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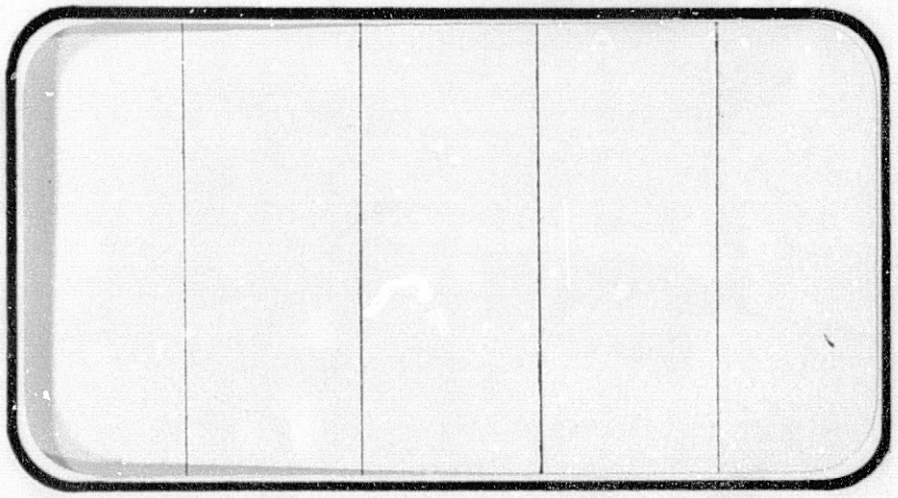
NASA CR-
141815



(NASA-CR-141815) RESULTS OF AERODYNAMIC HEAT TRANSFER TESTS OF A 0.0175-SCALE MODEL OF THE ROCKWELL INTERNATIONAL SPACE SHUTTLE ORBITER 139 (MODEL NUMBER 22-0) IN THE NASA/AMES 3.5-FOOT HYPERSONIC WIND TUNNEL

N76-13178

G3/18 Unclas 04778

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

October 1975

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NASA CR-141,815

RESULTS OF AERODYNAMIC HEAT TRANSFER TESTS OF A 0.0175-SCALE MODEL OF THE ROCKWELL INTERNATIONAL SPACE SHUTTLE ORBITER 139 (MODEL NUMBER 22-0) IN THE NASA/AMES 3.5-FOOT HYPERSONIC WIND TUNNEL (TEST OH6)

by

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Prepared under NASA Contract Number NAS9-13247

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for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	ARC 3.5-183
NASA Series Number:	OH6
Model Number:	22-0
Test Dates:	Feb. 6-11, 1974
Occupancy Hours:	56

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RESULTS OF AERODYNAMIC HEAT TRANSFER TESTS OF A 0.0175-SCALE MODEL OF THE ROCKWELL INTERNATIONAL SPACE SHUTTLE ORBITER 139 (MODEL NUMBER 22-0) IN THE NASA/AMES 3.5-FOOT HYPERSONIC WIND TUNNEL (TEST OH6)

by

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William K. Lockman, NASA-Ames Research Center

ABSTRACT

This report presents the results of a Hypersonic Wind Tunnel Test Program conducted using a 0.0175-scale thin-skin thermocouple model of the Rockwell International Space Shuttle Orbiter (Model 22-0) to obtain aerodynamic heat transfer data on the -139 configuration Orbiter under simulated entry conditions.

This test program was conducted in the NASA Ames Research Center 3.5 Hypersonic Wind Tunnel at a Mach number 7.3 and freestream Reynolds number from 1.0 to 6.0 million per foot. The model was tested through an angle-of-attack range from 10° to 30° at 0 degrees sideslip angle.

TABLE OF CONTENTS

INDEX OF MODEL FIGURES

NOMENCLATURE

Symbol	Computer Symbol	Definition
b		thickness of model skin, in.
b/2		wing semi-span-in.
C		specific heat of model skin material, BTU/lb_m - °R
c		wing and vertical chord length-in
C_0, C_1, C_2		constants in curve fit for C over model wall temperature range
c_p		specific heat of air stream (perfect gas value) BTU/lb_m - °R
CHAN		recording-system channel
H_{aw}	HAW	adiabatic wall enthalpy, BTU/lb_m
H_t	HT	free-stream total enthalpy, BTU/lb_m
H_{w_i}	HW	enthalpy based on model wall temperature for given T/C location at initial time, BTU/lb_m
h	H	heat-transfer coefficient at model wall for given T/C location, lb_m/ft^2-sec
h_s	HS	stagnation-point heat-transfer coefficient for reference sphere, lb_m/ft^2 - sec
h/h_s(X.XXX)	H/HS(X.XXX)	ratio of model heat-transfer coefficient to heat-transfer coefficient of reference sphere for H_{aw}/H_t= X.XXX
L	LENGTH	model reference length-ft
M_∞	MACH	free-stream Mach number
P_t	PT	free-stream total pressure, psia
$\dot{q}_i$,$\dot{q}$	Q	heat-transfer rate at model wall for given T/C location at initial time, BTU/ft^2 - sec
δ_e	ELEVON	elevon deflection angle, degree

NOMENCLATURE (Continued)

$\dot{q}_s$	QS	stagnation-point heat-transfer rate for reference sphere at initial time, BTU/ft^2 - sec
R_s	RS	reference sphere radius at model scale equivalent to 0.305 m (1 ft) for full-scale vehicle, ft.
Re_∞/ft	RE/FT	free-stream Reynolds number per foot
$Re_{\infty,L}$	REL	free-stream Reynolds number based on model reference length, L
St(X.XXX)	ST(X.XXX)	Stanton number based on free-stream flow conditions and the model heat-transfer coefficient for H_{aw}/H_t = X.XXX
T		temperature, °R
T_t	TT	free-stream total temperature, °R
T_{w_i}	TW	model wall temperature for given T/C location at initial time, °R
T/C	T/C	thermocouple
t	TIME	time, sec.
t_i		initial time (before model insertion into flow) extrapolated from $f(T_w)$ vs time, sec
u		velocity, ft/sec
W		density of model skin material lb_m/ft^3
X		distance aft of given reference point, in.
X_o		Orbiter longitudinal station, in.
Y		wing spanwise distance from ℄, in.
Y_o		Orbiter lateral station, inches
Z		vertical spanwise distance from W.L. = 500; in.
Z_o		Orbiter vertical station, inches

NOMENCLATURE (Concluded)

μ	viscosity of air, lb-sec/ft^2
ρ	density of air, slug/ft^3
α	angle of attack
β	angle of sideslip
ϕ	angular location coordinate on Orbiter
C'_{aw}	defined in Data Reduction section
T'_{aw}	defined in Data Reduction section
m	slope of straight line

SUBSCRIPTS

aw	adiabatic wall
i	initial value before model insertion into tunnel flow
PG	perfect gas (calorically and thermally perfect gas)
s	reference sphere
t	free-stream total condition
v	vertical tail
w	wall
∞	free-stream

INTRODUCTION

This report presents test information and data from a test program conducted with a .0175-scale thin-skin thermocouple model of the Rockwell International Space Shuttle Orbiter 139 (Model 22-O) in the NASA-Ames Research Center 3.5-Foot Hypersonic Wind Tunnel. The purpose of this program was to obtain aerodynamic heat transfer data on the Orbiter under simulated entry conditions.

The model was tested at a Mach number of 7.3 and free-stream Reynolds numbers from 1.0×10^6 to 6.0×10^6 per foot. The angle of attack was varied from 10° to 30° with 0° sideslip angle.

CONFIGURATIONS INVESTIGATED

The model tested was a 0.0175-scale thin-skin thermocouple model of the Rockwell International Space Shuttle Orbiter 139 for vehicle 3 (see Fig. 3). It was constructed of 15-5 PH stainless steel with the instrumented areas machined to a nominal skin thickness of 0.030 in.

The model was provided with the following control-surface deflections:

Elevons (both): -40°, 0°, +5°, +10°

Rudder flare: 0°, 40° (outside surface included angle)

Body flap: 0°, +10°

However, for this test program the elevon deflections were 0°, 5°, or 10° with both the rudder flare and body flap deflections set to 0°. The model angle of attack was varied from 10° to 30° with 0° sideslip angle.

The following nomenclature is used to describe model components for the vehicle 3 configuration:

Body: B_{17}
Canopy: C_7
Elevon: E_{22}
Body flap: F_5
OMS Pods: M_4
Rudder: R_5
Vertical: V_7
Wing: W_{103}

Table III presents model dimensional data.

MODEL INSTRUMENTATION

Model instrumentation consisted of 288 iron-constantan thermocouples (30-gage wire) spot welded to the thin-skin (nominal thickness of 0.030 in.) inner surface. For this test program, only 75 of the thermocouples were used. These thermocouple locations and the actual skin thicknesses are tabulated in Table IV.

TEST FACILITY DESCRIPTION

The NASA-Ames 3.5-Foot Hypersonic Wind Tunnel is a closed-circuit, blowdown-type tunnel capable of operating at nominal Mach numbers of 5, 7, and 10 at pressures to 1800 psia and temperatures to 3400°R for run times to four minutes. The major components of the facility include a gas storage system where the test gas is stored at 3000 psi, a storage heater filled with aluminum-oxide pebbles capable of heating the test gas to 3400°R, axisymmetric contoured nozzles with exit diameters of 42 inches for generating the desired Mach number, and a 900,000 ft^3 vacuum storage system which operates to pressures of 0.3 psia. The test section itself is an open-jet type enclosed within a chamber approximately 12 feet in diameter and 40 feet in length, arranged transversally to the flow direction.

A model support system is provided that can pitch models through an angle-of-attack range of -20 to +20 degrees, in a vertical plane, about a fixed point of rotation on the tunnel centerline. This rotation point is adjustable from 1 to 5 feet from the nozzle exit plane. The model normally is out of the test stream (strut centerline 37-inches from tunnel centerline) until the tunnel test conditions are established after which it is inserted. Insertion time is adjustable to as little as 1/2 second and models may be inserted at any strut angle.

A high-speed, analog-to-digital data acquisition system is used to record test data on magnetic tape. The present system is equipped to measure and record the outputs from 80 transducers in addition to 20 channels of tunnel parameters.

TEST PROCEDURE

The model was mounted with a base sting at a preset attitude on the tunnel quick-insert mechanism. The quick-insert mechanism injected the model into the air stream when steady-state test conditions were established and retracted the model at the completion of data acquisition. The model injection and retraction times were each set at about 1 second and the time on the tunnel centerline was also set at about 1 second.

The model wall temperature data for each thermocouple location and the tunnel conditions were recorded on magnetic tape at 0.07-second intervals during the test duration of about 3 seconds.

DATA REDUCTION

All test data were reduced at the NASA/Ames Research Center using the data-reduction techniques outlined below. The thermocouple data were reduced using the one-dimensional, thin-wall equation:

$$\dot{q} = WCb \frac{dT_w}{dt} = h\ (H_{aw} - H_w) \equiv hH_t\ (\frac{H_{aw}}{H_t} - \frac{H_w}{H_t}) \tag{1}$$

which neglects heat-conduction losses.

Assuming that W and h are constant and

$$C = C_o + C_1\ T_w + C_2\ T_w^2 \text{ for } T_w \text{ ranges} \tag{2}$$

the integration of equation (1) for $t = t_i$ to t and $T_w = T_{w_i}$ to T_w yields the linear equation:

$$f\ (T_w) = -\ \ell n\left(\frac{T'_{aw} - T_w}{T'_{aw} - T_{w_i}}\right) - \left[\frac{C_1}{C'_{aw}} + \frac{C_2}{C'_{aw}}\left(T'_{aw} + \frac{T_w + T_{w_i}}{2}\right)\right]\ (T_w - T_{w_i})$$

$$= \frac{hc_p}{WC'_{aw}b}\ (t - t_i) \tag{3}$$

where it is defined that:

$$T'_{aw} = \frac{H_{aw}}{c_p} \equiv \frac{H_{aw}}{H_t}\ \frac{H_t}{c_p} \geq (T_{aw})_{PG} \tag{4}$$

$$C'_{aw} = C_o + C_1\ T'_{aw} + C_2\ T'^2_{aw} \tag{5}$$

c_p = specific heat at adiabatic wall temperature

The form of Eq (3) is $f(T_w) = mt + a$ where m is the slope and a is the intercept for a straight line if heat-conduction errors are negligible. Thus, deviations from a straight line can indicate heat-conduction effects.

The slope, m, of $f(T_w)$ vs t from Eq (3) is computed by a least-squares, straight-line fit over a finite time interval (approx 1 sec) beginning when the model reaches uniform tunnel flow. The value of the heat-transfer coefficient, h, is then determined from:

$$h = \frac{WC'_{aw}b}{c_p} m \tag{6}$$

Using this value of h, the heat-transfer rate is evaluated at the initial time, t_i, when the model is isothermal at the initial wall enthalpy, H_{w_i}

$$\dot{q} = \dot{q}_i = h\,(H_{aw} - H_{w_i}) \equiv hH_t\,(\frac{H_{aw}}{H_t} - \frac{H_{w_i}}{H_t}) \tag{7}$$

where H_{aw}/H_t is the same value used to evaluate h. The resultant value of $\dot{q}$ is independent of the value of H_{aw}/H_t used for both the h and $\dot{q}$ evaluations.

The reference sphere heating is also evaluated at the inital wall enthalpy by the method of Fay and Riddell (ref. 1):

$$\dot{q}_s = h_s\,(H_t - H_{w_i}) \equiv h_s\,H_t\,(1.0 - \frac{H_{w_i}}{H_t}) \tag{8}$$

The model-to-sphere ratio of heat-transfer coefficients is then determined from Eqs. (7) and (8) as

$$\frac{h}{h_s} = \frac{\dot{q}_i}{\dot{q}_s}\left[\frac{1.0 - H_{w_i}/H_t}{H_{aw}/H_t - H_{w_i}/H_t}\right] \tag{9}$$

where $\dot{q}_i$ is constant for all values of H_{aw}/H_t.

To determine h/h_s for various values of H_{aw}/H_t, the particular value of H_{aw}/H_t is substituted into Eq. (9).

The Stanton number is defined as

$$St \equiv \frac{h}{\rho u} = \frac{\dot{q}_i}{\rho u(H_{aw} - H_{w_i})} \tag{10}$$

where for free-stream conditions, $\rho u = \rho_\infty V_\infty$.

The calculations of the model heating, reference sphere heating, and Reynolds number included the corrections of NACA report 1135 (ref. 2) for calorically imperfect, thermally perfect air. Keyes' equation for viscosity (see ref. 3) was also used for the sphere heating and Reynolds number computations:

$$\mu = \frac{0.0232 \times 10^{-6} \, T^{0.5}}{1 + \frac{220}{T} \times 10^{-9/T}} \tag{11}$$

where the units for T and μ are °R and lb-sec/ft^2, respectively.

REFERENCES

1. Fay, J. A.; and Riddell, F. R.: Theory of Stagnation Point Heat Transfer in Dissociated Air. J. Aeron. Sci;, Vol. 25, No. 1, Feb. 1958, pp. 73-85.

2. Ames Research Staff: Equations, Tables, and Charts for Compressible Flow. NACA Rept. 1135, 1953.

3. Bertram, Mitchel H.: Comment on "Viscosity of Air." J. Spacecraft Rockets, Vol. 4, No. 2, Feb. 1967, pp. 287-288.

4. Foster, T. S.: Pretest Information for Testing of the 22-0 Thin Skinned Thermocouple Orbiter Model in the Ames Research Center 3.5 Hypersonic Wind Tunnel (OH6); Rockwell International SD73-SH-0063, Dec. 10, 1973.

TABLE I.

TEST: OH-6 (ARC 3.5-183) DATE: 2/11/74

TEST CONDITIONS

Mach Number	Reynolds Number (per foot)	Total Pressure (pounds/sq. inch)	Total Temperature (deg. Rankine)
7.3	1.0×10^6	235	1500
7.3	2.0×10^6	470	1500
7.3	2.75×10^6	645	1500
7.3	3.7×10^6	870	1500
7.3	6.0×10^6	1410	1500

TABLE II. RUN SCHEDULE

Run No.	Conf.	α	α Sting	β	Mach	R_{e_∞}/ft	δ_e	Po (psi)	To (°R)	Date	Time
1	0_1	15	0	0	7.3	1.0	0	235	1500	2/6/74	2100
2	0_1	15	0	0	7.3	2.0	0	470	1500	2/6/74	2130
3	0_1	15	0	0	7.3	3.7	0	870	1500	2/6/74	2230
4	0_1	25	10	0	7.3	3.7	0	870	1500	2/6/74	2335
5	0_1	25	10	0	7.3	1.0	0	235	1500	2/7/74	0800
6	0_1	25	10	0	7.3	1.0	0	235	1500	2/7/74	1000
7	0_1	25	10	0	7.3	3.7	0	870	1500	2/7/74	1055
8	0_1	25	10	0	7.3	2.0	0	470	1500	2/7/74	1225
9	0_1	25	10	0	7.3	2.75	0	645	1500	2/7/74	1345
10	0_1	30	15	0	7.3	1.0	0	235	1500	2/7/74	1400
11	0_1	30	15	0	7.3	2.0	0	470	1500	2/7/74	1630
12	0_1	30	15	0	7.3	2.75	0	645	1500	2/7/74	1725
13	0_1	30	15	0	7.3	3.7	0	870	1500	2/7/74	1830
14	0_1	15	0	0	7.3	6.0	0	1410	1500	2/7/74	1936
15	0_1	25	10	0	7.3	6.0	0	1410	1500	2/7/74	2125
16	0_1	30	15	0	7.3	6.0	0	1410	1500	2/7/74	2240
17	0_1	15	0	0	7.3	1.0	10	235	1500	2/8/74	0815
18	0_1	15	0	0	7.3	2.0	10	470	1500	2/8/74	0908
19	0_1	15	0	0	7.3	3.7	10	870	1500	2/8/74	1010
20	0_1	15	0	0	7.3	6.0	10	1410	1500	2/8/74	1245
21	0_1	10	-5	0	7.3	1.0	10	235	1500	2/8/74	1445
22	0_1	10	-5	0	7.3	-	10	470	1500	2/8/74	1545
23	0_1	15	0	0	7.3	1.0	+5	235	1500	2/8/74	1730
24	0_1	15	0	0	7.3	2.0	+5	470	1500	2/8/74	1810
25	0_1	15	0	0	7.3	3.7	+5	870	1500	2/8/74	1920

TABLE II. (Concluded)

Run No.	Conf.	α	α_{Sting}	β	Mach	R_{e_∞}/ft	δ_e	P_c (psi)	T_o (°R)	Date	Time
26	O_1	15	0	0	7.3	6.0	+5	1410	1500	2/8/74	2120
27	O_1	10	-5	0	7.3	1.0	+5	235	1500	2/8/74	2235
28	O_1	10	-5	0	7.3	2.0	+5	470	1500	2/8/74	2310
29	O_1	10	-5	0	7.3	1.0	0	235	1500	2/11/74	0855
30	O_1	10	-5	0	7.3	2.0	0	470	1500	2/11/74	0945
31	O_1	25	10	0	7.3	3.7	0	870	1500	2/11/74	1050
32	O_1	20	5	0	7.3	1.0	0	235	1500	2/11/74	1243
33	O_1	20	5	0	7.3	2.0	0	470	1500	2/11/74	1350
34	O_1	20	5	0	7.3	3.7	0	870	1500	2/11/74	1440
35	O_1	20	5	0	7.3	6.0	0	1410	1500	2/11/74	1535
36	O_1	20	5	0	7.3	2.75	0	645	1500	2/11/74	1740
37	O_1	15	0	0	7.3	1.0	0	235	1500	2/11/74	1850
38	O_1	30	15	0	7.3	1.0	0	235	1500	2/11/74	2040
39	O_1	30	15	0	7.3	2.0	0	470	1500	2/11/74	2040

TABLE III. - MODEL DIMENSIONAL DATA.

MODEL COMPONENT: BODY - B17

GENERAL DESCRIPTION: Fuselage, 3 Configuration, Lightweight Orbiter per Rockwell Lines VL70-000139

Model Scale = 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length - IN.	1290.3	22.58025
Max. Width - IN.	267.6	4.6830
Max. Depth - IN.	244.5	4.27875
Fineness Ratio	4.82175	4.82175
Area - FT^2		
Max. Cross-Sectional	386.67	0.11242
Planform		
Wetted		
Base		

TABLE III. - Continued.

MODEL COMPONENT: Canopy - C7

GENERAL DESCRIPTION: Configuration 3 per Rockwell Lines VL70-000139

Insufficient information to complete dimensional data at this time.

Model Scale = 0.0175

DRAWING NUMBER VL70-000139

DIMENSION:	FULL SCALE	MODEL SCALE
Length (X_o = 433 to X_o = 670) - in. FS	237	4.148
Max Width		
Max Depth (Z_o = to Z_o = 501) - in FS		
Fineness Ratio		
Area		
Max Cross-Sectional		
Planform		
Wetted		
Base		

TABLE III. - Continued.

MODEL COMPONENT: ELEVON E-22

GENERAL DESCRIPTION: 3 Configuration per W103Rockwell Lines

VL70-000139 data for (1) of (2) sides

Scale Model = 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area - FT^2	205.52	0.06294
Span (equivalent)- IN.	353.34	6.18345
Inb'd equivalent chord	114.78	2.00865
Outb'd equivalent chord	55.00	0.96250
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	.208	.208
At Outb'd equiv. chord	.400	.400
Sweep Back Angles, degrees		
Leading Edge	0.00	0.00
Tailing Edge	-10.24	-10.24
Hingeline	0.00	0.00
Area Moment (Normal to hinge line) - FT^3	1548.07	0.00829
Product of Area Moment		

TABLE III. - Continued.

MODEL COMPONENT: F5 Body Flap

GENERAL DESCRIPTION: 3 Configuration per Rockwell Lines VL70-000139

Scale Model = 0.0175

DRAWING NUMBER VL70-000139

DIMENSION:	FULL SCALE	MODEL SCALE
Length - in	84.70	1.48225
Max Width - in	267.6	4.6830
Max Depth		
Fineness Ratio		
Area - Ft^2		
Max Cross-Sectional		
Planform	142.5195	0.04365
Wetted		
Base	38.0958	0.01167

TABLE III. - Continued.

MODEL COMPONENT : OMS Pod - M4

GENERAL DESCRIPTION : Orbital Maneuvering System Pods Located on the Orbiter Aft Fuselage

Model Scale = 0.0175

DRAWING NUMBER : VL70-000139

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length -IN	346.0	6.0550
Max Width -IN	108.0	1.890
Max Depth -IN	113.0	113.0
Fineness Ratio		
Area - FT^2		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

℄ of OMS Pod

WP = 463.9 IN. FS: WP 400 + 63.9 = 463.9
BP = 80.0 IN. FS
Length 1214.0 to 1560.0 = 346.0 IN. FS

NOTE: M4 identical to M3 of 2A configuration, except intersection to body.

TABLE III. - Continued.

MODEL COMPONENT: RUDDER - R5

GENERAL DESCRIPTION: 2A, 3 and 3A Configuration per Rockwell Lines VL70-000095

Model Scale = 0.0175

DRAWING NUMBER: VL70-000139 VL70-000095

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area - FT^2	106.38	0.03258
Span (equivalent) - IN.	201.0	3.5175
Inb'd equivalent chord	91.585	1.60274
Outb'd equivalent chord	50.833	0.88958
Ratio movable surface chord/ total surface chord		
At Inb'd equiv chord	0.400	0.400
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge	34.83	34.83
Tailing Edge	26.25	26.25
Hingeline	34.83	34.83
Area Moment (Normal to hinge line)- FT^3 Product of Area and Mean Chord	526.13	0.00282

TABLE III. - Continued.

MODEL COMPONENT: VERTICAL - V 7 (Lightweight Oribiter Configuration)

GENERAL DESCRIPTION: Centerline vertical tail, doublewedge airfoil with rounded leading edge.

NOTE: Same as V5, but with manipulator housing removed.

Model Scale = 0.0175

DRAWING NUMBER: VL70-000139, VL70-000095

DIMENSIONS:

	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) Ft^2	425.92	0.13044
Planform		
Span (Theo) In	315.72	5.52510
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.404	0.404
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	26.249	26.249
0.25 Element Line	41.130	41.130
Chords:		
Root (Theo) WP	268.50	4.69875
Tip (Theo) WP	108.47	1.89822
MAC	199.81	3.49667
Fus. Sta. of .25 MAC	1463.50	25.61125
W. P. of .25 MAC	635.522	11.12164
B. L. of .25 MAC	0.00	0.00
Airfoil Section		
Leading Wedge Angle Deg	10.000	10.000
Trailing Wedge Angle Deg	14.920	14.920
Leading Edge Radius	2.0	0.0350
Void Area - Ft^2	13.17	0.00403
Blanketed Area	0.00	0.00

TABLE III. - Concluded.

MODEL COMPONENT: WING-W 103 New Lightweight Orbiter

GENERAL DESCRIPTION: Configuration 3 Orbiter per Lines VL70-000139.

NOTE: Same planform as W87, except dihedral at TE

Scale Model = 0.0175

TEST NO.

DWG. NO. VL70-000139

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2	2690.00	0.82381
Planform	936.68	16.39190
Span (Theo In.	2.265	2.265
Aspect Ratio	1.177	1.177
Rate of Taper	0.200	0.200
Taper Ratio	3.500	3.500
Dihedral Angle, degrees (@ TE of Elevon)	3.000	3.000
Incidence Angle, degrees	+3.000	+3.000
Aerodynamic Twist, degrees		
Sweep Back Angles, degrees	45.000	45.000
Leading Edge	-10.24	-10.24
Trailing Edge	35.209	35.209
0.25 Element Line		
Chords:		
Root (Theo) B.P.0.0.	689.24	12.06170
Tip, (Theo) B.P.	137.85	2.41238
MAC	474.81	8.30928
Fus. Sta. of .25 MAC	1136.89	19.89558
W.P. of .25 MAC	299.20	5.2360
B.L. of .25 MAC	182.13	3.18728
EXPOSED DATA		
Area (Theo) Ft^2	1752.29	0.53664
Span, (Theo) In. BP108	720.68	12.61190
Aspect Ratio	2.058	2.058
Taper Ratio	0.2451	0.2451
Chords		
Root BP108	562.40	9.8420
Tip 1.00 $\frac{b}{2}$	137.85	2.41238
MAC	393.03	6.87802
Fus. Sta. of .25 MAC	1185.31	20.74292
W.P. of .25 MAC	300.20	5.25350
B.L. of .25 MAC	251.76	2.51580
Airfoil Section (Rockwell Mod NASA) XXXX-64		
Root $\frac{b}{2}$ =	0.10	0.10
Tip $\frac{b}{2}$ =	0.12	0.12
Data for (1) of (2) Sides		
Leading Edge Cuff Planform Area Ft^2	120.33	0.00368
Leading Edge Intersects Fus M. L. @ Sta	560.0	9.800
Leading Edge Intersects Wing @ Sta	1035.0	18.1125

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TABLE IV. - THERMOCOUPLE LOCATIONS

Fuselage

T/C No.	$\frac{X}{L}$	X_o (in. full scale)	Y_o (in. full scale)	Z_o (in. full scale)	ϕ (degrees)	Skin Thickness (inches)	Remarks
4	.020	263.81	0	—	0	.032	Bottom ℄
7	.050	302.52				.033	
12	.100	367.03				.034	
17	.150	431.54				.034	
22	.200	496.06				.031	
25	.275	592.83				.033	
27	.325	657.35				.033	
29	.375	721.86				.028	
30	.400	754.12				.033	
32	.450	818.64				.034	
34	.500	883.15				.030	
38	.600	1012.18				.028	
42	.700	1141.21				.034	
46	.800	1270.24				.035	
50	.900	1399.27				.034	Bottom ℄
54	1.000	1528.30				.029	*
59	.010	250.90			180	.035	Top ℄
62	.075	334.77				.033	
64	.125	399.29				.031	
65	.150	431.54				.026	
66	.160	444.45				.031	
67	.170	457.35				.031	
68	.180	470.25				.030	
69	.200	496.06				.033	
70	.250	560.58				.030	
71	.300	625.09				.030	
72	.400	754.12				.030	
74	.600	1012.18				.030	
76	.800	1270.24				.026	

*For configurations with $\delta_{bf} = 10°$, thermocouple number is located at $\frac{X}{L} = 1.008$ and the skin thickness is 0.033 inch

TABLE IV.

Fuselage - Concluded.

T/C No.	X / L	X_o (in. full scale)	Y_o (in. full scale)	Z_o (in. full scale)	ϕ (degrees)	Skin Thickness (inches)	Remarks
122	.300	625.09	0	350.00	65	.026	Fuselage side
129	.300	625.09	↓	360.00	70	.023	↓
135	.400	754.12		430.00	105	.033	
136	.500	883.15		430.00	105	.032	

TABLE IV.
Wing - Continued.

T/C No.	Y / b/2	X / C	X_o (in. full scale)	Y_o (in. full scale)	Skin thickness (inches)	Remarks
176	.500	.600	1317.428	234.170	.034	Wing-Bottom
177	↓	.700	1359.028	↓	.033	
178	↓	.900	1442.350	↓	.033	Elevon
179	.600	.100	1152.000	281.004	.033	
180	↓	.200	1188.000	↓	.031	
181	↓	.300	1224.000	↓	.026	
182	↓	.428	1270.230	↓	.026	
183	↓	.600	1332.000	↓	.027	
184	↓	.700	1368.000	↓	.024	
186	↓	.850	1422.000	↓	.033	Elevon
187	↓	.900	1440.000	↓	.034	Elevon
192	.750	.500	1325.028	351.255	.032	
193	↓	.700	1380.400	↓	.027	
194	↓	.800	1408.100	↓	.031	Elevon
196	↓	.900	1435.800	↓	.035	Elevon
197	.850	.100	1255.200	398.089	.031	
198	↓	.300	1299.600	↓	.034	
199	↓	.500	1344.000	↓	.032	
202	.950	———	———	444.857	.035	L. E. Rolled 30°
203	↓	.050	1295.925	↓	.035	
204	↓	.100	1303.828	↓	.035	
205	↓	.300	1335.543	↓	.024	
206	↓	.500	1367.257	↓	.022	
207	↓	.700	1398.950	↓	.035	Elevon
208	↓	.900	1430.650	↓	.030	Elevon
211	.600	0	———	281.004	.035	
225	.400	.050	1015.114	187.336	.025	Wing-Top
226	↓	.200	1090.428	↓	.024	
227	↓	.600	1291.171	↓	.033	
228	↓	.950	1466.875	↓	.031	Elevon
229	.600	.050	1134.886	281.004	.032	

TABLE IV.
Wing - Concluded.

T/C No.	Y / b/2	X / C̄	X_o (in. full scale)	Y_o (in. full scale	Skin thickness (inches)	Remarks
230	.600	.200	1188.657	281.004	.031	Wing-Top
231	↓	.600	1332.028	↓	.031	↓
232		.800	1404.000		.032	Elevon
234		.950	1458.000		.033	Elevon
235	.800	.050	1223.057	374.672	.033	
236	↓	.200	1260.257	↓	.033	
237		.600	1359.514		.032	
238		.800	1408.780		.030	Elevon
240		.950	1446.145		.030	Elevon

Vertical Tail

T/C	Z / b_v	X / C̄	X_o (in. full scale)	Z_o (in. full scale)	Skin Thickness (inches)	Remarks
274	.532	0.00	———	667.96	.034	L. E. Vertical
286	.905	0.00	———	785.73	.033	L. E. Vertical

Notes:

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

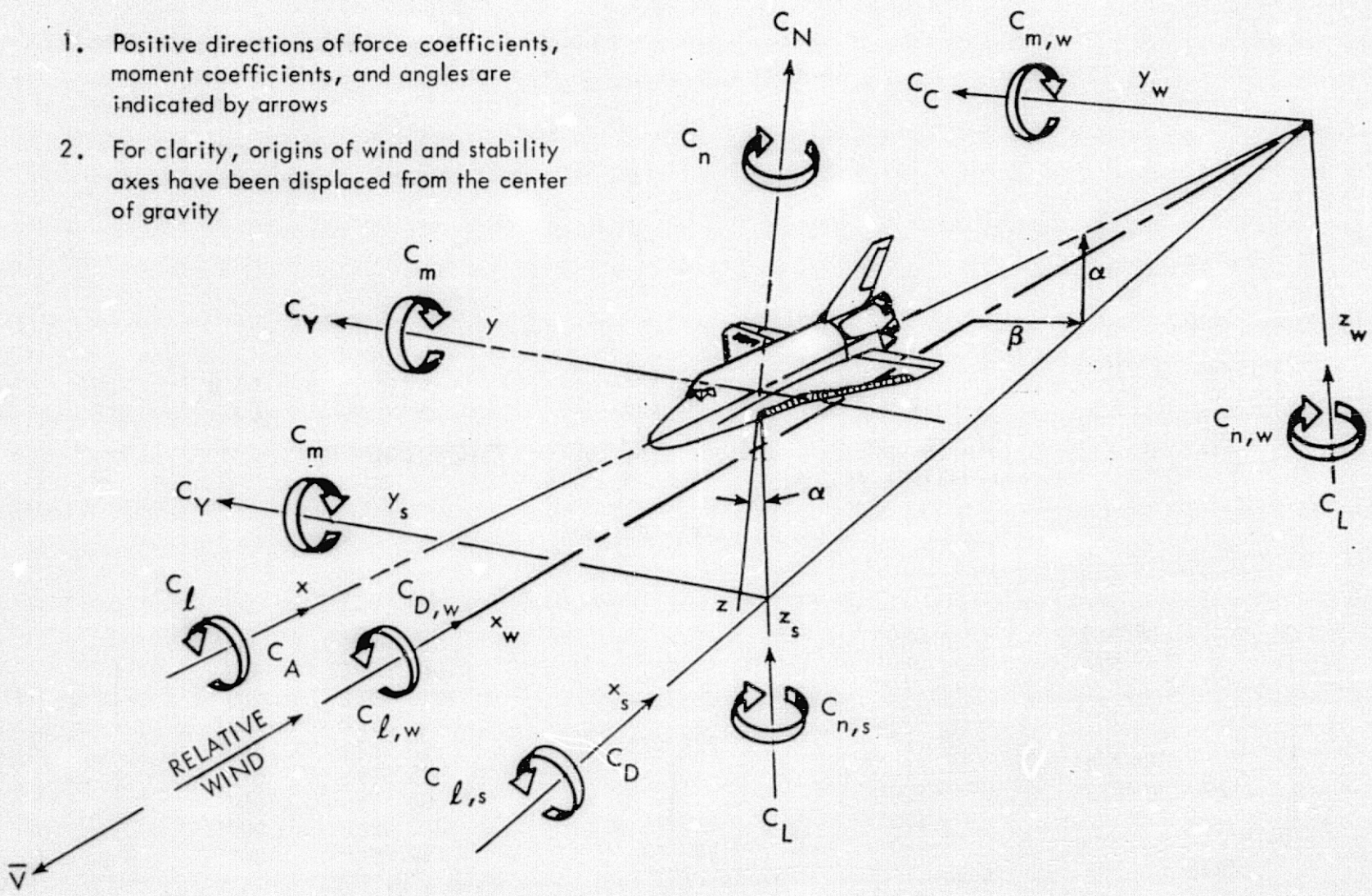

Figure 1. - Axis Systems.

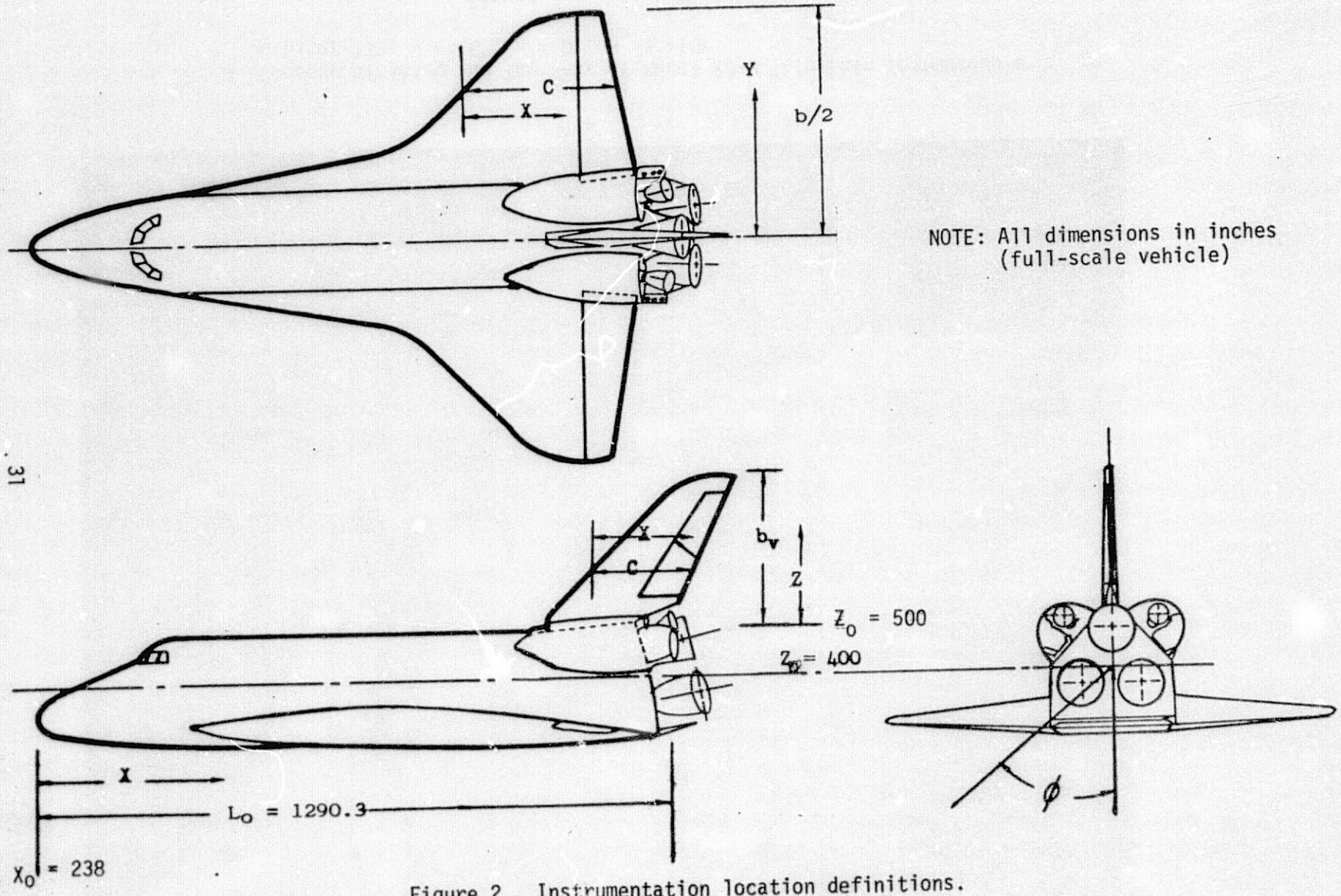

Figure 2. Instrumentation location definitions.

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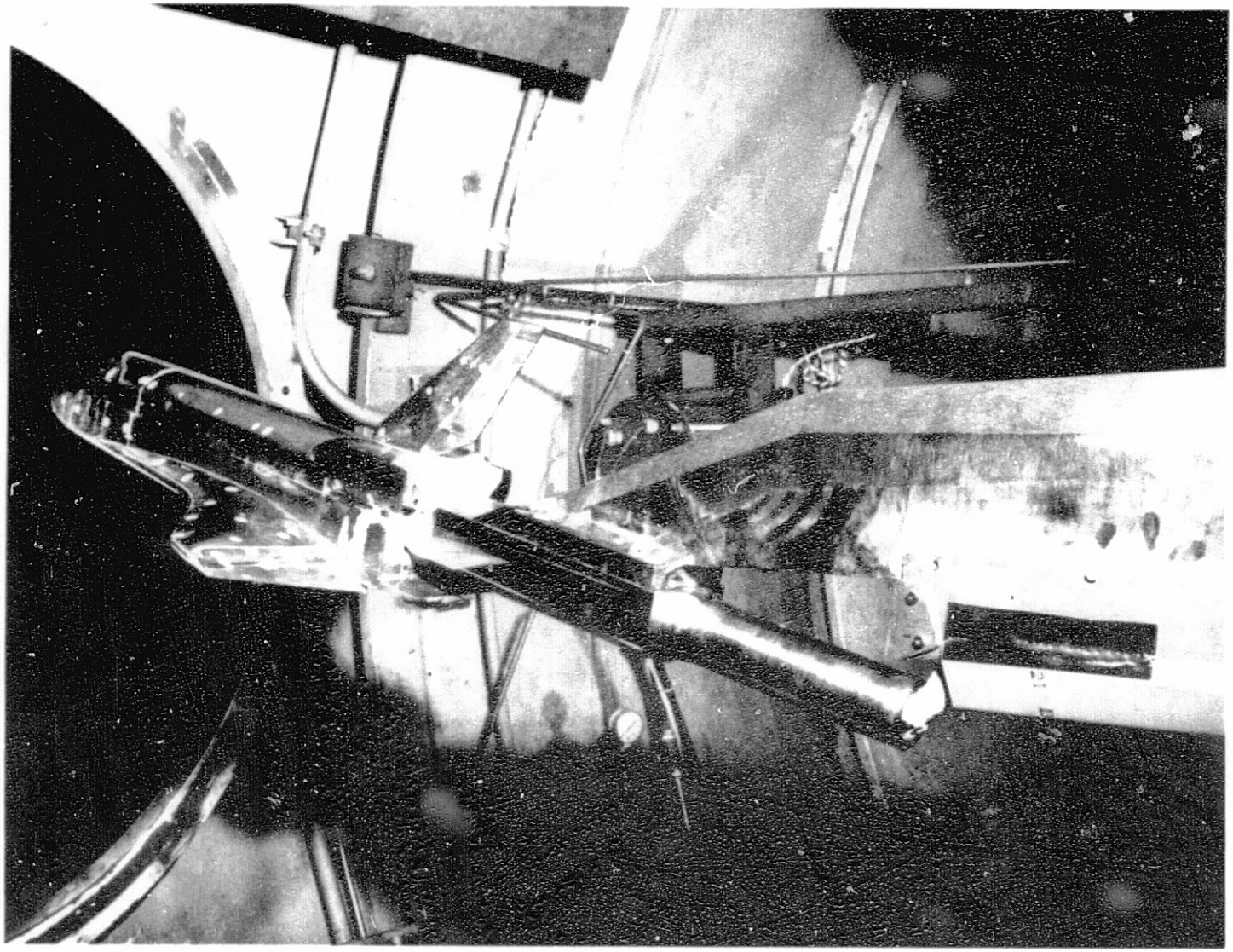

a. Closeup of Sting and Top Rear of Model 22-0 Thin-Skin Thermocouple Orbiter 139; α = 15°, β = 0°, δ_e = +10°

Figure 3. - Model installation photographs.

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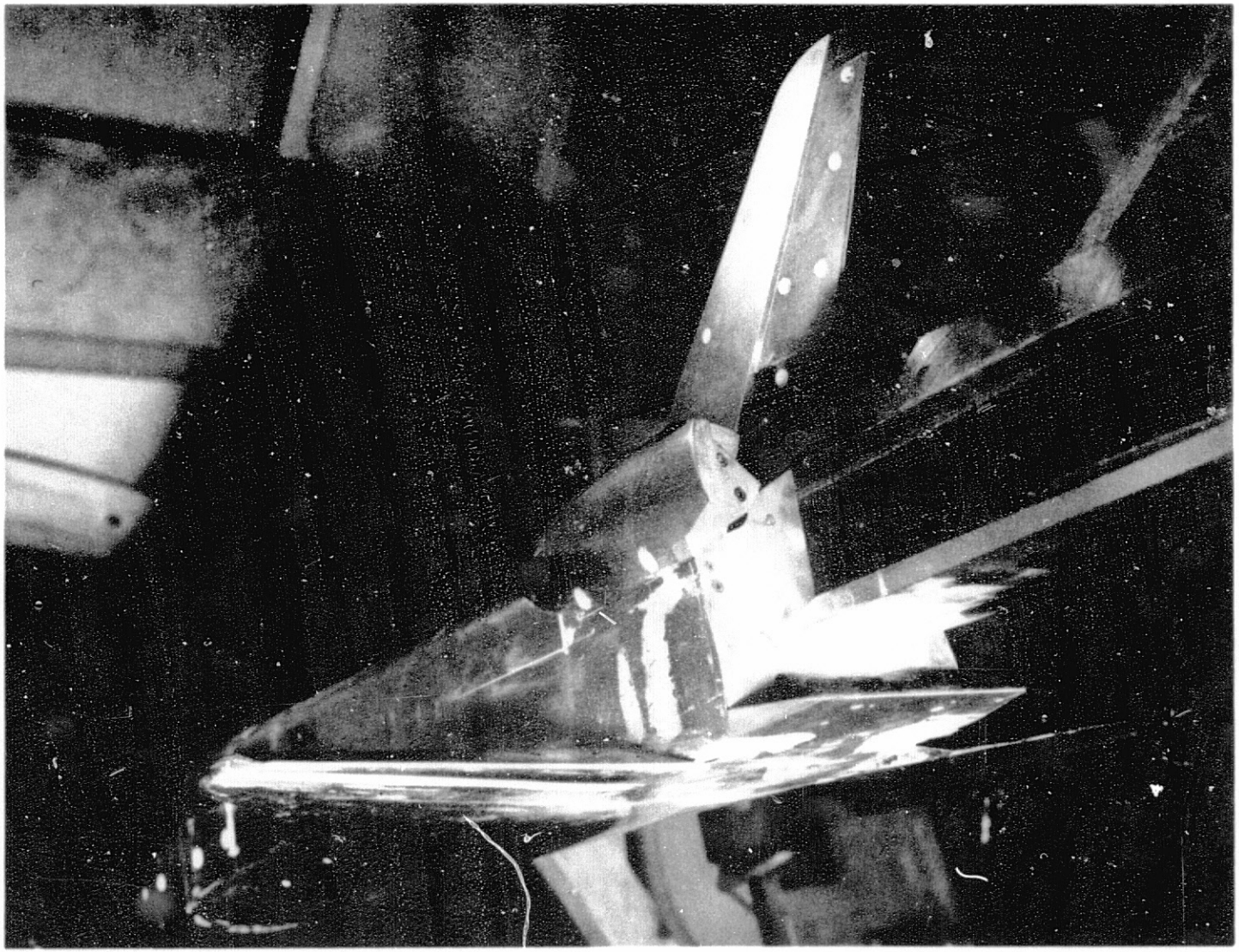

b. Closeup of Sting and Bottom Rear of Model 22-O Thin-Skin Thermocouple Orbiter 139; α = 15°, β = 0°, δ_e = +10°

Figure 3. - Concluded.

APPENDIX
TABULATED SOURCE DATA

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

								TEST NO. 183
MACH 7.30	RE/METER 3.2877E 06	REL 1.8859E 06	LENGTH(METER) 0.574	PT(ATM) 15.78	TT(DEG K) 827.0	H T(JOULE/KG) 0.85224E 06	RS(METER) 0.0053	RUN NO. 1
MACH 7.30	RE/FT 1.0021E 06	REL 1.8859E 06	LENGTH(FT) 1.882	PT(PSI) 231.97	TT(DEG R) 1488.6	H T(BTU/LBM) 366.48	RS(FT) 0.0175	

CHAN	T/C	TW(DEG K)	TW(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.863)	TIME(SEC)
1	4	304.9	548.9	6.662	5.870	33.556	29.568	8.4216E-03	8.6952E-03	0.719
2	7	304.1	547.4	3.380	2.978	33.609	29.614	4.2652E-03	4.4035E-03	0.687
3	12	303.8	546.9	1.753	1.545	33.629	29.632	2.2107E-03	2.2823E-03	0.676
4	17	303.7	546.7	1.154	1.017	33.637	29.638	1.4547E-03	1.5018E-03	0.664
5	22	303.7	546.8	0.742	0.630	33.638	29.639	1.1877E-03	1.2261E-03	0.625
6	25	303.7	546.8	0.797	0.703	33.637	29.639	1.0053E-03	1.0378E-03	0.613
7	27	304.0	547.2	0.812	0.716	33.618	29.622	1.0246E-03	1.0580E-03	0.591
8	29	303.9	547.0	0.735	0.647	33.626	29.629	9.2647E-04	9.5646E-04	0.563
9	30	303.9	547.0	0.707	0.623	33.623	29.626	8.9153E-04	9.2041E-04	0.572
10	32	303.6	546.5	0.656	0.578	33.641	29.642	8.2725E-04	8.5403E-04	0.560
11	34	303.7	546.6	0.597	0.526	33.637	29.639	7.5259E-04	7.7695E-04	0.514
12	38	303.9	547.1	0.551	0.486	33.622	29.626	6.9519E-04	7.1770E-04	0.438
13	42	303.6	546.4	0.483	0.426	33.645	29.645	6.0890E-04	6.2861E-04	0.406
14	46	303.5	546.3	0.345	0.304	33.648	29.648	4.3453E-04	4.4859E-04	0.165
15	50	303.2	545.7	0.268	0.236	33.671	29.669	3.3753E-04	3.4845E-04	0.142
16	54	302.8	545.1	0.173	0.152	33.693	29.688	2.1749E-04	2.2452E-04	0.000
17	59	305.1	549.3	6.791	5.984	33.544	29.557	8.5687E-03	8.8677E-03	0.719
18	62	303.7	546.7	0.903	0.795	33.637	29.638	1.1381E-03	1.1749E-03	0.671
19	64	304.1	547.4	0.349	0.308	33.615	29.619	4.4038E-04	4.5464E-04	0.594
20	65	304.0	547.2	0.324	0.286	33.617	29.621	4.0898E-04	4.2223E-04	0.704
21	66	304.1	547.3	1.338	1.179	33.612	29.617	1.6879E-03	1.7429E-03	0.622
22	67	304.3	547.7	2.557	2.253	33.596	29.605	3.2274E-03	3.3320E-03	0.658
23	68	304.5	548.0	2.526	2.561	33.588	29.595	3.6990E-03	3.8190E-03	0.626
24	69	303.8	546.9	0.965	0.850	33.630	29.632	1.2184E-03	1.2557E-03	0.684
25	70	303.3	546.0	0.159	0.140	33.661	29.660	1.9974E-04	2.0625E-04	0.634
26	71	303.4	546.1	0.100	0.088	33.655	29.655	1.2577E-04	1.2984E-04	0.729
27	72	303.1	545.6	0.092	0.081	33.674	29.671	1.1578E-04	1.1953E-04	0.708
28	74	303.0	545.4	0.333	0.293	33.683	29.679	4.1920E-04	4.3275E-04	0.784
29	76	302.9	545.1	0.130	0.114	33.691	29.687	1.6302E-04	1.6828E-04	0.429
30	122	303.7	546.7	0.464	0.409	33.635	29.637	5.8456E-04	6.0349E-04	0.604
31	129	303.6	546.5	0.412	0.363	33.642	29.643	5.1879E-04	5.3559E-04	0.589
32	135	303.6	546.5	0.255	0.224	33.644	29.645	3.2084E-04	3.3122E-04	0.567
33	136	304.0	547.3	0.301	0.265	33.615	29.620	3.7926E-04	3.9155E-04	0.570
34	176	303.2	545.8	2.599	2.290	33.666	29.664	3.2733E-03	3.3792E-03	0.576
35	177	303.1	545.6	2.066	1.815	33.674	29.671	2.6031E-03	2.6770E-03	0.574
36	178	302.8	545.1	1.019	0.898	33.692	29.687	1.2820E-03	1.3234E-03	0.576
37	179	305.1	549.1	3.604	3.176	33.549	29.561	4.5572E-03	4.7052E-03	0.493
38	180	304.1	547.4	1.808	1.593	33.610	29.615	2.2609E-03	2.3548E-03	0.437
39	181	303.2	545.8	1.159	1.021	33.667	29.665	1.4[illegible]5E-03	1.5067E-03	0.622
40	182	303.8	546.0	1.755	1.546	33.695	29.690	2.[illegible]81E-03	2.2794E-03	0.470
41	183	302.3	544.1	1.651	1.455	33.727	29.718	2.0748E-03	2.1417E-03	0.447
42	184	302.5	544.4	1.208	1.065	33.717	29.709	1.5192E-03	1.5683E-03	0.398
43	186	301.8	543.2	0.826	0.728	33.761	29.748	1.0368E-03	1.0702E-03	0.455
44	187	302.4	544.3	0.717	0.632	33.721	29.713	9.0192E-04	9.3104E-04	0.486
45	192	303.1	545.5	3.322	2.927	33.673	29.670	4.1822E-03	4.3175E-03	0.526
46	193	302.9	545.2	1.268	1.117	33.687	29.683	1.5957E-03	1.6472E-03	0.654
47	194	301.5	542.7	1.249	1.101	33.777	29.763	1.5672E-03	1.617[illegible]E-03	0.522
48	196	302.8	545.1	1.216	1.071	33.693	29.688	1.5296E-03	1.5792E-03	0.603
49	197	305.6	550.1	4.402	3.878	33.513	29.530	5.5722E-03	5.7534E-03	0.572
50	198	305.2	549.3	1.988	1.752	33.543	29.556	2.5143E-03	2.5959E-03	0.508
51	199	305.0	549.1	2.022	1.781	33.551	29.563	2.5562E-03	2.6392E-03	0.495
52	202	307.5	553.5	4.938	4.351	33.393	29.424	6.2768E-03	6.4817E-03	0.465
53	203	307.9	554.2	4.519	3.982	33.367	29.400	5.7490E-03	5.9369E-03	0.470
54	204	308.3	554.9	4.483	3.952	33.344	29.380	5.7107E-03	5.8975E-03	0.410
55	205	308.8	555.9	2.473	2.179	33.308	29.349	3.1531E-03	3.2563E-03	0.444
56	206	307.9	554.2	1.780	1.569	33.366	29.400	2.2646E-03	2.3389E-03	0.432
57	207	304.8	548.6	1.050	0.925	33.568	29.578	1.3269E-03	1.3700E-03	0.340
58	208	306.8	552.2	0.888	0.783	33.437	29.463	1.1275E-03	1.1642E-03	0.458
59	211	305.4	549.7	10.886	9.592	33.529	29.544	1.3774E-02	1.4221E-02	0.544
60	225	304.5	548.1	1.972	1.737	33.585	29.593	2.4899E-03	2.5707E-03	0.828
61	226	302.6	544.7	0.200	0.176	33.705	29.699	2.5164E-04	2.5977E-04	0.790
62	227	301.5	542.6	0.020	0.018	33.781	29.766	2.5034E-05	2.5840E-05	-0.084
63	228	301.3	542.3	0.070	0.062	33.791	29.774	8.7803E-05	9.0631E-05	0.448
64	229	303.4	546.2	3.436	3.028	33.655	29.654	4.3290E-03	4.4691E-03	0.779
65	230	301.8	543.3	0.477	0.420	33.758	29.746	5.9889E-04	6.1820E-04	0.683
66	231	300.5	540.8	0.059	0.052	33.844	29.821	7.4320E-05	7.6709E-05	0.727
67	232	299.7	539.5	0.019	0.016	33.891	29.863	2.3377E-05	2.4127E-05	0.188
68	234	300.9	541.7	0.043	0.038	33.814	29.795	5.3349E-05	5.5065E-05	0.612
69	235	303.0	545.5	4.319	3.806	33.680	29.676	5.4372E-03	5.6129E-03	0.856
70	236	301.5	542.6	0.856	0.754	33.781	29.766	7.6041E-04	7.8490E-04	0.716
71	237	300.0	540.1	0.185	0.163	33.873	29.847	2.3093E-04	2.3835E-04	0.683
72	238	299.9	539.9	0.129	0.114	33.878	29.851	1.6116E-04	1.6634E-04	0.616
73	240	300.7	541.3	0.254	0.224	33.827	29.806	3.1843E-04	3.2868E-04	0.887
74	274	301.8	543.2	6.076	5.354	33.759	29.746	7.6279E-03	7.8738E-03	0.419
75	286	301.0	541.7	8.452	7.448	33.813	29.794	1.0592E-02	1.0933E-02	0.423

FREE-STREAM DENSITY-VELOCITY PRODUCT = 1.0935E-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 2

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)		
7.30	6.3660E 06	3.6517E 06	0.374	31.63	844.0	0.8709E 06	0.0094		
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	1.9404E 06	3.6517E 06	1.882	464.97	1519.2	374.52	0.0179		

CHAN	T/C	M*/FT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)	CHAN	T/C	M*/FT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)
1	4	0.354	0.1934	0.2519	0.2266	0.2362	39	181	0.353	0.0770	0.1002	0.0911	0.0940
2	7	0.352	0.0978	0.1273	0.1157	0.1194	40	182	0.353	0.1657	0.2157	0.1960	0.2023
3	12	0.352	0.0507	0.0660	0.0600	0.0619	41	183	0.352	0.1296	0.1687	0.1533	0.1582
4	17	0.352	0.0334	0.0435	0.0396	0.0408	42	184	0.352	0.1017	0.1324	0.1203	0.1242
5	22	0.353	0.0275	0.0358	0.0325	0.0336	43	186	0.351	0.0579	0.0754	0.0685	0.0707
6	25	0.353	0.0283	0.0363	0.0276	0.0285	44	187	0.352	0.0443	0.0577	0.0524	0.0541
7	27	0.353	0.0237	0.0308	0.0280	0.0289	45	192	0.353	0.1665	0.2168	0.1970	0.2033
8	29	0.353	0.0214	0.0279	0.0254	0.0262	46	193	0.352	0.0735	0.0957	0.0869	0.0897
9	30	0.353	0.0205	0.0267	0.0243	0.0250	47	194	0.351	0.0634	0.0825	0.0750	0.0774
10	32	0.353	0.0187	0.0243	0.0221	0.0228	48	196	0.352	0.0530	0.0689	0.0626	0.0647
11	34	0.353	0.0170	0.0221	0.0201	0.0207	49	197	0.356	0.1305	0.1701	0.1545	0.1594
12	38	0.353	0.0153	0.0199	0.0181	0.0186	50	198	0.356	0.0575	0.0749	0.0680	0.0702
13	42	0.353	0.0124	0.0161	0.0146	0.0151	51	199	0.355	0.0578	0.0754	0.0684	0.0707
14	46	0.353	0.0079	0.0103	0.0094	0.0097	52	202	0.358	0.1357	0.1771	0.1607	0.1659
15	50	0.352	0.0062	0.0081	0.0074	0.0076	53	203	0.359	0.1238	0.1616	0.1467	0.1515
16	54	0.351	0.0054	0.0070	0.0064	0.0066	54	204	0.359	0.1228	0.1603	0.1455	0.1502
17	59	0.354	0.1941	0.2527	0.2276	0.2370	55	205	0.360	0.0703	0.0918	0.0833	0.0860
18	62	0.352	0.0249	0.0324	0.0294	0.0304	56	206	0.359	0.0527	0.0688	0.0625	0.0645
19	64	0.353	0.0070	0.0092	0.0083	0.0086	57	207	0.355	0.0321	0.0419	0.0380	0.0393
20	65	0.353	0.0120	0.0156	0.0142	0.0146	58	208	0.357	0.0290	0.0378	0.0343	0.0354
21	66	0.353	0.0454	0.0591	0.0537	0.0554	59	211	0.356	0.3025	0.3942	0.3580	0.3696
22	67	0.353	0.0842	0.1096	0.0995	0.1027	60	225	0.354	0.0557	0.0725	0.0659	0.0680
23	68	0.354	0.0867	0.1129	0.1026	0.1059	61	226	0.351	0.0047	0.0062	0.0056	0.0058
24	69	0.352	0.0268	0.0348	0.0316	0.0327	62	227	0.350	0.0008	0.0011	0.0010	0.0010
25	70	0.352	0.0041	0.0054	0.0049	0.0050	63	228	0.349	0.0019	0.0025	0.0023	0.0023
26	71	0.352	0.0023	0.0029	0.0027	0.0028	64	229	0.353	0.1023	0.1332	0.1210	0.1249
27	72	0.351	0.0025	0.0033	0.0030	0.0031	65	230	0.350	0.0142	0.0185	0.0168	0.0173
28	74	0.351	0.0086	0.0110	0.0100	0.0103	66	231	0.34	0.0013	0.0017	0.0015	0.0016
29	76	0.351	0.0085	0.0110	0.0100	0.0103	67	232	0.34	0.0010	0.0013	0.0011	0.0012
30	122	0.353	0.0130	0.0169	0.0154	0.0159	68	234	0.345	0.0015	0.0020	0.0018	0.0018
31	129	0.353	0.0114	0.0148	0.0134	0.0139	69	235	0.352	0.1304	0.1697	0.1542	0.1591
32	135	0.352	0.0071	0.0092	0.0084	0.0087	70	236	0.350	0.0166	0.0216	0.0197	0.0203
33	136	0.353	0.0090	0.0117	0.0107	0.0110	71	237	0.346	0.0055	0.0071	0.0064	0.0066
34	176	0.353	0.0885	0.1152	0.1047	0.1080	72	238	0.347	0.0026	0.0033	0.0030	0.0031
35	177	0.353	0.0680	0.0885	0.0804	0.0830	73	240	0.348	0.0057	0.0075	0.0068	0.0070
36	178	0.352	0.0314	0.0408	0.0371	0.0383	74	274	0.346	0.1519	0.1971	0.1793	0.1850
37	179	0.355	0.1274	0.1660	0.1507	0.1556	75	286	0.343	0.2113	0.2738	0.2492	0.2570
38	180	0.354	0.0698	0.0909	0.0826	0.0853							

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MACH 7.30	RE/METER 6.3660E 06	REL 3.6517E 06	LENGTH(METER) 0.574	PT(ATM) 31.63	TT(DEG K) 844.0	HT(JOULE/KG) 0.6779E 06	RSM(METER) 0.0053	TEST NO. 183
MACH 7.30	RE/FT 1.9404E 06	REL 3.6517E 06	LENGTH(FT) 1.882	PT(PSIA) 464.97	TT(DEG R) 1519.2	HT(BTU/LBM) 374.52	RS(FT) 0.0175	RUN NO. 2

CHAN	T/C	Tw(DEG K)	Tw(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.883)	TIME(SEC)
1	4	306.6	551.8	9.465	8.357	49.050	43.288	5.8684E-03	6.0548E-03	0.542
2	7	305.6	550.2	4.804	4.233	49.121	43.282	2.9857E-03	3.0607E-03	0.506
3	12	305.4	549.7	2.495	2.197	49.143	43.301	1.5383E-03	1.5876E-03	0.497
4	17	305.6	550.0	1.643	1.448	49.128	43.286	1.0142E-03	1.0467E-03	0.487
5	22	305.7	550.3	1.352	1.191	49.118	43.277	8.3452E-04	8.6126E-04	0.439
6	25	306.0	550.7	1.145	1.009	49.093	43.257	7.0700E-04	7.2967E-04	0.417
7	27	306.2	551.2	1.163	1.024	49.067	43.235	7.1860E-04	7.4165E-04	0.386
8	29	306.1	551.1	1.052	0.927	49.076	43.242	6.5029E-04	6.7115E-04	0.385
9	30	306.1	551.0	1.007	0.887	49.079	43.245	6.2228E-04	6.4224E-04	0.327
10	32	305.8	550.4	0.918	0.809	49.111	43.273	5.6665E-04	5.8481E-04	0.289
11	34	305.9	550.7	0.834	0.735	49.094	43.258	5.1496E-04	5.3150E-04	0.211
12	38	306.4	551.4	0.749	0.660	49.056	43.225	4.6314E-04	4.7801E-04	0.066
13	42	306.0	550.8	0.687	0.605	49.088	43.253	3.7519E-04	3.8723E-04	-0.104
14	46	305.9	550.6	0.389	0.342	49.099	43.263	2.4000E-04	2.4770E-04	-0.665
15	50	305.4	549.7	0.307	0.270	49.140	43.304	1.6920E-04	1.9526E-04	-0.652
16	54	304.5	548.1	0.265	0.233	49.228	43.376	1.6313E-04	1.6834E-04	-0.403
17	59	306.9	552.5	9.509	8.379	49.004	43.179	5.8861E-03	6.0753E-03	0.536
18	62	305.4	549.7	1.223	1.078	49.142	43.301	7.5455E-04	7.7872E-04	0.492
19	64	306.0	550.8	0.346	0.304	49.087	43.253	2.1346E-04	2.2030E-04	0.377
20	65	306.0	550.9	0.588	0.518	49.086	43.251	3.6321E-04	3.7486E-04	0.520
21	66	306.2	551.2	2.226	1.961	49.067	43.235	1.3757E-03	1.4198E-03	0.411
22	67	306.5	551.7	4.127	3.637	49.045	43.215	2.5523E-03	2.6342E-03	0.479
23	68	306.6	551.9	4.253	3.747	49.034	43.205	2.6306E-03	2.7151E-03	0.420
24	69	305.6	550.0	1.315	1.158	49.129	43.289	8.1134E-04	8.3733E-04	0.499
25	70	305.0	548.9	0.202	0.178	49.183	43.337	1.2474E-04	1.2873E-04	0.443
26	71	304.9	548.9	0.111	0.098	49.184	43.338	6.8659E-05	7.0856E-05	0.403
27	72	304.4	547.9	0.125	0.110	49.238	43.385	7.6772E-05	7.9225E-05	0.489
28	74	304.2	547.6	0.416	0.366	49.250	43.396	2.5590E-04	2.6408E-04	0.477
29	76	304.1	547.3	0.417	0.367	49.265	43.409	2.5654E-04	2.6473E-04	0.501
30	122	306.0	550.8	0.638	0.562	49.091	43.256	3.9429E-04	4.0693E-04	0.415
31	129	305.8	550.5	0.558	0.492	49.105	43.266	3.4466E-04	3.5571E-04	0.389
32	135	305.6	550.1	0.348	0.307	49.124	43.285	2.1505E-04	2.2194E-04	0.346
33	136	305.9	550.7	0.443	0.390	49.094	43.258	2.7370E-04	2.8247E-04	0.380
34	176	306.1	551.0	4.344	3.827	49.077	43.243	2.6841E-03	2.7702E-03	0.391
35	177	305.9	550.7	3.338	2.941	49.096	43.260	2.0616E-03	2.1277E-03	0.366
36	178	305.6	550.1	1.541	1.358	49.122	43.283	9.5104E-04	9.8151E-04	0.375
37	179	308.2	554.8	6.226	5.486	48.886	43.075	3.8644E-03	3.9889E-03	0.359
38	180	307.2	552.9	3.420	3.013	48.981	43.159	2.1179E-03	2.1860E-03	0.065
39	181	306.2	551.1	3.778	3.329	49.077	43.240	2.3346E-03	2.4097E-03	0.549
40	182	305.8	550.5	8.139	7.171	49.103	43.267	5.0262E-03	5.1873E-03	0.578
41	183	305.1	549.2	6.375	5.617	49.172	43.327	3.9307E-03	4.0565E-03	0.546
42	184	305.2	549.4	5.001	4.407	49.158	43.315	3.0847E-03	3.1834E-03	0.516
43	186	304.4	548.0	2.853	2.514	49.232	43.380	1.7564E-03	1.8125E-03	0.513
44	187	305.1	549.2	2.179	1.920	49.171	43.326	1.3435E-03	1.3865E-03	0.509
45	192	306.2	551.1	8.171	7.200	49.074	43.241	5.0497E-03	5.2117E-03	0.474
46	193	305.7	550.2	3.611	3.182	49.119	43.281	2.2291E-03	2.3005E-03	0.507
47	194	304.1	547.4	3.125	2.754	49.263	43.408	1.9229E-03	1.9843E-03	0.264
48	196	305.6	550.1	2.602	2.293	49.126	43.287	1.6063E-03	1.6577E-03	0.378
49	197	308.7	555.6	6.373	5.615	48.845	43.039	3.9592E-03	4.0869E-03	0.419
50	198	308.4	555.1	2.806	2.474	48.870	43.061	1.7435E-03	1.7997E-03	0.355
51	199	308.2	554.8	2.827	2.491	48.887	43.076	1.7547E-03	1.8113E-03	0.306
52	202	310.6	559.1	6.603	5.818	48.666	42.881	4.1196E-03	4.2531E-03	0.247
53	203	311.0	559.9	6.022	5.306	48.629	42.849	3.7599E-03	3.8818E-03	0.259
54	204	311.5	560.7	5.967	5.258	48.588	42.813	3.7294E-03	3.8505E-03	0.189
55	205	312.2	561.9	3.411	3.005	48.526	42.758	2.1348E-03	2.2042E-03	0.225
56	206	311.2	560.2	2.562	2.258	48.612	42.833	1.6005E-03	1.6525E-03	0.292
57	207	307.8	554.1	1.572	1.385	48.920	43.105	9.7512E-04	1.0065E-03	0.202
58	208	310.0	558.0	1.411	1.243	48.724	42.933	8.7916E-04	9.0760E-04	0.400
59	211	308.3	555.0	14.783	13.026	48.674	43.065	9.1779E-03	9.4738E-03	0.339
60	225	306.9	552.5	2.728	2.404	49.005	43.180	1.6884E-03	1.7427E-03	0.675
61	226	304.6	548.3	0.234	0.206	49.216	43.366	1.4395E-04	1.4856E-04	0.602
62	227	303.4	546.0	0.041	0.036	49.330	43.466	2.5341E-05	2.6151E-05	0.250
63	228	303.0	545.5	0.094	0.083	49.358	43.491	5.7968E-05	5.9815E-05	0.482
64	229	305.7	550.3	3.026	4.428	49.113	43.276	3.1029E-03	3.2024E-03	0.606
65	230	303.6	546.5	0.701	0.617	49.308	43.447	4.3056E-04	4.4430E-04	0.587
66	231	302.2	543.9	0.064	0.057	49.440	43.563	3.9442E-05	4.0697E-05	0.888
67	232	301.1	542.0	0.048	0.042	49.531	43.645	2.9188E-05	3.0114E-05	0.744
68	234	302.4	544.4	0.075	0.066	49.415	43.542	4.5e906-05	4.7144E-05	0.753
69	235	305.5	549.9	6.407	5.646	49.136	43.296	1.9534E-03	4.0806E-03	0.740
70	236	303.4	546.2	0.021	0.723	49.321	43.459	5.0447E-04	5.2056E-04	0.582
71	237	301.5	542.7	0.270	0.238	49.499	43.615	1.6930E-04	1.7055E-04	0.532
72	238	301.0	541.8	0.128	0.113	49.595	43.696	7.8082E-05	8.0559E-05	0.299
73	240	302.1	543.8	0.284	0.250	49.445	43.566	1.7412E-04	1.7966E-04	0.624
74	274	299.8	539.7	7.543	6.646	49.652	43.750	4.5097E-03	4.7433E-03	0.095
75	286	297.5	535.4	10.535	9.283	49.868	43.941	6.3932E-03	6.5945E-03	0.094

FREE-STREAM DENSITY-VELOCITY PRODUCT = 2.1635E-01 (SLUGS/FT2-SEC)

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TEST NO. 183
RUN NO. 3

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)										
7.30	1.1555E 07	6.6304E 06	0.574	59.01	857.5	0.88587E 06	0.0053										
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)										
7.30	3.5231E 06	6.6304E 06	1.882	867.50	1543.6	380.95	0.0175										

CHAN	T/C	HW/HT	C/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)	CHAN	T/C	HW/HT	C/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)
1	-	0.356	0.1926	0.2511	0.2280	0.2353	39	181	0.346	0.1747	0.2266	0.2062	0.2127
2	7	0.352	0.0985	0.1281	0.1164	0.1201	40	182	0.345	0.2439	0.3164	0.2879	0.2970
3	12	0.348	0.0505	0.0656	0.0596	0.0615	41	183	0.344	0.1650	0.2398	0.2182	0.2251
4	17	0.347	0.0327	0.0425	0.0386	0.0399	42	184	0.344	0.1306	0.1693	0.1541	0.1589
5	22	0.346	0.0279	0.0362	0.0330	0.0340	43	186	0.344	0.0751	0.0973	0.0886	0.0914
6	25	0.345	0.0234	0.0304	0.0276	0.0285	44	187	0.346	0.0595	0.0772	0.0703	0.0725
7	27	0.346	0.0232	0.0301	0.0274	0.0282	45	192	0.346	0.1884	0.2445	0.2225	0.2295
8	29	0.346	0.0204	0.0265	0.0241	0.0248	46	193	0.346	0.0793	0.1028	0.0936	0.0965
9	30	0.346	0.0201	0.0261	0.0237	0.0245	47	194	0.345	0.0813	0.1054	0.0959	0.0989
10	32	0.345	0.0181	0.0234	0.0213	0.0220	48	196	0.348	0.0644	0.0836	0.0761	0.0785
11	34	0.346	0.0160	0.0208	0.0189	0.0195	49	197	0.349	0.1285	0.1670	0.1518	0.1567
12	38	0.346	0.0142	0.0185	0.0168	0.0173	50	198	0.350	0.0593	0.0770	0.0700	0.0723
13	42	0.346	0.0114	0.0148	0.0134	0.0139	51	199	0.351	0.0793	0.1031	0.0937	0.0967
14	46	0.346	0.0081	0.0105	0.0096	0.0099	52	202	0.353	0.1359	0.1769	0.1607	0.1659
15	50	0.346	0.0094	0.0122	0.0111	0.0115	53	203	0.353	0.1221	0.1589	0.1444	0.1490
16	54	0.347	0.0101	0.0131	0.0119	0.0123	54	204	0.354	0.1229	0.1601	0.1454	0.1501
17	59	0.357	0.1959	0.2554	0.2319	0.2394	55	205	0.356	0.0776	0.1012	0.0919	0.0948
18	62	0.347	0.0249	0.0323	0.0294	0.0303	56	206	0.356	0.0622	0.0811	0.0736	0.0760
19	64	0.346	0.0062	0.0080	0.0073	0.0075	57	207	0.353	0.0743	0.0967	0.0879	0.0907
20	65	0.346	0.0145	0.0188	0.0171	0.0176	58	208	0.357	0.0550	0.0717	0.0651	0.0672
21	66	0.347	0.0679	0.0882	0.0802	0.0828	59	211	0.349	0.3961	0.5148	0.4681	0.4830
22	67	0.348	0.1142	0.1483	0.1349	0.1392	60	225	0.345	0.0534	0.0694	0.0631	0.0651
23	68	0.348	0.1182	0.1535	0.1396	0.1441	61	226	0.344	0.0042	0.0055	0.0050	0.0052
24	69	0.345	0.0304	0.0395	0.0359	0.0371	62	227	0.340	0.0008	0.0010	0.0009	0.0010
25	70	0.343	0.0041	0.0053	0.0048	0.0049	63	228	0.344	0.0016	0.0021	0.0019	0.0020
26	71	0.343	0.0021	0.0027	0.0024	0.0025	64	229	0.346	0.1097	0.1424	0.1295	0.1336
27	72	0.343	0.0026	0.0034	0.0031	0.0032	65	230	0.341	0.0147	0.0190	0.0173	0.0179
28	74	0.344	0.0097	0.0126	0.0115	0.0118	66	231	0.337	0.0009	0.0012	0.0011	0.0011
29	76	0.344	0.0134	0.0173	0.0158	0.0163	67	232	0.338	0.0016	0.0020	0.0019	0.0019
30	122	0.343	0.0132	0.0171	0.0155	0.0160	68	234	0.342	0.0016	0.0021	0.0019	0.0019
31	129	0.343	0.0112	0.0145	0.0132	0.0136	69	235	0.346	0.1255	0.1629	0.1482	0.1529
32	135	0.344	0.0071	0.0092	0.0083	0.0086	70	236	0.342	0.0159	0.0206	0.0188	0.0194
33	136	0.344	0.0103	0.0133	0.0121	0.0125	71	237	0.338	0.0054	0.0069	0.0063	0.0065
34	176	0.346	0.2021	0.2623	0.2386	0.2462	72	238	0.340	0.0028	0.0036	0.0033	0.0034
35	177	0.346	0.1529	0.1984	0.1805	0.1862	73	240	0.342	0.0055	0.0071	0.0065	0.0067
36	178	0.347	0.0669	0.0868	0.0790	0.0815	74	274	0.346	0.1694	0.2185	0.1988	0.2051
37	179	0.349	0.2186	0.2840	0.2582	0.2664	75	286	0.347	0.2356	0.3058	0.2781	0.2869
38	180	0.347	0.2353	0.3055	0.2778	0.2866							

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 3

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	XS(METER)
7.30	1.15898 07	6.63048 06	0.574	59.01	857.5	0.66987E 06	0.000
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	XS(FT)
7.30	3.52315 06	6.63048 06	1.882	867.50	1543.6	380.95	0.017

CHAR.	T/C	TW(DEG K)	TW(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(1.000)	TIME(SEC)
1	4	314.3	565.7	13.066	11.513	67.650	59.785	4.3241E-03	4.4631E-03	0.550
2	7	310.4	558.7	6.727	5.928	68.433	60.210	2.2088E-03	2.2793E-03	0.521
3	12	306.9	552.5	3.472	3.060	68.705	60.571	1.1317E-03	1.1678E-03	0.506
4	17	306.0	550.9	2.253	1.986	68.875	60.668	7.3222E-04	7.5647E-04	0.467
5	22	304.9	548.8	1.927	1.698	69.020	60.816	6.2437E-04	6.4540E-04	0.446
6	25	304.3	547.8	1.617	1.425	69.089	60.877	5.2437E-04	5.4094E-04	0.395
7	27	305.0	549.0	1.599	1.409	69.008	60.805	5.1931E-04	5.3574E-04	0.342
8	29	305.0	548.9	1.406	1.241	69.012	60.809	4.5716E-04	4.7162E-04	0.255
9	30	304.9	548.8	1.368	1.223	69.012	60.809	4.5053E-04	4.6478E-04	0.273
10	32	304.3	547.7	1.248	1.100	69.094	60.881	4.0478E-04	4.1755E-04	0.218
11	34	304.9	548.8	1.105	0.974	69.020	60.816	3.5880E-04	3.7015E-04	0.115
12	36	305.5	550.0	0.981	0.865	68.940	60.745	3.1898E-04	3.2908E-04	-0.042
13	42	305.1	549.2	0.786	0.692	68.989	60.789	2.5521E-04	2.6329E-04	-0.198
14	46	305.6	550.1	0.559	0.493	68.930	60.737	1.8178E-04	1.8754E-04	-0.599
15	50	305.6	550.1	0.649	0.572	68.929	60.736	2.1102E-04	2.1770E-04	-0.168
16	54	306.2	551.2	0.692	0.610	68.856	60.671	2.2539E-04	2.3254E-04	0.033
17	59	314.6	566.3	13.282	11.703	67.810	59.750	4.3988E-03	4.5409E-03	0.548
18	62	306.2	551.1	1.714	1.510	68.858	60.673	5.5791E-04	5.7561E-04	0.505
19	64	305.1	549.1	0.425	0.374	68.998	60.797	1.3801E-04	1.4238E-04	0.393
20	65	305.6	550.1	0.997	0.878	68.931	60.737	3.2400E-04	3.3427E-04	0.499
21	66	306.2	551.2	4.678	4.122	68.855	60.670	1.5227E-03	1.5710E-03	0.472
22	67	306.8	552.2	7.856	6.923	68.786	60.609	2.5601E-03	2.6414E-03	0.526
23	68	307.0	552.6	8.128	7.161	68.754	60.582	2.6490E-03	2.7340E-03	0.500
24	69	304.6	548.3	2.102	1.852	69.053	60.845	6.8207E-04	7.0364E-04	0.544
25	70	302.8	545.1	0.282	0.248	69.276	61.041	9.1057E-05	9.3926E-05	0.456
26	71	302.6	544.6	0.143	0.126	69.308	61.070	4.6346E-05	4.7806E-05	0.372
27	72	302.2	544.0	0.182	0.160	69.356	61.112	5.8629E-05	6.0474E-05	0.442
28	74	303.1	545.5	0.672	0.593	69.247	61.016	2.1747E-04	2.2432E-04	0.547
29	76	303.8	546.9	0.925	0.815	69.150	60.931	2.9960E-04	3.0905E-04	0.547
30	122	302.8	545.0	0.913	0.805	69.280	61.051	2.9510E-04	3.0440E-04	0.420
31	129	302.5	544.6	0.776	0.683	69.312	61.073	2.5054E-04	2.5842E-04	0.382
32	135	303.2	545.7	0.489	0.431	69.233	61.004	1.5827E-04	1.6326E-04	0.330
33	136	303.8	546.8	0.710	0.625	69.155	60.935	2.2989E-04	2.3715E-04	0.408
34	176	305.1	549.2	13.945	12.288	68.943	60.792	4.5286E-03	4.6721E-03	0.476
35	177	304.8	548.6	10.556	9.301	69.032	60.827	3.4259E-03	3.5342E-03	0.472
36	178	305.6	550.2	4.611	4.063	68.925	60.733	1.4490E-03	1.5466E-03	0.457
37	179	307.8	554.0	15.006	13.223	68.662	60.500	4.9000E-03	5.0559E-03	0.506
38	180	306.3	551.4	16.195	14.270	68.839	60.657	5.2726E-03	5.4400E-03	0.502
39	181	304.9	548.8	12.054	10.622	69.020	60.816	3.9130E-03	4.0368E-03	0.493
40	182	304.6	548.3	16.845	14.843	69.056	60.848	5.4649E-03	5.6377E-03	0.440
41	183	303.5	546.3	12.797	11.276	69.193	60.968	4.1424E-03	4.2730E-03	0.425
42	184	303.7	546.7	9.031	7.958	69.165	60.944	2.9246E-03	3.0169E-03	0.392
43	186	303.7	546.7	5.191	4.574	69.165	60.944	1.6811E-03	1.7341E-03	0.429
44	187	305.2	549.4	4.106	3.618	68.975	60.776	1.3337E-03	1.3760E-03	0.421
45	192	305.5	550.0	12.569	11.445	68.940	60.745	4.2220E-03	4.3558E-03	0.491
46	193	305.2	549.3	5.467	4.817	68.985	60.785	1.7757E-03	1.8320E-03	0.496
47	194	304.0	547.3	5.617	4.950	69.127	60.910	1.8202E-03	1.8777E-03	0.330
48	196	306.6	551.9	4.431	3.904	68.806	60.628	1.4433E-03	1.4891E-03	0.391
49	197	308.1	554.5	8.817	7.769	68.623	60.466	2.8809E-03	2.9727E-03	0.401
50	198	308.7	555.7	4.061	3.579	68.541	60.394	1.3286E-03	1.3712E-03	0.352
51	199	309.2	556.6	5.429	4.784	68.475	60.336	1.7783E-03	1.8351E-03	0.412
52	202	310.9	559.7	9.278	8.175	68.264	60.150	3.0494E-03	3.1471E-03	0.276
53	203	311.4	560.4	8.327	7.337	68.213	60.105	2.7393E-03	2.8272E-03	0.278
54	204	312.2	561.9	8.373	7.378	68.111	60.015	2.7590E-03	2.8477E-03	0.223
55	205	314.2	565.5	5.266	4.640	67.883	59.796	1.7423E-03	1.7985E-03	0.278
56	206	313.8	564.8	4.224	3.722	67.908	59.836	1.3968E-03	1.4418E-03	0.343
57	207	311.0	559.8	5.071	4.468	68.257	60.143	1.6668E-03	1.7202E-03	0.452
58	208	314.6	566.3	3.728	3.284	67.806	59.746	1.2346E-03	1.2745E-03	0.347
59	211	306.2	554.7	27.177	23.946	68.607	60.452	8.8819E-03	9.1648E-03	0.379
60	225	307.7	553.9	3.670	3.233	68.667	60.505	1.1981E-03	1.2363E-03	0.647
61	226	303.1	545.6	0.294	0.259	69.244	61.014	9.5175E-05	9.8175E-05	0.545
62	227	300.0	540.0	0.055	0.048	69.628	61.352	1.7530E-05	1.8079E-05	0.594
63	228	303.0	545.4	0.112	0.099	69.257	61.025	3.6182E-05	3.7322E-05	0.682
64	229	305.5	549.9	7.564	6.665	68.942	60.747	2.4586E-03	2.5365E-03	0.581
65	230	301.0	541.7	1.022	0.900	69.311	61.249	3.2301E-04	3.3933E-04	0.574
66	231	297.5	535.4	0.066	0.058	69.947	61.833	2.0976E-05	2.1630E-05	0.732
67	232	298.5	537.2	0.110	0.097	69.822	61.522	3.5344E-05	3.6447E-05	0.662
68	234	301.6	542.9	0.111	0.098	69.432	61.179	3.5827E-05	3.6952E-05	0.672
69	235	305.5	549.8	8.655	7.626	68.947	60.752	2.8127E-03	2.9018E-03	0.676
70	236	301.8	543.2	1.105	0.973	69.405	61.155	3.5637E-04	3.6757E-04	0.548
71	237	298.0	536.3	0.375	0.331	69.885	61.578	1.2018E-04	1.2393E-04	0.470
72	238	299.6	539.3	0.193	0.170	69.681	61.398	6.2017E-05	6.3957E-05	0.369
73	240	301.8	543.3	0.380	0.335	69.402	61.153	1.2252E-04	1.2637E-04	0.656
74	274	305.3	549.6	11.613	10.232	68.964	60.766	3.7731E-03	3.8925E-03	0.240
75	286	305.8	550.4	16.233	14.303	68.912	60.721	5.2786E-03	5.4459E-03	0.217

FREE-STREAM DENSITY-VELOCITY PRODUCT = 3.49934E-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 4

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	1.1645E 07	6.7949E 06	0.574	59.01	845.3	0.87239E 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	3.6104E 06	6.7949E 06	1.882	867.50	1521.6	375.15	0.0175

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)
1	4	0.360	0.2529	0.3304	0.2998	0.2987	39	181	0.354	0.2238	0.2915	0.2648	0.2638
2	7	0.358	0.1453	0.1897	0.1721	0.1715	40	182	0.354	0.3232	0.4209	0.3823	0.3810
3	12	0.357	0.0849	0.1106	0.1006	0.1002	41	183	0.353	0.2697	0.3511	0.3190	0.3179
4	17	0.356	0.0605	0.0789	0.0717	0.0714	42	184	0.353	0.2034	0.2648	0.2406	0.2397
5	22	0.356	0.0559	0.0728	0.0662	0.0659	43	186	0.353	0.1392	0.1812	0.1647	0.1641
6	25	0.355	0.0518	0.0675	0.0613	0.0611	44	187	0.354	0.1186	0.1545	0.1403	0.1398
7	27	0.355	0.0534	0.0696	0.0632	0.0630	45	192	0.355	0.3011	0.3922	0.3563	0.3549
8	29	0.355	0.0501	0.0653	0.0593	0.0591	46	193	0.354	0.1287	0.1677	0.1523	0.1517
9	30	0.355	0.0491	0.0639	0.0581	0.0578	47	194	0.352	0.1386	0.1804	0.1639	0.1633
10	32	0.354	0.0448	0.0584	0.0530	0.0528	48	196	0.355	0.1178	0.1536	0.1395	0.1390
11	34	0.355	0.0429	0.0559	0.0507	0.0506	49	197	0.357	0.1712	0.2233	0.2027	0.2020
12	38	0.355	0.0746	0.0972	0.0883	0.0880	50	198	0.358	0.2729	0.3561	0.3232	0.3220
13	42	0.354	0.1421	0.1852	0.1682	0.1676	51	199	0.358	0.2845	0.3712	0.3370	0.3358
14	46	0.355	0.1787	0.2328	0.2115	0.2107	52	202	0.360	0.1215	0.1586	0.1440	0.1434
15	50	0.355	0.1412	0.1840	0.1671	0.1665	53	203	0.360	0.1178	0.1539	0.1396	0.1391
16	54	0.355	0.1093	0.1425	0.1294	0.1289	54	204	0.361	0.1272	0.1662	0.1508	0.1503
17	59	0.360	0.1282	0.1674	0.1519	0.1514	55	205	0.362	0.1217	0.1591	0.1443	0.1438
18	62	0.356	0.0108	0.0141	0.0128	0.0127	56	206	0.362	0.1996	0.2609	0.2367	0.2358
19	64	0.355	0.0046	0.0060	0.0055	0.0054	57	207	0.358	0.1473	0.1922	0.1745	0.1739
20	65	0.355	0.0091	0.0119	0.0108	0.0108	58	208	0.362	0.1044	0.1365	0.1238	0.1234
21	66	0.356	0.0334	0.0435	0.0395	0.0394	59	211	0.357	0.3376	0.4403	0.3998	0.3983
22	67	0.356	0.0445	0.0581	0.0527	0.0525	60	225	0.357	0.0258	0.0337	0.0306	0.0305
23	68	0.356	0.0373	0.0487	0.0442	0.0441	61	226	0.353	0.0031	0.0040	0.0036	0.0036
24	69	0.355	0.0081	0.0106	0.0096	0.0096	62	227	0.351	0.0011	0.0015	0.0013	0.0013
25	70	0.354	0.0013	0.0017	0.0015	0.0015	63	228	0.354	0.0062	0.0080	0.0073	0.0073
26	71	0.354	0.0022	0.0029	0.0026	0.0026	64	229	0.355	0.0707	0.0922	0.0837	0.0834
27	72	0.353	0.0104	0.0136	0.0123	0.0123	65	230	0.352	0.0096	0.0125	0.0113	0.0113
28	74	0.353	0.0065	0.0085	0.0077	0.0077	66	231	0.350	0.0018	0.0023	0.0021	0.0021
29	76	0.354	0.0033	0.0043	0.0039	0.0039	67	232	0.350	0.0024	0.0031	0.0029	0.0028
30	122	0.354	0.0222	0.0289	0.0263	0.0262	68	234	0.353	0.0060	0.0078	0.0071	0.0071
31	129	0.354	0.0126	0.0164	0.0149	0.0148	69	235	0.356	0.0950	0.1239	0.1125	0.1121
32	135	0.354	0.0112	0.0146	0.0133	0.0132	70	236	0.353	0.0088	0.0114	0.0104	0.0103
33	136	0.354	0.0176	0.0229	0.0209	0.0208	71	237	0.350	0.0112	0.0146	0.0132	0.0132
34	176	0.354	0.2624	0.3418	0.3105	0.3094	72	238	0.350	0.0099	0.0129	0.0117	0.0117
35	177	0.354	0.2153	0.2805	0.2548	0.2539	73	240	0.353	0.0230	0.0299	0.0272	0.0271
36	178	0.355	0.1172	0.1527	0.1387	0.1382	74	274	0.354	0.1042	0.1357	0.1233	0.1228
37	179	0.357	0.3382	0.4410	0.4004	0.3990	75	286	0.354	0.1510	0.1967	0.1787	0.1781
38	180	0.355	0.3058	0.3986	0.3620	0.3606							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 4

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	1.1845E 07	6.7949E 06	0.574	59.01	845.3	0.8723VE 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	3.6104E 06	6.7949E 06	1.882	867.50	1521.6	375.15	0.0175

CHAN	T/C	TW(DEG K)	TW(DEG R)	Q(W/CM2)	QI(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(.900)	ST(0.902)	TIME(SEC)
1	4	312.6	563.1	16.789	14.793	66.382	58.491	5.6306E-03	5.6092E-03	0.477
2	7	311.1	560.1	9.677	8.527	66.589	58.674	3.2546E-03	3.2217E-03	0.439
3	12	309.9	557.8	5.670	4.996	66.748	58.814	1.8893E-03	1.8824E-03	0.419
4	17	309.4	556.9	4.045	3.564	66.809	58.867	1.3464E-03	1.3415E-03	0.368
5	22	308.8	555.9	3.738	3.293	66.879	58.929	1.2428E-03	1.2383E-03	0.320
6	25	308.3	554.9	3.469	3.056	66.948	58.990	1.1520E-03	1.1478E-03	0.264
7	27	308.5	555.3	3.576	3.151	66.917	58.963	1.1883E-03	1.1839E-03	0.227
8	29	308.5	555.2	3.352	2.954	66.924	58.969	1.1137E-03	1.1096E-03	0.171
9	30	308.4	555.1	3.283	2.893	66.935	58.979	1.0907E-03	1.0867E-03	0.186
10	32	307.8	554.0	3.002	2.645	67.010	59.045	9.9606E-04	9.9237E-	0.138
11	34	308.1	554.6	2.872	2.530	66.967	59.007	9.5343E-04	9.4994E-04	0.097
12	38	308.6	555.6	4.992	4.398	66.901	58.949	1.6592E-03	1.6531E-03	0.149
13	42	307.9	554.1	9.523	8.391	66.998	59.034	3.1599E-03	3.1484E-03	0.366
14	46	308.0	554.4	11.971	10.548	66.981	59.019	3.9734E-03	3.9509E-03	0.421
15	50	308.0	554.4	9.455	8.334	66.982	59.021	3.1394E-03	3.1279E-03	0.420
16	54	308.4	555.2	7.316	6.448	66.926	58.971	2.4314E-03	2.4225E-03	0.404
17	58	312.4	562.3	8.518	7.505	66.432	58.536	2.8549E-03	2.8433E-03	0.491
18	62	308.8	555.9	0.722	0.636	66.879	58.930	2.4016E-04	2.3928E-04	0.442
19	64	306.6	555.5	0.309	0.272	66.904	58.951	1.0262E-04	1.0225E-04	0.549
20	65	308.7	555.7	0.612	0.539	66.893	58.941	2.0334E-04	2.0259E-04	0.507
21	66	308.9	556.1	2.234	1.968	66.866	58.916	7.4295E-04	7.4023E-04	0.409
22	67	309.3	556.7	2.976	2.623	66.820	58.878	9.9063E-04	9.8700E-04	0.416
23	68	309.6	557.3	2.494	2.197	66.783	58.845	8.3059E-04	8.2754E-04	0.369
24	69	308.1	554.7	0.543	0.478	66.963	59.004	1.8029E-04	1.7963E-04	0.443
25	70	307.3	553.1	0.088	0.077	67.070	59.098	2.9072E-05	2.8966E-05	1.012
26	71	307.1	552.8	0.147	0.130	67.094	59.119	4.8712E-05	4.8535E-05	0.906
27	72	306.7	552.1	0.701	0.617	67.137	59.157	2.3199E-04	2.3114E-04	0.492
28	74	306.9	552.4	0.436	0.386	67.118	59.140	1.4508E-04	1.4455E-04	0.534
29	76	307.2	552.9	0.222	0.195	67.088	59.111	7.3489E-05	7.3217E-05	0.406
30	122	307.4	553.3	1.488	1.311	67.058	59.087	4.9337E-04	4.9157E-04	0.386
31	129	307.3	553.1	0.843	0.742	67.069	59.097	2.7925E-04	2.7823E-04	0.349
32	135	307.6	553.7	0.752	0.663	67.032	59.064	2.4937E-04	2.4846E-04	0.145
33	136	307.6	553.6	1.181	1.041	67.034	59.066	3.9168E-04	3.9025E-04	0.479
34	176	307.8	554.1	17.582	15.492	67.004	59.040	5.8339E-03	5.8125E-03	0.359
35	177	307.6	553.6	14.436	12.720	67.035	59.067	4.7873E-03	4.7699E-03	0.367
36	178	308.1	554.5	7.851	6.918	66.974	59.013	2.6064E-03	2.5969E-03	0.368
37	179	309.5	557.8	22.572	19.889	66.747	58.813	7.5223E-03	7.4947E-03	0.366
38	180	308.7	555.6	20.458	18.026	66.896	58.944	6.8004E-03	6.7756E-03	0.395
39	181	307.6	553.6	15.001	13.217	67.035	59.067	4.9746E-03	4.9564E-03	0.411
40	182	307.4	553.3	21.672	19.096	67.059	59.088	7.1840E-03	7.1578E-03	0.313
41	183	306.7	552.1	18.110	15.958	67.143	59.162	5.9949E-03	5.9731E-03	0.322
42	184	306.8	552.2	13.652	12.029	67.133	59.153	4.5200E-03	4.5035E-03	0.289
43	186	306.4	551.5	9.354	8.242	67.185	59.199	3.0942E-03	3.0830E-03	0.342
44	187	307.5	553.5	7.951	7.006	67.043	59.074	2.6365E-03	2.6268E-03	0.342
45	192	307.9	554.3	20.168	17.771	66.990	59.027	6.6934E-03	6.6690E-03	0.339
46	193	307.5	553.5	8.630	7.604	67.041	59.072	2.8615E-03	2.8511E-03	0.406
47	194	306.2	551.1	9.314	8.207	67.210	59.221	3.0796E-03	3.0683E-03	0.235
48	196	308.4	555.1	7.868	6.950	66.933	58.977	2.6204E-03	2.6108E-03	0.321
49	197	310.2	558.3	11.419	10.062	66.710	58.780	3.8078E-03	3.7939E-03	0.340
50	198	310.5	559.0	18.195	16.032	66.666	58.742	6.0719E-03	6.0496E-03	0.552
51	199	310.7	559.3	18.962	16.708	66.641	58.720	6.3369E-03	6.3072E-03	0.366
52	202	312.4	562.2	8.071	7.112	66.488	58.541	2.7040E-03	2.6940E-03	0.188
53	203	312.8	563.0	7.020	6.891	66.383	58.493	2.6223E-03	2.6126E-03	0.213
54	204	313.3	564.0	8.437	7.435	66.319	58.436	2.8324E-03	2.8220E-03	0.182
55	205	314.7	566.5	8.048	7.091	66.141	58.279	2.7100E-03	2.7000E-03	0.280
56	206	314.1	565.4	13.218	11.647	66.218	58.347	4.4446E-03	4.4284E-03	0.329
57	207	311.2	560.2	9.808	8.642	66.582	58.667	3.2778E-03	3.2657E-03	0.076
58	208	314.3	565.7	6.912	6.090	66.199	58.330	2.3251E-03	2.3165E-03	0.274
59	211	309.8	557.7	22.536	19.858	66.753	58.818	7.5096E-03	7.4821E-03	0.344
60	225	310.2	558.3	1.724	1.519	66.710	58.781	5.7501E-04	5.7290E-04	0.599
61	226	306.6	551.9	0.206	0.181	67.154	59.171	6.8150E-05	6.7901E-05	0.654
62	227	305.1	549.1	0.076	0.067	67.346	59.340	2.4996E-05	2.4907E-05	2.254
63	228	307.1	552.7	0.414	0.365	67.098	59.123	1.3717E-04	1.3667E-04	0.992
64	229	308.7	555.6	4.731	4.169	66.899	58.947	1.5726E-03	1.5669E-03	0.586
65	230	305.6	550.0	0.644	0.568	67.285	59.287	2.1275E-04	2.1197E-04	0.593
66	231	303.8	546.9	0.120	0.106	67.501	59.477	3.9457E-05	3.9314E-05	1.506
67	232	304.0	547.2	0.163	0.144	67.481	59.460	5.3704E-05	5.3509E-05	1.228
68	234	306.2	551.2	0.402	0.355	67.284	59.286	1.3309E-04	1.3260E-04	0.756
69	235	309.1	556.4	6.351	5.597	66.845	58.900	2.1131E-03	2.1054E-03	0.640
70	236	306.2	551.1	0.580	0.520	67.206	59.218	1.9506E-04	1.9437E-04	0.605
71	237	303.7	546.7	0.756	0.666	67.514	59.489	2.4867E-04	2.4777E-04	0.695
72	238	304.4	547.9	0.670	0.590	67.428	59.413	2.2070E-04	2.1990E-04	0.648
73	240	306.2	551.2	1.645	1.481	67.200	59.212	5.1085E-04	5.0899E-04	0.829
74	274	307.6	553.8	6.983	6.153	67.025	59.058	2.3103E-03	2.3078E-03	0.389
75	286	307.6	553.6	10.125	8.921	67.033	59.065	3.3578E-03	3.3455E-03	0.206

FREE-STREAM DENSITY-VELOCITY PRODUCT = 4.0325E-01 (SLUGS/FT2-SEC)

ORIGINAL PAGE IS
OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA *** TEST NO. 183 RUN NO. 5

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)									
7.40	3.2045E 06	1.8382E 06	0.574	15.47	829.9	0.8593BE 06	C.0053									
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)									
7.30	9.7673E 05	1.8382E 06	1.882	227.43	1493.7	367.83	0.0175									

CHAN	T/C	Re/FT	Q/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)	CHAN	T/C	Re/HT	Q/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)
1	4	0.355	0.2598	0.3385	0.3074	0.3063	39	181	0.350	0.0736	0.0957	0.0870	0.0867
2	7	0.353	0.1500	0.1953	0.1775	0.1768	40	182	0.350	0.0635	0.1086	0.0987	0.0983
3	12	0.352	0.0885	0.1151	0.1046	0.1042	41	183	0.350	0.0560	0.0858	0.0780	0.0777
4	17	0.351	0.0642	0.0836	0.0760	0.0757	42	184	0.350	0.0490	0.0637	0.0579	0.0577
5	22	0.350	0.0571	0.0743	0.0675	0.0673	43	186	0.350	0.0390	0.0507	0.0461	0.0459
6	25	0.349	0.0515	0.0669	0.0608	0.0606	44	187	0.352	0.0333	0.0433	0.0393	0.0392
7	27	0.350	0.0535	0.0696	0.0633	0.0630	45	192	0.353	0.0870	0.1133	0.1029	0.1025
8	29	0.349	0.0490	0.0637	0.0579	0.0577	46	193	0.353	0.0344	0.0447	0.0406	0.0405
9	30	0.349	0.0470	0.0611	0.0555	0.0553	47	194	0.350	0.0360	0.0468	0.0426	0.0424
10	32	0.349	0.0438	0.0569	0.0517	0.0515	48	196	0.353	0.0359	0.0467	0.0425	0.0423
11	34	0.349	0.0402	0.0522	0.0475	0.0473	49	197	0.356	0.1764	0.2300	0.2088	0.2081
12	38	0.349	0.0377	0.0490	0.0445	0.0444	50	198	0.357	0.0888	0.1158	0.1052	0.1048
13	42	0.349	0.0349	0.0453	0.0412	0.0411	51	199	0.358	0.2072	0.2703	0.2454	0.2445
14	46	0.349	0.0301	0.0391	0.0356	0.0354	52	202	0.359	0.1352	0.1765	0.1602	0.1596
15	50	0.348	0.0200	0.0260	0.0237	0.0236	53	203	0.360	0.1237	0.1617	0.1467	0.1461
16	54	0.349	0.0136	0.0177	0.0161	0.0160	54	204	0.361	0.1281	0.1674	0.1519	0.1513
17	59	0.355	0.1328	0.1730	0.1572	0.1566	55	205	0.363	0.1100	0.1439	0.1305	0.1300
18	62	0.351	0.0132	0.0171	0.0156	0.0155	56	206	0.363	0.0941	0.1231	0.1116	0.1112
19	64	0.351	0.0051	0.0066	0.0060	0.0060	57	207	0.358	0.0674	0.0879	0.0798	0.0795
20	65	0.351	0.0055	0.0072	0.0066	0.0065	58	208	0.361	0.0706	0.0922	0.0837	0.0834
21	66	0.351	0.0240	0.0312	0.0284	0.0283	59	211	0.354	0.2733	0.3559	0.3233	0.3221
22	67	0.351	0.0362	0.0471	0.0428	0.0426	60	225	0.350	0.0309	0.0401	0.0365	0.0364
23	68	0.351	0.0377	0.0490	0.0446	0.0444	61	226	0.348	0.0040	0.0052	0.0047	0.0047
24	69	0.350	0.0114	0.0148	0.0134	0.0134	62	227	0.346	0.0003	0.0004	0.0004	0.0004
25	70	0.349	0.0025	0.0032	0.0029	0.0029	63	228	0.348	0.0025	0.0032	0.0029	0.0029
26	71	0.349	0.0020	0.0025	0.0023	0.0023	64	229	0.349	0.0737	0.0957	0.0870	0.0867
27	72	0.343	0.0064	0.0084	0.0076	0.0076	65	230	0.347	0.0111	0.0145	0.0131	0.0131
28	74	0.348	0.0055	0.0071	0.0065	0.0065	66	231	0.345	0.0006	0.0007	0.0007	0.0007
29	76	0.348	0.0029	0.0038	0.0035	0.0035	67	232	0.345	0.0006	0.0008	0.0007	0.0007
30	122	0.349	0.0243	0.0316	0.0287	0.0286	68	234	0.348	0.0031	0.0040	0.0036	0.0036
31	129	0.349	0.0148	0.0192	0.0175	0.0174	69	235	0.349	0.0934	0.1213	0.1103	0.1099
32	135	0.349	0.0098	0.0127	0.0116	0.0115	70	236	0.347	0.0102	0.0133	0.0121	0.0120
33	136	0.349	0.0211	0.0274	0.0249	0.0248	71	237	0.345	0.0087	0.0113	0.0103	0.0102
34	176	0.351	0.0687	0.0894	0.0813	0.0810	72	238	0.346	0.0038	0.0049	0.0045	0.0044
35	177	0.351	0.0607	0.0789	0.0717	0.0714	73	240	0.348	0.0042	0.0055	0.0050	0.0049
36	178	0.351	0.0429	0.0558	0.0507	0.0505	74	274	0.350	0.1078	0.1401	0.1274	0.1269
37	179	0.354	0.1189	0.1549	0.1407	0.1402	75	286	0.350	0.1724	0.2241	0.2038	0.2030
38	180	0.352	0.0860	0.1119	0.1017	0.1013							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 5

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	2.2045E C6	1.6382E C6	0.574	15.47	929.9	0.8553E 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	9.7673E C5	1.6382E C6	1.882	227.43	1493.7	367.83	0.0175

CHAN	T/C	TA(DEG K)	TH(DEG R)	CI(LB/CM2)	CI(BTU/FT2-SEC)	CS(LB/CM2)	CS(BTU/FT2-SEC)	ST(0.900)	ST(0.902)	TIME(SEC)
1	4	302.3	544.1	3.720	7.689	33.593	29.660	1.1143E-02	1.1102E-02	0.542
2	7	300.7	541.3	3.055	4.454	33.694	29.669	6.4332E-03	6.4098E-03	0.506
3	12	299.5	539.1	2.488	2.633	33.769	29.755	3.7927E-03	3.7789E-03	0.500
4	17	299.1	538.3	2.171	1.913	33.799	29.781	2.7537E-03	2.7437E-03	0.491
5	22	298.3	537.0	1.933	1.703	33.845	29.822	2.4477E-03	2.4386E-03	0.450
6	25	297.4	535.4	1.746	1.539	33.902	29.872	2.2068E-03	2.1989E-03	0.443
7	27	297.8	536.0	1.814	1.599	33.881	29.854	2.2044E-03	2.2861E-03	0.413
8	29	297.5	535.5	1.662	1.464	33.899	29.869	2.1003E-03	2.0927E-03	0.363
9	30	297.6	535.7	1.593	1.404	33.891	29.862	2.0139E-03	2.0066E-03	0.356
10	32	297.1	534.8	1.485	1.308	33.924	29.891	1.8749E-03	1.8681E-03	0.321
11	34	297.3	535.1	1.362	1.200	33.912	29.881	1.7206E-03	1.7146E-03	0.268
12	38	297.5	535.6	1.277	1.126	33.896	29.867	1.6147E-03	1.6089E-03	0.180
13	42	297.1	534.8	1.183	1.043	33.923	29.891	1.4945E-03	1.4891E-03	0.209
14	46	297.1	534.9	1.021	0.900	33.921	29.889	1.2894E-03	1.2848E-03	0.145
15	50	296.8	534.2	0.681	0.600	33.944	29.909	8.5879E-04	8.5568E-04	0.010
16	54	297.1	534.8	0.462	0.408	33.922	29.890	5.8408E-04	5.8197E-04	-0.302
17	59	302.2	544.0	4.461	3.931	33.597	29.603	5.6962E-03	5.6754E-03	0.551
18	62	298.5	536.0	0.445	0.392	33.810	29.791	5.6462E-04	5.6257E-04	0.516
19	64	298.7	537.7	0.172	0.152	33.822	29.802	2.1798E-04	2.1719E-04	0.358
20	65	298.7	537.6	0.168	0.165	33.822	29.802	2.3765E-04	2.3679E-04	0.590
21	66	298.8	537.8	0.812	0.715	33.816	29.797	1.0291E-03	1.0254E-03	0.516
22	67	299.0	538.3	1.224	1.078	33.800	29.783	1.5516E-03	1.5460E-03	0.466
23	68	299.1	538.3	1.274	1.123	33.797	29.780	1.6158E-03	1.6100E-03	0.445
24	69	298.2	536.7	0.385	0.339	33.855	29.831	4.8725E-04	4.8549E-04	0.527
25	70	297.2	534.9	0.083	0.073	33.918	29.886	1.0502E-04	1.0464E-04	0.650
26	71	297.1	534.7	0.067	0.059	33.926	29.893	8.3997E-05	8.3693E-05	0.580
27	72	296.2	533.2	0.219	0.193	33.978	29.940	2.7582E-04	2.7483E-04	0.488
28	74	296.3	533.2	0.187	0.165	33.980	29.941	2.3938E-04	2.3853E-04	0.481
29	76	296.0	532.8	0.100	0.088	33.995	29.954	1.2972E-04	1.2927E-04	0.608
30	122	297.2	534.9	0.824	0.726	33.919	29.888	1.0404E-03	1.0367E-03	0.382
31	129	297.1	534.8	0.501	0.442	33.923	29.891	6.3289E-04	6.3060E-04	0.534
32	135	297.1	534.7	0.333	0.293	33.926	29.894	4.1991E-04	4.1840E-04	0.414
33	136	297.5	535.5	0.715	0.630	33.898	29.869	9.0095E-04	9.0422E-04	0.483
34	176	296.8	537.8	2.325	2.048	33.817	29.797	2.9462E-03	2.9355E-03	0.194
35	177	298.7	537.6	2.052	1.808	33.825	29.804	2.5998E-03	2.5904E-03	0.192
36	178	299.1	538.4	1.650	1.277	33.794	29.778	1.8388E-03	1.8321E-03	0.294
37	179	301.1	542.1	4.004	3.528	33.666	29.665	5.1004E-03	5.0818E-03	0.426
38	180	299.9	539.8	2.901	2.556	33.745	29.734	3.6854E-03	3.6720E-03	0.410
39	181	298.4	537.2	2.491	2.195	33.838	29.816	3.1553E-03	3.1438E-03	0.462
40	182	298.2	536.7	2.827	2.491	33.856	29.832	3.5780E-03	3.5650E-03	0.209
41	183	298.3	537.0	2.233	1.967	33.846	29.823	2.8268E-03	2.8165E-03	0.144
42	184	298.5	537.3	1.657	1.460	33.834	29.812	2.0985E-03	2.0909E-03	0.079
43	186	298.1	536.6	1.320	1.163	33.861	29.836	1.6708E-03	1.6647E-03	0.188
44	187	299.4	539.0	1.123	0.990	33.776	29.761	1.4258E-03	1.4206E-03	0.185
45	192	300.4	540.8	2.934	2.585	33.710	29.703	3.7311E-03	3.7175E-03	0.288
46	193	300.4	540.8	1.158	1.020	33.712	29.705	1.4727E-03	1.4673E-03	0.292
47	194	298.3	537.0	1.220	1.075	33.846	29.823	1.5440E-03	1.5384E-03	0.057
48	196	300.6	541.1	1.210	1.066	33.700	29.694	1.5398E-03	1.5342E-03	0.203
49	197	303.1	545.7	5.916	5.213	33.538	29.552	7.5689E-03	7.5411E-03	0.387
50	198	304.2	547.5	2.973	2.619	33.472	29.493	3.8117E-03	3.7977E-03	0.370
51	199	304.6	548.2	6.929	6.106	33.447	29.471	8.8922E-03	8.8596E-03	0.434
52	202	306.1	551.0	4.568	3.972	33.348	29.384	5.8047E-03	5.7833E-03	0.258
53	203	307.0	552.6	4.120	3.630	33.293	29.336	5.3147E-03	5.2951E-03	0.236
54	204	307.5	553.5	4.268	3.754	33.261	29.308	5.5016E-03	5.4815E-03	0.207
55	205	305.1	556.3	3.647	3.214	33.160	29.219	4.7265E-03	4.7090E-03	0.284
56	206	308.8	555.9	3.173	2.752	33.176	29.232	4.0448E-03	4.0298E-03	0.299
57	207	304.6	548.3	2.253	1.985	33.445	29.469	2.8914E-03	2.8804E-03	0.337
58	208	307.3	553.1	2.349	2.070	33.374	29.319	3.0322E-03	3.0210E-03	0.564
59	211	301.3	542.4	9.196	8.103	33.653	29.653	1.1719E-02	1.1676E-02	0.367
60	225	298.3	536.9	1.045	0.921	33.850	29.827	1.3226E-03	1.3180E-03	0.643
61	226	296.1	532.9	0.135	0.119	33.990	29.950	1.7011E-04	1.6950E-04	0.632
62	227	294.6	530.3	0.010	0.009	34.081	30.030	1.3123E-05	1.3076E-05	1.197
63	228	296.1	533.0	0.083	0.074	33.986	29.946	1.0518E-04	1.0480E-04	0.729
64	229	297.0	534.6	2.500	2.203	33.529	29.896	3.1562E-03	3.1448E-03	0.566
65	230	295.4	531.8	0.379	0.334	34.029	29.984	4.7678E-04	4.7507E-04	0.514
66	231	293.6	528.9	0.020	0.017	34.132	30.075	2.4610E-05	2.4522E-05	1.228
67	232	294.1	529.4	0.020	0.018	34.115	30.060	2.5429E-05	2.5337E-05	0.248
68	234	296.3	533.4	0.105	0.092	33.973	29.935	1.3181E-04	1.3133E-04	0.552
69	235	297.2	534.9	3.168	2.791	33.920	29.889	4.0005E-03	3.9861E-03	0.693
70	236	295.3	531.5	0.348	0.307	34.038	29.992	4.3809E-04	4.3651E-04	0.471
71	237	293.6	529.0	0.297	0.261	34.128	30.071	3.7208E-04	3.7074E-04	0.861
72	238	295.1	531.2	0.128	0.113	34.051	30.004	1.6139E-04	1.6081E-04	0.507
73	240	296.4	533.5	0.143	0.126	33.970	29.932	1.7983E-04	1.7918E-04	0.329
74	274	297.6	536.3	3.651	3.217	33.872	29.845	4.6181E-03	4.6014E-03	0.436
75	286	298.2	536.7	5.837	5.143	33.855	29.831	7.3078E-03	7.3610E-03	0.254

FREE-STREAM DENSITY-VELOCITY PRODUCT = 1.0677E-01 (SLUGS/FT2-SEC)

ORIGINAL PAGE IS
OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 6

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	3.3432E 06	1.9176E 06	0.574	15.42	867.7	0.8315E 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	1.0190E 06	1.9178E 06	1.882	226.63	1453.8	357.37	0.0175

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)
1	4	0.362	C.2619	0.3425	0.31C7	0.3095	39	181	C.358	0.0755	0.0985	0.0894	0.0891
2	7	C.361	0.1511	0.1974	0.1791	0.1784	40	182	0.358	0.0833	C.1086	0.0986	0.0983
3	12	C.360	0.0682	0.1152	0.1045	0.1041	41	183	0.358	0.0639	0.0834	0.0757	0.0754
4	17	0.360	C.0642	0.0838	0.0761	0.0758	42	184	0.358	0.0461	0.C602	0.0546	C.0544
5	22	0.359	0.0564	0.0736	0.C668	0.0665	43	185	C.357	0.0384	0.0500	0.0454	0.0453
6	25	0.359	0.0509	0.0665	0.C604	0.0601	44	187	0.358	0.0334	0.0435	0.0395	0.0394
7	27	0.359	0.0524	0.0684	0.0620	0.0618	45	192	0.358	0.0879	0.1147	0.1041	0.1037
8	29	0.359	0.0486	0.0635	0.0576	0.0574	46	193	0.358	0.0364	0.0475	0.0431	0.0430
9	30	0.359	0.0475	C.0620	0.C563	0.0561	47	194	0.357	0.0371	0.0484	0.0439	0.0438
10	32	0.359	0.0459	0.0599	0.C544	0.0542	48	196	0.358	0.0371	0.0484	0.0439	0.0438
11	34	0.359	0.0422	0.0550	0.0499	0.0498	49	197	0.360	0.1744	0.2278	0.2067	0.2060
12	38	0.359	C.C396	0.0517	0.0470	0.0468	50	198	0.360	0.0920	0.1202	0.1091	0.1087
13	42	0.359	0.0355	C.0463	0.C420	0.0418	51	199	C.360	0.2130	0.2782	0.2525	0.2515
14	46	0.359	0.0294	0.0384	0.C349	0.0348	52	202	0.361	0.1319	0.1723	0.1563	0.1558
15	50	0.358	0.0202	0.0263	0.0239	0.0238	53	203	0.361	0.1219	0.1593	0.1445	0.1440
16	54	0.358	C.0133	0.0173	0.0157	0.0157	54	204	0.361	0.1234	0.1613	0.1463	0.1458
17	59	C.362	0.1328	0.1736	0.1575	0.1569	55	205	C.362	0.1062	0.1415	0.1283	0.1278
18	62	0.359	0.0124	0.0162	0.C147	0.0146	56	206	0.361	0.0895	0.1170	0.1062	0.1058
19	64	C.360	0.0055	0.0072	0.0065	0.0065	57	207	0.359	0.0537	0.C701	0.0636	0.0634
20	65	0.360	C.C057	0.0074	0.0067	0.0067	58	208	0.361	0.0527	0.0689	0.0625	C.0623
21	66	0.360	0.0235	0.C307	0.0279	0.0278	59	211	0.360	0.2671	0.3489	0.3166	0.3154
22	67	0.360	0.0382	0.0499	0.C453	0.0451	60	225	0.361	0.0289	0.0377	0.0342	0.0341
23	68	C.360	0.0378	0.0494	0.0448	0.0446	61	226	0.358	0.0038	0.C049	0.0045	0.0045
24	69	0.359	C.C112	0.0146	0.0133	0.0132	62	227	0.356	0.0005	0.C006	0.0005	0.0005
25	70	0.358	0.0021	C.C029	0.C025	0.0025	63	228	0.357	0.0022	0.0028	0.0026	0.0025
26	71	0.358	0.0021	0.0028	0.C025	0.0025	64	229	0.359	0.0764	0.0997	0.0905	0.0902
27	72	0.358	0.0063	0.0083	0.0075	0.0075	65	230	0.357	0.0115	0.C150	0.0136	0.0136
28	74	0.358	C.C057	0.0074	0.0067	0.0067	66	231	0.355	0.0010	0.C013	0.0012	0.0012
29	76	0.358	C.0024	0.C03.	0.C029	0.0028	67	232	0.355	0.0016	0.0021	0.0019	0.0019
30	122	0.358	0.0238	0.0311	0.0282	0.0281	68	234	0.357	0.0037	0.0048	0.0044	0.0044
31	125	0.358	0.0141	0.0184	0.0167	0.0167	69	235	0.359	0.0936	0.1225	0.1111	0.1107
32	135	0.359	C.CC95	0.0123	0.0112	0.0112	70	236	0.357	0.0095	0.0124	0.0113	0.0112
33	136	0.359	C.0215	C.0280	0.C254	0.0253	71	237	C.355	0.0062	0.0081	0.0073	0.0073
34	176	0.358	0.0680	0.0888	0.C806	0.0803	72	238	0.356	0.0038	0.0049	0.0045	0.0045
35	177	0.358	0.0589	0.0769	0.0698	0.0696	73	240	0.357	0.0074	0.C097	0.0088	0.0088
36	178	0.358	C.C424	0.0553	0.0502	0.0500	74	274	0.358	0.0903	0.1178	0.1070	0.1066
37	179	0.360	0.1183	0.1546	0.1402	0.1397	75	286	C.357	0.1649	0.2151	0.1952	0.1945
38	180	0.359	0.0859	0.1121	0.1018	0.1014							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. TEST NO. 183

RUN NO. 6

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	3.5432E 06	1.9178E 06	3.574	15.42	807.7	0.8310SE 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	1.0190E 06	1.9178E 06	1.882	226.63	1453.6	357.37	0.0175

CHAN	T/C	Tw(DEG R)	Taw(DEG R)	QW/CM2)	C(BTU/FT2-SEC)	CS(W/CM2)	CS(BTU/FT2-SEC)	ST(0.500)	ST(0.702)	TIME(SEC)
1	4	299.8	539.6	8.426	7.424	32.108	28.344	1.1074E-02	1.1033E-02	0.544
2	7	298.6	537.4	4.871	4.292	32.244	28.412	6.3840E-03	6.3604E-03	0.510
3	12	297.9	536.3	2.847	2.509	32.284	28.447	3.7267E-03	3.7129E-03	0.497
4	17	297.6	535.6	2.074	1.827	32.307	28.467	2.7121E-03	2.7021E-03	0.490
5	22	297.3	535.2	1.822	1.605	32.324	28.482	2.3813E-03	2.3726E-03	0.486
6	25	297.2	534.9	1.647	1.451	32.334	28.490	2.1519E-03	2.1440E-03	0.439
7	27	297.4	535.4	1.692	1.491	32.317	28.476	2.2121E-03	2.2040E-03	0.396
8	29	297.4	535.3	1.572	1.385	32.321	28.479	2.0554E-03	2.0478E-03	0.356
9	30	297.4	535.2	1.535	1.353	32.322	28.480	2.0070E-03	1.9996E-03	0.362
10	32	296.9	534.5	1.484	1.308	32.349	28.503	1.9379E-03	1.9308E-	0.364
11	34	297.0	534.6	1.363	1.201	32.345	28.500	1.7807E-03	1.7741E-	0.301
12	38	297.2	534.9	1.281	1.129	32.332	28.489	1.6744E-03	1.6682E-	0.230
13	42	296.7	534.0	1.147	1.011	32.365	28.518	1.4978E-03	1.4920E-	0.244
14	46	296.7	534.1	0.953	0.840	32.363	28.516	1.2440E-03	1.2394E-	0.145
15	50	296.3	533.4	0.654	0.576	32.388	28.538	8.5237E-04	8.4924E-	0.070
16	54	296.0	532.8	0.430	0.379	32.406	28.554	5.6056E-04	5.5844E-	-0.170
17	59	299.6	539.2	4.274	3.766	32.180	28.355	5.6146E-03	5.5940E-	0.550
18	62	297.4	535.4	0.400	0.353	32.316	28.475	5.2323E-04	5.2130E-	0.485
19	64	297.7	535.9	0.176	0.157	32.298	28.459	2.3220E-04	2.3140E-	0.419
20	65	297.5	535.5	0.183	0.161	32.312	28.471	2.3946E-04	2.3858E-	0.564
21	66	297.5	535.6	0.760	0.670	32.310	28.470	9.9386E-04	9.9019E-	0.486
22	67	297.8	536.0	1.234	1.087	32.295	28.456	1.6141E-03	1.6082E-	0.499
23	68	297.9	536.2	1.221	1.076	32.289	28.451	1.5974E-03	1.5916E-	0.448
24	69	297.3	535.2	0.363	0.320	32.325	28.482	4.7403E-04	4.7229E-	0.531
25	70	296.8	533.9	0.068	0.060	32.369	28.521	8.9178E-05	8.8848E-	0.595
26	71	296.6	533.8	0.070	0.061	32.371	28.523	9.0746E-05	9.0413E-	0.662
27	72	296.4	533.1	0.205	0.181	32.396	28.545	2.6757E-04	2.6659E-	0.536
28	74	296.0	532.9	0.184	0.162	32.405	28.554	2.3966E-04	2.3878E-	0.555
29	76	295.8	532.5	0.078	0.069	32.417	28.564	1.0165E-04	1.0127E-	0.489
30	122	296.6	533.9	0.771	0.680	32.367	28.520	1.0066E-03	1.0031E-	0.389
31	129	296.6	533.9	0.457	0.403	32.369	28.521	5.9623E-04	5.9404E-	0.515
32	135	296.7	534.0	0.306	0.270	32.366	28.519	3.9936E-04	3.9789E-	0.387
33	136	297.0	534.7	0.694	0.612	32.342	28.497	9.0693E-04	9.0359E-	0.513
34	176	296.6	533.8	2.203	1.941	32.372	28.524	2.8742E-03	2.8636E-03	0.174
35	177	296.4	533.5	1.909	1.682	32.384	28.535	2.4893E-03	2.4801E-03	0.169
36	178	296.4	533.4	1.373	1.210	32.385	28.535	1.7911E-03	1.7846E-03	0.290
37	179	297.9	536.3	3.820	3.366	32.265	28.448	5.0000E-03	4.9816E-03	0.415
38	180	297.1	534.9	2.777	2.447	32.335	28.491	3.6289E-03	3.6149E-03	0.381
39	181	296.4	533.5	2.444	2.154	32.384	28.535	3.1880E-03	3.1763E-03	0.438
40	182	296.0	532.8	2.698	2.378	32.409	28.556	3.5164E-03	3.5035E-03	0.164
41	183	295.9	532.6	2.071	1.825	32.413	28.561	2.6985E-03	2.6886E-03	0.106
42	184	296.0	532.7	1.495	1.317	32.410	28.558	1.9477E-03	1.9406E-03	0.012
43	186	295.5	532.0	1.244	1.097	32.437	28.581	1.6201E-03	1.6142E-03	0.191
44	187	296.3	533.3	1.081	0.952	32.391	28.541	1.4090E-03	1.4038E-03	0.209
45	192	296.2	533.2	2.847	2.509	32.395	28.544	3.7121E-03	3.6985E-03	0.266
46	193	296.1	533.0	2.180	1.939	32.399	28.548	1.5537E-03	1.5320E-03	0.326
47	194	295.2	531.3	1.205	1.061	32.460	28.601	1.5669E-03	1.5611E-03	0.087
48	196	296.5	533.7	1.201	1.058	32.375	28.527	1.5600E-03	1.5610E-03	0.224
49	197	297.9	536.3	5.631	4.962	32.265	28.446	7.3702E-03	7.3430E-03	0.380
50	198	297.7	535.8	4.973	4.380	32.300	28.461	6.8891E-03	3.8748E-03	0.392
51	199	297.5	535.5	6.683	5.889	32.311	28.471	9.0001E-03	8.9677E-03	0.425
52	202	298.4	537.1	4.254	3.748	32.255	28.421	5.5739E-03	5.5533E-03	0.238
53	203	298.7	537.7	3.930	3.463	32.235	28.403	5.1531E-03	5.1340E-03	0.239
54	204	296.8	537.9	3.977	3.504	32.220	28.397	5.2159E-03	5.1966E-03	0.178
55	205	299.4	538.9	3.481	3.069	32.193	28.366	4.5741E-03	4.5571E-03	0.273
56	206	299.0	538.2	2.885	2.542	32.217	28.387	3.7847E-03	3.7707E-03	0.253
57	207	297.0	534.6	1.736	1.530	32.345	28.500	2.2677E-03	2.2594E-03	0.134
58	208	299.0	538.1	1.698	1.496	32.219	28.390	2.2275E-03	2.2192E-03	0.366
59	211	298.3	536.9	8.617	7.592	32.263	28.428	1.1280E-02	1.1245E-02	0.356
60	225	296.5	537.4	0.930	0.820	32.446	28.413	1.2194E-03	1.2149E-03	0.678
61	226	296.0	532.8	0.123	0.108	32.409	28.556	1.6016E-04	1.5960E-04	0.806
62	227	294.7	530.4	0.015	0.013	32.493	28.630	1.9002E-05	1.8932E-05	2.307
63	228	295.3	531.6	0.070	0.062	32.450	28.592	9.1048E-05	9.0714E-05	1.028
64	229	297.2	534.9	2.470	2.176	32.333	28.489	3.2273E-03	3.2154E-03	0.631
65	230	295.6	532.0	0.374	0.329	32.435	28.580	4.8467E-04	4.8488E-04	0.667
66	231	294.0	529.3	0.032	0.029	32.532	28.665	4.2127E-05	4.1973E-05	2.585
67	232	293.7	528.6	0.052	0.046	32.556	28.686	6.7700E-05	6.7453E-05	1.367
68	234	295.5	531.9	0.120	0.105	32.439	28.583	1.5585E-04	1.5527E-04	0.985
69	235	297.4	535.3	3.031	2.671	32.320	28.479	3.9627E-03	3.9481E-03	0.728
70	236	295.3	531.6	0.308	0.272	32.460	28.593	4.0139E-04	3.9991E-04	0.624
71	237	294.0	529.3	0.201	0.177	32.532	28.665	2.6129E-04	2.6033E-04	0.744
72	238	294.5	530.1	0.123	0.108	32.504	28.640	1.5948E-04	1.5890E-04	0.685
73	240	295.8	532.4	0.241	0.212	32.422	28.568	3.1351E-04	3.1236E-04	1.057
74	274	296.0	532.7	4.327	3.579	32.410	28.558	3.8137E-03	3.7997E-03	0.768
75	286	299.6	542.0	5.347	4.712	32.434	28.579	6.9622E-03	6.9367E-03	0.289

FREE-STREAM DENSITY-VELOCITY PRODUCT = 1.0844E-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA *** TEST NO. 183

															RUN NO. 7
MACH	7.30	REYNOLDS NO/FT	1.22855 07	REL	7.0472E 06	LENGTH(FT)	0.574	PTI(PSI)	58.68	TTI(DEG R)	824.6	HTI(BTU/LBM)	365.35	RSI(METER)	0.0053
MACH	7.30	REYNOLDS NO/FT	3.74465 06	REL	7.0472E 06	LENGTH(FT)	1.682	PTI(PSI)	862.55	TTI(DEG R)	1464.3	HTI(BTU/LBM)		RSI(FT)	0.0175

CHAN	T/C	M/M-T	C/CS	M/MS(0.850)	M/MS(C.SCC)	M/MS(0.950)	CHAN	T/C	M/M-T	C/CS	M/MS(0.900)	M/MS(1.002)
1	4	0.359	0.2640	0.3447	0.3128	0.3117	39	181	0.352	0.2462	0.3203	0.2911	0.2900
2	7	0.357	0.1501	0.1957	0.1771	0.1771	40	182	0.352	0.3534	0.4594	0.4179	0.4163
3	12	0.356	0.0871	0.1136	0.1031	0.1027	41	185	0.351	0.2867	0.3730	0.3390	0.3378
4	17	0.355	0.0628	0.0818	0.0743	0.0741	42	184	0.351	0.2126	0.2758	0.2507	0.2498
5	22	0.354	0.0571	0.0743	0.0675	0.0673	43	186	0.350	0.1470	0.1911	0.1737	0.1731
6	25	0.354	0.0604	0.0787	0.0715	0.0712	44	187	0.351	0.1252	0.1629	0.1480	0.1475
7	27	0.355	0.0890	0.1160	0.1054	0.1050	45	192	0.352	0.3192	0.4152	0.3774	0.3760
8	29	0.354	0.1431	0.1863	0.1693	0.1687	46	193	0.351	0.1394	0.1813	0.1648	0.1642
9	30	0.354	0.1492	0.1943	0.1765	0.1758	47	194	0.349	0.1438	0.1869	0.1700	0.1693
10	32	0.353	0.1810	0.2356	0.2141	0.2133	48	196	0.352	0.1275	0.1658	0.1507	0.1502
11	34	0.353	0.1927	0.2508	0.2280	0.2272	49	197	0.355	0.1817	0.2366	0.2151	0.2143
12	38	0.354	0.2004	0.2610	0.2371	0.2362	50	198	0.354	0.2840	0.3699	0.3360	0.3348
13	42	0.353	0.1867	0.2430	0.2208	0.2200	51	199	0.354	0.3003	0.3996	0.3625	0.3611
14	46	0.353	0.1883	0.2452	0.2228	0.2220	52	202	0.355	0.1227	0.1596	0.1452	0.1446
15	50	0.353	0.1458	0.1899	0.1725	0.1719	53	203	0.356	0.1161	0.1513	0.1374	0.1369
16	54	0.352	0.1122	0.1460	0.1326	0.1321	54	204	0.356	0.1193	0.1556	0.1413	0.1408
17	59	0.357	0.1355	0.1768	0.1605	0.1599	55	205	0.357	0.1206	0.1573	0.1428	0.1423
18	62	0.352	0.0119	0.0155	0.0140	0.0140	56	206	0.357	0.2017	0.2631	0.2389	0.2380
19	64	0.352	0.0048	0.0063	0.0057	0.0057	57	207	0.353	0.1451	0.1889	0.1716	0.1710
20	65	0.351	0.0095	0.0124	0.0112	0.0112	58	208	0.356	0.1074	0.1400	0.1271	0.1267
21	66	0.351	0.0344	0.0448	0.0407	0.0406	59	211	0.355	0.2914	0.3798	0.3449	0.3436
22	67	0.351	0.0464	0.0604	0.0549	0.0547	60	225	0.356	0.0275	0.0358	0.0325	0.0324
23	68	0.350	0.0389	0.0505	0.0459	0.0458	61	226	0.350	0.0029	0.0037	0.0034	0.0034
24	69	0.348	0.0091	0.0118	0.0108	0.0107	62	227	0.349	0.0025	0.0032	0.0029	0.0029
25	70	0.347	0.0015	0.0020	0.0018	0.0018	63	228	0.350	0.0048	0.0063	0.0057	0.0057
26	71	0.347	0.0024	0.0031	0.0028	0.0028	64	229	0.353	0.0078	0.0102	0.0092	0.0929
27	72	0.347	0.0107	0.0139	0.0126	0.0126	65	230	0.349	0.0094	0.0122	0.0111	0.0111
28	74	0.348	0.0067	0.0087	0.0079	0.0079	66	231	0.347	0.0022	0.0029	0.0026	0.0026
29	76	0.349	0.0044	0.0057	0.0052	0.0052	67	232	0.346	0.0037	0.0048	0.0044	0.0043
30	122	0.351	0.0221	0.0287	0.0261	0.0260	68	234	0.350	0.0069	0.0090	0.0082	0.0082
31	128	0.350	0.0140	0.0182	0.0165	0.0164	69	235	0.354	0.1005	0.1310	0.1190	0.1185
32	135	0.350	0.0140	0.0182	0.0165	0.0165	70	236	0.350	0.0093	0.0121	0.0110	0.0109
33	136	0.351	0.0187	0.0243	0.0221	0.0220	71	237	0.347	0.0115	0.0149	0.0135	0.0135
34	176	0.353	0.2814	0.3663	0.3326	0.3316	72	238	0.349	0.0084	0.0108	0.0098	0.0078
35	177	0.352	0.2237	0.2963	0.2693	0.2683	73	240	0.351	0.0158	0.0205	0.0186	0.0186
36	178	0.352	0.1235	0.1607	0.1460	0.1455	74	274	0.347	0.0968	0.1256	0.1143	0.1139
37	179	0.355	0.3031	0.3951	0.3588	0.3575	75	286	0.347	0.1348	0.1750	0.1592	0.1586
38	180	0.354	0.3397	0.4423	0.4019	0.4004							

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OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 163
RUN NO. 7

MACH	REYNOLDS NO/METER	NOSE RADIUS (METERS)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METERS)
7.30	1.22852E 07	7.04726E 00	3.574	58.68	824.40	0.6e496CE 06	0.0051
MACH	NO/FT	NOSE LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	3.74465E 06	7.04726E 00	1.682	862.55	1484.3	365.65	0.0175

CHAN.	T/C	TW(DEG K)	TW(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.902)	TIME(SEC)
1	4	303.8	546.9	17.034	15.009	64.522	56.853	5.7960E-03	5.7747E-03	0.549
2	7	302.0	543.7	9.716	8.561	64.763	57.048	3.2933E-03	3.2812E-03	0.498
3	12	300.8	541.5	5.654	4.982	64.894	57.161	1.9112E-03	1.9042E-03	0.458
4	17	300.4	540.8	4.080	3.595	64.953	57.212	1.3776E-03	1.3727E-03	0.498
5	22	299.9	539.8	3.710	3.269	65.013	57.265	1.2516E-03	1.2470E-03	0.337
6	25	299.7	539.4	3.929	3.462	65.039	57.288	1.3249E-03	1.3200E-03	0.344
7	27	299.9	539.9	5.788	5.100	65.007	57.260	1.9527E-03	1.9456E-03	0.307
8	29	299.7	539.4	9.304	8.196	65.037	57.306	3.1375E-03	3.1259E-03	0.322
9	30	299.3	538.7	9.708	8.554	65.086	57.349	3.2709E-03	3.2590E-03	0.363
10	32	298.3	536.9	11.806	10.403	65.210	57.459	3.9690E-03	3.9546E-03	0.457
11	34	298.8	537.9	12.556	11.064	65.143	57.400	4.2262E-03	4.2108E-03	0.482
12	38	299.5	539.1	13.035	11.486	65.056	57.323	4.3940E-03	4.3780E-03	0.484
13	42	298.6	537.5	12.166	10.720	65.166	57.420	4.0931E-03	4.0782E-03	0.491
14	46	299.0	538.2	12.262	10.805	65.119	57.379	4.1290E-03	4.1139E-03	0.482
15	50	298.7	537.7	9.963	8.778	65.174	57.409	3.1976E-03	3.1861E-03	0.475
16	54	298.0	536.4	7.318	6.446	65.265	57.490	2.4586E-03	2.4496E-03	0.446
17	59	302.1	543.8	8.772	7.729	64.734	57.039	2.9737E-03	2.9628E-03	0.569
18	62	298.0	536.4	0.775	0.683	65.243	57.468	2.6031E-04	2.5937E-04	0.523
19	64	297.7	535.9	0.314	0.277	65.279	57.520	1.0565E-04	1.0516E-04	0.571
20	65	297.0	534.5	0.622	0.548	65.375	57.604	2.0854E-04	2.0778E-04	0.511
21	66	296.7	534.1	2.253	1.985	65.405	57.631	7.5478E-04	7.5204E-04	0.442
22	67	296.7	534.1	3.038	2.677	65.405	57.631	1.0179E-03	1.0142E-03	0.469
23	68	296.4	533.5	2.543	2.241	65.446	57.667	8.5159E-04	8.4850E-04	0.411
24	69	294.4	529.8	0.599	0.528	65.698	57.889	1.9972E-04	1.9900E-04	0.550
25	70	293.5	528.3	0.100	0.088	65.804	57.982	3.3406E-05	3.3279E-05	0.975
26	71	293.7	528.6	0.155	0.137	65.785	57.965	5.1734E-05	5.1547E-05	1.024
27	72	293.6	528.5	0.702	0.619	65.792	57.972	2.3366E-04	2.3284E-04	0.564
28	74	294.4	529.9	0.439	0.386	65.695	57.886	1.4623E-04	1.4570E-04	0.622
29	76	295.1	531.2	0.289	0.255	65.605	57.806	9.6461E-05	9.6133E-05	0.624
30	122	296.6	533.8	1.444	1.273	65.424	57.667	4.8380E-04	4.8204E-04	0.447
31	129	296.5	533.7	0.914	0.805	65.433	57.655	3.0498E-04	3.0387E-04	0.434
32	135	296.4	533.5	0.918	0.807	65.441	57.664	3.0672E-04	3.0561E-04	0.282
33	139	297.2	534.6	1.222	1.076	65.389	57.549	4.0959E-04	4.0810E-04	0.570
34	170	298.2	536.8	10.351	10.170	65.214	57.463	6.1084E-03	6.1465E-03	0.390
35	177	298.0	536.4	14.096	13.090	65.244	57.489	4.9413E-03	4.9732E-03	0.392
36	178	297.4	535.4	8.068	7.109	65.317	57.553	2.7072E-03	2.6973E-03	0.399
37	179	300.6	541.0	17.682	17.342	64.426	57.208	6.6496E-03	6.6253E-03	0.354
38	180	299.1	538.4	22.116	19.487	65.105	57.366	7.4467E-03	7.4215E-03	0.496
39	181	297.8	536.0	16.069	14.159	65.274	57.515	5.3963E-03	5.3767E-03	0.494
40	182	297.4	535.2	23.087	20.343	65.325	57.560	7.7462E-03	7.7181E-03	0.363
41	183	297.2	535.0	18.736	16.509	65.340	57.574	6.2845E-03	6.2616E-03	0.360
42	184	297.2	534.9	13.855	12.209	65.347	57.579	4.6470E-03	4.6301E-03	0.309
43	186	296.9	533.1	9.603	8.479	65.471	57.691	3.2205E-03	3.2088E-03	0.385
44	187	297.1	535.1	8.179	7.207	65.353	57.587	2.7436E-03	2.7338E-03	0.386
45	192	297.5	535.5	20.642	18.365	65.314	57.542	6.9259E-03	6.9701E-03	0.385
46	193	297.1	534.7	9.113	8.030	65.361	57.592	3.0556E-03	3.0445E-03	0.475
47	194	295.4	531.7	9.432	8.311	65.570	57.776	3.1516E-03	3.1398E-03	0.466
48	196	297.6	535.7	8.333	7.343	65.295	57.533	2.7938E-03	2.7837E-03	0.385
49	197	300.0	540.0	11.812	10.408	64.496	57.208	3.9862E-03	3.9717E-03	0.419
50	198	299.7	539.4	16.471	14.275	65.038	57.307	6.2283E-03	6.2055E-03	0.375
51	199	299.6	539.2	19.926	17.559	65.050	57.317	6.7186E-03	6.6937E-03	0.407
52	02	300.0	540.1	7.972	7.024	64.993	57.267	2.6902E-03	2.6804E-03	0.206
53	203	300.8	541.4	7.532	6.637	64.898	57.184	2.5406E-03	2.5307E-03	0.225
54	204	301.1	542.0	7.741	6.821	64.861	57.152	2.6184E-03	2.6088E-03	0.156
55	205	302.3	544.2	7.883	6.876	64.708	57.016	2.6464E-03	2.6367E-03	0.328
56	206	301.6	542.9	13.071	11.518	64.795	57.093	4.4264E-03	4.4102E-03	0.346
57	207	298.3	536.9	9.463	8.338	65.211	57.460	3.1612E-03	3.1496E-03	0.000
58	208	301.4	542.5	6.960	6.133	64.822	57.117	2.3557E-03	2.3471E-03	0.203
59	211	300.6	541.1	18.913	16.669	64.921	57.204	6.4321E-03	6.4087E-03	0.318
60	225	301.2	542.2	1.780	1.569	64.843	57.136	6.0236E-04	6.0016E-04	0.755
61	226	296.4	533.5	0.188	0.166	65.446	57.667	6.3047E-05	6.2818E-05	0.935
62	227	295.0	531.1	0.161	0.142	65.614	57.815	5.3401E-05	5.3706E-05	1.046
63	228	296.1	533.1	0.316	0.279	65.479	57.692	1.0565E-04	1.0547E-04	1.106
64	229	296.7	534.7	1.634	1.439	65.158	57.413	1.7277E-03	1.7214E-03	0.690
65	230	295.6	532.0	0.617	0.544	65.545	57.754	2.0624E-04	2.0550E-04	0.728
66	231	294.7	530.7	0.136	0.120	65.674	57.856	4.6411E-05	4.6436E-05	2.046
67	232	294.1	529.5	0.243	0.214	65.657	58.029	8.0791E-05	8.0500E-05	1.463
68	234	296.0	532.8	0.496	0.440	65.484	57.703	1.5198E-04	1.5141E-04	0.964
69	235	296.7	534.4	0.839	0.741	65.038	57.307	2.2048E-03	2.1968E-03	0.725
70	236	295.7	532.4	0.618	0.545	65.233	57.741	2.0316E-04	2.0242E-04	0.789
71	237	295.5	532.4	0.795	0.665	65.098	57.975	2.5118E-04	2.5028E-04	0.812
72	238	296.4	534.7	0.494	0.363	65.435	57.845	1.4471E-04	1.4419E-04	0.634
73	240	296.6	533.9	1.032	0.909	65.419	57.644	3.4559E-04	3.4433E-04	0.864
74	274	294.9	529.0	0.382	0.666	65.754	57.938	2.1189E-03	2.1112E-03	0.335
75	226	294.3	528.4	8.069	7.014	65.798	57.977	2.9913E-03	2.9807E-03	0.110

FREE-STREAM DENSITY-VELOCITY PRODUCT = 4.8735E-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 8

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(M,TER)
7.30	6.1343E C6	3.6553E 06	C.974	31.71	858.6	0.8873SL 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	1.8686E C6	3.6553E 06	1.182	466.14	1546.0	381.58	C.0175

CHAN	T/C	MM/MT	Q/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)	CHAN	T/C	MM/MT	Q/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)
1	4	0.346	C.2651	0.3440	0.3138	0.3118	39	181	0.346	0.0048	0.1097	0.0999	0.0996
2	7	0.344	C.1534	0.1984	0.1812	0.1804	40	182	0.340	0.1007	0.1304	0.1187	0.1183
3	12	0.343	0.0892	0.1156	0.1052	0.1048	41	183	0.339	0.0667	0.0863	0.0786	0.0783
4	17	0.342	0.0646	0.0837	0.0762	0.0759	42	184	0.339	0.0491	0.0636	0.0579	0.0577
5	22	0.341	0.0579	0.0750	0.0682	0.0680	43	186	0.339	0.0418	0.0541	0.0492	0.0491
6	25	0.341	0.0524	0.0679	0.0618	0.0616	44	187	0.340	0.0359	0.0465	0.0424	0.0422
7	27	0.341	0.0539	0.0696	0.0634	0.0633	45	192	0.340	0.2558	0.3311	0.3015	0.3004
8	29	0.341	0.0505	0.0653	0.0595	0.0593	46	193	0.340	0.1247	0.1613	0.1469	0.1464
9	30	0.341	0.0491	0.0636	0.0579	0.0577	47	194	0.338	0.1316	0.1695	0.1544	0.1538
10	32	0.341	0.0468	0.0605	0.0551	0.0549	48	196	0.340	0.1095	0.1417	0.1290	0.1286
11	34	0.341	0.0433	0.0561	0.0511	0.0509	49	197	0.342	0.1758	0.2267	0.2063	0.2056
12	38	0.341	0.0416	0.0539	0.0490	0.0489	50	198	0.342	0.1326	0.1716	0.1564	0.1559
13	42	0.340	0.0359	0.0464	0.0423	0.0421	51	199	0.342	0.2613	0.3365	0.3081	0.3070
14	46	0.341	0.0316	0.0410	0.0373	0.0372	52	202	0.343	0.1291	0.1673	0.1523	0.1518
15	50	0.340	0.0248	0.0321	0.0292	0.0291	53	203	0.343	0.1207	0.1564	0.1423	0.1418
16	54	0.340	0.0215	0.0278	0.0253	0.0252	54	204	0.343	0.1230	0.1594	0.1451	0.1446
17	59	0.345	0.1355	0.1758	0.1599	0.1594	55	205	0.345	0.1065	0.1381	0.1257	0.1252
18	62	0.341	0.0121	0.0156	0.0142	0.0142	56	206	0.344	0.0862	0.1144	0.1041	0.1037
19	64	0.341	0.0051	0.0066	0.0060	0.0060	57	207	0.341	0.0867	0.1122	0.1022	0.1018
20	65	0.341	0.0074	0.0096	0.0087	0.0087	58	208	0.344	0.0697	0.1163	0.1059	0.1055
21	66	0.341	0.0293	0.0379	0.0345	0.0344	59	211	0.342	0.2637	0.3416	0.3110	0.3099
22	67	0.342	0.0433	0.0561	0.0511	0.0509	60	225	0.344	0.0278	0.0360	0.0328	0.0327
23	68	0.342	0.0337	0.0514	0.0468	0.0467	61	226	0.337	0.0027	0.0035	0.0032	0.0032
24	69	0.340	0.0100	0.0129	0.0118	0.0117	62	227	0.337	0.0005	0.0006	0.0005	0.0005
25	70	0.339	0.0017	0.0022	0.0020	0.0020	63	228	0.339	0.0038	0.0049	0.0044	0.0044
26	71	0.339	0.0021	0.0028	0.0025	0.0025	64	229	0.341	0.0753	0.0975	0.0887	0.0884
27	72	0.339	0.0086	0.0111	0.0102	0.0101	65	230	0.338	0.0104	0.0134	0.0122	0.0122
28	74	0.339	0.0067	0.0086	0.0077	0.0079	66	231	0.336	0.0007	0.0009	0.0008	0.0008
29	76	0.339	0.0044	0.0057	0.0052	0.0052	67	232	0.336	0.0018	0.0023	0.0021	0.0021
30	122	0.335	0.0238	0.0307	0.0280	0.0279	68	234	0.339	0.0041	0.0053	0.0048	0.0048
31	129	0.339	0.0136	0.0176	0.0161	0.0159	69	235	0.342	0.0954	0.1235	0.1125	0.1121
32	135	0.340	0.0111	0.0143	0.0131	0.0130	70	236	0.338	0.0102	0.0131	0.0120	0.0119
33	136	0.341	0.0192	0.0249	0.0227	0.0226	71	237	0.336	0.0086	0.0111	0.0101	0.0101
34	176	0.340	0.0771	0.0998	0.0909	0.0906	72	238	0.337	0.0059	0.0076	0.0069	0.0069
35	177	0.340	0.0753	0.0975	0.0888	0.0884	73	240	0.339	0.0121	0.0156	0.0143	0.0142
36	178	0.340	0.0589	0.0762	0.0694	0.0691	74	274	0.341	0.1086	0.1408	0.1282	0.1278
37	175	0.343	0.1158	0.1500	0.1366	0.1361	75	286	0.341	0.1522	0.1971	0.1795	0.1788
38	180	0.341	0.0826	0.1069	0.0974	0.0970							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, AMES RESEARCH CENTER, MOFFETT FIELD, CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 8

MACH	REY/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RSI(METER)
7.30	6.1943E 06	3.5533E 06	0.574	31.71	858.9	0.68735E 06	0.C493
MACH	RE/FT	REL	LENGTH(FT)	PT(PSIA)	TT(DEG R)	HT(BTU/LBM)	RSI(FT)
7.30	1.8880E 06	3.5533E 06	1.882	466.14	1546.0	301.58	0.0175

CHAN.	T/C	TW(DEG K)	TW(DEG R)	QW(W/CM2)	QW(BTU/FT2-SEC)	PS(N/CM2)	PS(BTU/FT2-SEC)	ST(0.900)	ST(0.902)	TIME(SEC)
1	4	305.7	550.7	13.421	11.826	50.630	44.612	8.1116E-03	8.0824E-03	0.623
2	7	304.1	547.5	7.794	6.867	50.745	44.757	4.6932E-03	4.6764E-03	0.589
3	12	302.6	545.0	4.542	4.002	50.720	44.857	2.7277E-03	2.7179E-03	0.567
4	17	302.2	544.0	3.674	3.002	50.969	44.911	1.9759E-03	1.9688E-03	0.539
5	22	301.7	543.0	2.655	2.402	51.021	44.956	1.7094E-03	1.7031E-03	0.464
6	25	301.3	542.3	2.677	2.359	51.056	44.987	1.6029E-03	1.5972E-03	0.417
7	27	301.7	543.0	2.751	2.424	51.020	44.955	1.0483E-03	1.6424E-03	0.364
8	29	301.6	542.9	2.575	2.269	51.026	44.961	1.5427E-03	1.5372E-03	0.298
9	30	301.5	542.7	2.368	2.209	51.034	44.966	1.5019E-03	1.4966E-03	0.300
10	32	301.6	541.5	2.390	2.106	51.097	45.023	1.4295E-03	1.4244E-03	0.276
11	34	301.2	542.2	2.213	1.950	51.063	44.993	1.3256E-03	1.3202E-03	0.208
12	38	301.6	542.9	2.142	1.870	51.028	44.962	1.2713E-03	1.2668E-03	0.130
13	42	300.8	541.4	1.633	1.615	51.103	45.029	1.0964E-03	1.0925E-03	0.061
14	46	301.1	542.0	1.616	1.424	51.073	45.003	9.6730E-04	9.6385E-04	-0.051
15	50	300.8	541.4	1.267	1.116	51.100	45.026	7.5763E-04	7.5493E-04	-0.075
16	54	300.6	541.1	1.098	0.966	51.116	45.040	6.5867E-04	6.5434E-04	-0.105
17	58	305.1	549.2	6.871	6.054	50.706	44.679	4.1458E-03	4.1309E-03	0.639
18	62	301.2	542.2	0.616	0.543	51.064	44.995	3.6862E-04	3.6730E-04	0.568
19	64	301.2	542.2	0.261	0.230	51.063	44.993	1.5627E-04	1.5571E-04	0.500
20	65	301.2	542.2	0.378	0.333	51.064	44.994	2.2654E-04	2.2573E-04	0.620
21	66	301.4	542.5	1.469	1.317	51.049	44.981	8.9498E-04	8.9179E-04	0.554
22	67	301.7	543.1	2.211	1.948	51.016	44.952	1.3249E-03	1.3202E-03	0.571
23	68	301.9	543.3	2.026	1.785	51.004	44.941	1.2143E-03	1.2100E-03	0.528
24	69	300.8	541.4	0.811	0.450	51.104	45.030	5.0539E-04	5.0430E-04	0.536
25	70	299.9	539.7	0.089	0.078	51.187	45.103	5.3073E-05	5.2885E-05	0.781
26	71	299.8	539.6	0.109	0.096	51.195	45.109	6.4977E-05	6.4746E-05	0.882
27	72	299.5	539.1	0.441	0.389	51.222	45.133	2.6332E-04	2.6238E-04	0.644
28	74	299.6	539.3	0.342	0.302	51.210	45.123	2.0430E-04	2.0358E-04	0.705
29	76	299.9	539.8	0.226	0.200	51.183	45.099	1.3519E-04	1.3470E-04	0.662
30	122	299.5	539.1	1.217	1.073	51.222	45.133	7.2616E-04	7.2358E-04	0.456
31	125	299.5	539.1	0.696	0.613	51.222	45.134	4.1504E-04	4.1367E-04	0.516
32	135	300.3	540.5	0.567	0.499	51.147	45.068	3.3850E-04	3.3737E-04	0.383
33	136	300.9	541.6	0.966	0.866	51.091	45.018	5.6828E-04	5.8618E-04	0.570
34	176	300.6	541.1	3.963	3.474	51.116	45.040	2.3576E-03	2.3492E-03	0.092
35	177	300.5	540.9	3.851	3.393	51.126	45.051	2.3016E-03	2.2934E-03	0.196
36	178	300.3	540.6	3.811	3.351	51.143	45.063	1.7995E-03	1.7931E-03	0.369
37	179	302.7	544.8	5.898	5.197	50.930	44.876	3.5411E-03	3.5285E-03	0.277
38	180	301.5	542.7	4.215	3.714	51.035	44.969	2.5244E-03	2.5154E-03	0.086
39	181	300.3	540.5	4.337	3.822	51.147	45.066	2.5915E-03	2.5822E-03	0.572
40	182	300.0	539.9	5.156	4.543	51.178	45.095	3.0786E-03	3.0677E-03	0.125
41	183	299.8	539.6	3.415	3.009	51.196	45.111	2.0385E-03	2.0312E-03	-0.076
42	184	299.8	539.6	2.516	2.217	51.192	45.107	1.5018E-03	1.4964E-03	-0.163
43	186	299.1	538.5	2.143	1.888	51.253	45.161	1.2772E-03	1.2726E-03	0.089
44	187	300.1	540.2	1.839	1.620	51.163	45.081	1.0984E-03	1.0945E-03	0.106
45	192	300.3	540.6	13.085	11.530	51.146	45.066	7.8185E-03	7.7906E-03	0.513
46	193	300.0	540.0	6.340	5.621	51.175	45.092	3.8094E-03	3.7958E-03	0.607
47	194	298.6	537.5	6.723	5.924	51.301	45.203	4.0035E-03	3.9893E-03	0.442
48	196	300.5	540.9	5.597	4.932	51.127	45.049	3.3454E-03	3.3340E-03	0.471
49	197	302.3	544.2	8.617	7.857	50.962	44.905	5.3498E-03	5.3307E-03	0.424
50	198	302.2	543.9	6.781	5.958	50.974	44.915	4.0552E-03	4.0407E-03	0.586
51	199	302.2	543.9	13.320	11.737	50.975	44.916	7.9891E-03	7.9605E-03	0.504
52	202	302.7	544.8	6.577	5.795	50.931	44.877	3.9485E-03	3.9344E-03	0.250
53	203	303.2	545.7	6.140	5.410	50.885	44.836	3.6897E-03	3.6765E-03	0.264
54	204	303.3	546.0	8.650	5.912	50.869	44.822	3.7610E-03	3.7475E-03	0.197
55	205	304.4	548.0	5.406	4.764	50.768	44.733	3.2576E-03	3.2459E-03	0.290
56	206	304.0	547.2	4.402	3.879	50.809	44.769	2.6981E-03	2.6885E-03	0.275
57	207	301.4	542.5	4.425	3.899	51.046	44.979	2.6496E-03	2.6403E-03	0.375
58	208	302.9	545.9	4.560	4.018	50.821	44.760	2.7442E-03	2.7343E-03	0.458
59	211	302.6	544.6	14.433	11.836	50.938	44.863	8.0631E-03	8.0343E-03	0.377
60	225	303.5	546.4	1.414	1.246	50.650	44.606	8.5041E-04	8.4736E-04	0.785
61	226	299.5	539.0	0.137	0.121	51.223	45.134	8.1989E-05	8.1698E-05	0.894
62	227	297.9	536.2	0.023	0.020	51.367	45.263	1.3824E-05	1.3780E-05	1.944
63	228	299.3	538.7	0.193	0.170	51.238	45.150	1.1474E-04	1.1438E-04	1.032
64	229	301.7	543.1	3.840	3.384	51.019	44.954	2.3009E-03	2.2927E-03	0.740
65	230	298.8	537.8	0.531	0.468	51.286	45.190	3.1653E-04	3.1541E-04	0.731
66	231	296.9	534.3	0.035	0.031	51.482	45.363	2.0734E-05	2.0661E-05	4.224
67	232	296.6	533.9	0.093	0.082	51.486	45.366	5.5429E-05	5.5233E-05	1.623
68	234	299.4	538.3	0.411	0.362	51.256	45.165	1.2972E-04	1.2926E-04	0.991
69	235	302.1	543.6	4.852	4.284	50.978	44.918	2.9159E-03	2.9055E-03	0.799
70	236	298.8	537.9	0.521	0.459	51.283	45.187	3.1052E-04	3.0942E-04	0.829
71	237	297.7	536.1	0.441	0.389	51.377	45.268	2.6166E-04	2.6076E-04	0.911
72	238	297.6	535.6	0.332	0.293	51.397	45.268	1.7946E-04	1.7883E-04	0.906
73	243	299.4	538.9	0.620	0.546	51.228	45.139	3.6953E-04	3.6822E-04	0.904
74	274	301.7	543.1	5.049	4.460	51.018	44.954	3.3248E-03	3.3129E-03	0.474
75	286	301.5	542.8	7.769	6.845	51.034	44.966	4.6934E-03	4.6780E-03	0.286

FREE-STREAM DENSITY-VELOCITY PRODUCT = 2.1446.-01 (SLUGS/FT2-SEC)

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 9

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	9.2663E C6	5.3154E 06	0.574	43.96	821.3	0.84597E 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	FT(BTU/LBM)	RS(FT)
7.30	2.8244E C6	5.3154E C6	1.882	646.17	1478.3	363.79	C.0175

CHAN	T/C	PH/PT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)	CHAN	T/C	PH/PT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)
1	4	C.367	C.2562	0.3358	0.3041	0.4031	39	181	0.361	0.1940	0.2535	0.2300	0.2292
2	7	0.365	C.1467	0.1921	0.1741	0.1735	40	182	C.360	0.3153	0.4114	0.3737	0.3723
3	12	0.364	0.0852	0.1115	0.1011	0.1008	41	183	C.360	0.2673	0.3492	0.3169	0.3157
4	17	C.363	0.0617	0.0807	C.0732	0.0729	42	184	0.360	0.2035	0.2658	0.2412	0.2403
5	22	0.363	C.0561	0.0734	0.0666	0.0663	43	186	0.359	0.1396	0.1822	0.1654	0.1648
6	25	0.363	C.0505	0.0661	0.0599	0.0597	44	187	C.360	0.1182	0.1545	0.1402	0.1396
7	27	0.363	0.0520	C.0680	0.0617	0.0615	45	192	0.361	0.2665	0.3487	0.3491	0.3478
8	29	0.363	0.0490	0.0641	C.0582	0.0579	46	193	0.360	0.1260	0.1656	0.1502	0.1497
9	30	0.363	0.0481	0.0629	0.0570	0.0568	47	194	0.358	0.1334	0.1742	0.1581	0.1575
10	32	0.362	0.0453	0.0592	0.0537	0.0535	48	196	0.361	0.1147	0.1499	0.1360	0.1355
11	34	0.362	0.0428	0.0560	0.0509	0.0506	49	197	0.363	0.1686	0.2205	0.2000	0.1993
12	38	0.363	0.0442	0.0578	0.0525	0.0523	50	198	0.363	0.2480	0.3243	0.2942	0.2931
13	42	0.362	C.0413	0.0540	0.0490	0.0488	51	199	0.363	0.2628	0.3439	0.3355	0.3342
14	46	0.362	0.0462	0.0604	0.0548	0.0546	52	202	C.363	0.1229	0.1608	0.1458	0.1452
15	50	0.361	0.0484	0.0633	0.0574	0.0572	53	203	0.364	0.1164	0.1523	0.1381	0.1376
16	54	C.361	0.0536	0.0700	C.0635	0.0633	54	204	0.364	0.1209	0.1582	0.1434	0.1429
17	58	0.366	C.1315	0.1722	0.1561	0.1555	55	205	0.365	0.1046	0.1370	0.1241	0.1237
18	62	0.362	C.0112	0.0146	0.0133	0.0132	56	206	C.365	0.1498	0.1962	0.1778	0.1772
19	64	0.362	0.0048	C.0063	0.0057	0.0057	57	207	0.361	0.1386	0.1811	0.1643	0.1637
20	65	0.362	0.0083	0.0109	0.0099	0.0098	58	208	0.364	0.0979	0.1281	0.1162	0.1157
21	66	0.362	0.0315	0.0411	0.0373	0.0372	59	211	0.364	0.2540	0.3323	0.3013	0.3002
22	67	0.362	C.0442	0.0578	0.0525	0.0523	60	225	C.364	0.0256	0.0335	0.0304	0.0302
23	68	0.362	0.0385	0.0504	0.0457	0.0455	61	226	0.360	0.0029	0.0037	0.0034	0.0034
24	69	0.361	0.0090	0.0117	0.0106	0.0106	62	227	0.358	0.0010	0.0013	0.0012	0.0012
25	70	0.360	C.0015	0.0020	0.0018	0.0018	63	228	0.360	0.0045	0.0059	0.0053	0.0053
26	71	0.360	C.0023	0.0030	0.0027	0.0027	64	229	0.362	0.0734	0.0959	0.0870	0.0867
27	72	0.360	0.0088	0.0115	0.0105	0.0104	65	230	0.359	0.0092	0.0120	0.0109	0.0108
28	74	0.360	0.0065	0.0085	0.0077	0.0077	66	231	0.357	0.0014	0.0018	0.0017	0.0017
29	76	0.360	C.0040	0.0052	0.0047	0.0047	67	232	0.356	0.0023	0.0029	0.0027	0.0027
30	122	0.361	C.0222	C.C290	0.0263	0.0262	68	234	C.359	0.0050	0.0065	0.0059	0.0059
31	129	0.361	0.0127	0.0166	0.0150	0.0150	69	235	0.363	0.0951	0.1244	0.1129	0.1124
32	135	0.361	0.0106	0.0138	0.0125	0.0125	70	236	0.359	0.0093	0.0121	0.0110	0.0109
33	136	0.362	0.0180	0.0235	0.0213	0.0212	71	237	0.357	0.0101	0.0132	0.0119	0.0119
34	176	0.361	C.1555	0.2032	0.1841	0.1836	72	238	C.357	0.0074	0.0096	0.0087	0.0087
35	177	C.361	0.1803	0.2356	0.2137	0.2129	73	240	0.360	0.0197	0.0257	0.0233	0.0233
36	178	C.361	0.1202	0.1571	0.1425	0.1420	74	274	0.360	0.0990	0.1293	0.1173	0.1169
37	179	0.364	C.2022	0.2646	0.2400	0.2391	75	286	0.360	0.1477	0.1929	0.1750	0.1744
38	180	0.362	0.1597	0.2088	0.1894	0.1887							

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MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	PS(METER)	TEST NO.	183
7.32	9.2863E 06	5.3154E 06	0.574	44.96	821.3	0.6459E 06	0.0054	RUN NO.	9
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	2.8244E 06	5.3154E 06	1.882	660.17	1478.3	363.79	0.0175		

CHAN	T/C	TA(DEG K)	TA(DEG R)	C(M/CM2)	L(BTU/FT2-SEC)	LS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.902)	TIME(SEC)
1	1	309.0	556.2	14.368	12.396	54.306	48.380	6.4934E-03	6.4692E-03	0.467
2	7	307.5	553.5	8.079	7.119	55.070	48.524	3.7155E-03	3.7025E-03	0.430
3	12	306.4	551.5	4.705	4.145	55.167	48.627	2.1569E-03	2.1509E-03	0.410
4	17	306.0	550.7	3.407	3.002	55.233	48.667	1.5619E-03	1.5581E-03	0.384
5	22	305.5	550.0	3.103	2.734	55.274	48.708	1.4212E-03	1.4154E-03	0.334
6	25	305.3	549.6	2.793	2.461	55.300	48.727	1.2789E-03	1.2741E-03	0.274
7	27	305.6	550.4	2.674	2.533	55.254	48.666	1.3172E-03	1.3123E-03	0.231
8	29	305.8	550.4	2.709	2.387	55.256	48.688	1.2415E-03	1.2369E-03	0.185
9	30	305.6	550.1	2.658	2.342	55.273	48.703	1.2174E-03	1.2128E-03	0.195
10	32	305.0	548.9	2.508	2.210	55.340	48.762	1.1472E-03	1.1429E-03	0.175
11	34	305.3	549.5	2.367	2.086	55.309	48.735	1.0834E-03	1.0794E-03	0.127
12	38	305.5	550.0	2.445	2.154	55.278	48.707	1.1198E-03	1.1156E-03	0.113
13	42	304.6	548.3	2.287	2.015	55.350	48.797	1.0454E-03	1.0416E-03	0.124
14	46	304.6	548.2	2.558	2.254	55.382	48.799	1.1689E-03	1.1646E-03	0.141
15	50	304.1	547.4	2.664	2.365	55.433	48.844	1.2253E-03	1.2208E-03	0.215
16	54	303.8	546.9	2.970	2.617	55.461	48.869	1.3594E-03	1.3504E-03	0.247
17	59	308.0	554.4	7.233	6.373	55.017	48.477	3.3308E-03	3.3184E-03	0.490
18	62	304.6	548.3	0.620	0.547	55.378	48.795	2.8350E-04	2.8245E-04	0.444
19	64	304.8	548.6	0.267	0.236	55.361	48.780	1.2222E-04	1.2176E-04	0.582
20	65	304.7	548.4	0.460	0.406	55.371	48.790	2.1051E-04	2.0973E-04	0.507
21	66	304.8	548.6	1.741	1.534	55.359	48.779	7.9814E-04	7.9319E-04	0.408
22	67	305.1	549.3	2.447	2.156	55.321	48.745	1.1199E-03	1.1158E-03	0.424
23	68	305.3	549.5	2.130	1.877	55.309	48.735	9.7493E-04	9.7132E-04	0.387
24	69	304.3	547.8	0.497	0.438	55.409	48.823	2.2685E-04	2.2602E-04	0.499
25	70	303.6	546.5	0.085	0.075	55.485	48.889	3.8685E-05	3.8745E-05	1.065
26	71	303.6	546.4	0.128	0.112	55.490	48.894	5.8196E-05	5.7983E-05	1.025
27	72	303.3	546.0	0.490	0.432	55.517	48.918	2.2325E-04	2.2240E-04	0.519
28	74	303.2	545.7	0.361	0.318	55.530	48.930	1.6468E-04	1.6407E-04	0.557
29	76	303.1	545.6	0.220	0.194	55.541	48.939	1.0013E-04	9.9762E-05	0.605
30	122	303.8	546.9	1.229	1.083	55.461	48.869	5.6094E-04	5.5886E-04	0.358
31	129	303.8	546.9	0.704	0.620	55.463	48.870	3.2112E-04	3.1993E-04	0.428
32	135	304.3	547.7	0.586	0.516	55.412	48.825	2.6768E-04	2.6669E-04	0.216
33	136	304.7	548.4	0.995	0.877	55.371	48.789	4.5475E-04	4.5307E-04	0.506
34	176	304.2	547.6	8.616	7.591	55.422	48.834	3.9344E-03	3.9199E-03	0.265
35	177	303.9	547.1	9.997	8.809	55.449	48.858	4.5629E-03	4.5460E-03	0.341
36	178	303.7	546.7	6.671	5.878	55.474	48.880	3.0430E-03	3.0318E-03	0.380
37	179	306.3	551.4	11.162	9.835	55.192	48.632	5.1217E-03	5.1026E-03	0.170
38	180	305.2	549.3	8.835	7.785	55.319	48.743	4.0432E-03	4.0282E-03	0.394
39	181	304.0	547.2	10.756	9.479	55.445	48.855	4.9104E-03	4.8923E-03	0.438
40	182	303.6	546.4	17.495	15.415	55.490	48.894	7.9782E-03	7.9487E-03	0.359
41	183	303.2	545.8	14.845	13.080	55.528	48.927	6.7646E-03	6.7396E-03	0.349
42	184	303.1	545.7	1.303	9.559	55.535	48.934	5.1497E-03	5.1307E-03	0.311
43	186	302.4	544.4	7.763	6.840	55.613	49.002	3.5313E-03	3.5182E-03	0.358
44	187	303.4	546.0	6.564	5.784	55.513	48.915	2.9921E-03	2.9810E-03	0.356
45	192	303.7	546.6	16.337	14.395	55.477	48.883	7.4521E-03	7.4246E-03	0.334
46	193	303.2	545.8	7.039	6.202	55.527	48.926	3.2075E-03	3.1957E-03	0.415
47	194	301.8	543.3	7.429	6.546	55.676	49.058	3.3752E-03	3.3627E-03	0.233
48	196	303.7	546.6	6.564	5.607	55.477	48.882	2.9029E-03	2.8922E-03	0.335
49	197	305.8	550.4	9.317	8.210	55.256	48.688	4.2643E-03	4.2535E-03	0.327
50	198	305.4	549.8	13.712	12.082	55.289	48.717	6.2791E-03	6.2559E-03	0.424
51	199	305.3	549.6	15.640	13.781	55.300	48.726	7.1605E-03	7.1340E-03	0.362
52	202	305.9	550.7	6.788	5.981	55.237	48.671	3.1118E-03	3.1003E-03	0.183
53	203	306.4	551.5	6.424	5.661	55.186	48.626	2.9481E-03	2.9371E-03	0.197
54	204	306.6	551.9	6.668	5.875	55.163	48.606	3.0612E-03	3.0498E-03	0.140
55	205	307.7	553.8	5.758	5.073	55.052	48.508	2.6496E-03	2.6397E-03	0.196
56	206	307.1	552.8	8.258	7.276	55.107	48.557	3.7955E-03	3.7814E-03	0.317
57	207	304.4	547.9	7.678	6.766	55.402	48.817	3.5079E-03	3.4949E-03	0.100
58	208	306.9	552.4	5.398	4.756	55.135	48.582	2.4796E-03	2.4703E-03	0.270
59	211	306.2	551.2	14.020	12.354	55.207	48.645	6.4310E-03	6.4071E-03	0.244
60	225	307.0	552.6	1.410	1.243	55.122	48.570	6.4800E-04	6.4559E-04	0.641
61	226	303.1	545.7	0.159	0.140	55.535	48.934	7.2564E-05	7.2296E-05	0.839
62	227	301.7	543.1	0.056	0.049	55.689	49.070	2.5347E-05	2.5254E-05	2.984
63	228	303.0	545.4	0.250	0.220	55.554	48.950	1.1389E-04	1.1347E-04	1.005
64	229	305.1	549.2	4.060	3.577	55.326	48.750	1.8577E-03	1.8508E-03	0.590
65	230	302.4	544.3	0.510	0.449	55.619	49.008	2.3202E-04	2.3116E-04	0.653
66	231	300.6	541.0	0.079	0.069	55.812	49.178	3.5621E-05	3.5491E-05	2.564
67	232	300.2	540.3	0.126	0.111	55.854	49.215	5.6088E-05	5.6679E-05	1.623
68	234	302.7	544.8	0.278	0.245	55.365	48.978	1.2632E-04	1.2585E-04	0.974
69	235	305.5	549.9	5.280	4.635	55.286	48.714	2.4089E-03	2.3994E-03	0.032
70	236	302.3	544.1	0.515	0.454	55.626	49.014	2.3406E-04	2.3322E-04	0.721
71	237	300.3	540.5	0.563	0.496	55.841	49.203	2.5506E-04	2.5413E-04	0.680
72	238	301.0	541.7	0.411	0.362	55.785	49.140	1.8630E-04	1.8561E-04	0.671
73	240	302.9	545.2	1.095	0.964	55.563	48.959	4.9840E-04	4.9656E-04	0.744
74	274	303.5	546.3	5.493	4.840	55.496	48.899	2.5048E-03	2.4956E-03	0.309
75	286	302.5	545.2	8.207	7.231	55.564	48.960	3.7368E-03	3.7231E-03	0.151

FREE-STREAM DENSITY-VELOCITY PRODUCT = 3.0554E-01 (SLUGS/FT2-SEC)

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 10

MACH		RE/METER		REL	LENGTH(METER)	PT(ATM)		TT(DEG K)	HT(JOULE/KG)		RS(METER)					
7.30		3.3522E C6		1.9229E C6	0.574	15.36		804.5	0.82756E 06		0.0053					
MACH		RE/FT		REL	LENGTH(FT)	PT(PSI)		TT(DEG R)	HT(BTU/LBM)		RS(FT)					
7.30		1.0217E C6		1.9229E D6	1.882	225.73		1448.1	355.87		0.0175					
CHAN	T/C	PM/PT	Q/QS	P/PS(0.850)	H/HS(0.900)	H/HS(0.912)	CHAN	T/C	PM/PT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.912)			
1	4	0.372	0.2899	0.3808	0.3447	0.3371	39	181	0.366	0.0913	0.1197	0.1084	0.1060			
2	7	0.370	0.1765	0.2317	0.2099	0.2052	40	182	0.367	0.1111	0.1456	0.1319	0.1290			
3	12	0.370	0.1073	0.1408	0.1275	0.1247	41	183	0.367	0.0769	0.1008	0.0914	0.0894			
4	17	0.369	0.0807	0.1059	0.0960	0.0938	42	184	0.367	0.0528	0.0691	0.0627	0.0613			
5	22	0.369	0.0724	0.0950	0.0860	0.0841	43	186	0.366	0.0432	0.0566	0.0513	0.0501			
6	25	0.369	0.0656	0.0860	0.0779	0.0762	44	187	0.367	0.0371	0.0486	0.0440	0.0431			
7	27	0.369	0.0677	0.0888	0.0804	0.0786	45	192	0.367	0.0872	0.1143	0.1036	0.1013			
8	29	0.369	0.0635	0.0833	0.0754	0.0738	46	193	0.367	0.0424	0.0555	0.0503	0.0492			
9	30	0.369	0.0617	0.0810	0.0733	0.0717	47	194	0.393	0.0000	0.0000	0.0000	0.0000			
10	32	0.369	0.0576	0.0755	0.0684	0.0669	48	196	0.367	0.0448	0.0588	0.0532	0.0521			
11	34	0.369	0.0539	0.0707	0.0640	0.0626	49	197	0.369	0.1869	0.2452	0.2221	0.2172			
12	38	0.369	0.0520	0.0682	0.0618	0.0604	50	198	0.369	0.2357	0.3092	0.2801	0.2739			
13	42	0.369	0.0451	0.0592	0.0536	0.0524	51	199	0.369	0.1840	0.2414	0.2186	0.2138			
14	46	0.369	0.0388	0.0506	0.0460	0.0450	52	202	0.370	0.1225	0.1608	0.1456	0.1424			
15	50	0.369	0.0279	0.0366	0.0332	0.0324	53	203	0.371	0.1192	0.1565	0.1418	0.1386			
16	54	0.368	0.0188	0.0247	0.0224	0.0219	54	204	0.371	0.1251	0.1642	0.1487	0.1454			
17	59	0.372	0.1083	0.1422	0.1287	0.1259	55	205	0.372	0.1205	0.1583	0.1433	0.1401			
18	62	0.369	0.0101	0.0132	0.0120	0.0117	56	206	0.371	0.1449	0.1903	0.1723	0.1685			
19	64	0.369	0.0066	0.0087	0.0079	0.0077	57	207	0.368	0.1098	0.1440	0.1304	0.1275			
20	65	0.369	0.0101	0.0133	0.0120	0.0118	58	208	0.371	0.0981	0.1286	0.1166	0.1140			
21	66	0.369	0.0364	0.0477	0.0432	0.0423	59	211	0.370	0.2614	0.3430	0.3107	0.3038			
22	67	0.369	0.0506	0.0664	0.0602	0.0588	60	225	0.370	0.0218	0.0286	0.0259	0.0253			
23	68	0.370	0.0486	0.0638	0.0578	0.0565	61	226	0.367	0.0011	0.0014	0.0013	0.0013			
24	69	0.369	0.0129	0.0169	0.0153	0.0150	62	227	0.366	0.0019	0.0025	0.0023	0.0022			
25	70	0.368	0.0023	0.0030	0.0027	0.0027	63	228	0.366	0.0026	0.0034	0.0031	0.0030			
26	71	0.368	0.0022	0.0029	0.0026	0.0025	64	229	0.368	0.0715	0.0938	0.0849	0.0831			
27	72	0.367	0.0070	0.0091	0.0083	0.0081	65	230	0.366	0.0080	0.0105	0.0095	0.0093			
28	74	0.367	0.0057	0.0075	0.0068	0.0067	66	231	0.364	-0.0000	-0.0000	-0.0000	-0.0000			
29	76	0.368	0.0053	0.0069	0.0063	0.0061	67	232	0.364	0.0009	0.0012	0.0011	0.0011			
30	122	0.368	0.0198	0.0260	0.0235	0.0230	68	234	0.366	0.0047	0.0061	0.0055	0.0054			
31	125	0.368	0.0178	0.0233	0.0211	0.0207	69	235	0.368	0.0793	0.1040	0.0942	0.0922			
32	135	0.368	0.0087	0.0114	0.0104	0.0101	70	236	0.366	0.0067	0.0088	0.0080	0.0078			
33	136	0.369	0.0356	0.0468	0.0424	0.0414	71	237	0.364	0.0057	0.0075	0.0068	0.0066			
34	176	0.368	0.0678	0.0889	0.0800	0.0788	72	238	0.364	0.0043	0.0056	0.0050	0.0049			
35	177	0.368	0.0571	0.0749	0.0678	0.0664	73	240	0.366	0.0073	0.0096	0.0087	0.0085			
36	178	0.368	0.0443	0.0581	0.0527	0.0515	74	274	0.367	0.0180	0.0235	0.0213	0.0208			
37	179	0.370	0.1589	0.2085	0.1888	0.1847	75	286	0.365	0.0290	0.0380	0.0344	0.0337			
38	180	0.369	0.1190	0.1561	0.1414	0.1382										

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. 2-D PRELIMINARY CAL

TEST NO. 183
RUN NO. 10

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	3.3522E C6	1.4226E C6	0.914	15.36	804.5	1.8276E 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG K)	HT(BTU/LBM)	RS(FT)
7.30	1.0217E C6	1.4229E 06	1.882	225.73	1448.1	355.87	0.0175

CHAN	T/C	TW(DEG K)	TW(DEG R)	C(W/CM2)	C(BTU/FT2-SEC)	CS(W/CM2)	CS(BTU/FT2-SEC)	ST(0.5[illegible])	ST(0.912)	TIME(SEC)
1	4	306.2	551.2	9.124	8.039	31.478	27.735	1.2274E-02	1.2002E-02	0.532
2	7	305.1	549.2	5.569	4.907	31.545	27.797	7.4727E-03	7.3071E-03	0.503
3	12	304.5	548.2	3.388	2.986	31.585	27.830	4.5479E-03	4.4400E-03	0.491
4	17	304.2	547.7	2.552	2.248	31.601	27.845	3.4171E-03	3.3416E-03	0.483
5	22	304.0	547.3	2.289	2.017	31.615	27.857	3.0632E-03	2.9955E-03	0.438
6	25	304.0	547.1	2.073	1.827	31.620	27.862	2.7747E-03	2.7134E-03	0.406
7	27	304.3	547.7	2.138	1.884	31.601	27.845	2.8638E-03	2.8005E-03	0.362
8	29	304.2	547.6	2.006	1.767	31.606	27.849	2.6858E-03	2.6264E-03	0.316
9	30	304.2	547.5	1.950	1.719	31.606	27.849	2.6115E-03	2.5538E-03	0.321
10	32	303.8	546.8	1.821	1.605	31.634	27.873	2.4356E-03	2.3820E-03	0.296
11	34	304.5	547.0	1.704	1.501	31.624	27.865	2.2798E-03	2.2294E-03	0.249
12	38	304.2	547.5	1.643	1.448	31.608	27.851	2.2002E-03	2.1515E-03	0.188
13	42	303.7	546.6	1.427	1.258	31.639	27.878	1.9091E-03	1.8669E-03	0.155
14	46	303.5	547.0	1.226	1.080	31.627	27.868	1.6397E-03	1.6035E-03	0.040
15	50	303.7	546.7	0.883	0.778	31.636	27.876	1.1810E-03	1.1550E-03	-0.023
16	54	303.5	546.3	0.596	0.525	31.648	27.886	7.9700E-04	7.7941E-04	-0.303
17	59	306.1	551.0	3.409	3.003	31.484	27.742	4.5841E-03	4.4824E-03	0.556
18	62	304.0	547.2	0.318	0.280	31.617	27.859	4.2675E-04	4.1632E-04	0.504
19	64	304.3	547.7	0.209	0.184	31.601	27.845	2.8000E-04	2.7361E-04	0.467
20	65	304.1	547.4	0.320	0.282	31.612	27.854	4.2855E-04	4.1908E-04	0.559
21	66	304.1	547.4	1.149	1.013	31.611	27.853	1.5387E-03	1.5047E-03	0.392
22	67	304.4	547.9	1.599	1.409	31.593	27.838	2.1422E-03	2.0948E-03	0.452
23	68	304.5	548.1	1.535	1.352	31.5[illegible]	27.833	2.0565E-03	2.0110E-03	0.460
24	69	303.9	547.0	0.407	0.359	31.627	27.867	5.4452E-04	5.3250E-04	0.551
25	70	303.2	545.8	0.073	0.064	31.667	27.903	9.7792E-05	9.5635E-05	0.668
26	71	303.2	545.8	0.069	0.061	31.668	27.903	9.2129E-05	9.0097E-05	0.698
27	72	302.7	544.9	0.220	0.194	31.659	27.931	2.9424E-04	2.8776E-04	0.517
28	74	302.7	544.8	0.182	0.[illegible]	31.702	27.934	2.4292E-04	2.3757E-04	0.592
29	76	303.0	545.3	0.167	[illegible]	31.684	27.918	2.2300E-04	2.1806E-04	0.839
30	122	303.3	546.0	0.627	0.555	31.660	27.897	8.3794E-04	8.1945E-04	0.394
31	129	303.3	546.0	0.564	0.497	31.662	27.898	7.5315E-04	7.3654E-04	0.398
32	135	303.3	546.0	0.276	0.243	31.660	27.897	3.6897E-04	3.6083E-04	0.300
33	136	303.7	546.7	1.128	0.994	31.636	27.876	1.5083E-03	1.4750E-03	0.542
34	176	303.3	546.0	2.147	1.892	31.660	27.897	2.8693E-03	2.8060E-03	0.050
35	177	303.1	545.7	1.809	1.594	31.672	27.908	2.4163E-03	2.3630E-03	0.036
36	178	303.0	545.4	1.404	1.238	31.681	27.915	1.8755E-03	1.8342E-03	0.159
37	179	304.9	548.8	5.015	4.418	31.563	27.811	6.7247E-03	6.5758E-03	0.385
38	180	304.0	547.1	3.762	3.314	31.620	27.861	5.0340E-03	4.9228E-03	0.322
39	181	303.0	545.5	2.891	2.548	31.678	27.913	3.8613E-03	3.7762E-03	0.369
40	182	302.6	544.6	3.522	3.104	31.709	27.940	4.6986E-03	4.5951E-03	0.184
41	183	302.2	544.0	2.441	2.151	31.729	27.958	3.2539E-03	3.1823E-03	0.085
42	184	302.3	544.2	1.674	1.475	31.724	27.953	2.2317E-03	2.1826E-03	-0.055
43	186	301.7	543.1	1.371	1.208	31.761	27.985	1.8257E-03	1.7856E-03	0.091
44	187	302.5	544.5	1.176	1.036	31.710	27.941	1.5684E-03	1.5339E-03	0.069
45	192	302.6	544.8	2.769	2.439	31.704	27.935	3.6897E-03	3.6084E-03	0.156
46	193	302.4	544.4	1.344	1.184	31.717	27.947	1.7922E-03	1.7527E-03	0.245
47	194	324.7	583.2	0.000	0.000	30.356	26.748	0.0000E-39	0.0000E-39	0.049
48	196	302.7	544.9	1.421	1.252	31.698	27.930	1.8964E-03	1.8547E-03	0.162
49	197	304.5	548.0	5.903	5.201	31.589	27.834	7.9084E-03	7.7335E-03	0.364
50	198	304.3	547.7	7.448	6.563	31.599	27.843	9.9744E-03	9.7543E-03	0.417
51	199	304.2	547.5	5.815	5.124	31.606	27.849	7.7861E-03	7.6140E-03	0.312
52	202	305.0	549.0	3.865	3.406	31.556	27.805	5.1851E-03	5.0702E-03	0.248
53	203	305.4	549.6	3.760	3.313	31.533	27.784	5.0479E-03	4.9360E-03	0.234
54	204	305.5	549.9	3.943	3.474	31.522	27.775	5.2957E-03	5.1762E-03	0.187
55	205	306.3	551.4	3.795	3.342	31.472	27.731	5.1033E-03	4.9899E-03	0.265
56	206	305.6	550.6	4.565	4.023	31.458	27.754	6.1365E-03	6.0003E-03	0.338
57	207	303.5	546.3	3.474	3.061	31.652	27.889	4.6445E-03	4.5419E-03	0.207
58	208	305.6	550.1	3.091	2.723	31.515	27.769	4.1918E-03	4.0597E-03	0.364
59	211	304.8	548.6	8.251	7.270	31.568	27.815	1.1063E-02	1.0818E-02	0.404
60	225	305.1	549.1	0.686	0.605	31.551	27.801	9.2088E-04	9.0029E-04	0.689
61	226	302.6	544.7	0.035	0.031	31.707	27.938	4.6482E-05	4.5458E-05	0.298
62	227	301.2	542.2	0.061	0.053	31.794	28.015	8.0469E-05	7.8702E-05	1.449
63	228	301.7	543.1	0.083	0.073	31.762	27.986	1.1065E-04	1.0821E-04	1.039
64	229	303.6	546.4	2.262	1.994	31.645	27.883	3.0291E-03	2.9583E-03	0.575
65	230	301.8	543.3	0.254	0.223	31.757	27.982	3.3705E-04	3.3022E-04	0.536
66	231	300.2	540.4	-0.000	-0.000	31.859	28.072	-0.0000E-39	-0.0000E-39	-0.038
67	232	299.6	539.3	0.030	0.027	31.897	28.106	4.0145E-05	3.9267E-05	2.265
68	234	301.6	542.8	0.148	0.131	31.772	27.995	1.9750E-04	1.9316E-04	0.917
69	235	303.3	546.0	2.511	2.213	31.661	27.896	3.3560E-03	3.2820E-03	0.714
70	236	301.3	542.3	0.214	0.188	31.789	28.011	2.8437E-04	2.7813E-04	0.561
71	237	299.8	539.6	0.163	0.141	31.884	28.094	2.4213E-04	2.3683E-04	0.778
72	238	300.1	540.2	0.136	0.119	31.864	28.077	1.7978E-04	1.7584E-04	0.724
73	240	301.5	542.7	0.233	0.205	31.776	27.999	3.1002E-04	3.0320E-04	0.956
74	274	302.1	543.8	0.578	0.502	31.736	27.964	7.5929E-04	7.4258E-04	-0.348
75	280	301.0	541.9	0.922	0.813	31.806	28.025	1.2259E-03	1.1990E-03	-0.784

FREE-STREAM DENSITY-VELOCITY PRODUCT = 1.082RE-01 (SLUGS/FT2-SEC)

ORIGINAL PAGE IS
OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 11

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)										
7.30	6.52C5E 06	3.7404E 06	0.574	31.86	835.7	0.66184E 06	0.0053										
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)										
7.30	1.98E5E C6	3.7404E C6	1.882	468.36	1504.3	370.61	0.0175										

CHAN	T/C	RM/HT	Q/QS	M/MS(0.850)	M/MS(0.900)	M/MS(0.912)	CHAN	T/C	RM/HT	Q/QS	M/MS(0.850)	M/MS(0.900)	M/MS(0.912)
1	4	0.356	C.2797	0.3649	0.3313	C.3241	39	181	C.352	0.0941	0.1225	0.1113	0.1089
2	7	0.356	C.1694	C.2206	0.2005	0.1962	40	182	0.351	0.1097	0.1428	0.1297	0.1270
3	12	C.355	0.1024	0.1333	0.1211	0.1185	41	183	0.351	0.0758	0.0986	0.0896	0.0877
4	17	C.354	0.C767	0.0999	0.090c	C.0888	42	184	0.351	0.0536	0.C697	0.0634	0.0620
5	22	0.353	0.0699	0.C910	0.0827	0.0809	43	186	C.350	0.0441	0.0573	0.0521	0.0510
6	25	0.353	C.0631	C.0821	0.C746	0.0730	44	187	0.351	0.0378	0.0491	0.0447	0.0437
7	27	C.354	0.0648	0.0843	0.C766	0.0750	45	192	0.352	0.0960	0.1249	0.1135	0.1111
8	29	0.354	G.C604	0.0786	0.0714	C.0699	46	193	0.351	0.0613	0.0797	0.0725	0.0709
9	30	0.353	C.0590	0.0769	0.0698	C.0683	47	194	C.400	0.0000	0.C000	C.0000	C.CC00
10	32	0.353	0.0541	C.C704	0.C64C	0.0626	48	196	0.351	0.0682	0.0887	0.0807	C.0789
11	34	C.353	0.0503	C.0655	0.0598	0.0583	49	197	0.353	0.1968	0.2563	0.2329	0.2279
12	38	0.354	0.C511	0.0666	0.0603	0.0592	50	198	0.353	0.3132	0.4079	0.3706	0.3626
13	42	0.353	C.0453	0.0589	0.0536	0.0524	51	199	C.353	0.3377	0.4398	0.3995	0.3909
14	46	0.353	C.0463	C.C603	0.C54c	0.0536	52	202	0.354	0.1186	0.1545	0.1403	0.1373
15	50	0.352	0.0461	C.0600	0.0546	0.0534	53	203	0.354	0.1152	0.1501	0.1363	0.1334
16	54	C.352	0.0489	0.0636	0.0578	C.0566	54	204	0.354	0.1208	0.1574	0.1430	0.1399
17	59	0.357	C.1045	0.1363	0.1237	C.1211	55	205	C.356	0.1796	0.2341	0.2126	C.2080
18	62	0.352	C.0082	C.C107	0.C095	0.0095	56	206	0.355	0.1836	0.2392	0.2172	C.2126
19	64	C.352	0.0062	C.0080	C.0073	C.0071	57	207	0.352	0.1390	0.1808	0.1643	0.1608
20	65	C.352	G.C145	0.0189	0.0172	G.0168	58	208	0.355	0.1254	0.1633	0.1483	0.1451
21	66	0.352	C.0433	0.0564	0.0512	G.C501	59	211	0.354	0.2511	0.3271	C.2972	G.2908
22	67	0.353	0.0555	C.C723	0.C657	0.0643	60	225	0.355	0.0201	0.0263	0.0238	C.0233
23	68	C.353	0.0487	C.0634	0.0576	0.0563	61	226	0.351	0.0038	0.0049	0.0045	0.0044
24	69	0.352	C.CC95	0.0124	0.0112	0.0110	62	227	0.345	C.0044	C.C057	0.0052	0.0051
25	70	0.351	C.C009	0.C012	0.0011	C.0011	63	228	C.351	0.0083	0.0109	0.0099	C.C097
26	71	0.351	C.0015	C.CC20	0.C018	0.0018	64	229	0.354	0.0658	0.0857	0.0778	0.0762
27	72	C.350	G.C061	C.0080	0.C073	G.C071	65	230	0.350	0.0067	0.0087	0.0079	0.0078
28	74	0.351	0.CC65	0.0084	0.0076	C.C075	66	231	0.348	0.0032	0.C042	0.0038	D.C037
29	76	0.351	C.C071	0.C093	0.0084	0.0083	67	232	C.347	0.0065	0.0084	0.0076	C.C075
30	122	0.351	C.0192	C.C250	0.C227	0.0222	68	234	0.350	0.0112	0.0146	0.0132	0.0130
31	129	C.351	0.0164	C.0213	0.C193	0.0189	69	235	0.354	0.0779	0.1015	0.0922	0.0902
32	135	C.352	0.C074	0.0097	0.008E	C.0086	70	236	0.35C	0.0056	0.C076	0.0069	0.0067
33	136	C.352	C.0368	0.0479	0.0435	C.0426	71	237	C.348	0.0127	0.0165	0.0150	C.C147
34	176	0.352	C.0816	C.1061	0.C964	0.0944	72	238	0.348	0.0100	0.0130	0.0118	G.0115
35	177	C.352	0.0554	0.1241	C.1123	0.1104	73	240	0.351	0.0155	0.0201	0.0183	0.0179
36	178	0.351	C.0845	0.1099	0.0994	0.0977	74	274	0.352	0.0000	0.C000	0.0000	0.0000
37	179	0.354	C.1498	0.1951	0.1772	0.1734	75	286	C.351	0.0000	0.0000	0.0000	C.CC00
38	180	0.353	C.1160	0.151C	0.1372	0.1343							

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 11

MACH 7.30	RE/METER 6.5205E 06	REL	3.7404E 06	LENGTH(METER) 0.574	PT(ATM) 31.86	TT(DEG K) 835.7	HT(JOULE/KG) 0.66184E 06	RS(METER) 0.0059
MACH 7.30	RE/FT 1.9875E 06	REL	3.7404E 06	LENGTH(FT) 1.882	PT(PSI) 468.36	TT(DEG R) 1504.3	HT(BTU/LBM) 370.61	RS(FT) 0.0175

CHAN	T/C	Tw(DEG K)	Tm(DEG R)	Qw(W/CM2)	QI(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.912)	TIME(SEC)
1	4	307.1	552.9	13.521	11.914	46.345	42.598	8.4047E-03	8.2227E-03	0.465
2	7	305.5	544.9	8.215	7.239	46.494	42.730	5.0E88E-03	4.9790E-03	0.429
3	12	304.3	547.7	4.975	4.384	46.808	42.830	3.0738E-03	3.0076E-03	0.409
4	17	303.7	546.7	3.733	3.289	46.656	42.875	2.3035E-03	2.2539E-03	0.387
5	22	303.2	545.7	3.404	3.000	46.767	42.917	2.0984E-03	2.0533E-03	0.335
6	25	302.9	545.3	3.072	2.709	46.730	42.938	1.8940E-03	1.8534E-03	0.276
7	27	303.4	546.1	3.154	2.779	46.688	42.901	1.9447E-03	1.9029E-03	0.231
8	29	303.4	546.1	2.939	2.590	46.691	42.903	1.8123E-03	1.7734E-03	0.178
9	30	303.3	545.9	2.875	2.533	46.701	42.912	1.7723E-03	1.7342E-03	0.192
10	32	302.6	544.7	2.638	2.324	46.758	42.962	1.6234E-03	1.5890E-03	0.157
11	34	303.0	545.4	2.452	2.161	46.722	42.931	1.5110E-03	1.4786E-03	0.101
12	36	303.5	546.2	2.460	2.194	46.681	42.895	1.5356E-03	1.5026E-	0.062
13	42	302.7	544.8	2.268	1.945	46.754	42.959	1.3594E-03	1.3303E-	0.012
14	46	302.8	545.0	2.258	1.990	46.748	42.952	1.3904E-03	1.3606E-03	-0.046
15	50	302.3	544.2	2.253	1.963	46.786	42.987	1.3840E-03	1.3549E-03	0.042
16	54	301.8	543.3	2.368	2.104	46.832	43.027	1.4674E-03	1.4359E-03	0.094
17	59	305.9	550.7	5.084	4.462	46.655	42.835	3.1398E-03	3.0719E-03	0.491
18	62	302.3	544.1	0.402	0.354	46.792	42.993	2.4747E-04	2.4216E-04	0.393
19	64	302.4	544.3	0.300	0.264	46.780	42.982	1.6466E-04	1.6066E-04	0.356
20	65	302.3	544.1	0.710	0.625	46.789	42.990	4.4658E-04	4.2722E-04	0.501
21	66	302.4	544.3	2.114	1.863	46.782	42.983	1.3006E-03	1.2728E-03	0.324
22	67	302.7	544.9	2.707	2.385	46.751	42.956	1.6665E-03	1.6308E-03	0.392
23	68	302.6	545.0	2.373	2.091	46.746	42.952	1.4614E-03	1.4300E-03	0.409
24	69	301.8	543.2	0.464	0.409	46.836	43.031	2.8542E-04	2.7931E-04	0.448
25	70	300.9	541.6	0.046	0.040	46.917	43.102	2.8193E-05	2.7590E-05	0.520
26	71	300.8	541.5	0.076	0.067	46.922	43.107	4.6373E-05	4.5382E-05	0.468
27	72	300.7	541.2	0.301	0.265	46.937	43.120	1.8440E-04	1.8046E-04	0.240
28	74	300.9	541.7	0.316	0.278	46.914	43.100	1.9379E-04	1.8965E-04	0.773
29	76	301.1	542.0	0.349	0.308	46.898	43.086	2.1435E-04	2.0976E-04	0.848
30	122	301.1	542.0	0.258	0.227	46.897	43.085	5.7585E-04	5.6354E-04	0.314
31	125	301.1	542.0	0.800	0.705	46.898	43.086	4.9070E-04	4.8020E-04	0.346
32	135	301.7	543.1	0.364	0.320	46.839	43.034	2.2340E-04	2.1862E-04	0.313
33	136	302.2	543.9	1.796	1.582	46.801	43.000	1.1045E-03	1.0808E-03	0.681
34	176	302.3	544.1	3.979	3.506	46.789	42.990	2.4477E-03	2.3952E-03	0.048
35	177	302.1	543.7	4.657	4.103	46.808	43.007	2.8635E-03	2.8021E-03	0.194
36	178	301.5	542.7	4.128	3.637	46.861	43.053	2.5352E-03	2.4809E-03	0.301
37	179	304.2	547.5	7.281	6.415	46.616	42.837	4.4972E-03	4.4004E-03	0.138
38	180	303.1	545.7	5.651	4.979	46.711	42.921	3.4828E-03	3.4080E-03	0.072
39	181	302.0	543.7	4.595	4.049	46.813	43.011	2.8252E-03	2.7647E-03	0.251
40	182	301.6	542.9	5.361	4.723	46.852	43.045	3.2931E-03	3.2226E-03	0.030
41	183	301.3	542.4	3.704	3.264	46.876	43.066	2.2740E-03	2.2253E-03	-0.068
42	184	301.3	542.4	2.620	2.308	46.879	43.069	1.6083E-03	1.5739E-03	-0.206
43	186	300.2	540.4	2.160	1.904	46.977	43.155	1.3233E-03	1.2950E-03	-0.052
44	187	301.2	542.1	1.847	1.627	46.893	43.081	1.1354E-03	1.1091E-03	-0.053
45	192	301.7	543.0	4.690	4.133	46.848	43.041	2.8815E-03	2.8198E-03	-0.019
46	193	301.2	542.2	2.996	2.640	46.884	43.074	1.8390E-03	1.7997E-03	0.308
47	194	343.5	618.3	0.000	0.000	45.034	39.681	0.0C00E-39	0.CC00E-39	0.137
48	196	301.4	542.5	3.334	2.938	48.672	43.062	2.0472E-03	2.0034E-03	0.242
49	197	303.3	546.0	9.665	8.446	48.694	42.906	5.9097E-03	5.7827E-03	0.342
50	198	303.3	545.9	15.255	13.441	48.699	42.911	9.4043E-03	9.2022E-03	0.376
51	199	303.2	545.8	16.446	14.493	48.702	42.913	1.0140E-02	9.9218E-03	0.317
52	202	303.4	546.2	5.774	5.088	48.684	42.897	3.5612E-03	3.4846E-03	0.185
53	203	303.9	547.0	5.605	4.939	48.642	42.860	3.4602E-03	3.3858E-03	0.169
54	204	304.1	547.3	5.876	5.177	48.626	42.846	3.6285E-03	3.5504E-03	0.114
55	205	305.1	549.3	8.717	7.681	48.520	42.760	5.3952E-03	5.2788E-03	0.340
56	206	304.6	548.4	8.916	7.857	48.574	42.800	5.5130E-03	5.3942E-03	0.243
57	207	302.0	543.5	6.785	5.979	48.820	43.017	4.1711E-03	4.0817E-03	0.064
58	208	304.4	547.9	6.092	5.368	48.597	42.821	3.7644E-03	3.6833E-03	0.269
59	211	304.0	547.3	12.212	10.761	48.629	42.848	7.5411E-03	7.3789E-03	0.334
60	225	305.0	549.0	0.978	0.861	48.541	42.771	6.0497E-04	5.9193E-04	0.646
61	226	301.2	542.2	0.186	0.164	48.686	43.075	1.1411E-04	1.1166E-04	0.799
62	227	299.8	539.7	0.215	0.189	48.615	43.188	1.3143E-04	1.2862E-04	1.263
63	228	300.9	541.7	0.408	0.360	48.913	43.099	2.5044E-04	2.4508E-04	1.C06
64	229	303.4	546.2	3.204	2.823	48.684	42.897	1.9757E-03	1.9332E-03	0.545
65	230	301.6	541.1	0.329	0.290	48.541	43.124	2.0151E-04	1.9721E-04	0.515
66	231	298.8	537.9	0.159	0.140	49.106	43.269	9.7182E-05	9.5116E-05	1.808
67	232	298.1	536.6	0.310	0.273	49.172	43.327	1.9381E-04	1.8969E-04	1.281
68	234	300.5	541.0	0.549	0.483	48.956	43.137	3.8624E-04	3.7808E-04	0.960
69	235	303.8	546.8	3.792	3.341	48.654	42.871	2.4400E-03	2.3897E-03	0.649
70	236	300.6	541.1	0.285	0.251	48.541	43.124	1.7473E-04	1.7100E-04	0.694
71	237	298.6	537.4	0.625	0.551	49.130	43.290	3.8163E-04	3.7351E-04	0.760
72	238	299.0	538.1	0.489	0.431	49.094	43.258	2.9899E-04	2.9263E-04	0.808
73	240	300.9	541.4	0.758	0.668	48.927	43.112	4.6408E-04	4.5495E-04	0.944
74	274	301.8	543.3	0.000	0.000	48.823	43.020	0.0C00E-39	0.CC00E-39	-0.362
75	280	301.0	541.8	0.000	0.000	48.906	43.093	0.0C00E-39	0.CC00E-39	-0.374

FREE-STREAM DENSITY-VELOCITY PRODUCT = 2.1931E-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	7.30	RE/METER	9.0288E C6	REL	5.1775E 06	LENGTH(METER)	0.574	PT(ATM)	44.01
MACH	7.30	RE/FT	2.7511E C6	REL	5.1775E C6	LENGTH(FT)	1.882	PT(PSI)	646.98

TT(DEG K)	834.7	HT(JOULE/KG)	0.66C73E 06	RS(METER)	0.C053	TEST NO.	183								
TT(DEG R)	1502.5	HT(BTU/LBM)	370.13	RS(FT)	0.0175	RUN NO.	12								

CHAN	T/C	PW/PT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.912)	CHAN	T/C	PW/PT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.912)
1	4	C.360	C.2844	0.3715	0.3371	0.3298	39	181	C.354	0.1372	0.1788	0.1624	0.1589
2	7	0.358	0.1710	C.2232	0.2026	0.1982	40	182	0.354	0.2184	0.2845	0.2584	0.2529
3	12	C.356	0.1031	0.1344	0.1221	0.1194	41	183	0.354	0.2173	0.2830	0.2571	0.2516
4	17	C.355	0.0771	0.1005	0.0913	0.0893	42	184	0.354	0.1806	0.2352	0.2137	0.2091
5	22	C.354	C.0712	0.C927	0.0842	C.0824	43	186	C.353	0.1449	0.1886	0.1714	C.1677
6	25	0.354	0.0658	0.0857	0.C779	0.0762	44	187	0.354	0.1255	0.1634	0.1485	0.1453
7	27	0.355	0.0673	C.0877	0.C797	0.0780	45	192	0.354	0.2973	0.3873	0.3518	0.3442
8	29	C.355	0.C658	0.0857	0.0778	0.0761	46	193	0.354	0.1508	0.1964	0.1784	0.1746
9	30	C.354	C.0652	0.0849	0.0771	0.0755	47	194	C.386	0.0000	0.C000	0.0000	C.CC00
10	32	0.354	C.0679	0.0884	0.C8C3	0.0786	48	196	0.355	0.1475	0.1922	0.1746	C.1708
11	34	0.355	0.1065	0.1387	0.1260	0.1233	49	197	0.357	0.2813	0.3668	0.3330	0.3258
12	38	C.356	0.1879	0.2450	0.2224	C.2176	50	198	0.357	C.3688	0.4809	0.4367	0.4272
13	42	C.355	C.1991	0.2594	0.2356	0.2305	51	199	0.357	0.3816	0.4976	0.4518	0.4421
14	46	0.356	0.2043	C.2663	0.2418	0.2366	52	202	0.357	0.1164	0.1545	0.1402	C.1372
15	50	C.356	0.1613	0.2102	0.1909	0.1868	53	203	0.358	0.1168	0.1550	0.1407	0.1377
16	54	C.355	0.1298	0.1692	0.1536	C.1503	54	204	0.356	0.1265	0.1677	0.1522	0.1489
17	59	C.356	C.1035	0.1351	0.1226	0.1200	55	205	0.360	0.2497	0.3261	0.2959	C.2895
18	62	0.353	C.0976	0.CC49	0.CC46	0.0048	56	206	0.359	0.2040	0.2664	0.2417	0.2365
19	64	C.353	0.0062	C.0081	C.0074	0.0072	57	207	0.356	0.1785	0.2324	0.2111	0.2065
20	65	0.353	C.0167	0.0217	0.0197	C.0193	58	208	0.359	0.1411	0.1843	0.1672	0.1636
21	66	0.353	C.0467	0.0608	0.0552	0.0540	59	211	C.357	0.2797	0.3648	0.3312	C.3240
22	67	0.353	C.0597	C.C777	0.C706	0.0691	60	225	0.357	0.0181	0.0236	0.0214	C.0209
23	68	C.353	0.0490	C.0638	0.C579	0.0567	61	226	0.352	0.0061	0.0080	0.0072	0.0071
24	69	0.352	C.CC72	0.0094	0.0086	C.0084	62	227	0.351	0.0067	0.C113	0.0103	0.0100
25	70	0.351	C.CC13	0.C017	0.0016	0.0015	63	228	0.354	0.0128	0.0166	0.0151	C.0148
26	71	0.351	C.0036	C.C046	0.C042	0.0041	64	229	0.355	0.0703	0.0916	0.0832	C.0814
27	72	0.351	0.0066	C.0086	0.C078	0.C076	65	230	0.352	0.0062	0.0081	0.0074	0.0072
28	74	0.352	C.CC75	0.0097	0.0088	C.0087	66	231	0.349	0.0056	0.C073	0.0066	0.0065
29	76	C.353	C.0089	0.0115	0.0105	C.0103	67	232	C.35C	0.0122	0.0159	0.0145	C.C142
30	122	0.351	C.0184	C.0239	0.C217	0.0213	68	234	0.353	0.0163	0.0238	0.0216	C.0212
31	129	C.351	0.0160	C.0208	0.C189	0.0185	69	235	0.356	0.0772	0.1006	0.0914	0.0894
32	130	C.353	C.CC78	0.0102	0.0093	C.0091	70	236	0.352	0.0044	0.C057	0.0052	0.0051
33	136	0.353	C.0435	0.0567	0.0515	C.0504	71	237	C.349	0.0170	0.0220	0.0200	C.C196
34	176	0.355	C.2218	0.2890	0.2625	0.2568	72	238	0.351	0.0121	0.0158	0.0143	C.0140
35	177	C.355	0.2104	0.2741	0.2490	0.2436	73	240	0.354	0.0164	0.0214	0.0194	0.0190
36	178	0.355	0.1337	0.1742	0.1583	0.1549	74	274	0.353	0.0000	0.CCCC	0.0000	0.0000
37	179	0.358	C.1784	0.2328	0.2113	0.2067	75	284	C.353	0.0000	0.0000	C.0000	C.CC00
38	180	0.356	C.1492	0.1945	0.1767	0.1729							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(FT-LBF/LBM-DEG R)
7.30	9.0258E 06	5.1775E 06	0.574	44.01	834.7	0.8673E 06	0.0353
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	2.7511E 06	5.1775E 06	1.882	646.98	1502.5	370.13	0.0175

TEST NO. 183
RUN NO. 12

CHAN	T/C	Tw(DEG K)	Tw(DEG R)	CH(W/CM2)	CH(BTU/FT2-SEC)	CS(W/CM2)	CS(BTU/FT2-SEC)	ST(0.900)	ST(0.912)	TIME(SEC)
1	4	306.8	555.8	16.075	14.165	56.527	49.808	7.269E-03	7.1115E-03	0.529
2	7	306.8	552.2	9.705	8.551	56.744	49.999	4.8047E-03	4.2750E-03	0.487
3	12	305.1	549.1	5.869	5.172	56.926	50.159	2.6331E-03	2.5763E-03	0.460
4	17	304.6	548.2	4.393	3.871	56.980	50.207	1.9660E-03	1.9261E-03	0.423
5	22	303.8	546.8	4.061	3.578	57.064	50.281	1.8164E-03	1.7778E-03	0.371
6	25	303.4	546.1	3.759	3.312	57.109	50.321	1.6802E-03	1.6441E-03	0.305
7	27	303.5	547.0	3.842	3.385	57.051	50.270	1.7193E-03	1.6822E-03	0.258
8	29	303.5	547.1	3.751	3.305	57.049	50.268	1.6786E-03	1.6425E-03	0.225
9	30	303.8	546.8	3.720	3.278	57.065	50.282	1.6643E-03	1.6285E-03	0.240
10	32	303.1	545.6	3.879	3.418	57.138	50.346	1.7325E-03	1.6956E-03	0.186
11	34	304.0	547.1	6.075	5.353	57.045	50.264	2.7187E-03	2.6602E-03	0.238
12	38	305.0	549.0	10.699	9.427	56.936	50.169	4.7987E-03	4.6952E-03	0.405
13	42	304.3	547.7	11.347	10.000	57.009	50.233	5.0828E-03	4.9733E-03	0.460
14	46	304.9	548.8	11.633	10.250	56.946	50.177	5.2165E-03	5.1040E-03	0.463
15	50	304.5	548.1	9.185	8.094	56.949	50.180	4.1187E-03	4.0299E-03	0.468
16	54	304.6	548.2	7.396	6.517	56.979	50.206	3.3144E-03	3.2429E-03	0.441
17	59	307.1	552.8	5.871	5.173	56.704	49.964	2.6453E-03	2.5880E-03	0.549
18	62	302.3	544.1	0.383	0.382	57.224	50.422	1.9312E-04	1.8898E-04	0.418
19	64	302.3	544.1	0.357	0.315	57.224	50.422	1.5929E-04	1.5587E-04	0.467
20	65	302.4	544.3	0.484	0.840	57.216	50.415	4.2539E-04	4.1626E-04	0.546
21	66	302.6	544.6	2.071	2.353	57.195	50.396	1.1917E-03	1.1661E-03	0.383
22	67	302.9	545.3	3.410	3.004	57.156	50.362	1.5227E-03	1.4900E-03	0.486
23	68	302.9	545.3	2.799	2.467	57.155	50.362	1.2501E-03	1.2232E-03	0.509
24	69	301.4	542.5	0.415	0.365	57.319	50.506	1.8450E-04	1.8055E-04	0.494
25	70	300.5	540.9	0.075	0.066	57.415	50.591	3.3481E-05	3.2765E-05	1.307
26	71	300.6	541.1	0.204	0.180	57.407	50.583	9.0661E-05	8.8722E-05	1.011
27	72	300.4	540.8	0.378	0.333	57.424	50.598	1.6789E-04	1.6430E-04	0.455
28	74	301.5	542.7	0.429	0.378	57.412	50.590	1.9096E-04	1.8687E-04	0.923
29	76	302.5	544.6	0.507	0.446	57.358	50.549	2.2602E-04	2.2117E-04	0.823
30	122	300.8	541.4	1.055	0.930	57.388	50.566	4.6899E-04	4.5896E-04	0.325
31	125	300.7	541.3	0.916	0.807	57.394	50.572	4.0709E-04	3.9838E-04	0.403
32	125	302.3	544.1	0.449	0.396	57.226	50.424	2.0017E-04	1.9587E-04	0.490
33	126	302.9	545.3	2.488	2.192	57.154	50.361	1.1110E-03	1.0871E-03	0.785
34	176	304.3	547.7	12.644	11.141	57.012	50.236	5.6023E-03	5.5403E-03	0.456
35	177	304.2	547.5	11.937	10.521	57.023	50.245	5.3715E-03	5.2558E-03	0.456
36	178	303.9	547.1	7.658	6.723	57.048	50.267	3.4149E-03	3.3410E-03	0.430
37	179	306.4	551.6	10.131	8.927	56.781	50.032	4.5581E-03	4.4535E-03	0.194
38	180	305.1	549.1	8.495	7.485	56.925	50.158	3.8111E-03	3.7288E-03	0.213
39	181	303.7	546.8	7.833	6.902	57.078	50.293	3.5033E-03	3.4279E-03	0.419
40	182	303.3	546.0	12.476	10.993	57.115	50.326	5.5796E-03	5.4559E-03	0.387
41	183	303.1	545.6	12.418	10.942	57.134	50.343	5.5476E-03	5.4284E-03	0.441
42	184	303.2	545.7	10.318	9.092	57.129	50.338	4.6103E-03	4.5112E-03	0.394
43	186	302.4	544.3	8.269	7.304	57.214	50.414	3.6975E-03	3.6179E-03	0.455
44	187	303.7	546.6	7.162	6.310	57.078	50.293	3.2031E-03	3.1342E-03	0.462
45	192	303.7	546.6	16.269	14.352	57.077	50.292	7.5848E-03	7.4265E-03	0.440
46	193	303.2	545.8	8.614	7.590	57.122	50.332	3.8494E-03	3.7667E-03	0.474
47	194	331.0	595.8	0.000	0.000	54.148	47.712	0.0000E-39	0.0000E-39	0.220
48	196	303.9	547.1	8.415	7.415	57.047	50.268	3.7659E-03	3.6848E-03	0.396
49	197	305.0	550.1	15.955	14.064	56.886	50.108	7.1834E-03	7.0287E-03	0.478
50	198	305.8	550.4	20.965	18.473	56.851	50.094	9.4192E-03	9.2156E-03	0.455
51	199	305.3	550.6	21.686	19.110	56.841	50.084	9.7463E-03	9.5356E-03	0.490
52	202	305.9	550.5	6.732	5.932	56.841	50.085	3.0251E-03	2.9597E-03	0.265
53	203	306.4	551.6	6.747	5.945	56.786	50.036	3.0356E-03	2.9699E-03	0.251
54	204	306.7	552.1	7.294	6.427	56.749	50.003	3.2837E-03	3.2126E-03	0.214
55	205	308.2	554.8	14.129	12.450	56.989	49.862	6.3816E-03	6.2430E-03	0.358
56	206	307.7	553.8	11.557	10.183	56.646	49.913	5.2137E-03	5.1006E-03	0.312
57	207	304.9	548.8	10.164	8.957	56.948	50.179	4.5534E-03	4.4552E-03	0.157
58	208	307.8	554.1	7.942	7.042	56.629	49.898	3.6067E-03	3.5284E-03	0.347
59	211	306.1	551.0	15.890	14.001	56.815	50.061	7.1442E-03	6.9896E-03	0.427
60	225	305.9	550.7	1.027	0.905	56.831	50.076	4.6163E-04	4.5165E-04	0.720
61	226	301.7	543.1	0.361	0.309	57.285	50.476	1.9617E-04	1.5282E-04	1.008
62	227	300.7	541.2	0.496	0.439	57.398	50.575	2.2149E-04	2.1671E-04	1.420
63	228	303.2	545.7	0.735	0.643	57.130	50.339	3.2615E-04	3.1914E-04	1.192
64	229	304.2	547.6	0.626	0.532	57.015	50.238	1.7949E-04	1.7562E-04	0.614
65	230	301.2	542.2	0.366	0.316	57.338	50.523	1.5946E-04	1.5599E-04	0.540
66	231	299.4	539.0	0.322	0.283	57.531	50.692	1.4255E-04	1.3951E-04	1.458
67	232	299.3	539.2	0.704	0.620	57.320	50.503	3.1205E-04	3.0537E-04	1.160
68	234	302.7	544.8	1.044	0.922	57.183	50.385	4.6701E-04	4.5699E-04	0.996
69	235	305.1	549.2	4.364	3.872	56.922	50.196	1.9713E-03	1.9288E-03	0.703
70	236	301.6	542.9	0.250	0.220	57.100	50.489	1.1134E-04	1.0900E-04	0.879
71	237	299.3	538.7	0.976	0.860	57.349	50.709	4.3230E-04	4.2308E-04	0.812
72	238	300.5	540.9	0.697	0.614	57.417	50.592	3.0964E-04	3.0302E-04	0.826
73	240	301.0	545.3	0.437	0.826	57.153	50.360	4.1860E-04	4.0960E-04	1.053
74	274	302.6	545.1	0.000	0.000	57.166	50.371	0.0000E-39	0.0000E-39	-2.876
75	286	302.2	544.0	0.000	0.000	57.234	50.431	0.0000E-39	0.0000E-39	-2.708

FREE-STREAM DENSITY-VELOCITY PRODUCT = 3.0318E-01 (SLUGS/FT2-SEC)

ORIGINAL PAGE IS
OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO.	183
7.30	1.1913E 07	6.8335E 06	0.574	59.18	843.5	0.8708E 06	0.0053	RUN NO.	13
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	3.6316E 06	6.8335E 06	1.882	869.98	1519.0	374.49	0.0175		

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.912)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.912)
1	4	0.355	0.2639	0.3700	0.3361	C. 48	39	181	0.352	0.2649	0.3447	0.3133	0.3066
2	7	0.353	0.1723	0.2242	0.2037	0.1 1	40	182	0.352	0.3891	0.5062	0.4600	0.4502
3	12	0.351	0.1030	0.1339	0.1217	0.1191	41	183	0.351	0.3088	0.4017	0.3651	0.3573
4	17	0.351	0.0764	0.0994	0.0904	0.0884	42	184	0.351	0.2406	0.3130	0.2845	0.2784
5	22	0.351	0.0717	0.0933	0.0848	0.0830	43	186	0.350	0.1724	0.2241	0.2037	0.1994
6	25	0.352	0.0693	0.0901	0.0819	0.0801	44	187	0.352	0.1485	0.1932	0.1756	0.1718
7	27	0.353	0.0807	0.1050	0.0954	0.0934	45	192	0.352	0.3616	0.4705	0.4276	0.4184
8	29	0.353	0.1085	0.1412	0.1283	0.1255	46	193	0.351	0.1538	0.2010	0.1818	0.1779
9	30	0.353	0.1173	0.1527	0.1388	0.1358	47	194	0.402	-0.0000	-0.0000	-0.0000	-0.0000
10	32	0.352	0.1784	0.2321	0.2109	0.2064	48	196	0.352	0.1515	0.1977	0.1797	0.1758
11	34	0.353	0.2240	0.2915	0.2649	0.2592	49	197	0.354	0.3603	0.4693	0.4263	0.4171
12	38	0.354	0.2368	0.3084	0.2801	0.2741	50	198	0.354	0.3826	0.4984	0.4527	0.4430
13	42	0.353	0.2200	0.2864	0.2602	0.2547	51	199	0.354	0.3631	0.4730	0.4297	0.4204
14	46	0.353	0.2222	0.2893	0.2629	0.2572	52	202	0.354	0.1387	0.1807	0.1641	0.1606
15	50	0.353	0.1739	0.2264	0.2057	0.2013	53	203	0.355	0.1631	0.2125	0.1930	0.1889
16	54	0.353	0.1402	0.1825	0.1658	0.1623	54	204	0.355	0.1872	0.2439	0.2215	0.2168
17	56	0.353	0.1025	0.1335	0.1213	0.1187	55	205	0.357	0.2664	0.3475	0.3155	0.3087
18	62	0.348	0.0076	0.0099	0.0090	0.0088	56	206	0.357	0.2165	0.2823	0.2563	0.2507
19	64	0.349	0.0061	0.0080	0.0073	0.0071	57	207	0.353	0.1980	0.2577	0.2342	0.2291
20	65	0.350	0.0181	0.0235	0.0214	0.0209	58	208	0.357	0.1428	0.1863	0.1691	0.1655
21	66	0.351	0.0479	0.0623	0.0566	0.0554	59	211	0.355	0.3313	0.4316	0.3920	0.3836
22	67	0.352	0.0607	0.0789	0.0717	0.0702	60	225	0.354	0.0157	0.0205	0.0186	0.0182
23	68	0.352	0.0490	0.0638	0.0580	0.0567	61	226	0.348	0.0065	0.0084	0.0077	0.0075
24	69	0.351	0.0063	0.0082	0.0075	0.0073	62	227	0.346	0.0082	0.0107	0.0097	0.0095
25	70	0.350	0.0020	0.0026	0.0024	0.0023	63	228	0.345	0.0106	0.0137	0.0125	0.0122
26	71	0.350	0.0058	0.0075	0.0068	0.0067	64	229	0.350	0.0732	0.0952	0.0866	0.0847
27	72	0.350	0.0067	0.0087	0.0079	0.0077	65	230	0.346	0.0061	0.0079	0.0072	0.0071
28	74	0.350	0.0067	0.0087	0.0079	0.0077	66	231	0.343	0.0049	0.0064	0.0058	0.0057
29	76	0.351	0.0088	0.0114	0.0104	0.0102	67	232	0.343	0.0116	0.0153	0.0139	0.0136
30	122	0.349	0.0160	0.0234	0.0213	0.0208	68	234	0.348	0.0165	0.0240	0.0219	0.0214
31	129	0.349	0.0154	0.0201	0.0183	0.0179	69	235	0.351	0.0743	0.0966	0.0878	0.0860
32	135	0.352	0.0097	0.0126	0.0115	0.0112	70	236	0.346	0.0031	0.0040	0.0036	0.0035
33	136	0.352	0.0376	0.0489	0.0445	0.0435	71	237	0.343	0.0132	0.0171	0.0155	0.0152
34	176	0.353	0.2923	0.3805	0.3457	0.3383	72	238	0.344	0.0111	0.0144	0.0131	0.0128
35	177	0.353	0.2460	0.3202	0.2909	0.2847	73	240	0.348	0.0143	0.0186	0.0169	0.0165
36	178	0.352	0.1474	0.1918	0.1743	0.1706	74	274	0.352	0.0000	0.0000	0.0000	0.0000
37	179	0.355	0.3615	0.4711	0.4279	0.4186	75	286	0.352	0.0000	0.0000	0.0000	0.0000
38	180	0.354	0.3571	0.4650	0.4225	0.4134							

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 13

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	
7.30	1.1913E 07	6.8335E 06	0.574	59.18	843.9	0.67085E 06	0.005	
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)	
7.30	3.631CE 06	6.8335E 06	1.882	869.98	1519.0	374.49	0.0175	

CHAN	T/C	Tw(DEG K)	Tw(DEG R)	C(W/CM2)	Q(BTU/FT2-SEC)	CS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.912)	TIME(SEC)
1	4	306.1	550.6	18.987	16.730	66.671	58.922	6.2974E-03	6.1621E-03	0.510
2	7	305.9	550.6	11.566	10.193	67.153	59.171	3.8168E-03	3.7369E-03	0.470
3	12	304.3	547.7	6.935	6.110	67.359	59.349	2.2815E-03	2.2327E-03	0.429
4	17	304.4	547.9	5.147	4.535	67.339	59.335	1.6937E-03	1.6574E-03	0.372
5	22	304.3	547.7	4.831	4.257	67.354	59.348	1.5895E-03	1.5555E-03	0.328
6	25	305.1	549.3	4.657	4.103	67.243	59.251	1.5349E-03	1.5020E-03	0.282
7	27	305.6	550.5	5.419	4.775	67.158	59.176	1.7689E-03	1.7505E-03	0.296
8	29	306.0	550.9	7.201	6.415	67.131	59.151	2.4044E-03	2.3527E-03	0.269
9	30	305.8	550.4	7.666	6.943	67.185	59.182	2.6008E-03	2.5450E-03	0.264
10	32	304.9	548.8	12.002	10.576	67.274	59.277	3.9541E-03	3.8694E-03	0.375
11	34	305.9	550.5	15.041	13.253	67.155	59.173	4.9651E-03	4.8585E-03	0.442
12	36	306.9	552.3	15.872	13.985	67.030	59.063	5.2504E-03	5.1375E-03	0.452
13	42	305.5	550.5	14.777	13.020	67.156	59.173	4.8778E-03	4.7732E-03	0.453
14	46	306.4	551.5	14.907	13.135	67.086	59.112	4.9266E-03	4.8209E-03	0.448
15	50	306.4	551.4	11.668	10.281	67.145	59.119	3.8557E-03	3.7728E-03	0.444
16	54	305.9	550.8	9.416	8.297	67.193	59.171	3.1084E-03	3.0417E-03	0.424
17	59	306.4	551.8	6.883	6.064	67.135	59.155	2.2727E-03	2.2240E-03	0.534
18	62	301.4	542.6	0.518	0.455	67.705	59.658	1.6987E-04	1.6528E-04	0.419
19	64	302.6	544.6	0.415	0.365	67.565	59.533	1.3598E-04	1.3308E-04	0.407
20	65	303.5	546.3	1.221	1.076	67.448	59.430	4.0102E-04	3.9246E-04	0.525
21	66	304.2	547.5	3.228	2.845	67.367	59.360	1.0619E-03	1.0392E-03	0.381
22	67	304.9	548.9	4.081	3.596	67.268	59.272	1.3446E-03	1.3158E-03	0.491
23	68	305.3	549.5	3.296	2.904	67.225	59.234	1.0866E-03	1.0633E-03	0.507
24	69	304.0	547.2	0.425	0.375	67.384	59.375	1.3991E-04	1.3691E-04	0.516
25	70	303.5	546.3	0.136	0.120	67.450	59.433	4.4782E-05	4.3825E-05	1.265
26	71	303.7	546.7	0.389	0.343	67.422	59.408	1.2798E-04	1.2525E-04	0.974
27	72	303.7	546.6	0.451	0.398	67.410	59.415	1.4831E-04	1.4514E-04	0.540
28	74	303.5	546.9	0.450	0.396	67.408	59.396	1.4779E-04	1.4463E-04	0.889
29	76	304.2	547.6	0.591	0.521	67.354	59.349	1.9460E-04	1.9044E-04	0.688
30	122	302.9	545.2	1.217	1.073	67.527	59.500	3.9938E-04	3.9086E-04	0.313
31	129	302.9	545.2	1.043	0.919	67.327	59.500	3.4221E-04	3.3491E-04	0.421
32	135	305.1	549.1	0.651	0.574	67.253	59.259	2.1465E-04	2.1005E-04	0.529
33	136	305.4	549.7	2.527	2.227	67.212	59.223	8.3336E-04	8.1549E-04	0.722
34	176	305.9	550.5	19.628	17.295	67.154	59.172	6.4795E-03	6.3404E-03	0.378
35	177	305.7	550.3	16.523	14.559	67.173	59.188	5.4527E-03	5.3350E-03	0.375
36	178	305.4	549.7	9.909	8.731	67.213	59.223	3.2677E-03	3.1977E-03	0.388
37	179	306.1	550.6	24.174	21.301	66.872	58.923	8.0184E-03	7.8455E-03	0.301
38	180	306.7	552.1	23.943	21.097	67.048	59.078	7.9186E-03	7.7478E-03	0.427
39	181	305.2	549.3	17.814	15.697	67.241	59.246	5.8720E-03	5.7462E-03	0.479
40	182	304.9	548.8	26.177	23.065	67.279	59.282	8.6231E-03	8.4384E-03	0.399
41	183	304.7	548.4	20.766	18.315	67.304	59.304	6.8443E-03	6.6978E-03	0
42	184	304.7	548.5	16.192	14.267	67.298	59.299	5.3320E-03	5.2179E-03	0
43	186	303.7	546.7	11.623	10.241	67.423	59.408	3.8195E-03	3.7379E-03	0.[illegible]
44	187	305.1	549.2	9.985	8.798	67.250	59.256	3.2907E-03	3.2202E-03	0.469
45	192	305.1	549.1	24.320	21.429	67.254	59.260	8.0148E-03	7.8431E-03	0.370
46	193	304.6	548.2	10.351	9.121	67.317	59.316	3.4076E-03	3.3347E-03	0.439
47	194	348.7	627.6	-0.000	-0.000	61.833	54.463	-0.0000E-39	-0.0000E-39	1.756
48	196	305.4	549.8	10.211	8.997	67.207	59.219	3.3677E-03	3.2955E-03	0.362
49	197	307.1	552.8	24.136	21.269	66.998	59.034	7.9892E-03	7.8173E-03	0.409
50	198	307.2	552.9	25.632	22.585	66.889	59.027	8.4851E-03	8.3025E-03	0.417
51	199	307.4	553.2	24.317	21.426	66.968	59.000	8.0525E-03	7.8792E-03	0.350
52	202	307.2	553.0	9.293	8.188	66.986	59.025	3.0763E-03	3.0102E-03	0.335
53	203	307.8	554.1	10.912	9.615	66.907	58.954	3.6172E-03	3.5393E-03	0.359
54	204	308.2	554.7	12.516	11.028	66.867	58.919	4.1517E-03	4.0622E-03	0.309
55	205	309.8	557.7	17.759	15.648	66.661	58.737	5.9116E-03	5.7839E-03	0.284
56	206	309.2	556.5	14.446	12.729	66.740	58.807	4.8024E-03	4.6987E-03	0.273
57	207	306.1	551.1	13.288	11.708	67.119	59.141	4.3890E-03	4.2947E-03	0.157
58	208	309.5	557.2	9.524	8.393	66.696	58.768	3.1690E-03	3.1005E-03	0.299
59	211	307.7	553.9	22.169	19.534	66.924	58.969	7.3465E-03	7.1885E-03	0.413
60	225	307.1	552.8	1.353	0.926	67.602	59.038	3.4866E-04	3.4116E-04	0.642
61	226	301.6	543.2	0.440	0.387	67.666	59.623	1.4389E-04	1.4083E-04	0.880
62	227	300.1	540.2	0.559	0.493	67.674	59.806	1.8236E-04	1.7849E-04	1.335
63	228	302.4	544.4	0.714	0.629	67.583	59.550	2.3378E-04	2.2859E-04	1.113
64	229	303.5	546.9	4.937	4.350	67.404	59.392	1.6227E-03	1.5881E-03	0.622
65	230	299.9	539.8	0.414	0.365	67.698	59.827	1.3511E-04	1.3224E-04	0.593
66	231	297.8	536.1	0.336	0.296	68.154	60.057	1.0915E-04	1.0685E-04	1.594
67	232	297.6	535.7	0.853	0.768	68.183	60.078	2.6061E-04	2.5511E-04	1.104
68	234	301.3	542.4	1.254	1.105	67.722	59.672	4.1004E-04	4.0132E-04	0.968
69	235	304.1	547.4	5.006	4.411	67.373	59.369	1.6466E-03	1.6114E-03	0.681
70	236	299.7	539.4	0.207	0.183	67.928	59.854	6.7560E-05	6.6129E-05	0.979
71	237	297.1	534.8	0.698	0.791	68.247	60.135	2.9112E-04	2.8499E-04	0.715
72	238	298.3	537.0	0.757	0.667	68.093	59.999	2.4584E-04	2.4065E-04	0.848
73	240	302.4	542.4	0.[illegible]	0.[illegible]	67.717	59.668	1.1[illegible]E-04	3.1010E-04	1.057
74	274	305.0	548.9	0.000	0.000	67.266	59.270	0.0000E-39	0.0000E-39	-2.614
75	286	305.0	549.0	0.000	0.000	67.282	59.287	0.0000E-39	0.0000E-39	-2.588

FREE-STREAM DENSITY-VELOCITY PRODUCT = 4.0483E-01 (SLUGS/FT2-SEC)

ORIGINAL PAGE IS
OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 14

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	KS(M,T,R)				
7.30	1.8[illegible]E 07	1.0875E 07	0.574	95.64	851.5	0.87525E 06	0.C052				
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTL/LBM)	RS(FT)				
7.30	5.7785E 06	1.0875E 07	1.882	1405.92	1532.8	378.10	0.0175				

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)
1	4	0.368	0.2830	0.2662	0.2412	0.2491	39	181	0.354	0.1697	0.2210	0.2008	0.2072
2	7	0.365	0.0991	0.1297	0.1176	0.1214	40	182	0.353	0.2697	0.3512	0.3191	0.3293
3	12	0.361	0.0511	0.0668	0.0606	0.0625	41	183	0.353	0.2102	0.2736	0.2486	0.2566
4	17	0.360	0.0359	0.0469	0.0425	0.0439	42	184	0.353	0.1494	0.1944	0.1767	0.1823
5	22	0.358	0.0371	0.0484	0.0439	0.0454	43	186	0.351	0.0897	0.1167	0.1061	0.1095
6	25	0.356	0.0483	0.0629	0.0572	0.0590	44	187	0.353	0.0720	0.0938	0.0852	0.0880
7	27	0.356	0.0566	0.0738	0.0670	0.0692	45	192	0.354	0.2128	0.2772	0.2518	0.2599
8	29	0.356	0.0650	0.0848	0.0770	0.0795	46	193	0.353	0.0936	0.1219	0.1107	0.1143
9	30	0.356	0.0674	0.0879	0.0798	0.0824	47	194	0.406	-0.0000	-0.0000	-0.0000	-0.0000
10	32	0.354	0.0721	0.0939	0.0853	0.0880	48	196	0.354	0.0780	0.1016	0.0923	0.0953
11	34	0.355	0.0759	0.0989	0.0898	0.0927	49	197	0.358	0.1416	0.1847	0.1677	0.1731
12	38	0.356	0.0874	0.1140	0.1035	0.1068	50	198	0.358	0.1150	0.1500	0.1362	0.1406
13	42	0.354	0.0916	0.1193	0.1084	0.1118	51	199	0.358	0.2305	0.3007	0.2730	0.2818
14	46	0.354	0.0983	0.1281	0.1163	0.1201	52	202	0.358	0.1421	0.1854	0.1683	0.1737
15	50	0.349	0.0798	0.1039	0.0944	0.0974	53	203	0.359	0.1285	0.1677	0.1522	0.1572
16	54	0.354	0.0589	0.0767	0.0697	0.0719	54	204	0.360	0.1291	0.1686	0.1530	0.1580
17	59	0.366	0.1985	0.2600	0.2357	0.2434	55	205	0.361	0.1357	0.1774	0.1609	0.1661
18	62	0.356	0.0241	0.0314	0.0285	0.0294	56	206	0.360	0.1939	0.2533	0.2299	0.2373
19	64	0.355	0.0060	0.0078	0.0071	0.0073	57	207	0.356	0.1292	0.1684	0.1529	0.1578
20	65	0.356	0.0163	0.0213	0.0193	0.0199	58	208	0.360	0.0780	0.1019	0.0924	0.0954
21	66	0.356	0.0983	0.1282	0.1164	0.1201	59	211	0.359	0.5338	0.6970	0.6326	0.6531
22	67	0.357	0.1800	0.2347	0.2131	0.2200	60	225	0.362	0.0533	0.0696	0.0632	0.0652
23	68	0.357	0.1823	0.2378	0.2159	0.2229	61	226	0.353	0.0038	0.0049	0.0045	0.0046
24	69	0.354	0.0373	0.0485	0.0441	0.0455	62	227	0.349	0.0004	0.0005	0.0005	0.0005
25	70	0.352	0.0043	0.0056	0.0051	0.0053	63	228	0.354	0.0012	0.0015	0.0014	0.0014
26	71	0.351	0.0021	0.0027	0.0025	0.0026	64	229	0.359	0.1565	0.2043	0.1854	0.1914
27	72	0.351	0.0026	0.0036	0.0033	0.0034	65	230	0.352	0.0205	0.0267	0.0243	0.0251
28	74	0.351	0.0108	0.0141	0.0128	0.0132	66	231	0.348	0.0007	0.0009	0.0008	0.0008
29	76	0.351	0.0158	0.0205	0.0186	0.0192	67	232	0.349	0.0012	0.0016	0.0015	0.0015
30	122	0.352	0.0136	0.0177	0.0161	0.0166	68	234	0.354	0.0019	0.0024	0.0022	0.0023
31	125	0.352	0.0109	0.0142	0.0129	0.0133	69	235	0.363	0.1279	0.1673	0.1517	0.1567
32	135	0.353	0.0065	0.0085	0.0077	0.0079	70	236	0.355	0.0158	0.0205	0.0186	0.0192
33	136	0.353	0.0116	0.0151	0.0137	0.0142	71	237	0.000	*******	*******	*******	*******
34	176	0.354	0.2229	0.2903	0.2637	0.2722	72	238	0.351	0.0036	0.0047	0.0043	0.0044
35	177	0.353	0.1691	0.2201	0.2000	0.2064	73	240	0.356	0.0074	0.0096	0.0087	0.0090
36	178	0.353	0.0765	0.0996	0.0905	0.0934	74	274	0.358	0.1597	0.2084	0.1892	0.1953
37	179	0.359	0.3019	0.3940	0.3576	0.3692	75	286	0.359	0.2250	0.2938	0.2666	0.2753
38	180	0.356	0.2382	0.3106	0.2821	0.2912							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, AMES RESEARCH CENTER

TEST NO. 183
RUN NO. 14

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULES/KG)	RSI(M-TBR)
7.30	1.69588E 07	1.06758 07	0.574	95.04	851.5	0.87925E 06	0.0154
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RSI(FT)
7.30	5.77853E 06	1.0875E 07	1.882	1405.32	1532.6	378.10	0.0175

CHAN	T/C	TW(DEG K)	TW(DEG R)	QIN(CM2)	QIN(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.883)	TIME(SEC)
1	4	322.3	580.2	17.065	15.037	84.066	74.073	3.5736E-03	3.6651E-03	0.493
2	7	316.2	574.6	8.378	7.382	84.059	74.508	1.7427E-03	1.7599E-03	0.449
3	12	316.0	568.8	4.146	3.629	85.365	74.957	8.9779E-04	9.2703E-04	0.416
4	17	315.0	567.0	3.058	2.695	85.233	75.102	6.3044E-04	6.5092E-04	0.388
5	22	313.1	563.6	3.172	2.795	85.224	75.359	6.5138E-04	6.7246E-04	0.381
6	25	311.3	560.4	4.144	1.651	85.015	75.614	3.4759E-04	3.7491E-04	0.415
7	27	312.0	561.5	4.251	4.274	85.710	75.522	9.9367E-04	1.0258E-03	0.413
8	29	311.8	561.2	5.575	4.912	85.737	75.546	1.1419E-03	1.1783E-03	0.416
9	32	311.4	560.6	5.784	5.097	85.792	75.595	1.1853E-03	1.2217E-03	0.435
10	32	307.9	557.9	6.203	5.469	86.031	75.805	1.2654E-03	1.3058E-03	0.445
11	34	310.9	559.6	6.920	6.745	85.884	75.676	1.5322E-03	1.5759E-03	0.434
12	38	311.4	560.5	7.502	6.610	85.798	75.600	1.5349E-03	1.5844E-03	0.426
13	42	309.7	557.5	7.653	6.946	86.054	75.838	1.6070E-03	1.6587E-03	0.439
14	46	309.9	557.8	8.463	7.453	86.044	75.816	1.7254E-03	1.7808E-03	0.438
15	50	309.4	556.9	8.870	8.053	86.116	75.879	1.8977E-03	1.9447E-03	0.443
16	54	309.8	557.6	5.066	4.467	86.059	75.830	1.0336E-03	1.0668E-03	0.419
17	55	320.1	576.1	16.761	14.768	84.424	74.389	3.4928E-03	3.6076E-03	0.490
18	62	311.9	561.4	2.064	1.819	85.719	75.540	4.2642E-04	4.3646E-04	0.441
19	64	311.1	560.0	0.513	0.452	85.846	75.642	1.0487E-04	1.0825E-04	0.392
20	65	311.4	560.5	1.400	1.234	85.799	75.600	2.8646E-04	2.9570E-04	0.420
21	66	311.8	561.3	8.429	7.427	85.735	75.544	1.7260E-03	1.7817E-03	0.366
22	67	312.5	562.4	15.411	13.580	85.631	75.452	3.1602E-03	3.2623E-03	0.438
23	68	312.5	562.6	15.609	13.754	85.620	75.443	3.2012E-03	3.3046E-03	0.417
24	69	309.7	557.5	3.207	2.826	86.068	75.837	6.5391E-04	6.7491E-04	0.491
25	70	308.0	554.3	0.374	0.330	86.345	76.081	7.6042E-05	7.8476E-05	0.380
26	71	307.5	553.6	0.182	0.160	86.411	76.140	3.6879E-05	3.8059E-05	0.407
27	72	306.9	552.5	0.239	0.210	86.511	76.227	4.8193E-05	4.9938E-05	0.387
28	74	307.1	552.8	0.937	0.826	86.478	76.199	1.9006E-04	1.9614E-04	0.469
29	76	307.7	553.8	1.362	1.200	86.393	76.124	2.7652E-04	2.8537E-04	0.495
30	122	308.1	554.5	1.172	1.033	86.228	76.066	2.4613E-04	2.4575E-04	0.339
31	129	308.0	554.4	0.942	0.830	86.357	76.074	1.9142E-04	1.9754E-04	0.272
32	135	308.9	556.1	0.561	0.494	86.192	75.946	1.1404E-04	1.1775E-04	0.179
33	136	309.0	556.2	1.000	0.881	86.185	75.940	2.0347E-04	2.0599E-04	0.292
34	176	309.9	557.7	19.180	16.901	86.046	75.818	3.9116E-03	4.0372E-03	0.397
35	177	309.4	557.0	14.558	12.828	86.111	75.875	2.9664E-03	3.0616E-03	0.394
36	178	309.3	556.7	6.590	5.806	86.140	75.901	1.3422E-03	1.3853E-03	0.382
37	179	314.2	565.5	25.761	22.699	85.362	75.216	5.3014E-03	5.4734E-03	0.372
38	180	311.8	561.3	20.425	17.997	85.731	75.540	4.1627E-03	4.3177E-03	0.378
39	181	309.5	557.1	14.615	12.878	86.101	75.867	2.9736E-03	3.0739E-03	0.443
40	182	309.3	556.7	23.234	20.472	86.135	75.897	4.7326E-03	4.8845E-03	0.366
41	183	308.9	556.0	18.118	15.965	86.195	75.949	3.6877E-03	3.8059E-03	0.356
42	184	308.5	556.0	12.875	11.345	86.200	75.954	2.6203E-03	2.7043E-03	0.316
43	186	307.6	553.6	7.754	6.832	86.409	76.138	1.5738E-03	1.6241E-03	0.362
44	187	309.3	556.8	6.205	5.468	86.130	75.893	1.2641E-03	1.3046E-03	0.360
45	192	310.2	558.4	18.301	16.126	85.588	75.767	3.7351E-03	3.8552E-03	0.364
46	193	309.3	556.7	8.063	7.105	86.138	75.899	1.6424E-03	1.6951E-03	0.427
47	194	355.3	639.6	-0.000	-0.000	78.860	69.487	-0.0000E-39	-0.0000E-39	0.892
48	196	310.0	558.1	6.713	5.915	86.017	75.792	1.3695E-03	1.4135E-03	0.334
49	197	313.4	564.1	12.101	10.663	85.481	75.320	2.4864E-03	2.5669E-03	0.368
50	198	313.1	563.5	9.638	8.647	85.534	75.367	2.0194E-03	2.0848E-03	0.477
51	199	313.0	563.5	19.717	17.374	85.541	75.373	4.0480E-03	4.1789E-03	0.324
52	202	313.4	564.2	12.145	10.701	85.475	75.319	2.4954E-03	2.5762E-03	0.254
53	203	314.3	565.7	10.965	9.662	85.344	75.199	2.2570E-03	2.3302E-03	0.257
54	204	314.7	566.5	11.010	9.701	85.271	75.135	2.2685E-03	2.3421E-03	0.206
55	205	316.4	569.4	11.537	10.165	85.015	74.910	2.3851E-03	2.4629E-03	0.314
56	206	315.4	567.8	16.516	14.553	85.162	75.039	3.4079E-03	3.5188E-03	0.375
57	207	311.6	560.8	11.079	9.762	85.773	75.578	2.2675E-03	2.3406E-03	0.113
58	208	315.4	567.7	6.642	5.852	85.170	75.047	1.3704E-03	1.4149E-03	0.280
59	211	314.5	566.1	45.539	40.126	85.305	75.165	9.3786E-03	9.6831E-03	0.357
60	225	317.1	570.7	4.523	3.985	84.901	74.809	9.3647E-04	9.6704E-04	0.577
61	226	306.9	556.0	0.320	0.287	86.193	75.952	6.6324E-05	6.8451E-05	0.335
62	227	305.2	549.4	0.033	0.029	86.778	76.463	6.7166E-06	6.9303E-06	1.719
63	228	310.2	558.4	0.100	0.088	85.988	75.767	2.0424E-05	2.1080E-05	0.832
64	229	314.5	566.1	13.349	11.761	85.305	75.165	2.7489E-03	2.8382E-03	0.535
65	230	316.3	569.3	1.771	1.560	86.260	76.007	3.6012E-04	3.7166E-04	0.555
66	231	304.3	547.8	0.061	0.053	86.920	76.588	1.2220E-05	1.2608E-05	1.085
67	232	305.3	549.5	0.109	0.096	86.766	76.455	2.1901E-05	2.2597E-05	0.744
68	234	310.1	558.2	0.160	0.141	86.407	75.784	3.2617E-05	3.3660E-05	0.654
69	235	317.6	571.6	10.847	9.559	84.822	74.740	2.2466E-03	2.3221E-03	0.618
70	236	310.6	559.0	1.354	1.193	85.932	75.718	2.7653E-04	2.8543E-04	0.505
71	237	0.0	0.0	********	********	**********	**********	1.4043E 02	1.4213E 02	0.000
72	238	307.0	552.7	0.311	0.274	86.400	76.134	6.3125E-05	6.5144E-05	0.470
73	240	311.4	560.5	0.233	0.557	85.803	75.604	1.2941E-04	1.3359E-04	0.692
74	274	313.6	564.4	13.046	12.125	85.454	75.247	2.6851E-03	2.8960E-03	0.143
75	275	314.2	565.5	14.210	10.727	85.360	75.214	3.9533E-03	4.0815E-03	0.080

FREE-STREAM DENSITY-VELOCITY PRODUCT = 6.5044E-01 (SLUGS/FT2-SEC)

1472804

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 15

MACH		RE/METER		REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)		RS(METER)								
7.30		1.6[illegible] C7		1.0816E C7	0.574	95.60	854.1	0.6B2C4E 06		C.0053								
MACH		RE/FT		REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)		RS(FT)								
7.30		5.7471E C6		1.0816E 07	1.882	1405.36	1537.3	379.30		0.0175								
CHAN	T/C	HW/HT	Q/CS	H/HS(0.850)	H/HS(0.900)	P/PS(0.902)	CHAN	T/C	HW/HT	Q/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)	CHAN	T/C	HW/HT	Q/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)
1	4	0.356	C.2658	0.3468	0.3143	0.3137	39	181	C.349	0.2554	0.3319	0.3018	C.3067							
2	7	C.354	C.1502	0.1956	C.1777	0.177C	4C	182	0.349	C.3663	0.5045	0.4587	0.4570							
3	12	0.352	C.0860	0.1119	0.1017	C.1014	41	183	C.348	0.3154	0.4097	0.3726	C.3713							
4	17	0.351	C.0638	C.C830	0.0754	0.0751	42	184	0.348	0.2377	0.3087	0.2807	0.2797							
5	22	0.351	C.0612	0.0795	C.0723	C.0720	43	186	0.347	0.1673	0.2171	0.1975	0.1968							
6	25	0.351	C.0690	0.0897	0.0815	0.0812	44	187	C.349	0.1422	0.1847	0.1680	0.1674							
7	27	C.352	0.0952	0.1239	0.1126	0.1122	45	192	0.349	0.3630	0.4710	0.4289	0.4274							
8	29	0.352	0.1644	0.2139	0.1944	0.1937	46	193	0.348	0.1588	0.2062	0.1875	0.1869							
9	30	0.351	C.1796	0.2337	0.2124	C.2116	47	194	0.4C7	-0.0000	-0.0000	-0.0000	-C.CCC0							
10	32	0.350	0.2153	0.2799	0.2545	0.2536	48	196	0.349	0.1454	0.1889	0.1718	0.1712							
11	34	0.351	0.2202	0.2865	0.2604	0.2594	49	197	0.352	0.3169	0.4124	0.3747	0.3734							
12	38	0.352	C.2298	0.2990	0.2717	C.2708	50	198	C.352	0.3364	0.4378	0.3978	C.3964							
13	42	0.351	0.2130	0.2770	0.2518	0.2509	51	199	0.353	0.3484	0.4534	0.4120	0.4105							
14	46	C.351	0.2186	0.2843	0.2584	C.2574	52	202	0.352	0.1300	0.1692	0.1538	0.1532							
15	50	0.351	C.1727	0.2246	0.2041	C.2034	53	203	0.353	0.1323	0.1722	0.1565	0.1559							
16	54	0.350	0.1306	0.1698	0.1543	0.1538	54	204	C.354	0.1469	0.1939	0.1761	C.1755							
17	59	0.354	0.1324	0.1725	0.1567	0.1561	55	205	0.356	0.3030	0.3950	0.3587	0.3574							
18	62	0.347	C.0112	0.0146	0.0133	0.0132	56	206	0.355	0.2341	0.3050	0.2770	C.2760							
19	64	C.348	C.0052	C.C068	0.0062	0.0061	57	207	C.350	0.1764	0.2293	0.2085	0.2077							
20	65	0.349	C.0120	0.0156	C.0142	0.0141	58	208	0.355	0.1240	0.1616	0.1468	0.1462							
21	66	0.350	C.C406	0.0528	0.0480	C.0478	59	211	C.353	0.4293	0.5569	0.5078	0.5060							
22	67	C.351	0.0497	C.0646	0.0587	0.0585	60	225	0.354	0.0269	0.0377	0.0342	0.0341							
23	68	C.351	C.0396	0.0515	0.0469	C.0467	61	226	0.346	0.0048	C.C062	0.0057	0.0057							
24	69	0.349	C.C084	C.C110	0.C1CC	0.0099	62	227	C.344	0.0029	0.0035	0.0034	C.0034							
25	70	0.348	0.0015	C.0020	C.0018	0.0018	63	228	0.353	-0.0000	-C.0000	-0.0000	-0.0000							
26	71	0.349	C.CC29	0.0037	0.0034	0.CC34	64	229	0.350	0.0945	0.1226	0.1116	0.1112							
27	72	0.349	C.0119	0.0155	0.0141	C.0140	65	230	0.344	0.0092	0.C119	0.0109	C.C108							
28	74	0.349	C.CC66	C.0086	C.CC78	0.0078	66	231	0.341	0.0035	0.0046	0.0042	0.0042							
29	76	0.349	C.CC76	0.0099	0.CC90	0.CC89	67	232	0.342	C.0045	0.C059	0.0054	0.0053							
30	122	0.347	C.C210	0.0272	0.0248	C.0247	68	234	0.347	0.0075	0.C098	0.0089	C.C089							
31	129	0.347	C.0171	C.C222	0.C202	0.C201	69	235	0.351	0.1045	0.1359	0.1235	0.1231							
32	135	C.350	0.0233	C.0303	0.C276	0.0275	70	236	0.344	0.0101	0.0131	0.0120	0.0119							
33	136	0.350	C.C205	0.0267	0.0243	C.C242	71	237	0.346	0.0000	0.C000	0.CCC0	0.CCC0							
34	176	0.350	C.3132	0.4071	0.3701	0.3686	72	238	C.343	0.0087	0.0113	C.0103	C.0102							
35	177	C.350	0.2569	0.2339	0.3035	0.3024	73	240	0.347	0.0169	0.0220	0.0200	0.0199							
36	178	0.349	C.1401	0.1821	0.1654	C.1650	74	274	0.353	0.1042	C.1356	0.1232	0.1228							
37	179	0.354	C.4401	0.5731	0.5206	C.5187	75	286	C.354	0.1452	0.1943	0.1765	C.1759							
38	180	0.352	0.3673	C.4778	0.4342	0.4327														

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 15

MACH 7.30	RE/METER 1.86556 07	REL 1.6816E 07	LENGTH(METER) 0.574	PT(ATM) 95.00	TT(DEG K) 854.1	RHO(KG/CU M) 0.662046 00	KS(M**2) 0.00 02	
MACH 7.30	RE/FT 5.74716 06	REL 1.0616E 07	LENGTH(FT) 1.882	PT(PSI) 1405.36	TT(DEG R) 1537.3	MU(LB/LBM) 379.30	RS(FT) 0.0175	

CHAN	T/C	TW(DEG K)	TW(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	CS(BTU/FT2-SEC)	ST(0.4CO)	ST(0.902)	TIME(SEC)
1	4	314.1	565.3	22.807	20.096	85.792	75.595	4.6784E-03	4.6617E-03	0.468
2	7	311.3	560.3	12.950	11.411	86.235	75.988	2.6410E-03	2.6214E-03	0.421
3	12	306.9	556.0	7.452	6.567	86.415	76.320	1.5124E-03	1.5069E-03	0.348
4	17	306.7	555.6	5.526	4.869	86.647	76.348	1.1210E-03	1.1169E-03	0.293
5	22	307.9	554.3	5.306	4.676	86.776	76.45[illegible]	1.0708E-03	1.0708E-03	0.173
6	25	308.1	554.5	5.582	5.271	86.747	76.436	1.2115E-03	1.2075E-03	0.144
7	27	306.9	556.0	8.247	7.267	86.614	76.316	1.6737E-03	1.6676E-03	0.203
8	29	306.6	556.1	14.239	12.547	86.608	76.314	2.8849E-03	2.8794E-03	0.291
9	30	306.7	555.6	15.564	13.714	86.653	76.353	3.1570E-03	3.1455E-03	0.344
10	32	307.3	553.2	18.705	16.482	86.662	76.537	3.7837E-03	3.7700E-03	0.413
11	34	308.5	555.2	19.091	16.822	86.682	76.379	3.8709E-03	3.8568E-03	0.417
12	38	305.5	557.1	19.880	17.517	86.519	76.235	4.0395E-03	4.0248E-03	0.416
13	42	307.9	554.2	18.498	16.298	86.779	76.464	3.7439E-03	3.7303E-03	0.425
14	46	308.3	554.9	18.953	16.700	86.716	76.408	3.8412E-03	3.8272E-03	0.422
15	50	306.6	554.5	14.982	13.201	86.750	76.439	3.0350E-03	3.0240E-03	0.423
16	54	307.8	554.0	11.333	9.986	86.756	76.479	2.2962E-03	2.2862E-03	0.388
17	59	311.3	560.3	11.417	10.060	86.233	75.983	2.3287E-03	2.3202E-03	0.497
18	62	304.9	548.8	0.981	0.864	87.248	76.877	1.9747E-04	1.9676E-04	0.482
19	64	305.6	550.0	0.460	0.405	87.144	76.786	9.1504E-05	9.1174E-05	0.764
20	65	306.6	551.8	1.043	0.919	86.982	76.643	2.1063E-04	2.0987E-04	0.486
21	66	307.2	553.0	3.527	3.106	86.880	76.553	7.1326E-04	7.1067E-04	0.400
22	67	308.1	554.6	4.308	3.796	86.736	76.427	8.7291E-04	8.6974E-04	0.417
23	68	308.5	555.3	3.435	3.027	86.681	76.377	6.9652E-04	6.9399E-04	0.368
24	69	306.4	551.6	0.734	0.647	87.006	76.664	1.4829E-04	1.4775E-04	0.573
25	70	305.7	550.3	0.132	0.116	87.117	76.762	2.6574E-05	2.6478E-05	1.403
26	71	306.1	551.0	0.250	0.220	87.057	76.709	5.0403E-05	5.0220E-05	1.204
27	72	306.2	551.1	1.036	0.915	87.045	76.699	2.0948E-04	2.0873E-04	0.546
28	74	306.2	551.1	0.577	0.508	87.047	76.700	1.1641E-04	1.1599E-04	0.644
29	76	306.6	551.9	0.660	0.581	86.979	76.640	1.3321E-04	1.3272E-04	0.629
30	122	304.6	548.3	1.831	1.614	87.294	76.918	3.6841E-04	3.6708E-04	0.397
31	129	304.6	548.2	1.493	1.316	87.300	76.923	3.0034E-04	2.9925E-04	0.345
32	135	307.2	552.9	2.028	1.787	86.868	76.560	4.1014E-04	4.0866E-04	0.321
33	136	307.3	553.2	1.784	1.572	86.866	76.541	3.6067E-04	3.5956E-04	0.503
34	176	307.4	553.3	27.198	23.965	86.850	76.527	5.5026E-03	5.4827E-03	0.347
35	177	307.1	552.8	22.320	19.667	86.896	76.567	4.5130E-03	4.4967E-03	0.351
36	178	306.6	551.9	12.190	10.741	86.981	76.642	2.4619E-03	2.4530E-03	0.349
37	179	310.6	559.2	37.995	33.479	86.338	76.075	7.7387E-03	7.7105E-03	0.337
38	180	308.7	555.7	31.822	28.040	86.644	76.345	6.4855E-03	6.4320E-03	0.334
39	181	309.4	557.9	22.217	19.576	86.977	76.639	4.4873E-03	4.4711E-03	0.435
40	182	306.3	551.4	33.788	29.772	87.025	76.680	6.8204E-03	6.7957E-03	0.317
41	183	306.1	550.9	27.461	24.197	87.066	76.717	5.5403E-03	5.5203E-03	0.309
42	184	306.0	550.9	20.652	18.233	87.068	76.718	4.1745E-03	4.1594E-03	0.267
43	186	304.5	548.1	14.605	12.869	87.311	76.933	2.9372E-03	2.9266E-03	0.342
44	187	306.3	551.3	12.374	10.903	87.032	76.687	2.4975E-03	2.4885E-03	0.338
45	192	306.6	551.9	31.576	27.823	86.977	76.639	6.3777E-03	6.3546E-03	0.331
46	193	305.9	550.6	13.827	12.183	87.164	76.741	2.7885E-03	2.7784E-03	0.416
47	194	357.5	643.6	-0.000	-0.000	78.926	69.546	-0.0000E-39	-0.0000E-39	0.553
48	196	306.9	552.4	12.639	11.137	86.937	76.603	2.5542E-03	2.5450E-03	0.327
49	197	309.4	556.8	27.423	24.163	86.542	76.256	5.5704E-03	5.5501E-03	0.436
50	198	309.5	557.1	29.104	25.645	86.520	76.236	5.9137E-03	5.8922E-03	0.330
51	199	309.7	557.4	30.130	26.549	86.488	76.208	6.1248E-03	6.1025E-03	0.341
52	202	309.3	556.8	11.253	9.915	86.545	76.261	2.2857E-03	2.2773E-03	0.230
53	203	310.1	558.1	11.432	10.073	86.427	76.153	2.3256E-03	2.3173E-03	0.278
54	204	310.6	559.0	12.857	11.329	86.350	76.086	2.6183E-03	2.6087E-03	0.261
55	205	312.6	562.7	26.066	22.968	86.027	75.801	5.3309E-03	5.3114E-03	0.237
56	206	311.8	561.3	20.167	17.770	86.151	75.911	4.1176E-03	4.1025E-03	0.184
57	207	307.8	554.0	15.308	13.488	86.792	76.475	3.0494E-03	3.0881E-03	0.088
58	208	311.8	561.3	10.684	9.414	86.150	75.910	2.1815E-03	2.1735E-03	0.247
59	211	310.1	558.2	37.165	32.695	86.424	76.152	7.5489E-03	7.5214E-03	0.317
60	229	310.6	559.5	2.497	2.200	86.309	76.050	5.0875E-04	5.0689E-04	0.721
61	226	304.1	547.4	0.422	0.372	87.275	76.969	8.4891E-05	8.4586E-05	0.968
62	227	301.9	543.4	0.254	0.224	87.427	77.300	5.0466E-05	5.0286E-05	1.482
63	228	310.3	558.5	-0.000	-0.000	86.399	76.129	-0.0000E-39	-0.0000E-39	1.702
64	233	307.1	552.8	8.209	7.234	86.895	76.566	1.6599E-03	1.6539E-03	0.608
65	230	302.4	544.3	0.807	0.711	87.652	77.233	1.6164E-04	1.6106E-04	0.833
66	231	299.5	539.0	0.313	0.276	88.112	77.639	6.2236E-05	6.2016E-05	1.535
67	232	299.9	539.9	0.400	0.353	88.040	77.575	7.9759E-05	7.9474E-05	1.314
68	234	304.6	548.3	0.659	0.581	87.293	76.917	1.3256E-04	1.3208E-04	0.961
69	235	307.9	554.3	9.649	7.990	86.767	76.454	1.8367E-03	1.8300E-03	0.677
70	236	302.4	544.4	0.884	0.783	87.639	77.222	1.7790E-04	1.7726E-04	0.799
71	237	33[illegible].7	600.7	0.000	0.000	81.891	72.157	0.0000E-39	0.0000E-39	1.247
72	238	301.3	542.4	0.764	0.673	87.816	77.378	1.5270E-04	1.5216E-04	0.588
73	240	305.1	549.2	1.473	1.300	87.210	76.849	2.9708E-04	2.9601E-04	0.761
74	274	310.0	558.0	9.004	7.933	86.440	76.165	1.8314E-03	1.8247E-03	0.267
75	266	310.6	559.1	12.883	11.352	86.342	76.079	2.6238E-03	2.6142E-03	0.147

PRE-STREAM DENSITY-VELOCITY PRODUCT = 6.4694E-01 (SLUGS/FT2-SEC)

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OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 16

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	1.8816E 07	1.0754E 07	0.574	95.77	855.9	0.88412E 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTL/LBM)	RS(FT)
7.30	5.7352E 06	1.0794E 07	1.882	1407.77	1540.7	380.19	0.0175

CHAN	T/C	HH/HT	C/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.912)
1	4	0.359	0.2876	0.3755	0.3408	0.3334
2	7	0.357	C.1754	0.2286	0.2077	0.2032
3	12	C.354	C.1053	0.1372	0.1246	0.1220
4	17	0.353	C.0781	0.1017	0.0924	0.0904
5	22	0.352	0.0730	0.0950	0.0863	0.0845
6	25	0.352	0.1614	0.2100	0.1906	0.1867
7	27	0.352	0.2871	0.3736	0.3395	0.3322
8	29	0.352	0.2930	0.3813	0.3465	0.3391
9	30	0.352	0.2734	0.3557	0.3233	0.3163
10	32	0.350	0.2669	0.3470	0.3155	0.3087
11	34	0.352	C.2630	0.3421	0.3109	C.3043
12	38	0.353	0.2777	0.3614	0.3284	0.3214
13	42	0.351	0.2621	0.3409	0.3099	0.3033
14	46	0.351	C.2684	0.3492	0.3173	C.3105
15	50	0.351	C.2140	0.2784	0.2530	0.2476
16	54	0.350	0.1494	0.2202	0.2002	0.1959
17	59	C.356	0.1031	0.1344	0.1221	0.1194
18	62	0.351	C.0069	0.0090	0.0082	C.0080
19	64	0.351	C.0054	0.0070	0.0064	C.0062
20	65	0.352	C.0204	0.0266	0.0242	0.0237
21	66	C.352	0.0505	0.0657	0.0597	0.0584
22	67	0.353	0.0735	0.0957	0.0870	C.0851
23	68	0.353	C.0544	0.0709	0.0644	0.0630
24	69	0.351	C.0057	C.0074	0.0068	0.0066
25	70	C.350	0.0014	C.0019	0.0017	0.0017
26	71	0.350	0.0069	0.0090	0.0082	C.0080
27	72	0.350	C.0065	0.0085	0.0077	0.0076
28	74	0.350	0.0056	C.0073	0.0066	0.0065
29	76	0.351	0.0103	0.0134	0.0122	0.0119
30	122	0.349	0.0237	0.0308	0.0280	C.0274
31	129	0.345	C.0168	0.0218	0.0198	C.0194
32	135	0.352	C.0347	0.0452	0.0411	0.0402
33	136	C.351	0.0372	0.0484	0.0440	0.0430
34	176	0.351	0.3469	0.4551	0.4136	0.4048
35	177	0.351	C.2948	0.3834	0.3485	0.3410
36	178	0.350	C.1761	0.2290	0.2082	0.2037
37	179	C.354	0.5202	0.6776	0.6155	0.6023
38	180	0.358	0.4337	0.5645	0.5129	0.5019

CHAN	T/C	HH/HT	C/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.912)
39	181	0.350	0.2911	0.3788	0.3441	0.3368
40	182	0.350	0.4293	0.5581	0.5074	0.4965
41	183	C.350	0.3463	0.4502	0.4093	C.4005
42	184	0.350	0.2727	0.3545	0.3223	0.3154
43	186	0.348	0.2001	0.2599	0.2363	0.2313
44	187	0.350	0.1750	0.2275	0.2068	0.2024
45	192	0.350	0.4078	0.5302	0.4820	0.4717
46	193	0.349	0.1758	0.2285	0.2077	0.2033
47	194	0.401	-0.0000	-0.0000	-0.0000	-0.0000
48	196	0.350	0.1770	0.2302	0.2092	0.2047
49	197	0.353	0.4483	0.5706	0.5185	0.5073
50	198	0.353	0.4305	0.5605	0.5093	0.4983
51	199	0.353	0.4086	0.5320	0.4834	0.4730
52	202	0.353	0.1971	0.2566	0.2332	0.2282
53	203	0.354	0.2081	0.2711	0.2463	C.2410
54	204	0.354	0.2262	0.2946	0.2676	0.2619
55	205	0.357	0.3040	0.3964	0.3600	0.3522
56	206	0.356	0.2507	0.3268	0.2967	0.2903
57	207	0.352	0.2198	0.2859	0.2599	C.2543
58	208	0.356	0.1654	0.2156	0.1958	0.1916
59	211	0.354	0.4379	0.5702	0.5180	0.5069
60	225	0.353	0.0180	0.0234	0.0212	0.0208
61	226	0.346	0.0068	0.0088	0.0080	C.C078
62	227	0.344	0.0068	0.0088	0.0080	0.0078
63	228	0.345	0.0000	0.0000	0.0000	0.0000
64	229	0.348	0.0660	0.0857	0.0780	0.0763
65	230	0.343	0.0033	0.0043	0.0039	0.0038
66	231	0.340	0.0068	0.0088	0.0080	0.0078
67	232	0.340	0.0129	0.0166	0.0152	0.0148
68	234	0.345	0.0196	0.0254	0.0231	0.0226
69	235	0.349	0.0794	0.1031	0.0938	0.0918
70	236	0.343	0.0022	0.0029	0.0026	C.0026
71	237	0.385	-0.0000	-0.0000	-0.0000	-0.0000
72	238	0.341	0.0121	0.0157	0.0143	0.0140
73	240	0.345	0.0143	0.0185	0.0168	0.0165
74	274	0.354	0.0000	0.0000	0.0000	0.0000
75	286	0.354	0.0000	0.0000	0.0000	0.0000

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIM.NAVY DATA ***

TEST NO. 183
RUN NO. 16

MACH	RE/METER	REL LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.33	1.8316E 07	1.0794E 07 0.574	55.77	855.5	0.88412E 06	0.0053
MACH	RE/FT	REL LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.33	5.7352E 06	1.0794E 07 1.882	1407.77	1540.7	380.19	0.0175

CHAN	T/C	Tw(DEG K)	Tw(DEG R)	q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.912)	TIM(SEC)
1	4	316.2	569.2	24.689	21.755	85.848	75.644	5.0666E-03	4.9566E-03	0.507
2	7	313.9	565.1	15.124	13.328	86.214	75.966	3.0980E-03	3.0219E-03	0.463
3	12	311.7	561.1	9.111	8.035	86.568	76.278	1.8537E-03	1.8139E-03	0.395
4	17	310.9	559.6	6.769	5.969	86.698	76.392	1.3737E-03	1.3442E-03	0.312
5	22	309.5	557.9	6.340	5.586	86.648	76.525	1.2644E-03	1.2565E-03	0.262
6	25	309.7	557.4	14.022	12.355	86.890	76.562	2.8283E-03	2.7775E-03	0.310
7	27	310.2	558.4	24.919	21.957	86.803	76.486	5.0500E-03	4.9417E-03	0.464
8	29	310.2	558.4	25.432	22.409	86.802	76.484	5.1539E-03	5.0434E-03	0.463
9	30	309.7	557.5	23.753	20.930	86.884	76.557	4.8085E-03	4.7055E-03	0.476
10	32	308.5	555.3	23.239	20.477	87.074	76.724	4.6729E-03	4.5926E-03	0.466
11	34	309.5	557.1	22.858	20.141	86.921	76.589	4.6252E-03	4.5262E-03	0.457
12	38	310.4	558.7	24.096	21.232	86.776	76.461	4.8869E-03	4.7802E-03	0.459
13	42	308.9	556.0	22.610	20.099	87.011	76.669	4.6100E-03	4.5114E-03	0.463
14	46	309.4	556.9	23.336	20.562	86.939	76.605	4.7206E-03	4.6196E-03	0.462
15	50	309.2	556.6	18.610	16.398	86.962	76.625	3.7836E-03	3.6831E-03	0.463
16	54	308.3	555.0	14.753	12.999	87.101	76.748	2.9781E-03	2.9145E-03	0.434
17	56	313.0	564.4	8.694	7.837	86.273	76.018	1.8150E-03	1.7758E-03	0.436
18	62	308.6	555.5	8.601	8.524	87.059	76.711	1.2136E-04	1.1876E-04	0.383
19	64	309.0	556.3	8.469	8.413	86.991	76.651	9.4861E-05	9.2837E-05	0.417
20	65	309.5	557.1	1.777	1.566	86.915	76.584	3.5966E-04	3.5196E-04	0.943
21	66	309.9	557.9	4.386	3.865	86.846	76.523	8.8838E-04	8.6914E-04	0.366
22	67	310.6	559.0	6.380	5.621	86.747	76.436	1.2936E-03	1.2661E-03	0.937
23	68	310.8	559.4	4.719	4.158	86.712	76.405	9.5751E-04	9.3695E-04	0.516
24	69	308.9	556.0	0.498	0.439	87.016	76.673	1.0067E-04	9.8518E-05	0.433
25	70	308.1	554.7	0.126	0.111	87.133	76.776	2.5392E-05	2.4850E-05	1.090
26	71	308.2	554.8	0.603	0.531	87.122	76.766	1.2173E-04	1.1913E-04	0.838
27	72	308.2	554.7	0.569	0.501	87.128	76.772	1.1482E-04	1.1237E-04	0.423
28	74	308.2	554.8	0.488	0.430	87.121	76.765	9.8390E-05	9.6289E-05	0.945
29	76	308.8	555.8	0.897	0.791	87.035	76.689	1.8131E-04	1.7744E-04	0.621
30	122	307.3	553.2	2.067	1.821	87.261	76.888	4.1644E-04	4.0756E-04	0.427
31	125	307.3	553.2	1.465	1.291	87.264	76.891	2.9519E-04	2.8890E-04	0.412
32	135	309.4	557.0	3.020	2.661	86.926	76.593	6.1096E-04	5.9790E-04	0.602
33	136	309.2	556.6	3.234	2.849	86.963	76.626	6.5394E-04	6.3995E-04	0.614
34	176	309.1	556.3	30.435	26.817	86.988	76.648	6.1529E-03	6.0212E-03	0.387
35	177	308.7	555.6	25.463	22.612	87.046	76.700	5.1842E-03	5.0733E-03	0.385
36	178	308.1	554.5	15.350	13.525	87.146	76.788	3.0968E-03	3.0307E-03	0.390
37	179	312.0	561.6	45.603	39.654	86.519	76.235	9.1541E-03	8.9571E-03	0.394
38	180	310.3	558.6	37.639	33.169	86.786	76.470	7.6293E-03	7.4657E-03	0.399
39	181	308.5	555.3	25.351	22.338	87.077	76.726	5.1191E-03	5.0098E-03	0.478
40	182	308.2	554.8	37.400	32.955	87.121	76.766	7.5479E-03	7.3867E-03	0.375
41	183	307.9	554.2	30.192	26.604	87.175	76.813	6.0890E-03	5.9591E-03	0.354
42	184	307.8	554.1	23.778	20.952	87.185	76.822	4.7947E-03	4.6924E-03	0.324
43	186	306.3	551.3	17.462	15.413	87.426	77.034	3.5163E-03	3.4415E-03	0.384
44	187	307.8	554.0	15.257	13.444	87.188	76.824	3.0764E-03	3.0108E-03	0.380
45	192	306.3	555.0	35.523	31.300	87.106	76.752	7.1704E-03	7.0172E-03	0.369
46	193	307.7	553.8	15.331	13.506	87.211	76.844	3.0904E-03	3.0244E-03	0.443
47	194	352.7	634.8	-0.000	-0.000	80.089	70.569	-0.0000E-39	-0.0000E-39	0.229
48	196	308.5	555.2	15.415	13.582	87.084	76.733	3.1124E-03	3.0464E-03	0.369
49	197	310.5	559.6	38.003	33.486	86.781	76.395	7.7117E-03	7.5461E-03	0.370
50	198	310.9	559.6	37.325	32.888	87.043	76.389	7.5744E-03	7.4122E-03	0.394
51	199	311.1	560.1	35.409	31.200	87.057	76.356	7.1895E-03	7.0350E-03	0.338
52	202	310.9	559.6	17.890	15.058	86.700	76.395	3.4680E-03	3.3935E-03	0.334
53	203	311.5	560.8	18.024	15.882	86.593	76.300	3.6627E-03	3.5840E-03	0.310
54	204	312.0	561.7	19.566	17.240	86.514	76.231	3.9801E-03	3.8945E-03	0.248
55	205	314.1	565.3	26.203	23.088	86.195	75.949	5.3526E-03	5.2369E-03	0.255
56	206	313.4	564.2	21.630	19.059	86.292	76.035	4.4129E-03	4.3176E-03	0.261
57	207	309.5	557.0	19.105	16.834	86.923	76.591	3.8656E-03	3.7828E-03	0.209
58	208	313.4	564.2	14.273	12.577	86.291	76.034	2.9120E-03	2.8491E-03	0.325
59	211	311.3	560.3	37.936	33.427	86.634	76.336	7.7049E-03	7.5393E-03	0.444
60	225	310.6	559.0	1.557	1.372	86.746	76.435	3.1581E-04	3.0903E-04	0.700
61	226	304.3	547.7	0.595	0.524	87.747	77.317	1.1910E-04	1.1658E-04	0.879
62	227	302.5	544.4	0.567	0.526	88.036	77.572	1.1915E-04	1.1663E-04	1.614
63	228	303.9	546.9	0.000	0.000	87.810	77.377	0.0000E-39	0.0000E-39	0.431
64	229	306.5	551.7	5.769	5.084	87.395	77.006	1.1602E-03	1.1355E-03	0.612
65	230	301.9	543.4	0.289	0.255	88.130	77.655	5.7649E-05	5.6433E-05	1.010
66	231	299.3	539.2	0.595	0.528	88.561	77.981	1.1883E-04	1.1634E-04	1.475
67	232	299.1	538.4	1.139	1.004	88.372	78.044	2.2971E-04	2.2097E-04	1.075
68	234	303.5	546.2	1.722	1.517	87.877	77.431	3.4416E-04	3.3690E-04	0.934
69	235	306.9	552.4	6.931	6.107	87.331	76.951	1.3949E-03	1.3652E-03	0.692
70	236	301.5	542.8	0.197	0.173	88.183	77.701	3.9178E-05	3.8352E-05	1.424
71	237	336.7	609.7	-0.000	-0.000	82.287	72.506	-0.0000E-39	-0.0000E-39	0.964
72	238	299.6	539.7	1.070	0.943	88.456	77.942	2.1433E-04	2.0787E-04	0.886
73	240	303.6	546.4	1.252	1.103	87.861	77.416	2.5931E-04	2.4501E-04	1.155
74	274	311.7	561.3	0.000	0.000	86.543	76.256	0.0000E-39	0.0000E-39	-4.215
75	286	311.4	561.3	0.000	0.000	86.543	76.256	0.0000E-39	0.0000E-39	-3.323

FREE-STREAM DENSITY-VELOCITY PRODUCT = 6.4912E-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO. 183
7.30	3.5583E C6	2.0412E 06	0.574	10.01	795.6	0.81811E 06	0.0053	RUN NO. 17
MACH	RE/FT	REL LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)	
7.30	1.0846E C6	2.0412E C6	1.882	235.28	1432.5	351.81	0.0175

CHAN	T/C	RH/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)	CHAN	T/C	RH/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)
1	4	0.370	0.1535	0.2540	0.2300	0.2376	39	181	0.365	0.0656	0.0862	0.0781	0.0807
2	7	0.368	0.0987	0.1295	0.1173	0.1212	40	182	0.365	0.0695	0.1171	0.1062	0.1097
3	12	0.367	0.0521	0.0682	0.0618	0.0639	41	183	0.364	0.0724	0.0948	0.0860	0.0888
4	17	0.367	0.0360	0.0472	0.0428	0.0442	42	184	0.364	0.0559	0.0731	0.0663	0.0685
5	22	0.366	0.0305	0.0400	0.0362	0.0374	43	186	0.364	0.0610	0.0796	0.0724	0.0747
6	25	0.366	0.0278	0.0364	0.0330	0.0341	44	187	0.365	0.0643	0.0842	0.0764	0.0789
7	27	0.366	0.0283	0.0371	0.0336	0.0347	45	192	0.365	0.0983	0.1287	0.1166	0.1205
8	29	0.366	0.0259	0.0339	0.0307	0.0317	46	193	0.364	0.0400	0.0523	0.0474	0.0490
9	30	0.366	0.0257	0.0337	0.0306	0.0316	47	194	0.439	-0.0000	-0.0000	-0.0000	-0.0000
10	32	0.366	0.0245	0.0321	0.0291	0.0300	48	196	0.365	0.0515	0.0675	0.0612	0.0632
11	34	0.366	0.0225	0.0295	0.0267	0.0276	49	197	0.368	0.1342	0.1760	0.1594	0.1647
12	38	0.366	0.0220	0.0288	0.0261	0.0270	50	198	0.367	0.0588	0.0771	0.0699	0.0722
13	42	0.365	0.0202	0.0264	0.0240	0.0248	51	199	0.367	0.0665	0.0872	0.0790	0.0816
14	46	0.366	0.0154	0.0202	0.0183	0.0189	52	202	0.369	0.1700	0.2230	0.2020	0.2087
15	50	0.365	0.0110	0.0144	0.0131	0.0135	53	203	0.369	0.1574	0.2066	0.1871	0.1933
16	54	0.365	0.0068	0.0090	0.0081	0.0084	54	204	0.370	0.1554	0.2039	0.1847	0.1906
17	59	0.370	0.1973	0.2590	0.2345	0.2423	55	205	0.369	0.0710	0.0932	0.0844	0.0872
18	62	0.367	0.0289	0.0379	0.0343	0.0354	56	206	0.365	0.0475	0.0622	0.0564	0.0583
19	64	0.367	0.0073	0.0096	0.0087	0.0090	57	207	0.366	0.0315	0.0412	0.0374	0.0386
20	65	0.367	0.0131	0.0171	0.0155	0.0160	58	208	0.369	0.0401	0.0525	0.0548	0.0566
21	66	0.367	0.0481	0.0630	0.0571	0.0590	59	211	0.364	0.3723	0.4884	0.4424	0.4570
22	67	0.367	0.1029	0.1349	0.1222	0.1263	60	225	0.369	0.0796	0.1045	0.0946	0.0978
23	68	0.367	0.1193	0.1564	0.1416	0.1464	61	226	0.365	0.0083	0.0109	0.0099	0.0102
24	69	0.366	0.0336	0.0440	0.0399	0.0412	62	227	0.363	0.0015	0.0019	0.0018	0.0018
25	70	0.365	0.0046	0.0060	0.0054	0.0056	63	228	0.000	*******	*******	*******	*******
26	71	0.365	0.0025	0.0033	0.0030	0.0031	64	229	0.367	0.1327	0.1739	0.1576	0.1628
27	72	0.365	0.0034	0.0045	0.0041	0.0042	65	230	0.364	0.0293	0.0383	0.0347	0.0359
28	74	0.365	0.0150	0.0196	0.0177	0.0183	66	231	0.362	0.0016	0.0021	0.0019	0.0020
29	76	0.364	0.0131	0.0172	0.0156	0.0161	67	232	0.362	0.0013	0.0018	0.0016	0.0016
30	122	0.365	0.0169	0.0221	0.0200	0.0207	68	234	0.364	0.0043	0.0056	0.0051	0.0052
31	129	0.365	0.0147	0.0192	0.0174	0.0180	69	235	0.368	0.1338	0.1754	0.1589	0.1642
32	135	0.365	0.0091	0.0119	0.0108	0.0111	70	236	0.364	0.0195	0.0255	0.0231	0.0239
33	136	0.366	0.0125	0.0163	0.0148	0.0153	71	237	0.416	-0.0000	-0.0000	-0.0000	-0.0000
34	176	0.365	0.0617	0.0808	0.0733	0.0757	72	238	0.363	0.0030	0.0040	0.0036	0.0037
35	177	0.365	0.0488	0.0639	0.0579	0.0598	73	240	0.365	0.0078	0.0102	0.0093	0.0096
36	178	0.365	0.0627	0.0821	0.0744	0.0769	74	274	0.365	0.2404	0.3147	0.2853	0.2947
37	179	0.368	0.1128	0.1480	0.1341	0.1385	75	286	0.365	0.1832	0.2398	0.2174	0.2246
38	180	0.366	0.0807	0.1057	0.0958	0.0990							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	REYNOLDS NUMBER/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO.	183
7.30	3.5EE3E C6	2.0412E 06	0.574	16.01	755.6	0.1161IE 06	0.0059	RUN NO.	17
MACH	REYNOLDS NUMBER/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	1.0646E C6	2.0412E 06	1.882	235.28	1432.5	351.81	0.0175		

CHAN	T/C	Tw(DEG K)	Tw(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	qS(W/CM2)	qS(BTU/FT2-SEC)	ST(0.95)	ST(0.85)	TIME(SEC)
1	4	301.3	542.3	6.164	5.441	31.651	28.065	7.4657E-03	8.2296E-03	0.503
2	7	299.0	536.7	3.154	2.779	31.944	28.147	4.0824E-03	4.1905E-03	0.461
3	12	299.0	538.2	1.666	1.468	32.000	28.196	2.4136E-03	2.4124E-03	0.442
4	17	298.6	537.5	1.154	1.017	32.024	28.216	1.4027E-03	1.5315E-03	0.452
5	22	298.2	536.8	0.978	0.861	32.048	28.238	1.2547E-03	1.2960E-03	0.421
6	25	298.1	536.6	0.891	0.785	32.058	28.247	1.1431E-03	1.1807E-03	0.452
7	27	298.4	537.1	0.907	0.799	32.037	28.229	1.1648E-03	1.2026E-03	0.414
8	29	298.4	537.0	0.826	0.730	32.040	28.232	1.0632E-03	1.0982E-03	0.382
9	30	298.4	537.1	0.825	0.727	32.040	28.231	1.0585E-03	1.0934E-03	0.401
10	32	297.9	536.3	0.786	0.692	32.066	28.256	1.0076E-03	1.0407E-03	0.402
11	34	298.1	536.5	0.722	0.636	32.058	28.248	9.2583E-04	9.5627E-04	0.354
12	36	298.3	537.0	0.705	0.621	32.043	28.235	9.0465E-04	9.3440E-04	0.303
13	42	297.7	535.9	0.648	0.571	32.081	28.268	8.3593E-04	8.6781E-04	0.322
14	46	297.8	536.0	0.495	0.436	32.079	28.266	6.4432E-04	6.6516E-04	0.168
15	50	297.4	535.4	0.354	0.312	32.097	28.284	4.5288E-04	4.6774E-04	0.115
16	54	297.4	535.3	0.220	0.194	32.104	28.288	2.8163E-04	2.9084E-04	-0.086
17	59	301.2	542.2	0.265	0.238	31.854	28.068	8.1221E-03	8.3911E-03	0.501
18	62	298.6	537.5	0.925	0.815	32.025	28.218	1.1886E-03	1.2278E-03	0.460
19	64	298.8	537.8	0.234	0.206	32.013	28.207	3.0067E-04	3.1078E-04	0.368
20	65	298.6	537.5	0.419	0.369	32.023	28.217	5.3794E-04	5.5565E-04	0.504
21	66	298.7	537.7	1.540	1.357	32.015	28.212	1.9776E-03	2.0430E-03	0.417
22	67	299.1	538.3	3.293	2.902	31.995	28.192	4.2343E-03	4.3738E-03	0.477
23	68	299.2	538.6	3.817	3.363	31.984	28.182	4.9100E-03	5.0710E-03	0.433
24	69	298.4	537.1	1.077	0.949	32.039	28.230	1.3829E-03	1.4284E-03	0.496
25	70	297.6	535.6	0.146	0.129	32.092	28.277	1.8769E-04	1.9385E-04	0.420
26	71	297.5	535.6	0.080	0.070	32.093	28.278	1.0230E-04	1.0566E-04	0.429
27	72	297.2	534.9	0.111	0.098	32.118	28.300	1.4175E-04	1.4640E-04	0.417
28	74	297.0	534.6	0.480	0.423	32.127	28.308	6.1471E-04	6.3487E-04	0.522
29	76	296.9	534.4	0.422	0.371	32.136	28.316	5.3930E-04	5.5698E-04	0.542
30	122	297.6	535.8	0.541	0.476	32.086	28.272	6.9299E-04	7.1575E-04	0.430
31	125	297.6	535.6	0.471	0.415	32.091	28.277	6.0404E-04	6.2388E-04	0.392
32	135	297.5	535.6	0.291	0.256	32.092	28.278	3.7249E-04	3.8472E-04	0.426
33	136	298.0	536.4	0.400	0.352	32.065	28.254	5.1296E-04	5.2982E-04	0.390
34	176	297.6	535.6	1.981	1.745	32.091	28.277	2.5370E-03	2.6211E-03	0.211
35	177	297.0	534.5	1.568	1.382	32.131	28.312	2.0064E-03	2.0722E-03	0.198
36	178	297.3	535.2	2.013	1.774	32.106	28.290	2.5780E-03	2.6626E-03	0.127
37	179	299.6	539.4	3.606	3.178	31.957	28.159	4.6431E-03	4.7963E-03	0.481
38	180	298.5	537.3	2.564	2.277	32.031	28.224	3.3184E-03	3.4276E-03	0.479
39	181	297.4	535.3	2.113	1.862	32.101	28.285	2.7064E-03	2.7952E-03	0.507
40	182	296.5	534.5	2.875	2.533	32.131	28.312	3.6783E-03	3.7989E-03	0.387
41	183	296.7	534.1	2.328	2.052	32.145	28.324	2.9777E-03	3.0753E-03	0.341
42	184	296.6	533.8	1.796	1.583	32.156	28.334	2.2962E-03	2.3714E-03	0.258
43	186	296.3	533.4	1.962	1.729	32.171	28.347	2.5068E-03	2.5889E-03	0.199
44	187	297.2	535.0	2.066	1.821	32.115	28.297	2.6456E-03	2.7324E-03	0.242
45	192	297.2	535.0	3.156	2.781	[illegible]112	28.295	4.0404E-03	4.1730E-03	0.338
46	193	296.4	533.5	1.286	1.133	32.168	28.345	1.6429E-03	1.6967E-03	0.223
47	194	357.6	643.6	-0.000	-0.000	28.240	24.883	-0.0000E-39	-0.0000E-39	1.335
48	196	297.6	535.7	1.653	1.457	32.089	28.275	2.1186E-03	2.1881E-03	0.043
49	197	300.1	540.1	4.285	3.775	31.931	28.135	5.5216E-03	5.7040E-03	0.340
50	198	299.2	538.6	1.882	1.658	31.986	28.184	2.4202E-[illegible]	2.5000E-03	0.291
51	199	298.7	537.7	2.130	1.877	32.018	28.212	2.7368E-03	2.8269E-03	0.295
52	202	300.5	540.9	5.423	4.778	31.902	28.110	6.9958E-03	7.2271E-03	0.272
53	203	300.9	541.6	5.019	4.422	31.876	28.087	6.4802E-03	6.6946E-03	0.283
54	204	301.0	541.8	4.953	4.364	31.871	28.082	6.3969E-03	6.6087E-03	0.220
55	205	301.0	541.7	2.263	1.994	31.872	28.084	2.9225E-03	3.0192E-03	0.312
56	206	299.5	539.0	1.518	1.337	31.966	28.168	1.9534E-03	2.0178E-03	0.182
57	207	298.4	537.1	1.068	0.888	32.039	28.230	1.2939E-03	1.3364E-03	0.321
58	208	300.9	541.6	[illegible]470	1.295	31.876	28.087	1.8977E-03	1.9605E-03	0.210
59	211	300.2	540.4	11.684	10.472	31.918	28.124	1.5322E-02	1.5829E-02	0.383
60	225	300.7	541.2	2.539	2.238	31.890	28.100	3.2772E-03	3.3857E-03	0.548
61	226	297.4	535.3	0.267	0.235	32.103	28.287	3.4221E-04	3.5345E-04	0.537
62	227	295.6	532.0	0.048	0.042	32.220	28.390	6.1083E-05	6.3079E-05	0.416
63	228	0.0	0.0	********	********	**********	**********	8.6394E 02	8.8058E 02	0.000
64	229	299.2	538.6	4.244	3.739	31.983	28.181	5.4590E-03	5.6390E-03	0.515
65	230	296.8	534.2	0.540	1.828	32.142	28.321	1.2026E-03	1.2421E-03	0.477
66	231	294.9	530.9	0.052	0.046	32.260	28.426	6.6856E-05	6.9038E-05	0.260
67	232	294.9	530.9	0.043	0.038	32.261	28.426	5.5045E-05	5.6842E-05	0.069
68	234	296.5	534.4	0.137	0.121	32.134	28.314	1.7543E-04	1.8118E-04	0.489
69	235	299.6	539.3	4.276	3.768	31.958	28.159	5.5048E-03	5.6864E-03	0.630
70	236	296.1	534.4	0.628	0.552	32.135	28.316	8.0111E-04	8.2737E-04	0.482
71	237	336.7	609.7	-0.000	-0.000	29.444	25.945	-0.0000E-39	-0.0000E-39	1.779
72	238	295.7	532.4	0.096	0.086	32.209	28.381	1.2507E-04	1.2915E-04	0.359
73	240	297.1	534.8	0.251	0.221	32.119	28.301	3.2163E-04	3.3218E-04	0.719
74	274	297.4	535.4	7.710	6.789	32.101	28.285	9.8836E-03	1.0208E-02	0.195
75	266	297.2	534.9	5.884	5.184	32.117	28.300	7.5320E-03	7.7791E-03	0.218

FREE-STREAM DENSITY-VELOCITY PRODUCT = 1.1362E-01 (SLUGS/FT2-SEC)

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 18

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)				
7.30	6.4719E C6	3.7125E 06	C.574	31.68	636.5	0.66272E 06	0.0053				
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)				
7.30	1.9726E C6	3.7125E C6	1.882	465.63	1505.8	370.59	C.0175				

CHAN	T/C	HW/HT	C/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)	CHAN	T/C	HW/HT	C/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)
1	4	0.357	C.1928	0.2514	0.2282	0.2356	39	181	0.350	0.0602	C.C7C3	0.0712	0.0734
2	7	0.355	C.0971	0.1265	0.1145	0.1186	40	182	0.349	0.1316	0.1710	0.1555	0.1605
3	12	0.353	0.0496	C.0646	0.0587	0.0606	41	183	0.349	0.1023	0.1329	0.1209	0.1247
4	17	C.353	0.0326	0.0424	C.0385	0.0398	42	184	0.349	0.1030	0.1338	0.1216	0.1255
5	22	0.352	C.0272	0.0354	0.0322	C.0332	43	186	0.348	0.1714	0.2226	C.2024	0.2088
6	25	0.352	C.0238	0.0309	0.0281	0.0290	44	187	C.349	0.1528	0.1985	0.1805	0.1862
7	27	C.352	0.0244	C.0318	0.0289	0.0298	45	192	0.349	0.1924	0.2500	0.2273	0.2346
8	29	C.352	0.0226	0.0294	C.0267	0.0276	46	193	0.348	C.0858	0.1114	0.1013	0.1045
9	30	0.352	C.C219	0.0285	0.0259	0.0267	47	194	0.347	0.1044	0.1355	0.1233	0.1272
10	32	0.351	C.0199	0.0259	C.C235	0.0243	48	196	C.349	0.1642	0.2134	0.1941	C.2002
11	34	C.351	0.0180	0.0234	C.C213	0.0220	49	197	0.353	0.1324	0.1724	0.1566	0.1616
12	38	C.352	0.0168	0.0219	0.0199	0.C205	50	198	0.352	0.0566	0.0736	0.0669	0.0691
13	42	0.351	C.C145	0.0188	0.0171	0.0177	51	199	0.351	0.0651	0.0847	0.0770	0.0795
14	46	0.350	C.C096	C.0125	0.0114	0.0117	52	202	C.353	0.1463	0.1904	0.1730	0.1785
15	50	0.350	0.0068	0.0089	0.C081	0.0083	53	203	0.353	0.1332	0.1735	0.1576	0.1627
16	54	0.350	0.C042	0.0055	C.C050	0.C052	54	204	0.353	0.1325	0.1725	0.1568	0.1618
17	59	0.356	0.1959	0.2554	0.2319	0.2394	55	205	0.353	0.0660	0.0859	0.0780	C.C805
18	62	0.351	C.0253	C.0329	0.C299	0.0309	56	206	C.352	0.0520	0.0676	0.0615	0.0634
19	64	0.351	0.0065	0.0085	0.CC77	0.0080	57	207	0.350	0.0392	0.0509	0.0463	0.0478
20	65	0.351	0.0123	0.0160	0.0146	0.0151	58	208	0.353	0.0504	0.0656	0.0596	0.0615
21	66	0.351	C.0488	0.0634	0.0577	0.0595	59	211	C.353	0.3156	0.4109	0.3733	C.3853
22	67	0.352	0.0916	0.1192	0.1083	0.1118	60	225	0.355	0.0583	0.0759	0.0690	0.0712
23	68	C.352	0.0973	0.1266	0.1151	0.1188	61	226	0.350	0.0051	0.0066	0.0060	0.0062
24	69	0.351	0.0283	0.0367	0.0334	C.0345	62	227	0.347	0.0010	0.C012	0.0011	0.0012
25	70	0.350	C.0043	0.C056	0.0051	C.0053	63	228	0.CCC	*******	*******	*******	*******
26	71	0.350	C.0024	0.0032	0.CC29	0.0030	64	229	0.353	0.1020	0.1328	0.1207	0.1246
27	72	0.349	C.0024	C.0031	0.C028	0.0029	65	230	0.349	0.0153	0.0199	0.0181	0.0187
28	74	0.349	0.C1CO	0.0129	0.0116	C.0121	66	231	0.346	C.0011	0.C015	0.0013	0.0014
29	76	0.349	C.0108	0.0141	0.0128	C.0132	67	232	0.346	0.0014	0.0018	0.0016	C.C017
30	122	0.350	C.0134	C.C174	0.0158	0.0163	68	234	0.349	0.0059	0.0077	0.0070	C.0072
31	129	C.350	0.0116	C.0151	0.C137	0.0142	69	235	0.354	0.1218	0.1716	0.1559	0.1609
32	135	0.350	0.CC69	0.0089	0.0081	0.0084	70	236	0.350	0.0170	0.0221	0.0201	0.0207
33	136	0.350	C.C092	0.0120	0.0109	0.0112	71	237	0.394	-0.0000	-0.0000	-0.0000	-0.CC00
34	176	0.350	0.0858	0.1115	0.1014	0.1046	72	238	0.347	0.0023	0.0030	0.0028	0.0028
35	177	0.349	0.0707	0.0918	0.C835	0.0861	73	240	0.350	0.0085	0.0110	0.0100	0.0103
36	178	0.349	0.1113	0.1447	0.1316	0.1357	74	274	0.350	0.1621	0.2107	0.1916	0.1977
37	179	0.353	C.1192	0.1551	0.1410	C.1455	75	286	0.350	0.2531	0.3290	0.2991	0.3087
38	180	0.351	0.0711	0.C925	0.C841	0.0868							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER

TEST NO. 183
RUN NO. 18

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	6.4719E 06	3.7125E 06	0.574	31.68	836.5	0.86272E 06	0.0052
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	1.9726E 06	3.7125E 06	1.882	465.63	1505.8	370.99	0.0175

CHAN	T/C	TW(DEG K)	TW(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.883)	TIME(SEC)
1	4	306.3	551.3	9.323	8.214	48.384	42.615	5.8117E-03	5.9594E-03	0.486
2	7	304.6	548.4	4.712	4.152	48.911	42.745	2.4271E-03	3.0213E-03	0.452
3	12	303.4	546.2	2.413	2.127	48.622	42.843	1.4955E-03	1.5434E-03	0.435
4	17	303.0	545.4	1.586	1.397	48.662	42.878	9.8166E-04	1.0131E-03	0.424
5	22	302.4	544.3	1.425	1.167	48.716	42.925	8.1920E-04	8.4543E-04	0.382
6	25	302.0	543.7	1.158	1.020	48.748	42.954	7.1546E-04	7.3837E-04	0.362
7	27	302.4	544.3	1.190	1.049	48.716	42.925	7.3596E-04	7.5952E-04	0.337
8	29	302.6	544.1	1.101	0.970	48.725	42.933	6.8057E-04	7.0235E-04	0.296
9	30	302.2	543.9	1.086	0.939	48.735	42.942	6.5882E-04	6.7990E-04	0.292
10	32	301.9	542.7	0.972	0.856	48.797	42.996	5.9965E-04	6.1881E-04	0.249
11	34	301.6	543.2	0.878	0.774	48.774	42.976	5.4226E-04	5.5960E-04	0.182
12	38	302.0	543.6	0.820	0.723	48.751	42.957	5.0678E-04	5.2300E-04	0.094
13	42	301.1	542.0	0.708	0.624	48.833	43.029	4.3633E-04	4.5026E-04	0.033
14	46	301.0	541.8	0.469	0.413	48.841	43.036	2.8927E-04	2.9851E-04	-0.366
15	50	300.4	540.8	0.333	0.294	48.894	43.082	2.0529E-04	2.1183E-04	-0.608
16	54	300.2	540.4	0.207	0.183	48.914	43.099	1.2756E-04	1.3162E-04	-0.984
17	59	305.4	549.7	9.491	8.363	48.443	42.685	5.7060E-03	6.0963E-03	0.486
18	62	301.7	543.0	1.236	1.089	48.780	42.982	7.6279E-04	7.8717E-04	0.442
19	64	301.6	543.2	0.319	0.281	48.774	42.976	1.9687E-04	2.0317E-04	0.366
20	65	301.7	543.1	0.602	0.530	48.778	42.980	3.7152E-04	3.8340E-04	0.435
21	66	301.5	543.4	2.378	2.095	48.764	42.968	1.4686E-03	1.5155E-03	0.382
22	67	302.2	544.0	4.465	3.934	48.732	42.939	2.7596E-03	2.8479E-03	0.434
23	68	302.4	544.2	4.741	4.178	48.719	42.928	2.9313E-03	3.0251E-03	0.387
24	69	301.2	542.2	1.380	1.216	48.823	43.020	8.5091E-04	8.7808E-04	0.457
25	70	300.3	540.6	0.212	0.187	48.902	43.090	1.3049E-04	1.3464E-04	0.371
26	71	300.2	540.4	0.119	0.104	48.912	43.098	7.2991E-05	7.5317E-05	0.439
27	72	299.8	539.7	0.118	0.104	48.949	43.131	7.2559E-05	7.4869E-05	0.424
28	74	299.7	539.5	0.488	0.430	48.959	43.139	2.9989E-04	3.0943E-04	0.462
29	76	299.8	539.1	0.531	0.468	48.982	43.160	3.2644E-04	3.3682E-04	0.414
30	122	300.4	540.7	0.655	0.577	48.897	43.085	4.0334E-04	4.1619E-04	0.360
31	129	300.4	540.6	0.569	0.501	48.902	43.089	3.5017E-04	3.6133E-04	0.335
32	135	300.7	541.3	0.336	0.296	48.867	43.058	2.0673E-04	2.1332E-04	0.223
33	138	301.0	541.9	0.449	0.396	48.835	43.034	2.7699E-04	2.8583E-04	0.315
34	176	300.9	540.9	4.195	3.696	48.887	43.076	2.5832E-03	2.6655E-03	0.291
35	177	299.8	539.7	3.459	3.048	48.949	43.130	2.1269E-03	2.1946E-03	0.313
36	178	300.0	539.9	5.449	4.801	48.936	43.121	3.3516E-03	3.4584E-03	0.346
37	179	302.9	545.2	5.801	5.112	48.672	42.886	3.5907E-03	3.7057E-03	0.259
38	180	301.6	543.0	3.470	3.058	48.784	42.986	2.1423E-03	2.2108E-03	0.262
39	181	300.4	540.7	2.645	2.595	48.900	43.087	1.8129E-03	1.8707E-03	0.385
40	182	300.0	539.9	6.441	5.676	48.838	43.121	3.9620E-03	4.0882E-03	0.397
41	183	299.6	539.3	5.010	4.415	48.971	43.150	3.0794E-03	3.1774E-03	0.314
42	184	299.5	539.0	5.043	4.444	48.983	43.161	3.0990E-03	3.1975E-03	0.298
43	186	298.8	537.8	8.405	7.406	49.044	43.214	5.1574E-03	5.3212E-03	0.387
44	187	299.8	539.6	7.478	6.589	48.955	43.136	4.5980E-03	4.7443E-03	0.389
45	192	300.1	540.1	9.413	8.294	48.928	43.112	5.7912E-03	5.9757E-03	0.395
46	193	299.2	538.6	4.203	3.703	49.003	43.179	2.5814E-03	2.6634E-03	0.448
47	194	298.3	536.9	5.124	4.514	49.090	43.255	3.1405E-03	3.2401E-03	0.410
48	196	300.1	540.1	8.036	7.081	48.928	43.112	4.9440E-03	5.1015E-03	0.376
49	197	302.8	545.1	6.446	5.680	48.676	42.890	3.9893E-03	4.1172E-03	0.378
50	198	302.1	543.7	2.759	2.431	48.745	42.951	1.7050E-03	1.7595E-03	0.324
51	199	301.7	543.0	3.178	2.800	48.781	42.982	1.9617E-03	2.0244E-03	0.302
52	202	302.9	545.3	7.118	6.272	48.666	42.882	4.4061E-03	4.5473E-03	0.255
53	203	303.2	545.8	6.481	5.710	48.639	42.858	4.0141E-03	4.1429E-03	0.254
54	204	303.4	546.1	6.444	5.678	48.625	42.845	3.9930E-03	4.1211E-03	0.200
55	205	303.6	546.4	3.207	2.826	48.610	42.832	1.9876E-03	2.0514E-03	0.298
56	206	302.3	544.1	2.532	2.231	48.725	42.933	1.5656E-03	1.6155E-03	0.276
57	207	300.7	541.3	1.914	1.686	48.867	43.056	1.1791E-03	1.2167E-03	0.358
58	208	303.4	546.1	2.451	2.160	48.627	42.847	1.5167E-03	1.5674E-03	0.240
59	211	303.3	545.9	15.350	13.525	48.637	42.856	9.5082E-03	9.8132E-03	0.315
60	225	305.2	549.4	2.624	2.488	48.459	42.699	1.7965E-03	1.8131E-03	0.586
61	226	300.5	541.0	0.246	0.218	48.685	43.074	1.5257E-04	1.5743E-04	0.480
62	227	298.3	537.0	0.047	0.042	49.088	43.253	2.8949E-05	2.9867E-05	0.304
63	228	C.C	C.C	********	********	**********	**********	4.2722E 02	4.3545E 02	0.000
64	229	303.4	546.1	4.962	4.372	48.627	42.847	3.0741E-03	3.1727E-03	0.540
65	230	299.6	539.9	0.751	0.662	48.939	43.122	4.6179E-04	4.7650E-04	0.461
66	231	297.5	535.6	0.055	0.048	49.159	43.316	3.3652E-05	3.4718E-05	0.376
67	232	297.4	535.4	0.068	0.060	49.169	43.324	4.1443E-05	4.2755E-05	0.323
68	234	299.7	539.4	0.290	0.256	48.982	43.143	1.7694E-04	1.8422E-04	0.595
69	235	304.1	547.4	6.399	5.636	48.580	42.788	3.9706E-03	4.0982E-03	0.642
70	236	303.3	546.6	0.831	0.733	48.905	43.092	5.1179E-04	5.2810E-04	0.474
71	237	338.7	609.7	-0.000	-0.000	49.411	43.538	-0.0000E-39	-0.0000E-39	2.316
72	238	298.3	536.9	0.114	0.101	49.069	43.254	7.0091E-05	7.2315E-05	0.426
73	240	300.3	540.5	0.414	0.369	48.910	43.097	2.5484E-04	2.6297E-04	0.609
74	274	300.6	541.1	7.924	6.982	48.677	43.087	4.8807E-03	5.0364E-03	0.110
75	286	300.3	540.5	12.561	10.909	48.908	43.095	7.6209E-03	7.8638E-03	0.144

FREE-STREAM DENSITY-VELOCITY PRODUCT = 2.17d9E-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL	LENGTH(METER)	PTIATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO.	183
7.30	1.1781E 07	6.7581E 06	0.574	59.12	848.9	0.8763E 06	0.0051	RUN NO.	1
MACH	RE/FT	REL	LENGTH(FT)	PTIPSI)	TTIDEG R)	HT(BTU/LBM)	RS(FT)		
7.30	3.5909E 06	6.7581E 06	1.882	869.07	1528.0	376.85	0.0175		

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)
1	4	0.358	0.1974	0.2576	0.2336	0.2414	39	181	0.349	0.1632	0.2120	0.1928	0.1989
2	7	0.355	0.0946	0.1297	0.1178	0.1216	40	182	0.349	0.2567	0.3361	0.3057	0.3154
3	12	0.353	0.0511	0.0666	0.0605	0.0624	41	183	0.348	0.2042	0.2651	0.2412	0.2489
4	17	0.353	0.0332	0.0432	0.0393	0.0405	42	184	0.348	0.1607	0.2192	0.1993	0.2056
5	22	0.352	0.0280	0.0365	0.0331	0.0342	43	186	0.347	0.2173	0.2821	0.2566	0.2647
6	25	0.351	0.0245	0.0318	0.0289	0.0299	44	187	0.349	0.1903	0.2473	0.2248	0.2320
7	27	0.352	0.0242	0.0315	0.0286	0.0295	45	192	0.349	0.2136	0.2775	0.2523	0.2604
8	29	0.352	0.0230	0.0300	0.0272	0.0281	46	193	0.348	0.0963	0.1251	0.1138	0.1174
9	30	0.352	0.0232	0.0302	0.0275	0.0283	47	194	0.346	0.1240	0.1610	0.1464	0.1511
10	32	0.351	0.0219	0.0284	0.0258	0.0267	48	196	0.349	0.1783	0.2317	0.2107	0.2174
11	34	0.351	0.0197	0.0256	0.0233	0.0240	49	197	0.353	0.1364	0.1776	0.1614	0.1665
12	38	0.352	0.0189	0.0246	0.0223	0.0231	50	198	0.352	0.0648	0.0843	0.0766	0.0791
13	42	0.350	0.0161	0.0209	0.0190	0.0196	51	199	0.351	0.1097	0.1427	0.1297	0.1338
14	46	0.349	0.0116	0.0151	0.0137	0.0141	52	202	0.353	0.1414	0.1841	0.1672	0.1726
15	50	0.349	0.0089	0.0129	0.0117	0.0121	53	203	0.353	0.1276	0.1662	0.1510	0.1558
16	54	0.349	0.0089	0.0116	0.0105	0.0109	54	204	0.354	0.1275	0.1660	0.1508	0.1557
17	59	0.356	0.2004	0.2612	0.2372	0.2449	55	205	0.354	0.0683	0.0890	0.0808	0.0834
18	62	0.351	0.0252	0.0327	0.0297	0.0307	56	206	0.352	0.0736	0.0958	0.0870	0.0898
19	64	0.350	0.0065	0.0084	0.0077	0.0079	57	207	0.350	0.0961	0.1276	0.1160	0.1197
20	65	0.350	0.0153	0.0199	0.0181	0.0186	58	208	0.354	0.1368	0.1782	0.1619	0.1671
21	66	0.351	0.0712	0.0926	0.0841	0.0868	59	211	0.354	0.3814	0.4967	0.4512	0.4657
22	67	0.351	0.1225	0.1594	0.1449	0.1495	60	225	0.356	0.0543	0.0708	0.0643	0.0663
23	68	0.352	0.1276	0.1660	0.1509	0.1557	61	226	0.349	0.0043	0.0056	0.0051	0.0053
24	69	0.350	0.0325	0.0423	0.0384	0.0397	62	227	0.346	0.0006	0.0007	0.0007	0.0007
25	70	0.349	0.0043	0.0056	0.0051	0.0052	63	228	0.348	0.0000	0.0000	0.0000	0.0000
26	71	0.348	0.0024	0.0031	0.0028	0.0029	64	229	0.353	0.1107	0.1441	0.1309	0.1351
27	72	0.348	0.0026	0.0033	0.0030	0.0031	65	230	0.346	0.0164	0.0213	0.0194	0.0200
28	74	0.348	0.0102	0.0133	0.0121	0.0124	66	231	0.345	0.0008	0.0011	0.0010	0.0010
29	76	0.348	0.0144	0.0187	0.0170	0.0175	67	232	0.345	0.0011	0.0014	0.0013	0.0013
30	122	0.349	0.0136	0.0176	0.0160	0.0165	68	234	0.349	0.0007	0.0074	0.0067	0.0070
31	125	0.349	0.0114	0.0148	0.0135	0.0139	69	235	0.355	0.1293	0.1665	0.1530	0.1579
32	135	0.350	0.0069	0.0089	0.0081	0.0084	70	236	0.349	0.0160	0.0208	0.0189	0.0195
33	136	0.350	0.0104	0.0136	0.0123	0.0127	71	237	0.348	0.0000	0.0000	0.0000	0.0000
34	116	0.349	0.2214	0.2877	0.2616	0.2700	72	238	0.346	0.0024	0.0032	0.0029	0.0030
35	117	0.348	0.1737	0.2256	0.2051	0.2117	73	240	0.345	0.0065	0.0085	0.0077	0.0080
36	118	0.349	0.2021	0.2625	0.2387	0.2463	74	274	0.350	0.1656	0.2127	0.1934	0.1996
37	179	0.353	0.2120	0.2760	0.2508	0.2588	75	286	0.350	0.2351	0.3056	0.2778	0.2867
38	180	0.351	0.2409	0.3134	0.2848	0.2939							

MACH				LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RSTR(FT)	RUN NO. 19
7.30	1.17618E 07	6.75618E 06		0.574	5.12	848.9	0.87645E 06	0.0053	
MACH	SQ/FT	SQL		LENGTH(FT)	PT(PSI)	TT(DEG F)	HT(BTU/LBM)	RS(FT)	
7.30	3.69095E 06	6.75618E 06		1.882	69.07	1526.8	376.85	0.0175	

GMAT	I/C	TW(DEG R)	TW(DEG R)	C1W/CP2)	C(LBL/FT2-SEC)	CS1W/CP2)	CS(LBL/FT2-SEC)	ST(...SEC)	ST(...SEC)	TIME(SEC)
1	4	312.2	547.7	13.227	11.655	67.000	59.041	4.4604E-03	4.5426E-03	0.454
2	7	310.1	558.2	6.045	5.099	67.284	59.286	2.2175E-03	2.2889E-03	0.418
3	12	306.1	555.0	3.452	3.041	67.484	59.462	1.1391E-03	1.1756E-03	0.402
4	17	307.7	553.9	2.244	1.978	67.563	59.532	7.3771E-04	7.6343E-04	0.383
5	22	306.7	552.4	1.550	1.671	67.668	59.624	6.2366E-04	6.4379E-04	0.338
6	25	306.4	551.5	1.656	1.461	67.727	59.677	5.4491E-04	5.6233E-04	0.296
7	27	306.5	552.5	1.637	1.443	67.660	59.618	5.3871E-04	5.5595E-04	0.256
8	29	306.9	552.4	1.556	1.373	67.662	59.620	5.1279E-04	5.2920E-04	0.228
9	30	306.8	552.2	1.572	1.386	67.678	59.633	5.1699E-04	5.3353E-04	0.251
10	32	306.0	550.7	1.482	1.305	67.782	59.725	4.8845E-04	5.0208E-04	0.235
11	34	306.4	551.5	1.335	1.176	67.726	59.675	4.3868E-04	4.5270E-04	0.163
12	35	306.7	552.1	1.279	1.127	67.685	59.640	4.2055E-04	4.3400E-04	0.109
13	40	305.3	549.5	1.093	0.963	67.868	59.801	3.5831E-04	3.6973E-04	0.031
14	40	304.9	548.9	0.787	0.694	67.908	59.836	2.5795E-04	2.6617E-04	-0.284
15	50	304.2	547.6	0.675	0.595	67.994	59.912	2.2082E-04	2.2784E-04	-0.346
16	54	304.3	547.8	0.650	0.534	67.985	59.904	1.9838E-04	2.0466E-04	-0.359
17	59	310.8	559.4	13.461	11.861	67.179	59.194	4.4052E-03	4.6073E-03	0.452
18	62	305.9	550.6	1.705	1.503	67.769	59.731	5.5794E-04	5.7761E-04	0.411
19	64	305.8	550.4	0.440	0.387	67.887	59.835	1.4426E-04	1.4886E-04	0.413
20	65	305.8	550.5	1.038	0.913	67.799	59.760	3.4014E-04	3.5105E-04	0.411
21	66	306.0	550.9	4.024	4.291	67.771	59.736	1.3644E-03	1.4069E-03	0.365
22	67	306.5	551.8	8.297	7.311	67.710	59.681	2.7276E-03	2.8150E-03	0.417
23	68	306.7	552.1	8.637	7.610	67.688	59.662	2.8405E-03	2.9314E-03	0.382
24	69	305.2	549.3	2.207	1.945	67.881	59.832	7.2360E-04	7.4607E-04	0.454
25	70	304.2	547.5	0.271	0.256	68.000	59.923	9.5169E-05	9.8196E-05	0.370
26	71	304.0	547.2	0.160	0.141	68.023	59.937	5.2484E-05	5.4132E-05	0.452
27	72	303.8	546.9	0.174	0.154	68.049	59.957	5.7010E-05	5.8822E-05	0.365
28	74	303.7	546.7	0.695	0.612	68.001	59.921	2.2701E-04	2.3422E-04	0.420
29	76	303.2	545.8	0.980	0.864	68.120	60.023	3.1598E-04	3.2601E-04	0.427
30	122	304.7	548.4	0.922	0.812	67.941	59.866	3.0180E-04	3.1141E-04	0.347
31	129	304.6	548.3	0.774	0.682	67.951	59.874	2.5358E-04	2.6166E-04	0.311
32	135	305.3	549.6	0.467	0.411	67.860	59.794	1.5506E-04	1.5996E-04	0.243
33	136	305.5	550.0	0.708	0.624	67.834	59.771	2.3243E-04	2.3985E-04	0.308
34	176	304.7	548.4	15.043	13.255	67.739	59.863	4.9266E-03	5.0835E-03	0.472
35	177	303.9	547.0	11.816	13.411	68.037	59.950	3.8634E-03	3.9862E-03	0.395
36	178	304.2	547.6	13.731	12.100	67.897	59.814	4.4955E-03	4.6384E-03	0.342
37	179	305.0	554.4	14.315	12.616	67.524	59.501	4.7212E-03	4.8730E-03	0.374
38	180	306.3	551.4	16.317	14.377	67.733	59.682	5.3629E-03	5.5343E-03	0.376
39	181	304.7	548.5	11.084	9.767	67.936	59.860	3.6305E-03	3.7460E-03	0.390
40	182	304.3	547.7	17.591	15.500	67.590	59.908	5.7561E-03	5.9393E-03	0.329
41	183	303.9	547.0	13.896	12.244	68.042	59.954	4.5431E-03	4.6875E-03	0.320
42	184	303.7	546.7	11.484	10.119	68.062	59.972	3.7545E-03	3.8727E-03	0.280
43	186	302.9	545.2	14.610	13.050	68.164	60.061	4.8323E-03	4.9856E-03	0.318
44	187	304.1	547.4	12.344	11.406	68.012	59.927	4.0342E-03	4.1608E-03	0.318
45	192	304.5	548.2	14.513	12.788	67.958	59.880	4.7515E-03	4.9029E-03	0.357
46	193	303.4	546.2	8.561	7.781	68.096	60.002	2.8430E-03	2.9111E-03	0.383
47	194	302.3	544.1	8.463	7.457	68.241	60.130	2.7576E-03	2.8451E-03	0.306
48	195	304.7	548.5	12.113	10.674	67.936	59.863	3.9732E-03	4.0938E-03	0.309
49	197	307.9	554.2	9.214	8.119	67.539	59.511	3.0380E-03	3.1354E-03	0.337
50	198	306.6	552.5	4.386	3.865	67.659	59.616	1.4431E-03	1.4893E-03	0.312
51	199	306.5	551.8	7.426	6.544	67.705	59.661	2.4415E-03	2.5196E-03	0.401
52	202	307.6	554.2	6.561	6.415	67.539	59.511	3.1488E-03	3.2497E-03	0.194
53	203	304.3	555.0	8.614	7.590	67.483	59.462	2.8426E-03	2.9338E-03	0.194
54	204	305.8	555.5	8.598	7.576	67.450	59.433	2.8191E-03	2.9108E-03	0.143
55	205	305.5	556.0	4.856	4.059	67.816	59.402	1.5210E-03	1.5707E-03	0.258
56	206	307.4	553.2	4.977	4.385	67.607	59.571	1.6389E-03	1.6914E-03	0.340
57	207	305.6	550.0	6.656	5.805	67.629	59.767	2.1834E-03	2.2535E-03	0.468
58	208	305.5	556.1	9.625	8.128	67.411	59.398	3.0479E-03	3.1459E-03	0.185
59	211	308.6	555.5	25.727	22.669	67.452	59.434	8.4946E-03	8.7674E-03	0.217
60	225	311.0	559.7	3.446	3.212	67.156	59.174	1.2044E-03	1.2488E-03	0.537
61	226	304.7	548.5	0.293	0.258	67.937	59.861	9.5565E-05	9.9021E-05	0.359
62	227	301.7	543.1	0.039	0.035	68.307	60.188	1.2775E-05	1.3178E-05	0.673
63	228	336.6	605.9	0.000	0.000	64.691	56.123	0.0000E-39	0.0000E-39	*******
64	229	308.4	555.1	7.469	6.581	67.479	59.456	2.4650E-03	2.5441E-03	0.483
65	230	303.5	547.0	1.117	0.984	67.841	59.954	3.6519E-04	3.7680E-04	0.527
66	231	300.9	541.6	0.057	0.051	68.416	60.263	1.8674E-05	1.9269E-05	0.634
67	232	301.1	541.9	0.075	0.066	68.293	60.264	2.4328E-05	2.5096E-05	0.314
68	234	304.2	547.5	0.348	0.342	68.005	59.922	1.2693E-04	1.3096E-04	0.540
69	235	309.6	557.3	8.705	7.671	67.320	59.329	2.8480E-03	2.9733E-03	0.577
70	236	304.7	548.4	1.079	0.954	67.744	59.806	3.5060E-04	3.6795E-04	0.436
71	237	318.7	573.7	0.000	0.000	63.704	56.131	0.0000E-39	0.0000E-39	0.751
72	238	302.2	544.0	0.165	0.146	68.244	60.132	5.4046E-05	5.5758E-05	0.460
73	240	304.9	548.7	0.494	0.351	67.918	59.845	1.4546E-04	1.5010E-04	0.508
74	274	305.4	549.7	11.102	9.783	67.649	59.784	3.6415E-03	3.7574E-03	0.096
75	688	305.9	548.9	16.645	14.650	67.837	59.774	5.2310E-03	5.3979E-03	0.064

FREE-STREAM DENSITY-VELOCITY PRODUCT = 4.127 7-01 (SLUGS/FT2-SEC)

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ORIGINAL PAGE IS
OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER PCFF:TT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	PT(JOULE/KG)	RS(METER)	TEST NO.	184
7.30	1.65C1E 07	1.0613E 07	C.574	55.77	864.5	0.893553 06	0.0053	RUN NO.	20
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	PT(BTU/LBM)	RS(FT)		
7.30	5.6191E 06	1.0613E 07	1.882	1407.83	1556.C	384.25	C.C175		

CHAN	T/C	P/PT	Q/QS	P/PS(0.850)	P/PS(0.900)	P/PS(0.883)	CHAN	T/C	P/PT	Q/QS	P/PS(0.85C)	P/PS(0.9CC)	P/PS(0.883)
1	4	C.362	C.2C14	C.2633	C.2[illegible]	C.2466	39	181	C.348	C.1744	C.2265	C.2C6C	0.2126
2	7	C.358	C.C58[illegible]	0.1287	C.11[illegible]	C.12C6	4C	182	C.348	C.2785	C.3[illegible]16	0.3289	C.3393
3	12	C.355	C.0516	C.0672	C.0[illegible]1C	0.063C	41	183	C.347	0.2234	0.29CC	0.2638	0.2722
4	17	C.354	C.C374	C.0468	C.0443	C.0457	42	184	0.347	C.1847	0.2398	0.2181	0.2250
5	22	C.353	C.C352	C.0511	C.0464	C.0479	43	186	0.346	C.2316	C.3C07	0.2736	C.2823
6	25	C.351	C.0511	C.0664	0.0[illegible]C4	C.0623	44	187	C.348	0.2069	C.2686	0.2443	C.2521
7	27	C.352	C.0601	C.0782	C.C711	0.0733	45	192	[illegible].348	0.2127	0.2841	0.2583	0.2665
8	29	C.352	C.0695	C.0904	C.0821	C.0848	46	193	0.347	C.1C82	0.14C4	0.1277	0.1318
9	3C	C.351	C.C712	C.0927	C.0842	C.0869	47	194	0.345	C.1417	C.1838	C.1672	0.1725
10	32	C.35C	C.0758	C.0985	C.0896	C.0924	48	196	C.349	0.1943	0.2524	0.2295	C.2368
11	34	C.35C	C.C796	C.1035	C.0941	C.0971	49	197	C.353	0.1399	0.1821	0.1655	0.1708
12	38	C.351	C.C9C6	0.1176	C.1C7C	C.1105	5C	198	C.352	0.1175	C.1529	0.1390	0.1434
13	42	0.348	C.C941	C.1222	C.1111	C.1146	51	199	C.351	C.2375	C.3094	C.2812	C.2902
14	46	C.349	C.1C03	C.1303	C.1185	C.1223	52	2C2	0.353	0.1397	0.1819	0.1652	0.1705
15	5C	C.347	0.1[illegible]1C	C.1052	C.C957	C.C9e7	53	2C3	0.354	C.1256	0.1635	0.1486	0.1533
16	54	C.347	C.C583	0.0757	C.C6E9	C.C71C	54	2C4	0.354	C.1252	C.163C	0.1481	C.1529
17	56	0.355	C.1589	C.2567	C.2357	C.2433	55	2C5	C.355	0.0998	0.1301	C.1181	C.1219
18	62	C.352	C.0245	C.C319	C.C29C	0.C295	56	2C6	0.353	0.1644	0.2400	0.2181	0.2251
19	64	C.351	C.CC61	C.0079	C.CC72	C.CC74	57	2C7	0.35C	C.1C1C	C.1313	C.1194	0.1232
2C	65	C.351	C.C164	C.0213	C.C194	C.C2CC	58	2C8	C.355	C.1641	C.2138	C.1942	C.2CC5
21	66	C.352	C.C975	C.1268	C.1153	0.1195	59	211	C.354	0.5172	C.6736	0.6119	0.6316
22	67	C.352	C.1776	0.2311	C.21CC	C.2167	6C	225	0.356	C.0540	0.C7C4	0.0639	0.0660
23	68	C.353	C.1EC7	0.2352	0.2137	C.22C6	61	226	C.348	C.0058	C.CC75	C.0068	0.0070
24	69	C.35C	C.C377	0.C49C	C.C445	C.C459	62	221	C.343	0.0010	0.0013	C.0012	C.CC13
25	7C	C.348	C.0045	C.0058	C.CC53	0.0055	63	228	0.348	0.0025	0.0033	0.0030	0.0031
26	71	C.348	C.CC22	C.0029	C.C026	C.CC27	64	229	0.353	C.1459	0.1899	0.1725	0.1781
27	72	C.347	C.CC29	C.0038	C.0034	C.CC36	65	23C	C.347	C.0219	C.C285	C.0259	C.C267
28	74	C.347	C.C11C	C.0143	C.C13C	0.0134	66	231	C.343	0.0007	C.0008	C.0006	0.0008
29	76	C.346	C.0155	C.0201	C.C183	0.C189	67	232	0.343	0.CC16	0.0024	0.0022	0.0022
3C	122	C.34E	C.C138	C.0179	C.C163	C.C168	68	234	C.34E	C.0059	C.CC77	C.CC7C	0.C072
31	125	C.34E	C.C11C	0.0143	C.C13C	C.C134	69	235	C.356	C.1317	C.1717	C.1560	C.1610
32	135	C.349	C.CC66	C.CC86	C.CC78	C.0081	7C	236	C.349	0.0168	0.0219	0.0199	C.0205
33	136	C.345	C.C117	C.0152	C.C138	C.C142	71	237	C.343	C.CC67	0.CC87	C.CC79	0.0081
34	178	C.348	C.2333	0.3C3C	C.2755	C.2843	72	238	0.346	C.0026	C.0034	C.0031	C.CC32
35	177	C.347	C.1E14	0.2355	C.2142	C.2210	73	24C	C.35C	0.0074	0.0096	C.00E8	C.CC9C
36	176	C.348	C.2142	C.2769	0.2536	0.2617	74	274	0.351	0.1588	0.2065	0.1877	0.1937
37	175	C.352	0.3128	C.4072	0.3700	C.3818	75	286	0.352	C.2262	0.297C	0.2699	0.2785
38	1EC	C.351	C.2471	0.3213	0.2921	C.3C14							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER PUFFER FIELD CALIB

TEST NO. 163
RUN NO. 20

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	1.85C1E 07	1.0613E 07	0.574	55.77	864.5	0.69355E 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	5.6351E 06	1.0613E 07	1.882	1407.83	1556.0	384.25	0.0175

CHAN	T/C	TW(DEG K)	TW(DEG R)	C(W/CM2)	C(BTU/FT2-SEC)	CS(W/CM2)	CS(BTU/FT2-SEC)	ST(C.90C)	ST(C.28C)	TIME(SEC)
1	4	321.8	579.2	17.405	15.335	86.441	76.166	3.5734E-03	3.6899E-03	0.473
2	7	318.9	574.0	8.567	7.549	86.693	76.504	1.7462E-03	1.8048E-03	0.433
3	12	316.2	569.2	4.504	3.968	87.321	76.942	9.1336E-04	9.4233E-04	0.415
4	17	315.3	567.6	3.275	2.885	87.458	77.062	6.6331E-04	6.8464E-04	0.421
5	22	313.8	564.8	3.441	3.032	87.304	77.277	6.9487E-04	7.1715E-04	0.426
6	25	312.5	562.5	4.450	3.957	87.514	77.404	9.0421E-04	9.3311E-04	0.462
7	27	312.1	561.8	5.277	4.650	87.620	77.501	1.0646E-03	1.0981E-03	0.455
8	29	312.8	563.1	6.103	5.378	87.856	77.413	1.2299E-03	1.2693E-03	0.459
9	30	312.9	562.9	6.262	5.518	87.900	77.459	1.2611E-03	1.3014E-03	0.468
10	32	311.1	559.9	6.680	5.886	88.038	77.661	1.3412E-03	1.3839E-03	0.472
11	34	311.6	560.9	7.009	6.176	88.045	77.583	1.4090E-03	1.4539E-03	0.458
12	36	311.9	561.4	7.570	7.022	88.011	77.550	1.6029E-03	1.6540E-03	0.443
13	42	309.6	557.6	8.310	7.322	88.345	77.844	1.6641E-03	1.7170E-03	0.443
14	46	309.3	556.7	8.672	7.817	88.421	77.910	1.7749E-03	1.8312E-03	0.446
15	50	308.4	555.1	7.176	6.323	88.564	78.036	1.4331E-03	1.4785E-03	0.451
16	54	308.7	555.7	5.160	4.546	88.312	77.791	1.0311E-03	1.0638E-03	0.409
17	58	319.4	575.3	17.261	15.209	88.781	78.466	3.5274E-03	3.6419E-03	0.473
18	62	312.8	563.0	2.155	1.898	87.870	77.425	4.3410E-04	4.4799E-04	0.425
19	64	312.2	562.0	0.537	0.473	87.956	77.503	1.0799E-04	1.1144E-04	0.361
20	65	312.5	562.5	1.442	1.270	87.910	77.460	2.9044E-04	2.9963E-04	0.409
21	66	312.8	563.1	8.565	7.547	87.856	77.413	1.7260E-03	1.7812E-03	0.346
22	67	313.5	564.3	15.682	13.730	87.751	77.320	3.1443E-03	3.2450E-03	0.425
23	68	313.7	564.7	15.650	13.966	87.713	77.287	3.2100E-03	3.3026E-03	0.399
24	69	311.4	560.6	2.310	2.024	88.077	77.608	6.6677E-04	6.8804E-04	0.482
25	70	309.5	557.7	0.396	0.349	88.332	77.832	7.9330E-05	8.1852E-05	0.404
26	71	309.5	557.7	0.198	0.174	88.396	77.888	3.9564E-05	4.0821E-05	0.466
27	72	308.8	555.9	0.258	0.227	88.498	77.979	5.1523E-05	5.3157E-05	0.435
28	74	306.3	551.9	0.975	0.859	88.582	78.052	1.9461E-04	2.0078E-04	0.465
29	76	307.6	553.7	1.377	1.214	88.687	78.145	2.7461E-04	2.8340E-04	0.461
30	122	310.0	558.1	1.217	1.072	88.501	77.805	2.4379E-04	2.5154E-04	0.349
31	125	310.0	558.0	0.971	0.856	88.312	77.815	1.9452E-04	2.0070E-04	0.286
32	135	310.6	559.1	0.584	0.514	88.216	77.730	1.1710E-04	1.2083E-04	0.212
33	136	310.4	558.7	1.032	0.909	88.243	77.754	2.0696E-04	2.1354E-04	0.306
34	176	309.6	557.4	20.612	18.162	88.364	77.861	4.1266E-03	4.2517E-03	0.381
35	177	308.7	555.7	16.055	14.147	88.514	77.993	3.2081E-03	3.3059E-03	0.400
36	178	309.2	556.6	18.591	16.734	88.430	77.918	3.7589E-03	3.9195E-03	0.349
37	179	314.2	565.5	27.412	24.153	87.643	77.226	5.5391E-03	5.7169E-03	0.375
38	180	312.0	561.6	21.742	19.156	87.554	77.534	4.3737E-03	4.5134E-03	0.367
39	181	309.7	557.4	15.411	13.579	88.361	77.858	3.0855E-03	3.1835E-03	0.429
40	182	309.3	556.7	24.625	21.658	88.424	77.914	4.9262E-03	5.0826E-03	0.393
41	183	309.0	556.2	19.762	17.413	88.469	77.950	3.9514E-03	4.0768E-03	0.339
42	184	308.9	556.0	16.342	14.399	88.488	77.970	3.2663E-03	3.3701E-03	0.258
43	186	309.7	557.4	20.554	18.111	88.360	78.139	4.0584E-03	4.2281E-03	0.337
44	187	309.4	556.9	18.288	16.113	88.403	77.895	3.6542E-03	3.7754E-03	0.334
45	192	310.0	557.9	15.313	13.018	88.316	77.819	3.0690E-03	3.9521E-03	0.366
46	193	308.3	555.0	4.550	8.441	88.571	78.043	1.9129E-03	1.9735E-03	0.403
47	194	308.9	556.0	12.554	11.058	88.799	78.244	2.5054E-03	2.5845E-03	0.259
48	196	310.2	558.4	17.140	15.110	88.272	77.779	3.4372E-03	3.5465E-03	0.331
49	197	314.1	565.4	12.261	10.803	87.664	77.235	2.4772E-03	2.5567E-03	0.366
50	198	313.2	563.7	10.318	9.092	87.802	77.366	2.0607E-03	2.1473E-03	0.482
51	199	312.7	562.9	20.503	18.419	87.678	77.433	4.2112E-03	4.3459E-03	0.316
52	202	313.9	565.1	12.250	10.794	87.684	77.261	2.4740E-03	2.5534E-03	0.238
53	203	314.7	566.4	10.557	9.690	87.967	77.158	2.2244E-03	2.2956E-03	0.239
54	204	315.0	567.0	10.955	9.653	87.812	77.110	2.2175E-03	2.2888E-03	0.185
55	205	315.6	568.0	8.728	7.691	87.422	77.030	1.7698E-03	1.8257E-03	0.354
56	206	313.8	564.8	16.174	14.251	87.716	77.264	3.2655E-03	3.3701E-03	0.322
57	207	311.3	560.3	8.960	7.842	88.101	77.629	1.7678E-03	1.8448E-03	0.424
58	208	315.7	568.3	14.343	12.638	87.993	77.509	2.9075E-03	3.0011E-03	0.260
59	211	314.9	566.8	45.273	39.892	87.535	77.130	9.1613E-03	9.4556E-03	0.346
60	225	317.1	570.8	4.705	4.146	87.174	76.812	1.5661E-04	9.8750E-04	0.565
61	226	316.2	569.2	0.509	0.448	88.429	77.916	1.0173E-04	1.0496E-04	0.585
62	227	316.4	569.7	0.093	0.082	88.038	78.454	1.8482E-05	1.0982E-05	0.907
63	228	316.4	569.7	0.224	0.197	88.342	77.841	4.4805E-05	4.6230E-05	0.726
64	229	314.3	565.7	12.261	11.261	87.625	77.210	2.4318E-03	2.5061E-03	0.516
65	230	316.6	569.4	1.942	1.711	88.538	78.014	3.8784E-04	4.0019E-04	0.563
66	231	316.7	569.5	0.056	0.051	88.146	78.550	1.1281E-05	1.1945E-05	1.147
67	232	316.5	569.2	0.165	0.145	88.032	78.449	3.2659E-05	3.3686E-05	0.596
68	234	316.6	569.7	0.522	0.460	88.335	77.835	1.0462E-04	1.0795E-04	0.607
69	235	316.5	569.7	11.458	10.132	87.276	76.902	2.3346E-03	2.4099E-03	0.613
70	236	316.7	569.3	1.488	1.311	88.262	77.769	2.9813E-04	3.0761E-04	0.500
71	237	316.5	569.9	0.665	0.624	88.028	78.445	1.1607E-04	1.2179E-04	0.468
72	238	317.7	571.9	0.233	0.206	88.469	78.129	4.6504E-05	4.7976E-05	0.591
73	240	311.9	560.3	0.651	0.575	88.108	77.835	1.3122E-04	1.3541E-04	0.726
74	224	312.4	562.4	13.461	12.301	87.521	77.471	2.8109E-03	2.9008E-03	0.103
75	241	312.1	561.8	20.042	17.660	87.615	77.377	4.0416E-03	4.1704E-03	0.046

FREE-STREAM DENSITY-VELOCITY PRODUCT = 8.4495E-01 (SLUGS/FT2-SEC)

1472084

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 21

MACH	7.30	RE/METER	3.33645 C6	REL	1.91395 C6	LENGTH(METER)	0.574	PT(ATM)	1.345	TT(DEG K)	625.0	HT(JOULE/KG)	0.25CC3E C6	PS(METER)	0.0053				
	CH	RE/FT		REL		LENGTH(FT)	1.882	PT(PSI)	234.44	TT(DEG R)	1485.0	HT(BTU/LBM)	365.52	RS(FT)	0.0175				
	20	1.0169E C6		1.9135E C6															

CHAN	T/C	PW/HT	Q/QS	P/PS(0.850)	P/PS(0.900)	P/PS(0.876)	CHAN	T/C	PW/HT	Q/QS	H/HS(0.850)	P/PS(0.900)	P/PS(0.876)
1	4	0.366	0.1785	0.2335	0.2120	0.2220	39	181	0.363	0.0427	0.0558	0.0506	0.0530
2	7	0.365	0.0842	0.1102	0.0999	0.1046	40	182	0.362	0.0646	0.0843	0.0768	0.0804
3	12	0.364	0.0414	0.0541	0.0491	0.0514	41	183	0.362	0.0462	0.0603	0.0571	0.0598
4	17	0.364	0.0269	0.0352	0.0319	0.0334	42	184	0.362	0.0350	0.0458	0.0415	0.0435
5	22	0.364	0.0214	0.0280	0.0254	0.0266	43	186	0.362	0.0371	0.0485	0.0440	0.0461
6	25	0.363	0.0175	0.0229	0.0208	0.0217	44	187	0.362	0.0419	0.0548	0.0497	0.0520
7	27	0.364	0.0172	0.0226	0.0205	0.0214	45	192	0.363	0.0493	0.0642	0.0537	0.0562
8	29	0.364	0.0150	0.0196	0.0178	0.0186	46	193	0.362	0.0337	0.0440	0.0399	0.0418
9	30	0.364	0.0141	0.0184	0.0167	0.0175	47	194	0.361	0.0311	0.0406	0.0368	0.0385
10	32	0.363	0.0123	0.0161	0.0146	0.0153	48	196	0.363	0.0821	0.1073	0.0973	0.1019
11	34	0.363	0.0114	0.0149	0.0135	0.0142	49	197	0.365	0.1196	0.1566	0.1420	0.1486
12	36	0.364	0.0104	0.0136	0.0123	0.0129	50	198	0.365	0.0521	0.0682	0.0618	0.0647
13	42	0.363	0.0098	0.0128	0.0116	0.0121	51	199	0.364	0.0516	0.0675	0.0612	0.0641
14	46	0.362	0.0057	0.0074	0.0067	0.0071	52	202	0.366	0.1520	0.1991	0.1804	0.1889
15	50	0.362	0.0046	0.0059	0.0053	0.0055	53	203	0.366	0.1359	0.1780	0.1614	0.1690
16	54	0.362	0.0034	0.0044	0.0040	0.0042	54	204	0.366	0.1257	0.1778	0.1611	0.1687
17	59	0.366	0.2520	0.3302	0.2993	0.3134	55	205	0.366	0.0682	0.0894	0.0810	0.0848
18	62	0.364	0.0415	0.0543	0.0492	0.0515	56	206	0.365	0.0442	0.0579	0.0524	0.0549
19	64	0.364	0.0186	0.0244	0.0221	0.0231	57	207	0.364	0.0225	0.0294	0.0267	0.0279
20	65	0.364	0.0205	0.0268	0.0242	0.0255	58	208	0.366	0.0365	0.0478	0.0457	0.0479
21	66	0.364	0.0541	0.1232	0.1117	0.1169	59	211	0.365	0.3676	0.4813	0.4363	0.4568
22	67	0.364	0.1611	0.2109	0.1912	0.2002	60	225	0.366	0.0926	0.1213	0.1100	0.1151
23	68	0.364	0.1696	0.2219	0.2012	0.2106	61	226	0.362	0.0104	0.0136	0.0124	0.0129
24	69	0.363	0.0438	0.0573	0.0519	0.0544	62	227	0.361	0.0007	0.0009	0.0008	0.0009
25	70	0.363	0.0058	0.0076	0.0069	0.0072	63	228	0.362	0.0010	0.0014	0.0012	0.0013
26	71	0.363	0.0031	0.0040	0.0037	0.0038	64	229	0.364	0.1515	0.1983	0.1798	0.1882
27	72	0.362	0.0025	0.0032	0.0029	0.0031	65	230	0.362	0.0340	0.0445	0.0403	0.0422
28	74	0.362	0.0045	0.0059	0.0053	0.0056	66	231	0.360	0.0021	0.0027	0.0025	0.0026
29	76	0.362	0.0094	0.0122	0.0111	0.0116	67	232	0.360	0.0004	0.0005	0.0004	0.0005
30	122	0.363	0.0114	0.0149	0.0135	0.0141	68	234	0.362	0.0024	0.0031	0.0029	0.0030
31	125	0.363	0.0102	0.0133	0.0121	0.0126	69	235	0.365	0.1574	0.2061	0.1868	0.1956
32	135	0.363	0.0050	0.0065	0.0059	0.0062	70	236	0.362	0.0245	0.0320	0.0291	0.0304
33	136	0.363	0.0047	0.0061	0.0055	0.0058	71	237	0.360	0.0078	0.0103	0.0093	0.0097
34	176	0.363	0.0534	0.0699	0.0634	0.0663	72	238	0.361	0.0033	0.0043	0.0039	0.0041
35	177	0.362	0.0423	0.0554	0.0502	0.0526	73	240	0.363	0.0053	0.0069	0.0062	0.0065
36	178	0.363	0.0638	0.0834	0.0756	0.0792	74	274	0.363	0.2436	0.3189	0.2892	0.3028
37	179	0.365	0.0775	0.1014	0.0919	0.0963	75	286	0.363	0.3217	0.4208	0.3816	0.3995
38	180	0.364	0.0521	0.0681	0.0618	0.0647							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL	LENGTH(METER)	PT(PSIA)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO.	183
7.40	3.3E+6	1.613E+ 06	0.574	15.95	625.0	0.6+5CD3E 06	0.0093	RUN NO.	21
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	1.01E+ 06	1.613E+ 06	1.882	234.44	1469.0	385.93	0.0175		

CHAN	T/C	TA(DEG R)	TA(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.+CC)	ST(0.+E6)	TIME(SEC)
1	4	310.1	558.1	5.539	5.233	33.263	29.309	7.6882E-03	7.6882E-03	0.609
2	7	309.0	556.2	2.676	2.473	33.332	29.370	3.5514E-03	3.7183E-03	0.577
3	12	308.2	554.7	1.381	1.217	33.384	29.416	1.8744E-03	1.8265E-03	0.569
4	17	308.0	554.4	0.856	0.791	33.398	29.428	1.1333E-03	1.1864E-03	0.571
5	22	307.7	553.8	0.718	0.630	33.417	29.445	9.0263E-04	9.4490E-04	0.547
6	25	307.5	553.5	0.585	0.515	33.428	29.454	7.3757E-04	7.7210E-04	0.542
7	27	307.7	553.9	0.576	0.508	33.416	29.444	7.2697E-04	7.6101E-04	0.518
8	29	307.8	554.0	0.500	0.441	33.409	29.438	6.3146E-04	6.6105E-04	0.486
9	30	307.7	553.9	0.470	0.414	33.414	29.442	5.9338E-04	6.2115E-04	0.482
10	32	307.4	553.3	0.433	0.381	33.436	29.462	5.4554E-04	5.7106E-04	0.484
11	34	307.3	553.6	0.382	0.336	33.426	29.453	4.8154E-04	5.0414E-04	0.447
12	38	307.6	553.8	0.347	0.306	33.419	29.447	4.3821E-04	4.5873E-04	0.409
13	42	306.9	552.4	0.278	0.245	33.468	29.490	3.4973E-04	3.6608E-04	0.323
14	46	306.8	552.2	0.190	0.166	33.472	29.494	2.3957E-04	2.5077E-04	0.072
15	50	306.8	551.9	0.150	0.132	33.486	29.506	1.8845E-04	1.9726E-04	-0.036
16	54	306.7	552.0	0.113	0.100	33.483	29.503	1.4228E-04	1.4893E-04	-0.008
17	59	310.2	558.3	8.382	7.386	33.256	29.303	1.0635E-02	1.1136E-02	0.600
18	62	307.8	554.0	1.386	1.222	33.410	29.438	1.7496E-03	1.8316E-03	0.574
19	64	307.8	554.1	0.622	0.546	33.407	29.436	7.8496E-04	8.2173E-04	0.542
20	65	307.8	554.0	0.685	0.604	33.412	29.441	8.6476E-04	9.0521E-04	0.591
21	66	307.9	554.1	3.144	2.771	33.405	29.435	3.9691E-03	4.1551E-03	0.524
22	67	308.1	554.5	3.381	4.141	33.393	29.424	6.7955E-03	7.1140E-03	0.562
23	69	308.2	554.7	5.661	4.988	33.387	29.418	7.1512E-03	7.4865E-03	0.534
24	69	307.4	553.3	1.464	1.290	33.437	29.462	1.8461E-03	1.9325E-03	0.595
25	70	306.9	552.5	0.195	0.172	33.465	29.487	2.4575E-04	2.5724E-04	0.515
26	71	306.8	552.3	0.104	0.091	33.471	29.493	1.3039E-04	1.3649E-04	0.365
27	72	306.7	552.1	0.083	0.073	33.480	29.501	1.0441E-04	1.0929E-04	0.395
28	74	306.6	551.9	0.150	0.132	33.485	29.505	1.8906E-04	1.9790E-04	0.497
29	76	306.3	551.4	0.313	0.276	33.505	29.522	3.9429E-04	4.1270E-04	0.593
30	122	307.0	552.6	0.381	0.336	33.461	29.484	4.8014E-04	5.0259E-04	0.429
31	125	307.0	552.6	0.341	0.300	33.462	29.485	4.2939E-04	4.4946E-04	0.449
32	129	307.2	552.9	0.166	0.146	33.480	29.474	2.0913E-04	2.1891E-04	0.336
33	130	307.2	552.9	0.156	0.137	33.480	29.474	1.9627E-04	2.0545E-04	0.318
34	176	307.0	552.6	1.768	1.575	33.462	29.484	2.2524E-03	2.3578E-03	0.417
35	177	306.8	552.2	1.417	1.249	33.477	29.498	1.7847E-03	1.8681E-03	0.411
36	178	307.2	552.5	2.133	1.879	33.450	29.474	2.6882E-03	2.8139E-03	0.293
37	179	306.8	555.8	2.583	2.276	33.347	29.383	3.2476E-03	3.4210E-03	0.525
38	180	307.8	554.0	1.740	1.533	33.410	29.439	2.1956E-03	2.2987E-03	0.545
39	181	306.9	552.5	1.428	1.258	33.465	29.487	1.7984E-03	1.8830E-03	0.625
40	182	306.8	552.2	2.169	1.911	33.476	29.497	2.7311E-03	2.8588E-03	0.478
41	183	306.4	551.5	1.614	1.422	33.495	29.517	2.0305E-03	2.1254E-03	0.429
42	184	306.5	551.7	1.173	1.033	33.492	29.511	1.4761E-03	1.5451E-03	0.326
43	186	306.1	551.0	1.244	1.096	33.517	29.533	1.5648E-03	1.6378E-03	0.260
44	187	306.8	552.2	1.402	1.235	33.474	29.495	1.7655E-03	1.8480E-03	0.311
45	192	307.0	552.6	1.514	1.334	33.459	29.482	1.9079E-03	1.9971E-03	0.380
46	193	306.8	552.2	1.127	0.993	33.476	29.497	1.4156E-03	1.4853E-03	0.585
47	194	305.7	550.2	1.042	0.918	33.547	29.560	1.3087E-03	1.3697E-03	0.642
48	196	307.1	552.6	2.745	2.419	33.453	29.476	3.4599E-03	3.6217E-03	0.516
49	197	309.1	556.5	3.685	3.512	33.322	29.361	5.0451E-03	5.2821E-03	0.469
50	198	308.6	555.5	1.737	1.531	33.356	29.391	2.1966E-03	2.2998E-03	0.397
51	199	308.4	555.2	1.720	1.516	33.368	29.402	2.1745E-03	2.2765E-03	0.369
52	202	309.9	557.8	5.057	4.456	33.276	29.321	6.4114E-03	6.7132E-03	0.365
53	203	310.0	558.0	4.521	3.983	33.266	29.312	5.7346E-03	6.0045E-03	0.362
54	204	310.2	558.3	4.813	3.977	33.257	29.304	5.7256E-03	5.9955E-03	0.316
55	205	310.3	558.2	2.269	1.999	33.259	29.306	2.8782E-03	3.0132E-03	0.359
56	206	309.3	556.7	1.471	1.297	33.345	29.365	1.8632E-03	1.9508E-03	0.305
57	207	307.9	554.2	0.751	0.662	33.403	29.433	9.4642E-04	9.9286E-04	0.693
58	208	309.1	557.5	1.282	1.130	33.285	29.329	1.6253E-03	1.7018E-03	0.338
59	211	309.0	556.2	12.254	10.798	33.130	29.189	1.5507E-02	1.6235E-02	0.446
60	225	309.5	557.0	3.285	2.918	33.302	29.344	3.9377E-03	4.0914E-03	0.689
61	226	306.7	552.0	0.369	0.306	33.481	29.501	4.3542E-04	4.5655E-04	0.627
62	227	309.1	549.2	0.024	0.021	33.563	29.573	3.0052E-05	3.1452E-05	0.329
63	228	306.8	551.8	0.025	0.021	33.489	29.508	4.0068E-05	4.1213E-05	0.566
64	229	308.2	554.8	5.058	4.457	33.380	29.413	6.3659E-03	6.6856E-03	0.647
65	230	306.3	551.4	1.345	1.204	33.505	29.542	1.6439E-03	1.7009E-03	0.620
66	231	304.5	548.8	0.072	0.062	33.598	29.602	8.7826E-05	9.1513E-05	0.456
67	232	305.2	548.5	0.012	0.011	33.593	29.600	1.5275E-05	1.6091E-05	-0.582
68	234	306.9	551.7	0.071	0.071	33.494	29.513	1.0130E-04	1.0610E-04	0.625
69	235	308.8	555.9	5.249	4.625	33.344	29.381	6.6396E-03	6.9514E-03	0.742
70	236	306.7	552.0	0.820	0.723	33.481	29.501	1.0327E-03	1.0809E-03	0.617
71	237	305.2	549.1	0.264	0.232	33.588	29.596	3.3074E-04	3.4614E-04	0.620
72	238	305.5	550.0	0.110	0.097	33.556	29.567	1.3839E-04	1.4486E-04	0.520
73	240	306.9	552.4	0.176	0.155	33.467	29.489	2.2192E-04	2.3230E-04	0.773
74	274	307.1	552.8	8.159	7.189	33.452	29.476	1.0274E-02	1.0761E-02	0.272
75	288	307.3	553.2	10.758	9.479	33.446	29.469	1.3564E-02	1.4198E-02	0.295

RATIO-STREAM DENSITY-VELOCITY PRODUCT = 1.100BE-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 22

MACH 7.20 RE/METER 6.45136 C6 REL 3.72368 C6 LENGTH(METER) C.574 PT(ATM) 31.87 TT(DEG K) 838.1 FT(JOULE/KG) 0.664498 C6 HS(METER) 0.0093

MACH 7.20 RE/FT 1.97856 C6 REL 3.72368 06 LENGTH(FT) 1.882 PT(PSI) 468.55 TT(DEG R) 1508.6 FT(BTU/LBM) 371.75 HS(FT) 0.0175

CHAN	T/C	HW/HT	C/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.676)	CHAN	T/C	HW/HT	C/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.876)
1	4	C.363	C.1766	C.2313	C.2097	0.2195	39	181	C.357	0.0736	0.0960	0.0871	C.0912
2	1	C.362	C.0825	C.1078	C.0978	0.1024	40	182	0.356	C.1299	0.1694	0.1538	0.1609
3	12	C.360	C.0396	0.0516	C.0470	C.0492	41	183	C.355	C.1104	C.1439	C.1307	0.1367
4	17	C.360	C.0251	C.0328	C.0298	C.0312	42	184	0.355	0.1012	0.1318	0.1197	C.1252
5	22	C.359	0.0198	C.0259	C.0235	C.0246	43	186	0.354	0.1616	0.2105	0.1912	C.2000
6	28	C.359	0.0161	C.0210	C.0191	C.0199	44	187	0.355	C.1414	0.1843	C.1674	0.1751
7	27	C.360	C.0135	C.0202	0.0184	C.0192	45	192	C.355	0.1094	C.1426	C.1295	C.1355
8	29	C.360	C.0136	C.0178	0.0161	0.0169	46	193	C.354	0.0608	0.0792	C.0720	0.0753
9	30	C.359	0.0127	0.0166	C.0151	0.0158	47	194	0.353	0.0671	0.0874	0.0794	0.0830
10	32	C.359	C.0114	0.0149	C.0135	C.0141	48	196	0.355	0.1153	C.1502	C.1364	C.1427
11	34	0.359	C.0098	C.0125	0.0114	C.0119	49	197	C.354	0.1162	0.1543	C.1400	C.1465
12	36	0.359	C.0081	C.0106	C.0096	0.0101	50	198	0.357	0.0509	0.0664	0.0603	0.0631
13	42	C.358	C.0065	C.0085	C.0077	0.0080	51	199	0.357	C.0523	C.0683	0.0620	0.0648
14	46	C.358	C.0039	C.0051	C.0047	C.0049	52	202	0.355	C.1395	C.1821	C.1652	0.1729
15	50	C.358	C.0033	C.0043	C.0039	C.0041	53	203	C.359	0.1271	0.1659	C.1506	C.1576
16	54	C.357	C.0025	C.0033	C.0030	0.0031	54	204	0.359	0.1250	0.1633	0.1482	0.1550
17	55	C.362	C.2466	0.3264	0.2960	C.3099	55	205	0.355	C.0639	0.0835	0.0758	0.0793
18	62	0.356	C.0391	0.0510	C.0463	C.0484	56	206	C.358	0.0419	C.0546	C.0496	C.0519
19	64	0.359	C.0148	C.0193	0.0175	C.0183	57	207	C.355	0.0224	0.0292	C.0266	C.0278
20	65	0.359	C.0253	C.0331	C.0300	C.0314	58	208	0.358	C.0425	0.0555	0.0504	0.0527
21	66	C.359	C.1130	0.1475	C.1339	C.1401	59	211	0.361	C.3210	C.4193	0.3805	0.3982
22	67	0.359	C.1733	0.2263	C.2053	C.2149	60	225	C.363	C.0882	C.1152	C.1046	C.1095
23	68	C.360	C.1725	0.2252	0.2044	0.2139	61	226	C.358	0.0079	0.0104	C.0094	C.0098
24	69	C.358	C.0432	0.0564	C.0512	C.0535	62	227	0.355	C.0008	C.0011	0.0010	0.0010
25	70	C.357	C.0059	0.0078	C.0070	C.0074	63	228	0.356	C.0014	C.0018	0.0017	0.0017
26	71	0.357	C.0035	C.0046	C.0042	C.0044	64	229	C.361	C.1411	C.1843	C.1672	C.1750
27	72	C.357	C.0028	C.0037	C.0034	0.0035	65	230	0.356	0.0351	0.0458	0.0416	0.0435
28	74	C.357	C.0050	C.0065	C.0059	C.0062	66	231	0.353	C.0020	0.0026	0.0024	0.0025
29	76	C.357	C.0152	0.0198	C.0179	C.0188	67	232	0.353	C.0008	C.0010	C.0009	C.0009
30	122	C.358	C.0107	C.0139	0.0127	0.0132	68	234	C.355	0.0036	0.0047	C.0043	0.0045
31	125	C.358	C.0093	C.0121	C.0110	0.0115	69	235	C.361	0.1576	0.2059	0.1868	0.1955
32	135	C.358	C.0047	C.0061	C.0055	C.0058	70	236	0.356	C.0228	C.0297	C.0270	0.0282
33	136	C.358	C.0042	C.0055	0.0050	C.0052	71	237	C.353	0.0074	C.0097	C.0088	C.0092
34	138	C.357	C.0739	C.0962	C.0875	C.0915	72	238	C.353	0.0027	C.0035	C.0032	C.0033
35	177	C.356	C.0608	C.0792	C.0719	C.0752	73	240	0.355	C.0077	0.0100	0.0091	0.0095
36	178	C.355	C.1195	0.1557	C.1414	C.1479	74	274	0.356	C.2159	C.2815	0.2556	C.2675
37	179	C.360	C.0703	C.0918	C.0833	C.0871	75	286	C.355	0.2784	C.3627	C.3295	C.3446
38	180	C.358	C.0675	C.0881	C.0800	C.0837							

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	PT(JOULE/KG)	RS(PCT,R)		
7.30	6.46182E 06	2.72236E 06	0.574	31.07	528.1	0.6644E 06	0.0763		
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	PT(BTU/LBM)	RS(FT)		
7.30	1.97002E 06	8.72260E 06	1.884	466.55	1506.6	571.75	0.0174		

CHAN.	T/C	Tv(DEG K)	Tv(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	CS(W/CM2)	CS(BTU/FT2-SEC)	ST(0.5CC)	ST(0.276)	TIME(SEC)
1	4	319.8	563.1	6.497	7.967	4E-.274	42.459	5.367[illegible]E-03	5.7[illegible]E-03	0.572
2	7	311.2	560.1	3.777	4.304	4E-.216	42.404	2.488[illegible]E-03	2.6[illegible]E-03	0.537
3	12	316.1	558.2	1.513	1.667	4E-.322	42.518	1.1944E-04	1.2496E-03	0.526
4	17	309.8	557.7	1.214	1.020	4E-.347	42.600	7.9645E-04	7.9167E-04	0.527
5	22	309.4	556.9	0.886	0.845	4E-.386	42.636	5.2421E-04	5.2421E-04	0.465
6	25	309.3	556.7	0.776	0.666	4E-.358	42.645	4.0683E-04	4.0683E-04	0.486
7	27	309.6	557.2	0.750	0.661	4E-.308	42.619	4.6[illegible]E-04	4.8[illegible]E-04	0.446
8	29	309.5	557.1	0.653	0.581	4E-.376	42.628	4.1[illegible]E-04	4.2937E-04	0.416
9	30	309.4	556.9	0.616	0.543	4E-.367	42.635	3.8[illegible]E-04	4.0102E-04	0.403
10	32	309.2	556.6	0.552	0.486	4E-.445	42.687	3.4304E-04	3.5895E-04	0.383
11	34	309.0	556.1	0.469	0.409	4E-.426	42.670	2.8[illegible]E-04	3.0231E-04	0.388
12	36	309.1	556.5	0.393	0.346	4E-.41[illegible]	42.656	2.4[illegible]E-04	2.5574E-04	0.121
13	42	308.3	554.9	0.315	0.277	4E-.49[illegible]	42.726	1.9529E-04	2.0424E-04	-0.024
14	45	308.1	554.7	0.150	0.166	4E-.5[illegible]	42.736	1.1823E-04	1.2371E-04	-0.667
15	50	307.7	553.9	0.160	0.141	4E-.539	42.770	9.8512E-05	1.0345E-04	-0.620
16	54	307.4	553.3	0.122	0.107	4E-.569	42.796	7.5549E-05	7.9042E-05	-0.557
17	59	311.9	561.4	12.021	10.592	4E-.16[illegible]	42.435	7.4214E-03	7.0728E-03	0.561
18	62	308.4	555.2	1.654	1.665	4E-.474	42.712	1.1[illegible]E-03	1.2311E-03	0.519
19	64	308.7	555.7	0.710	0.631	4E-.451	42.692	4.45[illegible]E-04	4.6566E-04	0.457
20	69	308.7	555.7	1.227	1.081	4E-.449	42.690	7.6[illegible]E-04	7.9789E-04	0.536
21	66	308.5	555.1	0.473	0.422	4E-.43[illegible]	42.673	3.4925E-04	3.5604E-04	0.428
22	67	309.2	556.7	0.[illegible]	7.389	4E-.356	42.643	5.21[illegible]E-03	5.4604E-03	0.495
23	68	309.5	557.0	8.346	7.354	4E-.382	42.631	5.1550E-03	5.4364E-03	0.494
24	69	308.3	555.0	2.094	1.845	4E-.485	42.722	1.3[illegible]E-03	1.3604E-03	0.554
25	70	307.8	553.6	0.289	0.254	4E-.559	42.784	1.7895E-04	1.8723E-04	0.494
26	71	307.5	553.6	0.172	0.152	4E-.556	42.784	1.0[illegible]E-04	1.1159E-04	0.504
27	72	307.3	553.1	0.138	0.122	4E-.579	42.805	8.5554E-05	8.9511E-05	0.427
28	74	307.2	552.9	0.242	0.214	4E-.590	42.814	1.5014E-04	1.5708E-04	0.478
29	76	306.9	552.5	0.737	0.649	4E-.611	42.833	4.5597E-04	4.7704E-04	0.653
30	122	307.6	554.0	0.518	0.457	4E-.524	42.765	3.2157E-04	3.3646E-04	0.451
31	125	307.8	554.0	0.451	0.397	4E-.537	42.768	2.7556E-04	2.9250E-04	0.353
32	135	307.5	554.3	0.226	0.199	4E-.519	42.752	1.4028E-04	1.4677E-04	0.253
33	136	308.1	554.6	0.205	0.181	4E-.5C2	42.737	1.2725E-04	1.3314E-04	0.204
34	176	307.0	552.6	3.591	3.164	4E-.607	42.830	2.2232E-03	2.3260E-03	0.390
35	177	306.4	551.4	2.957	2.605	4E-.665	42.880	1.8281E-03	1.9124E-03	0.418
36	115	305.5	550.5	5.620	5.128	4E-.711	42.921	3.5949E-03	3.7606E-03	0.465
37	179	309.6	557.4	3.398	2.994	4E-.364	42.615	2.1159E-03	2.2142E-03	0.360
38	180	308.3	554.9	3.275	2.886	4E-.489	42.726	2.0335E-03	2.1277E-03	0.487
39	181	307.0	552.6	3.577	3.152	4E-.607	42.830	2.2146E-03	2.3169E-03	0.597
40	182	306.4	551.5	6.324	5.572	4E-.664	42.880	3.9102E-03	4.0906E-03	0.335
41	183	309.7	557.2	5.279	4.740	4E-.729	42.937	3.3211E-03	3.4741E-03	0.359
42	184	305.6	550.1	4.930	4.344	4E-.734	42.941	3.0433E-03	3.1835E-03	0.315
43	185	304.5	548.1	7.694	6.955	4E-.835	43.031	4.8615E-03	5.0845E-03	0.403
44	187	305.2	549.6	6.657	6.017	4E-.761	42.965	4.2550E-03	4.4509E-03	0.423
45	152	306.0	550.7	5.329	4.695	4E-.7[illegible]	42.913	3.4519E-03	3.4437E-03	0.394
46	153	305.1	549.2	2.767	2.614	4E-.779	42.981	1.8297E-03	1.9139E-03	0.487
47	154	305.7	546.7	3.282	2.692	4E-.9C7	43.095	2.0181E-03	2.1107E-03	0.568
48	155	305.4	549.7	5.630	4.952	4E-.752	42.957	3.4677E-03	3.6274E-03	0.397
49	157	306.1	555.7	5.126	5.045	4E-.449	42.690	3.5584E-03	3.7235E-03	0.455
50	158	307.7	553.9	2.472	2.176	4E-.542	42.772	1.5328E-03	1.6037E-03	0.352
51	159	307.2	553.0	2.543	2.240	4E-.5E4	42.809	1.5751E-03	1.6479E-03	0.360
52	202	308.8	555.8	6.756	5.953	4E-.443	42.685	4.1594E-03	4.3542E-03	0.289
53	203	305.1	554.2	5.155	5.423	4E-.423	42.667	3.8272E-03	4.0048E-03	0.307
54	204	309.2	556.5	6.053	5.333	4E-.4C6	42.692	3.7652E-03	3.9401E-03	0.247
55	205	309.1	556.3	3.096	2.726	4E-.416	42.683	1.9251E-03	2.0145E-03	0.307
56	206	307.9	554.3	2.031	1.790	4E-.521	42.753	1.2601E-03	1.3184E-03	0.249
57	207	305.9	550.7	1.053	0.963	4E-.1C4	42.915	6.751EE-04	7.0631E-04	0.641
58	208	308.2	554.8	2.062	1.817	4E-.462	42.728	1.2[illegible]E-03	1.3396E-03	0.349
59	211	310.4	558.7	15.800	13.698	4E-.495	42.555	9.667[illegible]E-03	1.0118E-02	0.349
60	228	312.3	562.1	4.243	3.734	4E-.124	42.403	2.6572E-03	2.7814E-03	0.647
61	226	307.9	554.1	0.365	0.319	4E-.52E	42.754	2.3[illegible]E-04	2.4492E-04	0.443
62	227	305.2	549.3	0.041	0.036	4E-.771	42.974	2.9534E-05	2.6187E-05	0.469
63	228	306.2	551.1	0.048	0.042	4E-.6[illegible]	42.896	4.2[illegible]E-05	4.4[illegible]E-05	0.454
64	225	310.3	558.6	6.615	6.005	4E-.3C2	42.561	4.2498E-03	4.4476E-03	0.583
65	230	306.4	552.3	1.[illegible]	1.454	4E-.62C	42.841	1.05[illegible]E-03	1.1053E-03	0.562
66	231	304.1	547.4	0.[illegible]	0.[illegible]	4E-.67C	43.061	6.[illegible]E-05	6.2791E-05	0.441
67	232	303.9	546.9	0.037	0.032	4E-.928	43.110	2.3601E-05	2.3837E-05	0.279
68	234	305.6	550.0	0.176	0.156	4E-.735	42.945	1.6893E-04	1.1895E-04	0.727
69	235	310.4	558.7	7.612	6.707	4E-.258	42.557	4.7472E-03	4.9662E-03	0.717
70	236	306.8	552.3	1.100	0.977	4E-.522	42.842	6.[illegible]E-04	7.1775E-04	0.573
71	237	306.6	549.8	0.364	0.321	4E-.5C2	43.089	2.2391E-04	2.3419E-04	0.569
72	238	304.1	547.4	0.131	0.116	4E-.871	43.062	8.0[illegible]E-05	8.4546E-05	0.494
73	240	305.9	550.6	0.274	0.[illegible]	4E-.7C6	42.917	2.[illegible]E-04	2.4195E-04	0.913
74	274	306.6	551.8	10.[illegible]	[illegible]	4E-.646	42.864	6.[illegible]E-03	6.7580E-03	0.146
75	288	305.3	549.5	11.[illegible]	11.362	4E-.762	42.966	8.3748E-03	8.[illegible]E-03	0.105

FREE-STREAM DENSITY-VELOCITY PRODUCT = 2.[illegible]E-01 (SLUGS/FT2-SEC)

ORIGINAL PAGE IS
OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO. 183
7.30	3.7450E 06	2.1483E 06 0.574	16.50	786.0	0.80737E 06	0.0053	RUN NO. 23
MACH	RE/FT	REL LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)	
7.30	1.1415E 06	2.1483E 06 1.882	242.49	1414.8	347.19	0.0175	

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)
1	4	0.385	0.1985	0.2625	0.2371	0.2451	39	181	0.381	0.0352	0.0465	0.0420	0.0435
2	7	0.384	0.0990	0.1308	0.1181	0.1222	40	182	0.380	0.0531	0.0701	0.0633	0.0655
3	12	0.383	0.0510	0.0673	0.0608	0.0629	41	183	0.379	0.0511	0.0674	0.0609	0.0630
4	17	0.383	0.0344	0.0454	0.0410	0.0424	42	184	0.379	0.0385	0.0508	0.0459	0.0475
5	22	0.383	0.0282	0.0373	0.0337	0.0348	43	186	0.378	0.0322	0.0424	0.0384	0.0396
6	25	0.383	0.0247	0.0327	0.0295	0.0305	44	187	0.379	0.0321	0.0423	0.0383	0.0396
7	27	0.384	0.0252	0.0333	0.0301	0.0311	45	192	0.379	0.1281	0.1689	0.1527	0.1578
8	29	0.384	0.0234	0.0309	0.0279	0.0289	46	193	0.379	0.0480	0.0633	0.0572	0.0591
9	30	0.384	0.0222	0.0293	0.0264	0.0273	47	194	0.378	0.0393	0.0517	0.0468	0.0484
10	32	0.383	0.0207	0.0274	0.0247	0.0256	48	196	0.379	0.0714	0.0941	0.0851	0.0880
11	34	0.383	0.0187	0.0247	0.0223	0.0231	49	197	0.382	0.1340	0.1769	0.1599	0.1653
12	38	0.383	0.0177	0.0234	0.0212	0.0219	50	198	0.381	0.0575	0.0758	0.0685	0.0709
13	42	0.383	0.0151	0.0200	0.0180	0.0187	51	199	0.380	0.0613	0.0809	0.0732	0.0756
14	46	0.382	0.0105	0.0138	0.0125	0.0129	52	202	0.382	0.1447	0.1911	0.1726	0.1785
15	50	0.382	0.0081	0.0106	0.0096	0.0099	53	203	0.382	0.1320	0.1744	0.1575	0.1629
16	54	0.382	0.0044	0.0058	0.0052	0.0054	54	204	0.382	0.1314	0.1735	0.1568	0.1621
17	59	0.384	0.1991	0.2633	0.2378	0.2459	55	205	0.382	0.0701	0.0926	0.0836	0.0865
18	62	0.382	0.0258	0.0341	0.0308	0.0319	56	206	0.381	0.0506	0.0668	0.0604	0.0624
19	64	0.383	0.0090	0.0119	0.0108	0.0112	57	207	0.380	0.0295	0.0389	0.0351	0.0363
20	65	0.383	0.0097	0.0128	0.0116	0.0120	58	208	0.382	0.0344	0.0455	0.0411	0.0425
21	66	0.383	0.0390	0.0515	0.0466	0.0481	59	211	0.383	0.3121	0.4124	0.3725	0.3852
22	67	0.383	0.0770	0.1017	0.0919	0.0950	60	225	0.385	0.0595	0.0787	0.0711	0.0735
23	68	0.383	0.0880	0.1163	0.1051	0.1086	61	226	0.381	0.0051	0.0068	0.0061	0.0063
24	69	0.383	0.0284	0.0375	0.0339	0.0350	62	227	0.379	0.0008	0.0011	0.0010	0.0010
25	70	0.382	0.0043	0.0056	0.0051	0.0053	63	228	0.379	0.0026	0.0034	0.0031	0.0032
26	71	0.382	0.0026	0.0035	0.0031	0.0032	64	229	0.383	0.1024	0.1352	0.1222	0.1263
27	72	0.382	0.0023	0.0031	0.0028	0.0029	65	230	0.380	0.0159	0.0210	0.0190	0.0196
28	74	0.382	0.0094	0.0124	0.0112	0.0116	66	231	0.378	0.0018	0.0023	0.0021	0.0022
29	76	0.382	0.0060	0.0079	0.0072	0.0074	67	232	0.377	0.0006	0.0008	0.0008	0.0008
30	122	0.383	0.0137	0.0181	0.0164	0.0169	68	234	0.378	0.0020	0.0026	0.0023	0.0024
31	129	0.383	0.0119	0.0157	0.0142	0.0147	69	235	0.382	0.1348	0.1780	0.1608	0.1663
32	135	0.383	0.0069	0.0092	0.0083	0.0086	70	236	0.379	0.0170	0.0224	0.0203	0.0210
33	136	0.383	0.0088	0.0116	0.0105	0.0109	71	237	0.377	0.0058	0.0076	0.0069	0.0071
34	176	0.381	0.0780	0.1030	0.0930	0.0962	72	238	0.377	0.0026	0.0035	0.0031	0.0032
35	177	0.380	0.0635	0.0838	0.0758	0.0783	73	240	0.378	0.0078	0.0103	0.0093	0.0096
36	178	0.380	0.0463	0.0611	0.0552	0.0571	74	274	0.379	0.1598	0.2107	0.1905	0.1969
37	179	0.383	0.1045	0.1380	0.1247	0.1289	75	286	0.377	0.2313	0.3047	0.2755	0.2848
38	180	0.382	0.0577	0.0762	0.0688	0.0712							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	RE	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO.
7.30	3.7450E 06	2.1483E 06	0.574	16.50	786.0	0.80737E 06	0.0053	RUN NO. 23
MACH	RE/FT	RE	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)	
7.30	1.1415E 06	2.1483E 06	1.882	242.49	1414.8	347.19	0.0175	

POINT	T/C	TH(DEG K)	TH(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.883)	TIME(SEC)
1	4	309.2	556.5	6.179	5.445	31.123	27.424	8.0134E-03	8.2868E-03	0.590
2	7	308.3	555.0	3.086	2.719	31.177	27.471	3.9942E-03	4.1301E-03	0.547
3	12	308.0	554.4	1.590	1.401	31.203	27.494	2.0565E-03	2.1264E-03	0.530
4	17	307.9	554.3	1.072	0.945	31.204	27.495	1.3861E-03	1.4332E-03	0.537
5	22	307.9	554.3	0.861	0.776	31.205	27.495	1.1390E-03	1.1778E-03	0.491
6	25	308.2	554.8	0.771	0.680	31.187	27.480	9.9792E-04	1.0319E-03	0.485
7	27	308.4	555.2	0.785	0.692	31.171	27.466	1.0162E-03	1.0508E-03	0.459
8	29	308.4	555.2	0.729	0.643	31.171	27.466	9.4417E-04	9.7632E-04	0.448
9	30	308.4	555.1	0.691	0.608	31.173	27.468	8.9385E-04	9.2428E-04	0.430
10	32	308.1	554.5	0.646	0.569	31.196	27.488	8.3562E-04	8.6404E-04	0.422
11	34	308.1	554.6	0.584	0.514	31.193	27.485	7.5515E-04	7.8084E-04	0.363
12	38	308.2	554.8	0.553	0.487	31.186	27.479	7.1561E-04	7.3996E-04	0.315
13	42	307.9	553.6	0.472	0.416	31.231	27.518	6.1006E-04	6.3078E-04	0.256
14	46	307.5	553.4	0.327	0.288	31.235	27.522	4.2210E-04	4.3644E-04	0.014
15	50	307.2	552.9	0.252	0.222	31.255	27.540	3.2497E-04	3.3599E-04	0.030
16	54	306.8	552.2	0.137	0.120	31.281	27.562	1.7618E-04	1.8215E-04	-0.449
17	59	309.0	556.3	6.200	5.463	31.132	27.432	8.0374E-03	8.3115E-03	0.584
18	62	307.4	553.4	0.807	0.711	31.238	27.525	1.0419E-03	1.0772E-03	0.525
19	64	307.9	554.1	0.282	0.249	31.210	27.500	3.6474E-04	3.7714E-04	0.474
20	65	307.8	554.0	0.303	0.267	31.216	27.505	3.9174E-04	4.0506E-04	0.524
21	66	307.9	554.1	1.218	1.073	31.209	27.499	1.5742E-03	1.6277E-03	0.470
22	67	308.1	554.6	2.401	2.116	31.193	27.485	3.1061E-03	3.2117E-03	0.519
23	68	308.2	554.8	2.745	2.418	31.185	27.478	3.5514E-03	3.6722E-03	0.478
24	69	307.6	553.8	0.886	0.781	31.224	27.512	1.1445E-03	1.1834E-03	0.545
25	70	307.3	553.1	0.133	0.117	31.248	27.533	1.7204E-04	1.7788E-04	0.458
26	71	307.4	553.3	0.082	0.072	31.241	27.528	1.0553E-04	1.0911E-04	0.525
27	72	307.2	552.9	0.073	0.065	31.254	27.539	9.4528E-05	9.7736E-05	0.501
28	74	307.0	552.6	0.294	0.259	31.265	27.549	3.7926E-04	3.9213E-04	0.569
29	76	306.8	552.2	0.188	0.165	31.279	27.561	2.4215E-04	2.5036E-04	0.710
30	122	307.7	553.8	0.428	0.377	31.222	27.511	5.5314E-04	5.7194E-04	0.472
31	129	307.6	553.6	0.372	0.328	31.228	27.516	4.8079E-04	4.9712E-04	0.442
32	135	307.7	553.9	0.217	0.191	31.218	27.507	2.8015E-04	2.8967E-04	0.363
33	136	307.9	554.2	0.275	0.242	31.209	27.499	3.5562E-04	3.6771E-04	0.402
34	176	306.2	551.2	2.443	2.153	31.316	27.594	3.1457E-03	3.2522E-03	0.383
35	177	305.8	550.4	1.992	1.755	31.345	27.620	2.5618E-03	2.6484E-03	0.393
36	178	305.5	549.8	1.453	1.280	31.366	27.637	1.8671E-03	1.9302E-03	0.373
37	179	307.9	554.2	3.260	2.872	31.206	27.496	4.2145E-03	4.3578E-03	0.324
38	180	307.0	552.6	1.804	1.590	31.264	27.547	2.3276E-03	2.4064E-03	0.396
39	181	306.2	551.1	1.104	0.973	31.319	27.596	1.4213E-03	1.4694E-03	0.484
40	182	305.6	550.1	1.666	1.468	31.357	27.630	2.1419E-03	2.2143E-03	0.255
41	183	304.9	548.8	1.605	1.414	31.404	27.671	2.0595E-03	2.1290E-03	0.245
42	184	304.6	548.4	1.210	1.067	31.419	27.685	1.5527E-03	1.6051E-03	0.172
43	186	304.2	547.6	1.012	0.892	31.445	27.707	1.2971E-03	1.3408E-03	0.218
44	187	304.7	548.5	1.008	0.889	31.415	27.680	1.2938E-03	1.3375E-03	0.286
45	192	305.0	549.0	4.021	3.543	31.395	27.663	5.1630E-03	5.3373E-03	0.432
46	193	304.3	547.7	1.509	1.330	31.444	27.706	1.9444E-03	1.9996E-03	0.565
47	194	303.5	546.3	1.237	1.090	31.494	27.750	1.5822E-03	1.6355E-03	0.509
48	196	304.7	548.4	2.243	1.976	31.416	27.682	2.8773E-03	2.9743E-03	0.464
49	197	306.8	552.2	4.192	3.694	31.279	27.561	5.4051E-03	5.5884E-03	0.467
50	198	306.3	551.3	1.799	1.585	31.312	27.590	2.3173E-03	2.3958E-03	0.386
51	199	305.9	550.6	1.922	1.694	31.339	27.614	2.4734E-03	2.5571E-03	0.360
52	202	307.1	552.8	4.523	3.985	31.260	27.544	5.8361E-03	6.0342E-03	0.308
53	203	307.3	553.1	4.126	3.635	31.247	27.533	5.3262E-03	5.5070E-03	0.306
54	204	307.4	553.3	4.104	3.616	31.240	27.526	5.2998E-03	5.4798E-03	0.251
55	205	307.5	553.4	2.189	1.929	31.236	27.523	2.8269E-03	2.9229E-03	0.324
56	206	306.5	551.7	1.585	1.396	31.298	27.578	2.0421E-03	2.1113E-03	0.293
57	207	305.3	549.5	0.925	0.815	31.378	27.648	1.1885E-03	1.2287E-03	0.339
58	208	306.8	552.3	1.077	0.949	31.276	27.559	1.3892E-03	1.4363E-03	0.315
59	211	308.1	554.5	9.737	8.580	31.196	27.488	1.2594E-02	1.3022E-02	0.372
60	225	309.4	557.0	1.852	1.632	31.107	27.410	2.4034E-03	2.4854E-03	0.708
61	226	306.6	551.9	0.160	0.141	31.289	27.570	2.0684E-04	2.1385E-04	0.605
62	227	304.7	548.5	0.027	0.023	31.413	27.679	3.4152E-05	3.5304E-05	0.004
63	228	304.7	548.4	0.081	0.071	31.417	27.683	1.0349E-04	1.0698E-04	0.502
64	229	307.6	553.7	3.196	2.816	31.226	27.514	4.1296E-03	4.2699E-03	0.679
65	230	305.4	549.8	0.499	0.440	31.367	27.639	6.4159E-04	6.6327E-04	0.589
66	231	303.6	546.4	0.056	0.049	31.490	27.747	7.1186E-05	7.3581E-05	0.596
67	232	302.8	545.0	0.020	0.018	31.542	27.793	2.5540E-05	2.6398E-05	0.054
68	234	304.2	547.5	0.062	0.055	31.450	27.711	7.9306E-05	8.1978E-05	0.527
69	35	307.0	552.5	4.214	3.713	31.267	27.551	5.4365E-03	5.6210E-03	0.779
70	236	304.7	548.5	0.535	0.471	31.413	27.679	6.8613E-04	7.0928E-04	0.578
71	237	302.8	545.1	0.182	0.160	31.537	27.788	2.3187E-04	2.3965E-04	0.573
72	238	302.8	545.0	0.083	0.073	31.540	27.791	1.0585E-04	1.0944E-04	0.432
73	240	304.0	547.2	0.245	0.216	31.462	27.722	3.1430E-04	3.2488E-04	0.744
74	274	304.8	548.7	5.019	4.423	31.407	27.673	6.4416E-03	6.6592E-03	0.139
75	286	303.2	545.8	7.289	6.422	31.513	27.767	9.3179E-03	9.6311E-03	0.140

FREE-STREAM DENSITY-VELOCITY PRODUCT = 1.1802E-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 24

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	PS(METER)
7.30	3.8328E 06	3.8328E 06	0.574	31.75	822.1	0.84687E 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	1.1685E 06	3.8328E 06	1.882	466.72	1479.8	364.17	0.0175

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)
1	4	[illegible]	0.1990	0.2594	0.2356	0.2431	39	181	0.355	0.0642	0.0837	0.0760	0.0785
2	7	[illegible]	[illegible]	0.1298	0.1179	0.1217	40	182	0.355	0.1569	0.2045	0.1857	0.1917
3	12	[illegible]	[illegible]	0.0664	0.0604	0.0623	41	183	0.354	0.1379	0.1796	0.1631	0.1684
4	17	[illegible]	0.0342	0.0444	0.0404	0.0417	42	184	0.354	0.1200	0.1563	0.1420	0.1465
5	22	[illegible]	[illegible]	0.0366	0.0332	0.0343	43	186	0.353	0.1096	0.1428	0.1297	0.1339
6	25	0.354	0.0237	0.0309	0.0280	0.0289	44	187	0.354	0.0941	0.1225	0.1113	0.1149
7	27	0.355	0.0241	0.0314	0.0286	0.0295	45	192	0.354	0.1844	0.2402	0.2182	0.2252
8	29	0.355	0.0223	0.0290	0.0263	0.0272	46	193	0.353	0.0857	0.1116	0.1014	0.1046
9	30	0.355	0.0218	0.0284	0.0258	0.0267	47	194	0.352	0.0655	0.0852	0.0774	0.0799
10	32	0.355	0.0200	0.0261	0.0237	0.0245	48	196	0.354	0.0961	0.1252	0.1137	0.1174
11	34	0.356	0.0180	0.0234	0.0213	0.0220	49	197	0.357	0.1356	0.1766	0.1605	0.1657
12	38	0.358	0.0165	0.0215	0.0195	0.0202	50	198	0.356	0.0576	0.0751	0.0682	0.0704
13	42	0.359	0.0139	0.0182	0.0165	0.0170	51	199	0.356	0.0648	0.0845	0.0767	0.0792
14	46	0.360	0.0091	0.0119	0.0108	0.0111	52	202	0.357	0.1421	0.1853	0.1683	0.1737
15	50	0.360	0.0068	0.0089	0.0081	0.0084	53	203	0.358	0.1295	0.1690	0.1534	0.1584
16	54	0.359	0.0040	0.0052	0.0047	0.0049	54	204	0.358	0.1288	0.1681	0.1526	0.1576
17	59	0.355	0.2005	0.2613	0.2373	0.2449	55	205	0.359	0.0690	0.0900	0.0817	0.0844
18	62	0.351	0.0263	0.0341	0.0310	0.0320	56	206	0.357	0.0536	0.0699	0.0634	0.0655
19	64	0.351	0.0069	0.0090	0.0082	0.0085	57	207	0.355	0.0329	0.0428	0.0389	0.0401
20	65	0.351	0.0127	0.0165	0.0150	0.0155	58	208	0.358	0.0354	0.0462	0.0419	0.0433
21	66	0.351	0.0487	0.0633	0.0575	0.0594	59	211	0.359	0.3076	0.4016	0.3645	0.3763
22	67	0.351	0.0920	0.1196	0.1087	0.1122	60	225	0.361	0.0577	0.0754	0.0684	0.0706
23	68	0.351	0.0956	0.1243	0.1130	0.1166	61	226	0.356	0.0044	0.0058	0.0053	0.0054
24	69	0.349	0.0290	0.0377	0.0342	0.0353	62	227	0.354	0.0009	0.0011	0.0010	0.0011
25	70	0.349	0.0042	0.0055	0.0050	0.0052	63	228	0.354	0.0018	0.0023	0.0021	0.0021
26	71	0.350	0.0022	0.0029	0.0026	0.0027	64	229	0.359	0.1058	0.1381	0.1253	0.1294
27	72	0.351	0.0021	0.0027	0.0025	0.0025	65	230	0.354	0.0164	0.0214	0.0194	0.0200
28	74	0.354	0.0096	0.0125	0.0114	0.0117	66	231	0.351	0.0010	0.0013	0.0012	0.0012
29	76	0.357	0.0107	0.0139	0.0126	0.0130	67	232	0.350	0.0022	0.0028	0.0026	0.0027
30	122	0.351	0.0135	0.0175	0.0159	0.0164	68	234	0.353	0.0046	0.0060	0.0054	0.0056
31	129	0.351	0.0115	0.0150	0.0136	0.0141	69	235	0.358	0.1364	0.1781	0.1616	0.1669
32	135	0.353	0.0072	0.0094	0.0085	0.0088	70	236	0.354	0.0176	0.0230	0.0209	0.0215
33	136	0.355	0.0098	0.0127	0.0116	0.0120	71	237	0.350	0.0061	0.0079	0.0072	0.0074
34	176	0.356	0.0917	0.1196	0.1086	0.1121	72	238	0.351	0.0023	0.0030	0.0027	0.0028
35	177	0.356	0.0723	0.0943	0.0856	0.0884	73	240	0.353	0.0083	0.0109	0.0099	0.0102
36	178	0.355	0.0555	0.0723	0.0657	0.0678	74	274	0.355	0.1525	0.1987	0.1805	0.1863
37	179	0.359	0.1235	0.1612	0.1463	0.1510	75	286	0.354	0.2113	0.2752	0.2500	0.2580
38	180	0.357	0.0735	0.0959	0.0870	0.0899							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. PRELIMINARY DATA

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	6.6816E 06	3.8328E 06	0.574	31.75	822.1	0.84687E 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	2.0365E 06	3.8328E 06	1.882	466.72	1479.8	364.17	0.0175

TEST NO. 183
RUN NO. 24

CHAN	T/C	TW(DEG K)	TW(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.993)	TIME(SEC)
1	4	299.4	539.0	9.478	8.351	47.618	41.958	5.9232E-03	6.1140E-03	0.582
	7	297.7	535.9	4.763	4.197	47.774	42.096	2.9658E-03	3.0610E-03	0.538
3	12	296.7	534.0	2.445	2.154	47.368	42.178	1.5187E-03	1.5673E-03	0.515
4	17	296.5	533.8	1.636	1.441	47.881	42.190	1.0158E-03	1.0483E-03	0.520
5	22	296.6	533.9	1.345	1.185	47.673	42.182	8.3570E-04	8.6245E-04	0.470
	25	298.5	537.4	1.130	0.996	47.699	42.029	7.0483E-04	7.2748E-04	0.423
7	27	299.2	538.6	1.149	1.013	47.637	41.974	7.1807E-04	7.4118E-04	0.389
8	29	299.7	539.4	1.059	0.933	47.596	41.938	6.6226E-04	6.8360E-04	0.348
9	30	299.7	539.5	1.038	0.915	47.591	41.934	6.4945E-04	6.7037E-04	0.347
10	32	299.5	539.2	0.953	0.840	47.608	41.949	5.9600E-04	6.1520E-04	0.314
11	34	300.5	540.9	0.854	0.753	47.522	41.873	5.3513E-04	5.5241E-04	0.231
12	38	302.1	543.8	0.791	0.688	47.374	41.743	4.9112E-04	5.0703E-04	0.157
13	42	302.3	544.2	0.660	0.581	47.354	41.726	4.1449E-04	4.2844E-04	0.075
14	46	303.3	546.0	0.429	0.378	47.262	41.644	2.7036E-04	2.7915E-04	-0.308
15	50	303.7	546.7	0.323	0.285	47.227	41.613	2.0383E-04	2.1046E-04	-0.334
16	54	302.9	545.3	0.189	0.167	47.298	41.676	1.1906E-04	1.2293E-04	-0.816
17	59	299.0	538.2	9.558	8.422	47.659	41.994	5.9673E-03	6.1592E-03	0.578
18	62	295.7	532.3	1.259	1.110	47.958	42.258	7.8063E-04	8.0556E-04	0.547
19	64	295.9	532.7	0.332	0.293	47.938	42.240	2.0597E-04	2.1255E-04	0.471
20	65	295.8	532.4	0.608	0.536	47.950	42.250	3.7699E-04	3.8903E-04	0.530
21	66	295.9	532.6	2.333	2.056	47.941	42.243	1.4469E-03	1.4932E-03	0.439
22	67	296.1	533.0	4.407	3.883	47.920	42.224	2.7344E-03	2.8218E-03	0.517
23	68	296.1	532.9	4.581	4.036	47.926	42.229	2.8421E-03	2.9329E-03	0.461
24	69	294.4	529.9	1.394	1.228	48.076	42.362	8.6152E-04	8.8895E-04	0.558
25	70	294.1	529.4	0.204	0.180	48.105	42.387	1.2609E-04	1.3010E-04	0.467
26	71	294.8	530.7	0.107	0.094	48.039	42.328	6.6274E-05	6.8386E-05	0.379
27	72	295.9	532.6	0.100	0.088	47.940	42.242	6.1918E-05	6.3896E-05	0.390
28	74	298.5	537.3	0.458	0.404	47.702	42.032	2.8596E-04	2.9515E-04	0.558
29	76	300.9	541.7	0.507	0.446	47.482	41.838	3.1758E-04	3.2785E-04	0.569
30	122	296.2	533.1	0.646	0.569	47.914	42.219	4.0061E-04	4.1342E-04	0.455
31	129	296.0	532.8	0.553	0.487	47.930	42.233	3.4293E-04	3.5389E-04	0.427
32	135	297.4	535.4	0.344	0.303	47.799	42.117	2.1420E-04	2.2107E-04	0.422
33	136	299.0	538.3	0.466	0.411	47.653	41.989	2.9117E-04	3.0054E-04	0.468
34	176	300.4	540.7	4.361	3.842	47.528	41.879	2.7311E-03	2.8192E-03	0.397
35	177	300.2	540.4	3.438	3.029	47.548	41.896	2.1521E-03	2.2215E-03	0.374
36	178	299.5	539.1	2.643	2.329	47.614	41.954	1.6521E-03	1.7053E-03	0.351
37	179	302.4	544.2	5.347	5.152	47.351	41.723	3.6775E-03	3.7967E-03	0.314
38	180	301.0	541.8	3.489	3.075	47.474	41.831	2.1884E-03	2.2591E-03	0.218
39	181	299.7	539.5	3.056	2.693	47.589	41.932	1.9111E-03	1.9727E-03	0.456
40	182	299.1	538.3	7.479	6.590	47.652	41.988	4.6702E-03	4.8205E-03	0.541
41	183	298.6	537.5	6.576	5.794	47.692	42.023	4.1025E-03	4.2344E-03	0.499
42	184	298.7	537.7	5.721	5.041	47.684	42.016	3.5700E-03	3.6847E-03	0.407
43	186	297.9	536.3	5.236	4.614	47.755	42.078	3.2618E-03	3.3665E-03	0.437
44	187	298.8	537.8	4.485	3.952	47.677	42.010	2.7987E-03	2.8887E-03	0.460
45	192	298.6	537.5	8.794	7.749	47.693	42.024	5.4862E-03	5.6626E-03	0.468
46	193	297.9	536.2	4.092	3.606	47.757	42.080	2.5490E-03	2.6308E-03	0.523
47	194	296.6	534.2	3.134	2.761	47.861	42.172	1.9471E-03	2.0095E-03	0.454
48	196	298.6	537.4	4.585	4.040	47.698	42.028	2.8603E-03	2.9522E-03	0.423
49	197	301.1	542.0	6.435	5.670	47.465	41.823	4.0365E-03	4.1670E-03	0.454
50	198	300.4	540.8	2.737	2.412	47.526	41.877	1.7144E-03	1.7697E-03	0.368
51	199	300.1	540.3	3.082	2.716	47.553	41.900	1.9294E-03	1.9917E-03	0.354
52	202	301.4	542.6	6.739	5.938	47.437	41.798	4.2302E-03	4.3671E-03	0.272
53	203	301.8	543.2	6.139	5.409	47.402	41.768	3.8563E-03	3.9811E-03	0.272
54	204	302.1	543.8	6.104	5.378	47.376	41.744	3.8367E-03	3.9610E-03	0.216
55	205	302.4	544.3	3.265	2.877	47.346	41.718	2.0941E-03	2.1207E-03	0.293
56	206	301.3	542.3	2.542	2.239	47.448	41.808	1.5949E-03	1.6464E-03	0.316
57	207	299.3	538.8	1.565	1.379	47.628	41.967	9.7807E-04	1.0096E-03	0.315
58	208	301.6	542.9	1.678	1.478	47.418	41.781	1.0535E-03	1.0876E-03	0.294
59	211	302.8	545.0	14.555	12.825	47.315	41.691	9.1628E-03	9.4601E-03	0.359
60	225	304.7	548.5	2.718	2.395	47.135	41.532	1.7186E-03	1.7746E-03	0.698
61	226	300.2	540.3	0.211	0.186	47.550	41.898	1.3232E-04	1.3659E-04	0.508
62	227	298.4	537.0	0.041	0.036	47.716	42.044	2.5713E-05	2.6539E-05	0.491
63	228	298.6	537.4	0.084	0.074	47.696	42.027	5.2254E-05	5.3934E-05	0.427
64	229	302.5	544.4	5.009	4.413	47.342	41.715	3.1511E-03	3.2533E-03	0.654
65	230	298.8	537.9	0.783	0.689	47.674	42.008	4.8838E-04	5.0409E-04	0.646
66	231	296.3	533.3	0.048	0.042	47.903	42.209	2.9865E-05	3.0820E-05	0.511
67	232	295.4	531.7	0.105	0.093	47.987	42.283	6.5160E-05	6.7239E-05	0.559
68	234	297.5	535.6	0.220	0.194	47.790	42.109	1.3679E-04	1.4118E-04	0.649
69	235	302.2	544.0	6.462	5.694	47.361	41.732	4.0633E-03	4.1949E-03	0.777
70	236	298.4	537.0	0.841	0.741	47.716	42.044	5.2455E-04	5.4140E-04	0.621
71	237	295.4	531.7	0.292	0.257	47.985	42.281	1.8100E-04	1.8678E-04	0.527
72	238	295.5	532.0	0.110	0.097	47.972	42.270	6.8253E-05	7.0432E-05	0.388
73	240	297.6	535.6	0.399	0.352	47.788	42.108	2.4835E-04	2.5631E-04	0.695
74	274	299.1	538.4	7.266	6.402	47.649	41.985	4.5376E-03	4.6836E-03	0.107
75	286	298.1	536.6	10.089	8.889	47.740	42.066	6.2867E-03	6.4886E-03	0.017

FREE-STREAM DENSITY-VELOCITY PRODUCT = 2.2084E-01 (SLUGS/FT2-SEC)

5142

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 25

MACH 7.30	RE/METER 1.2035E 07	REL 6.9039E 06	LENGTH(METER) 0.574	PT(ATM) 59.16	TT(DEG K) 838.6	HT(JOULE/KG) 0.86504E 06	RS(METER) 0.0093
MACH 7.30	RE/FT 3.6684E 06	REL 6.9039E 06	LENGTH(FT) 1.882	PT(PSI) 869.61	TT(DEG R) 1509.6	HT(BTU/LBM) 371.99	RS(FT) 0.0175

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)
1	4	0.352	0.1999	0.2600	0.2363	0.2439	39	181	0.349	0.1670	0.2170	0.1973	0.2036
2	7	0.349	0.1013	0.1317	0.1197	0.1235	40	182	0.348	0.2642	0.3431	0.3120	0.3220
3	12	0.347	0.0520	0.0676	0.0615	0.0634	41	183	0.348	0.2015	0.2617	0.2380	0.2456
4	17	0.347	0.0339	0.0440	0.0400	0.0413	42	184	0.348	0.1513	0.1965	0.1787	0.1844
5	22	0.347	0.0287	0.0372	0.0339	0.0349	43	186	0.347	0.1303	0.1692	0.1539	0.1587
6	25	0.349	0.0245	0.0318	0.0290	0.0299	44	187	0.348	0.1101	0.1430	0.1301	0.1342
7	27	0.350	0.0248	0.0322	0.0293	0.0303	45	192	0.348	0.2136	0.2775	0.2524	0.2604
8	29	0.350	0.0236	0.0306	0.0279	0.0287	46	193	0.347	0.0938	0.1218	0.1108	0.1143
9	30	0.350	0.0237	0.0308	0.0280	0.0289	47	194	0.346	0.0776	0.1007	0.0916	0.0945
10	32	0.349	0.0224	0.0292	0.0265	0.0274	48	196	0.348	0.1130	0.1468	0.1335	0.1377
11	34	0.350	0.0205	0.0266	0.0242	0.0250	49	197	0.352	0.1386	0.1803	0.1638	0.1691
12	38	0.352	0.0198	0.0258	0.0234	0.0242	50	198	0.351	0.0669	0.0870	0.0791	0.0816
13	42	0.351	0.0172	0.0224	0.0204	0.0210	51	199	0.351	0.1118	0.1453	0.1321	0.1363
14	46	0.352	0.0134	0.0174	0.0158	0.0164	52	202	0.352	0.1428	0.1858	0.1689	0.1743
15	50	0.352	0.0109	0.0141	0.0128	0.0133	53	203	0.352	0.1280	0.1665	0.1513	0.1562
16	54	0.351	0.0094	0.0122	0.0111	0.0114	54	204	0.353	0.1277	0.1663	0.1511	0.1559
17	59	0.350	0.2020	0.2626	0.2388	0.2464	55	205	0.354	0.0736	0.0959	0.0871	0.0899
18	62	0.349	0.0255	0.0330	0.0301	0.0310	56	206	0.352	0.0733	0.0954	0.0867	0.0895
19	64	0.345	0.0063	0.0082	0.0074	0.0077	57	207	0.350	0.0859	0.1116	0.1015	0.1047
20	65	0.345	0.0157	0.0204	0.0186	0.0192	58	208	0.353	0.0875	0.1139	0.1035	0.1068
21	66	0.345	0.0718	0.0931	0.0847	0.0874	59	211	0.353	0.3808	0.4958	0.4504	0.4649
22	67	0.345	0.1241	0.1609	0.1464	0.1510	60	225	0.356	0.0548	0.0715	0.0649	0.0670
23	68	0.345	0.1289	0.1672	0.1521	0.1569	61	226	0.349	0.0043	0.0056	0.0051	0.0053
24	69	0.343	0.0334	0.0433	0.0394	0.0406	62	227	0.346	0.0010	0.0013	0.0012	0.0012
25	70	0.342	0.0044	0.0057	0.0052	0.0054	63	228	0.348	0.0025	0.0033	0.0030	0.0031
26	71	0.343	0.0022	0.0028	0.0026	0.0027	64	229	0.353	0.1123	0.1462	0.1329	0.1371
27	72	0.345	0.0026	0.0033	0.0030	0.0031	65	230	0.348	0.0166	0.0215	0.0196	0.0202
28	74	0.347	0.0107	0.0138	0.0126	0.0130	66	231	0.345	0.0006	0.0008	0.0008	0.0008
29	76	0.349	0.0145	0.0188	0.0171	0.0176	67	232	0.344	0.0024	0.0031	0.0028	0.0029
30	122	0.345	0.0141	0.0183	0.0167	0.0172	68	234	0.347	0.0050	0.0065	0.0059	0.0061
31	129	0.345	0.0118	0.0153	0.0140	0.0144	69	235	0.354	0.1290	0.1681	0.1527	0.1576
32	135	0.347	0.0074	0.0096	0.0088	0.0091	70	236	0.348	0.0160	0.0207	0.0189	0.0195
33	136	0.348	0.0104	0.0136	0.0123	0.0127	71	237	0.344	0.0064	0.0083	0.0076	0.0078
34	176	0.350	0.2165	0.2814	0.2558	0.2640	72	238	0.345	0.0027	0.0035	0.0032	0.0033
35	177	0.349	0.1661	0.2158	0.1962	0.2025	73	240	0.348	0.0065	0.0084	0.0077	0.0079
36	178	0.349	0.1206	0.1567	0.1425	0.1470	74	274	0.350	0.1629	0.2118	0.1925	0.1987
37	179	0.353	0.2168	0.2823	0.2565	0.2647	75	286	0.350	0.2331	0.3029	0.2754	0.2842
38	180	0.351	0.2453	0.3190	0.2900	0.2993							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. TAN PRELIMINARY DATA REF

TEST NO. 183
RUN NO. 25

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	1.2[illegible]E 07	6.9039E 06	0.574	59.16	838.6	0.86504E 06	0.0053
MACH	RE/FT	RLL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	3.6884E 06	6.9039E 06	1.882	869.61	1509.6	371.99	0.0175

CHAN	T/C	TW(DEG K)	TW(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.883)	TIME(SEC)
1	4	302.8	545.0	13.354	11.767	66.814	58.872	4.4122E-03	4.5533E-03	0.504
2	7	300.0	541.1	6.790	5.988	67.081	59.107	2.2353E-03	2.3065E-03	0.465
3	11	299.1	538.5	3.500	3.084	67.266	59.270	1.1477E-03	1.1841E-03	0.442
4	17	298.8	537.8	2.281	2.010	67.310	59.309	7.4725E-04	7.7095E-04	0.417
5	22	298.6	537.5	1.931	1.702	67.330	59.327	.3257E-04	6.9262E-04	0.371
6	25	300.4	540.6	1.645	1.449	67.114	59.137	5.4066E-04	5.5787E-04	0.312
7	27	301.2	542.1	1.663	1.465	67.013	59.047	5.4749E-04	5.6494E-04	0.287
8	29	301.5	542.7	1.578	1.391	66.974	59.013	5.2006E-04	5.3665E-04	0.248
9	30	301.4	542.5	1.588	1.400	66.988	59.025	5.2328E-04	5.3996E-04	0.270
10	32	300.7	541.3	1.505	1.326	67.069	59.097	4.9501E-04	5.1077E-04	0.240
11	34	301.7	543.1	1.372	1.209	66.946	58.988	4.5225E-04	4.6668E-04	0.181
12	38	301.0	545.3	1.323	1.166	66.789	58.850	4.3730E-04	4.5129E-04	0.126
13	42	302.5	544.5	1.153	1.016	66.850	58.904	3.8053E-04	3.9276E-04	0.071
14	46	303.1	545.7	0.795	0.788	66.767	58.831	2.9582E-04	3.0529E-04	-0.111
15	50	303.2	545.8	0.725	0.639	66.756	58.821	2.3966E-04	2.4754E-04	-0.133
16	54	302.7	544.8	0.625	0.551	66.825	58.882	2.0651E-04	2.1311E-04	-0.136
17	59	301.5	542.7	13.530	11.922	66.973	59.013	4.4581E-03	4.6003E-03	0.500
18	62	297.0	534.6	1.720	1.515	67.530	59.503	5.6137E-04	5.7911E-04	0.452
19	64	297.0	534.7	0.425	0.374	67.529	59.502	1.3872E-04	1.4310E-04	0.384
20	65	296.9	534.4	1.064	0.937	67.549	59.520	3.4707E-04	3.5803E-04	0.459
21	66	297.0	534.5	4.846	4.270	67.538	59.510	1.5817E-03	1.6317E-03	0.394
22	67	297.3	535.1	8.373	7.378	67.499	59.476	2.7348E-03	2.8212E-03	0.457
23	68	297.2	534.9	8.702	7.667	67.512	59.487	2.8413E-03	2.9311E-03	0.422
24	69	295.1	531.2	2.263	1.994	67.768	59.713	7.3563E-04	7.5877E-04	0.500
25	70	294.7	530.5	0.299	0.263	67.815	59.754	9.7038E-05	1.0009E-04	0.425
26	71	295.7	532.2	0.148	0.130	67.701	59.654	4.8063E-05	4.9577E-05	0.383
27	72	296.9	534.5	0.174	0.154	67.542	59.514	5.6892E-05	5.8689E-05	0.421
28	74	299.0	538.2	0.718	0.632	67.284	59.286	2.3522E-04	2.4268E-04	0.501
29	76	300.6	541.0	0.970	0.855	67.089	59.114	3.1893E-04	3.2908E-04	0.457
30	122	297.5	535.5	0.953	0.839	67.473	59.453	3.1126E-04	3.2110E-04	0.408
31	129	297.3	535.2	0.799	0.704	67.492	59.469	2.6086E-04	2.6911E-04	0.374
32	135	298.9	538.0	0.500	0.441	67.298	59.298	1.6387E-04	1.6906E-04	0.357
33	136	300.0	540.0	0.701	0.617	67.158	59.175	2.3014E-04	2.3746E-04	0.318
34	176	301.2	542.2	14.505	12.781	67.010	59.045	4.7765E-03	4.9288E-03	0.414
35	177	300.9	541.7	11.134	9.810	67.041	59.072	3.6643E-03	3.7811E-03	0.415
36	178	300.2	540.4	8.097	7.135	67.132	59.153	2.6609E-03	2.7455E-03	0.395
37	179	303.8	546.8	14.461	12.742	66.686	58.760	4.7880E-03	4.9415E-03	0.413
38	180	302.2	543.9	16.409	14.459	66.890	58.939	5.4145E-03	5.5875E-03	0.429
39	181	300.6	541.0	11.205	9.873	67.087	59.113	3.6849E-03	3.8022E-03	0.438
40	182	300.0	540.0	17.740	15.631	67.157	59.174	5.8271E-03	6.0124E-03	0.386
41	183	299.7	539.4	13.543	11.933	67.201	59.213	4.4452E-03	4.5865E-03	0.376
42	184	299.7	539.5	10.167	8.959	67.192	59.205	3.3377E-03	3.4438E-03	0.331
43	185	298.7	537.7	8.772	7.729	67.317	59.315	2.8736E-03	2.9647E-03	0.360
44	187	299.8	539.6	7.397	6.518	67.184	59.198	2.4287E-03	2.5059E-03	0.366
45	192	300.1	540.1	14.346	12.641	67.153	59.171	4.7127E-03	4.8626E-03	0.410
46	193	299.1	538.4	6.311	5.561	67.273	59.277	2.0691E-03	2.1347E-03	0.445
47	194	297.7	535.8	5.234	4.611	67.452	59.434	1.7106E-03	1.7647E-03	0.397
48	196	299.9	539.7	7.591	6.689	67.177	59.192	2.4927E-03	2.5720E-03	0.352
49	197	303.0	545.4	9.254	8.154	66.785	58.847	3.0588E-03	3.1567E-03	0.390
50	198	302.4	544.3	4.474	3.942	66.864	58.916	1.4768E-03	1.5240E-03	0.362
51	199	302.1	543.8	7.476	6.587	66.893	58.942	2.4665E-03	2.5453E-03	0.441
52	202	303.1	545.5	9.538	8.404	66.777	58.840	3.1533E-03	3.2543E-03	0.246
53	203	303.6	546.4	8.537	7.522	66.714	58.784	2.8252E-03	2.9158E-03	0.238
54	204	303.9	547.1	8.517	7.504	66.668	58.743	2.8209E-03	2.9113E-03	0.183
55	205	304.7	548.4	4.901	4.318	66.574	58.661	1.6257E-03	1.6779E-03	0.260
56	206	303.5	546.3	4.891	4.309	66.724	58.793	1.6183E-03	1.6702E-03	0.387
57	207	301.0	541.8	5.757	5.073	67.032	59.064	1.8952E-03	1.9556E-03	0.505
58	208	303.9	547.0	5.833	5.140	66.674	58.749	1.9318E-03	1.9937E-03	0.219
59	211	304.3	547.8	25.366	22.351	66.618	58.699	8.4088E-03	8.6787E-03	0.250
60	225	306.9	552.4	3.635	3.203	66.299	58.418	1.2116E-03	1.2507E-03	0.592
61	226	300.7	541.3	0.289	0.255	67.072	59.099	9.5100E-05	9.8128E-05	0.410
62	227	298.4	537.1	0.066	0.058	67.359	59.352	2.1557E-05	2.2240E-05	0.613
63	228	299.9	539.8	0.170	0.150	67.173	59.188	5.5862E-05	5.7638E-05	0.508
64	229	304.4	548.0	7.480	6.591	66.604	58.687	2.4801E-03	2.5598E-03	0.532
65	230	299.6	539.3	1.113	0.981	67.206	59.218	3.6543E-04	3.7704E-04	0.552
66	231	296.7	534.1	0.043	0.038	67.566	59.535	1.4063E-05	1.4507E-05	0.457
67	232	296.1	533.0	0.159	0.140	67.642	59.601	5.1948E-05	5.3586E-05	0.424
68	234	299.0	538.2	0.338	0.298	67.263	59.285	1.1075E-04	1.1427E-04	0.507
69	235	305.2	549.4	8.581	7.561	66.511	58.605	2.8498E-03	2.9414E-03	0.631
70	236	300.0	540.1	1.072	0.945	67.154	59.172	3.5218E-04	3.6337E-04	0.465
71	237	296.4	533.5	0.434	0.382	67.613	59.576	1.4146E-04	1.4593E-04	0.455
72	238	296.9	534.4	0.183	0.161	67.546	59.517	5.9655E-05	6.1539E-05	0.447
73	240	299.5	539.2	0.435	0.384	67.216	59.226	1.4290E-04	1.4744E-04	0.511
74	274	301.3	542.4	10.915	9.617	66.992	59.029	3.5953E-03	3.7100E-03	0.134
75	286	301.1	541.9	15.621	13.765	67.028	59.061	5.1425E-03	5.3064E-03	0.104

FREE-STREAM DENSITY-VELOCITY PRODUCT = 4.0629E-01 (SLUGS/FT2-SEC)

ORIGINAL PAGE IS
OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 26

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)		
7.30	1.8674E 07	1.0712E 07	0.574	95.63	859.1	0.88756E 06	0.0053		
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	5.6917E 06	1.0712E 07	1.882	1405.77	1546.3	381.67	0.0175		

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)
1	4	0.367	0.2095	0.2743	0.2486	0.2568
2	7	0.361	0.1022	0.1336	0.1212	0.1251
3	12	0.356	0.0533	0.0695	0.0631	0.0651
4	17	0.355	0.0390	0.0508	0.0462	0.0477
5	22	0.352	0.0398	0.0518	0.0471	0.0486
6	25	0.350	0.0529	0.0687	0.0625	0.0645
7	27	0.351	0.0632	0.0821	0.0747	0.0770
8	29	0.351	0.0820	0.1067	0.0970	0.1001
9	30	0.351	0.0919	0.1195	0.1086	0.1121
10	32	0.349	0.1016	0.1321	0.1201	0.1239
11	34	0.350	0.1058	0.1376	0.1251	0.1291
12	38	0.351	0.1147	0.1492	0.1356	0.1399
13	42	0.349	0.1115	0.1449	0.1317	0.1359
14	46	0.350	0.1135	0.1475	0.1341	0.1384
15	50	0.349	0.0884	0.1149	0.1045	0.1078
16	54	0.350	0.0632	0.0821	0.0746	0.0770
17	59	0.362	0.2046	0.2675	0.2426	0.2505
18	62	0.351	0.0250	0.0325	0.0295	0.0305
19	64	0.349	0.0064	0.0083	0.0075	0.0078
20	65	0.350	0.0171	0.0223	0.0203	0.0209
21	66	0.350	0.0964	0.1254	0.1140	0.1176
22	67	0.351	0.1762	0.2291	0.2082	0.2149
23	68	0.351	0.1782	0.2318	0.2107	0.2174
24	69	0.347	0.0384	0.0499	0.0454	0.0468
25	70	0.345	0.0046	0.0060	0.0054	0.0056
26	71	0.344	0.0022	0.0029	0.0026	0.0027
27	72	0.342	0.0030	0.0039	0.0035	0.0036
28	74	0.343	0.0112	0.0146	0.0133	0.0137
29	76	0.345	0.0159	0.0207	0.0188	0.0194
30	122	0.346	0.0140	0.0181	0.0165	0.0170
31	129	0.346	0.0113	0.0147	0.0134	0.0138
32	135	0.346	0.0067	0.0087	0.0079	0.0082
33	136	0.346	0.0114	0.0148	0.0135	0.0139
34	176	0.350	0.2319	0.3015	0.2741	0.2828
35	177	0.350	0.1797	0.2336	0.2124	0.2191
36	178	0.351	0.1282	0.1667	0.1516	0.1564
37	179	0.356	0.3210	0.4184	0.3799	0.3922
38	180	0.353	0.2533	0.3297	0.2996	0.3092

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)
39	181	0.350	0.1770	0.2301	0.2092	0.2159
40	182	0.350	0.2845	0.3698	0.3362	0.3469
41	183	0.349	0.2202	0.2861	0.2601	0.2684
42	184	0.350	0.1659	0.2156	0.1960	0.2023
43	186	0.349	0.1424	0.1851	0.1683	0.1736
44	187	0.351	0.1205	0.1568	0.1425	0.1471
45	192	0.352	0.2186	0.2844	0.2585	0.2668
46	193	0.351	0.1024	0.1335	0.1213	0.1252
47	194	0.348	0.0794	0.1032	0.0938	0.0968
48	196	0.352	0.1252	0.1629	0.1481	0.1528
49	197	0.355	0.1461	0.1904	0.1729	0.1785
50	198	0.355	0.1186	0.1546	0.1404	0.1450
51	199	0.356	0.2390	0.3116	0.2830	0.2921
52	202	0.356	0.1403	0.1829	0.1661	0.1715
53	203	0.356	0.1265	0.1650	0.1498	0.1546
54	204	0.357	0.1260	0.1644	0.1492	0.1540
55	205	0.359	0.1194	0.1559	0.1415	0.1461
56	206	0.358	0.1823	0.2378	0.2159	0.2229
57	207	0.355	0.0853	0.1112	0.1010	0.1042
58	208	0.360	0.1146	0.1497	0.1359	0.1403
59	211	0.356	0.5264	0.6862	0.6232	0.6433
60	225	0.358	0.0549	0.0716	0.0650	0.0671
61	226	0.357	0.0050	0.0065	0.0060	0.0061
62	227	0.342	0.0015	0.0019	0.0017	0.0018
63	228	0.350	0.0034	0.0044	0.0040	0.0041
64	229	0.354	0.1607	0.2094	0.1902	0.1963
65	230	0.346	0.0214	0.0277	0.0252	0.0260
66	231	0.341	0.0011	0.0015	0.0014	0.0014
67	232	0.343	0.0032	0.0042	0.0038	0.0039
68	234	0.349	0.0073	0.0095	0.0086	0.0089
69	235	0.356	0.1382	0.1801	0.1636	0.1688
70	236	0.348	0.0174	0.0226	0.0205	0.0212
71	237	0.342	0.0067	0.0087	0.0079	0.0082
72	238	0.346	0.0035	0.0045	0.0041	0.0042
73	240	0.351	0.0099	0.0129	0.0117	0.0121
74	274	0.352	0.1577	0.2052	0.1865	0.1925
75	286	0.355	0.2239	0.2918	0.2650	0.2735

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION — RUN NO. 28

MACH	7.30	RE/METER	1.8674E 07	REL LENGTH(METER)	1.0712E 07	PT(ATM)	95.63
MACH	7.30	RE/FT	5.6917E 06	REL LENGTH(FT)	1.0712E 07	PT(PSI)	1405.77

TT(DEG K)	859.1	HT(JOULE/KG)	0.88756E 06	RS(METER)	0.0053		
TT(DEG R)	1546.3	HT(BTU/LBM)	381.67	RS(FT)	0.0175		

CHAN	T/C	T(DEG K)	T(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.883)	TIME(SEC)
1	4	322.6	580.7	17.970	15.746	85.309	75.169	3.7064E-03	3.8285E-03	0.527
2	7	316.9	574.0	8.783	7.739	85.903	75.692	1.8075E-03	1.8663E-03	0.483
3	12	314.9	566.8	4.610	4.062	86.536	76.250	9.4094E-04	9.7131E-04	0.457
4	17	313.6	564.5	3.384	2.982	86.735	76.426	6.8891E-04	7.1108E-04	0.441
5	22	311.3	560.4	3.470	3.057	87.104	76.751	7.0292E-04	7.2544E-04	0.362
6	25	309.4	557.0	4.620	4.071	87.402	77.013	9.3231E-04	9.6205E-04	0.355
7	27	310.3	558.5	5.511	4.856	87.269	76.896	1.1141E-03	1.1497E-03	0.361
8	29	310.2	558.3	7.161	6.310	87.285	76.910	1.4474E-03	1.4936E-03	0.407
9	30	309.9	557.8	8.023	7.069	87.326	76.946	1.6206E-03	1.6723E-03	0.460
10	32	308.5	555.1	8.901	7.843	87.564	77.156	1.7924E-03	1.8495E-03	0.490
11	34	309.5	557.1	9.248	8.149	87.391	77.003	1.8665E-03	1.9261E-03	0.473
12	38	310.3	558.6	10.007	8.817	87.263	76.890	2.0230E-03	2.0877E-03	0.469
13	42	308.7	555.7	9.758	8.598	87.517	77.114	1.9662E-03	2.0288E-03	0.477
14	46	309.0	556.2	9.927	8.747	87.470	77.073	2.0016E-03	2.0654E-03	0.477
15	50	308.6	555.5	7.741	6.821	87.531	77.127	1.5596E-03	1.6092E-03	0.480
16	54	309.3	556.7	5.521	4.865	87.424	77.032	1.1139E-03	1.1494E-03	0.449
17	59	320.1	576.2	17.532	15.448	85.704	75.517	3.6176E-03	3.7357E-03	0.528
18	62	310.0	558.1	2.180	1.921	87.304	76.927	4.4052E-04	4.5460E-04	0.475
19	64	308.6	555.4	0.556	0.490	87.541	77.135	1.1210E-04	1.1567E-04	0.425
20	65	309.0	556.1	1.500	1.321	87.475	77.077	3.0234E-04	3.1198E-04	0.483
21	66	309.5	557.0	8.429	7.427	87.396	77.007	1.7011E-03	1.7553E-03	0.377
22	67	310.1	558.1	15.379	13.551	87.300	76.923	3.1076E-03	3.2069E-03	0.454
23	68	310.1	558.2	15.560	13.710	87.254	76.918	3.1444E-03	3.2449E-03	0.427
24	69	306.8	552.2	3.373	2.972	87.821	77.382	6.7706E-04	6.9854E-04	0.528
25	70	304.6	548.2	0.405	0.357	88.175	77.694	8.0979E-05	8.7536E-05	0.458
26	71	303.6	546.5	0.196	0.173	88.324	77.826	3.9131E-05	4.0364E-05	0.456
27	72	302.3	544.2	0.264	0.233	88.531	78.008	5.2546E-05	5.4197E-05	0.430
28	74	303.5	546.4	0.993	0.875	88.338	77.838	1.9808E-04	2.0432E-04	0.506
29	76	305.0	549.0	1.403	1.236	88.105	77.632	2.8050E-04	2.8936E-04	0.518
30	142	305.8	550.4	1.229	1.083	87.980	77.522	2.4612E-04	2.5391E-04	0.384
31	129	305.7	550.2	0.997	0.878	88.001	77.541	1.9962E-04	2.0594E-04	0.327
32	135	306.1	551.1	0.589	0.519	87.924	77.472	1.1813E-04	1.2188E-04	0.255
33	136	306.2	551.1	1.003	0.884	87.919	77.468	2.0111E-04	2.0748E-04	0.324
34	176	309.7	557.4	20.258	17.850	87.366	76.981	4.2900E-03	4.2205E-03	0.425
35	177	309.5	557.1	15.703	13.837	87.392	77.004	3.1693E-03	3.2704E-03	0.425
36	178	310.1	558.1	11.192	9.862	87.300	76.923	2.2616E-03	2.3338E-03	0.397
37	179	314.4	565.9	27.799	24.495	86.615	76.319	5.6677E-03	5.8504E-03	0.412
38	180	312.0	561.6	22.033	19.414	86.993	76.652	4.4899E-03	4.6133E-03	0.397
39	181	309.4	557.0	15.469	13.630	87.399	77.011	3.1217E-03	3.2213E-03	0.469
40	182	309.2	556.5	24.877	21.920	87.445	77.051	5.0174E-03	5.1774E-03	0.391
41	183	308.7	555.6	19.269	16.978	87.519	77.116	3.8825E-03	4.0061E-03	0.383
42	184	309.2	556.5	14.506	12.782	87.445	77.051	2.9257E-03	3.0190E-03	0.336
43	186	308.5	555.2	12.470	10.988	87.555	77.147	2.5114E-03	2.5914E-03	0.371
44	187	310.5	558.9	10.514	9.265	87.229	76.861	2.1266E-03	2.1946E-03	0.377
45	192	310.8	559.4	19.062	16.796	87.189	76.825	3.8574E-03	3.9808E-03	0.396
46	193	309.8	557.7	8.964	7.899	87.338	76.956	1.8105E-03	1.8683E-03	0.456
47	194	307.7	553.9	6.965	6.137	87.677	77.256	1.4005E-03	1.4450E-03	0.519
48	196	311.5	560.7	10.700	9.605	87.073	76.723	2.2091E-03	2.2799E-03	0.358
49	197	314.1	565.4	12.657	11.153	86.656	76.356	2.5791E-03	2.6622E-03	0.423
50	198	314.1	565.5	10.281	9.059	86.653	76.353	2.0951E-03	2.1626E-03	0.517
51	199	314.4	565.9	20.704	18.243	86.611	76.316	4.2213E-03	4.3574E-03	0.335
52	202	314.6	566.3	12.148	10.704	86.577	76.286	2.4780E-03	2.5579E-03	0.251
53	203	314.8	566.7	10.950	9.648	86.545	76.258	2.2344E-03	2.3066E-03	0.260
54	204	315.8	568.4	10.886	9.592	86.393	76.124	2.2258E-03	2.2978E-03	0.199
55	205	317.3	571.2	10.280	9.067	86.148	75.908	2.1104E-03	2.1794E-03	0.371
56	206	316.3	569.3	15.733	13.863	86.319	76.059	3.2201E-03	3.3243E-03	0.294
57	207	313.3	564.0	7.406	6.526	86.787	76.471	1.5066E-03	1.5551E-03	0.533
58	208	317.8	572.0	9.868	8.695	86.078	75.846	2.0261E-03	2.0919E-03	0.305
59	211	314.5	566.0	45.589	40.170	86.[illegible]	76.308	9.2963E-03	9.5961E-03	0.368
60	225	316.0	568.9	4.739	4.175	86.[illegible]	76.087	9.6944E-04	1.0008E-03	0.618
61	226	317.0	570.6	0.443	0.390	87.791	77.356	8.8867E-05	9.1687E-05	0.577
62	227	317.6	571.8	0.130	0.115	88.494	77.975	2.5955E-05	2.6772E-05	0.719
63	228	317.0	570.6	0.294	0.259	87.472	77.074	5.9342E-05	6.1233E-05	0.707
64	229	313.1	563.6	13.454	12.295	86.815	76.496	2.8374E-03	2.9287E-03	0.566
65	230	306.0	550.7	1.979	1.656	87.954	77.499	3.7652E-04	3.8844E-04	0.601
66	231	301.1	541.9	0.102	0.090	88.732	78.185	2.0204E-05	2.0838E-05	1.100
67	232	303.1	545.6	0.286	0.252	88.406	77.897	5.7019E-05	5.8814E-05	0.602
68	234	308.8	555.8	0.637	0.561	87.505	77.104	1.2829E-04	1.3238E-04	0.660
69	235	315.5	568.9	11.953	10.533	86.524	76.239	2.4402E-03	2.5187E-03	0.686
70	236	307.8	554.0	1.523	1.342	87.665	77.244	3.0632E-04	3.1605E-04	0.554
71	237	302.3	544.1	0.595	0.524	88.537	78.013	1.1836E-04	1.2208E-04	0.542
72	238	305.9	550.7	0.304	0.268	87.959	77.503	6.0834E-05	6.2760E-05	0.611
73	240	310.2	558.4	0.867	0.764	87.278	76.903	1.7522E-04	1.8082E-04	0.784
74	274	311.5	560.7	13.730	12.098	87.075	76.725	2.7825E-03	2.8716E-03	0.137
75	286	313.4	564.2	19.431	17.122	86.759	76.455	3.9537E-03	4.0809E-03	0.064

FREE-STREAM DENSITY-VELOCITY PRODUCT = 6.4668E-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	3.5210E 06	2.0198E 06	0.574	16.42	812.9	0.83677E 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	1.0732E 06	2.0198E 06	1.882	241.30	1463.2	359.83	0.0175

TEST NO. 183
RUN NO. 27

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.876)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.876)
1	4	0.364	0.1735	0.2275	0.2561	0.2159	39	181	0.368	0.0472	0.0619	0.0561	0.0587
2	7	0.367	0.0816	0.1670	0.0969	0.1015	40	182	0.367	0.0695	0.0911	0.0826	0.0865
3	12	0.366	0.0450	0.0524	0.0479	0.0497	41	183	0.366	0.0514	0.0673	0.0610	0.0638
4	17	0.368	0.0254	0.0333	0.0302	0.0316	42	184	0.367	0.0354	0.0463	0.0420	0.0440
5	22	0.367	0.0230	0.0262	0.0237	0.0248	43	186	0.366	0.0272	0.0356	0.0323	0.0338
6	25	0.368	0.0163	0.0213	0.0193	0.0202	44	187	0.366	0.0256	0.0336	0.0304	0.0319
7	27	0.368	0.0160	0.0210	0.0190	0.0199	45	192	0.367	0.0439	0.0575	0.0521	0.0546
8	29	0.368	0.0140	0.0184	0.0167	0.0175	46	193	0.366	0.0328	0.0430	0.0390	0.0408
9	30	0.368	0.0132	0.0173	0.0156	0.0164	47	194	0.365	0.0232	0.0303	0.0275	0.0288
10	32	0.368	0.0118	0.0154	0.0140	0.0146	48	196	0.366	0.0443	0.0580	0.0526	0.0550
11	34	0.369	0.0100	0.0131	0.0119	0.0125	49	197	0.370	0.1227	0.1611	0.1459	0.1528
12	38	0.369	0.0089	0.0117	0.0106	0.0111	50	198	0.369	0.0533	0.0699	0.0634	0.0663
13	42	0.369	0.0074	0.0097	0.0088	0.0092	51	199	0.368	0.0531	0.0697	0.0631	0.0661
14	46	0.369	0.0063	0.0070	0.0063	0.0066	52	202	0.370	0.1620	0.2126	0.1925	0.2017
15	51	0.369	0.0041	0.0053	0.0048	0.0050	53	203	0.371	0.1440	0.1891	0.1712	0.1794
16	54	0.369	0.0024	0.0031	0.0028	0.0029	54	204	0.371	0.1455	0.1911	0.1730	0.1812
17	59	0.368	0.2486	0.3260	0.2953	0.3093	55	205	0.371	0.0736	0.0967	0.0876	0.0917
18	62	0.368	0.0410	0.0537	0.0487	0.0510	56	206	0.370	0.0459	0.0602	0.0545	0.0571
19	64	0.36	0.0178	0.0233	0.0211	0.0221	57	207	0.367	0.0186	0.0243	0.0220	0.0231
20	65	0.365	0.0216	0.0283	0.0257	0.0269	58	208	0.370	0.0270	0.0355	0.0321	0.0336
21	66	0.365	0.0959	0.1256	0.1139	0.1192	59	211	0.370	0.4194	0.5506	0.4986	0.5223
22	67	0.365	0.1677	0.2196	0.1991	0.2084	60	225	0.371	0.0963	0.1265	0.1145	0.1200
23	68	0.365	0.1711	0.2241	0.2032	0.2127	61	226	0.367	0.0112	0.0146	0.0133	0.0139
24	69	0.364	0.0429	0.0561	0.0509	0.0533	62	227	0.365	0.0005	0.0006	0.0006	0.0006
25	70	0.364	0.0058	0.0076	0.0069	0.0072	63	228	0.365	0.0007	0.0009	0.0008	0.0008
26	71	0.364	0.0035	0.0046	0.0042	0.0044	64	229	0.369	0.1545	0.2027	0.1836	0.1923
27	72	0.365	0.0029	0.0038	0.0035	0.0036	65	230	0.366	0.0326	0.0427	0.0387	0.0405
28	74	0.367	0.0048	0.0063	0.0057	0.0060	66	231	0.364	0.0027	0.0035	0.0032	0.0033
29	76	0.368	0.0089	0.0116	0.0105	0.0110	67	232	0.362	0.0005	0.0007	0.0006	0.0007
30	122	0.367	0.0097	0.0140	0.0127	0.0133	68	234	0.365	0.0016	0.0021	0.0019	0.0020
31	124	0.367	0.0095	0.0125	0.0113	0.0118	69	235	0.368	0.1586	0.2080	0.1884	0.1973
32	135	0.367	0.0049	0.0065	0.0059	0.0061	70	236	0.365	0.0247	0.0324	0.0294	0.0307
33	136	0.368	0.0043	0.0057	0.0051	0.0054	71	237	0.363	0.0082	0.0107	0.0097	0.0102
34	176	0.369	0.0525	0.0689	0.0624	0.0654	72	238	0.362	0.0044	0.0057	0.0052	0.0054
35	177	0.368	0.0428	0.0561	0.0508	0.0532	73	240	0.364	0.0045	0.0058	0.0053	0.0056
36	178	0.367	0.0364	0.0478	0.0433	0.0453	74	274	0.367	0.2469	0.3235	0.2931	0.3070
37	179	0.370	0.0873	0.1146	0.1038	0.1088	75	286	0.366	0.2948	0.3862	0.3500	0.3665
38	181	0.369	0.0599	0.0786	0.0712	0.0746							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 27

MACH	RE/METER	REL	LENGTH(METER)	PTIATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	0.5210E 06	2.0196E 06	0.574	16.42	812.9	0.83677E 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	0.1588E 06	2.0196E 06	1.882	241.30	1463.2	359.83	0.0175

CHAN	T/C	TW(DEG K)	TW(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.876)	TIME(SEC)
1	4	306.4	551.4	5.750	5.066	33.133	29.194	7.1495E-03	7.4870E-03	0.448
2	7	305.4	549.7	2.710	2.388	33.197	29.251	3.3625E-03	3.5209E-03	0.417
3	12	305.0	549.1	1.329	1.171	33.218	29.270	1.6472E-03	1.7247E-03	0.417
4	17	305.2	549.3	0.844	0.744	33.209	29.262	1.0468E-03	1.0961E-03	0.409
5	22	305.4	549.7	0.663	0.584	33.196	29.250	8.2249E-04	8.6123E-04	0.379
6	25	305.3	549.3	0.538	0.474	33.138	29.199	6.6744E-04	7.0106E-04	0.373
7	27	305.0	549.0	0.529	0.466	33.118	29.182	6.5831E-04	6.8941E-04	0.357
8	29	305.0	549.0	0.464	0.409	33.101	29.166	5.7608E-04	6.0541E-04	0.345
9	30	305.2	549.2	0.436	0.384	33.106	29.171	5.4265E-04	5.6830E-04	0.337
10	32	305.0	549.0	0.390	0.344	33.119	29.182	4.8502E-04	5.0793E-04	0.327
11	34	304.9	548.9	0.331	0.292	33.092	29.159	4.1257E-04	4.3207E-04	0.260
12	35	304.8	548.6	0.296	0.261	33.053	29.124	3.6866E-04	3.8612E-04	0.208
13	42	304.9	549.1	0.245	0.216	33.072	29.141	3.0564E-04	3.2010E-04	0.198
14	46	304.7	548.8	0.176	0.155	33.048	29.120	2.1953E-04	2.2992E-04	0.065
15	50	304.7	548.6	0.134	0.118	33.046	29.118	1.6697E-04	1.7488E-04	-0.030
16	54	304.1	547.7	0.078	0.069	33.086	29.154	9.6971E-05	1.0156E-04	-0.346
17	59	305.5	550.0	8.236	7.257	33.125	29.188	1.0243E-02	1.0727E-02	0.437
18	62	304.5	548.1	1.365	1.203	33.255	29.302	1.6900E-03	1.7694E-03	0.411
19	64	304.7	548.4	0.692	0.621	33.242	29.290	7.3279E-04	7.6726E-04	0.368
20	65	304.4	548.0	0.720	0.634	33.259	29.306	8.9142E-04	9.3332E-04	0.447
21	66	304.4	547.9	3.191	2.812	33.261	29.307	3.9507E-03	4.1364E-03	0.355
22	67	304.5	548.1	5.577	4.914	33.255	29.303	6.9051E-03	7.2297E-03	0.400
23	68	304.4	548.0	5.692	5.015	33.259	29.306	7.0468E-03	7.3780E-03	0.371
24	69	303.2	545.8	1.430	1.260	33.337	29.375	1.7658E-03	1.8485E-03	0.434
25	70	303.0	545.5	0.193	0.170	33.349	29.385	2.3768E-04	2.4882E-04	0.380
26	71	303.5	546.3	0.117	0.103	33.318	29.357	1.4434E-04	1.5111E-04	0.298
27	72	304.4	547.9	0.097	0.086	33.261	29.308	1.2061E-04	1.2628E-04	0.398
28	74	305.5	549.9	0.159	0.140	33.189	29.244	1.9724E-04	2.0653E-04	0.367
29	76	306.4	551.6	0.294	0.259	33.127	29.190	3.6571E-04	3.8298E-04	0.389
30	122	305.5	550.0	0.355	0.313	33.186	29.242	4.4077E-04	4.6154E-04	0.303
31	129	305.4	549.7	0.316	0.278	33.197	29.251	3.9210E-04	4.1057E-04	0.297
32	135	305.6	550.2	0.164	0.144	33.179	29.235	2.0345E-04	2.1304E-04	0.263
33	136	306.3	551.3	0.143	0.126	33.138	29.199	1.7828E-04	1.8670E-04	0.221
34	175	306.7	552.0	1.740	1.533	33.111	29.175	2.1647E-03	2.2670E-03	0.327
35	177	306.4	551.5	1.417	1.249	33.129	29.191	1.7622E-03	1.8455E-03	0.298
36	178	305.9	550.7	1.206	1.065	33.160	29.219	1.5008E-03	1.5716E-03	0.288
37	179	308.3	555.0	2.483	2.540	33.003	29.080	3.0604E-03	3.2713E-03	0.418
38	180	307.3	553.1	1.982	1.747	33.071	29.140	2.4702E-03	2.5870E-03	0.410
39	181	306.4	551.5	1.563	1.378	33.129	29.191	1.9443E-03	2.0362E-03	0.479
40	182	306.0	550.8	2.305	2.031	33.155	29.214	2.8638E-03	2.9969E-03	0.331
41	183	305.3	549.6	1.705	1.502	33.199	29.253	2.1150E-03	2.2146E-03	0.343
42	184	305.5	549.8	1.174	1.034	33.192	29.246	1.4566E-03	1.5252E-03	0.279
43	186	304.6	548.3	0.904	0.796	33.246	29.294	1.1194E-03	1.1720E-03	0.284
44	187	305.3	549.5	0.851	0.750	33.204	29.257	1.0552E-03	1.1049E-03	0.266
45	192	305.8	550.4	1.455	1.282	33.169	29.227	1.8073E-03	1.8925E-03	0.306
46	193	305.3	549.5	1.090	0.961	33.204	29.258	1.3526E-03	1.4163E-03	0.468
47	194	304.8	548.6	0.771	0.679	33.303	29.344	9.5330E-04	9.9804E-04	0.663
48	196	305.3	549.5	1.670	1.295	33.201	29.254	1.8230E-03	1.9089E-03	0.328
49	197	307.4	554.3	4.154	3.572	33.029	29.103	5.0585E-03	5.2983E-03	0.369
50	198	307.3	553.1	1.763	1.554	33.072	29.141	2.1970E-03	2.3010E-03	0.296
51	199	307.0	552.6	1.758	1.549	33.092	29.158	2.1894E-03	2.2929E-03	0.286
52	202	308.6	555.5	5.342	4.707	32.983	29.063	6.6768E-03	6.9938E-03	0.287
53	203	308.8	555.8	4.749	4.185	32.972	29.053	5.9379E-03	6.2199E-03	0.277
54	204	309.1	556.5	4.795	4.225	32.950	29.034	5.9996E-03	6.2847E-03	0.243
55	205	309.3	556.7	2.426	2.137	32.943	29.027	3.0363E-03	3.1806E-03	0.265
56	206	308.3	554.9	1.515	1.335	33.007	29.084	1.8916E-03	1.9813E-03	0.230
57	207	306.0	550.8	0.615	0.542	33.155	29.214	7.6435E-04	8.0042E-04	0.599
58	208	308.2	554.8	0.992	0.786	33.009	29.085	1.1137E-03	1.1666E-03	0.241
59	211	308.6	555.5	13.834	12.190	32.986	29.065	1.7290E-02	1.8110E-02	0.353
60	225	308.8	555.9	3.176	2.799	32.970	29.051	3.9720E-03	4.1606E-03	0.515
61	226	309.3	556.4	0.370	0.326	33.171	29.228	4.6008E-04	4.8177E-04	0.447
62	227	304.7	547.5	0.016	0.014	33.272	29.317	1.9757E-05	2.0686E-05	0.265
63	228	304.5	548.1	0.023	0.020	33.255	29.303	2.8637E-05	2.9983E-05	-0.335
64	229	307.1	552.8	5.111	4.504	33.082	29.150	6.3668E-03	6.6680E-03	0.478
65	230	304.7	548.5	1.083	0.954	33.239	29.288	1.3413E-03	1.4044E-03	0.425
66	231	303.0	545.3	0.099	0.079	33.355	29.391	1.1631E-04	1.1548E-04	0.467
67	232	302.6	544.5	0.018	0.016	33.419	29.446	2.2240E-05	2.3279E-05	-0.560
68	234	303.7	546.6	0.055	0.048	33.307	29.348	6.7437E-05	7.0601E-05	0.381
69	235	306.3	552.3	5.250	4.626	33.101	29.166	6.3350E-03	6.8440E-03	0.571
70	236	304.3	547.8	0.423	0.725	33.267	29.312	1.0185E-03	1.0664E-03	0.454
71	237	302.6	543.9	0.273	0.241	33.406	29.435	3.3667E-04	3.5241E-04	0.466
72	238	302.9	545.4	0.145	0.129	33.425	29.452	1.4032E-04	1.4874E-04	0.403
73	240	303.6	546.4	0.144	0.131	33.315	29.355	1.4396E-04	1.9259E-04	0.560
74	274	305.5	549.9	8.192	7.219	33.187	29.242	1.0168E-02	1.0647E-02	0.097
75	280	304.9	548.8	9.297	8.033	33.230	29.280	1.2142E-02	1.2713E-02	0.097

THEL-STH AM DENSITY-VELOCITY PRODUCT = 1.1449E-01 (SLUGS/FT2-SEC)

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OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 28

MACH	RE/METER	REL	LENGTH(METER)	PTIATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	5.4984E 06	3.7277E 06	0.574	31.77	836.0	0.8621OE 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PTIPSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	1.9807E 06	3.7277E 06	1.882	467.00	1504.7	370.72	0.0175

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.876)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.876)
1	4	0.355	0.1758	0.2291	0.2081	0.2176	39	181	0.355	0.0743	0.0969	0.0880	0.0920
2	7	0.353	0.0810	0.1054	0.0958	0.1002	40	182	0.354	0.1266	0.1649	0.1498	0.1567
3	12	0.352	0.0385	0.0501	0.0455	0.0476	41	183	0.354	0.0987	0.1285	0.1168	0.1222
4	17	0.352	0.0242	0.0315	0.0286	0.0299	42	184	0.354	0.0809	0.1053	0.0957	0.1001
5	22	0.352	0.0190	0.0248	0.0225	0.0235	43	186	0.353	0.0747	0.0973	0.0884	0.0924
6	25	0.355	0.0152	0.0198	0.0180	0.0188	44	187	0.354	0.0667	0.0869	0.0790	0.0826
7	27	0.356	0.0148	0.0193	0.0175	0.0183	45	192	0.354	0.0929	0.1210	0.1099	0.1150
8	29	0.356	0.0128	0.0167	0.0151	0.0158	46	193	0.353	0.0539	0.0702	0.0638	0.0667
9	30	0.356	0.0122	0.0159	0.0144	0.0151	47	194	0.351	0.0430	0.0559	0.0508	0.0532
10	32	0.356	0.0106	0.0139	0.0126	0.0132	48	196	0.354	0.0631	0.0822	0.0747	0.0781
11	34	0.357	0.0086	0.0112	0.0102	0.0107	49	197	0.357	0.1204	0.1571	0.1426	0.1492
12	38	0.359	0.0073	0.0096	0.0087	0.0091	50	198	0.356	0.0515	0.0671	0.0610	0.0638
13	47	0.358	0.0057	0.0075	0.0068	0.0071	51	199	0.356	0.0515	0.0671	0.0609	0.0637
14	46	0.359	0.0036	0.0047	0.0043	0.0045	52	202	0.358	0.1417	0.1849	0.1678	0.1756
15	50	0.360	0.0033	0.0043	0.0039	0.0041	53	203	0.358	0.1298	0.1694	0.1537	0.1609
16	54	0.358	0.0026	0.0034	0.0031	0.0032	54	204	0.359	0.1279	0.1669	0.1515	0.1585
17	59	0.355	0.2523	0.3288	0.2986	0.3124	55	205	0.359	0.0678	0.0885	0.0803	0.0841
18	62	0.352	0.0398	0.0517	0.0470	0.0492	56	206	0.358	0.0429	0.0559	0.0508	0.0531
19	64	0.351	0.0151	0.0196	0.0178	0.0186	57	207	0.354	0.0192	0.0251	0.0228	0.0238
20	65	0.351	0.0272	0.0353	0.0321	0.0336	58	208	0.357	0.0266	0.0347	0.0315	0.0329
21	66	0.351	0.1186	0.1542	0.1402	0.1466	59	211	0.359	0.3366	0.4394	0.3988	0.4173
22	67	0.351	0.1840	0.2393	0.2175	0.2275	60	225	0.361	0.0925	0.1209	0.1097	0.1148
23	68	0.350	0.1800	0.2340	0.2127	0.2224	61	226	0.355	0.0090	0.0117	0.0106	0.0111
24	69	0.348	0.0452	0.0587	0.0534	0.0559	62	227	0.353	0.0004	0.0005	0.0004	0.0005
25	70	0.348	0.0059	0.0077	0.0070	0.0073	63	228	0.352	0.0015	0.0019	0.0017	0.0018
26	71	0.350	0.0041	0.0054	0.0049	0.0051	64	229	0.357	0.1483	0.1935	0.1756	0.1838
27	72	0.352	0.0028	0.0037	0.0033	0.0035	65	230	0.353	0.0359	0.0467	0.0424	0.0444
28	74	0.355	0.0048	0.0063	0.0057	0.0060	66	231	0.349	0.0020	0.0027	0.0024	0.0025
29	76	0.357	0.0172	0.0225	0.0204	0.0214	67	232	0.348	0.0006	0.0008	0.0007	0.0007
30	122	0.353	0.0105	0.0137	0.0124	0.0130	68	234	0.350	0.0021	0.0027	0.0025	0.0026
31	129	0.353	0.0091	0.0118	0.0107	0.0112	69	235	0.356	0.1626	0.2120	0.1925	0.2014
32	135	0.354	0.0046	0.0060	0.0055	0.0057	70	236	0.351	0.0238	0.0310	0.0281	0.0294
33	136	0.356	0.0038	0.0050	0.0045	0.0047	71	237	0.347	0.0074	0.0096	0.0088	0.0092
34	176	0.356	0.0663	0.0865	0.0785	0.0821	72	238	0.347	0.0037	0.0048	0.0044	0.0046
35	177	0.356	0.0518	0.0675	0.0613	0.0642	73	240	0.350	0.0066	0.0086	0.0078	0.0082
36	178	0.355	0.0505	0.0658	0.0597	0.0625	74	274	0.355	0.2134	0.2781	0.2526	0.2642
37	179	0.358	0.0766	0.1000	0.0907	0.0949	75	284	0.356	0.2770	0.3611	0.3279	0.3430
38	180	0.357	0.0679	0.0885	0.0804	0.0841							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH 7.30 REYNOLDS NUMBER/METER 3.49484E 06 R/L 3.72778E 06 LENGTH(METER) 0.574 PT(ATM) 31.77 TT(DEG K) 836.0 HT(JOULE/KG) 0.86210E 06 RS(METER) 0.0053 TEST NO. 183

MACH 7.30 REYNOLDS NUMBER/FT 1.06478E 06 R/L 3.72778E 06 LENGTH(FT) 1.882 PT(PSIA) 467.00 TT(DEG R) 1504.7 HT(BTU/LBM) 370.72 RS(FT) 0.0175 RUN NO. 28

RUN	T/C	Tw(DEG K)	Tw(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.876)	TIME(SEC)
1	4	304.9	548.8	8.526	7.513	48.503	42.738	5.2684E-03	5.5321E-03	0.494
2	7	303.1	546.6	3.459	3.471	48.047	42.865	2.4348E-03	2.5466E-03	0.451
3	12	302.3	544.1	1.875	1.652	48.743	42.950	1.1564E-03	1.2094E-03	0.436
4	17	301.7	543.4	1.181	1.040	48.779	42.981	7.2765E-04	7.6096E-04	0.431
5	22	302.1	543.8	0.928	0.818	48.758	42.962	5.7208E-04	5.9828E-04	0.403
6	25	304.9	548.9	0.736	0.650	48.499	42.735	4.5780E-04	4.7890E-04	0.394
7	27	305.5	549.9	0.717	0.631	48.450	42.691	4.4504E-04	4.6558E-04	0.364
8	29	305.9	550.6	0.619	0.546	48.412	42.657	3.8482E-04	4.0260E-04	0.330
9	30	305.8	550.4	0.589	0.519	48.422	42.667	3.6630E-04	3.8322E-04	0.332
10	32	305.5	550.0	0.515	0.454	48.444	42.686	3.2002E-04	3.3479E-04	0.299
11	34	306.4	551.5	0.417	0.367	48.366	42.617	2.5952E-04	2.7152E-04	0.158
12	35	307.8	554.0	0.354	0.312	48.242	42.508	2.2064E-04	2.3088E-04	0.044
13	42	307.6	553.8	0.277	0.244	48.252	42.516	1.7302E-04	1.8104E-04	-0.115
14	46	308.3	555.0	0.174	0.153	48.189	42.461	1.0802E-04	1.1388E-04	-0.677
15	50	308.6	555.5	0.159	0.140	48.165	42.440	9.9277E-05	1.0389E-04	-0.465
16	54	307.2	552.9	0.125	0.110	48.296	42.555	7.7809E-05	8.1413E-05	-0.467
17	59	304.6	548.3	12.245	10.790	48.531	42.762	7.5902E-03	7.9397E-03	0.480
18	62	301.7	543.1	1.941	1.710	48.792	42.992	1.1957E-03	1.2504E-03	0.435
19	64	301.6	542.9	0.735	0.648	48.801	43.001	4.5275E-04	4.7346E-04	0.361
20	65	301.1	542.0	1.327	1.169	48.850	43.044	8.1613E-04	8.5342E-04	0.470
21	66	301.0	541.7	5.794	5.105	48.862	43.054	3.5638E-03	3.7266E-03	0.335
22	67	300.9	541.6	8.993	7.924	48.867	43.059	5.5306E-03	5.7832E-03	0.416
23	68	300.5	541.0	8.801	7.755	48.900	43.088	5.4087E-03	5.6556E-03	0.369
24	69	298.6	537.4	2.220	1.956	49.081	43.247	1.3586E-03	1.4203E-03	0.481
25	70	298.8	537.8	0.291	0.256	49.060	43.229	1.7815E-04	1.8625E-04	0.403
26	71	300.1	540.3	0.203	0.179	48.937	43.120	1.2456E-04	1.3024E-04	0.516
27	72	302.2	543.9	0.137	0.121	48.751	42.957	8.4757E-05	8.8639E-05	0.275
28	74	304.7	548.5	0.235	0.207	48.517	42.750	1.4563E-04	1.5234E-04	0.371
29	76	306.0	551.8	0.834	0.735	48.352	42.604	5.1895E-04	5.4295E-04	0.583
30	122	303.1	545.6	0.511	0.450	48.665	42.880	3.1570E-04	3.3019E-04	0.352
31	129	302.9	545.2	0.441	0.388	48.684	42.897	2.7224E-04	2.8473E-04	0.312
32	135	304.0	547.3	0.225	0.199	48.580	42.806	1.3952E-04	1.4594E-04	0.227
33	136	303.3	546.5	0.184	0.162	48.470	42.709	1.1434E-04	1.1962E-04	0.212
34	176	303.5	546.9	3.214	2.832	48.450	42.691	1.9957E-03	2.0877E-03	0.320
35	177	303.3	546.5	2.511	2.213	48.468	42.707	1.5587E-03	1.6306E-03	0.273
36	178	304.5	548.1	2.460	2.159	48.538	42.768	1.5183E-03	1.5882E-03	0.279
37	179	307.6	553.7	3.696	3.256	48.253	42.518	2.3058E-03	2.4127E-03	0.403
38	180	306.1	551.0	3.285	2.894	48.391	42.639	2.0428E-03	2.1372E-03	0.433
39	181	304.9	548.8	3.605	3.177	48.504	42.738	2.2362E-03	2.3392E-03	0.536
40	182	304.2	547.6	6.148	5.418	48.566	42.793	3.8079E-03	3.9831E-03	0.286
41	183	303.5	546.3	4.801	4.230	48.633	42.852	2.9688E-03	3.1052E-03	0.357
42	184	303.8	546.9	3.931	3.464	48.601	42.824	2.4325E-03	2.5443E-03	0.278
43	186	302.9	545.3	3.638	3.205	48.682	42.895	2.2469E-03	2.3500E-03	0.314
44	187	303.7	546.6	3.245	2.859	48.613	42.835	2.0073E-03	2.0996E-03	0.308
45	192	303.8	546.8	4.517	3.980	48.605	42.828	2.7948E-03	2.9232E-03	0.324
46	193	303.3	545.9	2.624	2.312	48.652	42.869	1.6221E-03	1.6966E-03	0.422
47	194	301.6	542.9	2.098	1.849	48.803	43.002	1.2923E-03	1.3514E-03	0.638
48	196	303.5	546.3	3.071	2.706	48.630	42.850	1.8989E-03	1.9862E-03	0.334
49	197	306.6	551.8	5.824	5.131	48.351	42.604	3.6250E-03	3.7926E-03	0.404
50	198	305.8	550.4	2.494	2.197	48.423	42.667	1.5496E-03	1.6212E-03	0.292
51	199	305.5	549.8	2.493	2.197	48.451	42.692	1.5481E-03	1.6195E-03	0.285
52	202	307.3	553.1	6.841	6.028	48.286	42.546	4.2648E-03	4.4624E-03	0.227
53	203	307.5	553.5	6.264	5.519	48.265	42.528	3.9068E-03	4.0879E-03	0.250
54	204	307.9	554.3	6.167	5.434	48.227	42.495	3.8499E-03	4.0285E-03	0.190
55	205	308.1	554.5	3.269	2.881	48.214	42.483	2.0415E-03	2.1362E-03	0.242
56	206	306.9	552.5	2.071	1.825	48.317	42.574	1.2901E-03	1.3498E-03	0.208
57	207	304.2	547.6	0.935	0.824	48.566	42.793	5.7883E-04	6.0547E-04	0.572
58	208	306.8	552.2	1.284	1.132	48.332	42.587	7.9985E-04	8.3686E-04	0.257
59	211	306.2	551.8	16.221	14.295	48.198	42.469	1.0135E-02	1.0605E-02	0.291
60	225	307.6	553.3	4.446	3.918	48.071	42.357	2.7861E-03	2.9159E-03	0.564
61	226	304.9	548.9	0.448	0.394	48.479	42.734	2.7064E-04	2.8311E-04	0.420
62	227	302.8	545.0	0.018	0.016	48.698	42.909	1.1090E-05	1.1599E-05	-0.456
63	228	302.4	544.3	0.071	0.063	48.732	42.939	4.3963E-05	4.5977E-05	0.574
64	229	302.2	543.7	7.172	6.320	48.357	42.609	4.4638E-03	4.6703E-03	0.496
65	230	302.7	544.8	1.748	1.540	48.705	42.915	1.0788E-03	1.1283E-03	0.480
66	231	299.9	539.9	0.100	0.088	48.958	43.138	6.1391E-05	6.4189E-05	0.465
67	232	298.5	537.3	0.029	0.026	49.088	43.254	1.7759E-05	1.8566E-05	-0.043
68	234	300.6	541.1	0.103	0.091	48.896	43.084	6.3409E-05	6.6303E-05	0.317
69	235	305.4	549.8	7.879	6.943	48.455	42.695	4.8925E-03	5.1182E-03	0.639
70	236	301.5	542.8	1.161	1.023	48.810	43.009	7.1522E-04	7.4791E-04	0.504
71	237	299.2	538.8	0.364	0.321	49.111	43.273	2.2267E-04	2.3279E-04	0.470
72	238	297.5	536.1	0.182	0.160	49.149	43.307	1.1099E-04	1.1602E-04	0.427
73	240	300.2	540.3	0.323	0.285	48.934	43.119	1.9660E-04	2.0765E-04	0.778
74	274	305.0	549.	10.348	9.118	48.49.	42.729	6.4198E-03	6.7157E-03	0.039
75	276	304.5	549.0	13.425	11.829	48.465	42.704	8.3340E-03	8.7184E-03	0.039

FREE-STREAM DENSITY-VELOCITY PRODUCT = 2.1883E-01 (SLUGS/FT2-SEC)

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO.	183
7.30	5.78711E 06	2.1724E 06	0.574	16.02	767.4	0.78712E 06	0.0053	RUN NO.	29
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	1.1543E 06	2.1724E 06	1.882	235.55	1381.2	338.48	0.0175		

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.876)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.876)
1	4	0.387	0.1712	0.2267	0.2046	0.2147	39	181	0.378	0.0408	0.0538	0.0487	0.0510
2	7	0.389	0.0851	0.1059	0.0956	0.1003	40	182	0.378	0.0632	0.0832	0.0753	0.0789
3	12	0.382	0.0388	0.0512	0.0463	0.0485	41	183	0.378	0.0445	0.0587	0.0531	0.0556
4	17	0.381	0.0262	0.0346	0.0313	0.0328	42	184	0.377	0.0294	0.0388	0.0351	0.0367
5	22	0.380	0.0196	0.0259	0.0234	0.0245	43	186	0.378	0.0141	0.0186	0.0168	0.0176
6	25	0.377	0.0162	0.0214	0.0193	0.0203	44	187	0.378	0.0129	0.0170	0.0154	0.0162
7	27	0.378	0.0159	0.0210	0.0190	0.0199	45	192	0.379	0.0424	0.0558	0.0505	0.0529
8	29	0.377	0.0137	0.0181	0.0163	0.0171	46	193	0.379	0.0212	0.0280	0.0253	0.0265
9	30	0.377	0.0128	0.0169	0.0152	0.0160	47	194	0.378	0.0163	0.0215	0.0194	0.0204
10	32	0.377	0.0114	0.0150	0.0136	0.0142	48	196	0.379	0.0263	0.0347	0.0313	0.0329
11	34	0.377	0.0101	0.0133	0.0120	0.0126	49	197	0.381	0.1125	0.1485	0.1342	0.1407
12	38	0.377	0.0088	0.0116	0.0104	0.0110	50	198	0.381	0.0487	0.0643	0.0581	0.0609
13	42	0.376	0.0070	0.0093	0.0084	0.0088	51	199	0.381	0.0496	0.0655	0.0592	0.0621
14	46	0.376	0.0045	0.0059	0.0053	0.0056	52	202	0.381	0.1386	0.1830	0.1654	0.1734
15	50	0.376	0.0036	0.0047	0.0043	0.0045	53	203	0.382	0.1254	0.1655	0.1496	0.1568
16	54	0.377	0.0024	0.0032	0.0029	0.0030	54	204	0.382	0.1276	0.1685	0.1523	0.1597
17	59	0.367	0.2440	0.3231	0.2916	0.3059	55	205	0.383	0.0668	0.0883	0.0798	0.0836
18	62	0.381	0.0401	0.0529	0.0478	0.0502	56	206	0.382	0.0439	0.0580	0.0524	0.0549
19	64	0.380	0.0178	0.0235	0.0212	0.0223	57	207	0.381	0.0180	0.0238	0.0215	0.0225
20	65	0.380	0.0206	0.0272	0.0246	0.0257	58	208	0.383	0.0188	0.0249	0.0224	0.0235
21	66	0.380	0.0902	0.1189	0.1075	0.1127	59	211	0.380	0.3281	0.4329	0.3912	0.4102
22	67	0.380	0.1531	0.2020	0.1826	0.1914	60	225	0.381	0.0852	0.1124	0.1016	0.1065
23	68	0.380	0.1589	0.2096	0.1894	0.1986	61	226	0.377	0.0089	0.0118	0.0106	0.0111
24	69	0.379	0.0435	0.0574	0.0519	0.0544	62	227	0.374	0.0008	0.0010	0.0009	0.0010
25	70	0.378	0.0060	0.0079	0.0071	0.0075	63	228	0.377	0.0027	0.0035	0.0032	0.0033
26	71	0.377	0.0040	0.0052	0.0047	0.0049	64	229	0.380	0.1468	0.1936	0.1750	0.1834
27	72	0.376	0.0027	0.0036	0.0033	0.0034	65	230	0.377	0.0334	0.0440	0.0398	0.0417
28	74	0.376	0.0033	0.0043	0.0039	0.0041	66	231	0.374	0.0025	0.0032	0.0029	0.0031
29	76	0.376	0.0084	0.0111	0.0100	0.0105	67	232	0.375	0.0026	0.0034	0.0030	0.0032
30	122	0.377	0.0105	0.0139	0.0125	0.0131	68	234	0.378	0.0021	0.0027	0.0025	0.0026
31	129	0.377	0.0094	0.0124	0.0112	0.0118	69	235	0.381	0.1522	0.2009	0.1815	0.1903
32	135	0.377	0.0045	0.0060	0.0054	0.0057	70	236	0.378	0.0212	0.0280	0.0253	0.0265
33	136	0.377	0.0045	0.0059	0.0053	0.0056	71	237	0.376	0.0067	0.0089	0.0080	0.0084
34	176	0.378	0.0503	0.0663	0.0599	0.0628	72	238	0.378	0.0064	0.0085	0.0077	0.0080
35	177	0.377	0.0409	0.0538	0.0487	0.0510	73	240	0.379	0.0030	0.0040	0.0036	0.0038
36	178	0.378	0.0183	0.0242	0.0218	0.0229	74	274	0.380	0.2246	0.2962	0.2677	0.2807
37	179	0.380	0.0654	0.0863	0.0780	0.0817	75	286	0.381	0.2874	0.3794	0.3428	0.3595
38	180	0.379	0.0498	0.0657	0.0594	0.0622							

...AUTICS & SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	P/(METER)	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO. 1-3
7.37	[illegible]	2.17242 06	0.574	16.02	767.4	0.787122 06	0.0053	RUN NO. 2
MACH	P/FEET	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)	
7.37	[illegible]	2.17242 06	1.882	235.55	1381.2	338.48	0.0175	

LINE	T/C	T(DEG R)	T(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.876)	TIME(SEC)
1	4	295.6	546.3	5.692	4.496	29.737	26.202	6.9080E-03	7.2473E-03	0.678
2	7	295.7	543.1	2.391	2.107	29.857	26.308	3.2289E-03	3.3867E-03	0.647
3	12	294.7	539.4	1.147	1.025	29.909	26.424	1.5630E-03	1.6390E-03	0.620
4	17	294.7	537.7	0.769	0.695	30.052	26.480	1.0572E-03	1.1085E-03	0.666
5	22	297.0	536.5	0.592	0.521	30.127	26.546	7.4082E-04	8.2906E-04	0.602
6	25	295.3	532.4	0.491	0.432	30.240	26.645	6.5313E-04	6.8457E-04	0.612
7	27	296.0	532.8	0.481	0.424	30.227	26.634	6.4618E-04	6.7101E-04	0.579
8	29	295.8	532.5	0.415	0.366	30.236	26.644	5.5211E-04	5.7869E-04	0.551
9	30	295.7	532.4	0.387	0.341	30.241	26.646	5.1504E-04	5.3983E-04	0.546
10	32	295.4	531.8	0.344	0.303	30.268	26.670	4.5773E-04	4.7974E-04	0.517
11	34	295.4	531.8	0.306	0.269	30.268	26.670	4.0834E-04	4.2588E-04	0.483
12	36	295.3	531.6	0.265	0.234	30.268	26.670	3.5292E-04	3.6989E-04	0.393
13	42	295.9	532.6	0.213	0.188	30.296	26.695	2.8269E-04	2.9626E-04	0.294
14	46	295.6	532.0	0.136	0.120	30.294	26.693	1.8017E-04	1.8883E-04	-0.097
15	50	294.6	530.3	0.108	0.096	30.315	26.712	1.4368E-04	1.5078E-04	-0.200
16	54	295.2	531.3	0.074	0.065	30.280	26.681	9.7977E-05	1.0269E-04	-0.424
17	57	295.2	545.7	7.264	6.400	29.765	26.227	9.8441E-03	1.0327E-02	0.662
18	60	294.6	530.3	1.207	1.063	30.081	26.506	1.6154E-03	1.6942E-03	0.624
19	64	297.7	535.8	0.536	0.473	30.119	26.539	7.1693E-04	7.5161E-04	0.571
20	65	297.5	535.4	0.521	0.547	30.132	26.551	8.2928E-04	8.6938E-04	0.674
21	66	297.5	535.6	2.718	2.393	30.128	26.548	3.6302E-03	3.8057E-03	0.553
22	67	297.8	536.0	4.611	4.063	30.111	26.537	6.1659E-03	6.4643E-03	0.616
23	68	297.9	536.2	4.784	4.215	30.106	26.526	6.3982E-03	6.7079E-03	0.577
24	69	297.1	534.8	1.313	1.157	30.156	26.572	1.7525E-03	1.8371E-03	0.674
25	70	296.0	532.7	0.180	0.159	30.228	26.635	2.4022E-04	2.5179E-04	0.595
26	71	295.8	532.0	0.120	0.106	30.253	26.657	1.5936E-04	1.6702E-04	0.626
27	72	294.9	530.8	0.083	0.073	30.296	26.695	1.1006E-04	1.1535E-04	0.474
28	74	294.8	530.7	0.099	0.087	30.303	26.701	1.3116E-04	1.3745E-04	0.428
29	76	294.5	530.2	0.255	0.225	30.321	26.717	3.3834E-04	3.5457E-04	0.695
30	122	295.2	531.3	0.319	0.281	30.278	26.679	4.2353E-04	4.4388E-04	0.485
31	129	295.2	531.3	0.286	0.252	30.279	26.680	3.7962E-04	3.9787E-04	0.487
32	135	295.2	531.4	0.137	0.121	30.277	26.678	1.8233E-04	1.9110E-04	0.264
33	136	295.6	532.0	0.136	0.119	30.254	26.658	1.8035E-04	1.8903E-04	0.415
34	178	296.0	532.8	1.520	1.339	30.226	26.633	2.0239E-03	2.1214E-03	0.456
35	177	295.7	532.3	1.236	1.089	30.243	26.649	1.6442E-03	1.7234E-03	0.427
36	178	296.3	533.4	0.554	0.488	30.204	26.614	7.3802E-04	7.7359E-04	0.403
37	179	297.6	535.6	1.370	1.736	30.126	26.545	2.6332E-03	2.7605E-03	0.456
38	180	296.6	534.3	1.503	1.324	30.172	26.586	2.0053E-03	2.1021E-03	0.574
39	181	296.1	533.0	1.234	1.088	30.221	26.628	1.6440E-03	1.7232E-03	0.714
40	182	296.0	532.8	1.909	1.682	30.225	26.632	2.5421E-03	2.6645E-03	0.510
41	183	295.9	532.6	1.347	1.186	30.234	26.640	1.7923E-03	1.8786E-03	0.482
42	184	295.8	532.4	0.890	0.784	30.240	26.646	1.1843E-03	1.2413E-03	0.367
43	186	296.2	532.7	0.426	0.376	30.229	26.636	5.6757E-04	5.9491E-04	0.327
44	187	296.4	533.6	0.391	0.344	30.198	26.608	5.2070E-04	5.4580E-04	0.422
45	192	297.0	534.5	1.278	1.126	30.164	26.578	1.7053E-03	1.7876E-03	0.403
46	193	296.9	534.4	0.640	0.564	30.170	26.584	8.5416E-04	8.9539E-04	0.451
47	194	296.4	533.6	0.492	0.434	30.198	26.609	6.5582E-04	6.8744E-04	0.345
48	196	297.4	535.3	0.792	0.698	30.136	26.554	1.0584E-03	1.1095E-03	0.617
49	197	295.3	531.0	3.384	2.982	30.078	26.503	4.5315E-03	4.7511E-03	0.517
50	198	296.3	533.9	1.465	1.291	30.080	26.505	1.9613E-03	2.0563E-03	0.415
51	199	296.4	533.2	1.493	1.315	30.070	26.496	1.9994E-03	2.0963E-03	0.409
52	200	296.9	534.1	4.164	3.669	30.037	26.467	5.5841E-03	5.8551E-03	0.374
53	203	299.3	538.7	3.763	3.316	30.017	26.449	5.0510E-03	5.2964E-03	0.373
54	204	299.4	538.8	3.830	3.375	30.010	26.443	5.1417E-03	5.3915E-03	0.346
55	205	299.8	539.7	2.004	1.766	29.980	26.417	2.6936E-03	2.8246E-03	0.359
56	206	299.0	538.3	1.317	1.160	29.996	26.430	1.7684E-03	1.8543E-03	0.335
57	207	298.6	537.5	0.542	0.477	30.057	26.484	7.2573E-04	7.6099E-04	0.243
58	210	299.2	538.6	0.564	0.497	29.976	26.413	7.5806E-04	7.9494E-04	0.342
59	211	299.4	538.7	9.471	8.098	30.087	26.511	1.3213E-02	1.3853E-02	0.449
60	212	298.2	536.8	2.963	2.259	30.082	26.507	3.4316E-03	3.5979E-03	0.757
61	216	296.5	533.8	0.276	0.238	30.260	26.663	3.5427E-04	3.7655E-04	0.658
62	217	295.9	528.2	0.124	0.521	30.390	26.777	3.3472E-05	3.3187E-05	0.773
63	218	295.2	531.4	0.081	0.072	30.277	26.678	1.0797E-04	1.1316E-04	0.743
64	219	297.5	535.5	4.422	3.896	30.128	26.547	5.9093E-03	6.1950E-03	0.707
65	220	295.9	532.6	1.312	0.691	30.257	26.660	1.3452E-03	1.4099E-03	0.713
66	221	295.3	528.3	0.775	0.686	30.388	26.776	9.9234E-05	1.0399E-04	0.725
67	222	296.3	529.7	0.077	0.068	30.339	26.733	1.0260E-04	1.0752E-04	1.054
68	224	295.9	532.6	0.063	0.055	30.233	26.639	8.3228E-05	8.7235E-05	0.833
69	225	296.4	533.1	4.578	4.034	30.073	26.496	6.1311E-03	6.4282E-03	0.823
70	226	296.2	533.1	0.642	0.566	30.215	26.624	8.5503E-04	8.9623E-04	0.613
71	227	294.5	530.2	0.204	0.180	30.321	26.717	2.7076E-04	2.8375E-04	0.614
72	228	296.1	533.0	0.194	0.171	30.218	26.626	2.5880E-04	2.7127E-04	0.780
73	229	297.1	534.9	0.392	0.081	30.153	26.569	1.2279E-04	1.2872E-04	0.511
74	234	297.7	535.9	6.765	5.959	30.117	26.537	9.0422E-03	9.4796E-03	0.285
75	235	298.4	538.0	8.634	7.608	30.040	26.469	1.1578E-02	1.2140E-02	0.310

FREE-STREAM DENSITY-VELOCITY PRODUCT = 1.1635E-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 30

MACH	RE/METER	R-L	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)		
7.30	0.58433E 06	3.77983 06	0.574	31.73	828.6	0.85398E 06	0.0053		
MACH	RE/FT	R-L	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	2.00844E 06	3.77983 06	1.882	466.45	1491.5	367.23	0.0175		

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.876)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.876)
1	4	0.356	0.1742	0.2272	0.2063	0.2158	39	181	0.357	0.0711	0.0925	0.0840	0.0879
2	7	0.356	0.0807	0.1052	0.0955	0.0999	40	182	0.351	0.1227	0.1596	0.1450	0.1517
3	12	0.355	0.0385	0.0501	0.0455	0.0476	41	183	0.351	0.0974	0.1267	0.1152	0.1205
4	17	0.354	0.0243	0.0317	0.0288	0.0301	42	184	0.351	0.0804	0.1045	0.0950	0.0993
5	22	0.354	0.0190	0.0247	0.0224	0.0235	43	186	0.350	0.0350	0.0455	0.0413	0.0432
6	25	0.353	0.0153	0.0199	0.0181	0.0189	44	187	0.351	0.0260	0.0339	0.0308	0.0 22
7	27	0.354	0.0149	0.0194	0.0176	0.0184	45	192	0.352	0.0839	0.1092	0.0993	0.1038
8	29	0.354	0.0130	0.0170	0.0154	0.0161	46	193	0.351	0.0530	0.0689	0.0626	0.0655
9	30	0.353	0.0123	0.0160	0.0145	0.0152	47	194	0.349	0.0310	0.0403	0.0367	0.0383
10	32	0.353	0.0108	0.0140	0.0127	0.0133	48	196	0.351	0.0353	0.0460	0.0418	0.0437
11	34	0.353	0.0091	0.0118	0.0107	0.0112	49	197	0.355	0.1147	0.1494	0.1357	0.1420
12	38	0.353	0.0077	0.0100	0.0091	0.0095	50	198	0.354	0.0503	0.0655	0.0595	0.0622
13	42	0.352	0.0061	0.0079	0.0072	0.0075	51	199	0.354	0.0523	0.0681	0.0619	0.0647
14	46	0.352	0.0040	0.0052	0.0048	0.0050	52	202	0.355	0.1384	0.1804	0.1638	0.1714
15	50	0.352	0.0034	0.0045	0.0041	0.0042	53	203	0.356	0.1261	0.1644	0.1493	0.1562
16	54	0.351	0.0024	0.0031	0.0028	0.0030	54	204	0.356	0.1253	0.1633	0.1483	0.1551
17	59	0.357	0.2490	0.3248	0.2947	0.3085	55	205	0.356	0.0673	0.0878	0.0797	0.0834
18	62	0.353	0.0395	0.0514	0.0467	0.0488	56	206	0.355	0.0442	0.0575	0.0523	0.0547
19	64	0.353	0.0154	0.0200	0.0182	0.0190	57	207	0.352	0.0179	0.0233	0.0212	0.0221
20	65	0.353	0.0262	0.0342	0.0310	0.0325	58	208	0.355	0.0222	0.0289	0.0262	0.0274
21	66	0.353	0.1147	0.1559	0.1417	0.1482	59	211	0.356	0.3247	0.4233	0.3844	0.4021
22	67	0.354	0.1835	0.2351	0.2136	0.2234	60	225	0.357	0.0890	0.1161	0.1054	0.1102
23	68	0.354	0.1789	0.2330	0.2117	0.2214	61	226	0.352	0.0094	0.0122	0.0111	0.0116
24	69	0.353	0.0435	0.0567	0.0515	0.0539	62	227	0.349	0.0005	0.0006	0.0006	0.0006
25	70	0.352	0.0058	0.0075	0.0068	0.0072	63	228	0.351	0.0016	0.0021	0.0019	0.0020
26	71	0.352	0.0034	0.0044	0.0040	0.0042	64	229	0.352	0.1485	0.1935	0.1757	0.1838
27	72	0.351	0.0028	0.0037	0.0033	0.0035	65	230	0.351	0.0359	0.0467	0.0424	0.0444
28	74	0.351	0.0048	0.0063	0.0057	0.0060	66	231	0.349	0.0022	0.0028	0.0026	0.0027
29	76	0.351	0.0167	0.0217	0.0198	0.0207	67	232	0.348	0.0009	0.0011	0.0010	0.0011
30	122	0.352	0.0103	0.0134	0.0122	0.0127	68	234	0.351	0.0013	0.0016	0.0015	0.0016
31	129	0.352	0.0090	0.0117	0.0106	0.0111	69	235	0.356	0.1456	0.2028	0.1842	0.1927
32	135	0.352	0.0048	0.0062	0.0057	0.0059	70	236	0.352	0.0236	0.0307	0.0279	0.0291
33	136	0.353	0.0045	0.0059	0.0054	0.0056	71	237	0.349	0.0075	0.0098	0.0089	0.0093
34	176	0.352	0.0662	0.0861	0.0783	0.0819	72	238	0.349	0.0046	0.0060	0.0055	0.0057
35	177	0.352	0.0532	0.0692	0.0629	0.0658	73	240	0.351	0.0044	0.0057	0.0052	0.0054
36	178	0.351	0.0253	0.0329	0.0299	0.0313	74	274	0.352	0.2191	0.2852	0.2591	0.2710
37	179	0.355	0.0699	0.0911	0.0828	0.0866	75	286	0.352	0.2868	0.3732	0.3392	0.3547
38	180	0.353	0.0684	0.0890	0.0809	0.0846							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL	LENGTH(METERS)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO.	163
7.30	8.58973E 06	3.77985 06	0.574	31.73	826.6	0.85498E 06	0.0054	RUN NO.	30
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	2.61845 06	3.77985 06	1.882	466.45	1491.5	367.23	0.0175		

CHAN	T/C	TW(DEG K)	TW(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.876)	TIME(SEC)
1	4	304.2	547.6	8.326	7.336	47.865	42.122	5.2148E-03	5.4564E-03	0.687
2	7	302.7	544.8	3.868	3.408	47.950	42.250	2.4142E-03	2.5256E-03	0.648
3	12	301.6	542.8	1.848	1.628	48.049	42.338	1.1507E-03	1.2037E-03	0.635
4	17	301.2	542.1	1.169	1.030	48.084	42.368	7.2765E-04	7.6112E-04	0.631
5	22	300.7	541.2	0.913	0.805	48.131	42.410	5.6750E-04	5.9357E-04	0.567
6	25	300.5	540.8	0.737	0.650	48.150	42.427	4.5808E-04	4.7912E-04	0.547
7	27	300.7	541.3	0.715	0.630	48.127	42.407	4.4464E-04	4.6507E-04	0.508
8	29	300.6	541.1	0.627	0.553	48.137	42.415	3.8970E-04	4.0760E-04	0.474
9	30	300.5	540.8	0.592	0.521	48.150	42.426	3.6760E-04	3.8448E-04	0.458
10	32	299.8	539.7	0.518	0.457	48.207	42.477	3.2161E-04	3.3635E-04	0.410
11	34	300.0	540.0	0.437	0.385	48.192	42.463	2.7114E-04	2.8358E-04	0.296
12	38	300.3	540.5	0.370	0.326	48.169	42.443	2.2968E-04	2.4022E-04	0.098
13	42	299.6	539.3	0.294	0.259	48.229	42.496	1.8213E-04	1.9048E-04	-0.102
14	46	299.6	539.3	0.194	0.171	48.228	42.496	1.2024E-04	1.2575E-04	-0.650
15	50	299.1	538.4	0.166	0.146	48.275	42.537	1.0256E-04	1.0726E-04	-0.528
16	54	298.7	537.6	0.116	0.102	48.312	42.569	7.1791E-05	7.5075E-05	-0.686
17	59	303.4	546.0	11.925	10.508	47.886	42.194	7.4547E-03	7.7993E-03	0.674
18	62	300.1	540.2	1.902	1.676	48.180	42.453	1.1810E-03	1.2352E-03	0.625
19	64	300.4	540.8	0.740	0.652	48.152	42.428	4.5943E-04	4.8053E-04	0.533
20	65	300.4	540.6	1.264	1.114	48.160	42.435	7.8497E-04	8.2101E-04	0.641
21	66	300.5	540.9	5.765	5.080	48.145	42.422	3.5820E-03	3.7465E-03	0.551
22	67	301.0	541.7	8.683	7.651	48.104	42.386	5.4002E-03	5.6484E-03	0.617
23	68	301.1	542.0	8.603	7.580	48.090	42.373	5.3518E-03	5.5980E-03	0.584
24	69	300.0	539.9	2.308	1.849	48.195	42.466	1.3021E-03	1.3618E-03	0.669
25	70	299.1	538.3	0.279	0.246	48.276	42.538	1.7302E-04	1.8094E-04	0.596
26	71	299.1	538.3	0.164	0.145	48.277	42.538	1.0161E-04	1.0626E-04	0.567
27	72	298.7	537.7	0.136	0.120	48.311	42.568	8.4287E-05	8.8142E-05	0.450
28	74	298.6	537.5	0.233	0.206	48.320	42.577	1.4444E-04	1.5105E-04	0.586
29	76	298.3	537.0	0.808	0.712	48.346	42.599	4.9985E-04	5.2269E-04	0.792
30	122	299.3	538.8	0.496	0.437	48.252	42.517	3.0729E-04	3.2136E-04	0.457
31	129	299.3	538.7	0.432	0.381	48.258	42.522	2.6780E-04	2.8007E-04	0.408
32	135	299.4	538.9	0.231	0.203	48.249	42.514	1.4292E-04	1.4947E-04	0.362
33	136	299.8	539.6	0.219	0.193	48.212	42.481	1.3509E-04	1.4212E-04	0.424
34	176	299.4	539.0	3.194	2.814	48.243	42.509	1.9796E-03	2.0703E-03	0.438
35	177	299.0	538.2	2.568	2.262	48.284	42.544	1.5901E-03	1.6629E-03	0.407
36	178	298.7	537.7	1.223	1.077	48.311	42.568	7.5677E-04	7.9139E-04	0.484
37	179	301.7	543.1	3.359	2.960	48.035	42.325	2.0926E-03	2.1890E-03	0.472
38	180	300.4	540.8	3.291	2.900	48.152	42.429	2.0447E-03	2.1386E-03	0.600
39	181	299.3	538.7	3.429	3.022	48.256	42.520	2.1251E-03	2.2225E-03	0.684
40	182	298.9	538.0	5.925	5.220	48.296	42.555	3.6680E-03	3.8359E-03	0.472
41	183	298.4	537.0	4.711	4.151	48.342	42.596	2.9133E-03	3.0465E-03	0.509
42	184	298.3	536.9	3.885	3.423	48.349	42.602	2.4022E-03	2.5120E-03	0.454
43	186	297.7	535.8	1.692	1.491	48.405	42.651	1.0450E-03	1.0927E-03	0.459
44	187	298.4	537.2	1.258	1.109	48.336	42.590	7.7829E-04	8.1387E-04	0.398
45	192	299.1	538.3	4.053	3.571	48.278	42.540	2.5101E-03	2.6250E-03	0.480
46	193	298.4	537.2	2.561	2.257	48.335	42.590	1.5840E-03	1.6564E-03	0.575
47	194	297.1	534.9	1.504	1.325	48.443	42.693	9.2742E-04	9.6970E-04	0.390
48	196	298.7	537.6	1.708	1.505	48.314	42.571	1.0569E-03	1.1052E-03	0.514
49	197	301.6	542.8	5.511	4.856	48.048	42.337	3.4322E-03	3.5902E-03	0.536
50	198	300.9	541.7	2.418	2.131	48.106	42.388	1.5038E-03	1.5729E-03	0.434
51	199	300.6	541.1	2.518	2.219	48.138	42.416	1.5648E-03	1.6367E-03	0.431
52	202	302.0	543.6	6.646	5.856	48.011	42.304	4.1425E-03	4.3334E-03	0.374
53	203	302.4	544.3	6.050	5.331	47.976	42.274	3.7742E-03	3.9483E-03	0.382
54	204	302.6	544.7	6.007	5.293	47.953	42.253	3.7491E-03	3.9221E-03	0.327
55	205	303.0	545.3	3.225	2.842	47.923	42.226	2.0148E-03	2.1075E-03	0.362
56	206	302.2	543.9	2.119	1.867	47.993	42.289	1.3215E-03	1.3824E-03	0.334
57	207	299.6	539.3	0.863	0.760	48.227	42.494	5.3499E-04	5.5951E-04	0.213
58	208	301.8	543.3	1.064	0.937	48.024	42.316	6.6283E-04	6.9336E-04	0.488
59	211	302.4	544.4	15.576	13.725	47.969	42.267	9.7181E-03	1.0166E-02	0.448
60	225	303.6	546.4	4.259	3.753	47.865	42.176	2.6639E-03	2.7871E-03	0.768
61	226	299.3	538.7	0.452	0.398	48.259	42.522	2.7992E-04	2.9274E-04	0.678
62	227	297.1	534.8	0.024	0.021	48.456	42.696	1.4767E-05	1.5440E-05	0.109
63	228	298.5	537.2	0.079	0.070	48.332	42.587	4.9103E-05	5.1348E-05	0.577
64	229	302.0	543.7	7.128	6.280	48.006	42.300	4.4430E-03	4.6478E-03	0.715
65	230	298.8	537.8	1.733	1.527	48.302	42.560	1.0727E-03	1.1217E-03	0.706
66	231	296.4	533.5	0.106	0.093	48.521	42.754	6.5056E-05	6.8017E-05	0.659
67	232	296.1	533.0	0.043	0.038	48.547	42.777	2.6199E-05	2.7391E-05	0.370
68	234	296.2	536.7	0.061	0.054	48.360	42.612	3.7836E-05	3.9564E-05	0.422
69	235	302.7	544.8	7.461	6.574	47.949	42.250	4.6970E-03	4.8719E-03	0.836
70	236	299.1	538.3	1.137	1.002	48.278	42.539	7.0445E-04	7.3670E-04	0.700
71	237	296.4	533.5	0.366	0.322	48.523	42.756	2.2530E-04	2.3555E-04	0.708
72	238	296.9	534.4	0.225	0.198	48.474	42.712	1.3851E-04	1.4482E-04	0.621
73	240	298.6	537.4	0.212	0.187	48.322	42.578	1.3145E-04	1.3746E-04	0.810
74	274	299.5	539.1	10.571	9.315	48.240	42.506	6.5532E-03	6.8535E-03	0.282
75	286	299.1	538.4	13.848	12.202	48.275	42.537	8.5774E-03	8.9700E-03	0.277

FREE-STREAM DENSITY-VELOCITY PRODUCT = 2.1961E-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA *** TEST NO. 183 RUN NO. 31

MACH		RE/METER		REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)		RS(METER)							
7.30		1.204CE 07	6.4	7E 06	0.574	59.19	838.8	J.8651eE 06		0.0053							
MACH		RE/FT		EL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)		RS(FT)							
7.30		3.6659E 06	6.9C	7E 06	1.882	870.16	1509.8	372.04		0.0175							
CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.902)				
1	4	0.360	0.2664	0.3480	0.3156	0.3146	39	181	0.352	0.2501	0.3255	0.2958	0.2947				
2	7	0.358	0.1916	0.1979	0.1796	0.1790	40	182	0.352	0.3875	0.5042	0.4582	0.4565				
3	12	0.357	0.0861	0.1149	0.1043	0.1040	41	183	0.351	0.3165	0.4117	0.3742	0.3729				
4	17	0.356	0.0634	0.0827	0.0751	0.0748	42	184	0.351	0.2466	0.3205	0.2913	0.2902				
5	22	0.355	0.0582	0.0759	0.0689	0.0687	43	186	0.350	0.1491	0.1938	0.1762	0.1755				
6	25	0.355	0.0534	0.0696	0.0632	0.0630	44	187	0.351	0.1250	0.1626	0.1478	0.1472				
7	27	0.355	0.0552	0.0719	0.0653	0.0650	45	192	0.352	0.3418	0.4448	0.4042	0.4027				
8	29	0.355	0.0524	0.0683	0.0620	0.0618	46	193	0.351	0.1551	0.2018	0.1834	0.1827				
9	30	0.355	0.0522	0.0680	0.0618	0.0616	47	194	0.349	0.1178	0.1531	0.1392	0.1387				
10	32	0.354	0.0499	0.0650	0.0590	0.0588	48	196	0.352	0.1266	0.1647	0.1497	0.1491				
11	34	0.354	0.0480	0.0626	0.0568	0.0566	49	197	0.355	0.1799	0.2343	0.2128	0.2121				
12	38	0.355	0.0530	0.0691	0.0627	0.0625	50	198	0.355	0.2928	0.3815	0.3465	0.3453				
13	42	0.353	0.0547	0.0712	0.0647	0.0644	51	199	0.355	0.3366	0.4386	0.3984	0.3969				
14	46	0.353	0.0716	0.0933	0.0847	0.0844	52	202	0.355	0.1285	0.1674	0.1521	0.1515				
15	50	0.352	0.0826	0.1075	0.0977	0.0974	53	203	0.355	0.1147	0.1546	0.1404	0.1399				
16	54	0.352	0.0879	0.1143	0.1039	0.1035	54	204	0.356	0.1205	0.1570	0.1426	0.1421				
17	59	0.358	0.1362	0.1777	0.1613	0.1607	55	205	0.357	0.1218	0.1590	0.1443	0.1438				
18	62	0.353	0.0120	0.0156	0.0142	0.0141	56	206	0.357	0.2116	0.2759	0.2505	0.2496				
19	64	0.353	0.0048	0.0063	0.0057	0.0057	57	207	0.353	0.1493	0.1944	0.1766	0.1760				
20	65	0.353	0.0095	0.0124	0.0113	0.0112	58	208	0.356	0.1103	0.1438	0.1306	0.1301				
21	66	0.354	0.0354	0.0461	0.0419	0.0417	59	211	0.355	0.2575	0.3747	0.3403	0.3391				
22	67	0.354	0.0476	0.0620	0.0563	0.0561	60	225	0.357	0.0268	0.0350	0.0317	0.0316				
23	68	0.354	0.0460	0.0521	0.0473	0.0472	61	226	0.351	0.0037	0.0048	0.0044	0.0044				
24	69	0.353	0.0090	0.0117	0.0106	0.0106	62	227	0.349	0.0013	0.0018	0.0016	0.0016				
25	70	0.352	0.0016	0.0021	0.0019	0.0019	63	228	0.352	0.0062	0.0081	0.0073	0.0073				
26	71	0.352	0.0025	0.0032	0.0029	0.0029	64	229	0.354	0.0804	0.1047	0.0951	0.0948				
27	72	0.351	0.0106	0.0138	0.0126	0.0125	65	230	0.350	0.0087	0.0113	0.0103	0.0103				
28	74	0.351	0.0070	0.0091	0.0083	0.0082	66	231	0.348	0.0022	0.0028	0.0026	0.0026				
29	76	0.351	0.0042	0.0054	0.0049	0.0049	67	232	0.346	0.0027	0.0035	0.0032	0.0032				
30	122	0.352	0.0236	0.0307	0.0279	0.0278	68	234	0.351	0.0070	0.0091	0.0083	0.0082				
31	129	0.352	0.0133	0.0172	0.0157	0.0156	69	235	0.355	0.1014	0.1322	0.1200	0.1196				
32	135	0.353	0.0136	0.0180	0.0164	0.0163	70	236	0.351	0.0106	0.0138	0.0125	0.0125				
33	136	0.353	0.0184	0.0240	0.0218	0.0217	71	237	0.347	0.0117	0.0151	0.0138	0.0137				
34	176	0.353	0.3239	0.4216	0.3831	0.3817	72	238	0.349	0.0081	0.0106	0.0096	0.0096				
35	177	0.352	0.2623	0.3413	0.3101	0.3090	73	240	0.351	0.0201	0.0262	0.0238	0.0237				
36	178	0.352	0.1283	0.1669	0.1517	0.1511	74	274	0.352	0.1108	0.1442	0.1310	0.1306				
37	179	0.356	0.2749	0.3583	0.3254	0.3242	75	286	0.352	0.1502	0.1954	0.1776	0.1770				
38	180	0.354	0.3419	0.4454	0.4046	0.4031											

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER SUPPORT FACILITY

TEST NO. 183
RUN NO. 31

MACH 7.30	RE/METER 1.2044E 07	REL 6.9067E 06	LENGTH(METER) 0.574	PT(ATM) 59.19	TT(DEG K) 836.6	HT(JOULE/KG) 0.8651GE 06	RS(METER) 0.0053
MACH 7.30	RE/FT 3.6659E 06	REL 6.9067E 06	LENGTH(FT) 1.882	PT(PSI) 870.16	TT(DEG R) 1509.8	HT(BTU/LBM) 372.04	RS(FT) 0.0175

CHAN	T/C	TW(DEG K)	TW(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.960)	ST(0.982)	TIME(SEC)
1	4	310.9	559.9	17.552	15.466	65.667	58.057	5.6 0061E-03	5.8489E-03	0.524
2	7	308.6	555.5	1.027	5.845	66.118	58.459	3.3316E-03	3.3395E-03	0.462
3	12	307.2	552.9	5.643	5.148	66.302	58.421	1.4469E-03	1.4938E-03	0.455
4	17	306.7	552.0	4.208	3.708	66.362	58.474	1.4009E-03	1.3958E-03	0.411
5	22	306.0	550.8	3.869	3.410	66.446	58.548	1.2863E-03	1.2815E-03	0.360
6	25	305.7	550.2	3.553	3.130	66.486	58.583	1.1801E-03	1.1758E-03	0.300
7	27	306.1	551.1	3.664	3.228	66.428	58.532	1.2182E-03	1.2138E-03	0.262
8	29	306.0	550.9	3.480	3.067	66.442	58.545	1.1570E-03	1.1528E-03	0.208
9	30	305.8	550.4	3.471	3.058	66.472	58.571	1.1533E-03	1.1491E-03	0.234
10	32	304.8	548.7	3.324	2.929	66.594	58.678	1.1021E-03	1.0980E-03	0.209
11	34	305.3	549.5	3.196	2.816	66.535	58.627	1.0609E-03	1.0570E-03	0.169
12	38	305.7	550.2	3.525	3.106	66.486	58.583	1.1704E-03	1.1666E-03	0.187
13	42	304.3	547.8	3.643	3.210	66.655	58.732	1.2066E-03	1.2024E-03	0.232
14	46	304.1	547.4	4.777	4.209	66.682	58.756	1.5416E-03	1.5358E-03	0.284
15	50	303.5	546.2	4.861	4.283	66.762	58.827	1.8240E-03	1.8173E-03	0.363
16	54	302.9	545.2	5.517	4.861	66.836	58.891	1.9395E-03	1.9325E-03	0.389
17	58	303.6	546.5	5.873	5.175	66.724	58.264	3.0102E-03	2.9991E-03	0.533
18	62	304.3	547.7	9.006	7.935	66.661	58.737	2.6424E-04	2.6327E-04	0.513
19	64	304.4	547.9	0.796	0.703	66.649	58.727	1.0641E-04	1.0602E-04	0.591
20	65	304.4	548.0	0.321	0.283	66.643	58.721	2.1015E-04	2.0938E-04	0.543
21	66	304.7	548.4	2.359	2.078	66.614	58.696	7.8179E-04	7.7894E-04	0.462
22	67	305.1	549.1	3.170	2.793	66.565	58.653	1.0515E-03	1.0476E-03	0.480
23	68	305.2	549.4	2.662	2.346	66.545	58.635	8.8336E-04	8.8014E-04	0.434
24	69	303.7	546.7	0.600	0.528	66.728	58.796	1.9836E-04	1.9764E-04	0.547
25	70	302.9	545.2	0.106	0.094	66.834	58.889	3.5146E-05	3.5018E-05	1.086
26	71	302.8	545.1	0.165	0.145	66.842	58.897	5.4514E-05	5.4316E-05	1.093
27	72	302.5	544.5	0.710	0.626	66.886	58.935	2.3434E-04	2.3349E-04	0.561
28	74	302.3	544.2	0.467	0.412	66.906	58.953	1.5414E-04	1.5358E-04	0.640
29	76	302.0	543.6	0.280	0.247	66.949	58.991	9.2220E-05	9.1886E-05	0.622
30	122	303.3	545.9	1.578	1.390	66.789	58.850	5.2141E-04	5.1951E-04	0.489
31	129	303.1	545.7	0.886	0.780	66.803	58.863	2.9260E-04	2.9154E-04	0.377
32	135	303.9	547.0	0.923	0.813	66.707	58.778	3.0540E-04	3.0428E-04	0.269
33	136	304.0	547.2	1.230	1.084	66.693	58.766	4.0709E-04	4.0561E-04	0.541
34	176	303.7	546.7	21.618	19.049	66.734	58.801	7.1510E-03	7.1250E-03	0.435
35	177	303.4	546.0	17.513	15.431	66.777	58.839	5.7888E-03	5.7678E-03	0.431
36	178	302.9	545.2	8.573	7.554	66.837	58.893	2.8309E-03	2.8206E-03	0.428
37	179	303.4	546.5	18.249	16.080	66.395	58.503	6.0715E-03	6.0493E-03	0.275
38	180	305.1	549.1	22.760	20.055	66.361	58.651	7.5506E-03	7.5230E-03	0.555
39	181	303.5	546.4	16.665	14.710	66.754	58.819	5.5205E-03	5.5004E-03	0.474
40	182	303.1	545.5	25.890	22.812	66.812	58.871	8.5526E-03	8.5215E-03	0.389
41	183	302.8	544.6	21.169	18.653	66.875	58.926	6.9857E-03	6.9603E-03	0.391
42	184	302.5	544.6	16.478	14.519	66.877	58.928	5.4375E-03	5.4177E-03	0.554
43	186	301.4	542.6	9.990	8.802	67.017	59.051	3.2887E-03	3.2768E-03	0.401
44	187	302.6	544.6	8.359	7.365	66.874	58.925	2.7584E-03	2.7484E-03	0.399
45	192	303.3	546.0	22.827	20.114	66.761	58.843	7.5449E-03	7.5175E-03	0.390
46	193	302.5	544.4	10.377	9.143	66.669	58.936	3.4235E-03	3.4111E-03	0.471
47	194	300.5	540.9	7.911	6.971	67.136	59.155	2.5992E-03	2.5898E-03	0.283
48	196	302.8	545.1	8.462	7.456	66.842	58.897	2.7938E-03	2.7837E-03	0.383
49	197	305.5	549.9	11.962	10.540	66.507	58.601	3.9723E-03	3.9578E-03	0.387
50	198	305.5	549.8	19.477	17.162	66.514	58.606	6.4670E-03	6.4434E-03	0.460
51	199	305.4	549.8	22.392	19.730	66.317	58.610	7.4343E-03	7.4072E-03	0.411
52	202	305.6	550.2	8.544	7.528	66.491	58.567	2.8379E-03	2.8275E-03	0.222
53	203	306.2	551.1	7.882	6.945	66.423	58.527	2.6210E-03	2.6114E-03	0.231
54	204	306.6	552.0	7.995	7.044	66.367	58.478	2.6612E-03	2.6514E-03	0.174
55	205	307.9	554.2	8.067	7.108	66.205	58.339	2.6926E-03	2.6827E-03	0.307
56	206	307.1	552.8	14.031	12.363	66.308	58.426	4.6751E-03	4.6580E-03	0.455
57	207	303.7	546.7	9.965	8.780	66.732	58.800	3.2564E-03	3.2444E-03	0.091
58	208	306.8	552.2	7.319	6.449	66.351	58.484	2.4389E-03	2.4280E-03	0.281
59	211	306.2	551.1	19.097	16.827	66.424	58.528	6.3506E-03	6.3274E-03	0.311
60	225	307.3	553.1	1.777	1.566	66.284	58.406	5.9240E-04	5.9023E-04	0.678
61	226	302.5	544.4	0.248	0.219	66.666	58.937	8.1464E-05	8.1667E-05	0.838
62	227	300.8	541.4	0.680	0.600	67.099	59.123	2.9714E-05	2.9606E-05	1.976
63	228	302.8	545.0	0.415	0.366	66.846	58.900	1.3695E-04	1.3646E-04	0.897
64	229	305.3	549.6	5.349	4.713	66.532	58.624	1.7755E-03	1.7690E-03	0.650
65	230	301.8	543.2	0.584	0.515	66.471	59.011	1.9240E-04	1.9178E-04	0.731
66	231	299.5	539.1	0.147	0.130	67.258	59.204	4.6286E-05	4.6112E-05	1.907
67	232	299.4	538.8	0.183	0.161	67.275	59.279	5.9971E-05	5.9781E-05	1.499
68	234	302.5	544.4	0.467	0.411	66.987	58.937	1.5402E-04	1.5346E-04	0.947
69	235	306.2	551.2	6.735	5.934	66.420	58.525	2.2398E-03	2.2316E-03	0.683
70	236	302.1	543.7	0.709	0.625	66.935	58.979	2.3384E-04	2.3299E-04	0.732
71	237	299.3	538.7	0.785	0.691	67.286	59.288	2.5712E-04	2.5619E-04	0.826
72	238	300.2	540.4	0.547	0.482	67.167	59.183	1.7948E-04	1.7883E-04	0.799
73	240	302.7	544.9	1.345	1.185	66.654	58.957	4.4407E-04	4.4246E-04	0.863
74	274	303.5	546.3	7.396	6.519	66.761	58.825	2.4466E-03	2.4371E-03	0.440
75	286	302.5	545.3	10.035	8.846	66.828	58.884	3.3154E-03	3.3034E-03	0.207

FREE-STREAM DENSITY-VELOCITY PRODUCT = 4.0651E-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 193
RUN NO. 32

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	HS(METER)		
7.30	3.16931E 06	1.82958E 06	0.574	16.10	651.7	0.67946E 06	0.0054		
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	HS(FT)		
7.30	9.7210E 05	1.8295E 06	1.882	236.60	1533.1	378.19	0.0175		

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.892)
1	4	0.346	0.2302	0.2590	0.2719	0.2699
2	7	0.346	0.1237	0.1606	0.1461	0.1482
3	1	0.345	0.0683	0.0886	0.0806	0.0818
4	17	0.345	0.0484	0.0628	0.0571	0.0580
5	22	0.345	0.0415	0.0538	0.0486	0.0496
6	25	0.346	0.0364	0.0472	0.0429	0.0436
7	27	0.346	0.0370	0.0480	0.0437	0.0443
8	29	0.346	0.0340	0.0442	0.0402	0.0408
9	30	0.346	0.0335	0.0435	0.0396	0.0402
10	32	0.345	0.0308	0.0400	0.0364	0.0369
11	34	0.345	0.0287	0.0372	0.0339	0.0344
12	36	0.346	0.0281	0.0365	0.0332	0.0337
13	42	0.345	0.0241	0.0313	0.0285	0.0289
14	46	0.345	0.0190	0.0247	0.0225	0.0228
15	50	0.344	0.0142	0.0184	0.0168	0.0170
16	54	0.343	0.0095	0.0123	0.0112	0.0113
17	59	0.347	0.1703	0.2212	0.2012	0.2041
18	62	0.344	0.0193	0.0251	0.0229	0.0231
19	64	0.345	0.0060	0.0077	0.0070	0.0071
20	65	0.344	0.0065	0.0084	0.0076	0.0077
21	66	0.345	0.0235	0.0304	0.0277	0.0281
22	67	0.345	0.0458	0.0594	0.0541	0.0549
23	68	0.345	0.0525	0.0682	0.0620	0.0629
24	69	0.344	0.0192	0.0249	0.0226	0.0230
25	70	0.343	0.0034	0.0044	0.0040	0.0041
26	71	0.344	0.0023	0.0029	0.0027	0.0027
27	72	0.343	0.0057	0.0073	0.0067	0.0068
28	74	0.343	0.0100	0.0130	0.0118	0.0120
29	76	0.343	0.0059	0.0076	0.0069	0.0070
30	122	0.344	0.0193	0.0250	0.0227	0.0231
31	129	0.344	0.0147	0.0191	0.0174	0.0176
32	135	0.344	0.0102	0.0132	0.0121	0.0122
33	136	0.345	0.0134	0.0174	0.0159	0.0161
34	176	0.344	0.0758	0.0982	0.0894	0.0907
35	177	0.343	0.0640	0.0830	0.0756	0.0767
36	178	0.343	0.0335	0.0434	0.0395	0.0401
37	179	0.346	0.1119	0.1452	0.1321	0.1341
38	180	0.345	0.0644	0.0836	0.0760	0.0771

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.892)
39	181	0.344	0.0566	0.0734	0.0668	0.0678
40	182	0.343	0.0794	0.1028	0.0936	0.0950
41	183	0.342	0.0652	0.0844	0.0768	0.0780
42	184	0.342	0.0479	0.0620	0.0564	0.0573
43	186	0.342	0.0307	0.0397	0.0361	0.0367
44	187	0.342	0.0278	0.0361	0.0328	0.0333
45	192	0.343	0.1160	0.1529	0.1392	0.1412
46	193	0.342	0.0372	0.0482	0.0438	0.0445
47	194	0.388	0.0000	0.0000	0.0000	0.0000
48	196	0.343	0.0270	0.0350	0.0319	0.0324
49	197	0.345	0.1505	0.1952	0.1776	0.1802
50	198	0.345	0.0716	0.0929	0.0845	0.0858
51	199	0.345	0.0840	0.1089	0.0991	0.1006
52	202	0.346	0.1463	0.1898	0.1727	0.1752
53	203	0.346	0.1332	0.1729	0.1573	0.1596
54	204	0.346	0.1304	0.1692	0.1540	0.1562
55	205	0.347	0.0789	0.1024	0.0932	0.0945
56	206	0.346	0.0681	0.0884	0.0804	0.0816
57	207	0.343	0.0309	0.0401	0.0365	0.0370
58	208	0.346	0.0343	0.0445	0.0405	0.0411
59	211	0.346	0.3047	0.3954	0.3597	0.3650
60	225	0.348	0.0502	0.0652	0.0593	0.0601
61	226	0.343	0.0047	0.0061	0.0055	0.0056
62	227	0.341	0.0014	0.0018	0.0016	0.0017
63	228	0.342	0.0030	0.0039	0.0035	0.0036
64	229	0.345	0.0959	0.1244	0.1132	0.1149
65	230	0.342	0.0137	0.0178	0.0162	0.0164
66	231	0.340	0.0012	0.0015	0.0014	0.0014
67	232	0.339	0.0005	0.0006	0.0005	0.0006
68	234	0.341	0.0019	0.0025	0.0022	0.0023
69	235	0.345	0.1210	0.1570	0.1428	0.1449
70	236	0.342	0.0150	0.0195	0.0177	0.0180
71	237	0.339	0.0052	0.0067	0.0061	0.0062
72	238	0.340	0.0029	0.0037	0.0034	0.0034
73	240	0.341	0.0076	0.0098	0.0090	0.0091
74	274	0.342	0.1982	0.2567	0.2337	0.2371
75	286	0.341	0.1783	0.2308	0.2102	0.2132

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 32

MACH	RE/METER	REL	LENGTH(METER)	PTI(ATM)	TTI(DEG K)	HTI(JOULE/KG)	RSI(M-SK)
7.30	3.1863E 06	1.8259E 06	0.574	16.10	851.7	0.87946E 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PTI(PSI)	TTI(DEG R)	HTI(BTU/LBM)	RS(FT)
7.30	9.7210E 05	1.8259E 06	1.882	236.60	1533.1	378.19	0.0173

CHAN	T/C	TW(DEG R)	TW(DEG R)	QW(W/CM2)	QW(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.950)	ST(0.892)	TIME(SEC)
1	4	304.6	548.2	8.259	7.283	35.865	31.617	9.0367E-03	9.4913E-03	0.498
2	7	303.3	545.9	4.421	3.896	35.740	31.492	5.2240E-03	5.3615E-03	0.459
3	12	302.5	544.6	2.444	2.153	35.768	31.514	2.9159E-03	2.9585E-03	0.442
4	17	302.3	544.1	1.733	1.527	35.805	31.549	2.0666E-03	2.0967E-03	0.443
5	21	302.1	543.7	1.485	1.309	35.815	31.561	1.7703E-03	1.7962E-03	0.394
6	26	302.2	544.0	1.303	1.148	35.807	31.551	1.5537E-03	1.5764E-03	0.372
7	27	302.6	544.7	1.225	1.167	35.784	31.529	1.5610E-03	1.6041E-03	0.326
8	29	302.6	544.7	1.218	1.073	35.783	31.530	1.4537E-03	1.4750E-03	0.276
9	30	302.6	544.7	1.201	1.058	35.784	31.531	1.4327E-03	1.4537E-03	0.289
10	32	302.1	543.8	1.103	0.972	35.816	31.559	1.3156E-03	1.3346E-03	0.241
11	34	302.3	544.1	1.026	0.906	35.794	31.540	1.2261E-03	1.2440E-03	0.193
12	38	302.6	544.6	1.007	0.887	35.787	31.533	1.2016E-03	1.2192E-03	0.140
13	42	301.7	543.1	0.864	0.761	35.840	31.580	1.0274E-03	1.0445E-03	0.079
14	46	301.7	543.1	0.682	0.602	35.843	31.582	8.1335E-04	8.2524E-04	-0.081
15	50	301.3	542.3	0.510	0.450	35.869	31.606	6.0724E-04	6.1610E-04	-0.050
16	54	300.8	541.4	0.340	0.297	35.905	31.637	4.0384E-04	4.0973E-04	-0.252
17	59	304.1	547.4	6.079	5.356	35.688	31.444	7.2770E-03	7.3839E-03	0.506
18	62	301.4	542.6	0.693	0.611	35.859	31.597	8.2300E-04	8.3705E-04	0.449
19	64	301.7	543.1	0.213	0.188	35.839	31.579	2.5430E-04	2.5801E-04	0.386
20	65	301.6	542.9	0.232	0.204	35.845	31.588	2.7581E-04	2.7984E-04	0.502
21	66	301.7	543.0	0.841	0.741	35.843	31.583	1.0013E-03	1.0159E-03	0.394
22	67	302.1	543.7	1.642	1.446	35.820	31.562	1.9568E-03	1.9855E-03	0.440
23	68	302.2	543.9	1.882	1.658	35.811	31.554	2.2437E-03	2.2765E-03	0.401
24	69	301.4	542.6	0.688	0.606	35.860	31.598	8.1930E-04	8.3126E-04	0.460
25	70	300.7	541.2	0.123	0.108	35.910	31.642	1.4606E-04	1.4819E-04	0.285
26	71	300.8	541.5	0.082	0.072	35.900	31.633	9.7109E-05	9.8526E-05	0.428
27	72	300.6	541.1	0.404	0.179	35.912	31.644	2.4191E-04	2.4544E-04	0.367
28	74	300.6	541.1	0.359	0.316	35.914	31.645	4.2677E-04	4.3299E-04	0.446
29	76	300.3	540.6	0.211	0.186	35.933	31.662	2.5024E-04	2.5389E-04	0.665
30	122	301.2	542.2	0.691	0.609	35.875	31.610	8.2244E-04	8.3445E-04	0.501
31	129	301.1	542.0	0.528	0.465	35.880	31.615	6.2855E-04	6.3772E-04	0.359
32	135	301.8	542.8	0.366	0.323	35.852	31.590	4.3620E-04	4.4257E-04	0.375
33	136	302.2	543.9	0.481	0.424	35.813	31.556	5.7375E-04	5.8215E-04	0.416
34	176	301.2	542.2	2.718	2.395	35.874	31.610	3.2341E-03	3.2813E-03	0.254
35	177	300.6	541.2	2.300	2.027	35.911	31.643	2.7339E-03	2.7737E-03	0.248
36	178	300.2	540.4	1.205	1.062	35.939	31.667	1.4309E-03	1.4517E-03	0.244
37	179	302.9	545.2	4.003	3.527	35.784	31.513	4.7798E-03	4.8498E-03	0.398
38	180	301.9	543.5	2.308	2.034	35.827	31.568	2.7506E-03	2.7911E-03	0.350
39	181	300.6	541.5	2.032	1.791	35.899	31.632	2.4167E-03	2.4520E-03	0.389
40	182	300.2	540.4	2.652	2.313	35.938	31.666	3.3272E-03	3.4366E-03	0.196
41	183	299.9	539.7	2.343	2.065	35.963	31.688	2.7805E-03	2.8209E-03	0.159
42	184	299.5	539.8	1.721	1.517	35.962	31.687	2.0426E-03	2.0723E-03	0.057
43	186	299.1	538.4	1.104	0.973	36.013	31.732	1.3082E-03	1.3272E-03	0.165
44	187	299.8	539.7	1.001	0.882	35.964	31.689	1.1884E-03	1.2057E-03	0.195
45	192	300.3	540.5	4.240	3.736	35.936	31.665	5.0300E-03	5.1054E-03	0.309
46	193	299.8	539.7	1.337	1.178	35.965	31.690	1.5864E-03	1.6095E-03	0.357
47	194	339.8	611.6	0.000	0.000	32.369	29.403	0.0000E-39	0.0000E-39	-0.748
48	196	300.0	535.9	0.972	0.857	35.956	31.662	1.1539E-03	1.1707E-03	0.176
49	197	302.3	544.1	5.387	4.746	35.804	31.548	6.4246E-03	6.5186E-03	0.355
50	198	302.0	543.6	2.567	2.261	35.824	31.566	3.0590E-03	3.1038E-03	0.490
51	199	301.8	543.3	2.652	2.336	35.838	31.576	3.1586E-03	3.2047E-03	0.340
52	202	302.6	544.7	5.236	4.613	35.782	31.529	6.2486E-03	6.3401E-03	0.194
53	203	303.0	545.4	4.765	4.198	35.759	31.509	5.6907E-03	5.7740E-03	0.192
54	204	303.2	545.8	4.661	4.107	35.743	31.494	5.5702E-03	5.6518E-03	0.124
55	205	303.5	547.0	2.817	2.482	35.700	31.456	3.3709E-03	3.4204E-03	0.220
56	206	303.3	546.6	2.455	2.146	35.735	31.491	2.9104E-03	2.9531E-03	0.173
57	207	300.6	541.1	1.116	0.976	35.914	31.645	1.3134E-03	1.3330E-03	0.078
58	208	302.9	545.3	1.227	1.081	35.763	31.512	1.4647E-03	1.4862E-03	0.211
59	211	303.1	545.6	10.892	9.596	35.749	31.500	1.3013E-02	1.3204E-02	0.294
60	225	304.4	547.8	1.790	1.577	35.665	31.430	2.1443E-03	2.1758E-03	0.639
61	226	300.6	541.2	0.168	0.148	35.911	31.643	1.9926E-04	2.0218E-04	0.431
62	227	296.8	537.9	0.050	0.044	36.031	31.748	5.9073E-05	5.9932E-05	0.696
63	228	299.3	538.8	0.106	0.055	35.997	31.718	1.2746E-04	1.2932E-04	0.587
64	229	302.3	544.2	3.434	3.026	35.801	31.546	4.0963E-03	4.1563E-03	0.601
65	230	299.6	539.2	0.493	0.435	35.981	31.704	5.8901E-04	5.9752E-04	0.384
66	231	297.8	535.6	0.042	0.037	36.111	31.819	5.0182E-05	5.0909E-05	0.630
67	232	297.0	534.7	0.017	0.015	36.147	31.851	1.4783E-05	2.0070E-05	-0.329
68	234	296.3	533.1	0.069	0.060	36.024	31.742	8.1166E-05	8.2346E-05	0.378
69	235	302.2	544.0	4.233	3.730	35.810	31.553	5.1670E-03	5.2426E-03	0.690
70	236	299.1	538.4	0.544	0.477	36.011	31.730	6.4164E-04	6.5096E-04	0.515
71	237	297.1	534.7	0.187	0.164	36.145	31.848	2.2073E-04	2.2341E-04	0.368
72	239	297.4	535.4	0.103	0.091	36.120	31.827	1.2221E-04	1.2398E-04	0.067
73	240	296.5	533.9	0.274	0.241	36.028	31.746	3.2413E-04	3.2864E-04	0.719
74	274	299.4	539.0	7.134	6.284	35.785	31.711	8.4986E-03	8.5816E-03	0.244
75	266	298.2	536.9	6.431	5.666	36.067	31.780	7.6066E-03	7.7170E-03	0.076

FREE-STREAM DENSITY-VELOCITY PRODUCT = 1.0945E-01 (SLUGS/FT2-SEC)

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1473704

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)		TEST NO.	183
7.30	6.3624E 06	3.6497E 06	0.574	31.76	846.3	0.87349E 06	0.3053		RUN NO.	33
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)			
7.30	1.9393E 06	3.6497E 06	1.882	466.90	1523.4	375.62	0.0175			

CHAN	T/C	Hw/HT	C/CS	H/HS(0.850)	H/HS(0.880)	H/HS(0.892)	CHAN	T/C	Hw/HT	C/CS	H/HS(0.850)	H/HS(0.900)	H/HS(0.892)
1	4	0.353	0.2325	0.3027	0.2750	0.2791	39	181	0.347	0.0677	0.0875	0.0799	0.0811
2	7	0.351	0.1264	0.1632	0.1483	0.1505	40	182	0.347	0.1364	0.1797	0.1634	0.1658
3	12	0.350	0.0690	0.0897	0.0819	0.0827	41	183	0.346	0.1515	0.1966	0.1789	0.1815
4	17	0.351	0.0477	0.0621	0.0564	0.0573	42	184	0.346	0.1293	0.1678	0.1527	0.1549
5	22	0.349	0.0416	0.0541	0.0492	0.0499	43	186	0.345	0.0733	0.0951	0.0866	0.0878
6	25	0.349	0.0369	0.0479	0.0436	0.0442	44	187	0.346	0.0599	0.0777	0.0707	0.0717
7	27	0.350	0.0377	0.0490	0.0446	0.0452	45	192	0.347	0.2479	0.3218	0.2928	0.2970
8	29	0.350	0.0356	0.0463	0.0421	0.0427	46	193	0.346	0.1116	0.1448	0.1318	0.1337
9	30	0.350	0.0350	0.0454	0.0413	0.0419	47	194	0.391	0.0000	0.0000	0.0000	0.0000
10	32	0.349	0.0329	0.0427	0.0389	0.0394	48	196	0.346	0.0714	0.0927	0.0844	0.0856
11	34	0.349	0.0302	0.0393	0.0357	0.0363	49	197	0.349	0.1544	0.2007	0.1825	0.1851
12	38	0.350	0.0290	0.0377	0.0342	0.0348	50	198	0.349	0.0736	0.0959	0.0872	0.0885
13	42	0.349	0.0250	0.0325	0.0296	0.0300	51	199	0.349	0.1263	0.1641	0.1492	0.1514
14	46	0.348	0.0195	0.0253	0.0230	0.0234	52	202	0.349	0.1404	0.1825	0.1659	0.1684
15	50	0.348	0.0136	0.0177	0.0161	0.0163	53	203	0.350	0.1275	0.1658	0.1507	0.1529
16	54	0.347	0.0092	0.0120	0.0109	0.0110	54	204	0.350	0.1246	0.1619	0.1472	0.1494
17	58	0.352	0.1685	0.2192	0.1992	0.2022	55	205	0.351	0.0855	0.1112	0.1011	0.1026
18	62	0.348	0.0177	0.0230	0.0209	0.0212	56	206	0.350	0.0765	0.0995	0.0904	0.0917
19	64	0.349	0.0049	0.0064	0.0058	0.0059	57	207	0.347	0.0385	0.0500	0.0455	0.0461
20	65	0.349	0.0071	0.0092	0.0083	0.0085	58	208	0.350	0.0394	0.0512	0.0465	0.0472
21	66	0.349	0.0261	0.0339	0.0308	0.0313	59	211	0.350	0.3015	0.3920	0.3563	0.3616
22	67	0.349	0.0464	0.0603	0.0548	0.0556	60	225	0.352	0.0392	0.0510	0.0463	0.0470
23	68	0.349	0.0468	0.0608	0.0553	0.0561	61	226	0.347	0.0035	0.0045	0.0041	0.0042
24	69	0.348	0.0148	0.0193	0.0175	0.0178	62	227	0.345	0.0007	0.0009	0.0008	0.0008
25	70	0.347	0.0028	0.0036	0.0033	0.0034	63	228	0.346	0.0035	0.0045	0.0041	0.0042
26	71	0.347	0.0020	0.0026	0.0024	0.0024	64	229	0.350	0.0903	0.1174	0.1067	0.1083
27	72	0.347	0.0059	0.0077	0.0070	0.0071	65	230	0.346	0.0124	0.0161	0.0146	0.0148
28	74	0.347	0.0112	0.0146	0.0133	0.0135	66	231	0.343	0.0010	0.0013	0.0012	0.0012
29	76	0.347	0.0033	0.0043	0.0039	0.0039	67	232	0.343	0.0013	0.0017	0.0015	0.0015
30	122	0.348	0.0180	0.0234	0.0213	0.0216	68	234	0.345	0.0032	0.0042	0.0038	0.0039
31	129	0.348	0.0140	0.0181	0.0165	0.0167	69	235	0.350	0.1203	0.1563	0.1421	0.1442
32	135	0.348	0.0094	0.0122	0.0111	0.0112	70	236	0.346	0.0130	0.0168	0.0153	0.0155
33	136	0.349	0.0156	0.0202	0.0184	0.0186	71	237	0.343	0.0072	0.0093	0.0084	0.0086
34	176	0.348	0.0863	0.1121	0.1019	0.1034	72	238	0.344	0.0042	0.0055	0.0050	0.0051
35	177	0.347	0.0720	0.0935	0.0850	0.0863	73	240	0.346	0.0096	0.0124	0.0113	0.0114
36	178	0.347	0.0368	0.0477	0.0434	0.0441	74	274	0.346	0.1899	0.2465	0.2242	0.2275
37	179	0.350	0.1121	0.1457	0.1325	0.1344	75	286	0.345	0.1372	0.1780	0.1620	0.1643
38	180	0.349	0.0657	0.0854	0.0776	0.0788							

ORIGINAL PAGE IS
OF POOR QUALITY

	7.30	6.3e24E C6	3.e467E C6	0.57-	31.76	646.3	0.E7349E 06	C.0052			RUN NO. 33
	MACH	RE/FT	P1	LENGTH(FT)	PT(PSI)	TI(DEG R)	HT(BTU/LBM)	RS(FT)			
	7.30	1.93933E C6	3.e647E 06	1.ee2	466.90	1523.4	375.e2	0.0175			

CHAN	T/C	TW(DEG R)	TAW(DEG R)	C(W/CM2)	C(BTU/FT2-SEC)	CS(W/CM2)	CS(BTU/FT2-SEC)	ST(W/CM2)	ST(W/CM2)	TIME(SEC)
1	4	307.1	552.8	11.467	10.104	49.322	43.459	7.0473E-03	7.1540E-03	0.544
2	7	3C9.6	550.1	6.2C4	5.466	49.456	43.578	3.4017E-03	3.4580E-03	0.509
3	12	304.4	548.3	3.41C	3.012	49.547	43.658	2.0902E-03	2.1211E-03	0.495
4	17	3C4.3	547.7	2.367	2.086	49.579	43.686	1.4463E-03	1.4679E-03	0.485
5	22	3C3.9	547.C	2.C6b	1.820	49.613	43.716	1.2615E-03	1.2801E-03	0.48b
b	25	3C3.9	547.1	1.e3b	1.612	49.611	43.714	1.1174E-03	1.1338E-03	0.359
7	27	3C4.3	547.6	1.e7C	1.648	49.575	43.682	1.143eE-03	1.1600E-03	0.356
6	29	3C4.2	547.6	1.764	1.555	49.583	43.689	1.0782E-03	1.0941E-03	C.306
9	30	3C4.2	547.5	1.734	1.528	49.586	43.644	1.0593E-03	1.0750E-03	0.316
10	32	3C3.5	546.4	1.633	1.439	49.647	43.746	9.9055E-04	1.0112E-03	0.268
11	34	303.8	546.8	1.501	1.322	49.626	43.727	9.1620E-04	9.2971E-04	0.220
12	38	3C4.C	547.2	1.438	1.267	49.602	43.706	8.7808E-04	8.9103E-04	C.145
13	42	3C3.1	545.6	1.243	1.095	49.686	43.7C0	7.5791E-04	7.6907E-04	0.096
14	46	303.C	545.4	0.96d	0.853	49.694	43.787	5.9015E-04	5.9884E-04	-0.095
15	5C	302.5	544.5	0.676	C.596	49.743	43.830	4.1174E-04	4.1780E-04	-0.167
16	54	3C2.C	543.5	0.458	C.404	49.791	43.872	2.7879E-04	2.8288E-04	-0.365
17	59	3C6.2	551.1	8.324	7.334	49.405	43.532	5.1070E-03	5.1827E-03	0.549
18	62	302.0	545.3	0.881	0.776	49.699	43.791	5.3681E-04	5.4471E-04	0.493
19	64	303.2	545.7	0.244	C.215	49.678	43.773	1.4891E-04	1.5110E-04	0.408
20	65	3C3.1	545.6	0.e51	0.809	49.685	43.779	2.1383E-04	2.1698E-04	0.503
21	66	3C3.2	545.8	1.265	1.141	49.674	43.770	7.8988E-04	8.0151E-04	0.445
22	67	303.6	546.5	2.3C4	2.030	49.640	43.740	1.4059E-03	1.4266E-03	0.466
23	68	303.8	546.8	2.321	2.045	49.625	43.726	1.4171E-03	1.4380E-03	0.415
24	69	302.8	545.1	0.736	0.650	49.711	43.802	4.4966E-04	4.5628E-04	0.480
25	70	3C2.C	543.6	0.14C	0.123	49.789	43.871	8.5043E-05	8.6292E-05	0.479
26	71	302.1	543.8	0.099	C.087	49.779	43.862	6.0364E-05	6.1250E-05	0.563
27	72	301.6	543.2	0.294	0.259	49.806	43.886	1.7873E-04	1.8135E-04	0.476
28	74	3C1.7	543.1	0.559	0.493	49.812	43.891	3.3991E-04	3.4490E-04	0.531
29	76	3C1.4	542.5	0.164	0.145	49.844	43.919	9.9662E-05	1.0112E-04	0.478
30	122	302.4	544.4	0.896	0.789	49.747	43.834	5.4525E-04	5.5327E-04	0.571
31	129	302.3	544.2	0.695	C.612	49.756	43.841	4.2289E-04	4.2911E-04	0.422
32	135	302.c	545.0	0.465	C.410	49.714	43.805	2.8356E-04	2.8775E-04	0.398
33	136	303.3	548.0	0.772	C.681	49.685	43.762	4.7115E-04	4.7809E-04	0.4b5
34	176	3C2.5	544.5	4.293	3.783	49.742	43.830	2.6141E-03	2.6525E-03	0.236
35	177	3C2.C	543.6	3.586	3.159	49.789	43.871	2.1808E-03	2.2129E-03	0.242
36	178	301.4	542.6	1.833	1.615	49.838	43.914	1.113aE-03	1.1301E-03	0.282
37	179	3C6.4	548.0	5.555	4.895	49.565	43.674	3.395bE-03	3.4459E-03	0.153
38	180	3C3.4	546.0	3.263	2.875	49.664	43.760	1.9902E-03	2.0195E-03	0.125
39	181	3C2.2	543.9	3.369	2.968	49.771	43.855	2.0496E-03	2.0797E-03	0.398
40	182	301.6	542.9	6.896	6.077	49.823	43.901	4.1911E-03	4.2526E-03	0.389
41	183	301.2	542.1	7.554	6.656	49.861	43.934	4.5868E-03	4.6540E-03	0.499
42	184	3C1.2	542.1	6.449	5.682	49.862	43.935	3.9155E-03	3.9729E-03	0.508
43	186	3CC.2	540.4	3.664	3.228	49.951	44.013	2.2200E-03	2.2525E-03	0.508
44	187	301.1	542.0	2.985	2.630	49.867	43.940	1.8124E-03	1.8390E-03	0.502
45	192	301.7	543.0	12.352	10.883	49.819	43.897	7.5072E-03	7.6173E-03	0.421
46	193	3C1.2	542.1	5.565	4.903	49.863	43.936	3.3789E-03	3.4285E-03	0.486
47	194	335.9	611.8	0.CCC	0.CCO	46.331	40.824	0.0000E-39	0.0000E-39	0.0c4
48	196	301.2	542.2	3.562	3.139	49.856	43.930	2.1631E-03	2.1948E-03	0.366
49	197	303.6	546.5	7.665	6.754	49.638	43.738	4.6781E-03	4.7470E-03	0.393
5C	198	3C3.3	546.0	3.667	3.231	49.665	43.762	2.2364E-03	2.2694E-03	0.337
51	199	3C3.2	545.8	6.276	5.530	49.675	43.770	3.8267E-03	3.8831E-03	0.547
52	202	303.8	546.8	6.969	6.140	49.623	43.724	4.2544E-03	4.3171E-03	0.203
53	2C3	304.1	547.5	6.324	5.573	49.591	43.696	3.8640E-03	3.9210E-03	0.200
54	204	3C4.4	547.9	6.174	5.440	49.567	43.675	3.7743E-03	3.8301E-03	0.132
55	2C5	3C5.2	549.4	4.233	3.730	49.493	43.610	2.5917E-03	2.6300E-03	0.291
56	2C6	304.6	548.4	3.79C	3.340	49.540	43.656	2.3180E-03	2.3522E-03	0.202
57	2C7	301.9	543.4	1.918	1.690	49.799	43.880	1.1662E-03	1.1834E-03	0.149
58	208	304.2	547.6	1.953	1.721	49.586	43.692	1.1934E-03	1.2110E-03	0.270
59	211	3C4.6	546.2	14.935	13.163	49.352	43.662	9.1350E-03	9.2699E-03	0.339
60	225	3C6.1	550.9	1.936	1.7C6	49.417	43.543	1.1e78E-03	1.2054E-03	0.655
61	226	3C2.C	543.6	0.174	0.154	49.789	43.870	1.0609E-04	1.0765E-04	0.567
62	227	3CC.C	540.0	0.035	0.030	49.973	44.033	2.0949E-05	2.1255E-05	0.578
63	228	3C1.C	541.7	0.174	0.153	49.882	43.953	1.0553E-04	1.0707E-04	0.693
64	229	304.2	547.6	4.479	3.947	49.586	43.692	2.7368E-03	2.7772E-03	0.637
65	23C	3C1.C	541.9	0.617	0.544	49.875	43.947	3.7446E-04	3.7995E-04	0.611
66	231	298.7	537.7	0.049	0.043	50.086	44.132	2.9816E-05	3.0250E-05	0.943
67	232	298.2	536.9	0.C64	0.057	50.130	44.172	3.8926E-05	3.9493E-05	0.699
68	234	3CC.4	540.8	0.162	0.143	49.929	43.994	9.8068E-05	9.9503E-05	0.630
69	235	304.3	547.7	5.967	5.253	49.577	43.684	3.6436E-03	3.6974E-03	0.728
7C	236	3CC.6	541.4	0.e46	3.969	49.900	43.969	3.9208E-04	3.9782E-04	0.517
71	237	298.3	537.0	0.399	0.316	50.123	44.165	2.1660E-04	2.1976E-04	0.531
72	238	298.9	537.9	0.213	0.187	50.075	44.123	1.2e49E-04	1.3032E-04	0.470
73	24C	3CC.6	541.0	0.477	0.421	49.919	43.985	2.8940E-04	2.9363E-04	0.722
74	274	3C1.1	542.1	9.e7C	8.145	49.668	43.938	5.7499E-03	5.8342E-03	0.339
75	286	3CC.C	540.1	6.e5E	6.042	49.987	44.028	4.1540E-03	4.2147E-03	0.069

FREE-STREAM DENSITY-VELOCITY PRODUCT = 2.1e-7L-01 (SLUGS/FT2-SEC)

ORIGINAL PAGE IS
OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER, MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO.	183
7.30	1.1677E 07	6.6984E 06	0.574	59.17	853.7	0.8817CE 06	0.0053	RUN NO.	34
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	3.5542E 06	6.6984E 06	1.882	869.81	1536.7	379.15	0.0175		

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.892)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.892)
1	4	0.357	0.2316	0.3020	0.2742	0.2783	39	181	0.349	0.2071	0.2691	0.2447	0.2483
2	7	0.355	0.1242	0.1618	0.1464	0.1491	40	182	0.348	0.3395	0.4357	0.3963	0.4021
3	12	0.353	0.0687	0.0895	0.0813	0.0825	41	183	0.347	0.2556	0.3316	0.3018	0.3062
4	17	0.352	0.0467	0.0607	0.0552	0.0560	42	184	0.347	0.1918	0.2491	0.2266	0.2299
5	22	0.351	0.0412	0.0536	0.0487	0.0494	43	186	0.346	0.1051	0.1364	0.1241	0.1259
6	25	0.351	0.0374	0.0486	0.0442	0.0448	44	187	0.348	0.0885	0.1149	0.1045	0.1060
7	27	0.351	0.0384	0.0499	0.0454	0.0461	45	192	0.348	0.2724	0.3538	0.3218	0.3265
8	29	0.351	0.0363	0.0472	0.0429	0.0436	46	193	0.348	0.1223	0.1588	0.1444	0.1465
9	30	0.351	0.0358	0.0466	0.0423	0.0430	47	194	0.387	0.0000	0.0000	0.0000	0.0000
10	32	0.350	0.0340	0.0442	0.0402	0.0408	48	196	0.348	0.0940	0.1221	0.1111	0.1127
11	34	0.350	0.0328	0.0426	0.0388	0.0393	49	197	0.351	0.1588	0.2065	0.1877	0.1905
12	38	0.351	0.0332	0.0432	0.0392	0.0398	50	198	0.351	0.0915	0.1190	0.1082	0.1098
13	42	0.349	0.0299	0.0389	0.0353	0.0359	51	199	0.351	0.2535	0.3297	0.2996	0.3041
14	46	0.349	0.0285	0.0370	0.0337	0.0342	52	202	0.351	0.1413	0.1837	0.1670	0.1695
15	50	0.348	0.0252	0.0327	0.0297	0.0302	53	203	0.352	0.1254	0.1632	0.1483	0.1505
16	54	0.348	0.0241	0.0313	0.0285	0.0289	54	204	0.352	0.1233	0.1605	0.1458	0.1480
17	59	0.355	0.1672	0.2179	0.1979	0.2008	55	205	0.354	0.0975	0.1270	0.1154	0.1171
18	62	0.350	0.0172	0.0223	0.0203	0.0206	56	206	0.353	0.1371	0.1785	0.1622	0.1646
19	64	0.350	0.0042	0.0054	0.0049	0.0050	57	207	0.349	0.0704	0.0915	0.0832	0.0844
20	65	0.350	0.0086	0.0112	0.0102	0.0103	58	208	0.353	0.0951	0.1238	0.1125	0.1141
21	66	0.350	0.0232	0.0431	0.0392	0.0398	59	211	0.352	0.3182	0.4140	0.3763	0.3819
22	67	0.350	0.0562	0.0730	0.0664	0.0674	60	225	0.354	0.0371	0.0483	0.0438	0.0445
23	68	0.351	0.0524	0.0681	0.0619	0.0628	61	226	0.347	0.0037	0.0048	0.0044	0.0044
24	69	0.349	0.0145	0.0186	0.0171	0.0173	62	227	0.345	0.0013	0.0016	0.0015	0.0015
25	70	0.348	0.0025	0.0032	0.0029	0.0030	63	228	0.347	0.0036	0.0047	0.0043	0.0043
26	71	0.348	0.0019	0.0025	0.0022	0.0023	64	229	0.351	0.0933	0.1214	0.1103	0.1120
27	72	0.347	0.0069	0.0089	0.0081	0.0083	65	230	0.346	0.0119	0.0154	0.0140	0.0142
28	74	0.347	0.0124	0.0161	0.0147	0.0149	66	231	0.343	0.0014	0.0018	0.0016	0.0017
29	76	0.347	0.0053	0.0068	0.0062	0.0063	67	232	0.344	0.0015	0.0019	0.0017	0.0017
30	122	0.348	0.0172	0.0224	0.0203	0.0206	68	234	0.347	0.0029	0.0038	0.0034	0.0035
31	129	0.348	0.0143	0.0186	0.0169	0.0171	69	235	0.352	0.1179	0.1534	0.1394	0.1415
32	135	0.349	0.0092	0.0120	0.0109	0.0110	70	236	0.347	0.0131	0.0170	0.0155	0.0157
33	136	0.349	0.0147	0.0192	0.0174	0.0177	71	237	0.343	0.0067	0.0087	0.0079	0.0080
34	176	0.345	0.2785	0.3618	0.3290	0.3338	72	238	0.345	0.0051	0.0066	0.0060	0.0061
35	177	0.348	0.2132	0.2846	0.2590	0.2628	73	240	0.348	0.0106	0.0138	0.0125	0.0127
36	178	0.348	0.0958	0.1244	0.1131	0.1148	74	274	0.348	0.1285	0.2318	0.2108	0.2139
37	179	0.352	0.3114	0.4052	0.3683	0.3737	75	286	0.348	0.1424	0.1849	0.1681	0.1706
38	180	0.350	0.3187	0.4144	0.3767	0.3823							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. 400 FOOT PROPULSION WIND TUNNEL

TEST NO. 183
RUN NO. 34

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RE(METER)
7.30	1.1E77E C7	6.6934E 06	0.574	59.17	853.7	0.8817DE 06	C.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	3.5592E C6	6.6934E 06	1.882	869.81	1536.7	379.15	0.0175

CHAN	T/C	TM(DEG K)	TM(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.892)	TIME(SEC)
1	4	312.5	564.4	15.635	13.776	67.515	59.493	5.1786E-03	5.2560E-03	0.510
2	7	311.5	560.6	8.416	7.416	67.479	59.723	2.7794E-03	2.8167E-03	0.466
3	12	309.8	557.6	4.673	4.118	67.392	59.910	1.5396E-03	1.5585E-03	0.451
4	17	309.1	556.4	3.176	2.799	68.065	59.978	1.0424E-03	1.0579E-03	0.416
5	22	308.3	555.0	2.809	2.475	68.172	60.069	9.2024E-04	9.3386E-04	0.360
6	25	307.9	554.1	2.550	2.247	68.229	60.119	8.3457E-04	8.4690E-04	0.310
7	27	308.4	555.0	2.617	2.306	68.184	60.084	8.5753E-04	8.7022E-04	0.273
8	29	308.3	554.9	2.476	2.182	68.178	60.074	8.1116E-04	8.2315E-04	0.225
9	30	308.1	554.6	2.449	2.152	68.159	60.092	7.9591E-04	8.1174E-04	0.239
10	32	307.1	552.8	2.375	2.048	68.221	60.200	7.6971E-04	7.7C92E-04	0.218
11	34	307.6	553.6	2.239	1.973	68.266	60.151	7.3242E-04	7.4323E-04	0.185
12	38	307.9	554.2	2.264	1.995	68.224	60.114	7.4103E-04	7.5198E-04	0.156
13	42	306.5	551.8	2.045	1.802	68.343	60.264	6.6765E-04	6.7745E-04	0.123
14	46	306.4	551.5	1.951	1.719	68.414	60.282	6.3652E-04	6.4590E-04	0.052
15	50	305.6	550.2	1.725	1.520	68.305	60.305	5.6201E-04	5.7028E-04	0.060
16	54	305.3	549.5	1.655	1.458	68.551	60.404	5.3866E-04	5.4660E-04	0.077
17	59	312.0	561.6	11.319	9.974	67.714	59.665	3.7309E-03	3.7926E-03	0.510
18	62	307.0	552.6	1.174	1.035	68.338	60.215	3.8462E-04	3.8928E-04	0.458
19	64	306.8	552.3	0.284	0.251	68.356	60.230	9.2890E-05	9.4280E-05	0.412
20	65	306.9	552.4	0.588	0.518	68.351	60.226	1.9213E-04	1.9497E-04	0.445
21	66	307.1	552.8	2.266	1.998	68.322	60.201	7.4119E-04	7.5212E-04	0.406
22	67	307.6	553.6	3.835	3.379	68.264	60.150	1.2546E-03	1.2731E-03	0.420
23	68	307.8	554.0	3.573	3.149	68.244	60.128	1.1694E-03	1.1867E-03	0.376
24	69	306.3	551.4	0.990	0.872	68.421	60.281	3.2290E-04	3.2765E-04	0.455
25	70	305.2	549.4	0.169	0.149	68.557	60.406	5.4997E-05	5.5805E-05	0.461
26	71	305.2	549.4	0.130	0.114	68.561	60.411	4.2165E-05	4.2785E-05	0.524
27	72	304.8	548.6	0.473	0.417	68.515	60.459	1.5375E-04	1.5601E-04	0.487
28	74	304.7	548.4	0.853	0.752	68.628	60.471	2.7743E-04	2.8150E-04	0.487
29	76	304.2	547.6	0.361	0.318	68.683	60.519	1.1716E-04	1.1890E-04	0.532
30	122	305.6	550.1	1.179	1.039	68.512	60.368	3.8426E-04	3.8991E-04	0.484
31	129	305.5	549.9	0.979	0.863	68.525	60.380	3.1884E-04	3.2353E-04	0.372
32	135	306.3	551.4	0.630	0.555	68.421	60.286	2.0553E-04	2.0855E-04	0.341
33	136	306.5	551.8	1.006	0.886	68.392	60.260	3.2912E-04	3.3397E-04	0.371
34	176	306.2	551.2	19.056	16.791	68.433	60.298	6.2163E-03	6.3079E-03	0.426
35	177	305.8	550.4	15.015	13.230	68.496	60.349	4.8936E-03	4.9636E-03	0.418
36	178	305.4	549.7	6.566	5.785	68.560	60.393	2.1360E-03	2.1665E-03	0.396
37	179	306.5	556.1	21.207	18.686	68.094	60.000	6.9870E-03	7.0600E-03	0.306
38	180	307.6	553.6	21.759	19.172	68.267	60.152	7.1175E-03	7.2227E-03	0.413
39	181	305.9	550.7	14.183	12.497	68.467	60.329	4.6239E-03	4.6920E-03	0.435
40	182	305.4	549.8	22.992	20.259	68.530	60.384	7.4883E-03	7.5984E-03	0.389
41	183	304.9	548.8	17.530	15.448	68.596	60.443	5.7630E-03	5.7868E-03	0.376
42	184	305.1	549.1	13.196	11.592	68.578	60.427	4.2814E-03	4.3443E-03	0.330
43	186	304.0	547.2	7.223	6.365	68.710	60.542	2.3455E-03	2.3799E-03	0.373
44	187	305.2	549.3	6.067	5.346	68.565	60.415	1.9749E-03	2.0039E-03	0.369
45	192	305.8	550.4	18.654	16.437	68.485	60.344	6.0759E-03	6.1694E-03	0.387
46	193	305.1	549.3	8.385	7.388	68.567	60.417	2.7291E-03	2.7692E-03	0.448
47	194	340.0	612.0	0.000	0.000	64.624	56.590	0.0000E-39	0.0000E-39	0.390
48	196	305.6	550.1	6.441	5.675	68.508	60.365	2.0985E-03	2.1294E-03	0.361
49	197	308.1	554.6	10.628	9.541	68.194	60.086	3.5464E-03	3.5988E-03	0.372
50	198	308.0	554.4	6.242	5.500	68.211	60.103	2.0436E-03	2.0738E-03	0.413
51	199	308.1	554.5	17.286	15.233	68.203	60.096	5.6612E-03	5.7449E-03	0.407
52	202	308.3	554.9	9.630	8.485	68.175	60.071	3.1549E-03	3.2016E-03	0.222
53	203	308.7	555.7	8.545	7.530	68.123	60.026	2.8014E-03	2.8434E-03	0.210
54	204	309.1	556.5	8.394	7.396	68.068	59.977	2.7547E-03	2.7955E-03	0.148
55	205	310.4	558.8	6.624	5.836	67.907	59.835	2.1797E-03	2.2121E-03	0.325
56	206	309.8	557.6	9.323	8.215	67.990	59.909	3.0838E-03	3.1092E-03	0.237
57	207	306.5	551.6	4.815	4.243	68.403	60.272	1.5716E-03	1.5947E-03	-0.069
58	208	309.5	557.2	5.497	4.844	68.020	59.935	2.1243E-03	2.1558E-03	0.361
59	211	308.8	555.9	21.675	19.098	68.109	60.013	7.1086E-03	7.2139E-03	0.325
60	225	310.6	559.0	2.516	2.217	67.985	59.920	8.2625E-04	8.4056E-04	0.600
61	226	309.1	556.1	0.255	0.224	68.579	60.427	8.2859E-05	8.4076E-05	0.443
62	227	308.8	555.0	0.007	0.076	68.665	60.679	2.8020E-05	2.8430E-05	0.450
63	228	308.2	554.1	0.248	0.219	68.580	60.426	8.0863E-05	8.2051E-05	0.526
64	229	308.2	554.2	0.268	0.236	68.557	60.056	2.3843E-03	2.4191E-03	0.556
65	230	304.2	547.5	0.816	0.719	68.891	60.526	2.6501E-04	2.6890E-04	0.587
66	231	301.5	542.8	0.098	0.084	69.014	60.615	3.1338E-05	3.1784E-05	0.974
67	232	301.6	542.9	0.101	0.089	69.011	60.606	3.2529E-05	3.3003E-05	0.452
68	234	304.8	548.6	0.195	0.175	68.812	60.456	6.4556E-05	6.5503E-05	0.526
69	235	309.2	556.5	8.424	7.470	68.062	59.972	2.6336E-03	2.6726E-03	0.652
70	236	304.6	548.2	0.900	0.793	68.641	60.462	2.9261E-04	2.9690E-04	0.499
71	237	301.4	542.6	0.461	0.407	69.033	60.827	1.4903E-04	1.5120E-04	0.425
72	238	302.7	544.9	0.359	0.309	68.872	60.686	1.1351E-04	1.1517E-04	0.387
73	240	305.2	549.3	0.726	0.640	68.566	60.416	2.3041E-04	2.3988E-04	0.553
74	274	305.8	550.5	12.021	10.769	68.484	60.343	3.9834E-03	4.0421E-03	0.243
75	286	305.5	549.9	9.755	8.596	68.524	60.379	3.1774E-03	3.2241E-03	0.095

FREE-STREAM DENSITY-VELOCITY PRODUCT = 4.0174E-01 (SLUGS/FT2-SEC)

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 35

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)
7.30	1.9273E 07	1.1056E 07	0.574	95.71	843.7	0.8761E 06	0.0053
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	5.8744E 06	1.1056E 07	1.882	1406.88	1518.7	374.38	0.0175

CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.892)	CHAN	T/C	HW/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.892)
1	4	0.372	0.2396	0.3147	0.2849	0.2893	39	181	0.360	0.2253	0.2943	0.2670	0.2711
2	7	0.369	0.1275	0.1673	0.1515	0.1538	40	182	0.359	0.3730	0.4876	0.4420	0.4486
3	12	0.366	0.0749	0.0981	0.0889	0.0903	41	183	0.358	0.2916	0.3806	0.3454	0.3506
4	17	0.365	0.0707	0.0926	0.0840	0.0852	42	184	0.359	0.2222	0.2900	0.2632	0.2671
5	22	0.364	0.0795	0.1041	0.0944	0.0958	43	186	0.357	0.1238	0.1615	0.1466	0.1488
6	25	0.363	0.1104	0.1443	0.1309	0.1329	44	187	0.359	0.1009	0.1317	0.1195	0.1213
7	27	0.363	0.1305	0.1707	0.1548	0.1572	45	192	0.360	0.3140	0.4101	0.3722	0.3777
8	29	0.363	0.1483	0.1941	0.1760	0.1786	46	193	0.358	0.1398	0.1825	0.1657	0.1682
9	30	0.363	0.1470	0.1922	0.1743	0.1770	47	194	0.393	0.0000	0.0000	0.0000	0.0000
10	32	0.361	0.1552	0.2028	0.1840	0.1868	48	196	0.359	0.1078	0.1408	0.1278	0.1297
11	34	0.362	0.1641	0.2144	0.1944	0.1976	49	197	0.363	0.1694	0.2215	0.2009	0.2040
12	38	0.[illegible]	0.1717	0.[illegible]	0.2037	0.2067	50	198	0.363	0.2649	0.3452	0.3130	0.3178
13	42	0.360	0.1648	0.2150	0.1951	0.1980	51	199	0.363	0.3019	0.3948	0.3581	0.3635
14	46	0.360	0.1660	0.2176	0.1974	0.2004	52	202	0.363	0.1448	0.1893	0.1717	0.1743
15	50	0.359	0.1496	0.1692	0.1536	0.1559	53	203	0.364	0.1287	0.1684	0.1527	0.1550
16	54	0.358	0.0954	0.1245	0.1130	0.1147	54	204	0.364	0.1273	0.1667	0.1511	0.1534
17	59	0.369	0.1696	0.2225	0.2015	0.2046	55	205	0.366	0.1866	0.2445	0.2216	0.2250
18	62	0.361	0.0172	0.0224	0.0203	0.0206	56	206	0.365	0.2493	0.3264	0.2959	0.3004
19	64	0.361	0.0038	0.0050	0.0045	0.0046	57	207	0.360	0.1552	0.2028	0.1840	0.1868
20	66	0.361	0.0106	0.0139	0.0126	0.0128	58	208	0.365	0.1052	0.1378	0.1249	0.1268
21	68	0.362	0.0464	0.0607	0.0551	0.0559	59	211	0.364	0.5234	0.6849	0.6210	0.6304
22	67	0.362	0.0813	0.1063	0.0964	0.0979	60	225	0.366	0.0394	0.0516	0.0468	0.0475
23	68	0.362	0.0779	0.1018	0.0924	0.0938	61	226	0.358	0.0042	0.0054	0.0049	0.0050
24	69	0.360	0.0187	0.0244	0.0221	0.0225	62	227	0.355	0.0017	0.0022	0.0020	0.0020
25	70	0.358	0.0027	0.0035	0.0031	0.0032	63	228	0.359	0.0040	0.0053	0.0048	0.0049
26	71	0.358	0.0023	0.0030	0.0027	0.0028	64	229	0.363	0.1273	0.1665	0.1510	0.1533
27	72	0.358	0.0080	0.0104	0.0095	0.0096	65	230	0.357	0.0136	0.0178	0.0161	0.0164
28	74	0.357	0.0126	0.0164	0.0149	0.0151	66	231	0.353	0.0017	0.0023	0.0021	0.0021
29	76	0.357	0.0073	0.0096	0.0087	0.0088	67	232	0.354	0.0034	0.0045	0.0040	0.0041
30	122	0.359	0.0189	0.0246	0.0223	0.0227	68	234	0.359	0.0052	0.0068	0.0062	0.0063
31	129	0.359	0.0171	0.0224	0.0203	0.0206	69	235	0.365	0.1192	0.1561	0.1415	0.1437
32	135	0.360	0.0113	0.0147	0.0134	0.0136	70	236	0.358	0.0137	0.0179	0.0162	0.0165
33	136	0.360	0.0144	0.0188	0.0170	0.0173	71	237	0.354	0.0061	0.0079	0.0072	0.0073
34	176	0.360	0.2986	0.3899	0.3536	0.3592	72	238	0.356	0.0046	0.0060	0.0055	0.0056
35	177	0.359	0.2344	0.3060	0.2777	0.2819	73	240	0.360	0.0081	0.0106	0.0096	0.0098
36	178	0.359	0.1020	0.1332	0.1209	0.1227	74	274	0.360	0.1655	0.2162	0.1962	0.1991
37	179	0.364	0.3689	0.5090	0.4615	0.4685	75	286	0.360	0.1439	0.1880	0.1706	0.1732
38	180	0.362	0.3260	0.4262	0.3866	0.3924							

*** NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO.	183
7.30	1.9273E 07	1.1056E 07	0.574	95.71	843.7	0.8/0e1E 06	0.0053	RUN NO.	35
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	5.8744E 06	1.1056E 07	1.882	1406.88	1518.7	374.38	0.0175		

CHAN	T/C	TW(DEG K)	TW(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.95C)	ST(0.892)	TIME(SEC)
1	4	322.3	580.1	19.827	17.470	82.762	72.925	4.1934E-03	4.2579E-03	0.469
2	7	319.7	575.4	10.606	9.345	83.173	73.287	2.2405E-03	2.2647E-03	0.432
3	12	317.3	571.1	6.255	5.515	83.554	73.622	1.3045E-03	1.3295E-03	0.405
4	17	316.5	569.7	5.919	5.215	83.670	73.725	1.2363E-03	1.2551E-03	0.443
5	22	315.2	567.4	6.671	5.878	83.677	73.907	1.3896E-03	1.4106E-03	0.426
6	25	314.3	565.8	9.272	8.170	84.022	74.035	1.9275E-03	1.9567E-03	0.465
7	27	314.9	566.8	10.954	9.652	83.928	73.951	2.2801E-03	2.3146E-03	0.456
8	29	314.8	566.6	12.453	10.972	83.944	73.966	2.5915E-03	2.6307E-03	0.444
9	30	314.5	566.0	12.344	10.877	83.996	74.012	2.5672E-03	2.6060E-03	0.447
10	32	313.1	563.6	13.066	11.515	84.211	74.201	2.7098E-03	2.7507E-03	0.450
11	34	313.8	564.9	13.801	12.161	84.096	74.100	2.8663E-03	2.9095E-03	0.449
12	38	314.3	565.7	14.428	12.713	84.026	74.040	2.9992E-03	3.0445E-03	0.434
13	42	312.3	562.2	13.881	12.231	84.133	74.134	2.8737E-03	2.9169E-03	0.434
14	46	312.0	561.5	14.059	12.388	84.393	74.362	2.9081E-03	2.9519E-03	0.431
15	50	311.1	560.0	10.956	9.653	84.529	74.481	2.2621E-03	2.2960E-03	0.430
16	54	310.6	559.1	8.070	7.111	84.608	74.551	1.6645E-03	1.6894E-03	0.402
17	58	319.8	575.7	14.101	12.425	83.146	73.263	2.9667E-03	3.0121E-03	0.481
18	62	313.2	563.8	1.444	1.273	84.196	74.188	2.9955E-04	3.0407E-04	0.429
19	64	312.8	563.0	0.323	0.285	84.262	74.246	6.6944E-05	6.7953E-05	0.367
20	65	313.1	563.6	0.894	0.788	84.214	74.204	1.8541E-04	1.8820E-04	0.410
21	66	313.5	564.3	3.909	3.444	84.153	74.150	8.1112E-04	8.2335E-04	0.364
22	67	314.0	565.3	6.333	6.021	84.066	74.073	1.4197E-03	1.4412E-03	0.379
23	68	314.2	565.5	6.545	5.767	84.043	74.053	1.3602E-03	1.3807E-03	0.343
24	69	311.9	561.5	1.576	1.389	84.397	74.365	3.2597E-04	3.3087E-04	0.440
25	70	310.7	559.3	0.224	0.198	84.588	74.533	4.6309E-05	4.7003E-05	0.453
26	71	310.5	558.9	0.194	0.171	84.625	74.566	4.0080E-05	4.0681E-05	0.558
27	72	309.9	557.9	0.677	0.596	84.713	74.643	1.3937E-04	1.4146E-04	0.464
28	74	309.8	557.7	1.067	0.940	84.734	74.662	2.1975E-04	2.2304E-04	0.460
29	76	309.4	557.0	0.623	0.549	84.796	74.717	1.2817E-04	1.3008E-04	0.438
30	122	311.2	560.2	1.594	1.404	84.512	74.467	3.2916E-04	3.3410E-04	0.369
31	129	311.2	560.1	1.445	1.276	84.520	74.473	2.9914E-04	3.0263E-04	0.334
32	135	312.2	561.9	0.952	0.839	84.363	74.335	1.9698E-04	1.9995E-04	0.337
33	136	312.6	562.4	1.214	1.070	84.407	74.374	2.5103E-04	2.5480E-04	0.307
34	176	311.4	561.4	25.199	22.204	84.401	74.369	5.2119E-03	5.2902E-03	0.379
35	177	311.5	560.6	19.798	17.445	84.471	74.431	4.0909E-03	4.1524E-03	0.373
36	178	310.9	559.7	8.627	7.602	84.555	74.505	1.7806E-03	1.8073E-03	0.347
37	179	315.6	568.4	32.586	28.714	83.791	73.831	6.7960E-03	6.8990E-03	0.350
38	180	313.8	564.9	27.413	24.154	84.096	74.100	5.6931E-03	5.7791E-03	0.366
39	181	311.7	561.1	19.027	16.765	84.433	74.397	3.9336E-03	3.9927E-03	0.419
40	182	311.3	560.3	31.518	27.771	84.469	74.455	6.5101E-03	6.6079E-03	0.360
41	183	310.6	559.2	24.669	21.736	84.602	74.545	5.0884E-03	5.1647E-03	0.346
42	184	310.8	559.4	18.769	16.536	84.577	74.524	3.8770E-03	3.9351E-03	0.301
43	186	309.3	556.8	10.503	9.255	84.813	74.732	2.1604E-03	2.1927E-03	0.343
44	187	310.8	559.4	8.531	7.517	84.579	74.526	1.7603E-03	1.7867E-03	0.330
45	192	311.8	561.3	26.509	23.358	84.415	74.361	5.4817E-03	5.5641E-03	0.340
46	193	310.7	559.3	11.830	10.424	84.591	74.536	2.4405E-03	2.4771E-03	0.412
47	194	340.2	612.4	0.000	0.000	79.925	70.424	0.0000E-39	0.0000E-39	0.536
48	196	311.3	560.4	9.111	8.028	84.497	74.453	1.8821E-03	1.9103E-03	0.322
49	197	314.5	566.0	14.229	12.538	83.598	74.014	2.9590E-03	3.0036E-03	0.349
50	198	314.5	566.0	22.168	19.533	83.598	74.012	4.6101E-03	4.6798E-03	0.411
51	199	314.6	566.3	25.347	22.335	83.570	73.989	5.2732E-03	5.3529E-03	0.308
52	202	314.6	566.3	12.157	10.712	83.976	73.494	2.5289E-03	2.5671E-03	0.208
53	203	315.2	567.3	10.794	9.511	83.866	73.915	2.2461E-03	2.2822E-03	0.203
54	204	315.8	568.4	10.669	9.401	83.787	73.828	2.2250E-03	2.2588E-03	0.144
55	205	317.5	571.5	15.567	13.734	83.515	73.588	3.2628E-03	3.3125E-03	0.412
56	206	316.6	569.8	20.656	18.377	83.662	73.718	4.3570E-03	4.4232E-03	0.261
57	207	312.5	562.4	13.087	11.532	84.314	74.292	2.7100E-03	2.7508E-03	0.020
58	208	316.3	569.4	8.807	7.760	83.700	73.751	1.8390E-03	1.8669E-03	0.263
59	211	315.4	567.7	43.685	38.668	83.648	73.881	9.1446E-03	9.2833E-03	0.355
60	225	316.9	570.5	3.294	2.902	83.606	73.668	6.8864E-04	6.9910E-04	0.592
61	226	310.3	558.5	0.353	0.311	84.659	74.596	7.2664E-05	7.3753E-05	0.488
62	227	307.6	553.8	0.162	0.129	85.078	74.965	2.9017E-05	2.9449E-05	0.763
63	228	311.1	560.0	0.341	0.301	84.528	74.481	7.0437E-05	7.1494E-05	0.606
64	229	314.6	566.3	10.690	9.419	83.973	73.992	2.2237E-03	2.2573E-03	0.553
65	230	309.4	556.9	1.154	1.017	84.797	74.716	2.3743E-04	2.4098E-04	0.567
66	231	306.3	551.4	0.149	0.131	85.265	75.148	3.0454E-05	3.0907E-05	0.960
67	232	306.8	552.3	0.291	0.257	85.209	75.081	5.9622E-05	6.0509E-05	0.619
68	234	311.1	559.9	0.442	0.389	84.535	74.487	9.1193E-05	9.2562E-05	0.551
69	235	316.2	569.1	9.243	8.797	83.724	73.775	2.0837E-03	2.1153E-03	0.621
70	236	310.5	558.8	1.161	1.023	84.630	74.571	2.3928E-04	2.4286E-04	0.503
71	237	306.6	551.9	0.515	0.457	85.244	75.111	1.0611E-04	1.0769E-04	0.393
72	238	308.5	555.2	0.393	0.346	84.949	74.852	8.0836E-05	8.1839E-05	0.380
73	240	311.9	561.5	0.686	0.605	84.399	74.367	1.4197E-04	1.4411E-04	0.610
74	274	312.5	562.5	13.552	12.193	84.310	74.288	2.8892E-03	2.9327E-03	0.178
75	286	312.3	562.2	12.138	10.693	84.333	74.309	2.5127E-03	2.5505E-03	0.052

FREE-STREAM DENSITY-VELOCITY PRODUCT = 6.5477E-01 (SLUGS/FT2-SEC)

1473035

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)			TEST NO.	183
7.30	8.8173E C6	5.0579E C6	0.574	43.d8	844.8	0.t7179E 06	0.0053			RUN NO.	36
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)				
7.30	2.6875E C6	5.0579E 06	1.882	645.04	1520.6	374.89	0.0175				

CHAN	T/C	HK/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.892)	CHAN	T/C	HK/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.892)
1	4	0.360	0.2354	0.3075	0.2790	0.2832	39	181	0.353	0.1697	0.2209	0.2007	0.2037
2	1	0.358	0.1267	0.1653	0.1501	0.1523	40	182	0.352	0.3164	0.4118	0.3742	0.3797
3	12	0.357	0.0699	0.0911	0.0827	0.0840	41	183	0.352	0.2476	0.3221	0.2927	0.2971
4	17	0.356	0.0479	0.0624	0.0567	0.0575	42	184	0.352	0.1842	0.2396	0.2178	0.2210
5	22	0.356	0.0419	0.0546	0.0496	0.0503	43	186	0.351	0.0969	0.1261	0.1146	0.1163
6	25	0.355	0.0378	0.0492	0.0447	0.0454	44	187	0.352	0.0826	0.1075	0.0977	0.0992
7	27	0.356	0.0385	0.0502	0.0456	0.0463	45	192	0.352	0.2579	0.3356	0.3049	0.3095
8	29	0.356	0.0361	0.0471	0.0428	0.0434	46	193	0.352	0.1153	0.1501	0.1364	0.1384
9	30	0.356	0.0381	0.0467	0.0424	0.0430	47	194	0.352	0.0000	0.0000	0.0000	0.0000
10	32	0.355	0.0343	0.0444	0.0403	0.0409	48	196	0.352	0.0832	0.1083	0.0984	0.0999
11	34	0.355	0.0323	0.0420	0.0382	0.0387	49	197	0.355	0.1578	0.2056	0.1868	0.1896
12	28	0.355	0.0317	0.0414	0.0376	0.0381	50	198	0.355	0.0779	0.1015	0.0922	0.0936
13	42	0.354	0.0276	0.0360	0.0327	0.0332	51	199	0.355	0.2046	0.2665	0.2421	0.2457
14	46	0.354	0.0233	0.0303	0.0276	0.0280	52	202	0.355	0.1423	0.1854	0.1684	0.1709
15	50	0.353	0.0170	0.0221	0.0201	0.0204	53	203	0.355	0.1270	0.1655	0.1503	0.1525
16	54	0.353	0.0135	0.0176	0.0159	0.0162	54	204	0.356	0.1253	0.1634	0.1484	0.1506
17	59	0.359	0.1683	0.2197	0.1994	0.2024	55	205	0.357	0.0901	0.1175	0.1067	0.1083
18	62	0.354	0.0174	0.0227	0.0206	0.0209	56	206	0.357	0.0822	0.1072	0.0973	0.0988
19	66	0.354	0.0048	0.0063	0.0057	0.0058	57	207	0.353	0.0453	0.0569	0.0536	0.0544
20	65	0.354	0.0082	0.0100	0.0091	0.0092	58	208	0.356	0.0644	0.0709	0.0644	0.0654
21	66	0.355	0.0289	0.0377	0.0342	0.0347	59	211	0.356	0.3121	0.4068	0.3694	0.3749
22	67	0.355	0.0502	0.0655	0.0595	0.0603	60	225	0.358	0.0384	0.0501	0.0454	0.0461
23	68	0.355	0.0482	0.0628	0.0570	0.0579	61	226	0.352	0.0030	0.0039	0.0035	0.0036
24	69	0.354	0.0143	0.0187	0.0170	0.0172	62	227	0.350	0.0006	0.0008	0.0008	0.0008
25	70	0.353	0.0025	0.0032	0.0029	0.0030	63	228	0.351	0.0042	0.0055	0.0050	0.0050
26	71	0.353	0.0019	0.0025	0.0023	0.0023	64	229	0.355	0.0903	0.1177	0.1069	0.1085
27	72	0.353	0.0064	0.0084	0.0076	0.0077	65	230	0.351	0.0116	0.0153	0.0139	0.0141
28	74	0.352	0.0129	0.0162	0.0147	0.0150	66	231	0.348	0.0010	0.0012	0.0011	0.0011
29	76	0.352	0.0033	0.0043	0.0039	0.0040	67	232	0.348	0.0017	0.0023	0.0021	0.0021
30	122	0.353	0.0180	0.0234	0.0213	0.0216	68	234	0.351	0.0029	0.0038	0.0035	0.0035
31	129	0.353	0.0142	0.0185	0.0168	0.0170	69	235	0.356	0.1188	0.1546	0.1406	0.1427
32	135	0.354	0.0092	0.0119	0.0108	0.0110	70	236	0.351	0.0131	0.0171	0.0155	0.0158
33	136	0.354	0.0156	0.0203	0.0184	0.0187	71	237	0.348	0.0067	0.0087	0.0079	0.0080
34	176	0.353	0.1584	0.2062	0.1874	0.1901	72	238	0.349	0.0047	0.0061	0.0055	0.0056
35	177	0.353	0.1380	0.1797	0.1632	0.1657	73	240	0.351	0.0106	0.0136	0.0125	0.0127
36	178	0.352	0.0763	0.0993	0.0902	0.0916	74	274	0.352	0.1898	0.2470	0.2245	0.2278
37	179	0.356	0.1895	0.2470	0.2243	0.2276	75	286	0.351	0.1424	0.1852	0.1683	0.1708
38	180	0.355	0.1897	0.2471	0.2244	0.2278							

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 36

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	
7.30	8.8173E 06	5.0579E 06	0.574	43.66	844.8	0.9717E 06	0.0053	
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)	
7.30	2.6875E 06	5.0579E 06	1.882	645.04	1520.6	374.89	0.0175	

CHAN	T/C	TW(DEG K)	TW(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.892)	TIME(SEC)
1	4	312.6	562.7	13.468	11.864	57.178	50.358	6.0746E-03	6.1662E-03	0.471
2	7	310.9	559.6	7.670	6.760	57.361	50.561	3.2679E-03	3.3169E-03	0.432
3	12	309.6	557.3	4.019	3.541	57.523	50.724	1.8014E-03	1.8283E-03	0.420
4	17	309.2	556.5	2.755	2.428	57.566	50.762	1.2334E-03	1.2524E-03	0.404
5	22	308.7	555.6	2.415	2.128	57.624	50.775	1.0804E-03	1.0965E-03	0.351
6	25	308.5	555.3	2.176	1.917	57.651	50.787	9.7367E-04	9.8839E-04	0.315
7	27	309.0	556.1	2.218	1.955	57.591	50.746	9.9303E-04	1.0078E-03	0.276
8	29	308.9	556.1	2.091	1.843	57.592	50.746	9.3815E-04	9.4505E-04	0.230
9	30	308.8	555.9	2.064	1.819	57.609	50.757	9.2355E-04	9.3733E-04	0.249
10	32	308.1	554.5	1.965	1.731	57.667	50.810	8.7796E-04	8.9104E-04	0.231
11	34	308.4	555.1	1.860	1.639	57.655	50.802	8.3150E-04	8.4389E-04	0.187
12	38	308.6	555.4	1.829	1.612	57.633	50.783	8.1810E-04	8.3030E-04	0.138
13	42	307.3	553.1	1.596	1.406	57.771	50.904	7.1196E-04	7.2254E-04	0.086
14	46	307.1	552.8	1.347	1.187	57.792	50.923	6.0050E-04	6.0943E-04	-0.042
15	50	306.5	551.7	0.983	0.866	57.853	50.977	4.3773E-04	4.4422E-04	-0.112
16	54	306.1	551.0	0.781	0.688	57.894	51.013	3.4738E-04	3.5254E-04	-0.175
17	55	311.9	560.7	5.459	4.809	57.317	50.504	4.3414E-03	4.4065E-03	0.470
18	62	307.5	553.5	1.006	0.887	57.745	50.881	4.4916E-04	4.5584E-04	0.420
19	64	307.6	553.6	0.278	0.245	57.741	50.878	1.2386E-04	1.2570E-04	0.412
20	65	307.6	553.6	0.442	0.390	57.741	50.878	1.9740E-04	2.0034E-04	0.401
21	66	307.7	553.9	1.670	1.471	57.722	50.861	7.4557E-04	7.5667E-04	0.367
22	67	308.1	554.7	2.638	2.324	57.679	50.823	1.2950E-03	1.3143E-03	0.393
23	68	308.3	555.0	2.778	2.448	57.659	50.806	1.2421E-03	1.2606E-03	0.346
24	69	307.2	552.9	0.829	0.730	57.769	50.915	3.6966E-04	3.7516E-04	0.418
25	70	306.3	551.4	0.143	0.126	57.834	50.973	6.3617E-05	6.4561E-05	0.372
26	71	306.3	551.4	0.111	0.098	57.836	50.975	4.9311E-05	5.0043E-05	0.462
27	72	306.1	550.9	0.373	0.329	57.901	51.018	1.6599E-04	1.6845E-04	0.434
28	74	305.9	550.7	0.721	0.636	57.916	51.032	3.2084E-04	3.2565E-04	0.455
29	76	305.4	549.6	0.191	0.169	57.978	51.087	8.5026E-05	8.6286E-05	0.452
30	122	306.8	552.2	1.040	0.916	57.825	50.952	4.6346E-04	4.7035E-04	0.497
31	129	306.7	552.0	0.620	0.723	57.834	50.960	3.6541E-04	3.7084E-04	0.365
32	135	307.3	553.2	0.529	0.466	57.796	50.900	2.3584E-04	2.3934E-04	0.320
33	138	307.5	553.5	0.898	0.792	57.747	50.883	4.0096E-04	4.0693E-04	0.360
34	176	306.6	551.9	9.162	8.073	57.844	50.969	4.0806E-03	4.1414E-03	0.376
35	177	306.2	551.1	7.990	7.040	57.890	51.009	3.5557E-03	3.6084E-03	0.348
36	178	305.6	550.0	4.422	3.896	57.956	51.067	1.9652E-03	1.9943E-03	0.393
37	179	309.0	556.2	10.910	9.614	57.685	50.740	4.8846E-03	4.9575E-03	0.087
38	180	307.8	554.0	10.947	9.646	57.718	50.857	4.8882E-03	4.9609E-03	0.424
39	181	306.4	551.5	9.819	8.652	57.865	50.987	4.3720E-03	4.4369E-03	0.415
40	182	305.9	550.6	18.328	16.149	57.924	51.039	8.1908E-03	8.2716E-03	0.362
41	183	305.3	549.6	14.356	12.650	57.983	51.091	6.3770E-03	6.4715E-03	0.340
42	184	305.4	549.7	10.676	9.409	57.975	51.084	4.7440E-03	4.8143E-03	0.290
43	186	304.3	547.7	5.631	4.962	58.092	51.187	2.4962E-03	2.5331E-03	0.337
44	187	305.2	549.4	4.792	4.223	57.991	51.098	2.1285E-03	2.1600E-03	0.328
45	192	306.0	550.7	14.933	13.158	57.913	51.029	6.6426E-03	6.7411E-03	0.359
46	193	305.3	549.6	6.688	5.893	57.982	51.090	2.9710E-03	3.0150E-03	0.415
47	194	240.0	612.0	0.000	0.000	54.267	47.817	0.0000E-39	0.0000E-39	0.248
48	196	305.5	549.8	4.824	4.251	57.966	51.076	2.1436E-03	2.1755E-03	0.317
49	197	306.1	554.5	9.104	8.022	57.668	50.831	4.0678E-03	4.1284E-03	0.342
50	198	307.9	554.2	4.455	3.961	57.706	50.847	2.0077E-03	2.0376E-03	0.308
51	199	307.8	554.0	11.808	10.405	57.716	50.855	5.2730E-03	5.3515E-03	0.432
52	202	308.3	554.9	8.204	7.229	57.663	50.809	3.6671E-03	3.7218E-03	0.183
53	203	308.5	555.3	7.319	6.449	57.641	50.789	3.2732E-03	3.3220E-03	0.174
54	204	309.0	556.2	7.217	6.359	57.587	50.742	3.2310E-03	3.2793E-03	0.119
55	205	310.1	558.1	5.178	4.563	57.473	50.641	2.3235E-03	2.3583E-03	0.263
56	206	309.5	557.1	4.729	4.167	57.534	50.695	2.1193E-03	2.1509E-03	0.149
57	207	306.2	551.1	2.621	2.310	57.869	51.008	1.1666E-03	1.1839E-03	0.004
58	208	308.8	555.9	3.134	2.761	57.606	50.758	1.4024E-03	1.4233E-03	0.298
59	211	308.9	556.0	17.976	15.839	57.569	50.753	8.0454E-03	8.1655E-03	0.295
60	225	310.7	559.3	2.202	1.941	57.405	50.581	9.8552E-04	1.0043E-03	0.569
61	226	305.5	550.6	0.172	0.152	57.922	51.037	7.6552E-05	7.7687E-05	0.256
62	227	303.7	546.6	0.037	0.033	58.160	51.247	1.6494E-05	1.6737E-05	0.099
63	228	305.0	549.0	0.243	0.215	58.116	51.120	1.0809E-04	1.0969E-04	0.495
64	229	308.5	555.3	5.205	4.587	57.841	50.790	2.3279E-03	2.3626E-03	0.524
65	230	304.7	548.4	0.684	0.602	58.051	51.151	3.0331E-04	3.0780E-04	0.538
66	231	302.2	544.0	0.056	0.049	58.314	51.382	2.4543E-05	2.4904E-05	0.452
67	232	302.0	543.5	0.102	0.090	58.344	51.409	4.4374E-05	4.5035E-05	0.535
68	234	304.5	548.0	0.171	0.151	58.074	51.171	7.5894E-05	7.7016E-05	0.467
69	235	301.7	543.6	6.845	6.032	57.623	50.773	3.0623E-03	3.1080E-03	0.622
70	236	304.7	548.4	3.763	3.672	58.053	51.153	3.3853E-04	3.4354E-04	0.461
71	237	301.6	543.3	0.391	0.345	58.355	51.419	1.7259E-04	1.7513E-04	0.387
72	238	302.6	544.6	0.272	0.239	58.277	51.350	1.1993E-04	1.2170E-04	0.320
73	240	304.6	548.3	0.615	0.542	58.056	51.155	2.7289E-04	2.7693E-04	0.571
74	274	305.6	550.0	11.001	9.693	57.954	51.065	4.8894E-03	4.9618E-03	0.223
75	286	304.7	548.4	8.264	7.282	58.052	51.152	3.6662E-03	3.7204E-03	0.051

FREE-STREAM DENSITY-VELOCITY PRODUCT = 2.9936E-01 (SLUGS/FT2-SEC)

ORIGINAL PAGE IS
OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 37

MACH	RE/METER	REL LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(M.TER)			
7.30	3.3286E 06	1.9094E 06	0.574	14.44	841.0	0.86765E 06	0.0053		
MACH	RE/FT	REL LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)			
7.30	1.0145E 06	1.9094E 06	1.862	241.66	1513.8	373.11	0.0175		

CHAN	T/C	Hw/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)	CHAN	T/C	Hw/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.883)
1	4	0.359	0.1908	0.2490	0.2260	0.2334	39	181	0.355	0.0432	0.0561	0.0512	0.0528
2	7	0.357	0.0967	0.1261	0.1145	0.1182	40	182	0.354	0.0639	0.0832	0.0756	0.0780
3	12	0.356	0.0506	0.0659	0.0595	0.0618	41	183	0.353	0.0559	0.0728	0.0661	0.0682
4	17	0.356	0.0341	0.0444	0.0403	0.0416	42	184	0.353	0.0421	0.0548	0.0498	0.0514
5	22	0.355	0.0261	0.0367	0.0333	0.0344	43	186	0.352	0.0245	0.0319	0.0290	0.0299
6	25	0.355	0.0240	0.0313	0.0284	0.0294	44	187	0.353	0.0210	0.0274	0.0249	0.0256
7	27	0.356	0.0243	0.0317	0.0288	0.0297	45	192	0.354	0.1028	0.1339	0.1216	0.1256
8	29	0.356	0.0221	0.0287	0.0261	0.0269	46	193	0.351	0.0482	0.0628	0.0570	0.0588
9	30	0.356	0.0216	0.0281	0.0256	0.0264	47	194	0.398	0.0000	0.0000	0.0000	0.0000
10	32	0.355	0.0197	0.0257	0.0233	0.0241	48	196	0.353	0.0314	0.0409	0.0372	0.0384
11	34	0.356	0.0177	0.0231	0.0210	0.0216	49	197	0.356	0.1303	0.1699	0.1543	0.1593
12	38	0.356	0.0161	0.0210	0.0191	0.0197	50	198	0.356	0.0577	0.0752	0.0683	0.0705
13	42	0.355	0.0136	0.0177	0.0161	0.0166	51	199	0.355	0.0638	0.0832	0.0756	0.0780
14	46	0.355	0.0100	0.0130	0.0118	0.0122	52	202	0.357	0.1567	0.2043	0.1855	0.1915
15	50	0.355	0.0075	0.0098	0.0089	0.0092	53	203	0.357	0.1422	0.1855	0.1684	0.1738
16	54	0.355	0.0052	0.0068	0.0062	0.0064	54	204	0.357	0.1434	0.1870	0.1698	0.1753
17	59	0.358	0.1963	0.2562	0.2325	0.2401	55	205	0.358	0.0722	0.0943	0.0856	0.0883
18	62	0.355	0.0272	0.0355	0.0322	0.0333	56	206	0.357	0.0520	0.0678	0.0615	0.0635
19	64	0.355	0.0082	0.0106	0.0097	0.0100	57	207	0.354	0.0236	0.0308	0.0280	0.0289
20	65	0.355	0.0109	0.0142	0.0129	0.0133	58	208	0.356	0.0262	0.0341	0.0310	0.0320
21	66	0.355	0.0429	0.0559	0.0508	0.0524	59	211	0.357	0.3261	0.4253	0.3862	0.3987
22	67	0.356	0.0861	0.1122	0.1019	0.1052	60	225	0.358	0.0666	0.0869	0.0789	0.0815
23	68	0.356	0.1018	0.1326	0.1206	0.1245	61	226	0.354	0.0068	0.0088	0.0080	0.0082
24	69	0.355	0.0304	0.0396	0.0359	0.0371	62	227	0.352	0.0011	0.0014	0.0013	0.0014
25	70	0.354	0.0046	0.0060	0.0054	0.0056	63	228	0.353	0.0024	0.0032	0.0029	0.0030
26	71	0.354	0.0026	0.0034	0.0031	0.0032	64	229	0.356	0.0957	0.1300	0.1181	0.1219
27	72	0.354	0.0026	0.0034	0.0031	0.0032	65	230	0.353	0.0172	0.0231	0.0210	0.0217
28	74	0.354	0.0111	0.0144	0.0131	0.0135	66	231	0.351	0.0019	0.0025	0.0023	0.0023
29	76	0.354	0.0077	0.0101	0.0092	0.0095	67	232	0.350	0.0009	0.0012	0.0011	0.0011
30	122	0.355	0.0143	0.0187	0.0170	0.0175	68	234	0.352	0.0017	0.0022	0.0020	0.0021
31	129	0.355	0.0125	0.0163	0.0148	0.0152	69	235	0.356	0.1279	0.1668	0.1515	0.1564
32	135	0.355	0.0077	0.0101	0.0092	0.0095	70	236	0.353	0.0177	0.0230	0.0209	0.0216
33	136	0.355	0.0099	0.0129	0.0117	0.0121	71	237	0.350	0.0060	0.0078	0.0071	0.0073
34	176	0.355	0.0756	0.0984	0.0894	0.0923	72	238	0.350	0.0035	0.0045	0.0041	0.0043
35	177	0.354	0.0625	0.0814	0.0739	0.0763	73	240	0.352	0.0086	0.0111	0.0101	0.0104
36	178	0.354	0.0301	0.0392	0.0356	0.0367	74	274	0.354	0.1972	0.2568	0.2333	0.2408
37	179	0.357	0.0960	0.1253	0.1137	0.1174	75	286	0.352	0.2871	0.3737	0.3396	0.3504
38	180	0.356	0.0504	0.0657	0.0597	0.0616							

MACH	REYNOLDS NO/METER	REL	LENGTH(METER)	PT(PSIA)	TT(DEG K)	0.86765E 06	0.0095		RUN NO. 37
7.30	3.3286E C6	1.9094E 06	0.574	16.44	841.C				
MACH	RE/FT	SEL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	1.0145E C6	1.9094E 06	1.882	241.66	1513.8	273.11	0.0175		

CHAN	T/C	Tw(DEG R)	Tw(DEG R)	Q(W/CM2)	Q(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(CM)	ST(FT)	TIME(SEC)
1	4	305.5	557.8	6.663	5.871	34.924	30.772	8.0164E-03	8.2768E-03	0.493
2	7	308.5	555.4	3.385	2.983	35.411	30.849	4.0618E-03	4.1931E-03	0.462
3	12	307.7	553.8	1.773	1.562	35.068	30.906	2.1232E-03	2.1917E-03	0.451
4	17	307.4	553.3	1.185	1.053	34.887	30.917	1.4306E-03	1.4767E-03	0.450
5	22	307.1	552.7	0.988	0.871	35.108	30.939	1.1817E-03	1.2198E-03	0.411
6	25	307.1	552.7	0.843	0.743	35.107	30.934	1.0087E-03	1.0413E-03	0.404
7	27	307.4	553.3	0.853	0.752	35.027	30.916	1.0209E-03	1.0539E-03	0.379
8	29	307.4	553.4	0.774	0.682	35.083	30.913	9.2612E-04	9.5599E-04	0.358
9	30	307.4	553.3	0.758	0.667	35.087	30.916	9.0661E-04	9.3584E-04	0.364
10	32	307.C	552.5	0.693	0.610	35.115	30.941	8.2807E-04	8.5475E-04	0.338
11	34	307.2	553.C	0.622	0.548	35.097	30.925	7.4381E-04	7.6779E-04	0.277
12	38	307.6	553.7	0.565	0.497	35.071	30.903	6.7601E-04	6.9783E-04	0.201
13	42	307.C	552.5	0.478	0.421	35.113	30.939	5.7144E-04	5.8985E-04	0.127
14	46	307.1	552.7	0.351	0.309	35.107	30.934	4.1931E-04	4.3282E-04	-0.036
15	50	306.8	552.2	0.263	0.232	35.126	30.950	3.1474E-04	3.2488E-04	-0.086
16	54	306.3	551.4	0.184	0.162	35.156	30.977	2.1977E-04	2.2685E-04	-0.140
17	59	309.5	557.1	6.660	6.045	34.946	30.794	8.2476E-03	8.5148E-03	0.492
18	62	306.8	552.2	0.956	0.842	35.125	30.950	1.1429E-03	1.1797E-03	0.459
19	64	307.0	552.6	0.287	0.253	35.113	30.939	3.4309E-04	3.5414E-04	0.359
20	65	307.0	552.6	0.383	0.337	35.113	30.939	4.5777E-04	4.7252E-04	0.480
21	66	307.1	552.8	1.506	1.327	35.105	30.933	1.8019E-03	1.8600E-03	0.415
22	67	307.4	553.4	3.021	2.662	35.064	30.914	3.6154E-03	3.7320E-03	0.455
23	68	307.5	553.6	3.572	3.148	35.076	30.907	4.2771E-03	4.4150E-03	0.426
24	69	306.6	551.9	1.067	0.940	35.139	30.962	1.2751E-03	1.3162E-03	0.476
25	70	305.8	550.5	0.161	0.142	35.188	31.006	1.9214E-04	1.9831E-04	0.396
26	71	305.8	550.5	0.093	0.082	35.189	31.006	1.1045E-04	1.1400E-04	0.471
27	72	305.6	550.2	0.091	0.081	35.201	31.017	1.0896E-04	1.1246E-04	0.425
28	74	305.9	550.5	0.390	0.343	35.167	31.C05	4.6493E-04	4.7987E-04	0.493
29	76	306.C	550.6	0.275	0.240	35.177	30.996	3.2531E-04	3.3577E-04	0.565
30	122	306.4	551.5	0.504	0.444	35.152	30.973	6.0179E-04	6.2115E-04	0.415
31	129	306.3	551.3	0.439	0.387	35.159	30.980	5.2395E-04	5.4080E-04	0.387
32	135	306.7	552.0	0.272	0.240	35.135	30.958	3.2501E-04	3.3547E-04	0.379
33	136	307.C	552.7	0.347	0.305	35.110	30.936	4.1464E-04	4.2800E-04	0.383
34	176	306.5	551.8	2.655	2.339	35.142	30.965	3.1720E-03	3.2741E-03	0.360
35	177	306.1	551.0	2.197	1.936	35.169	30.989	2.6227E-03	2.7070E-03	0.360
36	178	305.6	550.1	1.060	0.934	35.204	31.020	1.2633E-03	1.3038E-03	0.358
37	179	308.4	555.1	3.363	2.963	35.019	30.857	4.0339E-03	4.1643E-03	0.423
38	180	307.4	553.2	1.769	1.558	35.088	30.916	2.1166E-03	2.1849E-03	0.403
39	181	306.3	551.3	1.520	1.340	35.159	30.980	1.8152E-03	1.8736E-03	0.443
40	182	305.8	550.4	2.240	1.982	35.193	31.010	2.6827E-03	2.7689E-03	0.316
41	183	305.1	549.2	1.969	1.735	35.234	31.046	2.3453E-03	2.4206E-03	0.293
42	184	305.2	549.3	1.405	1.307	35.232	31.044	1.7671E-03	1.8238E-03	0.230
43	186	304.2	547.7	0.866	0.763	35.290	31.095	1.0291E-03	1.0621E-03	0.280
44	187	305.0	548.9	0.741	0.653	35.246	31.056	8.8179E-04	9.1007E-04	0.256
45	192	305.6	550.1	3.620	3.189	35.202	31.018	4.3159E-03	4.4545E-03	0.459
46	193	305.1	549.1	1.655	1.497	35.239	31.050	2.0229E-03	2.0878E-03	0.444
47	194	343.8	618.8	0.000	0.000	32.705	28.817	0.0000E-39	0.0000E-39	-5.936
48	196	305.1	549.1	1.107	0.976	35.239	31.051	1.3189E-03	1.3612E-03	0.398
49	197	307.6	553.7	4.571	4.028	35.070	30.902	5.4738E-03	5.6504E-03	0.380
50	198	307.3	553.1	2.324	1.783	35.095	30.924	2.4218E-03	2.4999E-03	0.332
51	199	307.0	552.6	2.242	1.975	35.112	30.938	2.6807E-03	2.7671E-03	0.312
52	202	308.1	554.5	5.491	4.836	35.041	30.876	6.5815E-03	6.7940E-03	0.302
53	203	308.3	555.0	4.981	4.389	35.024	30.861	5.9732E-03	6.1662E-03	0.292
54	204	308.6	555.6	5.019	4.423	35.004	30.843	6.0231E-03	6.2179E-03	0.250
55	205	309.2	556.5	2.526	2.226	34.968	30.812	3.0350E-03	3.1332E-03	0.287
56	206	308.6	555.4	1.819	1.603	35.010	30.848	2.1822E-03	2.2528E-03	0.259
57	207	305.6	550.5	0.832	0.733	35.188	31.005	9.9214E-04	1.0240E-03	0.146
58	208	307.9	554.3	0.516	0.808	35.052	30.885	1.0494E-03	1.1349E-03	0.276
59	211	308.4	555.1	11.421	10.063	35.020	30.857	1.3698E-02	1.4141E-02	0.347
60	225	309.5	557.1	2.328	2.051	34.946	30.792	2.7986E-03	2.8893E-03	0.594
61	226	306.C	550.8	0.237	0.209	35.177	30.996	2.8341E-04	2.9252E-04	0.568
62	227	304.1	547.5	0.039	0.035	35.299	31.104	4.6658E-05	4.8152E-05	0.409
63	228	304.8	548.6	0.086	0.076	35.259	31.068	1.0269E-04	1.0598E-04	0.429
64	229	307.9	554.3	3.495	3.080	35.050	30.883	4.1883E-03	4.3235E-03	0.556
65	230	305.2	549.3	0.626	0.551	35.232	31.044	7.4958E-04	7.6951E-04	0.432
66	231	303.1	545.6	0.068	0.059	35.368	31.164	8.3061E-05	8.2618E-05	0.543
67	232	302.5	544.4	0.033	0.029	35.410	31.201	3.8965E-05	4.0209E-05	0.353
68	234	304.3	547.7	0.061	0.053	35.292	31.097	7.1997E-05	7.4303E-05	0.368
69	235	307.9	554.2	4.484	3.951	35.052	30.886	5.3728E-03	5.5463E-03	0.621
70	236	304.9	548.9	0.672	0.548	35.247	31.057	7.4114E-04	7.6491E-04	0.475
71	237	302.6	544.7	0.211	0.186	35.399	31.192	2.5022E-04	2.5821E-04	0.451
72	238	302.7	544.9	0.123	0.109	35.394	31.187	1.4632E-04	1.5099E-04	0.477
73	240	304.3	547.7	0.302	0.266	35.292	31.097	3.5925E-04	3.7076E-04	0.725
74	274	305.6	550.2	6.741	6.116	35.201	31.017	8.2769E-03	8.5428E-03	0.196
75	288	304.4	547.8	10.132	8.928	35.285	31.091	1.2049E-02	1.2435E-02	0.237

FREE-STREAM DENSITY-VELOCITY PRODUCT = 1.1270E-01 (SLUGS/FT2-SEC)

1472938

ORIGINAL PAGE IS
OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL	LENGTH(METER)	PI(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO.	183
7.30	3.3328E 06	1.911dE 06	0.574	16.39	d39.C	0.96544E 06	0.0053	RUN NO.	38
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	1.0158E C6	1.911cE C6	1.e82	240.98	1510.2	372.16	C.0175		

CHAN	T/C	Hw/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.912)	CHAN	T/C	Hw/HT	Q/QS	H/HS(0.850)	H/HS(0.900)	H/HS(0.912)
1	4	C.364	0.2601	0.3403	0.3[illegible]	C.3018	39	161	0.359	C.0607	0.1054	C.0956	0.0935
2	7	0.363	C.1639	0.2143	0.1944	C.1901	40	182	C.358	0.0782	0.1282	C.1164	C.1139
3	12	0.363	0.0991	0.1296	0.1176	0.1150	41	183	0.357	0.0810	0.1056	0.0959	0.0938
4	17	C.362	0.0752	C.0983	0.0892	0.0872	42	184	0.357	0.0834	0.1088	0.0988	0.0967
5	22	C.362	0.0677	0.0885	0.0802	G.0785	43	186	0.356	0.0832	0.0824	0.0748	0.0732
6	25	0.363	C.0623	0.0815	0.0735	0.0723	44	187	C.357	0.0508	0.0662	0.0601	C.0588
7	27	0.363	C.0653	0.0854	0.0775	0.0758	45	192	0.358	0.0833	0.1087	0.0987	0.0966
8	29	C.363	0.0616	C.0806	0.0731	0.0715	46	193	0.357	0.0427	0.0557	0.0506	0.0495
9	30	0.363	0.0604	0.0790	0.0716	C.0701	47	194	0.360	0.0000	0.0000	0.0000	0.0000
10	32	0.362	C.0562	0.0734	0.0666	C.0652	48	196	C.357	0.0382	0.0498	0.0452	0.0442
11	34	0.362	C.0531	C.0694	0.0629	0.0616	49	197	0.360	0.1717	0.2243	0.2035	0.1991
12	38	C.362	0.0528	C.0690	0.0626	0.C612	50	198	0.359	0.2054	0.2682	0.2434	0.2381
13	42	0.361	C.0475	0.0620	0.0563	0.0550	51	199	0.359	0.2528	0.3301	0.2996	0.2931
14	46	0.360	C.0433	0.C566	0.0514	0.0502	52	202	0.360	0.1146	0.1497	0.1359	C.1329
15	50	0.360	0.0312	C.0408	0.0370	0.0362	53	203	0.360	0.1101	0.1439	0.1306	0.1277
16	54	C.359	0.0237	C.0309	0.0280	0.0274	54	204	0.361	0.1146	0.1498	0.1359	0.1329
17	59	0.363	C.1C17	0.1330	0.1206	0.1180	55	205	0.362	0.1106	0.1446	0.1311	0.1283
18	62	0.361	C.0086	0.0115	C.0105	0.0102	56	206	0.361	0.1222	0.1596	0.1448	C.1417
19	64	0.361	C.0057	C.0075	[illegible]068	0.0066	57	207	0.357	0.0852	0.1112	0.1009	C.0988
20	65	0.361	0.0066	0.0115	0.0104	0.C102	58	208	0.360	0.0845	0.1103	0.1001	0.0979
21	66	C.361	C.0343	0.0448	0.0407	C.0398	59	211	0.361	0.2541	0.3320	0.3012	0.2946
22	67	0.362	C.0482	0.C630	0.0571	0.0559	60	225	0.363	0.0236	0.0308	0.0280	C.0273
23	68	0.362	0.0463	0.C606	0.0549	0.0537	61	226	0.359	0.0009	0.0012	0.0011	C.0011
24	69	C.361	0.0121	0.0158	0.0144	0.0141	62	227	0.357	-0.0000	-0.C000	-0.0000	-0.0000
25	70	0.361	C.0017	0.0023	0.0020	0.C020	63	228	0.357	-0.0000	-0.0000	-0.0000	-0.0000
26	71	0.361	C.0023	0.C030	0.0027	C.0027	64	229	0.360	0.0518	0.0676	0.0614	C.0600
27	72	0.360	0.0080	C.0105	0.0095	G.0093	65	230	0.358	0.0072	0.0094	0.0086	0.0084
28	74	C.360	0.0051	C.0066	0.C060	0.0059	66	231	0.355	-0.0000	-0.C000	-0.0000	-0.0000
29	76	0.359	C.0027	0.0036	0.0032	C.0032	67	232	0.354	0.0002	0.C003	0.0003	0.0003
30	122	0.362	C.0211	0.0276	0.0250	C.0245	68	234	C.356	0.0025	0.0033	C.0030	C.C029
31	129	0.362	C.0165	C.C216	0.C196	0.0192	69	235	0.360	0.0776	0.1013	0.0919	0.0899
32	135	C.362	0.0100	0.0131	C.C119	G.C116	70	236	0.357	0.0065	0.C085	0.0077	0.0075
33	136	C.362	C.0260	0.0340	0.0309	C.0302	71	237	0.354	0.0056	0.C075	0.0068	0.C067
34	176	0.355	C.0751	0.0981	0.0890	C.0871	72	238	0.354	C.0022	0.0028	0.0026	C.C025
35	177	0.359	C.0646	C.0844	0.C766	0.0749	73	240	0.356	0.0010	0.0013	0.0012	0.0012
36	178	G.358	0.0385	C.0503	0.C456	C.0446	74	274	0.35[illegible]	0.0452	G.0590	0.0535	0.0524
37	179	G.361	C.1415	0.1850	0.1678	C.1642	75	286	0.394	0.1175	0.1530	0.1390	0.1360
38	180	0.360	C.1027	0.1342	0.1217	G.1191							

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

TEST NO. 183
RUN NO. 38

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	RT(JOULE/KG)	RS(METER)		
7.30	3.3328E C6	1.9118E 06	0.574	16.39	839.C	0.6654E 06	0.0053		
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	RT(BTU/LBM)	RS(FT)		
7.30	1.0158E C6	1.9118E 06	1.882	240.98	1510.2	372.16	0.0175		

CHAN	T/C	TW(DEG K)	TW(DEG R)	QW(W/CM2)	QI(BTU/FT2-SEC)	QS(W/CM2)	QS(BTU/FT2-SEC)	ST(0.900)	ST(0.912)	TIME(SEC)
1	4	313.6	564.5	8.969	7.903	34.488	30.388	1.09396E-02	1.0700E-02	0.504
2	7	312.7	562.9	5.660	4.986	34.544	30.438	6.8907E-03	6.7401E-03	0.469
3	12	312.4	562.3	3.427	3.020	34.567	30.458	4.1667E-03	4.0777E-03	0.460
4	17	312.2	562.0	2.599	2.290	34.576	30.466	3.1006E-03	3.0916E-03	0.452
5	22	312.2	561.9	2.340	2.062	34.580	30.470	2.8448E-03	2.7827E-03	0.412
6	25	312.4	562.3	2.154	1.898	34.565	30.457	2.6200E-03	2.5627E-03	0.363
7	27	312.7	562.8	2.256	1.988	34.549	30.443	2.7466E-03	2.6860E-03	0.347
8	29	312.6	562.7	2.129	1.876	34.552	30.445	2.5915E-03	2.5349E-03	0.360
9	30	312.4	562.4	2.088	1.839	34.564	30.455	2.5397E-03	2.4842E-03	0.318
10	32	311.9	561.4	1.944	1.713	34.600	30.486	2.3619E-03	2.3104E-03	0.293
11	34	311.9	561.5	1.836	1.618	34.596	30.484	2.2316E-03	2.1829E-03	0.265
12	38	312.0	561.6	1.825	1.608	34.595	30.483	2.2178E-03	2.1694E-03	0.227
13	42	310.8	559.5	1.646	1.450	34.669	30.548	1.9953E-03	1.9518E-03	0.216
14	46	310.4	558.8	1.503	1.324	34.694	30.570	1.8208E-03	1.7812E-03	0.183
15	50	309.9	557.7	1.089	0.956	34.733	30.604	1.3123E-03	1.2836E-03	0.160
16	54	309.2	556.5	0.823	0.725	34.776	30.642	9.9432E-04	9.7275E-04	0.097
17	59	312.9	563.3	3.511	3.094	34.531	30.426	4.2762E-03	4.1827E-03	0.515
18	62	311.0	559.9	0.306	0.270	34.655	30.535	3.7140E-04	3.6331E-04	0.416
19	64	311.4	560.6	0.198	0.174	34.628	30.512	2.4026E-04	2.3503E-04	0.386
20	65	311.3	560.4	0.305	0.269	34.635	30.518	3.7013E-04	3.6207E-04	0.495
21	66	311.4	560.5	1.186	1.047	34.632	30.515	1.4420E-03	1.4104E-03	0.393
22	67	311.7	561.1	1.668	1.470	34.612	30.498	2.0258E-03	1.9816E-03	0.440
23	68	311.9	561.4	1.603	1.412	34.601	30.488	1.9473E-03	1.9048E-03	0.431
24	69	311.2	560.1	0.420	0.370	34.646	30.528	5.0941E-04	4.9831E-04	0.478
25	70	310.8	559.4	0.060	0.053	34.671	30.550	7.2655E-05	7.1073E-05	0.429
26	71	310.9	559.6	0.080	0.070	34.667	30.546	9.6896E-05	9.4786E-05	0.512
27	72	310.5	558.9	0.278	0.245	34.692	30.568	3.3720E-04	3.2986E-04	0.418
28	74	310.1	558.2	0.176	0.155	34.714	30.588	2.1292E-04	2.0829E-04	0.513
29	76	309.3	556.8	0.095	0.084	34.766	30.633	1.1487E-04	1.1238E-04	0.433
30	122	311.6	560.9	0.731	0.644	34.617	30.503	8.8723E-04	8.6789E-04	0.366
31	125	311.5	560.7	0.572	0.504	34.625	30.509	6.9496E-04	6.7976E-04	0.388
32	135	311.6	560.9	0.347	0.306	34.618	30.503	4.2154E-04	4.1235E-04	0.331
33	136	311.6	560.9	0.501	0.794	34.616	30.503	1.0939E-03	1.0701E-03	0.411
34	176	309.5	557.2	2.610	2.300	34.793	30.622	3.1556E-03	3.0871E-03	0.144
35	177	309.0	556.2	2.249	1.982	34.790	30.655	2.7156E-03	2.6567E-03	0.135
36	178	308.1	554.7	1.342	1.183	34.845	30.703	1.6179E-03	1.5829E-03	0.142
37	179	311.4	560.5	4.902	4.319	34.631	30.515	5.9499E-03	5.8203E-03	0.368
38	180	310.4	558.8	3.563	3.140	34.694	30.570	4.3166E-03	4.2227E-03	0.272
39	181	309.4	556.9	2.804	2.471	34.762	30.630	3.3890E-03	3.3155E-03	0.318
40	182	308.7	555.7	3.419	3.013	34.807	30.670	4.1269E-03	4.0374E-03	0.131
41	183	308.0	554.3	2.822	2.487	34.857	30.714	3.4004E-03	3.3269E-03	0.127
42	184	307.9	554.3	2.908	2.563	34.859	30.716	3.5040E-03	3.4282E-03	0.196
43	186	306.8	552.2	2.209	1.946	34.933	30.781	2.6547E-03	2.5974E-03	0.290
44	187	307.5	553.5	1.771	1.561	34.888	30.741	2.1320E-03	2.0859E-03	0.270
45	192	308.2	554.8	2.903	2.558	34.840	30.698	3.4999E-03	3.4242E-03	0.085
46	193	307.6	553.8	1.491	1.314	34.878	30.732	1.7950E-03	1.7562E-03	0.201
47	194	345.0	621.0	0.000	0.000	32.436	28.581	0.0000E-39	0.0000E-39	0.474
48	196	307.5	553.6	1.332	1.174	34.885	30.738	1.6039E-03	1.5693E-03	0.131
49	197	310.0	558.1	5.963	5.254	34.721	30.594	7.2171E-03	7.0603E-03	0.314
50	198	309.7	557.4	7.137	6.289	34.745	30.615	8.6314E-03	8.4440E-03	0.392
51	199	309.5	557.1	8.787	7.743	34.757	30.626	1.0622E-02	1.0392E-02	0.325
52	202	310.3	558.6	3.978	3.505	34.702	30.577	4.8171E-03	4.7123E-03	0.196
53	203	310.6	559.1	3.820	3.366	34.682	30.559	4.6294E-03	4.5287E-03	0.185
54	204	310.9	559.7	3.973	3.501	34.661	30.541	4.8176E-03	4.7127E-03	0.143
55	205	311.6	561.0	3.828	3.373	34.615	30.501	4.6490E-03	4.5476E-03	0.229
56	206	311.0	559.7	4.234	3.731	34.661	30.541	5.1349E-03	5.0231E-03	0.296
57	207	308.0	554.4	2.971	2.618	34.856	30.713	3.5798E-03	3.5024E-03	0.137
58	208	310.4	558.7	2.931	2.582	34.698	30.574	3.5498E-03	3.4726E-03	0.296
59	211	311.3	560.3	8.801	7.755	34.641	30.524	1.0679E-02	1.0446E-02	0.352
60	225	312.6	562.6	0.814	0.718	34.554	30.447	9.9105E-04	9.6940E-04	0.609
61	226	309.4	556.9	0.032	0.028	34.763	30.631	3.8621E-05	3.7783E-05	0.035
62	227	307.7	553.8	-0.000	-0.000	34.876	30.730	-0.0000E-39	-0.0000E-39	0.538
63	228	307.5	553.6	-0.000	-0.000	34.885	30.738	-0.0000E-39	-0.0000E-39	0.687
64	229	310.4	558.7	1.797	1.583	34.698	30.573	2.1764E-03	2.1291E-03	0.525
65	230	308.1	554.5	0.252	0.222	34.850	30.708	3.0328E-04	2.9671E-04	0.584
66	231	306.2	551.2	-0.000	-0.000	34.973	30.816	-0.0000E-39	-0.0000E-39	-0.907
67	232	309.2	549.3	0.008	0.007	35.041	30.876	9.2697E-06	9.0703E-06	3.966
68	234	306.5	552.4	0.088	0.077	34.928	30.777	1.0661E-04	1.0333E-04	0.739
69	235	309.4	557.5	2.694	2.374	34.727	30.599	3.2597E-03	3.1889E-03	0.634
70	236	307.3	553.1	0.227	0.200	34.901	30.752	2.7256E-04	2.6667E-04	0.517
71	237	305.3	549.6	0.203	0.179	35.029	30.865	2.4294E-04	2.3771E-04	0.638
72	238	305.2	549.3	0.076	0.067	35.039	30.874	9.1298E-05	8.9334E-05	0.650
73	240	306.7	552.1	0.036	0.031	34.938	30.765	4.2889E-05	4.1964E-05	1.237
74	274	307.0	552.7	1.579	1.391	34.917	30.766	1.8987E-03	1.8577E-03	0.149
75	286	305.2	549.3	4.116	3.626	35.039	30.879	4.9247E-03	4.8236E-03	0.232

FREE-STREAM DENSITY-VELOCITY PRODUCT = 1.1256E-01 (SLUGS/FT2-SEC)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	RE/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(METER)	TEST NO.	183
7.30	6.3652E C6	3.6628E C6	0.574	31.02	845.4	0.8725OE 06	0.0053	RUN NO.	39
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)		
7.30	1.9462E C6	3.6628E 06	1.882	467.73	1521.7	375.20	0.0175		

CHAN	T/C	H/HT	C/US	H/HS(0.850)	H/HS(0.900)	H/HS(0.912)	CHAN	T/C	H/HT	C/US	H/HS(0.850)	H/HS(0.900)	H/HS(0.912)
1	4	0.359	0.2811	0.3669	0.3330	0.3258	39	181	0.354	0.0945	0.1230	0.1118	0.1094
2	7	0.357	0.1751	0.2283	0.2073	0.2028	40	182	0.353	0.1192	0.1551	0.1409	0.1379
3	12	0.356	0.1088	0.1392	0.1264	0.1237	41	183	0.352	0.1919	0.2497	0.2269	0.2220
4	17	0.356	0.0744	0.1035	0.0940	0.0920	42	184	0.352	0.2124	0.2764	0.2512	0.2458
5	22	0.355	0.0720	0.0938	0.0852	0.0834	43	185	0.351	0.1454	0.1891	0.1719	0.1682
6	25	0.355	0.0664	0.0866	0.0786	0.0770	44	187	0.352	0.1252	0.1630	0.1481	0.1449
7	27	0.356	0.0680	0.0887	0.0806	0.0788	45	192	0.353	0.1001	0.1302	0.1183	0.1158
8	29	0.356	0.0640	0.0834	0.0757	0.0741	46	193	0.352	0.0636	0.0827	0.0752	0.0736
9	30	0.356	0.0620	0.0809	0.0734	0.0719	47	194	0.396	-0.0000	-0.0000	-0.0000	-0.0000
10	32	0.355	0.0569	0.0742	0.0674	0.0659	48	196	0.352	0.0643	0.0836	0.0760	0.0743
11	34	0.356	0.0526	0.0689	0.0626	0.0612	49	197	0.354	0.1949	0.2539	0.2307	0.2257
12	38	0.356	0.0528	0.0688	0.0625	0.0611	50	198	0.354	0.3308	0.4308	0.3914	0.3829
13	42	0.355	0.0462	0.0602	0.0547	0.0535	51	199	0.354	0.3528	0.4596	0.4174	0.4085
14	46	0.356	0.0504	0.0657	0.0597	0.0584	52	202	0.354	0.1082	0.1410	0.1280	0.1253
15	50	0.355	0.0558	0.0727	0.0660	0.0646	53	203	0.355	0.1208	0.1574	0.1429	0.1398
16	54	0.354	0.0640	0.0834	0.0758	0.0741	54	204	0.355	0.1230	0.1603	0.1456	0.1424
17	59	0.357	0.1029	0.1342	0.1218	0.1192	55	205	0.356	0.2024	0.2639	0.2397	0.2345
18	62	0.354	0.0076	0.0098	0.0089	0.0087	56	206	0.356	0.2133	0.2780	0.2525	0.2470
19	64	0.354	0.0049	0.0064	0.0058	0.0057	57	207	0.352	0.1431	0.1862	0.1692	0.1656
20	65	0.354	0.0137	0.0179	0.0163	0.0159	58	208	0.355	0.1335	0.1739	0.1580	0.1546
21	66	0.354	0.0463	0.0603	0.0548	0.0536	59	211	0.356	0.2576	0.3358	0.3049	0.2984
22	67	0.354	0.0589	0.0768	0.0698	0.0683	60	225	0.358	0.0165	0.0216	0.0196	0.0192
23	68	0.355	0.0506	0.0659	0.0599	0.0586	61	226	0.354	0.0014	0.0019	0.0017	0.0017
24	69	0.354	0.0093	0.0121	0.0109	0.0107	62	227	0.352	-0.0000	-0.0000	-0.0000	-0.0000
25	70	0.353	0.0005	0.0006	0.0005	0.0006	63	228	0.352	0.0029	0.0038	0.0035	0.0034
26	71	0.353	0.0018	0.0023	0.0021	0.0021	64	229	0.355	0.0539	0.0703	0.0638	0.0625
27	72	0.353	0.0052	0.0067	0.0061	0.0060	65	230	0.352	0.0072	0.0093	0.0085	0.0083
28	74	0.353	0.0071	0.0092	0.0084	0.0082	66	231	0.350	0.0042	0.0054	0.0049	0.0048
29	76	0.353	0.0084	0.0109	0.0099	0.0097	67	232	0.349	0.0105	0.0136	0.0124	0.0121
30	122	0.353	0.0199	0.0259	0.0235	0.0230	68	234	0.352	0.0169	0.0220	0.0200	0.0196
31	129	0.353	0.0172	0.0224	0.0203	0.0199	69	235	0.355	0.0823	0.1073	0.0974	0.0953
32	135	0.354	0.0070	0.0091	0.0082	0.0081	70	236	0.352	0.0056	0.0072	0.0066	0.0064
33	136	0.354	0.0461	0.0601	0.0545	0.0534	71	237	0.349	0.0115	0.0150	0.0136	0.0133
34	176	0.354	0.1971	0.2567	0.2332	0.2282	72	238	0.349	0.0103	0.0134	0.0122	0.0119
35	177	0.354	0.1998	0.2601	0.2363	0.2313	73	240	0.352	0.0085	0.0111	0.0101	0.0099
36	178	0.353	0.1236	0.1609	0.1462	0.1430	74	274	0.352	0.0000	0.0000	0.0000	0.0000
37	179	0.356	0.1566	0.2042	0.1854	0.1814	75	286	0.350	0.0000	0.0000	0.0000	0.0000
38	180	0.355	0.1209	0.1576	0.1431	0.1400							

ORIGINAL PAGE IS
OF POOR QUALITY

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD CALIF. *** PRELIMINARY DATA ***

MACH	Re/METER	REL	LENGTH(METER)	PT(ATM)	TT(DEG K)	HT(JOULE/KG)	RS(M-T.P)
7.30	6.98522E 06	3.66206E 06	0.076	31.02	845.4	0.67256E 06	0.0055
MACH	RE/FT	REL	LENGTH(FT)	PT(PSI)	TT(DEG R)	HT(BTU/LBM)	RS(FT)
7.30	1.94462E 06	3.66206E 06	1.000	457.73	1521.7	289.20	0.0170

TEST NO. 183
RUN NO. 39

CHAN	T/C	Tw(DEG K)	Tw(DEG R)	Qlm/C.2)	Q(BTU/FT2-SEC)	QST(W/C.2)	QST(BTU/FT2-SEC)	STEC(INCH)	STEP(INCH)	TIME(SEC)
1	4	311.6	560.8	13.734	12.102	48.887	43.058	5.2183E-03	5.1895E-03	0.512
2	7	310.3	558.6	8.575	7.555	46.791	43.150	5.2142E-03	5.1895E-03	0.482
3	12	309.4	556.9	5.238	4.615	49.601	43.231	5.2136E-03	5.1840E-03	0.466
4	17	309.0	556.3	3.939	3.469	49.698	43.262	2.4644E-03	2.3531E-03	0.445
5	22	308.7	555.6	3.537	3.117	49.132	43.292	2.1403E-03	2.1333E-03	0.396
6	25	308.8	555.9	3.264	2.876	49.114	43.280	2.1291E-03	1.9891E-03	0.345
7	27	309.2	556.6	3.340	2.943	49.090	43.246	2.0611E-03	2.0166E-03	0.310
8	29	309.3	556.7	3.140	2.766	49.074	43.241	1.7280E-03	1.6961E-03	0.264
9	30	309.2	556.5	3.145	2.683	49.084	43.250	1.6793E-03	1.6387E-03	0.272
10	32	309.6	555.6	2.757	2.469	49.134	43.273	1.7243E-03	1.6872E-03	0.235
11	34	309.0	556.3	2.594	2.286	49.097	43.261	1.6600E-03	1.5661E-03	0.185
12	38	309.6	557.2	2.569	2.281	49.049	43.219	1.5990E-03	1.5645E-03	0.146
13	42	308.8	555.6	2.669	2.303	49.120	43.281	1.3995E-03	1.3691E-03	0.097
14	46	308.9	556.0	2.477	2.183	49.112	43.274	1.5270E-03	1.4947E-03	0.066
15	50	309.5	555.4	2.741	2.415	49.143	43.301	1.6689E-03	1.6525E-03	0.193
16	54	307.9	554.3	3.150	2.776	44.190	42.350	1.7389E-03	1.6971E-03	0.262
17	59	310.4	558.7	5.035	4.440	48.374	43.153	3.1175E-03	3.0501E-03	0.525
18	62	307.3	553.2	0.372	0.328	49.254	43.400	2.2870E-04	2.2304E-04	0.409
19	64	307.5	553.6	0.244	0.215	49.225	43.382	1.4977E-04	1.4654E-04	0.413
20	65	307.5	553.5	0.677	0.597	49.240	43.367	4.1620E-04	4.0732E-04	0.517
21	66	307.6	553.8	2.275	2.006	49.225	43.374	1.4016E-03	1.3715E-03	0.409
22	67	307.9	554.3	2.900	2.555	49.158	43.330	1.7098E-03	1.7466E-04	0.467
23	68	308.1	554.5	2.490	2.194	49.186	43.334	1.5320E-03	1.4598E-03	0.476
24	69	307.1	552.8	0.456	0.402	49.272	43.416	2.8622E-04	2.7420E-04	0.517
25	70	306.6	551.8	0.024	0.021	49.323	43.460	1.4580E-05	1.4267E-05	1.120
26	71	306.6	551.9	0.288	0.777	49.321	43.458	5.3769E-05	5.2811E-05	0.892
27	72	306.5	551.7	0.255	0.225	49.330	43.466	1.5637E-04	1.5301E-04	0.262
28	74	306.8	552.3	0.349	0.308	49.300	43.440	2.1434E-04	2.0974E-04	0.859
29	76	307.1	552.7	0.414	0.365	49.277	43.419	2.5427E-04	2.4881E-04	0.943
30	122	306.9	552.5	0.979	0.862	49.289	43.430	6.0117E-04	5.8826E-04	0.385
31	125	306.9	552.4	0.847	0.746	49.287	43.437	5.2013E-04	5.0893E-04	0.423
32	135	307.5	553.6	0.343	0.302	49.235	43.362	2.1107E-04	2.0653E-04	0.453
33	136	307.5	554.2	2.268	1.997	49.202	43.334	1.3959E-03	1.3659E-03	0.787
34	176	307.7	553.9	9.701	8.548	49.218	43.368	5.9681E-03	5.8397E-03	0.300
35	177	307.3	553.1	9.041	8.071	49.261	43.406	6.0468E-03	5.9180E-03	0.347
36	178	306.4	551.5	6.096	5.373	49.342	43.477	3.7408E-03	3.6606E-03	0.393
37	179	309.3	556.7	7.687	6.773	49.074	43.260	4.7448E-03	4.6424E-03	0.245
38	180	308.4	555.1	5.545	5.235	49.159	43.316	3.6628E-03	3.5837E-03	0.168
39	181	307.3	553.1	4.654	4.101	49.297	43.402	2.8066E-03	2.7491E-03	0.261
40	182	306.7	552.1	5.276	4.177	49.312	43.456	3.0664E-03	3.0295E-03	0.139
41	183	309.1	556.0	9.471	8.345	49.369	43.498	5.8073E-03	5.6827E-03	0.279
42	184	306.1	551.0	10.414	9.238	49.364	43.494	6.4280E-03	6.2904E-03	0.326
43	186	305.0	548.9	7.194	6.339	49.470	43.580	4.4401E-03	4.3606E-03	0.336
44	187	305.6	550.4	6.186	5.451	49.395	43.524	3.7403E-03	3.7091E-03	0.388
45	192	306.3	551.4	4.947	4.350	49.344	43.479	3.0284E-03	2.9635E-03	0.036
46	193	305.8	550.4	3.146	2.767	49.397	43.525	1.9239E-03	1.8827E-03	0.293
47	194	344.4	619.9	-0.000	-0.000	49.671	43.771	-0.0000E-39	-0.0000E-39	1.459
48	196	305.6	550.1	3.175	2.797	49.410	43.536	1.9443E-03	1.9029E-03	0.206
49	197	307.8	554.0	9.553	8.453	49.211	43.361	5.9626E-03	5.7756E-03	0.367
50	198	307.8	554.0	16.278	14.343	49.215	43.365	1.0015E-02	9.7946E-03	0.433
51	199	307.7	553.9	17.364	15.300	49.217	43.367	1.0881E-02	1.0653E-02	0.358
52	202	307.9	554.3	5.323	4.690	49.198	43.350	3.2784E-03	3.2059E-03	0.186
53	203	308.2	554.8	5.931	5.225	49.170	43.325	3.6574E-03	3.5786E-03	0.276
54	204	308.6	555.5	6.044	5.325	49.158	43.297	3.7251E-03	3.6448E-03	0.200
55	205	309.5	557.1	6.331	5.577	49.147	43.288	6.1320E-03	6.0001E-03	0.440
56	206	308.5	556.1	10.474	9.229	49.105	43.252	6.5603E-03	6.3210E-03	0.319
57	207	306.0	550.8	7.065	6.225	49.175	43.306	4.3905E-03	4.2977E-03	0.187
58	208	308.4	555.1	6.561	5.782	49.159	43.316	4.0421E-03	3.9550E-03	0.373
59	211	308.9	556.1	12.651	11.147	49.107	43.269	7.8630E-03	7.6347E-03	0.391
60	226	310.6	559.1	8.210	7.233	49.154	43.304	5.6111E-04	4.9026E-04	0.780
61	226	307.1	552.8	0.072	0.062	49.273	43.416	4.3166E-05	4.2238E-05	2.560
62	227	306.6	550.2	-0.000	-0.000	49.408	43.535	-0.0000E-39	-0.0000E-39	-0.080
63	228	306.2	551.6	0.145	0.127	49.357	43.490	8.8440E-05	8.6746E-05	2.731
64	229	306.8	552.8	2.049	0.334	49.123	43.284	1.9334E-03	1.8982E-03	0.583
65	230	306.1	550.9	0.354	0.312	49.309	43.501	2.1712E-04	2.1246E-04	0.696
66	231	304.2	547.5	0.161	0.141	49.544	43.655	1.2970E-04	1.2302E-04	1.333
67	232	303.4	546.2	0.337	0.297	49.512	43.713	3.1846E-04	3.0971E-04	1.337
68	235	304.5	548.2	0.837	0.737	49.422	43.634	5.1430E-04	5.0138E-04	1.120
69	237	305.7	550.2	4.044	3.564	49.127	43.287	2.4936E-03	2.4394E-03	0.672
70	238	305.6	550.1	0.835	0.742	49.609	43.738	1.0455E-04	1.0454E-04	1.031
71	240	303.4	546.0	0.511	0.450	49.620	43.720	4.4997E-04	4.4057E-04	0.940
72	239	303.6	546.4	0.511	0.450	49.599	43.704	3.1147E-04	3.0484E-04	1.188
73	241	305.4	549.8	0.477	0.420	49.414	43.541	2.5044E-04	2.4296E-04	1.564
74	242	304.6	548.2	0.000	0.000	49.396	43.692	0.0000E-39	0.0000E-39	-2.235
75	243	303.1	545.7	0.000	0.000					-2.034

(QST)-STREAM STABILITY-VELOCITY PRODUCT = 2.1749E-02 (KG/M/S/FT2-SEC)