0.95634E 00
110	651.68	0.79207E 02	0.12601E 02	0.18664E-01	0.45690E-02	0.20344E 01	0.13707E 01	0.80000E-01	0.10161E 01
111	645.38	0.82473E 02	0.12968E 02	0.19164E-01	0.46914E-02	0.20936E 01	0.14106E 01	0.10000E-00	0.99593E 00
112	662.61	0.87205E 02	0.13905E 02	0.20676E-01	0.50617E-02	0.22449E 01	0.15125E 01	0.12000E-00	0.98137E 00
113	654.45	0.90028E 02	0.14344E 02	0.21265E-01	0.52058E-02	0.23156E 01	0.15602E 01	0.14000E-00	0.97413E 00
114	636.22	0.74784E 02	0.11802E 02	0.17384E-01	0.42556E-02	0.19054E 01	0.12838E 01	0.80000E-01	0.10114E 01
115	637.64	0.76214E 02	0.11997E 02	0.17679E-01	0.43278E-02	0.19367E 01	0.13049E 01	0.10000E-00	0.99900E 00
116	640.07	0.78802E 02	0.12503E 02	0.18442E-01	0.45146E-02	0.20185E 01	0.13600E 01	0.12000E-00	0.99713E 00
117	653.78	0.82246E 02	0.13099E 02	0.19416E-01	0.47530E-02	0.21147E 01	0.14248E 01	0.14000E-00	0.10155E 01
118	634.20	0.66571E 02	0.10583E 02	0.15577E-01	0.38133E-02	0.17086E 01	0.11512E 01	0.10000E-00	0.10165E 01
119	630.93	0.66242E 02	0.10460E 02	0.15378E-01	0.37646E-02	0.16887E 01	0.11378E 01	0.15000E-00	0.95255E 00
120	618.84	0.58551E 02	0.92025E 01	0.13471E-01	0.32977E-02	0.14856E 01	0.10010E 01	0.20000E-00	0.86029E 00
121	630.29	0.70040E 02	0.11112E 02	0.16332E-01	0.39982E-02	0.17939E 01	0.12087E 01	0.25000E-00	0.98581E 00
122	620.07	0.65100E 02	0.10273E 02	0.15044E-01	0.36828E-02	0.16584E 01	0.11174E 01	0.30000E-00	0.99410E 00
123	1085.37	-0.31174E-02	-0.61052E-03	-0.10737E-05	-0.26285E-06	-0.98562E-04	-0.66409E-04	0.35000E-00	0.
124	616.53	0.69087E 02	0.11008E 02	0.16101E-01	0.39416E-02	0.17772E 01	0.11974E 01	0.38000E-00	0.10014E 01
125	622.45	0.73179E 02	0.11793E 02	0.17285E-01	0.42316E-02	0.19039E 01	0.12828E 01	0.45000E-00	0.98079E 00
126	610.87	0.66703E 02	0.10824E 02	0.15799E-01	0.38677E-02	0.17473E 01	0.11773E 01	0.61000E 00	0.98115E 00
127	571.84	0.44122E 02	0.70438E 01	0.10142E-01	0.24828E-02	0.11371E 01	0.76618E 00	0.70000E 00	0.95709E 00
128	546.65	0.23518E 02	0.37144E 01	0.53016E-02	0.12979E-02	0.59965E 00	0.40403E-00	0.75000E 00	0.94536E 00
129	586.04	0.47477E 02	0.76630E 01	0.11088E-01	0.27144E-02	0.12371E 01	0.83352E 00	0.70000E 00	0.89134E 00
130	590.30	0.49124E 02	0.79471E 01	0.11516E-01	0.28193E-02	0.12830E 01	0.86443E 00	0.80000E 00	0.87533E 00
131	555.01	0.27980E 02	0.42123E 01	0.60297E-02	0.14761E-02	0.68004E 00	0.45819E-00	0.90000E 00	0.94987E 00
132	597.50	0.66258E 02	0.10244E 02	0.14883E-01	0.36434E-02	0.16538E 01	0.11143E 01	0.90000E 00	0.14192E 01
133	593.26	0.62312E 02	0.95636E 01	0.13873E-01	0.33963E-02	0.15439E 01	0.10403E 01	0.96000E 00	0.12669E 01
134	590.42	0.57872E 02	0.88835E 01	0.12874E-01	0.31516E-02	0.14341E 01	0.96629E 00	0.10000E 01	0.12005E 01
135	1085.37	-0.31174E-02	-0.62773E-03	-0.11040E-05	-0.27026E-06	-0.10134E-03	-0.68281E-04	0.70000E-02	0.
136	1085.37	-0.31174E-02	-0.61660E-03	-0.10844E-05	-0.26546E-06	-0.99543E-04	-0.67069E-04	0.70000E-02	0.
137	562.78	0.28167E 02	0.44383E 01	0.63703E-02	0.15595E-02	0.71652E 00	0.48277E-00	0.39000E-01	0.10219E 01
138	561.28	0.27668E 02	0.43349E 01	0.62186E-02	0.15224E-02	0.69982E 00	0.47152E-00	0.78000E-01	0.10284E 01
139	560.18	0.26706E 02	0.41614E 01	0.59675E-02	0.14609E-02	0.67181E 00	0.45265E-00	0.11700E-00	0.
140	561.73	0.27379E 02	0.42559E 01	0.61062E-02	0.14948E-02	0.68706E 00	0.46292E-00	0.78000E-01	0.10179E 01
141	660.98	0.11790E 03	0.13304E 02	0.19770E-01	0.48398E-02	0.21477E 01	0.14471E 01	-0.	0.
142	635.00	0.72802E 02	0.81052E 01	0.11933E-01	0.29212E-02	0.13085E 01	0.88163E 00	-0.	0.
143	559.80	0.27612E 02	0.42665E 01	0.61173E-02	0.14975E-02	0.68877E 00	0.46408E-00	0.78000E-01	0.10032E 01
144	561.26	0.29156E 02	0.45161E 01	0.64785E-02	0.15860E-02	0.72907E 00	0.49123E-00	0.70000E-02	0.10249E 01
145	561.52	0.26566E 02	0.40952E 01	0.58753E-02	0.14383E-02	0.66113E 00	0.44545E-00	0.70000E-02	0.10292E 01
146	560.32	0.25602E 02	0.39635E 01	0.56840E-02	0.13915E-02	0.63987E 00	0.43113E-00	0.39000E-01	0.10304E 01
147	561.95	0.25146E 02	0.38900E 01	0.55818E-02	0.13664E-02	0.62801E 00	0.42313E-00	0.78000E-01	0.
148	1085.37	-0.31174E-02	-0.61964E-03	-0.10897E-05	-0.26677E-06	-0.10003E-03	-0.67400E-04	0.11700E-00	0.
149	615.70	0.54276E 02	0.90007E 01	0.13161E-01	0.32218E-02	0.14531E 01	0.97903E 00	0.70000E-02	0.10186E 01
150	619.09	0.54481E 02	0.90938E 01	0.13313E-01	0.32590E-02	0.14681E 01	0.98917E 00	0.70000E-02	0.10109E 01
151	620.70	0.55998E 02	0.93550E 01	0.13703E-01	0.33546E-02	0.15103E 01	0.10176E 01	0.70000E-02	0.10068E 01
152	628.89	0.62402E 02	0.10091E 02	0.14824E-01	0.36290E-02	0.16290E 01	0.10976E 01	0.39000E-01	0.99664E 00

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	624.75	0.60975E 02	0.98385E 01	0.14432E-01	0.35330E-02	0.15883E 01	0.10702E 01	0.39000E-01	0.
154	622.97	0.61398E 02	0.98329E 01	0.14415E-01	0.35288E-02	0.15874E 01	0.10696E 01	0.78000E-01	0.99998E 00
155	617.40	0.57043E 02	0.95129E 01	0.13918E-01	0.34072E-02	0.15358E 01	0.10348E 01	0.39000E-01	0.
156	1039.32	-0.19735E-01	-0.39843E-02	-0.68688E-05	-0.16815E-05	-0.64322E-03	-0.43338E-03	0.39000E-01	0.
157	601.86	0.48786E 02	0.80688E 01	0.11741E-01	0.28741E-02	0.13026E 01	0.87767E 00	0.78000E-01	0.99918E 00
158	603.30	0.52638E 02	0.87401E 01	0.12724E-01	0.31148E-02	0.14110E 01	0.95069E 00	0.39000E-01	0.10349E 01
159	596.63	0.50210E 02	0.83071E 01	0.12065E-01	0.29536E-02	0.13411E 01	0.90359E 00	0.78000E-01	0.10183E 01
160	608.79	0.52357E 02	0.86916E 01	0.12678E-01	0.31035E-02	0.14032E 01	0.94541E 00	0.39000E-01	0.10208E 01
161	584.31	0.45278E 02	0.72427E 01	0.10474E-01	0.25640E-02	0.11693E 01	0.78781E 00	0.43000E-01	0.10351E 01
162	613.81	0.74090E 02	0.12080E 02	0.17651E-01	0.43211E-02	0.19502E 01	0.13140E 01	0.43000E-01	0.17081E 01
163	599.16	0.58429E 02	0.94672E 01	0.13762E-01	0.33690E-02	0.15284E 01	0.10298E 01	0.85000E-01	0.13587E 01
164	593.32	0.53359E 02	0.85771E 01	0.12443E-01	0.30460E-02	0.13847E 01	0.93296E 00	0.12800E-00	0.12573E 01
165	625.20	0.89850E 02	0.14738E 02	0.21623E-01	0.52933E-02	0.23793E 01	0.16031E 01	0.43000E-01	0.20632E 01
166	612.23	0.78904E 02	0.12813E 02	0.18711E-01	0.45806E-02	0.20685E 01	0.13937E 01	0.85000E-01	0.18184E 01
167	658.62	0.11573E 03	0.19255E 02	0.28589E-01	0.69989E-02	0.31085E 01	0.20944E 01	0.43000E-01	0.
168	609.11	0.68556E 02	0.11239E 02	0.16395E-01	0.40137E-02	0.18144E 01	0.12225E 01	0.12800E-00	0.15642E 01
169	637.50	0.88724E 02	0.14718E 02	0.21689E-01	0.53095E-02	0.23761E 01	0.16010E 01	0.85000E-01	0.20264E 01
170	624.58	0.79430E 02	0.13025E 02	0.19104E-01	0.46769E-02	0.21027E 01	0.14167E 01	0.12800E-00	0.17451E 01
171	627.54	0.87858E 02	0.14383E 02	0.21119E-01	0.51700E-02	0.23219E 01	0.15645E 01	0.85000E-01	0.19477E 01
172	678.76	0.10825E 03	0.18285E 02	0.27348E-01	0.66950E-02	0.29519E 01	0.19889E 01	0.43000E-01	0.
173	634.74	0.84137E 02	0.13937E 02	0.20517E-01	0.50227E-02	0.22500E 01	0.15160E 01	0.12800E-00	0.17548E 01
174	639.92	0.93390E 02	0.15437E 02	0.22768E-01	0.55737E-02	0.24922E 01	0.16792E 01	0.85000E-01	0.
175	663.54	0.10044E 03	0.16754E 02	0.24920E-01	0.61005E-02	0.27047E 01	0.18224E 01	0.43000E-01	0.21405E 01
176	667.94	0.95925E 02	0.16036E 02	0.23890E-01	0.58485E-02	0.25888E 01	0.17443E 01	0.43000E-01	0.20156E 01
177	597.01	0.48660E 02	0.78752E 01	0.11439E-01	0.28004E-02	0.12714E 01	0.85662E 00	0.12800E-00	0.91731E 00
178	612.07	0.59552E 02	0.97006E 01	0.14166E-01	0.34678E-02	0.15660E 01	0.10552E 01	0.85000E-01	0.11794E 01
179	630.56	0.66756E 02	0.10981E 02	0.16141E-01	0.39514E-02	0.17727E 01	0.11944E 01	0.70000E-02	0.13540E 01
180	604.13	0.58776E 02	0.95795E 01	0.13950E-01	0.34150E-02	0.15465E 01	0.10420E 01	0.70000E-02	0.
181	616.11	0.62046E 02	0.10177E 02	0.14883E-01	0.36435E-02	0.16430E 01	0.11070E 01	0.70000E-02	0.13130E 01
182	608.40	0.61181E 02	0.10026E 02	0.14622E-01	0.35796E-02	0.16186E 01	0.10906E 01	0.70000E-02	0.11954E 01
183	592.95	0.46952E 02	0.75822E 01	0.10998E-01	0.26924E-02	0.12241E 01	0.82475E 00	0.32000E-01	0.90064E 00
184	608.44	0.59016E 02	0.96717E 01	0.14105E-01	0.34531E-02	0.15614E 01	0.10520E 01	0.32000E-01	0.96389E 00
185	587.82	0.53721E 02	0.87068E 01	0.12606E-01	0.30861E-02	0.14056E 01	0.94707E 00	0.64000E-01	0.96397E 00
186	605.15	0.61445E 02	0.10020E 02	0.14597E-01	0.35733E-02	0.16176E 01	0.10899E 01	0.64000E-01	0.96802E 00
187	599.63	0.50608E 02	0.82547E 01	0.12002E-01	0.29380E-02	0.13326E 01	0.89789E 00	0.70000E-02	0.93333E 00
188	595.71	0.52238E 02	0.86384E 01	0.12542E-01	0.30703E-02	0.13946E 01	0.93962E 00	0.70000E-02	0.10188E 01
189	540.67	0.94296E 01	0.15437E 01	0.21988E-02	0.53827E-03	0.24921E-00	0.16791E-00	0.10600E 01	0.11116E 01
190	537.30	0.55003E 01	0.91669E 00	0.13042E-02	0.31927E-03	0.14799E-00	0.99711E-01	0.10840E 01	0.10936E 01
191	535.47	0.26790E 01	0.44844E-00	0.63761E-03	0.15609E-03	0.72396E-01	0.48779E-01	0.11080E 01	0.11231E 01
192	535.33	0.31184E 01	0.51915E 00	0.73811E-03	0.18069E-03	0.83811E-01	0.56470E-01	0.11080E 01	0.11437E 01
193	541.20	0.60255E 01	0.99124E 00	0.14122E-02	0.34570E-03	0.16002E-00	0.10782E-00	0.16580E 01	0.10769E 01
194	541.27	0.59735E 01	0.97822E 00	0.13936E-02	0.34117E-03	0.15792E-00	0.10640E-00	0.11700E 01	0.11572E 01
195	543.38	0.72145E 01	0.11883E 01	0.16942E-02	0.41474E-03	0.19184E-00	0.12926E-00	0.16740E 01	0.12693E 01
196	545.37	0.74748E 01	0.12269E 01	0.17504E-02	0.42850E-03	0.19807E-00	0.13345E-00	0.16950E 01	0.13800E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
53	1	-2.62	147.38	-0.02	-0.	3	C55	2.70	2	10.19	1829.50	2576.60	119	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.128648E 03	0.344953E-01	0.566089E 04	0.224967E-04	0.104205E-06	~~0.123015E 01~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.746690E 00	0.618903E 01	0.918300E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	570.53	0.37799E 02	0.59526E 01	0.87090E-02	0.21255E-02	0.96179E 00	0.64822E 00	0.10000E 01	0.10116E 01
198	576.49	0.38688E 02	0.59138E 01	0.86705E-02	0.21161E-02	0.95553E 00	0.64399E 00	0.12000E 01	0.10319E 01
199	543.31	0.18405E 02	0.29107E 01	0.42179E-02	0.10294E-02	0.47030E-00	0.31697E-00	0.13000E 01	0.10135E 01
200	515.04	0.40114E 01	0.57751E 00	0.82869E-03	0.20225E-03	0.93312E-01	0.62889E-01	0.11890E 01	0.95972E 00
201	530.15	0.32816E 01	0.54060E 00	0.77980E-03	0.19032E-03	0.87348E-01	0.58870E-01	0.14540E 01	0.89373E 00
202	530.64	0.33756E 01	0.55202E 00	0.79641E-03	0.19437E-03	0.89193E-01	0.60113E-01	0.17040E 01	0.94274E 00
203	534.20	0.24504E 01	0.40152E-00	0.58001E-03	0.14155E-03	0.64877E-01	0.43725E-01	0.20410E 01	0.10959E 01
204	532.55	0.61922E 00	0.47100E-01	0.67998E-04	0.16595E-04	0.76103E-02	0.51291E-02	0.20700E 01	0.
205	537.22	0.36847E 01	0.32102E-00	0.46421E-03	0.11329E-03	0.51869E-01	0.34958E-01	0.21880E 01	0.13160E 02
206	536.18	0.32016E 01	0.52520E 00	0.75918E-03	0.18528E-03	0.84860E-01	0.57193E-01	0.22480E 01	0.12996E 01
207	534.34	0.29974E 01	0.48292E-00	0.69762E-03	0.17026E-03	-0.78029E-01	0.52589E-01	0.20700E 01	0.11095E 01
208	532.31	0.12556E 01	0.11123E-00	0.16056E-03	0.39187E-04	0.17972E-01	0.12112E-01	0.20700E 01	0.20207E 01
209	542.81	0.63283E 01	0.51063E 00	0.73983E-03	0.18056E-03	0.82506E-01	0.55606E-01	0.21880E 01	0.11042E 02
210	534.38	0.25470E 01	0.42060E-00	0.60760E-03	0.14829E-03	0.67958E-01	0.45802E-01	0.20700E 01	0.12196E 01
211	540.68	0.61636E 01	0.10214E 01	0.14788E-02	0.36092E-03	0.16504E-00	0.11123E-00	0.21880E 01	0.30122E 01
212	538.01	0.37543E 01	0.61367E 00	0.88764E-03	0.21663E-03	0.99155E-01	0.66827E-01	0.22390E 01	0.17688E 01
213	534.61	0.21756E 01	0.35494E-00	0.51279E-03	0.12515E-03	0.57350E-01	0.38652E-01	0.21880E 01	0.11359E 01
214	537.05	0.24748E 01	0.40929E-00	0.59181E-03	0.14444E-03	0.66131E-01	0.44570E-01	0.22480E 01	0.13430E 01
215	522.71	0.71948E 00	0.10709E-00	0.15407E-03	0.37602E-04	0.17302E-01	0.11661E-01	0.11650E 01	0.13105E 01
216	1085.37	-0.31174E-02	-0.33756E-03	-0.60574E-06	-0.14784E-06	-0.54542E-04	-0.36759E-04	0.12050E 01	0.
217	524.45	0.46597E-00	0.67446E-01	0.97097E-04	0.23697E-04	0.10898E-01	0.73446E-02	0.12120E 01	0.10772E 01
218	528.21	0.65818E 00	0.95964E-01	0.13833E-03	0.33761E-04	0.15505E-01	0.10450E-01	0.11890E 01	0.14050E 01
219	527.52	0.44987E-00	0.74968E-01	0.10804E-03	0.26368E-04	0.12113E-01	0.81638E-02	0.14540E 01	0.11113E 01
220	531.56	0.12634E 01	0.21906E-00	0.31614E-03	0.77156E-04	0.35394E-01	0.23855E-01	0.17040E 01	0.87285E 00
221	533.71	0.10307E 01	0.17142E-00	0.24758E-03	0.60424E-04	0.27698E-01	0.18667E-01	0.20410E 01	0.10034E 01
222	537.51	0.24362E-00	0.41036E-01	0.59346E-04	0.14484E-04	0.66305E-02	0.44687E-02	0.22480E 01	0.
223	525.52	0.57663E 00	0.85961E-01	0.12380E-03	0.30213E-04	0.13889E-01	0.93608E-02	0.11650E 01	0.13157E 01
224	525.94	0.29351E-00	0.24441E-01	0.35204E-04	0.85918E-05	0.39491E-02	0.26615E-02	0.12050E 01	0.62631E 00
225	526.83	0.39896E-00	0.57824E-01	0.83314E-04	0.20333E-04	0.93430E-02	0.62969E-02	0.12120E 01	0.89522E 00
226	532.71	0.62546E 00	0.10491E-00	0.15147E-03	0.36966E-04	0.16951E-01	0.11424E-01	0.14540E 01	0.10116E 01
227	533.78	0.10161E 01	0.16366E-00	0.23637E-03	0.57688E-04	0.26443E-01	0.17822E-01	0.17040E 01	0.14884E 01
228	534.42	0.83272E 00	0.13689E-00	0.19775E-03	0.48262E-04	0.22117E-01	0.14906E-01	0.18780E 01	0.71138E 00
229	537.33	0.11086E 01	0.18337E-00	0.26517E-03	0.64715E-04	0.29628E-01	0.19968E-01	0.21880E 01	0.11270E 01
230	533.56	0.54182E 00	0.79781E-01	0.11522E-03	0.28120E-04	0.12891E-01	0.86879E-02	0.11890E 01	0.93826E 00
231	534.18	0.44260E-00	0.78189E-01	0.11294E-03	0.27565E-04	0.12633E-01	0.85145E-02	0.14540E 01	0.89921E 00
232	534.99	0.99689E 00	0.16267E-00	0.23505E-03	0.57366E-04	0.26284E-01	0.17715E-01	0.16130E 01	0.17275E 01
233	534.39	0.96623E 00	0.15883E-00	0.22945E-03	0.55999E-04	0.25663E-01	0.17296E-01	0.17040E 01	0.12251E 01
234	535.11	0.12457E 01	0.20579E-00	0.29737E-03	0.72574E-04	0.33251E-01	0.22410E-01	0.18780E 01	0.11120E 01
235	537.22	0.44208E-00	0.73008E-01	0.10557E-03	0.25766E-04	0.11796E-01	0.79503E-02	0.14540E 01	0.80252E 00
236	535.93	0.12873E 01	0.21017E-00	0.30378E-03	0.74139E-04	0.33958E-01	0.22887E-01	0.17040E 01	0.14029E 01
237	539.43	0.12675E 01	0.20991E-00	0.30377E-03	0.74137E-04	0.33916E-01	0.22858E-01	0.21880E 01	0.13128E 01
238	539.24	0.83792E 00	0.74519E-01	0.10783E-03	0.26318E-04	0.12041E-01	0.81149E-02	0.20700E 01	0.12878E 01
239	537.65	0.75273E 00	0.10977E-00	0.15875E-03	0.38744E-04	0.17736E-01	0.11953E-01	0.11890E 01	0.99474E 00
240	540.73	0.47896E-00	0.80413E-01	0.11642E-03	0.28414E-04	0.12993E-01	0.87567E-02	0.14540E 01	0.11043E 01
241	537.15	0.10551E 01	0.17317E-00	0.25041E-03	0.61114E-04	0.27981E-01	0.18858E-01	0.17040E 01	0.14202E 01
242	537.31	0.12634E 01	0.20897E-00	0.30219E-03	0.73751E-04	0.33765E-01	0.22756E-01	0.18780E 01	0.12102E 01
243	539.57	0.18904E 01	0.31308E-00	0.45310E-03	0.11058E-03	0.50586E-01	0.34093E-01	0.20410E 01	0.26147E 01
244	538.60	0.56520E 00	0.50957E-01	0.73722E-04	0.17992E-04	0.82335E-02	0.55491E-02	0.20700E 01	0.
245	541.44	0.12177E 01	0.99712E-01	0.14440E-03	0.35242E-04	0.16111E-01	0.10858E-01	0.21870E 01	0.12815E 01
246	540.76	0.13543E 01	0.22853E-00	0.33088E-03	0.80753E-04	0.36926E-01	0.24887E-01	0.22100E 01	0.14812E 01
247	542.59	0.33403E-00	0.54740E-01	0.79305E-04	0.19355E-04	0.88447E-02	0.59610E-02	0.14540E 01	0.57385E 00
248	538.78	0.12696E 01	0.21018E-00	0.30409E-03	0.74214E-04	0.33959E-01	0.22887E-01	0.17040E 01	0.18585E 01
249	539.09	0.10774E 01	0.90387E-01	0.13079E-03	0.31920E-04	0.14604E-01	0.98429E-02	0.18780E 01	0.26378E 01
250	541.14	0.12291E 01	0.10063E-00	0.14571E-03	0.35562E-04	0.16259E-01	0.10958E-01	0.21880E 01	0.34361E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	543.13	0.44935E-00	0.75928E-01	0.11002E-03	0.26852E-04	0.12268E-01	0.82684E-02	0.14540E 01	0.73247E 00
252	539.09	0.61454E 00	0.10308E-00	0.14916E-03	0.36403E-04	0.16655E-01	0.11225E-01	0.16130E 01	0.15455E 01
253	542.88	0.12997E 01	0.11471E-00	0.16621E-03	0.40564E-04	0.18535E-01	0.12492E-01	0.17060E 01	0.
254	540.79	0.12675E 01	0.21007E-00	0.30415E-03	0.74229E-04	0.33942E-01	0.22876E-01	0.21880E 01	0.97494E 00
255	541.40	0.79325E 00	0.73270E-01	0.10611E-03	0.25896E-04	0.11839E-01	0.79789E-02	0.16580E 01	0.17339E 01
256	539.46	0.15777E 01	0.13238E-00	0.19158E-03	0.46756E-04	0.21390E-01	0.14416E-01	0.17920E 01	0.47341E 01
257	536.36	0.12151E 01	0.20392E-00	0.29479E-03	0.71947E-04	0.32949E-01	0.22207E-01	0.10840E 01	0.10915E 01
258	541.56	0.53974E 00	0.91802E-01	0.13295E-03	0.32448E-04	0.14833E-01	0.99970E-02	0.14540E 01	0.89397E 00
259	539.85	0.61870E 00	0.10248E-00	0.14833E-03	0.36201E-04	0.16559E-01	0.11160E-01	0.16130E 01	0.13207E 01
260	540.18	0.11932E 01	0.19469E-00	0.28181E-03	0.68779E-04	0.31457E-01	0.21201E-01	0.17040E 01	0.33266E 01
261	539.68	0.13652E 01	0.22508E-00	0.32576E-03	0.79503E-04	0.36368E-01	0.24511E-01	0.18780E 01	0.28447E 01
262	538.89	0.91013E 00	0.15342E-00	0.22198E-03	0.54177E-04	0.24789E-01	0.16707E-01	0.20410E 01	0.92774E 00
263	541.95	0.13278E 01	0.22488E-00	0.32573E-03	0.79496E-04	0.36336E-01	0.24489E-01	0.14540E 01	0.20818E 01
264	539.91	0.73506E 00	0.12121E-00	0.17544E-03	0.42816E-04	0.19584E-01	0.13199E-01	0.16130E 01	0.14059E 01
265	540.14	0.69714E 00	0.11269E-00	0.16312E-03	0.39810E-04	0.18208E-01	0.12271E-01	0.17040E 01	0.14432E 01
266	538.83	0.92883E 00	0.15307E-00	0.22146E-03	0.54049E-04	0.24732E-01	0.16668E-01	0.18780E 01	0.14868E 01
267	539.36	0.89611E 00	0.15065E-00	0.21801E-03	0.53206E-04	0.24341E-01	0.16405E-01	0.20410E 01	0.10789E 01
268	539.89	0.60883E 00	0.10039E-00	0.14530E-03	0.35463E-04	0.16221E-01	0.10932E-01	0.16130E 01	0.13332E 01
269	540.19	0.74234E 00	0.12000E-00	0.17370E-03	0.42392E-04	0.19388E-01	0.13067E-01	0.18280E 01	0.10706E 01
270	539.99	0.76883E 00	0.12620E-00	0.18267E-03	0.44581E-04	0.20391E-01	0.13743E-01	0.18780E 01	0.11930E 01
271	540.17	0.98857E 00	0.16592E-00	0.24017E-03	0.58616E-04	0.26809E-01	0.18068E-01	0.20410E 01	0.12458E 01
272	539.35	0.58182E 00	0.98397E-01	0.14239E-03	0.34752E-04	0.15899E-01	0.10715E-01	0.16130E 01	0.86885E 00
273	540.91	0.79948E 00	0.13291E-00	0.19244E-03	0.46966E-04	0.21475E-01	0.14473E-01	0.17200E 01	0.12022E 01
274	539.78	0.65247E 00	0.10512E-00	0.15214E-03	0.37130E-04	0.16984E-01	0.11447E-01	0.18280E 01	0.75086E 00
275	540.25	0.96260E 00	0.15827E-00	0.22911E-03	0.55915E-04	0.25573E-01	0.17235E-01	0.18780E 01	0.10920E 01
276	1085.37	-0.31174E-02	-0.67492E-03	-0.12111E-05	-0.29558E-06	-0.10905E-03	-0.73496E-04	0.20600E 01	0.
277	540.05	0.99636E 00	0.83633E-01	0.12106E-03	0.29545E-04	0.13513E-01	0.91074E-02	0.21000E 01	0.15875E 01
278	1085.37	-0.31174E-02	-0.33756E-03	-0.60574E-06	-0.14784E-06	-0.54542E-04	-0.36759E-04	0.21870E 01	0.
279	542.04	0.11351E 01	0.19168E-00	0.27764E-03	0.67761E-04	0.30971E-01	0.20873E-01	0.21950E 01	0.15434E 01
280	540.12	0.92260E 00	0.15401E-00	0.22292E-03	0.54406E-04	0.24884E-01	0.16771E-01	0.18780E 01	0.12154E 01
281	540.24	0.93403E 00	0.15757E-00	0.22809E-03	0.55668E-04	0.25460E-01	0.17159E-01	0.20600E 01	0.11188E 01
282	539.91	0.83117E 00	0.13538E-00	0.19595E-03	0.47823E-04	0.21874E-01	0.14743E-01	0.18280E 01	0.12843E 01
283	540.11	0.10016E 01	0.16809E-00	0.24331E-03	0.59383E-04	0.27160E-01	0.18305E-01	0.20600E 01	0.12442E 01
284	539.96	0.13943E 01	0.22535E-00	0.32618E-03	0.79606E-04	0.36411E-01	0.24540E-01	0.17200E 01	0.26815E 01
285	540.54	0.15538E 01	0.25551E-00	0.36991E-03	0.90279E-04	0.41285E-01	0.27825E-01	0.18780E 01	0.27052E 01
286	540.06	0.11777E 01	0.10870E-00	0.15733E-03	0.38398E-04	0.17563E-01	0.11837E-01	0.16580E 01	0.14083E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.60574E-06	-0.14784E-06	-0.54542E-04	-0.36759E-04	0.17920E 01	0.
288	539.04	0.90701E 00	0.14903E-00	0.21564E-03	0.52628E-04	0.24080E-01	0.16229E-01	0.16130E 01	0.22696E 01
289	540.99	0.14405E 01	0.12098E-00	0.17517E-03	0.42751E-04	0.19547E-01	0.13174E-01	0.17060E 01	0.79186E 01
290	538.81	0.85610E 00	0.71810E-01	0.10390E-03	0.25357E-04	0.11603E-01	0.78199E-02	0.18780E 01	0.20858E 01
291	538.76	0.12348E 01	0.20193E-00	0.29215E-03	0.71301E-04	0.32626E-01	0.21989E-01	0.17200E 01	0.25671E 01
292	540.90	0.52156E 00	0.89728E-01	0.12992E-03	0.31707E-04	0.14498E-01	0.97711E-02	0.14400E 01	0.11206E 01
293	537.56	0.99481E 00	0.16057E-00	0.23222E-03	0.56674E-04	0.25944E-01	0.17485E-01	0.17200E 01	0.14433E 01
294	537.69	0.10265E 01	0.16957E-00	0.24524E-03	0.59852E-04	0.27398E-01	0.18465E-01	0.18780E 01	0.12845E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
43	1	-5.63	147.11	-59.16	-4.83	2	C55	2.75	2	10.19	1816.20	2561.30	111	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.127813E 03	0.343133E-01	0.564227E 04	0.225242E-04	0.103528E-06	~~0.133603E 01~~ 2.25	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.746449E 00	0.616736E 01	0.914031E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	534.66	0.21372E 01	0.34707E-00	0.51031E-03	0.12480E-03	0.56275E-01	0.37971E-01	-0.10600E 01	0.97805E 00
100	534.67	0.12447E 01	0.20826E-00	0.30621E-03	0.74887E-04	0.33768E-01	0.22785E-01	-0.10840E 01	0.12727E 01
101	534.61	0.69455E 00	0.11366E-00	0.16712E-03	0.40871E-04	0.18430E-01	0.12435E-01	-0.11080E 01	0.99431E 00
102	563.87	0.23519E 02	0.39002E 01	0.57947E-02	0.14172E-02	0.63240E 00	0.42671E-00	-0.11080E 01	0.29011E 02
103	539.53	0.44382E 01	0.74463E 00	0.10967E-02	0.26822E-03	0.12074E-00	0.81467E-01	-0.10800E 01	0.34039E 01
104	623.40	0.62887E 02	0.10421E 02	0.15822E-01	0.38696E-02	0.16898E 01	0.11402E 01	0.85000E 00	0.
105	637.34	0.76504E 02	0.12081E 02	0.18437E-01	0.45089E-02	0.19589E 01	0.13217E 01	0.94000E 00	0.98645E 00
106	645.05	0.83054E 02	0.13058E 02	0.19984E-01	0.48873E-02	0.21172E 01	0.14286E 01	0.96000E 00	0.98633E 00
107	637.94	0.82581E 02	0.12935E 02	0.19744E-01	0.48287E-02	0.20973E 01	0.14152E 01	0.98000E 00	0.10074E 01
108	642.82	0.83013E 02	0.13102E 02	0.20036E-01	0.49000E-02	0.21244E 01	0.14335E 01	0.10000E 01	0.10058E 01
109	626.27	0.73281E 02	0.11505E 02	0.17486E-01	0.42764E-02	0.18655E 01	0.12587E 01	0.10200E 01	0.99284E 00
110	642.88	0.73016E 02	0.11564E 02	0.17683E-01	0.43247E-02	0.18750E 01	0.12651E 01	0.80000E-01	0.10126E 01
111	637.97	0.76497E 02	0.11982E 02	0.18290E-01	0.44731E-02	0.19428E 01	0.13109E 01	0.10000E-00	0.99411E 00
112	655.70	0.82452E 02	0.13101E 02	0.20130E-01	0.49230E-02	0.21242E 01	0.14333E 01	0.12000E-00	0.98474E 00
113	648.89	0.87112E 02	0.13839E 02	0.21210E-01	0.51873E-02	0.22439E 01	0.15141E 01	0.14000E-00	0.98575E 00
114	634.85	0.71680E 02	0.11305E 02	0.17236E-01	0.42152E-02	0.18330E 01	0.12368E 01	0.80000E-01	0.99691E 00
115	638.55	0.73527E 02	0.11579E 02	0.17679E-01	0.43236E-02	0.18775E 01	0.12668E 01	0.10000E-00	0.98881E 00
116	642.16	0.76506E 02	0.12152E 02	0.18579E-01	0.45437E-02	0.19704E 01	0.13295E 01	0.12000E-00	0.98829E 00
117	656.82	0.80512E 02	0.12843E 02	0.19742E-01	0.48282E-02	0.20824E 01	0.14051E 01	0.14000E-00	0.10096E 01
118	642.15	0.67985E 02	0.10853E 02	0.16592E-01	0.40579E-02	0.17598E 01	0.11874E 01	0.10000E-00	0.10046E 01
119	642.84	0.65323E 02	0.10380E 02	0.15873E-01	0.38819E-02	0.16830E 01	0.11356E 01	0.15000E-00	0.15077E 01
120	708.40	0.56736E 02	0.93367E 01	0.14634E-01	0.35791E-02	0.15139E 01	0.10215E 01	0.20000E-00	0.91339E 00
121	642.23	0.64285E 02	0.10263E 02	0.15690E-01	0.38373E-02	0.16641E 01	0.11228E 01	0.25000E-00	0.96967E 00
122	636.61	0.61005E 02	0.97107E 01	0.14815E-01	0.36233E-02	0.15745E 01	0.10624E 01	0.30000E-00	0.97231E 00
123	1099.10	-0.52935E 00	-0.10422E-00	-0.19236E-03	-0.47043E-04	-0.16899E-01	-0.11402E-01	0.35000E-00	0.
124	637.79	0.69857E 02	0.11256E 02	0.17181E-01	0.42019E-02	0.18252E 01	0.12315E 01	0.38000E-00	0.99628E 00
125	647.82	0.77391E 02	0.12639E 02	0.19363E-01	0.47355E-02	0.20493E 01	0.13828E 01	0.45000E-00	0.98997E 00
126	636.82	0.71344E 02	0.11736E 02	0.17907E-01	0.43794E-02	0.19030E 01	0.12840E 01	0.61000E 00	0.99940E 00
127	596.02	0.51219E 02	0.82851E 01	0.12453E-01	0.30456E-02	0.13434E 01	0.90643E 00	0.70000E 00	0.99300E 00
128	562.51	0.29487E 02	0.46983E 01	0.69770E-02	0.17063E-02	0.76180E 00	0.51402E 00	0.75000E 00	0.10011E 01
129	606.64	0.51171E 02	0.83514E 01	0.12602E-01	0.30819E-02	0.13541E 01	0.91368E 00	0.70000E 00	0.92481E 00
130	611.20	0.53259E 02	0.87132E 01	0.13170E-01	0.32208E-02	0.14128E 01	0.95327E 00	0.80000E 00	0.91328E 00
131	572.04	0.32861E 02	0.49939E 01	0.74415E-02	0.18199E-02	0.80973E 00	0.54636E 00	0.90000E 00	0.92524E 00
132	620.10	0.65600E 02	0.10266E 02	0.15567E-01	0.38071E-02	0.16645E 01	0.11231E 01	0.90000E 00	0.13164E 01
133	617.75	0.63710E 02	0.99071E 01	0.15010E-01	0.36709E-02	0.16064E 01	0.10839E 01	0.96000E 00	0.11932E 01
134	615.34	0.60417E 02	0.93989E 01	0.14228E-01	0.34795E-02	0.15240E 01	0.10283E 01	0.10000E 01	0.11409E 01
135	1123.27	-0.45091E-00	-0.92128E-01	-0.17195E-03	-0.42052E-04	-0.14938E-01	-0.10079E-01	0.70000E-02	0.
136	1127.63	0.46709E-02	0.93897E-03	0.17560E-05	0.42946E-06	0.15225E-03	0.10273E-03	0.70000E-02	0.
137	568.82	0.29129E 02	0.46053E 01	0.68544E-02	0.16763E-02	0.74671E 00	0.50384E 00	0.39000E-01	0.99224E 00
138	567.34	0.28669E 02	0.45069E 01	0.67044E-02	0.16397E-02	0.73077E 00	0.49308E-00	0.78000E-01	0.99534E 00
139	578.32	0.41038E 02	0.64586E 01	0.96459E-02	0.23590E-02	0.10472E 01	0.70661E 00	0.11700E-00	0.
140	579.59	0.41351E 02	0.64911E 01	0.96989E-02	0.23720E-02	0.10525E 01	0.71017E 00	0.78000E-01	0.14667E 01
141	651.82	0.86403E 02	0.97040E 01	0.14889E-01	0.36413E-02	0.15734E 01	0.10617E 01	-0.	0.
142	631.55	0.55881E 02	0.62101E 01	0.94568E-02	0.23128E-02	0.10069E 01	0.67942E 00	-0.	0.
143	558.64	0.22135E 02	0.34179E 01	0.50686E-02	0.12396E-02	0.55419E 00	0.37394E-00	0.78000E-01	0.96962E 00
144	561.40	0.26280E 02	0.40709E 01	0.60430E-02	0.14779E-02	0.66008E 00	0.44538E-00	0.70000E-02	0.98433E 00
145	560.94	0.23682E 02	0.36494E 01	0.54163E-02	0.13246E-02	0.59173E 00	0.39926E-00	0.70000E-02	0.97128E 00
146	559.11	0.23474E 02	0.36316E 01	0.53864E-02	0.13173E-02	0.58885E 00	0.39732E-00	0.39000E-01	0.97480E 00
147	560.90	0.22877E 02	0.35370E 01	0.52494E-02	0.12838E-02	0.57350E 00	0.38696E-00	0.78000E-01	0.12761E 03
148	1085.37	-0.36365E-02	-0.72281E-03	-0.13257E-05	-0.32422E-06	-0.11720E-03	-0.79079E-04	0.11700E-00	0.
149	605.90	0.47259E 02	0.77962E 01	0.11761E-01	0.28763E-02	0.12641E 01	0.85295E 00	0.70000E-02	0.99586E 00
150	608.73	0.47653E 02	0.79105E 01	0.11946E-01	0.29215E-02	0.12826E 01	0.86545E 00	0.70000E-02	0.98697E 00
151	607.23	0.46535E 02	0.77186E 01	0.11649E-01	0.28490E-02	0.12515E 01	0.84445E 00	0.70000E-02	0.97620E 00
152	616.61	0.54432E 02	0.87450E 01	0.13244E-01	0.32390E-02	0.14179E 01	0.95675E 00	0.39000E-01	0.98289E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	614.33	0.54549E 02	0.87533E 01	0.13245E-01	0.32393E-02	0.14193E 01	0.95766E 00	0.39000E-01	0.
154	613.67	0.57943E 02	0.92339E 01	0.13969E-01	0.34164E-02	0.14972E 01	0.10102E 01	0.78000E-01	0.99297E 00
155	609.16	0.52456E 02	0.87097E 01	0.13155E-01	0.32171E-02	0.14122E 01	0.95289E 00	0.39000E-01	0.
156	600.56	0.47643E 02	0.78494E 01	0.11818E-01	0.28903E-02	0.12727E 01	0.85877E 00	0.39000E-01	0.
157	597.58	0.46240E 02	0.76301E 01	0.11475E-01	0.28065E-02	0.12372E 01	0.83478E 00	0.78000E-01	0.98683E 00
158	595.12	0.46200E 02	0.76374E 01	0.11476E-01	0.28066E-02	0.12384E 01	0.83557E 00	0.39000E-01	0.99259E 00
159	590.96	0.43178E 02	0.71218E 01	0.10685E-01	0.26132E-02	0.11548E 01	0.77917E 00	0.78000E-01	0.99074E 00
160	600.06	0.44647E 02	0.73770E 01	0.11105E-01	0.27158E-02	0.11961E 01	0.80709E 00	0.39000E-01	0.99790E 00
161	608.17	0.53111E 02	0.86056E 01	0.12993E-01	0.31775E-02	0.13953E 01	0.94150E 00	0.43000E-01	0.11558E 01
162	651.70	0.85793E 02	0.14269E 02	0.21892E-01	0.53539E-02	0.23136E 01	0.15611E 01	0.43000E-01	0.18877E 01
163	626.75	0.65740E 02	0.10809E 02	0.16432E-01	0.40186E-02	0.17527E 01	0.11826E 01	0.85000E-01	0.14508E 01
164	616.31	0.57471E 02	0.93525E 01	0.14163E-01	0.34636E-02	0.15165E 01	0.10232E 01	0.12800E-00	0.12772E 01
165	659.23	0.94542E 02	0.15785E 02	0.24286E-01	0.59396E-02	0.25595E 01	0.17270E 01	0.43000E-01	0.20696E 01
166	644.22	0.85009E 02	0.14038E 02	0.21478E-01	0.52528E-02	0.22762E 01	0.15359E 01	0.85000E-01	0.18652E 01
167	674.22	0.10544E 03	0.17683E 02	0.27360E-01	0.66912E-02	0.28672E 01	0.19346E 01	0.43000E-01	0.
168	636.88	0.72875E 02	0.12124E 02	0.18499E-01	0.45241E-02	0.19658E 01	0.13264E 01	0.12800E-00	0.15757E 01
169	652.07	0.82399E 02	0.13773E 02	0.21134E-01	0.51686E-02	0.22332E 01	0.15068E 01	0.85000E-01	0.17842E 01
170	641.59	0.75182E 02	0.12439E 02	0.19012E-01	0.46497E-02	0.20168E 01	0.13608E 01	0.12800E-00	0.15655E 01
171	641.93	0.82856E 02	0.13666E 02	0.20892E-01	0.51093E-02	0.22159E 01	0.14952E 01	0.85000E-01	0.17424E 01
172	690.02	0.10410E 03	0.17685E 02	0.27526E-01	0.67318E-02	0.28675E 01	0.19348E 01	0.43000E-01	0.
173	653.67	0.80073E 02	0.13395E 02	0.20567E-01	0.50299E-02	0.21720E 01	0.14655E 01	0.12800E-00	0.15965E 01
174	663.71	0.91211E 02	0.15264E 02	0.23524E-01	0.57532E-02	0.24750E 01	0.16700E 01	0.85000E-01	0.
175	691.18	0.98329E 02	0.16633E 02	0.25900E-01	0.63343E-02	0.26969E 01	0.18197E 01	0.43000E-01	0.20107E 01
176	680.70	0.88708E 02	0.14926E 02	0.23151E-01	0.56619E-02	0.24202E 01	0.16330E 01	0.43000E-01	0.17825E 01
177	611.78	0.49555E 02	0.80838E 01	0.12221E-01	0.29888E-02	0.13107E 01	0.88441E 00	0.12800E-00	0.89717E 00
178	612.76	0.53185E 02	0.86667E 01	0.13107E-01	0.32055E-02	0.14052E 01	0.94818E 00	0.85000E-01	0.10045E 01
179	632.98	0.63247E 02	0.10417E 02	0.15871E-01	0.38815E-02	0.16890E 01	0.11397E 01	0.70000E-02	0.12178E 01
180	611.55	0.56553E 02	0.92539E 01	0.13989E-01	0.34211E-02	0.15005E 01	0.10124E 01	0.70000E-02	0.
181	622.42	0.56859E 02	0.93577E 01	0.14202E-01	0.34733E-02	0.15173E 01	0.10238E 01	0.70000E-02	0.11341E 01
182	614.56	0.55695E 02	0.91573E 01	0.13858E-01	0.33891E-02	0.14848E 01	0.10019E 01	0.70000E-02	0.
183	612.89	0.49619E 02	0.80991E 01	0.12249E-01	0.29957E-02	0.13132E 01	0.88609E 00	0.32000E-01	0.91865E 00
184	634.93	0.62587E 02	0.10402E 02	0.15860E-01	0.38787E-02	0.16866E 01	0.11380E 01	0.32000E-01	0.98290E 00
185	615.34	0.59420E 02	0.97738E 01	0.14795E-01	0.36184E-02	0.15848E 01	0.10693E 01	0.64000E-01	0.99114E 00
186	631.52	0.65600E 02	0.10848E 02	0.16520E-01	0.40401E-02	0.17590E 01	0.11869E 01	0.64000E-01	0.98645E 00
187	618.55	0.53321E 02	0.87856E 01	0.13315E-01	0.32563E-02	0.14245E 01	0.96119E 00	0.70000E-02	0.94260E 00
188	607.53	0.51740E 02	0.86104E 01	0.12997E-01	0.31785E-02	0.13961E 01	0.94203E 00	0.70000E-02	0.96713E 00
189	536.13	0.73886E 01	0.12065E 01	0.17748E-02	0.43405E-03	0.19562E-00	0.13199E-00	0.10600E 01	0.11288E 01
190	532.12	0.42172E 01	0.70079E 00	0.10295E-02	0.25177E-03	0.11363E-00	0.76670E-01	0.10840E 01	0.11851E 01
191	529.96	0.19881E 01	0.33176E-00	0.48698E-03	0.11910E-03	0.53792E-01	0.36296E-01	0.11080E 01	0.11764E 01
192	529.58	0.22047E 01	0.36584E-00	0.53693E-03	0.13131E-03	0.59318E-01	0.40025E-01	0.11080E 01	0.11680E 01
193	535.56	0.65486E 01	0.10739E 01	0.15795E-02	0.38628E-03	0.17412E-00	0.11749E-00	0.16580E 01	0.12055E 01
194	535.87	0.59475E 01	0.97101E 00	0.14283E-02	0.34931E-03	0.15744E-00	0.10623E-00	0.11700E 01	0.11630E 01
195	536.53	0.68597E 01	0.11255E 01	0.16560E-02	0.40499E-03	0.18250E-00	0.12314E-00	0.16740E 01	0.12260E 01
196	536.12	0.63823E 01	0.10421E 01	0.15331E-02	0.37494E-03	0.16898E-00	0.11402E-00	0.16950E 01	0.11823E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
44	1	-5.61	147.11	59.11	4.81	2	C55	2.75	2	10.19	1813.70	2587.30	112	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.129242E 03	0.341489E-01	0.567369E 04	0.221685E-04	0.104686E-06	0.120956E 01	0.772000E 01
					2.20	

PR	Q(F-R)	Q(MEAS)
0.746860E 00	0.616324E 01	0.913222E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	537.73	0.21304E 01	0.34657E-00	0.49506E-03	0.12233E-03	0.56232E-01	0.37950E-01	-0.10600E 01	0.94870E 00
100	539.07	0.11595E 01	0.19448E-00	0.27794E-03	0.68682E-04	0.31556E-01	0.21296E-01	-0.10840E 01	0.11255E 01
101	538.61	0.65455E 00	0.10736E-00	0.15340E-03	0.37907E-04	0.17419E-01	0.11756E-01	-0.11080E 01	0.99251E 00
102	574.79	0.28570E 02	0.47665E 01	0.68968E-02	0.17043E-02	0.77337E 00	0.52194E 00	-0.11080E 01	0.38202E 02
103	574.86	0.48029E 02	0.82177E 01	0.11891E-01	0.29384E-02	0.13333E 01	0.89986E 00	-0.10800E 01	0.38641E 02
104	619.75	0.67190E 02	0.11113E 02	0.16337E-01	0.40372E-02	0.18031E 01	0.12169E 01	0.85000E 00	0.
105	633.32	0.79696E 02	0.12559E 02	0.18552E-01	0.45845E-02	0.20376E 01	0.13752E 01	0.94000E 00	0.98952E 00
106	640.75	0.85264E 02	0.13375E 02	0.19811E-01	0.48956E-02	0.21701E 01	0.14646E 01	0.96000E 00	0.98665E 00
107	633.67	0.83909E 02	0.13114E 02	0.19375E-01	0.47877E-02	0.21277E 01	0.14360E 01	0.98000E 00	0.10034E 01
108	637.19	0.82241E 02	0.12942E 02	0.19146E-01	0.47311E-02	0.20999E 01	0.14172E 01	0.10000E 01	0.99623E 00
109	620.53	0.71784E 02	0.11236E 02	0.16522E-01	0.40829E-02	0.18230E 01	0.12304E 01	0.10200E 01	0.98354E 00
110	634.67	0.74064E 02	0.11679E 02	0.17262E-01	0.42655E-02	0.18950E 01	0.12789E 01	0.80000E-01	0.10071E 01
111	628.71	0.76997E 02	0.12002E 02	0.17701E-01	0.43742E-02	0.19474E 01	0.13143E 01	0.10000E-00	0.99486E 00
112	644.09	0.81743E 02	0.12910E 02	0.19146E-01	0.47311E-02	0.20947E 01	0.14137E 01	0.12000E-00	0.98182E 00
113	637.09	0.85381E 02	0.13481E 02	0.19942E-01	0.49279E-02	0.21873E 01	0.14762E 01	0.14000E-00	0.98337E 00
114	619.18	0.69455E 02	0.10863E 02	0.15967E-01	0.39457E-02	0.17626E 01	0.11896E 01	0.80000E-01	0.98898E 00
115	619.86	0.70351E 02	0.10971E 02	0.16129E-01	0.39856E-02	0.17800E 01	0.12013E 01	0.10000E-00	0.98651E 00
116	621.45	0.72519E 02	0.11395E 02	0.16761E-01	0.41419E-02	0.18488E 01	0.12477E 01	0.12000E-00	0.98863E 00
117	633.09	0.75728E 02	0.11932E 02	0.17625E-01	0.43553E-02	0.19360E 01	0.13066E 01	0.14000E-00	0.10112E 01
118	616.68	0.63167E 02	0.99498E 01	0.14611E-01	0.36106E-02	0.16144E 01	0.10895E 01	0.10000E-00	0.99389E 00
119	612.84	0.60850E 02	0.95174E 01	0.13957E-01	0.34490E-02	0.15442E 01	0.10422E 01	0.15000E-00	0.88906E 00
120	611.39	0.55667E 02	0.87146E 01	0.12773E-01	0.31564E-02	0.14140E 01	0.95427E 00	0.20000E-00	0.90907E 00
121	611.32	0.62266E 02	0.97801E 01	0.14335E-01	0.35423E-02	0.15868E 01	0.10709E 01	0.25000E-00	0.97791E 00
122	604.02	0.57453E 02	0.89890E 01	0.13141E-01	0.32473E-02	0.14585E 01	0.98431E 00	0.30000E-00	0.97425E 00
123	1085.37	-0.36365E-02	-0.71218E-03	-0.12585E-05	-0.31098E-06	-0.11555E-03	-0.77986E-04	0.35000E-00	0.
124	601.96	0.62056E 02	0.98115E 01	0.14333E-01	0.35419E-02	0.15919E 01	0.10744E 01	0.38000E-00	0.98897E 00
125	607.34	0.66902E 02	0.10696E 02	0.15655E-01	0.38684E-02	0.17354E 01	0.11712E 01	0.45000E-00	0.97582E 00
126	596.90	0.59517E 02	0.95855E 01	0.13978E-01	0.34541E-02	0.15553E 01	0.10496E 01	0.61000E 00	0.97894E 00
127	561.54	0.36840E 02	0.58480E 01	0.84227E-02	0.20813E-02	0.94885E 00	0.64037E 00	0.70000E 00	0.97022E 00
128	541.94	0.18852E 02	0.29697E 01	0.42481E-02	0.10498E-02	0.48183E-00	0.32518E-00	0.75000E 00	0.97323E 00
129	578.89	0.39736E 02	0.63886E 01	0.92572E-02	0.22876E-02	0.10366E 01	0.69936E 00	0.70000E 00	0.83914E 00
130	587.89	0.49983E 02	0.80755E 01	0.11739E-01	0.29008E-02	0.13103E 01	0.88429E 00	0.80000E 00	0.10151E 01
131	552.78	0.25125E 02	0.37779E 01	0.54247E-02	0.13405E-02	0.61298E 00	0.41369E-00	0.90000E 00	0.10995E 01
132	594.70	0.59066E 02	0.91184E 01	0.13286E-01	0.32832E-02	0.14795E 01	0.99849E 00	0.90000E 00	0.13982E 01
133	588.73	0.53405E 02	0.81765E 01	0.11889E-01	0.29379E-02	0.13267E 01	0.89534E 00	0.96000E 00	0.12134E 01
134	585.16	0.49154E 02	0.75237E 01	0.10926E-01	0.27000E-02	0.12207E 01	0.82387E 00	0.10000E 01	0.11563E 01
135	1085.37	-0.36365E-02	-0.73226E-03	-0.12940E-05	-0.31975E-06	-0.11881E-03	-0.80184E-04	0.70000E-02	0.
136	1085.37	-0.36365E-02	-0.71927E-03	-0.12710E-05	-0.31408E-06	-0.11670E-03	-0.78762E-04	0.70000E-02	0.
137	561.25	0.25295E 02	0.39824E 01	0.57351E-02	0.14172E-02	0.64615E 00	0.43608E-00	0.39000E-01	0.97694E 00
138	559.89	0.24969E 02	0.39091E 01	0.56269E-02	0.13905E-02	0.63426E 00	0.42806E-00	0.78000E-01	0.98098E 00
139	559.33	0.26275E 02	0.40922E 01	0.58894E-02	0.14553E-02	0.66397E 00	0.44811E-00	0.11700E-00	0.
140	559.89	0.25810E 02	0.40079E 01	0.57692E-02	0.14256E-02	0.65030E 00	0.43888E-00	0.78000E-01	0.10370E 01
141	706.37	0.14538E 03	0.16786E 02	0.25465E-01	0.62928E-02	0.27236E 01	0.18381E 01	-0.	0.
142	646.99	0.79237E 02	0.88769E 01	0.13178E-01	0.32564E-02	0.14403E 01	0.97204E 00	-0.	0.
143	568.41	0.36143E 02	0.56112E 01	0.81010E-02	0.20019E-02	0.91043E 00	0.61444E 00	0.78000E-01	0.93907E 00
144	564.44	0.34183E 02	0.53040E 01	0.76470E-02	0.18897E-02	0.86059E 00	0.58080E 00	0.70000E-02	0.10092E 01
145	563.83	0.29387E 02	0.45358E 01	0.65381E-02	0.16156E-02	0.73595E 00	0.49669E-00	0.70000E-02	0.10211E 01
146	562.39	0.28846E 02	0.44708E 01	0.64411E-02	0.15917E-02	0.72540E 00	0.48956E-00	0.39000E-01	0.10072E 01
147	564.82	0.28234E 02	0.43747E 01	0.63080E-02	0.15588E-02	0.70981E 00	0.47904E-00	0.78000E-01	0.
148	1085.37	-0.36365E-02	-0.72281E-03	-0.12773E-05	-0.31562E-06	-0.11728E-03	-0.79149E-04	0.11700E-00	0.
149	619.53	0.49472E 02	0.82206E 01	0.12084E-01	0.29862E-02	0.13338E 01	0.90018E 00	0.70000E-02	0.96976E 00
150	622.60	0.52164E 02	0.87233E 01	0.12837E-01	0.31722E-02	0.14154E 01	0.95522E 00	0.70000E-02	0.97223E 00
151	625.28	0.54502E 02	0.91272E 01	0.13444E-01	0.33223E-02	0.14809E 01	0.99945E 00	0.70000E-02	0.96248E 00
152	640.14	0.63573E 02	0.10341E 02	0.15314E-01	0.37842E-02	0.16779E 01	0.11324E 01	0.39000E-01	0.96375E 00

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	637.77	0.62050E 02	0.10081E 02	0.14916E-01	0.36858E-02	0.16356E 01	0.11039E 01	0.39000E-01	0.
154	638.15	0.64452E 02	0.10405E 02	0.15397E-01	0.38048E-02	0.16882E 01	0.11393E 01	0.78000E-01	0.96014E 00
155	632.37	0.58002E 02	0.97495E 01	0.14398E-01	0.35578E-02	0.15819E 01	0.10676E 01	0.39000E-01	0.
156	621.35	0.51445E 02	0.85703E 01	0.12607E-01	0.31152E-02	0.13906E 01	0.93847E 00	0.39000E-01	0.
157	617.17	0.48730E 02	0.81257E 01	0.11935E-01	0.29492E-02	0.13184E 01	0.88978E 00	0.78000E-01	0.96618E 00
158	614.58	0.49066E 02	0.81961E 01	0.12027E-01	0.29720E-02	0.13298E 01	0.89749E 00	0.39000E-01	0.97062E 00
159	606.35	0.44534E 02	0.74065E 01	0.10837E-01	0.26779E-02	0.12017E 01	0.81103E 00	0.78000E-01	0.97913E 00
160	615.36	0.46354E 02	0.77221E 01	0.11335E-01	0.28009E-02	0.12529E 01	0.84558E 00	0.39000E-01	0.97806E 00
161	579.69	0.39981E 02	0.63793E 01	0.92464E-02	0.22849E-02	0.10351E 01	0.69855E 00	0.43000E-01	0.97348E 00
162	600.74	0.60265E 02	0.97574E 01	0.14248E-01	0.35208E-02	0.15832E 01	0.10685E 01	0.43000E-01	0.14849E 01
163	588.61	0.47692E 02	0.76837E 01	0.11172E-01	0.27607E-02	0.12467E 01	0.84139E 00	0.85000E-01	0.11864E 01
164	584.03	0.42704E 02	0.68300E 01	0.99147E-02	0.24500E-02	0.11082E 01	0.74790E 00	0.12800E-00	0.10779E 01
165	617.80	0.80323E 02	0.13124E 02	0.19280E-01	0.47643E-02	0.21294E 01	0.14371E 01	0.43000E-01	0.19886E 01
166	607.19	0.72443E 02	0.11732E 02	0.17170E-01	0.42429E-02	0.19035E 01	0.12847E 01	0.85000E-01	0.18137E 01
167	652.92	0.11673E 03	0.19364E 02	0.28808E-01	0.71187E-02	0.31418E 01	0.21204E 01	0.43000E-01	0.
168	602.20	0.61211E 02	0.99981E 01	0.14607E-01	0.36096E-02	0.16222E 01	0.10948E 01	0.12800E-00	0.15184E 01
169	637.40	0.90029E 02	0.14934E 02	0.22094E-01	0.54596E-02	0.24231E 01	0.16353E 01	0.85000E-01	0.22482E 01
170	625.18	0.79758E 02	0.13083E 02	0.19270E-01	0.47619E-02	0.21227E 01	0.14326E 01	0.12800E-00	0.19225E 01
171	629.96	0.93669E 02	0.15353E 02	0.22654E-01	0.55980E-02	0.24911E 01	0.16812E 01	0.85000E-01	0.22749E 01
172	662.77	0.10542E 03	0.17661E 02	0.26369E-01	0.65160E-02	0.28656E 01	0.19339E 01	0.43000E-01	0.
173	627.80	0.80522E 02	0.13290E 02	0.19594E-01	0.48418E-02	0.21563E 01	0.14553E 01	0.12800E-00	0.18732E 01
174	630.62	0.89461E 02	0.14716E 02	0.21719E-01	0.53669E-02	0.23877E 01	0.16115E 01	0.85000E-01	0.
175	647.82	0.95587E 02	0.15815E 02	0.23485E-01	0.58033E-02	0.25660E 01	0.17318E 01	0.43000E-01	0.22318E 01
176	663.41	0.10015E 03	0.16703E 02	0.24944E-01	0.61641E-02	0.27102E 01	0.18291E 01	0.43000E-01	0.23359E 01
177	598.95	0.53554E 02	0.86764E 01	0.12661E-01	0.31288E-02	0.14078E 01	0.95009E 00	0.12800E-00	0.11463E 01
178	619.32	0.70770E 02	0.11572E 02	0.17010E-01	0.42034E-02	0.18777E 01	0.12672E 01	0.85000E-01	0.15793E 01
179	634.88	0.73466E 02	0.12112E 02	0.17903E-01	0.44240E-02	0.19652E 01	0.13263E 01	0.70000E-02	0.16695E 01
180	604.82	0.61924E 02	0.10096E 02	0.14764E-01	0.36484E-02	0.16382E 01	0.11056E 01	0.70000E-02	0.
181	619.62	0.64507E 02	0.10601E 02	0.15583E-01	0.38509E-02	0.17200E 01	0.11608E 01	0.70000E-02	0.14865E 01
182	613.69	0.63949E 02	0.10510E 02	0.15417E-01	0.38097E-02	0.17052E 01	0.11508E 01	0.70000E-02	0.
183	584.74	0.38592E 02	0.62045E 01	0.90090E-02	0.22262E-02	0.10067E 01	0.67941E 00	0.32000E-01	0.83062E 00
184	597.24	0.50958E 02	0.83013E 01	0.12107E-01	0.29917E-02	0.13469E 01	0.90901E 00	0.32000E-01	0.94544E 00
185	577.86	0.45391E 02	0.73169E 01	0.10599E-01	0.26190E-02	0.11872E 01	0.80122E 00	0.64000E-01	0.95822E 00
186	592.57	0.53557E 02	0.86748E 01	0.12631E-01	0.31212E-02	0.14075E 01	0.94991E 00	0.64000E-01	0.96026E 00
187	590.70	0.44397E 02	0.72068E 01	0.10486E-01	0.25913E-02	0.11693E 01	0.78917E 00	0.70000E-02	0.91521E 00
188	596.31	0.52669E 02	0.87124E 01	0.12702E-01	0.31388E-02	0.14136E 01	0.95403E 00	0.70000E-02	0.11483E 01
189	540.52	0.12196E 02	0.19963E 01	0.28544E-02	0.70536E-03	0.32391E-00	0.21861E-00	0.10600E 01	0.10364E 01
190	534.04	0.78779E 01	0.13105E 01	0.18697E-02	0.46201E-03	0.21264E-00	0.14351E-00	0.10840E 01	0.10616E 01
191	528.57	0.40353E 01	0.67286E 00	0.95812E-03	0.23676E-03	0.10917E-00	0.73680E-01	0.11080E 01	0.10506E 01
192	529.29	0.45340E 01	0.75224E 00	0.10714E-02	0.26476E-03	0.12205E-00	0.82372E-01	0.11080E 01	0.10454E 01
193	538.40	0.69704E 01	0.11449E 01	0.16358E-02	0.40422E-03	0.18576E-00	0.12537E-00	0.16580E 01	0.13820E 01
194	541.91	0.84868E 01	0.13903E 01	0.19888E-02	0.49146E-03	0.22558E-00	0.15224E-00	0.11700E 01	0.17755E 01
195	541.32	0.89044E 01	0.14650E 01	0.20952E-02	0.51774E-03	0.23769E-00	0.16042E-00	0.16740E 01	0.16984E 01
196	541.57	0.91974E 01	0.15064E 01	0.21547E-02	0.53245E-03	0.24442E-00	0.16496E-00	0.16950E 01	0.18206E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
42	1	4.33	154.33	0.02	-0.	1	C55	2.70	2	10.19	1828.00	2541.10	104	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.126696E 03	0.346279E-01	0.561774E 04	0.229312E-04	0.102623E-06	~~0.126375E 01~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.746121E 00	0.618660E 01	0.917818E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	586.62	0.48876E 02	0.65276E 01	0.10012E-01	0.24157E-02	0.10551E 01	0.71121E 00	-0.	0.10277E 01
2	610.46	0.22475E 02	0.32345E 01	0.50055E-02	0.12077E-02	0.52282E 00	0.35241E-00	-0.30000E-01	0.
3	578.18	0.44253E 02	0.68049E 01	0.10405E-01	0.25104E-02	0.10999E 01	0.74142E 00	-0.60000E-01	0.10234E 01
4	579.66	0.42571E 02	0.67201E 01	0.10281E-01	0.24805E-02	0.10862E 01	0.73219E 00	-0.90000E-01	0.10315E 01
5	571.77	0.39207E 02	0.63192E 01	0.96397E-02	0.23258E-02	0.10214E 01	0.68851E 00	-0.20000E-00	0.10325E 01
6	570.98	0.35236E 02	0.56767E 01	0.86569E-02	0.20887E-02	0.91757E 00	0.61850E 00	-0.40000E-00	0.10165E 01
7	569.42	0.30287E 02	0.48985E 01	0.74659E-02	0.18013E-02	0.79179E 00	0.53371E 00	-0.60000E 00	0.10138E 01
8	568.40	0.28485E 02	0.46045E 01	0.70151E-02	0.16925E-02	0.74426E 00	0.50167E 00	-0.80000E 00	0.10464E 01
9	567.43	0.27136E 02	0.43146E 01	0.65712E-02	0.15854E-02	0.69741E 00	0.47009E-00	-0.90000E 00	0.97494E 00
10	568.36	0.25378E 02	0.40891E 01	0.62299E-02	0.15031E-02	0.66097E 00	0.44553E-00	-0.98000E 00	0.98135E 00
11	538.16	0.97195E 00	0.16696E-00	0.25157E-03	0.60696E-04	0.26987E-01	0.18190E-01	-0.11220E 01	0.43811E-00
12	540.18	0.21210E 01	0.31081E-00	0.46867E-03	0.11308E-03	0.50240E-01	0.33864E-01	-0.11890E 01	0.74678E 00
13	540.31	0.17797E 01	0.26889E-00	0.40547E-03	0.97828E-04	0.43463E-01	0.29296E-01	-0.13340E 01	0.61424E 00
14	539.33	0.17657E 01	0.30350E-00	0.45751E-03	0.11038E-03	0.49058E-01	0.33068E-01	-0.14400E 01	0.78700E 00
15	585.34	0.47806E 02	0.67875E 01	0.10406E-01	0.25107E-02	0.10971E 01	0.73953E 00	0.30000E-01	0.
16	-4157.09	0.10379E-01	-0.44754E-02	-0.27088E-05	-0.65355E-06	-0.72340E-03	-0.48761E-03	0.60000E-01	0.
17	579.82	0.44646E 02	0.70483E 01	0.10784E-01	0.26018E-02	0.11393E 01	0.76794E 00	0.90000E-01	0.10318E 01
18	580.54	0.43806E 02	0.70944E 01	0.10857E-01	0.26196E-02	0.11467E 01	0.77296E 00	0.20000E-00	0.10310E 01
19	597.19	0.46324E 02	0.75702E 01	0.11657E-01	0.28126E-02	0.12236E 01	0.82480E 00	0.40000E-00	0.10109E 01
20	618.29	0.58195E 02	0.96637E 01	0.14999E-01	0.36189E-02	0.15620E 01	0.10529E 01	0.60000E 00	0.
21	643.11	0.64244E 02	0.10176E 02	0.15943E-01	0.38465E-02	0.16448E 01	0.11087E 01	0.92000E 00	0.10208E 01
22	565.84	0.43382E 02	0.65926E 01	0.10035E-01	0.24211E-02	0.10656E 01	0.71829E 00	0.10400E 01	0.92209E 00
23	591.16	0.42460E 02	0.65599E 01	0.10079E-01	0.24317E-02	0.10603E 01	0.71472E 00	0.10600E 01	0.10044E 01
24	568.26	0.30187E 02	0.48251E 01	0.73509E-02	0.17736E-02	0.77993E 00	0.52572E 00	0.10840E 01	0.10042E 01
25	529.04	0.10409E 02	0.15235E 01	0.22881E-02	0.55204E-03	0.24626E-00	0.16600E-00	0.12070E 01	0.22647E 01
26	526.61	0.11236E 02	0.17322E 01	0.25992E-02	0.62712E-03	0.28000E-00	0.18874E-00	0.12490E 01	0.26791E 01
27	527.89	0.12336E 02	0.18723E 01	0.28107E-02	0.67813E-03	0.30264E-00	0.20400E-00	0.13340E 01	0.28678E 01
28	525.10	0.99730E 01	0.16806E 01	0.25203E-02	0.60807E-03	0.27165E-00	0.18310E-00	0.14540E 01	0.27867E 01
29	525.09	0.67584E 01	0.11051E 01	0.16573E-02	0.39986E-03	0.17863E-00	0.12041E-00	0.16580E 01	0.18618E 01
30	533.93	0.75153E 01	0.12501E 01	0.18808E-02	0.45378E-03	0.20207E-00	0.13621E-00	0.20410E 01	0.22115E 01
31	538.42	0.70826E 01	0.11811E 01	0.17799E-02	0.42944E-03	0.19092E-00	0.12869E-00	0.22480E 01	0.21377E 01
32	580.98	0.44135E 02	0.68038E 01	0.10414E-01	0.25127E-02	0.10998E 01	0.74130E 00	-0.60000E-01	0.
33	589.66	0.46798E 02	0.66600E 01	0.10227E-01	0.24675E-02	0.10765E 01	0.72563E 00	-0.30000E-01	0.10341E 01
34	584.42	0.47188E 02	0.72880E 01	0.11170E-01	0.26949E-02	0.11780E 01	0.79406E 00	0.30000E-01	0.
35	578.92	0.42785E 02	0.67513E 01	0.10326E-01	0.24914E-02	0.10913E 01	0.73558E 00	0.60000E-01	0.10247E 01
36	597.87	0.68714E 02	0.11233E 02	0.17302E-01	0.41746E-02	0.18157E 01	0.12239E 01	-0.86800E 00	0.24[illegible]E 01
37	598.23	0.63405E 02	0.10087E 02	0.15539E-01	0.37491E-02	0.16305E 01	0.10990E 01	-0.91100E 00	0.22885E 01
38	587.88	0.56216E 02	0.90534E 01	0.13893E-01	0.33520E-02	0.14634E 01	0.98641E 00	-0.95300E 00	0.20281E 01
39	1085.37	-0.31174E-02	-0.63280E-03	-0.11948E-05	-0.28828E-06	-0.10229E-03	-0.68946E-04	0.51000E-01	0.
40	1085.37	-0.31174E-02	-0.63280E-03	-0.11948E-05	-0.28828E-06	-0.10229E-03	-0.68946E-04	0.29000E-01	0.
41	1085.37	-0.31174E-02	-0.62915E-03	-0.11879E-05	-0.28662E-06	-0.10170E-03	-0.68549E-04	0.70000E-02	0.
42	630.92	0.10103E 03	0.16702E 02	0.26047E-01	0.62844E-02	0.26997E 01	0.18197E 01	-0.86800E 00	0.35216E 01
43	612.10	0.81807E 02	0.13424E 02	0.20788E-01	0.50155E-02	0.21699E 01	0.14626E 01	-0.91100E 00	0.29460E 01
44	600.40	0.68002E 02	0.11026E 02	0.16999E-01	0.41013E-02	0.17822E 01	0.12013E 01	-0.95300E 00	0.23848E 01
45	562.89	0.26616E 02	0.43883E 01	0.66722E-02	0.16098E-02	0.70932E 00	0.47812E-00	-0.10400E 01	0.32854E 01
46	1085.37	-0.31174E-02	-0.63442E-03	-0.11979E-05	-0.28902E-06	-0.10255E-03	-0.69122E-04	0.70000E-02	0.
47	569.46	0.34884E 02	0.55939E 01	0.85259E-02	0.20571E-02	0.90419E 00	0.60948E 00	0.29000E-01	0.
48	1085.37	-0.31174E-02	-0.63685E-03	-0.12025E-05	-0.29012E-06	-0.10294E-03	-0.69387E-04	0.51000E-01	0.
49	605.68	0.59845E 02	0.97307E 01	0.15032E-01	0.36268E-02	0.15729E 01	0.10602E 01	0.70000E-02	0.21630E 01
50	572.07	0.31360E 02	0.50231E 01	0.76633E-02	0.18489E-02	0.81194E 00	0.54729E 00	0.29000E-01	0.11585E 01
51	1085.37	-0.31174E-02	-0.63077E-03	-0.11910E-05	-0.28735E-06	-0.10196E-03	-0.68725E-04	0.51000E-01	0.
52	603.40	0.64332E 02	0.10508E 02	0.16219E-01	0.39131E-02	0.16985E 01	0.11449E 01	-0.86800E 00	0.
53	598.18	0.58587E 02	0.95793E 01	0.14757E-01	0.35603E-02	0.15484E 01	0.10437E 01	-0.91100E 00	0.21091E 01
54	595.42	0.55753E 02	0.90155E 01	0.13874E-01	0.33473E-02	0.14573E 01	0.98227E 00	-0.95300E 00	0.20263E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	558.89	0.18948E 02	0.31172E 01	0.47326E-02	0.11418E-02	0.50386E 00	0.33963E-00	-0.10400E 01	0.33707E 01
56	558.09	0.16725E 02	0.28370E 01	0.43059E-02	0.10389E-02	0.45857E-00	0.30910E-00	-0.10680E 01	0.60648E 01
57	555.22	0.12278E 02	0.20158E 01	0.30564E-02	0.73742E-03	0.32584E-00	0.21963E-00	-0.10400E 01	0.60186E 01
58	562.05	0.19043E 02	0.33974E 01	0.51640E-02	0.12459E-02	0.54915E 00	0.37016E-00	-0.10680E 01	0.36075E 01
59	549.69	0.12795E 02	0.20942E 01	0.31688E-02	0.76455E-03	0.33851E-00	0.22818E-00	-0.10400E 01	0.14272E 01
60	552.43	0.13431E 02	0.22711E 01	0.34398E-02	0.82994E-03	0.36709E-00	0.24744E-00	-0.10680E 01	0.30968E 01
61	538.30	0.14712E 01	0.24363E-00	0.36711E-03	0.88573E-04	0.39380E-01	0.26544E-01	-0.11220E 01	0.69021E 00
62	540.30	0.92571E 00	0.13986E-00	0.21090E-03	0.50884E-04	0.22606E-01	0.15238E-01	-0.13340E 01	0.36581E-00
63	539.98	0.17969E 01	0.30897E-00	0.46586E-03	0.11240E-03	0.49942E-01	0.33664E-01	-0.11220E 01	0.79808E 00
64	540.01	0.73611E 00	0.11119E-00	0.16766E-03	0.40451E-04	0.17973E-01	0.12115E-01	-0.13340E 01	0.25740E-00
65	539.98	0.14130E 01	0.24296E-00	0.36633E-03	0.88385E-04	0.39272E-01	0.26472E-01	0.14400E 01	0.64755E 00
66	539.70	0.24156E 01	0.39523E-00	0.59585E-03	0.14376E-03	0.63884E-01	0.43062E-01	0.16130E 01	0.12390E 01
67	539.44	0.27283E 01	0.43809E-00	0.66041E-03	0.15934E-03	0.70812E-01	0.47731E-01	0.17200E 01	0.13582E 01
68	539.46	0.20696E 01	0.34118E-00	0.51432E-03	0.12409E-03	0.55148E-01	0.37173E-01	-0.16130E 01	0.10908E 01
69	538.77	0.25668E 01	0.41199E-00	0.62092E-03	0.14981E-03	0.66594E-01	0.44888E-01	-0.18280E 01	0.11553E 01
70	541.31	0.20826E 01	0.30590E-00	0.46145E-03	0.11133E-03	0.49445E-01	0.33329E-01	-0.11650E 01	0.83376E 00
71	540.50	0.13408E 01	0.11257E-00	0.16977E-03	0.40960E-04	0.18196E-01	0.12265E-01	-0.12050E 01	0.10180E 01
72	542.67	0.20395E 01	0.29568E-00	0.44626E-03	0.10767E-03	0.47794E-01	0.32215E-01	-0.12120E 01	0.75262E 00
73	539.97	0.15106E 01	0.22172E-00	0.33431E-03	0.80659E-04	0.35839E-01	0.24157E-01	-0.11650E 01	0.61805E 00
74	539.32	0.84624E 00	0.71003E-01	0.10703E-03	0.25824E-04	0.11477E-01	0.77360E-02	-0.12050E 01	0.86148E 00
75	1091.00	0.21013E 01	0.39122E-00	0.74065E-03	0.17870E-03	0.63237E-01	0.42625E-01	-0.12120E 01	0.
76	538.24	0.23953E 01	0.36026E-00	0.54285E-03	0.13097E-03	0.58233E-01	0.39252E-01	0.10840E 01	0.97926E 00
77	538.13	0.19138E 01	0.30899E-00	0.46558E-03	0.11233E-03	0.49946E-01	0.33666E-01	0.11220E 01	0.84560E 00
78	540.34	0.17319E 01	0.25774E-00	0.38867E-03	0.93776E-04	0.41662E-01	0.28082E-01	0.13340E 01	0.59102E 00
79	538.56	0.76468E 00	0.12823E-00	0.19324E-03	0.46622E-04	0.20726E-01	0.13971E-01	-0.11890E 01	0.28602E-00
80	539.96	0.11081E 01	0.16654E-00	0.25110E-03	0.60583E-04	0.26919E-01	0.18145E-01	-0.13340E 01	0.37747E-00
81	537.58	0.45663E-00	0.73704E-01	0.11103E-03	0.26789E-04	0.11913E-01	0.80303E-02	-0.11470E 01	0.18280E-00
82	535.76	0.52470E-01	0.87767E-02	0.13213E-04	0.31879E-05	0.14187E-02	0.95625E-03	-0.11890E 01	0.19384E-01
83	543.14	0.45392E 01	0.76244E 00	0.11509E-02	0.27768E-03	0.12324E-00	0.83071E-01	-0.10840E 01	0.19976E 01
84	537.11	0.80052E 00	0.11731E-00	0.17669E-03	0.42629E-04	0.18961E-01	0.12781E-01	-0.11890E 01	0.28720E-00
85	539.71	0.11356E 01	0.16665E-00	0.25124E-03	0.60618E-04	0.26937E-01	0.18157E-01	-0.13090E 01	0.41400E-00
86	539.07	0.10691E 01	0.15899E-00	0.23964E-03	0.57818E-04	0.25698E-01	0.17322E-01	-0.13340E 01	0.38821E-00
87	579.61	0.34278E 02	0.51340E 01	0.78543E-02	0.18950E-02	0.82985E 00	0.55937E 00	0.11990E 01	0.76426E 01
88	545.35	0.21152E 02	0.31353E 01	0.47366E-02	0.11428E-02	0.50679E 00	0.34160E-00	0.12070E 01	0.48736E 01
89	528.50	0.96561E 01	0.14419E 01	0.21650E-02	0.52236E-03	0.23307E-00	0.15710E-00	0.13340E 01	0.24119E 01
90	557.53	0.28423E 02	0.40972E 01	0.62174E-02	0.15001E-02	0.66227E 00	0.44640E-00	0.12070E 01	0.64688E 01
91	536.43	0.13573E 02	0.21041E 01	0.31685E-02	0.76446E-03	0.34011E-00	0.22925E-00	0.12490E 01	0.32249E 01
92	531.59	0.11137E 02	0.16743E 01	0.25168E-02	0.60723E-03	0.27063E-00	0.18242E-00	0.13340E 01	0.26128E 01
93	525.43	0.81532E 01	0.13660E 01	0.20488E-02	0.49432E-03	0.22080E-00	0.14883E-00	0.14900E 01	0.21958E 01
94	548.39	0.23979E 01	0.25293E-00	0.38253E-03	0.92294E-04	0.40883E-01	0.27558E-01	-0.	0.
95	554.85	0.86779E 01	0.92523E 00	0.14026E-02	0.33842E-03	0.14955E-00	0.10081E-00	-0.	0.
96	540.65	0.15226E 01	0.15991E-00	0.24116E-03	0.58185E-04	0.25847E-01	0.17422E-01	-0.	0.
97	543.24	0.26784E 01	0.28170E-00	0.42525E-03	0.10260E-03	0.45534E-01	0.30693E-01	-0.	0.
98	546.44	0.33730E 01	0.35794E-00	0.54097E-03	0.13052E-03	0.57858E-01	0.38999E-01	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
45	1	4.33	154.33	-0.03	-0.	2	C55	2.75	2	10.19	1818.30	2587.30	113	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.129241E 03	0.342339E-01	0.567374E 04	0.222238E-04	0.104685E-06	~~0.1313605E 01~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.746860E 00	0.617066E 01	0.914677E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	538.89	0.32255E 01	0.52506E 00	0.75031E-03	0.18495E-03	0.85089E-01	0.57404E-01	-0.10600E 01	0.10617E 01
100	539.21	0.17268E 01	0.28966E-00	0.41397E-03	0.10204E-03	0.46941E-01	0.31668E-01	-0.10840E 01	0.11537E 01
101	539.51	0.10291E 01	0.16887E-00	0.24138E-03	0.59498E-04	0.27367E-01	0.18463E-01	-0.11080E 01	0.89562E 00
102	573.22	0.27498E 02	0.45835E 01	0.66285E-02	0.16339E-02	0.74279E 00	0.50111E 00	-0.11080E 01	0.21267E 02
103	581.68	0.36447E 02	0.62592E 01	0.90787E-02	0.22378E-02	0.10144E 01	0.68431E 00	-0.10800E 01	0.19941E 02
104	624.42	0.62935E 02	0.10435E 02	0.15366E-01	0.37877E-02	0.16911E 01	0.11408E 01	0.85000E 00	0.
105	636.16	0.67819E 02	0.10703E 02	0.15827E-01	0.39013E-02	0.17345E 01	0.11701E 01	0.94000E 00	0.96389E 00
106	642.22	0.70011E 02	0.10991E 02	0.16288E-01	0.40149E-02	0.17811E 01	0.12016E 01	0.96000E 00	0.95975E 00
107	634.49	0.67660E 02	0.10579E 02	0.15634E-01	0.38537E-02	0.17144E 01	0.11566E 01	0.98000E 00	0.97475E 00
108	633.91	0.63847E 02	0.10030E 02	0.14820E-01	0.36531E-02	0.16255E 01	0.10966E 01	0.10000E 01	0.97077E 00
109	615.80	0.52764E 02	0.82380E 01	0.12094E-01	0.29810E-02	0.13350E 01	0.90065E 00	0.10200E 01	0.95077E 00
110	639.15	0.64790E 02	0.10241E 02	0.15160E-01	0.37368E-02	0.16596E 01	0.11196E 01	0.80000E-01	0.98689E 00
111	634.59	0.66640E 02	0.10420E 02	0.15400E-01	0.37960E-02	0.16886E 01	0.11392E 01	0.10000E-00	0.97465E 00
112	648.47	0.68461E 02	0.10837E 02	0.16097E-01	0.39678E-02	0.17562E 01	0.11848E 01	0.12000E-00	0.96569E 00
113	640.03	0.68747E 02	0.10871E 02	0.16099E-01	0.39682E-02	0.17618E 01	0.11885E 01	0.14000E-00	0.96511E 00
114	627.83	0.62612E 02	0.98380E 01	0.14505E-01	0.35753E-02	0.15943E 01	0.10756E 01	0.80000E-01	0.95878E 00
115	629.72	0.62987E 02	0.98736E 01	0.14567E-01	0.35907E-02	0.16001E 01	0.10795E 01	0.10000E-00	0.96084E 00
116	632.15	0.64676E 02	0.10220E 02	0.15091E-01	0.37198E-02	0.16562E 01	0.11173E 01	0.12000E-00	0.96973E 00
117	643.88	0.66503E 02	0.10538E 02	0.15626E-01	0.38517E-02	0.17077E 01	0.11521E 01	0.14000E-00	0.10002E 01
118	629.25	0.60082E 02	0.95270E 01	0.14053E-01	0.34640E-02	0.15439E 01	0.10416E 01	0.10000E-00	0.96094E 00
119	627.75	0.58154E 02	0.91679E 01	0.13516E-01	0.33317E-02	0.14857E 01	0.10023E 01	0.15000E-00	0.11031E 01
120	585.42	0.52674E 02	0.81317E 01	0.11810E-01	0.29111E-02	0.13178E 01	0.88902E 00	0.20000E-00	0.87592E 00
121	628.41	0.58076E 02	0.92048E 01	0.13574E-01	0.33459E-02	0.14917E 01	0.10063E 01	0.25000E-00	0.96925E 00
122	621.11	0.55439E 02	0.87530E 01	0.12874E-01	0.31734E-02	0.14185E 01	0.95695E 00	0.30000E-00	0.96434E 00
123	1085.37	-0.36365E-02	-0.71218E-03	-0.12585E-05	-0.31021E-06	-0.11541E-03	-0.77861E-04	0.35000E-00	0.
124	620.92	0.59172E 02	0.94505E 01	0.13899E-01	0.34260E-02	0.15315E 01	0.10332E 01	0.38000E-00	0.97886E 00
125	627.11	0.62636E 02	0.10119E 02	0.14915E-01	0.36765E-02	0.16399E 01	0.11063E 01	0.45000E-00	0.96814E 00
126	618.28	0.59325E 02	0.96643E 01	0.14200E-01	0.35002E-02	0.15662E 01	0.10566E 01	0.61000E 00	0.96979E 00
127	576.42	0.35159E 02	0.56271E 01	0.81467E-02	0.20081E-02	0.91191E 00	0.61520E 00	0.70000E 00	0.95699E 00
128	554.62	0.16932E 02	0.26862E 01	0.38595E-02	0.95135E-03	0.43531E-00	0.29367E-00	0.75000E 00	0.95100E 00
129	611.60	0.61664E 02	0.10090E 02	0.14791E-01	0.36459E-02	0.16352E 01	0.11032E 01	0.70000E 00	0.12223E 01
130	622.70	0.71103E 02	0.11704E 02	0.17224E-01	0.42456E-02	0.18967E 01	0.12796E 01	0.80000E 00	0.13722E 01
131	565.37	0.27559E 02	0.41730E 01	0.60182E-02	0.14835E-02	0.67626E 00	0.45622E-00	0.90000E 00	0.11380E 01
132	595.10	0.52569E 02	0.81172E 01	0.11829E-01	0.29158E-02	0.13154E 01	0.88743E 00	0.90000E 00	0.11073E 01
133	594.43	0.50822E 02	0.78050E 01	0.11372E-01	0.28031E-02	0.12649E 01	0.85331E 00	0.96000E 00	0.10399E 01
134	592.63	0.47790E 02	0.73446E 01	0.10694E-01	0.26360E-02	0.11902E 01	0.80297E 00	0.10000E 01	0.10135E 01
135	1085.37	-0.36365E-02	-0.73226E-03	-0.12940E-05	-0.31895E-06	-0.11867E-03	-0.80057E-04	0.70000E-02	0.
136	1085.37	-0.36365E-02	-0.71927E-03	-0.12710E-05	-0.31329E-06	-0.11656E-03	-0.78636E-04	0.70000E-02	0.
137	573.23	0.32076E 02	0.50836E 01	0.73516E-02	0.18121E-02	0.82383E 00	0.55578E 00	0.39000E-01	0.10237E 01
138	572.06	0.30788E 02	0.48525E 01	0.70146E-02	0.17291E-02	0.78638E 00	0.53052E 00	0.78000E-01	0.10042E 01
139	570.21	0.31633E 02	0.49563E 01	0.71601E-02	0.17649E-02	0.80321E 00	0.54187E 00	0.11700E-00	0.
140	571.14	0.31632E 02	0.49426E 01	0.71426E-02	0.17606E-02	0.80098E 00	0.54037E 00	0.78000E-01	0.10341E 01
141	715.48	0.15058E 03	0.17466E 02	0.26586E-01	0.65534E-02	0.28305E 01	0.19095E 01	-0.	0.
142	667.82	0.84653E 02	0.95861E 01	0.14339E-01	0.35344E-02	0.15535E 01	0.10480E 01	-0.	0.
143	567.85	0.29715E 02	0.46119E 01	0.66570E-02	0.16409E-02	0.74739E 00	0.50421E 00	0.78000E-01	0.99324E 00
144	569.97	0.32939E 02	0.51267E 01	0.74055E-02	0.18254E-02	0.83081E 00	0.56049E 00	0.70000E-02	0.10062E 01
145	569.95	0.30112E 02	0.46634E 01	0.67363E-02	0.16605E-02	0.75574E 00	0.50984E 00	0.70000E-02	0.10069E 01
146	570.18	0.30299E 02	0.47162E 01	0.68132E-02	0.16794E-02	0.76430E 00	0.51562E 00	0.39000E-01	0.10072E 01
147	572.04	0.29396E 02	0.45729E 01	0.66104E-02	0.16294E-02	0.74107E 00	0.49995E-00	0.78000E-01	0.
148	1085.37	-0.36365E-02	-0.72281E-03	-0.12773E-05	-0.31484E-06	-0.11714E-03	-0.79024E-04	0.11700E-00	0.
149	622.39	0.58721E 02	0.97723E 01	0.14380E-01	0.35446E-02	0.15837E 01	0.10684E 01	0.70000E-02	0.99984E 00
150	623.30	0.59216E 02	0.99063E 01	0.14582E-01	0.35943E-02	0.16054E 01	0.10830E 01	0.70000E-02	0.98462E 00
151	618.97	0.56062E 02	0.93572E 01	0.13752E-01	0.33899E-02	0.15164E 01	0.10230E 01	0.70000E-02	0.95907E 00
152	625.56	0.58677E 02	0.94718E 01	0.13953E-01	0.34394E-02	0.15350E 01	0.10355E 01	0.39000E-01	0.95933E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	623.91	0.58690E 02	0.94656E 01	0.13936E-01	0.34352E-02	0.15340E 01	0.10349E 01	0.39000E-01	0.
154	622.38	0.58511E 02	0.93676E 01	0.13784E-01	0.33977E-02	0.15181E 01	0.10241E 01	0.78000E-01	0.96847E 00
155	619.21	0.57847E 02	0.96563E 01	0.14193E-01	0.34985E-02	0.15649E 01	0.10557E 01	0.39000E-01	0.
156	611.61	0.55260E 02	0.91584E 01	0.13425E-01	0.33091E-02	0.14842E 01	0.10013E 01	0.39000E-01	0.
157	607.86	0.53180E 02	0.88237E 01	0.12917E-01	0.31840E-02	0.14299E 01	0.96468E 00	0.78000E-01	0.97946E 00
158	607.32	0.55241E 02	0.91919E 01	0.13453E-01	0.33162E-02	0.14896E 01	0.10049E 01	0.39000E-01	0.98716E 00
159	605.17	0.52575E 02	0.87382E 01	0.12780E-01	0.31501E-02	0.14161E 01	0.95533E 00	0.78000E-01	0.99802E 00
160	616.36	0.54929E 02	0.91553E 01	0.13443E-01	0.33136E-02	0.14837E 01	0.10009E 01	0.39000E-01	0.99809E 00
161	594.31	0.45044E 02	0.72443E 01	0.10554E-01	0.26016E-02	0.11740E 01	0.79201E 00	0.43000E-01	0.97148E 00
162	598.07	0.47503E 02	0.76801E 01	0.11204E-01	0.27617E-02	0.12446E 01	0.83965E 00	0.43000E-01	0.10322E 01
163	595.12	0.45345E 02	0.73314E 01	0.10684E-01	0.26336E-02	0.11881E 01	0.80153E 00	0.85000E-01	0.99348E 00
164	593.10	0.44535E 02	0.71579E 01	0.10424E-01	0.25694E-02	0.11600E 01	0.78256E 00	0.12800E-00	0.98715E 00
165	602.07	0.54643E 02	0.88535E 01	0.12934E-01	0.31882E-02	0.14348E 01	0.96793E 00	0.43000E-01	0.11893E 01
166	600.06	0.54208E 02	0.87452E 01	0.12767E-01	0.31470E-02	0.14172E 01	0.95610E 00	0.85000E-01	0.11947E 01
167	633.55	0.87889E 02	0.14433E 02	0.21323E-01	0.52561E-02	0.23390E 01	0.15780E 01	0.43000E-01	0.
168	600.64	0.50538E 02	0.82479E 01	0.12043E-01	0.29686E-02	0.13366E 01	0.90172E 00	0.12800E-00	0.11051E 01
169	621.61	0.67944E 02	0.11177E 02	0.16443E-01	0.40531E-02	0.18114E 01	0.12220E 01	0.85000E-01	0.14950E 01
170	613.52	0.61411E 02	0.10011E 02	0.14685E-01	0.36197E-02	0.16224E 01	0.10945E 01	0.12800E-00	0.13078E 01
171	619.61	0.72852E 02	0.11876E 02	0.17459E-01	0.43034E-02	0.19246E 01	0.12984E 01	0.85000E-01	0.15726E 01
172	693.97	0.11323E 03	0.19274E 02	0.29106E-01	0.71745E-02	0.31235E 01	0.21072E 01	0.43000E-01	0.
173	632.07	0.75593E 02	0.12504E 02	0.18464E-01	0.45512E-02	0.20264E 01	0.13671E 01	0.12800E-00	0.15843E 01
174	644.25	0.89490E 02	0.14826E 02	0.21988E-01	0.54200E-02	0.24027E 01	0.16209E 01	0.85000E-01	0.
175	679.92	0.99936E 02	0.16809E 02	0.25253E-01	0.62248E-02	0.27240E 01	0.18377E 01	0.43000E-01	0.21184E 01
176	670.14	0.95344E 02	0.15957E 02	0.23888E-01	0.58883E-02	0.25859E 01	0.17445E 01	0.43000E-01	0.20037E 01
177	634.93	0.72743E 02	0.12013E 02	0.17756E-01	0.43767E-02	0.19467E 01	0.13133E 01	0.12800E-00	0.14649E 01
178	648.49	0.82177E 02	0.13645E 02	0.20267E-01	0.49957E-02	0.22112E 01	0.14917E 01	0.85000E-01	0.16947E 01
179	658.31	0.80915E 02	0.13503E 02	0.20128E-01	0.49616E-02	0.21883E 01	0.14763E 01	0.70000E-02	0.16828E 01
180	619.05	0.63354E 02	0.10408E 02	0.15297E-01	0.37707E-02	0.16867E 01	0.11379E 01	0.70000E-02	0.
181	617.23	0.58369E 02	0.95799E 01	0.14071E-01	0.34684E-02	0.15525E 01	0.10474E 01	0.70000E-02	0.11876E 01
182	614.95	0.60533E 02	0.99549E 01	0.14610E-01	0.36012E-02	0.16133E 01	0.10884E 01	0.70000E-02	0.24042E 01
183	609.44	0.52711E 02	0.85879E 01	0.12579E-01	0.31006E-02	0.13917E 01	0.93890E 00	0.32000E-01	0.10611E 01
184	613.08	0.51131E 02	0.84004E 01	0.12320E-01	0.30369E-02	0.13613E 01	0.91840E 00	0.32000E-01	0.91269E 00
185	591.44	0.44097E 02	0.71611E 01	0.10422E-01	0.25691E-02	0.11605E 01	0.78291E 00	0.64000E-01	0.90425E 00
186	611.52	0.54617E 02	0.89370E 01	0.13100E-01	0.32291E-02	0.14483E 01	0.97706E 00	0.64000E-01	0.95604E 00
187	607.79	0.48318E 02	0.79158E 01	0.11588E-01	0.28563E-02	0.12828E 01	0.86542E 00	0.70000E-02	0.92425E 00
188	624.35	0.65576E 02	0.11011E 02	0.16214E-01	0.39966E-02	0.17844E 01	0.12038E 01	0.70000E-02	0.13236E 01
189	545.89	0.88317E 01	0.14500E 01	0.20771E-02	0.51200E-03	0.23499E-00	0.15853E-00	0.10600E 01	0.98619E 00
190	542.35	0.51579E 01	0.86208E 00	0.12334E-02	0.30402E-03	0.13971E-00	0.94249E-01	0.10840E 01	0.10063E 01
191	540.55	0.24462E 01	0.41066E-00	0.58718E-03	0.14474E-03	0.66550E-01	0.44897E-01	0.11080E 01	0.10298E 01
192	540.55	0.28987E 01	0.48399E-00	0.69202E-03	0.17058E-03	0.78434E-01	0.52914E-01	0.11080E 01	0.10324E 01
193	551.91	0.42405E 01	0.70180E 00	0.10074E-02	0.24832E-03	0.11373E-00	0.76726E-01	0.16580E 01	0.10697E 01
194	550.96	0.38348E 01	0.63140E 00	0.90605E-03	0.22334E-03	0.10232E-00	0.69030E-01	0.11700E 01	0.10284E 01
195	551.96	0.41382E 01	0.68488E 00	0.98314E-03	0.24234E-03	0.11099E-00	0.74877E-01	0.16740E 01	0.10439E 01
196	554.01	0.41662E 01	0.68714E 00	0.98708E-03	0.24331E-03	0.11136E-00	0.75123E-01	0.16950E 01	0.10807E 01

~~CONFIDENTIAL~~

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
54	1	4.34	154.34	-0.02	-0.	3	C55	2.70	2	10.19	1845.60	2600.50	120	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.129961E 03	0.346884E-01	0.568995E 04	0.223940E-04	0.105269E-06	~~0.121850E 01~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.747064E 00	0.621468E 01	0.923418E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	576.00	0.40510E 02	0.63986E 01	0.91197E-02	0.22245E-02	0.10296E 01	0.69293E 00	0.10000E 01	0.99102E 00
198	580.46	0.40627E 02	0.62236E 01	0.88839E-02	0.21670E-02	0.10014E 01	0.67397E 00	0.12000E 01	0.99729E 00
199	549.19	0.19444E 02	0.30851E 01	0.43569E-02	0.10628E-02	0.49643E-00	0.33410E-00	0.13000E 01	0.99770E 00
200	542.25	0.20192E 01	0.29522E-00	0.41593E-03	0.10146E-03	0.47503E-01	0.31970E-01	0.11890E 01	0.89285E 00
201	548.05	0.17392E 01	0.28942E-00	0.40856E-03	0.99658E-04	0.46570E-01	0.31342E-01	0.14540E 01	0.76251E 00
202	547.20	0.23507E 01	0.38800E-00	0.54758E-03	0.13357E-03	0.62433E-01	0.42018E-01	0.17040E 01	0.86464E 00
203	546.33	0.29255E 01	0.33416E-00	0.47146E-03	0.11500E-03	0.53770E-01	0.36188E-01	0.20410E 01	0.10641E 01
204	544.20	0.57767E 00	0.44228E-01	0.62354E-04	0.15210E-04	0.71167E-02	0.47896E-02	0.20700E 01	0.
205	551.36	0.27823E 01	0.24433E-00	0.34531E-03	0.84229E-04	0.39316E-01	0.26460E-01	0.21880E 01	0.10085E 02
206	549.24	0.31932E 01	0.52769E 00	0.74523E-03	0.18178E-03	0.84910E-01	0.57145E-01	0.22480E 01	0.14672E 01
207	547.51	0.23023E 01	0.37369E-00	0.52744E-03	0.12865E-03	0.60131E-01	0.40469E-01	0.20700E 01	0.10573E 01
208	544.54	0.10260E 01	0.91515E-01	0.12904E-03	0.31475E-04	0.14726E-01	0.99105E-02	0.20700E 01	0.14278E 01
209	555.13	0.50473E 01	0.41007E-00	0.58029E-03	0.14155E-03	0.65985E-01	0.44408E-01	0.21880E 01	0.61796E 01
210	546.63	0.18119E 01	0.30128E-00	0.42510E-03	0.10369E-03	0.48479E-01	0.32627E-01	0.20700E 01	0.11798E 01
211	550.51	0.49371E 01	0.82270E 00	0.11624E-02	0.28353E-03	0.13238E-00	0.89093E-01	0.21880E 01	0.26302E 01
212	548.23	0.35771E 01	0.58808E 00	0.83022E-03	0.20251E-03	0.94627E-01	0.63685E-01	0.22390E 01	0.17807E 01
213	545.85	0.15657E 01	0.25706E-00	0.36261E-03	0.88450E-04	0.41363E-01	0.27838E-01	0.21880E 01	0.89534E 00
214	546.90	0.18514E 01	0.30789E-00	0.43447E-03	0.10598E-03	0.49542E-01	0.33342E-01	0.22480E 01	0.11183E 01
215	541.07	0.15294E 01	0.23000E-00	0.32391E-03	0.79010E-04	0.37009E-01	0.24907E-01	0.11650E 01	0.13108E 01
216	1085.37	-0.31174E-02	-0.33756E-03	-0.58531E-06	-0.14277E-06	-0.54316E-04	-0.36555E-04	0.12050E 01	0.
217	544.69	0.16587E 01	0.24284E-00	0.34242E-03	0.83524E-04	0.39075E-01	0.26298E-01	0.12120E 01	0.11583E 01
218	542.75	0.19112E 01	0.28094E-00	0.39589E-03	0.96566E-04	0.45207E-01	0.30424E-01	0.11890E 01	0.12604E 01
219	544.93	0.15179E 01	0.25545E-00	0.36022E-03	0.87867E-04	0.41104E-01	0.27663E-01	0.14540E 01	0.11365E 01
220	544.50	0.15886E 01	0.27746E-00	0.39120E-03	0.95424E-04	0.44645E-01	0.30047E-01	0.17040E 01	0.10564E 01
221	545.41	0.21366E 01	0.35772E-00	0.50453E-03	0.12307E-03	0.57561E-01	0.38739E-01	0.20410E 01	0.94199E 00
222	546.82	0.23366E 01	0.39565E-00	0.55829E-03	0.13618E-03	0.63663E-01	0.42846E-01	0.22480E 01	0.20887E 01
223	540.11	0.15948E 01	0.23971E-00	0.33748E-03	0.82320E-04	0.38572E-01	0.25959E-01	0.11650E 01	0.12378E 01
224	542.09	0.82442E 00	0.69280E-01	0.97602E-04	0.23807E-04	0.11148E-01	0.75025E-02	0.12050E 01	0.11864E 01
225	543.79	0.15875E 01	0.23230E-00	0.32746E-03	0.79876E-04	0.37380E-01	0.25157E-01	0.12120E 01	0.11221E 01
226	544.37	0.11392E 01	0.19235E-00	0.27119E-03	0.66150E-04	0.30950E-01	0.20830E-01	0.14540E 01	0.84568E 00
227	544.68	0.17657E 01	0.28614E-00	0.40347E-03	0.98417E-04	0.46043E-01	0.30987E-01	0.17040E 01	0.11542E 01
228	545.08	0.27579E 01	0.45609E-00	0.64319E-03	0.15689E-03	0.73388E-01	0.49391E-01	0.18780E 01	0.11681E 01
229	547.08	0.37117E 01	0.61731E 00	0.87115E-03	0.21250E-03	0.99331E-01	0.66851E-01	0.21880E 01	0.12621E 01
230	541.44	0.18093E 01	0.26761E-00	0.37692E-03	0.91941E-04	0.43060E-01	0.28980E-01	0.11890E 01	0.10647E 01
231	544.13	0.97922E 00	0.17396E-00	0.24524E-03	0.59821E-04	0.27992E-01	0.18839E-01	0.14540E 01	0.76665E 00
232	544.83	0.15647E 01	0.25674E-00	0.36204E-03	0.88311E-04	0.41312E-01	0.27804E-01	0.16130E 01	0.10463E 01
233	544.74	0.15595E 01	0.25784E-00	0.36358E-03	0.88686E-04	0.41490E-01	0.27923E-01	0.17040E 01	0.96360E 00
234	545.22	0.30203E 01	0.50179E 00	0.70769E-03	0.17262E-03	0.80743E-01	0.54341E-01	0.18780E 01	0.11758E 01
235	545.46	0.12821E 01	0.21271E-00	0.30002E-03	0.73181E-04	0.34227E-01	0.23035E-01	0.14540E 01	0.79334E 00
236	544.83	0.21070E 01	0.34573E-00	0.48753E-03	0.11892E-03	0.55632E-01	0.37441E-01	0.17040E 01	0.12017E 01
237	547.48	0.53699E 01	0.89329E 00	0.12608E-02	0.30754E-03	0.14374E-00	0.96737E-01	0.21880E 01	0.14646E 01
238	549.86	0.54852E 01	0.49073E-00	0.69317E-03	0.16908E-03	0.78962E-01	0.53142E-01	0.20700E 01	0.39764E 01
239	541.94	0.20405E 01	0.29828E-00	0.42020E-03	0.10250E-03	0.47996E-01	0.32302E-01	0.11890E 01	0.10373E 01
240	546.86	0.15117E 01	0.25467E-00	0.35937E-03	0.87658E-04	0.40979E-01	0.27579E-01	0.14540E 01	0.96273E 00
241	544.71	0.20597E 01	0.33951E-00	0.47874E-03	0.11678E-03	0.54631E-01	0.36767E-01	0.17040E 01	0.12677E 01
242	545.29	0.30561E 01	0.50777E 00	0.71613E-03	0.17468E-03	0.81705E-01	0.54988E-01	0.18780E 01	0.12039E 01
243	548.74	0.67964E 01	0.11314E 01	0.15975E-02	0.38968E-03	0.18205E-00	0.12252E-00	0.20410E 01	0.21772E 01
244	547.34	0.40519E 01	0.36711E-00	0.51812E-03	0.12638E-03	0.59072E-01	0.39756E-01	0.20700E 01	0.
245	551.93	0.79028E 01	0.65095E 00	0.92015E-03	0.22445E-03	0.10474E-00	0.70494E-01	0.21870E 01	0.24256E 01
246	548.30	0.60873E 01	0.10316E 01	0.14564E-02	0.35525E-03	0.16599E-00	0.11171E-00	0.22100E 01	0.15564E 01
247	547.34	0.20893E 01	0.34331E-00	0.48453E-03	0.11819E-03	0.55242E-01	0.37179E-01	0.14540E 01	0.12587E 01
248	545.04	0.25465E 01	0.42304E-00	0.59658E-03	0.14552E-03	0.68071E-01	0.45812E-01	0.17040E 01	0.15978E 01
249	546.05	0.28727E 01	0.24194E-00	0.34131E-03	0.83255E-04	0.38931E-01	0.26201E-01	0.18780E 01	0.43410E 01
250	547.84	0.45600E 01	0.37475E-00	0.52898E-03	0.12903E-03	0.60301E-01	0.40583E-01	0.21880E 01	0.51209E 01

~~CONFIDENTIAL~~

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	547.08	0.16514E 01	0.27967E-00	0.39467E-03	0.96269E-04	0.45001E-01	0.30286E-01	0.14540E 01	0.88166E 00
252	544.78	0.18192E 01	0.30612E-00	0.43167E-03	0.10529E-03	0.49258E-01	0.33151E-01	0.16130E 01	0.11571E 01
253	549.72	0.49600E 01	0.43944E-00	0.62070E-03	0.15140E-03	0.70710E-01	0.47588E-01	0.17060E 01	0.
254	546.77	0.51044E 01	0.84880E 00	0.11977E-02	0.29215E-03	0.13658E-00	0.91919E-01	0.21880E 01	0.11633E 01
255	545.72	0.22997E 01	0.21293E-00	0.30036E-03	0.73264E-04	0.34263E-01	0.23059E-01	0.16580E 01	0.27949E 01
256	545.21	0.31366E 01	0.26405E-00	0.37239E-03	0.90834E-04	0.42488E-01	0.28594E-01	0.17920E 01	0.59122E 01
257	536.91	0.16592E 01	0.27855E-00	0.39174E-03	0.95555E-04	0.44822E-01	0.30166E-01	0.10840E 01	0.98581E 00
258	546.75	0.17122E 01	0.29207E-00	0.41212E-03	0.10053E-03	0.46997E-01	0.31629E-01	0.14540E 01	0.84010E 00
259	545.11	0.18660E 01	0.31000E-00	0.43718E-03	0.10664E-03	0.49882E-01	0.33571E-01	0.16130E 01	0.11582E 01
260	545.92	0.26701E 01	0.43705E-00	0.61653E-03	0.15039E-03	0.70326E-01	0.47330E-01	0.17040E 01	0.21049E 01
261	545.89	0.32301E 01	0.53442E 00	0.75387E-03	0.18389E-03	0.85993E-01	0.57874E-01	0.18780E 01	0.17403E 01
262	546.54	0.39195E 01	0.66356E 00	0.93625E-03	0.22837E-03	0.10677E-00	0.71859E-01	0.20410E 01	0.11819E 01
263	552.67	0.72042E 01	0.12275E 01	0.17355E-02	0.42334E-03	0.19751E-00	0.13293E-00	0.14540E 01	0.33975E 01
264	544.38	0.14997E 01	0.24792E-00	0.34954E-03	0.85262E-04	0.39892E-01	0.26848E-01	0.16130E 01	0.96580E 00
265	545.19	0.22052E 01	0.35746E-00	0.50413E-03	0.12297E-03	0.57519E-01	0.38711E-01	0.17040E 01	0.13556E 01
266	545.89	0.26862E 01	0.44443E-00	0.62693E-03	0.15292E-03	0.71513E-01	0.48129E-01	0.18780E 01	0.13477E 01
267	546.48	0.35008E 01	0.59088E 00	0.83369E-03	0.20336E-03	0.95079E-01	0.63989E-01	0.20410E 01	0.11917E 01
268	545.90	0.18681E 01	0.30907E-00	0.43598E-03	0.10635E-03	0.49732E-01	0.33470E-01	0.16130E 01	0.11511E 01
269	545.23	0.22608E 01	0.36648E-00	0.51685E-03	0.12607E-03	0.58970E-01	0.39687E-01	0.19280E 01	0.12932E 01
270	545.87	0.24971E 01	0.41125E-00	0.58012E-03	0.14150E-03	0.66174E-01	0.44535E-01	0.18780E 01	0.13570E 01
271	546.26	0.32660E 01	0.55003E 00	0.77599E-03	0.18928E-03	0.88505E-01	0.59564E-01	0.20410E 01	0.12910E 01
272	543.43	0.13522E 01	0.22921E-00	0.32306E-03	0.78803E-04	0.36882E-01	0.24822E-01	0.16130E 01	0.79626E 00
273	545.65	0.23569E 01	0.39286E-00	0.55414E-03	0.13517E-03	0.63215E-01	0.42544E-01	0.17200E 01	0.15919E 01
274	544.43	0.18499E 01	0.29880E-00	0.42129E-03	0.10276E-03	0.48080E-01	0.32358E-01	0.18280E 01	0.11675E 01
275	545.84	0.26634E 01	0.43929E-00	0.61967E-03	0.15115E-03	0.70686E-01	0.47572E-01	0.18780E 01	0.15466E 01
276	1085.37	-0.31174E-02	-0.67492E-03	-0.11703E-05	-0.28546E-06	-0.10860E-03	-0.73089E-04	0.20600E 01	0.
277	545.73	0.26732E 01	0.22510E-00	0.31752E-03	0.77452E-04	0.36221E-01	0.24377E-01	0.21000E 01	0.22084E 01
278	1085.37	-0.31174E-02	-0.33756E-03	-0.58531E-06	-0.14277E-06	-0.54316E-04	-0.36555E-04	0.21870E 01	0.
279	547.59	0.38395E 01	0.65040E 00	0.91800E-03	0.22392E-03	0.10465E-00	0.70433E-01	0.21950E 01	0.14651E 01
280	545.78	0.29839E 01	0.49968E-00	0.70484E-03	0.17193E-03	0.80403E-01	0.54112E-01	0.18780E 01	0.16088E 01
281	546.83	0.35283E 01	0.59743E 00	0.84303E-03	0.20564E-03	0.96132E-01	0.64698E-01	0.20600E 01	0.14854E 01
282	545.79	0.33969E 01	0.55511E 00	0.78303E-03	0.19100E-03	0.89322E-01	0.60115E-01	0.18280E 01	0.17727E 01
283	546.19	0.39621E 01	0.66724E 00	0.94133E-03	0.22961E-03	0.10736E-00	0.72257E-01	0.20600E 01	0.14774E 01
284	545.51	0.35823E 01	0.58080E 00	0.81919E-03	0.19982E-03	0.93456E-01	0.62897E-01	0.17200E 01	0.18257E 01
285	547.12	0.50057E 01	0.82622E 00	0.11660E-02	0.28441E-03	0.13295E-00	0.89474E-01	0.18780E 01	0.24696E 01
286	545.90	0.36603E 01	0.33894E-00	0.47813E-03	0.11663E-03	0.54539E-01	0.36705E-01	0.16580E 01	0.23715E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.58531E-06	-0.14277E-06	-0.54316E-04	-0.36555E-04	0.17920E 01	0.
288	545.13	0.28888E 01	0.47629E-00	0.67169E-03	0.16384E-03	0.76639E-01	0.51579E-01	0.16130E 01	0.16082E 01
289	551.15	0.73714E 01	0.62260E 00	0.87984E-03	0.21461E-03	0.10018E-00	0.67424E-01	0.17060E 01	0.
290	547.29	0.46509E 01	0.39198E-00	0.55320E-03	0.13494E-03	0.63073E-01	0.42449E-01	0.18780E 01	0.71189E 01
291	545.60	0.38681E 01	0.63497E 00	0.89563E-03	0.21846E-03	0.10217E-00	0.68763E-01	0.17200E 01	0.24864E 01
292	546.52	0.21533E 01	0.37161E-00	0.52432E-03	0.12789E-03	0.59796E-01	0.40243E-01	0.14400E 01	0.13978E 01
293	544.98	0.34514E 01	0.55941E 00	0.78888E-03	0.19243E-03	0.90014E-01	0.60580E-01	0.17200E 01	0.18255E 01
294	547.03	0.41907E 01	0.69589E 00	0.98203E-03	0.23954E-03	0.11198E-00	0.75360E-01	0.18780E 01	0.15471E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
46	1	6.38	153.99	51.39	-4.98	2	C55	2.75	2	10.19	1823.50	2522.30	114	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.125663E 03	0.346270E-01	0.559473E 04	0.231190E-04	0.101787E-06	~~0.127030E 04~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.745813E 00	0.617927E 01	0.916370E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	540.73	0.45133E 01	0.73546E 00	0.11333E-02	0.27232E-03	0.11902E-00	0.80257E-01	-0.10600E 01	0.14458E 01
100	540.65	0.28010E 01	0.47025E-00	0.72458E-03	0.17411E-03	0.76101E-01	0.51316E-01	-0.10840E 01	0.14002E 01
101	540.38	0.20114E 01	0.33024E-00	0.50880E-03	0.12226E-03	0.53443E-01	0.36038E-01	-0.11080E 01	0.80245E 00
102	581.27	0.25903E 02	0.43367E 01	0.67848E-02	0.16304E-02	0.70182E 00	0.47325E-00	-0.11080E 01	0.11241E 02
103	582.14	0.35395E 02	0.60802E 01	0.95156E-02	0.22866E-02	0.98397E 00	0.66351E 00	-0.10800E 01	0.17392E 02
104	627.25	0.62204E 02	0.10329E 02	0.16447E-01	0.39521E-02	0.16716E 01	0.11272E 01	0.85000E 00	0.
105	636.87	0.68242E 02	0.10774E 02	0.17218E-01	0.41375E-02	0.17435E 01	0.11757E 01	0.94000E 00	0.10081E 01
106	641.94	0.70786E 02	0.11111E 02	0.17792E-01	0.42754E-02	0.17981E 01	0.12125E 01	0.96000E 00	0.10026E 01
107	634.25	0.68779E 02	0.10752E 02	0.17167E-01	0.41251E-02	0.17401E 01	0.11734E 01	0.98000E 00	0.10222E 01
108	631.59	0.65266E 02	0.10241E 02	0.16333E-01	0.39248E-02	0.16573E 01	0.11175E 01	0.10000E 01	0.10154E 01
109	613.52	0.54462E 02	0.84929E 01	0.13452E-01	0.32323E-02	0.13744E 01	0.92680E 00	0.10200E 01	0.10024E 01
110	641.77	0.66352E 02	0.10502E 02	0.16816E-01	0.40409E-02	0.16996E 01	0.11460E 01	0.80000E-01	0.10360E 01
111	636.29	0.68286E 02	0.10687E 02	0.17076E-01	0.41032E-02	0.17295E 01	0.11662E 01	0.10000E-00	0.10180E 01
112	649.47	0.70450E 02	0.11158E 02	0.17920E-01	0.43061E-02	0.18057E 01	0.12176E 01	0.12000E-00	0.10051E 01
113	639.83	0.71128E 02	0.11247E 02	0.17995E-01	0.43241E-02	0.18201E 01	0.12273E 01	0.14000E-00	0.10055E 01
114	632.11	0.66240E 02	0.10432E 02	0.16641E-01	0.39987E-02	0.16882E 01	0.11384E 01	0.80000E-01	0.10229E 01
115	634.03	0.67176E 02	0.10554E 02	0.16849E-01	0.40487E-02	0.17080E 01	0.11517E 01	0.10000E-00	0.10196E 01
116	636.50	0.69300E 02	0.10975E 02	0.17538E-01	0.42143E-02	0.17762E 01	0.11977E 01	0.12000E-00	0.10251E 01
117	648.89	0.72013E 02	0.11440E 02	0.18370E-01	0.44141E-02	0.18514E 01	0.12484E 01	0.14000E-00	0.10544E 01
118	638.96	0.66642E 02	0.10621E 02	0.16988E-01	0.40822E-02	0.17188E 01	0.11590E 01	0.10000E-00	0.10341E 01
119	639.30	0.67311E 02	0.10676E 02	0.17078E-01	0.41038E-02	0.17277E 01	0.11650E 01	0.15000E-00	0.
120	678.20	0.60815E 02	0.98573E 01	0.16011E-01	0.38473E-02	0.15952E 01	0.10757E 01	0.20000E-00	0.94900E 00
121	638.28	0.69488E 02	0.11071E 02	0.17703E-01	0.42539E-02	0.17916E 01	0.12081E 01	0.25000E-00	0.10288E 01
122	631.21	0.66703E 02	0.10588E 02	0.16884E-01	0.40572E-02	0.17134E 01	0.11554E 01	0.30000E-00	0.10207E 01
123	1085.37	-0.36365E-02	-0.71218E-03	-0.13814E-05	-0.33195E-06	-0.11525E-03	-0.77718E-04	0.35000E-00	0.
124	626.47	0.69770E 02	0.11176E 02	0.17789E-01	0.42747E-02	0.18086E 01	0.12196E 01	0.38000E-00	0.10156E 01
125	630.74	0.73409E 02	0.11882E 02	0.18945E-01	0.45524E-02	0.19229E 01	0.12967E 01	0.45000E-00	0.99598E 00
126	620.28	0.68629E 02	0.11192E 02	0.17772E-01	0.42706E-02	0.18112E 01	0.12213E 01	0.61000E 00	0.99123E 00
127	578.73	0.44268E 02	0.70938E 01	0.11088E-01	0.26643E-02	0.11480E 01	0.77412E 00	0.70000E 00	0.10030E 01
128	554.68	0.22754E 02	0.36099E 01	0.55914E-02	0.13436E-02	0.58419E 00	0.39393E-00	0.75000E 00	0.10121E 01
129	601.61	0.56125E 02	0.91352E 01	0.14403E-01	0.34610E-02	0.14784E 01	0.99689E 00	0.70000E 00	0.10059E 01
130	615.48	0.69946E 02	0.11469E 02	0.18180E-01	0.43685E-02	0.18561E 01	0.12516E 01	0.80000E 00	0.12053E 01
131	566.81	0.33460E 02	0.50704E 01	0.78896E-02	0.18958E-02	0.82056E 00	0.55332E 00	0.90000E 00	0.10903E 01
132	597.30	0.55490E 02	0.85784E 01	0.13503E-01	0.32447E-02	0.13883E 01	0.93613E 00	0.90000E 00	0.11004E 01
133	598.29	0.55759E 02	0.85810E 01	0.13512E-01	0.32469E-02	0.13887E 01	0.93642E 00	0.96000E 00	0.10499E 01
134	597.89	0.53969E 02	0.83178E 01	0.13096E-01	0.31468E-02	0.13461E 01	0.90769E 00	0.10000E 01	0.10365E 01
135	1085.37	-0.36365E-02	-0.73226E-03	-0.14204E-05	-0.34130E-06	-0.11850E-03	-0.79909E-04	0.70000E-02	0.
136	1085.37	-0.36365E-02	-0.71927E-03	-0.13952E-05	-0.33525E-06	-0.11640E-03	-0.78491E-04	0.70000E-02	0.
137	574.31	0.35603E 02	0.56458E 01	0.88097E-02	0.21169E-02	0.91367E 00	0.61611E 00	0.39000E-01	0.10185E 01
138	572.82	0.35018E 02	0.55216E 01	0.86110E-02	0.20692E-02	0.89357E 00	0.60255E 00	0.78000E-01	0.10234E 01
139	575.37	0.39518E 02	0.62095E 01	0.96931E-02	0.23292E-02	0.10049E 01	0.67762E 00	0.11700E-00	0.
140	574.90	0.38935E 02	0.60962E 01	0.95146E-02	0.22863E-02	0.98656E 00	0.66526E 00	0.78000E-01	0.11592E 01
141	683.86	0.11793E 03	0.13464E 02	0.21918E-01	0.52669E-02	0.21789E 01	0.14693E 01	-0.	0.
142	665.19	0.78644E 02	0.88936E 01	0.14372E-01	0.34534E-02	0.14393E 01	0.97052E 00	-0.	0.
143	567.48	0.28494E 02	0.44215E 01	0.68815E-02	0.16536E-02	0.71553E 00	0.48250E-00	0.78000E-01	0.10197E 01
144	569.84	0.31980E 02	0.49770E 01	0.77529E-02	0.18630E-02	0.80543E 00	0.54312E 00	0.70000E-02	0.10106E 01
145	569.46	0.29129E 02	0.45100E 01	0.70245E-02	0.16879E-02	0.72985E 00	0.49215E-00	0.70000E-02	0.10103E 01
146	572.97	0.31944E 02	0.49799E 01	0.77667E-02	0.18663E-02	0.80591E 00	0.54344E 00	0.39000E-01	0.99493E 00
147	576.48	0.31587E 02	0.49256E 01	0.76921E-02	0.18484E-02	0.79711E 00	0.53751E 00	0.78000E-01	0.
148	1085.37	-0.36365E-02	-0.72281E-03	-0.14020E-05	-0.33690E-06	-0.11697E-03	-0.78878E-04	0.11700E-00	0.
149	621.58	0.55196E 02	0.91818E 01	0.14588E-01	0.35054E-02	0.14859E 01	0.10020E 01	0.70000E-02	0.10177E 01
150	622.37	0.54787E 02	0.91608E 01	0.14559E-01	0.34984E-02	0.14825E 01	0.99968E 00	0.70000E-02	0.10103E 01
151	619.28	0.52498E 02	0.87637E 01	0.13911E-01	0.33428E-02	0.14182E 01	0.95635E 00	0.70000E-02	0.10240E 01
152	627.22	0.54851E 02	0.88620E 01	0.14110E-01	0.33907E-02	0.14342E 01	0.96708E 00	0.39000E-01	0.10177E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	626.07	0.54472E 02	0.87954E 01	0.13998E-01	0.33637E-02	0.14234E 01	0.95981E 00	0.39000E-01	0.
154	625.09	0.54112E 02	0.86757E 01	0.13802E-01	0.33167E-02	0.14040E 01	0.94675E 00	0.78000E-01	0.10173E 01
155	623.62	0.53881E 02	0.90153E 01	0.14334E-01	0.34445E-02	0.14590E 01	0.98380E 00	0.39000E-01	0.
156	615.61	0.50990E 02	0.84686E 01	0.13424E-01	0.32257E-02	0.13705E 01	0.92415E 00	0.39000E-01	0.
157	612.51	0.48520E 02	0.80706E 01	0.12778E-01	0.30704E-02	0.13061E 01	0.88071E 00	0.78000E-01	0.10320E 01
158	610.34	0.51532E 02	0.85886E 01	0.13587E-01	0.32648E-02	0.13899E 01	0.93725E 00	0.39000E-01	0.10440E 01
159	607.85	0.51916E 02	0.86411E 01	0.13657E-01	0.32816E-02	0.13984E 01	0.94297E 00	0.78000E-01	0.10179E 01
160	617.20	0.53111E 02	0.88562E 01	0.14047E-01	0.33754E-02	0.14332E 01	0.96644E 00	0.39000E-01	0.
161	597.90	0.48722E 02	0.78510E 01	0.12361E-01	0.29702E-02	0.12705E 01	0.85675E 00	0.43000E-01	0.10217E 01
162	602.50	0.52930E 02	0.85779E 01	0.13529E-01	0.32510E-02	0.13882E 01	0.93608E 00	0.43000E-01	0.11196E 01
163	598.06	0.48412E 02	0.78397E 01	0.12344E-01	0.29661E-02	0.12687E 01	0.85551E 00	0.85000E-01	0.10286E 01
164	595.77	0.47250E 02	0.76052E 01	0.11964E-01	0.28749E-02	0.12308E 01	0.82992E 00	0.12800E-00	0.10122E 01
165	607.08	0.61449E 02	0.99830E 01	0.15773E-01	0.37901E-02	0.16156E 01	0.10894E 01	0.43000E-01	0.12970E 01
166	603.27	0.59485E 02	0.96132E 01	0.15166E-01	0.36444E-02	0.15557E 01	0.10491E 01	0.85000E-01	0.12661E 01
167	635.69	0.92606E 02	0.15225E 02	0.24321E-01	0.58443E-02	0.24639E 01	0.16614E 01	0.43000E-01	0.
168	604.09	0.54849E 02	0.89680E 01	0.14153E-01	0.34009E-02	0.14513E 01	0.97865E 00	0.12800E-00	0.11571E 01
169	623.70	0.72228E 02	0.11895E 02	0.18914E-01	0.45450E-02	0.19250E 01	0.12981E 01	0.85000E-01	0.15232E 01
170	616.68	0.65911E 02	0.10763E 02	0.17067E-01	0.41012E-02	0.17417E 01	0.11745E 01	0.12800E-00	0.13376E 01
171	621.54	0.78417E 02	0.12797E 02	0.20330E-01	0.48853E-02	0.20709E 01	0.13964E 01	0.85000E-01	0.16127E 01
172	672.48	0.10513E 03	0.17700E 02	0.28685E-01	0.68929E-02	0.28645E 01	0.19316E 01	0.43000E-01	0.
173	626.38	0.73806E 02	0.12172E 02	0.19375E-01	0.46557E-02	0.19699E 01	0.13283E 01	0.12800E-00	0.14356E 01
174	632.19	0.83289E 02	0.13712E 02	0.21875E-01	0.52564E-02	0.22191E 01	0.14964E 01	0.85000E-01	0.
175	658.06	0.92957E 02	0.15461E 02	0.24915E-01	0.59869E-02	0.25021E 01	0.16872E 01	0.43000E-01	0.18460E 01
176	662.06	0.93414E 02	0.15569E 02	0.25128E-01	0.60382E-02	0.25196E 01	0.16990E 01	0.43000E-01	0.18385E 01
177	626.82	0.71062E 02	0.11685E 02	0.18602E-01	0.44701E-02	0.18910E 01	0.12751E 01	0.12800E-00	0.12914E 01
178	640.95	0.80513E 02	0.13316E 02	0.21315E-01	0.51220E-02	0.21550E 01	0.14531E 01	0.85000E-01	0.15252E 01
179	638.31	0.72447E 02	0.11966E 02	0.19134E-01	0.45978E-02	0.19364E 01	0.13058E 01	0.70000E-02	0.13928E 01
180	606.52	0.56716E 02	0.92558E 01	0.14621E-01	0.35132E-02	0.14979E 01	0.10100E 01	0.70000E-02	0.
181	609.05	0.53982E 02	0.88215E 01	0.13948E-01	0.33516E-02	0.14276E 01	0.96265E 00	0.70000E-02	0.10548E 01
182	605.74	0.55241E 02	0.90400E 01	0.14275E-01	0.34303E-02	0.14630E 01	0.98650E 00	0.70000E-02	0.
183	604.06	0.51322E 02	0.83376E 01	0.13158E-01	0.31618E-02	0.13493E 01	0.90985E 00	0.32000E-01	0.93576E 00
184	618.92	0.60813E 02	0.10022E 02	0.15906E-01	0.38222E-02	0.16219E 01	0.10937E 01	0.32000E-01	0.95302E 00
185	596.24	0.55109E 02	0.89725E 01	0.14118E-01	0.33924E-02	0.14520E 01	0.97913E 00	0.64000E-01	0.96160E 00
186	615.23	0.64440E 02	0.10565E 02	0.16745E-01	0.40237E-02	0.17098E 01	0.11529E 01	0.64000E-01	0.98352E 00
187	611.66	0.54149E 02	0.88893E 01	0.14069E-01	0.33808E-02	0.14386E 01	0.97006E 00	0.70000E-02	0.94934E 00
188	611.79	0.58665E 02	0.97850E 01	0.15488E-01	0.37216E-02	0.15835E 01	0.10678E 01	0.70000E-02	0.10881E 01
189	544.30	0.71107E 01	0.11664E 01	0.17997E-02	0.43246E-03	0.18876E-00	0.12729E-00	0.10600E 01	0.10312E 01
190	540.94	0.40639E 01	0.67869E 00	0.10459E-02	0.25132E-03	0.10983E-00	0.74063E-01	0.10840E 01	0.10352E 01
191	539.47	0.22816E 01	0.38278E-00	0.58955E-03	0.14167E-03	0.61946E-01	0.41772E-01	0.11080E 01	0.10097E 01
192	539.07	0.24603E 01	0.41044E-00	0.63205E-03	0.15188E-03	0.66422E-01	0.44790E-01	0.11080E 01	0.10527E 01
193	548.77	0.52488E 01	0.86715E 00	0.13402E-02	0.32204E-03	0.14033E-00	0.94628E-01	0.16580E 01	0.13133E 01
194	548.83	0.52852E 01	0.86917E 00	0.13433E-02	0.32280E-03	0.14066E-00	0.94849E-01	0.11700E 01	0.13480E 01
195	550.47	0.60047E 01	0.99296E 00	0.15356E-02	0.36900E-03	0.16069E-00	0.10836E-00	0.16740E 01	0.14555E 01
196	550.61	0.58109E 01	0.95658E 00	0.14794E-02	0.35550E-03	0.15480E-00	0.10439E-00	0.16950E 01	0.14738E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
47	1	6.33	153.95	-51.52	4.95	2	C55	2.70	2	10.19	1824.30	2570.30	115	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.128303E 03	0.344245E-01	0.565322E 04	0.225108E-04	0.103926E-06	~~0.121276E 01~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.746591E 00	0.618049E 01	0.916612E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	538.92	0.30047E 01	0.48913E-00	0.71288E-03	0.17411E-03	0.79141E-01	0.53363E-01	-0.10600E 01	0.99032E 00
100	539.18	0.19268E 01	0.32320E-00	0.47110E-03	0.11506E-03	0.52294E-01	0.35261E-01	-0.10840E 01	0.93157E 00
101	539.32	0.15865E 01	0.26032E-00	0.37945E-03	0.92675E-04	0.42119E-01	0.28400E-01	-0.11080E 01	0.63001E 00
102	583.28	0.32463E 02	0.54410E 01	0.80558E-02	0.19675E-02	0.88035E 00	0.59360E 00	-0.11080E 01	0.14463E 02
103	586.12	0.40750E 02	0.70152E 01	0.10397E-01	0.25394E-02	0.11351E 01	0.76534E 00	-0.10800E 01	0.20333E 02
104	627.92	0.58351E 02	0.96929E 01	0.14585E-01	0.35621E-02	0.15683E 01	0.10575E 01	0.85000E 00	0.
105	640.38	0.68203E 02	0.10787E 02	0.16305E-01	0.39823E-02	0.17454E 01	0.11769E 01	0.94000E 00	0.99419E 00
106	645.39	0.70901E 02	0.11149E 02	0.16883E-01	0.41234E-02	0.18039E 01	0.12163E 01	0.96000E 00	0.99776E 00
107	636.87	0.68206E 02	0.10678E 02	0.16119E-01	0.39368E-02	0.17276E 01	0.11649E 01	0.98000E 00	0.10133E 01
108	634.75	0.64084E 02	0.10072E 02	0.15193E-01	0.37106E-02	0.16296E 01	0.10988E 01	0.10000E 01	0.10187E 01
109	616.31	0.52368E 02	0.81784E 01	0.12254E-01	0.29928E-02	0.13233E 01	0.89224E 00	0.10200E 01	0.10074E 01
110	643.54	0.64478E 02	0.10215E 02	0.15458E-01	0.37754E-02	0.16528E 01	0.11144E 01	0.80000E-01	0.10118E 01
111	638.41	0.66381E 02	0.10400E 02	0.15709E-01	0.38367E-02	0.16827E 01	0.11346E 01	0.10000E-00	0.99569E 00
112	651.59	0.68709E 02	0.10894E 02	0.16535E-01	0.40384E-02	0.17626E 01	0.11885E 01	0.12000E-00	0.99316E 00
113	641.85	0.68670E 02	0.10869E 02	0.16438E-01	0.40148E-02	0.17587E 01	0.11858E 01	0.14000E-00	0.99433E 00
114	632.74	0.62020E 02	0.97702E 01	0.14727E-01	0.35968E-02	0.15808E 01	0.10659E 01	0.80000E-01	0.
115	634.53	0.62785E 02	0.98667E 01	0.14882E-01	0.36347E-02	0.15964E 01	0.10764E 01	0.10000E-00	0.99259E 00
116	636.92	0.64526E 02	0.10222E 02	0.15431E-01	0.37687E-02	0.16538E 01	0.11151E 01	0.12000E-00	0.99922E 00
117	648.18	0.66365E 02	0.10539E 02	0.15976E-01	0.39020E-02	0.17052E 01	0.11498E 01	0.14000E-00	0.10294E 01
118	635.27	0.58342E 02	0.92804E 01	0.14001E-01	0.34196E-02	0.15016E 01	0.10125E 01	0.10000E-00	0.99858E 00
119	634.42	0.57333E 02	0.90702E 01	0.13680E-01	0.33411E-02	0.14675E 01	0.98953E 00	0.15000E-00	0.55469E 00
120	680.19	0.51758E 02	0.83977E 01	0.12882E-01	0.31462E-02	0.13588E 01	0.91617E 00	0.20000E-00	0.94305E 00
121	635.07	0.57348E 02	0.91213E 01	0.13760E-01	0.33608E-02	0.14758E 01	0.99511E 00	0.25000E-00	0.10039E 01
122	628.52	0.54058E 02	0.85685E 01	0.12896E-01	0.31496E-02	0.13864E 01	0.93480E 00	0.30000E-00	0.99614E 00
123	1085.37	-0.31174E-02	-0.61052E-03	-0.11055E-05	-0.27000E-06	-0.98782E-04	-0.66606E-04	0.35000E-00	0.
124	627.92	0.56942E 02	0.91281E 01	0.13735E-01	0.33545E-02	0.14769E 01	0.99585E 00	0.38000E-00	0.10080E 01
125	632.90	0.59023E 02	0.95645E 01	0.14418E-01	0.35213E-02	0.15475E 01	0.10435E 01	0.45000E-00	0.99541E 00
126	623.45	0.54385E 02	0.88838E 01	0.13345E-01	0.32594E-02	0.14374E 01	0.96920E 00	0.61000E 00	0.98989E 00
127	576.45	0.30171E 02	0.48288E 01	0.71320E-02	0.17419E-02	0.78130E 00	0.52681E 00	0.70000E 00	0.97882E 00
128	553.28	0.13945E 02	0.22107E 01	0.32383E-02	0.79090E-03	0.35768E-00	0.24118E-00	0.75000E 00	0.99326E 00
129	619.33	0.58743E 02	0.96521E 01	0.14478E-01	0.35360E-02	0.15617E 01	0.10530E 01	0.70000E 00	0.13082E 01
130	632.15	0.67754E 02	0.11208E 02	0.16891E-01	0.41253E-02	0.18135E 01	0.12228E 01	0.80000E 00	0.14826E 01
131	566.98	0.24091E 02	0.36510E 01	0.53742E-02	0.13126E-02	0.59073E 00	0.39831E-00	0.90000E 00	0.12815E 01
132	609.16	0.52656E 02	0.81921E 01	0.12243E-01	0.29901E-02	0.13255E 01	0.89374E 00	0.90000E 00	0.12584E 01
133	605.64	0.48526E 02	0.74974E 01	0.11190E-01	0.27330E-02	0.12131E 01	0.81795E 00	0.96000E 00	0.11389E 01
134	601.32	0.43519E 02	0.67197E 01	0.10014E-01	0.24457E-02	0.10872E 01	0.73310E 00	0.10000E 01	0.10777E 01
135	1085.37	-0.31174E-02	-0.62773E-03	-0.11367E-05	-0.27761E-06	-0.10157E-03	-0.68484E-04	0.70000E-02	0.
136	1085.37	-0.31174E-02	-0.61660E-03	-0.11165E-05	-0.27269E-06	-0.99765E-04	-0.67269E-04	0.70000E-02	0.
137	573.49	0.29181E 02	0.46254E 01	0.68243E-02	0.16667E-02	0.74839E 00	0.50462E 00	0.39000E-01	0.98764E 00
138	572.01	0.28757E 02	0.45323E 01	0.66835E-02	0.16323E-02	0.73333E 00	0.49446E-00	0.78000E-01	0.99493E 00
139	570.47	0.28096E 02	0.44028E 01	0.64889E-02	0.15848E-02	0.71236E 00	0.48033E-00	0.11700E-00	0.
140	571.85	0.28576E 02	0.44668E 01	0.65865E-02	0.16087E-02	0.72273E 00	0.48732E-00	0.78000E-01	0.98644E 00
141	753.22	0.17607E 03	0.20801E 02	0.32804E-01	0.80119E-02	0.33656E 01	0.22694E 01	-0.	0.
142	692.56	0.91802E 02	0.10527E 02	0.16223E-01	0.39622E-02	0.17032E 01	0.11485E 01	-0.	0.
143	570.47	0.29801E 02	0.46319E 01	0.68265E-02	0.16673E-02	0.74944E 00	0.50533E 00	0.78000E-01	0.80482E 00
144	571.09	0.30071E 02	0.46831E 01	0.69036E-02	0.16861E-02	0.75773E 00	0.51092E 00	0.70000E-02	0.82484E 00
145	571.68	0.30417E 02	0.47152E 01	0.69523E-02	0.16980E-02	0.76291E 00	0.51441E 00	0.70000E-02	0.95565E 00
146	571.04	0.30600E 02	0.47654E 01	0.70247E-02	0.17157E-02	0.77103E 00	0.51989E 00	0.39000E-01	0.96687E 00
147	573.62	0.30847E 02	0.48028E 01	0.70864E-02	0.17307E-02	0.77709E 00	0.52397E 00	0.78000E-01	0.
148	1085.37	-0.31174E-02	-0.61964E-03	-0.11220E-05	-0.27403E-06	-0.10026E-03	-0.67601E-04	0.11700E-00	0.
149	630.17	0.51721E 02	0.86427E 01	0.13015E-01	0.31787E-02	0.13984E 01	0.94289E 00	0.70000E-02	0.96291E 00
150	629.65	0.51999E 02	0.87282E 01	0.13141E-01	0.32096E-02	0.14122E 01	0.95222E 00	0.70000E-02	0.94694E 00
151	628.98	0.55273E 02	0.92744E 01	0.13960E-01	0.34096E-02	0.15006E 01	0.10118E 01	0.70000E-02	0.95965E 00
152	640.35	0.65895E 02	0.10720E 02	0.16203E-01	0.39574E-02	0.17345E 01	0.11695E 01	0.39000E-01	0.97234E 00

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	640.27	0.67274E 02	0.10944E 02	0.16541E-01	0.40399E-02	0.17707E 01	0.11939E 01	0.39000E-01	0.
154	639.99	0.69478E 02	0.11227E 02	0.16967E-01	0.41440E-02	0.18165E 01	0.12248E 01	0.78000E-01	0.98181E 00
155	637.57	0.65175E 02	0.10985E 02	0.16587E-01	0.40512E-02	0.17774E 01	0.11984E 01	0.39000E-01	0.
156	629.30	0.59335E 02	0.99263E 01	0.14943E-01	0.36497E-02	0.16061E 01	0.10829E 01	0.39000E-01	0.
157	626.02	0.55861E 02	0.93584E 01	0.14071E-01	0.34367E-02	0.15142E 01	0.10210E 01	0.78000E-01	0.99167E 00
158	623.66	0.56690E 02	0.95153E 01	0.14295E-01	0.34914E-02	0.15396E 01	0.10381E 01	0.39000E-01	0.98225E 00
159	619.62	0.49804E 02	0.83417E 01	0.12514E-01	0.30563E-02	0.13497E 01	0.91006E 00	0.78000E-01	0.98632E 00
160	628.86	0.50631E 02	0.84950E 01	0.12786E-01	0.31229E-02	0.13745E 01	0.92678E 00	0.39000E-01	0.
161	601.22	0.39274E 02	0.63399E 01	0.94474E-02	0.23074E-02	0.10258E 01	0.69167E 00	0.43000E-01	0.97025E 00
162	605.88	0.43130E 02	0.70023E 01	0.10452E-01	0.25528E-02	0.11330E 01	0.76394E 00	0.43000E-01	0.10692E 01
163	602.77	0.40204E 02	0.65268E 01	0.97314E-02	0.23768E-02	0.10560E 01	0.71206E 00	0.85000E-01	0.10025E 01
164	600.68	0.39441E 02	0.63651E 01	0.94831E-02	0.23161E-02	0.10299E 01	0.69441E 00	0.12800E-00	0.99221E 00
165	613.66	0.51837E 02	0.84509E 01	0.12650E-01	0.30896E-02	0.13674E 01	0.92198E 00	0.43000E-01	0.12662E 01
166	614.08	0.53692E 02	0.87272E 01	0.13065E-01	0.31911E-02	0.14120E 01	0.95211E 00	0.85000E-01	0.13458E 01
167	656.09	0.87631E 02	0.14561E 02	0.22137E-01	0.54065E-02	0.23559E 01	0.15885E 01	0.43000E-01	0.
168	613.62	0.49330E 02	0.81068E 01	0.12135E-01	0.29637E-02	0.13117E 01	0.88443E 00	0.12800E-00	0.12221E 01
169	639.60	0.68826E 02	0.11430E 02	0.17272E-01	0.42185E-02	0.18494E 01	0.12470E 01	0.85000E-01	0.17249E 01
170	629.64	0.61503E 02	0.10112E 02	0.15225E-01	0.37184E-02	0.16361E 01	0.11032E 01	0.12800E-00	0.14886E 01
171	637.49	0.73684E 02	0.12126E 02	0.18309E-01	0.44717E-02	0.19619E 01	0.13229E 01	0.85000E-01	0.18076E 01
172	724.04	0.11291E 03	0.19508E 02	0.30423E-01	0.74303E-02	0.31564E 01	0.21283E 01	0.43000E-01	0.
173	652.31	0.76482E 02	0.12786E 02	0.19411E-01	0.47408E-02	0.20687E 01	0.13949E 01	0.12800E-00	0.18165E 01
174	667.58	0.91060E 02	0.15269E 02	0.23313E-01	0.56938E-02	0.24705E 01	0.16658E 01	0.85000E-01	-0.65656E 04
175	697.72	0.10022E 03	0.17009E 02	0.26263E-01	0.64143E-02	0.27520E 01	0.18556E 01	0.43000E-01	0.24054E 01
176	685.68	0.95754E 02	0.16153E 02	0.24828E-01	0.60640E-02	0.26135E 01	0.17622E 01	0.43000E-01	0.22792E 01
177	644.81	0.70362E 02	0.11679E 02	0.17683E-01	0.43187E-02	0.18897E 01	0.12742E 01	0.12800E-00	0.15991E 01
178	661.55	0.81190E 02	0.13572E 02	0.20675E-01	0.50497E-02	0.21959E 01	0.14807E 01	0.85000E-01	0.18926E 01
179	673.80	0.80247E 02	0.13499E 02	0.20657E-01	0.50452E-02	0.21841E 01	0.14727E 01	0.70000E-02	0.18846E 01
180	634.26	0.65772E 02	0.10892E 02	0.16427E-01	0.40122E-02	0.17624E 01	0.11883E 01	0.70000E-02	0.
181	636.88	0.59052E 02	0.97929E 01	0.14783E-01	0.36106E-02	0.15845E 01	0.10684E 01	0.70000E-02	0.13986E 01
182	635.27	0.61868E 02	0.10284E 02	0.15516E-01	0.37894E-02	0.16639E 01	0.11220E 01	0.70000E-02	0.
183	613.33	0.49370E 02	0.80603E 01	0.12064E-01	0.29464E-02	0.13041E 01	0.87936E 00	0.32000E-01	0.11128E 01
184	615.98	0.44869E 02	0.73828E 01	0.11060E-01	0.27014E-02	0.11945E 01	0.80544E 00	0.32000E-01	0.91389E 00
185	593.13	0.37906E 02	0.61614E 01	0.91547E-02	0.22359E-02	0.99691E 00	0.67219E 00	0.64000E-01	0.90697E 00
186	614.90	0.48219E 02	0.79043E 01	0.11837E-01	0.28910E-02	0.12789E 01	0.86234E 00	0.64000E-01	0.96591E 00
187	612.41	0.42894E 02	0.70445E 01	0.10540E-01	0.25742E-02	0.11398E 01	0.76854E 00	0.70000E-02	0.91288E 00
188	633.68	0.64959E 02	0.10961E 02	0.16527E-01	0.40365E-02	0.17735E 01	0.11958E 01	0.70000E-02	0.14702E 01
189	551.12	0.12207E 02	0.20101E 01	0.29422E-02	0.71860E-03	0.32523E-00	0.21930E-00	0.10600E 01	0.10039E 01
190	545.87	0.74977E 01	0.12556E 01	0.18344E-02	0.44804E-03	0.20316E-00	0.13698E-00	0.10840E 01	0.10158E 01
191	541.94	0.37356E 01	0.62760E 00	0.91566E-03	0.22364E-03	0.10154E-00	0.68469E-01	0.11080E 01	0.10279E 01
192	541.97	0.43590E 01	0.72838E 00	0.10627E-02	0.25955E-03	0.11785E-00	0.79465E-01	0.11080E 01	0.10345E 01
193	549.25	0.35127E 01	0.58049E 00	0.84911E-03	0.20738E-03	0.93922E-01	0.63330E-01	0.16580E 01	0.10857E 01
194	550.46	0.47132E 01	0.77582E 00	0.11353E-02	0.27729E-03	0.12553E-00	0.84640E-01	0.11700E 01	0.14733E 01
195	552.46	0.57642E 01	0.95425E 00	0.13974E-02	0.34130E-03	0.15440E-00	0.10411E-00	0.16740E 01	0.16596E 01
196	553.91	0.63714E 01	0.10508E 01	0.15396E-02	0.37602E-03	0.17002E-00	0.11464E-00	0.16950E 01	0.18701E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
39	1	8.35	158.35	0.02	-0.	1	C55	2.65	2	10.19	1831.80	1897.30	105	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.919043E 02	0.374597E-01	0.478469E 04	0.341972E-04	0.744425E-07	0.221278E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732199E 00	0.619267E 01	0.919022E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	594.07	0.50498E 02	0.67715E 01	0.20036E-01	0.38060E-02	0.10935E 01	0.73681E 00	-0.	0.10097E 01
2	595.40	0.48655E 02	0.69458E 01	0.20571E-01	0.39077E-02	0.11216E 01	0.75578E 00	-0.30000E-01	0.10057E 01
3	585.46	0.46075E 02	0.71131E 01	0.20918E-01	0.39735E-02	0.11486E 01	0.77398E 00	-0.60000E-01	0.10043E 01
4	586.98	0.44462E 02	0.70467E 01	0.20745E-01	0.39407E-02	0.11379E 01	0.76676E 00	-0.90000E-01	0.10128E 01
5	579.42	0.41473E 02	0.67124E 01	0.19655E-01	0.37336E-02	0.10839E 01	0.73038E 00	-0.20000E-00	0.10114E 01
6	577.42	0.37747E 02	0.61027E 01	0.17845E-01	0.33897E-02	0.98547E 00	0.66404E 00	-0.40000E-00	0.99892E 00
7	578.10	0.32883E 02	0.53436E 01	0.15632E-01	0.29695E-02	0.86289E 00	0.58144E 00	-0.60000E 00	0.10005E 01
8	577.81	0.30794E 02	0.50034E 01	0.14634E-01	0.27798E-02	0.80795E 00	0.54442E 00	-0.80000E 00	0.10173E 01
9	576.80	0.30471E 02	0.48698E 01	0.14233E-01	0.27037E-02	0.78639E 00	0.52989E 00	-0.90000E 00	0.98089E 00
10	576.36	0.28788E 02	0.46590E 01	0.13613E-01	0.25858E-02	0.75234E 00	0.50695E 00	-0.98000E 00	0.99466E 00
11	541.50	0.22499E 01	0.38719E-00	0.11041E-02	0.20974E-03	0.62524E-01	0.42131E-01	-0.11220E 01	0.74474E 00
12	544.23	0.36727E 01	0.53942E 00	0.15411E-02	0.29275E-03	0.87106E-01	0.58695E-01	-0.11890E 01	0.96337E 00
13	543.86	0.31257E 01	0.47318E-00	0.13516E-02	0.25673E-03	0.76410E-01	0.51487E-01	-0.13340E 01	0.95012E 00
14	542.67	0.31636E 01	0.54481E 00	0.15549E-02	0.29535E-03	0.87976E-01	0.59281E-01	-0.14400E 01	0.11224E 01
15	592.36	0.49402E 02	0.70408E 01	0.20808E-01	0.39525E-02	0.11370E 01	0.76611E 00	0.30000E-01	0.
16	919.71	0.98644E-02	0.17902E-02	0.69272E-05	0.13159E-05	0.28908E-03	0.19479E-03	0.60000E-01	0.
17	586.29	0.45740E 02	0.72465E 01	0.21323E-01	0.40504E-02	0.11702E 01	0.78850E 00	0.90000E-01	0.10133E 01
18	588.12	0.44136E 02	0.71774E 01	0.21147E-01	0.40170E-02	0.11590E 01	0.78098E 00	0.20000E-00	0.10121E 01
19	607.72	0.49413E 02	0.81207E 01	0.24266E-01	0.46094E-02	0.13113E 01	0.88362E 00	0.40000E-00	0.99324E 00
20	627.54	0.66349E 02	0.11072E 02	0.33566E-01	0.63760E-02	0.17879E 01	0.12047E 01	0.60000E 00	0.
21	639.96	0.59125E 02	0.93493E 01	0.28605E-01	0.54337E-02	0.15097E 01	0.10173E 01	0.92000E 00	0.10127E 01
22	592.04	0.39446E 02	0.60807E 01	0.17966E-01	0.34128E-02	0.98193E 00	0.66165E 00	0.10400E 01	0.10131E 01
23	584.05	0.35256E 02	0.54260E 01	0.15941E-01	0.30280E-02	0.87619E 00	0.59041E 00	0.10600E 01	0.10072E 01
24	564.34	0.24226E 02	0.38640E 01	0.11195E-01	0.21265E-02	0.62396E 00	0.42044E-00	0.10840E 01	0.10060E 01
25	530.93	0.68717E 01	0.10069E 01	0.28506E-02	0.54148E-03	0.16259E-00	0.10956E-00	0.12070E 01	0.23178E 01
26	528.67	0.74104E 01	0.11438E 01	0.32331E-02	0.61414E-03	0.18469E-00	0.12445E-00	0.12490E 01	0.26930E 01
27	529.06	0.82561E 01	0.12539E 01	0.35454E-02	0.67346E-03	0.20248E-00	0.13644E-00	0.13340E 01	0.29230E 01
28	526.33	0.67673E 01	0.11412E 01	0.32206E-02	0.61177E-03	0.18428E-00	0.12417E-00	0.14540E 01	0.27671E 01
29	525.03	0.42348E 01	0.69244E 00	0.19525E-02	0.37088E-03	0.11182E-00	0.75345E-01	0.16580E 01	0.16240E 01
30	531.16	0.55979E 01	0.92973E 00	0.26326E-02	0.50007E-03	0.15013E-00	0.10117E-00	0.20410E 01	0.20162E 01
31	536.36	0.56369E 01	0.93896E 00	0.26682E-02	0.50683E-03	0.15162E-00	0.10217E-00	0.22480E 01	0.20730E 01
32	587.87	0.46200E 02	0.71489E 01	0.21059E-01	0.40004E-02	0.11544E 01	0.77788E 00	-0.60000E-01	0.
33	596.30	0.48330E 02	0.69027E 01	0.20457E-01	0.38859E-02	0.11147E 01	0.75109E 00	-0.30000E-01	0.10196E 01
34	591.78	0.49230E 02	0.76339E 01	0.22551E-01	0.42837E-02	0.12327E 01	0.83066E 00	0.30000E-01	0.
35	586.12	0.44296E 02	0.70171E 01	0.20645E-01	0.39217E-02	0.11331E 01	0.76354E 00	0.60000E-01	0.10168E 01
36	607.58	0.72434E 02	0.11903E 02	0.35565E-01	0.67557E-02	0.19221E 01	0.12952E 01	-0.86800E 00	0.22744E 01
37	602.73	0.60990E 02	0.97263E 01	0.28959E-01	0.55009E-02	0.15706E 01	0.10583E 01	-0.91100E 00	0.19710E 01
38	594.89	0.57017E 02	0.92173E 01	0.27289E-01	0.51837E-02	0.14884E 01	0.10029E 01	-0.95300E 00	0.18349E 01
39	919.71	0.98644E-02	0.18710E-02	0.72400E-05	0.13753E-05	0.30213E-03	0.20359E-03	0.51000E-01	0.
40	919.71	0.98644E-02	0.18710E-02	0.72400E-05	0.13753E-05	0.30213E-03	0.20359E-03	0.29000E-01	0.
41	919.71	0.98644E-02	0.18602E-02	0.71983E-05	0.13674E-05	0.30039E-03	0.20241E-03	0.70000E-02	0.
42	628.65	0.93731E 02	0.15477E 02	0.46959E-01	0.89201E-02	0.24992E 01	0.16841E 01	-0.86800E 00	0.29220E 01
43	616.91	0.81234E 02	0.13365E 02	0.40203E-01	0.76367E-02	0.21581E 01	0.14542E 01	-0.91100E 00	0.26273E 01
44	603.49	0.65805E 02	0.10687E 02	0.31837E-01	0.60477E-02	0.17258E 01	0.11629E 01	-0.95300E 00	0.20661E 01
45	574.97	0.34655E 02	0.57519E 01	0.16790E-01	0.31893E-02	0.92882E 00	0.62587E 00	-0.10400E 01	0.37574E 01
46	632.75	0.85861E 02	0.14244E 02	0.43350E-01	0.82346E-02	0.23002E 01	0.15499E 01	0.70000E-02	0.
47	575.85	0.33841E 02	0.54456E 01	0.15906E-01	0.30213E-02	0.87936E 00	0.59254E 00	0.29000E-01	0.
48	575.17	0.27132E 02	0.43811E 01	0.12790E-01	0.24296E-02	0.70747E 00	0.47672E-00	0.51000E-01	0.92753E 00
49	617.64	0.65233E 02	0.10675E 02	0.32128E-01	0.61029E-02	0.17237E 01	0.11615E 01	0.70000E-02	0.21214E 01
50	579.65	0.30413E 02	0.48916E 01	0.14326E-01	0.27213E-02	0.78990E 00	0.53226E 00	0.29000E-01	0.10180E 01
51	579.74	0.28866E 02	0.46282E 01	0.13555E-01	0.25749E-02	0.74737E 00	0.50360E 00	0.51000E-01	0.
52	619.10	0.73509E 02	0.12108E 02	0.36480E-01	0.69296E-02	0.19552E 01	0.13174E 01	-0.86800E 00	0.
53	607.25	0.60796E 02	0.99889E 01	0.29838E-01	0.56679E-02	0.16130E 01	0.10869E 01	-0.91100E 00	0.19906E 01
54	604.66	0.58695E 02	0.95384E 01	0.28439E-01	0.54022E-02	0.15403E 01	0.10379E 01	-0.95300E 00	0.19202E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	571.15	0.24969E 02	0.41356E 01	0.12039E-01	0.22869E-02	0.66782E 00	0.45000E-00	-0.10400E 01	0.37610E 01
56	570.36	0.22034E 02	0.37630E 01	0.10948E-01	0.20797E-02	0.60765E 00	0.40946E-00	-0.10680E 01	0.67602E 01
57	564.45	0.15677E 02	0.25870E 01	0.74957E-02	0.14239E-02	0.41775E-00	0.28149E-00	-0.10400E 01	0.61258E 01
58	574.81	0.24856E 02	0.44658E 01	0.13034E-01	0.24759E-02	0.72114E 00	0.48593E-00	-0.10680E 01	0.42961E 01
59	558.13	0.14527E 02	0.23889E 01	0.68913E-02	0.13090E-02	0.38576E-00	0.25994E-00	-0.10400E 01	0.13150E 01
60	559.82	0.15197E 02	0.25804E 01	0.74524E-02	0.14156E-02	0.41668E-00	0.28077E-00	-0.10680E 01	0.28804E 01
61	543.09	0.26816E 01	0.44526E-00	0.12711E-02	0.24146E-03	0.71901E-01	0.48449E-01	-0.11220E 01	0.82265E 00
62	543.63	0.10468E 01	0.15844E-00	0.45248E-03	0.85951E-04	0.25585E-01	0.17240E-01	-0.13340E 01	0.26800E-00
63	545.27	0.23029E 01	0.39715E-00	0.11355E-02	0.21569E-03	0.64132E-01	0.43215E-01	-0.11220E 01	0.76991E 00
64	544.23	0.13881E 01	0.21017E-00	0.60047E-03	0.11406E-03	0.33939E-01	0.22869E-01	-0.13340E 01	0.42505E-00
65	543.22	0.18078E 01	0.31141E-00	0.88910E-03	0.16889E-03	0.50287E-01	0.33885E-01	0.14400E 01	0.56634E 00
66	541.74	0.27065E 01	0.44333E-00	0.12644E-02	0.24019E-03	0.71590E-01	0.48239E-01	0.16130E 01	0.82822E 00
67	541.04	0.31969E 01	0.51379E 00	0.14647E-02	0.27822E-03	0.82967E-01	0.55906E-01	0.17200E 01	0.89949E 00
68	541.49	0.26655E 01	0.43991E-00	0.12545E-02	0.23829E-03	0.71037E-01	0.47867E-01	-0.16130E 01	0.85199E 00
69	540.54	0.37101E 01	0.59611E 00	0.16988E-02	0.32269E-03	0.96260E-01	0.64863E-01	-0.18280E 01	0.98289E 00
70	545.88	0.33361E 01	0.49127E-00	0.14052E-02	0.26692E-03	0.79331E-01	0.53456E-01	-0.11650E 01	0.98117E 00
71	544.09	0.21210E 01	0.17844E-00	0.50977E-03	0.96833E-04	0.28815E-01	0.19416E-01	-0.12050E 01	0.13948E 01
72	546.48	0.33969E 01	0.49352E-00	0.14122E-02	0.26826E-03	0.79695E-01	0.53701E-01	-0.12120E 01	0.96276E 00
73	543.84	0.31662E 01	0.46573E-00	0.13302E-02	0.25269E-03	0.75206E-01	0.50676E-01	-0.11650E 01	0.96697E 00
74	542.18	0.14114E 01	0.11862E-00	0.33841E-03	0.64283E-04	0.19154E-01	0.12907E-01	-0.12050E 01	0.13344E 01
75	919.71	0.98644E-02	0.17123E-02	0.66261E-05	0.12587E-05	0.27651E-03	0.18632E-03	-0.12120E 01	0.
76	542.16	0.29335E 01	0.44218E-00	0.12615E-02	0.23963E-03	0.71404E-01	0.48114E-01	0.10840E 01	0.98127E 00
77	541.81	0.32338E 01	0.52320E 00	0.14923E-02	0.28347E-03	0.84487E-01	0.56930E-01	0.11220E 01	0.10524E 01
78	544.11	0.34535E 01	0.51503E 00	0.14713E-02	0.27949E-03	0.83168E-01	0.56041E-01	0.13340E 01	0.10348E 01
79	541.12	0.20016E 01	0.33612E-00	0.95824E-03	0.18202E-03	0.54277E-01	0.36573E-01	-0.11890E 01	0.57093E 00
80	543.17	0.24868E 01	0.37442E-00	0.10690E-02	0.20306E-03	0.60463E-01	0.40742E-01	-0.13340E 01	0.73203E 00
81	539.85	0.80053E 00	0.12938E-00	0.36852E-03	0.70003E-04	0.20892E-01	0.14078E-01	-0.11470E 01	0.21701E-00
82	537.99	0.22026E-00	0.36890E-01	0.10495E-03	0.19935E-04	0.59571E-02	0.40141E-02	-0.11890E 01	0.
83	548.22	0.57860E 01	0.97462E 00	0.27922E-02	0.53039E-03	0.15738E-00	0.10605E-00	-0.10840E 01	0.20829E 01
84	539.30	0.16192E 01	0.23757E-00	0.67644E-03	0.12849E-03	0.38363E-01	0.25850E-01	-0.11890E 01	0.44999E-00
85	541.82	0.21891E 01	0.32163E-00	0.91739E-03	0.17426E-03	0.51938E-01	0.34997E-01	-0.13090E 01	0.67351E 00
86	541.82	0.21309E 01	0.31738E-00	0.90527E-03	0.17196E-03	0.51251E-01	0.34535E-01	-0.13340E 01	0.63730E 00
87	568.23	0.24333E 02	0.36217E 01	0.10522E-01	0.19987E-02	0.58484E 00	0.39409E-00	0.11990E 01	0.81669E 01
88	542.45	0.14251E 02	0.21089E 01	0.60179E-02	0.11431E-02	0.34055E-00	0.22948E-00	0.12070E 01	0.50450E 01
89	532.50	0.78213E 01	0.11706E 01	0.33175E-02	0.63018E-03	0.18903E-00	0.12737E-00	0.13340E 01	0.29074E 01
90	550.45	0.19502E 02	0.28002E 01	0.80348E-02	0.15263E-02	0.45218E-00	0.30470E-00	0.12070E 01	0.64833E 01
91	537.73	0.10225E 02	0.15863E 01	0.45120E-02	0.85708E-03	0.25616E-00	0.17261E-00	0.12490E 01	0.37254E 01
92	534.83	0.89335E 01	0.13455E 01	0.38194E-02	0.72552E-03	0.21728E-00	0.14641E-00	0.13340E 01	0.31218E 01
93	528.12	0.59912E 01	0.10053E 01	0.28407E-02	0.53960E-03	0.16234E-00	0.10939E-00	0.14900E 01	0.23944E 01
94	553.77	0.30052E 01	0.31793E-00	0.91437E-03	0.17369E-03	0.51340E-01	0.34595E-01	-0.	0.
95	560.84	0.10645E 02	0.11388E 01	0.32912E-02	0.62518E-03	0.18389E-00	0.12391E-00	-0.	0.
96	543.76	0.26878E 01	0.28277E-00	0.80762E-03	0.15341E-03	0.45662E-01	0.30769E-01	-0.	0.
97	545.96	0.37330E 01	0.39321E-00	0.11248E-02	0.21365E-03	0.63496E-01	0.42786E-01	-0.	0.
98	546.52	0.43506E 01	0.46172E-00	0.13212E-02	0.25097E-03	0.74558E-01	0.50240E-01	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
48	1	8.42	158.42	-0.03	-0.	2	C55	2.70	2	10.19	1839.30	2590.00	116	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.129387E 03	0.346184E-01	0.567727E 04	0.224480E-04	0.104803E-06	~~0.122433E 01~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.746901E 00	0.620473E 01	0.921424E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	533.94	0.39403E 01	0.63963E 00	0.90960E-03	0.22183E-03	0.10309E-00	0.69418E-01	-0.10600E 01	0.10796E 01
100	533.97	0.22390E 01	0.37447E-00	0.53253E-03	0.12987E-03	0.60353E-01	0.40641E-01	-0.10840E 01	0.11081E 01
101	533.74	0.15496E 01	0.25347E-00	0.36042E-03	0.87901E-04	0.40851E-01	0.27508E-01	-0.11080E 01	0.82173E 00
102	570.25	0.29802E 02	0.49595E 01	0.71418E-02	0.17418E-02	0.79931E 00	0.53824E 00	-0.11080E 01	0.16121E 02
103	577.71	0.39585E 02	0.67835E 01	0.97939E-02	0.23885E-02	0.10933E 01	0.73620E 00	-0.10800E 01	0.18006E 02
104	613.94	0.55175E 02	0.90977E 01	0.13304E-01	0.32445E-02	0.14662E 01	0.98735E 00	0.85000E 00	0.
105	626.11	0.63086E 02	0.99036E 01	0.14545E-01	0.35472E-02	0.15961E 01	0.10748E 01	0.94000E 00	0.96828E 00
106	630.99	0.65080E 02	0.10157E 02	0.14943E-01	0.36443E-02	0.16370E 01	0.11023E 01	0.96000E 00	0.96687E 00
107	622.56	0.62360E 02	0.96891E 01	0.14212E-01	0.34660E-02	0.15616E 01	0.10515E 01	0.98000E 00	0.98108E 00
108	617.57	0.57726E 02	0.89910E 01	0.13165E-01	0.32106E-02	0.14491E 01	0.97577E 00	0.10000E 01	0.97879E 00
109	598.65	0.45945E 02	0.71079E 01	0.10338E-01	0.25212E-02	0.11456E 01	0.77141E 00	0.10200E 01	0.95338E 00
110	629.05	0.59970E 02	0.94289E 01	0.13862E-01	0.33807E-02	0.15196E 01	0.10233E 01	0.80000E-01	0.98224E 00
111	624.84	0.61795E 02	0.96129E 01	0.14112E-01	0.34415E-02	0.15493E 01	0.10433E 01	0.10000E-00	0.97300E 00
112	636.84	0.63631E 02	0.10012E 02	0.14760E-01	0.35997E-02	0.16136E 01	0.10866E 01	0.12000E-00	0.96856E 00
113	626.92	0.62755E 02	0.98558E 01	0.14479E-01	0.35311E-02	0.15884E 01	0.10696E 01	0.14000E-00	0.96304E 00
114	618.70	0.57938E 02	0.90598E 01	0.13271E-01	0.32364E-02	0.14601E 01	0.98323E 00	0.80000E-01	0.
115	620.94	0.58730E 02	0.91637E 01	0.13434E-01	0.32762E-02	0.14769E 01	0.99452E 00	0.10000E-00	0.96170E 00
116	623.56	**0.60411E 02**	**0.95027E 01**	**0.13944E-01**	0.34006E-02	0.15315E 01	0.10313E 01	0.12000E-00	0.96806E 00
117	633.87	0.62171E 02	0.97997E 01	0.14432E-01	**0.35197E-02**	**0.15794E 01**	**0.10635E 01**	**0.14000E-00**	**0.10014E 01**
118	620.07	0.55071E 02	0.86902E 01	0.12735E-01	0.31059E-02	0.14006E 01	0.94313E 00	0.10000E-00	0.95465E 00
119	619.64	0.54449E 02	0.85471E 01	0.12524E-01	0.30543E-02	0.13775E 01	0.92760E 00	0.15000E-00	0.55827E 00
120	664.85	0.51869E 02	0.83501E 01	0.12435E-01	0.30327E-02	0.13458E 01	0.90622E 00	0.20000E-00	0.95260E 00
121	621.91	0.55477E 02	0.87627E 01	0.12850E-01	0.31339E-02	0.14123E 01	0.95100E 00	0.25000E-00	0.97909E 00
122	615.95	0.52664E 02	0.82922E 01	0.12134E-01	0.29593E-02	0.13364E 01	0.89993E 00	0.30000E-00	0.96612E 00
123	1085.37	-0.31174E-02	-0.61052E-03	-0.10746E-05	-0.26208E-06	-0.98396E-04	-0.66259E-04	0.35000E-00	0.
124	615.52	0.56572E 02	0.90095E 01	0.13182E-01	0.32149E-02	0.14520E 01	0.97778E 00	0.38000E-00	0.97912E 00
125	620.32	0.59362E 02	0.95558E 01	0.14005E-01	0.34156E-02	0.15401E 01	0.10371E 01	0.45000E-00	0.96417E 00
126	612.22	0.56766E 02	0.92177E 01	0.13471E-01	0.32853E-02	0.14856E 01	0.10004E 01	0.61000E 00	0.96181E 00
127	568.69	0.31614E 02	0.50383E 01	0.72514E-02	0.17685E-02	0.81200E 00	0.54679E 00	0.70000E 00	0.94808E 00
128	548.27	0.14340E 02	0.22668E 01	0.32395E-02	0.79006E-03	0.36534E-00	0.24601E-00	0.75000E 00	0.94762E 00
129	618.84	0.70671E 02	0.11609E 02	0.17005E-01	0.41473E-02	0.18710E 01	0.12599E 01	0.70000E 00	0.14192E 01
130	622.07	0.73503E 02	0.12095E 02	0.17738E-01	0.43258E-02	0.19493E 01	0.13126E 01	0.80000E 00	0.14329E 01
131	557.57	0.24368E 02	0.36738E 01	0.52672E-02	0.12846E-02	0.59210E 00	0.39871E-00	0.90000E 00	0.10966E 01
132	588.42	0.47288E 02	0.72755E 01	0.10544E-01	0.25714E-02	0.11726E 01	0.78959E 00	0.90000E 00	0.98099E 00
133	589.60	0.48810E 02	0.74766E 01	0.10840E-01	0.26436E-02	0.12050E 01	0.81141E 00	0.96000E 00	0.99087E 00
134	588.47	0.46825E 02	0.71802E 01	0.10406E-01	0.25378E-02	0.11572E 01	0.77925E 00	0.10000E 01	0.99060E 00
135	1085.37	-0.31174E-02	-0.62773E-03	-0.11049E-05	-0.26947E-06	-0.10117E-03	-0.68127E-04	0.70000E-02	0.
136	1085.37	-0.31174E-02	-0.61660E-03	-0.10853E-05	-0.26469E-06	-0.99375E-04	-0.66918E-04	0.70000E-02	0.
137	572.15	0.34202E 02	0.54172E 01	0.78062E-02	0.19038E-02	0.87308E 00	0.58792E 00	0.39000E-01	0.99869E 00
138	570.71	0.33715E 02	0.53100E 01	0.76478E-02	0.18652E-02	0.85580E 00	0.57628E 00	0.78000E-01	0.10044E 01
139	569.84	0.33167E 02	0.51956E 01	0.74808E-02	0.18244E-02	0.83737E 00	0.56387E 00	0.11700E-00	0.
140	571.65	0.33631E 02	0.52564E 01	0.75731E-02	0.18469E-02	0.84716E 00	0.57047E 00	0.78000E-01	0.10064E 01
141	746.45	0.18358E 03	0.21619E 02	0.33177E-01	0.80912E-02	0.34842E 01	0.23462E 01	-0.	0.
142	681.24	0.96596E 02	0.11013E 02	0.16499E-01	0.40239E-02	0.17750E 01	0.11953E 01	-0.	0.
143	569.23	0.31928E 02	0.49591E 01	0.71388E-02	0.17410E-02	0.79925E 00	0.53820E 00	0.78000E-01	0.99660E 00
144	569.63	0.32006E 02	0.49804E 01	0.71705E-02	0.17487E-02	0.80268E 00	0.54051E 00	0.70000E-02	0.89902E 00
145	569.65	0.31836E 02	0.49296E 01	0.70973E-02	0.17309E-02	0.79449E 00	0.53500E 00	0.70000E-02	0.97148E 00
146	569.46	0.31860E 02	0.49573E 01	0.71368E-02	0.17405E-02	0.79896E 00	0.53801E 00	0.39000E-01	0.95232E 00
147	572.90	0.32196E 02	0.50108E 01	0.72224E-02	0.17614E-02	0.80758E 00	0.54381E 00	0.78000E-01	0.
148	1085.37	-0.31174E-02	-0.61964E-03	-0.10907E-05	-0.26599E-06	-0.99865E-04	-0.67248E-04	0.11700E-00	0.
149	616.79	0.56493E 02	0.93738E 01	0.13721E-01	0.33463E-02	0.15107E 01	0.10173E 01	0.70000E-02	0.94898E 00
150	616.06	0.54756E 02	0.91250E 01	0.13354E-01	0.32567E-02	0.14707E 01	0.99032E 00	0.70000E-02	0.93644E 00
151	611.72	0.52487E 02	0.87268E 01	0.12751E-01	0.31098E-02	0.14065E 01	0.94710E 00	0.70000E-02	0.96198E 00
152	619.92	0.54946E 02	0.88431E 01	0.12959E-01	0.31604E-02	0.14252E 01	0.95972E 00	0.39000E-01	0.96535E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	624.19	0.59833E 02	0.96515E 01	0.14165E-01	0.34545E-02	0.15555E 01	0.10475E 01	0.39000E-01	0.
154	617.87	0.56209E 02	0.89776E 01	0.13146E-01	0.32061E-02	0.14469E 01	0.97432E 00	0.78000E-01	0.99056E 00
155	615.25	0.54096E 02	0.90111E 01	0.13183E-01	0.32151E-02	0.14523E 01	0.97796E 00	0.39000E-01	0.
156	607.34	0.51757E 02	0.85583E 01	0.12486E-01	0.30450E-02	0.13793E 01	0.92882E 00	0.39000E-01	0.
157	605.18	0.50403E 02	0.83510E 01	0.12174E-01	0.29690E-02	0.13459E 01	0.90631E 00	0.78000E-01	0.95075E 00
158	602.59	0.52766E 02	0.87580E 01	0.12756E-01	0.31108E-02	0.14115E 01	0.95048E 00	0.39000E-01	0.95547E 00
159	603.03	0.54250E 02	0.90064E 01	0.13120E-01	0.31996E-02	0.14515E 01	0.97745E 00	0.78000E-01	0.97922E 00
160	611.80	0.55141E 02	0.91685E 01	0.13397E-01	0.32673E-02	0.14777E 01	0.99503E 00	0.39000E-01	0.
161	593.14	0.46019E 02	0.73965E 01	0.10737E-01	0.26185E-02	0.11921E 01	0.80272E 00	0.43000E-01	0.96443E 00
162	595.04	0.45906E 02	0.74099E 01	0.10763E-01	0.26250E-02	0.11942E 01	0.80417E 00	0.43000E-01	0.97327E 00
163	593.77	0.46586E 02	0.75265E 01	0.10928E-01	0.26651E-02	0.12130E 01	0.81684E 00	0.85000E-01	0.99324E 00
164	591.52	0.45716E 02	0.73414E 01	0.10651E-01	0.25975E-02	0.11832E 01	0.79675E 00	0.12800E-00	0.98376E 00
165	593.57	0.47934E 02	0.77310E 01	0.11224E-01	0.27373E-02	0.12460E 01	0.83902E 00	0.43000E-01	0.10164E 01
166	589.91	0.46271E 02	0.74240E 01	0.10765E-01	0.26253E-02	0.11965E 01	0.80571E 00	0.85000E-01	0.99481E 00
167	607.32	0.61796E 02	0.10008E 02	0.14601E-01	0.35609E-02	0.16130E 01	0.10862E 01	0.43000E-01	0.
168	592.31	0.46103E 02	0.74904E 01	0.10870E-01	0.26510E-02	0.12072E 01	0.81291E 00	0.12800E-00	0.98319E 00
169	603.55	0.52554E 02	0.85629E 01	0.12476E-01	0.30426E-02	0.13801E 01	0.92931E 00	0.85000E-01	0.11294E 01
170	599.51	0.49899E 02	0.80736E 01	0.11746E-01	0.28646E-02	0.13012E 01	0.87621E 00	0.12800E-00	0.10398E 01
171	604.53	0.59999E 02	0.97028E 01	0.14141E-01	0.34488E-02	0.15638E 01	0.10530E 01	0.85000E-01	0.12677E 01
172	676.32	0.10376E 03	0.17505E 02	0.26177E-01	0.63842E-02	0.28212E 01	0.18998E 01	0.43000E-01	0.
173	614.84	0.62334E 02	0.10218E 02	0.14946E-01	0.36451E-02	0.16468E 01	0.11089E 01	0.12800E-00	0.12855E 01
174	629.40	0.77806E 02	0.12791E 02	0.18807E-01	0.45867E-02	0.20615E 01	0.13882E 01	0.85000E-01	0.
175	688.21	0.10554E 03	0.17827E 02	0.26774E-01	0.65297E-02	0.28731E 01	0.19347E 01	0.43000E-01	0.22207E 01
176	672.86	0.98647E 02	0.16533E 02	0.24692E-01	0.60220E-02	0.26645E 01	0.17942E 01	0.43000E-01	0.20627E 01
177	633.17	0.75406E 02	0.12441E 02	0.18317E-01	0.44672E-02	0.20050E 01	0.13502E 01	0.12800E-00	0.15248E 01
178	646.17	0.84331E 02	0.13985E 02	0.20688E-01	0.50453E-02	0.22540E 01	0.15178E 01	0.85000E-01	0.17347E 01
179	658.82	0.84859E 02	0.14165E 02	0.21050E-01	0.51336E-02	0.22830E 01	0.15373E 01	0.70000E-02	0.17600E 01
180	622.26	0.65376E 02	0.10759E 02	0.15779E-01	0.38482E-02	0.17339E 01	0.11676E 01	0.70000E-02	0.
181	609.95	0.54656E 02	0.89359E 01	0.13049E-01	0.31823E-02	0.14402E 01	0.96979E 00	0.70000E-02	0.10964E 01
182	613.89	0.59552E 02	0.97879E 01	0.14313E-01	0.34906E-02	0.15775E 01	0.10623E 01	0.70000E-02	0.
183	620.75	0.64297E 02	0.10539E 02	0.15448E-01	0.37675E-02	0.16985E 01	0.11437E 01	0.32000E-01	0.13132E 01
184	612.42	0.54547E 02	0.89583E 01	0.13093E-01	0.31931E-02	0.14438E 01	0.97223E 00	0.32000E-01	0.10008E 01
185	588.20	0.45666E 02	0.74029E 01	0.10727E-01	0.26162E-02	0.11931E 01	0.80341E 00	0.64000E-01	0.98733E 00
186	604.75	0.51505E 02	0.83973E 01	0.12240E-01	0.29850E-02	0.13534E 01	0.91134E 00	0.64000E-01	0.93464E 00
187	603.06	0.47193E 02	0.77120E 01	0.11234E-01	0.27398E-02	0.12429E 01	0.83696E 00	0.70000E-02	0.91119E 00
188	635.33	0.73900E 02	0.12480E 02	0.18390E-01	0.44849E-02	0.20114E 01	0.13545E 01	0.70000E-02	0.15031E 01
189	542.76	0.92457E 01	0.15153E 01	0.21615E-02	0.52714E-03	0.24422E-00	0.16446E-00	0.10600E 01	0.10011E 01
190	538.72	0.52535E 01	0.87626E 00	0.12482E-02	0.30440E-03	0.14122E-00	0.95099E-01	0.10840E 01	0.98662E 00
191	536.31	0.25319E 01	0.42404E-00	0.60350E-03	0.14718E-03	0.68341E-01	0.46020E-01	0.11080E 01	0.10374E 01
192	536.26	0.29844E 01	0.49710E-00	0.70748E-03	0.17254E-03	0.80116E-01	0.53949E-01	0.11080E 01	0.10037E 01
193	545.60	0.30177E 01	0.49766E-00	0.71055E-03	0.17329E-03	0.80206E-01	0.54010E-01	0.16580E 01	0.10017E 01
194	545.31	0.28665E 01	0.47048E-00	0.67168E-03	0.16381E-03	0.75826E-01	0.51060E-01	0.11700E 01	0.95448E 00
195	545.53	0.27569E 01	0.45463E-00	0.64911E-03	0.15830E-03	0.73272E-01	0.49340E-01	0.16740E 01	0.87771E 00
196	545.69	0.26592E 01	0.43655E-00	0.62333E-03	0.15202E-03	0.70358E-01	0.47378E-01	0.16950E 01	0.83666E 00

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
55	1	8.40	158.40	-0.02	-0.	3	C55	2.70	2	10.19	1831.00	2586.40	121	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.129188E 03	0.344791E-01	0.567277E 04	0.223922E-04	0.104642E-06	~~0.[illegible]~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.746845E 00	0.619146E 01	0.918782E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	580.20	0.42146E 02	0.66725E 01	0.96835E-02	0.23694E-02	0.10777E 01	0.72623E 00	0.10000E 01	0.99957E 00
198	586.55	0.42087E 02	0.64687E 01	0.94087E-02	0.23022E-02	0.10448E 01	0.70405E 00	0.12000E 01	0.99809E 00
199	553.95	0.20136E 02	0.32033E 01	0.46065E-02	0.11271E-02	0.51738E 00	0.34865E-00	0.13000E 01	0.10007E 01
200	550.08	0.11158E 01	0.16386E-00	0.23531E-03	0.57577E-04	0.26465E-01	0.17834E-01	0.11890E 01	0.96976E 00
201	552.79	0.18592E 01	0.31020E-00	0.44590E-03	0.10910E-03	0.50102E-01	0.33763E-01	0.14540E 01	0.11066E 01
202	551.17	0.19714E 01	0.32613E-00	0.46853E-03	0.11464E-03	0.52674E-01	0.35496E-01	0.17040E 01	0.11286E 01
203	550.05	0.34114E 01	0.56400E 00	0.80994E-03	0.19818E-03	0.91093E-01	0.61385E-01	0.20410E 01	0.15157E 01
204	548.81	0.23538E 01	0.18068E-00	0.25936E-03	0.63460E-04	0.29182E-01	0.19665E-01	0.20700E 01	0.
205	561.41	0.13184E 02	0.11643E 01	0.16786E-02	0.41073E-03	0.18805E-00	0.12672E-00	0.21880E 01	0.42070E 02
206	554.16	0.78291E 01	0.12973E 01	0.18657E-02	0.45651E-03	0.20953E-00	0.14120E-00	0.22480E 01	0.33045E 01
207	549.88	0.32758E 01	0.53241E 00	0.76453E-03	0.18707E-03	0.85991E-01	0.57947E-01	0.20700E 01	0.16364E 01
208	548.60	0.20047E 01	0.17922E-00	0.25725E-03	0.62943E-04	0.28946E-01	0.19506E-01	0.20700E 01	0.30216E 01
209	563.54	0.14213E 02	0.11602E 01	0.16739E-02	0.40957E-03	0.18738E-00	0.12627E-00	0.21880E 01	0.14581E 02
210	550.10	0.34873E 01	0.58097E 00	0.83433E-03	0.20414E-03	0.93833E-01	0.63232E-01	0.20700E 01	0.11750E 01
211	554.05	0.72052E 01	0.12030E 01	0.17300E-02	0.42330E-03	0.19430E-00	0.13093E-00	0.21880E 01	0.22545E 01
212	552.28	0.52732E 01	0.86888E 00	0.12487E-02	0.30555E-03	0.14033E-00	0.94568E-01	0.22390E 01	0.16415E 01
213	550.68	0.38623E 01	0.63583E 00	0.91331E-03	0.22347E-03	0.10270E-00	0.69204E-01	0.21880E 01	0.93163E 00
214	551.95	0.44213E 01	0.73733E 00	0.10596E-02	0.25926E-03	0.11909E-00	0.80251E-01	0.22480E 01	0.10819E 01
215	548.96	0.24519E 01	0.37038E-00	0.53169E-03	0.13010E-03	0.59821E-01	0.40312E-01	0.11650E 01	0.10784E 01
216	1085.37	-0.31174E-02	-0.33756E-03	-0.59728E-06	-0.14614E-06	-0.54520E-04	-0.36740E-04	0.12050E 01	0.
217	552.39	0.24109E 01	0.35449E-00	0.50948E-03	0.12466E-03	0.57254E-01	0.38582E-01	0.12120E 01	0.10258E 01
218	553.95	0.27304E 01	0.40389E-00	0.58080E-03	0.14211E-03	0.65233E-01	0.43959E-01	0.11890E 01	0.10698E 01
219	550.67	0.20255E 01	0.34195E-00	0.49118E-03	0.12018E-03	0.55230E-01	0.37218E-01	0.14540E 01	0.10396E 01
220	550.01	0.22836E 01	0.40008E-00	0.57454E-03	0.14058E-03	0.64618E-01	0.43545E-01	0.17040E 01	0.11128E 01
221	549.65	0.18623E 01	0.31254E-00	0.44876E-03	0.10980E-03	0.50479E-01	0.34016E-01	0.20410E 01	0.11013E 01
222	550.87	0.21522E 01	0.36525E-00	0.52467E-03	0.12838E-03	0.58992E-01	0.39753E-01	0.22480E 01	0.84049E 00
223	548.37	0.25371E 01	0.38312E-00	0.54987E-03	0.13454E-03	0.61879E-01	0.41699E-01	0.11650E 01	0.10706E 01
224	550.22	0.10982E 01	0.92706E-01	0.13314E-03	0.32577E-04	0.14973E-01	0.10090E-01	0.12050E 01	0.12261E 01
225	551.90	0.24478E 01	0.35981E-00	0.51705E-03	0.12651E-03	0.58114E-01	0.39162E-01	0.12120E 01	0.10948E 01
226	549.91	0.19039E 01	0.32245E-00	0.46304E-03	0.11330E-03	0.52080E-01	0.35095E-01	0.14540E 01	0.84309E 00
227	550.67	0.29792E 01	0.48441E-00	0.69580E-03	0.17025E-03	0.78239E-01	0.52723E-01	0.17040E 01	0.11821E 01
228	550.76	0.36873E 01	0.61171E 00	0.87867E-03	0.21500E-03	0.98799E-01	0.66578E-01	0.18780E 01	0.13400E 01
229	550.58	0.27938E 01	0.46555E-00	0.66869E-03	0.16362E-03	0.75193E-01	0.50671E-01	0.21880E 01	0.12124E 01
230	547.91	0.29948E 01	0.44454E-00	0.63793E-03	0.15609E-03	0.71800E-01	0.48384E-01	0.11890E 01	0.10907E 01
231	549.45	0.17434E 01	0.31063E-00	0.44600E-03	0.10913E-03	0.50171E-01	0.33809E-01	0.14540E 01	0.74443E 00
232	550.67	0.31377E 01	0.51653E 00	0.74194E-03	0.18154E-03	0.83426E-01	0.56219E-01	0.16130E 01	0.11117E 01
233	550.61	0.27325E 01	0.45327E-00	0.65106E-03	0.15930E-03	0.73209E-01	0.49334E-01	0.17040E 01	0.95518E 00
234	550.91	0.34738E 01	0.57898E 00	0.83170E-03	0.20350E-03	0.93512E-01	0.63016E-01	0.18780E 01	0.10816E 01
235	550.69	0.25553E 01	0.42520E-00	0.61076E-03	0.14944E-03	0.68675E-01	0.46279E-01	0.14540E 01	0.94158E 00
236	550.55	0.36447E 01	0.59996E 00	0.86174E-03	0.21085E-03	0.96901E-01	0.65299E-01	0.17040E 01	0.11599E 01
237	551.60	0.40987E 01	0.68340E 00	0.98194E-03	0.24026E-03	0.11038E-00	0.74381E-01	0.21880E 01	0.12580E 01
238	556.44	0.77990E 01	0.70029E 00	0.10079E-02	0.24661E-03	0.11310E-00	0.76219E-01	0.20700E 01	0.53016E 01
239	547.88	0.34868E 01	0.51139E 00	0.73384E-03	0.17956E-03	0.82596E-01	0.55659E-01	0.11890E 01	0.11661E 01
240	551.51	0.27990E 01	0.47276E-00	0.67926E-03	0.16620E-03	0.76357E-01	0.51455E-01	0.14540E 01	0.10878E 01
241	549.72	0.36203E 01	0.59841E 00	0.85927E-03	0.21025E-03	0.96651E-01	0.65131E-01	0.17040E 01	0.11767E 01
242	550.46	0.37351E 01	0.62237E 00	0.89390E-03	0.21872E-03	0.10052E-00	0.67739E-01	0.18780E 01	0.98759E 00
243	554.49	0.77787E 01	0.12991E 01	0.18685E-02	0.45718E-03	0.20982E-00	0.14139E-00	0.20410E 01	0.21351E 01
244	553.22	0.52691E 01	0.47896E-00	0.68858E-03	0.16848E-03	0.77358E-01	0.52130E-01	0.20700E 01	0.
245	555.25	0.56868E 01	0.46928E-00	0.67514E-03	0.16520E-03	0.75795E-01	0.51076E-01	0.21870E 01	0.17577E 01
246	552.83	0.43678E 01	0.74206E 00	0.10667E-02	0.26100E-03	0.11985E-00	0.80765E-01	0.22100E 01	0.11754E 01
247	552.63	0.27200E 01	0.44826E-00	0.64432E-03	0.15765E-03	0.72400E-01	0.48789E-01	0.14540E 01	0.10564E 01
248	550.98	0.45553E 01	0.75928E 00	0.10907E-02	0.26688E-03	0.12263E-00	0.82639E-01	0.17040E 01	0.15754E 01
249	551.46	0.39678E 01	0.33518E-00	0.48159E-03	0.11784E-03	0.54137E-01	0.36481E-01	0.18780E 01	0.54770E 01
250	554.47	0.43912E 01	0.36221E-00	0.52096E-03	0.12747E-03	0.58501E-01	0.39423E-01	0.21880E 01	0.46659E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	552.72	0.29444E 01	0.50021E 00	0.71900E-03	0.17593E-03	0.80790E-01	0.54442E-01	0.14540E 01	0.10629E 01
252	549.90	0.37662E 01	0.63557E 00	0.91268E-03	0.22332E-03	0.10265E-00	0.69175E-01	0.16130E 01	0.13017E 01
253	558.17	0.92821E 01	0.82623E 00	0.11899E-02	0.29114E-03	0.13345E-00	0.89927E-01	0.17060E 01	0.89330E 04
254	553.62	0.47704E 01	0.79629E 00	0.11449E-02	0.28015E-03	0.12861E-00	0.86668E-01	0.21880E 01	0.98230E 00
255	554.31	0.59584E 01	0.55435E 00	0.79726E-03	0.19508E-03	0.89534E-01	0.60335E-01	0.16580E 01	0.54247E 01
256	550.18	0.33870E 01	0.28592E-00	0.41062E-03	0.10047E-03	0.46179E-01	0.31119E-01	0.17920E 01	0.52516E 01
257	541.12	0.20473E 01	0.34452E-00	0.49322E-03	0.12068E-03	0.55644E-01	0.37497E-01	0.10840E 01	0.98499E 00
258	551.74	0.30681E 01	0.52481E 00	0.75411E-03	0.18452E-03	0.84764E-01	0.57120E-01	0.14540E 01	0.10356E 01
259	550.24	0.36114E 01	0.60170E 00	0.86414E-03	0.21144E-03	0.97182E-01	0.65489E-01	0.16130E 01	0.12347E 01
260	551.21	0.46655E 01	0.76591E 00	0.11003E-02	0.26924E-03	0.12370E-00	0.83361E-01	0.17040E 01	0.17621E 01
261	550.98	0.39403E 01	0.65376E 00	0.93915E-03	0.22979E-03	0.10559E-00	0.71155E-01	0.18780E 01	0.13085E 01
262	551.86	0.44442E 01	0.75462E 00	0.10844E-02	0.26533E-03	0.12188E-00	0.82133E-01	0.20410E 01	0.99628E 00
263	555.41	0.54894E 01	0.93673E 00	0.13477E-02	0.32976E-03	0.15129E-00	0.10195E-00	0.14540E 01	0.17733E 01
264	550.00	0.28608E 01	0.47440E-00	0.68126E-03	0.16669E-03	0.76621E-01	0.51633E-01	0.16130E 01	0.94436E 00
265	551.08	0.36582E 01	0.59494E 00	0.85469E-03	0.20913E-03	0.96091E-01	0.64754E-01	0.17040E 01	0.11768E 01
266	550.82	0.39117E 01	0.64896E 00	0.93221E-03	0.22809E-03	0.10482E-00	0.70633E-01	0.18780E 01	0.11307E 01
267	552.19	0.45636E 01	0.77274E 00	0.11105E-02	0.27173E-03	0.12481E-00	0.84104E-01	0.20410E 01	0.10870E 01
268	551.13	0.31382E 01	0.52072E 00	0.74808E-03	0.18304E-03	0.84104E-01	0.56675E-01	0.16130E 01	0.10280E 01
269	551.76	0.36109E 01	0.58748E 00	0.84416E-03	0.20655E-03	0.94885E-01	0.63941E-01	0.18280E 01	0.10879E 01
270	552.01	0.39345E 01	0.65020E 00	0.93437E-03	0.22862E-03	0.10501E-00	0.70767E-01	0.18780E 01	0.11464E 01
271	552.62	0.47673E 01	0.80572E 00	0.11581E-02	0.28337E-03	0.13013E-00	0.87695E-01	0.20410E 01	0.12058E 01
272	549.36	0.17948E 01	0.30524E-00	0.43825E-03	0.10723E-03	0.49301E-01	0.33223E-01	0.16130E 01	0.57452E 00
273	552.28	0.35460E 01	0.59326E 00	0.85263E-03	0.20862E-03	0.95819E-01	0.64570E-01	0.17200E 01	0.11466E 01
274	551.05	0.27382E 01	0.44393E-00	0.63773E-03	0.15604E-03	0.71700E-01	0.48317E-01	0.18280E 01	0.84223E 00
275	551.98	0.39434E 01	0.65264E 00	0.93788E-03	0.22948E-03	0.10541E-00	0.71034E-01	0.18780E 01	0.11377E 01
276	1085.37	-0.31174E-02	-0.67492E-03	-0.11942E-05	-0.29220E-06	-0.10901E-03	-0.73458E-04	0.20600E 01	0.
277	551.46	0.35849E 01	0.30284E-00	0.43512E-03	0.10647E-03	0.48913E-01	0.32961E-01	0.21000E 01	0.22251E 01
278	1085.37	-0.31174E-02	-0.33756E-03	-0.59728E-06	-0.14614E-06	-0.54520E-04	-0.36740E-04	0.21870E 01	0.
279	554.29	0.57086E 01	0.97063E 00	0.13960E-02	0.34156E-03	0.15677E-00	0.10564E-00	0.21950E 01	0.13502E 01
280	551.71	0.37491E 01	0.62990E 00	0.90510E-03	0.22146E-03	0.10174E-00	0.68558E-01	0.18780E 01	0.10740E 01
281	552.55	0.48421E 01	0.82251E 00	0.11822E-02	0.28927E-03	0.13285E-00	0.89522E-01	0.20600E 01	0.11657E 01
282	551.20	0.34914E 01	0.57229E 00	0.82217E-03	0.20117E-03	0.92431E-01	0.62287E-01	0.18280E 01	0.10255E 01
283	551.97	0.48442E 01	0.81842E 00	0.11761E-02	0.28777E-03	0.13219E-00	0.89077E-01	0.20600E 01	0.11145E 01
284	549.99	0.38410E 01	0.62431E 00	0.89653E-03	0.21937E-03	0.10083E-00	0.67949E-01	0.17200E 01	0.11683E 01
285	551.38	0.43044E 01	0.71216E 00	0.10232E-02	0.25035E-03	0.11502E-00	0.77511E-01	0.18780E 01	0.12818E 01
286	551.44	0.42769E 01	0.39727E-00	0.57078E-03	0.13966E-03	0.64164E-01	0.43239E-01	0.16580E 01	0.22916E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.59728E-06	-0.14614E-06	-0.54520E-04	-0.36740E-04	0.17920E 01	0.
288	549.84	0.32083E 01	0.53035E 00	0.76157E-03	0.18634E-03	0.85659E-01	0.57724E-01	0.16130E 01	0.11118E 01
289	555.29	0.87075E 01	0.73715E 00	0.10605E-02	0.25949E-03	0.11906E-00	0.80231E-01	0.17060E 01	0.48173E 02
290	551.00	0.39735E 01	0.33558E-00	0.48208E-03	0.11796E-03	0.54200E-01	0.36524E-01	0.18780E 01	0.52080E 01
291	550.50	0.45174E 01	0.74360E 00	0.10680E-02	0.26133E-03	0.12010E-00	0.80933E-01	0.17200E 01	0.16268E 01
292	552.11	0.24203E 01	0.41899E-00	0.60214E-03	0.14733E-03	0.67673E-01	0.45603E-01	0.14400E 01	0.10342E 01
293	549.99	0.37512E 01	0.60970E 00	0.87556E-03	0.21423E-03	0.98474E-01	0.66360E-01	0.17200E 01	0.11290E 01
294	550.64	0.41356E 01	0.68813E 00	0.98842E-03	0.24185E-03	0.11114E-00	0.74896E-01	0.18780E 01	0.10183E 01

CONFIDENTIAL

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
40	1	12.50	162.50	0.02	-0.	1	C55	2.70	2	10.19	1826.30	1879.00	106	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.909339E 02	0.374197E-01	0.475929E 04	0.345252E-04	0.736565E-07	0.224586E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731669E 00	0.618375E 01	0.917256E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	608.33	0.53021E 02	0.71644E 01	0.21777E-01	0.41193E-02	0.11586E 01	0.78107E 00	-0.	0.97945E 00
2	609.63	0.51319E 02	0.73823E 01	0.22461E-01	0.42486E-02	0.11938E 01	0.80482E 00	-0.30000E-01	0.
3	598.45	0.49083E 02	0.76309E 01	0.23028E-01	0.43558E-02	0.12340E 01	0.83193E 00	-0.60000E-01	0.98655E 00
4	599.84	0.47308E 02	0.75500E 01	0.22806E-01	0.43139E-02	0.12209E 01	0.82310E 00	-0.90000E-01	0.99192E 00
5	591.77	0.44202E 02	0.72022E 01	0.21628E-01	0.40911E-02	0.11647E 01	0.78519E 00	-0.20000E-00	0.10034E 01
6	593.11	0.40111E 02	0.65404E 01	0.19660E-01	0.37188E-02	0.10577E 01	0.71304E 00	-0.40000E-00	0.10044E 01
7	591.21	0.35318E 02	0.57805E 01	0.17352E-01	0.32822E-02	0.93479E 00	0.63019E 00	-0.60000E 00	0.10087E 01
8	587.75	0.32962E 02	0.53847E 01	0.16123E-01	0.30498E-02	0.87079E 00	0.58705E 00	-0.80000E 00	0.
9	586.37	0.33146E 02	0.53252E 01	0.15929E-01	0.30131E-02	0.86116E 00	0.58056E 00	-0.90000E 00	0.99436E 00
10	585.08	0.31706E 02	0.51557E 01	0.15408E-01	0.29145E-02	0.83376E 00	0.56208E 00	-0.98000E 00	0.10194E 01
11	541.45	0.17569E 01	0.30234E-00	0.87595E-03	0.16569E-03	0.48893E-01	0.32962E-01	-0.11220E 01	0.66728E 00
12	543.85	0.29029E 01	0.42626E-00	0.12370E-02	0.23399E-03	0.68932E-01	0.46471E-01	-0.11890E 01	0.79424E 00
13	543.78	0.25896E 01	0.39200E-00	0.11376E-02	0.21517E-03	0.63393E-01	0.42737E-01	-0.13340E 01	0.98416E 00
14	543.03	0.24177E 01	0.41643E-00	0.12078E-02	0.22846E-03	0.67342E-01	0.45399E-01	-0.14400E 01	0.12378E 01
15	606.61	0.51652E 02	0.74182E 01	0.22520E-01	0.42597E-02	0.11996E 01	0.80873E 00	0.30000E-01	0.
16	919.71	0.98663E-02	0.17905E-02	0.70799E-05	0.13392E-05	0.28955E-03	0.19520E-03	0.60000E-01	0.
17	600.72	0.46980E 02	0.75012E 01	0.22674E-01	0.42889E-02	0.12131E 01	0.81779E 00	0.90000E-01	0.96377E 00
18	602.66	0.43992E 02	0.72102E 01	0.21825E-01	0.41284E-02	0.11660E 01	0.78607E 00	0.20000E-00	0.96933E 00
19	620.71	0.51648E 02	0.85468E 01	0.26218E-01	0.49593E-02	0.13821E 01	0.93178E 00	0.40000E-00	0.10660E 01
20	630.29	0.62015E 02	0.10364E 02	0.32020E-01	0.60567E-02	0.16759E 01	0.11298E 01	0.60000E 00	0.
21	640.09	0.55023E 02	0.87014E 01	0.27083E-01	0.51229E-02	0.14071E 01	0.94863E 00	0.92000E 00	0.96764E 00
22	585.35	0.32373E 02	0.49724E 01	0.14863E-01	0.28114E-02	0.80411E 00	0.54210E 00	0.10400E 01	0.96230E 00
23	577.98	0.28433E 02	0.43614E 01	0.12967E-01	0.24528E-02	0.70530E 00	0.47548E-00	0.10600E 01	0.95387E 00
24	560.17	0.18798E 02	0.29913E 01	0.87813E-02	0.16610E-02	0.48373E-00	0.32611E-00	0.10840E 01	0.94775E 00
25	530.98	0.39081E 01	0.57265E 00	0.16470E-02	0.31154E-03	0.92606E-01	0.62431E-01	0.12070E 01	0.18713E 01
26	528.72	0.36078E 01	0.55686E 00	0.15991E-02	0.30248E-03	0.90052E-01	0.60709E-01	0.12490E 01	0.18410E 01
27	528.88	0.37236E 01	0.56547E 00	0.16240E-02	0.30719E-03	0.91445E-01	0.61648E-01	0.13340E 01	0.19804E 01
28	527.92	0.22260E 01	0.37570E-00	0.10783E-02	0.20396E-03	0.60756E-01	0.40959E-01	0.14540E 01	0.16926E 01
29	528.50	0.26031E 01	0.42648E-00	0.12245E-02	0.23162E-03	0.68968E-01	0.46495E-01	0.16580E 01	0.20052E 01
30	534.50	0.48665E 01	0.80978E 00	0.23347E-02	0.44163E-03	0.13095E-00	0.88283E-01	0.20410E 01	0.19730E 01
31	538.85	0.52519E 01	0.87607E 00	0.25335E-02	0.47923E-03	0.14167E-00	0.95510E-01	0.22480E 01	0.14828E 01
32	601.10	0.47896E 02	0.74645E 01	0.22569E-01	0.42690E-02	0.12071E 01	0.81378E 00	-0.60000E-01	0.
33	610.62	0.50514E 02	0.72702E 01	0.22136E-01	0.41871E-02	0.11757E 01	0.79260E 00	-0.30000E-01	0.98395E 00
34	605.66	0.51857E 02	0.81015E 01	0.24577E-01	0.46489E-02	0.13101E 01	0.88324E 00	0.30000E-01	0.
35	598.59	0.46819E 02	0.74669E 01	0.22535E-01	0.42626E-02	0.12075E 01	0.81404E 00	0.60000E-01	0.98193E 00
36	615.87	0.69188E 02	0.11420E 02	0.34907E-01	0.66027E-02	0.18468E 01	0.12450E 01	-0.86800E 00	0.20315E 01
37	613.16	0.62430E 02	0.10012E 02	0.30540E-01	0.57768E-02	0.16190E 01	0.10915E 01	-0.91100E 00	0.18845E 01
38	604.14	0.57945E 02	0.94140E 01	0.28527E-01	0.53960E-02	0.15224E 01	0.10263E 01	-0.95300E 00	0.17251E 01
39	919.71	0.98663E-02	0.18714E-02	0.73995E-05	0.13997E-05	0.30263E-03	0.20402E-03	0.51000E-01	0.
40	919.71	0.98663E-02	0.18714E-02	0.73995E-05	0.13997E-05	0.30263E-03	0.20402E-03	0.29000E-01	0.
41	919.71	0.98663E-02	0.18606E-02	0.73569E-05	0.13916E-05	0.30088E-03	0.20284E-03	0.70000E-02	0.
42	641.66	0.99579E 02	0.16555E 02	0.51589E-01	0.97583E-02	0.26772E 01	0.18048E 01	-0.86800E 00	0.28876E 01
43	618.12	0.75948E 02	0.12503E 02	0.38281E-01	0.72409E-02	0.20219E 01	0.13631E 01	-0.91100E 00	0.22051E 01
44	610.90	0.65332E 02	0.10653E 02	0.32441E-01	0.61364E-02	0.17227E 01	0.11614E 01	-0.95300E 00	0.14910E 01
45	578.24	0.32113E 02	0.53396E 01	0.15879E-01	0.30035E-02	0.86348E 00	0.58212E 00	-0.10400E 01	0.26819E 01
46	640.29	0.78295E 02	0.13041E 02	0.40595E-01	0.76787E-02	0.21088E 01	0.14217E 01	0.70000E-02	0.
47	587.06	0.34490E 02	0.55841E 01	0.16712E-01	0.31611E-02	0.90303E 00	0.60878E 00	0.29000E-01	0.
48	587.98	0.31443E 02	0.51128E 01	0.15312E-01	0.28963E-02	0.82682E 00	0.55741E 00	0.51000E-01	0.96986E 00
49	625.98	0.61933E 02	0.10179E 02	0.31349E-01	0.59298E-02	0.16461E 01	0.11098E 01	0.70000E-02	0.18326E 01
50	591.20	0.31820E 02	0.51502E 01	0.15460E-01	0.29243E-02	0.83285E 00	0.56147E 00	0.29000E-01	0.97014E 00
51	591.37	0.31407E 02	0.50676E 01	0.15214E-01	0.28777E-02	0.81950E 00	0.55247E 00	0.51000E-01	0.
52	628.72	0.73729E 02	0.12206E 02	0.37667E-01	0.71249E-02	0.19738E 01	0.13307E 01	-0.86800E 00	0.
53	619.68	0.65558E 02	0.10843E 02	0.33236E-01	0.62868E-02	0.17534E 01	0.11821E 01	-0.91100E 00	0.19824E 01
54	614.55	0.60982E 02	0.99625E 01	0.30422E-01	0.57544E-02	0.16111E 01	0.10861E 01	-0.95300E 00	0.17972E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	574.39	0.24446E 02	0.40562E 01	0.12029E-01	0.22753E-02	0.65594E 00	0.44221E-00	-0.10400E 01	0.33133E 01
56	572.06	0.21331E 02	0.36463E 01	0.10795E-01	0.20420E-02	0.58966E 00	0.39752E-00	-0.10680E 01	0.57937E 01
57	569.23	0.17538E 02	0.29017E 01	0.85736E-02	0.16217E-02	0.46925E-00	0.31635E-00	-0.10400E 01	0.58420E 01
58	582.44	0.26723E 02	0.48212E 01	0.14381E-01	0.27202E-02	0.77966E 00	0.52561E 00	-0.10680E 01	0.38288E 01
59	564.61	0.17336E 02	0.28610E 01	0.84253E-02	0.15937E-02	0.46266E-00	0.31190E-00	-0.10400E 01	0.13802E 01
60	566.17	0.18097E 02	0.30834E 01	0.90905E-02	0.17195E-02	0.49863E-00	0.33616E-00	-0.10680E 01	0.29697E 01
61	543.30	0.18935E 01	0.31445E-00	0.91219E-03	0.17254E-03	0.50850E-01	0.34281E-01	-0.11220E 01	0.61851E 00
62	543.59	0.11969E 01	0.18116E-00	0.52564E-03	0.99427E-04	0.29296E-01	0.19750E-01	-0.13340E 01	0.37330E-00
63	545.28	0.20416E 01	0.35209E-00	0.10228E-02	0.19347E-03	0.56938E-01	0.38385E-01	-0.11220E 01	0.75811E 00
64	544.05	0.11792E 01	0.17853E-00	0.51818E-03	0.98017E-04	0.28871E-01	0.19464E-01	-0.13340E 01	0.45291E-00
65	543.88	0.17060E 01	0.29398E-00	0.85318E-03	0.16138E-03	0.47541E-01	0.32050E-01	0.14400E 01	0.72320E 00
66	542.64	0.22629E 01	0.37085E-00	0.10753E-02	0.20340E-03	0.59971E-01	0.40430E-01	0.16130E 01	0.94759E 00
67	542.44	0.26379E 01	0.42429E-00	0.12301E-02	0.23268E-03	0.68613E-01	0.46256E-01	0.17200E 01	0.86403E 00
68	542.43	0.18317E 01	0.30246E-00	0.87689E-03	0.16587E-03	0.48912E-01	0.32975E-01	-0.16130E 01	0.84985E 00
69	541.79	0.28686E 01	0.46122E-00	0.13366E-02	0.25282E-03	0.74586E-01	0.50282E-01	-0.18280E 01	0.80739E 00
70	544.34	0.25631E 01	0.37712E-00	0.10948E-02	0.20709E-03	0.60985E-01	0.41114E-01	-0.11650E 01	0.84543E 00
71	543.55	0.15564E 01	0.13090E-00	0.37979E-03	0.71839E-04	0.21168E-01	0.14270E-01	-0.12050E 01	0.12755E 01
72	545.24	0.25138E 01	0.36497E-00	0.10602E-02	0.20054E-03	0.59020E-01	0.39789E-01	-0.12120E 01	0.75917E 00
73	544.08	0.25808E 01	0.37966E-00	0.11020E-02	0.20844E-03	0.61397E-01	0.41391E-01	-0.11650E 01	0.82919E 00
74	542.61	0.11610E 01	0.97596E-01	0.28299E-03	0.53528E-04	0.15783E-01	0.10640E-01	-0.12050E 01	0.13119E 01
75	919.71	0.98663E-02	0.17127E-02	0.67720E-05	0.12810E-05	0.27696E-03	0.18672E-03	-0.12120E 01	0.
76	544.50	0.34722E 01	0.52407E 00	0.15216E-02	0.28781E-03	0.84749E-01	0.57134E-01	0.10840E 01	0.10095E 01
77	542.34	0.23288E 01	0.37690E-00	0.10926E-02	0.20668E-03	0.60950E-01	0.41090E-01	0.11220E 01	0.86739E 00
78	544.74	0.35096E 01	0.52358E 00	0.15204E-02	0.28759E-03	0.84671E-01	0.57081E-01	0.13340E 01	0.13574E 01
79	541.56	0.11740E 01	0.19720E-00	0.57137E-03	0.10808E-03	0.31890E-01	0.21499E-01	-0.11890E 01	0.34800E-00
80	543.75	0.23304E 01	0.35099E-00	0.10185E-02	0.19266E-03	0.56761E-01	0.38266E-01	-0.13340E 01	0.89356E 00
81	541.44	0.17923E-00	0.28992E-01	0.83994E-04	0.15888E-04	0.46884E-02	0.31607E-02	-0.11470E 01	0.53531E-01
82	539.15	0.26026E-00	0.43617E-01	0.12617E-03	0.23865E-04	0.70536E-02	0.47552E-02	-0.11890E 01	0.75440E-01
83	553.35	0.69849E 01	0.11799E 01	0.34472E-02	0.65205E-03	0.19081E-00	0.12864E-00	-0.10840E 01	0.22383E 01
84	540.68	0.15423E 01	0.22646E-00	0.65575E-03	0.12404E-03	0.36622E-01	0.24689E-01	-0.11890E 01	0.44019E-00
85	542.35	0.13584E 01	0.19965E-00	0.57878E-03	0.10948E-03	0.32286E-01	0.21766E-01	-0.13090E 01	0.45812E-00
86	541.99	0.89454E 00	0.13325E-00	0.38619E-03	0.73049E-04	0.21548E-01	0.14527E-01	-0.13340E 01	0.32226E-00
87	556.10	0.15291E 02	0.22607E 01	0.66176E-02	0.12517E-02	0.36559E-00	0.24647E-00	0.11990E 01	0.72174E 01
88	538.93	0.84956E 01	0.12547E 01	0.36288E-02	0.68640E-03	0.20291E-00	0.13679E-00	0.12070E 01	0.43447E 01
89	533.18	0.43532E 01	0.65178E 00	0.18775E-02	0.35513E-03	0.10540E-00	0.71058E-01	0.13340E 01	0.27544E 01
90	543.74	0.11759E 02	0.16821E 01	0.48811E-02	0.92328E-03	0.27202E-00	0.18338E-00	0.12070E 01	0.57292E 01
91	536.50	0.65860E 01	0.10210E 01	0.29479E-02	0.55760E-03	0.16511E-00	0.11131E-00	0.12490E 01	0.34545E 01
92	534.61	0.56036E 01	0.84389E 00	0.24333E-02	0.46026E-03	0.13647E-00	0.92001E-01	0.13340E 01	0.31648E 01
93	530.13	0.27725E 01	0.46575E-00	0.13388E-02	0.25324E-03	0.75319E-01	0.50777E-01	0.14900E 01	0.20102E 01
94	560.82	0.23699E 01	0.25170E-00	0.73926E-03	0.13983E-03	0.40704E-01	0.27441E-01	-0.	0.
95	570.20	0.16262E 02	0.17486E 01	0.51700E-02	0.97794E-03	0.28277E-00	0.19063E-00	-0.	0.
96	544.46	0.23782E 01	0.25029E-00	0.72668E-03	0.13746E-03	0.40476E-01	0.27287E-01	-0.	0.
97	546.71	0.31309E 01	0.32993E-00	0.95940E-03	0.18147E-03	0.53354E-01	0.35969E-01	-0.	0.
98	547.71	0.32800E 01	0.34832E-00	0.10136E-02	0.19173E-03	0.56329E-01	0.37974E-01	-0.	0.

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG,R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
49	1	12.50	162.50	-0.03	0.01	2	C55	2.70	2	10.19	1841.10	2582.00	117	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.128946E 03	0.346881E-01	0.566761E 04	0.225702E-04	0.104446E-06	~~0.123099E-01~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.746776E 00	0.620752E 01	0.921983E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	542.51	0.46016E 01	0.75060E 00	0.10806E-02	0.26255E-03	0.12092E-00	0.81411E-01	-0.10600E 01	0.10836E 01
100	543.07	0.25694E 01	0.43194E-00	0.62194E-03	0.15111E-03	0.69583E-01	0.46849E-01	-0.10840E 01	0.11740E 01
101	542.63	0.15340E 01	0.25218E-00	0.36305E-03	0.88211E-04	0.40624E-01	0.27352E-01	-0.11080E 01	0.88865E 00
102	584.13	0.32434E 02	0.54387E 01	0.79446E-02	0.19303E-02	0.87615E 00	0.58989E 00	-0.11080E 01	0.17533E 02
103	584.00	0.36608E 02	0.62949E 01	0.91949E-02	0.22341E-02	0.10141E 01	0.68276E 00	-0.10800E 01	0.14539E 02
104	615.22	0.53208E 02	0.87794E 01	0.12967E-01	0.31507E-02	0.14143E 01	0.95223E 00	0.85000E 00	0.
105	627.25	0.58793E 02	0.92351E 01	0.13699E-01	0.33285E-02	0.14877E 01	0.10017E 01	0.94000E 00	0.97872E 00
106	630.72	0.59618E 02	0.93030E 01	0.13817E-01	0.33572E-02	0.14987E 01	0.10090E 01	0.96000E 00	0.97071E 00
107	621.72	0.56360E 02	0.87530E 01	0.12958E-01	0.31485E-02	0.14101E 01	0.94937E 00	0.98000E 00	0.98083E 00
108	614.70	0.50686E 02	0.78824E 01	0.11640E-01	0.28282E-02	0.12698E 01	0.85494E 00	0.10000E 01	0.97598E 00
109	596.09	0.38732E 02	0.59838E 01	0.87780E-02	0.21328E-02	0.96396E 00	0.64901E 00	0.10200E 01	0.94811E 00
110	630.20	0.56523E 02	0.88923E 01	0.13205E-01	0.32084E-02	0.14325E 01	0.96448E 00	0.80000E-01	0.99792E 00
111	625.92	0.57926E 02	0.90162E 01	0.13368E-01	0.32481E-02	0.14525E 01	0.97791E 00	0.10000E-00	0.98452E 00
112	636.42	0.58479E 02	0.91992E 01	0.13691E-01	0.33266E-02	0.14819E 01	0.99776E 00	0.12000E-00	0.97068E 00
113	624.93	0.56325E 02	0.88366E 01	0.13097E-01	0.31823E-02	0.14235E 01	0.95844E 00	0.14000E-00	0.96609E 00
114	619.81	0.55102E 02	0.86215E 01	0.12755E-01	0.30991E-02	0.13889E 01	0.93510E 00	0.80000E-01	0.
115	621.79	0.55458E 02	0.86570E 01	0.12816E-01	0.31141E-02	0.13946E 01	0.93895E 00	0.10000E-00	0.97719E 00
116	624.13	0.56707E 02	0.89227E 01	0.13221E-01	0.32124E-02	0.14374E 01	0.96778E 00	0.12000E-00	0.97941E 00
117	634.33	0.57619E 02	0.90844E 01	0.13510E-01	0.32826E-02	0.14634E 01	0.98531E 00	0.14000E-00	0.10035E 01
118	622.48	0.52836E 02	0.83481E 01	0.12362E-01	0.30037E-02	0.13448E 01	0.90545E 00	0.10000E-00	0.97980E 00
119	621.78	0.52205E 02	0.82041E 01	0.12146E-01	0.29511E-02	0.13216E 01	0.88983E 00	0.15000E-00	0.79466E 00
120	635.44	0.47452E 02	0.75236E 01	0.11193E-01	0.27197E-02	0.12120E 01	0.81602E 00	0.20000E-00	0.90622E 00
121	623.59	0.53287E 02	0.84244E 01	0.12480E-01	0.30323E-02	0.13571E 01	0.91372E 00	0.25000E-00	0.98602E 00
122	618.05	0.51750E 02	0.81573E 01	0.12060E-01	0.29304E-02	0.13141E 01	0.88476E 00	0.30000E-00	0.97631E 00
123	1085.37	-0.31174E-02	-0.61052E-03	-0.10870E-05	-0.26412E-06	-0.98352E-04	-0.66218E-04	0.35000E-00	0.
124	617.83	0.54940E 02	0.87603E 01	0.12951E-01	0.31467E-02	0.14112E 01	0.95016E 00	0.38000E-00	0.99411E 00
125	622.12	0.56989E 02	0.91826E 01	0.13596E-01	0.33035E-02	0.14793E 01	0.99597E 00	0.45000E-00	0.98416E 00
126	616.64	0.54908E 02	0.89369E 01	0.13207E-01	0.32088E-02	0.14397E 01	0.96932E 00	0.61000E 00	0.97583E 00
127	571.32	0.27915E 02	0.44552E 01	0.64787E-02	0.15741E-02	0.71771E 00	0.48322E-00	0.70000E 00	0.94532E 00
128	552.74	0.11950E 02	0.18938E 01	0.27360E-02	0.66478E-03	0.30508E-00	0.20540E-00	0.75000E 00	0.93934E 00
129	632.10	0.75499E 02	0.12489E 02	0.18558E-01	0.45092E-02	0.20119E 01	0.13546E 01	0.70000E 00	0.15702E 01
130	624.26	0.70875E 02	0.11676E 02	0.17301E-01	0.42037E-02	0.18809E 01	0.12664E 01	0.80000E 00	0.14240E 01
131	561.64	0.20069E 02	0.30324E 01	0.43947E-02	0.10678E-02	0.48851E-00	0.32890E-00	0.90000E 00	0.99944E 00
132	595.70	0.47124E 02	0.72788E 01	0.10676E-01	0.25940E-02	0.11726E 01	0.78947E 00	0.90000E 00	0.98655E 00
133	597.61	0.48172E 02	0.74107E 01	0.10877E-01	0.26428E-02	0.11938E 01	0.80378E 00	0.96000E 00	0.99078E 00
134	596.12	0.46100E 02	0.70983E 01	0.10413E-01	0.25301E-02	0.11435E 01	0.76989E 00	0.10000E 01	0.99455E 00
135	1085.37	-0.31174E-02	-0.62773E-03	-0.11177E-05	-0.27157E-06	-0.10112E-03	-0.68085E-04	0.70000E-02	0.
136	1085.37	-0.31174E-02	-0.61660E-03	-0.10979E-05	-0.26675E-06	-0.99331E-04	-0.66877E-04	0.70000E-02	0.
137	582.83	0.36371E 02	0.57945E 01	0.84604E-02	0.20557E-02	0.93346E 00	0.62848E 00	0.39000E-01	0.10048E 01
138	580.65	0.36083E 02	0.57139E 01	0.83363E-02	0.20255E-02	0.92048E 00	0.61974E 00	0.78000E-01	0.10136E 01
139	578.48	0.35187E 02	0.55383E 01	0.80740E-02	0.19618E-02	0.89219E 00	0.60069E 00	0.11700E-00	0.
140	580.64	0.35589E 02	0.55898E 01	0.81552E-02	0.19815E-02	0.90048E 00	0.60628E 00	0.78000E-01	0.10016E 01
141	755.47	0.17850E 03	0.21111E 02	0.32836E-01	0.79783E-02	0.34009E 01	0.22897E 01	-0.	0.
142	710.41	0.11277E 03	0.13047E 02	0.19953E-01	0.48480E-02	0.21019E 01	0.14152E 01	-0.	0.
143	578.09	0.35212E 02	0.54958E 01	0.80109E-02	0.19464E-02	0.88535E 00	0.59609E 00	0.78000E-01	0.10068E 01
144	579.83	0.34877E 02	0.54577E 01	0.79602E-02	0.19341E-02	0.87920E 00	0.59195E 00	0.70000E-02	0.90580E 00
145	579.96	0.34593E 02	0.53869E 01	0.78573E-02	0.19091E-02	0.86780E 00	0.58427E 00	0.70000E-02	0.98129E 00
146	578.93	0.34716E 02	0.54298E 01	0.79171E-02	0.19236E-02	0.87472E 00	0.58893E 00	0.39000E-01	0.92537E 00
147	581.59	0.35213E 02	0.55065E 01	0.80364E-02	0.19526E-02	0.88707E 00	0.59725E 00	0.78000E-01	0.
148	1085.37	-0.31174E-02	-0.61964E-03	-0.11033E-05	-0.26806E-06	-0.99820E-04	-0.67207E-04	0.11700E-00	0.
149	617.47	0.54640E 02	0.90695E 01	0.13406E-01	0.32574E-02	0.14610E 01	0.98369E 00	0.70000E-02	0.96970E 00
150	615.80	0.52844E 02	0.88052E 01	0.13008E-01	0.31606E-02	0.14185E 01	0.95503E 00	0.70000E-02	0.96054E 00
151	613.18	0.51226E 02	0.85237E 01	0.12580E-01	0.30567E-02	0.13731E 01	0.92450E 00	0.70000E-02	0.96250E 00
152	621.89	0.54136E 02	0.87218E 01	0.12913E-01	0.31375E-02	0.14050E 01	0.94598E 00	0.39000E-01	0.97461E 00

~~CONFIDENTIAL~~

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	627.78	0.59493E 02	0.96148E 01	0.14265E-01	0.34661E-02	0.15489E 01	0.10428E 01	0.39000E-01	0.
154	618.99	0.53489E 02	0.85482E 01	0.12643E-01	0.30718E-02	0.13771E 01	0.92715E 00	0.78000E-01	0.97301E 00
155	616.68	0.52081E 02	0.86821E 01	0.12830E-01	0.31174E-02	0.13986E 01	0.94168E 00	0.39000E-01	0.
156	610.49	0.49928E 02	0.82698E 01	0.12194E-01	0.29628E-02	0.13322E 01	0.89696E 00	0.39000E-01	0.
157	608.42	0.48812E 02	0.81015E 01	0.11937E-01	0.29003E-02	0.13051E 01	0.87871E 00	0.78000E-01	0.97856E 00
158	606.69	0.50958E 02	0.84764E 01	0.12482E-01	0.30327E-02	0.13655E 01	0.91937E 00	0.39000E-01	0.
159	606.01	0.52934E 02	0.88019E 01	0.12958E-01	0.31484E-02	0.14179E 01	0.95467E 00	0.78000E-01	0.97665E 00
160	614.85	0.53205E 02	0.88609E 01	0.13086E-01	0.31795E-02	0.14274E 01	0.96107E 00	0.39000E-01	0.
161	599.13	0.45003E 02	0.72566E 01	0.10657E-01	0.25893E-02	0.11690E 01	0.78706E 00	0.43000E-01	0.95402E 00
162	601.32	0.44379E 02	0.71875E 01	0.10563E-01	0.25666E-02	0.11579E 01	0.77957E 00	0.43000E-01	0.95460E 00
163	600.62	0.45813E 02	0.74289E 01	0.10915E-01	0.26522E-02	0.11968E 01	0.80576E 00	0.85000E-01	0.98752E 00
164	598.53	0.45467E 02	0.73291E 01	0.10761E-01	0.26146E-02	0.11807E 01	0.79492E 00	0.12800E-00	0.98720E 00
165	598.82	0.45630E 02	0.73801E 01	0.10837E-01	0.26331E-02	0.11889E 01	0.80046E 00	0.43000E-01	0.98001E 00
166	596.28	0.45284E 02	0.72907E 01	0.10696E-01	0.25988E-02	0.11745E 01	0.79076E 00	0.85000E-01	0.98321E 00
167	602.14	0.50224E 02	0.81116E 01	0.11925E-01	0.28974E-02	0.13067E 01	0.87980E 00	0.43000E-01	0.
168	600.58	0.45519E 02	0.74285E 01	0.10915E-01	0.26520E-02	0.11967E 01	0.80571E 00	0.12800E-00	0.98089E 00
169	603.69	0.45896E 02	0.74785E 01	0.11000E-01	0.26728E-02	0.12047E 01	0.81113E 00	0.85000E-01	0.99791E 00
170	603.74	0.46554E 02	0.75496E 01	0.11105E-01	0.26983E-02	0.12162E 01	0.81885E 00	0.12800E-00	0.98127E 00
171	601.01	0.48368E 02	0.78070E 01	0.11473E-01	0.27875E-02	0.12577E 01	0.84677E 00	0.85000E-01	0.10341E 01
172	659.70	0.89505E 02	0.14972E 02	0.22472E-01	0.54600E-02	0.24119E 01	0.16239E 01	0.43000E-01	0.
173	612.88	0.54156E 02	0.88679E 01	0.13087E-01	0.31798E-02	0.14286E 01	0.96183E 00	0.12800E-00	0.11410E 01
174	622.37	0.66912E 02	0.10959E 02	0.16228E-01	0.39430E-02	0.17655E 01	0.11886E 01	0.85000E-01	0.
175	694.88	0.10632E 03	0.18018E 02	0.27395E-01	0.66562E-02	0.29025E 01	0.19542E 01	0.43000E-01	0.22796E 01
176	686.27	0.10189E 03	0.17193E 02	0.26058E-01	0.63314E-02	0.27697E 01	0.18648E 01	0.43000E-01	0.21846E 01
177	636.66	0.73024E 02	0.12070E 02	0.17965E-01	0.43650E-02	0.19444E 01	0.13091E 01	0.12800E-00	0.15174E 01
178	652.80	0.85452E 02	0.14220E 02	0.21290E-01	0.51729E-02	0.22908E 01	0.15424E 01	0.85000E-01	0.18033E 01
179	666.22	0.87998E 02	0.14745E 02	0.22184E-01	0.53902E-02	0.23754E 01	0.15993E 01	0.70000E-02	0.18828E 01
180	636.89	0.68679E 02	0.11389E 02	0.16954E-01	0.41193E-02	0.18348E 01	0.12353E 01	0.70000E-02	0.
181	611.52	0.52549E 02	0.85985E 01	0.12683E-01	0.30817E-02	0.13652E 01	0.93261E 00	0.70000E-02	0.10902E 01
182	617.81	0.58445E 02	0.96261E 01	0.14231E-01	0.34577E-02	0.15507E 01	0.10441E 01	0.70000E-02	0.
183	636.97	0.70432E 02	0.11643E 02	0.17332E-01	0.42112E-02	0.18757E 01	0.12629E 01	0.32000E-01	0.14956E 01
184	629.20	0.60944E 02	0.10098E 02	0.14990E-01	0.36422E-02	0.16268E 01	0.10953E 01	0.32000E-01	0.11788E 01
185	599.38	0.48887E 02	0.79730E 01	0.11710E-01	0.28452E-02	0.12844E 01	0.86477E 00	0.64000E-01	0.11286E 01
186	611.56	0.49856E 02	0.81581E 01	0.12034E-01	0.29239E-02	0.13142E 01	0.88484E 00	0.64000E-01	0.95512E 00
187	611.56	0.47488E 02	0.77955E 01	0.11499E-01	0.27939E-02	0.12558E 01	0.84551E 00	0.70000E-02	0.94958E 00
188	651.49	0.79433E 02	0.13528E 02	0.20244E-01	0.49188E-02	0.21793E 01	0.14673E 01	0.70000E-02	0.16724E 01
189	549.34	0.94135E 01	0.15485E 01	0.22346E-02	0.54294E-03	0.24946E-00	0.16796E-00	0.10600E 01	0.99550E 00
190	546.21	0.52977E 01	0.88735E 00	0.12791E-02	0.31078E-03	0.14295E-00	0.96243E-01	0.10840E 01	0.98457E 00
191	544.28	0.25164E 01	0.42332E-00	0.60978E-03	0.14816E-03	0.68194E-01	0.45914E-01	0.11080E 01	0.10145E 01
192	544.10	0.29584E 01	0.49495E-00	0.71292E-03	0.17322E-03	0.79734E-01	0.53683E-01	0.11080E 01	0.98349E 00
193	550.28	0.21694E 01	0.35869E-00	0.51777E-03	0.12581E-03	0.57784E-01	0.38905E-01	0.16580E 01	0.12799E 01
194	549.70	0.22561E 01	0.37121E-00	0.53573E-03	0.13017E-03	0.59799E-01	0.40262E-01	0.11700E 01	0.12656E 01
195	550.48	0.21751E 01	0.35968E-00	0.51923E-03	0.12616E-03	0.57943E-01	0.39012E-01	0.16740E 01	0.12327E 01
196	550.92	0.21371E 01	0.35187E-00	0.50804E-03	0.12344E-03	0.56685E-01	0.38165E-01	0.16950E 01	0.12320E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
56	1	12.44	162.44	-0.	-0.	3	C55	2.70	2	10.19	1834.00	2591.20	122	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.129454E 03	0.345137E-01	0.567866E 04	0.223686E-04	0.104858E-06	~~0.121055E 01~~ 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.746920E 00	0.619630E 01	0.919744E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	590.07	0.42502E 02	0.67650E 01	0.97957E-02	0.23969E-02	0.10918E 01	0.73553E 00	0.10000E 01	0.99795E 00
198	595.55	0.42774E 02	0.66062E 01	0.95842E-02	0.23451E-02	0.10662E 01	0.71827E 00	0.12000E 01	0.99464E 00
199	561.27	0.20585E 02	0.32881E 01	0.47137E-02	0.11534E-02	0.53066E 00	0.35751E-00	0.13000E 01	0.99317E 00
200	555.76	0.21662E 01	0.31911E-00	0.45659E-03	0.11172E-03	0.51500E-01	0.34696E-01	0.11890E 01	0.14002E 01
201	555.01	0.22810E 01	0.38105E-00	0.54508E-03	0.13337E-03	0.61497E-01	0.41430E-01	0.14540E 01	0.10822E 01
202	552.64	0.22935E 01	0.37972E-00	0.54273E-03	0.13280E-03	0.61282E-01	0.41286E-01	0.17040E 01	0.10062E 01
203	551.71	0.27096E 01	0.44838E-00	0.64065E-03	0.15676E-03	0.72363E-01	0.48751E-01	0.20410E 01	0.10580E 01
204	552.21	0.37418E 01	0.28777E-00	0.41124E-03	0.10063E-03	0.46443E-01	0.31288E-01	0.20700E 01	0.11663E 03
205	559.98	0.70629E 01	0.62321E 00	0.89300E-03	0.21850E-03	0.10058E-00	0.67759E-01	0.21880E 01	0.24696E 02
206	556.58	0.49325E 01	0.81843E 00	0.11713E-02	0.28661E-03	0.13208E-00	0.88985E-01	0.22480E 01	0.11379E 01
207	553.11	0.31896E 01	0.51933E 00	0.74238E-03	0.18165E-03	0.83812E-01	0.56464E-01	0.20700E 01	0.10026E 01
208	552.13	0.34971E 01	0.31326E-00	0.44766E-03	0.10954E-03	0.50557E-01	0.34060E-01	0.20700E 01	0.43406E 01
209	559.09	0.56816E 01	0.46262E-00	0.66269E-03	0.16215E-03	0.74661E-01	0.50299E-01	0.21880E 01	0.52667E 01
210	551.90	0.24021E 01	0.40058E-00	0.57239E-03	0.14006E-03	0.64648E-01	0.43553E-01	0.20700E 01	0.12935E 01
211	554.43	0.37616E 01	0.62817E 00	0.89838E-03	0.21982E-03	0.10138E-00	0.68299E-01	0.21880E 01	0.12236E 01
212	553.81	0.32608E 01	0.53774E 00	0.76889E-03	0.18814E-03	0.86784E-01	0.58466E-01	0.22390E 01	0.89756E 00
213	552.74	0.25283E 01	0.41670E-00	0.59559E-03	0.14573E-03	0.67249E-01	0.45306E-01	0.21880E 01	0.90230E 00
214	554.27	0.28509E 01	0.47605E-00	0.68079E-03	0.16658E-03	0.76829E-01	0.51759E-01	0.22480E 01	0.93433E 00
215	555.01	0.29626E 01	0.44903E-00	0.64231E-03	0.15716E-03	0.72467E-01	0.48821E-01	0.11650E 01	0.12244E 01
216	1085.37	-0.31174E-02	-0.33756E-03	-0.59314E-06	-0.14513E-06	-0.54478E-04	-0.36701E-04	0.12050E 01	0.
217	557.97	0.32525E 01	0.47971E-00	0.68690E-03	0.16808E-03	0.77419E-01	0.52157E-01	0.12120E 01	0.12921E 01
218	555.80	0.34306E 01	0.50800E 00	0.72686E-03	0.17785E-03	0.81984E-01	0.55233E-01	0.11890E 01	0.12926E 01
219	554.93	0.28447E 01	0.48140E-00	0.68859E-03	0.16849E-03	0.77692E-01	0.52341E-01	0.14540E 01	0.12365E 01
220	553.17	0.28649E 01	0.50281E 00	0.71878E-03	0.17588E-03	0.81147E-01	0.54669E-01	0.17040E 01	0.11121E 01
221	552.52	0.27694E 01	0.46550E-00	0.66529E-03	0.16279E-03	0.75125E-01	0.50612E-01	0.20410E 01	0.12405E 01
222	554.64	0.28332E 01	0.48183E-00	0.68914E-03	0.16862E-03	0.77761E-01	0.52388E-01	0.22480E 01	0.14928E 01
223	553.78	0.30140E 01	0.45651E-00	0.65273E-03	0.15972E-03	0.73675E-01	0.49635E-01	0.11650E 01	0.12329E 01
224	555.11	0.13907E 01	0.11772E-00	0.16839E-03	0.41203E-04	0.18998E-01	0.12799E-01	0.12050E 01	0.15279E 01
225	557.15	0.32109E 01	0.47337E-00	0.67762E-03	0.16581E-03	0.76395E-01	0.51467E-01	0.12120E 01	0.13463E 01
226	554.30	0.22094E 01	0.37510E-00	0.53642E-03	0.13126E-03	0.60536E-01	0.40783E-01	0.14540E 01	0.84446E 00
227	554.08	0.34073E 01	0.55507E 00	0.79375E-03	0.19422E-03	0.89580E-01	0.60350E-01	0.17040E 01	0.11193E 01
228	553.69	0.39834E 01	0.66191E 00	0.94639E-03	0.23157E-03	0.10682E-00	0.71967E-01	0.18780E 01	0.12476E 01
229	554.44	0.40613E 01	0.67823E 00	0.96998E-03	0.23734E-03	0.10946E-00	0.73742E-01	0.21880E 01	0.12085E 01
230	552.37	0.34582E 01	0.51461E 00	0.73544E-03	0.17995E-03	0.83051E-01	0.55951E-01	0.11890E 01	0.12323E 01
231	553.64	0.18660E 01	0.33325E-00	0.47647E-03	0.11659E-03	0.53782E-01	0.36233E-01	0.14540E 01	0.73682E 00
232	554.49	0.33777E 01	0.55722E 00	0.79693E-03	0.19500E-03	0.89928E-01	0.60585E-01	0.16130E 01	0.10234E 01
233	554.39	0.29948E 01	0.49784E-00	0.71197E-03	0.17421E-03	0.80344E-01	0.54128E-01	0.17040E 01	0.89056E 00
234	553.63	0.37190E 01	0.62079E 00	0.88757E-03	0.21718E-03	0.10019E-00	0.67496E-01	0.18780E 01	0.10804E 01
235	554.89	0.24597E 01	0.41025E-00	0.58682E-03	0.14359E-03	0.66209E-01	0.44605E-01	0.14540E 01	0.90695E 00
236	553.83	0.37943E 01	0.62573E 00	0.89470E-03	0.21892E-03	0.10098E-00	0.68033E-01	0.17040E 01	0.10771E 01
237	554.29	0.41730E 01	0.69683E 00	0.99652E-03	0.24384E-03	0.11246E-00	0.75763E-01	0.21880E 01	0.11397E 01
238	560.72	0.10463E 02	0.94171E 00	0.13497E-02	0.33026E-03	0.15198E-00	0.10239E-00	0.20700E 01	0.74408E 01
239	551.54	0.35725E 01	0.52503E 00	0.75013E-03	0.18355E-03	0.84733E-01	0.57085E-01	0.11890E 01	0.11468E 01
240	555.39	0.24571E 01	0.41592E-00	0.59503E-03	0.14560E-03	0.67125E-01	0.45222E-01	0.14540E 01	0.10026E 01
241	552.62	0.36935E 01	0.61151E 00	0.87400E-03	0.21386E-03	0.98689E-01	0.66487E-01	0.17040E 01	0.10494E 01
242	553.15	0.41029E 01	0.68468E 00	0.97877E-03	0.23949E-03	0.11050E-00	0.74443E-01	0.18780E 01	0.10743E 01
243	558.66	0.10909E 02	0.18260E 01	0.26153E-02	0.63992E-03	0.29469E-00	0.19853E-00	0.20410E 01	0.30211E 01
244	556.72	0.65964E 01	0.60078E 00	0.85988E-03	0.21040E-03	0.96957E-01	0.65320E-01	0.20700E 01	0.88802E 02
245	556.10	0.38031E 01	0.31399E-00	0.44931E-03	0.10994E-03	0.50673E-01	0.34139E-01	0.21870E 01	0.11405E 01
246	554.48	0.35803E 01	0.60882E 00	0.87071E-03	0.21305E-03	0.98255E-01	0.66194E-01	0.22100E 01	0.99344E 00
247	555.75	0.23164E 01	0.38241E-00	0.54715E-03	0.13388E-03	0.61715E-01	0.41578E-01	0.14540E 01	0.10140E 01
248	552.89	0.49101E 01	0.81928E 00	0.11711E-02	0.28655E-03	0.13222E-00	0.89077E-01	0.17040E 01	0.14768E 01
249	553.67	0.37371E 01	0.31609E-00	0.45194E-03	0.11058E-03	0.51012E-01	0.34367E-01	0.18780E 01	0.54710E 01
250	556.59	0.54712E 01	0.45183E-00	0.64666E-03	0.15823E-03	0.72919E-01	0.49125E-01	0.21880E 01	0.53612E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	555.18	0.21060E 01	0.35826E-00	0.51250E-03	0.12540E-03	0.57818E-01	0.38952E-01	0.14540E 01	0.98596E 00
252	552.46	0.32442E 01	0.54825E 00	0.78354E-03	0.19172E-03	0.88480E-01	0.59609E-01	0.16130E 01	0.11102E 01
253	560.29	0.12117E 02	0.10798E 01	0.15475E-02	0.37864E-03	0.17427E-00	0.11741E-00	0.17060E 01	0.26120E 04
254	555.28	0.52883E 01	0.88356E 00	0.12640E-02	0.30928E-03	0.14259E-00	0.96066E-01	0.21880E 01	0.10359E 01
255	555.80	0.65169E 01	0.60680E 00	0.86823E-03	0.21245E-03	0.97930E-01	0.65975E-01	0.16580E 01	0.55695E 01
256	553.03	0.29247E 01	0.24728E-00	0.35348E-03	0.86491E-04	0.39908E-01	0.26886E-01	0.17920E 01	0.42048E 01
257	544.95	0.23865E 01	0.40246E-00	0.57370E-03	0.14038E-03	0.64952E-01	0.43758E-01	0.10840E 01	0.95608E 00
258	555.22	0.20639E 01	0.35373E-00	0.50602E-03	0.12382E-03	0.57087E-01	0.38459E-01	0.14540E 01	0.10333E 01
259	553.25	0.26379E 01	0.44024E-00	0.62935E-03	0.15399E-03	0.71049E-01	0.47865E-01	0.16130E 01	0.10244E 01
260	554.37	0.46307E 01	0.76153E 00	0.10891E-02	0.26649E-03	0.12290E-00	0.82799E-01	0.17040E 01	0.16640E 01
261	554.31	0.38727E 01	0.64375E 00	0.92062E-03	0.22526E-03	0.10389E-00	0.69992E-01	0.18780E 01	0.11110E 01
262	556.05	0.48535E 01	0.82605E 00	0.11820E-02	0.28923E-03	0.13331E-00	0.89813E-01	0.20410E 01	0.98867E 00
263	555.70	-0.52220E-03	-0.89125E-04	-0.12752E-06	-0.31202E-07	-0.14384E-04	-0.96902E-05	0.14540E 01	0.
264	553.57	0.18982E 01	0.31540E-00	0.45093E-03	0.11034E-03	0.50901E-01	0.34292E-01	0.16130E 01	0.76457E 00
265	554.24	0.27974E 01	0.45575E-00	0.65175E-03	0.15948E-03	0.73552E-01	0.49552E-01	0.17040E 01	0.88029E 00
266	555.26	0.35766E 01	0.59484E 00	0.85096E-03	0.20822E-03	0.95999E-01	0.64675E-01	0.18780E 01	0.86244E 00
267	556.42	0.47392E 01	0.80436E 00	0.11511E-02	0.28167E-03	0.12981E-00	0.87455E-01	0.20410E 01	0.91986E 00
268	555.53	0.17008E 01	0.28291E-00	0.40475E-03	0.99038E-04	0.45657E-01	0.30759E-01	0.16130E 01	0.77423E 00
269	555.19	0.28919E 01	0.47141E-00	0.67436E-03	0.16501E-03	0.76078E-01	0.51254E-01	0.18280E 01	0.77320E 00
270	556.04	0.33569E 01	0.55598E 00	0.79558E-03	0.19467E-03	0.89728E-01	0.60449E-01	0.18780E 01	0.84771E 00
271	556.42	0.45205E 01	0.76563E 00	0.10957E-02	0.26811E-03	0.12356E-00	0.83244E-01	0.20410E 01	0.87459E 00
272	553.00	0.12390E 01	0.21114E-00	0.30181E-03	0.73849E-04	0.34075E-01	0.22956E-01	0.16130E 01	0.54426E 00
273	555.31	0.23507E 01	0.39394E-00	0.56357E-03	0.13790E-03	0.63577E-01	0.42832E-01	0.17200E 01	0.84607E 00
274	554.09	0.20956E 01	0.34032E-00	0.48665E-03	0.11908E-03	0.54923E-01	0.37002E-01	0.18280E 01	0.58765E 00
275	555.63	0.31730E 01	0.52621E 00	0.75287E-03	0.18422E-03	0.84923E-01	0.57213E-01	0.18780E 01	0.82803E 00
276	1085.37	-0.31174E-02	-0.67492E-03	-0.11859E-05	-0.29018E-06	-0.10892E-03	-0.73381E-04	0.20600E 01	0.
277	555.49	0.31018E 01	0.26262E-00	0.37572E-03	0.91934E-04	0.42383E-01	0.28553E-01	0.21000E 01	0.14690E 01
278	1066.68	0.96955E 01	0.10422E 01	0.18165E-02	0.44447E-03	0.16820E-00	0.11331E-00	0.21870E 01	0.
279	558.74	0.56535E 01	0.96365E 00	0.13802E-02	0.33772E-03	0.15552E-00	0.10477E-00	0.21950E 01	0.89617E 00
280	554.79	0.30234E 01	0.50884E 00	0.72780E-03	0.17808E-03	0.82120E-01	0.55324E-01	0.18780E 01	0.77713E 00
281	556.41	0.42966E 01	0.73142E 00	0.10468E-02	0.25613E-03	0.11804E-00	0.79524E-01	0.20600E 01	0.81453E 00
282	553.83	0.28639E 01	0.47011E-00	0.67219E-03	0.16448E-03	0.75870E-01	0.51114E-01	0.18280E 01	0.76136E 00
283	554.86	0.43392E 01	0.73429E 00	0.10503E-02	0.25700E-03	0.11850E-00	0.79836E-01	0.20600E 01	0.84516E 00
284	552.50	0.39787E 01	0.64758E 00	0.92553E-03	0.22646E-03	0.10451E-00	0.70409E-01	0.17200E 01	0.12684E 01
285	553.54	0.39709E 01	0.65777E 00	0.94042E-03	0.23011E-03	0.10616E-00	0.71517E-01	0.18780E 01	0.11137E 01
286	553.46	0.51294E 01	0.47699E-00	0.68194E-03	0.16686E-03	0.76979E-01	0.51861E-01	0.16580E 01	0.28460E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.59314E-06	-0.14513E-06	-0.54478E-04	-0.36701E-04	0.17920E 01	0.
288	551.87	0.33673E 01	0.55726E 00	0.79626E-03	0.19484E-03	0.89934E-01	0.60589E-01	0.16130E 01	0.11868E 01
289	557.37	0.91153E 01	0.77256E 00	0.11060E-02	0.27063E-03	0.12468E-00	0.83998E-01	0.17060E 01	0.29561E 02
290	553.46	0.33823E 01	0.28605E-00	0.40895E-03	0.10006E-03	0.46164E-01	0.31101E-01	0.18780E 01	0.40402E 01
291	552.06	0.45948E 01	0.75700E 00	0.10817E-02	0.26469E-03	0.12217E-00	0.82305E-01	0.17200E 01	0.16182E 01
292	554.78	0.29849E 01	0.51752E 00	0.74022E-03	0.18112E-03	0.83521E-01	0.56268E-01	0.14400E 01	0.12101E 01
293	551.57	0.35190E 01	0.57246E 00	0.81790E-03	0.20013E-03	0.92387E-01	0.62241E-01	0.17200E 01	0.10126E 01
294	553.76	0.36499E 01	0.60837E 00	0.86986E-03	0.21284E-03	0.98182E-01	0.66145E-01	0.18780E 01	0.92552E 00

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
60	1	4.39	154.39	-0.	-0.	1	C58	2.65	2	10.04	215.30	1671.80	3	C55	2.90

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.818608E 02	0.476115E-02	0.445124E 04	0.487975E-05	0.663073E-07	0.329785E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726146E 00	0.171113E 01	0.194618E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	547.73	0.52259E 02	0.68314E 01	0.23951E-01	0.34272E-01	0.39924E 01	0.35102E 01	-0.	0.23597E 01
2	683.41	0.15937E 02	0.23821E 01	0.94400E-02	0.13508E-01	0.13921E 01	0.12240E 01	-0.30000E-01	0.
3	599.77	0.90806E 00	0.14127E-00	0.51817E-03	0.74146E-03	0.82562E-01	0.72591E-01	-0.60000E-01	0.47035E-01
4	541.41	0.42667E 02	0.65943E 01	0.22996E-01	0.32906E-01	0.38538E 01	0.33883E 01	-0.90000E-01	0.22137E 01
5	534.48	0.37613E 02	0.59378E 01	0.20587E-01	0.29458E-01	0.34701E 01	0.30510E 01	-0.20000E-00	0.21595E 01
6	533.85	0.30511E 02	0.48149E 01	0.16685E-01	0.23875E-01	0.28139E 01	0.24740E 01	-0.40000E-00	0.20574E 01
7	532.92	0.22575E 02	0.35776E 01	0.12388E-01	0.17726E-01	0.20908E 01	0.18383E 01	-0.60000E 00	0.17586E 01
8	612.18	0.15184E 01	0.25133E-00	0.93212E-03	0.13338E-02	0.14688E-00	0.12914E-00	-0.80000E 00	0.11452E-00
9	533.10	0.15272E 02	0.23822E 01	0.82499E-02	0.11805E-01	0.13922E 01	0.12241E 01	-0.90000E 00	0.10182E 01
10	535.34	0.11597E 02	0.18346E 01	0.63653E-02	0.91083E-02	0.10722E 01	0.94267E 00	-0.98000E 00	0.78590E 00
11	537.11	0.40899E 01	0.70211E 00	0.24397E-02	0.34910E-02	0.41032E-00	0.36076E-00	-0.11220E 01	0.94011E 01
12	541.35	0.46940E 01	0.68830E 00	0.24002E-02	0.34345E-02	0.40225E-00	0.35367E-00	-0.11890E 01	0.84585E 01
13	544.36	0.44441E 01	0.67295E 00	0.23526E-02	0.33664E-02	0.39328E-00	0.34578E-00	-0.13340E 01	0.77139E 01
14	544.34	0.40540E 01	0.69879E 00	0.24429E-02	0.34956E-02	0.40838E-00	0.35906E-00	-0.14400E 01	0.69899E 01
15	637.09	-0.34850E 02	-0.50864E 01	-0.19296E-01	-0.27612E-01	-0.29726E 01	-0.26136E 01	0.30000E-01	0.
16	632.82	0.17216E 01	0.27258E-00	0.10300E-02	0.14739E-02	0.15930E-00	0.14006E-00	0.60000E-01	0.
17	675.64	-0.90331E 00	-0.14999E-00	-0.58997E-03	-0.84421E-03	-0.87655E-01	-0.77068E-01	0.90000E-01	0.
18	561.12	0.48266E 02	0.77338E 01	0.27425E-01	0.39244E-01	0.45197E 01	0.39738E 01	0.20000E-00	0.22206E 01
19	587.41	0.50618E 02	0.82283E 01	0.29852E-01	0.42716E-01	0.48087E 01	0.42279E 01	0.40000E-00	0.20338E 01
20	594.38	0.53227E 02	0.87265E 01	0.31855E-01	0.45582E-01	0.50999E 01	0.44839E 01	0.60000E 00	0.18575E 01
21	582.50	0.55610E 02	0.85283E 01	0.30808E-01	0.44083E-01	0.49840E 01	0.43821E 01	0.92000E 00	0.15442E 01
22	556.03	0.25027E 02	0.37827E 01	0.13356E-01	0.19111E-01	0.22106E 01	0.19436E 01	0.10400E 01	0.11939E 01
23	552.80	0.22250E 02	0.33659E 01	0.11852E-01	0.16959E-01	0.19671E 01	0.17295E 01	0.10600E 01	0.12020E 01
24	546.49	0.15165E 02	0.23949E 01	0.83877E-02	0.12002E-01	0.13996E 01	0.12306E 01	0.10840E 01	0.12322E 01
25	543.99	0.51340E 01	0.75782E 00	0.26485E-02	0.37898E-02	0.44288E-00	0.38939E-00	0.12070E 01	0.27339E 01
26	545.81	0.51803E 01	0.80730E 00	0.28258E-02	0.40434E-02	0.47179E-00	0.41481E-00	0.12490E 01	0.24197E 01
27	547.40	0.58774E 01	0.90190E 00	0.31611E-02	0.45234E-02	0.52708E 00	0.46342E-00	0.13340E 01	0.22315E 01
28	547.78	0.54109E 01	0.92353E 00	0.32380E-02	0.46333E-02	0.53972E 00	0.47453E-00	0.14540E 01	0.22777E 01
29	547.10	0.48878E 01	0.80922E 00	0.28356E-02	0.40575E-02	0.47291E-00	0.41580E-00	0.16580E 01	0.30674E 01
30	547.02	0.45813E 01	0.76771E 00	0.26899E-02	0.38491E-02	0.44865E-00	0.39447E-00	0.20410E 01	0.32147E 01
31	549.48	0.44753E 01	0.75098E 00	0.26368E-02	0.37731E-02	0.43888E-00	0.38587E-00	0.22480E 01	0.31215E 01
32	548.00	0.47802E 02	0.72241E 01	0.25269E-01	0.36158E-01	0.42218E 01	0.37119E 01	-0.60000E-01	0.22518E 01
33	552.34	0.49188E 02	0.68581E 01	0.24138E-01	0.34540E-01	0.40079E 01	0.35239E 01	-0.30000E-01	0.22899E 01
34	545.78	0.50041E 02	0.75658E 01	0.26462E-01	0.37893E-01	0.44215E 01	0.38875E 01	0.30000E-01	0.22740E 01
35	541.96	0.46417E 02	0.71759E 01	0.25036E-01	0.35825E-01	0.41937E 01	0.36872E 01	0.60000E-01	0.22469E 01
36	536.54	0.20342E 02	0.32150E 01	0.11166E-01	0.15977E-01	0.18789E 01	0.16519E 01	-0.86800E 00	0.82695E 00
37	544.07	0.21702E 02	0.33514E 01	0.11714E-01	0.16761E-01	0.19586E 01	0.17221E 01	-0.91100E 00	0.99611E 00
38	530.21	0.82577E 01	0.12880E 01	0.44499E-02	0.63674E-02	0.75274E 00	0.66183E 00	-0.95300E 00	0.40573E-00
39	661.08	0.18894E 01	0.31728E-00	0.12308E-02	0.17613E-02	0.18542E-00	0.16303E-00	0.51000E-01	0.
40	628.76	0.16597E 01	0.27407E-00	0.10318E-02	0.14765E-02	0.16017E-00	0.14083E-00	0.29000E-01	0.
41	1085.37	-0.31167E-02	-0.62900E-03	-0.40980E-05	-0.58639E-05	-0.36759E-03	-0.32320E-03	0.70000E-02	0.
42	526.41	0.65922E 01	0.10293E 01	0.35449E-02	0.50724E-02	0.60156E 00	0.52890E 00	-0.86800E 00	0.26899E-00
43	524.79	0.25242E 01	0.39479E-00	0.13577E-02	0.19428E-02	0.23072E-00	0.20285E-00	-0.91100E 00	0.10231E-00
44	526.04	0.14546E-00	0.22635E-01	0.77928E-04	0.11151E-03	0.13228E-01	0.11631E-01	-0.95300E 00	0.63743E-02
45	536.14	0.44779E 01	0.72736E 00	0.25253E-02	0.36135E-02	0.42508E-00	0.37374E-00	-0.10400E 01	0.56520E 00
46	1085.37	-0.31167E-02	-0.63426E-03	-0.41323E-05	-0.59130E-05	-0.37067E-03	-0.32590E-03	0.70000E-02	0.
47	692.34	0.22390E 01	0.38299E-00	0.15309E-02	0.21906E-02	0.22382E-00	0.19679E-00	0.29000E-01	0.18433E-00
48	689.60	0.22114E 01	0.37920E-00	0.15118E-02	0.21632E-02	0.22161E-00	0.19485E-00	0.51000E-01	0.19366E-00
49	519.72	0.32572E-00	0.50504E-01	0.17297E-03	0.24750E-03	0.29515E-01	0.25950E-01	0.70000E-02	0.15902E-01
50	519.88	0.23533E-00	0.36609E-01	0.12539E-03	0.17943E-03	0.21394E-01	0.18810E-01	0.29000E-01	0.16986E-01
51	1074.39	0.10322E 01	0.20795E-00	0.13312E-02	0.19048E-02	0.12153E-00	0.10685E-00	0.51000E-01	0.
52	523.79	0.15642E 01	0.24450E-00	0.84017E-03	0.12022E-02	0.14289E-00	0.12563E-00	-0.86800E 00	0.72842E-01
53	524.01	0.13403E-00	0.21033E-01	0.72289E-04	0.10344E-03	0.12292E-01	0.10807E-01	-0.91100E 00	0.68677E-02
54	527.93	-0.40517E-01	-0.63117E-02	-0.21764E-04	-0.31142E-04	-0.36886E-02	-0.32431E-02	-0.95300E 00	0.

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	536.07	0.42125E 01	0.68422E 00	0.23754E-02	0.33990E-02	0.39986E-00	0.35157E-00	-0.10400E 01	0.62946E 00
56	536.03	0.28000E 01	0.46913E-00	0.16286E-02	0.23305E-02	0.27417E-00	0.24105E-00	-0.10680E 01	0.49668E-00
57	538.08	0.19055E 01	0.30985E-00	0.10775E-02	0.15418E-02	0.18108E-00	0.15921E-00	-0.10400E 01	0.39551E-00
58	538.88	0.46182E 01	0.81335E 00	0.28304E-02	0.40501E-02	0.47533E-00	0.41792E-00	-0.10680E 01	0.52600E 00
59	534.87	0.49579E 01	0.80476E 00	0.27911E-02	0.39938E-02	0.47031E-00	0.41350E-00	-0.10400E 01	0.95388E 00
60	536.57	0.48857E 01	0.81884E 00	0.28439E-02	0.40695E-02	0.47853E-00	0.42074E-00	-0.10680E 01	0.92534E 00
61	539.02	0.37538E 01	0.62187E 00	0.21643E-02	0.30969E-02	0.36343E-00	0.31953E-00	-0.11220E 01	0.78627E 01
62	544.37	0.31293E 01	0.47386E-00	0.16566E-02	0.23705E-02	0.27693E-00	0.24348E-00	-0.13340E 01	0.71109E 01
63	538.84	0.26119E 01	0.44883E-00	0.15618E-02	0.22349E-02	0.26230E-00	0.23062E-00	-0.11220E 01	0.42211E 01
64	544.24	0.30099E 01	0.45574E-00	0.15931E-02	0.22796E-02	0.26634E-00	0.23417E-00	-0.13340E 01	0.90948E 01
65	544.61	0.36265E 01	0.62519E 00	0.21861E-02	0.31282E-02	0.36537E-00	0.32124E-00	0.14400E 01	0.80034E 01
66	544.89	0.41319E 01	0.67802E 00	0.23714E-02	0.33933E-02	0.39624E-00	0.34838E-00	0.16130E 01	0.91492E 01
67	545.51	0.46390E 01	0.74742E 00	0.26155E-02	0.37426E-02	0.43680E-00	0.38405E-00	0.17200E 01	0.60667E 01
68	545.24	0.42140E 01	0.69694E 00	0.24383E-02	0.34890E-02	0.40730E-00	0.35811E-00	-0.16130E 01	0.67259E 01
69	545.48	0.47018E 01	0.75754E 00	0.26509E-02	0.37932E-02	0.44271E-00	0.38924E-00	-0.18280E 01	0.57956E 01
70	540.45	0.46270E 01	0.67930E 00	0.23670E-02	0.33870E-02	0.39699E-00	0.34904E-00	-0.11650E 01	0.10665E 02
71	541.92	0.32280E 01	0.27124E-00	0.94631E-03	0.13541E-02	0.15852E-00	0.13937E-00	-0.12050E 01	0.78904E 01
72	543.98	0.47371E 01	0.68728E 00	0.24020E-02	0.34370E-02	0.40165E-00	0.35315E-00	-0.12120E 01	0.88021E 01
73	541.02	0.51865E 01	0.76168E 00	0.26553E-02	0.37996E-02	0.44513E-00	0.39137E-00	-0.11650E 01	0.11877E 02
74	541.20	0.31210E 01	0.26215E-00	0.91402E-03	0.13079E-02	0.15320E-00	0.13470E-00	-0.12050E 01	0.91928E 01
75	708.04	0.23465E 01	0.36929E-00	0.14991E-02	0.21451E-02	0.21582E-00	0.18975E-00	-0.12120E 01	0.
76	535.96	0.52114E 01	0.78280E 00	0.27174E-02	0.38884E-02	0.45747E-00	0.40222E-00	0.10840E 01	0.32425E 01
77	537.97	0.42078E 01	0.67932E 00	0.23622E-02	0.33801E-02	0.39700E-00	0.34905E-00	0.11220E 01	0.85539E 01
78	545.45	0.43200E 01	0.64473E 00	0.22560E-02	0.32282E-02	0.37679E-00	0.33128E-00	0.13340E 01	0.70862E 01
79	540.73	0.33065E 01	0.55513E 00	0.19348E-02	0.27686E-02	0.32442E-00	0.28524E-00	-0.11890E 01	0.11892E 02
80	544.99	0.39512E 01	0.59552E 00	0.20830E-02	0.29807E-02	0.34803E-00	0.30599E-00	-0.13340E 01	0.13259E 02
81	538.10	0.23865E 01	0.38531E-00	0.13400E-02	0.19174E-02	0.22518E-00	0.19798E-00	-0.11470E 01	0.32873E 01
82	538.95	0.11423E 01	0.19142E-00	0.66617E-03	0.95323E-03	0.11187E-00	0.98357E-01	-0.11890E 01	-0.59586E 02
83	535.29	0.35054E 01	0.58620E 00	0.20338E-02	0.29102E-02	0.34258E-00	0.30121E-00	-0.10840E 01	0.14627E 01
84	540.14	0.23522E 01	0.34527E-00	0.12028E-02	0.17211E-02	0.20178E-00	0.17741E-00	-0.11890E 01	0.10688E 02
85	544.58	0.30197E 01	0.44436E-00	0.15538E-02	0.22233E-02	0.25969E-00	0.22832E-00	-0.13090E 01	0.81979E 01
86	544.44	0.25647E 01	0.38255E-00	0.13375E-02	0.19138E-02	0.22356E-00	0.19656E-00	-0.13340E 01	0.87578E 01
87	551.67	0.11061E 02	0.16313E 01	0.57384E-02	0.82112E-02	0.95334E 00	0.83820E 00	0.11990E 01	0.14430E 01
88	547.03	0.79351E 01	0.11773E 01	0.41251E-02	0.59027E-02	0.68802E 00	0.60492E 00	0.12070E 01	0.19781E 01
89	549.90	0.54462E 01	0.82312E 00	0.28911E-02	0.41370E-02	0.48104E-00	0.42294E-00	0.13340E 01	0.18496E 01
90	548.23	0.84577E 01	0.12129E 01	0.42541E-02	0.60874E-02	0.70882E 00	0.62321E 00	0.12070E 01	0.15548E 01
91	549.27	0.57397E 01	0.89622E 00	0.31462E-02	0.45020E-02	0.52376E 00	0.46050E-00	0.12490E 01	0.18167E 01
92	550.03	0.56093E 01	0.85209E 00	0.29932E-02	0.42831E-02	0.49797E-00	0.43783E-00	0.13340E 01	0.19307E 01
93	549.27	0.52675E 01	0.89448E 00	0.31401E-02	0.44933E-02	0.52274E 00	0.45961E-00	0.14900E 01	0.33674E 01
94	546.31	0.60213E 01	0.63437E 00	0.22214E-02	0.31787E-02	0.37073E-00	0.32596E-00	-0.	0.10905E 01
95	550.15	0.84924E 01	0.90309E 00	0.31727E-02	0.45399E-02	0.52778E 00	0.46403E-00	-0.	0.10851E 01
96	545.97	0.53091E 01	0.55923E 00	0.19577E-02	0.28013E-02	0.32682E-00	0.28735E-00	-0.	0.12369E 02
97	547.72	0.68743E 01	0.72481E 00	0.25411E-02	0.36362E-02	0.42359E-00	0.37243E-00	-0.	0.17644E 02
98	547.97	0.60436E 01	0.64190E 00	0.22509E-02	0.32209E-02	0.37513E-00	0.32983E-00	-0.	0.82101E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
59	1	4.38	154.38	-0.	-0.	2	C58	2.65	2	10.04	217.70	1656.70	10	C55	3.10

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.810466E 02	0.481877E-02	0.442935E 04	0.498842E-05	0.656478E-07	0.338843E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725594E 00	0.172509E 01	0.196005E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	539.56	0.51023E 01	0.83090E 00	0.29357E-02	0.41296E-02	0.48166E-00	0.42392E-00	-0.10600E 01	0.22894E 01
100	541.64	0.46873E 01	0.78735E 00	0.27868E-02	0.39201E-02	0.45641E-00	0.40170E-00	-0.10840E 01	0.40452E 01
101	541.73	0.45107E 01	0.74113E 00	0.26234E-02	0.36902E-02	0.42962E-00	0.37812E-00	-0.11080E 01	0.57711E 01
102	573.25	0.36484E 02	0.60816E 01	0.22124E-01	0.31121E-01	0.35254E 01	0.31028E 01	-0.11080E 01	0.40318E 02
103	565.54	0.34512E 02	0.58747E 01	0.21227E-01	0.29860E-01	0.34055E 01	0.29972E 01	-0.10800E 01	0.24126E 02
104	1085.37	-0.31167E-02	-0.63669E-03	-0.42640E-05	-0.59980E-05	-0.36908E-03	-0.32483E-03	0.85000E 00	0.
105	581.73	0.55234E 02	0.84670E 01	0.31033E-01	0.43653E-01	0.49082E 01	0.43198E 01	0.94000E 00	0.15887E 01
106	581.58	0.53453E 02	0.81246E 01	0.29774E-01	0.41882E-01	0.47097E 01	0.41451E 01	0.96000E 00	0.15017E 01
107	575.20	0.47791E 02	0.72387E 01	0.26379E-01	0.37106E-01	0.41961E 01	0.36931E 01	0.98000E 00	0.14445E 01
108	574.10	0.40552E 02	0.61698E 01	0.22461E-01	0.31596E-01	0.35765E 01	0.31478E 01	0.10000E 01	0.13399E 01
109	565.62	0.30443E 02	0.46257E 01	0.16715E-01	0.23513E-01	0.26814E 01	0.23600E 01	0.10200E 01	0.12836E 01
110	587.82	0.54315E 02	0.83538E 01	0.30784E-01	0.43303E-01	0.48425E 01	0.42620E 01	0.80000E-01	0.15946E 01
111	581.56	0.54822E 02	0.83325E 01	0.30535E-01	0.42953E-01	0.48302E 01	0.42512E 01	0.10000E-00	0.15911E 01
112	587.74	0.52655E 02	0.80709E 01	0.29740E-01	0.41834E-01	0.46785E 01	0.41177E 01	0.12000E-00	0.14986E 01
113	578.12	0.48504E 02	0.74208E 01	0.27112E-01	0.38137E-01	0.43017E 01	0.37860E 01	0.14000E-00	0.14257E 01
114	581.10	0.55127E 02	0.84478E 01	0.30945E-01	0.43530E-01	0.48970E 01	0.43100E 01	0.80000E-01	0.16721E 01
115	590.99	0.54590E 02	0.83368E 01	0.30536E-01	0.42954E-01	0.48327E 01	0.42534E 01	0.10000E-00	0.16446E 01
116	581.26	0.54739E 02	0.84172E 01	0.30838E-01	0.43378E-01	0.48793E 01	0.42944E 01	0.12000E-00	0.16189E 01
117	587.69	0.53183E 02	0.81792E 01	0.30137E-01	0.42393E-01	0.47413E 01	0.41729E 01	0.14000E-00	0.15264E 01
118	587.43	0.54136E 02	0.83945E 01	0.30923E-01	0.43499E-01	0.48661E 01	0.42828E 01	0.10000E-00	0.16840E 01
119	586.34	0.53423E 02	0.82377E 01	0.30316E-01	0.42645E-01	0.47752E 01	0.42028E 01	0.15000E-00	0.16702E 01
120	586.36	0.53265E 02	0.82271E 01	0.30278E-01	0.42591E-01	0.47691E 01	0.41974E 01	0.20000E-00	0.17726E 01
121	584.60	0.52341E 02	0.81037E 01	0.29777E-01	0.41886E-01	0.46975E 01	0.41344E 01	0.25000E-00	0.16506E 01
122	582.87	0.51675E 02	0.79931E 01	0.29326E-01	0.41251E-01	0.46334E 01	0.40780E 01	0.30000E-00	0.17065E 01
123	1085.37	-0.31167E-02	-0.61037E-03	-0.40877E-05	-0.57501E-05	-0.35382E-03	-0.31141E-03	0.35000E-00	0.
124	578.39	0.51909E 02	0.81031E 01	0.29611E-01	0.41653E-01	0.46972E 01	0.41341E 01	0.38000E-00	0.16743E 01
125	578.68	0.49199E 02	0.77446E 01	0.28309E-01	0.39821E-01	0.44894E 01	0.39512E 01	0.45000E-00	0.15607E 01
126	577.71	0.45723E 02	0.72876E 01	0.26616E-01	0.37439E-01	0.42245E 01	0.37181E 01	0.61000E 00	0.16002E 01
127	552.53	0.19765E 02	0.31218E 01	0.11153E-01	0.15689E-01	0.18096E 01	0.15927E 01	0.70000E 00	0.13862E 01
128	544.54	0.91886E 01	0.14495E 01	0.51432E-02	0.72348E-02	0.84024E 00	0.73952E 00	0.75000E 00	0.14351E 01
129	574.28	0.42556E 02	0.68247E 01	0.24849E-01	0.34955E-01	0.39561E 01	0.34819E 01	0.70000E 00	0.17571E 01
130	575.04	0.40647E 02	0.65213E 01	0.23761E-01	0.33424E-01	0.37803E 01	0.33271E 01	0.80000E 00	0.15395E 01
131	548.79	0.12409E 02	0.18617E 01	0.66299E-02	0.93260E-02	0.10792E 01	0.94981E 00	0.90000E 00	0.12730E 01
132	574.73	0.37875E 02	0.57839E 01	0.21068E-01	0.29636E-01	0.33528E 01	0.29509E 01	0.90000E 00	0.16536E 01
133	572.45	0.34586E 02	0.52485E 01	0.19080E-01	0.26839E-01	0.30425E 01	0.26777E 01	0.96000E 00	0.15600E 01
134	569.79	0.30572E 02	0.46404E 01	0.16830E-01	0.23674E-01	0.26899E 01	0.23675E 01	0.10000E 01	0.14867E 01
135	1085.37	-0.31167E-02	-0.62758E-03	-0.42030E-05	-0.59122E-05	-0.36360E-03	-0.32019E-03	0.70000E-02	0.
136	1085.37	-0.31167E-02	-0.61645E-03	-0.41284E-05	-0.58073E-05	-0.35734E-03	-0.31451E-03	0.70000E-02	0.
137	544.35	0.22431E 02	0.34984E 01	0.12411E-01	0.17459E-01	0.20280E 01	0.17849E 01	0.39000E-01	0.14961E 01
138	542.68	0.20545E 02	0.31858E 01	0.11286E-01	0.15876E-01	0.18467E 01	0.16254E 01	0.78000E-01	0.13854E 01
139	1085.37	-0.31167E-02	-0.61948E-03	-0.41487E-05	-0.58359E-05	-0.35910E-03	-0.31605E-03	0.11700E-00	0.
140	543.09	0.21175E 02	0.32575E 01	0.11544E-01	0.16239E-01	0.18883E 01	0.16619E 01	0.78000E-01	0.14312E 01
141	551.93	0.10611E 02	0.11295E 01	0.40335E-02	0.56738E-02	0.65478E 00	0.57629E 00	-0.	0.23401E-00
142	552.00	0.91039E 01	0.96911E 00	0.34608E-02	0.48682E-02	0.56177E 00	0.49443E-00	-0.	0.21298E-00
143	543.15	0.18315E 02	0.28038E 01	0.99367E-02	0.13978E-01	0.16253E 01	0.14305E 01	0.78000E-01	0.13251E 01
144	1085.37	-0.31167E-02	-0.61543E-03	-0.41216E-05	-0.57978E-05	-0.35675E-03	-0.31399E-03	0.70000E-02	0.
145	546.37	0.22265E 02	0.34035E 01	0.12095E-01	0.17014E-01	0.19729E 01	0.17364E 01	0.70000E-02	0.17225E 01
146	544.24	0.19935E 02	0.30587E 01	0.10850E-01	0.15263E-01	0.17731E 01	0.15605E 01	0.39000E-01	0.14826E 01
147	1085.37	-0.31167E-02	-0.61442E-03	-0.41148E-05	-0.57862E-05	-0.35617E-03	-0.31347E-03	0.78000E-01	0.
148	1085.37	-0.31167E-02	-0.61948E-03	-0.41487E-05	-0.58359E-05	-0.35910E-03	-0.31605E-03	0.11700E-00	0.
149	589.52	0.52040E 02	0.85095E 01	0.31406E-01	0.44177E-01	0.49328E 01	0.43414E 01	0.70000E-02	0.17819E 01
150	588.49	0.51243E 02	0.84142E 01	0.31026E-01	0.43643E-01	0.48776E 01	0.42929E 01	0.70000E-02	0.17493E 01
151	584.55	0.49862E 02	0.81700E 01	0.30019E-01	0.42227E-01	0.47360E 01	0.41683E 01	0.70000E-02	0.17409E 01
152	585.11	0.53054E 02	0.83807E 01	0.30809E-01	0.43338E-01	0.48561E 01	0.42758E 01	0.39000E-01	0.16939E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	584.57	0.53464E 02	0.84429E 01	0.31023E-01	0.43639E-01	0.48942E 01	0.43075E 01	0.39000E-01	0.17353E 01
154	582.21	0.52300E 02	0.81947E 01	0.30047E-01	0.42267E-01	0.47503E 01	0.41808E 01	0.78000E-01	0.17180E 01
155	583.31	0.53000E 02	0.86784E 01	0.31852E-01	0.44806E-01	0.50307E 01	0.44276E 01	0.39000E-01	0.17762E 01
156	1085.37	-0.31167E-02	-0.64074E-03	-0.42911E-05	-0.60362E-05	-0.37142E-03	-0.32690E-03	0.39000E-01	0.
157	579.26	0.50079E 02	0.81819E 01	0.29922E-01	0.42091E-01	0.47429E 01	0.41743E 01	0.78000E-01	0.18562E 01
158	578.07	0.52520E 02	0.86021E 01	0.31426E-01	0.44206E-01	0.49865E 01	0.43887E 01	0.39000E-01	0.18615E 01
159	580.51	0.51686E 02	0.84769E 01	0.31036E-01	0.43657E-01	0.49139E 01	0.43248E 01	0.78000E-01	0.19042E 01
160	588.41	0.51454E 02	0.84485E 01	0.31150E-01	0.43817E-01	0.48974E 01	0.43103E 01	0.39000E-01	0.18264E 01
161	580.37	0.45834E 02	0.73159E 01	0.26782E-01	0.37673E-01	0.42409E 01	0.37325E 01	0.43000E-01	0.20481E 01
162	583.37	0.47304E 02	0.75873E 01	0.27849E-01	0.39175E-01	0.43982E 01	0.38710E 01	0.43000E-01	0.19491E 01
163	581.62	0.44287E 02	0.71081E 01	0.26050E-01	0.36643E-01	0.41204E 01	0.36265E 01	0.85000E-01	0.19629E 01
164	580.41	0.41770E 02	0.66673E 01	0.24408E-01	0.34334E-01	0.38649E 01	0.34016E 01	0.12800E-00	0.19262E 01
165	580.35	0.48209E 02	0.77197E 01	0.28260E-01	0.39752E-01	0.44750E 01	0.39385E 01	0.43000E-01	0.17879E 01
166	577.78	0.44581E 02	0.71058E 01	0.25953E-01	0.36507E-01	0.41191E 01	0.36253E 01	0.85000E-01	0.17506E 01
167	706.48	-0.32096E 03	-0.54709E 02	-0.22555E-00	-0.31728E-00	-0.31714E 02	-0.27912E 02	0.43000E-01	0.
168	581.65	0.41774E 02	0.67479E 01	0.24730E-01	0.34787E-01	0.39116E 01	0.34427E 01	0.12800E-00	0.17501E 01
169	584.41	0.44637E 02	0.71982E 01	0.26445E-01	0.37200E-01	0.41726E 01	0.36725E 01	0.85000E-01	0.15225E 01
170	583.32	0.42681E 02	0.68456E 01	0.25126E-01	0.35343E-01	0.39682E 01	0.34926E 01	0.12800E-00	0.15793E 01
171	578.80	0.45365E 02	0.72348E 01	0.26448E-01	0.37204E-01	0.41939E 01	0.36911E 01	0.85000E-01	0.14848E 01
172	592.08	0.55174E 02	0.89058E 01	0.32944E-01	0.46341E-01	0.51625E 01	0.45437E 01	0.43000E-01	0.14324E 01
173	583.31	0.42038E 02	0.67749E 01	0.24866E-01	0.34978E-01	0.39273E 01	0.34565E 01	0.12800E-00	0.14436E 01
174	582.73	0.46987E 02	0.75339E 01	0.27637E-01	0.38877E-01	0.43672E 01	0.38437E 01	0.85000E-01	0.14020E 01
175	591.63	0.55110E 02	0.88504E 01	0.32725E-01	0.46034E-01	0.51304E 01	0.45154E 01	0.43000E-01	0.15388E 01
176	590.21	0.53842E 02	0.86402E 01	0.31908E-01	0.44884E-01	0.50085E 01	0.44081E 01	0.43000E-01	0.15153E 01
177	580.73	0.41204E 02	0.66099E 01	0.24205E-01	0.34048E-01	0.38316E 01	0.33723E 01	0.12800E-00	0.15407E 01
178	582.94	0.45777E 02	0.73406E 01	0.26933E-01	0.37886E-01	0.42552E 01	0.37451E 01	0.85000E-01	0.15136E 01
179	593.11	0.53975E 02	0.87032E 01	0.32224E-01	0.45328E-01	0.50451E 01	0.44403E 01	0.70000E-02	0.19130E 01
180	1085.37	-0.31167E-02	-0.63264E-03	-0.42369E-05	-0.59599E-05	-0.36673E-03	-0.32277E-03	0.70000E-02	0.
181	580.03	0.47341E 02	0.76159E 01	0.27872E-01	0.39206E-01	0.44148E 01	0.38856E 01	0.70000E-02	0.20272E 01
182	579.56	0.48363E 02	0.78032E 01	0.28545E-01	0.40154E-01	0.45234E 01	0.39811E 01	0.70000E-02	0.20382E 01
183	581.39	0.42649E 02	0.68442E 01	0.25078E-01	0.35276E-01	0.39675E 01	0.34919E 01	0.32000E-01	0.18601E 01
184	581.84	0.40124E 02	0.64819E 01	0.23760E-01	0.33422E-01	0.37574E 01	0.33070E 01	0.32000E-01	0.16159E 01
185	564.78	0.30460E 02	0.48749E 01	0.17603E-01	0.24762E-01	0.28259E 01	0.24872E 01	0.64000E-01	0.14892E 01
186	576.23	0.40040E 02	0.64281E 01	0.23446E-01	0.32980E-01	0.37262E 01	0.32795E 01	0.64000E-01	0.15772E 01
187	584.32	0.45841E 02	0.74156E 01	0.27242E-01	0.38320E-01	0.42986E 01	0.37833E 01	0.70000E-02	0.18938E 01
188	585.65	0.49306E 02	0.81092E 01	0.29825E-01	0.41954E-01	0.47007E 01	0.41372E 01	0.70000E-02	0.20434E 01
189	541.16	0.62966E 01	0.10311E 01	0.36479E-02	0.51315E-02	0.59769E 00	0.52604E 00	0.10600E 01	0.18137E 01
190	541.09	0.49439E 01	0.82572E 00	0.29212E-02	0.41092E-02	0.47865E-00	0.42127E-00	0.10640E 01	0.24390E 01
191	541.62	0.42468E 01	0.71335E 00	0.25248E-02	0.35516E-02	0.41351E-00	0.36394E-00	0.11080E 01	0.37216E 01
192	540.96	0.42810E 01	0.71496E 00	0.25291E-02	0.35576E-02	0.41445E-00	0.36477E-00	0.11080E 01	0.35579E 01
193	550.05	0.46374E 01	0.76668E 00	0.27333E-02	0.38448E-02	0.44643E-00	0.39115E-00	0.16580E 01	0.32616E 01
194	549.66	0.46275E 01	0.76137E 00	0.27134E-02	0.38169E-02	0.44135E-00	0.38844E-00	0.11700E 01	0.34373E 01
195	550.36	0.47096E 01	0.77875E 00	0.27771E-02	0.39064E-02	0.45143E-00	0.39731E-00	0.16740E 01	0.31808E 01
196	552.07	0.47990E 01	0.79064E 00	0.28236E-02	0.39719E-02	0.45832E-00	0.40338E-00	0.16950E 01	0.34576E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
57	1	4.42	154.42	0.05	-0.	1	C58	2.65	2	10.19	1852.10	1872.70	42	C55	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.906005E 02	0.379791E-01	0.475089E 04	0.351702E-04	0.733864E-07	0.229218E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731484E 00	0.622490E 01	0.925480E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	578.51	0.48677E 02	0.64724E 01	0.19358E-01	0.36009E-02	0.10398E 01	0.69936E 00	-0.	0.99154E 00
2	985.77	0.87682E 00	0.15049E-00	0.64110E-03	0.11925E-03	0.24176E-01	0.16261E-01	-0.30000E-01	0.
3	818.24	0.15324E-00	0.26580E-01	0.96310E-04	0.17915E-04	0.42699E-02	0.28720E-02	-0.60000E-01	0.
4	571.93	0.42398E 02	0.66647E 01	0.19839E-01	0.36903E-02	0.10706E 01	0.72013E 00	-0.90000E-01	0.99176E 00
5	565.29	0.38760E 02	0.62249E 01	0.18441E-01	0.34304E-02	0.10000E 01	0.67261E 00	-0.20000E-00	0.98508E 00
6	565.49	0.35059E 02	0.56311E 01	0.16685E-01	0.31036E-02	0.90461E 00	0.60845E 00	-0.40000E-00	0.99197E 00
7	565.84	0.29867E 02	0.48210E 01	0.14288E-01	0.26578E-02	0.77447E 00	0.52092E 00	-0.60000E 00	0.98418E 00
8	948.19	0.41766E-00	0.81087E-01	0.33229E-03	0.61810E-04	0.13026E-01	0.87616E-02	-0.80000E 00	0.
9	568.38	0.29515E 02	0.46954E 01	0.13941E-01	0.25932E-02	0.75429E 00	0.50734E 00	-0.90000E 00	0.10883E 01
10	569.50	0.26982E 02	0.43503E 01	0.12927E-01	0.24046E-02	0.69885E 00	0.47006E-00	-0.98000E 00	0.10639E 01
11	542.64	0.22332E 01	0.38458E-00	0.11212E-02	0.20855E-03	0.61781E-01	0.41554E-01	-0.11220E 01	0.23034E 01
12	545.90	0.27517E 01	0.40452E-00	0.11820E-02	0.21987E-03	0.64985E-01	0.43709E-01	-0.11890E 01	0.13015E 01
13	548.45	0.23127E 01	0.35101E-00	0.10275E-02	0.19113E-03	0.56388E-01	0.37927E-01	-0.13340E 01	0.13054E 01
14	547.46	0.18208E 01	0.31440E-00	0.91967E-03	0.17107E-03	0.50506E-01	0.33971E-01	-0.14400E 01	0.10359E 01
15	679.09	-0.27705E 03	-0.41321E 02	-0.13331E-00	-0.24798E-01	-0.66380E 01	-0.44648E 01	0.30000E-01	0.
16	964.74	0.39844E-00	0.73706E-01	0.30718E-03	0.57140E-04	0.11840E-01	0.79641E-02	0.60000E-01	0.
17	572.48	0.44189E 02	0.69482E 01	0.20691E-01	0.38488E-02	0.11162E 01	0.75077E 00	0.90000E-01	0.98580E 00
18	575.96	0.43128E 02	0.69671E 01	0.20799E-01	0.38689E-02	0.11192E 01	0.75281E 00	0.20000E-00	0.98206E 00
19	602.15	0.45155E 02	0.73989E 01	0.22514E-01	0.41880E-02	0.11886E 01	0.79946E 00	0.40000E-00	0.97737E 00
20	626.06	0.55691E 02	0.92860E 01	0.28764E-01	0.53505E-02	0.14918E 01	0.10034E 01	0.60000E 00	0.96092E 00
21	640.09	0.65218E 02	0.10314E 02	0.32287E-01	0.60059E-02	0.16568E 01	0.11144E 01	0.92000E 00	0.10136E 01
22	603.23	0.45548E 02	0.70639E 01	0.21512E-01	0.40016E-02	0.11348E 01	0.76327E 00	0.10400E 01	0.10715E 01
23	597.27	0.41372E 02	0.64129E 01	0.19444E-01	0.36169E-02	0.10302E 01	0.69293E 00	0.10600E 01	0.97759E 00
24	577.79	0.29242E 02	0.46986E 01	0.14045E-01	0.26126E-02	0.75480E 00	0.50769E 00	0.10840E 01	0.97378E 00
25	554.91	0.97652E 01	0.14502E 01	0.42647E-02	0.79329E-03	0.23297E-00	0.15670E-00	0.12070E 01	0.95189E 00
26	557.16	0.10424E 02	0.16348E 01	0.48151E-02	0.89567E-03	0.26262E-00	0.17664E-00	0.12490E 01	0.94377E 00
27	560.93	0.11508E 02	0.17793E 01	0.52548E-02	0.97746E-03	0.28583E-00	0.19225E-00	0.13340E 01	0.95033E 00
28	558.69	0.94249E 01	0.16184E 01	0.47721E-02	0.88768E-03	0.25999E-00	0.17487E-00	0.14540E 01	0.96299E 00
29	553.85	0.66384E 01	0.11032E 01	0.32417E-02	0.60300E-03	0.17722E-00	0.11920E-00	0.16580E 01	0.99828E 00
30	554.82	0.75325E 01	0.12677E 01	0.37278E-02	0.69343E-03	0.20366E-00	0.13698E-00	0.20410E 01	0.10141E 01
31	557.09	0.70197E 01	0.11829E 01	0.34841E-02	0.64808E-03	0.19003E-00	0.12782E-00	0.22480E 01	0.10015E 01
32	572.96	0.44607E 02	0.68465E 01	0.20395E-01	0.37938E-02	0.10999E 01	0.73978E 00	-0.60000E-01	0.10063E 01
33	581.73	0.46458E 02	0.65831E 01	0.19735E-01	0.36710E-02	0.10575E 01	0.71132E 00	-0.30000E-01	0.98845E 00
34	575.85	0.46952E 02	0.72179E 01	0.21546E-01	0.40079E-02	0.11595E 01	0.77991E 00	0.30000E-01	0.99038E 00
35	570.59	0.42666E 02	0.67019E 01	0.19930E-01	0.37073E-02	0.10766E 01	0.72415E 00	0.60000E-01	0.99268E 00
36	566.60	0.38312E 02	0.61574E 01	0.18259E-01	0.33964E-02	0.98916E 00	0.66532E 00	-0.86800E 00	0.54815E 00
37	553.61	0.23895E 02	0.37098E 01	0.10899E-01	0.20274E-02	0.59596E 00	0.40085E-00	-0.91100E 00	0.36778E-00
38	580.75	0.29629E 02	0.47532E 01	0.14239E-01	0.26487E-02	0.76358E 00	0.51359E 00	-0.95300E 00	0.52502E 00
39	1077.91	0.45038E-00	0.91157E-01	0.43018E-03	0.80019E-04	0.14644E-01	0.98496E-02	0.51000E-01	0.
40	1029.76	0.54441E 00	0.10810E-00	0.48292E-03	0.89831E-04	0.17366E-01	0.11681E-01	0.29000E-01	0.
41	1085.37	-0.31167E-02	-0.62900E-03	-0.29945E-05	-0.55702E-06	-0.10105E-03	-0.67965E-04	0.70000E-02	0.
42	532.92	0.30390E-00	0.47628E-01	0.13791E-03	0.25652E-04	0.76512E-02	0.51463E-02	-0.86800E 00	0.28516E-02
43	533.91	0.31118E-00	0.48921E-01	0.14175E-03	0.26367E-04	0.78589E-02	0.52860E-02	-0.91100E 00	0.36443E-02
44	537.66	0.23585E 01	0.36943E-00	0.10732E-02	0.19963E-03	0.59347E-01	0.39917E-01	-0.95300E 00	0.33505E-01
45	565.57	0.27466E 02	0.45352E 01	0.13438E-01	0.24997E-02	0.72856E 00	0.49004E-00	-0.10400E 01	0.10335E 01
46	1085.37	-0.31167E-02	-0.63426E-03	-0.30195E-05	-0.56168E-06	-0.10189E-03	-0.68533E-04	0.70000E-02	0.
47	1107.32	0.31013E-00	0.63650E-01	0.31111E-03	0.57870E-04	0.10225E-01	0.68775E-02	0.29000E-01	0.
48	1127.63	-0.62390E-02	-0.12954E-02	-0.64920E-05	-0.12076E-05	-0.20810E-03	-0.13997E-03	0.51000E-01	0.
49	531.29	0.19793E-00	0.30892E-01	0.89345E-04	0.16619E-04	0.49626E-02	0.33379E-02	0.70000E-02	0.31747E-02
50	531.37	0.11948E-00	0.18709E-01	0.54113E-04	0.10066E-04	0.30055E-02	0.20215E-02	0.29000E-01	0.37246E-02
51	1085.37	-0.31167E-02	-0.63062E-03	-0.30022E-05	-0.55845E-06	-0.10131E-03	-0.68140E-04	0.51000E-01	0.
52	533.18	-0.10382E-02	-0.16315E-03	-0.47250E-06	-0.87891E-07	-0.26210E-04	-0.17629E-04	-0.86800E 00	-0.15526E-04
53	535.12	0.38361E-01	0.57421E-02	0.16652E-04	0.30974E-05	0.92244E-03	0.62044E-03	-0.91100E 00	0.59943E-03
54	535.23	-0.22334E-01	-0.34936E-02	-0.10132E-04	-0.18847E-05	-0.56122E-03	-0.37749E-03	-0.95300E 00	-0.36751E-03

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	556.67	0.15151E 02	0.24895E 01	0.73300E-02	0.13635E-02	0.39992E-00	0.26899E-00	-0.10400E 01	0.79863E 00
56	555.41	0.11943E 02	0.20228E 01	0.59506E-02	0.11069E-02	0.32496E-00	0.21857E-00	-0.10680E 01	0.71301E 00
57	551.85	0.95262E 01	0.15611E 01	0.45806E-02	0.85206E-03	0.25078E-00	0.16868E-00	-0.10400E 01	0.77443E 00
58	561.97	0.16284E 02	0.29050E 01	0.85859E-02	0.15971E-02	0.46668E-00	0.31390E-00	-0.10680E 01	0.85507E 00
59	549.86	0.11118E 02	0.18199E 01	0.53326E-02	0.99193E-03	0.29235E-00	0.19664E-00	-0.10400E 01	0.86902E 00
60	551.94	0.88852E 01	0.15020E 01	0.44077E-02	0.81989E-03	0.24129E-00	0.16230E-00	-0.10680E 01	0.66135E 00
61	543.78	0.10514E 01	0.17465E-00	0.50957E-03	0.94787E-04	0.28057E-01	0.18872E-01	-0.11220E 01	0.71687E 00
62	548.58	0.13990E 01	0.21234E-00	0.62163E-03	0.11563E-03	0.34111E-01	0.22944E-01	-0.13340E 01	0.15182E 01
63	544.04	0.12405E 01	0.21379E-00	0.62388E-03	0.11605E-03	0.34345E-01	0.23101E-01	-0.11220E 01	0.69194E 00
64	548.54	0.12878E 01	0.19546E-00	0.57220E-03	0.10644E-03	0.31400E-01	0.21120E-01	-0.13340E 01	0.17579E 01
65	548.01	0.12935E 01	0.22342E-00	0.65380E-03	0.12162E-03	0.35891E-01	0.24141E-01	0.14400E 01	0.91958E 00
66	547.29	0.19766E 01	0.32478E-00	0.94995E-03	0.17670E-03	0.52175E-01	0.35094E-01	0.16130E 01	0.82175E 00
67	547.90	0.24255E 01	0.39131E-00	0.11450E-02	0.21299E-03	0.62862E-01	0.42282E-01	0.17200E 01	0.89322E 00
68	547.57	0.16338E 01	0.27056E-00	0.79149E-03	0.14723E-03	0.43464E-01	0.29234E-01	-0.16130E 01	0.79301E 00
69	547.84	0.24883E 01	0.40144E-00	0.11746E-02	0.21849E-03	0.64489E-01	0.43376E-01	-0.18280E 01	0.97439E 00
70	546.00	0.31543E 01	0.46453E-00	0.13574E-02	0.25250E-03	0.74624E-01	0.50193E-01	-0.11650E 01	0.15186E 01
71	546.14	0.15164E 01	0.12772E-00	0.37325E-03	0.69429E-04	0.20517E-01	0.13800E-01	-0.12050E 01	0.11346E 01
72	548.96	0.24452E 01	0.35575E-00	0.10417E-02	0.19378E-03	0.57149E-01	0.38439E-01	-0.12120E 01	0.12032E 01
73	545.66	0.28026E 01	0.41266E-00	0.12056E-02	0.22425E-03	0.66292E-01	0.44589E-01	-0.11650E 01	0.18612E 01
74	544.94	0.10873E 01	0.91515E-01	0.26722E-03	0.49707E-04	0.14701E-01	0.98884E-02	-0.12050E 01	0.12889E 01
75	920.70	-0.43131E 01	-0.74903E 00	-0.29865E-02	-0.55553E-03	-0.12033E-00	-0.80934E-01	-0.12120E 01	0.
76	539.93	0.24145E 01	0.36350E-00	0.10577E-02	0.19674E-03	0.58394E-01	0.39277E-01	0.10840E 01	0.10090E 01
77	541.52	0.21387E 01	0.34597E-00	0.10078E-02	0.18747E-03	0.55579E-01	0.37383E-01	0.11220E 01	0.11197E 01
78	548.81	0.26260E 01	0.39265E-00	0.11497E-02	0.21386E-03	0.63077E-01	0.42427E-01	0.13340E 01	0.15234E 01
79	544.57	0.10426E 01	0.17542E-00	0.51209E-03	0.95256E-04	0.28180E-01	0.18954E-01	-0.11890E 01	0.13680E 01
80	548.12	0.14374E 01	0.21703E-00	0.63514E-03	0.11814E-03	0.34864E-01	0.23450E-01	-0.13340E 01	0.13032E 01
81	542.25	0.44676E-00	0.72300E-01	0.21072E-03	0.39196E-04	0.11615E-01	0.78122E-02	-0.11470E 01	0.98095E 00
82	542.53	0.17143E-01	0.28785E-02	0.83910E-05	0.15608E-05	0.46242E-03	0.31103E-03	-0.11890E 01	0.
83	546.50	0.46743E 01	0.78660E 00	0.22994E-02	0.42772E-03	0.12636E-00	0.84994E-01	-0.10840E 01	0.10317E 01
84	543.63	0.86857E 00	0.12774E-00	0.37267E-03	0.69322E-04	0.20521E-01	0.13803E-01	-0.11890E 01	0.10889E 01
85	547.93	0.11351E 01	0.16734E-00	0.48967E-03	0.91085E-04	0.26883E-01	0.18082E-01	-0.13090E 01	0.10041E 01
86	547.70	0.94650E 00	0.14144E-00	0.41380E-03	0.76973E-04	0.22721E-01	0.15283E-01	-0.13340E 01	0.88962E 00
87	601.37	0.32796E 02	0.49701E 01	0.15115E-01	0.28116E-02	0.79842E 00	0.53703E 00	0.11990E 01	0.96808E 00
88	569.69	0.20236E 02	0.30403E 01	0.90356E-02	0.16807E-02	0.48841E-00	0.32851E-00	0.12070E 01	0.96970E 00
89	561.41	0.90577E 01	0.13777E 01	0.40702E-02	0.75712E-03	0.22132E-00	0.14886E-00	0.13340E 01	0.95548E 00
90	582.25	0.27276E 02	0.39857E 01	0.11953E-01	0.22234E-02	0.64028E 00	0.43066E-00	0.12070E 01	0.97279E 00
91	567.03	0.12877E 02	0.20306E 01	0.60233E-02	0.11204E-02	0.32621E-00	0.21941E-00	0.12490E 01	0.96507E 00
92	564.12	0.10549E 02	0.16150E 01	0.47806E-02	0.88926E-03	0.25945E-00	0.17451E-00	0.13340E 01	0.96458E 00
93	557.65	0.78525E 01	0.13397E 01	0.39472E-02	0.73423E-03	0.21521E-00	0.14475E-00	0.14900E 01	0.98075E 00
94	553.83	0.28151E 01	0.29783E-00	0.87515E-03	0.16279E-03	0.47845E-01	0.32181E-01	-0.	0.11775E 01
95	561.43	0.99127E 01	0.10608E 01	0.31339E-02	0.58294E-03	0.17040E-00	0.11462E-00	-0.	0.11465E 01
96	547.97	0.95272E 00	0.10047E-00	0.29399E-03	0.54687E-04	0.16140E-01	0.10856E-01	-0.	0.62829E 00
97	548.95	0.16774E 01	0.17698E-00	0.51826E-03	0.96403E-04	0.28432E-01	0.19123E-01	-0.	0.62826E 00
98	549.46	0.23704E 01	0.25197E-00	0.73812E-03	0.13730E-03	0.40478E-01	0.27226E-01	-0.	0.70394E 00

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
58	1	4.41	154.41	0.05	-0.	2	C58	2.65	2	10.19	1847.30	1886.20	45	C55	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.913152E 02	0.378254E-01	0.476953E 04	0.347538E-04	0.739654E-07	0.225613E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731878E 00	0.621742E 01	0.923970E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	541.46	0.34057E 01	0.55521E 00	0.15985E-02	0.29972E-03	0.89298E-01	0.60089E-01	-0.10600E 01	0.10574E 01
100	542.70	0.18483E 01	0.31066E-00	0.89518E-03	0.16785E-03	0.49966E-01	0.33622E-01	-0.10840E 01	0.10725E 01
101	542.73	0.14795E 01	0.24322E-00	0.70087E-03	0.13142E-03	0.39120E-01	0.26324E-01	-0.11080E 01	0.14403E 01
102	570.69	0.26765E 02	0.44552E 01	0.13093E-01	0.24550E-02	0.71658E 00	0.48219E-00	-0.11080E 01	0.97201E 00
103	579.91	0.40070E 02	0.68748E 01	0.20337E-01	0.38133E-02	0.11057E 01	0.74405E 00	-0.10800E 01	0.10984E 01
104	557.61	0.16021E 01	0.25621E-00	0.74601E-03	0.13988E-03	0.41208E-01	0.27729E-01	0.85000E 00	0.24553E-01
105	633.60	0.70082E 02	0.11045E 02	0.33981E-01	0.63717E-02	0.17765E 01	0.11954E 01	0.94000E 00	0.10320E 01
106	639.75	0.72209E 02	0.11321E 02	0.34991E-01	0.65610E-02	0.18209E 01	0.12253E 01	0.96000E 00	0.10300E 01
107	631.62	0.69162E 02	0.10797E 02	0.33170E-01	0.62196E-02	0.17366E 01	0.11686E 01	0.98000E 00	0.10206E 01
108	631.20	0.65229E 02	0.10233E 02	0.31426E-01	0.58925E-02	0.16458E 01	0.11075E 01	0.10000E 01	0.10202E 01
109	614.26	0.53648E 02	0.83692E 01	0.25382E-01	0.47594E-02	0.13461E 01	0.90579E 00	0.10200E 01	0.10159E 01
110	637.05	0.67008E 02	0.10580E 02	0.32634E-01	0.61190E-02	0.17016E 01	0.11450E 01	0.80000E-01	0.10331E 01
111	632.31	0.68858E 02	0.10754E 02	0.33053E-01	0.61977E-02	0.17296E 01	0.11639E 01	0.10000E-00	0.10321E 01
112	646.84	0.70385E 02	0.11132E 02	0.34591E-01	0.64861E-02	0.17905E 01	0.12048E 01	0.12000E-00	0.10272E 01
113	637.84	0.70411E 02	0.11122E 02	0.34325E-01	0.64363E-02	0.17888E 01	0.12037E 01	0.14000E-00	0.10231E 01
114	625.51	0.65165E 02	0.10227E 02	0.31275E-01	0.58642E-02	0.16448E 01	0.11068E 01	0.80000E-01	0.10395E 01
115	627.36	0.65431E 02	0.10244E 02	0.31370E-01	0.58821E-02	0.16476E 01	0.11087E 01	0.10000E-00	0.10375E 01
116	629.92	0.67083E 02	0.10588E 02	0.32484E-01	0.60910E-02	0.17029E 01	0.11459E 01	0.12000E-00	0.10360E 01
117	641.67	0.68395E 02	0.10825E 02	0.33506E-01	0.62825E-02	0.17411E 01	0.11716E 01	0.14000E-00	0.10272E 01
118	626.90	0.62592E 02	0.99126E 01	0.30345E-01	0.56900E-02	0.15943E 01	0.10728E 01	0.10000E-00	0.10405E 01
119	624.92	0.60759E 02	0.95644E 01	0.29236E-01	0.54820E-02	0.15383E 01	0.10351E 01	0.15000E-00	0.10432E 01
120	627.52	0.60015E 02	0.94759E 01	0.29021E-01	0.54417E-02	0.15241E 01	0.10256E 01	0.20000E-00	0.11653E 01
121	625.24	0.60124E 02	0.95134E 01	0.29087E-01	0.54541E-02	0.15301E 01	0.10296E 01	0.25000E-00	0.10335E 01
122	617.78	0.57423E 02	0.90504E 01	0.27519E-01	0.51600E-02	0.14556E 01	0.97951E 00	0.30000E-00	0.10340E 01
123	1122.87	-0.57351E 00	-0.11395E-00	-0.55651E-03	-0.10435E-03	-0.18327E-01	-0.12332E-01	0.35000E-00	0.
124	617.13	0.60937E 02	0.97128E 01	0.29519E-01	0.55351E-02	0.15622E 01	0.10512E 01	0.38000E-00	0.10278E 01
125	623.67	0.64255E 02	0.10362E 02	0.31645E-01	0.59336E-02	0.16666E 01	0.11215E 01	0.45000E-00	0.10240E 01
126	614.46	0.60674E 02	0.98641E 01	0.29921E-01	0.56103E-02	0.15865E 01	0.10676E 01	0.61000E 00	0.10207E 01
127	576.00	0.35512E 02	0.56822E 01	0.16762E-01	0.31430E-02	0.91392E 00	0.61498E 00	0.70000E 00	0.10098E 01
128	556.27	0.17002E 02	0.26997E 01	0.78534E-02	0.14726E-02	0.43421E-00	0.29218E-00	0.75000E 00	0.10050E 01
129	606.91	0.61890E 02	0.10102E 02	0.30473E-01	0.57140E-02	0.16248E 01	0.10933E 01	0.70000E 00	0.10012E 01
130	618.83	0.72195E 02	0.11859E 02	0.36088E-01	0.67667E-02	0.19074E 01	0.12835E 01	0.80000E 00	0.10132E 01
131	564.87	0.27887E 02	0.42214E 01	0.12355E-01	0.23166E-02	0.67897E 00	0.45688E-00	0.90000E 00	0.10116E 01
132	591.50	0.53593E 02	0.82592E 01	0.24637E-01	0.46195E-02	0.13284E 01	0.89388E 00	0.90000E 00	0.10175E 01
133	591.72	0.52017E 02	0.79769E 01	0.23798E-01	0.44624E-02	0.12830E 01	0.86333E 00	0.96000E 00	0.10220E 01
134	590.39	0.46935E 02	0.75114E 01	0.22388E-01	0.41979E-02	0.12081E 01	0.81295E 00	0.10000E 01	0.10227E 01
135	1124.31	0.13973E-00	0.28560E-01	0.13973E-03	0.26200E-04	0.45935E-02	0.30910E-02	0.70000E-02	0.
136	1009.12	0.11673E 01	0.22397E-00	0.96126E-03	0.18024E-03	0.36023E-01	0.24240E-01	0.70000E-02	0.
137	567.06	0.32264E 02	0.50960E 01	0.14938E-01	0.28009E-02	0.81964E 00	0.55154E 00	0.39000E-01	0.10024E 01
138	565.86	0.31679E 02	0.49761E 01	0.14574E-01	0.27327E-02	0.80035E 00	0.53855E 00	0.78000E-01	0.10255E 01
139	1085.37	-0.31167E-02	-0.61948E-03	-0.28937E-05	-0.54258E-06	-0.99637E-04	-0.67046E-04	0.11700E-00	0.
140	566.74	0.31369E 02	0.48897E 01	0.14330E-01	0.26869E-02	0.78645E 00	0.52920E 00	0.78000E-01	0.98930E 00
141	633.63	0.78026E 02	0.86805E 01	0.26707E-01	0.50077E-02	0.13962E 01	0.93948E 00	-0.	0.49699E-00
142	595.17	0.33927E 02	0.36981E 01	0.11060E-01	0.20739E-02	0.59479E 00	0.40024E-00	-0.	0.38578E-00
143	565.64	0.29494E 02	0.45719E 01	0.13388E-01	0.25103E-02	0.73534E 00	0.49481E-00	0.78000E-01	0.99133E 00
144	1085.37	-0.31167E-02	-0.61543E-03	-0.28747E-05	-0.53903E-06	-0.98986E-04	-0.66608E-04	0.70000E-02	0.
145	567.07	0.29539E 02	0.46139E 01	0.13525E-01	0.25360E-02	0.74210E 00	0.49936E-00	0.70000E-02	0.98939E 00
146	566.53	0.29892E 02	0.46436E 01	0.13607E-01	0.25513E-02	0.74688E 00	0.50258E 00	0.39000E-01	0.98461E 00
147	1125.60	0.14779E 01	0.29589E-00	0.14499E-02	0.27187E-03	0.47591E-01	0.32024E-01	0.78000E-01	0.
148	1085.37	-0.31167E-02	-0.61948E-03	-0.28937E-05	-0.54258E-06	-0.99637E-04	-0.67046E-04	0.11700E-00	0.
149	620.17	0.59219E 02	0.98436E 01	0.29984E-01	0.56222E-02	0.15832E 01	0.10654E 01	0.70000E-02	0.10073E 01
150	622.16	0.59608E 02	0.99659E 01	0.30401E-01	0.57005E-02	0.16029E 01	0.10786E 01	0.70000E-02	0.10060E 01
151	617.75	0.58057E 02	0.96836E 01	0.29445E-01	0.55211E-02	0.15575E 01	0.10481E 01	0.70000E-02	0.10349E 01
152	623.64	0.61019E 02	0.98399E 01	0.30050E-01	0.56346E-02	0.15826E 01	0.10650E 01	0.39000E-01	0.10389E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	621.12	0.60946E 02	0.98151E 01	0.29918E-01	0.56099E-02	0.15786E 01	0.10623E 01	0.39000E-01	0.10369E 01
154	619.27	0.60543E 02	0.96770E 01	0.29457E-01	0.55234E-02	0.15564E 01	0.10473E 01	0.78000E-01	0.10330E 01
155	616.66	0.59242E 02	0.98757E 01	0.30004E-01	0.56260E-02	0.15884E 01	0.10688E 01	0.39000E-01	0.10227E 01
156	961.46	0.30691E 01	0.60014E 00	0.24517E-02	0.45972E-03	0.96525E-01	0.64952E-01	0.39000E-01	0.
157	605.07	0.54218E 02	0.89826E 01	0.27060E-01	0.50739E-02	0.14447E 01	0.97217E 00	0.78000E-01	0.10160E 01
158	603.49	0.56008E 02	0.93005E 01	0.27985E-01	0.52474E-02	0.14959E 01	0.10066E 01	0.39000E-01	0.10118E 01
159	601.39	0.52798E 02	0.87576E 01	0.26311E-01	0.49336E-02	0.14086E 01	0.94782E 00	0.78000E-01	0.10022E 01
160	613.23	0.55198E 02	0.91849E 01	0.27835E-01	0.52192E-02	0.14773E 01	0.99406E 00	0.39000E-01	0.10032E 01
161	588.77	0.45535E 02	0.73015E 01	0.21737E-01	0.40758E-02	0.11744E 01	0.79023E 00	0.43000E-01	0.10079E 01
162	592.94	0.48425E 02	0.78076E 01	0.23314E-01	0.43715E-02	0.12558E 01	0.84500E 00	0.43000E-01	0.10166E 01
163	590.41	0.46008E 02	0.74195E 01	0.22115E-01	0.41466E-02	0.11933E 01	0.80301E 00	0.85000E-01	0.10120E 01
164	588.15	0.45073E 02	0.72249E 01	0.21500E-01	0.40313E-02	0.11620E 01	0.78194E 00	0.12800E-00	0.10094E 01
165	596.58	0.56179E 02	0.90755E 01	0.27171E-01	0.50948E-02	0.14597E 01	0.98223E 00	0.43000E-01	0.10251E 01
166	595.34	0.56084E 02	0.90250E 01	0.26996E-01	0.50619E-02	0.14516E 01	0.97676E 00	0.85000E-01	0.10320E 01
167	627.55	0.90582E 02	0.14829E 02	0.45417E-01	0.85159E-02	0.23850E 01	0.16049E 01	0.43000E-01	0.10274E 01
168	596.75	0.51988E 02	0.84667E 01	0.25352E-01	0.47536E-02	0.13618E 01	0.91634E 00	0.12800E-00	0.10265E 01
169	616.53	0.69871E 02	0.11463E 02	0.34825E-01	0.65298E-02	0.18438E 01	0.12407E 01	0.85000E-01	0.10256E 01
170	608.27	0.62679E 02	0.10189E 02	0.30766E-01	0.57689E-02	0.16388E 01	0.11028E 01	0.12800E-00	0.10176E 01
171	614.78	0.75050E 02	0.12203E 02	0.37024E-01	0.69423E-02	0.19628E 01	0.13207E 01	0.85000E-01	0.10275E 01
172	685.07	0.11623E 03	0.19696E 02	0.63020E-01	0.11817E-01	0.31678E 01	0.21316E 01	0.43000E-01	0.10219E 01
173	627.66	0.77175E 02	0.12737E 02	0.39012E-01	0.73150E-02	0.20485E 01	0.13785E 01	0.12800E-00	0.10186E 01
174	639.15	0.90950E 02	0.15028E 02	0.46428E-01	0.87055E-02	0.24171E 01	0.16265E 01	0.85000E-01	0.10136E 01
175	674.24	0.10345E 03	0.17350E 02	0.55052E-01	0.10323E-01	0.27906E 01	0.18778E 01	0.43000E-01	0.10322E 01
176	664.01	0.98103E 02	0.16367E 02	0.51525E-01	0.96613E-02	0.26325E 01	0.17714E 01	0.43000E-01	0.10257E 01
177	630.04	0.74138E 02	0.12211E 02	0.37470E-01	0.70258E-02	0.19641E 01	0.13216E 01	0.12800E-00	0.10165E 01
178	642.71	0.83691E 02	0.13854E 02	0.42916E-01	0.80470E-02	0.22283E 01	0.14994E 01	0.85000E-01	0.10153E 01
179	650.86	0.82478E 02	0.13711E 02	0.42735E-01	0.80131E-02	0.22053E 01	0.14840E 01	0.70000E-02	0.10154E 01
180	1124.91	-0.38181E-00	-0.78689E-01	-0.38527E-03	-0.72241E-04	-0.12656E-01	-0.85164E-02	0.70000E-02	0.
181	610.89	0.59860E 02	0.97916E 01	0.29623E-01	0.55545E-02	0.15749E 01	0.10597E 01	0.70000E-02	0.10221E 01
182	608.35	0.61725E 02	0.10115E 02	0.30545E-01	0.57274E-02	0.16269E 01	0.10948E 01	0.70000E-02	0.10161E 01
183	604.09	0.52945E 02	0.86015E 01	0.25893E-01	0.48552E-02	0.13835E 01	0.93093E 00	0.32000E-01	0.10016E 01
184	610.12	0.52043E 02	0.85366E 01	0.25811E-01	0.48398E-02	0.13730E 01	0.92391E 00	0.32000E-01	0.10162E 01
185	589.32	0.44671E 02	0.72460E 01	0.21580E-01	0.40465E-02	0.11654E 01	0.78422E 00	0.64000E-01	0.10119E 01
186	608.79	0.55712E 02	0.91028E 01	0.27497E-01	0.51556E-02	0.14641E 01	0.98518E 00	0.64000E-01	0.10186E 01
187	602.75	0.49351E 02	0.80632E 01	0.24249E-01	0.45469E-02	0.12969E 01	0.87267E 00	0.70000E-02	0.10186E 01
188	617.38	0.65969E 02	0.11036E 02	0.33547E-01	0.62904E-02	0.17750E 01	0.11944E 01	0.70000E-02	0.10023E 01
189	545.12	0.88930E 01	0.14595E 01	0.42126E-02	0.78989E-03	0.23474E-00	0.15796E-00	0.10600E 01	0.10066E 01
190	542.14	0.51299E 01	0.85729E 00	0.24694E-02	0.46302E-03	0.13788E-00	0.92783E-01	0.10840E 01	0.99444E 00
191	541.16	0.24000E 01	0.40304E-00	0.11601E-02	0.21753E-03	0.64824E-01	0.43620E-01	0.11080E 01	0.98144E 00
192	540.33	0.28899E 01	0.48245E-00	0.13879E-02	0.26025E-03	0.77597E-01	0.52215E-01	0.11080E 01	0.99682E 00
193	556.23	0.43247E 01	0.71745E 00	0.20870E-02	0.39133E-03	0.11539E-00	0.77648E-01	0.16580E 01	0.10223E 01
194	555.36	0.38919E 01	0.64238E 00	0.18675E-02	0.35017E-03	0.10332E-00	0.69524E-01	0.11700E 01	0.10174E 01
195	556.14	0.42317E 01	0.70198E 00	0.20419E-02	0.38287E-03	0.11291E-00	0.75975E-01	0.16740E 01	0.10250E 01
196	555.74	0.42956E 01	0.70915E 00	0.20621E-02	0.38667E-03	0.11406E-00	0.76750E-01	0.16950E 01	0.10320E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
61	1	4.38	154.38	-0.	-0.	1	C59	2.70	2	10.04	222.70	1658.70	3	C55	2.90

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.811338E 02	0.492480E-02	0.443238E 04	0.509271E-05	0.657184E-07	0.345790E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725654E 00	0.175400E 01	0.198892E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	556.58	0.19556E 02	0.25691E 01	0.91922E-02	0.12657E-01	0.14647E 01	0.12917E 01	-0.	0.88743E 00
2	1084.78	-0.41931E 01	-0.74883E 00	-0.49913E-02	-0.68726E-02	-0.42693E-00	-0.37650E-00	-0.30000E-01	0.
3	1029.94	-0.74286E-01	-0.14115E-01	-0.86256E-04	-0.11877E-03	-0.80472E-02	-0.70967E-02	-0.60000E-01	0.
4	546.14	0.17346E 02	0.26880E 01	0.95319E-02	0.13125E-01	0.15325E 01	0.13515E 01	-0.90000E-01	0.90235E 00
5	538.07	0.15691E 02	0.24821E 01	0.87414E-02	0.12036E-01	0.14151E 01	0.12480E 01	-0.20000E-00	0.90271E 00
6	535.21	0.14767E 02	0.23321E 01	0.81931E-02	0.11281E-01	0.13296E 01	0.11726E 01	-0.40000E-00	0.99650E 00
7	535.27	0.14432E 02	0.22902E 01	0.80464E-02	0.11079E-01	0.13057E 01	0.11515E 01	-0.60000E 00	0.11258E 01
8	1085.37	-0.31174E-02	-0.63988E-03	-0.42693E-05	-0.58785E-05	-0.36481E-03	-0.32173E-03	-0.80000E 00	0.
9	538.92	0.16497E 02	0.25817E 01	0.90985E-02	0.12528E-01	0.14719E 01	0.12980E 01	-0.90000E 00	0.11034E 01
10	543.60	0.16006E 02	0.25438E 01	0.90007E-02	0.12393E-01	0.14503E 01	0.12790E 01	-0.98000E 00	0.10897E 01
11	540.35	0.73298E 00	0.12606E-00	0.44481E-03	0.61247E-03	0.71871E-01	0.63382E-01	-0.11220E 01	0.16879E 01
12	543.29	0.12390E 01	0.18187E-00	0.64335E-03	0.88585E-03	0.10369E-00	0.91442E-01	-0.11890E 01	0.22350E 01
13	545.69	0.11668E 01	0.17681E-00	0.62673E-03	0.86295E-03	0.10080E-00	0.88896E-01	-0.13340E 01	0.20267E 01
14	545.33	0.86130E 00	0.14854E-00	0.52638E-03	0.72478E-03	0.84689E-01	0.74686E-01	-0.14400E 01	0.14858E 01
15	1126.83	0.45612E-00	0.82782E-01	0.59316E-03	0.81673E-03	0.47196E-01	0.41622E-01	0.30000E-01	0.
16	1085.37	-0.31174E-02	-0.60546E-03	-0.40397E-05	-0.55623E-05	-0.34519E-03	-0.30442E-03	0.60000E-01	0.
17	1085.37	-0.31174E-02	-0.62105E-03	-0.41437E-05	-0.57055E-05	-0.35408E-03	-0.31226E-03	0.90000E-01	0.
18	562.62	0.18604E 02	0.29834E 01	0.10731E-01	0.14776E-01	0.17009E 01	0.15000E 01	0.20000E-00	0.85661E 00
19	571.04	0.21322E 02	0.34352E 01	0.12447E-01	0.17138E-01	0.19585E 01	0.17272E 01	0.40000E-00	0.84908E 00
20	578.29	0.24228E 02	0.39376E 01	0.14359E-01	0.19771E-01	0.22449E 01	0.19798E 01	0.60000E 00	0.83816E 00
21	564.22	0.29805E 02	0.45252E 01	0.16299E-01	0.22443E-01	0.25800E 01	0.22752E 01	0.92000E 00	0.81935E 00
22	552.86	0.17520E 02	0.26434E 01	0.94278E-02	0.12981E-01	0.15071E 01	0.13291E 01	0.10400E 01	0.83430E 00
23	550.79	0.15634E 02	0.23625E 01	0.84110E-02	0.11581E-01	0.13469E 01	0.11878E 01	0.10600E 01	0.84366E 00
24	545.91	0.10565E 02	0.16679E 01	0.59131E-02	0.81419E-02	0.95089E 00	0.83858E 00	0.10840E 01	0.85815E 00
25	543.71	0.17543E 01	0.25891E-00	0.91619E-03	0.12615E-02	0.14761E-00	0.13017E-00	0.12070E 01	0.93405E 00
26	545.67	0.19808E 01	0.30866E-00	0.10941E-02	0.15065E-02	0.17598E-00	0.15519E-00	0.12490E 01	0.92516E 00
27	547.29	0.24795E 01	0.38046E-00	0.13505E-02	0.18595E-02	0.21691E-00	0.19129E-00	0.13340E 01	0.94134E 00
28	547.75	0.23688E 01	0.40430E-00	0.14357E-02	0.19768E-02	0.23050E-00	0.20328E-00	0.14540E 01	0.99714E 00
29	547.16	0.23636E 01	0.39133E-00	0.13889E-02	0.19124E-02	0.22311E-00	0.19676E-00	0.16580E 01	0.14834E 01
30	547.42	0.28556E 01	0.47863E-00	0.16991E-02	0.23395E-02	0.27288E-00	0.24065E-00	0.20410E 01	0.20042E 01
31	549.65	0.31538E 01	0.52927E 00	0.18825E-02	0.25920E-02	0.30175E-00	0.26611E-00	0.22480E 01	0.22000E 01
32	554.84	0.18619E 02	0.28293E 01	0.10108E-01	0.13918E-01	0.16131E 01	0.14225E 01	-0.60000E-01	0.88192E 00
33	558.92	0.19144E 02	0.26790E 01	0.96050E-02	0.13225E-01	0.15274E 01	0.13470E 01	-0.30000E-01	0.89452E 00
34	554.79	0.19275E 02	0.29290E 01	0.10464E-01	0.14408E-01	0.16699E 01	0.14726E 01	0.30000E-01	0.88035E 00
35	551.12	0.17998E 02	0.27967E 01	0.99598E-02	0.13714E-01	0.15945E 01	0.14062E 01	0.60000E-01	0.87569E 00
36	540.03	0.14482E 02	0.22934E 01	0.80900E-02	0.11139E-01	0.13075E 01	0.11531E 01	-0.86800E 00	0.58990E 00
37	541.32	0.14457E 02	0.22291E 01	0.78719E-02	0.10839E-01	0.12708E 01	0.11207E 01	-0.91100E 00	0.66254E 00
38	544.09	0.17259E 02	0.27132E 01	0.96045E-02	0.13225E-01	0.15469E 01	0.13642E 01	-0.95300E 00	0.85469E 00
39	1085.37	-0.31174E-02	-0.63280E-03	-0.42220E-05	-0.58134E-05	-0.36077E-03	-0.31816E-03	0.51000E-01	0.
40	1085.37	-0.31174E-02	-0.63280E-03	-0.42220E-05	-0.58134E-05	-0.36077E-03	-0.31816E-03	0.29000E-01	0.
41	1085.37	-0.31174E-02	-0.62915E-03	-0.41977E-05	-0.57799E-05	-0.35870E-03	-0.31633E-03	0.70000E-02	0.
42	529.65	0.48053E-00	0.75170E-01	0.26285E-03	0.36192E-03	0.42856E-01	0.37795E-01	-0.86800E 00	0.19645E-01
43	531.06	0.98234E 00	0.15419E-00	0.53978E-03	0.74324E-03	0.87906E-01	0.77523E-01	-0.91100E 00	0.39957E-01
44	533.50	0.29486E 01	0.46078E-00	0.16164E-02	0.22257E-02	0.26270E-00	0.23167E-00	-0.95300E 00	0.12976E-00
45	541.54	0.68192E 01	0.11110E 01	0.39243E-02	0.54035E-02	0.63343E 00	0.55862E 00	-0.10400E 01	0.86331E 00
46	1085.37	-0.31174E-02	-0.63442E-03	-0.42329E-05	-0.58283E-05	-0.36170E-03	-0.31898E-03	0.70000E-02	0.
47	1085.37	-0.31174E-02	-0.63442E-03	-0.42329E-05	-0.58283E-05	-0.36170E-03	-0.31898E-03	0.29000E-01	0.
48	1085.37	-0.31174E-02	-0.63685E-03	-0.42491E-05	-0.58506E-05	-0.36308E-03	-0.32020E-03	0.51000E-01	0.
49	529.64	0.32608E 01	0.50846E 00	0.17779E-02	0.24480E-02	0.28988E-00	0.25565E-00	0.70000E-02	0.16010E-00
50	531.25	0.60754E 01	0.95124E 00	0.33307E-02	0.45861E-02	0.54233E 00	0.47827E-00	0.29000E-01	0.44137E-00
51	1085.37	-0.31174E-02	-0.63077E-03	-0.42085E-05	-0.57948E-05	-0.35962E-03	-0.31714E-03	0.51000E-01	0.
52	529.34	0.59481E 00	0.93270E-01	0.32605E-03	0.44895E-03	0.53175E-01	0.46895E-01	-0.86800E 00	0.27787E-01
53	530.74	0.23948E-00	0.37726E-01	0.13204E-03	0.18181E-03	0.21508E-01	0.18968E-01	-0.91100E 00	0.12318E-01
54	532.06	0.60782E-01	0.94908E-02	0.33254E-04	0.45788E-04	0.54109E-02	0.47718E-02	-0.95300E 00	0.31803E-02

CONFIDENTIAL

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	541.53	0.61901E 01	0.10085E 01	0.35623E-02	0.49050E-02	0.57499E 00	0.50708E 00	-0.10400E 01	0.92778E 00
56	541.77	0.47751E 01	0.80264E 00	0.28356E-02	0.39044E-02	0.45760E-00	0.40356E-00	-0.10680E 01	0.84977E 00
57	542.39	0.48748E 01	0.79462E 00	0.28087E-02	0.38674E-02	0.45303E-00	0.39952E-00	-0.10400E 01	0.10143E 01
58	545.14	0.93506E 01	0.16526E 01	0.58553E-02	0.80623E-02	0.94220E 00	0.83092E 00	-0.10680E 01	0.10687E 01
59	539.71	0.64416E 01	0.10484E 01	0.36974E-02	0.50911E-02	0.59773E 00	0.52714E 00	-0.10400E 01	0.12427E 01
60	541.81	0.62197E 01	0.10455E 01	0.36937E-02	0.50860E-02	0.59606E 00	0.52566E 00	-0.10680E 01	0.11815E 01
61	541.85	0.71636E 00	0.11887E-00	0.41996E-03	0.57825E-03	0.67768E-01	0.59764E-01	-0.11220E 01	0.15030E 01
62	546.77	0.54441E 00	0.82549E-01	0.29288E-03	0.40327E-03	0.47063E-01	0.41504E-01	-0.13340E 01	0.12587E 01
63	542.22	0.65195E 00	0.11224E-00	0.39669E-03	0.54621E-03	0.63992E-01	0.56434E-01	-0.11220E 01	0.10556E 01
64	546.77	0.53922E 00	0.81762E-01	0.29009E-03	0.39943E-03	0.46614E-01	0.41109E-01	-0.13340E 01	0.16317E 01
65	546.42	0.81714E 00	0.14101E-00	0.50016E-03	0.68869E-03	0.80396E-01	0.70900E-01	0.14400E 01	0.18051E 01
66	545.44	0.93663E 00	0.15374E-00	0.54484E-03	0.75021E-03	0.87651E-01	0.77299E-01	0.16130E 01	0.20746E 01
67	545.48	0.10982E 01	0.17693E-00	0.62707E-03	0.86342E-03	0.10087E-00	0.88960E-01	0.17200E 01	0.14361E 01
68	545.68	0.96156E 00	0.15907E-00	0.56384E-03	0.77637E-03	0.90689E-01	0.79978E-01	-0.16130E 01	0.15351E 01
69	545.64	0.11382E 01	0.18340E-00	0.65005E-03	0.89507E-03	0.10456E-00	0.92209E-01	-0.18280E 01	0.14031E 01
70	543.46	0.81610E 00	0.12002E-00	0.42461E-03	0.58466E-03	0.68424E-01	0.60343E-01	-0.11650E 01	0.18843E 01
71	545.08	0.73766E 00	0.62093E-01	0.21999E-03	0.30290E-03	0.35401E-01	0.31220E-01	-0.12050E 01	0.18063E 01
72	546.40	0.12603E 01	0.18309E-00	0.64940E-03	0.89417E-03	0.10439E-00	0.92056E-01	-0.12120E 01	0.23449E 01
73	543.10	0.10291E 01	0.15131E-00	0.53515E-03	0.73686E-03	0.86264E-01	0.76075E-01	-0.11650E 01	0.23595E 01
74	544.46	0.71948E 00	0.60542E-01	0.21437E-03	0.29518E-03	0.34516E-01	0.30439E-01	-0.12050E 01	0.21230E 01
75	1127.62	-0.17665E-01	-0.33353E-02	-0.23932E-04	-0.32953E-04	-0.19016E-02	-0.16770E-02	-0.12120E 01	0.
76	538.38	0.19657E 01	0.29567E-00	0.10415E-02	0.14341E-02	0.16857E-00	0.14866E-00	0.10840E 01	0.12247E 01
77	540.03	0.76623E 00	0.12385E-00	0.43688E-03	0.60155E-03	0.70608E-01	0.62269E-01	0.11220E 01	0.15595E 01
78	546.04	0.10400E 01	0.15527E-00	0.55053E-03	0.75804E-03	0.88521E-01	0.78065E-01	0.13340E 01	0.17066E 01
79	543.45	0.50701E 00	0.85253E-01	0.30162E-03	0.41531E-03	0.48605E-01	0.42864E-01	-0.11890E 01	0.18262E 01
80	545.98	0.70597E 00	0.10646E-00	0.37748E-03	0.51975E-03	0.60698E-01	0.53529E-01	-0.13340E 01	0.23703E 01
81	541.81	0.62961E 00	0.10187E-00	0.35989E-03	0.49554E-03	0.58076E-01	0.51217E-01	-0.11470E 01	0.86912E 00
82	542.39	0.82596E-01	0.13867E-01	0.49017E-04	0.67493E-04	0.79062E-02	0.69724E-02	-0.11890E 01	-0.43166E 01
83	539.33	0.29860E 01	0.50047E 00	0.17644E-02	0.24294E-02	0.28533E-00	0.25163E-00	-0.10840E 01	0.12488E 01
84	542.98	0.39688E-00	0.58350E-01	0.20635E-03	0.28413E-03	0.33267E-01	0.29338E-01	-0.11890E 01	0.18063E 01
85	546.09	0.58961E 00	0.86836E-01	0.30791E-03	0.42397E-03	0.49507E-01	0.43660E-01	-0.13090E 01	0.16020E 01
86	545.83	0.63065E 00	0.94141E-01	0.33374E-03	0.45954E-03	0.53672E-01	0.47333E-01	-0.13340E 01	0.21552E 01
87	550.50	0.62914E 01	0.92727E 00	0.33005E-02	0.45445E-02	0.52866E 00	0.46622E-00	0.11990E 01	0.82023E 00
88	546.66	0.35844E 01	0.53169E 00	0.18863E-02	0.25972E-02	0.30313E-00	0.26733E-00	0.12070E 01	0.89336E 00
89	549.52	0.25662E 01	0.38777E-00	0.13790E-02	0.18988E-02	0.22107E-00	0.19496E-00	0.13340E 01	0.87135E 00
90	547.98	0.48639E 01	0.69742E 00	0.24770E-02	0.34106E-02	0.39762E-00	0.35065E-00	0.12070E 01	0.89400E 00
91	548.72	0.28031E 01	0.43755E-00	0.15550E-02	0.21412E-02	0.24946E-00	0.22000E-00	0.12490E 01	0.88695E 00
92	549.35	0.25221E 01	0.38297E-00	0.13618E-02	0.18751E-02	0.21834E-00	0.19255E-00	0.13340E 01	0.86774E 00
93	549.57	0.22738E 01	0.38617E-00	0.13734E-02	0.18911E-02	0.22017E-00	0.19416E-00	0.14900E 01	0.14538E 01
94	548.75	0.61221E 01	0.64587E 00	0.22954E-02	0.31606E-02	0.36823E-00	0.32474E-00	-0.	0.11103E 01
95	550.87	0.91990E 01	0.97862E 00	0.34844E-02	0.47977E-02	0.55793E 00	0.49204E-00	-0.	0.11758E 01
96	545.28	0.76415E 00	0.80461E-01	0.28511E-03	0.39257E-03	0.45873E-01	0.40455E-01	-0.	0.17796E 01
97	545.92	0.11880E 01	0.12514E-00	0.44366E-03	0.61089E-03	0.71345E-01	0.62918E-01	-0.	0.30463E 01
98	548.50	0.16083E 01	0.17087E-00	0.60714E-03	0.83599E-03	0.97418E-01	0.85912E-01	-0.	0.21855E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
62	1	4.37	154.37	-0.	-0.	2	C59	2.70	2	10.04	216.30	1664.50	10	C55	3.10

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.814677E 02	0.478664E-02	0.444067E 04	0.492955E-05	0.659888E-07	0.333964E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725881E 00	0.171725E 01	0.195225E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	534.80	0.25070E 01	0.40717E-00	0.14220E-02	0.20190E-02	0.23710E-00	0.20856E-00	-0.10600E 01	0.11219E 01
100	536.78	0.13034E 01	0.21834E-00	0.76381E-03	0.10845E-02	0.12715E-00	0.11184E-00	-0.10840E 01	0.11218E 01
101	536.82	0.93870E 00	0.15381E-00	0.53808E-03	0.76398E-03	0.89567E-01	0.78785E-01	-0.11080E 01	0.11977E 01
102	538.09	0.43226E 01	0.70661E 00	0.24746E-02	0.35136E-02	0.41148E-00	0.36194E-00	-0.11080E 01	0.46845E 01
103	548.04	0.14174E 02	0.23895E 01	0.84392E-02	0.11982E-01	0.13914E 01	0.12239E 01	-0.10800E 01	0.98131E 01
104	641.92	0.15829E 01	0.26487E-00	0.10171E-02	0.14442E-02	0.15424E-00	0.13567E-00	0.85000E 00	0.
105	559.35	0.30070E 02	0.45533E 01	0.16238E-01	0.23055E-01	0.26515E 01	0.23323E 01	0.94000E 00	0.85436E 00
106	560.77	0.31002E 02	0.46586E 01	0.16634E-01	0.23618E-01	0.27128E 01	0.23863E 01	0.96000E 00	0.86108E 00
107	557.53	0.28859E 02	0.43288E 01	0.15414E-01	0.21885E-01	0.25208E 01	0.22174E 01	0.98000E 00	0.86383E 00
108	557.33	0.26509E 02	0.39961E 01	0.14226E-01	0.20199E-01	0.23270E 01	0.20469E 01	0.10000E 01	0.86787E 00
109	552.69	0.20811E 02	0.31396E 01	0.11133E-01	0.15807E-01	0.18283E 01	0.16082E 01	0.10200E 01	0.87124E 00
110	562.06	0.29322E 02	0.44467E 01	0.15895E-01	0.22568E-01	0.25894E 01	0.22777E 01	0.80000E-01	0.84882E 00
111	559.49	0.29797E 02	0.44743E 01	0.15958E-01	0.22658E-01	0.26055E 01	0.22919E 01	0.10000E-00	0.85436E 00
112	564.39	0.30877E 02	0.46728E 01	0.16737E-01	0.23764E-01	0.27211E 01	0.23935E 01	0.12000E-00	0.86763E 00
113	560.55	0.29923E 02	0.45340E 01	0.16186E-01	0.22982E-01	0.26403E 01	0.23225E 01	0.14000E-00	0.87107E 00
114	558.66	0.28495E 02	0.43131E 01	0.15372E-01	0.21826E-01	0.25116E 01	0.22093E 01	0.80000E-01	0.85371E 00
115	559.21	0.28718E 02	0.43336E 01	0.15453E-01	0.21941E-01	0.25236E 01	0.22198E 01	0.10000E-00	0.85487E 00
116	559.88	0.29327E 02	0.44570E 01	0.15902E-01	0.22579E-01	0.25955E 01	0.22830E 01	0.12000E-00	0.85721E 00
117	564.02	0.30469E 02	0.46255E 01	0.16563E-01	0.23516E-01	0.26936E 01	0.23693E 01	0.14000E-00	0.86322E 00
118	561.87	0.27580E 02	0.42171E 01	0.15072E-01	0.21400E-01	0.24558E 01	0.21601E 01	0.10000E-00	0.84596E 00
119	561.63	0.27506E 02	0.41843E 01	0.14952E-01	0.21229E-01	0.24366E 01	0.21433E 01	0.15000E-00	0.84835E 00
120	562.33	0.27903E 02	0.42534E 01	0.15208E-01	0.21593E-01	0.24769E 01	0.21787E 01	0.20000E-00	0.91644E 00
121	561.85	0.28184E 02	0.43096E 01	0.15402E-01	0.21868E-01	0.25096E 01	0.22075E 01	0.25000E-00	0.87779E 00
122	560.91	0.26648E 02	0.40725E 01	0.14543E-01	0.20649E-01	0.23715E 01	0.20861E 01	0.30000E-00	0.86947E 00
123	1032.13	0.34670E 01	0.66484E 00	0.40370E-02	0.57319E-02	0.38716E-00	0.34055E-00	0.35000E-00	0.
124	559.82	0.27851E 02	0.43034E 01	0.15353E-01	0.21799E-01	0.25060E 01	0.22043E 01	0.38000E-00	0.88921E 00
125	562.43	0.28299E 02	0.44151E 01	0.15787E-01	0.22415E-01	0.25710E 01	0.22615E 01	0.45000E-00	0.88971E 00
126	562.50	0.26046E 02	0.41169E 01	0.14722E-01	0.20902E-01	0.23974E 01	0.21088E 01	0.61000E 00	0.90398E 00
127	546.34	0.14788E 02	0.23276E 01	0.82089E-02	0.11655E-01	0.13554E 01	0.11923E 01	0.70000E 00	0.10355E 01
128	540.75	0.76514E 01	0.12045E 01	0.42277E-02	0.60026E-02	0.70139E 00	0.61696E 00	0.75000E 00	0.11926E 01
129	556.54	0.23462E 02	0.37260E 01	0.13256E-01	0.18821E-01	0.21698E 01	0.19086E 01	0.70000E 00	0.95932E 00
130	558.55	0.25596E 02	0.40695E 01	0.14503E-01	0.20591E-01	0.23698E 01	0.20845E 01	0.80000E 00	0.96069E 00
131	542.80	0.12084E 02	0.18069E 01	0.63533E-02	0.90207E-02	0.10522E 01	0.92555E 00	0.90000E 00	0.12356E 01
132	558.81	0.21798E 02	0.32997E 01	0.11762E-01	0.16700E-01	0.19215E 01	0.16902E 01	0.90000E 00	0.94336E 00
133	560.82	0.22785E 02	0.34355E 01	0.12268E-01	0.17418E-01	0.20006E 01	0.17598E 01	0.96000E 00	0.10211E 01
134	560.43	0.22135E 02	0.33425E 01	0.11931E-01	0.16940E-01	0.19464E 01	0.17121E 01	0.10000E 01	0.10709E 01
135	1055.88	0.17294E 01	0.34422E-00	0.21677E-02	0.30777E-02	0.20045E-00	0.17632E-00	0.70000E-02	0.
136	734.88	0.24312E 01	0.41279E-00	0.17360E-02	0.24648E-02	0.24038E-00	0.21144E-00	0.70000E-02	0.
137	539.41	0.19927E 02	0.30993E 01	0.10866E-01	0.15428E-01	0.18048E 01	0.15876E 01	0.39000E-01	0.13255E 01
138	539.07	0.19813E 02	0.30661E 01	0.10747E-01	0.15259E-01	0.17855E 01	0.15705E 01	0.78000E-01	0.13334E 01
139	1085.37	-0.31174E-02	-0.61964E-03	-0.40907E-05	-0.58082E-05	-0.36083E-03	-0.31740E-03	0.11700E-00	0.
140	538.90	0.19981E 02	0.30666E 01	0.10747E-01	0.15259E-01	0.17858E 01	0.15708E 01	0.78000E-01	0.13473E 01
141	563.68	0.39785E 02	0.42626E 01	0.15259E-01	0.21665E-01	0.24823E 01	0.21835E 01	-0.	0.88311E 00
142	564.36	0.36392E 02	0.39006E 01	0.13971E-01	0.19836E-01	0.22714E 01	0.19980E 01	-0.	0.85724E 00
143	539.10	0.18395E 02	0.28096E 01	0.9848OE-02	0.13983E-01	0.16361E 01	0.14392E 01	0.78000E-01	0.13279E 01
144	1085.37	-0.31174E-02	-0.61559E-03	-0.40640E-05	-0.57702E-05	-0.35847E-03	-0.31532E-03	0.70000E-02	0.
145	539.70	0.18845E 02	0.25653E 01	0.89964E-02	0.12773E-01	0.14939E 01	0.13140E 01	0.70000E-02	0.12983E 01
146	539.40	0.18246E 02	0.27920E 01	0.97887E-02	0.13898E-01	0.16259E 01	0.14301E 01	0.39000E-01	0.13533E 01
147	1075.76	0.34364E 01	0.67491E 00	0.43864E-02	0.62280E-02	0.39302E-00	0.34571E-00	0.78000E-01	0.
148	1085.92	-0.39895E 01	-0.79314E 00	-0.52409E-02	-0.74412E-02	-0.46187E-00	-0.40627E-00	0.11700E-00	0.
149	564.82	0.24084E 02	0.38853E 01	0.13922E-01	0.19766E-01	0.22625E 01	0.19902E 01	0.70000E-02	0.81361E 00
150	564.17	0.24116E 02	0.39077E 01	0.13994E-01	0.19869E-01	0.22755E 01	0.20016E 01	0.70000E-02	0.81239E 00
151	559.76	0.24079E 02	0.38921E 01	0.13885E-01	0.19715E-01	0.22665E 01	0.19936E 01	0.70000E-02	0.82932E 00
152	559.96	0.26233E 02	0.40871E 01	0.14583E-01	0.20706E-01	0.23800E 01	0.20935E 01	0.39000E-01	0.82606E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	Q/R	Q(ON)/Q(OFF)
153	558.81	0.26126E 02	0.40682E 01	0.14501E-01	0.20590E-01	0.23690E 01	0.20639E 01	0.39000E-01	0.83615E 00
154	556.66	0.23963E 02	0.40144E 01	0.14283E-01	0.20280E-01	0.23377E 01	0.20363E 01	0.78000E-01	0.84159E 00
155	556.50	0.25871E 02	0.40619E 01	0.14547E-01	0.20654E-01	0.23770E 01	0.20709E 01	0.39000E-01	0.83546E 00
156	922.90	0.35730E 01	0.66731E 00	0.38656E-02	0.50910E-02	0.40024E-00	0.35206E-00	0.39000E-01	0.
157	555.37	0.23158E 02	0.37337E 01	0.13270E-01	0.18841E-01	0.21742E 01	0.19128E 01	0.78000E-01	0.84707E 00
158	555.07	0.23734E 02	0.38417E 01	0.13650E-01	0.19381E-01	0.22371E 01	0.19678E 01	0.39000E-01	0.83134E 00
159	556.32	0.22849E 02	0.37020E 01	0.13191E-01	0.18729E-01	0.21558E 01	0.18963E 01	0.78000E-01	0.83101E 00
160	562.75	0.23381E 02	0.37855E 01	0.13640E-01	0.19224E-01	0.22044E 01	0.19390E 01	0.39000E-01	0.81923E 00
161	556.64	0.20164E 02	0.31767E 01	0.11303E-01	0.16048E-01	0.18499E 01	0.16272E 01	0.43000E-01	0.88931E 00
162	556.23	0.21143E 02	0.33446E 01	0.11917E-01	0.16920E-01	0.19478E 01	0.17133E 01	0.43000E-01	0.88285E 00
163	557.88	0.20472E 02	0.32431E 01	0.11551E-01	0.16401E-01	0.18885E 01	0.16612E 01	0.85000E-01	0.89559E 00
164	556.48	0.19946E 02	0.31457E 01	0.11210E-01	0.15916E-01	0.18318E 01	0.16113E 01	0.12800E-00	0.90679E 00
165	556.69	0.22273E 02	0.35244E 01	0.12562E-01	0.17836E-01	0.20524E 01	0.18053E 01	0.43000E-01	0.81827E 00
166	557.76	0.21532E 02	0.33945E 01	0.12089E-01	0.17165E-01	0.19767E 01	0.17388E 01	0.85000E-01	0.83627E 00
167	721.60	-0.11112E 02	-0.18084E 01	-0.79177E-02	-0.11242E-01	-0.11113E 01	-0.97753E 00	0.43000E-01	0.
168	558.68	0.21266E 02	0.33985E 01	0.12094E-01	0.17171E-01	0.19756E 01	0.17377E 01	0.12800E-00	0.87987E 00
169	561.70	0.23068E 02	0.36804E 01	0.13088E-01	0.18584E-01	0.22847E 01	0.19569E 01	0.85000E-01	0.80804E 00
170	560.75	0.23171E 02	0.36706E 01	0.13106E-01	0.18609E-01	0.21375E 01	0.18802E 01	0.12800E-00	0.84683E 00
171	559.95	0.24951E 02	0.39382E 01	0.14052E-01	0.19951E-01	0.22933E 01	0.20173E 01	0.85000E-01	0.80828E 00
172	560.74	0.30779E 02	0.49053E 01	0.17630E-01	0.25041E-01	0.28568E 01	0.25127E 01	0.43000E-01	0.78896E 00
173	562.38	0.25214E 02	0.40172E 01	0.14364E-01	0.20394E-01	0.23303E 01	0.20577E 01	0.12800E-00	0.85996E 00
174	563.05	0.27572E 02	0.43735E 01	0.15647E-01	0.22216E-01	0.25468E 01	0.22402E 01	0.85000E-01	0.81390E 00
175	560.59	0.29930E 02	0.47467E 01	0.17064E-01	0.24228E-01	0.27641E 01	0.24314E 01	0.43000E-01	0.82528E 00
176	560.06	0.29709E 02	0.47096E 01	0.16923E-01	0.24027E-01	0.27425E 01	0.24124E 01	0.43000E-01	0.82998E 00
177	561.25	0.25621E 02	0.40665E 01	0.14526E-01	0.20624E-01	0.23680E 01	0.20830E 01	0.12800E-00	0.84708E 00
178	563.19	0.27202E 02	0.43151E 01	0.15440E-01	0.21922E-01	0.25128E 01	0.22103E 01	0.85000E-01	0.80977E 00
179	565.04	0.24146E 02	0.38343E 01	0.13741E-01	0.19510E-01	0.22358E 01	0.19640E 01	0.70000E-02	0.84261E 00
180	991.60	-0.32418E-00	-0.63360E-01	-0.36275E-03	-0.51504E-03	-0.36058E-01	-0.32465E-01	0.70000E-02	0.
181	551.59	0.15924E 02	0.25219E 01	0.89539E-02	0.12685E-01	0.14686E 01	0.12918E 01	0.70000E-02	0.87129E 00
182	550.74	0.16239E 02	0.25709E 01	0.91292E-02	0.12962E-01	0.15018E 01	0.13210E 01	0.70000E-02	0.87562E 00
183	559.53	0.22545E 02	0.35749E 01	0.12751E-01	0.18104E-01	0.20618E 01	0.18312E 01	0.38000E-01	0.87160E 00
184	562.66	0.24637E 02	0.39385E 01	0.14066E-01	0.20000E-01	0.22935E 01	0.20174E 01	0.38000E-01	0.88188E 00
185	553.31	0.20778E 02	0.33044E 01	0.11723E-01	0.16645E-01	0.19242E 01	0.16926E 01	0.64000E-01	0.10094E 01
186	560.32	0.24319E 02	0.38703E 01	0.13814E-01	0.19614E-01	0.22538E 01	0.19825E 01	0.64000E-01	0.94963E 00
187	561.98	0.22270E 02	0.35567E 01	0.12720E-01	0.18061E-01	0.20784E 01	0.18229E 01	0.70000E-02	0.90861E 00
188	561.23	0.22689E 02	0.36614E 01	0.13150E-01	0.18671E-01	0.21438E 01	0.18857E 01	0.70000E-02	0.92768E 00
189	539.75	0.59626E 01	0.97560E 00	0.34215E-02	0.48580E-02	0.56612E 00	0.49973E-00	0.10600E 01	0.17161E 01
190	538.84	0.57621E 01	0.92784E 00	0.31991E-02	0.51224E-02	0.36544E-00	0.32145E-00	0.10640E 01	0.18936E 01
191	537.73	0.20094E 01	0.33678E-00	0.11791E-02	0.16741E-02	0.19612E-00	0.17251E-00	0.11080E 01	0.17570E 01
192	537.53	0.23974E 01	0.39961E-00	0.13988E-02	0.19861E-02	0.23270E-00	0.20469E-00	0.11080E 01	0.19886E 01
193	547.67	0.26062E 01	0.43050E-00	0.15193E-02	0.21571E-02	0.25058E-00	0.22041E-00	0.16980E 01	0.18306E 01
194	547.62	0.26234E 01	0.43113E-00	0.15221E-02	0.21612E-02	0.25106E-00	0.22084E-00	0.11700E 01	0.19464E 01
195	547.75	0.26463E 01	0.47030E-00	0.16606E-02	0.23570E-02	0.27367E-00	0.24090E-00	0.16740E 01	0.19209E 01
196	548.02	0.26539E 01	0.46906E-00	0.16566E-02	0.23521E-02	0.27315E-00	0.24027E-00	0.16950E 01	0.20513E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
63	1	-6.58	143.42	-0.	-0.	1	C56	2.70	2	10.04	222.90	1651.40	1	C55	2.90

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.807452E 02	0.493220E-02	0.442177E 04	0.512490E-05	0.654036E-07	0.348815E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725387E 00	0.175516E 01	0.199007E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	556.16	0.18530E 02	0.24337E 01	0.87679E-02	0.12026E-01	0.13866E 01	0.12229E 01	-0.	0.17350E 01
2	1085.37	-0.31174E-02	-0.55686E-03	-0.37661E-05	-0.51654E-05	-0.31727E-03	-0.27982E-03	-0.30000E-01	0.
3	1124.01	-0.36403E-02	-0.71758E-03	-0.51905E-05	-0.71190E-05	-0.40884E-03	-0.36058E-03	-0.60000E-01	0.
4	551.92	0.15752E 02	0.24488E 01	0.87899E-02	0.12056E-01	0.13952E 01	0.12305E 01	-0.90000E-01	0.16826E 01
5	546.56	0.13810E 02	0.21950E 01	0.78425E-02	0.10756E-01	0.12506E 01	0.11030E 01	-0.20000E-00	0.16103E 01
6	538.53	0.11408E 02	0.18051E 01	0.64050E-02	0.87848E-02	0.10284E 01	0.90704E 00	-0.40000E-00	0.15275E 01
7	534.62	0.10184E 02	0.16156E 01	0.57133E-02	0.78361E-02	0.92046E 00	0.81181E 00	-0.60000E 00	0.16196E 01
8	1085.37	-0.31174E-02	-0.63988E-03	-0.43276E-05	-0.59355E-05	-0.36457E-03	-0.32154E-03	-0.80000E 00	0.
9	536.27	0.13174E 02	0.20586E 01	0.72906E-02	0.99994E-02	0.11729E 01	0.10345E 01	-0.90000E 00	0.26014E 01
10	539.30	0.12161E 02	0.19280E 01	0.68456E-02	0.93891E-02	0.10985E 01	0.96880E 00	-0.98000E 00	0.29156E 01
11	537.47	0.56000E 00	0.96156E-01	0.34088E-03	0.46753E-03	0.54785E-01	0.48318E-01	-0.11220E 01	0.38449E 01
12	539.60	0.43585E-00	0.63847E-01	0.22676E-03	0.31101E-03	0.36377E-01	0.32083E-01	-0.11890E 01	0.17373E 01
13	542.61	0.57662E 00	0.87230E-01	0.31060E-03	0.42601E-03	0.49699E-01	0.43832E-01	-0.13340E 01	0.22334E 01
14	542.57	0.42909E-00	0.73889E-01	0.26309E-03	0.36084E-03	0.42098E-01	0.37129E-01	-0.14400E 01	0.
15	1085.37	-0.31174E-02	-0.55686E-03	-0.37661E-05	-0.51654E-05	-0.31727E-03	-0.27982E-03	0.30000E-01	0.
16	1085.37	-0.31174E-02	-0.60546E-03	-0.40947E-05	-0.56162E-05	-0.34496E-03	-0.30424E-03	0.60000E-01	0.
17	1085.37	-0.31174E-02	-0.62105E-03	-0.42002E-05	-0.57608E-05	-0.35384E-03	-0.31208E-03	0.90000E-01	0.
18	550.36	0.18906E 02	0.30113E 01	0.10794E-01	0.14805E-01	0.17157E 01	0.15131E 01	0.20000E-00	0.17973E 01
19	560.24	0.21475E 02	0.34393E 01	0.12435E-01	0.17055E-01	0.19595E 01	0.17282E 01	0.40000E-00	0.18302E 01
20	568.20	0.25483E 02	0.41187E 01	0.14996E-01	0.20568E-01	0.23466E 01	0.20696E 01	0.60000E 00	0.19889E 01
21	573.26	0.42005E 02	0.64094E 01	0.23440E-01	0.32150E-01	0.36517E 01	0.32207E 01	0.92000E 00	0.20273E 01
22	563.88	0.36136E 02	0.54855E 01	0.19897E-01	0.27289E-01	0.31254E 01	0.27565E 01	0.10400E 01	0.17497E 01
23	560.98	0.33174E 02	0.50413E 01	0.18239E-01	0.25016E-01	0.28723E 01	0.25332E 01	0.10600E 01	0.17357E 01
24	552.41	0.24126E 02	0.38227E 01	0.13727E-01	0.18828E-01	0.21780E 01	0.19209E 01	0.10840E 01	0.16827E 01
25	544.05	0.68068E 01	0.10048E 01	0.35822E-02	0.49131E-02	0.57247E 00	0.50489E 00	0.12070E 01	0.22080E 01
26	545.48	0.68816E 01	0.10722E 01	0.38274E-02	0.52495E-02	0.61091E 00	0.53879E 00	0.12490E 01	0.23469E 01
27	547.80	0.75049E 01	0.11519E 01	0.41201E-02	0.56509E-02	0.65630E 00	0.57883E 00	0.13340E 01	0.24123E 01
28	547.84	0.56971E 01	0.97242E 00	0.34782E-02	0.47705E-02	0.55403E 00	0.48863E-00	0.14540E 01	0.25471E 01
29	546.14	0.32203E 01	0.53286E 00	0.19031E-02	0.26103E-02	0.30359E-00	0.26776E-00	0.16580E 01	0.21764E 01
30	545.46	0.24307E 01	0.40696E-00	0.14526E-02	0.19924E-02	0.23186E-00	0.20449E-00	0.20410E 01	0.20098E 01
31	547.62	0.24675E 01	0.41363E-00	0.14792E-02	0.20288E-02	0.23567E-00	0.20785E-00	0.22480E 01	0.21921E 01
32	554.22	0.17355E 02	0.26363E 01	0.94818E-02	0.13005E-01	0.15020E 01	0.13247E 01	-0.60000E-01	0.16869E 01
33	557.56	0.17909E 02	0.25042E 01	0.90329E-02	0.12389E-01	0.14268E 01	0.12583E 01	-0.30000E-01	0.17106E 01
34	554.73	0.18486E 02	0.28090E 01	0.10107E-01	0.13863E-01	0.16004E 01	0.14115E 01	0.30000E-01	0.17289E 01
35	552.14	0.17144E 02	0.26656E 01	0.95698E-02	0.13126E-01	0.15187E 01	0.13394E 01	0.60000E-01	0.17253E 01
36	549.00	0.18775E 02	0.29731E 01	0.10563E-01	0.14487E-01	0.16939E 01	0.14939E 01	-0.86800E 00	0.24068E 01
37	541.11	0.17396E 02	0.26820E 01	0.95375E-02	0.13081E-01	0.15280E 01	0.13477E 01	-0.91100E 00	0.22011E 01
38	540.05	0.16831E 02	0.26400E 01	0.93796E-02	0.12865E-01	0.15041E 01	0.13266E 01	-0.95300E 00	0.22470E 01
39	1085.37	-0.31174E-02	-0.63280E-03	-0.42796E-05	-0.58697E-05	-0.36054E-03	-0.31798E-03	0.51000E-01	0.
40	1085.37	-0.31174E-02	-0.63280E-03	-0.42796E-05	-0.58697E-05	-0.36054E-03	-0.31798E-03	0.29000E-01	0.
41	1085.37	-0.31174E-02	-0.62915E-03	-0.42550E-05	-0.58359E-05	-0.35846E-03	-0.31615E-03	0.70000E-02	0.
42	540.51	0.17645E 02	0.27772E 01	0.98713E-02	0.13539E-01	0.15823E 01	0.13956E 01	-0.86800E 00	0.33594E 01
43	540.11	0.17777E 02	0.28045E 01	0.99646E-02	0.13667E-01	0.15978E 01	0.14092E 01	-0.91100E 00	0.31543E 01
44	541.14	0.17780E 02	0.27905E 01	0.99235E-02	0.13611E-01	0.15899E 01	0.14022E 01	-0.95300E 00	0.25517E 01
45	542.42	0.15465E 02	0.25209E 01	0.89749E-02	0.12310E-01	0.14363E 01	0.12667E 01	-0.10400E 01	0.92273E 01
46	1085.37	-0.31174E-02	-0.63442E-03	-0.42906E-05	-0.58848E-05	-0.36146E-03	-0.31879E-03	0.70000E-02	0.
47	1085.37	-0.31174E-02	-0.63442E-03	-0.42906E-05	-0.58848E-05	-0.36146E-03	-0.31879E-03	0.29000E-01	0.
48	1085.37	-0.31174E-02	-0.63685E-03	-0.43070E-05	-0.59073E-05	-0.36284E-03	-0.32001E-03	0.51000E-01	0.
49	537.33	0.11332E 02	0.17747E 01	0.62907E-02	0.86281E-02	0.10111E 01	0.89178E 00	0.70000E-02	0.23180E 01
50	536.55	0.11155E 02	0.17519E 01	0.62056E-02	0.85114E-02	0.99813E 00	0.88031E 00	0.29000E-01	0.25356E 01
51	1085.37	-0.31174E-02	-0.63077E-03	-0.42659E-05	-0.58510E-05	-0.35936E-03	-0.31696E-03	0.51000E-01	0.
52	540.43	0.16433E 02	0.25930E 01	0.92158E-02	0.12640E-01	0.14774E 01	0.13030E 01	-0.86800E 00	0.34544E 01
53	541.06	0.15763E 02	0.24976E 01	0.88814E-02	0.12181E-01	0.14230E 01	0.12550E 01	-0.91100E 00	0.38087E 01
54	540.71	0.15352E 02	0.24088E 01	0.85632E-02	0.11745E-01	0.13724E 01	0.12104E 01	-0.95300E 00	0.34521E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	540.76	0.97028E 01	0.15802E 01	0.56176E-02	0.77049E-02	0.90030E 00	0.79402E 00	-0.10400E 01	0.10098E 02
56	540.54	0.72592E 01	0.12194E 01	0.43341E-02	0.59445E-02	0.69473E 00	0.61272E 00	-0.10680E 01	0.12232E 02
57	547.50	0.17697E 02	0.28930E 01	0.10345E-01	0.14188E-01	0.16483E 01	0.14537E 01	-0.10400E 01	0.31608E 02
58	549.52	0.22637E 02	0.40106E 01	0.14366E-01	0.19704E-01	0.22851E 01	0.20153E 01	-0.10680E 01	0.32690E 02
59	538.03	0.78540E 01	0.12771E 01	0.45296E-02	0.62126E-02	0.72763E 00	0.64174E 00	-0.10400E 01	0.48909E 01
60	539.37	0.81834E 01	0.13737E 01	0.48778E-02	0.66901E-02	0.78266E 00	0.69027E 00	-0.10680E 01	0.91880E 01
61	538.11	0.23896E-00	0.39568E-01	0.14035E-03	0.19250E-03	0.22544E-01	0.19883E-01	-0.11220E 01	0.18008E 01
62	543.18	0.13618E-00	0.20910E-01	0.74493E-04	0.10217E-03	0.11914E-01	0.10507E-01	-0.13340E 01	0.19176E 01
63	538.26	0.21143E-00	0.36320E-01	0.12884E-03	0.17672E-03	0.20693E-01	0.18251E-01	-0.11220E 01	0.11126E 01
64	542.94	0.29351E-00	0.44409E-01	0.15817E-03	0.21695E-03	0.25302E-01	0.22315E-01	-0.13340E 01	0.
65	542.92	0.44260E-00	0.76230E-01	0.27151E-03	0.37239E-03	0.43432E-01	0.38305E-01	0.14400E 01	0.46873E 01
66	542.58	0.53351E 00	0.87431E-01	0.31151E-03	0.42698E-03	0.49814E-01	0.43934E-01	0.16130E 01	0.
67	543.06	0.59844E 00	0.96288E-01	0.34299E-03	0.47043E-03	0.54860E-01	0.48384E-01	0.17200E 01	0.23768E 01
68	543.23	0.54026E 00	0.89251E-01	0.31797E-03	0.43611E-03	0.50851E-01	0.44848E-01	-0.16130E 01	0.29654E 01
69	543.21	0.72312E 00	0.11636E-00	0.41454E-03	0.56856E-03	0.66295E-01	0.58469E-01	-0.18280E 01	0.30345E 01
70	538.87	0.24988E-00	0.36652E-01	0.13009E-03	0.17843E-03	0.20883E-01	0.18417E-01	-0.11650E 01	0.
71	541.02	0.28312E-00	0.23777E-01	0.84550E-04	0.11597E-03	0.13547E-01	0.11948E-01	-0.12050E 01	0.18427E 01
72	542.14	0.28883E-00	0.41862E-01	0.14900E-03	0.20436E-03	0.23851E-01	0.21035E-01	-0.12120E 01	0.23754E 01
73	539.81	0.24987E-00	0.36671E-01	0.13026E-03	0.17866E-03	0.20893E-01	0.18427E-01	-0.11650E 01	0.11729E 01
74	541.06	0.22026E-00	0.18499E-01	0.65781E-04	0.90222E-04	0.10540E-01	0.92955E-02	-0.12050E 01	0.23913E 01
75	1085.37	-0.31174E-02	-0.57914E-03	-0.39167E-05	-0.53720E-05	-0.32996E-03	-0.29101E-03	-0.12120E 01	0.
76	536.29	0.10800E 01	0.16226E-00	0.57464E-03	0.78814E-03	0.92446E-01	0.81533E-01	0.10840E 01	0.29258E 01
77	537.70	0.31065E-00	0.50145E-01	0.17760E-03	0.24367E-03	0.28570E-01	0.25198E-01	0.11220E 01	0.14518E 01
78	543.21	0.36364E-00	0.54203E-01	0.19310E-03	0.26485E-03	0.30882E-01	0.27237E-01	0.13340E 01	0.13407E 01
79	541.00	0.24675E-00	0.41434E-01	0.14733E-03	0.20207E-03	0.23607E-01	0.20820E-01	-0.11890E 01	0.
80	543.73	0.25974E-00	0.39121E-01	0.13943E-03	0.19124E-03	0.22289E-01	0.19658E-01	-0.13340E 01	0.29463E 02
81	539.48	0.29662E-00	0.47929E-01	0.17020E-03	0.23344E-03	0.27307E-01	0.24084E-01	-0.11470E 01	0.
82	540.55	0.59225E-01	0.99334E-02	0.35308E-04	0.48427E-04	0.56595E-02	0.49915E-02	-0.11890E 01	0.
83	537.31	0.13273E 01	0.22221E-00	0.78764E-03	0.10803E-02	0.12660E-00	0.11166E-00	-0.10840E 01	0.42107E 01
84	540.60	0.16416E-00	0.24103E-01	0.85676E-04	0.11751E-03	0.13733E-01	0.12112E-01	-0.11890E 01	0.17509E 01
85	543.73	0.25611E-00	0.37669E-01	0.13426E-03	0.18414E-03	0.21462E-01	0.18928E-01	-0.13090E 01	0.24096E 01
86	543.90	0.17559E-00	0.26182E-01	0.93332E-04	0.12801E-03	0.14917E-01	0.13157E-01	-0.13340E 01	0.18705E 01
87	558.41	0.21231E 02	0.31429E 01	0.11345E-01	0.15561E-01	0.17907E 01	0.15793E 01	0.11990E 01	0.21414E 01
88	548.48	0.11045E 02	0.16400E 01	0.58691E-02	0.80498E-02	0.93436E 00	0.82408E 00	0.12070E 01	0.17821E 01
89	550.30	0.56483E 01	0.85385E 00	0.30606E-02	0.41977E-02	0.48648E-00	0.42905E-00	0.13340E 01	0.18692E 01
90	553.15	0.15855E 02	0.22799E 01	0.81923E-02	0.11236E-01	0.12990E 01	0.11456E 01	0.12070E 01	0.19651E 01
91	551.55	0.81127E 01	0.12684E 01	0.45513E-02	0.62423E-02	0.72265E 00	0.63734E 00	0.12490E 01	0.19421E 01
92	550.97	0.67740E 01	0.10295E 01	0.36925E-02	0.50645E-02	0.58659E 00	0.51734E 00	0.13340E 01	0.18619E 01
93	548.69	0.46083E 01	0.78228E 00	0.28002E-02	0.38406E-02	0.44570E-00	0.39309E-00	0.14900E 01	0.21650E 01
94	543.84	0.26691E 01	0.28081E-00	0.10010E-02	0.13729E-02	0.15999E-00	0.14111E-00	-0.	0.31580E 02
95	545.23	0.41704E 01	0.44227E-00	0.15784E-02	0.21648E-02	0.25198E-00	0.22224E-00	-0.	0.81291E 01
96	543.38	0.35429E-00	0.37265E-01	0.13278E-03	0.18211E-03	0.21232E-01	0.18726E-01	-0.	0.32206E 01
97	542.90	0.36547E-00	0.40534E-01	0.14437E-03	0.19801E-03	0.23094E-01	0.20368E-01	-0.	0.
98	544.44	0.17922E-00	0.18998E-01	0.67754E-04	0.92928E-04	0.10824E-01	0.95464E-02	-0.	0.

~~CONFIDENTIAL~~

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
64	1	-2.60	147.40	-0.	-0.	1	C56	2.75	2	10.04	221.50	1650.20	2	C55	2.85

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.806880E 02	0.490277E-02	0.442003E 04	0.509793E-05	0.653573E-07	0.347088E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725348E 00	0.174709E 01	0.198199E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	549.42	0.16946E 02	0.22173E 01	0.79512E-02	0.10968E-01	0.12692E 01	0.11187E 01	-0.	0.14231E 01
2	1085.37	-0.36365E-02	-0.64958E-03	-0.44029E-05	-0.60732E-05	-0.37181E-03	-0.32774E-03	-0.30000E-01	0.
3	1125.63	0.51910E-02	0.10239E-02	0.74455E-05	0.10270E-04	0.58606E-03	0.51660E-03	-0.60000E-01	0.
4	545.10	0.14910E 02	0.23091E 01	0.82496E-02	0.11379E-01	0.13217E 01	0.11651E 01	-0.90000E-01	0.14508E 01
5	538.96	0.13578E 02	0.21488E 01	0.76365E-02	0.10533E-01	0.12300E 01	0.10842E 01	-0.20000E-00	0.14541E 01
6	534.35	0.13931E 02	0.21990E 01	0.77840E-02	0.10737E-01	0.12587E 01	0.11095E 01	-0.40000E-00	0.17020E 01
7	534.30	0.15189E 02	0.24090E 01	0.85269E-02	0.11762E-01	0.13789E 01	0.12154E 01	-0.60000E 00	0.21697E 01
8	1085.37	-0.36365E-02	-0.74643E-03	-0.50593E-05	-0.69786E-05	-0.42724E-03	-0.37661E-03	-0.80000E 00	0.
9	537.38	0.15959E 02	0.24954E 01	0.88560E-02	0.12216E-01	0.14283E 01	0.12590E 01	-0.90000E 00	0.28379E 01
10	540.92	0.14708E 02	0.23339E 01	0.83082E-02	0.11460E-01	0.13359E 01	0.11776E 01	-0.98000E 00	0.29487E 01
11	537.86	0.82078E 00	0.14096E-00	0.50048E-03	0.69033E-03	0.80685E-01	0.71122E-01	-0.11220E 01	0.63639E 01
12	539.98	0.91169E 00	0.13358E-00	0.47513E-03	0.65538E-03	0.76460E-01	0.67398E-01	-0.11890E 01	0.32341E 01
13	540.95	0.88000E 00	0.13300E-00	0.47346E-03	0.65306E-03	0.76126E-01	0.67104E-01	-0.13340E 01	0.31515E 01
14	540.03	0.62805E 00	0.10799E-00	0.38414E-03	0.52986E-03	0.61814E-01	0.54488E-01	-0.14400E 01	0.36326E 01
15	1122.21	-0.28209E-00	-0.51107E-01	-0.36935E-03	-0.50946E-03	-0.29253E-01	-0.25786E-01	0.30000E-01	0.
16	1085.37	-0.36365E-02	-0.70628E-03	-0.47872E-05	-0.66032E-05	-0.40426E-03	-0.35635E-03	0.60000E-01	0.
17	1085.37	-0.36365E-02	-0.72446E-03	-0.49104E-05	-0.67732E-05	-0.41467E-03	-0.36552E-03	0.90000E-01	0.
18	540.45	0.16972E 02	0.26883E 01	0.95657E-02	0.13195E-01	0.15387E 01	0.13564E 01	0.20000E-00	0.14881E 01
19	543.55	0.20219E 02	0.32081E 01	0.11446E-01	0.15788E-01	0.18363E 01	0.16186E 01	0.40000E-00	0.16277E 01
20	554.59	0.23706E 02	0.38028E 01	0.13698E-01	0.18894E-01	0.21766E 01	0.19187E 01	0.60000E 00	0.17439E 01
21	573.25	0.34251E 02	0.52263E 01	0.19136E-01	0.26396E-01	0.29914E 01	0.26369E 01	0.92000E 00	0.16944E 01
22	549.60	0.26647E 02	0.40132E 01	0.14393E-01	0.19853E-01	0.22971E 01	0.20248E 01	0.10400E 01	0.14713E 01
23	545.63	0.24286E 02	0.36593E 01	0.13079E-01	0.18041E-01	0.20945E 01	0.18463E 01	0.10600E 01	0.14638E 01
24	536.26	0.17186E 02	0.26985E 01	0.95677E-02	0.13197E-01	0.15446E 01	0.13615E 01	0.10840E 01	0.14194E 01
25	518.26	0.38904E 01	0.56595E 00	0.19762E-02	0.27259E-02	0.32394E-00	0.28555E-00	0.12070E 01	0.17115E 01
26	516.12	0.41855E 01	0.64140E 00	0.22356E-02	0.30837E-02	0.36712E-00	0.32361E-00	0.12490E 01	0.18725E 01
27	515.28	0.47932E 01	0.72229E 00	0.25158E-02	0.34701E-02	0.41342E-00	0.36443E-00	0.13340E 01	0.19589E 01
28	516.21	0.38540E 01	0.64616E 00	0.22524E-02	0.31068E-02	0.36985E-00	0.32602E-00	0.14540E 01	0.20490E 01
29	523.82	0.25205E 01	0.41185E-00	0.14449E-02	0.19930E-02	0.23574E-00	0.20780E-00	0.16580E 01	0.19509E 01
30	532.28	0.20660E 01	0.34334E-00	0.12132E-02	0.16734E-02	0.19652E-00	0.17323E-00	0.20410E 01	0.18372E 01
31	539.35	0.22841E 01	0.38112E-00	0.13549E-02	0.18688E-02	0.21815E-00	0.19229E-00	0.22480E 01	0.21705E 01
32	547.18	0.15903E 02	0.24063E 01	0.86120E-02	0.11879E-01	0.13773E 01	0.12141E 01	-0.60000E-01	0.14259E 01
33	551.03	0.16700E 02	0.23267E 01	0.83552E-02	0.11525E-01	0.13318E 01	0.11739E 01	-0.30000E-01	0.14492E 01
34	548.25	0.16851E 02	0.25513E 01	0.91396E-02	0.12607E-01	0.14603E 01	0.12872E 01	0.30000E-01	0.14466E 01
35	545.41	0.15820E 02	0.24504E 01	0.87567E-02	0.12079E-01	0.14026E 01	0.12364E 01	0.60000E-01	0.14609E 01
36	541.49	0.21955E 02	0.34797E 01	0.12393E-01	0.17094E-01	0.19917E 01	0.17556E 01	-0.86800E 00	0.25665E 01
37	542.19	0.19770E 02	0.30499E 01	0.10869E-01	0.14992E-01	0.17457E 01	0.15388E 01	-0.91100E 00	0.22978E 01
38	541.26	0.18487E 02	0.29016E 01	0.10332E-01	0.14251E-01	0.16608E 01	0.14640E 01	-0.95300E 00	0.23030E 01
39	1085.37	-0.36365E-02	-0.73816E-03	-0.50033E-05	-0.69013E-05	-0.42251E-03	-0.37244E-03	0.51000E-01	0.
40	1085.37	-0.36365E-02	-0.73816E-03	-0.50033E-05	-0.69013E-05	-0.42251E-03	-0.37244E-03	0.29000E-01	0.
41	1085.37	-0.36365E-02	-0.73391E-03	-0.49745E-05	-0.68616E-05	-0.42008E-03	-0.37029E-03	0.70000E-02	0.
42	542.70	0.24266E 02	0.38240E 01	0.13633E-01	0.18805E-01	0.21888E 01	0.19294E 01	-0.86800E 00	0.41478E 01
43	542.32	0.21984E 02	0.34725E 01	0.12376E-01	0.17071E-01	0.19876E 01	0.17520E 01	-0.91100E 00	0.30923E 01
44	542.67	0.20311E 02	0.31904E 01	0.11374E-01	0.15689E-01	0.18261E 01	0.16097E 01	-0.95300E 00	0.23238E 01
45	546.33	0.19715E 02	0.32208E 01	0.11519E-01	0.15888E-01	0.18435E 01	0.16250E 01	-0.10400E 01	0.99487E 01
46	1085.37	-0.36365E-02	-0.74005E-03	-0.50161E-05	-0.69190E-05	-0.42359E-03	-0.37339E-03	0.70000E-02	0.
47	1085.37	-0.36365E-02	-0.74005E-03	-0.50161E-05	-0.69190E-05	-0.42359E-03	-0.37339E-03	0.29000E-01	0.
48	1085.37	-0.36365E-02	-0.74289E-03	-0.50353E-05	-0.69455E-05	-0.42522E-03	-0.37482E-03	0.51000E-01	0.
49	537.95	0.14397E 02	0.22555E 01	0.80085E-02	0.11047E-01	0.12910E 01	0.11380E 01	0.70000E-02	0.25513E 01
50	538.47	0.15600E 02	0.24525E 01	0.87120E-02	0.12017E-01	0.14038E 01	0.12374E 01	0.29000E-01	0.30920E 01
51	1085.37	-0.36365E-02	-0.73580E-03	-0.49873E-05	-0.68792E-05	-0.42116E-03	-0.37124E-03	0.51000E-01	0.
52	542.79	0.20864E 02	0.32966E 01	0.11754E-01	0.16213E-01	0.18869E 01	0.16633E 01	-0.86800E 00	0.39445E 01
53	542.40	0.19232E 02	0.30496E 01	0.10869E-01	0.14993E-01	0.17455E 01	0.15386E 01	-0.91100E 00	0.39301E 01
54	542.91	0.18072E 02	0.28391E 01	0.10124E-01	0.13964E-01	0.16250E 01	0.14324E 01	-0.95300E 00	0.35354E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	543.81	0.12571E 02	0.20508E 01	0.73183E-02	0.10095E-01	0.11738E 01	0.10347E 01	-0.10400E 01	0.10114E 02
56	543.41	0.95574E 01	0.16080E 01	0.57362E-02	0.79123E-02	0.92036E 00	0.81129E 00	-0.10680E 01	0.11380E 02
57	554.60	0.23177E 02	0.38038E 01	0.13702E-01	0.18900E-01	0.21773E 01	0.19192E 01	-0.10400E 01	0.33052E 02
58	555.87	0.29321E 02	0.52132E 01	0.18799E-01	0.25931E-01	0.29839E 01	0.26303E 01	-0.10680E 01	0.25377E 02
59	540.05	0.10343E 02	0.16837E 01	0.59892E-02	0.82612E-02	0.96374E 00	0.84951E 00	-0.10400E 01	0.94774E 01
60	541.75	0.10876E 02	0.18281E 01	0.65122E-02	0.89826E-02	0.10464E 01	0.92235E 00	-0.10680E 01	0.10812E 02
61	539.17	0.27221E-00	0.45100E-01	0.16030E-03	0.22111E-03	0.25814E-01	0.22755E-01	-0.11220E 01	0.22452E 01
62	541.25	0.23948E-00	0.36200E-01	0.12890E-03	0.17780E-03	0.20720E-01	0.18265E-01	-0.13340E 01	0.31219E 01
63	540.41	0.35896E-00	0.61738E-01	0.21968E-03	0.30301E-03	0.35336E-01	0.31150E-01	-0.11220E 01	0.24202E 01
64	542.46	0.32727E-00	0.49504E-01	0.17646E-03	0.24340E-03	0.28335E-01	0.24977E-01	-0.13340E 01	0.33269E 01
65	540.98	0.49091E-00	0.84459E-01	0.30067E-03	0.41473E-03	0.48343E-01	0.42613E-01	0.14400E 01	0.36927E 01
66	539.67	0.70026E 00	0.11457E-00	0.40740E-03	0.56196E-03	0.65578E-01	0.57806E-01	0.16130E 01	0.29041E 01
67	539.50	0.84623E 00	0.13588E-00	0.48312E-03	0.66640E-03	0.77778E-01	0.68560E-01	0.17200E 01	0.37421E 01
68	540.13	0.70597E 00	0.11642E-00	0.41416E-03	0.57127E-03	0.66639E-01	0.58741E-01	-0.16130E 01	0.43272E 01
69	539.70	0.87117E 00	0.13990E-00	0.49750E-03	0.68623E-03	0.80079E-01	0.70588E-01	-0.18260E 01	0.32793E 01
70	541.19	0.59532E 00	0.87437E-01	0.31132E-03	0.42942E-03	0.50047E-01	0.44116E-01	-0.11650E 01	0.42582E 01
71	542.08	0.57715E 00	0.48500E-01	0.17282E-03	0.23838E-03	0.27760E-01	0.24470E-01	-0.12050E 01	0.33029E 01
72	542.98	0.85558E 00	0.12406E-00	0.44241E-03	0.61024E-03	0.71011E-01	0.62594E-01	-0.12120E 01	0.27733E 01
73	539.73	0.53618E 00	0.78979E-01	0.28086E-03	0.38740E-03	0.45206E-01	0.39848E-01	-0.11650E 01	0.21771E 01
74	540.65	0.46130E-00	0.38734E-01	0.13785E-03	0.19014E-03	0.22170E-01	0.19543E-01	-0.12050E 01	0.32506E 01
75	1085.37	-0.36365E-02	-0.67557E-03	-0.45790E-05	-0.63161E-05	-0.38668E-03	-0.34085E-03	-0.12120E 01	0.
76	536.01	0.15351E 01	0.23059E-00	0.81738E-03	0.11275E-02	0.13198E-00	0.11634E-00	0.10840E 01	0.33517E 01
77	537.02	0.44052E-00	0.71082E-01	0.25219E-03	0.34785E-03	0.40686E-01	0.35864E-01	0.11220E 01	0.17948E 01
78	540.91	0.73403E 00	0.10927E-00	0.38897E-03	0.53653E-03	0.62545E-01	0.55132E-01	0.13340E 01	0.23758E 01
79	539.13	0.26598E-00	0.44615E-01	0.15857E-03	0.21873E-03	0.25537E-01	0.22510E-01	-0.11890E 01	0.36510E 01
80	540.52	0.47844E-00	0.71931E-01	0.25597E-03	0.35307E-03	0.41172E-01	0.36292E-01	-0.13340E 01	0.39084E 01
81	537.74	0.39636E-00	0.63981E-01	0.22713E-03	0.31330E-03	0.36622E-01	0.32281E-01	-0.11470E 01	0.60841E 01
82	537.64	0.42598E-01	0.71329E-02	0.25320E-04	0.34925E-04	0.40827E-02	0.35988E-02	-0.11890E 01	0.
83	535.27	0.21319E 01	0.35652E-00	0.12630E-02	0.17421E-02	0.20406E-00	0.17988E-00	-0.10840E 01	0.47136E 01
84	537.94	0.29091E-00	0.42649E-01	0.15143E-03	0.20888E-03	0.24412E-01	0.21518E-01	-0.11890E 01	0.79223E 01
85	540.52	0.45611E-00	0.66964E-01	0.23829E-03	0.32869E-03	0.38329E-01	0.33786E-01	-0.13090E 01	0.33082E 01
86	540.39	0.28623E-00	0.42597E-01	0.15157E-03	0.20906E-03	0.24382E-01	0.21492E-01	-0.13340E 01	0.64172E 01
87	529.06	0.11872E 02	0.17288E 01	0.60922E-02	0.84033E-02	0.98956E 00	0.87228E 00	0.11990E 01	0.16564E 01
88	520.47	0.66644E 01	0.97405E 00	0.34075E-02	0.47002E-02	0.55753E 00	0.49145E-00	0.12070E 01	0.15145E 01
89	516.04	0.47330E 01	0.70176E 00	0.24458E-02	0.33736E-02	0.40167E-00	0.35407E-00	0.13340E 01	0.18957E 01
90	523.09	0.94722E 01	0.13393E 01	0.46955E-02	0.64767E-02	0.76656E 00	0.67571E 00	0.12070E 01	0.16150E 01
91	519.46	0.57621E 01	0.88470E 00	0.30923E-02	0.42653E-02	0.50638E 00	0.44637E-00	0.12490E 01	0.18121E 01
92	517.72	0.49751E 01	0.74207E 00	0.25900E-02	0.35725E-02	0.42475E-00	0.37441E-00	0.13340E 01	0.18199E 01
93	519.32	0.34171E 01	0.57053E 00	0.19940E-02	0.27504E-02	0.32656E-00	0.28786E-00	0.14900E 01	0.19946E 01
94	542.29	0.40468E 01	0.42539E-00	0.15161E-02	0.20912E-02	0.24348E-00	0.21463E-00	-0.	0.27720E 02
95	544.09	0.64582E 01	0.68445E 00	0.24431E-02	0.33699E-02	0.39176E-00	0.34533E-00	-0.	0.11538E 02
96	540.11	0.45662E-00	0.47941E-01	0.17054E-03	0.23523E-03	0.27440E-01	0.24188E-01	-0.	0.26762E 01
97	540.61	0.79325E 00	0.83306E-01	0.29647E-03	0.40894E-03	0.47683E-01	0.42032E-01	-0.	0.46909E 01
98	542.63	0.12582E 01	0.13323E-00	0.47498E-03	0.65516E-03	0.76261E-01	0.67222E-01	-0.	0.31737E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
65	1	4.39	154.39	-0.	-0.	1	C56	2.75	2	10.04	218.50	1652.10	3	C55	2.90

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.807997E 02	0.483780E-02	0.442270E 04	0.502343E-05	0.654478E-07	0.341749E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725425E 00	0.172973E 01	0.196467E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	557.35	0.19562E 02	0.25709E 01	0.92655E-02	0.12962E-01	0.14863E 01	0.13086E 01	-0.	0.88805E 00
2	1085.37	-0.36365E-02	-0.64958E-03	-0.43876E-05	-0.61380E-05	-0.37554E-03	-0.33063E-03	-0.30000E-01	0.
3	1126.74	-0.17669E-01	-0.34866E-02	-0.25310E-04	-0.35408E-04	-0.20157E-02	-0.17747E-02	-0.60000E-01	0.
4	550.18	0.17381E 02	0.26995E 01	0.96687E-02	0.13526E-01	0.15606E 01	0.13740E 01	-0.90000E-01	0.90621E 00
5	541.24	0.15638E 02	0.24781E 01	0.88076E-02	0.12322E-01	0.14326E 01	0.12613E 01	-0.20000E-00	0.90126E 00
6	533.77	0.14133E 02	0.22303E 01	0.78763E-02	0.11019E-01	0.12894E 01	0.11352E 01	-0.40000E-00	0.95300E 00
7	532.95	0.13161E 02	0.20857E 01	0.73606E-02	0.10297E-01	0.12058E 01	0.10616E 01	-0.60000E 00	0.10253E 01
8	1085.37	-0.36365E-02	-0.74643E-03	-0.50417E-05	-0.70532E-05	-0.43153E-03	-0.37993E-03	-0.80000E 00	0.
9	536.34	0.16024E 02	0.25041E 01	0.88626E-02	0.12399E-01	0.14477E 01	0.12745E 01	-0.90000E 00	0.10703E 01
10	540.45	0.15976E 02	0.25345E 01	0.90019E-02	0.12593E-01	0.14652E 01	0.12900E 01	-0.98000E 00	0.10857E 01
11	536.21	0.83688E 00	0.14360E-00	0.50818E-03	0.71092E-03	0.83016E-01	0.73089E-01	-0.11220E 01	0.19228E 01
12	538.53	0.91844E 00	0.13446E-00	0.47679E-03	0.66702E-03	0.77735E-01	0.68439E-01	-0.11890E 01	0.16524E 01
13	540.54	0.89247E 00	0.13485E-00	0.47900E-03	0.67010E-03	0.77961E-01	0.68638E-01	-0.13340E 01	0.15458E 01
14	539.92	0.76468E 00	0.13148E-00	0.46678E-03	0.65301E-03	0.76012E-01	0.66922E-01	-0.14400E 01	0.13152E 01
15	1111.96	-0.63792E 00	-0.11513E-00	-0.81397E-03	-0.11387E-02	-0.66557E-01	-0.58598E-01	0.30000E-01	0.
16	1085.37	-0.36365E-02	-0.70628E-03	-0.47705E-05	-0.66737E-05	-0.40831E-03	-0.35949E-03	0.60000E-01	0.
17	1085.37	-0.36365E-02	-0.72446E-03	-0.48933E-05	-0.68456E-05	-0.41883E-03	-0.36875E-03	0.90000E-01	0.
18	545.76	0.19701E 02	0.31299E 01	0.11168E-01	0.15623E-01	0.18095E 01	0.15931E 01	0.20000E-00	0.89867E 00
19	550.05	0.22769E 02	0.36259E 01	0.12985E-01	0.18166E-01	0.20962E 01	0.18456E 01	0.40000E-00	0.89621E 00
20	561.92	0.26052E 02	0.41961E 01	0.15183E-01	0.21241E-01	0.24259E 01	0.21358E 01	0.60000E 00	0.89319E 00
21	563.42	0.32130E 02	0.48761E 01	0.17667E-01	0.24716E-01	0.28190E 01	0.24819E 01	0.92000E 00	0.88289E 00
22	537.69	0.19273E 02	0.28832E 01	0.10216E-01	0.14292E-01	0.16669E 01	0.14675E 01	0.10400E 01	0.90999E 00
23	534.48	0.17018E 02	0.25482E 01	0.90045E-02	0.12597E-01	0.14732E 01	0.12970E 01	0.10600E 01	0.90997E 00
24	527.01	0.11513E 02	0.17983E 01	0.63143E-02	0.88335E-02	0.10396E 01	0.91530E 00	0.10840E 01	0.92524E 00
25	516.72	0.18390E 01	0.26729E-00	0.93042E-03	0.13016E-02	0.15453E-00	0.13605E-00	0.12070E 01	0.96428E 00
26	518.00	0.20514E 01	0.31471E-00	0.10967E-02	0.15342E-02	0.18194E-00	0.16018E-00	0.12490E 01	0.94329E 00
27	519.70	0.26644E 01	0.40251E-00	0.14047E-02	0.19651E-02	0.23270E-00	0.20488E-00	0.13340E 01	0.99589E 00
28	523.79	0.23829E 01	0.40124E-00	0.14050E-02	0.19656E-02	0.23197E-00	0.20423E-00	0.14540E 01	0.98959E 00
29	529.69	0.16961E 01	0.27807E-00	0.97861E-03	0.13690E-02	0.16076E-00	0.14153E-00	0.16580E 01	0.10541E 01
30	535.46	0.16639E 01	0.27702E-00	0.97973E-03	0.13706E-02	0.16015E-00	0.14100E-00	0.20410E 01	0.11600E 01
31	540.59	0.19070E 01	0.31842E-00	0.11311E-02	0.15823E-02	0.18408E-00	0.16207E-00	0.22480E 01	0.13236E 01
32	554.52	0.18817E 02	0.28589E 01	0.10278E-01	0.14379E-01	0.16528E 01	0.14552E 01	-0.60000E-01	0.89115E 00
33	558.72	0.19321E 02	0.27033E 01	0.97545E-02	0.13646E-01	0.15629E 01	0.13760E 01	-0.30000E-01	0.90263E 00
34	555.72	0.19549E 02	0.29721E 01	0.10696E-01	0.14964E-01	0.17182E 01	0.15128E 01	0.30000E-01	0.89330E 00
35	552.37	0.18390E 02	0.28597E 01	0.10262E-01	0.14356E-01	0.16532E 01	0.14556E 01	0.60000E-01	0.89542E 00
36	541.02	0.22348E 02	0.35410E 01	0.12583E-01	0.17603E-01	0.20471E 01	0.18023E 01	-0.86800E 00	0.91080E 00
37	542.06	0.20782E 02	0.32057E 01	0.11402E-01	0.15950E-01	0.18533E 01	0.16317E 01	-0.91100E 00	0.95280E 00
38	540.90	0.19921E 02	0.31261E 01	0.11107E-01	0.15539E-01	0.18073E 01	0.15912E 01	-0.95300E 00	0.98475E 00
39	1085.37	-0.36365E-02	-0.73816E-03	-0.49859E-05	-0.69751E-05	-0.42675E-03	-0.37572E-03	0.51000E-01	0.
40	1085.37	-0.36365E-02	-0.73816E-03	-0.49859E-05	-0.69751E-05	-0.42675E-03	-0.37572E-03	0.29000E-01	0.
41	1085.37	-0.36365E-02	-0.73391E-03	-0.49571E-05	-0.69349E-05	-0.42429E-03	-0.37355E-03	0.70000E-02	0.
42	543.48	0.24977E 02	0.39377E 01	0.14022E-01	0.19617E-01	0.22765E 01	0.20043E 01	-0.86800E 00	0.10291E 01
43	542.86	0.23231E 02	0.36706E 01	0.13064E-01	0.18277E-01	0.21221E 01	0.18683E 01	-0.91100E 00	0.95120E 00
44	542.93	0.21848E 02	0.34324E 01	0.12217E-01	0.17092E-01	0.19844E 01	0.17471E 01	-0.95300E 00	0.96660E 00
45	547.05	0.23737E 02	0.38793E 01	0.13857E-01	0.19385E-01	0.22427E 01	0.19745E 01	-0.10400E 01	0.30145E 01
46	1085.37	-0.36365E-02	-0.74005E-03	-0.49986E-05	-0.69929E-05	-0.42784E-03	-0.37668E-03	0.70000E-02	0.
47	1085.37	-0.36365E-02	-0.74005E-03	-0.49986E-05	-0.69929E-05	-0.42784E-03	-0.37668E-03	0.29000E-01	0.
48	1085.37	-0.36365E-02	-0.74289E-03	-0.50178E-05	-0.70197E-05	-0.42948E-03	-0.37812E-03	0.51000E-01	0.
49	536.49	0.13246E 02	0.20734E 01	0.73394E-02	0.10268E-01	0.11987E 01	0.10554E 01	0.70000E-02	0.65285E 00
50	537.02	0.14048E 02	0.22068E 01	0.78150E-02	0.10933E-01	0.12758E 01	0.11232E 01	0.29000E-01	0.10239E 01
51	1085.37	-0.36365E-02	-0.73580E-03	-0.49699E-05	-0.69527E-05	-0.42538E-03	-0.37452E-03	0.51000E-01	0.
52	543.28	0.21175E 02	0.33465E 01	0.11915E-01	0.16668E-01	0.19347E 01	0.17033E 01	-0.86800E 00	0.99699E 00
53	543.17	0.20377E 02	0.32326E 01	0.11508E-01	0.16100E-01	0.18688E 01	0.16454E 01	-0.91100E 00	0.10555E 01
54	543.31	0.19436E 02	0.30545E 01	0.10875E-01	0.15214E-01	0.17659E 01	0.15547E 01	-0.95300E 00	0.10236E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	543.98	0.15344E 02	0.25034E 01	0.89184E-02	0.12477E-01	0.14473E 01	0.12742E 01	-0.10400E 01	0.23030E 01
56	542.96	0.11828E 02	0.19894E 01	0.70812E-02	0.99064E-02	0.11501E 01	0.10126E 01	-0.10680E 01	0.21062E 01
57	555.77	0.27127E 02	0.44550E 01	0.16034E-01	0.22431E-01	0.25755E 01	0.22675E 01	-0.10400E 01	0.56866E 01
58	558.40	0.34744E 02	0.61862E 01	0.22315E-01	0.31219E-01	0.35764E 01	0.31487E 01	-0.10680E 01	0.40006E 01
59	540.00	0.12646E 02	0.20586E 01	0.73087E-02	0.10225E-01	0.11901E 01	0.10478E 01	-0.10400E 01	0.24401E 01
60	541.56	0.13288E 02	0.22333E 01	0.79397E-02	0.11107E-01	0.12911E 01	0.11367E 01	-0.10680E 01	0.25238E 01
61	537.08	0.37403E-00	0.61897E-01	0.21921E-03	0.30667E-03	0.35784E-01	0.31505E-01	-0.11220E 01	0.78260E 00
62	540.71	0.39169E-00	0.59191E-01	0.21028E-03	0.29417E-03	0.34219E-01	0.30127E-01	-0.13340E 01	0.88823E 00
63	537.80	0.47169E-00	0.81007E-01	0.28707E-03	0.40160E-03	0.46832E-01	0.41232E-01	-0.11220E 01	0.76185E 00
64	541.54	0.47117E-00	0.71235E-01	0.25325E-03	0.35429E-03	0.41183E-01	0.36258E-01	-0.13340E 01	0.14216E 01
65	540.56	0.68208E 00	0.11732E-00	0.41673E-03	0.58300E-03	0.67826E-01	0.59715E-01	0.14400E 01	0.15019E 01
66	539.59	0.85974E 00	0.14066E-00	0.49922E-03	0.69839E-03	0.81318E-01	0.71594E-01	0.16130E 01	0.18981E 01
67	539.75	0.95013E 00	0.15259E-00	0.54164E-03	0.75773E-03	0.88216E-01	0.77667E-01	0.17200E 01	0.12386E 01
68	540.18	0.85091E 00	0.14033E-00	0.49831E-03	0.69712E-03	0.81129E-01	0.71427E-01	-0.16130E 01	0.13543E 01
69	540.09	0.10223E 01	0.16422E-00	0.58309E-03	0.81572E-03	0.94939E-01	0.83586E-01	-0.18280E 01	0.12564E 01
70	538.84	0.83585E 00	0.12260E-00	0.43485E-03	0.60834E-03	0.70879E-01	0.62403E-01	-0.11650E 01	0.19248E 01
71	540.29	0.67636E 00	0.56780E-01	0.20164E-03	0.28209E-03	0.32826E-01	0.28901E-01	-0.12050E 01	0.16517E 01
72	541.58	0.98754E 00	0.14308E-00	0.50869E-03	0.71164E-03	0.82720E-01	0.72828E-01	-0.12120E 01	0.18325E 01
73	538.05	0.59481E 00	0.87207E-01	0.30910E-03	0.43242E-03	0.50416E-01	0.44388E-01	-0.11650E 01	0.13599E 01
74	539.23	0.51844E 00	0.43497E-01	0.15433E-03	0.21590E-03	0.25147E-01	0.22140E-01	-0.12050E 01	0.15253E 01
75	1085.37	-0.36365E-02	-0.67557E-03	-0.45631E-05	-0.63836E-05	-0.39056E-03	-0.34386E-03	-0.12120E 01	0.
76	534.34	0.18655E 01	0.27995E-00	0.98916E-03	0.13838E-02	0.16185E-00	0.14249E-00	0.10840E 01	0.11596E 01
77	535.36	0.66754E 00	0.10761E-00	0.38055E-03	0.53238E-03	0.62213E-01	0.54773E-01	0.11220E 01	0.13550E 01
78	540.48	0.88052E 00	0.13105E-00	0.46546E-03	0.65116E-03	0.75761E-01	0.66702E-01	0.13340E 01	0.14404E 01
79	538.19	0.38026E-00	0.63751E-01	0.22599E-03	0.31615E-03	0.36856E-01	0.32449E-01	-0.11890E 01	0.13656E 01
80	540.52	0.54234E 00	0.81537E-01	0.28962E-03	0.40516E-03	0.47138E-01	0.41502E-01	-0.13340E 01	0.18154E 01
81	536.64	0.58078E 00	0.93694E-01	0.33170E-03	0.46403E-03	0.54167E-01	0.47689E-01	-0.11470E 01	0.79937E 00
82	537.07	-0.72722E-02	-0.12173E-02	-0.43111E-05	-0.60311E-05	-0.70376E-03	-0.61960E-03	-0.11890E 01	0.
83	534.78	0.28743E 01	0.48052E-00	0.16984E-02	0.23761E-02	0.27780E-00	0.24458E-00	-0.10840E 01	0.11990E 01
84	537.42	0.32260E-00	0.47281E-01	0.16750E-03	0.23432E-03	0.27334E-01	0.24066E-01	-0.11890E 01	0.14636E 01
85	540.36	0.46857E-00	0.68789E-01	0.24430E-03	0.34177E-03	0.39768E-01	0.35013E-01	-0.13090E 01	0.12691E 01
86	540.28	0.47896E-00	0.71275E-01	0.25312E-03	0.35410E-03	0.41206E-01	0.36278E-01	-0.13340E 01	0.16317E 01
87	522.04	0.57548E 01	0.83468E 00	0.29186E-02	0.40830E-02	0.48255E-00	0.42485E-00	0.11990E 01	0.73833E 00
88	518.24	0.31418E 01	0.45861E-00	0.15985E-02	0.22362E-02	0.26514E-00	0.23343E-00	0.12070E 01	0.77057E 00
89	521.92	0.28374E 01	0.42212E-00	0.14758E-02	0.20646E-02	0.24404E-00	0.21485E-00	0.13340E 01	0.94854E 00
90	520.22	0.43039E 01	0.60752E 00	0.21210E-02	0.29672E-02	0.35122E-00	0.30922E-00	0.12070E 01	0.77876E 00
91	521.27	0.31958E 01	0.49119E-00	0.17164E-02	0.24012E-02	0.28397E-00	0.25001E-00	0.12490E 01	0.99568E 00
92	521.84	0.28961E 01	0.43300E-00	0.15138E-02	0.21177E-02	0.25033E-00	0.22039E-00	0.13340E 01	0.98110E 00
93	526.86	0.21371E 01	0.35836E-00	0.12581E-02	0.17601E-02	0.20717E-00	0.18240E-00	0.14900E 01	0.13491E 01
94	543.01	0.61470E 01	0.64643E 00	0.23010E-02	0.32190E-02	0.37371E-00	0.32902E-00	-0.	0.11112E 01
95	545.08	0.90151E 01	0.95596E 00	0.34089E-02	0.47689E-02	0.55266E 00	0.48657E-00	-0.	0.11486E 01
96	539.97	0.63169E 00	0.66316E-01	0.23544E-03	0.32938E-03	0.38339E-01	0.33754E-01	-0.	0.14668E 01
97	540.60	0.95636E 00	0.10044E-00	0.35677E-03	0.49911E-03	0.58064E-01	0.51121E-01	-0.	0.24450E 01
98	543.30	0.14675E 01	0.15546E-00	0.55352E-03	0.77436E-03	0.89877E-01	0.79129E-01	-0.	0.19884E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
66	1	8.40	158.40	-0.	-0.	1	C56	2.75	2	10.04	215.60	1656.00	4	C55	3.00

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.810192E 02	0.477518E-02	0.442834E 04	0.494497E-05	0.656256E-07	0.335928E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725575E 00	0.171317E 01	0.194821E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	552.42	0.20241E 02	0.26528E 01	0.94833E-02	0.13460E-01	0.15485E 01	0.13617E 01	-0.	0.92810E 00
2	1085.37	-0.36365E-02	-0.64958E-03	-0.43558E-05	-0.61825E-05	-0.37917E-03	-0.33343E-03	-0.30000E-01	0.
3	1127.28	-0.46799E-02	-0.92366E-03	-0.66594E-05	-0.94520E-05	-0.53915E-03	-0.47411E-03	-0.60000E-01	0.
4	540.52	0.18130E 02	0.28006E 01	0.99097E-02	0.14065E-01	0.16347E 01	0.14375E 01	-0.90000E-01	0.91136E 00
5	530.70	0.16598E 02	0.26147E 01	0.91751E-02	0.13023E-01	0.15262E 01	0.13421E 01	-0.20000E-00	0.91599E 00
6	526.77	0.16089E 02	0.25288E 01	0.88442E-02	0.12553E-01	0.14761E 01	0.12980E 01	-0.40000E-00	0.10111E 01
7	527.45	0.15931E 02	0.25170E 01	0.88078E-02	0.12501E-01	0.14692E 01	0.12919E 01	-0.60000E 00	0.11478E 01
8	1085.37	-0.36365E-02	-0.74643E-03	-0.50052E-05	-0.71042E-05	-0.43570E-03	-0.38314E-03	-0.80000E 00	0.
9	531.72	0.17581E 02	0.27403E 01	0.96241E-02	0.13660E-01	0.15995E 01	0.14066E 01	-0.90000E 00	0.11796E 01
10	536.04	0.17463E 02	0.27636E 01	0.97415E-02	0.13827E-01	0.16131E 01	0.14185E 01	-0.98000E 00	0.11608E 01
11	535.27	0.97559E 00	0.16731E-00	0.58936E-03	0.83651E-03	0.97659E-01	0.85877E-01	-0.11220E 01	0.15203E 01
12	540.51	0.99168E 00	0.14535E-00	0.51430E-03	0.72997E-03	0.84841E-01	0.74605E-01	-0.11890E 01	0.10530E 01
13	543.17	0.99377E 00	0.15038E-00	0.53332E-03	0.75697E-03	0.87779E-01	0.77189E-01	-0.13340E 01	0.10809E 01
14	542.33	0.89870E 00	0.15473E-00	0.54836E-03	0.77832E-03	0.90321E-01	0.79424E-01	-0.14400E 01	0.10193E 01
15	1011.56	0.14852E 01	0.25762E-00	0.15386E-02	0.21638E-02	0.15038E-00	0.13223E-00	0.30000E-01	0.
16	1085.37	-0.36365E-02	-0.70628E-03	-0.47360E-05	-0.67220E-05	-0.41226E-03	-0.36253E-03	0.60000E-01	0.
17	1085.37	-0.36365E-02	-0.72446E-03	-0.48579E-05	-0.68951E-05	-0.42288E-03	-0.37186E-03	0.90000E-01	0.
18	563.72	0.19365E 02	0.31073E 01	0.11217E-01	0.15921E-01	0.18138E 01	0.15950E 01	0.20000E-00	0.87132E 00
19	568.09	0.21701E 02	0.34906E 01	0.12649E-01	0.17954E-01	0.20375E 01	0.17917E 01	0.40000E-00	0.83925E 00
20	563.26	0.23641E 02	0.38106E 01	0.13751E-01	0.19517E-01	0.22243E 01	0.19560E 01	0.60000E 00	0.80661E 00
21	553.63	0.27016E 02	0.40779E 01	0.14593E-01	0.20712E-01	0.23803E 01	0.20931E 01	0.92000E 00	0.83625E 00
22	543.47	0.14620E 02	0.21943E 01	0.77841E-02	0.11048E-01	0.12809E 01	0.11263E 01	0.10400E 01	0.91689E 00
23	541.59	0.12842E 02	0.19306E 01	0.68375E-02	0.97048E-02	0.11269E 01	0.99095E 00	0.10600E 01	0.92733E 00
24	538.25	0.85906E 01	0.13504E 01	0.47690E-02	0.67689E-02	0.78824E 00	0.69315E 00	0.10840E 01	0.96623E 00
25	540.21	0.15522E 01	0.22863E-00	0.80879E-03	0.11480E-02	0.13346E-00	0.11736E-00	0.12070E 01	0.12600E 01
26	542.50	0.18660E 01	0.29026E-00	0.10288E-02	0.14602E-02	0.16943E-00	0.14899E-00	0.12490E 01	0.13721E 01
27	543.89	0.23953E 01	0.36685E-00	0.13018E-02	0.18477E-02	0.21413E-00	0.18830E-00	0.13340E 01	0.13873E 01
28	544.03	0.23065E 01	0.39284E-00	0.13942E-02	0.19789E-02	0.22931E-00	0.20164E-00	0.14540E 01	0.14107E 01
29	543.62	0.26628E 01	0.44000E-00	0.15610E-02	0.22157E-02	0.25683E-00	0.22585E-00	0.16580E 01	0.19649E 01
30	544.39	0.32203E 01	0.53884E 00	0.19130E-02	0.27152E-02	0.31453E-00	0.27658E-00	0.20410E 01	0.21007E 01
31	546.61	0.37948E 01	0.63576E 00	0.22614E-02	0.32097E-02	0.37110E-00	0.32633E-00	0.22480E 01	0.20787E 01
32	549.67	0.19166E 02	0.29041E 01	0.10357E-01	0.14700E-01	0.16951E 01	0.14906E 01	-0.60000E-01	0.89280E 00
33	553.80	0.19896E 02	0.27762E 01	0.99362E-02	0.14103E-01	0.16205E 01	0.14250E 01	-0.30000E-01	0.92080E 00
34	551.18	0.20072E 02	0.30439E 01	0.10870E-01	0.15428E-01	0.17768E 01	0.15624E 01	0.30000E-01	0.89913E 00
35	547.49	0.18791E 02	0.29141E 01	0.10373E-01	0.14723E-01	0.17010E 01	0.14958E 01	0.60000E-01	0.89182E 00
36	536.08	0.23785E 02	0.37583E 01	0.13248E-01	0.18804E-01	0.21937E 01	0.19291E 01	-0.86800E 00	0.91876E 00
37	536.81	0.21761E 02	0.33468E 01	0.11805E-01	0.16756E-01	0.19536E 01	0.17179E 01	-0.91100E 00	0.94899E 00
38	536.79	0.20923E 02	0.32757E 01	0.11554E-01	0.16399E-01	0.19121E 01	0.16814E 01	-0.95300E 00	0.97526E 00
39	1085.37	-0.36365E-02	-0.73818E-03	-0.49498E-05	-0.70255E-05	-0.43088E-03	-0.37889E-03	0.51000E-01	0.
40	1085.37	-0.36365E-02	-0.73818E-03	-0.49498E-05	-0.70255E-05	-0.43088E-03	-0.37889E-03	0.29000E-01	0.
41	1085.37	-0.36365E-02	-0.73391E-03	-0.49213E-05	-0.69850E-05	-0.42839E-03	-0.37671E-03	0.70000E-02	0.
42	538.44	0.25599E 02	0.40245E 01	0.14215E-01	0.20176E-01	0.23492E 01	0.20658E 01	-0.86800E 00	0.96543E 00
43	537.75	0.23782E 02	0.37470E 01	0.13227E-01	0.18774E-01	0.21872E 01	0.19233E 01	-0.91100E 00	0.90165E 00
44	538.56	0.22275E 02	0.34910E 01	0.12332E-01	0.17503E-01	0.20377E 01	0.17919E 01	-0.95300E 00	0.92396E 00
45	546.38	0.25543E 02	0.41730E 01	0.14840E-01	0.21064E-01	0.24359E 01	0.21420E 01	-0.10400E 01	0.26179E 01
46	1085.37	-0.36365E-02	-0.74005E-03	-0.49625E-05	-0.70435E-05	-0.43198E-03	-0.37986E-03	0.70000E-02	0.
47	1085.37	-0.36365E-02	-0.74005E-03	-0.49625E-05	-0.70435E-05	-0.43198E-03	-0.37986E-03	0.29000E-01	0.
48	1085.37	-0.36365E-02	-0.74289E-03	-0.49815E-05	-0.70705E-05	-0.43363E-03	-0.38132E-03	0.51000E-01	0.
49	530.63	0.14440E 02	0.22528E 01	0.79048E-02	0.11220E-01	0.13150E 01	0.11564E 01	0.70000E-02	0.69893E 00
50	532.79	0.16618E 02	0.26043E 01	0.91546E-02	0.12994E-01	0.15201E 01	0.13367E 01	0.29000E-01	0.12213E 01
51	1085.37	-0.36365E-02	-0.73580E-03	-0.49340E-05	-0.70030E-05	-0.42950E-03	-0.37768E-03	0.51000E-01	0.
52	538.69	0.22628E 02	0.35670E 01	0.12602E-01	0.17886E-01	0.20821E 01	0.18309E 01	-0.86800E 00	0.10608E 01
53	538.27	0.21518E 02	0.34042E 01	0.12022E-01	0.17064E-01	0.19871E 01	0.17473E 01	-0.91100E 00	0.11006E 01
54	540.06	0.20286E 02	0.31818E 01	0.11254E-01	0.15974E-01	0.18573E 01	0.16332E 01	-0.95300E 00	0.10221E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	543.99	0.16010E 02	0.26120E 01	0.92700E-02	0.13157E-01	0.15247E 01	0.13407E 01	-0.10400E 01	0.19491E 01
56	543.25	0.12453E 02	0.20950E 01	0.74302E-02	0.10546E-01	0.12229E 01	0.10753E 01	-0.10680E 01	0.18159E 01
57	559.84	0.29671E 02	0.48837E 01	0.17571E-01	0.24939E-01	0.28507E 01	0.25068E 01	-0.10400E 01	0.46112E 01
58	561.07	0.36873E 02	0.65749E 01	0.23681E-01	0.33611E-01	0.38378E 01	0.33748E 01	-0.10680E 01	0.34097E 01
59	540.71	0.14007E 02	0.22811E 01	0.80728E-02	0.11458E-01	0.13315E 01	0.11709E 01	-0.10400E 01	0.21845E 01
60	541.38	0.14682E 02	0.24674E 01	0.87371E-02	0.12401E-01	0.14402E 01	0.12665E 01	-0.10680E 01	0.21446E 01
61	537.82	0.48104E-00	0.79638E-01	0.28115E-03	0.39904E-03	0.46486E-01	0.40878E-01	-0.11220E 01	0.73096E 00
62	543.44	0.43584E-00	0.65963E-01	0.23399E-03	0.33211E-03	0.38504E-01	0.33858E-01	-0.13340E 01	0.78895E 00
63	538.66	0.64000E 00	0.10997E-00	0.38849E-03	0.55140E-03	0.64189E-01	0.56445E-01	-0.11220E 01	0.79926E 00
64	544.15	0.60571E 00	0.91709E-01	0.32551E-03	0.46202E-03	0.53532E-01	0.47074E-01	-0.13340E 01	0.12515E 01
65	543.16	0.92104E 00	0.15865E-00	0.56266E-03	0.79861E-03	0.92609E-01	0.81436E-01	0.14400E 01	0.11993E 01
66	541.89	0.10925E 01	0.17896E-00	0.63399E-03	0.89986E-03	0.10446E-00	0.91861E-01	0.16130E 01	0.87153E 00
67	542.41	0.12296E 01	0.19777E-00	0.70092E-03	0.99486E-03	0.11544E-00	0.10151E-00	0.17200E 01	0.11842E 01
68	542.65	0.10073E 01	0.16635E-00	0.58968E-03	0.83697E-03	0.97099E-01	0.85385E-01	-0.16130E 01	0.11964E 01
69	542.77	0.12758E 01	0.20525E-00	0.72765E-03	0.10328E-02	0.11981E-00	0.10535E-00	-0.18280E 01	0.11655E 01
70	539.12	0.10203E 01	0.14967E-00	0.52898E-03	0.75081E-03	0.87367E-01	0.76827E-01	-0.11650E 01	0.13074E 01
71	542.06	0.73871E 00	0.62076E-01	0.21994E-03	0.31217E-03	0.36235E-01	0.31863E-01	-0.12050E 01	0.11479E 01
72	542.91	0.10800E 01	0.15660E-00	0.55524E-03	0.78808E-03	0.91408E-01	0.80380E-01	-0.12120E 01	0.10201E 01
73	539.67	0.68000E 00	0.99788E-01	0.35284E-03	0.50080E-03	0.58248E-01	0.51220E-01	-0.11650E 01	0.91523E 00
74	541.09	0.69246E 00	0.58159E-01	0.20589E-03	0.29223E-03	0.33948E-01	0.29852E-01	-0.12050E 01	0.12703E 01
75	1085.37	-0.36365E-02	-0.67557E-03	-0.45301E-05	-0.64297E-05	-0.39434E-03	-0.34676E-03	-0.12120E 01	0.
76	533.95	0.23917E 01	0.35885E-00	0.12627E-02	0.17922E-02	0.20946E-00	0.18419E-00	0.10840E 01	0.13513E 01
77	536.03	0.80624E 00	0.13002E-00	0.45831E-03	0.65051E-03	0.75894E-01	0.66738E-01	0.11220E 01	0.12268E 01
78	543.31	0.96260E 00	0.14349E-00	0.50894E-03	0.72237E-03	0.83757E-01	0.73652E-01	0.13340E 01	0.10695E 01
79	539.66	0.56779E 00	0.95270E-01	0.33686E-03	0.47812E-03	0.55610E-01	0.48901E-01	-0.11890E 01	0.11647E 01
80	542.97	0.66234E 00	0.99715E-01	0.35357E-03	0.50185E-03	0.58205E-01	0.51183E-01	-0.13340E 01	0.10169E 01
81	537.76	0.75221E 00	0.12143E-00	0.42865E-03	0.60840E-03	0.70878E-01	0.62327E-01	-0.11470E 01	0.16325E 01
82	538.72	0.12779E-00	0.21412E-01	0.75647E-04	0.10737E-03	0.12498E-01	0.10990E-01	-0.11890E 01	0.16667E 01
83	534.64	0.36468E 01	0.60961E 00	0.21463E-02	0.30463E-02	0.35584E-00	0.31291E-00	-0.10840E 01	0.13514E 01
84	539.27	0.36363E-00	0.53350E-01	0.18857E-03	0.26765E-03	0.31141E-01	0.27384E-01	-0.11890E 01	0.10882E 01
85	542.13	0.54234E 00	0.79698E-01	0.28239E-03	0.40082E-03	0.46520E-01	0.40908E-01	-0.13090E 01	0.10597E 01
86	542.70	0.38909E-00	0.57980E-01	0.20554E-03	0.29174E-03	0.33844E-01	0.29761E-01	-0.13340E 01	0.88832E 00
87	543.94	0.41028E 01	0.60248E 00	0.21381E-02	0.30347E-02	0.35168E-00	0.30925E-00	0.11990E 01	0.98114E 00
88	541.77	0.26078E 01	0.38577E-00	0.13665E-02	0.19395E-02	0.22518E-00	0.19801E-00	0.12070E 01	0.11480E 01
89	545.78	0.21486E 01	0.32398E-00	0.11515E-02	0.16344E-02	0.18911E-00	0.16629E-00	0.13340E 01	0.13083E 01
90	542.89	0.31465E 01	0.44988E-00	0.15951E-02	0.22640E-02	0.26260E-00	0.23092E-00	0.12070E 01	0.98740E 00
91	545.27	0.20774E 01	0.32365E-00	0.11499E-02	0.16321E-02	0.18892E-00	0.16613E-00	0.12490E 01	0.11646E 01
92	545.80	0.20135E 01	0.30514E-00	0.10846E-02	0.15394E-02	0.17811E-00	0.15663E-00	0.13340E 01	0.12721E 01
93	544.88	0.22675E 01	0.38410E-00	0.13642E-02	0.19363E-02	0.22421E-00	0.19716E-00	0.14900E 01	0.
94	547.25	0.81720E 01	0.86141E 00	0.30657E-02	0.43513E-02	0.50282E 00	0.44216E-00	-0.	0.13832E 01
95	549.92	0.11116E 02	0.11820E 01	0.42162E-02	0.59842E-02	0.68993E 00	0.60670E 00	-0.	0.12169E 01
96	542.80	0.80727E 00	0.84883E-01	0.30094E-03	0.42714E-03	0.49547E-01	0.43570E-01	-0.	0.12830E 01
97	543.43	0.12758E 01	0.13420E-00	0.47604E-03	0.67567E-03	0.78334E-01	0.68884E-01	-0.	0.12109E 01
98	544.05	0.17797E 01	0.18861E-00	0.66942E-03	0.95014E-03	0.11010E-00	0.96815E-01	-0.	0.12090E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
67	1	12.49	162.49	-0.	-0.	1	C56	2.75	2	10.04	216.00	1657.90	5	C55	2.95

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.811170E 02	0.478190E-02	0.443106E 04	0.494596E-05	0.657048E-07	0.335796E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725642E 00	0.171521E 01	0.195023E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	558.13	0.21790E 02	0.28650E 01	0.10274E-01	0.14570E-01	0.16704E 01	0.14691E 01	-0.	0.96813E 00
2	1085.37	-0.36365E-02	-0.64958E-03	-0.43408E-05	-0.61561E-05	-0.37872E-03	-0.33308E-03	-0.30000E-01	0.
3	1127.60	0.31120E-02	0.61428E-03	0.44150E-05	0.62613E-05	0.35814E-03	0.31498E-03	-0.60000E-01	0.
4	544.02	0.19821E 02	0.30678E 01	0.10868E-01	0.15413E-01	0.17886E 01	0.15730E 01	-0.90000E-01	0.96764E 00
5	532.97	0.18961E 02	0.29907E 01	0.10496E-01	0.14885E-01	0.17436E 01	0.15335E 01	-0.20000E-00	0.10069E 01
6	527.53	0.19149E 02	0.30111E 01	0.10519E-01	0.14918E-01	0.17555E 01	0.15440E 01	-0.40000E-00	0.11671E 01
7	528.55	0.20427E 02	0.32292E 01	0.11290E-01	0.16012E-01	0.18827E 01	0.16558E 01	-0.60000E 00	0.13805E 01
8	1085.37	-0.36365E-02	-0.74643E-03	-0.49880E-05	-0.70740E-05	-0.43518E-03	-0.38274E-03	-0.80000E 00	0.
9	533.41	0.23267E 02	0.36300E 01	0.12744E-01	0.18073E-01	0.21163E 01	0.18613E 01	-0.90000E 00	0.15232E 01
10	537.49	0.21988E 02	0.34825E 01	0.12268E-01	0.17399E-01	0.20303E 01	0.17857E 01	-0.98000E 00	0.14240E 01
11	532.63	0.10738E 01	0.18387E-00	0.64509E-03	0.91486E-03	0.10720E-00	0.94281E-01	-0.11220E 01	0.17547E 01
12	537.81	0.84831E 00	0.12414E-00	0.43746E-03	0.62041E-03	0.72378E-01	0.63656E-01	-0.11890E 01	0.86083E 00
13	541.53	0.91689E 00	0.13862E-00	0.49002E-03	0.69495E-03	0.80818E-01	0.71078E-01	-0.13340E 01	0.91072E 00
14	540.72	0.83481E 00	0.14360E-00	0.50729E-03	0.71944E-03	0.83724E-01	0.73635E-01	-0.14400E 01	0.86941E 00
15	863.22	-0.67030E 01	-0.10914E 01	-0.53358E-02	-0.75673E-02	-0.63630E 00	-0.55962E 00	0.30000E-01	0.
16	1085.37	-0.36365E-02	-0.70628E-03	-0.47196E-05	-0.66934E-05	-0.41177E-03	-0.36215E-03	0.60000E-01	0.
17	1085.37	-0.36365E-02	-0.72446E-03	-0.48412E-05	-0.68658E-05	-0.42238E-03	-0.37148E-03	0.90000E-01	0.
18	568.80	0.19791E 02	0.31846E 01	0.11526E-01	0.16347E-01	0.18567E 01	0.16330E 01	0.20000E-00	0.88567E 00
19	571.38	0.21232E 02	0.34214E 01	0.12411E-01	0.17601E-01	0.19947E 01	0.17543E 01	0.40000E-00	0.83325E 00
20	561.54	0.22112E 02	0.35608E 01	0.12806E-01	0.18162E-01	0.20760E 01	0.18258E 01	0.60000E 00	0.81377E 00
21	553.09	0.24699E 02	0.37270E 01	0.13306E-01	0.18871E-01	0.21729E 01	0.19110E 01	0.92000E 00	0.87243E 00
22	541.00	0.13259E 02	0.19872E 01	0.70217E-02	0.99582E-02	0.11586E 01	0.10190E 01	0.10400E 01	0.14147E 01
23	539.40	0.11799E 02	0.17716E 01	0.62513E-02	0.88655E-02	0.10329E 01	0.90840E 00	0.10600E 01	0.10883E 01
24	536.71	0.79247E 01	0.12446E 01	0.43818E-02	0.62143E-02	0.72565E 00	0.63820E 00	0.10840E 01	0.11518E 01
25	540.35	0.17288E 01	0.25467E-00	0.89936E-03	0.12755E-02	0.14848E-00	0.13058E-00	0.12070E 01	0.17966E 01
26	542.45	0.19299E 01	0.30019E-00	0.10620E-02	0.15061E-02	0.17502E-00	0.15393E-00	0.12490E 01	0.18947E 01
27	543.60	0.23288E 01	0.35661E-00	0.12628E-02	0.17910E-02	0.20791E-00	0.18285E-00	0.13340E 01	0.19900E 01
28	543.77	0.23585E 01	0.40164E-00	0.14225E-02	0.20174E-02	0.23416E-00	0.20594E-00	0.14540E 01	0.20623E 01
29	543.25	0.31200E 01	0.51543E 00	0.18248E-02	0.25879E-02	0.30051E-00	0.26429E-00	0.16580E 01	0.26487E 01
30	543.57	0.37434E 01	0.62608E 00	0.22171E-02	0.31442E-02	0.36502E-00	0.32103E-00	0.20410E 01	0.23046E 01
31	546.32	0.42171E 01	0.70641E 00	0.25074E-02	0.35560E-02	0.41185E-00	0.36222E-00	0.22480E 01	0.21419E 01
32	555.63	0.20647E 02	0.31389E 01	0.11231E-01	0.15928E-01	0.18300E 01	0.16095E 01	-0.60000E-01	0.94281E 00
33	559.79	0.21104E 02	0.29547E 01	0.10610E-01	0.15048E-01	0.17226E 01	0.15151E 01	+0.30000E-01	0.94881E 00
34	556.34	0.21640E 02	0.32911E 01	0.11783E-01	0.16711E-01	0.19188E 01	0.16875E 01	0.30000E-01	0.95309E 00
35	551.99	0.20463E 02	0.31814E 01	0.11348E-01	0.16093E-01	0.18548E 01	0.16313E 01	0.60000E-01	0.95612E 00
36	538.08	0.28388E 02	0.44906E 01	0.15828E-01	0.22447E-01	0.26181E 01	0.23026E 01	-0.86800E 00	0.11416E 01
37	538.59	0.25872E 02	0.39831E 01	0.14045E-01	0.19919E-01	0.23222E 01	0.20424E 01	-0.91100E 00	0.11788E 01
38	537.88	0.25284E 02	0.39609E 01	0.13958E-01	0.19796E-01	0.23093E 01	0.20310E 01	-0.95300E 00	0.12104E 01
39	1085.37	-0.36365E-02	-0.73816E-03	-0.49327E-05	-0.69956E-05	-0.43036E-03	-0.37850E-03	0.51000E-01	0.
40	1085.37	-0.36365E-02	-0.73816E-03	-0.49327E-05	-0.69956E-05	-0.43036E-03	-0.37850E-03	0.29000E-01	0.
41	1085.37	-0.36365E-02	-0.73391E-03	-0.49043E-05	-0.69553E-05	-0.42789E-03	-0.37632E-03	0.70000E-02	0.
42	540.48	0.30079E 02	0.47342E 01	0.16721E-01	0.23713E-01	0.27602E 01	0.24275E 01	-0.86800E 00	0.11432E 01
43	538.83	0.27731E 02	0.43718E 01	0.15419E-01	0.21867E-01	0.25488E 01	0.22417E 01	-0.91100E 00	0.10711E 01
44	539.58	0.26449E 02	0.41474E 01	0.14637E-01	0.20758E-01	0.24180E 01	0.21266E 01	-0.95300E 00	0.11298E 01
45	547.38	0.30083E 02	0.49174E 01	0.17470E-01	0.24776E-01	0.28669E 01	0.25215E 01	-0.10400E 01	0.28629E 01
46	1085.37	-0.36365E-02	-0.74005E-03	-0.49454E-05	-0.70135E-05	-0.43147E-03	-0.37947E-03	0.70000E-02	0.
47	1085.37	-0.36365E-02	-0.74005E-03	-0.49454E-05	-0.70135E-05	-0.43147E-03	-0.37947E-03	0.29000E-01	0.
48	1085.37	-0.36365E-02	-0.74269E-03	-0.49643E-05	-0.70404E-05	-0.43312E-03	-0.38092E-03	0.51000E-01	0.
49	533.32	0.19775E 02	0.30899E 01	0.10847E-01	0.15383E-01	0.18015E 01	0.15844E 01	0.70000E-02	0.10450E 01
50	536.05	0.22773E 02	0.35754E 01	0.12580E-01	0.17841E-01	0.20845E 01	0.18333E 01	0.29000E-01	0.16437E 01
51	1085.37	-0.36365E-02	-0.73580E-03	-0.49170E-05	-0.69732E-05	-0.42899E-03	-0.37729E-03	0.51000E-01	0.
52	541.76	0.28539E 02	0.45066E 01	0.15934E-01	0.22598E-01	0.26274E 01	0.23108E 01	-0.86800E 00	0.13310E 01
53	540.63	0.26783E 02	0.42427E 01	0.14987E-01	0.21254E-01	0.24736E 01	0.21755E 01	-0.91100E 00	0.13527E 01
54	542.17	0.25069E 02	0.39367E 01	0.13924E-01	0.19747E-01	0.22952E 01	0.20186E 01	-0.95300E 00	0.12616E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	543.62	0.18594E 02	0.30330E 01	0.10741E-01	0.15233E-01	0.17683E 01	0.15552E 01	-0.10400E 01	0.20812E 01
56	542.38	0.14519E 02	0.24414E 01	0.86367E-02	0.12249E-01	0.14234E 01	0.12519E 01	-0.10680E 01	0.19863E 01
57	563.80	0.35183E 02	0.58038E 01	0.20914E-01	0.29661E-01	0.33837E 01	0.29760E 01	-0.10400E 01	0.30573E 01
58	563.81	0.42436E 02	0.75784E 01	0.27310E-01	0.38731E-01	0.44184E 01	0.38859E 01	-0.10680E 01	0.36031E 01
59	540.41	0.16894E 02	0.27507E 01	0.97145E-02	0.13777E-01	0.16037E 01	0.14104E 01	-0.10400E 01	0.24218E 01
60	540.88	0.17244E 02	0.28971E 01	0.10236E-01	0.14516E-01	0.16891E 01	0.14855E 01	-0.10680E 01	0.22483E 01
61	535.05	0.70442E 00	0.11644E-00	0.40935E-03	0.58053E-03	0.67885E-01	0.59704E-01	-0.11220E 01	0.98262E 00
62	542.44	0.43480E-00	0.65769E-01	0.23268E-03	0.32998E-03	0.38345E-01	0.33724E-01	-0.13340E 01	0.70874E 00
63	535.48	0.71585E 00	0.12278E-00	0.43179E-03	0.61237E-03	0.71582E-01	0.62955E-01	-0.11220E 01	0.82061E 00
64	542.69	0.54130E 00	0.81890E-01	0.28977E-03	0.41095E-03	0.47743E-01	0.41990E-01	-0.13340E 01	0.10295E 01
65	541.79	0.78961E 00	0.13591E-00	0.48056E-03	0.68153E-03	0.79239E-01	0.69690E-01	0.14400E 01	0.97566E 00
66	540.19	0.10291E 01	0.16842E-00	0.59470E-03	0.84340E-03	0.98193E-01	0.86360E-01	0.16130E 01	0.10636E 01
67	540.92	0.11564E 01	0.18583E-00	0.65658E-03	0.93116E-03	0.10834E-00	0.95288E-01	0.17200E 01	0.10374E 01
68	541.16	0.95325E 00	0.15729E-00	0.55586E-03	0.78832E-03	0.91705E-01	0.80654E-01	-0.16130E 01	0.10356E 01
69	541.30	0.12457E 01	0.20023E-00	0.70770E-03	0.10037E-02	0.11674E-00	0.10267E-00	-0.18280E 01	0.10221E 01
70	536.33	0.99688E 00	0.14602E-00	0.51389E-03	0.72880E-03	0.85130E-01	0.74871E-01	-0.11650E 01	0.15240E 01
71	539.76	0.62753E 00	0.52666E-01	0.18589E-03	0.26363E-03	0.30705E-01	0.27005E-01	-0.12050E 01	0.94468E 00
72	540.54	0.92572E 00	0.13405E-00	0.47346E-03	0.67147E-03	0.78153E-01	0.68735E-01	-0.12120E 01	0.93571E 00
73	537.01	0.54442E 00	0.79772E-01	0.28091E-03	0.39839E-03	0.46509E-01	0.40904E-01	-0.11650E 01	0.68427E 00
74	538.80	0.58805E 00	0.49325E-01	0.17396E-03	0.24671E-03	0.28758E-01	0.25292E-01	-0.12050E 01	0.10539E 01
75	1085.37	-0.36365E-02	-0.67557E-03	-0.45144E-05	-0.64024E-05	-0.39387E-03	-0.34640E-03	-0.12120E 01	0.
76	531.57	0.31465E 01	0.47146E-00	0.16526E-02	0.23437E-02	0.27487E-00	0.24175E-00	0.10840E 01	0.15068E 01
77	533.19	0.89455E 00	0.14403E-00	0.50556E-03	0.71698E-03	0.83973E-01	0.73853E-01	0.11220E 01	0.11929E 01
78	541.68	0.86753E 00	0.12920E-00	0.45679E-03	0.64782E-03	0.75327E-01	0.66249E-01	0.13340E 01	0.90470E 00
79	537.30	0.55689E 00	0.93316E-01	0.32869E-03	0.46615E-03	0.54405E-01	0.47849E-01	-0.11890E 01	0.12970E 01
80	541.63	0.65351E 00	0.98312E-01	0.34757E-03	0.49292E-03	0.57318E-01	0.50410E-01	-0.13340E 01	0.94887E 00
81	535.97	0.12514E 01	0.20181E-00	0.71002E-03	0.10070E-02	0.11766E-00	0.10348E-00	-0.11470E 01	0.22426E 01
82	537.00	0.11376E-00	0.19043E-01	0.67058E-04	0.95102E-04	0.11102E-01	0.97644E-02	-0.11890E 01	0.
83	533.44	0.49974E 01	0.83482E 00	0.29309E-02	0.41566E-02	0.48672E-00	0.42806E-00	-0.10840E 01	0.15962E 01
84	537.58	0.40155E-00	0.58858E-01	0.20737E-03	0.29409E-03	0.34315E-01	0.30180E-01	-0.11890E 01	0.10715E 01
85	541.17	0.49455E-00	0.72635E-01	0.25669E-03	0.36403E-03	0.42347E-01	0.37244E-01	-0.13090E 01	0.85300E 00
86	541.77	0.36104E-00	0.53773E-01	0.19013E-03	0.26964E-03	0.31351E-01	0.27573E-01	-0.13340E 01	0.67540E 00
87	542.66	0.47257E 01	0.69346E 00	0.24538E-02	0.34799E-02	0.40430E-00	0.35558E-00	0.11990E 01	0.16262E 01
88	541.30	0.25901E 01	0.38306E-00	0.13538E-02	0.19200E-02	0.22333E-00	0.19642E-00	0.12070E 01	0.16518E 01
89	546.07	0.30961E 01	0.46692E-00	0.16570E-02	0.23500E-02	0.27223E-00	0.23942E-00	0.13340E 01	0.24620E 01
90	542.44	0.33995E 01	0.48593E-00	0.17191E-02	0.24380E-02	0.28331E-00	0.24917E-00	0.12070E 01	0.16261E 01
91	545.03	0.22867E 01	0.35621E-00	0.12630E-02	0.17912E-02	0.20768E-00	0.18265E-00	0.12490E 01	0.18174E 01
92	545.71	0.22405E 01	0.33953E-00	0.12045E-02	0.17083E-02	0.19795E-00	0.17410E-00	0.13340E 01	0.19904E 01
93	544.84	0.24603E 01	0.41674E-00	0.14774E-02	0.20952E-02	0.24297E-00	0.21369E-00	0.14900E 01	0.23797E 01
94	549.54	0.12143E 02	0.12816E 01	0.45618E-02	0.64695E-02	0.74721E 00	0.65716E 00	-0.	0.17758E 01
95	550.33	0.14530E 02	0.15453E 01	0.55041E-02	0.78060E-02	0.90096E 00	0.79238E 00	-0.	0.13620E 01
96	541.28	0.92208E 00	0.96873E-01	0.34238E-03	0.48556E-03	0.56479E-01	0.49673E-01	-0.	0.11425E 01
97	542.16	0.17730E 01	0.18636E-00	0.65914E-03	0.93479E-03	0.10865E-00	0.95557E-01	-0.	0.15253E 01
98	542.56	0.23590E 01	0.24979E-00	0.88380E-03	0.12534E-02	0.14563E-00	0.12808E-00	-0.	0.17116E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
68	1	-6.60	143.40	-0.	-0.	1	C56	2.70	2	10.15	946.20	1828.40	20	C55	2.80

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.886488E 02	0.495838E-01	0.468101E 04	0.185347E-04	0.718055E-07	0.121642E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730377E 00	0.436551E 01	0.573509E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	546.67	0.24951E 02	0.32598E 01	0.99057E-02	0.35486E-02	0.74671E 00	0.56839E 00	-0.	0.10187E 01
2	1085.37	-0.31174E-02	-0.55686E-03	-0.28255E-05	-0.10122E-05	-0.12756E-03	-0.97097E-04	-0.30000E-01	0.
3	1101.60	0.88829E-01	0.17361E-01	0.89928E-04	0.32215E-04	0.39768E-02	0.30271E-02	-0.60000E-01	0.
4	543.71	0.21154E 02	0.32736E 01	0.99261E-02	0.35559E-02	0.74988E 00	0.57081E 00	-0.90000E-01	0.10151E 01
5	540.40	0.18616E 02	0.29486E 01	0.89191E-02	0.31951E-02	0.67544E 00	0.51414E 00	-0.20000E-00	0.99531E 00
6	539.41	0.16148E 02	0.25562E 01	0.77265E-02	0.27679E-02	0.58555E 00	0.44571E-00	-0.40000E-00	0.10053E 01
7	538.93	0.13540E 02	0.21530E 01	0.65056E-02	0.23305E-02	0.49319E-00	0.37541E-00	-0.60000E 00	0.10018E 01
8	1085.37	-0.31174E-02	-0.63988E-03	-0.32467E-05	-0.11631E-05	-0.14658E-03	-0.11157E-03	-0.80000E 00	0.
9	539.93	0.10940E 02	0.17131E 01	0.51801E-02	0.18557E-02	0.39242E-00	0.29871E-00	-0.90000E 00	0.10032E 01
10	541.86	0.96280E 01	0.15287E 01	0.46289E-02	0.16583E-02	0.35017E-00	0.26655E-00	-0.98000E 00	0.10232E 01
11	537.10	0.73195E 00	0.12565E-00	0.37917E-03	0.13583E-03	0.28783E-01	0.21910E-01	-0.11220E 01	0.28157E 01
12	539.88	0.92675E 00	0.13578E-00	0.41056E-03	0.14708E-03	0.31103E-01	0.23676E-01	-0.11890E 01	0.11438E 01
13	542.59	0.65402E 00	0.98937E-01	0.29975E-03	0.10738E-03	0.22663E-01	0.17251E-01	-0.13340E 01	0.16413E 01
14	541.99	0.58078E 00	0.99977E-01	0.30276E-03	0.10846E-03	0.22902E-01	0.17432E-01	-0.14400E 01	0.15140E 01
15	1085.37	-0.31174E-02	-0.55686E-03	-0.28255E-05	-0.10122E-05	-0.12756E-03	-0.97097E-04	0.30000E-01	0.
16	1085.37	-0.31174E-02	-0.60546E-03	-0.30721E-05	-0.11005E-05	-0.13869E-03	-0.10557E-03	0.60000E-01	0.
17	1085.37	-0.31174E-02	-0.62105E-03	-0.31512E-05	-0.11289E-05	-0.14226E-03	-0.10829E-03	0.90000E-01	0.
18	544.81	0.23466E 02	0.37260E 01	0.11307E-01	0.40506E-02	0.85351E 00	0.64969E 00	0.20000E-00	0.10078E 01
19	556.52	0.26410E 02	0.42210E 01	0.12920E-01	0.46284E-02	0.96690E 00	0.73600E 00	0.40000E-00	0.10048E 01
20	572.19	0.30471E 02	0.49357E 01	0.15285E-01	0.54755E-02	0.11306E 01	0.86061E 00	0.60000E 00	0.10134E 01
21	608.38	0.51343E 02	0.79846E 01	0.25416E-01	0.91049E-02	0.18290E 01	0.13922E 01	0.92000E 00	0.10057E 01
22	593.22	0.49764E 02	0.76763E 01	0.24153E-01	0.86523E-02	0.17584E 01	0.13385E 01	0.10400E 01	0.10127E 01
23	586.97	0.46433E 02	0.71575E 01	0.22413E-01	0.80292E-02	0.16396E 01	0.12480E 01	0.10600E 01	0.99883E 00
24	569.33	0.34927E 02	0.55861E 01	0.17262E-01	0.61839E-02	0.12796E 01	0.97402E 00	0.10840E 01	0.99482E 00
25	544.58	0.12433E 02	0.18358E 01	0.55699E-02	0.19953E-02	0.42052E-00	0.32010E-00	0.12070E 01	0.96150E 00
26	544.61	0.12776E 02	0.19896E 01	0.60369E-02	0.21626E-02	0.45576E-00	0.34692E-00	0.12490E 01	0.88012E 00
27	546.53	0.12673E 02	0.19438E 01	0.59061E-02	0.21158E-02	0.44526E-00	0.33893E-00	0.13340E 01	0.90561E 00
28	544.17	0.94935E 01	0.16171E 01	0.49049E-02	0.17571E-02	0.37042E-00	0.28196E-00	0.14540E 01	0.92443E 00
29	542.30	0.61075E 01	0.10084E 01	0.30546E-02	0.10943E-02	0.23100E-00	0.17584E-00	0.16580E 01	0.90140E 00
30	544.13	0.45070E 01	0.75404E 00	0.22871E-02	0.81931E-03	0.17273E-00	0.13148E-00	0.20410E 01	0.75014E 00
31	547.89	0.46681E 01	0.78262E 00	0.23803E-02	0.85272E-03	0.17927E-00	0.13646E-00	0.22480E 01	0.89869E 00
32	544.52	0.22868E 02	0.34549E 01	0.10482E-01	0.37551E-02	0.79142E 00	0.60242E 00	-0.60000E-01	0.99507E 00
33	548.59	0.23937E 02	0.33304E 01	0.10135E-01	0.36306E-02	0.76289E 00	0.58071E 00	-0.30000E-01	0.10030E 01
34	545.93	0.24374E 02	0.36854E 01	0.11193E-01	0.40097E-02	0.84420E 00	0.64260E 00	0.30000E-01	0.10080E 01
35	543.62	0.22694E 02	0.35117E 01	0.10647E-01	0.38143E-02	0.80443E 00	0.61233E 00	0.60000E-01	0.10062E 01
36	560.03	0.36833E 02	0.58982E 01	0.18101E-01	0.64843E-02	0.13511E 01	0.10284E 01	-0.86800E 00	0.96456E 00
37	558.02	0.31327E 02	0.48756E 01	0.14940E-01	0.53521E-02	0.11168E 01	0.85013E 00	-0.91100E 00	0.10078E 01
38	553.42	0.26959E 02	0.42603E 01	0.13010E-01	0.46608E-02	0.97590E 00	0.74285E 00	-0.95300E 00	0.10313E 01
39	1085.37	-0.31174E-02	-0.63280E-03	-0.32108E-05	-0.11502E-05	-0.14495E-03	-0.11034E-03	0.51000E-01	0.
40	1085.37	-0.31174E-02	-0.63280E-03	-0.32108E-05	-0.11502E-05	-0.14495E-03	-0.11034E-03	0.29000E-01	0.
41	1085.37	-0.31174E-02	-0.62915E-03	-0.31923E-05	-0.11436E-05	-0.14412E-03	-0.10970E-03	0.70000E-02	0.
42	560.47	0.33254E 02	0.52925E 01	0.16247E-01	0.58203E-02	0.12123E 01	0.92282E 00	-0.86800E 00	0.90302E 00
43	559.72	0.34398E 02	0.54864E 01	0.16833E-01	0.60302E-02	0.12568E 01	0.95664E 00	-0.91100E 00	0.92946E 00
44	558.56	0.31593E 02	0.50068E 01	0.15348E-01	0.54984E-02	0.11469E 01	0.87302E 00	-0.95300E 00	0.91149E 00
45	554.97	0.21926E 02	0.35992E 01	0.11004E-01	0.39421E-02	0.82446E 00	0.62757E 00	-0.10400E 01	0.30689E 01
46	1085.37	-0.31174E-02	-0.63442E-03	-0.32190E-05	-0.11532E-05	-0.14532E-03	-0.11062E-03	0.70000E-02	0.
47	1085.37	-0.31174E-02	-0.63442E-03	-0.32190E-05	-0.11532E-05	-0.14532E-03	-0.11062E-03	0.29000E-01	0.
48	1085.37	-0.31174E-02	-0.63685E-03	-0.32313E-05	-0.11576E-05	-0.14588E-03	-0.11104E-03	0.51000E-01	0.
49	550.02	0.20626E 02	0.32533E 01	0.99103E-02	0.35502E-02	0.74522E 00	0.56726E 00	0.70000E-02	0.66795E 00
50	539.85	0.11052E 02	0.17389E 01	0.52579E-02	0.18836E-02	0.39834E-00	0.30321E-00	0.29000E-01	0.85332E 00
51	1085.37	-0.31174E-02	-0.63077E-03	-0.32005E-05	-0.11465E-05	-0.14449E-03	-0.10998E-03	0.51000E-01	0.
52	558.84	0.29357E 02	0.46801E 01	0.14350E-01	0.51407E-02	0.10721E 01	0.81605E 00	-0.86800E 00	0.99469E 00
53	554.40	0.24560E 02	0.39207E 01	0.11982E-01	0.42923E-02	0.89810E 00	0.68363E 00	-0.91100E 00	0.99946E 00
54	556.48	0.23961E 02	0.37929E 01	0.11609E-01	0.41588E-02	0.86882E 00	0.66134E 00	-0.95300E 00	0.10503E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	549.93	0.13207E 02	0.21620E 01	0.65854E-02	0.23591E-02	0.49524E-00	0.37697E-00	-0.10400E 01	0.26103E 01
56	549.05	0.11370E 02	0.19190E 01	0.58414E-02	0.20926E-02	0.43957E-00	0.33460E-00	-0.10680E 01	0.30800E 01
57	563.34	0.17892E 02	0.29508E 01	0.90777E-02	0.32520E-02	0.67593E 00	0.51451E 00	-0.10400E 01	0.81899E 01
58	567.37	0.27315E 02	0.48876E 01	0.15082E-01	0.54028E-02	0.11196E 01	0.85224E 00	-0.10680E 01	0.71031E 01
59	544.74	0.10039E 02	0.16386E 01	0.49721E-02	0.17812E-02	0.37534E-00	0.28571E-00	-0.10400E 01	0.27067E 01
60	546.30	0.10584E 02	0.17836E 01	0.54186E-02	0.19411E-02	0.40858E-00	0.31101E-00	-0.10680E 01	0.34844E 01
61	537.69	0.32519E-00	0.53833E-01	0.16251E-03	0.58219E-04	0.12332E-01	0.93867E-02	-0.11220E 01	0.71165E 00
62	542.70	0.16519E-00	0.24991E-01	0.75722E-04	0.27126E-04	0.57247E-02	0.43576E-02	-0.13340E 01	0.74861E 00
63	538.05	0.52312E 00	0.89852E-01	0.27132E-03	0.97198E-04	0.20582E-01	0.15667E-01	-0.11220E 01	0.11667E 01
64	542.79	0.26857E-00	0.40633E-01	0.12312E-03	0.44107E-04	0.93077E-02	0.70849E-02	-0.13340E 01	0.11996E 01
65	542.52	0.52623E 00	0.90614E-01	0.27452E-03	0.98342E-04	0.20757E-01	0.15800E-01	0.14400E 01	0.16837E 01
66	541.87	0.70597E 00	0.11565E-00	0.35019E-03	0.12545E-03	0.26491E-01	0.20165E-01	0.16130E 01	0.11622E 01
67	542.50	0.78130E 00	0.12567E-00	0.38071E-03	0.13638E-03	0.28767E-01	0.21912E-01	0.17200E 01	0.10449E 01
68	542.81	0.59429E 00	0.98153E-01	0.29742E-03	0.10655E-03	0.22484E-01	0.17115E-01	-0.16130E 01	0.10740E 01
69	542.77	0.74130E 00	0.11925E-00	0.36135E-03	0.12945E-03	0.27317E-01	0.20794E-01	-0.18280E 01	0.97842E 00
70	538.91	0.50182E 00	0.73610E-01	0.22242E-03	0.79677E-04	0.16862E-01	0.12835E-01	-0.11650E 01	0.91809E 00
71	540.75	0.44312E-00	0.37209E-01	0.11258E-03	0.40331E-04	0.85235E-02	0.64880E-02	-0.12050E 01	0.97656E 00
72	541.82	0.66338E 00	0.96129E-01	0.29108E-03	0.10427E-03	0.22020E-01	0.16762E-01	-0.12120E 01	0.11523E 01
73	540.01	0.73974E 00	0.10858E-00	0.32833E-03	0.11762E-03	0.24871E-01	0.18932E-01	-0.11650E 01	0.13650E 01
74	540.35	0.51013E 00	0.42827E-01	0.12954E-03	0.46405E-04	0.98102E-02	0.74675E-02	-0.12050E 01	0.15110E 01
75	1085.37	-0.31174E-02	-0.57914E-03	-0.29385E-05	-0.10527E-05	-0.13266E-03	-0.10098E-03	-0.12120E 01	0.
76	535.90	0.75221E 00	0.11299E-00	0.34064E-03	0.12203E-03	0.25881E-01	0.19701E-01	0.10840E 01	0.96606E 00
77	537.46	0.56675E 00	0.91473E-01	0.27610E-03	0.98909E-04	0.20954E-01	0.15950E-01	0.11220E 01	0.12272E 01
78	542.91	0.57714E 00	0.86013E-01	0.26065E-03	0.93375E-04	0.19703E-01	0.14998E-01	0.13340E 01	0.13939E 01
79	539.96	0.32052E-00	0.53789E-01	0.16265E-03	0.58267E-04	0.12321E-01	0.93789E-02	-0.11890E 01	0.
80	542.80	0.24987E-00	0.37614E-01	0.11398E-03	0.40830E-04	0.86162E-02	0.65586E-02	-0.13340E 01	0.
81	538.60	0.20779E-00	0.33559E-01	0.10138E-03	0.36317E-04	0.76872E-02	0.58515E-02	-0.11470E 01	0.11680E 01
82	539.29	-0.69610E-01	-0.11667E-01	-0.35262E-04	-0.12632E-04	-0.26725E-02	-0.20343E-02	-0.11890E 01	0.
83	536.41	0.69818E 00	0.11683E-00	0.35236E-03	0.12623E-03	0.26762E-01	0.20371E-01	-0.10840E 01	0.89655E 00
84	539.77	0.19065E-00	0.27979E-01	0.84593E-04	0.30304E-04	0.64091E-02	0.48786E-02	-0.11890E 01	0.68606E 00
85	542.93	0.24000E-00	0.35284E-01	0.10693E-03	0.38305E-04	0.80824E-02	0.61523E-02	-0.13090E 01	0.96325E 00
86	542.92	0.19117E-00	0.28490E-01	0.86338E-04	0.30929E-04	0.65262E-02	0.49677E-02	-0.13340E 01	0.
87	581.28	0.30741E 02	0.46083E 01	0.14369E-01	0.51474E-02	0.10556E 01	0.80353E 00	0.11990E 01	0.77553E 00
88	552.42	0.20005E 02	0.29770E 01	0.90848E-02	0.32545E-02	0.68194E 00	0.51909E 00	0.12070E 01	0.76616E 00
89	545.69	0.86364E 01	0.13022E 01	0.39542E-02	0.14165E-02	0.29829E-00	0.22706E-00	0.13340E 01	0.86221E 00
90	567.26	0.29319E 02	0.42491E 01	0.13110E-01	0.46966E-02	0.97355E 00	0.74090E 00	0.12070E 01	0.88223E 00
91	549.34	0.12259E 02	0.19143E 01	0.58284E-02	0.20879E-02	0.43850E-00	0.33378E-00	0.12490E 01	0.89000E 00
92	546.94	0.94821E 01	0.14379E 01	0.43703E-02	0.15656E-02	0.32938E-00	0.25072E-00	0.13340E 01	0.87225E 00
93	543.72	0.74909E 01	0.12681E 01	0.38450E-02	0.13774E-02	0.29048E-00	0.22111E-00	0.14900E 01	0.94038E 00
94	543.32	0.52000E 00	0.54693E-01	0.16579E-03	0.59392E-04	0.12528E-01	0.95366E-02	-0.	0.98238E 00
95	545.50	0.11600E 01	0.12304E-00	0.37355E-03	0.13382E-03	0.28184E-01	0.21453E-01	-0.	0.10590E 01
96	542.90	0.28779E-00	0.30262E-01	0.91706E-04	0.32853E-04	0.69322E-02	0.52767E-02	-0.	0.14576E 01
97	543.33	0.67740E 00	0.71249E-01	0.21598E-03	0.77371E-04	0.16321E-01	0.12423E-01	-0.	0.12591E 01
98	542.92	0.10971E 01	0.11620E-00	0.35213E-03	0.12615E-03	0.26618E-01	0.20261E-01	-0.	0.11410E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
69	1	-2.62	147.38	-0.	-0.	1	C56	2.75	2	10.15	931.20	1818.90	21	C55	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.881614E 02	0.192973E-01	0.466762E 04	0.183645E-04	0.714108E-07	0.120844E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730093E 00	0.432927E 01	0.566565E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	547.83	0.26531E 02	0.34685E 01	0.10637E-01	0.38568E-02	0.80117E 00	0.61220E 00	-0.	0.10075E 01
2	1085.37	-0.36365E-02	-0.64958E-03	-0.33420E-05	-0.12118E-05	-0.15004E-03	-0.11465E-03	-0.30000E-01	0.
3	1098.68	0.17653E-01	0.34462E-02	0.18037E-04	0.65402E-05	0.79602E-03	0.60826E-03	-0.60000E-01	0.
4	544.87	0.22718E 02	0.35179E 01	0.10765E-01	0.39032E-02	0.81258E 00	0.62091E 00	-0.90000E-01	0.10077E 01
5	541.53	0.20252E 02	0.32098E 01	0.97977E-02	0.35526E-02	0.74141E 00	0.56653E 00	-0.20000E-00	0.99526E 00
6	540.31	0.17817E 02	0.28219E 01	0.86061E-02	0.31205E-02	0.65183E 00	0.49808E-00	-0.40000E-00	0.10116E 01
7	539.86	0.15224E 02	0.24222E 01	0.73845E-02	0.26776E-02	0.55949E 00	0.42752E-00	-0.60000E 00	0.10162E 01
8	1085.37	-0.36365E-02	-0.74643E-03	-0.38403E-05	-0.13925E-05	-0.17242E-03	-0.13175E-03	-0.80000E 00	0.
9	540.62	0.12481E 02	0.19550E 01	0.59637E-02	0.21624E-02	0.45159E-00	0.34507E-00	-0.90000E 00	0.10119E 01
10	542.00	0.11092E 02	0.17612E 01	0.53780E-02	0.19500E-02	0.40682E-00	0.31086E-00	-0.98000E 00	0.10219E 01
11	534.29	0.10530E 01	0.18048E-00	0.54798E-03	0.19870E-03	0.41689E-01	0.31855E-01	-0.11220E 01	0.36514E 01
12	536.80	0.97299E 00	0.14231E-00	0.43288E-03	0.15696E-03	0.32871E-01	0.25118E-01	-0.11890E 01	0.11532E 01
13	538.12	0.71533E 00	0.10794E-00	0.32866E-03	0.11917E-03	0.24933E-01	0.19052E-01	-0.13340E 01	0.12899E 01
14	537.69	0.59221E 00	0.10170E-00	0.30956E-03	0.11224E-03	0.23491E-01	0.17950E-01	-0.14400E 01	0.12213E 01
15	1085.37	-0.36365E-02	-0.64958E-03	-0.33420E-05	-0.12118E-05	-0.15004E-03	-0.11465E-03	0.30000E-01	0.
16	1085.37	-0.36365E-02	-0.70628E-03	-0.36337E-05	-0.13176E-05	-0.16314E-03	-0.12466E-03	0.60000E-01	0.
17	1085.37	-0.36365E-02	-0.72446E-03	-0.37273E-05	-0.13515E-05	-0.16734E-03	-0.12787E-03	0.90000E-01	0.
18	543.03	0.24838E 02	0.39400E 01	0.12040E-01	0.43656E-02	0.91008E 00	0.69542E 00	0.20000E-00	0.10029E 01
19	552.62	0.28115E 02	0.44838E 01	0.13799E-01	0.50035E-02	0.10357E 01	0.79139E 00	0.40000E-00	0.10017E 01
20	568.46	0.32912E 02	0.53202E 01	0.16569E-01	0.60078E-02	0.12289E 01	0.93903E 00	0.60000E 00	0.10120E 01
21	604.15	0.49837E 02	0.77328E 01	0.24748E-01	0.89734E-02	0.17862E 01	0.13649E 01	0.92000E 00	0.99760E 00
22	579.86	0.43571E 02	0.66724E 01	0.20960E-01	0.75999E-02	0.15412E 01	0.11777E 01	0.10400E 01	0.10129E 01
23	571.20	0.40109E 02	0.61296E 01	0.19129E-01	0.69360E-02	0.14158E 01	0.10819E 01	0.10600E 01	0.99876E 00
24	552.73	0.29340E 02	0.46496E 01	0.14311E-01	0.51889E-02	0.10740E 01	0.82066E 00	0.10840E 01	0.10008E 01
25	517.74	0.10059E 02	0.14629E 01	0.43886E-02	0.15913E-02	0.33792E-00	0.25821E-00	0.12070E 01	0.10457E 01
26	515.43	0.10229E 02	0.15669E 01	0.46926E-02	0.17015E-02	0.36192E-00	0.27655E-00	0.12490E 01	0.99911E 00
27	516.16	0.10331E 02	0.15576E 01	0.46674E-02	0.16924E-02	0.35979E-00	0.27492E-00	0.13340E 01	0.96781E 00
28	517.70	0.79143E 01	0.13280E 01	0.39838E-02	0.14445E-02	0.30676E-00	0.23440E-00	0.14540E 01	0.99752E 00
29	523.88	0.48452E 01	0.79173E 00	0.23857E-02	0.86504E-03	0.18288E-00	0.13974E-00	0.16580E 01	0.95306E 00
30	530.97	0.39096E 01	0.64926E 00	0.19665E-02	0.71305E-03	0.14997E-00	0.11460E-00	0.20410E 01	0.83322E 00
31	537.96	0.41107E 01	0.68534E 00	0.20865E-02	0.75655E-03	0.15830E-00	0.12096E-00	0.22480E 01	0.92001E 00
32	545.24	0.24166E 02	0.36525E 01	0.11180E-01	0.40537E-02	0.84369E 00	0.64468E 00	-0.60000E-01	0.98607E 00
33	549.15	0.25392E 02	0.35340E 01	0.10848E-01	0.39335E-02	0.81630E 00	0.62375E 00	-0.30000E-01	0.10093E 01
34	546.89	0.25996E 02	0.39329E 01	0.12052E-01	0.43702E-02	0.90844E 00	0.69416E 00	0.30000E-01	0.10008E 01
35	544.55	0.24294E 02	0.37613E 01	0.11507E-01	0.41723E-02	0.86880E 00	0.66388E 00	0.60000E-01	0.10033E 01
36	563.57	0.41210E 02	0.66121E 01	0.20516E-01	0.74391E-02	0.15273E 01	0.11670E 01	-0.86800E 00	0.97832E 00
37	559.73	0.34222E 02	0.53311E 01	0.16494E-01	0.59807E-02	0.12314E 01	0.94095E 00	-0.91100E 00	0.10297E 01
38	555.64	0.30300E 02	0.47941E 01	0.14788E-01	0.53619E-02	0.11074E 01	0.84617E 00	-0.95300E 00	0.10433E 01
39	1085.37	-0.36365E-02	-0.73816E-03	-0.37978E-05	-0.13770E-05	-0.17051E-03	-0.13029E-03	0.51000E-01	0.
40	1085.37	-0.36365E-02	-0.73816E-03	-0.37978E-05	-0.13770E-05	-0.17051E-03	-0.13029E-03	0.29000E-01	0.
41	1085.37	-0.36365E-02	-0.73391E-03	-0.37759E-05	-0.13691E-05	-0.16952E-03	-0.12954E-03	0.70000E-02	0.
42	569.14	0.42800E 02	0.68445E 01	0.21327E-01	0.77330E-02	0.15810E 01	0.12081E 01	-0.86800E 00	0.10226E 01
43	564.55	0.40396E 02	0.64603E 01	0.20060E-01	0.72737E-02	0.14922E 01	0.11403E 01	-0.91100E 00	0.94486E 00
44	562.32	0.39958E 02	0.57105E 01	0.17702E-01	0.64188E-02	0.13190E 01	0.10079E 01	-0.95300E 00	0.94118E 00
45	558.65	0.26798E 02	0.44081E 01	0.13627E-01	0.49412E-02	0.10182E 01	0.77804E 00	-0.10400E 01	0.28557E 01
46	1085.37	-0.36365E-02	-0.74005E-03	-0.38075E-05	-0.13806E-05	-0.17094E-03	-0.13062E-03	0.70000E-02	0.
47	1085.37	-0.36365E-02	-0.74005E-03	-0.38075E-05	-0.13806E-05	-0.17094E-03	-0.13062E-03	0.29000E-01	0.
48	1085.37	-0.36365E-02	-0.74289E-03	-0.38221E-05	-0.13859E-05	-0.17160E-03	-0.13112E-03	0.51000E-01	0.
49	552.43	0.22519E 02	0.35566E 01	0.10944E-01	0.39684E-02	0.82153E 00	0.62775E 00	0.70000E-02	0.67179E 00
50	541.42	0.12420E 02	0.19559E 01	0.59697E-02	0.21646E-02	0.45178E-00	0.34522E-00	0.29000E-01	0.88586E 00
51	1085.37	-0.36365E-02	-0.73580E-03	-0.37856E-05	-0.13726E-05	-0.16996E-03	-0.12987E-03	0.51000E-01	0.
52	562.93	0.32735E 02	0.52304E 01	0.16222E-01	0.58818E-02	0.12082E 01	0.92318E 00	-0.86800E 00	0.98364E 00
53	557.48	0.26822E 02	0.42890E 01	0.13248E-01	0.48036E-02	0.99071E 00	0.75703E 00	-0.91100E 00	0.10157E 01
54	550.73	0.27485E 02	0.43562E 01	0.13468E-01	0.48834E-02	0.10062E 01	0.76888E 00	-0.95300E 00	0.10449E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	552.15	0.16144E 02	0.26459E 01	0.81403E-02	0.29516E-02	0.61117E 00	0.46701E-00	-0.10400E 01	0.23038E 01
56	550.42	0.13450E 02	0.22718E 01	0.69805E-02	0.25311E-02	0.52476E 00	0.40099E-00	-0.10680E 01	0.25441E 01
57	570.42	0.24353E 02	0.40320E 01	0.12575E-01	0.45597E-02	0.93132E 00	0.71165E 00	-0.10400E 01	0.85393E 01
58	573.99	0.33864E 02	0.60816E 01	0.19019E-01	0.68962E-02	0.14048E 01	0.10734E 01	-0.10680E 01	0.66742E 01
59	546.10	0.11985E 02	0.19577E 01	0.59959E-02	0.21741E-02	0.45220E-00	0.34553E-00	-0.10400E 01	0.26637E 01
60	546.53	0.12540E 02	0.21135E 01	0.64752E-02	0.23479E-02	0.48819E-00	0.37304E-00	-0.10680E 01	0.34330E 01
61	535.22	0.41871E-00	0.69217E-01	0.21030E-03	0.76255E-04	0.15988E-01	0.12217E-01	-0.11220E 01	0.86893E 00
62	538.31	0.24467E-00	0.36924E-01	0.11244E-03	0.40771E-04	0.85289E-02	0.65172E-02	-0.13340E 01	0.76436E 00
63	536.65	0.61039E 00	0.10476E-00	0.31863E-03	0.11553E-03	0.24198E-01	0.18490E-01	-0.11220E 01	0.12317E 01
64	539.45	0.32000E-00	0.48323E-01	0.14728E-03	0.53402E-04	0.11162E-01	0.85291E-02	-0.13340E 01	0.14962E 01
65	538.82	0.55585E 00	0.95515E-01	0.29097E-03	0.10551E-03	0.22063E-01	0.16859E-01	0.14400E 01	0.17266E 01
66	537.70	0.81195E 00	0.13270E-00	0.40391E-03	0.14646E-03	0.30651E-01	0.23421E-01	0.16130E 01	0.14611E 01
67	537.44	0.96727E 00	0.15514E-00	0.47214E-03	0.17120E-03	0.35836E-01	0.27383E-01	0.17200E 01	0.13039E 01
68	537.76	0.72727E 00	0.11978E-00	0.36460E-03	0.13220E-03	0.27667E-01	0.21141E-01	-0.16130E 01	0.13849E 01
69	537.52	0.84000E 00	0.13473E-00	0.41006E-03	0.14868E-03	0.31122E-01	0.23781E-01	-0.18280E 01	0.10607E 01
70	537.88	0.75377E 00	0.11050E-00	0.33640E-03	0.12198E-03	0.25525E-01	0.19504E-01	-0.11650E 01	0.16344E 01
71	537.81	0.50234E 00	0.42113E-01	0.12820E-03	0.46483E-04	0.97274E-02	0.74330E-02	-0.12050E 01	0.10874E 01
72	539.03	0.86598E 00	0.12529E-00	0.38174E-03	0.13842E-03	0.28941E-01	0.22114E-01	-0.12120E 01	0.14913E 01
73	536.52	0.77559E 00	0.11361E-00	0.34553E-03	0.12529E-03	0.26243E-01	0.20053E-01	-0.11650E 01	0.14044E 01
74	536.61	0.58338E 00	0.48873E-01	0.14864E-03	0.53898E-04	0.11289E-01	0.86263E-02	-0.12050E 01	0.15238E 01
75	1085.37	-0.36365E-02	-0.67557E-03	-0.34757E-05	-0.12603E-05	-0.15605E-03	-0.11924E-03	-0.12120E 01	0.
76	533.00	0.99013E 00	0.14848E-00	0.45040E-03	0.16331E-03	0.34297E-01	0.26207E-01	0.10840E 01	0.10309E 01
77	533.88	0.50390E 00	0.81164E-01	0.24636E-03	0.89329E-04	0.18748E-01	0.14326E-01	0.11220E 01	0.10008E 01
78	538.05	0.67377E 00	0.10014E-00	0.30489E-03	0.11055E-03	0.23131E-01	0.17675E-01	0.13340E 01	0.14021E 01
79	535.48	0.41611E-00	0.69654E-01	0.21167E-03	0.76751E-04	0.16089E-01	0.12294E-01	-0.11890E 01	0.15235E 01
80	537.89	0.33818E-00	0.50769E-01	0.15456E-03	0.56041E-04	0.11727E-01	0.89608E-02	-0.13340E 01	0.17227E 01
81	533.66	0.12519E-00	0.20163E-01	0.61191E-04	0.22188E-04	0.46573E-02	0.35588E-02	-0.11470E 01	0.
82	534.19	0.60782E-01	0.10158E-01	0.30840E-04	0.11182E-04	0.23464E-02	0.17929E-02	-0.11890E 01	0.
83	533.31	0.12099E 01	0.20210E-00	0.61318E-03	0.22233E-03	0.46682E-01	0.35671E-01	-0.10840E 01	0.99327E 00
84	534.36	0.20260E-00	0.29642E-01	0.90005E-04	0.32635E-04	0.68469E-02	0.52319E-02	-0.11890E 01	0.79167E 00
85	536.99	0.27845E-00	0.40800E-01	0.12412E-03	0.45007E-04	0.94242E-02	0.72013E-02	-0.13090E 01	0.73406E 00
86	537.36	0.31481E-00	0.46770E-01	0.14233E-03	0.51607E-04	0.10803E-01	0.82551E-02	-0.13340E 01	0.10388E 01
87	552.11	0.25103E 02	0.37031E 01	0.11392E-01	0.41308E-02	0.85537E 00	0.65361E 00	0.11990E 01	0.80613E 00
88	525.16	0.16540E 02	0.24239E 01	0.73108E-02	0.26508E-02	0.55989E 00	0.42783E-00	0.12070E 01	0.83387E 00
89	514.69	0.77906E 01	0.11542E 01	0.34550E-02	0.12527E-02	0.26661E-00	0.20372E-00	0.13340E 01	0.93937E 00
90	537.05	0.23657E 02	0.33999E 01	0.10344E-01	0.37506E-02	0.78532E 00	0.60008E 00	0.12070E 01	0.91346E 00
91	520.43	0.11167E 02	0.17155E 01	0.51562E-02	0.18696E-02	0.39625E-00	0.30278E-00	0.12490E 01	0.96550E 00
92	516.46	0.87730E 01	0.13076E 01	0.39191E-02	0.14210E-02	0.30204E-00	0.23080E-00	0.13340E 01	0.94140E 00
93	520.14	0.65408E 01	0.10926E 01	0.32833E-02	0.11905E-02	0.25237E-00	0.19284E-00	0.14900E 01	0.10106E 01
94	538.37	0.84623E 00	0.88759E-01	0.27030E-03	0.98010E-04	0.20502E-01	0.15666E-01	-0.	0.10847E 01
95	541.89	0.19901E 01	0.21066E-00	0.64319E-03	0.23322E-03	0.48659E-01	0.37181E-01	-0.	0.82634E 00
96	537.85	0.37351E-00	0.39165E-01	0.11922E-03	0.43230E-04	0.90465E-02	0.69126E-02	-0.	0.10882E 01
97	538.67	0.79687E 00	0.83596E-01	0.25463E-03	0.92329E-04	0.19309E-01	0.14755E-01	-0.	0.24373E 01
98	538.87	0.13797E 01	0.14580E-00	0.44418E-03	0.16106E-03	0.33678E-01	0.25734E-01	-0.	0.24700E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
70	1	4.35	154.35	0.02	-0.	1	C56	2.70	2	10.15	937.20	1814.40	22	C55	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.879193E 02	0.194278E-01	0.466141E 04	0.185396E-04	0.712147E-07	0.122170E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.729951E 00	0.434380E 01	0.569347E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	549.14	0.29639E 02	0.38776E 01	0.11350E-01	0.42978E-02	0.89268E 00	0.68107E 00	-0.	0.10248E 01
2	1085.37	-0.31174E-02	-0.55686E-03	-0.28840E-05	-0.10372E-05	-0.12820E-03	-0.97807E-04	-0.30000E-01	0.
3	1094.87	0.62856E-01	0.12253E-01	0.64243E-04	0.23105E-04	0.28208E-02	0.21521E-02	-0.60000E-01	0.
4	545.04	0.25523E 02	0.39526E 01	0.12144E-01	0.43675E-02	0.90994E 00	0.69423E 00	-0.90000E-01	0.10157E 01
5	541.16	0.23228E 02	0.36806E 01	0.11276E-01	0.40553E-02	0.84732E 00	0.64646E 00	-0.20000E-00	0.10008E 01
6	541.56	0.20888E 02	0.33106E 01	0.10145E-01	0.36488E-02	0.76215E 00	0.58148E 00	-0.40000E-00	0.10028E 01
7	541.04	0.17992E 02	0.28644E 01	0.87746E-02	0.31558E-02	0.65943E 00	0.50311E 00	-0.60000E 00	0.10033E 01
8	1085.37	-0.31174E-02	-0.63988E-03	-0.33139E-05	-0.11919E-05	-0.14731E-03	-0.11239E-03	-0.80000E 00	0.
9	541.94	0.15432E 02	0.24191E 01	0.74155E-02	0.26670E-02	0.55692E 00	0.42490E-00	-0.90000E 00	0.10081E 01
10	544.07	0.14990E 02	0.23829E 01	0.73159E-02	0.26312E-02	0.54857E 00	0.41853E-00	-0.98000E 00	0.10084E 01
11	535.16	0.14857E 01	0.25477E-00	0.77707E-03	0.27947E-03	0.58652E-01	0.44749E-01	-0.11220E 01	0.32953E 01
12	539.30	0.16244E 01	0.23792E-00	0.72789E-03	0.26178E-03	0.54772E-01	0.41788E-01	-0.11890E 01	0.13639E 01
13	541.13	0.11699E 01	0.17683E-00	0.54171E-03	0.19482E-03	0.40708E-01	0.31058E-01	-0.13340E 01	0.14509E 01
14	540.16	0.10919E 01	0.18778E-00	0.57485E-03	0.20674E-03	0.43229E-01	0.32981E-01	-0.14400E 01	0.14639E 01
15	1127.62	-0.85200E-01	-0.15468E-01	-0.84721E-04	-0.30470E-04	-0.35609E-02	-0.27168E-02	0.30000E-01	0.
16	1085.37	-0.31174E-02	-0.60546E-03	-0.31357E-05	-0.11277E-05	-0.13938E-03	-0.10634E-03	0.60000E-01	0.
17	1085.37	-0.31174E-02	-0.62105E-03	-0.32164E-05	-0.11568E-05	-0.14297E-03	-0.10908E-03	0.90000E-01	0.
18	549.04	0.27243E 02	0.43359E 01	0.13361E-01	0.48053E-02	0.99818E 00	0.76156E 00	0.20000E-00	0.10098E 01
19	569.05	0.30461E 02	0.49022E 01	0.15335E-01	0.55151E-02	0.11285E 01	0.86102E 00	0.40000E-00	0.10039E 01
20	584.26	0.34367E 02	0.56036E 01	0.17733E-01	0.63777E-02	0.12900E 01	0.98422E 00	0.60000E 00	0.98181E 00
21	590.63	0.46165E 02	0.71112E 01	0.22614E-01	0.81332E-02	0.16371E 01	0.12490E 01	0.92000E 00	0.10147E 01
22	567.87	0.31837E 02	0.48435E 01	0.15138E-01	0.54443E-02	0.11150E 01	0.85072E 00	0.10400E 01	0.99880E 00
23	562.00	0.28724E 02	0.43676E 01	0.13590E-01	0.48876E-02	0.10055E 01	0.76712E 00	0.10600E 01	0.98243E 00
24	548.76	0.20221E 02	0.31974E 01	0.98510E-02	0.35429E-02	0.73609E 00	0.56160E 00	0.10840E 01	0.97485E 00
25	531.45	0.53403E 01	0.78272E 00	0.23808E-02	0.85626E-03	0.18019E-00	0.13748E-00	0.12070E 01	0.99865E 00
26	532.03	0.54509E 01	0.84292E 00	0.25650E-02	0.92251E-03	0.19405E-00	0.14805E-00	0.12490E 01	0.96530E 00
27	534.41	0.61621E 01	0.93871E 00	0.28615E-02	0.10291E-02	0.21610E-00	0.16488E-00	0.13340E 01	0.10175E 01
28	534.99	0.50431E 01	0.85459E 00	0.26062E-02	0.93732E-03	0.19674E-00	0.15010E-00	0.14540E 01	0.10715E 01
29	535.13	0.30010E 01	0.49352E-00	0.15052E-02	0.54135E-03	0.11361E-00	0.86682E-01	0.16580E 01	0.10728E 01
30	538.63	0.27075E 01	0.45158E-00	0.13809E-02	0.49663E-03	0.10396E-00	0.79316E-01	0.20410E 01	0.91164E 00
31	542.63	0.30114E 01	0.50340E 00	0.15439E-02	0.55525E-03	0.11589E-00	0.88417E-01	0.22480E 01	0.10589E 01
32	546.11	0.27047E 02	0.40901E 01	0.12576E-01	0.45230E-02	0.94159E 00	0.71838E 00	-0.60000E-01	0.10089E 01
33	550.94	0.28210E 02	0.39302E 01	0.12128E-01	0.43619E-02	0.90478E 00	0.69030E 00	-0.30000E-01	0.10187E 01
34	548.18	0.29204E 02	0.44214E 01	0.13616E-01	0.48969E-02	0.10179E 01	0.77657E 00	0.30000E-01	0.10159E 01
35	545.28	0.27361E 02	0.42378E 01	0.13022E-01	0.46835E-02	0.97559E 00	0.74432E 00	0.60000E-01	0.10087E 01
36	564.71	0.44978E 02	0.72212E 01	0.22515E-01	0.80975E-02	0.16624E 01	0.12683E 01	-0.86800E 00	0.97596E 00
37	562.51	0.38709E 02	0.60394E 01	0.18799E-01	0.67611E-02	0.13904E 01	0.10608E 01	-0.91100E 00	0.10393E 01
38	558.48	0.35236E 02	0.55839E 01	0.17329E-01	0.62323E-02	0.12855E 01	0.98076E 00	-0.95300E 00	0.10325E 01
39	1085.37	-0.31174E-02	-0.63280E-03	-0.32772E-05	-0.11787E-05	-0.14568E-03	-0.11114E-03	0.51000E-01	0.
40	1085.37	-0.31174E-02	-0.63280E-03	-0.32772E-05	-0.11787E-05	-0.14568E-03	-0.11114E-03	0.29000E-01	0.
41	1085.37	-0.31174E-02	-0.62915E-03	-0.32584E-05	-0.11719E-05	-0.14484E-03	-0.11050E-03	0.70000E-02	0.
42	576.98	0.54317E 02	0.87238E 01	0.27454E-01	0.98737E-02	0.20083E 01	0.15322E 01	-0.86800E 00	0.10882E 01
43	570.39	0.48801E 02	0.78296E 01	0.24517E-01	0.88175E-02	0.18025E 01	0.13752E 01	-0.91100E 00	0.90945E 00
44	568.06	0.43538E 02	0.69361E 01	0.21681E-01	0.77975E-02	0.15968E 01	0.12183E 01	-0.95300E 00	0.97638E 00
45	567.48	0.36415E 02	0.60192E 01	0.18807E-01	0.67638E-02	0.13857E 01	0.10572E 01	-0.10400E 01	0.25815E 01
46	1085.37	-0.31174E-02	-0.63442E-03	-0.32856E-05	-0.11817E-05	-0.14605E-03	-0.11143E-03	0.70000E-02	0.
47	1085.37	-0.31174E-02	-0.63442E-03	-0.32856E-05	-0.11817E-05	-0.14605E-03	-0.11143E-03	0.29000E-01	0.
48	1085.37	-0.31174E-02	-0.63685E-03	-0.32982E-05	-0.11862E-05	-0.14661E-03	-0.11186E-03	0.51000E-01	0.
49	553.26	0.25494E 02	0.40283E 01	0.12452E-01	0.44785E-02	0.92736E 00	0.70753E 00	0.70000E-02	0.68946E 00
50	542.53	0.15026E 02	0.23677E 01	0.72609E-02	0.26114E-02	0.54507E 00	0.41586E-00	0.29000E-01	0.92286E 00
51	1085.37	-0.31174E-02	-0.63077E-03	-0.32668E-05	-0.11749E-05	-0.14521E-03	-0.11079E-03	0.51000E-01	0.
52	565.90	0.37018E 02	0.59244E 01	0.18488E-01	0.66493E-02	0.13639E 01	0.10406E 01	-0.86800E 00	0.96855E 00
53	561.55	0.32722E 02	0.52444E 01	0.16313E-01	0.58668E-02	0.12073E 01	0.92112E 00	-0.91100E 00	0.10706E 01
54	564.06	0.34004E 02	0.54053E 01	0.16845E-01	0.60583E-02	0.12444E 01	0.94939E 00	-0.95300E 00	0.10227E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	558.63	0.22262E 02	0.36619E 01	0.11365E-01	0.40875E-02	0.84301E 00	0.64317E 00	-0.10400E 01	0.21008E 01
56	555.70	0.17787E 02	0.30132E 01	0.93314E-02	0.33560E-02	0.69367E 00	0.52923E 00	-0.10680E 01	0.19948E 01
57	587.36	0.35596E 02	0.59481E 01	0.18868E-01	0.67858E-02	0.13693E 01	0.10447E 01	-0.10400E 01	0.72884E 01
58	588.89	0.46802E 02	0.84735E 01	0.26911E-01	0.96783E-02	0.19507E 01	0.14883E 01	-0.10680E 01	0.58531E 01
59	551.86	0.16724E 02	0.27406E 01	0.84631E-02	0.30437E-02	0.63092E 00	0.48136E-00	-0.10400E 01	0.25933E 01
60	552.12	0.17518E 02	0.29618E 01	0.91478E-02	0.32900E-02	0.68184E 00	0.52020E 00	-0.10680E 01	0.28181E 01
61	536.92	0.53818E 00	0.89053E-01	0.27197E-03	0.97813E-04	0.20501E-01	0.15641E-01	-0.11220E 01	0.64517E 00
62	540.94	0.45611E-00	0.68934E-01	0.21115E-03	0.75939E-04	0.15869E-01	0.12107E-01	-0.13340E 01	0.67338E 00
63	537.90	0.86701E 00	0.14891E-00	0.45510E-03	0.16367E-03	0.34281E-01	0.26154E-01	-0.11220E 01	0.90650E 00
64	542.03	0.69455E 00	0.10503E-00	0.32199E-03	0.11580E-03	0.24180E-01	0.18448E-01	-0.13340E 01	0.23379E 01
65	540.98	0.10317E 01	0.17750E-00	0.54370E-03	0.19554E-03	0.40862E-01	0.31176E-01	0.14400E 01	0.16252E 01
66	539.90	0.13616E 01	0.22280E-00	0.68192E-03	0.24525E-03	0.51291E-01	0.39132E-01	0.16130E 01	0.14243E 01
67	540.48	0.14540E 01	0.23361E-00	0.71533E-03	0.25727E-03	0.53760E-01	0.41031E-01	0.17200E 01	0.13123E 01
68	540.54	0.11117E 01	0.18337E-00	0.56153E-03	0.20195E-03	0.42215E-01	0.32208E-01	-0.16130E 01	0.13139E 01
69	540.56	0.12701E 01	0.20407E-00	0.62492E-03	0.22475E-03	0.46981E-01	0.35844E-01	-0.18280E 01	0.12675E 01
70	538.39	0.13392E 01	0.19639E-00	0.60041E-03	0.21594E-03	0.45211E-01	0.34493E-01	-0.11650E 01	0.12442E 01
71	540.08	0.70390E 00	0.59085E-01	0.18087E-03	0.65048E-04	0.13602E-01	0.10378E-01	-0.12050E 01	0.10367E 01
72	541.16	0.11564E 01	0.16751E-00	0.51316E-03	0.18456E-03	0.38562E-01	0.29421E-01	-0.12120E 01	0.12416E 01
73	538.61	0.13470E 01	0.19755E-00	0.60408E-03	0.21726E-03	0.45479E-01	0.34698E-01	-0.11650E 01	0.17527E 01
74	538.97	0.71636E 00	0.60094E-01	0.18381E-03	0.66105E-04	0.13834E-01	0.10555E-01	-0.12050E 01	0.15018E 01
75	1085.37	-0.31174E-02	-0.57914E-03	-0.29993E-05	-0.10787E-05	-0.13332E-03	-0.10172E-03	-0.12120E 01	0.
76	533.65	0.15262E 01	0.22896E-00	0.69755E-03	0.25087E-03	0.52709E-01	0.40214E-01	0.10840E 01	0.10302E 01
77	535.20	0.97507E 00	0.15717E-00	0.47940E-03	0.17241E-03	0.36183E-01	0.27606E-01	0.11220E 01	0.11814E 01
78	541.08	0.11382E 01	0.16945E-00	0.51910E-03	0.18669E-03	0.39010E-01	0.29762E-01	0.13340E 01	0.13240E 01
79	537.69	0.48467E-00	0.81233E-01	0.24823E-03	0.89274E-04	0.18701E-01	0.14268E-01	-0.11890E 01	0.21560E 01
80	540.53	0.60156E 00	0.90441E-01	0.27694E-03	0.99602E-04	0.20821E-01	0.15885E-01	-0.13340E 01	0.15325E 01
81	535.79	0.10286E-00	0.16586E-01	0.50610E-04	0.18202E-04	0.38182E-02	0.29131E-02	-0.11470E 01	0.
82	536.55	-0.27531E-01	-0.46072E-02	-0.14066E-04	-0.50590E-05	-0.10606E-02	-0.80920E-03	-0.11890E 01	0.
83	534.91	0.19096E 01	0.31927E-00	0.97361E-03	0.35016E-03	0.73500E-01	0.56077E-01	-0.10840E 01	0.95455E 00
84	537.24	0.32935E-00	0.48265E-01	0.14744E-03	0.53026E-04	0.11111E-01	0.84773E-02	-0.11890E 01	0.83615E 00
85	539.80	0.33818E-00	0.49631E-01	0.15190E-03	0.54629E-04	0.11426E-01	0.87172E-02	-0.13090E 01	0.67006E 00
86	540.06	0.38442E-00	0.57199E-01	0.17509E-03	0.62971E-04	0.13168E-01	0.10046E-01	-0.13340E 01	0.91978E 00
87	552.49	0.14687E 02	0.21670E 01	0.66950E-02	0.24078E-02	0.49888E-00	0.38062E-00	0.11990E 01	0.80111E 00
88	536.84	0.92525E 01	0.13649E 01	0.41682E-02	0.14991E-02	0.31422E-00	0.23973E-00	0.12070E 01	0.84378E 00
89	537.14	0.59054E 01	0.88616E 00	0.27068E-02	0.97348E-03	0.20400E-00	0.15564E-00	0.13340E 01	0.94572E 00
90	543.54	0.13396E 02	0.19160E 01	0.58802E-02	0.21148E-02	0.44109E-00	0.33653E-00	0.12070E 01	0.88992E 00
91	539.60	0.73932E 01	0.11482E 01	0.35134E-02	0.12636E-02	0.26432E-00	0.20166E-00	0.12490E 01	0.96132E 00
92	538.61	0.62821E 01	0.94820E 00	0.28994E-02	0.10428E-02	0.21829E-00	0.16654E-00	0.13340E 01	0.94981E 00
93	535.91	0.45060E 01	0.75944E 00	0.23176E-02	0.83352E-03	0.17483E-00	0.13339E-00	0.14900E 01	0.10341E 01
94	542.76	0.98442E 00	0.10351E-00	0.31748E-03	0.11418E-03	0.23829E-01	0.18180E-01	-0.	0.96947E 00
95	547.24	0.36244E 01	0.38480E-00	0.11842E-02	0.42589E-03	0.88586E-01	0.67586E-01	-0.	0.88077E 00
96	540.58	0.42857E-00	0.45007E-01	0.13782E-03	0.49568E-04	0.10361E-01	0.79051E-02	-0.	0.86088E 00
97	541.66	0.97870E 00	0.10284E-00	0.31518E-03	0.11336E-03	0.23676E-01	0.18063E-01	-0.	0.
98	542.46	0.15112E 01	0.16001E-00	0.49068E-03	0.17647E-03	0.36836E-01	0.28104E-01	-0.	0.14677E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
71	1	8.42	158.42	0.02	-0.	1	C56	2.70	2	10.15	933.20	1811.80	23	C55	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.877865E 02	0.193513E-01	0.465775E 04	0.184946E-04	0.711071E-07	0.121962E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.729873E 00	0.433412E 01	0.567493E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	558.20	0.30746E 02	0.40428E 01	0.12572E-01	0.45361E-02	0.93278E 00	0.71239E 00	-0.	0.10233E 01
2	1085.37	-0.31174E-02	-0.55686E-03	-0.28950E-05	-0.10445E-05	-0.12848E-03	-0.98127E-04	-0.30000E-01	0.
3	1085.37	-0.31174E-02	-0.60546E-03	-0.31477E-05	-0.11357E-05	-0.13970E-03	-0.10669E-03	-0.60000E-01	0.
4	552.65	0.26624E 02	0.41408E 01	0.12823E-01	0.46268E-02	0.95539E 00	0.72966E 00	-0.90000E-01	0.10115E 01
5	547.20	0.24434E 02	0.38849E 01	0.11982E-01	0.43233E-02	0.89635E 00	0.68457E 00	-0.20000E-00	0.10004E 01
6	546.13	0.22329E 02	0.35481E 01	0.10935E-01	0.39454E-02	0.81865E 00	0.62523E 00	-0.40000E-00	0.10047E 01
7	545.36	0.19454E 02	0.31046E 01	0.95625E-02	0.34502E-02	0.71631E 00	0.54707E 00	-0.60000E 00	0.10039E 01
8	1085.37	-0.31174E-02	-0.63988E-03	-0.33266E-05	-0.12003E-05	-0.14764E-03	-0.11276E-03	-0.80000E 00	0.
9	545.00	0.17415E 02	0.27347E 01	0.84208E-02	0.30383E-02	0.63096E 00	0.48189E-00	-0.90000E 00	0.99978E 00
10	548.54	0.17112E 02	0.27271E 01	0.84198E-02	0.30379E-02	0.62923E 00	0.48056E-00	-0.98000E 00	0.10047E 01
11	539.54	0.17855E 01	0.30693E-00	0.94130E-03	0.33963E-03	0.70817E-01	0.54085E-01	-0.11220E 01	0.18340E 01
12	544.49	0.23262E 01	0.34171E-00	0.10518E-02	0.37950E-03	0.78841E-01	0.60213E-01	-0.11890E 01	0.11508E 01
13	545.73	0.12042E 01	0.18248E-00	0.56221E-03	0.20285E-03	0.42103E-01	0.32155E-01	-0.13340E 01	0.88338E 00
14	544.00	0.12971E 01	0.22355E-00	0.68784E-03	0.24818E-03	0.51578E-01	0.39392E-01	-0.14400E 01	0.93602E 00
15	1101.29	-0.20348E 01	-0.36572E-00	-0.19413E-02	-0.70042E-03	-0.84382E-01	-0.64445E-01	0.30000E-01	0.
16	1085.37	-0.31174E-02	-0.60546E-03	-0.31477E-05	-0.11357E-05	-0.13970E-03	-0.10669E-03	0.60000E-01	0.
17	1085.37	-0.31174E-02	-0.62105E-03	-0.32287E-05	-0.11649E-05	-0.14329E-03	-0.10944E-03	0.90000E-01	0.
18	562.62	0.28473E 02	0.45661E 01	0.14247E-01	0.51404E-02	0.10535E 01	0.80461E 00	0.20000E-00	0.10043E 01
19	582.54	0.31461E 02	0.51007E 01	0.16158E-01	0.58299E-02	0.11769E 01	0.89882E 00	0.40000E-00	0.99164E 00
20	587.03	0.36823E 02	0.60132E 01	0.19114E-01	0.68965E-02	0.13874E 01	0.10596E 01	0.60000E 00	0.10029E 01
21	589.33	0.41170E 02	0.63373E 01	0.20180E-01	0.72812E-02	0.14622E 01	0.11167E 01	0.92000E 00	0.99217E 00
22	567.17	0.26163E 02	0.39788E 01	0.12457E-01	0.44947E-02	0.91802E 00	0.70112E 00	0.10400E 01	0.10021E 01
23	561.87	0.23169E 02	0.35227E 01	0.10985E-01	0.39635E-02	0.81278E 00	0.62075E 00	0.10600E 01	0.97706E 00
24	551.50	0.15766E 02	0.24968E 01	0.77257E-02	0.27875E-02	0.57608E 00	0.43997E-00	0.10840E 01	0.97653E 00
25	544.57	0.32810E 01	0.48447E-00	0.14913E-02	0.53808E-03	0.11178E-00	0.85370E-01	0.12070E 01	0.96330E 00
26	547.49	0.36291E 01	0.56610E 00	0.17464E-02	0.63011E-03	0.13061E-00	0.99754E-01	0.12490E 01	0.95917E 00
27	550.31	0.45906E 01	0.70559E 00	0.21813E-02	0.78704E-03	0.16280E-00	0.12433E-00	0.13340E 01	0.10524E 01
28	549.85	0.38722E 01	0.66167E 00	0.20448E-02	0.73779E-03	0.15267E-00	0.11660E-00	0.14540E 01	0.10782E 01
29	546.21	0.22748E 01	0.37643E-00	0.11602E-02	0.41859E-03	0.86852E-01	0.66332E-01	0.16580E 01	0.10589E 01
30	544.18	0.21735E 01	0.36364E-00	0.11191E-02	0.40377E-03	0.83903E-01	0.64079E-01	0.20410E 01	0.88123E 00
31	546.06	0.23314E 01	0.39048E-00	0.12033E-02	0.43417E-03	0.90093E-01	0.68807E-01	0.22480E 01	0.97860E 00
32	554.28	0.27965E 02	0.42482E 01	0.13172E-01	0.47527E-02	0.98018E 00	0.74859E 00	-0.60000E-01	0.10079E 01
33	559.88	0.29359E 02	0.41107E 01	0.12799E-01	0.46181E-02	0.94844E 00	0.72435E 00	-0.30000E-01	0.10183E 01
34	557.28	0.30166E 02	0.45902E 01	0.14265E-01	0.51468E-02	0.10591E 01	0.80885E 00	0.30000E-01	0.99731E 00
35	554.08	0.28391E 02	0.44191E 01	0.13700E-01	0.49430E-02	0.10196E 01	0.77870E 00	0.60000E-01	0.99772E 00
36	564.89	0.43656E 02	0.70097E 01	0.21909E-01	0.79048E-02	0.16173E 01	0.12352E 01	-0.86800E 00	0.10005E 01
37	564.54	0.39255E 02	0.61315E 01	0.19159E-01	0.69126E-02	0.14147E 01	0.10804E 01	-0.91100E 00	0.10255E 01
38	561.48	0.36284E 02	0.57595E 01	0.17955E-01	0.64783E-02	0.13289E 01	0.10149E 01	-0.95300E 00	0.10199E 01
39	1085.37	-0.31174E-02	-0.63280E-03	-0.32898E-05	-0.11870E-05	-0.14600E-03	-0.11151E-03	0.51000E-01	0.
40	1085.37	-0.31174E-02	-0.63280E-03	-0.32898E-05	-0.11870E-05	-0.14600E-03	-0.11151E-03	0.29000E-01	0.
41	1085.37	-0.31174E-02	-0.62915E-03	-0.32708E-05	-0.11801E-05	-0.14516E-03	-0.11087E-03	0.70000E-02	0.
42	583.13	0.60297E 02	0.97166E 01	0.30794E-01	0.11111E-01	0.22419E 01	0.17122E 01	-0.86800E 00	0.10418E 01
43	575.12	0.52239E 02	0.84029E 01	0.26468E-01	0.95498E-02	0.19388E 01	0.14807E 01	-0.91100E 00	0.92598E 00
44	571.94	0.46206E 02	0.73769E 01	0.23180E-01	0.83635E-02	0.17020E 01	0.12999E 01	-0.95300E 00	0.10093E 01
45	576.69	0.41691E 02	0.69263E 01	0.21843E-01	0.78811E-02	0.15981E 01	0.12205E 01	-0.10400E 01	0.24690E 01
46	1085.37	-0.31174E-02	-0.63442E-03	-0.32982E-05	-0.11900E-05	-0.14638E-03	-0.11179E-03	0.70000E-02	0.
47	1085.37	-0.31174E-02	-0.63442E-03	-0.32982E-05	-0.11900E-05	-0.14638E-03	-0.11179E-03	0.29000E-01	0.
48	1085.37	-0.31174E-02	-0.63685E-03	-0.33108E-05	-0.11946E-05	-0.14694E-03	-0.11222E-03	0.51000E-01	0.
49	553.37	0.23873E 02	0.37725E 01	0.11689E-01	0.42176E-02	0.87042E 00	0.66477E 00	0.70000E-02	0.68262E 00
50	545.85	0.16371E 02	0.25844E 01	0.79631E-02	0.28731E-02	0.59629E 00	0.45541E-00	0.29000E-01	0.94733E 00
51	1085.37	-0.31174E-02	-0.63077E-03	-0.32793E-05	-0.11832E-05	-0.14554E-03	-0.11115E-03	0.51000E-01	0.
52	567.76	0.37425E 02	0.59957E 01	0.18780E-01	0.67760E-02	0.13834E 01	0.10565E 01	-0.86800E 00	0.97461E 00
53	566.16	0.35453E 02	0.56966E 01	0.17822E-01	0.64303E-02	0.13144E 01	0.10038E 01	-0.91100E 00	0.10654E 01
54	568.40	0.36428E 02	0.58044E 01	0.18190E-01	0.65631E-02	0.13392E 01	0.10228E 01	-0.95300E 00	0.10104E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	566.67	0.25904E 02	0.42799E 01	0.13395E-01	0.48330E-02	0.98750E 00	0.75418E 00	-0.10400E 01	0.21413E 01
56	563.80	0.20089E 02	0.34185E 01	0.10676E-01	0.38519E-02	0.78874E 00	0.60238E 00	-0.10680E 01	0.18693E 01
57	601.91	0.41827E 02	0.70443E 01	0.22651E-01	0.81727E-02	0.16253E 01	0.12413E 01	-0.10400E 01	0.66815E 01
58	601.40	0.53926E 02	0.98294E 01	0.31594E-01	0.11399E-01	0.22679E 01	0.17321E 01	-0.10680E 01	0.53901E 01
59	558.33	0.19394E 02	0.31896E 01	0.99200E-02	0.35792E-02	0.73593E 00	0.56205E 00	-0.10400E 01	0.25509E 01
60	559.46	0.20235E 02	0.34350E 01	0.10692E-01	0.38578E-02	0.79254E 00	0.60529E 00	-0.10680E 01	0.26376E 01
61	543.00	0.73974E 00	0.12282E-00	0.37765E-03	0.13626E-03	0.28339E-01	0.21643E-01	-0.11220E 01	0.56568E 00
62	546.89	0.49714E-00	0.75387E-01	0.23246E-03	0.83874E-04	0.17394E-01	0.13284E-01	-0.13340E 01	0.11128E 01
63	544.18	0.10878E 01	0.18749E-00	0.57697E-03	0.20817E-03	0.43258E-01	0.33038E-01	-0.11220E 01	0.77800E 00
64	547.91	0.70026E 00	0.10625E-00	0.32787E-03	0.11830E-03	0.24514E-01	0.18722E-01	-0.13340E 01	0.13203E 01
65	545.60	0.97819E 00	0.16873E-00	0.51979E-03	0.18754E-03	0.38930E-01	0.29732E-01	0.14400E 01	0.13450E 01
66	542.87	0.13610E 01	0.22308E-00	0.68584E-03	0.24746E-03	0.51471E-01	0.39310E-01	0.16130E 01	0.99385E 00
67	543.13	0.14722E 01	0.23668E-00	0.72842E-03	0.26282E-03	0.54656E-01	0.41742E-01	0.17200E 01	0.82814E 00
68	543.45	0.10099E 01	0.16685E-00	0.51319E-03	0.18516E-03	0.38497E-01	0.29402E-01	-0.16130E 01	0.72158E 00
69	543.60	0.18171E 01	0.29246E-00	0.89963E-03	0.32459E-03	0.67479E-01	0.51536E-01	-0.18280E 01	0.86345E 00
70	544.01	0.19771E 01	0.29085E-00	0.89494E-03	0.32290E-03	0.67107E-01	0.51251E-01	-0.11650E 01	0.13111E 01
71	545.75	0.87585E 00	0.73753E-01	0.22723E-03	0.81986E-04	0.17017E-01	0.12996E-01	-0.12050E 01	0.82506E 00
72	546.85	0.16868E 01	0.24511E-00	0.75581E-03	0.27270E-03	0.56555E-01	0.43193E-01	-0.12120E 01	0.93568E 00
73	542.93	0.20057E 01	0.29487E-00	0.90660E-03	0.32711E-03	0.68035E-01	0.51961E-01	-0.11650E 01	0.11572E 01
74	543.49	0.91377E 00	0.76849E-01	0.23637E-03	0.85285E-04	0.17731E-01	0.13542E-01	-0.12050E 01	0.11413E 01
75	1085.37	-0.31174E-02	-0.57914E-03	-0.30108E-05	-0.10863E-05	-0.13362E-03	-0.10205E-03	-0.12120E 01	0.
76	536.43	0.17839E 01	0.26803E-00	0.82011E-03	0.29590E-03	0.61842E-01	0.47230E-01	0.10840E 01	0.97936E 00
77	538.29	0.12888E 01	0.20811E-00	0.63765E-03	0.23007E-03	0.48017E-01	0.36672E-01	0.11220E 01	0.88943E 00
78	545.20	0.15969E 01	0.23829E-00	0.73388E-03	0.26479E-03	0.54981E-01	0.41991E-01	0.13340E 01	0.10564E 01
79	541.27	0.83065E 00	0.13950E-00	0.42838E-03	0.15456E-03	0.32187E-01	0.24582E-01	-0.11890E 01	0.81847E 00
80	544.51	0.10738E 01	0.16180E-00	0.49803E-03	0.17969E-03	0.37331E-01	0.28511E-01	-0.13340E 01	0.11357E 01
81	538.90	0.70133E-01	0.11329E-01	0.34726E-04	0.12529E-04	0.26138E-02	0.19962E-02	-0.11470E 01	0.17405E-00
82	539.85	0.14649E-00	0.24560E-01	0.75339E-04	0.27183E-04	0.56667E-02	0.43278E-02	-0.11890E 01	0.
83	537.97	0.22987E 01	0.38499E-00	0.11793E-02	0.42550E-03	0.88827E-01	0.67840E-01	-0.10840E 01	0.91349E 00
84	540.56	0.52519E 00	0.77110E-01	0.23666E-03	0.85388E-04	0.17791E-01	0.13588E-01	-0.11890E 01	0.82043E 00
85	543.33	0.74338E 00	0.10931E-00	0.33619E-03	0.12130E-03	0.25222E-01	0.19262E-01	-0.13090E 01	0.74159E 00
86	543.66	0.68312E 00	0.10185E-00	0.31332E-03	0.11305E-03	0.23500E-01	0.17947E-01	-0.13340E 01	0.89507E 00
87	558.05	0.94696E 01	0.14016E 01	0.43581E-02	0.15724E-02	0.32338E-00	0.24698E-00	0.11990E 01	0.81135E 00
88	548.62	0.57906E 01	0.85990E 00	0.26550E-02	0.95794E-03	0.19840E-00	0.15153E-00	0.12070E 01	0.84188E 00
89	553.47	0.47735E 01	0.72288E 00	0.22401E-02	0.80823E-03	0.16679E-00	0.12738E-00	0.13340E 01	0.94344E 00
90	552.58	0.82358E 01	0.11839E 01	0.36664E-02	0.13228E-02	0.27317E-00	0.20863E-00	0.12070E 01	0.86177E 00
91	553.77	0.50696E 01	0.79357E 00	0.24597E-02	0.88746E-03	0.18310E-00	0.13984E-00	0.12490E 01	0.93094E 00
92	554.04	0.45906E 01	0.69890E 00	0.21667E-02	0.78175E-03	0.16126E-00	0.12316E-00	0.13340E 01	0.92392E 00
93	550.53	0.36431E 01	0.61907E 00	0.19142E-02	0.69064E-03	0.14284E-00	0.10909E-00	0.14900E 01	0.10659E 01
94	547.37	0.12291E 01	0.12957E-00	0.39968E-03	0.14421E-03	0.29895E-01	0.22832E-01	-0.	0.89377E 00
95	552.26	0.50790E 01	0.54074E 00	0.16741E-02	0.60403E-03	0.12476E-00	0.95285E-01	-0.	0.93465E 00
96	543.97	0.76883E 00	0.80894E-01	0.24891E-03	0.89806E-04	0.18665E-01	0.14255E-01	-0.	0.72917E 00
97	544.97	0.15034E 01	0.15827E-00	0.48734E-03	0.17584E-03	0.36517E-01	0.27889E-01	-0.	0.88296E 00
98	545.60	0.20379E 01	0.21616E-00	0.66593E-03	0.24027E-03	0.49875E-01	0.38091E-01	-0.	0.90667E 00

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
72	1	12.49	162.49	0.02	-0.	1	C56	2.70	2	10.15	938.70	1803.20	24	C55	2.80

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.873271E 02	0.194796E-01	0.464573E 04	0.187151E-04	0.707350E-07	0.123745E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.729601E 00	0.434743E 01	0.570041E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	566.43	0.31803E 02	0.42007E 01	0.13246E-01	0.47352E-02	0.96625E 00	0.73692E 00	-0.	0.10247E 01
2	1085.37	-0.31174E-02	-0.55686E-03	-0.29323E-05	-0.10482E-05	-0.12809E-03	-0.97688E-04	-0.30000E-01	0.
3	1085.37	-0.31174E-02	-0.60546E-03	-0.31882E-05	-0.11397E-05	-0.13927E-03	-0.10621E-03	-0.60000E-01	0.
4	559.17	0.27541E 02	0.42989E 01	0.13481E-01	0.48191E-02	0.98883E 00	0.75414E 00	-0.90000E-01	0.10092E 01
5	552.90	0.25402E 02	0.40516E 01	0.12645E-01	0.45204E-02	0.93195E 00	0.71076E 00	-0.20000E-00	0.10003E 01
6	551.79	0.23548E 02	0.37536E 01	0.11705E-01	0.41844E-02	0.86340E 00	0.65847E 00	-0.40000E-00	0.10045E 01
7	549.58	0.21024E 02	0.33632E 01	0.10471E-01	0.37430E-02	0.77361E 00	0.58999E 00	-0.60000E 00	0.10023E 01
8	1085.37	-0.31174E-02	-0.63988E-03	-0.33695E-05	-0.12045E-05	-0.14719E-03	-0.11225E-03	-0.80000E 00	0.
9	548.19	0.19437E 02	0.30577E 01	0.95096E-02	0.33994E-02	0.70333E 00	0.53640E 00	-0.90000E 00	0.10066E 01
10	551.13	0.19015E 02	0.30347E 01	0.94590E-02	0.33814E-02	0.69804E 00	0.53237E 00	-0.98000E 00	0.10012E 01
11	537.35	0.17361E 01	0.29808E-00	0.91956E-03	0.32872E-03	0.68564E-01	0.52291E-01	-0.11220E 01	0.28574E 01
12	541.28	0.16332E 01	0.23948E-00	0.74095E-03	0.26487E-03	0.55085E-01	0.42011E-01	-0.11890E 01	0.11566E 01
13	543.68	0.10665E 01	0.16143E-00	0.50037E-03	0.17887E-03	0.37133E-01	0.28319E-01	-0.13340E 01	0.99994E 00
14	542.06	0.91377E 00	0.15730E-00	0.48698E-03	0.17409E-03	0.36183E-01	0.27595E-01	-0.14400E 01	0.11801E 01
15	1089.79	-0.31694E 01	-0.56712E 00	-0.30037E-02	-0.10737E-02	-0.13045E-00	-0.99487E-01	0.30000E-01	0.
16	1085.37	-0.31174E-02	-0.60546E-03	-0.31882E-05	-0.11397E-05	-0.13927E-03	-0.10621E-03	0.60000E-01	0.
17	1085.37	-0.31174E-02	-0.62105E-03	-0.32703E-05	-0.11691E-05	-0.14286E-03	-0.10895E-03	0.90000E-01	0.
18	573.50	0.30322E 02	0.48918E 01	0.15509E-01	0.55440E-02	0.11252E 01	0.85815E 00	0.20000E-00	0.10131E 01
19	589.90	0.33488E 02	0.54511E 01	0.17502E-01	0.62566E-02	0.12539E 01	0.95626E 00	0.40000E-00	0.10129E 01
20	583.69	0.34914E 02	0.56910E 01	0.18185E-01	0.65006E-02	0.13090E 01	0.99835E 00	0.60000E 00	0.10016E 01
21	585.80	0.38620E 02	0.59333E 01	0.18990E-01	0.67885E-02	0.13648E 01	0.10409E 01	0.92000E 00	0.99080E 00
22	558.96	0.21465E 02	0.32496E 01	0.10189E-01	0.36423E-02	0.74748E 00	0.57007E 00	0.10400E 01	0.99562E 00
23	554.42	0.18779E 02	0.28435E 01	0.88849E-02	0.31762E-02	0.65405E 00	0.49882E-00	0.10600E 01	0.97866E 00
24	545.60	0.12211E 02	0.19274E 01	0.59827E-02	0.21387E-02	0.44335E-00	0.33812E-00	0.10840E 01	0.96830E 00
25	540.62	0.18691E 01	0.27537E-00	0.85158E-03	0.30442E-03	0.63341E-01	0.48308E-01	0.12070E 01	0.91528E 00
26	543.22	0.22514E 01	0.35036E-00	0.10856E-02	0.38807E-03	0.80590E-01	0.61462E-01	0.12490E 01	0.94536E 00
27	545.13	0.27564E 01	0.42243E-00	0.13108E-02	0.46857E-03	0.97168E-01	0.74106E-01	0.13340E 01	0.93850E 00
28	544.82	0.19600E 01	0.33398E-00	0.10361E-02	0.37037E-03	0.76822E-01	0.58589E-01	0.14540E 01	0.89118E 00
29	542.66	0.13226E 01	0.21842E-00	0.67651E-03	0.24184E-03	0.50242E-01	0.38317E-01	0.16580E 01	0.99174E 00
30	542.00	0.19891E 01	0.33238E-00	0.10289E-02	0.36783E-03	0.76455E-01	0.58309E-01	0.20410E 01	0.10128E 01
31	544.58	0.22026E 01	0.36859E-00	0.11432E-02	0.40868E-03	0.84784E-01	0.64661E-01	0.22480E 01	0.10618E 01
32	562.20	0.28790E 02	0.43927E 01	0.13807E-01	0.49356E-02	0.10104E 01	0.77059E 00	-0.60000E-01	0.99556E 00
33	568.01	0.30532E 02	0.42941E 01	0.13557E-01	0.48462E-02	0.98773E 00	0.75330E 00	-0.30000E-01	0.10238E 01
34	565.24	0.31579E 02	0.48264E 01	0.15205E-01	0.54355E-02	0.11102E 01	0.84668E 00	0.30000E-01	0.10019E 01
35	561.61	0.30003E 02	0.46894E 01	0.14733E-01	0.52667E-02	0.10787E 01	0.82265E 00	0.60000E-01	0.10124E 01
36	565.29	0.42014E 02	0.67474E 01	0.21258E-01	0.75992E-02	0.15520E 01	0.11837E 01	-0.86800E 00	0.10260E 01
37	565.41	0.38725E 02	0.60515E 01	0.19067E-01	0.68161E-02	0.13920E 01	0.10616E 01	-0.91100E 00	0.10222E 01
38	561.95	0.36096E 02	0.57311E 01	0.18010E-01	0.64383E-02	0.13183E 01	0.10054E 01	-0.95300E 00	0.10137E 01
39	1085.37	-0.31174E-02	-0.63280E-03	-0.33321E-05	-0.11912E-05	-0.14556E-03	-0.11101E-03	0.51000E-01	0.
40	1085.37	-0.31174E-02	-0.63280E-03	-0.33321E-05	-0.11912E-05	-0.14556E-03	-0.11101E-03	0.29000E-01	0.
41	1085.37	-0.31174E-02	-0.62915E-03	-0.33129E-05	-0.11843E-05	-0.14472E-03	-0.11037E-03	0.70000E-02	0.
42	584.89	0.62668E 02	0.10108E 02	0.32330E-01	0.11557E-01	0.23251E 01	0.17733E 01	-0.86800E 00	0.99537E 00
43	577.88	0.54334E 02	0.87531E 01	0.27844E-01	0.99535E-02	0.20134E 01	0.15355E 01	-0.91100E 00	0.96060E 00
44	572.03	0.46942E 02	0.74948E 01	0.23735E-01	0.84846E-02	0.17240E 01	0.13148E 01	-0.95300E 00	0.10293E 01
45	560.19	0.47217E 02	0.78593E 01	0.25045E-01	0.89531E-02	0.18078E 01	0.13787E 01	-0.10400E 01	0.24573E 01
46	1085.37	-0.31174E-02	-0.63442E-03	-0.33407E-05	-0.11942E-05	-0.14593E-03	-0.11129E-03	0.70000E-02	0.
47	1085.37	-0.31174E-02	-0.63442E-03	-0.33407E-05	-0.11942E-05	-0.14593E-03	-0.11129E-03	0.29000E-01	0.
48	1085.37	-0.31174E-02	-0.63685E-03	-0.33535E-05	-0.11988E-05	-0.14649E-03	-0.11172E-03	0.51000E-01	0.
49	555.04	0.23051E 02	0.36459E 01	0.11398E-01	0.40744E-02	0.83864E 00	0.63959E 00	0.70000E-02	0.65840E 00
50	550.62	0.17744E 02	0.28086E 01	0.87510E-02	0.31283E-02	0.64604E 00	0.49271E-00	0.29000E-01	0.96063E 00
51	1085.37	-0.31174E-02	-0.63077E-03	-0.33215E-05	-0.11874E-05	-0.14509E-03	-0.11065E-03	0.51000E-01	0.
52	571.73	0.39779E 02	0.63868E 01	0.20221E-01	0.72285E-02	0.14691E 01	0.11204E 01	-0.86800E 00	0.10035E 01
53	569.56	0.38228E 02	0.61538E 01	0.19451E-01	0.69533E-02	0.14155E 01	0.10795E 01	-0.91100E 00	0.10635E 01
54	570.58	0.38054E 02	0.60709E 01	0.19204E-01	0.68650E-02	0.13964E 01	0.10650E 01	-0.95300E 00	0.10112E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	568.81	0.29617E 02	0.48991E 01	0.15476E-01	0.55325E-02	0.11269E 01	0.85943E 00	-0.10400E 01	0.20127E 01
56	564.36	0.22565E 02	0.38409E 01	0.12092E-01	0.43227E-02	0.88348E 00	0.67379E 00	-0.10680E 01	0.18215E 01
57	608.94	0.48638E 02	0.82224E 01	0.26797E-01	0.95793E-02	0.18913E 01	0.14424E 01	-0.10400E 01	0.61398E 01
58	607.80	0.62173E 02	0.11372E 02	0.37026E-01	0.13236E-01	0.26157E 01	0.19949E 01	-0.10680E 01	0.48022E 01
59	559.55	0.22944E 02	0.37760E 01	0.11845E-01	0.42342E-02	0.86856E 00	0.66241E 00	-0.10400E 01	0.25659E 01
60	560.26	0.23190E 02	0.39384E 01	0.12361E-01	0.44187E-02	0.90592E 00	0.69090E 00	-0.10680E 01	0.26080E 01
61	539.54	0.95585E 00	0.15840E-00	0.48945E-03	0.17497E-03	0.36435E-01	0.27787E-01	-0.11220E 01	0.10190E 01
62	544.74	0.41455E-00	0.62786E-01	0.19476E-03	0.69623E-04	0.14442E-01	0.11014E-01	-0.13340E 01	0.77586E 00
63	540.15	0.11870E 01	0.20413E-00	0.63104E-03	0.22558E-03	0.46953E-01	0.35809E-01	-0.11220E 01	0.10034E 01
64	545.39	0.61143E 00	0.92639E-01	0.28751E-03	0.10278E-03	0.21309E-01	0.16251E-01	-0.13340E 01	0.14696E 01
65	543.44	0.82702E 00	0.14248E-00	0.44155E-03	0.15784E-03	0.32774E-01	0.24995E-01	0.14400E 01	0.16217E 01
66	541.40	0.89506E 00	0.14659E-00	0.45358E-03	0.16214E-03	0.33718E-01	0.25715E-01	0.16130E 01	0.10524E 01
67	542.08	0.10935E 01	0.17585E-00	0.54439E-03	0.19461E-03	0.40448E-01	0.30848E-01	0.17200E 01	0.10085E 01
68	542.26	0.72156E 00	0.11914E-00	0.36888E-03	0.13187E-03	0.27404E-01	0.20900E-01	-0.16130E 01	0.10802E 01
69	542.47	0.12468E 01	0.20053E-00	0.62100E-03	0.22199E-03	0.46127E-01	0.35179E-01	-0.18280E 01	0.90549E 00
70	540.51	0.13797E 01	0.20257E-00	0.62639E-03	0.22392E-03	0.46595E-01	0.35536E-01	-0.11650E 01	0.12747E 01
71	542.79	0.63689E 00	0.53542E-01	0.16585E-03	0.59286E-04	0.12316E-01	0.93926E-02	-0.12050E 01	0.88476E 00
72	543.80	0.11465E 01	0.16632E-00	0.51557E-03	0.18431E-03	0.38258E-01	0.29177E-01	-0.12120E 01	0.11161E 01
73	540.33	0.14847E 01	0.21795E-00	0.67387E-03	0.24089E-03	0.50134E-01	0.38235E-01	-0.11650E 01	0.12460E 01
74	541.09	0.64364E 00	0.54058E-01	0.16723E-03	0.59781E-04	0.12434E-01	0.94831E-02	-0.12050E 01	0.11146E 01
75	1085.37	-0.31174E-02	-0.57914E-03	-0.30496E-05	-0.10902E-05	-0.13321E-03	-0.10160E-03	-0.12120E 01	0.
76	535.18	0.21210E 01	0.31846E-00	0.98085E-03	0.35063E-03	0.73253E-01	0.55866E-01	0.10840E 01	0.99156E 00
77	536.21	0.86857E 00	0.14009E-00	0.43180E-03	0.15436E-03	0.32223E-01	0.24575E-01	0.11220E 01	0.10228E 01
78	543.91	0.15616E 01	0.23285E-00	0.72187E-03	0.25805E-03	0.53561E-01	0.40848E-01	0.13340E 01	0.83495E 00
79	539.38	0.47117E-00	0.79045E-01	0.24422E-03	0.87303E-04	0.18182E-01	0.13867E-01	-0.11890E 01	0.10923E 01
80	543.26	0.11081E 01	0.16685E-00	0.51698E-03	0.18481E-03	0.38378E-01	0.29269E-01	-0.13340E 01	0.11577E 01
81	537.83	0.71694E-01	0.11574E-01	0.35717E-04	0.12768E-04	0.26622E-02	0.20303E-02	-0.11470E 01	0.
82	538.41	0.12416E-00	0.20799E-01	0.64214E-04	0.22955E-04	0.47841E-02	0.36486E-02	-0.11890E 01	0.75168E 00
83	538.25	0.29096E 01	0.48738E-00	0.15045E-02	0.53784E-03	0.11211E-00	0.85499E-01	-0.10840E 01	0.97043E 00
84	539.10	0.69351E 00	0.10174E-00	0.31427E-03	0.11234E-03	0.23402E-01	0.17847E-01	-0.11890E 01	0.10615E 01
85	542.43	0.68987E 00	0.10139E-00	0.31398E-03	0.11224E-03	0.23323E-01	0.17787E-01	-0.13090E 01	0.85359E 00
86	542.47	0.42494E-00	0.63313E-01	0.19607E-03	0.70089E-04	0.14563E-01	0.11107E-01	-0.13340E 01	0.10514E 01
87	549.09	0.60151E 01	0.88584E 00	0.27569E-02	0.98553E-03	0.20376E-00	0.15540E-00	0.11990E 01	0.82060E 00
88	543.45	0.33039E 01	0.48920E-00	0.15161E-02	0.54195E-03	0.11253E-00	0.85819E-01	0.12070E 01	0.79232E 00
89	548.35	0.33844E 01	0.51106E 00	0.15896E-02	0.56825E-03	0.11755E-00	0.89653E-01	0.13340E 01	0.96742E 00
90	545.86	0.47262E 01	0.67687E 00	0.21014E-02	0.75121E-03	0.15570E-00	0.11874E-00	0.12070E 01	0.81755E 00
91	548.19	0.34213E 01	0.53389E 00	0.16604E-02	0.59357E-03	0.12281E-00	0.93658E-01	0.12490E 01	0.95051E 00
92	548.69	0.32395E 01	0.49173E-00	0.15299E-02	0.54689E-03	0.11311E-00	0.86262E-01	0.13340E 01	0.93329E 00
93	545.75	0.20509E 01	0.34758E-00	0.10790E-02	0.38572E-03	0.79950E-01	0.60974E-01	0.14900E 01	0.95792E 00
94	550.25	0.15969E 01	0.16861E-00	0.52520E-03	0.18775E-03	0.38784E-01	0.29579E-01	-0.	0.11021E 01
95	556.57	0.89065E 01	0.95052E 00	0.29749E-02	0.10635E-02	0.21864E-00	0.16675E-00	-0.	0.95354E 00
96	542.73	0.77870E 00	0.81875E-01	0.25360E-03	0.90655E-04	0.18833E-01	0.14363E-01	-0.	0.13210E 01
97	543.74	0.11865E 01	0.12482E-00	0.38691E-03	0.13831E-03	0.28712E-01	0.21897E-01	-0.	0.14181E 01
98	543.92	0.10852E 01	0.11500E-00	0.35651E-03	0.12744E-03	0.26452E-01	0.20174E-01	-0.	0.11076E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
73	1	-6.60	143.40	0.02	-0.	1	C56	2.70	2	10.19	1845.30	1880.00	36	C55	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.909859E 02	0.378093E-01	0.476089E 04	0.348647E-04	0.736986E-07	0.226741E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731697E 00	0.621425E 01	0.923333E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	588.74	0.42154E 02	0.56364E 01	0.16873E-01	0.31595E-02	0.90700E 00	0.61044E 00	-0.	0.10111E 01
2	1085.37	-0.31174E-02	-0.55686E-03	-0.26240E-05	-0.49135E-06	-0.89610E-04	-0.60310E-04	-0.30000E-01	0.
3	1085.37	-0.31174E-02	-0.60546E-03	-0.28531E-05	-0.53423E-06	-0.97431E-04	-0.65573E-04	-0.60000E-01	0.
4	582.86	0.35869E 02	0.56720E 01	0.16908E-01	0.31660E-02	0.91274E 00	0.61430E 00	-0.90000E-01	0.10105E 01
5	576.51	0.31973E 02	0.51666E 01	0.15331E-01	0.28708E-02	0.83142E 00	0.55956E 00	-0.20000E-00	0.10005E 01
6	574.30	0.28052E 02	0.45275E 01	0.13414E-01	0.25117E-02	0.72857E 00	0.49035E-00	-0.40000E-00	0.10182E 01
7	569.88	0.24493E 02	0.39624E 01	0.11702E-01	0.21912E-02	0.63762E 00	0.42914E-00	-0.60000E 00	0.10174E 01
8	1085.37	-0.31174E-02	-0.63988E-03	-0.30153E-05	-0.56461E-06	-0.10297E-03	-0.69302E-04	-0.80000E 00	0.
9	566.40	0.21761E 02	0.34580E 01	0.10187E-01	0.19076E-02	0.55646E 00	0.37451E-00	-0.90000E 00	0.10200E 01
10	563.95	0.17901E 02	0.28773E 01	0.84619E-02	0.15845E-02	0.46302E-00	0.31163E-00	-0.98000E 00	0.99619E 00
11	542.83	0.15813E 01	0.27234E-00	0.78907E-03	0.14775E-03	0.43825E-01	0.29495E-01	-0.11220E 01	0.37176E 01
12	542.99	0.10177E 01	0.14936E-00	0.43281E-03	0.81042E-04	0.24035E-01	0.16176E-01	-0.11890E 01	0.12691E 01
13	542.64	0.95013E 00	0.14373E-00	0.41640E-03	0.77970E-04	0.23130E-01	0.15567E-01	-0.13340E 01	0.15340E 01
14	542.76	0.76987E 00	0.13259E-00	0.38413E-03	0.71929E-04	0.21336E-01	0.14359E-01	-0.14400E 01	0.12928E 01
15	1083.48	0.10796E 02	0.19271E 01	0.90608E-02	0.16966E-02	0.31011E-00	0.20871E-00	0.30000E-01	0.
16	1085.37	-0.31174E-02	-0.60546E-03	-0.28531E-05	-0.53423E-06	-0.97431E-04	-0.65573E-04	0.60000E-01	0.
17	1085.37	-0.31174E-02	-0.62105E-03	-0.29265E-05	-0.54799E-06	-0.99940E-04	-0.67262E-04	0.90000E-01	0.
18	585.71	0.40092E 02	0.65112E 01	0.19450E-01	0.36419E-02	0.10478E 01	0.70519E 00	0.20000E-00	0.99628E 00
19	598.51	0.45365E 02	0.74186E 01	0.22367E-01	0.41882E-02	0.11938E 01	0.80346E 00	0.40000E-00	0.98163E 00
20	608.48	0.50791E 02	0.83904E 01	0.25483E-01	0.47716E-02	0.13502E 01	0.90871E 00	0.60000E 00	0.98136E 00
21	657.02	0.77561E 02	0.12374E 02	0.38974E-01	0.72979E-02	0.19912E 01	0.13401E 01	0.92000E 00	0.99734E 00
22	643.76	0.73895E 02	0.11708E 02	0.36507E-01	0.68360E-02	0.18841E 01	0.12680E 01	0.10400E 01	0.98952E 00
23	634.29	0.69275E 02	0.10951E 02	0.33905E-01	0.63486E-02	0.17623E 01	0.11861E 01	0.10600E 01	0.99320E 00
24	607.75	0.52072E 02	0.85033E 01	0.25812E-01	0.48332E-02	0.13684E 01	0.92094E 00	0.10840E 01	0.98961E 00
25	569.11	0.22443E 02	0.33593E 01	0.99156E-02	0.18567E-02	0.54058E 00	0.36382E-00	0.12070E 01	0.95240E 00
26	570.96	0.25691E 02	0.40599E 01	0.11999E-01	0.22469E-02	0.65332E 00	0.43970E-00	0.12490E 01	0.96444E 00
27	569.14	0.23049E 02	0.35799E 01	0.10567E-01	0.19786E-02	0.57607E 00	0.38771E-00	0.13340E 01	0.96793E 00
28	559.40	0.15222E 02	0.26150E 01	0.76655E-02	0.14354E-02	0.42081E-00	0.28321E-00	0.14540E 01	0.92793E 00
29	551.45	0.89647E 01	0.14878E 01	0.43368E-02	0.81207E-03	0.23942E-00	0.16113E-00	0.16580E 01	0.87662E 00
30	551.36	0.89023E 01	0.14954E 01	0.43588E-02	0.81619E-03	0.24064E-00	0.16196E-00	0.20410E 01	0.88183E 00
31	552.53	0.87901E 01	0.14775E 01	0.43102E-02	0.80709E-03	0.23776E-00	0.16002E-00	0.22480E 01	0.10204E 01
32	584.50	0.38981E 02	0.60209E 01	0.17969E-01	0.33647E-02	0.96888E 00	0.65208E 00	-0.60000E-01	0.10113E 01
33	591.85	0.40729E 02	0.58032E 01	0.17412E-01	0.32604E-02	0.93385E 00	0.62850E 00	-0.30000E-01	0.10154E 01
34	587.01	0.40603E 02	0.62798E 01	0.18776E-01	0.35158E-02	0.10106E 01	0.68013E 00	0.30000E-01	0.99730E 00
35	582.80	0.37265E 02	0.58927E 01	0.17565E-01	0.32890E-02	0.94825E 00	0.63820E 00	0.60000E-01	0.99973E 00
36	595.17	0.60755E 02	0.99176E 01	0.29829E-01	0.55854E-02	0.15959E 01	0.10741E 01	-0.86800E 00	0.95637E 00
37	588.57	0.49867E 02	0.78920E 01	0.23623E-01	0.44234E-02	0.12700E 01	0.85473E 00	-0.91100E 00	0.10018E 01
38	581.04	0.43822E 02	0.70312E 01	0.20932E-01	0.39195E-02	0.11315E 01	0.76151E 00	-0.95300E 00	0.10222E 01
39	1085.37	-0.31174E-02	-0.63280E-03	-0.29819E-05	-0.55835E-06	-0.10183E-03	-0.68534E-04	0.51000E-01	0.
40	1085.37	-0.31174E-02	-0.63280E-03	-0.29819E-05	-0.55835E-06	-0.10183E-03	-0.68534E-04	0.29000E-01	0.
41	1085.37	-0.31174E-02	-0.62915E-03	-0.29647E-05	-0.55514E-06	-0.10124E-03	-0.68139E-04	0.70000E-02	0.
42	608.93	0.71516E 02	0.11686E 02	0.35503E-01	0.66479E-02	0.18805E 01	0.12656E 01	-0.86800E 00	0.10265E 01
43	596.35	0.60430E 02	0.98332E 01	0.29600E-01	0.55427E-02	0.15824E 01	0.10650E 01	-0.91100E 00	0.94559E 00
44	588.99	0.51857E 02	0.83563E 01	0.25020E-01	0.46851E-02	0.13447E 01	0.90502E 00	-0.95300E 00	0.94331E 00
45	582.24	0.42492E 02	0.70807E 01	0.21098E-01	0.39505E-02	0.11394E 01	0.76686E 00	-0.10400E 01	0.28437E 01
46	1085.37	-0.31174E-02	-0.63442E-03	-0.29895E-05	-0.55978E-06	-0.10209E-03	-0.68710E-04	0.70000E-02	0.
47	1085.37	-0.31174E-02	-0.63442E-03	-0.29895E-05	-0.55978E-06	-0.10209E-03	-0.68710E-04	0.29000E-01	0.
48	1085.37	-0.31174E-02	-0.63685E-03	-0.30010E-05	-0.56193E-06	-0.10248E-03	-0.68973E-04	0.51000E-01	0.
49	591.91	0.46162E 02	0.74504E 01	0.22355E-01	0.41860E-02	0.11989E 01	0.80691E 00	0.70000E-02	0.73215E 00
50	573.65	0.28731E 02	0.46061E 01	0.13640E-01	0.25541E-02	0.74121E 00	0.49885E-00	0.29000E-01	0.88412E 00
51	1085.37	-0.31174E-02	-0.63077E-03	-0.29723E-05	-0.55657E-06	-0.10150E-03	-0.68315E-04	0.51000E-01	0.
52	596.34	0.53892E 02	0.87693E 01	0.26397E-01	0.49429E-02	0.14112E 01	0.94974E 00	-0.86800E 00	0.96226E 00
53	587.02	0.44117E 02	0.71699E 01	0.21437E-01	0.40141E-02	0.11538E 01	0.77653E 00	-0.91100E 00	0.99733E 00
54	584.16	0.40911E 02	0.65752E 01	0.19619E-01	0.36736E-02	0.10581E 01	0.71212E 00	-0.95300E 00	0.10203E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	570.65	0.25938E 02	0.42948E 01	0.12691E-01	0.23764E-02	0.69112E 00	0.46514E-00	-0.10400E 01	0.24341E 01
56	567.20	0.21537E 02	0.36716E 01	0.10823E-01	0.20265E-02	0.59084E 00	0.39765E-00	-0.10680E 01	0.24564E 01
57	601.08	0.43868E 02	0.73848E 01	0.22307E-01	0.41770E-02	0.11884E 01	0.79980E 00	-0.10400E 01	0.76252E 01
58	603.88	0.58974E 02	0.10399E 02	0.31476E-01	0.58938E-02	0.16734E 01	0.11262E 01	-0.10680E 01	0.64546E 01
59	565.90	0.19957E 02	0.32960E 01	0.97064E-02	0.18175E-02	0.53039E 00	0.35696E-00	-0.10400E 01	0.27702E 01
60	564.04	0.20369E 02	0.34665E 01	0.10195E-01	0.19090E-02	0.55783E 00	0.37543E-00	-0.10680E 01	0.31076E 01
61	541.43	0.69195E 00	0.11479E-00	0.33226E-03	0.62215E-04	0.18472E-01	0.12432E-01	-0.11220E 01	0.96316E 00
62	541.51	0.21299E-00	0.32200E-01	0.93211E-04	0.17454E-04	0.51817E-02	0.34874E-02	-0.13340E 01	0.
63	542.45	0.92676E 00	0.15958E-00	0.46223E-03	0.86552E-04	0.25679E-01	0.17283E-01	-0.11220E 01	0.83721E 00
64	542.52	0.39532E-00	0.59800E-01	0.17323E-03	0.32436E-04	0.96231E-02	0.64766E-02	-0.13340E 01	0.17697E 01
65	542.86	0.51428E 00	0.88573E-01	0.25664E-03	0.48055E-04	0.14253E-01	0.95928E-02	0.14400E 01	0.15477E 01
66	543.40	0.79325E 00	0.13006E-00	0.37698E-03	0.70589E-04	0.20929E-01	0.14086E-01	0.16130E 01	0.12620E 01
67	543.53	0.87533E 00	0.14088E-00	0.40837E-03	0.76467E-04	0.22670E-01	0.15257E-01	0.17200E 01	0.12191E 01
68	543.34	0.74598E 00	0.12324E-00	0.35721E-03	0.66887E-04	0.19832E-01	0.13348E-01	-0.16130E 01	0.12452E 01
69	543.78	0.93091E 00	0.14984E-00	0.43444E-03	0.81348E-04	0.24113E-01	0.16228E-01	-0.18280E 01	0.11485E 01
70	544.08	0.83533E 00	0.12289E-00	0.35636E-03	0.66728E-04	0.19775E-01	0.13309E-01	-0.11650E 01	0.95880E 00
71	542.78	0.49091E-00	0.41269E-01	0.11957E-03	0.22389E-04	0.66411E-02	0.44696E-02	-0.12050E 01	0.76788E 00
72	544.01	0.58026E 00	0.84189E-01	0.24413E-03	0.45713E-04	0.13548E-01	0.91179E-02	-0.12120E 01	0.74365E 00
73	544.00	0.97870E 00	0.14397E-00	0.41748E-03	0.78174E-04	0.23168E-01	0.15593E-01	-0.11650E 01	0.16949E 01
74	543.01	0.63844E 00	0.53679E-01	0.15555E-03	0.29126E-04	0.86380E-02	0.58136E-02	-0.12050E 01	0.12302E 01
75	1085.37	-0.31174E-02	-0.57914E-03	-0.27290E-05	-0.51100E-06	-0.93195E-04	-0.62722E-04	-0.12120E 01	0.
76	543.96	0.13600E 01	0.20521E-00	0.59503E-03	0.11142E-03	0.33022E-01	0.22225E-01	0.10840E 01	0.96329E 00
77	543.27	0.68727E 00	0.11129E-00	0.32254E-03	0.60395E-04	0.17908E-01	0.12053E-01	0.11220E 01	0.10339E 01
78	543.59	0.79532E 00	0.11857E-00	0.34374E-03	0.64365E-04	0.19081E-01	0.12842E-01	0.13340E 01	0.14436E 01
79	543.50	0.29974E-00	0.50401E-01	0.14610E-03	0.27357E-04	0.81106E-02	0.54586E-02	-0.11890E 01	0.12037E 01
80	543.26	0.25663E-00	0.38641E-01	0.11199E-03	0.20971E-04	0.62182E-02	0.41850E-02	-0.13340E 01	0.
81	543.23	0.27740E-00	0.44918E-01	0.13018E-03	0.24376E-04	0.72262E-02	0.48647E-02	-0.11470E 01	0.
82	541.86	-0.43117E-01	-0.72370E-02	-0.20954E-04	-0.39237E-05	-0.11646E-02	-0.78379E-03	-0.11890E 01	0.
83	546.13	0.15361E 01	0.25845E-00	0.75056E-03	0.14054E-03	0.41590E-01	0.27991E-01	-0.10840E 01	0.86816E 00
84	542.78	0.40623E-00	0.59718E-01	0.17302E-03	0.32398E-04	0.96098E-02	0.64677E-02	-0.11890E 01	0.12148E 01
85	543.53	0.63325E 00	0.93129E-01	0.26996E-03	0.50550E-04	0.14986E-01	0.10086E-01	-0.13090E 01	0.14331E 01
86	543.67	0.37870E-00	0.56463E-01	0.16369E-03	0.30651E-04	0.90860E-02	0.61151E-02	-0.13340E 01	0.10126E 01
87	635.29	0.50059E 02	0.77239E 01	0.23931E-01	0.44810E-02	0.12429E 01	0.83652E 00	0.11990E 01	0.83430E 00
88	585.35	0.35371E 02	0.53599E 01	0.16006E-01	0.29972E-02	0.86252E 00	0.58049E 00	0.12070E 01	0.80334E 00
89	562.41	0.13914E 02	0.21176E 01	0.62207E-02	0.11648E-02	0.34076E-00	0.22934E-00	0.13340E 01	0.98456E 00
90	609.16	0.49477E 02	0.73354E 01	0.22290E-01	0.41737E-02	0.11804E 01	0.79445E 00	0.12070E 01	0.90044E 00
91	571.56	0.21559E 02	0.34082E 01	0.10077E-01	0.18870E-02	0.54844E 00	0.36911E-00	0.12490E 01	0.93214E 00
92	565.69	0.16167E 02	0.24773E 01	0.72944E-02	0.13659E-02	0.39865E-00	0.26830E-00	0.13340E 01	0.96785E 00
93	556.68	0.11860E 02	0.20223E 01	0.59167E-02	0.11079E-02	0.32543E-00	0.21902E-00	0.14900E 01	0.93786E 00
94	548.78	0.10488E 01	0.11065E-00	0.32194E-03	0.60284E-04	0.17806E-01	0.11984E-01	-0.	0.10124E 01
95	551.61	0.31460E 01	0.33482E-00	0.97610E-03	0.18277E-03	0.53879E-01	0.36262E-01	-0.	0.98933E 00
96	544.55	0.33871E-00	0.35649E-01	0.10341E-03	0.19364E-04	0.57367E-02	0.38609E-02	-0.	0.
97	545.70	0.65818E 00	0.69319E-01	0.20125E-03	0.37683E-04	0.11155E-01	0.75075E-02	-0.	0.90132E 00
98	546.48	0.12977E 01	0.13771E-00	0.40002E-03	0.74904E-04	0.22161E-01	0.14915E-01	-0.	0.11057E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
74	1	-2.61	147.39	0.02	-0.	1	C56	2.75	2	10.19	1849.10	1883.50	41	C55	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.911685E 02	0.378731E-01	0.476572E 04	0.348536E-04	0.738464E-07	0.226444E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731798E 00	0.622018E 01	0.924527E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	568.90	0.45319E 02	0.59942E 01	0.17636E-01	0.33001E-02	0.96367E 00	0.64835E 00	-0.	0.98354E 00
2	1085.37	-0.36365E-02	-0.64958E-03	-0.30461E-05	-0.56998E-06	-0.10443E-03	-0.70261E-04	-0.30000E-01	0.
3	1085.37	-0.36365E-02	-0.70628E-03	-0.33119E-05	-0.61973E-06	-0.11355E-03	-0.76393E-04	-0.60000E-01	0.
4	563.49	0.38840E 02	0.60770E 01	0.17812E-01	0.33329E-02	0.97698E 00	0.65731E 00	-0.90000E-01	0.98898E 00
5	557.76	0.35061E 02	0.56075E 01	0.16369E-01	0.30629E-02	0.90150E 00	0.60652E 00	-0.20000E-00	0.98691E 00
6	556.77	0.31298E 02	0.50028E 01	0.14594E-01	0.27308E-02	0.80429E 00	0.54112E 00	-0.40000E-00	0.10046E 01
7	556.01	0.27198E 02	0.43664E 01	0.12730E-01	0.23821E-02	0.70197E 00	0.47228E-00	-0.60000E 00	0.10162E 01
8	1085.37	-0.36365E-02	-0.74643E-03	-0.35002E-05	-0.65496E-06	-0.12000E-03	-0.80737E-04	-0.80000E 00	0.
9	556.47	0.24323E 02	0.38440E 01	0.11211E-01	0.20978E-02	0.61799E 00	0.41578E-00	-0.90000E 00	0.10206E 01
10	557.88	0.21159E 02	0.33896E 01	0.98956E-02	0.18517E-02	0.54494E 00	0.36663E-00	-0.98000E 00	0.10045E 01
11	539.80	0.18068E 01	0.31064E-00	0.89545E-03	0.16756E-03	0.49940E-01	0.33600E-01	-0.11220E 01	0.35256E 01
12	541.75	0.10281E 01	0.15078E-00	0.43524E-03	0.81442E-04	0.24241E-01	0.16309E-01	-0.11890E 01	0.14483E 01
13	543.16	0.89403E 00	0.13529E-00	0.39090E-03	0.73144E-04	0.21750E-01	0.14633E-01	-0.13340E 01	0.11633E 01
14	541.73	0.75273E 00	0.12956E-00	0.37397E-03	0.69977E-04	0.20829E-01	0.14013E-01	-0.14400E 01	0.99685E 00
15	1118.27	-0.95938E 01	-0.17355E 01	-0.84633E-02	-0.15837E-02	-0.27902E-00	-0.18772E-00	0.30000E-01	0.
16	1085.37	-0.36365E-02	-0.70628E-03	-0.33119E-05	-0.61973E-06	-0.11355E-03	-0.76393E-04	0.60000E-01	0.
17	1085.37	-0.36365E-02	-0.72446E-03	-0.33972E-05	-0.63569E-06	-0.11647E-03	-0.78361E-04	0.90000E-01	0.
18	563.19	0.42209E 02	0.67709E 01	0.19841E-01	0.37127E-02	0.10885E 01	0.73237E 00	0.20000E-00	0.97445E 00
19	580.24	0.45881E 02	0.74292E 01	0.22036E-01	0.41234E-02	0.11944E 01	0.80357E 00	0.40000E-00	0.96619E 00
20	602.32	**0.48502E 02**	**0.79859E 01**	**0.24069E-01**	**0.45038E-02**	**0.12839E 01**	**0.86379E 00**	**0.60000E 00**	**0.97066E 00**
21	650.54	0.78577E 02	0.12494E 02	0.39031E-01	0.73036E-02	0.20086E 01	0.13514E 01	0.92000E 00	0.10024E 01
22	615.54	0.63965E 02	0.99854E 01	0.30389E-01	0.56864E-02	0.16053E 01	0.10801E 01	0.10400E 01	0.11349E 01
23	607.22	0.59329E 02	0.92456E 01	0.27966E-01	0.52330E-02	0.14864E 01	0.10000E 01	0.10600E 01	0.99143E 00
24	580.62	0.43628E 02	0.70208E 01	0.20831E-01	0.38978E-02	0.11287E 01	0.75940E 00	0.10840E 01	0.99518E 00
25	543.49	0.17892E 02	0.26403E 01	0.76307E-02	0.14279E-02	0.42448E-00	0.28559E-00	0.12070E 01	0.99645E 00
26	544.80	0.19378E 02	0.30181E 01	0.87305E-02	0.16337E-02	0.48522E-00	0.32645E-00	0.12490E 01	0.92314E 00
27	545.59	0.18722E 02	0.28700E 01	0.83067E-02	0.15543E-02	0.46141E-00	0.31043E-00	0.13340E 01	0.94074E 00
28	540.78	0.13337E 02	0.22674E 01	0.65405E-02	0.12238E-02	0.36452E-00	0.24525E-00	0.14540E 01	0.95273E 00
29	538.23	0.79408E 01	0.13081E 01	0.37667E-02	0.70483E-03	0.21031E-00	0.14149E-00	0.16580E 01	0.87539E 00
30	542.68	0.79740E 01	0.13330E 01	0.38502E-02	0.72045E-03	0.21430E-00	0.14418E-00	0.20410E 01	0.86542E 00
31	547.92	0.80940E 01	0.13570E 01	0.39340E-02	0.73614E-03	0.21817E-00	0.14678E-00	0.22480E 01	0.99123E 00
32	563.91	0.41680E 02	0.63656E 01	0.18663E-01	0.34922E-02	0.10234E 01	0.68852E 00	-0.60000E-01	0.99837E 00
33	572.06	0.43441E 02	0.61232E 01	0.18057E-01	0.33787E-02	0.98441E 00	0.66231E 00	-0.30000E-01	0.98227E 00
34	567.36	0.43994E 02	0.67317E 01	0.19785E-01	0.37021E-02	0.10822E 01	0.72812E 00	0.30000E-01	0.98509E 00
35	562.52	0.40372E 02	0.63134E 01	0.18492E-01	0.34602E-02	0.10150E 01	0.68288E 00	0.60000E-01	0.98925E 00
36	590.60	0.66633E 02	0.10850E 02	0.32425E-01	0.60674E-02	0.17444E 01	0.11736E 01	-0.86800E 00	0.96069E 00
37	583.99	0.54647E 02	0.86270E 01	0.25658E-01	0.48012E-02	0.13869E 01	0.93313E 00	-0.91100E 00	0.96733E 00
38	576.99	0.49482E 02	0.79218E 01	0.23443E-01	0.43866E-02	0.12736E 01	0.85685E 00	-0.95300E 00	0.99712E 00
39	1085.37	-0.36365E-02	-0.73816E-03	-0.34615E-05	-0.64771E-06	-0.11867E-03	-0.79842E-04	0.51000E-01	0.
40	1085.37	-0.36365E-02	-0.73816E-03	-0.34615E-05	-0.64771E-06	-0.11867E-03	-0.79842E-04	0.29000E-01	0.
41	1085.37	-0.36365E-02	-0.73391E-03	-0.34415E-05	-0.64398E-06	-0.11799E-03	-0.79383E-04	0.70000E-02	0.
42	609.53	0.82505E 02	0.13486E 02	0.40862E-01	0.76460E-02	0.21681E 01	0.14587E 01	-0.86800E 00	0.98330E 00
43	593.58	0.69024E 02	0.11215E 02	0.33587E-01	0.62847E-02	0.18030E 01	0.12130E 01	-0.91100E 00	0.98239E 00
44	590.56	0.62185E 02	0.10029E 02	0.29970E-01	0.56081E-02	0.16124E 01	0.10848E 01	-0.95300E 00	0.10171E 01
45	586.48	0.50915E 02	0.85038E 01	0.25337E-01	0.47411E-02	0.13671E 01	0.91980E 00	-0.10400E 01	0.24380E 01
46	1085.37	-0.36365E-02	-0.74005E-03	-0.34703E-05	-0.64937E-06	-0.11898E-03	-0.80047E-04	0.70000E-02	0.
47	1085.37	-0.36365E-02	-0.74005E-03	-0.34703E-05	-0.64937E-06	-0.11898E-03	-0.80047E-04	0.29000E-01	0.
48	1085.37	-0.36365E-02	-0.74289E-03	-0.34836E-05	-0.65185E-06	-0.11943E-03	-0.80353E-04	0.51000E-01	0.
49	590.71	0.52938E 02	0.85386E 01	0.25519E-01	0.47751E-02	0.13727E 01	0.92356E 00	0.70000E-02	0.90934E 00
50	565.33	0.32503E 02	0.51870E 01	0.15223E-01	0.28485E-02	0.83390E 00	0.56104E 00	0.29000E-01	0.10067E 01
51	1085.37	-0.36365E-02	-0.73580E-03	-0.34504E-05	-0.64564E-06	-0.11829E-03	-0.79587E-04	0.51000E-01	0.
52	593.65	0.60648E 02	0.98543E 01	0.29514E-01	0.55226E-02	0.15842E 01	0.10659E 01	-0.86800E 00	0.96867E 00
53	581.94	0.48645E 02	0.78841E 01	0.23414E-01	0.43813E-02	0.12675E 01	0.85277E 00	-0.91100E 00	0.98133E 00
54	581.94	0.47436E 02	0.76147E 01	0.22614E-01	0.42316E-02	0.12242E 01	0.82364E 00	-0.95300E 00	0.98869E 00

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036 036

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	573.91	0.32851E 02	0.54493E 01	0.16090E-01	0.30108E-02	0.87606E 00	0.58941E 00	-0.10400E 01	0.22712E 01
56	570.80	0.26644E 02	0.45514E 01	0.13409E-01	0.25092E-02	0.73171E 00	0.49229E-00	-0.10680E 01	0.22063E 01
57	616.37	0.54417E 02	0.92357E 01	0.28125E-01	0.52627E-02	0.14848E 01	0.99897E 00	-0.10400E 01	0.69358E 01
58	614.63	0.68900E 02	0.12648E 02	0.38466E-01	0.71978E-02	0.20334E 01	0.13680E 01	-0.10680E 01	0.56231E 01
59	563.27	0.24039E 02	0.39644E 01	0.11618E-01	0.21739E-02	0.63734E 00	0.42880E-00	-0.10400E 01	0.27968E 01
60	563.83	0.24365E 02	0.41461E 01	0.12155E-01	0.22745E-02	0.66656E 00	0.44846E-00	-0.10680E 01	0.29764E 01
61	540.54	0.77559E 00	0.12860E-00	0.37089E-03	0.69401E-04	0.20674E-01	0.13910E-01	-0.11220E 01	0.11801E 01
62	543.36	0.16156E-00	0.24450E-01	0.70656E-04	0.13221E-04	0.39308E-02	0.26446E-02	-0.13340E 01	0.78220E 00
63	541.79	0.11797E 01	0.20306E-00	0.58616E-03	0.10968E-03	0.32646E-01	0.21964E-01	-0.11220E 01	0.10578E 01
64	544.78	0.29247E-00	0.44297E-01	0.12814E-03	0.23977E-04	0.71216E-02	0.47914E-02	-0.13340E 01	0.89316E 00
65	542.80	0.62390E 00	0.10745E-00	0.31038E-03	0.58079E-04	0.17274E-01	0.11622E-01	0.14400E 01	0.14337E 01
66	541.31	0.93403E 00	0.15296E-00	0.44139E-03	0.82592E-04	0.24591E-01	0.16545E-01	0.16130E 01	0.11921E 01
67	541.10	0.10592E 01	0.17024E-00	0.49118E-03	0.91909E-04	0.27369E-01	0.18414E-01	0.17200E 01	0.12640E 01
68	541.60	0.91740E 00	0.15142E-00	0.43703E-03	0.81777E-04	0.24343E-01	0.16378E-01	-0.16130E 01	0.12154E 01
69	541.16	0.10114E 01	0.16256E-00	0.46905E-03	0.87769E-04	0.26135E-01	0.17583E-01	-0.18280E 01	0.11174E 01
70	542.90	0.90961E 00	0.13373E-00	0.38631E-03	0.72287E-04	0.21499E-01	0.14464E-01	-0.11650E 01	0.11292E 01
71	543.53	0.50234E 00	0.42248E-01	0.12210E-03	0.22848E-04	0.67921E-02	0.45697E-02	-0.12050E 01	0.69457E 00
72	545.07	0.64156E 00	0.93137E-01	0.26947E-03	0.50422E-04	0.14973E-01	0.10074E-01	-0.12120E 01	0.71206E 00
73	540.76	0.97870E 00	0.14371E-00	0.41454E-03	0.77568E-04	0.23104E-01	0.15544E-01	-0.11650E 01	0.20581E 01
74	541.20	0.64415E 00	0.54104E-01	0.15612E-03	0.29212E-04	0.86982E-02	0.58521E-02	-0.12050E 01	0.15994E 01
75	1085.37	-0.36365E-02	-0.67557E-03	-0.31679E-05	-0.59278E-06	-0.10861E-03	-0.73072E-04	-0.12120E 01	0.
76	536.26	0.17610E 01	0.26457E-00	0.76078E-03	0.14236E-03	0.42534E-01	0.28617E-01	0.10840E 01	0.10241E 01
77	537.09	0.63792E 00	0.10294E-00	0.29617E-03	0.55419E-04	0.16549E-01	0.11134E-01	0.11220E 01	0.98526E 00
78	542.30	0.82909E 00	0.12352E-00	0.35668E-03	0.66742E-04	0.19858E-01	0.13360E-01	0.13340E 01	0.13059E 01
79	539.29	0.27481E-00	0.46101E-01	0.13284E-03	0.24858E-04	0.74115E-02	0.49864E-02	-0.11890E 01	0.14553E 01
80	541.81	0.42494E-00	0.63933E-01	0.18455E-03	0.34533E-04	0.10278E-01	0.69152E-02	-0.13340E 01	0.17368E 01
81	537.44	0.21143E-00	0.34125E-01	0.98208E-04	0.18377E-04	0.54861E-02	0.36910E-02	-0.11470E 01	0.84694E 00
82	537.14	0.65459E-01	0.10958E-01	0.31529E-04	0.58998E-05	0.17617E-02	0.11853E-02	-0.11890E 01	0.12131E 01
83	538.13	0.25605E 01	0.42887E-00	0.12349E-02	0.23106E-03	0.68949E-01	0.46389E-01	-0.10840E 01	0.96597E 00
84	538.17	0.43221E-00	0.63373E-01	0.18247E-03	0.34144E-04	0.10188E-01	0.68546E-02	-0.11890E 01	0.10820E 01
85	541.42	0.60676E 00	0.89128E-01	0.25721E-03	0.48129E-04	0.14329E-01	0.96404E-02	-0.13090E 01	0.13610E 01
86	540.97	0.65195E 00	0.97056E-01	0.28000E-03	0.52394E-04	0.15603E-01	0.10498E-01	-0.13340E 01	0.13386E 01
87	597.51	0.43129E 02	0.65225E 01	0.19590E-01	0.36657E-02	0.10486E 01	0.70550E 00	0.11990E 01	0.87056E 00
88	556.52	0.28646E 02	0.42726E 01	0.12461E-01	0.23317E-02	0.68689E 00	0.46213E-00	0.12070E 01	0.81971E 00
89	541.04	0.12814E 02	0.19271E 01	0.55598E-02	0.10403E-02	0.30981E-00	0.20844E-00	0.13340E 01	0.10076E 01
90	577.78	0.40969E 02	0.59719E 01	0.17683E-01	0.33088E-02	0.96009E 00	0.64595E 00	0.12070E 01	0.90785E 00
91	549.62	0.19283E 02	0.30114E 01	0.87405E-02	0.16355E-02	0.48414E-00	0.32573E-00	0.12490E 01	0.96501E 00
92	543.41	0.14151E 02	0.21417E 01	0.61892E-02	0.11581E-02	0.34431E-00	0.23165E-00	0.13340E 01	0.95740E 00
93	539.58	0.10343E 02	0.17469E 01	0.50349E-02	0.94212E-03	0.28084E-00	0.18895E-00	0.14900E 01	0.94781E 00
94	546.13	0.17943E 01	0.18902E-00	0.54728E-03	0.10241E-03	0.30388E-01	0.20445E-01	-0.	0.94227E 00
95	551.08	0.57709E 01	0.61400E 00	0.17839E-02	0.33381E-03	0.98711E-01	0.66413E-01	-0.	0.92100E 00
96	541.71	0.56156E 00	0.59011E-01	0.17033E-03	0.31872E-04	0.94870E-02	0.63828E-02	-0.	0.16914E 01
97	543.47	0.74910E 00	0.78796E-01	0.22772E-03	0.42611E-04	0.12668E-01	0.85228E-02	-0.	0.10691E 01
98	546.30	0.17486E 01	0.18555E-00	0.53729E-03	0.10054E-03	0.29830E-01	0.20069E-01	-0.	0.13488E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
75	1	4.36	154.36	0.02	-0.	1	C56	2.75	2	10.19	1852.60	1887.80	42	C55	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.913969E 02	0.379279E-01	0.477173E 04	0.348169E-04	0.740315E-07	0.225924E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731923E 00	0.622568E 01	0.925639E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	574.50	0.48592E 02	0.64469E 01	0.18971E-01	0.35492E-02	0.10355E 01	0.69648E 00	-0.	0.98764E 00
2	1127.76	0.11442E 01	0.20774E-00	0.10183E-02	0.19051E-03	0.33369E-01	0.22443E-01	-0.30000E-01	0.
3	1085.37	-0.36365E-02	-0.70628E-03	-0.32919E-05	-0.61585E-06	-0.11345E-03	-0.76301E-04	-0.60000E-01	0.
4	567.10	0.42655E 02	0.66871E 01	0.19575E-01	0.36622E-02	0.10741E 01	0.72243E 00	-0.90000E-01	0.99509E 00
5	559.45	0.39215E 02	0.62777E 01	0.18278E-01	0.34194E-02	0.10084E 01	0.67820E 00	-0.20000E-00	0.99343E 00
6	559.84	0.35599E 02	0.57001E 01	0.16601E-01	0.31057E-02	0.91557E 00	0.61580E 00	-0.40000E-00	0.10041E 01
7	560.61	0.30773E 02	0.49530E 01	0.14433E-01	0.27001E-02	0.79558E 00	0.53509E 00	-0.60000E 00	0.10111E 01
8	1085.37	-0.36365E-02	-0.74643E-03	-0.34790E-05	-0.65086E-06	-0.11990E-03	-0.80640E-04	-0.80000E 00	0.
9	561.18	0.27644E 02	0.43803E 01	0.12769E-01	0.23888E-02	0.70359E 00	0.47322E-00	-0.90000E 00	0.10152E 01
10	561.82	0.26106E 02	0.41914E 01	0.12224E-01	0.22868E-02	0.67324E 00	0.45281E-00	-0.98000E 00	0.10250E 01
11	537.02	0.25309E 01	0.43447E-00	0.12453E-02	0.23298E-03	0.69786E-01	0.46937E-01	-0.11220E 01	0.26022E 01
12	541.89	0.25117E 01	0.36841E-00	0.10596E-02	0.19822E-03	0.59176E-01	0.39801E-01	-0.11890E 01	0.11853E 01
13	544.63	0.18935E 01	0.28677E-00	0.82632E-03	0.15459E-03	0.46062E-01	0.30980E-01	-0.13340E 01	0.10665E 01
14	543.65	0.21132E 01	0.36412E-00	0.10485E-02	0.19616E-03	0.58487E-01	0.39337E-01	-0.14400E 01	0.11997E 01
15	989.09	-0.44777E 03	-0.76958E 02	-0.32278E-00	-0.60386E-01	-0.12361E 02	-0.83141E 01	0.30000E-01	0.
16	1085.37	-0.36365E-02	-0.70628E-03	-0.32919E-05	-0.61585E-06	-0.11345E-03	-0.76301E-04	0.60000E-01	0.
17	1085.37	-0.36365E-02	-0.72446E-03	-0.33767E-05	-0.63171E-06	-0.11637E-03	-0.78266E-04	0.90000E-01	0.
18	571.46	0.43222E 02	0.69652E 01	0.20452E-01	0.38263E-02	0.11188E 01	0.75247E 00	0.20000E-00	0.98179E 00
19	595.72	0.45429E 02	0.74179E 01	0.22164E-01	0.41464E-02	0.11915E 01	0.80138E 00	0.40000E-00	0.97988E 00
20	**618.79**	**0.57046E 02**	**0.94755E 01**	**0.28793E-01**	**0.53865E-02**	**0.15220E 01**	**0.10237E 01**	**0.60000E 00**	**0.98053E 00**
21	633.78	0.65705E 02	0.10356E 02	0.31821E-01	0.59531E-02	0.16635E 01	0.11188E 01	0.92000E 00	0.10177E 01
22	601.55	0.46238E 02	0.71645E 01	0.21497E-01	0.40217E-02	0.11508E 01	0.77401E 00	0.10400E 01	0.10867E 01
23	592.56	0.42039E 02	0.64998E 01	0.19376E-01	0.36249E-02	0.10440E 01	0.70219E 00	0.10600E 01	0.99084E 00
24	572.71	0.29751E 02	0.47670E 01	0.14010E-01	0.26211E-02	0.76570E 00	0.51500E 00	0.10840E 01	0.98796E 00
25	552.54	0.99351E 01	0.14735E 01	0.42695E-02	0.79874E-03	0.23668E-00	0.15919E-00	0.12070E 01	0.96718E 00
26	555.43	0.10723E 02	0.16800E 01	0.48776E-02	0.91251E-03	0.26985E-00	0.18150E-00	0.12490E 01	0.96986E 00
27	559.28	0.11225E 02	0.17339E 01	0.50477E-02	0.94434E-03	0.27851E-00	0.18732E-00	0.13340E 01	0.92608E 00
28	556.82	0.89808E 01	0.15406E 01	0.44772E-02	0.83759E-03	0.24745E-00	0.16643E-00	0.14540E 01	0.91670E 00
29	550.47	0.59299E 01	0.98359E 00	0.28458E-02	0.53240E-03	0.15799E-00	0.10626E-00	0.16580E 01	0.89005E 00
30	548.25	0.59964E 01	0.10055E 01	0.29047E-02	0.54342E-03	0.16151E-00	0.10863E-00	0.20410E 01	0.80434E 00
31	550.61	0.64956E 01	0.10907E 01	0.31559E-02	0.59041E-03	0.17519E-00	0.11783E-00	0.22480E 01	0.92346E 00
32	569.00	0.44856E 02	0.68698E 01	0.20137E-01	0.37673E-02	0.11035E 01	0.74217E 00	-0.60000E-01	0.10097E 01
33	577.37	0.46705E 02	0.66024E 01	0.19469E-01	0.36422E-02	0.10605E 01	0.71328E 00	-0.30000E-01	0.99135E 00
34	572.12	0.46937E 02	0.72008E 01	0.21154E-01	0.39575E-02	0.11566E 01	0.77792E 00	0.30000E-01	0.98804E 00
35	566.52	0.42540E 02	0.66671E 01	0.19509E-01	0.36497E-02	0.10709E 01	0.72027E 00	0.60000E-01	0.98753E 00
36	595.32	0.72823E 02	0.11889E 02	0.35511E-01	0.66435E-02	0.19096E 01	0.12844E 01	-0.86800E 00	0.10584E 01
37	993.38	-0.73820E 00	-0.14143E-00	-0.59582E-03	-0.11147E-03	-0.22716E-01	-0.15279E-01	-0.91100E 00	0.
38	582.59	0.56279E 02	0.90375E 01	0.26749E-01	0.50042E-02	0.14517E 01	0.97636E 00	-0.95300E 00	0.99824E 00
39	1085.37	-0.36365E-02	-0.73816E-03	-0.34405E-05	-0.64365E-06	-0.11857E-03	-0.79746E-04	0.51000E-01	0.
40	1085.37	-0.36365E-02	-0.73816E-03	-0.34405E-05	-0.64365E-06	-0.11857E-03	-0.79746E-04	0.29000E-01	0.
41	1085.37	-0.36365E-02	-0.73391E-03	-0.34207E-05	-0.63995E-06	-0.11788E-03	-0.79287E-04	0.70000E-02	0.
42	623.59	0.97465E 02	0.16051E 02	0.48945E-01	0.91567E-02	0.25781E 01	0.17340E 01	-0.86800E 00	0.96102E 00
43	604.27	0.81005E 02	0.13237E 02	0.39798E-01	0.74455E-02	0.21263E 01	0.14301E 01	-0.91100E 00	0.98607E 00
44	610.82	0.82509E 02	0.13453E 02	0.40639E-01	0.76028E-02	0.21608E 01	0.14533E 01	-0.95300E 00	0.12201E 01
45	600.42	0.66487E 02	0.11189E 02	0.33544E-01	0.62754E-02	0.17972E 01	0.12087E 01	-0.10400E 01	0.25497E 01
46	1085.37	-0.36365E-02	-0.74005E-03	-0.34493E-05	-0.64530E-06	-0.11887E-03	-0.79951E-04	0.70000E-02	0.
47	1085.37	-0.36365E-02	-0.74005E-03	-0.34493E-05	-0.64530E-06	-0.11887E-03	-0.79951E-04	0.29000E-01	0.
48	1085.37	-0.36365E-02	-0.74289E-03	-0.34625E-05	-0.64777E-06	-0.11933E-03	-0.80257E-04	0.51000E-01	0.
49	594.08	0.53419E 02	0.86318E 01	0.25760E-01	0.48192E-02	0.13865E 01	0.93252E 00	0.70000E-02	0.88707E 00
50	565.13	0.31602E 02	0.50553E 01	0.14778E-01	0.27646E-02	0.81201E 00	0.54614E 00	0.29000E-01	0.10064E 01
51	1085.37	-0.36365E-02	-0.73580E-03	-0.34295E-05	-0.64159E-06	-0.11819E-03	-0.79491E-04	0.51000E-01	0.
52	602.68	0.67822E 02	0.11074E 02	0.33254E-01	0.62213E-02	0.17787E 01	0.11963E 01	-0.86800E 00	0.10539E 01
53	591.53	0.57411E 02	0.93533E 01	0.27862E-01	0.52125E-02	0.15024E 01	0.10105E 01	-0.91100E 00	0.97641E 00
54	591.29	0.56499E 02	0.91157E 01	0.27150E-01	0.50792E-02	0.14642E 01	0.98480E 00	-0.95300E 00	0.10111E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	584.55	0.43233E 02	0.72132E 01	0.21379E-01	0.39997E-02	0.11586E 01	0.77926E 00	-0.10400E 01	0.23140E 01
56	578.88	0.33498E 02	0.57475E 01	0.16966E-01	0.31740E-02	0.92319E 00	0.62092E 00	-0.10680E 01	0.20259E 01
57	636.26	0.66315E 02	0.11374E 02	0.35011E-01	0.65499E-02	0.18269E 01	0.12287E 01	-0.10400E 01	0.56424E 01
58	635.05	0.85062E 02	0.15784E 02	0.48543E-01	0.90815E-02	0.25353E 01	0.17052E 01	-0.10680E 01	0.46459E 01
59	571.80	0.31786E 02	0.52665E 01	0.15468E-01	0.28938E-02	0.84594E 00	0.56896E 00	-0.10400E 01	0.25148E 01
60	570.73	0.32692E 02	0.55843E 01	0.16389E-01	0.30661E-02	0.89697E 00	0.60329E 00	-0.10680E 01	0.24589E 01
61	538.74	0.14655E 01	0.24274E-00	0.69660E-03	0.13032E-03	0.38990E-01	0.26224E-01	-0.11220E 01	0.99635E 00
62	544.84	0.75221E 00	0.11393E-00	0.32835E-03	0.61428E-04	0.18301E-01	0.12309E-01	-0.13340E 01	0.81460E 00
63	539.63	0.19699E 01	0.33865E-00	0.97245E-03	0.18193E-03	0.54396E-01	0.36586E-01	-0.11220E 01	0.10961E 01
64	546.19	0.14125E 01	0.21410E-00	0.61760E-03	0.11554E-03	0.34390E-01	0.23130E-01	-0.13340E 01	0.19255E 01
65	545.04	0.17039E 01	0.29382E-00	0.84688E-03	0.15844E-03	0.47194E-01	0.31742E-01	0.14400E 01	0.12093E 01
66	543.86	0.31070E 01	0.50954E 00	0.14675E-02	0.27454E-03	0.81845E-01	0.55048E-01	0.16130E 01	0.12892E 01
67	544.27	0.35751E 01	0.57561E 00	0.16582E-02	0.31022E-03	0.92457E-01	0.62185E-01	0.17200E 01	0.13139E 01
68	544.10	0.27044E 01	0.44699E-00	0.12875E-02	0.24087E-03	0.71798E-01	0.48290E-01	-0.16130E 01	0.13101E 01
69	543.98	0.32239E 01	0.51898E 00	0.14948E-02	0.27964E-03	0.83362E-01	0.56068E-01	-0.18280E 01	0.12597E 01
70	541.09	0.25834E 01	0.37941E-00	0.10906E-02	0.20403E-03	0.60942E-01	0.40989E-01	-0.11650E 01	0.12403E 01
71	542.28	0.11605E 01	0.97535E-01	0.28059E-03	0.52493E-04	0.15666E-01	0.10537E-01	-0.12050E 01	0.86644E 00
72	544.12	0.17782E 01	0.25801E-00	0.74319E-03	0.13904E-03	0.41443E-01	0.27873E-01	-0.12120E 01	0.87260E 00
73	541.16	0.28358E 01	0.41650E-00	0.11973E-02	0.22399E-03	0.66901E-01	0.44996E-01	-0.11650E 01	0.18785E 01
74	540.76	0.11839E 01	0.99414E-01	0.28570E-03	0.53448E-04	0.15968E-01	0.10740E-01	-0.12050E 01	0.14001E 01
75	1085.37	-0.36365E-02	-0.67557E-03	-0.31488E-05	-0.58907E-06	-0.10851E-03	-0.72984E-04	-0.12120E 01	0.
76	535.42	0.25060E 01	0.37631E-00	0.10774E-02	0.20157E-03	0.60444E-01	0.40654E-01	0.10840E 01	0.10446E 01
77	536.94	0.18784E 01	0.30309E-00	0.86871E-03	0.16252E-03	0.48683E-01	0.32744E-01	0.11220E 01	0.98091E 00
78	544.25	0.16758E 01	0.24994E-00	0.72003E-03	0.13470E-03	0.40147E-01	0.27002E-01	0.13340E 01	0.96974E 00
79	539.64	0.10753E 01	0.18043E-00	0.51810E-03	0.96928E-04	0.28981E-01	0.19492E-01	-0.11890E 01	0.14071E 01
80	543.55	0.11387E 01	0.17149E-00	0.49378E-03	0.92376E-04	0.27545E-01	0.18526E-01	-0.13340E 01	0.10297E 01
81	537.22	0.54339E 00	0.87689E-01	0.25138E-03	0.47029E-04	0.14085E-01	0.94734E-02	-0.11470E 01	0.11897E 01
82	537.46	0.20787E-02	0.34804E-03	0.99790E-06	0.18669E-06	0.55904E-04	0.37600E-04	-0.11890E 01	0.
83	540.23	0.45242E 01	0.75867E 00	0.21794E-02	0.40773E-03	0.12186E-00	0.81961E-01	-0.10840E 01	0.99506E 00
84	538.71	0.82131E 00	0.12046E-00	0.34569E-03	0.64671E-04	0.19349E-01	0.13014E-01	-0.11890E 01	0.10269E 01
85	542.15	0.10634E 01	0.15627E-00	0.44951E-03	0.84094E-04	0.25100E-01	0.16882E-01	-0.13090E 01	0.93771E 00
86	542.60	0.10883E 01	0.16216E-00	0.46662E-03	0.87296E-04	0.26048E-01	0.17519E-01	-0.13340E 01	0.10199E 01
87	589.35	0.27293E 02	0.41094E 01	0.12222E-01	0.22865E-02	0.66008E 00	0.44396E-00	0.11990E 01	0.80043E 00
88	561.96	0.16770E 02	0.25088E 01	0.73175E-02	0.13690E-02	0.40298E-00	0.27104E-00	0.12070E 01	0.80018E 00
89	559.82	0.92639E 01	0.14078E 01	0.41000E-02	0.76704E-03	0.22613E-00	0.15209E-00	0.13340E 01	0.97635E 00
90	574.79	0.24690E 02	0.35931E 01	0.10576E-01	0.19785E-02	0.57715E 00	0.38818E-00	0.12070E 01	0.87696E 00
91	566.06	0.13497E 02	0.21272E 01	0.62224E-02	0.11641E-02	0.34168E-00	0.22981E-00	0.12490E 01	0.10110E 01
92	562.64	0.10581E 02	0.16186E 01	0.47234E-02	0.88365E-03	0.25999E-00	0.17487E-00	0.13340E 01	0.96673E 00
93	555.08	0.73590E 01	0.12537E 01	0.36389E-02	0.68078E-03	0.20137E-00	0.13544E-00	0.14900E 01	0.91779E 00
94	549.41	0.24307E 01	0.25653E-00	0.74165E-03	0.13875E-03	0.41204E-01	0.27713E-01	-0.	0.10142E 01
95	556.22	0.80197E 01	0.85571E 00	0.24858E-02	0.46504E-03	0.13745E-00	0.92445E-01	-0.	0.92486E 00
96	544.16	0.16868E 01	0.17750E-00	0.51129E-03	0.95653E-04	0.28510E-01	0.19175E-01	-0.	0.11100E 01
97	546.44	0.29668E 01	0.31259E-00	0.90186E-03	0.16872E-03	0.50209E-01	0.33770E-01	-0.	0.11097E 01
98	547.60	0.43101E 01	0.45769E-00	0.13216E-02	0.24724E-03	0.73516E-01	0.49446E-01	-0.	0.12787E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
76	1	8.45	158.45	0.02	-0.	1	C56	2.70	2	10.19	1843.80	1877.10	39	C55	2.65

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.908305E 02	0.377901E-01	0.475681E 04	0.349067E-04	0.735727E-07	0.227207E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731611E 00	0.621187E 01	0.922854E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	581.28	0.50662E 02	0.67465E 01	0.20141E-01	0.37700E-02	0.10861E 01	0.73105E 00	-0.	0.99631E 00
2	1085.37	-0.31174E-02	-0.55686E-03	-0.26349E-05	-0.49322E-06	-0.89645E-04	-0.60341E-04	-0.30000E-01	0.
3	1085.37	-0.31174E-02	-0.60546E-03	-0.28649E-05	-0.53627E-06	-0.97468E-04	-0.65607E-04	-0.60000E-01	0.
4	572.67	0.44902E 02	0.70610E 01	0.20950E-01	0.39214E-02	0.11367E 01	0.76513E 00	-0.90000E-01	0.10020E 01
5	563.90	0.41755E 02	0.67007E 01	0.19756E-01	0.36980E-02	0.10787E 01	0.72609E 00	-0.20000E-00	0.99826E 00
6	564.45	0.38096E 02	0.61154E 01	0.18037E-01	0.33763E-02	0.98446E 00	0.66266E 00	-0.40000E-00	0.10021E 01
7	564.41	0.33347E 02	0.53785E 01	0.15864E-01	0.29694E-02	0.86584E 00	0.58281E 00	-0.60000E 00	0.10065E 01
8	1085.37	-0.31174E-02	-0.63988E-03	-0.30278E-05	-0.56676E-06	-0.10301E-03	-0.69338E-04	-0.80000E 00	0.
9	563.89	0.30766E 02	0.48823E 01	0.14395E-01	0.26945E-02	0.78597E 00	0.52905E 00	-0.90000E 00	0.10026E 01
10	565.90	0.28136E 02	0.45274E 01	0.13368E-01	0.25022E-02	0.72883E 00	0.49059E-00	-0.98000E 00	0.97175E 00
11	542.26	0.30535E 01	0.52572E 00	0.15265E-02	0.28574E-03	0.84632E-01	0.56967E-01	-0.11220E 01	0.13578E 01
12	547.55	0.37995E 01	0.55907E 00	0.16294E-02	0.30499E-03	0.90001E-01	0.60581E-01	-0.11890E 01	0.10364E 01
13	549.69	0.27091E 01	0.41145E-00	0.12009E-02	0.22480E-03	0.66236E-01	0.44584E-01	-0.13340E 01	0.86954E 00
14	548.54	0.25948E 01	0.44832E-00	0.13075E-02	0.24474E-03	0.72171E-01	0.48579E-01	-0.14400E 01	0.82289E 00
15	771.27	-0.29263E 03	-0.45666E 02	-0.15814E-00	-0.29602E-01	-0.73514E 01	-0.49484E 01	0.30000E-01	0.
16	1085.37	-0.31174E-02	-0.60546E-03	-0.28649E-05	-0.53627E-06	-0.97468E-04	-0.65607E-04	0.60000E-01	0.
17	1085.37	-0.31174E-02	-0.62105E-03	-0.29387E-05	-0.55008E-06	-0.99978E-04	-0.67297E-04	0.90000E-01	0.
18	581.73	0.43706E 02	0.70828E 01	0.21152E-01	0.39593E-02	0.11402E 01	0.76749E 00	0.20000E-00	0.98682E 00
19	608.74	0.48358E 02	0.79517E 01	0.24219E-01	0.45335E-02	0.12801E 01	0.86164E 00	0.40000E-00	0.97919E 00
20	625.54	0.65270E 02	0.10880E 02	0.33556E-01	0.62811E-02	0.17515E 01	0.11790E 01	0.60000E 00	0.98266E 00
21	626.00	0.59715E 02	0.93737E 01	0.28919E-01	0.54132E-02	0.15090E 01	0.10157E 01	0.92000E 00	0.10026E 01
22	593.17	0.38240E 02	0.58985E 01	0.17762E-01	0.33247E-02	0.94955E 00	0.63916E 00	0.10400E 01	0.97004E 00
23	583.47	0.34465E 02	0.53026E 01	0.15855E-01	0.29679E-02	0.85363E 00	0.57459E 00	0.10600E 01	0.97726E 00
24	566.89	0.23488E 02	0.37515E 01	0.11084E-01	0.20748E-02	0.60392E 00	0.40651E-00	0.10840E 01	0.97089E 00
25	554.10	0.67532E 01	0.10025E 01	0.29352E-02	0.54942E-03	0.16138E-00	0.10863E-00	0.12070E 01	0.99563E 00
26	556.92	0.71423E 01	0.11200E 01	0.32858E-02	0.61505E-03	0.18030E-00	0.12136E-00	0.12490E 01	0.97919E 00
27	560.50	0.80743E 01	0.12481E 01	0.36709E-02	0.68713E-03	0.20092E-00	0.13524E-00	0.13340E 01	0.99537E 00
28	559.00	0.67465E 01	0.11587E 01	0.34044E-02	0.63724E-03	0.18653E-00	0.12556E-00	0.14540E 01	0.10153E 01
29	553.02	0.41522E 01	0.68971E 00	0.20179E-02	0.37772E-03	0.11103E-00	0.74737E-01	0.16580E 01	0.99606E 00
30	549.53	0.47735E 01	0.80104E 00	0.23378E-02	0.43760E-03	0.12895E-00	0.86800E-01	0.20410E 01	0.86158E 00
31	551.87	0.55797E 01	0.93755E 00	0.27407E-02	0.51302E-03	0.15093E-00	0.10159E-00	0.22480E 01	0.99850E 00
32	574.83	0.46627E 02	0.71639E 01	0.21288E-01	0.39847E-02	0.11533E 01	0.77628E 00	-0.60000E-01	0.10021E 01
33	583.90	0.48571E 02	0.68908E 01	0.20610E-01	0.38580E-02	0.11093E 01	0.74668E 00	-0.30000E-01	0.99828E 00
34	579.10	0.48798E 02	0.75150E 01	0.22400E-01	0.41929E-02	0.12098E 01	0.81433E 00	0.30000E-01	0.98442E 00
35	572.85	0.44223E 02	0.69549E 01	0.20637E-01	0.38630E-02	0.11196E 01	0.75363E 00	0.60000E-01	0.99114E 00
36	596.03	0.72692E 02	0.11872E 02	0.35823E-01	0.67055E-02	0.19111E 01	0.12864E 01	-0.86800E 00	0.99740E 00
37	1076.11	0.69559E 00	0.13776E-00	0.64483E-03	0.12070E-03	0.22177E-01	0.14928E-01	-0.91100E 00	0.
38	585.93	0.57821E 02	0.93020E 01	0.27863E-01	0.52156E-02	0.14974E 01	0.10080E 01	-0.95300E 00	0.10092E 01
39	1085.37	-0.31174E-02	-0.63280E-03	-0.29943E-05	-0.56048E-06	-0.10187E-03	-0.68570E-04	0.51000E-01	0.
40	1085.37	-0.31174E-02	-0.63280E-03	-0.29943E-05	-0.56048E-06	-0.10187E-03	-0.68570E-04	0.29000E-01	0.
41	1085.37	-0.31174E-02	-0.62915E-03	-0.29770E-05	-0.55725E-06	-0.10128E-03	-0.68175E-04	0.70000E-02	0.
42	626.49	0.10300E 03	0.16988E 02	0.52431E-01	0.98143E-02	0.27348E 01	0.18409E 01	-0.86800E 00	0.10976E 01
43	610.26	0.85137E 02	0.13957E 02	0.42559E-01	0.79663E-02	0.22469E 01	0.15124E 01	-0.91100E 00	0.10443E 01
44	615.00	0.87041E 02	0.14223E 02	0.43523E-01	0.81468E-02	0.22897E 01	0.15412E 01	-0.95300E 00	0.13309E 01
45	611.87	0.74615E 02	0.12633E 02	0.38568E-01	0.72194E-02	0.20338E 01	0.13690E 01	-0.10400E 01	0.21963E 01
46	1085.37	-0.31174E-02	-0.63442E-03	-0.30019E-05	-0.56191E-06	-0.10213E-03	-0.68745E-04	0.70000E-02	0.
47	1085.37	-0.31174E-02	-0.63442E-03	-0.30019E-05	-0.56191E-06	-0.10213E-03	-0.68745E-04	0.29000E-01	0.
48	1085.37	-0.31174E-02	-0.63685E-03	-0.30134E-05	-0.56407E-06	-0.10252E-03	-0.69008E-04	0.51000E-01	0.
49	592.63	0.50610E 02	0.81716E 01	0.24597E-01	0.46041E-02	0.13155E 01	0.88547E 00	0.70000E-02	0.76549E 00
50	565.71	0.30277E 02	0.48328E 01	0.14267E-01	0.26706E-02	0.77799E 00	0.52368E 00	0.29000E-01	0.98798E 00
51	1085.37	-0.31174E-02	-0.63077E-03	-0.29847E-05	-0.55869E-06	-0.10154E-03	-0.68350E-04	0.51000E-01	0.
52	607.08	0.71169E 02	0.11648E 02	0.35433E-01	0.66325E-02	0.18751E 01	0.12621E 01	-0.86800E 00	0.96201E 00
53	598.44	0.63034E 02	0.10308E 02	0.31159E-01	0.58325E-02	0.16594E 01	0.11170E 01	-0.91100E 00	0.10319E 01
54	596.33	0.60061E 02	0.97169E 01	0.29327E-01	0.54896E-02	0.15643E 01	0.10529E 01	-0.95300E 00	0.10187E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	593.82	0.47631E 02	0.79870E 01	0.24062E-01	0.45041E-02	0.12858E 01	0.86547E 00	-0.10400E 01	0.19313E 01
56	589.39	0.36328E 02	0.62688E 01	0.18825E-01	0.35237E-02	0.10092E 01	0.67928E 00	-0.10680E 01	0.16659E 01
57	654.13	0.75455E 02	0.13062E 02	0.41166E-01	0.77056E-02	0.21028E 01	0.14154E 01	-0.10400E 01	0.50491E 01
58	650.61	0.95297E 02	0.17827E 02	0.56031E-01	0.10488E-01	0.28698E 01	0.19317E 01	-0.10680E 01	0.39919E 01
59	579.36	0.35715E 02	0.59420E 01	0.17715E-01	0.33159E-02	0.95656E 00	0.64388E 00	-0.10400E 01	0.24873E 01
60	581.97	0.39075E 02	0.67158E 01	0.20059E-01	0.37548E-02	0.10811E 01	0.72772E 00	-0.10680E 01	0.26026E 01
61	545.17	0.21205E 01	0.35251E-00	0.10257E-02	0.19199E-03	0.56748E-01	0.38198E-01	-0.11220E 01	0.79169E 00
62	551.57	0.14364E 01	0.21838E-00	0.63826E-03	0.11947E-03	0.35155E-01	0.23663E-01	-0.13340E 01	0.13783E 01
63	546.09	0.23387E 01	0.40352E-00	0.11748E-02	0.21991E-03	0.64959E-01	0.43725E-01	-0.11220E 01	0.10160E 01
64	552.46	0.12644E 01	0.19233E-00	0.56248E-03	0.10529E-03	0.30962E-01	0.20841E-01	-0.13340E 01	0.91512E 00
65	550.80	0.19860E 01	0.34356E-00	0.10036E-02	0.18785E-03	0.55307E-01	0.37228E-01	0.14400E 01	0.11032E 01
66	547.96	0.27335E 01	0.44932E-00	0.13099E-02	0.24519E-03	0.72332E-01	0.48688E-01	0.16130E 01	0.10135E 01
67	547.88	0.31616E 01	0.51006E 00	0.14869E-02	0.27832E-03	0.82111E-01	0.55270E-01	0.17200E 01	0.99274E 00
68	547.89	0.23730E 01	0.39304E-00	0.11458E-02	0.21447E-03	0.63273E-01	0.42590E-01	-0.16130E 01	0.89346E 00
69	547.74	0.35060E 01	0.56558E 00	0.16486E-02	0.30859E-03	0.91049E-01	0.61286E-01	-0.18280E 01	0.94878E 00
70	548.61	0.32187E 01	0.47471E-00	0.13845E-02	0.25916E-03	0.76420E-01	0.51439E-01	-0.11650E 01	0.96629E 00
71	549.11	0.17532E 01	0.14791E-00	0.43156E-03	0.80781E-04	0.23812E-01	0.16028E-01	-0.12050E 01	0.82891E 00
72	551.93	0.26956E 01	0.39283E-00	0.11484E-02	0.21497E-03	0.63239E-01	0.42567E-01	-0.12120E 01	0.79598E 00
73	545.97	0.42421E 01	0.62472E 00	0.18187E-02	0.34043E-03	0.10057E-00	0.67694E-01	-0.11650E 01	0.13414E 01
74	545.80	0.16187E 01	0.13631E-00	0.39678E-03	0.74271E-04	0.21944E-01	0.14771E-01	-0.12050E 01	0.11491E 01
75	1085.37	-0.31174E-02	-0.57914E-03	-0.27403E-05	-0.51295E-06	-0.93231E-04	-0.62755E-04	-0.12120E 01	0.
76	537.95	0.28073E 01	0.42215E-00	0.12221E-02	0.22875E-03	0.67959E-01	0.45744E-01	0.10840E 01	0.95470E 00
77	540.25	0.32171E 01	0.52005E 00	0.15079E-02	0.28226E-03	0.83719E-01	0.56353E-01	0.11220E 01	0.99398E 00
78	549.17	0.33756E 01	0.50484E 00	0.14730E-02	0.27572E-03	0.81270E-01	0.54704E-01	0.13340E 01	0.98021E 00
79	543.19	0.16166E 01	0.27179E-00	0.78969E-03	0.14782E-03	0.43754E-01	0.29451E-01	-0.11890E 01	0.80861E 00
80	548.43	0.24566E 01	0.37098E-00	0.10819E-02	0.20251E-03	0.59721E-01	0.40199E-01	-0.13340E 01	0.99081E 00
81	540.16	0.57040E 00	0.92201E-01	0.26732E-03	0.50039E-04	0.14843E-01	0.99908E-02	-0.11470E 01	0.71264E 00
82	540.61	0.18183E-01	0.30498E-02	0.88453E-05	0.16557E-05	0.49097E-03	0.33048E-03	-0.11890E 01	0.
83	544.89	0.56088E 01	0.94302E 00	0.27432E-02	0.51349E-03	0.15181E-00	0.10219E-00	-0.10840E 01	0.96758E 00
84	541.70	0.13532E 01	0.19881E-00	0.57705E-03	0.10801E-03	0.32005E-01	0.21543E-01	-0.11890E 01	0.83685E 00
85	545.81	0.16826E 01	0.24777E-00	0.72122E-03	0.13500E-03	0.39886E-01	0.26848E-01	-0.13090E 01	0.77036E 00
86	546.66	0.20156E 01	0.30102E-00	0.87675E-03	0.16411E-03	0.48459E-01	0.32618E-01	-0.13340E 01	0.94845E 00
87	580.12	0.19768E 02	0.29616E 01	0.88339E-02	0.16536E-02	0.47676E-00	0.32091E-00	0.11990E 01	0.81774E 00
88	560.78	0.11407E 02	0.17054E 01	0.50171E-02	0.93912E-03	0.27454E-00	0.18480E-00	0.12070E 01	0.80867E 00
89	562.81	0.78296E 01	0.11918E 01	0.35112E-02	0.65725E-03	0.19186E-00	0.12915E-00	0.13340E 01	0.10181E 01
90	568.94	0.16955E 02	0.24595E 01	0.72776E-02	0.13623E-02	0.39593E-00	0.26651E-00	0.12070E 01	0.87833E 00
91	565.93	0.10089E 02	0.15900E 01	0.46947E-02	0.87878E-03	0.25596E-00	0.17229E-00	0.12490E 01	0.10023E 01
92	564.80	0.86509E 01	0.13249E 01	0.39089E-02	0.73169E-03	0.21329E-00	0.14357E-00	0.13340E 01	0.98469E 00
93	558.97	0.57953E 01	0.98942E 00	0.29069E-02	0.54414E-03	0.15928E-00	0.10721E-00	0.14900E 01	0.98420E 00
94	555.99	0.27533E 01	0.29164E-00	0.85504E-03	0.16005E-03	0.46949E-01	0.31602E-01	-0.	0.91731E 00
95	562.48	0.98982E 01	0.10598E 01	0.31216E-02	0.58431E-03	0.17061E-00	0.11484E-00	-0.	0.93063E 00
96	547.62	0.23642E 01	0.24926E-00	0.72648E-03	0.13599E-03	0.40126E-01	0.27010E-01	-0.	0.88149E 00
97	550.12	0.41221E 01	0.43521E-00	0.12707E-02	0.23785E-03	0.70061E-01	0.47159E-01	-0.	0.11068E 01
98	550.83	0.54275E 01	0.57739E 00	0.16867E-02	0.31572E-03	0.92949E-01	0.62566E-01	-0.	0.12505E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
77	1	12.46	162.46	0.02	-0.	1	C56	2.70	2	10.19	1842.30	1888.60	40	C55	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.914443E 02	0.377119E-01	0.477283E 04	0.346006E-04	0.740699E-07	0.224456E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731949E 00	0.620948E 01	0.922376E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	593.27	0.54586E 02	0.73165E 01	0.21805E-01	0.41039E-02	0.11783E 01	0.79323E 00	-0.	0.10212E 01
2	1085.37	-0.31174E-02	-0.55686E-03	-0.25923E-05	-0.48790E-06	-0.89679E-04	-0.60373E-04	-0.30000E-01	0.
3	1085.37	-0.31174E-02	-0.60546E-03	-0.28186E-05	-0.53048E-06	-0.97506E-04	-0.65641E-04	-0.60000E-01	0.
4	582.64	0.48807E 02	0.77171E 01	0.22824E-01	0.42957E-02	0.12428E 01	0.83666E 00	-0.90000E-01	0.10221E 01
5	572.38	0.45590E 02	0.73503E 01	0.21581E-01	0.40617E-02	0.11837E 01	0.79689E 00	-0.20000E-00	0.10206E 01
6	572.24	0.41290E 02	0.66567E 01	0.19542E-01	0.36780E-02	0.10720E 01	0.72169E 00	-0.40000E-00	0.10178E 01
7	572.05	0.36433E 02	0.59010E 01	0.17322E-01	0.32600E-02	0.95032E 00	0.63976E 00	-0.60000E 00	0.10208E 01
8	1085.37	-0.31174E-02	-0.63988E-03	-0.29788E-05	-0.56064E-06	-0.10305E-03	-0.69374E-04	-0.80000E 00	0.
9	569.91	0.34044E 02	0.54205E 01	0.15887E-01	0.29900E-02	0.87293E 00	0.58766E 00	-0.90000E 00	0.10179E 01
10	570.66	0.32335E 02	0.52166E 01	0.15297E-01	0.28791E-02	0.84010E 00	0.56556E 00	-0.98000E 00	0.10118E 01
11	537.32	0.32899E 01	0.56485E 00	0.16182E-02	0.30455E-03	0.90965E-01	0.61238E-01	-0.11220E 01	0.18683E 01
12	542.50	0.33475E 01	0.49118E-00	0.14122E-02	0.26578E-03	0.79102E-01	0.53252E-01	-0.11890E 01	0.11523E 01
13	545.61	0.22182E 01	0.33612E-00	0.96848E-03	0.18228E-03	0.54131E-01	0.36441E-01	-0.13340E 01	0.85745E 00
14	544.64	0.19345E 01	0.33351E-00	0.96031E-03	0.18074E-03	0.53710E-01	0.36158E-01	-0.14400E 01	0.80088E 00
15	905.60	-0.30780E 01	-0.51062E 00	-0.19693E-02	-0.37064E-03	-0.82232E-01	-0.55359E-01	0.30000E-01	0.
16	1085.37	-0.31174E-02	-0.60546E-03	-0.28186E-05	-0.53048E-06	-0.97506E-04	-0.65641E-04	0.60000E-01	0.
17	1085.37	-0.31174E-02	-0.62105E-03	-0.28912E-05	-0.54414E-06	-0.10002E-03	-0.67332E-04	0.90000E-01	0.
18	595.17	0.44475E 02	0.72600E 01	0.21667E-01	0.40778E-02	0.11692E 01	0.78710E 00	0.20000E-00	0.10069E 01
19	617.81	0.50781E 02	0.83905E 01	0.25457E-01	0.47912E-02	0.13512E 01	0.90966E 00	0.40000E-00	0.98171E 00
20	621.14	0.63928E 02	0.10632E 02	0.32336E-01	0.60859E-02	0.17122E 01	0.11527E 01	0.60000E 00	0.10259E 01
21	622.34	0.56609E 02	0.88690E 01	0.26999E-01	0.50814E-02	0.14283E 01	0.96154E 00	0.92000E 00	0.10193E 01
22	580.67	0.32395E 02	0.49632E 01	0.14658E-01	0.27588E-02	0.79929E 00	0.53808E 00	0.10400E 01	0.99815E 00
23	572.05	0.28616E 02	0.43752E 01	0.12843E-01	0.24171E-02	0.70460E 00	0.47434E-00	0.10600E 01	0.10032E 01
24	557.21	0.18709E 02	0.29722E 01	0.86336E-02	0.16249E-02	0.47866E-00	0.32223E-00	0.10840E 01	0.99361E 00
25	544.75	0.37662E 01	0.55616E 00	0.16015E-02	0.30142E-03	0.89567E-01	0.60297E-01	0.12070E 01	0.97120E 00
26	546.87	0.38161E 01	0.59506E 00	0.17161E-02	0.32297E-03	0.95831E-01	0.64514E-01	0.12490E 01	0.10686E 01
27	549.03	0.42260E 01	0.64908E 00	0.18747E-02	0.35282E-03	0.10453E-00	0.70370E-01	0.13340E 01	0.11479E 01
28	548.32	0.31569E 01	0.53898E 00	0.15559E-02	0.29283E-03	0.86799E-01	0.58434E-01	0.14540E 01	0.14346E 01
29	545.87	0.30073E 01	0.49754E-00	0.14338E-02	0.26986E-03	0.80126E-01	0.53941E-01	0.16580E 01	0.11666E 01
30	545.66	0.46551E 01	0.77947E 00	0.22460E-02	0.42271E-03	0.12553E-00	0.84507E-01	0.20410E 01	0.96257E 00
31	548.78	0.53309E 01	0.89420E 00	0.25822E-02	0.48598E-03	0.14401E-00	0.96945E-01	0.22480E 01	0.10207E 01
32	586.13	0.49871E 02	0.77096E 01	0.22859E-01	0.43022E-02	0.12416E 01	0.83584E 00	-0.60000E-01	0.10328E 01
33	596.16	0.52451E 02	0.74908E 01	0.22371E-01	0.42104E-02	0.12063E 01	0.81212E 00	-0.30000E-01	0.10303E 01
34	590.97	0.53131E 02	0.82353E 01	0.24503E-01	0.46116E-02	0.13262E 01	0.89283E 00	0.30000E-01	0.10165E 01
35	583.98	0.48446E 02	0.76655E 01	0.22693E-01	0.42710E-02	0.12345E 01	0.83106E 00	0.60000E-01	0.10266E 01
36	599.71	0.71971E 02	0.11777E 02	0.35263E-01	0.66368E-02	0.18967E 01	0.12768E 01	-0.86800E 00	0.10313E 01
37	1121.02	-0.15532E-00	-0.31299E-01	-0.15198E-03	-0.28604E-04	-0.50405E-02	-0.33933E-02	-0.91100E 00	0.
38	588.73	0.58673E 02	0.94535E 01	0.28082E-01	0.52852E-02	0.15224E 01	0.10249E 01	-0.95300E 00	0.10042E 01
39	1085.37	-0.31174E-02	-0.63280E-03	-0.29458E-05	-0.55443E-06	-0.10191E-03	-0.68605E-04	0.51000E-01	0.
40	1085.37	-0.31174E-02	-0.63280E-03	-0.29458E-05	-0.55443E-06	-0.10191E-03	-0.68605E-04	0.29000E-01	0.
41	1085.37	-0.31174E-02	-0.62915E-03	-0.29289E-05	-0.55123E-06	-0.10132E-03	-0.68210E-04	0.70000E-02	0.
42	632.69	0.10646E 03	0.17616E 02	0.54040E-01	0.10171E-01	0.28370E 01	0.19099E 01	-0.86800E 00	0.10641E 01
43	614.78	0.87725E 02	0.14416E 02	0.43642E-01	0.82136E-02	0.23216E 01	0.15629E 01	-0.91100E 00	0.11530E 01
44	617.14	0.89319E 02	0.14612E 02	0.44312E-01	0.83398E-02	0.23532E 01	0.15842E 01	-0.95300E 00	0.13716E 01
45	616.50	0.83975E 02	0.14268E 02	0.43313E-01	0.81517E-02	0.22978E 01	0.15469E 01	-0.10400E 01	0.26721E 01
46	1085.37	-0.31174E-02	-0.63442E-03	-0.29534E-05	-0.55585E-06	-0.10217E-03	-0.68781E-04	0.70000E-02	0.
47	1085.37	-0.31174E-02	-0.63442E-03	-0.29534E-05	-0.55585E-06	-0.10217E-03	-0.68781E-04	0.29000E-01	0.
48	1085.37	-0.31174E-02	-0.63685E-03	-0.29647E-05	-0.55798E-06	-0.10256E-03	-0.69044E-04	0.51000E-01	0.
49	598.18	0.51027E 02	0.82636E 01	0.24715E-01	0.46516E-02	0.13308E 01	0.89591E 00	0.70000E-02	0.81183E 00
50	572.83	0.32039E 02	0.51340E 01	0.15079E-01	0.28379E-02	0.82680E 00	0.55661E 00	0.29000E-01	0.99685E 00
51	1085.37	-0.31174E-02	-0.63077E-03	-0.29364E-05	-0.55265E-06	-0.10158E-03	-0.68386E-04	0.51000E-01	0.
52	997.42	0.17546E 02	0.34474E 01	0.14569E-01	0.27420E-02	0.55518E 00	0.37375E-00	-0.86800E 00	0.
53	604.59	0.67092E 02	0.11008E 02	0.33076E-01	0.62252E-02	0.17727E 01	0.11934E 01	-0.91100E 00	0.10152E 01
54	599.71	0.62253E 02	0.10090E 02	0.30211E-01	0.56859E-02	0.16249E 01	0.10939E 01	-0.95300E 00	0.10126E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
85	896.39	0.52867E 02	0.88773E 01	0.26516E-01	0.49906E-02	0.14296E 01	0.96244E 00	-0.10400E 01	0.21886E 01
86	891.16	0.40551E 02	0.70043E 01	0.20843E-01	0.39228E-02	0.11280E 01	0.75937E 00	-0.10680E 01	0.19209E 01
87	884.57	0.86031E 02	0.14973E 02	0.47050E-01	0.88550E-02	0.24114E 01	0.16233E 01	-0.10400E 01	0.31601E 01
88	881.85	0.10861E 03	0.20436E 02	0.64060E-01	0.12060E-01	0.32910E 01	0.22155E 01	-0.10680E 01	0.42388E 01
89	883.17	0.42509E 02	0.70865E 01	0.20967E-01	0.39461E-02	0.11412E 01	0.76829E 00	-0.10400E 01	0.24769E 01
90	886.49	0.47837E 02	0.82418E 01	0.24443E-01	0.46004E-02	0.13273E 01	0.89354E 00	-0.10680E 01	0.26730E 01
91	889.49	0.24886E 01	0.40907E-00	0.11737E-02	0.22089E-03	0.65878E-01	0.44349E-01	-0.11220E 01	0.13009E 01
92	848.94	0.12945E 01	0.19631E-00	0.58616E-03	0.10655E-03	0.31615E-01	0.21283E-01	-0.13340E 01	0.10838E 01
93	839.65	0.26504E 01	0.45565E-00	0.13074E-02	0.24607E-03	0.73379E-01	0.49399E-01	-0.11220E 01	0.12941E 01
94	847.86	0.12956E 01	0.19657E-00	0.58727E-03	0.10676E-03	0.31656E-01	0.21311E-01	-0.13340E 01	0.11010E 01
95	847.07	0.19932E 01	0.34410E-00	0.99248E-03	0.18679E-03	0.55416E-01	0.37306E-01	0.14400E 01	0.11709E 01
96	844.62	0.23990E 01	0.39359E-00	0.11333E-02	0.21329E-03	0.63385E-01	0.42671E-01	0.16130E 01	0.10613E 01
97	844.98	0.27266E 01	0.43920E-00	0.12649E-02	0.23807E-03	0.70730E-01	0.47616E-01	0.17200E 01	0.10351E 01
98	844.58	0.17745E 01	0.29338E-00	0.84471E-03	0.15898E-03	0.47247E-01	0.31807E-01	-0.16130E 01	0.96998E 00
99	844.56	0.27532E 01	0.44336E-00	0.12765E-02	0.24025E-03	0.71401E-01	0.48068E-01	-0.16280E 01	0.96128E 00
70	841.70	0.32826E 01	0.46226E-00	0.13858E-02	0.26081E-03	0.77665E-01	0.52285E-01	-0.11650E 01	0.12768E 01
71	843.17	0.14629E 01	0.12301E-00	0.35382E-03	0.66591E-04	0.19809E-01	0.13336E-01	-0.12050E 01	0.93972E 00
72	845.05	0.22348E 01	0.32443E-00	0.93442E-03	0.17586E-03	0.52247E-01	0.35173E-01	-0.12120E 01	0.88892E 00
73	841.52	0.41382E 01	0.60790E 00	0.17466E-02	0.32872E-03	0.97898E-01	0.65906E-01	-0.11650E 01	0.16012E 01
74	841.42	0.13491E 01	0.11333E-00	0.32558E-03	0.61277E-04	0.18251E-01	0.12287E-01	-0.12050E 01	0.11612E 01
75	1085.37	-0.31174E-02	-0.37914E-03	-0.26960E-05	-0.50741E-06	-0.93266E-04	-0.62787E-04	-0.12120E 01	0.
76	835.64	0.36364E 01	0.54612E 00	0.15627E-02	0.29411E-03	0.87949E-01	0.59208E-01	0.10840E 01	0.10421E 01
77	836.34	0.25034E 01	0.40379E-00	0.11560E-02	0.21756E-03	0.65027E-01	0.43777E-01	0.11220E 01	0.10713E 01
78	845.82	0.28421E 01	0.42425E-00	0.12226E-02	0.23010E-03	0.68323E-01	0.45996E-01	0.13340E 01	0.81029E 00
79	839.70	0.10478E 01	0.17581E-00	0.50450E-03	0.94950E-04	0.28314E-01	0.19061E-01	-0.11890E 01	0.89155E 00
80	845.00	0.21958E 01	0.33096E-00	0.95320E-03	0.17940E-03	0.53299E-01	0.35881E-01	-0.13340E 01	0.94293E 00
81	837.78	0.81562E-01	0.13166E-01	0.37731E-04	0.71012E-05	0.21204E-02	0.14274E-02	-0.11470E 01	0.45413E-00
82	837.80	0.17922E-00	0.30013E-01	0.86011E-04	0.16188E-04	0.46335E-02	0.32539E-02	-0.11890E 01	0.68810E 00
83	845.03	0.69974E 01	0.11766E 01	0.33867E-02	0.63778E-03	0.18948E-00	0.12756E-00	-0.10840E 01	0.99780E 00
84	839.32	0.15481E 01	0.22713E-00	0.65158E-03	0.12263E-03	0.36578E-01	0.24624E-01	-0.11890E 01	0.10030E 01
85	843.34	0.13013E 01	0.19136E-00	0.55049E-03	0.10361E-03	0.30817E-01	0.20746E-01	-0.13090E 01	0.95840E 00
86	843.41	0.95896E 00	0.14296E-00	0.41127E-03	0.77404E-04	0.23022E-01	0.15499E-01	-0.13340E 01	0.10729E 01
87	861.99	0.12905E 02	0.19142E 01	0.55790E-02	0.10500E-02	0.30827E-00	0.20753E-00	0.11990E 01	0.84673E 00
88	849.37	0.69091E 01	0.10264E 01	0.29652E-02	0.55807E-03	0.16530E-00	0.11128E-00	0.12070E 01	0.81804E 00
89	852.58	0.49351E 01	0.74697E 00	0.21626E-02	0.40704E-03	0.12030E-00	0.80984E-01	0.13340E 01	0.11460E 01
90	854.61	0.10425E 02	0.15004E 01	0.43504E-02	0.81878E-03	0.24163E-00	0.16267E-00	0.12070E 01	0.89198E 00
91	854.32	0.67808E 01	0.10618E 01	0.30779E-02	0.57929E-03	0.17099E-00	0.11511E-00	0.12490E 01	0.10400E 01
92	853.95	0.59112E 01	0.89990E 00	0.26080E-02	0.49085E-03	0.14492E-00	0.97583E-01	0.13340E 01	0.10864E 01
93	849.34	0.34509E 01	0.58602E 00	0.16929E-02	0.31861E-03	0.94375E-01	0.63533E-01	0.14900E 01	0.12582E 01
94	859.49	0.24556E 01	0.26061E-00	0.75824E-03	0.14271E-03	0.41970E-01	0.28255E-01	-0.	0.10394E 01
95	868.39	0.15672E 02	0.17049E 01	0.49917E-02	0.93946E-03	0.27457E-00	0.18484E-00	-0.	0.97501E 00
96	844.57	0.20753E 01	0.21843E-00	0.62892E-03	0.11837E-03	0.35177E-01	0.23682E-01	-0.	0.87271E 00
97	846.78	0.33953E 01	0.35781E-00	0.10318E-02	0.19419E-03	0.57625E-01	0.38792E-01	-0.	0.10845E 01
98	847.20	0.35091E 01	0.37259E-00	0.10746E-02	0.20225E-03	0.59996E-01	0.40390E-01	-0.	0.10696E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
81	2	3.60	153.60	0.02	-0.	1	C60	2.75	2	10.04	215.30	1675.30	65	C56	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE#10-6/FT	CP(INF)
0.820419E 02	0.475884E-02	0.445615E 04	0.486662E-05	0.664540E-07	0.328534E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726267E 00	0.171089E 01	0.194594E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	569.88	0.18256E 02	0.24166E 01	0.86035E-02	0.12331E-01	0.14121E 01	0.12415E 01	-0.	0.93975E 00
2	570.70	0.18390E 02	0.25902E 01	0.92303E-02	0.13229E-01	0.15139E 01	0.13311E 01	-0.30000E-01	0.
3	563.88	0.17080E 02	0.26058E 01	0.92319E-02	0.13231E-01	0.15231E 01	0.13391E 01	-0.60000E-01	0.
4	562.46	0.16643E 02	0.26025E 01	0.92088E-02	0.13198E-01	0.15211E 01	0.13374E 01	-0.90000E-01	0.96407E 00
5	550.54	0.15012E 02	0.23914E 01	0.83765E-02	0.12005E-01	0.13977E 01	0.12289E 01	-0.20000E-00	0.96501E 00
6	533.71	0.13570E 02	0.21413E 01	0.73951E-02	0.10599E-01	0.12515E 01	0.11004E 01	-0.40000E-00	0.96010E 00
7	517.96	0.13182E 02	0.20713E 01	0.70609E-02	0.10120E-01	0.12107E 01	0.10644E 01	-0.60000E 00	0.99310E 00
8	536.39	0.14696E 02	0.23336E 01	0.80773E-02	0.11576E-01	0.13639E 01	0.11992E 01	-0.80000E 00	0.
9	536.97	0.15988E 02	0.24993E 01	0.86550E-02	0.12404E-01	0.14608E 01	0.12844E 01	-0.90000E 00	0.99808E 00
10	534.72	0.15531E 02	0.24561E 01	0.84896E-02	0.12167E-01	0.14356E 01	0.12622E 01	-0.98000E 00	0.96907E 00
11	534.98	0.68676E 00	0.11776E-00	0.40711E-03	0.58348E-03	0.68827E-01	0.60513E-01	-0.11220E 01	0.82006E 00
12	537.20	0.11408E 01	0.16689E-00	0.57804E-03	0.82846E-03	0.97544E-01	0.85762E-01	-0.11890E 01	0.12412E 01
13	539.68	0.10410E 01	0.15723E-00	0.54572E-03	0.78212E-03	0.91897E-01	0.80797E-01	-0.13340E 01	0.11660E 01
14	490.84	0.74441E 00	0.12445E-00	0.41499E-03	0.59476E-03	0.72739E-01	0.63953E-01	-0.14400E 01	0.94653E 00
15	568.22	0.18578E 02	0.26131E 01	0.92922E-02	0.13318E-01	0.15273E 01	0.13428E 01	0.30000E-01	0.
16	549.89	0.13121E 02	0.19863E 01	0.69539E-02	0.99664E-02	0.11610E 01	0.10208E 01	0.60000E-01	0.
17	568.09	0.18226E 02	0.28590E 01	0.10165E-01	0.14569E-01	0.16711E 01	0.14692E 01	0.90000E-01	0.
18	567.12	0.18610E 02	0.29918E 01	0.10629E-01	0.15233E-01	0.17487E 01	0.15374E 01	0.20000E-00	0.95588E 00
19	574.36	0.21465E 02	0.34645E 01	0.12385E-01	0.17751E-01	0.20250E 01	0.17804E 01	0.40000E-00	0.95549E 00
20	534.57	0.25230E 02	0.40021E 01	0.13832E-01	0.19823E-01	0.23392E 01	0.20566E 01	0.60000E 00	0.95377E 00
21	556.60	0.31335E 02	0.47376E 01	0.16680E-01	0.23906E-01	0.27691E 01	0.24346E 01	0.92000E 00	0.97160E 00
22	542.34	0.18948E 02	0.28420E 01	0.98862E-02	0.14169E-01	0.16611E 01	0.14605E 01	0.10400E 01	0.98571E 00
23	548.14	0.17113E 02	0.25821E 01	0.90264E-02	0.12937E-01	0.15092E 01	0.13269E 01	0.10600E 01	0.10133E 01
24	541.50	0.11559E 02	0.18204E 01	0.63281E-02	0.90694E-02	0.10640E 01	0.93549E 00	0.10840E 01	0.10123E 01
25	536.20	0.17813E 01	0.26179E-00	0.90599E-03	0.12985E-02	0.15301E-00	0.13453E-00	0.12070E 01	0.97942E 00
26	539.15	0.22005E 01	0.34165E-00	0.11853E-02	0.16988E-02	0.19969E-00	0.17557E-00	0.12490E 01	0.10856E 01
27	540.76	0.28545E 01	0.43641E-00	0.15161E-02	0.21729E-02	0.25508E-00	0.22427E-00	0.13340E 01	0.10842E 01
28	534.06	0.25455E 01	0.43112E-00	0.14894E-02	0.21345E-02	0.25199E-00	0.22155E-00	0.14540E 01	0.10745E 01
29	539.17	0.19049E 01	0.31398E-00	0.10893E-02	0.15612E-02	0.18352E-00	0.16135E-00	0.16580E 01	0.11291E 01
30	537.59	0.18842E 01	0.31407E-00	0.10882E-02	0.15596E-02	0.18357E-00	0.16140E-00	0.20410E 01	0.11337E 01
31	541.22	0.22790E 01	0.38065E-00	0.13229E-02	0.18960E-02	0.22249E-00	0.19561E-00	0.22480E 01	0.11954E 01
32	567.48	0.17739E 02	0.27144E 01	0.96464E-02	0.13825E-01	0.15866E 01	0.13949E 01	-0.60000E-01	0.94946E 00
33	572.27	0.18139E 02	0.25570E 01	0.91245E-02	0.13077E-01	0.14946E 01	0.13140E 01	-0.30000E-01	0.94588E 00
34	-4157.13	0.51854E-02	-0.22381E-02	-0.17526E-05	-0.25119E-05	-0.13082E-02	-0.11501E-02	0.30000E-01	0.
35	557.22	0.17365E 02	0.27076E 01	0.95380E-02	0.13670E-01	0.15826E 01	0.13914E 01	0.60000E-01	0.94681E 00
36	526.05	0.91907E 01	0.14440E 01	0.49553E-02	0.71019E-02	0.84398E 00	0.74204E 00	-0.86800E 00	0.40779E-00
37	529.19	0.78390E 01	0.12004E 01	0.41303E-02	0.59196E-02	0.70165E 00	0.61690E 00	-0.91100E 00	0.37446E-00
38	533.62	0.86577E 01	0.13530E 01	0.46726E-02	0.66968E-02	0.79084E 00	0.69532E 00	-0.95300E 00	0.43281E-00
39	516.10	-0.38440E-01	-0.59671E-02	-0.20310E-04	-0.29108E-04	-0.34877E-02	-0.30664E-02	0.51000E-01	0.
40	525.46	0.53511E-01	0.83509E-02	0.28644E-04	0.41053E-04	0.48810E-02	0.42915E-02	0.29000E-01	0.
41	524.93	-0.14025E-01	-0.21755E-02	-0.74587E-05	-0.10690E-04	-0.12715E-02	-0.11179E-02	0.70000E-02	0.
42	518.19	0.21247E-00	0.33021E-01	0.11259E-03	0.16136E-03	0.19301E-01	0.16969E-01	-0.86800E 00	0.83859E-02
43	525.54	0.23896E-01	0.37390E-02	0.12826E-04	0.18382E-04	0.21854E-02	0.19214E-02	-0.91100E 00	0.10186E-02
44	528.18	0.13974E-00	0.21772E-01	0.74849E-04	0.10727E-03	0.12726E-01	0.11189E-01	-0.95300E 00	0.
45	537.45	0.74665E 01	0.12137E 01	0.42048E-02	0.60263E-02	0.70940E 00	0.62371E 00	-0.10400E 01	0.31287E-00
46	525.03	-0.33246E-01	-0.52003E-02	-0.17831E-04	-0.25555E-04	-0.30396E-02	-0.26724E-02	0.70000E-02	0.
47	525.55	-0.52466E-01	-0.82092E-02	-0.28160E-04	-0.40359E-04	-0.47982E-02	-0.42186E-02	0.29000E-01	0.
48	525.28	0.27536E-01	0.43243E-02	0.14830E-04	0.21255E-04	0.25275E-02	0.22222E-02	0.51000E-01	0.
49	524.89	-0.32201E-01	-0.50076E-02	-0.17168E-04	-0.24605E-04	-0.29269E-02	-0.25733E-02	0.70000E-02	0.
50	524.77	-0.44155E-01	-0.68881E-02	-0.23613E-04	-0.33843E-04	-0.40261E-02	-0.35397E-02	0.29000E-01	0.
51	524.72	-0.46750E-01	-0.72695E-02	-0.24919E-04	-0.35715E-04	-0.42489E-02	-0.37357E-02	0.51000E-01	0.
52	525.75	0.17665E-01	0.27643E-02	0.94838E-05	0.13592E-04	0.16157E-02	0.14205E-02	-0.86800E 00	0.
53	526.96	-0.29090E-01	-0.45727E-02	-0.15704E-04	-0.22507E-04	-0.26727E-02	-0.23499E-02	-0.91100E 00	0.
54	528.75	0.16627E-01	0.25913E-02	0.89125E-05	0.12773E-04	0.15146E-02	0.13316E-02	-0.95300E 00	0.

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	536.97	0.58706E 01	0.95404E 00	0.33039E-02	0.47351E-02	0.55763E 00	0.49027E-00	-0.10400E 01	0.38110E-00
56	536.66	0.42977E 01	0.72032E 00	0.24938E-02	0.35742E-02	0.42102E-00	0.37016E-00	-0.10680E 01	0.36208E-00
57	537.04	0.39475E 01	0.64154E 00	0.22218E-02	0.31843E-02	0.37497E-00	0.32968E-00	-0.10400E 01	0.14400E-00
58	536.37	0.87034E 01	0.15324E 01	0.53130E-02	0.76146E-02	0.89567E 00	0.78748E 00	-0.10680E 01	0.24771E-00
59	535.78	0.50582E 01	0.82145E 00	0.28419E-02	0.40730E-02	0.48013E-00	0.42213E-00	-0.10400E 01	0.39903E-00
60	537.19	0.50878E 01	0.85300E 00	0.29545E-02	0.42344E-02	0.49857E-00	0.43835E-00	-0.10680E 01	0.36195E-00
61	536.31	0.44727E-00	0.73985E-01	0.25607E-03	0.36700E-03	0.43243E-01	0.38020E-01	-0.11220E 01	0.11953E 01
62	539.89	0.48363E-00	0.73051E-01	0.25360E-03	0.36345E-03	0.42697E-01	0.37540E-01	-0.13340E 01	0.12342E 01
63	536.59	0.45039E-00	0.77297E-01	0.26760E-03	0.38352E-03	0.45179E-01	0.39722E-01	-0.11220E 01	0.95420E 00
64	540.55	0.55740E 00	0.84224E-01	0.29255E-03	0.41928E-03	0.49228E-01	0.43282E-01	-0.13340E 01	0.11823E 01
65	535.29	0.86078E 00	0.14762E-00	0.51049E-03	0.73164E-03	0.86283E-01	0.75860E-01	0.14400E 01	0.12583E 01
66	533.56	0.10218E 01	0.16661E-00	0.57533E-03	0.82456E-03	0.97381E-01	0.85618E-01	0.16130E 01	0.11845E 01
67	539.50	0.10945E 01	0.17576E-00	0.60995E-03	0.87418E-03	0.10273E-00	0.90320E-01	0.17200E 01	0.11518E 01
68	531.57	0.87481E 00	0.14357E-00	0.49497E-03	0.70939E-03	0.83917E-01	0.73781E-01	-0.16130E 01	0.10231E 01
69	540.69	0.11751E 01	0.18881E-00	0.65591E-03	0.94005E-03	0.11036E-00	0.97029E-01	-0.18280E 01	0.11497E 01
70	537.95	0.79585E 00	0.11668E-00	0.40439E-03	0.57957E-03	0.68196E-01	0.59959E-01	-0.11650E 01	0.95171E 00
71	538.74	0.71585E 00	0.60043E-01	0.20824E-03	0.29845E-03	0.35094E-01	0.30855E-01	-0.12050E 01	0.10575E 01
72	539.34	0.10712E 01	0.15501E-00	0.53786E-03	0.77086E-03	0.90600E-01	0.79656E-01	-0.12120E 01	0.10834E 01
73	537.46	0.11226E 01	0.16453E-00	0.57002E-03	0.81695E-03	0.96169E-01	0.84552E-01	-0.11650E 01	0.18867E 01
74	538.02	0.74702E 00	0.62632E-01	0.21709E-03	0.31113E-03	0.36608E-01	0.32186E-01	-0.12050E 01	0.14399E 01
75	521.49	0.12229E 01	0.17426E-00	0.59578E-03	0.85387E-03	0.10186E-00	0.89552E-01	-0.12120E 01	0.
76	533.50	0.18301E 01	0.27452E-00	0.94793E-03	0.13586E-02	0.16046E-00	0.14107E-00	0.10840E 01	0.98060E 00
77	535.61	0.76416E 00	0.12321E-00	0.42618E-03	0.61080E-03	0.72012E-01	0.63314E-01	0.11220E 01	0.11450E 01
78	537.82	0.11247E 01	0.16713E-00	0.57920E-03	0.83012E-03	0.97688E-01	0.85889E-01	0.13340E 01	0.12753E 01
79	537.81	0.58078E 00	0.97347E-01	0.33735E-03	0.48350E-03	0.56899E-01	0.50026E-01	-0.11890E 01	0.15270E 01
80	539.79	0.74597E 00	0.11211E-00	0.38915E-03	0.55773E-03	0.65525E-01	0.57611E-01	-0.13340E 01	0.13750E 01
81	526.26	0.60883E 00	0.97643E-01	0.33514E-03	0.48033E-03	0.57072E-01	0.50178E-01	-0.11470E 01	0.10421E 01
82	537.05	0.10857E-00	0.18174E-01	0.62942E-04	0.90209E-04	0.10623E-01	0.93395E-02	-0.11890E 01	0.
83	535.31	0.25693E 01	0.42967E-00	0.14859E-02	0.21296E-02	0.25114E-00	0.22080E-00	-0.10840E 01	0.89418E 00
84	537.70	0.43117E-00	0.63202E-01	0.21900E-03	0.31388E-03	0.36941E-01	0.32479E-01	-0.11890E 01	0.13367E 01
85	540.46	0.72208E 00	0.10601E-00	0.36819E-03	0.52769E-03	0.61962E-01	0.54478E-01	-0.13090E 01	0.15411E 01
86	541.51	0.65040E 00	0.96855E-01	0.33669E-03	0.48254E-03	0.56611E-01	0.49773E-01	-0.13340E 01	0.13589E 01
87	541.60	0.54223E 01	0.79521E 00	0.27646E-02	0.39622E-02	0.46479E-00	0.40865E-00	0.11990E 01	0.95271E 00
88	537.63	0.30519E 01	0.45042E-00	0.15607E-02	0.22368E-02	0.26327E-00	0.23147E-00	0.12070E 01	0.98214E 00
89	543.57	0.27808E 01	0.41879E-00	0.14583E-02	0.20901E-02	0.24478E-00	0.21521E-00	0.13340E 01	0.99211E 00
90	539.24	0.41719E 01	0.59528E 00	0.20654E-02	0.29601E-02	0.34793E-00	0.30591E-00	0.12070E 01	0.97965E 00
91	542.59	0.31314E 01	0.48713E-00	0.16949E-02	0.24291E-02	0.28472E-00	0.25033E-00	0.12490E 01	0.99173E 00
92	543.79	0.29345E 01	0.44422E-00	0.15472E-02	0.22174E-02	0.25964E-00	0.22828E-00	0.13340E 01	0.10259E 01
93	542.99	0.23745E 01	0.40180E-00	0.13985E-02	0.20043E-02	0.23485E-00	0.20648E-00	0.14900E 01	0.11212E 01
94	538.60	0.48862E 01	0.51257E 00	0.17775E-02	0.25475E-02	0.29959E-00	0.26340E-00	-0.	0.79292E 00
95	545.38	0.84758E 01	0.89893E 00	0.31351E-02	0.44932E-02	0.52542E 00	0.46195E-00	-0.	0.94034E 00
96	541.16	0.54546E 00	0.57301E-01	0.19913E-03	0.28540E-03	0.33492E-01	0.29447E-01	-0.	0.86406E 00
97	530.98	0.11834E 01	0.12360E-00	0.42591E-03	0.61042E-03	0.72245E-01	0.63519E-01	-0.	0.12306E 01
98	543.56	0.15164E 01	0.16066E-00	0.55945E-03	0.80180E-03	0.93903E-01	0.82561E-01	-0.	0.10334E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
78	1	4.36	154.36	0.02	-0.	1	C60	2.70	2	10.19	1848.30	1877.70	75	C56	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.908664E 02	0.378807E-01	0.475781E 04	0.349765E-04	0.736018E-07	0.227620E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731631E 00	0.621900E 01	0.924288E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	574.04	0.48741E 02	0.64651E 01	0.19189E-01	0.35839E-02	0.10396E 01	0.69947E 00	-0.	0.10028E 01
2	1085.37	-0.31174E-02	-0.55686E-03	-0.26324E-05	-0.49165E-06	-0.89542E-04	-0.60248E-04	-0.30000E-01	0.
3	1085.37	-0.31174E-02	-0.60546E-03	-0.28621E-05	-0.53456E-06	-0.97357E-04	-0.65506E-04	-0.60000E-01	0.
4	987.36	-0.49195E-00	-0.94230E-01	-0.39954E-03	-0.74624E-04	-0.15152E-01	-0.10195E-01	-0.90000E-01	0.
5	559.57	0.38738E 02	0.62017E 01	0.18217E-01	0.34025E-02	0.99721E 00	0.67097E 00	-0.20000E-00	0.98789E 00
6	559.98	0.35022E 02	0.56081E 01	0.16479E-01	0.30778E-02	0.90178E 00	0.60675E 00	-0.40000E-00	0.98386E 00
7	559.54	0.29819E 02	0.47965E 01	0.14089E-01	0.26315E-02	0.77126E 00	0.51894E 00	-0.60000E 00	0.96840E 00
8	1085.37	-0.31174E-02	-0.63988E-03	-0.30248E-05	-0.56495E-06	-0.10289E-03	-0.69230E-04	-0.80000E 00	0.
9	1085.37	-0.31174E-02	-0.62976E-03	-0.29770E-05	-0.55602E-06	-0.10126E-03	-0.68135E-04	-0.90000E 00	0.
10	563.13	0.27527E 02	0.44226E 01	0.13024E-01	0.24326E-02	0.71114E 00	0.47848E-00	-0.98000E 00	0.10552E 01
11	537.41	0.21839E 01	0.37498E-00	0.10844E-02	0.20254E-03	0.60295E-01	0.40569E-01	-0.11220E 01	0.86307E 00
12	542.48	0.26665E 01	0.39125E-00	0.11355E-02	0.21208E-03	0.62912E-01	0.42330E-01	-0.11890E 01	0.10620E 01
13	544.80	0.20956E 01	0.31740E-00	0.92270E-03	0.17234E-03	0.51038E-01	0.34340E-01	-0.13340E 01	0.11068E 01
14	544.09	0.18395E 01	0.31703E-00	0.92115E-03	0.17204E-03	0.50977E-01	0.34300E-01	-0.14400E 01	0.87067E 00
15	958.51	-0.52075E 02	-0.88369E 01	-0.36370E-01	-0.67929E-02	-0.14209E 01	-0.95607E 00	0.30000E-01	0.
16	1085.37	-0.31174E-02	-0.60546E-03	-0.28621E-05	-0.53456E-06	-0.97357E-04	-0.65506E-04	0.60000E-01	0.
17	1085.37	-0.31174E-02	-0.62105E-03	-0.29358E-05	-0.54833E-06	-0.99864E-04	-0.67193E-04	0.90000E-01	0.
18	571.68	0.42988E 02	0.69281E 01	0.20528E-01	0.38340E-02	0.11140E 01	0.74957E 00	0.20000E-00	0.99467E 00
19	597.59	0.45146E 02	0.73793E 01	0.22279E-01	0.41610E-02	0.11866E 01	0.79838E 00	0.40000E-00	0.99480E 00
20	621.86	0.56272E 02	0.93621E 01	0.28776E-01	0.53745E-02	0.15054E 01	0.10129E 01	0.60000E 00	0.98803E 00
21	628.29	0.65408E 02	0.10280E 02	0.31749E-01	0.59298E-02	0.16530E 01	0.11122E 01	0.92000E 00	0.99266E 00
22	595.78	0.46001E 02	0.71056E 01	0.21424E-01	0.40014E-02	0.11426E 01	0.76877E 00	0.10400E 01	0.99178E 00
23	586.66	0.41665E 02	0.64214E 01	0.19233E-01	0.35922E-02	0.10325E 01	0.69474E 00	0.10600E 01	0.98794E 00
24	567.64	0.29466E 02	0.47084E 01	0.13911E-01	0.25981E-02	0.75709E 00	0.50940E 00	0.10840E 01	0.98771E 00
25	548.09	0.90779E 01	0.13431E 01	0.39134E-02	0.73090E-03	0.21596E-00	0.14531E-00	0.12070E 01	0.91150E 00
26	551.34	0.10484E 02	0.16388E 01	0.47861E-02	0.89392E-03	0.26352E-00	0.17731E-00	0.12490E 01	0.97548E 00
27	555.80	0.11348E 02	0.17495E 01	0.51254E-02	0.95728E-03	0.28131E-00	0.18928E-00	0.13340E 01	0.10090E 01
28	554.10	0.95112E 01	0.16291E 01	0.47669E-02	0.89033E-03	0.26195E-00	0.17625E-00	0.14540E 01	0.10574E 01
29	548.86	0.63164E 01	0.10468E 01	0.30517E-02	0.56997E-03	0.16832E-00	0.11325E-00	0.16580E 01	0.10643E 01
30	548.35	0.62042E 01	0.10404E 01	0.30321E-02	0.56631E-03	0.16730E-00	0.11257E-00	0.20410E 01	0.10347E 01
31	552.02	0.65553E 01	0.11016E 01	0.32186E-02	0.60115E-03	0.17713E-00	0.11918E-00	0.22480E 01	0.10100E 01
32	568.32	0.44363E 02	0.67917E 01	0.20075E-01	0.37495E-02	0.10921E 01	0.73480E 00	-0.60000E-01	0.98863E 00
33	576.78	0.46575E 02	0.65819E 01	0.19574E-01	0.36558E-02	0.10583E 01	0.71210E 00	-0.30000E-01	0.99690E 00
34	571.66	0.46428E 02	0.71208E 01	0.21099E-01	0.39406E-02	0.11450E 01	0.77041E 00	0.30000E-01	0.98889E 00
35	566.00	0.42286E 02	0.66254E 01	0.19551E-01	0.36516E-02	0.10653E 01	0.71681E 00	0.60000E-01	0.99375E 00
36	559.48	0.33390E 02	0.53453E 01	0.15701E-01	0.29325E-02	0.85951E 00	0.57832E 00	-0.86800E 00	0.44960E-00
37	1085.37	-0.31174E-02	-0.61964E-03	-0.29291E-05	-0.54708E-06	-0.99636E-04	-0.67039E-04	-0.91100E 00	0.
38	558.42	0.29471E 02	0.46701E 01	0.13707E-01	0.25601E-02	0.75094E 00	0.50526E 00	-0.95300E 00	0.51675E 00
39	1085.37	-0.31174E-02	-0.63280E-03	-0.29913E-05	-0.55870E-06	-0.10175E-03	-0.68463E-04	0.51000E-01	0.
40	1085.37	-0.31174E-02	-0.63280E-03	-0.29913E-05	-0.55870E-06	-0.10175E-03	-0.68463E-04	0.29000E-01	0.
41	1085.37	-0.31174E-02	-0.62915E-03	-0.29741E-05	-0.55548E-06	-0.10117E-03	-0.68069E-04	0.70000E-02	0.
42	523.99	-0.71179E-01	-0.11099E-01	-0.31801E-04	-0.59395E-05	-0.17847E-02	-0.12008E-02	-0.86800E 00	0.
43	525.11	0.46910E-00	0.73381E-01	0.21042E-03	0.39300E-04	0.11799E-01	0.79392E-02	-0.91100E 00	0.55436E-02
44	527.86	0.15735E 01	0.24511E-00	0.70419E-03	0.13152E-03	0.39414E-01	0.26519E-01	-0.95300E 00	0.18220E-01
45	557.80	0.20275E 02	0.33334E 01	0.97797E-02	0.18266E-02	0.53601E 00	0.36065E-00	-0.10400E 01	0.29792E-00
46	1085.37	-0.31174E-02	-0.63442E-03	-0.29990E-05	-0.56013E-06	-0.10201E-03	-0.68638E-04	0.70000E-02	0.
47	1085.37	-0.31174E-02	-0.63442E-03	-0.29990E-05	-0.56013E-06	-0.10201E-03	-0.68638E-04	0.29000E-01	0.
48	1085.37	-0.31174E-02	-0.63685E-03	-0.30105E-05	-0.56227E-06	-0.10240E-03	-0.68901E-04	0.51000E-01	0.
49	523.73	-0.98179E-01	-0.15258E-01	-0.43709E-04	-0.81636E-05	-0.24534E-02	-0.16508E-02	0.70000E-02	0.
50	524.14	-0.69611E-01	-0.10855E-01	-0.31106E-04	-0.58098E-05	-0.17455E-02	-0.11745E-02	0.29000E-01	0.
51	1085.37	-0.31174E-02	-0.63077E-03	-0.29818E-05	-0.55691E-06	-0.10143E-03	-0.68244E-04	0.51000E-01	0.
52	1098.04	0.51122E 01	0.10455E 01	0.50168E-02	0.93699E-03	0.16811E-00	0.11311E-00	-0.86800E 00	0.
53	527.33	0.70650E-01	0.11108E-01	0.31901E-04	0.59581E-05	0.17862E-02	0.12018E-02	-0.91100E 00	0.11876E-02
54	529.96	-0.13506E-01	-0.21064E-02	-0.60603E-05	-0.11319E-05	-0.33870E-03	-0.22789E-03	-0.95300E 00	0.

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	554.40	0.17035E 02	0.27955E 01	0.81819E-02	0.15281E-02	0.44952E-00	0.30245E-00	-0.10400E 01	0.38755E-00
56	552.03	0.12344E 02	0.20868E 01	0.60974E-02	0.11388E-02	0.33556E-00	0.22578E-00	-0.10680E 01	0.36308E-00
57	551.46	0.88010E 01	0.14419E 01	0.42114E-02	0.78657E-03	0.23186E-00	0.15600E-00	-0.10400E 01	0.12677E-00
58	562.85	0.19350E 02	0.34537E 01	0.10169E-01	0.18993E-02	0.55534E 00	0.37366E-00	-0.10680E 01	0.21881E-00
59	549.24	0.12592E 02	0.20604E 01	0.60084E-02	0.11222E-02	0.33131E-00	0.22292E-00	-0.10400E 01	0.39123E-00
60	548.07	0.93709E 01	0.15807E 01	0.46058E-02	0.86023E-03	0.25418E-00	0.17102E-00	-0.10680E 01	0.28306E-00
61	539.30	0.95689E 00	0.15855E-00	0.45914E-03	0.85754E-04	0.25494E-01	0.17154E-01	-0.11220E 01	0.65317E 00
62	544.14	0.11361E 01	0.17201E-00	0.49982E-03	0.93353E-04	0.27659E-01	0.18610E-01	-0.13340E 01	0.15098E 01
63	539.66	0.11865E 01	0.20398E-00	0.59085E-03	0.11035E-03	0.32799E-01	0.22069E-01	-0.11220E 01	0.60233E 00
64	545.53	0.15221E 01	0.23063E-00	0.67080E-03	0.12529E-03	0.37085E-01	0.24952E-01	-0.13340E 01	0.10772E 01
65	545.18	0.15061E 01	0.26006E-00	0.75622E-03	0.14124E-03	0.41818E-01	0.28137E-01	0.14400E 01	0.88510E 00
66	544.11	0.21117E 01	0.34636E-00	0.10064E-02	0.18797E-03	0.55694E-01	0.37473E-01	0.16130E 01	0.67975E 00
67	544.51	0.23829E 01	0.38371E-00	0.11152E-02	0.20829E-03	0.61699E-01	0.41514E-01	0.17200E 01	0.66661E 00
68	544.18	0.17309E 01	0.28610E-00	0.83134E-03	0.15527E-03	0.46004E-01	0.30954E-01	-0.16130E 01	0.64006E 00
69	544.53	0.24857E 01	0.40028E-00	0.11634E-02	0.21729E-03	0.64363E-01	0.43306E-01	-0.18280E 01	0.77128E 00
70	542.24	0.32940E 01	0.48409E-00	0.14047E-02	0.26237E-03	0.77840E-01	0.52374E-01	-0.11650E 01	0.12759E 01
71	542.15	0.14748E 01	0.12394E-00	0.35963E-03	0.67168E-04	0.19929E-01	0.13409E-01	-0.12050E 01	0.12707E 01
72	544.30	0.24057E 01	0.34909E-00	0.10145E-02	0.18948E-03	0.56134E-01	0.37769E-01	-0.12120E 01	0.13530E 01
73	542.00	0.27927E 01	0.41036E-00	0.11906E-02	0.22237E-03	0.65985E-01	0.44398E-01	-0.11650E 01	0.98526E 00
74	541.23	0.10462E 01	0.87878E-01	0.25483E-03	0.47594E-04	0.14131E-01	0.95076E-02	-0.12050E 01	0.88396E 00
75	1085.37	-0.31174E-02	-0.57914E-03	-0.27377E-05	-0.51132E-06	-0.93124E-04	-0.62658E-04	-0.12120E 01	0.
76	536.20	0.24987E 01	0.37538E-00	0.10847E-02	0.20259E-03	0.60360E-01	0.40613E-01	0.10840E 01	0.99753E 00
77	537.80	0.20655E 01	0.33342E-00	0.96454E-03	0.18015E-03	0.53614E-01	0.36074E-01	0.11220E 01	0.11001E 01
78	545.36	0.23164E 01	0.34569E-00	0.10053E-02	0.18777E-03	0.55586E-01	0.37400E-01	0.13340E 01	0.13831E 01
79	540.73	0.11688E 01	0.19624E-00	0.56885E-03	0.10624E-03	0.31554E-01	0.21231E-01	-0.11890E 01	0.10876E 01
80	544.33	0.13044E 01	0.19653E-00	0.57114E-03	0.10667E-03	0.31602E-01	0.21263E-01	-0.13340E 01	0.11460E 01
81	538.25	0.28936E-00	0.46722E-01	0.13520E-03	0.25252E-04	0.75128E-02	0.50549E-02	-0.11470E 01	0.53281E 00
82	538.77	0.85718E-01	0.14362E-01	0.41577E-04	0.77653E-05	0.23095E-02	0.15539E-02	-0.11890E 01	0.
83	541.40	0.46665E 01	0.78305E 00	0.22709E-02	0.42415E-03	0.12591E-00	0.84719E-01	-0.10840E 01	0.10321E 01
84	540.05	0.87221E 00	0.12802E-00	0.37093E-03	0.69279E-04	0.20586E-01	0.13851E-01	-0.11890E 01	0.10628E 01
85	543.39	0.11434E 01	0.16814E-00	0.48831E-03	0.91202E-04	0.27036E-01	0.18191E-01	-0.13090E 01	0.10760E 01
86	543.49	0.84987E 00	0.12670E-00	0.36798E-03	0.68729E-04	0.20373E-01	0.13708E-01	-0.13340E 01	0.78133E 00
87	583.80	0.27318E 02	0.41009E 01	0.12257E-01	0.22893E-02	0.65941E 00	0.44368E-00	0.11990E 01	0.99793E 00
88	557.50	0.16588E 02	0.24754E 01	0.72609E-02	0.13561E-02	0.39804E-00	0.26782E-00	0.12070E 01	0.98669E 00
89	556.63	0.92738E 01	0.14068E 01	0.41240E-02	0.77025E-03	0.22622E-00	0.15221E-00	0.13340E 01	0.99929E 00
90	569.88	0.24085E 02	0.34956E 01	0.10344E-01	0.19320E-02	0.56209E 00	0.37820E-00	0.12070E 01	0.97286E 00
91	562.17	0.13622E 02	0.21423E 01	0.63048E-02	0.11776E-02	0.34448E-00	0.23178E-00	0.12490E 01	0.10071E 01
92	559.28	0.10874E 02	0.16603E 01	0.48761E-02	0.91072E-03	0.26697E-00	0.17963E-00	0.13340E 01	0.10258E 01
93	552.22	0.78317E 01	0.13321E 01	0.38927E-02	0.72704E-03	0.21420E-00	0.14412E-00	0.14900E 01	0.10625E 01
94	549.88	0.26644E 01	0.28127E-00	0.82059E-03	0.15326E-03	0.45228E-01	0.30431E-01	-0.	0.10964E 01
95	557.63	0.96904E 01	0.10348E 01	0.30355E-02	0.56694E-03	0.16639E-00	0.11195E-00	-0.	0.12093E 01
96	544.60	0.10099E 01	0.10629E-00	0.30896E-03	0.57704E-04	0.17092E-01	0.11500E-01	-0.	0.59882E 00
97	546.08	0.19132E 01	0.20154E-00	0.58642E-03	0.10953E-03	0.32408E-01	0.21805E-01	-0.	0.64474E 00
98	546.63	0.24603E 01	0.26111E-00	0.76004E-03	0.14195E-03	0.41986E-01	0.28250E-01	-0.	0.57050E 00

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
80	2	4.58	154.58	0.02	-0.	1	C61	2.75	2	10.04	215.80	1689.20	65	C56	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.827824E 02	0.476471E-02	0.447629E 04	0.482904E-05	0.670537E-07	0.324541E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726758E 00	0.171408E 01	0.194911E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	546.50	0.19180E 02	0.25056E 01	0.86309E-02	0.12410E-01	0.14618E 01	0.12855E 01	-0.	0.97460E 00
2	546.16	0.19216E 02	0.26700E 01	0.91945E-02	0.13220E-01	0.15577E 01	0.13699E 01	-0.30000E-01	0.
3	539.30	0.17787E 02	0.26768E 01	0.91657E-02	0.13179E-01	0.15617E 01	0.13733E 01	-0.60000E-01	0.
4	538.21	0.17248E 02	0.26609E 01	0.91033E-02	0.13089E-01	0.15524E 01	0.13652E 01	-0.90000E-01	0.98570E 00
5	528.95	0.15809E 02	0.24879E 01	0.84467E-02	0.12145E-01	0.14515E 01	0.12764E 01	-0.20000E-00	0.10040E 01
6	516.61	0.15221E 02	0.23786E 01	0.79949E-02	0.11496E-01	0.13877E 01	0.12204E 01	-0.40000E-00	0.10665E 01
7	505.53	0.14753E 02	0.23017E 01	0.76675E-02	0.11025E-01	0.13428E 01	0.11809E 01	-0.60000E 00	0.11036E 01
8	527.20	0.14882E 02	0.23508E 01	0.79699E-02	0.11460E-01	0.13715E 01	0.12061E 01	-0.80000E 00	0.
9	528.97	0.15805E 02	0.24596E 01	0.83508E-02	0.12007E-01	0.14350E 01	0.12619E 01	-0.90000E 00	0.98223E 00
10	527.10	0.15438E 02	0.24308E 01	0.82404E-02	0.11848E-01	0.14181E 01	0.12471E 01	-0.98000E 00	0.95908E 00
11	531.32	0.70857E 00	0.12125E-00	0.41244E-03	0.59303E-03	0.70735E-01	0.62206E-01	-0.11220E 01	0.84436E 00
12	535.51	0.12281E 01	0.17948E-00	0.61265E-03	0.88091E-03	0.10471E-00	0.92085E-01	-0.11890E 01	0.13348E 01
13	538.57	0.10997E 01	0.16599E-00	0.56802E-03	0.81674E-03	0.96838E-01	0.85161E-01	-0.13340E 01	0.12309E 01
14	489.52	0.99013E 00	0.16540E-00	0.54399E-03	0.78219E-03	0.96494E-01	0.84858E-01	-0.14400E 01	0.12580E 01
15	547.02	0.19150E 02	0.26621E 01	0.91740E-02	0.13191E-01	0.15531E 01	0.13658E 01	0.30000E-01	0.
16	541.04	0.18686E 02	0.28148E 01	0.96522E-02	0.13878E-01	0.16422E 01	0.14442E 01	0.60000E-01	0.
17	549.89	0.18490E 02	0.28713E 01	0.99185E-02	0.14261E-01	0.16751E 01	0.14731E 01	0.90000E-01	0.
18	554.44	0.18852E 02	0.30095E 01	0.10436E-01	0.15005E-01	0.17558E 01	0.15440E 01	0.20000E-00	0.96153E 00
19	561.96	0.21577E 02	0.34589E 01	0.12070E-01	0.17355E-01	0.20179E 01	0.17746E 01	0.40000E-00	0.95394E 00
20	518.35	0.25025E 02	0.39332E 01	0.13239E-01	0.19035E-01	0.22946E 01	0.20179E 01	0.60000E 00	0.93735E 00
21	547.26	0.29261E 02	0.44010E 01	0.15170E-01	0.21812E-01	0.25676E 01	0.22580E 01	0.92000E 00	0.90257E 00
22	550.63	0.17177E 02	0.25884E 01	0.89469E-02	0.12864E-01	0.15101E 01	0.13280E 01	0.10400E 01	0.89775E 00
23	543.92	0.15760E 02	0.23723E 01	0.81543E-02	0.11725E-01	0.13840E 01	0.12171E 01	0.10600E 01	0.93097E 00
24	539.31	0.10639E 02	0.16735E 01	0.57302E-02	0.82393E-02	0.97630E 00	0.85858E 00	0.10840E 01	0.93060E 00
25	536.78	0.17590E 01	0.25859E-00	0.88360E-03	0.12705E-02	0.15086E-00	0.13267E-00	0.12070E 01	0.96745E 00
26	539.42	0.22281E 01	0.34598E-00	0.11848E-02	0.17036E-02	0.20185E-00	0.17751E-00	0.12490E 01	0.10994E 01
27	541.06	0.27600E 01	0.42203E-00	0.14472E-02	0.20809E-02	0.24621E-00	0.21652E-00	0.13340E 01	0.10485E 01
28	533.63	0.26078E 01	0.44157E-00	0.15050E-02	0.21639E-02	0.25762E-00	0.22655E-00	0.14540E 01	0.11005E 01
29	539.32	0.24774E 01	0.40837E-00	0.13984E-02	0.20106E-02	0.23825E-00	0.20952E-00	0.16580E 01	0.14686E 01
30	537.33	0.28499E 01	0.47497E-00	0.16237E-02	0.23347E-02	0.27710E-00	0.24369E-00	0.20410E 01	0.17146E 01
31	541.35	0.33304E 01	0.55632E 00	0.19081E-02	0.27436E-02	0.32456E-00	0.28542E-00	0.22480E 01	0.17471E 01
32	543.93	0.18383E 02	0.27765E 01	0.95438E-02	0.13723E-01	0.16198E 01	0.14245E 01	-0.60000E-01	0.97118E 00
33	547.87	0.18869E 02	0.26242E 01	0.90498E-02	0.13012E-01	0.15310E 01	0.13464E 01	-0.30000E-01	0.97074E 00
34	-4157.13	0.51854E-02	-0.22381E-02	-0.17474E-05	-0.25125E-05	-0.13057E-02	-0.11483E-02	0.30000E-01	0.
35	534.34	0.18165E 02	0.27962E 01	0.95356E-02	0.13711E-01	0.16313E 01	0.14346E 01	0.60000E-01	0.97779E 00
36	528.35	0.12693E 02	0.19968E 01	0.67761E-02	0.97431E-02	0.11650E 01	0.10245E 01	-0.86800E 00	0.56391E 00
37	529.51	0.11871E 02	0.18183E 01	0.61761E-02	0.88803E-02	0.10608E 01	0.93287E 00	-0.91100E 00	0.56721E 00
38	530.68	0.12468E 02	0.19452E 01	0.66136E-02	0.95095E-02	0.11349E 01	0.99801E 00	-0.95300E 00	0.62224E 00
39	518.91	0.13416E 02	0.20859E 01	0.70239E-02	0.10099E-01	0.12169E 01	0.10702E 01	0.51000E-01	0.
40	527.84	0.13822E 02	0.21600E 01	0.73267E-02	0.10535E-01	0.12601E 01	0.11082E 01	0.29000E-01	0.
41	528.96	0.13264E 02	0.20622E 01	0.70015E-02	0.10067E-01	0.12031E 01	0.10580E 01	0.70000E-02	0.
42	519.36	0.15605E 01	0.24270E-00	0.81756E-03	0.11755E-02	0.14159E-00	0.12452E-00	-0.86800E 00	0.
43	522.24	0.39378E-00	0.61498E-01	0.20765E-03	0.29857E-03	0.35878E-01	0.31552E-01	-0.91100E 00	0.
44	523.26	0.47430E-00	0.73690E-01	0.24903E-03	0.35806E-03	0.42991E-01	0.37807E-01	-0.95300E 00	0.
45	535.33	0.12166E 02	0.19752E 01	0.67413E-02	0.96930E-02	0.11523E 01	0.10134E 01	-0.10400E 01	0.50916E 00
46	522.41	0.60811E 01	0.94980E 00	0.32075E-02	0.46119E-02	0.55412E 00	0.48730E-00	0.70000E-02	0.
47	526.93	0.10121E 02	0.15848E 01	0.53717E-02	0.77237E-02	0.92457E 00	0.81309E 00	0.29000E-01	0.
48	528.43	0.12857E 02	0.20227E 01	0.68645E-02	0.98702E-02	0.11801E 01	0.10378E 01	0.51000E-01	0.
49	522.15	0.32738E 01	0.50832E 00	0.17162E-02	0.24677E-02	0.29656E-00	0.26080E-00	0.70000E-02	0.24516E-00
50	523.82	0.58827E 01	0.91720E 00	0.31010E-02	0.44587E-02	0.53510E 00	0.47057E-00	0.29000E-01	0.41562E-00
51	524.27	0.66338E 01	0.10313E 01	0.34879E-02	0.50151E-02	0.60164E 00	0.52910E 00	0.51000E-01	0.
52	523.10	0.80417E 00	0.12565E-00	0.42457E-03	0.61047E-03	0.73306E-01	0.64466E-01	-0.86800E 00	0.37547E-01
53	523.64	0.28053E-00	0.44014E-01	0.14878E-03	0.21393E-03	0.25678E-01	0.22582E-01	-0.91100E 00	0.13616E-01
54	524.67	0.21715E-00	0.33765E-01	0.11423E-03	0.16425E-03	0.19698E-01	0.17323E-01	-0.95300E 00	0.11054E-01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	536.66	0.95231E 01	0.15473E 01	0.52867E-02	0.76016E-02	0.90272E 00	0.79386E 00	-0.10400E 01	0.61808E 00
56	535.43	0.72540E 01	0.12150E 01	0.41470E-02	0.59628E-02	0.70882E 00	0.62335E 00	-0.10680E 01	0.61074E 00
57	541.72	0.14489E 02	0.23609E 01	0.81004E-02	0.11647E-01	0.13774E 01	0.12113E 01	-0.10400E 01	0.52994E 00
58	544.77	0.21226E 02	0.37508E 01	0.12902E-01	0.18551E-01	0.21882E 01	0.19244E 01	-0.10680E 01	0.60632E 00
59	535.86	0.96722E 01	0.15708E 01	0.53636E-02	0.77120E-02	0.91644E 00	0.80593E 00	-0.10400E 01	0.76304E 00
60	535.89	0.93854E 01	0.15724E 01	0.53689E-02	0.77198E-02	0.91733E 00	0.80672E 00	-0.10680E 01	0.70407E 00
61	533.08	0.64416E 00	0.10636E-00	0.36233E-03	0.52098E-03	0.62050E-01	0.54568E-01	-0.11220E 01	0.17183E 01
62	538.53	0.44364E-00	0.66959E-01	0.22913E-03	0.32946E-03	0.39064E-01	0.34353E-01	-0.13340E 01	0.11312E 01
63	533.71	0.76780E 00	0.13156E-00	0.44840E-03	0.64473E-03	0.76751E-01	0.67496E-01	-0.11220E 01	0.16241E 01
64	539.17	0.62701E 00	0.94669E-01	0.32413E-03	0.46605E-03	0.55230E-01	0.48571E-01	-0.13340E 01	0.13290E 01
65	534.96	0.88364E 00	0.15151E-00	0.51694E-03	0.74329E-03	0.88392E-01	0.77734E-01	0.14400E 01	0.12914E 01
66	533.46	0.11351E 01	0.18506E-00	0.63063E-03	0.90676E-03	0.10797E-00	0.94947E-01	0.16130E 01	0.13157E 01
67	538.43	0.10977E 01	0.17615E-00	0.60274E-03	0.86666E-03	0.10277E-00	0.90377E-01	0.17200E 01	0.11544E 01
68	531.63	0.10005E 01	0.16421E-00	0.55874E-03	0.80339E-03	0.95801E-01	0.84249E-01	-0.16130E 01	0.11702E 01
69	539.96	0.12457E 01	0.20008E-00	0.68549E-03	0.98564E-03	0.11673E-00	0.10265E-00	-0.18280E 01	0.12184E 01
70	534.64	0.95325E 00	0.13949E-00	0.47581E-03	0.68414E-03	0.81380E-01	0.71567E-01	-0.11650E 01	0.11378E 01
71	536.17	0.76675E 00	0.64220E-01	0.21933E-03	0.31537E-03	0.37466E-01	0.32948E-01	-0.12050E 01	0.11310E 01
72	536.57	0.10722E 01	0.15491E-00	0.52926E-03	0.76100E-03	0.90378E-01	0.79480E-01	-0.12120E 01	0.10827E 01
73	535.67	0.10639E 01	0.15577E-00	0.53179E-03	0.76464E-03	0.90878E-01	0.79920E-01	-0.11650E 01	0.17862E 01
74	536.22	0.68208E 00	0.57129E-01	0.19512E-03	0.28056E-03	0.33329E-01	0.29310E-01	-0.12050E 01	0.13134E 01
75	520.90	0.11101E 01	0.15815E-00	0.53341E-03	0.76696E-03	0.92263E-01	0.81137E-01	-0.12120E 01	0.
76	529.86	0.19512E 01	0.29208E-00	0.99236E-03	0.14269E-02	0.17040E-00	0.14985E-00	0.10840E 01	0.10433E 01
77	533.31	0.76987E 00	0.12397E-00	0.42238E-03	0.60733E-03	0.72322E-01	0.63601E-01	0.11220E 01	0.11520E 01
78	539.70	0.10540E 01	0.15680E-00	0.53709E-03	0.77225E-03	0.91478E-01	0.80448E-01	0.13340E 01	0.11965E 01
79	536.10	0.56104E 00	0.93948E-01	0.32084E-03	0.46133E-03	0.54810E-01	0.48201E-01	-0.11890E 01	0.14737E 01
80	539.84	0.66649E 00	0.10016E-00	0.34313E-03	0.49337E-03	0.58437E-01	0.51390E-01	-0.13340E 01	0.12284E 01
81	527.77	0.67273E 00	0.10798E-00	0.36626E-03	0.52663E-03	0.62998E-01	0.55402E-01	-0.11470E 01	0.11525E 01
82	535.80	0.46754E-01	0.78208E-02	0.26702E-04	0.38394E-04	0.45627E-02	0.40125E-02	-0.11890E 01	0.
83	532.14	0.28545E 01	0.47651E-00	0.16220E-02	0.23323E-02	0.27800E-00	0.24448E-00	-0.10840E 01	0.99165E 00
84	536.42	0.29662E-00	0.43449E-01	0.14842E-03	0.21341E-03	0.25348E-01	0.22292E-01	-0.11890E 01	0.91895E 00
85	538.96	0.70701E 00	0.10371E-00	0.35502E-03	0.51047E-03	0.60505E-01	0.53210E-01	-0.13090E 01	0.15077E 01
86	540.42	0.65610E 00	0.97644E-01	0.33466E-03	0.48119E-03	0.56966E-01	0.50097E-01	-0.13340E 01	0.13700E 01
87	541.52	0.50192E 01	0.73606E 00	0.25250E-02	0.36306E-02	0.42942E-00	0.37764E-00	0.11990E 01	0.88185E 00
88	538.09	0.30364E 01	0.44824E-00	0.15333E-02	0.22047E-02	0.26150E-00	0.22997E-00	0.12070E 01	0.97739E 00
89	542.81	0.27834E 01	0.41900E-00	0.14389E-02	0.20689E-02	0.24445E-00	0.21497E-00	0.13340E 01	0.99261E 00
90	539.82	0.40203E 01	0.57382E 00	0.19657E-02	0.28264E-02	0.33477E-00	0.29440E-00	0.12070E 01	0.94453E 00
91	541.62	0.28738E 01	0.44680E-00	0.15328E-02	0.22040E-02	0.26067E-00	0.22923E-00	0.12490E 01	0.90963E 00
92	542.58	0.28914E 01	0.43740E-00	0.15018E-02	0.21593E-02	0.25518E-00	0.22441E-00	0.13340E 01	0.10102E 01
93	541.90	0.25616E 01	0.43318E-00	0.14865E-02	0.21373E-02	0.25272E-00	0.22225E-00	0.14900E 01	0.12088E 01
94	537.53	0.54961E 01	0.57620E 00	0.19701E-02	0.28327E-02	0.33615E-00	0.29562E-00	-0.	0.89136E 00
95	545.04	0.90036E 01	0.95472E 00	0.32847E-02	0.47229E-02	0.55699E 00	0.48983E-00	-0.	0.99870E 00
96	540.68	0.75169E 00	0.78944E-01	0.27062E-03	0.38912E-03	0.46056E-01	0.40503E-01	-0.	0.11904E 01
97	531.49	0.12951E 01	0.13531E-00	0.46035E-03	0.66191E-03	0.78940E-01	0.69421E-01	-0.	0.13472E 01
98	541.56	0.14665E 01	0.15520E-00	0.53242E-03	0.76554E-03	0.90544E-01	0.79626E-01	-0.	0.99833E 00

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
79	1	4.35	154.35	0.02	-0.	1	C61	2.70	2	10.19	1847.30	1877.60	75	C56	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.908574E 02	0.378607E-01	0.475756E 04	0.349615E-04	0.735945E-07	0.227532E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731626E 00	0.621742E 01	0.923970E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	576.54	0.48672E 02	0.64648E 01	0.19225E-01	0.35924E-02	0.10398E 01	0.69967E 00	-0.	0.10028E 01
2	1083.63	-0.19181E 02	-0.34239E 01	-0.16156E-01	-0.30190E-02	-0.55069E 00	-0.37056E-00	-0.30000E-01	0.
3	1085.37	-0.31174E-02	-0.60546E-03	-0.28628E-05	-0.53495E-06	-0.97381E-04	-0.65528E-04	-0.60000E-01	0.
4	1043.15	-0.11974E 01	-0.23461E-00	-0.10569E-02	-0.19750E-03	-0.37734E-01	-0.25391E-01	-0.90000E-01	0.
5	562.79	0.38603E 02	0.61912E 01	0.18231E-01	0.34067E-02	0.99578E 00	0.67006E 00	-0.20000E-00	0.98622E 00
6	563.29	0.35151E 02	0.56390E 01	0.16611E-01	0.31040E-02	0.90697E 00	0.61030E 00	-0.40000E-00	0.98928E 00
7	563.43	0.30443E 02	0.49075E 01	0.14458E-01	0.27016E-02	0.78931E 00	0.53113E 00	-0.60000E 00	0.99081E 00
8	1085.37	-0.31174E-02	-0.63988E-03	-0.30256E-05	-0.56537E-06	-0.10292E-03	-0.69254E-04	-0.80000E 00	0.
9	1085.37	-0.31174E-02	-0.62976E-03	-0.29777E-05	-0.55642E-06	-0.10129E-03	-0.68158E-04	-0.90000E 00	0.
10	564.54	0.26204E 02	0.42134E 01	0.12423E-01	0.23213E-02	0.67767E 00	0.45601E-00	-0.98000E 00	0.10052E 01
11	539.17	0.15366E 01	0.26410E-00	0.76485E-03	0.14292E-03	0.42478E-01	0.28583E-01	-0.11220E 01	0.60787E 00
12	544.63	0.22088E 01	0.32449E-00	0.94333E-03	0.17627E-03	0.52190E-01	0.35119E-01	-0.11890E 01	0.88078E 00
13	547.22	0.19657E 01	0.29813E-00	0.86830E-03	0.16225E-03	0.47952E-01	0.32267E-01	-0.13340E 01	0.10396E 01
14	546.60	0.19782E 01	0.34141E-00	0.99390E-03	0.18572E-03	0.54912E-01	0.36950E-01	-0.14400E 01	0.93763E 00
15	924.71	-0.53133E 02	-0.88877E 01	-0.35373E-01	-0.66098E-02	-0.14295E 01	-0.96190E 00	0.30000E-01	0.
16	1085.37	-0.31174E-02	-0.60546E-03	-0.28628E-05	-0.53495E-06	-0.97381E-04	-0.65528E-04	0.60000E-01	0.
17	1085.37	-0.31174E-02	-0.62105E-03	-0.29365E-05	-0.54873E-06	-0.99889E-04	-0.67216E-04	0.90000E-01	0.
18	574.15	0.42993E 02	0.69384E 01	0.20598E-01	0.38490E-02	0.11160E 01	0.75093E 00	0.20000E-00	0.99615E 00
19	599.34	0.45039E 02	0.73687E 01	0.22278E-01	0.41630E-02	0.11852E 01	0.79750E 00	0.40000E-00	0.99337E 00
20	623.25	0.56234E 02	0.93626E 01	0.28812E-01	0.53838E-02	0.15059E 01	0.10133E 01	0.60000E 00	0.98809E 00
21	634.64	0.65253E 02	0.10290E 02	0.31936E-01	0.59677E-02	0.16550E 01	0.11136E 01	0.92000E 00	0.99363E 00
22	601.98	0.45594E 02	0.70663E 01	0.21406E-01	0.39999E-02	0.11365E 01	0.76478E 00	0.10400E 01	0.98629E 00
23	592.66	0.41561E 02	0.64261E 01	0.19334E-01	0.36128E-02	0.10336E 01	0.69549E 00	0.10600E 01	0.98866E 00
24	573.35	0.29383E 02	0.47098E 01	0.13974E-01	0.26112E-02	0.75752E 00	0.50974E 00	0.10840E 01	0.98800E 00
25	552.92	0.99247E 01	0.14723E 01	0.43052E-02	0.80448E-03	0.23680E-00	0.15934E-00	0.12070E 01	0.99919E 00
26	554.89	0.10726E 02	0.16801E 01	0.49197E-02	0.91930E-03	0.27022E-00	0.18183E-00	0.12490E 01	0.10001E 01
27	558.62	0.11308E 02	0.17460E 01	0.51263E-02	0.95792E-03	0.28083E-00	0.18897E-00	0.13340E 01	0.10070E 01
28	556.18	0.91917E 01	0.15762E 01	0.46197E-02	0.86324E-03	0.25351E-00	0.17059E-00	0.14540E 01	0.10231E 01
29	550.78	0.58000E 01	0.96222E 00	0.28094E-02	0.52497E-03	0.15476E-00	0.10414E-00	0.16580E 01	0.97827E 00
30	549.78	0.57990E 01	0.97325E 00	0.28396E-02	0.53062E-03	0.15654E-00	0.10533E-00	0.20410E 01	0.96793E 00
31	553.37	0.63512E 01	0.10681E 01	0.31242E-02	0.58379E-03	0.17179E-00	0.11560E-00	0.22480E 01	0.97928E 00
32	571.18	0.44373E 02	0.68040E 01	0.20156E-01	0.37664E-02	0.10943E 01	0.73639E 00	-0.60000E-01	0.99042E 00
33	579.35	0.46508E 02	0.65817E 01	0.19612E-01	0.36648E-02	0.10586E 01	0.71233E 00	-0.30000E-01	0.99686E 00
34	1089.95	0.66337E 00	0.12920E-00	0.61419E-03	0.11477E-03	0.20780E-01	0.13983E-01	0.30000E-01	0.
35	568.70	0.42433E 02	0.66583E 01	0.19689E-01	0.36792E-02	0.10709E 01	0.72062E 00	0.60000E-01	0.99868E 00
36	578.46	0.40136E 02	0.64926E 01	0.19335E-01	0.36129E-02	0.10443E 01	0.70269E 00	-0.86800E 00	0.54610E 00
37	1085.37	-0.31174E-02	-0.61964E-03	-0.29298E-05	-0.54747E-06	-0.99661E-04	-0.67062E-04	-0.91100E 00	0.
38	565.59	0.33070E 02	0.52612E 01	0.15524E-01	0.29008E-02	0.84621E 00	0.56942E 00	-0.95300E 00	0.58215E 00
39	1085.37	-0.31174E-02	-0.63280E-03	-0.29921E-05	-0.55910E-06	-0.10178E-03	-0.68487E-04	0.51000E-01	0.
40	1085.37	-0.31174E-02	-0.63280E-03	-0.29921E-05	-0.55910E-06	-0.10178E-03	-0.68487E-04	0.29000E-01	0.
41	1085.37	-0.31174E-02	-0.62915E-03	-0.29748E-05	-0.55588E-06	-0.10119E-03	-0.68092E-04	0.70000E-02	0.
42	528.25	0.49299E 01	0.77058E 00	0.22147E-02	0.41385E-03	0.12394E-00	0.83399E-01	-0.86800E 00	0.48008E-01
43	527.30	0.19870E 01	0.31122E-00	0.89388E-03	0.16703E-03	0.50056E-01	0.33683E-01	-0.91100E 00	0.23511E-01
44	528.92	0.27309E 01	0.42566E-00	0.12240E-02	0.22871E-03	0.68463E-01	0.46069E-01	-0.95300E 00	0.31641E-01
45	561.19	0.23961E 02	0.39468E 01	0.11609E-01	0.21693E-02	0.63480E 00	0.42716E-00	-0.10400E 01	0.35274E-00
46	1085.37	-0.31174E-02	-0.63442E-03	-0.29997E-05	-0.56053E-06	-0.10204E-03	-0.68662E-04	0.70000E-02	0.
47	1085.37	-0.31174E-02	-0.63442E-03	-0.29997E-05	-0.56053E-06	-0.10204E-03	-0.68662E-04	0.29000E-01	0.
48	1085.37	-0.31174E-02	-0.63685E-03	-0.30112E-05	-0.56268E-06	-0.10243E-03	-0.68925E-04	0.51000E-01	0.
49	534.32	0.12830E 02	0.20058E 01	0.57893E-02	0.10818E-02	0.32262E-00	0.21709E-00	0.70000E-02	0.23237E-00
50	544.01	0.21601E 02	0.34065E 01	0.98988E-02	0.18497E-02	0.54789E 00	0.36868E-00	0.29000E-01	0.67385E 00
51	1085.37	-0.31174E-02	-0.63077E-03	-0.29825E-05	-0.55731E-06	-0.10145E-03	-0.68268E-04	0.51000E-01	0.
52	1085.37	-0.31174E-02	-0.63442E-03	-0.29997E-05	-0.56053E-06	-0.10204E-03	-0.68662E-04	-0.86800E 00	0.
53	527.44	0.60156E 00	0.94587E-01	0.27170E-03	0.50770E-04	0.15213E-01	0.10237E-01	-0.91100E 00	0.10113E-01
54	529.24	0.61923E 00	0.96535E-01	0.27764E-03	0.51881E-04	0.15527E-01	0.10448E-01	-0.95300E 00	0.10590E-01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	562.64	0.16941E 02	0.27928E 01	0.82231E-02	0.15366E-02	0.44919E-00	0.30226E-00	-0.10400E 01	0.38718E-00
56	557.95	0.13423E 02	0.22768E 01	0.66814E-02	0.12485E-02	0.36619E-00	0.24641E-00	-0.10680E 01	0.39614E-00
57	568.12	0.33290E 02	0.55651E 01	0.16689E-01	0.31185E-02	0.89508E 00	0.60230E 00	-0.10400E 01	0.48928E-00
58	594.28	0.44898E 02	0.81525E 01	0.24557E-01	0.45888E-02	0.13112E 01	0.88233E 00	-0.10680E 01	0.51650E 00
59	568.66	0.24873E 02	0.41141E 01	0.12165E-01	0.22733E-02	0.66170E 00	0.44526E-00	-0.10400E 01	0.78118E 00
60	563.91	0.21074E 02	0.35862E 01	0.10569E-01	0.19749E-02	0.57680E 00	0.38813E-00	-0.10680E 01	0.64219E 00
61	541.26	0.14364E 01	0.23826E-00	0.69101E-03	0.12912E-03	0.38321E-01	0.25786E-01	-0.11220E 01	0.98154E 00
62	546.86	0.10706E 01	0.16235E-00	0.47271E-03	0.88332E-04	0.26112E-01	0.17571E-01	-0.13340E 01	0.14250E 01
63	541.95	0.15855E 01	0.27292E-00	0.79192E-03	0.14798E-03	0.43896E-01	0.29538E-01	-0.11220E 01	0.80591E 00
64	547.84	0.92260E 00	0.13998E-00	0.40785E-03	0.76211E-04	0.22514E-01	0.15149E-01	-0.13340E 01	0.65381E 00
65	547.73	0.17735E 01	0.30628E-00	0.89234E-03	0.16675E-03	0.49262E-01	0.33148E-01	0.14400E 01	0.10424E 01
66	546.20	0.24307E 01	0.39914E-00	0.11616E-02	0.21707E-03	0.64198E-01	0.43199E-01	0.16130E 01	0.78333E 00
67	546.40	0.28634E 01	0.46157E-00	0.13435E-02	0.25105E-03	0.74239E-01	0.49956E-01	0.17200E 01	0.80188E 00
68	546.37	0.21969E 01	0.36357E-00	0.10582E-02	0.19774E-03	0.58475E-01	0.39348E-01	-0.16130E 01	0.81337E 00
69	546.46	0.28026E 01	0.45179E-00	0.13151E-02	0.24574E-03	0.72666E-01	0.48897E-01	-0.18280E 01	0.87053E 00
70	543.59	0.25371E 01	0.37314E-00	0.10840E-02	0.20255E-03	0.60015E-01	0.40385E-01	-0.11650E 01	0.98347E 00
71	544.20	0.10670E 01	0.89773E-01	0.26090E-03	0.48753E-04	0.14439E-01	0.97160E-02	-0.12050E 01	0.92042E 00
72	545.92	0.18364E 01	0.26672E-00	0.77608E-03	0.14502E-03	0.42898E-01	0.28866E-01	-0.12120E 01	0.10338E 01
73	543.65	0.20317E 01	0.29881E-00	0.86808E-03	0.16221E-03	0.48060E-01	0.32340E-01	-0.11650E 01	0.71743E 00
74	543.32	0.84156E 00	0.70769E-01	0.20554E-03	0.38409E-04	0.11382E-01	0.76592E-02	-0.12050E 01	0.71186E 00
75	1085.37	-0.31174E-02	-0.57914E-03	-0.27383E-05	-0.51169E-06	-0.93147E-04	-0.62679E-04	-0.12120E 01	0.
76	538.44	0.24478E 01	0.36820E-00	0.10658E-02	0.19915E-03	0.59220E-01	0.39849E-01	0.10840E 01	0.97845E 00
77	539.93	0.20119E 01	0.32518E-00	0.94222E-03	0.17607E-03	0.52301E-01	0.35193E-01	0.11220E 01	0.10729E 01
78	547.20	0.19855E 01	0.29661E-00	0.86384E-03	0.16142E-03	0.47706E-01	0.32102E-01	0.13340E 01	0.11867E 01
79	542.77	0.11979E 01	0.20135E-00	0.58459E-03	0.10924E-03	0.32385E-01	0.21792E-01	-0.11890E 01	0.11159E 01
80	546.38	0.12639E 01	0.19064E-00	0.55491E-03	0.10369E-03	0.30663E-01	0.20633E-01	-0.13340E 01	0.11117E 01
81	540.21	0.44000E-00	0.71125E-01	0.20613E-03	0.38518E-04	0.11440E-01	0.76978E-02	-0.11470E 01	0.81111E 00
82	540.51	-0.48828E-01	-0.81894E-02	-0.23739E-04	-0.44359E-05	-0.13172E-02	-0.88633E-03	-0.11890E 01	0.
83	543.45	0.44452E 01	0.74677E 00	0.21692E-02	0.40533E-03	0.12011E-00	0.80822E-01	-0.10840E 01	0.98431E 00
84	541.89	0.81714E 00	0.12006E-00	0.34837E-03	0.65097E-04	0.19311E-01	0.12994E-01	-0.11890E 01	0.99668E 00
85	545.32	0.13319E 01	0.19608E-00	0.57031E-03	0.10657E-03	0.31537E-01	0.21222E-01	-0.13090E 01	0.12548E 01
86	545.59	0.11688E 01	0.17446E-00	0.50751E-03	0.94833E-04	0.28059E-01	0.18881E-01	-0.13340E 01	0.10759E 01
87	586.50	0.27038E 02	0.40648E 01	0.12175E-01	0.22751E-02	0.65378E 00	0.43993E-00	0.11990E 01	0.98915E 00
88	561.61	0.16774E 02	0.25089E 01	0.73818E-02	0.13794E-02	0.40353E-00	0.27154E-00	0.12070E 01	0.10000E 01
89	558.63	0.91314E 01	0.13868E 01	0.40716E-02	0.76083E-03	0.22305E-00	0.15009E-00	0.13340E 01	0.98508E 00
90	573.23	0.24372E 02	0.35439E 01	0.10514E-01	0.19646E-02	0.56999E 00	0.38355E-00	0.12070E 01	0.98631E 00
91	565.13	0.13618E 02	0.21451E 01	0.63272E-02	0.11823E-02	0.34501E-00	0.23216E-00	0.12490E 01	0.10084E 01
92	561.67	0.10673E 02	0.16318E 01	0.48014E-02	0.89720E-03	0.26246E-00	0.17661E-00	0.13340E 01	0.10082E 01
93	554.64	0.73881E 01	0.12583E 01	0.36840E-02	0.68840E-03	0.20239E-00	0.13619E-00	0.14900E 01	0.10037E 01
94	551.93	0.27823E 01	0.29405E-00	0.85926E-03	0.16056E-03	0.47295E-01	0.31825E-01	-0.	0.11463E 01
95	558.83	0.87127E 01	0.93100E 00	0.27338E-02	0.51085E-03	0.14974E-00	0.10076E-00	-0.	0.10880E 01
96	546.33	0.12618E 01	0.13294E-00	0.38694E-03	0.72304E-04	0.21382E-01	0.14388E-01	-0.	0.74896E 00
97	548.19	0.25766E 01	0.27175E-00	0.79198E-03	0.14799E-03	0.43707E-01	0.29411E-01	-0.	0.86935E 00
98	548.77	0.32743E 01	0.34792E-00	0.10144E-02	0.18955E-03	0.55959E-01	0.37655E-01	-0.	0.76017E 00

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
83	2	-7.46	142.54	0.02	-0.	2	C57	2.75	2	10.04	229.20	1686.50	6	C55	3.00

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.825803E 02	0.505128E-02	0.447254E 04	0.513200E-05	0.668901E-07	0.345457E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726625E 00	0.179123E 01	0.202636E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	534.23	0.32473E 01	0.52723E 00	0.18024E-02	0.24406E-02	0.29434E-00	0.26018E-00	-0.10600E 01	0.17083E 01
100	535.56	0.31086E 01	0.52039E 00	0.17809E-02	0.24116E-02	0.29052E-00	0.25681E-00	-0.10840E 01	0.31270E 01
101	534.07	0.27574E 01	0.45111E-00	0.15420E-02	0.20880E-02	0.25184E-00	0.22262E-00	-0.11080E 01	0.40067E 01
102	535.46	0.30914E 01	0.50460E 00	0.17268E-02	0.23383E-02	0.28171E-00	0.24902E-00	-0.11080E 01	0.39168E 01
103	534.72	0.30868E 01	0.51649E 00	0.17664E-02	0.23919E-02	0.28834E-00	0.25489E-00	-0.10800E 01	0.26170E 01
104	580.49	0.56143E 02	0.90921E 01	0.32317E-01	0.43761E-01	0.50759E 01	0.44869E 01	0.85000E 00	0.16237E 01
105	582.99	0.62691E 02	0.96168E 01	0.34256E-01	0.46386E-01	0.53688E 01	0.47458E 01	0.94000E 00	0.14651E 01
106	583.74	0.64754E 02	0.98538E 01	0.35123E-01	0.47560E-01	0.55012E 01	0.48628E 01	0.96000E 00	0.13961E 01
107	537.54	0.60086E 02	0.89127E 01	0.30552E-01	0.41371E-01	0.49757E 01	0.43984E 01	0.98000E 00	0.13102E 01
108	562.07	0.59495E 02	0.89921E 01	0.31464E-01	0.42605E-01	0.50201E 01	0.44376E 01	0.10000E 01	0.13072E 01
109	567.64	0.51148E 02	0.77805E 01	0.27353E-01	0.37039E-01	0.43437E 01	0.38396E 01	0.10200E 01	0.12838E 01
110	590.56	0.63847E 02	0.98344E 01	0.35261E-01	0.47747E-01	0.54903E 01	0.48532E 01	0.80000E-01	0.15786E 01
111	578.42	0.62244E 02	0.94444E 01	0.33510E-01	0.45376E-01	0.52726E 01	0.46608E 01	0.10000E-00	0.14719E 01
112	586.02	0.67431E 02	0.10326E 02	0.36879E-01	0.49938E-01	0.57648E 01	0.50959E 01	0.12000E-00	0.14880E 01
113	579.89	0.63655E 02	0.97482E 01	0.34631E-01	0.46894E-01	0.54422E 01	0.48107E 01	0.14000E-00	0.13353E 01
114	576.39	0.60011E 02	0.91726E 01	0.32489E-01	0.43993E-01	0.51208E 01	0.45266E 01	0.80000E-01	0.15557E 01
115	578.23	0.60817E 02	0.92738E 01	0.32899E-01	0.44549E-01	0.51774E 01	0.45766E 01	0.10000E-00	0.15333E 01
116	568.11	0.61932E 02	0.94549E 01	0.33253E-01	0.45028E-01	0.52785E 01	0.46660E 01	0.12000E-00	0.15009E 01
117	564.58	0.66325E 02	0.10072E 02	0.35318E-01	0.47824E-01	0.56231E 01	0.49706E 01	0.14000E-00	0.15183E 01
118	579.56	0.60844E 02	0.93944E 01	0.33365E-01	0.45180E-01	0.52446E 01	0.46361E 01	0.10000E-00	0.17136E 01
119	576.51	0.60588E 02	0.92925E 01	0.32917E-01	0.44573E-01	0.51878E 01	0.45858E 01	0.15000E-00	0.17079E 01
120	563.79	0.61025E 02	0.93099E 01	0.32623E-01	0.44175E-01	0.51975E 01	0.45944E 01	0.20000E-00	0.17605E 01
121	579.46	0.60860E 02	0.93963E 01	0.33369E-01	0.45185E-01	0.52457E 01	0.46370E 01	0.25000E-00	0.16738E 01
122	564.35	0.57714E 02	0.88370E 01	0.30981E-01	0.41951E-01	0.49335E 01	0.43610E 01	0.30000E-00	0.17389E 01
123	571.75	0.57981E 02	0.89587E 01	0.31605E-01	0.42797E-01	0.50014E 01	0.44210E 01	0.35000E-00	0.18413E 01
124	555.61	0.56110E 02	0.86497E 01	0.30101E-01	0.40760E-01	0.48289E 01	0.42686E 01	0.38000E-00	0.15855E 01
125	567.59	0.56481E 02	0.88370E 01	0.31066E-01	0.42066E-01	0.49335E 01	0.43610E 01	0.45000E-00	0.14863E 01
126	568.45	0.49450E 02	0.78418E 01	0.27587E-01	0.37357E-01	0.43779E 01	0.38699E 01	0.61000E 00	0.15118E 01
127	546.55	0.27572E 02	0.43405E 01	0.14991E-01	0.20299E-01	0.24232E 01	0.21420E 01	0.70000E 00	0.13373E 01
128	534.42	0.13972E 02	0.21916E 01	0.74933E-02	0.10147E-01	0.12235E 01	0.10815E 01	0.75000E 00	0.13007E 01
129	566.97	0.38116E 02	0.60882E 01	0.21391E-01	0.28966E-01	0.33989E 01	0.30045E 01	0.70000E 00	0.16578E 01
130	569.65	0.41633E 02	0.66597E 01	0.23453E-01	0.31758E-01	0.37179E 01	0.32865E 01	0.80000E 00	0.17395E 01
131	540.37	0.15180E 02	0.22668E 01	0.77886E-02	0.10547E-01	0.12655E 01	0.11186E 01	0.90000E 00	0.13325E 01
132	557.92	0.36208E 02	0.54783E 01	0.19102E-01	0.25866E-01	0.30584E 01	0.27035E 01	0.90000E 00	0.13932E 01
133	569.12	0.33094E 02	0.50129E 01	0.17645E-01	0.23894E-01	0.27986E 01	0.24738E 01	0.96000E 00	0.14003E 01
134	565.87	0.29336E 02	0.44432E 01	0.15597E-01	0.21120E-01	0.24805E 01	0.21927E 01	0.10000E 01	0.13537E 01
135	548.74	0.19750E 02	0.30980E 01	0.10719E-01	0.14515E-01	0.17295E 01	0.15288E 01	0.70000E-02	0.16085E 01
136	547.89	0.21483E 02	0.33084E 01	0.11439E-01	0.15490E-01	0.18470E 01	0.16327E 01	0.70000E-02	0.
137	543.68	0.20379E 02	0.31772E 01	0.10947E-01	0.14823E-01	0.17737E 01	0.15679E 01	0.39000E-01	0.14935E 01
138	540.74	0.16668E 02	0.25819E 01	0.88740E-02	0.12016E-01	0.14414E 01	0.12741E 01	0.78000E-01	0.12159E 01
139	539.55	0.16104E 02	0.24807E 01	0.85178E-02	0.11534E-01	0.13849E 01	0.12242E 01	0.11700E-00	0.11215E 01
140	542.71	0.19357E 02	0.29773E 01	0.10250E-01	0.13879E-01	0.16621E 01	0.14693E 01	0.78000E-01	0.13637E 01
141	-4157.13	0.51854E-02	-0.15703E-02	-0.12267E-05	-0.16612E-05	-0.87668E-03	-0.77495E-03	-0.	0.
142	-4157.13	0.51854E-02	-0.15703E-02	-0.12267E-05	-0.16612E-05	-0.87668E-03	-0.77495E-03	-0.	0.
143	540.07	0.16298E 02	0.24907E 01	0.85561E-02	0.11586E-01	0.13905E 01	0.12292E 01	0.78000E-01	0.12002E 01
144	536.04	0.11928E 02	0.18218E 01	0.62372E-02	0.84459E-02	0.10171E 01	0.89904E 00	0.70000E-02	0.97111E 00
145	544.29	0.19405E 02	0.29627E 01	0.10213E-01	0.13830E-01	0.16540E 01	0.14621E 01	0.70000E-02	0.16994E 01
146	535.51	0.17879E 02	0.27299E 01	0.93421E-02	0.12650E-01	0.15240E 01	0.13472E 01	0.39000E-01	0.13820E 01
147	541.28	0.14565E 02	0.22273E 01	0.76589E-02	0.10371E-01	0.12435E 01	0.10992E 01	0.78000E-01	0.10835E 01
148	540.58	0.13837E 02	0.21326E 01	0.73289E-02	0.99242E-02	0.11906E 01	0.10524E 01	0.11700E-00	0.98924E 00
149	571.43	0.48565E 02	0.78633E 01	0.27734E-01	0.37554E-01	0.43899E 01	0.38805E 01	0.70000E-02	0.17581E 01
150	574.31	0.47384E 02	0.77207E 01	0.27298E-01	0.36964E-01	0.43103E 01	0.38101E 01	0.70000E-02	0.16752E 01
151	575.36	0.47140E 02	0.76854E 01	0.27197E-01	0.36828E-01	0.42905E 01	0.37927E 01	0.70000E-02	0.16334E 01
152	585.40	0.57784E 02	0.91294E 01	0.32587E-01	0.44127E-01	0.50967E 01	0.45053E 01	0.39000E-01	0.17324E 01

CONFIDENTIAL

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	582.45	0.57832E 02	0.91222E 01	0.32479E-01	0.43980E-01	0.50927E 01	0.45017E 01	0.39000E-01	0.17748E 01
154	578.67	0.57587E 02	0.90056E 01	0.31960E-01	0.43277E-01	0.50276E 01	0.44442E 01	0.78000E-01	0.17551E 01
155	568.11	0.56326E 02	0.91466E 01	0.32169E-01	0.43560E-01	0.51063E 01	0.45138E 01	0.39000E-01	0.18111E 01
156	565.39	0.55596E 02	0.89861E 01	0.31531E-01	0.42697E-01	0.50167E 01	0.44346E 01	0.39000E-01	0.19679E 01
157	569.54	0.51637E 02	0.83918E 01	0.29550E-01	0.40014E-01	0.46849E 01	0.41413E 01	0.78000E-01	0.19331E 01
158	548.51	0.54049E 02	0.87093E 01	0.30128E-01	0.40797E-01	0.48622E 01	0.42980E 01	0.39000E-01	0.19507E 01
159	559.79	0.48565E 02	0.78748E 01	0.27501E-01	0.37239E-01	0.43963E 01	0.38862E 01	0.78000E-01	0.19182E 01
160	569.00	0.56565E 02	0.91899E 01	0.32345E-01	0.43799E-01	0.51305E 01	0.45352E 01	0.39000E-01	0.21486E 01
161	572.22	0.41670E 02	0.66216E 01	0.23370E-01	0.31645E-01	0.36967E 01	0.32677E 01	0.43000E-01	0.10250E 01
162	579.37	0.48748E 02	0.78019E 01	0.27704E-01	0.37515E-01	0.43556E 01	0.38502E 01	0.43000E-01	0.13900E 01
163	575.46	0.41548E 02	0.66460E 01	0.23521E-01	0.31850E-01	0.37103E 01	0.32798E 01	0.85000E-01	0.15211E 01
164	574.40	0.37374E 02	0.59461E 01	0.21025E-01	0.28470E-01	0.33196E 01	0.29344E 01	0.12800E-00	0.15542E 01
165	576.12	0.50250E 02	0.80281E 01	0.28428E-01	0.38495E-01	0.44819E 01	0.39618E 01	0.43000E-01	0.12077E 01
166	574.81	0.44752E 02	0.71216E 01	0.25190E-01	0.34110E-01	0.39758E 01	0.35145E 01	0.85000E-01	0.12511E 01
167	1085.37	-0.36365E-02	-0.73226E-03	-0.46487E-05	-0.62949E-05	-0.40880E-03	-0.36137E-03	0.43000E-01	0.
168	575.29	0.39959E 02	0.64323E 01	0.22761E-01	0.30821E-01	0.35910E 01	0.31743E 01	0.12800E-00	0.13398E 01
169	579.47	0.46577E 02	0.74908E 01	0.26602E-01	0.36022E-01	0.41819E 01	0.36967E 01	0.85000E-01	0.12934E 01
170	577.59	0.42342E 02	0.67701E 01	0.24004E-01	0.32504E-01	0.37796E 01	0.33410E 01	0.12800E-00	0.13061E 01
171	573.77	0.46967E 02	0.74697E 01	0.26398E-01	0.35746E-01	0.41702E 01	0.36863E 01	0.85000E-01	0.12887E 01
172	587.11	0.59640E 02	0.96008E 01	0.34321E-01	0.46474E-01	0.53599E 01	0.47380E 01	0.43000E-01	0.14772E 01
173	576.74	0.41547E 02	0.66720E 01	0.23639E-01	0.32009E-01	0.37248E 01	0.32926E 01	0.12800E-00	0.14555E 01
174	575.87	0.48027E 02	0.76719E 01	0.27161E-01	0.36779E-01	0.42830E 01	0.37860E 01	0.85000E-01	0.13705E 01
175	585.12	0.58673E 02	0.93894E 01	0.33507E-01	0.45372E-01	0.52419E 01	0.46336E 01	0.43000E-01	0.15387E 01
176	582.81	0.53322E 02	0.85224E 01	0.30353E-01	0.41101E-01	0.47579E 01	0.42058E 01	0.43000E-01	0.16926E 01
177	574.22	0.41083E 02	0.65673E 01	0.23218E-01	0.31439E-01	0.36663E 01	0.32409E 01	0.12800E-00	0.18159E 01
178	576.37	0.43175E 02	0.68987E 01	0.24434E-01	0.33087E-01	0.38514E 01	0.34045E 01	0.85000E-01	0.19638E 01
179	586.05	0.54305E 02	0.87230E 01	0.31154E-01	0.42186E-01	0.48698E 01	0.43047E 01	0.70000E-02	0.19147E 01
180	584.49	0.55158E 02	0.88951E 01	0.31726E-01	0.42961E-01	0.49659E 01	0.43897E 01	0.70000E-02	0.26500E 01
181	585.97	0.64796E 02	0.10458E 02	0.37348E-01	0.50573E-01	0.58384E 01	0.51609E 01	0.70000E-02	0.22150E 01
182	577.33	0.54483E 02	0.87800E 01	0.31123E-01	0.42144E-01	0.49017E 01	0.43329E 01	0.70000E-02	0.19960E 01
183	565.01	0.35613E 02	0.56640E 01	0.19868E-01	0.26903E-01	0.31621E 01	0.27952E 01	0.32000E-01	0.15900E 01
184	573.07	0.40485E 02	0.65090E 01	0.22989E-01	0.31130E-01	0.36338E 01	0.32121E 01	0.32000E-01	0.14784E 01
185	559.60	0.34660E 02	0.55313E 01	0.19314E-01	0.26153E-01	0.30880E 01	0.27297E 01	0.64000E-01	0.14201E 01
186	568.44	0.41419E 02	0.66211E 01	0.23293E-01	0.31541E-01	0.36964E 01	0.32675E 01	0.64000E-01	0.14364E 01
187	573.26	0.41014E 02	0.65949E 01	0.23296E-01	0.31546E-01	0.36817E 01	0.32545E 01	0.70000E-02	0.16695E 01
188	575.85	0.44074E 02	0.72100E 01	0.25526E-01	0.34565E-01	0.40252E 01	0.35581E 01	0.70000E-02	0.20013E 01
189	528.13	0.48410E 01	0.78691E 00	0.26767E-02	0.36245E-02	0.43931E-00	0.38834E-00	0.10600E 01	0.15028E 01
190	524.51	0.39974E 01	0.66141E 00	0.22431E-02	0.30374E-02	0.36925E-00	0.32640E-00	0.10840E 01	0.20334E 01
191	522.24	0.36738E 01	0.61037E 00	0.20662E-02	0.27979E-02	0.34076E-00	0.30122E-00	0.11080E 01	0.37234E 01
192	518.25	0.36307E 01	0.59859E 00	0.20197E-02	0.27349E-02	0.33418E-00	0.29540E-00	0.11080E 01	0.31506E 01
193	528.98	0.76420E 01	0.12485E 01	0.42498E-02	0.57548E-02	0.69703E 00	0.61615E 00	0.16580E 01	0.30421E 01
194	529.65	0.59761E 01	0.97225E 00	0.33112E-02	0.44837E-02	0.54278E 00	0.47980E-00	0.11700E 01	0.26994E 01
195	528.80	0.63740E 01	0.10413E 01	0.35438E-02	0.47987E-02	0.58132E 00	0.51386E 00	0.16740E 01	0.25908E 01
196	527.46	0.60306E 01	0.97990E 00	0.33313E-02	0.45109E-02	0.54706E 00	0.48358E-00	0.16950E 01	0.25245E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
84	2	-7.40	142.60	0.02	-0.	2	C57	2.75	2	10.15	939.80	1836.30	25	C55	2.80

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.890741E 02	0.194384E-01	0.469201E 04	0.183093E-04	0.721500E-07	0.119869E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730622E 00	0.435006E 01	0.570546E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	534.98	0.10249E 01	0.16648E-00	0.49815E-03	0.18023E-03	0.38270E-01	0.29179E-01	-0.10600E 01	0.10614E 01
100	535.19	0.47429E-00	0.79381E-01	0.23757E-03	0.85950E-04	0.18248E-01	0.13913E-01	-0.10840E 01	0.95389E 00
101	534.04	0.39585E-00	0.64759E-01	0.19364E-03	0.70060E-04	0.14887E-01	0.11350E-01	-0.11080E 01	0.12242E 01
102	535.26	0.50857E 00	0.83003E-01	0.24842E-03	0.89877E-04	0.19081E-01	0.14548E-01	-0.11080E 01	0.18856E-00
103	535.15	0.66546E 00	0.11137E-00	0.33330E-03	0.12059E-03	0.25603E-01	0.19521E-01	-0.10800E 01	0.11032E 01
104	591.63	0.44857E 02	0.73085E 01	0.22803E-01	0.82502E-02	0.16801E 01	0.12810E 01	0.85000E 00	0.10732E 01
105	608.21	0.57808E 02	0.89891E 01	0.28403E-01	0.10276E-01	0.20664E 01	0.15755E 01	0.94000E 00	0.10389E 01
106	616.68	0.63236E 02	0.97947E 01	0.31150E-01	0.11270E-01	0.22516E 01	0.17167E 01	0.96000E 00	0.10332E 01
107	570.51	0.62706E 02	0.94734E 01	0.29094E-01	0.10526E-01	0.21778E 01	0.16604E 01	0.98000E 00	0.10094E 01
108	601.78	0.63818E 02	0.98563E 01	0.30991E-01	0.11212E-01	0.22658E 01	0.17275E 01	0.10000E 01	0.10150E 01
109	607.55	0.57383E 02	0.89200E 01	0.28170E-01	0.10192E-01	0.20505E 01	0.15634E 01	0.10200E 01	0.10217E 01
110	609.33	0.53363E 02	0.83029E 01	0.26257E-01	0.94998E-02	0.19087E 01	0.14553E 01	0.80000E-01	0.10222E 01
111	600.60	0.56845E 02	0.87295E 01	0.27423E-01	0.99215E-02	0.20068E 01	0.15300E 01	0.10000E-00	0.10296E 01
112	616.06	0.62209E 02	0.96814E 01	0.30775E-01	0.11134E-01	0.22256E 01	0.16969E 01	0.12000E-00	0.10334E 01
113	618.72	0.65953E 02	0.10313E 02	0.32851E-01	0.11886E-01	0.23708E 01	0.18076E 01	0.14000E-00	0.10283E 01
114	593.07	0.51223E 02	0.79006E 01	0.24678E-01	0.89284E-02	0.18162E 01	0.13848E 01	0.80000E-01	0.10396E 01
115	598.02	0.52694E 02	0.81219E 01	0.25464E-01	0.92129E-02	0.18671E 01	0.14235E 01	0.10000E-00	0.10267E 01
116	588.11	0.54849E 02	0.84657E 01	0.26344E-01	0.95312E-02	0.19461E 01	0.14838E 01	0.12000E-00	0.10147E 01
117	590.69	0.58445E 02	0.90030E 01	0.28071E-01	0.10156E-01	0.20696E 01	0.15780E 01	0.14000E-00	0.10105E 01
118	588.53	0.46151E 02	0.71606E 01	0.22290E-01	0.80644E-02	0.16461E 01	0.12550E 01	0.10000E-00	0.10258E 01
119	588.01	0.45994E 02	0.70985E 01	0.22088E-01	0.79913E-02	0.16318E 01	0.12442E 01	0.15000E-00	0.10243E 01
120	575.33	0.46437E 02	0.71295E 01	0.21975E-01	0.79503E-02	0.16389E 01	0.12496E 01	0.20000E-00	0.10115E 01
121	596.38	0.47186E 02	0.73523E 01	0.23023E-01	0.83296E-02	0.16902E 01	0.12886E 01	0.25000E-00	0.10233E 01
122	576.73	0.43143E 02	0.66511E 01	0.20521E-01	0.74245E-02	0.15290E 01	0.11657E 01	0.30000E-00	0.10173E 01
123	589.95	0.46639E 02	0.72781E 01	0.22680E-01	0.82055E-02	0.16731E 01	0.12756E 01	0.35000E-00	0.11167E 01
124	572.18	0.48065E 02	0.74777E 01	0.22994E-01	0.83190E-02	0.17190E 01	0.13106E 01	0.38000E-00	0.10045E 01
125	595.07	0.54472E 02	0.86512E 01	0.27063E-01	0.97914E-02	0.19888E 01	0.15163E 01	0.45000E-00	0.10196E 01
126	587.28	0.49372E 02	0.79103E 01	0.24600E-01	0.89003E-02	0.18184E 01	0.13864E 01	0.61000E 00	0.10240E 01
127	565.23	0.35831E 02	0.56994E 01	0.17435E-01	0.63080E-02	0.13102E 01	0.99893E 00	0.70000E 00	0.10223E 01
128	547.26	0.20115E 02	0.31780E 01	0.95947E-02	0.34713E-02	0.73057E 00	0.55702E 00	0.75000E 00	0.10222E 01
129	569.24	0.35090E 02	0.56118E 01	0.17219E-01	0.62296E-02	0.12901E 01	0.98359E 00	0.70000E 00	0.10063E 01
130	573.46	0.38597E 02	0.61871E 01	0.19043E-01	0.68898E-02	0.14223E 01	0.10844E 01	0.80000E 00	0.10281E 01
131	549.54	0.21969E 02	0.32974E 01	0.99718E-02	0.36078E-02	0.75802E 00	0.57794E 00	0.90000E 00	0.10220E 01
132	560.60	0.46183E 02	0.69980E 01	0.21335E-01	0.77189E-02	0.16087E 01	0.12265E 01	0.90000E 00	0.10206E 01
133	575.30	0.43726E 02	0.66458E 01	0.20483E-01	0.74108E-02	0.15278E 01	0.11648E 01	0.96000E 00	0.10316E 01
134	572.96	0.40755E 02	0.61967E 01	0.19066E-01	0.68979E-02	0.14245E 01	0.10861E 01	0.10000E 01	0.10315E 01
135	573.24	0.36500E 02	0.58033E 01	0.17859E-01	0.64614E-02	0.13341E 01	0.10172E 01	0.70000E-02	0.23462E 01
136	568.48	0.36411E 02	0.56716E 01	0.17392E-01	0.62924E-02	0.13038E 01	0.99407E 00	0.70000E-02	0.
137	563.15	0.32729E 02	0.51583E 01	0.15756E-01	0.57004E-02	0.11858E 01	0.90409E 00	0.39000E-01	0.21161E 01
138	555.42	0.24119E 02	0.37668E 01	0.11440E-01	0.41390E-02	0.86591E 00	0.66020E 00	0.78000E-01	0.15888E 01
139	564.18	0.39647E 02	0.61914E 01	0.18926E-01	0.68473E-02	0.14233E 01	0.10852E 01	0.11700E-00	0.27808E 01
140	572.47	0.46443E 02	0.72621E 01	0.22336E-01	0.80810E-02	0.16694E 01	0.12728E 01	0.78000E-01	0.31928E 01
141	-4157.13	0.51854E-02	-0.15703E-02	-0.11879E-05	-0.42978E-06	-0.36099E-03	-0.27523E-03	-0.	0.
142	-4157.13	0.51854E-02	-0.15703E-02	-0.11879E-05	-0.42978E-06	-0.36099E-03	-0.27523E-03	-0.	0.
143	563.84	0.38350E 02	0.59388E 01	0.18149E-01	0.65664E-02	0.13652E 01	0.10409E 01	0.78000E-01	0.31163E 01
144	547.60	0.20678E 02	0.31787E 01	0.95989E-02	0.34729E-02	0.73071E 00	0.55712E 00	0.70000E-02	0.15704E 01
145	554.95	0.22006E 02	0.33799E 01	0.10262E-01	0.37126E-02	0.77698E 00	0.59240E 00	0.70000E-02	0.16123E 01
146	552.37	0.31008E 02	0.47794E 01	0.14483E-01	0.52400E-02	0.10987E 01	0.83768E 00	0.39000E-01	0.23956E 01
147	556.77	0.24802E 02	0.38259E 01	0.11631E-01	0.42081E-02	0.87949E 00	0.67056E 00	0.78000E-01	0.19068E 01
148	562.78	0.33239E 02	0.51867E 01	0.15838E-01	0.57303E-02	0.11923E 01	0.90908E 00	0.11700E-00	0.27031E 01
149	579.47	0.39404E 02	0.64081E 01	0.19812E-01	0.71680E-02	0.14731E 01	0.11232E 01	0.70000E-02	0.11350E 01
150	570.89	0.29691E 02	0.46287E 01	0.14834E-01	0.53669E-02	0.11100E 01	0.84634E 00	0.70000E-02	0.84623E 00
151	572.46	0.28141E 02	0.45806E 01	0.14088E-01	0.50971E-02	0.10530E 01	0.80284E 00	0.70000E-02	0.78275E 00
152	588.13	0.40256E 02	0.63695E 01	0.19821E-01	0.71713E-02	0.14642E 01	0.11164E 01	0.39000E-01	0.97559E 00

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3937-04
056 056

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	586.10	0.39926E 02	0.63103E 01	0.19607E-01	0.70937E-02	0.14506E 01	0.11060E 01	0.39000E-01	0.98982E 00
154	587.83	0.42580E 02	0.66921E 01	0.20820E-01	0.75328E-02	0.15384E 01	0.11729E 01	0.78000E-01	0.10207E 01
155	570.07	0.38779E 02	0.63040E 01	0.19354E-01	0.70023E-02	0.14492E 01	0.11049E 01	0.39000E-01	0.10078E 01
156	569.81	0.36639E 02	0.59365E 01	0.18222E-01	0.65928E-02	0.13647E 01	0.10405E 01	0.39000E-01	0.10523E 01
157	573.70	0.34446E 02	0.56108E 01	0.17273E-01	0.62491E-02	0.12898E 01	0.98340E 00	0.78000E-01	0.10439E 01
158	558.45	0.38708E 02	0.62719E 01	0.19091E-01	0.69071E-02	0.14418E 01	0.10993E 01	0.39000E-01	0.11375E 01
159	574.47	0.44601E 02	0.72908E 01	0.22457E-01	0.81249E-02	0.16760E 01	0.12779E 01	0.78000E-01	0.14221E 01
160	585.48	0.48729E 02	0.79884E 01	0.24810E-01	0.89761E-02	0.18364E 01	0.14001E 01	0.39000E-01	0.14831E 01
161	561.29	0.28673E 02	0.45290E 01	0.13815E-01	0.49981E-02	0.10411E 01	0.79380E 00	0.43000E-01	0.10159E 01
162	594.01	0.59541E 02	0.96053E 01	0.30024E-01	0.10862E-01	0.22081E 01	0.16835E 01	0.43000E-01	0.10256E 01
163	579.29	0.44629E 02	0.71538E 01	0.22115E-01	0.80010E-02	0.16445E 01	0.12538E 01	0.85000E-01	0.10089E 01
164	573.16	0.39851E 02	0.63359E 01	0.19497E-01	0.70539E-02	0.14565E 01	0.11105E 01	0.12800E-00	0.10205E 01
165	603.21	0.72051E 02	0.11681E 02	0.36768E-01	0.13303E-01	0.26853E 01	0.20474E 01	0.43000E-01	0.10141E 01
166	594.08	0.61258E 02	0.98508E 01	0.30793E-01	0.11141E-01	0.22645E 01	0.17266E 01	0.85000E-01	0.10088E 01
167	1085.37	-0.36365E-02	-0.73226E-03	-0.36728E-05	-0.13288E-05	-0.16833E-03	-0.12834E-03	0.43000E-01	0.
168	584.85	0.50076E 02	0.81031E 01	0.25154E-01	0.91006E-02	0.18627E 01	0.14202E 01	0.12800E-00	0.10186E 01
169	600.16	0.59699E 02	0.97093E 01	0.30491E-01	0.11031E-01	0.22320E 01	0.17018E 01	0.85000E-01	0.10655E 01
170	591.77	0.54021E 02	0.87042E 01	0.27161E-01	0.98268E-02	0.20009E 01	0.15256E 01	0.12800E-00	0.10439E 01
171	594.50	0.61524E 02	0.98959E 01	0.30944E-01	0.11195E-01	0.22749E 01	0.17345E 01	0.85000E-01	0.10785E 01
172	1085.37	-0.36365E-02	-0.73580E-03	-0.36906E-05	-0.13352E-05	-0.16915E-03	-0.12896E-03	0.43000E-01	0.
173	587.27	0.43529E 02	0.70303E 01	0.21864E-01	0.79102E-02	0.16161E 01	0.12322E 01	0.12800E-00	0.10382E 01
174	599.50	0.58114E 02	0.94029E 01	0.29514E-01	0.10678E-01	0.21615E 01	0.16480E 01	0.85000E-01	0.10390E 01
175	616.74	0.62326E 02	0.10145E 02	0.32266E-01	0.11674E-01	0.23321E 01	0.17781E 01	0.43000E-01	0.10755E 01
176	600.12	0.48412E 02	0.78105E 01	0.24527E-01	0.88738E-02	0.17955E 01	0.13690E 01	0.43000E-01	0.10422E 01
177	571.91	0.35475E 02	0.56636E 01	0.17412E-01	0.62996E-02	0.13020E 01	0.99267E 00	0.12800E-00	0.10302E 01
178	569.45	0.30529E 02	0.48596E 01	0.14913E-01	0.53954E-02	0.11171E 01	0.85175E 00	0.85000E-01	0.10299E 01
179	590.10	0.43126E 02	0.69424E 01	0.21636E-01	0.78279E-02	0.15959E 01	0.12168E 01	0.70000E-02	0.11414E 01
180	582.09	0.43199E 02	0.69574E 01	0.21553E-01	0.77977E-02	0.15994E 01	0.12194E 01	0.70000E-02	0.14513E 01
181	597.13	0.45829E 02	0.74414E 01	0.23315E-01	0.84353E-02	0.17106E 01	0.13043E 01	0.70000E-02	0.14508E 01
182	579.68	0.36759E 02	0.59314E 01	0.18341E-01	0.66358E-02	0.13635E 01	0.10396E 01	0.70000E-02	0.11669E 01
183	572.82	0.33824E 02	0.54027E 01	0.16621E-01	0.60134E-02	0.12420E 01	0.94693E 00	0.32000E-01	0.10195E 01
184	585.32	0.43615E 02	0.70593E 01	0.21921E-01	0.79311E-02	0.16228E 01	0.12373E 01	0.32000E-01	0.10221E 01
185	574.73	0.41118E 02	0.66169E 01	0.20385E-01	0.73754E-02	0.15211E 01	0.11597E 01	0.64000E-01	0.10223E 01
186	583.43	0.45951E 02	0.74061E 01	0.22966E-01	0.83089E-02	0.17025E 01	0.12981E 01	0.64000E-01	0.10204E 01
187	574.44	0.34890E 02	0.56137E 01	0.17291E-01	0.62558E-02	0.12905E 01	0.98391E 00	0.70000E-02	0.10152E 01
188	570.45	0.33605E 02	0.54812E 01	0.16833E-01	0.60901E-02	0.12600E 01	0.96070E 00	0.70000E-02	0.10887E 01
189	532.88	0.65590E 01	0.10690E 01	0.31940E-02	0.11556E-02	0.24575E-00	0.18737E-00	0.10600E 01	0.10273E 01
190	528.54	0.42177E 01	0.69945E 00	0.20833E-02	0.75372E-03	0.16079E-00	0.12259E-00	0.10840E 01	0.10802E 01
191	525.22	0.20452E 01	0.34037E-00	0.10114E-02	0.36591E-03	0.78245E-01	0.59657E-01	0.11080E 01	0.10395E 01
192	520.27	0.22036E 01	0.36373E-00	0.10770E-02	0.38964E-03	0.83616E-01	0.63752E-01	0.11080E 01	0.10040E 01
193	520.20	0.47205E 01	0.76739E 00	0.22720E-02	0.82201E-03	0.17641E-00	0.13450E-00	0.16580E 01	0.11815E 01
194	521.09	0.38956E 01	0.63070E 00	0.18685E-02	0.67601E-03	0.14499E-00	0.11054E-00	0.11700E 01	0.10482E 01
195	520.85	0.43813E 01	0.71251E 00	0.21105E-02	0.76358E-03	0.16379E-00	0.12488E-00	0.16740E 01	0.99449E 00
196	519.54	0.42701E 01	0.69072E 00	0.20441E-02	0.73953E-03	0.15878E-00	0.12106E-00	0.16950E 01	0.93004E 00

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
85	2	3.43	~~153.43~~ 147.0	0.02	-0.	2	C57	2.70	2	10.15	934.50	1841.00	26	C55	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.893254E 02	0.193232E-01	0.469845E 04	0.181495E-04	0.723536E-07	0.118652E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730766E 00	0.433739E 01	0.568118E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	540.22	0.12613E 01	0.20548E-00	0.61469E-03	0.22404E-03	0.47373E-01	0.36168E-01	-0.10600E 01	0.98500E 00
100	540.67	0.60104E 00	0.10091E-00	0.30196E-03	0.11006E-03	0.23264E-01	0.17761E-01	-0.10840E 01	0.97422E 00
101	539.00	0.49558E-00	0.81302E-01	0.24300E-03	0.88571E-04	0.18745E-01	0.14311E-01	-0.11080E 01	0.11391E 01
102	539.96	0.55585E 00	0.90958E-01	0.27205E-03	0.99159E-04	0.20971E-01	0.16010E-01	-0.11080E 01	0.89017E-01
103	540.07	0.77663E 00	0.13034E-00	0.38987E-03	0.14210E-03	0.30050E-01	0.22942E-01	-0.10800E 01	0.97225E 00
104	593.45	0.45282E 02	0.73850E 01	0.22977E-01	0.83746E-02	0.17026E 01	0.12999E 01	0.85000E 00	0.10438E 01
105	607.52	0.54590E 02	0.84856E 01	0.26684E-01	0.97259E-02	0.19564E 01	0.14936E 01	0.94000E 00	0.10131E 01
106	614.09	0.59158E 02	0.91505E 01	0.28920E-01	0.10541E-01	0.21097E 01	0.16107E 01	0.96000E 00	0.10157E 01
107	566.93	0.58218E 02	0.87780E 01	0.26777E-01	0.97596E-02	0.20238E 01	0.15451E 01	0.98000E 00	0.99881E 00
108	596.38	0.58185E 02	0.89603E 01	0.27940E-01	0.10184E-01	0.20658E 01	0.15772E 01	0.10000E 01	0.10135E 01
109	599.64	0.51198E 02	0.79248E 01	0.24772E-01	0.90289E-02	0.18271E 01	0.13949E 01	0.10200E 01	0.10386E 01
110	608.68	0.50589E 02	0.78685E 01	0.24766E-01	0.90266E-02	0.18141E 01	0.13850E 01	0.80000E-01	0.10006E 01
111	599.57	0.53545E 02	0.82183E 01	0.25688E-01	0.93628E-02	0.18947E 01	0.14466E 01	0.10000E-00	0.10071E 01
112	613.06	0.58234E 02	0.90483E 01	0.28574E-01	0.10415E-01	0.20861E 01	0.15927E 01	0.12000E-00	0.10160E 01
113	614.03	0.60843E 02	0.94905E 01	0.29993E-01	0.10932E-01	0.21881E 01	0.16705E 01	0.14000E-00	0.10171E 01
114	593.00	0.48748E 02	0.75186E 01	0.23385E-01	0.85233E-02	0.17334E 01	0.13234E 01	0.80000E-01	0.10166E 01
115	597.68	0.50066E 02	0.77155E 01	0.24082E-01	0.87775E-02	0.17788E 01	0.13581E 01	0.10000E-00	0.10102E 01
116	587.27	0.51978E 02	0.80189E 01	0.24834E-01	0.90514E-02	0.18488E 01	0.14115E 01	0.12000E-00	0.99930E 00
117	589.00	0.55202E 02	0.84956E 01	0.26344E-01	0.96020E-02	0.19587E 01	0.14954E 01	0.14000E-00	0.99318E 00
118	588.66	0.44501E 02	0.69050E 01	0.21406E-01	0.78022E-02	0.15920E 01	0.12154E 01	0.10000E-00	0.10089E 01
119	587.35	0.43922E 02	0.67763E 01	0.20987E-01	0.76493E-02	0.15623E 01	0.11928E 01	0.15000E-00	0.10059E 01
120	572.94	0.44564E 02	0.68329E 01	0.20936E-01	0.76308E-02	0.15754E 01	0.12027E 01	0.20000E-00	0.99534E 00
121	594.54	0.45423E 02	0.70705E 01	0.22017E-01	0.80246E-02	0.16301E 01	0.12446E 01	0.25000E-00	0.10053E 01
122	574.70	0.42254E 02	0.65066E 01	0.19962E-01	0.72759E-02	0.15001E 01	0.11453E 01	0.30000E-00	0.10233E 01
123	587.80	0.45298E 02	0.70606E 01	0.21875E-01	0.79729E-02	0.16278E 01	0.12428E 01	0.35000E-00	0.11234E 01
124	569.87	0.46496E 02	0.72243E 01	0.22085E-01	0.80496E-02	0.16656E 01	0.12716E 01	0.38000E-00	0.10221E 01
125	592.23	0.51931E 02	0.82351E 01	0.25598E-01	0.93302E-02	0.18986E 01	0.14495E 01	0.45000E-00	0.10442E 01
126	587.51	0.47698E 02	0.76430E 01	0.23674E-01	0.86287E-02	0.17621E 01	0.13453E 01	0.61000E 00	0.10344E 01
127	562.19	0.32145E 02	0.51046E 01	0.15517E-01	0.56557E-02	0.11769E 01	0.89851E 00	0.70000E 00	0.10461E 01
128	544.61	0.17237E 02	0.27193E 01	0.81607E-02	0.29744E-02	0.62695E 00	0.47865E-00	0.75000E 00	0.10571E 01
129	571.61	0.34348E 02	0.55003E 01	0.16836E-01	0.61366E-02	0.12681E 01	0.96817E 00	0.70000E 00	0.10346E 01
130	574.95	0.35748E 02	0.57350E 01	0.17598E-01	0.64143E-02	0.13222E 01	0.10095E 01	0.80000E 00	0.10662E 01
131	549.77	0.18455E 02	0.27702E 01	0.83448E-02	0.30415E-02	0.63869E 00	0.48762E-00	0.90000E 00	0.10167E 01
132	559.22	0.41444E 02	0.62750E 01	0.19033E-01	0.69373E-02	0.14467E 01	0.11045E 01	0.90000E 00	0.99774E 00
133	575.56	0.39821E 02	0.60531E 01	0.18583E-01	0.67731E-02	0.13956E 01	0.10655E 01	0.96000E 00	0.10066E 01
134	573.97	0.37746E 02	0.57425E 01	0.17608E-01	0.64179E-02	0.13240E 01	0.10108E 01	0.10000E 01	0.10073E 01
135	581.46	0.41454E 02	0.66207E 01	0.20415E-01	0.74408E-02	0.15264E 01	0.11654E 01	0.70000E-02	0.23901E 01
136	574.28	0.38585E 02	0.60295E 01	0.18493E-01	0.67403E-02	0.13901E 01	0.10613E 01	0.70000E-02	0.
137	571.14	0.34584E 02	0.54747E 01	0.16752E-01	0.61058E-02	0.12622E 01	0.96365E 00	0.39000E-01	0.19973E 01
138	563.58	0.27816E 02	0.43637E 01	0.13278E-01	0.48397E-02	0.10061E 01	0.76809E 00	0.78000E-01	0.16358E 01
139	570.17	0.42594E 02	0.66737E 01	0.20406E-01	0.74377E-02	0.15386E 01	0.11747E 01	0.11700E-00	0.26204E 01
140	577.71	0.49391E 02	0.77453E 01	0.23816E-01	0.86804E-02	0.17857E 01	0.13633E 01	0.78000E-01	0.29876E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23753E-05	-0.86577E-06	-0.72468E-03	-0.55327E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23753E-05	-0.86577E-06	-0.72468E-03	-0.55327E-03	-0.	0.
143	570.03	0.41313E 02	0.64195E 01	0.19627E-01	0.71537E-02	0.14800E 01	0.11300E 01	0.78000E-01	0.28939E 01
144	553.24	0.22432E 02	0.34592E 01	0.10447E-01	0.38076E-02	0.79753E 00	0.60889E 00	0.70000E-02	0.14979E 01
145	561.84	0.24504E 02	0.37780E 01	0.11481E-01	0.41847E-02	0.87103E 00	0.66500E 00	0.70000E-02	0.15849E 01
146	561.17	0.35111E 02	0.54382E 01	0.16518E-01	0.60207E-02	0.12538E 01	0.95722E 00	0.39000E-01	0.23417E 01
147	566.22	0.29540E 02	0.45806E 01	0.13965E-01	0.50901E-02	0.10561E 01	0.80628E 00	0.78000E-01	0.19581E 01
148	569.02	0.36109E 02	0.56539E 01	0.17273E-01	0.62959E-02	0.13035E 01	0.99521E 00	0.11700E-00	0.25289E 01
149	571.35	0.32354E 02	0.52384E 01	0.16031E-01	0.58431E-02	0.12077E 01	0.92205E 00	0.70000E-02	0.95703E 00
150	568.61	0.27413E 02	0.44528E 01	0.13600E-01	0.49568E-02	0.10266E 01	0.78378E 00	0.70000E-02	0.80032E 00
151	568.98	0.25711E 02	0.41770E 01	0.12761E-01	0.46511E-02	0.96303E 00	0.73524E 00	0.70000E-02	0.75407E 00
152	588.83	0.38944E 02	0.61642E 01	0.19112E-01	0.69661E-02	0.14212E 01	0.10850E 01	0.39000E-01	0.10063E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	586.02	0.39123E 02	0.61831E 01	0.19130E-01	0.69726E-02	0.14255E 01	0.10883E 01	0.39000E-01	0.10199E 01
154	586.89	0.41058E 02	0.64496E 01	0.19968E-01	0.72779E-02	0.14870E 01	0.11353E 01	0.78000E-01	0.10327E 01
155	568.69	0.38795E 02	0.63017E 01	0.19248E-01	0.70155E-02	0.14529E 01	0.11092E 01	0.39000E-01	0.10387E 01
156	574.68	0.45262E 02	0.73532E 01	0.22559E-01	0.82224E-02	0.16953E 01	0.12943E 01	0.39000E-01	0.13130E 01
157	573.49	0.38753E 02	0.63116E 01	0.19347E-01	0.70515E-02	0.14552E 01	0.11110E 01	0.78000E-01	0.11673E 01
158	566.80	0.51541E 02	0.83897E 01	0.25590E-01	0.93270E-02	0.19343E 01	0.14768E 01	0.39000E-01	0.15088E 01
159	567.34	0.39863E 02	0.64908E 01	0.19805E-01	0.72187E-02	0.14965E 01	0.11425E 01	0.78000E-01	0.12300E 01
160	582.12	0.45805E 02	0.74953E 01	0.23123E-01	0.84279E-02	0.17281E 01	0.13193E 01	0.39000E-01	0.13870E 01
161	561.76	0.27423E 02	0.43328E 01	0.13167E-01	0.47990E-02	0.99893E 00	0.76265E 00	0.43000E-01	0.10147E 01
162	578.71	0.44884E 02	0.71808E 01	0.22096E-01	0.80537E-02	0.16556E 01	0.12640E 01	0.43000E-01	0.11512E 01
163	569.43	0.34799E 02	0.55481E 01	0.16955E-01	0.61799E-02	0.12791E 01	0.97657E 00	0.85000E-01	0.11074E 01
164	566.75	0.32491E 02	0.51475E 01	0.15700E-01	0.57224E-02	0.11868E 01	0.90607E 00	0.12800E-00	0.11073E 01
165	592.50	0.60303E 02	0.97203E 01	0.30221E-01	0.11015E-01	0.22411E 01	0.17110E 01	0.43000E-01	0.10936E 01
166	587.81	0.54746E 02	0.87739E 01	0.27183E-01	0.99076E-02	0.20228E 01	0.15444E 01	0.85000E-01	0.10605E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.31274E-05	-0.11399E-05	-0.14473E-03	-0.11049E-03	0.43000E-01	0.
168	583.64	0.47541E 02	0.76877E 01	0.23744E-01	0.86541E-02	0.17724E 01	0.13532E 01	0.12800E-00	0.10540E 01
169	600.71	0.58105E 02	0.94529E 01	0.29573E-01	0.10779E-01	0.21794E 01	0.16639E 01	0.85000E-01	0.10228E 01
170	591.24	0.50575E 02	0.81467E 01	0.25305E-01	0.92230E-02	0.18782E 01	0.14340E 01	0.12800E-00	0.10136E 01
171	594.10	0.57602E 02	0.92630E 01	0.28834E-01	0.10510E-01	0.21356E 01	0.16305E 01	0.85000E-01	0.10409E 01
172	1085.37	-0.31174E-02	-0.63077E-03	-0.31425E-05	-0.11454E-05	-0.14543E-03	-0.11103E-03	0.43000E-01	0.
173	600.65	0.55109E 02	0.89651E 01	0.28045E-01	0.10222E-01	0.20669E 01	0.15780E 01	0.12800E-00	0.10506E 01
174	605.86	0.64074E 02	0.10403E 02	0.32671E-01	0.11908E-01	0.23983E 01	0.18311E 01	0.85000E-01	0.10899E 01
175	625.95	0.68976E 02	0.11282E 02	0.35984E-01	0.13115E-01	0.26011E 01	0.19859E 01	0.43000E-01	0.11387E 01
176	612.98	0.57224E 02	0.92958E 01	0.29354E-01	0.10699E-01	0.21432E 01	0.16363E 01	0.43000E-01	0.10638E 01
177	573.66	0.32990E 02	0.52718E 01	0.16162E-01	0.58906E-02	0.12154E 01	0.92795E 00	0.12800E-00	0.10496E 01
178	575.97	0.33289E 02	0.53179E 01	0.16331E-01	0.59522E-02	0.12261E 01	0.93606E 00	0.85000E-01	0.98631E 00
179	591.84	0.42374E 02	0.68278E 01	0.21218E-01	0.77335E-02	0.15742E 01	0.12018E 01	0.70000E-02	0.11446E 01
180	581.86	0.41029E 02	0.66072E 01	0.20379E-01	0.74278E-02	0.15233E 01	0.11630E 01	0.70000E-02	0.14544E 01
181	594.40	0.43183E 02	0.70014E 01	0.21799E-01	0.79454E-02	0.16142E 01	0.12324E 01	0.70000E-02	0.14156E 01
182	579.12	0.35749E 02	0.57666E 01	0.17750E-01	0.64696E-02	0.13295E 01	0.10150E 01	0.70000E-02	0.11466E 01
183	575.62	0.33304E 02	0.53278E 01	0.16357E-01	0.59618E-02	0.12284E 01	0.93781E 00	0.32000E-01	0.10333E 01
184	586.90	0.42173E 02	0.68318E 01	0.21151E-01	0.77093E-02	0.15751E 01	0.12025E 01	0.32000E-01	0.10306E 01
185	574.69	0.38716E 02	0.62301E 01	0.19114E-01	0.69667E-02	0.14364E 01	0.10966E 01	0.64000E-01	0.10371E 01
186	584.07	0.44080E 02	0.71071E 01	0.21957E-01	0.80030E-02	0.16386E 01	0.12510E 01	0.64000E-01	0.10300E 01
187	577.91	0.34825E 02	0.56140E 01	0.17265E-01	0.62927E-02	0.12943E 01	0.98817E 00	0.70000E-02	0.10240E 01
188	573.84	0.33702E 02	0.55073E 01	0.16886E-01	0.61545E-02	0.12697E 01	0.96939E 00	0.70000E-02	0.10978E 01
189	535.02	0.63320E 01	0.10333E 01	0.30795E-02	0.11224E-02	0.23823E-00	0.18188E-00	0.10600E 01	0.10414E 01
190	530.92	0.39314E 01	0.65287E 00	0.19401E-02	0.70711E-03	0.15052E-00	0.11492E-00	0.10840E 01	0.10548E 01
191	527.29	0.19273E 01	0.32113E-00	0.95178E-03	0.34691E-03	0.74037E-01	0.56525E-01	0.11080E 01	0.10359E 01
192	522.54	0.21455E 01	0.35459E-00	0.10474E-02	0.38176E-03	0.81752E-01	0.62415E-01	0.11080E 01	0.10678E 01
193	516.26	0.41725E 01	0.67677E 00	0.19902E-02	0.72538E-03	0.15603E-00	0.11913E-00	0.16580E 01	0.11912E 01
194	517.07	0.30914E 01	0.49935E-00	0.14693E-02	0.53553E-03	0.11513E-00	0.87896E-01	0.11700E 01	0.10864E 01
195	515.94	0.34327E 01	0.55669E 00	0.16367E-02	0.59653E-03	0.12835E-00	0.97988E-01	0.16740E 01	0.11255E 01
196	513.13	0.33079E 01	0.53306E 00	0.15641E-02	0.57008E-03	0.12290E-00	0.93829E-01	0.16950E 01	0.11107E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
86	2	-5.41	147.22	-59.14	-4.64	2	C57	2.70	2	10.14	919.30	1843.00	86	C57	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.894493E 02	0.190106E-01	0.470118E 04	0.178312E-04	0.724539E-07	0.116477E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730836E 00	0.430033E 01	0.561040E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	536.71	0.11740E 01	0.19088E-00	0.56856E-03	0.21081E-03	0.44387E-01	0.34023E-01	-0.10600E 01	0.10000E 01
100	536.70	0.59377E 00	0.99462E-01	0.29626E-03	0.10984E-03	0.23129E-01	0.17728E-01	-0.10840E 01	0.10000E 01
101	535.55	0.47688E-00	0.78083E-01	0.23239E-03	0.86162E-04	0.18157E-01	0.13917E-01	-0.11080E 01	0.10000E 01
102	536.71	0.47429E-00	0.77470E-01	0.23076E-03	0.85558E-04	0.18015E-01	0.13808E-01	-0.11080E 01	0.10000E 01
103	536.80	0.75896E 00	0.12714E-00	0.37873E-03	0.14042E-03	0.29566E-01	0.22662E-01	-0.10800E 01	0.10000E 01
104	591.66	0.42887E 02	0.69876E 01	0.21671E-01	0.80349E-02	0.16249E 01	0.12455E 01	0.85000E 00	0.10000E 01
105	603.48	0.54218E 02	0.84096E 01	0.26314E-01	0.97566E-02	0.19556E 01	0.14989E 01	0.94000E 00	0.10000E 01
106	609.39	0.58889E 02	0.90861E 01	0.28559E-01	0.10589E-01	0.21129E 01	0.16195E 01	0.96000E 00	0.10000E 01
107	562.69	0.57802E 02	0.86949E 01	0.26392E-01	0.97855E-02	0.20219E 01	0.15498E 01	0.98000E 00	0.10000E 01
108	591.62	0.57460E 02	0.88260E 01	0.27371E-01	0.10149E-01	0.20524E 01	0.15731E 01	0.10000E 01	0.10000E 01
109	595.77	0.49961E 02	0.77172E 01	0.24008E-01	0.89013E-02	0.17946E 01	0.13755E 01	0.10200E 01	0.10000E 01
110	606.25	0.50217E 02	0.78005E 01	0.24460E-01	0.90691E-02	0.18139E 01	0.13904E 01	0.80000E-01	0.10000E 01
111	596.79	0.53456E 02	0.81922E 01	0.25505E-01	0.94564E-02	0.19050E 01	0.14602E 01	0.10000E-00	0.10000E 01
112	610.37	0.58241E 02	0.90365E 01	0.28425E-01	0.10539E-01	0.21013E 01	0.16107E 01	0.12000E-00	0.10000E 01
113	610.62	0.60739E 02	0.94570E 01	0.29753E-01	0.11032E-01	0.21991E 01	0.16856E 01	0.14000E-00	0.10000E 01
114	592.51	0.48565E 02	0.74884E 01	0.23239E-01	0.86163E-02	0.17414E 01	0.13347E 01	0.80000E-01	0.10000E 01
115	597.84	0.50572E 02	0.77941E 01	0.24285E-01	0.90041E-02	0.18124E 01	0.13892E 01	0.10000E-00	0.10000E 01
116	587.40	0.52886E 02	0.81595E 01	0.25225E-01	0.93526E-02	0.18974E 01	0.14543E 01	0.12000E-00	0.10000E 01
117	590.44	0.56615E 02	0.87199E 01	0.27019E-01	0.10018E-01	0.20277E 01	0.15542E 01	0.14000E-00	0.10000E 01
118	592.36	0.45672E 02	0.71009E 01	0.22034E-01	0.81696E-02	0.16513E 01	0.12657E 01	0.10000E-00	0.10000E 01
119	593.03	0.45932E 02	0.71083E 01	0.22068E-01	0.81822E-02	0.16530E 01	0.12670E 01	0.15000E-00	0.10000E 01
120	580.06	0.46685E 02	0.71861E 01	0.22094E-01	0.81918E-02	0.16710E 01	0.12808E 01	0.20000E-00	0.10000E 01
121	602.88	0.47538E 02	0.74331E 01	0.23248E-01	0.86198E-02	0.17285E 01	0.13249E 01	0.25000E-00	0.10000E 01
122	584.77	0.43340E 02	0.67108E 01	0.20705E-01	0.76769E-02	0.15605E 01	0.11961E 01	0.30000E-00	0.10000E 01
123	599.15	0.45569E 02	0.71465E 01	0.22289E-01	0.82641E-02	0.16618E 01	0.12738E 01	0.35000E-00	0.10000E 01
124	581.48	0.46773E 02	0.73137E 01	0.22510E-01	0.83461E-02	0.17007E 01	0.13036E 01	0.38000E-00	0.10000E 01
125	606.06	0.52361E 02	0.83651E 01	0.26226E-01	0.97240E-02	0.19452E 01	0.14910E 01	0.45000E-00	0.10000E 01
126	603.64	0.49712E 02	0.80353E 01	0.25146E-01	0.93235E-02	0.18685E 01	0.14322E 01	0.61000E 00	0.10000E 01
127	578.20	0.36170E 02	0.57945E 01	0.17791E-01	0.65964E-02	0.13475E 01	0.10328E 01	0.70000E 00	0.10000E 01
128	556.64	0.20388E 02	0.32380E 01	0.97850E-02	0.36280E-02	0.75296E 00	0.57714E 00	0.75000E 00	0.10000E 01
129	584.91	0.36251E 02	0.58474E 01	0.18043E-01	0.66899E-02	0.13598E 01	0.10422E 01	0.70000E 00	0.10000E 01
130	588.68	0.39198E 02	0.63357E 01	0.19605E-01	0.72691E-02	0.14733E 01	0.11293E 01	0.80000E 00	0.10000E 01
131	561.78	0.22998E 02	0.34754E 01	0.10542E-01	0.39088E-02	0.80818E 00	0.61946E 00	0.90000E 00	0.10000E 01
132	570.44	0.41086E 02	0.62595E 01	0.19108E-01	0.70849E-02	0.14556E 01	0.11157E 01	0.90000E 00	0.10000E 01
133	588.11	0.40706E 02	0.62302E 01	0.19270E-01	0.71450E-02	0.14488E 01	0.11105E 01	0.96000E 00	0.10000E 01
134	587.07	0.39159E 02	0.60001E 01	0.18544E-01	0.68757E-02	0.13953E 01	0.10695E 01	0.10000E 01	0.10000E 01
135	592.39	0.42780E 02	0.68731E 01	0.21328E-01	0.79077E-02	0.15983E 01	0.12251E 01	0.70000E-02	0.10000E 01
136	586.59	0.40022E 02	0.62961E 01	0.19452E-01	0.72124E-02	0.14641E 01	0.11222E 01	0.70000E-02	0.10000E 01
137	570.46	0.31331E 02	0.49579E 01	0.15135E-01	0.56117E-02	0.11529E 01	0.88369E 00	0.39000E-01	0.10000E 01
138	561.93	0.24141E 02	0.37838E 01	0.11479E-01	0.42560E-02	0.87988E 00	0.67442E 00	0.78000E-01	0.10000E 01
139	581.29	0.46082E 02	0.72642E 01	0.22355E-01	0.82885E-02	0.16892E 01	0.12948E 01	0.11700E-00	0.10000E 01
140	593.27	0.54821E 02	0.86698E 01	0.26920E-01	0.99813E-02	0.20161E 01	0.15453E 01	0.78000E-01	0.10000E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23743E-05	-0.88031E-06	-0.73093E-03	-0.56025E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23743E-05	-0.88031E-06	-0.73093E-03	-0.56025E-03	-0.	0.
143	565.17	0.35229E 02	0.54596E 01	0.16602E-01	0.61556E-02	0.12696E 01	0.97312E 00	0.78000E-01	0.10000E 01
144	552.00	0.21762E 02	0.33535E 01	0.10100E-01	0.37448E-02	0.77983E 00	0.59773E 00	0.70000E-02	0.10000E 01
145	559.33	0.23938E 02	0.36856E 01	0.11160E-01	0.41377E-02	0.85706E 00	0.65693E 00	0.70000E-02	0.10000E 01
146	561.47	0.42531E 02	0.65886E 01	0.19581E-01	0.74083E-02	0.15321E 01	0.11744E 01	0.39000E-01	0.10000E 01
147	567.41	0.36851E 02	0.57180E 01	0.17417E-01	0.64576E-02	0.13297E 01	0.10192E 01	0.78000E-01	0.10000E 01
148	564.79	0.32220E 02	0.50334E 01	0.15302E-01	0.56734E-02	0.11705E 01	0.89715E 00	0.11700E-00	0.10000E 01
149	575.37	0.34797E 02	0.54463E 01	0.17300E-01	0.64142E-02	0.13130E 01	0.10064E 01	0.70000E-02	0.10000E 01
150	577.16	0.31163E 02	0.50856E 01	0.15602E-01	0.57849E-02	0.11826E 01	0.90646E 00	0.70000E-02	0.10000E 01
151	578.95	0.29740E 02	0.48581E 01	0.14924E-01	0.55335E-02	0.11297E 01	0.86592E 00	0.70000E-02	0.10000E 01
152	586.53	0.40966E 02	0.64762E 01	0.20008E-01	0.74183E-02	0.15060E 01	0.11543E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	584.82	0.40645E 02	0.64195E 01	0.19807E-01	0.73440E-02	0.14928E 01	0.11442E 01	0.39000E-01	0.10000E 01
154	584.89	0.41772E 02	0.65547E 01	0.20225E-01	0.74990E-02	0.15242E 01	0.11683E 01	0.78000E-01	0.10000E 01
155	569.19	0.39301E 02	0.63857E 01	0.19476E-01	0.72211E-02	0.14849E 01	0.11382E 01	0.39000E-01	0.10000E 01
156	589.25	0.53449E 02	0.87525E 01	0.27095E-01	0.10046E-01	0.20353E 01	0.15600E 01	0.39000E-01	0.10000E 01
157	587.09	0.46875E 02	0.76912E 01	0.23771E-01	0.88137E-02	0.17885E 01	0.13709E 01	0.78000E-01	0.10000E 01
158	571.89	0.52410E 02	0.85552E 01	0.26145E-01	0.96937E-02	0.19894E 01	0.15249E 01	0.39000E-01	0.10000E 01
159	572.54	0.42913E 02	0.70075E 01	0.21425E-01	0.79438E-02	0.16295E 01	0.12490E 01	0.78000E-01	0.10000E 01
160	586.52	0.53204E 02	0.87269E 01	0.26961E-01	0.99964E-02	0.20294E 01	0.15555E 01	0.39000E-01	0.10000E 01
161	576.10	0.29653E 02	0.47221E 01	0.14476E-01	0.53672E-02	0.10981E 01	0.84167E 00	0.43000E-01	0.10000E 01
162	601.82	0.49109E 02	0.79557E 01	0.24863E-01	0.92185E-02	0.18500E 01	0.14180E 01	0.43000E-01	0.10000E 01
163	587.53	0.38075E 02	0.61306E 01	0.18954E-01	0.70277E-02	0.14256E 01	0.10927E 01	0.85000E-01	0.10000E 01
164	582.89	0.34883E 02	0.55756E 01	0.17179E-01	0.63694E-02	0.12966E 01	0.99380E 00	0.12800E-00	0.10000E 01
165	611.75	0.60089E 02	0.97864E 01	0.30816E-01	0.11426E-01	0.22757E 01	0.17443E 01	0.43000E-01	0.10000E 01
166	603.08	0.53732E 02	0.86826E 01	0.27161E-01	0.10070E-01	0.20191E 01	0.15476E 01	0.85000E-01	0.10000E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.31180E-05	-0.11561E-05	-0.14597E-03	-0.11189E-03	0.43000E-01	0.
168	597.34	0.45962E 02	0.74876E 01	0.23321E-01	0.86468E-02	0.17412E 01	0.13346E 01	0.12800E-00	0.10000E 01
169	609.17	0.53365E 02	0.87212E 01	0.27408E-01	0.10162E-01	0.20280E 01	0.15545E 01	0.85000E-01	0.10000E 01
170	601.04	0.47666E 02	0.77188E 01	0.24108E-01	0.89387E-02	0.17949E 01	0.13758E 01	0.12800E-00	0.10000E 01
171	602.10	0.54123E 02	0.87411E 01	0.27323E-01	0.10131E-01	0.20327E 01	0.15580E 01	0.85000E-01	0.10000E 01
172	1085.37	-0.31174E-02	-0.63077E-03	-0.31331E-05	-0.11617E-05	-0.14668E-03	-0.11243E-03	0.43000E-01	0.
173	608.02	0.49799E 02	0.81335E 01	0.25538E-01	0.94689E-02	0.18914E 01	0.14497E 01	0.12800E-00	0.10000E 01
174	615.24	0.59301E 02	0.96759E 01	0.30549E-01	0.11327E-01	0.22500E 01	0.17246E 01	0.85000E-01	0.10000E 01
175	631.59	0.63053E 02	0.10344E 02	0.33073E-01	0.12263E-01	0.24054E 01	0.18437E 01	0.43000E-01	0.10000E 01
176	617.97	0.52737E 02	0.85896E 01	0.27177E-01	0.10076E-01	0.19974E 01	0.15310E 01	0.43000E-01	0.10000E 01
177	586.46	0.36142E 02	0.58161E 01	0.17967E-01	0.66618E-02	0.13525E 01	0.10367E 01	0.12800E-00	0.10000E 01
178	584.19	0.34092E 02	0.54707E 01	0.16872E-01	0.62556E-02	0.12722E 01	0.97510E 00	0.85000E-01	0.10000E 01
179	598.52	0.41559E 02	0.67208E 01	0.20951E-01	0.77681E-02	0.15629E 01	0.11979E 01	0.70000E-02	0.10000E 01
180	589.74	0.39700E 02	0.64205E 01	0.19883E-01	0.73722E-02	0.14930E 01	0.11444E 01	0.70000E-02	0.10000E 01
181	598.79	0.39684E 02	0.64494E 01	0.20109E-01	0.74559E-02	0.14997E 01	0.11495E 01	0.70000E-02	0.10000E 01
182	583.75	0.32884E 02	0.53178E 01	0.16395E-01	0.60788E-02	0.12366E 01	0.94785E 00	0.70000E-02	0.10000E 01
183	588.66	0.34953E 02	0.56314E 01	0.17425E-01	0.64609E-02	0.13095E 01	0.10037E 01	0.32000E-01	0.10000E 01
184	602.41	0.44735E 02	0.73076E 01	0.22848E-01	0.84713E-02	0.16993E 01	0.13025E 01	0.32000E-01	0.10000E 01
185	590.85	0.42484E 02	0.68969E 01	0.21376E-01	0.79258E-02	0.16038E 01	0.12293E 01	0.64000E-01	0.10000E 01
186	600.23	0.46811E 02	0.76136E 01	0.23765E-01	0.88115E-02	0.17705E 01	0.13571E 01	0.64000E-01	0.10000E 01
187	590.23	0.36096E 02	0.58579E 01	0.18148E-01	0.67287E-02	0.13622E 01	0.10441E 01	0.70000E-02	0.10000E 01
188	583.52	0.34383E 02	0.56483E 01	0.17411E-01	0.64555E-02	0.13135E 01	0.10068E 01	0.70000E-02	0.10000E 01
189	532.76	0.43075E 01	0.70202E 00	0.20851E-02	0.77311E-03	0.16325E-00	0.12513E-00	0.10600E 01	0.10000E 01
190	529.84	0.25413E 01	0.42176E-00	0.12501E-02	0.46350E-03	0.98076E-01	0.75174E-01	0.10840E 01	0.10000E 01
191	527.65	0.12681E 01	0.21133E-00	0.62540E-03	0.23188E-03	0.49142E-01	0.37667E-01	0.11080E 01	0.10000E 01
192	522.60	0.13564E 01	0.22418E-00	0.66104E-03	0.24510E-03	0.52131E-01	0.39958E-01	0.11080E 01	0.10000E 01
193	524.11	0.47330E 01	0.77113E 00	0.22763E-02	0.84399E-03	0.17932E-00	0.13745E-00	0.16580E 01	0.10000E 01
194	524.37	0.38452E 01	0.62370E 00	0.18414E-02	0.68276E-03	0.14504E-00	0.11117E-00	0.11700E 01	0.10000E 01
195	524.14	0.38296E 01	0.62396E 00	0.18419E-02	0.68293E-03	0.14510E-00	0.11121E-00	0.16740E 01	0.10000E 01
196	523.42	0.36629E 01	0.59381E 00	0.17520E-02	0.64959E-03	0.13808E-00	0.10584E-00	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
87	2	-5.41	145.14	26.09	2.38	2	C57	2.75	2	10.15	938.80	1831.50	87	C57	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.888196E 02	0.194275E-01	0.468527E 04	0.183514E-04	0.719439E-07	0.120316E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730475E 00	0.434765E 01	0.570084E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	537.07	0.12925E 01	0.21018E-00	0.63251E-03	0.22864E-03	0.48343E-01	0.36868E-01	-0.10600E 01	0.10000E 01
100	536.97	0.53611E 00	0.89817E-01	0.27027E-03	0.97700E-04	0.20659E-01	0.15755E-01	-0.10840E 01	0.10000E 01
101	535.91	0.42286E-00	0.69251E-01	0.20823E-03	0.75272E-04	0.15928E-01	0.12148E-01	-0.11080E 01	0.10000E 01
102	537.14	0.44831E-00	0.73246E-01	0.22044E-03	0.79684E-04	0.16847E-01	0.12848E-01	-0.11080E 01	0.10000E 01
103	537.24	0.75585E 00	0.12665E-00	0.38119E-03	0.13779E-03	0.29131E-01	0.22216E-01	-0.10800E 01	0.10000E 01
104	589.85	0.42628E 02	0.69385E 01	0.21714E-01	0.78494E-02	0.15959E 01	0.12171E 01	0.85000E 00	0.10000E 01
105	601.84	0.53449E 02	0.82830E 01	0.26160E-01	0.94563E-02	0.19052E 01	0.14529E 01	0.94000E 00	0.10000E 01
106	607.76	0.58292E 02	0.89862E 01	0.28510E-01	0.10306E-01	0.20669E 01	0.15763E 01	0.96000E 00	0.10000E 01
107	560.42	0.57305E 02	0.86094E 01	0.26356E-01	0.95274E-02	0.19802E 01	0.15102E 01	0.98000E 00	0.10000E 01
108	589.34	0.56750E 02	0.87061E 01	0.27235E-01	0.98452E-02	0.20025E 01	0.15272E 01	0.10000E 01	0.10000E 01
109	593.31	0.49517E 02	0.76385E 01	0.23968E-01	0.86640E-02	0.17569E 01	0.13399E 01	0.10200E 01	0.10000E 01
110	602.75	0.48968E 02	0.75924E 01	0.23995E-01	0.86739E-02	0.17463E 01	0.13318E 01	0.80000E-01	0.10000E 01
111	592.79	0.52022E 02	0.79553E 01	0.24952E-01	0.90198E-02	0.18298E 01	0.13955E 01	0.10000E-00	0.10000E 01
112	606.02	0.56531E 02	0.87508E 01	0.27726E-01	0.10022E-01	0.20128E 01	0.15350E 01	0.12000E-00	0.10000E 01
113	606.19	0.58983E 02	0.91620E 01	0.29032E-01	0.10495E-01	0.21073E 01	0.16071E 01	0.14000E-00	0.10000E 01
114	587.04	0.46622E 02	0.71676E 01	0.22384E-01	0.80913E-02	0.16486E 01	0.12573E 01	0.80000E-01	0.10000E 01
115	591.15	0.48257E 02	0.74105E 01	0.23214E-01	0.83916E-02	0.17045E 01	0.12999E 01	0.10000E-00	0.10000E 01
116	579.72	0.50192E 02	0.77115E 01	0.23950E-01	0.86575E-02	0.17737E 01	0.13527E 01	0.12000E-00	0.10000E 01
117	581.44	0.53275E 02	0.81655E 01	0.25392E-01	0.91790E-02	0.18781E 01	0.14323E 01	0.14000E-00	0.10000E 01
118	584.02	0.43022E 02	0.66588E 01	0.20748E-01	0.74999E-02	0.15316E 01	0.11680E 01	0.10000E-00	0.10000E 01
119	583.36	0.43093E 02	0.66341E 01	0.20660E-01	0.74683E-02	0.15259E 01	0.11637E 01	0.15000E-00	0.10000E 01
120	566.89	0.43651E 02	0.66708E 01	0.20520E-01	0.74177E-02	0.15344E 01	0.11702E 01	0.20000E-00	0.10000E 01
121	588.73	0.44682E 02	0.69334E 01	0.21680E-01	0.78370E-02	0.15947E 01	0.12162E 01	0.25000E-00	0.10000E 01
122	569.13	0.41143E 02	0.63164E 01	0.19462E-01	0.70352E-02	0.14528E 01	0.11080E 01	0.30000E-00	0.10000E 01
123	580.66	0.43550E 02	0.67618E 01	0.21015E-01	0.75966E-02	0.15553E 01	0.11861E 01	0.35000E-00	0.10000E 01
124	561.93	0.44432E 02	0.68735E 01	0.21066E-01	0.76149E-02	0.15810E 01	0.12057E 01	0.38000E-00	0.10000E 01
125	581.23	0.48905E 02	0.77091E 01	0.23969E-01	0.86645E-02	0.17732E 01	0.13523E 01	0.45000E-00	0.10000E 01
126	575.62	0.43460E 02	0.69190E 01	0.21422E-01	0.77439E-02	0.15914E 01	0.12137E 01	0.61000E 00	0.10000E 01
127	551.19	0.26244E 02	0.41420E 01	0.12594E-01	0.45526E-02	0.95271E 00	0.72657E 00	0.70000E 00	0.10000E 01
128	537.42	0.13180E 02	0.20709E 01	0.62337E-02	0.22534E-02	0.47632E-00	0.36326E-00	0.75000E 00	0.10000E 01
129	562.82	0.28413E 02	0.45280E 01	0.13886E-01	0.50197E-02	0.10415E 01	0.79426E 00	0.70000E 00	0.10000E 01
130	564.50	0.29948E 02	0.47769E 01	0.14668E-01	0.53023E-02	0.10987E 01	0.83794E 00	0.80000E 00	0.10000E 01
131	542.65	0.15676E 02	0.23438E 01	0.70820E-02	0.25600E-02	0.53909E 00	0.41113E-00	0.90000E 00	0.10000E 01
132	552.84	0.40725E 02	0.61444E 01	0.18705E-01	0.67616E-02	0.14133E 01	0.10778E 01	0.90000E 00	0.10000E 01
133	567.83	0.37522E 02	0.56796E 01	0.17483E-01	0.63199E-02	0.13064E 01	0.99627E 00	0.96000E 00	0.10000E 01
134	565.39	0.34582E 02	0.52364E 01	0.16089E-01	0.58161E-02	0.12044E 01	0.91853E 00	0.10000E 01	0.10000E 01
135	578.59	0.41752E 02	0.66579E 01	0.20660E-01	0.74683E-02	0.15314E 01	0.11679E 01	0.70000E-02	0.10000E 01
136	571.76	0.38115E 02	0.59479E 01	0.18363E-01	0.66378E-02	0.13681E 01	0.10433E 01	0.70000E-02	0.10000E 01
137	566.93	0.38776E 02	0.61240E 01	0.18838E-01	0.68098E-02	0.14086E 01	0.10742E 01	0.39000E-01	0.10000E 01
138	561.24	0.34756E 02	0.54455E 01	0.16681E-01	0.60298E-02	0.12525E 01	0.95521E 00	0.78000E-01	0.10000E 01
139	564.69	0.38318E 02	0.59857E 01	0.18382E-01	0.66449E-02	0.13768E 01	0.10500E 01	0.11700E-00	0.10000E 01
140	571.06	0.42486E 02	0.66383E 01	0.20483E-01	0.74044E-02	0.15269E 01	0.11644E 01	0.78000E-01	0.10000E 01
141	-4157.13	0.51854E-02	-0.15703E-02	-0.11892E-05	-0.42987E-06	-0.36119E-03	-0.27546E-03	-0.	0.
142	-4157.13	0.51854E-02	-0.15703E-02	-0.11892E-05	-0.42987E-06	-0.36119E-03	-0.27546E-03	-0.	0.
143	580.67	0.45261E 02	0.70742E 01	0.21986E-01	0.79476E-02	0.16271E 01	0.12409E 01	0.78000E-01	0.10000E 01
144	556.51	0.23577E 02	0.36424E 01	0.11118E-01	0.40191E-02	0.83778E 00	0.63892E 00	0.70000E-02	0.10000E 01
145	567.11	0.26265E 02	0.40613E 01	0.12495E-01	0.45167E-02	0.93414E 00	0.71241E 00	0.70000E-02	0.10000E 01
146	561.31	0.32629E 02	0.50542E 01	0.15483E-01	0.55968E-02	0.11625E 01	0.88657E 00	0.39000E-01	0.10000E 01
147	565.81	0.26900E 02	0.41702E 01	0.12818E-01	0.46334E-02	0.95919E 00	0.73151E 00	0.78000E-01	0.10000E 01
148	577.88	0.39714E 02	0.62487E 01	0.19380E-01	0.70056E-02	0.14373E 01	0.10961E 01	0.11700E-00	0.10000E 01
149	581.82	0.36563E 02	0.59538E 01	0.18520E-01	0.66947E-02	0.13694E 01	0.10444E 01	0.70000E-02	0.10000E 01
150	577.68	0.32664E 02	0.53321E 01	0.16535E-01	0.59771E-02	0.12264E 01	0.93532E 00	0.70000E-02	0.10000E 01
151	571.39	0.27024E 02	0.43963E 01	0.13569E-01	0.49049E-02	0.10112E 01	0.77117E 00	0.70000E-02	0.10000E 01
152	593.18	0.41639E 02	0.66063E 01	0.20727E-01	0.74926E-02	0.15195E 01	0.11588E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	592.65	0.41416E 02	0.65691E 01	0.20602E-01	0.74472E-02	0.15109E 01	0.11523E 01	0.39000E-01	0.10000E 01
154	593.83	0.43318E 02	0.68302E 01	0.21440E-01	0.77502E-02	0.15710E 01	0.11981E 01	0.78000E-01	0.10000E 01
155	576.97	0.40832E 02	0.66628E 01	0.20650E-01	0.74647E-02	0.15325E 01	0.11687E 01	0.39000E-01	0.10000E 01
156	577.61	0.40198E 02	0.65410E 01	0.20282E-01	0.73317E-02	0.15045E 01	0.11474E 01	0.39000E-01	0.10000E 01
157	580.79	0.37602E 02	0.61485E 01	0.19111E-01	0.69082E-02	0.14142E 01	0.10785E 01	0.78000E-01	0.10000E 01
158	565.70	0.41450E 02	0.67431E 01	0.20724E-01	0.74914E-02	0.15510E 01	0.11828E 01	0.39000E-01	0.10000E 01
159	575.13	0.40739E 02	0.66618E 01	0.20619E-01	0.74533E-02	0.15323E 01	0.11686E 01	0.78000E-01	0.10000E 01
160	585.39	0.44174E 02	0.72413E 01	0.22586E-01	0.81644E-02	0.16656E 01	0.12702E 01	0.39000E-01	0.10000E 01
161	559.33	0.25563E 02	0.40333E 01	0.12337E-01	0.44598E-02	0.92770E 00	0.70750E 00	0.43000E-01	0.10000E 01
162	566.52	0.33344E 02	0.52991E 01	0.16296E-01	0.58907E-02	0.12188E 01	0.92953E 00	0.43000E-01	0.10000E 01
163	561.43	0.27422E 02	0.43527E 01	0.13335E-01	0.48204E-02	0.10012E 01	0.76352E 00	0.85000E-01	0.10000E 01
164	559.39	0.25687E 02	0.40531E 01	0.12398E-01	0.44818E-02	0.93224E 00	0.71096E 00	0.12800E-00	0.10000E 01
165	579.33	0.49009E 02	0.78434E 01	0.24352E-01	0.88030E-02	0.18041E 01	0.13758E 01	0.43000E-01	0.10000E 01
166	578.94	0.48426E 02	0.77237E 01	0.23974E-01	0.86661E-02	0.17765E 01	0.13548E 01	0.85000E-01	0.10000E 01
167	1085.37	-0.36365E-02	-0.73226E-03	-0.36986E-05	-0.13370E-05	-0.16843E-03	-0.12845E-03	0.43000E-01	0.
168	575.21	0.42086E 02	0.67743E 01	0.20968E-01	0.75797E-02	0.15582E 01	0.11883E 01	0.12800E-00	0.10000E 01
169	598.02	0.60501E 02	0.98284E 01	0.30950E-01	0.11188E-01	0.22606E 01	0.17240E 01	0.85000E-01	0.10000E 01
170	588.78	0.52798E 02	0.84934E 01	0.26559E-01	0.96006E-02	0.19536E 01	0.14898E 01	0.12800E-00	0.10000E 01
171	590.29	0.61558E 02	0.98788E 01	0.30927E-01	0.11180E-01	0.22722E 01	0.17329E 01	0.85000E-01	0.10000E 01
172	1085.37	-0.36365E-02	-0.73580E-03	-0.37165E-05	-0.13435E-05	-0.16924E-03	-0.12907E-03	0.43000E-01	0.
173	593.78	0.55699E 02	0.90276E 01	0.28337E-01	0.10243E-01	0.20764E 01	0.15836E 01	0.12800E-00	0.10000E 01
174	598.98	0.65711E 02	0.10629E 02	0.33496E-01	0.12108E-01	0.24448E 01	0.18645E 01	0.85000E-01	0.10000E 01
175	620.38	0.73486E 02	0.11985E 02	0.38395E-01	0.13879E-01	0.27566E 01	0.21022E 01	0.43000E-01	0.10000E 01
176	608.57	0.62792E 02	0.10176E 02	0.32306E-01	0.11678E-01	0.23407E 01	0.17851E 01	0.43000E-01	0.10000E 01
177	565.23	0.30169E 02	0.47988E 01	0.14743E-01	0.53295E-02	0.11038E 01	0.84178E 00	0.12800E-00	0.10000E 01
178	576.11	0.37483E 02	0.59883E 01	0.18548E-01	0.67047E-02	0.13774E 01	0.10504E 01	0.85000E-01	0.10000E 01
179	591.80	0.44568E 02	0.71813E 01	0.22507E-01	0.81361E-02	0.16518E 01	0.12597E 01	0.70000E-02	0.10000E 01
180	580.20	0.42719E 02	0.68730E 01	0.21353E-01	0.77189E-02	0.15809E 01	0.12056E 01	0.70000E-02	0.10000E 01
181	596.40	0.46466E 02	0.75418E 01	0.23720E-01	0.85744E-02	0.17347E 01	0.13229E 01	0.70000E-02	0.10000E 01
182	582.95	0.38257E 02	0.61841E 01	0.19253E-01	0.69597E-02	0.14224E 01	0.10848E 01	0.70000E-02	0.10000E 01
183	566.70	0.28438E 02	0.45272E 01	0.13924E-01	0.50334E-02	0.10413E 01	0.79413E 00	0.32000E-01	0.10000E 01
184	574.01	0.37158E 02	0.59773E 01	0.18484E-01	0.66819E-02	0.13748E 01	0.10485E 01	0.32000E-01	0.10000E 01
185	562.34	0.32772E 02	0.52379E 01	0.16058E-01	0.58047E-02	0.12048E 01	0.91880E 00	0.64000E-01	0.10000E 01
186	571.71	0.38821E 02	0.62170E 01	0.19193E-01	0.69379E-02	0.14300E 01	0.10905E 01	0.64000E-01	0.10000E 01
187	569.42	0.32013E 02	0.51366E 01	0.15830E-01	0.57225E-02	0.11815E 01	0.90103E 00	0.70000E-02	0.10000E 01
188	569.00	0.32705E 02	0.53302E 01	0.16422E-01	0.59363E-02	0.12260E 01	0.93499E 00	0.70000E-02	0.10000E 01
189	537.06	0.82940E 01	0.13550E 01	0.40777E-02	0.14740E-02	0.31167E-00	0.23769E-00	0.10600E 01	0.10000E 01
190	531.63	0.53823E 01	0.89417E 00	0.26803E-02	0.96889E-03	0.20567E-00	0.15685E-00	0.10840E 01	0.10000E 01
191	527.33	0.28073E 01	0.46776E-00	0.13978E-02	0.50529E-03	0.10759E-00	0.82052E-01	0.11080E 01	0.10000E 01
192	522.45	0.31449E 01	0.51975E 00	0.15477E-02	0.55947E-03	0.11955E-00	0.91171E-01	0.11080E 01	0.10000E 01
193	517.06	0.32597E 01	0.52897E 00	0.15691E-02	0.56720E-03	0.12167E-00	0.92788E-01	0.16580E 01	0.10000E 01
194	518.65	0.37034E 01	0.59874E 00	0.17781E-02	0.64275E-03	0.13772E-00	0.10503E-00	0.11700E 01	0.10000E 01
195	519.77	0.49959E 01	0.81195E 00	0.24132E-02	0.87233E-03	0.18676E-00	0.14243E-00	0.16740E 01	0.10000E 01
196	520.75	0.55797E 01	0.90319E 00	0.26862E-02	0.97103E-03	0.20774E-00	0.15843E-00	0.16950E 01	0.10000E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
88	2	3.63	153.63	-0.03	-0.	2	C57	2.70	2	10.15	937.30	1830.80	27	C55	2.85

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.887845E 02	0.193984E-01	0.468429E 04	0.183312E-04	0.719155E-07	0.120206E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730455E 00	0.434403E 01	0.569390E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	541.17	0.18836E 01	0.30702E-00	0.92726E-03	0.33563E-03	0.70677E-01	0.53921E-01	-0.10600E 01	0.98278E 00
100	540.60	0.96987E 00	0.16282E-00	0.49154E-03	0.17792E-03	0.37481E-01	0.28596E-01	-0.10840E 01	0.95963E 00
101	539.70	0.66805E 00	0.10964E-00	0.33078E-03	0.11973E-03	0.25239E-01	0.19256E-01	-0.11080E 01	0.10396E 01
102	540.59	0.66494E 00	0.10885E-00	0.32860E-03	0.11894E-03	0.25057E-01	0.19117E-01	-0.11080E 01	0.10739E-00
103	540.93	0.11486E 01	0.19286E-00	0.58236E-03	0.21079E-03	0.44396E-01	0.33871E-01	-0.10800E 01	0.94753E 00
104	596.82	0.44315E 02	0.72404E 01	0.22794E-01	0.82504E-02	0.16667E 01	0.12716E 01	0.85000E 00	0.10301E 01
105	606.17	0.50556E 02	0.78529E 01	0.24899E-01	0.90126E-02	0.18077E 01	0.13792E 01	0.94000E 00	0.10677E 01
106	610.06	0.52815E 02	0.81518E 01	0.25925E-01	0.93837E-02	0.18766E 01	0.14317E 01	0.96000E 00	0.10733E 01
107	561.52	0.50599E 02	0.76066E 01	0.23320E-01	0.84408E-02	0.17511E 01	0.13359E 01	0.98000E 00	0.10508E 01
108	586.28	0.47639E 02	0.72964E 01	0.22787E-01	0.82479E-02	0.16796E 01	0.12814E 01	0.10000E 01	0.10599E 01
109	587.93	0.39232E 02	0.60343E 01	0.18869E-01	0.68298E-02	0.13891E 01	0.10598E 01	0.10200E 01	0.10677E 01
110	608.15	0.47616E 02	0.74041E 01	0.23512E-01	0.85104E-02	0.17044E 01	0.13003E 01	0.80000E-01	0.10320E 01
111	598.05	0.49712E 02	0.76236E 01	0.24023E-01	0.86952E-02	0.17550E 01	0.13389E 01	0.10000E-00	0.10488E 01
112	609.32	0.52098E 02	0.80788E 01	0.25678E-01	0.92943E-02	0.18598E 01	0.14189E 01	0.12000E-00	0.10677E 01
113	607.04	0.52013E 02	0.80830E 01	0.25646E-01	0.92828E-02	0.18607E 01	0.14196E 01	0.14000E-00	0.10692E 01
114	594.32	0.46515E 02	0.71794E 01	0.22559E-01	0.81653E-02	0.16527E 01	0.12609E 01	0.80000E-01	0.10272E 01
115	598.08	0.47499E 02	0.73214E 01	0.23071E-01	0.83507E-02	0.16854E 01	0.12858E 01	0.10000E-00	0.10443E 01
116	586.27	0.48849E 02	0.75320E 01	0.23522E-01	0.85142E-02	0.17339E 01	0.13228E 01	0.12000E-00	0.10382E 01
117	587.17	0.50637E 02	0.77854E 01	0.24330E-01	0.88067E-02	0.17922E 01	0.13673E 01	0.14000E-00	0.10379E 01
118	592.37	0.44556E 02	0.69276E 01	0.21735E-01	0.78672E-02	0.15947E 01	0.12167E 01	0.10000E-00	0.10159E 01
119	591.70	0.43978E 02	0.68010E 01	0.21327E-01	0.77195E-02	0.15656E 01	0.11944E 01	0.15000E-00	0.10263E 01
120	574.82	0.43693E 02	0.67063E 01	0.20764E-01	0.75158E-02	0.15438E 01	0.11778E 01	0.20000E-00	0.10302E 01
121	597.78	0.43490E 02	0.67815E 01	0.21364E-01	0.77331E-02	0.15611E 01	0.11910E 01	0.25000E-00	0.10231E 01
122	578.98	0.39952E 02	0.61667E 01	0.19153E-01	0.69326E-02	0.14196E 01	0.10830E 01	0.30000E-00	0.10046E 01
123	591.08	0.41281E 02	0.64459E 01	0.20204E-01	0.73131E-02	0.14839E 01	0.11321E 01	0.35000E-00	0.10857E 01
124	572.55	0.41939E 02	0.65259E 01	0.20171E-01	0.73013E-02	0.15023E 01	0.11461E 01	0.38000E-00	0.99588E 00
125	592.58	0.44821E 02	0.71088E 01	0.22307E-01	0.80744E-02	0.16365E 01	0.12485E 01	0.45000E-00	0.10173E 01
126	589.00	0.42438E 02	0.68058E 01	0.21298E-01	0.77092E-02	0.15667E 01	0.11953E 01	0.61000E 00	0.10251E 01
127	559.74	0.25554E 02	0.40524E 01	0.12407E-01	0.44909E-02	0.93288E 00	0.71172E 00	0.70000E 00	0.10373E 01
128	542.96	0.12556E 02	0.19790E 01	0.59848E-02	0.21663E-02	0.45557E-00	0.34757E-00	0.75000E 00	0.10498E 01
129	577.13	0.33299E 02	0.53486E 01	0.16589E-01	0.60046E-02	0.12312E 01	0.93935E 00	0.70000E 00	0.97083E 00
130	588.61	0.43652E 02	0.70554E 01	0.22073E-01	0.79896E-02	0.16242E 01	0.12391E 01	0.80000E 00	0.99421E 00
131	552.62	0.19603E 02	0.29473E 01	0.89764E-02	0.32491E-02	0.67848E 00	0.51763E 00	0.90000E 00	0.10634E 01
132	557.23	0.35517E 02	0.53718E 01	0.16416E-01	0.59420E-02	0.12366E 01	0.94343E 00	0.90000E 00	0.10525E 01
133	574.71	0.35215E 02	0.53504E 01	0.16565E-01	0.59958E-02	0.12317E 01	0.93968E 00	0.96000E 00	0.10578E 01
134	573.10	0.33554E 02	0.51023E 01	0.15778E-01	0.57109E-02	0.11746E 01	0.89610E 00	0.10000E 01	0.10522E 01
135	583.79	0.42919E 02	0.68634E 01	0.21394E-01	0.77439E-02	0.15800E 01	0.12054E 01	0.70000E-02	0.22056E 01
136	572.22	0.33766E 02	0.52704E 01	0.16287E-01	0.58951E-02	0.12133E 01	0.92563E 00	0.70000E-02	0.
137	579.71	0.37940E 02	0.60341E 01	0.18752E-01	0.67873E-02	0.13891E 01	0.10598E 01	0.39000E-01	0.19189E 01
138	576.83	0.40132E 02	0.63419E 01	0.19666E-01	0.71182E-02	0.14599E 01	0.11138E 01	0.78000E-01	0.20693E 01
139	571.43	0.42586E 02	0.66770E 01	0.20621E-01	0.74640E-02	0.15371E 01	0.11727E 01	0.11700E-00	0.22571E 01
140	578.78	0.50117E 02	0.78638E 01	0.24420E-01	0.88392E-02	0.18102E 01	0.13811E 01	0.78000E-01	0.26235E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23806E-05	-0.86170E-06	-0.72358E-03	-0.55204E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23806E-05	-0.86170E-06	-0.72358E-03	-0.55204E-03	-0.	0.
143	573.07	0.42499E 02	0.66149E 01	0.20454E-01	0.74036E-02	0.15227E 01	0.11617E 01	0.78000E-01	0.24557E 01
144	555.14	0.20697E 02	0.31950E 01	0.97489E-02	0.35287E-02	0.73549E 00	0.56113E 00	0.70000E-02	0.11620E 01
145	568.05	0.27246E 02	0.42151E 01	0.12985E-01	0.47001E-02	0.97033E 00	0.74029E 00	0.70000E-02	0.15139E 01
146	570.67	0.40383E 02	0.62877E 01	0.19408E-01	0.70248E-02	0.14474E 01	0.11043E 01	0.39000E-01	0.22581E 01
147	578.79	0.38589E 02	0.60251E 01	0.18711E-01	0.67725E-02	0.13870E 01	0.10582E 01	0.78000E-01	0.21470E 01
148	573.06	0.38379E 02	0.60228E 01	0.18624E-01	0.67410E-02	0.13865E 01	0.10578E 01	0.11700E-00	0.22146E 01
149	571.45	0.26676E 02	0.43193E 01	0.13340E-01	0.48285E-02	0.99431E 00	0.75858E 00	0.70000E-02	0.73906E 00
150	572.75	0.26318E 02	0.42846E 01	0.13246E-01	0.47944E-02	0.98633E 00	0.75250E 00	0.70000E-02	0.71640E 00
151	574.02	0.25313E 02	0.41239E 01	0.12761E-01	0.46189E-02	0.94932E 00	0.72426E 00	0.70000E-02	0.70006E 00
152	596.29	0.41313E 02	0.65656E 01	0.20661E-01	0.74785E-02	0.15114E 01	0.11531E 01	0.39000E-01	0.10618E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	601.98	0.46284E 02	0.73782E 01	0.23319E-01	0.84406E-02	0.16985E 01	0.12958E 01	0.39000E-01	0.12182E 01
154	597.16	0.44260E 02	0.69912E 01	0.22015E-01	0.79685E-02	0.16094E 01	0.12278E 01	0.78000E-01	0.11630E 01
155	582.61	0.44063E 02	0.72122E 01	0.22462E-01	0.81302E-02	0.16603E 01	0.12667E 01	0.39000E-01	0.12019E 01
156	587.53	0.49732E 02	0.81362E 01	0.25434E-01	0.92059E-02	0.18730E 01	0.14289E 01	0.39000E-01	0.14753E 01
157	581.39	0.38017E 02	0.62185E 01	0.19349E-01	0.70035E-02	0.14315E 01	0.10921E 01	0.78000E-01	0.11910E 01
158	569.99	0.46545E 02	0.75899E 01	0.23415E-01	0.84754E-02	0.17472E 01	0.13330E 01	0.39000E-01	0.13874E 01
159	570.12	0.31882E 02	0.51992E 01	0.16041E-01	0.58063E-02	0.11968E 01	0.91311E 00	0.78000E-01	0.98844E 00
160	575.23	0.33443E 02	0.54518E 01	0.16885E-01	0.61118E-02	0.12550E 01	0.95749E 00	0.39000E-01	0.99100E 00
161	570.92	0.28545E 02	0.45328E 01	0.13994E-01	0.50651E-02	0.10434E 01	0.79608E 00	0.43000E-01	0.10169E 01
162	574.53	0.29440E 02	0.46993E 01	0.14547E-01	0.52654E-02	0.10818E 01	0.82532E 00	0.43000E-01	0.10348E 01
163	572.53	0.29071E 02	0.46427E 01	0.14350E-01	0.51942E-02	0.10688E 01	0.81538E 00	0.85000E-01	0.10172E 01
164	570.59	0.28983E 02	0.46015E 01	0.14202E-01	0.51406E-02	0.10593E 01	0.80814E 00	0.12800E-00	0.10133E 01
165	575.76	0.34418E 02	0.54975E 01	0.17034E-01	0.61655E-02	0.12655E 01	0.96551E 00	0.43000E-01	0.10647E 01
166	576.95	0.35029E 02	0.55808E 01	0.17307E-01	0.62644E-02	0.12847E 01	0.98014E 00	0.85000E-01	0.11041E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.31739E-05	-0.11488E-05	-0.14451E-03	-0.11025E-03	0.43000E-01	0.
168	575.91	0.33736E 02	0.54323E 01	0.16833E-01	0.60930E-02	0.12505E 01	0.95406E 00	0.12800E-00	0.11052E 01
169	592.51	0.47025E 02	0.76166E 01	0.23899E-01	0.86506E-02	0.17533E 01	0.13377E 01	0.85000E-01	0.10606E 01
170	586.94	0.42806E 02	0.68791E 01	0.21495E-01	0.77802E-02	0.15836E 01	0.12082E 01	0.12800E-00	0.10573E 01
171	592.10	0.51501E 02	0.82730E 01	0.25951E-01	0.93933E-02	0.19045E 01	0.14530E 01	0.85000E-01	0.10605E 01
172	1085.37	-0.31174E-02	-0.63077E-03	-0.31892E-05	-0.11544E-05	-0.14520E-03	-0.11078E-03	0.43000E-01	0.
173	597.11	0.49168E 02	0.79834E 01	0.25138E-01	0.90991E-02	0.18378E 01	0.14021E 01	0.12800E-00	0.10166E 01
174	603.42	0.58410E 02	0.94706E 01	0.29965E-01	0.10846E-01	0.21801E 01	0.16633E 01	0.85000E-01	0.10392E 01
175	636.66	0.71805E 02	0.11811E 02	0.38349E-01	0.13881E-01	0.27189E 01	0.20744E 01	0.43000E-01	0.12512E 01
176	629.11	0.66705E 02	0.10929E 02	0.35275E-01	0.12768E-01	0.25158E 01	0.19194E 01	0.43000E-01	0.11679E 01
177	592.79	0.44998E 02	0.72661E 01	0.22804E-01	0.82543E-02	0.16727E 01	0.12761E 01	0.12800E-00	0.10035E 01
178	604.42	0.52206E 02	0.84693E 01	0.26818E-01	0.97069E-02	0.19496E 01	0.14874E 01	0.85000E-01	0.10327E 01
179	602.50	0.46884E 02	0.75981E 01	0.24024E-01	0.86957E-02	0.17491E 01	0.13344E 01	0.70000E-02	0.11031E 01
180	587.50	0.39641E 02	0.64032E 01	0.20016E-01	0.72449E-02	0.14740E 01	0.11246E 01	0.70000E-02	0.12557E 01
181	596.02	0.39793E 02	0.64575E 01	0.20317E-01	0.73538E-02	0.14865E 01	0.11341E 01	0.70000E-02	0.13875E 01
182	583.78	0.34060E 02	0.55082E 01	0.17170E-01	0.62148E-02	0.12680E 01	0.96739E 00	0.70000E-02	0.11242E 01
183	578.71	0.30769E 02	0.49306E 01	0.15311E-01	0.55419E-02	0.11350E 01	0.86595E 00	0.32000E-01	0.10240E 01
184	586.97	0.37466E 02	0.60696E 01	0.18965E-01	0.68647E-02	0.13972E 01	0.10660E 01	0.32000E-01	0.10503E 01
185	573.13	0.32743E 02	0.52645E 01	0.16279E-01	0.58924E-02	0.12119E 01	0.92458E 00	0.64000E-01	0.10525E 01
186	584.82	0.39443E 02	0.63620E 01	0.19847E-01	0.71837E-02	0.14645E 01	0.11173E 01	0.64000E-01	0.10323E 01
187	582.57	0.33297E 02	0.53812E 01	0.16759E-01	0.60660E-02	0.12388E 01	0.94508E 00	0.70000E-02	0.10262E 01
188	584.00	0.36909E 02	0.60648E 01	0.18908E-01	0.68439E-02	0.13961E 01	0.10651E 01	0.70000E-02	0.10986E 01
189	538.08	0.60608E 01	0.99073E 00	0.29855E-02	0.10806E-02	0.22807E-00	0.17400E-00	0.10600E 01	0.96628E 00
190	533.78	0.37029E 01	0.61590E 00	0.18502E-02	0.66969E-03	0.14178E-00	0.10817E-00	0.10840E 01	0.10036E 01
191	530.10	0.17849E 01	0.29788E-00	0.89247E-03	0.32304E-03	0.68573E-01	0.52316E-01	0.11080E 01	0.10251E 01
192	525.71	0.20748E 01	0.34353E-00	0.10260E-02	0.37136E-03	0.79082E-01	0.60333E-01	0.11080E 01	0.97563E 00
193	520.93	0.32068E 01	0.52152E 00	0.15522E-02	0.56184E-03	0.12006E-00	0.91593E-01	0.16580E 01	0.11753E 01
194	521.97	0.24764E 01	0.40113E-00	0.11948E-02	0.43245E-03	0.92339E-01	0.70448E-01	0.11700E 01	0.10644E 01
195	520.91	0.25132E 01	0.40873E-00	0.12165E-02	0.44032E-03	0.94090E-01	0.71784E-01	0.16740E 01	0.11098E 01
196	518.13	0.21345E 01	0.34500E-00	0.10248E-02	0.37092E-03	0.79420E-01	0.60591E-01	0.16950E 01	0.99452E 00

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087 087

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
89	2	6.62	154.13	51.47	-5.17	2	C57	2.70	2	10.15	936.50	1826.10	89	C57	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.885391E 02	0.193921E-01	0.467779E 04	0.183760E-04	0.717167E-07	0.120666E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730313E 00	0.434222E 01	0.569043E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	542.34	0.18894E 01	0.30816E-00	0.93527E-03	0.33817E-03	0.70967E-01	0.54153E-01	-0.10600E 01	0.10000E 01
100	542.10	0.10135E 01	0.17029E-00	0.51675E-03	0.18685E-03	0.39217E-01	0.29926E-01	-0.10840E 01	0.10000E 01
101	541.09	0.94130E 00	0.15460E-00	0.46880E-03	0.16951E-03	0.35605E-01	0.27169E-01	-0.11080E 01	0.10000E 01
102	541.94	0.96052E 00	0.15735E-00	0.47744E-03	0.17263E-03	0.36238E-01	0.27652E-01	-0.11080E 01	0.10000E 01
103	542.07	0.12083E 01	0.20302E-00	0.61605E-03	0.22275E-03	0.46754E-01	0.35677E-01	-0.10800E 01	0.10000E 01
104	589.13	0.38372E 02	0.62435E 01	0.19623E-01	0.70952E-02	0.14379E 01	0.10972E 01	0.85000E 00	0.10000E 01
105	597.85	0.45168E 02	0.69847E 01	0.22099E-01	0.79906E-02	0.16086E 01	0.12274E 01	0.94000E 00	0.10000E 01
106	601.72	0.47786E 02	0.73428E 01	0.23301E-01	0.84252E-02	0.16910E 01	0.12904E 01	0.96000E 00	0.10000E 01
107	553.45	0.46332E 02	0.69341E 01	0.21218E-01	0.76720E-02	0.15969E 01	0.12185E 01	0.98000E 00	0.10000E 01
108	578.73	0.44403E 02	0.67728E 01	0.21119E-01	0.76363E-02	0.15598E 01	0.11902E 01	0.10000E 01	0.10000E 01
109	581.39	0.37033E 02	0.56759E 01	0.17735E-01	0.64125E-02	0.13071E 01	0.99744E 00	0.10200E 01	0.10000E 01
110	599.95	0.42645E 02	0.66020E 01	0.20922E-01	0.75650E-02	0.15204E 01	0.11602E 01	0.80000E-01	0.10000E 01
111	590.23	0.45130E 02	0.68918E 01	0.21679E-01	0.78386E-02	0.15872E 01	0.12111E 01	0.10000E-00	0.10000E 01
112	601.40	0.47955E 02	0.74049E 01	0.23492E-01	0.84943E-02	0.17053E 01	0.13013E 01	0.12000E-00	0.10000E 01
113	599.70	0.48432E 02	0.74969E 01	0.23753E-01	0.85887E-02	0.17265E 01	0.13174E 01	0.14000E-00	0.10000E 01
114	586.64	0.43076E 02	0.66211E 01	0.20770E-01	0.75101E-02	0.15248E 01	0.11635E 01	0.80000E-01	0.10000E 01
115	590.78	0.44666E 02	0.68577E 01	0.21581E-01	0.78031E-02	0.15793E 01	0.12051E 01	0.10000E-00	0.10000E 01
116	579.04	0.46519E 02	0.71447E 01	0.22284E-01	0.80575E-02	0.16454E 01	0.12556E 01	0.12000E-00	0.10000E 01
117	580.76	0.49271E 02	0.75490E 01	0.23576E-01	0.85246E-02	0.17385E 01	0.13266E 01	0.14000E-00	0.10000E 01
118	586.44	0.42905E 02	0.66495E 01	0.20856E-01	0.75412E-02	0.15314E 01	0.11685E 01	0.10000E-00	0.10000E 01
119	588.04	0.45086E 02	0.69586E 01	0.21852E-01	0.79013E-02	0.16025E 01	0.12229E 01	0.15000E-00	0.10000E 01
120	572.81	0.46864E 02	0.71852E 01	0.22306E-01	0.80653E-02	0.16547E 01	0.12627E 01	0.20000E-00	0.10000E 01
121	596.15	0.48050E 02	0.74859E 01	0.23654E-01	0.85528E-02	0.17240E 01	0.13155E 01	0.25000E-00	0.10000E 01
122	577.95	0.45809E 02	0.70668E 01	0.22023E-01	0.79631E-02	0.16275E 01	0.12419E 01	0.30000E-00	0.10000E 01
123	589.61	0.46653E 02	0.72790E 01	0.22886E-01	0.82750E-02	0.16763E 01	0.12792E 01	0.35000E-00	0.10000E 01
124	570.48	0.47206E 02	0.73371E 01	0.22738E-01	0.82215E-02	0.16897E 01	0.12894E 01	0.38000E-00	0.10000E 01
125	591.38	0.50190E 02	0.79552E 01	0.25046E-01	0.90560E-02	0.18321E 01	0.13980E 01	0.45000E-00	0.10000E 01
126	588.35	0.46836E 02	0.75084E 01	0.23585E-01	0.85277E-02	0.17292E 01	0.13195E 01	0.61000E 00	0.10000E 01
127	561.11	0.30213E 02	0.47949E 01	0.14756E-01	0.53354E-02	0.11042E 01	0.84262E 00	0.70000E 00	0.10000E 01
128	544.67	0.15546E 02	0.24526E 01	0.74566E-02	0.26961E-02	0.56483E 00	0.43101E-00	0.75000E 00	0.10000E 01
129	576.01	0.35709E 02	0.57321E 01	0.17838E-01	0.64497E-02	0.13201E 01	0.10073E 01	0.70000E 00	0.10000E 01
130	584.71	0.45194E 02	0.72892E 01	0.22833E-01	0.82558E-02	0.16787E 01	0.12810E 01	0.80000E 00	0.10000E 01
131	554.26	0.22508E 02	0.33871E 01	0.10371E-01	0.37498E-02	0.78004E 00	0.59523E 00	0.90000E 00	0.10000E 01
132	556.73	0.38108E 02	0.57620E 01	0.17674E-01	0.63906E-02	0.13270E 01	0.10126E 01	0.90000E 00	0.10000E 01
133	575.59	0.38786E 02	0.58960E 01	0.18342E-01	0.66320E-02	0.13578E 01	0.10361E 01	0.96000E 00	0.10000E 01
134	575.07	0.37874E 02	0.57653E 01	0.17928E-01	0.64825E-02	0.13277E 01	0.10132E 01	0.10000E 01	0.10000E 01
135	582.96	0.42565E 02	0.68037E 01	0.21284E-01	0.76957E-02	0.15669E 01	0.11956E 01	0.70000E-02	0.10000E 01
136	575.16	0.36386E 02	0.56886E 01	0.17691E-01	0.63967E-02	0.13101E 01	0.99968E 00	0.70000E-02	0.10000E 01
137	569.22	0.34772E 02	0.54987E 01	0.17025E-01	0.61557E-02	0.12663E 01	0.96631E 00	0.39000E-01	0.10000E 01
138	566.10	0.33222E 02	0.52191E 01	0.16121E-01	0.58290E-02	0.12019E 01	0.91717E 00	0.78000E-01	0.10000E 01
139	574.80	0.45499E 02	0.71470E 01	0.22220E-01	0.80344E-02	0.16459E 01	0.12560E 01	0.11700E-00	0.10000E 01
140	585.44	0.55823E 02	0.87908E 01	0.27552E-01	0.99621E-02	0.20245E 01	0.15448E 01	0.78000E-01	0.10000E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23831E-05	-0.86166E-06	-0.72388E-03	-0.55237E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23831E-05	-0.86166E-06	-0.72388E-03	-0.55237E-03	-0.	0.
143	565.98	0.30809E 02	0.47767E 01	0.14753E-01	0.53345E-02	0.11001E 01	0.83943E 00	0.78000E-01	0.10000E 01
144	557.51	0.21962E 02	0.33946E 01	0.10419E-01	0.37672E-02	0.78178E 00	0.59655E 00	0.70000E-02	0.10000E 01
145	571.45	0.27121E 02	0.42036E 01	0.13036E-01	0.47137E-02	0.96808E 00	0.73872E 00	0.70000E-02	0.10000E 01
146	585.21	0.48134E 02	0.75543E 01	0.23672E-01	0.85593E-02	0.17397E 01	0.13275E 01	0.39000E-01	0.10000E 01
147	594.07	0.47758E 02	0.75189E 01	0.23721E-01	0.85768E-02	0.17316E 01	0.13213E 01	0.78000E-01	0.10000E 01
148	567.13	0.28863E 02	0.45148E 01	0.13956E-01	0.50463E-02	0.10397E 01	0.79340E 00	0.11700E-00	0.10000E 01
149	572.92	0.27271E 02	0.44191E 01	0.13720E-01	0.49608E-02	0.10177E 01	0.77658E 00	0.70000E-02	0.10000E 01
150	578.27	0.28138E 02	0.45947E 01	0.14323E-01	0.51788E-02	0.10582E 01	0.80745E 00	0.70000E-02	0.10000E 01
151	577.73	0.27185E 02	0.44378E 01	0.13828E-01	0.49999E-02	0.10220E 01	0.77987E 00	0.70000E-02	0.10000E 01
152	586.29	0.35031E 02	0.55372E 01	0.17365E-01	0.62790E-02	0.12752E 01	0.97306E 00	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	597.49	0.46090E 02	0.73295E 01	0.23184E-01	0.83828E-02	0.16880E 01	0.12880E 01	0.39000E-01	0.10000E 01
154	594.91	0.44295E 02	0.69883E 01	0.22061E-01	0.79768E-02	0.16094E 01	0.12281E 01	0.78000E-01	0.10000E 01
155	595.00	0.52315E 02	0.86206E 01	0.27216E-01	0.98407E-02	0.19853E 01	0.15149E 01	0.39000E-01	0.10000E 01
156	599.59	0.53437E 02	0.87994E 01	0.27878E-01	0.10080E-01	0.20265E 01	0.15464E 01	0.39000E-01	0.10000E 01
157	585.79	0.39669E 02	0.65042E 01	0.20390E-01	0.73728E-02	0.14979E 01	0.11430E 01	0.78000E-01	0.10000E 01
158	575.08	0.46229E 02	0.75593E 01	0.23507E-01	0.84998E-02	0.17409E 01	0.13284E 01	0.39000E-01	0.10000E 01
159	569.79	0.31791E 02	0.51834E 01	0.16055E-01	0.58051E-02	0.11937E 01	0.91089E 00	0.78000E-01	0.10000E 01
160	572.98	0.31182E 02	0.50771E 01	0.15763E-01	0.56997E-02	0.11692E 01	0.89222E 00	0.39000E-01	0.10000E 01
161	570.99	0.31209E 02	0.49561E 01	0.15365E-01	0.55556E-02	0.11414E 01	0.87095E 00	0.43000E-01	0.10000E 01
162	575.00	0.33264E 02	0.53111E 01	0.16515E-01	0.59715E-02	0.12231E 01	0.93334E 00	0.43000E-01	0.10000E 01
163	572.30	0.31238E 02	0.49883E 01	0.15480E-01	0.55971E-02	0.11488E 01	0.87660E 00	0.85000E-01	0.10000E 01
164	570.64	0.30903E 02	0.49065E 01	0.15207E-01	0.54986E-02	0.11300E 01	0.86224E 00	0.12800E-00	0.10000E 01
165	576.49	0.39065E 02	0.62423E 01	0.19433E-01	0.70264E-02	0.14376E 01	0.10970E 01	0.43000E-01	0.10000E 01
166	576.57	0.38390E 02	0.61149E 01	0.19037E-01	0.68834E-02	0.14083E 01	0.10746E 01	0.85000E-01	0.10000E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.31955E-05	-0.11554E-05	-0.14457E-03	-0.11031E-03	0.43000E-01	0.
168	576.53	0.36159E 02	0.58246E 01	0.18133E-01	0.65563E-02	0.13414E 01	0.10236E 01	0.12800E-00	0.10000E 01
169	590.41	0.47599E 02	0.77009E 01	0.24227E-01	0.87600E-02	0.17735E 01	0.13533E 01	0.85000E-01	0.10000E 01
170	585.83	0.44059E 02	0.70763E 01	0.22185E-01	0.80215E-02	0.16296E 01	0.12435E 01	0.12800E-00	0.10000E 01
171	587.13	0.50461E 02	0.80842E 01	0.25370E-01	0.91731E-02	0.18618E 01	0.14207E 01	0.85000E-01	0.10000E 01
172	1085.37	-0.31174E-02	-0.63077E-03	-0.32110E-05	-0.11610E-05	-0.14526E-03	-0.11085E-03	0.43000E-01	0.
173	590.60	0.47042E 02	0.76114E 01	0.23949E-01	0.86594E-02	0.17529E 01	0.13376E 01	0.12800E-00	0.10000E 01
174	593.97	0.54545E 02	0.87991E 01	0.27757E-01	0.10036E-01	0.20264E 01	0.15463E 01	0.85000E-01	0.10000E 01
175	621.09	0.68197E 02	0.11126E 02	0.35841E-01	0.12959E-01	0.25623E 01	0.19552E 01	0.43000E-01	0.10000E 01
176	616.78	0.63966E 02	0.10412E 02	0.33428E-01	0.12087E-01	0.23979E 01	0.18297E 01	0.43000E-01	0.10000E 01
177	588.00	0.45701E 02	0.73604E 01	0.23114E-01	0.83574E-02	0.16951E 01	0.12935E 01	0.12800E-00	0.10000E 01
178	597.85	0.51539E 02	0.83316E 01	0.26361E-01	0.95315E-02	0.19187E 01	0.14641E 01	0.85000E-01	0.10000E 01
179	596.66	0.45638E 02	0.73730E 01	0.23306E-01	0.84271E-02	0.16980E 01	0.12957E 01	0.70000E-02	0.10000E 01
180	588.29	0.40895E 02	0.66085E 01	0.20757E-01	0.75053E-02	0.15219E 01	0.11613E 01	0.70000E-02	0.10000E 01
181	589.74	0.39994E 02	0.64680E 01	0.20338E-01	0.73539E-02	0.14896E 01	0.11367E 01	0.70000E-02	0.10000E 01
182	578.65	0.34026E 02	0.54873E 01	0.17110E-01	0.61866E-02	0.12637E 01	0.96430E 00	0.70000E-02	0.10000E 01
183	579.50	0.33819E 02	0.54216E 01	0.16916E-01	0.61164E-02	0.12486E 01	0.95276E 00	0.32000E-01	0.10000E 01
184	587.59	0.41817E 02	0.67767E 01	0.21274E-01	0.76922E-02	0.15606E 01	0.11909E 01	0.32000E-01	0.10000E 01
185	574.56	0.37781E 02	0.60792E 01	0.18897E-01	0.68329E-02	0.14000E 01	0.10683E 01	0.64000E-01	0.10000E 01
186	585.03	0.44023E 02	0.71016E 01	0.22250E-01	0.80453E-02	0.16355E 01	0.12480E 01	0.64000E-01	0.10000E 01
187	582.38	0.36400E 02	0.58821E 01	0.18393E-01	0.66504E-02	0.13546E 01	0.10337E 01	0.70000E-02	0.10000E 01
188	582.94	0.37397E 02	0.61415E 01	0.19212E-01	0.69467E-02	0.14144E 01	0.10793E 01	0.70000E-02	0.10000E 01
189	535.54	0.46925E 01	0.76596E 00	0.23132E-02	0.83641E-03	0.17640E-00	0.13461E-00	0.10600E 01	0.10000E 01
190	531.50	0.26810E 01	0.44537E-00	0.13411E-02	0.48490E-03	0.10257E-00	0.78266E-01	0.10840E 01	0.10000E 01
191	528.93	0.15133E 01	0.25237E-00	0.75852E-03	0.27426E-03	0.58121E-01	0.44351E-01	0.11080E 01	0.10000E 01
192	524.10	0.16816E 01	0.27817E-00	0.83312E-03	0.30124E-03	0.64061E-01	0.48883E-01	0.11080E 01	0.10000E 01
193	519.67	0.30935E 01	0.50274E 00	0.15009E-02	0.54271E-03	0.11578E-00	0.88349E-01	0.16580E 01	0.10000E 01
194	520.75	0.28109E 01	0.45500E-00	0.13594E-02	0.49155E-03	0.10478E-00	0.79958E-01	0.11700E 01	0.10000E 01
195	520.63	0.30925E 01	0.50285E 00	0.15023E-02	0.54320E-03	0.11581E-00	0.88368E-01	0.16740E 01	0.10000E 01
196	521.27	0.29849E 01	0.48331E-00	0.14446E-02	0.52233E-03	0.11131E-00	0.84934E-01	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
90	2	6.59	154.12	-51.47	5.15	2	C57	2.70	2	10.15	935.00	1827.30	90	C57	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.886043E 02	0.193594E-01	0.467946E 04	0.183315E-04	0.717694E-07	0.120329E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730351E 00	0.433860E 01	0.568349E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	540.30	0.18374E 01	0.29934E-00	0.90621E-03	0.32834E-03	0.68995E-01	0.52669E-01	-0.10600E 01	0.10000E 01
100	540.15	0.10036E 01	0.16845E-00	0.50989E-03	0.18475E-03	0.38825E-01	0.29638E-01	-0.10840E 01	0.10000E 01
101	539.09	0.77610E 00	0.12733E-00	0.38513E-03	0.13954E-03	0.29348E-01	0.22403E-01	-0.11080E 01	0.10000E 01
102	540.14	0.99948E 00	0.16357E-00	0.49512E-03	0.17940E-03	0.37701E-01	0.28780E-01	-0.11080E 01	0.10000E 01
103	540.19	0.12239E 01	0.20542E-00	0.62182E-03	0.22530E-03	0.47347E-01	0.36143E-01	-0.10800E 01	0.10000E 01
104	592.64	0.37874E 02	0.61741E 01	0.19436E-01	0.70421E-02	0.14231E 01	0.10863E 01	0.85000E 00	0.10000E 01
105	600.32	0.44290E 02	0.68581E 01	0.21716E-01	0.78683E-02	0.15807E 01	0.12067E 01	0.94000E 00	0.10000E 01
106	603.66	0.47152E 02	0.72528E 01	0.23025E-01	0.83425E-02	0.16717E 01	0.12761E 01	0.96000E 00	0.10000E 01
107	554.78	0.45859E 02	0.68682E 01	0.21015E-01	0.76143E-02	0.15831E 01	0.12085E 01	0.98000E 00	0.10000E 01
108	579.35	0.43897E 02	0.66979E 01	0.20873E-01	0.75629E-02	0.15438E 01	0.11785E 01	0.10000E 01	0.10000E 01
109	581.05	0.36769E 02	0.56344E 01	0.17581E-01	0.63702E-02	0.12987E 01	0.99136E 00	0.10200E 01	0.10000E 01
110	601.94	0.40775E 02	0.63193E 01	0.20035E-01	0.72591E-02	0.14565E 01	0.11119E 01	0.80000E-01	0.10000E 01
111	591.85	0.43006E 02	0.65732E 01	0.20680E-01	0.74927E-02	0.15151E 01	0.11565E 01	0.10000E-00	0.10000E 01
112	602.28	0.45758E 02	0.70691E 01	0.22418E-01	0.81225E-02	0.16293E 01	0.12438E 01	0.12000E-00	0.10000E 01
113	600.00	0.46441E 02	0.71898E 01	0.22761E-01	0.82468E-02	0.16572E 01	0.12650E 01	0.14000E-00	0.10000E 01
114	588.86	0.39182E 02	0.60297E 01	0.18926E-01	0.68576E-02	0.13898E 01	0.10609E 01	0.80000E-01	0.10000E 01
115	592.19	0.40060E 02	0.61552E 01	0.19369E-01	0.70181E-02	0.14187E 01	0.10830E 01	0.10000E-00	0.10000E 01
116	579.69	0.41518E 02	0.63788E 01	0.19884E-01	0.72044E-02	0.14702E 01	0.11223E 01	0.12000E-00	0.10000E 01
117	580.65	0.43602E 02	0.66800E 01	0.20838E-01	0.75501E-02	0.15397E 01	0.11753E 01	0.14000E-00	0.10000E 01
118	586.93	0.36659E 02	0.56829E 01	0.17812E-01	0.64536E-02	0.13098E 01	0.99989E 00	0.10000E-00	0.10000E 01
119	587.21	0.36696E 02	0.56610E 01	0.17747E-01	0.64302E-02	0.13048E 01	0.99604E 00	0.15000E-00	0.10000E 01
120	571.22	0.37504E 02	0.57451E 01	0.17795E-01	0.64476E-02	0.13242E 01	0.10108E 01	0.20000E-00	0.10000E 01
121	594.36	0.38572E 02	0.60036E 01	0.18924E-01	0.68566E-02	0.13838E 01	0.10563E 01	0.25000E-00	0.10000E 01
122	577.02	0.36822E 02	0.56775E 01	0.17662E-01	0.63994E-02	0.13086E 01	0.99894E 00	0.30000E-00	0.10000E 01
123	589.67	0.38778E 02	0.60505E 01	0.19003E-01	0.68854E-02	0.13946E 01	0.10646E 01	0.35000E-00	0.10000E 01
124	571.14	0.39420E 02	0.61291E 01	0.18983E-01	0.68781E-02	0.14127E 01	0.10784E 01	0.38000E-00	0.10000E 01
125	591.02	0.41647E 02	0.65998E 01	0.20750E-01	0.75184E-02	0.15212E 01	0.11612E 01	0.45000E-00	0.10000E 01
126	588.64	0.38443E 02	0.61638E 01	0.19344E-01	0.70089E-02	0.14207E 01	0.10845E 01	0.61000E 00	0.10000E 01
127	555.26	0.21080E 02	0.33346E 01	0.10207E-01	0.36982E-02	0.76859E 00	0.58672E 00	0.70000E 00	0.10000E 01
128	537.86	0.96909E 01	0.15230E 01	0.46025E-02	0.16676E-02	0.35104E-00	0.26797E-00	0.75000E 00	0.10000E 01
129	579.08	0.33363E 02	0.53645E 01	0.16714E-01	0.60561E-02	0.12365E 01	0.94388E 00	0.70000E 00	0.10000E 01
130	593.32	0.43515E 02	0.70511E 01	0.22208E-01	0.80465E-02	0.16252E 01	0.12406E 01	0.80000E 00	0.10000E 01
131	549.67	0.16554E 02	0.24848E 01	0.75741E-02	0.27443E-02	0.57271E 00	0.43719E-00	0.90000E 00	0.10000E 01
132	560.34	0.32955E 02	0.49928E 01	0.15340E-01	0.55580E-02	0.11508E 01	0.87848E 00	0.90000E 00	0.10000E 01
133	576.06	0.30890E 02	0.46968E 01	0.14601E-01	0.52903E-02	0.10826E 01	0.82640E 00	0.96000E 00	0.10000E 01
134	573.21	0.28647E 02	0.43564E 01	0.13514E-01	0.48963E-02	0.10041E 01	0.76650E 00	0.10000E 01	0.10000E 01
135	592.53	0.41034E 02	0.65932E 01	0.20753E-01	0.75194E-02	0.15197E 01	0.11601E 01	0.70000E-02	0.10000E 01
136	575.88	0.30009E 02	0.46935E 01	0.14589E-01	0.52858E-02	0.10818E 01	0.82581E 00	0.70000E-02	0.10000E 01
137	589.11	0.40415E 02	0.64608E 01	0.20283E-01	0.73493E-02	0.14891E 01	0.11368E 01	0.39000E-01	0.10000E 01
138	589.36	0.45687E 02	0.72690E 01	0.22825E-01	0.82702E-02	0.16754E 01	0.12790E 01	0.78000E-01	0.10000E 01
139	574.02	0.39589E 02	0.62159E 01	0.19294E-01	0.69906E-02	0.14327E 01	0.10937E 01	0.11700E-00	0.10000E 01
140	578.20	0.42002E 02	0.65883E 01	0.20514E-01	0.74327E-02	0.15185E 01	0.11592E 01	0.78000E-01	0.10000E 01
141-4157.09		0.10379E-01	-0.31432E-02	-0.23824E-05	-0.86322E-06	-0.72448E-03	-0.55305E-03	-0.	0.
142-4157.09		0.10379E-01	-0.31432E-02	-0.23824E-05	-0.86322E-06	-0.72448E-03	-0.55305E-03	-0.	0.
143	580.84	0.49644E 02	0.77598E 01	0.24210E-01	0.87718E-02	0.17886E 01	0.13653E 01	0.78000E-01	0.10000E 01
144	554.95	0.20610E 02	0.31812E 01	0.97348E-02	0.35272E-02	0.73323E 00	0.55972E 00	0.70000E-02	0.10000E 01
145	566.78	0.27918E 02	0.43161E 01	0.13324E-01	0.48278E-02	0.99482E 00	0.75941E 00	0.70000E-02	0.10000E 01
146	557.38	0.34301E 02	0.53016E 01	0.16253E-01	0.58888E-02	0.12220E 01	0.93280E 00	0.39000E-01	0.10000E 01
147	566.02	0.30804E 02	0.47760E 01	0.14736E-01	0.53392E-02	0.11008E 01	0.84033E 00	0.78000E-01	0.10000E 01
148	576.96	0.44051E 02	0.69352E 01	0.21606E-01	0.78286E-02	0.15985E 01	0.12202E 01	0.11700E-00	0.10000E 01
149	580.15	0.35328E 02	0.57474E 01	0.17922E-01	0.64936E-02	0.13247E 01	0.10112E 01	0.70000E-02	0.10000E 01
150	581.91	0.35058E 02	0.57360E 01	0.17910E-01	0.64893E-02	0.13221E 01	0.10092E 01	0.70000E-02	0.10000E 01
151	573.45	0.26795E 02	0.43639E 01	0.13539E-01	0.49057E-02	0.10058E 01	0.76783E 00	0.70000E-02	0.10000E 01
152	599.59	0.46530E 02	0.74079E 01	0.23444E-01	0.84943E-02	0.17074E 01	0.13034E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	599.49	0.49364E 02	0.78586E 01	0.24868E-01	0.90103E-02	0.18113E 01	0.13827E 01	0.39000E-01	0.10000E 01
154	593.05	0.44891E 02	0.70752E 01	0.22279E-01	0.80723E-02	0.16308E 01	0.12449E 01	0.78000E-01	0.10000E 01
155	578.80	0.44364E 02	0.72463E 01	0.22573E-01	0.81788E-02	0.16702E 01	0.12750E 01	0.39000E-01	0.10000E 01
156	578.56	0.41990E 02	0.68360E 01	0.21291E-01	0.77143E-02	0.15756E 01	0.12028E 01	0.39000E-01	0.10000E 01
157	581.35	0.39650E 02	0.64854E 01	0.20241E-01	0.73340E-02	0.14948E 01	0.11411E 01	0.78000E-01	0.10000E 01
158	565.68	0.41702E 02	0.67840E 01	0.20926E-01	0.75820E-02	0.15636E 01	0.11936E 01	0.39000E-01	0.10000E 01
159	573.65	0.38478E 02	0.62871E 01	0.19509E-01	0.70686E-02	0.14491E 01	0.11062E 01	0.78000E-01	0.10000E 01
160	579.97	0.40130E 02	0.65590E 01	0.20450E-01	0.74095E-02	0.15118E 01	0.11540E 01	0.39000E-01	0.10000E 01
161	573.34	0.26634E 02	0.42349E 01	0.13138E-01	0.47603E-02	0.97610E 00	0.74512E 00	0.43000E-01	0.10000E 01
162	576.91	0.27216E 02	0.43500E 01	0.13531E-01	0.49027E-02	0.10026E 01	0.76537E 00	0.43000E-01	0.10000E 01
163	575.53	0.27261E 02	0.43609E 01	0.13551E-01	0.49100E-02	0.10051E 01	0.76729E 00	0.85000E-01	0.10000E 01
164	573.61	0.26977E 02	0.42902E 01	0.13312E-01	0.48233E-02	0.98884E 00	0.75484E 00	0.12800E-00	0.10000E 01
165	577.68	0.31154E 02	0.49814E 01	0.15504E-01	0.56177E-02	0.11482E 01	0.87647E 00	0.43000E-01	0.10000E 01
166	578.69	0.31914E 02	0.50893E 01	0.15852E-01	0.57437E-02	0.11730E 01	0.89546E 00	0.85000E-01	0.10000E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.31899E-05	-0.11558E-05	-0.14469E-03	-0.11045E-03	0.43000E-01	0.
168	578.18	0.30263E 02	0.48792E 01	0.15192E-01	0.55044E-02	0.11246E 01	0.85848E 00	0.12800E-00	0.10000E 01
169	599.85	0.45114E 02	0.73361E 01	0.23221E-01	0.84136E-02	0.16909E 01	0.12908E 01	0.85000E-01	0.10000E 01
170	593.07	0.40834E 02	0.65840E 01	0.20733E-01	0.75120E-02	0.15175E 01	0.11584E 01	0.12800E-00	0.10000E 01
171	598.74	0.49811E 02	0.80303E 01	0.25397E-01	0.92019E-02	0.18509E 01	0.14129E 01	0.85000E-01	0.10000E 01
172	1085.37	-0.31174E-02	-0.63077E-03	-0.32053E-05	-0.11614E-05	-0.14539E-03	-0.11098E-03	0.43000E-01	0.
173	607.39	0.50568E 02	0.82562E 01	0.26285E-01	0.95239E-02	0.19030E 01	0.14527E 01	0.12800E-00	0.10000E 01
174	617.34	0.62063E 02	0.10138E 02	0.32526E-01	0.11785E-01	0.23367E 01	0.17837E 01	0.85000E-01	0.10000E 01
175	650.83	0.72961E 02	0.12090E 02	0.39828E-01	0.14431E-01	0.27867E 01	0.21273E 01	0.43000E-01	0.10000E 01
176	641.78	0.68786E 02	0.11345E 02	0.37104E-01	0.13444E-01	0.26149E 01	0.19961E 01	0.43000E-01	0.10000E 01
177	598.55	0.45571E 02	0.73815E 01	0.23342E-01	0.84573E-02	0.17014E 01	0.12988E 01	0.12800E-00	0.10000E 01
178	612.96	0.53843E 02	0.87747E 01	0.28057E-01	0.10166E-01	0.20225E 01	0.15439E 01	0.85000E-01	0.10000E 01
179	612.65	0.49097E 02	0.79999E 01	0.25573E-01	0.92658E-02	0.18439E 01	0.14076E 01	0.70000E-02	0.10000E 01
180	594.07	0.41876E 02	0.67883E 01	0.21392E-01	0.77510E-02	0.15646E 01	0.11944E 01	0.70000E-02	0.10000E 01
181	605.83	0.40630E 02	0.66281E 01	0.21077E-01	0.76366E-02	0.15277E 01	0.11662E 01	0.70000E-02	0.10000E 01
182	593.16	0.35400E 02	0.57540E 01	0.18120E-01	0.65655E-02	0.13262E 01	0.10124E 01	0.70000E-02	0.10000E 01
183	577.74	0.28993E 02	0.46436E 01	0.14454E-01	0.52369E-02	0.10703E 01	0.81703E 00	0.32000E-01	0.10000E 01
184	584.49	0.31936E 02	0.51666E 01	0.16164E-01	0.58565E-02	0.11908E 01	0.90905E 00	0.32000E-01	0.10000E 01
185	570.08	0.27008E 02	0.43351E 01	0.13416E-01	0.48610E-02	0.99919E 00	0.76275E 00	0.64000E-01	0.10000E 01
186	583.68	0.34391E 02	0.55436E 01	0.17333E-01	0.62800E-02	0.12777E 01	0.97539E 00	0.64000E-01	0.10000E 01
187	582.98	0.30460E 02	0.49239E 01	0.15387E-01	0.55750E-02	0.11349E 01	0.86635E 00	0.70000E-02	0.10000E 01
188	587.69	0.38175E 02	0.62854E 01	0.19711E-01	0.71420E-02	0.14487E 01	0.11059E 01	0.70000E-02	0.10000E 01
189	537.09	0.81668E 01	0.13342E 01	0.40297E-02	0.14601E-02	0.30753E-00	0.23476E-00	0.10600E 01	0.10000E 01
190	532.29	0.52234E 01	0.86808E 00	0.26127E-02	0.94665E-03	0.20008E-00	0.15274E-00	0.10840E 01	0.10000E 01
191	528.46	0.26899E 01	0.44849E-00	0.13461F-02	0.48772E-03	0.10337E-00	0.78911E-01	0.11080E 01	0.10000E 01
192	523.67	0.28992E 01	0.47948E-00	0.14341E-02	0.51962E-03	0.11051E-00	0.84363E-01	0.11080E 01	0.10000E 01
193	518.01	0.20083E 01	0.32607E-00	0.97132E-03	0.35193E-03	0.75156E-01	0.57372E-01	0.16580E 01	0.10000E 01
194	519.30	0.17413E 01	0.28163E-00	0.83971E-03	0.30425E-03	0.64912E-01	0.49552E-01	0.11700E 01	0.10000E 01
195	519.22	0.21023E 01	0.34158E-00	0.10184E-02	0.36899E-03	0.78730E-01	0.60100E-01	0.16740E 01	0.10000E 01
196	519.86	0.21455E 01	0.34711E-00	0.10353E-02	0.37513E-03	0.80004E-01	0.61073E-01	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
91	2	7.59	157.59	-0.	-0.	2	C57	2.70	2	10.15	936.50	1825.60	29	C55	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.885117E 02	0.193931E-01	0.467707E 04	0.183826E-04	0.716945E-07	0.120728E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730297E 00	0.434222E 01	0.569043E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	540.81	0.22707E 01	0.37003E-00	0.11223E-02	0.40572E-03	0.85216E-01	0.65026E-01	-0.10600E 01	0.98003E 00
100	540.83	0.12166E 01	0.20427E-00	0.61957E-03	0.22398E-03	0.47043E-01	0.35897E-01	-0.10840E 01	0.10162E 01
101	539.13	0.90390E 00	0.14830E-00	0.44924E-03	0.16240E-03	0.34153E-01	0.26061E-01	-0.11080E 01	0.10993E 01
102	540.23	0.95948E 00	0.15703E-00	0.47608E-03	0.17211E-03	0.36164E-01	0.27596E-01	-0.11080E 01	0.17598E-00
103	540.50	0.14514E 01	0.24365E-00	0.73882E-03	0.26709E-03	0.56112E-01	0.42817E-01	-0.10800E 01	0.10175E 01
104	593.25	0.41181E 02	0.67155E 01	0.21183E-01	0.76576E-02	0.15465E 01	0.11801E 01	0.85000E 00	0.10600E 01
105	601.01	0.45717E 02	0.70817E 01	0.22471E-01	0.81234E-02	0.16309E 01	0.12445E 01	0.94000E 00	0.10499E 01
106	603.45	0.47369E 02	0.72855E 01	0.23161E-01	0.83729E-02	0.16778E 01	0.12803E 01	0.96000E 00	0.10508E 01
107	553.49	0.45061E 02	0.67439E 01	0.20646E-01	0.74636E-02	0.15531E 01	0.11851E 01	0.98000E 00	0.10302E 01
108	576.08	0.41693E 02	0.63502E 01	0.19772E-01	0.71475E-02	0.14624E 01	0.11160E 01	0.10000E 01	0.10412E 01
109	576.31	0.33497E 02	0.51198E 01	0.15943E-01	0.57635E-02	0.11791E 01	0.89972E 00	0.10200E 01	0.10631E 01
110	603.05	0.43102E 02	0.66839E 01	0.21242E-01	0.76790E-02	0.15393E 01	0.11746E 01	0.80000E-01	0.10282E 01
111	592.58	0.44842E 02	0.68566E 01	0.21617E-01	0.78145E-02	0.15790E 01	0.12049E 01	0.10000E-00	0.10408E 01
112	602.55	0.46648E 02	0.72075E 01	0.22897E-01	0.82775E-02	0.16599E 01	0.12666E 01	0.12000E-00	0.10548E 01
113	598.69	0.45850E 02	0.70934E 01	0.22468E-01	0.81223E-02	0.16336E 01	0.12465E 01	0.14000E-00	0.10527E 01
114	589.96	0.42711E 02	0.65767E 01	0.20693E-01	0.74806E-02	0.15146E 01	0.11558E 01	0.80000E-01	0.10454E 01
115	593.27	0.43127E 02	0.66303E 01	0.20914E-01	0.75606E-02	0.15269E 01	0.11652E 01	0.10000E-00	0.10442E 01
116	580.53	0.44459E 02	0.68337E 01	0.21348E-01	0.77175E-02	0.15738E 01	0.12009E 01	0.12000E-00	0.10366E 01
117	581.36	0.46216E 02	0.70833E 01	0.22142E-01	0.80044E-02	0.16313E 01	0.12448E 01	0.14000E-00	0.10334E 01
118	588.29	0.41340E 02	0.64132E 01	0.20153E-01	0.72854E-02	0.14770E 01	0.11270E 01	0.10000E-00	0.10328E 01
119	588.18	0.41151E 02	0.63517E 01	0.19958E-01	0.72149E-02	0.14628E 01	0.11162E 01	0.15000E-00	0.10380E 01
120	570.72	0.41406E 02	0.63410E 01	0.19663E-01	0.71084E-02	0.14603E 01	0.11143E 01	0.20000E-00	0.10108E 01
121	592.96	0.41796E 02	0.65005E 01	0.20500E-01	0.74109E-02	0.14970E 01	0.11424E 01	0.25000E-00	0.10279E 01
122	574.46	0.39212E 02	0.60375E 01	0.18775E-01	0.67872E-02	0.13904E 01	0.10610E 01	0.30000E-00	0.10085E 01
123	585.81	0.40413E 02	0.62924E 01	0.19736E-01	0.71347E-02	0.14491E 01	0.11058E 01	0.35000E-00	0.10808E 01
124	566.63	0.40838E 02	0.63340E 01	0.19582E-01	0.70788E-02	0.14587E 01	0.11131E 01	0.38000E-00	0.99242E 00
125	585.69	0.42697E 02	0.67468E 01	0.21159E-01	0.76492E-02	0.15538E 01	0.11856E 01	0.45000E-00	0.10033E 01
126	582.65	0.39998E 02	0.63923E 01	0.20001E-01	0.72306E-02	0.14721E 01	0.11233E 01	0.61000E 00	0.10074E 01
127	551.84	0.22562E 02	0.35623E 01	0.10892E-01	0.39376E-02	0.82038E 00	0.62601E 00	0.70000E 00	0.10344E 01
128	535.73	0.10492E 02	0.16469E 01	0.49767E-02	0.17991E-02	0.37928E-00	0.28942E-00	0.75000E 00	0.10611E 01
129	582.89	0.40998E 02	0.66059E 01	0.20673E-01	0.74735E-02	0.15213E 01	0.11609E 01	0.70000E 00	0.97007E 00
130	591.38	0.50169E 02	0.81209E 01	0.25579E-01	0.92470E-02	0.18702E 01	0.14271E 01	0.80000E 00	0.10500E 01
131	545.77	0.17362E 02	0.26004E 01	0.79156E-02	0.28615E-02	0.59885E 00	0.45697E-00	0.90000E 00	0.10344E 01
132	551.22	0.31557E 02	0.47569E 01	0.14539E-01	0.52558E-02	0.10955E 01	0.83595E 00	0.90000E 00	0.10145E 01
133	570.22	0.33253E 02	0.50401E 01	0.15623E-01	0.56479E-02	0.11607E 01	0.88571E 00	0.96000E 00	0.10233E 01
134	568.89	0.32175E 02	0.48812E 01	0.15116E-01	0.54644E-02	0.11241E 01	0.85779E 00	0.10000E 01	0.10252E 01
135	579.16	0.40279E 02	0.64251E 01	0.20051E-01	0.72486E-02	0.14797E 01	0.11291E 01	0.70000E-02	0.19218E 01
136	566.71	0.29824E 02	0.46411E 01	0.14349E-01	0.51872E-02	0.10688E 01	0.81560E 00	0.70000E-02	0.
137	584.82	0.45768E 02	0.72995E 01	0.22878E-01	0.82704E-02	0.16811E 01	0.12828E 01	0.39000E-01	0.21553E 01
138	581.73	0.48616E 02	0.77031E 01	0.24086E-01	0.87073E-02	0.17740E 01	0.13537E 01	0.78000E-01	0.23293E 01
139	569.42	0.41091E 02	0.64355E 01	0.19937E-01	0.72073E-02	0.14821E 01	0.11309E 01	0.11700E-00	0.19901E 01
140	575.82	0.46637E 02	0.73059E 01	0.22743E-01	0.82216E-02	0.16825E 01	0.12839E 01	0.78000E-01	0.22418E 01
141-4157.09		0.10379E-01	-0.31432E-02	-0.23833E-05	-0.86158E-06	-0.72388E-03	-0.55237E-03	-0.	0.
142-4157.09		0.10379E-01	-0.31432E-02	-0.23833E-05	-0.86158E-06	-0.72388E-03	-0.55237E-03	-0.	0.
143	572.10	0.41546E 02	0.64632E 01	0.20063E-01	0.72529E-02	0.14885E 01	0.11358E 01	0.78000E-01	0.21697E 01
144	550.05	0.15856E 02	0.24407E 01	0.74531E-02	0.26943E-02	0.56209E 00	0.42891E-00	0.70000E-02	0.80813E 00
145	567.12	0.26430E 02	0.40868E 01	0.12639E-01	0.45690E-02	0.94117E 00	0.71819E 00	0.70000E-02	0.13461E 01
146	575.53	0.47663E 02	0.74410E 01	0.23158E-01	0.83717E-02	0.17136E 01	0.13076E 01	0.39000E-01	0.24269E 01
147	583.21	0.44149E 02	0.69099E 01	0.21630E-01	0.78194E-02	0.15913E 01	0.12143E 01	0.78000E-01	0.22243E 01
148	572.80	0.37986E 02	0.59603E 01	0.18512E-01	0.66920E-02	0.13726E 01	0.10474E 01	0.11700E-00	0.19721E 01
149	567.53	0.27397E 02	0.44264E 01	0.13694E-01	0.49503E-02	0.10194E 01	0.77787E 00	0.70000E-02	0.77428E 00
150	570.14	0.26982E 02	0.43864E 01	0.13596E-01	0.49151E-02	0.10102E 01	0.77084E 00	0.70000E-02	0.76260E 00
151	571.66	0.25448E 02	0.41405E 01	0.12849E-01	0.46448E-02	0.95354E 00	0.72762E 00	0.70000E-02	0.74877E 00
152	600.78	0.43754E 02	0.69703E 01	0.22114E-01	0.79942E-02	0.16052E 01	0.12249E 01	0.39000E-01	0.11932E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	608.52	0.55299E 02	0.88462E 01	0.28233E-01	0.10206E-01	0.20373E 01	0.15546E 01	0.39000E-01	0.15195E 01
154	597.17	0.45612E 02	0.72049E 01	0.22795E-01	0.82404E-02	0.16593E 01	0.12661E 01	0.78000E-01	0.12414E 01
155	590.64	0.53604E 02	0.88121E 01	0.27741E-01	0.10028E-01	0.20294E 01	0.15486E 01	0.39000E-01	0.15250E 01
156	573.20	0.38929E 02	0.63192E 01	0.19632E-01	0.70972E-02	0.14553E 01	0.11105E 01	0.39000E-01	0.11865E 01
157	573.68	0.32490E 02	0.52920E 01	0.16447E-01	0.59456E-02	0.12187E 01	0.92999E 00	0.78000E-01	0.10427E 01
158	558.38	0.35199E 02	0.57031E 01	0.17523E-01	0.63346E-02	0.13134E 01	0.10022E 01	0.39000E-01	0.10699E 01
159	566.48	0.32573E 02	0.53013E 01	0.16387E-01	0.59240E-02	0.12209E 01	0.93161E 00	0.78000E-01	0.10103E 01
160	570.65	0.32897E 02	0.53495E 01	0.16588E-01	0.59966E-02	0.12320E 01	0.94008E 00	0.39000E-01	0.98523E 00
161	568.50	0.28421E 02	0.45071E 01	0.13953E-01	0.50442E-02	0.10380E 01	0.79206E 00	0.43000E-01	0.10180E 01
162	572.06	0.28450E 02	0.45352E 01	0.14078E-01	0.50891E-02	0.10444E 01	0.79698E 00	0.43000E-01	0.10249E 01
163	570.41	0.29341E 02	0.46804E 01	0.14510E-01	0.52456E-02	0.10779E 01	0.82250E 00	0.85000E-01	0.10235E 01
164	568.49	0.29128E 02	0.46191E 01	0.14300E-01	0.51695E-02	0.10638E 01	0.81174E 00	0.12800E-00	0.10175E 01
165	570.12	0.29460E 02	0.46912E 01	0.14541E-01	0.52565E-02	0.10804E 01	0.82439E 00	0.43000E-01	0.10146E 01
166	569.60	0.29086E 02	0.46154E 01	0.14300E-01	0.51696E-02	0.10629E 01	0.81108E 00	0.85000E-01	0.10264E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.31979E-05	-0.11561E-05	-0.14457E-03	-0.11031E-03	0.43000E-01	0.
168	569.75	0.29817E 02	0.47851E 01	0.14828E-01	0.53603E-02	0.11020E 01	0.84090E 00	0.12800E-00	0.10272E 01
169	578.01	0.35050E 02	0.56325E 01	0.17562E-01	0.63488E-02	0.12971E 01	0.98981E 00	0.85000E-01	0.10572E 01
170	575.35	0.33401E 02	0.53339E 01	0.16598E-01	0.60002E-02	0.12284E 01	0.93734E 00	0.12800E-00	0.10550E 01
171	579.32	0.40849E 02	0.65165E 01	0.20339E-01	0.73525E-02	0.15007E 01	0.11452E 01	0.85000E-01	0.10541E 01
172	1085.37	-0.31174E-02	-0.63077E-03	-0.32134E-05	-0.11617E-05	-0.14526E-03	-0.11085E-03	0.43000E-01	0.
173	588.49	0.44122E 02	0.71308E 01	0.22411E-01	0.81018E-02	0.16422E 01	0.12531E 01	0.12800E-00	0.10264E 01
174	595.95	0.53711E 02	0.86738E 01	0.27416E-01	0.99111E-02	0.19975E 01	0.15243E 01	0.85000E-01	0.10256E 01
175	633.47	0.71675E 02	0.11770E 02	0.38304E-01	0.13847E-01	0.27106E 01	0.20684E 01	0.43000E-01	0.11857E 01
176	630.92	0.68144E 02	0.11175E 02	0.36295E-01	0.13121E-01	0.25736E 01	0.19639E 01	0.43000E-01	0.11828E 01
177	595.72	0.50773E 02	0.82116E 01	0.25951E-01	0.93814E-02	0.18911E 01	0.14431E 01	0.12800E-00	0.10527E 01
178	607.28	0.56607E 02	0.91973E 01	0.29326E-01	0.10601E-01	0.21181E 01	0.16163E 01	0.85000E-01	0.10605E 01
179	598.93	0.45581E 02	0.73727E 01	0.23357E-01	0.84437E-02	0.16979E 01	0.12956E 01	0.70000E-02	0.97723E 00
180	587.45	0.39417E 02	0.63668E 01	0.19994E-01	0.72280E-02	0.14663E 01	0.11189E 01	0.70000E-02	0.12583E 01
181	589.22	0.36715E 02	0.59362E 01	0.18667E-01	0.67482E-02	0.13671E 01	0.10432E 01	0.70000E-02	0.13422E 01
182	579.63	0.32324E 02	0.52156E 01	0.16282E-01	0.58861E-02	0.12011E 01	0.91655E 00	0.70000E-02	0.11007E 01
183	580.72	0.34868E 02	0.55936E 01	0.17477E-01	0.63179E-02	0.12882E 01	0.98297E 00	0.32000E-01	0.99576E 00
184	580.62	0.34902E 02	0.56346E 01	0.17604E-01	0.63638E-02	0.12976E 01	0.99019E 00	0.32000E-01	0.10625E 01
185	566.30	0.29724E 02	0.47612E 01	0.14716E-01	0.53198E-02	0.10965E 01	0.83670E 00	0.64000E-01	0.10630E 01
186	578.70	0.37042E 02	0.59547E 01	0.18577E-01	0.67156E-02	0.13714E 01	0.10464E 01	0.64000E-01	0.10302E 01
187	578.50	0.32394E 02	0.52237E 01	0.16294E-01	0.58902E-02	0.12030E 01	0.91797E 00	0.70000E-02	0.10233E 01
188	585.68	0.37713E 02	0.62027E 01	0.19453E-01	0.70322E-02	0.14285E 01	0.10900E 01	0.70000E-02	0.10003E 01
189	534.12	0.63143E 01	0.10299E 01	0.31084E-02	0.11237E-02	0.23718E-00	0.18098E-00	0.10600E 01	0.99806E 00
190	529.92	0.38114E 01	0.63258E 00	0.19034E-02	0.68810E-03	0.14568E-00	0.11117E-00	0.10840E 01	0.10484E 01
191	526.13	0.17974E 01	0.29929E-00	0.89810E-03	0.32467E-03	0.68925E-01	0.52595E-01	0.11080E 01	0.10121E 01
192	521.48	0.21616E 01	0.35704E-00	0.10678E-02	0.38601E-03	0.82224E-01	0.62743E-01	0.11080E 01	0.10429E 01
193	514.36	0.24655E 01	0.39946E-00	0.11886E-02	0.42967E-03	0.91994E-01	0.70199E-01	0.16580E 01	0.12321E 01
194	516.19	0.20400E 01	0.32935E-00	0.98125E-03	0.35473E-03	0.75849E-01	0.57878E-01	0.11700E 01	0.10924E 01
195	514.86	0.19995E 01	0.32405E-00	0.96455E-03	0.34869E-03	0.74629E-01	0.56947E-01	0.16740E 01	0.10584E 01
196	511.94	0.18390E 01	0.29617E-00	0.87971E-03	0.31802E-03	0.68208E-01	0.52047E-01	0.16950E 01	0.10605E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
92	2	11.65	161.65	-0.	-0.	2	C57	2.65	2	10.15	946.30	1829.40	30	C55	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.887034E 02	0.195834E-01	0.468245E 04	0.185230E-04	0.718498E-07	0.121526E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730408E 00	0.436570E 01	0.573546E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	543.54	0.27101E 01	0.44233E-00	0.13398E-02	0.48013E-03	0.10132E-00	0.77121E-01	-0.10600E 01	0.96815E 00
100	543.16	0.14255E 01	0.23965E-00	0.72570E-03	0.26006E-03	0.54893E-01	0.41784E-01	-0.10840E 01	0.95852E 00
101	541.72	0.10914E 01	0.17933E-00	0.54247E-03	0.19440E-03	0.41076E-01	0.31266E-01	-0.11080E 01	0.11721E 01
102	542.56	0.11855E 01	0.19427E-00	0.58803E-03	0.21072E-03	0.44499E-01	0.33872E-01	-0.11080E 01	0.28342E 01
103	542.95	0.17699E 01	0.29751E-00	0.90080E-03	0.32280E-03	0.68148E-01	0.51873E-01	-0.10800E 01	0.10303E 01
104	591.60	0.37579E 02	0.61226E 01	0.19222E-01	0.68884E-02	0.14024E 01	0.10675E 01	0.85000E 00	0.10465E 01
105	597.06	0.42303E 02	0.65389E 01	0.20615E-01	0.73874E-02	0.14978E 01	0.11401E 01	0.94000E 00	0.10407E 01
106	598.19	0.43496E 02	0.66708E 01	0.21049E-01	0.75429E-02	0.15280E 01	0.11631E 01	0.96000E 00	0.10484E 01
107	548.44	0.40982E 02	0.61162E 01	0.18593E-01	0.66629E-02	0.14010E 01	0.10664E 01	0.98000E 00	0.10314E 01
108	568.01	0.37103E 02	0.56262E 01	0.17353E-01	0.62184E-02	0.12887E 01	0.98095E 00	0.10000E 01	0.10534E 01
109	568.11	0.28535E 02	0.43418E 01	0.13392E-01	0.47992E-02	0.99452E 00	0.75701E 00	0.10200E 01	0.10799E 01
110	600.00	0.40082E 02	0.62054E 01	0.19607E-01	0.70264E-02	0.14214E 01	0.10819E 01	0.80000E-01	0.10140E 01
111	588.99	0.41724E 02	0.63674E 01	0.19951E-01	0.71495E-02	0.14585E 01	0.11102E 01	0.10000E-00	0.10296E 01
112	597.77	0.43125E 02	0.66461E 01	0.20964E-01	0.75126E-02	0.15224E 01	0.11588E 01	0.12000E-00	0.10469E 01
113	592.41	0.41588E 02	0.64123E 01	0.20144E-01	0.72187E-02	0.14688E 01	0.11180E 01	0.14000E-00	0.10556E 01
114	587.84	0.39737E 02	0.61117E 01	0.19133E-01	0.68565E-02	0.13999E 01	0.10656E 01	0.80000E-01	0.10267E 01
115	590.76	0.40468E 02	0.62130E 01	0.19493E-01	0.69855E-02	0.14231E 01	0.10833E 01	0.10000E-00	0.10328E 01
116	577.48	0.41739E 02	0.64050E 01	0.19895E-01	0.71296E-02	0.14671E 01	0.11167E 01	0.12000E-00	0.10308E 01
117	578.06	0.43179E 02	0.66059E 01	0.20528E-01	0.73564E-02	0.15131E 01	0.11518E 01	0.14000E-00	0.10341E 01
118	587.00	0.38765E 02	0.60093E 01	0.18801E-01	0.67373E-02	0.13765E 01	0.10477E 01	0.10000E-00	0.10301E 01
119	586.85	0.38752E 02	0.59771E 01	0.18698E-01	0.67005E-02	0.13691E 01	0.10421E 01	0.15000E-00	0.10193E 01
120	569.38	0.39040E 02	0.59743E 01	0.18445E-01	0.66099E-02	0.13685E 01	0.10416E 01	0.20000E-00	0.99142E 00
121	591.24	0.40065E 02	0.62255E 01	0.19540E-01	0.70021E-02	0.14260E 01	0.10854E 01	0.25000E-00	0.10236E 01
122	573.05	0.38336E 02	0.58980E 01	0.18260E-01	0.65434E-02	0.13510E 01	0.10283E 01	0.30000E-00	0.10167E 01
123	584.53	0.39792E 02	0.61913E 01	0.19334E-01	0.69284E-02	0.14182E 01	0.10795E 01	0.35000E-00	0.10937E 01
124	565.18	0.40199E 02	0.62298E 01	0.19174E-01	0.68711E-02	0.14270E 01	0.10862E 01	0.38000E-00	0.10115E 01
125	583.29	0.41448E 02	0.65408E 01	0.20406E-01	0.73127E-02	0.14982E 01	0.11404E 01	0.45000E-00	0.10267E 01
126	581.28	0.38450E 02	0.61403E 01	0.19128E-01	0.68545E-02	0.14065E 01	0.10706E 01	0.61000E 00	0.10087E 01
127	548.62	0.19955E 02	0.31451E 01	0.95621E-02	0.34266E-02	0.72040E 00	0.54835E 00	0.70000E 00	0.10390E 01
128	533.47	0.87055E 01	0.13648E 01	0.41037E-02	0.14706E-02	0.31261E-00	0.23795E-00	0.75000E 00	0.10584E 01
129	591.17	0.47663E 02	0.77144E 01	0.24212E-01	0.86764E-02	0.17670E 01	0.13450E 01	0.70000E 00	0.10172E 01
130	588.97	0.47982E 02	0.77567E 01	0.24304E-01	0.87094E-02	0.17767E 01	0.13524E 01	0.80000E 00	0.10126E 01
131	543.48	0.14492E 02	0.21678E 01	0.65662E-02	0.23530E-02	0.49656E-00	0.37797E-00	0.90000E 00	0.10272E 01
132	552.71	0.31592E 02	0.47662E 01	0.14534E-01	0.52085E-02	0.10917E 01	0.83100E 00	0.90000E 00	0.10201E 01
133	571.47	0.33025E 02	0.50089E 01	0.15489E-01	0.55504E-02	0.11473E 01	0.87331E 00	0.96000E 00	0.10325E 01
134	569.79	0.31742E 02	0.48179E 01	0.14880E-01	0.53322E-02	0.11036E 01	0.84002E 00	0.10000E 01	0.10344E 01
135	578.12	0.36557E 02	0.58280E 01	0.18112E-01	0.64905E-02	0.13350E 01	0.10161E 01	0.70000E-02	0.16215E 01
136	566.94	0.25432E 02	0.39582E 01	0.12198E-01	0.43713E-02	0.90665E 00	0.69012E 00	0.70000E-02	0.
137	591.49	0.50322E 02	0.80549E 01	0.25287E-01	0.90616E-02	0.18451E 01	0.14044E 01	0.39000E-01	0.22233E 01
138	585.56	0.50986E 02	0.80955E 01	0.25300E-01	0.90663E-02	0.18543E 01	0.14115E 01	0.78000E-01	0.22815E 01
139	570.14	0.38233E 02	0.59902E 01	0.18505E-01	0.66313E-02	0.13721E 01	0.10444E 01	0.11700E-00	0.17040E 01
140	572.99	0.38761E 02	0.60626E 01	0.18769E-01	0.67258E-02	0.13887E 01	0.10570E 01	0.78000E-01	0.17090E 01
141-4157.14		0.51867E-02	-0.15707E-02	-0.11900E-05	-0.42644E-06	-0.35979E-03	-0.27386E-03	-0.	0.
142-4157.14		0.51867E-02	-0.15707E-02	-0.11900E-05	-0.42644E-06	-0.35979E-03	-0.27386E-03	-0.	0.
143	569.90	0.35803E 02	0.55629E 01	0.17182E-01	0.61572E-02	0.12742E 01	0.96992E 00	0.78000E-01	0.16988E 01
144	551.43	0.15047E 02	0.23180E 01	0.70622E-02	0.25308E-02	0.53097E 00	0.40416E-00	0.70000E-02	0.70364E 00
145	568.09	0.25389E 02	0.39279E 01	0.12116E-01	0.43416E-02	0.89972E 00	0.68485E 00	0.70000E-02	0.11995E 01
146	581.10	0.55457E 02	0.86840E 01	0.27048E-01	0.96927E-02	0.19891E 01	0.15141E 01	0.39000E-01	0.26330E 01
147	586.88	0.47669E 02	0.74757E 01	0.23386E-01	0.83806E-02	0.17124E 01	0.13034E 01	0.78000E-01	0.22282E 01
148	570.20	0.33068E 02	0.51811E 01	0.16006E-01	0.57359E-02	0.11868E 01	0.90335E 00	0.11700E-00	0.15651E 01
149	569.32	0.26803E 02	0.43347E 01	0.13383E-01	0.47957E-02	0.99291E 00	0.75578E 00	0.70000E-02	0.82302E 00
150	571.36	0.25809E 02	0.41986E 01	0.12982E-01	0.46521E-02	0.96171E 00	0.73204E 00	0.70000E-02	0.79558E 00
151	574.17	0.24669E 02	0.40192E 01	0.12453E-01	0.44627E-02	0.92062E 00	0.70076E 00	0.70000E-02	0.77663E 00
152	609.70	0.48372E 02	0.77430E 01	0.24649E-01	0.88330E-02	0.17736E 01	0.13500E 01	0.39000E-01	0.13902E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	608.31	0.53525E 02	0.85614E 01	0.27225E-01	0.97561E-02	0.19611E 01	0.14927E 01	0.39000E-01	0.15354E 01
154	602.27	0.50713E 02	0.80325E 01	0.25425E-01	0.91110E-02	0.18399E 01	0.14005E 01	0.78000E-01	0.14351E 01
155	586.10	0.51276E 02	0.84087E 01	0.26290E-01	0.94210E-02	0.19261E 01	0.14661E 01	0.39000E-01	0.15142E 01
156	570.09	0.32821E 02	0.53186E 01	0.16430E-01	0.58876E-02	0.12183E 01	0.92732E 00	0.39000E-01	0.10322E 01
157	573.81	0.31299E 02	0.50985E 01	0.15793E-01	0.56596E-02	0.11678E 01	0.88894E 00	0.78000E-01	0.10345E 01
158	557.74	0.32273E 02	0.52271E 01	0.15999E-01	0.57334E-02	0.11973E 01	0.91136E 00	0.39000E-01	0.10145E 01
159	567.27	0.32084E 02	0.52240E 01	0.16103E-01	0.57707E-02	0.11966E 01	0.91082E 00	0.78000E-01	0.10344E 01
160	570.04	0.31437E 02	0.51103E 01	0.15785E-01	0.56568E-02	0.11706E 01	0.89100E 00	0.39000E-01	0.99027E 00
161	570.53	0.27797E 02	0.44130E 01	0.13637E-01	0.48868E-02	0.10108E 01	0.76943E 00	0.43000E-01	0.10245E 01
162	574.15	0.27699E 02	0.44204E 01	0.13697E-01	0.49082E-02	0.10125E 01	0.77072E 00	0.43000E-01	0.10229E 01
163	572.92	0.29035E 02	0.46380E 01	0.14357E-01	0.51450E-02	0.10624E 01	0.80865E 00	0.85000E-01	0.10353E 01
164	570.78	0.29090E 02	0.46190E 01	0.14276E-01	0.51158E-02	0.10580E 01	0.80535E 00	0.12800E-00	0.10349E 01
165	571.62	0.28447E 02	0.45336E 01	0.14021E-01	0.50243E-02	0.10385E 01	0.79045E 00	0.43000E-01	0.10173E 01
166	571.47	0.28926E 02	0.45946E 01	0.14208E-01	0.50914E-02	0.10524E 01	0.80109E 00	0.85000E-01	0.10262E 01
167	1085.37	-0.31167E-02	-0.62758E-03	-0.31795E-05	-0.11394E-05	-0.14375E-03	-0.10942E-03	0.43000E-01	0.
168	572.88	0.29830E 02	0.47955E 01	0.14845E-01	0.53196E-02	0.10984E 01	0.83611E 00	0.12800E-00	0.10301E 01
169	575.04	0.29148E 02	0.46763E 01	0.14499E-01	0.51958E-02	0.10712E 01	0.81534E 00	0.85000E-01	0.10244E 01
170	574.85	0.30265E 02	0.48319E 01	0.14979E-01	0.53679E-02	0.11068E 01	0.84246E 00	0.12800E-00	0.10254E 01
171	572.45	0.30787E 02	0.48929E 01	0.15141E-01	0.54259E-02	0.11208E 01	0.85310E 00	0.85000E-01	0.10230E 01
172	1085.37	-0.31167E-02	-0.63062E-03	-0.31949E-05	-0.11449E-05	-0.14445E-03	-0.10995E-03	0.43000E-01	0.
173	581.53	0.35823E 02	0.57678E 01	0.17971E-01	0.64399E-02	0.13212E 01	0.10056E 01	0.12800E-00	0.10132E 01
174	587.24	0.44248E 02	0.71121E 01	0.22255E-01	0.79752E-02	0.16291E 01	0.12400E 01	0.85000E-01	0.99377E 00
175	632.69	0.71200E 02	0.11687E 02	0.37877E-01	0.13573E-01	0.26771E 01	0.20377E 01	0.43000E-01	0.11234E 01
176	633.11	0.69298E 02	0.11378E 02	0.36886E-01	0.13218E-01	0.26061E 01	0.19837E 01	0.43000E-01	0.11609E 01
177	593.45	0.48830E 02	0.78875E 01	0.24798E-01	0.88865E-02	0.18067E 01	0.13752E 01	0.12800E-00	0.10130E 01
178	606.05	0.56229E 02	0.91298E 01	0.28982E-01	0.10386E-01	0.20913E 01	0.15918E 01	0.85000E-01	0.10424E 01
179	606.53	0.49944E 02	0.81115E 01	0.25759E-01	0.92308E-02	0.18580E 01	0.14143E 01	0.70000E-02	0.10286E 01
180	596.24	0.40818E 02	0.66246E 01	0.20872E-01	0.74794E-02	0.15174E 01	0.11550E 01	0.70000E-02	0.12806E 01
181	586.79	0.33618E 02	0.54282E 01	0.16980E-01	0.60848E-02	0.12434E 01	0.94642E 00	0.70000E-02	0.12914E 01
182	579.29	0.30106E 02	0.48569E 01	0.15107E-01	0.54137E-02	0.11125E 01	0.84682E 00	0.70000E-02	0.10505E 01
183	591.06	0.41469E 02	0.66899E 01	0.20995E-01	0.75235E-02	0.15324E 01	0.11664E 01	0.32000E-01	0.10118E 01
184	584.66	0.36940E 02	0.59768E 01	0.18666E-01	0.66890E-02	0.13690E 01	0.10421E 01	0.32000E-01	0.10408E 01
185	568.52	0.31265E 02	0.50142E 01	0.15471E-01	0.55441E-02	0.11485E 01	0.87425E 00	0.64000E-01	0.10450E 01
186	578.07	0.34868E 02	0.56034E 01	0.17413E-01	0.62401E-02	0.12835E 01	0.97698E 00	0.64000E-01	0.10428E 01
187	579.19	0.31814E 02	0.51320E 01	0.15962E-01	0.57199E-02	0.11755E 01	0.89479E 00	0.70000E-02	0.10212E 01
188	596.90	0.43137E 02	0.71379E 01	0.22500E-01	0.80631E-02	0.16350E 01	0.12445E 01	0.70000E-02	0.10451E 01
189	534.28	0.64883E 01	0.10584E 01	0.31842E-02	0.11411E-02	0.24242E-00	0.18453E-00	0.10600E 01	0.10109E 01
190	530.37	0.37668E 01	0.62532E 00	0.18761E-02	0.67230E-03	0.14324E-00	0.10903E-00	0.10840E 01	0.10173E 01
191	527.08	0.19429E 01	0.32368E-00	0.96879E-03	0.34717E-03	0.74142E-01	0.56435E-01	0.11080E 01	0.11097E 01
192	522.49	0.22187E 01	0.36668E-00	0.10939E-02	0.39199E-03	0.83992E-01	0.63933E-01	0.11080E 01	0.10477E 01
193	515.32	0.12166E 01	0.19723E-00	0.58535E-03	0.20976E-03	0.45177E-01	0.34388E-01	0.16580E 01	0.14200E 01
194	516.93	0.10218E 01	0.16504E-00	0.49038E-03	0.17573E-03	0.37804E-01	0.28775E-01	0.11700E 01	0.11991E 01
195	516.27	0.11351E 01	0.18411E-00	0.54677E-03	0.19594E-03	0.42171E-01	0.32100E-01	0.16740E 01	0.12904E 01
196	516.11	0.12426E 01	0.20060E-00	0.59570E-03	0.21347E-03	0.45950E-01	0.34976E-01	0.16950E 01	0.15926E 01

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3937-04
065 065

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
93	2	-7.36	142.64	-0.	-0.	2	C57	2.70	2	10.19	1850.00	1897.00	50	C55	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.918832E 02	0.378381E-01	0.478437E 04	0.345506E-04	0.744254E-07	0.223601E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732188E 00	0.622172E 01	0.924837E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	543.98	0.17699E 01	0.28893E-00	0.82560E-03	0.15523E-03	0.46440E-01	0.31242E-01	-0.10600E 01	0.99580E 00
100	543.16	0.90650E 00	0.15240E-00	0.43522E-03	0.81832E-04	0.24495E-01	0.16479E-01	-0.10840E 01	0.92157E 00
101	541.88	0.65818E 00	0.10815E-00	0.30859E-03	0.58022E-04	0.17383E-01	0.11694E-01	-0.11080E 01	0.11205E 01
102	543.39	0.73559E 00	0.12060E-00	0.34447E-03	0.64769E-04	0.19384E-01	0.13040E-01	-0.11080E 01	0.21821E-01
103	543.87	0.11304E 01	0.19012E-00	0.54320E-03	0.10213E-03	0.30557E-01	0.20557E-01	-0.10800E 01	0.32358E-01
104	630.93	0.69108E 02	0.11498E 02	0.34956E-01	0.65726E-02	0.18480E 01	0.12432E 01	0.85000E 00	0.10074E 01
105	653.78	0.86790E 02	0.13823E 02	0.42745E-01	0.80372E-02	0.22217E 01	0.14946E 01	0.94000E 00	0.10160E 01
106	665.93	0.94098E 02	0.14954E 02	0.46669E-01	0.87750E-02	0.24035E 01	0.16169E 01	0.96000E 00	0.10198E 01
107	618.97	0.93829E 02	0.14551E 02	0.43851E-01	0.82451E-02	0.23387E 01	0.15733E 01	0.98000E 00	0.10017E 01
108	654.04	0.94594E 02	0.15017E 02	0.46448E-01	0.87333E-02	0.24137E 01	0.16238E 01	0.10000E 01	0.10175E 01
109	656.09	0.85654E 02	0.13658E 02	0.42310E-01	0.79553E-02	0.21953E 01	0.14768E 01	0.10200E 01	0.10305E 01
110	653.39	0.77722E 02	0.12376E 02	0.38260E-01	0.71939E-02	0.19892E 01	0.13382E 01	0.80000E-01	0.99574E 00
111	641.90	0.82150E 02	0.12894E 02	0.39521E-01	0.74309E-02	0.20724E 01	0.13942E 01	0.10000E-00	0.10077E 01
112	667.13	0.89209E 02	0.14258E 02	0.44538E-01	0.83742E-02	0.22917E 01	0.15417E 01	0.12000E-00	0.10230E 01
113	667.72	0.95158E 02	0.15265E 02	0.47704E-01	0.89695E-02	0.24535E 01	0.16505E 01	0.14000E-00	0.10250E 01
114	630.98	0.71519E 02	0.11256E 02	0.34223E-01	0.64347E-02	0.18092E 01	0.12171E 01	0.80000E-01	0.99752E 00
115	635.90	0.72916E 02	0.11467E 02	0.34991E-01	0.65791E-02	0.18431E 01	0.12399E 01	0.10000E-00	0.10061E 01
116	623.47	0.75582E 02	0.11889E 02	0.35946E-01	0.67588E-02	0.19108E 01	0.12855E 01	0.12000E-00	0.99773E 00
117	635.05	0.80512E 02	0.12699E 02	0.38724E-01	0.72811E-02	0.20410E 01	0.13731E 01	0.14000E-00	0.10069E 01
118	623.58	0.61599E 02	0.97384E 01	0.29447E-01	0.55368E-02	0.15652E 01	0.10530E 01	0.10000E-00	0.10000E 01
119	625.10	0.60247E 02	0.94846E 01	0.28712E-01	0.53986E-02	0.15244E 01	0.10255E 01	0.15000E-00	0.10105E 01
120	610.23	0.62681E 02	0.98067E 01	0.29366E-01	0.55216E-02	0.15762E 01	0.10604E 01	0.20000E-00	0.11480E 01
121	638.58	0.67490E 02	0.10754E 02	0.32880E-01	0.61823E-02	0.17285E 01	0.11628E 01	0.25000E-00	0.10254E 01
122	616.07	0.62976E 02	0.99164E 01	0.29821E-01	0.56071E-02	0.15938E 01	0.10722E 01	0.30000E-00	0.10124E 01
123	634.60	0.68658E 02	0.10972E 02	0.33447E-01	0.62889E-02	0.17635E 01	0.11864E 01	0.35000E-00	0.
124	614.65	0.70302E 02	0.11191E 02	0.33619E-01	0.63211E-02	0.17987E 01	0.12100E 01	0.38000E-00	0.99795E 00
125	643.41	0.78364E 02	0.12769E 02	0.39180E-01	0.73668E-02	0.20523E 01	0.13806E 01	0.45000E-00	0.10115E 01
126	628.41	0.70808E 02	0.11597E 02	0.35191E-01	0.66169E-02	0.18639E 01	0.12539E 01	0.61000E 00	0.10136E 01
127	595.64	0.50908E 02	0.82329E 01	0.24396E-01	0.45870E-02	0.13233E 01	0.89020E 00	0.70000E 00	0.10281E 01
128	569.91	0.28877E 02	0.46199E 01	0.13442E-01	0.25273E-02	0.74254E 00	0.49954E-00	0.75000E 00	0.10408E 01
129	598.89	0.50283E 02	0.81724E 01	0.24273E-01	0.45639E-02	0.13135E 01	0.88366E 00	0.70000E 00	0.10053E 01
130	604.44	0.54265E 02	0.88459E 01	0.26379E-01	0.49598E-02	0.14218E 01	0.95648E 00	0.80000E 00	0.10300E 01
131	571.98	0.30888E 02	0.46940E 01	0.13677E-01	0.25716E-02	0.75445E 00	0.50754E 00	0.90000E 00	0.10608E 01
132	600.66	0.72488E 02	0.11226E 02	0.33386E-01	0.62774E-02	0.18044E 01	0.12139E 01	0.90000E 00	0.10328E 01
133	612.71	0.67847E 02	0.10522E 02	0.31566E-01	0.59352E-02	0.16912E 01	0.11377E 01	0.96000E 00	0.10381E 01
134	608.32	0.62510E 02	0.96883E 01	0.28972E-01	0.54474E-02	0.15572E 01	0.10476E 01	0.10000E 01	0.10351E 01
135	628.84	0.71074E 02	0.11643E 02	0.35343E-01	0.66453E-02	0.18713E 01	0.12589E 01	0.70000E-02	0.
136	617.50	0.68233E 02	0.10914E 02	0.32854E-01	0.61774E-02	0.17541E 01	0.11801E 01	0.70000E-02	0.
137	600.46	0.54302E 02	0.87340E 01	0.25970E-01	0.48830E-02	0.14038E 01	0.94438E 00	0.39000E-01	0.20780E 01
138	589.71	0.44407E 02	0.70667E 01	0.20851E-01	0.39205E-02	0.11358E 01	0.76411E 00	0.78000E-01	0.17230E 01
139	597.01	0.60972E 02	0.96937E 01	0.28752E-01	0.54062E-02	0.15580E 01	0.10482E 01	0.11700E-00	0.24480E 01
140	615.98	0.77207E 02	0.12359E 02	0.37166E-01	0.69881E-02	0.19865E 01	0.13364E 01	0.78000E-01	0.30626E 01
141-4157.09		0.10379E-01	-0.31432E-02	-0.23459E-05	-0.44109E-06	-0.50520E-03	-0.33987E-03	-0.	0.
142-4157.09		0.10379E-01	-0.31432E-02	-0.23459E-05	-0.44109E-06	-0.50520E-03	-0.33987E-03	-0.	0.
143	601.53	0.64059E 02	0.10126E 02	0.30131E-01	0.56655E-02	0.16275E 01	0.10949E 01	0.78000E-01	0.25826E 01
144	577.93	0.39839E 02	0.62277E 01	0.18222E-01	0.34263E-02	0.10010E 01	0.67339E 00	0.70000E-02	0.15254E 01
145	603.26	0.49354E 02	0.77829E 01	0.23189E-01	0.43601E-02	0.12509E 01	0.84155E 00	0.70000E-02	0.21211E 01
146	587.57	0.57557E 02	0.90446E 01	0.26646E-01	0.50102E-02	0.14537E 01	0.97797E 00	0.39000E-01	0.25768E 01
147	593.25	0.48282E 02	0.75980E 01	0.22476E-01	0.42260E-02	0.12212E 01	0.82155E 00	0.78000E-01	0.21765E 01
148	597.99	0.55166E 02	0.87752E 01	0.26046E-01	0.48974E-02	0.14104E 01	0.94884E 00	0.11700E-00	0.
149	625.79	0.63502E 02	0.10587E 02	0.32065E-01	0.60291E-02	0.17016E 01	0.11447E 01	0.70000E-02	0.10866E 01
150	611.49	0.52797E 02	0.87773E 01	0.26308E-01	0.49465E-02	0.14108E 01	0.94906E 00	0.70000E-02	0.88922E 00
151	614.81	0.48637E 02	0.80999E 01	0.24336E-01	0.45758E-02	0.13019E 01	0.87582E 00	0.70000E-02	0.82946E 00
152	624.60	0.60270E 02	0.97241E 01	0.29426E-01	0.55326E-02	0.15629E 01	0.10514E 01	0.39000E-01	0.96546E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	623.64	0.58395E 02	0.94167E 01	0.28476E-01	0.53542E-02	0.15135E 01	0.10182E 01	0.39000E-01	0.96877E 00
154	626.37	0.60074E 02	0.96381E 01	0.29204E-01	0.54910E-02	0.15491E 01	0.10421E 01	0.78000E-01	0.99528E 00
155	606.86	0.55943E 02	0.92773E 01	0.27713E-01	0.52108E-02	0.14911E 01	0.10031E 01	0.39000E-01	0.97484E 00
156	610.79	0.55746E 02	0.92348E 01	0.27665E-01	0.52017E-02	0.14843E 01	0.99854E 00	0.39000E-01	0.
157	611.20	0.50546E 02	0.84017E 01	0.25177E-01	0.47339E-02	0.13504E 01	0.90846E 00	0.78000E-01	0.10025E 01
158	604.44	0.63444E 02	0.10541E 02	0.31432E-01	0.59101E-02	0.16942E 01	0.11397E 01	0.39000E-01	0.11988E 01
159	617.91	0.67916E 02	0.11365E 02	0.34223E-01	0.64348E-02	0.18267E 01	0.12289E 01	0.78000E-01	0.12999E 01
160	644.67	0.82421E 02	0.13944E 02	0.42826E-01	0.80523E-02	0.22411E 01	0.15077E 01	0.39000E-01	0.14874E 01
161	605.37	0.53670E 02	0.86831E 01	0.25910E-01	0.48718E-02	0.13956E 01	0.93888E 00	0.43000E-01	0.10656E 01
162	651.59	0.94800E 02	0.15766E 02	0.48674E-01	0.91518E-02	0.25340E 01	0.17047E 01	0.43000E-01	0.10577E 01
163	626.42	0.70962E 02	0.11666E 02	0.35350E-01	0.66466E-02	0.18750E 01	0.12614E 01	0.85000E-01	0.10416E 01
164	613.89	0.61127E 02	0.99346E 01	0.29829E-01	0.56085E-02	0.15968E 01	0.10742E 01	0.12800E-00	0.10223E 01
165	657.67	0.10586E 03	0.17661E 02	0.54773E-01	0.10299E-01	0.28386E 01	0.19096E 01	0.43000E-01	0.10357E 01
166	645.77	0.94173E 02	0.15564E 02	0.47843E-01	0.89956E-02	0.25016E 01	0.16829E 01	0.85000E-01	0.10294E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.28885E-05	-0.54311E-06	-0.10089E-03	-0.67875E-04	0.43000E-01	0.
168	634.61	0.78210E 02	0.12996E 02	0.39618E-01	0.74491E-02	0.20888E 01	0.14052E 01	0.12800E-00	0.10125E 01
169	653.75	0.90650E 02	0.15165E 02	0.46896E-01	0.88176E-02	0.24375E 01	0.16398E 01	0.85000E-01	0.10271E 01
170	642.97	0.83951E 02	0.13899E 02	0.42636E-01	0.80166E-02	0.22340E 01	0.15029E 01	0.12800E-00	0.10465E 01
171	644.30	0.94270E 02	0.15568E 02	0.47803E-01	0.89881E-02	0.25023E 01	0.16834E 01	0.85000E-01	0.10699E 01
172	944.11	0.63995E 02	0.12226E 02	0.48459E-01	0.91114E-02	0.19651E 01	0.13220E 01	0.43000E-01	0.
173	638.87	0.74135E 02	0.12307E 02	0.37636E-01	0.70766E-02	0.19781E 01	0.13307E 01	0.12800E-00	0.95954E 00
174	655.27	0.94396E 02	0.15729E 02	0.48693E-01	0.91555E-02	0.25280E 01	0.17007E 01	0.85000E-01	0.99576E 00
175	687.87	0.10448E 03	0.17644E 02	0.55995E-01	0.10529E-01	0.28358E 01	0.19077E 01	0.43000E-01	0.10167E 01
176	668.83	0.87379E 02	0.14614E 02	0.45709E-01	0.85944E-02	0.23489E 01	0.15802E 01	0.43000E-01	0.98404E 00
177	604.20	0.49517E 02	0.80451E 01	0.23986E-01	0.45100E-02	0.12931E 01	0.86989E 00	0.12800E-00	0.10326E 01
178	602.82	0.45504E 02	0.73757E 01	0.21968E-01	0.41306E-02	0.11855E 01	0.79751E 00	0.85000E-01	0.99526E 00
179	646.84	0.71945E 02	0.11936E 02	0.36718E-01	0.69038E-02	0.19184E 01	0.12906E 01	0.70000E-02	0.11196E 01
180	638.82	0.75069E 02	0.12462E 02	0.38108E-01	0.71652E-02	0.20029E 01	0.13474E 01	0.70000E-02	0.12844E 01
181	676.39	0.83467E 02	0.14127E 02	0.44440E-01	0.83559E-02	0.22706E 01	0.15275E 01	0.70000E-02	0.13569E 01
182	648.44	0.69889E 02	0.11697E 02	0.36028E-01	0.67741E-02	0.18801E 01	0.12648E 01	0.70000E-02	0.11594E 01
183	603.82	0.48382E 02	0.78590E 01	0.23425E-01	0.44045E-02	0.12632E 01	0.84977E 00	0.32000E-01	0.10054E 01
184	621.88	0.61729E 02	0.10189E 02	0.30771E-01	0.57857E-02	0.16376E 01	0.11017E 01	0.32000E-01	0.10125E 01
185	606.13	0.58154E 02	0.95187E 01	0.28419E-01	0.53435E-02	0.15299E 01	0.10292E 01	0.64000E-01	0.10194E 01
186	620.71	0.65068E 02	0.10699E 02	0.32284E-01	0.60702E-02	0.17196E 01	0.11569E 01	0.64000E-01	0.10119E 01
187	608.34	0.50996E 02	0.83569E 01	0.24991E-01	0.46989E-02	0.13432E 01	0.90361E 00	0.70000E-02	0.10084E 01
188	606.00	0.54002E 02	0.89794E 01	0.26807E-01	0.50403E-02	0.14432E 01	0.97092E 00	0.70000E-02	0.10682E 01
189	547.33	0.93803E 01	0.15413E 01	0.44144E-02	0.83002E-03	0.24773E-00	0.16666E-00	0.10600E 01	0.10109E 01
190	542.53	0.60348E 01	0.10087E 01	0.28795E-02	0.54141E-03	0.16213E-00	0.10907E-00	0.10840E 01	0.10457E 01
191	537.62	0.28670E 01	0.48051E-00	0.13670E-02	0.25703E-03	0.77230E-01	0.51956E-01	0.11080E 01	0.10060E 01
192	533.93	0.31325E 01	0.52107E 00	0.14787E-02	0.27802E-03	0.83751E-01	0.56342E-01	0.11080E 01	0.98319E 00
193	541.83	0.98935E 01	0.16281E 01	0.46454E-02	0.87345E-03	0.26169E-00	0.17605E-00	0.16580E 01	0.13769E 01
194	543.96	0.92447E 01	0.15162E 01	0.43323E-02	0.81458E-03	0.24369E-00	0.16394E-00	0.11700E 01	0.11720E 01
195	544.11	0.10661E 02	0.17567E 01	0.50199E-02	0.94387E-03	0.28234E-00	0.18994E-00	0.16740E 01	0.11560E 01
196	544.41	0.10717E 02	0.17581E 01	0.50250E-02	0.94483E-03	0.28257E-00	0.19010E-00	0.16950E 01	0.10911E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
94	2	-3.36	146.64	-0.02	-0.	2	C57	2.70	2	10.19	1851.80	1896.80	51	C55	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.918738E 02	0.378750E-01	0.478415E 04	0.345878E-04	0.744178E-07	0.223854E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732183E 00	0.622446E 01	0.925392E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	543.41	0.24421E 01	0.39855E-00	0.11385E-02	0.21385E-03	0.64029E-01	0.43068E-01	-0.10600E 01	0.10681E 01
100	542.80	0.12348E 01	0.20755E-00	0.59267E-03	0.11132E-03	0.33345E-01	0.22429E-01	-0.10840E 01	0.10733E 01
101	541.56	0.92000E 00	0.15115E-00	0.43123E-03	0.80999E-04	0.24283E-01	0.16333E-01	-0.11080E 01	0.13828E 01
102	542.83	0.95896E 00	0.15718E-00	0.44883E-03	0.84304E-04	0.25251E-01	0.16985E-01	-0.11080E 01	0.30960E-01
103	543.42	0.15642E 01	0.26300E-00	0.75133E-03	0.14112E-03	0.42253E-01	0.28421E-01	-0.10800E 01	0.47305E-01
104	636.45	0.69802E 02	0.11647E 02	0.35560E-01	0.66792E-02	0.18712E 01	0.12586E 01	0.85000E 00	0.10126E 01
105	656.36	0.85300E 02	0.13604E 02	0.42156E-01	0.79183E-02	0.21855E 01	0.14701E 01	0.94000E 00	0.10106E 01
106	666.02	0.91383E 02	0.14523E 02	0.45336E-01	0.85154E-02	0.23333E 01	0.15694E 01	0.96000E 00	0.10235E 01
107	617.56	0.89971E 02	0.13942E 02	0.41981E-01	0.78852E-02	0.22399E 01	0.15066E 01	0.98000E 00	0.10107E 01
108	646.31	0.88015E 02	0.13917E 02	0.42803E-01	0.80397E-02	0.22358E 01	0.15039E 01	0.10000E 01	0.10313E 01
109	643.38	0.76386E 02	0.12100E 02	0.37135E-01	0.69751E-02	0.19440E 01	0.13076E 01	0.10200E 01	0.10521E 01
110	657.32	0.77937E 02	0.12436E 02	0.38564E-01	0.72435E-02	0.19978E 01	0.13438E 01	0.80000E-01	0.98691E 00
111	644.99	0.82516E 02	0.12972E 02	0.39859E-01	0.74867E-02	0.20841E 01	0.14018E 01	0.10000E-00	0.10003E 01
112	668.88	0.88809E 02	0.14207E 02	0.44444E-01	0.83480E-02	0.22824E 01	0.15352E 01	0.12000E-00	0.10217E 01
113	665.29	0.92537E 02	0.14826E 02	0.46254E-01	0.86879E-02	0.23818E 01	0.16021E 01	0.14000E-00	0.10336E 01
114	637.06	0.73658E 02	0.11630E 02	0.35524E-01	0.66724E-02	0.18684E 01	0.12568E 01	0.80000E-01	0.98543E 00
115	641.42	0.75500E 02	0.11908E 02	0.36490E-01	0.68540E-02	0.19130E 01	0.12868E 01	0.10000E-00	0.99258E 00
116	628.03	0.78448E 02	0.12369E 02	0.37530E-01	0.70493E-02	0.19872E 01	0.13366E 01	0.12000E-00	0.98928E 00
117	638.51	0.82873E 02	0.13095E 02	0.40041E-01	0.75209E-02	0.21038E 01	0.14150E 01	0.14000E-00	0.99969E 00
118	629.97	0.65298E 02	0.10358E 02	0.31473E-01	0.59116E-02	0.16641E 01	0.11193E 01	0.10000E-00	0.97874E 00
119	631.37	0.65502E 02	0.10346E 02	0.31469E-01	0.59109E-02	0.16621E 01	0.11180E 01	0.15000E-00	0.98910E 00
120	676.95	0.59523E 02	0.96418E 01	0.30349E-01	0.57005E-02	0.15490E 01	0.10419E 01	0.20000E-00	0.10477E 01
121	640.57	0.71127E 02	0.11345E 02	0.34745E-01	0.65262E-02	0.18227E 01	0.12260E 01	0.25000E-00	0.10210E 01
122	616.39	0.66198E 02	0.10426E 02	0.31365E-01	0.58913E-02	0.16750E 01	0.11266E 01	0.30000E-00	0.10149E 01
123	630.85	0.69007E 02	0.11006E 02	0.33465E-01	0.62857E-02	0.17682E 01	0.11894E 01	0.35000E-00	0.
124	609.97	0.69938E 02	0.11105E 02	0.33253E-01	0.62460E-02	0.17841E 01	0.12000E 01	0.38000E-00	0.10088E 01
125	634.72	0.75152E 02	0.12190E 02	0.37169E-01	0.69816E-02	0.19584E 01	0.13173E 01	0.45000E-00	0.10337E 01
126	623.10	0.68291E 02	0.11153E 02	0.33719E-01	0.63335E-02	0.17919E 01	0.12053E 01	0.61000E 00	0.10304E 01
127	584.36	0.45891E 02	0.73764E 01	0.21685E-01	0.40732E-02	0.11851E 01	0.79712E 00	0.70000E 00	0.10472E 01
128	557.81	0.24795E 02	0.39405E 01	0.11370E-01	0.21356E-02	0.63307E 00	0.42582E-00	0.75000E 00	0.10609E 01
129	597.18	0.49220E 02	0.79922E 01	0.23712E-01	0.44538E-02	0.12840E 01	0.86365E 00	0.70000E 00	0.10430E 01
130	601.37	0.50112E 02	0.81554E 01	0.24269E-01	0.45586E-02	0.13102E 01	0.88130E 00	0.80000E 00	0.10262E 01
131	563.73	0.27642E 02	0.41817E 01	0.12116E-01	0.22757E-02	0.67181E 00	0.45188E-00	0.90000E 00	0.99274E 00
132	591.00	0.66932E 02	0.10312E 02	0.30460E-01	0.57213E-02	0.16567E 01	0.11144E 01	0.90000E 00	0.10066E 01
133	604.16	0.63314E 02	0.97745E 01	0.29146E-01	0.54745E-02	0.15703E 01	0.10563E 01	0.96000E 00	0.10221E 01
134	600.47	0.59026E 02	0.91098E 01	0.27092E-01	0.50887E-02	0.14636E 01	0.98443E 00	0.10000E 01	0.10255E 01
135	640.31	0.95801E 02	0.15788E 02	0.48342E-01	0.90802E-02	0.25365E 01	0.17061E 01	0.70000E-02	0.
136	652.74	0.11912E 03	0.19409E 02	0.59981E-01	0.11266E-01	0.31181E 01	0.20973E 01	0.70000E-02	0.
137	619.16	0.74333E 02	0.12076E 02	0.36403E-01	0.68376E-02	0.19401E 01	0.13049E 01	0.39000E-01	0.27209E 01
138	603.55	0.59699E 02	0.95713E 01	0.28528E-01	0.53584E-02	0.15377E 01	0.10343E 01	0.78000E-01	0.22080E 01
139	604.95	0.77830E 02	0.12427E 02	0.37076E-01	0.69640E-02	0.19964E 01	0.13429E 01	0.11700E-00	0.29863E 01
140	612.30	0.80218E 02	0.12816E 02	0.38443E-01	0.72207E-02	0.20590E 01	0.13850E 01	0.78000E-01	0.30113E 01
141-4	157.09	0.10379E-01	-0.31432E-02	-0.23460E-05	-0.44065E-06	-0.50498E-03	-0.33967E-03	-0.	0.
142-4	157.09	0.10379E-01	-0.31432E-02	-0.23460E-05	-0.44065E-06	-0.50498E-03	-0.33967E-03	-0.	0.
143	599.19	0.69089E 02	0.10907E 02	0.32407E-01	0.60871E-02	0.17523E 01	0.11787E 01	0.78000E-01	0.25564E 01
144	575.49	0.43888E 02	0.68514E 01	0.20016E-01	0.37595E-02	0.11007E 01	0.74038E 00	0.70000E-02	0.15171E 01
145	602.53	0.54032E 02	0.85173E 01	0.25368E-01	0.47648E-02	0.13684E 01	0.92040E 00	0.70000E-02	0.20798E 01
146	591.88	0.67079E 02	0.10566E 02	0.31228E-01	0.58656E-02	0.16974E 01	0.11417E 01	0.39000E-01	0.26658E 01
147	598.53	0.57619E 02	0.90931E 01	0.27005E-01	0.50723E-02	0.14609E 01	0.98262E 00	0.78000E-01	0.23376E 01
148	596.62	0.59439E 02	0.94479E 01	0.28020E-01	0.52630E-02	0.15179E 01	0.10210E 01	0.11700E-00	0.
149	616.50	0.56957E 02	0.94493E 01	0.28430E-01	0.53400E-02	0.15181E 01	0.10211E 01	0.70000E-02	0.10498E 01
150	608.12	0.47385E 02	0.78633E 01	0.23515E-01	0.44168E-02	0.12633E 01	0.84973E 00	0.70000E-02	0.86469E 00
151	609.17	0.43276E 02	0.71856E 01	0.21504E-01	0.40392E-02	0.11544E 01	0.77649E 00	0.70000E-02	0.76810E 00
152	630.90	0.61575E 02	0.99676E 01	0.30308E-01	0.56928E-02	0.16014E 01	0.10771E 01	0.39000E-01	0.98777E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	629.86	0.60241E 02	0.97463E 01	0.29612E-01	0.55621E-02	0.15658E 01	0.10532E 01	0.39000E-01	0.99063E 00
154	629.57	0.61438E 02	0.98735E 01	0.29992E-01	0.56335E-02	0.15862E 01	0.10670E 01	0.78000E-01	0.10041E 01
155	610.93	0.57362E 02	0.95333E 01	0.28567E-01	0.53657E-02	0.15316E 01	0.10302E 01	0.39000E-01	0.10021E 01
156	620.20	0.64349E 02	0.10713E 02	0.32321E-01	0.60708E-02	0.17212E 01	0.11577E 01	0.39000E-01	0.
157	613.69	0.54482E 02	0.90679E 01	0.27227E-01	0.51140E-02	0.14568E 01	0.97990E 00	0.78000E-01	0.11238E 01
158	616.30	0.77881E 02	0.13021E 02	0.39172E-01	0.73577E-02	0.20920E 01	0.14071E 01	0.39000E-01	0.14898E 01
159	610.58	0.67047E 02	0.11176E 02	0.33481E-01	0.62887E-02	0.17955E 01	0.12077E 01	0.78000E-01	0.13454E 01
160	637.15	0.79971E 02	0.13476E 02	0.41166E-01	0.77322E-02	0.21650E 01	0.14563E 01	0.39000E-01	0.15505E 01
161	594.69	0.48020E 02	0.77247E 01	0.22877E-01	0.42971E-02	0.12410E 01	0.83474E 00	0.43000E-01	0.10665E 01
162	629.11	0.79708E 02	0.13101E 02	0.39784E-01	0.74726E-02	0.21048E 01	0.14158E 01	0.43000E-01	0.10845E 01
163	612.45	0.62112E 02	0.10136E 02	0.30406E-01	0.57111E-02	0.16284E 01	0.10953E 01	0.85000E-01	0.10706E 01
164	604.31	0.56725E 02	0.91722E 01	0.27353E-01	0.51378E-02	0.14736E 01	0.99117E 00	0.12800E-00	0.10694E 01
165	637.75	0.93685E 02	0.15469E 02	0.47274E-01	0.88794E-02	0.24852E 01	0.16716E 01	0.43000E-01	0.10496E 01
166	626.39	0.83377E 02	0.13641E 02	0.41339E-01	0.77648E-02	0.21915E 01	0.14741E 01	0.85000E-01	0.10646E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.28892E-05	-0.54268E-06	-0.10085E-03	-0.67834E-04	0.43000E-01	0.
168	622.61	0.72632E 02	0.11993E 02	0.36245E-01	0.68080E-02	0.19268E 01	0.12960E 01	0.12800E-00	0.10671E 01
169	647.35	0.89746E 02	0.14965E 02	0.46061E-01	0.86516E-02	0.24041E 01	0.16171E 01	0.85000E-01	0.10168E 01
170	633.33	0.79835E 02	0.13151E 02	0.40061E-01	0.75246E-02	0.21129E 01	0.14212E 01	0.12800E-00	0.10097E 01
171	636.31	0.89192E 02	0.14668E 02	0.44780E-01	0.84110E-02	0.23566E 01	0.15851E 01	0.85000E-01	0.10198E 01
172	686.73	0.65294E 02	0.11073E 02	0.35118E-01	0.65963E-02	0.17790E 01	0.11966E 01	0.43000E-01	0.
173	646.33	0.85715E 02	0.14285E 02	0.43935E-01	0.82523E-02	0.22949E 01	0.15436E 01	0.12800E-00	0.10250E 01
174	653.23	0.98052E 02	0.16321E 02	0.50457E-01	0.94773E-02	0.26220E 01	0.17636E 01	0.85000E-01	0.10573E 01
175	691.08	0.10997E 03	0.18602E 02	0.59193E-01	0.11118E-01	0.29885E 01	0.20102E 01	0.43000E-01	0.11103E 01
176	675.88	0.96833E 02	0.16254E 02	0.51119E-01	0.96018E-02	0.26112E 01	0.17564E 01	0.43000E-01	0.10136E 01
177	602.30	0.47698E 02	0.77416E 01	0.23053E-01	0.43301E-02	0.12437E 01	0.83657E 00	0.12800E-00	0.98304E 00
178	615.23	0.55291E 02	0.90216E 01	0.27118E-01	0.50936E-02	0.14494E 01	0.97489E 00	0.85000E-01	0.93000E 00
179	643.53	0.71737E 02	0.11881E 02	0.36464E-01	0.68491E-02	0.19087E 01	0.12838E 01	0.70000E-02	0.10820E 01
180	634.03	0.73325E 02	0.12142E 02	0.37004E-01	0.69504E-02	0.19506E 01	0.13121E 01	0.70000E-02	0.12675E 01
181	664.38	0.79285E 02	0.13337E 02	0.41580E-01	0.78100E-02	0.21426E 01	0.14412E 01	0.70000E-02	0.13105E 01
182	640.69	0.69267E 02	0.11547E 02	0.35365E-01	0.66425E-02	0.18550E 01	0.12478E 01	0.70000E-02	0.11517E 01
183	601.97	0.48067E 02	0.78001E 01	0.23222E-01	0.43618E-02	0.12531E 01	0.84289E 00	0.32000E-01	0.10287E 01
184	617.32	0.60147E 02	0.99038E 01	0.29815E-01	0.56003E-02	0.15911E 01	0.10702E 01	0.32000E-01	0.10240E 01
185	599.43	0.55146E 02	0.89941E 01	0.26728E-01	0.50203E-02	0.14450E 01	0.97192E 00	0.64000E-01	0.10330E 01
186	616.08	0.62812E 02	0.10303E 02	0.30988E-01	0.58206E-02	0.16552E 01	0.11133E 01	0.64000E-01	0.10282E 01
187	607.39	0.51542E 02	0.84422E 01	0.25232E-01	0.47394E-02	0.13563E 01	0.91228E 00	0.70000E-02	0.10227E 01
188	606.84	0.54927E 02	0.91373E 01	0.27299E-01	0.51276E-02	0.14680E 01	0.98740E 00	0.70000E-02	0.10578E 01
189	538.48	0.91896E 01	0.15025E 01	0.42777E-02	0.80349E-03	0.24139E-00	0.16237E-00	0.10600E 01	0.97331E 00
190	533.31	0.58146E 01	0.96689E 00	0.27430E-02	0.51522E-03	0.15534E-00	0.10448E-00	0.10840E 01	0.10548E 01
191	529.42	0.28384E 01	0.47352E-00	0.13398E-02	0.25165E-03	0.76074E-01	0.51170E-01	0.11080E 01	0.10559E 01
192	525.29	0.29610E 01	0.49015E-00	0.13830E-02	0.25976E-03	0.78746E-01	0.52967E-01	0.11080E 01	0.94414E 00
193	530.44	0.83616E 01	0.13672E 01	0.38712E-02	0.72712E-03	0.21965E-00	0.14775E-00	0.16580E 01	0.13793E 01
194	532.80	0.74390E 01	0.12124E 01	0.34383E-02	0.64583E-03	0.19478E-00	0.13102E-00	0.11700E 01	0.12394E 01
195	532.08	0.87371E 01	0.14300E 01	0.40534E-02	0.76135E-03	0.22973E-00	0.15453E-00	0.16740E 01	0.12034E 01
196	532.10	0.84270E 01	0.13729E 01	0.38916E-02	0.73096E-03	0.22056E-00	0.14836E-00	0.16950E 01	0.11190E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
95	2	-5.40	147.23	-59.14	-4.63	2	C57	2.70	2	10.19	1852.30	1906.00	43	C55	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.923601E 02	0.378477E-01	0.479680E 04	0.343809E-04	0.748117E-07	0.221929E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732445E 00	0.622525E 01	0.925551E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	545.32	0.36805E 01	0.63398E 00	0.17991E-02	0.33906E-03	0.10184E-00	0.68497E-01	-0.10600E 01	0.18267E 01
100	543.87	0.23808E 01	0.40042E-00	0.11352E-02	0.21394E-03	0.64322E-01	0.43263E-01	-0.10840E 01	0.19227E 01
101	542.52	0.15543E 01	0.25549E-00	0.72364E-03	0.13638E-03	0.41041E-01	0.27604E-01	-0.11080E 01	0.22478E 01
102	545.18	0.24130E 01	0.39602E-00	0.11237E-02	0.21178E-03	0.63615E-01	0.42787E-01	-0.11080E 01	0.10154E-00
103	545.18	0.32810E 01	0.55223E 00	0.15670E-02	0.29532E-03	0.88709E-01	0.59665E-01	-0.10800E 01	0.74162E 00
104	625.80	0.64691E 02	0.10734E 02	0.32243E-01	0.60766E-02	0.17243E 01	0.11598E 01	0.85000E 00	0.10300E 01
105	640.32	0.78142E 02	0.12359E 02	0.37521E-01	0.70713E-02	0.19853E 01	0.13353E 01	0.94000E 00	0.10230E 01
106	648.86	0.84887E 02	0.13372E 02	0.40853E-01	0.76994E-02	0.21480E 01	0.14448E 01	0.96000E 00	0.10240E 01
107	601.72	0.84531E 02	0.12989E 02	0.38344E-01	0.72264E-02	0.20865E 01	0.14034E 01	0.98000E 00	0.10042E 01
108	630.12	0.84051E 02	0.13178E 02	0.39710E-01	0.74838E-02	0.21169E 01	0.14238E 01	0.10000E 01	0.10058E 01
109	628.83	0.74167E 02	0.11660E 02	0.35101E-01	0.66153E-02	0.18730E 01	0.12598E 01	0.10200E 01	0.10135E 01
110	644.77	0.72780E 02	0.11538E 02	0.35142E-01	0.66230E-02	0.18533E 01	0.12466E 01	0.80000E-01	0.99775E 00
111	633.24	0.77645E 02	0.12132E 02	0.36641E-01	0.69054E-02	0.19488E 01	0.13108E 01	0.10000E-00	0.10125E 01
112	655.28	0.84327E 02	0.13396E 02	0.41122E-01	0.77500E-02	0.21519E 01	0.14473E 01	0.12000E-00	0.10225E 01
113	651.75	0.88969E 02	0.14155E 02	0.43339E-01	0.81678E-02	0.22738E 01	0.15294E 01	0.14000E-00	0.10228E 01
114	631.52	0.72545E 02	0.11421E 02	0.34449E-01	0.64924E-02	0.18346E 01	0.12340E 01	0.80000E-01	0.10103E 01
115	637.01	0.75600E 02	0.11896E 02	0.36028E-01	0.67899E-02	0.19109E 01	0.12853E 01	0.10000E-00	0.10274E 01
116	623.91	0.78694E 02	0.12381E 02	0.37139E-01	0.69992E-02	0.19888E 01	0.13377E 01	0.12000E-00	0.10188E 01
117	634.21	0.82997E 02	0.13085E 02	0.39547E-01	0.74531E-02	0.21019E 01	0.14137E 01	0.14000E-00	0.10188E 01
118	635.19	0.70261E 02	0.11176E 02	0.33801E-01	0.63703E-02	0.17952E 01	0.12075E 01	0.10000E-00	0.10298E 01
119	639.05	0.67583E 02	0.10718E 02	0.32508E-01	0.61265E-02	0.17216E 01	0.11580E 01	0.15000E-00	0.10326E 01
120	620.96	0.65781E 02	0.10350E 02	0.30981E-01	0.58388E-02	0.16627E 01	0.11183E 01	0.20000E-00	0.11085E 01
121	648.34	0.66312E 02	0.10620E 02	0.32434E-01	0.61125E-02	0.17060E 01	0.11474E 01	0.25000E-00	0.10348E 01
122	629.27	0.62770E 02	0.99533E 01	0.29973E-01	0.56489E-02	0.15989E 01	0.10754E 01	0.30000E-00	0.10250E 01
123	646.81	0.68651E 02	0.11041E 02	0.33681E-01	0.63476E-02	0.17736E 01	0.11929E 01	0.35000E-00	0.
124	626.75	0.70542E 02	0.11301E 02	0.33970E-01	0.64021E-02	0.18154E 01	0.12210E 01	0.38000E-00	0.10040E 01
125	654.76	0.78518E 02	0.12869E 02	0.39490E-01	0.74425E-02	0.20673E 01	0.13904E 01	0.45000E-00	0.10182E 01
126	642.91	0.72853E 02	0.12023E 02	0.36570E-01	0.68921E-02	0.19313E 01	0.12990E 01	0.61000E 00	0.10245E 01
127	599.53	0.52366E 02	0.84865E 01	0.25013E-01	0.47141E-02	0.13632E 01	0.91692E 00	0.70000E 00	0.10243E 01
128	565.09	0.30188E 02	0.48169E 01	0.13857E-01	0.26116E-02	0.77377E 00	0.52043E 00	0.75000E 00	0.10252E 01
129	614.91	0.52444E 02	0.85968E 01	0.25620E-01	0.48284E-02	0.13810E 01	0.92883E 00	0.70000E 00	0.10294E 01
130	617.65	0.54482E 02	0.89439E 01	0.26707E-01	0.50333E-02	0.14367E 01	0.96633E 00	0.80000E 00	0.10265E 01
131	576.33	0.33419E 02	0.50907E 01	0.14760E-01	0.27817E-02	0.81775E 00	0.55001E 00	0.90000E 00	0.10194E 01
132	609.27	0.66477E 02	0.10343E 02	0.30699E-01	0.57856E-02	0.16615E 01	0.11175E 01	0.90000E 00	0.10075E 01
133	624.21	0.64604E 02	0.10081E 02	0.30245E-01	0.57000E-02	0.16193E 01	0.10891E 01	0.96000E 00	0.10176E 01
134	621.09	0.61130E 02	0.95389E 01	0.28555E-01	0.53816E-02	0.15323E 01	0.10306E 01	0.10000E 01	0.10149E 01
135	572.01	0.27695E 02	0.44004E 01	0.12720E-01	0.23973E-02	0.70686E 00	0.47543E-00	0.70000E-02	0.
136	571.49	0.29179E 02	0.45526E 01	0.13155E-01	0.24793E-02	0.73132E 00	0.49188E-00	0.70000E-02	0.
137	571.63	0.29435E 02	0.46608E 01	0.13469E-01	0.25385E-02	0.74870E 00	0.50357E 00	0.39000E-01	0.10121E 01
138	570.36	0.28212E 02	0.44425E 01	0.12827E-01	0.24174E-02	0.71363E 00	0.47998E-00	0.78000E-01	0.98571E 00
139	601.94	0.61945E 02	0.98746E 01	0.29155E-01	0.54946E-02	0.15862E 01	0.10669E 01	0.11700E-00	0.15289E 01
140	615.24	0.71940E 02	0.11512E 02	0.34315E-01	0.64671E-02	0.18492E 01	0.12438E 01	0.78000E-01	0.17735E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23411E-05	-0.44121E-06	-0.50492E-03	-0.33961E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23411E-05	-0.44121E-06	-0.50492E-03	-0.33961E-03	-0.	0.
143	593.36	0.59298E 02	0.93331E 01	0.27398E-01	0.51635E-02	0.14992E 01	0.10084E 01	0.78000E-01	0.27307E 01
144	575.90	0.41071E 02	0.64130E 01	0.18589E-01	0.35033E-02	0.10302E 01	0.69289E 00	0.70000E-02	0.15753E 01
145	598.55	0.49627E 02	0.78063E 01	0.22992E-01	0.43332E-02	0.12540E 01	0.84342E 00	0.70000E-02	0.21391E 01
146	596.16	0.75592E 02	0.11934E 02	0.35090E-01	0.66132E-02	0.19170E 01	0.12894E 01	0.39000E-01	0.32862E 01
147	602.50	0.64754E 02	0.10241E 02	0.30249E-01	0.57008E-02	0.16451E 01	0.11065E 01	0.78000E-01	0.28954E 01
148	594.03	0.54190E 02	0.86015E 01	0.25253E-01	0.47593E-02	0.13817E 01	0.92934E 00	0.11700E-00	0.
149	607.46	0.48183E 02	0.79553E 01	0.23581E-01	0.44441E-02	0.12779E 01	0.85952E 00	0.70000E-02	0.10204E 01
150	614.66	0.49712E 02	0.82783E 01	0.24667E-01	0.46487E-02	0.13298E 01	0.89442E 00	0.70000E-02	0.10465E 01
151	617.38	0.47550E 02	0.79298E 01	0.23674E-01	0.44617E-02	0.12738E 01	0.85676E 00	0.70000E-02	0.10274E 01
152	612.35	0.53837E 02	0.86299E 01	0.25671E-01	0.48360E-02	0.13863E 01	0.93241E 00	0.39000E-01	0.98684E 00

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	613.09	0.54389E 02	0.87217E 01	0.25958E-01	0.48921E-02	0.14010E 01	0.94233E 00	0.39000E-01	0.99639E 00
154	615.61	0.58953E 02	0.94045E 01	0.28041E-01	0.52847E-02	0.15107E 01	0.10161E 01	0.78000E-01	0.10185E 01
155	598.64	0.55106E 02	0.90984E 01	0.26800E-01	0.50508E-02	0.14615E 01	0.98302E 00	0.39000E-01	0.10446E 01
156	633.36	0.79776E 02	0.13374E 02	0.40396E-01	0.76131E-02	0.21484E 01	0.14450E 01	0.39000E-01	0.17038E 01
157	623.52	0.68879E 02	0.11524E 02	0.34559E-01	0.65130E-02	0.18512E 01	0.12451E 01	0.78000E-01	0.15103E 01
158	616.14	0.81629E 02	0.13647E 02	0.40706E-01	0.76716E-02	0.21922E 01	0.14745E 01	0.39000E-01	0.17869E 01
159	597.95	0.53601E 02	0.88743E 01	0.26127E-01	0.49239E-02	0.14255E 01	0.95881E 00	0.78000E-01	0.12461E 01
160	614.04	0.62879E 02	0.10468E 02	0.31175E-01	0.58754E-02	0.16815E 01	0.11310E 01	0.39000E-01	0.14190E 01
161	613.83	0.54726E 02	0.88940E 01	0.26485E-01	0.49914E-02	0.14287E 01	0.96094E 00	0.43000E-01	0.10335E 01
162	659.47	0.88076E 02	0.14707E 02	0.45290E-01	0.85354E-02	0.23625E 01	0.15890E 01	0.43000E-01	0.10307E 01
163	632.51	0.67268E 02	0.11094E 02	0.33489E-01	0.63113E-02	0.17821E 01	0.11987E 01	0.85000E-01	0.10264E 01
164	620.88	0.59146E 02	0.96485E 01	0.28879E-01	0.54426E-02	0.15499E 01	0.10425E 01	0.12800E-00	0.10316E 01
165	665.25	0.96051E 02	0.16087E 02	0.49753E-01	0.93765E-02	0.25841E 01	0.17381E 01	0.43000E-01	0.10191E 01
166	650.61	0.86234E 02	0.14288E 02	0.43709E-01	0.82375E-02	0.22952E 01	0.15437E 01	0.85000E-01	0.10178E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.28525E-05	-0.53759E-06	-0.10084E-03	-0.67823E-04	0.43000E-01	0.
168	641.34	0.73816E 02	0.12309E 02	0.37397E-01	0.70480E-02	0.19773E 01	0.13299E 01	0.12800E-00	0.10153E 01
169	658.21	0.84262E 02	0.14129E 02	0.43468E-01	0.81922E-02	0.22697E 01	0.15266E 01	0.85000E-01	0.10258E 01
170	647.26	0.76738E 02	0.12733E 02	0.38857E-01	0.73230E-02	0.20454E 01	0.13758E 01	0.12800E-00	0.10236E 01
171	648.53	0.85503E 02	0.14152E 02	0.43225E-01	0.81462E-02	0.22733E 01	0.15290E 01	0.85000E-01	0.10356E 01
172	523.15	0.74813E 02	0.11623E 02	0.32490E-01	0.61231E-02	0.18670E 01	0.12558E 01	0.43000E-01	0.
173	659.40	0.81845E 02	0.13732E 02	0.42285E-01	0.79692E-02	0.22059E 01	0.14837E 01	0.12800E-00	0.10252E 01
174	668.52	0.93419E 02	0.15672E 02	0.48590E-01	0.91573E-02	0.25175E 01	0.16933E 01	0.85000E-01	0.10267E 01
175	701.62	0.10374E 03	0.17640E 02	0.56093E-01	0.10571E-01	0.28337E 01	0.19059E 01	0.43000E-01	0.10605E 01
176	686.87	0.92007E 02	0.15530E 02	0.48824E-01	0.92015E-02	0.24946E 01	0.16779E 01	0.43000E-01	0.10405E 01
177	616.49	0.50798E 02	0.83075E 01	0.24786E-01	0.46712E-02	0.13345E 01	0.89757E 00	0.12800E-00	0.10277E 01
178	619.15	0.54182E 02	0.88590E 01	0.26482E-01	0.49910E-02	0.14231E 01	0.95716E 00	0.85000E-01	0.10222E 01
179	648.74	0.69866E 02	0.11602E 02	0.35443E-01	0.66797E-02	0.18637E 01	0.12535E 01	0.70000E-02	0.11138E 01
180	642.64	0.71027E 02	0.11814E 02	0.35929E-01	0.67712E-02	0.18978E 01	0.12765E 01	0.70000E-02	0.12767E 01
181	668.03	0.73260E 02	0.12346E 02	0.38265E-01	0.72115E-02	0.19833E 01	0.13340E 01	0.70000E-02	0.13193E 01
182	646.52	0.64466E 02	0.10779E 02	0.32874E-01	0.61956E-02	0.17315E 01	0.11646E 01	0.70000E-02	0.11771E 01
183	620.93	0.50574E 02	0.82902E 01	0.24814E-01	0.46766E-02	0.13317E 01	0.89571E 00	0.32000E-01	0.10236E 01
184	639.46	0.63671E 02	0.10607E 02	0.32182E-01	0.60650E-02	0.17039E 01	0.11460E 01	0.32000E-01	0.10197E 01
185	620.06	0.60538E 02	0.99827E 01	0.29861E-01	0.56277E-02	0.16036E 01	0.10786E 01	0.64000E-01	0.10214E 01
186	636.91	0.66818E 02	0.11081E 02	0.33556E-01	0.63241E-02	0.17800E 01	0.11972E 01	0.64000E-01	0.10215E 01
187	626.50	0.54485E 02	0.90152E 01	0.27093E-01	0.51061E-02	0.14482E 01	0.97403E 00	0.70000E-02	0.10261E 01
188	619.05	0.55312E 02	0.92615E 01	0.27684E-01	0.52173E-02	0.14877E 01	0.10006E 01	0.70000E-02	0.10756E 01
189	541.42	0.68888E 01	0.11282E 01	0.31931E-02	0.60178E-03	0.18123E-00	0.12190E-00	0.10600E 01	0.93510E 00
190	537.52	0.39771E 01	0.66292E 00	0.18712E-02	0.35265E-03	0.10649E-00	0.71624E-01	0.10840E 01	0.94596E 00
191	533.49	0.18956E 01	0.31696E-00	0.89222E-03	0.16815E-03	0.50915E-01	0.34245E-01	0.11080E 01	0.95539E 00
192	530.60	0.20499E 01	0.34035E-00	0.95618E-03	0.18020E-03	0.54672E-01	0.36772E-01	0.11080E 01	0.93032E 00
193	531.99	0.89392E 01	0.14630E 01	0.41140E-02	0.77534E-03	0.23501E-00	0.15806E-00	0.16580E 01	0.13623E 01
194	533.92	0.74701E 01	0.12183E 01	0.34304E-02	0.64650E-03	0.19570E-00	0.13162E-00	0.11700E 01	0.12547E 01
195	531.96	0.83361E 01	0.13642E 01	0.38363E-02	0.72300E-03	0.21915E-00	0.14740E-00	0.16740E 01	0.12121E 01
196	530.13	0.77164E 01	0.12557E 01	0.35268E-02	0.66466E-03	0.20171E-00	0.13567E-00	0.16950E 01	0.12050E 01

CONFIDENTIAL

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
96	2	-5.36	147.24	59.06	4.60	2	C57	2.70	2	10.19	1845.30	1896.80	44	C55	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.918748E 02	0.377406E-01	0.478409E 04	0.344647E-04	0.744185E-07	0.223052E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732183E 00	0.621422E 01	0.923327E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	543.96	0.22379E 01	0.36534E-00	0.10441E-02	0.19681E-03	0.58791E-01	0.39568E-01	-0.10600E 01	0.10542E 01
100	544.00	0.15922E 01	0.26781E-00	0.76536E-03	0.14427E-03	0.43096E-01	0.29005E-01	-0.10840E 01	0.13771E 01
101	543.12	0.11668E 01	0.19185E-00	0.54796E-03	0.10329E-03	0.30873E-01	0.20779E-01	-0.11080E 01	0.17870E 01
102	544.41	0.59741E 00	0.98004E-01	0.28016E-03	0.52812E-04	0.15771E-01	0.10614E-01	-0.11080E 01	0.20561E-01
103	544.31	0.12873E 01	0.21656E-00	0.61902E-03	0.11669E-03	0.34849E-01	0.23454E-01	-0.10800E 01	0.26353E-01
104	623.22	0.69655E 02	0.11542E 02	0.34897E-01	0.65782E-02	0.18573E 01	0.12500E 01	0.85000E 00	0.10386E 01
105	637.69	0.81268E 02	0.12836E 02	0.39225E-01	0.73941E-02	0.20655E 01	0.13902E 01	0.94000E 00	0.10221E 01
106	646.16	0.86998E 02	0.13686E 02	0.42087E-01	0.79335E-02	0.22023E 01	0.14822E 01	0.96000E 00	0.10233E 01
107	599.42	0.85753E 02	0.13160E 02	0.39109E-01	0.73722E-02	0.21178E 01	0.14253E 01	0.98000E 00	0.10035E 01
108	625.87	0.83704E 02	0.13094E 02	0.39668E-01	0.74776E-02	0.21072E 01	0.14182E 01	0.10000E 01	0.10117E 01
109	624.14	0.73085E 02	0.11461E 02	0.34676E-01	0.65367E-02	0.18444E 01	0.12413E 01	0.10200E 01	0.10200E 01
110	638.37	0.74011E 02	0.11694E 02	0.35753E-01	0.67396E-02	0.18817E 01	0.12665E 01	0.80000E-01	0.10013E 01
111	625.21	0.77782E 02	0.12102E 02	0.36645E-01	0.69077E-02	0.19475E 01	0.13107E 01	0.10000E-00	0.10083E 01
112	646.25	0.83328E 02	0.13175E 02	0.40520E-01	0.76383E-02	0.21202E 01	0.14269E 01	0.12000E-00	0.10205E 01
113	642.18	0.86668E 02	0.13721E 02	0.42070E-01	0.79303E-02	0.22079E 01	0.14860E 01	0.14000E-00	0.10178E 01
114	618.20	0.70187E 02	0.10972E 02	0.33053E-01	0.62307E-02	0.17657E 01	0.11883E 01	0.80000E-01	0.10100E 01
115	620.95	0.70819E 02	0.11050E 02	0.33354E-01	0.62874E-02	0.17782E 01	0.11968E 01	0.10000E-00	0.10072E 01
116	605.82	0.72738E 02	0.11334E 02	0.33838E-01	0.63785E-02	0.18239E 01	0.12275E 01	0.12000E-00	0.99465E 00
117	613.56	0.76070E 02	0.11863E 02	0.35615E-01	0.67135E-02	0.19089E 01	0.12848E 01	0.14000E-00	0.99422E 00
118	613.15	0.63572E 02	0.99948E 01	0.29998E-01	0.56547E-02	0.16084E 01	0.10825E 01	0.10000E-00	0.10045E 01
119	613.47	0.61433E 02	0.96119E 01	0.28855E-01	0.54394E-02	0.15468E 01	0.10410E 01	0.15000E-00	0.10099E 01
120	592.68	0.61794E 02	0.95772E 01	0.28323E-01	0.53390E-02	0.15412E 01	0.10373E 01	0.20000E-00	0.10990E 01
121	618.49	0.63437E 02	0.10002E 02	0.30137E-01	0.56809E-02	0.16095E 01	0.10833E 01	0.25000E-00	0.10227E 01
122	596.95	0.59140E 02	0.92178E 01	0.27344E-01	0.51544E-02	0.14833E 01	0.99832E 00	0.30000E-00	0.10255E 01
123	611.68	0.61918E 02	0.97759E 01	0.29309E-01	0.55249E-02	0.15731E 01	0.10588E 01	0.35000E-00	0.
124	591.32	0.62981E 02	0.99008E 01	0.29252E-01	0.55141E-02	0.15933E 01	0.10723E 01	0.38000E-00	0.10091E 01
125	614.14	0.68088E 02	0.10925E 02	0.32812E-01	0.61853E-02	0.17580E 01	0.11832E 01	0.45000E-00	0.10214E 01
126	604.16	0.60405E 02	0.97665E 01	0.29122E-01	0.54897E-02	0.15716E 01	0.10577E 01	0.61000E 00	0.10189E 01
127	567.79	0.37626E 02	0.59935E 01	0.17415E-01	0.32827E-02	0.96448E 00	0.64912E 00	0.70000E 00	0.10249E 01
128	547.31	0.19272E 02	0.30448E 01	0.87217E-02	0.16441E-02	0.48998E-00	0.32977E-00	0.75000E 00	0.10253E 01
129	583.94	0.40760E 02	0.65712E 01	0.19312E-01	0.36405E-02	0.10574E 01	0.71169E 00	0.70000E 00	0.10286E 01
130	591.79	0.50689E 02	0.82069E 01	0.24255E-01	0.45722E-02	0.13207E 01	0.88884E 00	0.80000E 00	0.10163E 01
131	556.38	0.25284E 02	0.38094E 01	0.10981E-01	0.20699E-02	0.61302E 00	0.41258E-00	0.90000E 00	0.10083E 01
132	580.19	0.61431E 02	0.94092E 01	0.27580E-01	0.51989E-02	0.15141E 01	0.10191E 01	0.90000E 00	0.10319E 01
133	591.42	0.55211E 02	0.84653E 01	0.25012E-01	0.47149E-02	0.13622E 01	0.91682E 00	0.96000E 00	0.10353E 01
134	587.45	0.50555E 02	0.77479E 01	0.22828E-01	0.43031E-02	0.12468E 01	0.83913E 00	0.10000E 01	0.10298E 01
135	560.54	0.23462E 02	0.37044E 01	0.10709E-01	0.20167E-02	0.59612E 00	0.40121E-00	0.70000E-02	0.
136	559.65	0.24122E 02	0.37391E 01	0.10803E-01	0.20363E-02	0.60170E 00	0.40496E-00	0.70000E-02	0.
137	562.05	0.26855E 02	0.42300E 01	0.12241E-01	0.23075E-02	0.68069E 00	0.45812E-00	0.39000E-01	0.10622E 01
138	562.18	0.27820E 02	0.43610E 01	0.12622E-01	0.23792E-02	0.70178E 00	0.47232E-00	0.78000E-01	0.11156E 01
139	578.50	0.49710E 02	0.78242E 01	0.22906E-01	0.43180E-02	0.12591E 01	0.84739E 00	0.11700E-00	0.19120E 01
140	582.43	0.48086E 02	0.75600E 01	0.22195E-01	0.41838E-02	0.12166E 01	0.81878E 00	0.78000E-01	0.18863E 01
141-4157.09		0.10379E-01	-0.31432E-02	-0.23460E-05	-0.44223E-06	-0.50581E-03	-0.34042E-03	-0.	0.
142-4157.09		0.10379E-01	-0.31432E-02	-0.23460E-05	-0.44223E-06	-0.50581E-03	-0.34042E-03	-0.	0.
143	615.49	0.72598E 02	0.11561E 02	0.34759E-01	0.65523E-02	0.18605E 01	0.12522E 01	0.78000E-01	0.20603E 01
144	579.53	0.42889E 02	0.67103E 01	0.19660E-01	0.37059E-02	0.10798E 01	0.72675E 00	0.70000E-02	0.12651E 01
145	610.55	0.54205E 02	0.85812E 01	0.25706E-01	0.48458E-02	0.13809E 01	0.92938E 00	0.70000E-02	0.18919E 01
146	593.18	0.59296E 02	0.93462E 01	0.27650E-01	0.52121E-02	0.15040E 01	0.10122E 01	0.39000E-01	0.20905E 01
147	599.59	0.50370E 02	0.79537E 01	0.23639E-01	0.44560E-02	0.12799E 01	0.86142E 00	0.78000E-01	0.18181E 01
148	608.73	0.61810E 02	0.98889E 01	0.29585E-01	0.55769E-02	0.15913E 01	0.10710E 01	0.11700E-00	0.
149	617.69	0.52057E 02	0.86417E 01	0.26023E-01	0.49054E-02	0.13906E 01	0.93593E 00	0.70000E-02	0.10512E 01
150	603.68	0.41621E 02	0.66904E 01	0.20539E-01	0.38717E-02	0.11088E 01	0.74626E 00	0.70000E-02	0.78988E 00
151	599.19	0.37784E 02	0.62402E 01	0.18541E-01	0.34950E-02	0.10042E 01	0.67583E 00	0.70000E-02	0.68369E 00
152	633.58	0.63052E 02	0.10221E 02	0.31140E-01	0.58701E-02	0.16448E 01	0.11070E 01	0.39000E-01	0.98840E 00

CONFIDENTIAL

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	635.65	0.61699E 02	0.10013E 02	0.30552E-01	0.57591E-02	0.16112E 01	0.10844E 01	0.39000E-01	0.99325E 00
154	639.70	0.65265E 02	0.10544E 02	0.32271E-01	0.60833E-02	0.16968E 01	0.11420E 01	0.78000E-01	0.10134E 01
155	618.14	0.58611E 02	0.97783E 01	0.29455E-01	0.55524E-02	0.15735E 01	0.10590E 01	0.39000E-01	0.10030E 01
156	616.77	0.53054E 02	0.88169E 01	0.26532E-01	0.50015E-02	0.14188E 01	0.95490E 00	0.39000E-01	0.10288E 01
157	617.70	0.49593E 02	0.82719E 01	0.24909E-01	0.46955E-02	0.13311E 01	0.89588E 00	0.78000E-01	0.10180E 01
158	605.11	0.53737E 02	0.89311E 01	0.26650E-01	0.50236E-02	0.14372E 01	0.96727E 00	0.39000E-01	0.10897E 01
159	609.52	0.56605E 02	0.94301E 01	0.28228E-01	0.53212E-02	0.15175E 01	0.10213E 01	0.78000E-01	0.12732E 01
160	624.95	0.64404E 02	0.10784E 02	0.32645E-01	0.61538E-02	0.17353E 01	0.11679E 01	0.39000E-01	0.13965E 01
161	582.19	0.41740E 02	0.66691E 01	0.19576E-01	0.36901E-02	0.10732E 01	0.72229E 00	0.43000E-01	0.10454E 01
162	605.30	0.62377E 02	0.10124E 02	0.30213E-01	0.56953E-02	0.16292E 01	0.10965E 01	0.43000E-01	0.10376E 01
163	591.47	0.49234E 02	0.79444E 01	0.23474E-01	0.44249E-02	0.12784E 01	0.86041E 00	0.85000E-01	0.10339E 01
164	585.05	0.43942E 02	0.70319E 01	0.20683E-01	0.38988E-02	0.11316E 01	0.76158E 00	0.12800E-00	0.10296E 01
165	618.91	0.81097E 02	0.13258E 02	0.39960E-01	0.75326E-02	0.21335E 01	0.14359E 01	0.43000E-01	0.10102E 01
166	609.76	0.73650E 02	0.11944E 02	0.35759E-01	0.67407E-02	0.19220E 01	0.12935E 01	0.85000E-01	0.10181E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.28892E-05	-0.54463E-06	-0.10102E-03	-0.67986E-04	0.43000E-01	0.
168	603.73	0.62597E 02	0.10233E 02	0.30503E-01	0.57500E-02	0.16467E 01	0.11083E 01	0.12800E-00	0.10235E 01
169	639.31	0.90868E 02	0.15088E 02	0.46164E-01	0.87022E-02	0.24280E 01	0.16341E 01	0.85000E-01	0.10103E 01
170	626.56	0.80992E 02	0.13295E 02	0.40295E-01	0.75957E-02	0.21394E 01	0.14398E 01	0.12800E-00	0.10162E 01
171	628.23	0.94368E 02	0.15454E 02	0.46898E-01	0.88404E-02	0.24869E 01	0.16737E 01	0.85000E-01	0.10066E 01
172	362.39	0.98876E 02	0.13933E 02	0.35404E-01	0.66737E-02	0.22421E 01	0.15090E 01	0.43000E-01	0.
173	634.38	0.86218E 02	0.14279E 02	0.43529E-01	0.82055E-02	0.22978E 01	0.15465E 01	0.12800E-00	0.10744E 01
174	641.34	0.10062E 03	0.16645E 02	0.51006E-01	0.96148E-02	0.26786E 01	0.18028E 01	0.85000E-01	0.11311E 01
175	679.88	0.11653E 03	0.19600E 02	0.61834E-01	0.11656E-01	0.31541E 01	0.21228E 01	0.43000E-01	0.12393E 01
176	661.36	0.10282E 03	0.17131E 02	0.53286E-01	0.10045E-01	0.27567E 01	0.18553E 01	0.43000E-01	0.10256E 01
177	600.38	0.54436E 02	0.88260E 01	0.26246E-01	0.49475E-02	0.14203E 01	0.95589E 00	0.12800E-00	0.10172E 01
178	621.82	0.70198E 02	0.11494E 02	0.34717E-01	0.65442E-02	0.18496E 01	0.12448E 01	0.85000E-01	0.99326E 00
179	644.54	0.77779E 02	0.12888E 02	0.39586E-01	0.74621E-02	0.20739E 01	0.13958E 01	0.70000E-02	0.10641E 01
180	629.97	0.76298E 02	0.12607E 02	0.38307E-01	0.72211E-02	0.20287E 01	0.13654E 01	0.70000E-02	0.12487E 01
181	660.42	0.83932E 02	0.14090E 02	0.43797E-01	0.82559E-02	0.22674E 01	0.15260E 01	0.70000E-02	0.13291E 01
182	640.96	0.74042E 02	0.12344E 02	0.37815E-01	0.71283E-02	0.19865E 01	0.13369E 01	0.70000E-02	0.11745E 01
183	588.18	0.39523E 02	0.63661E 01	0.18766E-01	0.35375E-02	0.10244E 01	0.68947E 00	0.32000E-01	0.10260E 01
184	599.54	0.51750E 02	0.84407E 01	0.25085E-01	0.47287E-02	0.13583E 01	0.91416E 00	0.32000E-01	0.10168E 01
185	582.33	0.46164E 02	0.74597E 01	0.21899E-01	0.41280E-02	0.12004E 01	0.80791E 00	0.64000E-01	0.10195E 01
186	598.03	0.54400E 02	0.88374E 01	0.26236E-01	0.49455E-02	0.14221E 01	0.95712E 00	0.64000E-01	0.10187E 01
187	594.48	0.45137E 02	0.73419E 01	0.21741E-01	0.40982E-02	0.11815E 01	0.79516E 00	0.70000E-02	0.10187E 01
188	605.49	0.56931E 02	0.94639E 01	0.28247E-01	0.53247E-02	0.15229E 01	0.10250E 01	0.70000E-02	0.10863E 01
189	542.05	0.14043E 02	0.23006E 01	0.65660E-02	0.12377E-02	0.37022E-00	0.24917E-00	0.10600E 01	0.11524E 01
190	534.46	0.96010E 01	0.15976E 01	0.45358E-02	0.85502E-03	0.25708E-00	0.17302E-00	0.10840E 01	0.12191E 01
191	526.78	0.47881E 01	0.79756E 00	0.22526E-02	0.42462E-03	0.12834E-00	0.86379E-01	0.11080E 01	0.11853E 01
192	524.49	0.50951E 01	0.84302E 00	0.23772E-02	0.44812E-03	0.13566E-00	0.91302E-01	0.11080E 01	0.11207E 01
193	528.89	0.95434E 01	0.15591E 01	0.44097E-02	0.83125E-03	0.25089E-00	0.16886E-00	0.16580E 01	0.13618E 01
194	531.57	0.94021E 01	0.15313E 01	0.43390E-02	0.81793E-03	0.24642E-00	0.16584E-00	0.11700E 01	0.11014E 01
195	530.58	0.98384E 01	0.16088E 01	0.45557E-02	0.85877E-03	0.25890E-00	0.17424E-00	0.16740E 01	0.10982E 01
196	532.89	0.93896E 01	0.15304E 01	0.43404E-02	0.81818E-03	0.24627E-00	0.16575E-00	0.16950E 01	0.10159E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
97	2	3.65	153.65	-0.02	-0.	2	C57	2.70	2	10.19	1844.80	1896.30	45	C55	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.918473E 02	0.377323E-01	0.478337E 04	0.344675E-04	0.743963E-07	0.223103E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732168E 00	0.621343E 01	0.923168E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	548.14	0.33268E 01	0.54436E 00	0.15609E-02	0.29425E-03	0.87611E-01	0.58967E-01	-0.10600E 01	0.10368E 01
100	548.42	0.26992E 01	0.45513E-00	0.13053E-02	0.24607E-03	0.73250E-01	0.49301E-01	-0.10840E 01	0.15713E 01
101	546.42	0.21345E 01	0.35164E-00	0.10071E-02	0.18985E-03	0.56593E-01	0.38091E-01	-0.11080E 01	0.20823E 01
102	547.29	0.14909E 01	0.24498E-00	0.70202E-03	0.13234E-03	0.39427E-01	0.26537E-01	-0.11080E 01	0.53448E-01
103	548.01	0.24847E 01	0.41886E-00	0.12009E-02	0.22639E-03	0.67412E-01	0.45372E-01	-0.10800E 01	0.66919E-01
104	634.77	0.67061E 02	0.11180E 02	0.34108E-01	0.64299E-02	0.17993E 01	0.12110E 01	0.85000E 00	0.10714E 01
105	645.62	0.71192E 02	0.11291E 02	0.34725E-01	0.65462E-02	0.18171E 01	0.12230E 01	0.94000E 00	0.10549E 01
106	651.24	0.74013E 02	0.11673E 02	0.36053E-01	0.67966E-02	0.18788E 01	0.12645E 01	0.96000E 00	0.10621E 01
107	602.74	0.71701E 02	0.11023E 02	0.32852E-01	0.61932E-02	0.17741E 01	0.11941E 01	0.98000E 00	0.10420E 01
108	621.63	0.67301E 02	0.10505E 02	0.31740E-01	0.59835E-02	0.16907E 01	0.11379E 01	0.10000E 01	0.10474E 01
109	614.88	0.56151E 02	0.87625E 01	0.26345E-01	0.49665E-02	0.14103E 01	0.94918E 00	0.10200E 01	0.10637E 01
110	648.46	0.66460E 02	0.10556E 02	0.32533E-01	0.61331E-02	0.16989E 01	0.11434E 01	0.80000E-01	0.10308E 01
111	636.05	0.69529E 02	0.10880E 02	0.33224E-01	0.62633E-02	0.17510E 01	0.11785E 01	0.10000E-00	0.10441E 01
112	653.52	0.71923E 02	0.11415E 02	0.35316E-01	0.66576E-02	0.18372E 01	0.12365E 01	0.12000E-00	0.10533E 01
113	645.86	0.72322E 02	0.11471E 02	0.35287E-01	0.66521E-02	0.18462E 01	0.12426E 01	0.14000E-00	0.10552E 01
114	632.06	0.66268E 02	0.10436E 02	0.31773E-01	0.59898E-02	0.16795E 01	0.11304E 01	0.80000E-01	0.10608E 01
115	634.60	0.66103E 02	0.10389E 02	0.31689E-01	0.59740E-02	0.16720E 01	0.11253E 01	0.10000E-00	0.10522E 01
116	619.15	0.67339E 02	0.10568E 02	0.31872E-01	0.60084E-02	0.17008E 01	0.11447E 01	0.12000E-00	0.10341E 01
117	624.84	0.69083E 02	0.10838E 02	0.32823E-01	0.61876E-02	0.17442E 01	0.11740E 01	0.14000E-00	0.10285E 01
118	629.10	0.63706E 02	0.10101E 02	0.30687E-01	0.57850E-02	0.16256E 01	0.10942E 01	0.10000E-00	0.10602E 01
119	629.56	0.61564E 02	0.97146E 01	0.29524E-01	0.55657E-02	0.15635E 01	0.10523E 01	0.15000E-00	0.10596E 01
120	609.99	0.60762E 02	0.95051E 01	0.28476E-01	0.53682E-02	0.15298E 01	0.10296E 01	0.20000E-00	0.11689E 01
121	632.63	0.61060E 02	0.96993E 01	0.29544E-01	0.55695E-02	0.15610E 01	0.10507E 01	0.25000E-00	0.10537E 01
122	610.49	0.59426E 02	0.93298E 01	0.27961E-01	0.52711E-02	0.15015E 01	0.10106E 01	0.30000E-00	0.10659E 01
123	623.95	0.61227E 02	0.97298E 01	0.29448E-01	0.55514E-02	0.15659E 01	0.10540E 01	0.35000E-00	0.
124	603.71	0.62184E 02	0.98410E 01	0.29349E-01	0.55327E-02	0.15838E 01	0.10660E 01	0.38000E-00	0.10413E 01
125	625.61	0.65837E 02	0.10628E 02	0.32206E-01	0.60713E-02	0.17105E 01	0.11513E 01	0.45000E-00	0.10503E 01
126	617.77	0.61680E 02	0.10045E 02	0.30265E-01	0.57056E-02	0.16167E 01	0.10881E 01	0.61000E 00	0.10394E 01
127	572.69	0.37135E 02	0.59311E 01	0.17301E-01	0.32616E-02	0.95457E 00	0.64248E 00	0.70000E 00	0.10540E 01
128	547.02	0.18475E 02	0.29185E 01	0.83618E-02	0.15763E-02	0.46970E-00	0.31613E-00	0.75000E 00	0.10865E 01
129	607.71	0.56719E 02	0.92621E 01	0.27702E-01	0.52224E-02	0.14907E 01	0.10033E 01	0.70000E 00	0.91795E 00
130	622.71	0.70748E 02	0.11645E 02	0.35213E-01	0.66383E-02	0.18742E 01	0.12615E 01	0.80000E 00	0.99496E 00
131	562.36	0.29554E 02	0.44676E 01	0.12938E-01	0.24390E-02	0.71902E 00	0.48394E-00	0.90000E 00	0.10706E 01
132	581.92	0.54380E 02	0.83371E 01	0.24479E-01	0.46146E-02	0.13418E 01	0.90310E 00	0.90000E 00	0.10271E 01
133	597.21	0.53479E 02	0.82254E 01	0.24416E-01	0.46028E-02	0.13238E 01	0.89100E 00	0.96000E 00	0.10539E 01
134	593.97	0.50266E 02	0.77308E 01	0.22894E-01	0.43160E-02	0.12442E 01	0.83742E 00	0.10000E 01	0.10526E 01
135	571.09	0.29276E 02	0.46493E 01	0.13547E-01	0.25538E-02	0.74626E 00	0.50362E 00	0.70000E-02	0.
136	571.15	0.31214E 02	0.48692E 01	0.14188E-01	0.26747E-02	0.78366E 00	0.52744E 00	0.70000E-02	0.
137	577.87	0.31846E 02	0.50598E 01	0.14814E-01	0.27926E-02	0.81434E 00	0.54810E 00	0.39000E-01	0.99532E 00
138	577.81	0.31223E 02	0.49366E 01	0.14452E-01	0.27245E-02	0.79451E 00	0.53475E 00	0.78000E-01	0.10173E 01
139	587.06	0.55502E 02	0.87767E 01	0.25864E-01	0.48758E-02	0.14125E 01	0.95072E 00	0.11700E-00	0.17708E 01
140	588.82	0.51824E 02	0.81761E 01	0.24124E-01	0.45478E-02	0.13159E 01	0.88566E 00	0.78000E-01	0.16542E 01
141-4157.09		0.10379E-01	-0.31432E-02	-0.23463E-05	-0.44232E-06	-0.50588E-03	-0.34048E-03	-0.	0.
142-4157.09		0.10379E-01	-0.31432E-02	-0.23463E-05	-0.44232E-06	-0.50588E-03	-0.34048E-03	-0.	0.
143	603.50	0.71503E 02	0.11315E 02	0.33738E-01	0.63602E-02	0.18210E 01	0.12256E 01	0.78000E-01	0.24534E 01
144	578.73	0.44143E 02	0.69035E 01	0.20224E-01	0.38125E-02	0.11111E 01	0.74781E 00	0.70000E-02	0.13466E 01
145	608.39	0.57310E 02	0.90624E 01	0.27118E-01	0.51123E-02	0.14585E 01	0.98166E 00	0.70000E-02	0.19433E 01
146	610.00	0.80236E 02	0.12761E 02	0.38232E-01	0.72075E-02	0.20539E 01	0.13824E 01	0.39000E-01	0.27058E 01
147	616.54	0.71791E 02	0.11439E 02	0.34435E-01	0.64915E-02	0.18411E 01	0.12391E 01	0.78000E-01	0.25015E 01
148	602.41	0.62789E 02	0.10012E 02	0.29829E-01	0.56234E-02	0.16113E 01	0.10845E 01	0.11700E-00	0.
149	605.32	0.48126E 02	0.79367E 01	0.23697E-01	0.44673E-02	0.12774E 01	0.85973E 00	0.70000E-02	0.81216E 00
150	607.39	0.48412E 02	0.80308E 01	0.24014E-01	0.45271E-02	0.12925E 01	0.86991E 00	0.70000E-02	0.81068E 00
151	609.55	0.46745E 02	0.77632E 01	0.23250E-01	0.43831E-02	0.12494E 01	0.84093E 00	0.70000E-02	0.82965E 00
152	639.19	0.67104E 02	0.10910E 02	0.33393E-01	0.62952E-02	0.17559E 01	0.11818E 01	0.39000E-01	0.11518E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	654.53	0.80965E 02	0.13269E 02	0.41081E-01	0.77445E-02	0.21355E 01	0.14373E 01	0.39000E-01	0.14018E 01
154	639.24	0.71222E 02	0.11504E 02	0.35213E-01	0.66382E-02	0.18515E 01	0.12461E 01	0.78000E-01	0.12281E 01
155	629.88	0.74051E 02	0.12431E 02	0.37788E-01	0.71237E-02	0.20007E 01	0.13466E 01	0.39000E-01	0.12873E 01
156	628.74	0.76196E 02	0.12743E 02	0.38704E-01	0.72964E-02	0.20509E 01	0.13804E 01	0.39000E-01	0.13914E 01
157	614.23	0.59107E 02	0.98406E 01	0.29572E-01	0.55749E-02	0.15838E 01	0.10660E 01	0.78000E-01	0.11152E 01
158	606.90	0.70398E 02	0.11712E 02	0.35008E-01	0.65996E-02	0.18849E 01	0.12686E 01	0.39000E-01	0.12742E 01
159	597.35	0.52871E 02	0.87507E 01	0.25978E-01	0.48973E-02	0.14084E 01	0.94790E 00	0.78000E-01	0.10014E 01
160	607.44	0.55581E 02	0.92202E 01	0.27571E-01	0.51977E-02	0.14839E 01	0.99875E 00	0.39000E-01	0.10071E 01
161	596.08	0.46253E 02	0.74460E 01	0.22084E-01	0.41633E-02	0.11984E 01	0.80657E 00	0.43000E-01	0.10278E 01
162	602.32	0.50278E 02	0.81473E 01	0.24273E-01	0.45759E-02	0.13112E 01	0.88254E 00	0.43000E-01	0.10608E 01
163	597.04	0.46086E 02	0.74588E 01	0.22138E-01	0.41733E-02	0.12004E 01	0.80796E 00	0.85000E-01	0.10174E 01
164	593.56	0.45028E 02	0.72389E 01	0.21431E-01	0.40402E-02	0.11650E 01	0.78413E 00	0.12800E-00	0.10113E 01
165	607.40	0.59334E 02	0.96409E 01	0.28829E-01	0.54347E-02	0.15516E 01	0.10443E 01	0.43000E-01	0.10889E 01
166	607.57	0.60217E 02	0.97539E 01	0.29170E-01	0.54991E-02	0.15698E 01	0.10566E 01	0.85000E-01	0.11153E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.28913E-05	-0.54506E-06	-0.10103E-03	-0.67998E-04	0.43000E-01	0.
168	605.29	0.55535E 02	0.90859E 01	0.27128E-01	0.51141E-02	0.14623E 01	0.98421E 00	0.12800E-00	0.11016E 01
169	626.60	0.71932E 02	0.11865E 02	0.35979E-01	0.67827E-02	0.19095E 01	0.12852E 01	0.85000E-01	0.10616E 01
170	616.72	0.64113E 02	0.10469E 02	0.31519E-01	0.59419E-02	0.16850E 01	0.11341E 01	0.12800E-00	0.10457E 01
171	625.78	0.78274E 02	0.12802E 02	0.38798E-01	0.73141E-02	0.20604E 01	0.13867E 01	0.85000E-01	0.10780E 01
172	270.36	0.12921E 03	0.17113E 02	0.41204E-01	0.77676E-02	0.27542E 01	0.18537E 01	0.43000E-01	0.
173	635.32	0.77997E 02	0.12924E 02	0.39445E-01	0.74360E-02	0.20800E 01	0.14000E 01	0.12800E-00	0.10336E 01
174	645.77	0.92435E 02	0.15326E 02	0.47141E-01	0.88869E-02	0.24666E 01	0.16602E 01	0.85000E-01	0.10337E 01
175	691.63	0.10676E 03	0.18063E 02	0.57532E-01	0.10846E-01	0.29071E 01	0.19566E 01	0.43000E-01	0.10746E 01
176	678.80	0.99908E 02	0.16795E 02	0.52965E-01	0.99849E-02	0.27030E 01	0.18192E 01	0.43000E-01	0.10525E 01
177	632.51	0.72970E 02	0.12035E 02	0.36654E-01	0.69099E-02	0.19369E 01	0.13036E 01	0.12800E-00	0.10018E 01
178	650.74	0.83911E 02	0.13949E 02	0.43065E-01	0.81184E-02	0.22450E 01	0.15110E 01	0.85000E-01	0.10223E 01
179	652.23	0.78565E 02	0.13070E 02	0.40397E-01	0.76156E-02	0.21035E 01	0.14158E 01	0.70000E-02	0.96793E 00
180	637.76	0.74717E 02	0.12396E 02	0.37903E-01	0.71454E-02	0.19951E 01	0.13428E 01	0.70000E-02	0.11910E 01
181	656.99	0.75738E 02	0.12692E 02	0.39368E-01	0.74216E-02	0.20426E 01	0.13748E 01	0.70000E-02	0.13249E 01
182	642.72	0.68917E 02	0.11500E 02	0.35293E-01	0.66534E-02	0.18509E 01	0.12458E 01	0.70000E-02	0.11552E 01
183	604.64	0.48893E 02	0.79455E 01	0.23712E-01	0.44701E-02	0.12788E 01	0.86068E 00	0.32000E-01	0.92520E 00
184	612.65	0.53277E 02	0.87508E 01	0.26267E-01	0.49518E-02	0.14084E 01	0.94791E 00	0.32000E-01	0.10417E 01
185	591.62	0.46622E 02	0.75718E 01	0.22386E-01	0.42201E-02	0.12186E 01	0.82020E 00	0.64000E-01	0.10574E 01
186	611.50	0.56697E 02	0.92771E 01	0.27824E-01	0.52452E-02	0.14931E 01	0.10049E 01	0.64000E-01	0.10381E 01
187	609.56	0.49749E 02	0.81579E 01	0.24433E-01	0.46060E-02	0.13129E 01	0.88369E 00	0.70000E-02	0.10306E 01
188	619.60	0.62161E 02	0.10411E 02	0.31410E-01	0.59213E-02	0.16756E 01	0.11278E 01	0.70000E-02	0.94551E 00
189	539.11	0.96021E 01	0.15705E 01	0.44753E-02	0.84367E-03	0.25276E-00	0.17012E-00	0.10600E 01	0.10831E 01
190	535.88	0.67039E 01	0.11164E 01	0.31742E-02	0.59838E-03	0.17967E-00	0.12093E-00	0.10840E 01	0.12950E 01
191	530.37	0.36026E 01	0.60132E 00	0.17033E-02	0.32109E-03	0.96778E-01	0.65137E-01	0.11080E 01	0.14643E 01
192	526.98	0.35501E 01	0.58823E 00	0.16623E-02	0.31338E-03	0.94671E-01	0.63719E-01	0.11080E 01	0.12154E 01
193	522.36	0.60140E 01	0.97888E 00	0.27576E-02	0.51985E-03	0.15754E-00	0.10603E-00	0.16580E 01	0.13948E 01
194	524.44	0.48551E 01	0.78754E 00	0.22217E-02	0.41883E-03	0.12675E-00	0.85308E-01	0.11700E 01	0.12473E 01
195	522.43	0.55283E 01	0.89985E 00	0.25351E-02	0.47791E-03	0.14482E-00	0.97475E-01	0.16740E 01	0.13139E 01
196	523.36	0.49912E 01	0.80912E 00	0.22809E-02	0.42999E-03	0.13022E-00	0.87646E-01	0.16950E 01	0.11775E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
98	2	6.63	154.14	51.45	-5.18	2	C57	2.70	2	10.19	1847.50	1901.50	46	C55	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.921221E 02	0.377680E-01	0.479056E 04	0.343971E-04	0.746189E-07	0.222317E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732317E 00	0.621778E 01	0.924042E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	549.74	0.37808E 01	0.61921E 00	0.17695E-02	0.33375E-03	0.99587E-01	0.67011E-01	-0.10600E 01	0.84194E 00
100	549.92	0.27590E 01	0.46559E-00	0.13306E-02	0.25098E-03	0.74881E-01	0.50387E-01	-0.10840E 01	0.99009E 00
101	548.33	0.25221E 01	0.41593E-00	0.11874E-02	0.22397E-03	0.66893E-01	0.45012E-01	-0.11080E 01	0.12595E 01
102	549.81	0.19860E 01	0.32678E-00	0.93385E-03	0.17614E-03	0.52556E-01	0.35364E-01	-0.11080E 01	0.75352E-01
103	549.80	0.23008E 01	0.38825E-00	0.11095E-02	0.20927E-03	0.62442E-01	0.42016E-01	-0.10800E 01	0.63855E-01
104	630.83	0.62717E 02	0.10434E 02	0.31588E-01	0.59582E-02	0.16781E 01	0.11292E 01	0.85000E 00	0.10102E 01
105	640.20	0.68349E 02	0.10809E 02	0.32951E-01	0.62152E-02	0.17385E 01	0.11698E 01	0.94000E 00	0.10032E 01
106	645.24	0.71396E 02	0.11226E 02	0.34348E-01	0.64788E-02	0.18054E 01	0.12149E 01	0.96000E 00	0.10104E 01
107	597.15	0.69323E 02	0.10626E 02	0.31393E-01	0.59214E-02	0.17090E 01	0.11499E 01	0.98000E 00	0.98828E 00
108	616.03	0.65758E 02	0.10234E 02	0.30648E-01	0.57808E-02	0.16458E 01	0.11075E 01	0.10000E 01	0.99932E 00
109	610.59	0.54851E 02	0.85402E 01	0.25476E-01	0.48052E-02	0.13735E 01	0.92422E 00	0.10200E 01	0.10056E 01
110	643.16	0.65311E 02	0.10345E 02	0.31604E-01	0.59612E-02	0.16638E 01	0.11195E 01	0.80000E-01	0.98505E 00
111	630.63	0.68282E 02	0.10654E 02	0.32250E-01	0.60830E-02	0.17135E 01	0.11530E 01	0.10000E-00	0.99691E 00
112	648.38	0.71039E 02	0.11245E 02	0.34487E-01	0.65049E-02	0.18085E 01	0.12169E 01	0.12000E-00	0.10078E 01
113	640.26	0.71573E 02	0.11320E 02	0.34508E-01	0.65088E-02	0.18205E 01	0.12250E 01	0.14000E-00	0.10065E 01
114	628.49	0.65823E 02	0.10346E 02	0.31268E-01	0.58978E-02	0.16640E 01	0.11197E 01	0.80000E-01	0.99176E 00
115	631.09	0.66894E 02	0.10493E 02	0.31774E-01	0.59932E-02	0.16877E 01	0.11356E 01	0.10000E-00	0.99422E 00
116	615.59	0.68768E 02	0.10772E 02	0.32249E-01	0.60828E-02	0.17324E 01	0.11657E 01	0.12000E-00	0.98150E 00
117	622.03	0.71323E 02	0.11172E 02	0.33606E-01	0.63388E-02	0.17969E 01	0.12091E 01	0.14000E-00	0.97657E 00
118	628.89	0.65518E 02	0.10387E 02	0.31401E-01	0.59228E-02	0.16705E 01	0.11241E 01	0.10000E-00	0.97797E 00
119	631.89	0.66924E 02	0.10573E 02	0.32035E-01	0.60424E-02	0.17005E 01	0.11443E 01	0.15000E-00	0.99035E 00
120	614.40	0.67848E 02	0.10639E 02	0.31823E-01	0.60025E-02	0.17110E 01	0.11513E 01	0.20000E-00	0.10793E 01
121	637.17	0.68689E 02	0.10937E 02	0.33266E-01	0.62746E-02	0.17590E 01	0.11836E 01	0.25000E-00	0.98790E 00
122	615.99	0.67216E 02	0.10584E 02	0.31695E-01	0.59784E-02	0.17022E 01	0.11454E 01	0.30000E-00	0.99962E 00
123	630.10	0.69296E 02	0.11048E 02	0.33428E-01	0.63052E-02	0.17768E 01	0.11956E 01	0.35000E-00	0.
124	609.43	0.70181E 02	0.11141E 02	0.33205E-01	0.62632E-02	0.17917E 01	0.12056E 01	0.38000E-00	0.99687E 00
125	631.80	0.74185E 02	0.12015E 02	0.36399E-01	0.68655E-02	0.19323E 01	0.13002E 01	0.45000E-00	0.10112E 01
126	623.69	0.68910E 02	0.11258E 02	0.33904E-01	0.63950E-02	0.18106E 01	0.12183E 01	0.61000E 00	0.10059E 01
127	581.67	0.44193E 02	0.70931E 01	0.20726E-01	0.39094E-02	0.11408E 01	0.76762E 00	0.70000E 00	0.99990E 00
128	555.99	0.22860E 02	0.36293E 01	0.10416E-01	0.19646E-02	0.58370E 00	0.39276E-00	0.75000E 00	0.10054E 01
129	607.52	0.54607E 02	0.89162E 01	0.26539E-01	0.50057E-02	0.14340E 01	0.96491E 00	0.70000E 00	0.97603E 00
130	621.58	0.69011E 02	0.11353E 02	0.34137E-01	0.64389E-02	0.18258E 01	0.12286E 01	0.80000E 00	0.98989E 00
131	571.22	0.33983E 02	0.51621E 01	0.14973E-01	0.28243E-02	0.83022E 00	0.55865E 00	0.90000E 00	0.10181E 01
132	588.50	0.54791E 02	0.84301E 01	0.24753E-01	0.46688E-02	0.13558E 01	0.91231E 00	0.90000E 00	0.98271E 00
133	604.11	0.55310E 02	0.85386E 01	0.25353E-01	0.47820E-02	0.13733E 01	0.92405E 00	0.96000E 00	0.99506E 00
134	602.52	0.53605E 02	0.82823E 01	0.24563E-01	0.46331E-02	0.13320E 01	0.89631E 00	0.10000E 01	0.99573E 00
135	578.10	0.32596E 02	0.51964E 01	0.15146E-01	0.28568E-02	0.83574E 00	0.56236E 00	0.70000E-02	0.
136	578.24	0.34535E 02	0.54082E 01	0.15765E-01	0.29736E-02	0.86980E 00	0.58528E 00	0.70000E-02	0.
137	578.21	0.33657E 02	0.53486E 01	0.15591E-01	0.29407E-02	0.86022E 00	0.57883E 00	0.39000E-01	0.94736E 00
138	577.21	0.33440E 02	0.52854E 01	0.15396E-01	0.29039E-02	0.85005E 00	0.57199E 00	0.78000E-01	0.95722E 00
139	843.98	-0.92624E 00	-0.16636E-00	-0.59776E-03	-0.11275E-03	-0.26756E-01	-0.18004E-01	0.11700E-00	0.
140	609.23	0.70781E 02	0.11290E 02	0.33646E-01	0.63463E-02	0.18158E 01	0.12218E 01	0.78000E-01	0.18520E 01
141-4157.09		0.10379E-01	-0.31432E-02	-0.23435E-05	-0.44203E-06	-0.50552E-03	-0.34016E-03	-0.	0.
142-4157.09		0.10379E-01	-0.31432E-02	-0.23435E-05	-0.44203E-06	-0.50552E-03	-0.34016E-03	-0.	0.
143	600.97	0.57709E 02	0.91193E 01	0.27016E-01	0.50957E-02	0.14667E 01	0.98689E 00	0.78000E-01	0.20625E 01
144	584.36	0.41827E 02	0.65614E 01	0.19209E-01	0.36232E-02	0.10553E 01	0.71007E 00	0.70000E-02	0.13183E 01
145	616.78	0.52494E 02	0.83381E 01	0.24985E-01	0.47126E-02	0.13410E 01	0.90235E 00	0.70000E-02	0.18488E 01
146	633.91	0.83445E 02	0.13441E 02	0.40783E-01	0.76924E-02	0.21617E 01	0.14546E 01	0.39000E-01	0.26991E 01
147	636.93	0.75649E 02	0.12184E 02	0.37053E-01	0.69889E-02	0.19596E 01	0.13186E 01	0.78000E-01	0.24736E 01
148	1085.37	-0.31174E-02	-0.61964E-03	-0.28334E-05	-0.53443E-06	-0.99655E-04	-0.67057E-04	0.11700E-00	0.
149	618.26	0.50914E 02	0.84545E 01	0.25361E-01	0.47836E-02	0.13597E 01	0.91495E 00	0.70000E-02	0.92079E 00
150	627.78	0.54663E 02	0.91662E 01	0.27688E-01	0.52224E-02	0.14742E 01	0.99196E 00	0.70000E-02	0.10006E 01
151	627.50	0.51713E 02	0.86702E 01	0.26184E-01	0.49388E-02	0.13944E 01	0.93829E 00	0.70000E-02	0.98933E 00
152	629.60	0.55215E 02	0.89319E 01	0.27016E-01	0.50958E-02	0.14365E 01	0.96661E 00	0.39000E-01	0.10079E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	651.69	0.74893E 02	0.12256E 02	0.37680E-01	0.71072E-02	0.19711E 01	0.13263E 01	0.39000E-01	0.13935E 01
154	646.42	0.69352E 02	0.11244E 02	0.34434E-01	0.64950E-02	0.18084E 01	0.12168E 01	0.78000E-01	0.12960E 01
155	661.83	0.86872E 02	0.14828E 02	0.45936E-01	0.86643E-02	0.23847E 01	0.16046E 01	0.39000E-01	0.16448E 01
156	660.04	0.79682E 02	0.13545E 02	0.41905E-01	0.79041E-02	0.21784E 01	0.14658E 01	0.39000E-01	0.15994E 01
157	632.16	0.55910E 02	0.93969E 01	0.28476E-01	0.53711E-02	0.15113E 01	0.10169E 01	0.78000E-01	0.11643E 01
158	626.64	0.66026E 02	0.11100E 02	0.33500E-01	0.63188E-02	0.17852E 01	0.12012E 01	0.39000E-01	0.12924E 01
159	609.13	0.52105E 02	0.86785E 01	0.25861E-01	0.48780E-02	0.13958E 01	0.93919E 00	0.78000E-01	0.10043E 01
160	614.69	0.52621E 02	0.87628E 01	0.26218E-01	0.49452E-02	0.14093E 01	0.94832E 00	0.39000E-01	0.98945E 00
161	603.60	0.47883E 02	0.77395E 01	0.22971E-01	0.43329E-02	0.12447E 01	0.83757E 00	0.43000E-01	0.98580E 00
162	609.99	0.52571E 02	0.85540E 01	0.25506E-01	0.48110E-02	0.13757E 01	0.92571E 00	0.43000E-01	0.99721E 00
163	605.04	0.47405E 02	0.77053E 01	0.22894E-01	0.43182E-02	0.12392E 01	0.83387E 00	0.85000E-01	0.98286E 00
164	601.67	0.46443E 02	0.74990E 01	0.22227E-01	0.41924E-02	0.12061E 01	0.81155E 00	0.12800E-00	0.98604E 00
165	611.69	0.59824E 02	0.97429E 01	0.29087E-01	0.54864E-02	0.15669E 01	0.10544E 01	0.43000E-01	0.97595E 00
166	609.57	0.57484E 02	0.93211E 01	0.27785E-01	0.52408E-02	0.14991E 01	0.10087E 01	0.85000E-01	0.96961E 00
167	1085.37	-0.31174E-02	-0.62773E-03	-0.28704E-05	-0.54142E-06	-0.10096E-03	-0.67934E-04	0.43000E-01	0.
168	609.55	0.53091E 02	0.87060E 01	0.25951E-01	0.48949E-02	0.14002E 01	0.94216E 00	0.12800E-00	0.97079E 00
169	630.60	0.72576E 02	0.11996E 02	0.36311E-01	0.68489E-02	0.19293E 01	0.12982E 01	0.85000E-01	0.10085E 01
170	623.35	0.66097E 02	0.10831E 02	0.32611E-01	0.61511E-02	0.17420E 01	0.11722E 01	0.12800E-00	0.10063E 01
171	628.60	0.79496E 02	0.13021E 02	0.39355E-01	0.74232E-02	0.20942E 01	0.14091E 01	0.85000E-01	0.10175E 01
172	-97.02	0.25265E 03	0.24546E 02	0.48760E-01	0.91970E-02	0.39477E 01	0.26564E 01	0.43000E-01	0.
173	633.43	0.73951E 02	0.12242E 02	0.37131E-01	0.70036E-02	0.19688E 01	0.13248E 01	0.12800E-00	0.10058E 01
174	638.47	0.85256E 02	0.14082E 02	0.42873E-01	0.80867E-02	0.22648E 01	0.15240E 01	0.85000E-01	0.10270E 01
175	671.72	0.10223E 03	0.17122E 02	0.53442E-01	0.10080E-01	0.27538E 01	0.18530E 01	0.43000E-01	0.11074E 01
176	668.79	0.95737E 02	0.16012E 02	0.49865E-01	0.94055E-02	0.25751E 01	0.17328E 01	0.43000E-01	0.10285E 01
177	630.07	0.69841E 02	0.11504E 02	0.34807E-01	0.65653E-02	0.18502E 01	0.12449E 01	0.12800E-00	0.98451E 00
178	645.56	0.79419E 02	0.13167E 02	0.40297E-01	0.76007E-02	0.21176E 01	0.14249E 01	0.85000E-01	0.98881E 00
179	640.52	0.70819E 02	0.11710E 02	0.35706E-01	0.67348E-02	0.18833E 01	0.12673E 01	0.70000E-02	0.97861E 00
180	623.24	0.61197E 02	0.10076E 02	0.30335E-01	0.57218E-02	0.16205E 01	0.10904E 01	0.70000E-02	0.10886E 01
181	624.07	0.56293E 02	0.92727E 01	0.27934E-01	0.52688E-02	0.14913E 01	0.10035E 01	0.70000E-02	0.10511E 01
182	620.01	0.55905E 02	0.92185E 01	0.27688E-01	0.52225E-02	0.14826E 01	0.99762E 00	0.70000E-02	0.10197E 01
183	609.03	0.50780E 02	0.82715E 01	0.24647E-01	0.46489E-02	0.13303E 01	0.89514E 00	0.32000E-01	0.99207E 00
184	621.98	0.61068E 02	0.10080E 02	0.30320E-01	0.57189E-02	0.16212E 01	0.10909E 01	0.32000E-01	0.10058E 01
185	600.89	0.55333E 02	0.90317E 01	0.26755E-01	0.50464E-02	0.14526E 01	0.97741E 00	0.64000E-01	0.10066E 01
186	619.11	0.64682E 02	0.10627E 02	0.31896E-01	0.60163E-02	0.17091E 01	0.11500E 01	0.64000E-01	0.10059E 01
187	615.59	0.54496E 02	0.89651E 01	0.26841E-01	0.50627E-02	0.14419E 01	0.97021E 00	0.70000E-02	0.10085E 01
188	616.26	0.57592E 02	0.96290E 01	0.28842E-01	0.54402E-02	0.15486E 01	0.10420E 01	0.70000E-02	0.98406E 00
189	538.97	0.86005E 01	0.14066E 01	0.39898E-02	0.75256E-03	0.22622E-00	0.15222E-00	0.10600E 01	0.12059E 01
190	538.70	0.81205E 01	0.13545E 01	0.38412E-02	0.72453E-03	0.21784E-00	0.14658E-00	0.10840E 01	0.19958E 01
191	532.69	0.56291E 01	0.94080E 00	0.26572E-02	0.50119E-03	0.15131E-00	0.10181E-00	0.11080E 01	0.24578E 01
192	527.74	0.42816E 01	0.70973E 00	0.19978E-02	0.37682E-03	0.11415E-00	0.76807E-01	0.11080E 01	0.17292E 01
193	529.10	0.66405E 01	0.10850E 01	0.30569E-02	0.57660E-03	0.17450E-00	0.11742E-00	0.16580E 01	0.12512E 01
194	531.11	0.61590E 01	0.10028E 01	0.28293E-02	0.53366E-03	0.16128E-00	0.10853E-00	0.11700E 01	0.11537E 01
195	529.78	0.66774E 01	0.10914E 01	0.30765E-02	0.58030E-03	0.17554E-00	0.11812E-00	0.16740E 01	0.10991E 01
196	531.40	0.62395E 01	0.10161E 01	0.28673E-02	0.54084E-03	0.16342E-00	0.10996E-00	0.16950E 01	0.10622E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
99	2	6.57	154.10	-51.47	5.14	2	C57	2.70	2	10.19	1851.00	1904.70	47	C55	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.922960E 02	0.378269E-01	0.479512E 04	0.343858E-04	0.747598E-07	0.222037E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732410E 00	0.622329E 01	0.925154E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	541.37	0.33179E 01	0.54086E 00	0.15323E-02	0.28884E-03	0.86910E-01	0.58462E-01	-0.10600E 01	0.11058E 01
100	540.75	0.22758E 01	0.38210E-00	0.10821E-02	0.20397E-03	0.61398E-01	0.41301E-01	-0.10840E 01	0.11822E 01
101	539.61	0.22234E 01	0.36488E-00	0.10325E-02	0.19463E-03	0.58631E-01	0.39440E-01	-0.11080E 01	0.14017E 01
102	541.14	0.19366E 01	0.31712E-00	0.89829E-03	0.16933E-03	0.50957E-01	0.34277E-01	-0.11080E 01	0.58283E-01
103	541.11	0.23029E 01	0.38671E-00	0.10954E-02	0.20648E-03	0.62139E-01	0.41800E-01	-0.10800E 01	0.55125E-01
104	627.84	0.59824E 02	0.99371E 01	0.29927E-01	0.56413E-02	0.15968E 01	0.10741E 01	0.85000E 00	0.10252E 01
105	639.52	0.69372E 02	0.10967E 02	0.33314E-01	0.62797E-02	0.17623E 01	0.11854E 01	0.94000E 00	0.10167E 01
106	644.23	0.72463E 02	0.11388E 02	0.34711E-01	0.65431E-02	0.18298E 01	0.12309E 01	0.96000E 00	0.10214E 01
107	597.58	0.70184E 02	0.10760E 02	0.31706E-01	0.59767E-02	0.17291E 01	0.11631E 01	0.98000E 00	0.10077E 01
108	614.44	0.65142E 02	0.10129E 02	0.30210E-01	0.56946E-02	0.16276E 01	0.10949E 01	0.10000E 01	0.10057E 01
109	607.58	0.53383E 02	0.82983E 01	0.24627E-01	0.46422E-02	0.13334E 01	0.89696E 00	0.10200E 01	0.10147E 01
110	641.95	0.63941E 02	0.10122E 02	0.30800E-01	0.58058E-02	0.16264E 01	0.10940E 01	0.80000E-01	0.99090E 00
111	630.23	0.66987E 02	0.10450E 02	0.31527E-01	0.59429E-02	0.16792E 01	0.11296E 01	0.10000E-00	0.10048E 01
112	647.39	0.70075E 02	0.11087E 02	0.33872E-01	0.63850E-02	0.17815E 01	0.11983E 01	0.12000E-00	0.10177E 01
113	638.57	0.70190E 02	0.11091E 02	0.33666E-01	0.63461E-02	0.17822E 01	0.11988E 01	0.14000E-00	0.10204E 01
114	628.44	0.62582E 02	0.98365E 01	0.29637E-01	0.55866E-02	0.15806E 01	0.10632E 01	0.80000E-01	0.10068E 01
115	631.53	0.63236E 02	0.99219E 01	0.29962E-01	0.56479E-02	0.15943E 01	0.10725E 01	0.10000E-00	0.10056E 01
116	616.14	0.64881E 02	0.10166E 02	0.30356E-01	0.57222E-02	0.16335E 01	0.10988E 01	0.12000E-00	0.99452E 00
117	621.12	0.67006E 02	0.10491E 02	0.31442E-01	0.59266E-02	0.16858E 01	0.11340E 01	0.14000E-00	0.99545E 00
118	628.30	0.59295E 02	0.93974E 01	0.28311E-01	0.53367E-02	0.15100E 01	0.10158E 01	0.10000E-00	0.10126E 01
119	632.26	0.58112E 02	0.91830E 01	0.27745E-01	0.52300E-02	0.14756E 01	0.99259E 00	0.15000E-00	0.10124E 01
120	612.98	0.57743E 02	0.90473E 01	0.26955E-01	0.50810E-02	0.14538E 01	0.97792E 00	0.20000E-00	0.10774E 01
121	639.17	0.57921E 02	0.92322E 01	0.28036E-01	0.52848E-02	0.14835E 01	0.99790E 00	0.25000E-00	0.10122E 01
122	620.60	0.55438E 02	0.87506E 01	0.26215E-01	0.49415E-02	0.14061E 01	0.94585E 00	0.30000E-00	0.10213E 01
123	634.18	0.56750E 02	0.90670E 01	0.27434E-01	0.51713E-02	0.14569E 01	0.98005E 00	0.35000E-00	0.
124	614.09	0.57396E 02	0.91337E 01	0.27234E-01	0.51336E-02	0.14677E 01	0.98726E 00	0.38000E-00	0.10086E 01
125	633.12	0.60274E 02	0.97684E 01	0.29533E-01	0.55670E-02	0.15696E 01	0.10559E 01	0.45000E-00	0.10213E 01
126	620.65	0.55610E 02	0.90706E 01	0.27174E-01	0.51224E-02	0.14575E 01	0.98044E 00	0.61000E 00	0.10210E 01
127	568.42	0.31161E 02	0.49652E 01	0.14332E-01	0.27017E-02	0.79785E 00	0.53669E 00	0.70000E 00	0.10282E 01
128	540.77	0.14601E 02	0.22984E 01	0.65088E-02	0.12269E-02	0.36932E-00	0.24843E-00	0.75000E 00	0.10397E 01
129	617.82	0.59225E 02	0.97235E 01	0.29071E-01	0.54799E-02	0.15624E 01	0.10510E 01	0.70000E 00	0.10074E 01
130	630.45	0.69388E 02	0.11468E 02	0.34604E-01	0.65229E-02	0.18428E 01	0.12396E 01	0.80000E 00	0.10232E 01
131	558.99	0.25693E 02	0.38766E 01	0.11117E-01	0.20956E-02	0.62293E 00	0.41903E-00	0.90000E 00	0.10618E 01
132	592.97	0.53297E 02	0.82201E 01	0.24141E-01	0.45507E-02	0.13209E 01	0.88851E 00	0.90000E 00	0.10034E 01
133	603.18	0.49261E 02	0.76010E 01	0.22487E-01	0.42388E-02	0.12214E 01	0.82160E 00	0.96000E 00	0.10138E 01
134	596.92	0.44285E 02	0.68217E 01	0.20091E-01	0.37872E-02	0.10962E 01	0.73736E 00	0.10000E 01	0.10152E 01
135	571.87	0.28365E 02	0.45066E 01	0.13040E-01	0.24580E-02	0.72415E 00	0.48712E-00	0.70000E-02	0.
136	572.41	0.30708E 02	0.47936E 01	0.13876E-01	0.26156E-02	0.77027E 00	0.51814E 00	0.70000E-02	0.
137	583.97	0.38925E 02	0.62052E 01	0.18108E-01	0.34134E-02	0.99709E 00	0.67072E 00	0.39000E-01	0.13415E 01
138	587.24	0.39484E 02	0.62749E 01	0.18354E-01	0.34598E-02	0.10083E 01	0.67826E 00	0.78000E-01	0.13845E 01
139	363.66	-0.28452E 01	-0.39417E-00	-0.99622E-03	-0.18779E-03	-0.63338E-01	-0.42606E-01	0.11700E-00	0.
140	576.77	0.37525E 02	0.58814E 01	0.17076E-01	0.32189E-02	0.94507E 00	0.63572E 00	0.78000E-01	0.13167E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23418E-05	-0.44143E-06	-0.50508E-03	-0.33975E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23418E-05	-0.44143E-06	-0.50508E-03	-0.33975E-03	-0.	0.
143	614.88	0.80990E 02	0.12894E 02	0.38467E-01	0.72511E-02	0.20719E 01	0.13937E 01	0.78000E-01	0.27837E 01
144	582.16	0.43935E 02	0.68837E 01	0.20063E-01	0.37818E-02	0.11061E 01	0.74406E 00	0.70000E-02	0.14699E 01
145	606.62	0.56656E 02	0.89505E 01	0.26544E-01	0.50037E-02	0.14382E 01	0.96746E 00	0.70000E-02	0.18982E 01
146	594.82	0.70351E 02	0.11098E 02	0.32638E-01	0.61523E-02	0.17834E 01	0.11996E 01	0.39000E-01	0.23289E 01
147	604.76	0.62540E 02	0.99028E 01	0.29329E-01	0.55286E-02	0.15912E 01	0.10704E 01	0.78000E-01	0.20619E 01
148	1085.37	-0.31174E-02	-0.61964E-03	-0.28204E-05	-0.53166E-06	-0.99567E-04	-0.66976E-04	0.11700E-00	0.
149	614.66	0.47415E 02	0.78584E 01	0.23441E-01	0.44187E-02	0.12627E 01	0.84942E 00	0.70000E-02	0.90925E 00
150	614.82	0.43482E 02	0.72414E 01	0.21603E-01	0.40722E-02	0.11636E 01	0.78273E 00	0.70000E-02	0.82966E 00
151	606.25	0.39072E 02	0.64774E 01	0.19205E-01	0.36202E-02	0.10408E 01	0.70015E 00	0.70000E-02	0.69842E 00
152	636.50	0.70774E 02	0.11490E 02	0.34825E-01	0.65646E-02	0.18464E 01	0.12420E 01	0.39000E-01	0.10718E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	640.45	0.73373E 02	0.11937E 02	0.36284E-01	0.68396E-02	0.19181E 01	0.12903E 01	0.39000E-01	0.10907E 01
154	635.03	0.72260E 02	0.11646E 02	0.35259E-01	0.66463E-02	0.18714E 01	0.12588E 01	0.78000E-01	0.10373E 01
155	619.39	0.69763E 02	0.11646E 02	0.34860E-01	0.65711E-02	0.18714E 01	0.12589E 01	0.39000E-01	0.10602E 01
156	-4157.09	0.10379E-01	-0.47373E-02	-0.35294E-05	-0.66529E-06	-0.76122E-03	-0.51206E-03	0.39000E-01	0.
157	615.41	0.58374E 02	0.97247E 01	0.29024E-01	0.54710E-02	0.15626E 01	0.10511E 01	0.78000E-01	0.10391E 01
158	602.63	0.61910E 02	0.10276E 02	0.30388E-01	0.57281E-02	0.16512E 01	0.11107E 01	0.39000E-01	0.10799E 01
159	603.82	0.53025E 02	0.88068E 01	0.26066E-01	0.49135E-02	0.14151E 01	0.95193E 00	0.78000E-01	0.10558E 01
160	612.79	0.56686E 02	0.94303E 01	0.28092E-01	0.52953E-02	0.15153E 01	0.10193E 01	0.39000E-01	0.11101E 01
161	600.93	0.40126E 02	0.64765E 01	0.19129E-01	0.36058E-02	0.10407E 01	0.70005E 00	0.43000E-01	0.10215E 01
162	607.53	0.44177E 02	0.71787E 01	0.21304E-01	0.40158E-02	0.11535E 01	0.77595E 00	0.43000E-01	0.10252E 01
163	602.72	0.40909E 02	0.66411E 01	0.19640E-01	0.37023E-02	0.10671E 01	0.71784E 00	0.85000E-01	0.10175E 01
164	599.02	0.40422E 02	0.65176E 01	0.19224E-01	0.36238E-02	0.10473E 01	0.70449E 00	0.12800E-00	0.10240E 01
165	613.24	0.51996E 02	0.84751E 01	0.25254E-01	0.47605E-02	0.13618E 01	0.91607E 00	0.43000E-01	0.10029E 01
166	614.23	0.54066E 02	0.87887E 01	0.26208E-01	0.49402E-02	0.14122E 01	0.94997E 00	0.85000E-01	0.10070E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.28573E-05	-0.53861E-06	-0.10087E-03	-0.67852E-04	0.43000E-01	0.
168	610.87	0.49550E 02	0.81310E 01	0.24188E-01	0.45595E-02	0.13065E 01	0.87888E 00	0.12800E-00	0.10030E 01
169	639.09	0.70011E 02	0.11624E 02	0.35296E-01	0.66534E-02	0.18678E 01	0.12564E 01	0.85000E-01	0.10170E 01
170	627.99	0.62669E 02	0.10295E 02	0.31007E-01	0.58449E-02	0.16542E 01	0.11127E 01	0.12800E-00	0.10181E 01
171	636.99	0.75212E 02	0.12374E 02	0.37516E-01	0.70718E-02	0.19883E 01	0.13375E 01	0.85000E-01	0.10205E 01
172	-1092.70	0.89108E 03	-0.91649E 01	-0.12556E-01	-0.23668E-02	-0.14727E 01	-0.99063E 00	0.43000E-01	-0.46980E-00
173	652.97	0.78676E 02	0.13157E 02	0.40365E-01	0.76089E-02	0.21141E 01	0.14221E 01	0.12800E-00	0.10290E 01
174	669.15	0.95637E 02	0.16049E 02	0.49841E-01	0.93951E-02	0.25789E 01	0.17348E 01	0.85000E-01	0.10511E 01
175	707.70	0.10560E 03	0.18011E 02	0.57609E-01	0.10859E-01	0.28941E 01	0.19468E 01	0.43000E-01	0.10589E 01
176	688.66	0.99463E 02	0.16803E 02	0.52962E-01	0.99835E-02	0.27001E 01	0.18163E 01	0.43000E-01	0.10402E 01
177	641.55	0.71922E 02	0.11918E 02	0.36256E-01	0.68343E-02	0.19151E 01	0.12882E 01	0.12800E-00	0.10205E 01
178	661.23	0.83124E 02	0.13893E 02	0.42888E-01	0.80844E-02	0.22324E 01	0.15017E 01	0.85000E-01	0.10237E 01
179	670.21	0.81559E 02	0.13694E 02	0.42561E-01	0.80228E-02	0.22005E 01	0.14802E 01	0.70000E-02	0.10144E 01
180	646.78	0.70656E 02	0.11778E 02	0.35969E-01	0.67802E-02	0.18926E 01	0.12731E 01	0.70000E-02	0.10813E 01
181	649.73	0.61077E 02	0.10197E 02	0.31208E-01	0.58828E-02	0.16385E 01	0.11022E 01	0.70000E-02	0.10413E 01
182	647.74	0.63779E 02	0.10671E 02	0.32611E-01	0.61472E-02	0.17147E 01	0.11534E 01	0.70000E-02	0.10376E 01
183	611.48	0.49502E 02	0.80740E 01	0.24029E-01	0.45295E-02	0.12974E 01	0.87272E 00	0.32000E-01	0.10017E 01
184	611.92	0.45679E 02	0.74999E 01	0.22327E-01	0.42088E-02	0.12051E 01	0.81067E 00	0.32000E-01	0.10159E 01
185	588.75	0.38994E 02	0.63232E 01	0.18515E-01	0.34901E-02	0.10161E 01	0.68347E 00	0.64000E-01	0.10263E 01
186	611.50	0.49100E 02	0.80341E 01	0.23910E-01	0.45072E-02	0.12910E 01	0.86841E 00	0.64000E-01	0.10164E 01
187	612.67	0.43524E 02	0.71490E 01	0.21294E-01	0.40140E-02	0.11487E 01	0.77274E 00	0.70000E-02	0.10148E 01
188	632.82	0.65217E 02	0.11000E 02	0.33247E-01	0.62672E-02	0.17675E 01	0.11889E 01	0.70000E-02	0.10036E 01
189	546.16	0.12773E 02	0.20974E 01	0.59618E-02	0.11238E-02	0.33703E-00	0.22671E-00	0.10600E 01	0.10434E 01
190	540.53	0.83610E 01	0.13960E 01	0.39527E-02	0.74510E-03	0.22432E-00	0.15089E-00	0.10840E 01	0.11118E 01
191	533.90	0.41901E 01	0.70078E 00	0.19753E-02	0.37235E-03	0.11261E-00	0.75748E-01	0.11080E 01	0.11166E 01
192	532.09	0.45907E 01	0.76284E 00	0.21476E-02	0.40482E-03	0.12258E-00	0.82456E-01	0.11080E 01	0.10473E 01
193	522.81	0.43865E 01	0.71415E 00	0.19979E-02	0.37661E-03	0.11475E-00	0.77193E-01	0.16580E 01	0.12303E 01
194	526.65	0.48348E 01	0.78524E 00	0.22025E-02	0.41517E-03	0.12618E-00	0.84876E-01	0.11700E 01	0.10121E 01
195	525.43	0.63704E 01	0.10387E 01	0.29110E-02	0.54872E-03	0.16690E-00	0.11227E-00	0.16740E 01	0.10885E 01
196	526.09	0.68057E 01	0.11050E 01	0.30982E-02	0.58401E-03	0.17756E-00	0.11944E-00	0.16950E 01	0.10516E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
100	2	7.60	157.60	-0.	-0.	2	C57	2.70	2	10.19	1857.80	1900.90	48	C55	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.920931E 02	0.379820E-01	0.478993E 04	0.346030E-04	0.745954E-07	0.223690E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732301E 00	0.623382E 01	0.927292E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	551.36	0.39642E 01	0.64983E 00	0.18599E-02	0.34877E-03	0.10424E-00	0.70078E-01	-0.10600E 01	0.10159E 01
100	550.33	0.27345E 01	0.46158E-00	0.13201E-02	0.24755E-03	0.74044E-01	0.49777E-01	-0.10840E 01	0.12326E 01
101	548.03	0.22930E 01	0.37808E-00	0.10796E-02	0.20245E-03	0.60650E-01	0.40773E-01	-0.11080E 01	0.14916E 01
102	549.48	0.16421E 01	0.27015E-00	0.77218E-03	0.14480E-03	0.43336E-01	0.29133E-01	-0.11080E 01	0.54471E-01
103	550.27	0.25325E 01	0.42746E-00	0.12225E-02	0.22924E-03	0.68570E-01	0.46097E-01	-0.10800E 01	0.63015E-01
104	637.31	0.60899E 02	0.10166E 02	0.30939E-01	0.58017E-02	0.16308E 01	0.10963E 01	0.85000E 00	0.11174E 01
105	646.49	0.65453E 02	0.10385E 02	0.31822E-01	0.59673E-02	0.16660E 01	0.11200E 01	0.94000E 00	0.10486E 01
106	650.62	0.67331E 02	0.10616E 02	0.32630E-01	0.61188E-02	0.17030E 01	0.11449E 01	0.96000E 00	0.10452E 01
107	606.89	0.64714E 02	0.99714E 01	0.29680E-01	0.55657E-02	0.15996E 01	0.10753E 01	0.98000E 00	0.10291E 01
108	617.78	0.59352E 02	0.92451E 01	0.27736E-01	0.52011E-02	0.14831E 01	0.99700E 00	0.10000E 01	0.10283E 01
109	610.91	0.47889E 02	0.74575E 01	0.22262E-01	0.41746E-02	0.11963E 01	0.80422E 00	0.10200E 01	0.10492E 01
110	648.82	0.61085E 02	0.97039E 01	0.29786E-01	0.55855E-02	0.15567E 01	0.10465E 01	0.80000E-01	0.10292E 01
111	637.42	0.63968E 02	0.10017E 02	0.30487E-01	0.57171E-02	0.16069E 01	0.10802E 01	0.10000E-00	0.10420E 01
112	653.37	0.65687E 02	0.10424E 02	0.32106E-01	0.60206E-02	0.16722E 01	0.11242E 01	0.12000E-00	0.10412E 01
113	643.60	0.65137E 02	0.10320E 02	0.31553E-01	0.59168E-02	0.16554E 01	0.11129E 01	0.14000E-00	0.10471E 01
114	634.73	0.60917E 02	0.96065E 01	0.29180E-01	0.54719E-02	0.15410E 01	0.10360E 01	0.80000E-01	0.10603E 01
115	637.23	0.61234E 02	0.96365E 01	0.29325E-01	0.54991E-02	0.15458E 01	0.10392E 01	0.10000E-00	0.10516E 01
116	621.21	0.62516E 02	0.98216E 01	0.29539E-01	0.55393E-02	0.15755E 01	0.10592E 01	0.12000E-00	0.10336E 01
117	624.74	0.63862E 02	0.10018E 02	0.30208E-01	0.56647E-02	0.16071E 01	0.10804E 01	0.14000E-00	0.10223E 01
118	633.01	0.58488E 02	0.92926E 01	0.28191E-01	0.52864E-02	0.14907E 01	0.10021E 01	0.10000E-00	0.10693E 01
119	634.69	0.57353E 02	0.90746E 01	0.27564E-01	0.51688E-02	0.14557E 01	0.97861E 00	0.15000E-00	0.10617E 01
120	615.10	0.57052E 02	0.89491E 01	0.26796E-01	0.50248E-02	0.14356E 01	0.96508E 00	0.20000E-00	0.10717E 01
121	638.27	0.57392E 02	0.91435E 01	0.27847E-01	0.52219E-02	0.14668E 01	0.98604E 00	0.25000E-00	0.10435E 01
122	618.84	0.55803E 02	0.88000E 01	0.26421E-01	0.49545E-02	0.14116E 01	0.94900E 00	0.30000E-00	0.10612E 01
123	632.21	0.57666E 02	0.92039E 01	0.27906E-01	0.52329E-02	0.14765E 01	0.99256E 00	0.35000E-00	0.
124	612.14	0.58513E 02	0.93018E 01	0.27792E-01	0.52117E-02	0.14922E 01	0.10031E 01	0.38000E-00	0.10324E 01
125	631.96	0.61655E 02	0.99861E 01	0.30271E-01	0.56766E-02	0.16019E 01	0.10769E 01	0.45000E-00	0.10450E 01
126	622.51	0.59009E 02	0.96344E 01	0.29004E-01	0.54389E-02	0.15455E 01	0.10390E 01	0.61000E 00	0.10452E 01
127	575.30	0.33219E 02	0.53133E 01	0.15463E-01	0.28997E-02	0.85233E 00	0.57299E 00	0.70000E 00	0.10546E 01
128	550.67	0.15561E 02	0.24632E 01	0.70464E-02	0.13214E-02	0.39513E-00	0.26563E-00	0.75000E 00	0.10866E 01
129	630.03	0.69691E 02	0.11516E 02	0.34859E-01	0.65368E-02	0.18473E 01	0.12419E 01	0.70000E 00	0.99199E 00
130	635.38	0.76570E 02	0.12688E 02	0.38559E-01	0.72306E-02	0.20353E 01	0.13683E 01	0.80000E 00	0.10490E 01
131	564.62	0.26388E 02	0.39938E 01	0.11536E-01	0.21633E-02	0.64067E 00	0.43070E-00	0.90000E 00	0.10871E 01
132	587.59	0.48019E 02	0.73845E 01	0.21679E-01	0.40652E-02	0.11846E 01	0.79635E 00	0.90000E 00	0.10150E 01
133	601.92	0.49455E 02	0.76257E 01	0.22617E-01	0.42412E-02	0.12233E 01	0.82236E 00	0.96000E 00	0.10199E 01
134	599.00	0.47418E 02	0.73125E 01	0.21643E-01	0.40585E-02	0.11730E 01	0.78859E 00	0.10000E 01	0.10184E 01
135	585.55	0.31889E 02	0.51045E 01	0.14963E-01	0.28060E-02	0.81884E 00	0.55047E 00	0.70000E-02	0.
136	585.10	0.33719E 02	0.53004E 01	0.15533E-01	0.29127E-02	0.85026E 00	0.57160E 00	0.70000E-02	0.
137	594.33	0.36217E 02	0.58061E 01	0.17127E-01	0.32116E-02	0.93138E 00	0.62613E 00	0.39000E-01	0.10718E 01
138	593.44	0.36378E 02	0.58008E 01	0.17100E-01	0.32067E-02	0.93053E 00	0.62556E 00	0.78000E-01	0.10924E 01
139	-410.97	-0.76871E 00	-0.49191E-01	-0.85435E-04	-0.16021E-04	-0.78909E-02	-0.53048E-02	0.11700E-00	0.
140	592.64	0.42846E 02	0.67737E 01	0.19957E-01	0.37424E-02	0.10866E 01	0.73048E 00	0.78000E-01	0.12887E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23438E-05	-0.43951E-06	-0.50422E-03	-0.33897E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23438E-05	-0.43951E-06	-0.50422E-03	-0.33897E-03	-0.	0.
143	614.70	0.72714E 02	0.11575E 02	0.34649E-01	0.64974E-02	0.18568E 01	0.12483E 01	0.78000E-01	0.23341E 01
144	585.10	0.39852E 02	0.62541E 01	0.18328E-01	0.34368E-02	0.10033E 01	0.67445E 00	0.70000E-02	0.12557E 01
145	616.31	0.55211E 02	0.87673E 01	0.26275E-01	0.49270E-02	0.14064E 01	0.94548E 00	0.70000E-02	0.17785E 01
146	629.03	0.92116E 02	0.14799E 02	0.44766E-01	0.83945E-02	0.23740E 01	0.15960E 01	0.39000E-01	0.29853E 01
147	631.53	0.77958E 02	0.12521E 02	0.37943E-01	0.71151E-02	0.20085E 01	0.13502E 01	0.78000E-01	0.24988E 01
148	1085.37	-0.31174E-02	-0.61964E-03	-0.28354E-05	-0.53171E-06	-0.99399E-04	-0.66822E-04	0.11700E-00	0.
149	627.35	0.60623E 02	0.10115E 02	0.30559E-01	0.57306E-02	0.16226E 01	0.10908E 01	0.70000E-02	0.10791E 01
150	633.22	0.61359E 02	0.10318E 02	0.31308E-01	0.58709E-02	0.16552E 01	0.11128E 01	0.70000E-02	0.11307E 01
151	628.80	0.53418E 02	0.89622E 01	0.27105E-01	0.50827E-02	0.14377E 01	0.96649E 00	0.70000E-02	0.10270E 01
152	655.97	0.70984E 02	0.11642E 02	0.35925E-01	0.67367E-02	0.18675E 01	0.12554E 01	0.39000E-01	0.13165E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	659.79	0.75846E 02	0.12464E 02	0.38571E-01	0.72330E-02	0.19993E 01	0.13441E 01	0.39000E-01	0.12914E 01
154	656.36	0.76271E 02	0.12430E 02	0.38367E-01	0.71947E-02	0.19939E 01	0.13404E 01	0.78000E-01	0.13846E 01
155	652.43	0.82389E 02	0.13994E 02	0.43071E-01	0.80767E-02	0.22449E 01	0.15092E 01	0.39000E-01	0.15530E 01
156	-4157.09	0.10379E-01	-0.47373E-02	-0.35324E-05	-0.66241E-06	-0.75994E-03	-0.51088E-03	0.39000E-01	0.
157	622.27	0.53497E 02	0.89447E 01	0.26923E-01	0.50486E-02	0.14349E 01	0.96460E 00	0.78000E-01	0.10711E 01
158	607.59	0.56257E 02	0.93624E 01	0.27881E-01	0.52284E-02	0.15019E 01	0.10096E 01	0.39000E-01	0.10690E 01
159	611.98	0.53940E 02	0.89978E 01	0.26881E-01	0.50407E-02	0.14434E 01	0.97033E 00	0.78000E-01	0.99905E 00
160	618.20	0.54677E 02	0.91223E 01	0.27376E-01	0.51336E-02	0.14634E 01	0.98376E 00	0.39000E-01	0.99496E 00
161	607.23	0.46048E 02	0.74574E 01	0.22203E-01	0.41635E-02	0.11963E 01	0.80421E 00	0.43000E-01	0.10082E 01
162	611.44	0.46685E 02	0.76021E 01	0.22702E-01	0.42571E-02	0.12195E 01	0.81981E 00	0.43000E-01	0.10259E 01
163	608.32	0.46496E 02	0.75707E 01	0.22558E-01	0.42301E-02	0.12145E 01	0.81644E 00	0.85000E-01	0.10059E 01
164	603.98	0.45836E 02	0.74103E 01	0.22011E-01	0.41275E-02	0.11887E 01	0.79913E 00	0.12800E-00	0.10094E 01
165	608.47	0.48778E 02	0.79303E 01	0.23632E-01	0.44315E-02	0.12721E 01	0.85521E 00	0.43000E-01	0.10258E 01
166	605.36	0.46902E 02	0.75882E 01	0.22561E-01	0.42308E-02	0.12173E 01	0.81832E 00	0.85000E-01	0.10221E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.28725E-05	-0.53866E-06	-0.10070E-03	-0.67695E-04	0.43000E-01	0.
168	605.88	0.46099E 02	0.75446E 01	0.22440E-01	0.42081E-02	0.12103E 01	0.81362E 00	0.12800E-00	0.10072E 01
169	620.99	0.57960E 02	0.95318E 01	0.28663E-01	0.53750E-02	0.15290E 01	0.10279E 01	0.85000E-01	0.11132E 01
170	615.29	0.53842E 02	0.87854E 01	0.26309E-01	0.49336E-02	0.14093E 01	0.94743E 00	0.12800E-00	0.10882E 01
171	619.92	0.64727E 02	0.10554E 02	0.31711E-01	0.59465E-02	0.16930E 01	0.11381E 01	0.85000E-01	0.10877E 01
172	-4157.09	0.10379E-01	-0.46625E-02	-0.34766E-05	-0.65195E-06	-0.74793E-03	-0.50280E-03	0.43000E-01	0.
173	631.18	0.66874E 02	0.11057E 02	0.33498E-01	0.62817E-02	0.17737E 01	0.11924E 01	0.12800E-00	0.10821E 01
174	646.95	0.85678E 02	0.14215E 02	0.43570E-01	0.81703E-02	0.22802E 01	0.15329E 01	0.85000E-01	0.11113E 01
175	706.21	0.11103E 03	0.18923E 02	0.60682E-01	0.11379E-01	0.30355E 01	0.20406E 01	0.43000E-01	0.10615E 01
176	688.98	0.10116E 03	0.17093E 02	0.54087E-01	0.10142E-01	0.27420E 01	0.18433E 01	0.43000E-01	0.10339E 01
177	645.09	0.77322E 02	0.12836E 02	0.39291E-01	0.73680E-02	0.20592E 01	0.13843E 01	0.12800E-00	0.10317E 01
178	660.32	0.86139E 02	0.14390E 02	0.44552E-01	0.83544E-02	0.23084E 01	0.15519E 01	0.85000E-01	0.10290E 01
179	668.94	0.85114E 02	0.14282E 02	0.44505E-01	0.83456E-02	0.22910E 01	0.15402E 01	0.70000E-02	0.10083E 01
180	648.84	0.73328E 02	0.12236E 02	0.37559E-01	0.70432E-02	0.19629E 01	0.13196E 01	0.70000E-02	0.11373E 01
181	639.90	0.60287E 02	0.10013E 02	0.30533E-01	0.57256E-02	0.16063E 01	0.10799E 01	0.70000E-02	0.11205E 01
182	638.13	0.62553E 02	0.10413E 02	0.31711E-01	0.59465E-02	0.16705E 01	0.11230E 01	0.70000E-02	0.10639E 01
183	628.29	0.61504E 02	0.10121E 02	0.30598E-01	0.57378E-02	0.16236E 01	0.10915E 01	0.32000E-01	0.96034E 00
184	618.54	0.52706E 02	0.86842E 01	0.26068E-01	0.48883E-02	0.13931E 01	0.93651E 00	0.32000E-01	0.96940E 00
185	596.15	0.44790E 02	0.72921E 01	0.21538E-01	0.40389E-02	0.11698E 01	0.78639E 00	0.64000E-01	0.98503E 00
186	615.10	0.53573E 02	0.87828E 01	0.26298E-01	0.49315E-02	0.14089E 01	0.94715E 00	0.64000E-01	0.10459E 01
187	616.57	0.48849E 02	0.80403E 01	0.24101E-01	0.45194E-02	0.12898E 01	0.86708E 00	0.70000E-02	0.10426E 01
188	643.32	0.71719E 02	0.12163E 02	0.37180E-01	0.69721E-02	0.19511E 01	0.13116E 01	0.70000E-02	0.97460E 00
189	546.36	0.99600E 01	0.16357E 01	0.46654E-02	0.87487E-03	0.26239E-00	0.17640E-00	0.10600E 01	0.10795E 01
190	543.48	0.70016E 01	0.11710E 01	0.33332E-02	0.62505E-03	0.18784E-00	0.12628E-00	0.10840E 01	0.13364E 01
191	537.28	0.38130E 01	0.63892E 00	0.18110E-02	0.33961E-03	0.10249E-00	0.68902E-01	0.11080E 01	0.15067E 01
192	534.68	0.37065E 01	0.61682E 00	0.17453E-02	0.32728E-03	0.98947E-01	0.66519E-01	0.11080E 01	0.12408E 01
193	535.85	0.43875E 01	0.71962E 00	0.20378E-02	0.38213E-03	0.11544E-00	0.77604E-01	0.16580E 01	0.14460E 01
194	537.53	0.34779E 01	0.56835E 00	0.16112E-02	0.30214E-03	0.91171E-01	0.61291E-01	0.11700E 01	0.12080E 01
195	535.47	0.36623E 01	0.60055E 00	0.17001E-02	0.31881E-03	0.96337E-01	0.64764E-01	0.16740E 01	0.13210E 01
196	536.74	0.34707E 01	0.56691E 00	0.16063E-02	0.30122E-03	0.90940E-01	0.61136E-01	0.16950E 01	0.12986E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
101	2	11.65	161.65	-0.	-0.	2	C57	2.70	2	10.19	1848.00	1900.40	49	C55	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.920670E 02	0.377826E-01	0.478913E 04	0.344310E-04	0.745743E-07	0.222604E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732287E 00	0.621857E 01	0.924201E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	552.93	0.47860E 01	0.78523E 00	0.22509E-02	0.42427E-03	0.12627E-00	0.84964E-01	-0.10600E 01	0.10461E 01
100	551.18	0.34410E 01	0.58111E 00	0.16637E-02	0.31359E-03	0.93447E-01	0.62877E-01	-0.10840E 01	0.13453E 01
101	549.36	0.26436E 01	0.43622E-00	0.12473E-02	0.23511E-03	0.70148E-01	0.47200E-01	-0.11080E 01	0.17298E 01
102	550.43	0.23730E 01	0.39060E-00	0.11177E-02	0.21068E-03	0.62812E-01	0.42263E-01	-0.11080E 01	0.19219E 01
103	551.58	0.31808E 01	0.53727E 00	0.15386E-02	0.29002E-03	0.86398E-01	0.58134E-01	-0.10800E 01	0.13350E-01
104	628.84	0.55583E 02	0.92376E 01	0.27952E-01	0.52686E-02	0.14855E 01	0.99952E 00	0.85000E 00	0.10522E 01
105	637.30	0.60493E 02	0.95524E 01	0.29085E-01	0.54823E-02	0.15361E 01	0.10336E 01	0.94000E 00	0.10344E 01
106	639.43	0.61975E 02	0.97150E 01	0.29627E-01	0.55843E-02	0.15623E 01	0.10512E 01	0.96000E 00	0.10443E 01
107	594.18	0.59092E 02	0.90432E 01	0.26685E-01	0.50300E-02	0.14542E 01	0.97849E 00	0.98000E 00	0.10332E 01
108	602.63	0.53091E 02	0.82034E 01	0.24354E-01	0.45905E-02	0.13192E 01	0.88762E 00	0.10000E 01	0.10407E 01
109	594.48	0.41430E 02	0.63950E 01	0.18875E-01	0.35577E-02	0.10284E 01	0.69195E 00	0.10200E 01	0.10687E 01
110	639.34	0.56650E 02	0.89551E 01	0.27308E-01	0.51472E-02	0.14401E 01	0.96896E 00	0.80000E-01	0.10071E 01
111	628.24	0.59108E 02	0.92113E 01	0.27860E-01	0.52513E-02	0.14813E 01	0.99668E 00	0.10000E-00	0.10216E 01
112	642.24	0.60690E 02	0.95760E 01	0.29264E-01	0.55159E-02	0.15399E 01	0.10361E 01	0.12000E-00	0.10410E 01
113	629.84	0.58790E 02	0.92472E 01	0.28001E-01	0.52780E-02	0.14870E 01	0.10006E 01	0.14000E-00	0.10465E 01
114	626.37	0.56343E 02	0.88461E 01	0.26719E-01	0.50362E-02	0.14225E 01	0.95717E 00	0.80000E-01	0.10261E 01
115	628.58	0.56506E 02	0.88523E 01	0.26781E-01	0.50479E-02	0.14235E 01	0.95783E 00	0.10000E-00	0.10226E 01
116	612.08	0.57741E 02	0.90275E 01	0.26984E-01	0.50863E-02	0.14517E 01	0.97679E 00	0.12000E-00	0.10117E 01
117	613.78	0.59004E 02	0.92024E 01	0.27541E-01	0.51912E-02	0.14798E 01	0.99571E 00	0.14000E-00	0.10130E 01
118	624.14	0.54211E 02	0.85729E 01	0.25851E-01	0.48727E-02	0.13786E 01	0.92760E 00	0.10000E-00	0.10269E 01
119	626.26	0.53755E 02	0.84678E 01	0.25574E-01	0.48205E-02	0.13617E 01	0.91623E 00	0.15000E-00	0.10321E 01
120	603.96	0.54271E 02	0.84624E 01	0.25147E-01	0.47400E-02	0.13608E 01	0.91564E 00	0.20000E-00	0.11248E 01
121	628.22	0.54714E 02	0.86711E 01	0.26226E-01	0.49433E-02	0.13944E 01	0.93822E 00	0.25000E-00	0.10293E 01
122	608.72	0.53823E 02	0.84422E 01	0.25173E-01	0.47449E-02	0.13576E 01	0.91346E 00	0.30000E-00	0.10349E 01
123	621.53	0.55387E 02	0.87905E 01	0.26457E-01	0.49869E-02	0.14136E 01	0.95115E 00	0.35000E-00	0.
124	601.42	0.56085E 02	0.88649E 01	0.26295E-01	0.49564E-02	0.14255E 01	0.95919E 00	0.38000E-00	0.10119E 01
125	620.56	0.58677E 02	0.94468E 01	0.28412E-01	0.53554E-02	0.15191E 01	0.10222E 01	0.45000E-00	0.10288E 01
126	614.96	0.56391E 02	0.91702E 01	0.27468E-01	0.51775E-02	0.14747E 01	0.99223E 00	0.61000E 00	0.10261E 01
127	564.56	0.29704E 02	0.47232E 01	0.13649E-01	0.25727E-02	0.75953E 00	0.51105E 00	0.70000E 00	0.10602E 01
128	540.91	0.13178E 02	0.20746E 01	0.58979E-02	0.11117E-02	0.33362E-00	0.22448E-00	0.75000E 00	0.10955E 01
129	633.89	0.75535E 02	0.12507E 02	0.37984E-01	0.71597E-02	0.20112E 01	0.13532E 01	0.70000E 00	0.10014E 01
130	629.65	0.76024E 02	0.12560E 02	0.38027E-01	0.71677E-02	0.20197E 01	0.13590E 01	0.80000E 00	0.10757E 01
131	555.14	0.21927E 02	0.33014E 01	0.94779E-02	0.17865E-02	0.53089E 00	0.35722E-00	0.90000E 00	0.10887E 01
132	584.75	0.47980E 02	0.73671E 01	0.21594E-01	0.40703E-02	0.11847E 01	0.79714E 00	0.90000E 00	0.10121E 01
133	598.87	0.49286E 02	0.75872E 01	0.22464E-01	0.42343E-02	0.12201E 01	0.82095E 00	0.96000E 00	0.10238E 01
134	595.52	0.47046E 02	0.72416E 01	0.21390E-01	0.40317E-02	0.11645E 01	0.78355E 00	0.10000E 01	0.10202E 01
135	586.04	0.34370E 02	0.55030E 01	0.16145E-01	0.30431E-02	0.88493E 00	0.59543E 00	0.70000E-02	0.
136	585.54	0.35905E 02	0.56453E 01	0.16556E-01	0.31207E-02	0.90782E 00	0.61083E 00	0.70000E-02	0.
137	598.50	0.41703E 02	0.67005E 01	0.19834E-01	0.37385E-02	0.10775E 01	0.72501E 00	0.39000E-01	0.11564E 01
138	598.47	0.44753E 02	0.71556E 01	0.21180E-01	0.39923E-02	0.11507E 01	0.77425E 00	0.78000E-01	0.12523E 01
139	-1897.09	-0.10384E 03	0.11189E 02	0.12414E-01	0.23400E-02	0.17992E 01	0.12106E 01	0.11700E-00	0.
140	589.63	0.37576E 02	0.59308E 01	0.17444E-01	0.32881E-02	0.95372E 00	0.64172E 00	0.78000E-01	0.10610E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23441E-05	-0.44184E-06	-0.50546E-03	-0.34010E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23441E-05	-0.44184E-06	-0.50546E-03	-0.34010E-03	-0.	0.
143	608.51	0.62769E 02	0.99591E 01	0.29692E-01	0.55966E-02	0.16015E 01	0.10776E 01	0.78000E-01	0.18121E 01
144	584.96	0.41980E 02	0.65875E 01	0.19312E-01	0.36400E-02	0.10593E 01	0.71277E 00	0.70000E-02	0.12070E 01
145	613.07	0.52756E 02	0.83630E 01	0.25016E-01	0.47153E-02	0.13448E 01	0.90489E 00	0.70000E-02	0.15525E 01
146	631.48	0.92615E 02	0.14899E 02	0.45169E-01	0.85140E-02	0.23959E 01	0.16121E 01	0.39000E-01	0.27439E 01
147	633.95	0.79688E 02	0.12815E 02	0.38922E-01	0.73364E-02	0.20607E 01	0.13866E 01	0.78000E-01	0.23272E 01
148	1085.37	-0.31174E-02	-0.61964E-03	-0.28375E-05	-0.53484E-06	-0.99643E-04	-0.67045E-04	0.11700E-00	0.
149	613.15	0.50392E 02	0.83452E 01	0.24964E-01	0.47055E-02	0.13420E 01	0.90296E 00	0.70000E-02	0.92014E 00
150	614.79	0.49401E 02	0.82270E 01	0.24640E-01	0.46444E-02	0.13230E 01	0.89018E 00	0.70000E-02	0.93433E 00
151	615.89	0.41547E 02	0.69231E 01	0.20751E-01	0.39114E-02	0.11133E 01	0.74909E 00	0.70000E-02	0.81222E 00
152	670.93	0.86388E 02	0.14277E 02	0.44580E-01	0.84029E-02	0.22959E 01	0.15448E 01	0.39000E-01	0.16369E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	659.89	0.83215E 02	0.13675E 02	0.42345E-01	0.79816E-02	0.21991E 01	0.14797E 01	0.39000E-01	0.14223E 01
154	657.84	0.80640E 02	0.13152E 02	0.40661E-01	0.76642E-02	0.21149E 01	0.14230E 01	0.78000E-01	0.15386E 01
155	634.22	0.70510E 02	0.11864E 02	0.36040E-01	0.67931E-02	0.19078E 01	0.12836E 01	0.39000E-01	0.13665E 01
156	-4157.09	0.10379E-01	-0.47373E-02	-0.35329E-05	-0.66591E-06	-0.76180E-03	-0.51258E-03	0.39000E-01	0.
157	611.99	0.50127E 02	0.83355E 01	0.24914E-01	0.46961E-02	0.13404E 01	0.90192E 00	0.78000E-01	0.10289E 01
158	597.53	0.51099E 02	0.84583E 01	0.25019E-01	0.47159E-02	0.13602E 01	0.91520E 00	0.39000E-01	0.99786E 00
159	604.74	0.54309E 02	0.90243E 01	0.26832E-01	0.50576E-02	0.14512E 01	0.97645E 00	0.78000E-01	0.10253E 01
160	610.28	0.52475E 02	0.87181E 01	0.26026E-01	0.49056E-02	0.14020E 01	0.94332E 00	0.39000E-01	0.98388E 00
161	601.83	0.46185E 02	0.74580E 01	0.22129E-01	0.41710E-02	0.11993E 01	0.80697E 00	0.43000E-01	0.10278E 01
162	606.35	0.46028E 02	0.74747E 01	0.22250E-01	0.41940E-02	0.12020E 01	0.80877E 00	0.43000E-01	0.10400E 01
163	604.19	0.46722E 02	0.75908E 01	0.22561E-01	0.42525E-02	0.12207E 01	0.82134E 00	0.85000E-01	0.10218E 01
164	600.98	0.46215E 02	0.74594E 01	0.22119E-01	0.41692E-02	0.11995E 01	0.80712E 00	0.12800E-00	0.10178E 01
165	602.81	0.46705E 02	0.75704E 01	0.22478E-01	0.42368E-02	0.12174E 01	0.81913E 00	0.43000E-01	0.10258E 01
166	600.81	0.46100E 02	0.74403E 01	0.22060E-01	0.41581E-02	0.11965E 01	0.80505E 00	0.85000E-01	0.10205E 01
167	1085.37	-0.31174E-02	-0.62773E-03	-0.28746E-05	-0.54183E-06	-0.10095E-03	-0.67922E-04	0.43000E-01	0.
168	602.61	0.46393E 02	0.75793E 01	0.22501E-01	0.42413E-02	0.12188E 01	0.82010E 00	0.12800E-00	0.10203E 01
169	606.65	0.47081E 02	0.76838E 01	0.22878E-01	0.43123E-02	0.12356E 01	0.83140E 00	0.85000E-01	0.10275E 01
170	605.86	0.47273E 02	0.76749E 01	0.22838E-01	0.43048E-02	0.12342E 01	0.83044E 00	0.12800E-00	0.10166E 01
171	604.38	0.50375E 02	0.81458E 01	0.24214E-01	0.45640E-02	0.13099E 01	0.88138E 00	0.85000E-01	0.10434E 01
172	-4157.09	0.10379E-01	-0.46625E-02	-0.34770E-05	-0.65539E-06	-0.74977E-03	-0.50449E-03	0.43000E-01	0.
173	616.13	0.56193E 02	0.92175E 01	0.27633E-01	0.52086E-02	0.14822E 01	0.99734E 00	0.12800E-00	0.10394E 01
174	626.95	0.70539E 02	0.11581E 02	0.34995E-01	0.65961E-02	0.18624E 01	0.12531E 01	0.85000E-01	0.10568E 01
175	709.42	0.11451E 03	0.19547E 02	0.62875E-01	0.11851E-01	0.31434E 01	0.21151E 01	0.43000E-01	0.10849E 01
176	698.42	0.10790E 03	0.18318E 02	0.58417E-01	0.11011E-01	0.29457E 01	0.19820E 01	0.43000E-01	0.10654E 01
177	641.45	0.78109E 02	0.12943E 02	0.39529E-01	0.74508E-02	0.20813E 01	0.14004E 01	0.12800E-00	0.10723E 01
178	661.62	0.90181E 02	0.15075E 02	0.46742E-01	0.88104E-02	0.24243E 01	0.16312E 01	0.85000E-01	0.10601E 01
179	673.03	0.89393E 02	0.15031E 02	0.47009E-01	0.88608E-02	0.24172E 01	0.16264E 01	0.70000E-02	0.10194E 01
180	655.00	0.75610E 02	0.12657E 02	0.39050E-01	0.73605E-02	0.20354E 01	0.13695E 01	0.70000E-02	0.11113E 01
181	627.68	0.55945E 02	0.92329E 01	0.27914E-01	0.52615E-02	0.14847E 01	0.99902E 00	0.70000E-02	0.10738E 01
182	631.34	0.60678E 02	0.10066E 02	0.30513E-01	0.57514E-02	0.16186E 01	0.10891E 01	0.70000E-02	0.10457E 01
183	639.08	0.70322E 02	0.11638E 02	0.35482E-01	0.66879E-02	0.18715E 01	0.12592E 01	0.32000E-01	0.99957E 00
184	625.01	0.60700E 02	0.10036E 02	0.30281E-01	0.57077E-02	0.16138E 01	0.10859E 01	0.32000E-01	0.99386E 00
185	596.23	0.49436E 02	0.80488E 01	0.23786E-01	0.44834E-02	0.12943E 01	0.87090E 00	0.64000E-01	0.10095E 01
186	608.87	0.50916E 02	0.83196E 01	0.24810E-01	0.46765E-02	0.13379E 01	0.90019E 00	0.64000E-01	0.10198E 01
187	613.21	0.48351E 02	0.79440E 01	0.23765E-01	0.44795E-02	0.12775E 01	0.85956E 00	0.70000E-02	0.10190E 01
188	656.12	0.79762E 02	0.13617E 02	0.42045E-01	0.79250E-02	0.21897E 01	0.14733E 01	0.70000E-02	0.10066E 01
189	542.24	0.10635E 02	0.17425E 01	0.49582E-02	0.93456E-03	0.28021E-00	0.18854E-00	0.10600E 01	0.11253E 01
190	540.66	0.82234E 01	0.13731E 01	0.39029E-02	0.73566E-03	0.22081E-00	0.14857E-00	0.10840E 01	0.15474E 01
191	534.05	0.48712E 01	0.81475E 00	0.23053E-02	0.43454E-03	0.13102E-00	0.88157E-01	0.11080E 01	0.19247E 01
192	531.35	0.42571E 01	0.70713E 00	0.19971E-02	0.37644E-03	0.11371E-00	0.76512E-01	0.11080E 01	0.14287E 01
193	519.49	0.24099E 01	0.39160E-00	0.10971E-02	0.20680E-03	0.62973E-01	0.42372E-01	0.16580E 01	0.10918E 01
194	522.29	0.22852E 01	0.37023E-00	0.10392E-02	0.19588E-03	0.59536E-01	0.40059E-01	0.11700E 01	0.99736E 00
195	519.23	0.21974E 01	0.35702E-00	0.10001E-02	0.18851E-03	0.57412E-01	0.38630E-01	0.16740E 01	0.99260E 00
196	520.54	0.13527E 01	0.21894E-00	0.61383E-03	0.11570E-03	0.35207E-01	0.23689E-01	0.16950E 01	0.62222E 00

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
138	2	-7.42	142.58	-0.	-0.	1	C2	2.70	2	10.05	235.00	1670.70	138	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.817154E 02	0.518072E-02	0.444977E 04	0.531923E-05	0.661895E-07	0.360007E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726048E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	549.01	0.16557E 02	0.21660E 01	0.76109E-02	0.99941E-02	0.11876E 01	0.10517E 01	-0.	0.10000E 01
2	-3981.78	-0.15457E 04	0.57270E 03	0.46037E-00	0.60452E 00	0.31401E 03	0.27809E 03	-0.30000E-01	0.
3	-4157.09	0.10379E-01	-0.44754E-02	-0.35081E-05	-0.46066E-05	-0.24538E-02	-0.21731E-02	-0.60000E-01	0.
4	-4157.09	0.10379E-01	-0.45906E-02	-0.35985E-05	-0.47253E-05	-0.25170E-02	-0.22291E-02	-0.90000E-01	0.
5	535.61	0.12979E 02	0.20503E 01	0.71232E-02	0.93537E-02	0.11241E 01	0.99554E 00	-0.20000E-00	0.10000E 01
6	532.66	0.12924E 02	0.20381E 01	0.70635E-02	0.92753E-02	0.11175E 01	0.98963E 00	-0.40000E-00	0.10000E 01
7	533.10	0.14504E 02	0.22988E 01	0.79699E-02	0.10466E-01	0.12604E 01	0.11162E 01	-0.60000E 00	0.10000E 01
8	-4157.09	0.10379E-01	-0.47298E-02	-0.37076E-05	-0.48686E-05	-0.25933E-02	-0.22967E-02	-0.80000E 00	0.
9	535.66	0.16111E 02	0.25168E 01	0.87444E-02	0.11483E-01	0.13799E 01	0.12221E 01	-0.90000E 00	0.10000E 01
10	537.91	0.14450E 02	0.22892E 01	0.79689E-02	0.10464E-01	0.12552E 01	0.11116E 01	-0.98000E 00	0.10000E 01
11	533.76	0.34026E-00	0.58302E-01	0.20225E-03	0.26558E-03	0.31967E-01	0.28310E-01	-0.11220E 01	0.10000E 01
12	535.27	0.65299E 00	0.95423E-01	0.33143E-03	0.43522E-03	0.52320E-01	0.46335E-01	-0.11890E 01	0.10000E 01
13	535.79	0.67532E 00	0.10177E-00	0.35363E-03	0.46437E-03	0.55799E-01	0.49416E-01	-0.13340E 01	0.10000E 01
14	533.94	0.63377E 00	0.10861E-00	0.37680E-03	0.49479E-03	0.59548E-01	0.52736E-01	-0.14400E 01	0.10000E 01
15	-4157.09	0.10379E-01	-0.41161E-02	-0.32265E-05	-0.42369E-05	-0.22568E-02	-0.19987E-02	0.30000E-01	0.
16	-4157.09	0.10379E-01	-0.44754E-02	-0.35081E-05	-0.46066E-05	-0.24538E-02	-0.21731E-02	0.60000E-01	0.
17	1100.09	0.59218E-01	0.11865E-01	0.79362E-04	0.10421E-03	0.65053E-02	0.57612E-02	0.90000E-01	0.
18	542.24	0.17205E 02	0.27280E 01	0.95308E-02	0.12515E-01	0.14957E 01	0.13246E 01	0.20000E-00	0.10000E 01
19	539.80	0.20165E 02	0.31929E 01	0.11132E-01	0.14618E-01	0.17506E 01	0.15504E 01	0.40000E-00	0.10000E 01
20	-4157.09	0.10379E-01	-0.47298E-02	-0.37076E-05	-0.48686E-05	-0.25933E-02	-0.22967E-02	0.60000E 00	0.
21	-4157.09	0.10379E-01	-0.44529E-02	-0.34905E-05	-0.45835E-05	-0.24415E-02	-0.21622E-02	0.92000E 00	0.
22	570.04	0.32001E 02	0.48743E 01	0.17439E-01	0.22900E-01	0.26726E 01	0.23668E 01	0.10400E 01	0.10000E 01
23	541.80	0.33523E 02	0.50402E 01	0.17603E-01	0.23115E-01	0.27635E 01	0.24474E 01	0.10600E 01	0.10000E 01
24	529.66	0.24750E 02	0.38717E 01	0.13385E-01	0.17576E-01	0.21228E 01	0.18800E 01	0.10840E 01	0.10000E 01
25	500.29	0.53314E 01	0.76761E 00	0.25903E-02	0.34014E-02	0.42087E-00	0.37273E-00	0.12070E 01	0.10000E 01
26	497.21	0.45117E 01	0.68389E 00	0.23020E-02	0.30229E-02	0.37497E-00	0.33208E-00	0.12490E 01	0.10000E 01
27	496.68	0.44940E 01	0.66997E 00	0.22542E-02	0.29601E-02	0.36734E-00	0.32532E-00	0.13340E 01	0.10000E 01
28	502.59	0.33236E 01	0.55289E 00	0.18692E-02	0.24545E-02	0.30314E-00	0.26847E-00	0.14540E 01	0.10000E 01
29	515.22	0.28836E 01	0.46888E-00	0.16017E-02	0.21032E-02	0.25708E-00	0.22767E-00	0.16580E 01	0.10000E 01
30	524.41	0.22779E 01	0.37688E-00	0.12972E-02	0.17034E-02	0.20664E-00	0.18300E-00	0.20410E 01	0.10000E 01
31	531.88	0.21953E 01	0.36476E-00	0.12633E-02	0.16589E-02	0.19999E-00	0.17712E-00	0.22480E 01	0.10000E 01
32	-4157.09	0.10379E-01	-0.44799E-02	-0.35116E-05	-0.46113E-05	-0.24563E-02	-0.21753E-02	-0.60000E-01	0.
33	-4157.09	0.10379E-01	-0.41161E-02	-0.32265E-05	-0.42369E-05	-0.22568E-02	-0.19987E-02	-0.30000E-01	0.
34	-4157.09	0.10379E-01	-0.44799E-02	-0.35116E-05	-0.46113E-05	-0.24563E-02	-0.21753E-02	0.30000E-01	0.
35	-4157.09	0.10379E-01	-0.45906E-02	-0.35985E-05	-0.47253E-05	-0.25170E-02	-0.22291E-02	0.60000E-01	0.
36	533.82	0.16824E 02	0.26549E 01	0.92101E-02	0.12094E-01	0.14557E 01	0.12891E 01	-0.86800E 00	0.10000E 01
37	535.75	0.16613E 02	0.25535E 01	0.88728E-02	0.11651E-01	0.14001E 01	0.12399E 01	-0.91100E 00	0.10000E 01
38	535.26	0.15697E 02	0.24554E 01	0.85283E-02	0.11199E-01	0.13463E 01	0.11923E 01	-0.95300E 00	0.10000E 01
39	-4157.09	0.10379E-01	-0.46774E-02	-0.36665E-05	-0.48146E-05	-0.25646E-02	-0.22712E-02	0.51000E-01	0.
40	-4157.09	0.10379E-01	-0.46774E-02	-0.36665E-05	-0.48146E-05	-0.25646E-02	-0.22712E-02	0.29000E-01	0.
41	-4157.09	0.10379E-01	-0.46505E-02	-0.36454E-05	-0.47869E-05	-0.25498E-02	-0.22581E-02	0.70000E-02	0.
42	535.72	0.17331E 02	0.27204E 01	0.94525E-02	0.12412E-01	0.14916E 01	0.13210E 01	-0.86800E 00	0.10000E 01
43	535.47	0.16393E 02	0.25794E 01	0.89605E-02	0.11766E-01	0.14143E 01	0.12525E 01	-0.91100E 00	0.10000E 01
44	538.35	0.20835E 02	0.32649E 01	0.11369E-01	0.14929E-01	0.17901E 01	0.15853E 01	-0.95300E 00	0.10000E 01
45	532.46	0.45330E 01	0.73478E 00	0.25461E-02	0.33434E-02	0.40287E-00	0.35679E-00	-0.10400E 01	0.10000E 01
46	-4157.09	0.10379E-01	-0.46894E-02	-0.36759E-05	-0.48270E-05	-0.25712E-02	-0.22770E-02	0.70000E-02	0.
47	-4157.09	0.10379E-01	-0.46894E-02	-0.36759E-05	-0.48270E-05	-0.25712E-02	-0.22770E-02	0.29000E-01	0.
48	534.27	0.15575E 02	0.24584E 01	0.85318E-02	0.11203E-01	0.13479E 01	0.11937E 01	0.51000E-01	0.10000E 01
49	536.02	0.16464E 02	0.25765E 01	0.89547E-02	0.11759E-01	0.14127E 01	0.12511E 01	0.70000E-02	0.10000E 01
50	536.11	0.16136E 02	0.25334E 01	0.88053E-02	0.11563E-01	0.13890E 01	0.12301E 01	0.29000E-01	0.10000E 01
51	-4157.09	0.10379E-01	-0.46625E-02	-0.36548E-05	-0.47992E-05	-0.25564E-02	-0.22639E-02	0.51000E-01	0.
52	-4157.09	0.10379E-01	-0.46894E-02	-0.36759E-05	-0.48270E-05	-0.25712E-02	-0.22770E-02	-0.86800E 00	0.
53	536.83	0.16831E 02	0.26606E 01	0.92531E-02	0.12151E-01	0.14588E 01	0.12919E 01	-0.91100E 00	0.10000E 01
54	537.31	0.16320E 02	0.25558E 01	0.88925E-02	0.11677E-01	0.14013E 01	0.12410E 01	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	531.04	0.31522E 01	0.51055E 00	0.17670E-02	0.23204E-02	0.27993E-00	0.24791E-00	-0.10400E 01	0.10000E 01
56	531.20	0.15865E 01	0.26509E-00	0.91760E-03	0.12049E-02	0.14535E-00	0.12872E-00	-0.10680E 01	0.10000E 01
57	528.48	0.13018E 01	0.21055E-00	0.72715E-03	0.95485E-03	0.11544E-00	0.10223E-00	-0.10400E 01	0.10000E 01
58	527.80	0.29133E 01	0.50988E 00	0.17600E-02	0.23111E-02	0.27956E-00	0.24758E-00	-0.10680E 01	0.10000E 01
59	530.72	0.50291E 01	0.81440E 00	0.28179E-02	0.37003E-02	0.44653E-00	0.39545E-00	-0.10400E 01	0.10000E 01
60	528.56	0.25792E 01	0.43032E-00	0.14863E-02	0.19517E-02	0.23594E-00	0.20895E-00	-0.10680E 01	0.10000E 01
61	532.70	0.53818E 00	0.88841E-01	0.30791E-03	0.40433E-03	0.48711E-01	0.43139E-01	-0.11220E 01	0.10000E 01
62	535.36	0.70338E 00	0.10597E-00	0.36810E-03	0.48337E-03	0.58103E-01	0.51457E-01	-0.13340E 01	0.10000E 01
63	532.81	0.46182E-00	0.79089E-01	0.27413E-03	0.35998E-03	0.43364E-01	0.38403E-01	-0.11220E 01	0.10000E 01
64	535.58	0.68935E 00	0.10387E-00	0.36087E-03	0.47387E-03	0.56951E-01	0.50437E-01	-0.13340E 01	0.10000E 01
65	532.80	0.67532E 00	0.11565E-00	0.40086E-03	0.52639E-03	0.63411E-01	0.56157E-01	0.14400E 01	0.10000E 01
66	530.88	0.62909E 00	0.10242E-00	0.35443E-03	0.46541E-03	0.56155E-01	0.49731E-01	0.16130E 01	0.10000E 01
67	532.60	0.75429E 00	0.12065E-00	0.41812E-03	0.54905E-03	0.66151E-01	0.58584E-01	0.17200E 01	0.10000E 01
68	519.01	0.67636E 00	0.11021E-00	0.37767E-03	0.49593E-03	0.60430E-01	0.53517E-01	-0.16130E 01	0.10000E 01
69	534.81	0.77558E 00	0.12421E-00	0.43126E-03	0.56630E-03	0.68104E-01	0.60314E-01	-0.18280E 01	0.10000E 01
70	520.47	0.40675E-00	0.59044E-01	0.20257E-03	0.26600E-03	0.32373E-01	0.28670E-01	-0.11650E 01	0.10000E 01
71	534.93	0.35584E-00	0.29783E-01	0.10342E-03	0.13580E-03	0.16330E-01	0.14462E-01	-0.12050E 01	0.10000E 01
72	536.66	0.60779E 00	0.87819E-01	0.30538E-03	0.40101E-03	0.48151E-01	0.42642E-01	-0.12120E 01	0.10000E 01
73	533.56	0.53506E 00	0.78249E-01	0.27140E-03	0.35638E-03	0.42903E-01	0.37996E-01	-0.11650E 01	0.10000E 01
74	535.72	0.25559E-00	0.21401E-01	0.74361E-04	0.97646E-04	0.11734E-01	0.10392E-01	-0.12050E 01	0.10000E 01
75	527.54	0.68987E 00	0.98648E-01	0.34043E-03	0.44703E-03	0.54088E-01	0.47901E-01	-0.12120E 01	0.10000E 01
76	532.62	0.13356E 01	0.20024E-00	0.69395E-03	0.91125E-03	0.10979E-00	0.97230E-01	0.10840E 01	0.10000E 01
77	533.60	0.41143E-00	0.66259E-01	0.22982E-03	0.30178E-03	0.36329E-01	0.32173E-01	0.11220E 01	0.10000E 01
78	526.40	0.67221E 00	0.99251E-01	0.34219E-03	0.44934E-03	0.54419E-01	0.48193E-01	0.13340E 01	0.10000E 01
79	535.03	0.59428E 00	0.99455E-01	0.34537E-03	0.45351E-03	0.54530E-01	0.48292E-01	-0.11890E 01	0.10000E 01
80	528.98	0.66909E 00	0.99941E-01	0.34531E-03	0.45344E-03	0.54797E-01	0.48528E-01	-0.13340E 01	0.10000E 01
81	525.93	0.47013E-00	0.75384E-01	0.25980E-03	0.34115E-03	0.41332E-01	0.36604E-01	-0.11470E 01	0.10000E 01
82	534.02	0.59584E 00	0.99569E-01	0.34547E-03	0.45365E-03	0.54593E-01	0.48348E-01	-0.11890E 01	0.10000E 01
83	532.17	0.14197E 01	0.23700E-00	0.82104E-03	0.10781E-02	0.12995E-00	0.11508E-00	-0.10840E 01	0.10000E 01
84	532.88	0.61662E 00	0.90142E-01	0.31247E-03	0.41031E-03	0.49424E-01	0.43770E-01	-0.11890E 01	0.10000E 01
85	534.79	0.66026E 00	0.96625E-01	0.33548E-03	0.44052E-03	0.52979E-01	0.46918E-01	-0.13090E 01	0.10000E 01
86	537.03	0.62701E 00	0.93137E-01	0.32397E-03	0.42542E-03	0.51066E-01	0.45224E-01	-0.13340E 01	0.10000E 01
87	501.31	0.53740E 01	0.77023E 00	0.26013E-02	0.34158E-02	0.42231E-00	0.37400E-00	0.11990E 01	0.10000E 01
88	495.60	0.51226E 01	0.73805E 00	0.24811E-02	0.32580E-02	0.40467E-00	0.35838E-00	0.12070E 01	0.10000E 01
89	495.15	0.42977E 01	0.62958E 00	0.21157E-02	0.27781E-02	0.34519E-00	0.30571E-00	0.13340E 01	0.10000E 01
90	500.51	0.54384E 01	0.75902E 00	0.25618E-02	0.33639E-02	0.41617E-00	0.36856E-00	0.12070E 01	0.10000E 01
91	499.15	0.46852E 01	0.71100E 00	0.23970E-02	0.31476E-02	0.38983E-00	0.34524E-00	0.12490E 01	0.10000E 01
92	498.13	0.44707E 01	0.65935E 00	0.22211E-02	0.29166E-02	0.36152E-00	0.32016E-00	0.13340E 01	0.10000E 01
93	507.37	0.32483E 01	0.53864E 00	0.18282E-02	0.24006E-02	0.29533E-00	0.26155E-00	0.14900E 01	0.10000E 01
94-4157.09		0.10379E-01	-0.31208E-02	-0.24463E-05	-0.32123E-05	-0.17111E-02	-0.15154E-02	-0.	0.
95-4157.09		0.10379E-01	-0.31432E-02	-0.24639E-05	-0.32354E-05	-0.17234E-02	-0.15263E-02	-0.	0.
96-4157.09		0.10379E-01	-0.31208E-02	-0.24463E-05	-0.32123E-05	-0.17111E-02	-0.15154E-02	-0.	0.
97-4157.09		0.10379E-01	-0.31208E-02	-0.24463E-05	-0.32123E-05	-0.17111E-02	-0.15154E-02	-0.	0.
98-4157.09		0.10379E-01	-0.31432E-02	-0.24639E-05	-0.32354E-05	-0.17234E-02	-0.15263E-02	-0.	0.

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
143	2	-7.41	142.59	-0.	-0.	2	C2	2.70	2	10.05	235.00	1675.40	143	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.819684E 02	0.517857E-02	0.445665E 04	0.530060E-05	0.663944E-07	0.358193E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726218E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	539.68	0.14260E 01	0.23223E-00	0.80592E-03	0.10604E-02	0.12733E-00	0.11276E-00	-0.10600E 01	0.10000E 01
100	539.12	0.77091E 00	0.12931E-00	0.44854E-03	0.59015E-03	0.70900E-01	0.62790E-01	-0.10840E 01	0.10000E 01
101	541.01	0.53870E 00	0.88476E-01	0.30738E-03	0.40443E-03	0.48510E-01	0.42961E-01	-0.11080E 01	0.10000E 01
102	541.00	0.54078E 00	0.88545E-01	0.30762E-03	0.40474E-03	0.48548E-01	0.42995E-01	-0.11080E 01	0.10000E 01
103	540.39	0.90182E 00	0.15138E-00	0.52565E-03	0.69160E-03	0.82999E-01	0.73505E-01	-0.10800E 01	0.10000E 01
104	-4157.09	0.10379E-01	-0.47074E-02	-0.36862E-05	-0.48500E-05	-0.25810E-02	-0.22858E-02	0.85000E 00	0.
105	564.90	0.45289E 02	0.68789E 01	0.24388E-01	0.32087E-01	0.37716E 01	0.33402E 01	0.94000E 00	0.10000E 01
106	565.37	0.49225E 02	0.74158E 01	0.26302E-01	0.34605E-01	0.40660E 01	0.36009E 01	0.96000E 00	0.10000E 01
107	552.93	0.47299E 02	0.70767E 01	0.24834E-01	0.32675E-01	0.38801E 01	0.34362E 01	0.98000E 00	0.10000E 01
108	553.68	0.48615E 02	0.73136E 01	0.25682E-01	0.33790E-01	0.40100E 01	0.35513E 01	0.10000E 01	0.10000E 01
109	561.12	0.43510E 02	0.65948E 01	0.23305E-01	0.30663E-01	0.36159E 01	0.32022E 01	0.10200E 01	0.10000E 01
110	567.64	0.43028E 02	0.65452E 01	0.23259E-01	0.30603E-01	0.35887E 01	0.31782E 01	0.80000E-01	0.10000E 01
111	558.66	0.44515E 02	0.66814E 01	0.23561E-01	0.31000E-01	0.36633E 01	0.32443E 01	0.10000E-00	0.10000E 01
112	571.70	0.49180E 02	0.74726E 01	0.26648E-01	0.35061E-01	0.40972E 01	0.36285E 01	0.12000E-00	0.10000E 01
113	566.47	0.50883E 02	0.77351E 01	0.27460E-01	0.36130E-01	0.42411E 01	0.37559E 01	0.14000E-00	0.10000E 01
114	-4157.09	0.10379E-01	-0.44529E-02	-0.34869E-05	-0.45878E-05	-0.24415E-02	-0.21622E-02	0.80000E-01	0.
115	562.01	0.42251E 02	0.63856E 01	0.22583E-01	0.29712E-01	0.35012E 01	0.31007E 01	0.10000E-00	0.10000E 01
116	561.83	0.43653E 02	0.66414E 01	0.23484E-01	0.30898E-01	0.36414E 01	0.32248E 01	0.12000E-00	0.10000E 01
117	563.14	0.46808E 02	0.70241E 01	0.24447E-01	0.32165E-01	0.38512E 01	0.34107E 01	0.14000E-00	0.10000E 01
118	561.44	0.37953E 02	0.58020E 01	0.20509E-01	0.26984E-01	0.31812E 01	0.28173E 01	0.10000E-00	0.10000E 01
119	550.12	0.19126E 03	0.28910E 02	0.10121E-00	0.13316E-00	0.15851E 02	0.14038E 02	0.15000E-00	0.10000E 01
120	565.49	0.35671E 02	0.54470E 01	0.19321E-01	0.25421E-01	0.29865E 01	0.26449E 01	0.20000E-00	0.10000E 01
121	559.45	0.39647E 02	0.60543E 01	0.21365E-01	0.28110E-01	0.33195E 01	0.29398E 01	0.25000E-00	0.10000E 01
122	553.93	0.36010E 02	0.54821E 01	0.19255E-01	0.25333E-01	0.30058E 01	0.26619E 01	0.30000E-00	0.10000E 01
123	553.79	0.37422E 02	0.57251E 01	0.20106E-01	0.26453E-01	0.31390E 01	0.27799E 01	0.35000E-00	0.10000E 01
124	547.47	0.37790E 02	0.57991E 01	0.20257E-01	0.26652E-01	0.31796E 01	0.28159E 01	0.38000E-00	0.10000E 01
125	556.10	0.41372E 02	0.64321E 01	0.22633E-01	0.29778E-01	0.35267E 01	0.31232E 01	0.45000E-00	0.10000E 01
126	554.34	0.36054E 02	0.56730E 01	0.19932E-01	0.26225E-01	0.31104E 01	0.27546E 01	0.61000E 00	0.10000E 01
127	542.64	0.22935E 02	0.36025E 01	0.12533E-01	0.16490E-01	0.19752E 01	0.17493E 01	0.70000E 00	0.10000E 01
128	535.63	0.11984E 02	0.18810E 01	0.65057E-02	0.85597E-02	0.10313E 01	0.91337E 00	0.75000E 00	0.10000E 01
129	551.31	0.26643E 02	0.42188E 01	0.14785E-01	0.19453E-01	0.23131E 01	0.20485E 01	0.70000E 00	0.10000E 01
130	552.72	0.27681E 02	0.43866E 01	0.15391E-01	0.20250E-01	0.24051E 01	0.21300E 01	0.80000E 00	0.10000E 01
131	540.57	0.12698E 02	0.18964E 01	0.65859E-02	0.86651E-02	0.10398E 01	0.92081E 00	0.90000E 00	0.10000E 01
132	550.92	0.22620E 02	0.34091E 01	0.11943E-01	0.15714E-01	0.18692E 01	0.16554E 01	0.90000E 00	0.10000E 01
133	552.25	0.22944E 02	0.34432E 01	0.12076E-01	0.15889E-01	0.18879E 01	0.16719E 01	0.96000E 00	0.10000E 01
134	550.69	0.21756E 02	0.32675E 01	0.11445E-01	0.15058E-01	0.17915E 01	0.15866E 01	0.10000E 01	0.10000E 01
135	-4157.09	0.10379E-01	-0.46400E-02	-0.36335E-05	-0.47806E-05	-0.25441E-02	-0.22530E-02	0.70000E-02	0.
136	548.09	0.14819E 02	0.22823E 01	0.79767E-02	0.10495E-01	0.12514E 01	0.11082E 01	0.70000E-02	0.10000E 01
137	545.81	0.15384E 02	0.24014E 01	0.83768E-02	0.11021E-01	0.13167E 01	0.11661E 01	0.39000E-01	0.10000E 01
138	-4157.09	0.10379E-01	-0.46026E-02	-0.36042E-05	-0.47420E-05	-0.25236E-02	-0.22349E-02	0.78000E-01	0.
139	-4157.09	0.10379E-01	-0.45801E-02	-0.35866E-05	-0.47189E-05	-0.25112E-02	-0.22240E-02	0.11700E-00	0.
140	543.53	0.15657E 02	0.24092E 01	0.83877E-02	0.11036E-01	0.13209E 01	0.11698E 01	0.78000E-01	0.10000E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.24614E-05	-0.32385E-05	-0.17234E-02	-0.15263E-02	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.24614E-05	-0.32385E-05	-0.17234E-02	-0.15263E-02	-0.	0.
143	541.41	0.14911E 02	0.22805E 01	0.79255E-02	0.10428E-01	0.12504E 01	0.11073E 01	0.78000E-01	0.10000E 01
144	544.88	0.14903E 02	0.22875E 01	0.79731E-02	0.10490E-01	0.12542E 01	0.11107E 01	0.70000E-02	0.10000E 01
145	546.03	0.13699E 02	0.20936E 01	0.73042E-02	0.96102E-02	0.11479E 01	0.10166E 01	0.70000E-02	0.10000E 01
146	542.27	0.14763E 02	0.22626E 01	0.78690E-02	0.10353E-01	0.12405E 01	0.10986E 01	0.39000E-01	0.10000E 01
147	947.14	0.38544E-00	0.71840E-01	0.38069E-03	0.50089E-03	0.59389E-01	0.34883E-01	0.78000E-01	0.
148	870.87	-0.24255E 01	-0.44093E-00	-0.21251E-02	-0.27960E-02	-0.24176E-00	-0.21410E-00	0.11700E-00	0.
149	545.82	0.29217E 02	0.46640E 01	0.16269E-01	0.21406E-01	0.25572E 01	0.22647E 01	0.70000E-02	0.10000E 01
150	551.30	0.30014E 02	0.48287E 01	0.16922E-01	0.22264E-01	0.26475E 01	0.23447E 01	0.70000E-02	0.10000E 01
151	554.96	0.31015E 02	0.49998E 01	0.17576E-01	0.23125E-01	0.27414E 01	0.24278E 01	0.70000E-02	0.10000E 01
152	556.18	0.35820E 02	0.55704E 01	0.19502E-01	0.25791E-01	0.30542E 01	0.27048E 01	0.39000E-01	0.10000E 01

CONFIDENTIAL

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.09		0.10379E-01	-0.45801E-02	-0.35866E-05	-0.47189E-05	-0.25112E-02	-0.22240E-02	0.39000E-01	0.
154	551.96	0.35258E 02	0.54331E 01	0.19051E-01	0.25065E-01	0.29789E 01	0.26381E 01	0.78000E-01	0.10000E 01
155-4157.09		0.10379E-01	-0.47523E-02	-0.37214E-05	-0.48962E-05	-0.26056E-02	-0.23076E-02	0.39000E-01	0.
156-4157.09		0.10379E-01	-0.47373E-02	-0.37096E-05	-0.48808E-05	-0.25974E-02	-0.23003E-02	0.39000E-01	0.
157	545.50	0.28855E 02	0.46272E 01	0.16137E-01	0.21231E-01	0.25371E 01	0.22468E 01	0.78000E-01	0.10000E 01
158-4157.09		0.10379E-01	-0.47672E-02	-0.37331E-05	-0.49117E-05	-0.26138E-02	-0.23148E-02	0.39000E-01	0.
159-4157.09		0.10379E-01	-0.47672E-02	-0.37331E-05	-0.49117E-05	-0.26138E-02	-0.23148E-02	0.78000E-01	0.
160-4157.09		0.10379E-01	-0.47523E-02	-0.37214E-05	-0.48962E-05	-0.26056E-02	-0.23076E-02	0.39000E-01	0.
161	547.40	0.22530E 02	0.35314E 01	0.12335E-01	0.16229E-01	0.19362E 01	0.17147E 01	0.43000E-01	0.10000E 01
162	547.83	0.22901E 02	0.36020E 01	0.12586E-01	0.16560E-01	0.19749E 01	0.17490E 01	0.43000E-01	0.10000E 01
163	546.17	0.22044E 02	0.34695E 01	0.12106E-01	0.15928E-01	0.19023E 01	0.16847E 01	0.85000E-01	0.10000E 01
164	548.80	0.21167E 02	0.33202E 01	0.11611E-01	0.15277E-01	0.18205E 01	0.16122E 01	0.12800E-00	0.10000E 01
165-4157.09		0.10379E-01	-0.46550E-02	-0.36452E-05	-0.47960E-05	-0.25523E-02	-0.22603E-02	0.43000E-01	0.
166	545.52	0.22305E 02	0.34925E 01	0.12180E-01	0.16025E-01	0.19149E 01	0.16958E 01	0.85000E-01	0.10000E 01
167-4157.09		0.10379E-01	-0.46400E-02	-0.36335E-05	-0.47806E-05	-0.25441E-02	-0.22530E-02	0.43000E-01	0.
168	544.35	0.15764E 02	0.24944E 01	0.86904E-02	0.11434E-01	0.13677E 01	0.12112E 01	0.12800E-00	0.10000E 01
169	550.41	0.22755E 02	0.36014E 01	0.12612E-01	0.16593E-01	0.19746E 01	0.17488E 01	0.85000E-01	0.10000E 01
170	551.26	0.22860E 02	0.36023E 01	0.12624E-01	0.16609E-01	0.19751E 01	0.17492E 01	0.12800E-00	0.10000E 01
171	548.59	0.23334E 02	0.36598E 01	0.12796E-01	0.16836E-01	0.20066E 01	0.17771E 01	0.85000E-01	0.10000E 01
172-4157.09		0.10379E-01	-0.46625E-02	-0.36510E-05	-0.48037E-05	-0.25564E-02	-0.22639E-02	0.43000E-01	0.
173	553.43	0.24173E 02	0.38323E 01	0.13454E-01	0.17702E-01	0.21012E 01	0.18608E 01	0.12800E-00	0.10000E 01
174-4157.09		0.10379E-01	-0.46550E-02	-0.36452E-05	-0.47960E-05	-0.25523E-02	-0.22603E-02	0.85000E-01	0.
175	551.72	0.25061E 02	0.39376E 01	0.13804E-01	0.18162E-01	0.21589E 01	0.19120E 01	0.43000E-01	0.10000E 01
176	552.18	0.25309E 02	0.39774E 01	0.13949E-01	0.18353E-01	0.21808E 01	0.19313E 01	0.43000E-01	0.10000E 01
177	554.80	0.26220E 02	0.41466E 01	0.14575E-01	0.19176E-01	0.22735E 01	0.20135E 01	0.12800E-00	0.10000E 01
178	553.48	0.25564E 02	0.40334E 01	0.14161E-01	0.18632E-01	0.22115E 01	0.19585E 01	0.85000E-01	0.10000E 01
179	553.69	0.26191E 02	0.41328E 01	0.14513E-01	0.19094E-01	0.22660E 01	0.20068E 01	0.70000E-02	0.10000E 01
180-4157.09		0.10379E-01	-0.46774E-02	-0.36628E-05	-0.48191E-05	-0.25646E-02	-0.22712E-02	0.70000E-02	0.
181	548.22	0.25217E 02	0.39861E 01	0.13933E-01	0.18332E-01	0.21856E 01	0.19355E 01	0.70000E-02	0.10000E 01
182-4157.09		0.10379E-01	-0.46924E-02	-0.36745E-05	-0.48346E-05	-0.25728E-02	-0.22785E-02	0.70000E-02	0.
183	554.68	0.26404E 02	0.41754E 01	0.14674E-01	0.19307E-01	0.22893E 01	0.20274E 01	0.32000E-01	0.10000E 01
184	558.89	0.30784E 02	0.49108E 01	0.17321E-01	0.22789E-01	0.26925E 01	0.23845E 01	0.32000E-01	0.10000E 01
185	549.70	0.27098E 02	0.43007E 01	0.15051E-01	0.19803E-01	0.23580E 01	0.20883E 01	0.64000E-01	0.10000E 01
186	555.65	0.32381E 02	0.51398E 01	0.18079E-01	0.23787E-01	0.28181E 01	0.24957E 01	0.64000E-01	0.10000E 01
187	554.73	0.28308E 02	0.45054E 01	0.15835E-01	0.20834E-01	0.24703E 01	0.21877E 01	0.70000E-02	0.10000E 01
188	553.40	0.26625E 02	0.43020E 01	0.15103E-01	0.19871E-01	0.23587E 01	0.20889E 01	0.70000E-02	0.10000E 01
189	535.82	0.32706E 01	0.53396E 00	0.18470E-02	0.24302E-02	0.29276E-00	0.25927E-00	0.10600E 01	0.10000E 01
190	534.65	0.19880E 01	0.33084E-00	0.11433E-02	0.15043E-02	0.18140E-00	0.16064E-00	0.10840E 01	0.10000E 01
191	534.41	0.10057E 01	0.16825E-00	0.58132E-03	0.76485E-03	0.92250E-01	0.81697E-01	0.11080E 01	0.10000E 01
192	534.13	0.11491E 01	0.19117E-00	0.66035E-03	0.86882E-03	0.10482E-00	0.92825E-01	0.11080E 01	0.10000E 01
193	535.59	0.31080E 01	0.50969E 00	0.17628E-02	0.23193E-02	0.27946E-00	0.24749E-00	0.16580E 01	0.10000E 01
194	536.36	0.27294E 01	0.44572E-00	0.15425E-02	0.20295E-02	0.24439E-00	0.21643E-00	0.11700E 01	0.10000E 01
195	535.70	0.28717E 01	0.47096E-00	0.16290E-02	0.21432E-02	0.25822E-00	0.22868E-00	0.16740E 01	0.10000E 01
196	538.25	0.27294E 01	0.44620E-00	0.15466E-02	0.20349E-02	0.24465E-00	0.21666E-00	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
152	2	-7.41	142.59	-0.	-0.	3	C2	2.70	2	10.05	235.00	1665.50	152	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.814445E 02	0.518303E-02	0.444239E 04	0.533929E-05	0.659700E-07	0.361966E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725865E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	555.37	0.17353E 02	0.27099E 01	0.96216E-02	0.12608E-01	0.14858E 01	0.13159E 01	0.10000E 01	0.10000E 01
198	557.27	0.15645E 02	0.23662E 01	0.84150E-02	0.11027E-01	0.12974E 01	0.11490E 01	0.12000E 01	0.10000E 01
199	540.64	0.67506E 01	0.10660E 01	0.37376E-02	0.48976E-02	0.58447E 00	0.51761E 00	0.13000E 01	0.10000E 01
200	540.99	0.21564E 01	0.31505E-00	0.11050E-02	0.14479E-02	0.17274E-00	0.15298E-00	0.11890E 01	0.10000E 01
201	546.58	0.18109E 01	0.30110E-00	0.10611E-02	0.13904E-02	0.16509E-00	0.14620E-00	0.14540E 01	0.10000E 01
202	543.81	0.17304E 01	0.28508E-00	0.10022E-02	0.13133E-02	0.15631E-00	0.13843E-00	0.17040E 01	0.10000E 01
203	544.15	0.10935E 01	0.18019E-00	0.63366E-03	0.83033E-03	0.98796E-01	0.87494E-01	0.20410E 01	0.10000E 01
204	543.27	-0.36882E-01	-0.28224E-02	-0.99179E-05	-0.12996E-04	-0.15475E-02	-0.13705E-02	0.20700E 01	0.
205	542.84	0.10961E-00	0.95799E-02	0.33652E-04	0.44096E-04	0.52525E-02	0.46517E-02	0.21880E 01	0.10000E 01
206	544.62	0.11932E 01	0.19668E-00	0.69192E-03	0.90667E-03	0.10784E-00	0.95500E-01	0.22480E 01	0.10000E 01
207	544.58	0.13377E 01	0.21676E-00	0.76256E-03	0.99923E-03	0.11885E-00	0.10525E-00	0.20700E 01	0.10000E 01
208	542.96	0.42598E-00	0.37963E-01	0.13337E-03	0.17476E-03	0.20815E-01	0.18434E-01	0.20700E 01	0.10000E 01
209	541.64	0.31377E-00	0.25301E-01	0.88787E-04	0.11634E-03	0.13872E-01	0.12286E-01	0.21880E 01	0.10000E 01
210	543.05	0.98857E 00	0.16404E-00	0.57635E-03	0.75524E-03	0.89944E-01	0.79655E-01	0.20700E 01	0.10000E 01
211	544.93	0.93195E 00	0.15481E-00	0.54478E-03	0.71386E-03	0.84881E-01	0.75171E-01	0.21880E 01	0.10000E 01
212	544.41	0.10561E 01	0.17325E-00	0.60940E-03	0.79854E-03	0.94992E-01	0.84126E-01	0.22390E 01	0.10000E 01
213	543.33	0.93714E 00	0.15364E-00	0.53993E-03	0.70752E-03	0.84241E-01	0.74604E-01	0.21880E 01	0.10000E 01
214	544.54	0.85454E 00	0.14192E-00	0.49926E-03	0.65421E-03	0.77814E-01	0.68913E-01	0.22480E 01	0.10000E 01
215	540.02	0.33663E-00	0.50595E-01	0.17731E-03	0.23234E-03	0.27741E-01	0.24567E-01	0.11650E 01	0.10000E 01
216	584.77	-0.32222E-01	-0.27724E-02	-0.10098E-04	-0.13232E-04	-0.15201E-02	-0.13462E-02	0.12050E 01	0.
217	542.74	0.31844E-00	0.46570E-01	0.16358E-03	0.21435E-03	0.25534E-01	0.22613E-01	0.12120E 01	0.10000E 01
218	558.02	-0.81922E 00	-0.12146E-00	-0.43221E-03	-0.56636E-03	-0.66594E-01	-0.58976E-01	0.11890E 01	0.10000E 01
219	542.75	0.38753E-00	0.65136E-01	0.22879E-03	0.29980E-03	0.35714E-01	0.31628E-01	0.14540E 01	0.10000E 01
220	541.47	0.50182E 00	0.87498E-01	0.30700E-03	0.40229E-03	0.47974E-01	0.42486E-01	0.17040E 01	0.10000E 01
221	542.64	0.42909E-00	0.71728E-01	0.25192E-03	0.33011E-03	0.39328E-01	0.34829E-01	0.20410E 01	0.10000E 01
222	518.45	0.46857E-00	0.78078E-01	0.26872E-03	0.35212E-03	0.42810E-01	0.37912E-01	0.22480E 01	0.10000E 01
223	538.94	0.38338E-00	0.57587E-01	0.20162E-03	0.26420E-03	0.31575E-01	0.27963E-01	0.11650E 01	0.10000E 01
224	540.72	0.26182E-00	0.21985E-01	0.77090E-04	0.10102E-03	0.12054E-01	0.10675E-01	0.12050E 01	0.10000E 01
225	540.91	0.28623E-00	0.41817E-01	0.14665E-03	0.19217E-03	0.22928E-01	0.20305E-01	0.12120E 01	0.10000E 01
226	542.69	0.31740E-00	0.53540E-01	0.18805E-03	0.24641E-03	0.29355E-01	0.25997E-01	0.14540E 01	0.10000E 01
227	539.17	0.37143E-00	0.60005E-01	0.21013E-03	0.27535E-03	0.32900E-01	0.29137E-01	0.17040E 01	0.10000E 01
228	536.52	0.47533E-00	0.78229E-01	0.27334E-03	0.35817E-03	0.42892E-01	0.37986E-01	0.18780E 01	0.10000E 01
229	541.05	0.47065E-00	0.78012E-01	0.27362E-03	0.35855E-03	0.42773E-01	0.37880E-01	0.21880E 01	0.10000E 01
230	533.88	0.46857E-00	0.69203E-01	0.24228E-03	0.31748E-03	0.37943E-01	0.33603E-01	0.11890E 01	0.10000E 01
231	533.68	0.33610E-00	0.59358E-01	0.20691E-03	0.27112E-03	0.32546E-01	0.28823E-01	0.14540E 01	0.10000E 01
232	542.47	0.39376E-00	0.64526E-01	0.22659E-03	0.29692E-03	0.35379E-01	0.31332E-01	0.16130E 01	0.10000E 01
233	540.98	0.44467E-00	0.73369E-01	0.25732E-03	0.33718E-03	0.40227E-01	0.35625E-01	0.17040E 01	0.10000E 01
234	538.40	0.44156E-00	0.73081E-01	0.25575E-03	0.33513E-03	0.40070E-01	0.35486E-01	0.18780E 01	0.10000E 01
235	542.44	0.45350E-00	0.75115E-01	0.26377E-03	0.34564E-03	0.41185E-01	0.36474E-01	0.14540E 01	0.10000E 01
236	542.06	0.36675E-00	0.60086E-01	0.21093E-03	0.27640E-03	0.32945E-01	0.29176E-01	0.17040E 01	0.10000E 01
237	524.73	0.48676E-00	0.79941E-01	0.27657E-03	0.36241E-03	0.43831E-01	0.38817E-01	0.21880E 01	0.10000E 01
238	542.77	0.25455E-00	0.22683E-01	0.79674E-04	0.10440E-03	0.12437E-01	0.11014E-01	0.20700E 01	0.10000E 01
239	539.62	0.41195E-00	0.60140E-01	0.21068E-03	0.27607E-03	0.32974E-01	0.29202E-01	0.11890E 01	0.10000E 01
240	545.94	0.45331E-00	0.76362E-01	0.26895E-03	0.35243E-03	0.41869E-01	0.37079E-01	0.14540E 01	0.10000E 01
241	543.02	0.51792E 00	0.85289E-01	0.29965E-03	0.39265E-03	0.46763E-01	0.41414E-01	0.17040E 01	0.10000E 01
242	542.95	0.51325E 00	0.85164E-01	0.29919E-03	0.39205E-03	0.46695E-01	0.41353E-01	0.18780E 01	0.10000E 01
243	524.05	0.45039E-00	0.73940E-01	0.25566E-03	0.33501E-03	0.40541E-01	0.35903E-01	0.20410E 01	0.10000E 01
244	545.94	-0.16103E-01	-0.14562E-02	-0.51202E-05	-0.67094E-05	-0.79844E-03	-0.70711E-03	0.20700E 01	0.
245	543.37	0.41610E-00	0.34111E-01	0.11988E-03	0.15708E-03	0.18703E-01	0.16563E-01	0.21870E 01	0.10000E 01
246	537.15	0.43896E-00	0.73925E-01	0.25843E-03	0.33864E-03	0.40532E-01	0.35896E-01	0.22100E 01	0.10000E 01
247	545.98	0.41143E-00	0.67553E-01	0.23793E-03	0.31178E-03	0.37039E-01	0.32802E-01	0.14540E 01	0.10000E 01
248	539.16	0.39065E-00	0.64683E-01	0.22651E-03	0.29681E-03	0.35465E-01	0.31408E-01	0.17040E 01	0.10000E 01
249	541.26	0.14494E-00	0.12174E-01	0.42707E-04	0.55962E-04	0.66748E-02	0.59113E-02	0.18780E 01	0.10000E 01
250	543.37	0.18182E-00	0.14905E-01	0.52382E-04	0.68640E-04	0.81723E-02	0.72375E-02	0.21880E 01	0.10000E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	545.82	0.53195E 00	0.90021E-01	0.31703E-03	0.41542E-03	0.49358E-01	0.43712E-01	0.14540E 01	0.10000E 01
252	542.02	0.46493E-00	0.78115E-01	0.27421E-03	0.35931E-03	0.42830E-01	0.37930E-01	0.16130E 01	0.10000E 01
253	543.21	-0.63895E-01	-0.56403E-02	-0.19819E-04	-0.25971E-04	-0.30925E-02	-0.27388E-02	0.17060E 01	0.
254	542.71	0.52779E 00	0.87566E-01	0.30756E-03	0.40302E-03	0.48011E-01	0.42519E-01	0.21880E 01	0.10000E 01
255	530.55	0.11169E-00	0.10254E-01	0.35648E-04	0.46712E-04	0.56221E-02	0.49789E-02	0.16580E 01	0.
256	543.94	0.15533E-00	0.13066E-01	0.45942E-04	0.60201E-04	0.71641E-02	0.63446E-02	0.17920E 01	0.
257	534.53	0.74286E 00	0.12455E-00	0.43444E-03	0.56928E-03	0.68287E-01	0.60476E-01	0.10840E 01	0.10000E 01
258	545.17	0.38026E-00	0.64808E-01	0.22810E-03	0.29890E-03	0.35533E-01	0.31469E-01	0.14540E 01	0.10000E 01
259	542.45	0.51844E 00	0.86002E-01	0.30200E-03	0.39574E-03	0.47154E-01	0.41760E-01	0.16130E 01	0.10000E 01
260	543.85	0.42649E-00	0.69728E-01	0.24515E-03	0.32123E-03	0.38231E-01	0.33858E-01	0.17040E 01	0.10000E 01
261	544.08	0.34130E-00	0.56410E-01	0.19836E-03	0.25993E-03	0.30929E-01	0.27391E-01	0.18780E 01	0.10000E 01
262	542.78	0.59792E 00	0.10101E-00	0.35482E-03	0.46494E-03	0.55385E-01	0.49049E-01	0.20410E 01	0.10000E 01
263	543.37	0.54286E 00	0.92015E-01	0.32337E-03	0.42374E-03	0.50451E-01	0.44680E-01	0.14540E 01	0.10000E 01
264	543.06	0.57506E 00	0.94992E-01	0.33375E-03	0.43733E-03	0.52083E-01	0.46125E-01	0.16130E 01	0.10000E 01
265	542.17	0.64416E 00	0.10424E-00	0.36597E-03	0.47955E-03	0.57155E-01	0.50616E-01	0.17040E 01	0.10000E 01
266	542.52	0.72104E 00	0.11907E-00	0.41815E-03	0.54793E-03	0.65284E-01	0.57816E-01	0.18780E 01	0.10000E 01
267	543.05	0.68260E 00	0.11499E-00	0.40401E-03	0.52941E-03	0.63049E-01	0.55837E-01	0.20410E 01	0.10000E 01
268	542.57	0.63377E 00	0.10466E-00	0.36756E-03	0.48164E-03	0.57384E-01	0.50819E-01	0.16130E 01	0.10000E 01
269	541.88	0.67792E 00	0.10969E-00	0.38499E-03	0.50448E-03	0.60140E-01	0.53261E-01	0.18280E 01	0.10000E 01
270	542.63	0.62857E 00	0.10333E-00	0.36291E-03	0.47555E-03	0.56655E-01	0.50174E-01	0.18780E 01	0.10000E 01
271	540.19	0.76727E 00	0.12878E-00	0.45136E-03	0.59145E-03	0.70609E-01	0.62531E-01	0.20410E 01	0.10000E 01
272	542.33	0.71896E 00	0.12179E-00	0.42765E-03	0.56038E-03	0.66778E-01	0.59139E-01	0.16130E 01	0.10000E 01
273	541.91	0.71376E 00	0.11873E-00	0.41673E-03	0.54607E-03	0.65097E-01	0.57650E-01	0.17200E 01	0.10000E 01
274	540.79	0.74026E 00	0.11933E-00	0.41844E-03	0.54832E-03	0.65426E-01	0.57942E-01	0.18280E 01	0.10000E 01
275	540.77	0.70442E 00	0.11585E-00	0.40625E-03	0.53234E-03	0.63522E-01	0.56255E-01	0.18780E 01	0.10000E 01
276	-4157.09	0.10379E-01	-0.49888E-02	-0.39149E-05	-0.51299E-05	-0.27353E-02	-0.24224E-02	0.20600E 01	0.
277	542.17	0.57246E 00	0.48109E-01	0.16890E-03	0.22132E-03	0.26378E-01	0.23360E-01	0.21000E 01	0.10000E 01
278	-4157.09	0.10379E-01	-0.24951E-02	-0.19580E-05	-0.25657E-05	-0.13681E-02	-0.12116E-02	0.21870E 01	0.
279	543.71	0.69039E 00	0.11670E-00	0.41023E-03	0.53755E-03	0.63984E-01	0.56664E-01	0.21950E 01	0.10000E 01
280	542.39	0.76883E 00	0.12850E-00	0.45123E-03	0.59127E-03	0.70457E-01	0.62397E-01	0.18780E 01	0.10000E 01
281	542.18	0.77143E 00	0.13028E-00	0.45740E-03	0.59936E-03	0.71433E-01	0.63261E-01	0.20600E 01	0.10000E 01
282	541.51	0.65715E 00	0.10713E-00	0.37590E-03	0.49258E-03	0.58739E-01	0.52020E-01	0.18280E 01	0.10000E 01
283	541.61	0.70805E 00	0.11893E-00	0.41735E-03	0.54688E-03	0.65210E-01	0.57751E-01	0.20600E 01	0.10000E 01
284	542.94	0.46597E-00	0.75439E-01	0.26502E-03	0.34728E-03	0.41363E-01	0.36631E-01	0.17200E 01	0.10000E 01
285	543.16	0.50182E 00	0.82644E-01	0.29039E-03	0.38052E-03	0.45313E-01	0.40130E-01	0.18780E 01	0.10000E 01
286	541.67	0.36468E-00	0.33689E-01	0.11822E-03	0.15492E-03	0.18471E-01	0.16358E-01	0.16580E 01	0.10000E 01
287	1119.70	-0.20000E 01	-0.21944E-00	-0.15323E-02	-0.20078E-02	-0.12032E-00	-0.10655E-00	0.17920E 01	0.
288	541.59	0.49039E-00	0.80691E-01	0.28315E-03	0.37103E-03	0.44242E-01	0.39181E-01	0.16130E 01	0.10000E 01
289	543.55	0.14028E-01	0.11798E-02	0.41469E-05	0.54339E-05	0.64687E-03	0.57288E-03	0.17060E 01	0.10000E 01
290	540.04	0.14442E-00	0.12122E-01	0.42481E-04	0.55666E-04	0.66464E-02	0.58861E-02	0.18780E 01	0.
291	541.90	0.33610E-00	0.55060E-01	0.19326E-03	0.25324E-03	0.30189E-01	0.26735E-01	0.17200E 01	0.10000E 01
292	542.74	0.43896E-00	0.75596E-01	0.26553E-03	0.34794E-03	0.41449E-01	0.36707E-01	0.14400E 01	0.10000E 01
293	538.10	0.45766E-00	0.73892E-01	0.25853E-03	0.33876E-03	0.40514E-01	0.35880E-01	0.17200E 01	0.10000E 01
294	542.57	0.54234E 00	0.89834E-01	0.31549E-03	0.41341E-03	0.49255E-01	0.43621E-01	0.18780E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
139	2	-3.41	146.59	-0.	-0.	1	C2	2.70	2	10.05	235.00	1578.80	139	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.821493E 02	0.517702E-02	0.446157E 04	0.528735E-05	0.665409E-07	0.356904E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726339E 00	0.182385E 01	0.203944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	544.28	0.20229E 02	0.26393E 01	0.91648E-02	0.12075E-01	0.14471E 01	0.12816E 01	-0.	0.10000E 01
2	-4175.58	-0.10423E 03	0.41623E 02	0.32486E-01	0.42802E-01	0.22822E 02	0.20211E 02	-0.30000E-01	0.
3	-4157.09	0.10379E-01	-0.44754E-02	-0.35020E-05	-0.46140E-05	-0.24538E-02	-0.21731E-02	-0.60000E-01	0.
4	-4157.09	0.10379E-01	-0.45906E-02	-0.35921E-05	-0.47328E-05	-0.25170E-02	-0.22291E-02	-0.90000E-01	0.
5	542.08	0.15302E 02	0.24260E 01	0.84087E-02	0.11079E-01	0.13302E 01	0.11780E 01	-0.20000E-00	0.10000E 01
6	540.12	0.13755E 02	0.21783E 01	0.75377E-02	0.99313E-02	0.11943E 01	0.10577E 01	-0.40000E-00	0.10000E 01
7	537.31	0.12429E 02	0.19746E 01	0.68169E-02	0.89816E-02	0.10827E 01	0.95881E 00	-0.60000E 00	0.10000E 01
8	-4157.09	0.10379E-01	-0.47298E-02	-0.37011E-05	-0.48764E-05	-0.25933E-02	-0.22967E-02	-0.80000E 00	0.
9	539.18	0.15230E 02	0.23838E 01	0.82421E-02	0.10859E-01	0.13070E 01	0.11575E 01	-0.90000E 00	0.10000E 01
10	543.10	0.14560E 02	0.23134E 01	0.80250E-02	0.10573E-01	0.12684E 01	0.11233E 01	-0.98000E 00	0.10000E 01
11	538.81	0.43532E-00	0.74804E-01	0.25857E-03	0.34068E-03	0.41015E-01	0.36323E-01	-0.11220E 01	0.10000E 01
12	540.03	0.57818E 00	0.84719E-01	0.29314E-03	0.38622E-03	0.46450E-01	0.41137E-01	-0.11890E 01	0.10000E 01
13	539.86	0.67636E 00	0.10216E-00	0.35343E-03	0.46567E-03	0.56013E-01	0.49606E-01	-0.13340E 01	0.10000E 01
14	537.95	0.49506E-00	0.85028E-01	0.29370E-03	0.38696E-03	0.46620E-01	0.41287E-01	-0.14400E 01	0.10000E 01
15	-4157.09	0.10379E-01	-0.41161E-02	-0.32209E-05	-0.42437E-05	-0.22568E-02	-0.19987E-02	0.30000E-01	0.
16	-4157.09	0.10379E-01	-0.44754E-02	-0.35020E-05	-0.46140E-05	-0.24538E-02	-0.21731E-02	0.60000E-01	0.
17	1109.19	0.44670E-01	0.89813E-02	0.60082E-04	0.79161E-04	0.49244E-02	0.43610E-02	0.90000E-01	0.
18	531.16	0.20115E 02	0.31695E 01	0.10886E-01	0.14343E-01	0.17378E 01	0.15390E 01	0.20000E-00	0.10000E 01
19	536.10	0.23608E 02	0.37302E 01	0.12865E-01	0.16950E-01	0.20453E 01	0.18113E 01	0.40000E-00	0.10000E 01
20	-4157.09	0.10379E-01	-0.47298E-02	-0.37011E-05	-0.48764E-05	-0.25933E-02	-0.22967E-02	0.60000E 00	0.
21	-4157.09	0.10379E-01	-0.44529E-02	-0.34844E-05	-0.45909E-05	-0.24415E-02	-0.21622E-02	0.92000E 00	0.
22	563.17	0.28771E 02	0.43658E 01	0.15404E-01	0.20295E-01	0.23937E 01	0.21199E 01	0.10400E 01	0.10000E 01
23	539.96	0.30036E 02	0.45112E 01	0.15608E-01	0.20565E-01	0.24735E 01	0.21905E 01	0.10600E 01	0.10000E 01
24	531.20	0.21250E 02	0.33272E 01	0.11428E-01	0.15057E-01	0.18243E 01	0.16156E 01	0.10840E 01	0.10000E 01
25	516.22	0.38166E 01	0.55458E 00	0.18815E-02	0.24790E-02	0.30407E-00	0.26929E-00	0.12070E 01	0.10000E 01
26	514.96	0.34442E 01	0.52745E 00	0.17876E-02	0.23553E-02	0.28919E-00	0.25611E-00	0.12490E 01	0.10000E 01
27	515.05	0.34862E 01	0.52527E 00	0.17804E-02	0.23457E-02	0.28800E-00	0.25505E-00	0.13340E 01	0.10000E 01
28	517.95	0.27491E 01	0.46137E-00	0.15675E-02	0.20653E-02	0.25296E-00	0.22403E-00	0.14540E 01	0.10000E 01
29	524.87	0.25548E 01	0.41770E-00	0.14272E-02	0.18805E-02	0.22902E-00	0.20282E-00	0.16580E 01	0.10000E 01
30	532.07	0.20322E 01	0.33769E-00	0.11607E-02	0.15293E-02	0.18515E-00	0.16397E-00	0.20410E 01	0.10000E 01
31	537.91	0.20254E 01	0.33768E-00	0.11664E-02	0.15367E-02	0.18515E-00	0.16397E-00	0.22480E 01	0.10000E 01
32	-4157.09	0.10379E-01	-0.44799E-02	-0.35055E-05	-0.46186E-05	-0.24563E-02	-0.21753E-02	-0.60000E-01	0.
33	-4157.09	0.10379E-01	-0.41161E-02	-0.32209E-05	-0.42437E-05	-0.22568E-02	-0.19987E-02	-0.30000E-01	0.
34	-4157.09	0.10379E-01	-0.44799E-02	-0.35055E-05	-0.46186E-05	-0.24563E-02	-0.21753E-02	0.30000E-01	0.
35	-4157.09	0.10379E-01	-0.45906E-02	-0.35921E-05	-0.47328E-05	-0.25170E-02	-0.22291E-02	0.60000E-01	0.
36	537.00	0.15910E 02	0.25151E 01	0.86806E-02	0.11437E-01	0.13790E 01	0.12213E 01	-0.86800E 00	0.10000E 01
37	539.22	0.16066E 02	0.24744E 01	0.85557E-02	0.11273E-01	0.13567E 01	0.12015E 01	-0.91100E 00	0.10000E 01
38	539.22	0.15838E 02	0.24831E 01	0.85859E-02	0.11312E-01	0.13615E 01	0.12057E 01	-0.95300E 00	0.10000E 01
39	-4157.09	0.10379E-01	-0.46774E-02	-0.36601E-05	-0.48223E-05	-0.25646E-02	-0.22712E-02	0.51000E-01	0.
40	-4157.09	0.10379E-01	-0.46774E-02	-0.36601E-05	-0.48223E-05	-0.25646E-02	-0.22712E-02	0.29000E-01	0.
41	-4157.09	0.10379E-01	-0.46505E-02	-0.36390E-05	-0.47946E-05	-0.25498E-02	-0.22581E-02	0.70000E-02	0.
42	538.91	0.16346E 02	0.25705E 01	0.88860E-02	0.11708E-01	0.14094E 01	0.12482E 01	-0.86800E 00	0.10000E 01
43	538.95	0.16145E 02	0.25455E 01	0.87997E-02	0.11594E-01	0.13957E 01	0.12360E 01	-0.91100E 00	0.10000E 01
44	542.56	0.21168E 02	0.33248E 01	0.11529E-01	0.15190E-01	0.18230E 01	0.16144E 01	-0.95300E 00	0.10000E 01
45	536.30	0.47636E 01	0.77385E 00	0.26693E-02	0.35169E-02	0.42429E-00	0.37576E-00	-0.10400E 01	0.10000E 01
46	-4157.09	0.10379E-01	-0.46894E-02	-0.36694E-05	-0.48347E-05	-0.25712E-02	-0.22770E-02	0.70000E-02	0.
47	-4157.09	0.10379E-01	-0.46894E-02	-0.36694E-05	-0.48347E-05	-0.25712E-02	-0.22770E-02	0.29000E-01	0.
48	537.73	0.12930E 02	0.20449E 01	0.70620E-02	0.93046E-02	0.11212E 01	0.99294E 00	0.51000E-01	0.10000E 01
49	539.25	0.14466E 02	0.22680E 01	0.78422E-02	0.10333E-01	0.12435E 01	0.11012E 01	0.70000E-02	0.10000E 01
50	539.62	0.14022E 02	0.22059E 01	0.76301E-02	0.10053E-01	0.12095E 01	0.10711E 01	0.29000E-01	0.10000E 01
51	-4157.09	0.10379E-01	-0.46625E-02	-0.36484E-05	-0.48069E-05	-0.25564E-02	-0.22639E-02	0.51000E-01	0.
52	-4157.09	0.10379E-01	-0.46894E-02	-0.36694E-05	-0.48347E-05	-0.25712E-02	-0.22770E-02	-0.86800E 00	0.
53	540.30	0.16141E 02	0.25565E 01	0.88478E-02	0.11657E-01	0.14017E 01	0.12414E 01	-0.91100E 00	0.10000E 01
54	541.19	0.16202E 02	0.25428E 01	0.88070E-02	0.11604E-01	0.13942E 01	0.12347E 01	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	535.34	0.33512E 01	0.54410E 00	0.18753E-02	0.24708E-02	0.29832E-00	0.26420E-00	-0.10400E 01	0.10000E 01
56	535.45	0.16852E 01	0.28226E-00	0.97292E-03	0.12819E-02	0.15476E-00	0.13706E-00	-0.10680E 01	0.10000E 01
57	532.28	0.13470E 01	0.21832E-00	0.75056E-03	0.98890E-03	0.11970E-00	0.10601E-00	-0.10400E 01	0.10000E 01
58	531.43	0.30135E 01	0.52851E 00	0.18157E-02	0.23922E-02	0.28978E-00	0.25663E-00	-0.10680E 01	0.10000E 01
59	534.20	0.51844E 01	0.84120E 00	0.28965E-02	0.38163E-02	0.46122E-00	0.40846E-00	-0.10400E 01	0.10000E 01
60	532.33	0.26431E 01	0.44192E-00	0.15193E-02	0.20018E-02	0.24230E-00	0.21459E-00	-0.10680E 01	0.10000E 01
61	536.78	0.47117E-00	0.77958E-01	0.26901E-03	0.35444E-03	0.42744E-01	0.37854E-01	-0.11220E 01	0.10000E 01
62	539.12	0.66338E 00	0.10016E-00	0.34629E-03	0.45625E-03	0.54915E-01	0.48633E-01	-0.13340E 01	0.10000E 01
63	537.40	0.41351E-00	0.70999E-01	0.24513E-03	0.32297E-03	0.38923E-01	0.34475E-01	-0.11220E 01	0.10000E 01
64	539.68	0.62597E 00	0.94539E-01	0.32702E-03	0.43087E-03	0.51835E-01	0.45905E-01	-0.13340E 01	0.10000E 01
65	536.55	0.61662E 00	0.10582E-00	0.36510E-03	0.48103E-03	0.58022E-01	0.51384E-01	0.14400E 01	0.10000E 01
66	534.38	0.67221E 00	0.10965E-00	0.37763E-03	0.49755E-03	0.60122E-01	0.53245E-01	0.16130E 01	0.10000E 01
67	535.82	0.74338E 00	0.11912E-00	0.41073E-03	0.54116E-03	0.65313E-01	0.57842E-01	0.17200E 01	0.10000E 01
68	522.73	0.69922E 00	0.11418E-00	0.38945E-03	0.51313E-03	0.62605E-01	0.55443E-01	-0.16130E 01	0.10000E 01
69	538.07	0.77767E 00	0.12477E-00	0.43102E-03	0.56790E-03	0.68413E-01	0.60586E-01	-0.18280E 01	0.10000E 01
70	525.41	0.30493E-00	0.44389E-01	0.15174E-03	0.19992E-03	0.24338E-01	0.21554E-01	-0.11650E 01	0.10000E 01
71	540.00	0.23948E-00	0.20101E-01	0.69551E-04	0.91637E-04	0.11021E-01	0.97605E-02	-0.12050E 01	0.10000E 01
72	541.25	0.54026E 00	0.78263E-01	0.27107E-03	0.35715E-03	0.42911E-01	0.38002E-01	-0.12120E 01	0.10000E 01
73	538.32	0.39325E-00	0.57664E-01	0.19924E-03	0.26251E-03	0.31617E-01	0.28000E-01	-0.11650E 01	0.10000E 01
74	540.70	0.20468E-00	0.17186E-01	0.59500E-04	0.78395E-04	0.94232E-02	0.83452E-02	-0.12050E 01	0.10000E 01
75	532.09	0.61870E 00	0.88700E-01	0.30489E-03	0.40170E-03	0.48633E-01	0.43070E-01	-0.12120E 01	0.10000E 01
76	536.58	0.14125E 01	0.21224E-00	0.73226E-03	0.96480E-03	0.11637E-00	0.10306E-00	0.10840E 01	0.10000E 01
77	537.75	0.34649E-00	0.55933E-01	0.19316E-03	0.25450E-03	0.30667E-01	0.27159E-01	0.11220E 01	0.10000E 01
78	530.46	0.65091E 00	0.96328E-01	0.33066E-03	0.43567E-03	0.52816E-01	0.46774E-01	0.13340E 01	0.10000E 01
79	539.07	0.43428E-00	0.72844E-01	0.25185E-03	0.33182E-03	0.39940E-01	0.35371E-01	-0.11890E 01	0.10000E 01
80	532.95	0.63948E 00	0.95732E-01	0.32929E-03	0.43386E-03	0.52489E-01	0.46484E-01	-0.13340E 01	0.10000E 01
81	529.79	0.35688E-00	0.57351E-01	0.19676E-03	0.25924E-03	0.31445E-01	0.27848E-01	-0.11470E 01	0.10000E 01
82	538.05	0.47844E-00	0.80132E-01	0.27680E-03	0.36471E-03	0.43935E-01	0.38909E-01	-0.11890E 01	0.10000E 01
83	535.17	0.13694E 01	0.22898E-00	0.78907E-03	0.10396E-02	0.12555E-00	0.11118E-00	-0.10840E 01	0.10000E 01
84	536.94	0.45662E-00	0.66905E-01	0.23090E-03	0.30423E-03	0.36684E-01	0.32487E-01	-0.11890E 01	0.10000E 01
85	538.74	0.58701E 00	0.86098E-01	0.29758E-03	0.39208E-03	0.47206E-01	0.41806E-01	-0.13090E 01	0.10000E 01
86	540.61	0.59169E 00	0.88066E-01	0.30487E-03	0.40168E-03	0.48286E-01	0.42762E-01	-0.13340E 01	0.10000E 01
87	516.09	0.38603E 01	0.55800E 00	0.18929E-02	0.24940E-02	0.30595E-00	0.27095E-00	0.11990E 01	0.10000E 01
88	511.00	0.36914E 01	0.53661E 00	0.18128E-02	0.23885E-02	0.29422E-00	0.26056E-00	0.12070E 01	0.10000E 01
89	512.74	0.32670E 01	0.48349E-00	0.16356E-02	0.21551E-02	0.26509E-00	0.23477E-00	0.13340E 01	0.10000E 01
90	516.11	0.38883E 01	0.54757E 00	0.18576E-02	0.24475E-02	0.30023E-00	0.26589E-00	0.12070E 01	0.10000E 01
91	516.59	0.34478E 01	0.52850E 00	0.17936E-02	0.23631E-02	0.28977E-00	0.25662E-00	0.12490E 01	0.10000E 01
92	516.26	0.33865E 01	0.50470E 00	0.17124E-02	0.22561E-02	0.27672E-00	0.24507E-00	0.13340E 01	0.10000E 01
93	521.33	0.27148E 01	0.45379E-00	0.15460E-02	0.20370E-02	0.24881E-00	0.22035E-00	0.14900E 01	0.10000E 01
94-4157.09		0.10379E-01	-0.31208E-02	-0.24420E-05	-0.32175E-05	-0.17111E-02	-0.15154E-02	-0.	0.
95-4157.09		0.10379E-01	-0.31432E-02	-0.24596E-05	-0.32406E-05	-0.17234E-02	-0.15263E-02	-0.	0.
96-4157.09		0.10379E-01	-0.31208E-02	-0.24420E-05	-0.32175E-05	-0.17111E-02	-0.15154E-02	-0.	0.
97-4157.09		0.10379E-01	-0.31208E-02	-0.24420E-05	-0.32175E-05	-0.17111E-02	-0.15154E-02	-0.	0.
98-4157.09		0.10379E-01	-0.31432E-02	-0.24596E-05	-0.32406E-05	-0.17234E-02	-0.15263E-02	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
144	2	-3.41	146.59	-0.	-0.	2	C2	2.75	2	10.05	235.00	1673.20	144	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.818509E 02	0.517957E-02	0.445346E 04	0.530924E-05	0.662992E-07	0.359034E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726139E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	540.16	0.20442E 01	0.33300E-00	0.11585E-02	0.15229E-02	0.18258E-00	0.16169E-00	-0.10600E 01	0.10000E 01
100	539.30	0.10655E 01	0.17874E-00	0.62139E-03	0.81683E-03	0.97999E-01	0.86789E-01	-0.10840E 01	0.10000E 01
101	540.63	0.68520E 00	0.11251E-00	0.39159E-03	0.51476E-03	0.61689E-01	0.54632E-01	-0.11080E 01	0.10000E 01
102	540.74	0.72000E 00	0.11787E-00	0.41029E-03	0.53933E-03	0.64628E-01	0.57235E-01	-0.11080E 01	0.10000E 01
103	540.44	0.13377E 01	0.22454E-00	0.78139E-03	0.10272E-02	0.12312E-00	0.10903E-00	-0.10800E 01	0.10000E 01
104-4157.13		0.51854E-02	-0.23518E-02	-0.18425E-05	-0.24219E-05	-0.12895E-02	-0.11419E-02	0.85000E 00	0.
105	564.10	0.42696E 02	0.64820E 01	0.23015E-01	0.30253E-01	0.35540E 01	0.31475E 01	0.94000E 00	0.10000E 01
106	562.59	0.45776E 02	0.68855E 01	0.24416E-01	0.32095E-01	0.37753E 01	0.33434E 01	0.96000E 00	0.10000E 01
107	549.16	0.43595E 02	0.65088E 01	0.22817E-01	0.29994E-01	0.35687E 01	0.31605E 01	0.98000E 00	0.10000E 01
108	545.76	0.42824E 02	0.64140E 01	0.22420E-01	0.29472E-01	0.35167E 01	0.31144E 01	0.10000E 01	0.10000E 01
109	550.69	0.36860E 02	0.55546E 01	0.19497E-01	0.25629E-01	0.30455E 01	0.26971E 01	0.10200E 01	0.10000E 01
110	567.95	0.40432E 02	0.61514E 01	0.21913E-01	0.28805E-01	0.33727E 01	0.29869E 01	0.80000E-01	0.10000E 01
111	557.92	0.42187E 02	0.63294E 01	0.22354E-01	0.29385E-01	0.34703E 01	0.30733E 01	0.10000E-00	0.10000E 01
112	568.45	0.45263E 02	0.68652E 01	0.24466E-01	0.32161E-01	0.37641E 01	0.33335E 01	0.12000E-00	0.10000E 01
113	561.48	0.46228E 02	0.70082E 01	0.24827E-01	0.32635E-01	0.38425E 01	0.34030E 01	0.14000E-00	0.10000E 01
114-4157.13		0.51854E-02	-0.22246E-02	-0.17429E-05	-0.22910E-05	-0.12198E-02	-0.10802E-02	0.80000E-01	0.
115	562.45	0.40247E 02	0.60843E 01	0.21572E-01	0.28357E-01	0.33360E 01	0.29543E 01	0.10000E-00	0.10000E 01
116	561.36	0.41406E 02	0.62978E 01	0.22308E-01	0.29324E-01	0.34530E 01	0.30580E 01	0.12000E-00	0.10000E 01
117	541.04	0.43496E 02	0.65194E 01	0.22698E-01	0.29837E-01	0.35745E 01	0.31656E 01	0.14000E-00	0.10000E 01
118	564.58	0.36681E 02	0.56172E 01	0.19952E-01	0.26227E-01	0.30799E 01	0.27275E 01	0.10000E-00	0.10000E 01
119	566.00	0.31083E 03	0.47398E 02	0.16856E-00	0.22158E-00	0.25988E 02	0.23015E 02	0.15000E-00	0.10000E 01
120	585.12	0.32316E 02	0.49881E 01	0.18036E-01	0.23708E-01	0.27349E 01	0.24221E 01	0.20000E-00	0.10000E 01
121	558.97	0.37579E 02	0.57368E 01	0.20279E-01	0.26658E-01	0.31455E 01	0.27856E 01	0.25000E-00	0.10000E 01
122	555.17	0.34676E 02	0.52825E 01	0.18613E-01	0.24467E-01	0.28964E 01	0.25650E 01	0.30000E-00	0.10000E 01
123	552.98	0.35706E 02	0.54600E 01	0.19203E-01	0.25242E-01	0.29937E 01	0.26512E 01	0.35000E-00	0.10000E 01
124	546.31	0.36126E 02	0.55402E 01	0.19375E-01	0.25469E-01	0.30376E 01	0.26901E 01	0.38000E-00	0.10000E 01
125	552.75	0.38757E 02	0.60143E 01	0.21148E-01	0.27799E-01	0.32976E 01	0.29204E 01	0.45000E-00	0.10000E 01
126	553.07	0.33782E 02	0.53117E 01	0.18682E-01	0.24558E-01	0.29123E 01	0.25792E 01	0.61000E 00	0.10000E 01
127	534.67	0.20193E 02	0.31577E 01	0.10936E-01	0.14375E-01	0.17313E 01	0.15333E 01	0.70000E 00	0.10000E 01
128	524.05	0.10195E 02	0.15898E 01	0.54573E-02	0.71737E-02	0.87168E 00	0.77197E 00	0.75000E 00	0.10000E 01
129	552.18	0.25510E 02	0.40413E 01	0.14204E-01	0.18671E-01	0.22158E 01	0.19624E 01	0.70000E 00	0.10000E 01
130	552.60	0.26324E 02	0.41714E 01	0.14666E-01	0.19278E-01	0.22871E 01	0.20255E 01	0.80000E 00	0.10000E 01
131	531.94	0.11364E 02	0.16988E 01	0.58352E-02	0.76705E-02	0.92596E 00	0.82004E 00	0.90000E 00	0.10000E 01
132	551.80	0.21723E 02	0.32756E 01	0.11509E-01	0.15128E-01	0.17960E 01	0.15905E 01	0.90000E 00	0.10000E 01
133	550.60	0.21814E 02	0.32705E 01	0.11479E-01	0.15090E-01	0.17932E 01	0.15881E 01	0.96000E 00	0.10000E 01
134	547.52	0.20506E 02	0.30744E 01	0.10763E-01	0.14148E-01	0.16857E 01	0.14928E 01	0.10000E 01	0.10000E 01
135-4157.13		0.51854E-02	-0.23181E-02	-0.18161E-05	-0.23873E-05	-0.12710E-02	-0.11256E-02	0.70000E-02	0.
136	544.54	0.13976E 02	0.21483E 01	0.75017E-02	0.98610E-02	0.11779E 01	0.10431E 01	0.70000E-02	0.10000E 01
137	543.12	0.15542E 02	0.24224E 01	0.84488E-02	0.11106E-01	0.13282E 01	0.11763E 01	0.39000E-01	0.10000E 01
138-4157.13		0.51854E-02	-0.22994E-02	-0.18016E-05	-0.23660E-05	-0.12608E-02	-0.11165E-02	0.78000E-01	0.
139-4157.13		0.51854E-02	-0.22882E-02	-0.17927E-05	-0.23565E-05	-0.12546E-02	-0.11111E-02	0.11700E-00	0.
140	541.72	0.16272E 02	0.25014E 01	0.87140E-02	0.11455E-01	0.13715E 01	0.12146E 01	0.78000E-01	0.10000E 01
141-4157.13		0.51854E-02	-0.15703E-02	-0.12303E-05	-0.16172E-05	-0.86100E-03	-0.76251E-03	-0.	0.
142-4157.13		0.51854E-02	-0.15703E-02	-0.12303E-05	-0.16172E-05	-0.86100E-03	-0.76251E-03	-0.	0.
143	539.24	0.16375E 02	0.25012E 01	0.86954E-02	0.11430E-01	0.13714E 01	0.12145E 01	0.78000E-01	0.10000E 01
144	541.38	0.15501E 02	0.23746E 01	0.82700E-02	0.10871E-01	0.13020E 01	0.11530E 01	0.70000E-02	0.10000E 01
145	542.15	0.13993E 02	0.21339E 01	0.74363E-02	0.97752E-02	0.11700E 01	0.10361E 01	0.70000E-02	0.10000E 01
146	539.40	0.15925E 02	0.24368E 01	0.84726E-02	0.11137E-01	0.13361E 01	0.11833E 01	0.39000E-01	0.10000E 01
147	1048.55	0.87265E-01	0.16956E-01	0.10402E-03	0.13674E-03	0.92968E-02	0.82333E-02	0.78000E-01	0.
148	951.55	0.17360E 01	0.32684E-00	0.17477E-02	0.22974E-02	0.17921E-00	0.15871E-00	0.11700E-00	0.
149	556.28	0.28776E 02	0.46203E 01	0.16295E-01	0.21420E-01	0.25333E 01	0.22435E 01	0.70000E-02	0.10000E 01
150	562.30	0.29493E 02	0.47739E 01	0.16924E-01	0.22246E-01	0.26175E 01	0.23181E 01	0.70000E-02	0.10000E 01
151	563.63	0.30051E 02	0.48678E 01	0.17276E-01	0.22710E-01	0.26690E 01	0.23636E 01	0.70000E-02	0.10000E 01
152	562.47	0.33908E 02	0.52902E 01	0.18756E-01	0.24656E-01	0.29005E 01	0.25687E 01	0.39000E-01	0.10000E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.13		0.51854E-02	-0.22882E-02	-0.17927E-05	-0.23565E-05	-0.12546E-02	-0.11111E-02	0.39000E-01	0.
154	555.98	0.33463E 02	0.51681E 01	0.18223E-01	0.23954E-01	0.28336E 01	0.25095E 01	0.78000E-01	0.10000E 01
155-4157.13		0.51854E-02	-0.23742E-02	-0.18600E-05	-0.24451E-05	-0.13018E-02	-0.11528E-02	0.39000E-01	0.
156-4157.13		0.51854E-02	-0.23667E-02	-0.18542E-05	-0.24373E-05	-0.12977E-02	-0.11492E-02	0.39000E-01	0.
157	553.66	0.27763E 02	0.44724E 01	0.15738E-01	0.20688E-01	0.24522E 01	0.21717E 01	0.78000E-01	0.10000E 01
158-4157.13		0.51854E-02	-0.23817E-02	-0.18659E-05	-0.24528E-05	-0.13059E-02	-0.11565E-02	0.39000E-01	0.
159-4157.13		0.51854E-02	-0.23817E-02	-0.18659E-05	-0.24528E-05	-0.13059E-02	-0.11565E-02	0.78000E-01	0.
160-4157.13		0.51854E-02	-0.23742E-02	-0.18600E-05	-0.24451E-05	-0.13018E-02	-0.11528E-02	0.39000E-01	0.
161	549.74	0.22275E 02	0.34960E 01	0.12262E-01	0.16118E-01	0.19168E 01	0.16975E 01	0.43000E-01	0.10000E 01
162	550.19	0.22405E 02	0.35285E 01	0.12380E-01	0.16274E-01	0.19346E 01	0.17133E 01	0.43000E-01	0.10000E 01
163	548.83	0.21804E 02	0.34367E 01	0.12044E-01	0.15833E-01	0.18843E 01	0.16688E 01	0.85000E-01	0.10000E 01
164	551.31	0.21071E 02	0.33099E 01	0.11624E-01	0.15280E-01	0.18148E 01	0.16072E 01	0.12800E-00	0.10000E 01
165-4157.13		0.51854E-02	-0.23256E-02	-0.18220E-05	-0.23950E-05	-0.12751E-02	-0.11292E-02	0.43000E-01	0.
166	548.39	0.21853E 02	0.34272E 01	0.12006E-01	0.15783E-01	0.18791E 01	0.16641E 01	0.85000E-01	0.10000E 01
167-4157.13		0.51854E-02	-0.23181E-02	-0.18161E-05	-0.23873E-05	-0.12710E-02	-0.11256E-02	0.43000E-01	0.
168	545.24	0.16780E 02	0.26565E 01	0.92818E-02	0.12201E-01	0.14565E 01	0.12899E 01	0.12800E-00	0.10000E 01
169	552.62	0.22252E 02	0.35262E 01	0.12398E-01	0.16297E-01	0.19334E 01	0.17122E 01	0.85000E-01	0.10000E 01
170	552.87	0.22417E 02	0.35557E 01	0.12434E-01	0.16344E-01	0.19386E 01	0.17168E 01	0.12800E-00	0.10000E 01
171	551.32	0.22787E 02	0.35794E 01	0.12571E-01	0.16525E-01	0.19626E 01	0.17381E 01	0.85000E-01	0.10000E 01
172-4157.13		0.51854E-02	-0.23293E-02	-0.18249E-05	-0.23988E-05	-0.12772E-02	-0.11311E-02	0.43000E-01	0.
173	555.02	0.23386E 02	0.37108E 01	0.13074E-01	0.17185E-01	0.20346E 01	0.18019E 01	0.12800E-00	0.10000E 01
174-4157.13		0.51854E-02	-0.23256E-02	-0.18220E-05	-0.23950E-05	-0.12751E-02	-0.11292E-02	0.85000E-01	0.
175	554.39	0.24311E 02	0.38254E 01	0.13470E-01	0.17706E-01	0.20974E 01	0.18575E 01	0.43000E-01	0.10000E 01
176	554.82	0.24466E 02	0.38506E 01	0.13564E-01	0.17830E-01	0.21113E 01	0.18698E 01	0.43000E-01	0.10000E 01
177	554.81	0.25026E 02	0.39578E 01	0.13941E-01	0.18326E-01	0.21700E 01	0.19218E 01	0.12800E-00	0.10000E 01
178	555.23	0.24653E 02	0.38936E 01	0.13720E-01	0.18035E-01	0.21348E 01	0.18906E 01	0.85000E-01	0.10000E 01
179	555.34	0.25168E 02	0.39750E 01	0.14008E-01	0.18414E-01	0.21795E 01	0.19302E 01	0.70000E-02	0.10000E 01
180-4157.13		0.51854E-02	-0.23368E-02	-0.18307E-05	-0.24065E-05	-0.12813E-02	-0.11347E-02	0.70000E-02	0.
181	550.66	0.24944E 02	0.39485E 01	0.13859E-01	0.18218E-01	0.21649E 01	0.19173E 01	0.70000E-02	0.10000E 01
182-4157.13		0.51854E-02	-0.23443E-02	-0.18366E-05	-0.24142E-05	-0.12854E-02	-0.11383E-02	0.70000E-02	0.
183	555.20	0.25434E 02	0.40232E 01	0.14176E-01	0.18635E-01	0.22059E 01	0.19535E 01	0.32000E-01	0.10000E 01
184	558.04	0.28811E 02	0.45939E 01	0.16226E-01	0.21330E-01	0.25188E 01	0.22307E 01	0.32000E-01	0.10000E 01
185	546.42	0.24955E 02	0.39535E 01	0.13827E-01	0.18176E-01	0.21676E 01	0.19197E 01	0.64000E-01	0.10000E 01
186	554.41	0.30102E 02	0.47749E 01	0.16813E-01	0.22102E-01	0.26180E 01	0.23185E 01	0.64000E-01	0.10000E 01
187	556.41	0.27260E 02	0.43427E 01	0.15318E-01	0.20136E-01	0.23811E 01	0.21087E 01	0.70000E-02	0.10000E 01
188	556.01	0.25657E 02	0.41516E 01	0.14639E-01	0.19243E-01	0.22763E 01	0.20159E 01	0.70000E-02	0.10000E 01
189	530.27	0.36052E 01	0.58673E 00	0.20245E-02	0.26612E-02	0.32170E-00	0.28490E-00	0.10600E 01	0.10000E 01
190	528.05	0.21688E 01	0.35958E-00	0.12384E-02	0.16279E-02	0.19715E-00	0.17460E-00	0.10840E 01	0.10000E 01
191	526.56	0.11210E 01	0.18671E-00	0.64226E-03	0.84426E-03	0.10237E-00	0.90662E-01	0.11080E 01	0.10000E 01
192	526.64	0.13122E 01	0.21738E-00	0.74780E-03	0.98300E-03	0.11919E-00	0.10555E-00	0.11080E 01	0.10000E 01
193	528.34	0.23366E 01	0.38162E-00	0.13146E-02	0.17281E-02	0.20924E-00	0.18530E-00	0.16580E 01	0.10000E 01
194	529.74	0.22021E 01	0.35827E-00	0.12357E-02	0.16243E-02	0.19644E-00	0.17397E-00	0.11700E 01	0.10000E 01
195	528.62	0.23543E 01	0.38456E-00	0.13251E-02	0.17418E-02	0.21085E-00	0.18673E-00	0.16740E 01	0.10000E 01
196	529.90	0.22810E 01	0.37116E-00	0.12803E-02	0.16829E-02	0.20350E-00	0.18022E-00	0.16950E 01	0.10000E 01

CONFIDENTIAL

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
153	2	-3.41	146.59	-0.	-0.	3	C2	2.70	2	10.05	235.00	1663.20	153	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.813181E 02	0.518410E-02	0.443894E 04	0.534870E-05	0.658677E-07	0.362885E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725779E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	548.50	0.18730E 02	0.29139E 01	0.10309E-01	0.13495E-01	0.15977E 01	0.14149E 01	0.10000E 01	0.10000E 01
198	554.11	0.16697E 02	0.25209E 01	0.89617E-02	0.11732E-01	0.13822E 01	0.12241E 01	0.12000E 01	0.10000E 01
199	534.16	0.79719E 01	0.12543E 01	0.43837E-02	0.57387E-02	0.68770E 00	0.60903E 00	0.13000E 01	0.10000E 01
200	524.24	0.16982E 01	0.24577E-00	0.85186E-03	0.11152E-02	0.13475E-00	0.11934E-00	0.11890E 01	0.10000E 01
201	535.50	0.15283E 01	0.25253E-00	0.88363E-03	0.11567E-02	0.13846E-00	0.12262E-00	0.14540E 01	0.10000E 01
202	532.36	0.15210E 01	0.24898E-00	0.86889E-03	0.11375E-02	0.13651E-00	0.12090E-00	0.17040E 01	0.10000E 01
203	538.06	0.99117E 00	0.16277E-00	0.57077E-03	0.74718E-03	0.89244E-01	0.79035E-01	0.20410E 01	0.10000E 01
204	539.24	-0.43634E-01	-0.33315E-02	-0.11694E-04	-0.15309E-04	-0.18266E-02	-0.16177E-02	0.20700E 01	0.
205	538.35	0.71171E-01	0.62046E-02	0.21763E-04	0.28489E-04	0.34019E-02	0.30127E-02	0.21880E 01	0.
206	540.21	0.96208E 00	0.15818E-00	0.55570E-03	0.72746E-03	0.86730E-01	0.76809E-01	0.22480E 01	0.10000E 01
207	538.83	0.11122E 01	0.17965E-00	0.63037E-03	0.82520E-03	0.98498E-01	0.87231E-01	0.20700E 01	0.10000E 01
208	537.92	0.34805E-00	0.30931E-01	0.10845E-03	0.14197E-03	0.16959E-01	0.15019E-01	0.20700E 01	0.10000E 01
209	537.30	0.31169E-00	0.25072E-01	0.87863E-04	0.11502E-03	0.13747E-01	0.12174E-01	0.21880E 01	0.10000E 01
210	537.40	0.84156E 00	0.13921E-00	0.48787E-03	0.63867E-03	0.76326E-01	0.67594E-01	0.20700E 01	0.10000E 01
211	540.32	0.90285E 00	0.14959E-00	0.52556E-03	0.68801E-03	0.82019E-01	0.72637E-01	0.21880E 01	0.10000E 01
212	540.14	0.95532E 00	0.15634E-00	0.54921E-03	0.71896E-03	0.85722E-01	0.75916E-01	0.22390E 01	0.10000E 01
213	537.94	0.94805E 00	0.15496E-00	0.54334E-03	0.71128E-03	0.84964E-01	0.75245E-01	0.21880E 01	0.10000E 01
214	540.28	0.89039E 00	0.14752E-00	0.51828E-03	0.67847E-03	0.80885E-01	0.71632E-01	0.22480E 01	0.10000E 01
215	530.28	0.33403E-00	0.49930E-01	0.17394E-03	0.22770E-03	0.27376E-01	0.24244E-01	0.11650E 01	0.10000E 01
216	630.05	-0.77610E 00	-0.68411E-01	-0.26020E-03	-0.34063E-03	-0.37509E-01	-0.33218E-01	0.12050E 01	0.
217	533.50	0.36364E-00	0.52904E-01	0.18480E-03	0.24192E-03	0.29007E-01	0.25688E-01	0.12120E 01	0.10000E 01
218	528.66	-0.50233E 00	-0.73259E-01	-0.25487E-03	-0.33364E-03	-0.40167E-01	-0.35572E-01	0.11890E 01	0.
219	533.80	0.36468E-00	0.60987E-01	0.21309E-03	0.27895E-03	0.33439E-01	0.29613E-01	0.14540E 01	0.10000E 01
220	533.34	0.56883E 00	0.98728E-01	0.34483E-03	0.45141E-03	0.54132E-01	0.47939E-01	0.17040E 01	0.10000E 01
221	536.09	0.58286E 00	0.97074E-01	0.33984E-03	0.44487E-03	0.53225E-01	0.47136E-01	0.20410E 01	0.10000E 01
222	514.59	0.66753E 00	0.11099E-00	0.38161E-03	0.49956E-03	0.60852E-01	0.53891E-01	0.22480E 01	0.10000E 01
223	531.55	0.35533E-00	0.53152E-01	0.18536E-03	0.24265E-03	0.29142E-01	0.25809E-01	0.11650E 01	0.10000E 01
224	533.29	0.28727E-00	0.24022E-01	0.83897E-04	0.10983E-03	0.13171E-01	0.11664E-01	0.12050E 01	0.10000E 01
225	533.55	0.33299E-00	0.48446E-01	0.16924E-03	0.22155E-03	0.26563E-01	0.23524E-01	0.12120E 01	0.10000E 01
226	537.79	0.42078E-00	0.70782E-01	0.24815E-03	0.32485E-03	0.38809E-01	0.34370E-01	0.14540E 01	0.10000E 01
227	534.12	0.43584E-00	0.70212E-01	0.24539E-03	0.32124E-03	0.38497E-01	0.34093E-01	0.17040E 01	0.10000E 01
228	531.38	0.62234E 00	0.10213E-00	0.35611E-03	0.46618E-03	0.55995E-01	0.49590E-01	0.18780E 01	0.10000E 01
229	536.98	0.70805E 00	0.11709E-00	0.41023E-03	0.53703E-03	0.64202E-01	0.56858E-01	0.21880E 01	0.10000E 01
230	535.61	0.47585E-00	0.70148E-01	0.24547E-03	0.32135E-03	0.38461E-01	0.34062E-01	0.11890E 01	0.10000E 01
231	529.58	0.42597E-00	0.75056E-01	0.26132E-03	0.34209E-03	0.41152E-01	0.36445E-01	0.14540E 01	0.10000E 01
232	538.19	0.51533E 00	0.84243E-01	0.29544E-03	0.38676E-03	0.46190E-01	0.40906E-01	0.16130E 01	0.10000E 01
233	536.99	0.34336E-00	0.56528E-01	0.19804E-03	0.25925E-03	0.30994E-01	0.27448E-01	0.17040E 01	0.10000E 01
234	534.00	0.55221E 00	0.91168E-01	0.31860E-03	0.41707E-03	0.49987E-01	0.44269E-01	0.18780E 01	0.10000E 01
235	539.26	0.48727E-00	0.80564E-01	0.28279E-03	0.37020E-03	0.44172E-01	0.39119E-01	0.14540E 01	0.10000E 01
236	538.52	0.45922E-00	0.75086E-01	0.26340E-03	0.34482E-03	0.41169E-01	0.36459E-01	0.17040E 01	0.10000E 01
237	522.14	0.64208E 00	0.10530E-00	0.36432E-03	0.47693E-03	0.57732E-01	0.51128E-01	0.21880E 01	0.10000E 01
238	540.28	0.36104E-00	0.32127E-01	0.11287E-03	0.14776E-03	0.17615E-01	0.15600E-01	0.20700E 01	0.10000E 01
239	538.20	0.46078E-00	0.67215E-01	0.23573E-03	0.30859E-03	0.36853E-01	0.32638E-01	0.11890E 01	0.10000E 01
240	543.86	0.54182E 00	0.91126E-01	0.32112E-03	0.42037E-03	0.50963E-01	0.44249E-01	0.14540E 01	0.10000E 01
241	540.07	0.53818E 00	0.88480E-01	0.31080E-03	0.40686E-03	0.48513E-01	0.42963E-01	0.17040E 01	0.10000E 01
242	540.19	0.55169E 00	0.91401E-01	0.32109E-03	0.42033E-03	0.50114E-01	0.44382E-01	0.18780E 01	0.10000E 01
243	522.06	0.49351E-00	0.80927E-01	0.27999E-03	0.36653E-03	0.44372E-01	0.39296E-01	0.20410E 01	0.10000E 01
244	542.10	-0.30129E-01	-0.27217E-02	-0.95769E-05	-0.12537E-04	-0.14923E-02	-0.13216E-02	0.20700E 01	0.
245	541.09	0.49091E-00	0.40191E-01	0.14130E-03	0.18497E-03	0.22037E-01	0.19516E-01	0.21870E 01	0.10000E 01
246	534.96	0.60000E 00	0.10092E-00	0.35296E-03	0.46206E-03	0.55333E-01	0.49004E-01	0.22100E 01	0.10000E 01
247	544.22	0.53403E 00	0.87597E-01	0.30878E-03	0.40422E-03	0.48029E-01	0.42535E-01	0.14540E 01	0.10000E 01
248	536.52	0.42078E-00	0.69569E-01	0.24363E-03	0.31894E-03	0.38144E-01	0.33780E-01	0.17040E 01	0.10000E 01
249	539.30	0.13403E-00	0.11245E-01	0.39475E-04	0.51675E-04	0.61657E-02	0.54604E-02	0.18780E 01	0.10000E 01
250	541.54	0.13247E-00	0.10848E-01	0.38153E-04	0.49945E-04	0.59479E-02	0.52675E-02	0.21880E 01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	544.53	0.57091E 00	0.96545E-01	0.34041E-03	0.44563E-03	0.52934E-01	0.46879E-01	0.14540E 01	0.10000E 01
252	539.96	0.53299E 00	0.89446E-01	0.31416E-03	0.41126E-03	0.49042E-01	0.43432E-01	0.16130E 01	0.10000E 01
253	541.76	-0.74283E-01	-0.65520E-02	-0.23048E-04	-0.30171E-04	-0.35924E-02	-0.31814E-02	0.17060E 01	0.
254	540.91	0.78026E 00	0.12932E-00	0.45458E-03	0.59508E-03	0.70906E-01	0.62795E-01	0.21880E 01	0.10000E 01
255	528.87	0.18754E-00	0.17200E-01	0.59849E-04	0.78348E-04	0.94307E-02	0.83519E-02	0.16580E 01	0.
256	542.53	0.12727E-00	0.10698E-01	0.37657E-04	0.49296E-04	0.58656E-02	0.51946E-02	0.17920E 01	0.10000E 01
257	535.84	0.92624E 00	0.15540E-00	0.54393E-03	0.71204E-03	0.85207E-01	0.75460E-01	0.10840E 01	0.10000E 01
258	543.82	0.51792E 00	0.88202E-01	0.31081E-03	0.40687E-03	0.48360E-01	0.42828E-01	0.14540E 01	0.10000E 01
259	540.54	0.61558E 00	0.10201E-00	0.35845E-03	0.46925E-03	0.55929E-01	0.49531E-01	0.16130E 01	0.10000E 01
260	541.97	0.49455E-00	0.80769E-01	0.28417E-03	0.37200E-03	0.44285E-01	0.39219E-01	0.17040E 01	0.10000E 01
261	542.07	0.50909E 00	0.84047E-01	0.29573E-03	0.38713E-03	0.46082E-01	0.40811E-01	0.16780E 01	0.10000E 01
262	540.73	0.60935E 00	0.10283E-00	0.36139E-03	0.47309E-03	0.56379E-01	0.49929E-01	0.20410E 01	0.10000E 01
263	541.94	0.57922E 00	0.98101E-01	0.34514E-03	0.45181E-03	0.53788E-01	0.47635E-01	0.14540E 01	0.10000E 01
264	541.64	0.63169E 00	0.10426E-00	0.36672E-03	0.48007E-03	0.57166E-01	0.50627E-01	0.16130E 01	0.10000E 01
265	540.86	0.74338E 00	0.12021E-00	0.42253E-03	0.55313E-03	0.65910E-01	0.58370E-01	0.17040E 01	0.10000E 01
266	540.57	0.55792E 00	0.92032E-01	0.32341E-03	0.42337E-03	0.50460E-01	0.44688E-01	0.18780E 01	0.10000E 01
267	541.37	0.72624E 00	0.12223E-00	0.42982E-03	0.56267E-03	0.67017E-01	0.59350E-01	0.20410E 01	0.10000E 01
268	541.47	0.64364E 00	0.10622E-00	0.37357E-03	0.48903E-03	0.58242E-01	0.51579E-01	0.16130E 01	0.10000E 01
269	540.77	0.74234E 00	0.12003E-00	0.42189E-03	0.55228E-03	0.65814E-01	0.58285E-01	0.18280E 01	0.10000E 01
270	541.42	0.69766E 00	0.11461E-00	0.40304E-03	0.52762E-03	0.62840E-01	0.55651E-01	0.18780E 01	0.10000E 01
271	539.05	0.82494E 00	0.13837E-00	0.48561E-03	0.63571E-03	0.75866E-01	0.67187E-01	0.20410E 01	0.10000E 01
272	541.45	0.65974E 00	0.11171E-00	0.39284E-03	0.51426E-03	0.61248E-01	0.54241E-01	0.16130E 01	0.10000E 01
273	541.05	0.73091E 00	0.12152E-00	0.42720E-03	0.55925E-03	0.66628E-01	0.59006E-01	0.17200E 01	0.10000E 01
274	539.99	0.70961E 00	0.11434E-00	0.40159E-03	0.52571E-03	0.62689E-01	0.55518E-01	0.18280E 01	0.10000E 01
275	539.88	0.74390E 00	0.12229E-00	0.42947E-03	0.56222E-03	0.67048E-01	0.59379E-01	0.18780E 01	0.10000E 01
276	-4157.09	0.10379E-01	-0.49888E-02	-0.39169E-05	-0.51275E-05	-0.27353E-02	-0.24224E-02	0.20600E 01	0.
277	541.09	0.81975E 00	0.68849E-01	0.24205E-03	0.31686E-03	0.37749E-01	0.33431E-01	0.21000E 01	0.
278	-4157.09	0.10379E-01	-0.24951E-02	-0.19590E-05	-0.25645E-05	-0.13681E-02	-0.12116E-02	0.21870E 01	0.
279	543.00	0.90857E 00	0.15351E-00	0.54058E-03	0.70766E-03	0.84170E-01	0.74542E-01	0.21950E 01	0.10000E 01
280	541.57	0.68935E 00	0.11516E-00	0.40505E-03	0.53024E-03	0.63144E-01	0.55921E-01	0.18780E 01	0.10000E 01
281	541.50	0.79637E 00	0.13444E-00	0.47282E-03	0.61895E-03	0.73713E-01	0.65281E-01	0.20600E 01	0.10000E 01
282	540.54	0.62961E 00	0.10259E-00	0.36049E-03	0.47191E-03	0.56247E-01	0.49813E-01	0.18280E 01	0.10000E 01
283	540.56	0.75065E 00	0.12602E-00	0.44283E-03	0.57970E-03	0.69093E-01	0.61189E-01	0.20600E 01	0.10000E 01
284	541.99	0.53299E 00	0.86242E-01	0.30343E-03	0.39722E-03	0.47286E-01	0.41877E-01	0.17200E 01	0.10000E 01
285	542.21	0.55117E 00	0.90724E-01	0.31926E-03	0.41794E-03	0.49743E-01	0.44053E-01	0.18780E 01	0.10000E 01
286	541.78	0.32883E-00	0.30379E-01	0.10687E-03	0.13990E-03	0.16657E-01	0.14751E-01	0.16580E 01	0.10000E 01
287	1125.91	0.72103E 00	0.79299E-01	0.56236E-03	0.73618E-03	0.43479E-01	0.38505E-01	0.17920E 01	0.
288	539.58	0.65974E 00	0.10843E-00	0.38073E-03	0.49841E-03	0.59454E-01	0.52652E-01	0.16130E 01	0.10000E 01
289	541.86	-0.88833E-01	-0.74641E-02	-0.26258E-04	-0.34374E-04	-0.40925E-02	-0.36243E-02	0.17060E 01	0.10000E 01
290	538.29	0.10442E-00	0.87561E-02	0.30710E-04	0.40202E-04	0.48009E-02	0.42517E-02	0.18780E 01	0.
291	539.27	0.36364E-00	0.59482E-01	0.20880E-03	0.27333E-03	0.32614E-01	0.28883E-01	0.17200E 01	0.10000E 01
292	540.35	0.64156E 00	0.11034E-00	0.38767E-03	0.50749E-03	0.60498E-01	0.53577E-01	0.14400E 01	0.10000E 01
293	535.07	0.48155E-00	0.77617E-01	0.27149E-03	0.35540E-03	0.42557E-01	0.37668E-01	0.17200E 01	0.10000E 01
294	541.02	0.49714E-00	0.82277E-01	0.28924E-03	0.37864E-03	0.45112E-01	0.39951E-01	0.18780E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
145	2	-5.42	147.21	-59.14	-4.65	2	C2	2.75	2	10.05	235.00	1673.50	145	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.818690E 02	0.517941E-02	0.445395E 04	0.530791E-05	0.663139E-07	0.358904E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726151E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	537.55	0.14769E 01	0.24024E-00	0.83370E-03	0.10961E-02	0.13172E-00	0.11665E-00	-0.10600E 01	0.10000E 01
100	537.00	0.82338E 00	0.13795E-00	0.47851E-03	0.62909E-03	0.75636E-01	0.66983E-01	-0.10840E 01	0.10000E 01
101	538.44	0.50442E 00	0.82725E-01	0.28730E-03	0.37771E-03	0.45358E-01	0.40169E-01	-0.11080E 01	0.10000E 01
102	538.43	0.57403E 00	0.93853E-01	0.32594E-03	0.42852E-03	0.51459E-01	0.45572E-01	-0.11080E 01	0.10000E 01
103	537.86	0.87845E 00	0.14725E-00	0.51113E-03	0.67198E-03	0.80734E-01	0.71498E-01	-0.10800E 01	0.10000E 01
104	-4157.13	0.51854E-02	-0.23518E-02	-0.18423E-05	-0.24221E-05	-0.12895E-02	-0.11419E-02	0.85000E 00	0.
105	564.17	0.42676E 02	0.64793E 01	0.22999E-01	0.30236E-01	0.35525E 01	0.31461E 01	0.94000E 00	0.10000E 01
106	562.91	0.45364E 02	0.68248E 01	0.24199E-01	0.31814E-01	0.37420E 01	0.33139E 01	0.96000E 00	0.10000E 01
107	549.58	0.43378E 02	0.64779E 01	0.22710E-01	0.29856E-01	0.35518E 01	0.31455E 01	0.98000E 00	0.10000E 01
108	546.87	0.42158E 02	0.63181E 01	0.22099E-01	0.29053E-01	0.34642E 01	0.30679E 01	0.10000E 01	0.10000E 01
109	551.53	0.36053E 02	0.54356E 01	0.19087E-01	0.25094E-01	0.29803E 01	0.26394E 01	0.10200E 01	0.10000E 01
110	568.71	0.40532E 02	0.61692E 01	0.21983E-01	0.28902E-01	0.33825E 01	0.29956E 01	0.80000E-01	0.10000E 01
111	559.29	0.42554E 02	0.63892E 01	0.22584E-01	0.29692E-01	0.35031E 01	0.31024E 01	0.10000E-00	0.10000E 01
112	570.67	0.45196E 02	0.68634E 01	0.24499E-01	0.32209E-01	0.37632E 01	0.33327E 01	0.12000E-00	0.10000E 01
113	563.93	0.46440E 02	0.70499E 01	0.25019E-01	0.32892E-01	0.38654E 01	0.34232E 01	0.14000E-00	0.10000E 01
114	-4157.13	0.51854E-02	-0.22246E-02	-0.17427E-05	-0.22912E-05	-0.12198E-02	-0.10802E-02	0.80000E-01	0.
115	566.16	0.41648E 02	0.63090E 01	0.22432E-01	0.29492E-01	0.34592E 01	0.30634E 01	0.10000E-00	0.10000E 01
116	565.85	0.42920E 02	0.65443E 01	0.23263E-01	0.30584E-01	0.35882E 01	0.31777E 01	0.12000E-00	0.10000E 01
117	547.05	0.44815E 02	0.67396E 01	0.23577E-01	0.30996E-01	0.36953E 01	0.32726E 01	0.14000E-00	0.10000E 01
118	570.20	0.38538E 02	0.59199E 01	0.21122E-01	0.27769E-01	0.32458E 01	0.28745E 01	0.10000E-00	0.10000E 01
119	550.71	0.11797E 03	0.17838E 02	0.62594E-01	0.82292E-01	0.97804E 01	0.86615E 01	0.15000E-00	0.10000E 01
120	596.10	0.35381E 02	0.54937E 01	0.20050E-01	0.26360E-01	0.30121E 01	0.26676E 01	0.20000E-00	0.10000E 01
121	571.39	0.40565E 02	0.62353E 01	0.22270E-01	0.29279E-01	0.34187E 01	0.30276E 01	0.25000E-00	0.10000E 01
122	569.29	0.38025E 02	0.58381E 01	0.20814E-01	0.27365E-01	0.32010E 01	0.28348E 01	0.30000E-00	0.10000E 01
123	566.02	0.39112E 02	0.60242E 01	0.21417E-01	0.28158E-01	0.33030E 01	0.29252E 01	0.35000E-00	0.10000E 01
124	558.81	0.39744E 02	0.61377E 01	0.21687E-01	0.28511E-01	0.33653E 01	0.29803E 01	0.38000E-00	0.10000E 01
125	562.57	0.42922E 02	0.66969E 01	0.23739E-01	0.31209E-01	0.36718E 01	0.32518E 01	0.45000E-00	0.10000E 01
126	556.42	0.38647E 02	0.60880E 01	0.21467E-01	0.28223E-01	0.33380E 01	0.29562E 01	0.61000E 00	0.10000E 01
127	536.00	0.24766E 02	0.38756E 01	0.13432E-01	0.17660E-01	0.21250E 01	0.18819E 01	0.70000E 00	0.10000E 01
128	523.70	0.12981E 02	0.20238E 01	0.69429E-02	0.91279E-02	0.11097E 01	0.98272E 00	0.75000E 00	0.10000E 01
129	550.39	0.30082E 02	0.47610E 01	0.16702E-01	0.21958E-01	0.26104E 01	0.23118E 01	0.70000E 00	0.10000E 01
130	550.60	0.31125E 02	0.49266E 01	0.17286E-01	0.22726E-01	0.27012E 01	0.23922E 01	0.80000E 00	0.10000E 01
131	529.96	0.13264E 02	0.22660E 01	0.78141E-02	0.10273E-01	0.12424E 01	0.11003E 01	0.90000E 00	0.10000E 01
132	548.75	0.25855E 02	0.38920E 01	0.13635E-01	0.17925E-01	0.21340E 01	0.18898E 01	0.90000E 00	0.10000E 01
133	547.91	0.26272E 02	0.39330E 01	0.13769E-01	0.18101E-01	0.21564E 01	0.19098E 01	0.96000E 00	0.10000E 01
134	545.30	0.25301E 02	0.37885E 01	0.13233E-01	0.17398E-01	0.20772E 01	0.18396E 01	0.10000E 01	0.10000E 01
135	-4157.13	0.51854E-02	-0.23181E-02	-0.18160E-05	-0.23875E-05	-0.12710E-02	-0.11256E-02	0.70000E-02	0.
136	542.16	0.13519E 02	0.20752E 01	0.72297E-02	0.95049E-02	0.11378E 01	0.10077E 01	0.70000E-02	0.10000E 01
137	541.30	0.13547E 02	0.21093E 01	0.73430E-02	0.96538E-02	0.11565E 01	0.10242E 01	0.39000E-01	0.10000E 01
138	-4157.13	0.51854E-02	-0.22994E-02	-0.18013E-05	-0.23682E-05	-0.12606E-02	-0.11165E-02	0.78000E-01	0.
139	-4157.13	0.51854E-02	-0.22882E-02	-0.17925E-05	-0.23566E-05	-0.12546E-02	-0.11111E-02	0.11700E-00	0.
140	540.95	0.12991E 02	0.19961E 01	0.69471E-02	0.91333E-02	0.10945E 01	0.96927E 00	0.78000E-01	0.10000E 01
141	-4157.13	0.51854E-02	-0.15703E-02	-0.12302E-05	-0.16173E-05	-0.86100E-03	-0.76251E-03	-0.	0.
142	-4157.13	0.51854E-02	-0.15703E-02	-0.12302E-05	-0.16173E-05	-0.86100E-03	-0.76251E-03	-0.	0.
143	537.90	0.14370E 02	0.21935E 01	0.76143E-02	0.10010E-01	0.12026E 01	0.10651E 01	0.78000E-01	0.10000E 01
144	539.16	0.13815E 02	0.21137E 01	0.73450E-02	0.96565E-02	0.11589E 01	0.10263E 01	0.70000E-02	0.10000E 01
145	539.25	0.13002E 02	0.19795E 01	0.68793E-02	0.90441E-02	0.10853E 01	0.96117E 00	0.70000E-02	0.10000E 01
146	537.64	0.14266E 02	0.21808E 01	0.75687E-02	0.99505E-02	0.11957E 01	0.10589E 01	0.39000E-01	0.10000E 01
147	1113.82	-0.43123E-01	-0.85950E-02	-0.58517E-04	-0.76932E-04	-0.47125E-02	-0.41735E-02	0.78000E-01	0.
148	1015.53	-0.11802E 01	-0.22817E-00	-0.13321E-02	-0.17513E-02	-0.12510E-00	-0.11079E-00	0.11700E-00	0.
149	553.46	0.29080E 02	0.46619E 01	0.16397E-01	0.21557E-01	0.25561E 01	0.22637E 01	0.70000E-02	0.10000E 01
150	550.27	0.29624E 02	0.47845E 01	0.16897E-01	0.22215E-01	0.26233E 01	0.23232E 01	0.70000E-02	0.10000E 01
151	559.18	0.29726E 02	0.48034E 01	0.16977E-01	0.22320E-01	0.26336E 01	0.23324E 01	0.70000E-02	0.10000E 01
152	560.17	0.33175E 02	0.51693E 01	0.18286E-01	0.24040E-01	0.28343E 01	0.25101E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.13		0.51854E-02	-0.22882E-02	-0.17925E-05	-0.23566E-05	-0.12546E-02	-0.11111E-02	0.39000E-01	0.
154	557.90	0.32447E 02	0.50166E 01	0.17711E-01	0.23285E-01	0.27505E 01	0.24359E 01	0.78000E-01	0.10000E 01
155-4157.13		0.51854E-02	-0.23742E-02	-0.18599E-05	-0.24452E-05	-0.13018E-02	-0.11528E-02	0.39000E-01	0.
156-4157.13		0.51854E-02	-0.23667E-02	-0.18540E-05	-0.24375E-05	-0.12977E-02	-0.11492E-02	0.39000E-01	0.
157	559.32	0.27418E 02	0.44308E 01	0.15662E-01	0.20591E-01	0.24293E 01	0.21514E 01	0.78000E-01	0.10000E 01
158-4157.13		0.51854E-02	-0.23817E-02	-0.18658E-05	-0.24529E-05	-0.13059E-02	-0.11565E-02	0.39000E-01	0.
159-4157.13		0.51854E-02	-0.23817E-02	-0.18658E-05	-0.24529E-05	-0.13059E-02	-0.11565E-02	0.78000E-01	0.
160-4157.13		0.51854E-02	-0.23742E-02	-0.18599E-05	-0.24452E-05	-0.13018E-02	-0.11528E-02	0.39000E-01	0.
161	551.15	0.25663E 02	0.40309E 01	0.14150E-01	0.18603E-01	0.22101E 01	0.19573E 01	0.43000E-01	0.10000E 01
162	551.19	0.25999E 02	0.40969E 01	0.14382E-01	0.18908E-01	0.22463E 01	0.19893E 01	0.43000E-01	0.10000E 01
163	548.53	0.25300E 02	0.39871E 01	0.13965E-01	0.18360E-01	0.21861E 01	0.19360E 01	0.85000E-01	0.10000E 01
164	549.56	0.24702E 02	0.38764E 01	0.13589E-01	0.17866E-01	0.21254E 01	0.18823E 01	0.12800E-00	0.10000E 01
165-4157.13		0.51854E-02	-0.23256E-02	-0.18218E-05	-0.23952E-05	-0.12751E-02	-0.11292E-02	0.43000E-01	0.
166	546.94	0.25573E 02	0.40072E 01	0.14017E-01	0.18428E-01	0.21971E 01	0.19458E 01	0.85000E-01	0.10000E 01
167-4157.13		0.51854E-02	-0.23181E-02	-0.18160E-05	-0.23875E-05	-0.12710E-02	-0.11256E-02	0.43000E-01	0.
168	542.47	0.18217E 02	0.28796E 01	0.10035E-01	0.13192E-01	0.15789E 01	0.13982E 01	0.12800E-00	0.10000E 01
169	551.44	0.26065E 02	0.41276E 01	0.14493E-01	0.19054E-01	0.22631E 01	0.20042E 01	0.85000E-01	0.10000E 01
170	551.07	0.26497E 02	0.41750E 01	0.14655E-01	0.19267E-01	0.22891E 01	0.20272E 01	0.12800E-00	0.10000E 01
171	549.45	0.26573E 02	0.41698E 01	0.14616E-01	0.19216E-01	0.22863E 01	0.20247E 01	0.85000E-01	0.10000E 01
172-4157.13		0.51854E-02	-0.23293E-02	-0.18248E-05	-0.23990E-05	-0.12772E-02	-0.11311E-02	0.43000E-01	0.
173	553.31	0.27883E 02	0.44201E 01	0.15545E-01	0.20437E-01	0.24235E 01	0.21463E 01	0.12800E-00	0.10000E 01
174-4157.13		0.51854E-02	-0.23256E-02	-0.18218E-05	-0.23952E-05	-0.12751E-02	-0.11292E-02	0.85000E-01	0.
175	554.54	0.28261E 02	0.44473E 01	0.15657E-01	0.20584E-01	0.24384E 01	0.21595E 01	0.43000E-01	0.10000E 01
176	554.80	0.28594E 02	0.45003E 01	0.15847E-01	0.20833E-01	0.24675E 01	0.21852E 01	0.43000E-01	0.10000E 01
177	553.22	0.29662E 02	0.46869E 01	0.16482E-01	0.21669E-01	0.25698E 01	0.22758E 01	0.12800E-00	0.10000E 01
178	554.21	0.29056E 02	0.45862E 01	0.16141E-01	0.21221E-01	0.25146E 01	0.22269E 01	0.85000E-01	0.10000E 01
179	556.84	0.29341E 02	0.46380E 01	0.16360E-01	0.21508E-01	0.25430E 01	0.22521E 01	0.70000E-02	0.10000E 01
180-4157.13		0.51854E-02	-0.23368E-02	-0.18306E-05	-0.24067E-05	-0.12813E-02	-0.11347E-02	0.70000E-02	0.
181	555.03	0.28236E 02	0.44804E 01	0.15780E-01	0.20746E-01	0.24566E 01	0.21756E 01	0.70000E-02	0.10000E 01
182-4157.13		0.51854E-02	-0.23443E-02	-0.18365E-05	-0.24144E-05	-0.12854E-02	-0.11383E-02	0.70000E-02	0.
183	554.41	0.29728E 02	0.47005E 01	0.16546E-01	0.21753E-01	0.25772E 01	0.22824E 01	0.32000E-01	0.10000E 01
184	557.82	0.34182E 02	0.54497E 01	0.19239E-01	0.25294E-01	0.29880E 01	0.26462E 01	0.32000E-01	0.10000E 01
185	545.55	0.30294E 02	0.47969E 01	0.16759E-01	0.22033E-01	0.26301E 01	0.23292E 01	0.64000E-01	0.10000E 01
186	554.36	0.35744E 02	0.56696E 01	0.19957E-01	0.26237E-01	0.31086E 01	0.27530E 01	0.64000E-01	0.10000E 01
187	557.88	0.31388E 02	0.50044E 01	0.17668E-01	0.23228E-01	0.27439E 01	0.24300E 01	0.70000E-02	0.10000E 01
188	556.91	0.29746E 02	0.48157E 01	0.16988E-01	0.22334E-01	0.26404E 01	0.23384E 01	0.70000E-02	0.10000E 01
189	529.52	0.31605E 01	0.51415E 00	0.17723E-02	0.23301E-02	0.28190E-00	0.24965E-00	0.10600E 01	0.10000E 01
190	528.37	0.18862E 01	0.31278E-00	0.10772E-02	0.14162E-02	0.17150E-00	0.15188E-00	0.10840E 01	0.10000E 01
191	527.72	0.90910E 00	0.15151E-00	0.52151E-03	0.68562E-03	0.83073E-01	0.73570E-01	0.11080E 01	0.10000E 01
192	527.59	0.10847E 01	0.17978E-00	0.61875E-03	0.81347E-03	0.98574E-01	0.87298E-01	0.11080E 01	0.10000E 01
193	527.35	0.24571E 01	0.40107E-00	0.13801E-02	0.18144E-02	0.21990E-00	0.19475E-00	0.16580E 01	0.10000E 01
194	528.78	0.23366E 01	0.37996E-00	0.13090E-02	0.17209E-02	0.20833E-00	0.18450E-00	0.11700E 01	0.10000E 01
195	527.71	0.26306E 01	0.42948E-00	0.14783E-02	0.19435E-02	0.23548E-00	0.20854E-00	0.16740E 01	0.10000E 01
196	528.97	0.24494E 01	0.39833E-00	0.13725E-02	0.18044E-02	0.21840E-00	0.19342E-00	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
146	2	-5.42	147.21	59.13	4.65	2	C2	2.75	2	10.05	235.00	1675.80	146	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.819865E 02	0.517841E-02	0.445715E 04	0.529927E-05	0.664091E-07	0.358063E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726230E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	537.49	0.20784E 01	0.33807E-00	0.11707E-02	0.15405E-02	0.18536E-00	0.16416E-00	-0.10600E 01	0.10000E 01
100	536.96	0.10384E 01	0.17398E-00	0.60218E-03	0.79241E-03	0.95389E-01	0.84477E-01	-0.10840E 01	0.10000E 01
101	538.02	0.79377E 00	0.13015E-00	0.45089E-03	0.59332E-03	0.71359E-01	0.63196E-01	-0.11080E 01	0.10000E 01
102	537.88	0.98650E 00	0.16124E-00	0.55854E-03	0.73498E-03	0.88407E-01	0.78293E-01	-0.11080E 01	0.10000E 01
103	537.43	0.13912E 01	0.23313E-00	0.80726E-03	0.10623E-02	0.12782E-00	0.11320E-00	-0.10800E 01	0.10000E 01
104	-4157.13	0.51854E-02	-0.23518E-02	-0.18415E-05	-0.24232E-05	-0.12895E-02	-0.11419E-02	0.85000E 00	0.
105	565.22	0.37037E 02	0.56265E 01	0.19947E-01	0.26248E-01	0.30850E 01	0.27321E 01	0.94000E 00	0.10000E 01
106	563.43	0.39356E 02	0.59226E 01	0.20964E-01	0.27587E-01	0.32473E 01	0.28758E 01	0.96000E 00	0.10000E 01
107	549.96	0.38155E 02	0.56992E 01	0.19943E-01	0.26243E-01	0.31248E 01	0.27673E 01	0.98000E 00	0.10000E 01
108	545.46	0.37333E 02	0.55906E 01	0.19490E-01	0.25646E-01	0.30653E 01	0.27146E 01	0.10000E 01	0.10000E 01
109	548.65	0.31732E 02	0.47765E 01	0.16696E-01	0.21970E-01	0.26189E 01	0.23193E 01	0.10200E 01	0.10000E 01
110	567.40	0.34390E 02	0.52306E 01	0.18578E-01	0.24446E-01	0.28679E 01	0.25398E 01	0.80000E-01	0.10000E 01
111	558.27	0.35759E 02	0.53661E 01	0.18910E-01	0.24884E-01	0.29422E 01	0.26056E 01	0.10000E-00	0.10000E 01
112	567.90	0.38379E 02	0.58193E 01	0.20677E-01	0.27209E-01	0.31906E 01	0.28257E 01	0.12000E-00	0.10000E 01
113	561.23	0.39143E 02	0.59333E 01	0.20962E-01	0.27584E-01	0.32532E 01	0.28810E 01	0.14000E-00	0.10000E 01
114	-4157.13	0.51854E-02	-0.22246E-02	-0.17419E-05	-0.22922E-05	-0.12198E-02	-0.10802E-02	0.80000E-01	0.
115	562.10	0.33763E 02	0.51030E 01	0.18042E-01	0.23742E-01	0.27979E 01	0.24779E 01	0.10000E-00	0.10000E 01
116	561.47	0.34861E 02	0.53027E 01	0.18739E-01	0.24658E-01	0.29074E 01	0.25748E 01	0.12000E-00	0.10000E 01
117	541.94	0.36490E 02	0.54721E 01	0.19020E-01	0.25028E-01	0.30003E 01	0.26571E 01	0.14000E-00	0.10000E 01
118	563.48	0.31233E 02	0.47800E 01	0.16920E-01	0.22265E-01	0.26208E 01	0.23210E 01	0.10000E-00	0.10000E 01
119	539.66	0.44855E 02	0.67404E 01	0.23583E-01	0.30770E-01	0.36957E 01	0.32729E 01	0.15000E-00	0.10000E 01
120	584.34	0.26805E 02	0.41357E 01	0.14906E-01	0.19614E-01	0.22676E 01	0.20082E 01	0.20000E-00	0.10000E 01
121	569.34	0.30698E 02	0.47133E 01	0.16768E-01	0.22065E-01	0.25843E 01	0.22886E 01	0.25000E-00	0.10000E 01
122	569.23	0.28471E 02	0.43712E 01	0.15550E-01	0.20462E-01	0.23967E 01	0.21225E 01	0.30000E-00	0.10000E 01
123	567.59	0.29230E 02	0.45060E 01	0.16007E-01	0.21063E-01	0.24706E 01	0.21880E 01	0.35000E-00	0.10000E 01
124	561.27	0.29454E 02	0.45547E 01	0.16092E-01	0.21176E-01	0.24973E 01	0.22116E 01	0.38000E-00	0.10000E 01
125	563.93	0.31036E 02	0.48460E 01	0.17161E-01	0.22582E-01	0.26570E 01	0.23531E 01	0.45000E-00	0.10000E 01
126	550.13	0.28768E 02	0.45159E 01	0.15805E-01	0.20798E-01	0.24760E 01	0.21928E 01	0.61000E 00	0.10000E 01
127	532.57	0.16395E 02	0.25608E 01	0.88313E-02	0.11621E-01	0.14041E 01	0.12434E 01	0.70000E 00	0.10000E 01
128	525.88	0.83455E 01	0.13027E 01	0.44678E-02	0.58791E-02	0.71427E 00	0.63256E 00	0.75000E 00	0.10000E 01
129	543.63	0.23101E 02	0.36424E 01	0.12678E-01	0.16685E-01	0.19971E 01	0.17666E 01	0.70000E 00	0.10000E 01
130	543.08	0.24444E 02	0.38528E 01	0.13404E-01	0.17639E-01	0.21125E 01	0.18708E 01	0.80000E 00	0.10000E 01
131	530.73	0.11495E 02	0.17072E 01	0.58765E-02	0.77355E-02	0.93603E 00	0.82896E 00	0.90000E 00	0.10000E 01
132	541.94	0.21265E 02	0.31889E 01	0.11084E-01	0.14585E-01	0.17484E 01	0.15484E 01	0.90000E 00	0.10000E 01
133	541.81	0.22819E 02	0.34044E 01	0.11832E-01	0.15569E-01	0.18666E 01	0.16531E 01	0.96000E 00	0.10000E 01
134	540.20	0.22803E 02	0.34046E 01	0.11817E-01	0.15549E-01	0.18667E 01	0.16532E 01	0.10000E 01	0.10000E 01
135	-4157.13	0.51854E-02	-0.23181E-02	-0.18151E-05	-0.23885E-05	-0.12710E-02	-0.11256E-02	0.70000E-02	0.
136	539.53	0.16154E 02	0.24761E 01	0.85889E-02	0.11302E-01	0.13576E 01	0.12023E 01	0.70000E-02	0.10000E 01
137	540.79	0.17569E 02	0.27348E 01	0.94964E-02	0.12496E-01	0.14995E 01	0.13279E 01	0.39000E-01	0.10000E 01
138	-4157.13	0.51854E-02	-0.22994E-02	-0.18005E-05	-0.23692E-05	-0.12608E-02	-0.11165E-02	0.78000E-01	0.
139	-4157.13	0.51854E-02	-0.22882E-02	-0.17917E-05	-0.23577E-05	-0.12546E-02	-0.11111E-02	0.11700E-00	0.
140	540.20	0.17597E 02	0.27028E 01	0.93805E-02	0.12344E-01	0.14819E 01	0.13124E 01	0.78000E-01	0.10000E 01
141	-4157.13	0.51854E-02	-0.15703E-02	-0.12296E-05	-0.16180E-05	-0.86100E-03	-0.76251E-03	-0.	0.
142	-4157.13	0.51854E-02	-0.15703E-02	-0.12296E-05	-0.16180E-05	-0.86100E-03	-0.76251E-03	-0.	0.
143	543.83	0.16223E 02	0.24845E 01	0.86494E-02	0.11382E-01	0.13622E 01	0.12064E 01	0.78000E-01	0.10000E 01
144	545.12	0.15403E 02	0.23645E 01	0.82405E-02	0.10844E-01	0.12964E 01	0.11481E 01	0.70000E-02	0.10000E 01
145	544.04	0.13811E 02	0.21084E 01	0.73412E-02	0.96602E-02	0.11560E 01	0.10238E 01	0.70000E-02	0.10000E 01
146	542.61	0.15686E 02	0.24046E 01	0.83625E-02	0.11004E-01	0.13184E 01	0.11676E 01	0.39000E-01	0.10000E 01
147	1126.15	0.41557E-01	0.83219E-02	0.57624E-04	0.75827E-04	0.45628E-02	0.40409E-02	0.78000E-01	0.
148	1059.80	-0.11236E 01	-0.22110E-00	-0.13740E-02	-0.18080E-02	-0.12123E-00	-0.10736E-00	0.11700E-00	0.
149	564.66	0.27001E 02	0.43556E 01	0.15433E-01	0.20309E-01	0.23881E 01	0.21149E 01	0.70000E-02	0.10000E 01
150	568.85	0.27300E 02	0.44350E 01	0.15771E-01	0.20753E-01	0.24316E 01	0.21535E 01	0.70000E-02	0.10000E 01
151	571.11	0.28081E 02	0.45675E 01	0.16274E-01	0.21415E-01	0.25043E 01	0.22178E 01	0.70000E-02	0.10000E 01
152	574.90	0.32210E 02	0.50567E 01	0.18077E-01	0.23788E-01	0.27737E 01	0.24564E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.13		0.51854E-02	-0.22882E-02	-0.17917E-05	-0.23577E-05	-0.12546E-02	-0.11111E-02	0.39000E-01	0.
154	570.97	0.32014E 02	0.49854E 01	0.17761E-01	0.23372E-01	0.27334E 01	0.24207E 01	0.78000E-01	0.10000E 01
155-4157.13		0.51854E-02	-0.23742E-02	-0.18590E-05	-0.24463E-05	-0.13018E-02	-0.11528E-02	0.39000E-01	0.
156-4157.13		0.51854E-02	-0.23667E-02	-0.18532E-05	-0.24386E-05	-0.12977E-02	-0.11492E-02	0.39000E-01	0.
157	569.40	0.26426E 02	0.42943E 01	0.15278E-01	0.20105E-01	0.23545E 01	0.20852E 01	0.78000E-01	0.10000E 01
158-4157.13		0.51854E-02	-0.23817E-02	-0.18649E-05	-0.24540E-05	-0.13059E-02	-0.11565E-02	0.39000E-01	0.
159-4157.13		0.51854E-02	-0.23817E-02	-0.18649E-05	-0.24540E-05	-0.13059E-02	-0.11565E-02	0.78000E-01	0.
160-4157.13		0.51854E-02	-0.23742E-02	-0.18590E-05	-0.24463E-05	-0.13018E-02	-0.11528E-02	0.39000E-01	0.
161	543.44	0.19598E 02	0.30649E 01	0.10666E-01	0.14036E-01	0.16805E 01	0.14882E 01	0.43000E-01	0.10000E 01
162	543.06	0.20018E 02	0.31401E 01	0.10925E-01	0.14376E-01	0.17217E 01	0.15247E 01	0.43000E-01	0.10000E 01
163	539.98	0.19593E 02	0.30731E 01	0.10664E-01	0.14033E-01	0.16849E 01	0.14922E 01	0.85000E-01	0.10000E 01
164	541.14	0.19313E 02	0.30164E 01	0.10477E-01	0.13787E-01	0.16539E 01	0.14647E 01	0.12800E-00	0.10000E 01
165-4157.13		0.51854E-02	-0.23256E-02	-0.18210E-05	-0.23962E-05	-0.12751E-02	-0.11292E-02	0.43000E-01	0.
166	539.61	0.19790E 02	0.30883E 01	0.10713E-01	0.14098E-01	0.16933E 01	0.14996E 01	0.85000E-01	0.10000E 01
167-4157.13		0.51854E-02	-0.23181E-02	-0.18151E-05	-0.23885E-05	-0.12710E-02	-0.11256E-02	0.43000E-01	0.
168	538.36	0.14118E 02	0.22265E 01	0.77157E-02	0.10153E-01	0.12208E 01	0.10811E 01	0.12800E-00	0.10000E 01
169	543.46	0.20603E 02	0.32482E 01	0.11304E-01	0.14876E-01	0.17810E 01	0.15772E 01	0.85000E-01	0.10000E 01
170	543.10	0.21171E 02	0.33211E 01	0.11555E-01	0.15205E-01	0.18209E 01	0.16126E 01	0.12800E-00	0.10000E 01
171	542.30	0.20815E 02	0.32532E 01	0.11311E-01	0.14884E-01	0.17837E 01	0.15796E 01	0.85000E-01	0.10000E 01
172-4157.13		0.51854E-02	-0.23293E-02	-0.18239E-05	-0.24000E-05	-0.12772E-02	-0.11311E-02	0.43000E-01	0.
173	545.24	0.22196E 02	0.35028E 01	0.12209E-01	0.16065E-01	0.19205E 01	0.17008E 01	0.12800E-00	0.10000E 01
174-4157.13		0.51854E-02	-0.23256E-02	-0.18210E-05	-0.23962E-05	-0.12751E-02	-0.11292E-02	0.85000E-01	0.
175	546.32	0.22113E 02	0.34639E 01	0.12084E-01	0.15902E-01	0.18992E 01	0.16820E 01	0.43000E-01	0.10000E 01
176	546.62	0.22363E 02	0.35036E 01	0.12226E-01	0.16088E-01	0.19210E 01	0.17012E 01	0.43000E-01	0.10000E 01
177	545.34	0.23522E 02	0.37004E 01	0.12899E-01	0.16973E-01	0.20289E 01	0.17968E 01	0.12800E-00	0.10000E 01
178	546.25	0.22742E 02	0.35737E 01	0.12467E-01	0.16405E-01	0.19594E 01	0.17353E 01	0.85000E-01	0.10000E 01
179	548.84	0.22623E 02	0.35602E 01	0.12447E-01	0.16379E-01	0.19521E 01	0.17287E 01	0.70000E-02	0.10000E 01
180-4157.13		0.51854E-02	-0.23368E-02	-0.18297E-05	-0.24078E-05	-0.12813E-02	-0.11347E-02	0.70000E-02	0.
181	547.63	0.21350E 02	0.33737E 01	0.11783E-01	0.15505E-01	0.18498E 01	0.16382E 01	0.70000E-02	0.10000E 01
182-4157.13		0.51854E-02	-0.23443E-02	-0.18356E-05	-0.24155E-05	-0.12854E-02	-0.11383E-02	0.70000E-02	0.
183	546.96	0.23201E 02	0.36531E 01	0.12751E-01	0.16779E-01	0.20030E 01	0.17738E 01	0.32000E-01	0.10000E 01
184	548.59	0.26749E 02	0.42427E 01	0.14830E-01	0.19514E-01	0.23262E 01	0.20601E 01	0.32000E-01	0.10000E 01
185	539.08	0.22250E 02	0.35104E 01	0.12172E-01	0.16017E-01	0.19247E 01	0.17045E 01	0.64000E-01	0.10000E 01
186	545.77	0.27076E 02	0.42742E 01	0.14904E-01	0.19612E-01	0.23435E 01	0.20754E 01	0.64000E-01	0.10000E 01
187	550.68	0.24098E 02	0.38267E 01	0.13399E-01	0.17632E-01	0.20981E 01	0.18581E 01	0.70000E-02	0.10000E 01
188	549.14	0.23020E 02	0.37107E 01	0.12976E-01	0.17075E-01	0.20345E 01	0.18018E 01	0.70000E-02	0.10000E 01
189	520.21	0.55720E 01	0.90165E 00	0.30778E-02	0.40501E-02	0.49437E-00	0.43781E-00	0.10600E 01	0.10000E 01
190	517.28	0.36114E 01	0.59509E 00	0.20265E-02	0.26667E-02	0.32628E-00	0.28896E-00	0.10840E 01	0.10000E 01
191	515.05	0.21247E 01	0.35156E-00	0.11950E-02	0.15725E-02	0.19275E-00	0.17070E-00	0.11080E 01	0.10000E 01
192	515.44	0.23636E 01	0.38907E-00	0.13229E-02	0.17408E-02	0.21332E-00	0.18892E-00	0.11080E 01	0.10000E 01
193	526.85	0.23122E 01	0.37731E-00	0.12950E-02	0.17041E-02	0.20687E-00	0.18321E-00	0.16580E 01	0.10000E 01
194	528.08	0.22338E 01	0.36309E-00	0.12475E-02	0.16416E-02	0.19908E-00	0.17630E-00	0.11700E 01	0.10000E 01
195	527.05	0.22940E 01	0.37438E-00	0.12852E-02	0.16912E-02	0.20527E-00	0.18179E-00	0.16740E 01	0.10000E 01
196	528.23	0.22790E 01	0.37047E-00	0.12730E-02	0.16752E-02	0.20312E-00	0.17989E-00	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG,R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
140	2	3.58	153.58	-0.	-0.	1	C2	2.75	2	10.05	235.00	1678.00	140	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.821041E 02	0.517741E-02	0.446034E 04	0.529066E-05	0.665043E-07	0.357226E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726308E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	553.08	0.22248E 02	0.29170E 01	0.10213E-01	0.13451E-01	0.15994E 01	0.14164E 01	-0.	0.10000E 01
2-2120.53		-0.42333E 03	0.52056E 02	0.58851E-01	0.77513E-01	0.28542E 02	0.25277E 02	-0.30000E-01	0.
3-4157.13		0.51854E-02	-0.22359E-02	-0.17499E-05	-0.23047E-05	-0.12259E-02	-0.10857E-02	-0.60000E-01	0.
4-4157.13		0.51854E-02	-0.22934E-02	-0.17949E-05	-0.23641E-05	-0.12575E-02	-0.11136E-02	-0.90000E-01	0.
5	545.47	0.17319E 02	0.27511E 01	0.95702E-02	0.12605E-01	0.15084E 01	0.13358E 01	-0.20000E-00	0.10000E 01
6	538.63	0.15247E 02	0.24126E 01	0.83449E-02	0.10991E-01	0.13228E 01	0.11715E 01	-0.40000E-00	0.10000E 01
7	533.27	0.13792E 02	0.21861E 01	0.75277E-02	0.99147E-02	0.11986E 01	0.10615E 01	-0.60000E 00	0.10000E 01
8-4157.13		0.51854E-02	-0.23630E-02	-0.18494E-05	-0.24358E-05	-0.12956E-02	-0.11474E-02	-0.80000E 00	0.
9	536.31	0.16710E 02	0.26113E 01	0.90146E-02	0.11873E-01	0.14317E 01	0.12680E 01	-0.90000E 00	0.10000E 01
10	541.30	0.15614E 02	0.24783E 01	0.85913E-02	0.11316E-01	0.13588E 01	0.12034E 01	-0.98000E 00	0.10000E 01
11	539.05	0.22650E-00	0.38925E-01	0.13469E-03	0.17739E-03	0.21342E-01	0.18901E-01	-0.11220E 01	0.10000E 01
12	541.90	0.67221E 00	0.98599E-01	0.34197E-03	0.45041E-03	0.54061E-01	0.47877E-01	-0.11890E 01	0.10000E 01
13	543.09	0.82857E 00	0.12538E-00	0.43528E-03	0.57331E-03	0.68743E-01	0.60879E-01	-0.13340E 01	0.10000E 01
14	540.70	0.69871E 00	0.12019E-00	0.41644E-03	0.54849E-03	0.65899E-01	0.58361E-01	-0.14400E 01	0.10000E 01
15-4157.13		0.51854E-02	-0.20564E-02	-0.16094E-05	-0.21197E-05	-0.11275E-02	-0.99852E-03	0.30000E-01	0.
16-4157.13		0.51854E-02	-0.22359E-02	-0.17499E-05	-0.23047E-05	-0.12259E-02	-0.10857E-02	0.60000E-01	0.
17	1117.27	0.28051E-01	0.56574E-02	0.38423E-04	0.50606E-04	0.31019E-02	0.27470E-02	0.90000E-01	0.
18	541.36	0.22061E 02	0.34962E 01	0.12121E-01	0.15964E-01	0.19169E 01	0.16977E 01	0.20000E-00	0.10000E 01
19	551.36	0.25311E 02	0.40337E 01	0.14102E-01	0.18574E-01	0.22117E 01	0.19587E 01	0.40000E-00	0.10000E 01
20-4157.13		0.51854E-02	-0.23630E-02	-0.18494E-05	-0.24358E-05	-0.12956E-02	-0.11474E-02	0.60000E 00	0.
21-4157.13		0.51854E-02	-0.22246E-02	-0.17411E-05	-0.22932E-05	-0.12198E-02	-0.10802E-02	0.92000E 00	0.
22	559.78	0.20722E 02	0.31385E 01	0.11051E-01	0.14555E-01	0.17208E 01	0.15240E 01	0.10400E 01	0.10000E 01
23	544.20	0.19700E 02	0.29659E 01	0.10306E-01	0.13575E-01	0.16262E 01	0.14401E 01	0.10600E 01	0.10000E 01
24	538.91	0.13102E 02	0.20603E 01	0.71280E-02	0.93882E-02	0.11296E 01	0.10004E 01	0.10840E 01	0.10000E 01
25	536.55	0.17696E 01	0.26306E-00	0.90831E-03	0.11963E-02	0.14423E-00	0.12773E-00	0.12070E 01	0.10000E 01
26	537.83	0.15839E 01	0.24573E-00	0.84939E-03	0.11187E-02	0.13473E-00	0.11932E-00	0.12490E 01	0.10000E 01
27	538.53	0.16275E 01	0.24851E-00	0.85949E-03	0.11320E-02	0.13626E-00	0.12067E-00	0.13340E 01	0.10000E 01
28	538.41	0.13953E 01	0.23691E-00	0.81927E-03	0.10791E-02	0.12989E-00	0.11503E-00	0.14540E 01	0.10000E 01
29	539.13	0.15455E 01	0.25472E-00	0.88142E-03	0.11609E-02	0.13966E-00	0.12369E-00	0.16580E 01	0.10000E 01
30	541.47	0.14805E 01	0.24733E-00	0.85750E-03	0.11294E-02	0.13561E-00	0.12009E-00	0.20410E 01	0.10000E 01
31	543.82	0.15293E 01	0.25582E-00	0.88870E-03	0.11705E-02	0.14026E-00	0.12422E-00	0.22480E 01	0.10000E 01
32-4157.13		0.51854E-02	-0.22381E-02	-0.17516E-05	-0.23070E-05	-0.12271E-02	-0.10868E-02	-0.60000E-01	0.
33-4157.13		0.51854E-02	-0.20564E-02	-0.16094E-05	-0.21197E-05	-0.11275E-02	-0.99852E-03	-0.30000E-01	0.
34-4157.13		0.51854E-02	-0.22381E-02	-0.17516E-05	-0.23070E-05	-0.12271E-02	-0.10868E-02	0.30000E-01	0.
35-4157.13		0.51854E-02	-0.22934E-02	-0.17949E-05	-0.23641E-05	-0.12575E-02	-0.11136E-02	0.60000E-01	0.
36	534.02	0.17370E 02	0.27414E 01	0.94459E-02	0.12441E-01	0.15031E 01	0.13312E 01	-0.86800E 00	0.10000E 01
37	537.13	0.17110E 02	0.26320E 01	0.90923E-02	0.11975E-01	0.14431E 01	0.12780E 01	-0.91100E 00	0.10000E 01
38	537.35	0.16901E 02	0.26469E 01	0.91453E-02	0.12045E-01	0.14512E 01	0.12852E 01	-0.95300E 00	0.10000E 01
39-4157.13		0.51854E-02	-0.23368E-02	-0.18289E-05	-0.24088E-05	-0.12813E-02	-0.11347E-02	0.51000E-01	0.
40-4157.13		0.51854E-02	-0.23368E-02	-0.18289E-05	-0.24088E-05	-0.12813E-02	-0.11347E-02	0.29000E-01	0.
41-4157.13		0.51854E-02	-0.23233E-02	-0.18183E-05	-0.23949E-05	-0.12739E-02	-0.11281E-02	0.70000E-02	0.
42	536.07	0.17669E 02	0.28086E 01	0.96938E-02	0.12766E-01	0.15599E 01	0.13638E 01	-0.86800E 00	0.10000E 01
43	536.49	0.17388E 02	0.27376E 01	0.94520E-02	0.12449E-01	0.15010E 01	0.13293E 01	-0.91100E 00	0.10000E 01
44	541.63	0.23566E 02	0.36995E 01	0.12828E-01	0.16896E-01	0.20284E 01	0.17964E 01	-0.95300E 00	0.10000E 01
45	555.67	0.53720E 01	0.87235E 00	0.30099E-02	0.39643E-02	0.47830E-00	0.42359E-00	-0.10400E 01	0.10000E 01
46-4157.13		0.51854E-02	-0.23428E-02	-0.18336E-05	-0.24150E-05	-0.12845E-02	-0.11376E-02	0.70000E-02	0.
47-4157.13		0.51854E-02	-0.23428E-02	-0.18336E-05	-0.24150E-05	-0.12845E-02	-0.11376E-02	0.29000E-01	0.
48	553.96	0.14843E 02	0.23425E 01	0.80710E-02	0.10630E-01	0.12844E 01	0.11375E 01	0.51000E-01	0.10000E 01
49	536.62	0.16486E 02	0.25806E 01	0.89117E-02	0.11737E-01	0.14150E 01	0.12532E 01	0.70000E-02	0.10000E 01
50	537.20	0.16076E 02	0.25255E 01	0.87250E-02	0.11492E-01	0.13847E 01	0.12263E 01	0.29000E-01	0.10000E 01
51-4157.13		0.51854E-02	-0.23293E-02	-0.18230E-05	-0.24011E-05	-0.12772E-02	-0.11311E-02	0.51000E-01	0.
52-4157.13		0.51854E-02	-0.23428E-02	-0.18336E-05	-0.24150E-05	-0.12845E-02	-0.11376E-02	-0.86800E 00	0.
53	536.96	0.17327E 02	0.27416E 01	0.94824E-02	0.12489E-01	0.15032E 01	0.13313E 01	-0.91100E 00	0.10000E 01
54	541.55	0.17185E 02	0.26977E 01	0.93538E-02	0.12320E-01	0.14791E 01	0.13099E 01	-0.95300E 00	0.10000E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	536.03	0.36862E 01	0.59873E 00	0.20664E-02	0.27217E-02	0.32828E-00	0.29073E-00	-0.10400E 01	0.10000E 01
56	535.57	0.18488E 01	0.30969E-00	0.10684E-02	0.14072E-02	0.16980E-00	0.15037E-00	-0.10680E 01	0.10000E 01
57	535.86	0.15605E 01	0.25316E-00	0.87216E-03	0.11487E-02	0.13880E-00	0.12292E-00	-0.10400E 01	0.10000E 01
58	531.96	0.35418E 01	0.62135E 00	0.21373E-02	0.28150E-02	0.34068E-00	0.30171E-00	-0.10680E 01	0.10000E 01
59	534.44	0.59013E 01	0.95765E 00	0.33008E-02	0.43475E-02	0.52507E 00	0.46501E-00	-0.10400E 01	0.10000E 01
60	532.36	0.29990E 01	0.50143E 00	0.17253E-02	0.22724E-02	0.27493E-00	0.24348E-00	-0.10680E 01	0.10000E 01
61	537.71	0.52052E 00	0.86169E-01	0.29782E-03	0.39225E-03	0.47246E-01	0.41841E-01	-0.11220E 01	0.10000E 01
62	542.50	0.87844E 00	0.13288E-00	0.46110E-03	0.60731E-03	0.72856E-01	0.64522E-01	-0.13340E 01	0.10000E 01
63	537.72	0.45299E-00	0.77792E-01	0.26887E-03	0.35412E-03	0.42652E-01	0.37773E-01	-0.11220E 01	0.10000E 01
64	542.11	0.86130E 00	0.13026E-00	0.45186E-03	0.59514E-03	0.71419E-01	0.63249E-01	-0.13340E 01	0.10000E 01
65	538.69	0.77195E 00	0.13264E-00	0.45860E-03	0.60429E-03	0.72725E-01	0.64406E-01	0.14400E 01	0.10000E 01
66	536.77	0.75480E 00	0.12329E-00	0.42579E-03	0.56081E-03	0.67601E-01	0.59868E-01	0.16130E 01	0.10000E 01
67	538.72	0.78754E 00	0.12640E-00	0.43725E-03	0.57590E-03	0.69307E-01	0.61378E-01	0.17200E 01	0.10000E 01
68	525.74	0.71948E 00	0.11769E-00	0.40274E-03	0.53045E-03	0.64529E-01	0.57147E-01	-0.16130E 01	0.10000E 01
69	541.03	0.80156E 00	0.12882E-00	0.44647E-03	0.58804E-03	0.70632E-01	0.62552E-01	-0.18280E 01	0.10000E 01
70	525.29	0.35533E-00	0.51722E-01	0.17693E-03	0.23303E-03	0.28359E-01	0.25114E-01	-0.11650E 01	0.10000E 01
71	541.43	0.33714E-00	0.28321E-01	0.98190E-04	0.12933E-03	0.15528E-01	0.13752E-01	-0.12050E 01	0.10000E 01
72	542.83	0.70650E 00	0.10244E-00	0.35555E-03	0.46830E-03	0.56164E-01	0.49739E-01	-0.12120E 01	0.10000E 01
73	539.93	0.41247E-00	0.60538E-01	0.20962E-03	0.27609E-03	0.33192E-01	0.29395E-01	-0.11650E 01	0.10000E 01
74	542.21	0.28987E-00	0.24361E-01	0.84513E-04	0.11131E-03	0.13357E-01	0.11829E-01	-0.12050E 01	0.10000E 01
75	534.53	0.78390E 00	0.11254E-00	0.38793E-03	0.51094E-03	0.61704E-01	0.54645E-01	-0.12120E 01	0.10000E 01
76	536.70	0.16187E 01	0.24325E-00	0.84000E-03	0.11064E-02	0.13337E-00	0.11811E-00	0.10840E 01	0.10000E 01
77	538.58	0.45455E-00	0.73409E-01	0.25390E-03	0.33441E-03	0.40249E-01	0.35645E-01	0.11220E 01	0.10000E 01
78	533.86	0.85351E 00	0.12655E-00	0.43600E-03	0.57425E-03	0.69389E-01	0.61451E-01	0.13340E 01	0.10000E 01
79	540.46	0.63844E 00	0.10717E-00	0.37126E-03	0.48898E-03	0.58761E-01	0.52039E-01	-0.11890E 01	0.10000E 01
80	536.43	0.83221E 00	0.12483E-00	0.43098E-03	0.56764E-03	0.68443E-01	0.60613E-01	-0.13340E 01	0.10000E 01
81	530.81	0.49870E-00	0.80188E-01	0.27556E-03	0.36294E-03	0.43966E-01	0.38937E-01	-0.11470E 01	0.10000E 01
82	539.95	0.47169E-00	0.79086E-01	0.27385E-03	0.36069E-03	0.43362E-01	0.38402E-01	-0.11890E 01	0.10000E 01
83	535.42	0.15839E 01	0.26489E-00	0.91376E-03	0.12035E-02	0.14524E-00	0.12862E-00	-0.10840E 01	0.10000E 01
84	538.98	0.59637E 00	0.87481E-01	0.30267E-03	0.39865E-03	0.47965E-01	0.42478E-01	-0.11890E 01	0.10000E 01
85	541.96	0.64052E 00	0.94116E-01	0.32644E-03	0.42996E-03	0.51603E-01	0.45700E-01	-0.13090E 01	0.10000E 01
86	543.62	0.81922E 00	0.12214E-00	0.42423E-03	0.55875E-03	0.66968E-01	0.59307E-01	-0.13340E 01	0.10000E 01
87	536.45	0.17403E 01	0.25448E-00	0.87861E-03	0.11572E-02	0.13953E-00	0.12357E-00	0.11990E 01	0.10000E 01
88	532.65	0.17299E 01	0.25459E-00	0.87621E-03	0.11540E-02	0.13959E-00	0.12362E-00	0.12070E 01	0.10000E 01
89	537.02	0.14436E 01	0.21661E-00	0.74823E-03	0.98549E-03	0.11877E-00	0.10518E-00	0.13340E 01	0.10000E 01
90	537.84	0.17610E 01	0.25108E-00	0.86787E-03	0.11431E-02	0.13766E-00	0.12192E-00	0.12070E 01	0.10000E 01
91	540.36	0.16208E 01	0.25181E-00	0.87225E-03	0.11488E-02	0.13807E-00	0.12227E-00	0.12490E 01	0.10000E 01
92	539.92	0.15761E 01	0.23807E-00	0.82433E-03	0.10857E-02	0.13053E-00	0.11560E-00	0.13340E 01	0.10000E 01
93	539.95	0.13849E 01	0.23395E-00	0.81010E-03	0.10670E-02	0.12827E-00	0.11360E-00	0.14900E 01	0.10000E 01
94	-4157.13	0.51854E-02	-0.15591E-02	-0.12202E-05	-0.16071E-05	-0.85485E-03	-0.75706E-03	-0.	0.
95	-4157.13	0.51854E-02	-0.15703E-02	-0.12290E-05	-0.16187E-05	-0.86100E-03	-0.76251E-03	-0.	0.
96	-4157.13	0.51854E-02	-0.15591E-02	-0.12202E-05	-0.16071E-05	-0.85485E-03	-0.75706E-03	-0.	0.
97	-4157.13	0.51854E-02	-0.15591E-02	-0.12202E-05	-0.16071E-05	-0.85485E-03	-0.75706E-03	-0.	0.
98	-4157.13	0.51854E-02	-0.15703E-02	-0.12290E-05	-0.16187E-05	-0.86100E-03	-0.76251E-03	-0.	0.

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
147	2	3.58	153.58	-0.02	-0.	2	C2	2.70	2	10.05	235.00	1672.50	147	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.818148E 02	0.517988E-02	0.445248E 04	0.531190E-05	0.662700E-07	0.359293E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726115E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	534.42	0.22852E 01	0.37106E-00	0.12856E-02	0.16895E-02	0.20345E-00	0.18018E-00	-0.10600E 01	0.10000E 01
100	533.98	0.10499E 01	0.17559E-00	0.60815E-03	0.79920E-03	0.96277E-01	0.85263E-01	-0.10840E 01	0.10000E 01
101	535.68	0.80571E 00	0.13193E-00	0.45759E-03	0.60134E-03	0.72338E-01	0.64063E-01	-0.11080E 01	0.10000E 01
102	535.54	0.86130E 00	0.14059E-00	0.48756E-03	0.64072E-03	0.77085E-01	0.68267E-01	-0.11080E 01	0.10000E 01
103	534.74	0.14935E 01	0.24990E-00	0.86605E-03	0.11381E-02	0.13702E-00	0.12134E-00	-0.10800E 01	0.10000E 01
104	-4157.09	0.10379E-01	-0.47074E-02	-0.36885E-05	-0.48472E-05	-0.25810E-02	-0.22858E-02	0.85000E 00	0.
105	554.20	0.39065E 02	0.58984E 01	0.20780E-01	0.27308E-01	0.32340E 01	0.28641E 01	0.94000E 00	0.10000E 01
106	552.91	0.40395E 02	0.60436E 01	0.21268E-01	0.27949E-01	0.33137E 01	0.29346E 01	0.96000E 00	0.10000E 01
107	540.85	0.37450E 02	0.55654E 01	0.19386E-01	0.25476E-01	0.30514E 01	0.27024E 01	0.98000E 00	0.10000E 01
108	538.39	0.34203E 02	0.51016E 01	0.17734E-01	0.23305E-01	0.27971E 01	0.24772E 01	0.10000E 01	0.10000E 01
109	542.40	0.27011E 02	0.40516E 01	0.14132E-01	0.18571E-01	0.22214E 01	0.19673E 01	0.10200E 01	0.10000E 01
110	557.29	0.37394E 02	0.56558E 01	0.19978E-01	0.26253E-01	0.31010E 01	0.27463E 01	0.80000E-01	0.10000E 01
111	548.12	0.38639E 02	0.57656E 01	0.20207E-01	0.26555E-01	0.31612E 01	0.27996E 01	0.10000E-00	0.10000E 01
112	558.66	0.39960E 02	0.60283E 01	0.21318E-01	0.28015E-01	0.33052E 01	0.29271E 01	0.12000E-00	0.10000E 01
113	552.32	0.38881E 02	0.58645E 01	0.20627E-01	0.27107E-01	0.32154E 01	0.28476E 01	0.14000E-00	0.10000E 01
114	-4157.09	0.10379E-01	-0.44529E-02	-0.34891E-05	-0.45852E-05	-0.24415E-02	-0.21622E-02	0.80000E-01	0.
115	552.64	0.37639E 02	0.56591E 01	0.19910E-01	0.26165E-01	0.31028E 01	0.27479E 01	0.10000E-00	0.10000E 01
116	552.27	0.38236E 02	0.57865E 01	0.20352E-01	0.26745E-01	0.31727E 01	0.28097E 01	0.12000E-00	0.10000E 01
117	534.16	0.39337E 02	0.58732E 01	0.20344E-01	0.26735E-01	0.32202E 01	0.28518E 01	0.14000E-00	0.10000E 01
118	555.89	0.35863E 02	0.54656E 01	0.19283E-01	0.25340E-01	0.29968E 01	0.26539E 01	0.10000E-00	0.10000E 01
119	536.02	0.15207E 03	0.22805E 02	0.79116E-01	0.10397E-00	0.12504E 02	0.11073E 02	0.15000E-00	0.10000E 01
120	555.91	0.31668E 02	0.48102E 01	0.16971E-01	0.22302E-01	0.26374E 01	0.23357E 01	0.20000E-00	0.10000E 01
121	554.17	0.35917E 02	0.54686E 01	0.19265E-01	0.25317E-01	0.29984E 01	0.26554E 01	0.25000E-00	0.10000E 01
122	552.11	0.34113E 02	0.51880E 01	0.18245E-01	0.23976E-01	0.28445E 01	0.25191E 01	0.30000E-00	0.10000E 01
123	551.70	0.34603E 02	0.52875E 01	0.18588E-01	0.24427E-01	0.28991E 01	0.25675E 01	0.35000E-00	0.10000E 01
124	545.92	0.35063E 02	0.53760E 01	0.18807E-01	0.24715E-01	0.29476E 01	0.26104E 01	0.38000E-00	0.10000E 01
125	551.94	0.36166E 02	0.56096E 01	0.19724E-01	0.25921E-01	0.30757E 01	0.27239E 01	0.45000E-00	0.10000E 01
126	551.57	0.32751E 02	0.51453E 01	0.18086E-01	0.23768E-01	0.28211E 01	0.24984E 01	0.61000E 00	0.10000E 01
127	533.12	0.16522E 02	0.25813E 01	0.89335E-02	0.11740E-01	0.14153E 01	0.12534E 01	0.70000E 00	0.10000E 01
128	525.34	0.73117E 01	0.11410E 01	0.39234E-02	0.51559E-02	0.62560E 00	0.55403E 00	0.75000E 00	0.10000E 01
129	550.23	0.26957E 02	0.42661E 01	0.14979E-01	0.19684E-01	0.23391E 01	0.20715E 01	0.70000E 00	0.10000E 01
130	550.72	0.27244E 02	0.43126E 01	0.15148E-01	0.19907E-01	0.23646E 01	0.20941E 01	0.80000E 00	0.10000E 01
131	551.26	0.10127E 02	0.15045E 01	0.51988E-02	0.68320E-02	0.82490E 00	0.73054E 00	0.90000E 00	0.10000E 01
132	550.07	0.24354E 02	0.36687E 01	0.12880E-01	0.16926E-01	0.20115E 01	0.17814E 01	0.90000E 00	0.10000E 01
133	549.70	0.24100E 02	0.36115E 01	0.12674E-01	0.16656E-01	0.19801E 01	0.17536E 01	0.96000E 00	0.10000E 01
134	547.19	0.22516E 02	0.33751E 01	0.11820E-01	0.15533E-01	0.18505E 01	0.16388E 01	0.10000E 01	0.10000E 01
135	-4157.09	0.10379E-01	-0.46400E-02	-0.36357E-05	-0.47779E-05	-0.25441E-02	-0.22530E-02	0.70000E-02	0.
136	542.78	0.15606E 02	0.23964E 01	0.83612E-02	0.10988E-01	0.13139E 01	0.11636E 01	0.70000E-02	0.10000E 01
137	541.19	0.16571E 02	0.25800E 01	0.89998E-02	0.11814E-01	0.14146E 01	0.12528E 01	0.39000E-01	0.10000E 01
138	-4157.09	0.10379E-01	-0.46026E-02	-0.36064E-05	-0.47393E-05	-0.25236E-02	-0.22349E-02	0.78000E-01	0.
139	-4157.09	0.10379E-01	-0.45801E-02	-0.35888E-05	-0.47162E-05	-0.25112E-02	-0.22240E-02	0.11700E-00	0.
140	539.00	0.16501E 02	0.25327E 01	0.88087E-02	0.11576E-01	0.13887E 01	0.12298E 01	0.78000E-01	0.10000E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.24629E-05	-0.32366E-05	-0.17234E-02	-0.15263E-02	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.24629E-05	-0.32366E-05	-0.17234E-02	-0.15263E-02	-0.	0.
143	534.88	0.15892E 02	0.24216E 01	0.83931E-02	0.11030E-01	0.13277E 01	0.11758E 01	0.78000E-01	0.10000E 01
144	537.84	0.15310E 02	0.23406E 01	0.81325E-02	0.10687E-01	0.12833E 01	0.11365E 01	0.70000E-02	0.10000E 01
145	539.45	0.14152E 02	0.21549E 01	0.74976E-02	0.98529E-02	0.11815E 01	0.10464E 01	0.70000E-02	0.10000E 01
146	535.74	0.15790E 02	0.24112E 01	0.83632E-02	0.10990E-01	0.13220E 01	0.11708E 01	0.39000E-01	0.10000E 01
147	1086.47	0.18708E-01	0.36897E-02	0.24052E-04	0.31608E-04	0.20230E-02	0.17916E-02	0.78000E-01	0.
148	1095.10	-0.96567E 00	-0.19266E-00	-0.12737E-02	-0.16739E-02	-0.10564E-00	-0.93552E-01	0.11700E-00	0.
149	552.48	0.31186E 02	0.49969E 01	0.17578E-01	0.23100E-01	0.27397E 01	0.24263E 01	0.70000E-02	0.10000E 01
150	556.00	0.31841E 02	0.51359E 01	0.18121E-01	0.23814E-01	0.28160E 01	0.24938E 01	0.70000E-02	0.10000E 01
151	555.35	0.31546E 02	0.50867E 01	0.17938E-01	0.23573E-01	0.27890E 01	0.24699E 01	0.70000E-02	0.10000E 01
152	555.34	0.34406E 02	0.53408E 01	0.18802E-01	0.24708E-01	0.29283E 01	0.25933E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	-4157.09	0.10379E-01	-0.45801E-02	-0.35888E-05	-0.47162E-05	-0.25112E-02	-0.22240E-02	0.39000E-01	0.
154	550.14	0.33650E 02	0.51802E 01	0.18187E-01	0.23900E-01	0.28402E 01	0.25153E 01	0.78000E-01	0.10000E 01
155	-4157.09	0.10379E-01	-0.47523E-02	-0.37237E-05	-0.48935E-05	-0.26056E-02	-0.23076E-02	0.39000E-01	0.
156	-4157.09	0.10379E-01	-0.47373E-02	-0.37120E-05	-0.48781E-05	-0.25974E-02	-0.23003E-02	0.39000E-01	0.
157	548.70	0.29780E 02	0.47841E 01	0.16776E-01	0.22046E-01	0.26231E 01	0.23230E 01	0.78000E-01	0.10000E 01
158	-4157.09	0.10379E-01	-0.47672E-02	-0.37354E-05	-0.49089E-05	-0.26138E-02	-0.23148E-02	0.39000E-01	0.
159	-4157.09	0.10379E-01	-0.47672E-02	-0.37354E-05	-0.49089E-05	-0.26138E-02	-0.23148E-02	0.78000E-01	0.
160	-4157.09	0.10379E-01	-0.47523E-02	-0.37237E-05	-0.48935E-05	-0.26056E-02	-0.23076E-02	0.39000E-01	0.
161	549.90	0.25234E 02	0.39606E 01	0.13902E-01	0.18270E-01	0.21716E 01	0.19232E 01	0.43000E-01	0.10000E 01
162	550.26	0.25326E 02	0.39887E 01	0.14005E-01	0.18405E-01	0.21870E 01	0.19368E 01	0.43000E-01	0.10000E 01
163	548.47	0.24763E 02	0.39025E 01	0.13681E-01	0.17979E-01	0.21397E 01	0.18949E 01	0.85000E-01	0.10000E 01
164	550.82	0.24210E 02	0.38020E 01	0.13356E-01	0.17551E-01	0.20846E 01	0.18461E 01	0.12800E-00	0.10000E 01
165	-4157.09	0.10379E-01	-0.46550E-02	-0.36474E-05	-0.47933E-05	-0.25523E-02	-0.22603E-02	0.43000E-01	0.
166	547.31	0.24738E 02	0.38772E 01	0.13580E-01	0.17846E-01	0.21259E 01	0.18827E 01	0.85000E-01	0.10000E 01
167	-4157.09	0.10379E-01	-0.46400E-02	-0.36357E-05	-0.47779E-05	-0.25441E-02	-0.22530E-02	0.43000E-01	0.
168	544.25	0.18140E 02	0.28702E 01	0.10027E-01	0.13177E-01	0.15737E 01	0.13937E 01	0.12800E-00	0.10000E 01
169	552.58	0.24902E 02	0.39459E 01	0.13882E-01	0.18243E-01	0.21635E 01	0.19160E 01	0.85000E-01	0.10000E 01
170	553.04	0.25160E 02	0.39687E 01	0.13968E-01	0.18356E-01	0.21760E 01	0.19271E 01	0.12800E-00	0.10000E 01
171	550.08	0.25304E 02	0.39721E 01	0.13945E-01	0.18325E-01	0.21779E 01	0.19287E 01	0.85000E-01	0.10000E 01
172	0.	0.	0.	0.	0.	0.	0.	0.	0.
173	554.00	0.25589E 02	0.40580E 01	0.14293E-01	0.18784E-01	0.22249E 01	0.19704E 01	0.12800E-00	0.10000E 01
174	-4157.09	0.10379E-01	-0.46550E-02	-0.36474E-05	-0.47933E-05	-0.25523E-02	-0.22603E-02	0.85000E-01	0.
175	553.72	0.26765E 02	0.42099E 01	0.14825E-01	0.19482E-01	0.23082E 01	0.20442E 01	0.43000E-01	0.10000E 01
176	553.77	0.26895E 02	0.42305E 01	0.14898E-01	0.19579E-01	0.23195E 01	0.20542E 01	0.43000E-01	0.10000E 01
177	553.61	0.26604E 02	0.42045E 01	0.14805E-01	0.19456E-01	0.23053E 01	0.20416E 01	0.12800E-00	0.10000E 01
178	553.80	0.26717E 02	0.42161E 01	0.14848E-01	0.19512E-01	0.23116E 01	0.20472E 01	0.85000E-01	0.10000E 01
179	555.63	0.27508E 02	0.43454E 01	0.15327E-01	0.20142E-01	0.23825E 01	0.21100E 01	0.70000E-02	0.10000E 01
180	-4157.09	0.10379E-01	-0.46774E-02	-0.36650E-05	-0.48164E-05	-0.25646E-02	-0.22712E-02	0.70000E-02	0.
181	551.60	0.27415E 02	0.43417E 01	0.15262E-01	0.20056E-01	0.23805E 01	0.21082E 01	0.70000E-02	0.10000E 01
182	-4157.09	0.10379E-01	-0.46924E-02	-0.36768E-05	-0.48318E-05	-0.25728E-02	-0.22785E-02	0.70000E-02	0.
183	554.36	0.26851E 02	0.42454E 01	0.14958E-01	0.19657E-01	0.23277E 01	0.20614E 01	0.32000E-01	0.10000E 01
184	555.76	0.29103E 02	0.46347E 01	0.16349E-01	0.21486E-01	0.25411E 01	0.22505E 01	0.32000E-01	0.10000E 01
185	543.32	0.23623E 02	0.37360E 01	0.13041E-01	0.17138E-01	0.20484E 01	0.18141E 01	0.64000E-01	0.10000E 01
186	551.77	0.29528E 02	0.46769E 01	0.16442E-01	0.21608E-01	0.25643E 01	0.22709E 01	0.64000E-01	0.10000E 01
187	555.52	0.28742E 02	0.45765E 01	0.16141E-01	0.21212E-01	0.25093E 01	0.22222E 01	0.70000E-02	0.10000E 01
188	555.17	0.27662E 02	0.44739E 01	0.15774E-01	0.20730E-01	0.24530E 01	0.21724E 01	0.70000E-02	0.10000E 01
189	523.88	0.37668E 01	0.61081E 00	0.20978E-02	0.27568E-02	0.33490E-00	0.29659E-00	0.10600E 01	0.10000E 01
190	521.66	0.23117E 01	0.38187E-00	0.13091E-02	0.17203E-02	0.20938E-00	0.18543E-00	0.10840E 01	0.10000E 01
191	521.09	0.11055E 01	0.18354E-00	0.62891E-03	0.82648E-03	0.10064E-00	0.89123E-01	0.11080E 01	0.10000E 01
192	520.94	0.12925E 01	0.21342E-00	0.73118E-03	0.96088E-03	0.11701E-00	0.10363E-00	0.11080E 01	0.10000E 01
193	528.93	0.14790E 01	0.24162E-00	0.83332E-03	0.10951E-02	0.13248E-00	0.11733E-00	0.16580E 01	0.10000E 01
194	529.68	0.12914E 01	0.21011E-00	0.72507E-03	0.95285E-03	0.11520E-00	0.10202E-00	0.11700E 01	0.10000E 01
195	0.	0.	0.	0.	0.	0.	0.	0.	0.
196	531.98	0.14577E 01	0.23746E-00	0.82104E-03	0.10790E-02	0.13020E-00	0.11530E-00	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
154	2	3.58	153.58	-0.	-0.	3	C2	2.70	2	10.05	235.00	1665.20	154	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.814264E 02	0.518318E-02	0.444190E 04	0.534064E-05	0.659554E-07	0.362098E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725853E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	550.53	0.19611E 02	0.30544E 01	0.10803E-01	0.14155E-01	0.16747E 01	0.14831E 01	0.10000E 01	0.10000E 01
198	555.75	0.18179E 02	0.27473E 01	0.97606E-02	0.12788E-01	0.15063E 01	0.13340E 01	0.12000E 01	0.10000E 01
199	536.92	0.86670E 01	0.13657E 01	0.47751E-02	0.62563E-02	0.74882E 00	0.66316E 00	0.13000E 01	0.10000E 01
200	537.99	0.85247E 00	0.12434E-00	0.43512E-03	0.57008E-03	0.68172E-01	0.60374E-01	0.11890E 01	0.10000E 01
201	545.21	0.75896E 00	0.12609E-00	0.44398E-03	0.58170E-03	0.69137E-01	0.61228E-01	0.14540E 01	0.10000E 01
202	542.54	0.97610E 00	0.16070E-00	0.56454E-03	0.73965E-03	0.88109E-01	0.78030E-01	0.17040E 01	0.10000E 01
203	543.26	0.77142E 00	0.12705E-00	0.44662E-03	0.58515E-03	0.69662E-01	0.61693E-01	0.20410E 01	0.10000E 01
204	542.58	-0.23377E-01	-0.17882E-02	-0.62823E-05	-0.82310E-05	-0.98047E-03	-0.86831E-03	0.20700E 01	0.
205	542.05	0.92467E-01	0.80779E-02	0.28366E-04	0.37165E-04	0.44291E-02	0.39224E-02	0.21880E 01	0.10000E 01
206	544.26	0.89559E 00	0.14759E-00	0.51923E-03	0.68029E-03	0.80920E-01	0.71663E-01	0.22480E 01	0.10000E 01
207	544.01	0.81871E 00	0.13262E-00	0.46649E-03	0.61119E-03	0.72717E-01	0.64398E-01	0.20700E 01	0.10000E 01
208	542.28	0.40312E-00	0.35912E-01	0.12613E-03	0.16526E-03	0.19690E-01	0.17438E-01	0.20700E 01	0.10000E 01
209	540.95	0.42286E-00	0.34085E-01	0.11958E-03	0.15667E-03	0.18688E-01	0.16550E-01	0.21880E 01	0.10000E 01
210	542.03	0.58805E 00	0.97526E-01	0.34246E-03	0.44869E-03	0.53472E-01	0.47355E-01	0.20700E 01	0.10000E 01
211	544.14	0.78286E 00	0.12999E-00	0.45727E-03	0.59911E-03	0.71271E-01	0.63118E-01	0.21880E 01	0.10000E 01
212	543.75	0.92104E 00	0.15104E-00	0.53115E-03	0.69590E-03	0.82813E-01	0.73340E-01	0.22390E 01	0.10000E 01
213	542.42	0.90337E 00	0.14803E-00	0.51999E-03	0.68128E-03	0.81165E-01	0.71880E-01	0.21880E 01	0.10000E 01
214	543.77	0.89922E 00	0.14928E-00	0.52497E-03	0.68780E-03	0.81848E-01	0.72485E-01	0.22480E 01	0.10000E 01
215	536.88	0.36779E-00	0.55182E-01	0.19293E-03	0.25277E-03	0.30256E-01	0.26795E-01	0.11650E 01	0.10000E 01
216	703.29	-0.24260E-00	-0.22202E-01	-0.90371E-04	-0.11840E-03	-0.12173E-01	-0.10781E-01	0.12050E 01	0.
217	540.82	0.56883E 00	0.83099E-01	0.29150E-03	0.38193E-03	0.45562E-01	0.40350E-01	0.12120E 01	0.10000E 01
218	544.09	-0.10322E 01	-0.15185E-00	-0.53414E-03	-0.69982E-03	-0.83256E-01	-0.73732E-01	0.11890E 01	0.
219	541.03	0.61558E 00	0.10337E-00	0.36267E-03	0.47517E-03	0.56676E-01	0.50192E-01	0.14540E 01	0.10000E 01
220	540.09	0.59792E 00	0.10417E-00	0.36521E-03	0.47849E-03	0.57117E-01	0.50583E-01	0.17040E 01	0.10000E 01
221	541.30	0.77818E 00	0.12999E-00	0.45617E-03	0.59766E-03	0.71270E-01	0.63117E-01	0.20410E 01	0.10000E 01
222	517.55	0.87636E 00	0.14595E-00	0.50210E-03	0.65785E-03	0.80025E-01	0.70870E-01	0.22480E 01	0.10000E 01
223	536.05	0.49351E-00	0.74009E-01	0.25857E-03	0.33878E-03	0.40579E-01	0.35937E-01	0.11650E 01	0.10000E 01
224	538.49	0.29559E-00	0.24789E-01	0.86787E-04	0.11371E-03	0.13592E-01	0.12037E-01	0.12050E 01	0.10000E 01
225	539.09	0.52000E 00	0.75892E-01	0.26583E-03	0.34829E-03	0.41611E-01	0.36851E-01	0.12120E 01	0.10000E 01
226	541.67	0.63948E 00	0.10781E-00	0.37845E-03	0.49584E-03	0.59109E-01	0.52347E-01	0.14540E 01	0.10000E 01
227	538.29	0.67169E 00	0.10846E-00	0.37965E-03	0.49741E-03	0.59467E-01	0.52665E-01	0.17040E 01	0.10000E 01
228	535.77	0.87532E 00	0.14400E-00	0.50298E-03	0.65900E-03	0.78953E-01	0.69921E-01	0.18780E 01	0.10000E 01
229	540.07	0.10265E 01	0.17005E-00	0.59615E-03	0.78107E-03	0.93238E-01	0.82572E-01	0.21880E 01	0.10000E 01
230	537.66	0.63533E 00	0.93787E-01	0.32805E-03	0.42981E-03	0.51432E-01	0.45530E-01	0.11890E 01	0.10000E 01
231	532.92	0.58961E 00	0.10408E-00	0.36270E-03	0.47520E-03	0.57069E-01	0.50540E-01	0.14540E 01	0.10000E 01
232	541.66	0.68000E 00	0.11138E-00	0.39099E-03	0.51228E-03	0.61069E-01	0.54083E-01	0.16130E 01	0.10000E 01
233	540.58	0.72205E 00	0.11911E-00	0.41774E-03	0.54732E-03	0.65307E-01	0.57836E-01	0.17040E 01	0.10000E 01
234	537.62	0.77454E 00	0.12814E-00	0.44828E-03	0.58733E-03	0.70256E-01	0.62220E-01	0.18780E 01	0.10000E 01
235	541.54	0.65455E 00	0.10836E-00	0.38035E-03	0.49833E-03	0.59412E-01	0.52616E-01	0.14540E 01	0.10000E 01
236	541.36	0.74130E 00	0.12140E-00	0.42606E-03	0.55822E-03	0.66563E-01	0.58949E-01	0.17040E 01	0.10000E 01
237	524.22	0.90078E 00	0.14789E-00	0.51161E-03	0.67030E-03	0.81089E-01	0.71813E-01	0.21880E 01	0.10000E 01
238	541.51	0.37455E-00	0.33352E-01	0.11707E-03	0.15338E-03	0.18287E-01	0.16195E-01	0.20700E 01	0.10000E 01
239	538.78	0.65663E 00	0.95815E-01	0.33553E-03	0.43961E-03	0.52534E-01	0.46525E-01	0.11890E 01	0.10000E 01
240	545.21	0.71564E 00	0.12049E-00	0.42423E-03	0.55582E-03	0.66061E-01	0.58504E-01	0.14540E 01	0.10000E 01
241	542.20	0.77488E 00	0.12749E-00	0.44775E-03	0.58664E-03	0.69902E-01	0.61906E-01	0.17040E 01	0.10000E 01
242	542.29	0.84104E 00	0.13950E-00	0.48998E-03	0.64196E-03	0.76488E-01	0.67738E-01	0.18780E 01	0.10000E 01
243	523.76	0.78909E 00	0.12952E-00	0.44789E-03	0.58682E-03	0.71016E-01	0.62892E-01	0.20410E 01	0.10000E 01
244	542.52	-0.62857E-01	-0.56796E-02	-0.19952E-04	-0.26141E-04	-0.31141E-02	-0.27578E-02	0.20700E 01	0.
245	542.34	0.73870E 00	0.60521E-01	0.21258E-03	0.27852E-03	0.33183E-01	0.29387E-01	0.21870E 01	0.10000E 01
246	536.47	0.85454E 00	0.14386E-00	0.50278E-03	0.65874E-03	0.78875E-01	0.69852E-01	0.22100E 01	0.10000E 01
247	545.21	0.71428E 00	0.11725E-00	0.41276E-03	0.54080E-03	0.64276E-01	0.56923E-01	0.14540E 01	0.10000E 01
248	538.44	0.73974E 00	0.12244E-00	0.42863E-03	0.56158E-03	0.67130E-01	0.59451E-01	0.17040E 01	0.10000E 01
249	540.13	0.22590E-00	0.18795E-01	0.65891E-04	0.86339E-04	0.10305E-01	0.91261E-02	0.18780E 01	0.10000E 01
250	542.30	0.36702E-00	0.31707E-01	0.11137E-03	0.14591E-03	0.17385E-01	0.15396E-01	0.21880E 01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	545.26	0.81091E 00	0.13719E-00	0.48306E-03	0.63289E-03	0.75218E-01	0.66614E-01	0.14540E 01	0.10000E 01
252	541.37	0.79948E 00	0.13427E-00	0.47124E-03	0.61741E-03	0.73621E-01	0.65199E-01	0.16130E 01	0.10000E 01
253	541.92	0.15067E-01	0.13290E-02	0.46665E-05	0.61140E-05	0.72870E-03	0.64534E-03	0.17060E 01	0.10000E 01
254	542.03	0.11569E 01	0.19186E-00	0.67374E-03	0.88272E-03	0.10520E-00	0.93164E-01	0.21880E 01	0.10000E 01
255	529.31	0.38805E-00	0.35600E-01	0.12368E-03	0.16204E-03	0.19519E-01	0.17286E-01	0.16580E 01	0.10000E 01
256	542.91	0.19273E-00	0.16203E-01	0.56941E-04	0.74603E-04	0.88841E-02	0.78678E-02	0.17920E 01	0.10000E 01
257	533.63	0.12774E 01	0.21406E-00	0.74635E-03	0.97786E-03	0.11737E-00	0.10394E-00	0.10840E 01	0.10000E 01
258	544.63	0.74701E 00	0.12728E-00	0.44792E-03	0.58685E-03	0.69784E-01	0.61801E-01	0.14540E 01	0.10000E 01
259	541.74	0.78338E 00	0.12990E-00	0.45602E-03	0.59748E-03	0.71222E-01	0.63075E-01	0.16130E 01	0.10000E 01
260	542.89	0.70806E 00	0.11570E-00	0.40657E-03	0.53269E-03	0.63437E-01	0.56180E-01	0.17040E 01	0.10000E 01
261	543.27	0.71480E 00	0.11809E-00	0.41511E-03	0.54387E-03	0.64747E-01	0.57340E-01	0.18780E 01	0.10000E 01
262	542.32	0.97974E 00	0.16548E-00	0.58121E-03	0.76150E-03	0.90729E-01	0.80350E-01	0.20410E 01	0.10000E 01
263	542.79	0.79429E 00	0.13459E-00	0.47292E-03	0.61961E-03	0.73794E-01	0.65352E-01	0.14540E 01	0.10000E 01
264	542.48	0.84727E 00	0.13991E-00	0.49149E-03	0.64394E-03	0.76712E-01	0.67937E-01	0.16130E 01	0.10000E 01
265	541.63	0.88987E 00	0.14396E-00	0.50535E-03	0.66210E-03	0.78932E-01	0.69903E-01	0.17040E 01	0.10000E 01
266	541.98	0.85299E 00	0.14081E-00	0.49445E-03	0.64782E-03	0.77207E-01	0.68375E-01	0.18780E 01	0.10000E 01
267	542.70	0.10618E 01	0.17884E-00	0.62836E-03	0.82327E-03	0.98057E-01	0.86840E-01	0.20410E 01	0.10000E 01
268	542.14	0.87533E 00	0.14452E-00	0.50752E-03	0.66495E-03	0.79237E-01	0.70173E-01	0.16130E 01	0.10000E 01
269	541.44	0.94182E 00	0.15235E-00	0.53470E-03	0.70056E-03	0.83531E-01	0.73976E-01	0.18280E 01	0.10000E 01
270	542.21	0.92520E 00	0.15206E-00	0.53403E-03	0.69968E-03	0.83371E-01	0.73834E-01	0.18780E 01	0.10000E 01
271	540.05	0.10509E 01	0.17637E-00	0.61829E-03	0.81007E-03	0.96702E-01	0.85640E-01	0.20410E 01	0.10000E 01
272	541.93	0.81299E 00	0.13769E-00	0.48346E-03	0.63343E-03	0.75495E-01	0.66859E-01	0.16130E 01	0.10000E 01
273	541.52	0.79065E 00	0.13149E-00	0.46152E-03	0.60467E-03	0.72093E-01	0.63846E-01	0.17200E 01	0.10000E 01
274	540.58	0.90442E 00	0.14577E-00	0.51125E-03	0.66983E-03	0.79925E-01	0.70782E-01	0.18280E 01	0.10000E 01
275	540.42	0.90805E 00	0.14932E-00	0.52361E-03	0.68603E-03	0.81869E-01	0.72504E-01	0.18780E 01	0.10000E 01
276	-4157.09	0.10379E-01	-0.49888E-02	-0.39152E-05	-0.51296E-05	-0.27353E-02	-0.24224E-02	0.20600E 01	0.
277	541.64	0.77455E 00	0.65072E-01	0.22843E-03	0.29928E-03	0.35678E-01	0.31597E-01	0.21000E 01	0.10000E 01
278	-4157.09	0.10379E-01	-0.24951E-02	-0.19582E-05	-0.25656E-05	-0.13681E-02	-0.12116E-02	0.21870E 01	0.
279	543.40	0.11143E 01	0.18831E-00	0.66204E-03	0.86740E-03	0.10325E-00	0.91440E-01	0.21950E 01	0.10000E 01
280	542.05	0.88883E 00	0.14853E-00	0.52157E-03	0.68336E-03	0.81438E-01	0.72122E-01	0.18780E 01	0.10000E 01
281	542.16	0.10379E 01	0.17529E-00	0.61559E-03	0.80654E-03	0.96109E-01	0.85114E-01	0.20600E 01	0.10000E 01
282	540.92	0.86078E 00	0.14028E-00	0.49214E-03	0.64479E-03	0.76915E-01	0.68117E-01	0.18280E 01	0.10000E 01
283	541.26	0.10249E 01	0.17213E-00	0.60404E-03	0.79140E-03	0.94376E-01	0.83580E-01	0.20600E 01	0.10000E 01
284	542.31	0.78909E 00	0.12771E-00	0.44855E-03	0.58768E-03	0.70020E-01	0.62010E-01	0.17200E 01	0.10000E 01
285	542.51	0.75792E 00	0.12478E-00	0.43833E-03	0.57430E-03	0.68414E-01	0.60588E-01	0.18780E 01	0.10000E 01
286	541.33	0.46182E-00	0.42655E-01	0.14970E-03	0.19613E-03	0.23387E-01	0.20712E-01	0.16580E 01	0.10000E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.22258E-05	-0.29162E-05	-0.18508E-03	-0.16391E-03	0.17920E 01	0.
288	540.96	0.80935E 00	0.13313E-00	0.46706E-03	0.61193E-03	0.72993E-01	0.64643E-01	0.16130E 01	0.10000E 01
289	542.47	-0.69608E-01	-0.58507E-02	-0.20552E-04	-0.26928E-04	-0.32079E-02	-0.28409E-02	0.17060E 01	0.
290	539.20	0.18026E-00	0.15124E-01	0.52980E-04	0.69413E-04	0.82921E-02	0.73436E-02	0.18780E 01	0.10000E 01
291	540.97	0.63377E 00	0.10377E-00	0.36405E-03	0.47698E-03	0.56895E-01	0.50386E-01	0.17200E 01	0.10000E 01
292	542.04	0.75221E 00	0.12949E-00	0.45471E-03	0.59576E-03	0.70999E-01	0.62877E-01	0.14400E 01	0.10000E 01
293	537.30	0.80001E 00	0.12911E-00	0.45155E-03	0.59162E-03	0.70789E-01	0.62691E-01	0.17200E 01	0.10000E 01
294	542.43	0.89091E 00	0.14756E-00	0.51834E-03	0.67912E-03	0.80907E-01	0.71652E-01	0.18780E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)
148	2	6.57	154.11	51.44	-5.14	2	C2	2.75	2	10.05	235.00	1668.60

(OFF)

GRP	CONFIG	TIME
148	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.816070E 02	0.518165E-02	0.444682E 04	0.532724E-05	0.661017E-07	0.360790E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725975E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	537.88	0.23372E 01	0.38024E-00	0.13262E-02	0.17400E-02	0.20848E-00	0.18463E-00	-0.10600E 01	0.10000E 01
100	537.86	0.12306E 01	0.20628E-00	0.71945E-03	0.94394E-03	0.11310E-00	0.10016E-00	-0.10840E 01	0.10000E 01
101	539.18	0.92624E 00	0.15197E-00	0.53061E-03	0.69617E-03	0.83322E-01	0.73791E-01	-0.11080E 01	0.10000E 01
102	539.05	0.10099E 01	0.16517E-00	0.57664E-03	0.75657E-03	0.90561E-01	0.80201E-01	-0.11080E 01	0.10000E 01
103	538.23	0.14899E 01	0.24978E-00	0.87145E-03	0.11434E-02	0.13695E-00	0.12129E-00	-0.10800E 01	0.10000E 01
104	-4157.13	0.51854E-02	-0.23518E-02	-0.18443E-05	-0.24198E-05	-0.12895E-02	-0.11419E-02	0.85000E 00	0.
105	563.66	0.34479E 02	0.52333E 01	0.18658E-01	0.24480E-01	0.28694E 01	0.25411E 01	0.94000E 00	0.10000E 01
106	562.63	0.35435E 02	0.53302E 01	0.18986E-01	0.24911E-01	0.29225E 01	0.25882E 01	0.96000E 00	0.10000E 01
107	550.71	0.33279E 02	0.49729E 01	0.17534E-01	0.23005E-01	0.27266E 01	0.24147E 01	0.98000E 00	0.10000E 01
108	547.06	0.30725E 02	0.46052E 01	0.16187E-01	0.21238E-01	0.25250E 01	0.22362E 01	0.10000E 01	0.10000E 01
109	551.48	0.24385E 02	0.36764E 01	0.12971E-01	0.17018E-01	0.20157E 01	0.17851E 01	0.10200E 01	0.10000E 01
110	566.69	0.33085E 02	0.50302E 01	0.17980E-01	0.23591E-01	0.27580E 01	0.24425E 01	0.80000E-01	0.10000E 01
111	558.61	0.34167E 02	0.51281E 01	0.18203E-01	0.23883E-01	0.28117E 01	0.24900E 01	0.10000E-00	0.10000E 01
112	569.27	0.35547E 02	0.53939E 01	0.19324E-01	0.25353E-01	0.29574E 01	0.26191E 01	0.12000E-00	0.10000E 01
113	563.46	0.34695E 02	0.52655E 01	0.18769E-01	0.24626E-01	0.28870E 01	0.25567E 01	0.14000E-00	0.10000E 01
114	-4157.13	0.51854E-02	-0.22246E-02	-0.17446E-05	-0.22890E-05	-0.12198E-02	-0.10802E-02	0.80000E-01	0.
115	564.85	0.33746E 02	0.51083E 01	0.18231E-01	0.23919E-01	0.28008E 01	0.24804E 01	0.10000E-00	0.10000E 01
116	565.02	0.34661E 02	0.52826E 01	0.18855E-01	0.24739E-01	0.28964E 01	0.25650E 01	0.12000E-00	0.10000E 01
117	547.23	0.35866E 02	0.53944E 01	0.18964E-01	0.24881E-01	0.29577E 01	0.26194E 01	0.14000E-00	0.10000E 01
118	568.06	0.32633E 02	0.50069E 01	0.17919E-01	0.23510E-01	0.27453E 01	0.24312E 01	0.10000E-00	0.10000E 01
119	540.67	0.41911E 02	0.63016E 01	0.22030E-01	0.28905E-01	0.34551E 01	0.30599E 01	0.15000E-00	0.10000E 01
120	595.00	0.31852E 02	0.49429E 01	0.18112E-01	0.23763E-01	0.27101E 01	0.24001E 01	0.20000E-00	0.10000E 01
121	570.79	0.34533E 02	0.53064E 01	0.19035E-01	0.24975E-01	0.29095E 01	0.25766E 01	0.25000E-00	0.10000E 01
122	570.06	0.33410E 02	0.51318E 01	0.18397E-01	0.24138E-01	0.28137E 01	0.24919E 01	0.30000E-00	0.10000E 01
123	569.68	0.34336E 02	0.52992E 01	0.18991E-01	0.24917E-01	0.29055E 01	0.25731E 01	0.35000E-00	0.10000E 01
124	564.11	0.34874E 02	0.54014E 01	0.19265E-01	0.25276E-01	0.29616E 01	0.26228E 01	0.38000E-00	0.10000E 01
125	570.35	0.36602E 02	0.57353E 01	0.20566E-01	0.26984E-01	0.31446E 01	0.27849E 01	0.45000E-00	0.10000E 01
126	574.55	0.33116E 02	0.52691E 01	0.18963E-01	0.24880E-01	0.28890E 01	0.25585E 01	0.61000E 00	0.10000E 01
127	550.56	0.19400E 02	0.30608E 01	0.10791E-01	0.14158E-01	0.16782E 01	0.14862E 01	0.70000E 00	0.10000E 01
128	538.03	0.96826E 01	0.15219E 01	0.53085E-02	0.69649E-02	0.83442E 00	0.73897E 00	0.75000E 00	0.10000E 01
129	565.72	0.27749E 02	0.44292E 01	0.15819E-01	0.20755E-01	0.24285E 01	0.21507E 01	0.70000E 00	0.10000E 01
130	563.25	0.28510E 02	0.45445E 01	0.16196E-01	0.21250E-01	0.24917E 01	0.22067E 01	0.80000E 00	0.10000E 01
131	538.97	0.13793E 02	0.20580E 01	0.71845E-02	0.94263E-02	0.11284E 01	0.99932E 00	0.90000E 00	0.10000E 01
132	552.59	0.26006E 02	0.39232E 01	0.13855E-01	0.18178E-01	0.21510E 01	0.19050E 01	0.90000E 00	0.10000E 01
133	550.33	0.27126E 02	0.40664E 01	0.14333E-01	0.18805E-01	0.22295E 01	0.19745E 01	0.96000E 00	0.10000E 01
134	548.08	0.26739E 02	0.40100E 01	0.14107E-01	0.18509E-01	0.21986E 01	0.19471E 01	0.10000E 01	0.10000E 01
135	-4157.13	0.51854E-02	-0.23181E-02	-0.18179E-05	-0.23851E-05	-0.12710E-02	-0.11256E-02	0.70000E-02	0.
136	538.84	0.16141E 02	0.24731E 01	0.86326E-02	0.11526E-01	0.13560E 01	0.12009E 01	0.70000E-02	0.10000E 01
137	539.00	0.17118E 02	0.26619E 01	0.92928E-02	0.12192E-01	0.14595E 01	0.12925E 01	0.39000E-01	0.10000E 01
138	-4157.13	0.51854E-02	-0.22994E-02	-0.18032E-05	-0.25659E-05	-0.12608E-02	-0.11163E-02	0.78000E-01	0.
139	-4157.13	0.51854E-02	-0.22882E-02	-0.17944E-05	-0.23544E-05	-0.12546E-02	-0.11111E-02	0.11700E-00	0.
140	538.57	0.16876E 02	0.25897E 01	0.90374E-02	0.11857E-01	0.14199E 01	0.12575E 01	0.78000E-01	0.10000E 01
141	-4157.13	0.51854E-02	-0.15703E-02	-0.12315E-05	-0.16157E-05	-0.86100E-03	-0.76251E-03	-0.	0.
142	-4157.13	0.51854E-02	-0.15703E-02	-0.12315E-05	-0.16157E-05	-0.86100E-03	-0.76251E-03	-0.	0.
143	546.98	0.15494E 02	0.23770E 01	0.83546E-02	0.10961E-01	0.13033E 01	0.11542E 01	0.78000E-01	0.10000E 01
144	548.72	0.15037E 02	0.23130E 01	0.81416E-02	0.10682E-01	0.12682E 01	0.11231E 01	0.70000E-02	0.10000E 01
145	548.26	0.13804E 02	0.21122E 01	0.74319E-02	0.97509E-02	0.11581E 01	0.10256E 01	0.70000E-02	0.10000E 01
146	547.11	0.16219E 02	0.24926E 01	0.87616E-02	0.11496E-01	0.13667E 01	0.12103E 01	0.39000E-01	0.10000E 01
147	1085.37	-0.36365E-02	-0.71691E-03	-0.46980E-05	-0.61639E-05	-0.39307E-03	-0.34811E-03	0.78000E-01	0.
148	1116.45	-0.15954E-00	-0.32093E-01	-0.22153E-03	-0.29066E-03	-0.17596E-01	-0.15583E-01	0.11700E-00	0.
149	553.65	0.26414E 02	0.42350E 01	0.14969E-01	0.19640E-01	0.23220E 01	0.20564E 01	0.70000E-02	0.10000E 01
150	558.63	0.26812E 02	0.43312E 01	0.15375E-01	0.20172E-01	0.23748E 01	0.21031E 01	0.70000E-02	0.10000E 01
151	557.33	0.26364E 02	0.42556E 01	0.15090E-01	0.19798E-01	0.23333E 01	0.20664E 01	0.70000E-02	0.10000E 01
152	556.89	0.26439E 02	0.44234E 01	0.15679E-01	0.20571E-01	0.24253E 01	0.21479E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.13		0.51854E-02	-0.22882E-02	-0.17944E-05	-0.23544E-05	-0.12546E-02	-0.11111E-02	0.39000E-01	0.
154	552.83	0.27735E 02	0.42760E 01	0.15104E-01	0.19817E-01	0.23445E 01	0.20763E 01	0.78000E-01	0.10000E 01
155-4157.13		0.51854E-02	-0.23742E-02	-0.18619E-05	-0.24428E-05	-0.13018E-02	-0.11528E-02	0.39000E-01	0.
156-4157.13		0.51854E-02	-0.23667E-02	-0.18560E-05	-0.24352E-05	-0.12977E-02	-0.11492E-02	0.39000E-01	0.
157	550.18	0.24558E 02	0.39485E 01	0.13916E-01	0.18258E-01	0.21649E 01	0.19173E 01	0.78000E-01	0.10000E 01
158-4157.13		0.51854E-02	-0.23817E-02	-0.18677E-05	-0.24505E-05	-0.13059E-02	-0.11565E-02	0.39000E-01	0.
159-4157.13		0.51854E-02	-0.23817E-02	-0.18677E-05	-0.24505E-05	-0.13059E-02	-0.11565E-02	0.78000E-01	0.
160-4157.13		0.51854E-02	-0.23742E-02	-0.18619E-05	-0.24428E-05	-0.13018E-02	-0.11528E-02	0.39000E-01	0.
161	564.64	0.24988E 02	0.39543E 01	0.14110E-01	0.18512E-01	0.21681E 01	0.19201E 01	0.43000E-01	0.10000E 01
162	564.09	0.25030E 02	0.39725E 01	0.14168E-01	0.18589E-01	0.21781E 01	0.19289E 01	0.43000E-01	0.10000E 01
163	558.60	0.24763E 02	0.39245E 01	0.13931E-01	0.18278E-01	0.21518E 01	0.19056E 01	0.85000E-01	0.10000E 01
164	556.38	0.24328E 02	0.38322E 01	0.13577E-01	0.17814E-01	0.21012E 01	0.18608E 01	0.12800E-00	0.10000E 01
165-4157.13		0.51854E-02	-0.23256E-02	-0.18238E-05	-0.23928E-05	-0.12751E-02	-0.11292E-02	0.43000E-01	0.
166	556.38	0.24809E 02	0.39080E 01	0.13846E-01	0.18166E-01	0.21427E 01	0.18976E 01	0.85000E-01	0.10000E 01
167-4157.13		0.51854E-02	-0.23181E-02	-0.18179E-05	-0.23851E-05	-0.12710E-02	-0.11256E-02	0.43000E-01	0.
168	548.45	0.18642E 02	0.29566E 01	0.10404E-01	0.13651E-01	0.16211E 01	0.14356E 01	0.12800E-00	0.10000E 01
169	561.33	0.25056E 02	0.39896E 01	0.14195E-01	0.18625E-01	0.21875E 01	0.19372E 01	0.85000E-01	0.10000E 01
170	558.97	0.25804E 02	0.40837E 01	0.14501E-01	0.19025E-01	0.22390E 01	0.19829E 01	0.12800E-00	0.10000E 01
171	559.65	0.25880E 02	0.40841E 01	0.14510E-01	0.19038E-01	0.22393E 01	0.19831E 01	0.85000E-01	0.10000E 01
172-4157.13		0.51854E-02	-0.23293E-02	-0.18267E-05	-0.23967E-05	-0.12772E-02	-0.11311E-02	0.43000E-01	0.
173	562.79	0.26491E 02	0.42216E 01	0.15039E-01	0.19732E-01	0.23147E 01	0.20499E 01	0.12800E-00	0.10000E 01
174-4157.13		0.51854E-02	-0.23256E-02	-0.18238E-05	-0.23928E-05	-0.12751E-02	-0.11292E-02	0.85000E-01	0.
175	569.79	0.26649E 02	0.42291E 01	0.15158E-01	0.19887E-01	0.23188E 01	0.20535E 01	0.43000E-01	0.10000E 01
176	570.41	0.26778E 02	0.42510E 01	0.15244E-01	0.20001E-01	0.23308E 01	0.20641E 01	0.43000E-01	0.10000E 01
177	566.18	0.27490E 02	0.43750E 01	0.15632E-01	0.20509E-01	0.23988E 01	0.21244E 01	0.12800E-00	0.10000E 01
178	568.56	0.27090E 02	0.43100E 01	0.15431E-01	0.20246E-01	0.23631E 01	0.20928E 01	0.85000E-01	0.10000E 01
179	574.18	0.26927E 02	0.42974E 01	0.15461E-01	0.20285E-01	0.23562E 01	0.20867E 01	0.70000E-02	0.10000E 01
180-4157.13		0.51854E-02	-0.23368E-02	-0.18326E-05	-0.24044E-05	-0.12813E-02	-0.11347E-02	0.70000E-02	0.
181	570.99	0.27267E 02	0.43649E 01	0.15661E-01	0.20547E-01	0.23933E 01	0.21195E 01	0.70000E-02	0.10000E 01
182-4157.13		0.51854E-02	-0.23443E-02	-0.18384E-05	-0.24121E-05	-0.12854E-02	-0.11383E-02	0.70000E-02	0.
183	570.92	0.27110E 02	0.43258E 01	0.15519E-01	0.20362E-01	0.23718E 01	0.21005E 01	0.32000E-01	0.10000E 01
184	574.22	0.30211E 02	0.48603E 01	0.17487E-01	0.22943E-01	0.26648E 01	0.23600E 01	0.32000E-01	0.10000E 01
185	559.01	0.26495E 02	0.42269E 01	0.15010E-01	0.19693E-01	0.23176E 01	0.20525E 01	0.64000E-01	0.10000E 01
186	572.99	0.30599E 02	0.49038E 01	0.17625E-01	0.23124E-01	0.26887E 01	0.23811E 01	0.64000E-01	0.10000E 01
187	576.81	0.28821E 02	0.46433E 01	0.16744E-01	0.21968E-01	0.25459E 01	0.22546E 01	0.70000E-02	0.10000E 01
188	574.60	0.27329E 02	0.44677E 01	0.16080E-01	0.21097E-01	0.24496E 01	0.21694E 01	0.70000E-02	0.10000E 01
189	535.85	0.39242E 01	0.64066E 00	0.22307E-02	0.29267E-02	0.35127E-00	0.31109E-00	0.10600E 01	0.10000E 01
190	534.99	0.23496E 01	0.39108E-00	0.13607E-02	0.17853E-02	0.21443E-00	0.18990E-00	0.10840E 01	0.10000E 01
191	534.89	0.13086E 01	0.21898E-00	0.76182E-03	0.99953E-03	0.12006E-00	0.10633E-00	0.11080E 01	0.10000E 01
192	534.50	0.14281E 01	0.23763E-00	0.82643E-03	0.10843E-02	0.13029E-00	0.11538E-00	0.11080E 01	0.10000E 01
193	539.66	0.19242E 01	0.31627E-00	0.11047E-02	0.14494E-02	0.17341E-00	0.15357E-00	0.16580E 01	0.10000E 01
194	540.11	0.19818E 01	0.32433E-00	0.11333E-02	0.14869E-02	0.17783E-00	0.15748E-00	0.11700E 01	0.10000E 01
195	539.78	0.20956E 01	0.34447E-00	0.12033E-02	0.15788E-02	0.18887E-00	0.16726E-00	0.16740E 01	0.10000E 01
196	540.56	0.18561E 01	0.30384E-00	0.10621E-02	0.13935E-02	0.16659E-00	0.14753E-00	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
149	2	6.57	154.11	-51.44	5.14	2	C2	2.75	2	10.05	235.00	1670.70	149	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.817154E 02	0.518072E-02	0.444977E 04	0.531923E-05	0.661895E-07	0.360007E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726048E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	537.76	0.20842E 01	0.33906E-00	0.11801E-02	0.15497E-02	0.18590E-00	0.16464E-00	-0.10600E 01	0.10000E 01
100	537.93	0.10364E 01	0.17372E-00	0.60474E-03	0.79411E-03	0.95251E-01	0.84354E-01	-0.10840E 01	0.10000E 01
101	539.55	0.71845E 00	0.11790E-00	0.41098E-03	0.53967E-03	0.64644E-01	0.57249E-01	-0.11080E 01	0.10000E 01
102	539.38	0.81767E 00	0.13376E-00	0.46619E-03	0.61217E-03	0.73339E-01	0.64949E-01	-0.11080E 01	0.10000E 01
103	538.30	0.13496E 01	0.22628E-00	0.78794E-03	0.10347E-02	0.12407E-00	0.10987E-00	-0.10800E 01	0.10000E 01
104	-4157.13	0.51854E-02	-0.23518E-02	-0.18435E-05	-0.24207E-05	-0.12895E-02	-0.11419E-02	0.85000E 00	0.
105	565.05	0.35792E 02	0.54367E 01	0.19367E-01	0.25432E-01	0.29809E 01	0.26399E 01	0.94000E 00	0.10000E 01
106	565.03	0.36845E 02	0.55496E 01	0.19769E-01	0.25959E-01	0.30428E 01	0.26947E 01	0.96000E 00	0.10000E 01
107	554.06	0.34518E 02	0.51677E 01	0.18237E-01	0.23947E-01	0.28334E 01	0.25093E 01	0.98000E 00	0.10000E 01
108	552.56	0.31669E 02	0.47612E 01	0.16780E-01	0.22035E-01	0.26105E 01	0.23119E 01	0.10000E 01	0.10000E 01
109	557.64	0.24795E 02	0.37509E 01	0.13277E-01	0.17435E-01	0.20566E 01	0.18213E 01	0.10200E 01	0.10000E 01
110	566.34	0.34089E 02	0.51819E 01	0.18480E-01	0.24267E-01	0.28412E 01	0.25162E 01	0.80000E-01	0.10000E 01
111	558.34	0.34870E 02	0.52327E 01	0.18534E-01	0.24337E-01	0.28691E 01	0.25409E 01	0.10000E-00	0.10000E 01
112	569.96	0.36383E 02	0.55229E 01	0.19758E-01	0.25945E-01	0.30282E 01	0.26818E 01	0.12000E-00	0.10000E 01
113	564.93	0.35050E 02	0.53238E 01	0.18963E-01	0.24901E-01	0.29190E 01	0.25851E 01	0.14000E-00	0.10000E 01
114	-4157.13	0.51854E-02	-0.22246E-02	-0.17438E-05	-0.22899E-05	-0.12198E-02	-0.10802E-02	0.80000E-01	0.
115	561.19	0.33340E 02	0.50366E 01	0.17883E-01	0.23482E-01	0.27615E 01	0.24456E 01	0.10000E-00	0.10000E 01
116	561.27	0.33824E 02	0.51444E 01	0.18267E-01	0.23986E-01	0.28206E 01	0.24980E 01	0.12000E-00	0.10000E 01
117	544.71	0.34914E 02	0.52439E 01	0.18359E-01	0.24108E-01	0.28752E 01	0.25463E 01	0.14000E-00	0.10000E 01
118	561.51	0.31897E 02	0.48764E 01	0.17318E-01	0.22741E-01	0.26737E 01	0.23678E 01	0.10000E-00	0.10000E 01
119	538.65	0.41858E 02	0.62865E 01	0.21897E-01	0.28754E-01	0.34468E 01	0.30525E 01	0.15000E-00	0.10000E 01
120	574.24	0.27582E 02	0.42321E 01	0.15196E-01	0.19955E-01	0.23204E 01	0.20550E 01	0.20000E-00	0.10000E 01
121	560.78	0.31190E 02	0.47663E 01	0.16917E-01	0.22214E-01	0.26133E 01	0.23143E 01	0.25000E-00	0.10000E 01
122	556.87	0.29480E 02	0.44952E 01	0.15901E-01	0.20881E-01	0.24647E 01	0.21828E 01	0.30000E-00	0.10000E 01
123	556.56	0.29674E 02	0.45467E 01	0.16079E-01	0.21114E-01	0.24929E 01	0.22077E 01	0.35000E-00	0.10000E 01
124	551.74	0.29579E 02	0.45500E 01	0.16025E-01	0.21043E-01	0.24947E 01	0.22093E 01	0.38000E-00	0.10000E 01
125	557.25	0.29681E 02	0.46174E 01	0.16339E-01	0.21455E-01	0.25317E 01	0.22421E 01	0.45000E-00	0.10000E 01
126	554.96	0.26270E 02	0.41349E 01	0.14603E-01	0.19176E-01	0.22671E 01	0.20078E 01	0.61000E 00	0.10000E 01
127	538.72	0.11641E 02	0.18245E 01	0.63555E-02	0.83457E-02	0.10004E 01	0.88593E 00	0.70000E 00	0.10000E 01
128	534.11	0.48686E 01	0.76353E 00	0.26494E-02	0.34790E-02	0.41863E-00	0.37074E-00	0.75000E 00	0.10000E 01
129	551.00	0.21906E 02	0.34682E 01	0.12207E-01	0.16029E-01	0.19016E 01	0.16840E 01	0.70000E 00	0.10000E 01
130	551.81	0.21921E 02	0.34720E 01	0.12229E-01	0.16058E-01	0.19037E 01	0.16859E 01	0.80000E 00	0.10000E 01
131	537.51	0.71839E 01	0.10710E 01	0.37269E-02	0.48939E-02	0.58722E 00	0.52004E 00	0.90000E 00	0.10000E 01
132	549.49	0.20276E 02	0.30535E 01	0.10734E-01	0.14095E-01	0.16742E 01	0.14827E 01	0.90000E 00	0.10000E 01
133	550.31	0.20100E 02	0.30130E 01	0.10599E-01	0.13918E-01	0.16520E 01	0.14630E 01	0.96000E 00	0.10000E 01
134	548.63	0.18879E 02	0.28322E 01	0.99486E-02	0.13064E-01	0.15529E 01	0.13752E 01	0.10000E 01	0.10000E 01
135	-4157.13	0.51854E-02	-0.23181E-02	-0.18171E-05	-0.23861E-05	-0.12710E-02	-0.11256E-02	0.70000E-02	0.
136	544.15	0.14807E 02	0.22755E 01	0.79627E-02	0.10456E-01	0.12476E 01	0.11049E 01	0.70000E-02	0.10000E 01
137	544.54	0.15764E 02	0.24589E 01	0.86076E-02	0.11303E-01	0.13482E 01	0.11940E 01	0.39000E-01	0.10000E 01
138	-4157.13	0.51854E-02	-0.22894E-02	-0.18024E-05	-0.23669E-05	-0.12608E-02	-0.11165E-02	0.78000E-01	0.
139	-4157.13	0.51854E-02	-0.22882E-02	-0.17937E-05	-0.23553E-05	-0.12546E-02	-0.11111E-02	0.11700E-00	0.
140	544.41	0.15710E 02	0.24186E 01	0.84656E-02	0.11116E-01	0.13261E 01	0.11744E 01	0.78000E-01	0.10000E 01
141	-4157.13	0.51854E-02	-0.15703E-02	-0.12309E-05	-0.16164E-05	-0.86100E-03	-0.76251E-03	-0.	0.
142	-4157.13	0.51854E-02	-0.15705E-02	-0.12309E-05	-0.16164E-05	-0.86100E-03	-0.76251E-03	-0.	0.
143	537.24	0.16634E 02	0.25380E 01	0.88298E-02	0.11595E-01	0.13915E 01	0.12324E 01	0.78000E-01	0.10000E 01
144	537.39	0.15886E 02	0.24280E 01	0.84484E-02	0.11094E-01	0.13313E 01	0.11790E 01	0.70000E-02	0.10000E 01
145	537.23	0.14864E 02	0.22605E 01	0.78644E-02	0.10327E-01	0.12394E 01	0.10976E 01	0.70000E-02	0.10000E 01
146	536.99	0.16130E 02	0.24648E 01	0.85734E-02	0.11258E-01	0.13514E 01	0.11968E 01	0.39000E-01	0.10000E 01
147	1085.37	-0.36365E-02	-0.71691E-03	-0.46807E-05	-0.61464E-05	-0.39307E-03	-0.34811E-03	0.78000E-01	0.
148	1125.34	0.27115E-00	0.54728E-01	0.38213E-03	0.50179E-03	0.30007E-01	0.26574E-01	0.11700E-00	0.
149	563.73	0.30527E 02	0.49219E 01	0.17513E-01	0.22997E-01	0.26986E 01	0.23899E 01	0.70000E-02	0.10000E 01
150	566.25	0.30807E 02	0.49974E 01	0.17821E-01	0.23401E-01	0.27400E 01	0.24266E 01	0.70000E-02	0.10000E 01
151	565.48	0.30702E 02	0.49765E 01	0.17741E-01	0.23296E-01	0.27298E 01	0.24173E 01	0.70000E-02	0.10000E 01
152	566.06	0.33842E 02	0.52904E 01	0.18868E-01	0.24769E-01	0.29007E 01	0.25688E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.13		0.51854E-02	-0.22882E-02	-0.17937E-05	-0.23553E-05	-0.12546E-02	-0.11111E-02	0.39000E-01	0.
154	565.69	0.34132E 02	0.52999E 01	0.18890E-01	0.24805E-01	0.29059E 01	0.25735E 01	0.78000E-01	0.10000E 01
155-4157.13		0.51854E-02	-0.23742E-02	-0.18611E-05	-0.24438E-05	-0.13018E-02	-0.11528E-02	0.39000E-01	0.
156-4157.13		0.51854E-02	-0.23667E-02	-0.18552E-05	-0.24361E-05	-0.12977E-02	-0.11492E-02	0.39000E-01	0.
157	564.39	0.30468E 02	0.49374E 01	0.17579E-01	0.23083E-01	0.27071E 01	0.23975E 01	0.78000E-01	0.10000E 01
158-4157.13		0.51854E-02	-0.23817E-02	-0.18669E-05	-0.24515E-05	-0.13059E-02	-0.11565E-02	0.39000E-01	0.
159-4157.13		0.51854E-02	-0.23817E-02	-0.18669E-05	-0.24515E-05	-0.13059E-02	-0.11565E-02	0.78000E-01	0.
160-4157.13		0.51854E-02	-0.23742E-02	-0.18611E-05	-0.24438E-05	-0.13018E-02	-0.11528E-02	0.39000E-01	0.
161	549.77	0.21492E 02	0.33731E 01	0.11860E-01	0.15574E-01	0.18494E 01	0.16379E 01	0.43000E-01	0.10000E 01
162	549.93	0.21628E 02	0.34056E 01	0.11976E-01	0.15726E-01	0.18673E 01	0.16537E 01	0.43000E-01	0.10000E 01
163	547.77	0.21094E 02	0.33229E 01	0.11664E-01	0.15316E-01	0.18219E 01	0.16135E 01	0.85000E-01	0.10000E 01
164	549.48	0.20588E 02	0.32307E 01	0.11357E-01	0.14913E-01	0.17714E 01	0.15687E 01	0.12800E-00	0.10000E 01
165-4157.13		0.51854E-02	-0.23256E-02	-0.18230E-05	-0.23938E-05	-0.12751E-02	-0.11292E-02	0.43000E-01	0.
166	546.30	0.20668E 02	0.32375E 01	0.11350E-01	0.14904E-01	0.17751E 01	0.15720E 01	0.85000E-01	0.10000E 01
167-4157.13		0.51854E-02	-0.23181E-02	-0.18171E-05	-0.23861E-05	-0.12710E-02	-0.11256E-02	0.43000E-01	0.
168	544.11	0.15700E 02	0.24840E 01	0.86920E-02	0.11414E-01	0.13619E 01	0.12061E 01	0.12800E-00	0.10000E 01
169	551.08	0.20993E 02	0.33238E 01	0.11700E-01	0.15363E-01	0.18224E 01	0.16139E 01	0.85000E-01	0.10000E 01
170	551.42	0.21108E 02	0.33266E 01	0.11713E-01	0.15381E-01	0.18239E 01	0.16153E 01	0.12800E-00	0.10000E 01
171	549.11	0.21082E 02	0.33075E 01	0.11623E-01	0.15262E-01	0.18134E 01	0.16060E 01	0.85000E-01	0.10000E 01
172-4157.13		0.51854E-02	-0.23293E-02	-0.18259E-05	-0.23976E-05	-0.12772E-02	-0.11311E-02	0.43000E-01	0.
173	552.84	0.21337E 02	0.33816E 01	0.11921E-01	0.15654E-01	0.18541E 01	0.16420E 01	0.12800E-00	0.10000E 01
174-4157.13		0.51854E-02	-0.23256E-02	-0.18230E-05	-0.23938E-05	-0.12751E-02	-0.11292E-02	0.85000E-01	0.
175	552.91	0.22615E 02	0.35555E 01	0.12535E-01	0.16460E-01	0.19494E 01	0.17264E 01	0.43000E-01	0.10000E 01
176	553.11	0.22521E 02	0.35412E 01	0.12486E-01	0.16396E-01	0.19416E 01	0.17195E 01	0.43000E-01	0.10000E 01
177	553.76	0.21788E 02	0.34437E 01	0.12149E-01	0.15954E-01	0.18881E 01	0.16721E 01	0.12800E-00	0.10000E 01
178	553.08	0.22024E 02	0.34741E 01	0.12250E-01	0.16086E-01	0.19048E 01	0.16869E 01	0.85000E-01	0.10000E 01
179	555.07	0.22991E 02	0.36306E 01	0.12823E-01	0.16839E-01	0.19906E 01	0.17629E 01	0.70000E-02	0.10000E 01
180-4157.13		0.51854E-02	-0.23368E-02	-0.18318E-05	-0.24053E-05	-0.12813E-02	-0.11347E-02	0.70000E-02	0.
181	551.52	0.23419E 02	0.37087E 01	0.13060E-01	0.17149E-01	0.20335E 01	0.18008E 01	0.70000E-02	0.10000E 01
182-4157.13		0.51854E-02	-0.23443E-02	-0.18376E-05	-0.24130E-05	-0.12854E-02	-0.11383E-02	0.70000E-02	0.
183	554.06	0.22174E 02	0.35053E 01	0.12370E-01	0.16244E-01	0.19219E 01	0.17021E 01	0.32000E-01	0.10000E 01
184	557.09	0.23393E 02	0.37281E 01	0.13190E-01	0.17320E-01	0.20441E 01	0.18102E 01	0.32000E-01	0.10000E 01
185	546.74	0.18178E 02	0.28802E 01	0.10101E-01	0.13264E-01	0.15792E 01	0.13986E 01	0.64000E-01	0.10000E 01
186	554.00	0.23514E 02	0.37290E 01	0.13159E-01	0.17279E-01	0.20446E 01	0.18107E 01	0.64000E-01	0.10000E 01
187	555.84	0.24091E 02	0.38366E 01	0.13560E-01	0.17806E-01	0.21036E 01	0.18629E 01	0.70000E-02	0.10000E 01
188	554.14	0.23202E 02	0.37505E 01	0.13236E-01	0.17381E-01	0.20563E 01	0.18211E 01	0.70000E-02	0.10000E 01
189	535.86	0.46644E 01	0.76152E 00	0.26463E-02	0.34750E-02	0.41753E-00	0.36977E-00	0.10600E 01	0.10000E 01
190	535.84	0.28036E 01	0.46687E-00	0.16224E-02	0.21304E-02	0.25598E-00	0.22670E-00	0.10840E 01	0.10000E 01
191	536.28	0.14909E 01	0.24968E-00	0.86797E-03	0.11398E-02	0.13690E-00	0.12124E-00	0.11080E 01	0.10000E 01
192	535.83	0.16696E 01	0.27803E-00	0.96615E-03	0.12687E-02	0.15244E-00	0.13500E-00	0.11080E 01	0.10000E 01
193	545.46	0.11901E 01	0.19626E-00	0.68753E-03	0.90282E-03	0.10760E-00	0.95296E-01	0.16580E 01	0.10000E 01
194	545.23	0.11662E 01	0.19141E-00	0.67041E-03	0.88034E-03	0.10495E-00	0.92941E-01	0.11700E 01	0.10000E 01
195	545.40	0.11086E 01	0.18280E-00	0.64036E-03	0.84088E-03	0.10023E-00	0.88763E-01	0.16740E 01	0.10000E 01
196	547.10	0.11096E 01	0.18230E-00	0.63954E-03	0.83980E-03	0.99955E-01	0.88521E-01	0.16950E 01	0.10000E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
141	2	7.57	157.57	-0.	-0.		C2	2.75	2	10.05	235.00	1678.00	141	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.821041E 02	0.517741E-02	0.446034 04	0.529066E-05	0.665043E-07	0.357226E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726308E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	569.88	0.22277E 02	0.29482E 01	0.10471E-01	0.13791E-01	0.16164E 01	0.14315E 01	-0.	0.10000E 01
2-3048.51		-0.81660E 03	0.19577E 03	0.18288E-00	0.24087E-00	0.10734E 03	0.95059E 02	-0.30000E-01	0.
3-4157.13		0.51854E-02	-0.22359E-02	-0.17499E-05	-0.23047E-05	-0.12259E-02	-0.10857E-02	-0.60000E-01	0.
4-4157.13		0.51854E-02	-0.22934E-02	-0.17949E-05	-0.23641E-05	-0.12575E-02	-0.11136E-02	-0.90000E-01	0.
5	547.94	0.18114E 02	0.28813E 01	0.10044E-01	0.13229E-01	0.15798E 01	0.13991E 01	-0.20000E-00	0.10000E 01
6	539.42	0.16560E 02	0.26215E 01	0.90734E-02	0.11951E-01	0.14374E 01	0.12729E 01	-0.40000E-00	0.10000E 01
7	537.77	0.15342E 02	0.24380E 01	0.84266E-02	0.11099E-01	0.13367E 01	0.11838E 01	-0.60000E 00	0.10000E 01
8-4157.13		0.51854E-02	-0.23630E-02	-0.18494E-05	-0.24358E-05	-0.12956E-02	-0.11474E-02	-0.80000E 00	0.
9	541.60	0.17510E 02	0.27444E 01	0.95162E-02	0.12534E-01	0.15047E 01	0.13326E 01	-0.90000E 00	0.10000E 01
10	546.37	0.16656E 02	0.26512E 01	0.92299E-02	0.12157E-01	0.14536E 01	0.12874E 01	-0.98000E 00	0.10000E 01
11	542.60	0.51429E 00	0.88561E-01	0.30734E-03	0.40479E-03	0.48557E-01	0.43003E-01	-0.11220E 01	0.10000E 01
12	545.10	0.97194E 00	0.14282E-00	0.49668E-03	0.65418E-03	0.78307E-01	0.69349E-01	-0.11890E 01	0.10000E 01
13	545.24	0.10369E 01	0.15709E-00	0.54636E-03	0.71961E-03	0.86129E-01	0.76277E-01	-0.13340E 01	0.10000E 01
14	543.25	0.98598E 00	0.16985E-00	0.58976E-03	0.77677E-03	0.93127E-01	0.82473E-01	-0.14400E 01	0.10000E 01
15-4157.13		0.51854E-02	-0.20564E-02	-0.16094E-05	-0.21197E-05	-0.11275E-02	-0.99852E-03	0.30000E-01	0.
16-4157.13		0.51854E-02	-0.22359E-02	-0.17499E-05	-0.23047E-05	-0.12259E-02	-0.10857E-02	0.60000E-01	0.
17	1122.80	0.33763E-01	0.68237E-02	0.46782E-04	0.61616E-04	0.37414E-02	0.33134E-02	0.90000E-01	0.
18	559.41	0.21883E 02	0.35031E 01	0.12331E-01	0.16241E-01	0.19207E 01	0.17010E 01	0.20000E-00	0.10000E 01
19	569.44	0.24965E 02	0.40186E 01	0.14267E-01	0.18791E-01	0.22034E 01	0.19513E 01	0.40000E-00	0.10000E 01
20-4157.13		0.51854E-02	-0.23630E-02	-0.18494E-05	-0.24358E-05	-0.12956E-02	-0.11474E-02	0.60000E 00	0.
21-4157.13		0.51854E-02	-0.22246E-02	-0.17411E-05	-0.22932E-05	-0.12198E-02	-0.10802E-02	0.92000E 00	0.
22	581.26	0.13995E 02	0.21449E 01	0.76929E-02	0.10132E-01	0.11760E 01	0.10415E 01	0.10400E 01	0.10000E 01
23	545.62	0.14619E 02	0.22027E 01	0.76636E-02	0.10094E-01	0.12077E 01	0.10696E 01	0.10600E 01	0.10000E 01
24	540.73	0.95688E 01	0.15063E 01	0.52191E-02	0.68741E-02	0.82587E 00	0.73140E 00	0.10840E 01	0.10000E 01
25	541.67	0.11792E 01	0.17384E-00	0.60281E-03	0.79396E-03	0.95313E-01	0.84410E-01	0.12070E 01	0.10000E 01
26	543.55	0.10566E 01	0.16446E-00	0.57119E-03	0.75231E-03	0.90171E-01	0.79856E-01	0.12490E 01	0.10000E 01
27	544.61	0.10764E 01	0.16491E-00	0.57327E-03	0.75505E-03	0.90420E-01	0.80077E-01	0.13340E 01	0.10000E 01
28	544.47	0.96207E 00	0.16390E-00	0.56969E-03	0.75034E-03	0.89866E-01	0.79586E-01	0.14540E 01	0.10000E 01
29	543.71	0.12005E 01	0.19838E-00	0.68909E-03	0.90760E-03	0.10877E-00	0.96328E-01	0.16580E 01	0.10000E 01
30	543.69	0.15527E 01	0.25971E-00	0.90212E-03	0.11882E-02	0.14240E-00	0.12611E-00	0.20410E 01	0.10000E 01
31	545.32	0.17860E 01	0.29900E-00	0.10400E-02	0.13698E-02	0.16394E-00	0.14518E-00	0.22480E 01	0.10000E 01
32-4157.13		0.51854E-02	-0.22381E-02	-0.17516E-05	-0.23070E-05	-0.12271E-02	-0.10868E-02	-0.60000E-01	0.
33-4157.13		0.51854E-02	-0.20564E-02	-0.16094E-05	-0.21197E-05	-0.11275E-02	-0.99852E-03	-0.30000E-01	0.
34-4157.13		0.51854E-02	-0.22381E-02	-0.17516E-05	-0.23070E-05	-0.12271E-02	-0.10868E-02	0.30000E-01	0.
35-4157.13		0.51854E-02	-0.22934E-02	-0.17949E-05	-0.23641E-05	-0.12575E-02	-0.11136E-02	0.60000E-01	0.
36	539.66	0.18281E 02	0.28943E 01	0.10019E-01	0.13197E-01	0.15869E 01	0.14054E 01	-0.86800E 00	0.10000E 01
37	542.48	0.17978E 02	0.27739E 01	0.96254E-02	0.12678E-01	0.15209E 01	0.13469E 01	-0.91100E 00	0.10000E 01
38	542.95	0.18139E 02	0.28498E 01	0.98926E-02	0.13030E-01	0.15625E 01	0.13838E 01	-0.95300E 00	0.10000E 01
39-4157.13		0.51854E-02	-0.23368E-02	-0.18289E-05	-0.24088E-05	-0.12813E-02	-0.11347E-02	0.51000E-01	0.
40-4157.13		0.51854E-02	-0.23368E-02	-0.18289E-05	-0.24088E-05	-0.12813E-02	-0.11347E-02	0.29000E-01	0.
41-4157.13		0.51854E-02	-0.23233E-02	-0.18183E-05	-0.23949E-05	-0.12739E-02	-0.11281E-02	0.70000E-02	0.
42	541.60	0.18618E 02	0.29321E 01	0.10167E-01	0.13391E-01	0.16076E 01	0.14237E 01	-0.86800E 00	0.10000E 01
43	542.11	0.18404E 02	0.29067E 01	0.10083E-01	0.13281E-01	0.15937E 01	0.14114E 01	-0.91100E 00	0.10000E 01
44	546.09	0.25841E 02	0.40714E 01	0.14194E-01	0.18695E-01	0.22323E 01	0.19769E 01	-0.95300E 00	0.10000E 01
45	540.28	0.64062E 01	0.10430E 01	0.36126E-02	0.47582E-02	0.57188E 00	0.50646E 00	-0.10400E 01	0.10000E 01
46-4157.13		0.51854E-02	-0.23428E-02	-0.18336E-05	-0.24150E-05	-0.12845E-02	-0.11376E-02	0.70000E-02	0.
47-4157.13		0.51854E-02	-0.23428E-02	-0.18336E-05	-0.24150E-05	-0.12845E-02	-0.11376E-02	0.29000E-01	0.
48	539.23	0.16201E 02	0.25644E 01	0.88743E-02	0.11688E-01	0.14060E 01	0.12452E 01	0.51000E-01	0.10000E 01
49	541.55	0.17537E 02	0.27530E 01	0.95455E-02	0.12572E-01	0.15094E 01	0.13368E 01	0.70000E-02	0.10000E 01
50	541.91	0.17139E 02	0.26996E 01	0.93634E-02	0.12332E-01	0.14802E 01	0.13109E 01	0.29000E-01	0.10000E 01
51-4157.13		0.51854E-02	-0.23293E-02	-0.18230E-05	-0.24011E-05	-0.12772E-02	-0.11311E-02	0.51000E-01	0.
52-4157.13		0.51854E-02	-0.23428E-02	-0.18336E-05	-0.24150E-05	-0.12845E-02	-0.11376E-02	0.86800E 00	0.
53	544.04	0.18077E 02	0.28692E 01	0.99690E-02	0.13130E-01	0.15731E 01	0.13932E 01	-0.91100E 00	0.10000E 01
54	546.08	0.18142E 02	0.28552E 01	0.99374E-02	0.13089E-01	0.15655E 01	0.13864E 01	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	540.02	0.41408E 01	0.67407E 00	0.23342E-02	0.30744E-02	0.36959E-00	0.32731E-00	-0.10400E 01	0.10000E 01
56	539.46	0.21455E 01	0.36016E-00	0.12466E-02	0.16419E-02	0.19747E-00	0.17488E-00	-0.10680E 01	0.10000E 01
57	537.04	0.17070E 01	0.27742E-00	0.95827E-03	0.12621E-02	0.15210E-00	0.13470E-00	-0.10400E 01	0.10000E 01
58	536.36	0.38218E 01	0.67214E 00	0.23204E-02	0.30563E-02	0.36853E-00	0.32637E-00	-0.10680E 01	0.10000E 01
59	539.83	0.65673E 01	0.10690E 01	0.37011E-02	0.48747E-02	0.58610E 00	0.51905E 00	-0.10400E 01	0.10000E 01
60	536.75	0.35647E 01	0.59749E 00	0.20634E-02	0.27177E-02	0.32760E-00	0.29012E-00	-0.10680E 01	0.10000E 01
61	541.14	0.68260E 00	0.11322E-00	0.39243E-03	0.51686E-03	0.62077E-01	0.54975E-01	-0.11220E 01	0.10000E 01
62	544.75	0.10831E 01	0.16405E-00	0.57033E-03	0.75117E-03	0.89945E-01	0.79656E-01	-0.13340E 01	0.10000E 01
63	541.47	0.55533E 00	0.95568E-01	0.33134E-03	0.43641E-03	0.52399E-01	0.46405E-01	-0.11220E 01	0.10000E 01
64	545.00	0.11112E 01	0.16832E-00	0.58531E-03	0.77090E-03	0.92288E-01	0.81731E-01	-0.13340E 01	0.10000E 01
65	541.65	0.10306E 01	0.17759E-00	0.61510E-03	0.81015E-03	0.97259E-01	0.86133E-01	0.14400E 01	0.10000E 01
66	539.42	0.98442E 00	0.16104E-00	0.55738E-03	0.73413E-03	0.88297E-01	0.78196E-01	0.16130E 01	0.10000E 01
67	540.76	0.11387E 01	0.18298E-00	0.63402E-03	0.83507E-03	0.10033E-00	0.88848E-01	0.17200E 01	0.10000E 01
68	527.75	0.97195E 00	0.15917E-00	0.54559E-03	0.71860E-03	0.87272E-01	0.77288E-01	-0.16130E 01	0.10000E 01
69	542.99	0.10187E 01	0.16390E-00	0.56898E-03	0.74940E-03	0.89865E-01	0.79585E-01	-0.18280E 01	0.10000E 01
70	529.76	0.59740E 00	0.87179E-01	0.29932E-03	0.39424E-03	0.47799E-01	0.42331E-01	-0.11650E 01	0.10000E 01
71	544.66	0.43896E-00	0.36941E-01	0.12842E-03	0.16914E-03	0.20255E-01	0.17938E-01	-0.12050E 01	0.10000E 01
72	546.83	0.93454E 00	0.13580E-00	0.47297E-03	0.62294E-03	0.74460E-01	0.65942E-01	-0.12120E 01	0.10000E 01
73	543.22	0.66026E 00	0.97085E-01	0.33709E-03	0.44399E-03	0.53231E-01	0.47141E-01	-0.11650E 01	0.10000E 01
74	545.55	0.32364E-00	0.27250E-01	0.94801E-04	0.12486E-03	0.14941E-01	0.13232E-01	-0.12050E 01	0.10000E 01
75	537.52	0.10613E 01	0.15262E-00	0.52740E-03	0.69463E-03	0.83680E-01	0.74107E-01	-0.12120E 01	0.10000E 01
76	540.83	0.19122E 01	0.28802E-00	0.99805E-03	0.13145E-02	0.15792E-00	0.13985E-00	0.10840E 01	0.10000E 01
77	542.11	0.65143E 00	0.10542E-00	0.36568E-03	0.48163E-03	0.57798E-01	0.51186E-01	0.11220E 01	0.10000E 01
78	536.39	0.11091E 01	0.16469E-00	0.56856E-03	0.74885E-03	0.90296E-01	0.79966E-01	0.13340E 01	0.10000E 01
79	543.85	0.90961E 00	0.15298E-00	0.53146E-03	0.69998E-03	0.83878E-01	0.74283E-01	-0.11890E 01	0.10000E 01
80	539.60	0.10166E 01	0.15276E-00	0.52881E-03	0.69650E-03	0.83759E-01	0.74177E-01	-0.13340E 01	0.10000E 01
81	533.99	0.68053E 00	0.10962E-00	0.37770E-03	0.49747E-03	0.60104E-01	0.53228E-01	-0.11470E 01	0.10000E 01
82	543.08	0.95533E 00	0.16046E-00	0.55707E-03	0.73371E-03	0.87977E-01	0.77913E-01	-0.11890E 01	0.10000E 01
83	539.78	0.18816E 01	0.31544E-00	0.10921E-02	0.14384E-02	0.17295E-00	0.15317E-00	-0.10840E 01	0.10000E 01
84	541.62	0.92571E 00	0.13600E-00	0.47157E-03	0.62110E-03	0.74565E-01	0.66035E-01	-0.11890E 01	0.10000E 01
85	544.14	0.10052E 01	0.14788E-00	0.51386E-03	0.67681E-03	0.81081E-01	0.71806E-01	-0.13090E 01	0.10000E 01
86	546.40	0.10951E 01	0.16352E-00	0.56928E-03	0.74980E-03	0.89656E-01	0.79400E-01	-0.13340E 01	0.10000E 01
87	541.78	0.12436E 01	0.18240E-00	0.63257E-03	0.83315E-03	0.10001E-00	0.88569E-01	0.11990E 01	0.10000E 01
88	538.32	0.10987E 01	0.16221E-00	0.56093E-03	0.73880E-03	0.88941E-01	0.78766E-01	0.12070E 01	0.10000E 01
89	543.17	0.10519E 01	0.15839E-00	0.54993E-03	0.72431E-03	0.86843E-01	0.76909E-01	0.13340E 01	0.10000E 01
90	542.50	0.11813E 01	0.16886E-00	0.58597E-03	0.77178E-03	0.92586E-01	0.81995E-01	0.12070E 01	0.10000E 01
91	545.31	0.10452E 01	0.16284E-00	0.56640E-03	0.74600E-03	0.89284E-01	0.79070E-01	0.12490E 01	0.10000E 01
92	545.24	0.10613E 01	0.16079E-00	0.55922E-03	0.73655E-03	0.88158E-01	0.78073E-01	0.13340E 01	0.10000E 01
93	546.03	0.98182E 00	0.16642E-00	0.57920E-03	0.76287E-03	0.91247E-01	0.80809E-01	0.14900E 01	0.10000E 01
94	-4157.13	0.51854E-02	-0.15591E-02	-0.12202E-05	-0.16071E-05	-0.85485E-03	-0.75706E-03	-0.	0.
95	-4157.13	0.51854E-02	-0.15703E-02	-0.12290E-05	-0.16187E-05	-0.86100E-03	-0.76251E-03	-0.	0.
96	-4157.13	0.51854E-02	-0.15591E-02	-0.12202E-05	-0.16071E-05	-0.85485E-03	-0.75706E-03	-0.	0.
97	-4157.13	0.51854E-02	-0.15591E-02	-0.12202E-05	-0.16071E-05	-0.85485E-03	-0.75706E-03	-0.	0.
98	-4157.13	0.51854E-02	-0.15703E-02	-0.12290E-05	-0.16187E-05	-0.86100E-03	-0.76251E-03	-0.	0.

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
150	2	7.58	157.58	-0.03	-0.	2	C2	2.75	2	10.05	235.00	1664.00	150	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.813632E 02	0.518372E-02	0.444017E 04	0.534534E-05	0.659042E-07	0.362557E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725810E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	536.89	0.23725E 01	0.38577E-00	0.13503E-02	0.17683E-02	0.21151E-00	0.18732E-00	-0.10600E 01	0.10000E 01
100	536.89	0.12494E 01	0.20930E-00	0.73262E-03	0.95939E-03	0.11476E-00	0.10163E-00	-0.10840E 01	0.10000E 01
101	538.66	0.83585E 00	0.13710E-00	0.48060E-03	0.62937E-03	0.75169E-01	0.66570E-01	-0.11080E 01	0.10000E 01
102	538.77	0.10042E 01	0.16421E-00	0.57569E-03	0.75389E-03	0.90034E-01	0.79735E-01	-0.11080E 01	0.10000E 01
103	537.61	0.15070E 01	0.25257E-00	0.88460E-03	0.11584E-02	0.13848E-00	0.12264E-00	-0.10800E 01	0.10000E 01
104	-4157.13	0.51854E-02	-0.23518E-02	-0.18461E-05	-0.24176E-05	-0.12895E-02	-0.11419E-02	0.85000E 00	0.
105	556.34	0.32908E 02	0.49746E 01	0.17704E-01	0.23184E-01	0.27275E 01	0.24155E 01	0.94000E 00	0.10000E 01
106	556.24	0.33230E 02	0.49809E 01	0.17724E-01	0.23211E-01	0.27310E 01	0.24186E 01	0.96000E 00	0.10000E 01
107	545.86	0.30483E 02	0.45427E 01	0.16022E-01	0.20982E-01	0.24907E 01	0.22058E 01	0.98000E 00	0.10000E 01
108	544.39	0.26588E 02	0.39791E 01	0.14017E-01	0.18356E-01	0.21817E 01	0.19321E 01	0.10000E 01	0.10000E 01
109	549.66	0.19958E 02	0.30059E 01	0.10636E-01	0.13929E-01	0.16481E 01	0.14596E 01	0.10200E 01	0.10000E 01
110	558.12	0.31467E 02	0.47616E 01	0.16971E-01	0.22225E-01	0.26107E 01	0.23121E 01	0.80000E-01	0.10000E 01
111	550.62	0.32345E 02	0.48331E 01	0.17116E-01	0.22414E-01	0.26499E 01	0.23468E 01	0.10000E-00	0.10000E 01
112	561.84	0.32597E 02	0.49261E 01	0.17614E-01	0.23067E-01	0.27010E 01	0.23920E 01	0.12000E-00	0.10000E 01
113	557.25	0.31003E 02	0.46890E 01	0.16700E-01	0.21870E-01	0.25709E 01	0.22768E 01	0.14000E-00	0.10000E 01
114	-4157.13	0.51854E-02	-0.22246E-02	-0.17463E-05	-0.22869E-05	-0.12198E-02	-0.10802E-02	0.80000E-01	0.
115	554.68	0.31562E 02	0.47508E 01	0.16883E-01	0.22109E-01	0.26048E 01	0.23068E 01	0.10000E-00	0.10000E 01
116	555.15	0.32043E 02	0.48570E 01	0.17267E-01	0.22612E-01	0.26631E 01	0.23584E 01	0.12000E-00	0.10000E 01
117	539.36	0.32709E 02	0.48978E 01	0.17180E-01	0.22498E-01	0.26854E 01	0.23782E 01	0.14000E-00	0.10000E 01
118	555.67	0.30754E 02	0.46864E 01	0.16668E-01	0.21828E-01	0.25695E 01	0.22756E 01	0.10000E-00	0.10000E 01
119	526.55	0.10049E 03	0.14990E 02	0.52015E-01	0.68116E-01	0.82188E 01	0.72786E 01	0.15000E-00	0.10000E 01
120	565.83	0.27420E 02	0.41879E 01	0.15027E-01	0.19678E-01	0.22962E 01	0.20335E 01	0.20000E-00	0.10000E 01
121	557.99	0.30404E 02	0.46391E 01	0.16533E-01	0.21651E-01	0.25436E 01	0.22526E 01	0.25000E-00	0.10000E 01
122	555.78	0.29335E 02	0.44704E 01	0.15901E-01	0.20824E-01	0.24511E 01	0.21707E 01	0.30000E-00	0.10000E 01
123	556.56	0.29821E 02	0.45692E 01	0.16264E-01	0.21299E-01	0.25053E 01	0.22187E 01	0.35000E-00	0.10000E 01
124	552.10	0.30046E 02	0.46228E 01	0.16392E-01	0.21466E-01	0.25346E 01	0.22447E 01	0.38000E-00	0.10000E 01
125	558.25	0.30805E 02	0.47949E 01	0.17092E-01	0.22383E-01	0.26290E 01	0.23283E 01	0.45000E-00	0.10000E 01
126	557.89	0.28768E 02	0.45354E 01	0.16162E-01	0.21165E-01	0.24867E 01	0.22023E 01	0.61000E 00	0.10000E 01
127	541.56	0.13771E 02	0.21619E 01	0.75972E-02	0.99488E-02	0.11853E 01	0.10497E 01	0.70000E 00	0.10000E 01
128	537.15	0.60161E 01	0.94511E 00	0.33089E-02	0.43332E-02	0.51820E 00	0.45892E-00	0.75000E 00	0.10000E 01
129	555.89	0.24358E 02	0.38669E 01	0.13756E-01	0.18014E-01	0.21202E 01	0.18776E 01	0.70000E 00	0.10000E 01
130	556.99	0.24680E 02	0.39204E 01	0.13960E-01	0.18281E-01	0.21495E 01	0.19036E 01	0.80000E 00	0.10000E 01
131	539.82	0.95611E 01	0.14272E 01	0.50082E-02	0.65584E-02	0.78255E 00	0.69303E 00	0.90000E 00	0.10000E 01
132	555.54	0.22900E 02	0.34602E 01	0.12306E-01	0.16115E-01	0.19972E 01	0.16802E 01	0.90000E 00	0.10000E 01
133	556.03	0.23048E 02	0.34660E 01	0.12331E-01	0.16148E-01	0.19004E 01	0.16830E 01	0.96000E 00	0.10000E 01
134	553.85	0.21713E 02	0.32668E 01	0.11601E-01	0.15192E-01	0.17912E 01	0.15863E 01	0.10000E 01	0.10000E 01
135	-4157.13	0.51854E-02	-0.23181E-02	-0.18197E-05	-0.23830E-05	-0.12710E-02	-0.11256E-02	0.70000E-02	0.
136	539.17	0.17115E 02	0.26228E 01	0.91984E-02	0.12046E-01	0.14381E 01	0.12736F 01	0.70000E-02	0.10000E 01
137	538.35	0.18003E 02	0.27984E 01	0.98071E-02	0.12843E-01	0.15343E 01	0.13588E 01	0.39000E-01	0.10000E 01
138	-4157.13	0.51854E-02	-0.22994E-02	-0.18050F-05	-0.23638E-05	-0.12608E-02	-0.11165E-02	0.78000E-01	0.
139	-4157.13	0.51854E-02	-0.22882E-02	-0.17962E-05	-0.23522E-05	-0.12546E-02	-0.11111E-02	0.11700E-00	0.
140	536.88	0.17999E 02	0.27593E 01	0.96583E-02	0.12648E-01	0.15129E 01	0.13398E 01	0.78000E-01	0.10000E 01
141	-4157.13	0.51854E-02	-0.15703E-02	-0.12327E-05	-0.16143E-05	-0.86100E-03	-0.76251E-03	-0.	0.
142	-4157.13	0.51854E-02	-0.15703E-02	-0.12327E-05	-0.16143E-05	-0.86100E-03	-0.76251E-03	-0.	0.
143	536.10	0.16767E 02	0.25567E 01	0.89432E-02	0.11712E-01	0.14018E 01	0.12415E 01	0.78000E-01	0.10000E 01
144	537.53	0.16406E 02	0.25077E 01	0.87826E-02	0.11501E-01	0.13750E 01	0.12177E 01	0.70000E-02	0.10000E 01
145	536.31	0.15495E 02	0.23579E 01	0.82632E-02	0.10821E-01	0.12928E 01	0.11449E 01	0.70000E-02	0.10000E 01
146	537.21	0.17637E 02	0.26954E 01	0.94373E-02	0.12359E-01	0.14779E 01	0.13088E 01	0.39000E-01	0.10000E 01
147	1085.37	-0.36365E-02	-0.71691E-03	-0.47373E-05	-0.62036E-05	-0.39307E-03	-0.34811E-03	0.78000E-01	0.
148	1126.31	-0.42597E-00	-0.86009E-01	-0.60936E-03	-0.79799E-03	-0.47158E-01	-0.41763E-01	0.11700E-00	0.
149	548.92	0.28433E 02	0.45466E 01	0.16078E-01	0.21055E-01	0.24929E 01	0.22077E 01	0.70000E-02	0.10000E 01
150	552.02	0.28451E 02	0.45790E 01	0.16236E-01	0.21261E-01	0.25106E 01	0.22234E 01	0.70000E-02	0.10000E 01
151	550.78	0.27609E 02	0.44404E 01	0.15727E-01	0.20596E-01	0.24345E 01	0.21561E 01	0.70000E-02	0.10000E 01
152	551.00	0.29642E 02	0.45953E 01	0.16279E-01	0.21318E-01	0.25195E 01	0.22313E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.13		0.51854E-02	-0.22882E-02	-0.17962E-05	-0.23522E-05	-0.12546E-02	-0.11111E-02	0.39000E-01	0.
154	549.43	0.29209E 02	0.44946E 01	0.15901E-01	0.20823E-01	0.24644E 01	0.21825E 01	0.78000E-01	0.10000E 01
155-4157.13		0.51854E-02	-0.23742E-02	-0.18637E-05	-0.24406E-05	-0.13018E-02	-0.11528E-02	0.39000E-01	0.
156-4157.13		0.51854E-02	-0.23667E-02	-0.18579E-05	-0.24330E-05	-0.12977E-02	-0.11492E-02	0.39000E-01	0.
157	546.41	0.27041E 02	0.43385E 01	0.15309E-01	0.20048E-01	0.23788E 01	0.21066E 01	0.78000E-01	0.10000E 01
158-4157.13		0.51854E-02	-0.23817E-02	-0.18696E-05	-0.24483E-05	-0.13059E-02	-0.11565E-02	0.39000E-01	0.
159-4157.13		0.51854E-02	-0.23817E-02	-0.18696E-05	-0.24483E-05	-0.13059E-02	-0.11565E-02	0.78000E-01	0.
160-4157.13		0.51854E-02	-0.23742E-02	-0.18637E-05	-0.24406E-05	-0.13018E-02	-0.11528E-02	0.39000E-01	0.
161	555.12	0.23226E 02	0.36561E 01	0.12998E-01	0.17021E-01	0.20046E 01	0.17753E 01	0.43000E-01	0.10000E 01
162	555.36	0.23185E 02	0.36620E 01	0.13021E-01	0.17052E-01	0.20078E 01	0.17781E 01	0.43000E-01	0.10000E 01
163	553.90	0.22917E 02	0.36225E 01	0.12865E-01	0.16847E-01	0.19862E 01	0.17590E 01	0.85000E-01	0.10000E 01
164	555.99	0.22512E 02	0.35454E 01	0.12614E-01	0.16518E-01	0.19439E 01	0.17215E 01	0.12800E-00	0.10000E 01
165-4157.13		0.51854E-02	-0.23256E-02	-0.18256E-05	-0.23907E-05	-0.12751E-02	-0.11292E-02	0.43000E-01	0.
166	552.37	0.22777E 02	0.35799E 01	0.12697E-01	0.16627E-01	0.19628E 01	0.17383E 01	0.85000E-01	0.10000E 01
167-4157.13		0.51854E-02	-0.23181E-02	-0.18197E-05	-0.23830E-05	-0.12710E-02	-0.11256E-02	0.43000E-01	0.
168	547.16	0.17433E 02	0.27629E 01	0.97558E-02	0.12776E-01	0.15149E 01	0.13416E 01	0.12800E-00	0.10000E 01
169	557.59	0.22995E 02	0.36539E 01	0.13018E-01	0.17047E-01	0.20034E 01	0.17742E 01	0.85000E-01	0.10000E 01
170	557.98	0.23509E 02	0.37184E 01	0.13252E-01	0.17354E-01	0.20388E 01	0.18056E 01	0.12600E-00	0.10000E 01
171	555.16	0.23369E 02	0.36787E 01	0.13078E-01	0.17127E-01	0.20170E 01	0.17862E 01	0.85000E-01	0.10000E 01
172-4157.13		0.51854E-02	-0.23293E-02	-0.18285E-05	-0.23945E-05	-0.12772E-02	-0.11311E-02	0.43000E-01	0.
173	559.13	0.23806E 02	0.37860E 01	0.13506E-01	0.17687E-01	0.20758E 01	0.18384E 01	0.12800E-00	0.10000E 01
174-4157.13		0.51854E-02	-0.23256E-02	-0.18256E-05	-0.23907E-05	-0.12751E-02	-0.11292E-02	0.85000E-01	0.
175	558.77	0.24641E 02	0.38867E 01	0.13861E-01	0.18152E-01	0.21311E 01	0.18873E 01	0.43000E-01	0.10000E 01
176	558.89	0.24653E 02	0.38889E 01	0.13870E-01	0.18164E-01	0.21322E 01	0.18883E 01	0.43000E-01	0.10000E 01
177	559.33	0.24419E 02	0.38716E 01	0.13814E-01	0.18090E-01	0.21227E 01	0.18799E 01	0.12800E-00	0.10000E 01
178	558.91	0.24463E 02	0.38714E 01	0.13808E-01	0.18082E-01	0.21226E 01	0.18798E 01	0.85000E-01	0.10000E 01
179	560.27	0.24831E 02	0.39326E 01	0.14043E-01	0.18390E-01	0.21562E 01	0.19096E 01	0.70000E-02	0.10000E 01
180-4157.13		0.51854E-02	-0.23368E-02	-0.18344E-05	-0.24022E-05	-0.12813E-02	-0.11347E-02	0.70000E-02	0.
181	556.08	0.25120E 02	0.39883E 01	0.14190E-01	0.18583E-01	0.21867E 01	0.19366E 01	0.70000E-02	0.10000E 01
182-4157.13		0.51854E-02	-0.23443E-02	-0.18403E-05	-0.24099E-05	-0.12854E-02	-0.11383E-02	0.70000E-02	0.
183	559.32	0.24410E 02	0.38701E 01	0.13808E-01	0.18082E-01	0.21219E 01	0.18792E 01	0.32000E-01	0.10000E 01
184	562.00	0.26260E 02	0.41964E 01	0.15007E-01	0.19652E-01	0.23008E 01	0.20376E 01	0.32000E-01	0.10000E 01
185	550.46	0.21163E 02	0.33603E 01	0.11898E-01	0.15582E-01	0.18424E 01	0.16316E 01	0.64000E-01	0.10000E 01
186	558.35	0.26260E 02	0.41746E 01	0.14882E-01	0.19489E-01	0.22889E 01	0.20270E 01	0.64000E-01	0.10000E 01
187	560.10	0.26048E 02	0.41582E 01	0.14846E-01	0.19442E-01	0.22799E 01	0.20191E 01	0.70000E-02	0.10000E 01
188	559.38	0.25062E 02	0.40628E 01	0.14497E-01	0.18984E-01	0.22276E 01	0.19728E 01	0.70000E-02	0.10000E 01
189	539.10	0.42436E 01	0.69409E 00	0.24340E-02	0.31875E-02	0.38056E-00	0.33703E-00	0.10600E 01	0.10000E 01
190	538.56	0.24618E 01	0.41058E-00	0.14392E-02	0.18847E-02	0.22512E-00	0.19937E-00	0.10840E 01	0.10000E 01
191	538.84	0.12223E 01	0.20500E-00	0.71875E-03	0.94123E-03	0.11240E-00	0.99542E-01	0.11080E 01	0.10000E 01
192	538.21	0.14779E 01	0.24644E-00	0.86357E-03	0.11309E-02	0.13512E-00	0.11966E-00	0.11080E 01	0.10000E 01
193	545.63	0.11538E 01	0.19028E-00	0.67098E-03	0.87868E-03	0.10433E-00	0.92393E-01	0.16580E 01	0.10000E 01
194	545.22	0.11761E 01	0.19303E-00	0.68044E-03	0.89106E-03	0.10583E-00	0.93727E-01	0.11700E 01	0.10000E 01
195	545.77	0.12473E 01	0.20571E-00	0.72550E-03	0.95008E-03	0.11279E-00	0.99688E-01	0.16740E 01	0.10000E 01
196	547.53	0.12706E 01	0.20881E-00	0.73753E-03	0.96583E-03	0.11449E-00	0.10139E-00	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
155	2	7.57	157.57	-0.	-0.	3	C2	2.70	2	10.05	235.00	1659.20	155	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.811106E 02	0.518587E-02	0.443327E 04	0.536421E-05	0.656996E-07	0.364403E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725638E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	566.64	0.19388E 02	0.30466E 01	0.10991E-01	0.14365E-01	0.16704E 01	0.14793E 01	0.10000E 01	0.10000E 01
198	567.48	0.19323E 02	0.29391E 01	0.10611E-01	0.13868E-01	0.16115E 01	0.14271E 01	0.12000E 01	0.10000E 01
199	544.63	0.10007E 02	0.15837E 01	0.56058E-02	0.73267E-02	0.86833E 00	0.76900E 00	0.13000E 01	0.10000E 01
200	544.44	0.76571E 00	0.11209E-00	0.39669E-03	0.51847E-03	0.61457E-01	0.54426E-01	0.11890E 01	0.10000E 01
201	547.29	0.76935E 00	0.12797E-00	0.45401E-03	0.59337E-03	0.70165E-01	0.62138E-01	0.14540E 01	0.10000E 01
202	544.90	0.95636E 00	0.15766E-00	0.55819E-03	0.72953E-03	0.86442E-01	0.76553E-01	0.17040E 01	0.10000E 01
203	545.45	0.10244E 01	0.16893E-00	0.59837E-03	0.78206E-03	0.92621E-01	0.82026E-01	0.20410E 01	0.10000E 01
204	544.96	-0.63376E-01	-0.48543E-02	-0.17188E-04	-0.22464E-04	-0.26616E-02	-0.23571E-02	0.20700E 01	0.
205	543.95	0.11740E-00	0.10267E-01	0.36322E-04	0.47472E-04	0.56295E-02	0.49855E-02	0.21880E 01	0.10000E 01
206	546.20	0.13319E 01	0.21973E-00	0.77884E-03	0.10179E-02	0.12048E-00	0.10670E-00	0.22480E 01	0.10000E 01
207	546.40	0.10909E 01	0.17696E-00	0.62732E-03	0.81988E-03	0.97023E-01	0.85924E-01	0.20700E 01	0.10000E 01
208	544.56	0.35740E-00	0.31880E-01	0.11284E-03	0.14748E-03	0.17480E-01	0.15480E-01	0.20700E 01	0.10000E 01
209	542.95	0.34130E-00	0.27542E-01	0.97349E-04	0.12723E-03	0.15101E-01	0.13373E-01	0.21880E 01	0.10000E 01
210	544.43	0.10629E 01	0.17651E-00	0.62468E-03	0.81643E-03	0.96777E-01	0.85706E-01	0.20700E 01	0.10000E 01
211	546.13	0.13044E 01	0.21683E-00	0.76850E-03	0.10044E-02	0.11889E-00	0.10529E-00	0.21880E 01	0.10000E 01
212	545.47	0.14270E 01	0.23424E-00	0.82973E-03	0.10844E-02	0.12843E-00	0.11374E-00	0.22390E 01	0.10000E 01
213	544.26	0.14670E 01	0.24064E-00	0.85152E-03	0.11129E-02	0.13194E-00	0.11685E-00	0.21880E 01	0.10000E 01
214	545.42	0.14390E 01	0.23910E-00	0.84691E-03	0.11069E-02	0.13110E-00	0.11610E-00	0.22480E 01	0.10000E 01
215	543.33	0.51273E 00	0.77207E-01	0.27299E-03	0.35679E-03	0.42332E-01	0.37489E-01	0.11650E 01	0.10000E 01
216	745.67	-0.71063E 00	-0.66403E-01	-0.28414E-03	-0.37136E-03	-0.36408E-01	-0.32243E-01	0.12050E 01	0.
217	545.55	0.63585E 00	0.93136E-01	0.32993E-03	0.43121E-03	0.51065E-01	0.45224E-01	0.12120E 01	0.10000E 01
218	548.12	-0.20161E 01	-0.29726E-00	-0.10554E-02	-0.13793E-02	-0.16299E-00	-0.14434E-00	0.11890E 01	0.
219	543.66	0.63221E 00	0.10632E-00	0.37601E-03	0.49144E-03	0.58292E-01	0.51624E-01	0.14540E 01	0.10000E 01
220	542.64	0.82753E 00	0.14438E-00	0.51021E-03	0.66683E-03	0.79164E-01	0.70108E-01	0.17040E 01	0.10000E 01
221	543.56	0.12270E 01	0.20522E-00	0.72574E-03	0.94852E-03	0.11252E-00	0.99647E-01	0.20410E 01	0.10000E 01
222	519.42	0.14842E 01	0.24744E-00	0.85741E-03	0.11206E-02	0.13567E-00	0.12015E-00	0.22480E 01	0.10000E 01
223	542.12	0.57766E 00	0.86926E-01	0.30703E-03	0.40128E-03	0.47661E-01	0.42209E-01	0.11650E 01	0.10000E 01
224	543.38	0.32831E-00	0.27610E-01	0.97625E-04	0.12759E-03	0.15138E-01	0.13406E-01	0.12050E 01	0.10000E 01
225	543.82	0.53350E 00	0.78069E-01	0.27615E-03	0.36092E-03	0.42805E-01	0.37908E-01	0.12120E 01	0.10000E 01
226	543.94	0.72052E 00	0.12162E-00	0.43026E-03	0.56233E-03	0.66685E-01	0.59056E-01	0.14540E 01	0.10000E 01
227	540.59	0.80520E 00	0.13019E-00	0.45924E-03	0.60021E-03	0.71380E-01	0.63214E-01	0.17040E 01	0.10000E 01
228	538.03	0.86390E 00	0.14230E-00	0.50087E-03	0.65463E-03	0.78022E-01	0.69097E-01	0.18780E 01	0.10000E 01
229	542.15	0.13143E 01	0.21798E-00	0.76997E-03	0.10063E-02	0.11952E-00	0.10585E-00	0.21880E 01	0.10000E 01
230	541.50	0.67740E 00	0.10019E-00	0.35371E-03	0.46228E-03	0.54935E-01	0.48650E-01	0.11890E 01	0.10000E 01
231	535.08	0.74130E 00	0.13102E-00	0.46003E-03	0.60124E-03	0.71838E-01	0.63621E-01	0.14540E 01	0.10000E 01
232	543.92	0.82234E 00	0.13487E-00	0.47710E-03	0.62355E-03	0.73946E-01	0.65487E-01	0.16130E 01	0.10000E 01
233	542.91	0.89091E 00	0.14715E-00	0.52012E-03	0.67977E-03	0.80683E-01	0.71453E-01	0.17040E 01	0.10000E 01
234	539.92	0.95532E 00	0.15825E-00	0.55791E-03	0.72917E-03	0.86786E-01	0.76841E-01	0.18780E 01	0.10000E 01
235	543.41	0.86286E 00	0.14299E-00	0.50563E-03	0.66084E-03	0.78403E-01	0.69434E-01	0.14540E 01	0.10000E 01
236	543.50	0.83793E 00	0.13739E-00	0.48585E-03	0.63499E-03	0.75330E-01	0.66712E-01	0.17040E 01	0.10000E 01
237	526.44	0.10696E 01	0.17584E-00	0.61288E-03	0.80102E-03	0.96409E-01	0.85380E-01	0.21880E 01	0.10000E 01
238	543.67	0.49670E-00	0.44462E-01	0.15725E-03	0.20552E-03	0.24378E-01	0.21589E-01	0.20700E 01	0.10000E 01
239	542.55	0.80000E 00	0.14698E-00	0.51335E-03	0.67124E-03	0.79641E-01	0.70503E-01	0.11890E 01	0.10000E 01
240	546.56	0.86130E 00	0.14508E-00	0.51438E-03	0.67227E-03	0.79544E-01	0.70445E-01	0.14540E 01	0.10000E 01
241	544.14	0.88052E 00	0.14509E-00	0.51337E-03	0.67096E-03	0.79553E-01	0.70452E-01	0.17040E 01	0.10000E 01
242	544.36	0.93818E 00	0.15580E-00	0.55135E-03	0.72059E-03	0.85422E-01	0.75650E-01	0.18780E 01	0.10000E 01
243	526.03	0.88519E 00	0.14549E-00	0.50692E-03	0.66253E-03	0.79768E-01	0.70643E-01	0.20410E 01	0.10000E 01
244	544.63	-0.48830E-01	-0.44174E-02	-0.15636E-04	-0.20436E-04	-0.24220E-02	-0.21450E-02	0.20700E 01	0.
245	544.23	0.90753E 00	0.74432E-01	0.26358E-03	0.34422E-03	0.40810E-01	0.36142E-01	0.21870E 01	0.10000E 01
246	538.45	0.10914E 01	0.18394E-00	0.64767E-03	0.84648E-03	0.10085E-00	0.89315E-01	0.22100E 01	0.10000E 01
247	546.39	0.80623E 00	0.13241E-00	0.46939E-03	0.61348E-03	0.72598E-01	0.64293E-01	0.14540E 01	0.10000E 01
248	540.37	0.90805E 00	0.15046E-00	0.53064E-03	0.69353E-03	0.82494E-01	0.73057E-01	0.17040E 01	0.10000E 01
249	542.02	0.25195E-00	0.21172E-01	0.74774E-04	0.97728E-04	0.11608E-01	0.10280E-01	0.18780E 01	0.10000E 01
250	544.25	0.31377E-00	0.29734E-01	0.91061E-04	0.11901E-03	0.14110E-01	0.12496E-01	0.21880E 01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	546.49	0.89247E 00	0.15109E-00	0.53566E-03	0.70009E-03	0.82840E-01	0.73364E-01	0.14540E 01	0.10000E 01
252	543.14	0.93351E 00	0.15694E-00	0.55481E-03	0.72512E-03	0.86048E-01	0.76205E-01	0.16130E 01	0.10000E 01
253	543.79	0.23378E-01	0.20644E-02	0.73019E-05	0.95434E-05	0.11319E-02	0.10024E-02	0.17060E 01	0.
254	543.98	0.12457E 01	0.20682E-00	0.73169E-03	0.95629E-03	0.11340E-00	0.10043E-00	0.21880E 01	0.10000E 01
255	531.01	0.39896E-00	0.36636E-01	0.12819E-03	0.16754E-03	0.20087E-01	0.17789E-01	0.16580E 01	0.10000E 01
256	544.67	0.18390E-00	0.15476E-01	0.54783E-04	0.71600E-04	0.84854E-02	0.75148E-02	0.17920E 01	0.10000E 01
257	538.98	0.13740E 01	0.23094E-00	0.81354E-03	0.10633E-02	0.12662E-00	0.11214E-00	0.10840E 01	0.10000E 01
258	546.09	0.86649E 00	0.14775E-00	0.52366E-03	0.68440E-03	0.81012E-01	0.71744E-01	0.14540E 01	0.10000E 01
259	543.51	0.91481E 00	0.15184E-00	0.53696E-03	0.70179E-03	0.83254E-01	0.73730E-01	0.16130E 01	0.10000E 01
260	544.79	0.70182E 00	0.11480E-00	0.40642E-03	0.53118E-03	0.62945E-01	0.55745E-01	0.17040E 01	0.10000E 01
261	545.10	0.69247E 00	0.11452E-00	0.40551E-03	0.52999E-03	0.62788E-01	0.55605E-01	0.18780E 01	0.10000E 01
262	544.22	0.10790E 01	0.18243E-00	0.64551E-03	0.84366E-03	0.10002E-00	0.88581E-01	0.20410E 01	0.10000E 01
263	544.67	0.94130E 00	0.15967E-00	0.56519E-03	0.73869E-03	0.87544E-01	0.77530E-01	0.14540E 01	0.10000E 01
264	544.35	0.93818E 00	0.15509E-00	0.54882E-03	0.71729E-03	0.85032E-01	0.75305E-01	0.16130E 01	0.10000E 01
265	543.50	0.10338E 01	0.16741E-00	0.59203E-03	0.77376E-03	0.91792E-01	0.81292E-01	0.17040E 01	0.10000E 01
266	543.84	0.10213E 01	0.16878E-00	0.59702E-03	0.78028E-03	0.92539E-01	0.81953E-01	0.18780E 01	0.10000E 01
267	544.61	0.10764E 01	0.18149E-00	0.64239E-03	0.83959E-03	0.99507E-01	0.88124E-01	0.20410E 01	0.10000E 01
268	544.17	0.97247E 00	0.16074E-00	0.56874E-03	0.74333E-03	0.88131E-01	0.78049E-01	0.16130E 01	0.10000E 01
269	543.41	0.11283E 01	0.18272E-00	0.64609E-03	0.84442E-03	0.10018E-00	0.88722E-01	0.18280E 01	0.10000E 01
270	544.19	0.10919E 01	0.17966E-00	0.63571E-03	0.83085E-03	0.98507E-01	0.87238E-01	0.18780E 01	0.10000E 01
271	542.09	0.11979E 01	0.20127E-00	0.71091E-03	0.92914E-03	0.11036E-00	0.97733E-01	0.20410E 01	0.10000E 01
272	543.92	0.10608E 01	0.17986E-00	0.63626E-03	0.83158E-03	0.98615E-01	0.87334E-01	0.16130E 01	0.10000E 01
273	543.46	0.88260E 00	0.14694E-00	0.51960E-03	0.67910E-03	0.80565E-01	0.71349E-01	0.17200E 01	0.10000E 01
274	542.60	0.10914E 01	0.17611E-00	0.62231E-03	0.81334E-03	0.96561E-01	0.85515E-01	0.18280E 01	0.10000E 01
275	542.42	0.11174E 01	0.18395E-00	0.64990E-03	0.84939E-03	0.10086E-00	0.89320E-01	0.18780E 01	0.10000E 01
276	-4157.09	0.10379E-01	-0.49888E-02	-0.39202E-05	-0.51236E-05	-0.27353E-02	-0.24224E-02	0.20600E 01	0.
277	543.41	0.47897E-00	0.40280E-01	0.14243E-03	0.18615E-03	0.22085E-01	0.19559E-01	0.21000E 01	0.10000E 01
278	-4157.09	0.10379E-01	-0.24951E-02	-0.19607E-05	-0.25626E-05	-0.13681E-02	-0.12116E-02	0.21870E 01	0.
279	545.28	0.11906E 01	0.20143E-00	0.71341E-03	0.93240E-03	0.11044E-00	0.97809E-01	0.21950E 01	0.10000E 01
280	543.96	0.10805E 01	0.18076E-00	0.63946E-03	0.83576E-03	0.99108E-01	0.87770E-01	0.18780E 01	0.10000E 01
281	544.17	0.11418E 01	0.19305E-00	0.68307E-03	0.89275E-03	0.10585E-00	0.93740E-01	0.20600E 01	0.10000E 01
282	542.79	0.10930E 01	0.17831E-00	0.63018E-03	0.82363E-03	0.97767E-01	0.86583E-01	0.18280E 01	0.10000E 01
283	543.18	0.11112E 01	0.18681E-00	0.66044E-03	0.86317E-03	0.10243E-00	0.90710E-01	0.20600E 01	0.10000E 01
284	544.15	0.85766E 00	0.13895E-00	0.49163E-03	0.64254E-03	0.76183E-01	0.67468E-01	0.17200E 01	0.10000E 01
285	544.33	0.85870E 00	0.14151E-00	0.50078E-03	0.65451E-03	0.77590E-01	0.68714E-01	0.18780E 01	0.10000E 01
286	543.09	0.67065E 00	0.62005E-01	0.21919E-03	0.28648E-03	0.33997E-01	0.30108E-01	0.16580E 01	0.10000E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.22501E-05	-0.29408E-05	-0.18508E-03	-0.16391E-03	0.17920E 01	0.
288	542.85	0.97039E 00	0.15979E-00	0.56474E-03	0.73810E-03	0.87609E-01	0.77587E-01	0.16130E 01	0.10000E 01
289	544.29	0.16105E-01	0.13551E-02	0.47952E-05	0.62672E-05	0.74298E-03	0.65799E-03	0.17060E 01	0.
290	541.04	0.19013E-00	0.15968E-01	0.56349E-04	0.73647E-04	0.87552E-02	0.77536E-02	0.18780E 01	0.10000E 01
291	542.88	0.75013E 00	0.12295E-00	0.43456E-03	0.56796E-03	0.67414E-01	0.59702E-01	0.17200E 01	0.10000E 01
292	543.60	0.99013E 00	0.17060E-00	0.60334E-03	0.78854E-03	0.93537E-01	0.82837E-01	0.14400E 01	0.10000E 01
293	539.39	0.88831E 00	0.14353E-00	0.50578E-03	0.66104E-03	0.78695E-01	0.69692E-01	0.17200E 01	0.10000E 01
294	544.45	0.10462E 01	0.17349E-00	0.61399E-03	0.80247E-03	0.95120E-01	0.84239E-01	0.16780E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)
142	2	11.63	161.63	-0.	-0.	1	C2	2.70	2	10.05	235.00	1680.00

(OFF) GRP	CONFIG	TIME
142	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.822126E 02	0.517648E-02	0.446329E 04	0.528273E-05	0.665922E-07	0.356454E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726381E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	574.77	0.23508E 02	0.31193E 01	0.11103E-01	0.14636E-01	0.17103E 01	0.15146E 01	-0.	0.10000E 01
2	-2810.13	-0.75062E 03	0.15649E 03	0.15277E-00	0.20138E-00	0.85800E 02	0.75985E 02	-0.30000E-01	0.
3	-4157.09	0.10379E-01	-0.44754E-02	-0.35011E-05	-0.46151E-05	-0.24538E-02	-0.21731E-02	-0.60000E-01	0.
4	-4157.09	0.10379E-01	-0.45906E-02	-0.35912E-05	-0.47339E-05	-0.25170E-02	-0.22291E-02	-0.90000E-01	0.
5	552.42	0.19473E 02	0.31051E 01	0.10844E-01	0.14294E-01	0.17025E 01	0.15077E 01	-0.20000E-00	0.10000E 01
6	541.76	0.17892E 02	0.28361E 01	0.98162E-02	0.12940E-01	0.15550E 01	0.13771E 01	-0.40000E-00	0.10000E 01
7	539.91	0.16423E 02	0.26129E 01	0.90298E-02	0.11903E-01	0.14326E 01	0.12688E 01	-0.60000E 00	0.10000E 01
8	-4157.09	0.10379E-01	-0.47298E-02	-0.37001E-05	-0.48775E-05	-0.25933E-02	-0.22967E-02	-0.80000E 00	0.
9	542.53	0.17797E 02	0.27909E 01	0.96660E-02	0.12742E-01	0.15302E 01	0.13552E 01	-0.90000E 00	0.10000E 01
10	547.52	0.17044E 02	0.27147E 01	0.94414E-02	0.12446E-01	0.14884E 01	0.13182E 01	-0.98000E 00	0.10000E 01
11	543.58	0.65818E 00	0.11340E-00	0.39310E-03	0.51819E-03	0.62178E-01	0.55065E-01	-0.11220E 01	0.10000E 01
12	546.11	0.11377E 01	0.16727E-00	0.58105E-03	0.76595E-03	0.91711E-01	0.81220E-01	-0.11890E 01	0.10000E 01
13	546.42	0.12260E 01	0.18586E-00	0.64580E-03	0.85129E-03	0.10190E-00	0.90247E-01	-0.13340E 01	0.10000E 01
14	544.27	0.10592E 01	0.18257E-00	0.63324E-03	0.83474E-03	0.10010E-00	0.88651E-01	-0.14400E 01	0.10000E 01
15	-4157.09	0.10379E-01	-0.41161E-02	-0.32200E-05	-0.42447E-05	-0.22568E-02	-0.19987E-02	0.30000E-01	0.
16	-4157.09	0.10379E-01	-0.44754E-02	-0.35011E-05	-0.46151E-05	-0.24538E-02	-0.21731E-02	0.60000E-01	0.
17	1126.38	0.13504E-01	0.27330E-02	0.18779E-04	0.24755E-04	0.14985E-02	0.13270E-02	0.90000E-01	0.
18	565.95	0.23164E 02	0.37215E 01	0.13147E-01	0.17330E-01	0.20404E 01	0.18070E 01	0.20000E-00	0.10000E 01
19	571.47	0.26285E 02	0.42357E 01	0.15034E-01	0.19818E-01	0.23224E 01	0.20567E 01	0.40000E-00	0.10000E 01
20	-4157.09	0.10379E-01	-0.47298E-02	-0.37001E-05	-0.48775E-05	-0.25933E-02	-0.22967E-02	0.60000E 00	0.
21	-4157.09	0.10379E-01	-0.44529E-02	-0.34835E-05	-0.45919E-05	-0.24415E-02	-0.21622E-02	0.92000E 00	0.
22	572.03	0.11137E 02	0.16982E 01	0.60306E-02	0.79495E-02	0.93113E 00	0.82461E 00	0.10400E 01	0.10000E 01
23	545.65	0.11140E 02	0.16785E 01	0.58285E-02	0.76831E-02	0.92030E 00	0.81502E 00	0.10600E 01	0.10000E 01
24	542.34	0.70545E 01	0.11115E 01	0.38489E-02	0.50736E-02	0.60942E 00	0.53970E 00	0.10840E 01	0.10000E 01
25	544.68	0.82805E 00	0.12228E-00	0.42425E-03	0.55925E-03	0.67042E-01	0.59373E-01	0.12070E 01	0.10000E 01
26	545.69	0.76156E 00	0.11867E-00	0.41211E-03	0.54324E-03	0.65068E-01	0.57625E-01	0.12490E 01	0.10000E 01
27	545.98	0.82441E 00	0.12641E-00	0.43907E-03	0.57878E-03	0.69308E-01	0.61380E-01	0.13340E 01	0.10000E 01
28	545.09	0.76623E 00	0.13058E-00	0.45323E-03	0.59745E-03	0.71598E-01	0.63407E-01	0.14540E 01	0.10000E 01
29	544.01	0.10436E 01	0.17249E-00	0.59813E-03	0.78845E-03	0.94572E-01	0.83754E-01	0.16580E 01	0.10000E 01
30	544.41	0.17491E 01	0.29267E-00	0.10152E-02	0.13383E-02	0.16047E-00	0.14211E-00	0.20410E 01	0.10000E 01
31	546.40	0.20878E 01	0.34974E-00	0.12152E-02	0.16019E-02	0.19176E-00	0.16982E-00	0.22480E 01	0.10000E 01
32	-4157.09	0.10379E-01	-0.44799E-02	-0.35046E-05	-0.46197E-05	-0.24563E-02	-0.21753E-02	-0.60000E-01	0.
33	-4157.09	0.10379E-01	-0.41161E-02	-0.32200E-05	-0.42447E-05	-0.22568E-02	-0.19987E-02	-0.30000E-01	0.
34	-4157.09	0.10379E-01	-0.44799E-02	-0.35046E-05	-0.46197E-05	-0.24563E-02	-0.21753E-02	0.30000E-01	0.
35	-4157.09	0.10379E-01	-0.45906E-02	-0.35912E-05	-0.47339E-05	-0.25170E-02	-0.22291E-02	0.60000E-01	0.
36	540.42	0.18293E 02	0.28976E 01	0.10018E-01	0.13205E-01	0.15887E 01	0.14070E 01	-0.86800E 00	0.10000E 01
37	543.16	0.17713E 02	0.27339E 01	0.94737E-02	0.12488E-01	0.14990E 01	0.13275E 01	-0.91100E 00	0.10000E 01
38	543.74	0.18472E 02	0.29033E 01	0.10065E-01	0.13268E-01	0.15918E 01	0.14097E 01	-0.95300E 00	0.10000E 01
39	-4157.09	0.10379E-01	-0.46774E-02	-0.36591E-05	-0.48235E-05	-0.25646E-02	-0.22712E-02	0.51000E-01	0.
40	-4157.09	0.10379E-01	-0.46774E-02	-0.36591E-05	-0.48235E-05	-0.25646E-02	-0.22712E-02	0.29000E-01	0.
41	-4157.09	0.10379E-01	-0.46505E-02	-0.36381E-05	-0.47957E-05	-0.25498E-02	-0.22581E-02	0.70000E-02	0.
42	542.31	0.18611E 02	0.29323E 01	0.10154E-01	0.13385E-01	0.16077E 01	0.14238E 01	-0.86800E 00	0.10000E 01
43	542.76	0.18505E 02	0.29238E 01	0.10128E-01	0.13351E-01	0.16031E 01	0.14197E 01	-0.91100E 00	0.10000E 01
44	548.62	0.26093E 02	0.41125E 01	0.14316E-01	0.18871E-01	0.22548E 01	0.19969E 01	-0.95300E 00	0.10000E 01
45	540.99	0.68525E 01	0.11161E 01	0.38605E-02	0.50890E-02	0.61195E 00	0.54195E 00	-0.10400E 01	0.10000E 01
46	-4157.09	0.10379E-01	-0.46894E-02	-0.36685E-05	-0.48358E-05	-0.25712E-02	-0.22770E-02	0.70000E-02	0.
47	-4157.09	0.10379E-01	-0.46894E-02	-0.36685E-05	-0.48358E-05	-0.25712E-02	-0.22770E-02	0.29000E-01	0.
48	540.66	0.16567E 02	0.26245E 01	0.90755E-02	0.11963E-01	0.14390E 01	0.12744E 01	0.51000E-01	0.10000E 01
49	542.66	0.17163E 02	0.26960E 01	0.93383E-02	0.12310E-01	0.14782E 01	0.13091E 01	0.70000E-02	0.10000E 01
50	542.84	0.16666E 02	0.26266E 01	0.90995E-02	0.11995E-01	0.14402E 01	0.12754E 01	0.29000E-01	0.10000E 01
51	-4157.09	0.10379E-01	-0.46625E-02	-0.36474E-05	-0.48080E-05	-0.25564E-02	-0.22639E-02	0.51000E-01	0.
52	-4157.09	0.10379E-01	-0.46894E-02	-0.36685E-05	-0.48358E-05	-0.25712E-02	-0.22770E-02	-0.86800E 00	0.
53	544.37	0.17798E 02	0.28253E 01	0.98002E-02	0.12919E-01	0.15491E 01	0.13719E 01	-0.91100E 00	0.10000E 01
54	546.08	0.18208E 02	0.28656E 01	0.99541E-02	0.13121E-01	0.15712E 01	0.13914E 01	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	540.03	0.46390E 01	0.75517E 00	0.26100E-02	0.34405E-02	0.41405E-00	0.36669E-00	-0.10400E 01	0.10000E 01
56	539.72	0.24343E 01	0.40871E-00	0.14122E-02	0.18616E-02	0.22409E-00	0.19846E-00	-0.10680E 01	0.10000E 01
57	537.10	0.19179E 01	0.31170E-00	0.10747E-02	0.14166E-02	0.17090E-00	0.15135E-00	-0.10400E 01	0.10000E 01
58	536.60	0.42478E 01	0.74716E 00	0.25750E-02	0.33943E-02	0.40966E-00	0.36280E-00	-0.10680E 01	0.10000E 01
59	540.09	0.69044E 01	0.11240E 01	0.38849E-02	0.51211E-02	0.61628E 00	0.54578E 00	-0.10400E 01	0.10000E 01
60	537.54	0.38826E 01	0.65107E 00	0.22455E-02	0.29601E-02	0.35698E-00	0.31614E-00	-0.10680E 01	0.10000E 01
61	541.82	0.80675E 00	0.13386E-00	0.46334E-03	0.61078E-03	0.73395E-01	0.64999E-01	-0.11220E 01	0.10000E 01
62	545.73	0.12883E 01	0.19524E-00	0.67800E-03	0.89375E-03	0.10705E-00	0.94800E-01	-0.13340E 01	0.10000E 01
63	542.23	0.72312E 00	0.12450E-00	0.43107E-03	0.56824E-03	0.68260E-01	0.60452E-01	-0.11220E 01	0.10000E 01
64	546.26	0.12307E 01	0.18655E-00	0.64812E-03	0.85435E-03	0.10228E-00	0.90583E-01	-0.13340E 01	0.10000E 01
65	542.78	0.11818E 01	0.20353E-00	0.70506E-03	0.92941E-03	0.11159E-00	0.98829E-01	0.14400E 01	0.10000E 01
66	540.56	0.11481E 01	0.18793E-00	0.64980E-03	0.85657E-03	0.10304E-00	0.91253E-01	0.16130E 01	0.10000E 01
67	541.79	0.11792E 01	0.18960E-00	0.65625E-03	0.86507E-03	0.10396E-00	0.92064E-01	0.17200E 01	0.10000E 01
68	528.88	0.11662E 01	0.19111E-00	0.65442E-03	0.86266E-03	0.10478E-00	0.92797E-01	-0.16130E 01	0.10000E 01
69	543.91	0.12275E 01	0.19760E-00	0.68516E-03	0.90318E-03	0.10834E-00	0.95949E-01	-0.18280E 01	0.10000E 01
70	530.57	0.76208E 00	0.11126E-00	0.38153E-03	0.50293E-03	0.61004E-01	0.54025E-01	-0.11650E 01	0.10000E 01
71	545.96	0.42961E-00	0.36181E-01	0.12567E-03	0.16566E-03	0.19837E-01	0.17568E-01	-0.12050E 01	0.10000E 01
72	547.61	0.11912E 01	0.17317E-00	0.60232E-03	0.79398E-03	0.94949E-01	0.84087E-01	-0.12120E 01	0.10000E 01
73	544.11	0.71533E 00	0.10523E-00	0.36495E-03	0.48108E-03	0.57699E-01	0.51099E-01	-0.11650E 01	0.10000E 01
74	546.76	0.27429E-00	0.23110E-01	0.80323E-04	0.10588E-03	0.12671E-01	0.11222E-01	-0.12050E 01	0.10000E 01
75	538.71	0.11896E 01	0.17119E-00	0.59100E-03	0.77906E-03	0.93860E-01	0.83123E-01	-0.12120E 01	0.10000E 01
76	542.21	0.22649E 01	0.34141E-00	0.11821E-02	0.15583E-02	0.18719E-00	0.16578E-00	0.10840E 01	0.10000E 01
77	543.26	0.73766E 00	0.11945E-00	0.41394E-03	0.54566E-03	0.65491E-01	0.57999E-01	0.11220E 01	0.10000E 01
78	537.66	0.12556E 01	0.18657E-00	0.64355E-03	0.84833E-03	0.10230E-00	0.90593E-01	0.13340E 01	0.10000E 01
79	544.98	0.97819E 00	0.16462E-00	0.57132E-03	0.75311E-03	0.90260E-01	0.79935E-01	-0.11890E 01	0.10000E 01
80	540.22	0.13403E 01	0.20147E-00	0.69641E-03	0.91801E-03	0.11046E-00	0.97826E-01	-0.13340E 01	0.10000E 01
81	535.08	0.66078E 00	0.10651E-00	0.36659E-03	0.48324E-03	0.58396E-01	0.51716E-01	-0.11470E 01	0.10000E 01
82	543.80	0.10270E 01	0.17257E-00	0.59831E-03	0.78869E-03	0.94617E-01	0.83794E-01	-0.11890E 01	0.10000E 01
83	540.08	0.21444E 01	0.35957E-00	0.12428E-02	0.16383E-02	0.19715E-00	0.17460E-00	-0.10840E 01	0.10000E 01
84	542.64	0.10930E 01	0.16066E-00	0.55648E-03	0.73356E-03	0.88089E-01	0.78012E-01	-0.11890E 01	0.10000E 01
85	545.14	0.11797E 01	0.17366E-00	0.60276E-03	0.79456E-03	0.95215E-01	0.84323E-01	-0.13090E 01	0.10000E 01
86	547.29	0.12551E 01	0.18750E-00	0.65200E-03	0.85947E-03	0.10281E-00	0.91047E-01	-0.13340E 01	0.10000E 01
87	545.18	0.83325E 00	0.12245E-00	0.42502E-03	0.56026E-03	0.67136E-01	0.59456E-01	0.11990E 01	0.10000E 01
88	541.63	0.88312E 00	0.13063E-00	0.45208E-03	0.59593E-03	0.71622E-01	0.63429E-01	0.12070E 01	0.10000E 01
89	544.89	0.73351E 00	0.11055E-00	0.38363E-03	0.50571E-03	0.60613E-01	0.53679E-01	0.13340E 01	0.10000E 01
90	545.34	0.77714E 00	0.11127E-00	0.38627E-03	0.50918E-03	0.61007E-01	0.54028E-01	0.12070E 01	0.10000E 01
91	547.48	0.74961E 00	0.11693E-00	0.40666E-03	0.53606E-03	0.64112E-01	0.56778E-01	0.12490E 01	0.10000E 01
92	547.18	0.75169E 00	0.11400E-00	0.39638E-03	0.52251E-03	0.62507E-01	0.55357E-01	0.13340E 01	0.10000E 01
93	546.56	0.83117E 00	0.14093E-00	0.48973E-03	0.64557E-03	0.77268E-01	0.68429E-01	0.14900E 01	0.10000E 01
94-4157.09		0.10379E-01	-0.31208E-02	-0.24414E-05	-0.32182E-05	-0.17111E-02	-0.15154E-02	-0.	0.
95-4157.09		0.10379E-01	-0.31432E-02	-0.24589E-05	-0.32414E-05	-0.17234E-02	-0.15263E-02	-0.	0.
96-4157.09		0.10379E-01	-0.31208E-02	-0.24414E-05	-0.32182E-05	-0.17111E-02	-0.15154E-02	-0.	0.
97-4157.09		0.10379E-01	-0.31208E-02	-0.24414E-05	-0.32182E-05	-0.17111E-02	-0.15154E-02	-0.	0.
98-4157.09		0.10379E-01	-0.31432E-02	-0.24589E-05	-0.32414E-05	-0.17234E-02	-0.15263E-02	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
151	2	11.62	161.62	-0.	-0.	2	C2	2.70	2	10.05	235.00	1659.10	151	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.811016E 02	0.518594E-02	0.443303E 04	0.536488E-05	0.656923E-07	0.364469E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725632E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	535.69	0.26062E 01	0.42349E-00	0.14879E-02	0.19445E-02	0.23220E-00	0.20564E-00	-0.10600E 01	0.10000E 01
100	535.88	0.13330E 01	0.22319E-00	0.78428E-03	0.10250E-02	0.12237E-00	0.10837E-00	-0.10840E 01	0.10000E 01
101	537.18	0.86130E 00	0.14115E-00	0.49657E-03	0.64895E-03	0.77394E-01	0.68540E-01	-0.11080E 01	0.10000E 01
102	537.28	0.86702E 00	0.14166E-00	0.49840E-03	0.65135E-03	0.77673E-01	0.68788E-01	-0.11080E 01	0.10000E 01
103	536.37	0.15657E 01	0.26222E-00	0.92184E-03	0.12047E-02	0.14378E-00	0.12733E-00	-0.10800E 01	0.10000E 01
104	-4157.09	0.10379E-01	-0.47074E-02	-0.36992E-05	-0.48344E-05	-0.25810E-02	-0.22858E-02	0.85000E 00	0.
105	554.54	0.30924E 02	0.46701E 01	0.16675E-01	0.21792E-01	0.25606E 01	0.22677E 01	0.94000E 00	0.10000E 01
106	554.49	0.30821E 02	0.46153E 01	0.16478E-01	0.21535E-01	0.25305E 01	0.22410E 01	0.96000E 00	0.10000E 01
107	544.62	0.27859E 02	0.41489E 01	0.14688E-01	0.19196E-01	0.22748E 01	0.20146E 01	0.98000E 00	0.10000E 01
108	541.61	0.23215E 02	0.34690E 01	0.12250E-01	0.16009E-01	0.19020E 01	0.16844E 01	0.10000E 01	0.10000E 01
109	546.77	0.16449E 02	0.24734E 01	0.87726E-02	0.11465E-01	0.13561E 01	0.12010E 01	0.10200E 01	0.10000E 01
110	555.97	0.29804E 02	0.45046E 01	0.16104E-01	0.21045E-01	0.24698E 01	0.21873E 01	0.80000E-01	0.10000E 01
111	548.94	0.30540E 02	0.45591E 01	0.16200E-01	0.21172E-01	0.24997E 01	0.22138E 01	0.10000E-00	0.10000E 01
112	559.48	0.30444E 02	0.45947E 01	0.16476E-01	0.21532E-01	0.25192E 01	0.22310E 01	0.12000E-00	0.10000E 01
113	555.38	0.28218E 02	0.42635E 01	0.15234E-01	0.19909E-01	0.23376E 01	0.20702E 01	0.14000E-00	0.10000E 01
114	-4157.09	0.10379E-01	-0.44529E-02	-0.34993E-05	-0.45731E-05	-0.24415E-02	-0.21622E-02	0.80000E-01	0.
115	553.13	0.30256E 02	0.45502E 01	0.16227E-01	0.21207E-01	0.24948E 01	0.22094E 01	0.10000E-00	0.10000E 01
116	553.65	0.30518E 02	0.46221E 01	0.16491E-01	0.21551E-01	0.25342E 01	0.22443E 01	0.12000E-00	0.10000E 01
117	537.62	0.30517E 02	0.45653E 01	0.16066E-01	0.20996E-01	0.25031E 01	0.22168E 01	0.14000E-00	0.10000E 01
118	553.21	0.29895E 02	0.45492E 01	0.16224E-01	0.21203E-01	0.24943E 01	0.22089E 01	0.10000E-00	0.10000E 01
119	513.42	0.10222E 03	0.15134E 02	0.52187E-01	0.68203E-01	0.82978E 01	0.73486E 01	0.15000E-00	0.10000E 01
120	568.81	0.25804E 02	0.39475E 01	0.14270E-01	0.18650E-01	0.21644E 01	0.19168E 01	0.20000E-00	0.10000E 01
121	556.89	0.29476E 02	0.44947E 01	0.16081E-01	0.21016E-01	0.24644E 01	0.21825E 01	0.25000E-00	0.10000E 01
122	555.28	0.29123E 02	0.44369E 01	0.15852E-01	0.20717E-01	0.24327E 01	0.21544E 01	0.30000E-00	0.10000E 01
123	556.46	0.29419E 02	0.45074E 01	0.16120E-01	0.21067E-01	0.24714E 01	0.21886E 01	0.35000E-00	0.10000E 01
124	552.17	0.29538E 02	0.45447E 01	0.16194E-01	0.21164E-01	0.24918E 01	0.22068E 01	0.38000E-00	0.10000E 01
125	558.61	0.29618E 02	0.46110E 01	0.16522E-01	0.21592E-01	0.25282E 01	0.22390E 01	0.45000E-00	0.10000E 01
126	558.65	0.28199E 02	0.44476E 01	0.15937E-01	0.20828E-01	0.24386E 01	0.21596E 01	0.61000E 00	0.10000E 01
127	543.64	0.12300E 02	0.19331E 01	0.68379E-02	0.89363E-02	0.10599E 01	0.93865E 00	0.70000E 00	0.10000E 01
128	539.77	0.48681E 01	0.76588E 00	0.27002E-02	0.35289E-02	0.41993E-00	0.37189E-00	0.75000E 00	0.10000E 01
129	554.45	0.24840E 02	0.39402E 01	0.14068E-01	0.18385E-01	0.21604E 01	0.19133E 01	0.70000E 00	0.10000E 01
130	555.40	0.25131E 02	0.39886E 01	0.14252E-01	0.18626E-01	0.21869E 01	0.19367E 01	0.80000E 00	0.10000E 01
131	540.58	0.86836E 01	0.12968E 01	0.45753E-02	0.59793E-02	0.71104E 00	0.62970E 00	0.90000E 00	0.10000E 01
132	552.34	0.23846E 02	0.37967E 01	0.13818E-01	0.18061E-01	0.21721E 01	0.19465E 01	0.90000E 00	0.10000E 01
133	553.42	0.23821E 02	0.35771E 01	0.12760E-01	0.16676E-01	0.19613E 01	0.17369E 01	0.96000E 00	0.10000E 01
134	551.87	0.22494E 02	0.33806E 01	0.12043E-01	0.15738E-01	0.18535E 01	0.16415E 01	0.10000E 01	0.10000E 01
135	-4157.09	0.10379E-01	-0.46400E-02	-0.35463E-05	-0.47653E-05	-0.25441E-02	-0.22530E-02	0.70000E-02	0.
136	543.33	0.17797E 02	0.27337E 01	0.96675E-02	0.12634E-01	0.14989E 01	0.13274E 01	0.70000E-02	0.10000E 01
137	540.22	0.18621E 02	0.28975E 01	0.10219E-01	0.13356E-01	0.15887E 01	0.14069E 01	0.39000E-01	0.10000E 01
138	-4157.09	0.10379E-01	-0.46026E-02	-0.36169E-05	-0.47268E-05	-0.25236E-02	-0.22349E-02	0.78000E-01	0.
139	-4157.09	0.10379E-01	-0.45801E-02	-0.35992E-05	-0.47038E-05	-0.25112E-02	-0.22240E-02	0.11700E-00	0.
140	538.01	0.18434E 02	0.28278E 01	0.99550E-02	0.13010E-01	0.15505E 01	0.13731E 01	0.78000E-01	0.10000E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.24701E-05	-0.32281E-05	-0.17234E-02	-0.15263E-02	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.24701E-05	-0.32281E-05	-0.17234E-02	-0.15263E-02	-0.	0.
143	536.24	0.17870E 02	0.27251E 01	0.95789E-02	0.12519E-01	0.14941E 01	0.13232E 01	0.78000E-01	0.10000E 01
144	539.05	0.18018E 02	0.27566E 01	0.97127E-02	0.12693E-01	0.15114E 01	0.13385E 01	0.70000E-02	0.10000E 01
145	540.75	0.17236E 02	0.26264E 01	0.92676E-02	0.12112E-01	0.14400E 01	0.12753E 01	0.70000E-02	0.10000E 01
146	538.15	0.19094E 02	0.29196E 01	0.10279E-01	0.13434E-01	0.16008E 01	0.14177E 01	0.39000E-01	0.10000E 01
147	1085.37	-0.31174E-02	-0.61457E-03	-0.40979E-05	-0.53554E-05	-0.33696E-03	-0.29842E-03	0.78000E-01	0.
148	1103.46	-0.23949E 01	-0.47936E-00	-0.32952E-02	-0.43064E-02	-0.26283E-00	-0.23276E-00	0.11700E-00	0.
149	546.34	0.28538E 02	0.45569E 01	0.16156E-01	0.21114E-01	0.24985E 01	0.22127E 01	0.70000E-02	0.10000E 01
150	550.20	0.28227E 02	0.45384E 01	0.16144E-01	0.21098E-01	0.24884E 01	0.22037E 01	0.70000E-02	0.10000E 01
151	549.84	0.27917E 02	0.44877E 01	0.15959E-01	0.20856E-01	0.24606E 01	0.21791E 01	0.70000E-02	0.10000E 01
152	551.60	0.29248E 02	0.45363E 01	0.16159E-01	0.21118E-01	0.24872E 01	0.22027E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.09		0.10379E-01	-0.45801E-02	-0.35992E-05	-0.47038E-05	-0.25112E-02	-0.22240E-02	0.39000E-01	0.
154	548.75	0.28383E 02	0.43660E 01	0.15511E-01	0.20271E-01	0.23938E 01	0.21200E 01	0.78000E-01	0.10000E 01
155-4157.09		0.10379E-01	-0.47523E-02	-0.37345E-05	-0.48805E-05	-0.26056E-02	-0.23076E-02	0.39000E-01	0.
156-4157.09		0.10379E-01	-0.47373E-02	-0.37228E-05	-0.48652E-05	-0.25974E-02	-0.23003E-02	0.39000E-01	0.
157	546.43	0.26496E 02	0.42510E 01	0.15073E-01	0.19699E-01	0.23308E 01	0.20642E 01	0.78000E-01	0.10000E 01
158-4157.09		0.10379E-01	-0.47672E-02	-0.37463E-05	-0.48959E-05	-0.26138E-02	-0.23148E-02	0.39000E-01	0.
159-4157.09		0.10379E-01	-0.47672E-02	-0.37463E-05	-0.48959E-05	-0.26138E-02	-0.23148E-02	0.78000E-01	0.
160-4157.09		0.10379E-01	-0.47523E-02	-0.37345E-05	-0.48805E-05	-0.26056E-02	-0.23076E-02	0.39000E-01	0.
161	552.35	0.25261E 02	0.39704E 01	0.14150E-01	0.18492E-01	0.21769E 01	0.19279E 01	0.43000E-01	0.10000E 01
162	551.97	0.25057E 02	0.39502E 01	0.14073E-01	0.18392E-01	0.21658E 01	0.19181E 01	0.43000E-01	0.10000E 01
163	550.07	0.24809E 02	0.39152E 01	0.13919E-01	0.18190E-01	0.21456E 01	0.19001E 01	0.85000E-01	0.10000E 01
164	551.72	0.24532E 02	0.38545E 01	0.13729E-01	0.17942E-01	0.21134E 01	0.18716E 01	0.12800E-00	0.10000E 01
165-4157.09		0.10379E-01	-0.46550E-02	-0.36581E-05	-0.47806E-05	-0.25523E-02	-0.22603E-02	0.43000E-01	0.
166	548.80	0.24191E 02	0.37947E 01	0.13482E-01	0.17620E-01	0.20806E 01	0.18426E 01	0.85000E-01	0.10000E 01
167-4157.09		0.10379E-01	-0.46400E-02	-0.36463E-05	-0.47653E-05	-0.25441E-02	-0.22530E-02	0.43000E-01	0.
168	544.30	0.18079E 02	0.28608E 01	0.10125E-01	0.13232E-01	0.15685E 01	0.13891E 01	0.12800E-00	0.10000E 01
169	553.24	0.24412E 02	0.38698E 01	0.13802E-01	0.18037E-01	0.21218E 01	0.18791E 01	0.85000E-01	0.10000E 01
170	553.44	0.24684E 02	0.38945E 01	0.13892E-01	0.18155E-01	0.21353E 01	0.18910E 01	0.12800E-00	0.10000E 01
171	551.47	0.24551E 02	0.38569E 01	0.13735E-01	0.17950E-01	0.21147E 01	0.18728E 01	0.85000E-01	0.10000E 01
172-4157.09		0.10379E-01	-0.46625E-02	-0.36639E-05	-0.47883E-05	-0.25564E-02	-0.22639E-02	0.43000E-01	0.
173	555.95	0.24676E 02	0.39175E 01	0.14005E-01	0.18302E-01	0.21479E 01	0.19022E 01	0.12800E-00	0.10000E 01
174-4157.09		0.10379E-01	-0.46550E-02	-0.36581E-05	-0.47806E-05	-0.25523E-02	-0.22603E-02	0.85000E-01	0.
175	555.95	0.26008E 02	0.40960E 01	0.14643E-01	0.19136E-01	0.22458E 01	0.19889E 01	0.43000E-01	0.10000E 01
176	556.41	0.25873E 02	0.40757E 01	0.14576E-01	0.19049E-01	0.22346E 01	0.19790E 01	0.43000E-01	0.10000E 01
177	557.02	0.24775E 02	0.39229E 01	0.14037E-01	0.18344E-01	0.21509E 01	0.19048E 01	0.12800E-00	0.10000E 01
178	556.78	0.25184E 02	0.39808E 01	0.14241E-01	0.18611E-01	0.21826E 01	0.19329E 01	0.85000E-01	0.10000E 01
179	557.90	0.26177E 02	0.41403E 01	0.14826E-01	0.19376E-01	0.22701E 01	0.20104E 01	0.70000E-02	0.10000E 01
180-4157.09		0.10379E-01	-0.46774E-02	-0.36757E-05	-0.48037E-05	-0.25646E-02	-0.22712E-02	0.70000E-02	0.
181	554.72	0.26506E 02	0.42051E 01	0.15017E-01	0.19625E-01	0.23056E 01	0.20419E 01	0.70000E-02	0.10000E 01
182-4157.09		0.10379E-01	-0.46924E-02	-0.36875E-05	-0.48191E-05	-0.25728E-02	-0.22785E-02	0.70000E-02	0.
183	557.74	0.24999E 02	0.39600E 01	0.14179E-01	0.18530E-01	0.21712E 01	0.19229E 01	0.32000E-01	0.10000E 01
184	561.73	0.26156E 02	0.41791E 01	0.15015E-01	0.19622E-01	0.22913E 01	0.20292E 01	0.32000E-01	0.10000E 01
185	551.21	0.20372E 02	0.32360E 01	0.11521E-01	0.15057E-01	0.17743E 01	0.15713E 01	0.64000E-01	0.10000E 01
186	558.53	0.25955E 02	0.41264E 01	0.14784E-01	0.19321E-01	0.22625E 01	0.20037E 01	0.64000E-01	0.10000E 01
187	559.45	0.26733E 02	0.42659E 01	0.15296E-01	0.19990E-01	0.23390E 01	0.20714E 01	0.70000E-02	0.10000E 01
188	558.35	0.26120E 02	0.42320E 01	0.15160E-01	0.19813E-01	0.23204E 01	0.20549E 01	0.70000E-02	0.10000E 01
189	541.05	0.43974E 01	0.72003E 00	0.25413E-02	0.33212E-02	0.39478E-00	0.34962E-00	0.10600E 01	0.10000E 01
190	539.88	0.25507E 01	0.42572E-00	0.15011E-02	0.19617E-02	0.23342E-00	0.20671E-00	0.10840E 01	0.10000E 01
191	538.72	0.12691E 01	0.21283E-00	0.74969E-03	0.97975E-03	0.11669E-00	0.10334E-00	0.11080E 01	0.10000E 01
192	538.40	0.15714E 01	0.26206E-00	0.92286E-03	0.12061E-02	0.14369E-00	0.12725E-00	0.11080E 01	0.10000E 01
193	544.63	0.85870E 00	0.14154E-00	0.50108E-03	0.65484E-03	0.77603E-01	0.68725E-01	0.16580E 01	0.10000E 01
194	544.47	0.87636E 00	0.14377E-00	0.50892E-03	0.66510E-03	0.78828E-01	0.69811E-01	0.11700E 01	0.10000E 01
195	544.60	0.78181E 00	0.12883E-00	0.45619E-03	0.59618E-03	0.70653E-01	0.62571E-01	0.16740E 01	0.10000E 01
196	545.02	0.77558E 00	0.12728E-00	0.45075E-03	0.58907E-03	0.69785E-01	0.61802E-01	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
156	2	11.61	161.61	-0.	-0.	3	C2	2.70	2	10.05	235.00	1657.40	156	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.810114E 02	0.518671E-02	0.443056E 04	0.537165E-05	0.656193E-07	0.365131E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.725570E 00	0.182385E 01	0.205944E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	561.73	0.21036E 02	0.32968E 01	0.11865E-01	0.15495E-01	0.18076E 01	0.16008E 01	0.10000E 01	0.10000E 01
198	565.37	0.20849E 02	0.31676E 01	0.11436E-01	0.14935E-01	0.17368E 01	0.15381E 01	0.12000E 01	0.10000E 01
199	542.90	0.10414E 02	0.16465E 01	0.58300E-02	0.76138E-02	0.90275E 00	0.79948E 00	0.13000E 01	0.10000E 01
200	541.33	0.53974E 00	0.78872E-01	0.27891E-03	0.36424E-03	0.43245E-01	0.38298E-01	0.11890E 01	0.10000E 01
201	546.40	0.70338E 00	0.11694E-00	0.41531E-03	0.54238E-03	0.64116E-01	0.56781E-01	0.14540E 01	0.10000E 01
202	543.26	0.81247E 00	0.13381E-00	0.47397E-03	0.61898E-03	0.73368E-01	0.64975E-01	0.17040E 01	0.10000E 01
203	544.08	0.94545E 00	0.15579E-00	0.55219E-03	0.72114E-03	0.85417E-01	0.75645E-01	0.20410E 01	0.10000E 01
204	543.66	-0.98681E-02	-0.75531E-03	-0.26762E-05	-0.34950E-05	-0.41413E-03	-0.36675E-03	0.20700E 01	0.
205	543.10	0.11013E-00	0.96267E-02	0.34094E-04	0.44525E-04	0.52783E-02	0.46744E-02	0.21880E 01	0.
206	543.85	0.14431E 01	0.23776E-00	0.84257E-03	0.11004E-02	0.13036E-00	0.11545E-00	0.22480E 01	0.10000E 01
207	543.36	0.11340E 01	0.18364E-00	0.65050E-03	0.84952E-03	0.10069E-00	0.89168E-01	0.20700E 01	0.10000E 01
208	543.16	0.38078E-00	0.33938E-01	0.12020E-03	0.15698E-03	0.18608E-01	0.16479E-01	0.20700E 01	0.10000E 01
209	542.16	0.32883E-00	0.26524E-01	0.93858E-04	0.12257E-03	0.14543E-01	0.12879E-01	0.21880E 01	0.10000E 01
210	543.24	0.11797E 01	0.19579E-00	0.69347E-03	0.90564E-03	0.10735E-00	0.95068E-01	0.20700E 01	0.10000E 01
211	545.26	0.11818E 01	0.19635E-00	0.69668E-03	0.90984E-03	0.10766E-00	0.95344E-01	0.21880E 01	0.10000E 01
212	544.75	0.14125E 01	0.23176E-00	0.82194E-03	0.10734E-02	0.12707E-00	0.11253E-00	0.22390E 01	0.10000E 01
213	543.52	0.14291E 01	0.23432E-00	0.83016E-03	0.10841E-02	0.12848E-00	0.11378E-00	0.21880E 01	0.10000E 01
214	544.87	0.14582E 01	0.24222E-00	0.85913E-03	0.11220E-02	0.13281E-00	0.11761E-00	0.22480E 01	0.10000E 01
215	540.13	0.67688E 00	0.10174E-00	0.35941E-03	0.46937E-03	0.55784E-01	0.49403E-01	0.11650E 01	0.10000E 01
216	807.58	0.42561E 01	0.40955E-00	0.18783E-02	0.24529E-02	0.22455E-00	0.19886E-00	0.12050E 01	0.
217	543.32	0.61610E 00	0.90131E-01	0.31926E-03	0.41695E-03	0.49418E-01	0.43765E-01	0.12120E 01	0.10000E 01
218	571.99	0.28873E 01	0.43138E-00	0.15665E-02	0.20457E-02	0.23652E-00	0.20946E-00	0.11890E 01	0.10000E 01
219	543.12	0.64000E 00	0.10759E-00	0.38106E-03	0.49764E-03	0.58993E-01	0.52244E-01	0.14540E 01	0.10000E 01
220	542.39	0.89922E 00	0.15687E-00	0.55522E-03	0.72509E-03	0.86010E-01	0.76171E-01	0.17040E 01	0.10000E 01
221	542.69	0.11861E 01	0.19860E-00	0.70311E-03	0.91824E-03	0.10889E-00	0.96436E-01	0.20410E 01	0.10000E 01
222	519.13	0.14904E 01	0.24844E-00	0.86220E-03	0.11260E-02	0.13622E-00	0.12064E-00	0.22480E 01	0.10000E 01
223	539.71	0.46494E-00	0.69869E-01	0.24673E-03	0.32222E-03	0.38308E-01	0.33926E-01	0.11650E 01	0.10000E 01
224	541.45	0.27220E-00	0.22866E-01	0.80868E-04	0.10561E-03	0.12537E-01	0.11103E-01	0.12050E 01	0.10000E 01
225	542.08	0.53195E 00	0.77766E-01	0.27517E-03	0.35936E-03	0.42638E-01	0.37761E-01	0.12120E 01	0.10000E 01
226	543.19	0.64675E 00	0.10913E-00	0.38650E-03	0.50476E-03	0.59833E-01	0.52988E-01	0.14540E 01	0.10000E 01
227	539.64	0.84520E 00	0.13658E-00	0.48228E-03	0.62983E-03	0.74886E-01	0.66319E-01	0.17040E 01	0.10000E 01
228	537.00	0.10203E 01	0.16796E-00	0.59174E-03	0.77279E-03	0.92090E-01	0.81555E-01	0.18780E 01	0.10000E 01
229	541.09	0.12842E 01	0.21286E-00	0.75255E-03	0.98280E-03	0.11671E-00	0.10336E-00	0.21880E 01	0.10000E 01
230	539.75	0.68987E 00	0.10194E-00	0.35998E-03	0.47012E-03	0.55891E-01	0.49497E-01	0.11890E 01	0.10000E 01
231	534.59	0.73195E 00	0.12933E-00	0.45473E-03	0.59386E-03	0.70913E-01	0.62801E-01	0.14540E 01	0.10000E 01
232	543.06	0.78182E 00	0.12816E-00	0.45387E-03	0.59273E-03	0.70268E-01	0.62230E-01	0.16130E 01	0.10000E 01
233	541.23	0.80623E 00	0.13304E-00	0.47042E-03	0.61434E-03	0.72945E-01	0.64601E-01	0.17040E 01	0.10000E 01
234	538.74	0.95221E 00	0.15763E-00	0.55617E-03	0.72634E-03	0.86426E-01	0.76539E-01	0.18780E 01	0.10000E 01
235	543.00	0.79221E 00	0.13126E-00	0.46481E-03	0.60702E-03	0.71967E-01	0.63734E-01	0.14540E 01	0.10000E 01
236	542.41	0.91117E 00	0.14931E-00	0.52847E-03	0.69016E-03	0.81864E-01	0.72500E-01	0.17040E 01	0.10000E 01
237	526.05	0.10836E 01	0.17810E-00	0.62169E-03	0.81191E-03	0.97652E-01	0.86481E-01	0.21880E 01	0.10000E 01
238	542.95	0.49299E-00	0.43935E-01	0.15558E-03	0.20318E-03	0.24089E-01	0.21333E-01	0.20700E 01	0.10000E 01
239	540.31	0.73922E 00	0.10796E-00	0.38143E-03	0.49813E-03	0.59193E-01	0.52422E-01	0.11890E 01	0.10000E 01
240	546.41	0.92312E 00	0.15548E-00	0.55219E-03	0.72113E-03	0.85246E-01	0.75495E-01	0.14540E 01	0.10000E 01
241	543.23	0.91013E 00	0.14989E-00	0.53092E-03	0.69336E-03	0.82186E-01	0.72784E-01	0.17040E 01	0.10000E 01
242	543.32	0.96416E 00	0.16002E-00	0.56681E-03	0.74024E-03	0.87736E-01	0.77699E-01	0.18780E 01	0.10000E 01
243	525.43	0.88572E 00	0.14552E-00	0.50770E-03	0.66304E-03	0.79788E-01	0.70661E-01	0.20410E 01	0.10000E 01
244	544.09	-0.54025E-01	-0.48859E-02	-0.17318E-04	-0.22617E-04	-0.26789E-02	-0.23724E-02	0.20700E 01	0.
245	544.18	0.91117E 00	0.74728E-01	0.26490E-03	0.34594E-03	0.40973E-01	0.36286E-01	0.21870E 01	0.10000E 01
246	538.66	0.10909E 01	0.18387E-00	0.64874E-03	0.84722E-03	0.10082E-00	0.89284E-01	0.22100E 01	0.10000E 01
247	546.88	0.86598E 00	0.14226E-00	0.50545E-03	0.66010E-03	0.77999E-01	0.69076E-01	0.14540E 01	0.10000E 01
248	540.63	0.93870E 00	0.15556E-00	0.54975E-03	0.71796E-03	0.85291E-01	0.75534E-01	0.17040E 01	0.10000E 01
249	541.77	0.26650E-00	0.22391E-01	0.79209E-04	0.10344E-03	0.12277E-01	0.10872E-01	0.18780E 01	0.
250	544.60	0.34442E-00	0.28254E-01	0.10019E-03	0.13084E-03	0.15491E-01	0.13719E-01	0.21880E 01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	547.17	0.91481E 00	0.15493E-00	0.55060E-03	0.71906E-03	0.84946E-01	0.75229E-01	0.14540E 01	0.10000E 01
252	542.97	0.93870E 00	0.15780E-00	0.55878E-03	0.72975E-03	0.86519E-01	0.76622E-01	0.16130E 01	0.10000E 01
253	544.72	-0.13039E-00	-0.11520E-01	-0.40855E-04	-0.53354E-03	-0.63162E-02	-0.55937E-02	0.17060E 01	0.
254	544.67	0.11086E 01	0.18412E-00	0.65296E-03	0.85274E-03	0.10095E-00	0.89405E-01	0.21880E 01	0.10000E 01
255	532.38	0.28779E-00	0.26448E-01	0.92815E-04	0.12121E-03	0.14501E-01	0.12842E-01	0.16580E 01	0.10000E 01
256	543.85	0.20520E-00	0.17261E-01	0.61169E-04	0.79884E-04	0.94639E-02	0.83813E-02	0.17920E 01	0.
257	535.33	0.15304E 01	0.25670E-00	0.90311E-03	0.11794E-02	0.14074E-00	0.12464E-00	0.10840E 01	0.10000E 01
258	545.40	0.91792E 00	0.15646E-00	0.55521E-03	0.72508E-03	0.85787E-01	0.75973E-01	0.14540E 01	0.10000E 01
259	543.17	0.95948E 00	0.15923E-00	0.56394E-03	0.73648E-03	0.87303E-01	0.77316E-01	0.16130E 01	0.10000E 01
260	544.21	0.91689E 00	0.14993E-00	0.53150E-03	0.69412E-03	0.82207E-01	0.72803E-01	0.17040E 01	0.10000E 01
261	544.47	0.10307E 01	0.17038E-00	0.60412E-03	0.78896E-03	0.93419E-01	0.82732E-01	0.18780E 01	0.10000E 01
262	542.93	0.13273E 01	0.22425E-00	0.79407E-03	0.10370E-02	0.12295E-00	0.10889E-00	0.20410E 01	0.10000E 01
263	543.88	0.90389E 00	0.15326E-00	0.54312E-03	0.70930E-03	0.84029E-01	0.74416E-01	0.14540E 01	0.10000E 01
264	543.54	0.94961E 00	0.15690E-00	0.55589E-03	0.72597E-03	0.86029E-01	0.76188E-01	0.16130E 01	0.10000E 01
265	542.73	0.10223E 01	0.16549E-00	0.58592E-03	0.76518E-03	0.90738E-01	0.80358E-01	0.17040E 01	0.10000E 01
266	541.77	0.12540E 01	0.20700E-00	0.73225E-03	0.95629E-03	0.11349E-00	0.10051E-00	0.18780E 01	0.10000E 01
267	542.85	0.11600E 01	0.19539E-00	0.69185E-03	0.90352E-03	0.10713E-00	0.94878E-01	0.20410E 01	0.10000E 01
268	542.06	0.95117E 00	0.15703E-00	0.55564E-03	0.72564E-03	0.86099E-01	0.76249E-01	0.16130E 01	0.10000E 01
269	542.34	0.11075E 01	0.17924E-00	0.63439E-03	0.82849E-03	0.98278E-01	0.87036E-01	0.18280E 01	0.10000E 01
270	542.46	0.10966E 01	0.18026E-00	0.63804E-03	0.83325E-03	0.98833E-01	0.87527E-01	0.18780E 01	0.10000E 01
271	540.73	0.11751E 01	0.19728E-00	0.69727E-03	0.91061E-03	0.10817E-00	0.95794E-01	0.20410E 01	0.10000E 01
272	542.93	0.94598E 00	0.16030E-00	0.56764E-03	0.74132E-03	0.87894E-01	0.77839E-01	0.16130E 01	0.10000E 01
273	542.50	0.10317E 01	0.17167E-00	0.60765E-03	0.79357E-03	0.94123E-01	0.83356E-01	0.17200E 01	0.10000E 01
274	541.68	0.10795E 01	0.17410E-00	0.61582E-03	0.80423E-03	0.95455E-01	0.84536E-01	0.18280E 01	0.10000E 01
275	540.73	0.10748E 01	0.17677E-00	0.62477E-03	0.81592E-03	0.96921E-01	0.85833E-01	0.18780E 01	0.10000E 01
276-4	157.09	0.10379E-01	-0.49888E-02	-0.39218E-05	-0.51217E-05	-0.27353E-02	-0.24224E-02	0.20600E 01	0.
277	541.58	0.45089E-00	0.37880E-01	0.13398E-03	0.17497E-03	0.20769E-01	0.18393E-01	0.21000E 01	0.10000E 01
278-4	157.09	0.10379E-01	-0.24951E-02	-0.19615E-05	-0.25616E-05	-0.13681E-02	-0.12116E-02	0.21870E 01	0.
279	544.25	0.11745E 01	0.19859E-00	0.70401E-03	0.91941E-03	0.10889E-00	0.96431E-01	0.21950E 01	0.10000E 01
280	542.63	0.10488E 01	0.17533E-00	0.62067E-03	0.81057E-03	0.96129E-01	0.85133E-01	0.18780E 01	0.10000E 01
281	542.20	0.11538E 01	0.19486E-00	0.68956E-03	0.90054E-03	0.10684E-00	0.94616E-01	0.20600E 01	0.10000E 01
282	541.88	0.10514E 01	0.17145E-00	0.60655E-03	0.79213E-03	0.94002E-01	0.83249E-01	0.18280E 01	0.10000E 01
283	542.18	0.11662E 01	0.19596E-00	0.69345E-03	0.90562E-03	0.10744E-00	0.95152E-01	0.20600E 01	0.10000E 01
284	543.45	0.89039E 00	0.14419E-00	0.51081E-03	0.66710E-03	0.79059E-01	0.70015E-01	0.17200E 01	0.10000E 01
285	543.44	0.81663E 00	0.13451E-00	0.47651E-03	0.62231E-03	0.73751E-01	0.65314E-01	0.18780E 01	0.10000E 01
286	542.28	0.48260E-00	0.44598E-01	0.15783E-03	0.20613E-03	0.24453E-01	0.21655E-01	0.16580E 01	0.10000E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.22579E-05	-0.29487E-05	-0.18508E-03	-0.16391E-03	0.17920E 01	0.
288	542.12	0.87273E 00	0.14365E-00	0.50830E-03	0.66382E-03	0.78760E-01	0.69750E-01	0.16130E 01	0.10000E 01
289	542.86	0.88312E-01	0.74245E-02	0.26289E-04	0.34332E-04	0.40708E-02	0.36051E-02	0.17060E 01	0.10000E 01
290	539.86	0.10598E-00	0.88945E-02	0.31413E-04	0.41024E-04	0.48768E-02	0.43189E-02	0.18780E 01	0.
291	542.26	0.76935E 00	0.12606E-00	0.44612E-03	0.58262E-03	0.69117E-01	0.61210E-01	0.17200E 01	0.10000E 01
292	543.88	0.88468E 00	0.15245E-00	0.54027E-03	0.70557E-03	0.83588E-01	0.74026E-01	0.14400E 01	0.10000E 01
293	538.62	0.93403E 00	0.15385E-00	0.53220E-03	0.69503E-03	0.82709E-01	0.73248E-01	0.17200E 01	0.10000E 01
294	541.99	0.92623E 00	0.15338E-00	0.54267E-03	0.70871E-03	0.84094E-01	0.74474E-01	0.18780E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
128	2	-7.41	142.59	-0.	-0.	1	C2	2.75	2	10.15	940.50	1829.60	128	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.887178E 02	0.194648E-01	0.468264E 04	0.184077E-04	0.718614E-07	0.120756E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730417E 00	0.435166E 01	0.570852E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	549.26	0.24421E 02	0.31952E 01	0.97175E-02	0.35040E-02	0.73424E 00	0.55972E 00	-0.	0.10000E 01
2-4157.13		0.51854E-02	-0.20564E-02	-0.15579E-05	-0.56174E-06	-0.47255E-03	-0.36023E-03	-0.30000E-01	0.
3-4157.13		0.51854E-02	-0.22359E-02	-0.16938E-05	-0.61077E-06	-0.51379E-03	-0.39167E-03	-0.60000E-01	0.
4-4157.13		0.51854E-02	-0.22934E-02	-0.17375E-05	-0.62650E-06	-0.52703E-03	-0.40176E-03	-0.90000E-01	0.
5	540.73	0.18025E 02	0.28556E 01	0.86308E-02	0.31121E-02	0.65621E 00	0.50024E 00	-0.20000E-00	0.10000E 01
6	540.55	0.15653E 02	0.24795E 01	0.74930E-02	0.27019E-02	0.56978E 00	0.43435E-00	-0.40000E-00	0.10000E 01
7	540.23	0.13106E 02	0.20857E 01	0.63014E-02	0.22722E-02	0.47928E-00	0.36536E-00	-0.60000E 00	0.10000E 01
8-4157.13		0.51854E-02	-0.23630E-02	-0.17901E-05	-0.64549E-06	-0.54301E-03	-0.41394E-03	-0.80000E 00	0.
9	540.82	0.10296E 02	0.16130E 01	0.48753E-02	0.17580E-02	0.37066E-00	0.28255E-00	-0.90000E 00	0.10000E 01
10	543.36	0.89418E 01	0.14209E 01	0.43028E-02	0.15515E-02	0.32652E-00	0.24891E-00	-0.98000E 00	0.10000E 01
11	537.79	0.50389E 00	0.86537E-01	0.26099E-03	0.94108E-04	0.19886E-01	0.15159E-01	-0.11220E 01	0.10000E 01
12	539.46	0.88676E 00	0.12989E-00	0.39222E-03	0.14143E-03	0.29849E-01	0.22754E-01	-0.11890E 01	0.10000E 01
13	540.64	0.50857E 00	0.76849E-01	0.23225E-03	0.83746E-04	0.17660E-01	0.13462E-01	-0.13340E 01	0.10000E 01
14	535.97	0.48260E-00	0.82795E-01	0.24937E-03	0.89919E-04	0.19026E-01	0.14504E-01	-0.14400E 01	0.10000E 01
15-4157.13		0.51854E-02	-0.20564E-02	-0.15579E-05	-0.56174E-06	-0.47255E-03	-0.36023E-03	0.30000E-01	0.
16-4157.13		0.51854E-02	-0.22359E-02	-0.16938E-05	-0.61077E-06	-0.51379E-03	-0.39167E-03	0.60000E-01	0.
17	1085.37	-0.36365E-02	-0.72446E-03	-0.36694E-05	-0.13231E-05	-0.16648E-03	-0.12691E-03	0.90000E-01	0.
18	544.87	0.23068E 02	0.36630E 01	0.11104E-01	0.40041E-02	0.84174E 00	0.64167E 00	0.20000E-00	0.10000E 01
19	552.89	0.26019E 02	0.41500E 01	0.12655E-01	0.45633E-02	0.95366E 00	0.72699E 00	0.40000E-00	0.10000E 01
20-4157.13		0.51854E-02	-0.23630E-02	-0.17901E-05	-0.64549E-06	-0.54301E-03	-0.41394E-03	0.60000E 00	0.
21-4157.13		0.51854E-02	-0.22246E-02	-0.16853E-05	-0.60770E-06	-0.51122E-03	-0.38971E-03	0.92000E 00	0.
22	586.36	0.51865E 02	0.79707E 01	0.24921E-01	0.89862E-02	0.18317E 01	0.13963E 01	0.10400E 01	0.10000E 01
23	579.66	0.48456E 02	0.74396E 01	0.23143E-01	0.83451E-02	0.17096E 01	0.13032E 01	0.10600E 01	0.10000E 01
24	559.36	0.36836E 02	0.58591E 01	0.17953E-01	0.64734E-02	0.13464E 01	0.10264E 01	0.10840E 01	0.10000E 01
25	512.81	0.83351E 01	0.12088E 01	0.35805E-02	0.12911E-02	0.27777E-00	0.21175E-00	0.12070E 01	0.10000E 01
26	509.88	0.74831E 01	0.11426E 01	0.33776E-02	0.12179E-02	0.26258E-00	0.20017E-00	0.12490E 01	0.10000E 01
27	510.14	0.71849E 01	0.10795E 01	0.31915E-02	0.11508E-02	0.24807E-00	0.18910E-00	0.13340E 01	0.10000E 01
28	515.00	0.53657E 01	0.89899E 00	0.26671E-02	0.96170E-03	0.20659E-00	0.15748E-00	0.14540E 01	0.10000E 01
29	525.84	0.46120E 01	0.75446E 00	0.22558E-02	0.81339E-03	0.17337E-00	0.13216E-00	0.16580E 01	0.10000E 01
30	532.77	0.37174E 01	0.61797E 00	0.18570E-02	0.66958E-03	0.14201E-00	0.10825E-00	0.20410E 01	0.10000E 01
31	540.85	0.35408E 01	0.59129E 00	0.17873E-02	0.64446E-03	0.13588E-00	0.10358E-00	0.22480E 01	0.10000E 01
32-4157.13		0.51854E-02	-0.22381E-02	-0.16955E-05	-0.61138E-06	-0.51431E-03	-0.39206E-03	-0.60000E-01	0.
33-4157.13		0.51854E-02	-0.20564E-02	-0.15579E-05	-0.56174E-06	-0.47255E-03	-0.36023E-03	-0.30000E-01	0.
34-4157.13		0.51854E-02	-0.22381E-02	-0.16955E-05	-0.61138E-06	-0.51431E-03	-0.39206E-03	0.30000E-01	0.
35-4157.13		0.51854E-02	-0.22934E-02	-0.17375E-05	-0.62650E-06	-0.52703E-03	-0.40176E-03	0.60000E-01	0.
36	540.68	0.11292E 02	0.17889E 01	0.54066E-02	0.19495E-02	0.41109E-00	0.31338E-00	-0.86800E 00	0.10000E 01
37	540.76	0.10890E 02	0.16786E 01	0.50734E-02	0.18294E-02	0.38573E-00	0.29405E-00	-0.91100E 00	0.10000E 01
38	542.18	0.10577E 02	0.16609E 01	0.50253E-02	0.18120E-02	0.38168E-00	0.29096E-00	-0.95300E 00	0.10000E 01
39-4157.13		0.51854E-02	-0.23368E-02	-0.17703E-05	-0.63834E-06	-0.53693E-03	-0.40935E-03	0.51000E-01	0.
40-4157.13		0.51854E-02	-0.23368E-02	-0.17703E-05	-0.63834E-06	-0.53693E-03	-0.40935E-03	0.25000E-01	0.
41-4157.13		0.51854E-02	-0.23233E-02	-0.17601E-05	-0.63467E-06	-0.53390E-03	-0.40700E-03	0.70000E-02	0.
42	544.22	0.14026E 02	0.22122E 01	0.67032E-02	0.24171E-02	0.50836E 00	0.38753E-00	-0.86800E 00	0.10000E 01
43	543.07	0.13369E 02	0.21126E 01	0.63960E-02	0.23063E-02	0.48547E-00	0.37008E-00	-0.91100E 00	0.10000E 01
44	549.59	0.18399E 02	0.29014E 01	0.88263E-02	0.31826E-02	0.66674E 00	0.50826E 00	-0.95300E 00	0.10000E 01
45	536.15	0.31751E 01	0.51574E 00	0.15536E-02	0.56019E-03	0.11852E-00	0.90346E-01	-0.10400E 01	0.10000E 01
46-4157.13		0.51854E-02	-0.23428E-02	-0.17749E-05	-0.63998E-06	-0.53837E-03	-0.41040E-03	0.70000E-02	0.
47-4157.13		0.51854E-02	-0.23428E-02	-0.17749E-05	-0.63998E-06	-0.53837E-03	-0.41040E-03	0.29000E-01	0.
48	541.63	0.12060E 02	0.19115E 01	0.57610E-02	0.20845E-02	0.43925E-00	0.33485E-00	0.51000E-01	0.10000E 01
49	542.16	0.11465E 02	0.18036E 01	0.54568E-02	0.19676E-02	0.41446E-00	0.31595E-00	0.70000E-02	0.10000E 01
50	542.34	0.11233E 02	0.17699E 01	0.53555E-02	0.19311E-02	0.40671E-00	0.31004E-00	0.29000E-01	0.10000E 01
51-4157.13		0.51854E-02	-0.23293E-02	-0.17647E-05	-0.63630E-06	-0.53527E-03	-0.40804E-03	0.31000E-01	0.
52-4157.13		0.51854E-02	-0.23428E-02	-0.17749E-05	-0.63998E-06	-0.53837E-03	-0.41040E-03	-0.86800E 00	0.
53	542.43	0.11062E 02	0.17541E 01	0.53082E-02	0.19140E-02	0.40309E-00	0.30728E-00	-0.91100E 00	0.10000E 01
54	543.19	0.11022E 02	0.17319E 01	0.52439E-02	0.18909E-02	0.39799E-00	0.30339E-00	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	535.16	0.17958E 01	0.29154E-00	0.87759E-03	0.31644E-03	0.66996E-01	0.51072E-01	-0.10400E 01	0.10000E 01
56	535.11	0.84208E 00	0.14102E-00	0.42446E-03	0.15305E-03	0.32405E-01	0.24703E-01	-0.10680E 01	0.10000E 01
57	532.72	0.65767E 00	0.10662E-00	0.32038E-03	0.11552E-03	0.24501E-01	0.18678E-01	-0.10400E 01	0.10000E 01
58	530.55	0.17397E 01	0.30497E-00	0.91493E-03	0.32991E-03	0.70080E-01	0.53423E-01	-0.10680E 01	0.10000E 01
59	531.42	0.34452E 01	0.55813E 00	0.16755E-02	0.60416E-03	0.12826E-00	0.97771E-01	-0.10400E 01	0.10000E 01
60	531.72	0.15075E 01	0.25197E-00	0.75658E-03	0.27281E-03	0.57902E-01	0.44139E-01	-0.10680E 01	0.10000E 01
61	535.90	0.56156E 00	0.92868E-01	0.27970E-03	0.10085E-03	0.21341E-01	0.16268E-01	-0.11220E 01	0.10000E 01
62	540.08	0.52572E 00	0.79415E-01	0.23991E-03	0.86507E-04	0.18249E-01	0.13912E-01	-0.13340E 01	0.10000E 01
63	535.82	0.64104E 00	0.10997E-00	0.33118E-03	0.11942E-03	0.25270E-01	0.19264E-01	-0.11220E 01	0.10000E 01
64	540.09	0.64676E 00	0.97700E-01	0.29515E-03	0.10643E-03	0.22451E-01	0.17115E-01	-0.13340E 01	0.10000E 01
65	536.06	0.47273E-00	0.81106E-01	0.24430E-03	0.88090E-04	0.18638E-01	0.14208E-01	0.14400E 01	0.10000E 01
66	535.02	0.44623E-00	0.72819E-01	0.21917E-03	0.79030E-04	0.16734E-01	0.12756E-01	0.16130E 01	0.10000E 01
67	537.37	0.70650E 00	0.11331E-00	0.34163E-03	0.12319E-03	0.26039E-01	0.19849E-01	0.17200E 01	0.10000E 01
68	520.74	0.54598E 00	0.89056E-01	0.26530E-03	0.95661E-04	0.20465E-01	0.15601E-01	-0.16130E 01	0.10000E 01
69	539.76	0.68104E 00	0.10938E-00	0.33034E-03	0.11911E-03	0.25134E-01	0.19160E-01	-0.18280E 01	0.10000E 01
70	525.23	0.75688E 00	0.11017E-00	0.32925E-03	0.11872E-03	0.25316E-01	0.19299E-01	-0.11650E 01	0.10000E 01
71	538.55	0.46494E-00	0.38993E-01	0.11766E-03	0.42428E-04	0.89605E-02	0.68307E-02	-0.12050E 01	0.10000E 01
72	541.21	0.79948E 00	0.11581E-00	0.35015E-03	0.12626E-03	0.26613E-01	0.20287E-01	-0.12120E 01	0.10000E 01
73	536.89	0.68208E 00	0.99937E-01	0.30120E-03	0.10861E-03	0.22965E-01	0.17507E-01	-0.11650E 01	0.10000E 01
74	539.76	0.35221E-00	0.29559E-01	0.89275E-04	0.32191E-04	0.67926E-02	0.51780E-02	-0.12050E 01	0.10000E 01
75	529.58	0.81611E 00	0.11683E-00	0.35027E-03	0.12630E-03	0.26848E-01	0.20467E-01	-0.12120E 01	0.10000E 01
76	535.82	0.86806E 00	0.13038E-00	0.39265E-03	0.14158E-03	0.29961E-01	0.22840E-01	0.10840E 01	0.10000E 01
77	536.21	0.63688E 00	0.10272E-00	0.30944E-03	0.11158E-03	0.23605E-01	0.17994E-01	0.11220E 01	0.10000E 01
78	529.45	0.62026E 00	0.91740E-01	0.27501E-03	0.99164E-04	0.21082E-01	0.16071E-01	0.13340E 01	0.10000E 01
79	539.16	0.83688E 00	0.14038E-00	0.42380E-03	0.15282E-03	0.32259E-01	0.24592E-01	-0.11890E 01	0.10000E 01
80	533.77	0.55481E 00	0.83095E-01	0.24988E-03	0.90101E-04	0.19095E-01	0.14556E-01	-0.13340E 01	0.10000E 01
81	529.12	0.82650E 00	0.13277E-00	0.39791E-03	0.14348E-03	0.30510E-01	0.23258E-01	-0.11470E 01	0.10000E 01
82	538.69	0.70078E 00	0.11741E-00	0.35435E-03	0.12777E-03	0.26982E-01	0.20568E-01	-0.11890E 01	0.10000E 01
83	534.39	0.73818E 00	0.12338E-00	0.37119E-03	0.13384E-03	0.28353E-01	0.21614E-01	-0.10840E 01	0.10000E 01
84	538.96	0.68520E 00	0.10051E-00	0.30339E-03	0.10940E-03	0.23097E-01	0.17607E-01	-0.11890E 01	0.10000E 01
85	539.34	0.65870E 00	0.96645E-01	0.29180E-03	0.10522E-03	0.22209E-01	0.16930E-01	-0.13090E 01	0.10000E 01
86	542.18	0.72052E 00	0.10734E-00	0.32476E-03	0.11710E-03	0.24666E-01	0.18803E-01	-0.13340E 01	0.10000E 01
87	514.21	0.84395E 01	0.12186E 01	0.36132E-02	0.13029E-02	0.28003E-00	0.21347E-00	0.11990E 01	0.10000E 01
88	507.81	0.81506E 01	0.11827E 01	0.34907E-02	0.12587E-02	0.27177E-00	0.20717E-00	0.12070E 01	0.10000E 01
89	508.21	0.66613E 01	0.98324E 00	0.29029E-02	0.10467E-02	0.22595E-00	0.17224E-00	0.13340E 01	0.10000E 01
90	512.89	0.82925E 01	0.11656E 01	0.34529E-02	0.12451E-02	0.26786E-00	0.20419E-00	0.12070E 01	0.10000E 01
91	513.47	0.74239E 01	0.11359E 01	0.33664E-02	0.12139E-02	0.26104E-00	0.19899E-00	0.12490E 01	0.10000E 01
92	512.79	0.70857E 01	0.10539E 01	0.31217E-02	0.11256E-02	0.24219E-00	0.18462E-00	0.13340E 01	0.10000E 01
93	520.17	0.51964E 01	0.86802E 00	0.25847E-02	0.93200E-03	0.19947E-00	0.15206E-00	0.14500E 01	0.10000E 01
94	-4157.13	0.51854E-02	-0.15591E-02	-0.11812E-05	-0.42590E-06	-0.35828E-03	-0.27312E-03	-0.	0.
95	119.42	0.70089E 00	0.55864E-01	0.12949E-03	0.46693E-04	0.12837E-01	0.97861E-02	-0.	0.
96	-4157.13	0.51854E-02	-0.15591E-02	-0.11812E-05	-0.42590E-06	-0.35828E-03	-0.27312E-03	-0.	0.
97	-4157.13	0.51854E-02	-0.15591E-02	-0.11812E-05	-0.42590E-06	-0.35828E-03	-0.27312E-03	-0.	0.
98	-4157.13	0.51854E-02	-0.15703E-02	-0.11897E-05	-0.42897E-06	-0.36086E-03	-0.27509E-03	-0.	0.

CONFIDENTIAL

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
133	2	-7.40	142.60	-0.	-0.	2	C2	2.70	2	10.15	936.20	1831.50	133	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.888220E 02	0.193751E-01	0.468524E 04	0.183014E-04	0.719458E-07	0.119985E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730477E 00	0.434141E 01	0.560888E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	538.70	0.97195E 00	0.15820E-00	0.47666E-03	0.17278E-03	0.36441E-01	0.27809E-01	-0.10600E 01	0.10000E 01
100	537.02	0.50753E 00	0.85032E-01	0.25589E-03	0.92752E-04	0.19586E-01	0.14947E-01	-0.10840E 01	0.10000E 01
101	538.68	0.45143E-00	0.74046E-01	0.22309E-03	0.80866E-04	0.17056E-01	0.13016E-01	-0.11080E 01	0.10000E 01
102	539.00	0.51221E 00	0.83772E-01	0.25245E-03	0.91508E-04	0.19296E-01	0.14726E-01	-0.11080E 01	0.10000E 01
103	537.87	0.59688E 00	0.10005E-00	0.30127E-03	0.10920E-03	0.23046E-01	0.17587E-01	-0.10800E 01	0.10000E 01
104	-4157.09	0.10379E-01	-0.47074E-02	-0.35647E-05	-0.12921E-05	-0.10843E-02	-0.82747E-03	0.85000E 00	0.
105	605.64	0.57590E 02	0.89429E 01	0.28326E-01	0.10268E-01	0.20599E 01	0.15720E 01	0.94000E 00	0.10000E 01
106	611.15	0.63266E 02	0.97705E 01	0.31079E-01	0.11265E-01	0.22505E 01	0.17175E 01	0.96000E 00	0.10000E 01
107	589.89	0.62570E 02	0.95534E 01	0.29898E-01	0.10837E-01	0.22005E 01	0.16793E 01	0.98000E 00	0.10000E 01
108	591.44	0.64007E 02	0.98307E 01	0.30802E-01	0.11165E-01	0.22644E 01	0.17280E 01	0.10000E 01	0.10000E 01
109	599.26	0.57896E 02	0.89598E 01	0.28241E-01	0.10237E-01	0.20638E 01	0.15750E 01	0.10200E 01	0.10000E 01
110	606.50	0.53155E 02	0.82581E 01	0.26174E-01	0.94875E-02	0.19022E 01	0.14516E 01	0.80000E-01	0.10000E 01
111	599.02	0.56755E 02	0.87082E 01	0.27444E-01	0.99476E-02	0.20059E 01	0.15307E 01	0.10000E-00	0.10000E 01
112	616.66	0.62255E 02	0.96916E 01	0.30959E-01	0.11222E-01	0.22324E 01	0.17036E 01	0.12000E-00	0.10000E 01
113	612.09	0.66037E 02	0.10290E 02	0.32755E-01	0.11873E-01	0.23702E 01	0.18088E 01	0.14000E-00	0.10000E 01
114	-4157.09	0.10379E-01	-0.44529E-02	-0.33721E-05	-0.12223E-05	-0.10257E-02	-0.78274E-03	0.80000E-01	0.
115	598.81	0.52721E 02	0.81294E 01	0.25615E-01	0.92849E-02	0.18725E 01	0.14290E 01	0.10000E-00	0.10000E 01
116	599.20	0.54973E 02	0.85358E 01	0.26904E-01	0.97519E-02	0.19661E 01	0.15004E 01	0.12000E-00	0.10000E 01
117	570.43	0.58508E 02	0.89137E 01	0.27492E-01	0.99650E-02	0.20532E 01	0.15669E 01	0.14000E-00	0.10000E 01
118	593.86	0.45866E 02	0.71370E 01	0.22404E-01	0.81207E-02	0.16439E 01	0.12546E 01	0.10000E-00	0.10000E 01
119	570.04	0.28932E 02	0.44216E 01	0.13633E-01	0.49416E-02	0.10185E 01	0.77724E 00	0.15000E-00	0.10000E 01
120	588.39	0.46065E 02	0.71229E 01	0.22267E-01	0.80712E-02	0.16407E 01	0.12521E 01	0.20000E-00	0.10000E 01
121	590.70	0.47140E 02	0.73226E 01	0.22931E-01	0.83120E-02	0.16867E 01	0.12872E 01	0.25000E-00	0.10000E 01
122	581.23	0.43050E 02	0.66531E 01	0.20686E-01	0.74981E-02	0.15325E 01	0.11695E 01	0.30000E-00	0.10000E 01
123	582.67	0.46465E 02	0.72224E 01	0.22480E-01	0.81486E-02	0.16636E 01	0.12696E 01	0.35000E-00	0.10000E 01
124	571.92	0.47839E 02	0.74414E 01	0.22976E-01	0.83283E-02	0.17140E 01	0.13081E 01	0.38000E-00	0.10000E 01
125	589.84	0.54437E 02	0.86212E 01	0.26980E-01	0.97797E-02	0.19858E 01	0.15155E 01	0.45000E-00	0.10000E 01
126	583.05	0.49315E 02	0.78830E 01	0.24544E-01	0.88965E-02	0.18158E 01	0.13857E 01	0.61000E 00	0.10000E 01
127	562.24	0.35881E 02	0.56979E 01	0.17467E-01	0.63313E-02	0.13125E 01	0.10016E 01	0.70000E 00	0.10000E 01
128	543.72	0.19981E 02	0.31506E 01	0.95274E-02	0.34534E-02	0.72571E 00	0.55382E 00	0.75000E 00	0.10000E 01
129	570.61	0.36889E 02	0.59041E 01	0.18212E-01	0.66013E-02	0.13599E 01	0.10378E 01	0.70000E 00	0.10000E 01
130	572.49	0.39750E 02	0.63685E 01	0.19672E-01	0.71305E-02	0.14669E 01	0.11195E 01	0.80000E 00	0.10000E 01
131	548.79	0.22218E 02	0.33333E 01	0.10117E-01	0.36673E-02	0.76779E 00	0.58593E 00	0.90000E 00	0.10000E 01
132	563.16	0.31510E 02	0.47814E 01	0.14667E-01	0.53165E-02	0.11013E 01	0.84048E 00	0.90000E 00	0.10000E 01
133	563.48	0.33749E 02	0.50962E 01	0.15637E-01	0.56679E-02	0.11739E 01	0.89582E 00	0.96000E 00	0.10000E 01
134	561.74	0.33459E 02	0.50561E 01	0.15494E-01	0.56160E-02	0.11646E 01	0.88877E 00	0.10000E 01	0.10000E 01
135	-4157.09	0.10379E-01	-0.46400E-02	-0.35137E-05	-0.12736E-05	-0.10688E-02	-0.81563E-03	0.70000E-02	0.
136	547.75	0.15928E 02	0.24528E 01	0.74391E-02	0.26965E-02	0.56497E 00	0.43115E-00	0.70000E-02	0.10000E 01
137	546.86	0.15879E 02	0.24801E 01	0.75170E-02	0.27247E-02	0.57126E 00	0.43595E-00	0.39000E-01	0.10000E 01
138	-4157.09	0.10379E-01	-0.46026E-02	-0.34654E-05	-0.12634E-05	-0.10602E-02	-0.80905E-03	0.78000E-01	0.
139	-4157.09	0.10379E-01	-0.45801E-02	-0.34684E-05	-0.12572E-05	-0.10550E-02	-0.80510E-03	0.11700E-00	0.
140	546.16	0.15014E 02	0.23136E 01	0.70089E-02	0.25406E-02	0.53292E 00	0.40670E-00	0.78000E-01	0.10000E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23803E-05	-0.86279E-06	-0.72401E-03	-0.55252E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23803E-05	-0.86279E-06	-0.72401E-03	-0.55252E-03	-0.	0.
143	543.63	0.14130E 02	0.21638E 01	0.65428E-02	0.23716E-02	0.49640E-00	0.38035E-00	0.78000E-01	0.10000E 01
144	547.92	0.15285E 02	0.23501E 01	0.71286E-02	0.25839E-02	0.54132E 00	0.41310E-00	0.70000E-02	0.10000E 01
145	548.34	0.14060E 02	0.21515E 01	0.65282E-02	0.23663E-02	0.49558E-00	0.37820E-00	0.70000E-02	0.10000E 01
146	542.77	0.13377E 02	0.20508E 01	0.61973E-02	0.22464E-02	0.47238E-00	0.36049E-00	0.39000E-01	0.10000E 01
147	796.65	0.67946E 00	0.15329E-00	0.56944E-03	0.20641E-03	0.35310E-01	0.26946E-01	0.78000E-01	0.
148	635.99	0.11366E 01	0.18458E-00	0.59908E-03	0.21715E-03	0.42517E-01	0.32446E-01	0.11700E-00	0.10000E 01
149	569.91	0.35776E 02	0.57677E 01	0.17843E-01	0.64678E-02	0.13331E 01	0.10174E 01	0.70000E-02	0.10000E 01
150	571.36	0.36085E 02	0.58702E 01	0.18117E-01	0.65671E-02	0.13521E 01	0.10319E 01	0.70000E-02	0.10000E 01
151	581.99	0.37118E 02	0.60734E 01	0.18894E-01	0.68488E-02	0.13989E 01	0.10676E 01	0.70000E-02	0.10000E 01
152	586.54	0.42493E 02	0.67242E 01	0.21020E-01	0.76191E-02	0.15488E 01	0.11820E 01	0.39000E-01	0.10000E 01

CONFIDENTIAL

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.09		0.10379E-01	-0.45801E-02	-0.34684E-05	-0.12572E-05	-0.10550E-02	-0.80510E-03	0.39000E-01	0.
154	580.92	0.42577E 02	0.66664E 01	0.20723E-01	0.75114E-02	0.15355E 01	0.11718E 01	0.78000E-01	0.10000E 01
155-4157.09		0.10379E-01	-0.47523E-02	-0.35988E-05	-0.13045E-05	-0.10946E-02	-0.83536E-03	0.39000E-01	0.
156-4157.09		0.10379E-01	-0.47373E-02	-0.35874E-05	-0.13003E-05	-0.10912E-02	-0.83273E-03	0.39000E-01	0.
157	570.77	0.34002E 02	0.55295E 01	0.17058E-01	0.61832E-02	0.12737E 01	0.97199E 00	0.78000E-01	0.10000E 01
158-4157.09		0.10379E-01	-0.47672E-02	-0.36101E-05	-0.13086E-05	-0.10981E-02	-0.83799E-03	0.39000E-01	0.
159-4157.09		0.10379E-01	-0.47672E-02	-0.36101E-05	-0.13086E-05	-0.10981E-02	-0.83799E-03	0.78000E-01	0.
160-4157.09		0.10379E-01	-0.47523E-02	-0.35988E-05	-0.13045E-05	-0.10946E-02	-0.83536E-03	0.39000E-01	0.
161	564.03	0.27545E 02	0.43575E 01	0.13375E-01	0.48483E-02	0.10037E 01	0.76597E 00	0.43000E-01	0.10000E 01
162	562.37	0.28087E 02	0.44534E 01	0.13653E-01	0.49488E-02	0.10258E 01	0.78282E 00	0.43000E-01	0.10000E 01
163	561.22	0.27590E 02	0.43788E 01	0.13413E-01	0.48619E-02	0.10086E 01	0.76971E 00	0.85000E-01	0.10000E 01
164	562.80	0.27018E 02	0.42711E 01	0.13098E-01	0.47478E-02	0.98380E 00	0.75078E 00	0.12800E-00	0.10000E 01
165-4157.09		0.10379E-01	-0.46550E-02	-0.35251E-05	-0.12778E-05	-0.10722E-02	-0.81826E-03	0.43000E-01	0.
166	561.86	0.28362E 02	0.44813E 01	0.13734E-01	0.49781E-02	0.10322E 01	0.78773E 00	0.85000E-01	0.10000E 01
167-4157.09		0.10379E-01	-0.46400E-02	-0.35137E-05	-0.12736E-05	-0.10688E-02	-0.81563E-03	0.43000E-01	0.
168	550.00	0.18313E 02	0.29069E 01	0.88310E-02	0.32010E-02	0.66958E 00	0.51098E 00	0.12800E-00	0.10000E 01
169	564.94	0.29641E 02	0.47291E 01	0.14526E-01	0.52653E-02	0.10893E 01	0.83129E 00	0.85000E-01	0.10000E 01
170	566.68	0.30818E 02	0.48980E 01	0.15064E-01	0.54604E-02	0.11282E 01	0.86098E 00	0.12800E-00	0.10000E 01
171	563.72	0.30551E 02	0.48321E 01	0.14829E-01	0.53751E-02	0.11130E 01	0.84939E 00	0.85000E-01	0.10000E 01
172-4157.09		0.10379E-01	-0.46625E-02	-0.35307E-05	-0.12798E-05	-0.10740E-02	-0.81957E-03	0.43000E-01	0.
173	570.55	0.33365E 02	0.53398E 01	0.16470E-01	0.59700E-02	0.12300E 01	0.93863E 00	0.12800E-00	0.10000E 01
174-4157.09		0.10379E-01	-0.46550E-02	-0.35251E-05	-0.12778E-05	-0.10722E-02	-0.81826E-03	0.85000E-01	0.
175	570.59	0.32451E 02	0.51521E 01	0.15892E-01	0.57604E-02	0.11867E 01	0.90564E 00	0.43000E-01	0.10000E 01
176	571.57	0.32974E 02	0.52380E 01	0.16169E-01	0.58607E-02	0.12065E 01	0.92074E 00	0.43000E-01	0.10000E 01
177	574.24	0.37037E 02	0.59206E 01	0.18312E-01	0.66377E-02	0.13637E 01	0.10407E 01	0.12800E-00	0.10000E 01
178	573.04	0.34844E 02	0.55573E 01	0.17173E-01	0.62249E-02	0.12801E 01	0.97687E 00	0.85000E-01	0.10000E 01
179	574.05	0.33446E 02	0.53373E 01	0.16506E-01	0.59829E-02	0.12294E 01	0.93819E 00	0.70000E-02	0.10000E 01
180-4157.09		0.10379E-01	-0.46774E-02	-0.35421E-05	-0.12839E-05	-0.10774E-02	-0.82221E-03	0.70000E-02	0.10000E 01
181	568.81	0.30568E 02	0.48875E 01	0.15056E-01	0.54573E-02	0.11258E 01	0.85913E 00	0.70000E-02	0.10000E 01
182-4157.09		0.10379E-01	-0.46924E-02	-0.35534E-05	-0.12880E-05	-0.10808E-02	-0.82484E-03	0.70000E-02	0.
183	574.94	0.36091E 02	0.57715E 01	0.17860E-01	0.64739E-02	0.13294E 01	0.10145E 01	0.32000E-01	0.10000E 01
184	585.56	0.44244E 02	0.71621E 01	0.22341E-01	0.80982E-02	0.16497E 01	0.12590E 01	0.32000E-01	0.10000E 01
185	571.61	0.41160E 02	0.66123E 01	0.20411E-01	0.73986E-02	0.15231E 01	0.11623E 01	0.64000E-01	0.10000E 01
186	582.67	0.46422E 02	0.74790E 01	0.23279E-01	0.84381E-02	0.17227E 01	0.13147E 01	0.64000E-01	0.10000E 01
187	577.79	0.36871E 02	0.59433E 01	0.18431E-01	0.66809E-02	0.13690E 01	0.10447E 01	0.70000E-02	0.10000E 01
188	574.60	0.34487E 02	0.56378E 01	0.17442E-01	0.63224E-02	0.12986E 01	0.99102E 00	0.70000E-02	0.10000E 01
189	529.81	0.60987E 01	0.99229E 00	0.29705E-02	0.10767E-02	0.22856E-00	0.17443E-00	0.10600E 01	0.10000E 01
190	526.88	0.37231E 01	0.61686E 00	0.18427E-02	0.66794E-03	0.14209E-00	0.10843E-00	0.10840E 01	0.10000E 01
191	525.17	0.18816E 01	0.31313E-00	0.93426E-03	0.33865E-03	0.72127E-01	0.55043E-01	0.11080E 01	0.10000E 01
192	524.93	0.20738E 01	0.34321E-00	0.10238E-02	0.37111E-03	0.79055E-01	0.60330E-01	0.11080E 01	0.10000E 01
193	526.82	0.44951E 01	0.73350E 00	0.21911E-02	0.79421E-03	0.16895E-00	0.12894E-00	0.16580E 01	0.10000E 01
194	528.55	0.42348E 01	0.68633E 00	0.20593E-02	0.74645E-03	0.15860E-00	0.12103E-00	0.11700E 01	0.10000E 01
195	527.48	0.46114E 01	0.75277E 00	0.22497E-02	0.81546E-03	0.17339E-00	0.13232E-00	0.16740E 01	0.10000E 01
196	529.06	0.44275E 01	0.72007E 00	0.21544E-02	0.78093E-03	0.16586E-00	0.12658E-00	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
123	2	-7.41	142.59	-0.	-0.	3	C2	2.70	2	10.15	935.50	1825.80	123	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.885218E 02	0.193707E-01	0.467730E 04	0.183594E-04	0.717027E-07	0.120568E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730303E 00	0.433960E 01	0.568542E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	554.72	0.22926E 02	0.35790E 01	0.10965E-01	0.39688E-02	0.82473E 00	0.62951E 00	0.10000E 01	0.10000E 01
198	555.01	0.23645E 02	0.35717E 01	0.10945E-01	0.39616E-02	0.82305E 00	0.62822E 00	0.12000E 01	0.10000E 01
199	536.90	0.11528E 02	0.18166E 01	0.54932E-02	0.19882E-02	0.41861E-00	0.31952E-00	0.13000E 01	0.10000E 01
200	513.03	0.40026E 01	0.57557E 00	0.17107E-02	0.61918E-03	0.13263E-00	0.10124E-00	0.11890E 01	0.10000E 01
201	531.09	0.29813E 01	0.49140E-00	0.14797E-02	0.53555E-03	0.11324E-00	0.86431E-01	0.14540E 01	0.10000E 01
202	529.16	0.26810E 01	0.43807E-00	0.13172E-02	0.47677E-03	0.10095E-00	0.77051E-01	0.17040E 01	0.10000E 01
203	531.77	0.17107E 01	0.27993E-00	0.84331E-03	0.30523E-03	0.64505E-01	0.49236E-01	0.20410E 01	0.10000E 01
204	529.72	0.56625E-01	0.43002E-02	0.12936E-04	0.46820E-05	0.99092E-03	0.75635E-03	0.20700E 01	0.10000E 01
205	531.33	0.23013E-00	0.19983E-01	0.60183E-04	0.21783E-04	0.46049E-02	0.35148E-02	0.21880E 01	0.10000E 01
206	534.70	0.18426E 01	0.30202E-00	0.91181E-03	0.33003E-03	0.69596E-01	0.53121E-01	0.22480E 01	0.10000E 01
207	531.74	0.21668E 01	0.34858E-00	0.10501E-02	0.38009E-03	0.80326E-01	0.61312E-01	0.20700E 01	0.10000E 01
208	529.76	0.56623E 00	0.50088E-01	0.15068E-03	0.54537E-04	0.11542E-01	0.88100E-02	0.20700E 01	0.10000E 01
209	530.11	0.51065E 00	0.40910E-01	0.12310E-03	0.44555E-04	0.94272E-02	0.71956E-02	0.21880E 01	0.10000E 01
210	529.70	0.16712E 01	0.27524E-00	0.82794E-03	0.29967E-03	0.63424E-01	0.48411E-01	0.20700E 01	0.10000E 01
211	534.40	0.14473E 01	0.23900E-00	0.72138E-03	0.26110E-03	0.55073E-01	0.42037E-01	0.21880E 01	0.10000E 01
212	535.85	0.15470E 01	0.25257E-00	0.76316E-03	0.27622E-03	0.58201E-01	0.44424E-01	0.22390E 01	0.10000E 01
213	533.40	0.13481E 01	0.21978E-00	0.66290E-03	0.23993E-03	0.50645E-01	0.38657E-01	0.21880E 01	0.10000E 01
214	536.39	0.12639E 01	0.20895E-00	0.63160E-03	0.22861E-03	0.48149E-01	0.36752E-01	0.22480E 01	0.10000E 01
215	522.59	0.63429E 00	0.94399E-01	0.28250E-03	0.10225E-03	0.21753E-01	0.16604E-01	0.11650E 01	0.10000E 01
216	-1151.08	0.30495E 02	-0.27939E-00	-0.38837E-03	-0.14057E-03	-0.64381E-01	-0.49141E-01	0.12050E 01	0.
217	523.85	0.66338E 00	0.95985E-01	0.28751E-03	0.10406E-03	0.22118E-01	0.16883E-01	0.12120E 01	0.10000E 01
218	524.97	0.71584E 00	0.10418E-00	0.31231E-03	0.11304E-03	0.24007E-01	0.18324E-01	0.11890E 01	0.10000E 01
219	527.80	0.33870E-00	0.56451E-01	0.16958E-03	0.61378E-04	0.13008E-01	0.99291E-02	0.14540E 01	0.10000E 01
220	529.40	0.93818E 00	0.16247E-00	0.48862E-03	0.17685E-03	0.37439E-01	0.28577E-01	0.17040E 01	0.10000E 01
221	531.29	0.49818E-00	0.82747E-01	0.24920E-03	0.90196E-04	0.19068E-01	0.14554E-01	0.20410E 01	0.10000E 01
222	514.35	0.35637E-00	0.59242E-01	0.17624E-03	0.63790E-04	0.13652E-01	0.10420E-01	0.22480E 01	0.10000E 01
223	522.73	0.52052E 00	0.77473E-01	0.23187E-03	0.83926E-04	0.17853E-01	0.13627E-01	0.11650E 01	0.10000E 01
224	523.85	0.37454E-00	0.31152E-01	0.93313E-04	0.33774E-04	0.71786E-02	0.54793E-02	0.12050E 01	0.10000E 01
225	523.36	0.56208E 00	0.81306E-01	0.24346E-03	0.88118E-04	0.18736E-01	0.14301E-01	0.12120E 01	0.10000E 01
226	532.04	0.63013E 00	0.10566E-00	0.31836E-03	0.11523E-03	0.24347E-01	0.18584E-01	0.14540E 01	0.10000E 01
227	530.56	0.84156E 00	0.13530E-00	0.40724E-03	0.14740E-03	0.31177E-01	0.23797E-01	0.17040E 01	0.10000E 01
228	527.94	0.95896E 00	0.15706E-00	0.47185E-03	0.17078E-03	0.36192E-01	0.27625E-01	0.18780E 01	0.10000E 01
229	531.58	0.60676E 00	0.10004E-00	0.30133E-03	0.10907E-03	0.23052E-01	0.17595E-01	0.21880E 01	0.10000E 01
230	528.97	0.44052E-00	0.64697E-01	0.19451E-03	0.70403E-04	0.14909E-01	0.11379E-01	0.11890E 01	0.10000E 01
231	523.08	0.72987E 00	0.12813E-00	0.38358E-03	0.13883E-03	0.29525E-01	0.22536E-01	0.14540E 01	0.10000E 01
232	533.22	0.88572E 00	0.14439E-00	0.43545E-03	0.15761E-03	0.33272E-01	0.25396E-01	0.16130E 01	0.10000E 01
233	532.60	0.10462E 01	0.17181E-00	0.51790E-03	0.18745E-03	0.39591E-01	0.30219E-01	0.17040E 01	0.10000E 01
234	530.12	0.89143E 00	0.14685E-00	0.44187E-03	0.15993E-03	0.33839E-01	0.25829E-01	0.18780E 01	0.10000E 01
235	537.83	0.49974E-00	0.82559E-01	0.24982E-03	0.90421E-04	0.19025E-01	0.14521E-01	0.14540E 01	0.10000E 01
236	533.75	0.10499E 01	0.17120E-00	0.51650E-03	0.18695E-03	0.39451E-01	0.30112E-01	0.17040E 01	0.10000E 01
237	516.66	0.65714E 00	0.10743E-00	0.32013E-03	0.11587E-03	0.24755E-01	0.18896E-01	0.21880E 01	0.10000E 01
238	534.32	0.36338E-00	0.34001E-01	0.10262E-03	0.37144E-04	0.78350E-02	0.59803E-02	0.20700E 01	0.10000E 01
239	534.93	0.58961E 00	0.85849E-01	0.25923E-03	0.93825E-04	0.19783E-01	0.15100E-01	0.11890E 01	0.10000E 01
240	538.04	0.56624E 00	0.94922E-01	0.28728E-03	0.10398E-03	0.21874E-01	0.16696E-01	0.14540E 01	0.10000E 01
241	536.40	0.11049E 01	0.18128E-00	0.54798E-03	0.19834E-03	0.41774E-01	0.31885E-01	0.17040E 01	0.10000E 01
242	535.84	0.11231E 01	0.18562E-00	0.56085E-03	0.20300E-03	0.42773E-01	0.32648E-01	0.18780E 01	0.10000E 01
243	512.98	0.57974E 00	0.94575E-01	0.28108E-03	0.10174E-03	0.21794E-01	0.16635E-01	0.20410E 01	0.10000E 01
244	534.53	0.10910E-01	0.98140E-03	0.29625E-05	0.10723E-05	0.22615E-03	0.17262E-03	0.20700E 01	0.10000E 01
245	537.79	0.51013E 00	0.41687E-01	0.12614E-03	0.45656E-04	0.96063E-02	0.73323E-02	0.21870E 01	0.10000E 01
246	532.48	0.62026E 00	0.10418E-00	0.31402E-03	0.11366E-03	0.24007E-01	0.18324E-01	0.22100E 01	0.10000E 01
247	545.50	0.38338E-00	0.62930E-01	0.19150E-03	0.69312E-04	0.14501E-01	0.11069E-01	0.14540E 01	0.10000E 01
248	534.04	0.10322E 01	0.17042E-00	0.51426E-03	0.18613E-03	0.39271E-01	0.29975E-01	0.17040E 01	0.10000E 01
249	536.06	0.23533E-00	0.19709E-01	0.59561E-04	0.21558E-04	0.45416E-02	0.34665E-02	0.18780E 01	0.10000E 01
250	537.72	0.24000E-00	0.19612E-01	0.59340E-04	0.21478E-04	0.45193E-02	0.34495E-02	0.21880E 01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	546.20	0.38442E-00	0.65069E-01	0.19811E-03	0.71704E-04	0.14994E-01	0.11445E-01	0.14540E 01	0.10000E 01
252	537.90	0.63169E 00	0.10589E-00	0.32042E-03	0.11598E-03	0.24400E-01	0.18624E-01	0.16130E 01	0.10000E 01
253	539.64	-0.36884E-01	-0.32494E-02	-0.98456E-05	-0.35636E-05	-0.74878E-03	-0.57153E-03	0.17060E 01	0.
254	539.38	0.62909E 00	0.10418E-00	0.31560E-03	0.11423E-03	0.24006E-01	0.18324E-01	0.21880E 01	0.10000E 01
255	528.17	0.18961E-00	0.17384E-01	0.52233E-04	0.18906E-04	0.40058E-02	0.30576E-02	0.16580E 01	0.10000E 01
256	538.90	0.23844E-00	0.20001E-01	0.60571E-04	0.21923E-04	0.46091E-02	0.35180E-02	0.17920E 01	0.10000E 01
257	534.63	0.62702E 00	0.10513E-00	0.31738E-03	0.11487E-03	0.24226E-01	0.18491E-01	0.10840E 01	0.10000E 01
258	543.26	0.42337E-00	0.72078E-01	0.21897E-03	0.79257E-04	0.16609E-01	0.12678E-01	0.14540E 01	0.10000E 01
259	537.83	0.43273E-00	0.71597E-01	0.21665E-03	0.78415E-04	0.16499E-01	0.12593E-01	0.16130E 01	0.10000E 01
260	539.42	0.58338E 00	0.95141E-01	0.28823E-03	0.10432E-03	0.21924E-01	0.16734E-01	0.17040E 01	0.10000E 01
261	540.12	0.75377E 00	0.12431E-00	0.37678E-03	0.13637E-03	0.28645E-01	0.21864E-01	0.18780E 01	0.10000E 01
262	537.90	0.76312E 00	0.12857E-00	0.38906E-03	0.14082E-03	0.29627E-01	0.22614E-01	0.20410E 01	0.10000E 01
263	539.70	0.42545E-00	0.71967E-01	0.21807E-03	0.78928E-04	0.16584E-01	0.12658E-01	0.14540E 01	0.10000E 01
264	538.23	0.40312E-00	0.66408E-01	0.20101E-03	0.72754E-04	0.15303E-01	0.11680E-01	0.16130E 01	0.10000E 01
265	537.91	0.55689E 00	0.89903E-01	0.27206E-03	0.98470E-04	0.20717E-01	0.15813E-01	0.17040E 01	0.10000E 01
266	538.05	0.10893E 01	0.17944E-00	0.54306E-03	0.19656E-03	0.41349E-01	0.31561E-01	0.18780E 01	0.10000E 01
267	538.78	0.80000E 00	0.13445E-00	0.40711E-03	0.14735E-03	0.30982E-01	0.23648E-01	0.20410E 01	0.10000E 01
268	537.47	0.58909E 00	0.97004E-01	0.29345E-03	0.10621E-03	0.22353E-01	0.17062E-01	0.16130E 01	0.10000E 01
269	537.98	0.68520E 00	0.11062E-00	0.33477E-03	0.12117E-03	0.25491E-01	0.19457E-01	0.18280E 01	0.10000E 01
270	538.52	0.72312E 00	0.11860E-00	0.35905E-03	0.12996E-03	0.27329E-01	0.20860E-01	0.18780E 01	0.10000E 01
271	534.51	0.82909E 00	0.13871E-00	0.41872E-03	0.15155E-03	0.31964E-01	0.24398E-01	0.20410E 01	0.10000E 01
272	538.48	0.41507E-00	0.70161E-01	0.21241E-03	0.76879E-04	0.16168E-01	0.12341E-01	0.16130E 01	0.10000E 01
273	539.11	0.62078E 00	0.10310E-00	0.31226E-03	0.11302E-03	0.23757E-01	0.18134E-01	0.17200E 01	0.10000E 01
274	536.51	0.74390E 00	0.11963E-00	0.36163E-03	0.13089E-03	0.27566E-01	0.21041E-01	0.18280E 01	0.10000E 01
275	536.42	0.86182E 00	0.14140E-00	0.42742E-03	0.15470E-03	0.32583E-01	0.24870E-01	0.18780E 01	0.10000E 01
276	-4157.09	0.10379E-01	-0.49888E-02	-0.37825E-05	-0.13691E-05	-0.11496E-02	-0.87747E-03	0.20600E 01	0.
277	537.74	0.47948E-00	0.40195E-01	0.12162E-03	0.44019E-04	0.92623E-02	0.70698E-02	0.21000E 01	0.10000E 01
278	539.13	0.28831E-00	0.24188E-01	0.73262E-04	0.26517E-04	0.55738E-02	0.42544E-02	0.21870E 01	0.
279	541.50	0.86234E 00	0.14558E-00	0.44170E-03	0.15987E-03	0.33547E-01	0.25606E-01	0.21950E 01	0.10000E 01
280	538.73	0.75637E 00	0.12616E-00	0.38200E-03	0.13826E-03	0.29072E-01	0.22190E-01	0.18780E 01	0.10000E 01
281	538.59	0.82650E 00	0.13930E-00	0.42176E-03	0.15265E-03	0.32100E-01	0.24502E-01	0.20600E 01	0.10000E 01
282	533.64	0.76052E 00	0.12344E-00	0.37237E-03	0.13478E-03	0.28444E-01	0.21711E-01	0.18280E 01	0.10000E 01
283	537.36	0.77506E 00	0.12988E-00	0.39288E-03	0.14220E-03	0.29929E-01	0.22844E-01	0.20600E 01	0.10000E 01
284	538.74	0.69663E 00	0.11252E-00	0.34069E-03	0.12331E-03	0.25928E-01	0.19790E-01	0.17200E 01	0.10000E 01
285	538.99	0.79844E 00	0.13119E-00	0.39731E-03	0.14380E-03	0.30230E-01	0.23074E-01	0.18780E 01	0.10000E 01
286	537.97	0.31585E-00	0.29118E-01	0.88118E-04	0.31894E-04	0.67098E-02	0.51215E-02	0.16580E 01	0.10000E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.17192E-05	-0.62227E-06	-0.77786E-04	-0.59373E-04	0.17920E 01	0.
288	536.15	0.65818E 00	0.10797E-00	0.32631E-03	0.11811E-03	0.24880E-01	0.18991E-01	0.16130E 01	0.10000E 01
289	538.35	0.86754E-01	0.72775E-02	0.22039E-04	0.79771E-05	0.16770E-02	0.12800E-02	0.17060E 01	0.10000E 01
290	536.24	0.22130E-00	0.18536E-01	0.56024E-04	0.20278E-04	0.42714E-02	0.32603E-02	0.18780E 01	0.10000E 01
291	537.38	0.10171E 01	0.16620E-00	0.50276E-03	0.18197E-03	0.38299E-01	0.29233E-01	0.17200E 01	0.10000E 01
292	535.92	0.57766E 00	0.99102E-01	0.29946E-03	0.10839E-03	0.22837E-01	0.17431E-01	0.14400E 01	0.10000E 01
293	537.12	0.12452E 01	0.20093E-00	0.60771E-03	0.21996E-03	0.46302E-01	0.35342E-01	0.17200E 01	0.10000E 01
294	535.47	0.12208E 01	0.20141E-00	0.60840E-03	0.22021E-03	0.46412E-01	0.35425E-01	0.18780E 01	0.10000E 01

CONFIDENTIAL

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
129	2	-3.40	146.60	-0.	-0.	1	C2	2.75	2	10.15	934.20	1831.80	129	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.888421E 02	0.193339E-01	0.468571E 04	0.182584E-04	0.719621E-07	0.119687E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730488E 00	0.433658E 01	0.567963E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	551.35	0.26517E 02	0.34734E 01	0.10559E-01	0.38361E-02	0.80095E 00	0.61155E 00	-0.	0.10000E 01
2-4157.13		0.51854E-02	-0.20564E-02	-0.15571E-05	-0.56569E-06	-0.47420E-03	-0.36206E-03	-0.30000E-01	0.
3-4157.13		0.51854E-02	-0.22359E-02	-0.16930E-05	-0.61506E-06	-0.51558E-03	-0.39366E-03	-0.60000E-01	0.
4-4157.13		0.51854E-02	-0.22934E-02	-0.17366E-05	-0.63090E-06	-0.52886E-03	-0.40380E-03	-0.90000E-01	0.
5	543.38	0.19917E 02	0.31600E 01	0.95507E-02	0.34697E-02	0.72869E 00	0.55638E 00	-0.20000E-00	0.10000E 01
6	543.95	0.17443E 02	0.27683E 01	0.83702E-02	0.30408E-02	0.63835E 00	0.48740E-00	-0.40000E-00	0.10000E 01
7	543.48	0.14832E 02	0.23646E 01	0.71471E-02	0.25965E-02	0.54526E 00	0.41633E-00	-0.60000E 00	0.10000E 01
8-4157.13		0.51854E-02	-0.23630E-02	-0.17893E-05	-0.65003E-06	-0.54490E-03	-0.41604E-03	-0.80000E 00	0.
9	543.55	0.12051E 02	0.18909E 01	0.57158E-02	0.20765E-02	0.43604E-00	0.33293E-00	-0.90000E 00	0.10000E 01
10	545.84	0.10931E 02	0.17395E 01	0.52668E-02	0.19134E-02	0.40112E-00	0.30627E-00	-0.98000E 00	0.10000E 01
11	539.90	0.42234E-00	0.72617E-01	0.21892E-03	0.79531E-04	0.16745E-01	0.12786E-01	-0.11220E 01	0.10000E 01
12	542.85	0.10395E 01	0.15255E-00	0.46088E-03	0.16744E-03	0.35178E-01	0.26859E-01	-0.11890E 01	0.10000E 01
13	543.30	0.76936E 00	0.11643E-00	0.35187E-03	0.12783E-03	0.26848E-01	0.20500E-01	-0.13340E 01	0.10000E 01
14	537.95	0.31377E-00	0.53890E-01	0.16223E-03	0.58938E-04	0.12427E-01	0.94884E-02	-0.14400E 01	0.10000E 01
15-4157.13		0.51854E-02	-0.20564E-02	-0.15571E-05	-0.56569E-06	-0.47420E-03	-0.36206E-03	0.30000E-01	0.
16-4157.13		0.51854E-02	-0.22359E-02	-0.16930E-05	-0.61506E-06	-0.51558E-03	-0.39366E-03	0.60000E-01	0.
17	1085.37	-0.36365E-02	-0.72446E-03	-0.36574E-05	-0.13287E-05	-0.16706E-03	-0.12755E-03	0.90000E-01	0.
18	546.84	0.24846E 02	0.39496E 01	0.11967E-01	0.43476E-02	0.91076E 00	0.69539E 00	0.20000E-00	0.10000E 01
19	556.92	0.28060E 02	0.44857E 01	0.13693E-01	0.49744E-02	0.10344E 01	0.78978E 00	0.40000E-00	0.10000E 01
20-4157.13		0.51854E-02	-0.23630E-02	-0.17893E-05	-0.65003E-06	-0.54490E-03	-0.41604E-03	0.60000E 00	0.
21-4157.13		0.51854E-02	-0.22246E-02	-0.16845E-05	-0.61197E-06	-0.51299E-03	-0.39169E-03	0.92000E 00	0.
22	581.53	0.45433E 02	0.69638E 01	0.21650E-01	0.78654E-02	0.16058E 01	0.12261E 01	0.10400E 01	0.10000E 01
23	575.31	0.41889E 02	0.64161E 01	0.19855E-01	0.72130E-02	0.14795E 01	0.11297E 01	0.10600E 01	0.10000E 01
24	557.87	0.30832E 02	0.49001E 01	0.14968E-01	0.54378E-02	0.11299E 01	0.86274E 00	0.10840E 01	0.10000E 01
25	521.17	0.62431E 01	0.90972E 00	0.27057E-02	0.98295E-03	0.20978E-00	0.16017E-00	0.12070E 01	0.10000E 01
26	519.32	0.56177E 01	0.86246E 00	0.25617E-02	0.93064E-03	0.19888E-00	0.15185E-00	0.12490E 01	0.10000E 01
27	520.13	0.56171E 01	0.84879E 00	0.25225E-02	0.91642E-03	0.19573E-00	0.14944E-00	0.13340E 01	0.10000E 01
28	523.03	0.43423E 01	0.73087E 00	0.21766E-02	0.79076E-03	0.16854E-00	0.12868E-00	0.14540E 01	0.10000E 01
29	530.70	0.38462E 01	0.63093E 00	0.18894E-02	0.68641E-03	0.14549E-00	0.11109E-00	0.16580E 01	0.10000E 01
30	536.68	0.31886E 01	0.53123E 00	0.15977E-02	0.58045E-03	0.12250E-00	0.93532E-01	0.20410E 01	0.10000E 01
31	543.82	0.30764E 01	0.51459E 00	0.15558E-02	0.56520E-03	0.11866E-00	0.90603E-01	0.22480E 01	0.10000E 01
32-4157.13		0.51854E-02	-0.22381E-02	-0.16947E-05	-0.61568E-06	-0.51610E-03	-0.39406E-03	-0.60000E-01	0.
33-4157.13		0.51854E-02	-0.20564E-02	-0.15571E-05	-0.56569E-06	-0.47420E-03	-0.36206E-03	-0.30000E-01	0.
34-4157.13		0.51854E-02	-0.22381E-02	-0.16947E-05	-0.61568E-06	-0.51610E-03	-0.39406E-03	0.30000E-01	0.
35-4157.13		0.51854E-02	-0.22934E-02	-0.17366E-05	-0.63090E-06	-0.52886E-03	-0.40380E-03	0.60000E-01	0.
36	543.68	0.13141E 02	0.20852E 01	0.63036E-02	0.22901E-02	0.48085E-00	0.36714E-00	-0.86800E 00	0.10000E 01
37	544.06	0.12662E 02	0.19554E 01	0.59129E-02	0.21481E-02	0.45091E-00	0.34429E-00	-0.91100E 00	0.10000E 01
38	545.87	0.12540E 02	0.19734E 01	0.59750E-02	0.21707E-02	0.45505E-00	0.34745E-00	-0.95300E 00	0.10000E 01
39-4157.13		0.51854E-02	-0.23368E-02	-0.17695E-05	-0.64283E-06	-0.53886E-03	-0.41144E-03	0.51000E-01	0.
40-4157.13		0.51854E-02	-0.23368E-02	-0.17695E-05	-0.64283E-06	-0.53886E-03	-0.41144E-03	0.29000E-01	0.
41-4157.13		0.51854E-02	-0.23233E-02	-0.17593E-05	-0.63913E-06	-0.53576E-03	-0.40907E-03	0.70000E-02	0.
42	546.19	0.16565E 02	0.26184E 01	0.79416E-02	0.28851E-02	0.60380E 00	0.46102E-00	-0.86800E 00	0.10000E 01
43	546.83	0.15756E 02	0.24951E 01	0.75601E-02	0.27465E-02	0.57537E 00	0.43931E-00	-0.91100E 00	0.10000E 01
44	554.62	0.22080E 02	0.34916E 01	0.10640E-01	0.38654E-02	0.80514E 00	0.61475E 00	-0.95300E 00	0.10000E 01
45	539.61	0.38779E 01	0.63114E 00	0.19023E-02	0.69108E-03	0.14554E-00	0.11112E-00	-0.10400E 01	0.10000E 01
46-4157.13		0.51854E-02	-0.23428E-02	-0.17740E-05	-0.64448E-06	-0.54024E-03	-0.41249E-03	0.70000E-02	0.
47-4157.13		0.51854E-02	-0.23428E-02	-0.17740E-05	-0.64448E-06	-0.54024E-03	-0.41249E-03	0.29000E-01	0.
48	545.21	0.13593E 02	0.21588E 01	0.65333E-02	0.23735E-02	0.49781E-00	0.38009E-00	0.51000E-01	0.10000E 01
49	546.27	0.13177E 02	0.20741E 01	0.62817E-02	0.22821E-02	0.47827E-00	0.36517E-00	0.70000E-02	0.10000E 01
50	547.07	0.12758E 02	0.20154E 01	0.61077E-02	0.22189E-02	0.46475E-00	0.35485E-00	0.29000E-01	0.10000E 01
51-4157.13		0.51854E-02	-0.23293E-02	-0.17638E-05	-0.64077E-06	-0.53714E-03	-0.41012E-03	0.51000E-01	0.
52-4157.13		0.51854E-02	-0.23428E-02	-0.17740E-05	-0.64448E-06	-0.54024E-03	-0.41249E-03	-0.86800E 00	0.
53	546.75	0.12878E 02	0.20471E 01	0.62023E-02	0.22532E-02	0.47206E-00	0.36043E-00	-0.91100E 00	0.10000E 01
54	548.90	0.12737E 02	0.20077E 01	0.60926E-02	0.22134E-02	0.46298E-00	0.35350E-00	-0.95300E 00	0.10000E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	539.85	0.23361E 01	0.38026E-00	0.11463E-02	0.41645E-03	0.87686E-01	0.66951E-01	-0.10400E 01	0.10000E 01
56	538.85	0.10405E 01	0.17461E-00	0.52600E-03	0.19109E-03	0.40265E-01	0.30744E-01	-0.10680E 01	0.10000E 01
57	537.82	0.85922E 00	0.13970E-00	0.42051E-03	0.15277E-03	0.32214E-01	0.24596E-01	-0.10400E 01	0.10000E 01
58	535.58	0.21278E 01	0.37405E-00	0.11241E-02	0.40838E-03	0.86255E-01	0.65858E-01	-0.10680E 01	0.10000E 01
59	536.78	0.41553E 01	0.67521E 00	0.20309E-02	0.73782E-03	0.15570E-00	0.11888E-00	-0.10400E 01	0.10000E 01
60	534.93	0.19361E 01	0.32419E-00	0.97381E-03	0.35378E-03	0.74757E-01	0.57079E-01	-0.10680E 01	0.10000E 01
61	539.00	0.57870E 00	0.95870E-01	0.28883E-03	0.10493E-03	0.22107E-01	0.16880E-01	-0.11220E 01	0.10000E 01
62	542.52	0.82130E 00	0.12424E-00	0.37525E-03	0.13633E-03	0.28649E-01	0.21874E-01	-0.13340E 01	0.10000E 01
63	539.14	0.65351E 00	0.11232E-00	0.33841E-03	0.12294E-03	0.25900E-01	0.19775E-01	-0.11220E 01	0.10000E 01
64	542.62	0.88000E 00	0.13312E-00	0.40212E-03	0.14609E-03	0.30698E-01	0.23439E-01	-0.13340E 01	0.10000E 01
65	537.61	0.46805E-00	0.80374E-01	0.24190E-03	0.87880E-04	0.18534E-01	0.14151E-01	0.14400E 01	0.10000E 01
66	535.89	0.38442E-00	0.62762E-01	0.18866E-03	0.68538E-04	0.14473E-01	0.11050E-01	0.16130E 01	0.10000E 01
67	538.70	0.58702E 00	0.94219E-01	0.28379E-03	0.10310E-03	0.21727E-01	0.16589E-01	0.17200E 01	0.10000E 01
68	522.61	0.36883E-00	0.60226E-01	0.17931E-03	0.65140E-04	0.13888E-01	0.10604E-01	-0.16130E 01	0.10000E 01
69	541.30	0.55948E 00	0.89931E-01	0.27139E-03	0.98594E-04	0.20738E-01	0.15834E-01	-0.18280E 01	0.10000E 01
70	527.34	0.74598E 00	0.10871E-00	0.32476E-03	0.11798E-03	0.25068E-01	0.19140E-01	-0.11650E 01	0.10000E 01
71	541.77	0.48416E-00	0.40679E-01	0.12280E-03	0.44613E-04	0.93804E-02	0.71622E-02	-0.12050E 01	0.10000E 01
72	543.61	0.92832E 00	0.13466E-00	0.40704E-03	0.14788E-03	0.31051E-01	0.23709E-01	-0.12120E 01	0.10000E 01
73	540.61	0.68416E 00	0.10045E-00	0.30299E-03	0.11007E-03	0.23164E-01	0.17686E-01	-0.11650E 01	0.10000E 01
74	543.00	0.47792E-00	0.40183E-01	0.12141E-03	0.44108E-04	0.92660E-02	0.70749E-02	-0.12050E 01	0.10000E 01
75	532.71	0.99429E 00	0.14260E-00	0.42764E-03	0.15536E-03	0.32882E-01	0.25106E-01	-0.12120E 01	0.10000E 01
76	539.32	0.90026E 00	0.13548E-00	0.40827E-03	0.14832E-03	0.31242E-01	0.23854E-01	0.10840E 01	0.10000E 01
77	539.49	0.62494E 00	0.10098E-00	0.30433E-03	0.11056E-03	0.23285E-01	0.17779E-01	0.11220E 01	0.10000E 01
78	532.17	0.81091E 00	0.12012E-00	0.36011E-03	0.13082E-03	0.27700E-01	0.21150E-01	0.13340E 01	0.10000E 01
79	541.62	0.94286E 00	0.15838E-00	0.47806E-03	0.17367E-03	0.36521E-01	0.27885E-01	-0.11890E 01	0.10000E 01
80	536.36	0.83533E 00	0.12529E-00	0.37674E-03	0.13687E-03	0.28892E-01	0.22060E-01	-0.13340E 01	0.10000E 01
81	531.53	0.79169E 00	0.12735E-00	0.38159E-03	0.13863E-03	0.29366E-01	0.22422E-01	-0.11470E 01	0.10000E 01
82	541.38	0.67792E 00	0.11376E-00	0.34331E-03	0.12472E-03	0.26232E-01	0.20029E-01	-0.11890E 01	0.10000E 01
83	536.79	0.83169E 00	0.13920E-00	0.41869E-03	0.15211E-03	0.32099E-01	0.24508E-01	-0.10840E 01	0.10000E 01
84	541.48	0.76156E 00	0.11187E-00	0.33764E-03	0.12266E-03	0.25797E-01	0.19697E-01	-0.11890E 01	0.10000E 01
85	541.20	0.91169E 00	0.13390E-00	0.40406E-03	0.14679E-03	0.30878E-01	0.23576E-01	-0.13090E 01	0.10000E 01
86	544.42	0.98701E 00	0.14722E-00	0.44529E-03	0.16177E-03	0.33949E-01	0.25921E-01	-0.13340E 01	0.10000E 01
87	522.01	0.62888E 01	0.91213E 00	0.27144E-02	0.98614E-03	0.21033E-00	0.16060E-00	0.11990E 01	0.10000E 01
88	515.81	0.60462E 01	0.88135E 00	0.26112E-02	0.94864E-03	0.20324E-00	0.15518E-00	0.12070E 01	0.10000E 01
89	517.72	0.50665E 01	0.75193E 00	0.22308E-02	0.81045E-03	0.17339E-00	0.13239E-00	0.13340E 01	0.10000E 01
90	521.64	0.62286E 01	0.87992E 00	0.26179E-02	0.95106E-03	0.20291E-00	0.15493E-00	0.12070E 01	0.10000E 01
91	523.34	0.55720E 01	0.85740E 00	0.25540E-02	0.92786E-03	0.19771E-00	0.15096E-00	0.12490E 01	0.10000E 01
92	522.57	0.54395E 01	0.81359E 00	0.24222E-02	0.87996E-03	0.18761E-00	0.14325E-00	0.13340E 01	0.10000E 01
93	526.57	0.42244E 01	0.70824E 00	0.21146E-02	0.76822E-03	0.16332E-00	0.12470E-00	0.14900E 01	0.10000E 01
94	-4157.13	0.51854E-02	-0.15591E-02	-0.11806E-05	-0.42890E-06	-0.35953E-03	-0.27451E-03	-0.	0.
95	223.89	0.32779E-00	0.28310E-01	0.69499E-04	0.25248E-04	0.65281E-02	0.49844E-02	-0.	0.
96	-4157.13	0.51854E-02	-0.15591E-02	-0.11806E-05	-0.42890E-06	-0.35953E-03	-0.27451E-03	-0.	0.
97	-4157.13	0.51854E-02	-0.15591E-02	-0.11806E-05	-0.42890E-06	-0.35953E-03	-0.27451E-03	-0.	0.
98	-4157.13	0.51854E-02	-0.15703E-02	-0.11891E-05	-0.43198E-06	-0.36211E-03	-0.27649E-03	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
134	2	-3.40	146.60	-0.	-0.	2	C2	2.70	2	10.15	931.20	1834.10	134	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.889634E 02	0.192689E-01	0.468880E 04	0.181722E-04	0.720604E-07	0.119038E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730558E 00	0.432932E 01	0.566575E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	543.20	0.11662E 01	0.19031E-00	0.57397E-03	0.20937E-03	0.43958E-01	0.33589E-01	-0.10600E 01	0.10000E 01
100	541.09	0.59532E 00	0.99970E-01	0.30105E-03	0.10982E-03	0.23091E-01	0.17645E-01	-0.10840E 01	0.10000E 01
101	543.40	0.49143E-00	0.80821E-01	0.24379E-03	0.88930E-04	0.18668E-01	0.14265E-01	-0.11080E 01	0.10000E 01
102	543.56	0.50650E 00	0.83050E-01	0.25055E-03	0.91394E-04	0.19183E-01	0.14658E-01	-0.11080E 01	0.10000E 01
103	542.25	0.76727E 00	0.12893E-00	0.38858E-03	0.14175E-03	0.29780E-01	0.22756E-01	-0.10800E 01	0.10000E 01
104	-4157.09	0.10379E-01	-0.47074E-02	-0.35627E-05	-0.12996E-05	-0.10873E-02	-0.83085E-03	0.85000E 00	0.
105	600.91	0.54783E 02	0.84856E 01	0.26717E-01	0.97458E-02	0.19600E 01	0.14977E 01	0.94000E 00	0.10000E 01
106	605.05	0.59229E 02	0.91172E 01	0.28797E-01	0.10505E-01	0.21059E 01	0.16092E 01	0.96000E 00	0.10000E 01
107	583.61	0.58038E 02	0.88313E 01	0.27444E-01	0.10011E-01	0.20399E 01	0.15587E 01	0.98000E 00	0.10000E 01
108	584.35	0.58178E 02	0.89011E 01	0.27677E-01	0.10096E-01	0.20560E 01	0.15710E 01	0.10000E 01	0.10000E 01
109	591.95	0.51089E 02	0.78752E 01	0.24627E-01	0.89835E-02	0.18190E 01	0.13900E 01	0.10200E 01	0.10000E 01
110	602.53	0.50753E 02	0.78682E 01	0.24804E-01	0.90479E-02	0.18174E 01	0.13887E 01	0.80000E-01	0.10000E 01
111	594.48	0.53779E 02	0.82315E 01	0.25791E-01	0.94079E-02	0.19013E 01	0.14529E 01	0.10000E-00	0.10000E 01
112	610.33	0.58285E 02	0.90430E 01	0.28679E-01	0.10461E-01	0.20888E 01	0.15961E 01	0.12000E-00	0.10000E 01
113	605.13	0.61123E 02	0.94890E 01	0.29973E-01	0.10933E-01	0.21918E 01	0.16748E 01	0.14000E-00	0.10000E 01
114	-4157.09	0.10379E-01	-0.44529E-02	-0.33702E-05	-0.12294E-05	-0.10285E-02	-0.78594E-03	0.80000E-01	0.
115	595.13	0.50195E 02	0.77246E 01	0.24215E-01	0.88329E-02	0.17843E 01	0.13634E 01	0.10000E-00	0.10000E 01
116	595.01	0.52027E 02	0.80601E 01	0.25264E-01	0.92158E-02	0.18617E 01	0.14226E 01	0.12000E-00	0.10000E 01
117	565.07	0.55066E 02	0.83647E 01	0.25637E-01	0.93516E-02	0.19321E 01	0.14764E 01	0.14000E-00	0.10000E 01
118	591.65	0.44317E 02	0.68876E 01	0.21534E-01	0.78551E-02	0.15909E 01	0.12157E 01	0.10000E-00	0.10000E 01
119	546.22	-0.98309E 02	-0.14827E 02	-0.44818E-01	-0.16349E-01	-0.34249E 01	-0.26170E 01	0.15000E-00	0.
120	584.98	0.44457E 02	0.68615E 01	0.21345E-01	0.77861E-02	0.15849E 01	0.12111E 01	0.20000E-00	0.10000E 01
121	588.64	0.45489E 02	0.70583E 01	0.22018E-01	0.80315E-02	0.16304E 01	0.12458E 01	0.25000E-00	0.10000E 01
122	580.43	0.42086E 02	0.65011E 01	0.20155E-01	0.73519E-02	0.15017E 01	0.11474E 01	0.30000E-00	0.10000E 01
123	581.59	0.44972E 02	0.69862E 01	0.21677E-01	0.79073E-02	0.16137E 01	0.12331E 01	0.35000E-00	0.10000E 01
124	570.86	0.46067E 02	0.71616E 01	0.22044E-01	0.80411E-02	0.16542E 01	0.12640E 01	0.38000E-00	0.10000E 01
125	587.64	0.51555E 02	0.81551E 01	0.25420E-01	0.92725E-02	0.18837E 01	0.14394E 01	0.45000E-00	0.10000E 01
126	582.02	0.47352E 02	0.75650E 01	0.23481E-01	0.85652E-02	0.17474E 01	0.13352E 01	0.61000E 00	0.10000E 01
127	557.69	0.32115E 02	0.50871E 01	0.15506E-01	0.56564E-02	0.11750E 01	0.89786E 00	0.70000E 00	0.10000E 01
128	539.44	0.17157E 02	0.26988E 01	0.81174E-02	0.29610E-02	0.62337E 00	0.47633E-00	0.75000E 00	0.10000E 01
129	572.59	0.36538E 02	0.58541E 01	0.18043E-01	0.65816E-02	0.13522E 01	0.10333E 01	0.70000E 00	0.10000E 01
130	574.48	0.38617E 02	0.61937E 01	0.19116E-01	0.69731E-02	0.14306E 01	0.10932E 01	0.80000E 00	0.10000E 01
131	548.66	0.20237E 02	0.30360E 01	0.91932E-02	0.33535E-02	0.70126E 00	0.53585E 00	0.90000E 00	0.10000E 01
132	566.84	0.31883E 02	0.48477E 01	0.14877E-01	0.54268E-02	0.11197E 01	0.85562E 00	0.90000E 00	0.10000E 01
133	567.13	0.33794E 02	0.51132E 01	0.15695E-01	0.57253E-02	0.11811E 01	0.90248E 00	0.96000E 00	0.10000E 01
134	564.82	0.33248E 02	0.50328E 01	0.15422E-01	0.56256E-02	0.11625E 01	0.88828E 00	0.10000E 01	0.10000E 01
135	-4157.09	0.10379E-01	-0.46400E-02	-0.35118E-05	-0.12810E-05	-0.10718E-02	-0.81896E-03	0.70000E-02	0.
136	550.75	0.17266E 02	0.26633E 01	0.80770E-02	0.29463E-02	0.61518E 00	0.47007E-00	0.70000E-02	0.10000E 01
137	550.56	0.17335E 02	0.27131E 01	0.82271E-02	0.30010E-02	0.62668E 00	0.47886E-00	0.39000E-01	0.10000E 01
138	-4157.09	0.10379E-01	-0.46026E-02	-0.34834E-05	-0.12707E-05	-0.10631E-02	-0.81235E-03	0.78000E-01	0.
139	-4157.09	0.10379E-01	-0.45801E-02	-0.34664E-05	-0.12645E-05	-0.10579E-02	-0.80839E-03	0.11700E-00	0.
140	549.77	0.18479E 02	0.28447E 01	0.77118E-02	0.28131E-02	0.58778E 00	0.44913E-00	0.78000E-01	0.
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23789E-05	-0.86778E-06	-0.72603E-03	-0.55478E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23789E-05	-0.86778E-06	-0.72603E-03	-0.55478E-03	-0.	0.
143	545.89	0.15220E 02	0.23333E 01	0.70501E-02	0.25717E-02	0.53895E 00	0.41182E-00	0.78000E-01	0.10000E 01
144	549.63	0.16792E 02	0.25842E 01	0.78307E-02	0.28565E-02	0.59690E 00	0.45611E-00	0.70000E-02	0.10000E 01
145	550.04	0.15641E 02	0.23958E 01	0.72620E-02	0.26490E-02	0.55338E 00	0.42285E-00	0.70000E-02	0.10000E 01
146	545.23	0.15218E 02	0.23363E 01	0.70567E-02	0.25741E-02	0.53964E 00	0.41235E-00	0.39000E-01	0.10000E 01
147	931.77	-0.22283E-00	-0.41261E-01	-0.17428E-03	-0.63573E-04	-0.95306E-02	-0.72825E-02	0.78000E-01	0.
148	774.26	-0.10385E-01	-0.18058E-02	-0.65565E-05	-0.23917E-05	-0.41711E-03	-0.31873E-03	0.11700E-00	0.
149	573.51	0.34570E 02	0.56038E 01	0.17283E-01	0.63044E-02	0.12944E 01	0.98906E 00	0.70000E-02	0.10000E 01
150	574.58	0.34738E 02	0.56610E 01	0.17473E-01	0.63738E-02	0.13076E 01	0.99915E 00	0.70000E-02	0.10000E 01
151	583.48	0.35265E 02	0.57749E 01	0.17944E-01	0.65456E-02	0.13339E 01	0.10193E 01	0.70000E-02	0.10000E 01
152	586.65	0.40424E 02	0.63909E 01	0.19906E-01	0.72612E-02	0.14762E 01	0.11280E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.09		0.10379E-01	-0.45801E-02	-0.34664E-05	-0.12645E-05	-0.10579E-02	-0.80839E-03	0.39000E-01	0.
154	580.13	0.41337E 02	0.64696E 01	0.20052E-01	0.73146E-02	0.14944E 01	0.11419E 01	0.78000E-01	0.10000E 01
155-4157.09		0.10379E-01	-0.47523E-02	-0.35967E-05	-0.13120E-05	-0.10977E-02	-0.83877E-03	0.39000E-01	0.
156-4157.09		0.10379E-01	-0.47373E-02	-0.35854E-05	-0.13079E-05	-0.10942E-02	-0.83613E-03	0.39000E-01	0.
157	589.91	0.34671E 02	0.56357E 01	0.17335E-01	0.63233E-02	0.13017E 01	0.99469E 00	0.78000E-01	0.10000E 01
158-4157.09		0.10379E-01	-0.47672E-02	-0.36080E-05	-0.13161E-05	-0.11012E-02	-0.84141E-03	0.39000E-01	0.
159-4157.09		0.10379E-01	-0.47672E-02	-0.36080E-05	-0.13161E-05	-0.11012E-02	-0.84141E-03	0.78000E-01	0.
160-4157.09		0.10379E-01	-0.47523E-02	-0.35967E-05	-0.13120E-05	-0.10977E-02	-0.83877E-03	0.39000E-01	0.
161	563.03	0.28278E 02	0.44709E 01	0.13682E-01	0.49909E-02	0.10327E 01	0.78911E 00	0.43000E-01	0.10000E 01
162	562.05	0.28841E 02	0.45722E 01	0.13982E-01	0.51003E-02	0.10561E 01	0.80699E 00	0.85000E-01	0.10000E 01
163	561.18	0.28484E 02	0.45207E 01	0.13815E-01	0.50395E-02	0.10442E 01	0.79789E 00	0.12800E-00	0.10000E 01
164	563.58	0.28029E 02	0.44328E 01	0.13571E-01	0.49504E-02	0.10239E 01	0.78239E 00	0.43000E-01	0.
165-4157.09		0.10379E-01	-0.46550E-02	-0.35231E-05	-0.12851E-05	-0.10752E-02	-0.82160E-03	0.85000E-01	0.10000E 01
166	563.77	0.29181E 02	0.46155E 01	0.14132E-01	0.51552E-02	0.10661E 01	0.81464E 00	0.43000E-01	0.
167-4157.09		0.10379E-01	-0.46400E-02	-0.35118E-05	-0.12810E-05	-0.10718E-02	-0.81896E-03	0.12800E-00	0.10000E 01
168	551.75	0.18068E 02	0.28709E 01	0.87130E-02	0.31783E-02	0.66313E 00	0.50671E 00	0.85000E-01	0.10000E 01
169	567.27	0.30162E 02	0.48185E 01	0.14792E-01	0.53959E-02	0.11130E 01	0.85046E 00	0.12800E-00	0.10000E 01
170	569.14	0.31162E 02	0.49595E 01	0.15246E-01	0.55614E-02	0.11456E 01	0.87534E 00	0.85000E-01	0.10000E 01
171	566.61	0.30990E 02	0.49094E 01	0.15064E-01	0.54950E-02	0.11340E 01	0.86651E 00	0.43000E-01	0.
172-4157.09		0.10379E-01	-0.46625E-02	-0.35287E-05	-0.12872E-05	-0.10770E-02	-0.82292E-03	0.12800E-00	0.10000E 01
173	573.67	0.33482E 02	0.53676E 01	0.16557E-01	0.60395E-02	0.12398E 01	0.94739E 00	0.85000E-01	0.
174-4157.09		0.10379E-01	-0.46550E-02	-0.35231E-05	-0.12851E-05	-0.10752E-02	-0.82160E-03	0.43000E-01	0.10000E 01
175	572.29	0.32647E 02	0.51881E 01	0.15986E-01	0.58314E-02	0.11984E 01	0.91569E 00	0.43000E-01	0.10000E 01
176	573.11	0.33207E 02	0.52795E 01	0.16278E-01	0.59378E-02	0.12195E 01	0.93182E 00	0.12800E-00	0.10000E 01
177	577.07	0.36580E 02	0.58569E 01	0.18110E-01	0.66062E-02	0.13527E 01	0.10337E 01	0.85000E-01	0.10000E 01
178	575.45	0.34729E 02	0.55463E 01	0.17130E-01	0.62488E-02	0.12811E 01	0.97891E 00	0.70000E-02	0.10000E 01
179	575.36	0.33689E 02	0.53800E 01	0.16616E-01	0.60610E-02	0.12427E 01	0.94957E 00	0.70000E-02	0.
180-4157.09		0.10379E-01	-0.46774E-02	-0.35401E-05	-0.12913E-05	-0.10804E-02	-0.82556E-03	0.70000E-02	0.10000E 01
181	568.38	0.31218E 02	0.49902E 01	0.15332E-01	0.55927E-02	0.11526E 01	0.88076E 00	0.70000E-02	0.
182-4157.09		0.10379E-01	-0.46924E-02	-0.35514E-05	-0.12955E-05	-0.10839E-02	-0.82821E-03	0.32000E-01	0.10000E 01
183	577.43	0.35779E 02	0.57293E 01	0.17722E-01	0.64646E-02	0.13234E 01	0.10112E 01	0.32000E-01	0.10000E 01
184	585.59	0.42738E 02	0.69184E 01	0.21531E-01	0.78542E-02	0.15980E 01	0.12211E 01	0.64000E-01	0.10000E 01
185	570.41	0.38792E 02	0.62278E 01	0.19163E-01	0.69903E-02	0.14385E 01	0.10992E 01	0.64000E-01	0.10000E 01
186	581.91	0.44325E 02	0.71381E 01	0.22154E-01	0.80812E-02	0.16488E 01	0.12599E 01	0.70000E-02	0.10000E 01
187	578.96	0.36753E 02	0.59281E 01	0.18358E-01	0.66966E-02	0.13693E 01	0.10463E 01	0.70000E-02	0.10000E 01
188	576.84	0.34444E 02	0.56378E 01	0.17431E-01	0.63584E-02	0.13022E 01	0.99506E 00	0.70000E-02	0.10000E 01
189	538.28	0.59532E 01	0.97327E 00	0.29249E-02	0.10669E-02	0.22481E-00	0.17178E-00	0.10600E 01	0.10000E 01
190	535.72	0.36291E 01	0.60429E 00	0.18127E-02	0.66123E-03	0.13958E-00	0.10666E-00	0.10840E 01	0.10000E 01
191	533.87	0.18057E 01	0.30199E-00	0.90469E-03	0.33001E-03	0.69756E-01	0.53302E-01	0.11080E 01	0.10000E 01
192	534.48	0.20120E 01	0.33478E-00	0.10034E-02	0.36600E-03	0.77329E-01	0.59089E-01	0.11080E 01	0.10000E 01
193	534.08	0.37548E 01	0.61523E 00	0.18433E-02	0.67240E-03	0.14211E-00	0.10859E-00	0.16580E 01	0.10000E 01
194	535.69	0.36016E 01	0.58794E 00	0.17636E-02	0.64332E-03	0.13580E-00	0.10377E-00	0.11700E 01	0.10000E 01
195	534.27	0.36816E 01	0.60329E 00	0.18078E-02	0.65944E-03	0.13935E-00	0.10648E-00	0.16740E 01	0.10000E 01
196	535.71	0.32774E 01	0.53503E 00	0.16049E-02	0.58544E-03	0.12358E-00	0.94432E-01	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)
124	2	-3.40	146.60	-0.	-0.	3	C2	2.70	2	10.15	943.00	1822.70

(OFF)

GRP	CONFIG	TIME
124	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.883511E 02	0.195287E-01	0.467303E 04	0.185449E-04	0.715644E-07	0.121910E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730204E 00	0.435768E 01	0.572006E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	596.58	0.23070E 02	0.36849E 01	0.11684E-01	0.41904E-02	0.84560E 00	0.64420E 00	0.10000E 01	0.10000E 01
198	598.33	0.23823E 02	0.36849E 01	0.11700E-01	0.41961E-02	0.84561E 00	0.64421E 00	0.12000E 01	0.10000E 01
199	571.31	0.11746E 02	0.18867E 01	0.58687E-02	0.21048E-02	0.43297E-00	0.32985E-00	0.13000E 01	0.10000E 01
200	553.11	0.29003E 01	0.42661E-00	0.13091E-02	0.46949E-03	0.97899E-01	0.74582E-01	0.11890E 01	0.10000E 01
201	544.84	0.24431E 01	0.40582E-00	0.12377E-02	0.44389E-03	0.93127E-01	0.70947E-01	0.14540E 01	0.10000E 01
202	545.81	0.22977E 01	0.37896E-00	0.11566E-02	0.41481E-03	0.86965E-01	0.66252E-01	0.17040E 01	0.10000E 01
203	547.40	0.16706E 01	0.27579E-00	0.84270E-03	0.30224E-03	0.63289E-01	0.48215E-01	0.20410E 01	0.10000E 01
204	545.64	0.46754E-02	0.35826E-03	0.10932E-05	0.39209E-06	0.82213E-04	0.62632E-04	0.20700E 01	0.
205	545.82	0.18909E-00	0.16554E-01	0.50522E-04	0.18120E-04	0.37988E-02	0.28940E-02	0.21880E 01	0.
206	547.30	0.16421E 01	0.27106E-00	0.82818E-03	0.29703E-03	0.62203E-01	0.47388E-01	0.22480E 01	0.10000E 01
207	548.13	0.19330E 01	0.31385E-00	0.95951E-03	0.34413E-03	0.72023E-01	0.54869E-01	0.20700E 01	0.10000E 01
208	546.36	0.50442E 00	0.45039E-01	0.13751E-03	0.49319E-04	0.10336E-01	0.78739E-02	0.20700E 01	0.10000E 01
209	543.78	0.50701E 00	0.40933E-01	0.12474E-03	0.44738E-04	0.93933E-02	0.71561E-02	0.21880E 01	0.10000E 01
210	543.67	0.16047E 01	0.26637E-00	0.81169E-03	0.29111E-03	0.61128E-01	0.46568E-01	0.20700E 01	0.10000E 01
211	547.29	0.14379E 01	0.23918E-00	0.73076E-03	0.26209E-03	0.54886E-01	0.41814E-01	0.21880E 01	0.10000E 01
212	547.37	0.14291E 01	0.23483E-00	0.71751E-03	0.25734E-03	0.53888E-01	0.41054E-01	0.22390E 01	0.10000E 01
213	544.82	0.13268E 01	0.21770E-00	0.66393E-03	0.23812E-03	0.49958E-01	0.38059E-01	0.21880E 01	0.10000E 01
214	546.52	0.12338E 01	0.20513E-00	0.62637E-03	0.22465E-03	0.47073E-01	0.35861E-01	0.22480E 01	0.10000E 01
215	550.85	0.52312E 00	0.79104E-01	0.24232E-03	0.86909E-04	0.18153E-01	0.13829E-01	0.11650E 01	0.10000E 01
216	-1148.30	0.33973E 01	-0.30531E-01	-0.42528E-04	-0.15253E-04	-0.70062E-02	-0.53375E-02	0.12050E 01	0.
217	543.49	0.61611E 00	0.90140E-01	0.27464E-03	0.98498E-04	0.20685E-01	0.15759E-01	0.12120E 01	0.10000E 01
218	546.19	0.49818E-00	0.73375E-01	0.22400E-03	0.80338E-04	0.16838E-01	0.12828E-01	0.11890E 01	0.10000E 01
219	538.42	0.56312E 00	0.94420E-01	0.28661E-03	0.10279E-03	0.21667E-01	0.16507E-01	0.14540E 01	0.10000E 01
220	539.50	0.90338E 00	0.15734E-00	0.47797E-03	0.17142E-03	0.36106E-01	0.27506E-01	0.17040E 01	0.10000E 01
221	542.28	0.67117E 00	0.11217E-00	0.34146E-03	0.12246E-03	0.25741E-01	0.19610E-01	0.20410E 01	0.10000E 01
222	522.42	0.43741E-00	0.73050E-01	0.21917E-03	0.78606E-04	0.16764E-01	0.12771E-01	0.22480E 01	0.10000E 01
223	549.03	0.47273E-00	0.71411E-01	0.21846E-03	0.78353E-04	0.16387E-01	0.12484E-01	0.11650E 01	0.10000E 01
224	544.66	0.36416E-00	0.30646E-01	0.93451E-04	0.33516E-04	0.70326E-02	0.53576E-02	0.12050E 01	0.10000E 01
225	542.44	0.61143E 00	0.89403E-01	0.27218E-03	0.97618E-04	0.20516E-01	0.15630E-01	0.12120E 01	0.10000E 01
226	541.55	0.56520E 00	0.95277E-01	0.28987E-03	0.10396E-03	0.21864E-01	0.16657E-01	0.14540E 01	0.10000E 01
227	540.11	0.85870E 00	0.13880E-00	0.42184E-03	0.15129E-03	0.31852E-01	0.24265E-01	0.17040E 01	0.10000E 01
228	537.38	0.81974E 00	0.13498E-00	0.40941E-03	0.14683E-03	0.30975E-01	0.23597E-01	0.18780E 01	0.10000E 01
229	539.90	0.53403E 00	0.88460E-01	0.26881E-03	0.96408E-04	0.20300E-01	0.15465E-01	0.21880E 01	0.10000E 01
230	544.84	0.57195E 00	0.84754E-01	0.25848E-03	0.92705E-04	0.19449E-01	0.14817E-01	0.11890E 01	0.10000E 01
231	532.06	0.53195E 00	0.93861E-01	0.28359E-03	0.10171E-03	0.21539E-01	0.16409E-01	0.14540E 01	0.10000E 01
232	542.67	0.91584E 00	0.15010E-00	0.45703E-03	0.16392E-03	0.34444E-01	0.26240E-01	0.16130E 01	0.10000E 01
233	542.28	0.10301E 01	0.17009E-00	0.51775E-03	0.18569E-03	0.39032E-01	0.29735E-01	0.17040E 01	0.10000E 01
234	539.58	0.10005E 01	0.16570E-00	0.50341E-03	0.18055E-03	0.38026E-01	0.28969E-01	0.18780E 01	0.10000E 01
235	545.43	0.31948E-00	0.53005E-01	0.16173E-03	0.58003E-04	0.12164E-01	0.92666E-02	0.14540E 01	0.10000E 01
236	543.25	0.10214E 01	0.16582E-00	0.50511E-03	0.18116E-03	0.38051E-01	0.28988E-01	0.17040E 01	0.10000E 01
237	524.12	0.47689E-00	0.78293E-01	0.23519E-03	0.84352E-04	0.17967E-01	0.13688E-01	0.21880E 01	0.10000E 01
238	541.87	0.32519E-00	0.28963E-01	0.88139E-04	0.31611E-04	0.66465E-02	0.50635E-02	0.20700E 01	0.10000E 01
239	548.82	0.73143E 00	0.10733E-00	0.32830E-03	0.11775E-03	0.24631E-01	0.18764E-01	0.11890E 01	0.10000E 01
240	543.54	0.41143E-00	0.69185E-01	0.21080E-03	0.75603E-04	0.15877E-01	0.12095E-01	0.14540E 01	0.10000E 01
241	545.06	0.83584E 00	0.13780E-00	0.42033E-03	0.15075E-03	0.31623E-01	0.24091E-01	0.17040E 01	0.10000E 01
242	544.53	0.11184E 01	0.18575E-00	0.56637E-03	0.20313E-03	0.42626E-01	0.32473E-01	0.18780E 01	0.10000E 01
243	520.51	0.79740E 00	0.13065E-00	0.39143E-03	0.14039E-03	0.29980E-01	0.22840E-01	0.20410E 01	0.10000E 01
244	541.46	0.43120E-01	0.38939E-02	0.11846E-04	0.42486E-05	0.89358E-03	0.68075E-03	0.20700E 01	0.
245	544.74	0.53611E 00	0.43982E-01	0.13413E-03	0.48104E-04	0.10093E-01	0.76891E-02	0.21870E 01	0.10000E 01
246	539.40	0.55065E 00	0.92852E-01	0.28205E-03	0.10116E-03	0.21308E-01	0.16233E-01	0.22100E 01	0.10000E 01
247	549.72	0.46234E-00	0.76071E-01	0.23284E-03	0.83508E-04	0.17457E-01	0.13299E-01	0.14540E 01	0.10000E 01
248	541.96	0.78493E 00	0.13017E-00	0.39616E-03	0.14208E-03	0.29872E-01	0.22757E-01	0.17040E 01	0.10000E 01
249	543.84	0.18286E-00	0.15382E-01	0.46876E-04	0.16812E-04	0.35298E-02	0.26891E-02	0.18780E 01	0.
250	544.69	0.23948E-00	0.19646E-01	0.59911E-04	0.21487E-04	0.45085E-02	0.34347E-02	0.21880E 01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	550.31	0.39584E-00	0.67157E-01	0.20564E-03	0.73754E-04	0.15411E-01	0.11741E-01	0.14540E 01	0.10000E 01
252	544.56	0.35740E-00	0.60134E-01	0.18336E-03	0.65761E-04	0.13799E-01	0.10513E-01	0.16130E 01	0.10000E 01
253	545.65	-0.20757E-02	-0.18348E-03	-0.55991E-06	-0.20081E-06	-0.42105E-04	-0.32077E-04	0.17060E 01	0.
254	546.49	0.62545E 00	0.10399E-00	0.31753E-03	0.11388E-03	0.23863E-01	0.18180E-01	0.21880E 01	0.10000E 01
255	534.99	0.20987E-00	0.19315E-01	0.58483E-04	0.20975E-04	0.44324E-02	0.33767E-02	0.16580E 01	0.10000E 01
256	546.05	0.19117E-00	0.16101E-01	0.49147E-04	0.17627E-04	0.36948E-02	0.28148E-02	0.17920E 01	0.10000E 01
257	555.42	0.71273E 00	0.12090E-00	0.37161E-03	0.13328E-03	0.27744E-01	0.21136E-01	0.10840E 01	0.10000E 01
258	548.25	0.39273E-00	0.67048E-01	0.20500E-03	0.73523E-04	0.15386E-01	0.11722E-01	0.14540E 01	0.10000E 01
259	544.21	0.33091E-00	0.54947E-01	0.16750E-03	0.60074E-04	0.12609E-01	0.96061E-02	0.16130E 01	0.10000E 01
260	545.41	0.35585E-00	0.58229E-01	0.17766E-03	0.63718E-04	0.13362E-01	0.10180E-01	0.17040E 01	0.10000E 01
261	546.97	0.67584E 00	0.11188E-00	0.34176E-03	0.12257E-03	0.25675E-01	0.19560E-01	0.18780E 01	0.10000E 01
262	545.40	0.82649E 00	0.13983E-00	0.42664E-03	0.15302E-03	0.32089E-01	0.24446E-01	0.20410E 01	0.10000E 01
263	546.16	0.41091E-00	0.69759E-01	0.21296E-03	0.76378E-04	0.16008E-01	0.12196E-01	0.14540E 01	0.10000E 01
264	544.77	0.32468E-00	0.53683E-01	0.16371E-03	0.58716E-04	0.12319E-01	0.93850E-02	0.16130E 01	0.10000E 01
265	544.64	0.44467E-00	0.72059E-01	0.21973E-03	0.78808E-04	0.16536E-01	0.12598E-01	0.17040E 01	0.10000E 01
266	544.80	0.74649E 00	0.12343E-00	0.37642E-03	0.13501E-03	0.28325E-01	0.21578E-01	0.18780E 01	0.10000E 01
267	546.88	0.80779E 00	0.13637E-00	0.41654E-03	0.14939E-03	0.31295E-01	0.23842E-01	0.20410E 01	0.10000E 01
268	543.87	0.39273E-00	0.64902E-01	0.19780E-03	0.70940E-04	0.14894E-01	0.11346E-01	0.16130E 01	0.10000E 01
269	545.62	0.58234E 00	0.94420E-01	0.28812E-03	0.10334E-03	0.21667E-01	0.16507E-01	0.18280E 01	0.10000E 01
270	546.44	0.64312E 00	0.10595E-00	0.32350E-03	0.11602E-03	0.24313E-01	0.18522E-01	0.18780E 01	0.10000E 01
271	542.65	0.82234E 00	0.13821E-00	0.42084E-03	0.15093E-03	0.31717E-01	0.24163E-01	0.20410E 01	0.10000E 01
272	545.28	0.31065E-00	0.52712E-01	0.16081E-03	0.57676E-04	0.12096E-01	0.92153E-02	0.16130E 01	0.10000E 01
273	546.21	0.40624E-00	0.67736E-01	0.20679E-03	0.74165E-04	0.15544E-01	0.11842E-01	0.17200E 01	0.10000E 01
274	544.20	0.54078E 00	0.87339E-01	0.26624E-03	0.95487E-04	0.20043E-01	0.15269E-01	0.18280E 01	0.10000E 01
275	544.35	0.61455E 00	0.10128E-00	0.30876E-03	0.11074E-03	0.23241E-01	0.17706E-01	0.18780E 01	0.10000E 01
276	-4157.09	0.10379E-01	-0.49888E-02	-0.37851E-05	-0.13575E-05	-0.11448E-02	-0.87215E-03	0.20600E 01	0.
277	545.96	0.47169E-00	0.39725E-01	0.12125E-03	0.43487E-04	0.91160E-02	0.69448E-02	0.21000E 01	0.10000E 01
278	-4157.09	0.10379E-01	-0.24951E-02	-0.18931E-05	-0.67897E-06	-0.57258E-03	-0.43621E-03	0.21870E 01	0.
279	548.20	0.91740E 00	0.15546E-00	0.47529E-03	0.17046E-03	0.35675E-01	0.27178E-01	0.21950E 01	0.10000E 01
280	546.64	0.62857E 00	0.10531E-00	0.32160E-03	0.11534E-03	0.24166E-01	0.18411E-01	0.18780E 01	0.10000E 01
281	546.62	0.86338E 00	0.14617E-00	0.44638E-03	0.16010E-03	0.33544E-01	0.25555E-01	0.20600E 01	0.10000E 01
282	540.85	0.64520E 00	0.10514E-00	0.31973E-03	0.11467E-03	0.24129E-01	0.18382E-01	0.18280E 01	0.10000E 01
283	545.27	0.73195E 00	0.12320E-00	0.37585E-03	0.13480E-03	0.28272E-01	0.21538E-01	0.20600E 01	0.10000E 01
284	545.03	0.44831E-00	0.72665E-01	0.22164E-03	0.79493E-04	0.16675E-01	0.12704E-01	0.17200E 01	0.10000E 01
285	545.62	0.66598E 00	0.10983E-00	0.33515E-03	0.12020E-03	0.25204E-01	0.19201E-01	0.18780E 01	0.10000E 01
286	544.75	0.25039E-00	0.23171E-01	0.70663E-04	0.25343E-04	0.53174E-02	0.40509E-02	0.16580E 01	0.10000E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.17271E-05	-0.61941E-06	-0.77463E-04	-0.59013E-04	0.17920E 01	0.
288	543.21	0.26338E-00	0.43377E-01	0.13213E-03	0.47389E-04	0.99542E-02	0.75833E-02	0.16130E 01	0.
289	544.47	-0.24934E-01	-0.20981E-02	-0.63970E-05	-0.22943E-05	-0.48147E-03	-0.36679E-03	0.17060E 01	0.
290	543.68	0.25559E-00	0.21497E-01	0.65506E-04	0.23494E-04	0.49332E-02	0.37582E-02	0.18780E 01	0.10000E 01
291	544.80	0.61715E 00	0.10126E-00	0.30882E-03	0.11076E-03	0.23238E-01	0.17703E-01	0.17200E 01	0.10000E 01
292	540.60	0.40156E-00	0.69072E-01	0.21000E-03	0.75317E-04	0.15851E-01	0.12075E-01	0.14400E 01	0.10000E 01
293	544.87	0.76935E 00	0.13469E-00	0.38028E-03	0.13639E-03	0.28614E-01	0.21799E-01	0.17200E 01	0.10000E 01
294	543.98	0.11314E 01	0.18756E-00	0.57167E-03	0.20503E-03	0.43042E-01	0.32790E-01	0.18780E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
130	2	3.59	153.59	-0.	-0.	1	C2	2.75	2	10.15	936.50	1824.40	130	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.884480E 02	0.193936E-01	0.467538E 04	0.183964E-04	0.716429E-07	0.120863E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730260E 00	0.434201E 01	0.569004E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	559.80	0.29392E 02	0.38682E 01	0.11910E-01	0.43040E-02	0.89087E 00	0.67981E 00	-0.	0.10000E 01
2-4157.13		0.51854E-02	-0.20564E-02	-0.15596E-05	-0.56360E-06	-0.47360E-03	-0.36140E-03	-0.30000E-01	0.
3-4157.13		0.51854E-02	-0.22359E-02	-0.16958E-05	-0.61278E-06	-0.51494E-03	-0.39294E-03	-0.60000E-01	0.
4-4157.13		0.51854E-02	-0.22934E-02	-0.17394E-05	-0.62856E-06	-0.52820E-03	-0.40306E-03	-0.90000E-01	0.
5	548.58	0.22930E 02	0.36487E 01	0.11142E-01	0.40262E-02	0.84032E 00	0.64124E 00	-0.20000E-00	0.10000E 01
6	549.92	0.20511E 02	0.32661E 01	0.99831E-02	0.36075E-02	0.75220E 00	0.57400E 00	-0.40000E-00	0.10000E 01
7	549.70	0.17651E 02	0.28237E 01	0.86297E-02	0.31185E-02	0.65033E 00	0.49626E-00	-0.60000E 00	0.10000E 01
8-4157.13		0.51854E-02	-0.23630E-02	-0.17922E-05	-0.64762E-06	-0.54421E-03	-0.41528E-03	-0.80000E 00	0.
9	550.74	0.15141E 02	0.23853E 01	0.72955E-02	0.26363E-02	0.54936E 00	0.41921E-00	-0.90000E 00	0.10000E 01
10	555.34	0.14360E 02	0.22972E 01	0.70500E-02	0.25476E-02	0.52907E 00	0.40373E-00	-0.98000E 00	0.10000E 01
11	546.51	0.10764E 01	0.18576E-00	0.56636E-03	0.20466E-03	0.42782E-01	0.32646E-01	-0.11220E 01	0.10000E 01
12	548.68	0.14977E 01	0.22051E-00	0.67341E-03	0.24335E-03	0.50786E-01	0.38754E-01	-0.11890E 01	0.10000E 01
13	548.35	0.17138E 01	0.26009E-00	0.79407E-03	0.28695E-03	0.59900E-01	0.45709E-01	-0.13340E 01	0.10000E 01
14	542.96	0.14779E 01	0.25455E-00	0.77409E-03	0.27973E-03	0.58625E-01	0.44736E-01	-0.14400E 01	0.10000E 01
15-4157.13		0.51854E-02	-0.20564E-02	-0.15596E-05	-0.56360E-06	-0.47360E-03	-0.36140E-03	0.30000E-01	0.
16-4157.13		0.51854E-02	-0.22359E-02	-0.16958E-05	-0.61278E-06	-0.51494E-03	-0.39294E-03	0.60000E-01	0.
17	1085.37	-0.36365E-02	-0.72446E-03	-0.36972E-05	-0.13360E-05	-0.16685E-03	-0.12732E-03	0.90000E-01	0.
18	557.96	0.27326E 02	0.43708E 01	0.13440E-01	0.48566E-02	0.10066E 01	0.76815E 00	0.20000E-00	0.10000E 01
19	575.89	0.30532E 02	0.49322E 01	0.15371E-01	0.55544E-02	0.11359E 01	0.86681E 00	0.40000E-00	0.10000E 01
20-4157.13		0.51854E-02	-0.23630E-02	-0.17922E-05	-0.64762E-06	-0.54421E-03	-0.41528E-03	0.60000E 00	0.
21-4157.13		0.51854E-02	-0.22246E-02	-0.16872E-05	-0.60971E-06	-0.51235E-03	-0.39097E-03	0.92000E 00	0.
22	581.18	0.33544E 02	0.51406E 01	0.16084E-01	0.58123E-02	0.11839E 01	0.90343E 00	0.10400E 01	0.10000E 01
23	577.00	0.30259E 02	0.46390E 01	0.14469E-01	0.52286E-02	0.10684E 01	0.81528E 00	0.10600E 01	0.10000E 01
24	564.60	0.21290E 02	0.33961E 01	0.10495E-01	0.37923E-02	0.78216E 00	0.59686E 00	0.10840E 01	0.10000E 01
25	549.33	0.33179E 01	0.49122E-00	0.15008E-02	0.54234E-03	0.11313E-00	0.86330E-01	0.12070E 01	0.10000E 01
26	550.50	0.30068E 01	0.46981E-00	0.14366E-02	0.51915E-03	0.10820E-00	0.82567E-01	0.12490E 01	0.10000E 01
27	551.66	0.30727E 01	0.47264E-00	0.14465E-02	0.52273E-03	0.10885E-00	0.83064E-01	0.13340E 01	0.10000E 01
28	550.99	0.25958E 01	0.44385E-00	0.13578E-02	0.49064E-03	0.10222E-00	0.78005E-01	0.14540E 01	0.10000E 01
29	550.74	0.26758E 01	0.44391E-00	0.13577E-02	0.49062E-03	0.10224E-00	0.78016E-01	0.16580E 01	0.10000E 01
30	549.68	0.24847E 01	0.41699E-00	0.12743E-02	0.46050E-03	0.96035E-01	0.73283E-01	0.20410E 01	0.10000E 01
31	551.45	0.23865E 01	0.40090E-00	0.12268E-02	0.44332E-03	0.92331E-01	0.70457E-01	0.22480E 01	0.10000E 01
32-4157.13		0.51854E-02	-0.22381E-02	-0.16975E-05	-0.61340E-06	-0.51545E-03	-0.39334E-03	-0.60000E-01	0.
33-4157.13		0.51854E-02	-0.20564E-02	-0.15596E-05	-0.56360E-06	-0.47360E-03	-0.36140E-03	-0.30000E-01	0.
34-4157.13		0.51854E-02	-0.22381E-02	-0.16975E-05	-0.61340E-06	-0.51545E-03	-0.39334E-03	0.30000E-01	0.
35-4157.13		0.51854E-02	-0.22934E-02	-0.17394E-05	-0.62856E-06	-0.52820E-03	-0.40306E-03	0.60000E-01	0.
36	549.92	0.16381E 02	0.26085E 01	0.79733E-02	0.28813E-02	0.60076E 00	0.45844E-00	-0.86800E 00	0.10000E 01
37	551.24	0.15855E 02	0.24582E 01	0.75212E-02	0.27179E-02	0.56615E 00	0.43202E-00	-0.91100E 00	0.10000E 01
38	552.65	0.15962E 02	0.25213E 01	0.77222E-02	0.27905E-02	0.58067E 00	0.44310E-00	-0.95300E 00	0.10000E 01
39-4157.13		0.51854E-02	-0.23366E-02	-0.17723E-05	-0.64045E-06	-0.53819E-03	-0.41068E-03	0.51000E-01	0.
40-4157.13		0.51854E-02	-0.23358E-02	-0.17723E-05	-0.64045E-06	-0.53819E-03	-0.41068E-03	0.29000E-01	0.
41-4157.13		0.51854E-02	-0.23233E-02	-0.17621E-05	-0.63676E-06	-0.53509E-03	-0.40832E-03	0.70000E-02	0.
42	555.10	0.20724E 02	0.32885E 01	0.10090E-01	0.36463E-02	0.75738E 00	0.57795E 00	-0.86800E 00	0.10000E 01
43	553.33	0.19593E 02	0.31140E 01	0.95424E-02	0.34483E-02	0.71718E 00	0.54727E 00	-0.91100E 00	0.10000E 01
44	563.80	0.28752E 02	0.45698E 01	0.14113E-01	0.50999E-02	0.10525E 01	0.80313E 00	-0.95300E 00	0.10000E 01
45	544.54	0.57792E 01	0.94318E 00	0.28716E-02	0.10377E-02	0.21722E-00	0.16576E-00	-0.10400E 01	0.10000E 01
46-4157.13		0.51854E-02	-0.23428E-02	-0.17769E-05	-0.64209E-06	-0.53956E-03	-0.41174E-03	0.70000E-02	0.
47-4157.13		0.51854E-02	-0.23428E-02	-0.17769E-05	-0.64209E-06	-0.53956E-03	-0.41174E-03	0.29000E-01	0.
48	550.60	0.16403E 02	0.26129E 01	0.79907E-02	0.28875E-02	0.60177E 00	0.45921E-00	0.51000E-01	0.10000E 01
49	551.90	0.16023E 02	0.25300E 01	0.77445E-02	0.27986E-02	0.58267E 00	0.44463E-00	0.70000E-02	0.10000E 01
50	552.49	0.15701E 02	0.24879E 01	0.76190E-02	0.27532E-02	0.57298E 00	0.43724E-00	0.29000E-01	0.10000E 01
51-4157.13		0.51854E-02	-0.23293E-02	-0.17668E-05	-0.63940E-06	-0.53646E-03	-0.40937E-03	0.51000E-01	0.
52-4157.13		0.51854E-02	-0.23428E-02	-0.17769E-05	-0.64209E-06	-0.53956E-03	-0.41174E-03	-0.86800E 00	0.
53	553.00	0.16026E 02	0.25563E 01	0.78316E-02	0.28300E-02	0.58874E 00	0.44926E-00	-0.91100E 00	0.10000E 01
54	554.34	0.16214E 02	0.25794E 01	0.79101E-02	0.28584E-02	0.59406E 00	0.45332E-00	-0.95300E 00	0.10000E 01

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050 050

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	543.16	0.33304E 01	0.54311E 00	0.16518E-02	0.59691E-03	0.12508E-00	0.95449E-01	-0.10400E 01	0.10000E 01
56	542.89	0.15740E 01	0.26474E-00	0.80505E-03	0.29092E-03	0.60973E-01	0.46528E-01	-0.10680E 01	0.10000E 01
57	540.22	0.12265E 01	0.19968E-00	0.60602E-03	0.21899E-03	0.45988E-01	0.35093E-01	-0.10400E 01	0.10000E 01
58	538.33	0.29626E 01	0.52161E 00	0.15809E-02	0.57126E-03	0.12013E-00	0.91671E-01	-0.10680E 01	0.10000E 01
59	540.29	0.56982E 01	0.92774E 00	0.28157E-02	0.10175E-02	0.21367E-00	0.16305E-00	-0.10400E 01	0.10000E 01
60	539.81	0.26847E 01	0.45077E-00	0.13676E-02	0.49421E-03	0.10382E-00	0.79221E-01	-0.10680E 01	0.10000E 01
61	544.17	0.10597E 01	0.17607E-00	0.53591E-03	0.19366E-03	0.40551E-01	0.30944E-01	-0.11220E 01	0.10000E 01
62	548.09	0.13912E 01	0.24145E-00	0.73701E-03	0.26633E-03	0.55607E-01	0.42433E-01	-0.13340E 01	0.10000E 01
63	543.98	0.10166E 01	0.17520E-00	0.53318E-03	0.19267E-03	0.40350E-01	0.30791E-01	-0.11220E 01	0.10000E 01
64	547.85	0.17475E 01	0.26514E-00	0.80918E-03	0.29241E-03	0.61063E-01	0.46597E-01	-0.13340E 01	0.10000E 01
65	542.60	0.14135E 01	0.24341E-00	0.74001E-03	0.26741E-03	0.56059E-01	0.42778E-01	0.14400E 01	0.10000E 01
66	540.53	0.11558E 01	0.18920E-00	0.57434E-03	0.20755E-03	0.43575E-01	0.33252E-01	0.16130E 01	0.10000E 01
67	542.61	0.93662E 00	0.15066E-00	0.45805E-03	0.16552E-03	0.34699E-01	0.26478E-01	0.17200E 01	0.10000E 01
68	526.82	0.11195E 01	0.18323E-00	0.55069E-03	0.19900E-03	0.42200E-01	0.32203E-01	-0.16130E 01	0.10000E 01
69	544.92	0.59429E 00	0.95720E-01	0.29150E-03	0.10534E-03	0.22045E-01	0.16822E-01	-0.18280E 01	0.10000E 01
70	534.11	0.13678E 01	0.20009E-00	0.60455E-03	0.21846E-03	0.46083E-01	0.35165E-01	-0.11650E 01	0.10000E 01
71	547.33	0.67169E 00	0.56611E-01	0.17271E-03	0.62411E-04	0.13038E-01	0.99492E-02	-0.12050E 01	0.10000E 01
72	550.14	0.15527E 01	0.22605E-00	0.69107E-03	0.24973E-03	0.52062E-01	0.39728E-01	-0.12120E 01	0.10000E 01
73	546.16	0.13314E 01	0.19610E-00	0.59773E-03	0.21600E-03	0.45162E-01	0.34463E-01	-0.11650E 01	0.10000E 01
74	548.69	0.49922E-00	0.42107E-01	0.12859E-03	0.46467E-04	0.96975E-02	0.74001E-02	-0.12050E 01	0.10000E 01
75	538.52	0.15522E 01	0.22334E-00	0.67697E-03	0.24463E-03	0.51437E-01	0.39251E-01	-0.12120E 01	0.10000E 01
76	544.39	0.12868E 01	0.19420E-00	0.59118E-03	0.21363E-03	0.44726E-01	0.34130E-01	0.10840E 01	0.10000E 01
77	544.74	0.10301E 01	0.16694E-00	0.50834E-03	0.18370E-03	0.38448E-01	0.29339E-01	0.11220E 01	0.10000E 01
78	537.41	0.17169E 01	0.25508E-00	0.77256E-03	0.27917E-03	0.58747E-01	0.44830E-01	0.13340E 01	0.10000E 01
79	547.76	0.16182E 01	0.27275E-00	0.83236E-03	0.30079E-03	0.62816E-01	0.47935E-01	-0.11890E 01	0.10000E 01
80	541.48	0.17039E 01	0.25631E-00	0.77859E-03	0.28135E-03	0.59030E-01	0.45045E-01	-0.13340E 01	0.10000E 01
81	537.55	0.15870E 01	0.25615E-00	0.77588E-03	0.28038E-03	0.58994E-01	0.45018E-01	-0.11470E 01	0.10000E 01
82	547.01	0.13195E 01	0.22211E-00	0.67745E-03	0.24481E-03	0.51154E-01	0.39035E-01	-0.11890E 01	0.10000E 01
83	541.69	0.13548E 01	0.22738E-00	0.69081E-03	0.24963E-03	0.52367E-01	0.39961E-01	-0.10840E 01	0.10000E 01
84	547.30	0.14327E 01	0.21115E-00	0.64416E-03	0.23278E-03	0.48630E-01	0.37109E-01	-0.11890E 01	0.10000E 01
85	547.09	0.14826E 01	0.21847E-00	0.66640E-03	0.24081E-03	0.50316E-01	0.38396E-01	-0.13090E 01	0.10000E 01
86	549.59	0.19818E 01	0.29646E-00	0.90595E-03	0.32738E-03	0.68277E-01	0.52102E-01	-0.13340E 01	0.10000E 01
87	549.99	0.33397E 01	0.49210E-00	0.15042E-02	0.54357E-03	0.11333E-00	0.86484E-01	0.11990E 01	0.10000E 01
88	545.27	0.30712E 01	0.45521E-00	0.13866E-02	0.50108E-03	0.10484E-00	0.80001E-01	0.12070E 01	0.10000E 01
89	549.20	0.29023E 01	0.43847E-00	0.13395E-02	0.48406E-03	0.10098E-00	0.77060E-01	0.13340E 01	0.10000E 01
90	549.98	0.33190E 01	0.47643E-00	0.14563E-02	0.52626E-03	0.10972E-00	0.83730E-01	0.12070E 01	0.10000E 01
91	553.69	0.30234E 01	0.47325E-00	0.14506E-02	0.52418E-03	0.10899E-00	0.83171E-01	0.12490E 01	0.10000E 01
92	553.19	0.29610E 01	0.45059E-00	0.13806E-02	0.49890E-03	0.10377E-00	0.79189E-01	0.13340E 01	0.10000E 01
93	553.24	0.26816E 01	0.45636E-00	0.13984E-02	0.50531E-03	0.10510E-00	0.80204E-01	0.14900E 01	0.10000E 01
94	-4157.13	0.51854E-02	-0.15591E-02	-0.11825E-05	-0.42731E-06	-0.35908E-03	-0.27401E-03	-0.	0.
95	289.02	0.25922E-00	0.23447E-01	0.60164E-04	0.21741E-04	0.54001E-02	0.41208E-02	-0.	0.
96	-4157.13	0.51854E-02	-0.15591E-02	-0.11825E-05	-0.42731E-06	-0.35908E-03	-0.27401E-03	-0.	0.
97	-4157.13	0.51854E-02	-0.15591E-02	-0.11825E-05	-0.42731E-06	-0.35908E-03	-0.27401E-03	-0.	0.
98	-4157.13	0.51854E-02	-0.15703E-02	-0.11910E-05	-0.43038E-06	-0.36166E-03	-0.27598E-03	-0.	0.

CONFIDENTIAL

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
135	2	3.60	153.60	-0.	-0.	2	C2	2.75	2	10.15	940.00	1821.80	135	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.883082E 02	0.194695E-01	0.467180E 04	0.184976E-04	0.715297E-07	0.121626E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730179E 00	0.435046E 01	0.570621E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	541.62	0.18249E 01	0.29753E-00	0.90594E-03	0.32583E-03	0.68391E-01	0.52141E-01	-0.10600E 01	0.10000E 01
100	540.40	0.88052E 00	0.14780E-00	0.44964E-03	0.16172E-03	0.33974E-01	0.25902E-01	-0.10840E 01	0.10000E 01
101	542.28	0.75221E 00	0.12363E-00	0.37662E-03	0.13546E-03	0.28418E-01	0.21666E-01	-0.11080E 01	0.10000E 01
102	542.51	0.86805E 00	0.14225E-00	0.43342E-03	0.15588E-03	0.32698E-01	0.24929E-01	-0.11080E 01	0.10000E 01
103	540.90	0.10748E 01	0.18047E-00	0.54920E-03	0.19753E-03	0.41482E-01	0.31626E-01	-0.10800E 01	0.10000E 01
104-4157.13		0.51854E-02	-0.23518E-02	-0.17847E-05	-0.64187E-06	-0.54058E-03	-0.41214E-03	0.85000E 00	0.
105	594.26	0.51118E 02	0.78895E 01	0.24991E-01	0.89883E-02	0.18135E 01	0.13826E 01	0.94000E 00	0.10000E 01
106	598.76	0.53167E 02	0.81566E 01	0.25926E-01	0.93248E-02	0.18749E 01	0.14294E 01	0.96000E 00	0.10000E 01
107	577.75	0.50675E 02	0.76862E 01	0.24043E-01	0.86472E-02	0.17668E 01	0.13470E 01	0.98000E 00	0.10000E 01
108	574.92	0.47739E 02	0.72664E 01	0.22681E-01	0.81575E-02	0.16703E 01	0.12734E 01	0.10000E 01	0.10000E 01
109	583.22	0.39177E 02	0.60105E 01	0.18879E-01	0.67901E-02	0.13816E 01	0.10533E 01	0.10200E 01	0.10000E 01
110	595.87	0.48438E 02	0.74624E 01	0.23731E-01	0.85350E-02	0.17199E 01	0.13113E 01	0.80000E-01	0.10000E 01
111	588.84	0.50582E 02	0.77185E 01	0.24348E-01	0.87571E-02	0.17742E 01	0.13527E 01	0.10000E-00	0.10000E 01
112	604.49	0.52744E 02	0.81579E 01	0.26045E-01	0.93676E-02	0.18752E 01	0.14297E 01	0.12000E-00	0.10000E 01
113	598.99	0.52270E 02	0.80880E 01	0.25713E-01	0.92479E-02	0.18591E 01	0.14174E 01	0.14000E-00	0.10000E 01
114-4157.13		0.51854E-02	-0.22246E-02	-0.16882E-05	-0.60718E-06	-0.51136E-03	-0.38986E-03	0.80000E-01	0.
115	590.76	0.48388E 02	0.74290E 01	0.23469E-01	0.84410E-02	0.17076E 01	0.13019E 01	0.10000E-00	0.10000E 01
116	591.59	0.49631E 02	0.76747E 01	0.24261E-01	0.87256E-02	0.17641E 01	0.13450E 01	0.12000E-00	0.10000E 01
117	562.20	0.51240E 02	0.77712E 01	0.24026E-01	0.86412E-02	0.17863E 01	0.13619E 01	0.14000E-00	0.10000E 01
118	587.81	0.44993E 02	0.69782E 01	0.21996E-01	0.79109E-02	0.16040E 01	0.12229E 01	0.10000E-00	0.10000E 01
119	568.47	0.44401E 02	0.67800E 01	0.21060E-01	0.75745E-02	0.15585E 01	0.11882E 01	0.15000E-00	0.10000E 01
120	617.48	0.40543E 02	0.63676E 01	0.20536E-01	0.73860E-02	0.14637E 01	0.11159E 01	0.20000E-00	0.10000E 01
121	590.05	0.43606E 02	0.67713E 01	0.21380E-01	0.76896E-02	0.15565E 01	0.11867E 01	0.25000E-00	0.10000E 01
122	582.99	0.40270E 02	0.62293E 01	0.19563E-01	0.70360E-02	0.14319E 01	0.10917E 01	0.30000E-00	0.10000E 01
123	583.94	0.41183E 02	0.64057E 01	0.20132E-01	0.72406E-02	0.14724E 01	0.11226E 01	0.35000E-00	0.10000E 01
124	573.61	0.41769E 02	0.65032E 01	0.20279E-01	0.72934E-02	0.14948E 01	0.11397E 01	0.38000E-00	0.10000E 01
125	589.24	0.44683E 02	0.70741E 01	0.22322E-01	0.80284E-02	0.16261E 01	0.12397E 01	0.45000E-00	0.10000E 01
126	583.16	0.42606E 02	0.68111E 01	0.21393E-01	0.76942E-02	0.15656E 01	0.11936E 01	0.61000E 00	0.10000E 01
127	558.21	0.25581E 02	0.40533E 01	0.12494E-01	0.44937E-02	0.93169E 00	0.71033E 00	0.70000E 00	0.10000E 01
128	543.49	0.12388E 02	0.19531E 01	0.59550E-02	0.21418E-02	0.44893E-00	0.34227E-00	0.75000E 00	0.10000E 01
129	573.00	0.34971E 02	0.56044E 01	0.17468E-01	0.62826E-02	0.12882E 01	0.98216E 00	0.70000E 00	0.10000E 01
130	575.09	0.36604E 02	0.58728E 01	0.18333E-01	0.65939E-02	0.13499E 01	0.10292E 01	0.80000E 00	0.10000E 01
131	549.16	0.16707E 02	0.25071E 01	0.76762E-02	0.27608E-02	0.57627E 00	0.43936E-00	0.90000E 00	0.10000E 01
132	567.28	0.32357E 02	0.49211E 01	0.15273E-01	0.54930E-02	0.11312E 01	0.86242E 00	0.90000E 00	0.10000E 01
133	568.49	0.33777E 02	0.51146E 01	0.15887E-01	0.57140E-02	0.11756E 01	0.89631E 00	0.96000E 00	0.10000E 01
134	566.39	0.32655E 02	0.49472E 01	0.15343E-01	0.55183E-02	0.11372E 01	0.86696E 00	0.10000E 01	0.10000E 01
135-4157.13		0.51854E-02	-0.23181E-02	-0.17591E-05	-0.63269E-06	-0.53284E-03	-0.40624E-03	0.70000E-02	0.
136	550.09	0.19518E 02	0.30095E 01	0.92211E-02	0.33165E-02	0.69178E 00	0.52741E 00	0.70000E-02	0.10000E 01
137	550.70	0.19932E 02	0.31198E 01	0.95633E-02	0.34396E-02	0.71713E 00	0.54675E 00	0.39000E-01	0.10000E 01
138-4157.13		0.51854E-02	-0.22994E-02	-0.17449E-05	-0.62759E-06	-0.52855E-03	-0.40297E-03	0.78000E-01	0.
139-4157.13		0.51854E-02	-0.22682E-02	-0.17364E-05	-0.62453E-06	-0.52397E-03	-0.40100E-03	0.11700E-00	0.
140	550.03	0.19301E 02	0.29808E 01	0.91327E-02	0.32847E-02	0.68518E 00	0.52238E 00	0.78000E-01	0.10000E 01
141-4157.13		0.51854E-02	-0.15703E-02	-0.11917E-05	-0.42860E-06	-0.36096E-03	-0.27520E-03	-0.	0.
142-4157.13		0.51854E-02	-0.15703E-02	-0.11917E-05	-0.42860E-06	-0.36096E-03	-0.27520E-03	-0.	0.
143	546.57	0.17507E 02	0.26852E 01	0.82059E-02	0.29513E-02	0.61722E 00	0.47057E-00	0.78000E-01	0.10000E 01
144	550.65	0.19726E 02	0.30375E 01	0.93104E-02	0.33486E-02	0.69819E 00	0.53231E 00	0.70000E-02	0.10000E 01
145	551.28	0.18550E 02	0.28432E 01	0.87192E-02	0.31360E-02	0.65355E 00	0.49827E-00	0.70000E-02	0.10000E 01
146	547.49	0.18387E 02	0.28262E 01	0.86428E-02	0.31085E-02	0.64964E 00	0.49529E-00	0.39000E-01	0.10000E 01
147	1012.91	-0.34598E-00	-0.66270E-01	-0.31086E-03	-0.11180E-03	-0.15233E-01	-0.11614E-01	0.78000E-01	0.
148	844.74	0.48107E-00	0.86435E-01	0.33944E-03	0.12208E-03	0.19868E-01	0.15148E-01	0.11700E-00	0.
149	575.57	0.35190E 02	0.57106E 01	0.17833E-01	0.64140E-02	0.13126E 01	0.10008E 01	0.70000E-02	0.10000E 01
150	575.65	0.36558E 02	0.59611E 01	0.18617E-01	0.66958E-02	0.13702E 01	0.10447E 01	0.70000E-02	0.10000E 01
151	579.71	0.37006E 02	0.60475E 01	0.18945E-01	0.68137E-02	0.13901E 01	0.10598E 01	0.70000E-02	0.10000E 01
152	583.56	0.40893E 02	0.64536E 01	0.20273E-01	0.72914E-02	0.14834E 01	0.11310E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.13		0.51854E-02	-0.22882E-02	-0.17364E-05	-0.62453E-06	-0.52597E-03	-0.40100E-03	0.39000E-01	0.
154	576.57	0.39464E 02	0.61644E 01	0.19265E-01	0.69290E-02	0.14170E 01	0.10803E 01	0.78000E-01	0.10000E 01
155-4157.13		0.51854E-02	-0.23742E-02	-0.18017E-05	-0.64800E-06	-0.54574E-03	-0.41607E-03	0.39000E-01	0.
156-4157.13		0.51854E-02	-0.23667E-02	-0.17960E-05	-0.64596E-06	-0.54402E-03	-0.41476E-03	0.39000E-01	0.
157	570.22	0.32410E 02	0.52690E 01	0.16388E-01	0.58942E-02	0.12111E 01	0.92338E 00	0.78000E-01	0.10000E 01
158-4157.13		0.51854E-02	-0.23817E-02	-0.18074E-05	-0.65004E-06	-0.54745E-03	-0.41738E-03	0.39000E-01	0.
159-4157.13		0.51854E-02	-0.23817E-02	-0.18074E-05	-0.65004E-06	-0.54745E-03	-0.41738E-03	0.78000E-01	0.
160-4157.13		0.51854E-02	-0.23742E-02	-0.18017E-05	-0.64800E-06	-0.54574E-03	-0.41607E-03	0.39000E-01	0.
161	564.39	0.29244E 02	0.46271E 01	0.14329E-01	0.51536E-02	0.10636E 01	0.81069E 00	0.43000E-01	0.10000E 01
162	563.32	0.29581E 02	0.46927E 01	0.14521E-01	0.52225E-02	0.10787E 01	0.82239E 00	0.43000E-01	0.10000E 01
163	562.30	0.29474E 02	0.46807E 01	0.14472E-01	0.52051E-02	0.10759E 01	0.82029E 00	0.85000E-01	0.10000E 01
164	563.97	0.29163E 02	0.46132E 01	0.14281E-01	0.51364E-02	0.10604E 01	0.80845E 00	0.12800E-00	0.10000E 01
165-4157.13		0.51854E-02	-0.23256E-02	-0.17648E-05	-0.63473E-06	-0.53456E-03	-0.40755E-03	0.43000E-01	0.
166	564.21	0.29911E 02	0.47322E 01	0.14652E-01	0.52699E-02	0.10878E 01	0.82931E 00	0.85000E-01	0.10000E 01
167-4157.13		0.51854E-02	-0.23181E-02	-0.17591E-05	-0.63269E-06	-0.53204E-03	-0.40624E-03	0.43000E-01	0.
168	551.44	0.20396E 02	0.32403E 01	0.99381E-02	0.35743E-02	0.74482E 00	0.56786E 00	0.12800E-00	0.10000E 01
169	567.39	0.30776E 02	0.49168E 01	0.15260E-01	0.54886E-02	0.11302E 01	0.86166E 00	0.85000E-01	0.10000E 01
170	568.67	0.31882E 02	0.50727E 01	0.15759E-01	0.56680E-02	0.11660E 01	0.88897E 00	0.12800E-00	0.10000E 01
171	566.74	0.31496E 02	0.49899E 01	0.15480E-01	0.55675E-02	0.11470E 01	0.87447E 00	0.85000E-01	0.10000E 01
172-4157.13		0.51854E-02	-0.23293E-02	-0.17676E-05	-0.63575E-06	-0.53542E-03	-0.40821E-03	0.43000E-01	0.
173	573.63	0.33183E 02	0.53197E 01	0.16588E-01	0.59662E-02	0.12228E 01	0.93227E 00	0.12800E-00	0.10000E 01
174-4157.13		0.51854E-02	-0.23256E-02	-0.17648E-05	-0.63473E-06	-0.53456E-03	-0.40755E-03	0.85000E-01	0.
175	572.85	0.32674E 02	0.51940E 01	0.16187E-01	0.58218E-02	0.11939E 01	0.91024E 00	0.43000E-01	0.10000E 01
176	573.75	0.32924E 02	0.52362E 01	0.16330E-01	0.58731E-02	0.12036E 01	0.91763E 00	0.43000E-01	0.10000E 01
177	576.77	0.35075E 02	0.56147E 01	0.17550E-01	0.63120E-02	0.12906E 01	0.98396E 00	0.12800E-00	0.10000E 01
178	575.33	0.33871E 02	0.54089E 01	0.16888E-01	0.60740E-02	0.12433E 01	0.94789E 00	0.85000E-01	0.10000E 01
179	575.57	0.33152E 02	0.52948E 01	0.16535E-01	0.59470E-02	0.12171E 01	0.92790E 00	0.70000E-02	0.10000E 01
180-4157.13		0.51854E-02	-0.23368E-02	-0.17733E-05	-0.63779E-06	-0.53714E-03	-0.40952E-03	0.70000E-02	0.
181	569.47	0.31590E 02	0.50527E 01	0.15706E-01	0.56490E-02	0.11614E 01	0.88547E 00	0.70000E-02	0.10000E 01
182-4157.13		0.51854E-02	-0.23443E-02	-0.17790E-05	-0.63983E-06	-0.53886E-03	-0.41083E-03	0.70000E-02	0.
183	576.87	0.34318E 02	0.54937E 01	0.17173E-01	0.61765E-02	0.12628E 01	0.96276E 00	0.32000E-01	0.10000E 01
184	585.24	0.39266E 02	0.63551E 01	0.19992E-01	0.71905E-02	0.14608E 01	0.11137E 01	0.32000E-01	0.10000E 01
185	570.07	0.34049E 02	0.54653E 01	0.16997E-01	0.61131E-02	0.12563E 01	0.95779E 00	0.64000E-01	0.10000E 01
186	582.21	0.39953E 02	0.64350E 01	0.20197E-01	0.72642E-02	0.14792E 01	0.11277E 01	0.64000E-01	0.10000E 01
187	579.30	0.35456E 02	0.57200E 01	0.17913E-01	0.64427E-02	0.13148E 01	0.10024E 01	0.70000E-02	0.10000E 01
188	576.82	0.33712E 02	0.55179E 01	0.17248E-01	0.62034E-02	0.12683E 01	0.96700E 00	0.70000E-02	0.10000E 01
189	541.62	0.61372E 01	0.10052E 01	0.30607E-02	0.11008E-02	0.23106E-00	0.17616E-00	0.10600E 01	0.10000E 01
190	539.51	0.35231E 01	0.58790E 00	0.17873E-02	0.64282E-03	0.13514E-00	0.10303E-00	0.10840E 01	0.10000E 01
191	538.14	0.17018E 01	0.28530E-00	0.86649E-03	0.31164E-03	0.65580E-01	0.49999E-01	0.11080E 01	0.10000E 01
192	537.99	0.19777E 01	0.32973E-00	0.10013E-02	0.36013E-03	0.75792E-01	0.57784E-01	0.11080E 01	0.10000E 01
193	539.99	0.25631E 01	0.42137E-00	0.12615E-02	0.46090E-03	0.96856E-01	0.73844E-01	0.16580E 01	0.10000E 01
194	540.84	0.24945E 01	0.40841E-00	0.12428E-02	0.44700E-03	0.93876E-01	0.71572E-01	0.11700E 01	0.10000E 01
195	540.43	0.26208E 01	0.43095E-00	0.13110E-02	0.47153E-03	0.99059E-01	0.75524E-01	0.16740E 01	0.10000E 01
196	541.16	0.26613E 01	0.43579E-00	0.13265E-02	0.47708E-03	0.10017E-00	0.76371E-01	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
125	2	3.60	153.60	-0.	-0.	3	C2	2.70	2	10.15	935.70	1830.90	125	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.887951E 02	0.193659E-01	0.468452E 04	0.182983E-04	0.719240E-07	0.119982E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730461E 00	0.434020E 01	0.568657E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	569.97	0.25954E 02	0.40860E 01	0.12604E-01	0.45700E-02	0.94144E 00	0.71854E 00	0.10000E 01	0.10000E 01
198	574.34	0.26521E 02	0.40492E 01	0.12531E-01	0.45435E-02	0.93295E 00	0.71206E 00	0.12000E 01	0.10000E 01
199	557.09	0.12781E 02	0.20369E 01	0.62232E-02	0.22565E-02	0.46931E-00	0.35820E-00	0.13000E 01	0.10000E 01
200	557.24	0.15574E 01	0.22961E-00	0.70159E-03	0.25439E-03	0.52903E-01	0.40378E-01	0.11890E 01	0.10000E 01
201	555.39	0.14265E 01	0.23835E-00	0.72729E-03	0.26371E-03	0.54917E-01	0.41914E-01	0.14540E 01	0.10000E 01
202	554.32	0.16421E 01	0.27212E-00	0.82970E-03	0.30084E-03	0.62699E-01	0.47854E-01	0.17040E 01	0.10000E 01
203	554.48	0.13361E 01	0.22144E-00	0.67524E-03	0.24484E-03	0.51020E-01	0.38940E-01	0.20410E 01	0.10000E 01
204	553.71	-0.71167E-01	-0.54778E-02	-0.16694E-04	-0.60532E-05	-0.12621E-02	-0.96329E-03	0.20700E 01	0.
205	551.56	0.12208E-00	0.10722E-01	0.32624E-04	0.11829E-04	0.24703E-02	0.18855E-02	0.21880E 01	0.10000E 01
206	553.22	0.13392E 01	0.22180E-00	0.67571E-03	0.24501E-03	0.51103E-01	0.39004E-01	0.22480E 01	0.10000E 01
207	555.63	0.14951E 01	0.24376E-00	0.74395E-03	0.26975E-03	0.56164E-01	0.42867E-01	0.20700E 01	0.10000E 01
208	553.46	0.40727E-00	0.36510E-01	0.11125E-03	0.40337E-04	0.84120E-02	0.64203E-02	0.20700E 01	0.10000E 01
209	549.73	0.43896E-00	0.35557E-01	0.10805E-03	0.39177E-04	0.81925E-02	0.62529E-02	0.21880E 01	0.10000E 01
210	551.07	0.12545E 01	0.20912E-00	0.63606E-03	0.23063E-03	0.48181E-01	0.36774E-01	0.20700E 01	0.10000E 01
211	553.25	0.12494E 01	0.20850E-00	0.63522E-03	0.23033E-03	0.48040E-01	0.36666E-01	0.21880E 01	0.10000E 01
212	552.37	0.12634E 01	0.20818E-00	0.63382E-03	0.22982E-03	0.47965E-01	0.36609E-01	0.22390E 01	0.10000E 01
213	550.58	0.12416E 01	0.20438E-00	0.62143E-03	0.22533E-03	0.47090E-01	0.35941E-01	0.21880E 01	0.10000E 01
214	551.67	0.10997E 01	0.18337E-00	0.55801E-03	0.20233E-03	0.42250E-01	0.32247E-01	0.22480E 01	0.10000E 01
215	554.76	0.55273E 00	0.83763E-01	0.25547E-03	0.92633E-04	0.19299E-01	0.14730E-01	0.11650E 01	0.10000E 01
216-1	048.10	-0.16428E 02	0.44859E-01	0.64247E-04	0.23295E-04	0.10336E-01	0.78887E-02	0.12050E 01	0.
217	554.71	0.10099E 01	0.14868E-00	0.45345E-03	0.16442E-03	0.34256E-01	0.26146E-01	0.12120E 01	0.10000E 01
218	554.74	0.10000E 01	0.14799E-00	0.45135E-03	0.16366E-03	0.34097E-01	0.26024E-01	0.11890E 01	0.10000E 01
219	548.48	0.90182E 00	0.15207E-00	0.46166E-03	0.16739E-03	0.35037E-01	0.26741E-01	0.14540E 01	0.10000E 01
220	546.53	0.11948E 01	0.20892E-00	0.63335E-03	0.22965E-03	0.48136E-01	0.36739E-01	0.17040E 01	0.10000E 01
221	548.40	0.10914E 01	0.18304E-00	0.55565E-03	0.20147E-03	0.42172E-01	0.32187E-01	0.20410E 01	0.10000E 01
222	527.46	0.10171E 01	0.17036E-00	0.50935E-03	0.18469E-03	0.39251E-01	0.29958E-01	0.22480E 01	0.10000E 01
223	552.35	0.65766E 00	0.99532E-01	0.30303E-03	0.10988E-03	0.22933E-01	0.17503E-01	0.11650E 01	0.10000E 01
224	553.21	0.43896E-00	0.37118E-01	0.11308E-03	0.41002E-04	0.85522E-02	0.65273E-02	0.12050E 01	0.10000E 01
225	551.88	0.96676E 00	0.14211E-00	0.43250E-03	0.15682E-03	0.32742E-01	0.24990E-01	0.12120E 01	0.10000E 01
226	548.35	0.89610E 00	0.15163E-00	0.46030E-03	0.16690E-03	0.34937E-01	0.26665E-01	0.14540E 01	0.10000E 01
227	545.17	0.10940E 01	0.17734E-00	0.53708E-03	0.19474E-03	0.40860E-01	0.31186E-01	0.17040E 01	0.10000E 01
228	542.22	0.14852E 01	0.24522E-00	0.74106E-03	0.26870E-03	0.56499E-01	0.43122E-01	0.18780E 01	0.10000E 01
229	544.84	0.13366E 01	0.22202E-00	0.67225E-03	0.24375E-03	0.51155E-01	0.39043E-01	0.21880E 01	0.10000E 01
230	547.51	0.11444E 01	0.16984E-00	0.51524E-03	0.18682E-03	0.39131E-01	0.29866E-01	0.11890E 01	0.10000E 01
231	537.70	0.99117E 00	0.17544E-00	0.52846E-03	0.19162E-03	0.40423E-01	0.30853E-01	0.14540E 01	0.10000E 01
232	547.07	0.94701E 00	0.15559E-00	0.47186E-03	0.17109E-03	0.35848E-01	0.27360E-01	0.16130E 01	0.10000E 01
233	547.03	0.10535E 01	0.17441E-00	0.52894E-03	0.19179E-03	0.40185E-01	0.30671E-01	0.17040E 01	0.10000E 01
234	543.69	0.13486E 01	0.22386E-00	0.67725E-03	0.24557E-03	0.51579E-01	0.39367E-01	0.16780E 01	0.10000E 01
235	549.97	0.10790E 01	0.17946E-00	0.54544E-03	0.19777E-03	0.41349E-01	0.31559E-01	0.14540E 01	0.10000E 01
236	546.41	0.85818E 00	0.14084E-00	0.42723E-03	0.15491E-03	0.32473E-01	0.24785E-01	0.17040E 01	0.10000E 01
237	528.15	0.17714E 01	0.29143E-00	0.87195E-03	0.31616E-03	0.67161E-01	0.51260E-01	0.21880E 01	0.10000E 01
238	546.79	0.54130E 00	0.48544E-01	0.14659E-03	0.53151E-04	0.11139E-01	0.85015E-02	0.20700E 01	0.10000E 01
239	549.54	0.13340E 01	0.19584E-00	0.59501E-03	0.21575E-03	0.45122E-01	0.34439E-01	0.11890E 01	0.10000E 01
240	547.10	0.11351E 01	0.19125E-00	0.58002E-03	0.21031E-03	0.44064E-01	0.33652E-01	0.14540E 01	0.10000E 01
241	547.91	0.83117E 00	0.13725E-00	0.41650E-03	0.15102E-03	0.31623E-01	0.24136E-01	0.17040E 01	0.10000E 01
242	547.56	0.10904E 01	0.18140E-00	0.55034E-03	0.19955E-03	0.41795E-01	0.31899E-01	0.18780E 01	0.10000E 01
243	524.75	0.13122E 01	0.21551E-00	0.64309E-03	0.23318E-03	0.49654E-01	0.37898E-01	0.20410E 01	0.10000E 01
244	546.90	-0.47271E-01	-0.42818E-02	-0.12984E-04	-0.47079E-05	-0.98653E-03	-0.75296E-03	0.20700E 01	0.
245	547.98	0.14400E 01	0.11835E-00	0.35917E-03	0.13023E-03	0.27269E-01	0.20812E-01	0.21870E 01	0.10000E 01
246	542.69	0.19356E 01	0.32698E-00	0.98849E-03	0.35842E-03	0.75338E-01	0.57501E-01	0.22100E 01	0.10000E 01
247	552.22	0.11725E 01	0.19318E-00	0.58810E-03	0.21324E-03	0.44510E-01	0.33972E-01	0.14540E 01	0.10000E 01
248	543.80	0.69610E 00	0.11556E-00	0.34963E-03	0.12677E-03	0.26626E-01	0.20322E-01	0.17040E 01	0.10000E 01
249	546.67	0.21870E-00	0.18426E-01	0.55865E-04	0.20256E-04	0.42454E-02	0.32402E-02	0.18780E 01	0.10000E 01
250	547.78	0.40364E-00	0.33171E-01	0.10065E-03	0.36495E-04	0.76426E-02	0.58331E-02	0.21880E 01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	552.50	0.12504E 01	0.21239E-00	0.64671E-03	0.23449E-03	0.48936E-01	0.37350E-01	0.14540E 01	0.10000E 01
252	547.00	0.99117E 00	0.16699E-00	0.50643E-03	0.18363E-03	0.38476E-01	0.29366E-01	0.16130E 01	0.10000E 01
253	548.05	0.17143E-01	0.15174E-02	0.46053E-05	0.16698E-05	0.34962E-03	0.26684E-03	0.17060E 01	0.
254	548.69	0.18873E 01	0.31417E-00	0.95393E-03	0.34589E-03	0.72385E-01	0.55247E-01	0.21880E 01	0.10000E 01
255	535.86	0.44520E-00	0.40994E-01	0.12331E-03	0.44712E-04	0.94451E-02	0.72088E-02	0.16580E 01	0.10000E 01
256	548.73	0.22701E-00	0.19148E-01	0.58143E-04	0.21082E-04	0.44118E-02	0.33673E-02	0.17920E 01	0.10000E 01
257	547.72	0.94494E 00	0.15960E-00	0.48427E-03	0.17559E-03	0.36773E-01	0.28067E-01	0.10840E 01	0.10000E 01
258	551.87	0.13371E 01	0.22874E-00	0.69618E-03	0.25243E-03	0.52704E-01	0.40225E-01	0.14540E 01	0.10000E 01
259	546.88	0.93455E 00	0.15541E-00	0.47126E-03	0.17088E-03	0.35808E-01	0.27330E-01	0.16130E 01	0.10000E 01
260	548.22	0.47117E-00	0.77221E-01	0.23439E-03	0.84989E-04	0.17792E-01	0.13580E-01	0.17040E 01	0.10000E 01
261	549.01	0.43948E-00	0.72838E-01	0.22122E-03	0.80211E-04	0.16782E-01	0.12809E-01	0.16780E 01	0.10000E 01
262	547.91	0.10764E 01	0.18236E-00	0.55341E-03	0.20066E-03	0.42018E-01	0.32069E-01	0.20410E 01	0.10000E 01
263	549.84	0.14182E 01	0.24126E-00	0.73316E-03	0.26584E-03	0.55586E-01	0.42426E-01	0.14540E 01	0.10000E 01
264	547.78	0.10701E 01	0.17724E-00	0.53780E-03	0.19500E-03	0.40836E-01	0.31168E-01	0.16130E 01	0.10000E 01
265	547.19	0.73870E 00	0.11988E-00	0.36359E-03	0.13184E-03	0.27620E-01	0.21081E-01	0.17040E 01	0.10000E 01
266	547.94	0.51584E 00	0.85442E-01	0.25929E-03	0.94017E-04	0.19686E-01	0.15025E-01	0.16780E 01	0.10000E 01
267	549.26	0.89870E 00	0.15192E-00	0.46149E-03	0.16733E-03	0.35004E-01	0.26716E-01	0.20410E 01	0.10000E 01
268	548.21	0.10016E 01	0.16592E-00	0.50362E-03	0.18261E-03	0.38229E-01	0.29177E-01	0.16130E 01	0.10000E 01
269	547.34	0.54026E 00	0.87681E-01	0.26597E-03	0.96438E-04	0.20202E-01	0.15419E-01	0.16280E 01	0.10000E 01
270	548.48	0.53351E 00	0.87990E-01	0.26713E-03	0.96860E-04	0.20273E-01	0.15473E-01	0.16780E 01	0.10000E 01
271	544.23	0.74597E 00	0.12549E-00	0.37979E-03	0.13771E-03	0.28913E-01	0.22067E-01	0.20410E 01	0.10000E 01
272	548.23	0.10758E 01	0.18285E-00	0.55503E-03	0.20125E-03	0.42130E-01	0.32155E-01	0.16130E 01	0.10000E 01
273	548.35	0.73559E 00	0.12280E-00	0.37277E-03	0.13516E-03	0.28293E-01	0.21594E-01	0.17200E 01	0.10000E 01
274	545.48	0.48312E-00	0.78082E-01	0.23653E-03	0.85764E-04	0.17990E-01	0.13731E-01	0.16280E 01	0.10000E 01
275	546.09	0.49091E-00	0.80981E-01	0.24542E-03	0.88988E-04	0.18658E-01	0.14241E-01	0.16780E 01	0.10000E 01
276	-4157.09	0.10379E-01	-0.49888E-02	-0.37783E-05	-0.13700E-05	-0.11494E-02	-0.87729E-03	0.20600E 01	0.
277	547.73	0.61143E 00	0.51544E-01	0.15640E-03	0.56708E-04	0.11876E-01	0.90641E-02	0.21000E 01	0.10000E 01
278	-4157.09	0.10379E-01	-0.24951E-02	-0.18897E-05	-0.68519E-06	-0.57489E-03	-0.43878E-03	0.21870E 01	0.
279	549.96	0.95896E 00	0.16266E-00	0.49436E-03	0.17925E-03	0.37478E-01	0.28604E-01	0.21950E 01	0.10000E 01
280	548.14	0.52883E 00	0.88674E-01	0.26914E-03	0.97588E-04	0.20431E-01	0.15593E-01	0.16780E 01	0.10000E 01
281	548.51	0.69974E 00	0.11860E-00	0.36005E-03	0.13055E-03	0.27325E-01	0.20855E-01	0.20600E 01	0.10000E 01
282	542.84	0.60104E 00	0.98058E-01	0.29647E-03	0.10750E-03	0.22593E-01	0.17244E-01	0.16280E 01	0.10000E 01
283	546.64	0.77455E 00	0.13047E-00	0.39556E-03	0.14343E-03	0.30061E-01	0.22944E-01	0.20600E 01	0.10000E 01
284	547.75	0.69974E 00	0.11359E-00	0.34467E-03	0.12497E-03	0.26172E-01	0.19975E-01	0.17200E 01	0.10000E 01
285	548.44	0.59637E 00	0.98506E-01	0.29905E-03	0.10843E-03	0.22696E-01	0.17323E-01	0.16780E 01	0.10000E 01
286	547.73	0.66234E 00	0.61396E-01	0.18629E-03	0.67547E-04	0.14146E-01	0.10797E-01	0.16580E 01	0.10000E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.17063E-05	-0.61869E-06	-0.77775E-04	-0.59361E-04	0.17920E 01	0.
288	546.05	0.95532E 00	0.15759E-00	0.47757E-03	0.17316E-03	0.36309E-01	0.27712E-01	0.16130E 01	0.10000E 01
289	548.30	-0.60259E-01	-0.50815E-02	-0.15425E-04	-0.55930E-05	-0.11708E-02	-0.89359E-03	0.17060E 01	0.
290	547.18	0.26649E-00	0.22459E-01	0.68118E-04	0.24699E-04	0.51746E-02	0.39494E-02	0.16780E 01	0.10000E 01
291	547.33	0.65974E 00	0.10841E-00	0.32884E-03	0.11923E-03	0.24977E-01	0.19064E-01	0.17200E 01	0.10000E 01
292	543.64	0.12047E 01	0.20757E-00	0.62793E-03	0.22768E-03	0.47825E-01	0.36502E-01	0.14400E 01	0.10000E 01
293	547.46	0.97247E 00	0.15784E-00	0.47882E-03	0.17362E-03	0.36366E-01	0.27756E-01	0.17200E 01	0.10000E 01
294	549.17	0.10400E 01	0.17291E-00	0.52520E-03	0.19043E-03	0.39839E-01	0.30406E-01	0.16780E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
131	2	7.59	157.59	-0.	-0.	1	C2	2.70	2	10.15	933.50	1825.80	131	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.885237E 02	0.193302E-01	0.467728E 04	0.183206E-04	0.717042E-07	0.120310E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730304E 00	0.433477E 01	0.567616E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	561.72	0.30872E 02	0.40672E 01	0.12526E-01	0.45433E-02	0.93827E 00	0.71654E 00	-0.	0.10000E 01
2-4157.09		0.10379E-01	-0.41161E-02	-0.31209E-05	-0.11320E-05	-0.94956E-03	-0.72516E-03	-0.30000E-01	0.
3-4157.09		0.10379E-01	-0.44754E-02	-0.33933E-05	-0.12308E-05	-0.10324E-02	-0.78845E-03	-0.60000E-01	0.
4-4157.09		0.10379E-01	-0.45906E-02	-0.34807E-05	-0.12625E-05	-0.10590E-02	-0.80875E-03	-0.90000E-01	0.
5	549.17	0.24330E 02	0.38727E 01	0.11816E-01	0.42860E-02	0.89340E 00	0.68227E 00	-0.20000E-00	0.10000E 01
6	550.13	0.22234E 02	0.35409E 01	0.10812E-01	0.39215E-02	0.81685E 00	0.62381E 00	-0.40000E-00	0.10000E 01
7	549.59	0.19278E 02	0.30839E 01	0.94127E-02	0.34141E-02	0.71144E 00	0.54331E 00	-0.60000E 00	0.10000E 01
8-4157.09		0.10379E-01	-0.47298E-02	-0.35862E-05	-0.13008E-05	-0.10911E-02	-0.83328E-03	-0.80000E 00	0.
9	550.08	0.17269E 02	0.27195E 01	0.83033E-02	0.30117E-02	0.62736E 00	0.47910E-00	-0.90000E 00	0.10000E 01
10	554.58	0.16439E 02	0.26287E 01	0.80528E-02	0.29209E-02	0.60642E 00	0.46311E-00	-0.98000E 00	0.10000E 01
11	545.15	0.12904E 01	0.22253E-00	0.67697E-03	0.24555E-03	0.51335E-01	0.39204E-01	-0.11220E 01	0.10000E 01
12	548.88	0.21138E 01	0.31126E-00	0.94952E-03	0.34440E-03	0.71805E-01	0.54836E-01	-0.11890E 01	0.10000E 01
13	550.15	0.17579E 01	0.26706E-00	0.81544E-03	0.29577E-03	0.61608E-01	0.47049E-01	-0.13340E 01	0.10000E 01
14	544.69	0.14306E 01	0.24665E-00	0.75011E-03	0.27207E-03	0.56900E-01	0.43453E-01	-0.14400E 01	0.10000E 01
15-4157.09		0.10379E-01	-0.41161E-02	-0.31209E-05	-0.11320E-05	-0.94956E-03	-0.72516E-03	0.30000E-01	0.
16-4157.09		0.10379E-01	-0.44754E-02	-0.33933E-05	-0.12308E-05	-0.10324E-02	-0.78845E-03	0.60000E-01	0.
17	1085.37	-0.31174E-02	-0.62105E-03	-0.31631E-05	-0.11473E-05	-0.14327E-03	-0.10941E-03	0.90000E-01	0.
18	563.28	0.28530E 02	0.45769E 01	0.14112E-01	0.51186E-02	0.10559E 01	0.80634E 00	0.20000E-00	0.10000E 01
19	562.00	0.31659E 02	0.51313E 01	0.16045E-01	0.58198E-02	0.11837E 01	0.90400E 00	0.40000E-00	0.10000E 01
20-4157.09		0.10379E-01	-0.47298E-02	-0.35862E-05	-0.13008E-05	-0.10911E-02	-0.83328E-03	0.60000E 00	0.
21-4157.09		0.10379E-01	-0.44529E-02	-0.33762E-05	-0.12246E-05	-0.10273E-02	-0.78449E-03	0.92000E 00	0.
22	571.57	0.27763E 02	0.42323E 01	0.13131E-01	0.47627E-02	0.97636E 00	0.74563E 00	0.10400E 01	0.10000E 01
23	567.94	0.24734E 02	0.37731E 01	0.11674E-01	0.42344E-02	0.87043E 00	0.66473E 00	0.10600E 01	0.10000E 01
24	558.00	0.16929E 02	0.26906E 01	0.82636E-02	0.29973E-02	0.62071E 00	0.47402E-00	0.10840E 01	0.10000E 01
25	549.68	0.22094E 01	0.32716E-00	0.99862E-03	0.36221E-03	0.75473E-01	0.57637E-01	0.12070E 01	0.10000E 01
26	551.78	0.19995E 01	0.31264E-00	0.95578E-03	0.34667E-03	0.72124E-01	0.5508OE-01	0.12490E 01	0.10000E 01
27	553.28	0.20675E 01	0.31831E-00	0.97419E-03	0.35335E-03	0.73432E-01	0.56078E-01	0.13340E 01	0.10000E 01
28	552.67	0.17886E 01	0.30611E-00	0.93642E-03	0.33965E-03	0.70616E-01	0.53928E-01	0.14540E 01	0.10000E 01
29	551.22	0.20099E 01	0.33552E-00	0.10192E-02	0.36967E-03	0.76941E-01	0.58758E-01	0.16580E 01	0.10000E 01
30	548.81	0.21018E 01	0.35256E-00	0.10755E-02	0.39008E-03	0.81334E-01	0.62113E-01	0.20410E 01	0.10000E 01
31	551.05	0.19756E 01	0.33180E-00	0.10138E-02	0.36772E-03	0.76544E-01	0.58455E-01	0.22480E 01	0.10000E 01
32-4157.09		0.10379E-01	-0.44799E-02	-0.33967E-05	-0.12320E-05	-0.10335E-02	-0.78924E-03	-0.60000E-01	0.
33-4157.09		0.10379E-01	-0.41161E-02	-0.31209E-05	-0.11320E-05	-0.94956E-03	-0.72516E-03	-0.30000E-01	0.
34-4157.09		0.10379E-01	-0.44799E-02	-0.33967E-05	-0.12320E-05	-0.10335E-02	-0.78924E-03	0.30000E-01	0.
35-4157.09		0.10379E-01	-0.45906E-02	-0.34807E-05	-0.12625E-05	-0.10590E-02	-0.80875E-03	0.60000E-01	0.
36	549.36	0.18399E 02	0.29289E 01	0.89380E-02	0.32419E-02	0.67567E 00	0.51600E 00	-0.86800E 00	0.10000E 01
37	551.10	0.18028E 02	0.27950E 01	0.85404E-02	0.30977E-02	0.64479E 00	0.49241E-00	-0.91100E 00	0.10000E 01
38	552.50	0.18297E 02	0.28900E 01	0.88397E-02	0.32063E-02	0.66669E 00	0.50914E 00	-0.95300E 00	0.10000E 01
39-4157.09		0.10379E-01	-0.46774E-02	-0.35465E-05	-0.12964E-05	-0.10791E-02	-0.82405E-03	0.51000E-01	0.
40-4157.09		0.10379E-01	-0.46774E-02	-0.35465E-05	-0.12864E-05	-0.10791E-02	-0.82405E-03	0.29000E-01	0.
41-4157.09		0.10379E-01	-0.46505E-02	-0.35260E-05	-0.12789E-05	-0.10728E-02	-0.81930E-03	0.70000E-02	0.
42	554.00	0.22775E 02	0.36117E 01	0.11060E-01	0.40114E-02	0.83319E 00	0.63629E 00	-0.86800F 00	0.10000E 01
43	552.38	0.21660E 02	0.34406E 01	0.10523E-01	0.38168E-02	0.79372E 00	0.60615E 00	-0.91100E 00	0.10000E 01
44	563.96	0.32285E 02	0.51317E 01	0.15831E-01	0.57420E-02	0.11839E 01	0.90408E 00	-0.95300E 00	0.10000E 01
45	543.70	0.70146E 01	0.11443E 01	0.34774E-02	0.12613E-02	0.26097E-00	0.20159E-00	-0.10400E 01	0.10000E 01
46-4157.09		0.10379E-01	-0.46894E-02	-0.35556E-05	-0.12896E-05	-0.10818E-02	-0.82616E-03	0.70000E-02	0.
47-4157.09		0.10379E-01	-0.46894E-02	-0.35556E-05	-0.12896E-05	-0.10818E-02	-0.82616E-03	0.29000E-01	0.
48	550.07	0.18419E 02	0.29333E 01	0.89561E-02	0.32485E-02	0.67669E 00	0.51677E 00	0.51000E-01	0.10000E 01
49	552.09	0.18455E 02	0.29142E 01	0.89112E-02	0.32322E-02	0.67229E 00	0.51342E 00	0.70000E-02	0.10000E 01
50	552.66	0.17761E 02	0.28177E 01	0.86195E-02	0.31264E-02	0.65001E 00	0.49640E-00	0.29000E-01	0.10000E 01
51-4157.09		0.10379E-01	-0.46625E-02	-0.35351E-05	-0.12822E-05	-0.10756E-02	-0.82141E-03	0.51000E-01	0.
52-4157.09		0.10379E-01	-0.46894E-02	-0.35556E-05	-0.12896E-05	-0.10818E-02	-0.82616E-03	-0.86800E 00	0.
53	553.48	0.18113E 02	0.28900E 01	0.88460E-02	0.32086E-02	0.66669E 00	0.50914E 00	-0.91100E 00	0.10000E 01
54	556.66	0.18766E 02	0.29708E 01	0.91150E-02	0.33061E-02	0.68539E 00	0.52339E 00	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
35	542.95	0.41309E 01	0.67357E 00	0.20458E-02	0.74205E-03	0.15539E-00	0.11867E-00	-0.10400E 01	0.10000E 01
36	542.40	0.19132E 01	0.32171E-00	0.97674E-03	0.35428E-03	0.74216E-01	0.56678E-01	-0.10680E 01	0.10000E 01
37	539.83	0.17740E 01	0.28876E-00	0.87506E-03	0.31740E-03	0.66615E-01	0.50873E-01	-0.10400E 01	0.10000E 01
38	537.74	0.37719E 01	0.66389E 00	0.20088E-02	0.72860E-03	0.15315E-00	0.11696E-00	-0.10680E 01	0.10000E 01
39	540.01	0.68888E 01	0.11214E 01	0.33988E-02	0.12328E-02	0.25870E-00	0.19757E-00	-0.10400E 01	0.10000E 01
60	538.75	0.32961E 01	0.55310E 00	0.16748E-02	0.60747E-03	0.12760E-00	0.97443E-01	-0.10680E 01	0.10000E 01
61	543.62	0.16099E 01	0.26739E-00	0.81254E-03	0.29472E-03	0.61685E-01	0.47107E-01	-0.11220E 01	0.10000E 01
62	549.69	0.17990E 01	0.27322E-00	0.83398E-03	0.30249E-03	0.63030E-01	0.48135E-01	-0.13340E 01	0.10000E 01
63	543.01	0.14748E 01	0.25402E-00	0.77158E-03	0.27986E-03	0.58601E-01	0.44753E-01	-0.11220E 01	0.10000E 01
64	549.23	0.17273E 01	0.26227E-00	0.80027E-03	0.29027E-03	0.60503E-01	0.46205E-01	-0.13340E 01	0.10000E 01
65	543.92	0.16078E 01	0.27707E-00	0.84215E-03	0.30546E-03	0.63918E-01	0.48813E-01	0.14400E 01	0.10000E 01
66	541.43	0.18021E 01	0.29513E-00	0.89542E-03	0.32478E-03	0.68085E-01	0.51995E-01	0.16130E 01	0.10000E 01
67	544.11	0.19143E 01	0.30819E-00	0.93685E-03	0.33981E-03	0.71096E-01	0.54295E-01	0.17200E 01	0.10000E 01
68	528.49	0.17636E 01	0.28894E-00	0.86840E-03	0.31498E-03	0.66657E-01	0.50905E-01	-0.16130E 01	0.10000E 01
69	546.21	0.20421E 01	0.32915E-00	0.10021E-02	0.36348E-03	0.75931E-01	0.57987E-01	-0.18280E 01	0.10000E 01
70	532.43	0.18629E 01	0.27226E-00	0.82060E-03	0.29764E-03	0.62808E-01	0.47965E-01	-0.11650E 01	0.10000E 01
71	547.14	0.84780E 00	0.71446E-01	0.21767E-03	0.78953E-04	0.16482E-01	0.12587E-01	-0.12050E 01	0.10000E 01
72	550.12	0.18530E 01	0.26976E-00	0.82369E-03	0.29876E-03	0.62233E-01	0.47526E-01	-0.12120E 01	0.10000E 01
73	546.03	0.17990E 01	0.26494E-00	0.80652E-03	0.29253E-03	0.61119E-01	0.46675E-01	-0.11650E 01	0.10000E 01
74	548.32	0.58234E 00	0.49108E-01	0.14975E-03	0.54315E-04	0.11329E-01	0.86516E-02	-0.12050E 01	0.10000E 01
75	539.46	0.19512E 01	0.28089E-00	0.85099E-03	0.30866E-03	0.64800E-01	0.49487E-01	-0.12120E 01	0.10000E 01
76	543.27	0.15839E 01	0.23890E-00	0.72577E-03	0.26325E-03	0.55112E-01	0.42088E-01	0.10840E 01	0.10000E 01
77	544.09	0.14234E 01	0.23059E-00	0.70095E-03	0.25424E-03	0.53195E-01	0.40624E-01	0.11220E 01	0.10000E 01
78	539.10	0.16935E 01	0.25185E-00	0.76279E-03	0.27667E-03	0.58100E-01	0.44370E-01	0.13340E 01	0.10000E 01
79	547.24	0.19668E 01	0.33141E-00	0.10098E-02	0.36626E-03	0.76453E-01	0.58386E-01	-0.11890E 01	0.10000E 01
80	543.18	0.18135E 01	0.27306E-00	0.82949E-03	0.30087E-03	0.62992E-01	0.48106E-01	-0.13340E 01	0.10000E 01
81	536.54	0.19262E 01	0.31073E-00	0.93936E-03	0.34072E-03	0.71683E-01	0.54743E-01	-0.11470E 01	0.10000E 01
82	546.83	0.20878E 01	0.35141E-00	0.10704E-02	0.38824E-03	0.81067E-01	0.61909E-01	-0.11890E 01	0.10000E 01
83	540.20	0.16062E 01	0.26935E-00	0.81646E-03	0.29614E-03	0.62137E-01	0.47453E-01	-0.10840E 01	0.10000E 01
84	547.10	0.17761E 01	0.26173E-00	0.79738E-03	0.28922E-03	0.60379E-01	0.46110E-01	-0.11890E 01	0.10000E 01
85	548.09	0.18260E 01	0.26922E-00	0.82081E-03	0.29772E-03	0.62108E-01	0.47431E-01	-0.13090E 01	0.10000E 01
86	551.30	0.19371E 01	0.29005E-00	0.88642E-03	0.32152E-03	0.66914E-01	0.51100E-01	-0.13340E 01	0.10000E 01
87	550.30	0.22478E 01	0.33126E-00	0.10116E-02	0.36692E-03	0.76419E-01	0.58360E-01	0.11990E 01	0.10000E 01
88	545.87	0.20758E 01	0.30778E-00	0.93684E-03	0.33980E-03	0.71004E-01	0.54224E-01	0.12070E 01	0.10000E 01
89	551.73	0.18951E 01	0.28670E-00	0.87645E-03	0.31790E-03	0.66140E-01	0.50510E-01	0.13340E 01	0.10000E 01
90	550.75	0.21455E 01	0.30811E-00	0.94120E-03	0.34138E-03	0.71078E-01	0.54281E-01	0.12070E 01	0.10000E 01
91	555.77	0.20442E 01	0.32034E-00	0.98220E-03	0.35626E-03	0.73900E-01	0.56436E-01	0.12490E 01	0.10000E 01
92	555.48	0.20452E 01	0.31162E-00	0.95527E-03	0.34649E-03	0.71889E-01	0.54900E-01	0.13340E 01	0.10000E 01
93	554.29	0.18171E 01	0.30943E-00	0.94772E-03	0.34375E-03	0.71384E-01	0.54514E-01	0.14900E 01	0.10000E 01
94	-4157.09	0.10379E-01	-0.31208E-02	-0.23662E-05	-0.85825E-06	-0.71994E-03	-0.54981E-03	-0.	0.
95	335.53	0.12883E-00	0.12025E-01	0.31726E-04	0.11507E-04	0.27741E-02	0.21186E-02	-0.	0.
96	-4157.09	0.10379E-01	-0.31208E-02	-0.23662E-05	-0.85825E-06	-0.71994E-03	-0.54981E-03	-0.	0.
97	-4157.09	0.10379E-01	-0.31208E-02	-0.23662E-05	-0.85825E-06	-0.71994E-03	-0.54981E-03	-0.	0.
98	-4157.09	0.10379E-01	-0.31432E-02	-0.23832E-05	-0.86443E-06	-0.72512E-03	-0.55376E-03	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
136	2	?.59	157.59	-0.	-0.	2	C2	2.70	2	10.15	929.70	1822.20	136	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.883358E 02	0.192611E-01	0.467219E 04	0.182939E-04	0.715520E-07	0.120259E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730195E 00	0.432568E 01	0.565860E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	540.35	0.21662E 01	0.35292E-00	0.10733E-02	0.39029E-03	0.81588E-01	0.62367E-01	-0.10600E 01	0.10000E 01
100	539.35	0.10774E 01	0.18075E-00	0.54926E-03	0.19973E-03	0.41784E-01	0.31941E-01	-0.10840E 01	0.10000E 01
101	541.19	0.87741E 00	0.14412E-00	0.43855E-03	0.15947E-03	0.33317E-01	0.25468E-01	-0.11080E 01	0.10000E 01
102	541.32	0.96104E 00	0.15738E-00	0.47897E-03	0.17417E-03	0.36384E-01	0.27812E-01	-0.11080E 01	0.10000E 01
103	539.74	0.13153E 01	0.22071E-00	0.67090E-03	0.24396E-03	0.51023E-01	0.39003E-01	-0.10800E 01	0.10000E 01
104	-4157.09	0.10379E-01	-0.47074E-02	-0.35720E-05	-0.12989E-05	-0.10882E-02	-0.83187E-03	0.85000E 00	0.
105	590.39	0.45872E 02	0.70651E 01	0.22306E-01	0.81114E-02	0.16333E 01	0.12485E 01	0.94000E 00	0.10000E 01
106	594.31	0.47279E 02	0.72359E 01	0.22914E-01	0.83325E-02	0.16728E 01	0.12787E 01	0.96000E 00	0.10000E 01
107	573.45	0.44823E 02	0.67826E 01	0.21141E-01	0.76876E-02	0.15680E 01	0.11986E 01	0.98000E 00	0.10000E 01
108	569.28	0.41235E 02	0.62571E 01	0.19442E-01	0.70697E-02	0.14465E 01	0.11057E 01	0.10000E 01	0.10000E 01
109	577.67	0.32794E 02	0.50160E 01	0.15684E-01	0.57034E-02	0.11596E 01	0.88641E 00	0.10200E 01	0.10000E 01
110	591.55	0.43432E 02	0.66935E 01	0.21152E-01	0.76916E-02	0.15474E 01	0.11829E 01	0.80000E-01	0.10000E 01
111	585.14	0.45207E 02	0.68845E 01	0.21649E-01	0.78725E-02	0.15915E 01	0.12166E 01	0.10000E-00	0.10000E 01
112	599.49	0.46776E 02	0.72154E 01	0.22940E-01	0.83420E-02	0.16680E 01	0.12751E 01	0.12000E-00	0.10000E 01
113	594.03	0.45784E 02	0.70655E 01	0.22370E-01	0.81345E-02	0.16334E 01	0.12486E 01	0.14000E-00	0.10000E 01
114	-4157.09	0.10379E-01	-0.44529E-02	-0.33789E-05	-0.12287E-05	-0.10294E-02	-0.78690E-03	0.80000E-01	0.
115	587.38	0.43702E 02	0.66974E 01	0.21097E-01	0.76716E-02	0.15483E 01	0.11835E 01	0.10000E-00	0.10000E 01
116	588.35	0.44685E 02	0.68978E 01	0.21744E-01	0.79070E-02	0.15946E 01	0.12190E 01	0.12000E-00	0.10000E 01
117	558.83	0.46010E 02	0.69649E 01	0.21472E-01	0.78082E-02	0.16101E 01	0.12308E 01	0.14000E-00	0.10000E 01
118	584.67	0.41747E 02	0.64637E 01	0.20319E-01	0.73887E-02	0.14943E 01	0.11422E 01	0.10000E-00	0.10000E 01
119	565.88	0.29733E 02	0.45336E 01	0.14051E-01	0.51094E-02	0.10481E 01	0.80116E 00	0.15000E-00	0.10000E 01
120	602.19	0.39100E 02	0.60910E 01	0.19406E-01	0.70567E-02	0.14081E 01	0.10764E 01	0.20000E-00	0.10000E 01
121	590.02	0.41566E 02	0.64543E 01	0.20372E-01	0.74081E-02	0.14921E 01	0.11406E 01	0.25000E-00	0.10000E 01
122	583.77	0.38996E 02	0.60348E 01	0.18958E-01	0.68937E-02	0.13951E 01	0.10664E 01	0.30000E-00	0.10000E 01
123	585.26	0.39811E 02	0.61968E 01	0.19488E-01	0.70867E-02	0.14326E 01	0.10951E 01	0.35000E-00	0.10000E 01
124	575.23	0.40282E 02	0.62773E 01	0.19592E-01	0.71244E-02	0.14512E 01	0.11093E 01	0.38000E-00	0.10000E 01
125	590.59	0.42284E 02	0.66992E 01	0.21154E-01	0.76926E-02	0.15487E 01	0.11839E 01	0.45000E-00	0.10000E 01
126	584.61	0.39704E 02	0.63522E 01	0.19967E-01	0.72609E-02	0.14685E 01	0.11225E 01	0.61000E 00	0.10000E 01
127	560.67	0.22212E 02	0.35243E 01	0.10880E-01	0.39565E-02	0.81474E 00	0.62280E 00	0.70000E 00	0.10000E 01
128	548.68	0.10110E 02	0.15986E 01	0.48914E-02	0.17787E-02	0.36955E-00	0.28249E-00	0.75000E 00	0.10000E 01
129	574.00	0.33625E 02	0.53916E 01	0.16812E-01	0.61135E-02	0.12464E 01	0.95278E 00	0.70000E 00	0.10000E 01
130	575.89	0.35213E 02	0.56522E 01	0.17650E-01	0.64182E-02	0.13067E 01	0.99883E 00	0.80000E 00	0.10000E 01
131	551.64	0.14879E 02	0.22358E 01	0.68563E-02	0.24932E-02	0.51687E 00	0.39511E-00	0.90000E 00	0.10000E 01
132	568.49	0.31873E 02	0.48506E 01	0.15063E-01	0.54774E-02	0.11214E 01	0.85719E 00	0.90000E 00	0.10000E 01
133	569.76	0.33129E 02	0.50199E 01	0.15603E-01	0.56739E-02	0.11605E 01	0.88710E 00	0.96000E 00	0.10000E 01
134	567.69	0.31950E 02	0.48439E 01	0.15033E-01	0.54665E-02	0.11198E 01	0.85599E 00	0.10000E 01	0.10000E 01
135	-4157.09	0.10379E-01	-0.46400E-02	-0.35209E-05	-0.12803E-05	-0.10727E-02	-0.81996E-03	0.70000E-02	0.
136	550.83	0.20932E 02	0.32289E 01	0.98956E-02	0.35984E-02	0.74645E 00	0.57060E 00	0.70000E-02	0.10000E 01
137	551.10	0.21418E 02	0.33531E 01	0.10278E-01	0.37375E-02	0.77515E 00	0.59254E 00	0.39000E-01	0.10000E 01
138	-4157.09	0.10379E-01	-0.46026E-02	-0.34925E-05	-0.12700E-05	-0.10640E-02	-0.81335E-03	0.78000E-01	0.
139	-4157.09	0.10379E-01	-0.45801E-02	-0.34754E-05	-0.12636E-05	-0.10588E-02	-0.80938E-03	0.11700E-00	0.
140	550.55	0.20903E 02	0.32292E 01	0.98945E-02	0.35980E-02	0.74652E 00	0.57065E 00	0.78000E-01	0.10000E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23851E-05	-0.86732E-06	-0.72664E-03	-0.55546E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23851E-05	-0.86732E-06	-0.72664E-03	-0.55546E-03	-0.	0.
143	547.10	0.19128E 02	0.29348E 01	0.89694E-02	0.32616E-02	0.67846E 00	0.51862E 00	0.78000E-01	0.10000E 01
144	551.74	0.21327E 02	0.32861E 01	0.10078E-01	0.36646E-02	0.75966E 00	0.58070E 00	0.70000E-02	0.10000E 01
145	552.66	0.20010E 02	0.30694E 01	0.94196E-02	0.34253E-02	0.70958E 00	0.54242E 00	0.70000E-02	0.10000E 01
146	549.07	0.20172E 02	0.31035E 01	0.94990E-02	0.34542E-02	0.71746E 00	0.54844E 00	0.39000E-01	0.10000E 01
147	1079.49	-0.47583E-00	-0.93590E-01	-0.47564E-03	-0.17296E-03	-0.21636E-01	-0.16539E-01	0.78000E-01	0.
148	908.81	-0.79116E 00	-0.14625E-00	-0.61195E-03	-0.22253E-03	-0.33809E-01	-0.25844E-01	0.11700E-00	0.
149	573.15	0.36187E 02	0.58647E 01	0.18276E-01	0.66457E-02	0.13558E 01	0.10364E 01	0.70000E-02	0.10000E 01
150	572.54	0.36734E 02	0.59795E 01	0.18625E-01	0.67727E-02	0.13823E 01	0.10567E 01	0.70000E-02	0.10000E 01
151	576.30	0.36043E 02	0.58792E 01	0.18365E-01	0.66781E-02	0.13591E 01	0.10390E 01	0.70000E-02	0.10000E 01
152	582.07	0.38769E 02	0.61141E 01	0.19182E-01	0.69752E-02	0.14134E 01	0.10809E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.09		0.10379E-01	-0.45801E-02	-0.34754E-05	-0.12638E-05	-0.10588E-02	-0.80938E-03	0.39000E-01	0.
154	576.04	0.38030E 02	0.59366E 01	0.18546E-01	0.67442E-02	0.13729E 01	0.10495E 01	0.78000E-01	0.10000E 01
155-4157.09		0.10379E-01	-0.47523E-02	-0.36061E-05	-0.13113E-05	-0.10986E-02	-0.83980E-03	0.39000E-01	0.
156-4157.09		0.10379E-01	-0.47373E-02	-0.35947E-05	-0.13072E-05	-0.10952E-02	-0.83716E-03	0.39000E-01	0.
157	569.97	0.32305E 02	0.52513E 01	0.16325E-01	0.59364E-02	0.12140E 01	0.92799E 00	0.78000E-01	0.10000E 01
158-4157.09		0.10379E-01	-0.47672E-02	-0.36174E-05	-0.13154E-05	-0.11021E-02	-0.84245E-03	0.39000E-01	0.
159-4157.09		0.10379E-01	-0.47672E-02	-0.36174E-05	-0.13154E-05	-0.11021E-02	-0.84245E-03	0.78000E-01	0.
160-4157.09		0.10379E-01	-0.47523E-02	-0.36061E-05	-0.13113E-05	-0.10986E-02	-0.83980E-03	0.39000E-01	0.
161	566.73	0.29099E 02	0.46101E 01	0.14297E-01	0.51989E-02	0.10656E 01	0.81469E 00	0.43000E-01	0.10000E 01
162	565.24	0.29223E 02	0.46409E 01	0.14376E-01	0.52278E-02	0.10729E 01	0.82012E 00	0.43000E-01	0.10000E 01
163	564.09	0.29327E 02	0.46619E 01	0.14429E-01	0.52469E-02	0.10777E 01	0.82383E 00	0.85000E-01	0.10000E 01
164	566.10	0.29212E 02	0.46264E 01	0.14341E-01	0.52149E-02	0.10695E 01	0.81756E 00	0.12800E-00	0.10000E 01
165-4157.09		0.10379E-01	-0.46550E-02	-0.35322E-05	-0.12845E-05	-0.10761E-02	-0.82261E-03	0.43000E-01	0.
166	565.80	0.29528E 02	0.46757E 01	0.14490E-01	0.52692E-02	0.10809E 01	0.82628E 00	0.85000E-01	0.10000E 01
167-4157.09		0.10379E-01	-0.46400E-02	-0.35209E-05	-0.12803E-05	-0.10727E-02	-0.81996E-03	0.43000E-01	0.
168	551.10	0.20234E 02	0.32138E 01	0.98514E-02	0.35823E-02	0.74297E 00	0.56794E 00	0.12800E-00	0.10000E 01
169	568.55	0.30216E 02	0.48306E 01	0.15001E-01	0.54550E-02	0.11167E 01	0.85364E 00	0.85000E-01	0.10000E 01
170	569.81	0.31289E 02	0.49816E 01	0.15485E-01	0.56308E-02	0.11516E 01	0.88032E 00	0.12800E-00	0.10000E 01
171	567.76	0.30724E 02	0.48703E 01	0.15116E-01	0.54966E-02	0.11259E 01	0.86067E 00	0.85000E-01	0.10000E 01
172-4157.09		0.10379E-01	-0.46625E-02	-0.35379E-05	-0.12865E-05	-0.10779E-02	-0.82393E-03	0.43000E-01	0.
173	574.43	0.32311E 02	0.51821E 01	0.16164E-01	0.58779E-02	0.11980E 01	0.91576E 00	0.12800E-00	0.10000E 01
174-4157.09		0.10379E-01	-0.46550E-02	-0.35322E-05	-0.12845E-05	-0.10761E-02	-0.82261E-03	0.85000E-01	0.
175	574.16	0.31816E 02	0.50612E 01	0.15784E-01	0.57396E-02	0.11700E 01	0.89440E 00	0.43000E-01	0.10000E 01
176	574.87	0.32099E 02	0.51081E 01	0.15939E-01	0.57959E-02	0.11809E 01	0.90269E 00	0.43000E-01	0.10000E 01
177	577.45	0.33830E 02	0.54173E 01	0.16936E-01	0.61587E-02	0.12524E 01	0.95732E 00	0.12800E-00	0.10000E 01
178	576.14	0.32855E 02	0.52489E 01	0.16394E-01	0.59614E-02	0.12134E 01	0.92757E 00	0.85000E-01	0.10000E 01
179	576.82	0.31988E 02	0.51123E 01	0.15975E-01	0.58092E-02	0.11819E 01	0.90343E 00	0.70000E-02	0.10000E 01
180-4157.09		0.10379E-01	-0.46774E-02	-0.35493E-05	-0.12906E-05	-0.10813E-02	-0.82658E-03	0.70000E-02	0.
181	571.43	0.30711E 02	0.49175E 01	0.15304E-01	0.55651E-02	0.11368E 01	0.86899E 00	0.70000E-02	0.10000E 01
182-4157.09		0.10379E-01	-0.46924E-02	-0.35606E-05	-0.12948E-05	-0.10848E-02	-0.82922E-03	0.70000E-02	0.
183	577.95	0.32806E 02	0.52549E 01	0.16435E-01	0.59763E-02	0.12148E 01	0.92862E 00	0.32000E-01	0.10000E 01
184	585.83	0.37024E 02	0.59942E 01	0.18859E-01	0.68580E-02	0.13857E 01	0.10593E 01	0.32000E-01	0.10000E 01
185	570.76	0.31439E 02	0.50483E 01	0.15703E-01	0.57103E-02	0.11670E 01	0.89211E 00	0.64000E-01	0.10000E 01
186	582.95	0.37510E 02	0.60441E 01	0.18975E-01	0.68999E-02	0.13972E 01	0.10681E 01	0.64000E-01	0.10000E 01
187	580.71	0.33845E 02	0.54643E 01	0.17126E-01	0.62275E-02	0.12632E 01	0.96563E 00	0.70000E-02	0.10000E 01
188	577.95	0.32518E 02	0.53257E 01	0.16656E-01	0.60569E-02	0.12312E 01	0.94114E 00	0.70000E-02	0.10000E 01
189	545.37	0.61694E 01	0.10126E 01	0.30909E-02	0.11240E-02	0.23409E-00	0.17895E-00	0.10600E 01	0.10000E 01
190	543.88	0.35039E 01	0.58613E 00	0.17871E-02	0.64986E-03	0.13550E-00	0.10358E-00	0.10840E 01	0.10000E 01
191	542.61	0.17262E 01	0.29012E-00	0.88377E-03	0.32137E-03	0.67070E-01	0.51270E-01	0.11080E 01	0.10000E 01
192	542.36	0.20307E 01	0.33940E-00	0.10337E-02	0.37588E-03	0.78461E-01	0.59977E-01	0.11080E 01	0.10000E 01
193	549.40	0.19496E 01	0.32220E-00	0.98641E-03	0.35870E-03	0.74886E-01	0.56938E-01	0.16580E 01	0.10000E 01
194	549.28	0.19657E 01	0.32335E-00	0.98983E-03	0.35994E-03	0.74751E-01	0.57141E-01	0.11700E 01	0.10000E 01
195	549.55	0.19501E 01	0.32232E-00	0.98686E-03	0.35886E-03	0.74512E-01	0.56958E-01	0.16740E 01	0.10000E 01
196	549.79	0.20353E 01	0.33490E-00	0.10256E-02	0.37293E-03	0.77420E-01	0.59181E-01	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
126	2	7.57	157.57	-0.	-0.	3	C2	2.70	2	10.15	942.00	1832.30	126	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.888624E 02	0.194899E-01	0.468650E 04	0.184015E-04	0.719785E-07	0.120618E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730500E 00	0.435527E 01	0.571544E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	568.47	0.26996E 02	0.42465E 01	0.13068E-01	0.47097E-02	0.97502E 00	0.74298E 00	0.10000E 01	0.10000E 01
198	572.25	0.27769E 02	0.42348E 01	0.13069E-01	0.47101E-02	0.97234E 00	0.74094E 00	0.12000E 01	0.10000E 01
199	553.85	0.13350E 02	0.21237E 01	0.64649E-02	0.23300E-02	0.48760E-00	0.37156E-00	0.13000E 01	0.10000E 01
200	551.62	0.10525E 01	0.15468E-00	0.47012E-03	0.16943E-03	0.35516E-01	0.27064E-01	0.11890E 01	0.10000E 01
201	555.33	0.71377E 00	0.11926E-00	0.36344E-03	0.13099E-03	0.27382E-01	0.20866E-01	0.14540E 01	0.10000E 01
202	552.54	0.96624E 00	0.15997E-00	0.48650E-03	0.17534E-03	0.36729E-01	0.27988E-01	0.17040E 01	0.10000E 01
203	554.07	0.10847E 01	0.17973E-00	0.54721E-03	0.19722E-03	0.41266E-01	0.31446E-01	0.20410E 01	0.10000E 01
204	554.12	-0.58699E-01	-0.45192E-02	-0.13760E-04	-0.49593E-05	-0.10376E-02	-0.79070E-03	0.20700E 01	0.
205	551.42	0.15532E-00	0.13640E-01	0.41451E-04	0.14939E-04	0.31319E-02	0.23866E-02	0.21880E 01	0.10000E 01
206	551.76	0.12130E 01	0.20073E-00	0.61013E-03	0.21989E-03	0.46089E-01	0.35121E-01	0.22480E 01	0.10000E 01
207	553.78	0.13138E 01	0.21398E-00	0.65138E-03	0.23476E-03	0.49132E-01	0.37440E-01	0.20700E 01	0.10000E 01
208	553.34	0.45662E-00	0.40931E-01	0.12455E-03	0.44890E-04	-0.93979E-02	0.71614E-02	0.20700E 01	0.10000E 01
209	549.66	0.53663E 00	0.43467E-01	0.13192E-03	0.47543E-04	0.99802E-02	0.76051E-02	0.21880E 01	0.10000E 01
210	551.41	0.13740E 01	0.22908E-00	0.69611E-03	0.25088E-03	0.52597E-01	0.40080E-01	0.20700E 01	0.10000E 01
211	553.40	0.13621E 01	0.22733E-00	0.69183E-03	0.24934E-03	0.52198E-01	0.39776E-01	0.21880E 01	0.10000E 01
212	552.40	0.13745E 01	0.22650E-00	0.68879E-03	0.24824E-03	0.52006E-01	0.39630E-01	0.22390E 01	0.10000E 01
213	551.10	0.17579E 01	0.28946E-00	0.87942E-03	0.31695E-03	0.66463E-01	0.50646E-01	0.21880E 01	0.10000E 01
214	552.19	0.16010E 01	0.26704E-00	0.81194E-03	0.29263E-03	0.61314E-01	0.46722E-01	0.22480E 01	0.10000E 01
215	553.20	0.98702E 00	0.14945E-00	0.45473E-03	0.16389E-03	0.34314E-01	0.26148E-01	0.11650E 01	0.10000E 01
216	-581.91	-0.40759E 01	-0.10249E-00	-0.17243E-03	-0.62145E-04	-0.23533E-01	-0.17932E-01	0.12050E 01	0.
217	555.00	0.13153E 01	0.19368E-00	0.59011E-03	0.21268E-03	0.44470E-01	0.33887E-01	0.12120E 01	0.10000E 01
218	555.36	0.12655E 01	0.18734E-00	0.57093E-03	0.20577E-03	0.43014E-01	0.32778E-01	0.11890E 01	0.10000E 01
219	551.22	0.10447E 01	0.17642E-00	0.53603E-03	0.19319E-03	0.40508E-01	0.30868E-01	0.14540E 01	0.10000E 01
220	547.54	0.10935E 01	0.19131E-00	0.57972E-03	0.20893E-03	0.43927E-01	0.33473E-01	0.17040E 01	0.10000E 01
221	548.89	0.84468E 00	0.14169E-00	0.42978E-03	0.15490E-03	0.32534E-01	0.24791E-01	0.20410E 01	0.10000E 01
222	528.05	0.99636E 00	0.16693E-00	0.49873E-03	0.17975E-03	0.38329E-01	0.29208E-01	0.22480E 01	0.10000E 01
223	551.08	0.10473E 01	0.15838E-00	0.48118E-03	0.17342E-03	0.36366E-01	0.27712E-01	0.11650E 01	0.10000E 01
224	553.19	0.47637E-00	0.40280E-01	0.12256E-03	0.44173E-04	0.92487E-02	0.70476E-02	0.12050E 01	0.10000E 01
225	552.32	0.11865E 01	0.17445E-00	0.53047E-03	0.19118E-03	0.40055E-01	0.30523E-01	0.12120E 01	0.10000E 01
226	550.19	0.12192E 01	0.20652E-00	0.62702E-03	0.22598E-03	0.47419E-01	0.36134E-01	0.14540E 01	0.10000E 01
227	546.41	0.12795E 01	0.20755E-00	0.62837E-03	0.22647E-03	0.47654E-01	0.36313E-01	0.17040E 01	0.10000E 01
228	543.10	0.14281E 01	0.23590E-00	0.71250E-03	0.25679E-03	0.54164E-01	0.41274E-01	0.18780E 01	0.10000E 01
229	545.34	0.13392E 01	0.22252E-00	0.67318E-03	0.24262E-03	0.51091E-01	0.38932E-01	0.21880E 01	0.10000E 01
230	547.47	0.15283E 01	0.22680E-00	0.68722E-03	0.24768E-03	0.52076E-01	0.39683E-01	0.11890E 01	0.10000E 01
231	539.49	0.12260E 01	0.21723E-00	0.65438E-03	0.23584E-03	0.49877E-01	0.38007E-01	0.14540E 01	0.10000E 01
232	548.53	0.12925E 01	0.21252E-00	0.64443E-03	0.23226E-03	0.48795E-01	0.37183E-01	0.16130E 01	0.10000E 01
233	547.63	0.13517E 01	0.22385E-00	0.67835E-03	0.24448E-03	0.51398E-01	0.39166E-01	0.17040E 01	0.10000E 01
234	544.64	0.14540E 01	0.24150E-00	0.73023E-03	0.26318E-03	0.55449E-01	0.42253E-01	0.18780E 01	0.10000E 01
235	551.66	0.12655E 01	0.21068E-00	0.64034E-03	0.23078E-03	0.48374E-01	0.36862E-01	0.14540E 01	0.10000E 01
236	547.66	0.14332E 01	0.23555E-00	0.71382E-03	0.25727E-03	0.54084E-01	0.41213E-01	0.17040E 01	0.10000E 01
237	529.97	0.14078E 01	0.23189E-00	0.69376E-03	0.25004E-03	0.53244E-01	0.40573E-01	0.21880E 01	0.10000E 01
238	549.70	0.54909E 00	0.49120E-01	0.14908E-03	0.53728E-04	0.11278E-01	0.85942E-02	0.20700E 01	0.10000E 01
239	549.09	0.17397E 01	0.25533E-00	0.77458E-03	0.27916E-03	0.58626E-01	0.44674E-01	0.11890E 01	0.10000E 01
240	548.82	0.14239E 01	0.24015E-00	0.72836E-03	0.26251E-03	0.55139E-01	0.42017E-01	0.14540E 01	0.10000E 01
241	549.23	0.15605E 01	0.25788E-00	0.78238E-03	0.28197E-03	0.59210E-01	0.45119E-01	0.17040E 01	0.10000E 01
242	548.70	0.16307E 01	0.27145E-00	0.82324E-03	0.29670E-03	0.62326E-01	0.47494E-01	0.18780E 01	0.10000E 01
243	527.03	0.14332E 01	0.23569E-00	0.70364E-03	0.25360E-03	0.54117E-01	0.41238E-01	0.20410E 01	0.10000E 01
244	550.73	-0.51949E-01	-0.47156E-02	-0.14322E-04	-0.51619E-05	-0.10827E-02	-0.82506E-03	0.20700E 01	0.10000E 01
245	549.96	0.12977E 01	0.10677E-00	0.32411E-03	0.11681E-03	0.24515E-01	0.18681E-01	0.21870E 01	0.10000E 01
246	544.25	0.15725E 01	0.26587E-00	0.80571E-03	0.28966E-03	0.61046E-01	0.46519E-01	0.22100E 01	0.10000E 01
247	554.03	0.13155E 01	0.21694E-00	0.66030E-03	0.23805E-03	0.49811E-01	0.37957E-01	0.14540E 01	0.10000E 01
248	545.65	0.13117E 01	0.21798E-00	0.65960E-03	0.23772E-03	0.50050E-01	0.38139E-01	0.17040E 01	0.10000E 01
249	547.91	0.23689E-00	0.19972E-01	0.60534E-04	0.21817E-04	0.45857E-02	0.34944E-02	0.18780E 01	0.
250	551.35	0.35844E-00	0.29519E-01	0.89686E-04	0.32323E-04	0.67769E-02	0.51641E-02	0.21880E 01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	554.71	0.13112E 01	0.22299E-00	0.67927E-03	0.24481E-03	0.51200E-01	0.39016E-01	0.14540E 01	0.10000E 01
252	548.87	0.15553E 01	0.26232E-00	0.79564E-03	0.28676E-03	0.60230E-01	0.45896E-01	0.16130E 01	0.10000E 01
253	551.27	-0.89871E-01	-0.79692E-02	-0.24214E-04	-0.87269E-05	-0.18298E-02	-0.13943E-02	0.17060E 01	0.10000E 01
254	551.46	0.19574E 01	0.32634E-00	0.99172E-03	0.35742E-03	0.74931E-01	0.57099E-01	0.21880E 01	0.10000E 01
255	538.79	0.62234E 00	0.57399E-01	0.17282E-03	0.62287E-04	0.13179E-01	0.10043E-01	0.16580E 01	0.10000E 01
256	549.72	0.29974E-00	0.25296E-01	0.76774E-04	0.27670E-04	0.58082E-02	0.44260E-02	0.17920E 01	0.10000E 01
257	545.52	0.12369E 01	0.20866E-00	0.63133E-03	0.22754E-03	0.47909E-01	0.36508E-01	0.10840E 01	0.10000E 01
258	553.52	0.14971E 01	0.25635E-00	0.78020E-03	0.28119E-03	0.58860E-01	0.44852E-01	0.14540E 01	0.10000E 01
259	549.09	0.16904E 01	0.28145E-00	0.85382E-03	0.30772E-03	0.64624E-01	0.49244E-01	0.16130E 01	0.10000E 01
260	550.75	0.14307E 01	0.23480E-00	0.71317E-03	0.25703E-03	0.53913E-01	0.41082E-01	0.17040E 01	0.10000E 01
261	551.20	0.14831E 01	0.24611E-00	0.74774E-03	0.26949E-03	0.56508E-01	0.43060E-01	0.18780E 01	0.10000E 01
262	549.33	0.20535E 01	0.34820E-00	0.10565E-02	0.38076E-03	0.79948E-01	0.60922E-01	0.20410E 01	0.10000E 01
263	551.76	0.15688E 01	0.26717E-00	0.81208E-03	0.29268E-03	0.61344E-01	0.46745E-01	0.14540E 01	0.10000E 01
264	549.56	0.17236E 01	0.28576E-00	0.86717E-03	0.31253E-03	0.65612E-01	0.49997E-01	0.16130E 01	0.10000E 01
265	548.83	0.18577E 01	0.30174E-00	0.91519E-03	0.32984E-03	0.69282E-01	0.52794E-01	0.17040E 01	0.10000E 01
266	549.50	0.19086E 01	0.31641E-00	0.96015E-03	0.34604E-03	0.72649E-01	0.55360E-01	0.18780E 01	0.10000E 01
267	550.23	0.21205E 01	0.35867E-00	0.10890E-02	0.39247E-03	0.82352E-01	0.62754E-01	0.20410E 01	0.10000E 01
268	550.41	0.17247E 01	0.28606E-00	0.86865E-03	0.31307E-03	0.65682E-01	0.50051E-01	0.16130E 01	0.10000E 01
269	548.38	0.20317E 01	0.32993E-00	0.10003E-02	0.36053E-03	0.75753E-01	0.57725E-01	0.18280E 01	0.10000E 01
270	549.53	0.20971E 01	0.34608E-00	0.10502E-02	0.37851E-03	0.79463E-01	0.60552E-01	0.18780E 01	0.10000E 01
271	545.11	0.21639E 01	0.36756E-00	0.11118E-02	0.40070E-03	0.84394E-01	0.64310E-01	0.20410E 01	0.10000E 01
272	550.02	0.18774E 01	0.31941E-00	0.96962E-03	0.34946E-03	0.73339E-01	0.55885E-01	0.16130E 01	0.10000E 01
273	549.86	0.19330E 01	0.32296E-00	0.98029E-03	0.35331E-03	0.74155E-01	0.56507E-01	0.17200E 01	0.10000E 01
274	546.68	0.19699E 01	0.31859E-00	0.96476E-03	0.34771E-03	0.73150E-01	0.55741E-01	0.18280E 01	0.10000E 01
275	546.73	0.21190E 01	0.34967E-00	0.10589E-02	0.38165E-03	0.80287E-01	0.61180E-01	0.18780E 01	0.10000E 01
276	-4157.09	0.10379E-01	-0.49888E-02	-0.37771E-05	-0.13613E-05	-0.11455E-02	-0.87286E-03	0.20600E 01	0.
277	547.29	0.10421E 01	0.87827E-01	0.26608E-03	0.95898E-04	0.20166E-01	0.15367E-01	0.21000E 01	0.10000E 01
278	-4157.09	0.10379E-01	-0.24951E-02	-0.18891E-05	-0.68086E-06	-0.57290E-03	-0.43656E-03	0.21870E 01	0.
279	551.50	0.23039E 01	0.39113E-00	0.11886E-02	0.42839E-03	0.89805E-01	0.68433E-01	0.21950E 01	0.10000E 01
280	548.59	0.20229E 01	0.33927E-00	0.10288E-02	0.37080E-03	0.77900E-01	0.59361E-01	0.18780E 01	0.10000E 01
281	548.65	0.22436E 01	0.38029E-00	0.11533E-02	0.41565E-03	0.87318E-01	0.66538E-01	0.20600E 01	0.10000E 01
282	544.55	0.18592E 01	0.30362E-00	0.91801E-03	0.33086E-03	0.69713E-01	0.53123E-01	0.18280E 01	0.10000E 01
283	547.51	0.22068E 01	0.37190E-00	0.11269E-02	0.40614E-03	0.85392E-01	0.65070E-01	0.20600E 01	0.10000E 01
284	549.45	0.15579E 01	0.25314E-00	0.76813E-03	0.27684E-03	0.58123E-01	0.44291E-01	0.17200E 01	0.10000E 01
285	549.82	0.17725E 01	0.29300E-00	0.88932E-03	0.32052E-03	0.67274E-01	0.51264E-01	0.18780E 01	0.10000E 01
286	548.15	0.65091E 00	0.60351E-01	0.18295E-03	0.65938E-04	0.13857E-01	0.10559E-01	0.16580E 01	0.10000E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.17029E-05	-0.61373E-06	-0.77506E-04	-0.59061E-04	0.17920E 01	0.
288	547.28	0.15351E 01	0.25339E-00	0.76768E-03	0.27668E-03	0.58181E-01	0.44335E-01	0.16130E 01	0.10000E 01
289	549.83	0.23896E-01	0.20168E-02	0.61216E-05	0.22063E-05	0.46336E-03	0.35288E-03	0.17060E 01	0.10000E 01
290	547.06	0.41974E-00	0.35371E-01	0.10714E-03	0.38615E-04	0.81215E-02	0.61887E-02	0.18780E 01	0.10000E 01
291	548.46	0.12088E 01	0.19876E-00	0.60267E-03	0.21721E-03	0.45636E-01	0.34775E-01	0.17200E 01	0.10000E 01
292	545.15	0.11179E 01	0.19278E-00	0.58315E-03	0.21017E-03	0.44264E-01	0.33730E-01	0.14400E 01	0.10000E 01
293	548.43	0.16073E 01	0.26101E-00	0.79142E-03	0.28523E-03	0.59930E-01	0.45668E-01	0.17200E 01	0.10000E 01
294	548.71	0.18192E 01	0.30238E-00	0.91705E-03	0.33051E-03	0.69429E-01	0.52906E-01	0.18780E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
132	2	11.66	161.66	-0.	-0.	1	C2	2.70	2	10.15	939.50	1829.10	132	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.886914E 02	0.194455E-01	0.468191E 04	0.183950E-04	0.718400E-07	0.120690E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730401E 00	0.434925E 01	0.570390E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	574.21	0.31900E 02	0.42316E 01	0.13116E-01	0.47334E-02	0.97295E 00	0.74188E 00	-0.	0.10000E 01
2-4157.09		0.10379E-01	-0.41161E-02	-0.31187E-05	-0.11255E-05	-0.94640E-03	-0.72164E-03	-0.30000E-01	0.
3-4157.09		0.10379E-01	-0.44754E-02	-0.33908E-05	-0.12237E-05	-0.10290E-02	-0.78462E-03	-0.60000E-01	0.
4-4157.09		0.10379E-01	-0.45906E-02	-0.34782E-05	-0.12552E-05	-0.10555E-02	-0.80482E-03	-0.90000E-01	0.
5	560.34	0.25464E 02	0.40784E 01	0.12511E-01	0.45152E-02	0.93774E 00	0.71503E 00	-0.20000E-00	0.10000E 01
6	561.88	0.23565E 02	0.37775E 01	0.11601E-01	0.41868E-02	0.86853E 00	0.66226E 00	-0.40000E-00	0.10000E 01
7	560.97	0.20866E 02	0.33590E 01	0.10309E-01	0.37205E-02	0.77233E 00	0.58890E 00	-0.60000E 00	0.10000E 01
8-4157.09		0.10379E-01	-0.47298E-02	-0.35836E-05	-0.12933E-05	-0.10875E-02	-0.82923E-03	-0.80000E 00	0.
9	559.85	0.19330E 02	0.30607E 01	0.93859E-02	0.33872E-02	0.70373E 00	0.53660E 00	-0.90000E 00	0.10000E 01
10	565.00	0.18582E 02	0.29885E 01	0.91996E-02	0.33200E-02	0.68713E 00	0.52394E 00	-0.98000E 00	0.10000E 01
11	549.71	0.92052E 00	0.15915E-00	0.48440E-03	0.17481E-03	0.36592E-01	0.27902E-01	-0.11220E 01	0.10000E 01
12	551.84	0.13055E 01	0.19255E-00	0.58699E-03	0.21184E-03	0.44272E-01	0.33758E-01	-0.11890E 01	0.10000E 01
13	551.94	0.10613E 01	0.16139E-00	0.49203E-03	0.17757E-03	0.37107E-01	0.28295E-01	-0.13340E 01	0.10000E 01
14	546.65	0.76675E 00	0.13234E-00	0.40189E-03	0.14504E-03	0.30427E-01	0.23201E-01	-0.14400E 01	0.10000E 01
15-4157.09		0.10379E-01	-0.41161E-02	-0.31187E-05	-0.11255E-05	-0.94640E-03	-0.72164E-03	0.30000E-01	0.
16-4157.09		0.10379E-01	-0.44754E-02	-0.33908E-05	-0.12237E-05	-0.10290E-02	-0.78462E-03	0.60000E-01	0.
17	1085.37	-0.31174E-02	-0.62105E-03	-0.31480E-05	-0.11361E-05	-0.14280E-03	-0.10888E-03	0.90000E-01	0.
18	577.09	0.30404E 02	0.49146E 01	0.15266E-01	0.55093E-02	0.11300E 01	0.86162E 00	0.20000E-00	0.10000E 01
19	592.79	0.33991E 02	0.55416E 01	0.17419E-01	0.62864E-02	0.12741E 01	0.97154E 00	0.40000E-00	0.10000E 01
20-4157.09		0.10379E-01	-0.47298E-02	-0.35836E-05	-0.12933E-05	-0.10875E-02	-0.82923E-03	0.60000E 00	0.
21-4157.09		0.10379E-01	-0.44529E-02	-0.33738E-05	-0.12176E-05	-0.10238E-02	-0.78068E-03	0.92000E 00	0.
22	572.33	0.22832E 02	0.34821E 01	0.10778E-01	0.38896E-02	0.80063E 00	0.61048E 00	0.10400E 01	0.10000E 01
23	569.20	0.20021E 02	0.30564E 01	0.94380E-02	0.34061E-02	0.70274E 00	0.53584E 00	0.10600E 01	0.10000E 01
24	560.37	0.13256E 02	0.21097E 01	0.64719E-02	0.23356E-02	0.48506E-00	0.36986E-00	0.10840E 01	0.10000E 01
25	553.86	0.14452E 01	0.21450E-00	0.65488E-03	0.23634E-03	0.49319E-01	0.37606E-01	0.12070E 01	0.10000E 01
26	554.38	0.13740E 01	0.21516E-00	0.65713E-03	0.23715E-03	0.49470E-01	0.37721E-01	0.12490E 01	0.10000E 01
27	554.59	0.13797E 01	0.21257E-00	0.64935E-03	0.23434E-03	0.48876E-01	0.37268E-01	0.13340E 01	0.10000E 01
28	552.69	0.12203E 01	0.20884E-00	0.63706E-03	0.22991E-03	0.48018E-01	0.36614E-01	0.14540E 01	0.10000E 01
29	550.82	0.12447E 01	0.20650E-00	0.62902E-03	0.22701E-03	0.47478E-01	0.36202E-01	0.16580E 01	0.10000E 01
30	548.45	0.12161E 01	0.20395E-00	0.62019E-03	0.22382E-03	0.46893E-01	0.35756E-01	0.20410E 01	0.10000E 01
31	551.10	0.13631E 01	0.22894E-00	0.69755E-03	0.25174E-03	0.52640E-01	0.40138E-01	0.22480E 01	0.10000E 01
32-4157.09		0.10379E-01	-0.44799E-02	-0.33942E-05	-0.12249E-05	-0.10300E-02	-0.78540E-03	-0.60000E-01	0.
33-4157.09		0.10379E-01	-0.41161E-02	-0.31187E-05	-0.11255E-05	-0.94640E-03	-0.72164E-03	-0.30000E-01	0.
34-4157.09		0.10379E-01	-0.44799E-02	-0.33942E-05	-0.12249E-05	-0.10300E-02	-0.78540E-03	0.30000E-01	0.
35-4157.09		0.10379E-01	-0.45906E-02	-0.34782E-05	-0.12552E-05	-0.10555E-02	-0.80482E-03	0.60000E-01	0.
36	558.99	0.20621E 02	0.33002E 01	0.10114E-01	0.36500E-02	0.75880E 00	0.57859E 00	-0.86800E 00	0.10000E 01
37	561.02	0.20269E 02	0.31597E 01	0.96978E-02	0.34998E-02	0.72650E 00	0.55396E 00	-0.91100E 00	0.10000E 01
38	562.22	0.20768E 02	0.32980E 01	0.10131E-01	0.36563E-02	0.75829E 00	0.57820E 00	-0.95300E 00	0.10000E 01
39-4157.09		0.10379E-01	-0.46774E-02	-0.35439E-05	-0.12790E-05	-0.10755E-02	-0.82004E-03	0.51000E-01	0.
40-4157.09		0.10379E-01	-0.46774E-02	-0.35439E-05	-0.12790E-05	-0.10755E-02	-0.82004E-03	0.29000E-01	0.
41-4157.09		0.10379E-01	-0.46505E-02	-0.35235E-05	-0.12716E-05	-0.10693E-02	-0.81532E-03	0.70000E-02	0.
42	562.98	0.24332E 02	0.38780E 01	0.11920E-01	0.43017E-02	0.89165E 00	0.67989E 00	-0.86800E 00	0.10000E 01
43	561.44	0.23325E 02	0.37238E 01	0.11433E-01	0.41260E-02	0.85620E 00	0.65286E 00	-0.91100E 00	0.10000E 01
44	574.30	0.25512E 02	0.36769E 01	0.17597E-01	0.63506E-02	0.13053E 01	0.99527E 00	-0.95300E 00	0.10000E 01
45	550.39	0.85179E 01	0.13947E 01	0.42472E-02	0.15327E-02	0.32067E-00	0.24452E-00	-0.10400E 01	0.10000E 01
46-4157.09		0.10379E-01	-0.46894E-02	-0.35530E-05	-0.12822E-05	-0.10782E-02	-0.82214E-03	0.70000E-02	0.
47-4157.09		0.10379E-01	-0.46894E-02	-0.35530E-05	-0.12822E-05	-0.10782E-02	-0.82214E-03	0.29000E-01	0.
48	560.74	0.20672E 02	0.33117E 01	0.10162E-01	0.36674E-02	0.76143E 00	0.58059E 00	0.51000E-01	0.10000E 01
49	562.29	0.20834E 02	0.33085E 01	0.10164E-01	0.36682E-02	0.76071E 00	0.58005E 00	0.70000E-02	0.10000E 01
50	562.62	0.20154E 02	0.32115E 01	0.98685E-02	0.35614E-02	0.73840E 00	0.56303E 00	0.29000E-01	0.10000E 01
51-4157.09		0.10379E-01	-0.46629E-02	-0.35328E-05	-0.12749E-03	-0.10720E-02	-0.81742E-03	0.51000E-01	0.
52-4157.09		0.10379E-01	-0.46894E-02	-0.35530E-05	-0.12822E-05	-0.10782E-02	-0.82214E-03	-0.86800E 00	0.
53	563.11	0.20303E 02	0.32568E 01	0.10011E-01	0.36130E-02	0.74882E 00	0.57098E 00	-0.91100E 00	0.10000E 01
54	563.94	0.21024E 02	0.33418E 01	0.10279E-01	0.37096E-02	0.76837E 00	0.58589E 00	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	548.08	0.49101E 01	0.80293E 00	0.24410E-02	0.88091E-03	0.18461E-00	0.14077E-00	-0.10400E 01	0.10000E 01
56	547.53	0.24847E 01	0.41900E-00	0.12733E-02	0.45951E-03	0.96338E-01	0.73458E-01	-0.10680E 01	0.10000E 01
57	543.68	0.18384E 01	0.29989E-00	0.90875E-03	0.32796E-03	0.68953E-01	0.52577E-01	-0.10400E 01	0.10000E 01
58	543.30	0.44629E 01	0.78795E 00	0.23871E-02	0.86146E-03	0.18117E-00	0.13814E-00	-0.10680E 01	0.10000E 01
59	546.26	0.78213E 01	0.12777E 01	0.38791E-02	0.13999E-02	0.29377E-00	0.22400E-00	-0.10400E 01	0.10000E 01
60	544.27	0.39174E 01	0.65940E 00	0.19990E-02	0.72142E-03	0.15161E-00	0.11560E-00	-0.10680E 01	0.10000E 01
61	547.40	0.13184E 01	0.21945E-00	0.66681E-03	0.24064E-03	0.50457E-01	0.38474E-01	-0.11220E 01	0.10000E 01
62	551.62	0.14514E 01	0.22067E-00	0.67261E-03	0.24274E-03	0.50739E-01	0.38688E-01	-0.13340E 01	0.10000E 01
63	546.68	0.10275E 01	0.17737E-00	0.53874E-03	0.19442E-03	0.40781E-01	0.31096E-01	-0.11220E 01	0.10000E 01
64	551.11	0.10784E 01	0.16392E-00	0.49944E-03	0.18024E-03	0.37689E-01	0.28738E-01	-0.13340E 01	0.10000E 01
65	545.90	0.98857E 00	0.17055E-00	0.51765E-03	0.18681E-03	0.39213E-01	0.29900E-01	0.14400E 01	0.10000E 01
66	543.47	0.96935E 00	0.15894E-00	0.48155E-03	0.17379E-03	0.36544E-01	0.27865E-01	0.16130E 01	0.10000E 01
67	546.56	0.12805E 01	0.20644E-00	0.62688E-03	0.22623E-03	0.47465E-01	0.36192E-01	0.17200E 01	0.10000E 01
68	530.74	0.85507E 00	0.14027E-00	0.42106E-03	0.15196E-03	0.32251E-01	0.24591E-01	-0.16130E 01	0.10000E 01
69	548.78	0.15122E 01	0.24409E-00	0.74244E-03	0.26794E-03	0.56123E-01	0.42794E-01	-0.16280E 01	0.10000E 01
70	535.96	0.11418E 01	0.16721E-00	0.50385E-03	0.18183E-03	0.38446E-01	0.29315E-01	-0.11650E 01	0.10000E 01
71	550.47	0.53559E 00	0.45219E-01	0.13771E-03	0.49698E-04	0.10397E-01	0.79278E-02	-0.12050E 01	0.10000E 01
72	552.92	0.12416E 01	0.18103E-00	0.55231E-03	0.19932E-03	0.41624E-01	0.31738E-01	-0.12120E 01	0.10000E 01
73	549.30	0.12068E 01	0.17805E-00	0.54176E-03	0.19551E-03	0.40937E-01	0.31215E-01	-0.11650E 01	0.10000E 01
74	551.94	0.39585E-00	0.33448E-01	0.10197E-03	0.36801E-04	0.76906E-02	0.58641E-02	-0.12050E 01	0.10000E 01
75	541.84	0.13169E 01	0.18983E-00	0.57448E-03	0.20732E-03	0.43648E-01	0.33281E-01	-0.12120E 01	0.10000E 01
76	547.83	0.19631E 01	0.29685E-00	0.90228E-03	0.32562E-03	0.68253E-01	0.52043E-01	0.10840E 01	0.10000E 01
77	547.38	0.10447E 01	0.16955E-00	0.51518E-03	0.18592E-03	0.38984E-01	0.29725E-01	0.11220E 01	0.10000E 01
78	540.84	0.11740E 01	0.17476E-00	0.52849E-03	0.19072E-03	0.40183E-01	0.30640E-01	0.13340E 01	0.10000E 01
79	550.34	0.13174E 01	0.22237E-00	0.67715E-03	0.24438E-03	0.51129E-01	0.38986E-01	-0.11890E 01	0.10000E 01
80	545.33	0.11953E 01	0.18020E-00	0.54670E-03	0.19730E-03	0.41431E-01	0.31592E-01	-0.13340E 01	0.10000E 01
81	539.62	0.14390E 01	0.23253E-00	0.70254E-03	0.25354E-03	0.53464E-01	0.40767E-01	-0.11470E 01	0.10000E 01
82	549.87	0.14758E 01	0.24883E-00	0.75745E-03	0.27335E-03	0.57212E-01	0.43624E-01	-0.11890E 01	0.10000E 01
83	545.14	0.19886E 01	0.33439E-00	0.10144E-02	0.36607E-03	0.76884E-01	0.58624E-01	-0.10840E 01	0.10000E 01
84	549.92	0.16779E 01	0.24765E-00	0.75389E-03	0.27207E-03	0.56940E-01	0.43417E-01	-0.11890E 01	0.10000E 01
85	550.09	0.14249E 01	0.21033E-00	0.64036E-03	0.23110E-03	0.48360E-01	0.36875E-01	-0.13090E 01	0.10000E 01
86	553.02	0.14836E 01	0.22236E-00	0.67845E-03	0.24485E-03	0.51126E-01	0.38984E-01	-0.13340E 01	0.10000E 01
87	555.03	0.15190E 01	0.22444E-00	0.68581E-03	0.24750E-03	0.51604E-01	0.39349E-01	0.11990E 01	0.10000E 01
88	550.29	0.13808E 01	0.20523E-00	0.62494E-03	0.22553E-03	0.47188E-01	0.35981E-01	0.12070E 01	0.10000E 01
89	552.29	0.13138E 01	0.19882E-00	0.60630E-03	0.21881E-03	0.45714E-01	0.34857E-01	0.13340E 01	0.10000E 01
90	555.38	0.14062E 01	0.20247E-00	0.61883E-03	0.22333E-03	0.46552E-01	0.35496E-01	0.12070E 01	0.10000E 01
91	557.95	0.13091E 01	0.20539E-00	0.62897E-03	0.22699E-03	0.47225E-01	0.36010E-01	0.12490E 01	0.10000E 01
92	555.87	0.13943E 01	0.21249E-00	0.64970E-03	0.23447E-03	0.48857E-01	0.37253E-01	0.13340E 01	0.10000E 01
93	553.95	0.12691E 01	0.21606E-00	0.65969E-03	0.23807E-03	0.49679E-01	0.37880E-01	0.14900E 01	0.10000E 01
94	-4157.09	0.10379E-01	-0.31208E-02	-0.23645E-05	-0.85333E-06	-0.71755E-03	-0.54713E-03	-0.	0.
95	364.37	0.13714E-00	0.13045E-01	0.34965E-04	0.12618E-04	0.29993E-02	0.22870E-02	-0.	0.
96	-4157.09	0.10379E-01	-0.31208E-02	-0.23645E-05	-0.85333E-06	-0.71755E-03	-0.54713E-03	-0.	0.
97	-4157.09	0.10379E-01	-0.31208E-02	-0.23645E-05	-0.85333E-06	-0.71755E-03	-0.54713E-03	-0.	0.
98	-4157.09	0.10379E-01	-0.31432E-02	-0.23815E-05	-0.85946E-06	-0.72271E-03	-0.55107E-03	-0.	0.

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3937-06
071 07

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
137	2	11.63	161.63	-0.	-0.	2	C2	2.70	2	10.15	948.00	1816.50	137	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.880189E 02	0.196421E-01	0.466440E 04	0.187229E-04	0.712953E-07	0.123317E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730010E 00	0.436968E 01	0.574310E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	541.61	0.26249E 01	0.42800E-00	0.13095E-02	0.46605E-03	0.97949E-01	0.74525E-01	-0.10600E 01	0.10000E 01
100	540.06	0.12670E 01	0.21264E-00	0.64974E-03	0.23124E-03	0.48663E-01	0.37025E-01	-0.10840E 01	0.10000E 01
101	541.92	0.89455E 00	0.14700E-00	0.44977E-03	0.16007E-03	0.33640E-01	0.25595E-01	-0.11080E 01	0.10000E 01
102	542.19	0.10358E 01	0.16972E-00	0.51940E-03	0.18485E-03	0.38840E-01	0.29552E-01	-0.11080E 01	0.10000E 01
103	540.79	0.15668E 01	0.26305E-00	0.80420E-03	0.28621E-03	0.60199E-01	0.45803E-01	-0.10800E 01	0.10000E 01
104	-4157.09	0.10379E-01	-0.47074E-02	-0.35764E-05	-0.12728E-05	-0.10773E-02	-0.81966E-03	0.85000E 00	0.
105	591.59	0.42182E 02	0.65010E 01	0.20650E-01	0.73494E-02	0.14878E 01	0.11320E 01	0.94000E 00	0.10000E 01
106	593.87	0.43091E 02	0.65934E 01	0.20980E-01	0.74669E-02	0.15089E 01	0.11480E 01	0.96000E 00	0.10000E 01
107	572.57	0.40443E 02	0.61169E 01	0.19150E-01	0.68155E-02	0.13998E 01	0.10651E 01	0.98000E 00	0.10000E 01
108	566.65	0.36337E 02	0.55058E 01	0.17160E-01	0.61073E-02	0.12600E 01	0.95869E 00	0.10000E 01	0.10000E 01
109	574.12	0.27778E 02	0.42406E 01	0.13292E-01	0.47305E-02	0.97046E 00	0.73838E 00	0.10200E 01	0.10000E 01
110	593.11	0.40189E 02	0.61989E 01	0.19714E-01	0.70161E-02	0.14186E 01	0.10794E 01	0.80000E-01	0.10000E 01
111	586.09	0.41766E 02	0.63637E 01	0.20129E-01	0.71639E-02	0.14563E 01	0.11081E 01	0.10000E-00	0.10000E 01
112	599.11	0.42787E 02	0.65988E 01	0.21083E-01	0.75034E-02	0.15101E 01	0.11490E 01	0.12000E-00	0.10000E 01
113	591.91	0.41139E 02	0.63413E 01	0.20148E-01	0.71706E-02	0.14512E 01	0.11042E 01	0.14000E-00	0.10000E 01
114	-4157.09	0.10379E-01	-0.44529E-02	-0.33831E-05	-0.12040E-05	-0.10190E-02	-0.77535E-03	0.80000E-01	0.
115	589.36	0.40434E 02	0.62031E 01	0.19670E-01	0.70007E-02	0.14196E 01	0.10801E 01	0.10000E-00	0.10000E 01
116	589.95	0.41346E 02	0.63880E 01	0.20266E-01	0.72125E-02	0.14619E 01	0.11123E 01	0.12000E-00	0.10000E 01
117	560.55	0.42420E 02	0.64276E 01	0.19942E-01	0.70972E-02	0.14710E 01	0.11192E 01	0.14000E-00	0.10000E 01
118	588.42	0.38596E 02	0.59881E 01	0.18975E-01	0.67530E-02	0.13704E 01	0.10427E 01	0.10000E-00	0.10000E 01
119	573.28	0.41452E 02	0.63464E 01	0.19879E-01	0.70750E-02	0.14524E 01	0.11050E 01	0.15000E-00	0.10000E 01
120	597.52	0.33917E 02	0.52705E 01	0.16818E-01	0.59856E-02	0.12061E 01	0.91771E 00	0.20000E-00	0.10000E 01
121	593.20	0.39349E 02	0.61206E 01	0.19466E-01	0.69279E-02	0.14007E 01	0.10657E 01	0.25000E-00	0.10000E 01
122	587.66	0.37696E 02	0.58459E 01	0.18513E-01	0.65889E-02	0.13378E 01	0.10179E 01	0.30000E-00	0.10000E 01
123	588.93	0.38646E 02	0.60274E 01	0.19107E-01	0.68001E-02	0.13794E 01	0.10495E 01	0.35000E-00	0.10000E 01
124	578.96	0.38957E 02	0.60832E 01	0.19137E-01	0.68110E-02	0.13921E 01	0.10592E 01	0.38000E-00	0.10000E 01
125	592.56	0.40141E 02	0.63666E 01	0.20238E-01	0.72028E-02	0.14570E 01	0.11086E 01	0.45000E-00	0.10000E 01
126	586.75	0.37618E 02	0.60253E 01	0.19068E-01	0.67864E-02	0.13789E 01	0.10491E 01	0.61000E 00	0.10000E 01
127	560.58	0.19388E 02	0.30759E 01	0.95433E-02	0.33964E-02	0.70393E 00	0.53559E 00	0.70000E 00	0.10000E 01
128	549.27	0.83569E 01	0.13218E 01	0.40665E-02	0.14472E-02	0.30249E-00	0.23015E-00	0.75000E 00	0.10000E 01
129	577.63	0.32276E 02	0.51857E 01	0.16297E-01	0.58002E-02	0.11867E 01	0.90294E 00	0.70000E 00	0.10000E 01
130	579.35	0.33386E 02	0.53690E 01	0.16896E-01	0.60131E-02	0.12287E 01	0.93487E 00	0.80000E 00	0.10000E 01
131	553.86	0.13291E 02	0.19997E 01	0.61730E-02	0.21969E-02	0.45762E-00	0.34819E-00	0.90000E 00	0.10000E 01
132	572.93	0.31262E 02	0.47693E 01	0.14935E-01	0.53155E-02	0.10915E 01	0.83044E 00	0.90000E 00	0.10000E 01
133	573.88	0.32434E 02	0.49257E 01	0.15436E-01	0.54937E-02	0.11272E 01	0.85767E 00	0.96000E 00	0.10000E 01
134	571.44	0.31113E 02	0.47267E 01	0.14785E-01	0.52620E-02	0.10817E 01	0.82302E 00	0.10000E 01	0.10000E 01
135	-4157.09	0.10379E-01	-0.46400E-02	-0.35252E-05	-0.12546E-05	-0.10619E-02	-0.80793E-03	0.70000E-02	0.
136	558.12	0.22202E 02	0.34386E 01	0.10649E-01	0.37899E-02	0.78691E 00	0.59873E 00	0.70000E-02	0.10000E 01
137	558.13	0.22822E 02	0.35869E 01	0.11108E-01	0.39533E-02	0.82086E 00	0.62455E 00	0.39000E-01	0.10000E 01
138	-4157.09	0.10379E-01	-0.46026E-02	-0.34968E-05	-0.12445E-05	-0.10533E-02	-0.80141E-03	0.78000E-01	0.
139	-4157.09	0.10379E-01	-0.45801E-02	-0.34797E-05	-0.12384E-05	-0.10482E-02	-0.79750E-03	0.11700E-00	0.
140	557.17	0.22676E 02	0.35160E 01	0.10881E-01	0.38725E-02	0.80464E 00	0.61222E 00	0.78000E-01	0.10000E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23861E-05	-0.84990E-06	-0.71933E-03	-0.54731E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23861E-05	-0.84990E-06	-0.71933E-03	-0.54731E-03	-0.	0.
143	554.23	0.21078E 02	0.32469E 01	0.10026E-01	0.35682E-02	0.74305E 00	0.56535E 00	0.78000E-01	0.10000E 01
144	558.95	0.23163E 02	0.35832E 01	0.11103E-01	0.39517E-02	0.82001E 00	0.62391E 00	0.70000E-02	0.10000E 01
145	559.63	0.21618E 02	0.33290E 01	0.10321E-01	0.36733E-02	0.76184E 00	0.57965E 00	0.70000E-02	0.10000E 01
146	556.34	0.22166E 02	0.34240E 01	0.10589E-01	0.37688E-02	0.78358E 00	0.59619E 00	0.39000E-01	0.10000E 01
147	1115.91	-0.33780E-01	-0.67383E-02	-0.36211E-04	-0.12887E-04	-0.15420E-02	-0.11733E-02	0.78000E-01	0.
148	954.72	0.25658E-00	0.48371E-01	0.21399E-03	0.76160E-04	0.11070E-01	0.84225E-02	0.11700E-00	0.
149	574.30	0.34136E 02	0.55358E 01	0.17354E-01	0.61761E-02	0.12669E 01	0.96390E 00	0.70000E-02	0.10000E 01
150	572.90	0.34221E 02	0.55717E 01	0.17448E-01	0.62096E-02	0.12751E 01	0.97015E 00	0.70000E-02	0.10000E 01
151	577.83	0.33322E 02	0.54399E 01	0.17099E-01	0.60855E-02	0.12449E 01	0.94721E 00	0.70000E-02	0.10000E 01
152	582.78	0.36848E 02	0.57815E 01	0.18241E-01	0.64920E-02	0.13231E 01	0.10987E 01	0.39000E-01	0.10000E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.09		0.10379E-01	-0.45801E-02	-0.34797E-05	-0.12384E-05	-0.10482E-02	-0.79750E-03	0.39000E-01	0.
154	579.03	0.36474E 02	0.57050E 01	0.17949E-01	0.63879E-02	0.13056E 01	0.99337E 00	0.78000E-01	0.10000E 01
155-4157.09		0.10379E-01	-0.47523E-02	-0.36105E-05	-0.12850E-05	-0.10876E-02	-0.82748E-03	0.39000E-01	0.
156-4157.09		0.10379E-01	-0.47373E-02	-0.35991E-05	-0.12809E-05	-0.10841E-02	-0.82487E-03	0.39000E-01	0.
157	573.76	0.31317E 02	0.51013E 01	0.15985E-01	0.56890E-02	0.11674E 01	0.88825E 00	0.78000E-01	0.10000E 01
158-4157.09		0.10379E-01	-0.47672E-02	-0.36219E-05	-0.12890E-05	-0.10910E-02	-0.83008E-03	0.39000E-01	0.
159-4157.09		0.10379E-01	-0.47672E-02	-0.36219E-05	-0.12890E-05	-0.10910E-02	-0.83008E-03	0.78000E-01	0.
160-4157.09		0.10379E-01	-0.47523E-02	-0.36105E-05	-0.12850E-05	-0.10876E-02	-0.82748E-03	0.39000E-01	0.
161	572.85	0.28368E 02	0.45094E 01	0.14121E-01	0.50255E-02	0.10320E 01	0.78519E 00	0.43000E-01	0.10000E 01
162	571.48	0.28530E 02	0.45464E 01	0.14222E-01	0.50615E-02	0.10404E 01	0.79163E 00	0.43000E-01	0.10000E 01
163	570.45	0.28765E 02	0.45886E 01	0.14343E-01	0.51045E-02	0.10501E 01	0.79898E 00	0.85000E-01	0.10000E 01
164	572.26	0.28677E 02	0.45890E 01	0.14363E-01	0.51119E-02	0.10502E 01	0.79904E 00	0.12800E-00	0.10000E 01
165-4157.09		0.10379E-01	-0.46550E-02	-0.35366E-05	-0.12587E-05	-0.10653E-02	-0.81053E-03	0.43000E-01	0.
166	571.12	0.28887E 02	0.45875E 01	0.14346E-01	0.51059E-02	0.10499E 01	0.79879E 00	0.85000E-01	0.10000E 01
167-4157.09		0.10379E-01	-0.46400E-02	-0.35252E-05	-0.12546E-05	-0.10619E-02	-0.80793E-03	0.43000E-01	0.
168	555.96	0.19166E 02	0.30525E 01	0.94377E-02	0.33589E-02	0.69855E 00	0.53150E 00	0.12800E-00	0.10000E 01
169	574.11	0.29336E 02	0.47042E 01	0.14745E-01	0.52476E-02	0.10766E 01	0.81911E 00	0.85000E-01	0.10000E 01
170	575.50	0.30442E 02	0.48618E 01	0.15255E-01	0.54292E-02	0.11126E 01	0.84655E 00	0.12800E-00	0.10000E 01
171	572.40	0.30052E 02	0.47760E 01	0.14950E-01	0.53208E-02	0.10930E 01	0.83161E 00	0.85000E-01	0.10000E 01
172-4157.09		0.10379E-01	-0.46625E-02	-0.35423E-05	-0.12607E-05	-0.10670E-02	-0.81184E-03	0.43000E-01	0.
173	578.66	0.31329E 02	0.50363E 01	0.15840E-01	0.56374E-02	0.11525E 01	0.87692E 00	0.12800E-00	0.10000E 01
174-4157.09		0.10379E-01	-0.46550E-02	-0.35366E-05	-0.12587E-05	-0.10653E-02	-0.81053E-03	0.85000E-01	0.
175	578.89	0.31039E 02	0.49505E 01	0.15573E-01	0.55424E-02	0.11329E 01	0.86198E 00	0.43000E-01	0.10000E 01
176	579.39	0.31034E 02	0.49509E 01	0.15580E-01	0.55450E-02	0.11330E 01	0.86206E 00	0.43000E-01	0.10000E 01
177	581.60	0.32326E 02	0.51882E 01	0.16355E-01	0.58205E-02	0.11873E 01	0.90338E 00	0.12800E-00	0.10000E 01
178	579.95	0.31624E 02	0.50629E 01	0.15939E-01	0.56728E-02	0.11586E 01	0.88156E 00	0.85000E-01	0.10000E 01
179	581.85	0.30813E 02	0.49381E 01	0.15569E-01	0.55411E-02	0.11301E 01	0.85984E 00	0.70000E-02	0.10000E 01
180-4157.09		0.10379E-01	-0.46774E-02	-0.35537E-05	-0.12647E-05	-0.10704E-02	-0.81444E-03	0.70000E-02	0.
181	577.00	0.29645E 02	0.47613E 01	0.14956E-01	0.53230E-02	0.10896E 01	0.82905E 00	0.70000E-02	0.10000E 01
182-4157.09		0.10379E-01	-0.46924E-02	-0.35650E-05	-0.12688E-05	-0.10739E-02	-0.81705E-03	0.70000E-02	0.
183	581.60	0.31544E 02	0.50627E 01	0.15959E-01	0.56798E-02	0.11586E 01	0.88153E 00	0.32000E-01	0.10000E 01
184	580.48	0.34953E 02	0.56671E 01	0.17958E-01	0.63914E-02	0.12969E 01	0.98676E 00	0.32000E-01	0.10000E 01
185	572.38	0.29085E 02	0.46744E 01	0.14632E-01	0.52075E-02	0.10697E 01	0.81391E 00	0.64000E-01	0.10000E 01
186	585.07	0.35186E 02	0.56762E 01	0.17940E-01	0.63849E-02	0.12990E 01	0.98835E 00	0.64000E-01	0.10000E 01
187	584.66	0.32624E 02	0.52785E 01	0.16678E-01	0.59358E-02	0.12080E 01	0.91911E 00	0.70000E-02	0.10000E 01
188	581.33	0.31337E 02	0.51418E 01	0.16205E-01	0.57673E-02	0.11767E 01	0.89530E 00	0.70000E-02	0.10000E 01
189	547.04	0.63439E 01	0.10422E 01	0.32011E-02	0.11393E-02	0.23852E-00	0.18148E-00	0.10600E 01	0.10000E 01
190	545.66	0.35616E 01	0.59637E 00	0.18298E-02	0.65123E-03	0.13648E-00	0.10384E-00	0.10840E 01	0.10000E 01
191	544.93	0.17408E 01	0.29295E-00	0.89836E-03	0.31973E-03	0.67042E-01	0.51009E-01	0.11080E 01	0.10000E 01
192	544.48	0.19891E 01	0.33285E-00	0.10204E-02	0.36314E-03	0.76172E-01	0.57956E-01	0.11080E 01	0.10000E 01
193	547.85	0.92727E 00	0.15311E-00	0.47055E-03	0.16747E-03	0.35040E-01	0.26660E-01	0.16580E 01	0.10000E 01
194	547.29	0.93506E 00	0.15364E-00	0.47198E-03	0.16798E-03	0.35161E-01	0.26753E-01	0.11700E 01	0.10000E 01
195	547.90	0.10468E 01	0.17285E-00	0.53122E-03	0.18906E-03	0.39556E-01	0.30097E-01	0.16740E 01	0.10000E 01
196	548.90	0.84598E 00	0.13558E-00	0.47849E-03	0.17029E-03	0.35603E-01	0.27089E-01	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
127	2	11.65	161.65	-0.	-0.	3	C2	2.70	2	10.15	935.70	1833.90	127	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.889501E 02	0.193603E-01	0.468861E 04	0.182611E-04	0.720496E-07	0.119634E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.730551E 00	0.434020E 01	0.568657E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	575.18	0.27331E 02	0.43152E 01	0.13327E-01	0.48380E-02	0.99423E 00	0.75883E 00	0.10000E 01	0.10000E 01
198	580.13	0.28280E 02	0.43314E 01	0.13427E-01	0.48743E-02	0.99797E 00	0.76169E 00	0.12000E 01	0.10000E 01
199	559.90	0.13721E 02	0.21900E 01	0.66875E-02	0.24277E-02	0.50458E 00	0.38512E-00	0.13000E 01	0.10000E 01
200	555.45	0.59533E 00	0.87683E-01	0.26688E-03	0.96880E-04	0.20203E-01	0.15419E-01	0.11890E 01	0.10000E 01
201	555.75	0.10945E 01	0.18292E-00	0.55687E-03	0.20215E-03	0.42146E-01	0.32167E-01	0.14540E 01	0.10000E 01
202	552.06	0.11065E 01	0.18314E-00	0.55602E-03	0.20184E-03	0.42195E-01	0.32205E-01	0.17040E 01	0.10000E 01
203	553.72	0.99169E 00	0.16429E-00	0.49940E-03	0.18129E-03	0.37852E-01	0.28890E-01	0.20410E 01	0.10000E 01
204	554.31	-0.53506E-01	-0.41198E-02	-0.12529E-04	-0.45481E-05	-0.94922E-03	-0.72448E-03	0.20700E 01	0.
205	551.57	0.94549E-01	0.83039E-02	0.25202E-04	0.91488E-05	0.19132E-02	0.14603E-02	0.21880E 01	0.10000E 01
206	552.36	0.17096E 01	0.28301E-00	0.85942E-03	0.31198E-03	0.65206E-01	0.49767E-01	0.22480E 01	0.10000E 01
207	553.57	0.12535E 01	0.20415E-00	0.62049E-03	0.22525E-03	0.47036E-01	0.35900E-01	0.20700E 01	0.10000E 01
208	553.29	0.35221E-00	0.31570E-01	0.95937E-04	0.34827E-04	0.72740E-02	0.55518E-02	0.20700E 01	0.10000E 01
209	549.93	0.48000E-00	0.38886E-01	0.11788E-03	0.42791E-04	0.89594E-02	0.68382E-02	0.21880E 01	0.10000E 01
210	551.20	0.93247E 00	0.15544E-00	0.47163E-03	0.17121E-03	0.35814E-01	0.27335E-01	0.20700E 01	0.10000E 01
211	553.47	0.12338E 01	0.20593E-00	0.62586E-03	0.22720E-03	0.47447E-01	0.36213E-01	0.21880E 01	0.10000E 01
212	552.78	0.16062E 01	0.26473E-00	0.80418E-03	0.29193E-03	0.60996E-01	0.46554E-01	0.22390E 01	0.10000E 01
213	551.14	0.13408E 01	0.22078E-00	0.66986E-03	0.24317E-03	0.50869E-01	0.38825E-01	0.21880E 01	0.10000E 01
214	552.46	0.13501E 01	0.22522E-00	0.68400E-03	0.24830E-03	0.51892E-01	0.39606E-01	0.22480E 01	0.10000E 01
215	558.00	0.10878E 01	0.16515E-00	0.50360E-03	0.18281E-03	0.38050E-01	0.29041E-01	0.11650E 01	0.10000E 01
216	-404.45	-0.17969E 01	-0.63296E-01	-0.11417E-03	-0.41444E-04	-0.14584E-01	-0.11131E-01	0.12050E 01	0.
217	558.30	0.15148E 01	0.22346E-00	0.68157E-03	0.24742E-03	0.51487E-01	0.39297E-01	0.12120E 01	0.10000E 01
218	559.08	0.15538E 01	0.23049E-00	0.70342E-03	0.25535E-03	0.53107E-01	0.40533E-01	0.11890E 01	0.10000E 01
219	552.53	0.14088E 01	0.23810E-00	0.72313E-03	0.26250E-03	0.54858E-01	0.41870E-01	0.14540E 01	0.10000E 01
220	548.55	0.13979E 01	0.24471E-00	0.74106E-03	0.26902E-03	0.56382E-01	0.43033E-01	0.17040E 01	0.10000E 01
221	549.72	0.12545E 01	0.21055E-00	0.63814E-03	0.23165E-03	0.48511E-01	0.37025E-01	0.20410E 01	0.10000E 01
222	528.92	0.11049E 01	0.18522E-00	0.55296E-03	0.20073E-03	0.42675E-01	0.32571E-01	0.22480E 01	0.10000E 01
223	555.63	0.10961E 01	0.16619E-00	0.50589E-03	0.18365E-03	0.38291E-01	0.29225E-01	0.11650E 01	0.10000E 01
224	556.92	0.47169E-00	0.39968E-01	0.12178E-03	0.44208E-04	0.92087E-02	0.70284E-02	0.12050E 01	0.10000E 01
225	555.70	0.14374E 01	0.21174E-00	0.64458E-03	0.23399E-03	0.48785E-01	0.37235E-01	0.12120E 01	0.10000E 01
226	551.72	0.14135E 01	0.23964E-00	0.72738E-03	0.26405E-03	0.55214E-01	0.42141E-01	0.14540E 01	0.10000E 01
227	547.83	0.16956E 01	0.27526E-00	0.83314E-03	0.30244E-03	0.63421E-01	0.48405E-01	0.17040E 01	0.10000E 01
228	544.61	0.17055E 01	0.28196E-00	0.85140E-03	0.30907E-03	0.64965E-01	0.49583E-01	0.18780E 01	0.10000E 01
229	546.75	0.19532E 01	0.32480E-00	0.98228E-03	0.35658E-03	0.74834E-01	0.57116E-01	0.21880E 01	0.10000E 01
230	550.49	0.16535E 01	0.24580E-00	0.74541E-03	0.27059E-03	0.56633E-01	0.43224E-01	0.11890E 01	0.10000E 01
231	540.99	0.13262E 01	0.23519E-00	0.70831E-03	0.25713E-03	0.54189E-01	0.41359E-01	0.14540E 01	0.10000E 01
232	550.13	0.15849E 01	0.26084E-00	0.79081E-03	0.28707E-03	0.60098E-01	0.45869E-01	0.16130E 01	0.10000E 01
233	549.30	0.17184E 01	0.28485E-00	0.86309E-03	0.31332E-03	0.65631E-01	0.50092E-01	0.17040E 01	0.10000E 01
234	546.24	0.18473E 01	0.30709E-00	0.92838E-03	0.33701E-03	0.70754E-01	0.54002E-01	0.18780E 01	0.10000E 01
235	553.02	0.13771E 01	0.22945E-00	0.69713E-03	0.25307E-03	0.52867E-01	0.40350E-01	0.14540E 01	0.10000E 01
236	549.39	0.17460E 01	0.28722E-00	0.87033E-03	0.31594E-03	0.66177E-01	0.50509E-01	0.17040E 01	0.10000E 01
237	532.03	0.21101E 01	0.34799E-00	0.10412E-02	0.37798E-03	0.80178E-01	0.61195E-01	0.21880E 01	0.10000E 01
238	551.82	0.78962E 00	0.70719E-01	0.21467E-03	0.77929E-04	0.16294E-01	0.12436E-01	0.20700E 01	0.10000E 01
239	551.73	0.15725E 01	0.23112E-00	0.70154E-03	0.25467E-03	0.53252E-01	0.40644E-01	0.11890E 01	0.10000E 01
240	550.24	0.13314E 01	0.22473E-00	0.68139E-03	0.24735E-03	0.51778E-01	0.39519E-01	0.14540E 01	0.10000E 01
241	551.22	0.16213E 01	0.26822E-00	0.81383E-03	0.29543E-03	0.61798E-01	0.47167E-01	0.17040E 01	0.10000E 01
242	550.98	0.19766E 01	0.32946E-00	0.99947E-03	0.36282E-03	0.75909E-01	0.57936E-01	0.18780E 01	0.10000E 01
243	529.59	0.20790E 01	0.34238E-00	0.10226E-02	0.37123E-03	0.76885E-01	0.60208E-01	0.20410E 01	0.10000E 01
244	553.31	-0.82596E-01	-0.75083E-02	-0.22817E-04	-0.82829E-05	-0.17300E-02	-0.13204E-02	0.20700E 01	0.
245	552.05	0.18421E 01	0.15174E-00	0.46070E-03	0.16724E-03	0.34962E-01	0.26684E-01	0.21870E 01	0.10000E 01
246	546.64	0.22613E 01	0.38285E-00	0.11578E-02	0.42029E-03	0.88211E-01	0.67326E-01	0.22100E 01	0.10000E 01
247	555.17	0.11345E 01	0.18724E-00	0.56978E-03	0.20684E-03	0.43141E-01	0.32927E-01	0.14540E 01	0.10000E 01
248	547.96	0.14104E 01	0.23469E-00	0.71039E-03	0.25788E-03	0.54072E-01	0.41270E-01	0.17040E 01	0.10000E 01
249	550.88	0.22754E-00	0.19215E-01	0.58288E-04	0.21159E-04	0.44272E-02	0.33790E-02	0.18780E 01	0.10000E 01
250	554.15	0.44523E-00	0.36802E-01	0.11190E-03	0.40623E-04	0.84792E-02	0.64717E-02	0.21880E 01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	555.91	0.10010E 01	0.17036E-00	0.51870E-03	0.18830E-03	0.39252E-01	0.29959E-01	0.14540E 01	0.10000E 01
252	550.77	0.12327E 01	0.20813E-00	0.63130E-03	0.22917E-03	0.47954E-01	0.36600E-01	0.16130E 01	0.10000E 01
253	554.86	-0.81038E-01	-0.72003E-02	-0.21906E-04	-0.79520E-05	-0.16590E-02	-0.12662E-02	0.17060E 01	0.10000E 01
254	554.37	0.30535E 01	0.50991E 00	0.15508E-02	0.56295E-03	0.11749E-00	0.89670E-01	0.21880E 01	0.
255	541.61	0.53507E 00	0.49428E-01	0.14893E-03	0.54063E-04	0.11389E-01	0.86921E-02	0.16580E 01	0.10000E 01
256	553.09	0.37247E-00	0.31493E-01	0.95689E-04	0.34737E-04	0.72562E-02	0.55382E-02	0.17920E 01	0.10000E 01
257	549.29	0.15273E 01	0.25819E-00	0.78230E-03	0.28398E-03	0.59488E-01	0.45403E-01	0.10840E 01	0.10000E 01
258	554.78	0.92104E 00	0.15782E-00	0.48010E-03	0.17428E-03	0.36362E-01	0.27753E-01	0.14540E 01	0.10000E 01
259	551.11	0.10322E 01	0.17206E-00	0.52202E-03	0.18950E-03	0.39643E-01	0.30257E-01	0.16130E 01	0.10000E 01
260	553.67	0.11268E 01	0.18523E-00	0.56303E-03	0.20439E-03	0.42677E-01	0.32573E-01	0.17040E 01	0.10000E 01
261	554.53	0.16509E 01	0.27446E-00	0.83479E-03	0.30304E-03	0.63236E-01	0.48264E-01	0.18780E 01	0.10000E 01
262	552.50	0.25257E 01	0.42902E-00	0.13030E-02	0.47300E-03	0.98848E-01	0.75445E-01	0.20410E 01	0.10000E 01
263	553.37	0.85766E 00	0.14619E-00	0.44427E-03	0.16128E-03	0.33683E-01	0.25708E-01	0.14540E 01	0.10000E 01
264	551.71	0.96312E 00	0.15986E-00	0.48524E-03	0.17615E-03	0.36833E-01	0.28113E-01	0.16130E 01	0.10000E 01
265	551.55	0.12535E 01	0.20392E-00	0.61888E-03	0.22466E-03	0.46983E-01	0.35859E-01	0.17040E 01	0.10000E 01
266	552.80	0.17745E 01	0.29473E-00	0.89531E-03	0.32501E-03	0.67907E-01	0.51829E-01	0.18780E 01	0.10000E 01
267	553.52	0.25413E 01	0.43062E-00	0.13088E-02	0.47512E-03	0.99217E-01	0.75726E-01	0.20410E 01	0.10000E 01
268	552.56	0.82701E 00	0.13734E-00	0.41712E-03	0.15142E-03	0.31643E-01	0.24151E-01	0.16130E 01	0.10000E 01
269	551.49	0.16307E 01	0.26526E-00	0.80502E-03	0.29223E-03	0.61117E-01	0.46647E-01	0.18280E 01	0.10000E 01
270	552.80	0.17600E 01	0.29097E-00	0.88391E-03	0.32087E-03	0.67042E-01	0.51169E-01	0.18780E 01	0.10000E 01
271	548.52	0.25553E 01	0.43089E-00	0.13048E-02	0.47367E-03	0.99279E-01	0.75773E-01	0.20410E 01	0.10000E 01
272	552.26	0.80052E 00	0.13636E-00	0.41408E-03	0.15032E-03	0.31419E-01	0.23980E-01	0.16130E 01	0.10000E 01
273	552.45	0.10805E 01	0.18079E-00	0.54907E-03	0.19932E-03	0.41656E-01	0.31793E-01	0.17200E 01	0.10000E 01
274	549.75	0.15413E 01	0.24970E-00	0.75683E-03	0.27474E-03	0.57532E-01	0.43911E-01	0.18280E 01	0.10000E 01
275	549.89	0.17558E 01	0.29026E-00	0.87986E-03	0.31940E-03	0.66877E-01	0.51043E-01	0.18780E 01	0.10000E 01
276	-4157.09	0.10379E-01	-0.49888E-02	-0.37758E-05	-0.13707E-05	-0.11494E-02	-0.87729E-03	0.20600E 01	0.
277	550.79	0.11584E 01	0.97824E-01	0.29673E-03	0.10772E-03	0.22539E-01	0.17203E-01	0.21000E 01	0.10000E 01
278	-4157.09	0.10379E-01	-0.24951E-02	-0.18885E-05	-0.68555E-06	-0.57489E-03	-0.43878E-03	0.21870E 01	0.
279	554.99	0.31013E 01	0.52752E 00	0.16050E-02	0.58266E-03	0.12154E-00	0.92766E-01	0.21950E 01	0.10000E 01
280	551.68	0.16987E 01	0.28540E-00	0.86625E-03	0.31446E-03	0.65757E-01	0.50188E-01	0.18780E 01	0.10000E 01
281	552.14	0.24509E 01	0.41623E-00	0.12638E-02	0.45877E-03	0.95901E-01	0.73195E-01	0.20600E 01	0.10000E 01
282	547.58	0.16914E 01	0.27669E-00	0.83730E-03	0.30395E-03	0.63750E-01	0.48656E-01	0.18280E 01	0.10000E 01
283	550.81	0.26260E 01	0.44337E-00	0.13449E-02	0.48821E-03	0.10215E-00	0.77968E-01	0.20600E 01	0.10000E 01
284	552.28	0.11984E 01	0.19504E-00	0.59225E-03	0.21499E-03	0.44937E-01	0.34298E-01	0.17200E 01	0.10000E 01
285	553.09	0.16421E 01	0.27194E-00	0.82625E-03	0.29994E-03	0.62656E-01	0.47821E-01	0.18780E 01	0.10000E 01
286	550.83	0.61974E 00	0.57546E-01	0.17456E-03	0.63367E-04	0.13259E-01	0.10120E-01	0.16580E 01	0.10000E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.16990E-05	-0.61678E-06	-0.77775E-04	-0.59361E-04	0.17920E 01	0.
288	549.03	0.13449E 01	0.22223E-00	0.67320E-03	0.24438E-03	0.51202E-01	0.39079E-01	0.16130E 01	0.10000E 01
289	553.23	-0.74804E-01	-0.63254E-02	-0.19221E-04	-0.69774E-05	-0.14574E-02	-0.11123E-02	0.17060E 01	0.
290	549.86	0.44000E-00	0.37137E-01	0.11257E-03	0.40864E-04	0.85564E-02	0.65306E-02	0.18780E 01	0.10000E 01
291	550.70	0.13164E 01	0.21671E-00	0.65729E-03	0.23861E-03	0.49930E-01	0.38109E-01	0.17200E 01	0.10000E 01
292	546.48	0.12322E 01	0.21265E-00	0.64300E-03	0.23342E-03	0.48995E-01	0.37395E-01	0.14400E 01	0.10000E 01
293	550.43	0.16940E 01	0.27541E-00	0.83517E-03	0.30318E-03	0.63455E-01	0.48431E-01	0.17200E 01	0.10000E 01
294	551.17	0.19429E 01	0.32337E-00	0.98115E-03	0.35617E-03	0.74507E-01	0.56866E-01	0.18780E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
107	2	-7.37	142.63	-0.03	-0.	1	C2	2.70	2	10.19	1851.30	1893.80	107	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.917179E 02	0.378767E-01	0.478009E 04	0.346481E-04	0.742915E-07	0.224435E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732098E 00	0.622368E 01	0.925233E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	576.36	0.41950E 02	0.55713E 01	0.16329E-01	0.30643E-02	0.89518E 00	0.60215E 00	-0.	0.10000E 01
2	-4157.09	0.10379E-01	-0.41161E-02	-0.30742E-05	-0.57691E-06	-0.66137E-03	-0.44488E-03	-0.30000E-01	0.
3	567.84	0.37035E 02	0.56627E 01	0.16497E-01	0.30959E-02	0.90987E 00	0.61203E 00	-0.60000E-01	0.10000E 01
4	-4157.09	0.10379E-01	-0.45906E-02	-0.34286E-05	-0.64342E-06	-0.73761E-03	-0.49616E-03	-0.90000E-01	0.
5	563.77	0.31548E 02	0.50623E 01	0.14706E-01	0.27597E-02	0.81340E 00	0.54714E 00	-0.20000E-00	0.10000E 01
6	561.77	0.27567E 02	0.44187E 01	0.12818E-01	0.24055E-02	0.70998E 00	0.47757E-00	-0.40000E-00	0.10000E 01
7	551.85	0.23644E 02	0.37871E 01	0.10910E-01	0.20474E-02	0.60849E 00	0.40931E-00	-0.60000E 00	0.10000E 01
8	-4157.09	0.10379E-01	-0.47298E-02	-0.35325E-05	-0.66293E-06	-0.75997E-03	-0.51120E-03	-0.80000E 00	0.
9	563.51	0.20126E 02	0.31932E 01	0.92742E-02	0.17404E-02	0.51307E 00	0.34512E-00	-0.90000E 00	0.10000E 01
10	566.40	0.16856E 02	0.27130E 01	0.78956E-02	0.14817E-02	0.43591E-00	0.29322E-00	-0.98000E 00	0.10000E 01
11	556.59	0.77039E 00	0.13370E-00	0.38645E-03	0.72522E-04	0.21483E-01	0.14451E-01	-0.11220E 01	0.10000E 01
12	559.10	0.10561E 01	0.15640E-00	0.45285E-03	0.84984E-04	0.25130E-01	0.16904E-01	-0.11890E 01	0.10000E 01
13	558.88	0.86961E 00	0.13275E-00	0.38431E-03	0.72121E-04	0.21330E-01	0.14348E-01	-0.13340E 01	0.10000E 01
14	546.75	0.69143E 00	0.11934E-00	0.34259E-03	0.64291E-04	0.19176E-01	0.12899E-01	-0.14400E 01	0.10000E 01
15	-4157.09	0.10379E-01	-0.41161E-02	-0.30742E-05	-0.57691E-06	-0.66137E-03	-0.44488E-03	0.30000E-01	0.
16	-4157.09	0.10379E-01	-0.44754E-02	-0.33425E-05	-0.62726E-06	-0.71909E-03	-0.48370E-03	0.60000E-01	0.
17	571.95	0.38938E 02	0.61207E 01	0.17883E-01	0.33560E-02	0.98346E 00	0.66153E 00	0.90000E-01	0.10000E 01
18	575.44	0.39970E 02	0.64552E 01	0.18907E-01	0.35481E-02	0.10372E 01	0.69768E 00	0.20000E-00	0.10000E 01
19	595.71	0.45656E 02	0.74550E 01	0.22153E-01	0.41574E-02	0.11978E 01	0.80574E 00	0.40000E-00	0.10000E 01
20	-4157.09	0.10379E-01	-0.47298E-02	-0.35325E-05	-0.66293E-06	-0.75997E-03	-0.51120E-03	0.60000E 00	0.
21	646.12	0.78488E 02	0.12451E 02	0.38395E-01	0.72053E-02	0.20006E 01	0.13457E 01	0.92000E 00	0.10000E 01
22	639.65	0.76666E 02	0.12121E 02	0.37197E-01	0.69805E-02	0.19476E 01	0.13101E 01	0.10400E 01	0.10000E 01
23	637.41	0.72056E 02	0.11410E 02	0.34955E-01	0.65598E-02	0.18333E 01	0.12332E 01	0.10600E 01	0.10000E 01
24	611.84	0.54606E 02	0.89367E 01	0.26868E-01	0.50422E-02	0.14359E 01	0.96589E 00	0.10840E 01	0.10000E 01
25	565.20	0.11406E 02	0.17036E 01	0.49539E-02	0.92966E-03	0.27373E-00	0.18413E-00	0.12070E 01	0.10000E 01
26	562.74	0.10158E 02	0.15980E 01	0.46387E-02	0.87052E-03	0.25676E-00	0.17271E-00	0.12490E 01	0.10000E 01
27	560.74	0.99455E 01	0.15375E 01	0.44569E-02	0.83639E-03	0.24704E-00	0.16618E-00	0.13340E 01	0.10000E 01
28	558.92	0.75943E 01	0.13042E 01	0.37759E-02	0.70859E-03	0.20956E-00	0.14096E-00	0.14540E 01	0.10000E 01
29	558.81	0.67335E 01	0.11221E 01	0.32483E-02	0.60958E-03	0.18029E-00	0.12128E-00	0.16580E 01	0.10000E 01
30	557.94	0.56473E 01	0.95211E 00	0.27545E-02	0.51692E-03	0.15298E-00	0.10290E-00	0.20410E 01	0.10000E 01
31	560.76	0.52571E 01	0.88772E 00	0.25733E-02	0.48291E-03	0.14264E-00	0.95945E-01	0.22480E 01	0.10000E 01
32	-4157.09	0.10379E-01	-0.44799E-02	-0.33458E-05	-0.62789E-06	-0.71981E-03	-0.48419E-03	-0.60000E-01	0.
33	578.56	0.40185E 02	0.56844E 01	0.16686E-01	0.31314E-02	0.91336E 00	0.61438E 00	-0.30000E-01	0.10000E 01
34	-4157.09	0.10379E-01	-0.44799E-02	-0.33458E-05	-0.62789E-06	-0.71981E-03	-0.48419E-03	0.30000E-01	0.
35	570.42	0.37295E 02	0.58576E 01	0.17096E-01	0.32082E-02	0.94118E 00	0.63309E 00	0.60000E-01	0.10000E 01
36	564.29	0.21900E 02	0.35152E 01	0.10215E-01	0.19170E-02	0.56481E 00	0.37992E-00	-0.86800E 00	0.10000E 01
37	565.92	0.20944E 02	0.32739E 01	0.95249E-02	0.17875E-02	0.52604E 00	0.35385E-00	-0.91100E 00	0.10000E 01
38	568.56	0.19989E 02	0.31853E 01	0.92643E-02	0.17423E-02	0.51186E 00	0.34427E-00	-0.95300E 00	0.10000E 01
39	-4157.09	0.10379E-01	-0.46774E-02	-0.34934E-05	-0.65558E-06	-0.75155E-03	-0.50554E-03	0.51000E-01	0.
40	-4157.09	0.10379E-01	-0.46774E-02	-0.34934E-05	-0.65558E-06	-0.75155E-03	-0.50554E-03	0.29000E-01	0.
41	-4157.09	0.10379E-01	-0.46505E-02	-0.34733E-05	-0.65181E-06	-0.74723E-03	-0.50263E-03	0.70000E-02	0.
42	565.37	0.22399E 02	0.35746E 01	0.10396E-01	0.19509E-02	0.57435E 00	0.38634E-00	-0.86800E 00	0.10000E 01
43	565.90	0.21951E 02	0.35130E 01	0.10220E-01	0.19180E-02	0.56446E 00	0.37969E-00	-0.91100E 00	0.10000E 01
44	578.32	0.31086E 02	0.49803E 01	0.14617E-01	0.27430E-02	0.80021E 00	0.53827E 00	-0.95300E 00	0.10000E 01
45	555.24	0.53943E 01	0.88563E 00	0.25574E-02	0.47993E-03	0.14230E-00	0.95720E-01	-0.10400E 01	0.10000E 01
46	-4157.09	0.10379E-01	-0.46894E-02	-0.35023E-05	-0.65726E-06	-0.75348E-03	-0.50684E-03	0.70000E-02	0.
47	-4157.09	0.10379E-01	-0.46894E-02	-0.35023E-05	-0.65726E-06	-0.75348E-03	-0.50684E-03	0.29000E-01	0.
48	561.60	0.21148E 02	0.33894E 01	0.98309E-02	0.18449E-02	0.54460E 00	0.36633E-00	0.51000E-01	0.10000E 01
49	564.39	0.21167E 02	0.33654E 01	0.97804E-02	0.18354E-02	0.54074E 00	0.36373E-00	0.70000E-02	0.10000E 01
50	565.05	0.20709E 02	0.33042E 01	0.96072E-02	0.18029E-02	0.53091E 00	0.35712E-00	0.29000E-01	0.10000E 01
51	-1938.14	-0.34395E 02	0.39573E 01	0.43589E-02	0.81800E-03	0.63584E 00	0.42771E-00	0.51000E-01	0.
52	-4157.09	0.10379E-01	-0.46894E-02	-0.35023E-05	-0.65726E-06	-0.75348E-03	-0.50684E-03	-0.86800E 00	0.
53	567.21	0.20930E 02	0.33649E 01	0.97985E-02	0.18388E-02	0.54066E 00	0.36368E-00	-0.91100E 00	0.10000E 01
54	568.55	0.20453E 02	0.32593E 01	0.94999E-02	0.17828E-02	0.52369E 00	0.35227E-00	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	555.81	0.31896E 01	0.52383E 00	0.15132E-02	0.28398E-03	0.84168E-01	0.56616E-01	-0.10400E 01	0.10000E 01
56	554.57	0.14343E 01	0.24282E-00	0.70085E-03	0.13152E-03	0.39015E-01	0.26244E-01	-0.10680E 01	0.10000E 01
57	552.10	0.10556E 01	0.17300E-00	0.49848E-03	0.93546E-04	0.27798E-01	0.18698E-01	-0.10400E 01	0.10000E 01
58	552.05	0.29049E 01	0.51540E 00	0.14850E-02	0.27868E-03	0.82813E-01	0.55705E-01	-0.10680E 01	0.10000E 01
59	551.15	0.58748E 01	0.96233E 00	0.27709E-02	0.52000E-03	0.15462E-00	0.10401E-00	-0.10400E 01	0.10000E 01
60	550.53	0.25782E 01	0.43549E-00	0.12534E-02	0.23522E-03	0.69974E-01	0.47069E-01	-0.10680E 01	0.10000E 01
61	552.93	0.76987E 00	0.12854E-00	0.37057E-03	0.69543E-04	0.20653E-01	0.13892E-01	-0.11220E 01	0.10000E 01
62	556.11	0.91844E 00	0.14014E-00	0.40550E-03	0.76097E-04	0.22518E-01	0.15147E-01	-0.13340E 01	0.10000E 01
63	554.87	0.78545E 00	0.13619E-00	0.39315E-03	0.73780E-04	0.21882E-01	0.14719E-01	-0.11220E 01	0.10000E 01
64	557.96	0.92572E 00	0.14124E-00	0.40863E-03	0.76685E-04	0.22694E-01	0.15266E-01	-0.13340E 01	0.10000E 01
65	551.11	0.85974E 00	0.14676E-00	0.42832E-03	0.80379E-04	0.23902E-01	0.16078E-01	0.14400E 01	0.10000E 01
66	547.42	0.67948E 00	0.11166E-00	0.32067E-03	0.60178E-04	0.17940E-01	0.12068E-01	0.16130E 01	0.10000E 01
67	552.40	0.68571E 00	0.11091E-00	0.31963E-03	0.59982E-04	0.17820E-01	0.11987E-01	0.17200E 01	0.10000E 01
68	552.95	0.56779E 00	0.93258E-01	0.26517E-03	0.49763E-04	0.14984E-01	0.10079E-01	-0.16130E 01	0.10000E 01
69	555.06	0.76779E 00	0.12437E-00	0.35908E-03	0.67386E-04	0.19983E-01	0.13442E-01	-0.18280E 01	0.10000E 01
70	546.05	0.90545E 00	0.13335E-00	0.38261E-03	0.71802E-04	0.21426E-01	0.14413E-01	-0.11650E 01	0.10000E 01
71	557.35	0.69247E 00	0.58689E-01	0.16972E-03	0.31851E-04	0.94299E-02	0.63431E-02	-0.12050E 01	0.10000E 01
72	560.75	0.99221E 00	0.14530E-00	0.42121E-03	0.79045E-04	0.23347E-01	0.15705E-01	-0.12120E 01	0.10000E 01
73	556.68	0.87117E 00	0.12906E-00	0.37306E-03	0.70010E-04	0.20737E-01	0.13949E-01	-0.11650E 01	0.10000E 01
74	558.30	0.47481E-00	0.40263E-01	0.11651E-03	0.21865E-04	0.64693E-02	0.43516E-02	-0.12050E 01	0.10000E 01
75	545.22	0.10119E 01	0.14615E-00	0.41911E-03	0.78651E-04	0.23483E-01	0.15796E-01	-0.12120E 01	0.10000E 01
76	550.17	0.12644E 01	0.19145E-00	0.55088E-03	0.10338E-03	0.30761E-01	0.20692E-01	0.10840E 01	0.10000E 01
77	549.18	0.80675E 00	0.13107E-00	0.37688E-03	0.70727E-04	0.21059E-01	0.14166E-01	0.11220E 01	0.10000E 01
78	546.88	0.92572E 00	0.13827E-00	0.39695E-03	0.74494E-04	0.22217E-01	0.14944E-01	0.13340E 01	0.10000E 01
79	555.56	0.10244E 01	0.17342E-00	0.50089E-03	0.93999E-04	0.27865E-01	0.18744E-01	-0.11890E 01	0.10000E 01
80	550.52	0.87377E 00	0.13210E-00	0.38021E-03	0.71352E-04	0.21226E-01	0.14278E-01	-0.13340E 01	0.10000E 01
81	541.50	0.94961E 00	0.15361E-00	0.43937E-03	0.82453E-04	0.24682E-01	0.16603E-01	-0.11470E 01	0.10000E 01
82	555.18	0.95689E 00	0.16181E-00	0.46722E-03	0.87681E-04	0.25999E-01	0.17488E-01	-0.11890E 01	0.10000E 01
83	545.22	0.11668E 01	0.19620E-00	0.56264E-03	0.10559E-03	0.31526E-01	0.21206E-01	-0.10840E 01	0.10000E 01
84	555.39	0.10140E 01	0.15012E-00	0.43353E-03	0.81359E-04	0.24121E-01	0.16225E-01	-0.11890E 01	0.10000E 01
85	555.73	0.95065E 00	0.14076E-00	0.40661E-03	0.76306E-04	0.22617E-01	0.15214E-01	-0.13090E 01	0.10000E 01
86	558.78	0.87117E 00	0.13099E-00	0.37918E-03	0.71157E-04	0.21046E-01	0.14157E-01	-0.13340E 01	0.10000E 01
87	564.99	0.11336E 02	0.16843E 01	0.48969E-02	0.91896E-03	0.27062E-00	0.18204E-00	0.11990E 01	0.10000E 01
88	560.01	0.10769E 02	0.16094E 01	0.46628E-02	0.87503E-03	0.25859E-00	0.17394E-00	0.12070E 01	0.10000E 01
89	561.66	0.90644E 01	0.13789E 01	0.39998E-02	0.75061E-03	0.22156E-00	0.14904E-00	0.13340E 01	0.10000E 01
90	562.00	0.11194E 02	0.16176E 01	0.46931E-02	0.88073E-03	0.25991E-00	0.17483E-00	0.12070E 01	0.10000E 01
91	566.55	0.10081E 02	0.15892E 01	0.46254E-02	0.86802E-03	0.25534E-00	0.17176E-00	0.12490E 01	0.10000E 01
92	566.44	0.97371E 01	0.14926E 01	0.43442E-02	0.81524E-03	0.23983E-00	0.16133E-00	0.13340E 01	0.10000E 01
93	561.86	0.75595E 01	0.12927E 01	0.37501E-02	0.70375E-03	0.20770E-00	0.13971E-00	0.14900E 01	0.10000E 01
94	-4157.09	0.10379E-01	-0.31208E-02	-0.23308E-05	-0.43741E-06	-0.50144E-03	-0.33730E-03	-0.	0.
95	409.96	-0.88883E 00	-0.87026E-01	-0.22825E-03	-0.42835E-04	-0.13983E-01	-0.94058E-02	-0.	0.
96	-4157.09	0.10379E-01	-0.31208E-02	-0.23308E-05	-0.43741E-06	-0.50144E-03	-0.33730E-03	-0.	0.
97	-4157.09	0.10379E-01	-0.31208E-02	-0.23308E-05	-0.43741E-06	-0.50144E-03	-0.33730E-03	-0.	0.
98	-4157.09	0.10379E-01	-0.31432E-02	-0.23476E-05	-0.44055E-06	-0.50504E-03	-0.33972E-03	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
109	2	-7.37	142.63	-0.03	-0.	2	C2	2.75	2	10.19	1852.50	1887.30	109	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.913694E 02	0.379295E-01	0.477101E 04	0.348288E-04	0.740092E-07	0.226036E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731908E 00	0.622564E 01	0.925630E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	535.71	0.17465E 01	0.28380E-00	0.81309E-03	0.15208E-03	0.45585E-01	0.30660E-01	-0.10600E 01	0.10000E 01
100	538.03	0.86494E 00	0.14499E-00	0.41608E-03	0.77826E-04	0.23290E-01	0.15664E-01	-0.10840E 01	0.10000E 01
101	538.49	0.62286E 00	0.10215E-00	0.29323E-03	0.54848E-04	0.16408E-01	0.11036E-01	-0.11080E 01	0.10000E 01
102	537.35	0.79585E 00	0.13004E-00	0.37299E-03	0.69766E-04	0.20888E-01	0.14049E-01	-0.11080E 01	0.10000E 01
103	538.30	0.10192E 01	0.17088E-00	0.49047E-03	0.91739E-04	0.27448E-01	0.18461E-01	-0.10800E 01	0.10000E 01
104	-4157.13	0.51854E-02	-0.23518E-02	-0.17590E-05	-0.32902E-06	-0.37775E-03	-0.25407E-03	0.85000E 00	0.
105	648.89	0.86807E 02	0.13791E 02	0.42876E-01	0.80198E-02	0.22151E 01	0.14899E 01	0.94000E 00	0.10000E 01
106	659.57	0.94239E 02	0.14928E 02	0.46789E-01	0.87517E-02	0.23978E 01	0.16127E 01	0.96000E 00	0.10000E 01
107	627.27	0.93657E 02	0.14588E 02	0.44627E-01	0.83473E-02	0.23432E 01	0.15760E 01	0.98000E 00	0.10000E 01
108	639.27	0.94759E 02	0.14929E 02	0.46080E-01	0.86190E-02	0.23979E 01	0.16128E 01	0.10000E 01	0.10000E 01
109	644.49	0.86094E 02	0.13646E 02	0.42287E-01	0.79095E-02	0.21919E 01	0.14743E 01	0.10200E 01	0.10000E 01
110	647.50	0.76657E 02	0.12169E 02	0.37796E-01	0.70696E-02	0.19547E 01	0.13147E 01	0.80000E-01	0.10000E 01
111	641.69	0.81648E 02	0.12814E 02	0.39625E-01	0.74116E-02	0.20583E 01	0.13844E 01	0.10000E-00	0.10000E 01
112	663.66	0.89032E 02	0.14204E 02	0.44661E-01	0.83536E-02	0.22816E 01	0.15346E 01	0.12000E-00	0.10000E 01
113	659.32	0.95622E 02	0.15273E 02	0.47863E-01	0.89525E-02	0.24533E 01	0.16500E 01	0.14000E-00	0.10000E 01
114	632.08	0.71074E 02	0.11193E 02	0.34363E-01	0.64274E-02	0.17978E 01	0.12092E 01	0.80000E-01	0.10000E 01
115	633.73	0.72642E 02	0.11411E 02	0.35076E-01	0.65609E-02	0.18329E 01	0.12328E 01	0.10000E-00	0.10000E 01
116	629.70	0.75841E 02	0.11969E 02	0.36680E-01	0.68608E-02	0.19225E 01	0.12930E 01	0.12000E-00	0.10000E 01
117	604.40	0.80850E 02	0.12547E 02	0.37742E-01	0.70595E-02	0.20153E 01	0.13555E 01	0.14000E-00	0.10000E 01
118	619.45	0.61205E 02	0.96550E 01	0.29366E-01	0.54928E-02	0.15508E 01	0.10431E 01	0.10000E-00	0.10000E 01
119	601.26	0.50120E 02	0.77907E 01	0.23382E-01	0.43736E-02	0.12514E 01	0.84167E 00	0.15000E-00	0.10000E 01
120	607.35	0.64810E 02	0.10124E 02	0.30521E-01	0.57088E-02	0.16262E 01	0.10938E 01	0.20000E-00	0.10000E 01
121	626.53	0.69560E 02	0.11014E 02	0.33676E-01	0.62989E-02	0.17692E 01	0.11899E 01	0.25000E-00	0.10000E 01
122	607.95	0.64220E 02	0.10069E 02	0.30367E-01	0.56801E-02	0.16173E 01	0.10878E 01	0.30000E-00	0.10000E 01
123	616.49	0.69302E 02	0.10970E 02	0.33292E-01	0.62271E-02	0.17620E 01	0.11851E 01	0.35000E-00	0.10000E 01
124	604.98	0.70914E 02	0.11230E 02	0.33797E-01	0.63215E-02	0.18039E 01	0.12132E 01	0.38000E-00	0.10000E 01
125	625.01	0.79025E 02	0.12753E 02	0.38948E-01	0.72850E-02	0.20484E 01	0.13777E 01	0.45000E-00	0.10000E 01
126	611.18	0.71286E 02	0.11569E 02	0.34975E-01	0.65418E-02	0.18583E 01	0.12499E 01	0.61000E 00	0.10000E 01
127	578.80	0.51682E 02	0.82821E 01	0.24458E-01	0.45748E-02	0.13303E 01	0.89475E 00	0.70000E 00	0.10000E 01
128	551.21	0.29215E 02	0.46258E 01	0.13397E-01	0.25058E-02	0.74303E 00	0.49975E-00	0.75000E 00	0.10000E 01
129	590.83	0.53212E 02	0.86109E 01	0.25650E-01	0.47977E-02	0.13831E 01	0.93028E 00	0.70000E 00	0.10000E 01
130	593.16	0.56445E 02	0.91455E 01	0.27288E-01	0.51041E-02	0.14690E 01	0.98803E 00	0.80000E 00	0.10000E 01
131	558.51	0.32502E 02	0.49027E 01	0.14272E-01	0.26694E-02	0.78751E 00	0.52967E 00	0.90000E 00	0.10000E 01
132	580.53	0.46258E 02	0.70865E 01	0.20953E-01	0.39192E-02	0.11383E 01	0.76559E 00	0.90000E 00	0.10000E 01
133	581.04	0.48991E 02	0.74694E 01	0.22094E-01	0.41325E-02	0.11998E 01	0.80696E 00	0.96000E 00	0.10000E 01
134	579.61	0.48373E 02	0.73819E 01	0.21812E-01	0.40799E-02	0.11857E 01	0.79750E 00	0.10000E 01	0.10000E 01
135	-4157.13	0.51854E-02	-0.23181E-02	-0.17339E-05	-0.32431E-06	-0.37235E-03	-0.25044E-03	0.70000E-02	0.
136	559.84	0.25026E 02	0.38798E 01	0.11304E-01	0.21144E-02	0.62319E 00	0.41915E-00	0.70000E-02	0.10000E 01
137	559.43	0.25318E 02	0.39821E 01	0.11599E-01	0.21696E-02	0.63964E 00	0.43021E-00	0.39000E-01	0.10000E 01
138	557.07	0.24735E 02	0.38664E 01	0.11243E-01	0.21030E-02	0.62104E 00	0.41770E-00	0.78000E-01	0.10000E 01
139	-4157.13	0.51854E-02	-0.22882E-02	-0.17115E-05	-0.32013E-06	-0.36755E-03	-0.24721E-03	0.11700E-00	0.
140	558.06	0.24550E 02	0.38083E 01	0.11082E-01	0.20729E-02	0.61172E 00	0.41143E-00	0.78000E-01	0.10000E 01
141	-4157.13	0.51854E-02	-0.15703E-02	-0.11746E-05	-0.21970E-06	-0.25224E-03	-0.16965E-03	-0.	0.
142	-4157.13	0.51854E-02	-0.15703E-02	-0.11746E-05	-0.21970E-06	-0.25224E-03	-0.16965E-03	-0.	0.
143	556.08	0.25279E 02	0.38979E 01	0.11327E-01	0.21187E-02	0.62611E 00	0.42111E-00	0.78000E-01	0.10000E 01
144	557.19	0.25911E 02	0.40044E 01	0.11646E-01	0.21783E-02	0.64322E 00	0.43262E-00	0.70000E-02	0.10000E 01
145	558.09	0.23112E 02	0.35560E 01	0.10348E-01	0.19356E-02	0.57119E 00	0.38417E-00	0.70000E-02	0.10000E 01
146	545.02	0.22044E 02	0.33837E 01	0.97573E-02	0.18251E-02	0.54351E 00	0.36556E-00	0.39000E-01	0.10000E 01
147	-3572.57	0.59615E 02	-0.20496E 02	-0.16668E-01	-0.31176E-02	-0.32922E 01	-0.22143E 01	0.78000E-01	0.
148	-1254.62	-0.13237E 02	0.38215E-00	0.50278E-03	0.94043E-04	0.61383E-01	0.41285E-01	0.11700E-00	0.
149	598.64	0.55446E 02	0.91112E 01	0.27294E-01	0.51051E-02	0.14635E 01	0.98433E 00	0.70000E-02	0.10000E 01
150	605.75	0.56375E 02	0.93434E 01	0.28134E-01	0.52624E-02	0.15008E 01	0.10094E 01	0.70000E-02	0.10000E 01
151	614.07	0.55989E 02	0.94671E 01	0.28741E-01	0.53759E-02	0.15239E 01	0.10249E 01	0.70000E-02	0.10000E 01
152	617.79	0.62764E 02	0.10090E 02	0.30652E-01	0.57332E-02	0.16207E 01	0.10901E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	-4157.13	0.51854E-02	-0.22882E-02	-0.17115E-05	-0.32013E-06	-0.36755E-03	-0.24721E-03	0.39000E-01	0.
154	617.01	0.60323E 02	0.96302E 01	0.29238E-01	0.54688E-02	0.15469E 01	0.10404E 01	0.78000E-01	0.10000E 01
155	-4157.13	0.51854E-02	-0.23742E-02	-0.17758E-05	-0.33216E-06	-0.38136E-03	-0.25650E-03	0.39000E-01	0.
156	-4157.13	0.51854E-02	-0.23667E-02	-0.17702E-05	-0.33111E-06	-0.38016E-03	-0.25569E-03	0.39000E-01	0.
157	595.58	0.49646E 02	0.81833E 01	0.24460E-01	0.45751E-02	0.13144E 01	0.88408E 00	0.78000E-01	0.10000E 01
158	581.16	0.51742E 02	0.84890E 01	0.25111E-01	0.46970E-02	0.13636E 01	0.91711E 00	0.39000E-01	0.10000E 01
159	583.87	0.49831E 02	0.81875E 01	0.24267E-01	0.45390E-02	0.13151E 01	0.88454E 00	0.78000E-01	0.10000E 01
160	594.86	0.51971E 02	0.85633E 01	0.25582E-01	0.47850E-02	0.13755E 01	0.92513E 00	0.39000E-01	0.10000E 01
161	580.58	0.48202E 02	0.67370E 01	0.19920E-01	0.37260E-02	0.10821E 01	0.72782E 00	0.43000E-01	0.10000E 01
162	583.86	0.42660E 02	0.68442E 01	0.20285E-01	0.37943E-02	0.10994E 01	0.73941E 00	0.43000E-01	0.10000E 01
163	577.14	0.41868E 02	0.67034E 01	0.19772E-01	0.36983E-02	0.10767E 01	0.72420E 00	0.85000E-01	0.10000E 01
164	579.40	0.41038E 02	0.65470E 01	0.19342E-01	0.36179E-02	0.10516E 01	0.70730E 00	0.12800E-00	0.10000E 01
165	580.24	0.43100E 02	0.69012E 01	0.20401E-01	0.38159E-02	0.11085E 01	0.74557E 00	0.43000E-01	0.10000E 01
166	579.62	0.42655E 02	0.68057E 01	0.20110E-01	0.37615E-02	0.10932E 01	0.73525E 00	0.85000E-01	0.10000E 01
167	42.60	0.67205E 03	0.74134E 02	0.15893E-00	0.29727E-01	0.11908E 02	0.80090E 01	0.43000E-01	0.
168	581.61	0.43146E 02	0.69694E 01	0.20623E-01	0.38574E-02	0.11195E 01	0.75294E 00	0.12800E-00	0.10000E 01
169	581.30	0.43672E 02	0.70627E 01	0.20894E-01	0.39082E-02	0.11345E 01	0.76302E 00	0.85000E-01	0.10000E 01
170	585.18	0.45327E 02	0.72774E 01	0.21589E-01	0.40382E-02	0.11689E 01	0.78621E 00	0.12800E-00	0.10000E 01
171	582.17	0.45045E 02	0.71970E 01	0.21305E-01	0.39849E-02	0.11560E 01	0.77752E 00	0.85000E-01	0.10000E 01
172	-4157.13	0.51854E-02	-0.23293E-02	-0.17423E-05	-0.32588E-06	-0.37415E-03	-0.25165E-03	0.43000E-01	0.
173	591.05	0.48497E 02	0.78487E 01	0.23383E-01	0.43737E-02	0.12607E 01	0.84793E 00	0.12800E-00	0.10000E 01
174	-4157.13	0.51854E-02	-0.23256E-02	-0.17395E-05	-0.32536E-06	-0.37355E-03	-0.25124E-03	0.85000E-01	0.
175	591.81	0.47794E 02	0.76762E 01	0.22882E-01	0.42799E-02	0.12330E 01	0.82930E 00	0.43000E-01	0.10000E 01
176	593.09	0.48619E 02	0.78142E 01	0.23314E-01	0.43608E-02	0.12552E 01	0.84420E 00	0.43000E-01	0.10000E 01
177	597.02	0.53233E 02	0.86154E 01	0.25778E-01	0.48216E-02	0.13839E 01	0.93076E 00	0.12800E-00	0.10000E 01
178	594.91	0.50663E 02	0.81771E 01	0.24429E-01	0.45693E-02	0.13134E 01	0.88341E 00	0.85000E-01	0.10000E 01
179	596.47	0.49470E 02	0.79911E 01	0.23901E-01	0.44705E-02	0.12836E 01	0.86332E 00	0.70000E-02	0.10000E 01
180	-4157.13	0.51854E-02	-0.23368E-02	-0.17479E-05	-0.32693E-06	-0.37535E-03	-0.25246E-03	0.70000E-02	0.
181	589.34	0.46278E 02	0.74828E 01	0.22265E-01	0.41646E-02	0.12019E 01	0.80840E 00	0.70000E-02	0.10000E 01
182	559.27	0.15034E 02	0.23988E 01	0.69864E-02	0.13068E-02	0.38530E-00	0.25915E-00	0.70000E-02	0.10000E 01
183	598.02	0.52096E 02	0.84360E 01	0.25260E-01	0.47247E-02	0.13550E 01	0.91138E 00	0.32000E-01	0.10000E 01
184	610.74	0.63090E 02	0.10352E 02	0.31286E-01	0.58518E-02	0.16628E 01	0.11184E 01	0.32000E-01	0.10000E 01
185	592.74	0.59046E 02	0.95954E 01	0.28621E-01	0.53535E-02	0.15413E 01	0.10366E 01	0.64000E-01	0.10000E 01
186	608.10	0.66297E 02	0.10828E 02	0.32662E-01	0.61092E-02	0.17393E 01	0.11698E 01	0.64000E-01	0.10000E 01
187	601.88	0.54085E 02	0.88325E 01	0.26521E-01	0.49606E-02	0.14187E 01	0.95421E 00	0.70000E-02	0.10000E 01
188	598.36	0.50735E 02	0.84017E 01	0.25163E-01	0.47067E-02	0.13495E 01	0.90768E 00	0.70000E-02	0.10000E 01
189	535.95	0.84457E 01	0.13789E 01	0.39513E-02	0.73908E-03	0.22149E-00	0.14897E-00	0.10600E 01	0.10000E 01
190	531.51	0.50842E 01	0.84457E 00	0.24127E-02	0.45129E-03	0.13566E-00	0.91243E-01	0.10840E 01	0.10000E 01
191	528.82	0.25283E 01	0.42164E-00	0.12023E-02	0.22488E-03	0.67726E-01	0.45551E-01	0.11080E 01	0.10000E 01
192	529.86	0.28738E 01	0.47694E-00	0.13609E-02	0.25456E-03	0.76609E-01	0.51526E-01	0.11080E 01	0.10000E 01
193	534.06	0.64109E 01	0.10504E 01	0.30061E-02	0.56227E-03	0.16872E-00	0.11348E-00	0.16580E 01	0.10000E 01
194	536.86	0.60992E 01	0.99633E 00	0.28568E-02	0.53435E-03	0.16004E-00	0.10764E-00	0.11700E 01	0.10000E 01
195	535.64	0.67740E 01	0.11109E 01	0.31826E-02	0.59529E-03	0.17844E-00	0.12002E-00	0.16740E 01	0.10000E 01
196	537.96	0.61148E 01	0.99949E 00	0.28680E-02	0.53645E-03	0.16054E-00	0.10798E-00	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
118	2	-7.36	142.64	0.02	-0.	3	C2	2.70	2	10.19	1848.30	1899.40	118	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.920119E 02	0.377920E-01	0.478770E 04	0.344602E-04	0.745296E-07	0.222859E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732257E 00	0.621896E 01	0.924281E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	570.89	0.35993E 02	0.56692E 01	0.16471E-01	0.31029E-02	0.91161E 00	0.61337E 00	0.10000E 01	0.10000E 01
198	573.74	0.36314E 02	0.55425E 01	0.16135E-01	0.30396E-02	0.89122E 00	0.59965E 00	0.12000E 01	0.10000E 01
199	546.82	0.17449E 02	0.27650E 01	0.78995E-02	0.14882E-02	0.44460E-00	0.29915E-00	0.13000E 01	0.10000E 01
200	534.00	0.54327E 01	0.79061E 00	0.22390E-02	0.42179E-03	0.12713E-00	0.85537E-01	0.11890E 01	0.10000E 01
201	549.46	0.44535E 01	0.74167E 00	0.21228E-02	0.39991E-03	0.11926E-00	0.80243E-01	0.14540E 01	0.10000E 01
202	543.79	0.37984E 01	0.62578E 00	0.17841E-02	0.33610E-03	0.10062E-00	0.67705E-01	0.17040E 01	0.10000E 01
203	545.80	0.22732E 01	0.37493E-00	0.10704E-02	0.20166E-03	0.60289E-01	0.40565E-01	0.20410E 01	0.10000E 01
204	544.97	-0.25975E-01	-0.19896E-02	-0.56769E-05	-0.10695E-05	-0.31992E-03	-0.21526E-03	0.20700E 01	0.10000E 01
205	543.51	0.21974E-00	0.19212E-01	0.54764E-04	0.10317E-04	0.30893E-02	0.20786E-02	0.21880E 01	0.10000E 01
206	546.75	0.26270E 01	0.43351E-00	0.12385E-02	0.23331E-03	0.69708E-01	0.46903E-01	0.22480E 01	0.10000E 01
207	546.65	0.28805E 01	0.46731E-00	0.13349E-02	0.25149E-03	0.75143E-01	0.50560E-01	0.20700E 01	0.10000E 01
208	543.62	0.73715E 00	0.65718E-01	0.18734E-03	0.35293E-04	0.10567E-01	0.71102E-02	0.20700E 01	0.10000E 01
209	541.85	0.74078E 00	0.59741E-01	0.17010E-03	0.32044E-04	0.96063E-02	0.64635E-02	0.21880E 01	0.10000E 01
210	542.27	0.20992E 01	0.34819E-00	0.99167E-03	0.18682E-03	0.55989E-01	0.37672E-01	0.20700E 01	0.10000E 01
211	546.87	0.20670E 01	0.34374E-00	0.98209E-03	0.18501E-03	0.55272E-01	0.37190E-01	0.21880E 01	0.10000E 01
212	547.51	0.21813E 01	0.35846E-00	0.10246E-02	0.19302E-03	0.57640E-01	0.38783E-01	0.22390E 01	0.10000E 01
213	544.81	0.17834E 01	0.29263E-00	0.83487E-03	0.15728E-03	0.47054E-01	0.31660E-01	0.21880E 01	0.10000E 01
214	545.90	0.17283E 01	0.28726E-00	0.82017E-03	0.15451E-03	0.46190E-01	0.31079E-01	0.22480E 01	0.10000E 01
215	536.20	0.68520E 00	0.10276E-00	0.29146E-03	0.54908E-04	0.16524E-01	0.11118E-01	0.11650E 01	0.10000E 01
216	-4157.09	0.10379E-01	-0.24951E-02	-0.18612E-05	-0.35062E-06	-0.40121E-03	-0.26995E-03	0.12050E 01	0.
217	539.15	0.34858E-00	0.50875E-01	0.14458E-03	0.27237E-04	0.81805E-02	0.55042E-02	0.12120E 01	0.
218	537.81	0.55065E 00	0.80723E-01	0.22920E-03	0.43178E-04	0.12980E-01	0.87336E-02	0.11890E 01	0.10000E 01
219	541.15	0.49662E-00	0.83398E-01	0.23734E-03	0.44712E-04	0.13410E-01	0.90230E-02	0.14540E 01	0.10000E 01
220	541.51	0.14582E 01	0.25426E-00	0.72375E-03	0.13635E-03	0.40884E-01	0.27508E-01	0.17040E 01	0.10000E 01
221	543.59	0.86026E 00	0.14388E-00	0.41015E-03	0.77267E-04	0.23136E-01	0.15567E-01	0.20410E 01	0.10000E 01
222	529.23	0.56468E 00	0.94671E-01	0.26723E-03	0.50343E-04	0.15223E-01	0.10243E-01	0.22480E 01	0.10000E 01
223	535.26	0.47429E-00	0.71095E-01	0.20151E-03	0.37962E-04	0.11432E-01	0.76920E-02	0.11650E 01	0.10000E 01
224	538.51	0.47532E-00	0.39863E-01	0.11324E-03	0.21333E-04	0.64100E-02	0.43129E-02	0.12050E 01	0.10000E 01
225	539.21	0.32364E-00	0.47237E-01	0.13425E-03	0.25291E-04	0.75956E-02	0.51106E-02	0.12120E 01	0.10000E 01
226	544.95	0.51013E 00	0.86159E-01	0.24584E-03	0.46313E-04	0.13854E-01	0.93217E-02	0.14540E 01	0.10000E 01
227	543.04	0.93195E 00	0.15089E-00	0.42996E-03	0.80999E-04	0.24262E-01	0.16325E-01	0.17040E 01	0.10000E 01
228	541.06	0.76728E 00	0.12660E-00	0.36027E-03	0.67869E-04	0.20357E-01	0.13697E-01	0.18780E 01	0.10000E 01
229	546.47	0.10379E 01	0.17256E-00	0.49289E-03	0.92855E-04	0.27748E-01	0.18670E-01	0.21880E 01	0.10000E 01
230	538.14	0.60156E 00	0.88807E-01	0.25221E-03	0.47513E-04	0.14280E-01	0.96082E-02	0.11890E 01	0.10000E 01
231	536.69	0.50649E 00	0.89603E-01	0.25422E-03	0.47891E-04	0.14408E-01	0.96943E-02	0.14540E 01	0.10000E 01
232	545.37	0.71325E 00	0.11707E-00	0.33413E-03	0.62946E-04	0.18825E-01	0.12666E-01	0.16130E 01	0.10000E 01
233	544.89	0.77039E 00	0.12739E-00	0.36346E-03	0.68472E-04	0.20484E-01	0.13782E-01	0.17040E 01	0.10000E 01
234	541.80	0.83688E 00	0.13878E-00	0.39511E-03	0.74434E-04	0.22315E-01	0.15014E-01	0.18780E 01	0.10000E 01
235	548.98	0.54546E 00	0.90676E-01	0.25945E-03	0.48877E-04	0.14581E-01	0.98105E-02	0.14540E 01	0.10000E 01
236	543.85	0.10468E 01	0.17166E-00	0.48944E-03	0.92205E-04	0.27603E-01	0.18573E-01	0.17040E 01	0.10000E 01
237	531.99	0.95169E 00	0.15694E-00	0.44385E-03	0.83615E-04	0.25236E-01	0.16980E-01	0.21880E 01	0.10000E 01
238	547.53	0.64883E 00	0.57972E-01	0.16571E-03	0.31217E-04	0.93218E-02	0.62721E-02	0.20700E 01	0.10000E 01
239	541.26	0.72572E 00	0.10604E-00	0.30181E-03	0.56857E-04	0.17052E-01	0.11473E-01	0.11890E 01	0.10000E 01
240	542.63	0.48675E-00	0.81809E-01	0.23305E-03	0.43904E-04	0.13155E-01	0.88511E-02	0.14540E 01	0.10000E 01
241	547.39	0.98234E 00	0.16216E-00	0.46348E-03	0.87314E-04	0.26076E-01	0.17545E-01	0.17040E 01	0.10000E 01
242	547.85	0.87532E 00	0.14564E-00	0.41640E-03	0.78444E-04	0.23419E-01	0.15757E-01	0.18780E 01	0.10000E 01
243	529.47	0.95013E 00	0.15646E-00	0.44173E-03	0.83216E-04	0.25159E-01	0.16928E-01	0.20410E 01	0.10000E 01
244	548.43	-0.25973E-01	-0.23547E-02	-0.67347E-05	-0.12687E-05	-0.37863E-03	-0.25476E-03	0.20700E 01	0.
245	548.75	0.81818E 00	0.67274E-01	0.19246E-03	0.36256E-04	0.10818E-01	0.72785E-02	0.21870E 01	0.10000E 01
246	544.50	0.89766E 00	0.15180E-00	0.43299E-03	0.81570E-04	0.24409E-01	0.16423E-01	0.22100E 01	0.10000E 01
247	554.88	0.51325E 00	0.84690E-01	0.24331E-03	0.45837E-04	0.13618E-01	0.91628E-02	0.14540E 01	0.10000E 01
248	544.25	0.10000E 01	0.16605E-00	0.47357E-03	0.89214E-04	0.26701E-01	0.17966E-01	0.17040E 01	0.10000E 01
249	548.63	0.35065E-00	0.29575E-01	0.84601E-04	0.15938E-04	0.47559E-02	0.31998E-02	0.18780E 01	0.10000E 01
250	548.99	0.60624E 00	0.49654E-01	0.14264E-03	0.26872E-04	0.80164E-02	0.53938E-02	0.21880E 01	0.10000E 01

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3937-06
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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	553.80	0.50182E 00	0.85301E-01	0.24488E-03	0.46133E-04	0.13716E-01	0.92289E-02	0.14540E 01	0.10000E 01
252	546.84	0.50701E 00	0.85415E-01	0.24403E-03	0.45973E-04	0.13735E-01	0.92412E-02	0.16130E 01	0.10000E 01
253	551.29	-0.81557E-01	-0.72319E-02	-0.20725E-04	-0.39044E-05	-0.11629E-02	-0.78244E-03	0.17060E 01	0.
254	548.74	0.11605E 01	0.19319E-00	0.55268E-03	0.10412E-03	0.31065E-01	0.20902E-01	0.21860E 01	0.10000E 01
255	536.88	0.34909E-00	0.32163E-01	0.91262E-04	0.17193E-04	0.51717E-02	0.34797E-02	0.16580E 01	0.10000E 01
256	549.45	0.28935E-00	0.24416E-01	0.69883E-04	0.13165E-04	0.39261E-02	0.26416E-02	0.17920E 01	0.10000E 01
257	537.02	0.99689E 00	0.16737E-00	0.47496E-03	0.89477E-04	0.26913E-01	0.18108E-01	0.10840E 01	0.10000E 01
258	551.33	0.53506E 00	0.91505E-01	0.26225E-03	0.49404E-04	0.14714E-01	0.99002E-02	0.14540E 01	0.10000E 01
259	545.66	0.50026E 00	0.83135E-01	0.23733E-03	0.44709E-04	0.13368E-01	0.89946E-02	0.16130E 01	0.10000E 01
260	548.84	0.39325E-00	0.64473E-01	0.18446E-03	0.34749E-04	0.10367E-01	0.69754E-02	0.17040E 01	0.10000E 01
261	549.05	0.59325E 00	0.98325E-01	0.28135E-03	0.53002E-04	0.15811E-01	0.10638E-01	0.18780E 01	0.10000E 01
262	546.30	0.10561E 01	0.17877E-00	0.51056E-03	0.96184E-04	0.28746E-01	0.19342E-01	0.20410E 01	0.10000E 01
263	547.52	0.54857E 00	0.93200E-01	0.26640E-03	0.50186E-04	0.14986E-01	0.10084E-01	0.14540E 01	0.10000E 01
264	545.86	0.49299E-00	0.81562E-01	0.23287E-03	0.43869E-04	0.13115E-01	0.88244E-02	0.16130E 01	0.10000E 01
265	545.96	0.57922E 00	0.93932E-01	0.26821E-03	0.50526E-04	0.15104E-01	0.10163E-01	0.17040E 01	0.10000E 01
266	545.74	0.78909E 00	0.13054E-00	0.37268E-03	0.70208E-04	0.20991E-01	0.14124E-01	0.18780E 01	0.10000E 01
267	546.99	0.89403E 00	0.15094E-00	0.43129E-03	0.81250E-04	0.24271E-01	0.16331E-01	0.20410E 01	0.10000E 01
268	544.77	0.50078E 00	0.82801E-01	0.23623E-03	0.44502E-04	0.13314E-01	0.89584E-02	0.16130E 01	0.10000E 01
269	546.35	0.72572E 00	0.11771E-00	0.33620E-03	0.63336E-04	0.18928E-01	0.12736E-01	0.18280E 01	0.10000E 01
270	546.06	0.68260E 00	0.11243E-00	0.32103E-03	0.60478E-04	0.18078E-01	0.12164E-01	0.18780E 01	0.10000E 01
271	542.11	0.83221E 00	0.13983E-00	0.39819E-03	0.75014E-04	0.22484E-01	0.15128E-01	0.20410E 01	0.10000E 01
272	545.75	0.72779E 00	0.12353E-00	0.35265E-03	0.66435E-04	0.19863E-01	0.13365E-01	0.16130E 01	0.10000E 01
273	546.21	0.77507E 00	0.12923E-00	0.36907E-03	0.69527E-04	0.20781E-01	0.13982E-01	0.17200E 01	0.10000E 01
274	544.32	0.80675E 00	0.13030E-00	0.37164E-03	0.70011E-04	0.20953E-01	0.14098E-01	0.18280E 01	0.10000E 01
275	544.14	0.81870E 00	0.13491E-00	0.38471E-03	0.72475E-04	0.21693E-01	0.14596E-01	0.18780E 01	0.10000E 01
276	-4157.09	0.10379E-01	-0.49888E-02	-0.37213E-05	-0.70104E-06	-0.80219E-03	-0.53975E-03	0.20600E 01	0.
277	545.15	0.66494E 00	0.55974E-01	0.15973E-03	0.30092E-04	0.90005E-02	0.60559E-02	0.21000E 01	0.10000E 01
278	-4157.09	0.10379E-01	-0.24951E-02	-0.18612E-05	-0.35062E-06	-0.40121E-03	-0.26995E-03	0.21870E 01	0.
279	549.25	0.71948E 00	0.12199E-00	0.34911E-03	0.65768E-04	0.19616E-01	0.13199E-01	0.21950E 01	0.10000E 01
280	546.08	0.75065E 00	0.12572E-00	0.35901E-03	0.67632E-04	0.20216E-01	0.13602E-01	0.18780E 01	0.10000E 01
281	546.53	0.77403E 00	0.13104E-00	0.37430E-03	0.70514E-04	0.21071E-01	0.14177E-01	0.20600E 01	0.10000E 01
282	539.67	0.67532E 00	0.10998E-00	0.31267E-03	0.58903E-04	0.17685E-01	0.11899E-01	0.18280E 01	0.10000E 01
283	543.33	0.85974E 00	0.14455E-00	0.41200E-03	0.77615E-04	0.23244E-01	0.15640E-01	0.20600E 01	0.10000E 01
284	546.92	0.64000E 00	0.10384E-00	0.29670E-03	0.55895E-04	0.16698E-01	0.11235E-01	0.17200E 01	0.10000E 01
285	548.55	0.67896E 00	0.11216E-00	0.32081E-03	0.60437E-04	0.18035E-01	0.12134E-01	0.18780E 01	0.10000E 01
286	547.15	0.67636E 00	0.62675E-01	0.17910E-03	0.33741E-04	0.10078E-01	0.67810E-02	0.16580E 01	0.10000E 01
287	1119.26	-0.18452E 01	-0.20242E-00	-0.96562E-03	-0.18191E-03	-0.32549E-01	-0.21900E-01	0.17920E 01	0.
288	544.04	0.56987E 00	0.93898E-01	0.26775E-03	0.50441E-04	0.15099E-01	0.10159E-01	0.16130E 01	0.10000E 01
289	550.09	0.11117E-00	0.93840E-02	0.26871E-04	0.50621E-05	0.15089E-02	0.10153E-02	0.17060E 01	0.10000E 01
290	546.16	0.23377E-00	0.19689E-01	0.56227E-04	0.10592E-04	0.31660E-02	0.21303E-02	0.18780E 01	0.10000E 01
291	546.05	0.73351E 00	0.12044E-00	0.34391E-03	0.64789E-04	0.19367E-01	0.13031E-01	0.17200E 01	0.10000E 01
292	539.66	0.51013E 00	0.87700E-01	0.24933E-03	0.46970E-04	0.14102E-01	0.94885E-02	0.14400E 01	0.10000E 01
293	545.30	0.10197E 01	0.16531E-00	0.47179E-03	0.88879E-04	0.26581E-01	0.17885E-01	0.17200E 01	0.10000E 01
294	543.48	0.80468E 00	0.13336E-00	0.38013E-03	0.71611E-04	0.21444E-01	0.14428E-01	0.18780E 01	0.10000E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
108	2	-3.38	146.62	-0.03	-0.	1	C2	2.75	2	10.19	1853.80	1893.50	108	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.916992E 02	0.379299E-01	0.477963E 04	0.347038E-04	0.742764E-07	0.224820E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732088E 00	0.622759E 01	0.926026E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	577.63	0.43925E 02	0.58377E 01	0.17130E-01	0.32098E-02	0.93739E 00	0.63040E 00	-0.	0.10000E 01
2	-4157.13	0.51854E-02	-0.20564E-02	-0.15360E-05	-0.28781E-06	-0.33021E-03	-0.22207E-03	-0.30000E-01	0.
3	569.46	0.39355E 02	0.60228E 01	0.17571E-01	0.32925E-02	0.96712E 00	0.65040E 00	-0.60000E-01	0.10000E 01
4	-4157.13	0.51854E-02	-0.22934E-02	-0.17130E-05	-0.32098E-06	-0.36827E-03	-0.24766E-03	-0.90000E-01	0.
5	566.15	0.33723E 02	0.54185E 01	0.15771E-01	0.29553E-02	0.87008E 00	0.58514E 00	-0.20000E-00	0.10000E 01
6	565.84	0.29987E 02	0.48174E 01	0.14019E-01	0.26268E-02	0.77356E 00	0.52022E 00	-0.40000E-00	0.10000E 01
7	557.01	0.25966E 02	0.41709E 01	0.12063E-01	0.22603E-02	0.66975E 00	0.45041E-00	-0.60000E 00	0.10000E 01
8	-4157.13	0.51854E-02	-0.23630E-02	-0.17650E-05	-0.33072E-06	-0.37944E-03	-0.25517E-03	-0.80000E 00	0.
9	567.18	0.22636E 02	0.35986E 01	0.10482E-01	0.19641E-02	0.57785E 00	0.38861E-00	-0.90000E 00	0.10000E 01
10	569.41	0.20245E 02	0.32640E 01	0.95222E-02	0.17843E-02	0.52411E 00	0.35247E-00	-0.98000E 00	0.10000E 01
11	553.41	0.63377E 00	0.10980E-00	0.31675E-03	0.59352E-04	0.17631E-01	0.11857E-01	-0.11220E 01	0.10000E 01
12	555.57	0.10894E 01	0.16101E-00	0.46518E-03	0.87166E-04	0.25854E-01	0.17387E-01	-0.11890E 01	0.10000E 01
13	555.02	0.83273E 00	0.12685E-00	0.36635E-03	0.68646E-04	0.20369E-01	0.13698E-01	-0.13340E 01	0.10000E 01
14	543.38	0.61611E 00	0.10614E-00	0.30408E-03	0.56978E-04	0.17044E-01	0.11462E-01	-0.14400E 01	0.10000E 01
15	-4157.13	0.51854E-02	-0.20564E-02	-0.15360E-05	-0.31293E-06	-0.35902E-03	-0.24145E-03	0.60000E-01	0.
16	-4157.13	0.51854E-02	-0.22359E-02	-0.16700E-05	-0.28781E-06	-0.33021E-03	-0.22207E-03	0.30000E-01	0.
17	570.74	0.40919E 02	0.64279E 01	0.18770E-01	0.35172E-02	0.10322E 01	0.69414E 00	0.90000E-01	0.10000E 01
18	571.85	0.41327E 02	0.66612E 01	0.19467E-01	0.36477E-02	0.10696E 01	0.71933E 00	0.20000E-00	0.10000E 01
19	588.05	0.45337E 02	0.73756E 01	0.21804E-01	0.40856E-02	0.11843E 01	0.79648E 00	0.40000E-00	0.10000E 01
20	-4157.13	0.51854E-02	-0.23630E-02	-0.17650E-05	-0.33072E-06	-0.37944E-03	-0.25517E-03	0.60000E 00	0.
21	646.98	0.78674E 02	0.12486E 02	0.38540E-01	0.72216E-02	0.20050E 01	0.13484E 01	0.92000E 00	0.10000E 01
22	621.93	0.65828E 02	0.10311E 02	0.31240E-01	0.58538E-02	0.16557E 01	0.11135E 01	0.10400E 01	0.10000E 01
23	619.17	0.61252E 02	0.96062E 01	0.29046E-01	0.54426E-02	0.15425E 01	0.10374E 01	0.10600E 01	0.10000E 01
24	593.39	0.45065E 02	0.73026E 01	0.21671E-01	0.40608E-02	0.11726E 01	0.78860E 00	0.10840E 01	0.10000E 01
25	545.07	0.87345E 01	0.12901E 01	0.37001E-02	0.69333E-03	0.20715E-00	0.13931E-00	0.12070E 01	0.10000E 01
26	542.40	0.80452E 01	0.12514E 01	0.35825E-02	0.67130E-03	0.20094E-00	0.13513E-00	0.12490E 01	0.10000E 01
27	540.48	0.79216E 01	0.12109E 01	0.34620E-02	0.64871E-03	0.19444E-00	0.13076E-00	0.13340E 01	0.10000E 01
28	541.46	0.62878E 01	0.10694E 01	0.30595E-02	0.57330E-03	0.17172E-00	0.11548E-00	0.14540E 01	0.10000E 01
29	546.24	0.57761E 01	0.95583E 00	0.27437E-02	0.51411E-03	0.15348E-00	0.10322E-00	0.16580E 01	0.10000E 01
30	549.77	0.49148E 01	0.82486E 00	0.23736E-02	0.44476E-03	0.13245E-00	0.89075E-01	0.20410E 01	0.10000E 01
31	556.25	0.45512E 01	0.76659E 00	0.22138E-02	0.41520E-03	0.12310E-00	0.82782E-01	0.22480E 01	0.10000E 01
32	-4157.13	0.51854E-02	-0.22381E-02	-0.16717E-05	-0.31324E-06	-0.35938E-03	-0.24169E-03	-0.60000E-01	0.
33	579.86	0.42003E 02	0.59458E 01	0.17475E-01	0.32745E-02	0.95476E 00	0.64208E 00	-0.30000E-01	0.10000E 01
34	-4157.13	0.51854E-02	-0.22381E-02	-0.16717E-05	-0.31324E-06	-0.35938E-03	-0.24169E-03	0.30000E-01	0.
35	571.38	0.39365E 02	0.61859E 01	0.18072E-01	0.33863E-02	0.99331E 00	0.66801E 00	0.60000E-01	0.10000E 01
36	568.17	0.24346E 02	0.39162E 01	0.11415E-01	0.21389E-02	0.62885E 00	0.42290E-00	-0.86800E 00	0.10000E 01
37	569.20	0.23375E 02	0.36605E 01	0.10677E-01	0.20007E-02	0.58778E 00	0.39529E-00	-0.91100E 00	0.10000E 01
38	570.60	0.22351E 02	0.35657E 01	0.10411E-01	0.19508E-02	0.57256E 00	0.38505E-00	-0.95300E 00	0.10000E 01
39	-4157.13	0.51854E-02	-0.23368E-02	-0.17454E-05	-0.32705E-06	-0.37523E-03	-0.25235E-03	0.51000E-01	0.
40	-4157.13	0.51854E-02	-0.23368E-02	-0.17454E-05	-0.32705E-06	-0.37523E-03	-0.25235E-03	0.29000E-01	0.
41	-4157.13	0.51854E-02	-0.23233E-02	-0.17354E-05	-0.32517E-06	-0.37307E-03	-0.25089E-03	0.70000E-02	0.
42	569.32	0.25117E 02	0.40171E 01	0.11719E-01	0.21958E-02	0.64505E 00	0.43380E-00	-0.86800E 00	0.10000E 01
43	569.07	0.24757E 02	0.39691E 01	0.11577E-01	0.21692E-02	0.63735E 00	0.42862E-00	-0.91160E 00	0.10000E 01
44	583.26	0.35685E 02	0.57325E 01	0.16889E-01	0.31646E-02	0.92050E 00	0.61904E 00	-0.95300E 00	0.10000E 01
45	555.32	0.66411E 01	0.10904E 01	0.31497E-02	0.59019E-03	0.17509E-00	0.11775E-00	-0.10400E 01	0.10000E 01
46	-4157.13	0.51854E-02	-0.23428E-02	-0.17499E-05	-0.32789E-06	-0.37620E-03	-0.25299E-03	0.70000E-02	0.
47	-4157.13	0.51854E-02	-0.23428E-02	-0.17499E-05	-0.32789E-06	-0.37620E-03	-0.25299E-03	0.29000E-01	0.
48	566.35	0.23377E 02	0.37565E 01	0.10936E-01	0.20491E-02	0.60320E 00	0.40566E-00	0.51000E-01	0.10000E 01
49	569.18	0.23605E 02	0.37628E 01	0.10976E-01	0.20566E-02	0.60422E 00	0.40634E-00	0.70000E-02	0.10000E 01
50	569.89	0.22929E 02	0.36663E 01	0.10706E-01	0.20060E-02	0.58905E 00	0.39614E-00	0.29000E-01	0.10000E 01
51	-1414.57	0.16828E 02	-0.81965E 00	-0.10289E-02	-0.19280E-03	-0.13162E-00	-0.88513E-01	0.51000E-01	0.
52	-4157.13	0.51854E-02	-0.23428E-02	-0.17499E-05	-0.32789E-06	-0.37620E-03	-0.25299E-03	0.86800E 00	0.
53	570.96	0.23486E 02	0.37656E 01	0.11053E-01	0.20706E-02	0.60756E 00	0.40859E-00	-0.91100E 00	0.10000E 01
54	571.87	0.23160E 02	0.36974E 01	0.10805E-01	0.20247E-02	0.59371E 00	0.39928E-00	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	554.55	0.40509E 01	0.66482E 00	0.19194E-02	0.35966E-03	0.10675E-00	0.71793E-01	-0.10400E 01	0.10000E 01
56	552.61	0.18104E 01	0.30616E-00	0.88272E-03	0.16540E-03	0.49162E-01	0.33062E-01	-0.10680E 01	0.10000E 01
57	550.20	0.13657E 01	0.22359E-00	0.64358E-03	0.12059E-03	0.35904E-01	0.24145E-01	-0.10400E 01	0.10000E 01
58	550.81	0.35933E 01	0.63709E 00	0.18346E-02	0.34376E-03	0.10230E-00	0.68798E-01	-0.10680E 01	0.10000E 01
59	550.15	0.70348E 01	0.11517E 01	0.33149E-02	0.62115E-03	0.18494E-00	0.12437E-00	-0.10400E 01	0.10000E 01
60	548.63	0.32275E 01	0.54460E 00	0.15659E-02	0.29341E-03	0.87450E-01	0.58811E-01	-0.10680E 01	0.10000E 01
61	550.12	0.79740E 00	0.13293E-00	0.38259E-03	0.71690E-04	0.21345E-01	0.14355E-01	-0.11220E 01	0.10000E 01
62	554.31	0.10919E 01	0.16627E-00	0.47996E-03	0.89935E-04	0.26699E-01	0.17955E-01	-0.13340E 01	0.10000E 01
63	551.91	0.66649E 00	0.11537E-00	0.33247E-03	0.62299E-04	0.18526E-01	0.12459E-01	-0.11220E 01	0.10000E 01
64	554.38	0.87013E 00	0.13250E-00	0.38249E-03	0.71672E-04	0.21276E-01	0.14308E-01	-0.13340E 01	0.10000E 01
65	548.29	0.87740E 00	0.15157E-00	0.43571E-03	0.81643E-04	0.24339E-01	0.16368E-01	0.14400E 01	0.10000E 01
66	544.18	0.71793E 00	0.11776E-00	0.33754E-03	0.63249E-04	0.18909E-01	0.12717E-01	0.16130E 01	0.10000E 01
67	548.56	0.66909E 00	0.10799E-00	0.31047E-03	0.58177E-04	0.17340E-01	0.11661E-01	0.17200E 01	0.10000E 01
68	529.54	0.67740E 00	0.11105E-00	0.31511E-03	0.59046E-04	0.17831E-01	0.11992E-01	-0.16130E 01	0.10000E 01
69	550.83	0.81195E 00	0.13121E-00	0.37783E-03	0.70799E-04	0.21069E-01	0.14169E-01	-0.18280E 01	0.10000E 01
70	542.77	0.80987E 00	0.11905E-00	0.34092E-03	0.63882E-04	0.19117E-01	0.12856E-01	-0.11650E 01	0.10000E 01
71	553.83	0.69247E 00	0.58574E-01	0.16903E-03	0.31672E-04	0.94056E-02	0.63254E-02	-0.12050E 01	0.10000E 01
72	557.11	0.10613E 01	0.15511E-00	0.44862E-03	0.84062E-04	0.24907E-01	0.16750E-01	-0.12120E 01	0.10000E 01
73	553.39	0.76416E 00	0.11300E-00	0.32599E-03	0.61083E-04	0.18145E-01	0.12203E-01	-0.11650E 01	0.10000E 01
74	554.68	0.54598E 00	0.46205E-01	0.13341E-03	0.24999E-04	0.74194E-02	0.49896E-02	-0.12050E 01	0.10000E 01
75	541.46	0.10483E 01	0.15109E-00	0.43226E-03	0.80997E-04	0.24261E-01	0.16316E-01	-0.12120E 01	0.10000E 01
76	547.81	0.14805E 01	0.22387E-00	0.64332E-03	0.12055E-03	0.35948E-01	0.24176E-01	0.10840E 01	0.10000E 01
77	546.33	0.69247E 00	0.11232E-00	0.32244E-03	0.60418E-04	0.18036E-01	0.12129E-01	0.11220E 01	0.10000E 01
78	542.69	0.92000E 00	0.13709E-00	0.39256E-03	0.73557E-04	0.22014E-01	0.14804E-01	0.13340E 01	0.10000E 01
79	552.11	0.90857E 00	0.15352E-00	0.44247E-03	0.82909E-04	0.24651E-01	0.16578E-01	-0.11890E 01	0.10000E 01
80	546.06	0.90286E 00	0.13616E-00	0.39080E-03	0.73228E-04	0.21864E-01	0.14704E-01	-0.13340E 01	0.10000E 01
81	538.53	0.77662E 00	0.12542E-00	0.35810E-03	0.67101E-04	0.20139E-01	0.13544E-01	-0.11470E 01	0.10000E 01
82	551.72	0.98910E 00	0.16693E-00	0.48101E-03	0.90132E-04	0.26806E-01	0.18027E-01	-0.11890E 01	0.10000E 01
83	543.05	0.14722E 01	0.24727E-00	0.70822E-03	0.13271E-03	0.39705E-01	0.26702E-01	-0.10840E 01	0.10000E 01
84	551.92	0.10203E 01	0.15075E-00	0.43444E-03	0.81405E-04	0.24207E-01	0.16279E-01	-0.11890E 01	0.10000E 01
85	551.44	0.10540E 01	0.15570E-00	0.44855E-03	0.84049E-04	0.25001E-01	0.16814E-01	-0.13090E 01	0.10000E 01
86	554.47	0.93455E 00	0.14018E-00	0.40469E-03	0.75831E-04	0.22509E-01	0.15138E-01	-0.13340E 01	0.10000E 01
87	544.44	0.87320E 01	0.12826E 01	0.36772E-02	0.68903E-03	0.20596E-00	0.13851E-00	0.11990E 01	0.10000E 01
88	538.70	0.83527E 01	0.12335E 01	0.35223E-02	0.66001E-03	0.19807E-00	0.13320E-00	0.12070E 01	0.10000E 01
89	540.34	0.73938E 01	0.11115E 01	0.31775E-02	0.59540E-03	0.17848E-00	0.12003E-00	0.13340E 01	0.10000E 01
90	540.93	0.87247E 01	0.12461E 01	0.35637E-02	0.66777E-03	0.20009E-00	0.13456E-00	0.12070E 01	0.10000E 01
91	545.56	0.80197E 01	0.12496E 01	0.35853E-02	0.67182E-03	0.20066E-00	0.13495E-00	0.12490E 01	0.10000E 01
92	545.64	0.77771E 01	0.11785E 01	0.33815E-02	0.63362E-03	0.18924E-00	0.12726E-00	0.13340E 01	0.10000E 01
93	545.19	0.62468E 01	0.10583E 01	0.30357E-02	0.56884E-03	0.16994E-00	0.11429E-00	0.14900E 01	0.10000E 01
94	-4157.13	0.51854E-02	-0.15591E-02	-0.11645E-05	-0.21821E-06	-0.25036E-03	-0.16837E-03	-0.	0.
95	377.11	-0.65454E 00	-0.62772E-01	-0.16136E-03	-0.30235E-04	-0.10080E-01	-0.67786E-02	-0.	0.
96	-4157.13	0.51854E-02	-0.15591E-02	-0.11645E-05	-0.21821E-06	-0.25036E-03	-0.16837E-03	-0.	0.
97	-4157.13	0.51854E-02	-0.15591E-02	-0.11645E-05	-0.21821E-06	-0.25036E-03	-0.16837E-03	-0.	0.
98	-4157.13	0.51854E-02	-0.15703E-02	-0.11729E-05	-0.21978E-06	-0.25216E-03	-0.16958E-03	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
110	2	-3.38	146.62	-0.03	-0.	2	C2	2.70	2	10.19	1845.80	1885.50	110	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.912788E 02	0.377968E-01	0.476856E 04	0.347413E-04	0.739359E-07	0.225576E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731858E 00	0.621501E 01	0.923486E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	538.91	0.21553E 01	0.35086E-00	0.10090E-02	0.18929E-03	0.56454E-01	0.37993E-01	-0.10600E 01	0.10000E 01
100	541.93	0.10421E 01	0.17507E-00	0.50451E-03	0.94652E-04	0.28169E-01	0.18958E-01	-0.10840E 01	0.10000E 01
101	541.94	0.61247E 00	0.10064E-00	0.29003E-03	0.54414E-04	0.16194E-01	0.10898E-01	-0.11080E 01	0.10000E 01
102	540.78	0.89091E 00	0.14586E-00	0.41998E-03	0.78793E-04	0.23468E-01	0.15794E-01	-0.11080E 01	0.10000E 01
103	541.63	0.13543E 01	0.22749E-00	0.65542E-03	0.12296E-03	0.36603E-01	0.24634E-01	-0.10800E 01	0.10000E 01
104	-4157.09	0.10379E-01	-0.47074E-02	-0.35224E-05	-0.66084E-06	-0.75742E-03	-0.50974E-03	0.85000E 00	0.
105	643.69	0.85820E 02	0.13597E 02	0.42177E-01	0.79130E-02	0.21878E 01	0.14724E 01	0.94000E 00	0.10000E 01
106	652.07	0.91915E 02	0.14503E 02	0.45274E-01	0.84939E-02	0.23336E 01	0.15705E 01	0.96000E 00	0.10000E 01
107	618.77	0.89807E 02	0.13926E 02	0.42401E-01	0.79550E-02	0.22407E 01	0.15079E 01	0.98000E 00	0.10000E 01
108	624.76	0.88118E 02	0.13777E 02	0.42134E-01	0.79049E-02	0.22167E 01	0.14918E 01	0.10000E 01	0.10000E 01
109	628.18	0.76522E 02	0.12026E 02	0.36873E-01	0.69178E-02	0.19350E 01	0.13022E 01	0.10200E 01	0.10000E 01
110	644.46	0.78237E 02	0.12401E 02	0.38489E-01	0.72209E-02	0.19953E 01	0.13428E 01	0.80000E-01	0.10000E 01
111	637.39	0.83155E 02	0.13021E 02	0.40200E-01	0.75421E-02	0.20951E 01	0.14100E 01	0.10000E-00	0.10000E 01
112	657.84	0.89074E 02	0.14169E 02	0.44424E-01	0.83344E-02	0.22797E 01	0.15343E 01	0.12000E-00	0.10000E 01
113	649.88	0.92638E 02	0.14725E 02	0.45888E-01	0.86092E-02	0.23692E 01	0.15944E 01	0.14000E-00	0.10000E 01
114	631.36	0.74130E 02	0.11669E 02	0.35865E-01	0.67287E-02	0.18776E 01	0.12636E 01	0.80000E-01	0.10000E 01
115	632.45	**0.76501E 02**	**0.12009E 02**	**0.36939E-01**	0.69302E-02	0.19323E 01	0.13004E 01	0.10000E-00	0.10000E 01
116	628.27	**0.79514E 02**	**0.12539E 02**	**0.38448E-01**	**0.72133E-02**	**0.20175E 01**	**0.13578E 01**	**0.12000E-00**	**0.10000E 01**
117	601.40	0.83256E 02	0.12899E 02	0.38779E-01	0.72754E-02	0.20755E 01	0.13968E 01	0.14000E-00	0.10000E 01
118	622.12	0.65902E 02	0.10411E 02	0.31777E-01	0.59618E-02	0.16751E 01	0.11273E 01	0.10000E-00	0.10000E 01
119	604.21	0.70530E 02	0.10981E 02	0.33079E-01	0.62061E-02	0.17668E 01	0.11891E 01	0.15000E-00	0.10000E 01
120	617.28	0.68117E 02	0.10697E 02	0.32535E-01	0.61040E-02	0.17212E 01	0.11583E 01	0.20000E-00	0.10000E 01
121	626.29	0.71196E 02	0.11272E 02	0.34512E-01	0.64749E-02	0.18136E 01	0.12206E 01	0.25000E-00	0.10000E 01
122	608.59	0.65887E 02	0.10334E 02	0.31230E-01	0.58590E-02	0.16627E 01	0.11190E 01	0.30000E-00	0.10000E 01
123	613.73	0.68413E 02	0.10813E 02	0.32802E-01	0.61541E-02	0.17398E 01	0.11709E 01	0.35000E-00	0.10000E 01
124	602.19	0.69520E 02	0.10993E 02	0.33067E-01	0.62038E-02	0.17688E 01	0.11904E 01	0.38000E-00	0.10000E 01
125	619.17	0.74741E 02	0.12024E 02	0.36623E-01	0.68708E-02	0.19347E 01	0.13020E 01	0.45000E-00	0.10000E 01
126	606.57	0.68143E 02	0.11032E 02	0.33290E-01	0.62456E-02	0.17750E 01	0.11946E 01	0.61000E 00	0.10000E 01
127	569.32	0.46164E 02	0.73596E 01	0.21621E-01	0.40563E-02	0.11842E 01	0.79694E 00	0.70000E 00	0.10000E 01
128	542.48	0.24936E 02	0.39291E 01	0.11327E-01	0.21251E-02	0.63220E 00	0.42547E-00	0.75000E 00	0.10000E 01
129	589.58	0.53164E 02	0.85972E 01	0.25625E-01	0.48076E-02	0.13833E 01	0.93095E 00	0.70000E 00	0.10000E 01
130	591.54	0.56084E 02	0.90790E 01	0.27100E-01	0.50843E-02	0.14608E 01	0.98313E 00	0.80000E 00	0.10000E 01
131	552.91	0.29490E 02	0.44346E 01	0.12878E-01	0.24160E-02	0.71353E 00	0.48020E-00	0.90000E 00	0.10000E 01
132	581.00	0.47105E 02	0.72182E 01	0.21383E-01	0.40116E-02	0.11614E 01	0.78162E 00	0.90000E 00	0.10000E 01
133	581.08	0.49512E 02	0.75490E 01	0.22364E-01	0.41957E-02	0.12146E 01	0.81745E 00	0.96000E 00	0.10000E 01
134	578.97	0.48506E 02	0.73996E 01	0.21888E-01	0.41065E-02	0.11906E 01	0.80127E 00	0.10000E 01	0.10000E 01
135	-4157.09	0.10379E-01	-0.46400E-02	-0.34720E-05	-0.65138E-06	-0.74658E-03	-0.50243E-03	0.70000E-02	0.
136	560.25	0.27186E 02	0.42155E 01	0.12305E-01	0.23085E-02	0.67828E 00	0.45648E-00	0.70000E-02	0.10000E 01
137	560.93	0.27590E 02	0.43430E 01	0.12683E-01	0.23795E-02	0.69879E 00	0.47028E-00	0.39000E-01	0.10000E 01
138	558.83	0.26939E 02	0.42151E 01	0.12291E-01	0.23060E-02	0.67821E 00	0.45643E-00	0.78000E-01	0.10000E 01
139	-4157.09	0.10379E-01	-0.45801E-02	-0.34272E-05	-0.64298E-06	-0.73695E-03	-0.49596E-03	0.11700E-00	0.
140	560.12	0.26921E 02	0.41809E 01	0.12203E-01	0.22894E-02	0.67271E 00	0.45273E-00	0.78000E-01	0.10000E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23520E-05	-0.44126E-06	-0.50575E-03	-0.34037E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23520E-05	-0.44126E-06	-0.50575E-03	-0.34037E-03	-0.	0.
143	558.79	0.27538E 02	0.42527E 01	0.12400E-01	0.23265E-02	0.68426E 00	0.46050E-00	0.78000E-01	0.10000E 01
144	559.32	0.26479E 02	0.44065E 01	0.12854E-01	0.24115E-02	0.70901E 00	0.47716E-00	0.70000E-02	0.10000E 01
145	559.59	0.25840E 02	0.39790E 01	0.11609E-01	0.21780E-02	0.64023E 00	0.43087E-00	0.70000E-02	0.10000E 01
146	548.13	0.25016E 02	0.38467E 01	0.11133E-01	0.20887E-02	0.61893E 00	0.41654E-00	0.39000E-01	0.10000E 01
147	-2069.97	0.34757E 01	-0.44874E-00	-0.48108E-03	-0.90257E-04	-0.72203E-01	-0.48592E-01	0.78000E-01	0.
148	-443.67	-0.15667E 02	-0.94968E 00	-0.16414E-02	-0.30794E-03	-0.15280E-00	-0.10284E-00	0.11700E-00	0.
149	603.66	0.53630E 02	0.88366E 01	0.26609E-01	0.49922E-02	0.14218E 01	0.95687E 00	0.70000E-02	0.10000E 01
150	611.17	0.54122E 02	0.89960E 01	0.27238E-01	0.51103E-02	0.14475E 01	0.97413E 00	0.70000E-02	0.10000E 01
151	617.75	0.55705E 02	0.92915E 01	0.28270E-01	0.53037E-02	0.14959E 01	0.10061E 01	0.70000E-02	0.10000E 01
152	621.68	0.62845E 02	0.10125E 02	0.30900E-01	0.57971E-02	0.16291E 01	0.10964E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.09		0.10379E-01	-0.45801E-02	-0.34272E-05	-0.64298E-06	-0.73695E-03	-0.49596E-03	0.39000E-01	0.
154	618.74	0.61538E 02	0.98331E 01	0.29940E-01	0.56170E-02	0.15822E 01	0.10648E 01	0.78000E-01	0.10000E 01
155-4157.09		0.10379E-01	-0.47523E-02	-0.35560E-05	-0.66714E-06	-0.76464E-03	-0.51460E-03	0.39000E-01	0.
156-4157.09		0.10379E-01	-0.47373E-02	-0.35448E-05	-0.66504E-06	-0.76224E-03	-0.51298E-03	0.39000E-01	0.
157	598.42	0.48916E 02	0.80754E 01	0.24224E-01	0.45448E-02	0.12993E 01	0.87444E 00	0.78000E-01	0.10000E 01
158	583.77	0.51402E 02	0.84452E 01	0.25067E-01	0.47029E-02	0.13588E 01	0.91449E 00	0.39000E-01	0.10000E 01
159	587.09	0.49564E 02	0.81580E 01	0.24273E-01	0.45539E-02	0.13126E 01	0.88339E 00	0.78000E-01	0.10000E 01
160	598.88	0.51562E 02	0.85142E 01	0.25549E-01	0.47933E-02	0.13699E 01	0.92196E 00	0.39000E-01	0.10000E 01
161	580.72	0.43830E 02	0.69974E 01	0.20724E-01	0.38881E-02	0.11259E 01	0.75771E 00	0.43000E-01	0.10000E 01
162	584.30	0.44071E 02	0.70723E 01	0.21000E-01	0.39399E-02	0.11379E 01	0.76582E 00	0.43000E-01	0.10000E 01
163	578.40	0.43489E 02	0.69678E 01	0.20602E-01	0.38652E-02	0.11211E 01	0.75451E 00	0.85000E-01	0.10000E 01
164	580.07	0.42745E 02	0.68218E 01	0.20195E-01	0.37888E-02	0.10976E 01	0.73870E 00	0.12800E-00	0.10000E 01
165	580.24	0.44611E 02	0.71432E 01	0.21149E-01	0.39678E-02	0.11494E 01	0.77351E 00	0.43000E-01	0.10000E 01
166	579.76	0.44159E 02	0.70462E 01	0.20855E-01	0.39126E-02	0.11337E 01	0.76300E 00	0.85000E-01	0.10000E 01
167-4157.09		0.10379E-01	-0.46400E-02	-0.34720E-05	-0.65138E-06	-0.74658E-03	-0.50245E-03	0.43000E-01	0.
168	582.52	0.44460E 02	0.71852E 01	0.21308E-01	0.39976E-02	0.11561E 01	0.77805E 00	0.12800E-00	0.10000E 01
169	581.63	0.45109E 02	0.72632E 01	0.21526E-01	0.40385E-02	0.11687E 01	0.78650E 00	0.85000E-01	0.10000E 01
170	585.08	0.46491E 02	0.74639E 01	0.22175E-01	0.41604E-02	0.12009E 01	0.80823E 00	0.12800E-00	0.10000E 01
171	582.55	0.46210E 02	0.73847E 01	0.21900E-01	0.41087E-02	0.11882E 01	0.79965E 00	0.85000E-01	0.10000E 01
172-4157.09		0.10379E-01	-0.46625E-02	-0.34888E-05	-0.65453E-06	-0.75019E-03	-0.50488E-03	0.43000E-01	0.
173	590.90	0.49079E 02	0.79423E 01	0.23696E-01	0.44456E-02	0.12779E 01	0.86004E 00	0.12800E-00	0.10000E 01
174-4157.09		0.10379E-01	-0.46550E-02	-0.34832E-05	-0.65348E-06	-0.74899E-03	-0.50407E-03	0.85000E-01	0.
175	591.79	0.48735E 02	0.78273E 01	0.23368E-01	0.43841E-02	0.12594E 01	0.84759E 00	0.43000E-01	0.10000E 01
176	593.13	0.49500E 02	0.79559E 01	0.23775E-01	0.44604E-02	0.12801E 01	0.86151E 00	0.43000E-01	0.10000E 01
177	595.23	0.53097E 02	0.85851E 01	0.25694E-01	0.48205E-02	0.13813E 01	0.92964E 00	0.12800E-00	0.10000E 01
178	593.92	0.50985E 02	0.82247E 01	0.24592E-01	0.46138E-02	0.13234E 01	0.89061E 00	0.85000E-01	0.10000E 01
179	595.67	0.50229E 02	0.81103E 01	0.24281E-01	0.45554E-02	0.13050E 01	0.87823E 00	0.70000E-02	0.10000E 01
180-4157.09		0.10379E-01	-0.46774E-02	-0.35000E-05	-0.65663E-06	-0.75260E-03	-0.50650E-03	0.70000E-02	0.
181	588.60	0.47954E 02	0.77507E 01	0.23086E-01	0.43312E-02	0.12471E 01	0.83928E 00	0.70000E-02	0.10000E 01
182	564.46	0.52413E 02	0.83869E 01	0.24554E-01	0.46066E-02	0.13495E 01	0.90818E 00	0.70000E-02	0.10000E 01
183	596.17	0.52042E 02	0.84187E 01	0.25213E-01	0.47303E-02	0.13546E 01	0.91162E 00	0.32000E-01	0.10000E 01
184	607.05	0.61271E 02	0.10034E 02	0.30290E-01	0.56827E-02	0.16145E 01	0.10865E 01	0.32000E-01	0.10000E 01
185	587.28	0.55745E 02	0.90322E 01	0.26877E-01	0.50425E-02	0.14533E 01	0.97806E 00	0.64000E-01	0.10000E 01
186	603.74	0.63520E 02	0.10351E 02	0.31170E-01	0.58479E-02	0.16654E 01	0.11208E 01	0.64000E-01	0.10000E 01
187	600.68	0.54192E 02	0.88444E 01	0.26575E-01	0.49858E-02	0.14231E 01	0.95772E 00	0.70000E-02	0.10000E 01
188	596.98	0.51242E 02	0.84793E 01	0.25410E-01	0.47672E-02	0.13643E 01	0.91819E 00	0.70000E-02	0.10000E 01
189	537.22	0.84992E 01	0.13887E 01	0.39887E-02	0.74833E-03	0.22344E-00	0.15037E-00	0.10600E 01	0.10000E 01
190	533.38	0.50405E 01	0.83821E 00	0.24012E-02	0.45049E-03	0.13487E-00	0.90766E-01	0.10840E 01	0.10000E 01
191	531.95	0.23901E 01	0.39930E-00	0.11427E-02	0.21439E-03	0.64248E-01	0.43238E-01	0.11080E 01	0.10000E 01
192	531.85	0.27319E 01	0.45391E-00	0.12989E-02	0.24370E-03	0.73035E-01	0.49152E-01	0.11080E 01	0.10000E 01
193	535.72	0.56125E 01	0.92046E 00	0.26411E-02	0.49550E-03	0.14810E-00	0.99672E-01	0.16580E 01	0.10000E 01
194	538.42	0.51704E 01	0.84535E 00	0.24301E-02	0.45592E-03	0.13602E-00	0.91539E-01	0.11700E 01	0.10000E 01
195	537.30	0.57034E 01	0.93620E 00	0.26892E-02	0.50453E-03	0.15064E-00	0.10138E-00	0.16740E 01	0.10000E 01
196	537.93	0.54395E 01	0.88909E 00	0.25550E-02	0.47935E-03	0.14306E-00	0.96276E-01	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
119	2	-3.37	146.63	0.02	-0.	3	C2	2.70	2	10.19	1843.00	1900.80	119	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.920861E 02	0.376778E-01	0.478956E 04	0.343284E-04	0.745897E-07	0.221914E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732297E 00	0.621066E 01	0.922611E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	589.58	0.36978E 02	0.58842E 01	0.17301E-01	0.32706E-02	0.94743E 00	0.63777E 00	0.10000E 01	0.10000E 01
198	597.03	0.37076E 02	0.57309E 01	0.16940E-01	0.32024E-02	0.92276E 00	0.62116E 00	0.12000E 01	0.10000E 01
199	563.92	0.17953E 02	0.28719E 01	0.82929E-02	0.15677E-02	0.46241E-00	0.31128E-00	0.13000E 01	0.10000E 01
200	547.20	0.41044E 01	0.60175E 00	0.17176E-02	0.32468E-03	0.96890E-01	0.65222E-01	0.11890E 01	0.10000E 01
201	550.94	0.36291E 01	0.60488E 00	0.17310E-02	0.32721E-03	0.97393E-01	0.65561E-01	0.14540E 01	0.10000E 01
202	547.14	0.35475E 01	0.58555E 00	0.16713E-02	0.31593E-03	0.94281E-01	0.63466E-01	0.17040E 01	0.10000E 01
203	552.26	0.22135E 01	0.36640E-00	0.10495E-02	0.19839E-03	0.58995E-01	0.39713E-01	0.20410E 01	0.10000E 01
204	553.51	-0.64935E-01	-0.49975E-02	-0.14327E-04	-0.27083E-05	-0.80467E-03	-0.54167E-03	0.20700E 01	0.
205	550.35	0.27793E-00	0.24393E-01	0.69775E-04	0.13190E-04	0.39275E-02	0.26439E-02	0.21880E 01	0.10000E 01
206	551.69	0.24421E 01	0.40411E-00	0.11570E-02	0.21872E-03	0.65067E-01	0.43800E-01	0.22480E 01	0.10000E 01
207	553.41	0.26727E 01	0.43524E-00	0.12477E-02	0.23585E-03	0.70080E-01	0.47175E-01	0.20700E 01	0.10000E 01
208	552.03	0.61455E 00	0.55046E-01	0.15764E-03	0.29800E-04	0.88632E-02	0.59664E-02	0.20700E 01	0.10000E 01
209	548.09	0.57143E 00	0.46246E-01	0.13208E-03	0.24968E-04	0.74462E-02	0.50125E-02	0.21880E 01	0.10000E 01
210	548.67	0.20717E 01	0.34486E-00	0.98533E-03	0.18626E-03	0.55527E-01	0.37379E-01	0.20700E 01	0.10000E 01
211	552.48	0.20327E 01	0.33909E-00	0.97141E-03	0.18363E-03	0.54599E-01	0.36754E-01	0.21880E 01	0.10000E 01
212	552.38	0.21055E 01	0.34694E-00	0.99381E-03	0.18787E-03	0.55862E-01	0.37604E-01	0.22390E 01	0.10000E 01
213	548.67	0.19003E 01	0.31248E-00	0.89281E-03	0.16877E-03	0.50313E-01	0.33869E-01	0.21880E 01	0.10000E 01
214	549.77	0.18296E 01	0.30475E-00	0.87140E-03	0.16473E-03	0.49069E-01	0.33031E-01	0.22480E 01	0.10000E 01
215	549.64	0.54078E 00	0.81719E-01	0.23365E-03	0.44167E-04	0.13158E-01	0.88574E-02	0.11650E 01	0.10000E 01
216	-4157.09	0.10379E-01	-0.24951E-02	-0.18606E-05	-0.35172E-06	-0.40175E-03	-0.27044E-03	0.12050E 01	0.
217	547.38	0.42701E-00	0.62611E-01	0.17873E-03	0.33787E-04	0.10081E-01	0.67863E-02	0.12120E 01	0.10000E 01
218	555.68	0.46130E-00	0.68303E-01	0.19611E-03	0.37071E-04	0.10998E-01	0.74033E-02	0.11890E 01	0.10000E 01
219	541.79	0.40156E-00	0.67458E-01	0.19183E-03	0.36263E-04	0.10862E-01	0.73117E-02	0.14540E 01	0.10000E 01
220	542.60	0.14384E 01	0.25097E-00	0.71407E-03	0.13498E-03	0.40409E-01	0.27202E-01	0.17040E 01	0.10000E 01
221	546.54	0.10197E 01	0.17084E-00	0.48740E-03	0.92136E-04	0.27507E-01	0.18517E-01	0.20410E 01	0.10000E 01
222	531.92	0.71325E 00	0.11976E-00	0.33828E-03	0.63947E-04	0.19283E-01	0.12981E-01	0.22480E 01	0.10000E 01
223	548.09	0.43273E-00	0.65334E-01	0.18660E-03	0.35274E-04	0.10520E-01	0.70815E-02	0.11650E 01	0.10000E 01
224	547.96	0.46286E-00	0.39024E-01	0.11144E-03	0.21067E-04	0.62834E-02	0.42297E-02	0.12050E 01	0.10000E 01
225	547.39	0.44052E-00	0.64592E-01	0.18439E-03	0.34856E-04	0.10400E-01	0.70010E-02	0.12120E 01	0.10000E 01
226	546.47	0.61351E 00	0.10371E-00	0.29586E-03	0.55928E-04	0.16698E-01	0.11241E-01	0.14540E 01	0.10000E 01
227	544.87	0.67844E 00	0.10996E-00	0.31334E-03	0.59233E-04	0.17704E-01	0.11918E-01	0.17040E 01	0.10000E 01
228	542.65	0.11652E 01	0.19243E-00	0.54753E-03	0.10350E-03	0.30984E-01	0.20857E-01	0.18780E 01	0.10000E 01
229	548.24	0.97767E 00	0.16271E-00	0.46475E-03	0.87854E-04	0.26198E-01	0.17635E-01	0.21880E 01	0.10000E 01
230	547.44	0.57299E 00	0.85031E-01	0.24274E-03	0.45888E-04	0.13691E-01	0.92164E-02	0.11890E 01	0.10000E 01
231	538.88	0.49091E-00	0.86953E-01	0.24677E-03	0.46649E-04	0.14001E-01	0.94246E-02	0.14540E 01	0.10000E 01
232	547.61	0.57299E 00	0.94166E-01	0.26885E-03	0.50823E-04	0.15162E-01	0.10206E-01	0.16130E 01	0.10000E 01
233	546.42	0.78338E 00	0.12965E-00	0.36985E-03	0.69915E-04	0.20875E-01	0.14052E-01	0.17040E 01	0.10000E 01
234	543.82	0.11148E 01	0.18507E-00	0.52702E-03	0.99626E-04	0.29799E-01	0.20060E-01	0.18780E 01	0.10000E 01
235	551.45	0.54649E 00	0.90974E-01	0.26043E-03	0.49231E-04	0.14648E-01	0.98605E-02	0.14540E 01	0.10000E 01
236	546.32	0.91221E 00	0.14981E-00	0.42734E-03	0.80782E-04	0.24121E-01	0.16237E-01	0.17040E 01	0.10000E 01
237	534.41	0.96831E 00	0.15990E-00	0.45242E-03	0.85524E-04	0.25747E-01	0.17332E-01	0.21880E 01	0.10000E 01
238	550.01	0.64675E 00	0.57866E-01	0.16549E-03	0.31283E-04	0.93172E-02	0.62720E-02	0.20700E 01	0.10000E 01
239	551.99	0.75065E 00	0.11035E-00	0.31601E-03	0.59737E-04	0.17767E-01	0.11960E-01	0.11890E 01	0.10000E 01
240	544.76	0.43273E-00	0.72816E-01	0.20749E-03	0.39223E-04	0.11724E-01	0.78923E-02	0.14540E 01	0.10000E 01
241	549.75	0.73766E 00	0.12193E-00	0.34865E-03	0.65907E-04	0.19633E-01	0.13216E-01	0.17040E 01	0.10000E 01
242	550.36	0.10364E 01	0.17268E-00	0.49395E-03	0.93375E-04	0.27804E-01	0.18716E-01	0.18780E 01	0.10000E 01
243	531.64	0.72624E 00	0.11974E-00	0.33815E-03	0.63922E-04	0.19280E-01	0.12978E-01	0.20410E 01	0.10000E 01
244	551.05	-0.24933E-01	-0.22636E-02	-0.64783E-05	-0.12246E-05	-0.36448E-03	-0.24535E-03	0.20700E 01	0.
245	551.36	0.94493E 00	0.77809E-01	0.22273E-03	0.42104E-04	0.12528E-01	0.84336E-02	0.21870E 01	0.10000E 01
246	546.93	0.91117E 00	0.15429E-00	0.44032E-03	0.83236E-04	0.24843E-01	0.16723E-01	0.22100E 01	0.10000E 01
247	556.24	0.57766E 00	0.95391E-01	0.27398E-03	0.51793E-04	0.15359E-01	0.10339E-01	0.14540E 01	0.10000E 01
248	546.96	0.66000E 00	0.11309E-00	0.32273E-03	0.61008E-04	0.18209E-01	0.12257E-01	0.17040E 01	0.10000E 01
249	551.10	0.40572E-00	0.34266E-01	0.98070E-04	0.18539E-04	0.55174E-02	0.37141E-02	0.18780E 01	0.10000E 01
250	553.05	0.35533E-00	0.29286E-01	0.83930E-04	0.15866E-04	0.47155E-02	0.31743E-02	0.21880E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
111	2	-5.41	147.22	-59.16	-4.64	2	C2	2.70	2	10.19	1846.30	1889.50	111	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE#10-6/FT	CP(INF)
0.914895E 02	0.377909E-01	0.477407E 04	0.346559E-04	0.741065E-07	0.224762E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731974E 00	0.621580E 01	0.923645E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	534.83	0.21849E 01	0.35486E-00	0.10141E-02	0.19051E-03	0.57091E-01	0.38420E-01	-0.10600E 01	0.10000E 01
100	538.05	0.97611E 00	0.16363E-00	0.46866E-03	0.88041E-04	0.26325E-01	0.17716E-01	-0.10840E 01	0.10000E 01
101	538.15	0.69714E 00	0.11431E-00	0.32743E-03	0.61510E-04	0.18391E-01	0.12376E-01	-0.11080E 01	0.10000E 01
102	537.13	0.82286E 00	0.13444E-00	0.38480E-03	0.72288E-04	0.21628E-01	0.14555E-01	-0.11080E 01	0.10000E 01
103	537.38	0.13055E 01	0.21876E-00	0.62627E-03	0.11765E-03	0.35195E-01	0.23685E-01	-0.10800E 01	0.10000E 01
104	-4157.09	0.10379E-01	-0.47074E-02	-0.35192E-05	-0.66111E-06	-0.75732E-03	-0.50965E-03	0.85000E 00	0.
105	633.04	0.77729E 02	0.12247E 02	0.37548E-01	0.70538E-02	0.19703E 01	0.13259E 01	0.94000E 00	0.10000E 01
106	642.12	0.84337E 02	0.13239E 02	0.40866E-01	0.76771E-02	0.21299E 01	0.14333E 01	0.96000E 00	0.10000E 01
107	611.07	0.83147E 02	0.12840E 02	0.38735E-01	0.72767E-02	0.20657E 01	0.13902E 01	0.98000E 00	0.10000E 01
108	618.48	0.83597E 02	0.13027E 02	0.39512E-01	0.74226E-02	0.20957E 01	0.14104E 01	0.10000E 01	0.10000E 01
109	625.56	0.73839E 02	0.11588E 02	0.35332E-01	0.66375E-02	0.18643E 01	0.12546E 01	0.10200E 01	0.10000E 01
110	636.10	0.72365E 02	0.11420E 02	0.35093E-01	0.65925E-02	0.18372E 01	0.12364E 01	0.80000E-01	0.10000E 01
111	631.19	0.77223E 02	0.12053E 02	0.36904E-01	0.69327E-02	0.19391E 01	0.13050E 01	0.10000E-00	0.10000E 01
112	652.18	0.83881E 02	0.13304E 02	0.41378E-01	0.77732E-02	0.21403E 01	0.14404E 01	0.12000E-00	0.10000E 01
113	645.91	0.88508E 02	0.14039E 02	0.43460E-01	0.81642E-02	0.22586E 01	0.15200E 01	0.14000E-00	0.10000E 01
114	629.34	0.72115E 02	0.11340E 02	0.34673E-01	0.65136E-02	0.18244E 01	0.12278E 01	0.80000E-01	0.10000E 01
115	632.69	0.74587E 02	0.11710E 02	0.35894E-01	0.67429E-02	0.18839E 01	0.12678E 01	0.10000E-00	0.10000E 01
116	630.59	0.77879E 02	0.12296E 02	0.37630E-01	0.70691E-02	0.19782E 01	0.13312E 01	0.12000E-00	0.10000E 01
117	604.82	0.81956E 02	0.12721E 02	0.38201E-01	0.71764E-02	0.20466E 01	0.13773E 01	0.14000E-00	0.10000E 01
118	629.69	0.68114E 02	0.10803E 02	0.33040E-01	0.62067E-02	0.17380E 01	0.11696E 01	0.10000E-00	0.10000E 01
119	612.82	0.44019E 02	0.68848E 01	0.20796E-01	0.39067E-02	0.11076E 01	0.74540E 00	0.15000E-00	0.10000E 01
120	629.54	0.64669E 02	0.10222E 02	0.31258E-01	0.58720E-02	0.16445E 01	0.11067E 01	0.20000E-00	0.10000E 01
121	638.64	0.66419E 02	0.10584E 02	0.32585E-01	0.61213E-02	0.17027E 01	0.11459E 01	0.25000E-00	0.10000E 01
122	625.40	0.63112E 02	0.99872E 01	0.30447E-01	0.57198E-02	0.16067E 01	0.10813E 01	0.30000E-00	0.10000E 01
123	633.69	0.68673E 02	0.10969E 02	0.33647E-01	0.63209E-02	0.17647E 01	0.11876E 01	0.35000E-00	0.10000E 01
124	623.18	0.70655E 02	0.11298E 02	0.34387E-01	0.64598E-02	0.18176E 01	0.12232E 01	0.38000E-00	0.10000E 01
125	644.11	0.78325E 02	0.12767E 02	0.39468E-01	0.74144E-02	0.20539E 01	0.13822E 01	0.45000E-00	0.10000E 01
126	632.29	0.71552E 02	0.11743E 02	0.35982E-01	0.67596E-02	0.18891E 01	0.12713E 01	0.61000E 00	0.10000E 01
127	597.67	0.51535E 02	0.83435E 01	0.24926E-01	0.46825E-02	0.13423E 01	0.90332E 00	0.70000E 00	0.10000E 01
128	566.78	0.29386E 02	0.46933E 01	0.13715E-01	0.25764E-02	0.75505E 00	0.50812E 00	0.75000E 00	0.10000E 01
129	610.18	0.55228E 02	0.90304E 01	0.27224E-01	0.51143E-02	0.14528E 01	0.97769E 00	0.70000E 00	0.10000E 01
130	614.96	0.58199E 02	0.95406E 01	0.28863E-01	0.54222E-02	0.15349E 01	0.10329E 01	0.80000E 00	0.10000E 01
131	576.78	0.35423E 02	0.53974E 01	0.15884E-01	0.29840E-02	0.86833E 00	0.58436E 00	0.90000E 00	0.10000E 01
132	601.25	0.50339E 02	0.77987E 01	0.23359E-01	0.43881E-02	0.12546E 01	0.84433E 00	0.90000E 00	0.10000E 01
133	604.55	0.53770E 02	0.83028E 01	0.24928E-01	0.46830E-02	0.13358E 01	0.89892E 00	0.96000E 00	0.10000E 01
134	604.03	0.53276E 02	0.82381E 01	0.24725E-01	0.46447E-02	0.13254E 01	0.89192E 00	0.10000E 01	0.10000E 01
135	-4157.09	0.10379E-01	-0.46400E-02	-0.34688E-05	-0.65165E-06	-0.74649E-03	-0.50236E-03	0.70000E-02	0.
136	564.11	0.28868E 02	0.44658E 01	0.13084E-01	0.24579E-02	0.72168E 00	0.48567E-00	0.70000E-02	0.10000E 01
137	564.06	0.29434E 02	0.46413E 01	0.13537E-01	0.25430E-02	0.74669E 00	0.50249E 00	0.39000E-01	0.10000E 01
138	561.87	0.28690E 02	0.45280E 01	0.13186E-01	0.24771E-02	0.72847E 00	0.49023E-00	0.78000E-01	0.10000E 01
139	-4157.09	0.10379E-01	-0.45801E-02	-0.34241E-05	-0.64324E-06	-0.73685E-03	-0.49588E-03	0.11700E-00	0.
140	561.62	0.28473E 02	0.44256E 01	0.12886E-01	0.24207E-02	0.71200E 00	0.47915E-00	0.78000E-01	0.10000E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23499E-05	-0.44144E-06	-0.50568E-03	-0.34031E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23499E-05	-0.44144E-06	-0.50568E-03	-0.34031E-03	-0.	0.
143	555.17	0.22872E 02	0.35250E 01	0.10217E-01	0.19193E-02	0.56710E 00	0.38164E-00	0.78000E-01	0.10000E 01
144	557.20	0.26761E 02	0.41357E 01	0.12004E-01	0.22551E-02	0.66536E 00	0.44776E-00	0.70000E-02	0.10000E 01
145	557.59	0.24427E 02	0.37573E 01	0.10909E-01	0.20493E-02	0.60447E 00	0.40679E-00	0.70000E-02	0.10000E 01
146	546.09	0.24256E 02	0.37255E 01	0.10730E-01	0.20157E-02	0.59936E 00	0.40334E-00	0.39000E-01	0.10000E 01
147	582.74	0.17714E-00	0.27717E-01	0.81920E-04	0.15389E-04	0.44592E-02	0.30009E-02	0.78000E-01	0.10000E 01
148	-79.29	-0.16032E 01	-0.15578E-00	-0.31428E-03	-0.59040E-04	-0.25061E-01	-0.16865E-01	0.11700E-00	0.10000E 01
149	592.41	0.47802E 02	0.76286E 01	0.23299E-01	0.43769E-02	0.12595E 01	0.84758E 00	0.70000E-02	0.10000E 01
150	597.74	0.46568E 02	0.80149E 01	0.23945E-01	0.44983E-02	0.12894E 01	0.86775E 00	0.70000E-02	0.10000E 01
151	600.41	0.47844E 02	0.79068E 01	0.23668E-01	0.44462E-02	0.12721E 01	0.85604E 00	0.70000E-02	0.10000E 01
152	604.27	0.55744E 02	0.88972E 01	0.26707E-01	0.50172E-02	0.14314E 01	0.96327E 00	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	-4157.09	0.10379E-01	-0.45801E-02	-0.34241E-05	-0.64324E-06	-0.73685E-03	-0.49588E-03	0.39000E-01	0.
154	607.80	0.58537E 02	0.92993E 01	0.27986E-01	0.52575E-02	0.14961E 01	0.10068E 01	0.78000E-01	0.10000E 01
155	-4157.09	0.10379E-01	-0.47523E-02	-0.35528E-05	-0.66741E-06	-0.76455E-03	-0.51451E-03	0.39000E-01	0.
156	-4157.09	0.10379E-01	-0.47373E-02	-0.35416E-05	-0.66531E-06	-0.76214E-03	-0.51289E-03	0.39000E-01	0.
157	593.70	0.46955E 02	0.77319E 01	0.23032E-01	0.43268E-02	0.12439E 01	0.83710E 00	0.78000E-01	0.10000E 01
158	577.30	0.46997E 02	0.76944E 01	0.22653E-01	0.42555E-02	0.12379E 01	0.83305E 00	0.39000E-01	0.10000E 01
159	583.28	0.43764E 02	0.71884E 01	0.21254E-01	0.39927E-02	0.11565E 01	0.77827E 00	0.78000E-01	0.10000E 01
160	591.18	0.44955E 02	0.73925E 01	0.21981E-01	0.41294E-02	0.11893E 01	0.80036E 00	0.39000E-01	0.10000E 01
161	595.05	0.46275E 02	0.74454E 01	0.22201E-01	0.41705E-02	0.11978E 01	0.80609E 00	0.43000E-01	0.10000E 01
162	599.05	0.46730E 02	0.75590E 01	0.22605E-01	0.42465E-02	0.12161E 01	0.81839E 00	0.43000E-01	0.10000E 01
163	593.64	0.46118E 02	0.74504E 01	0.22193E-01	0.41691E-02	0.11986E 01	0.80663E 00	0.85000E-01	0.10000E 01
164	595.83	0.45493E 02	0.73226E 01	0.21847E-01	0.41041E-02	0.11781E 01	0.79279E 00	0.12800E-00	0.10000E 01
165	595.21	0.47247E 02	0.76269E 01	0.22744E-01	0.42727E-02	0.12270E 01	0.82574E 00	0.43000E-01	0.10000E 01
166	595.30	0.46772E 02	0.75264E 01	0.22446E-01	0.42167E-02	0.12109E 01	0.81486E 00	0.85000E-01	0.10000E 01
167	-4157.09	0.10379E-01	-0.46400E-02	-0.34688E-05	-0.65165E-06	-0.74649E-03	-0.50236E-03	0.43000E-01	0.
168	599.59	0.47173E 02	0.76943E 01	0.23018E-01	0.43241E-02	0.12379E 01	0.83304E 00	0.12800E-00	0.10000E 01
169	598.07	0.47518E 02	0.77195E 01	0.23068E-01	0.43336E-02	0.12419E 01	0.83577E 00	0.85000E-01	0.10000E 01
170	602.84	0.49021E 02	0.79458E 01	0.23827E-01	0.44760E-02	0.12783E 01	0.86026E 00	0.12800E-00	0.10000E 01
171	598.86	0.48647E 02	0.78430E 01	0.23451E-01	0.44054E-02	0.12618E 01	0.84914E 00	0.85000E-01	0.10000E 01
172	-4157.09	0.10379E-01	-0.46625E-02	-0.34856E-05	-0.65480E-06	-0.75010E-03	-0.50479E-03	0.43000E-01	0.
173	610.54	0.51303E 02	0.83903E 01	0.25301E-01	0.47530E-02	0.13498E 01	0.90839E 00	0.12800E-00	0.10000E 01
174	-4157.09	0.10379E-01	-0.46550E-02	-0.34800E-05	-0.65375E-06	-0.74889E-03	-0.50398E-03	0.85000E-01	0.
175	608.91	0.51034E 02	0.82723E 01	0.24916E-01	0.46806E-02	0.13308E 01	0.89561E 00	0.43000E-01	0.10000E 01
176	610.62	0.51610E 02	0.83734E 01	0.25252E-01	0.47437E-02	0.13471E 01	0.90656E 00	0.43000E-01	0.10000E 01
177	616.80	0.55087E 02	0.90103E 01	0.27296E-01	0.51277E-02	0.14496E 01	0.97552E 00	0.12800E-00	0.10000E 01
178	613.41	0.52928E 02	0.86277E 01	0.26072E-01	0.48978E-02	0.13880E 01	0.93410E 00	0.85000E-01	0.10000E 01
179	612.92	0.52488E 02	0.85537E 01	0.25839E-01	0.48540E-02	0.13761E 01	0.92608E 00	0.70000E-02	0.10000E 01
180	-4157.09	0.10379E-01	-0.46774E-02	-0.34968E-05	-0.65690E-06	-0.75251E-03	-0.50641E-03	0.70000E-02	0.
181	604.20	0.50624E 02	0.82513E 01	0.24767E-01	0.46527E-02	0.13275E 01	0.89334E 00	0.70000E-02	0.10000E 01
182	616.84	0.68053E 03	0.11203E 03	0.33939E-00	0.63756E-01	0.18023E 02	0.12129E 02	0.70000E-02	0.
183	616.13	0.53920E 02	0.88163E 01	0.26695E-01	0.50148E-02	0.14184E 01	0.95451E 00	0.32000E-01	0.10000E 01
184	633.27	0.63732E 02	0.10583E 02	0.32452E-01	0.60964E-02	0.17026E 01	0.11458E 01	0.32000E-01	0.10000E 01
185	615.04	0.59960E 02	0.98612E 01	0.29835E-01	0.56047E-02	0.15865E 01	0.10676E 01	0.64000E-01	0.10000E 01
186	630.88	0.66523E 02	0.10997E 02	0.33663E-01	0.63239E-02	0.17692E 01	0.11906E 01	0.64000E-01	0.10000E 01
187	619.65	0.56536E 02	0.93206E 01	0.28295E-01	0.53154E-02	0.14995E 01	0.10091E 01	0.70000E-02	0.10000E 01
188	614.83	0.53290E 02	0.89030E 01	0.26932E-01	0.50593E-02	0.14323E 01	0.96390E 00	0.70000E-02	0.10000E 01
189	540.03	0.65309E 01	0.10688E 01	0.30652E-02	0.57582E-03	0.17194E-00	0.11571E-00	0.10600E 01	0.10000E 01
190	537.24	0.35481E 01	0.59131E 00	0.16926E-02	0.31797E-03	0.95129E-01	0.64019E-01	0.10840E 01	0.10000E 01
191	536.59	0.16836E 01	0.28201E-00	0.80689E-03	0.15158E-03	0.45370E-01	0.30532E-01	0.11080E 01	0.10000E 01
192	536.24	0.18805E 01	0.31323E-00	0.89599E-03	0.16832E-03	0.50392E-01	0.33912E-01	0.11080E 01	0.10000E 01
193	549.93	0.53886E 01	0.89081E 00	0.25725E-02	0.48327E-03	0.14331E-00	0.96445E-01	0.16580E 01	0.10000E 01
194	551.10	0.50706E 01	0.83495E 00	0.24132E-02	0.45333E-03	0.13433E-00	0.90397E-01	0.11700E 01	0.10000E 01
195	551.05	0.55496E 01	0.91801E 00	0.26531E-02	0.49841E-03	0.14769E-00	0.99389E-01	0.16740E 01	0.10000E 01
196	551.04	0.53532E 01	0.88145E 00	0.25475E-02	0.47856E-03	0.14181E-00	0.95432E-01	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
112	2	-5.41	147.22	59.14	4.64	2	C2	2.70	2	10.19	1849.80	1894.70	112	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.917640E 02	0.378421E-01	0.478127E 04	0.345991E-04	0.743288E-07	0.224060E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732123E 00	0.622132E 01	0.924757E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	537.64	0.22457E 01	0.36531E-00	0.10413E-02	0.19564E-03	0.58719E-01	0.39504E-01	-0.10600E 01	0.10000E 01
100	540.98	0.10291E 01	0.17280E-00	0.49370E-03	0.92757E-04	0.27775E-01	0.18686E-01	-0.10840E 01	0.10000E 01
101	540.71	0.65871E 00	0.10817E-00	0.30898E-03	0.58053E-04	0.17387E-01	0.11697E-01	-0.11080E 01	0.10000E 01
102	539.72	0.76260E 00	0.12477E-00	0.35618E-03	0.66919E-04	0.20056E-01	0.13493E-01	-0.11080E 01	0.10000E 01
103	539.54	0.12675E 01	0.21267E-00	0.60699E-03	0.11404E-03	0.34183E-01	0.22997E-01	-0.10800E 01	0.10000E 01
104	-4157.09	0.10379E-01	-0.47074E-02	-0.35151E-05	-0.66042E-06	-0.75665E-03	-0.50904E-03	0.85000E 00	0.
105	632.02	0.80600E 02	0.12692E 02	0.38699E-01	0.72708E-02	0.20401E 01	0.13725E 01	0.94000E 00	0.10000E 01
106	640.09	0.86449E 02	0.13556E 02	0.41581E-01	0.78123E-02	0.21790E 01	0.14659E 01	0.96000E 00	0.10000E 01
107	609.22	0.84710E 02	0.13069E 02	0.39186E-01	0.73624E-02	0.21006E 01	0.14132E 01	0.98000E 00	0.10000E 01
108	612.13	0.83647E 02	0.12991E 02	0.39034E-01	0.73339E-02	0.20881E 01	0.14048E 01	0.10000E 01	0.10000E 01
109	617.41	0.73104E 02	0.11424E 02	0.34458E-01	0.64741E-02	0.18362E 01	0.12353E 01	0.10200E 01	0.10000E 01
110	631.14	0.73678E 02	0.11597E 02	0.35336E-01	0.66391E-02	0.18641E 01	0.12541E 01	0.80000E-01	0.10000E 01
111	624.78	0.77555E 02	0.12064E 02	0.36588E-01	0.68742E-02	0.19392E 01	0.13046E 01	0.10000E-00	0.10000E 01
112	643.61	0.83273E 02	0.13149E 02	0.40437E-01	0.75974E-02	0.21135E 01	0.14219E 01	0.12000E-00	0.10000E 01
113	636.33	0.86858E 02	0.13709E 02	0.41931E-01	0.78781E-02	0.22035E 01	0.14824E 01	0.14000E-00	0.10000E 01
114	618.30	0.70261E 02	0.10984E 02	0.33155E-01	0.62293E-02	0.17656E 01	0.11878E 01	0.80000E-01	0.10000E 01
115	619.09	0.71344E 02	0.11121E 02	0.33586E-01	0.63103E-02	0.17875E 01	0.12026E 01	0.10000E-00	0.10000E 01
116	615.40	0.73594E 02	0.11526E 02	0.34717E-01	0.65227E-02	0.18527E 01	0.12464E 01	0.12000E-00	0.10000E 01
117	586.03	0.76793E 02	0.11800E 02	0.34795E-01	0.65373E-02	0.18966E 01	0.12760E 01	0.14000E-00	0.10000E 01
118	609.64	0.63792E 02	0.10011E 02	0.30025E-01	0.56412E-02	0.16091E 01	0.10825E 01	0.10000E-00	0.10000E 01
119	584.00	0.69510E 02	0.10705E 02	0.31520E-01	0.59220E-02	0.17206E 01	0.11575E 01	0.15000E-00	0.10000E 01
120	604.26	0.61469E 02	0.95863E 01	0.28641E-01	0.53811E-02	0.15409E 01	0.10366E 01	0.20000E-00	0.10000E 01
121	612.94	0.63618E 02	0.10001E 02	0.30068E-01	0.56493E-02	0.16075E 01	0.10815E 01	0.25000E-00	0.10000E 01
122	598.11	0.59160E 02	0.92266E 01	0.27444E-01	0.51562E-02	0.14831E 01	0.99773E 00	0.30000E-00	0.10000E 01
123	603.82	0.61950E 02	0.97398E 01	0.29090E-01	0.54656E-02	0.15656E 01	0.10532E 01	0.35000E-00	0.10000E 01
124	592.73	0.63061E 02	0.99209E 01	0.29395E-01	0.55229E-02	0.15947E 01	0.10728E 01	0.38000E-00	0.10000E 01
125	609.32	0.68488E 02	0.10961E 02	0.32868E-01	0.61752E-02	0.17618E 01	0.11853E 01	0.45000E-00	0.10000E 01
126	597.20	0.60788E 02	0.97917E 01	0.29106E-01	0.54685E-02	0.15739E 01	0.10588E 01	0.61000E 00	0.10000E 01
127	563.33	0.37934E 02	0.60275E 01	0.17491E-01	0.32862E-02	0.96885E 00	0.65180E 00	0.70000E 00	0.10000E 01
128	543.31	0.19357E 02	0.30514E 01	0.87321E-02	0.16406E-02	0.49048E-00	0.32997E-00	0.75000E 00	0.10000E 01
129	585.12	0.47194E 02	0.76133E 01	0.22436E-01	0.42153E-02	0.12238E 01	0.82328E 00	0.70000E 00	0.10000E 01
130	586.92	0.49266E 02	0.79555E 01	0.23474E-01	0.44104E-02	0.12787E 01	0.86028E 00	0.80000E 00	0.10000E 01
131	551.78	0.22864E 02	0.34361E 01	0.98907E-02	0.18583E-02	0.55230E 00	0.37156E-00	0.90000E 00	0.10000E 01
132	580.88	0.42563E 02	0.65217E 01	0.19161E-01	0.36000E-02	0.10483E 01	0.70523E 00	0.90000E 00	0.10000E 01
133	581.27	0.44192E 02	0.67385E 01	0.19803E-01	0.37207E-02	0.10831E 01	0.72868E 00	0.96000E 00	0.10000E 01
134	579.04	0.42653E 02	0.65069E 01	0.19092E-01	0.35871E-02	0.10459E 01	0.70364E 00	0.10000E 01	0.10000E 01
135	-4157.09	0.10379E-01	-0.46400E-02	-0.34648E-05	-0.65097E-06	-0.74582E-03	-0.50175E-03	0.70000E-02	0.
136	562.55	0.25753E 02	0.39984E 01	0.11596E-01	0.21788E-02	0.64270E 00	0.43238E-00	0.70000E-02	0.10000E 01
137	562.86	0.25869E 02	0.40764E 01	0.11825E-01	0.22217E-02	0.65523E 00	0.44081E-00	0.39000E-01	0.10000E 01
138	561.13	0.25436E 02	0.39849E 01	0.11546E-01	0.21692E-02	0.64053E 00	0.43092E-00	0.78000E-01	0.10000E 01
139	-4157.09	0.10379E-01	-0.45801E-02	-0.34201E-05	-0.64257E-06	-0.73620E-03	-0.49528E-03	0.11700E-00	0.
140	561.52	0.24867E 02	0.38650E 01	0.11201E-01	0.21045E-02	0.62125E 00	0.41794E-00	0.78000E-01	0.10000E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23471E-05	-0.44098E-06	-0.50524E-03	-0.33990E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23471E-05	-0.44098E-06	-0.50524E-03	-0.33990E-03	-0.	0.
143	571.44	0.38424E 02	0.59753E 01	0.17439E-01	0.32764E-02	0.96046E 00	0.64615E 00	0.78000E-01	0.10000E 01
144	565.35	0.33855E 02	0.52558E 01	0.15273E-01	0.28695E-02	0.84481E 00	0.56835E 00	0.70000E-02	0.10000E 01
145	565.14	0.28759E 02	0.44421E 01	0.12907E-01	0.24249E-02	0.71402E 00	0.48036E-00	0.70000E-02	0.10000E 01
146	553.64	0.28779E 02	0.44388E 01	0.12794E-01	0.24037E-02	0.71349E 00	0.48000E-00	0.39000E-01	0.10000E 01
147	723.63	-0.24473E 01	-0.41193E-00	-0.13477E-02	-0.25321E-03	-0.66212E-01	-0.44544E-01	0.78000E-01	0.
148	176.00	-0.44113E 01	-0.53563E 00	-0.12250E-02	-0.23016E-03	-0.86095E-01	-0.57921E-01	0.11700E-00	0.
149	610.35	0.51263E 02	0.84769E 01	0.25438E-01	0.47794E-02	0.13626E 01	0.91666E 00	0.70000E-02	0.10000E 01
150	616.36	0.53832E 02	0.89725E 01	0.27044E-01	0.50811E-02	0.14422E 01	0.97026E 00	0.70000E-02	0.10000E 01
151	623.67	0.56675E 02	0.94830E 01	0.28736E-01	0.53990E-02	0.15243E 01	0.10255E 01	0.70000E-02	0.10000E 01
152	633.49	0.66197E 02	0.10730E 02	0.32752E-01	0.61536E-02	0.17248E 01	0.11604E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	-4157.09	0.10379E-01	-0.45801E-02	-0.34201E-05	-0.64257E-06	-0.73620E-03	-0.49528E-03	0.39000E-01	0.
154	635.95	0.67208E 02	0.10837E 02	0.33138E-01	0.62261E-02	0.17419E 01	0.11719E 01	0.78000E-01	0.10000E 01
155	-4157.09	0.10379E-01	-0.47523E-02	-0.35486E-05	-0.66672E-06	-0.76387E-03	-0.51389E-03	0.39000E-01	0.
156	-4157.09	0.10379E-01	-0.47373E-02	-0.35374E-05	-0.66462E-06	-0.76146E-03	-0.51228E-03	0.39000E-01	0.
157	617.34	0.50432E 02	0.84101E 01	0.25367E-01	0.47660E-02	0.13518E 01	0.90944E 00	0.78000E-01	0.10000E 01
158	600.24	0.50940E 02	0.84442E 01	0.25155E-01	0.47263E-02	0.13573E 01	0.91312E 00	0.39000E-01	0.10000E 01
159	601.24	0.45608E 02	0.75644E 01	0.22551E-01	0.42369E-02	0.12159E 01	0.81799E 00	0.78000E-01	0.10000E 01
160	609.79	0.47535E 02	0.78953E 01	0.23684E-01	0.44497E-02	0.12691E 01	0.85377E 00	0.39000E-01	0.10000E 01
161	580.03	0.41062E 02	0.65531E 01	0.19241E-01	0.36151E-02	0.10533E 01	0.70862E 00	0.43000E-01	0.10000E 01
162	582.72	0.40983E 02	0.65711E 01	0.19331E-01	0.36320E-02	0.10562E 01	0.71058E 00	0.43000E-01	0.10000E 01
163	577.47	0.40445E 02	0.64766E 01	0.18982E-01	0.35665E-02	0.10410E 01	0.70036E 00	0.85000E-01	0.10000E 01
164	579.94	0.39708E 02	0.63365E 01	0.18604E-01	0.34954E-02	0.10185E 01	0.68521E 00	0.12800E-00	0.10000E 01
165	579.37	0.41235E 02	0.65995E 01	0.19368E-01	0.36390E-02	0.10608E 01	0.71364E 00	0.43000E-01	0.10000E 01
166	579.14	0.40553E 02	0.64687E 01	0.18981E-01	0.35663E-02	0.10398E 01	0.69950E 00	0.85000E-01	0.10000E 01
167	-4157.09	0.10379E-01	-0.46400E-02	-0.34648E-05	-0.65097E-06	-0.74582E-03	-0.50175E-03	0.43000E-01	0.
168	581.10	0.40777E 02	0.65848E 01	0.19349E-01	0.36354E-02	0.10584E 01	0.71206E 00	0.12800E-00	0.10000E 01
169	580.19	0.41286E 02	0.66425E 01	0.19506E-01	0.36649E-02	0.10677E 01	0.71830E 00	0.85000E-01	0.10000E 01
170	583.55	0.42423E 02	0.68051E 01	0.20031E-01	0.37635E-02	0.10938E 01	0.73587E 00	0.12800E-00	0.10000E 01
171	580.75	0.42273E 02	0.67489E 01	0.19826E-01	0.37250E-02	0.10848E 01	0.72980E 00	0.85000E-01	0.10000E 01
172	-4157.09	0.10379E-01	-0.46625E-02	-0.34815E-05	-0.65412E-06	-0.74943E-03	-0.50418E-03	0.43000E-01	0.
173	587.93	0.43912E 02	0.70947E 01	0.20949E-01	0.39360E-02	0.11404E 01	0.76720E 00	0.12800E-00	0.10000E 01
174	-4157.09	0.10379E-01	-0.46550E-02	-0.34760E-05	-0.65307E-06	-0.74823E-03	-0.50337E-03	0.85000E-01	0.
175	588.42	0.44201E 02	0.70861E 01	0.20931E-01	0.39326E-02	0.11390E 01	0.76627E 00	0.43000E-01	0.10000E 01
176	589.30	0.44581E 02	0.71505E 01	0.21135E-01	0.39709E-02	0.11494E 01	0.77323E 00	0.43000E-01	0.10000E 01
177	590.49	0.46933E 02	0.75692E 01	0.22391E-01	0.42069E-02	0.12166E 01	0.81850E 00	0.12800E-00	0.10000E 01
178	589.53	0.45531E 02	0.73274E 01	0.21661E-01	0.40698E-02	0.11778E 01	0.79236E 00	0.85000E-01	0.10000E 01
179	590.91	0.45047E 02	0.72549E 01	0.21468E-01	0.40335E-02	0.11661E 01	0.78452E 00	0.70000E-02	0.10000E 01
180	-4157.09	0.10379E-01	-0.46774E-02	-0.34927E-05	-0.65622E-06	-0.75184E-03	-0.50580E-03	0.70000E-02	0.
181	585.44	0.44198E 02	0.71313E 01	0.21020E-01	0.39493E-02	0.11463E 01	0.77116E 00	0.70000E-02	0.10000E 01
182	534.84	0.14796E 02	0.23288E 01	0.66254E-02	0.12448E-02	0.37432E-00	0.25183E-00	0.70000E-02	0.
183	590.89	0.46306E 02	0.74697E 01	0.22103E-01	0.41528E-02	0.12007E 01	0.80774E 00	0.32000E-01	0.10000E 01
184	598.83	0.53854E 02	0.87804E 01	0.26130E-01	0.49095E-02	0.14113E 01	0.94949E 00	0.32000E-01	0.10000E 01
185	579.85	0.47318E 02	0.76359E 01	0.22418E-01	0.42119E-02	0.12274E 01	0.82572E 00	0.64000E-01	0.10000E 01
186	594.86	0.55704E 02	0.90338E 01	0.26808E-01	0.50368E-02	0.14521E 01	0.97689E 00	0.64000E-01	0.10000E 01
187	594.82	0.48402E 02	0.78745E 01	0.23367E-01	0.43902E-02	0.12657E 01	0.85152E 00	0.70000E-02	0.10000E 01
188	592.31	0.45967E 02	0.75873E 01	0.22474E-01	0.42225E-02	0.12196E 01	0.82047E 00	0.70000E-02	0.10000E 01
189	537.35	0.11788E 02	0.19262E 01	0.54894E-02	0.10314E-02	0.30960E-00	0.20829E-00	0.10600E 01	0.10000E 01
190	530.27	0.74369E 01	0.12345E 01	0.35013E-02	0.65783E-03	0.19844E-00	0.13350E-00	0.10840E 01	0.10000E 01
191	525.13	0.38483E 01	0.64043E 00	0.18100E-02	0.34006E-03	0.10294E-00	0.69253E-01	0.11080E 01	0.10000E 01
192	526.15	0.43449E 01	0.71958E 00	0.20351E-02	0.38236E-03	0.11566E-00	0.77813E-01	0.11080E 01	0.10000E 01
193	536.61	0.50488E 01	0.82844E 00	0.23598E-02	0.44336E-03	0.13316E-00	0.89584E-01	0.16580E 01	0.10000E 01
194	538.89	0.47881E 01	0.78304E 00	0.22340E-02	0.41972E-03	0.12586E-00	0.84675E-01	0.11700E 01	0.10000E 01
195	537.92	0.52530E 01	0.86257E 00	0.24592E-02	0.46205E-03	0.13865E-00	0.93276E-01	0.16740E 01	0.10000E 01
196	536.91	0.50597E 01	0.82744E 00	0.23605E-02	0.44350E-03	0.13300E-00	0.89476E-01	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
104	2	4.55	154.55	-0.02	-0.	1	C2	2.70	2	10.19	1849.50	1893.10	104	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE#10-6/FT	CP(INF)
0.916815E 02	0.378433E-01	0.477911E 04	0.346314E-04	0.742620E-07	0.224370E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732078E 00	0.622093E 01	0.924678E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	599.95	0.47218E 02	0.63517E 01	0.18944E-01	0.35576E-02	0.10210E 01	0.68691E 00	-0.	0.10000E 01
2	601.09	0.45751E 02	0.65512E 01	0.19556E-01	0.36724E-02	0.10531E 01	0.70849E 00	-0.30000E-01	0.10000E 01
3	589.35	0.42979E 02	0.66491E 01	0.19681E-01	0.36959E-02	0.10688E 01	0.71907E 00	-0.60000E-01	0.10000E 01
4	589.40	0.41054E 02	0.65150E 01	0.19285E-01	0.36215E-02	0.10473E 01	0.70457E 00	-0.90000E-01	0.10000E 01
5	582.57	0.37750E 02	0.61203E 01	0.18028E-01	0.33856E-02	0.98383E 00	0.66189E 00	-0.20000E-00	0.10000E 01
6	579.98	0.34492E 02	0.55843E 01	0.16419E-01	0.30833E-02	0.89766E 00	0.60391E 00	-0.40000E-00	0.10000E 01
7	567.44	0.29908E 02	0.48319E 01	0.14081E-01	0.26443E-02	0.77672E 00	0.52255E 00	-0.60000E 00	0.10000E 01
8	575.49	0.27117E 02	0.44004E 01	0.12897E-01	0.24220E-02	0.70736E 00	0.47589E-00	-0.80000E 00	0.10000E 01
9	575.94	0.27703E 02	0.44255E 01	0.12974E-01	0.24365E-02	0.71139E 00	0.47860E-00	-0.90000E 00	0.10000E 01
10	574.87	0.25768E 02	0.41668E 01	0.12207E-01	0.22924E-02	0.66980E 00	0.45062E-00	-0.98000E 00	0.10000E 01
11	547.25	0.22073E 01	0.38109E-00	0.10950E-02	0.20563E-03	0.61259E-01	0.41213E-01	-0.11220E 01	0.10000E 01
12	549.49	0.28255E 01	0.41620E-00	0.11978E-02	0.22493E-03	0.66903E-01	0.45010E-01	-0.11890E 01	0.10000E 01
13	550.84	0.28805E 01	0.43776E-00	0.12610E-02	0.23680E-05	0.70370E-01	0.47342E-01	-0.13340E 01	0.10000E 01
14	539.69	0.22431E 01	0.38564E-00	0.11023E-02	0.20700E-03	0.61990E-01	0.41705E-01	-0.14400E 01	0.10000E 01
15-4157.09		0.10379E-01	-0.41161E-02	-0.30747E-05	-0.57740E-06	-0.66166E-03	-0.44514E-03	0.30000E-01	0.
16-4157.09		0.10379E-01	-0.44754E-02	-0.33430E-05	-0.62779E-06	-0.71941E-03	-0.48399E-03	0.60000E-01	0.
17	594.90	0.42918E 02	0.68311E 01	0.20300E-01	0.38123E-02	0.10981E 01	0.73876E 00	0.90000E-01	0.10000E 01
18	598.60	0.42076E 02	0.68811E 01	0.20503E-01	0.38504E-02	0.11061E 01	0.74416E 00	0.20000E-00	0.10000E 01
19	619.21	0.45290E 02	0.74887E 01	0.22651E-01	0.42537E-02	0.12038E 01	0.80987E 00	0.40000E-00	0.10000E 01
20-4157.09		0.10379E-01	-0.47298E-02	-0.35331E-05	-0.66349E-06	-0.76031E-03	-0.51151E-03	0.60000E 00	0.
21	637.15	**0.63135E 02**	**0.99689E 01**	**0.30555E-01**	**0.57380E-02**	**0.16025E 01**	**0.10781E 01**	**0.92000E 00**	**0.10000E 01**
22	594.88	0.46308E 02	0.71496E 01	0.21246E-01	0.39899E-02	0.11493E 01	0.77320E 00	0.10400E 01	0.10000E 01
23	592.78	0.42238E 02	0.65314E 01	0.19380E-01	0.36394E-02	0.10499E 01	0.70634E 00	0.10600E 01	0.10000E 01
24	570.90	0.30017E 02	0.48049E 01	0.14037E-01	0.26360E-02	0.77238E 00	0.51963E 00	0.10840E 01	0.10000E 01
25	534.90	0.45808E 01	0.67272E 00	0.19165E-02	0.35991E-03	0.10814E-00	0.72751E-01	0.12070E 01	0.10000E 01
26	535.70	0.41725E 01	0.64656E 00	0.18430E-02	0.34611E-03	0.10393E-00	0.69923E-01	0.12490E 01	0.10000E 01
27	535.27	0.42836E 01	0.65287E 00	0.18605E-02	0.34938E-03	0.10495E-00	0.70605E-01	0.13340E 01	0.10000E 01
28	538.81	0.35512E 01	0.60307E 00	0.17227E-02	0.32352E-03	0.96942E-01	0.65219E-01	0.14540E 01	0.10000E 01
29	544.36	0.35906E 01	0.59355E 00	0.17021E-02	0.31964E-03	0.95412E-01	0.64190E-01	0.16580E 01	0.10000E 01
30	547.44	0.33725E 01	0.56527E 00	0.16244E-02	0.30505E-03	0.90866E-01	0.61131E-01	0.20410E 01	0.10000E 01
31	552.12	0.32878E 01	0.55252E 00	0.15930E-02	0.29915E-03	0.88816E-01	0.59752E-01	0.22480E 01	0.10000E 01
32-4157.09		0.10379E-01	-0.44799E-02	-0.33464E-05	-0.62842E-06	-0.72013E-03	-0.48448E-03	-0.60000E-01	0.
33	602.15	0.44950E 02	0.64401E 01	0.19239E-01	0.36129E-02	0.10352E 01	0.69647E 00	-0.30000E-01	0.10000E 01
34-4157.09		0.10379E-01	-0.44799E-02	-0.33464E-05	-0.62842E-06	-0.72013E-03	-0.48448E-03	0.30000E-01	0.
35	591.82	0.41461E 02	0.65883E 01	0.19535E-01	0.36686E-02	0.10590E 01	0.71249E 00	0.60000E-01	0.10000E 01
36	576.70	0.28912E 02	0.46725E 01	0.13706E-01	0.25739E-02	0.75110E 00	0.50531E 00	-0.86800E 00	0.10000E 01
37	576.82	0.28029E 02	0.44077E 01	0.12930E-01	0.24282E-02	0.70852E 00	0.47667E-00	-0.91100E 00	0.10000E 01
38	575.31	0.27909E 02	0.44640E 01	0.13082E-01	0.24566E-02	0.71758E 00	0.48276E-00	-0.95300E 00	0.10000E 01
39	575.01	0.25772E 02	0.41348E 01	0.12114E-01	0.22750E-02	0.66466E 00	0.44716E-00	0.51000E-01	0.10000E 01
40-4157.09		0.10379E-01	-0.46774E-02	-0.34940E-05	-0.65614E-06	-0.75189E-03	-0.50584E-03	0.29000E-01	0.
41-4157.09		0.10379E-01	-0.46505E-02	-0.34738E-05	-0.65236E-06	-0.74756E-03	-0.50293E-03	0.70000E-02	0.
42	578.23	0.29510E 02	0.47427E 01	0.13927E-01	0.26154E-02	0.76238E 00	0.51290E 00	-0.86800E 00	0.10000E 01
43	575.62	0.28321E 02	0.45567E 01	0.13356E-01	0.25082E-02	0.73248E 00	0.49279E-00	-0.91100E 00	0.10000E 01
44	576.71	0.28884E 02	0.46234E 01	0.13562E-01	0.25469E-02	0.74320E 00	0.50000E 00	-0.95300E 00	0.10000E 01
45	550.90	0.81553E 01	0.13357E 01	0.38477E-02	0.72257E-03	0.21471E-00	0.14445E-00	-0.10400E 01	0.10000E 01
46-4157.09		0.10379E-01	-0.46894E-02	-0.35029E-05	-0.65782E-06	-0.75381E-03	-0.50714E-03	0.70000E-02	0.
47-4157.09		0.10379E-01	-0.46894E-02	-0.35029E-05	-0.65782E-06	-0.75381E-03	-0.50714E-03	0.29000E-01	0.
48	577.04	0.26572E 02	0.42951E 01	0.12602E-01	0.23666E-02	0.69043E 00	0.46450E-00	0.51000E-01	0.10000E 01
49	580.24	0.28051E 02	0.44988E 01	0.13230E-01	0.24844E-02	0.72316E 00	0.48652E-00	0.70000E-02	0.10000E 01
50	580.20	0.26948E 02	0.43357E 01	0.12750E-01	0.23943E-02	0.69695E 00	0.46888E-00	0.29000E-01	0.10000E 01
51-2208.35		-0.64700E 02	0.97804E 01	0.10150E-01	0.19061E-02	0.15722E 01	0.10577E 01	0.51000E-01	0.
52	-721.25	0.67636E 02	0.21643E 01	0.33618E-02	0.63132E-03	0.34791E-00	0.23406E-00	-0.86800E 00	0.
53	579.42	0.28862E 02	0.45419E 01	0.13349E-01	0.25068E-02	0.73010E 00	0.49119E-00	-0.91100E 00	0.10000E 01
54	576.46	0.27769E 02	0.44493E 01	0.13068E-01	0.24540E-02	0.71521E 00	0.48117E-00	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	549.17	0.56520E 01	0.92480E 00	0.26608E-02	0.49968E-03	0.14866E-00	0.10001E-00	-0.10400E 01	0.10000E 01
56	546.15	0.27761E 01	0.46778E-00	0.13431E-02	0.25222E-03	0.75195E-01	0.50589E-01	-0.10680E 01	0.10000E 01
57	545.26	0.20514E 01	0.33493E-00	0.96105E-03	0.18048E-03	0.53839E-01	0.36221E-01	-0.10400E 01	0.10000E 01
58	547.80	0.50410E 01	0.89228E 00	0.25648E-02	0.48165E-03	0.14343E-00	0.96456E-01	-0.10680E 01	0.10000E 01
59	550.68	0.89600E 01	0.14673E 01	0.42262E-02	0.79365E-03	0.23587E-00	0.15868E-00	-0.10400E 01	0.10000E 01
60	547.48	0.43491E 01	0.73338E 00	0.21076E-02	0.39579E-03	0.11789E-00	0.79312E-01	-0.10680E 01	0.10000E 01
61	545.80	0.21226E 01	0.35298E-00	0.10132E-02	0.19028E-03	0.56741E-01	0.38174E-01	-0.11220E 01	0.10000E 01
62	551.13	0.25153E 01	0.38233E-00	0.11015E-02	0.20686E-03	0.61458E-01	0.41347E-01	-0.13340E 01	0.10000E 01
63	544.98	0.22452E 01	0.38714E-00	0.11106E-02	0.20857E-03	0.62232E-01	0.41868E-01	-0.11220E 01	0.10000E 01
64	550.39	0.28431E 01	0.43197E-00	0.12439E-02	0.23360E-03	0.69438E-01	0.46716E-01	-0.13340E 01	0.10000E 01
65	545.27	0.21756E 01	0.37520E-00	0.10766E-02	0.20218E-03	0.60313E-01	0.40576E-01	0.14400E 01	0.10000E 01
66	542.51	0.19465E 01	0.31898E-00	0.91353E-03	0.17155E-03	0.51275E-01	0.34496E-01	0.16130E 01	0.10000E 01
67	547.24	0.20000E 01	0.32255E-00	0.92679E-03	0.17404E-03	0.51849E-01	0.34882E-01	0.17200E 01	0.10000E 01
68	528.01	0.19096E 01	0.31277E-00	0.88688E-03	0.16655E-03	0.50278E-01	0.33825E-01	-0.16130E 01	0.10000E 01
69	549.95	0.22078E 01	0.35660E-00	0.10266E-02	0.19278E-03	0.57323E-01	0.38565E-01	-0.18280E 01	0.10000E 01
70	536.26	0.25049E 01	0.36689E-00	0.10462E-02	0.19647E-03	0.58976E-01	0.39677E-01	-0.11650E 01	0.10000E 01
71	545.60	0.13132E 01	0.11058E-00	0.31736E-03	0.59598E-04	0.17775E-01	0.11958E-01	-0.12050E 01	0.10000E 01
72	551.08	0.26971E 01	0.39287E-00	0.11319E-02	0.21255E-03	0.63153E-01	0.42487E-01	-0.12120E 01	0.10000E 01
73	547.61	0.24338E 01	0.35874E-00	0.10311E-02	0.19362E-03	0.57667E-01	0.38797E-01	-0.11650E 01	0.10000E 01
74	546.83	0.97819E 00	0.82420E-01	0.23675E-03	0.44461E-04	0.13249E-01	0.89134E-02	-0.12050E 01	0.10000E 01
75	535.83	0.28395E 01	0.40794E-00	0.11629E-02	0.21839E-03	0.65576E-01	0.44117E-01	-0.12120E 01	0.10000E 01
76	545.66	0.24358E 01	0.36789E-00	0.10559E-02	0.19829E-03	0.59137E-01	0.39785E-01	0.10840E 01	0.10000E 01
77	542.08	0.22582E 01	0.36541E-00	0.10462E-02	0.19647E-03	0.58739E-01	0.39518E-01	0.11220E 01	0.10000E 01
78	539.69	0.29314E 01	0.43609E-00	0.12465E-02	0.23408E-03	0.70100E-01	0.47161E-01	0.13340E 01	0.10000E 01
79	548.84	0.26582E 01	0.44832E-00	0.12896E-02	0.24218E-03	0.72066E-01	0.48484E-01	-0.11890E 01	0.10000E 01
80	543.72	0.29294E 01	0.44120E-00	0.12646E-02	0.23749E-03	0.70922E-01	0.47714E-01	-0.13340E 01	0.10000E 01
81	536.00	0.25003E 01	0.40320E-00	0.11496E-02	0.21588E-03	0.64814E-01	0.43605E-01	-0.11470E 01	0.10000E 01
82	549.03	0.26868E 01	0.45278E-00	0.13026E-02	0.24462E-03	0.72783E-01	0.48966E-01	-0.11890E 01	0.10000E 01
83	542.02	0.22738E 01	0.38168E-00	0.10927E-02	0.20521E-03	0.61354E-01	0.41277E-01	-0.10840E 01	0.10000E 01
84	549.37	0.27683E 01	0.40846E-00	0.11754E-02	0.22073E-03	0.65659E-01	0.44173E-01	-0.11890E 01	0.10000E 01
85	549.32	0.27283E 01	0.40254E-00	0.11583E-02	0.21752E-03	0.64708E-01	0.43533E-01	-0.13090E 01	0.10000E 01
86	552.09	0.27340E 01	0.40955E-00	0.11808E-02	0.22174E-03	0.65835E-01	0.44292E-01	-0.13340E 01	0.10000E 01
87	535.08	0.45974E 01	0.67176E 00	0.19141E-02	0.35945E-03	0.10798E-00	0.72648E-01	0.11990E 01	0.10000E 01
88	530.05	0.43777E 01	0.64332E 00	0.18267E-02	0.34304E-03	0.10341E-00	0.69572E-01	0.12070E 01	0.10000E 01
89	536.24	0.39860E 01	0.59782E 00	0.17047E-02	0.32014E-03	0.96099E-01	0.64652E-01	0.13340E 01	0.10000E 01
90	530.97	0.44597E 01	0.63338E 00	0.17996E-02	0.33795E-03	0.10181E-00	0.68497E-01	0.12070E 01	0.10000E 01
91	538.84	0.42031E 01	0.65246E 00	0.18639E-02	0.35002E-03	0.10488E-00	0.70561E-01	0.12490E 01	0.10000E 01
92	540.29	0.42416E 01	0.64081E 00	0.18324E-02	0.34412E-03	0.10301E-00	0.69301E-01	0.13340E 01	0.10000E 01
93	543.01	0.36764E 01	0.62210E 00	0.17823E-02	0.33469E-03	0.10000E-00	0.67277E-01	0.14900E 01	0.10000E 01
94	-4157.09	0.10379E-01	-0.31208E-02	-0.23312E-05	-0.43778E-06	-0.50166E-03	-0.33750E-03	-0.	0.
95	409.10	-0.98701E-02	-0.96587E-03	-0.25333E-05	-0.47574E-06	-0.15526E-03	-0.10445E-03	-0.	0.
96	-4157.09	0.10379E-01	-0.31208E-02	-0.23312E-05	-0.43778E-06	-0.50166E-03	-0.33750E-03	-0.	0.
97	-4157.09	0.10379E-01	-0.31208E-02	-0.23312E-05	-0.43778E-06	-0.50166E-03	-0.33750E-03	-0.	0.
98	-4157.09	0.10379E-01	-0.31432E-02	-0.23479E-05	-0.44092E-06	-0.50527E-03	-0.33993E-03	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
113	2	3.64	153.64	-0.	-0.	2	C2	2.75	2	10.19	1849.80	1891.90	113	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.916173E 02	0.378534E-01	0.477744E 04	0.346649E-04	0.742100E-07	0.224665E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732043E 00	0.622132E 01	0.924757E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	549.59	0.30197E 01	0.49453E-00	0.14248E-02	0.26740E-03	0.79489E-01	0.53477E-01	-0.10600E 01	0.10000E 01
100	552.47	0.14857E 01	0.25108E-00	0.72484E-03	0.13603E-03	0.40358E-01	0.27151E-01	-0.10840E 01	0.10000E 01
101	552.34	0.11408E 01	0.18855E-00	0.54428E-03	0.10215E-03	0.30308E-01	0.20389E-01	-0.11080E 01	0.10000E 01
102	551.46	0.13086E 01	0.21552E-00	0.62173E-03	0.11668E-03	0.34642E-01	0.23305E-01	-0.11080E 01	0.10000E 01
103	551.11	0.18587E 01	0.31388E-00	0.90526E-03	0.16990E-03	0.50452E-01	0.33942E-01	-0.10800E 01	0.10000E 01
104	-4157.13	0.51854E-02	-0.23518E-02	-0.17572E-05	-0.32978E-06	-0.37802E-03	-0.25431E-03	0.85000E 00	0.
105	642.78	0.70119E 02	0.11104E 02	0.34216E-01	0.64216E-02	0.17849E 01	0.12008E 01	0.94000E 00	0.10000E 01
106	651.74	0.72591E 02	0.11452E 02	0.35527E-01	0.66676E-02	0.18408E 01	0.12384E 01	0.96000E 00	0.10000E 01
107	621.86	0.69878E 02	0.10853E 02	0.32928E-01	0.61798E-02	0.17445E 01	0.11736E 01	0.98000E 00	0.10000E 01
108	623.56	0.66128E 02	0.10332E 02	0.31386E-01	0.58905E-02	0.16608E 01	0.11173E 01	0.10000E 01	0.10000E 01
109	630.31	0.55072E 02	0.86646E 01	0.26452E-01	0.49645E-02	0.13927E 01	0.93696E 00	0.10200E 01	0.10000E 01
110	641.69	0.65567E 02	0.10377E 02	0.31951E-01	0.59964E-02	0.16680E 01	0.11222E 01	0.80000E-01	0.10000E 01
111	637.85	0.68254E 02	0.10691E 02	0.32821E-01	0.61597E-02	0.17184E 01	0.11560E 01	0.10000E-00	0.10000E 01
112	657.48	0.70563E 02	0.11222E 02	0.34964E-01	0.65620E-02	0.18038E 01	0.12135E 01	0.12000E-00	0.10000E 01
113	651.02	0.70822E 02	0.11264E 02	0.34923E-01	0.65542E-02	0.18105E 01	0.12180E 01	0.14000E-00	0.10000E 01
114	631.34	0.65186E 02	0.10261E 02	0.31351E-01	0.58838E-02	0.16494E 01	0.11096E 01	0.80000E-01	0.10000E 01
115	634.53	0.65389E 02	0.10276E 02	0.31470E-01	0.59062E-02	0.16517E 01	0.11112E 01	0.10000E-00	0.10000E 01
116	632.82	0.66673E 02	0.10539E 02	0.32235E-01	0.60497E-02	0.16940E 01	0.11396E 01	0.12000E-00	0.10000E 01
117	604.97	0.67875E 02	0.10536E 02	0.31574E-01	0.59257E-02	0.16936E 01	0.11394E 01	0.14000E-00	0.10000E 01
118	624.91	0.62668E 02	0.99143E 01	0.30147E-01	0.56579E-02	0.15936E 01	0.10721E 01	0.10000E-00	0.10000E 01
119	602.69	0.53428E 02	0.83114E 01	0.24866E-01	0.46667E-02	0.13360E 01	0.89877E 00	0.15000E-00	0.10000E 01
120	625.58	0.58857E 02	0.92836E 01	0.28243E-01	0.53006E-02	0.14922E 01	0.10039E 01	0.20000E-00	0.10000E 01
121	635.18	0.59705E 02	0.94968E 01	0.29098E-01	0.54610E-02	0.15265E 01	0.10269E 01	0.25000E-00	0.10000E 01
122	619.67	0.57533E 02	0.90767E 01	0.27494E-01	0.51600E-02	0.14590E 01	0.98153E 00	0.30000E-00	0.10000E 01
123	627.46	0.59597E 02	0.94883E 01	0.28906E-01	0.54250E-02	0.15251E 01	0.10260E 01	0.35000E-00	0.10000E 01
124	617.58	0.60557E 02	0.96546E 01	0.29199E-01	0.54800E-02	0.15518E 01	0.10440E 01	0.38000E-00	0.10000E 01
125	637.03	0.64359E 02	0.10452E 02	0.32068E-01	0.60185E-02	0.16800E 01	0.11302E 01	0.45000E-00	0.10000E 01
126	624.96	0.60957E 02	0.99654E 01	0.30304E-01	0.56873E-02	0.16018E 01	0.10776E 01	0.61000E 00	0.10000E 01
127	588.69	0.36496E 02	0.58800E 01	0.17415E-01	0.32684E-02	0.94514E 00	0.63585E 00	0.70000E 00	0.10000E 01
128	568.77	0.17667E 02	0.28246E 01	0.82481E-02	0.15480E-02	0.45402E-00	0.30545E-00	0.75000E 00	0.10000E 01
129	607.27	0.50562E 02	0.82547E 01	0.24776E-01	0.46503E-02	0.13268E 01	0.89264E 00	0.70000E 00	0.10000E 01
130	610.38	0.52156E 02	0.85291E 01	0.25660E-01	0.48158E-02	0.13710E 01	0.92231E 00	0.80000E 00	0.10000E 01
131	573.80	0.24107E 02	0.36671E 01	0.10746E-01	0.20168E-02	0.58945E 00	0.39655E-00	0.90000E 00	0.10000E 01
132	598.07	0.47399E 02	0.73306E 01	0.21858E-01	0.41023E-02	0.11783E 01	0.79270E 00	0.90000E 00	0.10000E 01
133	599.78	0.48733E 02	0.75058E 01	0.22408E-01	0.42055E-02	0.12065E 01	0.81165E 00	0.96000E 00	0.10000E 01
134	597.99	0.47018E 02	0.72469E 01	0.21607E-01	0.40552E-02	0.11648E 01	0.78365E 00	0.10000E 01	0.10000E 01
135	-4157.13	0.51854E-02	-0.23181E-02	-0.17321E-05	-0.32507E-06	-0.37261E-03	-0.25067E-03	0.70000E-02	0.
136	574.28	0.30766E 02	0.48076E 01	0.14093E-01	0.26450E-02	0.77276E 00	0.51988E 00	0.70000E-02	0.10000E 01
137	577.62	0.31257E 02	0.49657E 01	0.14591E-01	0.27384E-02	0.79817E 00	0.53697E 00	0.39000E-01	0.10000E 01
138	576.24	0.30569E 02	0.48322E 01	0.14185E-01	0.26622E-02	0.77611E 00	0.52254E 00	0.78000E-01	0.10000E 01
139	-4157.13	0.51854E-02	-0.22882E-02	-0.17097E-05	-0.32087E-06	-0.36780E-03	-0.24744E-03	0.11700E-00	0.
140	576.54	0.30497E 02	0.47794E 01	0.14033E-01	0.26337E-02	0.76822E 00	0.51682E 00	0.78000E-01	0.10000E 01
141	-4157.13	0.51854E-02	-0.15703E-02	-0.11733E-05	-0.22021E-06	-0.25241E-03	-0.16981E-03	-0.	0.
142	-4157.13	0.51854E-02	-0.15703E-02	-0.11733E-05	-0.22021E-06	-0.25241E-03	-0.16981E-03	-0.	0.
143	576.28	0.29780E 02	0.46433E 01	0.13631E-01	0.25382E-02	0.74636E 00	0.50211E 00	0.78000E-01	0.10000E 01
144	577.87	0.32594E 02	0.50950E 01	0.14974E-01	0.28102E-02	0.81895E 00	0.55095E 00	0.70000E-02	0.10000E 01
145	578.26	0.29770E 02	0.46316E 01	0.13616E-01	0.25553E-02	0.74447E 00	0.50084E 00	0.70000E-02	0.10000E 01
146	568.59	0.30109E 02	0.46826E 01	0.13672E-01	0.25659E-02	0.75267E 00	0.50636E 00	0.39000E-01	0.10000E 01
147	847.02	-0.23063E-00	-0.41142E-01	-0.14979E-03	-0.28111E-04	-0.66131E-02	-0.44490E-02	0.78000E-01	0.
148	283.32	-0.12354E 01	-0.15993E-00	-0.58472E-03	-0.72204E-04	-0.25707E-01	-0.17294E-01	0.11700E-00	0.10000E 01
149	614.14	0.58988E 02	0.97739E 01	0.29486E-01	0.55339E-02	0.15710E 01	0.10569E 01	0.70000E-02	0.10000E 01
150	619.44	0.60265E 02	0.10061E 02	0.30471E-01	0.57186E-02	0.16172E 01	0.10880E 01	0.70000E-02	0.10000E 01
151	619.89	0.58432E 02	0.97565E 01	0.29553E-01	0.55465E-02	0.15682E 01	0.10550E 01	0.70000E-02	0.10000E 01
152	623.49	0.61231E 02	0.98733E 01	0.29991E-01	0.56286E-02	0.15870E 01	0.10677E 01	0.39000E-01	0.10000E 01

~~CONFIDENTIAL~~

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-	4157.13	0.51854E-02	-0.22882E-02	-0.17097E-05	-0.32087E-06	-0.36780E-03	-0.24744E-03	0.39000E-01	0.
154	625.26	0.60325E 02	0.96726E 01	0.29420E-01	0.55214E-02	0.15548E 01	0.10460E 01	0.78000E-01	0.10000E 01
155-	4157.13	0.51854E-02	-0.23742E-02	-0.17740E-05	-0.33293E-06	-0.38162E-03	-0.25674E-03	0.39000E-01	0.
156-	4157.13	0.51854E-02	-0.23667E-02	-0.17684E-05	-0.33188E-06	-0.38042E-03	-0.25593E-03	0.39000E-01	0.
157	608.09	0.54288E 02	0.90087E 01	0.27058E-01	0.50781E-02	0.14480E 01	0.97417E 00	0.78000E-01	0.10000E 01
158	592.85	0.56396E 02	0.93115E 01	0.27661E-01	0.51913E-02	0.14967E 01	0.10069E 01	0.39000E-01	0.10000E 01
159	598.99	0.52853E 02	0.87555E 01	0.26124E-01	0.49029E-02	0.14073E 01	0.94679E 00	0.78000E-01	0.10000E 01
160	610.08	0.55218E 02	0.91728E 01	0.27591E-01	0.51781E-02	0.14744E 01	0.99191E 00	0.39000E-01	0.10000E 01
161	593.90	0.46376E 02	0.74570E 01	0.22168E-01	0.41605E-02	0.11986E 01	0.80637E 00	0.43000E-01	0.10000E 01
162	597.38	0.46041E 02	0.74408E 01	0.22176E-01	0.41619E-02	0.11960E 01	0.80463E 00	0.43000E-01	0.10000E 01
163	592.07	0.45718E 02	0.73795E 01	0.21909E-01	0.41118E-02	0.11862E 01	0.79799E 00	0.85000E-01	0.10000E 01
164	593.96	0.45095E 02	0.72511E 01	0.21557E-01	0.40458E-02	0.11655E 01	0.78411E 00	0.12800E-00	0.10000E 01
165	593.93	0.46149E 02	0.74445E 01	0.22132E-01	0.41536E-02	0.11966E 01	0.80502E 00	0.43000E-01	0.10000E 01
166	594.22	0.45517E 02	0.73201E 01	0.21766E-01	0.40850E-02	0.11766E 01	0.79157E 00	0.85000E-01	0.10000E 01
167-	4157.13	0.51854E-02	-0.23181E-02	-0.17321E-05	-0.32507E-06	-0.37261E-03	-0.25067E-03	0.43000E-01	0.
168	598.41	0.45788E 02	0.74636E 01	0.22260E-01	0.41777E-02	0.11997E 01	0.80709E 00	0.12800E-00	0.10000E 01
169	597.57	0.46034E 02	0.74764E 01	0.22285E-01	0.41824E-02	0.12017E 01	0.80847E 00	0.85000E-01	0.10000E 01
170	601.78	0.47253E 02	0.76549E 01	0.22887E-01	0.42953E-02	0.12304E 01	0.82777E 00	0.12800E-00	0.10000E 01
171	598.15	0.46858E 02	0.75517E 01	0.22519E-01	0.42263E-02	0.12138E 01	0.81662E 00	0.85000E-01	0.10000E 01
172-	4157.13	0.51854E-02	-0.23293E-02	-0.17404E-05	-0.32664E-06	-0.37441E-03	-0.25189E-03	0.43000E-01	0.
173	607.99	0.48326E 02	0.78926E 01	0.23704E-01	0.44486E-02	0.12686E 01	0.85348E 00	0.12800E-00	0.10000E 01
174-	4157.13	0.51854E-02	-0.23256E-02	-0.17376E-05	-0.32611E-06	-0.37381E-03	-0.25148E-03	0.85000E-01	0.
175	607.23	0.48996E 02	0.79348E 01	0.23817E-01	0.44700E-02	0.12754E 01	0.85804E 00	0.43000E-01	0.10000E 01
176	608.63	0.49138E 02	0.79638E 01	0.23929E-01	0.44909E-02	0.12801E 01	0.86118E 00	0.43000E-01	0.10000E 01
177	613.21	0.50232E 02	0.82005E 01	0.24723E-01	0.46399E-02	0.13181E 01	0.88678E 00	0.12800E-00	0.10000E 01
178	610.64	0.49467E 02	0.80516E 01	0.24228E-01	0.45471E-02	0.12942E 01	0.87068E 00	0.85000E-01	0.10000E 01
179	610.66	0.49298E 02	0.80241E 01	0.24146E-01	0.45316E-02	0.12898E 01	0.86770E 00	0.70000E-02	0.10000E 01
180-	4157.13	0.51854E-02	-0.23368E-02	-0.17460E-05	-0.32769E-06	-0.37561E-03	-0.25269E-03	0.70000E-02	0.
181	602.81	0.49528E 02	0.80666E 01	0.24136E-01	0.45297E-02	0.12966E 01	0.87230E 00	0.70000E-02	0.10000E 01
182	538.08	0.26259E 02	0.41406E 01	0.11834E-01	0.22211E-02	0.66554E 00	0.44775E-00	0.70000E-02	0.10000E 01
183	613.09	0.49578E 02	0.80932E 01	0.24397E-01	0.45787E-02	0.13009E 01	0.87517E 00	0.32000E-01	0.10000E 01
184	625.10	0.55667E 02	0.92040E 01	0.27991E-01	0.52533E-02	0.14794E 01	0.99529E 00	0.32000E-01	0.10000E 01
185	605.23	0.48407E 02	0.79194E 01	0.23737E-01	0.44548E-02	0.12730E 01	0.85638E 00	0.64000E-01	0.10000E 01
186	621.60	0.56824E 02	0.93479E 01	0.28356E-01	0.53217E-02	0.15026E 01	0.10109E 01	0.64000E-01	0.10000E 01
187	616.74	0.52030E 02	0.85646E 01	0.25887E-01	0.48584E-02	0.13767E 01	0.92615E 00	0.70000E-02	0.10000E 01
188	612.31	0.49861E 02	0.83188E 01	0.25063E-01	0.47037E-02	0.13371E 01	0.89957E 00	0.70000E-02	0.10000E 01
189	557.03	0.88997E 01	0.14703E 01	0.42580E-02	0.79914E-03	0.23633E-00	0.15899E-00	0.10600E 01	0.10000E 01
190	553.94	0.50925E 01	0.85666E 00	0.24756E-02	0.46461E-03	0.13770E-00	0.92637E-01	0.10840E 01	0.10000E 01
191	552.91	0.23590E 01	0.39876E-00	0.11515E-02	0.21611E-03	0.64095E-01	0.43120E-01	0.11080E 01	0.10000E 01
192	552.12	0.27896E 01	0.46880E-00	0.13530E-02	0.25393E-03	0.75353E-01	0.50694E-01	0.11080E 01	0.10000E 01
193	562.61	0.39408E 01	0.65607E 00	0.19075E-02	0.35799E-03	0.10546E-00	0.70945E-01	0.16580E 01	0.10000E 01
194	563.93	0.37023E 01	0.61399E 00	0.17868E-02	0.33533E-03	0.98691E-01	0.66395E-01	0.11700E 01	0.10000E 01
195	564.00	0.39377E 01	0.65605E 00	0.19093E-02	0.35833E-03	0.10545E-00	0.70943E-01	0.16740E 01	0.10000E 01
196	564.07	0.38338E 01	0.63584E 00	0.18505E-02	0.34730E-03	0.10220E-00	0.68757E-01	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
120	2	3.63	153.63	0.02	-0.	3	C2	2.70	2	10.19	1853.00	1895.90	120	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.918277E 02	0.379044E-01	0.478297E 04	0.346320E-04	0.743805E-07	0.224197E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732158E 00	0.622642E 01	0.925788E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	579.65	0.40795E 02	0.64566E 01	0.18933E-01	0.35525E-02	0.10370E 01	0.69742E 00	0.10000E 01	0.10000E 01
198	583.70	0.40665E 02	0.62405E 01	0.18351E-01	0.34434E-02	0.10023E 01	0.67407E 00	0.12000E 01	0.10000E 01
199	554.37	0.19433E 02	0.30922E 01	0.89077E-02	0.16714E-02	0.49663E-00	0.33401E-00	0.13000E 01	0.10000E 01
200	552.35	0.22488E 01	0.33065E-00	0.95115E-03	0.17847E-03	0.53104E-01	0.35716E-01	0.11890E 01	0.10000E 01
201	560.73	0.22649E 01	0.37956E-00	0.10982E-02	0.20607E-03	0.60960E-01	0.40999E-01	0.14540E 01	0.10000E 01
202	555.19	0.27065E 01	0.44874E-00	0.12934E-02	0.24269E-03	0.72070E-01	0.48471E-01	0.17040E 01	0.10000E 01
203	555.61	0.18935E 01	0.31402E-00	0.90535E-03	0.16988E-03	0.50433E-01	0.33919E-01	0.20410E 01	0.10000E 01
204	555.03	0.29612E-01	0.22809E-02	0.65736E-05	0.12334E-05	0.36633E-03	0.24638E-03	0.20700E 01	0.
205	551.66	0.27585E-00	0.24228E-01	0.69660E-04	0.13071E-04	0.38911E-02	0.26170E-02	0.21880E 01	0.10000E 01
206	553.80	0.21709E 01	0.35966E-00	0.10356E-02	0.19432E-03	0.57763E-01	0.38849E-01	0.22480E 01	0.10000E 01
207	556.83	0.21662E 01	0.35343E-00	0.10199E-02	0.19136E-03	0.56763E-01	0.38176E-01	0.20700E 01	0.10000E 01
208	554.01	0.71480E 00	0.64097E-01	0.18459E-03	0.34637E-04	0.10294E-01	0.69235E-02	0.20700E 01	0.10000E 01
209	549.73	0.81922E 00	0.66359E-01	0.19054E-03	0.35753E-04	-0.10658E-01	0.71679E-02	0.21880E 01	0.10000E 01
210	551.74	0.15314E 01	0.25536E-00	0.73426E-03	0.13778E-03	0.41013E-01	0.27583E-01	0.20700E 01	0.10000E 01
211	554.68	0.18727E 01	0.31279E-00	0.90123E-03	0.16910E-03	0.50236E-01	0.33786E-01	0.21880E 01	0.10000E 01
212	554.27	0.20021E 01	0.33025E-00	0.95126E-03	0.17849E-03	0.53040E-01	0.35672E-01	0.22390E 01	0.10000E 01
213	551.87	0.17429E 01	0.28711E-00	0.82562E-03	0.15492E-03	0.46111E-01	0.31012E-01	0.21880E 01	0.10000E 01
214	552.44	0.16504E 01	0.27531E-00	0.79200E-03	0.14861E-03	0.44216E-01	0.29738E-01	0.22480E 01	0.10000E 01
215	549.00	0.11616E 01	0.17546E-00	0.50357E-03	0.94488E-04	0.28181E-01	0.18953E-01	0.11650E 01	0.10000E 01
216	-4157.09	0.10379E-01	-0.24951E-02	-0.18626E-05	-0.34950E-06	-0.40073E-03	-0.26951E-03	0.12050E 01	0.
217	552.27	0.14260E 01	0.20965E-00	0.60306E-03	0.11316E-03	0.33672E-01	0.22646E-01	0.12120E 01	0.10000E 01
218	548.84	0.15112E 01	0.22290E-00	0.63965E-03	0.12002E-03	0.35800E-01	0.24077E-01	0.11890E 01	0.10000E 01
219	549.14	0.13325E 01	0.22476E-00	0.64512E-03	0.12105E-03	0.36099E-01	0.24278E-01	0.14540E 01	0.10000E 01
220	546.89	0.15018E 01	0.26265E-00	0.75270E-03	0.14123E-03	0.42184E-01	0.28371E-01	0.17040E 01	0.10000E 01
221	550.44	0.22618E 01	0.37975E-00	0.10909E-02	0.20470E-03	0.60989E-01	0.41019E-01	0.20410E 01	0.10000E 01
222	534.01	0.11268E 01	0.18942E-00	0.53803E-03	0.10095E-03	0.30422E-01	0.20460E-01	0.22480E 01	0.10000E 01
223	546.71	0.12836E 01	0.19366E-00	0.55490E-03	0.10412E-03	0.31102E-01	0.20918E-01	0.11650E 01	0.10000E 01
224	549.69	0.69195E 00	0.58396E-01	0.16767E-03	0.31461E-04	0.93787E-02	0.63077E-02	0.12050E 01	0.10000E 01
225	550.62	0.14094E 01	0.20702E-00	0.59480E-03	0.11161E-03	0.33249E-01	0.22361E-01	0.12120E 01	0.10000E 01
226	550.79	0.13423E 01	0.22745E-00	0.65359E-03	0.12264E-03	0.36531E-01	0.24569E-01	0.14540E 01	0.10000E 01
227	547.73	0.15273E 01	0.24792E-00	0.71090E-03	0.13339E-03	0.39818E-01	0.26780E-01	0.17040E 01	0.10000E 01
228	545.44	0.23605E 01	0.39044E-00	0.11178E-02	0.20974E-03	0.62708E-01	0.42174E-01	0.18780E 01	0.10000E 01
229	549.33	0.29371E 01	0.48911E-00	0.14040E-02	0.26345E-03	0.78554E-01	0.52831E-01	0.21880E 01	0.10000E 01
230	545.50	0.16956E 01	0.25135E-00	0.71962E-03	0.13503E-03	0.40369E-01	0.27150E-01	0.11890E 01	0.10000E 01
231	541.82	0.12790E 01	0.22691E-00	0.64800E-03	0.12159E-03	0.36444E-01	0.24510E-01	0.14540E 01	0.10000E 01
232	550.24	0.14909E 01	0.24538E-00	0.70483E-03	0.13225E-03	0.39409E-01	0.26505E-01	0.16130E 01	0.10000E 01
233	549.55	0.16140E 01	0.26758E-00	0.76824E-03	0.14415E-03	0.42975E-01	0.28903E-01	0.17040E 01	0.10000E 01
234	546.25	0.25673E 01	0.42678E-00	0.12225E-02	0.22939E-03	0.68543E-01	0.46099E-01	0.18780E 01	0.10000E 01
235	553.48	0.16088E 01	0.26812E-00	0.77188E-03	0.14483E-03	0.43062E-01	0.28961E-01	0.14540E 01	0.10000E 01
236	548.01	0.17501E 01	0.28769E-00	0.82507E-03	0.15481E-03	0.46204E-01	0.31075E-01	0.17040E 01	0.10000E 01
237	535.30	0.36914E 01	0.60990E 00	0.17339E-02	0.32534E-03	0.97953E-01	0.65879E-01	0.21860E 01	0.10000E 01
238	550.17	0.13792E 01	0.12341E-00	0.35447E-03	0.66512E-04	0.19821E-01	0.13331E-01	0.20700E 01	0.10000E 01
239	547.95	0.19605E 01	0.28755E-00	0.82466E-03	0.15474E-03	0.46183E-01	0.31060E-01	0.11890E 01	0.10000E 01
240	546.65	0.15704E 01	0.26453E-00	0.75794E-03	0.14222E-03	0.42485E-01	0.28573E-01	0.14540E 01	0.10000E 01
241	550.77	0.16192E 01	0.26781E-00	0.76953E-03	0.14439E-03	0.43011E-01	0.28927E-01	0.17040E 01	0.10000E 01
242	551.79	0.25294E 01	0.42178E-00	0.12128E-02	0.22757E-03	0.67740E-01	0.45559E-01	0.18780E 01	0.10000E 01
243	532.90	0.31496E 01	0.51967E 00	0.14750E-02	0.27676E-03	0.83462E-01	0.56133E-01	0.20410E 01	0.10000E 01
244	550.31	-0.13506E-01	-0.12257E-02	-0.35208E-05	-0.66063E-06	-0.19685E-03	-0.13239E-03	0.20700E 01	0.
245	551.88	0.32562E 01	0.26837E-00	0.77173E-03	0.14481E-03	0.43101E-01	0.28988E-01	0.21870E 01	0.10000E 01
246	548.04	0.39117E 01	0.66280E 00	0.19009E-02	0.35668E-03	0.10645E-00	0.71593E-01	0.22100E 01	0.10000E 01
247	557.02	0.16509E 01	0.27274E-00	0.78711E-03	0.14769E-03	0.43803E-01	0.29460E-01	0.14540E 01	0.10000E 01
248	546.84	0.15922E 01	0.26477E-00	0.75874E-03	0.14237E-03	0.42524E-01	0.28600E-01	0.17040E 01	0.10000E 01
249	550.09	0.66026E 00	0.55734E-01	0.16007E-03	0.30036E-04	0.89512E-02	0.60201E-02	0.18780E 01	0.10000E 01
250	551.14	0.88884E 00	0.73181E-01	0.21034E-03	0.39467E-04	0.11753E-01	0.79047E-02	0.21880E 01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	556.95	0.18629E 01	0.31721E-00	0.91542E-03	0.17177E-03	0.50946E-01	0.34264E-01	0.14540E 01	0.10000E 01
252	549.74	0.15678E 01	0.26455E-00	0.75962E-03	0.14253E-03	0.42488E-01	0.28576E-01	0.16130E 01	0.10000E 01
253	551.70	0.77943E-02	0.69131E-03	0.19877E-05	0.37297E-06	0.11103E-03	0.74673E-04	0.17060E 01	0.
254	553.56	0.43714E 01	0.72967E 00	0.21007E-02	0.39418E-03	0.11719E-00	0.78816E-01	0.21880E 01	0.10000E 01
255	538.89	0.82597E 00	0.76185E-01	0.21712E-03	0.40741E-04	0.12236E-01	0.82292E-02	0.16580E 01	0.10000E 01
256	551.00	0.52883E 00	0.44662E-01	0.12836E-03	0.24084E-04	0.71730E-02	0.48242E-02	0.17920E 01	0.10000E 01
257	542.94	0.16774E 01	0.28256E-00	0.80754E-03	0.15153E-03	0.45381E-01	0.30521E-01	0.10840E 01	0.10000E 01
258	555.14	0.20286E 01	0.34766E-00	0.10020E-02	0.18802E-03	0.55836E-01	0.37553E-01	0.14540E 01	0.10000E 01
259	549.38	0.16073E 01	0.26766E-00	0.76836E-03	0.14417E-03	0.42987E-01	0.28911E-01	0.16130E 01	0.10000E 01
260	551.68	0.12644E 01	0.20763E-00	0.59699E-03	0.11202E-03	0.33346E-01	0.22427E-01	0.17040E 01	0.10000E 01
261	552.45	0.18494E 01	0.30709E-00	0.88344E-03	0.16577E-03	0.49321E-01	0.33171E-01	0.18780E 01	0.10000E 01
262	551.29	0.33075E 01	0.56144E 00	0.16139E-02	0.30282E-03	0.90171E-01	0.60645E-01	0.20410E 01	0.10000E 01
263	552.16	0.21210E 01	0.36129E-00	0.10392E-02	0.19498E-03	0.58025E-01	0.39025E-01	0.14540E 01	0.10000E 01
264	549.92	0.15480E 01	0.25670E-00	0.73717E-03	0.13832E-03	0.41227E-01	0.27727E-01	0.16130E 01	0.10000E 01
265	549.51	0.16229E 01	0.26370E-00	0.75707E-03	0.14205E-03	0.42352E-01	0.28484E-01	0.17040E 01	0.10000E 01
266	550.55	0.19881E 01	0.32977E-00	0.94744E-03	0.17778E-03	0.52964E-01	0.35621E-01	0.18780E 01	0.10000E 01
267	552.15	0.29283E 01	0.49583E-00	0.14261E-02	0.26759E-03	0.79633E-01	0.53557E-01	0.20410E 01	0.10000E 01
268	549.91	0.16192E 01	0.26850E-00	0.77105E-03	0.14468E-03	0.43122E-01	0.29002E-01	0.16130E 01	0.10000E 01
269	550.17	0.17434E 01	0.28339E-00	0.81396E-03	0.15273E-03	0.45514E-01	0.30610E-01	0.18280E 01	0.10000E 01
270	550.60	0.18353E 01	0.30305E-00	0.87071E-03	0.16338E-03	0.48672E-01	0.32735E-01	0.18780E 01	0.10000E 01
271	546.52	0.25294E 01	0.42604E-00	0.12206E-02	0.22903E-03	0.68424E-01	0.46019E-01	0.20410E 01	0.10000E 01
272	550.06	0.16919E 01	0.28786E-00	0.82675E-03	0.15513E-03	0.46233E-01	0.31094E-01	0.16130E 01	0.10000E 01
273	550.02	0.14769E 01	0.24678E-00	0.70874E-03	0.13299E-03	0.39634E-01	0.26656E-01	0.17200E 01	0.10000E 01
274	547.97	0.15813E 01	0.25593E-00	0.73397E-03	0.13772E-03	0.41104E-01	0.27644E-01	0.18280E 01	0.10000E 01
275	548.05	0.17200E 01	0.28404E-00	0.81465E-03	0.15286E-03	0.45619E-01	0.30681E-01	0.18780E 01	0.10000E 01
276	-4157.09	0.10379E-01	-0.49888E-02	-0.37242E-05	-0.69880E-06	-0.80122E-03	-0.53887E-03	0.20600E 01	0.
277	548.14	0.12088E 01	0.10193E-00	0.29236E-03	0.54857E-04	0.16370E-01	0.11010E-01	0.21000E 01	0.10000E 01
278	-4157.09	0.10379E-01	-0.24951E-02	-0.18626E-05	-0.34950E-06	-0.40073E-03	-0.26951E-03	0.21870E 01	0.
279	552.86	0.26130E 01	0.44394E-00	0.12775E-02	0.23970E-03	0.71299E-01	0.47952E-01	0.21950E 01	0.10000E 01
280	549.97	0.18504E 01	0.31059E-00	0.89196E-03	0.16736E-03	0.49882E-01	0.33548E-01	0.18780E 01	0.10000E 01
281	550.48	0.23704E 01	0.40219E-00	0.11554E-02	0.21680E-03	0.64594E-01	0.43443E-01	0.20600E 01	0.10000E 01
282	543.24	0.19190E 01	0.31314E-00	0.89512E-03	0.16796E-03	0.50293E-01	0.33825E-01	0.18280E 01	0.10000E 01
283	547.33	0.26800E 01	0.45162E-00	0.12946E-02	0.24292E-03	0.72532E-01	0.48782E-01	0.20600E 01	0.10000E 01
284	550.32	0.19569E 01	0.31812E-00	0.91382E-03	0.17147E-03	0.51092E-01	0.34362E-01	0.17200E 01	0.10000E 01
285	551.64	0.20218E 01	0.33455E-00	0.96191E-03	0.18049E-03	0.53731E-01	0.36137E-01	0.18780E 01	0.10000E 01
286	550.17	0.15397E 01	0.14292E-00	0.41051E-03	0.77027E-04	0.22954E-01	0.15438E-01	0.16580E 01	0.10000E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.15555E-05	-0.29187E-06	-0.54214E-04	-0.36462E-04	0.17920E 01	0.
288	547.71	0.17938E 01	0.29617E-00	0.84922E-03	0.15935E-03	0.47566E-01	0.31991E-01	0.16130E 01	0.10000E 01
289	551.06	0.17870E-00	0.15093E-01	0.43377E-04	0.81391E-05	0.24240E-02	0.16303E-02	0.17060E 01	0.
290	548.20	0.65299E 00	0.55062E-01	0.15794E-03	0.29635E-04	0.88433E-02	0.59476E-02	0.18780E 01	0.10000E 01
291	548.99	0.15527E 01	0.25538E-00	0.73290E-03	0.13752E-03	0.41015E-01	0.27585E-01	0.17200E 01	0.10000E 01
292	542.54	0.15439E 01	0.26585E-00	0.75957E-03	0.14252E-03	0.42698E-01	0.28716E-01	0.14400E 01	0.10000E 01
293	549.22	0.18862E 01	0.30645E-00	0.87962E-03	0.16505E-03	0.49218E-01	0.33101E-01	0.17200E 01	0.10000E 01
294	551.90	0.27013E 01	0.44979E-00	0.12935E-02	0.24270E-03	0.72239E-01	0.48585E-01	0.18780E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
114	2	6.62	154.14	51.47	-5.17	2	C2	2.70	2	10.19	1851.80	1889.50	114	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.914887E 02	0.379048E-01	0.477411E 04	0.347607E-04	0.741058E-07	0.225446E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731973E 00	0.622446E 01	0.925392E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	543.77	0.31164E 01	0.50869E 00	0.14627E-02	0.27395E-03	0.81725E-01	0.54970E-01	-0.10600E 01	0.10000E 01
100	547.15	0.19933E 01	0.33585E-00	0.96801E-03	0.18130E-03	0.53957E-01	0.36293E-01	-0.10840E 01	0.10000E 01
101	547.88	0.24961E 01	0.41154E-00	0.11868E-02	0.22227E-03	0.66117E-01	0.44472E-01	-0.11080E 01	0.10000E 01
102	546.81	0.23486E 01	0.38580E-00	0.11117E-02	0.20821E-03	0.61981E-01	0.41690E-01	-0.11080E 01	0.10000E 01
103	545.30	0.20769E 01	0.34959E-00	0.10063E-02	0.18847E-03	0.56163E-01	0.37777E-01	-0.10800E 01	0.10000E 01
104	-4157.09	0.10379E-01	-0.47074E-02	-0.35192E-05	-0.65911E-06	-0.75627E-03	-0.50869E-03	0.85000F 00	0.
105	633.30	0.67820E 02	0.10687E 02	0.32772E-01	0.61379E-02	0.17169E 01	0.11549E 01	0.94000E 00	0.10000E 01
106	639.86	0.70677E 02	0.11082E 02	0.34149E-01	0.63958E-02	0.17803E 01	0.11975E 01	0.96000E 00	0.10000E 01
107	609.28	0.68175E 02	0.10518E 02	0.31688E-01	0.59349E-02	0.16898E 01	0.11366E 01	0.98000E 00	0.10000E 01
108	609.75	0.65029E 02	0.10086E 02	0.30398E-01	0.56932E-02	0.16204E 01	0.10900E 01	0.10000E 01	0.10000E 01
109	615.32	0.54281E 02	0.84727E 01	0.25639E-01	0.48019E-02	0.13612E 01	0.91558E 00	0.10200E 01	0.10000E 01
110	634.35	0.64297E 02	0.10137E 02	0.31111E-01	0.58268E-02	0.16286E 01	0.10955E 01	0.80000E-01	0.10000E 01
111	629.43	0.67321E 02	0.10498E 02	0.32100E-01	0.60120E-02	0.16866E 01	0.11344E 01	0.10000E-00	0.10000E 01
112	646.51	0.70202E 02	0.11101E 02	0.34381E-01	0.64392E-02	0.17835E 01	0.11996E 01	0.12000E-00	0.10000E 01
113	638.35	0.70802E 02	0.11186E 02	0.34433E-01	0.64490E-02	0.17972E 01	0.12088E 01	0.14000E-00	0.10000E 01
114	627.25	0.64925E 02	0.10198E 02	0.31134E-01	0.58310E-02	0.16384E 01	0.11021E 01	0.80000E-01	0.10000E 01
115	629.68	0.66032E 02	0.10351E 02	0.31655E-01	0.59287E-02	0.16629E 01	0.11185E 01	0.10000E-00	0.10000E 01
116	627.44	0.67920E 02	0.10706E 02	0.32687E-01	0.61220E-02	0.17200E 01	0.11569E 01	0.12000E-00	0.10000E 01
117	598.15	0.70155E 02	0.10850E 02	0.32426E-01	0.60731E-02	0.17432E 01	0.11725E 01	0.14000E-00	0.10000E 01
118	626.88	0.64856E 02	0.10271E 02	0.31347E-01	0.58710E-02	0.16501E 01	0.11099E 01	0.10000E-00	0.10000E 01
119	606.13	0.18044E 03	0.28122E 02	0.84531E-01	0.15832E-01	0.45180E 01	0.30389E 01	0.15000E-00	0.
120	620.56	0.66029E 02	0.10387E 02	0.31554E-01	0.59098E-02	0.16688E 01	0.11225E 01	0.20000E-00	0.10000E 01
121	635.21	0.67650E 02	0.10761E 02	0.33045E-01	0.61890E-02	0.17288E 01	0.11628E 01	0.25000E-00	0.10000E 01
122	620.97	0.65705E 02	0.10373E 02	0.31521E-01	0.59035E-02	0.16665E 01	0.11209E 01	0.30000E-00	0.10000E 01
123	626.24	0.68116E 02	0.10838E 02	0.33061E-01	0.61919E-02	0.17411E 01	0.11711E 01	0.35000E-00	0.10000E 01
124	614.66	0.69129E 02	0.11004E 02	0.33283E-01	0.62336E-02	0.17679E 01	0.11891E 01	0.38000E-00	0.10000E 01
125	631.39	0.73676E 02	0.11930E 02	0.36531E-01	0.68419E-02	0.19166E 01	0.12891E 01	0.45000E-00	0.10000E 01
126	617.90	0.69322E 02	0.11291E 02	0.34231E-01	0.64111E-02	0.18139E 01	0.12201E 01	0.61000E 00	0.10000E 01
127	580.63	0.44090E 02	0.70726E 01	0.20872E-01	0.39091E-02	0.11363E 01	0.76429E 00	0.70000E 00	0.10000E 01
128	559.13	0.22426E 02	0.35666E 01	0.10366E-01	0.19415E-02	0.57299E 00	0.38541E-00	0.75000E 00	0.10000E 01
129	601.58	0.55798E 02	0.90818E 01	0.27208E-01	0.50958E-02	0.14590E 01	0.98140E 00	0.70000E 00	0.10000E 01
130	604.48	0.58374E 02	0.95158E 01	0.28569E-01	0.53506E-02	0.15288E 01	0.10283E 01	0.80000E 00	0.10000E 01
131	569.55	0.30642E 02	0.46503E 01	0.13616E-01	0.25501E-02	0.74710E 00	0.50252E 00	0.90000E 00	0.10000E 01
132	596.13	0.50460E 02	0.77959E 01	0.23264E-01	0.43571E-02	0.12525E 01	0.84244E 00	0.90000E 00	0.10000E 01
133	598.37	0.53107E 02	0.81733E 01	0.24429E-01	0.45754E-02	0.13131E 01	0.88322E 00	0.96000E 00	0.10000E 01
134	597.26	0.52085E 02	0.80248E 01	0.23966E-01	0.44887E-02	0.12892E 01	0.86718E 00	0.10000E 01	0.10000E 01
135	-4157.09	0.10379E-01	-0.46400E-02	-0.34688E-05	-0.64969E-06	-0.74545E-03	-0.50141E-03	0.70000E-02	0.
136	575.81	0.34265E 02	0.53589E 01	0.15760E-01	0.29517E-02	0.86094E 00	0.57909E 00	0.70000E-02	0.10000E 01
137	576.39	0.34915E 02	0.55431E 01	0.16309E-01	0.30544E-02	0.89053E 00	0.59900E 00	0.39000E-01	0.10000E 01
138	574.12	0.34195E 02	0.53956E 01	0.15849E-01	0.29684E-02	0.86684E 00	0.58306E 00	0.78000E-01	0.10000E 01
139	-4157.09	0.10379E-01	-0.45801E-02	-0.34241E-05	-0.64130E-06	-0.73583E-03	-0.49494E-03	0.11700E-00	0.
140	573.60	0.33612E 02	0.52591E 01	0.15443E-01	0.28922E-02	0.84491E 00	0.56831E 00	0.78000E-01	0.10000E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23499E-05	-0.44011E-06	-0.50498E-03	-0.33967E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23499E-05	-0.44011E-06	-0.50498E-03	-0.33967E-03	-0.	0.
143	567.89	0.27938E 02	0.43362E 01	0.12681E-01	0.23750E-02	0.69663E 00	0.46858E-00	0.78000E-01	0.10000E 01
144	570.01	0.31642E 02	0.49249E 01	0.14424E-01	0.27015E-02	0.79121E 00	0.53219E 00	0.70000E-02	0.10000E 01
145	570.71	0.28813E 02	0.44641E 01	0.13081E-01	0.24500E-02	0.71719E 00	0.48240E-00	0.70000E-02	0.10000E 01
146	564.48	0.32257E 02	0.50053E 01	0.14603E-01	0.27349E-02	0.80413E 00	0.54088E 00	0.39000E-01	0.10000E 01
147	897.95	-0.13963E 01	-0.25480E-00	-0.97464E-03	-0.18254E-03	-0.40935E-01	-0.27534E-01	0.78000E-01	0.
148	356.70	-0.59845E 00	-0.82643E-01	-0.21070E-03	-0.39462E-04	-0.13277E-01	-0.89306E-02	0.11700E-00	0.10000E 01
149	606.04	0.54685E 02	0.90218E 01	0.27116E-01	0.50786E-02	0.14494E 01	0.97492E 00	0.70000E-02	0.10000E 01
150	610.02	0.54584E 02	0.90672E 01	0.27332E-01	0.51190E-02	0.14567E 01	0.97982E 00	0.70000E-02	0.10000E 01
151	611.31	0.51485E 02	0.85583E 01	0.25822E-01	0.48363E-02	0.13749E 01	0.92483E 00	0.70000E-02	0.10000E 01
152	615.42	0.54234E 02	0.87077E 01	0.26352E-01	0.49355E-02	0.13989E 01	0.94097E 00	0.39000E-01	0.10000E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.09		0.10379E-01	-0.45801E-02	-0.34241E-05	-0.64130E-06	-0.73583E-03	-0.49494E-03	0.39000E-01	0.
154	618.71	0.53373E 02	0.85285E 01	0.25872E-01	0.48456E-02	0.13702E 01	0.92160E 00	0.78000E-01	0.10000E 01
155-4157.09		0.10379E-01	-0.47523E-02	-0.35528E-05	-0.66540E-06	-0.76348E-03	-0.51354E-03	0.39000E-01	0.
156-4157.09		0.10379E-01	-0.47373E-02	-0.35416E-05	-0.66330E-06	-0.76108E-03	-0.51192E-03	0.39000E-01	0.
157	604.45	0.47216E 02	0.78200E 01	0.23477E-01	0.43970E-02	0.12563E 01	0.84505E 00	0.78000E-01	0.10000E 01
158	590.35	0.49894E 02	0.82268E 01	0.24448E-01	0.45788E-02	0.13217E 01	0.88901E 00	0.39000E-01	0.10000E 01
159	596.55	0.51314E 02	0.84894E 01	0.25341E-01	0.47461E-02	0.13639E 01	0.91738E 00	0.78000E-01	0.10000E 01
160-4157.09		0.10379E-01	-0.47523E-02	-0.35528E-05	-0.66540E-06	-0.76348E-03	-0.51354E-03	0.39000E-01	0.
161	595.01	0.47762E 02	0.76844E 01	0.22912E-01	0.42913E-02	0.12345E 01	0.83039E 00	0.43000E-01	0.10000E 01
162	597.45	0.47405E 02	0.76616E 01	0.22885E-01	0.42861E-02	0.12309E 01	0.82793E 00	0.43000E-01	0.10000E 01
163	591.91	0.47221E 02	0.76214E 01	0.22674E-01	0.42466E-02	0.12244E 01	0.82359E 00	0.85000E-01	0.10000E 01
164	594.16	0.46722E 02	0.75137E 01	0.22390E-01	0.41934E-02	0.12071E 01	0.81194E 00	0.12800E-00	0.10000E 01
165	593.29	0.47732E 02	0.76972E 01	0.22922E-01	0.42931E-02	0.12366E 01	0.83178E 00	0.43000E-01	0.10000E 01
166	592.51	0.47255E 02	0.75925E 01	0.22598E-01	0.42323E-02	0.12198E 01	0.82046E 00	0.85000E-01	0.10000E 01
167-4157.09		0.10379E-01	-0.46400E-02	-0.34688E-05	-0.64968E-06	-0.74545E-03	-0.50141E-03	0.43000E-01	0.
168	596.71	0.47592E 02	0.77507E 01	0.23139E-01	0.43336E-02	0.12452E 01	0.83756E 00	0.12800E-00	0.10000E 01
169	595.34	0.48140E 02	0.78091E 01	0.23290E-01	0.43620E-02	0.12546E 01	0.84387E 00	0.85000E-01	0.10000E 01
170	599.39	0.49735E 02	0.80466E 01	0.24069E-01	0.45078E-02	0.12927E 01	0.86954E 00	0.12800E-00	0.10000E 01
171	594.64	0.49331E 02	0.79352E 01	0.23654E-01	0.44302E-02	0.12748E 01	0.85750E 00	0.85000E-01	0.10000E 01
172-4157.09		0.10379E-01	-0.46625E-02	-0.34856E-05	-0.65282E-06	-0.74905E-03	-0.50384E-03	0.43000E-01	0.
173	604.17	0.52020E 02	0.84786E 01	0.25449E-01	0.47663E-02	0.13621E 01	0.91622E 00	0.12800E-00	0.10000E 01
174-4157.09		0.10379E-01	-0.46550E-02	-0.34800E-05	-0.65177E-06	-0.74785E-03	-0.50303E-03	0.85000E-01	0.
175	603.92	0.51809E 02	0.83756E 01	0.25135E-01	0.47076E-02	0.13456E 01	0.90508E 00	0.43000E-01	0.10000E 01
176	605.03	0.52352E 02	0.84684E 01	0.25434E-01	0.47636E-02	0.13605E 01	0.91512E 00	0.43000E-01	0.10000E 01
177	608.62	0.55559E 02	0.90480E 01	0.27246E-01	0.51029E-02	0.14536E 01	0.97774E 00	0.12800E-00	0.10000E 01
178	606.16	0.53768E 02	0.87307E 01	0.26244E-01	0.49152E-02	0.14026E 01	0.94346E 00	0.85000E-01	0.10000E 01
179	608.59	0.52841E 02	0.85914E 01	0.25871E-01	0.48453E-02	0.13803E 01	0.92841E 00	0.70000E-02	0.10000E 01
180-4157.09		0.10379E-01	-0.46774E-02	-0.34968E-05	-0.65492E-06	-0.75146E-03	-0.50545E-03	0.70000E-02	0.
181	603.21	0.51336E 02	0.83629E 01	0.25084E-01	0.46980E-02	0.13435E 01	0.90371E 00	0.70000E-02	0.10000E 01
182	434.13	-0.43219E 03	-0.64120E 02	-0.17137E-00	-0.32096E-01	-0.10301E 02	-0.69290E 01	0.70000E-02	0.
183	608.96	0.54702E 02	0.89100E 01	0.26837E-01	0.50264E-02	0.14315E 01	0.96284E 00	0.32000E-01	0.10000E 01
184	619.78	0.63784E 02	0.10516E 02	0.31928E-01	0.59798E-02	0.16895E 01	0.11364E 01	0.32000E-01	0.10000E 01
185	598.85	0.57229E 02	0.93308E 01	0.27899E-01	0.52252E-02	0.14991E 01	0.10083E 01	0.64000E-01	0.10000E 01
186	615.29	0.65515E 02	0.10742E 02	0.32505E-01	0.60879E-02	0.17257E 01	0.11608E 01	0.64000E-01	0.10000E 01
187	613.33	0.56988E 02	0.93637E 01	0.28294E-01	0.52992E-02	0.15043E 01	0.10119E 01	0.70000E-02	0.10000E 01
188	609.12	0.53993E 02	0.89930E 01	0.27090E-01	0.50738E-02	0.14448E 01	0.97180E 00	0.70000E-02	0.10000E 01
189	549.83	0.68743E 01	0.11311E 01	0.32663E-02	0.61174E-03	0.18172E-00	0.12223E-00	0.10600E 01	0.10000E 01
190	547.11	0.39122E 01	0.65562E 00	0.18896E-02	0.35390E-03	0.10533E-00	0.70847E-01	0.10840E 01	0.10000E 01
191	546.70	0.22504E 01	0.37909E-00	0.10923E-02	0.20457E-03	0.60903E-01	0.40965E-01	0.11080E 01	0.10000E 01
192	546.51	0.23273E 01	0.38988E-00	0.11232E-02	0.21037E-03	0.62637E-01	0.42131E-01	0.11080E 01	0.10000E 01
193	554.32	0.39844E 01	0.66030E 00	0.19127E-02	0.35822E-03	0.10608E-00	0.71353E-01	0.16580E 01	0.10000E 01
194	554.95	0.39075E 01	0.64480E 00	0.18686E-02	0.34998E-03	0.10359E-00	0.69679E-01	0.11700E 01	0.10000E 01
195	555.33	0.41143E 01	0.68220E 00	0.19775E-02	0.37037E-03	0.10980E-00	0.73720E-01	0.16740E 01	0.10000E 01
196	557.26	0.39283E 01	0.64907E 00	0.18840E-02	0.35286E-03	0.10428E-00	0.70139E-01	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
115	2	6.59	154.11	-51.52	5.16	2	C2	2.75	2	10.19	1859.10	1891.10	115	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.915701E 02	0.380485E-01	0.477633E 04	0.348615E-04	0.741718E-07	0.226003E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732018E 00	0.623577E 01	0.927687E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	546.11	0.30218E 01	0.49391E-00	0.14206E-02	0.26517E-03	0.79206E-01	0.53241E-01	-0.10600E 01	0.10000E 01
100	551.06	0.20546E 01	0.34694E-00	0.10013E-02	0.18691E-03	0.55637E-01	0.37398E-01	-0.10840E 01	0.10000E 01
101	551.75	0.25008E 01	0.41320E-00	0.11932E-02	0.22272E-03	0.66263E-01	0.44541E-01	-0.11080E 01	0.10000E 01
102	550.29	0.22857E 01	0.37620E-00	0.10852E-02	0.20257E-03	0.60330E-01	0.40553E-01	-0.11080E 01	0.10000E 01
103	547.94	0.20468E 01	0.34502E-00	0.99363E-03	0.18547E-03	0.55329E-01	0.37192E-01	-0.10800E 01	0.10000E 01
104-4157.13		0.51854E-02	-0.23519E-02	-0.17575E-05	-0.32807E-06	-0.37714E-03	-0.25351E-03	0.85000E 00	0.
105	637.26	0.68709E 02	0.10850E 02	0.33321E-01	0.62198E-02	0.17399E 01	0.11695E 01	0.94000E 00	0.10000E 01
106	644.93	0.71078E 02	0.11174E 02	0.34515E-01	0.64426E-02	0.17919E 01	0.12045E 01	0.96000E 00	0.10000E 01
107	615.05	0.68096E 02	0.10538E 02	0.31838E-01	0.59430E-02	0.16900E 01	0.11360E 01	0.98000E 00	0.10000E 01
108	614.45	0.63585E 02	0.98871E 01	0.29858E-01	0.55733E-02	0.15855E 01	0.10658E 01	0.10000E 01	0.10000E 01
109	620.59	0.51864E 02	0.81182E 01	0.24627E-01	0.45969E-02	0.13019E 01	0.87510E 00	0.10200E 01	0.10000E 01
110	636.34	0.63969E 02	0.10096E 02	0.30986E-01	0.57840E-02	0.16191E 01	0.10883E 01	0.80000E-01	0.10000E 01
111	631.97	0.66895E 02	0.10445E 02	0.31954E-01	0.59646E-02	0.16751E 01	0.11260E 01	0.10000E-00	0.10000E 01
112	649.94	0.69238E 02	0.10969E 02	0.34008E-01	0.63480E-02	0.17590E 01	0.11824E 01	0.12000E-00	0.10000E 01
113	642.36	0.69038E 02	0.10931E 02	0.33698E-01	0.62901E-02	0.17529E 01	0.11783E 01	0.14000E-00	0.10000E 01
114-4157.13		0.51854E-02	-0.22246E-02	-0.16625E-05	-0.31033E-06	-0.35676E-03	-0.23981E-03	0.80000E-01	0.
115	629.27	0.63429E 02	0.99404E 01	0.30348E-01	0.56648E-02	0.15941E 01	0.10715E 01	0.10000E-00	0.10000E 01
116	627.47	0.64902E 02	0.10230E 02	0.31191E-01	0.58222E-02	0.16406E 01	0.11028E 01	0.12000E-00	0.10000E 01
117	598.08	0.66200E 02	0.10238E 02	0.30553E-01	0.57030E-02	0.16419E 01	0.11036E 01	0.14000E-00	0.10000E 01
118	621.52	0.58850E 02	0.92936E 01	0.28212E-01	0.52660E-02	0.14904E 01	0.10018E 01	0.10000E-00	0.10000E 01
119	596.30	0.10544E 03	0.16346E 02	0.48715E-01	0.90932E-02	0.26213E 01	0.17620E 01	0.15000E-00	0.10000E 01
120	618.90	0.56655E 02	0.89048E 01	0.26979E-01	0.50360E-02	0.14280E 01	0.95989E 00	0.20000E-00	0.10000E 01
121	632.16	0.57210E 02	0.90855E 01	0.27797E-01	0.51887E-02	0.14570E 01	0.97937E 00	0.25000E-00	0.10000E 01
122	618.86	0.54545E 02	0.86017E 01	0.26060E-01	0.48644E-02	0.13794E 01	0.92722E 00	0.30000E-00	0.10000E 01
123	626.20	0.56120E 02	0.89289E 01	0.27198E-01	0.50768E-02	0.14319E 01	0.96249E 00	0.35000E-00	0.10000E 01
124	616.27	0.56840E 02	0.90558E 01	0.27384E-01	0.51115E-02	0.14522E 01	0.97616E 00	0.38000E-00	0.10000E 01
125	633.29	0.59283E 02	0.96086E 01	0.29423E-01	0.54921E-02	0.15409E 01	0.10358E 01	0.45000E-00	0.10000E 01
126	623.16	0.54949E 02	0.89745E 01	0.27276E-01	0.50914E-02	0.14392E 01	0.96741E 00	0.61000E 00	0.10000E 01
127	580.16	0.30762E 02	0.49333E 01	0.14534E-01	0.27129E-02	0.79113E 00	0.53178E 00	0.70000E 00	0.10000E 01
128	558.53	0.13999E 02	0.22257E 01	0.64574E-02	0.12054E-02	0.35693E-00	0.23992E-00	0.75000E 00	0.10000E 01
129	607.63	0.45183E 02	0.73779E 01	0.22170E-01	0.41382E-02	0.11832E 01	0.79530E 00	0.70000E 00	0.10000E 01
130	610.10	0.46234E 02	0.75595E 01	0.22756E-01	0.42477E-02	0.12123E 01	0.81487E 00	0.80000E 00	0.10000E 01
131	586.78	0.18801E 02	0.28489E 01	0.83137E-02	0.15519E-02	0.45687E-00	0.30710E-00	0.90000E 00	0.10000E 01
132	600.11	0.42046E 02	0.65099E 01	0.19455E-01	0.36315E-02	0.10440E 01	0.70173E 00	0.90000E 00	0.10000E 01
133	601.53	0.42700E 02	0.65828E 01	0.19693E-01	0.36759E-02	0.10557E 01	0.70959E 00	0.96000E 00	0.10000E 01
134	598.75	0.40437E 02	0.62352E 01	0.18616E-01	0.34748E-02	0.99991E 00	0.67212E 00	0.10000E 01	0.10000E 01
135-4157.13		0.51654E-02	-0.23161E-02	-0.17324E-05	-0.32337E-06	-0.37174E-03	-0.24989E-03	0.70000E-02	0.
136	570.45	0.29199E 02	0.45533E 01	0.13322E-01	0.24867E-02	0.73019E 00	0.49082E-00	0.70000E-02	0.10000E 01
137	571.01	0.29587E 02	0.46833E 01	0.13700E-01	0.25587E-02	0.75104E 00	0.50484E 00	0.39000E-01	0.10000E 01
138	569.18	0.28949E 02	0.45554E 01	0.13316E-01	0.24856E-02	0.73053E 00	0.49105E-00	0.76000E-01	0.10000E 01
139-4157.13		0.51854E-02	-0.22882E-02	-0.17100E-05	-0.31920E-06	-0.36695E-03	-0.24666E-03	0.11700E-00	0.
140	568.31	0.29025E 02	0.45282E 01	0.13229E-01	0.24693E-02	0.72617E 00	0.48812E-00	0.78000E-01	0.10000E 01
141-4157.13		0.51854E-02	-0.15703E-02	-0.11736E-05	-0.21906E-06	-0.25183E-03	-0.16927E-03	-0.	0.
142-4157.13		0.51854E-02	-0.15703E-02	-0.11736E-05	-0.21906E-06	-0.25183E-03	-0.16927E-03	-0.	0.
143	571.92	0.36999E 02	0.57552E 01	0.16656E-01	0.31464E-02	0.92294E 00	0.62038E 00	0.78000E-01	0.10000E 01
144	570.09	0.36477E 02	0.56776E 01	0.16607E-01	0.30999E-02	0.91050E 00	0.61202E 00	0.70000E-02	0.10000E 01
145	569.40	0.31869E 02	0.49340E 01	0.14425E-01	0.26926E-02	0.79124E 00	0.53186E 00	0.70000E-02	0.10000E 01
146	559.11	0.31858E 02	0.49287E 01	0.14306E-01	0.26703E-02	0.79039E 00	0.53129E 00	0.39000E-01	0.10000E 01
147	932.93	-0.16779E-00	-0.31085E-01	-0.12273E-03	-0.22909E-04	-0.49850E-02	-0.33508E-02	0.78000E-01	0.
148	412.40	0.22395E 01	0.32000E-00	0.84245E-03	0.15725E-03	0.51317E-01	0.34494E-01	0.11700E-00	0.
149	615.85	0.54121E 02	0.89756E 01	0.27133E-01	0.50647E-02	0.14394E 01	0.96753E 00	0.70000E-02	0.10000E 01
150	617.83	0.55258E 02	0.92173E 01	0.27904E-01	0.52086E-02	0.14781E 01	0.99358E 00	0.70000E-02	0.10000E 01
151	620.90	0.57844E 02	0.96644E 01	0.29324E-01	0.54736E-02	0.15498E 01	0.10418E 01	0.70000E-02	0.10000E 01
152	627.67	0.66220E 02	0.11025E 02	0.33618E-01	0.62752E-02	0.17679E 01	0.11884E 01	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153-4157.13		0.51854E-02	-0.22882E-02	-0.17100E-05	-0.31920E-06	-0.36695E-03	-0.24666E-03	0.39000E-01	0.
154	632.75	0.71038E 02	0.11435E 02	0.35003E-01	0.65336E-02	0.18338E 01	0.12327E 01	0.78000E-01	0.10000E 01
155-4157.13		0.51854E-02	-0.23742E-02	-0.17743E-05	-0.33119E-06	-0.38074E-03	-0.25593E-03	0.39000E-01	0.
156-4157.13		0.51854E-02	-0.23667E-02	-0.17687E-05	-0.33015E-06	-0.37954E-03	-0.25512E-03	0.39000E-01	0.
157	617.80	0.56576E 02	0.94370E 01	0.28569E-01	0.53327E-02	0.15134E 01	0.10173E 01	0.78000E-01	0.10000E 01
158	603.47	0.58337E 02	0.96872E 01	0.29021E-01	0.54171E-02	0.15535E 01	0.10442E 01	0.39000E-01	0.10000E 01
159	608.74	0.50788E 02	0.84574E 01	0.25434E-01	0.47476E-02	0.13563E 01	0.91167E 00	0.78000E-01	0.10000E 01
160-4157.13		0.51854E-02	-0.23742E-02	-0.17743E-05	-0.33119E-06	-0.38074E-03	-0.25593E-03	0.39000E-01	0.
161	596.73	0.40576E 02	0.65343E 01	0.19480E-01	0.36362E-02	0.10479E 01	0.70436E 00	0.43000E-01	0.10000E 01
162	599.87	0.40469E 02	0.65492E 01	0.19569E-01	0.36528E-02	0.10503E 01	0.70597E 00	0.43000E-01	0.10000E 01
163	594.82	0.40275E 02	0.65106E 01	0.19383E-01	0.36180E-02	0.10441E 01	0.70181E 00	0.85000E-01	0.10000E 01
164	597.14	0.39827E 02	0.64151E 01	0.19131E-01	0.35709E-02	0.10288E 01	0.69152E 00	0.12800E-00	0.10000E 01
165	596.88	0.40667E 02	0.65706E 01	0.19591E-01	0.36568E-02	0.10537E 01	0.70828E 00	0.43000E-01	0.10000E 01
166	596.70	0.40269E 02	0.64847E 01	0.19332E-01	0.36085E-02	0.10399E 01	0.69902E 00	0.85000E-01	0.10000E 01
167	351.40	0.45942E 03	0.63967E 02	0.16217E-00	0.30271E-01	0.10258E 02	0.68953E 01	0.43000E-01	0.
168	600.36	0.40654E 02	0.66337E 01	0.19829E-01	0.37012E-02	0.10638E 01	0.71508E 00	0.12800E-00	0.10000E 01
169	599.39	0.40760E 02	0.66264E 01	0.19793E-01	0.36945E-02	0.10626E 01	0.71429E 00	0.85000E-01	0.10000E 01
170	603.60	0.41992E 02	0.67931E 01	0.20353E-01	0.37991E-02	0.10894E 01	0.73226E 00	0.12800E-00	0.10000E 01
171	599.85	0.41586E 02	0.67082E 01	0.20044E-01	0.37414E-02	0.10758E 01	0.72311E 00	0.85000E-01	0.10000E 01
172-4157.13		0.51854E-02	-0.23293E-02	-0.17408E-05	-0.32494E-06	-0.37354E-03	-0.25109E-03	0.43000E-01	0.
173	608.44	0.43089E 02	0.70390E 01	0.21164E-01	0.39505E-02	0.11288E 01	0.75877E 00	0.12800E-00	0.10000E 01
174-4157.13		0.51854E-02	-0.23256E-02	-0.17380E-05	-0.32441E-06	-0.37294E-03	-0.25069E-03	0.85000E-01	0.10000E 01
175	608.53	0.43632E 02	0.70711E 01	0.21262E-01	0.39688E-02	0.11340E 01	0.76223E 00	0.43000E-01	0.10000E 01
176	609.67	0.43704E 02	0.70870E 01	0.21327E-01	0.39810E-02	0.11365E 01	0.76394E 00	0.43000E-01	0.10000E 01
177	613.22	0.44737E 02	0.73034E 01	0.22036E-01	0.41132E-02	0.11712E 01	0.78727E 00	0.12800E-00	0.10000E 01
178	610.46	0.44061E 02	0.71710E 01	0.21592E-01	0.40305E-02	0.11500E 01	0.77299E 00	0.85000E-01	0.10000E 01
179	612.41	0.43965E 02	0.71628E 01	0.21599E-01	0.40316E-02	0.11487E 01	0.77212E 00	0.70000E-02	0.10000E 01
180-4157.13		0.51854E-02	-0.23368E-02	-0.17464E-05	-0.32598E-06	-0.37474E-03	-0.25190E-03	0.70000E-02	0.
181	604.18	0.42961E 02	0.70021E 01	0.20988E-01	0.39176E-02	0.11229E 01	0.75479E 00	0.70000E-02	0.10000E 01
182	273.76	-0.53301E 03	-0.71215E 02	-0.17245E-00	-0.32190E-01	-0.11420E 02	-0.76766E 01	0.70000E-02	0.
183	612.93	0.44375E 02	0.72433E 01	0.21849E-01	0.40784E-02	0.11616E 01	0.78079E 00	0.32000E-01	0.10000E 01
184	623.51	0.48901E 02	0.80784E 01	0.24559E-01	0.45842E-02	0.12955E 01	0.87081E 00	0.32000E-01	0.10000E 01
185	600.79	0.41623E 02	0.67934E 01	0.20312E-01	0.37915E-02	0.10894E 01	0.73229E 00	0.64000E-01	0.10000E 01
186	619.28	0.49805E 02	0.81833E 01	0.24800E-01	0.46292E-02	0.13123E 01	0.88211E 00	0.64000E-01	0.10000E 01
187	617.67	0.46856E 02	0.77168E 01	0.23359E-01	0.43602E-02	0.12375E 01	0.83183E 00	0.70000E-02	0.10000E 01
188	612.81	0.44675E 02	0.74557E 01	0.22488E-01	0.41977E-02	0.11956E 01	0.80369E 00	0.70000E-02	0.10000E 01
189	553.48	0.12143E 02	0.20022E 01	0.57885E-02	0.10805E-02	0.32108E-00	0.21583E-00	0.10600E 01	0.10000E 01
190	549.69	0.73652E 01	0.12361E 01	0.35641E-02	0.66528E-03	0.19822E-00	0.13324E-00	0.10840E 01	0.10000E 01
191	547.28	0.36234E 01	0.61057E 00	0.17576E-02	0.32807E-03	0.97914E-01	0.65816E-01	0.11080E 01	0.10000E 01
192	547.55	0.42005E 01	0.70410E 00	0.20272E-02	0.37840E-03	0.11291E-00	0.75899E-01	0.11080E 01	0.10000E 01
193	560.39	0.32156E 01	0.53468E 00	0.15533E-02	0.28994E-03	0.85745E-01	0.57636E-01	0.16580E 01	0.10000E 01
194	560.74	0.31808E 01	0.52657E 00	0.15301E-02	0.28561E-03	0.84443E-01	0.56761E-01	0.11700E 01	0.10000E 01
195	561.38	0.34561E 01	0.57499E 00	0.16716E-02	0.31202E-03	0.92209E-01	0.61961E-01	0.16740E 01	0.10000E 01
196	562.04	0.33917E 01	0.56189E 00	0.16342E-02	0.30505E-03	0.90107E-01	0.60569E-01	0.16950E 01	0.10000E 01

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3937-06
007 007

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
105	2	8.65	158.65	-0.03	-0.	1	C2	2.75	2	10.19	1852.00	1890.50	105	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.915436E 02	0.379057E-01	0.477555E 04	0.347407E-04	0.741504E-07	0.225248E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732003E 00	0.622485E 01	0.925471E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	598.35	0.49896E 02	0.67062E 01	0.20026E-01	0.37516E-02	0.10773E 01	0.72463E 00	-0.	0.10000E 01
2	599.20	0.48282E 02	0.69065E 01	0.20636E-01	0.38660E-02	0.11095E 01	0.74627E 00	-0.30000E-01	0.10000E 01
3	587.72	0.45819E 02	0.70823E 01	0.20987E-01	0.39318E-02	0.11377E 01	0.76526E 00	-0.60000E-01	0.10000E 01
4	588.02	0.43877E 02	0.69578E 01	0.20623E-01	0.38635E-02	0.11178E 01	0.75182E 00	-0.90000E-01	0.10000E 01
5	581.51	0.40960E 02	0.66370E 01	0.19580E-01	0.36682E-02	0.10662E 01	0.71714E 00	-0.20000E-00	0.10000E 01
6	579.17	0.37752E 02	0.61093E 01	0.17994E-01	0.33709E-02	0.98144E 00	0.66013E 00	-0.40000E-00	0.10000E 01
7	566.17	0.33081E 02	0.53408E 01	0.15586E-01	0.29199E-02	0.85798E 00	0.57709E 00	-0.60000E 00	0.10000E 01
8	574.23	0.30330E 02	0.49184E 01	0.14435E-01	0.27043E-02	0.79013E 00	0.53145E 00	-0.80000E 00	0.10000E 01
9	575.92	0.31079E 02	0.49647E 01	0.14589E-01	0.27330E-02	0.79756E 00	0.53645E 00	-0.90000E 00	0.10000E 01
10	575.22	0.28961E 02	0.46840E 01	0.13757E-01	0.25772E-02	0.75246E 00	0.50612E 00	-0.98000E 00	0.10000E 01
11	546.25	0.30130E 01	0.51990E 00	0.14962E-02	0.28030E-03	0.83521E-01	0.56177E-01	-0.11220E 01	0.10000E 01
12	550.53	0.37990E 01	0.55993E 00	0.16162E-02	0.30278E-03	0.89950E-01	0.60502E-01	-0.11890E 01	0.10000E 01
13	552.03	0.32748E 01	0.49802E-00	0.14390E-02	0.26958E-03	0.80004E-01	0.53812E-01	-0.13340E 01	0.10000E 01
14	541.02	0.28213E 01	0.48540E-00	0.13918E-02	0.26075E-03	0.77978E-01	0.52449E-01	-0.14400E 01	0.10000E 01
15-4157.13		0.51854E-02	-0.20564E-02	-0.15370E-05	-0.28794E-06	-0.33035E-03	-0.22220E-03	0.30000E-01	0.
16-4157.13		0.51854E-02	-0.22359E-02	-0.16711E-05	-0.31307E-06	-0.35918E-03	-0.24159E-03	0.60000E-01	0.
17	593.40	0.44968E 02	0.71516E 01	0.21279E-01	0.39865E-02	0.11489E 01	0.77276E 00	0.90000E-01	0.10000E 01
18	598.94	0.43353E 02	0.70914E 01	0.21185E-01	0.39688E-02	0.11392E 01	0.76624E 00	0.20000E-00	0.10000E 01
19	624.79	0.49301E 02	0.81760E 01	0.24891E-01	0.46631E-02	0.13134E 01	0.88344E 00	0.40000E-00	0.10000E 01
20-4157.13		0.51854E-02	-0.23630E-02	-0.17661E-05	-0.33087E-06	-0.37960E-03	-0.25533E-03	0.60000E 00	0.
21	632.05	0.58626E 02	0.92322E 01	0.28257E-01	0.52938E-02	0.14831E 01	0.99756E 00	0.92000E 00	0.10000E 01
22	593.06	0.38913E 02	0.60019E 01	0.17854E-01	0.33448E-02	0.96418E 00	0.64852E 00	0.10400E 01	0.10000E 01
23	588.73	0.34914E 02	0.53870E 01	0.15975E-01	0.29928E-02	0.86540E 00	0.58208E 00	0.10600E 01	0.10000E 01
24	570.67	0.23998E 02	0.38409E 01	0.11245E-01	0.21066E-02	0.61703E 00	0.41503E-00	0.10840E 01	0.10000E 01
25	547.58	0.29371E 01	0.43442E-00	0.12514E-02	0.23443E-03	0.69788E-01	0.46940E-01	0.12070E 01	0.10000E 01
26	549.01	0.27205E 01	0.42473E-00	0.12247E-02	0.22943E-03	0.68231E-01	0.45893E-01	0.12490E 01	0.10000E 01
27	548.18	0.27943E 01	0.42898E-00	0.12362E-02	0.23159E-03	0.68913E-01	0.46352E-01	0.13340E 01	0.10000E 01
28	549.89	0.24135E 01	0.41242E-00	0.11899E-02	0.22292E-03	0.66254E-01	0.44563E-01	0.14540E 01	0.10000E 01
29	551.00	0.25699E 01	0.42639E-00	0.12312E-02	0.23065E-03	0.68499E-01	0.46073E-01	0.16580E 01	0.10000E 01
30	550.15	0.27470E 01	0.46113E-00	0.13307E-02	0.24929E-03	0.74079E-01	0.49827E-01	0.20410E 01	0.10000E 01
31	553.26	0.26935E 01	0.45294E-00	0.13099E-02	0.24539E-03	0.72762E-01	0.48941E-01	0.22480E 01	0.10000E 01
32-4157.13		0.51854E-02	-0.22381E-02	-0.16728E-05	-0.31338E-06	-0.35954E-03	-0.24183E-03	-0.60000E-01	0.
33	600.86	0.47287E 02	0.67703E 01	0.20254E-01	0.37943E-02	0.10876E 01	0.73155E 00	-0.30000E-01	0.10000E 01
34-4157.13		0.51854E-02	-0.22381E-02	-0.16728E-05	-0.31338E-06	-0.35954E-03	-0.24183E-03	0.30000E-01	0.
35	589.38	0.43486E 02	0.69009E 01	0.20474E-01	0.38356E-02	0.11086E 01	0.74566E 00	0.60000E-01	0.10000E 01
36	576.10	0.32394E 02	0.52335E 01	0.15361E-01	0.28814E-02	0.84075E 00	0.56550E 00	-0.86800E 00	0.10000E 01
37	576.55	0.31385E 02	0.49347E 01	0.14507E-01	0.27178E-02	0.79275E 00	0.53321E 00	-0.91100E 00	0.10000E 01
38	576.37	0.31388E 02	0.50233E 01	0.14766E-01	0.27662E-02	0.80698E 00	0.54279E 00	-0.95300E 00	0.10000E 01
39	573.58	0.28494E 02	0.45678E 01	0.13400E-01	0.25104E-02	0.73379E 00	0.49356E-00	0.51000E-01	0.10000E 01
40-4157.13		0.51854E-02	-0.23369E-02	-0.17466E-05	-0.32720E-06	-0.37540E-03	-0.25250E-03	0.29000E-01	0.
41-4157.13		0.51854E-02	-0.23233E-02	-0.17365E-05	-0.32532E-06	-0.37324E-03	-0.25104E-03	0.70000E-02	0.
42	577.70	0.32967E 02	0.52968E 01	0.15584E-01	0.29196E-02	0.85091E 00	0.57233E 00	-0.86800E 00	0.10000E 01
43	575.46	0.31618E 02	0.50869E 01	0.14943E-01	0.27994E-02	0.81719E 00	0.54965E 00	-0.91100E 00	0.10000E 01
44	578.02	0.32291E 02	0.51726E 01	0.15222E-01	0.28517E-02	0.83096E 00	0.55891E 00	-0.95300E 00	0.10000E 01
45	550.67	0.93465E 01	0.15308E 01	0.44195E-02	0.82796E-03	0.24591E-00	0.16540E-00	-0.10400E 01	0.10000E 01
46-4157.13		0.51854E-02	-0.23428E-02	-0.17510E-05	-0.32804E-06	-0.37636E-03	-0.25315E-03	0.70000E-02	0.
47-4157.13		0.51854E-02	-0.23428E-02	-0.17510E-05	-0.32804E-06	-0.37636E-03	-0.25315E-03	0.29000E-01	0.
48	576.20	0.29235E 02	0.47234E 01	0.13883E-01	0.26008E-02	0.75880E 00	0.51038E 00	0.51000E-01	0.10000E 01
49	579.84	0.31383E 02	0.50321E 01	0.14828E-01	0.27779E-02	0.80839E 00	0.54374E 00	0.70000E-02	0.10000E 01
50	579.28	0.29880E 02	0.48050E 01	0.14153E-01	0.26515E-02	0.77190E 00	0.51919E 00	0.29000E-01	0.10000E 01
51-2558.69		-0.25708E 02	0.51384E 01	0.49697E-02	0.93103E-03	0.82546E 00	0.55522E 00	0.51000E-01	0.
52-4157.13		0.51854E-02	-0.23428E-02	-0.17510E-05	-0.32804E-06	-0.37636E-03	-0.25315E-03	-0.86800E 00	0.
53	579.04	0.31010E 02	0.50180E 01	0.14778E-01	0.27685E-02	0.80612E 00	0.54221E 00	-0.91100E 00	0.10000E 01
54	579.48	0.30986E 02	0.49674E 01	0.14634E-01	0.27415E-02	0.79800E 00	0.53675E 00	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	549.03	0.67210E 01	0.10996E 01	0.31707E-02	0.59401E-03	0.17665E-00	0.11882E-00	-0.10400E 01	0.10000E 01
56	545.92	0.33039E 01	0.55664E 00	0.16016E-02	0.30004E-03	0.89423E-01	0.60147E-01	-0.10680E 01	0.10000E 01
57	545.33	0.25865E 01	0.42231E-00	0.12146E-02	0.22754E-03	0.67842E-01	0.45632E-01	-0.10400E 01	0.10000E 01
58	548.23	0.56712E 01	0.10395E 01	0.29955E-02	0.56119E-03	0.16699E-00	0.11232E-00	-0.10680E 01	0.10000E 01
59	550.70	0.11092E 02	0.18166E 01	0.52440E-02	0.98241E-03	0.29182E-00	0.19628E-00	-0.10400E 01	0.10000E 01
60	545.86	0.53174E 01	0.89585E 00	0.25774E-02	0.48286E-03	0.14392E-00	0.96799E-01	-0.10680E 01	0.10000E 01
61	545.33	0.32556E 01	0.54125E 00	0.15567E-02	0.29163E-03	0.86951E-01	0.58484E-01	-0.11220E 01	0.10000E 01
62	552.13	0.38873E 01	0.59119E 00	0.17083E-02	0.32004E-03	0.94972E-01	0.63880E-01	-0.13340E 01	0.10000E 01
63	545.52	0.29906E 01	0.51084E 00	0.14837E-02	0.27797E-03	0.82868E-01	0.55738E-01	-0.11220E 01	0.10000E 01
64	551.72	0.32519E 01	0.49446E-00	0.14284E-02	0.26760E-03	0.79432E-01	0.53427E-01	-0.13340E 01	0.10000E 01
65	546.30	0.31865E 01	0.54986E 00	0.15825E-02	0.29646E-03	0.88333E-01	0.59414E-01	0.14400E 01	0.10000E 01
66	542.75	0.32660E 01	0.53528E 00	0.15367E-02	0.28789E-03	0.85991E-01	0.57838E-01	0.16130E 01	0.10000E 01
67	547.22	0.35418E 01	0.57120E 00	0.16449E-02	0.30816E-03	0.91761E-01	0.61720E-01	0.17200E 01	0.10000E 01
68	527.83	0.31527E 01	0.51633E 00	0.14671E-02	0.27486E-03	0.82947E-01	0.55791E-01	-0.16130E 01	0.10000E 01
69	550.01	0.37548E 01	0.60649E 00	0.17500E-02	0.32784E-03	0.97431E-01	0.65534E-01	-0.18280E 01	0.10000E 01
70	536.99	0.34171E 01	0.50070E 00	0.14317E-02	0.26822E-03	0.80436E-01	0.54102E-01	-0.11650E 01	0.10000E 01
71	546.73	0.15184E 01	0.12793E-00	0.36830E-03	0.68997E-04	0.20552E-01	0.13824E-01	-0.12050E 01	0.10000E 01
72	552.54	0.35164E 01	0.51261E 00	0.14817E-02	0.27758E-03	0.82350E-01	0.55390E-01	-0.12120E 01	0.10000E 01
73	547.89	0.32670E 01	0.48164E-00	0.13877E-02	0.25997E-03	0.77374E-01	0.52043E-01	-0.11650E 01	0.10000E 01
74	547.64	0.10546E 01	0.88895E-01	0.25607E-03	0.47973E-04	0.14281E-01	0.96054E-02	-0.12050E 01	0.10000E 01
75	537.29	0.35299E 01	0.50755E 00	0.14516E-02	0.27195E-03	0.81536E-01	0.54842E-01	-0.12120E 01	0.10000E 01
76	543.64	0.29870E 01	0.45062E-00	0.12945E-02	0.24251E-03	0.72390E-01	0.48691E-01	0.10840E 01	0.10000E 01
77	541.25	0.30738E 01	0.49716E-00	0.14258E-02	0.26711E-03	0.79866E-01	0.53719E-01	0.11220E 01	0.10000E 01
78	540.92	0.33434E 01	0.49771E-00	0.14271E-02	0.26735E-03	0.79956E-01	0.53780E-01	0.13340E 01	0.10000E 01
79	548.98	0.34904E 01	0.58872E 00	0.16975E-02	0.31800E-03	0.94576E-01	0.63613E-01	-0.11890E 01	0.10000E 01
80	544.33	0.33948E 01	0.51148E 00	0.14700E-02	0.27539E-03	0.82167E-01	0.55267E-01	-0.13340E 01	0.10000E 01
81	535.13	0.36987E 01	0.59618E 00	0.17026E-02	0.31896E-03	0.95774E-01	0.64419E-01	-0.11470E 01	0.10000E 01
82	548.99	0.36120E 01	0.60868E 00	0.17550E-02	0.32879E-03	0.97782E-01	0.65769E-01	-0.11890E 01	0.10000E 01
83	540.01	0.27907E 01	0.46792E-00	0.13408E-02	0.25118E-03	0.75169E-01	0.50560E-01	-0.10840E 01	0.10000E 01
84	549.37	0.35782E 01	0.52795E 00	0.15227E-02	0.28526E-03	0.84813E-01	0.57047E-01	-0.11890E 01	0.10000E 01
85	549.15	0.32369E 01	0.47754E-00	0.13770E-02	0.25798E-03	0.76714E-01	0.51599E-01	-0.13090E 01	0.10000E 01
86	553.40	0.33221E 01	0.49801E-00	0.14403E-02	0.26984E-03	0.80003E-01	0.53811E-01	-0.13340E 01	0.10000E 01
87	547.39	0.30140E 01	0.44346E-00	0.12772E-02	0.23927E-03	0.71240E-01	0.47917E-01	0.11990E 01	0.10000E 01
88	542.97	0.28239E 01	0.41802E-00	0.12002E-02	0.22486E-03	0.67153E-01	0.45168E-01	0.12070E 01	0.10000E 01
89	549.28	0.25649E 01	0.40263E-00	0.11611E-02	0.21753E-03	0.64680E-01	0.43505E-01	0.13340E 01	0.10000E 01
90	542.89	0.30208E 01	0.43191E-00	0.12401E-02	0.23231E-03	0.69384E-01	0.46669E-01	0.12070E 01	0.10000E 01
91	552.20	0.27226E 01	0.42581E-00	0.12305E-02	0.23052E-03	0.68405E-01	0.46010E-01	0.12490E 01	0.10000E 01
92	553.58	0.28317E 01	0.43100E-00	0.12467E-02	0.23356E-03	0.69239E-01	0.46571E-01	0.13340E 01	0.10000E 01
93	552.53	0.24681E 01	0.41986E-00	0.12136E-02	0.22735E-03	0.67449E-01	0.45367E-01	0.14900E 01	0.10000E 01
94	-4157.13	0.51854E-02	-0.15591E-02	-0.11653E-05	-0.21831E-06	-0.25047E-03	-0.16847E-03	-0.	0.
95	377.24	0.96624E-01	0.92672E-02	0.23878E-04	0.44733E-05	0.14887E-02	0.10014E-02	-0.	0.
96	-4157.13	0.51854E-02	-0.15591E-02	-0.11653E-05	-0.21831E-06	-0.25047E-03	-0.16847E-03	-0.	0.
97	-4157.13	0.51854E-02	-0.15591E-02	-0.11653E-05	-0.21831E-06	-0.25047E-03	-0.16847E-03	-0.	0.
98	-4157.13	0.51854E-02	-0.15703E-02	-0.11737E-05	-0.21988E-06	-0.25227E-03	-0.16968E-03	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
116	2	7.62	157.62	0.02	-0.	2	C2	2.70	2	10.19	1850.00	1901.60	116	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.921309E 02	0.378190E-01	0.479082E 04	0.344402E-04	0.746261E-07	0.222587E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732322E 00	0.622172E 01	0.924837E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	551.53	0.36140E 01	0.59249E 00	0.16949E-02	0.31928E-03	0.95229E-01	0.64064E-01	-0.10600E 01	0.10000E 01
100	554.51	0.19974E 01	0.33794E-00	0.96873E-03	0.18248E-03	0.54316E-01	0.36540E-01	-0.10840E 01	0.10000E 01
101	555.12	0.18634E 01	0.30846E-00	0.88461E-03	0.16664E-03	0.49578E-01	0.33353E-01	-0.11080E 01	0.10000E 01
102	554.92	0.18644E 01	0.30765E-00	0.88216E-03	0.16618E-03	0.49448E-01	0.33266E-01	-0.11080E 01	0.10000E 01
103	553.45	0.22281E 01	0.37674E-00	0.10792E-02	0.20328E-03	0.60552E-01	0.40736E-01	-0.10800E 01	0.10000E 01
104	-4157.09	0.10379E-01	-0.47074E-02	-0.35096E-05	-0.66111E-06	-0.75660E-03	-0.50899E-03	0.85000E 00	0.
105	635.75	0.64824E 02	0.10228E 02	0.31072E-01	0.58531E-02	0.16439E 01	0.11059E 01	0.94000E 00	0.10000E 01
106	642.63	0.66901E 02	0.10505E 02	0.32075E-01	0.60421E-02	0.16884E 01	0.11358E 01	0.96000E 00	0.10000E 01
107	612.67	0.63897E 02	0.98760E 01	0.29501E-01	0.55571E-02	0.15873E 01	0.10679E 01	0.98000E 00	0.10000E 01
108	609.63	0.59227E 02	0.91858E 01	0.27379E-01	0.51574E-02	0.14764E 01	0.99324E 00	0.10000E 01	0.10000E 01
109	615.31	0.47764E 02	0.74555E 01	0.22313E-01	0.42032E-02	0.11983E 01	0.80614E 00	0.10200E 01	0.10000E 01
110	634.66	0.60874E 02	0.95994E 01	0.29138E-01	0.54889E-02	0.15429E 01	0.10380E 01	0.80000E-01	0.10000E 01
111	630.74	0.63313E 02	0.98796E 01	0.29903E-01	0.56329E-02	0.15879E 01	0.10683E 01	0.10000E-00	0.10000E 01
112	648.14	0.65314E 02	0.10337E 02	0.31693E-01	0.59701E-02	0.16615E 01	0.11177E 01	0.12000E-00	0.10000E 01
113	639.69	0.64727E 02	0.10234E 02	0.31180E-01	0.58734E-02	0.16449E 01	0.11066E 01	0.14000E-00	0.10000E 01
114	-4157.09	0.10379E-01	-0.44529E-02	-0.33199E-05	-0.62537E-06	-0.71571E-03	-0.48148E-03	0.80000E-01	0.
115	629.01	0.60809E 02	0.95286E 01	0.28804E-01	0.54258E-02	0.15315E 01	0.10303E 01	0.10000E-00	0.10000E 01
116	627.44	0.62276E 02	0.98162E 01	0.29639E-01	0.55832E-02	0.15777E 01	0.10614E 01	0.12000E-00	0.10000E 01
117	597.13	0.63309E 02	0.97862E 01	0.28907E-01	0.54454E-02	0.15729E 01	0.10582E 01	0.14000E-00	0.10000E 01
118	621.05	0.57658E 02	0.91030E 01	0.27358E-01	0.51534E-02	0.14631E 01	0.98429E 00	0.10000E-00	0.10000E 01
119	594.13	0.98868E 02	0.15310E 02	0.45126E-01	0.85005E-02	0.24607E 01	0.16554E 01	0.15000E-00	0.10000E 01
120	623.03	0.55648E 02	0.87656E 01	0.26382E-01	0.49696E-02	0.14089E 01	0.94780E 00	0.20000E-00	0.10000E 01
121	631.73	0.56369E 02	0.89498E 01	0.27108E-01	0.51065E-02	0.14385E 01	0.96772E 00	0.25000E-00	0.10000E 01
122	618.96	0.54424E 02	0.85830E 01	0.25756E-01	0.48517E-02	0.13795E 01	0.92806E 00	0.30000E-00	0.10000E 01
123	626.15	0.56831E 02	0.90417E 01	0.27275E-01	0.51378E-02	0.14532E 01	0.97765E 00	0.35000E-00	0.10000E 01
124	616.54	0.57748E 02	0.92016E 01	0.27563E-01	0.51922E-02	0.14790E 01	0.99494E 00	0.38000E-00	0.10000E 01
125	633.78	0.61132E 02	0.99109E 01	0.30064E-01	0.56633E-02	0.15929E 01	0.10716E 01	0.45000E-00	0.10000E 01
126	622.46	0.58700E 02	0.95837E 01	0.28832E-01	0.54312E-02	0.15404E 01	0.10363E 01	0.61000E 00	0.10000E 01
127	584.12	0.33065E 02	0.53142E 01	0.15553E-01	0.29297E-02	0.85414E 00	0.57461E 00	0.70000E 00	0.10000E 01
128	565.55	0.14988E 02	0.23921E 01	0.69101E-02	0.13017E-02	0.38448E-00	0.25865E-00	0.75000E 00	0.10000E 01
129	606.49	0.50125E 02	0.81799E 01	0.24325E-01	0.45822E-02	0.13147E 01	0.88447E 00	0.70000E 00	0.10000E 01
130	609.09	0.51654E 02	0.84412E 01	0.25149E-01	0.47375E-02	0.13567E 01	0.91272E 00	0.80000E 00	0.10000E 01
131	571.26	0.22055E 02	0.33502E 01	0.97165E-02	0.18303E-02	0.53848E 00	0.36225E-00	0.90000E 00	0.10000E 01
132	597.60	0.47966E 02	0.74165E 01	0.21915E-01	0.41282E-02	0.11920E 01	0.80192E 00	0.90000E 00	0.10000E 01
133	599.26	0.49005E 02	0.75455E 01	0.22323E-01	0.42050E-02	0.12128E 01	0.81588E 00	0.96000E 00	0.10000E 01
134	597.59	0.47037E 02	0.72483E 01	0.21418E-01	0.40345E-02	0.11650E 01	0.78374E 00	0.10000E 01	0.10000E 01
135	-4157.09	0.10379E-01	-0.46400E-02	-0.34593E-05	-0.65165E-06	-0.74578E-03	-0.50171E-03	0.70000E-02	0.
136	574.41	0.33511E 02	0.52370E 01	0.15222E-01	0.28675E-02	0.84173E 00	0.56626E 00	0.70000E-02	0.10000E 01
137	577.53	0.34149E 02	0.54248E 01	0.15803E-01	0.29768E-02	0.87191E 00	0.58657E 00	0.39000E-01	0.10000E 01
138	576.34	0.33462E 02	0.52865E 01	0.15387E-01	0.28985E-02	0.84966E 00	0.57161E 00	0.78000E-01	0.10000E 01
139	-4157.09	0.10379E-01	-0.45801E-02	-0.34147E-05	-0.64324E-06	-0.73615E-03	-0.49524E-03	0.11700E-00	0.
140	577.07	0.33319E 02	0.52232E 01	0.15210E-01	0.28652E-02	0.83951E 00	0.56477E 00	0.78000E-01	0.10000E 01
141	-4157.09	0.10379E-01	-0.31432E-02	-0.23434E-05	-0.44144E-06	-0.50520E-03	-0.33987E-03	-0.	0.
142	-4157.09	0.10379E-01	-0.31432E-02	-0.23434E-05	-0.44144E-06	-0.50520E-03	-0.33987E-03	-0.	0.
143	575.42	0.31928E 02	0.49760E 01	0.14474E-01	0.27265E-02	0.79978E 00	0.53804E 00	0.78000E-01	0.10000E 01
144	578.06	0.35436E 02	0.55398E 01	0.16144E-01	0.30411E-02	0.89040E 00	0.59900E 00	0.70000E-02	0.10000E 01
145	578.30	0.32615E 02	0.50743E 01	0.14790E-01	0.27860E-02	0.81557E 00	0.54867E 00	0.70000E-02	0.10000E 01
146	569.60	0.33452E 02	0.52055E 01	0.15080E-01	0.28406E-02	0.83666E 00	0.56286E 00	0.39000E-01	0.10000E 01
147	970.11	-0.16260E 01	-0.30599E-00	-0.12373E-02	-0.23308E-03	-0.49182E-01	-0.33086E-01	0.78000E-01	0.
148	475.09	-0.20670E 01	-0.30678E-00	-0.83365E-03	-0.15704E-03	-0.49308E-01	-0.33171E-01	0.11700E-00	0.
149	611.40	0.59702E 02	0.98778E 01	0.29479E-01	0.55530E-02	0.15876E 01	0.10681E 01	0.70000E-02	0.10000E 01
150	615.86	0.58478E 02	0.97443E 01	0.29174E-01	0.54957E-02	0.15662E 01	0.10536E 01	0.70000E-02	0.10000E 01
151	615.56	0.54450E 02	0.90717E 01	0.27155E-01	0.51132E-02	0.14581E 01	0.98089E 00	0.70000E-02	0.10000E 01
152	620.49	0.56901E 02	0.91605E 01	0.27519E-01	0.51839E-02	0.14723E 01	0.99050E 00	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	-4157.09	0.10379E-01	-0.45801E-02	-0.34147E-05	-0.64324E-06	-0.73615E-03	-0.49524E-03	0.39000E-01	0.
154	623.80	0.56568E 02	0.90632E 01	0.27293E-01	0.51412E-02	0.14567E 01	0.97998E 00	0.78000E-01	0.10000E 01
155	-4157.09	0.10379E-01	-0.47523E-02	-0.35430E-05	-0.66741E-06	-0.76382E-03	-0.51385E-03	0.39000E-01	0.
156	-4157.09	0.10379E-01	-0.47373E-02	-0.35319E-05	-0.66531E-06	-0.76141E-03	-0.51223E-03	0.39000E-01	0.
157	609.17	0.52901E 02	0.87836E 01	0.26171E-01	0.49299E-02	0.14118E 01	0.94975E 00	0.78000E-01	0.10000E 01
158	593.72	0.55490E 02	0.91662E 01	0.27010E-01	0.50879E-02	0.14733E 01	0.99111E 00	0.39000E-01	0.10000E 01
159	599.96	0.55492E 02	0.91975E 01	0.27223E-01	0.51282E-02	0.14783E 01	0.99450E 00	0.78000E-01	0.10000E 01
160	-4157.09	0.10379E-01	-0.47523E-02	-0.35430E-05	-0.66741E-06	-0.76382E-03	-0.51385E-03	0.39000E-01	0.
161	597.13	0.47613E 02	0.76693E 01	0.22654E-01	0.42674E-02	0.12327E 01	0.82926E 00	0.43000E-01	0.10000E 01
162	599.86	0.47045E 02	0.76134E 01	0.22533E-01	0.42446E-02	0.12237E 01	0.82321E 00	0.43000E-01	0.10000E 01
163	594.74	0.46878E 02	0.75777E 01	0.22345E-01	0.42093E-02	0.12179E 01	0.81935E 00	0.85000E-01	0.10000E 01
164	596.18	0.46354E 02	0.74626E 01	0.22028E-01	0.41496E-02	0.11994E 01	0.80691E 00	0.12800E-00	0.10000E 01
165	596.27	0.47094E 02	0.76066E 01	0.22455E-01	0.42299E-02	0.12226E 01	0.82248E 00	0.43000E-01	0.10000E 01
166	595.54	0.46370E 02	0.74627E 01	0.22019E-01	0.41477E-02	0.11995E 01	0.80692E 00	0.85000E-01	0.10000E 01
167	-901.28	0.14046E 04	0.16369E 02	0.23840E-01	0.44909E-02	0.26310E 01	0.17700E 01	0.43000E-01	0.
168	599.69	0.46706E 02	0.76185E 01	0.22546E-01	0.42470E-02	0.12245E 01	0.82377E 00	0.12800E-00	0.10000E 01
169	598.37	0.46661E 02	0.75815E 01	0.22415E-01	0.42223E-02	0.12186E 01	0.81977E 00	0.85000E-01	0.10000E 01
170	602.31	0.47914E 02	0.77642E 01	0.23020E-01	0.43363E-02	0.12479E 01	0.83952E 00	0.12800E-00	0.10000E 01
171	598.21	0.47491E 02	0.76541E 01	0.22627E-01	0.42623E-02	0.12302E 01	0.82761E 00	0.85000E-01	0.10000E 01
172	-4157.09	0.10379E-01	-0.46625E-02	-0.34761E-05	-0.65480E-06	-0.74939E-03	-0.50414E-03	0.43000E-01	0.
173	607.43	0.48685E 02	0.79489E 01	0.23654E-01	0.44558E-02	0.12776E 01	0.85949E 00	0.12800E-00	0.10000E 01
174	-4157.09	0.10379E-01	-0.46550E-02	-0.34705E-05	-0.65375E-06	-0.74818E-03	-0.50333E-03	0.85000E-01	0.
175	608.39	0.49539E 02	0.80277E 01	0.23906E-01	0.45032E-02	0.12903E 01	0.86802E 00	0.43000E-01	0.10000E 01
176	609.51	0.49433E 02	0.80154E 01	0.23888E-01	0.44999E-02	0.12883E 01	0.86668E 00	0.43000E-01	0.10000E 01
177	612.11	0.50006E 02	0.81589E 01	0.24361E-01	0.45890E-02	0.13114E 01	0.88220E 00	0.12800E-00	0.10000E 01
178	610.38	0.49537E 02	0.80619E 01	0.24042E-01	0.45288E-02	0.12958E 01	0.87171E 00	0.85000E-01	0.10000E 01
179	611.58	0.49422E 02	0.80484E 01	0.24022E-01	0.45252E-02	0.12936E 01	0.87025E 00	0.70000E-02	0.10000E 01
180	-4157.09	0.10379E-01	-0.46774E-02	-0.34872E-05	-0.65690E-06	-0.75179E-03	-0.50576E-03	0.70000E-02	0.
181	605.86	0.49959E 02	0.81501E 01	0.24226E-01	0.45635E-02	0.13099E 01	0.88125E 00	0.70000E-02	0.10000E 01
182	14.00	0.52558E 04	0.57162E 03	0.11971E 01	0.22550E-00	0.91875E 02	0.61808E 02	0.70000E-02	0.
183	612.30	0.49185E 02	0.80257E 01	0.23967E-01	0.45147E-02	0.12899E 01	0.86779E 00	0.32000E-01	0.10000E 01
184	623.01	0.54195E 02	0.89508E 01	0.26939E-01	0.50745E-02	0.14386E 01	0.96782E 00	0.32000E-01	0.10000E 01
185	601.66	0.45918E 02	0.74979E 01	0.22220E-01	0.41856E-02	0.12051E 01	0.81073E 00	0.64000E-01	0.10000E 01
186	618.72	0.54698E 02	0.89845E 01	0.26956E-01	0.50777E-02	0.14440E 01	0.97146E 00	0.64000E-01	0.10000E 01
187	616.50	0.51423E 02	0.84637E 01	0.25352E-01	0.47757E-02	0.13603E 01	0.91516E 00	0.70000E-02	0.10000E 01
188	612.73	0.49755E 02	0.83030E 01	0.24803E-01	0.46722E-02	0.13345E 01	0.89778E 00	0.70000E-02	0.10000E 01
189	558.18	0.91564E 01	0.15137E 01	0.43501E-02	0.81944E-03	0.24329E-00	0.16367E-00	0.10600E 01	0.10000E 01
190	555.56	0.52748E 01	0.88814E 00	0.25478E-02	0.47993E-03	0.14275E-00	0.96032E-01	0.10840E 01	0.10000E 01
191	555.19	0.24151E 01	0.40876E-00	0.11723E-02	0.22083E-03	0.65698E-01	0.44198E-01	0.11080E 01	0.10000E 01
192	554.36	0.29434E 01	0.49526E-00	0.14196E-02	0.26741E-03	0.79601E-01	0.53551E-01	0.11080E 01	0.10000E 01
193	561.82	0.29855E 01	0.49681E-00	0.14314E-02	0.26964E-03	0.79851E-01	0.53719E-01	0.16580E 01	0.10000E 01
194	562.55	0.29745E 01	0.49292E-00	0.14209E-02	0.26766E-03	0.79225E-01	0.53298E-01	0.11700E 01	0.10000E 01
195	562.95	0.31107E 01	0.51797E 00	0.14935E-02	0.28134E-03	0.83252E-01	0.56006E-01	0.16740E 01	0.10000E 01
196	562.94	0.31481E 01	0.52178E 00	0.15045E-02	0.28341E-03	0.83865E-01	0.56419E-01	0.16950E 01	0.10000E 01

APOLLO M-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
121	2	7.64	157.64	0.02	-0.	3	C2	2.70	2	10.19	1851.30	1894.70	121	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.917638E 02	0.378732E-01	0.478128E 04	0.346276E-04	0.743287E-07	0.224245E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732123E 00	0.622368E 01	0.925233E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	586.10	0.42030E 02	0.66754E 01	0.19685E-01	0.36955E-02	0.10726E 01	0.72148E 00	0.10000E 01	0.10000E 01
198	591.70	0.42050E 02	0.64811E 01	0.19189E-01	0.36023E-02	0.10414E 01	0.70048E 00	0.12000E 01	0.10000E 01
199	560.10	0.20053E 02	0.32011E 01	0.92680E-02	0.17399E-02	0.51434E 00	0.34598E-00	0.13000E 01	0.10000E 01
200	555.76	0.11470E 01	0.16897E-00	0.48772E-03	0.91559E-04	0.27149E-01	0.18262E-01	0.11890E 01	0.10000E 01
201	561.86	0.16717E 01	0.28032E-00	0.81260E-03	0.15255E-03	0.45041E-01	0.30297E-01	0.14540E 01	0.10000E 01
202	556.37	0.17418E 01	0.28898E-00	0.83450E-03	0.15666E-03	0.46433E-01	0.31233E-01	0.17040E 01	0.10000E 01
203	557.81	0.22410E 01	0.37210E-00	0.10756E-02	0.20192E-03	0.59789E-01	0.40217E-01	0.20410E 01	0.10000E 01
204	557.10	-0.23376E-01	-0.18027E-02	-0.52084E-05	-0.97775E-06	-0.28965E-03	-0.19484E-03	0.20700E 01	0.
205	553.31	0.31481E-00	0.27675E-01	0.79748E-04	0.14971E-04	0.44467E-02	0.29911E-02	0.21880E 01	0.10000E 01
206	554.43	0.23688E 01	0.39258E-00	0.11321E-02	0.21253E-03	0.63079E-01	0.42431E-01	0.22480E 01	0.10000E 01
207	557.18	0.19938E 01	0.32536E-00	0.94007E-03	0.17648E-03	0.52277E-01	0.35165E-01	0.20700E 01	0.10000E 01
208	555.83	0.66078E 00	0.59313E-01	0.17121E-03	0.32142E-04	0.95302E-02	0.64106E-02	0.20700E 01	0.10000E 01
209	551.53	0.98130E 00	0.79568E-01	0.22900E-03	0.42989E-04	0.12785E-01	0.85997E-02	0.21880E 01	0.10000E 01
210	554.84	0.29600E 01	0.49443E-00	0.14262E-02	0.26775E-03	0.79443E-01	0.53438E-01	0.20700E 01	0.10000E 01
211	557.60	0.31896E 01	0.53360E 00	0.15422E-02	0.28951E-03	0.85737E-01	0.57672E-01	0.21880E 01	0.10000E 01
212	556.91	0.32042E 01	0.52931E 00	0.15291E-02	0.28705E-03	0.85048E-01	0.57208E-01	0.22390E 01	0.10000E 01
213	555.32	0.41351E 01	0.68249E 00	0.19694E-02	0.36971E-03	0.10966E-00	0.73764E-01	0.21880E 01	0.10000E 01
214	555.83	0.40779E 01	0.68154E 00	0.19674E-02	0.36933E-03	0.10951E-00	0.73661E-01	0.22480E 01	0.10000E 01
215	554.64	0.22665E 01	0.34345E-00	0.99060E-03	0.18596E-03	0.55165E-01	0.37121E-01	0.11650E 01	0.10000E 01
216-4	157.09	0.10379E-01	-0.24951E-02	-0.18632E-05	-0.34977E-06	-0.40091E-03	-0.26968E-03	0.12050E 01	0.
217	556.84	0.23444E 01	0.34557E-00	0.99822E-03	0.18739E-03	0.55524E-01	0.37349E-01	0.12120E 01	0.10000E 01
218	561.67	0.25413E 01	0.37753E-00	0.10943E-02	0.20542E-03	0.60661E-01	0.40804E-01	0.11890E 01	0.10000E 01
219	552.86	0.19460E 01	0.32893E-00	0.94755E-03	0.17788E-03	0.52852E-01	0.35551E-01	0.14540E 01	0.10000E 01
220	550.62	0.20514E 01	0.35952E-00	0.10341E-02	0.19412E-03	0.57767E-01	0.38858E-01	0.17040E 01	0.10000E 01
221	552.60	0.16883E 01	0.28380E-00	0.81738E-03	0.15344E-03	0.45600E-01	0.30673E-01	0.20410E 01	0.10000E 01
222	536.56	0.25813E 01	0.43457E-00	0.12378E-02	0.23237E-03	0.69525E-01	0.46968E-01	0.22480E 01	0.10000E 01
223	552.63	0.23642E 01	0.35785E-00	0.10307E-02	0.19349E-03	0.57498E-01	0.38677E-01	0.11650E 01	0.10000E 01
224	554.61	0.89351E 00	0.75613E-01	0.21808E-03	0.40940E-04	0.12149E-01	0.81723E-02	0.12050E 01	0.10000E 01
225	555.67	0.22312E 01	0.32866E-00	0.94861E-03	0.17808E-03	0.52808E-01	0.35522E-01	0.12120E 01	0.10000E 01
226	554.50	0.22525E 01	0.38246E-00	0.11030E-02	0.20706E-03	0.61453E-01	0.41337E-01	0.14540E 01	0.10000E 01
227	551.28	0.25195E 01	0.40980E-00	0.11792E-02	0.22137E-03	0.65845E-01	0.44291E-01	0.17040E 01	0.10000E 01
228	548.78	0.27548E 01	0.45651E-00	0.13113E-02	0.24618E-03	0.73351E-01	0.49340E-01	0.18780E 01	0.10000E 01
229	550.14	0.23049E 01	0.38400E-00	0.11041E-02	0.20727E-03	0.61700E-01	0.41503E-01	0.21880E 01	0.10000E 01
230	550.10	0.27423E 01	0.40757E-00	0.11718E-02	0.21998E-03	0.65486E-01	0.44050E-01	0.11890E 01	0.10000E 01
231	545.52	0.23470E 01	0.41727E-00	0.11959E-02	0.22450E-03	0.67045E-01	0.45099E-01	0.14540E 01	0.10000E 01
232	553.75	0.28177E 01	0.46465E-00	0.13393E-02	0.25143E-03	0.74658E-01	0.50220E-01	0.16130E 01	0.10000E 01
233	552.82	0.28571E 01	0.47454E-00	0.13669E-02	0.25661E-03	0.76247E-01	0.51288E-01	0.17040E 01	0.10000E 01
234	549.89	0.32135E 01	0.53529E 00	0.15388E-02	0.28886E-03	0.86009E-01	0.57855E-01	0.18780E 01	0.10000E 01
235	556.97	0.27044E 01	0.45158E-00	0.13046E-02	0.24491E-03	0.72559E-01	0.48808E-01	0.14540E 01	0.10000E 01
236	551.63	0.31403E 01	0.51723E 00	0.14887E-02	0.27947E-03	0.83108E-01	0.55903E-01	0.17040E 01	0.10000E 01
237	539.33	0.32805E 01	0.54324E 00	0.15503E-02	0.29103E-03	0.87285E-01	0.58713E-01	0.21880E 01	0.10000E 01
238	556.36	0.14712E 01	0.13209E-00	0.38145E-03	0.71608E-04	0.21224E-01	0.14277E-01	0.20700E 01	0.10000E 01
239	552.48	0.29823E 01	0.43853E-00	0.12629E-02	0.23709E-03	0.70462E-01	0.47397E-01	0.11890E 01	0.10000E 01
240	550.07	0.25751E 01	0.43459E-00	0.12495E-02	0.23456E-03	0.69829E-01	0.46971E-01	0.14540E 01	0.10000E 01
241	554.41	0.30686E 01	0.50855E 00	0.14665E-02	0.27531E-03	0.81712E-01	0.54964E-01	0.17040E 01	0.10000E 01
242	555.97	0.37704E 01	0.63019E 00	0.18193E-02	0.34153E-03	0.10126E-00	0.68111E-01	0.18780E 01	0.10000E 01
243	538.35	0.36764E 01	0.60845E 00	0.17352E-02	0.32575E-03	0.97763E-01	0.65762E-01	0.20410E 01	0.10000E 01
244	557.96	-0.98701E-01	-0.89955E-02	-0.26005E-04	-0.48819E-05	-0.14454E-02	-0.97224E-03	0.20700E 01	0.
245	557.27	0.32317E 01	0.26698E-00	0.77146E-03	0.14482E-03	0.42898E-01	0.28856E-01	0.21870E 01	0.10000E 01
246	553.20	0.37153E 01	0.63134E 00	0.18191E-02	0.34150E-03	0.10144E-00	0.68235E-01	0.22100E 01	0.10000E 01
247	561.13	0.25626E 01	0.42432E-00	0.12294E-02	0.23079E-03	0.68179E-01	0.45861E-01	0.14540E 01	0.10000E 01
248	552.03	0.28899E 01	0.48196E-00	0.13876E-02	0.26048E-03	0.77440E-01	0.52091E-01	0.17040E 01	0.10000E 01
249	554.75	0.72312E 00	0.61198E-01	0.17652E-03	0.33138E-04	0.98331E-02	0.66143E-02	0.18780E 01	0.10000E 01
250	559.10	0.93871E 00	0.77629E-01	0.22460E-03	0.42163E-04	0.12473E-01	0.83902E-02	0.21880E 01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	561.33	0.27569E 01	0.47059E-00	0.13637E-02	0.25600E-03	0.75613E-01	0.50862E-01	0.14540E 01	0.10000E 01
252	554.05	0.28868E 01	0.48828E-00	0.14077E-02	0.26427E-03	0.78455E-01	0.52774E-01	0.16130E 01	0.10000E 01
253	557.57	0.10394E-02	0.92492E-04	0.26732E-06	0.50182E-07	0.14861E-04	0.99967E-05	0.17060E 01	0.10000E 01
254	559.91	0.48395E 01	0.81064E 00	0.23467E-02	0.44054E-03	0.13025E-00	0.87615E-01	0.21880E 01	0.10000E 01
255	544.59	0.11044E 01	0.10219E-00	0.29271E-03	0.54949E-04	0.16420E-01	0.11045E-01	0.16580E 01	0.10000E 01
256	555.29	0.64312E 00	0.54444E-01	0.15710E-03	0.29492E-04	0.87479E-02	0.58844E-02	0.17920E 01	0.10000E 01
257	547.40	0.20712E 01	0.34977E-00	0.10037E-02	0.18843E-03	0.56199E-01	0.37803E-01	0.10840E 01	0.10000E 01
258	558.97	0.29507E 01	0.50676E 00	0.14660E-02	0.27522E-03	0.81425E-01	0.54771E-01	0.14540E 01	0.10000E 01
259	553.97	0.29190E 01	0.48734E-00	0.14049E-02	0.26375E-03	0.78304E-01	0.52672E-01	0.16130E 01	0.10000E 01
260	556.43	0.26400E 01	0.43466E-00	0.12552E-02	0.23564E-03	0.69839E-01	0.46978E-01	0.17040E 01	0.10000E 01
261	557.37	0.30005E 01	0.49961E-00	0.14437E-02	0.27103E-03	0.80276E-01	0.53998E-01	0.18780E 01	0.10000E 01
262	555.62	0.44514E 01	0.75744E 00	0.21861E-02	0.41040E-03	0.12170E-00	0.81865E-01	0.20410E 01	0.10000E 01
263	556.91	0.30930E 01	0.52824E 00	0.15260E-02	0.28647E-03	0.84876E-01	0.57093E-01	0.14540E 01	0.10000E 01
264	554.47	0.30218E 01	0.50235E 00	0.14487E-02	0.27197E-03	0.80716E-01	0.54294E-01	0.16130E 01	0.10000E 01
265	554.01	0.31034E 01	0.50554E 00	0.14575E-02	0.27361E-03	0.81229E-01	0.54639E-01	0.17040E 01	0.10000E 01
266	554.24	0.34530E 01	0.57395E 00	0.16550E-02	0.31068E-03	0.92221E-01	0.62034E-01	0.18780E 01	0.10000E 01
267	556.21	0.41891E 01	0.71091E 00	0.20527E-02	0.38534E-03	0.11423E-00	0.76835E-01	0.20410E 01	0.10000E 01
268	553.75	0.30483E 01	0.50655E 00	0.14601E-02	0.27410E-03	0.81391E-01	0.54748E-01	0.16130E 01	0.10000E 01
269	554.68	0.33138E 01	0.54001E 00	0.15576E-02	0.29240E-03	0.86767E-01	0.58365E-01	0.18280E 01	0.10000E 01
270	554.69	0.34270E 01	0.56717E 00	0.16359E-02	0.30710E-03	0.91131E-01	0.61300E-01	0.18780E 01	0.10000E 01
271	550.97	0.39574E 01	0.66823E 00	0.19224E-02	0.36089E-03	0.10737E-00	0.72223E-01	0.20410E 01	0.10000E 01
272	554.96	0.31143E 01	0.53130E 00	0.15327E-02	0.28774E-03	0.85368E-01	0.57424E-01	0.16130E 01	0.10000E 01
273	554.99	0.30878E 01	0.51739E 00	0.14926E-02	0.28021E-03	0.83132E-01	0.55920E-01	0.17200E 01	0.10000E 01
274	552.88	0.32478E 01	0.52709E 00	0.15184E-02	0.28504E-03	0.84690E-01	0.56968E-01	0.18280E 01	0.10000E 01
275	552.25	0.34655E 01	0.57363E 00	0.16517E-02	0.31008E-03	0.92169E-01	0.61999E-01	0.18780E 01	0.10000E 01
276	-4157.09	0.10379E-01	-0.49888E-02	-0.37252E-05	-0.69932E-06	-0.80158E-03	-0.53919E-03	0.20600E 01	0.
277	551.69	0.16109E 01	0.13610E-00	0.39174E-03	0.73541E-04	0.21868E-01	0.14710E-01	0.21000E 01	0.10000E 01
278	-4157.09	0.10379E-01	-0.24951E-02	-0.18632E-05	-0.34977E-06	-0.40091E-03	-0.26968E-03	0.21870E 01	0.
279	557.36	0.42208E 01	0.71889E 00	0.20774E-02	0.38998E-03	0.11551E-00	0.77698E-01	0.21950E 01	0.10000E 01
280	554.38	0.34857E 01	0.58652E 00	0.16913E-02	0.31751E-03	0.94239E-01	0.63391E-01	0.18780E 01	0.10000E 01
281	554.66	0.41491E 01	0.70562E 00	0.20352E-02	0.38206E-03	0.11338E-00	0.76264E-01	0.20600E 01	0.10000E 01
282	547.87	0.34109E 01	0.55805E 00	0.16020E-02	0.30074E-03	0.89666E-01	0.60314E-01	0.18280E 01	0.10000E 01
283	551.92	0.43465E 01	0.73432E 00	0.21139E-02	0.39685E-03	0.11799E-00	0.79366E-01	0.20600E 01	0.10000E 01
284	555.08	0.32784E 01	0.53437E 00	0.15417E-02	0.28943E-03	0.85861E-01	0.57756E-01	0.17200E 01	0.10000E 01
285	556.45	0.33486E 01	0.55558E 00	0.16045E-02	0.30120E-03	0.89269E-01	0.60048E-01	0.18780E 01	0.10000E 01
286	553.84	0.18639E 01	0.17336E-00	0.49975E-03	0.93816E-04	0.27856E-01	0.18737E-01	0.16580E 01	0.10000E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.15582E-05	-0.29251E-06	-0.54238E-04	-0.36484E-04	0.17920E 01	0.
288	552.46	0.28816E 01	0.47704E-00	0.13738E-02	0.25790E-03	0.76649E-01	0.51558E-01	0.16130E 01	0.10000E 01
289	555.04	0.18078E-00	0.15302E-01	0.44147E-04	0.82876E-05	0.24587E-02	0.16539E-02	0.17060E 01	0.10000E 01
290	551.86	0.76260E 00	0.64436E-01	0.18549E-03	0.34822E-04	0.10353E-01	0.69643E-02	0.18780E 01	0.10000E 01
291	553.35	0.27725E 01	0.45709E-00	0.13172E-02	0.24727E-03	0.73444E-01	0.49403E-01	0.17200E 01	0.10000E 01
292	546.19	0.23481E 01	0.40515E-00	0.11617E-02	0.21809E-03	0.65099E-01	0.43789E-01	0.14400E 01	0.10000E 01
293	553.58	0.33158E 01	0.54002E 00	0.15564E-02	0.29218E-03	0.86768E-01	0.58366E-01	0.17200E 01	0.10000E 01
294	554.34	0.40530E 01	0.67578E 00	0.19487E-02	0.36583E-03	0.10858E-00	0.73039E-01	0.18780E 01	0.10000E 01

CONFIDENTIAL

GROUP106

3937-06
009 009

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
106	2	11.65	161.65	-0.03	0.01	1	C2	2.75	2	10.19	1851.00	1892.10	106	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.916263E 02	0.378786E-01	0.477769E 04	0.346846E-04	0.742173E-07	0.224783E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732048E 00	0.622329E 01	0.525154E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	608.60	0.54126E 02	0.73147E 01	0.21975E-01	0.41216E-02	0.11754E 01	0.79065E 00	-0.	0.10000E 01
2-4157.13		0.51854E-02	-0.20564E-02	-0.15364E-05	-0.28817E-06	-0.33044E-03	-0.22228E-03	-0.30000E-01	0.
3	596.90	0.49794E 02	0.77349E 01	0.23041E-01	0.43215E-02	0.12429E 01	0.83607E 00	-0.60000E-01	0.10000E 01
4	597.36	0.47757E 02	0.76115E 01	0.22681E-01	0.42540E-02	0.12231E 01	0.82272E 00	-0.90000E-01	0.10000E 01
5	588.78	0.44125E 02	0.71780E 01	0.21258E-01	0.39871E-02	0.11534E 01	0.77588E 00	-0.20000E-00	0.10000E 01
6	587.19	0.40063E 02	0.65118E 01	0.19262E-01	0.36129E-02	0.10464E 01	0.70386E 00	-0.40000E-00	0.10000E 01
7	574.12	0.35340E 02	0.57304E 01	0.16794E-01	0.31499E-02	0.92080E 00	0.61940E 00	-0.60000E 00	0.10000E 01
8-4157.13		0.51854E-02	-0.23630E-02	-0.17655E-05	-0.33114E-06	-0.37970E-03	-0.25541E-03	-0.80000E 00	0.
9	582.49	0.33405E 02	0.53554E 01	0.15789E-01	0.29613E-02	0.86054E 00	0.57886E 00	-0.90000E 00	0.10000E 01
10	583.49	0.31130E 02	0.50576E 01	0.14921E-01	0.27986E-02	0.81269E 00	0.54668E 00	-0.98000E 00	0.10000E 01
11	553.95	0.26145E 01	0.45309E-00	0.13092E-02	0.24555E-03	0.72806E-01	0.48975E-01	-0.11220E 01	0.10000E 01
12	558.11	0.36260E 01	0.53669E 00	0.15552E-02	0.29170E-03	0.86239E-01	0.58011E-01	-0.11890E 01	0.10000E 01
13	557.70	0.26109E 01	0.39831E-00	0.11539E-02	0.21642E-03	0.64003E-01	0.43053E-01	-0.13340E 01	0.10000E 01
14	545.82	0.19501E 01	0.33642E-00	0.96658E-03	0.18129E-03	0.54059E-01	0.36364E-01	-0.14400E 01	0.10000E 01
15-4157.13		0.51854E-02	-0.20564E-02	-0.15364E-05	-0.28817E-06	-0.33044E-03	-0.22228E-03	0.30000E-01	0.
16-4157.13		0.51854E-02	-0.22359E-02	-0.16705E-05	-0.31332E-06	-0.35927E-03	-0.24167E-03	0.60000E-01	0.
17	602.42	0.48702E 02	0.77832E 01	0.23277E-01	0.43659E-02	0.12507E 01	0.84128E 00	0.90000E-01	0.10000E 01
18	607.59	0.45264E 02	0.74383E 01	0.22330E-01	0.41881E-02	0.11952E 01	0.80401E 00	0.20000E-00	0.10000E 01
19	631.42	0.48179E 02	0.80179E 01	0.24494E-01	0.45941E-02	0.12884E 01	0.86665E 00	0.40000E-00	0.10000E 01
20-4157.13		0.51854E-02	-0.23630E-02	-0.17655E-05	-0.33114E-06	-0.37970E-03	-0.25541E-03	0.60000E 00	0.
21	632.57	0.57088E 02	0.89924E 01	0.27495E-01	0.51569E-02	0.14450E 01	0.97199E 00	0.92000E 00	0.10000E 01
22	591.44	0.33530E 02	0.51672E 01	0.15332E-01	0.28756E-02	0.83030E 00	0.55852E 00	0.10400E 01	0.10000E 01
23	588.05	0.29545E 02	0.45723E 01	0.13533E-01	0.25383E-02	0.73470E 00	0.49422E-00	0.10600E 01	0.10000E 01
24	572.46	0.19700E 02	0.31562E 01	0.92389E-02	0.17329E-02	0.50716E 00	0.34115E-00	0.10840E 01	0.10000E 01
25	556.48	0.20587E 01	0.30601E-00	0.88574E-03	0.16613E-03	0.49171E-01	0.33076E-01	0.12070E 01	0.10000E 01
26	556.53	0.19294E 01	0.30248E-00	0.87555E-03	0.16422E-03	0.48604E-01	0.32695E-01	0.12490E 01	0.10000E 01
27	554.41	0.18535E 01	0.28554E-00	0.82530E-03	0.15479E-03	0.45882E-01	0.30864E-01	0.13340E 01	0.10000E 01
28	553.88	0.12961E 01	0.22197E-00	0.64133E-03	0.12029E-03	0.35668E-01	0.23993E-01	0.14540E 01	0.10000E 01
29	552.88	0.12805E 01	0.21269E-00	0.61408E-03	0.11518E-03	0.34176E-01	0.22989E-01	0.16580E 01	0.10000E 01
30	551.93	0.24426E 01	0.41044E-00	0.11842E-02	0.22212E-03	0.65952E-01	0.44364E-01	0.20410E 01	0.10000E 01
31	555.54	0.35091E 01	0.59083E 00	0.17090E-02	0.32055E-03	0.94939E-01	0.63863E-01	0.22480E 01	0.10000E 01
32-4157.13		0.51854E-02	-0.22381E-02	-0.16722E-05	-0.31364E-06	-0.35963E-03	-0.24192E-03	-0.60000E-01	0.
33	610.82	0.51332E 02	0.73868E 01	0.22233E-01	0.41700E-02	0.11873E 01	0.79866E 00	-0.30000E-01	0.10000E 01
34-4157.13		0.51854E-02	-0.22381E-02	-0.16722E-05	-0.31364E-06	-0.35963E-03	-0.24192E-03	0.30000E-01	0.
35	599.37	0.47660E 02	0.76043E 01	0.22692E-01	0.42561E-02	0.12219E 01	0.82195E 00	0.60000E-01	0.10000E 01
36	583.27	0.34659E 02	0.56214E 01	0.16582E-01	0.31101E-02	0.90328E 00	0.60762E 00	-0.86600E 00	0.10000E 01
37	584.33	0.33648E 02	0.53129E 01	0.15684E-01	0.29417E-02	0.85372E 00	0.57427E 00	-0.91100E 00	0.10000E 01
38	585.28	0.33933E 02	0.54571E 01	0.16120E-01	0.30236E-02	0.87686E 00	0.58986E 00	-0.95300E 00	0.10000E 01
39	580.33	0.31359E 02	0.50457E 01	0.14853E-01	0.27858E-02	0.81078E 00	0.54539E 00	0.51000E-01	0.10000E 01
40-4157.13		0.51854E-02	-0.23368E-02	-0.17460E-05	-0.32747E-06	-0.37549E-03	-0.25259E-03	0.29000E-01	0.
41-4157.13		0.51854E-02	-0.23233E-02	-0.17359E-05	-0.32559E-06	-0.37333E-03	-0.25113E-03	0.70000E-02	0.
42	584.97	0.35541E 02	0.57331E 01	0.16932E-01	0.31758E-02	0.92123E 00	0.61969E 00	-0.86800E 00	0.10000E 01
43	583.57	0.35088E 02	0.56701E 01	0.16730E-01	0.31378E-02	0.91112E 00	0.61289E 00	-0.91100E 00	0.10000E 01
44	594.85	0.44199E 02	0.71450E 01	0.21252E-01	0.39861E-02	0.11481E 01	0.77231E 00	-0.95300E 00	0.10000E 01
45	559.49	0.12099E 02	0.19910E 01	0.57753E-02	0.10832E-02	0.31993E-00	0.21521E-00	-0.10400E 01	0.10000E 01
46-4157.13		0.51854E-02	-0.23428E-02	-0.17504E-05	-0.32831E-06	-0.37646E-03	-0.25323E-03	0.70000E-02	0.
47-4157.13		0.51854E-02	-0.23428E-02	-0.17504E-05	-0.32831E-06	-0.37646E-03	-0.25323E-03	0.29000E-01	0.
48	583.59	0.32498E 02	0.52717E 01	0.15554E-01	0.29174E-02	0.84710E 00	0.56982E 00	0.51000E-01	0.10000E 01
49	587.96	0.34488E 02	0.55544E 01	0.16439E-01	0.30834E-02	0.89251E 00	0.60037E 00	0.70000E-02	0.10000E 01
50	587.62	0.32863E 02	0.53087E 01	0.15708E-01	0.29463E-02	0.85303E 00	0.57382E 00	0.29000E-01	0.10000E 01
51-2220.32		-0.62025E 01	0.94771E 00	0.98132E-03	0.18406E-03	0.15228E-00	0.10244E-00	0.51000E-01	0.
52-4157.13		0.51854E-02	-0.23428E-02	-0.17504E-05	-0.32831E-06	-0.37646E-03	-0.25323E-03	-0.86800E 00	0.
53	587.23	0.33650E 02	0.54695E 01	0.16180E-01	0.30347E-02	0.87888E 00	0.59120E 00	-0.91100E 00	0.10000E 01
54	588.37	0.34411E 02	0.55433E 01	0.16411E-01	0.30781E-02	0.89074E 00	0.59918E 00	-0.95300E 00	0.10000E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	557.80	0.74457E 01	0.12242E 01	0.35466E-02	0.66521E-03	0.19671E-00	0.13232E-00	-0.10400E 01	0.10000E 01
56	554.38	0.37179E 01	0.62936E 00	0.18190E-02	0.34118E-03	0.10113E-00	0.68028E-01	-0.10680E 01	0.10000E 01
57	551.18	0.30322E 01	0.49670E-00	0.14324E-02	0.26866E-03	0.79814E-01	0.53689E-01	-0.10400E 01	0.10000E 01
58	553.90	0.70899E 01	0.12592E 01	0.36382E-02	0.68238E-03	0.20234E-00	0.13611E-00	-0.10680E 01	0.10000E 01
59	556.97	0.12614E 02	0.20729E 01	0.60022E-02	0.11258E-02	0.33310E-00	0.22407E-00	-0.10400E 01	0.10000E 01
60	551.52	0.61434E 01	0.10383E 01	0.29949E-02	0.56173E-03	0.16684E-00	0.11223E-00	-0.10680E 01	0.10000E 01
61	550.98	0.30483E 01	0.50840E 00	0.14659E-02	0.27495E-03	0.81692E-01	0.54953E-01	-0.11220E 01	0.10000E 01
62	556.99	0.31823E 01	0.48529E-00	0.14052E-02	0.26356E-03	0.77980E-01	0.52455E-01	-0.13340E 01	0.10000E 01
63	553.24	0.26810E 01	0.46443E-00	0.13413E-02	0.25157E-03	0.74628E-01	0.50201E-01	-0.11220E 01	0.10000E 01
64	557.32	0.25844E 01	0.39418E-00	0.11416E-02	0.21412E-03	0.63340E-01	0.42607E-01	-0.13340E 01	0.10000E 01
65	550.53	0.23501E 01	0.40650E-00	0.11717E-02	0.21977E-03	0.65318E-01	0.43938E-01	0.14400E 01	0.10000E 01
66	546.51	0.23829E 01	0.39136E-00	0.11250E-02	0.21100E-03	0.62887E-01	0.42303E-01	0.16130E 01	0.10000E 01
67	551.34	0.30379E 01	0.49106E-00	0.14163E-02	0.26564E-03	0.78907E-01	0.53079E-01	0.17200E 01	0.10000E 01
68	551.76	0.21683E 01	0.35590E-00	0.10127E-02	0.18994E-03	0.57189E-01	0.38469E-01	-0.16130E 01	0.10000E 01
69	554.25	0.35283E 01	0.57125E 00	0.16509E-02	0.30965E-03	0.91793E-01	0.61747E-01	-0.18280E 01	0.10000E 01
70	544.97	0.30306E 01	0.44607E-00	0.12808E-02	0.24023E-03	0.71677E-01	0.48215E-01	-0.11650E 01	0.10000E 01
71	555.01	0.12125E 01	0.10263E-00	0.29675E-03	0.55659E-04	0.16491E-01	0.11093E-01	-0.12050E 01	0.10000E 01
72	552.71	0.32847E 01	0.48075E-00	0.13947E-02	0.26159E-03	0.77250E-01	0.51964E-01	-0.12120E 01	0.10000E 01
73	555.31	0.30930E 01	0.45787E-00	0.13242E-02	0.24837E-03	0.73574E-01	0.49492E-01	-0.11650E 01	0.10000E 01
74	555.88	0.87845E 00	0.74391E-01	0.21524E-03	0.40370E-04	0.11954E-01	0.80409E-02	-0.12050E 01	0.10000E 01
75	544.22	0.33008E 01	0.47646E-00	0.13674E-02	0.25647E-03	0.76561E-01	0.51500E-01	-0.12120E 01	0.10000E 01
76	549.47	0.34301E 01	0.51916E 00	0.14954E-02	0.28047E-03	0.83422E-01	0.56116E-01	0.10840E 01	0.10000E 01
77	547.32	0.26774E 01	0.43452E-00	0.12497E-02	0.23440E-03	0.69822E-01	0.46968E-01	0.11220E 01	0.10000E 01
78	546.16	0.25834E 01	0.38571E-00	0.11084E-02	0.20790E-03	0.61978E-01	0.41691E-01	0.13340E 01	0.10000E 01
79	554.92	0.33486E 01	0.56667E 00	0.16384E-02	0.30731E-03	0.91056E-01	0.61251E-01	-0.11890E 01	0.10000E 01
80	549.21	0.26000E 01	0.39280E-00	0.11312E-02	0.21217E-03	0.63118E-01	0.42458E-01	-0.13340E 01	0.10000E 01
81	540.66	0.33496E 01	0.54159E 00	0.15505E-02	0.29081E-03	0.87027E-01	0.58541E-01	-0.11470E 01	0.10000E 01
82	554.57	0.34203E 01	0.57817E 00	0.16713E-02	0.31347E-03	0.92904E-01	0.62494E-01	-0.11890E 01	0.10000E 01
83	544.98	0.31351E 01	0.52713E 00	0.15136E-02	0.28390E-03	0.84703E-01	0.56978E-01	-0.10840E 01	0.10000E 01
84	554.73	0.34764E 01	0.51446E 00	0.14873E-02	0.27896E-03	0.82667E-01	0.55608E-01	-0.11890E 01	0.10000E 01
85	554.01	0.29460E 01	0.43580E-00	0.12592E-02	0.23618E-03	0.70027E-01	0.47105E-01	-0.13090E 01	0.10000E 01
86	558.07	0.27512E 01	0.41349E-00	0.11982E-02	0.22473E-03	0.66443E-01	0.44695E-01	-0.13340E 01	0.10000E 01
87	556.67	0.21179E 01	0.31323E-00	0.90676E-03	0.17007E-03	0.50332E-01	0.33857E-01	0.11990E 01	0.10000E 01
88	552.25	0.19408E 01	0.28879E-00	0.83343E-03	0.15632E-03	0.46404E-01	0.31215E-01	0.12070E 01	0.10000E 01
89	555.20	0.15610E 01	0.23663E-00	0.68431E-03	0.12835E-03	0.38023E-01	0.25577E-01	0.13340E 01	0.10000E 01
90	551.92	0.20431E 01	0.29360E-00	0.84713E-03	0.15889E-03	0.47178E-01	0.31735E-01	0.12070E 01	0.10000E 01
91	559.59	0.18821E 01	0.29556E-00	0.85738E-03	0.16081E-03	0.47493E-01	0.31948E-01	0.12490E 01	0.10000E 01
92	559.69	0.17460E 01	0.26665E-00	0.77356E-03	0.14509E-03	0.42847E-01	0.28822E-01	0.13340E 01	0.10000E 01
93	555.78	0.13595E 01	0.23169E-00	0.67031E-03	0.12572E-03	0.37230E-01	0.25044E-01	0.14900E 01	0.10000E 01
94	-4157.13	0.51854E-02	-0.15591E-02	-0.11649E-05	-0.21849E-06	-0.25053E-03	-0.16853E-03	-0.	0.
95	408.00	0.46233E-01	0.45212E-02	0.11860E-04	0.22245E-05	0.72649E-03	0.48869E-03	-0.	0.
96	-4157.13	0.51854E-02	-0.15591E-02	-0.11649E-05	-0.21849E-06	-0.25053E-03	-0.16853E-03	-0.	0.
97	-4157.13	0.51854E-02	-0.15591E-02	-0.11649E-05	-0.21849E-06	-0.25053E-03	-0.16853E-03	-0.	0.
98	-4157.13	0.51854E-02	-0.15703E-02	-0.11733E-05	-0.22006E-06	-0.25233E-03	-0.16974E-03	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
117	2	11.65	161.65	0.02	-0.	2	C2	2.75	2	10.19	1850.30	1895.00	117	C2	2.75

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.917823E 02	0.378511E-01	0.478175E 04	0.346004E-04	0.743436E-07	0.224046E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732133E 00	0.622211E 01	0.924916E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
99	546.22	0.42379E 01	0.69272E 00	0.19857E-02	0.37303E-03	0.11133E-00	0.74895E-01	-0.10600E 01	0.10000E 01
100	548.12	0.21823E 01	0.36791E-00	0.10560E-02	0.19838E-03	0.59130E-01	0.39778E-01	-0.10840E 01	0.10000E 01
101	548.02	0.17210E 01	0.28378E-00	0.81448E-03	0.15301E-03	0.45608E-01	0.30681E-01	-0.11080E 01	0.10000E 01
102	548.30	0.18868E 01	0.31019E-00	0.89046E-03	0.16728E-03	0.49853E-01	0.33537E-01	-0.11080E 01	0.10000E 01
103	547.29	0.25694E 01	0.43296E-00	0.12420E-02	0.23332E-03	0.69584E-01	0.46811E-01	-0.10800E 01	0.10000E 01
104	-4157.13	0.51854E-02	-0.23518E-02	-0.17560E-05	-0.32987E-06	-0.37797E-03	-0.25427E-03	0.85000E 00	0.
105	633.52	0.59874E 02	0.94359E 01	0.28793E-01	0.54089E-02	0.15165E 01	0.10202E 01	0.94000E 00	0.10000E 01
106	638.02	0.61182E 02	0.95837E 01	0.29341E-01	0.55120E-02	0.15403E 01	0.10362E 01	0.96000E 00	0.10000E 01
107	606.98	0.57914E 02	0.89241E 01	0.26706E-01	0.50170E-02	0.14343E 01	0.96485E 00	0.98000E 00	0.10000E 01
108	599.48	0.52358E 02	0.80764E 01	0.24039E-01	0.45159E-02	0.12980E 01	0.87321E 00	0.10000E 01	0.10000E 01
109	602.77	0.40705E 02	0.63113E 01	0.18830E-01	0.35374E-02	0.10143E 01	0.68237E 00	0.10200E 01	0.10000E 01
110	632.90	0.56560E 02	0.89108E 01	0.27178E-01	0.51056E-02	0.14321E 01	0.96342E 00	0.80000E-01	0.10000E 01
111	628.42	0.58760E 02	0.91580E 01	0.27840E-01	0.52299E-02	0.14719E 01	0.99015E 00	0.10000E-00	0.10000E 01
112	642.69	0.60049E 02	0.94771E 01	0.29116E-01	0.54697E-02	0.15231E 01	0.10246E 01	0.12000E-00	0.10000E 01
113	631.79	0.58092E 02	0.91468E 01	0.27875E-01	0.52365E-02	0.14700E 01	0.98893E 00	0.14000E-00	0.10000E 01
114	-4157.13	0.51854E-02	-0.22246E-02	-0.16610E-05	-0.31204E-06	-0.35754E-03	-0.24052E-03	0.80000E-01	0.
115	627.30	0.56588E 02	0.88591E 01	0.26909E-01	0.50550E-02	0.14238E 01	0.95783E 00	0.10000E-00	0.10000E 01
116	625.07	0.57871E 02	0.91103E 01	0.27627E-01	0.51898E-02	0.14642E 01	0.98499E 00	0.12000E-00	0.10000E 01
117	592.31	0.58718E 02	0.90530E 01	0.26807E-01	0.50359E-02	0.14550E 01	0.97879E 00	0.14000E-00	0.10000E 01
118	621.65	0.53949E 02	0.85202E 01	0.25772E-01	0.48415E-02	0.13693E 01	0.92118E 00	0.10000E-00	0.10000E 01
119	589.97	0.66822E 02	0.10324E 02	0.30520E-01	0.57334E-02	0.16593E 01	0.11162E 01	0.15000E-00	0.10000E 01
120	616.71	0.52883E 02	0.83022E 01	0.25022E-01	0.47006E-02	0.13343E 01	0.89762E 00	0.20000E-00	0.10000E 01
121	630.06	0.53859E 02	0.85438E 01	0.26004E-01	0.48850E-02	0.13731E 01	0.92373E 00	0.25000E-00	0.10000E 01
122	618.29	0.52998E 02	0.83552E 01	0.25211E-01	0.47361E-02	0.13428E 01	0.90335E 00	0.30000E-00	0.10000E 01
123	624.53	0.54678E 02	0.86918E 01	0.26347E-01	0.49495E-02	0.13969E 01	0.93974E 00	0.35000E-00	0.10000E 01
124	614.97	0.55350E 02	0.88122E 01	0.26525E-01	0.49830E-02	0.14163E 01	0.95275E 00	0.38000E-00	0.10000E 01
125	630.55	0.57649E 02	0.93304E 01	0.28408E-01	0.53367E-02	0.14996E 01	0.10088E 01	0.45000E-00	0.10000E 01
126	621.68	0.56117E 02	0.91583E 01	0.27703E-01	0.52042E-02	0.14719E 01	0.99017E 00	0.61000E 00	0.10000E 01
127	577.87	0.29424E 02	0.47129E 01	0.13813E-01	0.25948E-02	0.75744E 00	0.50954E 00	0.70000E 00	0.10000E 01
128	559.05	0.12677E 02	0.20161E 01	0.58311E-02	0.10954E-02	0.32402E-00	0.21798E-00	0.75000E 00	0.10000E 01
129	608.32	0.48692E 02	0.79538E 01	0.23826E-01	0.44759E-02	0.12783E 01	0.85995E 00	0.70000E 00	0.10000E 01
130	609.73	0.50158E 02	0.81996E 01	0.24587E-01	0.46189E-02	0.13178E 01	0.88652E 00	0.80000E 00	0.10000E 01
131	566.59	0.20024E 02	0.30341E 01	0.88218E-02	0.16572E-02	0.48763E-00	0.32804E-00	0.90000E 00	0.10000E 01
132	600.72	0.47637E 02	0.73780E 01	0.21980E-01	0.41291E-02	0.11858E 01	0.79769E 00	0.90000E 00	0.10000E 01
133	601.32	0.48524E 02	0.74797E 01	0.22293E-01	0.41878E-02	0.12021E 01	0.80869E 00	0.96000E 00	0.10000E 01
134	598.82	0.46285E 02	0.71372E 01	0.21233E-01	0.39888E-02	0.11471E 01	0.77165E 00	0.10000E 01	0.10000E 01
135	-4157.13	0.51854E-02	-0.23181E-02	-0.17308E-05	-0.32515E-06	-0.37256E-03	-0.25063E-03	0.70000E-02	0.
136	580.90	0.35382E 02	0.55490E 01	0.16298E-01	0.30617E-02	0.89183E 00	0.59995E 00	0.70000E-02	0.10000E 01
137	582.91	0.36195E 02	0.57667E 01	0.16962E-01	0.31864E-02	0.92682E 00	0.62349E 00	0.39000E-01	0.10000E 01
138	590.85	0.35594E 02	0.56371E 01	0.16556E-01	0.31102E-02	0.90598E 00	0.60947E 00	0.78000E-01	0.10000E 01
139	-4157.13	0.51854E-02	-0.22882E-02	-0.17085E-05	-0.32095E-06	-0.36775E-03	-0.24740E-03	0.11700E-00	0.
140	583.12	0.35484E 02	0.55809E 01	0.16418E-01	0.30842E-02	0.89694E 00	0.60339E 00	0.78000E-01	0.10000E 01
141	-4157.13	0.51854E-02	-0.15703E-02	-0.11725E-05	-0.22026E-06	-0.25238E-03	-0.16978E-03	-0.	0.
142	-4157.13	0.51854E-02	-0.15703E-02	-0.11725E-05	-0.22026E-06	-0.25238E-03	-0.16978E-03	-0.	0.
143	580.68	0.34924E 02	0.54585E 01	0.16030E-01	0.30113E-02	0.87728E 00	0.59017E 00	0.78000E-01	0.10000E 01
144	585.19	0.38392E 02	0.60253E 01	0.17751E-01	0.33347E-02	0.96836E 00	0.65144E 00	0.70000E-02	0.10000E 01
145	585.08	0.35155E 02	0.54896E 01	0.16172E-01	0.30380E-02	0.88228E 00	0.59353E 00	0.70000E-02	0.10000E 01
146	576.64	0.37563E 02	0.58677E 01	0.17182E-01	0.32278E-02	0.94305E 00	0.63441E 00	0.39000E-01	0.10000E 01
147	1017.94	-0.36413E-00	-0.69889E-01	-0.29934E-03	-0.56233E-04	-0.11232E-01	-0.75563E-02	0.78000E-01	0.
148	535.04	-0.13106E 01	-0.20137E-00	-0.57280E-03	-0.10760E-03	-0.32363E-01	-0.21772E-01	0.11700E-00	0.
149	613.22	0.56475E 02	0.93529E 01	0.28117E-01	0.52820E-02	0.15032E 01	0.10112E 01	0.70000E-02	0.10000E 01
150	615.71	0.55017E 02	0.91669E 01	0.27608E-01	0.51864E-02	0.14733E 01	0.99110E 00	0.70000E-02	0.10000E 01
151	616.11	0.53139E 02	0.88558E 01	0.26670E-01	0.50118E-02	0.14233E 01	0.95747E 00	0.70000E-02	0.10000E 01
152	620.72	0.55580E 02	0.89490E 01	0.27051E-01	0.50817E-02	0.14383E 01	0.96755E 00	0.39000E-01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
153	-4157.13	0.51854E-02	-0.22882E-02	-0.17085E-05	-0.32095E-06	-0.36775E-03	-0.24740E-03	0.39000E-01	0.
154	623.55	0.54841E 02	0.87853E 01	0.26611E-01	0.49991E-02	0.14120E 01	0.94985E 00	0.78000E-01	0.10000E 01
155	-4157.13	0.51854E-02	-0.23742E-02	-0.17727E-05	-0.33302E-06	-0.38157E-03	-0.25669E-03	0.39000E-01	0.
156	-4157.13	0.51854E-02	-0.23667E-02	-0.17671E-05	-0.33197E-06	-0.38037E-03	-0.25588E-03	0.39000E-01	0.
157	610.50	0.49826E 02	0.82790E 01	0.24840E-01	0.46663E-02	0.13306E 01	0.89511E 00	0.78000E-01	0.10000E 01
158	-4157.13	0.51854E-02	-0.23817E-02	-0.17783E-05	-0.33406E-06	-0.38278E-03	-0.25750E-03	0.39000E-01	0.
159	605.38	0.54217E 02	0.90123E 01	0.26939E-01	0.50607E-02	0.14484E 01	0.97439E 00	0.78000E-01	0.10000E 01
160	-4157.13	0.51854E-02	-0.23742E-02	-0.17727E-05	-0.33302E-06	-0.38157E-03	-0.25669E-03	0.39000E-01	0.
161	604.08	0.47047E 02	0.76063E 01	0.22715E-01	0.42672E-02	0.12225E 01	0.82238E 00	0.43000E-01	0.10000E 01
162	606.26	0.46366E 02	0.75293E 01	0.22521E-01	0.42306E-02	0.12101E 01	0.81405E 00	0.43000E-01	0.10000E 01
163	600.06	0.46386E 02	0.75228E 01	0.22413E-01	0.42105E-02	0.12090E 01	0.81335E 00	0.85000E-01	0.10000E 01
164	602.36	0.45962E 02	0.74241E 01	0.22143E-01	0.41598E-02	0.11932E 01	0.80267E 00	0.12800E-00	0.10000E 01
165	602.46	0.46469E 02	0.75306E 01	0.22463E-01	0.42198E-02	0.12103E 01	0.81419E 00	0.43000E-01	0.10000E 01
166	600.97	0.45941E 02	0.74152E 01	0.22095E-01	0.41506E-02	0.11917E 01	0.80171E 00	0.85000E-01	0.10000E 01
167	-3821.68	-0.21263E 04	0.83203E 03	0.65090E 00	0.12228E-00	0.13372E 03	0.89958E 02	0.43000E-01	0.
168	604.19	0.46316E 02	0.75732E 01	0.22618E-01	0.42489E-02	0.12171E 01	0.81879E 00	0.12800E-00	0.10000E 01
169	602.97	0.46009E 02	0.74942E 01	0.22362E-01	0.42009E-02	0.12044E 01	0.81025E 00	0.85000E-01	0.10000E 01
170	606.34	0.47377E 02	0.76937E 01	0.23014E-01	0.43233E-02	0.12365E 01	0.83183E 00	0.12800E-00	0.10000E 01
171	602.08	0.46748E 02	0.75499E 01	0.22514E-01	0.42294E-02	0.12134E 01	0.81628E 00	0.85000E-01	0.10000E 01
172	-4157.13	0.51854E-02	-0.23293E-02	-0.17392E-05	-0.32672E-06	-0.37436E-03	-0.25184E-03	0.43000E-01	0.
173	609.80	0.47542E 02	0.77721E 01	0.23307E-01	0.43783E-02	0.12491E 01	0.84030E 00	0.12800E-00	0.10000E 01
174	-4157.13	0.51854E-02	-0.23256E-02	-0.17364E-05	-0.32620E-06	-0.37376E-03	-0.25144E-03	0.85000E-01	0.
175	612.64	0.48665E 02	0.79041E 01	0.23752E-01	0.44619E-02	0.12703E 01	0.85458E 00	0.43000E-01	0.10000E 01
176	613.51	0.48434E 02	0.78702E 01	0.23665E-01	0.44456E-02	0.12649E 01	0.85091E 00	0.43000E-01	0.10000E 01
177	613.88	0.48709E 02	0.79546E 01	0.23925E-01	0.44945E-02	0.12784E 01	0.86004E 00	0.12800E-00	0.10000E 01
178	612.77	0.48391E 02	0.78854E 01	0.23698E-01	0.44518E-02	0.12673E 01	0.85255E 00	0.85000E-01	0.10000E 01
179	616.37	0.47968E 02	0.78315E 01	0.23598E-01	0.44330E-02	0.12587E 01	0.84672E 00	0.70000E-02	0.10000E 01
180	-4157.13	0.51854E-02	-0.23368E-02	-0.17448E-05	-0.32777E-06	-0.37557E-03	-0.25265E-03	0.70000E-02	0.
181	611.13	0.48210E 02	0.78870E 01	0.23674E-01	0.44473E-02	0.12676E 01	0.85272E 00	0.70000E-02	0.10000E 01
182	-673.20	-0.13295E 04	-0.49620E 02	-0.78321E-01	-0.14713E-01	-0.79749E 01	-0.53649E 01	0.70000E-02	0.
183	614.56	0.47651E 02	0.77847E 01	0.23426E-01	0.44007E-02	0.12511E 01	0.84167E 00	0.32000E-01	0.10000E 01
184	622.54	0.51881E 02	0.85664E 01	0.25929E-01	0.48709E-02	0.13768E 01	0.92618E 00	0.32000E-01	0.10000E 01
185	598.70	0.43335E 02	0.70648E 01	0.21016E-01	0.39481E-02	0.11354E 01	0.76384E 00	0.64000E-01	0.10000E 01
186	617.58	0.52032E 02	0.85414E 01	0.25759E-01	0.48390E-02	0.13727E 01	0.92348E 00	0.64000E-01	0.10000E 01
187	619.52	0.49798E 02	0.82094E 01	0.24793E-01	0.46576E-02	0.13194E 01	0.88758E 00	0.70000E-02	0.10000E 01
188	616.06	0.48388E 02	0.80892E 01	0.24368E-01	0.45778E-02	0.13001E 01	0.87458E 00	0.70000E-02	0.10000E 01
189	552.77	0.94379E 01	0.15555E 01	0.44793E-02	0.84147E-03	0.25000E-00	0.16818E-00	0.10600E 01	0.10000E 01
190	549.65	0.53704E 01	0.90126E 00	0.25896E-02	0.48648E-03	0.14485E-00	0.97442E-01	0.10840E 01	0.10000E 01
191	548.31	0.24748E 01	0.41727E-00	0.11979E-02	0.22503E-03	0.67062E-01	0.45114E-01	0.11080E 01	0.10000E 01
192	548.31	0.30010E 01	0.50326E 00	0.14447E-02	0.27140E-03	0.80882E-01	0.54411E-01	0.11080E 01	0.10000E 01
193	553.40	0.16920E 01	0.28025E-00	0.80735E-03	0.15167E-03	0.45040E-01	0.30300E-01	0.16580E 01	0.10000E 01
194	553.72	0.17787E 01	0.29331E-00	0.84519E-03	0.15877E-03	0.47140E-01	0.31712E-01	0.11700E 01	0.10000E 01
195	554.02	0.17610E 01	0.29179E-00	0.84098E-03	0.15798E-03	0.46896E-01	0.31548E-01	0.16740E 01	0.10000E 01
196	555.34	0.17304E 01	0.28550E-00	0.82390E-03	0.15478E-03	0.45901E-01	0.30879E-01	0.16950E 01	0.10000E 01

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
122	2	11.63	161.63	-0.	-0.	3	C2	2.70	2	10.19	1849.10	1896.80	122	C2	2.70

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.918742E 02	0.378201E-01	0.478413E 04	0.345375E-04	0.744181E-07	0.223526E 01	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.732183E 00	0.622029E 01	0.924549E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
197	603.36	0.42286E 02	0.67789E 01	0.20202E-01	0.38001E-02	0.10898E 01	0.73322E 00	0.10000E 01	0.10000E 01
198	604.23	0.42804E 02	0.66418E 01	0.19806E-01	0.37256E-02	0.10678E 01	0.71838E 00	0.12000E 01	0.10000E 01
199	566.67	0.20664E 02	0.33107E 01	0.96120E-02	0.18081E-02	0.53224E 00	0.35809E-00	0.13000E 01	0.10000E 01
200	546.23	0.15553E 01	0.22790E-00	0.65232E-03	0.12271E-03	0.36639E-01	0.24650E-01	0.11890E 01	0.10000E 01
201	551.73	0.21117E 01	0.35212E-00	0.10117E-02	0.19031E-03	0.56608E-01	0.38085E-01	0.14540E 01	0.10000E 01
202	547.66	0.22857E 01	0.37738E-00	0.10812E-02	0.20339E-03	0.60670E-01	0.40818E-01	0.17040E 01	0.10000E 01
203	548.38	0.25657E 01	0.42378E-00	0.12148E-02	0.22851E-03	0.68129E-01	0.45837E-01	0.20410E 01	0.10000E 01
204	545.22	0.32209E-01	0.24674E-02	0.70576E-05	0.13276E-05	0.39667E-03	0.26688E-03	0.20700E 01	0.10000E 01
205	545.43	0.28832E-00	0.25235E-01	0.72189E-04	0.13579E-04	0.40569E-02	0.27294E-02	0.21880E 01	0.10000E 01
206	550.99	0.43481E 01	0.71922E 00	0.20654E-02	0.38852E-03	0.11563E-00	0.77792E-01	0.22480E 01	0.10000E 01
207	549.02	0.31886E 01	0.51797E 00	0.14854E-02	0.27942E-03	0.83272E-01	0.56025E-01	0.20700E 01	0.10000E 01
208	545.13	0.80883E 00	0.72170E-01	0.20641E-03	0.38828E-04	0.11602E-01	0.78060E-02	0.20700E 01	0.10000E 01
209	544.12	0.10878E 01	0.87838E-01	0.25105E-03	0.47224E-04	0.14121E-01	0.95007E-02	0.21880E 01	0.10000E 01
210	545.29	0.18639E 01	0.30968E-00	0.88582E-03	0.16663E-03	0.49786E-01	0.33496E-01	0.20700E 01	0.10000E 01
211	550.63	0.30805E 01	0.51336E 00	0.14738E-02	0.27724E-03	0.82529E-01	0.55525E-01	0.21880E 01	0.10000E 01
212	551.35	0.36379E 01	0.59911E 00	0.17209E-02	0.32372E-03	0.96316E-01	0.64801E-01	0.22390E 01	0.10000E 01
213	549.44	0.28073E 01	0.46182E-00	0.13248E-02	0.24920E-03	0.74245E-01	0.49951E-01	0.21880E 01	0.10000E 01
214	550.81	0.30571E 01	0.50951E 00	0.14630E-02	0.27520E-03	0.81911E-01	0.55109E-01	0.22480E 01	0.10000E 01
215	548.36	0.24286E 01	0.36673E-00	0.10512E-02	0.19774E-03	0.58957E-01	0.39666E-01	0.11650E 01	0.10000E 01
216	-4157.09	0.10379E-01	-0.24951E-02	-0.18623E-05	-0.35031E-06	-0.40113E-03	-0.26988E-03	0.12050E 01	0.
217	547.80	0.25314E 01	0.37126E-00	0.10638E-02	0.20011E-03	0.59685E-01	0.40155E-01	0.12120E 01	0.10000E 01
218	548.52	0.26649E 01	0.39302E-00	0.11267E-02	0.21194E-03	0.63183E-01	0.42509E-01	0.11890E 01	0.10000E 01
219	546.23	0.23117E 01	0.38931E-00	0.11143E-02	0.20961E-03	0.62587E-01	0.42108E-01	0.14540E 01	0.10000E 01
220	544.91	0.25881E 01	0.45212E-00	0.12929E-02	0.24321E-03	0.72685E-01	0.48902E-01	0.17040E 01	0.10000E 01
221	547.68	0.22384E 01	0.37524E-00	0.10751E-02	0.20224E-03	0.60326E-01	0.40587E-01	0.20410E 01	0.10000E 01
222	530.70	0.19236E 01	0.32278E-00	0.91406E-03	0.17194E-03	0.51891E-01	0.34912E-01	0.22480E 01	0.10000E 01
223	546.46	0.24545E 01	0.37026E-00	0.10599E-02	0.19938E-03	0.59524E-01	0.40047E-01	0.11650E 01	0.10000E 01
224	545.09	0.91533E 00	0.77049E-01	0.22036E-03	0.41451E-04	0.12387E-01	0.83337E-02	0.12050E 01	0.10000E 01
225	546.33	0.23995E 01	0.35162E-00	0.10065E-02	0.18933E-03	0.56527E-01	0.38031E-01	0.12120E 01	0.10000E 01
226	548.04	0.26255E 01	0.44419E-00	0.12730E-02	0.23946E-03	0.71410E-01	0.48044E-01	0.14540E 01	0.10000E 01
227	546.18	0.30577E 01	0.49592E-00	0.14194E-02	0.26700E-03	0.79726E-01	0.53639E-01	0.17040E 01	0.10000E 01
228	543.84	0.32104E 01	0.53054E 00	0.15161E-02	0.28518E-03	0.85292E-01	0.57384E-01	0.18780E 01	0.10000E 01
229	545.39	0.33777E 01	0.56123E 00	0.16054E-02	0.30199E-03	0.90225E-01	0.60703E-01	0.21880E 01	0.10000E 01
230	544.83	0.28182E 01	0.41761E-00	0.11941E-02	0.22463E-03	0.67136E-01	0.45169E-01	0.11890E 01	0.10000E 01
231	538.63	0.25538E 01	0.45228E-00	0.12878E-02	0.24224E-03	0.72710E-01	0.48919E-01	0.14540E 01	0.10000E 01
232	548.35	0.33117E 01	0.54447E 00	0.15607E-02	0.29358E-03	0.87532E-01	0.58891E-01	0.16130E 01	0.10000E 01
233	548.43	0.33740E 01	0.55902E 00	0.16025E-02	0.30144E-03	0.89870E-01	0.60464E-01	0.17040E 01	0.10000E 01
234	545.07	0.34587E 01	0.57459E 00	0.16433E-02	0.30912E-03	0.92374E-01	0.62148E-01	0.18780E 01	0.10000E 01
235	549.65	0.27200E 01	0.45234E-00	0.12978E-02	0.24412E-03	0.72720E-01	0.48925E-01	0.14540E 01	0.10000E 01
236	547.07	0.35361E 01	0.58096E 00	0.16638E-02	0.31297E-03	0.93397E-01	0.62837E-01	0.17040E 01	0.10000E 01
237	530.75	0.37101E 01	0.61141E 00	0.17315E-02	0.32570E-03	0.98293E-01	0.66131E-01	0.21880E 01	0.10000E 01
238	545.46	0.14182E 01	0.12656E-00	0.36207E-03	0.68107E-04	0.20347E-01	0.13689E-01	0.20700E 01	0.10000E 01
239	546.99	0.31231E 01	0.45783E-00	0.13111E-02	0.24663E-03	0.73602E-01	0.49519E-01	0.11890E 01	0.10000E 01
240	543.86	0.24665E 01	0.41483E-00	0.11854E-02	0.22298E-03	0.66690E-01	0.44868E-01	0.14540E 01	0.10000E 01
241	548.70	0.35273E 01	0.58271E 00	0.16707E-02	0.31427E-03	0.93679E-01	0.63027E-01	0.17040E 01	0.10000E 01
242	549.23	0.38275E 01	0.63734E 00	0.18280E-02	0.34386E-03	0.10246E-00	0.68935E-01	0.18780E 01	0.10000E 01
243	527.55	0.36743E 01	0.60441E 00	0.17079E-02	0.32127E-03	0.97167E-01	0.65373E-01	0.20410E 01	0.10000E 01
244	544.12	0.74806E-01	0.67654E-02	0.19336E-04	0.36373E-05	0.10876E-02	0.73175E-03	0.20700E 01	0.10000E 01
245	548.63	0.33486E 01	0.27531E-00	0.78933E-03	0.14848E-03	0.44260E-01	0.29778E-01	0.21870E 01	0.10000E 01
246	544.83	0.36234E 01	0.61284E 00	0.17524E-02	0.32964E-03	0.98523E-01	0.66285E-01	0.22100E 01	0.10000E 01
247	553.05	0.22878E 01	0.37712E-00	0.10845E-02	0.20401E-03	0.60628E-01	0.40790E-01	0.14540E 01	0.10000E 01
248	545.73	0.33382E 01	0.55477E 00	0.15874E-02	0.29859E-03	0.89188E-01	0.60005E-01	0.17040E 01	0.10000E 01
249	545.43	0.69624E 00	0.57776E-01	0.16528E-03	0.31090E-04	0.92883E-02	0.62491E-02	0.18780E 01	0.10000E 01
250	547.93	0.10255E 01	0.84278E-01	0.24151E-03	0.45429E-04	0.13549E-01	0.91155E-02	0.21880E 01	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
251	553.29	0.21382E 01	0.36336E-00	0.10451E-02	0.19659E-03	0.58415E-01	0.39301E-01	0.14540E 01	0.10000E 01
252	547.44	0.29304E 01	0.49384E-00	0.14147E-02	0.26611E-03	0.79392E-01	0.53414E-01	0.16130E 01	0.10000E 01
253	546.73	0.46739E-02	0.41340E-03	0.11837E-05	0.22265E-06	0.66459E-04	0.44713E-04	0.17060E 01	0.10000E 01
254	551.45	0.51158E 01	0.85292E 00	0.24501E-02	0.46088E-03	0.13712E-00	0.92253E-01	0.21880E 01	0.10000E 01
255	534.83	0.11839E 01	0.10895E-00	0.30941E-03	0.58201E-04	0.17515E-01	0.11784E-01	0.16560E 01	0.10000E 01
256	546.26	0.69819E 00	0.58809E-01	0.16833E-03	0.31664E-04	0.94544E-02	0.63608E-02	0.17920E 01	0.10000E 01
257	547.95	0.24920E 01	0.42095E-00	0.12063E-02	0.22692E-03	0.67674E-01	0.45531E-01	0.10840E 01	0.10000E 01
258	550.61	0.20026E 01	0.34234E-00	0.98286E-03	0.18488E-03	0.55036E-01	0.37028E-01	0.14540E 01	0.10000E 01
259	546.08	0.25855E 01	0.42976E-00	0.12300E-02	0.23136E-03	0.69090E-01	0.46483E-01	0.16130E 01	0.10000E 01
260	547.71	0.27932E 01	0.45766E-00	0.13113E-02	0.24666E-03	0.73575E-01	0.49501E-01	0.17040E 01	0.10000E 01
261	549.00	0.34961E 01	0.57943E 00	0.16617E-02	0.31257E-03	0.93151E-01	0.62671E-01	0.18780E 01	0.10000E 01
262	548.87	0.49288E 01	0.83552E 00	0.23959E-02	0.45067E-03	0.13432E-00	0.90371E-01	0.20410E 01	0.10000E 01
263	547.70	0.20499E 01	0.34830E-00	0.99795E-03	0.18772E-03	0.55994E-01	0.37672E-01	0.14540E 01	0.10000E 01
264	546.53	0.24925E 01	0.41252E-00	0.11810E-02	0.22215E-03	0.66318E-01	0.44618E-01	0.16130E 01	0.10000E 01
265	546.71	0.31912E 01	0.51773E 00	0.14824E-02	0.27884E-03	0.83232E-01	0.55998E-01	0.17040E 01	0.10000E 01
266	547.44	0.41652E 01	0.68972E 00	0.19758E-02	0.37166E-03	0.11088E-00	0.74600E-01	0.18780E 01	0.10000E 01
267	550.25	0.51699E 01	0.87444E 00	0.25099E-02	0.47212E-03	0.14058E-00	0.94581E-01	0.20410E 01	0.10000E 01
268	545.31	0.22094E 01	0.36541E-00	0.10452E-02	0.19661E-03	0.58745E-01	0.39523E-01	0.16130E 01	0.10000E 01
269	548.00	0.37553E 01	0.60969E 00	0.17472E-02	0.32867E-03	0.98017E-01	0.65945E-01	0.18280E 01	0.10000E 01
270	548.26	0.39771E 01	0.65586E 00	0.18799E-02	0.35362E-03	0.10544E-00	0.70939E-01	0.18780E 01	0.10000E 01
271	545.41	0.52005E 01	0.87542E 00	0.25043E-02	0.47107E-03	0.14074E-00	0.94686E-01	0.20410E 01	0.10000E 01
272	546.12	0.22852E 01	0.38794E-00	0.11103E-02	0.20885E-03	0.62367E-01	0.41960E-01	0.16130E 01	0.10000E 01
273	547.35	0.27906E 01	0.46561E-00	0.13337E-02	0.25088E-03	0.74853E-01	0.50361E-01	0.17200E 01	0.10000E 01
274	545.90	0.35823E 01	0.57912E 00	0.16572E-02	0.31173E-03	0.93101E-01	0.62638E-01	0.18280E 01	0.10000E 01
275	545.83	0.38530E 01	0.63550E 00	0.18185E-02	0.34206E-03	0.10217E-00	0.68736E-01	0.18780E 01	0.10000E 01
276	-4157.09	0.10379E-01	-0.49888E-02	-0.37234E-05	-0.70040E-06	-0.80201E-03	-0.53959E-03	0.20600E 01	0.
277	545.27	0.21236E 01	0.17878E-00	0.51137E-03	0.96192E-04	0.28741E-01	0.19337E-01	0.21000E 01	0.10000E 01
278	161.96	-0.26879E 03	-0.17588E 02	-0.39864E-01	-0.74987E-02	-0.28275E 01	-0.19023E 01	0.21870E 01	0.
279	552.01	0.63325E 01	0.10753E 01	0.30903E-02	0.58130E-03	0.17288E-00	0.11631E-00	0.21950E 01	0.10000E 01
280	547.90	0.39055E 01	0.65477E 00	0.18763E-02	0.35294E-03	0.10526E-00	0.70821E-01	0.18780E 01	0.10000E 01
281	549.59	0.52951E 01	0.89797E 00	0.25762E-02	0.48460E-03	0.14436E-00	0.97125E-01	0.20600E 01	0.10000E 01
282	541.25	0.37881E 01	0.61746E 00	0.17613E-02	0.33130E-03	0.99265E-01	0.66785E-01	0.18280E 01	0.10000E 01
283	546.59	0.51579E 01	0.86882E 00	0.24874E-02	0.46789E-03	0.13967E-00	0.93972E-01	0.20600E 01	0.10000E 01
284	545.99	0.31481E 01	0.51053E 00	0.14610E-02	0.27483E-03	0.82074E-01	0.55219E-01	0.17200E 01	0.10000E 01
285	547.91	0.35766E 01	0.59060E 00	0.16924E-02	0.31836E-03	0.94948E-01	0.63880E-01	0.18780E 01	0.10000E 01
286	544.89	0.18109E 01	0.16760E-00	0.47926E-03	0.90151E-04	0.26943E-01	0.18127E-01	0.16580E 01	0.10000E 01
287	1085.37	-0.31174E-02	-0.33756E-03	-0.15536E-05	-0.29225E-06	-0.54267E-04	-0.36511E-04	0.17920E 01	0.
288	544.94	0.28483E 01	0.46956E-00	0.13428E-02	0.25259E-03	0.75488E-01	0.50788E-01	0.16130E 01	0.10000E 01
289	544.03	0.31065E-00	0.26134E-01	0.74689E-04	0.14049E-04	0.42014E-02	0.28267E-02	0.17060E 01	0.10000E 01
290	543.02	0.84208E 00	0.70801E-01	0.20220E-03	0.38035E-04	0.11382E-01	0.76579E-02	0.18780E 01	0.10000E 01
291	545.48	0.28499E 01	0.46780E-00	0.13383E-02	0.25173E-03	0.75205E-01	0.50597E-01	0.17200E 01	0.10000E 01
292	541.03	0.24857E 01	0.42767E-00	0.12197E-02	0.22944E-03	0.68754E-01	0.46257E-01	0.14400E 01	0.10000E 01
293	546.60	0.34847E 01	0.56531E 00	0.16185E-02	0.30445E-03	0.90882E-01	0.61145E-01	0.17200E 01	0.10000E 01
294	546.31	0.39600E 01	0.65733E 00	0.18815E-02	0.35393E-03	0.10567E-00	0.71097E-01	0.18780E 01	0.10000E 01

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
159	3	-0.25	176.75	0.02	-0.	1	C2	2.90	2	10.05	249.90	1685.00	159	C2	2.90

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.824157E 02	0.548898E-02	0.447060E 04	0.558784E-05	0.667567E-07	0.376729E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726516E 00	0.190662E 01	0.214449E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	577.45	0.68898E 02	0.91558E 01	0.32507E-01	0.40445E-01	0.48021E 01	0.42694E 01	-0.	0.10000E 01
2	584.09	0.67212E 02	0.95363E 01	0.34053E-01	0.42368E-01	0.50017E 01	0.44469E 01	-0.30000E-01	0.10000E 01
3	573.92	0.60901E 02	0.93429E 01	0.33071E-01	0.41147E-01	0.49002E 01	0.43567E 01	-0.60000E-01	0.10000E 01
4	579.93	0.60565E 02	0.95621E 01	0.34022E-01	0.42330E-01	0.50152E 01	0.44589E 01	-0.90000E-01	0.10000E 01
5	-4157.12	0.51840E-02	-0.23511E-02	-0.18373E-05	-0.22860E-05	-0.12331E-02	-0.10964E-02	-0.20000E-00	0.
6	569.15	0.50768E 02	0.81707E 01	0.28804E-01	0.35838E-01	0.42854E 01	0.38101E 01	-0.40000E-00	0.
7	544.06	0.46530E 02	0.74203E 01	0.25612E-01	0.31866E-01	0.38919E 01	0.34602E 01	-0.60000E 00	0.10000E 01
8	530.19	0.42657E 02	0.67498E 01	0.23031E-01	0.28655E-01	0.35402E 01	0.31475E 01	-0.80000E 00	0.10000E 01
9	530.27	0.40485E 02	0.63049E 01	0.21515E-01	0.26768E-01	0.33069E 01	0.29401E 01	-0.90000E 00	0.10000E 01
10	540.87	0.36448E 02	0.57838E 01	0.19910E-01	0.24772E-01	0.30335E 01	0.26971E 01	-0.98000E 00	0.10000E 01
11	540.49	0.37725E 01	0.64886E 00	0.22330E-02	0.27782E-02	0.34032E-00	0.30257E-00	-0.11220E 01	0.10000E 01
12	547.92	0.37517E 01	0.55215E 00	0.19119E-02	0.23788E-02	0.28960E-00	0.25748E-00	-0.11890E 01	0.10000E 01
13	551.40	0.27579E 01	0.41927E-00	0.14560E-02	0.18116E-02	0.21990E-00	0.19551E-00	-0.13340E 01	0.10000E 01
14	591.70	-0.36318E-02	-0.64255E-03	-0.23096E-05	-0.28736E-05	-0.33701E-03	-0.29963E-03	-0.14400E 01	0.
15	571.84	0.65795E 02	0.92730E 01	0.32765E-01	0.40766E-01	0.48636E 01	0.43241E 01	0.30000E-01	0.10000E 01
16	563.78	0.59564E 02	0.90870E 01	0.31889E-01	0.39676E-01	0.47660E 01	0.42374E 01	0.60000E-01	0.10000E 01
17	557.53	0.54826E 02	0.85500E 01	0.29846E-01	0.37134E-01	0.44844E 01	0.39869E 01	0.90000E-01	0.10000E 01
18	557.56	0.54929E 02	0.87840E 01	0.30664E-01	0.38152E-01	0.46071E 01	0.40961E 01	0.20000E-00	0.10000E 01
19	569.56	0.49204E 02	0.79208E 01	0.27933E-01	0.34754E-01	0.41544E 01	0.36936E 01	0.40000E-00	0.10000E 01
20	569.10	0.38637E 02	0.62479E 01	0.22025E-01	0.27403E-01	0.32769E 01	0.29135E 01	0.60000E 00	0.10000E 01
21	563.60	0.25453E 02	0.38632E 01	0.13555E-01	0.16865E-01	0.20262E 01	0.18015E 01	0.92000E 00	0.10000E 01
22	544.05	0.55241E 01	0.82938E 00	0.28626E-02	0.35616E-02	0.43500E-00	0.38675E-00	0.10400E 01	0.10000E 01
23	541.97	0.46442E 01	0.69832E 00	0.24061E-02	0.29936E-02	0.36626E-00	0.32563E-00	0.10600E 01	0.10000E 01
24	541.50	0.43382E 01	0.68318E 00	0.23530E-02	0.29276E-02	0.35832E-00	0.31858E-00	0.10840E 01	0.10000E 01
25	547.51	0.26161E 01	0.38692E-00	0.13393E-02	0.16664E-02	0.20294E-00	0.18043E-00	0.12070E 01	0.10000E 01
26	549.19	0.21870E 01	0.34147E-00	0.11837E-02	0.14727E-02	0.17910E-00	0.15923E-00	0.12490E 01	0.10000E 01
27	550.04	0.20909E 01	0.32133E-00	0.11147E-02	0.13868E-02	0.16853E-00	0.14984E-00	0.13340E 01	0.10000E 01
28	591.70	-0.36318E-02	-0.63502E-03	-0.22826E-05	-0.28399E-05	-0.33306E-03	-0.29612E-03	0.14540E 01	0.
29	591.70	-0.36318E-02	-0.61620E-03	-0.22149E-05	-0.27558E-05	-0.32319E-03	-0.28734E-03	0.16580E 01	0.
30	591.70	-0.36318E-02	-0.62373E-03	-0.22420E-05	-0.27894E-05	-0.32714E-03	-0.29085E-03	0.20410E 01	0.
31	591.70	-0.36318E-02	-0.62373E-03	-0.22420E-05	-0.27894E-05	-0.32714E-03	-0.29085E-03	0.22480E 01	0.
32	810.51	-0.21144E-00	0.36579E-01	0.16263E-03	0.20234E-03	0.19185E-01	0.17057E-01	-0.60000E-01	0.
33	-4157.12	0.51840E-02	-0.20558E-02	-0.16066E-05	-0.19988E-05	-0.10783E-02	-0.95866E-03	-0.30000E-01	0.
34	836.05	0.90904E-01	0.15912E-01	0.72772E-04	0.90542E-04	0.83459E-02	0.74201E-02	0.30000E-01	0.
35	879.72	0.83103E-02	0.15202E-02	0.73108E-05	0.90960E-05	0.79732E-03	0.70888E-03	0.60000E-01	0.
36	530.28	0.42582E 02	0.67063E 01	0.22865E-01	0.28473E-01	0.35174E 01	0.31272E 01	-0.86800E 00	0.10000E 01
37	535.64	0.42047E 02	0.64625E 01	0.22150E-01	0.27559E-01	0.33895E 01	0.30135E 01	-0.91100E 00	0.10000E 01
38	535.37	0.38907E 02	0.60865E 01	0.20857E-01	0.25950E-01	0.31923E 01	0.28382E 01	-0.95300E 00	0.10000E 01
39	538.05	0.46792E 02	0.73546E 01	0.25259E-01	0.31426E-01	0.38574E 01	0.34295E 01	0.51000E-01	0.10000E 01
40	534.28	0.44763E 02	0.70208E 01	0.24037E-01	0.29906E-01	0.36823E 01	0.32759E 01	0.20000E-01	0.10000E 01
41	534.25	0.45261E 02	0.70579E 01	0.24163E-01	0.30064E-01	0.37018E 01	0.32912E 01	0.70000E-02	0.10000E 01
42	531.19	0.43522E 02	0.68142E 01	0.23270E-01	0.28952E-01	0.35739E 01	0.31775E 01	-0.86800E 00	0.10000E 01
43	531.94	0.40545E 02	0.63669E 01	0.21756E-01	0.27069E-01	0.33394E 01	0.29690E 01	-0.91100E 00	0.10000E 01
44	537.06	0.40287E 02	0.63084E 01	0.21648E-01	0.26934E-01	0.33087E 01	0.29417E 01	-0.95300E 00	0.10000E 01
45	532.03	0.12235E 02	0.19827E 01	0.67757E-02	0.84302E-02	0.10399E 01	0.92457E 00	-0.10400E 01	0.10000E 01
46	535.10	0.45795E 02	0.72044E 01	0.24682E-01	0.30709E-01	0.37786E 01	0.33595E 01	0.70000E-02	0.10000E 01
47	536.15	0.45094E 02	0.70983E 01	0.24340E-01	0.30283E-01	0.37230E 01	0.33100E 01	0.29000E-01	0.10000E 01
48	537.67	0.45648E 02	0.72191E 01	0.24785E-01	0.30837E-01	0.37863E 01	0.33663E 01	0.51000E-01	0.10000E 01
49	539.01	0.47595E 02	0.74609E 01	0.25644E-01	0.31906E-01	0.39131E 01	0.34791E 01	0.70000E-02	0.10000E 01
50	539.77	0.45967E 02	0.72320E 01	0.24873E-01	0.30946E-01	0.37931E 01	0.33723E 01	0.29000E-01	0.10000E 01
51	540.03	0.44745E 02	0.70181E 01	0.24143E-01	0.30038E-01	0.36809E 01	0.32726E 01	0.51000E-01	0.10000E 01
52	537.32	0.43915E 02	0.69173E 01	0.23742E-01	0.29540E-01	0.36280E 01	0.32256E 01	-0.86800E 00	0.10000E 01
53	537.89	0.42499E 02	0.67219E 01	0.23082E-01	0.28719E-01	0.35256E 01	0.31345E 01	-0.91100E 00	0.10000E 01
54	541.74	0.40224E 02	0.63152E 01	0.21755E-01	0.27068E-01	0.33122E 01	0.29448E 01	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	534.29	0.96005E 01	0.15578E 01	0.53335E-02	0.66359E-02	0.81706E 00	0.72643E 00	-0.10400E 01	0.10000E 01
56	534.96	0.53792E 01	0.90073E 00	0.30855E-02	0.38390E-02	0.47242E-00	0.42002E-00	-0.10680E 01	0.10000E 01
57	536.12	0.45512E 01	0.73926E 00	0.25348E-02	0.31538E-02	0.38773E-00	0.34472E-00	-0.10400E 01	0.10000E 01
58	534.15	0.87174E 01	0.15312E 01	0.52418E-02	0.65218E-02	0.80311E 00	0.71402E 00	-0.10680E 01	0.10000E 01
59	535.18	0.13556E 02	0.22008E 01	0.75405E-02	0.93818E-02	0.11543E 01	0.10263E 01	-0.10400E 01	0.10000E 01
60	533.87	0.74800E 01	0.12517E 01	0.42841E-02	0.53302E-02	0.65652E 00	0.58370E 00	-0.10680E 01	0.10000E 01
61	539.36	0.35247E 01	0.58403E 00	0.20080E-02	0.24983E-02	0.30632E-00	0.27234E-00	-0.11220E 01	0.10000E 01
62	550.30	0.30208E 01	0.45894E-00	0.15924E-02	0.19812E-02	0.24071E-00	0.21401E-00	-0.13340E 01	0.10000E 01
63	540.57	0.36203E 01	0.62271E 00	0.21431E-02	0.26664E-02	0.32660E-00	0.29037E-00	-0.11220E 01	0.10000E 01
64	551.51	0.29839E 01	0.45365E-00	0.15756E-02	0.19603E-02	0.23793E-00	0.21154E-00	-0.13340E 01	0.10000E 01
65	591.70	-0.36318E-02	-0.64255E-03	-0.23096E-05	-0.28736E-05	-0.33701E-03	-0.29963E-03	0.14400E 01	0.
66	591.70	-0.36318E-02	-0.61150E-03	-0.21980E-05	-0.27347E-05	-0.32072E-03	-0.28515E-03	0.16130E 01	0.
67	591.70	-0.36318E-02	-0.60021E-03	-0.21574E-05	-0.26843E-05	-0.31480E-03	-0.27988E-03	0.17200E 01	0.
68	591.70	-0.36318E-02	-0.61620E-03	-0.22149E-05	-0.27558E-05	-0.32319E-03	-0.28734E-03	-0.16130E 01	0.
69	591.70	-0.36318E-02	-0.60021E-03	-0.21574E-05	-0.26843E-05	-0.31480E-03	-0.27988E-03	-0.18280E 01	0.
70	545.86	0.39138E 01	0.57633E 00	0.19922E-02	0.24787E-02	0.30228E-00	0.26875E-00	-0.11650E 01	0.10000E 01
71	547.74	0.10036E 01	0.84608E-01	0.29293E-03	0.36446E-03	0.44376E-01	0.39454E-01	-0.12050E 01	0.10000E 01
72	550.61	0.35304E 01	0.51411E 00	0.17842E-02	0.22199E-02	0.26964E-00	0.23973E-00	-0.12120E 01	0.10000E 01
73	545.61	0.36151E 01	0.53227E 00	0.18396E-02	0.22887E-02	0.27917E-00	0.24821E-00	-0.11650E 01	0.10000E 01
74	547.47	0.58962E 00	0.49698E-01	0.17203E-03	0.21403E-03	0.26066E-01	0.23175E-01	-0.12050E 01	0.
75	550.16	0.34140E 01	0.49444E-00	0.17153E-02	0.21342E-02	0.25933E-00	0.23056E-00	-0.12120E 01	0.10000E 01
76	535.29	0.47008E 01	0.70584E 00	0.24186E-02	0.30092E-02	0.37020E-00	0.32914E-00	0.10840E 01	0.10000E 01
77	540.31	0.37740E 01	0.61010E 00	0.20992E-02	0.26119E-02	0.31999E-00	0.28450E-00	0.11220E 01	0.10000E 01
78	551.05	0.29512E 01	0.44182E-00	0.15339E-02	0.19085E-02	0.23173E-00	0.20603E-00	0.13340E 01	0.10000E 01
79	546.35	0.38203E 01	0.64341E 00	0.22250E-02	0.27683E-02	0.33746E-00	0.30003E-00	-0.11890E 01	0.10000E 01
80	550.66	0.30551E 01	0.46192E-00	0.16032E-02	0.19947E-02	0.24227E-00	0.21540E-00	-0.13340E 01	0.10000E 01
81	543.53	0.43408E 01	0.70298E 00	0.24253E-02	0.30176E-02	0.36871E-00	0.32781E-00	-0.11470E 01	0.10000E 01
82	546.25	0.37849E 01	0.63685E 00	0.22022E-02	0.27399E-02	0.33402E-00	0.29697E-00	-0.11890E 01	0.10000E 01
83	537.10	0.45543E 01	0.76238E 00	0.26162E-02	0.32551E-02	0.39986E-00	0.35550E-00	-0.10840E 01	0.10000E 01
84	591.70	-0.36318E-02	-0.54847E-03	-0.19715E-05	-0.24529E-05	-0.28767E-03	-0.25576E-03	-0.11890E 01	0.
85	548.83	0.31392E 01	0.46304E-00	0.16046E-02	0.19964E-02	0.24286E-00	0.21592E-00	-0.13090E 01	0.10000E 01
86	550.17	0.32374E 01	0.48444E-00	0.16806E-02	0.20910E-02	0.25408E-00	0.22590E-00	-0.13340E 01	0.10000E 01
87	546.27	0.26052E 01	0.38307E-00	0.13246E-02	0.16481E-02	0.20091E-00	0.17863E-00	0.11990E 01	0.10000E 01
88	546.73	0.24525E 01	0.36380E-00	0.12585E-02	0.15658E-02	0.19081E-00	0.16964E-00	0.12070E 01	0.10000E 01
89	550.28	0.21720E 01	0.32833E-00	0.11391E-02	0.14173E-02	0.17220E-00	0.15310E-00	0.13340E 01	0.10000E 01
90	547.21	0.26582E 01	0.38098E-00	0.13185E-02	0.16404E-02	0.19982E-00	0.17766E-00	0.12070E 01	0.10000E 01
91	549.49	0.23044E 01	0.35986E-00	0.12477E-02	0.15524E-02	0.18874E-00	0.16781E-00	0.12490E 01	0.10000E 01
92	550.29	0.21860E 01	0.33211E-00	0.11523E-02	0.14337E-02	0.17419E-00	0.15487E-00	0.13340E 01	0.10000E 01
93	591.70	-0.36318E-02	-0.63126E-03	-0.22690E-05	-0.28231E-05	-0.33109E-03	-0.29436E-03	0.14900E 01	0.
94	591.70	-0.36318E-02	-0.39230E-03	-0.14101E-05	-0.17544E-05	-0.20576E-03	-0.18293E-03	-0.	0.
95	591.70	-0.36318E-02	-0.39512E-03	-0.14203E-05	-0.17671E-05	-0.20724E-03	-0.18425E-03	-0.	0.
96	591.70	-0.36318E-02	-0.39230E-03	-0.14101E-05	-0.17544E-05	-0.20576E-03	-0.18293E-03	-0.	0.
97	591.70	-0.36318E-02	-0.39230E-03	-0.14101E-05	-0.17544E-05	-0.20576E-03	-0.18293E-03	-0.	0.
98	591.70	-0.36318E-02	-0.39512E-03	-0.14203E-05	-0.17671E-05	-0.20724E-03	-0.18425E-03	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
158	3	1.75	178.75	0.02	-0.	1	C2	2.85	2	10.05	252.90	1675.30	158	C2	2.85

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.818886E 02	0.555809E-02	0.445664E 04	0.569462E-05	0.663297E-07	0.385193E-00	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.726164E 00	0.192334E 01	0.216188E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	583.40	0.68553E 02	0.91395E 01	0.32930E-01	0.40328E-01	0.47519E 01	0.42276E 01	-0.	0.10000E 01
2	589.01	0.65550E 02	0.93253E 01	0.33765E-01	0.41351E-01	0.48485E 01	0.43135E 01	-0.30000E-01	0.10000E 01
3	578.25	0.62562E 02	0.96205E 01	0.34508E-01	0.42261E-01	0.50020E 01	0.44501E 01	-0.60000E-01	0.10000E 01
4	583.29	0.61616E 02	0.97458E 01	0.35111E-01	0.43000E-01	0.50671E 01	0.45080E 01	-0.90000E-01	0.10000E 01
5	-4157.12	0.51843E-02	-0.23513E-02	-0.18413E-05	-0.22550E-05	-0.12225E-02	-0.10876E-02	-0.20000E-00	0.
6	578.85	0.57784E 02	0.93495E 01	0.33554E-01	0.41092E-01	0.48611E 01	0.43247E 01	-0.40000E-00	0.10000E 01
7	550.87	0.53399E 02	0.85482E 01	0.29951E-01	0.36681E-01	0.44445E 01	0.39541E 01	-0.60000E 00	0.10000E 01
8	535.42	0.48752E 02	0.77369E 01	0.26759E-01	0.32771E-01	0.40227E 01	0.35788E 01	-0.80000E 00	0.10000E 01
9	534.74	0.45930E 02	0.71711E 01	0.24788E-01	0.30357E-01	0.37285E 01	0.33171E 01	-0.90000E 00	0.10000E 01
10	544.46	0.39753E 02	0.63209E 01	0.22027E-01	0.26976E-01	0.32864E 01	0.29238E 01	-0.98000E 00	0.10000E 01
11	533.77	0.38343E 01	0.65700E 00	0.22691E-02	0.27790E-02	0.34159E-00	0.30390E-00	-0.11220E 01	0.10000E 01
12	538.44	0.40525E 01	0.59326E 00	0.20570E-02	0.25192E-02	0.30845E-00	0.27442E-00	-0.11890E 01	0.10000E 01
13	542.05	0.31984E 01	0.48370E-00	0.16822E-02	0.20602E-02	0.25149E-00	0.22374E-00	-0.13340E 01	0.10000E 01
14	591.70	-0.31130E-02	-0.55076E-03	-0.19989E-05	-0.24480E-05	-0.28636E-03	-0.25476E-03	-0.14400E 01	0.
15	577.68	0.65395E 02	0.92461E 01	0.33149E-01	0.40597E-01	0.48073E 01	0.42769E 01	0.30000E-01	0.10000E 01
16	569.00	0.58984E 02	0.90245E 01	0.32113E-01	0.39328E-01	0.46921E 01	0.41744E 01	0.60000E-01	0.10000E 01
17	567.18	0.57997E 02	0.90929E 01	0.32305E-01	0.39564E-01	0.47277E 01	0.42060E 01	0.90000E-01	0.10000E 01
18	561.70	0.51711E 02	0.82884E 01	0.29309E-01	0.35894E-01	0.43094E 01	0.38339E 01	0.20000E-00	0.10000E 01
19	565.11	0.41085E 02	0.65976E 01	0.23398E-01	0.28656E-01	0.34303E 01	0.30518E 01	0.40000E-00	0.10000E 01
20	563.00	0.30909E 02	0.49814E 01	0.17635E-01	0.21597E-01	0.25900E 01	0.23042E 01	0.60000E 00	0.10000E 01
21	557.51	0.20319E 02	0.30736E 01	0.10830E-01	0.13263E-01	0.15981E 01	0.14217E 01	0.92000E 00	0.10000E 01
22	536.93	0.49543E 01	0.74085E 00	0.25655E-02	0.31419E-02	0.38519E-00	0.34269E-00	0.10400E 01	0.10000E 01
23	535.44	0.43481E 01	0.65140E 00	0.22529E-02	0.27591E-02	0.33868E-00	0.30131E-00	0.10600E 01	0.10000E 01
24	534.94	0.42140E 01	0.66119E 00	0.22858E-02	0.27994E-02	0.34377E-00	0.30584E-00	0.10840E 01	0.10000E 01
25	539.25	0.26000E 01	0.38276E-00	0.13280E-02	0.16264E-02	0.19901E-00	0.17705E-00	0.12070E 01	0.10000E 01
26	540.71	0.22499E 01	0.34962E-00	0.12145E-02	0.14874E-02	0.18178E-00	0.16172E-00	0.12490E 01	0.10000E 01
27	541.75	0.22213E 01	0.33979E-00	0.11814E-02	0.14469E-02	0.17666E-00	0.15717E-00	0.13340E 01	0.10000E 01
28	591.70	-0.31130E-02	-0.54431E-03	-0.19755E-05	-0.24193E-05	-0.28300E-03	-0.25178E-03	0.14540E 01	0.
29	591.70	-0.31130E-02	-0.52818E-03	-0.19169E-05	-0.23476E-05	-0.27462E-03	-0.24432E-03	0.16580E 01	0.
30	591.70	-0.31130E-02	-0.53463E-03	-0.19404E-05	-0.23763E-05	-0.27797E-03	-0.24730E-03	0.20410E 01	0.
31	591.70	-0.31130E-02	-0.53463E-03	-0.19404E-05	-0.23763E-05	-0.27797E-03	-0.24730E-03	0.22480E 01	0.
32	697.46	0.18442E-00	0.30214E-01	0.12092E-03	0.14809E-03	0.15709E-01	0.13976E-01	-0.60000E-01	0.
33	-4157.12	0.51843E-02	-0.20559E-02	-0.16100E-05	-0.19717E-05	-0.10689E-02	-0.95100E-03	-0.30000E-01	0.
34	624.65	0.62857E-01	0.99196E-02	0.37076E-04	0.45406E-04	0.51575E-02	0.45884E-02	0.30000E-01	0.10000E 01
35	515.23	0.37663E-00	0.57351E-01	0.19507E-03	0.23889E-03	0.29818E-01	0.26528E-01	0.60000E-01	0.
36	534.71	0.47135E 02	0.74419E 01	0.25723E-01	0.31502E-01	0.38693E 01	0.34423E 01	-0.86800E 00	0.10000E 01
37	540.32	0.44885E 02	0.69170E 01	0.24021E-01	0.29418E-01	0.35963E 01	0.31995E 01	-0.91100E 00	0.10000E 01
38	538.29	0.43253E 02	0.67775E 01	0.23497E-01	0.28776E-01	0.35238E 01	0.31350E 01	-0.95300E 00	0.10000E 01
39	541.68	0.51782E 02	0.81524E 01	0.28344E-01	0.34712E-01	0.42386E 01	0.37710E 01	0.51000E-01	0.10000E 01
40	538.19	0.49988E 02	0.78575E 01	0.27238E-01	0.33358E-01	0.40863E 01	0.36346E 01	0.29000E-01	0.10000E 01
41	538.15	0.50487E 02	0.78902E 01	0.27351E-01	0.33496E-01	0.41023E 01	0.36497E 01	0.70000E-02	0.10000E 01
42	535.63	0.47933E 02	0.75237E 01	0.26026E-01	0.31873E-01	0.39118E 01	0.34802E 01	-0.86800E 00	0.10000E 01
43	538.59	0.44912E 02	0.70673E 01	0.24446E-01	0.29939E-01	0.36745E 01	0.32691E 01	-0.91100E 00	0.10000E 01
44	539.73	0.44615E 02	0.69965E 01	0.24285E-01	0.29742E-01	0.36377E 01	0.32363E 01	-0.95300E 00	0.10000E 01
45	529.31	0.42375E 02	0.65037E 01	0.22571E-01	0.27627E-01	0.33858E 01	0.30113E 01	-0.10400E 01	0.10000E 01
46	538.25	0.50434E 02	0.79483E 01	0.27554E-01	0.33745E-01	0.41325E 01	0.36765E 01	0.70000E-02	0.10000E 01
47	539.08	0.50052E 02	0.78918E 01	0.27378E-01	0.33529E-01	0.41031E 01	0.36504E 01	0.29000E-01	0.10000E 01
48	540.27	0.50775E 02	0.80418E 01	0.27926E-01	0.34200E-01	0.41811E 01	0.37198E 01	0.51000E-01	0.10000E 01
49	542.33	0.50724E 02	0.79662E 01	0.27711E-01	0.33937E-01	0.41418E 01	0.36848E 01	0.70000E-02	0.10000E 01
50	542.45	0.49204E 02	0.77528E 01	0.26972E-01	0.33032E-01	0.40309E 01	0.35861E 01	0.29000E-01	0.10000E 01
51	541.90	0.47909E 02	0.75223E 01	0.26158E-01	0.32035E-01	0.39110E 01	0.34795E 01	0.51000E-01	0.10000E 01
52	539.96	0.46657E 02	0.73601E 01	0.25552E-01	0.31293E-01	0.38267E 01	0.34045E 01	-0.86800E 00	0.10000E 01
53	540.77	0.45183E 02	0.71580E 01	0.24867E-01	0.30455E-01	0.37217E 01	0.33110E 01	-0.91100E 00	0.10000E 01
54	542.93	0.42949E 02	0.67475E 01	0.23484E-01	0.28760E-01	0.35082E 01	0.31211E 01	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	530.27	0.11175E 02	0.18092E 01	0.62304E-02	0.76303E-02	0.94065E 00	0.83686E 00	-0.10400E 01	0.10000E 01
56	530.03	0.63429E 01	0.10591E 01	0.36467E-02	0.44660E-02	0.55067E 00	0.48991E-00	-0.10680E 01	0.10000E 01
57	529.80	0.52795E 01	0.85450E 00	0.29415E-02	0.36025E-02	0.44428E-00	0.39526E-00	-0.10400E 01	0.10000E 01
58	529.56	0.10078E 02	0.17656E 01	0.60765E-02	0.74418E-02	0.91800E 00	0.81671E 00	-0.10680E 01	0.10000E 01
59	530.63	0.15555E 02	0.25189E 01	0.86769E-02	0.10626E-01	0.13096E 01	0.11651E 01	-0.10400E 01	0.10000E 01
60	529.26	0.88566E 01	0.14782E 01	0.50865E-02	0.62293E-02	0.76858E 00	0.68378E 00	-0.10680E 01	0.10000E 01
61	532.89	0.38171E 01	0.63019E 00	0.21750E-02	0.26636E-02	0.32765E-00	0.29150E-00	-0.11220E 01	0.10000E 01
62	542.17	0.32488E 01	0.49135E-00	0.17090E-02	0.20930E-02	0.25547E-00	0.22728E-00	-0.13340E 01	0.10000E 01
63	533.26	0.36239E 01	0.62077E 00	0.21431E-02	0.26246E-02	0.32276E-00	0.28714E-00	-0.11220E 01	0.10000E 01
64	542.15	0.31340E 01	0.47398E-00	0.16486E-02	0.20190E-02	0.24644E-00	0.21925E-00	-0.13340E 01	0.10000E 01
65	591.70	-0.31130E-02	-0.55076E-03	-0.19989E-05	-0.24480E-05	-0.28636E-03	-0.25476E-03	0.14400E 01	0.
66	591.70	-0.31130E-02	-0.52415E-03	-0.19023E-05	-0.23297E-05	-0.27252E-03	-0.24245E-03	0.16130E 01	0.
67	591.70	-0.31130E-02	-0.51447E-03	-0.18672E-05	-0.22867E-05	-0.26749E-03	-0.23797E-03	0.17200E 01	0.
68	591.70	-0.31130E-02	-0.52818E-03	-0.19169E-05	-0.23476E-05	-0.27462E-03	-0.24432E-03	-0.16130E 01	0.
69	591.70	-0.31130E-02	-0.51447E-03	-0.18672E-05	-0.22867E-05	-0.26749E-03	-0.23797E-03	-0.18280E 01	0.
70	536.64	0.40805E 01	0.59779E 00	0.20696E-02	0.25346E-02	0.31081E-00	0.27651E-00	-0.11650E 01	0.10000E 01
71	537.01	0.11881E 01	0.99553E-01	0.34477E-03	0.42223E-03	0.51761E-01	0.46050E-01	-0.12050E 01	0.10000E 01
72	540.37	0.36800E 01	0.53283E 00	0.18505E-02	0.22662E-02	0.27703E-00	0.24647E-00	-0.12120E 01	0.10000E 01
73	536.64	0.39548E 01	0.57937E 00	0.20058E-02	0.24565E-02	0.30123E-00	0.26799E-00	-0.11650E 01	0.10000E 01
74	536.64	0.76001E 00	0.63671E-01	0.22043E-03	0.26996E-03	0.33104E-01	0.29452E-01	-0.12050E 01	0.10000E 01
75	540.43	0.36379E 01	0.52401E 00	0.18199E-02	0.22288E-02	0.27245E-00	0.24239E-00	-0.12120E 01	0.10000E 01
76	530.27	0.57283E 01	0.85769E 00	0.29537E-02	0.36173E-02	0.44593E-00	0.39673E-00	0.10840E 01	0.10000E 01
77	533.45	0.37356E 01	0.60155E 00	0.20771E-02	0.25438E-02	0.31276E-00	0.27826E-00	0.11220E 01	0.10000E 01
78	542.34	0.32681E 01	0.48689E-00	0.16937E-02	0.20743E-02	0.25315E-00	0.22522E-00	0.13340E 01	0.10000E 01
79	538.95	0.38052E 01	0.63822E 00	0.22138E-02	0.27112E-02	0.33183E-00	0.29521E-00	-0.11890E 01	0.10000E 01
80	542.45	0.33481E 01	0.50390E 00	0.17531E-02	0.21470E-02	0.26199E-00	0.23309E-00	-0.13340E 01	0.10000E 01
81	537.14	0.43512E 01	0.70214E 00	0.24319E-02	0.29783E-02	0.36506E-00	0.32478E-00	-0.11470E 01	0.10000E 01
82	539.23	0.40416E 01	0.67736E 00	0.23501E-02	0.28782E-02	0.35218E-00	0.31332E-00	-0.11890E 01	0.10000E 01
83	532.17	0.53621E 01	0.89510E 00	0.30874E-02	0.37811E-02	0.46539E-00	0.41404E-00	-0.10840E 01	0.10000E 01
84	591.70	-0.31130E-02	-0.47012E-03	-0.17062E-05	-0.20896E-05	-0.24443E-03	-0.21746E-03	-0.11890E 01	0.
85	542.84	0.34057E 01	0.50067E 00	0.17424E-02	0.21339E-02	0.26031E-00	0.23159E-00	-0.13090E 01	0.10000E 01
86	542.96	0.33008E 01	0.49194E-00	0.17122E-02	0.20969E-02	0.25577E-00	0.22755E-00	-0.13340E 01	0.10000E 01
87	538.20	0.25938E 01	0.37966E-00	0.13161E-02	0.16119E-02	0.19740E-00	0.17562E-00	0.11990E 01	0.10000E 01
88	538.59	0.24810E 01	0.36636E-00	0.12705E-02	0.15559E-02	0.19048E-00	0.16947E-00	0.12070E 01	0.10000E 01
89	542.11	0.21231E 01	0.31948E-00	0.11112E-02	0.13608E-02	0.16611E-00	0.14778E-00	0.13340E 01	0.10000E 01
90	539.15	0.27262E 01	0.38898E-00	0.13495E-02	0.16527E-02	0.20224E-00	0.17993E-00	0.12070E 01	0.10000E 01
91	541.07	0.23158E 01	0.35995E-00	0.12508E-02	0.15318E-02	0.18715E-00	0.16650E-00	0.12490E 01	0.10000E 01
92	542.03	0.22156E 01	0.33506E-00	0.11652E-02	0.14271E-02	0.17421E-00	0.15498E-00	0.13340E 01	0.10000E 01
93	591.70	-0.31130E-02	-0.54108E-03	-0.19638E-05	-0.24050E-05	-0.28132E-03	-0.25028E-03	0.14900E 01	0.
94	591.70	-0.31130E-02	-0.53626E-03	-0.12204E-05	-0.14946E-05	-0.17483E-03	-0.15554E-03	-0.	0.
95	591.70	-0.31130E-02	-0.53868E-03	-0.12292E-05	-0.15054E-05	-0.17609E-03	-0.15666E-03	-0.	0.
96	591.70	-0.31130E-02	-0.53626E-03	-0.12204E-05	-0.14946E-05	-0.17483E-03	-0.15554E-03	-0.	0.
97	591.70	-0.31130E-02	-0.53626E-03	-0.12204E-05	-0.14946E-05	-0.17483E-03	-0.15554E-03	-0.	0.
98	591.70	-0.31130E-02	-0.53868E-03	-0.12292E-05	-0.15054E-05	-0.17609E-03	-0.15666E-03	-0.	0.

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)
171	3	-0.24	176.76	0.02	-0.	1	C2	2.85	2	10.20	~~0100.00~~ 580	~~1297.00~~ 1315

GRP	CONFIG	TIME
171	C2	2.85

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.844720E 02	0.500518E-01	0.459280E 04	0.497129E-04	0.684223E-07	~~0.3868448E-01~~ 0.80	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.727848E 00	0.647066E 01	0.107484E 02

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	566.69	0.26769E 02	0.35364E 01	0.11627E-01	0.15827E-02	0.54653E 00	0.32902E-00	-0.	0.10000E 01
2	562.97	0.40982E 02	0.57477E 01	0.18842E-01	0.25649E-02	0.88627E 00	0.53475E 00	-0.30000E-01	0.10000E 01
3	562.96	0.22844E 02	0.34834E 01	0.11419E-01	0.15544E-02	0.53834E 00	0.32409E-00	-0.60000E-01	0.10000E 01
4	564.87	0.22030E 02	0.34495E 01	0.11325E-01	0.15416E-02	0.53310E 00	0.32093E-00	-0.90000E-01	0.10000E 01
5	-1157.14	-0.15475E 01	0.27861E-01	0.39724E-04	0.54076E-05	0.43058E-02	0.25921E-02	-0.20000E-00	0.
6	557.91	0.21366E 02	0.34174E 01	0.11158E-01	0.15189E-02	0.52814E 00	0.31794E-00	-0.40000E-00	0.10000E 01
7	1085.37	-0.36375E-02	-0.74663E-03	-0.42183E-05	-0.57423E-06	-0.11539E-03	-0.69464E-04	-0.60000E 00	0.
8	863.78	-0.82080E-01	-0.15361E-01	-0.66280E-04	-0.90226E-05	-0.23739E-02	-0.14291E-02	-0.80000E 00	0.
9	1037.46	0.55579E-01	0.11017E-01	0.58326E-04	0.79398E-05	0.17027E-02	0.10250E-02	-0.90000E 00	0.
10	551.91	0.20597E 02	0.32887E 01	0.10687E-01	0.14548E-02	0.50825E 00	0.30597E-00	-0.98000E 00	0.10000E 01
11	536.97	0.22016E 01	0.37791E-00	0.12138E-02	0.16524E-03	0.58404E-01	0.35160E-01	-0.11220E 01	0.10000E 01
12	540.85	0.28400E 01	0.41632E-00	0.13412E-02	0.18258E-03	0.64340E-01	0.38733E-01	-0.11890E 01	0.10000E 01
13	544.00	0.24379E 01	0.36909E-00	0.11920E-02	0.16226E-03	0.57040E-01	0.34339E-01	-0.13340E 01	0.10000E 01
14	591.70	-0.31130E-02	-0.55076E-03	-0.18475E-05	-0.25150E-06	-0.85116E-04	-0.51241E-04	-0.14400E 01	0.
15	564.79	0.27651E 02	0.38820E 01	0.12744E-01	0.17348E-02	0.59994E 00	0.36117E-00	0.30000E-01	0.10000E 01
16	684.54	-0.17818E-00	-0.28974E-01	-0.10514E-03	-0.14313E-04	-0.44778E-02	-0.26957E-02	0.60000E-01	0.
17	-4157.12	0.51843E-02	-0.22929E-02	-0.17644E-05	-0.24019E-06	-0.35436E-03	-0.21333E-03	0.90000E-01	0.
18	558.77	**0.29595E 02**	**0.47359E 01**	0.15473E-01	0.21063E-02	**0.73190E 00**	**0.44061E-00**	**0.20000E-00**	**0.10000E 01**
19	561.65	**0.22956E 02**	**0.36793E 01**	0.12049E-01	0.16402E-02	0.56862E 00	0.34231E-00	0.40000E-00	0.10000E 01
20	564.92	0.21247E 02	0.34279E 01	0.11254E-01	0.15320E-02	0.52976E 00	0.31892E-00	0.60000E 00	0.10000E 01
21	571.37	0.23170E 02	0.35318E 01	0.11655E-01	0.15866E-02	0.54582E 00	0.32859E-00	0.92000E 00	0.10000E 01
22	546.77	0.83107E 01	0.12496E 01	0.40445E-02	0.55057E-03	0.19312E-00	0.11626E-00	0.10400E 01	0.10000E 01
23	543.08	0.55439E 01	0.83413E 00	0.26919E-02	0.36645E-03	0.12891E-00	0.77605E-01	0.10600E 01	0.10000E 01
24	542.00	0.48120E 01	0.75801E 00	0.24442E-02	0.33273E-03	0.11714E-00	0.70523E-01	0.10840E 01	0.10000E 01
25	543.05	0.31242E 01	0.46091E-00	0.14874E-02	0.20248E-03	0.71231E-01	0.42882E-01	0.12070E 01	0.10000E 01
26	543.98	0.28940E 01	0.45055E-00	0.14550E-02	0.19807E-03	0.69629E-01	0.41917E-01	0.12490E 01	0.10000E 01
27	544.47	0.27756E 01	0.42522E-00	0.13738E-02	0.18701E-03	0.65715E-01	0.39561E-01	0.13340E 01	0.10000E 01
28	591.70	-0.31130E-02	-0.54431E-03	-0.18259E-05	-0.24856E-06	-0.84119E-04	-0.50641E-04	0.14540E 01	0.
29	591.70	-0.31130E-02	-0.52818E-03	-0.17718E-05	-0.24119E-06	-0.81627E-04	-0.49140E-04	0.16580E 01	0.
30	591.70	-0.31130E-02	-0.53463E-03	-0.17934E-05	-0.24414E-06	-0.82624E-04	-0.49741E-04	0.20410E 01	0.
31	591.70	-0.31130E-02	-0.53463E-03	-0.17934E-05	-0.24414E-06	-0.82624E-04	-0.49741E-04	0.22480E 01	0.
32	1085.37	-0.36375E-02	-0.70717E-03	-0.39954E-05	-0.54389E-06	-0.10929E-03	-0.65793E-04	-0.60000E-01	0.
33	-4157.12	0.51843E-02	-0.20559E-02	-0.15820E-05	-0.21536E-06	-0.31773E-03	-0.19128E-03	-0.30000E-01	0.
34	1085.37	-0.36375E-02	-0.70717E-03	-0.39954E-05	-0.54389E-06	-0.10929E-03	-0.65793E-04	0.30000E-01	0.
35	1105.29	-0.81046E-01	-0.16271E-01	-0.94572E-04	-0.12874E-04	-0.25145E-02	-0.15138E-02	0.60000E-01	0.
36	548.90	0.22032E 02	0.35064E 01	0.11368E-01	0.15474E-02	0.54189E 00	0.32622E-00	-0.86800E 00	0.10000E 01
37	1085.37	-0.36375E-02	-0.72300E-03	-0.40848E-05	-0.55606E-06	-0.11174E-03	-0.67266E-04	-0.91100E 00	0.
38	761.29	0.51944E-01	0.91383E-02	0.35577E-04	0.48430E-05	0.14123E-02	0.85020E-03	-0.95300E 00	0.
39	665.52	0.50389E-01	0.84812E-02	0.30268E-04	0.41204E-05	0.13107E-02	0.78906E-03	0.51000E-01	0.10000E 01
40	-4157.12	0.51843E-02	-0.23363E-02	-0.17978E-05	-0.24473E-06	-0.36106E-03	-0.21736E-03	0.29000E-01	0.
41	1085.37	-0.36375E-02	-0.73411E-03	-0.41476E-05	-0.56460E-06	-0.11345E-03	-0.68299E-04	0.70000E-02	0.
42	550.07	0.22926E 02	0.36277E 01	0.11772E-01	0.16025E-02	0.56064E 00	0.33751E-00	-0.86800E 00	0.10000E 01
43	549.10	0.22477E 02	0.35639E 01	0.11556E-01	0.15731E-02	0.55078E 00	0.33157E-00	-0.91100E 00	0.10000E 01
44	551.97	0.23319E 02	0.36821E 01	0.11966E-01	0.16289E-02	0.56905E 00	0.34257E-00	-0.95300E 00	0.10000E 01
45	537.16	0.88795E 01	0.14432E 01	0.46360E-02	0.63110E-03	0.22303E-00	0.13427E-00	-0.10400E 01	0.10000E 01
46	925.19	0.99737E-01	0.19011E-01	0.87751E-04	0.11945E-04	0.29380E-02	0.17687E-02	0.70000E-02	0.
47	512.03	-0.17663E-01	-0.27425E-02	-0.86418E-05	-0.11764E-05	-0.42383E-03	-0.25515E-03	0.29000E-01	0.10000E 01
48	1069.11	0.57654E-01	0.11703E-01	0.64646E-04	0.88001E-05	0.18087E-02	0.10888E-02	0.51000E-01	0.
49	552.63	0.22254E 02	0.35151E 01	0.11429E-01	0.15558E-02	0.54324E 00	0.32703E-00	0.70000E-02	0.10000E 01
50	551.89	0.20395E 02	0.32305E 01	0.10498E-01	0.14290E-02	0.49925E-00	0.30056E-00	0.29000E-01	0.10000E 01
51	1085.37	-0.36375E-02	-0.73600E-03	-0.41583E-05	-0.56606E-06	-0.11374E-03	-0.68475E-04	0.51000E-01	0.
52	1085.37	-0.36375E-02	-0.74025E-03	-0.41823E-05	-0.56933E-06	-0.11440E-03	-0.68871E-04	-0.86800E 00	0.
53	552.78	0.22270E 02	0.35518E 01	0.11550E-01	0.15723E-02	0.54891E 00	0.33045E-00	-0.91100E 00	0.10000E 01
54	553.93	0.23004E 02	0.36362E 01	0.11835E-01	0.16111E-02	0.56195E 00	0.33830E-00	-0.95300E 00	0.10000E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	536.11	0.67579E 01	0.10977E 01	0.35234E-02	0.47963E-03	0.16964E-00	0.10213E-00	-0.10400E 01	0.10000E 01
56	534.81	0.37231E 01	0.62337E 00	0.19989E-02	0.27211E-03	0.96338E-01	0.57996E-01	-0.10680E 01	0.10000E 01
57	533.36	0.29143E 01	0.47264E-00	0.15139E-02	0.20608E-03	0.73043E-01	0.43973E-01	-0.10400E 01	0.10000E 01
58	535.42	0.61958E 01	0.10891E 01	0.34939E-02	0.47562E-03	0.16831E-00	0.10133E-00	-0.10680E 01	0.10000E 01
59	538.16	0.94161E 01	0.15312E 01	0.49228E-02	0.67014E-03	0.23664E-00	0.14246E-00	-0.10400E 01	0.10000E 01
60	535.24	0.52468E 01	0.87869E 00	0.28186E-02	0.38368E-03	0.13580E-00	0.81751E-01	-0.10680E 01	0.10000E 01
61	534.99	0.23501E 01	0.38846E-00	0.12458E-02	0.16959E-03	0.60033E-01	0.36141E-01	-0.11220E 01	0.10000E 01
62	543.47	0.24478E 01	0.37047E-00	0.11960E-02	0.16281E-03	0.57254E-01	0.34468E-01	-0.13340E 01	0.10000E 01
63	535.86	0.23943E 01	0.41074E-00	0.13182E-02	0.17944E-03	0.63477E-01	0.38214E-01	-0.11220E 01	0.10000E 01
64	543.76	0.23891E 01	0.36165E-00	0.11677E-02	0.15896E-03	0.55890E-01	0.33646E-01	-0.13340E 01	0.10000E 01
65	591.70	-0.31130E-02	-0.55076E-03	-0.18475E-05	-0.25150E-06	-0.85116E-04	-0.51241E-04	0.14400E 01	0.
66	591.70	-0.31130E-02	-0.52415E-03	-0.17583E-05	-0.23935E-06	-0.81004E-04	-0.48765E-04	0.16130E 01	0.
67	591.70	-0.31130E-02	-0.51447E-03	-0.17258E-05	-0.23493E-06	-0.79508E-04	-0.47865E-04	0.17200E 01	0.
68	591.70	-0.31130E-02	-0.52818E-03	-0.17718E-05	-0.24119E-06	-0.81627E-04	-0.49140E-04	-0.16130E 01	0.
69	591.70	-0.31130E-02	-0.51447E-03	-0.17258E-05	-0.23493E-06	-0.79508E-04	-0.47865E-04	-0.18280E 01	0.
70	537.85	0.27823E 01	0.40789E-00	0.13110E-02	0.17847E-03	0.63036E-01	0.37948E-01	-0.11650E 01	0.10000E 01
71	539.43	0.86754E 00	0.72794E-01	0.23426E-03	0.31889E-04	0.11250E-01	0.67726E-02	-0.12050E 01	0.10000E 01
72	541.78	0.27647E 01	0.40062E-00	0.12916E-02	0.17582E-03	0.61913E-01	0.37272E-01	-0.12120E 01	0.10000E 01
73	539.14	0.26213E 01	0.38456E-00	0.12373E-02	0.16843E-03	0.59431E-01	0.35778E-01	-0.11650E 01	0.10000E 01
74	539.32	0.60468E 00	0.50735E-01	0.16326E-03	0.22224E-04	0.78408E-02	0.47202E-02	-0.12050E 01	0.10000E 01
75	542.57	0.28722E 01	0.41421E-00	0.13362E-02	0.18190E-03	0.64014E-01	0.38537E-01	-0.12120E 01	0.10000E 01
76	533.98	0.30369E 01	0.45566E-00	0.14602E-02	0.19877E-03	0.70419E-01	0.42393E-01	0.10840E 01	0.10000E 01
77	535.86	0.23886E 01	0.38516E-00	0.12361E-02	0.16826E-03	0.59525E-01	0.35834E-01	0.11220E 01	0.10000E 01
78	544.11	0.27356E 01	0.40797E-00	0.13177E-02	0.17937E-03	0.63048E-01	0.37956E-01	0.13340E 01	0.10000E 01
79	540.41	0.29657E 01	0.49783E-00	0.16033E-02	0.21825E-03	0.76936E-01	0.46316E-01	-0.11890E 01	0.10000E 01
80	544.12	0.28504E 01	0.42940E-00	0.13869E-02	0.18880E-03	0.66362E-01	0.39950E-01	-0.13340E 01	0.10000E 01
81	538.48	0.31029E 01	0.50108E 00	0.16114E-02	0.21935E-03	0.77439E-01	0.46619E-01	-0.11470E 01	0.10000E 01
82	540.62	0.31933E 01	0.53560E 00	0.17252E-02	0.23485E-03	0.82774E-01	0.49831E-01	-0.11890E 01	0.10000E 01
83	534.92	0.28691E 01	0.47969E-00	0.15383E-02	0.20941E-03	0.74133E-01	0.44629E-01	-0.10840E 01	0.10000E 01
84	591.70	-0.31130E-02	-0.47012E-03	-0.15770E-05	-0.21468E-06	-0.72654E-04	-0.43739E-04	-0.11890E 01	0.
85	544.37	0.32218E 01	0.47404E-00	0.15314E-02	0.20847E-03	0.73260E-01	0.44103E-01	-0.13090E 01	0.10000E 01
86	544.82	0.30140E 01	0.44967E-00	0.14532E-02	0.19782E-03	0.69493E-01	0.41836E-01	-0.13340E 01	0.10000E 01
87	542.03	0.30358E 01	0.44533E-00	0.14360E-02	0.19548E-03	0.68823E-01	0.41432E-01	0.11990E 01	0.10000E 01
88	542.28	0.29844E 01	0.44161E-00	0.14243E-02	0.19389E-03	0.68248E-01	0.41086E-01	0.12070E 01	0.10000E 01
89	544.69	0.25652E 01	0.38656E-00.	0.12491E-02	0.17004E-03	0.59741E-01	0.35965E-01	0.13340E 01	0.10000E 01
90	543.23	0.30177E 01	0.43154E-00	0.13929E-02	0.18961E-03	0.66692E-01	0.40150E-01	0.12070E 01	0.10000E 01
91	544.70	0.28312E 01	0.44094E-00	0.14248E-02	0.19396E-03	0.68145E-01	0.41024E-01	0.12490E 01	0.10000E 01
92	545.02	0.27018E 01	0.40927E-00	0.13228E-02	0.18007E-03	0.63251E-01	0.38078E-01	0.13340E 01	0.10000E 01
93	591.70	-0.31130E-02	-0.54108E-03	-0.18151E-05	-0.24708E-06	-0.83621E-04	-0.50341E-04	0.14900E 01	0.
94	591.70	-0.31130E-02	-0.33626E-03	-0.11280E-05	-0.15355E-06	-0.51967E-04	-0.31285E-04	-0.	0.
95	591.70	-0.31130E-02	-0.33868E-03	-0.11361E-05	-0.15466E-06	-0.52341E-04	-0.31510E-04	-0.	0.
96	591.70	-0.31130E-02	-0.33626E-03	-0.11280E-05	-0.15355E-06	-0.51967E-04	-0.31285E-04	-0.	0.
97	591.70	-0.31130E-02	-0.33626E-03	-0.11280E-05	-0.15355E-06	-0.51967E-04	-0.31285E-04	-0.	0.
98	591.70	-0.31130E-02	-0.33868E-03	-0.11361E-05	-0.15466E-06	-0.52341E-04	-0.31510E-04	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
170	3	2.74	179.74	0.02	-0.	1	C2	2.80	2	10.20	[redacted]	[redacted]	170	C2	2.80

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.848596E 02	0.500065E-01	0.460333E 04	0.494410E-04	0.687362E-07	[redacted]	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.728092E 00	0.647097E 01	0.107478E 02

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	568.13	0.35529E 02	0.46974E 01	0.15358E-01	0.20973E-02	0.72591E 00	0.43705E-00	-0.	0.10000E 01
2	550.24	0.33073E 02	0.46059E 01	0.14849E-01	0.20278E-02	0.71177E 00	0.42854E-00	-0.30000E-01	0.10000E 01
3	561.95	0.31896E 02	0.48610E 01	0.15816E-01	0.21599E-02	0.75121E 00	0.45228E-00	-0.60000E-01	0.10000E 01
4	563.36	0.30897E 02	0.48338E 01	0.15745E-01	0.21501E-02	0.74700E 00	0.44975E-00	-0.90000E-01	0.10000E 01
5	-771.85	-0.16665E 01	-0.44118E-01	-0.71385E-04	-0.97486E-05	-0.68179E-02	-0.41049E-02	-0.20000E-00	0.
6	564.60	0.20721E 02	0.33266E 01	0.10846E-01	0.14811E-02	0.51407E 00	0.30951E-00	-0.40000E-00	0.10000E 01
7	1085.38	-0.31187E-02	-0.64015E-03	-0.35753E-05	-0.48825E-06	-0.98926E-04	-0.59560E-04	-0.60000E 00	0.
8	879.88	-0.54026E-01	-0.10183E-01	-0.44304E-04	-0.60503E-05	-0.15737E-02	-0.94746E-03	-0.80000E 00	0.
9	1033.27	0.33243E-01	0.65786E-02	0.34266E-04	0.46795E-05	0.10166E-02	0.61208E-03	-0.90000E 00	0.
10	554.81	0.21919E 02	0.35054E 01	0.11341E-01	0.15488E-02	0.54171E 00	0.32615E-00	-0.98000E 00	0.10000E 01
11	532.46	0.19377E 01	0.33177E-00	0.10550E-02	0.14407E-03	0.51271E-01	0.30869E-01	-0.11220E 01	0.10000E 01
12	536.35	0.23995E 01	0.35086E-00	0.11190E-02	0.15282E-03	0.54220E-01	0.32645E-01	-0.11890E 01	0.10000E 01
13	538.79	0.18826E 01	0.28418E-00	0.90808E-03	0.12401E-03	0.43916E-01	0.26441E-01	-0.13340E 01	0.10000E 01
14	591.71	-0.36329E-02	-0.64274E-03	-0.21414E-05	-0.29243E-06	-0.99327E-04	-0.59802E-04	-0.14400E 01	0.
15	566.26	0.33725E 02	0.47385E 01	0.15469E-01	0.21126E-02	0.73227E 00	0.44088E-00	0.30000E-01	0.10000E 01
16	710.92	-0.16156E-00	-0.26620E-01	-0.98156E-04	-0.13405E-04	-0.41138E-02	-0.24768E-02	0.60000E-01	0.
17	-3813.14	-0.74805E 01	0.28857E 01	0.23290E-02	0.31806E-03	0.44594E-00	0.26849E-00	0.90000E-01	0.
18	556.89	0.22949E 02	0.36686E 01	0.11889E-01	0.16236E-02	0.56693E 00	0.34133E-00	0.20000E-00	0.10000E 01
19	560.56	0.20917E 02	0.33506E 01	0.10889E-01	0.14871E-02	0.51779E 00	0.31175E-00	0.40000E-00	0.10000E 01
20	562.47	0.20657E 02	0.33281E 01	0.10833E-01	0.14793E-02	0.51431E 00	0.30965E-00	0.60000E 00	0.10000E 01
21	570.61	0.22192E 02	0.33813E 01	0.11077E-01	0.15127E-02	0.52254E 00	0.31461E-00	0.92000E 00	0.10000E 01
22	544.45	0.74670E 01	0.11213E 01	0.35988E-02	0.49147E-03	0.17329E-00	0.10433E-00	0.10400E 01	0.10000E 01
23	540.27	0.48312E 01	0.72575E 00	0.23217E-02	0.31706E-03	0.11215E-00	0.67525E-01	0.10600E 01	0.10000E 01
24	539.44	0.41808E 01	0.65763E 00	0.21025E-02	0.28712E-03	0.10163E-00	0.61188E-01	0.10840E 01	0.10000E 01
25	538.23	0.24982E 01	0.36756E-00	0.11740E-02	0.16033E-03	0.56802E-01	0.34199E-01	0.12070E 01	0.10000E 01
26	538.64	0.21922E 01	0.34027E-00	0.10872E-02	0.14847E-03	0.52584E-01	0.31659E-01	0.12490E 01	0.10000E 01
27	539.00	0.19122E 01	0.29205E-00	0.93338E-03	0.12747E-03	0.45133E-01	0.27173E-01	0.13340E 01	0.10000E 01
28	591.71	-0.36329E-02	-0.63521E-03	-0.21163E-05	-0.28901E-06	-0.98164E-04	-0.59101E-04	0.14540E 01	0.
29	591.71	-0.36329E-02	-0.61639E-03	-0.20536E-05	-0.28044E-06	-0.95255E-04	-0.57350E-04	0.16580E 01	0.
30	591.71	-0.36329E-02	-0.62392E-03	-0.20786E-05	-0.28387E-06	-0.96418E-04	-0.58051E-04	0.20410E 01	0.
31	591.71	-0.36329E-02	-0.62392E-03	-0.20786E-05	-0.28387E-06	-0.96418E-04	-0.58051E-04	0.22480E 01	0.
32	1085.38	-0.31187E-02	-0.60632E-03	-0.33863E-05	-0.46245E-06	-0.93698E-04	-0.56413E-04	-0.60000E-01	0.
33	-4157.13	0.51853E-02	-0.20564E-02	-0.15799E-05	-0.21575E-06	-0.31778E-03	-0.19133E-03	-0.30000E-01	0.
34	1085.38	-0.31187E-02	-0.60632E-03	-0.33863E-05	-0.46245E-06	-0.93698E-04	-0.56413E-04	0.30000E-01	0.
35	1114.24	-0.46238E-01	-0.93146E-02	-0.54196E-04	-0.74013E-05	-0.14394E-02	-0.86665E-03	0.60000E-01	0.
36	552.57	0.22737E 02	0.36259E 01	0.11711E-01	0.15993E-02	0.56033E 00	0.33736E-00	-0.86800E 00	0.10000E 01
37	1085.38	-0.31187E-02	-0.61989E-03	-0.34621E-05	-0.47280E-06	-0.95795E-04	-0.57676E-04	-0.91100E 00	0.
38	918.92	0.71685E-01	0.13548E-01	0.61517E-04	0.84010E-05	0.20937E-02	0.12606E-02	-0.95300E 00	0.
39	654.52	-0.88328E-02	-0.14783E-02	-0.51883E-05	-0.70854E-06	-0.22845E-03	-0.13754E-03	0.51000E-01	0.10000E 01
40	-4157.13	0.51853E-02	-0.23368E-02	-0.17953E-05	-0.24517E-06	-0.36111E-03	-0.21742E-03	0.29000E-01	0.
41	1085.38	-0.31187E-02	-0.62941E-03	-0.35153E-05	-0.48007E-06	-0.97267E-04	-0.58562E-04	0.70000E-02	0.
42	553.12	0.23399E 02	0.37089E 01	0.11984E-01	0.16366E-02	0.57316E 00	0.34508E-00	-0.86800E 00	0.10000E 01
43	552.07	0.23169E 02	0.36797E 01	0.11880E-01	0.16224E-02	0.56865E 00	0.34237E-00	-0.91100E 00	0.10000E 01
44	554.56	0.24429E 02	0.38629E 01	0.12496E-01	0.17064E-02	0.59696E 00	0.35941E-00	-0.95300E 00	0.10000E 01
45	537.64	0.98031E 01	0.15937E 01	0.50880E-02	0.69484E-03	0.24628E-00	0.14828E-00	-0.10400E 01	0.10000E 01
46	909.24	0.10026E-00	0.16978E-01	0.85247E-04	0.11642E-04	0.29328E-02	0.17658E-02	0.70000E-02	0.
47	517.63	-0.74281E-01	-0.11570E-01	-0.36379E-04	-0.49680E-05	-0.17880E-02	-0.10765E-02	0.29000E-01	0.
48	1062.51	0.19213E-01	0.38900E-02	0.21058E-04	0.28757E-05	0.60115E-03	0.36193E-03	0.51000E-01	0.
49	556.58	0.22943E 02	0.36320E 01	0.11767E-01	0.16070E-02	0.56128E 00	0.33793E-00	0.70000E-02	0.10000E 01
50	555.18	0.20568E 02	0.32639E 01	0.10563E-01	0.14425E-02	0.50439E 00	0.30368E-00	0.29000E-01	0.10000E 01
51	1085.38	-0.31187E-02	-0.63103E-03	-0.35244E-05	-0.48130E-06	-0.97517E-04	-0.58712E-04	0.51000E-01	0.
52	1085.38	-0.31187E-02	-0.63468E-03	-0.35447E-05	-0.48408E-06	-0.98081E-04	-0.59052E-04	-0.86800E 00	0.
53	555.41	0.23291E 02	0.37201E 01	0.12042E-01	0.16445E-02	0.57490E 00	0.34613E-00	-0.91100E 00	0.10000E 01
54	557.15	0.23977E 02	0.37969E 01	0.12307E-01	0.16807E-02	0.58676E 00	0.35327E-00	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	537.42	0.76649E 01	0.12459E 01	0.39771E-02	0.54312E-03	0.19254E-00	0.11592E-00	-0.10400E 01	0.10000E 01
56	534.30	0.43569E 01	0.72928E 00	0.23223E-02	0.31714E-03	0.11270E-00	0.67853E-01	-0.10680E 01	0.10000E 01
57	533.82	0.33699E 01	0.54666E 00	0.17401E-02	0.23764E-03	0.84479E-01	0.50863E-01	-0.10400E 01	0.10000E 01
58	536.60	0.69429E 01	0.12212E 01	0.38957E-02	0.53201E-03	0.18872E-00	0.11362E-00	-0.10680E 01	0.10000E 01
59	539.53	0.10134E 02	0.16492E 01	0.52728E-02	0.72007E-03	0.25486E-00	0.15344E-00	-0.10400E 01	0.10000E 01
60	534.32	0.58109E 01	0.97267E 00	0.30974E-02	0.42299E-03	0.15031E-00	0.90499E-01	-0.10680E 01	0.10000E 01
61	532.26	0.19631E 01	0.32399E-00	0.10301E-02	0.14067E-03	0.50067E-01	0.30144E-01	-0.11220E 01	0.10000E 01
62	530.26	0.22644E 01	0.34172E-00	0.10915E-02	0.14906E-03	0.52807E-01	0.31794E-01	-0.13340E 01	0.10000E 01
63	533.35	0.19787E 01	0.33897E-00	0.10786E-02	0.14730E-03	0.52383E-01	0.31538E-01	-0.11220E 01	0.10000E 01
64	530.86	0.17958E 01	0.27110E-00	0.86631E-03	0.11831E-03	0.41894E-01	0.25223E-01	-0.13340E 01	0.10000E 01
65	591.71	-0.36329E-02	-0.64274E-03	-0.21414E-05	-0.29243E-06	-0.99327E-04	-0.59802E-04	0.14400E 01	0.
66	591.71	-0.36329E-02	-0.61169E-03	-0.20379E-05	-0.27830E-06	-0.94528E-04	-0.56913E-04	0.16130E 01	0.
67	591.71	-0.36329E-02	-0.60039E-03	-0.20003E-05	-0.27316E-06	-0.92783E-04	-0.55862E-04	0.17200E 01	0.
68	591.71	-0.36329E-02	-0.61639E-03	-0.20536E-05	-0.28044E-06	-0.95255E-04	-0.57350E-04	-0.16130E 01	0.
69	591.71	-0.36329E-02	-0.60039E-03	-0.20003E-05	-0.27316E-06	-0.92783E-04	-0.55862E-04	-0.18280E 01	0.
70	534.56	0.25210E 01	0.36889E-00	0.11749E-02	0.16045E-03	0.57008E-01	0.34323E-01	-0.11650E 01	0.10000E 01
71	534.60	0.85403E 00	0.71466E-01	0.22763E-03	0.31086E-04	0.11044E-01	0.66494E-02	-0.12050E 01	0.10000E 01
72	536.72	0.21293E 01	0.30768E-00	0.98160E-03	0.13405E-03	0.47547E-01	0.28627E-01	-0.12120E 01	0.10000E 01
73	535.30	0.23210E 01	0.33977E-00	0.10828E-02	0.14787E-03	0.52507E-01	0.31613E-01	-0.11650E 01	0.10000E 01
74	534.50	0.63689E 00	0.53293E-01	0.16973E-03	0.23179E-04	0.82357E-02	0.49585E-02	-0.12050E 01	0.10000E 01
75	537.89	0.23158E 01	0.33310E-00	0.10637E-02	0.14526E-03	0.51476E-01	0.30992E-01	-0.12120E 01	0.10000E 01
76	533.66	0.34748E 01	0.52127E 00	0.16591E-02	0.22657E-03	0.80555E-01	0.48500E-01	0.10840E 01	0.10000E 01
77	533.46	0.20172E 01	0.32483E-00	0.10337E-02	0.14117E-03	0.50198E-01	0.30223E-01	0.11220E 01	0.10000E 01
78	539.37	0.21086E 01	0.31362E-00	0.10026E-02	0.13692E-03	0.48466E-01	0.29180E-01	0.13340E 01	0.10000E 01
79	536.87	0.25995E 01	0.43548E-00	0.13895E-02	0.18975E-03	0.67298E-01	0.40518E-01	-0.11890E 01	0.10000E 01
80	539.89	0.22712E 01	0.34133E-00	0.10916E-02	0.14908E-03	0.52749E-01	0.31758E-01	-0.13340E 01	0.10000E 01
81	535.73	0.29813E 01	0.48071E-00	0.15324E-02	0.20927E-03	0.74286E-01	0.44726E-01	-0.11470E 01	0.10000E 01
82	537.58	0.27912E 01	0.46736E-00	0.14920E-02	0.20376E-03	0.72224E-01	0.43484E-01	-0.11890E 01	0.10000E 01
83	534.68	0.33938E 01	0.56733E 00	0.18071E-02	0.24679E-03	0.87673E-01	0.52786E-01	-0.10840E 01	0.10000E 01
84	591.71	-0.36329E-02	-0.54864E-03	-0.18278E-05	-0.24962E-06	-0.84784E-04	-0.51046E-04	-0.11890E 01	0.
85	540.07	0.27486E 01	0.40344E-00	0.12904E-02	0.17622E-03	0.62346E-01	0.37536E-01	-0.13090E 01	0.10000E 01
86	540.83	0.25683E 01	0.38231E-00	0.12236E-02	0.16710E-03	0.59081E-01	0.35571E-01	-0.13340E 01	0.10000E 01
87	537.70	0.25616E 01	0.37484E-00	0.11968E-02	0.16343E-03	0.57927E-01	0.34876E-01	0.11990E 01	0.10000E 01
88	537.79	0.24104E 01	0.35577E-00	0.11360E-02	0.15513E-03	0.54980E-01	0.33102E-01	0.12070E 01	0.10000E 01
89	539.03	0.16727E 01	0.25127E-00	0.80307E-03	0.10967E-03	0.38831E-01	0.23379E-01	0.13340E 01	0.10000E 01
90	538.03	0.25096E 01	0.35784E-00	0.11428E-02	0.15606E-03	0.55300E-01	0.33294E-01	0.12070E 01	0.10000E 01
91	536.97	0.20717E 01	0.32162E-00	0.10279E-02	0.14037E-03	0.49702E-01	0.29924E-01	0.12490E 01	0.10000E 01
92	539.21	0.18577E 01	0.28048E-00	0.89656E-03	0.12244E-03	0.43345E-01	0.26097E-01	0.13340E 01	0.10000E 01
93	591.71	-0.36329E-02	-0.63145E-03	-0.21037E-05	-0.28729E-06	-0.97582E-04	-0.58751E-04	0.14900E 01	0.
94	591.71	-0.36329E-02	-0.39242E-03	-0.13074E-05	-0.17854E-06	-0.60643E-04	-0.36512E-04	-0.	0.
95	591.71	-0.36329E-02	-0.39524E-03	-0.13168E-05	-0.17983E-06	-0.61080E-04	-0.36774E-04	-0.	0.10000E 01
96	591.71	-0.36329E-02	-0.39242E-03	-0.13074E-05	-0.17854E-06	-0.60643E-04	-0.36512E-04	-0.	0.
97	591.71	-0.36329E-02	-0.39242E-03	-0.13074E-05	-0.17854E-06	-0.60643E-04	-0.36512E-04	-0.	0.
98	591.71	-0.36329E-02	-0.39524E-03	-0.13168E-05	-0.17983E-06	-0.61080E-04	-0.36774E-04	-0.	0.

~~CONFIDENTIAL~~

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)
168	3	-0.22	176.78	0.02	-0.	1	C2	2.85	2	10.20	[redacted]	[redacted]

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GRP	CONFIG	TIME
168	C2	2.85

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.675863E 02	0.572230E-01	0.467925E 04	0.548146E-04	0.709449E-07	0.[redacted]	0.772000E 01

1.20

PR	Q(F-R)	Q(MEAS)
0.729755E 00	0.540209E 01	0.114544E 02

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	590.03	0.42013E 02	0.56214E 01	0.17840E-01	0.21618E-02	0.10406E 01	0.49076E-00	-0.	0.10000E 01
2	562.46	0.18936E 02	0.26551E 01	0.82518E-02	0.99993E-03	0.49150E-00	0.23180E-00	-0.30000E-01	0.10000E 01
3	583.21	0.37399E 02	0.57666E 01	0.18206E-01	0.22062E-02	0.10675E 01	0.50344E 00	-0.60000E-01	0.10000E 01
4	585.54	0.35919E 02	0.56883E 01	0.17991E-01	0.21801E-02	0.10530E 01	0.49661E-00	-0.90000E-01	0.10000E 01
5	-194.10	-0.76987E 00	-0.67965E-01	-0.13570E-03	-0.16443E-04	-0.12581E-01	-0.59335E-02	-0.20000E-00	0.
6	571.28	0.30029E 02	0.48386E 01	0.15138E-01	0.18344E-02	0.89568E 00	0.42242E-00	-0.40000E-00	0.10000E 01
7	1085.37	-0.36375E-02	-0.74663E-03	-0.38570E-05	-0.46738E-06	-0.13821E-03	-0.65183E-04	-0.60000E 00	0.
8	951.24	-0.46234E-01	-0.89877E-02	-0.39628E-04	-0.48020E-05	-0.16638E-02	-0.78465E-03	-0.80000E 00	0.
9	1024.74	0.24931E-01	0.49169E-02	0.23568E-04	0.28559E-05	0.91019E-03	0.42926E-03	-0.90000E 00	0.
10	567.22	0.27041E 02	0.43543E 01	0.13581E-01	0.16457E-02	0.80603E 00	0.38014E-00	-0.98000E 00	0.10000E 01
11	542.50	0.38920E 01	0.67017E 00	0.20521E-02	0.24866E-03	0.12406E-00	0.58507E-01	-0.11220E 01	0.10000E 01
12	546.60	0.41060E 01	0.60385E 00	0.18546E-02	0.22474E-03	0.11178E-00	0.52718E-01	-0.11890E 01	0.10000E 01
13	548.97	0.34816E 01	0.52855E 00	0.16262E-02	0.19706E-03	0.97843E-01	0.46144E-01	-0.13340E 01	0.10000E 01
14	591.70	-0.31130E-02	-0.55076E-03	-0.17502E-05	-0.21208E-06	-0.10195E-03	-0.48083E-04	-0.14400E 01	0.
15	586.83	0.41316E 02	0.58708E 01	0.18586E-01	0.22522E-02	0.10868E 01	0.51253E 00	0.30000E-01	0.10000E 01
16	813.80	-0.13143E-00	-0.22750E-01	-0.87298E-04	-0.10579E-04	-0.42113E-02	-0.19861E-02	0.60000E-01	0.
17	-832.86	-0.23247E 01	-0.44444E-01	-0.68776E-04	-0.83341E-05	-0.82272E-02	-0.38801E-02	0.90000E-01	0.
18	573.66	0.32751E 02	0.52841E 01	0.16562E-01	0.20069E-02	0.97817E 00	0.46132E-00	0.20000E-00	0.10000E 01
19	581.68	0.32596E 02	0.52822E 01	0.16657E-01	0.20185E-02	0.97780E 00	0.46115E-00	0.40000E-00	0.10000E 01
20	585.25	0.30818E 02	0.50276E 01	0.15898E-01	0.19264E-02	0.93068E 00	0.43892E-00	0.60000E 00	0.10000E 01
21	592.11	0.31399E 02	0.48405E 01	0.15387E-01	0.18645E-02	0.89604E 00	0.42259E-00	0.92000E 00	0.10000E 01
22	556.07	0.11054E 02	0.16708E 01	0.51678E-02	0.62622E-03	0.30928E-00	0.14586E-00	0.10400E 01	0.10000E 01
23	550.21	0.73434E 01	0.11093E 01	0.34161E-02	0.41396E-03	0.20535E-00	0.96844E-01	0.10600E 01	0.10000E 01
24	548.48	0.63283E 01	0.10005E 01	0.30771E-02	0.37288E-03	0.18520E-00	0.87346E-01	0.10840E 01	0.10000E 01
25	548.51	0.45990E 01	0.68056E 00	0.20932E-02	0.25365E-03	0.12598E-00	0.59415E-01	0.12070E 01	0.10000E 01
26	549.06	0.42556E 01	0.66440E 00	0.20443E-02	0.24772E-03	0.12299E-00	0.58004E-01	0.12490E 01	0.10000E 01
27	549.36	0.41574E 01	0.63866E 00	0.19655E-02	0.23818E-03	0.11822E-00	0.55757E-01	0.13340E 01	0.10000E 01
28	591.70	-0.31130E-02	-0.54431E-03	-0.17297E-05	-0.20960E-06	-0.10076E-03	-0.47520E-04	0.14540E 01	0.
29	591.70	-0.31130E-02	-0.52818E-03	-0.16784E-05	-0.20339E-06	-0.97773E-04	-0.46112E-04	0.16580E 01	0.
30	591.70	-0.31130E-02	-0.53463E-03	-0.16989E-05	-0.20587E-06	-0.98968E-04	-0.46675E-04	0.20410E 01	0.
31	591.70	-0.31130E-02	-0.53463E-03	-0.16989E-05	-0.20587E-06	-0.98968E-04	-0.46675E-04	0.22480E 01	0.
32	1085.37	-0.36375E-02	-0.70717E-03	-0.36531E-05	-0.44268E-06	-0.13091E-03	-0.61738E-04	-0.60000E-01	0.
33	-4157.12	0.51843E-02	-0.20559E-02	-0.15621E-05	-0.18929E-06	-0.38058E-03	-0.17949E-03	-0.30000E-01	0.
34	1085.37	-0.36375E-02	-0.70717E-03	-0.36531E-05	-0.44268E-06	-0.13091E-03	-0.61738E-04	0.30000E-01	0.
35	1124.58	0.48304E-01	0.97691E-02	0.53144E-04	0.64398E-05	0.18084E-02	0.85287E-03	0.60000E-01	0.
36	563.05	0.29191E 02	0.46823E 01	0.14559E-01	0.17642E-02	0.86676E 00	0.40878E-00	-0.86800E 00	0.10000E 01
37	565.77	0.29036E 02	0.45384E 01	0.14140E-01	0.17134E-02	0.84011E 00	0.39621E-00	-0.91100E 00	0.10000E 01
38	952.59	0.65973E-01	0.12648E-01	0.55838E-04	0.67663E-05	0.23414E-02	0.11042E-02	-0.95300E 00	0.
39	618.18	0.51907E-02	0.85236E-03	0.27649E-05	0.33505E-06	0.15778E-03	0.74414E-04	0.51000E-01	0.10000E 01
40	-3837.87	-0.48779E 01	0.19371E 01	0.15397E-02	0.18658E-03	0.35859E-00	0.16912E-00	0.29000E-01	0.
41	1085.37	-0.36375E-02	-0.73411E-03	-0.37923E-05	-0.45954E-06	-0.13589E-03	-0.64090E-04	0.70000E-02	0.
42	564.13	0.30662E 02	0.48900E 01	0.15217E-01	0.18439E-02	0.90520E 00	0.42691E-00	-0.86800E 00	0.10000E 01
43	562.81	0.29859E 02	0.47705E 01	0.14830E-01	0.17971E-02	0.88309E 00	0.41648E-00	-0.91100E 00	0.10000E 01
44	566.08	0.30868E 02	0.49123E 01	0.15308E-01	0.18550E-02	0.90933E 00	0.42886E-00	-0.95300E 00	0.10000E 01
45	544.27	0.11804E 02	0.19262E 01	0.59057E-02	0.71564E-03	0.35656E-00	0.16816E-00	-0.10400E 01	0.10000E 01
46	844.63	0.78443E-01	0.14430E-01	0.57024E-04	0.69101E-05	0.26711E-02	0.12597E-02	0.70000E-02	0.
47	514.30	-0.24935E-01	-0.38766E-02	-0.11628E-04	-0.14091E-05	-0.71761E-03	-0.33844E-03	0.29000E-01	0.
48	1006.38	0.86743E-01	0.17171E-01	0.80551E-04	0.97610E-05	0.31787E-02	0.14991E-02	0.51000E-01	0.
49	566.24	0.30021E 02	0.47779E 01	0.14891E-01	0.18045E-02	0.88445E 00	0.41712E-00	0.70000E-02	0.10000E 01
50	564.89	0.27621E 02	0.44068E 01	0.13721E-01	0.16627E-02	0.81577E 00	0.38473E-00	0.29000E-01	0.10000E 01
51	1085.37	-0.36375E-02	-0.73600E-03	-0.38020E-05	-0.46072E-06	-0.13624E-03	-0.64255E-04	0.51000E-01	0.
52	1085.37	-0.36375E-02	-0.74025E-03	-0.38240E-05	-0.46339E-06	-0.13703E-03	-0.64626E-04	-0.86800E 00	0.
53	566.96	0.29997E 02	0.48221E 01	0.15037E-01	0.18222E-02	0.89263E 00	0.42098E-00	-0.91100E 00	0.10000E 01
54	568.75	0.30853E 02	0.49172E 01	0.15355E-01	0.18607E-02	0.91024E 00	0.42929E-00	-0.95300E 00	0.10000E 01

~~CONFIDENTIAL~~

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	543.00	0.89361E 01	0.14571E 01	0.44634E-02	0.54086E-03	0.26973E-00	0.12721E-00	-0.10400E 01	0.10000E 01
56	539.94	0.47631E 01	0.79981E 00	0.24444E-02	0.29621E-03	0.14806E-00	0.69826E-01	-0.10680E 01	0.10000E 01
57	538.60	0.38083E 01	0.61946E 00	0.18913E-02	0.22919E-03	0.11467E-00	0.54080E-01	-0.10400E 01	0.10000E 01
58	541.89	0.81974E 01	0.14462E 01	0.44261E-02	0.53635E-03	0.26770E-00	0.12625E-00	-0.10680E 01	0.10000E 01
59	546.20	0.12379E 02	0.20221E 01	0.62087E-02	0.75236E-03	0.37432E-00	0.17654E-00	-0.10400E 01	0.10000E 01
60	541.20	0.68514E 01	0.11513E 01	0.35219E-02	0.42677E-03	0.21312E-00	0.10051E-00	-0.10680E 01	0.10000E 01
61	540.00	0.37013E 01	0.61352E 00	0.18751E-02	0.22722E-03	0.11357E-00	0.53562E-01	-0.11220E 01	0.10000E 01
62	548.83	0.33106E 01	0.50257E 00	0.15461E-02	0.18735E-03	0.93032E-01	0.43876E-01	-0.13340E 01	0.10000E 01
63	541.13	0.37501E 01	0.64525E 00	0.19738E-02	0.23918E-03	0.11944E-00	0.56332E-01	-0.11220E 01	0.10000E 01
64	549.22	0.32296E 01	0.49037E-00	0.15090E-02	0.18286E-03	0.90775E-01	0.42811E-01	-0.13340E 01	0.10000E 01
65	591.70	-0.31130E-02	-0.55076E-03	-0.17502E-05	-0.21208E-06	-0.10195E-03	-0.48083E-04	0.14400E 01	0.
66	591.70	-0.31130E-02	-0.52415E-03	-0.16656E-05	-0.20184E-06	-0.97027E-04	-0.45760E-04	0.16130E 01	0.
67	591.70	-0.31130E-02	-0.51447E-03	-0.16349E-05	-0.19811E-06	-0.95236E-04	-0.44915E-04	0.17200E 01	0.
68	591.70	-0.31130E-02	-0.52818E-03	-0.16784E-05	-0.20339E-06	-0.97773E-04	-0.46112E-04	-0.16130E 01	0.
69	591.70	-0.31130E-02	-0.51447E-03	-0.16349E-05	-0.19811E-06	-0.95236E-04	-0.44915E-04	-0.18280E 01	0.
70	544.66	0.40286E 01	0.59284E 00	0.18182E-02	0.22032E-03	0.10974E-00	0.51757E-01	-0.11650E 01	0.10000E 01
71	544.65	0.13382E 01	0.11262E-00	0.34538E-03	0.41852E-04	0.20847E-01	0.98317E-02	-0.12050E 01	0.10000E 01
72	548.20	0.38156E 01	0.55489E 00	0.17063E-02	0.20676E-03	0.10272E-00	0.48444E-01	-0.12120E 01	0.10000E 01
73	544.58	0.39610E 01	0.58288E 00	0.17875E-02	0.21661E-03	0.10790E-00	0.50887E-01	-0.11650E 01	0.10000E 01
74	544.30	0.96157E 00	0.80905E-01	0.24806E-03	0.30060E-04	0.14977E-01	0.70632E-02	-0.12050E 01	0.10000E 01
75	548.22	0.41730E 01	0.60371E 00	0.18564E-02	0.22495E-03	0.11175E-00	0.52705E-01	-0.12120E 01	0.10000E 01
76	539.22	0.40530E 01	0.60991E 00	0.18630E-02	0.22576E-03	0.11290E-00	0.53247E-01	0.10840E 01	0.10000E 01
77	540.84	0.38353E 01	0.62019E 00	0.18967E-02	0.22984E-03	0.11481E-00	0.54144E-01	0.11220E 01	0.10000E 01
78	549.04	0.37631E 01	0.56275E 00	0.17315E-02	0.20982E-03	0.10417E-00	0.49130E-01	0.13340E 01	0.10000E 01
79	545.37	0.43647E 01	0.73470E 00	0.22544E-02	0.27319E-03	0.13600E-00	0.64141E-01	-0.11890E 01	0.10000E 01
80	548.60	0.39423E 01	0.59539E 00	0.18314E-02	0.22192E-03	0.11022E-00	0.51979E-01	-0.13340E 01	0.10000E 01
81	543.27	0.46197E 01	0.74805E 00	0.22918E-02	0.27772E-03	0.13848E-00	0.65307E-01	-0.11470E 01	0.10000E 01
82	545.10	0.46286E 01	0.77830E 00	0.23877E-02	0.28934E-03	0.14407E-00	0.67948E-01	-0.11890E 01	0.10000E 01
83	539.42	0.37242E 01	0.62423E 00	0.19071E-02	0.23109E-03	0.11555E-00	0.54497E-01	-0.10840E 01	0.10000E 01
84	591.70	-0.31130E-02	-0.47012E-03	-0.14939E-05	-0.18103E-06	-0.87026E-04	-0.41043E-04	-0.11890E 01	0.
85	548.84	0.46400E 01	0.68441E 00	0.21055E-02	0.25514E-03	0.12669E-00	0.59751E-01	-0.13090E 01	0.10000E 01
86	549.05	0.42426E 01	0.63446E 00	0.19522E-02	0.23656E-03	0.11745E-00	0.55390E-01	-0.13340E 01	0.10000E 01
87	547.37	0.43964E 01	0.64684E 00	0.19878E-02	0.24087E-03	0.11974E-00	0.56471E-01	0.11990E 01	0.10000E 01
88	547.64	0.43678E 01	0.64825E 00	0.19925E-02	0.24145E-03	0.12000E-00	0.56594E-01	0.12070E 01	0.10000E 01
89	549.61	0.38462E 01	0.58121E 00	0.17891E-02	0.21680E-03	0.10759E-00	0.50741E-01	0.13340E 01	0.10000E 01
90	548.19	0.45138E 01	0.64729E 00	0.19904E-02	0.24119E-03	0.11982E-00	0.56510E-01	0.12070E 01	0.10000E 01
91	549.39	0.42857E 01	0.66923E 00	0.20597E-02	0.24959E-03	0.12388E-00	0.58426E-01	0.12490E 01	0.10000E 01
92	549.81	0.40644E 01	0.61733E 00	0.19005E-02	0.23030E-03	0.11428E-00	0.53895E-01	0.13340E 01	0.10000E 01
93	591.70	-0.31130E-02	-0.54108E-03	-0.17194E-05	-0.20836E-06	-0.10016E-03	-0.47238E-04	0.14900E 01	0.
94	591.70	-0.31130E-02	-0.33626E-03	-0.10686E-05	-0.12949E-06	-0.62247E-04	-0.29357E-04	-0.	0.
95	591.70	-0.31130E-02	-0.33868E-03	-0.10762E-05	-0.13042E-06	-0.62694E-04	-0.29568E-04	-0.	0.
96	591.70	-0.31130E-02	-0.33626E-03	-0.10686E-05	-0.12949E-06	-0.62247E-04	-0.29357E-04	-0.	0.
97	591.70	-0.31130E-02	-0.33626E-03	-0.10686E-05	-0.12949E-06	-0.62247E-04	-0.29357E-04	-0.	0.
98	591.70	-0.31130E-02	-0.33868E-03	-0.10762E-05	-0.13042E-06	-0.62694E-04	-0.29568E-04	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)
167	3	2.74	179.74	0.02	-0.	1	C2	2.80	2	10.20	[illegible]	[illegible]

925 1631

GRP (OFF)	CONFIG (OFF)	TIME (OFF)
167	C2	2.80

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.871503E 02	0.573412E-01	0.466761E 04	0.552027E-04	0.705917E-07	0.[illegible]	0.772000E 01

1.20

PR	Q(F-R)	Q(MEAS)
0.729495E 00	0.538623E 01	0.114596E 02

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	585.58	0.39020E 02	0.52083E 01	0.16597E-01	0.20020E-02	0.96697E 00	0.45449E-00	-0.	0.10000E 01
2	555.73	0.24343E 02	0.34004E 01	0.10592E-01	0.12777E-02	0.63132E 00	0.29673E-00	-0.30000E-01	0.10000E 01
3	578.09	0.35414E 02	0.54453E 01	0.17252E-01	0.20811E-02	0.10110E 01	0.47518E-00	-0.60000E-01	0.10000E 01
4	580.61	0.34743E 02	0.54873E 01	0.17419E-01	0.21012E-02	0.10188E 01	0.47884E-00	-0.90000E-01	0.10000E 01
5	-91.63	-0.59916E 00	-0.59096E-01	-0.12449E-03	-0.15017E-04	-0.10972E-01	-0.51569E-02	-0.20000E-00	0.
6	579.86	0.31852E 02	0.51565E 01	0.16359E-01	0.19734E-02	0.95735E 00	0.44997E-00	-0.40000E-00	0.10000E 01
7	1085.38	-0.31187E-02	-0.64015E-03	-0.33476E-05	-0.40381E-06	-0.11885E-03	-0.55861E-04	-0.60000E 00	0.
8	977.92	-0.21300E-01	-0.41872E-02	-0.19220E-04	-0.23184E-05	-0.77738E-03	-0.36538E-03	-0.80000E 00	0.
9	1025.91	0.73763E-01	0.14554E-01	0.70658E-04	0.85232E-05	0.27021E-02	0.12701E-02	-0.90000E 00	0.
10	569.22	0.29032E 02	0.46801E 01	0.14728E-01	0.17765E-02	0.86889E 00	0.40839E-00	-0.98000E 00	0.10000E 01
11	534.74	0.32478E 01	0.55681E 00	0.17075E-02	0.20597E-03	0.10338E-00	0.48589E-01	-0.11220E 01	0.10000E 01
12	538.03	0.35283E 01	0.51641E 00	0.15874E-02	0.19149E-03	0.95876E-01	0.45063E-01	-0.11890E 01	0.10000E 01
13	540.37	0.31086E 01	0.46966E-00	0.14463E-02	0.17446E-03	0.87197E-01	0.40984E-01	-0.13340E 01	0.10000E 01
14	591.71	-0.36329E-02	-0.64274E-03	-0.20579E-05	-0.24823E-06	-0.11933E-03	-0.56087E-04	-0.14400E 01	0.
15	583.21	0.38646E 02	0.54806E 01	0.17432E-01	0.21028E-02	0.10175E 01	0.47825E-00	0.30000E-01	0.10000E 01
16	837.11	-0.13195E-00	-0.23085E-01	-0.91414E-04	-0.11027E-04	-0.42859E-02	-0.20144E-02	0.60000E-01	0.
17	-531.78	-0.16286E 01	-0.83964E-01	-0.14577E-03	-0.17583E-04	-0.15589E-01	-0.73270E-02	0.90000E-01	0.
18	576.40	0.35496E 02	0.57356E 01	0.18148E-01	0.21892E-02	0.10649E 01	0.50050E 00	0.20000E-00	0.10000E 01
19	579.57	0.30536E 02	0.49427E 01	0.15678E-01	0.18911E-02	0.91766E 00	0.43131E-00	0.40000E-00	0.10000E 01
20	580.59	0.28087E 02	0.45705E 01	0.14508E-01	0.17501E-02	0.84856E 00	0.39884E-00	0.60000E 00	0.10000E 01
21	587.78	0.29077E 02	0.44720E 01	0.14275E-01	0.17219E-02	0.83027E 00	0.39024E-00	0.92000E 00	0.10000E 01
22	549.65	0.97803E 01	0.14730E 01	0.45673E-02	0.55094E-03	0.27347E-00	0.12854E-00	0.10400E 01	0.10000E 01
23	543.83	0.63964E 01	0.96279E 00	0.29724E-02	0.35855E-03	0.17875E-00	0.84016E-01	0.10600E 01	0.10000E 01
24	542.32	0.54566E 01	0.85971E 00	0.26512E-02	0.31980E-03	0.15961E-00	0.75021E-01	0.10840E 01	0.10000E 01
25	539.91	0.33699E 01	0.49628E-00	0.15277E-02	0.18428E-03	0.92139E-01	0.43307E-01	0.12070E 01	0.10000E 01
26	540.05	0.27896E 01	0.43333E-00	0.13341E-02	0.16092E-03	0.80452E-01	0.37814E-01	0.12490E 01	0.10000E 01
27	540.35	0.25148E 01	0.38438E-00	0.11836E-02	0.14278E-03	0.71364E-01	0.33542E-01	0.13340E 01	0.10000E 01
28	591.71	-0.36329E-02	-0.63521E-03	-0.20338E-05	-0.24532E-06	-0.11793E-03	-0.55431E-04	0.14540E 01	0.
29	591.71	-0.36329E-02	-0.61639E-03	-0.19735E-05	-0.23806E-06	-0.11444E-03	-0.53788E-04	0.16580E 01	0.
30	591.71	-0.36329E-02	-0.62392E-03	-0.19976E-05	-0.24096E-06	-0.11584E-03	-0.54445E-04	0.20410E 01	0.
31	591.71	-0.36329E-02	-0.62392E-03	-0.19976E-05	-0.24096E-06	-0.11584E-03	-0.54445E-04	0.22480E 01	0.
32	1085.38	-0.31187E-02	-0.60632E-03	-0.31707E-05	-0.38247E-06	-0.11257E-03	-0.52909E-04	-0.60000E-01	0.
33	-4157.13	0.51853E-02	-0.20564E-02	-0.15652E-05	-0.18880E-06	-0.38178E-03	-0.17944E-03	-0.30000E-01	0.
34	1085.38	-0.31187E-02	-0.60632E-03	-0.31707E-05	-0.38247E-06	-0.11257E-03	-0.52909E-04	0.30000E-01	0.
35	1117.37	0.34280E-01	0.69139E-02	0.37726E-04	0.45507E-05	0.12836E-02	0.60333E-03	0.60000E-01	0.
36	566.61	0.30972E 02	0.49778E 01	0.15634E-01	0.18858E-02	0.92418E 00	0.43436E-00	-0.86800E 00	0.10000E 01
37	569.59	0.30842E 02	0.48307E 01	0.15206E-01	0.18343E-02	0.89687E 00	0.42154E-00	-0.91100E 00	0.10000E 01
38	1085.38	-0.31187E-02	-0.63103E-03	-0.33000E-05	-0.39806E-06	-0.11716E-03	-0.55066E-04	-0.95300E 00	0.
39	610.86	-0.17141E-01	-0.28038E-02	-0.91124E-05	-0.10992E-05	-0.52055E-03	-0.24467E-03	0.51000E-01	0.
40	-2818.05	-0.45454E 01	0.10821E 01	0.10195E-02	0.12298E-03	0.20091E-00	0.94430E-01	0.29000E-01	0.
41	1085.38	-0.31187E-02	-0.62941E-03	-0.32915E-05	-0.39704E-06	-0.11686E-03	-0.54924E-04	0.70000E-02	0.
42	567.43	0.31592E 02	0.50474E 01	0.15862E-01	0.19134E-02	0.93710E 00	0.44045E-00	-0.86800E 00	0.10000E 01
43	566.62	0.31208E 02	0.49966E 01	0.15693E-01	0.18930E-02	0.92767E 00	0.43602E-00	-0.91100E 00	0.10000E 01
44	569.91	0.32661E 02	0.52118E 01	0.16410E-01	0.19794E-02	0.96761E 00	0.45480E-00	-0.95300E 00	0.10000E 01
45	544.08	0.13103E 02	0.21379E 01	0.66017E-02	0.79633E-03	0.39693E-00	0.18656E-00	-0.10400E 01	0.10000E 01
46	830.37	0.43632E-01	0.79741E-02	0.31371E-04	0.37842E-05	0.14805E-02	0.69585E-03	0.70000E-02	0.
47	517.02	-0.58180E-01	-0.90592E-02	-0.27421E-04	-0.33077E-05	-0.16819E-02	-0.79053E-03	0.29000E-01	0.
48	988.78	0.44150E-01	0.86768E-02	0.40324E-04	0.48642E-05	0.16109E-02	0.75716E-03	0.51000E-01	0.
49	570.76	0.31724E 02	0.50615E 01	0.15947E-01	0.19236E-02	0.93972E 00	0.44168E-00	0.70000E-02	0.10000E 01
50	568.94	0.28337E 02	0.45311E 01	0.14256E-01	0.17196E-02	0.84124E 00	0.39540E-00	0.29000E-01	0.10000E 01
51	1085.38	-0.31187E-02	-0.63103E-03	-0.33000E-05	-0.39806E-06	-0.11716E-03	-0.55066E-04	0.51000E-01	0.
52	1085.38	-0.31187E-02	-0.63468E-03	-0.33190E-05	-0.40036E-06	-0.11783E-03	-0.55384E-04	-0.86800E 00	0.
53	571.44	0.31565E 02	0.50666E 01	0.16034E-01	0.19341E-02	0.94437E 00	0.44387E-00	-0.91100E 00	0.10000E 01
54	573.66	0.32123E 02	0.51534E 01	0.16209E-01	0.19552E-02	0.95305E 00	0.44795E-00	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	543.21	0.10141E 02	0.16538E 01	0.51033E-02	0.61559E-03	0.30704E-00	0.14431E-00	-0.10400E 01	0.10000E 01
56	537.65	0.56057E 01	0.94008E 00	0.28890E-02	0.34849E-03	0.17453E-00	0.82034E-01	-0.10680E 01	0.10000E 01
57	537.39	0.44426E 01	0.72214E 00	0.22188E-02	0.26764E-03	0.13407E-00	0.63016E-01	-0.10400E 01	0.10000E 01
58	542.08	0.94109E 01	0.16604E 01	0.51196E-02	0.61755E-03	0.30827E-00	0.14489E-00	-0.10680E 01	0.10000E 01
59	546.67	0.13624E 02	0.22261E 01	0.68872E-02	0.83078E-03	0.41330E-00	0.19426E-00	-0.10400E 01	0.10000E 01
60	538.65	0.76353E 01	0.12812E 01	0.39401E-02	0.47528E-03	0.23786E-00	0.11180E-00	-0.10680E 01	0.10000E 01
61	534.30	0.36623E 01	0.60511E 00	0.18550E-02	0.22376E-03	0.11234E-00	0.52804E-01	-0.11220E 01	0.10000E 01
62	540.56	0.39543E 01	0.59750E 00	0.18402E-02	0.22197E-03	0.11093E-00	0.52140E-01	-0.13340E 01	0.10000E 01
63	535.44	0.33377E 01	0.57244E 00	0.17563E-02	0.21186E-03	0.10628E-00	0.49953E-01	-0.11220E 01	0.10000E 01
64	540.33	0.31642E 01	0.47805E-00	0.14720E-02	0.17756E-03	0.88754E-01	0.41716E-01	-0.13340E 01	0.10000E 01
65	591.71	-0.36329E-02	-0.64274E-03	-0.20579E-05	-0.24823E-06	-0.11933E-03	-0.56087E-04	0.14400E 01	0.
66	591.71	-0.36329E-02	-0.61169E-03	-0.19584E-05	-0.23624E-06	-0.11357E-03	-0.53378E-04	0.16130E 01	0.
67	591.71	-0.36329E-02	-0.60039E-03	-0.19223E-05	-0.23188E-06	-0.11147E-03	-0.52392E-04	0.17200E 01	0.
68	591.71	-0.36329E-02	-0.61639E-03	-0.19735E-05	-0.23806E-06	-0.11444E-03	-0.53788E-04	-0.16130E 01	0.
69	591.71	-0.36329E-02	-0.60039E-03	-0.19223E-05	-0.23188E-06	-0.11147E-03	-0.52392E-04	-0.18280E 01	0.
70	536.13	0.36130E 01	0.52914E 00	0.16243E-02	0.19593E-03	0.98240E-01	0.46174E-01	-0.11650E 01	0.10000E 01
71	535.45	0.13049E 01	0.10925E-00	0.33520E-03	0.40434E-04	0.20284E-01	0.95336E-02	-0.12050E 01	0.10000E 01
72	538.64	0.32701E 01	0.47303E-00	0.14547E-02	0.17548E-03	0.87821E-01	0.41278E-01	-0.12120E 01	0.10000E 01
73	536.84	0.33538E 01	0.49138E-00	0.15092E-02	0.18204E-03	0.91228E-01	0.42879E-01	-0.11650E 01	0.10000E 01
74	535.20	0.86754E 00	0.72622E-01	0.22277E-03	0.26872E-04	0.13483E-01	0.63372E-02	-0.12050E 01	0.10000E 01
75	539.53	0.33958E 01	0.48889E-00	0.15045E-02	0.18148E-03	0.90767E-01	0.42662E-01	-0.12120E 01	0.10000E 01
76	536.59	0.47849E 01	0.71900E 00	0.22078E-02	0.26632E-03	0.13349E-00	0.62742E-01	0.10840E 01	0.10000E 01
77	535.58	0.31995E 01	0.51584E 00	0.15828E-02	0.19093E-03	0.95771E-01	0.45014E-01	0.11220E 01	0.10000E 01
78	540.92	0.30514E 01	0.45426E-00	0.13994E-02	0.16880E-03	0.84336E-01	0.39640E-01	0.13340E 01	0.10000E 01
79	538.52	0.34395E 01	0.57674E 00	0.17735E-02	0.21394E-03	0.10708E-00	0.50328E-01	-0.11890E 01	0.10000E 01
80	541.48	0.32369E 01	0.48691E-00	0.15006E-02	0.18101E-03	0.90399E-01	0.42489E-01	-0.13340E 01	0.10000E 01
81	537.72	0.38623E 01	0.62346E 00	0.19161E-02	0.23113E-03	0.11575E-00	0.54405E-01	-0.11470E 01	0.10000E 01
82	539.26	0.36764E 01	0.61616E 00	0.18958E-02	0.22868E-03	0.11440E-00	0.53768E-01	-0.11890E 01	0.10000E 01
83	537.47	0.44307E 01	0.74184E 00	0.22795E-02	0.27496E-03	0.13773E-00	0.64735E-01	-0.10840E 01	0.10000E 01
84	591.71	-0.36329E-02	-0.54864E-03	-0.17566E-05	-0.21189E-06	-0.10186E-03	-0.47876E-04	-0.11890E 01	0.
85	541.73	0.36779E 01	0.54035E 00	0.16656E-02	0.20092E-03	0.10032E-00	0.47153E-01	-0.13090E 01	0.10000E 01
86	542.22	0.35600E 01	0.53035E 00	0.16354E-02	0.19727E-03	0.98464E-01	0.46280E-01	-0.13340E 01	0.10000E 01
87	539.28	0.33470E 01	0.49022E-00	0.15083E-02	0.18194E-03	0.91013E-01	0.42778E-01	0.11990E 01	0.10000E 01
88	539.35	0.32244E 01	0.47634E-00	0.14657E-02	0.17680E-03	0.88436E-01	0.41566E-01	0.12070E 01	0.10000E 01
89	540.65	0.22712E 01	0.34148E-00	0.10518E-02	0.12687E-03	0.63399E-01	0.29798E-01	0.13340E 01	0.10000E 01
90	540.14	0.33283E 01	0.47514E-00	0.14629E-02	0.17646E-03	0.88214E-01	0.41462E-01	0.12070E 01	0.10000E 01
91	540.66	0.27673E 01	0.43001E-00	0.13244E-02	0.15976E-03	0.79836E-01	0.37524E-01	0.12490E 01	0.10000E 01
92	540.72	0.24862E 01	0.37571E-00	0.11572E-02	0.13959E-03	0.69754E-01	0.32786E-01	0.13340E 01	0.10000E 01
93	591.71	-0.36329E-02	-0.63145E-03	-0.20217E-05	-0.24387E-06	-0.11723E-03	-0.55102E-04	0.14900E 01	0.
94	591.71	-0.36329E-02	-0.39242E-03	-0.12564E-05	-0.15156E-06	-0.72856E-04	-0.34244E-04	-0.	0.
95	591.71	-0.36329E-02	-0.39524E-03	-0.12655E-05	-0.15265E-06	-0.73380E-04	-0.34490E-04	-0.	0.
96	591.71	-0.36329E-02	-0.39242E-03	-0.12564E-05	-0.15156E-06	-0.72856E-04	-0.34244E-04	-0.	0.
97	591.71	-0.36329E-02	-0.39242E-03	-0.12564E-05	-0.15156E-06	-0.72856E-04	-0.34244E-04	-0.	0.
98	591.71	-0.36329E-02	-0.39524E-03	-0.12655E-05	-0.15265E-06	-0.73380E-04	-0.34490E-04	-0.	0.

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	(OFF) GRP	(OFF) CONFIG	(OFF) TIME
165	3	-0.22	176.78	0.02	-0.	1	C2	2.90	2	10.21	[redacted]	1415 1415	165	C2	2.90

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.901148E 02	0.673352E-01	0.474908E 04	0.626914E-04	0.729930E-07	0[redacted]4	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731212E 00	0.775853E 00	0.121100E 02

1.73

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	624.65	0.59701E 02	0.81373E 01	0.25404E-01	0.26521E-02	0.10488E 02	0.67195E 00	-0.	0.10000E 01
2	627.54	0.59410E 02	0.86277E 01	0.26994E-01	0.28181E-02	0.11120E 02	0.71244E 00	-0.30000E-01	0.10000E 01
3	615.27	0.58215E 02	0.91324E 01	0.28310E-01	0.29554E-02	0.11771E 02	0.75412E 00	-0.60000E-01	0.10000E 01
4	619.26	0.57432E 02	0.92611E 01	0.28795E-01	0.30061E-02	0.11937E 02	0.76475E 00	-0.90000E-01	0.10000E 01
5	-860.31	-0.40003E-00	-0.65974E-02	-0.99067E-05	-0.10342E-05	-0.85034E-02	-0.54479E-03	-0.20000E-00	0.
6	598.20	0.39657E 02	0.64772E 01	0.19795E-01	0.20666E-02	0.83485E 01	0.53486E 00	-0.40000E-00	0.10000E 01
7	1085.37	-0.36374E-02	-0.74661E-03	-0.36036E-05	-0.37619E-06	-0.96231E-03	-0.61652E-04	-0.60000E 00	0.
8	1045.24	-0.58714E-01	-0.11863E-01	-0.54629E-04	-0.57029E-05	-0.15290E-01	-0.97957E-03	-0.80000E 00	0.
9	1017.36	-0.57238E-02	-0.11255E-02	-0.50231E-05	-0.52438E-06	-0.14506E-02	-0.92937E-04	-0.90000E 00	0.
10	595.17	0.35239E 02	0.57616E 01	0.17595E-01	0.18368E-02	0.74262E 01	0.47577E-00	-0.98000E 00	0.
11	556.58	0.55475E 01	0.96278E 00	0.28587E-02	0.29843E-03	0.12409E 01	0.79502E-01	-0.11220E 01	0.10000E 01
12	561.07	0.57834E 01	0.85741E 00	0.25541E-02	0.26663E-03	0.11051E 01	0.70802E-01	-0.11890E 01	0.10000E 01
13	560.27	0.43855E 01	0.66998E 00	0.19946E-02	0.20822E-03	0.86353E 00	0.55324E-01	-0.13340E 01	0.10000E 01
14	591.70	-0.36318E-02	-0.64255E-03	-0.19572E-05	-0.20432E-06	-0.82818E-03	-0.53059E-04	-0.14400E 01	0.
15	618.89	0.53822E 02	0.77805E 01	0.24185E-01	0.25248E-02	0.10028E 02	0.64248E 00	0.30000E-01	0.10000E 01
16	974.82	-0.23688E-00	-0.44005E-01	-0.18759E-03	-0.19583E-04	-0.56719E-01	-0.36338E-02	0.60000E-01	0.
17	43.90	-0.62561E 00	-0.68353E-01	-0.14894E-03	-0.15548E-04	-0.88100E-01	-0.56443E-02	0.90000E-01	0.
18	599.55	0.37075E 02	0.60664E 01	0.18586E-01	0.19403E-02	0.78189E 01	0.50094E 00	0.20000E-00	0.10000E 01
19	620.65	0.50151E 02	0.82986E 01	0.25830E-01	0.26965E-02	0.10696E 02	0.68528E 00	0.40000E-00	0.10000E 01
20	621.01	0.41448E 02	0.68927E 01	0.21460E-01	0.22403E-02	0.88840E 01	0.56917E 00	0.60000E 00	0.10000E 01
21	626.92	0.40269E 02	0.63243E 01	0.19778E-01	0.20648E-02	0.81515E 01	0.52224E 00	0.92000E 00	0.10000E 01
22	576.73	0.14156E 02	0.21641E 01	0.65200E-02	0.68065E-03	0.27893E 01	0.17870E-00	0.10400E 01	0.10000E 01
23	568.48	0.93034E 01	0.14197E 01	0.42516E-02	0.44384E-03	0.18298E 01	0.11723E-00	0.10600E 01	0.10000E 01
24	566.11	0.80197E 01	0.12804E 01	0.38279E-02	0.39961E-03	0.16503E 01	0.10573E-00	0.10840E 01	0.10000E 01
25	562.87	0.52894E 01	0.78900E 00	0.23533E-02	0.24567E-03	0.10169E 01	0.65152E-01	0.12070E 01	0.10000E 01
26	561.53	0.46457E 01	0.73036E 00	0.21763E-02	0.22720E-03	0.94136E 00	0.60310E-01	0.12490E 01	0.10000E 01
27	560.62	0.43730E 01	0.67600E 00	0.20130E-02	0.21015E-03	0.87129E 00	0.55821E-01	0.13340E 01	0.10000E 01
28	591.70	-0.36318E-02	-0.63502E-03	-0.19343E-05	-0.20193E-06	-0.81848E-03	-0.52437E-04	0.14540E 01	0.
29	591.70	-0.36318E-02	-0.61620E-03	-0.18770E-05	-0.19595E-06	-0.79423E-03	-0.50884E-04	0.16580E 01	0.
30	591.70	-0.36318E-02	-0.62373E-03	-0.18999E-05	-0.19834E-06	-0.80393E-03	-0.51505E-04	0.20410E 01	0.
31	591.70	-0.36318E-02	-0.62373E-03	-0.18999E-05	-0.19834E-06	-0.80393E-03	-0.51505E-04	0.22480E 01	0.
32	1085.37	-0.36374E-02	-0.70715E-03	-0.34131E-05	-0.35631E-06	-0.91145E-03	-0.58394E-04	-0.60000E-01	0.
33	-4157.12	0.51640E-02	-0.20556E-02	-0.15460E-05	-0.16140E-06	-0.26498E-02	-0.16976E-03	-0.30000E-01	0.
34	1085.37	-0.36374E-02	-0.70715E-03	-0.34131E-05	-0.35631E-06	-0.91145E-03	-0.58394E-04	0.30000E-01	0.
35	1100.69	0.14181E-00	0.28420E-01	0.13974E-03	0.14588E-04	0.36630E-01	0.23468E-02	0.60000E-01	0.
36	592.71	0.36385E 02	0.59317E 01	0.18082E-01	0.18876E-02	0.76454E 01	0.48981E-00	-0.86800E 00	0.10000E 01
37	595.38	0.36025E 02	0.57225E 01	0.17478E-01	0.18247E-02	0.73757E 01	0.47254E-00	-0.91100E 00	0.10000E 01
38	556.94	0.51120E 02	0.80942E 01	0.24040E-01	0.25096E-02	0.10433E 02	0.66839E 00	-0.95300E 00	0.10000E 01
39	573.05	0.57161E-02	0.91607E-03	0.27526E-05	0.28735E-06	0.11807E-02	0.75646E-04	0.51000E-01	0.
40	-408.50	-0.11532E 01	-0.75663E-01	-0.13419E-03	-0.14009E-04	-0.97523E-01	-0.62480E-02	0.29000E-01	0.
41	1119.74	0.43632E-01	0.69229E-02	0.44921E-04	0.46895E-05	0.11501E-01	0.73682E-03	0.70000E-02	0.
42	593.66	0.36575E 02	0.59277E 01	0.18082E-01	0.18877E-02	0.76402E 01	0.48949E-00	-0.86800E 00	0.10000E 01
43	592.02	0.36325E 02	0.58970E 01	0.17967E-01	0.18756E-02	0.76007E 01	0.48695E-00	-0.91100E 00	0.10000E 01
44	595.48	0.37595E 02	0.60795E 01	0.18570E-01	0.19386E-02	0.78359E 01	0.50202E 00	-0.95300E 00	0.10000E 01
45	560.86	0.14450E 02	0.23799E 01	0.70881E-02	0.73996E-03	0.30674E 01	0.19652E-00	-0.10400E 01	0.10000E 01
46	756.03	0.77926E-02	0.13621E-02	0.46454E-05	0.48495E-06	0.17556E-02	0.11248E-03	0.70000E-02	0.
47	576.43	-0.29610E-01	-0.47664E-02	-0.14357E-04	-0.14988E-05	-0.61434E-02	-0.39359E-03	0.29000E-01	0.
48	939.07	0.70127E-01	0.13498E-01	0.55453E-04	0.57890E-05	0.17397E-01	0.11146E-02	0.51000E-01	0.
49	596.23	0.35398E 02	0.57265E 01	0.17502E-01	0.18271E-02	0.73809E 01	0.47287E-00	0.70000E-02	0.10000E 01
50	594.39	0.32916E 02	0.53367E 01	0.16288E-01	0.17004E-02	0.68766E 01	0.44069E-00	0.29000E-01	0.10000E 01
51	1126.50	0.53479E 01	0.10993E 01	0.55816E-02	0.58269E-03	0.14169E 01	0.90776E-01	0.51000E-01	0.
52	574.31	0.34767E 01	0.55900E 00	0.16812E-02	0.17551E-03	0.72050E 00	0.46160E-01	-0.86800E 00	0.10000E 01
53	596.18	0.34992E 02	0.57151E 01	0.17466E-01	0.18234E-02	0.73663E 01	0.47193E-00	-0.91100E 00	0.10000E 01
54	597.11	0.35860E 02	0.58040E 01	0.17750E-01	0.18530E-02	0.74808E 01	0.47927E-00	-0.95300E 00	0.10000E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	558.89	0.11056E 02	0.18188E 01	0.54093E-02	0.56470E-03	0.23442E 01	0.15019E-00	-0.10400E 01	0.10000E 01
56	553.91	0.58966E 01	0.99791E 00	0.29574E-02	0.30873E-03	0.12862E 01	0.82404E-01	-0.10680E 01	0.10000E 01
57	552.81	0.44572E 01	0.73078E 00	0.21640E-02	0.22591E-03	0.94191E 00	0.60345E-01	-0.10400E 01	0.10000E 01
58	557.94	0.98384E 01	0.17513E 01	0.52051E-02	0.54338E-03	0.22572E 01	0.14461E-00	-0.10680E 01	0.10000E 01
59	565.19	0.15314E 02	0.25281E 01	0.75531E-02	0.78850E-03	0.32585E 01	0.20876E-00	-0.10400E 01	0.10000E 01
60	556.56	0.84743E 01	0.14363E 01	0.42645E-02	0.44519E-03	0.18512E 01	0.11860E-00	-0.10680E 01	0.10000E 01
61	553.96	0.55044E 01	0.91955E 00	0.27252E-02	0.28450E-03	0.11852E 01	0.75933E-01	-0.11220E 01	0.10000E 01
62	560.57	0.44156E 01	0.67469E 00	0.20091E-02	0.20973E-03	0.86961E 00	0.55713E-01	-0.13340E 01	0.10000E 01
63	555.12	0.53003E 01	0.91912E 00	0.27262E-02	0.28460E-03	0.11847E 01	0.75897E-01	-0.11220E 01	0.10000E 01
64	560.96	0.43647E 01	0.66706E 00	0.19869E-02	0.20742E-03	0.85977E 00	0.55083E-01	-0.13340E 01	0.10000E 01
65	591.70	-0.36318E-02	-0.64255E-03	-0.19572E-05	-0.20432E-06	-0.82818E-03	-0.53059E-04	0.14400E 01	0.
66	591.70	-0.36318E-02	-0.61150E-03	-0.18627E-05	-0.19445E-06	-0.78816E-03	-0.50495E-04	0.16130E 01	0.
67	591.70	-0.36318E-02	-0.60021E-03	-0.18283E-05	-0.19086E-06	-0.77361E-03	-0.49563E-04	0.17200E 01	0.
68	591.70	-0.36318E-02	-0.61620E-03	-0.18770E-05	-0.19595E-06	-0.79423E-03	-0.50884E-04	-0.16130E 01	0.
69	591.70	-0.36318E-02	-0.60021E-03	-0.18283E-05	-0.19086E-06	-0.77361E-03	-0.49563E-04	-0.18280E 01	0.
70	559.16	0.54587E 01	0.80981E 00	0.24090E-02	0.25148E-03	0.10438E 01	0.66871E-01	-0.11650E 01	0.10000E 01
71	557.97	0.19221E 01	0.16296E-00	0.48435E-03	0.50563E-04	0.21004E-00	0.13457E-01	-0.12050E 01	0.10000E 01
72	562.09	0.53657E 01	0.78637E 00	0.23442E-02	0.24472E-03	0.10136E 01	0.64935E-01	-0.12120E 01	0.10000E 01
73	558.93	0.53273E 01	0.79021E 00	0.23503E-02	0.24536E-03	0.10185E 01	0.65253E-01	-0.11650E 01	0.10000E 01
74	557.54	0.12509E 01	0.10603E-00	0.31505E-03	0.32889E-04	0.13666E-00	0.87556E-02	-0.12050E 01	0.10000E 01
75	561.47	0.56452E 01	0.82273E 00	0.24515E-02	0.25592E-03	0.10604E 01	0.67938E-01	-0.12120E 01	0.10000E 01
76	552.23	0.51959E 01	0.78761E 00	0.23313E-02	0.24338E-03	0.10152E 01	0.65038E-01	0.10840E 01	0.10000E 01
77	554.16	0.55803E 01	0.90910E 00	0.26946E-02	0.28130E-03	0.11717E 01	0.75070E-01	0.11220E 01	0.10000E 01
78	559.82	0.48623E 01	0.73150E 00	0.21771E-02	0.22727E-03	0.94284E 00	0.60405E-01	0.13340E 01	0.10000E 01
79	558.20	0.60582E 01	0.10271E 01	0.30532E-02	0.31873E-03	0.13238E 01	0.84812E-01	-0.11890E 01	0.10000E 01
80	558.97	0.50774E 01	0.77125E 00	0.22940E-02	0.23948E-03	0.99407E 00	0.63687E-01	-0.13340E 01	0.10000E 01
81	556.03	0.64151E 01	0.10462E 01	0.31051E-02	0.32416E-03	0.13484E 01	0.86390E-01	-0.11470E 01	0.10000E 01
82	557.63	0.65678E 01	0.11121E 01	0.33046E-02	0.34498E-03	0.14334E 01	0.91835E-01	-0.11890E 01	0.10000E 01
83	552.20	0.48494E 01	0.81866E 00	0.24232E-02	0.25297E-03	0.10552E 01	0.67602E-01	-0.10840E 01	0.10000E 01
84	591.70	-0.36318E-02	-0.54847E-03	-0.16707E-05	-0.17441E-06	-0.70692E-03	-0.45290E-04	-0.11890E 01	0.
85	558.71	0.60488E 01	0.89714E 00	0.26679E-02	0.27851E-03	0.11563E 01	0.74082E-01	-0.13090E 01	0.10000E 01
86	559.38	0.55158E 01	0.82962E 00	0.24683E-02	0.25768E-03	0.10693E 01	0.68507E-01	-0.13340E 01	0.10000E 01
87	562.12	0.52494E 01	0.77869E 00	0.23213E-02	0.24233E-03	0.10037E 01	0.64301E-01	0.11990E 01	0.10000E 01
88	562.07	0.50457E 01	0.75490E 00	0.22503E-02	0.23492E-03	0.97299E 00	0.62336E-01	0.12070E 01	0.10000E 01
89	560.64	0.40940E 01	0.62246E 00	0.18536E-02	0.19351E-03	0.80229E 00	0.51400E-01	0.13340E 01	0.10000E 01
90	562.50	0.52145E 01	0.75375E 00	0.22476E-02	0.23464E-03	0.97152E 00	0.62242E-01	0.12070E 01	0.10000E 01
91	561.73	0.45159E 01	0.71002E 00	0.21160E-02	0.22090E-03	0.91514E 00	0.58630E-01	0.12490E 01	0.10000E 01
92	561.02	0.42509E 01	0.64969E 00	0.19352E-02	0.20203E-03	0.83739E 00	0.53649E-01	0.13340E 01	0.10000E 01
93	591.70	-0.36318E-02	-0.63126E-03	-0.19228E-05	-0.20073E-06	-0.81363E-03	-0.52127E-04	0.14900E 01	0.
94	591.70	-0.36318E-02	-0.39230E-03	-0.11950E-05	-0.12475E-06	-0.50564E-03	-0.32395E-04	-0.	0.
95	591.70	-0.36318E-02	-0.39512E-03	-0.12036E-05	-0.12565E-06	-0.50928E-03	-0.32628E-04	-0.	0.
96	591.70	-0.36318E-02	-0.39230E-03	-0.11950E-05	-0.12475E-06	-0.50564E-03	-0.32395E-04	-0.	0.
97	591.70	-0.36318E-02	-0.39230E-03	-0.11950E-05	-0.12475E-06	-0.50564E-03	-0.32395E-04	-0.	0.
98	591.70	-0.36318E-02	-0.39512E-03	-0.12036E-05	-0.12565E-06	-0.50928E-03	-0.32628E-04	-0.	0.

APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)
166	3	2.76	179.76	0.02	-0.	1	C2	2.85	2	10.21	[redacted]	[redacted]

1415 1415

GRP	CONFIG	TIME
166	C2	2.85

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE#10-6/FT	CP(INF)
0.902066E 02	0.673545E-01	0.475151E 04	0.626455E-04	0.730674E-07	[redacted]	0.772000E 01

1.173

PR	Q(F-R)	Q(MEAS)
0.731264E 00	0.753392E 00	0.121115E 02

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	617.82	0.47126E 02	0.64001E 01	0.19847E-01	0.20723E-02	0.84950E 01	0.52843E 00	-0.	0.10000E 01
2	617.96	0.42983E 02	0.62106E 01	0.19261E-01	0.20112E-02	0.82435E 01	0.51278E 00	-0.30000E-01	0.10000E 01
3	607.35	0.38870E 02	0.60720E 01	0.18682E-01	0.19508E-02	0.80596E 01	0.50134E 00	-0.60000E-01	0.10000E 01
4	609.81	0.37592E 02	0.60314E 01	0.18592E-01	0.19413E-02	0.80057E 01	0.49799E-00	-0.90000E-01	0.10000E 01
5	-198.46	-0.18183E-01	-0.15972E-02	-0.30954E-05	-0.32321E-06	-0.21200E-02	-0.13187E-03	-0.20000E-00	0.
6	604.84	0.48514E 02	0.79607E 01	0.24448E-01	0.25528E-02	0.10567E 02	0.65729E 00	-0.40000E-00	0.10000E 01
7	1085.37	-0.36375E-02	-0.74663E-03	-0.35948E-05	-0.37536E-06	-0.99103E-03	-0.61646E-04	-0.60000E 00	0.
8	1039.54	-0.81047E-01	-0.16338E-01	-0.74576E-04	-0.77870E-05	-0.21685E-01	-0.13489E-02	-0.80000E 00	0.
9	1020.08	-0.24420E-01	-0.48071E-02	-0.21470E-04	-0.22418E-05	-0.63806E-02	-0.39690E-03	-0.90000E 00	0.
10	600.43	0.38039E 02	0.62370E 01	0.19091E-01	0.19935E-02	0.82785E 01	0.51496E 00	-0.98000E 00	0.
11	556.00	0.45943E 01	0.79709E 00	0.23622E-02	0.24665E-03	0.10580E 01	0.65812E-01	-0.11220E 01	0.10000E 01
12	560.01	0.45642E 01	0.67626E 00	0.20099E-02	0.20987E-03	0.89762E 00	0.55836E-01	-0.11890E 01	0.10000E 01
13	561.18	0.41688E 01	0.63720E 00	0.18954E-02	0.19791E-03	0.84578E 00	0.52611E-01	-0.13340E 01	0.10000E 01
14	591.70	-0.31130E-02	-0.55076E-03	-0.16750E-05	-0.17490E-06	-0.73104E-03	-0.45474E-04	-0.14400E 01	0.
15	616.85	0.51153E 02	0.73867E 01	0.22889E-01	0.23900E-02	0.98045E 01	0.60989E 00	0.30000E-01	0.10000E 01
16	950.61	-0.13559E-00	-0.24933E-01	-0.10343E-03	-0.10800E-04	-0.33095E-01	-0.20587E-02	0.60000E-01	0.
17	74.24	-0.55002E 00	-0.61680E-01	-0.13637E-03	-0.14239E-04	-0.81870E-01	-0.50927E-02	0.90000E-01	0.
18	610.47	0.54631E 02	0.89914E 01	0.27729E-01	0.28954E-02	0.11935E 02	0.74238E 00	0.20000E-00	0.10000E 01
19	614.18	0.39459E 02	0.65072E 01	0.20124E-01	0.21013E-02	0.86372E 01	0.53727E 00	0.40000E-00	0.10000E 01
20	615.31	0.36665E 02	0.60789E 01	0.18815E-01	0.19646E-02	0.80687E 01	0.50191E 00	0.60000E 00	0.10000E 01
21	621.12	0.37592E 02	0.58858E 01	0.18297E-01	0.19105E-02	0.78124E 01	0.48596E-00	0.92000E 00	0.10000E 01
22	571.56	0.12512E 02	0.19074E 01	0.57164E-02	0.59689E-03	0.25318E 01	0.15749E-00	0.10400E 01	0.10000E 01
23	564.50	0.80462E 01	0.12251E 01	0.36529E-02	0.38143E-03	0.16262E 01	0.10115E-00	0.10600E 01	0.10000E 01
24	562.44	0.69169E 01	0.11021E 01	0.32811E-02	0.34260E-03	0.14628E 01	0.90993E-01	0.10840E 01	0.10000E 01
25	563.72	0.42520E 01	0.63455E 00	0.18910E-02	0.19745E-03	0.84226E 00	0.52392E-01	0.12070E 01	0.10000E 01
26	563.77	0.35631E 01	0.56085E 00	0.16714E-02	0.17452E-03	0.74444E 00	0.46307E-01	0.12490E 01	0.10000E 01
27	563.43	0.30379E 01	0.47035E-00	0.14013E-02	0.14632E-03	0.62431E 00	0.38835E-01	0.13340E 01	0.10000E 01
28	591.70	-0.31130E-02	-0.54431E-03	-0.16554E-05	-0.17286E-06	-0.72248E-03	-0.44941E-04	0.14540E 01	0.
29	591.70	-0.31130E-02	-0.52818E-03	-0.16064E-05	-0.16773E-06	-0.70107E-03	-0.43610E-04	0.16580E 01	0.
30	591.70	-0.31130E-02	-0.53463E-03	-0.16260E-05	-0.16978E-06	-0.70963E-03	-0.44142E-04	0.20410E 01	0.
31	591.70	-0.31130E-02	-0.53463E-03	-0.16260E-05	-0.16978E-06	-0.70963E-03	-0.44142E-04	0.22480E 01	0.
32	1085.37	-0.36375E-02	-0.70717E-03	-0.34049E-05	-0.35553E-06	-0.93865E-03	-0.58388E-04	-0.60000E-01	0.
33	-4157.12	0.51843E-02	-0.20559E-02	-0.15455E-05	-0.16138E-06	-0.27289E-02	-0.16975E-03	-0.30000E-01	0.
34	1085.37	-0.36375E-02	-0.70717E-03	-0.34049E-05	-0.35553E-06	-0.93865E-03	-0.58388E-04	0.30000E-01	0.
35	1085.37	-0.36375E-02	-0.72466E-03	-0.34890E-05	-0.36432E-06	-0.96186E-03	-0.59832E-04	0.60000E-01	0.
36	594.08	0.39260E 02	0.64050E 01	0.19514E-01	0.20376E-02	0.85015E 01	0.52883E 00	-0.86800E 00	0.10000E 01
37	598.04	0.38738E 02	0.61622E 01	0.18829E-01	0.19661E-02	0.81793E 01	0.50879E 00	-0.91100E 00	0.10000E 01
38	586.83	0.24405E 02	0.39281E 01	0.11904E-01	0.12430E-02	0.52139E 01	0.32433E-00	-0.95300E 00	0.10000E 01
39	579.57	-0.35324E-01	-0.56813E-02	-0.17126E-04	-0.17882E-05	-0.75409E-02	-0.46908E-03	0.51000E-01	0.
40	-601.93	-0.17221E 01	-0.77445E-01	-0.12729E-03	-0.13292E-04	-0.10280E-00	-0.63943E-02	0.29000E-01	0.
41	1127.54	0.83048E-02	0.17034E-02	0.86379E-05	0.90194E-06	0.22610E-02	0.14064E-03	0.70000E-02	0.
42	595.10	0.39618E 02	0.64259E 01	0.19592E-01	0.20458E-02	0.85293E 01	0.53056E 00	-0.86800E 00	0.10000E 01
43	593.71	0.38951E 02	0.63291E 01	0.19277E-01	0.20129E-02	0.84007E 01	0.52256E 00	-0.91100E 00	0.10000E 01
44	597.95	0.40262E 02	0.65194E 01	0.19919E-01	0.20799E-02	0.86534E 01	0.53828E 00	-0.95300E 00	0.10000E 01
45	562.65	0.16250E 02	0.26789E 01	0.79770E-02	0.83294E-03	0.35558E 01	0.22119E-00	-0.10400E 01	0.10000E 01
46	757.39	0.73249E-01	0.12937E-01	0.44839E-04	0.46820E-05	0.17171E-01	0.10681E-02	0.70000E-02	0.
47	640.58	0.10410E-02	0.17342E-03	0.54713E-06	0.57130E-07	0.23018E-03	0.14318E-04	0.29000E-01	0.
48	957.26	0.23895E-01	0.46348E-02	0.19357E-04	0.20212E-05	0.61519E-02	0.38267E-03	0.51000E-01	0.
49	598.88	0.40145E 02	0.65038E 01	0.19885E-01	0.20764E-02	0.86327E 01	0.53699E 00	0.70000E-02	0.10000E 01
50	596.12	0.38360E 02	0.59007E 01	0.18004E-01	0.18800E-02	0.78321E 01	0.48719E-00	0.29000E-01	0.10000E 01
51	1085.37	-0.36375E-02	-0.73600E-03	-0.35437E-05	-0.37002E-06	-0.97691E-03	-0.60768E-04	0.51000E-01	0.
52	920.61	-0.45108E 01	-0.85809E 00	-0.34535E-02	-0.36061E-03	-0.11390E 01	-0.70849E-01	-0.86800E 00	0.
53	599.33	0.39072E 02	0.63924E 01	0.19551E-01	0.20413E-02	0.84849E 01	0.52780E 00	-0.91100E 00	0.10000E 01
54	600.67	0.39657E 02	0.64309E 01	0.19688E-01	0.20558E-02	0.85359E 01	0.53097E 00	-0.95300E 00	0.10000E 01

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	560.33	0.12634E 02	0.20801E 01	0.61837E-02	0.64568E-03	0.27610E 01	0.17175E-00	-0.10400E 01	0.10000E 01
56	554.43	0.70291E 01	0.11899E 01	0.35223E-02	0.36779E-03	0.15794E 01	0.98246E-01	-0.10680E 01	0.10000E 01
57	552.36	0.54748E 01	0.89741E 00	0.26526E-02	0.27698E-03	0.11912E 01	0.74096E-01	-0.10400E 01	0.10000E 01
58	550.57	0.11569E 02	0.20600E 01	0.61161E-02	0.63863E-03	0.27343E 01	0.17009E-00	-0.10680E 01	0.10000E 01
59	565.34	0.17483E 02	0.28865E 01	0.86116E-02	0.89920E-03	0.38313E 01	0.23832E-00	-0.10400E 01	0.10000E 01
60	556.53	0.98774E 01	0.16740E 01	0.49628E-02	0.51821E-03	0.22220E 01	0.13822E-00	-0.10680E 01	0.10000E 01
61	552.27	0.49803E 01	0.83120E 00	0.24567E-02	0.25652E-03	0.11033E 01	0.68629E-01	-0.11220E 01	0.10000E 01
62	561.47	0.52291E 01	0.79939E 00	0.23783E-02	0.24834E-03	0.10611E 01	0.66003E-01	-0.13340E 01	0.10000E 01
63	553.64	0.46208E 01	0.80063E 00	0.23687E-02	0.24733E-03	0.10627E 01	0.66105E-01	-0.11220E 01	0.10000E 01
64	561.55	0.41714E 01	0.63773E 00	0.18975E-02	0.19813E-03	0.84648E 00	0.52655E-01	-0.13340E 01	0.10000E 01
65	591.70	-0.31130E-02	-0.55076E-03	-0.16750E-05	-0.17490E-06	-0.73104E-03	-0.45474E-04	0.14400E 01	0.
66	591.70	-0.31130E-02	-0.52415E-03	-0.15941E-05	-0.16645E-06	-0.69572E-03	-0.43277E-04	0.16130E 01	0.
67	591.70	-0.31130E-02	-0.51447E-03	-0.15647E-05	-0.16338E-06	-0.68287E-03	-0.42478E-04	0.17200E 01	0.
68	591.70	-0.31130E-02	-0.52818E-03	-0.16064E-05	-0.16773E-06	-0.70107E-03	-0.43610E-04	-0.16130E 01	0.
69	591.70	-0.31130E-02	-0.51447E-03	-0.15647E-05	-0.16338E-06	-0.68287E-03	-0.42478E-04	-0.18260E 01	0.
70	557.65	0.46649E 01	0.69147E 00	0.20516E-02	0.21422E-03	0.91781E 00	0.57092E-01	-0.11650E 01	0.10000E 01
71	557.58	0.16265E 01	0.13787E-00	0.40904E-03	0.42711E-04	0.18300E-00	0.11383E-01	-0.12050E 01	0.10000E 01
72	561.35	0.43626E 01	0.63909E 00	0.19012E-02	0.19852E-03	0.84829E 00	0.52767E-01	-0.12120E 01	0.10000E 01
73	558.00	0.42821E 01	0.63485E 00	0.18841E-02	0.19673E-03	0.84265E 00	0.52417E-01	-0.11650E 01	0.10000E 01
74	557.45	0.10670E 01	0.90439E-01	0.26829E-03	0.28015E-04	0.12004E-00	0.74671E-02	-0.12050E 01	0.10000E 01
75	560.94	0.43896E 01	0.63955E 00	0.19020E-02	0.19861E-03	0.84890E 00	0.52805E-01	-0.12120E 01	0.10000E 01
76	552.83	0.62966E 01	0.95479E 00	0.28231E-02	0.29478E-03	0.12673E 01	0.78833E-01	0.10840E 01	0.10000E 01
77	552.83	0.45143E 01	0.73489E 00	0.21729E-02	0.22689E-03	0.97545E 00	0.60677E-01	0.11220E 01	0.10000E 01
78	560.60	0.40681E 01	0.61228E 00	0.18205E-02	0.19009E-03	0.81269E 00	0.50553E-01	0.13340E 01	0.10000E 01
79	556.76	0.45080E 01	0.76366E 00	0.22643E-02	0.23644E-03	0.10136E 01	0.63053E-01	-0.11890E 01	0.10000E 01
80	559.72	0.41444E 01	0.62980E 00	0.18714E-02	0.19541E-03	0.83595E 00	0.52000E-01	-0.13340E 01	0.10000E 01
81	554.64	0.50836E 01	0.82841E 00	0.24526E-02	0.25610E-03	0.10996E 01	0.68399E-01	-0.11470E 01	0.10000E 01
82	556.18	0.50732E 01	0.85836E 00	0.25441E-02	0.26565E-03	0.11393E 01	0.70871E-01	-0.11890E 01	0.10000E 01
83	552.46	0.57117E 01	0.96438E 00	0.28507E-02	0.29767E-03	0.12801E 01	0.79625E-01	-0.10840E 01	0.10000E 01
84	591.70	-0.31130E-02	-0.47012E-03	-0.14298E-05	-0.14930E-06	-0.62401E-03	-0.38816E-04	-0.11890E 01	0.
85	559.16	0.46426E 01	0.68874E 00	0.20457E-02	0.21361E-03	0.91419E 00	0.56867E-01	-0.13090E 01	0.10000E 01
86	559.57	0.43969E 01	0.66139E 00	0.19651E-02	0.20519E-03	0.87788E 00	0.54608E-01	-0.13340E 01	0.10000E 01
87	562.47	0.42712E 01	0.63371E 00	0.18867E-02	0.19701E-03	0.84115E 00	0.52323E-01	0.11990E 01	0.10000E 01
88	562.58	0.40239E 01	0.60219E 00	0.17930E-02	0.18723E-03	0.79931E 00	0.49721E-01	0.12070E 01	0.10000E 01
89	563.44	0.27906E 01	0.42495E-00	0.12661E-02	0.13220E-03	0.56404E 00	0.35086E-01	0.13340E 01	0.10000E 01
90	564.21	0.42307E 01	0.61211E 00	0.18247E-02	0.19053E-03	0.81247E 00	0.50539E-01	0.12070E 01	0.10000E 01
91	564.46	0.34312E 01	0.54029E 00	0.16109E-02	0.16821E-03	0.71714E 00	0.44609E-01	0.12490E 01	0.10000E 01
92	563.88	0.29699E 01	0.45462E-00	0.13549E-02	0.14148E-03	0.60343E 00	0.37536E-01	0.13340E 01	0.10000E 01
93	591.70	-0.31130E-02	-0.54108E-03	-0.16456E-05	-0.17183E-06	-0.71820E-03	-0.44675E-04	0.14900E 01	0.
94	591.70	-0.31130E-02	-0.33626E-03	-0.10227E-05	-0.10679E-06	-0.44633E-03	-0.27764E-04	-0.	0.
95	591.70	-0.31130E-02	-0.33868E-03	-0.10300E-05	-0.10755E-06	-0.44954E-03	-0.27964E-04	-0.	0.
96	591.70	-0.31130E-02	-0.33626E-03	-0.10227E-05	-0.10679E-06	-0.44633E-03	-0.27764E-04	-0.	0.
97	591.70	-0.31130E-02	-0.33626E-03	-0.10227E-05	-0.10679E-06	-0.44633E-03	-0.27764E-04	-0.	0.
98	591.70	-0.31130E-02	-0.33868E-03	-0.10300E-05	-0.10755E-06	-0.44954E-03	-0.27964E-04	-0.	0.

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	GRP (OFF)	CONFIG (OFF)	TIME (OFF)
162	3	0.75	177.75	0.02	-0.	1	C2	2.85	2	10.21	[redacted]	1834 1883	162	C2	2.85

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.907298E 02	0.770481E-01	0.476725E 04	0.712482E-04	0.734911E-07	0[redacted] 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731556E 00	-0.883417E 01	0.123912E 02

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	630.91	0.54946E 02	0.75140E 01	0.23345E-01	0.21362E-02	-0.85056E 00	0.60639E 00	-0.	0.10000E 01
2	632.08	0.51945E 02	0.75615E 01	0.23514E-01	0.21516E-02	-0.85594E 00	0.61023E 00	-0.30000E-01	0.10000E 01
3	619.23	0.49558E 02	0.77907E 01	0.23994E-01	0.21956E-02	-0.88188E 00	0.62872E 00	-0.60000E-01	0.10000E 01
4	622.89	0.48687E 02	0.78661E 01	0.24293E-01	0.22229E-02	-0.89042E 00	0.63481E 00	-0.90000E-01	0.10000E 01
5	-4157.12	0.51843E-02	-0.23513E-02	-0.17641E-05	-0.16143E-06	0.26616E-03	-0.18975E-03	-0.20000E-00	0.
6	616.92	0.50759E 02	0.83829E 01	0.25773E-01	0.23584E-02	-0.94892E 00	0.67652E 00	-0.40000E-00	0.10000E 01
7	606.57	0.45264E 02	0.74698E 01	0.22790E-01	0.20854E-02	-0.84556E 00	0.60283E 00	-0.60000E 00	0.10000E 01
8	605.06	0.43589E 02	0.71874E 01	0.21904E-01	0.20044E-02	-0.81359E 00	0.58004E 00	-0.80000E 00	0.10000E 01
9	606.25	0.43929E 02	0.71335E 01	0.21759E-01	0.19911E-02	-0.80749E 00	0.57569E 00	-0.90000E 00	0.10000E 01
10	607.80	0.43138E 02	0.71010E 01	0.21685E-01	0.19843E-02	-0.80381E 00	0.57306E 00	-0.98000E 00	0.10000E 01
11	547.42	0.62166E 01	0.10734E 01	0.31379E-02	0.28714E-03	-0.12151E-00	0.86626E-01	-0.11220E 01	0.10000E 01
12	550.25	0.61195E 01	0.90181E 00	0.26416E-02	0.24172E-03	-0.10208E-00	0.72778E-01	-0.11890E 01	0.10000E 01
13	552.05	0.47340E 01	0.71993E 00	0.21115E-02	0.19322E-03	-0.81494E-01	0.58100E-01	-0.13340E 01	0.10000E 01
14	591.70	-0.31130E-02	-0.55076E-03	-0.16621E-05	-0.15209E-06	0.62344E-04	-0.44447E-04	-0.14400E 01	0.
15	627.91	0.56656E 02	0.82293E 01	0.25510E-01	0.23343E-02	-0.93153E 00	0.66412E 00	0.30000E-01	0.10000E 01
16	1115.71	-0.69096E-01	-0.13577E-01	-0.66980E-04	-0.61291E-05	0.15369E-02	-0.10957E-02	0.60000E-01	0.10000E 01
17	89.62	-0.54053E 00	-0.61402E-01	-0.13607E-03	-0.12451E-04	0.69505E-02	-0.49553E-02	0.90000E-01	0.
18	615.00	0.53942E 02	0.88995E 01	0.27323E-01	0.25002E-02	-0.10074E 01	0.71821E 00	0.20000E-00	0.10000E 01
19	620.63	0.46234E 02	0.76506E 01	0.23587E-01	0.21584E-02	-0.86602E 00	0.61742E 00	0.40000E-00	0.10000E 01
20	624.88	0.45832E 02	0.76374E 01	0.23621E-01	0.21615E-02	-0.86453E 00	0.61635E 00	0.60000E 00	0.10000E 01
21	632.80	0.46305E 02	0.72948E 01	0.22697E-01	0.20769E-02	-0.82575E 00	0.58871E 00	0.92000E 00	0.10000E 01
22	568.74	0.16048E 02	0.24426E 01	0.72499E-02	0.66341E-03	-0.27650E-00	0.19712E-00	0.10400E 01	0.10000E 01
23	558.87	0.10537E 02	0.15993E 01	0.47136E-02	0.43132E-03	-0.18104E-00	0.12907E-00	0.10600E 01	0.10000E 01
24	556.01	0.90047E 01	0.14296E 01	0.42048E-02	0.38476E-03	-0.16183E-00	0.11537E-00	0.10840E 01	0.10000E 01
25	551.57	0.52358E 01	0.77614E 00	0.22756E-02	0.20823E-03	-0.87856E-01	0.62636E-01	0.12070E 01	0.10000E 01
26	551.32	0.42634E 01	0.66646E 00	0.19537E-02	0.17878E-03	-0.75441E-01	0.53785E-01	0.12490E 01	0.10000E 01
27	551.27	0.36701E 01	0.56441E 00	0.16545E-02	0.15139E-03	-0.63889E-01	0.45549E-01	0.13340E 01	0.10000E 01
28	591.70	-0.31130E-02	-0.54431E-03	-0.16426E-05	-0.15031E-06	0.61614E-04	-0.43927E-04	0.14540E 01	0.
29	591.70	-0.31130E-02	-0.52818E-03	-0.15940E-05	-0.14586E-06	0.59788E-04	-0.42625E-04	0.16580E 01	0.
30	591.70	-0.31130E-02	-0.53463E-03	-0.16134E-05	-0.14764E-06	0.60519E-04	-0.43146E-04	0.20410E 01	0.
31	591.70	-0.31130E-02	-0.53463E-03	-0.16134E-05	-0.14764E-06	0.60519E-04	-0.43146E-04	0.22480E 01	0.
32	1085.37	-0.36375E-02	-0.70717E-03	-0.33634E-05	-0.30777E-06	0.80050E-04	-0.57070E-04	-0.60000E-01	0.
33	-4157.12	0.51843E-02	-0.20559E-02	-0.15426E-05	-0.14115E-06	0.23273E-03	-0.16592E-03	-0.30000E-01	0.
34	1085.37	-0.36375E-02	-0.70717E-03	-0.33634E-05	-0.30777E-06	0.80050E-04	-0.57070E-04	0.30000E-01	0.
35	1048.21	-0.96103E-01	-0.18868E-01	-0.85965E-04	-0.78663E-05	0.21358E-02	-0.15227E-02	0.60000E-01	0.
36	605.64	0.42436E 02	0.69663E 01	0.21239E-01	0.19435E-02	-0.78856E 00	0.56219E 00	-0.86800E 00	0.10000E 01
37	608.67	0.42071E 02	0.67307E 01	0.20567E-01	0.18820E-02	-0.76189E 00	0.54318E 00	-0.91100E 00	0.10000E 01
38	605.66	0.43032E 02	0.69893E 01	0.21278E-01	0.19471E-02	-0.79116E 00	0.56405E 00	-0.95300E 00	0.10000E 01
39	535.21	0.25978E-01	0.40765E-02	0.11815E-04	0.10812E-05	-0.46145E-03	0.32898E-03	0.51000E-01	0.
40	167.91	-0.32571E-00	-0.40138E-01	-0.92747E-04	-0.84869E-05	0.45435E-02	-0.32393E-02	0.29000E-01	0.
41	602.79	0.40988E 02	0.66371E 01	0.20193E-01	0.18478E-02	-0.75130E 00	0.53563E 00	0.70000E-02	0.10000E 01
42	606.86	0.43018E 02	0.70215E 01	0.21427E-01	0.19607E-02	-0.79481E 00	0.56665E 00	-0.86800E 00	0.10000E 01
43	604.09	0.42323E 02	0.69155E 01	0.21060E-01	0.19272E-02	-0.78281E 00	0.55809E 00	-0.91100E 00	0.10000E 01
44	606.70	0.43547E 02	0.70845E 01	0.21617E-01	0.19781E-02	-0.80195E 00	0.57174E 00	-0.95300E 00	0.10000E 01
45	555.80	0.17016E 02	0.27986E 01	0.82458E-02	0.75454E-03	-0.31679E-00	0.22585E-00	-0.10400E 01	0.10000E 01
46	630.77	0.40002E-01	0.66295E-02	0.20595E-04	0.18846E-05	-0.73044E-03	0.53502E-03	0.70000E-02	0.
47	531.21	0.98190E-01	0.15413E-01	0.44548E-04	0.40765E-05	-0.17447E-02	0.12439E-02	0.29000E-01	0.
48	602.72	0.40710E 02	0.66725E 01	0.20300E-01	0.18576E-02	-0.75531E 00	0.53849E 00	0.51000E-01	0.10000E 01
49	610.96	0.43004E 02	0.70121E 01	0.21464E-01	0.19641E-02	-0.79375E 00	0.56589E 00	0.70000E-02	0.10000E 01
50	608.86	0.40657E 02	0.66433E 01	0.20303E-01	0.18578E-02	-0.75200E 00	0.53613E 00	0.29000E-01	0.10000E 01
51	607.47	0.39820E 02	0.64809E 01	0.19786E-01	0.18106E-02	-0.73362E 00	0.52302E 00	0.51000E-01	0.10000E 01
52	606.81	0.41769E 02	0.68422E 01	0.20910E-01	0.19134E-02	-0.77452E 00	0.55218E 00	-0.86800E 00	0.10000E 01
53	608.98	0.41002E 02	0.67429E 01	0.20609E-01	0.18859E-02	-0.76327E 00	0.54416E 00	-0.91100E 00	0.10000E 01
54	608.04	0.41788E 02	0.68032E 01	0.20779E-01	0.19014E-02	-0.77011E 00	0.54904E 00	-0.95300E 00	0.10000E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	555.32	0.13315E 02	0.21862E 01	0.64269E-02	0.58611E-03	-0.24747E-00	0.17643E-00	-0.10400E 01	0.10000E 01
56	547.75	0.71512E 01	0.12061E 01	0.35266E-02	0.32271E-03	-0.13652E-00	0.97332E-01	-0.10680E 01	0.10000E 01
57	545.21	0.55174E 01	0.90079E 00	0.26292E-02	0.24059E-03	-0.10197E-00	0.72696E-01	-0.10400E 01	0.10000E 01
58	552.93	0.11857E 02	0.21047E 01	0.61767E-02	0.56521E-03	-0.23824E-00	0.16985E-00	-0.10680E 01	0.10000E 01
59	562.91	0.19871E 02	0.32762E 01	0.96836E-02	0.88611E-03	-0.37086E-00	0.26440E-00	-0.10400E 01	0.10000E 01
60	551.45	0.10966E 02	0.18532E 01	0.54331E-02	0.49717E-03	-0.20978E-00	0.14956E-00	-0.10680E 01	0.10000E 01
61	544.71	0.62779E 01	0.10434E 01	0.30443E-02	0.27858E-03	-0.11811E-00	0.84202E-01	-0.11220E 01	0.10000E 01
62	552.51	0.57673E 01	0.87729E 00	0.25739E-02	0.23553E-03	-0.99307E-01	0.70799E-01	-0.13340E 01	0.10000E 01
63	545.86	0.60452E 01	0.10429E 01	0.30454E-02	0.27868E-03	-0.11805E-00	0.84164E-01	-0.11220E 01	0.10000E 01
64	552.52	0.49652E 01	0.75529E 00	0.22160E-02	0.20278E-03	-0.85496E-01	0.60953E-01	-0.13340E 01	0.10000E 01
65	591.70	-0.31130E-02	-0.55076E-03	-0.16621E-05	-0.15209E-06	0.62344E-04	-0.44447E-04	0.14400E 01	0.
66	591.70	-0.31130E-02	-0.52415E-03	-0.15818E-05	-0.14474E-06	0.59332E-04	-0.42300E-04	0.16130E 01	0.
67	591.70	-0.31130E-02	-0.51447E-03	-0.15526E-05	-0.14207E-06	0.58237E-04	-0.41519E-04	0.17200E 01	0.
68	591.70	-0.31130E-02	-0.52818E-03	-0.15940E-05	-0.14586E-06	0.59788E-04	-0.42625E-04	-0.16130E 01	0.
69	591.70	-0.31130E-02	-0.51447E-03	-0.15526E-05	-0.14207E-06	0.58237E-04	-0.41519E-04	-0.18280E 01	0.
70	548.70	0.59496E 01	0.87752E 00	0.25676E-02	0.23495E-03	-0.99332E-01	0.70818E-01	-0.11650E 01	0.10000E 01
71	546.31	0.21075E 01	0.17753E-00	0.51856E-03	0.47452E-04	-0.20095E-01	0.14327E-01	-0.12050E 01	0.10000E 01
72	551.68	0.56920E 01	0.82938E 00	0.24319E-02	0.22253E-03	-0.93883E-01	0.66932E-01	-0.12120E 01	0.10000E 01
73	548.05	0.57319E 01	0.84511E 00	0.24717E-02	0.22617E-03	-0.95664E-01	0.68202E-01	-0.11650E 01	0.10000E 01
74	545.43	0.14192E 01	0.11949E-00	0.34882E-03	0.31919E-04	-0.13526E-01	0.96429E-02	-0.12050E 01	0.10000E 01
75	551.33	0.57382E 01	0.83158E 00	0.24377E-02	0.22307E-03	-0.94133E-01	0.67111E-01	-0.12120E 01	0.10000E 01
76	546.53	0.67881E 01	0.10257E 01	0.29966E-02	0.27421E-03	-0.11611E-00	0.82776E-01	0.10840E 01	0.10000E 01
77	545.83	0.63584E 01	0.10311E 01	0.30108E-02	0.27551E-03	-0.11671E-00	0.83210E-01	0.11220E 01	0.10000E 01
78	551.91	0.50281E 01	0.75312E 00	0.22086E-02	0.20211E-03	-0.85251E-01	0.60778E-01	0.13340E 01	0.10000E 01
79	549.00	0.63917E 01	0.10781E 01	0.31552E-02	0.28872E-03	-0.12204E-00	0.87004E-01	-0.11890E 01	0.10000E 01
80	551.65	0.53756E 01	0.81323E 00	0.23845E-02	0.21820E-03	-0.92055E-01	0.65630E-01	-0.13340E 01	0.10000E 01
81	547.80	0.68203E 01	0.11072E 01	0.32375E-02	0.29626E-03	-0.12533E-00	0.89351E-01	-0.11470E 01	0.10000E 01
82	549.05	0.68010E 01	0.11461E 01	0.33544E-02	0.30695E-03	-0.12974E-00	0.92495E-01	-0.11890E 01	0.10000E 01
83	546.64	0.64073E 01	0.10783E 01	0.31506E-02	0.28830E-03	-0.12206E-00	0.87023E-01	-0.10840E 01	0.10000E 01
84	591.70	-0.31130E-02	-0.47012E-03	-0.14187E-05	-0.12982E-06	0.53216E-04	-0.37940E-04	-0.11890E 01	0.
85	552.09	0.63070E 01	0.93200E 00	0.27336E-02	0.25014E-03	-0.10550E-00	0.75214E-01	-0.13090E 01	0.10000E 01
86	552.25	0.58987E 01	0.88370E 00	0.25922E-02	0.23720E-03	-0.10003E-00	0.71316E-01	-0.13340E 01	0.10000E 01
87	550.54	0.53132E 01	0.78312E 00	0.22944E-02	0.20995E-03	-0.88647E-01	0.63199E-01	0.11990E 01	0.10000E 01
88	550.54	0.50343E 01	0.74838E 00	0.21926E-02	0.20064E-03	-0.84714E-01	0.60396E-01	0.12070E 01	0.10000E 01
89	551.48	0.34031E 01	0.51478E 00	0.15092E-02	0.13810E-03	-0.58272E-01	0.41544E-01	0.13340E 01	0.10000E 01
90	551.67	0.52982E 01	0.76126E 00	0.22321E-02	0.20425E-03	-0.86172E-01	0.61435E-01	0.12070E 01	0.10000E 01
91	551.74	0.42151E 01	0.65906E 00	0.19326E-02	0.17684E-03	-0.74604E-01	0.53188E-01	0.12490E 01	0.10000E 01
92	551.69	0.36213E 01	0.55060E 00	0.16145E-02	0.14774E-03	-0.62327E-01	0.44435E-01	0.13340E 01	0.10000E 01
93	591.70	-0.31130E-02	-0.54108E-03	-0.16329E-05	-0.14942E-06	0.61249E-04	-0.43667E-04	0.14900E 01	0.
94	591.70	-0.31130E-02	-0.33626E-03	-0.10148E-05	-0.92859E-07	0.38064E-04	-0.27137E-04	-0.	0.
95	591.70	-0.31130E-02	-0.33868E-03	-0.10221E-05	-0.93527E-07	0.38338E-04	-0.27332E-04	-0.	0.
96	591.70	-0.31130E-02	-0.33626E-03	-0.10148E-05	-0.92859E-07	0.38064E-04	-0.27137E-04	-0.	0.
97	591.70	-0.31130E-02	-0.33626E-03	-0.10148E-05	-0.92859E-07	0.38064E-04	-0.27137E-04	-0.	0.
98	591.70	-0.31130E-02	-0.33868E-03	-0.10221E-05	-0.93527E-07	0.38338E-04	-0.27332E-04	-0.	0.

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APOLLO H-11 HEAT TRANSFER DATA JUNE,1964 AEDC WIND TUNNEL TEST

GRP	RUN	ALPHA(S)	ALPHA(M)	PHI(S)	CHI(M)	TYPE	CONFIG	TIME	SECT	MACH	PO(PSIA)	TO(DEG.R)	GRP (OFF)	CONFIG (OFF)	TIME (OFF)
161	3	2.75	179.75	0.02	-0.	1	C2	2.90	2	10.21	[redacted]	1834 1883	161	C2	2.90

T(INF)	P(INF)	V(INF)	RHO(INF)	MU(INF)	RE*10-6/FT	CP(INF)
0.906443E 02	0.766832E-01	0.476494E 04	0.709776E-04	0.734219E-07	[redacted] 2.20	0.772000E 01

PR	Q(F-R)	Q(MEAS)
0.731508E 00	-0.833936E 01	0.123862E 02

T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
1	642.61	0.63930E 02	0.87961E 01	0.27612E-01	0.25375E-02	-0.10548E 01	0.71016E 00	-0.	0.10000E 01
2	643.67	0.59950E 02	0.87798E 01	0.27583E-01	0.25349E-02	-0.10528E 01	0.70884E 00	-0.30000E-01	0.10000E 01
3	628.73	0.54312E 02	0.85809E 01	0.26655E-01	0.24496E-02	-0.10290E 01	0.69278E 00	-0.60000E-01	0.10000E 01
4	629.86	0.50704E 02	0.82221E 01	0.25562E-01	0.23491E-02	-0.98594E 00	0.66381E 00	-0.90000E-01	0.10000E 01
5	-4157.12	0.51840E-02	-0.23511E-02	-0.17646E-05	-0.16217E-06	0.28193E-03	-0.18982E-03	-0.20000E-00	0.
6	624.07	0.51010E 02	0.84563E 01	0.26176E-01	0.24055E-02	-0.10140E 01	0.68272E 00	-0.40000E-00	0.10000E 01
7	616.26	0.46486E 02	0.77111E 01	0.23730E-01	0.21808E-02	-0.92467E 00	0.62256E 00	-0.60000E 00	0.10000E 01
8	614.14	0.44805E 02	0.74239E 01	0.22810E-01	0.20962E-02	-0.89023E 00	0.59937E 00	-0.80000E 00	0.10000E 01
9	613.94	0.45165E 02	0.73644E 01	0.22624E-01	0.20791E-02	-0.88308E 00	0.59456E 00	-0.90000E 00	0.10000E 01
10	614.11	0.44638E 02	0.73727E 01	0.22652E-01	0.20817E-02	-0.88409E 00	0.59524E 00	-0.98000E 00	0.10000E 01
11	540.84	0.55673E 01	0.95775E 00	0.27906E-02	0.25646E-03	-0.11485E-00	0.77324E-01	-0.11220E 01	0.10000E 01
12	541.81	0.58457E 01	0.85740E 00	0.25000E-02	0.22975E-03	-0.10281E-00	0.69222E-01	-0.11890E 01	0.10000E 01
13	543.05	0.47631E 01	0.72073E 00	0.21033E-02	0.19329E-03	-0.86425E-01	0.58188E-01	-0.13340E 01	0.10000E 01
14	591.70	-0.36318E-02	-0.64255E-03	-0.19418E-05	-0.17845E-06	0.77050E-04	-0.51876E-04	-0.14400E 01	0.
15	639.41	0.64539E 02	0.94310E 01	0.29533E-01	0.27141E-02	-0.11309E 01	0.76141E 00	0.30000E-01	0.10000E 01
16	629.50	0.59440E 02	0.93949E 01	0.29200E-01	0.26835E-02	-0.11266E 01	0.75850E 00	0.60000E-01	0.10000E 01
17	18.76	-0.40894E-00	-0.43698E-01	-0.93483E-04	-0.85911E-05	0.52400E-02	-0.35280E-02	0.90000E-01	0.
18	618.74	0.49142E 02	0.81236E 01	0.25046E-01	0.23017E-02	-0.97413E 00	0.65586E 00	0.20000E-00	0.10000E 01
19	621.86	0.45569E 02	0.75454E 01	0.23317E-01	0.21429E-02	-0.90479E 00	0.60918E 00	0.40000E-00	0.10000E 01
20	622.09	0.44225E 02	0.73588E 01	0.22745E-01	0.20902E-02	-0.88242E 00	0.59411E 00	0.60000E 00	0.10000E 01
21	629.79	0.44108E 02	0.69376E 01	0.21567E-01	0.19820E-02	-0.83191E 00	0.56011E 00	0.92000E 00	0.10000E 01
22	562.73	0.14858E 02	0.22541E 01	0.66706E-02	0.61303E-03	-0.27029E-00	0.18198E-00	0.10400E 01	0.10000E 01
23	552.59	0.95533E 01	0.14450E 01	0.42456E-02	0.39017E-03	-0.17328E-00	0.11666E-00	0.10600E 01	0.10000E 01
24	549.99	0.82468E 01	0.13049E 01	0.38268E-02	0.35168E-03	-0.15647E-00	0.10535E-00	0.10840E 01	0.10000E 01
25	543.33	0.51247E 01	0.75617E 00	0.22072E-02	0.20284E-03	-0.90674E-01	0.61049E-01	0.12070E 01	0.10000E 01
26	542.72	0.42062E 01	0.65437E 00	0.19092E-02	0.17546E-03	-0.78468E-01	0.52831E-01	0.12490E 01	0.10000E 01
27	542.88	0.34618E 01	0.52988E 00	0.15462E-02	0.14209E-03	-0.63540E-01	0.42780E-01	0.13340E 01	0.10000E 01
28	591.70	-0.36318E-02	-0.63502E-03	-0.19191E-05	-0.17636E-06	0.76147E-04	-0.51268E-04	0.14540E 01	0.
29	591.70	-0.36318E-02	-0.61620E-03	-0.18622E-05	-0.17114E-06	0.73891E-04	-0.49749E-04	0.16580E 01	0.
30	591.70	-0.36318E-02	-0.62373E-03	-0.18849E-05	-0.17323E-06	0.74793E-04	-0.50357E-04	0.20410E 01	0.
31	591.70	-0.36318E-02	-0.62373E-03	-0.18849E-05	-0.17323E-06	0.74793E-04	-0.50357E-04	0.22480E 01	0.
32	1085.37	-0.36374E-02	-0.70715E-03	-0.33707E-05	-0.30977E-06	0.84797E-04	-0.57092E-04	-0.60000E-01	0.
33	-4157.12	0.51840E-02	-0.20558E-02	-0.15430E-05	-0.14180E-06	0.24652E-03	-0.16598E-03	-0.30000E-01	0.
34	1085.37	-0.36374E-02	-0.70715E-03	-0.33707E-05	-0.30977E-06	0.84797E-04	-0.57092E-04	0.30000E-01	0.
35	888.82	-0.11117E-00	-0.20418E-01	-0.79019E-04	-0.72619E-05	0.24484E-02	-0.16485E-02	0.60000E-01	0.
36	612.30	0.43553E 02	0.71751E 01	0.22015E-01	0.20232E-02	-0.86039E 00	0.57928E 00	-0.86800E 00	0.10000E 01
37	615.55	0.43203E 02	0.69371E 01	0.21337E-01	0.19608E-02	-0.83185E 00	0.56007E 00	-0.91100E 00	0.10000E 01
38	610.69	0.44390E 02	0.72371E 01	0.22179E-01	0.20383E-02	-0.86782E 00	0.58429E 00	-0.95300E 00	0.10000E 01
39	519.24	-0.17142E-01	-0.26658E-02	-0.76514E-05	-0.70316E-06	0.31966E-03	-0.21522E-03	0.51000E-01	0.
40	69.60	-0.42115E-00	-0.47929E-01	-0.10522E-03	-0.96694E-05	0.57473E-02	-0.38695E-02	0.29000E-01	0.
41	608.99	0.43165E 02	0.70129E 01	0.21465E-01	0.19726E-02	-0.84094E 00	0.56619E 00	0.70000E-02	0.10000E 01
42	613.10	0.44189E 02	0.72367E 01	0.22218E-01	0.20418E-02	-0.86778E 00	0.58426E 00	-0.86800E 00	0.10000E 01
43	610.59	0.43524E 02	0.71365E 01	0.21869E-01	0.20098E-02	-0.85576E 00	0.57616E 00	-0.91100E 00	0.10000E 01
44	613.21	0.44756E 02	0.73070E 01	0.22435E-01	0.20618E-02	-0.87620E 00	0.58993E 00	-0.95300E 00	0.10000E 01
45	561.57	0.18403E 02	0.30320E 01	0.89654E-02	0.82393E-03	-0.36358E-00	0.24479E-00	-0.10400E 01	0.10000E 01
46	599.92	0.81037E-01	0.13212E-01	0.40168E-04	0.36914E-05	-0.15843E-02	0.10666E-02	0.70000E-02	0.10000E 01
47	607.59	0.41603E 02	0.68105E 01	0.20824E-01	0.19137E-02	-0.81667E 00	0.54985E 00	0.29000E-01	0.10000E 01
48	608.49	0.42853E 02	0.70455E 01	0.21557E-01	0.19811E-02	-0.84485E 00	0.56882E 00	0.51000E-01	0.10000E 01
49	615.77	0.44794E 02	0.73227E 01	0.22526E-01	0.20702E-02	-0.87809E 00	0.59120E 00	0.70000E-02	0.10000E 01
50	613.56	0.42665E 02	0.69888E 01	0.21464E-01	0.19725E-02	-0.83805E 00	0.56424E 00	0.29000E-01	0.10000E 01
51	611.76	0.41862E 02	0.68288E 01	0.20944E-01	0.19248E-02	-0.81866E 00	0.55132E 00	0.51000E-01	0.10000E 01
52	616.15	0.43737E 02	0.71927E 01	0.22133E-01	0.20340E-02	-0.86250E 00	0.58070E 00	-0.86800E 00	0.10000E 01
53	615.37	0.42875E 02	0.70750E 01	0.21758E-01	0.19995E-02	-0.84838E 00	0.57120E 00	-0.91100E 00	0.10000E 01
54	616.36	0.43288E 02	0.70787E 01	0.21785E-01	0.20021E-02	-0.84883E 00	0.57150E 00	-0.95300E 00	0.10000E 01

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T/C	TEMP	DT/DT	Q(STOR)	H(STOR)	ST(STOR)	Q/Q(F-R)	Q/Q(MEAS)	S/R	Q(ON)/Q(OFF)
55	558.52	0.14422E 02	0.23721E 01	0.69988E-02	0.64319E-03	-0.28444E-00	0.19151E-00	-0.10400E 01	0.10000E 01
56	547.95	0.80021E 01	0.13497E 01	0.39526E-02	0.36324E-03	-0.16185E-00	0.10897E-00	-0.10680E 01	0.10000E 01
57	545.91	0.61969E 01	0.10121E 01	0.29597E-02	0.27199E-03	-0.12137E-00	0.81714E-01	-0.10400E 01	0.10000E 01
58	555.69	0.12984E 02	0.23083E 01	0.67969E-02	0.62464E-03	-0.27680E-00	0.18636E-00	-0.10680E 01	0.10000E 01
59	566.43	0.21399E 02	0.35352E 01	0.10490E-01	0.96399E-03	-0.42391E-00	0.28541E-00	-0.10400E 01	0.10000E 01
60	551.94	0.12102E 02	0.20459E 01	0.60081E-02	0.55215E-03	-0.24533E-00	0.16517E-00	-0.10680E 01	0.10000E 01
61	540.36	0.64416E 01	0.10680E 01	0.31107E-02	0.28587E-03	-0.12806E-00	0.86221E-01	-0.11220E 01	0.10000E 01
62	544.14	0.62187E 01	0.94155E 00	0.27499E-02	0.25271E-03	-0.11290E-00	0.76016E-01	-0.13340E 01	0.10000E 01
63	541.09	0.57018E 01	0.98103E 00	0.28590E-02	0.26274E-03	-0.11764E-00	0.79204E-01	-0.11220E 01	0.10000E 01
64	543.34	0.51829E 01	0.78436E 00	0.22895E-02	0.21040E-03	-0.94056E-01	0.63326E-01	-0.13340E 01	0.10000E 01
65	591.70	-0.36318E-02	-0.64255E-03	-0.19418E-05	-0.17845E-06	0.77050E-04	-0.51876E-04	0.14400E 01	0.
66	591.70	-0.36318E-02	-0.61150E-03	-0.18480E-05	-0.16983E-06	0.73327E-04	-0.49369E-04	0.16130E 01	0.
67	591.70	-0.36318E-02	-0.60021E-03	-0.18139E-05	-0.16669E-06	0.71973E-04	-0.48458E-04	0.17200E 01	0.
68	591.70	-0.36318E-02	-0.61620E-03	-0.18622E-05	-0.17114E-06	0.73891E-04	-0.49749E-04	-0.16130E 01	0.
69	591.70	-0.36318E-02	-0.60021E-03	-0.18139E-05	-0.16669E-06	0.71973E-04	-0.48458E-04	-0.18280E 01	0.
70	540.51	0.56759E 01	0.83331E 00	0.24275E-02	0.22309E-03	-0.99925E-01	0.67277E-01	-0.11650E 01	0.10000E 01
71	536.81	0.21179E 01	0.17745E-00	0.51559E-03	0.47383E-04	-0.21279E-01	0.14327E-01	-0.12050E 01	0.10000E 01
72	542.15	0.56530E 01	0.81932E 00	0.23895E-02	0.21960E-03	-0.98247E-01	0.66148E-01	-0.12120E 01	0.10000E 01
73	540.58	0.52026E 01	0.76386E 00	0.22253E-02	0.20451E-03	-0.91597E-01	0.61670E-01	-0.11650E 01	0.10000E 01
74	536.17	0.15839E 01	0.13266E-00	0.38528E-03	0.35407E-04	-0.15908E-01	0.10710E-01	-0.12050E 01	0.10000E 01
75	542.73	0.53527E 01	0.77201E 00	0.22524E-02	0.20700E-03	-0.92574E-01	0.62328E-01	-0.12120E 01	0.10000E 01
76	546.44	0.77195E 01	0.11664E 01	0.34120E-02	0.31356E-03	-0.13986E-00	0.94168E-01	0.10840E 01	0.10000E 01
77	541.53	0.56447E 01	0.91313E 00	0.26619E-02	0.24463E-03	-0.10950E-00	0.73721E-01	0.11220E 01	0.10000E 01
78	543.55	0.46000E 01	0.68579E 00	0.20021E-02	0.18399E-03	-0.82236E-01	0.55368E-01	0.13340E 01	0.10000E 01
79	542.08	0.54935E 01	0.92301E 00	0.26918E-02	0.24737E-03	-0.11068E-00	0.74519E-01	-0.11890E 01	0.10000E 01
80	544.10	0.46847E 01	0.70572E 00	0.20610E-02	0.18941E-03	-0.84626E-01	0.56977E-01	-0.13340E 01	0.10000E 01
81	542.26	0.60857E 01	0.98488E 00	0.28726E-02	0.26399E-03	-0.11810E-00	0.79514E-01	-0.11470E 01	0.10000E 01
82	542.83	0.57132E 01	0.95947E 00	0.27996E-02	0.25728E-03	-0.11505E-00	0.77463E-01	-0.11890E 01	0.10000E 01
83	546.20	0.70608E 01	0.11880E 01	0.34747E-02	0.31932E-03	-0.14246E-00	0.95914E-01	-0.10840E 01	0.10000E 01
84	591.70	-0.36318E-02	-0.54847E-03	-0.16575E-05	-0.15232E-06	0.65769E-04	-0.44281E-04	-0.11890E 01	0.
85	544.27	0.51803E 01	0.76216E 00	0.22261E-02	0.20458E-03	-0.91393E-01	0.61533E-01	-0.13090E 01	0.10000E 01
86	544.70	0.49808E 01	0.74304E 00	0.21710E-02	0.19951E-03	-0.89101E-01	0.59990E-01	-0.13340E 01	0.10000E 01
87	542.68	0.51922E 01	0.76192E 00	0.22229E-02	0.20429E-03	-0.91365E-01	0.61514E-01	0.11990E 01	0.10000E 01
88	542.52	0.48649E 01	0.71997E 00	0.21003E-02	0.19302E-03	-0.86334E-01	0.58126E-01	0.12070E 01	0.10000E 01
89	543.23	0.31782E 01	0.47854E-00	0.13967E-02	0.12836E-03	-0.57384E-01	0.38635E-01	0.13340E 01	0.10000E 01
90	543.63	0.51158E 01	0.73176E 00	0.21364E-02	0.19633E-03	-0.87748E-01	0.59078E-01	0.12070E 01	0.10000E 01
91	543.47	0.40291E 01	0.62708E 00	0.18306E-02	0.16823E-03	-0.75195E-01	0.50627E-01	0.12490E 01	0.10000E 01
92	543.38	0.34307E 01	0.51920E 00	0.15155E-02	0.13928E-03	-0.62259E-01	0.41918E-01	0.13340E 01	0.10000E 01
93	591.70	-0.36318E-02	-0.63126E-03	-0.19077E-05	-0.17532E-06	0.75696E-04	-0.50964E-04	0.14900E 01	0.
94	591.70	-0.36318E-02	-0.39230E-03	-0.11855E-05	-0.10895E-06	0.47042E-04	-0.31672E-04	-0.	0.
95	591.70	-0.36318E-02	-0.39512E-03	-0.11941E-05	-0.10974E-06	0.47380E-04	-0.31900E-04	-0.	0.
96	591.70	-0.36318E-02	-0.39230E-03	-0.11855E-05	-0.10895E-06	0.47042E-04	-0.31672E-04	-0.	0.
97	591.70	-0.36318E-02	-0.39230E-03	-0.11855E-05	-0.10895E-06	0.47042E-04	-0.31672E-04	-0.	0.
98	591.70	-0.36318E-02	-0.39512E-03	-0.11941E-05	-0.10974E-06	0.47380E-04	-0.31900E-04	-0.	0.

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M = 10.0

Configuration		Group			Re/Ft X10^{-6}	α Deg	ψ Deg	Page
NAA	AEDC	A	B	C				
C_{55}	11	1	6	15	0.33	143	0	B1-B6
C_{55}	11	2	7	16	0.33	147	0	B7-B12
C_{55}	11		8		0.33	147	-5	B13, B14
C_{55}	11		9		0.33	147	5	B15, B16
C_{55}	11	3	10	17	0.33	154	0	B17-B22
C_{55}	11		11		0.33	154	-5	B23, B24
C_{55}	11		12		0.33	154	5	B25, B26
C_{55}	11	4	13	18	0.33	158	0	B27-B32
C_{55}	11	5	14	19	0.33	162	0	B33-B38
C_{55}	11	20	25	31	1.20	143	0	B39-B44
C_{55}	11	21	26	32	1.20	147	0	B45-B50
C_{55}	11	22	27	33	1.20	154	0	B51-B56
C_{55}	11	23	29	34	1.20	158	0	B57-B62
C_{55}	11	24	30	35	1.20	162	0	B63-B68
C_{55}	11	36	50	52	2.20	143	0	B69-B74
C_{55}	11	41	51	53	2.20	147	0	B75-B80
C_{55}	11		43		2.20	147	-5	B81, B82
C_{55}	11		44		2.20	147	5	B83, B84
C_{55}	11	42	45	54	2.20	154	0	B85-B90
C_{55}	11		46		2.20	154	-5	B91, B92
C_{55}	11		47		2.20	154	5	B93, B94
C_{55}	11	39	48	55	2.20	158	0	B95-B100
C_{55}	11	40	49	56	2.20	162	0	B101-B106
C_{58}	12	60	59		0.33	154	0	B107-B110
C_{58}	12	57	58		2.20	154	0	B111-B114
C_{59}	13	61	62		0.33	154	0	B115-B118

Tabulated Data Index (Cont.)
M = 10.0

Configuration		Group			Re/Ft X10^{-6}	α Deg	ψ Deg	Page
NAA	AEDC	A	B	C				
C_{56}	14	63			0.33	143	0	B119, B120
C_{56}	14	64			0.33	147	0	B121, B122
C_{56}	14	65			0.33	154	0	B123, B124
C_{56}	14	66			0.33	158	0	B125, B126
C_{56}	14	67			0.33	162	0	B127, B128
C_{56}	14	68			1.20	143	0	B129, B130
C_{56}	14	69			1.20	147	0	B131, B132
C_{56}	14	70			1.20	154	0	B133, B134
C_{56}	14	71			1.20	158	0	B135, B136
C_{56}	14	72			1.20	162	0	B137, B138
C_{56}	14	73			1.20	143	0	B139, B140
C_{56}	14	74			1.20	147	0	B141, B142
C_{56}	14	75			1.20	154	0	B143, B144
C_{56}	14	76			1.20	158	0	B145, B146
C_{56}	14	77			2.20	162	0	B147, B148
C_{60}	15	81			0.33	154	0	B149, B150
C_{60}	15	78			2.20	154	0	B151, B152
C_{61}	16	80			0.33	154	0	B153, B154
C_{61}	16	79			2.20	154	0	B155, B156
C_{57}	17		83		0.33	143	0	B157, B158
C_{57}	17		84		1.20	143	0	B159, B160
C_{57}	17		85		1.20	147	0	B161, B162
C_{57}	17		86		1.20	147	-5	B163, B164
C_{57}	17		87		1.20	147	5	B165, B166
C_{57}	17		88		1.20	154	0	B167, B168
C_{57}	17		89		1.20	154	-5	B169, B170

Tabulated Data Index (Cont.)
M = 10.0

Configuration		Group			Re/Ft X10^{-6}	α Deg	ψ Deg	Page
NAA	AEDC	A	B	C				
C_{57}	17		90		1.20	154	5	B171, B172
C_{57}	17		91		1.20	158	0	B173, B174
C_{57}	17		92		1.20	162	0	B175, B176
C_{57}	17		93		2.20	143	0	B177, B178
C_{57}	17		94		2.20	147	0	B179, B180
C_{57}	17		95		2.20	147	-5	B181, B182
C_{57}	17		96		2.20	147	5	B183, B184
C_{57}	17		97		2.20	154	0	B185, B186
C_{57}	17		98		2.20	154	-5	B187, B188
C_{57}	17		99		2.20	154	5	B189, B190
C_{57}	17		100		2.20	158	0	B191, B192
C_{57}	17		101		2.20	158	0	B193, B194
C_2	10	138	143	152	0.35	143	0	B195-B200
C_2	10	139	144	153	0.35	147	0	B201-B206
C_2	10		145		0.35	147	-5	B207, B208
C_2	10		146		0.35	147	5	B209, B210
C_2	10	140	147	154	0.35	154	0	B211-B216
C_2	10		148		0.35	154	-5	B217, B218
C_2	10		149		0.35	154	5	B219, B220
C_2	10	141	150	155	0.35	158	0	B221-B226
C_2	10	142	151	156	0.35	162	0	B227-B232
C_2	10	128	133	123	1.20	143	0	B233-B238
C_2	10	129	134	124	1.20	147	0	B239-B244
C_2	10	130	135	125	1.20	154	0	B245-B250
C_2	10	131	136	126	1.20	158	0	B251-B256
C_2	10	132	137	127	1.20	162	0	B257-B262

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Tabulated Data Index (Cont.)
M = 10.0

Configuration		Group			Re/Ft X10^{-6}	α Deg	ψ Deg	Page
NAA	AEDC	A	B	C				
C_2	10	107	109	118	2.20	143	0	B263-B268
C_2	10	108	110	119	2.20	147	0	B269, B274
C_2	10		111		2.20	147	-5	B275, B276
C_2	10		112		2.20	147	5	B277, B278
C_2	10	104	113	120	2.20	154	0	B279-B284
C_2	10		114		2.20	154	-5	B285, B286
C_2	10		115		2.20	154	5	B287, B288
C_2	10	105	116	121	2.20	158	0	B289, B294
C_2	10	106	117	122	2.20	162	0	B295-B300
C_2	10	159			0.38	177	0	B301, B302
C_2	10	158			0.38	180	0	B303, B304
C_2	10	171			0.80	177	0	B305, B306
C_2	10	170			0.80	180	0	B307, B308
C_2	10	168			1.20	177	0	B309, B310
C_2	10	167			1.20	180	0	B311, B312
C_2	10	165			1.73	177	0	B313, B314
C_2	10	166			1.73	180	0	B315, B316
C_2	10	162			2.20	177	0	B317, B318
C_2	10	161			2.20	180	0	B319, B320