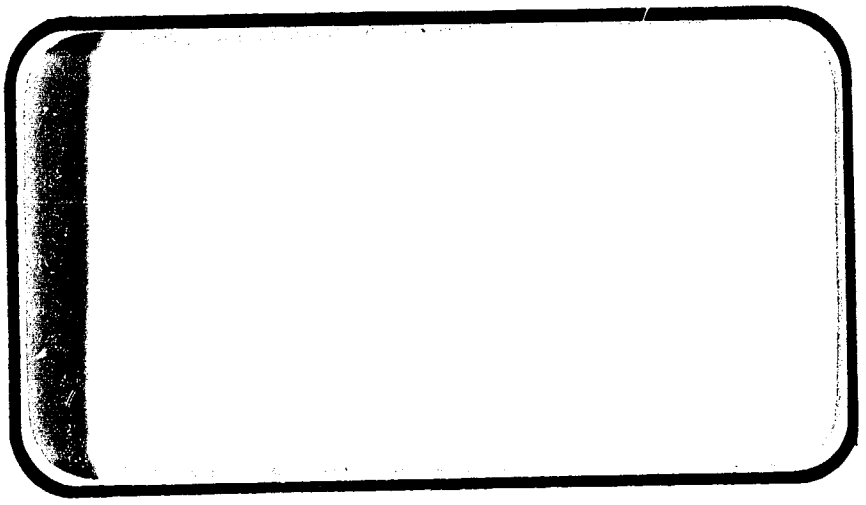
NASA CR-
134101

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



(NASA-CR-134101) HEAT TRANSFER TESTS OF AN 0.006-SCALE THIN SKIN SPACE SHUTTLE THERMOCOUPLE MODEL (41-0) IN THE LANGLEY RESEARCH CENTER VARIABLE DENSITY (Chrysler Corp.) 243 p HC $15.25 CSCL 22B G3/31

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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

August, 1974

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HEAT TRANSFER TESTS OF AN 0.006-SCALE THIN SKIN SPACE SHUTTLE THERMOCOUPLE MODEL (41-0) IN THE LANGLEY RESEARCH CENTER VARIABLE DENSITY TUNNEL AT M = 8 (OH13)

by

D. G. Walstad
Rockwell International

Prepared under NASA Contract No. NAS9-13247

by

Data Management Services
Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL SPECIFICS:

Test Number:	LaRC/VDT 644
NASA Series No:	OH-13
Model Number:	41-0
Date:	13 June 1973
Occupancy:	8 Hours

FACILITY COORDINATOR:

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by

D. G. Walstad, Rockwell International

ABSTRACT

This report presents data obtained from heat transfer tests on an 0.006-scale, Space Shuttle Orbiter Vehicle in the Langley Research Center, Variable Density, Mach 8 Wind Tunnel. The purpose of this test was to obtain orbiter entry heating distributions and to correlate phase change paint data with thermocouple data. The orbiter was tested at 0, 30, and 35 degrees angle of attack at Reynolds numbers of 1, 2, 3, 4, and 6 million per foot. Temperature data were obtained from a total of 57 thermocouples.

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INDEX OF DATA FIGURES

COEFFICIENT SCHEDULE:

A: H/HO VS. X/L

B: H/HO VS. X/C

NOMENCLATURE

Symbol	Plot Symbol	Definition
b	-	Model skin thickness, inches
b/2	-	Percent span, wing
c	-	Specific heat of model material, BTU/lbm-°R
C_p	-	Specific heat at constant pressure of airstream, BTU/lbm-°R
g	-	Gravitational constant, ft/sec^2
h	H	Heat-transfer coefficient, BTU/ft^2-sec-°R
h_{ref}	HO	Reference heat transfer coefficient, BTU/ft^2-sec-°R
H	-	Enthalpy, BTU/lb
Ho	-	Stagnation enthalpy, BTU/lb
H_{aw}	-	Adiabatic wall enthalpy, BTU/lb
H_w	-	Model wall enthalpy, BTU/lb
k	-	Thermal conductivity coefficient, BTU/ft-sec-°R
M	MACH	Mach Number
ORB	ORB	Orbiter
P	-	Static pressure, psia
P_o	-	Stagnation pressure, psia
P_{oo}	-	Tunnel free stream pressure, psia
$\dot{q}$	-	Heat flux, BTU/ft^2-sec
$\dot{q}_{ot}$	-	Stagnation-point heat-transfer rate calculated using Fay and Riddell's equation, BTU/ft^2-sec.
R	-	Gas constant, Ft-lb/slug-°R
r	HAW/HT	Adiabatic wall temperature ratio, T_{AW}/T_o
R_e	-	Reynolds Number
R_n/l	RN/L	Unit Reynolds number, per foot

NOMENCLATURE (Continued)

Symbol	Plot Symbol	Definition
r_s	-	Radius of scaled one-foot sphere, inches
T	-	Temperature, °R
T_o	-	Stagnation temperature, °R
T_w	-	Model wall temperature, °R
t	-	Time, sec.
u	-	Velocity, ft/sec
W	-	Density of model material, Lbw/ft^3
x	-	Longitudinal distance coordinate, feet
α	ALPHA	Model angle of attack, deg.
μ	-	Viscosity of air
ρ	-	Density of air

Subscripts

Symbol	Plot Symbol	Definition
aw	-	Adiabatic wall
∞		Tunnel free stream conditions
o	0	Tunnel stagnation conditions
w		Model wall conditions

Superscripts

Symbol	Plot Symbol	Definition
'	-	Conditions behind shock

NOMENCLATURE (Concluded)

ADDITIONS TO STANDARD NOMENCLATURE

Symbol	Plot Symbol	Description
h/h_{ref}	H/HO	ratio of local heat transfer coefficient to reference heat transfer coefficient.
X/L	X/L	longitudinal position expressed as ratio of distance from orbiter nose to actual orbiter length.
X/C	X/C	chordwise position expressed as ratio of distance from leading edge to chord length.
Y(BP)	Y(BP)	distance from orbiter centerline in outboard direction.
2Y/B	2Y/B	spanwise position expressed as ratio of distance from fuselage centerline in the outboard direction to one half the span length.
β	BETA	angle of sideslip, degrees.
δ_e	ELEVON	surface deflection angle, positive deflection trailing edge down; degrees.
δ_r	RUDDER	rudder deflection angle, degrees.

CONFIGURATION INVESTIGATED

The orbiter was an 0.006-scale representation of the modified VL70-000089B lines. The main body lines were defined by Grumman drawing SS-H-00326-11 and the nose was defined by Drawing SS-H-00326-15. The orbiter was constructed of Grumman material "G" (Stycast) with thin skin, 15-5 PH stainless steel inserts. The inserts were located on underside centerline region, left-hand wing underside and left-hand windshield. Thermocouples were spot welded to the skin and clamped in bundles at convenient locations within the model. The model had no provisions for elevon, rudder, or body flap deflections.

The model configuration consisted of the following components:

Components	Description
B_{10}	Fuselage per -89B lines, 2A configuration
C_5	Orbiter canopy used on fuselage B_{10}
D_7	Manipulator housing per -93 lines, 2A configuration
F_4	Aft body flap used on fuselage B_{10}
M_3	OMS Pods per -94A lines, 2A configuration
V_5	Centerline vertical tail, double wedge airfoil with rounded leading edges
W_{87}	Wing per -93 lines. Used on fuselage B_{10}

Table III and Figure 1 provide a detailed description of the model components.

MODEL INSTRUMENTATION

The orbiter was instrumented with 57 iron-constantan thermocouples spot welded to thin skin (nominally 0.030-inch) 15-5 PH stainless steel inserts. The leads were 50 feet in length and were connected to 18 pin connectors. The exact location of each thermocouple is presented in Table IV and illustrated in Figure 2.

TEST FACILITY DESCRIPTION

The Langley Mach 8.0 Variable-Density Hypersonic tunnel is located in Building 1247D and is under the direction of the Aerophysics Division. This tunnel is used for fundamental aerodynamic and fluid dynamic investigation over large Reynolds Number ranges obtaining pressure and heat transfer measurements. The test medium is air and is heated by a combination of dowtherm and electrical resistance heaters. The models are sting mounted with injection from the bottom of the test section after flow has been established. The tunnel has an axially symmetric contoured nozzle. The tunnel cross section is 18 inches in diameter with a core of 4 to 14 inches depending on pressure.

Examples of operating conditions are as follows:

Stagnation pressure (psia)	15 to 2930
Stagnation temperature °(R)	1160 to 1510
Mach Number	7.5 to 8.0
Reynolds Number (1/Ft)	0.1×10^6 to 12.0×10^6
Running time (sec, for Exhaust into vacuum tank Exhaust into Atmosphere	 90 600

TEST PROCEDURES

Heat transfer data were obtained by measuring the temperature rise over a period of time from a total of 57 iron-constantan thermocouples. The model was injected into the flow stream from the bottom of the test section and held on tunnel center line for approximately 3 seconds, during which time temperature measurements were taken. Model angle of attack had to be preset manually before securing the test section for testing.

A maximum of 54 thermocouples could be recorded at any given time. Temperature measurements were collected through the Beckman Data Acquisition system. The thermocouple leads were routed through the model support system and connected to a connector panel. Leads that were exposed to flow conditions were wrapped with asbestos tape.

Prior to testing, a thermocouple heat response check, through the data system, was performed on all thermocouples. As an aid in making this check, a fiberglass mask with thermocouple locating holes in it was provided. By placing the tip of a soldering iron to the hole, an accurate and quick response could be obtained.

The model was leveled in pitch and roll by means of a leveling block which attached to the top of the orbiter.

DATA REDUCTION

Heat transfer data were computed using the following equations and procedures:

The thermocouple heat-transfer data were reduced by the one-dimensional thin wall equation:

$$\dot{q} = Wcb \frac{dT_w}{dt}, \text{ Btu/ft}^2\text{-sec}$$

where the symbols are as defined in the Nomenclature section.

The theoretical stagnation-point heat-transfer rate was calculated using Fay and Riddell's equation:

$$\dot{q}_{ot} = 0.94 \ (\rho_w \mu_w)^{0.5} \ (\rho_o' \mu_o' / \rho_w \mu_w)^{0.4} \ (H_o - H_w) \ (du/dx)^{0.5}$$

where

$$\mu = \frac{0.0232 \times 10^{-6} \ T^{0.5}}{1 + (220/T)}$$

and

$$\frac{du}{dx} = (1/r_s) \ [2RT \ (1 - P_\infty / P_o')]^{0.5}$$

Local heat transfer coefficient for each thermocouple was computed by:

$$h_{local} = \frac{\dot{q}}{r \ T_o - T_w}$$

at $r = 1.0, 0.85$

The ratio of the local heat-transfer coefficient to the reference heat-transfer coefficient was computed by:

$$\frac{h}{h_{ref}}$$

where

$$h_{ref} = \frac{\dot{q}_{ot}}{rT_o - T_w}$$

at $r = 1.0$

The ratio of the heat-transfer coefficient at adiabatic wall-temperature ratios of $r = 0.85, 1.0$ to the reference heat-transfer coefficients was computed.

TABLE I.

TEST : OH13 DATE : June 1973

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per unit length)	STAGNATION PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
8.0	1×10^6/ft	200	775
8.0	2×10^6/ft	450	850
8.0	3×10^6/ft	700	925
8.0	4×10^6/ft	950	900
8.0	6×10^6/ft	1470	970

BALANCE UTILIZED: None

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF			
SF			
AF			
PM			
RM			
YM			

COMMENTS: Model instrumented with 57 iron-constantan thermocouples.

TABLE II.

TEST: OH 13 VDHT-644 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: JUNE 1973

	DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES Mach	PARAMETERS/VALUES $\bar{c}_c$	PARAMETERS/VALUES δ_R	NO. OF RUNS	~~MACH NUMBERS~~ (OR ALTERNATE INDEPENDENT VARIABLE): RN/L 1	2	3	4	6	TEST RUN NUMBERS
I	(*)PØC01	$B_{10}C_5W_{87}D_7F_4M_3V_5$	0	0	8.0	0	0		14	15	16	17	18	
	2		30	↓	↓	↓	↓		1	2	3	6	7	
	3		35	↓	↓	↓	↓		8	13	9	12	10	
	4	+500°Paint	35	↓	↓	↓	↓				11			
II	(*)PØQ01	$B_{10}C_5W_{87}D_7F_4M_3V_5$	0	0	8.0	0	0		14	15	16	17	18	
	2		30	↓	↓	↓	↓		1	2	3	6	7	
	3		35	↓	↓	↓	↓		8	13	9	12	10	
	4	+500° Paint	35	↓	↓	↓	↓				11			

13

1 7 13 19 25 31 37 43 49 55 61 67 75 76

I H/HO COEFFICENTS RN/L HAW/HT 1

II QDCT RN/L MACH 1

α OR β SCHEDULES IDVAR(1) IDVAR(2) NDV

* B DATA SETS REFER TO LOWER FUSELAGE SURFACE.
C DATA SETS REFER TO ORBITER CANOPY.
W DATA SETS REFER TO LOWER WING SURFACE.

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT: Body - (B_{10})

GENERAL DESCRIPTION: Fuselage. 2A Configuration lightweight orbiter.
per Rockwell lines VL70-000089B model scale = 0.00593

DRAWING NUMBER VL70-000089B
VL70-000092. 93. 94A

DIMENSION:	FULL SCALE	MODEL SCALE
Length - in	1328.3	7.87682
Max Width in (@ X_O = 1528.3)	265.0	1.57145
Max Depth in (@ X_O = 1480.52)	248.0	1.47064
Fineness Ratio	5.012	5.012
Area - FT^2		
Max Cross-Sectional	456.4	0.01605
Planform		
Wetted		
Base		

TABLE III. - Continued.

MODEL COMPONENT: Orbiter Canopy (C_5)

GENERAL DESCRIPTION: Orbiter canopy for lightweight Model Scale = 0.00593

DRAWING NUMBER VL 70 000092

DIMENSION:	FULL SCALE	MODEL SCALE
Sta. fwd bulkhead in.	391.0	2.31863
Sta. TE - in.	560.0	3.32080
Canopy body intersection, in.	391.0	2.31863

TABLE III. - Continued.

MODEL COMPONENT: Manipulator Housing (D_7)

GENERAL DESCRIPTION: 2A configuration per Rockwell lines
VL70-000093 - model scale = 0.00593

DRAWING NUMBER VL70-000093, SS-A-00092

DIMENSION:	FULL SCALE	MODEL SCALE
Length - in	881.0	5.22433
Max Width - in.	51.0	0.30243
Max Depth - in.	23.0	0.13639
Fineness Ratio	-	-
Area		
Max Cross-Sectional	-	-
Planform	-	-
Wetted	-	-
Base	-	-

Location at:

℄ fuselage BP = 0.0
WP = 500.0 in FS
X_o 426.0 to X_o 1307.0 in. FS

TABLE III. - Continued.

MODEL COMPONENT: Body Flap (F_4)

GENERAL DESCRIPTION: Aft body flap used on lightweight orbiter configuration. Model Scale = 0.00593

DRAWING NUMBER VL-70-000094A. SS-A-0092

DIMENSION:	FULL SCALE	MODEL SCALE
Length, in.	84.70	0.50227
Max Width, in.	265.00	1.57145
Max Depth	-	-
Fineness Ratio	-	-
Area, FT^2		
Max Cross-Sectional		
Planform	142.64	0.00502
Wetted	-	-
Base	38.65	0.00136

TABLE III. - Continued.

MODEL COMPONENT: OMS Pod (M_3)

GENERAL DESCRIPTION: 2A Lightweight orbiter configuration per Rockwell lines VL70-000094A.

Model Scale = 0.00593

DRAWING NUMBER VL70-000094A. SS-A-00092

DIMENSION:	FULL SCALE	MODEL SCALE
Length	346.0	2.05178
Max Width	108.0	0.64044
Max Depth	113.8	0.67483
Fineness Ratio	-	-
Area		
Max Cross-Sectional	-	-
Planform	-	-
Wetted	-	-
Base	-	-

℄ of OMS pod
Z_o = 463.9 in FS: WP400 + 63.9 = 463.9 in FS
Y_o = 80.0 in FS
Length: X_o 1214.0 to X_o 1560.0 = 346.0 in FS

TABLE III. - Continued.

MODEL COMPONENT: WING (Wg7) Lightweight Orbiter

GENERAL DESCRIPTION: Orbiter configuration per Rockwell lines VL70-00093.

Model Scale = 0.00593.

Note: Dihedral angle is defined at the lower surface of the wing at the 75.33 percent element line projected into a plane perpendicular to the FRL.

TEST NO. DWG. NO. VL70-000093

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2 Planform	2690.0	0.09459
Span (Theo) In.	936.682	5.55452
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	3.000	3.000
Aerodynamic Twist, degrees	+3.000	+3.000
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	-10.24	-10.24
0.25 Element Line	35.209	35.209
Chords: - in.		
Root (Theo) B.P.0.0.	689.24	4.08919
Tip, (Theo) B.P.	137.85	0.81745
MAC	474.81	2.81562
Fus. Sta. of .25 MAC	1136.89	6.74176
W.P. of .25 MAC	299.20	1.77426
B.L. of .25 MAC	182.13	1.08003
EXPOSED DATA		
Area (Theo) Ft^2	1752.29	0.06162
Span, (Theo) In. BP108	720.68	4.27363
Aspect Ratio	2.058	2.058
Taper Ratio	0.2451	0.2451
Chords		
Root BP108	562.40	3.33503
Tip 1.00 $\frac{b}{2}$	137.85	0.81745
MAC	393.03	2.33067
Fus. Sta. of .25 MAC	1185.31	7.02889
W.P. of .25 MAC	300.20	1.78019
B.L. of .25 MAC	143.76	0.85250
Airfoil Section (Rockwell Mod NASA) XXXX-64		
T/C@ Root $\frac{b}{2}$ = 0.485	0.10	0.10
T/C@ Tip $\frac{b}{2}$ = 1.00	0.12	0.12
Data for (1) of (2) Sides		
Leading Edge Cuff Planform Area Ft^2	190.33	0.00423
Leading Edge Intersects Fus M. L. @ Sta	560.0	3.32080
Leading Edge Intersects Wing @ Sta	1035.0	6.13755

TABLE III. - Concluded.

MODEL COMPONENT: VERTICAL (V_5) Lightweight orbiter configuration

GENERAL DESCRIPTION: Centerline vertical tail double wedge airfoil with rounded leading edge.

Model Scale = 0.00593

DRAWING NUMBER: VL 70-000095. SS-A-00092

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) Ft^2	413.25	0.01453
Planform	-	-
Span (Theo) In	315.72	1.87222
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	.507
Taper Ratio	0.404	.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	1.59220
Tip (Theo) WP	108.47	0.62323
MAC	199.81	1.18487
Fus. Sta. of .25 MAC	1463.50	8.67856
W. P. of .25 MAC	635.52	3.76863
B. L. of .25 MAC	0.0	0.0
Airfoil Section		
Leading Wedge Angle Deg	10.00	10.00
Trailing Wedge Angle Deg	14.92	14.92
Leading Edge Radius	2.00	0.01186
Void Area	13.17	0.00046
Blanketed Area	12.67	0.00045

TABLE IV. Orbiter Thermocouple Location

T/C No.	Skin Thick.	* Location y - b/2	* Location x/l - x/c	Remarks	T/C No.	Skin Thick.	* Location y - b/2	* Location x/l - x/c	Remarks
1	.033	Y=.047	.1536	Windshield	31	.0315	Y=.415	1.00	Fuselage
2	.031	Y=.047	.1612		32	.0315	b/2=.40	.225	Wing
3	.034	Y=.047	.1594		33	.033		.250	
4	.0375	Y=.213	.1588		34	.0312		.300	
5	.0375	Y=.196	.1657		35	.033		.400	
6	.0335	Y=.178	.1724		36	.0335		.500	
7	.033	Y=0	.0875	Fuselage	37	.032		.600	
8	.032		.100		38	.0315		.700	
9	.031		.125		39	.0315		.800	
10	.0305		.150		40	.0310		.900	
11	.030		.175		41	.034	b/2=.60	.175	
12	.031		.200		42	.032		.200	
13	.0295		.250		43	.031		.300	
14	.0295		.300		44	.033		.400	
15	.0295		.400		45	.032		.500	
16	.0302		.500		46	.032		.600	
17	.0312		.600		47	.0325		.700	
18	.0315		.700		48	.031		.800	
19	.031		.800		49	.0315		.875	
20	.0295		.900		50	.035	b/2=.80	.250	
21	.030		1.00		51	.033		.300	
22	.0305		1.025		52	.033		.400	
23	.0285	Y=.415	.350		53	.0315		.500	
24	.0285		.375		54	.032		.600	
25	.0315		.400		55	.032		.700	
26	.0325		.500		56	.0335		.800	
27	.0320		.600		57	.033		.850	
28	.0315		.700						
29	.0325		.800						
30	.0315		.900						

* model scale, in.

x/l = (t/c's 1 - 31)
x/c = (t/c's 32 57)

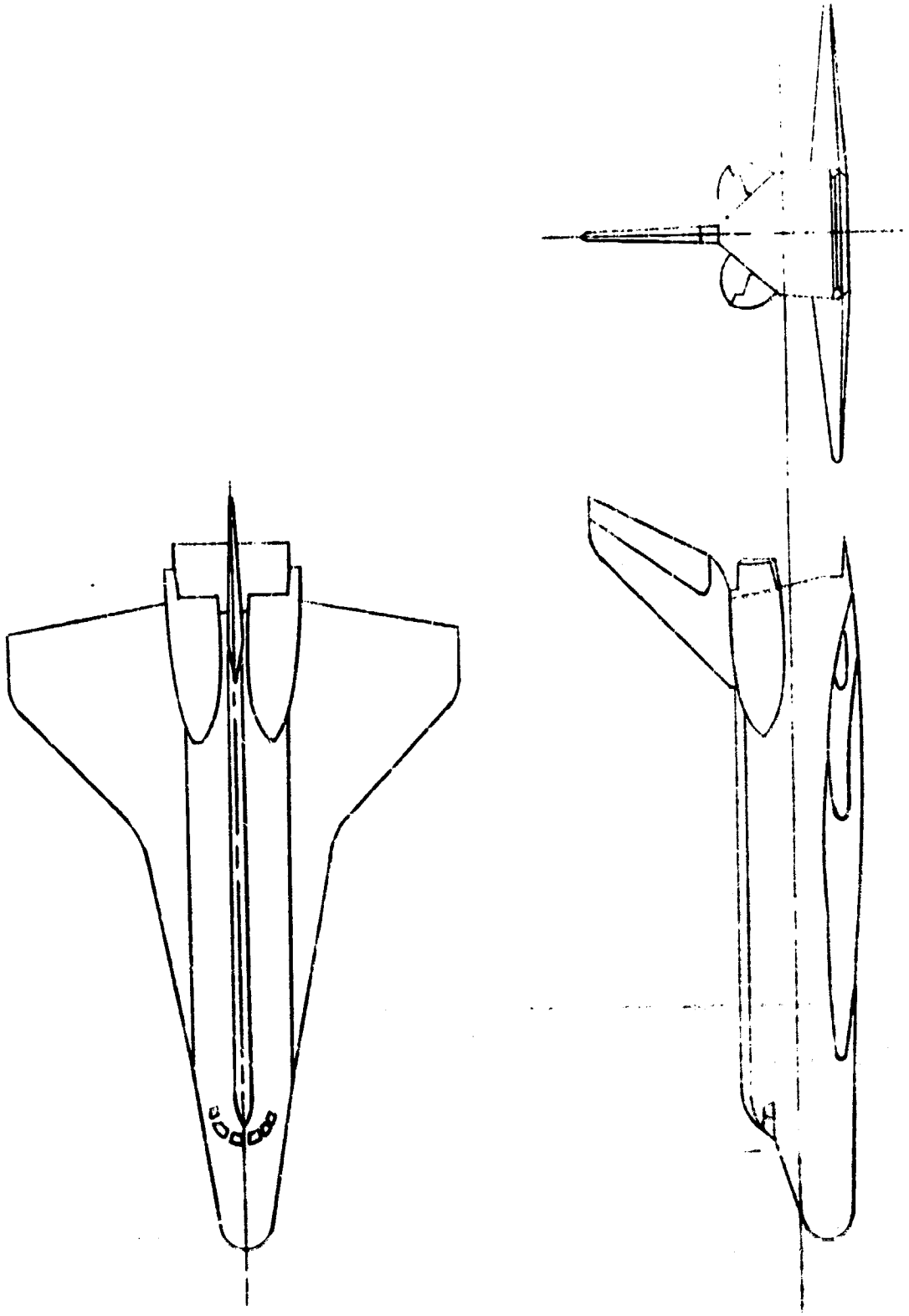


Figure 1. General Model Arrangement.

THERMOCOUPLE LOCATIONS

WINDSHIELD			Y_o 0			BP 70 Y = .415			.4 b/2 Y = 1.111			.6 b/2 Y = 1.667			.8 b/2 Y = 2.222		
NO.	DIST. FROM x_o 200	Y	NO.	X/L	DIST. FROM X_o 200	NO	X/L	DISTR. FROM X_o 200		X/C	DISTR. FROM L.E.	NO.	X/C	DISTR. FROM L.E.	NO.	X/C	DIST. FROM L.E.
1	1.210	.047	7	.0875	.689	23	.35	2.757	32	.225	.742	41	.175	.423	50	.25	.419
2	1.272	.047	8	.100	.788	24	.375	2.954	33	.25	.819	42	.2	.476	51	.3	.491
3	1.334	.047	9	.125	.985	25	.4	3.151	34	.3	.972	43	.3	.689	52	.4	.639
4	1.251	.213	10	.150	1.182	26	.5	3.939	35	.4	1.279	44	.4	.901	53	.5	.787
5	1.305	.196	11	.175	1.378	27	.6	4.726	36	.5	1.586	45	.5	1.114	54	.6	.934
6	1.358	.178	12	.20	1.595	28	.7	5.514	37	.6	1.893	46	.6	1.326	55	.7	1.081
			13	.25	1.969	29	.8	6.302	38	.7	2.200	47	.7	1.539	56	.8	1.222
			14	.3	2.363	30	.9	7.089	39	.8	2.507	48	.8	1.751	57	.85	1.301
			15	.4	3.151	31	1.0	7.877	40	.9	2.814	49	.875	1.911			
			16	.5	3.939												
			17.	.6	4.726												
			18	.7	5.514												
			19	.8	6.302												
			20	.9	7.089												
			21	1.0	7.877												
			22	1.025	8.074												

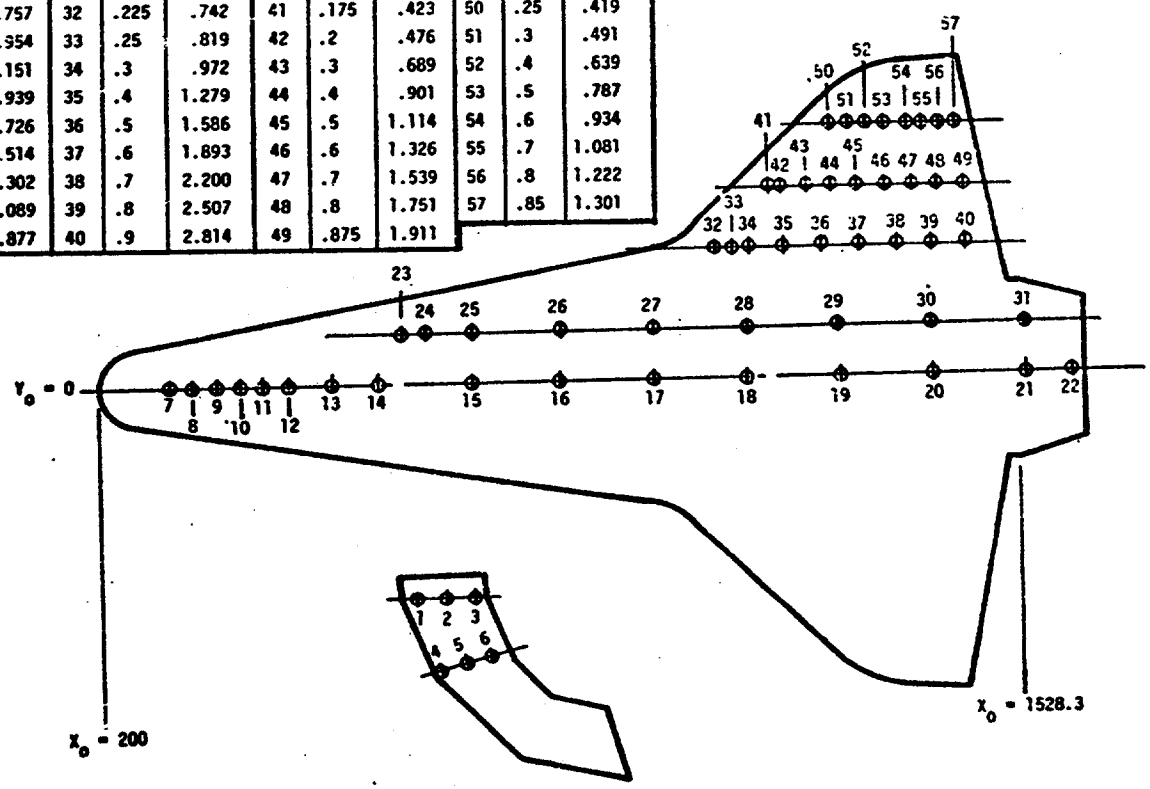


Figure 2. 41-OTS .006 Scale Orbiter T/C Locations.

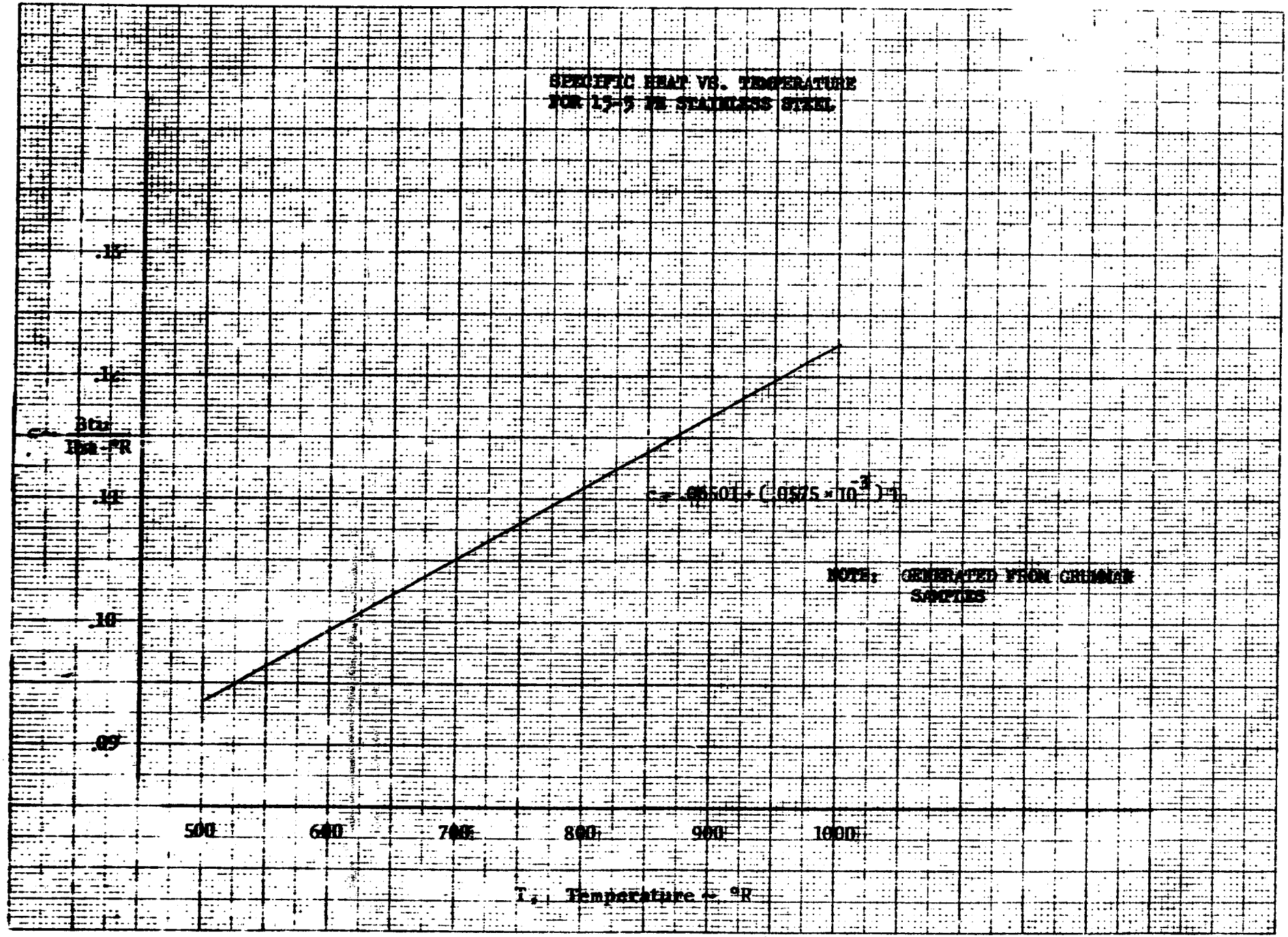


Figure 3. Specific Heat Curve.

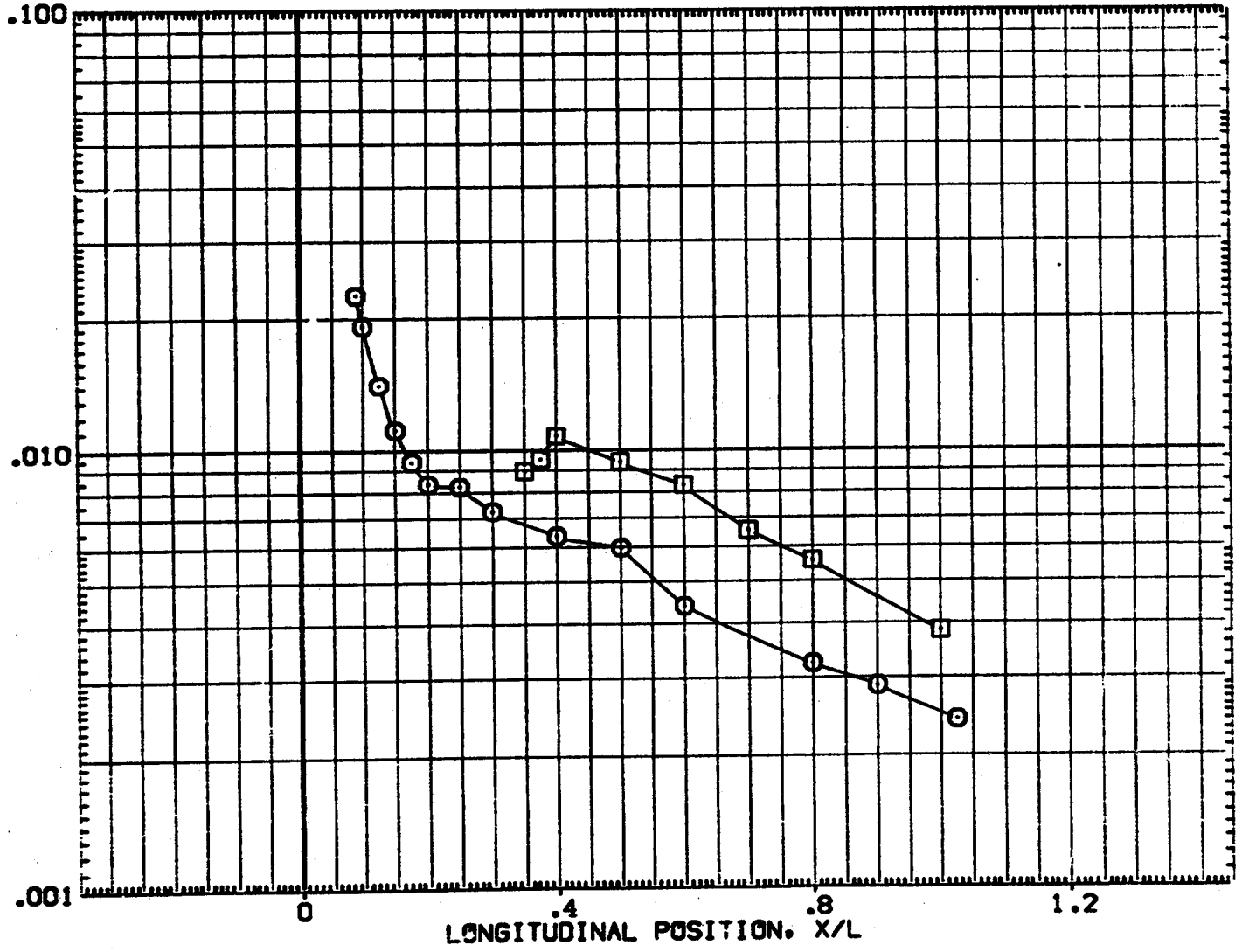
DATA FIGURES

OH13 B10C5W87D7F4M3V5 (BP0001)

SYMBOL	V(BP)	HAV/HT	RN/L
○	.000	.850	1.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



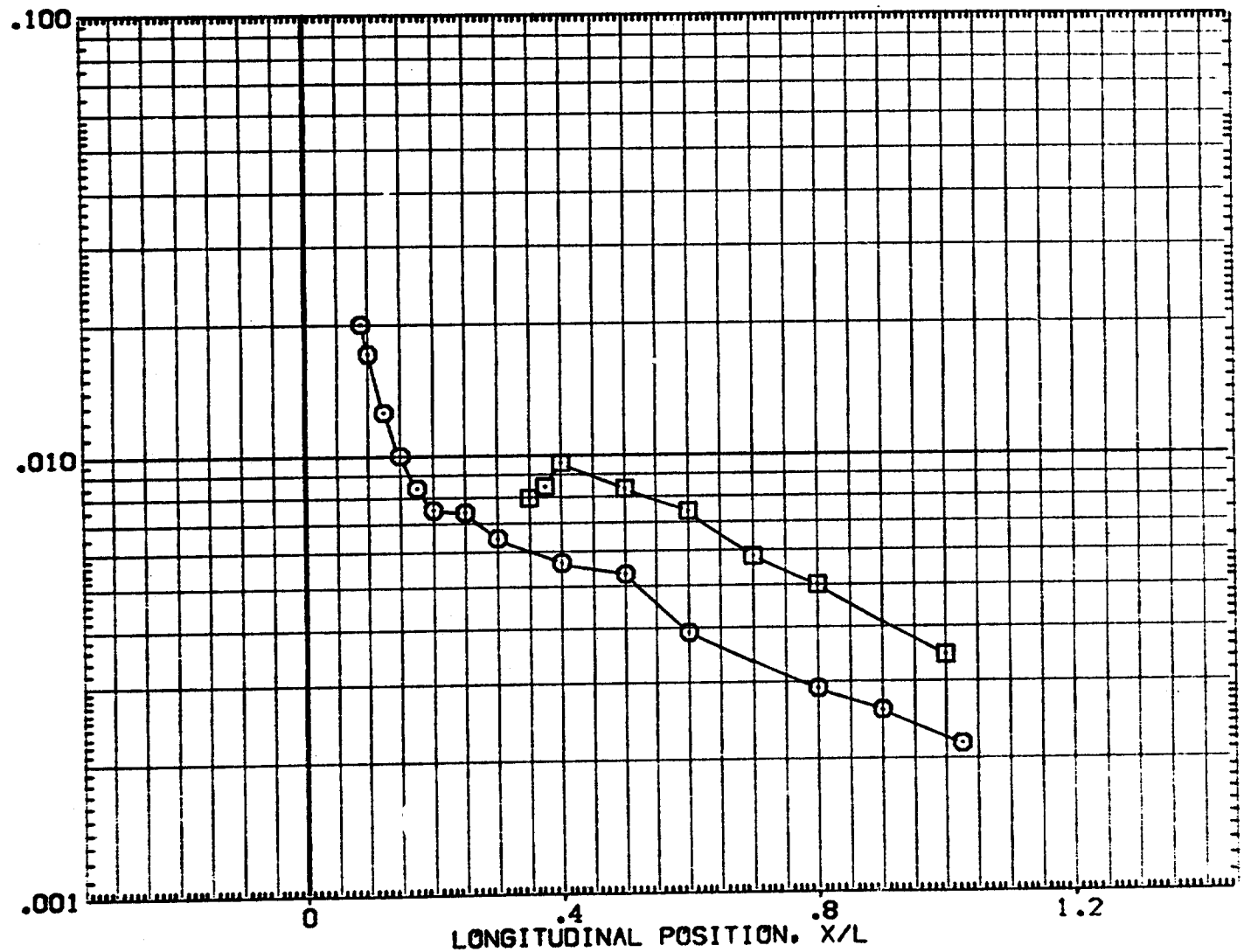
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0001)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	1.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



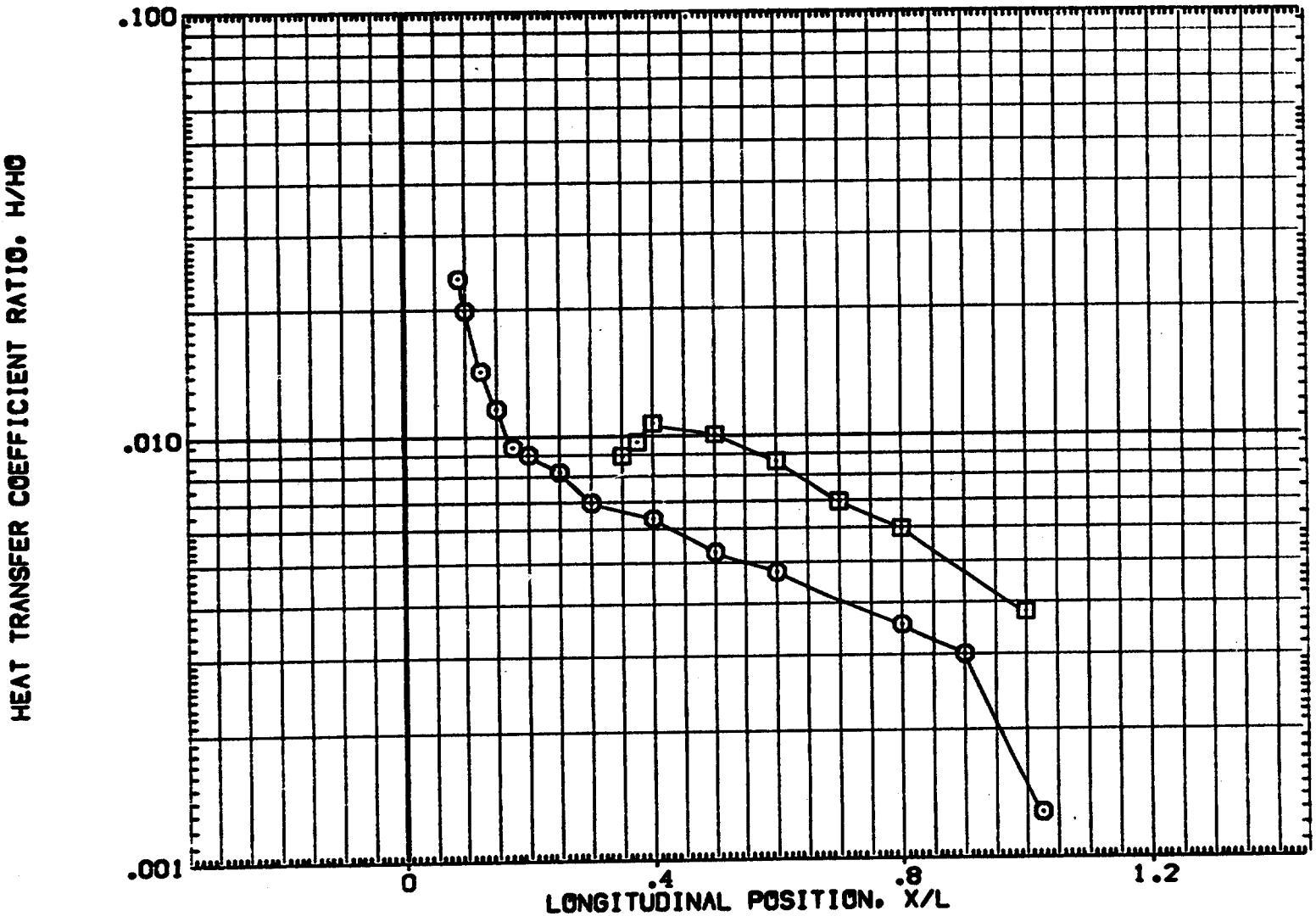
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0001)

SYMBOL	Y(BP)	HAW/HT	RN/L
○	.000	.850	2.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



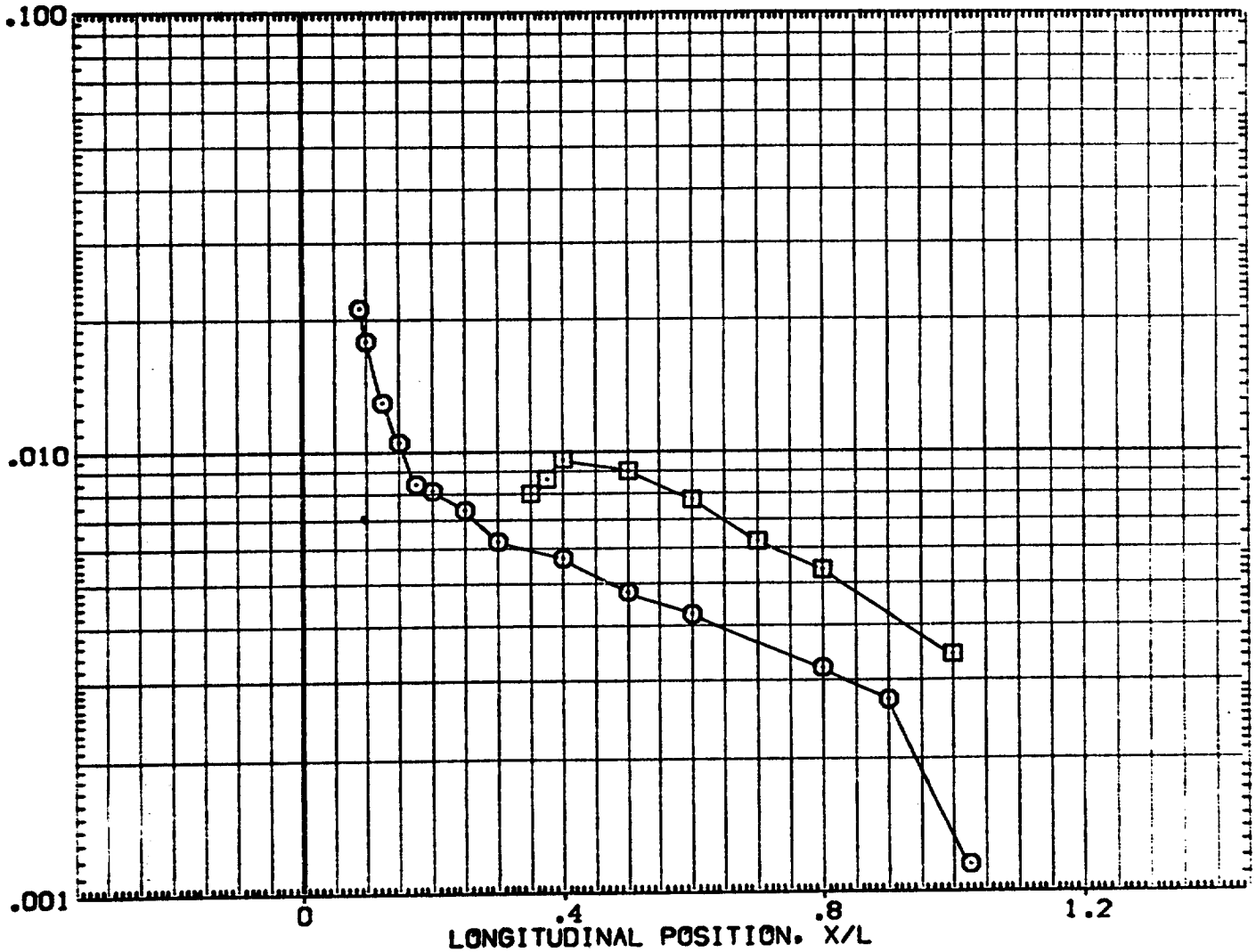
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0001)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	2.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



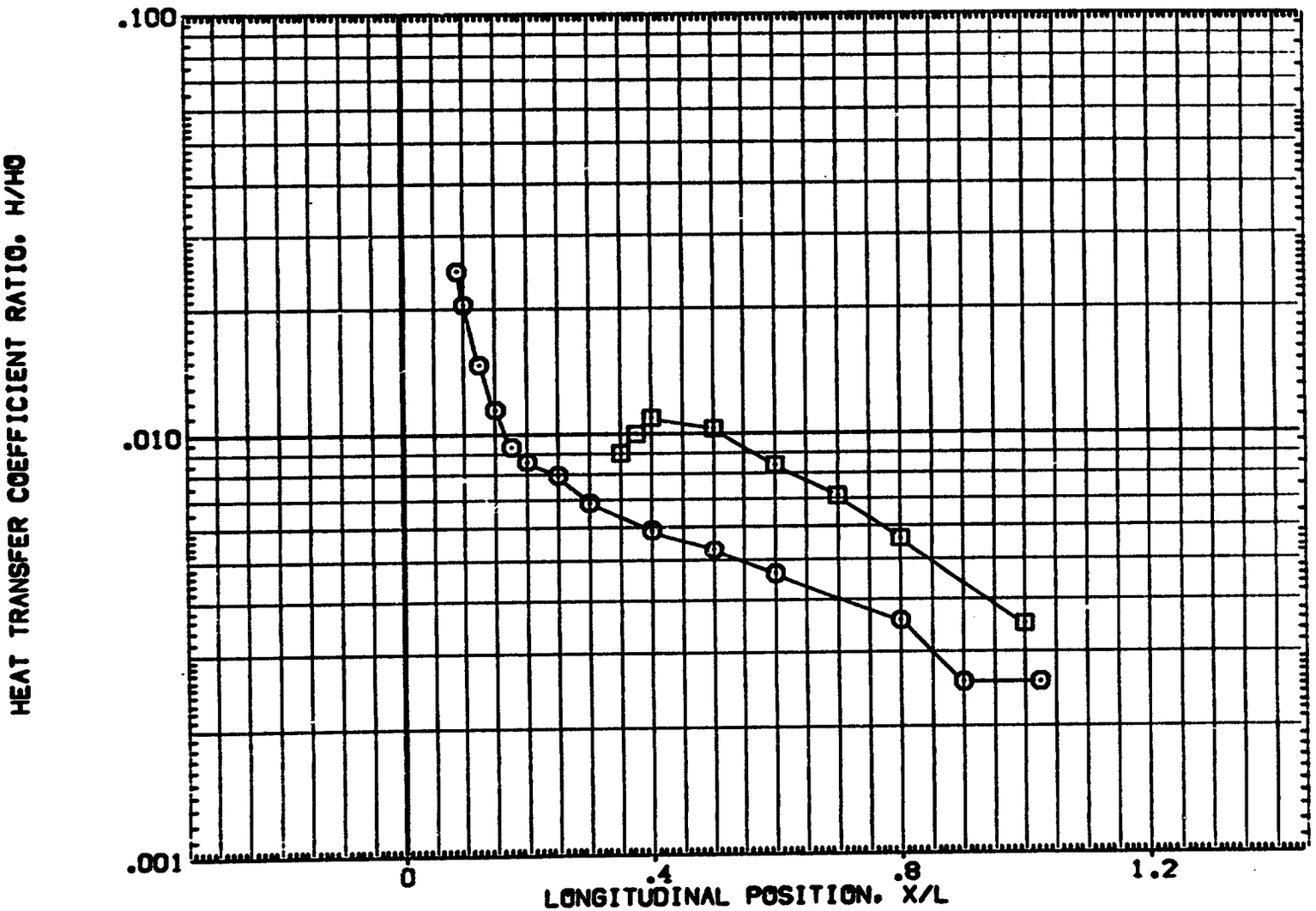
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0001)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	.850	3.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



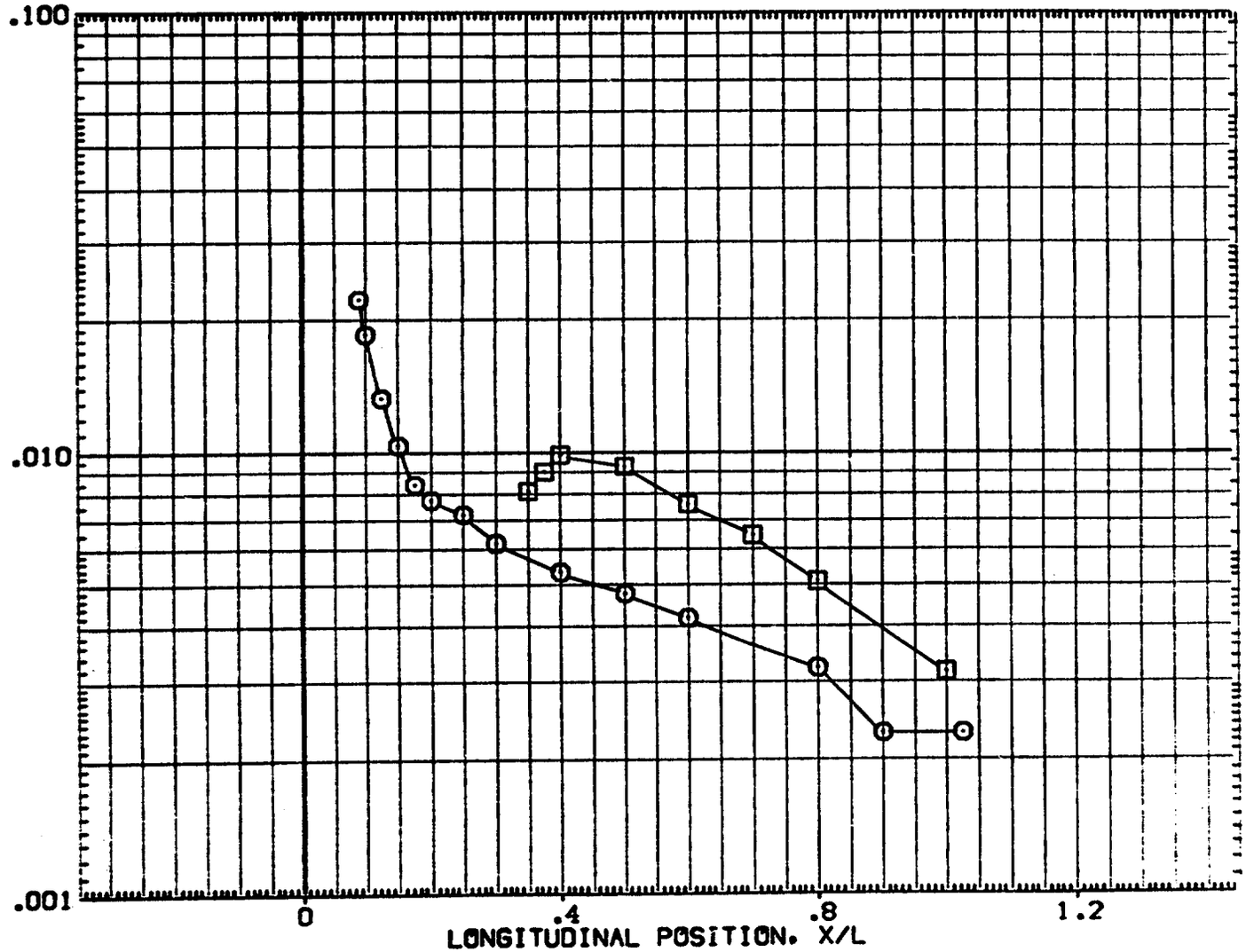
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0001)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	3.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



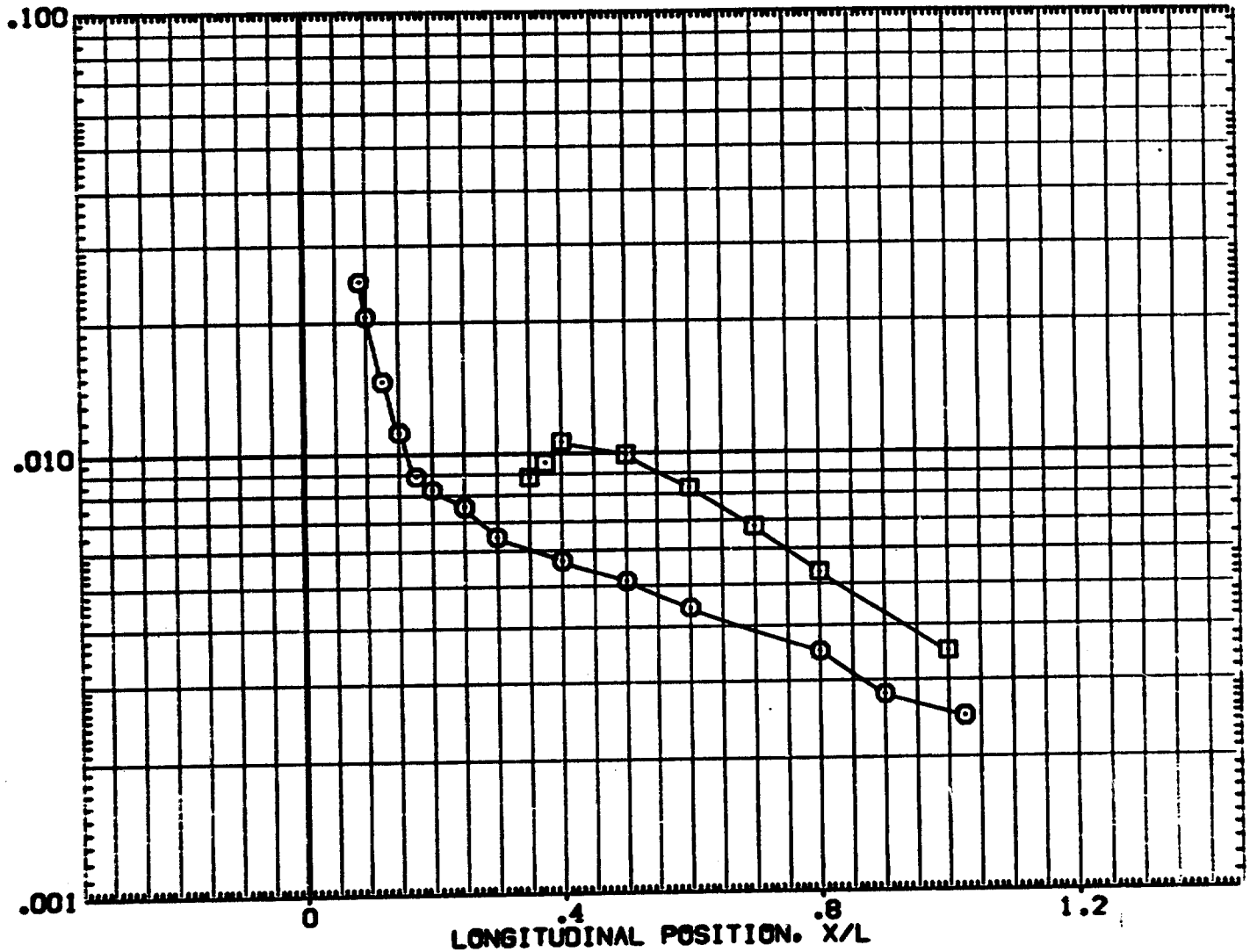
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0001)

SYMBOL	Y(BP)	HAW/HT	RN/L
○	.000	.850	4.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



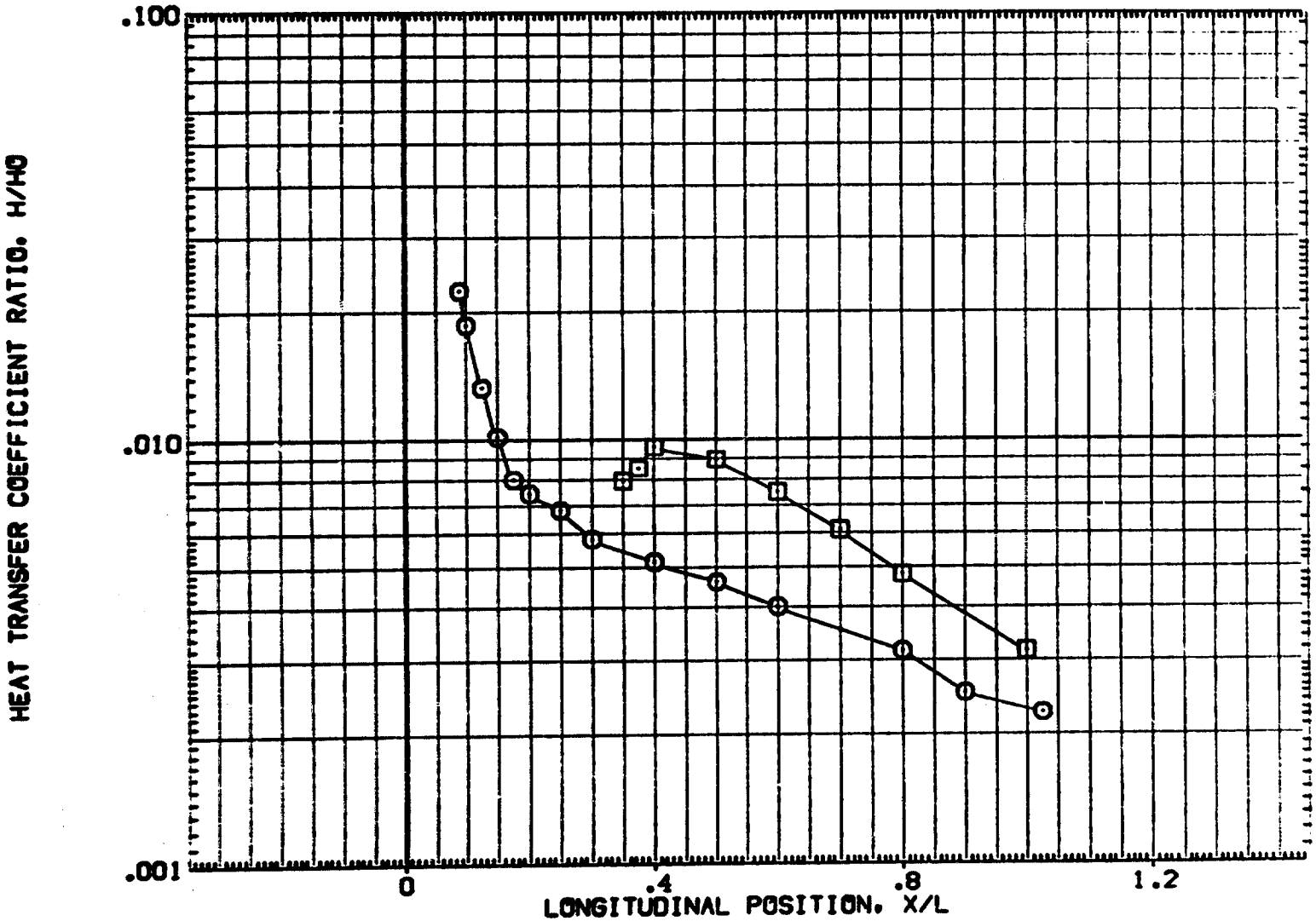
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0001)

SYMBOL	Y(BP)	HAW/HT	RN/L
○	.000	1.000	4.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



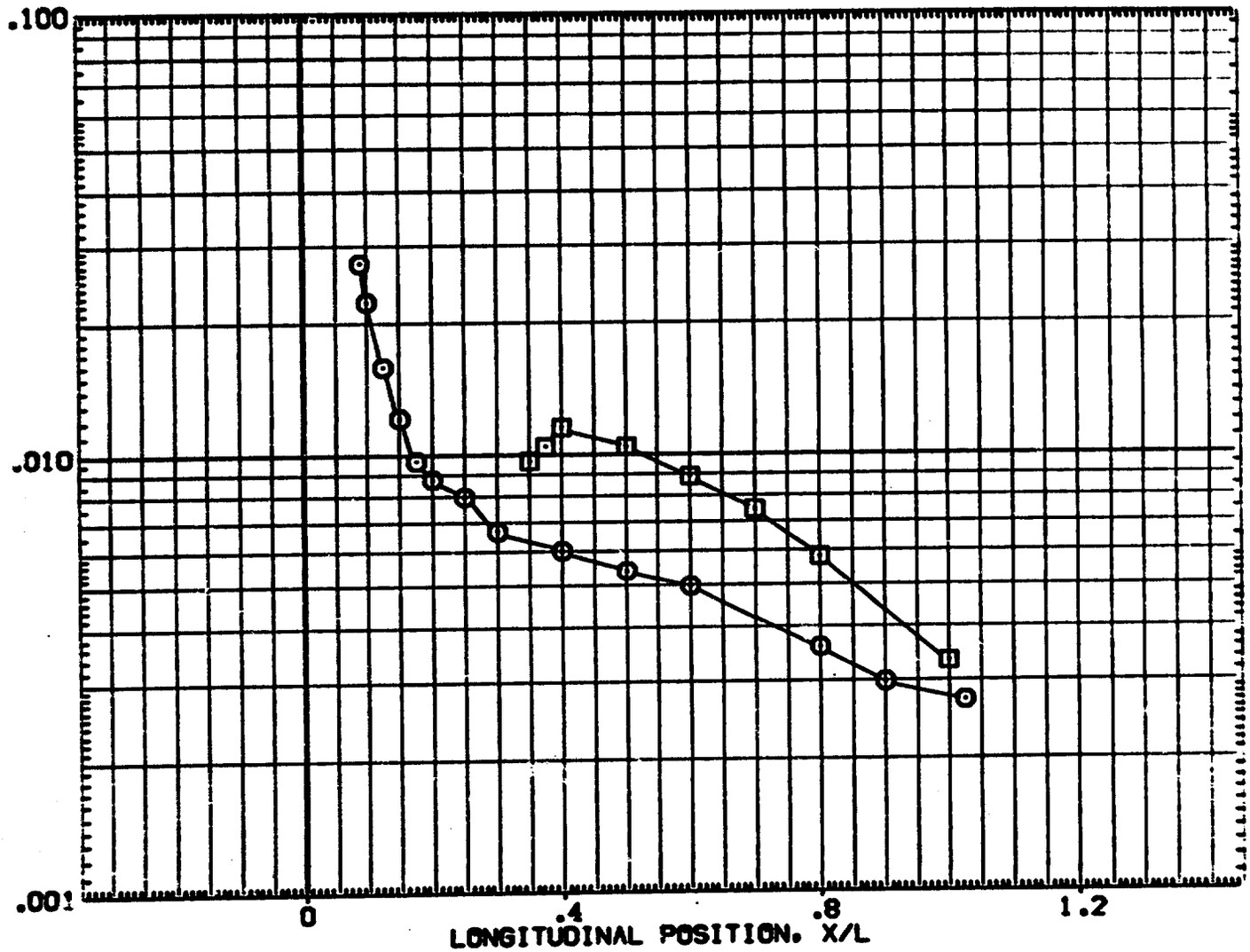
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0001)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	.850	6.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



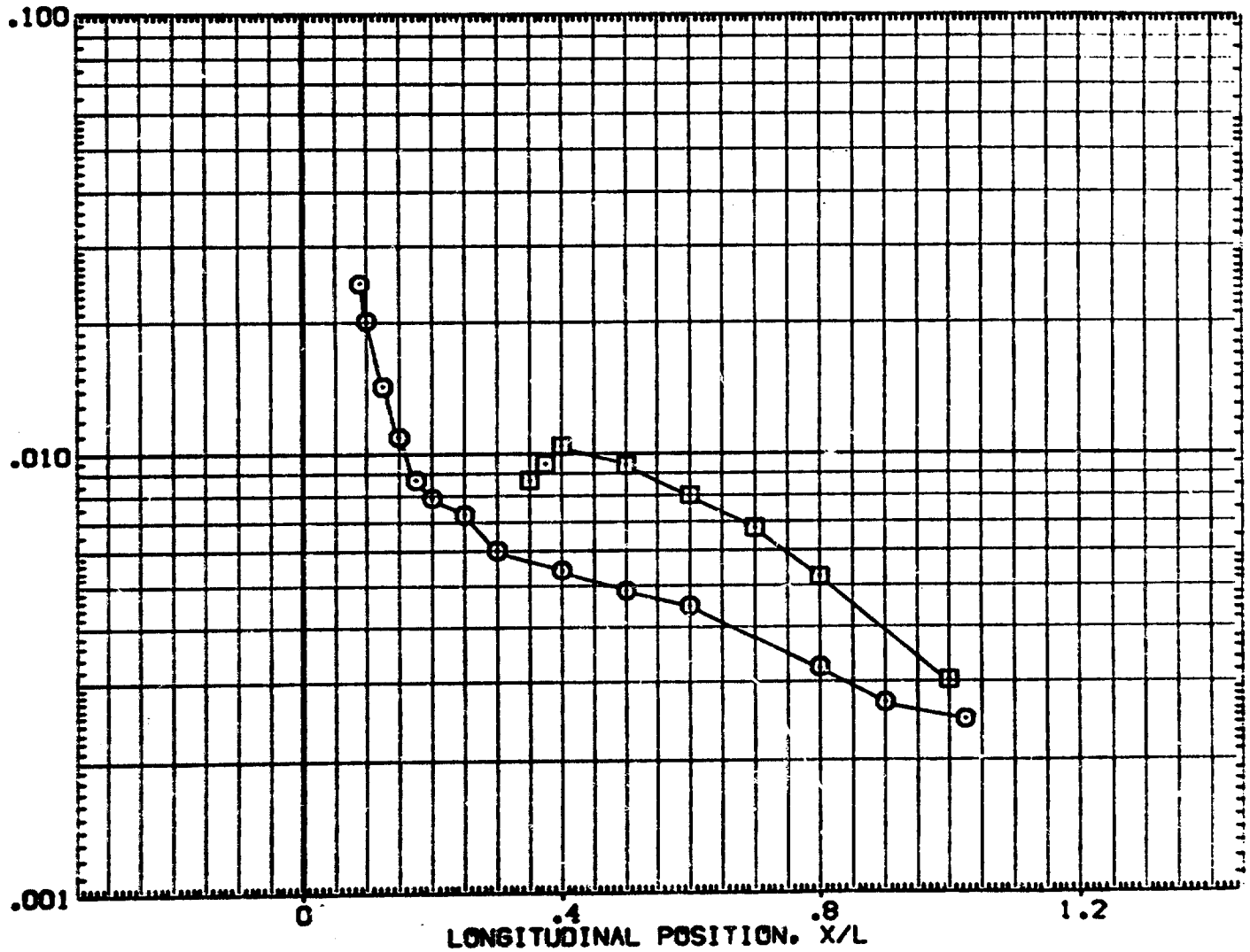
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0001)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	6.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



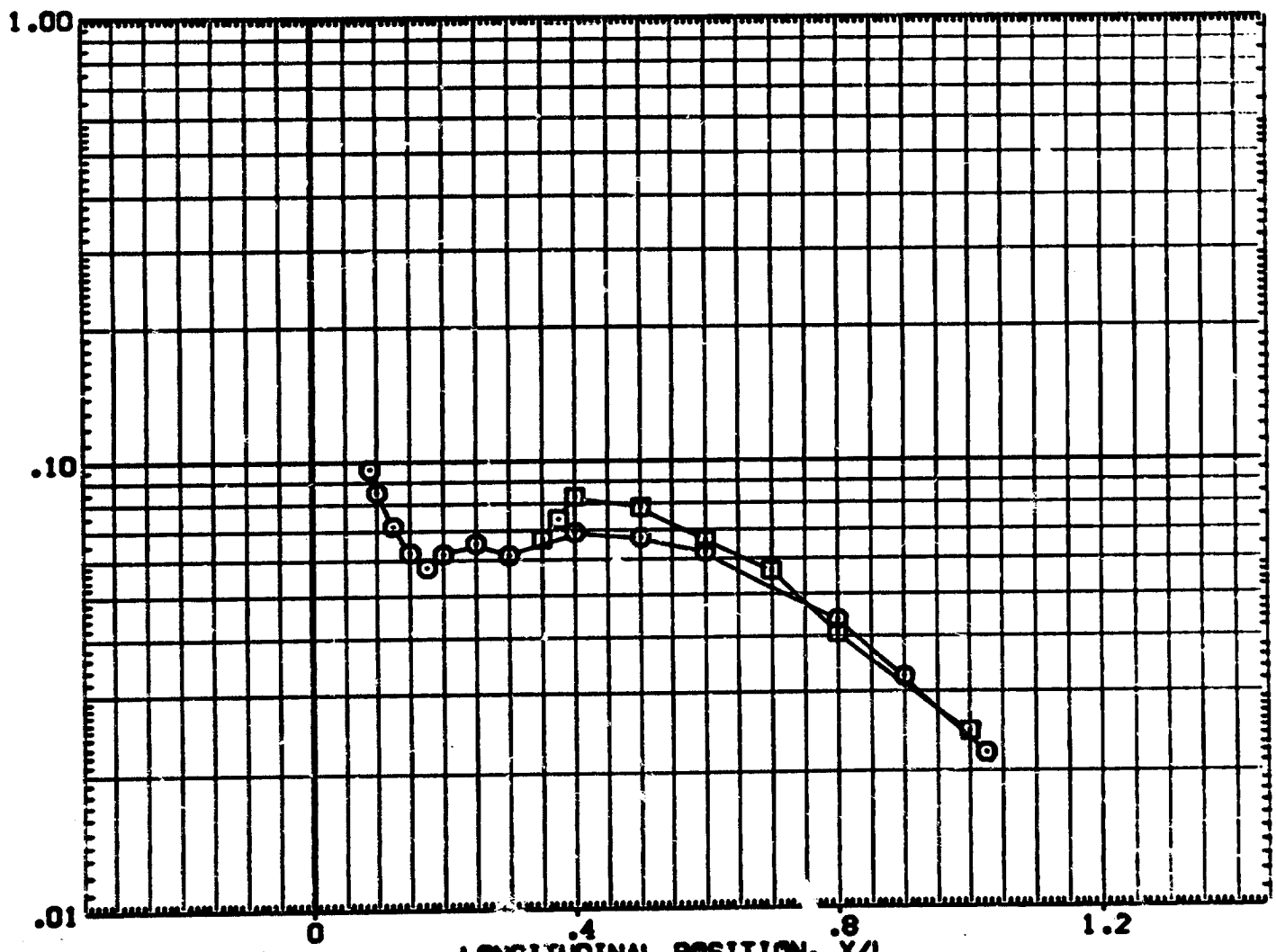
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	.850	1.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



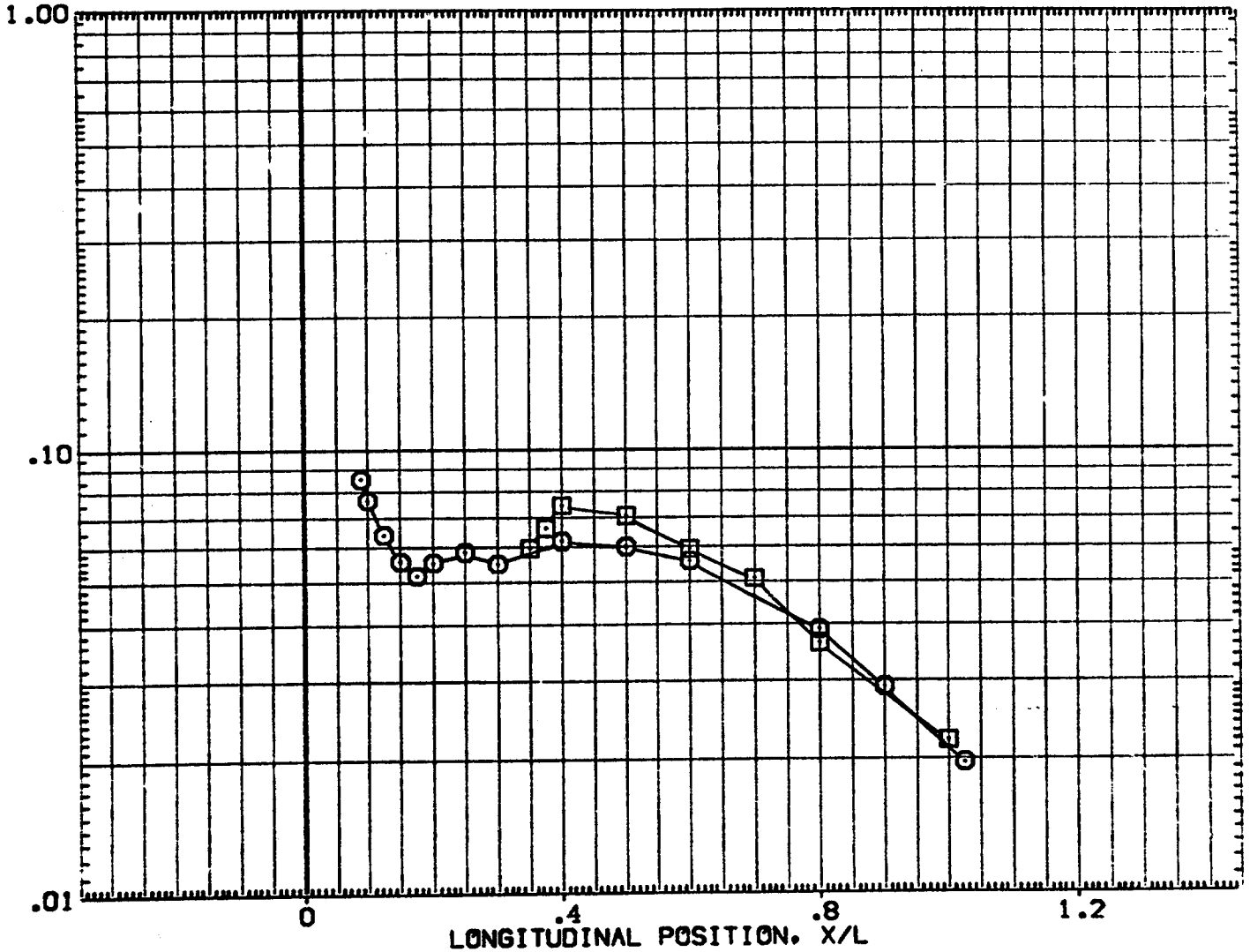
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

0H13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	1.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



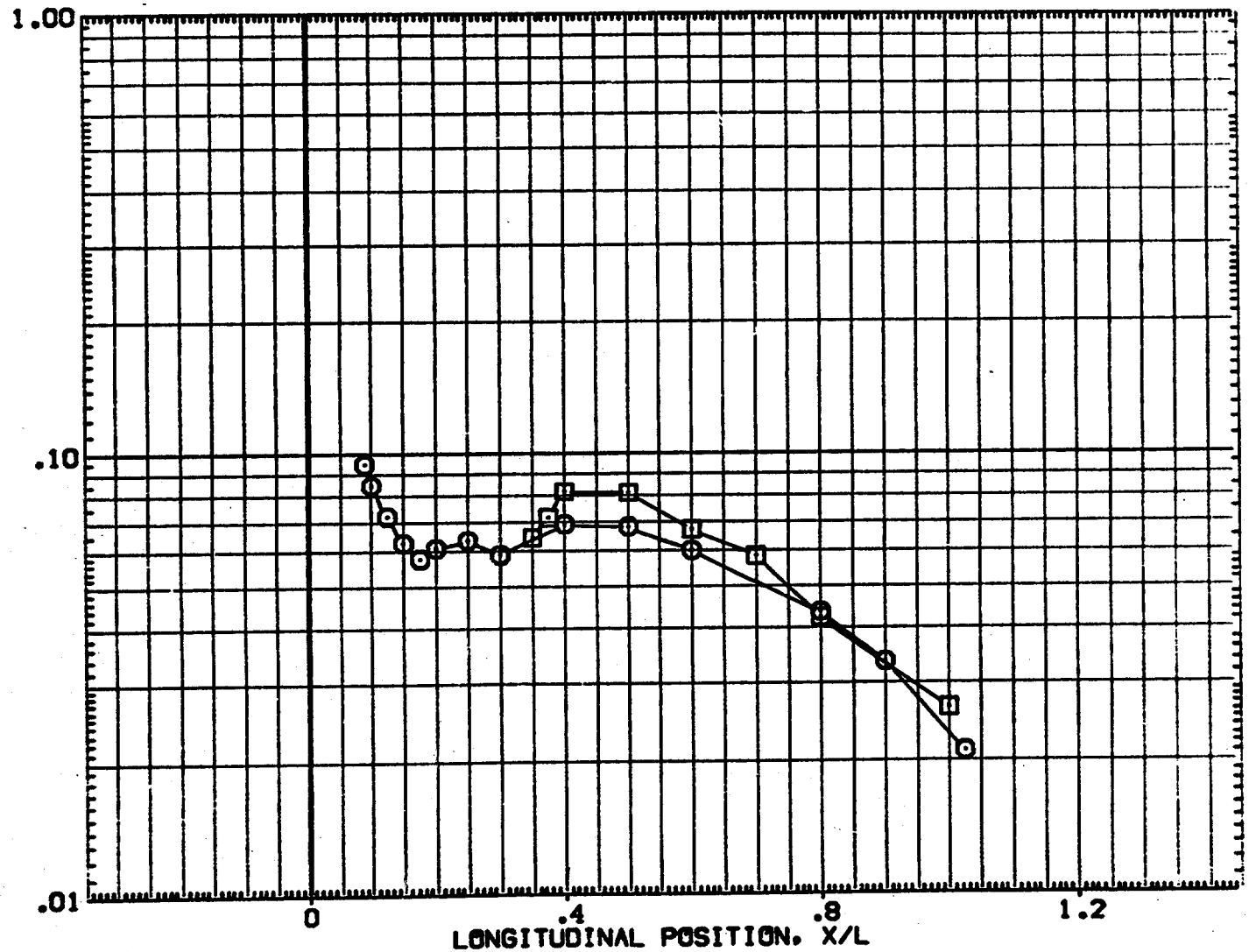
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	.850	2.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



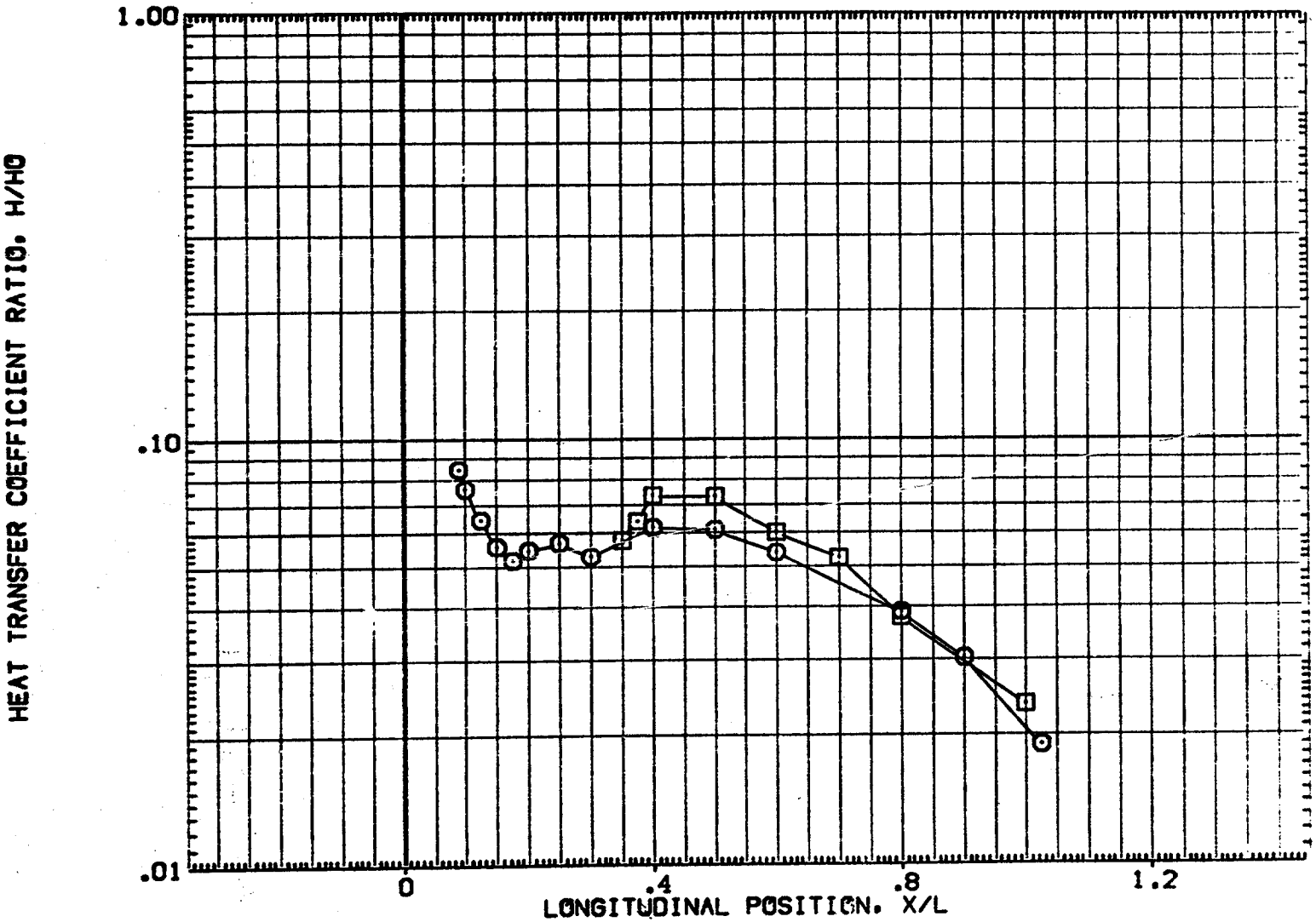
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	2.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



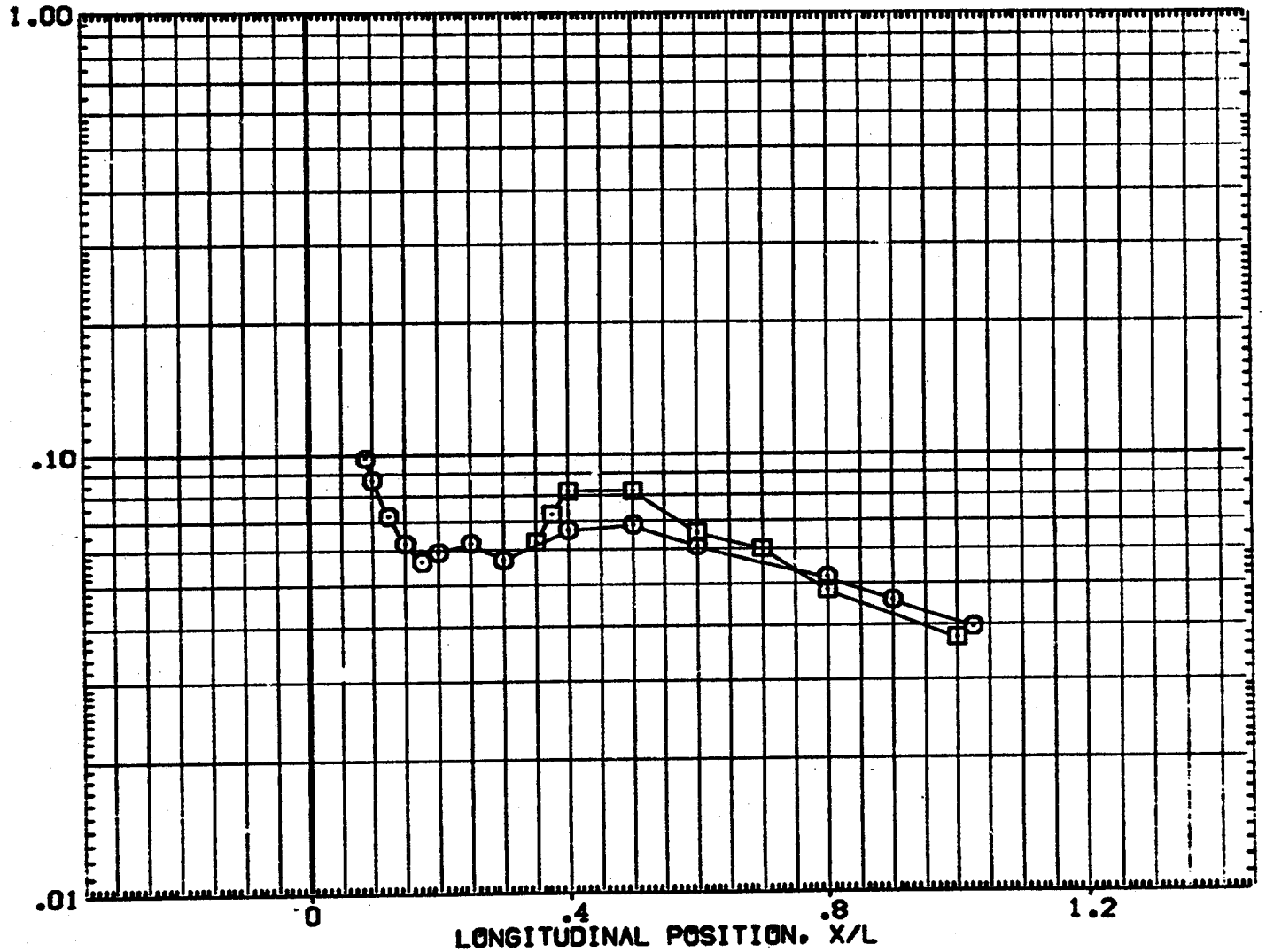
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	.850	3.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



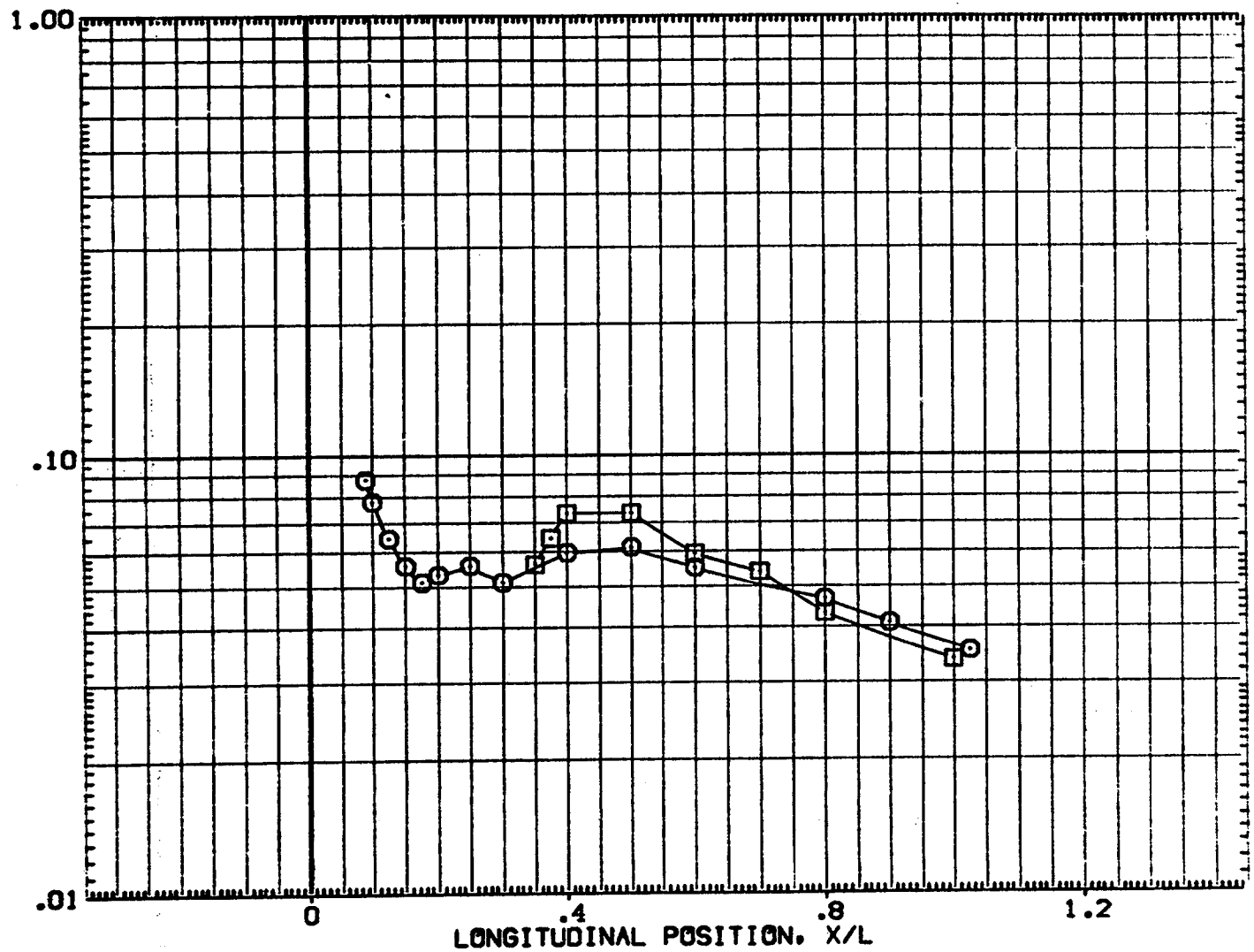
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	3.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



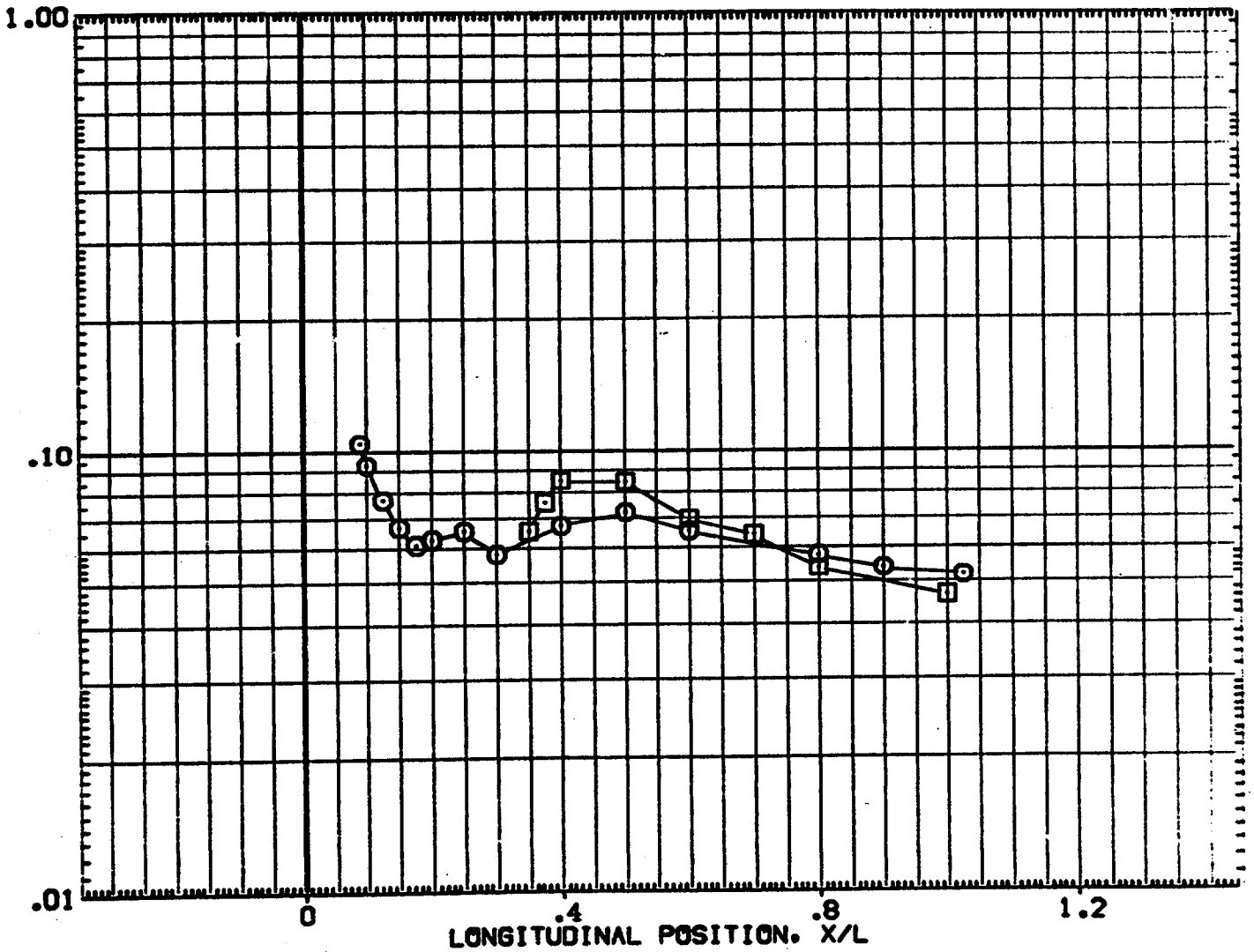
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	.850	4.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



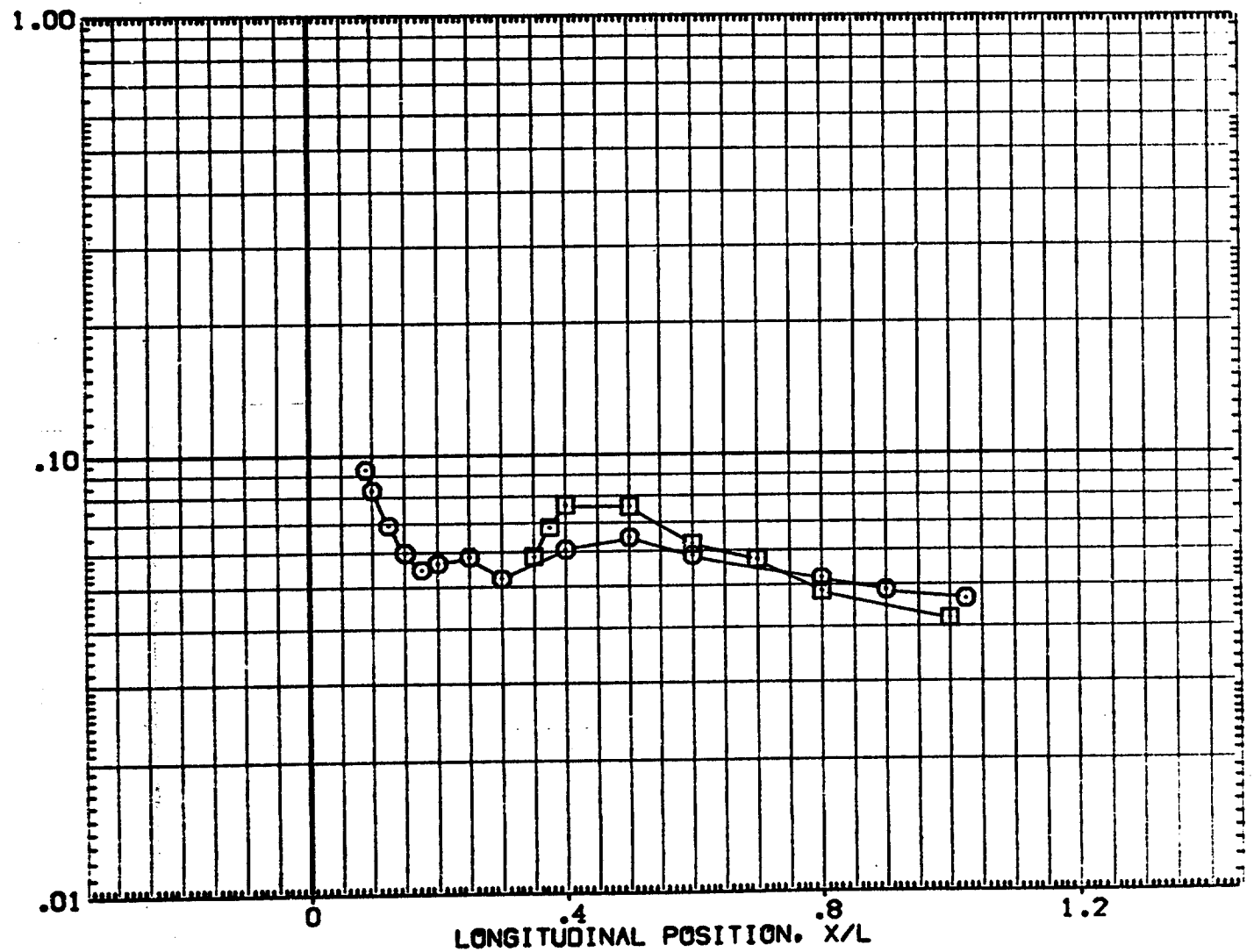
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	4.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



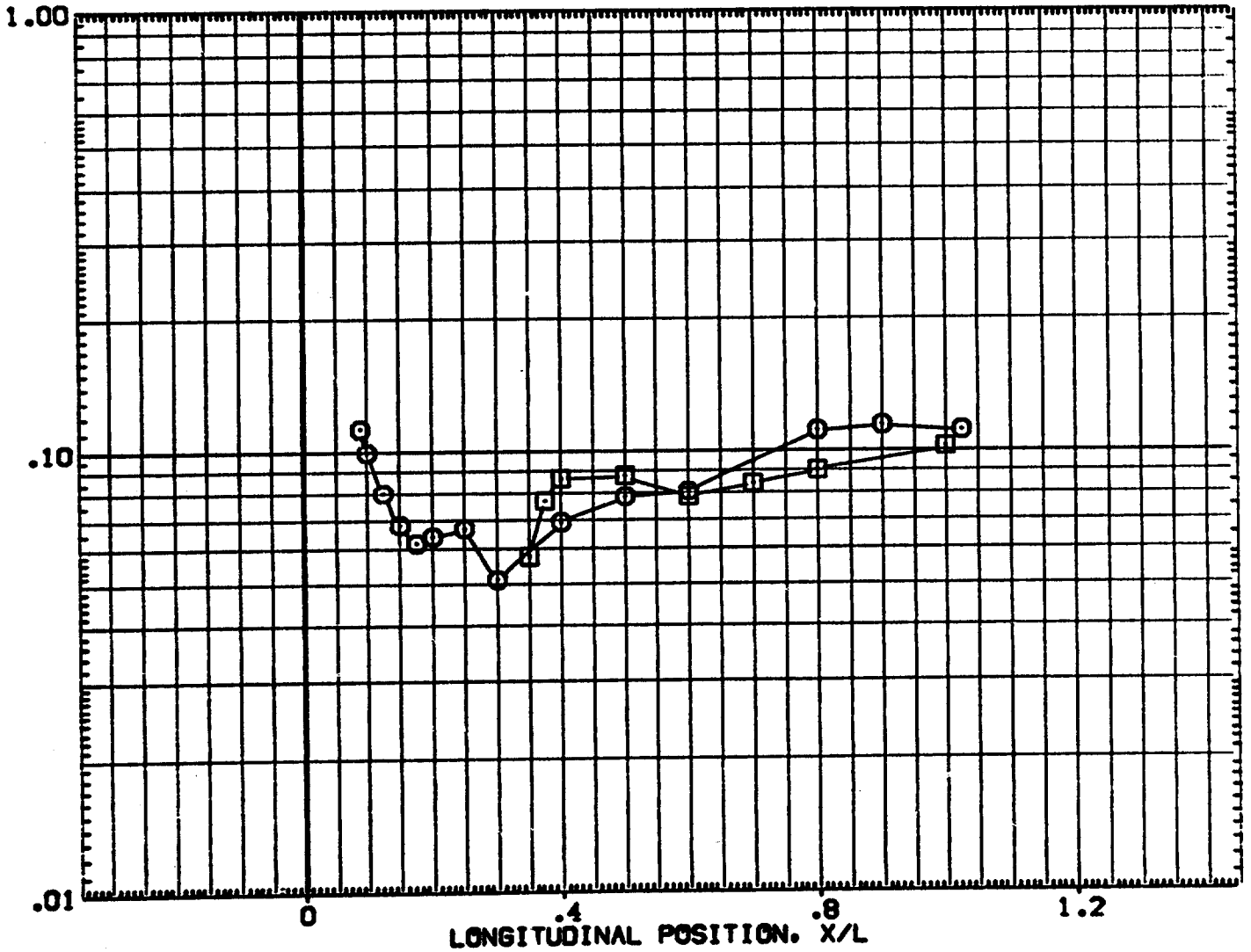
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	.850	6.000
□	70.000		

PARAMETRIC VALUES

MACH	9.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



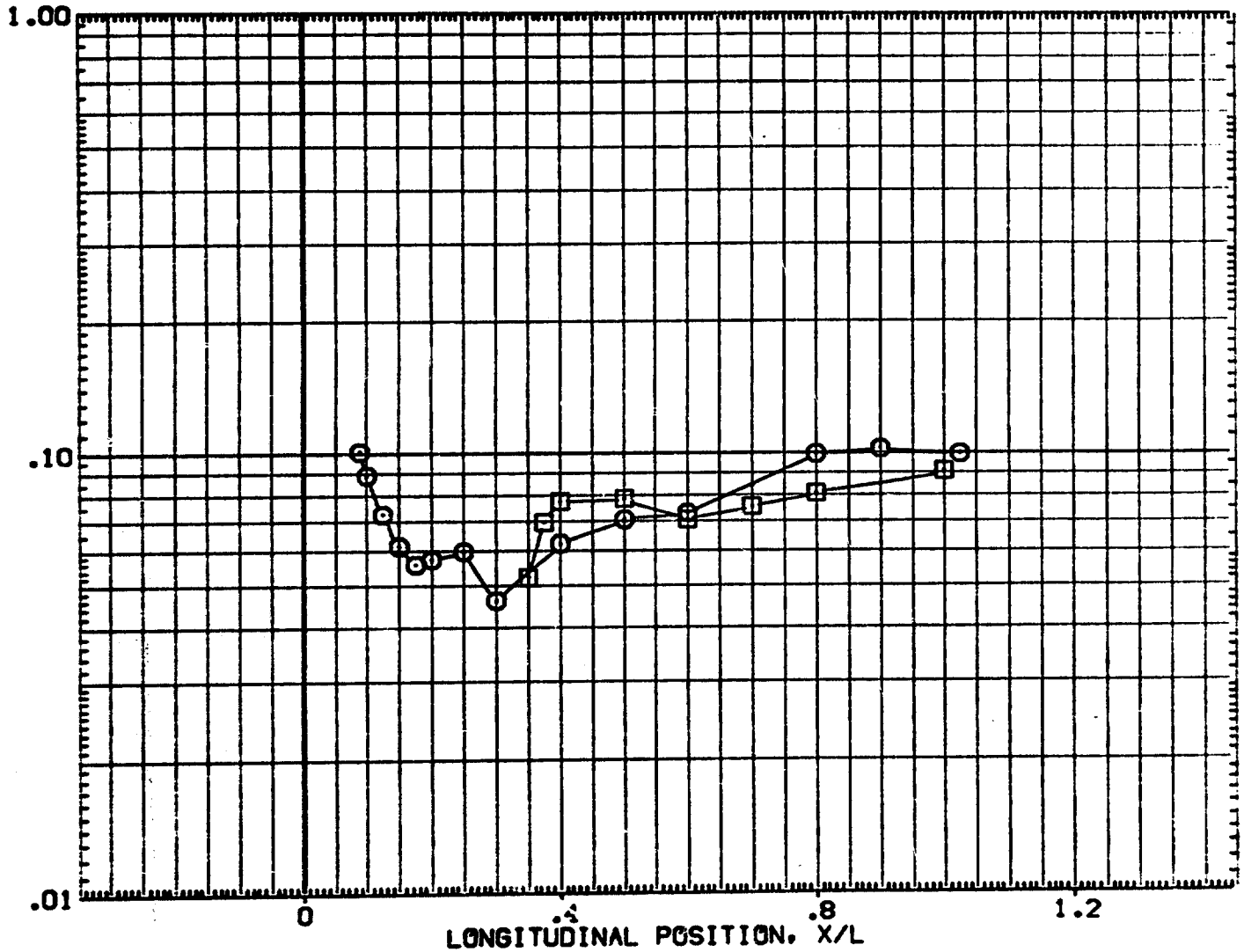
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	6.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



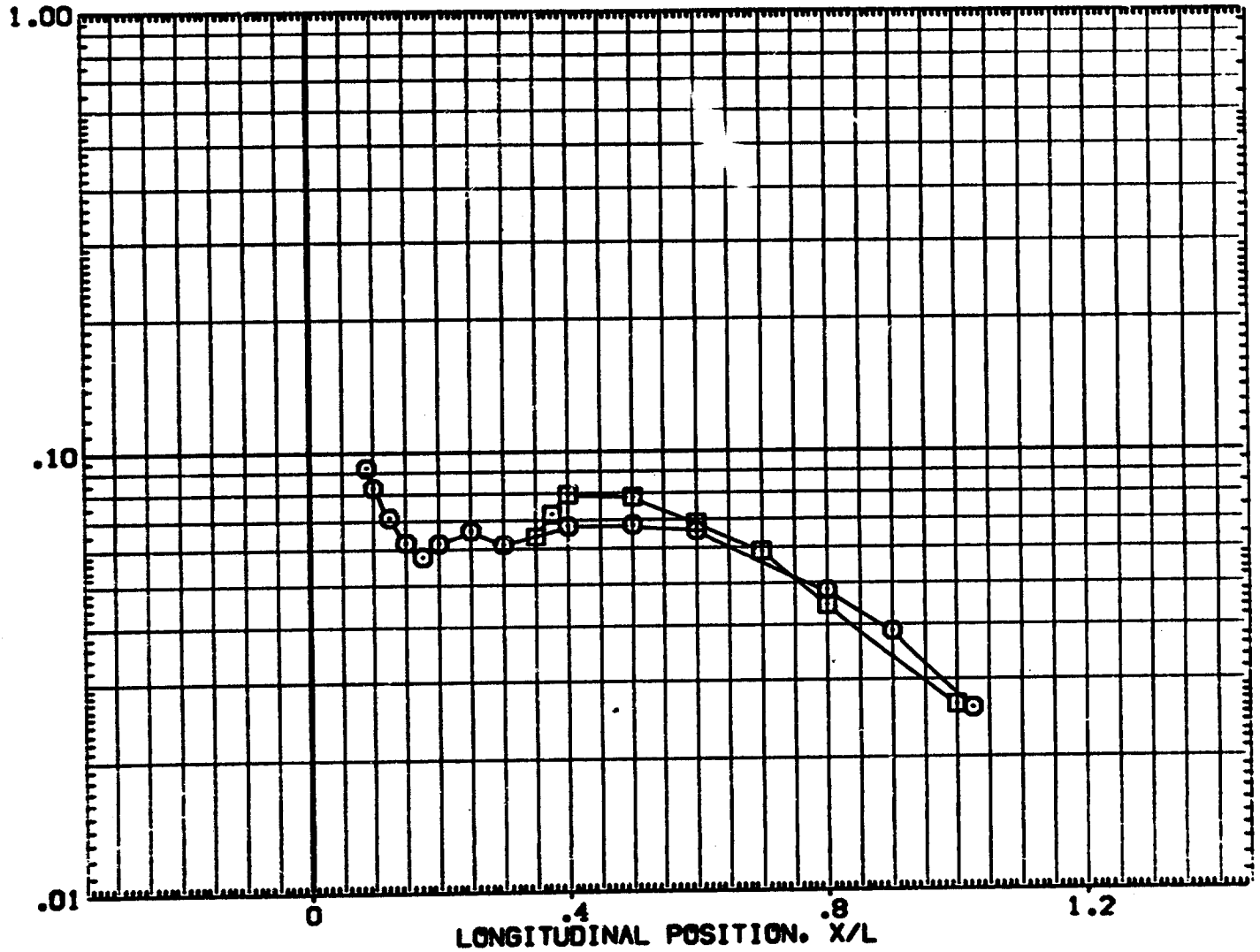
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0003)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	.850	1.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



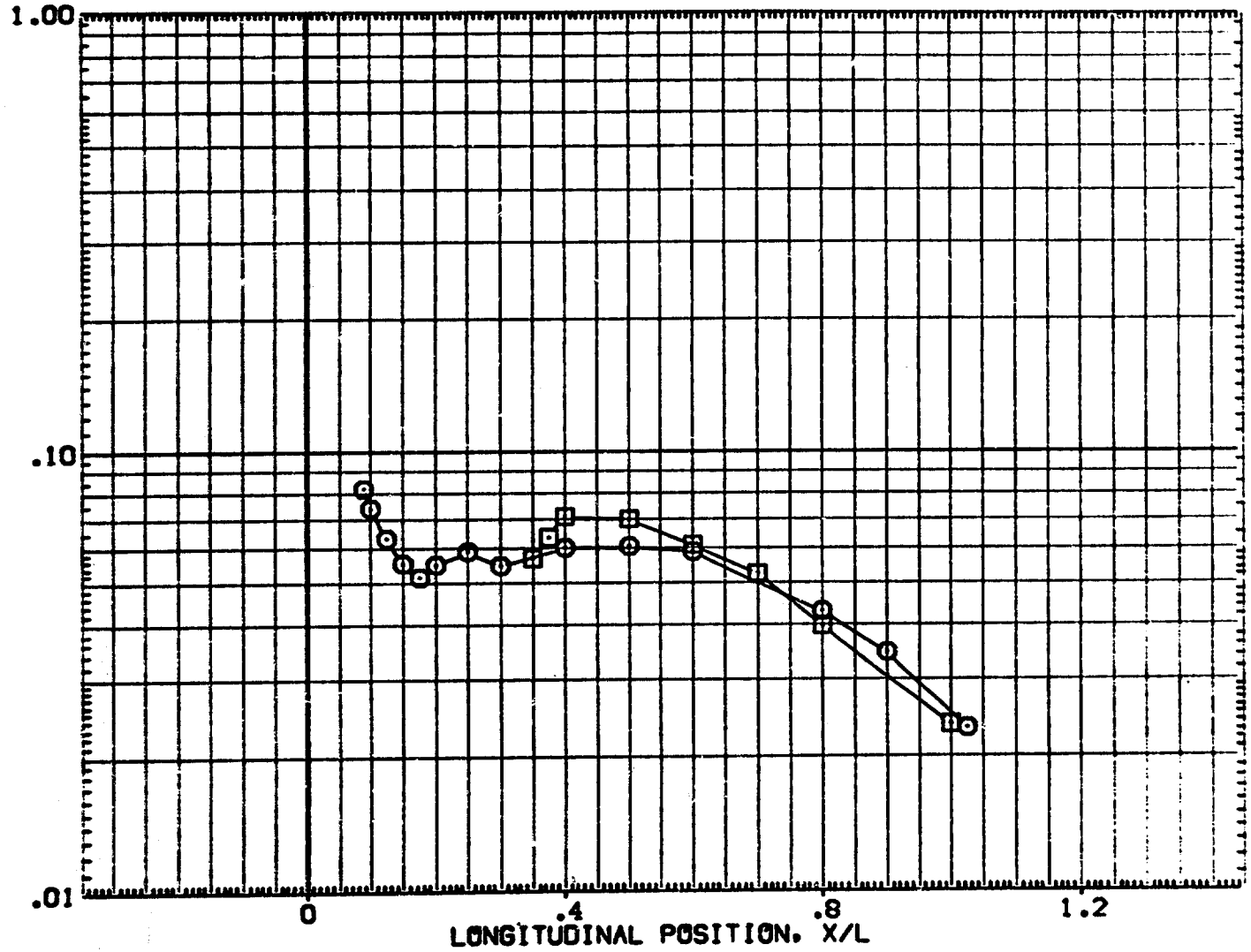
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W8707F4M3V5 (BP0003)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	1.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



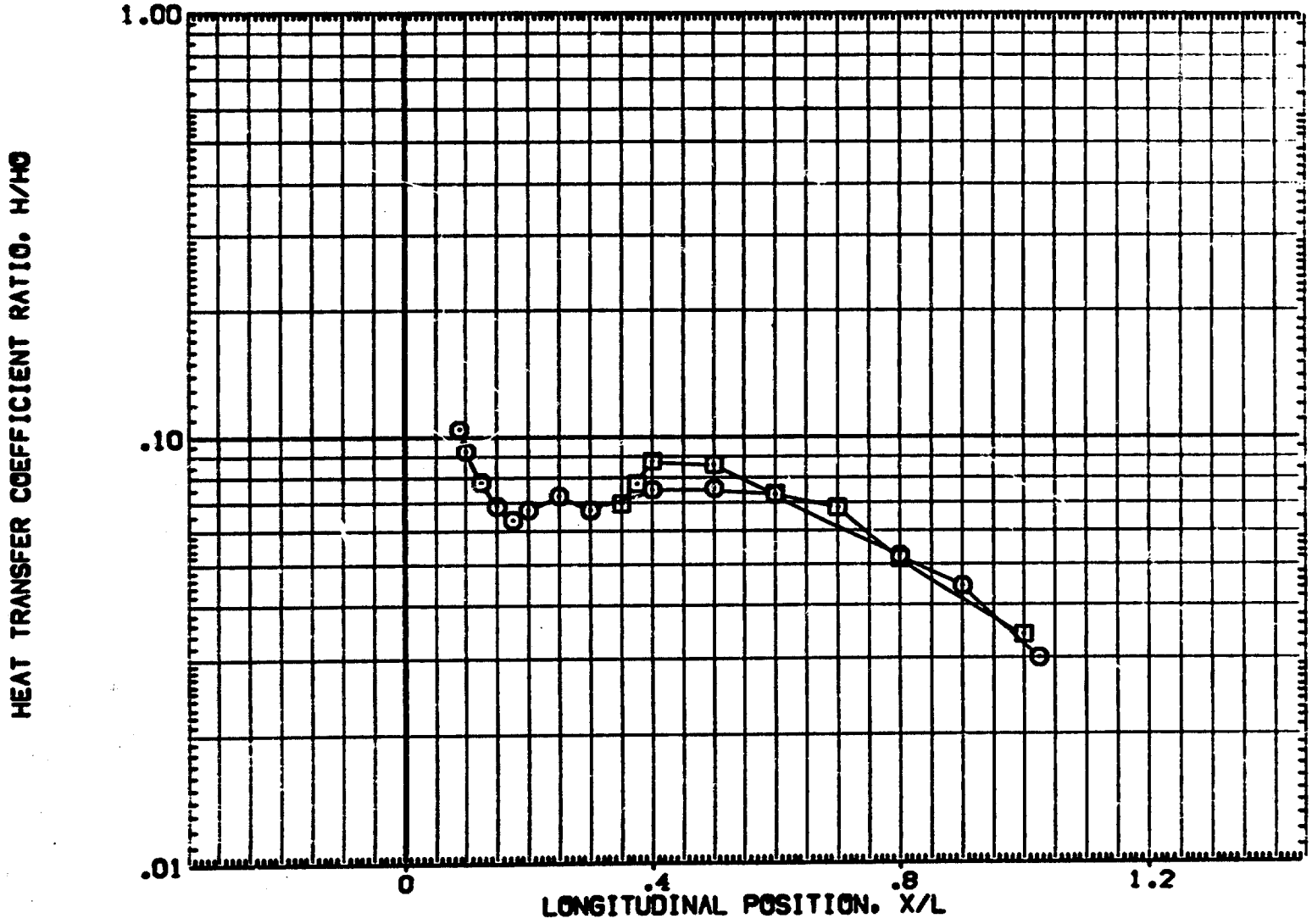
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0003)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	.850	2.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



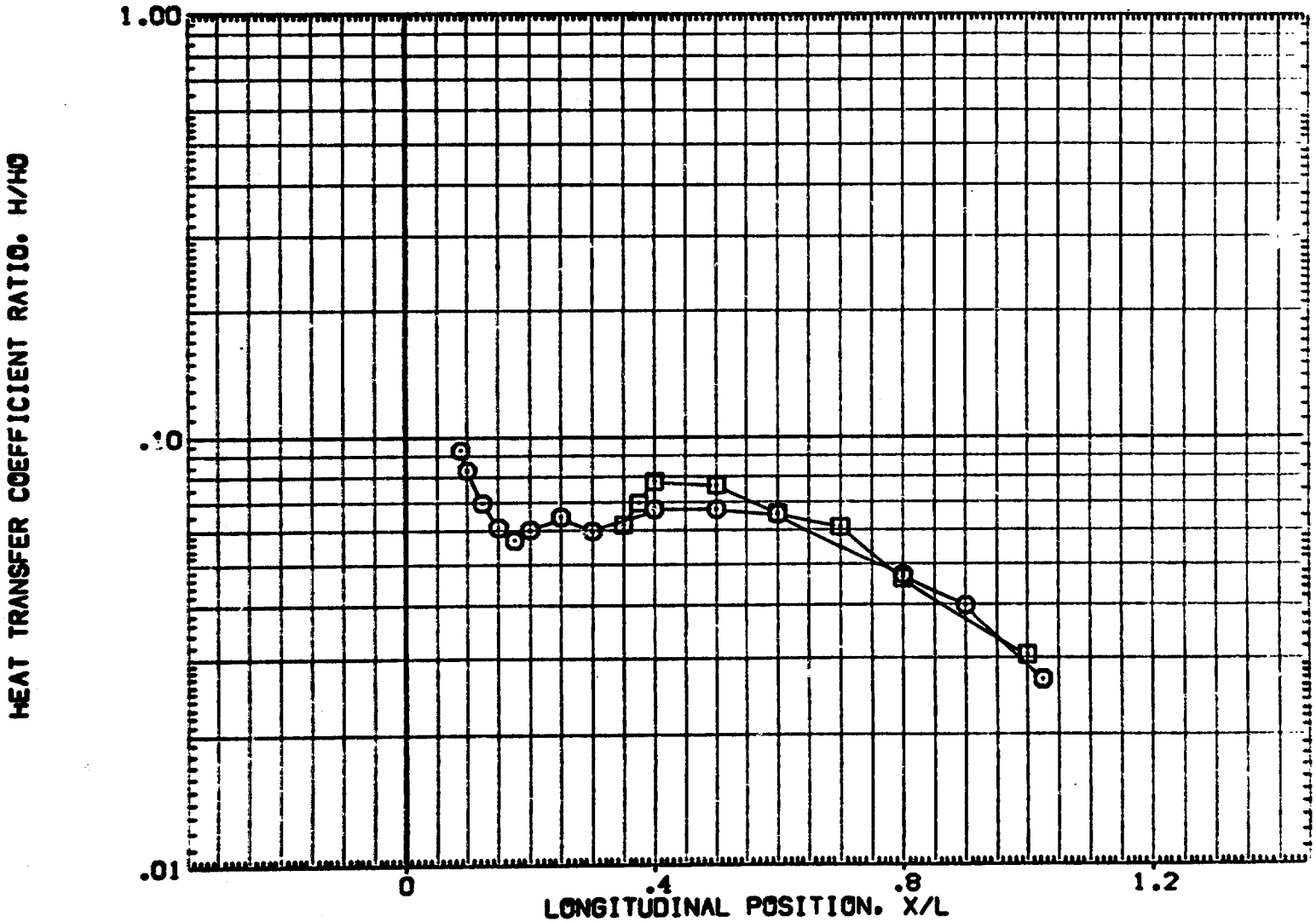
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0003)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	2.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



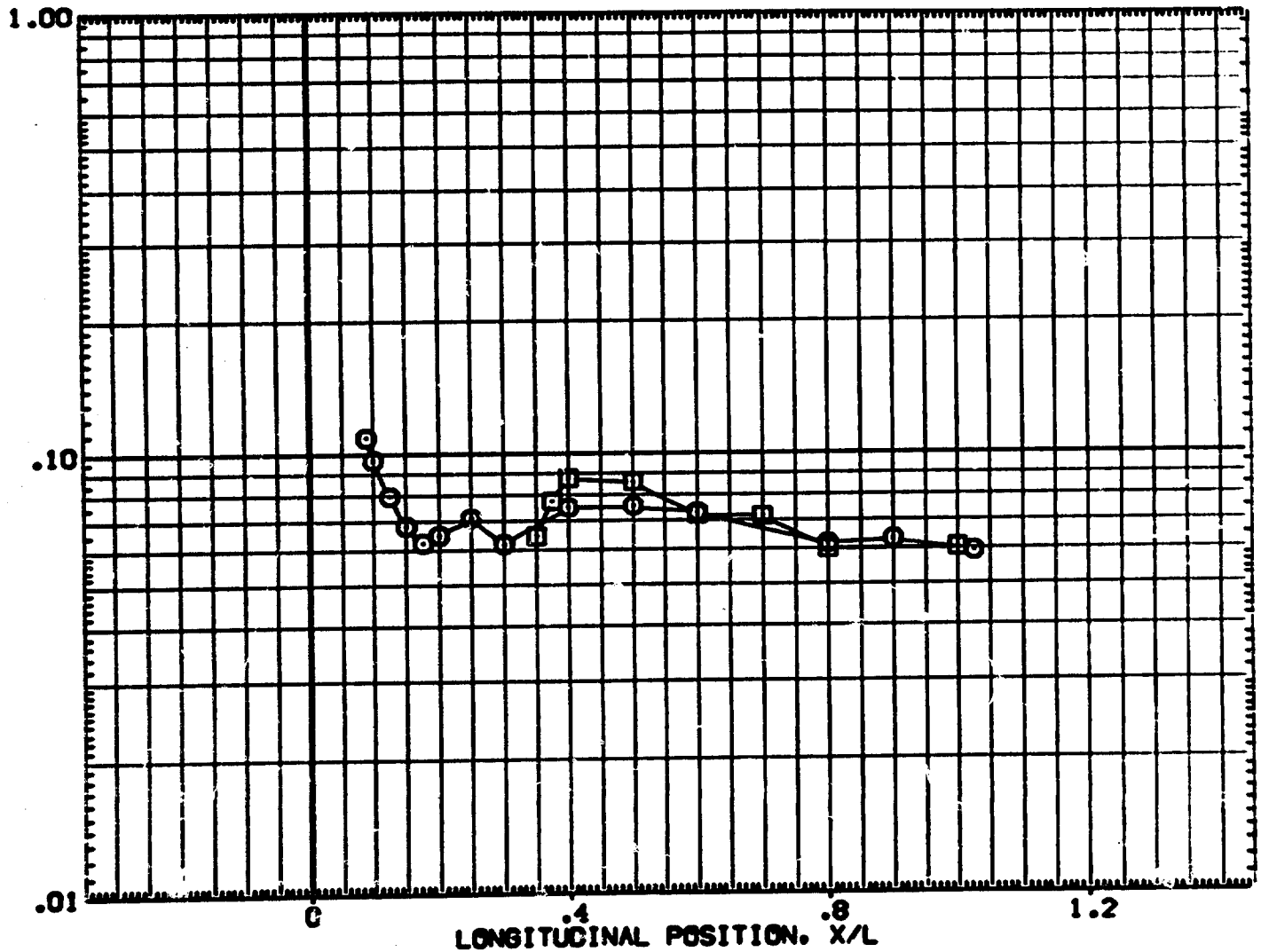
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0003)

SYMBOL	Y(BP)	HAY/AT	RN/L
○	.000	.850	3.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



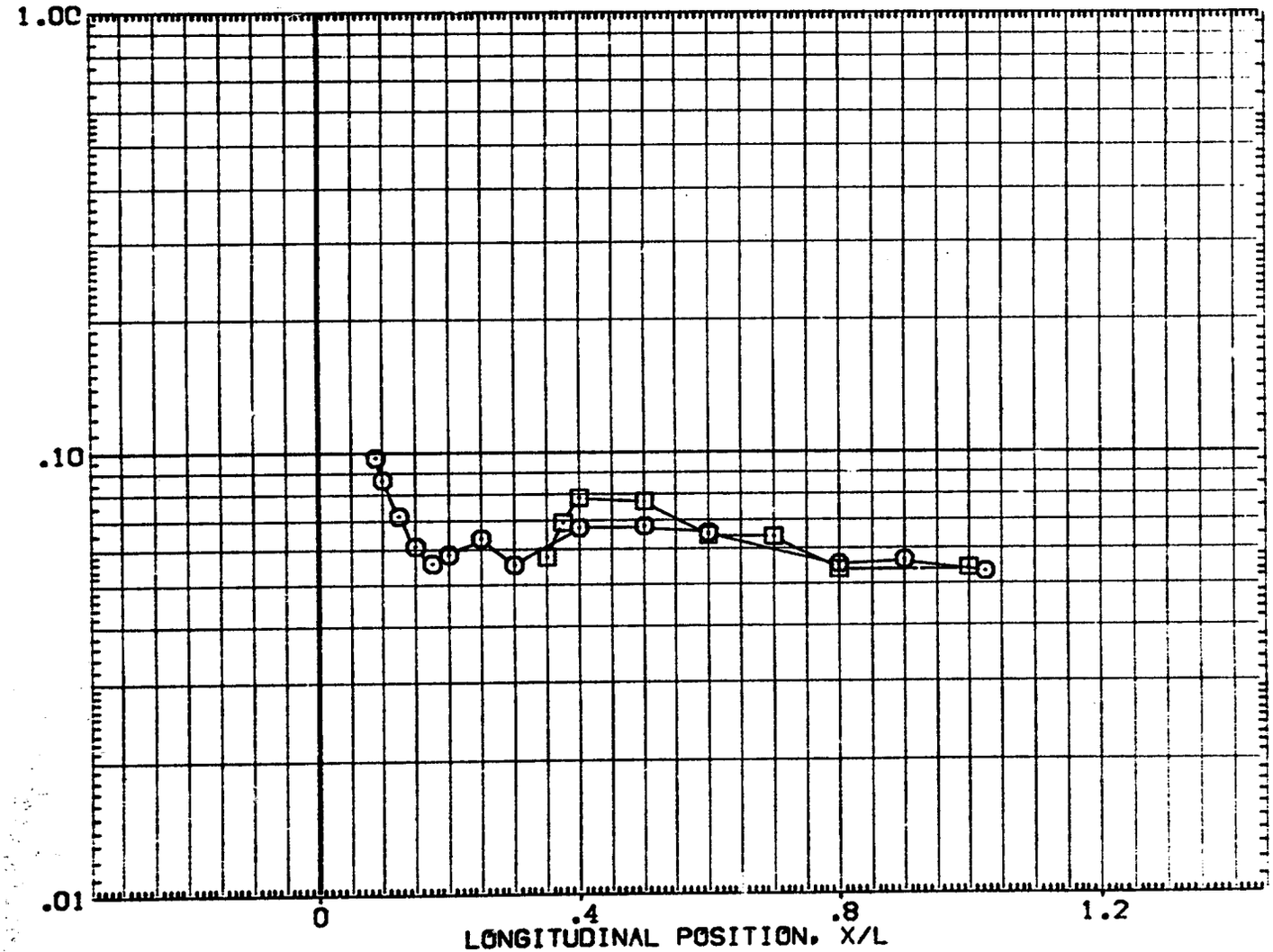
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0003)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	3.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



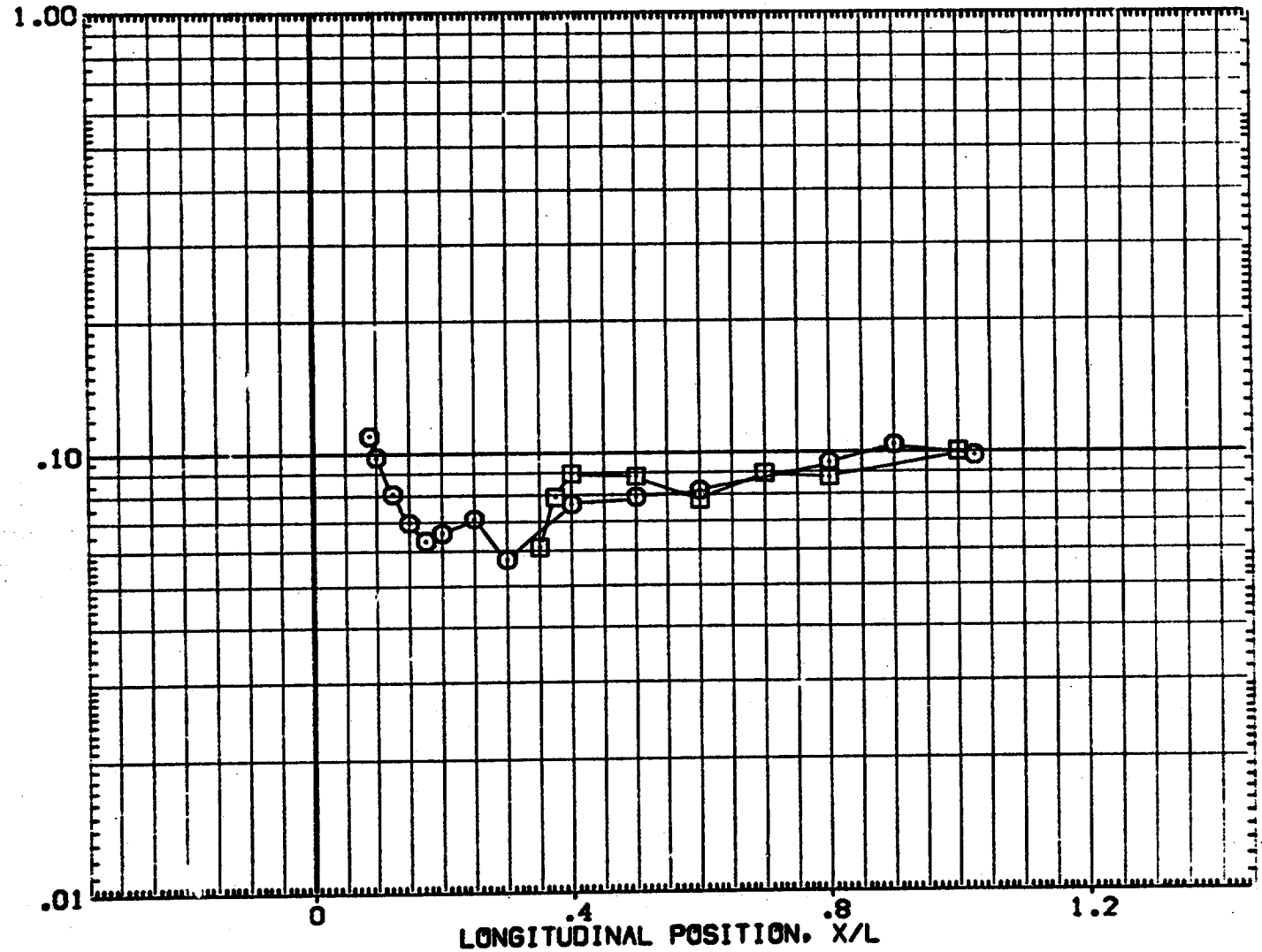
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

0H13 B10C5W87D7F4M3V5 (BP0003)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	.850	4.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



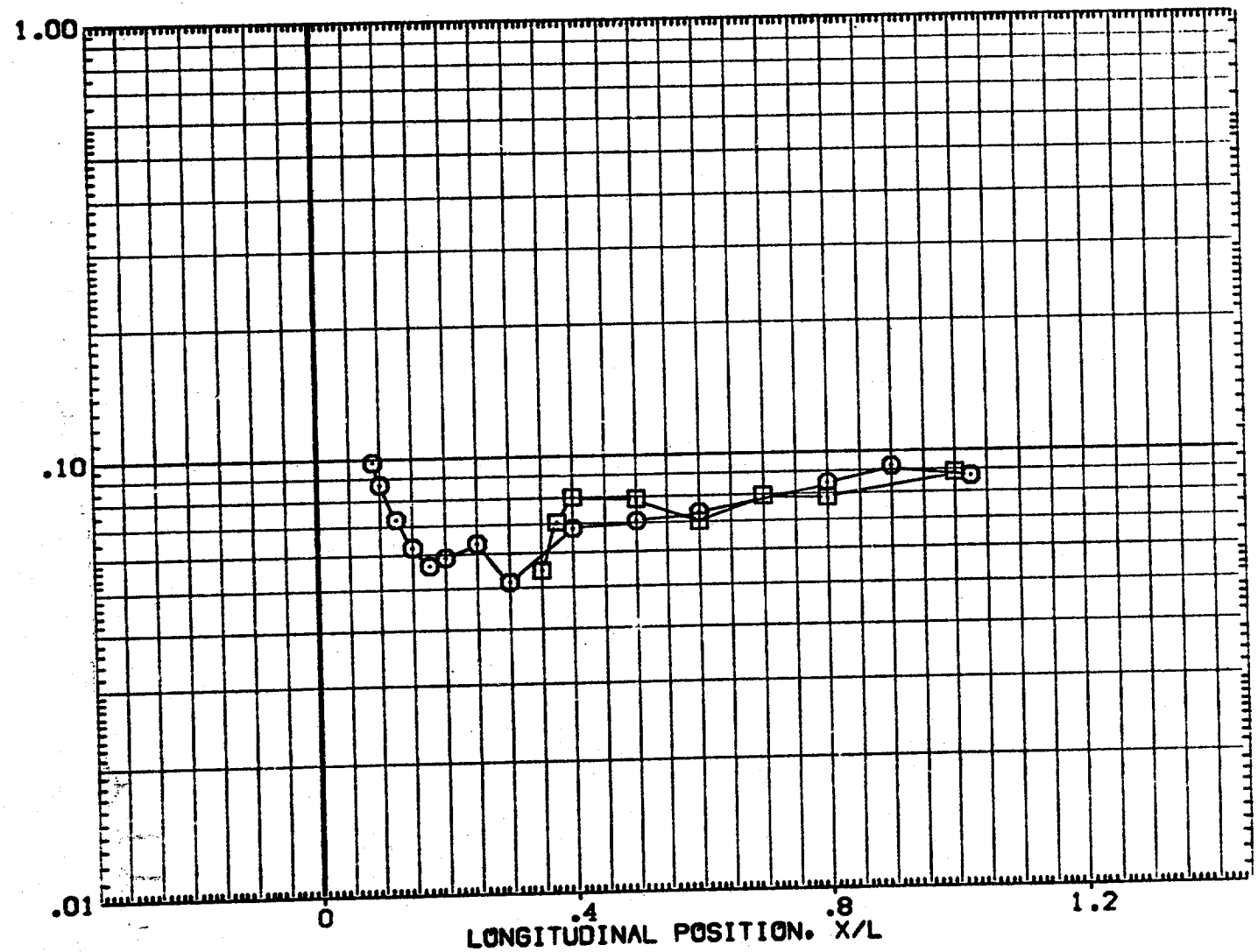
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

0H13 B10C5W87D7F4M3V5 (BP0003)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	4.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



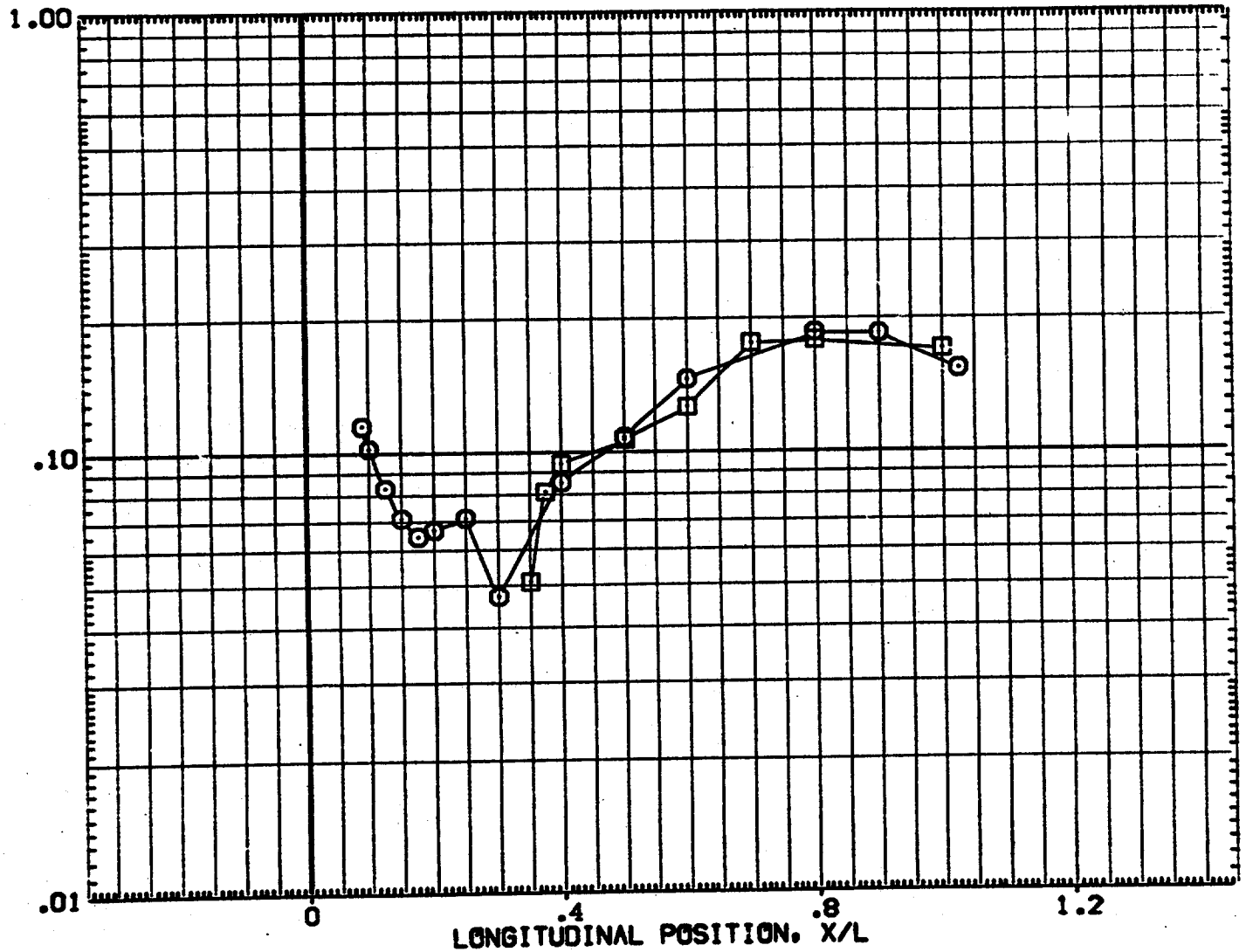
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0003)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	.850	6.000
□	70.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



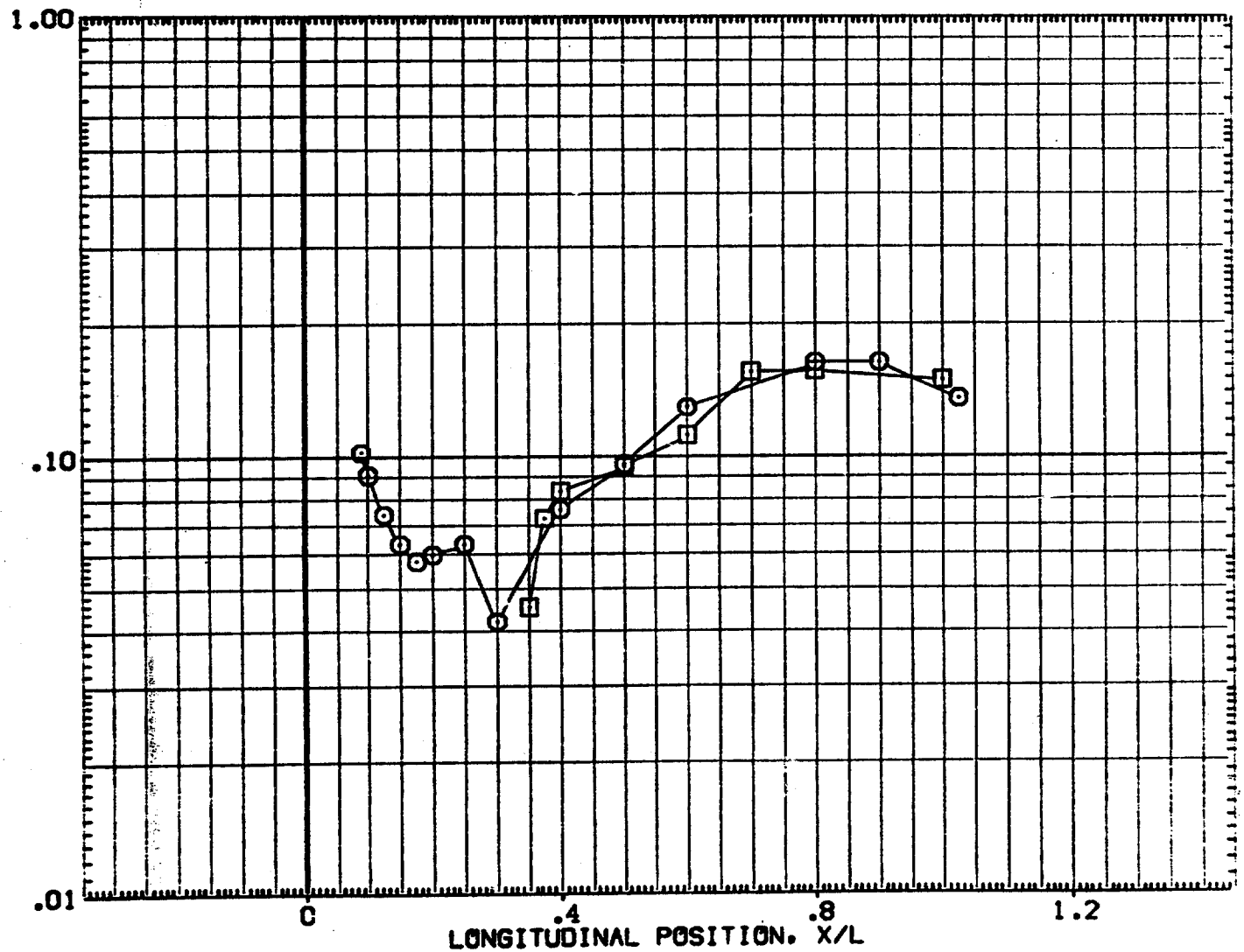
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0003)

SYMBOL	Y(BP)	HAV/HT	RN/L
○	.000	1.000	6.000
□	70.000		

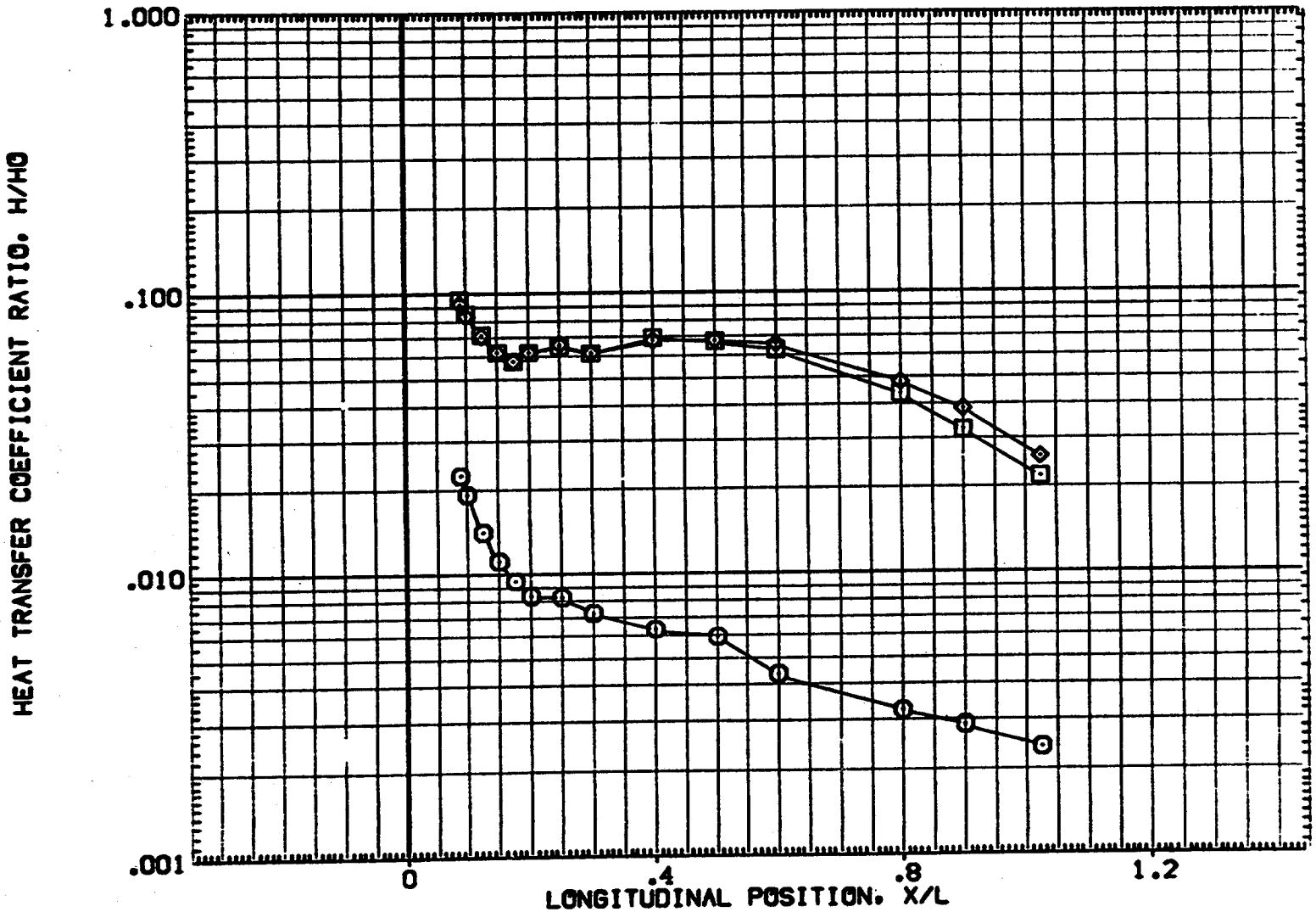
PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

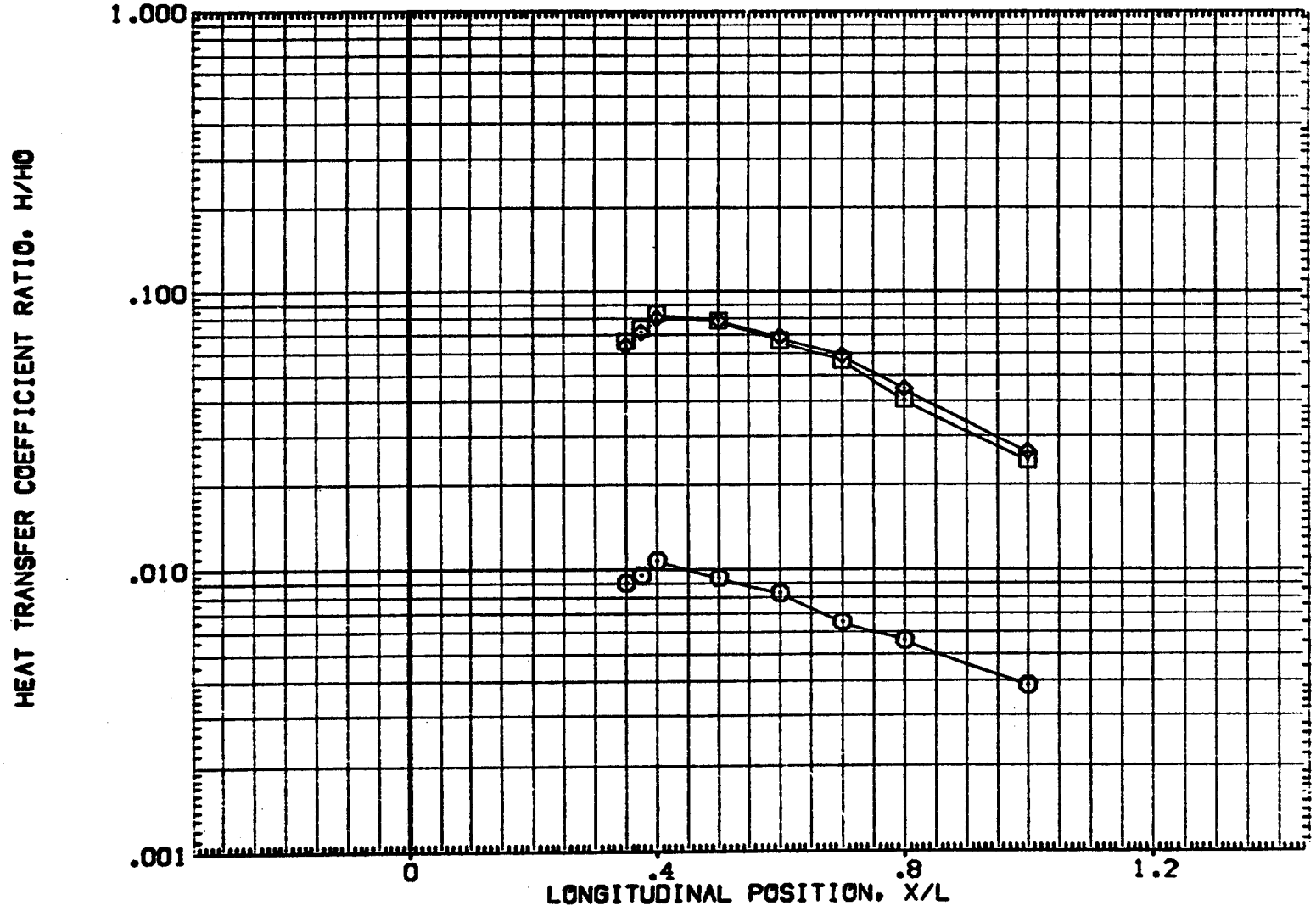
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	□	0H13 B10CSW87D7F4H3V5	.000	.000	.000	.000
(BP0002)	◇	0H13 B10CSW87D7F4H3V5	30.000	.000	.000	.000
(BP0003)	○	0H13 B10CSW87D7F4H3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 1.000 HAW/HT= .850 Y(BP) = .000

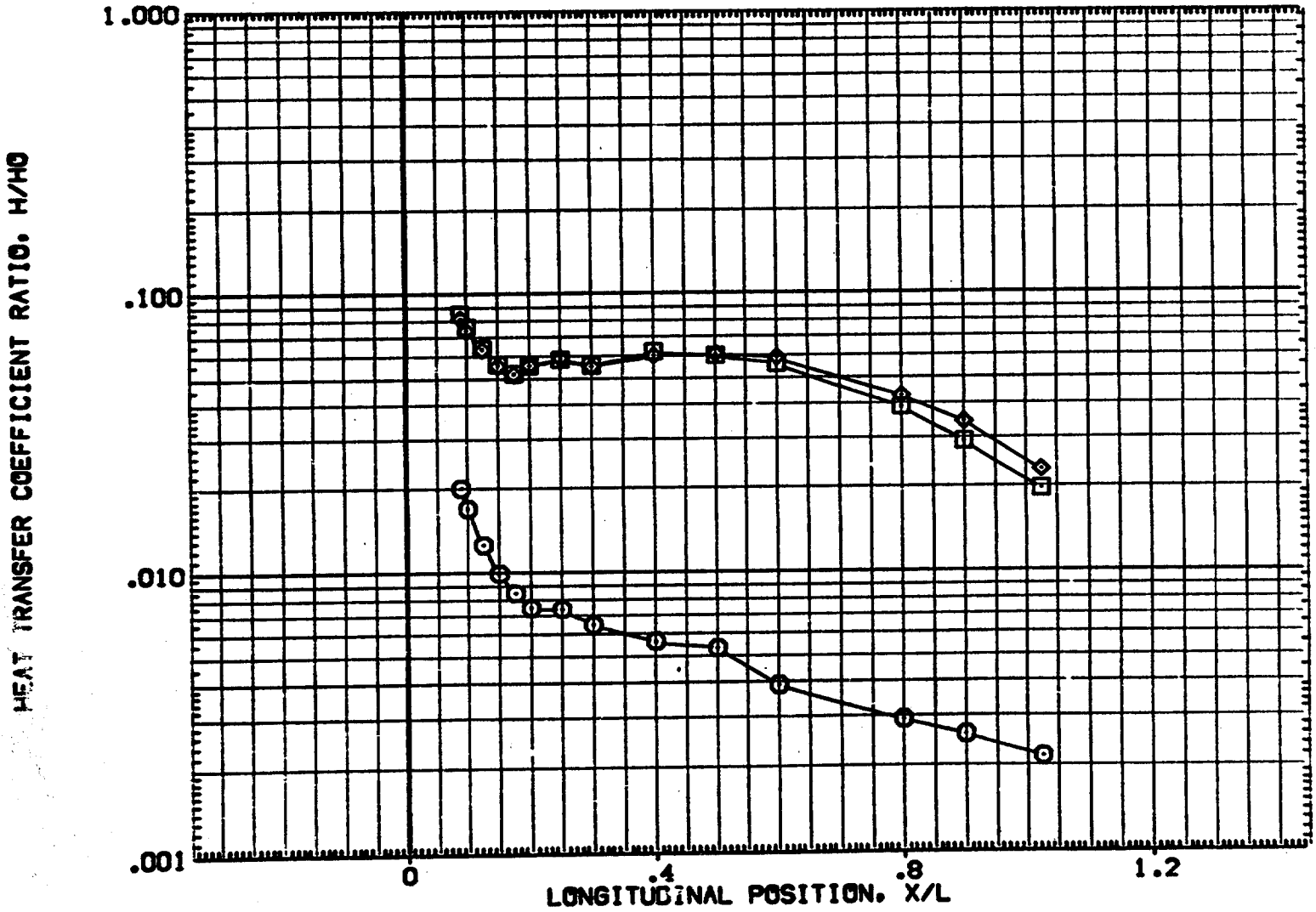
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	○	0413 B10CSV87D7F4H3V5	.000	.000	.000	.000
(BP0002)	□	0413 B10CSV87D7F4H3V5	30.000	.000	.000	.000
(BP0003)	◇	0413 B10CSV87D7F4H3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 1.000 HAW/HT= .850 Y(BP) = 70.000

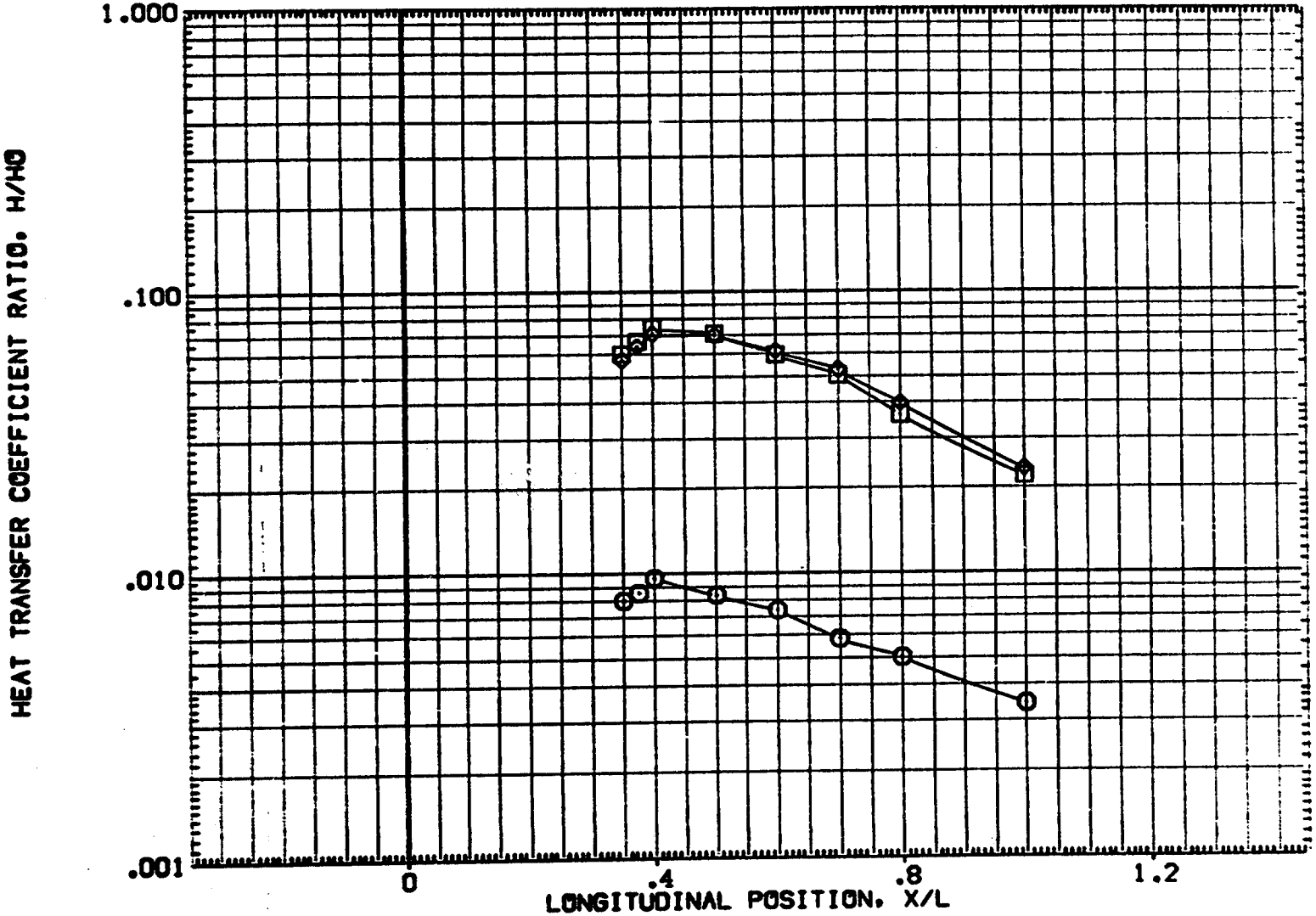
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	○	0H13 B10CSW070704V5	.000	.000	.000	.000
(BP0002)	□	0H13 B10CSW070704V5	30.000	.000	.000	.000
(BP0003)	◇	0H13 B10CSW070704V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 1.000 HAW/HT= 1.000 Y(BP) = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	□	0H13 B10CSM07OF4H3V5	.000	.000	.000	.000
(BP0002)	◁	0H13 B10CSM07OF4H3V5	30.000	.000	.000	.000
(BP0003)	◇	0H13 B10CSM07OF4H3V5	35.000	.000	.000	.000

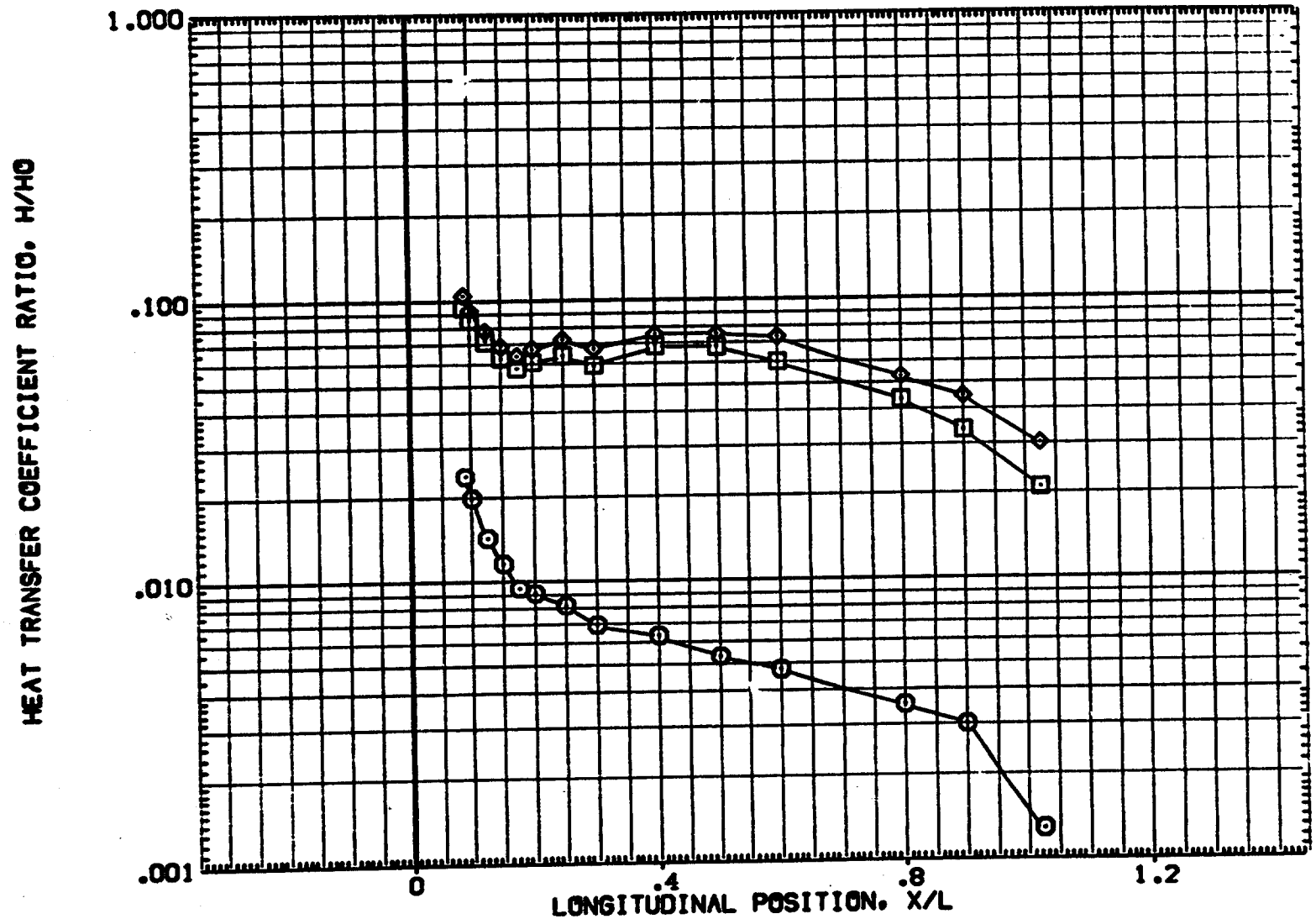


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 1.000 HAW/HT= 1.000 Y(BP) = 70.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BP0001)	○	9H13 B10CSWB70/F4H3V5
(BP0002)	□	9H13 B10CSWB70/F4H3V5
(BP0003)	◇	9H13 B10CSWB70/F4H3V5

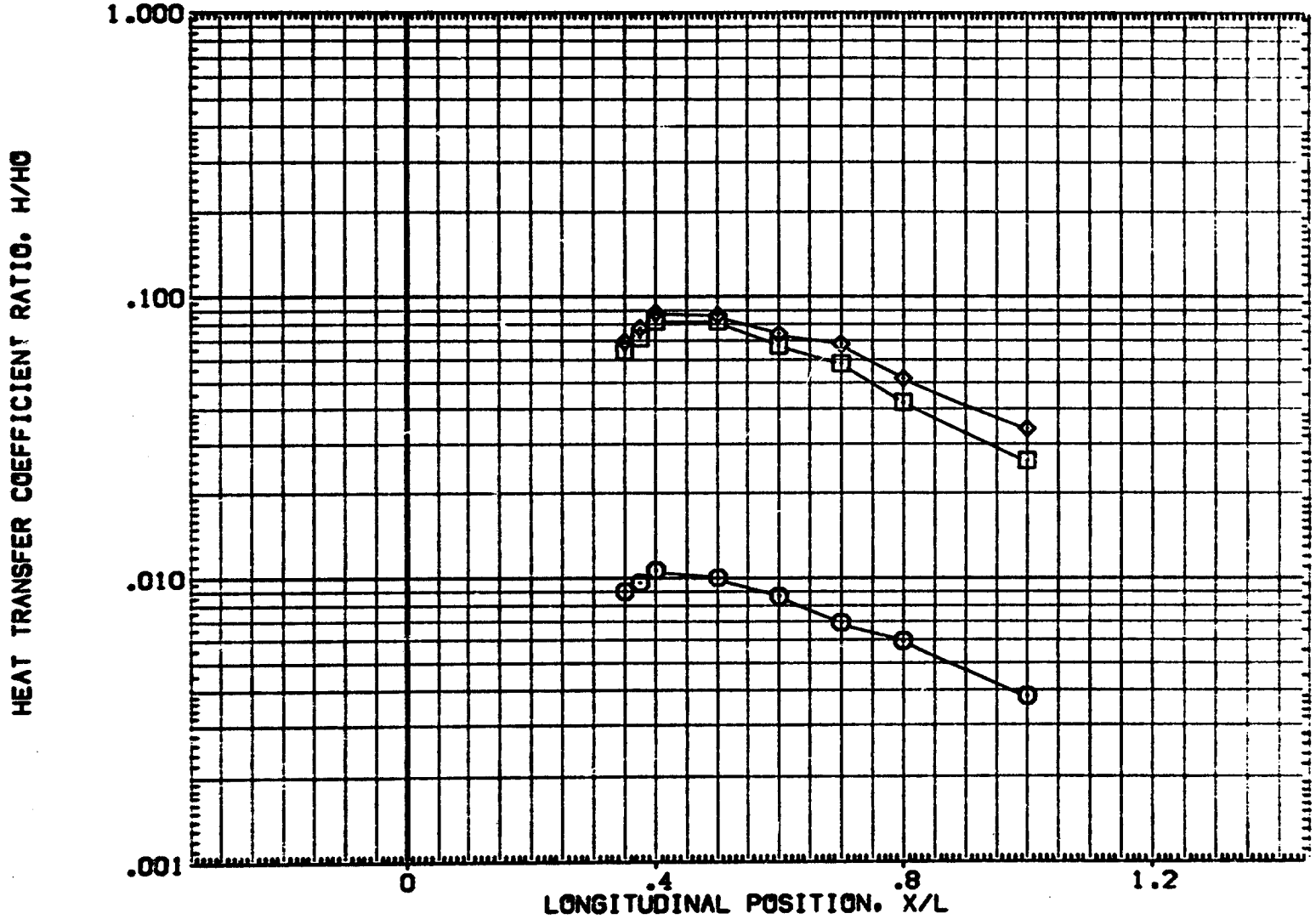
ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 2.000 HAW/HT= .850 Y(BP) = .000

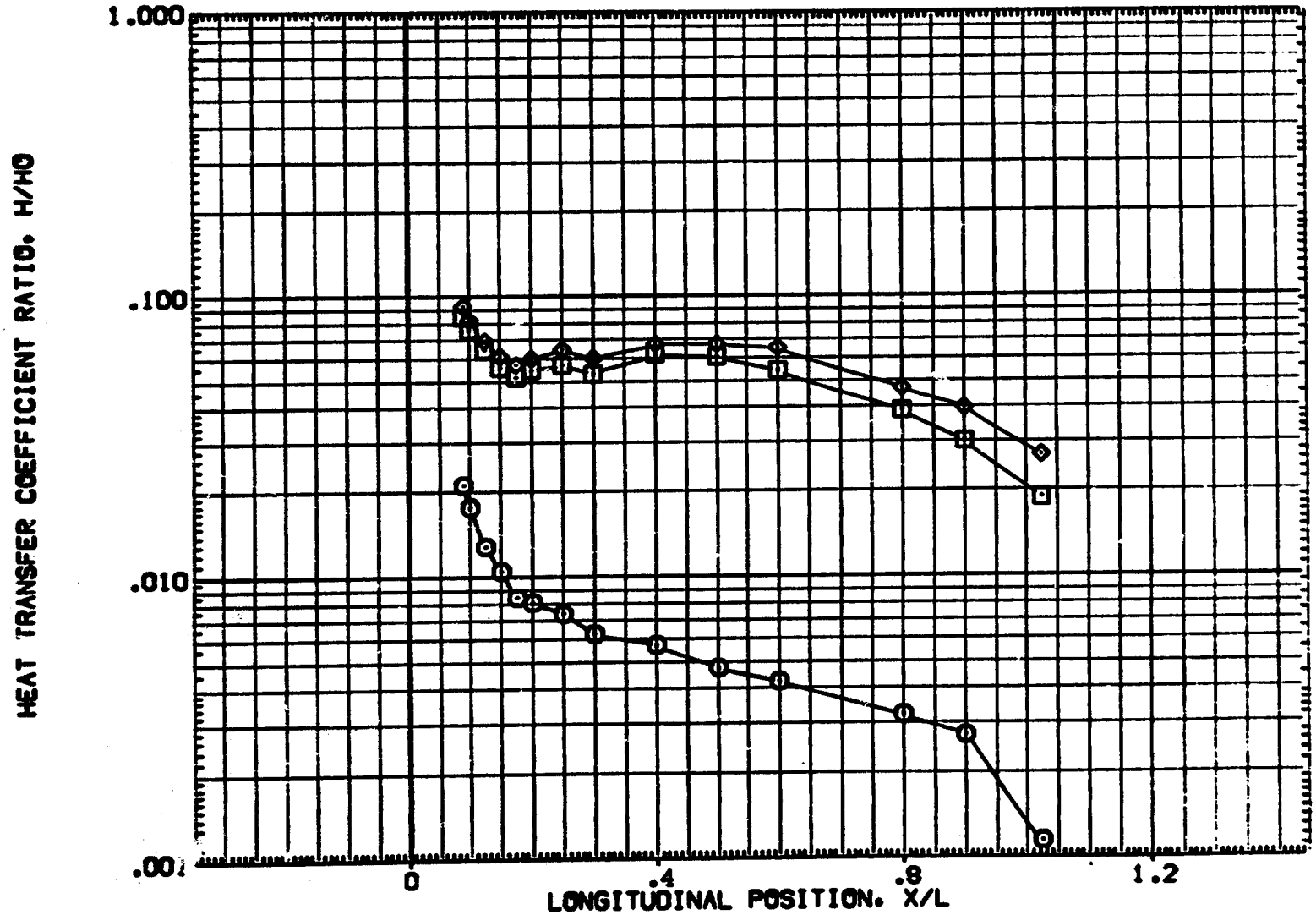
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	□	0413 B10CSW8707F4H3V5	.000	.000	.000	.000
(BP0002)	□	0413 B10CSW8707F4H3V5	30.000	.000	.000	.000
(BP0003)	◇	0413 B10CSW8707F4H3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 2.000 HAW/HT= .850 Y(BP) = 70.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	○	0413 B10CSM67U7F4P3V5	.000	.000	.000	.000
(BP0002)	□	0413 B10CSM67U7F4P3V5	30.000	.000	.000	.000
(BP0003)	◇	0413 B10CSM67U7F4P3V5	35.000	.000	.000	.000

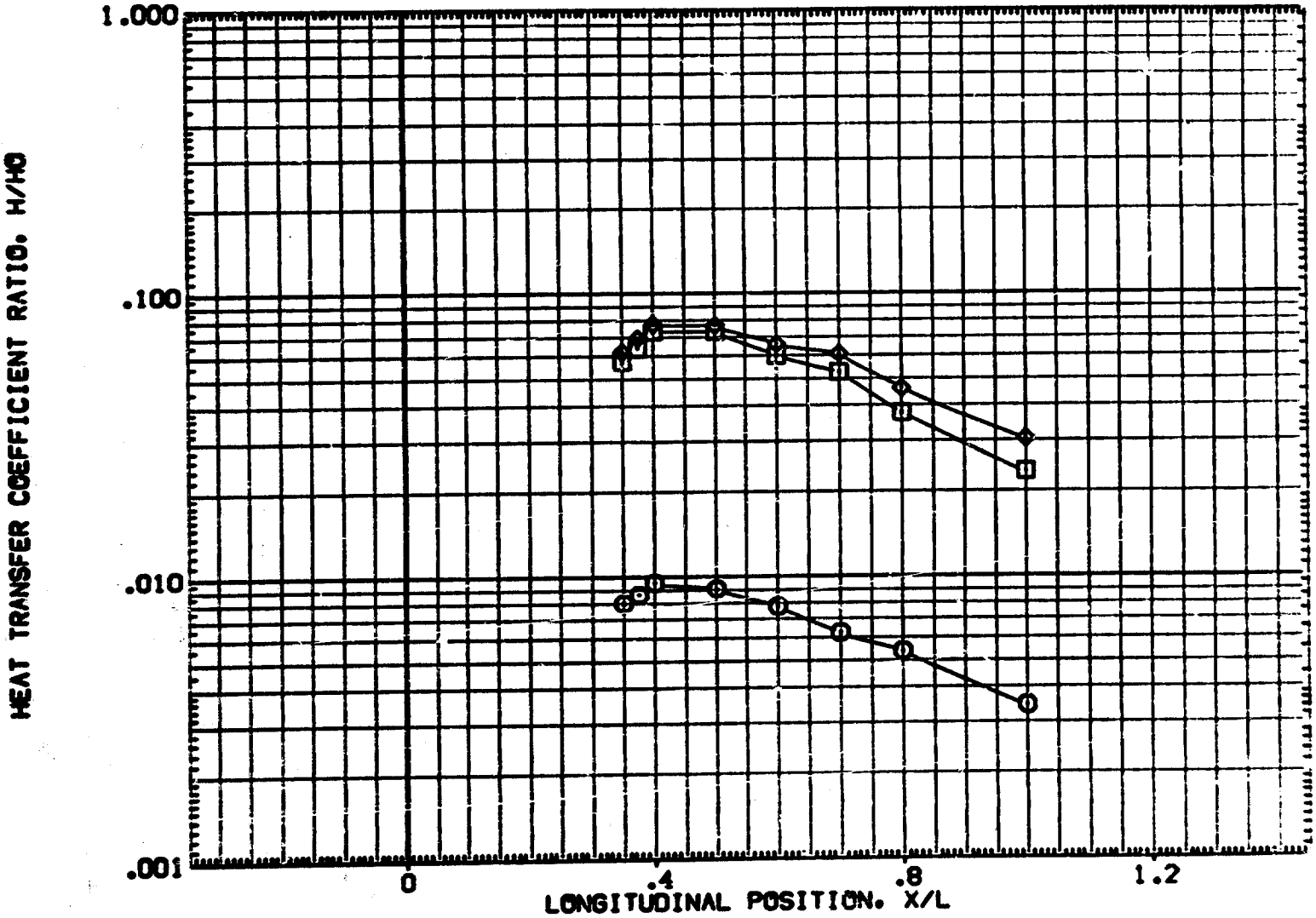


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 2.000 HAW/HT= 1.000 Y(BP) = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
[illegible]	□	0413 [illegible]
[illegible]	◇	0413 [illegible]
[illegible]	◇	0413 [illegible]

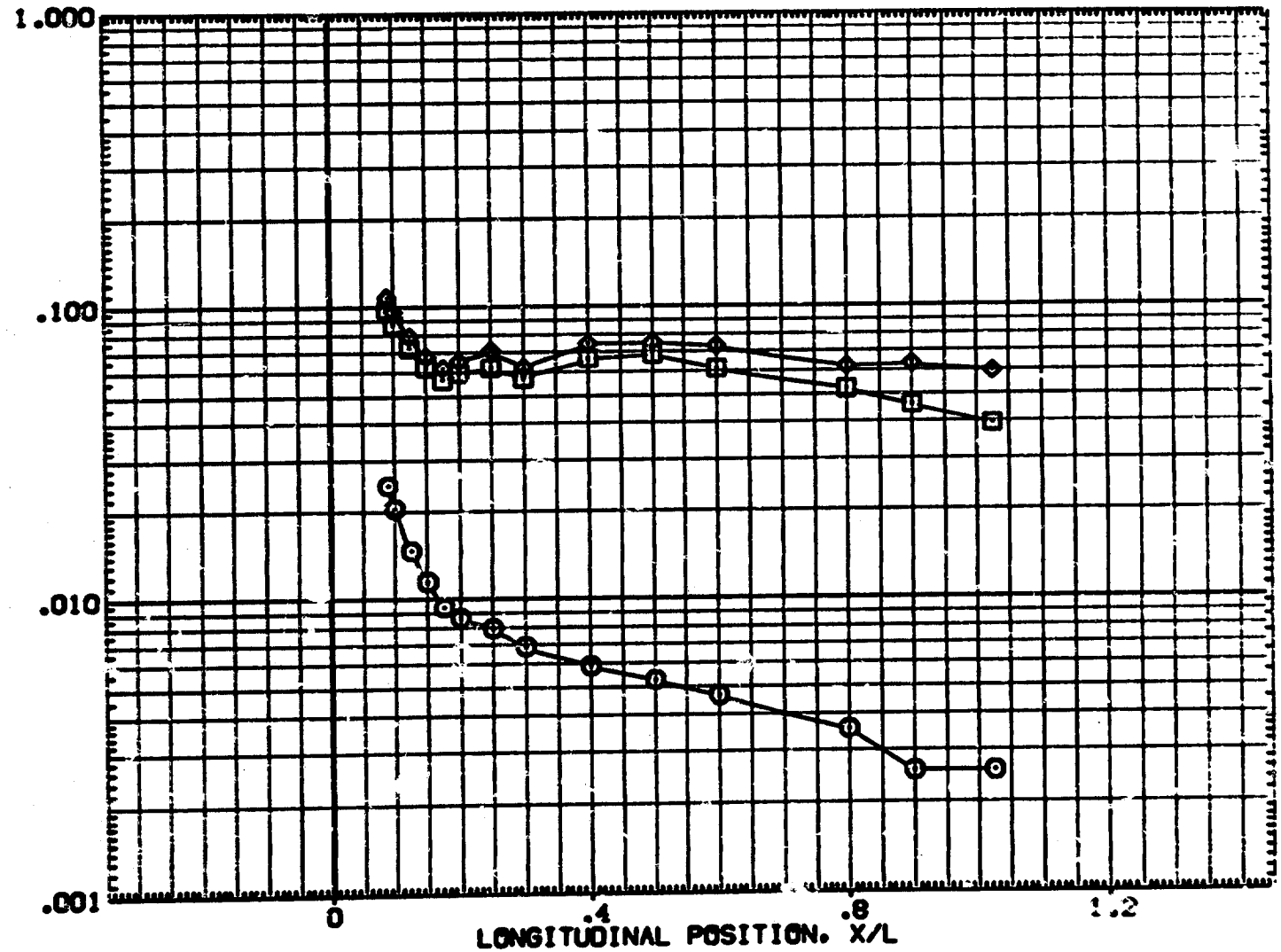
ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 2.000 HAW/HT= 1.000 Y(BP) = 70.000

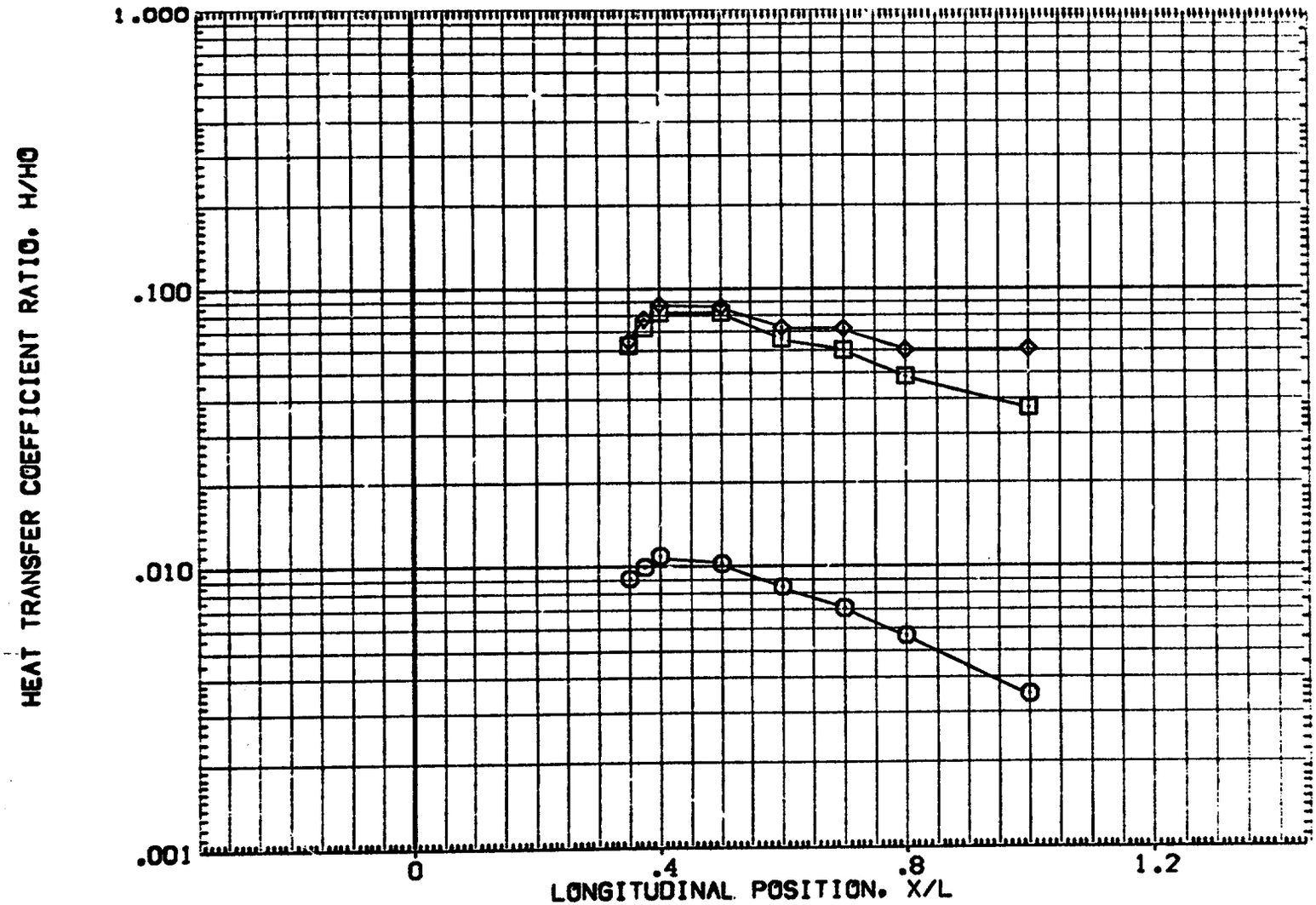
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	○	0413 B10CSW67OTF4OV5	.000	.000	.000	.000
(BP0002)	□	0413 B10CSW67OTF4OV5	30.000	.000	.000	.000
(BP0003)	◇	0413 B10CSW67OTF4OV5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 3.000 HAW/HT= .850 Y(BP) = .000

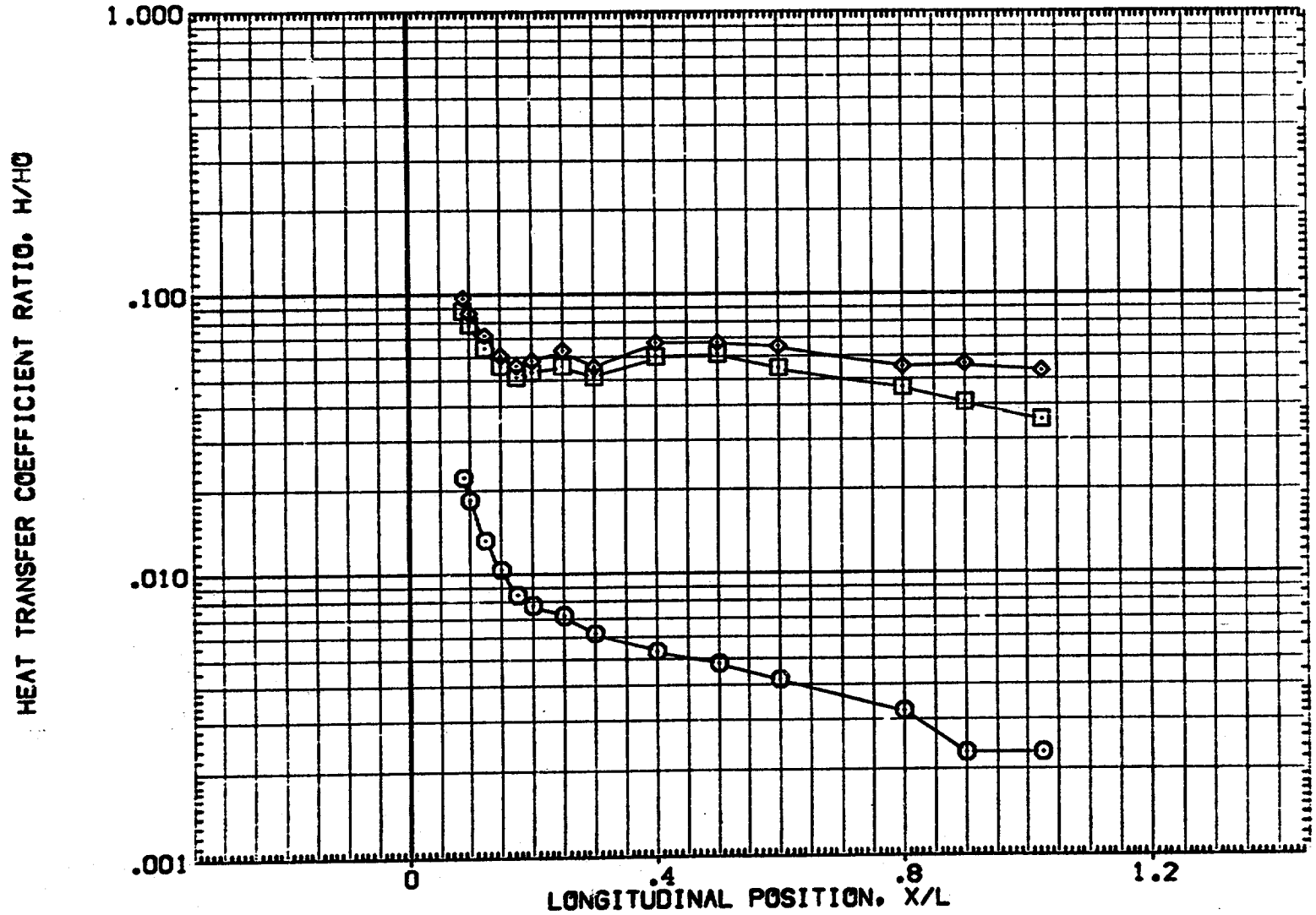
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
[BP0001]	○	OH13 B10CSWB7D7F4H3V5	.000	.000	.000	.000
[BP0002]	□	OH13 B10CSWB7D7F4H3V5	30.000	.000	.000	.000
[BP0003]	◇	OH13 B10CSWB7D7F4H3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 3.000 HAW/HT= .850 Y(BP) = 70.000

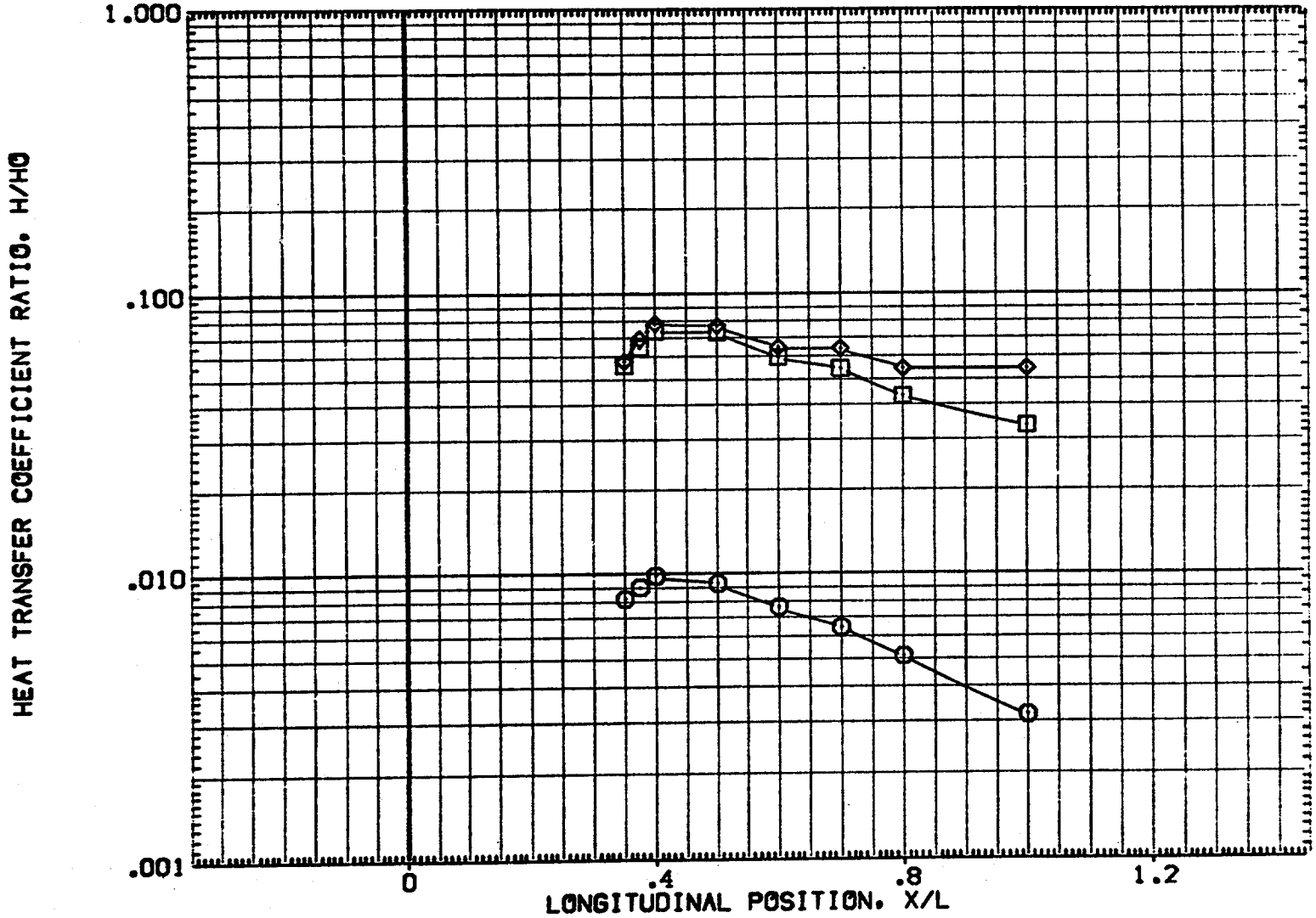
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	○	OH13 B10C5VB7D7F4M3V5	.000	.000	.000	.000
(BP0002)	□	OH13 B10C5VB7D7F4M3V5	30.000	.000	.000	.000
(BP0003)	◇	OH13 B10C5VB7D7F4M3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 3.000 HAW/HT= 1.000 Y(BP) = .000

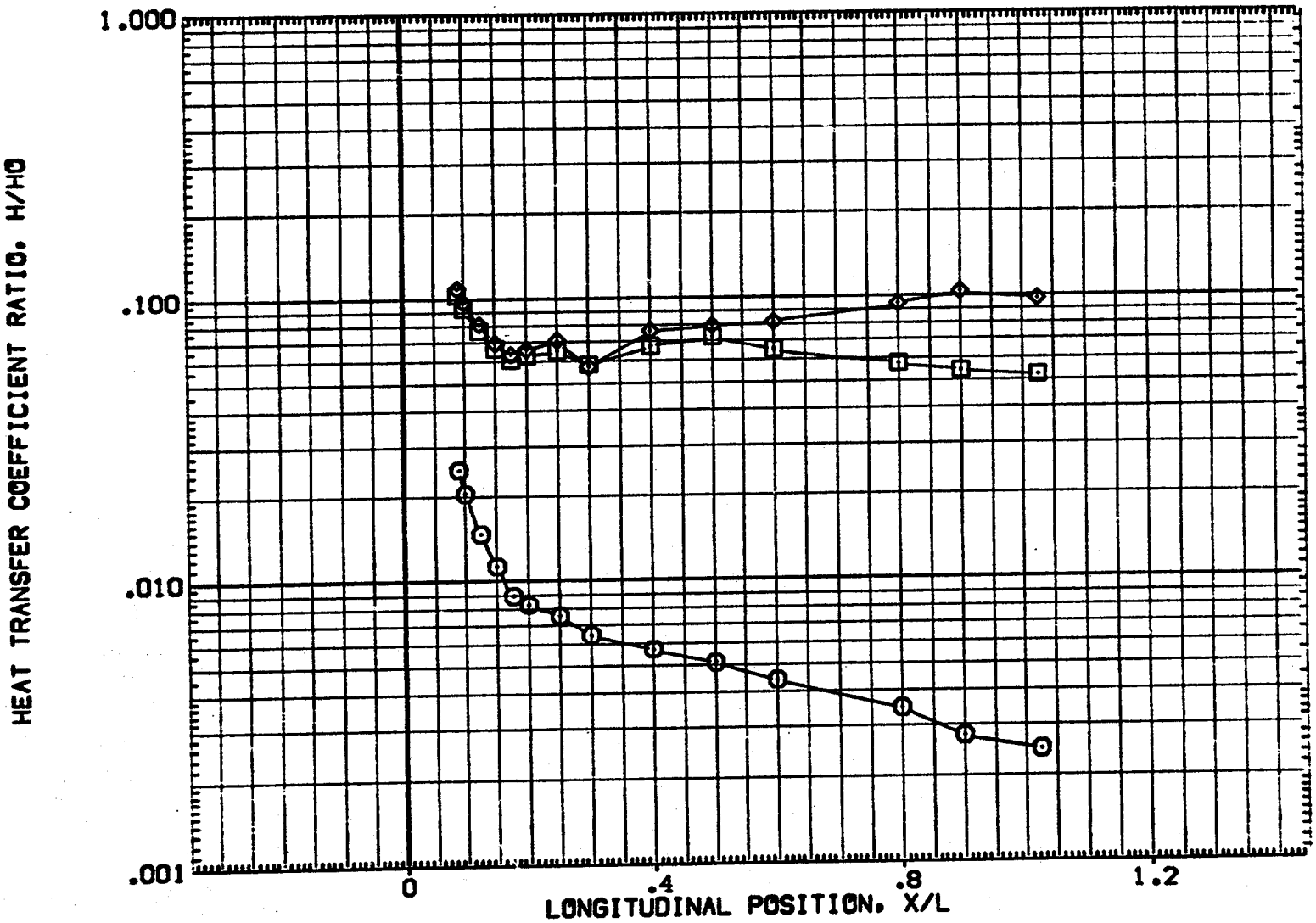
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	○	0413 B10CSW8707F4M3V5	.000	.000	.000	.000
(BP0002)	□	0413 B10CSW8707F4M3V5	30.000	.000	.000	.000
(BP0003)	◇	0413 B10CSW8707F4M3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 3.000 HAW/HT= 1.000 Y(BP) = 70.000

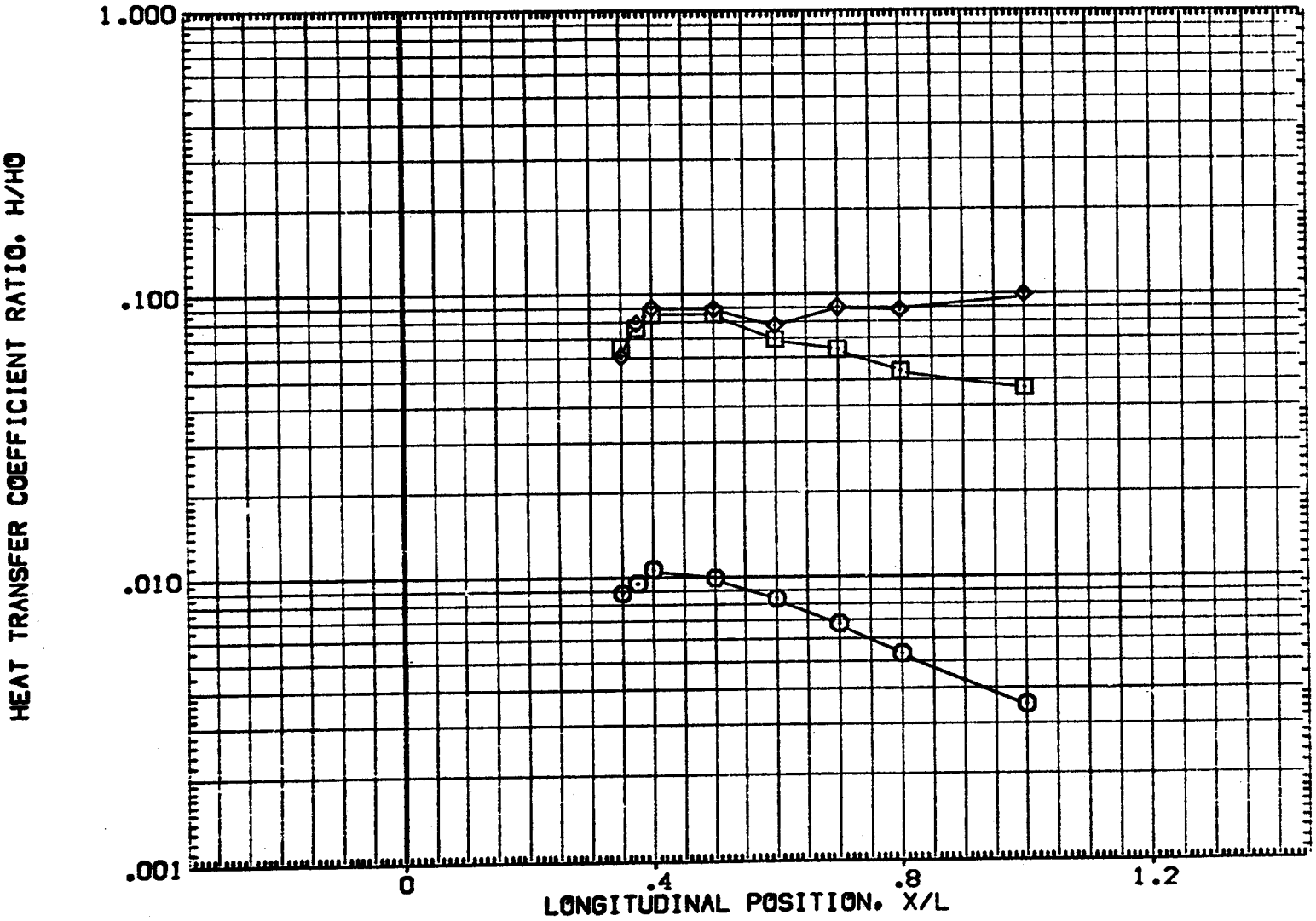
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	○	0H13 B10C5W87D7F4M3V5	.000	.000	.000	.000
(BP0002)	□	0H13 B10C5W87D7F4M3V5	30.000	.000	.000	.000
(BP0003)	◇	0H13 B10C5W87D7F4M3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 4.000 HAW/HT= .850 Y(BP) = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	○	0413 B10CSW67D7F4M3V5	.000	.000	.000	.000
(BP0002)	□	0413 B10CSW67D7F4M3V5	30.000	.000	.000	.000
(BP0003)	◇	0413 B10CSW67D7F4M3V5	35.000	.000	.000	.000

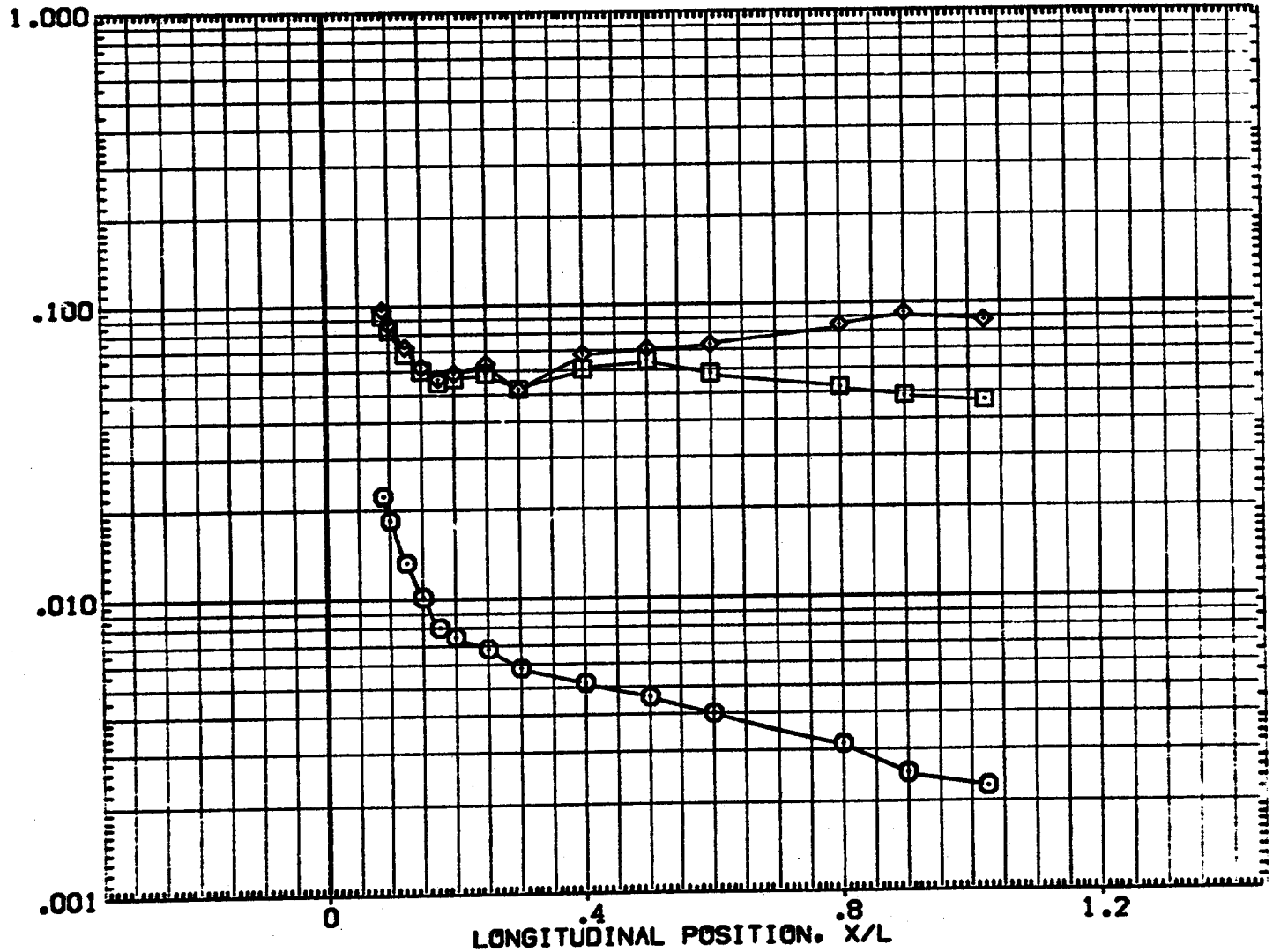


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 4.000 HAW/HT= .850 Y(BP) = 70.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BP0001)	○	0H13 B10CSW87D7F4M3V5
(BP0002)	□	0H13 B10CSW87D7F4M3V5
(BP0003)	◇	0H13 B10C[illegible]87D7F4M3V5

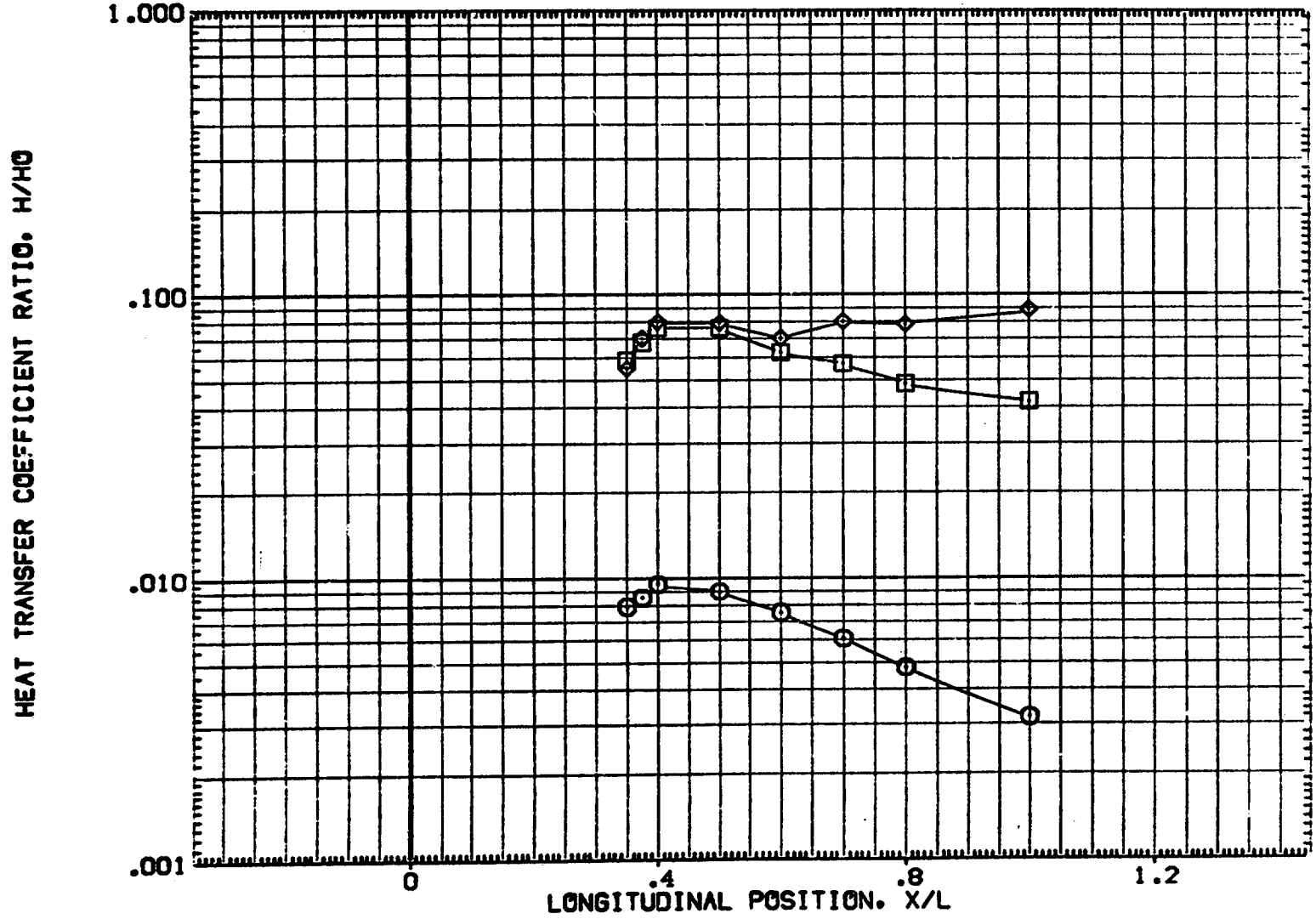
ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 4.000 HAW/HT= 1.000 Y(BP) = .000

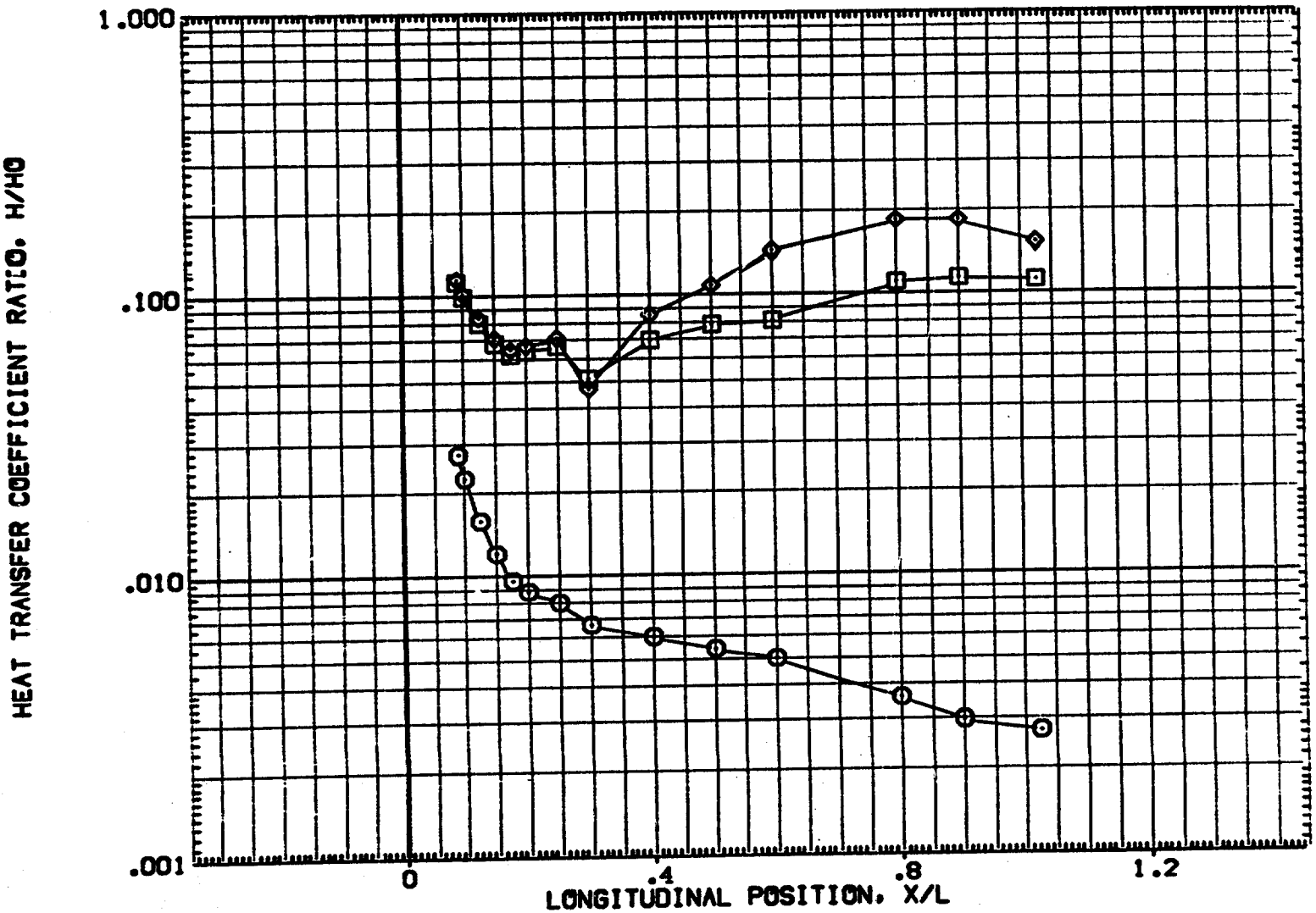
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	○	0413 B10C5W8707F4V3V5	.000	.000	.000	.000
(BP0002)	□	0413 B10C5W8707F4V3V5	30.000	.000	.000	.000
(BP0003)	◇	0413 B10C5W8707F4V3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 4.000 HAW/HT= 1.000 Y(BP) = 70.000

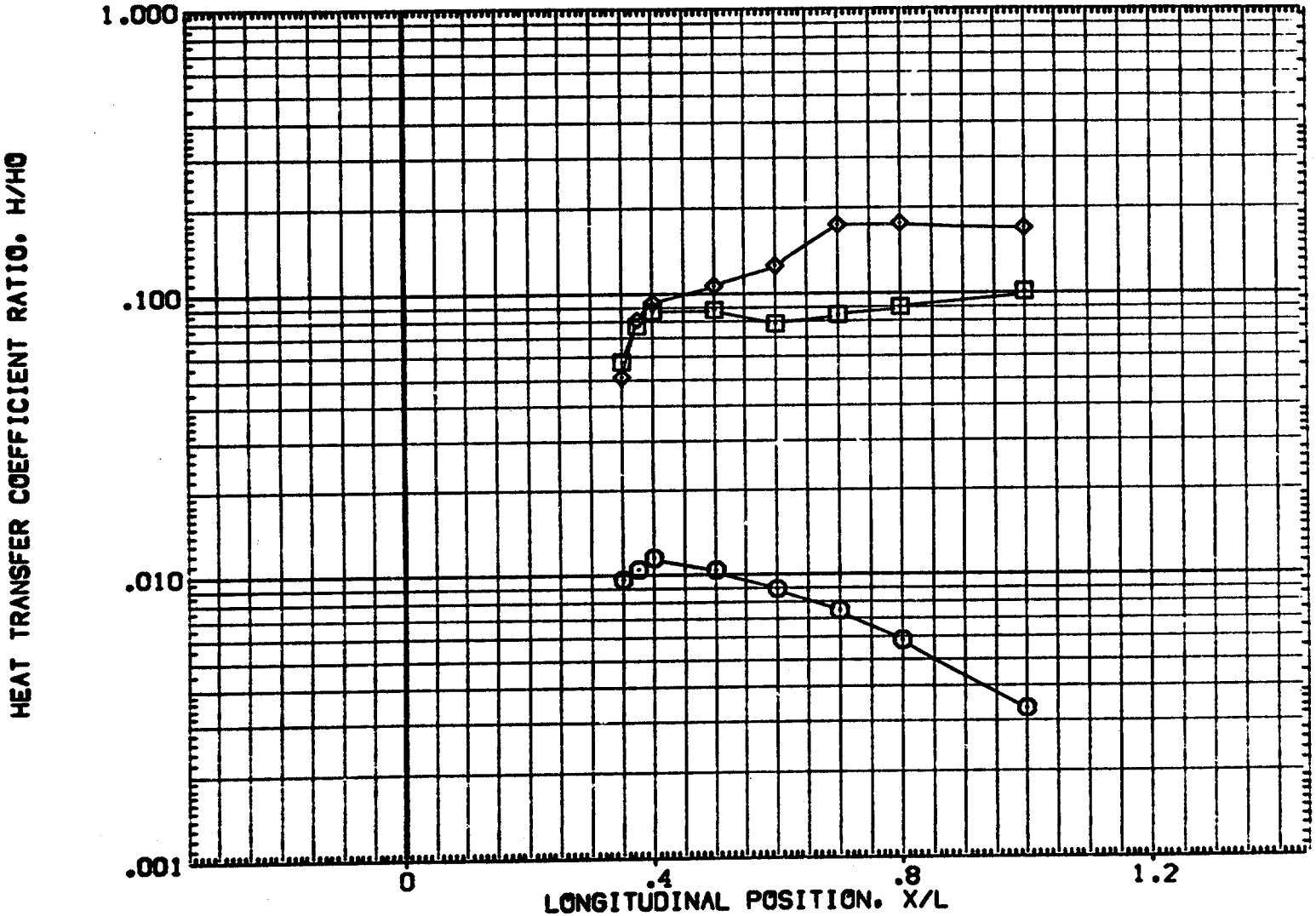
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	○	0H13 B10CSWB70TF4M3V5	.000	.000	.000	.000
(BP0002)	□	0H13 B10CSWB70TF4M3V5	30.000	.000	.000	.000
(BP0003)	◇	0H13 B10CSWB70TF4M3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 6.000 HAW/HT= .850 Y(BP) = .000

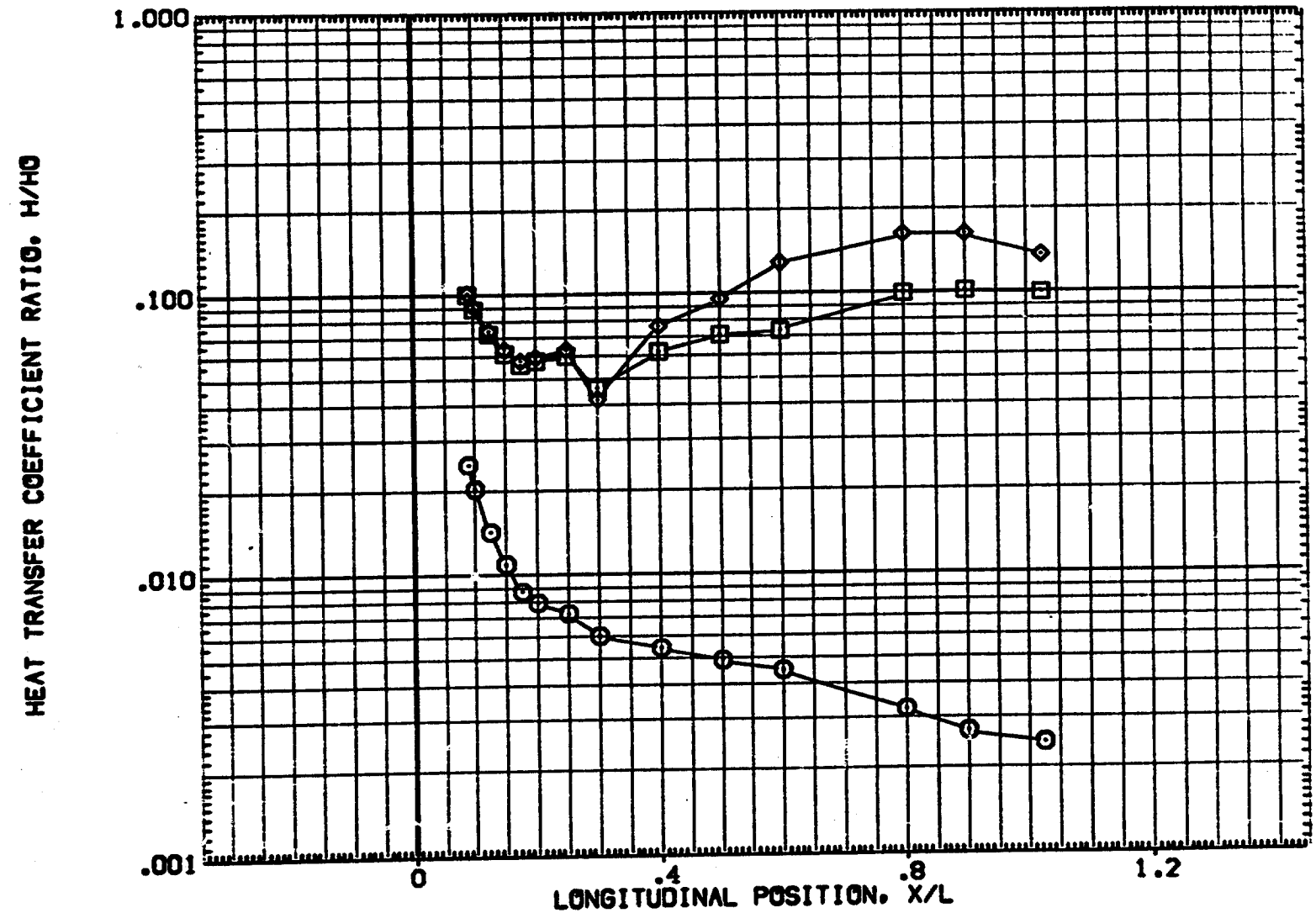
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	○	0H13 B10CSW8707F4P3V5	.000	.000	.000	.000
(BP0002)	□	0H13 B10CSW8707F4P3V5	30.000	.000	.000	.000
(BP0003)	◇	0H13 B10CSW8707F4P3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 6.000 HAW/HT= .850 Y(BP) = 70.000

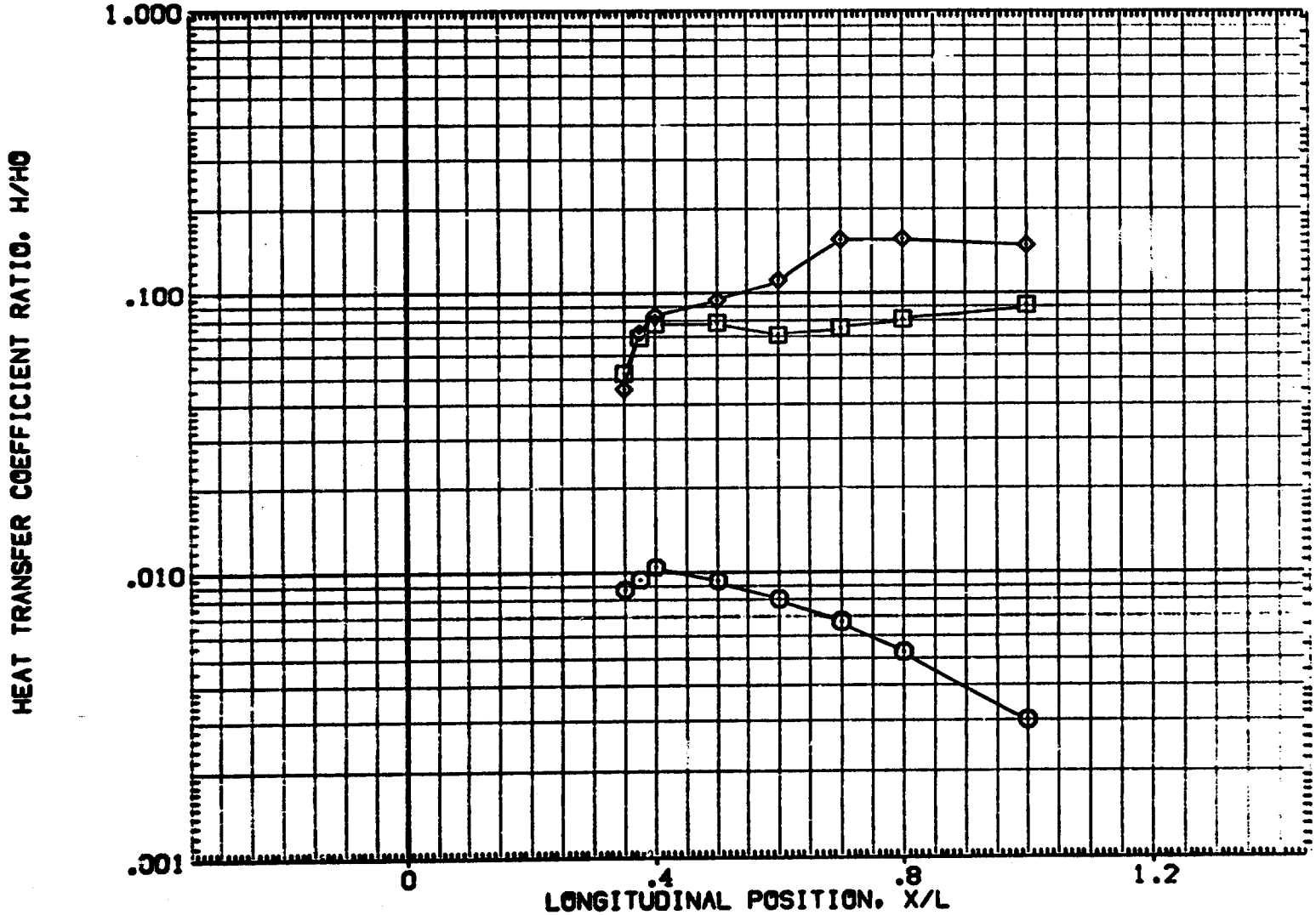
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	○	OH13 B10CSW8707F4H3V5	.000	.000	.000	.000
(BP0002)	□	OH13 B10CSW8707F4H3V5	30.000	.000	.000	.000
(BP0003)	◇	OH13 B10CSW8707F4H3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

RN/L = 6.000 HAW/HT= 1.000 Y(BP) = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(BP0001)	□	0413 B10CSW8707F4H3V5	.000	.000	.000	.000
(BP0002)	□	0413 B10CSW8707F4H3V5	30.000	.000	.000	.000
(BP0003)	◇	0413 B10CSW8707F4H3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

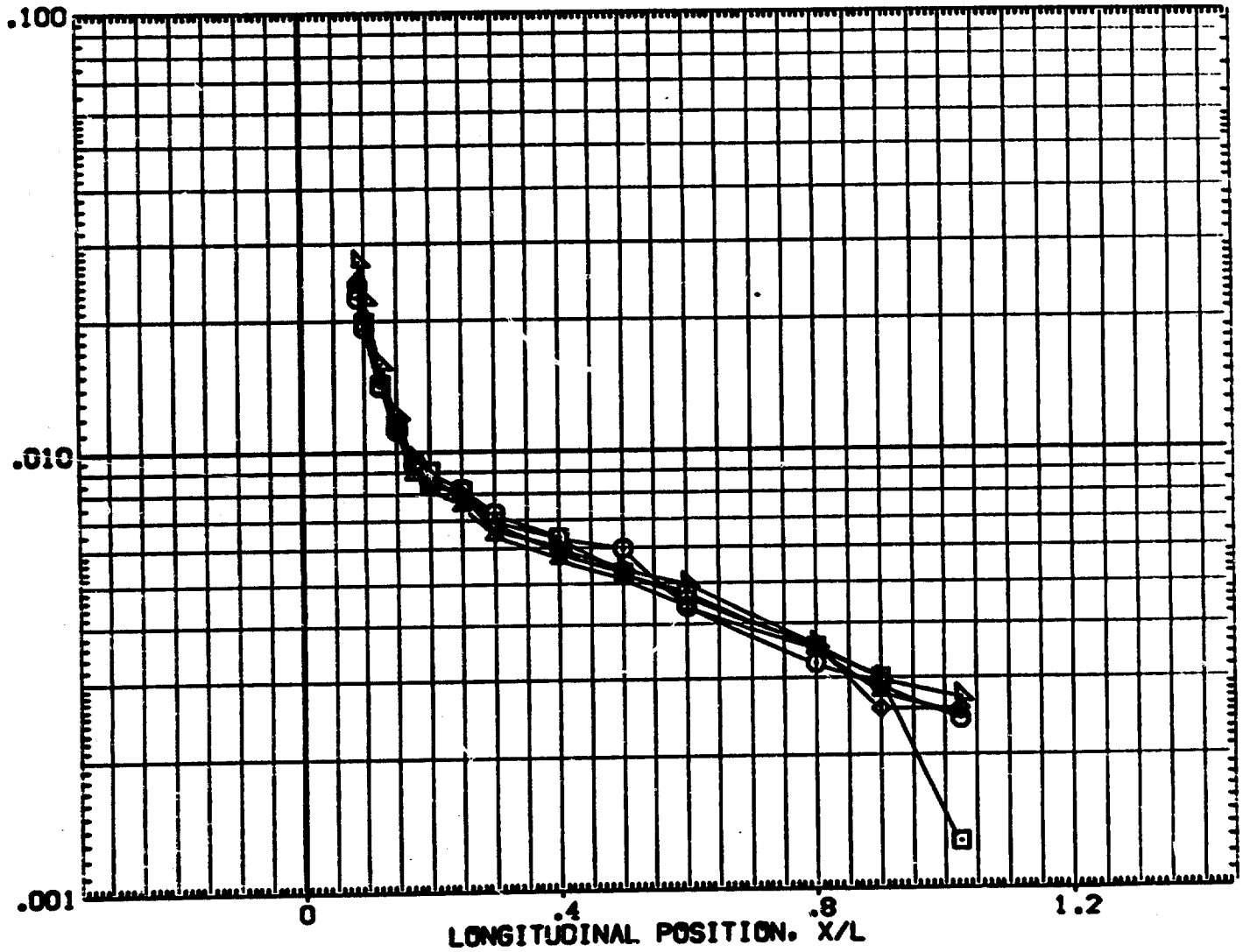
RN/L = 6.000 HAW/HT= 1.000 Y(BP) = 70.000

OH13 B10C5W8707F4M3V5 (BP0001)

SYMBOL	RN/L	Y(BP)	MAV/MT
○	1.000	.000	.850
□	2.000		
◇	3.000		
△	4.000		
▽	6.000		

PARAMETRIC VALUES

MAV	8.000	ALPHA	.000
BE	.000	ELEVON	.000
RUDDER	.000		



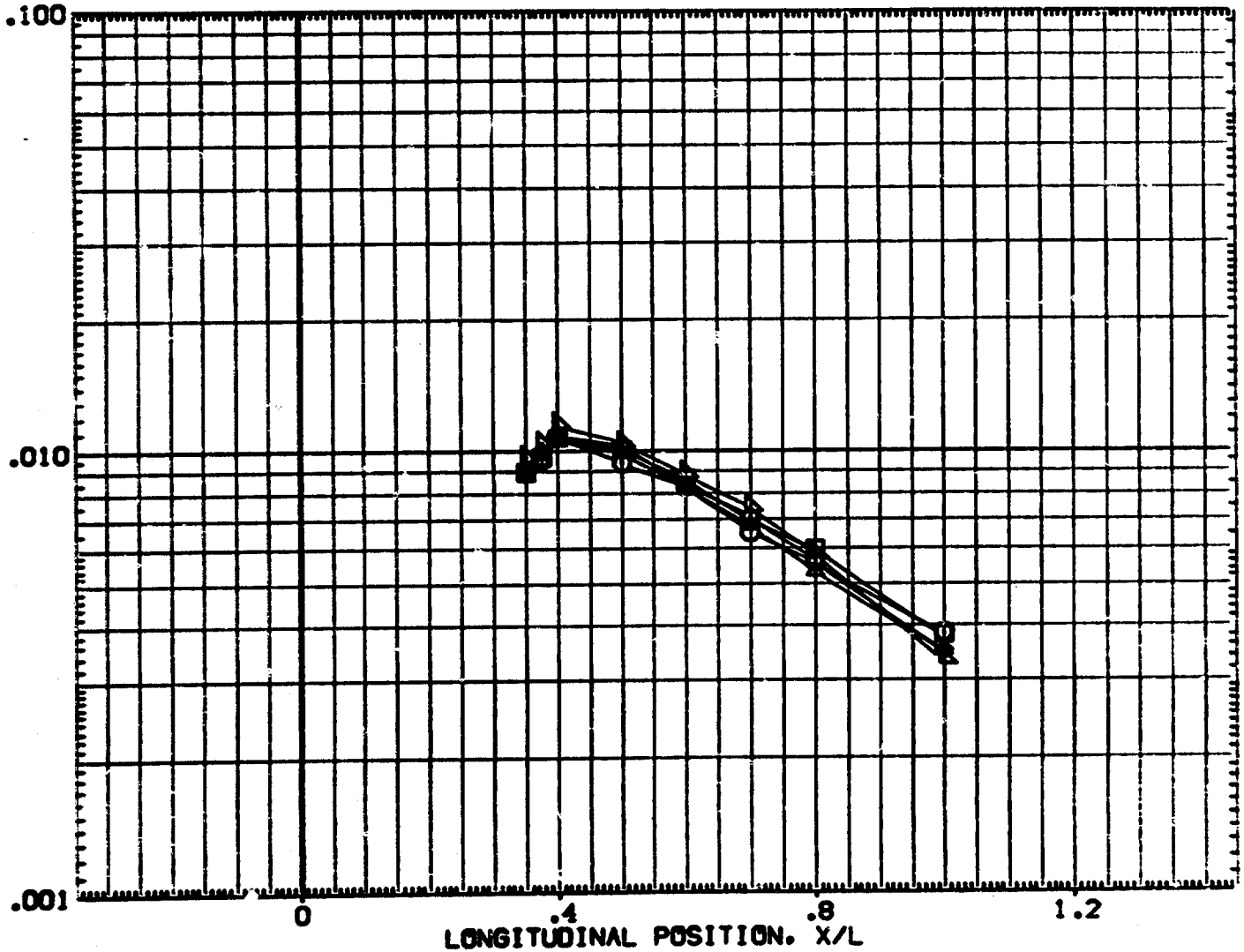
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0001)

SYMBOL	RN/L	Y(BP)	HAW/HT
○	1.000	70.000	.850
□	2.000		
◇	3.000		
△	4.000		
▽	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



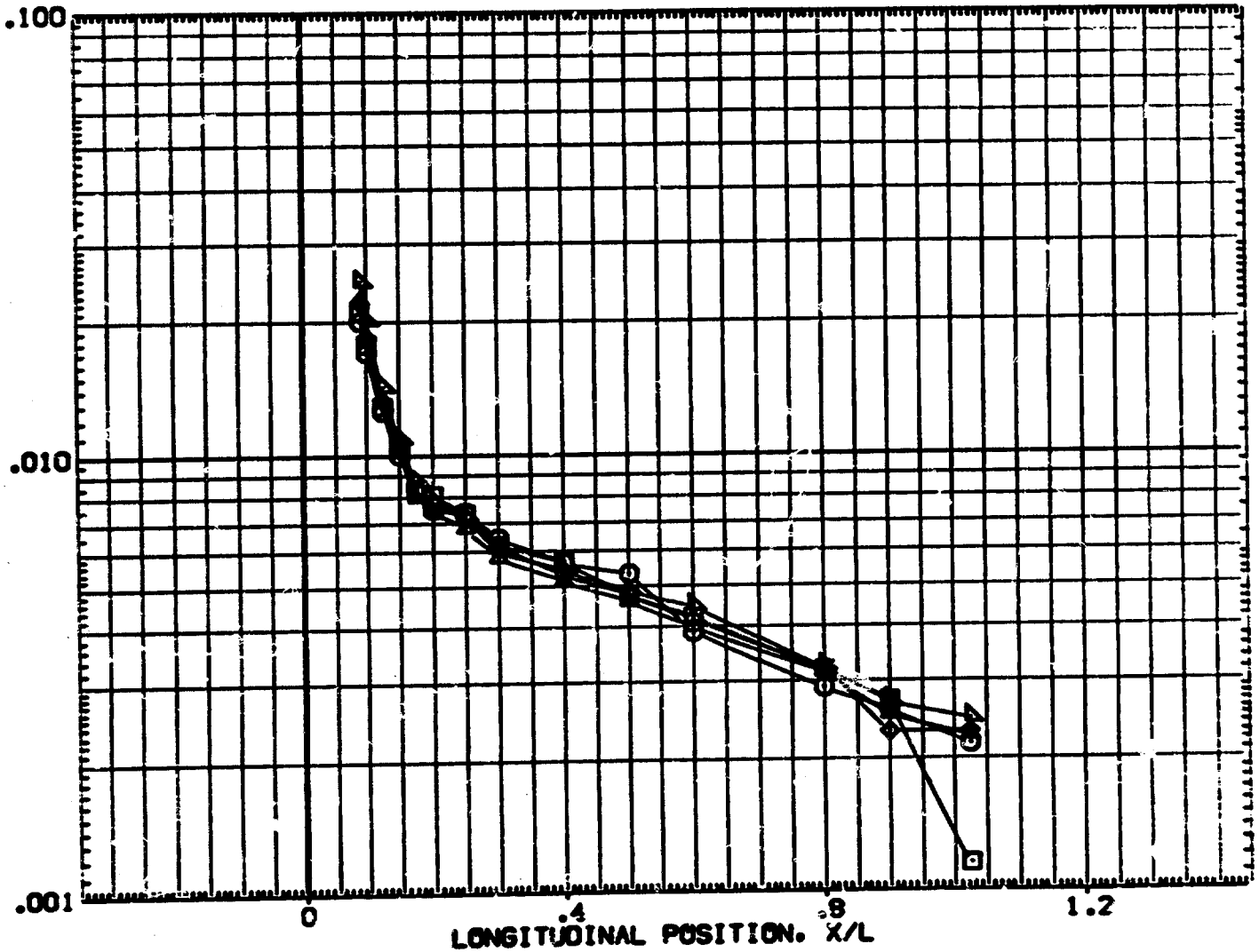
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0001)

SYMBOL	RN/L	Y(BP)	HAV/HT
○	1.000	.000	1.000
△	2.000		
◇	3.000		
□	4.000		
▽	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



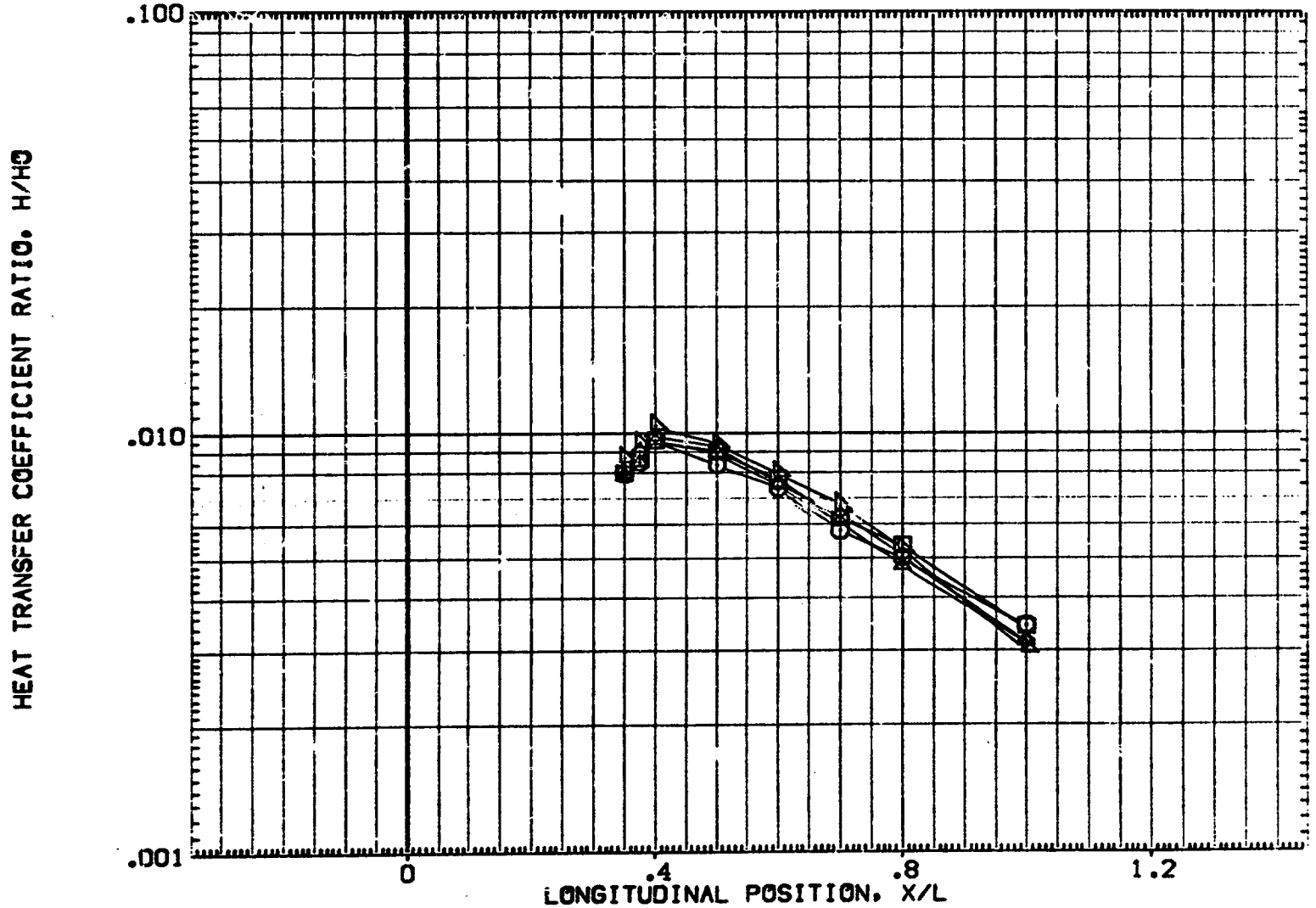
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0001)

SYMBOL	RN/L	Y(BP)	HAW/HT
○	1.000	70.000	1.000
□	2.000		
◇	3.000		
▷	4.000		
△	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



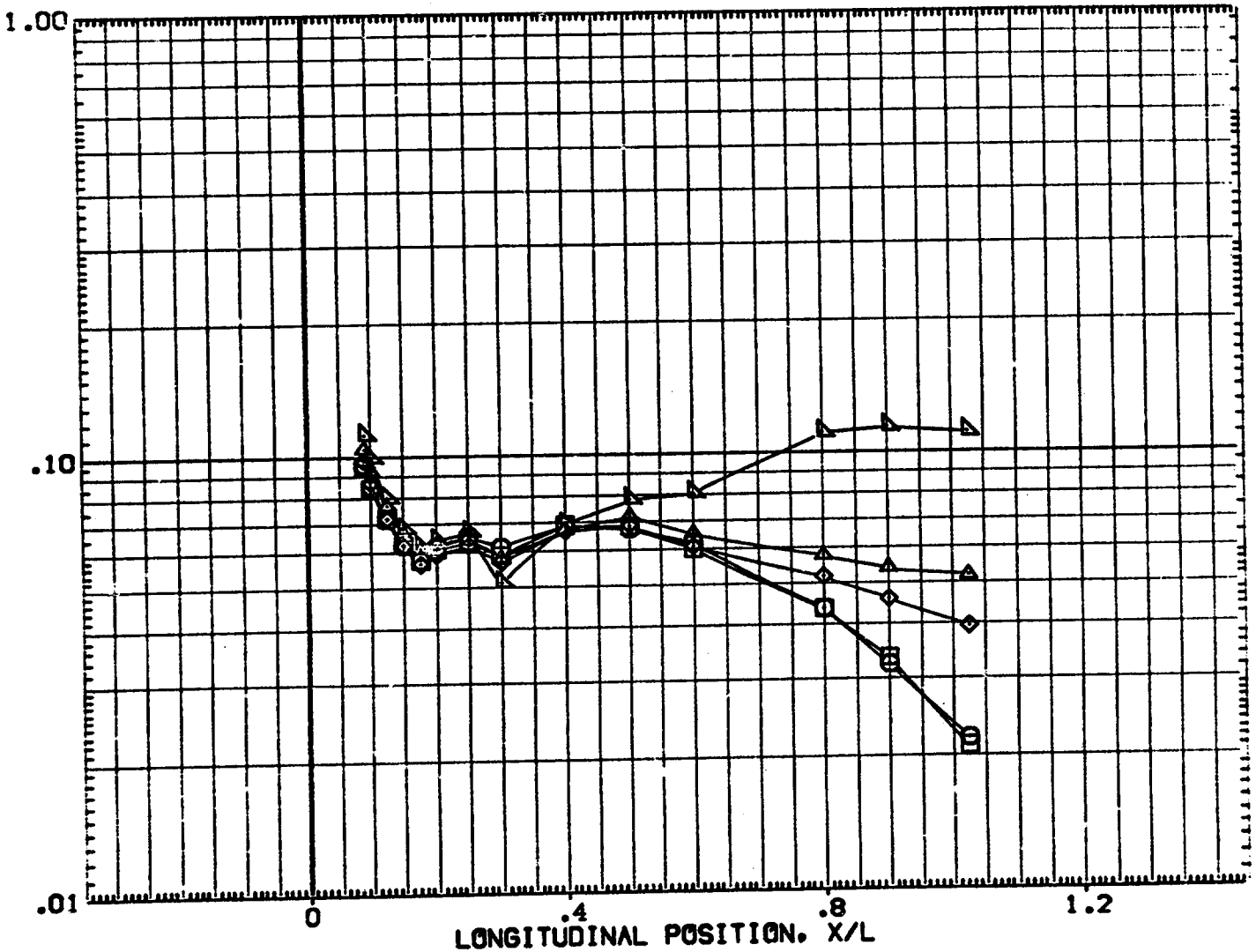
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

0H13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	RN/L	Y(BP)	HAW/HT
○	1.000	.000	.850
□	2.000		
◇	3.000		
▷	4.000		
△	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



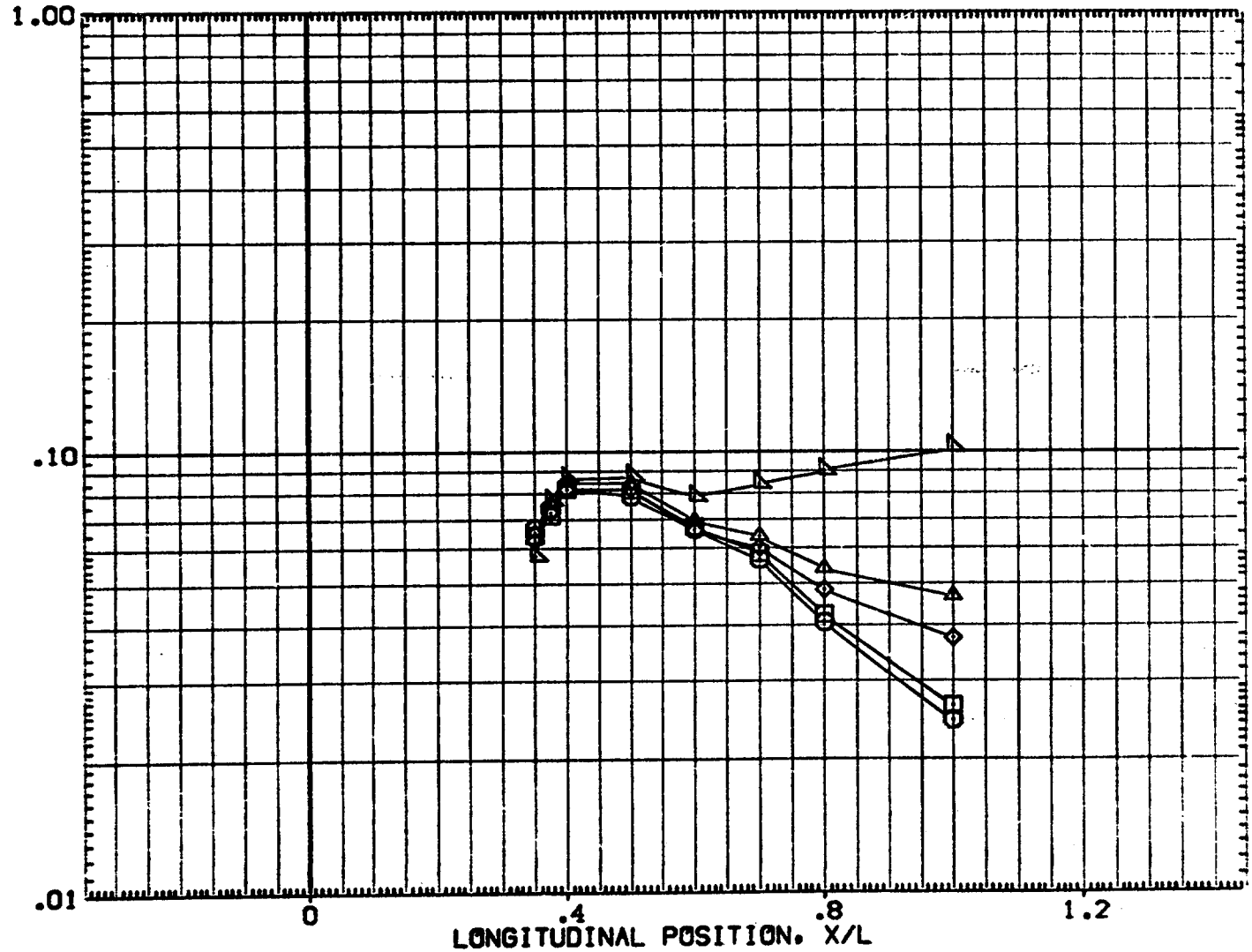
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	RN/L	Y(BP)	HAV/HT
○	1.000	70.000	.850
□	2.000		
◇	3.000		
△	4.000		
◁	6.000		

PARAMETRIC VALUES

MACH	9.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



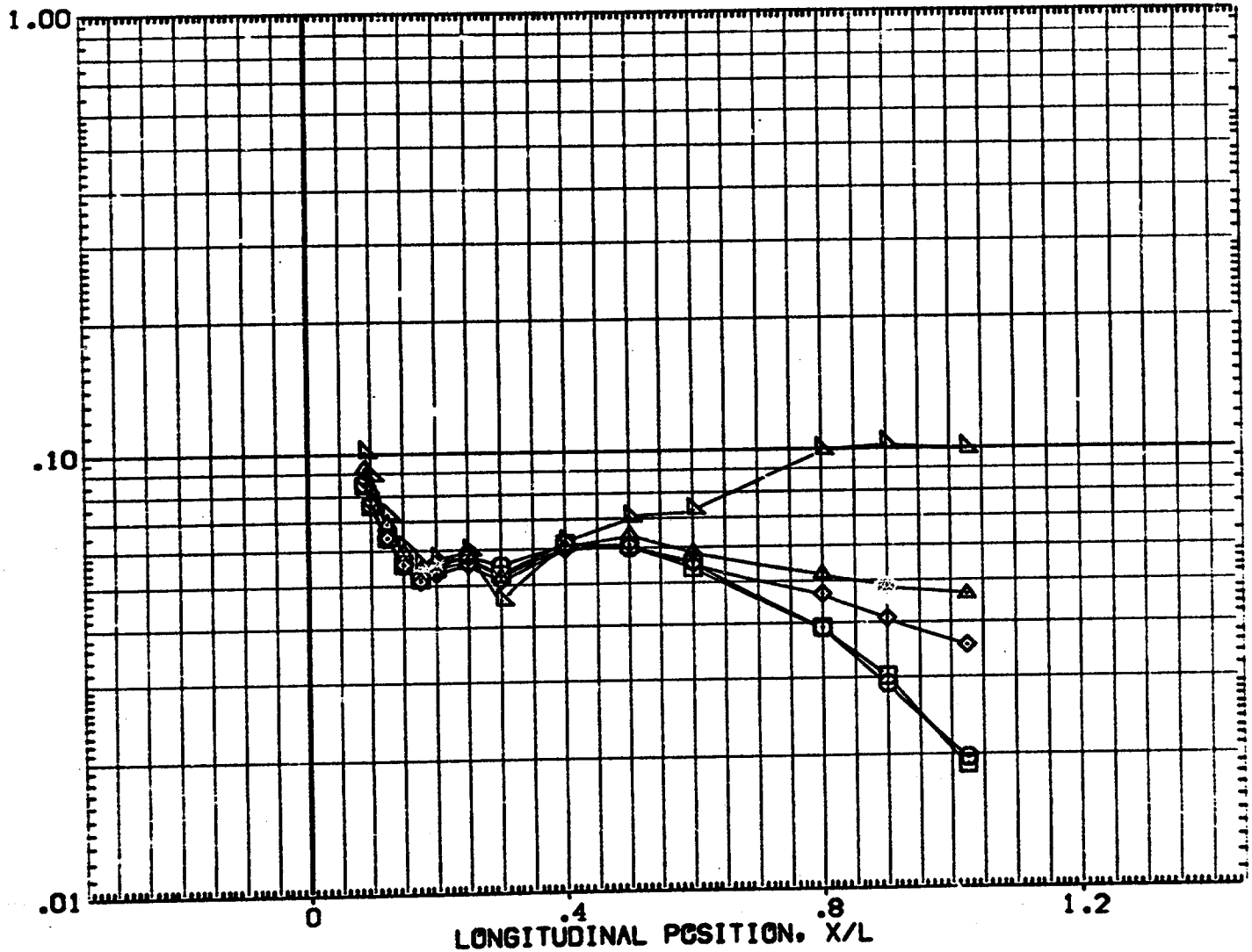
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	PN/L	Y(BP)	HAW/HT
○	1.000	.000	1.000
□	2.000		
◇	3.000		
△	4.000		
◁	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



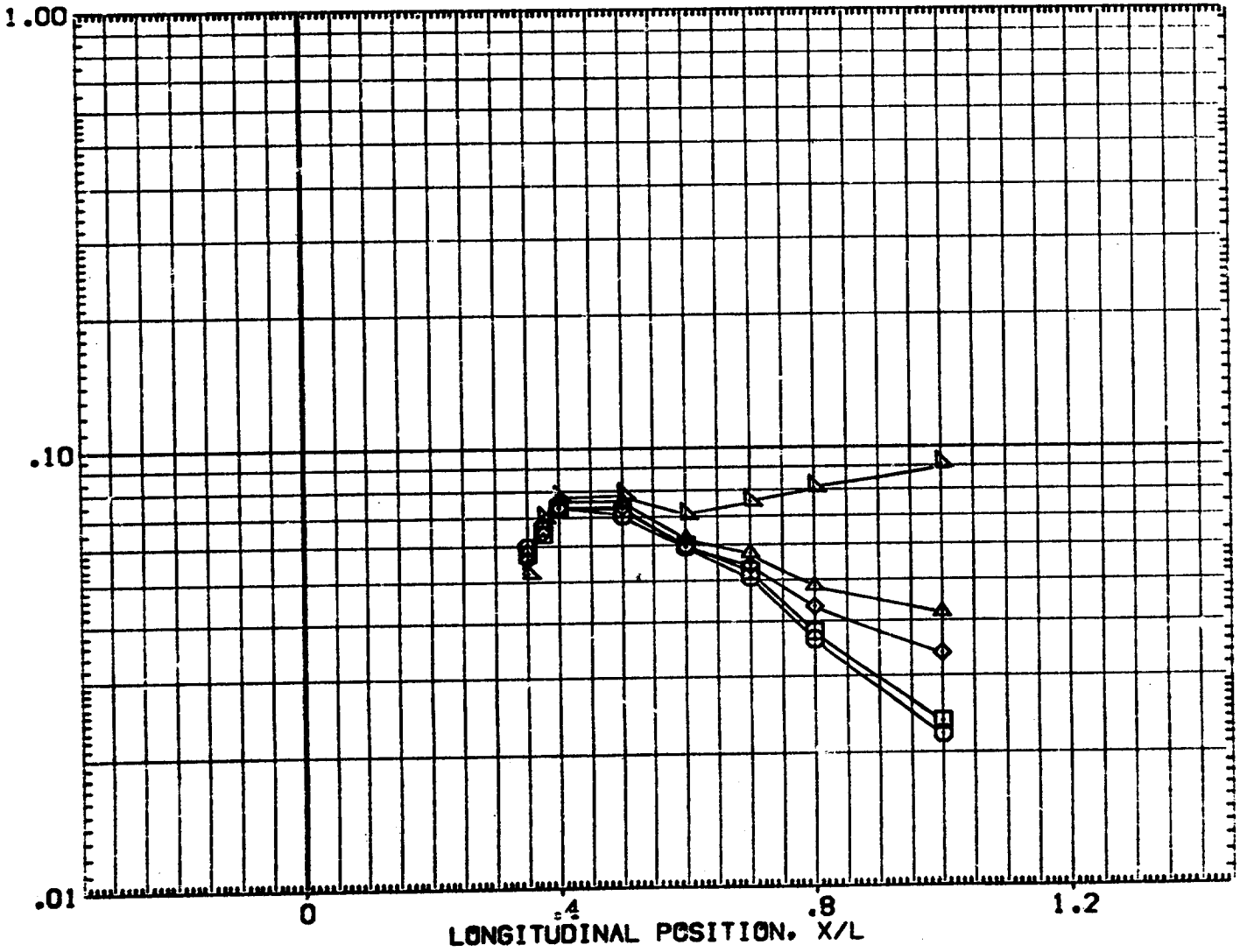
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0002)

SYMBOL	RN/L	Y(BP)	MAV/HT
○	1.000	70.000	1.000
□	2.000		
◇	3.000		
▷	4.000		
△	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



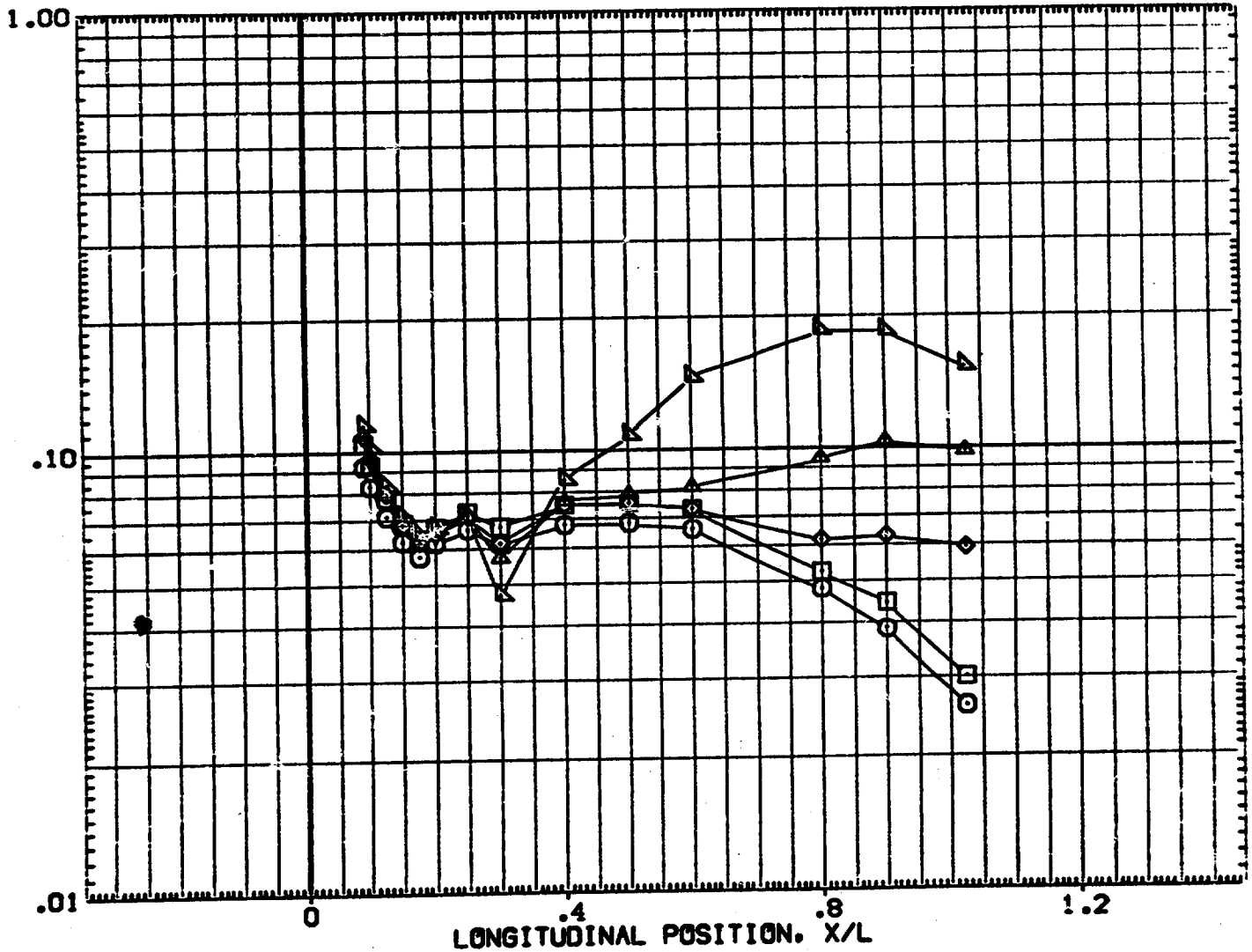
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

CH13 B10C5W87D7F4M3V5 (BP0003)

SYMBOL	RN/L	Y(BP)	HAV/HT
○	1.000	.000	.850
□	2.000		
◇	3.000		
△	4.000		
▽	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



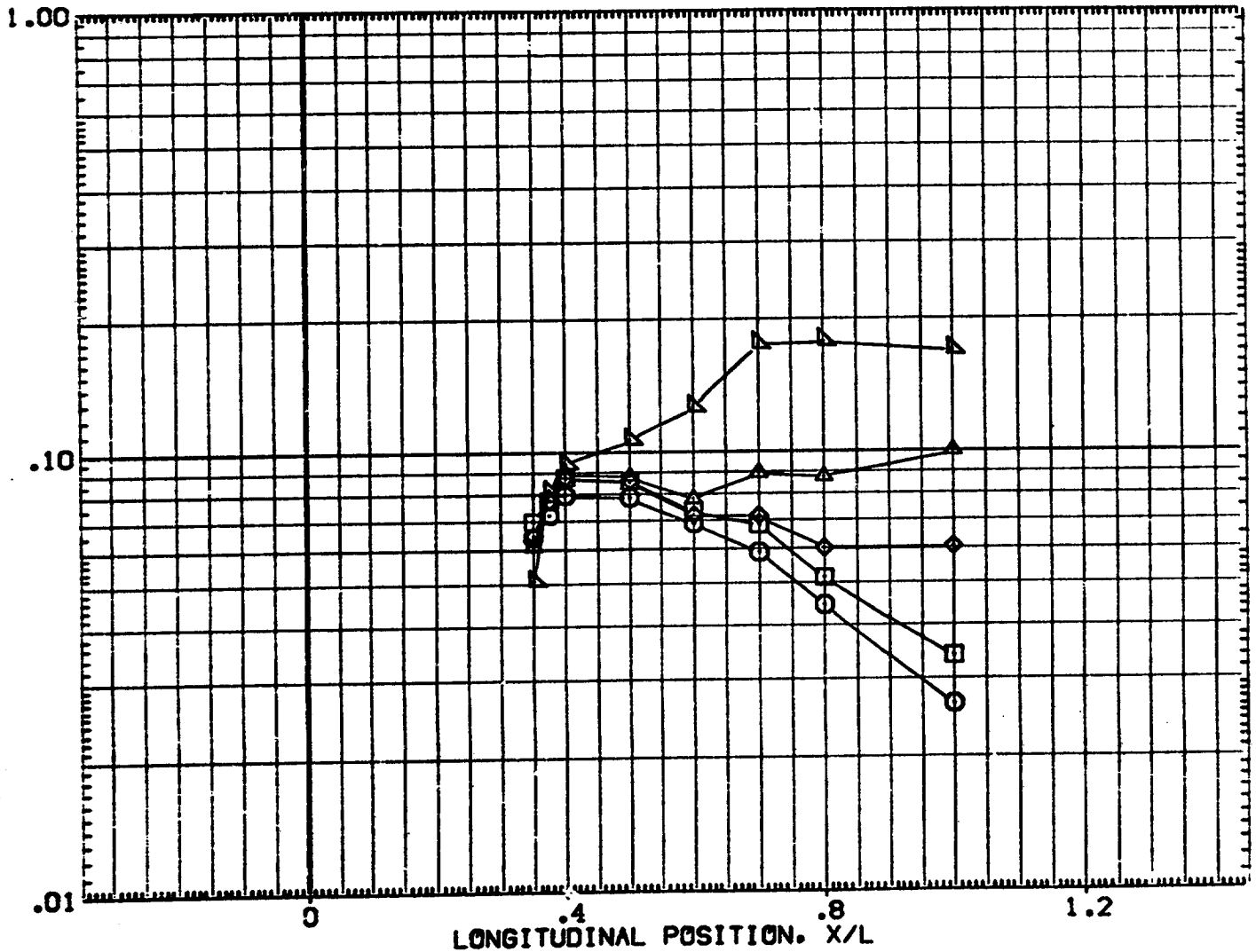
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0003)

SYMBOL	RN/L	Y(BP)	HAV/HT
○	1.000	70.000	.850
□	2.000		
◇	3.000		
△	4.000		
▱	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



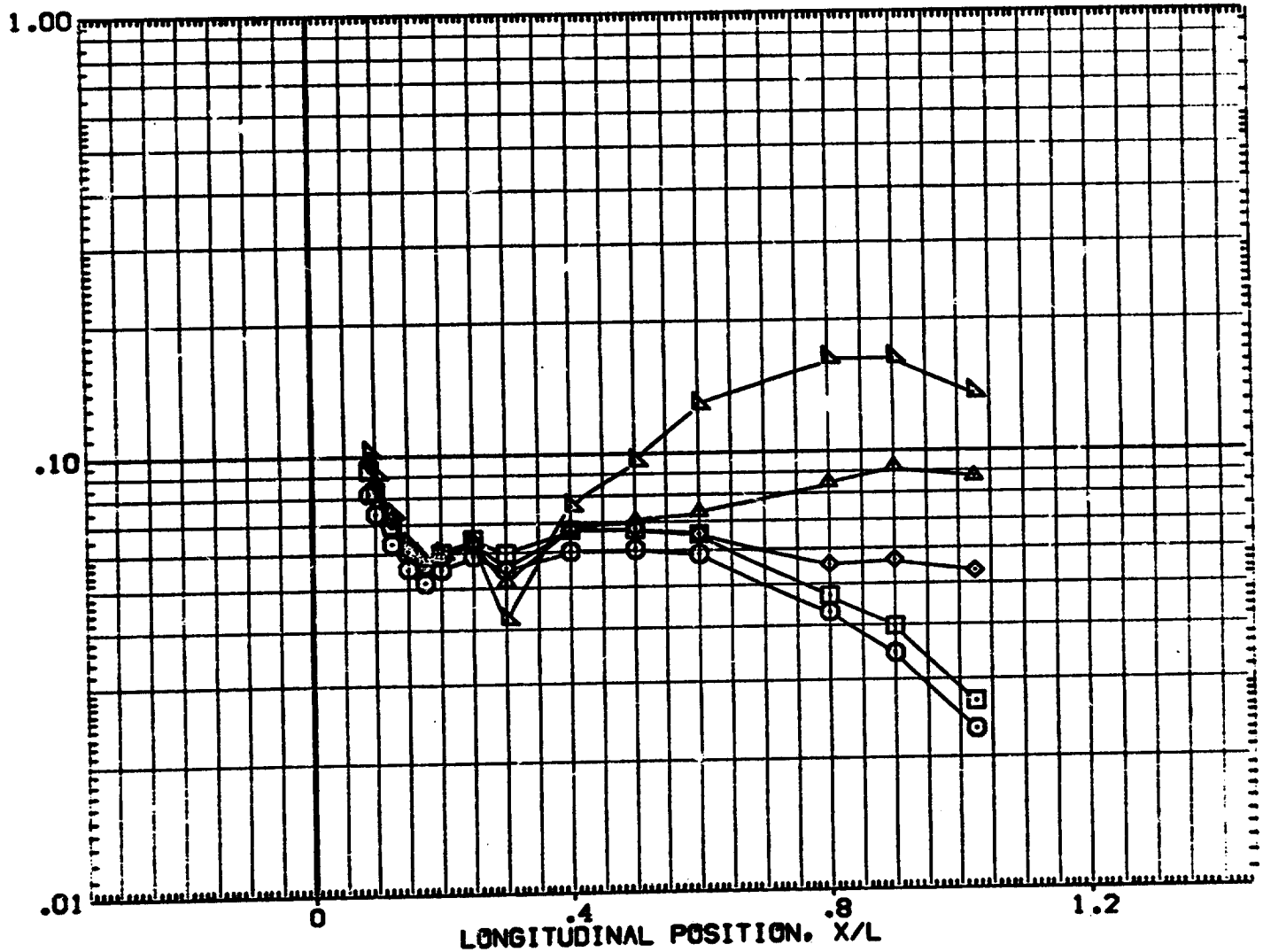
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0003)

SYMBOL	RN/L	Y(BP)	HAV/HT
○	1.000	.000	1.000
□	2.000		
◇	3.000		
△	4.000		
▽	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



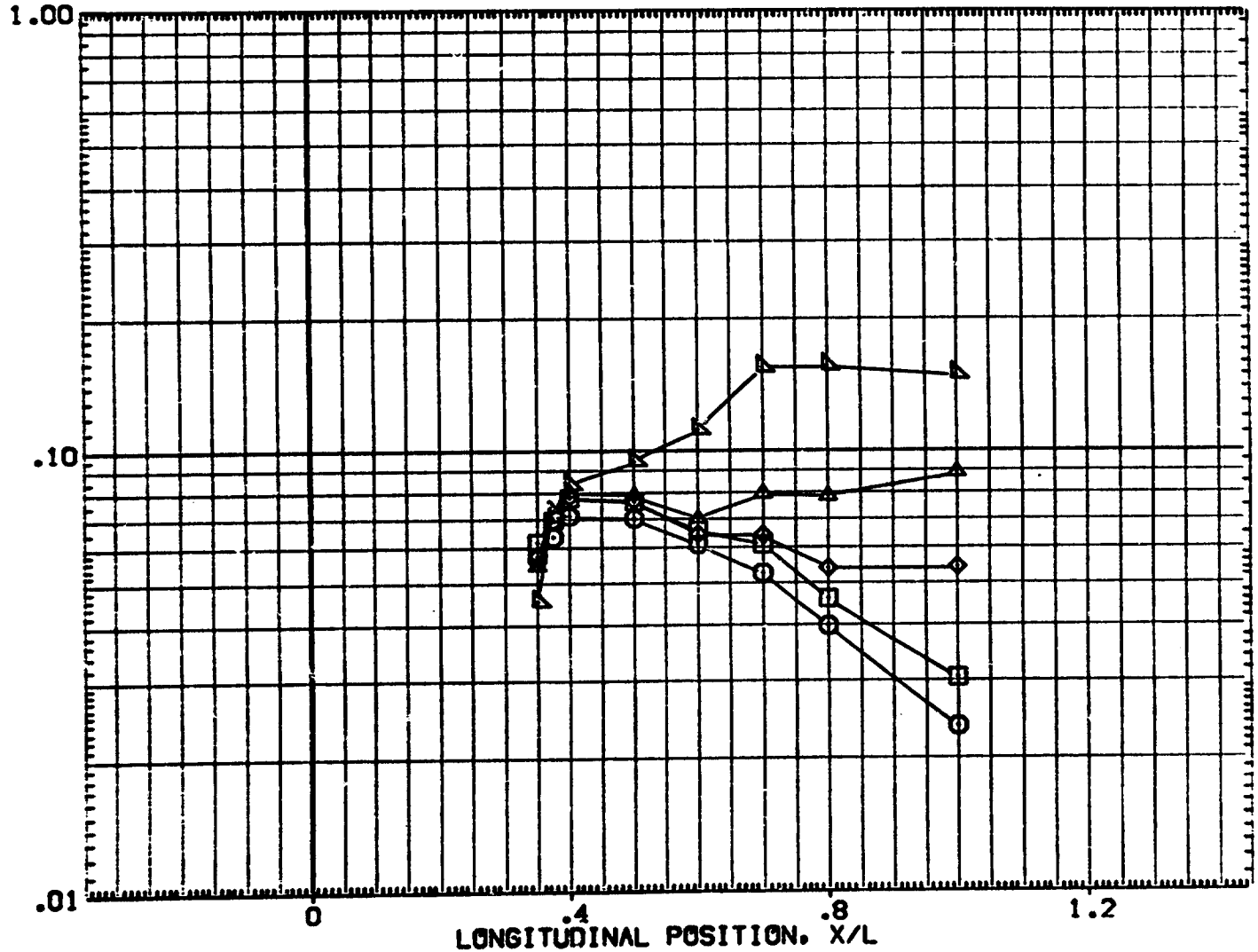
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (BP0003)

SYMBOL	RN/L	Y(BP)	HAV/HT
○	1.000	70.000	1.000
□	2.000		
◇	3.000		
△	4.000		
▷	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



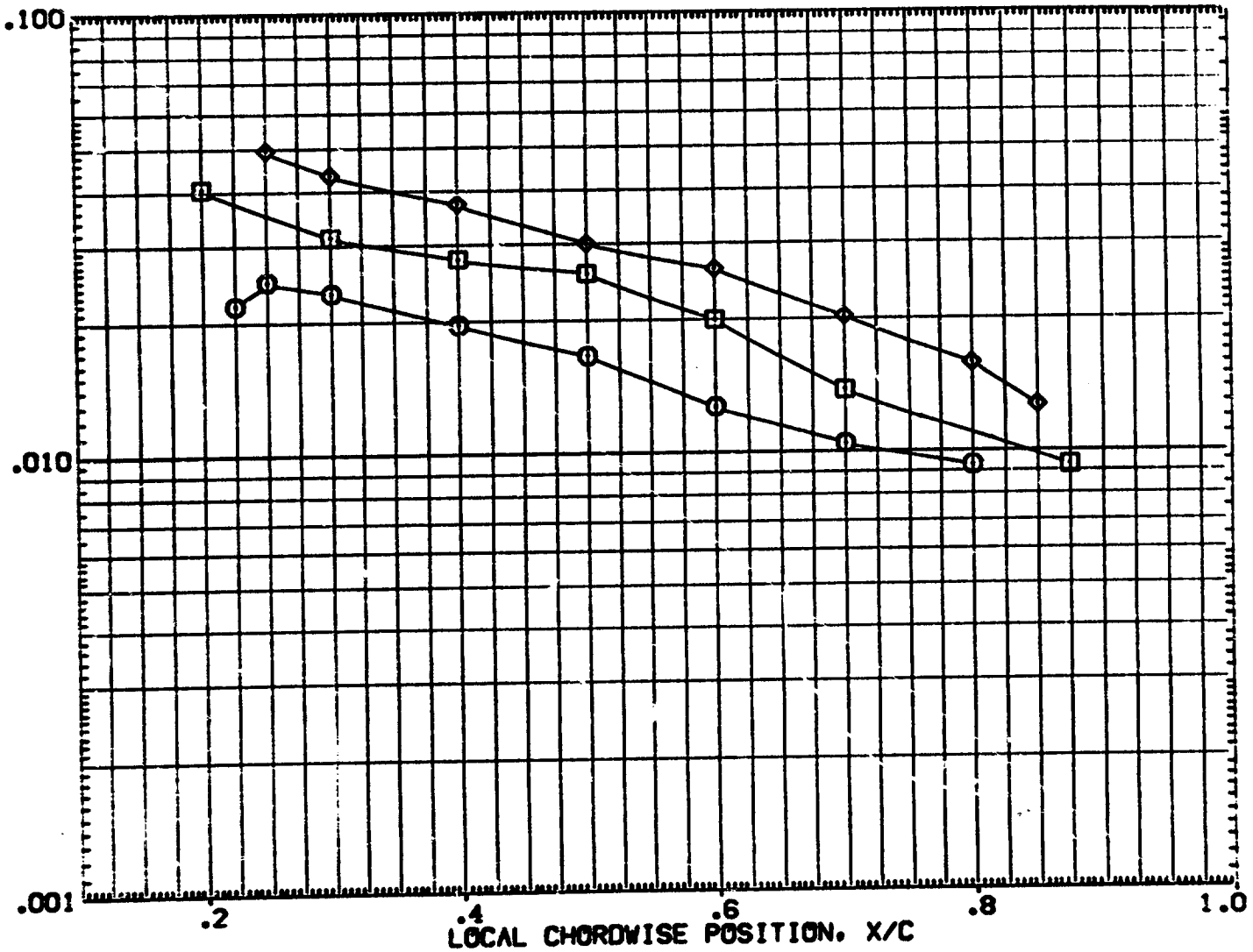
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER BODY

OH13 B10C5W87D7F4M3V5 (WP0001)

SYMBOL	ZV/B	HAV/HT	RN/L
○	.400	.850	1.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



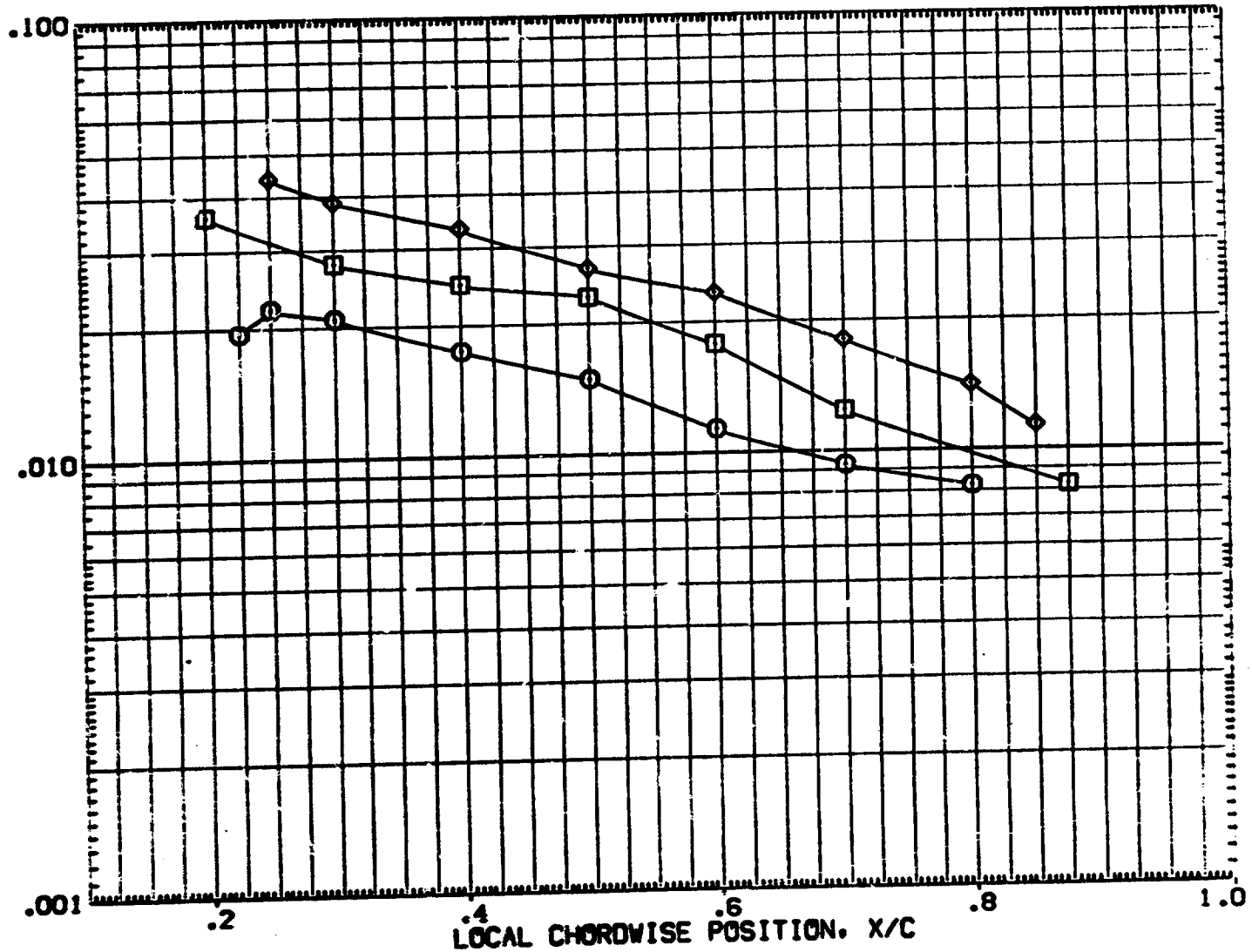
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 910C5W87D7F4M3V5 (WP0001)

SYMBOL	Z/B	HAV/HT	RN/L
○	.100	1.000	1.000
□	.800		
◇	.900		

PARAMETRIC VALUES

MACH	0.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



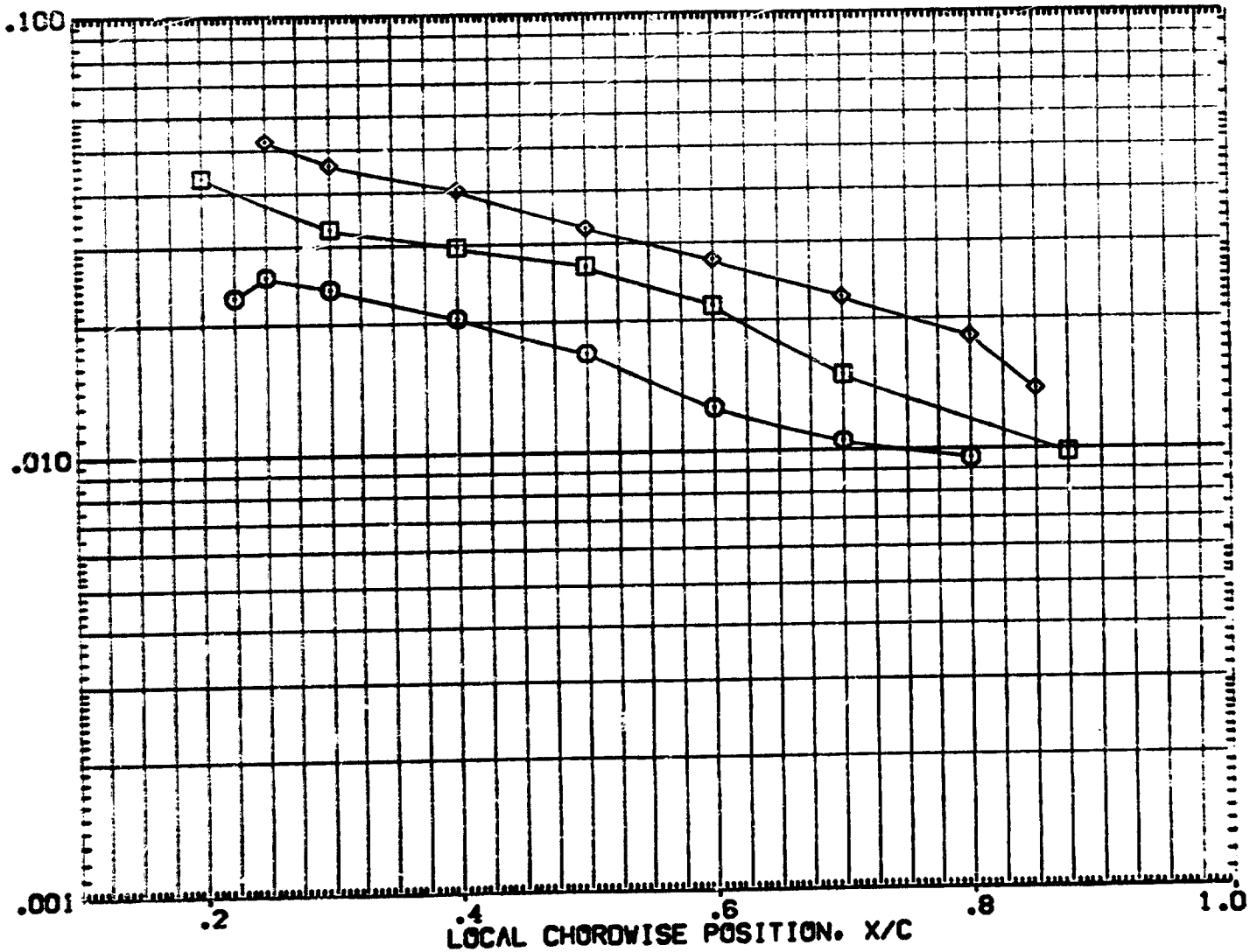
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OF 13 B10CSW87D7F4M3V5 (WP0001)

SYMBOL	ZV/B	HAV/R	RN/L
○	.400	.650	2.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



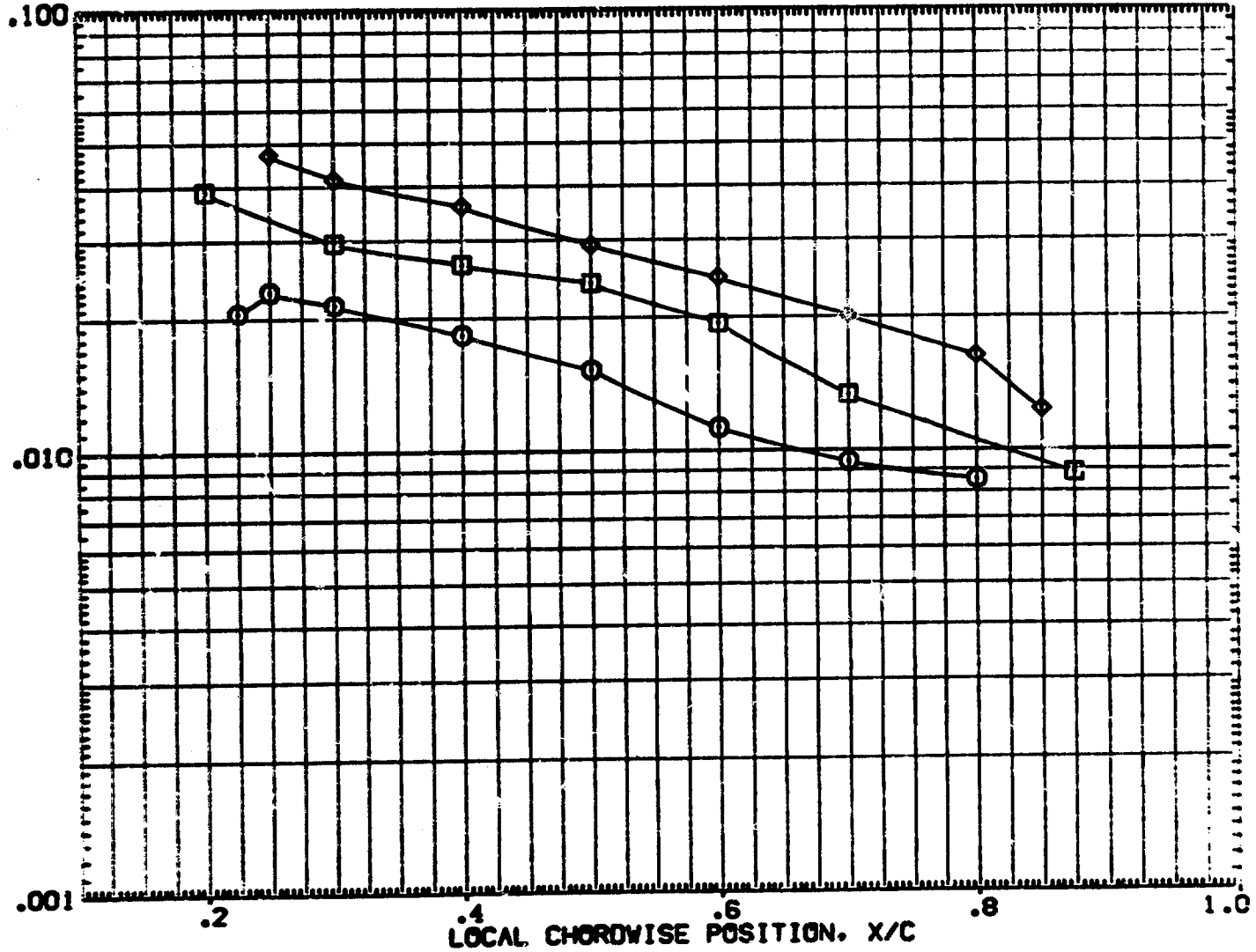
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0001)

SYMBOL	2Y/B	HAV/HT	BN/L
○	.400	1.000	2.000
□	.800		
◇	.900		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



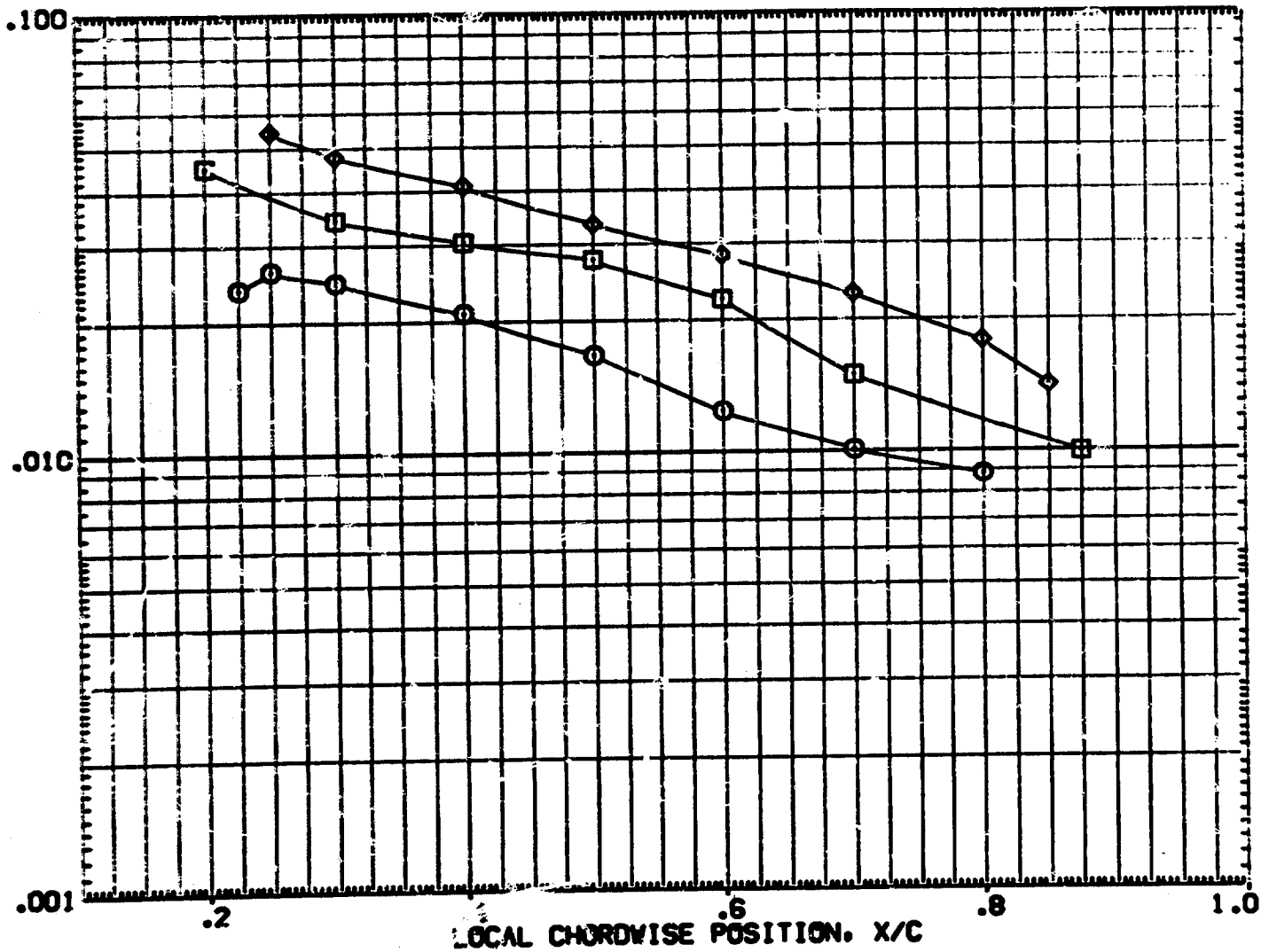
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W8707F4M3V5 (WP0001)

SYMBOL	Z/B	HAS/HT	RN/L
◇	.400	.850	3.000
□	.800		
○	.900		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



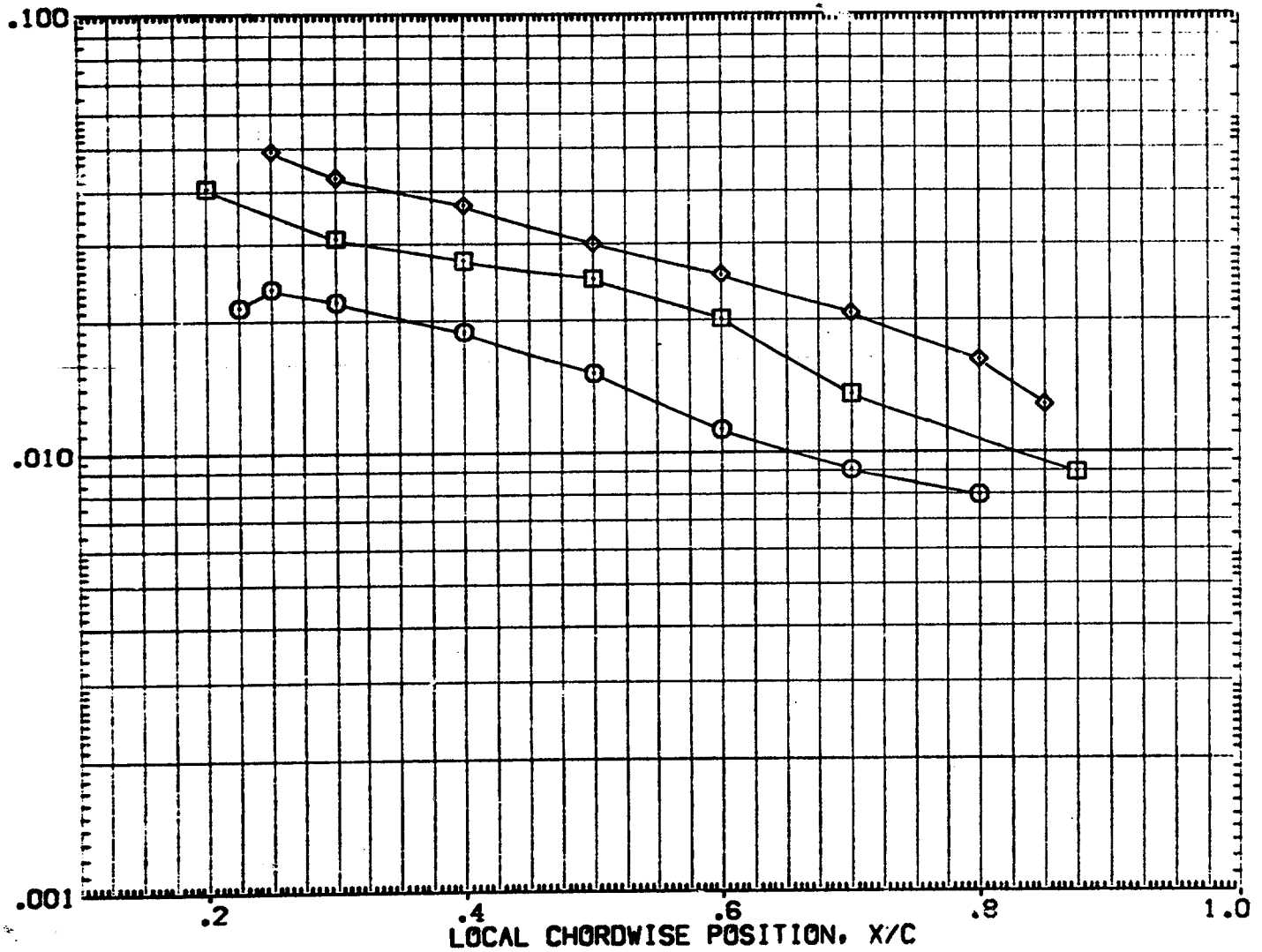
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0001)

SYMBOL	ZV/B	HAV/HT	RN/L
○	.400	1.000	3.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



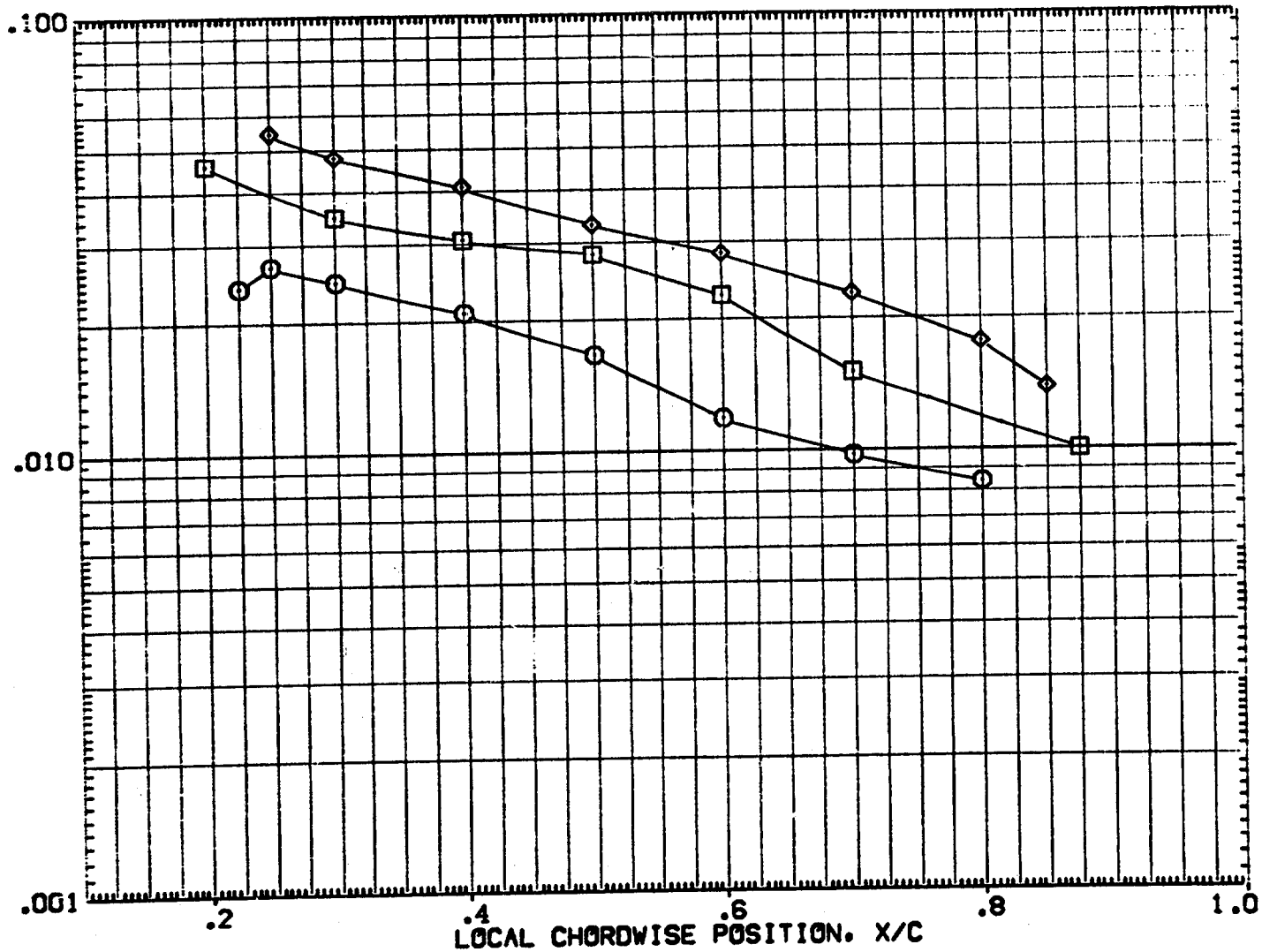
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0001)

SYMBOL	2Y/B	HAV/HT	RN/L
○	.400	.850	4.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



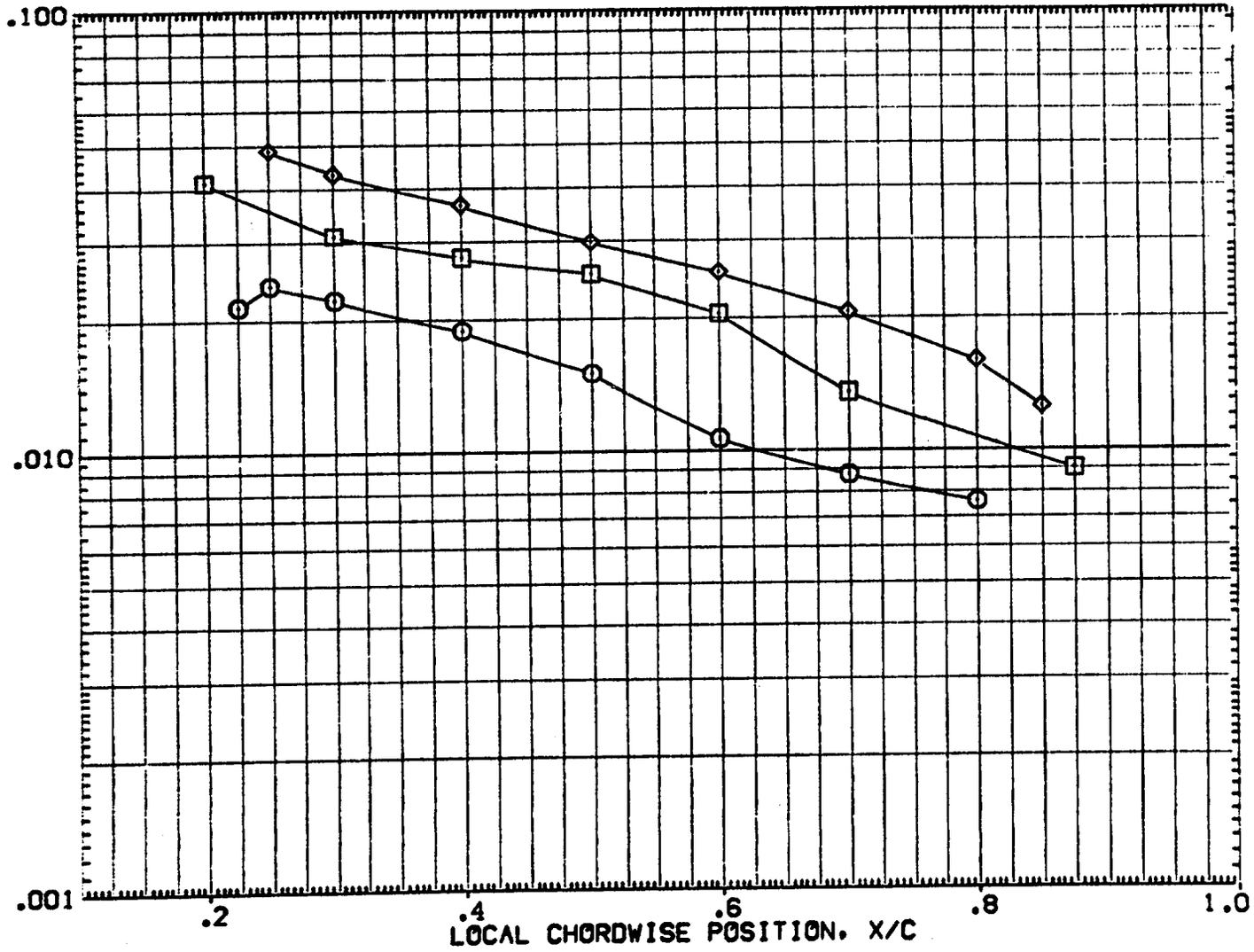
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0001)

SYMBOL	ZY/B	HAV/HT	RN/L
○	.400	1.000	4.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



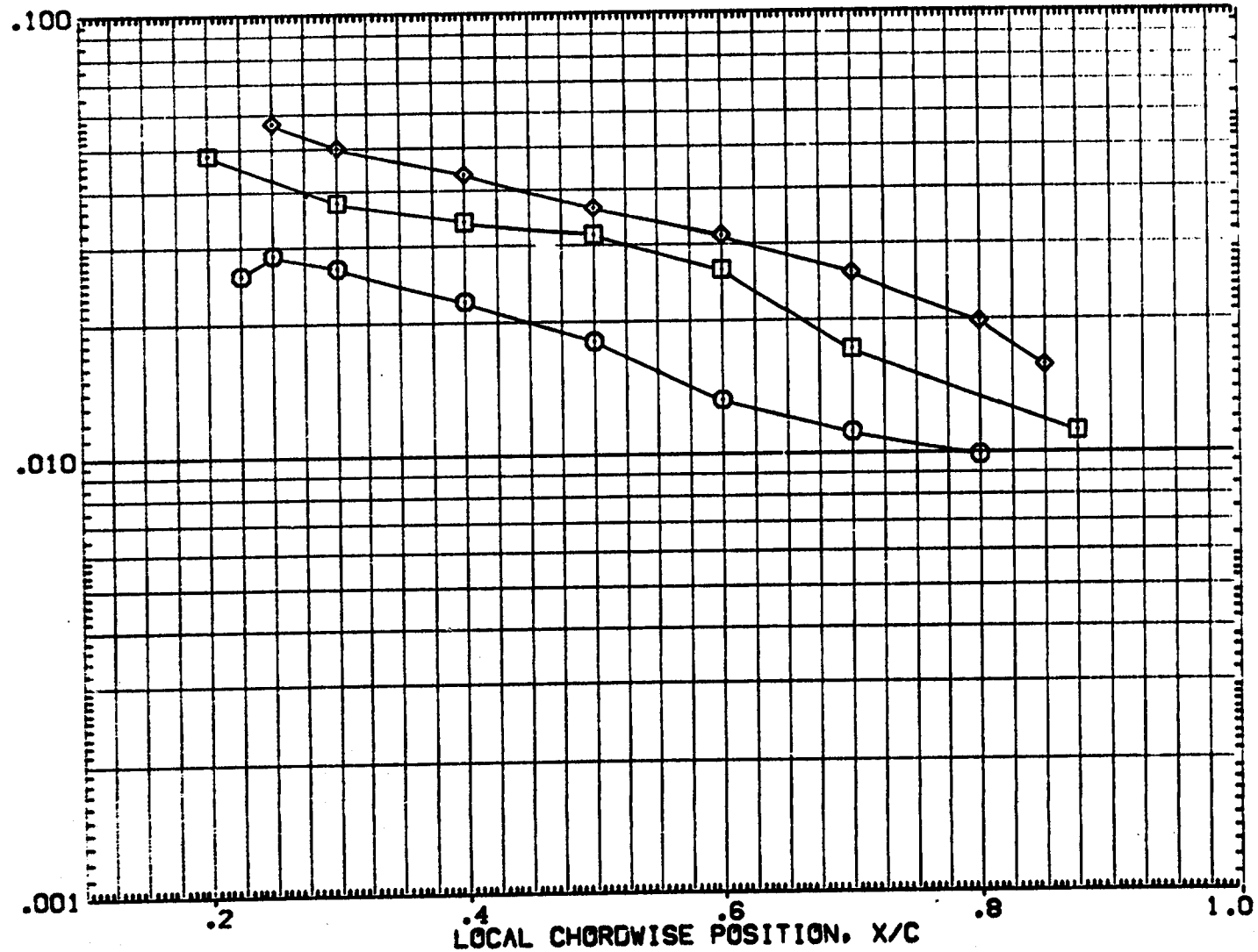
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0001)

SYMBOL	2Y/B	HAV/HT	RN/L
○	.400	.850	6.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



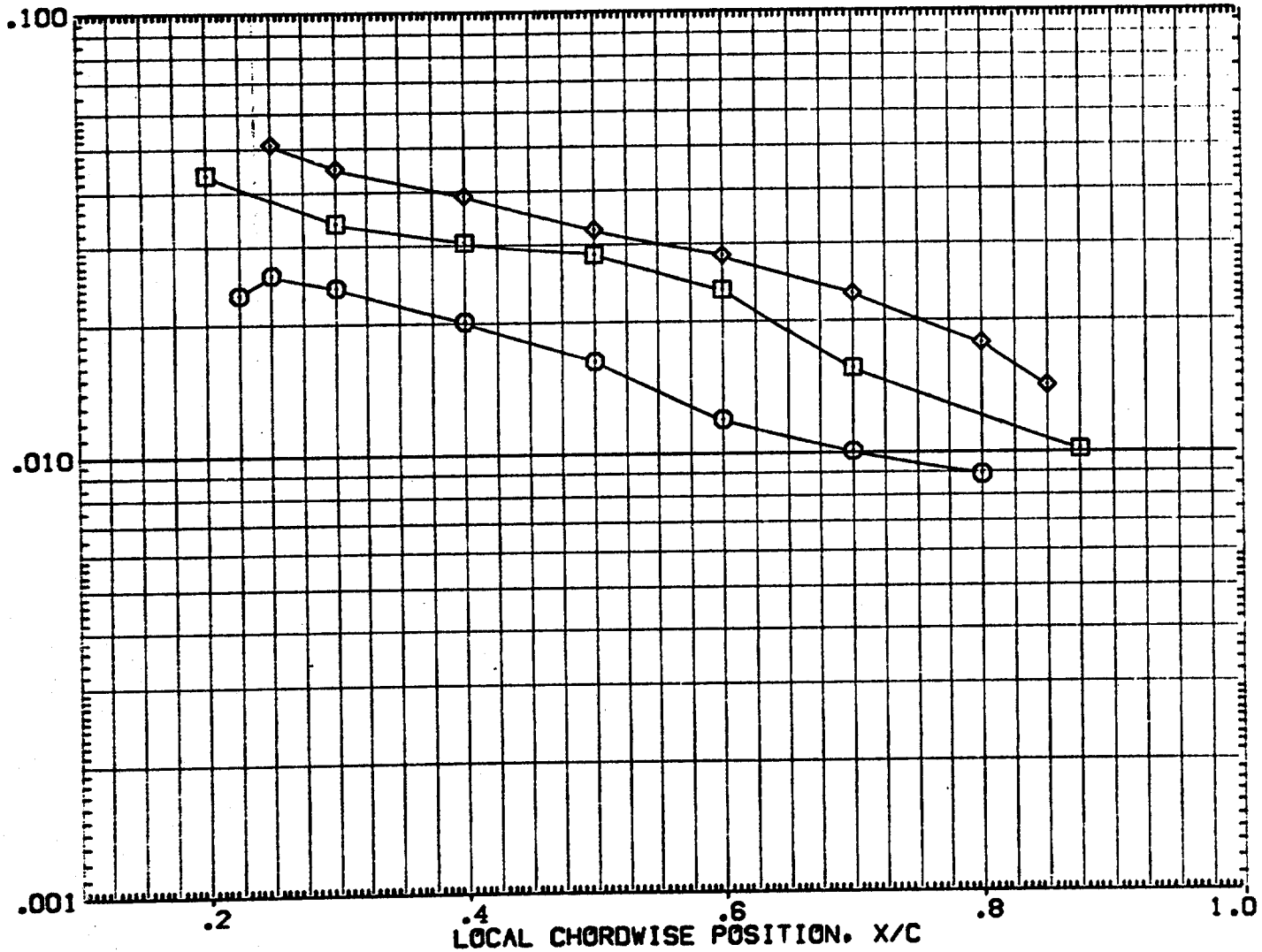
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W8707F4M3V5 (WP0001)

SYMBOL	ZV/B	HAV/HT	RN/L
○	.400	1.000	6.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



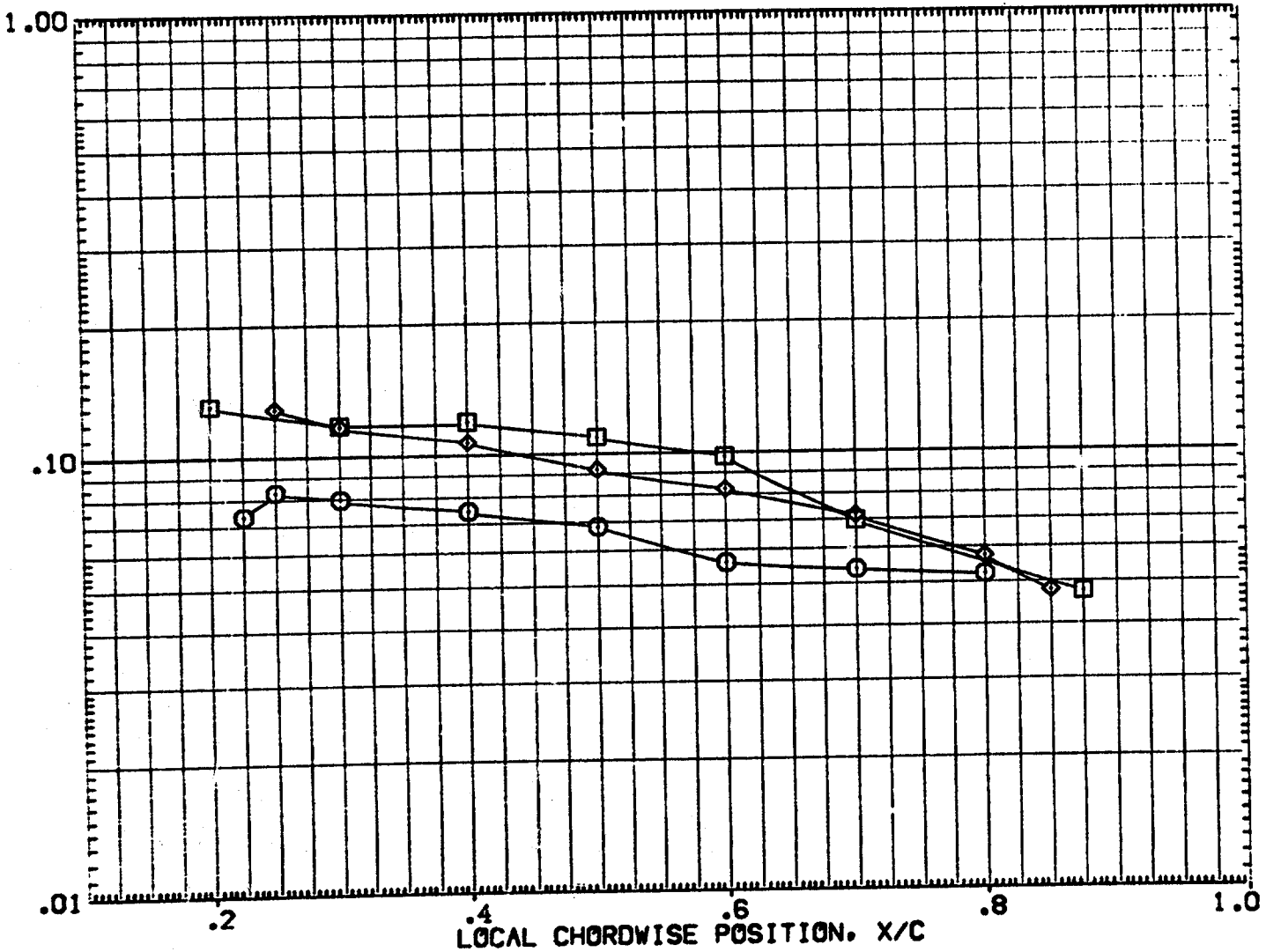
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	2Y/B	HAW/HT	RN/L
○	.400	.850	1.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



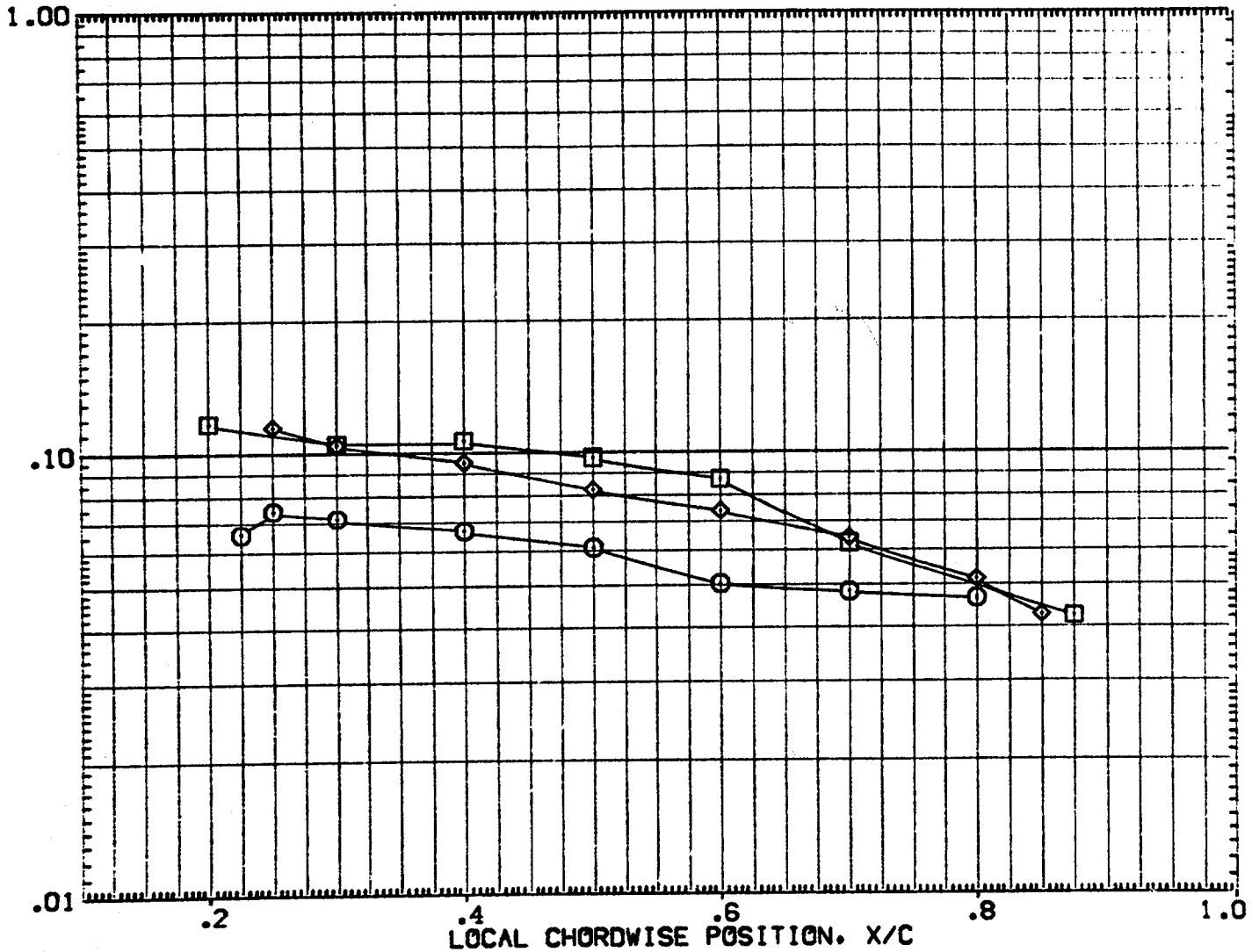
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	2Y/B	HAV/HT	RN/L
○	.400	1.000	1.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



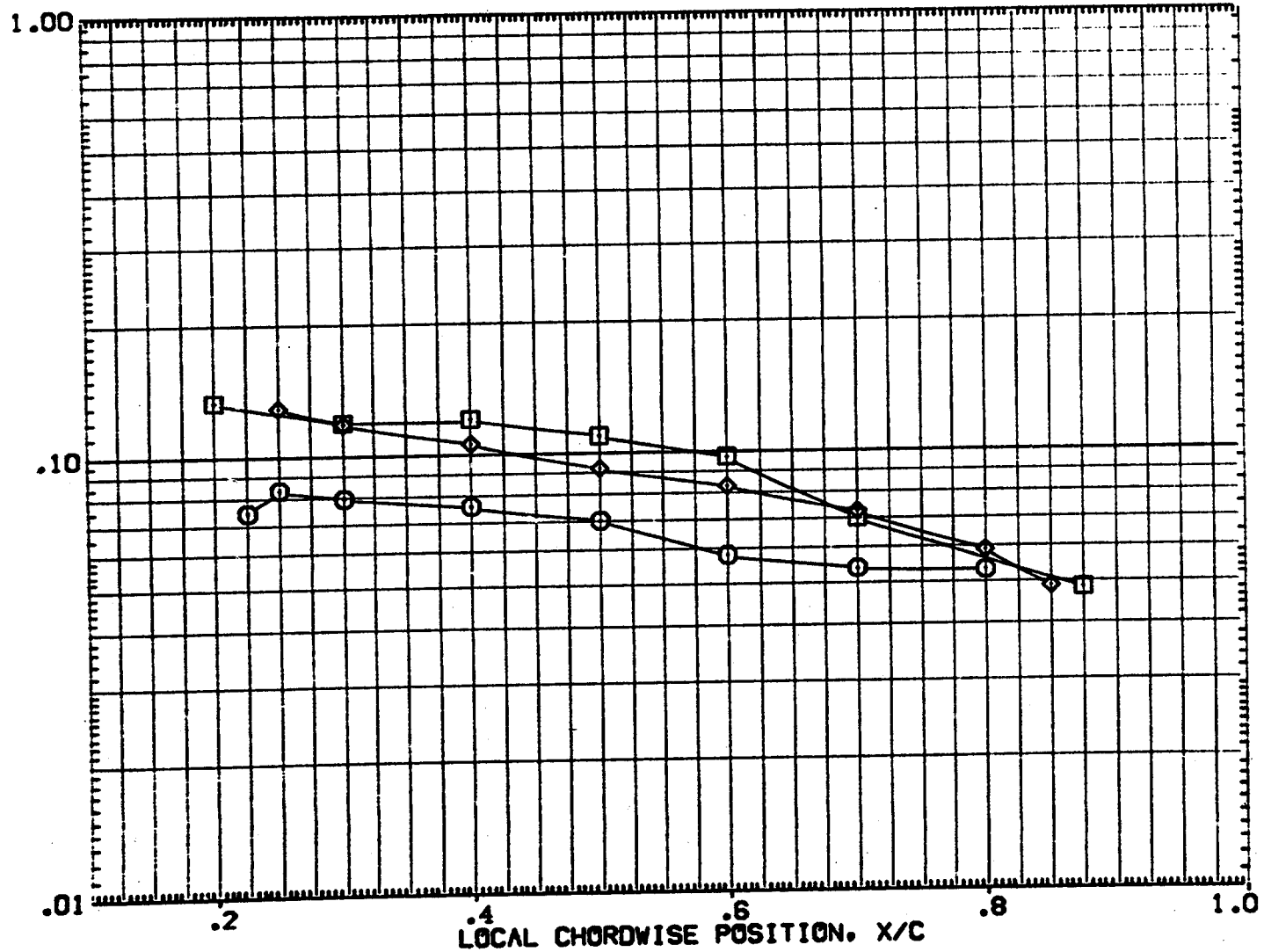
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	Z/B	HAV/HT	RN/L
□	.400	.850	2.000
◇	.600		
○	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



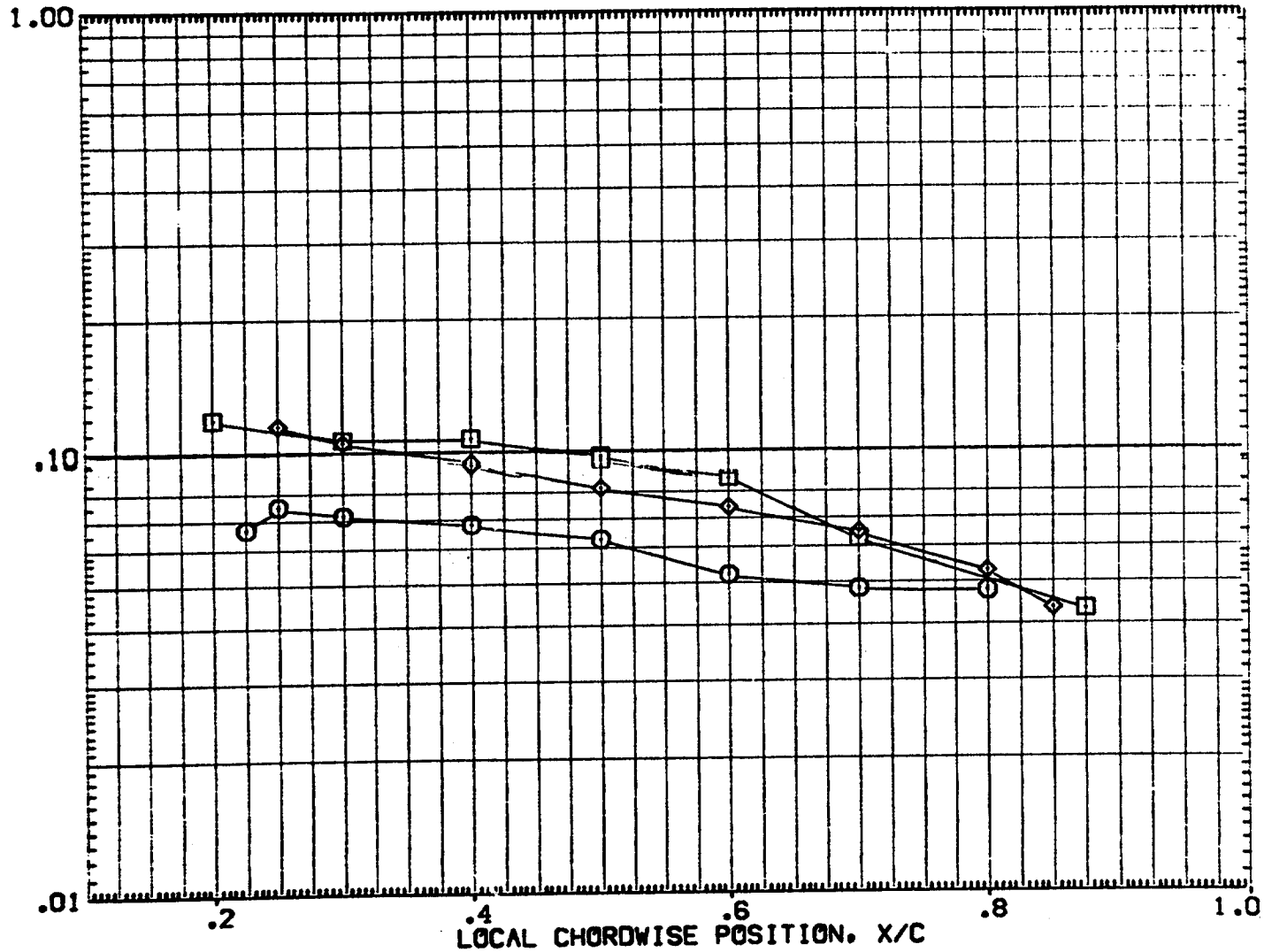
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	2Y/B	HAV/HT	RN/L
○	.400	1.000	2.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



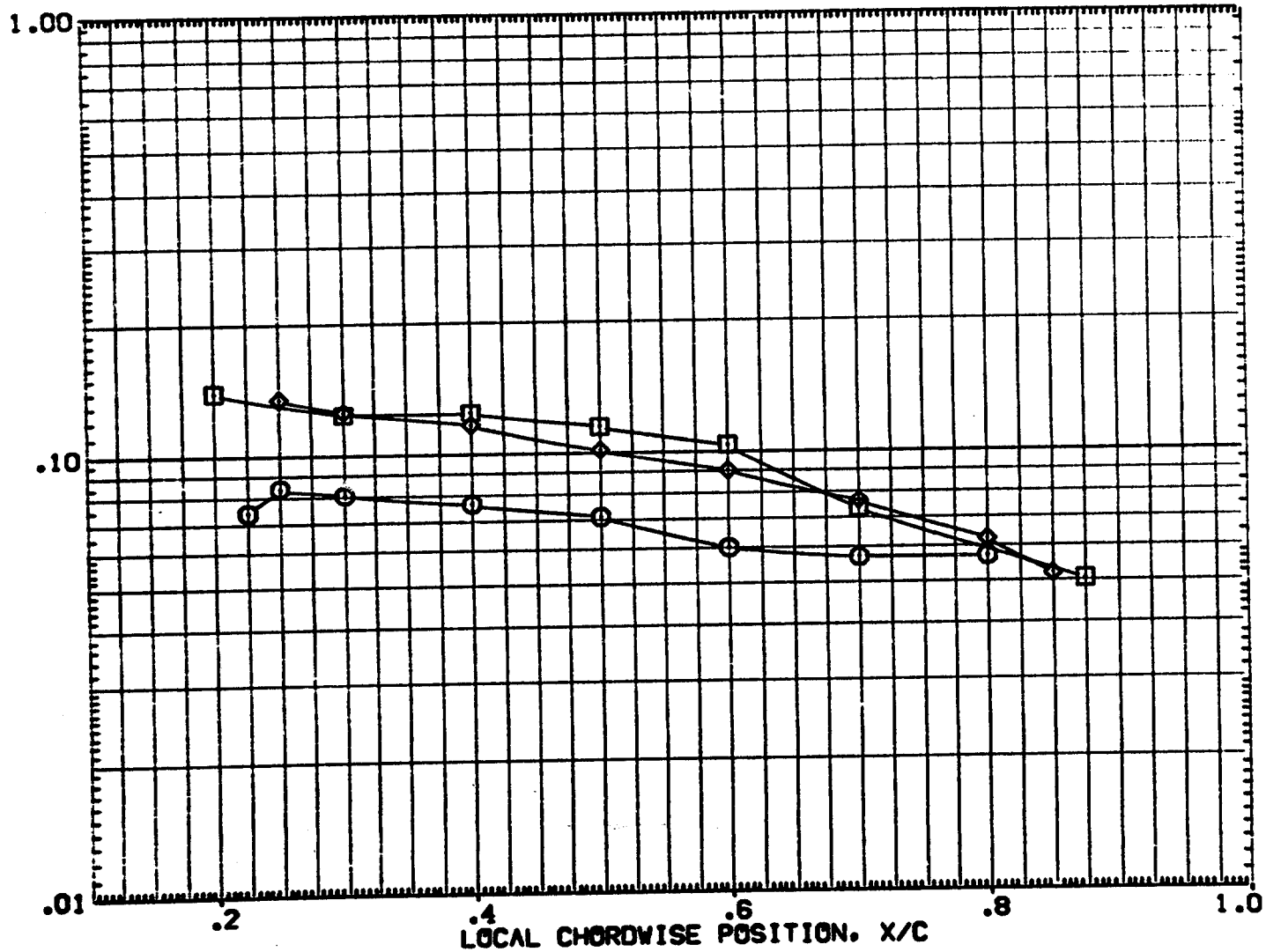
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	2Y/B	HAV/HT	RN/L
○	.400	.850	3.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



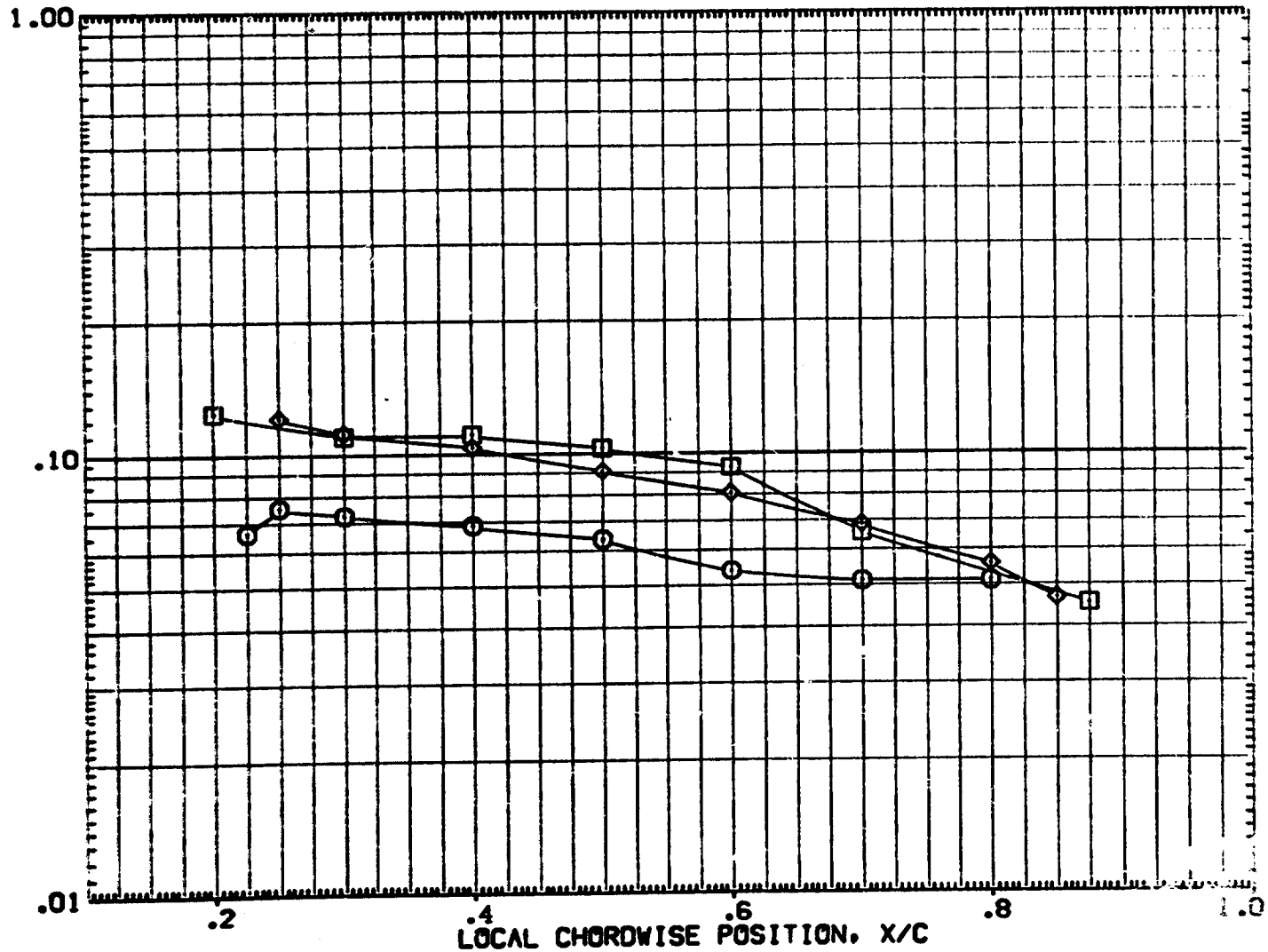
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	ZV/B	HAV/HT	RN/L
○	.400	1.000	3.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



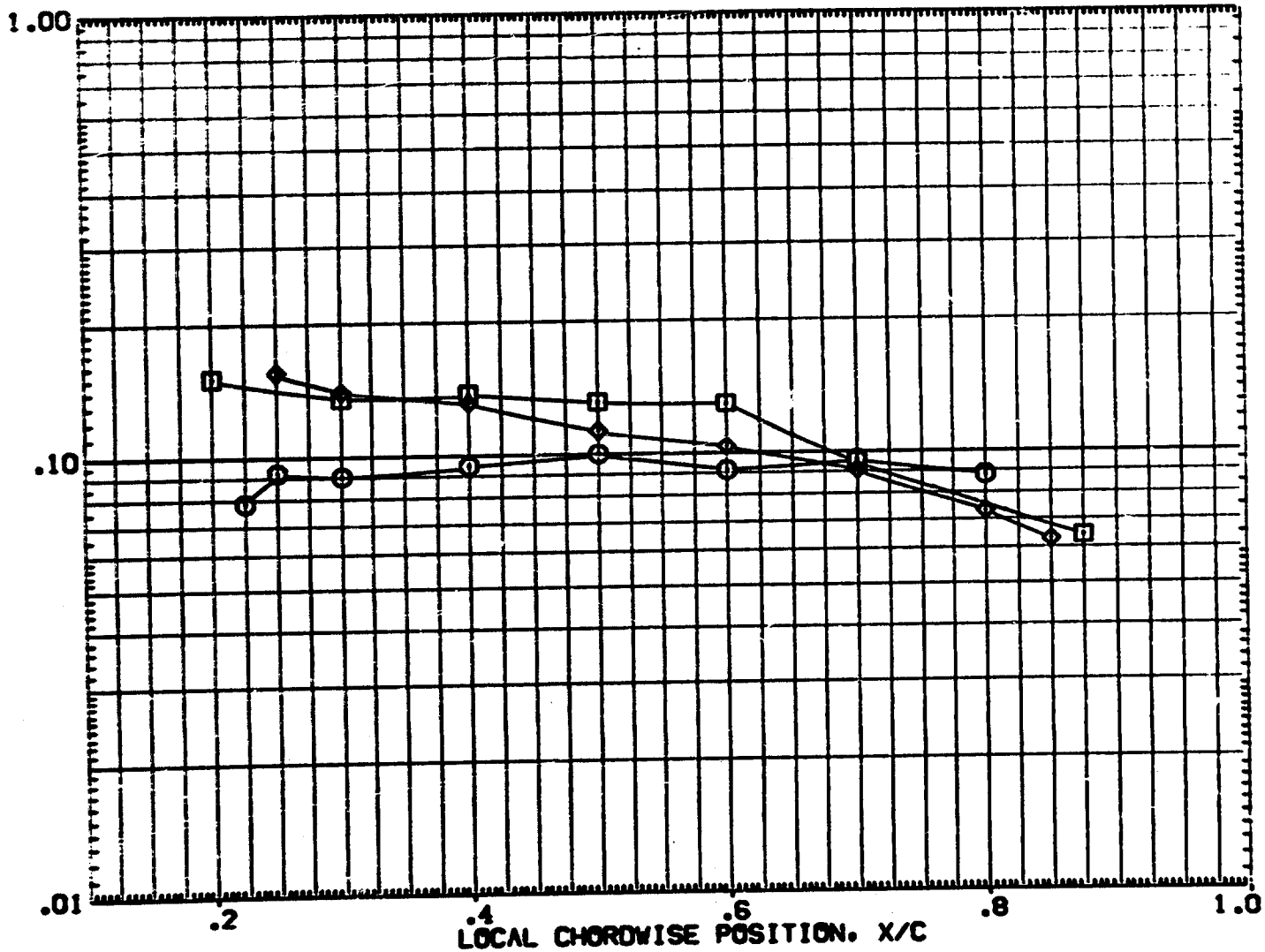
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	ZV/B	HAV/HT	RN/L
○	.400	.850	4.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	9.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



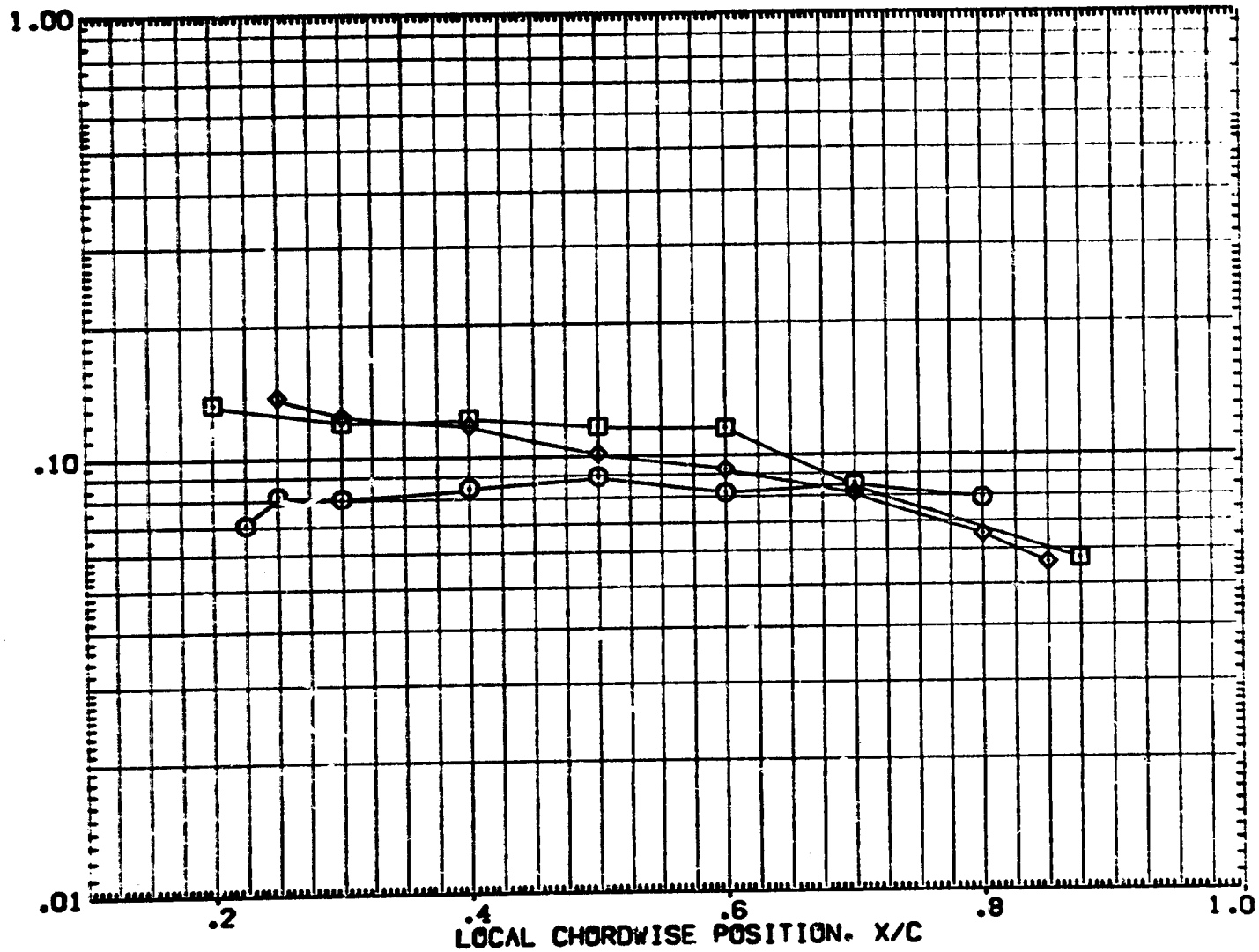
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	Z/B	MAV/MT	RN/L
○	.400	1.000	4.000
□	.800		
◇	.900		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



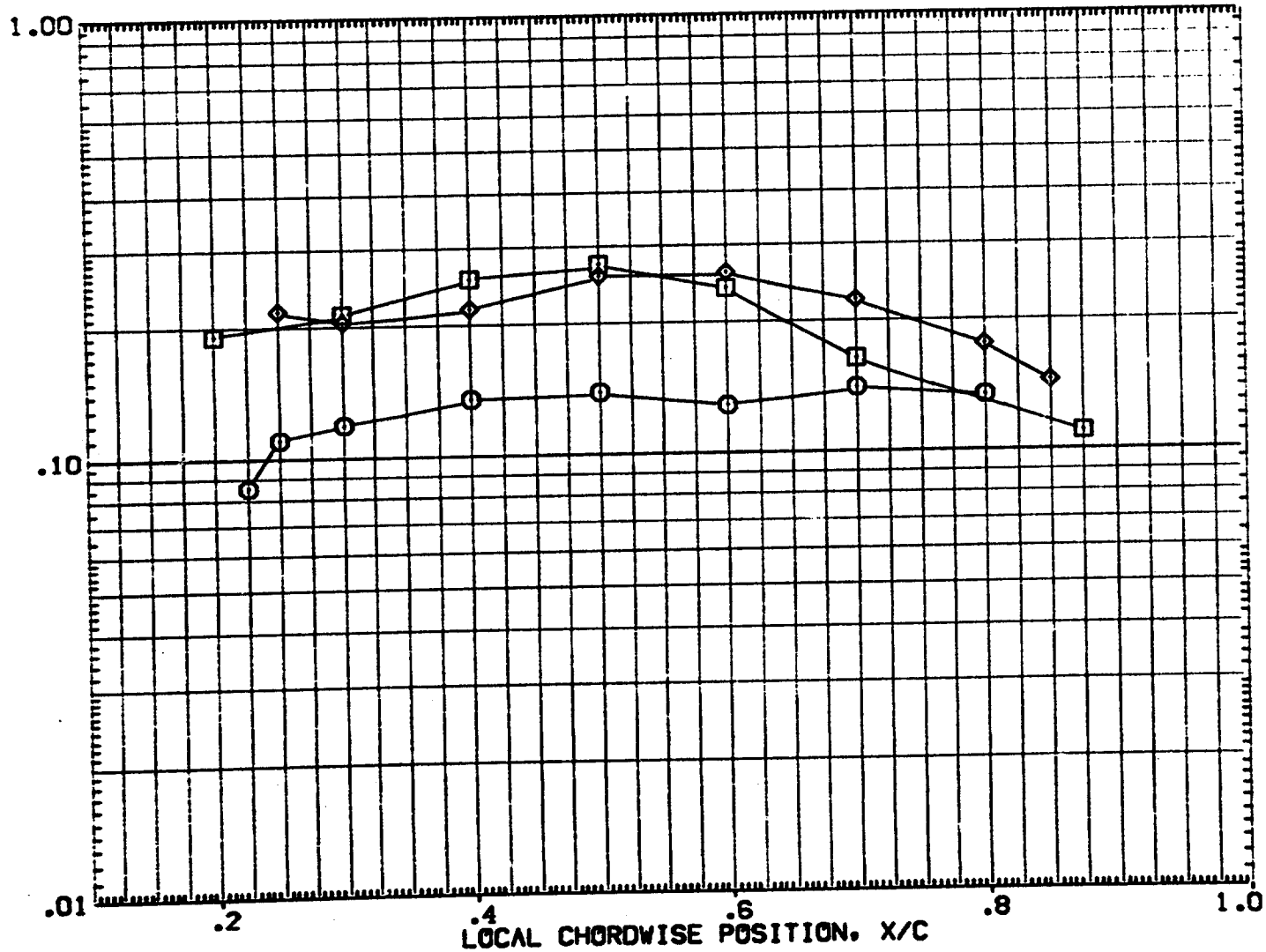
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

0H13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	2Y/B	HAV/HT	RN/L
○	.400	.850	6.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



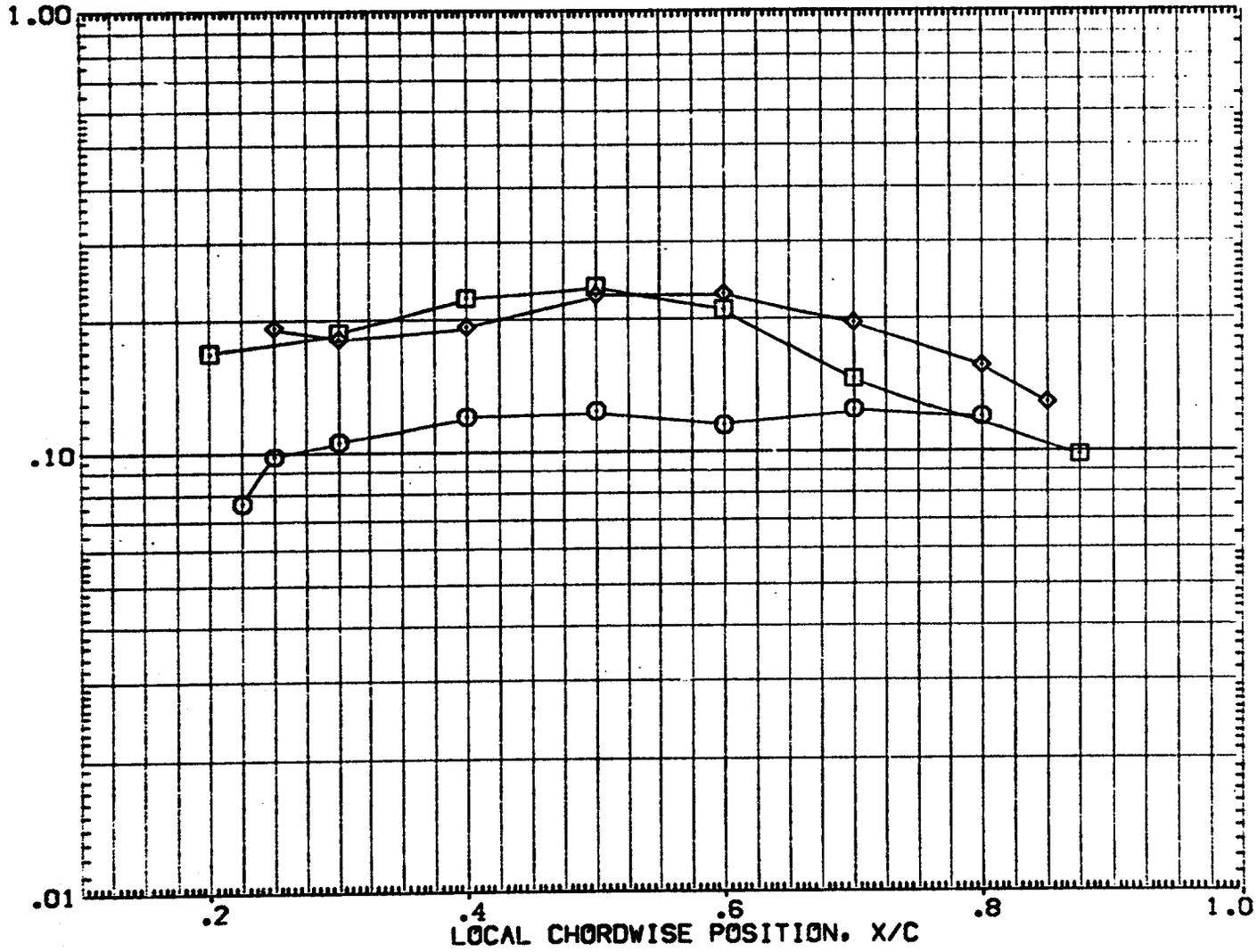
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	2V/B	HAV/HT	RN/L
○	.400	1.000	6.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



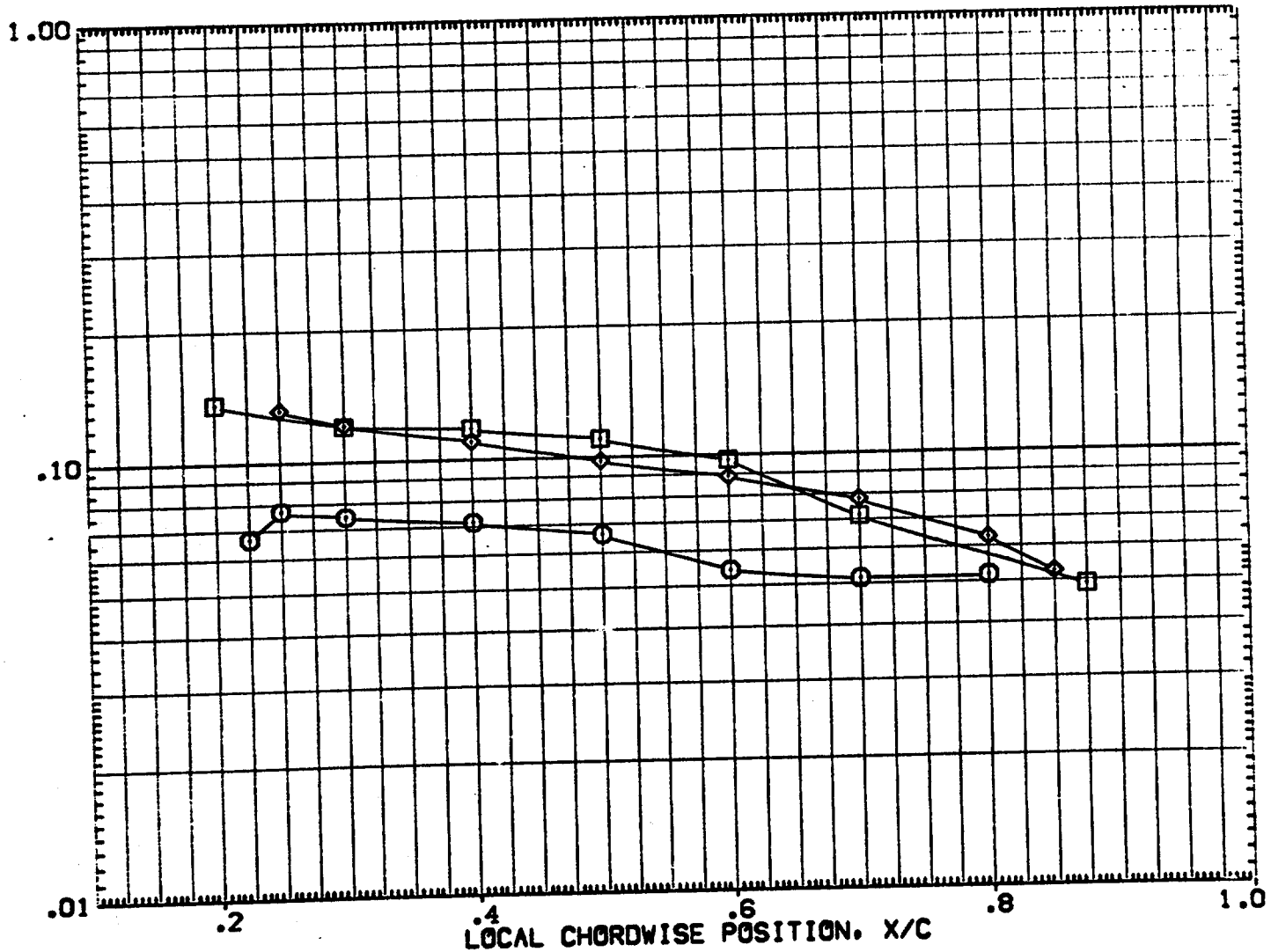
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

0H13 B10C5W87D7F4M3V5 (WP0003)

SYMBOL	ZY/B	HAW/HT	RN/L
○	.400	.850	1.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



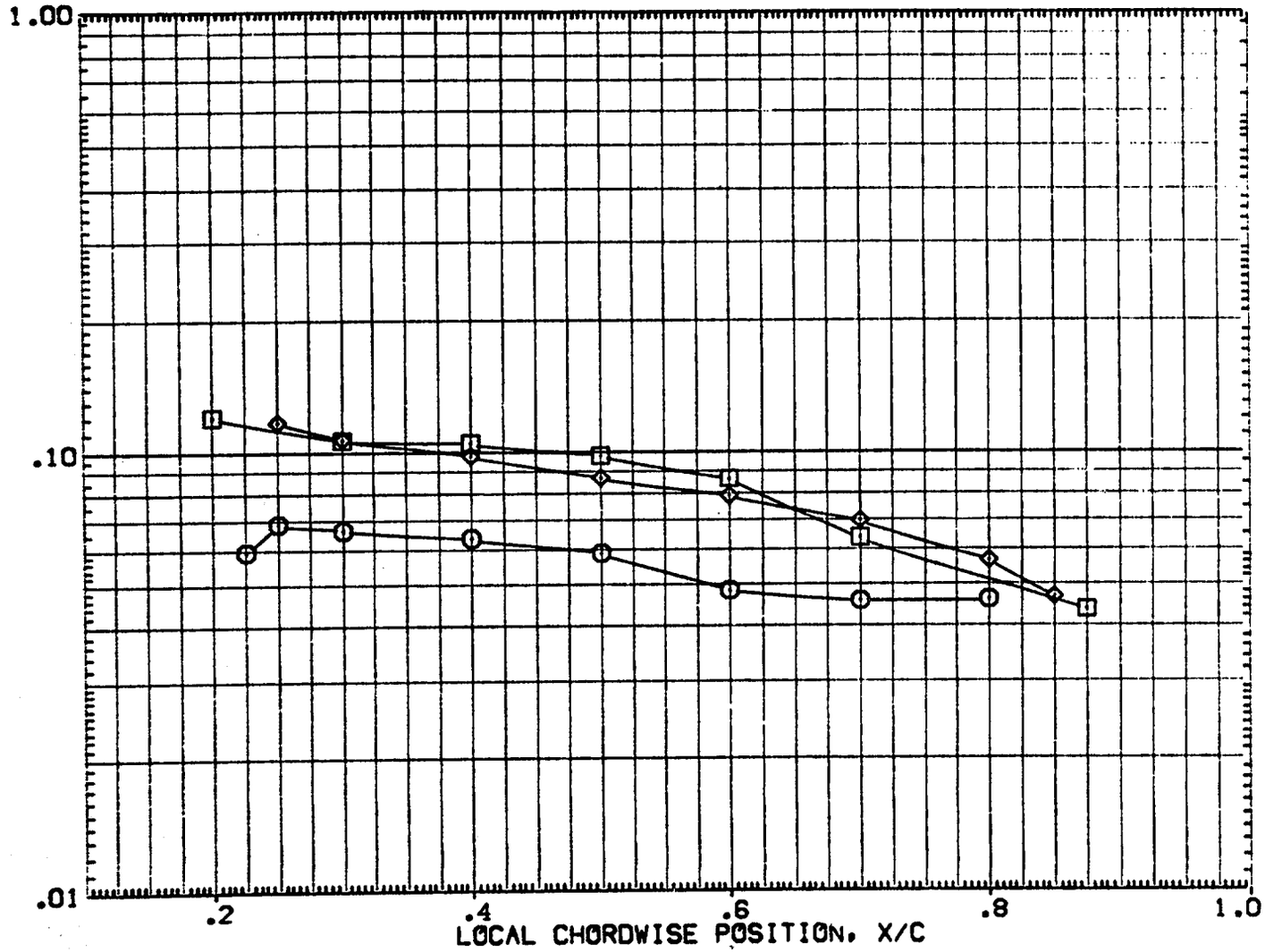
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10CSW87D7F4M3V5 (WP0003)

SYMBOL	2Y/B	HAV/HT	RN/L
○	.400	1.000	1.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



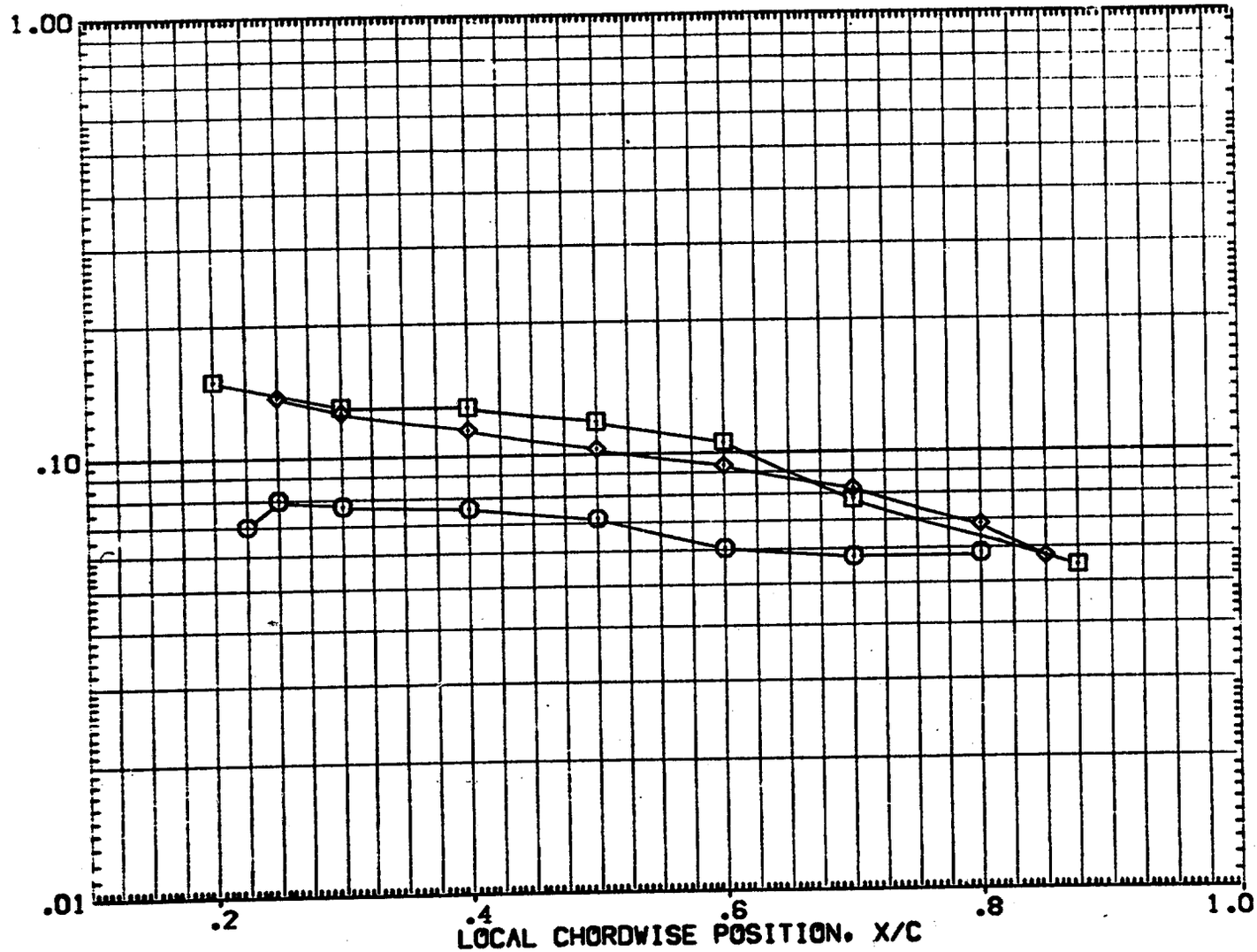
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0003)

SYMBOL	ZV/B	HAV/HT	RN/L
○	.400	.850	2.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



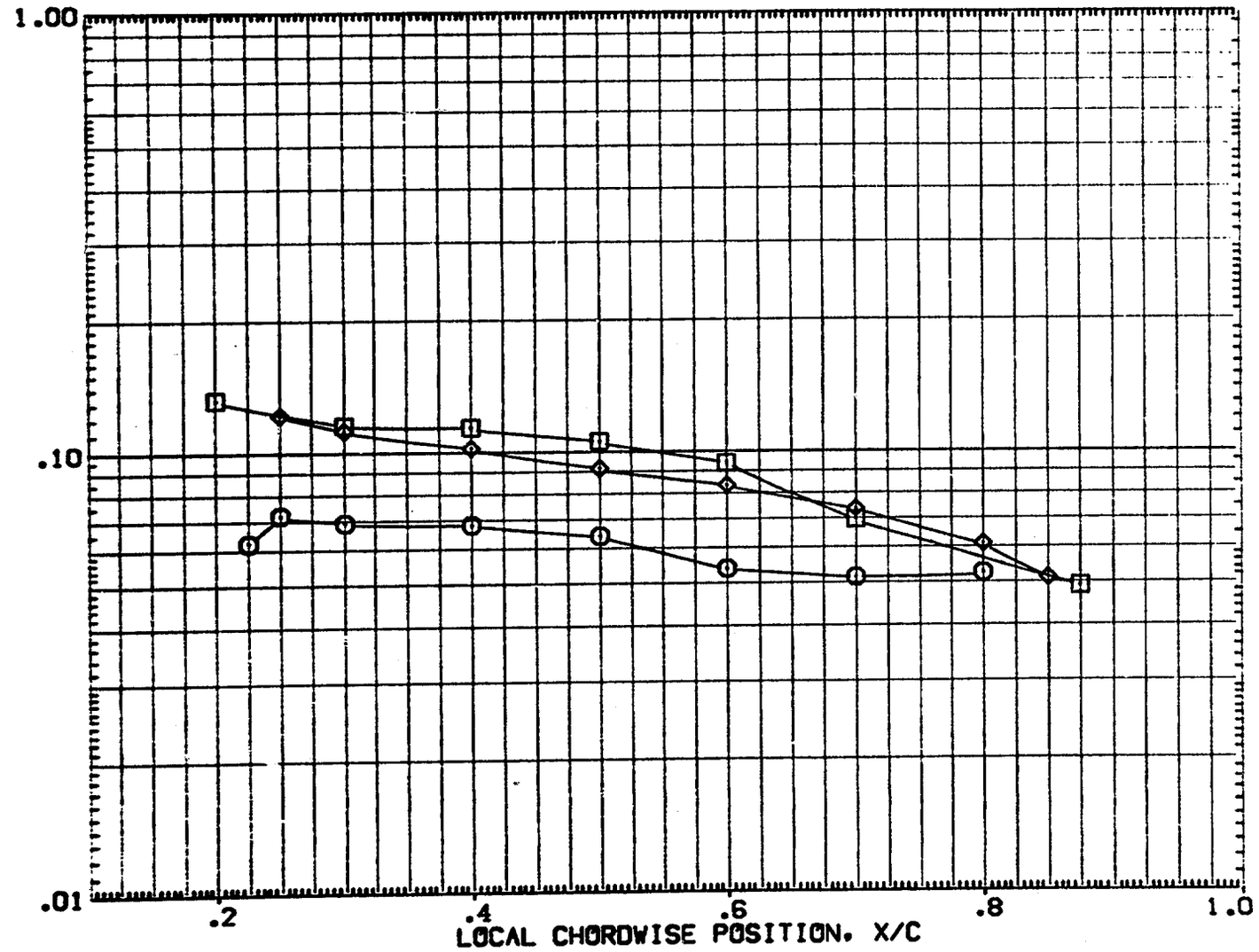
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0003)

SYMBOL	ZY/B	HAV/HT	RN/L
○	.400	1.000	2.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



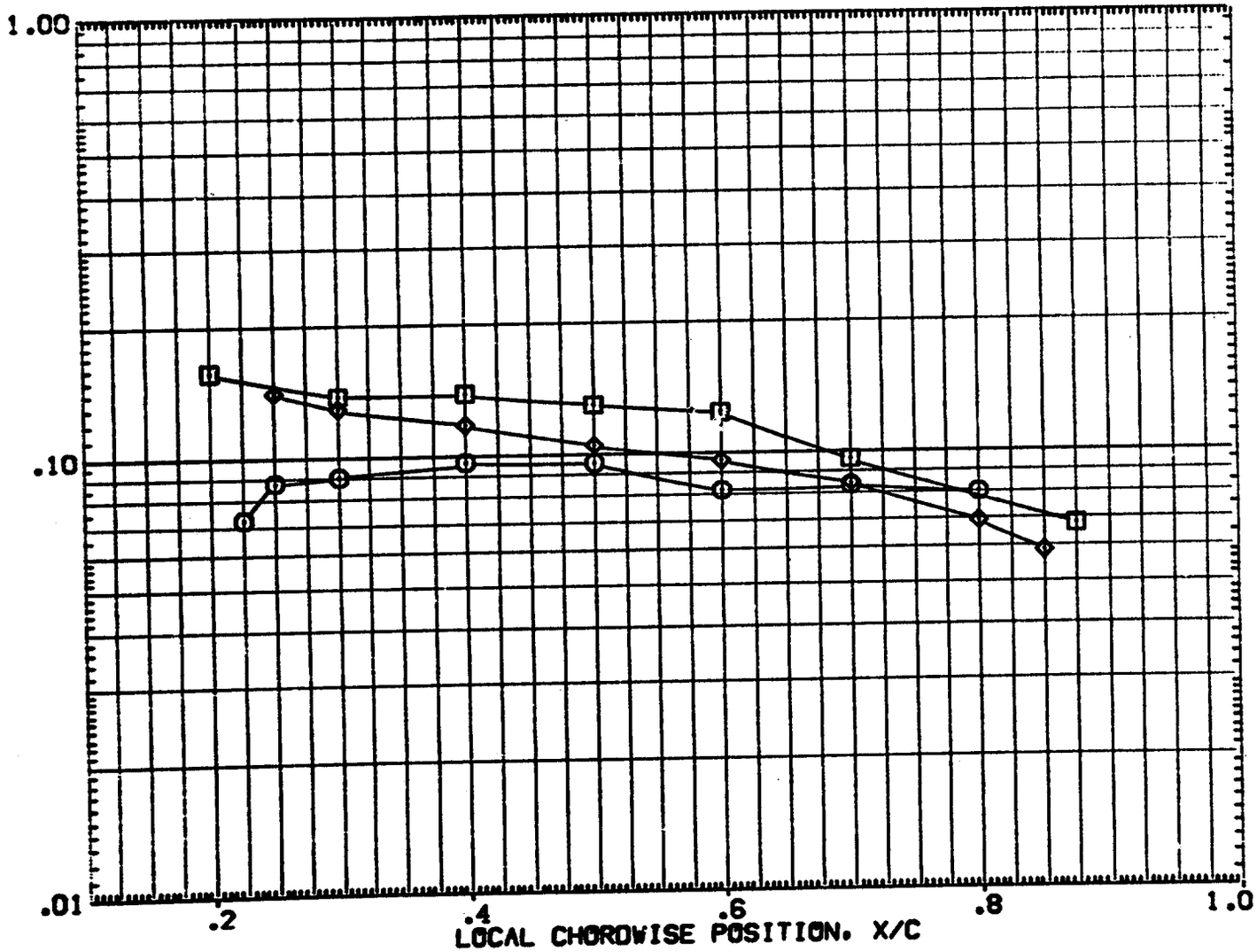
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

CH13 B:OC5W87D7F4M3V5 (WP0003)

SYMBOL	ZY/B	HAV/HT	RN/L
○	.400	.850	3.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



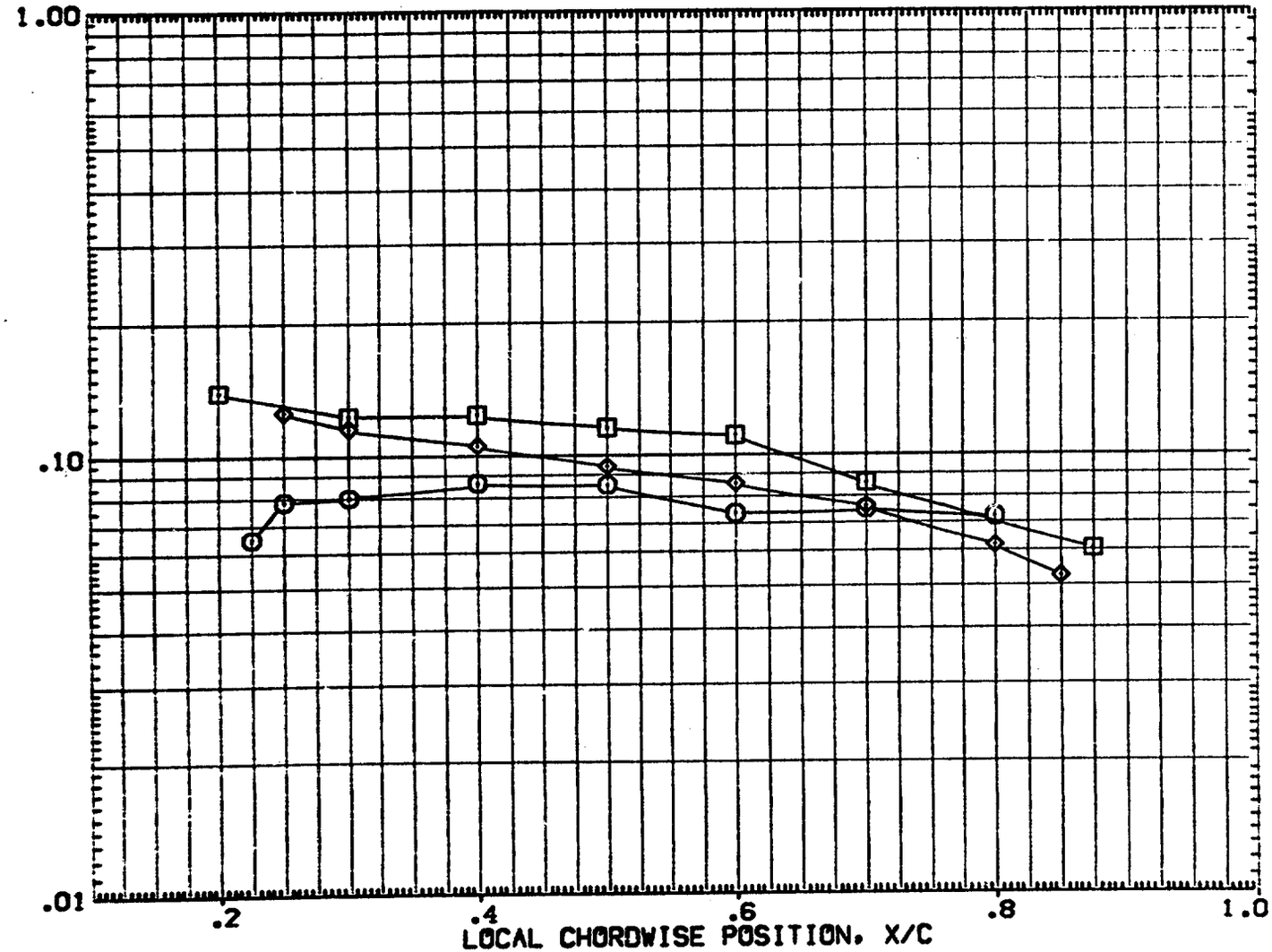
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0003)

SYMBOL	ZV/B	HAV/HT	RN/L
○	.400	1.000	3.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



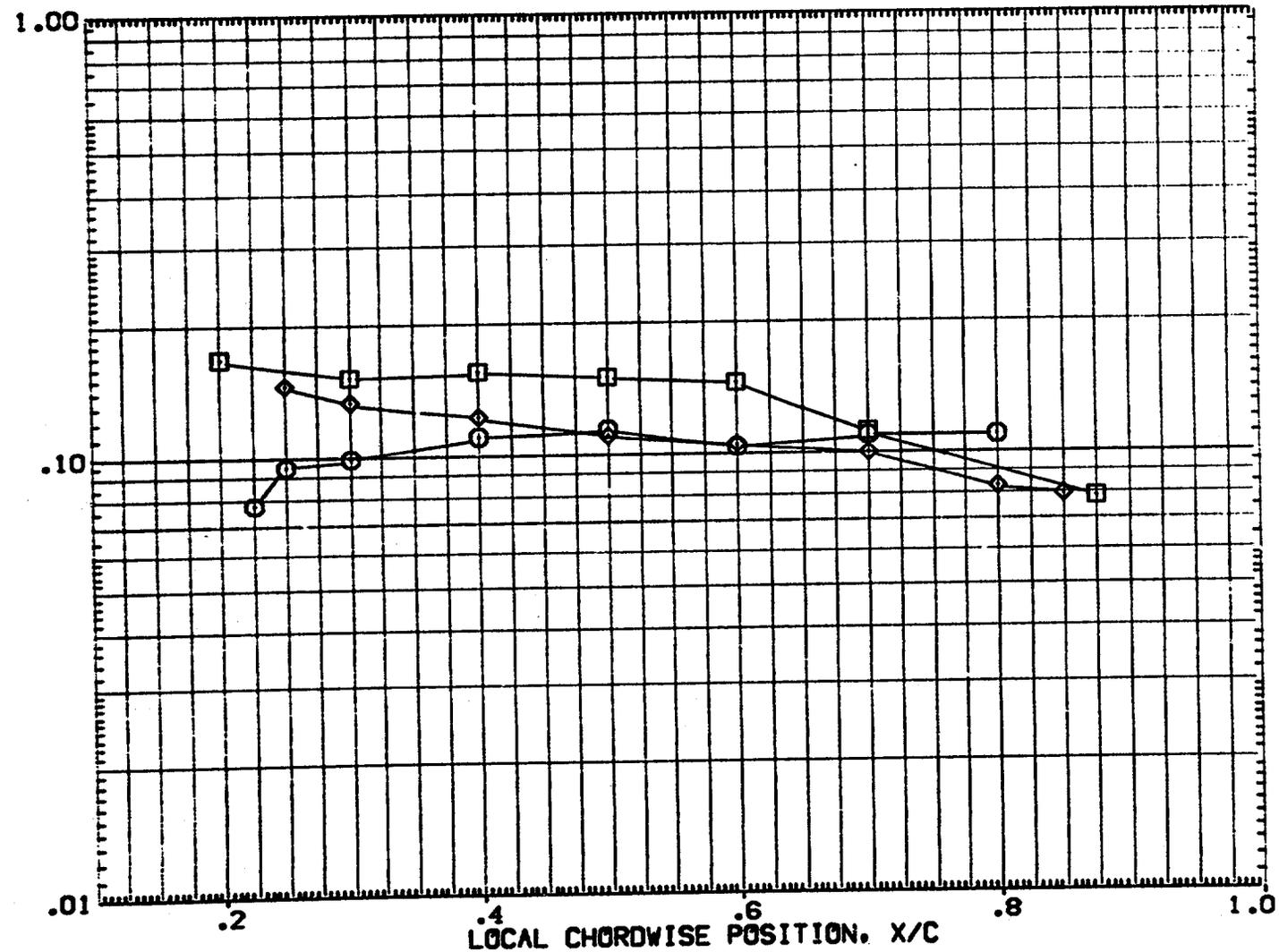
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

0413 B10C5W87D7F4M3V5 (WP0003)

SYMBOL	ZY/B	HAV/HT	RN/L
○	.400	.850	4.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



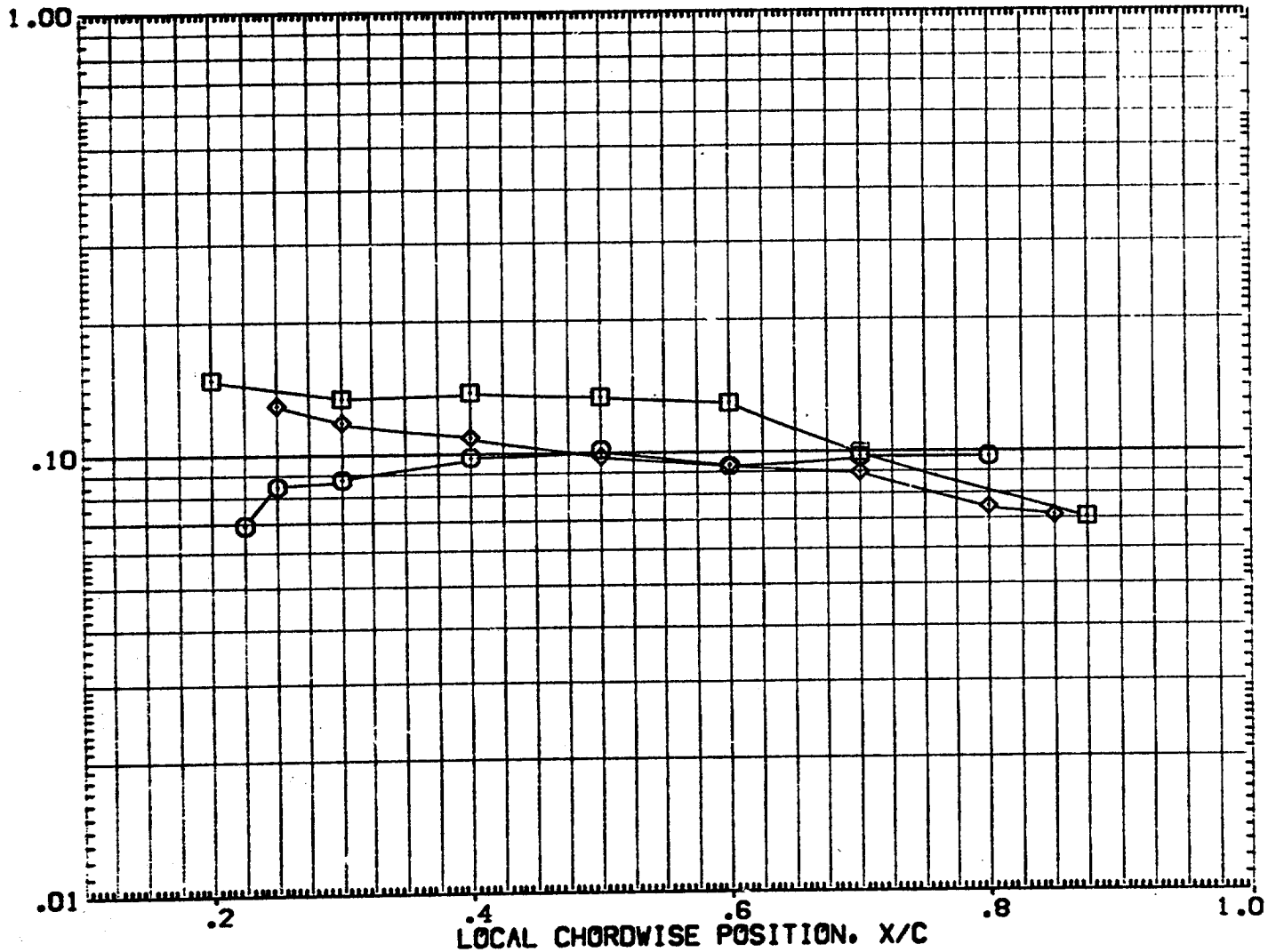
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0003)

SYMBOL	ZV/B	HAV/HT	RN/L
○	.400	1.000	4.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



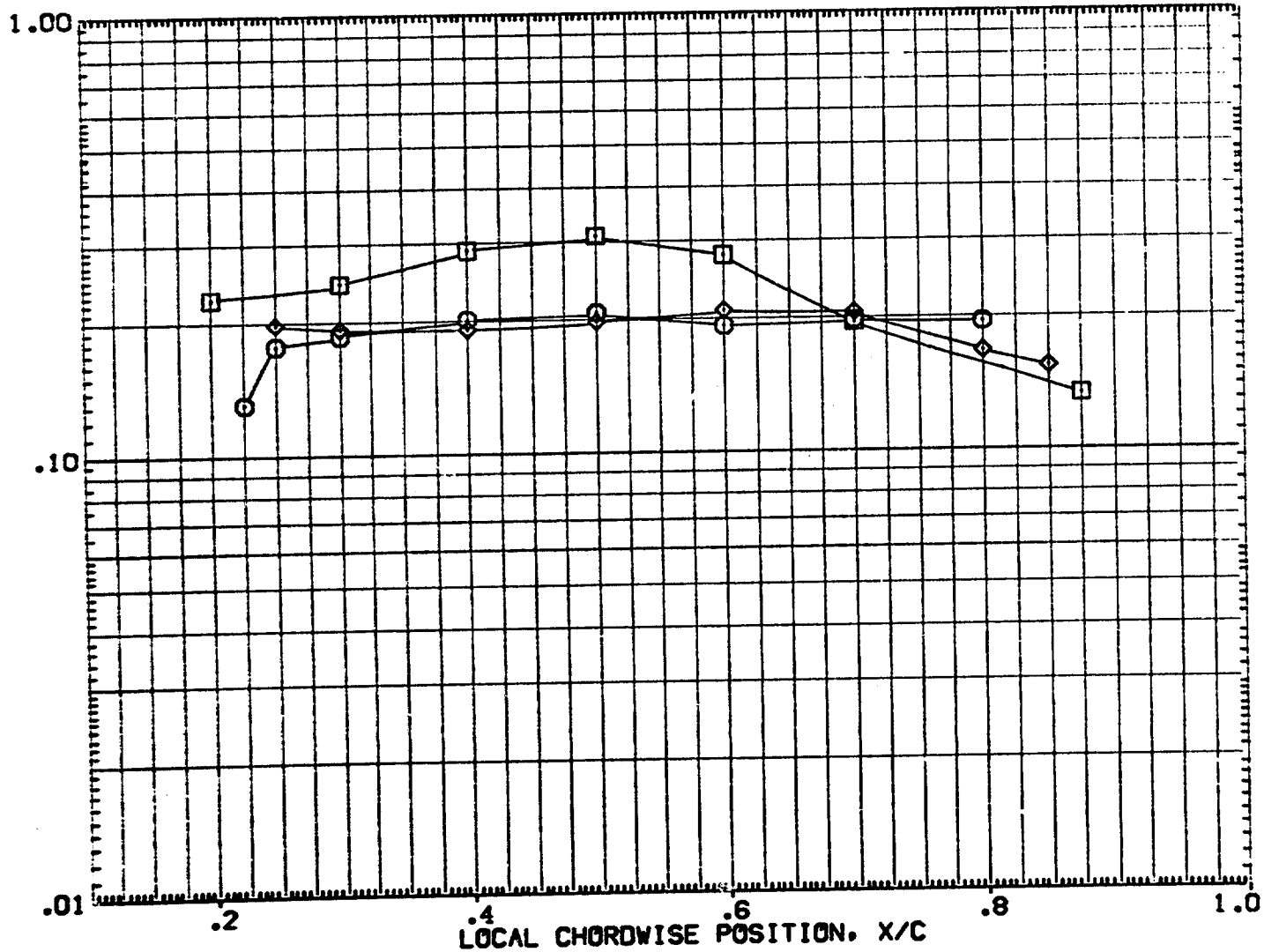
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0003)

SYMBOL	ZV/B	HAV/HT	RN/L
○	.400	.850	6.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0003)

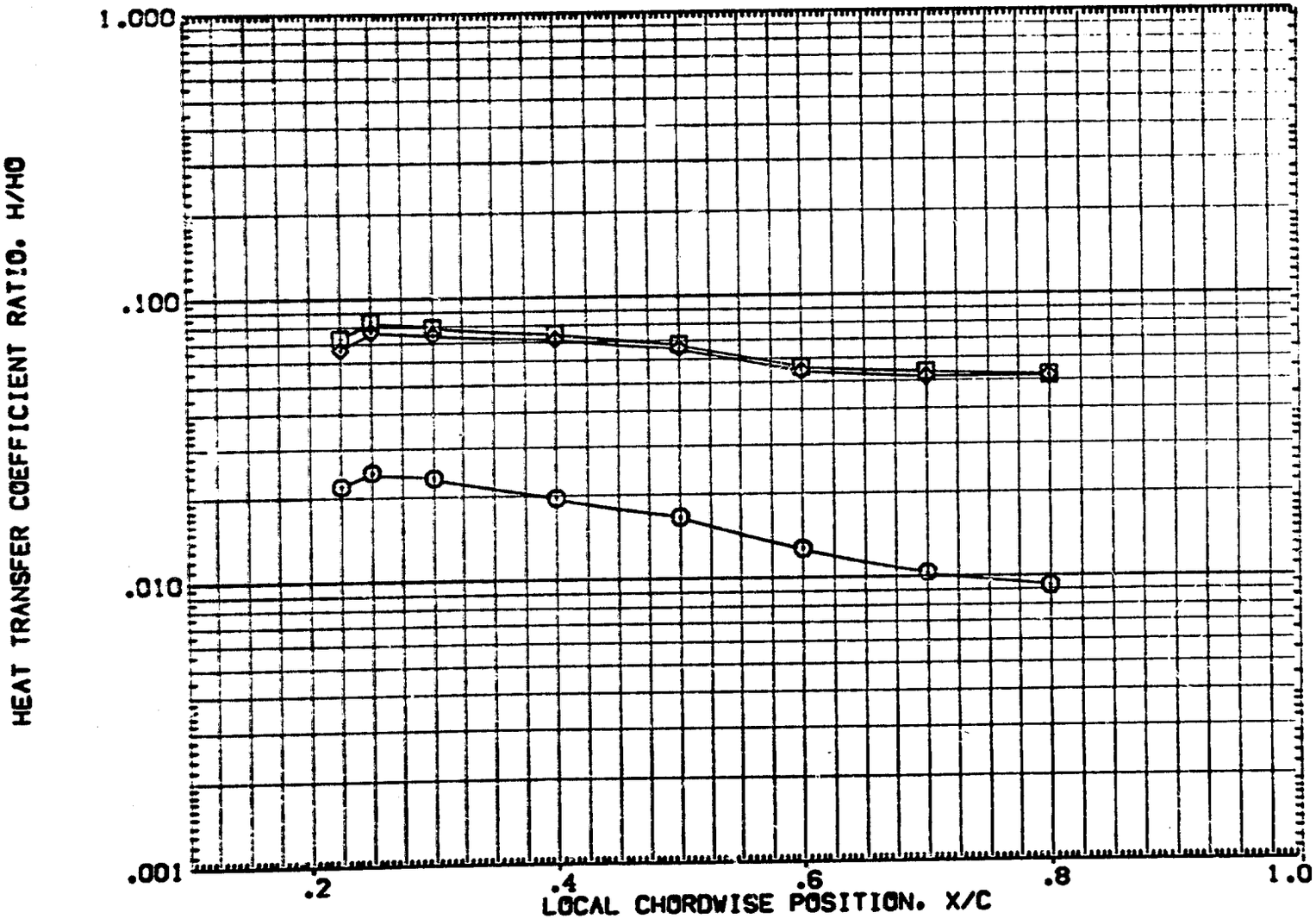
SYMBOL	ZV/B	HAV/HT	RN/L
○	.400	1.000	6.000
□	.600		
◇	.800		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		

HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

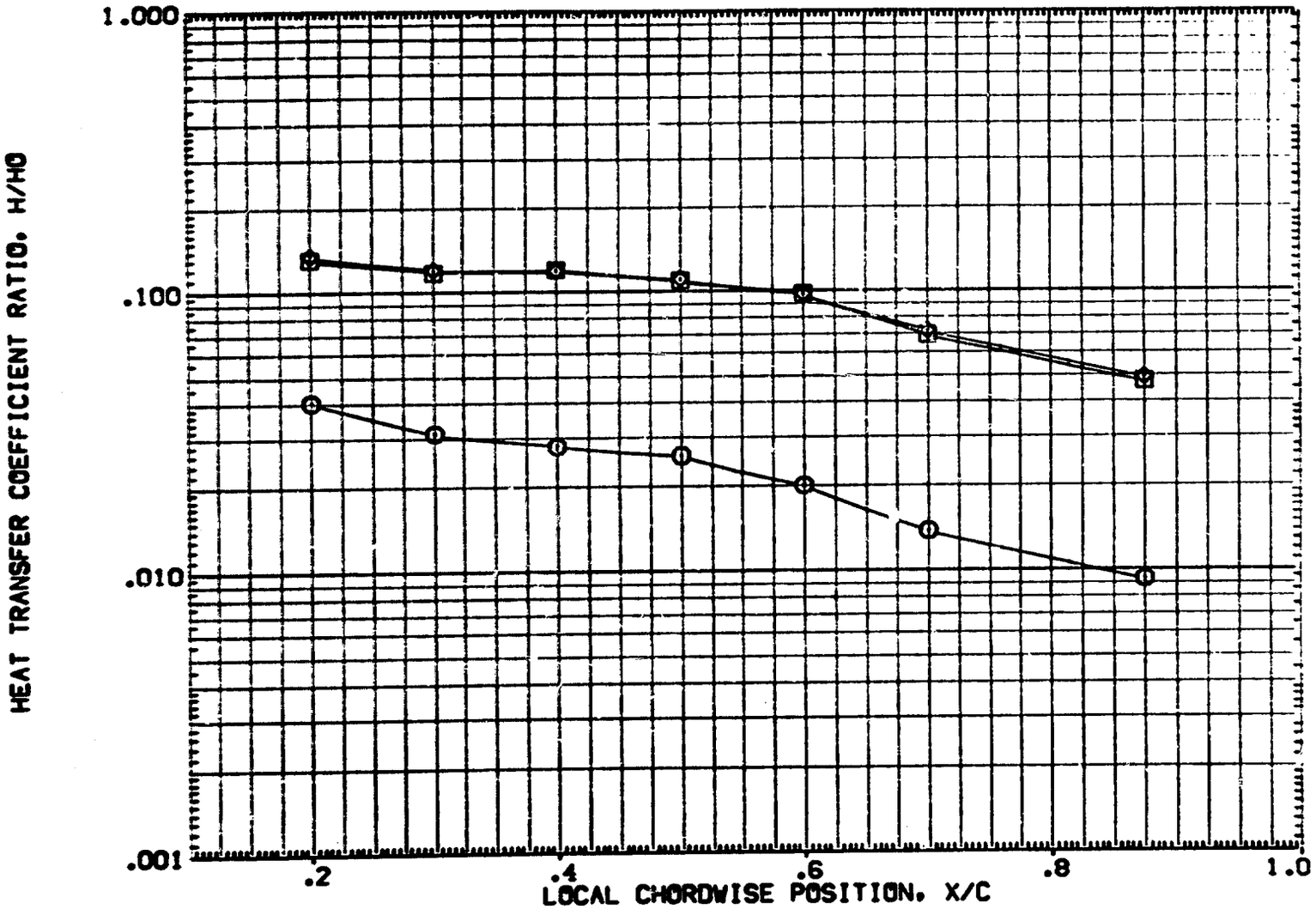
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(VP0001)	□	0413 B10CSW8707F4M3V5	.000	.000	.000	.000
(VP0002)	◇	0413 B10CSW8707F4M3V5	30.000	.000	.000	.000
(VP0003)		0413 B10CSW8707F4M3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 1.000 HAW/HT= .850 2Y/B = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
[illegible]	□	0413 [illegible]	.000	.000	.000	.000
[illegible]	○	0413 [illegible]	35.000	.000	.000	.000
[illegible]	◇	0413 [illegible]	35.000	.000	.000	.000

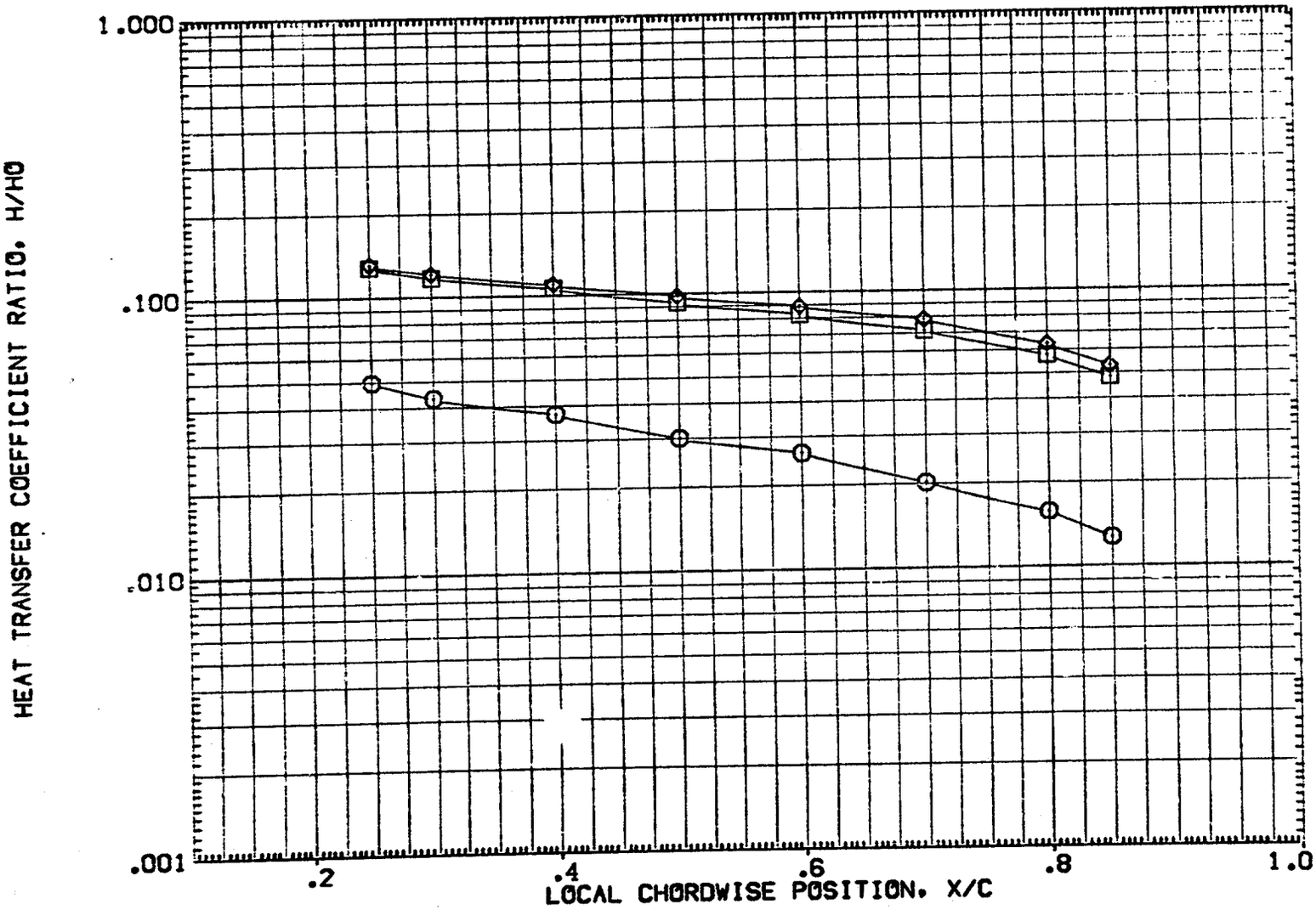


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 1.000 HAW/HT= .850 2Y/B = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(VPC001)	□	OH13 B10C5V87D7F4M3V5
(VPC002)	□	OH13 B10C5V87D7F4M3V5
(VPC003)	◇	OH13 B10C5V87D7F4M3V5

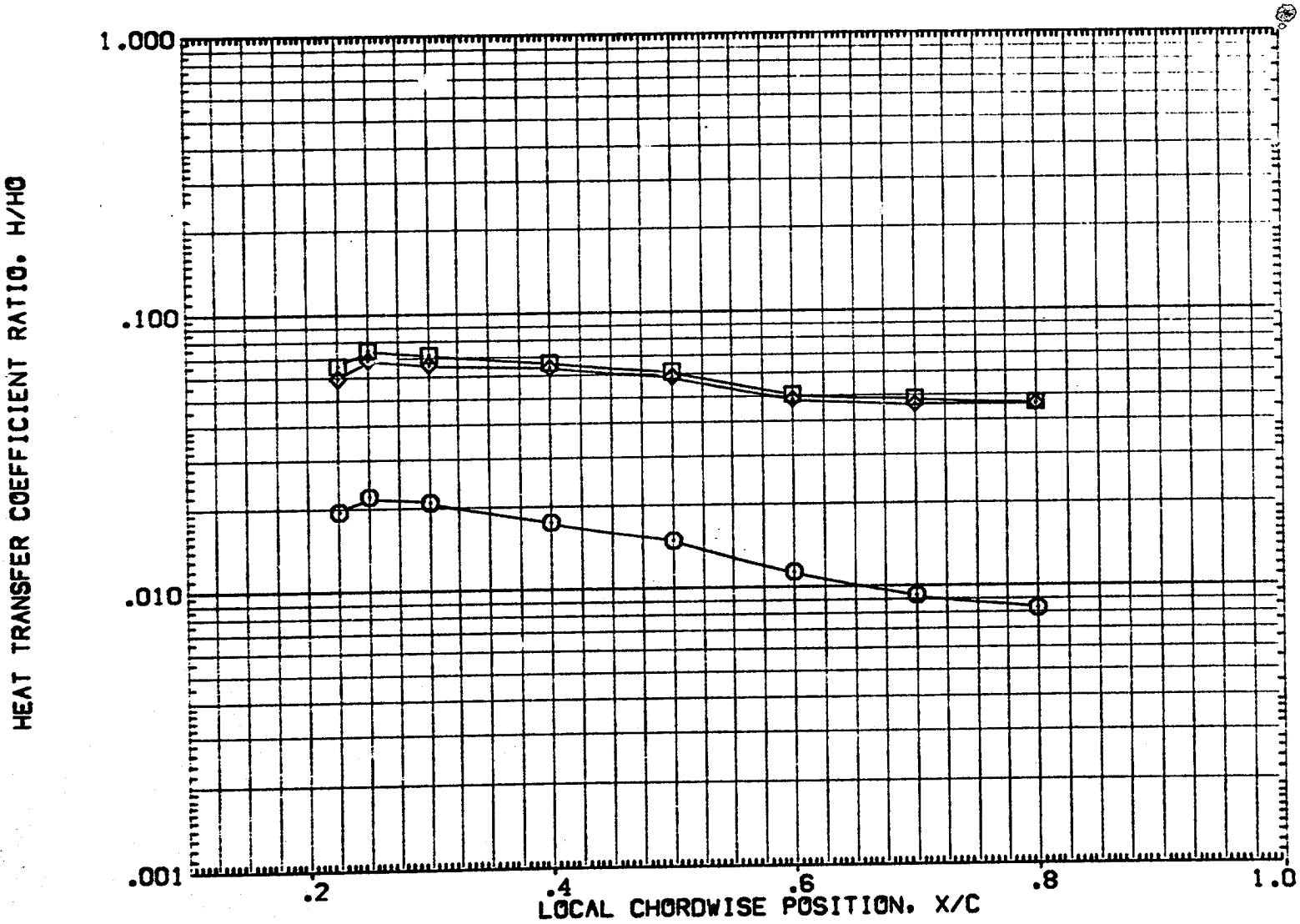
ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 1.000 HAW/HT= .850 2Y/B = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
[illegible]	□	0413 B10CSW87D7F4M3V5	.000	.000	.000	.000
[illegible]	□	0413 B10CSW87D7F4M3V5	30.000	.000	.000	.000
[illegible]	◇	0413 B10CSW87D7F4M3V5	35.000	.000	.000	.000

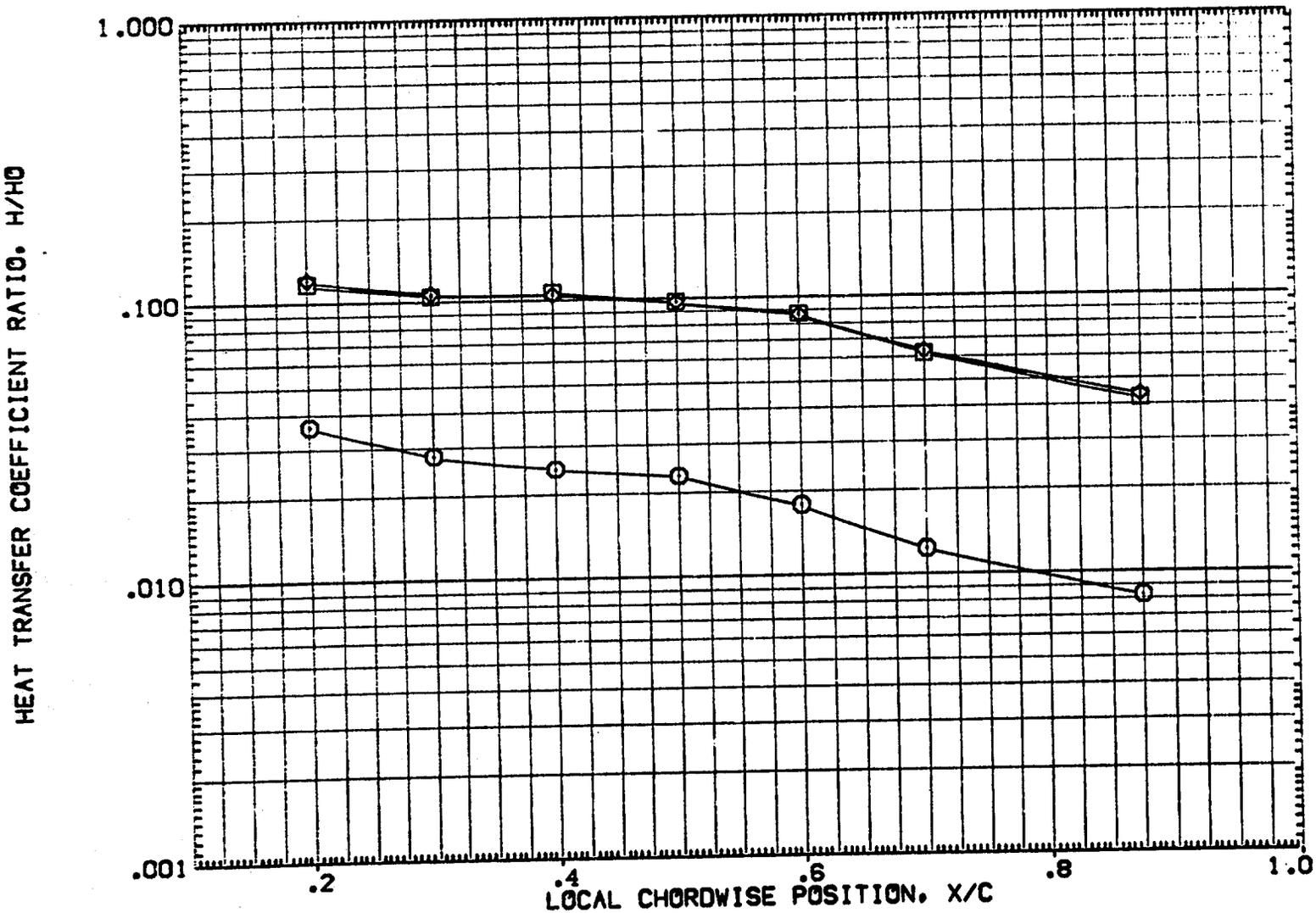


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 1.000 HAW/HT= 1.000 2Y/B = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(VP0001)	○	OH13 B10CSVB7D7F4M3V5
(VP0002)	□	OH13 B10CSVB7D7F4M3V5
(VP0003)	◇	OH13 B10CSVB7D7F4M3V5

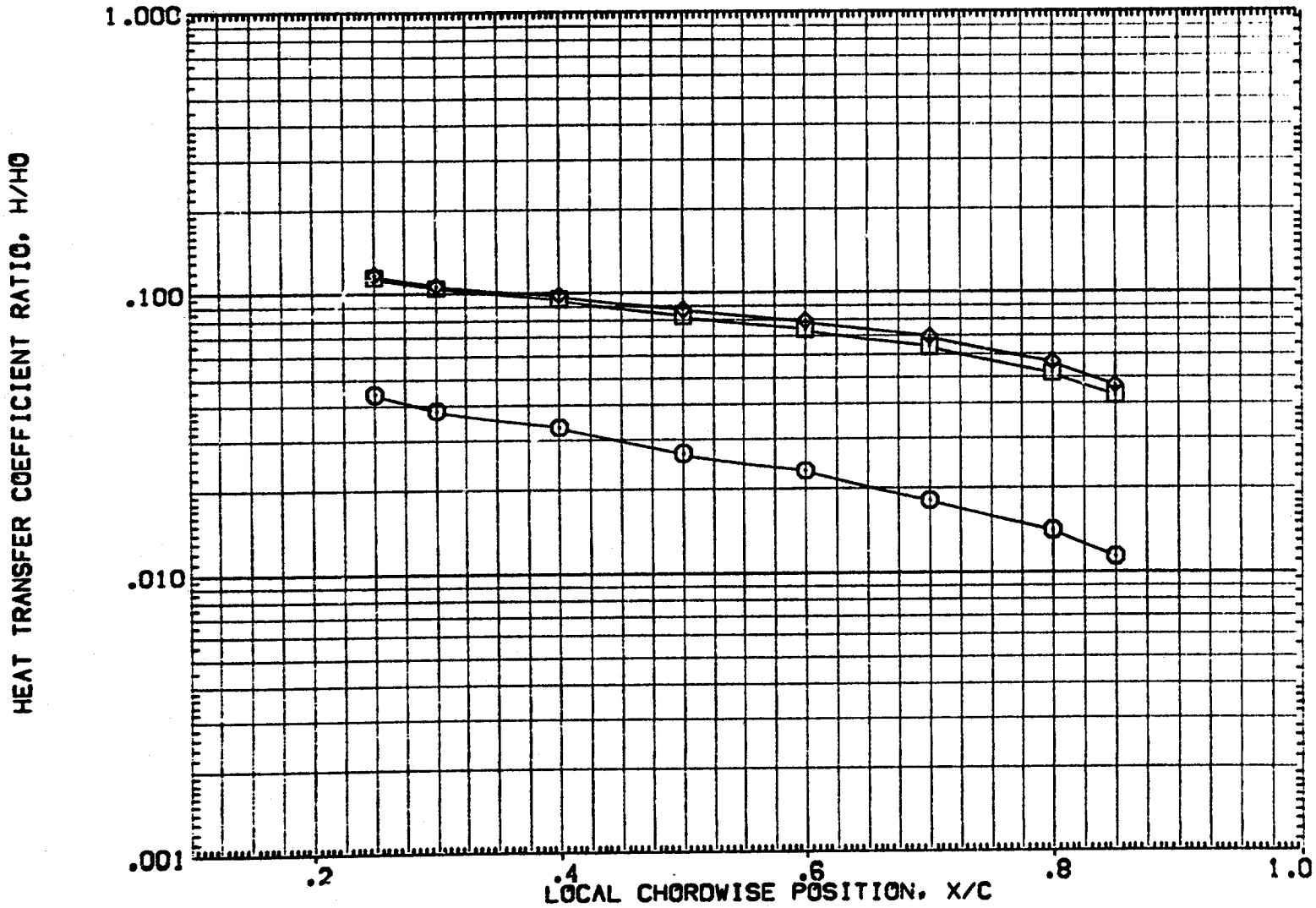
ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 1.000 HAW/HT= 1.000 2Y/B = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
[VP0001]	○	OH13 B10C5W87D7F4H3V5	.000	.000	.000	.000
[VP0002]	□	OH13 B10C5W87D7F4H3V5	30.000	.000	.000	.000
[VP0003]	◇	OH13 B10C5W87D7F4H3V5	35.000	.000	.000	.000

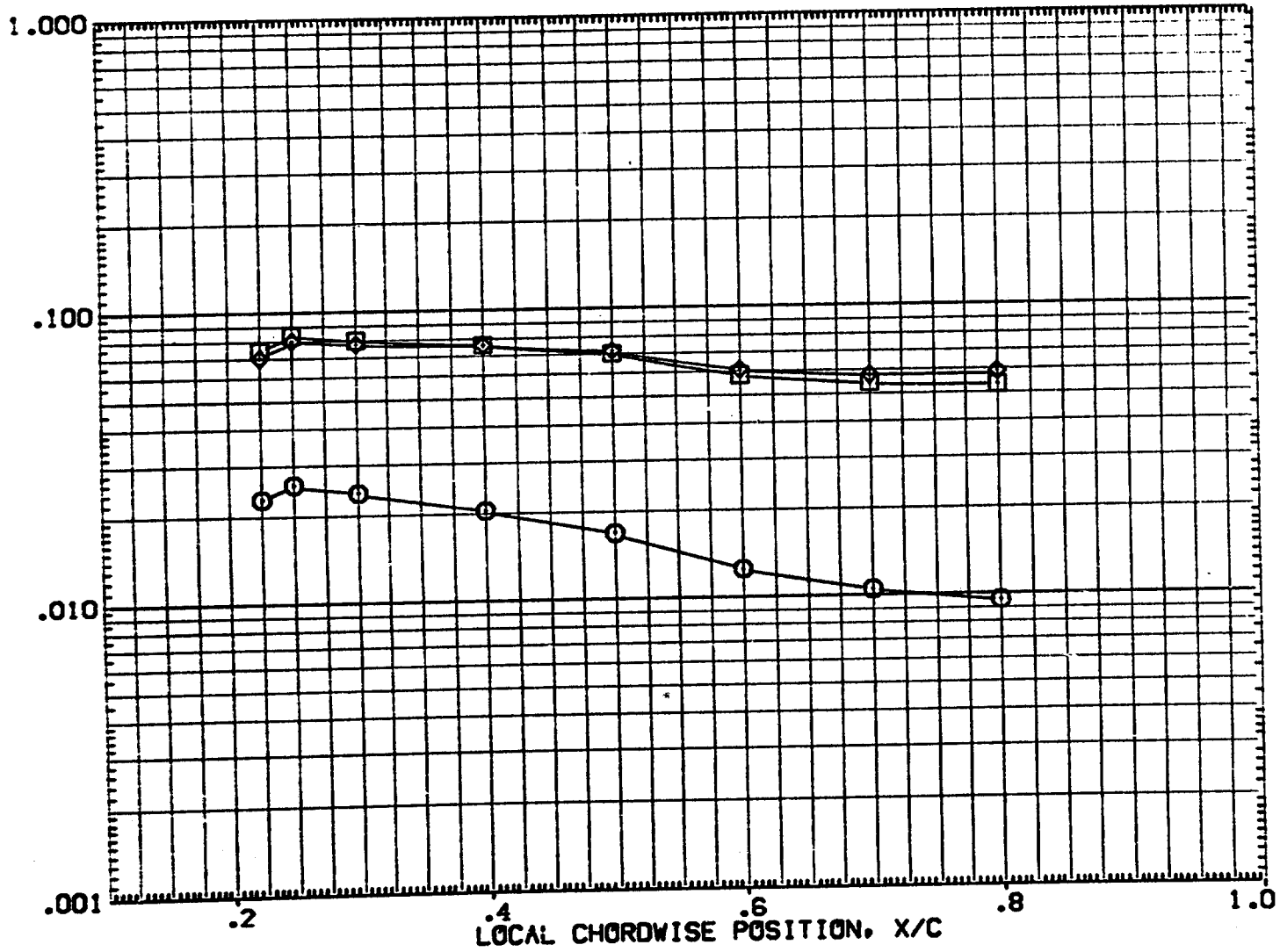


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 1.000 HAW/HT= 1.000 2Y/B = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(VP0001)	□	0H13 B10CSVB707F4M3V5
(VP0002)	▽	0H13 B10CSVB707F4M3V5
(VP0003)	◇	0H13 B10CSVB707F4M3V5

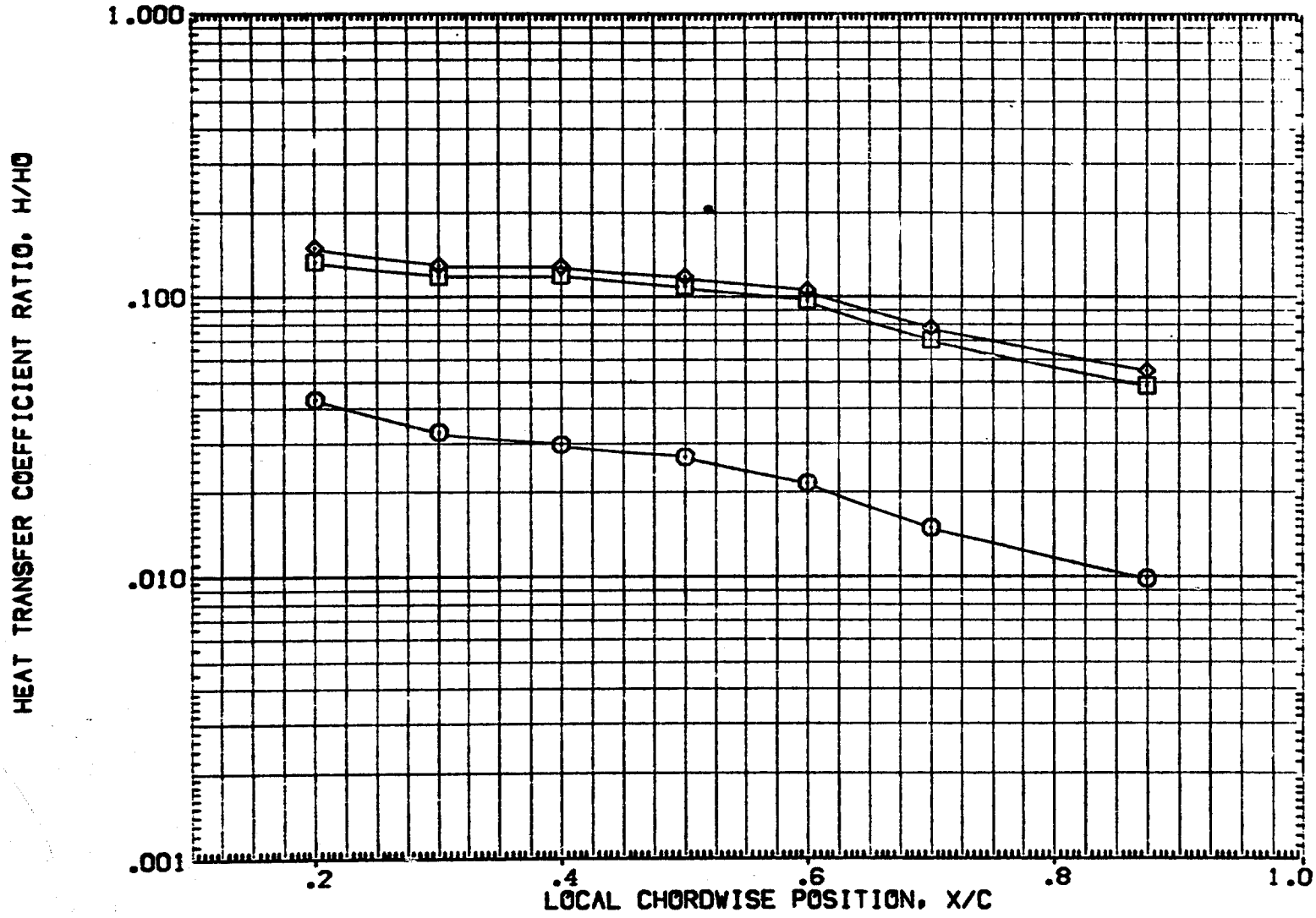
ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 2.000 HAW/HT= .850 2Y/B = .400

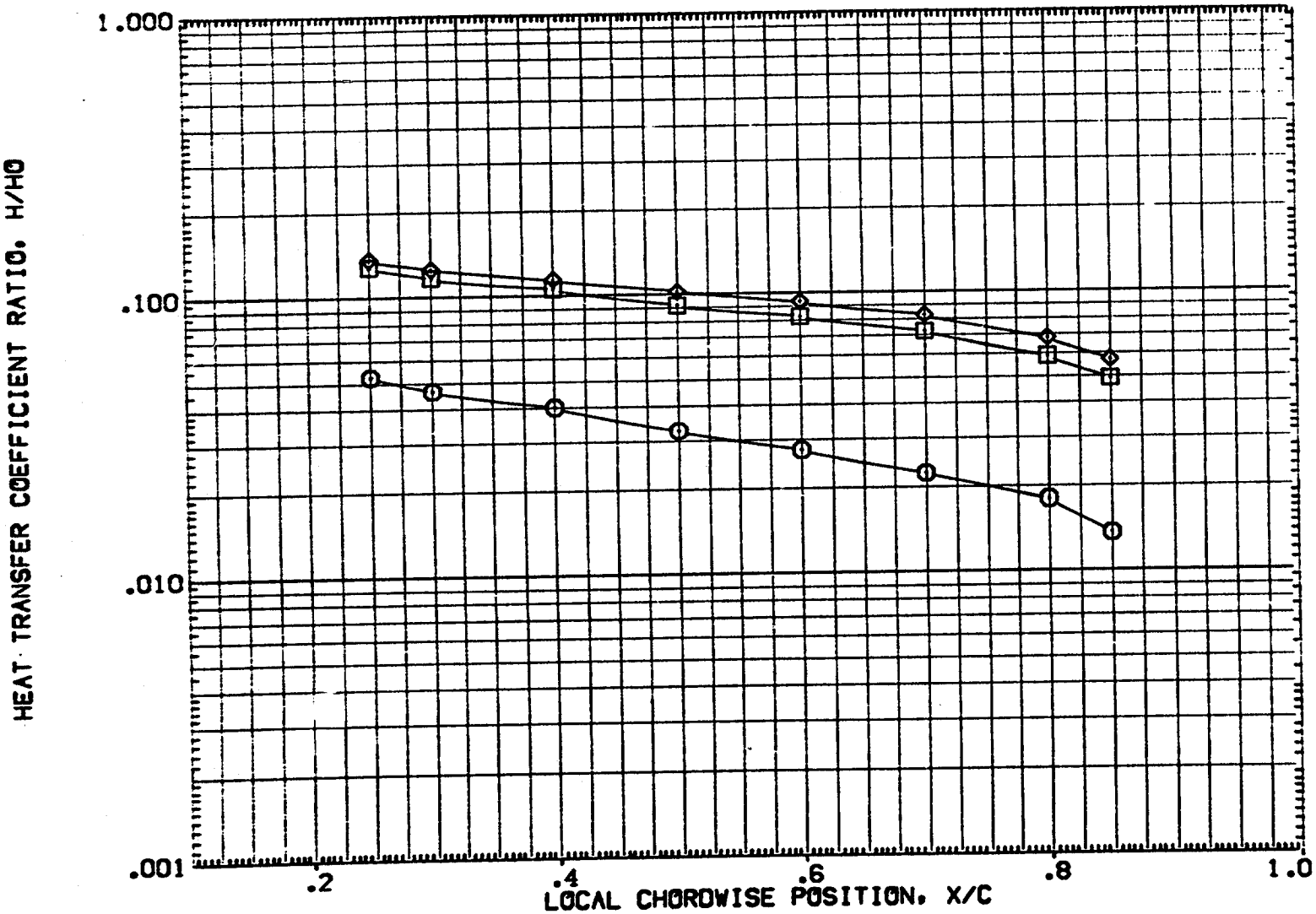
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(VP0001)	○	0413 B10CSW@70/F4V3V5	.000	.000	.000	.000
(VP0002)	□	0413 B10CSW@70/F4V3V5	30.000	.000	.000	.000
(VP0003)	◇	0413 B10CSW@70/F4V3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 2.000 HAW/HT= .850 2Y/B = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(VP0001)	○	OH13 B10CSW87D7F4M3V5	.000	.000	.000	.000
(VP0002)	□	OH13 B10CSW87D7F4M3V5	30.000	.000	.000	.000
(VP0003)	◇	OH13 B10CSW87D7F4M3V5	35.000	.000	.000	.000

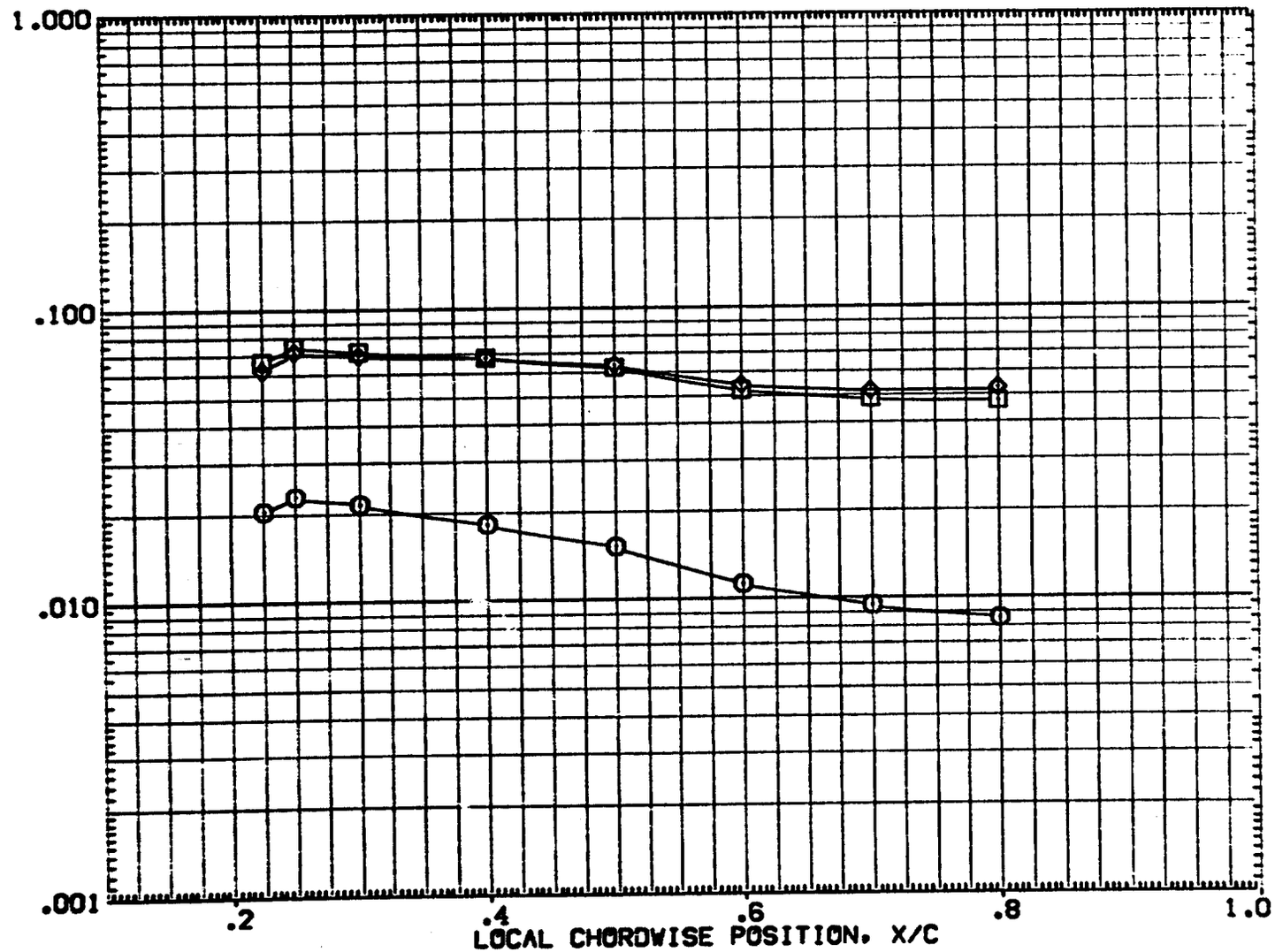


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 2.000 HAW/HT= .850 2Y/B = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
[VP0001]	○	0413 B10C5W8707F4V3V5
[VP0002]	□	0413 B10C5W8707F4V3V5
[VP0003]	◇	0413 B10C5W8707F4V3V5

ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000

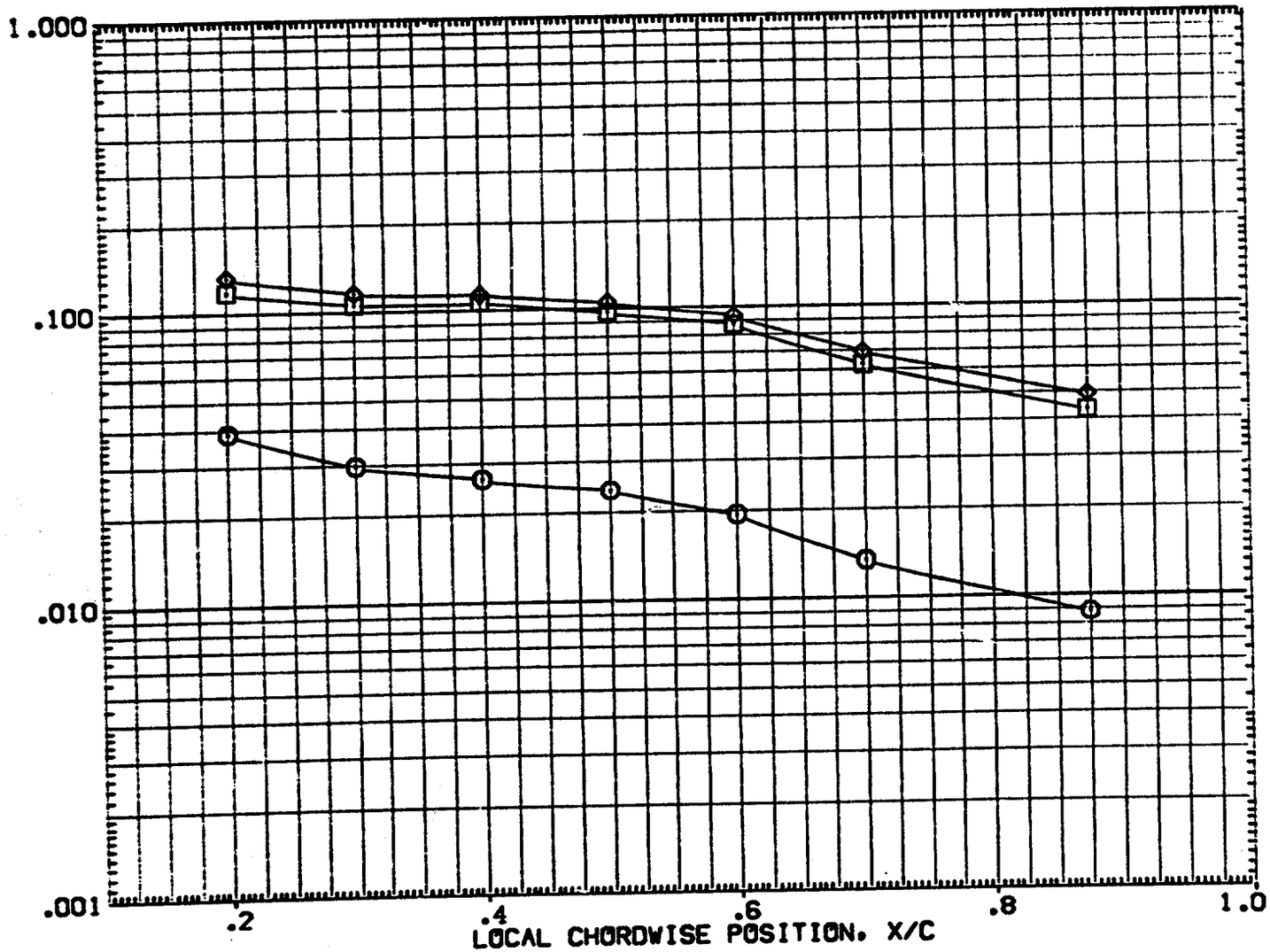


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 2.000 HAW/HT= 1.000 2Y/B = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
[VP0001]	□	0413 B10C5W8707F4V3V5
[VP0002]	◇	0413 B10C5W8707F4V3V5
[VP0003]		0413 B10C5W8707F4V3V5

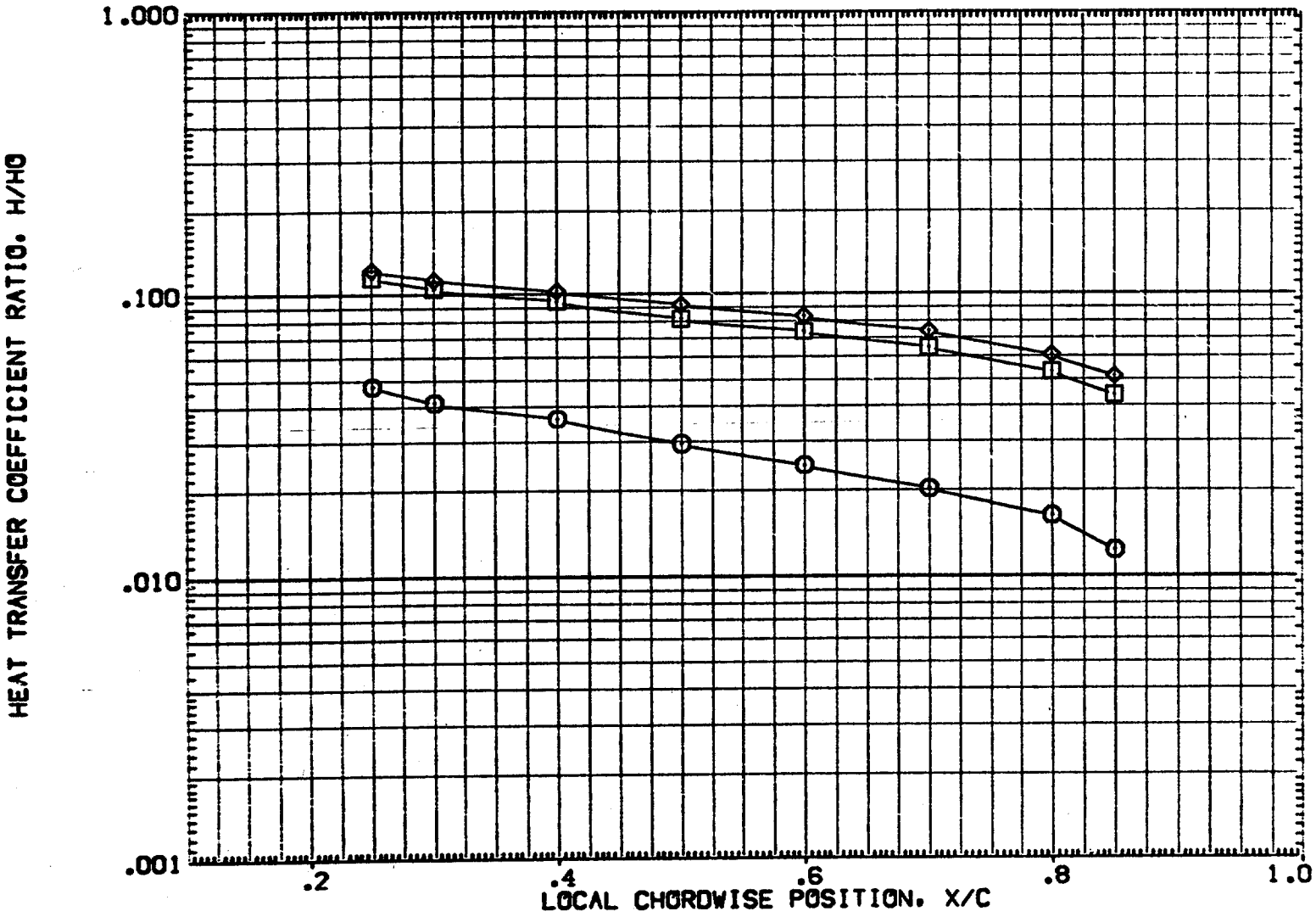
ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 2.000 HAW/HT= 1.000 2Y/B = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
[VPD001]	○	OH13 B10CSWB707F4H3V5	.000	.000	.000	.000
[VPD002]	□	OH13 B10CSWB707F4H3V5	30.000	.000	.000	.000
[VPD003]	◇	OH13 B10CSWB707F4H3V5	35.000	.000	.000	.000

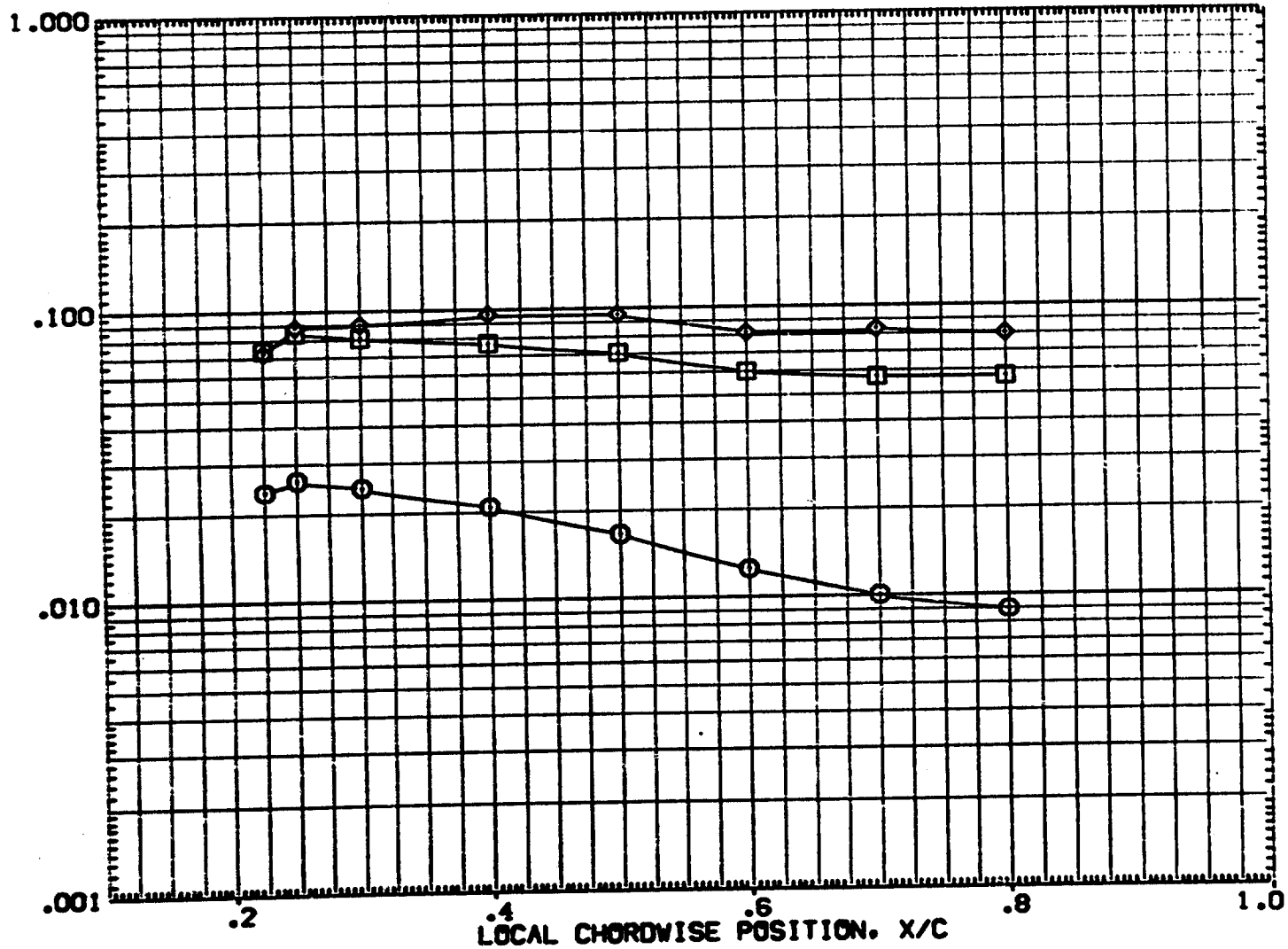


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 2.000 HAW/HT= 1.000 2Y/B = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
[VP0001]	○	9H13 B10CSW8707F4M3V5
[VP0002]	□	9H13 B10CSW8707F4M3V5
[VP0003]	◇	9H13 B10CSW8707F4M3V5

ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000

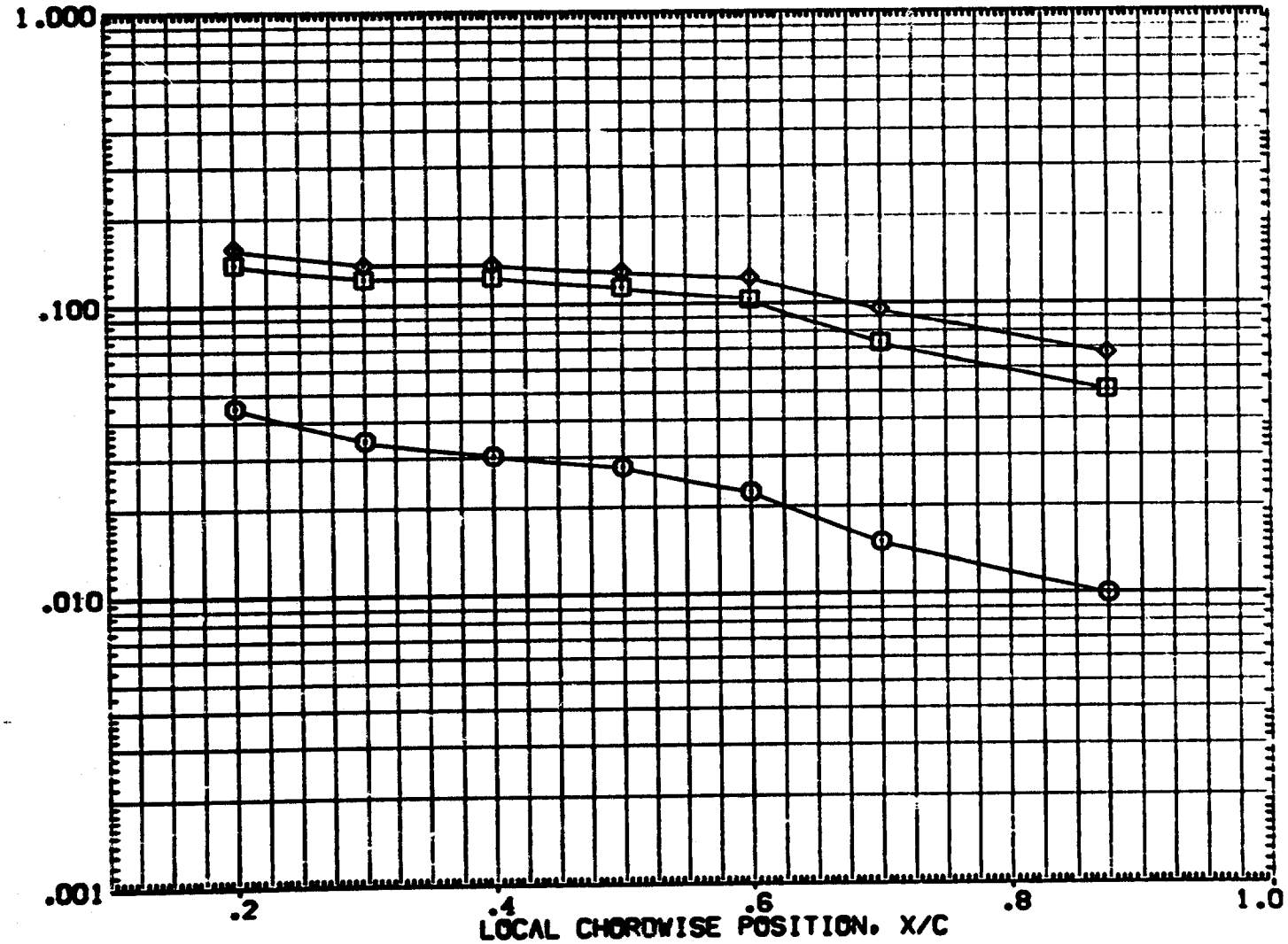


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 3.000 HAW/HT= .850 2Y/B = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
[illegible]	□	[illegible]
[illegible]	◇	[illegible]

ALPHA	ELEVON	BETA	RUDDER
30.000	.000	.000	.000
35.000	.000	.000	.000

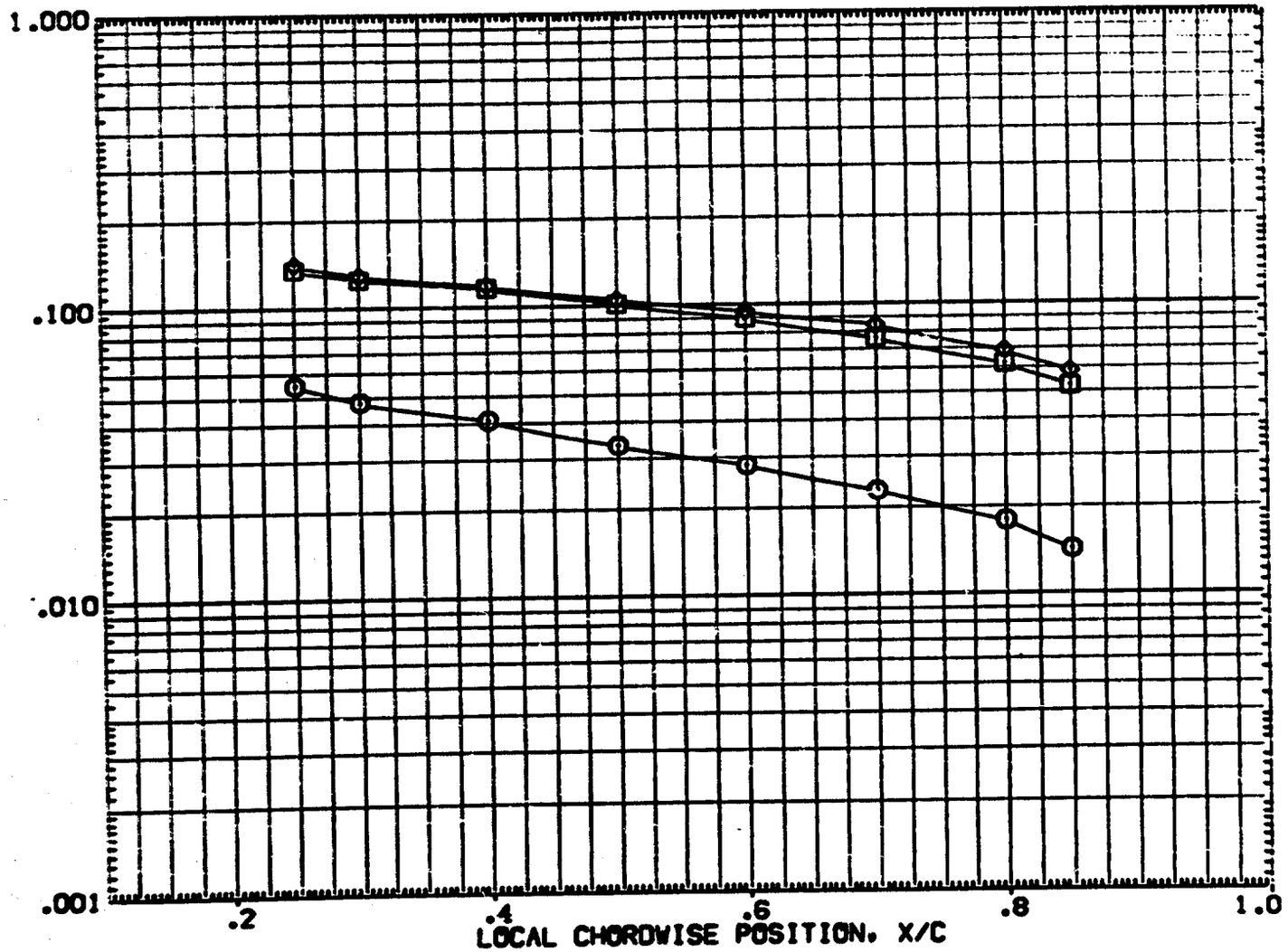


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 3.000 HAW/HT= .850 2Y/B = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
[illegible]	□	0+13 B10CSWB70TF4*3V5
[illegible]	□	0+13 B10CSWB70TF4*3V5
[illegible]	◇	0+12 B10CSWB70TF4*3V5

ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000

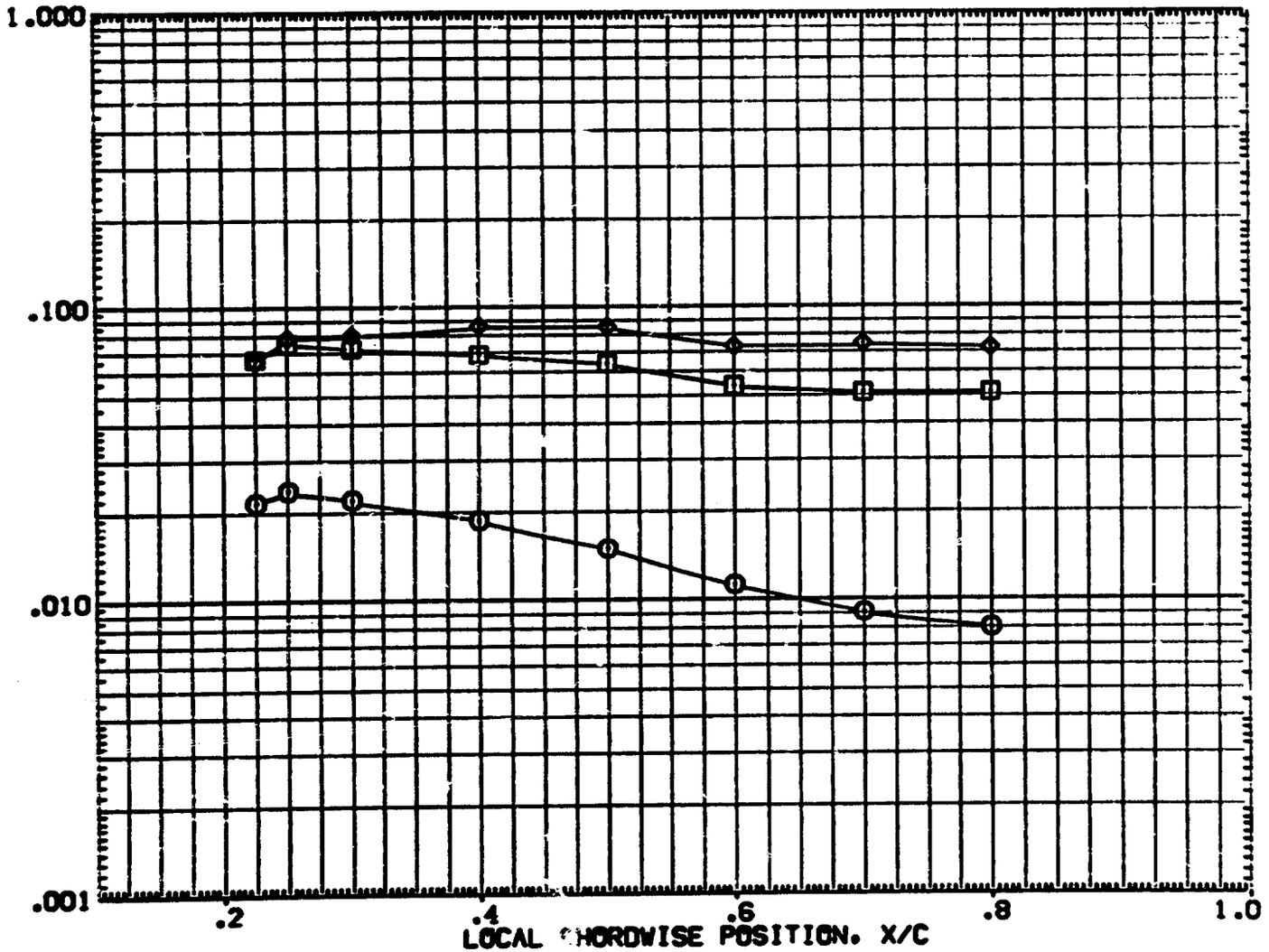


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 3.000 HAW/HT= .850 2Y/B = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
[illegible]	○	0413 [illegible]
[illegible]	□	0413 [illegible]
[illegible]	◇	0413 [illegible]

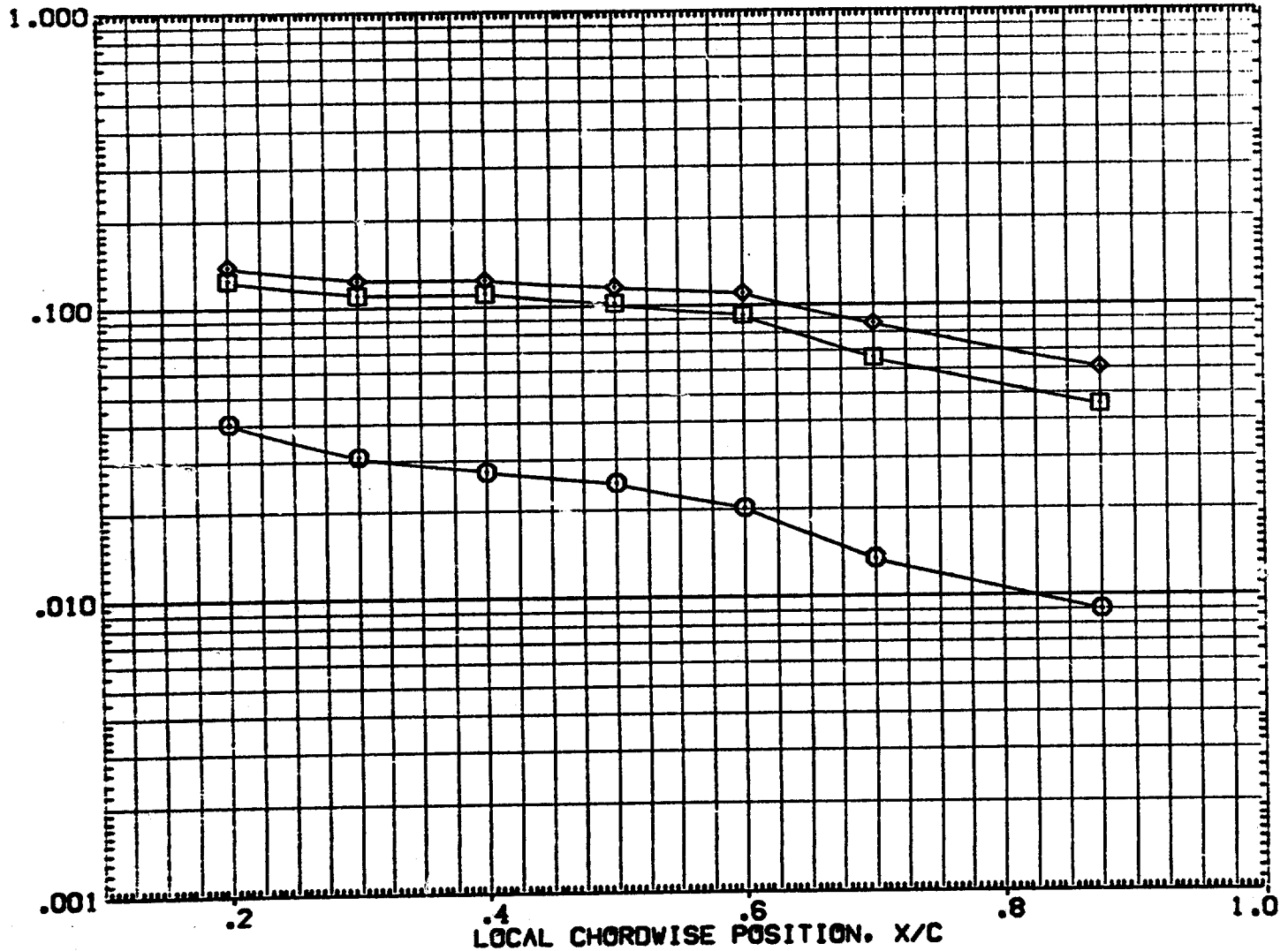
ALPHA	ELEVON	BETA	RUDDER
[illegible]	.000	.000	.000
35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 3.000 HAW/HT= 1.000 2Y/B = .400

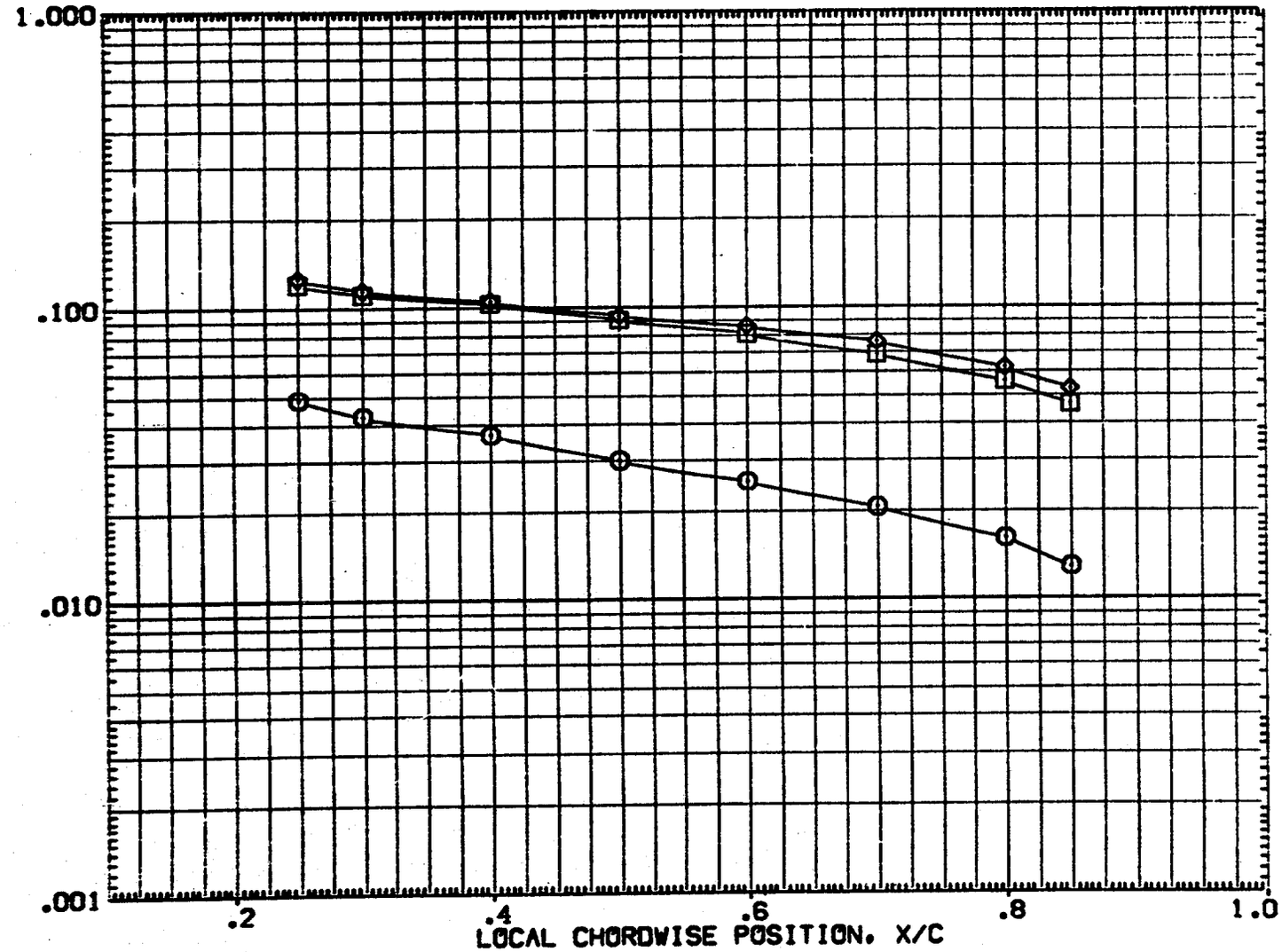
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(VP0001)	○	0413 B10C5V87D7F4M3V5	.000	.000	.000	.000
(VP0002)	□	0413 B10C5V87D7F4M3V5	30.000	.000	.000	.000
(VP0003)	◇	0413 B10C5V87D7F4M3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 3.000 HAW/HT= 1.000 2Y/B = .600

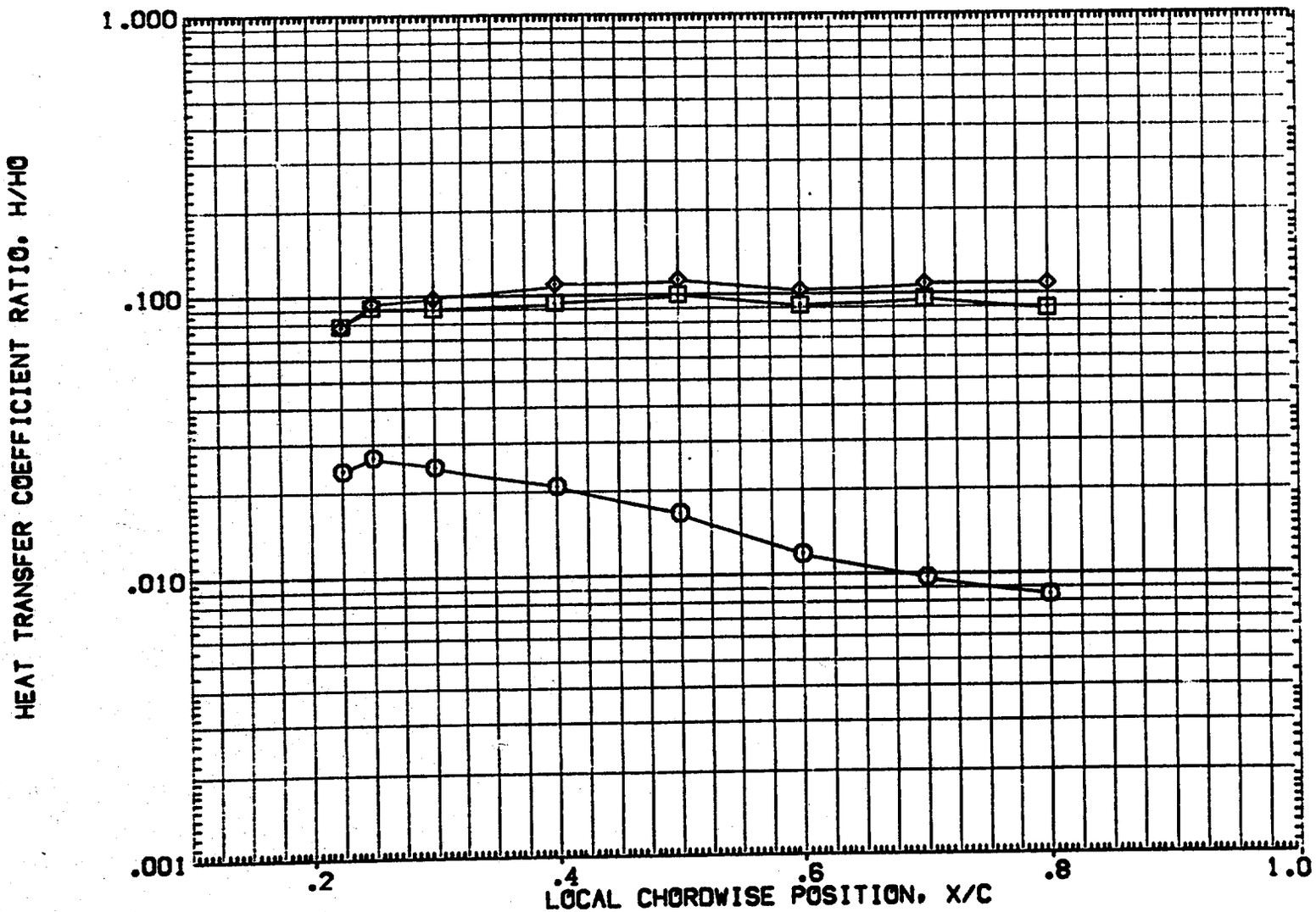
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(VP0001)	○	0413 B10CSW67D7F413V5	.000	.000	.000	.000
(VP0002)	□	0413 B10CSW67D7F413V5	30.000	.000	.000	.000
(VP0003)	◇	0413 B10CSW67D7F413V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 3.000 HAW/HT= 1.000 2Y/B = .800

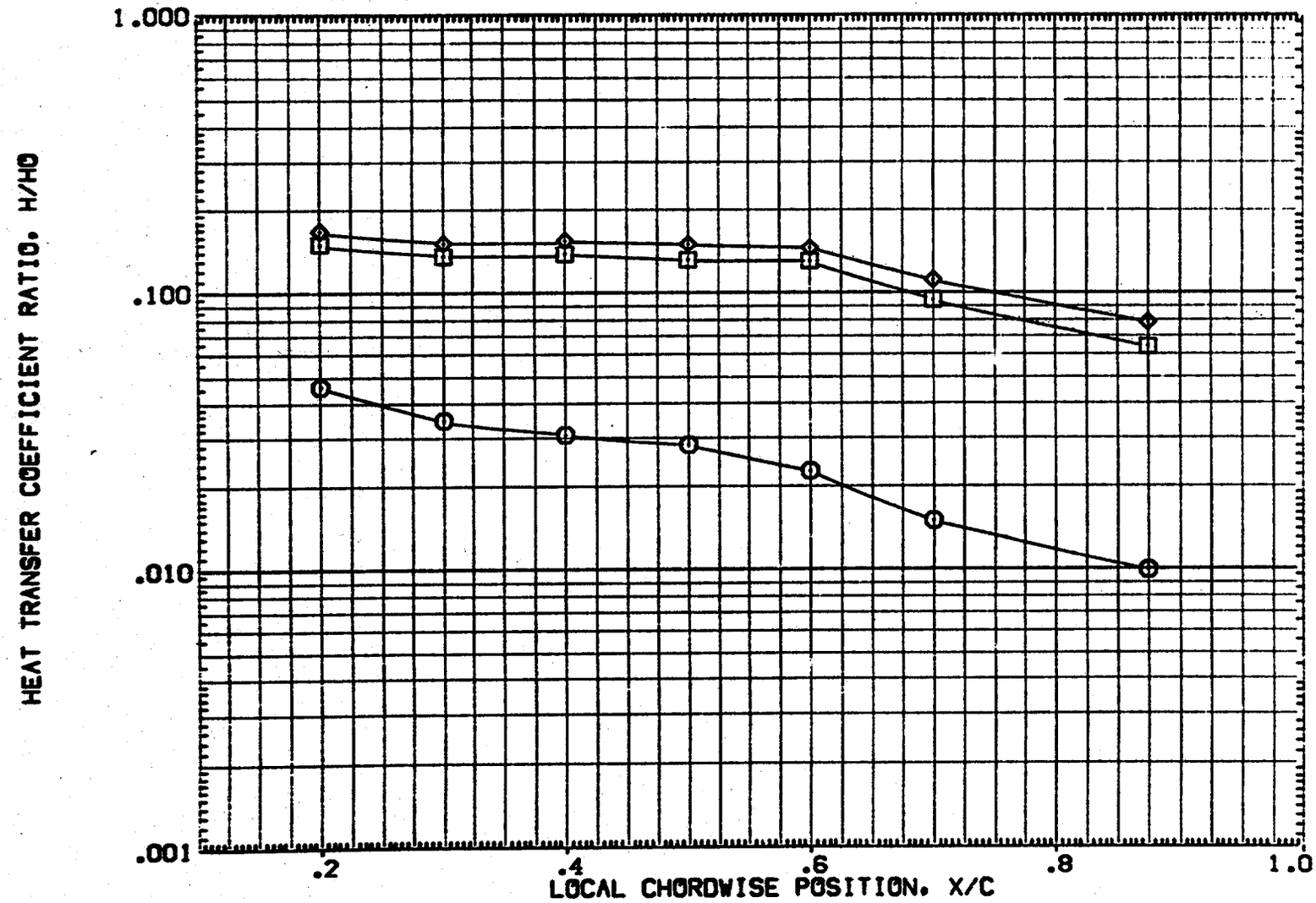
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
[VP0001]	○	OH13 B10CSWB70TF4M3V5	.000	.000	.000	.000
[VP0002]	□	OH13 B10CSWB70TF4M3V5	30.000	.000	.000	.000
[VP0003]	◇	OH13 B10CSWB70TF4M3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 4.000 HAW/HT= .850 2Y/B = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(VP0001)	○	0413 B10CSWB7D7F4M3V5	.000	.000	.000	.000
(VP0002)	□	0413 B10CSWB7D7F4M3V5	30.000	.000	.000	.000
(VP0003)	◇	0413 B10CSWB7D7F4M3V5	35.000	.000	.000	.000

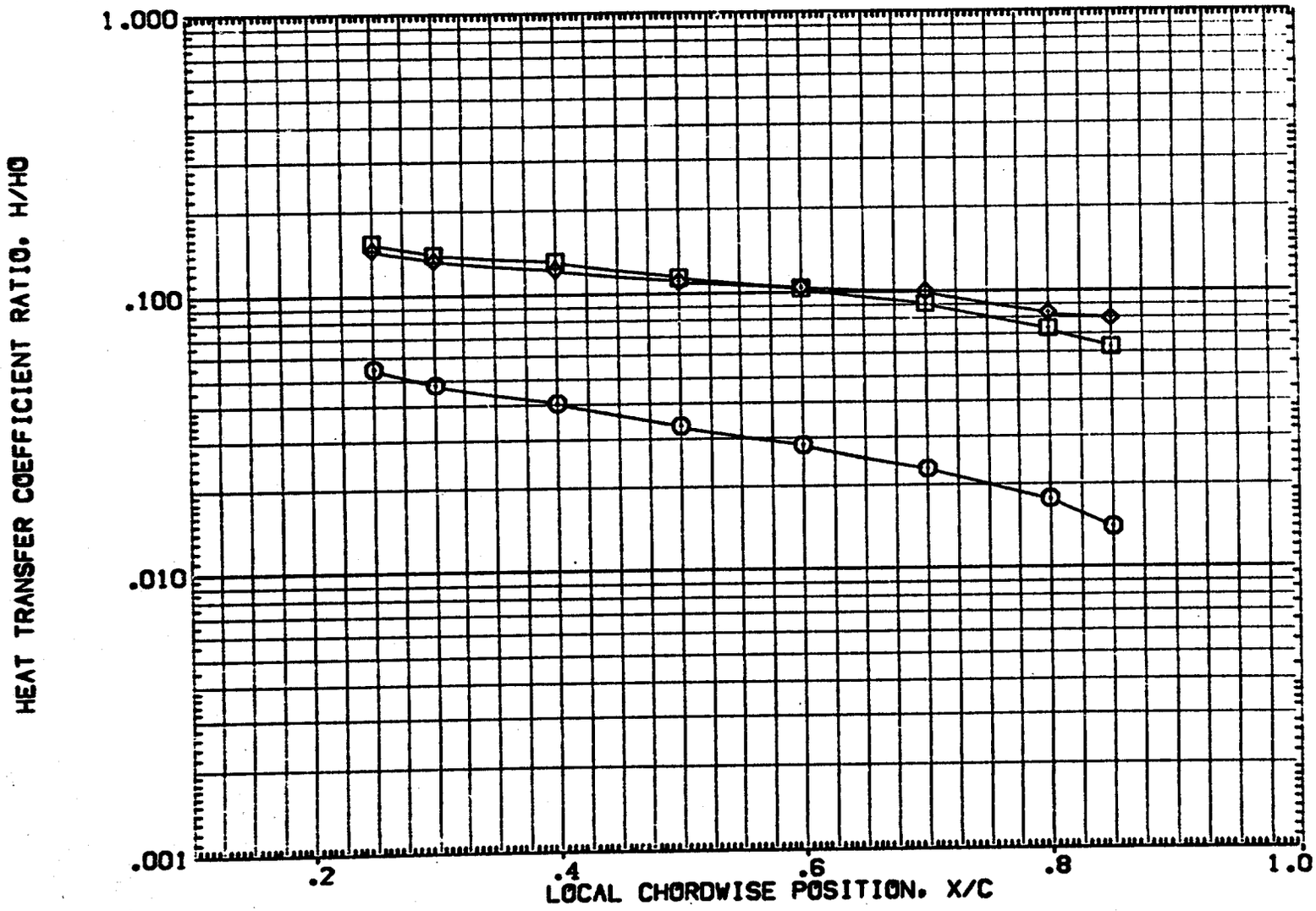


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 4.000 HAW/HT= .850 2Y/B = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
[VP0001]	○	0413 B10CSWB707F4M3V5
[VP0002]	□	0413 B10CSWB707F4M3V5
[VP0003]	◇	0413 B10CSWB707F4M3V5

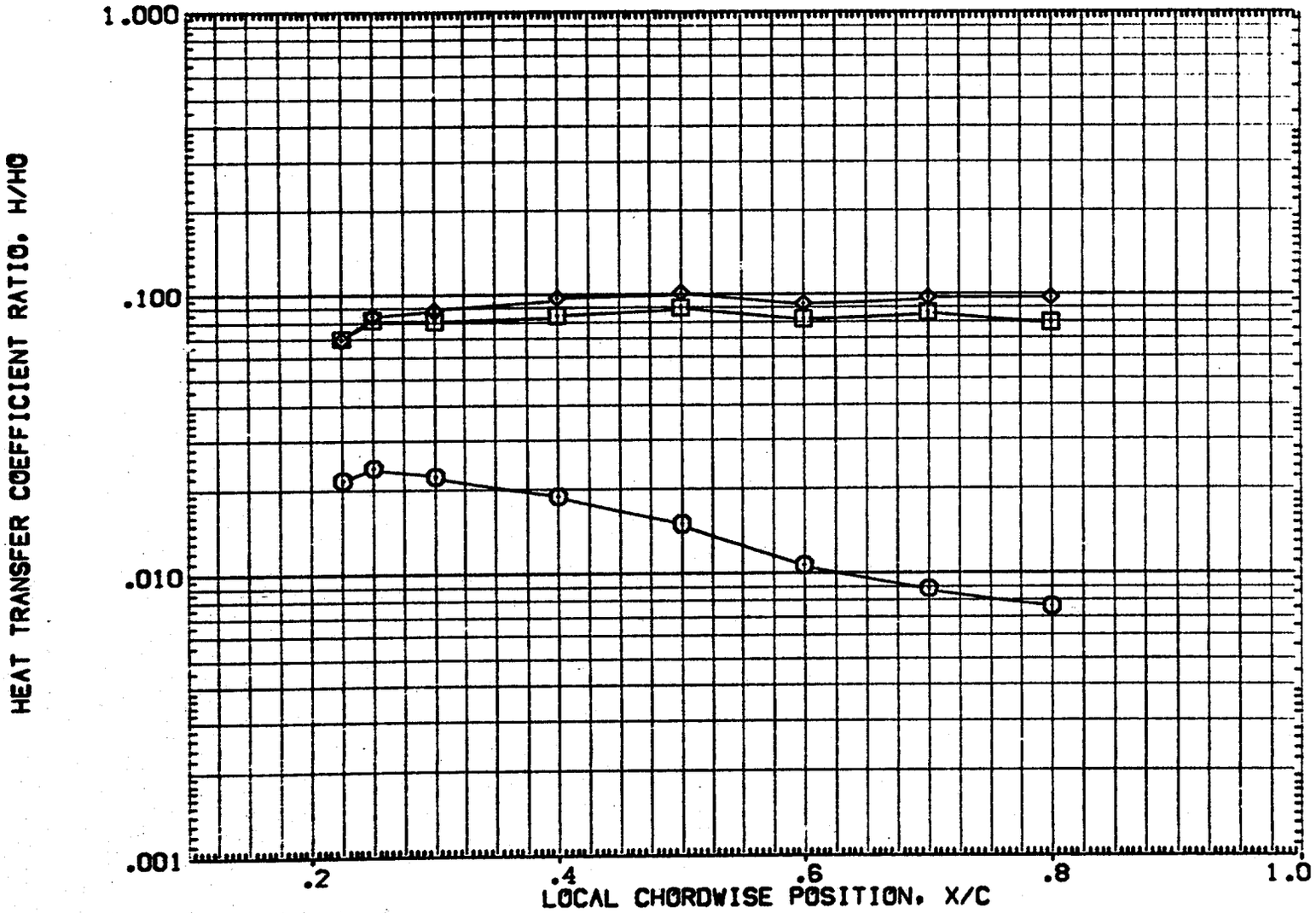
ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 4.000 HAW/HT= .850 2Y/B = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
[VP0001]	○	0413 B10CSW87D7F4M3V5	.000	.000	.000	.000
[VP0002]	□	0413 B10CSW87D7F4M3V5	30.000	.000	.000	.000
[VP0003]	◇	0413 B10CSW87D7F4M3V5	35.000	.000	.000	.000

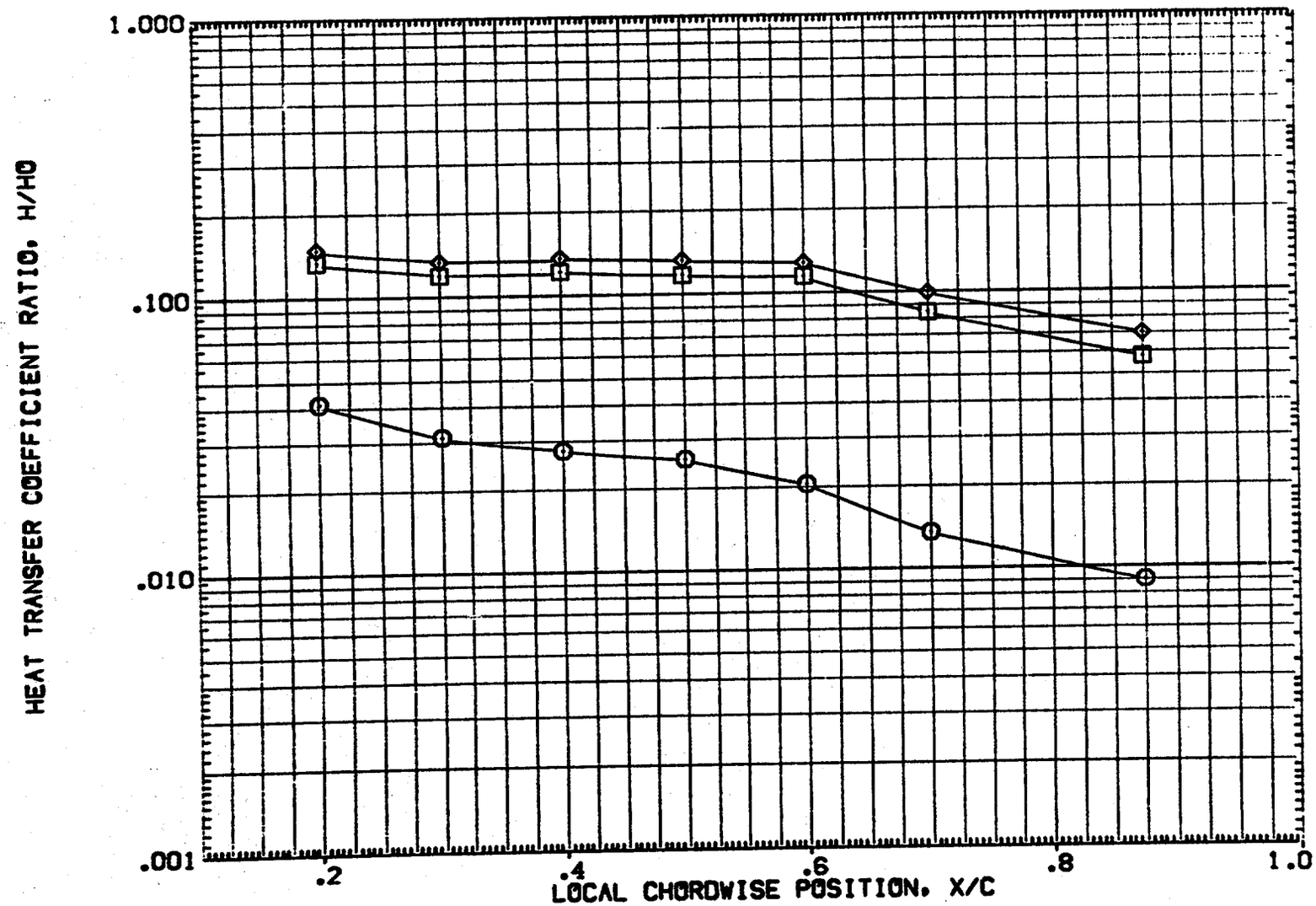


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 4.000 HAW/HT= 1.000 2Y/B = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(VP0001)	○	0H13 B10CSW87D7F4M3V5
(VP0002)	□	0H13 B10CSW87D7F4M3V5
(VP0003)	◇	0H13 B10CSW87D7F4M3V5

ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000

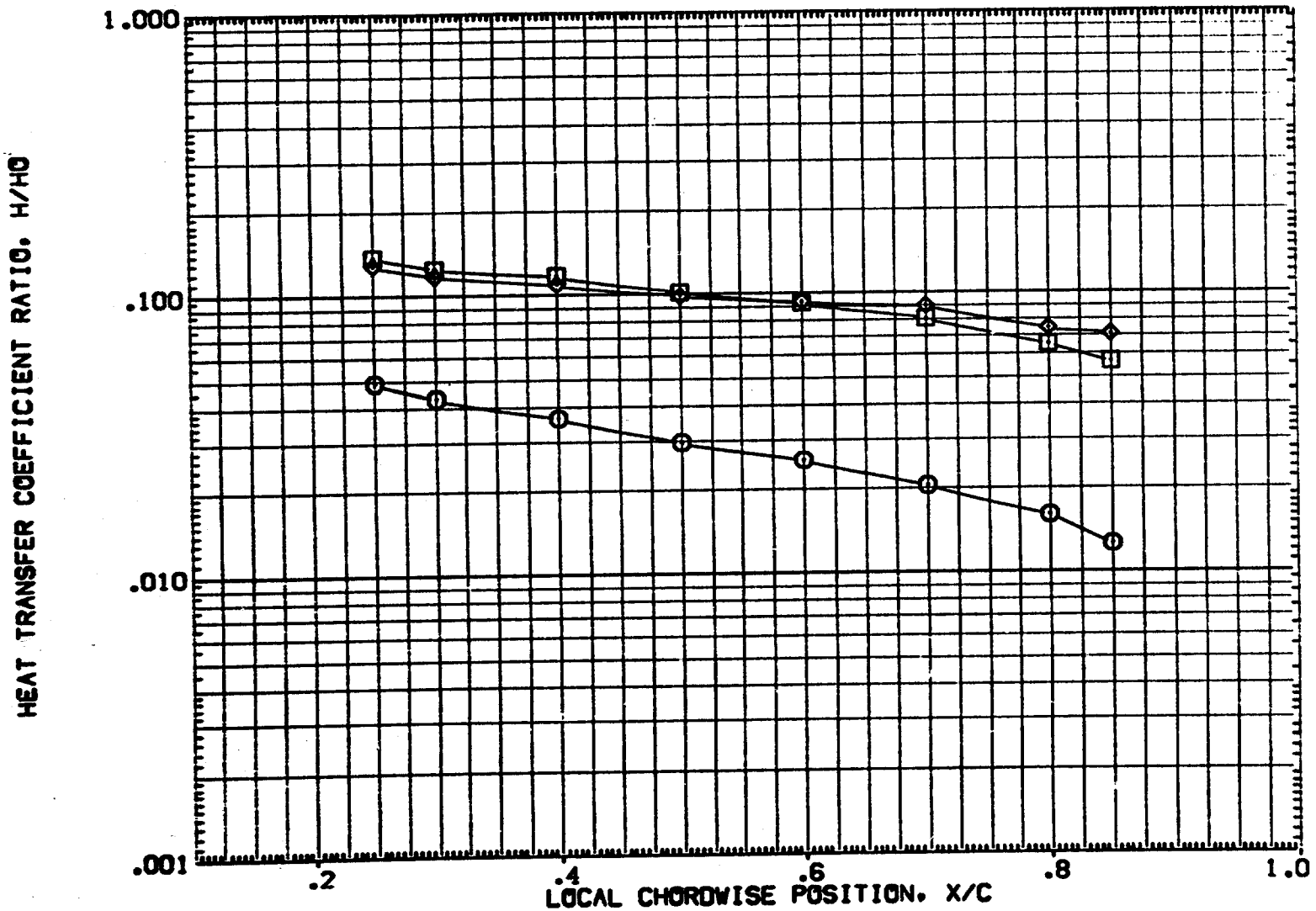


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 4.000 HAW/HT= 1.000 2Y/B = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
[VP0001]	○	0H13 B10C5W87D7F4H3V5
[VP0002]	□	0H13 B10C5W87D7F4H3V5
[VP0003]	◇	0H13 B10C5W87D7F4H3V5

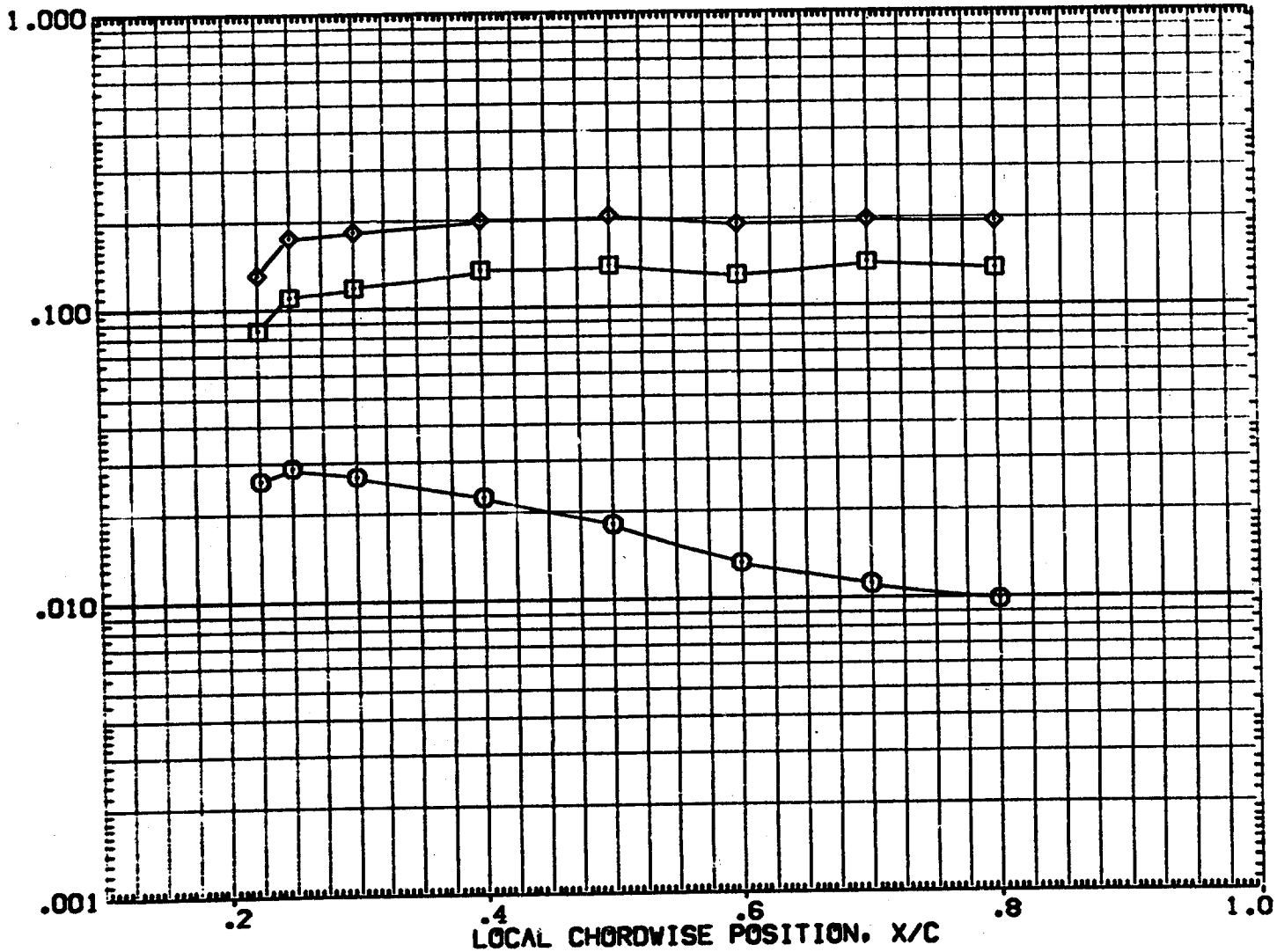
ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 4.000 HAW/HT= 1.000 2Y/B = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
[VP0001]	○	0413 B10CSWB707F4P3V5	.000	.000	.000	.000
[VP0002]	□	0413 B10CSWB707F4P3V5	30.000	.000	.000	.000
[VP0003]	◇	0413 B10CSWB707F4P3V5	35.000	.000	.000	.000

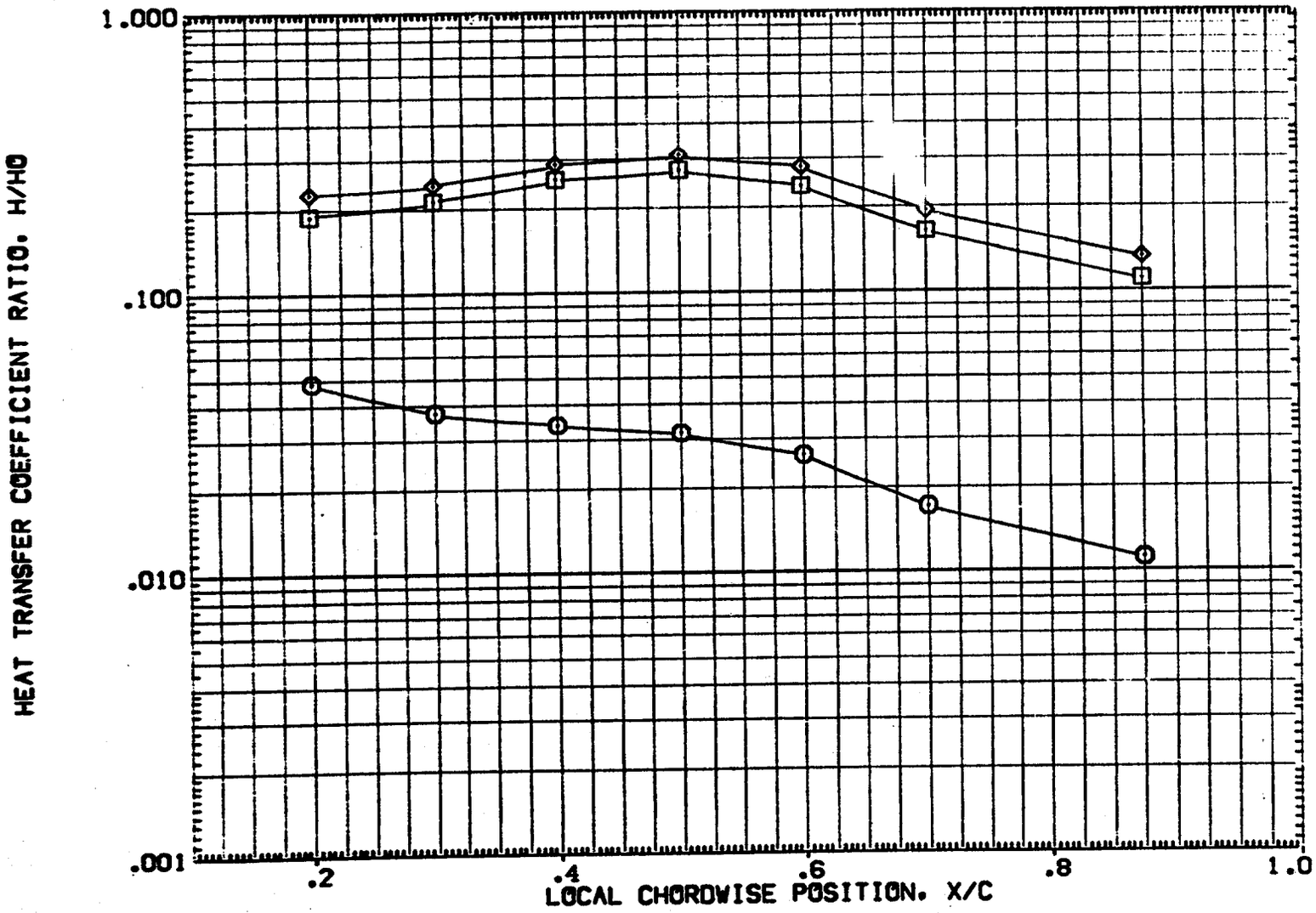


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 6.000 HAW/HT= .850 2Y/B = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(VPC001)	○	0H13 B10OSW67O7F4H3V5
(VPC002)	□	0H13 B10OSW67O7F4H3V5
(VPC003)	◇	0H13 B10OSW67O7F4H3V5

ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000

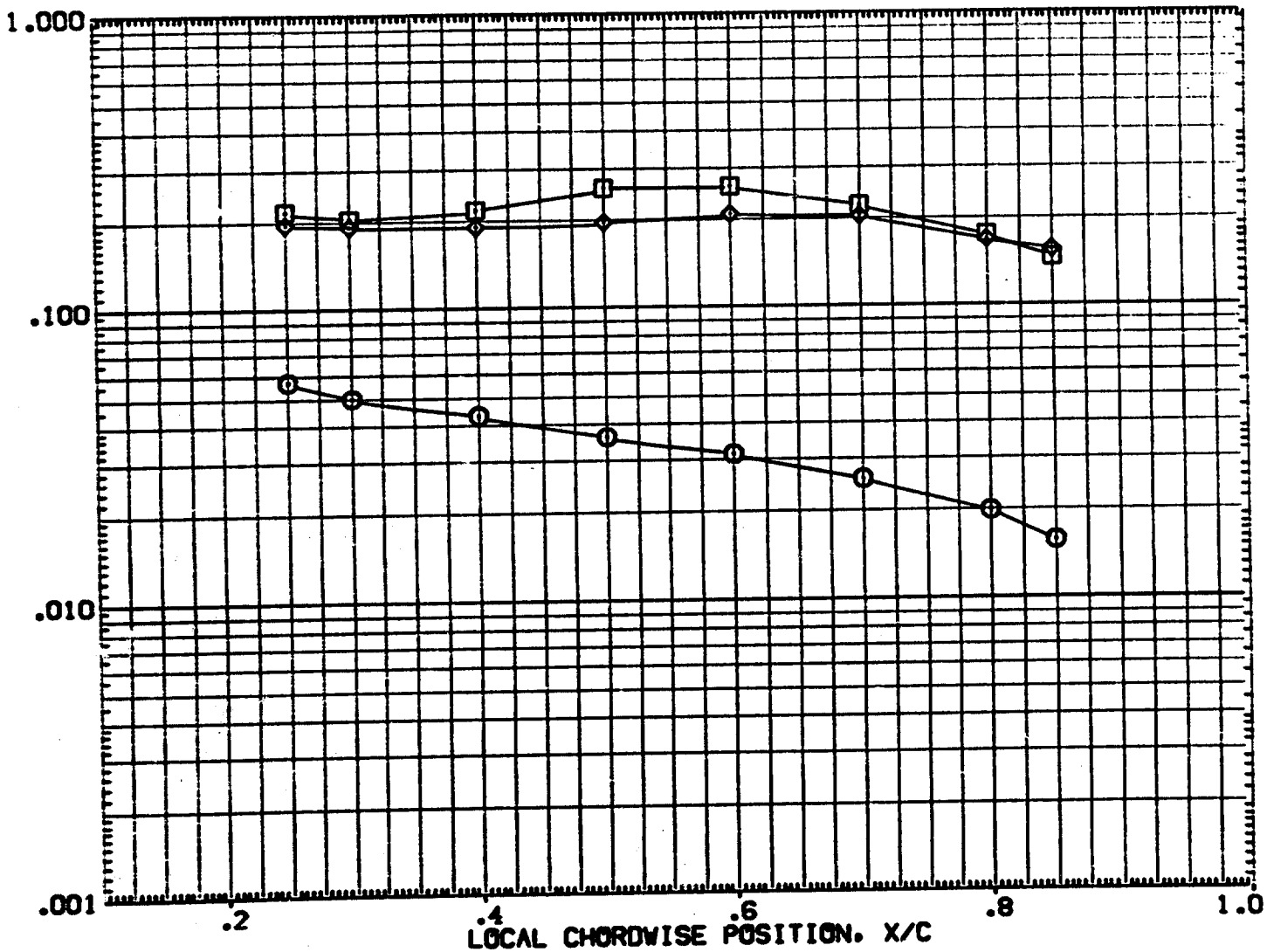


HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 6.000 HAW/HT= .850 2Y/B = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
[VP0001]	□	0H13 B10CSWB707F4M3V5
[VP0002]	○	0H13 B10CSWB707F4M3V5
[VP0003]	◇	0H13 B10CSWB707F4M3V5

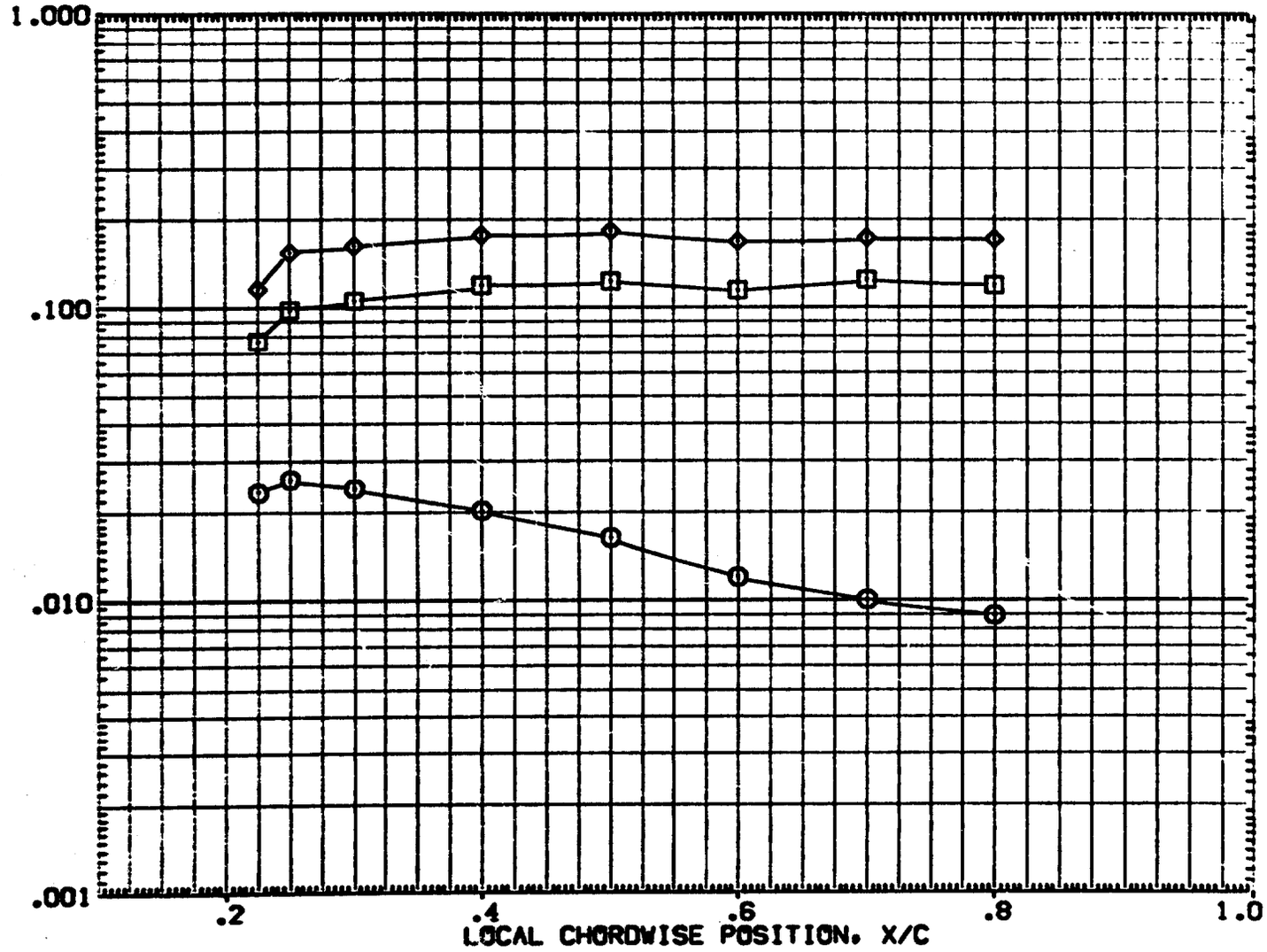
ALPHA	ELEVON	BETA	RUDDER
.000	.000	.000	.000
30.000	.000	.000	.000
35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 6.000 HAW/HT= .850 2Y/B = .800

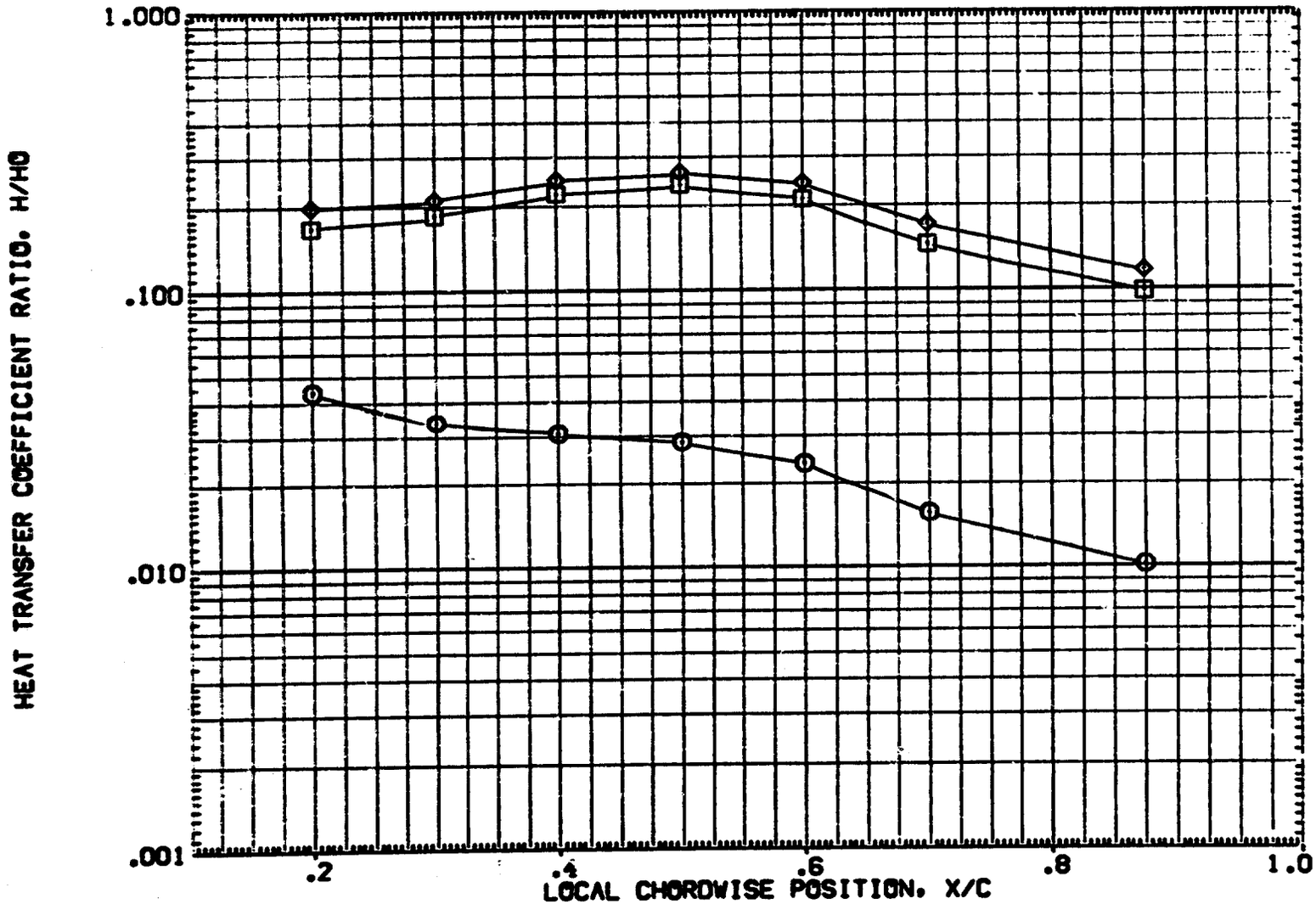
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(VPD001)	□	0413 B10CSWB707F4V5	.000	.000	.000	.000
(VPD002)	◇	0413 B10CSWB707F4V5	30.000	.000	.000	.000
(VPD003)	◇	0413 B10CSWB707F4V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 6.000 HAW/HT= 1.000 2Y/B = .400

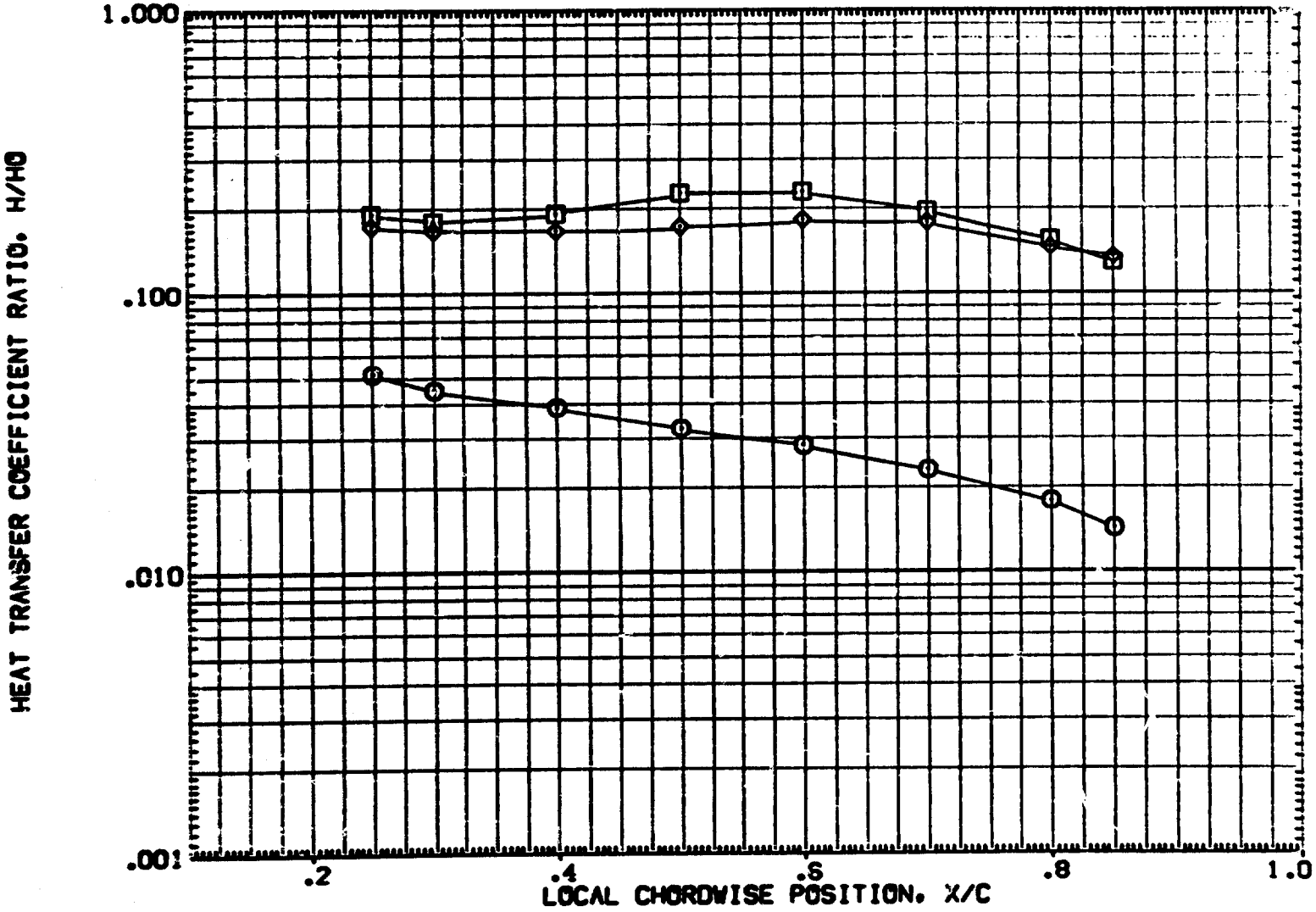
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(VP0001)	○	0413 B10CSW8707F4H3V5	.000	.000	.000	.000
(VP0002)	□	0413 B10CSW8707F4H3V5	30.000	.000	.000	.000
(VP0003)	◇	0413 B10CSW8707F4H3V5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

RN/L = 6.000 HAW/HT= 1.000 2Y/B = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BETA	RUDDER
(VP0001)	○	0413 B10CSW070FF4GV5	.000	.000	.000	.000
(VP0002)	□	0413 B10CSW070FF4GV5	30.000	.000	.000	.000
(VP0003)	◇	0413 B10CSW070FF4GV5	35.000	.000	.000	.000



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

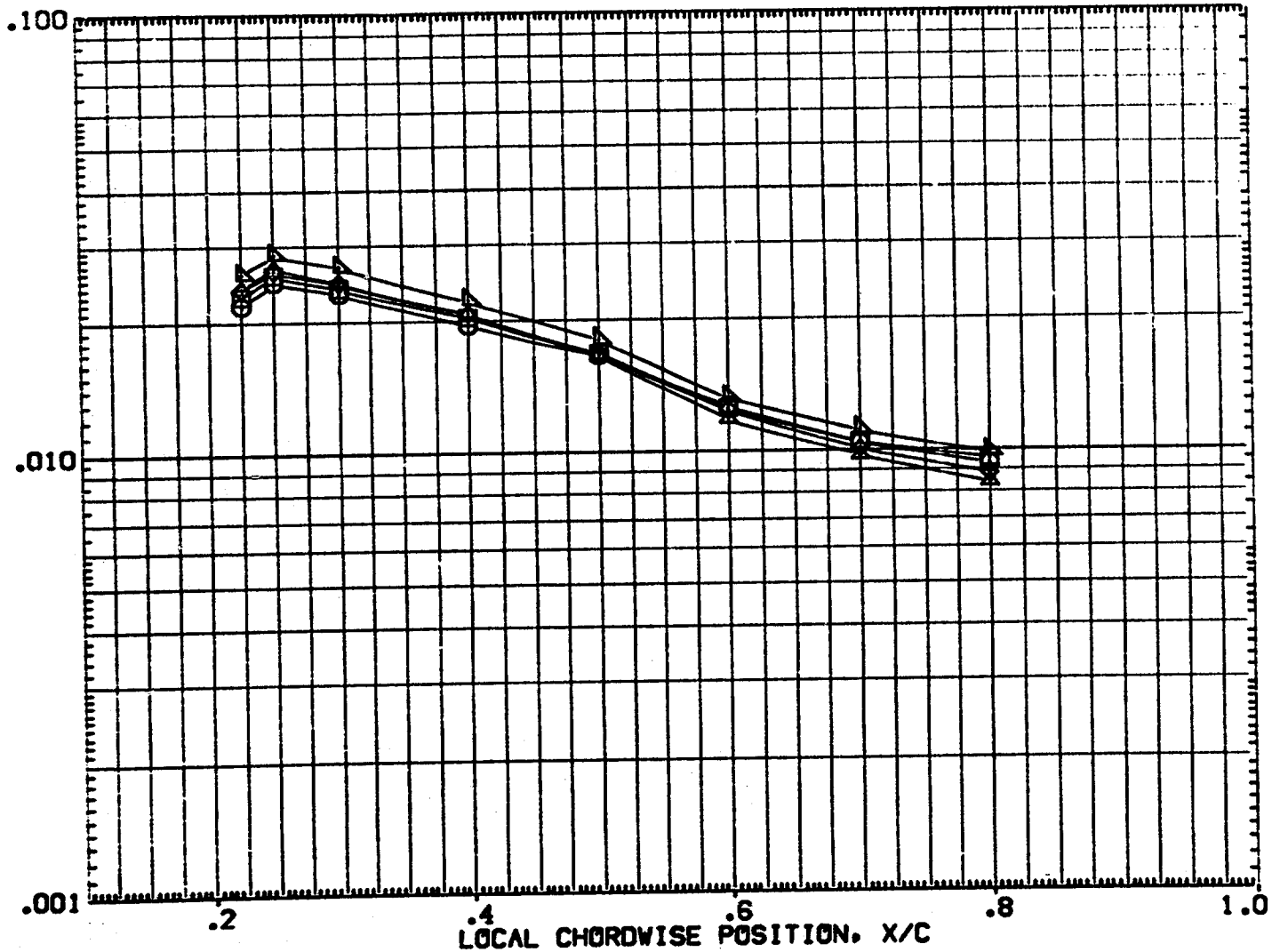
RN/L = 6.000 HAW/HT= 1.000 2Y/B = .800

OH13 B10C5W87D7F4M3V5 (WP0001)

SYMBOL	RN/L	Z/B	HAV/HT
▽	1.000	.400	.850
▷	2.000		
◇	3.000		
□	4.000		
○	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



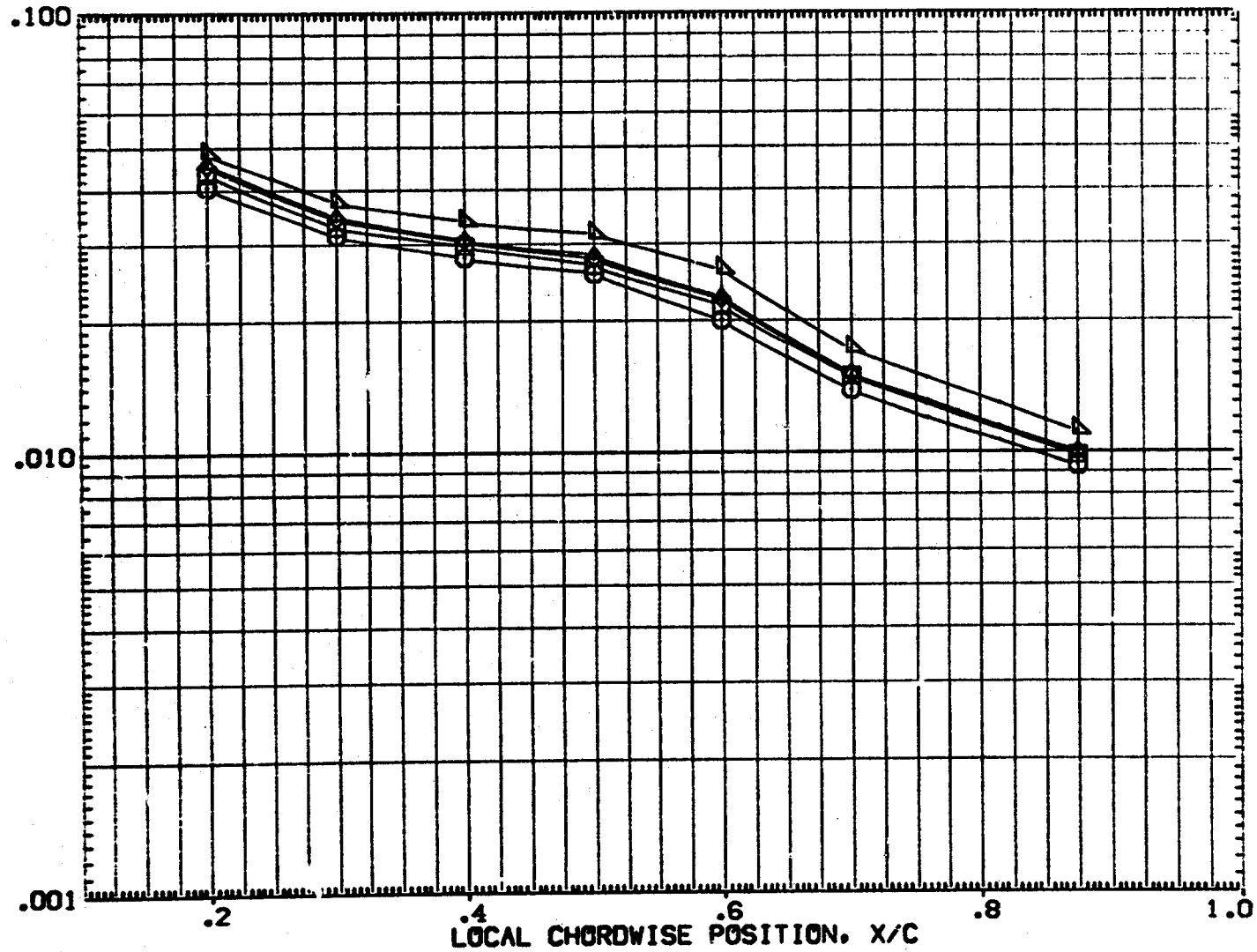
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0001)

SYMBOL	RN/L	ZY/B	HAV/HT
○	1.000	.600	.850
□	2.000		
◇	3.000		
△	4.000		
◁	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



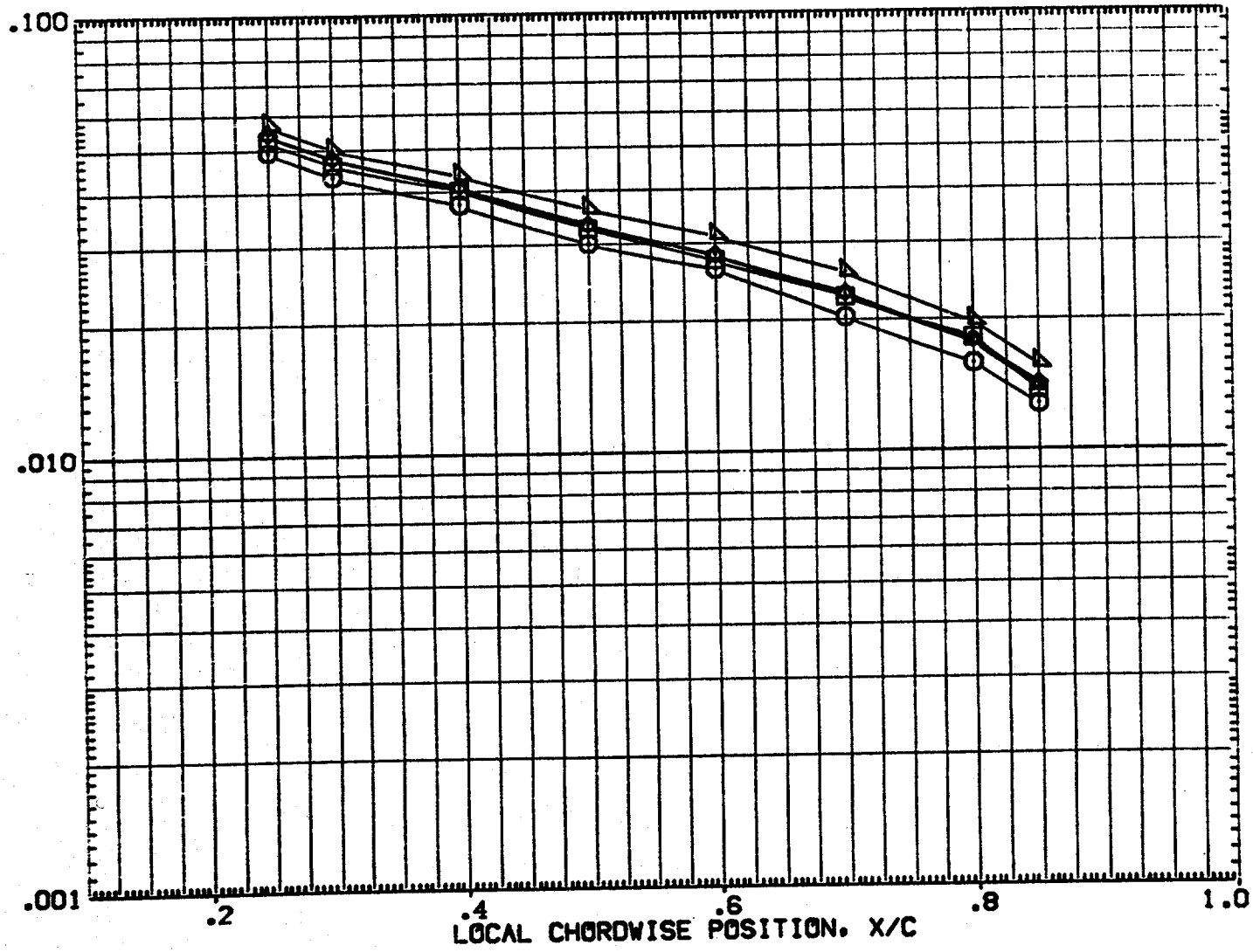
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0001)

SYMBOL	RN/L	2Y/B	HAV/HT
○	1.000	.800	.650
□	2.000		
◇	3.000		
△	4.000		
▷	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



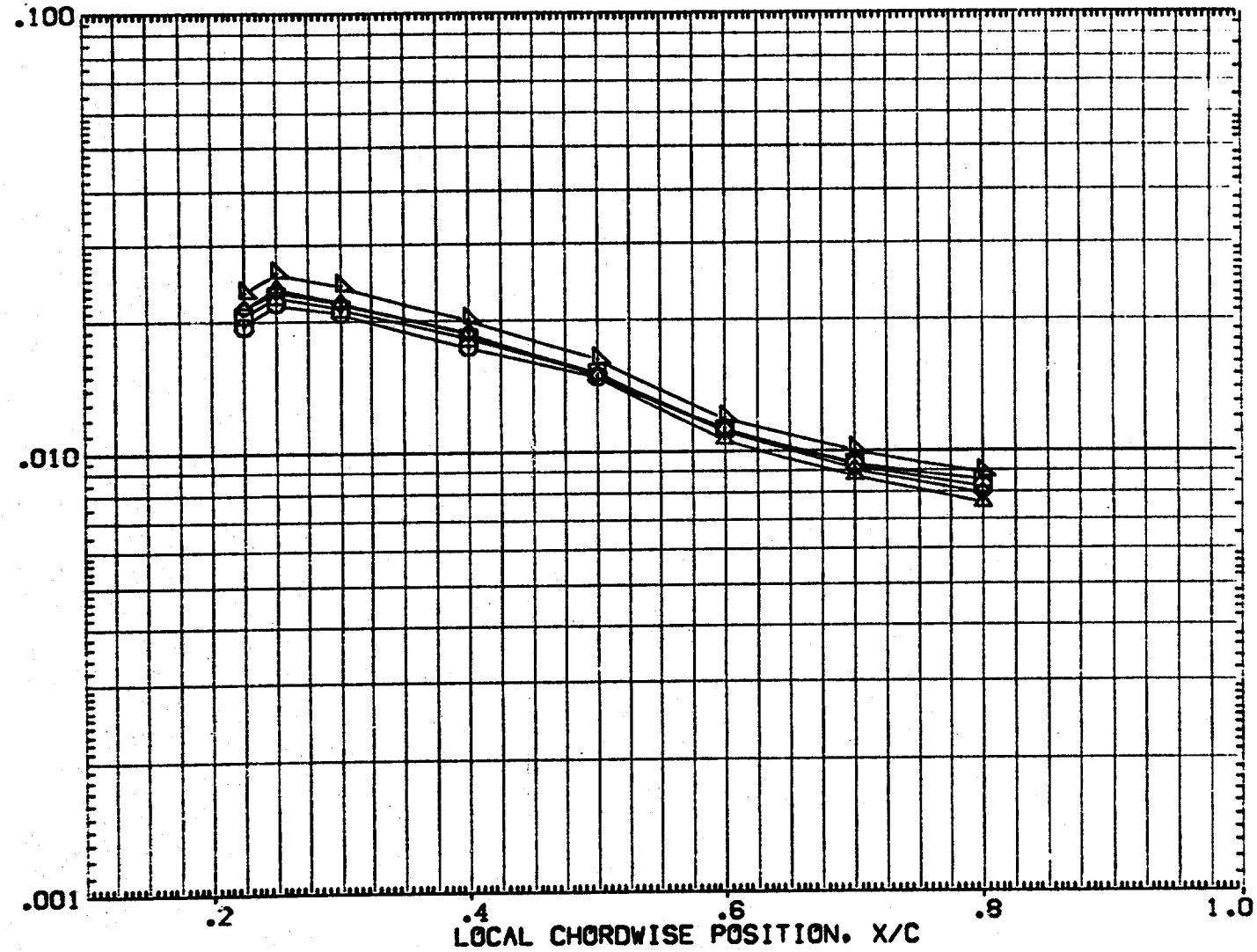
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0001)

SYMBOL	RN/L	ZY/B	HAV/HT
○	1.000	.400	1.000
□	2.000		
◇	3.000		
△	4.000		
◁	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



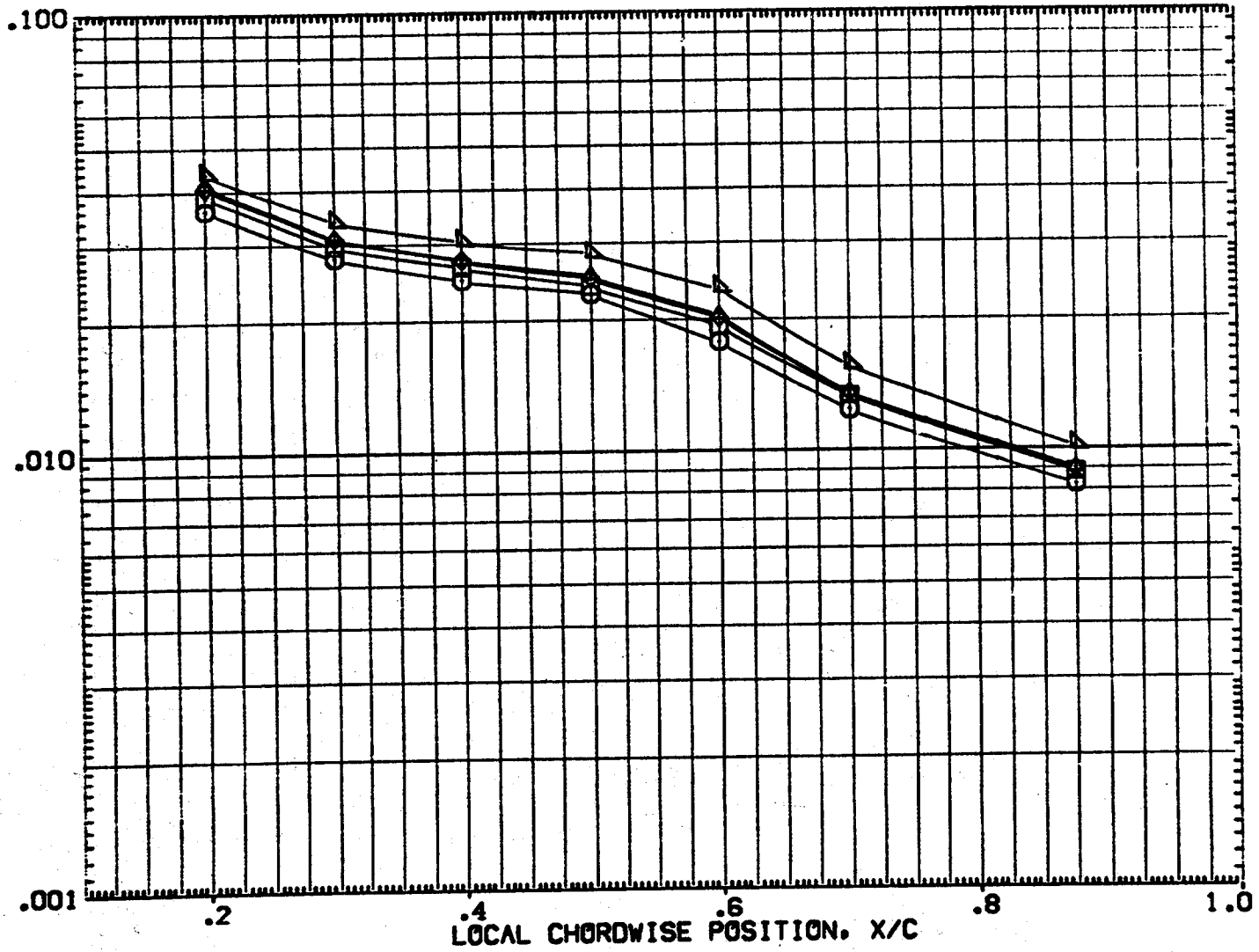
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0001)

SYMBOL	RN/L	ZY/B	HAV/HT
○	1.000	.600	1.000
□	2.000		
◇	3.000		
△	4.000		
◁	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



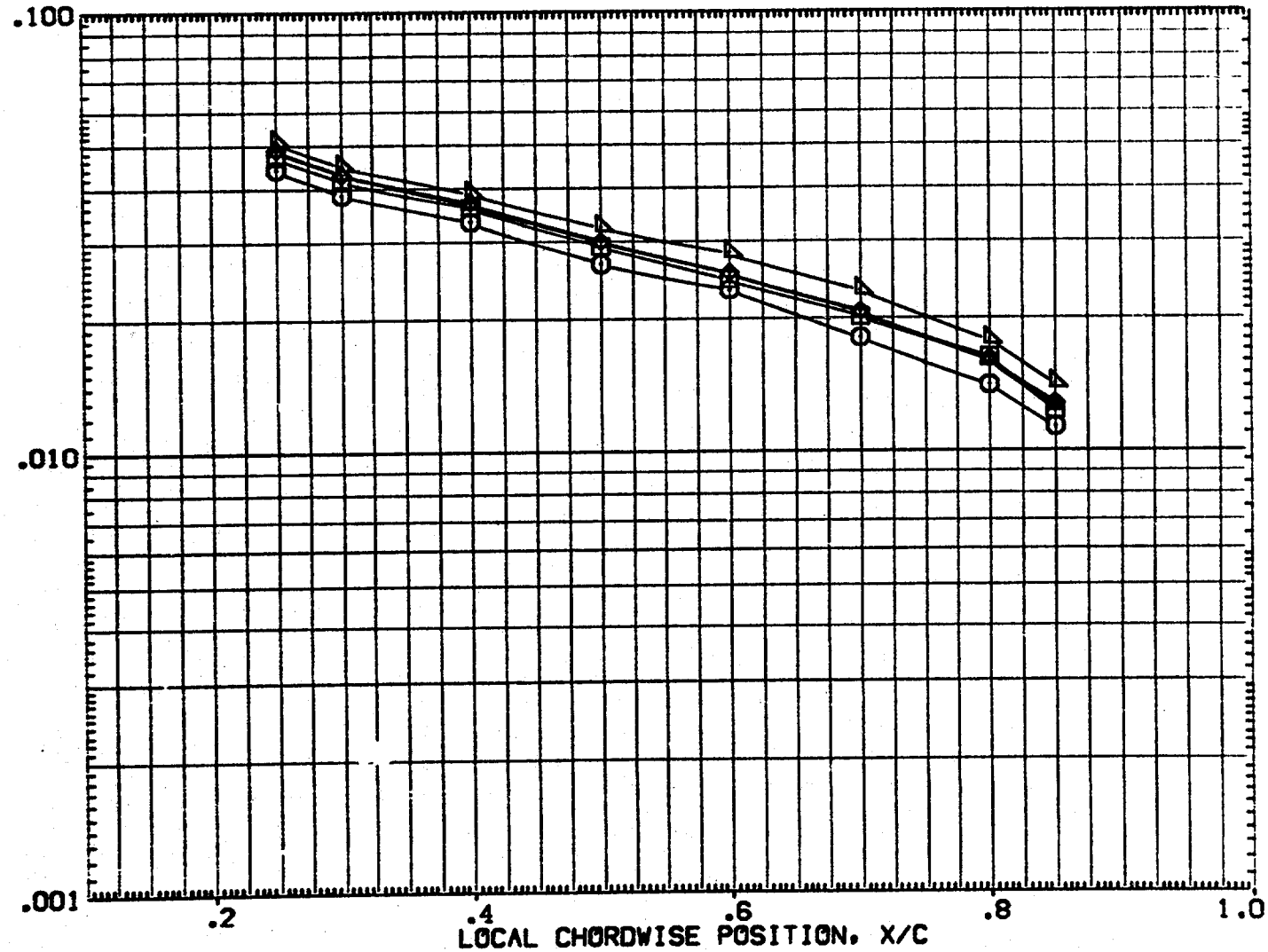
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0001)

SYMBOL	FN/L	ZV/B	HAV/HT
○	1.000	.800	1.000
□	2.000		
◇	3.000		
△	4.000		
▷	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	.000
BETA	.000	ELEVON	.000
RUDDER	.000		



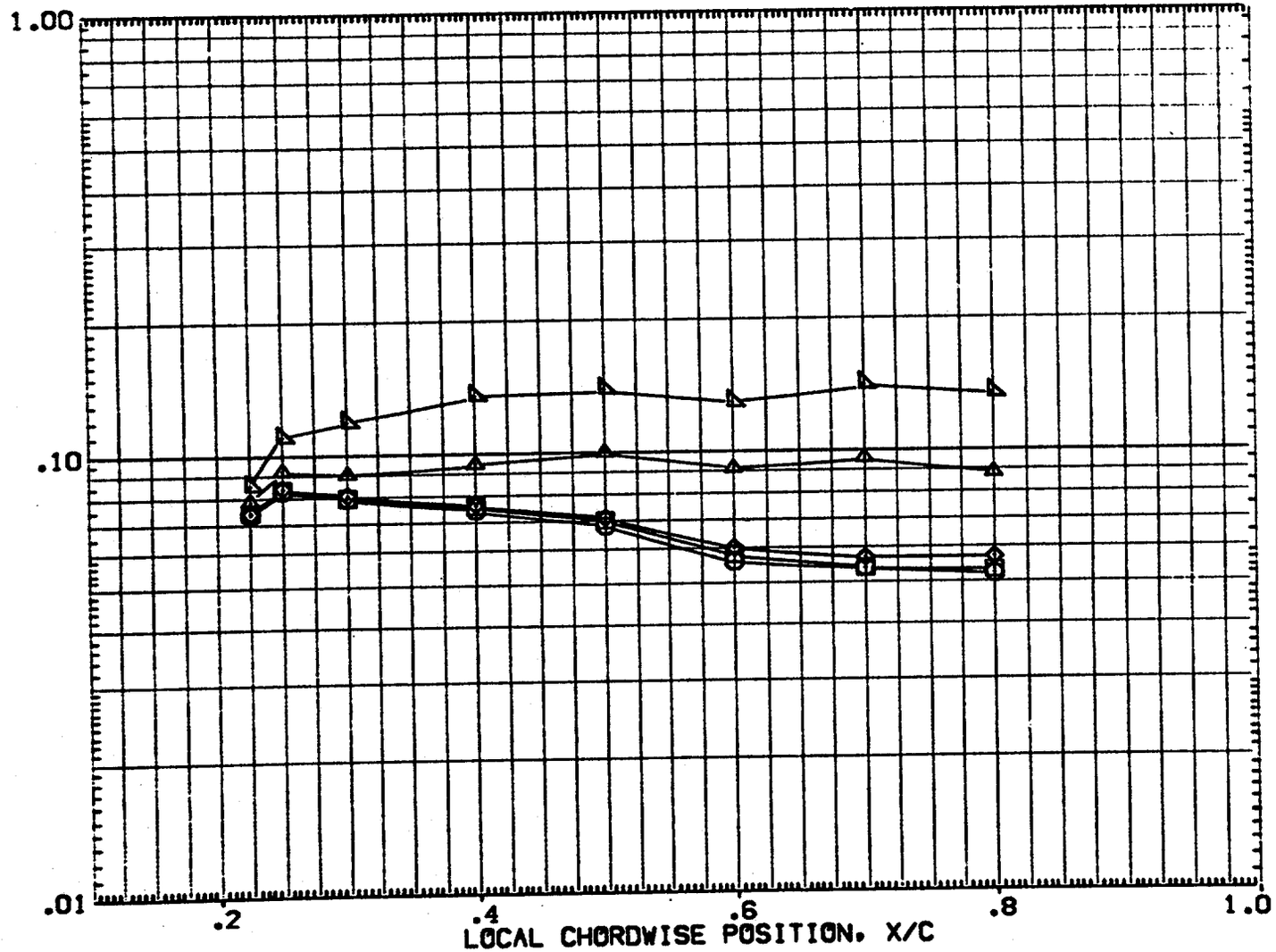
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	RN/L	ZY/B	HAW/HT
○	1.000	.400	.850
□	2.000		
◇	3.000		
△	4.000		
▷	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



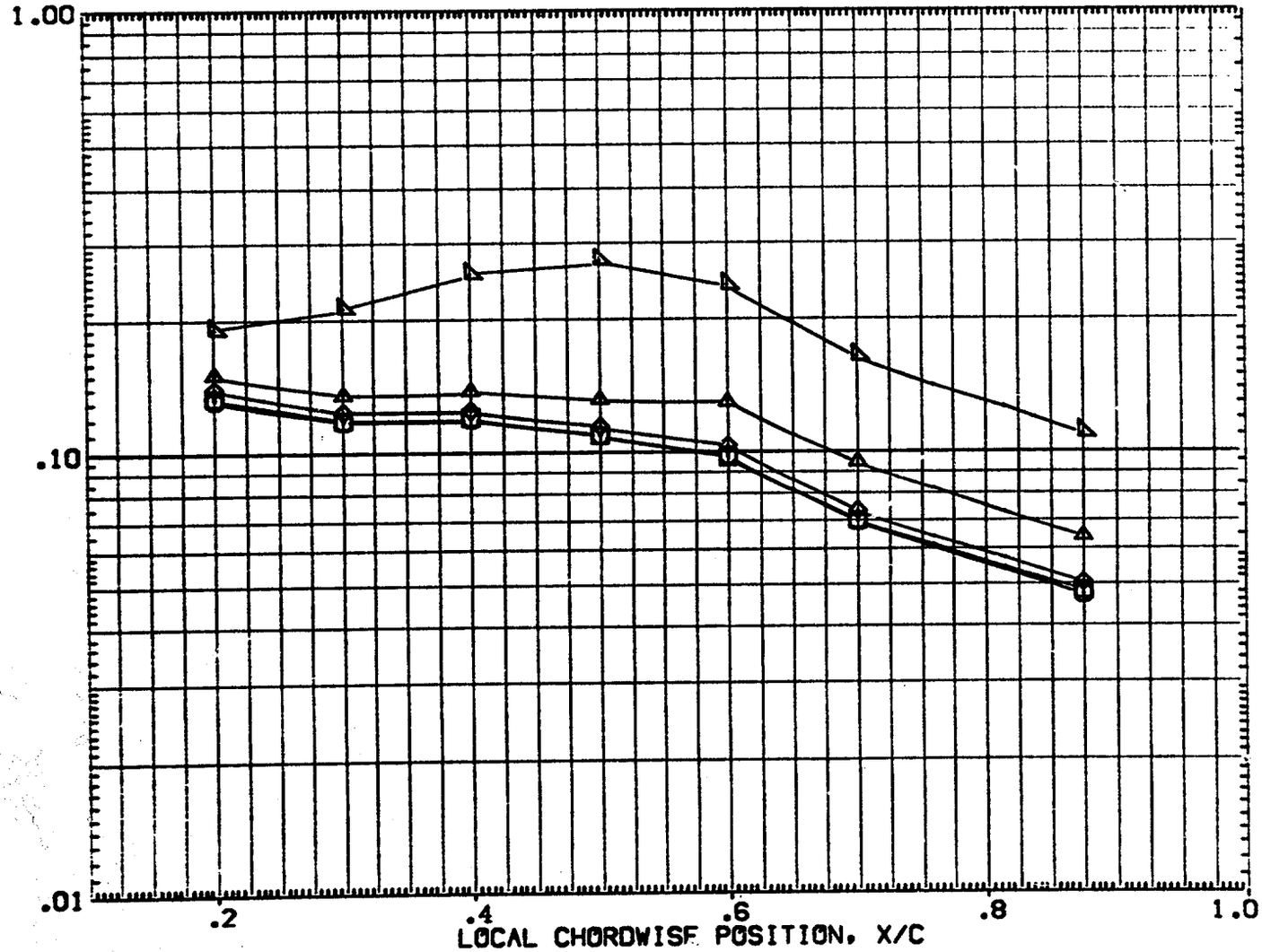
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	RN/L	2Y/B	HAV/HT
○	1.000	.600	.850
□	2.000		
◇	3.000		
△	4.000		
▷	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



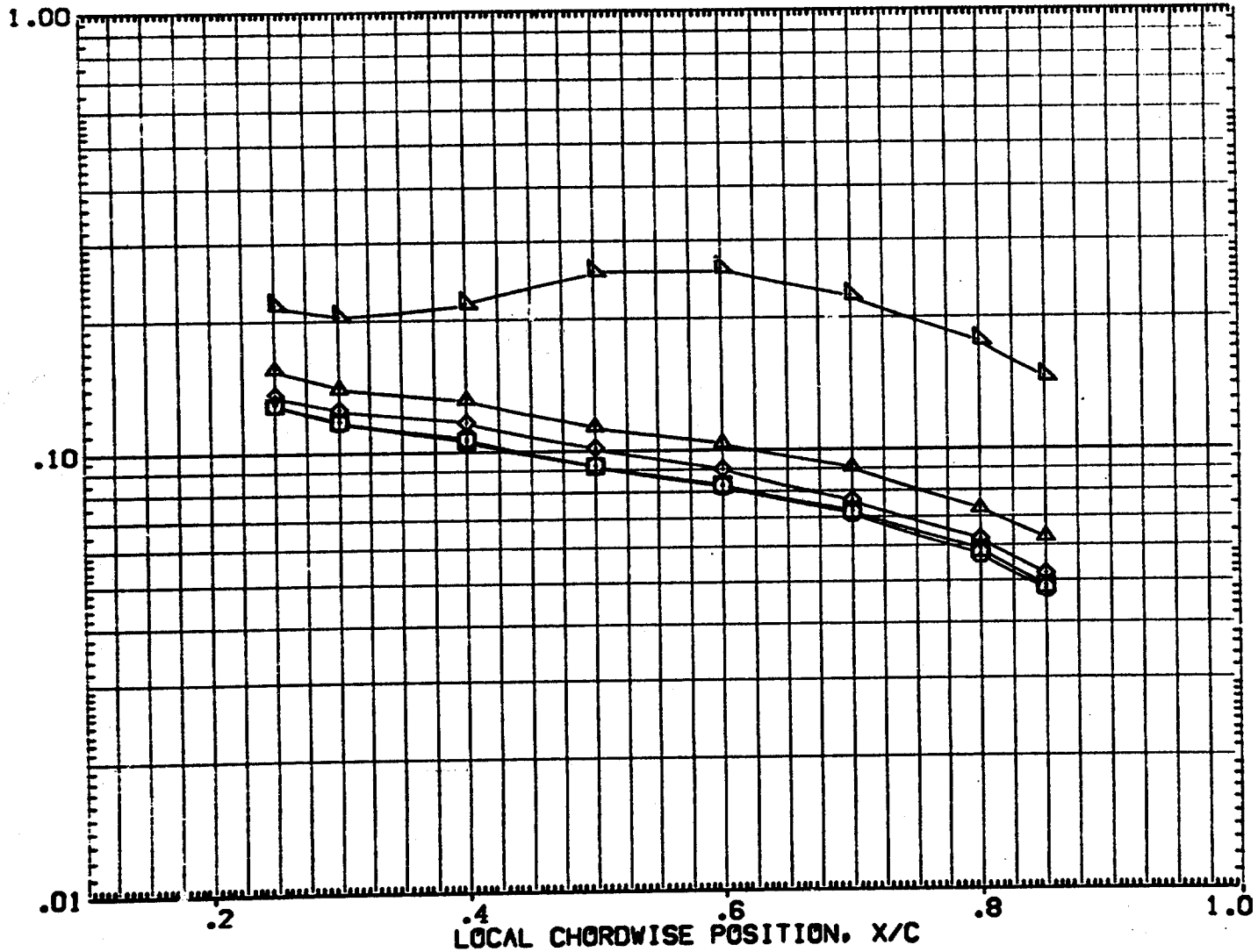
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	RN/L	2Y/B	HAV/HT
○	1.000	.800	.850
□	2.000		
◇	3.000		
△	4.000		
◁	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



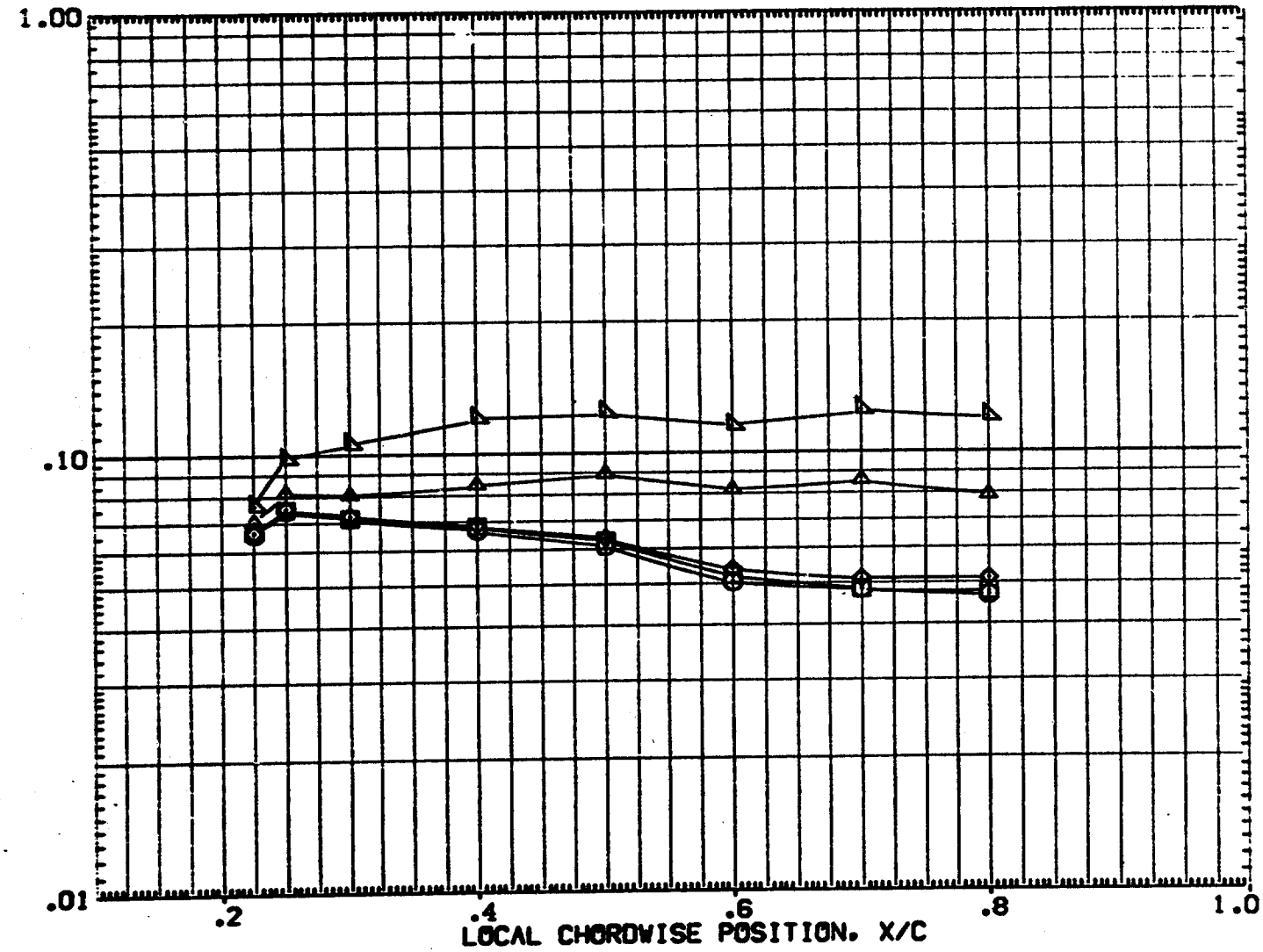
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	RN/L	Z/B	HAV/HT
△	1.000	.400	1.000
▷	2.000		
◇	3.000		
□	4.000		
○	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



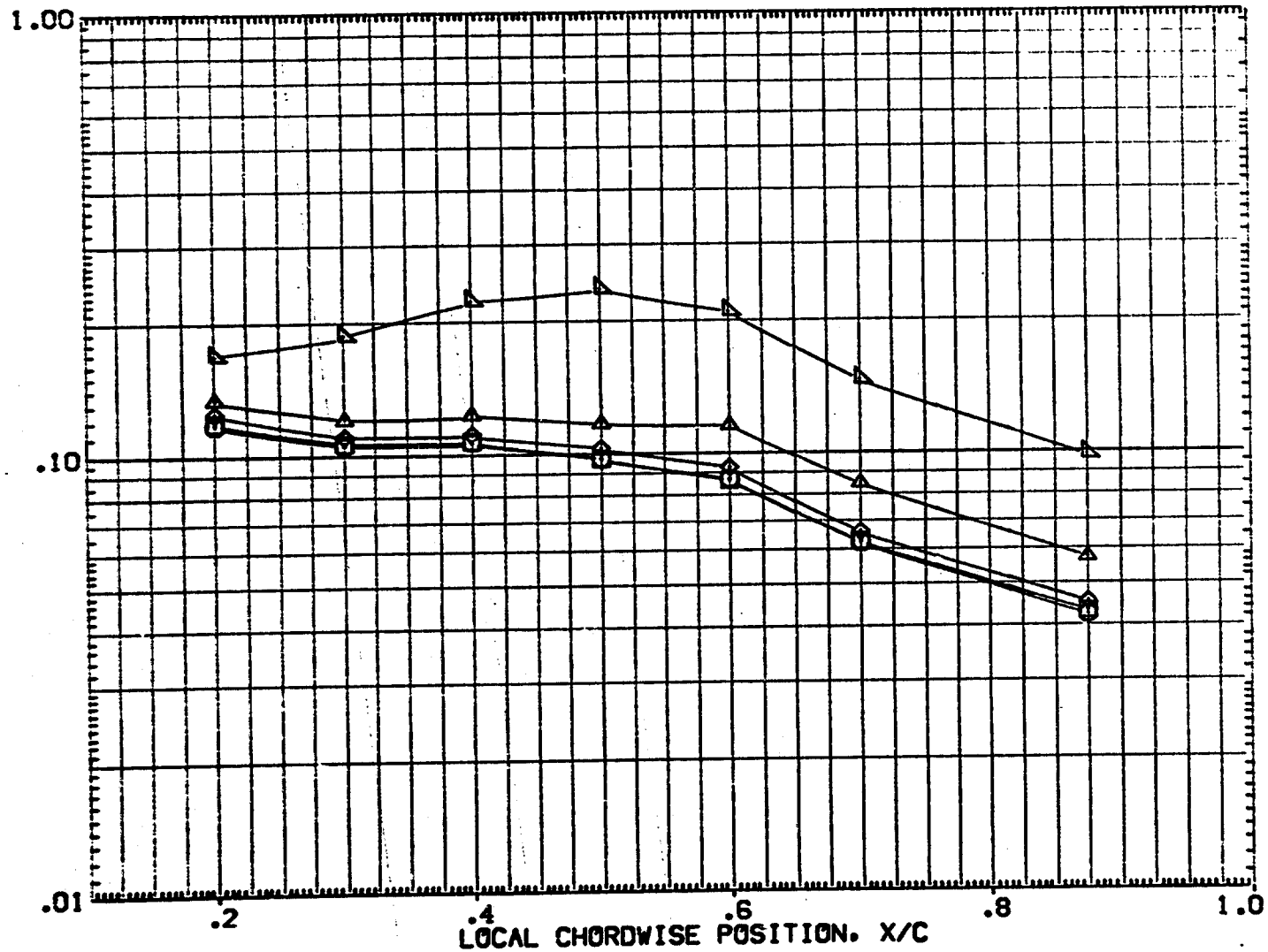
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

0413 B10C5W8707F4M3V5 (WP0002)

SYMBOL	RN/L	ZY/B	HAV/HT
▽	1.000	.600	1.000
▷	2.000		
◇	3.000		
□	4.000		
○	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



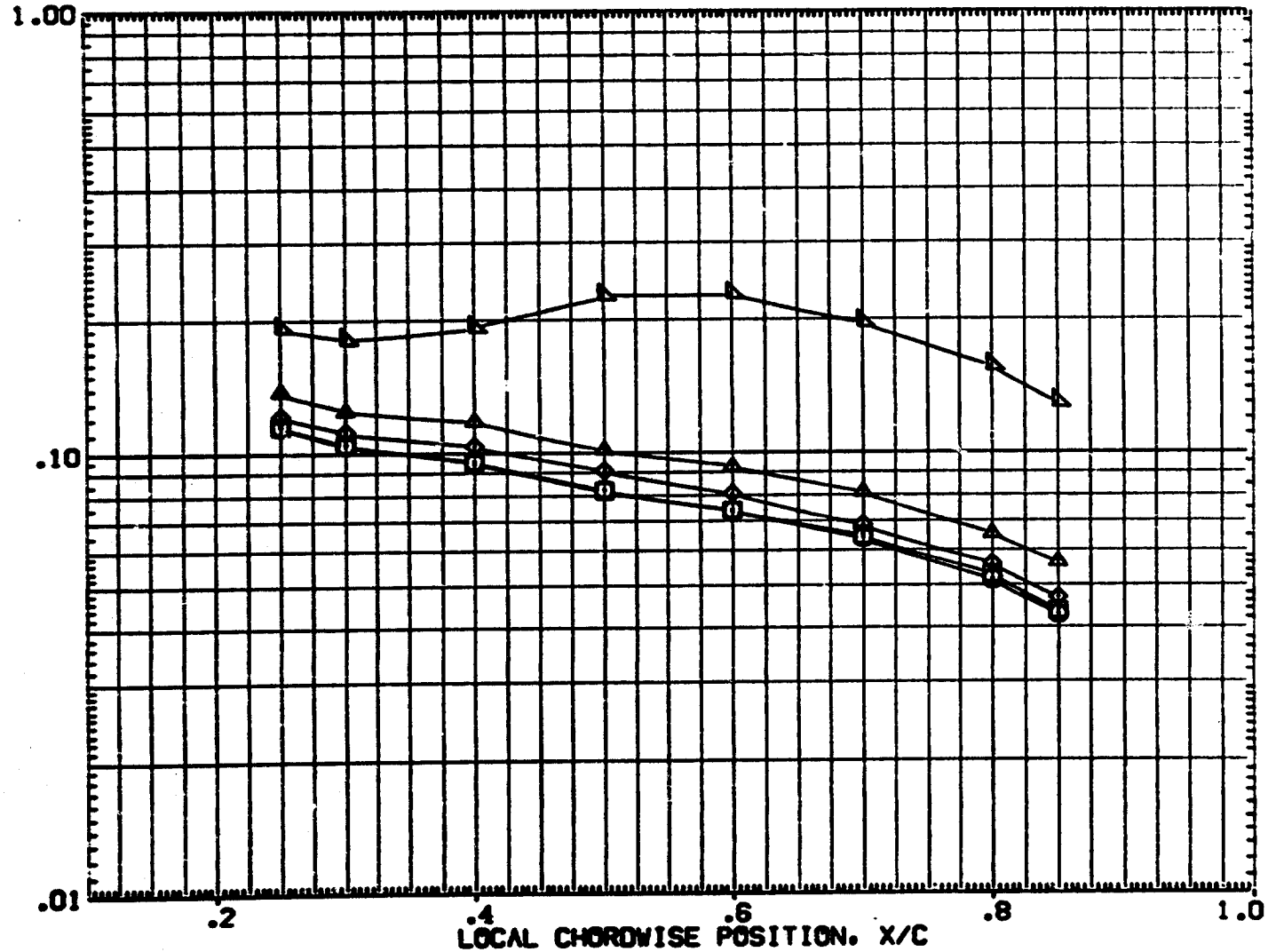
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0002)

SYMBOL	RN/L	2Y/B	HW/AT
○	1.000	.800	1.000
□	2.000		
◇	3.000		
▷	4.000		
△	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	30.000
BETA	.000	ELEVON	.000
RUDDER	.000		



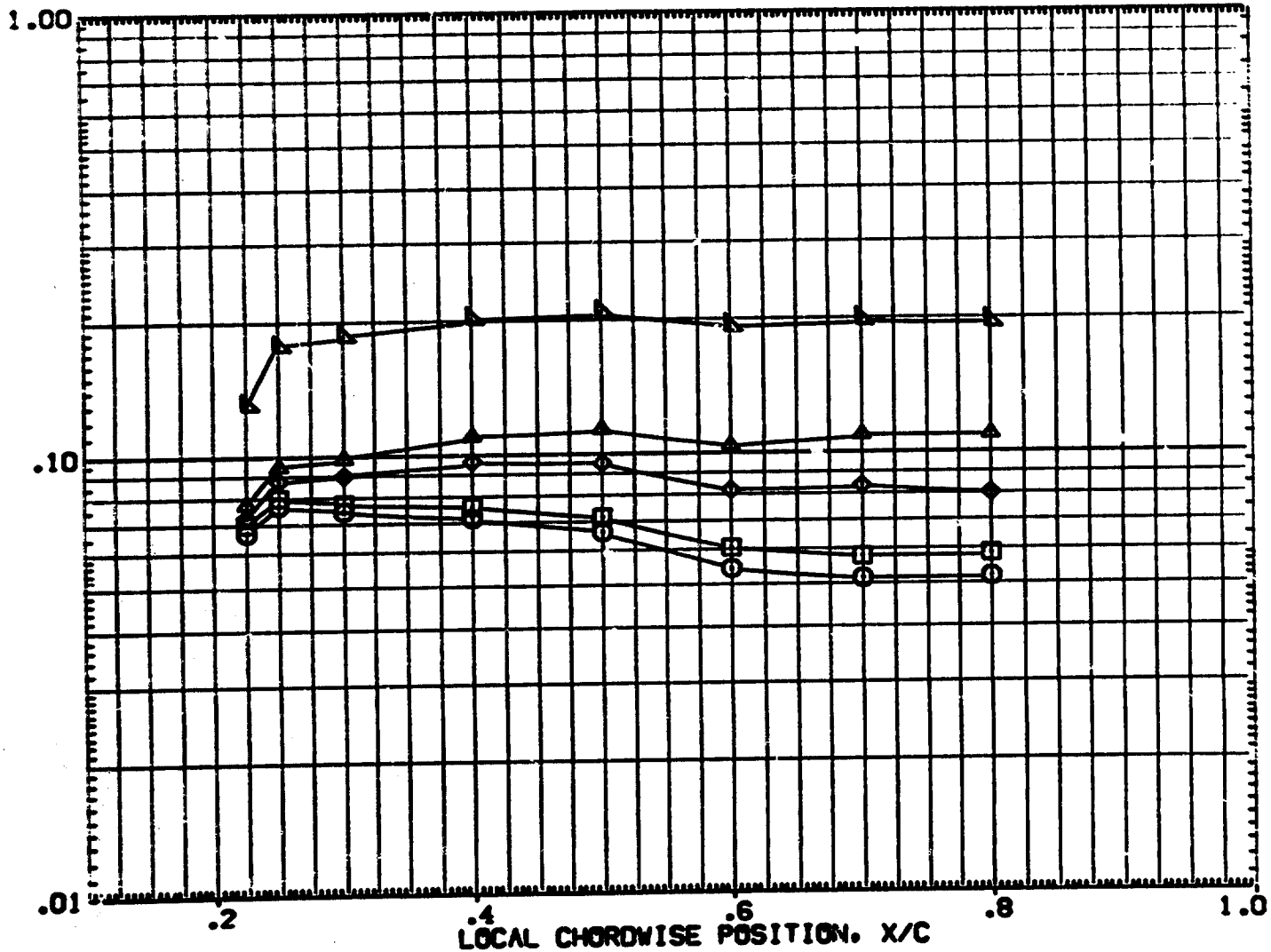
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B:OCSW87D7F4M3V5 (WP0003)

SYMBOL	RN/L	Z/B	MAC/MT
○	1.000	.400	.850
□	2.000		
◇	3.000		
△	4.000		
◁	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



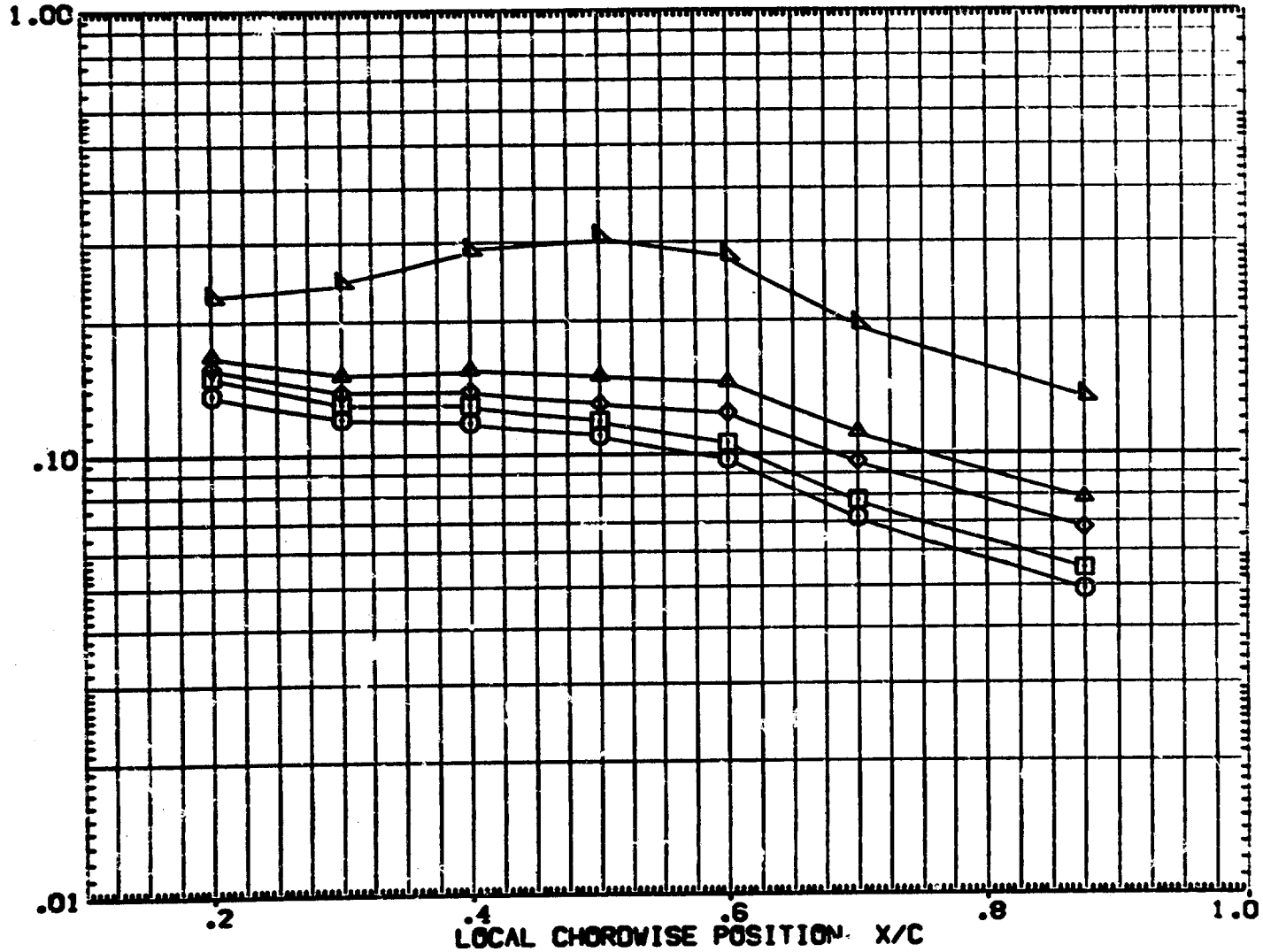
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0003)

SYMBOL	RN/L	2Y/B	HAV/HT
○	1.000	.800	.850
□	2.000		
◇	3.000		
▷	4.000		
△	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



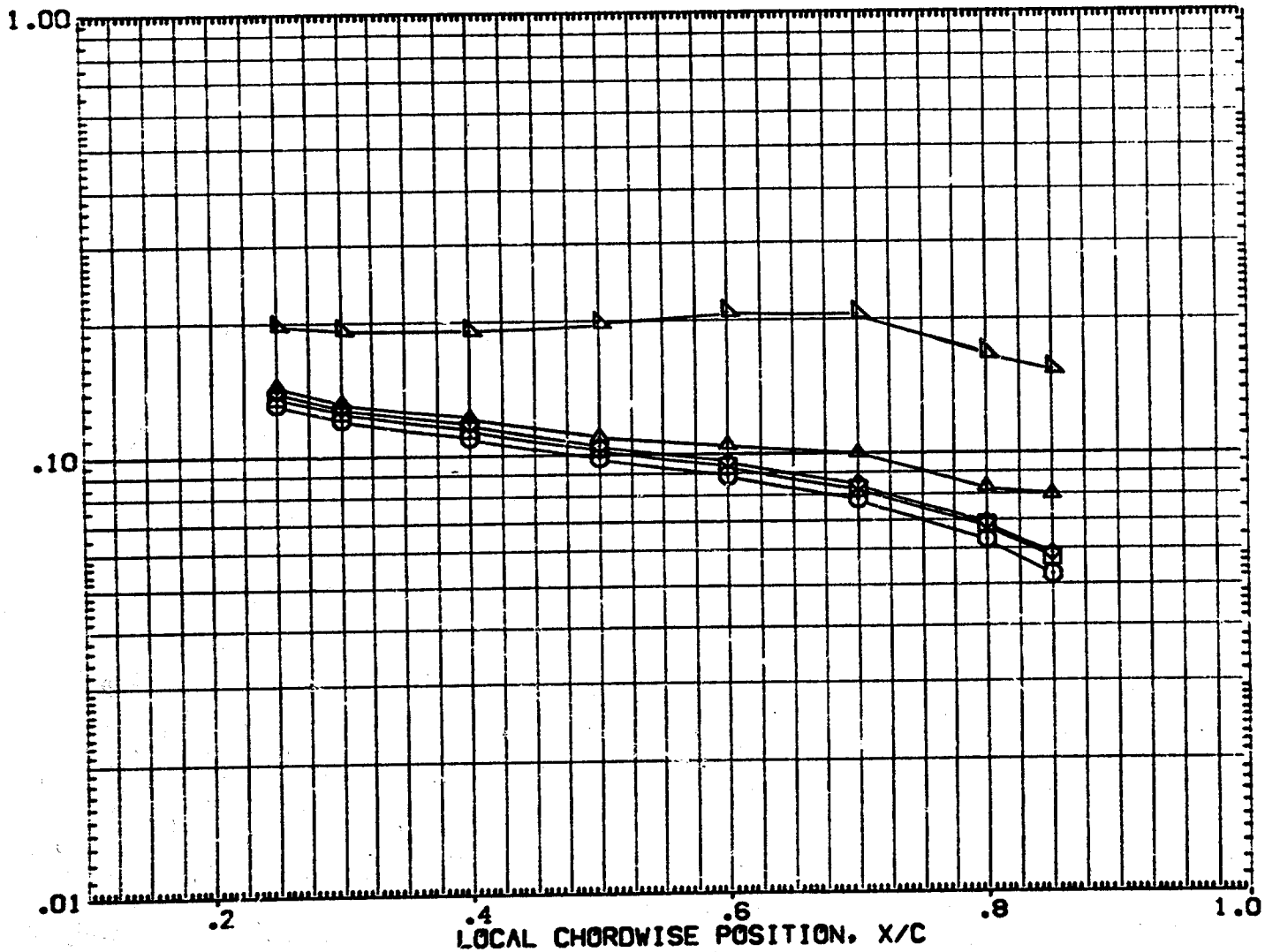
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0003)

SYMBOL	RN/L	2Y/B	HAV/HT
△	1.000	.800	.850
◇	2.000		
□	3.000		
▷	4.000		
C	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



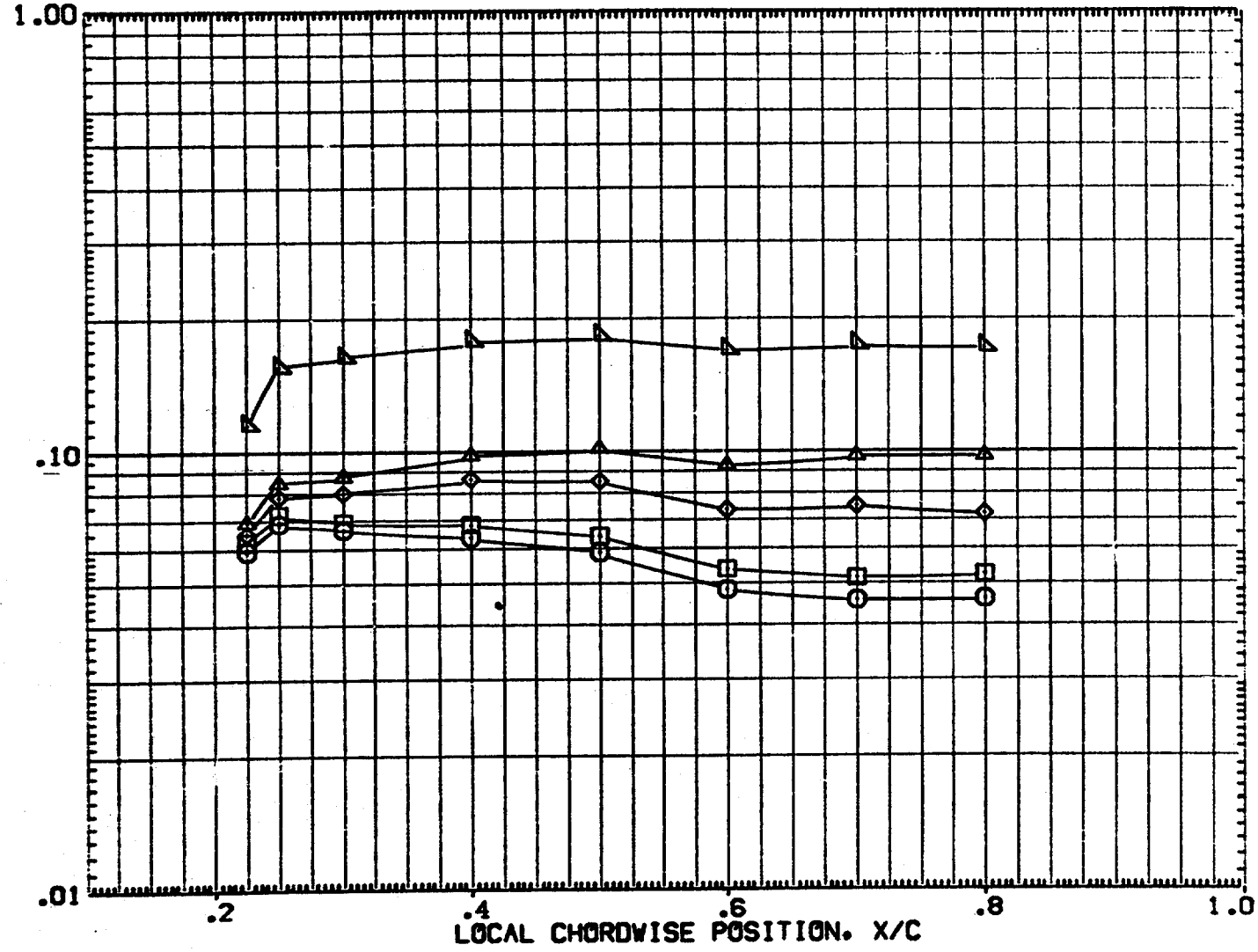
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0003)

SYMBOL	RN/L	2Y/B	HAV/HT
○	1.000	.400	1.000
□	2.000		
◇	3.000		
△	4.000		
⊿	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



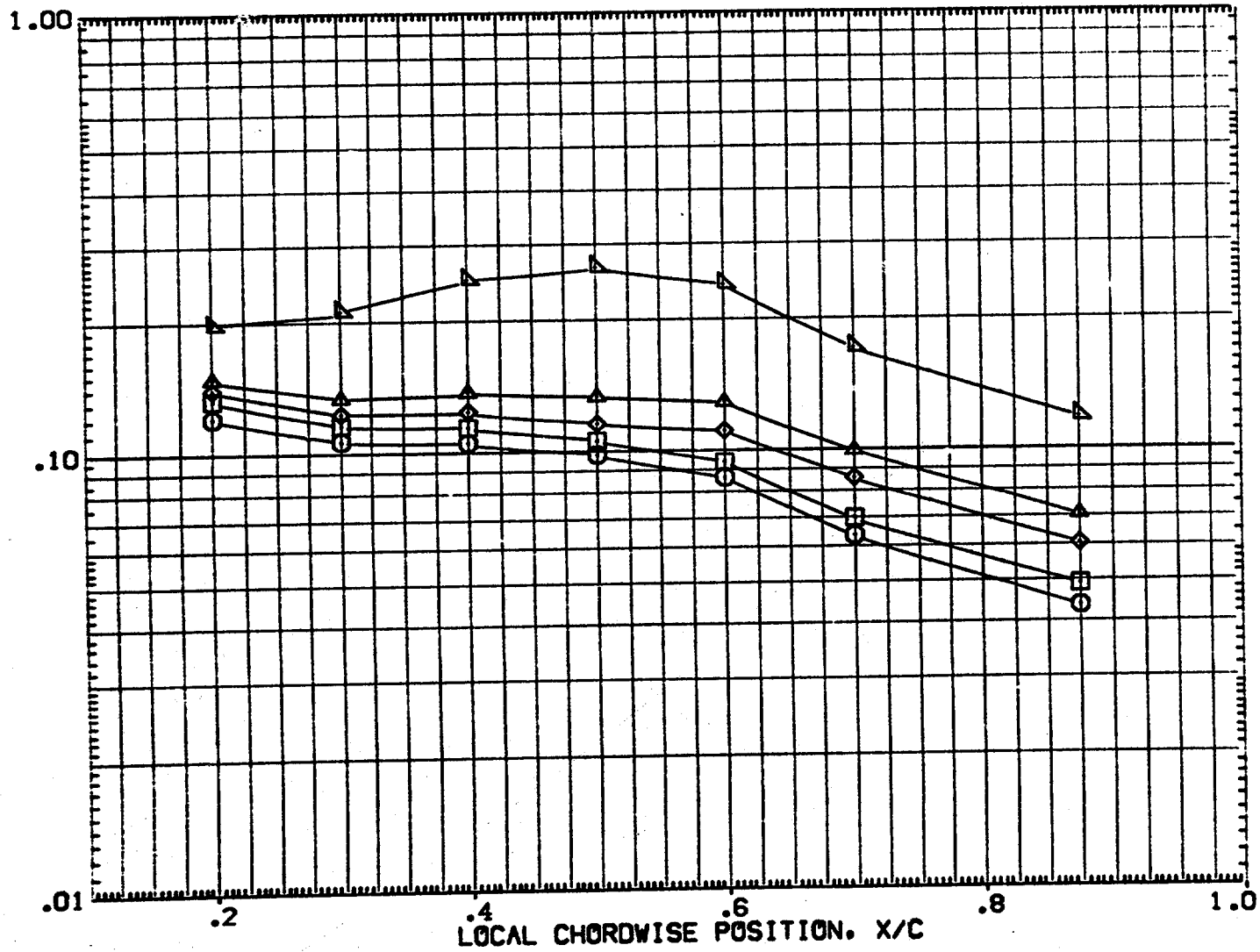
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0003)

SYMBOL	RN/L	2Y/B	HAV/HT
▽	1.000	.600	1.000
▷	2.000		
◇	3.000		
□	4.000		
○	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



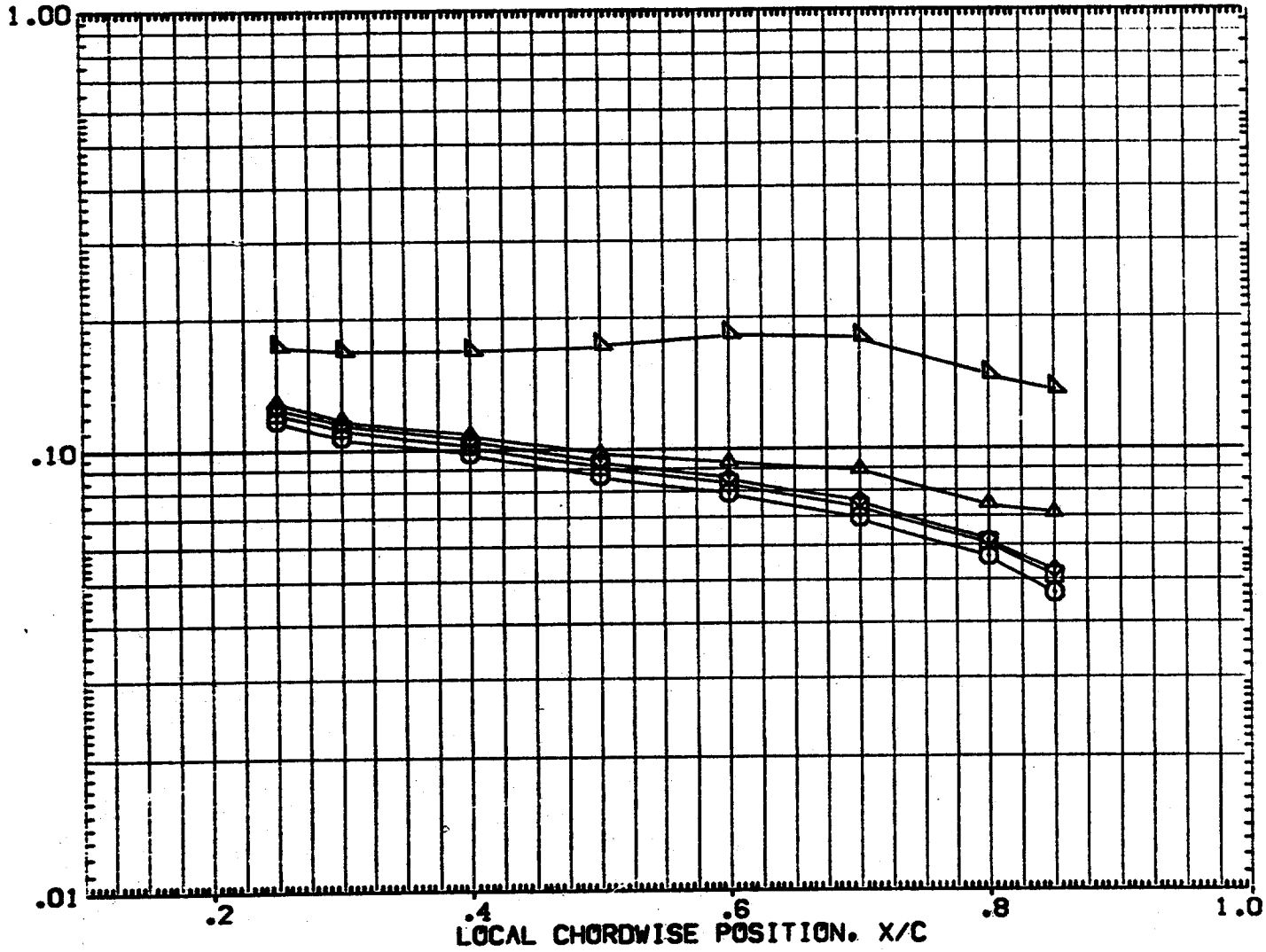
HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

OH13 B10C5W87D7F4M3V5 (WP0003)

SYMBOL	RN/L	ZV/B	HAV/HT
○	1.000	.800	1.000
□	2.000		
◇	3.000		
△	4.000		
▽	6.000		

PARAMETRIC VALUES

MACH	8.000	ALPHA	35.000
BETA	.000	ELEVON	.000
RUDDER	.000		



HEAT TRANSFER COEFFICIENT RATIOS ON ORBITER WING

APPENDIX

TABULATED SOURCE DATA

Tabulations of plotted data are available on request from Data Management Services.

CH13 B10C5N67D7F4H3V5 (BPO001) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = .000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 1.000 HAW/HT(1) = .850 MACH = 7.772 PO = 182.026 TO = 1230.889 HO = .040

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.0225	
.100	.0192	
.125	.0141	
.150	.0112	
.175	.0094	
.200	.0084	
.250	.0085	
.300	.0072	
.350		.0080
.375		.0095
.400	.0065	.0108
.500	.0060	.0094
.600	.0044	.0085
.700		.0065
.800	.0032	.0056
.900	.0029	
1.000		.0039
1.025	.0024	

RN/L (1) = 1.000 HAW/HT(2) = 1.000 MACH = 7.772 PO = 182.026 TO = 1230.889 HO = .040

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.0801	
.100	.0171	
.125	.0126	
.150	.0100	
.175	.0084	
.200	.0075	
.250	.0074	
.300	.0064	
.350		.0080
.375		.0085
.400	.0057	.0096
.500	.0053	.0084

CH13 B10C5M87D7F4M3V5 (BPO001)

RN/L (1) = 1.000 HAW/HT(2) = 1.000

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.600	.0039	.0074
.700		.0058
.800	.0029	.0050
.900	.0026	
1.000		.0034
1.025	.0021	

RN/L (2) = 2.000 HAW/HT(1) = .850 MACH = 7.883 PO = 401.847 TO = 1312.202 HO = .061

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.0256	
.100	.0199	
.125	.0143	
.150	.0117	
.175	.0094	
.200	.0090	
.250	.0082	
.300	.0069	
.350		.0090
.375		.0096
.400	.0063	.0107
.500	.0053	.0101
.600	.0047	.0086
.700		.0070
.800	.0035	.0060
.900	.0030	
1.000		.0038
1.025	.0013	

RN/L (2) = 2.000 HAW/HT(2) = 1.000 MACH = 7.883 PO = 401.847 TO = 1312.202 HO = .061

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L	
.088	.0212
.100	.0176
.125	.0129
.150	.0105
.175	.0084

OH13 B10C9V87D7F4M3V5 (BPC001)

RN/L (2) = 2.000 HAW/HT(2) = 1.000

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.200	.0081	
.250	.0074	
.300	.0062	
.350		.0080
.375		.0086
.400	.0057	.0096
.500	.0047	.0090
.600	.0042	.0078
.700		.0062
.800	.0032	.0053
.900	.0027	
1.000		.0034
1.025	.0011	

RN/L (3) = 3.000 HAW/HT(1) = .850 MACH = 7.945 PO = 646.050 TO = 1404.168 HO = .077

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.0246	
.100	.0205	
.125	.0147	
.150	.0114	
.175	.0093	
.200	.0086	
.250	.0080	
.300	.0069	
.350		.0080
.375		.0100
.400	.0059	.0109
.500	.0053	.0105
.600	.0046	.0084
.700		.0071
.800	.0036	.0056
.900	.0026	
1.000		.0035
1.025	.0025	

CH13 B10C9W87D7F4W5V5 (BPC001)

RN/L (3) = 3.000 HAW/HT(2) = 1.000 MACH = 7.945 PO = 646.050 TO = 1404.168 HO = .077

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.0222	
.100	.0185	
.125	.0132	
.150	.0103	
.175	.0084	
.200	.0077	
.250	.0072	
.300	.0062	
.350		.0082
.375		.0090
.400	.0053	.0099
.500	.0048	.0093
.600	.0042	.0076
.700		.0064
.800	.0032	.0051
.900	.0025	
1.000		.0032
1.025	.0025	

RN/L (4) = 4.000 HAW/HT(1) = .850 MACH = 7.980 PO = 855.101 TO = 1374.570 HO = .087

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.0249	
.100	.0206	
.125	.0147	
.150	.0113	
.175	.0089	
.200	.0085	
.250	.0075	
.300	.0064	
.350		.0088
.375		.0095
.400	.0057	.0106
.500	.0051	.0099
.600	.0044	.0083
.700		.0068
.800	.0035	.0053
.900	.0028	
1.000		.0035
1.025	.0025	

CH13 B10C9-87D7F-3-3V5 (BPC001)

RN/L (4) = 4.000 HW/HT(2) = 1.000 MACH = 7.980 PO = 855.101 TO = 1374.570 HO = .087

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(IN) .0000 70.0000

X/L		
.088	.0024	
.100	.0165	
.125	.0133	
.150	.0101	
.175	.0080	
.200	.0074	
.250	.0068	
.300	.0058	
.350		.0079
.375		.0086
.400	.0051	.0096
.500	.0046	.0089
.600	.0040	.0075
.700		.0061
.800	.0031	.0048
.900	.0025	
1.000		.0032
1.025	.0022	

RN/L (5) = 6.000 HW/HT(1) = .850 MACH = 8.040 PO = 1411.324 TO = 1421.927 HO = .108

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(IN) .0000 70.0000

X/L		
.088	.0275	
.100	.0225	
.125	.0159	
.150	.0121	
.175	.0096	
.200	.0088	
.250	.0080	
.300	.0067	
.350		.0097
.375		.0104
.400	.0060	.0116
.500	.0054	.0104
.600	.0050	.0089
.700		.0075
.800	.0036	.0058
.900	.0030	
1.000		.0033
1.025	.0027	

CH13 B10C9V8707F4HSV5 (BPC001)

RN/L (5) = 6.000 HAW/HT(2) = 1.000 MACH = 8.040 PO = 1411.324 TO = 1421.927 HO = .108

SECTION (1)BODY DEPENDENT VARIABLE H/HO

X/L	Y(0F) .0000	70.0000
.088	.0246	
.100	.0203	
.125	.0143	
.150	.0109	
.175	.0087	
.200	.0079	
.250	.0072	
.300	.0080	
.350		.0087
.375		.0094
.400	.0054	.0104
.500	.0049	.0094
.600	.0045	.0080
.700		.0067
.800	.0052	.0052
.900	.0027	
1.000		.0030
1.025	.0024	

OH13 B10C9M870TF4H5V5 (BP0002) (20 JUL 74)

REFERENCE DATA

SREF = 2880.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0050 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 30.000
BETA = .000 ELEVON = .000
RUDDER = .000

R/L (1) = 1.000 HW/HT(1) = .850 MACH = 7.778 PO = 189.790 TO = 1306.705 HO = .041

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.0896	
.100	.0855	
.125	.0715	
.150	.0621	
.175	.0577	
.200	.0618	
.250	.0652	
.300	.0614	
.350		.0889
.375		.0740
.400	.0630	.0892
.500	.0671	.0788
.600	.0822	.0883
.700		.0564
.800	.0434	.0405
.900	.0325	
1.000		.0845
1.025	.0818	

R/L (1) = 1.000 HW/HT(2) = 1.000 MACH = 7.778 PO = 189.790 TO = 1306.705 HO = .041

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.0855	
.100	.0764	
.125	.0640	
.150	.0556	
.175	.0516	
.200	.0553	
.250	.0584	
.300	.0550	
.350		.0588
.375		.0662
.400	.0618	.0744
.500	.0801	.0705

CH13 B10C9.870/F40GV5 (BF0002)

RN/L (1) = 1.000 HAW/HT(2) = 1.000

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(IN) .0000 70.0000

X/L		
.800	.0557	.0984
.700		.0905
.600	.0566	.0563
.900	.0290	
1.000		.0219
1.025	.0195	

RN/L (2) = 2.000 HAW/HT(1) = .850 MACH = 7.883 PO = 401.225 TO = 1340.003 HO = .080

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(IN) .0000 70.0000

X/L		
.088	.0848	
.100	.0850	
.125	.0718	
.150	.0824	
.175	.0575	
.200	.0807	
.250	.0837	
.300	.0990	
.350		.0844
.375		.0716
.400	.0887	.0818
.500	.0878	.0814
.600	.0802	.0875
.700		.0583
.800	.0435	.0422
.900	.0315	
1.000		.0282
1.025	.0210	

RN/L (2) = 2.000 HAW/HT(2) = 1.000 MACH = 7.883 PO = 401.225 TO = 1340.003 HO = .080

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(IN) .0000 70.0000

X/L		
.088	.0848	
.100	.0781	
.125	.0643	
.150	.0559	
.175	.0515	

CH13 B10C9.8TDTF4GV5 (BP0002)

RNVL (2) = 2.000 MAN/HT(2) = 1.000

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.200	.0544	
.250	.0570	
.300	.0528	
.350		.0576
.375		.0600
.400	.0616	.0721
.500	.0807	.0728
.600	.0539	.0602
.700		.0522
.800	.0380	.0378
.900	.0304	
1.000		.0236
1.025	.0168	

RNVL (3) = 3.000 MAN/HT(1) = .850 MACH = 7.946 PO = 851.221 TO = 1383.661 HO = .075

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.0380	
.100	.0372	
.125	.0720	
.150	.0680	
.175	.0586	
.200	.0584	
.250	.0680	
.300	.0519	
.350		.0825
.375		.0721
.400	.0887	.0821
.500	.0883	.0819
.600	.0611	.0659
.700		.0800
.800	.0518	.0481
.900	.0456	
1.000		.0375
1.025	.0384	

CH13 B10[illegible]97D7F4N5V5 (HP0002)

RN/L (3) = 3.000 HAW/HT(2) = 1.000 MACH = 7.946 PO = 651.961 TO = 1383.661 HO = .075

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.0877	
.100	.0781	
.125	.0646	
.150	.0556	
.175	.0508	
.200	.0533	
.250	.0556	
.300	.0511	
.350		.0560
.375		.0646
.400	.0598	.0735
.500	.0612	.0734
.600	.0548	.0591
.700		.0538
.800	.0466	.0432
.900	.0410	
1.000		.0336
1.025	.0354	

RN/L (4) = 4.000 HAW/HT(1) = .850 MACH = 7.980 PO = 857.278 TO = 1373.090 HO = .086

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.1040	
.100	.0928	
.125	.0770	
.150	.0666	
.175	.0609	
.200	.0628	
.250	.0653	
.300	.0581	
.350		.0654
.375		.0759
.400	.0675	.0852
.500	.0721	.0850
.600	.0651	.0696
.700		.0638
.800	.0576	.0537
.900	.0540	
1.000		.0465
1.025	.0517	

OH13 B10C5W87D7F4H3V5 (BPC002)

RN/L (4) = 4.000 HAW/HT(2) = 1.000 MACH = 7.980 PO = 857.278 TO = 1373.090 HO = .086

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.0930	
.100	.0830	
.125	.0690	
.150	.0597	
.175	.0546	
.200	.0563	
.250	.0585	
.300	.0521	
.350		.0586
.375		.0679
.400	.0603	.0762
.500	.0646	.0761
.600	.0584	.0623
.700		.0571
.800	.0517	.0482
.900	.0484	
1.000		.0417
1.025	.0463	

RN/L (5) = 6.000 HAW/HT(1) = .850 MACH = 8.040 PO = 1422.212 TO = 1489.263 HO = .110

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.1125	
.100	.0990	
.125	.0804	
.150	.0682	
.175	.0619	
.200	.0638	
.250	.0664	
.300	.0510	
.350		.0578
.375		.0772
.400	.0691	.0867
.500	.0784	.0876
.600	.0810	.0785
.700		.0644
.800	.1108	.0699
.900	.1141	
1.000		.1018
1.025	.1111	

DATE 23 JUL 74

TABULATED HEAT TRANSFER DATA FOR CH13 LARC VDHT-644

CH13 B10C9.87U7F4M3V5 (BFC002)

RN/L (5) = 6.000 HAW/HT(2) = 1.000 MACH = 8.040 PO = 1422.212 TO = 1489.263 HO = .110

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.1007	
.100	.0888	
.125	.0722	
.150	.0613	
.175	.0556	
.200	.0574	
.250	.0597	
.300	.0460	
.350		.0520
.375		.0692
.400	.0621	.0777
.500	.0704	.0786
.600	.0727	.0704
.700		.0757
.800	.0990	.0805
.900	.1019	
1.000		.0911
1.025	.0992	

DATE 23 JUL 74

TABULATED HEAT TRANSFER DATA FOR CH13 LARC VCHT-64A

CH13 B10C5W87D7F4H3V5

(BPC003) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 35.000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 1.000 HAW/HT(1) = .850 MACH = 7.774 PO = 183.902 TO = 1246.346 HO = .041

DEPENDENT VARIABLE H/HO

SECTION (1)BODY

Y(BP) .0000 70.0000

X/L		
.088	.0921	
.100	.0832	
.125	.0707	
.150	.0622	
.175	.0575	
.200	.0619	
.250	.0661	
.300	.0612	
.350		.0641
.375		.0716
.400	.0677	.0799
.500	.0678	.0783
.600	.0659	.0686
.700		.0588
.800	.0480	.0445
.900	.0387	
1.000		.0263
1.025	.0258	

RN/L (1) = 1.000 HAW/HT(2) = 1.000 MACH = 7.774 PO = 183.902 TO = 1246.346 HO = .041

DEPENDENT VARIABLE H/HO

SECTION (1)BODY

Y(BP) .0000 70.0000

X/L		
.088	.0819	
.100	.0740	
.125	.0629	
.150	.0553	
.175	.0513	
.200	.0551	
.250	.0588	
.300	.0545	
.350		.0570
.375		.0637
.400	.0602	.0710
.500	.0603	.0697

CH13 B10C5W87D7F4M3V5 (BPO003)

RN/L (1) = 1.000 HAW/HT(2) = 1.000

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.600	.0587	.0611
.700		.0524
.800	.0428	.0397
.900	.0345	
1.000		.0235
1.025	.0230	

RN/L (2) = 2.000 HAW/HT(1) = .850 MACH = 7.885 PO = 407.136 TO = 1303.428 HO = .062

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.1043	
.100	.0930	
.125	.0780	
.150	.0683	
.175	.0635	
.200	.0672	
.250	.0723	
.300	.0669	
.350		.0692
.375		.0778
.400	.0749	.0875
.500	.0754	.0858
.600	.0730	.0734
.700		.0682
.800	.0524	.0514
.900	.0444	
1.000		.0339
1.025	.0299	

RN/L (2) = 2.000 HAW/HT(2) = 1.000 MACH = 7.885 PO = 407.136 TO = 1303.428 HO = .062

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L	
.088	.0929
.100	.0828
.125	.0696
.150	.0609
.175	.0567

CH13 B10C5W87D7F4M5V5 (BPOOC3)

RN/L (2) = 2.000 HAW/HT(2) = 1.000

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.200	.0800	
.290	.0645	
.300	.0597	
.350		.0617
.375		.0693
.400	.0669	.0779
.500	.0673	.0765
.600	.0652	.0655
.700		.0609
.800	.0469	.0459
.900	.0397	
1.000		.0305
1.025	.0267	

RN/L (3) = 3.000 HAW/HT(1) = .850 MACH = 7.955 PO = 698.624 TO = 1395.183 HO = .078

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.1085	
.100	.0965	
.125	.0795	
.150	.0679	
.175	.0621	
.200	.0650	
.250	.0707	
.300	.0616	
.350		.0645
.375		.0773
.400	.0748	.0878
.500	.0753	.0858
.600	.0729	.0720
.700		.0714
.800	.0618	.0600
.900	.0629	
1.000		.0606
1.025	.0592	

CH13 B10C3W07D7F4H5V5 (BP0003)

RN/L (3) = 3.000 HAW/HT(2) = 1.000 MACH = 7.955 PO = 696.624 TO = 1395.183 HO = .078

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BF) .0000 70.0000

X/L		
.088	.0970	
.100	.0863	
.125	.0712	
.150	.0608	
.175	.0557	
.200	.0565	
.250	.0634	
.300	.0553	
.350		.0578
.375		.0692
.400	.0670	.0786
.500	.0675	.0768
.600	.0654	.0646
.700		.0640
.800	.0554	.0539
.900	.0564	
1.000		.0543
1.025	.0531	

RN/L (4) = 4.000 HAW/HT(1) = .850 MACH = 7.979 PO = 852.612 TO = 1360.299 HO = .087

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BF) .0000 70.0000

X/L		
.088	.1096	
.100	.0978	
.125	.0808	
.150	.0695	
.175	.0630	
.200	.0659	
.250	.0707	
.300	.0672	
.350		.0809
.375		.0789
.400	.0763	.0898
.500	.0789	.0896
.600	.0621	.0780
.700		.0695
.800	.0948	.0850
.900	.1057	
1.000		.0999
1.025	.0879	

CH13 B10C9W87D7F4HSV5 (BPO005)

RN/L (4) = 4.000 HAW/HT(2) = 1.000 MACH = 7.979 PO = 852.612 TO = 1360.299 HO = .087

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.0977	
.100	.0872	
.125	.0722	
.150	.0621	
.175	.0563	
.200	.0589	
.250	.0632	
.300	.0512	
.350		.0544
.375		.0704
.400	.0882	.0601
.500	.0705	.0791
.600	.0734	.0897
.700		.0797
.800	.0845	.0786
.900	.0924	
1.000		.0890
1.025	.0872	

RN/L (5) = 6.000 HAW/HT(1) = .850 MACH = 8.038 PO = 1396.702 TO = 1363.365 HO = .108

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BF) .0000 70.0000

X/L		
.088	.1148	
.100	.1018	
.125	.0852	
.150	.0707	
.175	.0644	
.200	.0867	
.250	.0707	
.300	.0469	
.350		.0507
.375		.0811
.400	.0854	.0657
.500	.1079	.1067
.600	.1489	.1260
.700		.1761
.800	.1852	.1780
.900	.1849	
1.000		.1894
1.025	.1533	

CH13 B10C9W87D7F4H3V5 (BP0003)

RN/L (5) = 6.000 HW/HT(2) = 1.000 MACH = 8.038 PO = 1396.702 TO = 1363.365 HO = .108

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y(BP) .0000 70.0000

X/L		
.088	.1080	
.100	.0906	
.125	.0741	
.150	.0630	
.175	.0575	
.200	.0595	
.250	.0530	
.300	.0420	
.350		.0453
.375		.0721
.400	.0760	.0894
.500	.0959	.0949
.600	.1295	.1118
.700		.1552
.800	.1629	.1569
.900	.1625	
1.000		.1491
1.025	.1331	

CH13 B10C9.87I/7F4HSV5 WITH 500 DEG PAINT (BPC004) (20 JUL 74)

REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 536.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 35.000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 3.700 HAW/HT(1) = .850 MACH = 7.950 PO = 670.937 TO = 1389.792 HO = .072

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y (IN) .0000 70.0000

X/L		
.088	.1028	
.100	.0913	
.125	.0768	
.150	.0673	
.175	.0630	
.200	.0609	
.250	.0708	
.300	.0589	
.350		.0588
.375		.0790
.400	.0751	.0841
.500	.0782	.0844
.600	.0748	.0734
.700		.0721
.800	.0619	.0807
.900	.0635	
1.000		.0847
1.025	.0633	

RN/L (1) = 3.000 HAW/HT(2) = 1.000 MACH = 7.950 PO = 670.937 TO = 1389.792 HO = .072

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y (IN) .0000 70.0000

X/L		
.088	.0820	
.100	.0817	
.125	.0688	
.150	.0603	
.175	.0565	
.200	.0800	
.250	.0654	
.300	.0526	
.350		.0589
.375		.0854
.400	.0855	.0773
.500	.0785	.0736

TABULATED HEAT TRANSFER DATA FOR CH13 LARC VDHT-644

CH13 B10C3wB7D7F4HSV3 WITH 900 DEG PAINT (BPC004)

RN/L (1) = 3.000 HAW/HT(2) = 1.000

SECTION (1)BODY DEPENDENT VARIABLE H/HO

Y (DP)	.0000	70.0000
X/L		
.600	.0555	.0545
.900	.0570	
1.000		.0560
1.025	.0567	

CH13 B10C9%87DTF4NSV5 6APC001) (20 JUL 74)

REFERENCE DATA

SREF = 2880.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = .000
BETA = .000 ELEVON = .000
RUDDER = .000

RNVL (1) = 1.000 HWL/HT(1) = .850 MACH = 7.772 PO = 182.026 TO = 1250.889 HO = .040

SECTION (1 %ENG DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.0405	
.225	.0219		
.250	.0248		.0494
.300	.0234	.0314	.0432
.400	.0196	.0278	.0374
.500	.0167	.0257	.0300
.600	.0127	.0200	.0261
.700	.0104	.0158	.0203
.800	.0065		.0159
.850			.0127
.875		.0082	

RNVL (1) = 1.000 HWL/HT(2) = 1.000 MACH = 7.772 PO = 182.026 TO = 1250.889 HO = .040

SECTION (1 %ENG DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.0361	
.225	.0196		
.250	.0221		.0440
.300	.0208	.0280	.0386
.400	.0175	.0248	.0333
.500	.0148	.0229	.0268
.600	.0114	.0179	.0253
.700	.0093	.0123	.0181
.800	.0083		.0141
.850			.0114
.875		.0082	

CH13 B10C9.87DTF4SV5 &PO001)

RN/L (2) = 2.000 MAH/HT(1) = .850 MACH = 7.885 PO = 401.847 TO = 1312.202 HO = .061

SECTION (1)WING DEPENDENT VARIABLE H/HO

Z/B	.4000	.6000	.8000
X/C			
.200		.0432	
.225	.0829		
.250	.0856		.0926
.300	.0840	.0590	.0482
.400	.0805	.0896	.0422
.500	.0169	.0867	.0327
.600	.0125	.0216	.0275
.700	.0105	.0149	.0225
.800	.0095		.0181
.850			.0137
.875		.0098	

RN/L (2) = 2.000 MAH/HT(2) = 1.000 MACH = 7.885 PO = 401.847 TO = 1312.202 HO = .061

SECTION (1)WING DEPENDENT VARIABLE H/HO

Z/B	.4000	.6000	.8000
X/C			
.200		.0367	
.225	.0806		
.250	.0850		.0471
.300	.0815	.0896	.0414
.400	.0184	.0886	.0360
.500	.0152	.0240	.0295
.600	.0113	.0194	.0247
.700	.0084	.0134	.0202
.800	.0066		.0163
.850			.0123
.875		.0088	

RN/L (3) = 3.000 MAH/HT(1) = .850 MACH = 7.945 PO = 646.050 TO = 1404.169 HO = .077

SECTION (1)WING DEPENDENT VARIABLE H/HO

Z/B	.4000	.6000	.8000
X/C			
.200		.0497	
.225	.0830		
.250	.0885		.0544
.300	.0846	.0845	.0476
.400	.0800	.0905	.0411
.500	.0167	.0277	.0334
.600	.0125	.0224	.0282

CH13 B10C9.870TF4GV5 64P0001)

RNVL (3) = 3.000 HWAHT(1) = .850

SECTION (1%RING DEPENDENT VARIABLE H/HO

Y/B	.4000	.6000	.8000
X/C			
.700	.0101	.0150	.0250
.800	.0088		.0180
.850			.0142
.875		.0088	

RNVL (3) = 3.000 HWAHT(2) = 1.000 MACH = 7.945 PO = 646.050 TO = 1404.168 HO = .077

SECTION (1%RING DEPENDENT VARIABLE H/HO

Y/B	.4000	.6000	.8000
X/C			
.800		.0405	
.825	.0215		
.850	.0257		.0488
.900	.0221	.0308	.0429
.400	.0188	.0275	.0370
.925	.0151	.0250	.0313
.800	.0113	.0212	.0255
.700	.0081	.0136	.0207
.800	.0080		.0182
.850			.0128
.875		.0080	

RNVL (4) = 4.000 HWAHT(1) = .850 MACH = 7.980 PO = 855.101 TO = 1374.570 HO = .087

SECTION (1%RING DEPENDENT VARIABLE H/HO

Y/B	.4000	.6000	.8000
X/C			
.800		.0458	
.825	.0259		
.850	.0287		.0544
.900	.0247	.0346	.0478
.925	.0200	.0308	.0407
.900	.0166	.0262	.0332
.800	.0118	.0227	.0285
.700	.0087	.0151	.0228
.800	.0084		.0177
.850			.0140
.875		.0100	

CH13 B10C9W87D7F4H5V5 (WPC001)

RN/L (4) = 4.000 HAW/HT(2) = 1.000 MACH = 7.980 PO = 855.101 TO = 1374.570 HO = .087

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.0411	
.225	.0215		
.250	.0240		.0489
.300	.0222	.0312	.0430
.400	.0188	.0277	.0366
.500	.0150	.0254	.0299
.600	.0107	.0204	.0255
.700	.0088	.0136	.0206
.800	.0076		.0160
.850			.0126
.875		.0090	

RN/L (5) = 6.000 HAW/HT(1) = .850 MACH = 3.040 PO = 1411.324 TO = 1421.927 HO = .108

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.0485	
.225	.0259		
.250	.0287		.0569
.300	.0267	.0376	.0500
.400	.0224	.0339	.0432
.500	.0180	.0316	.0361
.600	.0132	.0262	.0314
.700	.0112	.0173	.0256
.800	.0098		.0198
.850			.0157
.875		.0112	

RN/L (5) = 6.000 HAW/HT(2) = 1.000 MACH = 8.040 PO = 1411.324 TO = 1421.927 HO = .108

SECTION (1)WING DEPENCENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.0436	
.225	.0233		
.250	.0259		.0512
.300	.0241	.0339	.0450
.400	.0202	.0305	.0389
.500	.0163	.0285	.0325
.600	.0120	.0236	.0282

CH13 B10C5W87D7F4H3V5 (WPO001)

RN/L (5) = 6.000 HAW/HT(2) = 1.000

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.700	.0101	.0156	.0231
.800	.0089		.0179
.850			.0142
.875		.0101	

CH13 B10C9W87D7F4M3V5 (WPC002) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.6000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 30.000
BETA = .000 ELEVON = .000
RUDDER = .000

RNVL (1) = 1.000 HAW/HT(1) = .850 MACH = 7.778 PO = 189.790 TO = 1306.705 HO = .041

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1315	
.225	.0734		
.250	.0832		.1288
.300	.0796	.1177	.1168
.400	.0745	.1196	.1068
.500	.0682	.1091	.0921
.600	.0560	.0978	.0826
.700	.0538	.0694	.0713
.800	.0519		.0574
.850			.0476
.875		.0471	

RNVL (1) = 1.000 HAW/HT(2) = 1.000 MACH = 7.778 PO = 189.790 TO = 1306.705 HO = .041

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1172	
.225	.0656		
.250	.0744		.1149
.300	.0712	.1049	.1043
.400	.0666	.1067	.0954
.500	.0611	.0974	.0823
.600	.0502	.0874	.0739
.700	.0482	.0621	.0638
.800	.0465		.0514
.850			.0427
.875		.0422	

CH13 B10C9W87D7F4M5V5 (WPC002)

RN/L (2) = 2.000 HAW/HT(1) = .850 MACH = 7.883 PO = 401.225 TO = 1340.003 HO = .060

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1336	
.225	.0743		
.250	.0837		.1287
.300	.0799	.1191	.1179
.400	.0758	.1201	.1057
.500	.0700	.1091	.0919
.600	.0580	.0971	.0828
.700	.0540	.0701	.0723
.800	.0530		.0589
.850			.0486
.875		.0482	

RN/L (2) = 2.000 HAW/HT(2) = 1.000 MACH = 7.883 PO = 401.225 TO = 1340.003 HO = .060

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1190	
.225	.0665		
.250	.0748		.1148
.300	.0714	.1062	.1052
.400	.0679	.1071	.0944
.500	.0627	.0973	.0822
.600	.0520	.0867	.0741
.700	.0483	.0628	.0647
.800	.0475		.0528
.850			.0436
.875		.0432	

RN/L (3) = 3.000 HAW/HT(1) = .850 MACH = 7.946 PO = 651.961 TO = 1383.661 HO = .075

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1398	
.225	.0740		
.250	.0843		.1357
.300	.0806	.1236	.1254
.400	.0765	.1246	.1161
.500	.0709	.1148	.1012
.600	.0599	.1038	.0901

CH13 B10C5W87D7F4M3V5 (WPO002)

RN/L (3) = 3.000 HAW/HT(1) = .850

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.700	.0569	.0733	.0764
.800	.0568		.0622
.850			.0517
.875		.0504	

RN/L (3) = 3.000 HAW/HT(2) = 1.000 MACH = 7.946 PO = 651.961 TO = 1383.661 HO = .075

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1244	
.225	.0663		
.250	.0755		.1211
.300	.0722	.1101	.1119
.400	.0686	.1111	.1037
.500	.0635	.1024	.0905
.600	.0537	.0927	.0807
.700	.0511	.0657	.0685
.800	.0510		.0558
.850			.0464
.875		.0453	

RN/L (4) = 4.000 HAW/HT(1) = .850 MACH = 7.980 PO = 857.278 TO = 1373.090 HO = .086

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1508	
.225	.0786		
.250	.0918		.1551
.300	.0903	.1354	.1399
.400	.0948	.1382	.1319
.500	.1002	.1319	.1135
.600	.0916	.1296	.1036
.700	.0962	.0945	.0908
.800	.0885		.0729
.850			.0626
.875		.0639	

OH13 B10C9W87D7F4M3V5 (WP0002)

RN/L (4) = 4.000 HAW/HT(2) = 1.000 MACH = 7.980 PO = 857.278 TO = 1373.090 HO = .086

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1339	
.225	.0703		
.250	.0820		.1381
.300	.0807	.1204	.1246
.400	.0846	.1229	.1176
.500	.0895	.1173	.1013
.600	.0818	.1153	.0926
.700	.0859	.0845	.0812
.800	.0791		.0652
.850			.0561
.875		.0573	

RN/L (5) = 6.000 HAW/HT(1) = .850 MACH = 8.040 PO = 1422.212 TO = 1489.263 HO = .110

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1915	
.225	.0854		
.250	.1100		.2178
.300	.1189	.2136	.2044
.400	.1351	.2556	.2178
.500	.1393	.2728	.2572
.600	.1286	.2398	.2599
.700	.1407	.1644	.2235
.800	.1342		.1763
.850			.1451
.875		.1098	

RN/L (5) = 6.000 HAW/HT(2) = 1.000 MACH = 8.040 PO = 1422.212 TO = 1489.263 HO = .110

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1690	
.225	.0765		
.250	.0982		.1926
.300	.1058	.1876	.1811
.400	.1202	.2234	.1928
.500	.1241	.2385	.2268
.600	.1147	.2106	.2286

CH13 B10C5W87D7F4M5V5 (WP0002)

RN/L (5) = 6.000 HAW/HT(2) = 1.000

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.700	.1251	.1459	.1969
.800	.1194		.1562
.850			.1291
.875		.0980	

CH13 B10C5W87D7F4M5V5 (WP0003) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 35.000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 1.000 HAW/HT(1) = .850 MACH = 7.774 PO = 183.902 TO = 1246.346 HO = .041

SECTION (1)WING DEPENDENT VARIABLE H/HO

ZY/B	.4000	.6000	.8000
X/C			
.200		.1362	
.225	.0668		
.250	.0772		.1317
.300	.0742	.1202	.1209
.400	.0716	.1182	.1103
.500	.0661	.1103	.0980
.600	.0541	.0971	.0889
.700	.0513	.0712	.0782
.800	.0516		.0632
.850			.0522
.875		.0489	

RN/L (1) = 1.000 HAW/HT(2) = 1.000 MACH = 7.774 PO = 183.902 TO = 1246.346 HO = .041

SECTION (1)WING DEPENDENT VARIABLE H/HO

ZY/B	.4000	.6000	.8000
X/C			
.200		.1207	
.225	.0594		
.250	.0687		.1169
.300	.0660	.1066	.1074
.400	.0637	.1049	.0980
.500	.0588	.0979	.0871
.600	.0482	.0863	.0791
.700	.0457	.0633	.0696
.800	.0460		.0563
.850			.0465
.875		.0436	

CH13 B10C5W87D7F4M5V5 (MPO003)

RN/L (2) = 2.000 HAW/HT(1) = .850 MACH = 7.885 PO = 407.136 TO = 1303.428 HO = .062

SECTION (1)WING DEPENDENT VARIABLE H/HO

Z Y/B	.4000	.6000	.8000
X/C			
.200		.1497	
.225	.0697		
.250	.0670		.1370
.300	.0776	.1303	.1264
.400	.0762	.1286	.1143
.500	.0714	.1191	.1024
.600	.0603	.1057	.0937
.700	.0575	.0778	.0823
.800	.0585		.0682
.850			.0571
.875		.0545	

RN/L (2) = 2.000 HAW/HT(2) = 1.000 MACH = 7.885 PO = 407.136 TO = 1303.428 HO = .062

SECTION (1)WING DEPENDENT VARIABLE H/HO

Z Y/B	.4000	.6000	.8000
X/C			
.200		.1328	
.225	.0822		
.250	.0716		.1218
.300	.0892	.1156	.1124
.400	.0879	.1142	.1025
.500	.0837	.1058	.0912
.600	.0539	.0940	.0835
.700	.0514	.0694	.0734
.800	.0522		.0609
.850			.0510
.875		.0487	

RN/L (3) = 3.000 HAW/HT(1) = .850 MACH = 7.955 PO = 698.624 TO = 1395.183 HO = .078

SECTION (1)WING DEPENDENT VARIABLE H/HO

Z Y/B	.4000	.6000	.8000
X/C			
.200		.1579	
.225	.0724		
.250	.0880		.1410
.300	.0900	.1382	.1293
.400	.0867	.1368	.1181
.500	.0855	.1301	.1050
.600	.0817	.1241	.0959

CH13 B10C9.87D7F4K5V5 (APO003)

RN/L (3) = 3.000 HAW/HT(1) = .850

SECTION (1)WING DEPENDENT VARIABLE H/HO

Z Y/B	.4000	.6000	.8000
X/C			
.700	.0836	.0958	.0846
.800	.0804		.0688
.850			.0584
.875		.0674	

RN/L (3) = 3.000 HAW/HT(2) = 1.000 MACH = 7.955 PO = 698.624 TO = 1395.183 HO = .078

SECTION (1)WING DEPENDENT VARIABLE H/HO

Z Y/B	.4000	.6000	.8000
X/C			
.200		.1403	
.225	.0848		
.250	.0787		.1258
.300	.0804	.1229	.1154
.400	.0865	.1236	.1054
.500	.0854	.1159	.0959
.600	.0732	.1107	.0858
.700	.0749	.0857	.0758
.800	.0720		.0617
.850			.0525
.875		.0804	

RN/L (4) = 4.000 HAW/HT(1) = .850 MACH = 7.979 PO = 852.612 TO = 1360.299 HO = .087

SECTION (1)WING DEPENDENT VARIABLE H/HO

Z Y/B	.4000	.6000	.8000
X/C			
.200		.1679	
.225	.0774		
.250	.0848		.1451
.300	.0985	.1512	.1324
.400	.1090	.1554	.1222
.500	.1140	.1502	.1122
.600	.1058	.1452	.1050
.700	.1083	.1117	.1001
.800	.1083		.0853
.850			.0795
.875		.0788	

CH13 B10C5W8707F4HSV5 (WPC003)

RN/L (4) = 4.000 HAW/HT(2) = 1.000 MACH = 7.979 PO = 852.612 TO = 1360.299 HO = .087

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1485	
.225	.0891		
.250	.0845		.1250
.300	.0877	.1339	.1177
.400	.0979	.1377	.1088
.500	.1016	.1331	.0982
.600	.0925	.1288	.0936
.700	.0974	.0994	.0893
.800	.0974		.0744
.850			.0710
.875		.0704	

RN/L (5) = 6.000 HAW/HT(1) = .850 MACH = 8.038 PO = 1396.702 TO = 1363.365 HO = .108

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.2274	
.225	.1309		
.250	.1765		.1976
.300	.1857	.2446	.1921
.400	.2012	.2896	.1913
.500	.2074	.3094	.1971
.600	.1921	.2796	.2089
.700	.1980	.1955	.2057
.800	.1955		.1676
.850			.1546
.875		.1332	

RN/L (5) = 6.000 HAW/HT(2) = 1.000 MACH = 8.038 PO = 1396.702 TO = 1363.365 HO = .108

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1979	
.225	.1157		
.250	.1552		.1738
.300	.1627	.2119	.1688
.400	.1767	.2498	.1683
.500	.1822	.2865	.1731
.600	.1688	.2422	.1630

CH13 B10C3M87D7F4M5V5 (APO003)

RN/L (5) = 6.000 HAW/HT(2) = 1.000

SECTION (1)M&NG DEPENDENT VARIABLE H/HO

Y/S	.4000	.6000	.8000
X/C			
.700	.1736	.1712	.1797
.800	.1716		.1472
.850			.1362
.875		.1176	

CH13 B10C9W87D7F4W8V5 WITH 500 DEG PAINT 6-PO004) (20 JUL 74)

REFERENCE DATA

SREF = 2880.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 35.000
BETA = .000 ELEVON = .000
RUDDER = .000

:AVL (1) = 3.000 HAVHT(1) = .850 MACH = 7.950 PO = 670.957 TO = 1389.792 HO = .072

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1665	
.225	.0766		
.250	.0979		.1404
.300	.0857	.1485	.1285
.400	.0828	.1484	.1170
.500	.0804	.1350	.1039
.600	.0751	.1189	.0963
.700	.0771	.0881	.0857
.800	.0791		.0709
.850			.0809
.875		.0825	

RAVL (1) = 3.000 HAVHT(2) = 1.000 MACH = 7.950 PO = 670.957 TO = 1389.792 HO = .072

SECTION (1)WING DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.200		.1480	
.225	.0686		
.250	.0787		.1253
.300	.0767	.1322	.1148
.400	.0742	.1322	.1046
.500	.0721	.1204	.0901
.600	.0655	.1061	.0862
.700	.0690	.0784	.0768
.800	.0708		.0565
.850			.0546
.875		.0580	

OH13 B10C9W87D7F4M3V5 (CP0001) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = .000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 1.000 HAW/HT(1) = .850 MACH = 7.772 PO = 182.026 TO = 1230.889 HO = .040

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.1036
2.000	.1526
3.000	.1895

RN/L (1) = 1.000 HAW/HT(2) = 1.000 MACH = 7.772 PO = 182.026 TO = 1230.889 HO = .040

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0919
2.000	.1348
3.000	.1672

RN/L (2) = 2.000 HAW/HT(1) = .850 MACH = 7.883 PO = 401.847 TO = 1312.202 HO = .061

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.1208
2.000	.1802
3.000	.2157

RN/L (2) = 2.000 HAW/HT(2) = 1.000 MACH = 7.883 PO = 401.847 TO = 1312.202 HO = .061

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.1075
2.000	.1591
3.000	.1902

CH13 B10C9.87D7F4HSV5 (CP0001)

RN/L (3) = 3.000 HAW/HT(1) = .850 MACH = 7.945 PO = 646.050 TO = 1404.168 HO = .077

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.1379
2.000	.1717
3.000	.2040

RN/L (3) = 3.000 HAW/HT(2) = 1.000 MACH = 7.945 PO = 646.050 TO = 1404.168 HO = .077

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.1228
2.000	.1505
3.000	.1785

RN/L (4) = 4.000 HAW/HT(1) = .850 MACH = 7.980 PO = 855.101 TO = 1374.570 HO = .087

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.1569
2.000	.1951
3.000	.2281

RN/L (4) = 4.000 HAW/HT(2) = 1.000 MACH = 7.980 PO = 855.101 TO = 1374.570 HO = .087

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.1389
2.000	.1673
3.000	.1973

CH13 B10C9W87D7F4H5V5 (CP0001)

RN/L (5) = 6.000 HAW/HT(1) = .850 MACH = 8.040 PO = 1411.324 TO = 1421.927 HO = .108

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.1575
2.000	.2312
3.000	.2674

RN/L (5) = 6.000 HAW/HT(2) = 1.000 MACH = 8.040 PO = 1411.324 TO = 1421.927 HO = .108

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.1373
2.000	.1972
3.000	.2279

CH13 B10C9W87DTF4H5V5 (CPC002) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 30.000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 1.000 HAW/HT(1) = .850 MACH = 7.778 PO = 189.790 TO = 1306.705 HO = .041

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0066
2.000	.0091
3.000	.0123

RN/L (1) = 1.000 HAW/HT(2) = 1.000 MACH = 7.778 PO = 189.790 TO = 1306.705 HO = .041

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0059
2.000	.0082
3.000	.0111

RN/L (2) = 2.000 HAW/HT(1) = .850 MACH = 7.883 PO = 401.225 TO = 1340.003 HO = .060

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0088
2.000	.0130
3.000	.0171

RN/L (2) = 2.000 HAW/HT(2) = 1.000 MACH = 7.883 PO = 401.225 TO = 1340.003 HO = .060

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0079
2.000	.0116
3.000	.0153

CH13 B10C5W87D7F4M3V5 (CPC002)

RN/L (3) = 3.000 HAW/HT(1) = .850 MACH = 7.946 PO = 651.961 TO = 1383.661 HO = .075

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0111
2.000	.0169
3.000	.0207

RN/L (3) = 3.000 HAW/HT(2) = 1.000 MACH = 7.946 PO = 651.961 TO = 1383.661 HO = .075

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0100
2.000	.0152
3.000	.0186

RN/L (4) = 4.000 HAW/HT(1) = .850 MACH = 7.980 PO = 857.278 TO = 1373.090 HO = .086

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0131
2.000	.0199
3.000	.0248

RN/L (4) = 4.000 HAW/HT(2) = 1.000 MACH = 7.980 PO = 857.278 TO = 1373.090 HO = .086

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0118
2.000	.0179
3.000	.0223

CH13 B10C5W87D7F4NSV5 (CPC002)

RN/L (5) = 6.000 HAW/HT(1) = .850 MACH = 8.040 PO = 1422.212 TO = 1489.263 HO = .110

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0158
2.000	.0238
3.000	.0294

RN/L (5) = 6.000 HAW/HT(2) = 1.000 MACH = 8.040 PO = 1422.212 TO = 1489.263 HO = .110

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0143
2.000	.0216
3.000	.0265

CH13 B10C3W87D7F4H3V3 (CPC003) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 35.000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 1.000 HAW/HT(1) = .850 MACH = 7.774 PO = 183.902 TO = 1246.346 HO = .041

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0073
2.000	.0087
3.000	.0110

RN/L (1) = 1.000 HAW/HT(2) = 1.000 MACH = 7.774 PO = 183.902 TO = 1246.346 HO = .041

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0065
2.000	.0079
3.000	.0098

RN/L (2) = 2.000 HAW/HT(1) = .850 MACH = 7.885 PO = 407.136 TO = 1303.428 HO = .062

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0111
2.000	.0133
3.000	.0168

RN/L (2) = 2.000 HAW/HT(2) = 1.000 MACH = 7.885 PO = 407.136 TO = 1303.428 HO = .062

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0100
2.000	.0119
3.000	.0169

CH13 B10C5%87D7F4H5V5 (CPO003)

RN/L (3) = 3.000 HAW/HT(1) = .850 MACH = 7.955 PO = 698.624 TO = 1395.183 HO = .078

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0133
2.000	.0183
3.000	.0189

RN/L (3) = 3.000 HAW/HT(2) = 1.000 MACH = 7.955 PO = 698.624 TO = 1395.183 HO = .078

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0120
2.000	.0165
3.000	.0170

RN/L (4) = 4.000 HAW/HT(1) = .850 MACH = 7.979 PO = 852.612 TO = 1360.299 HO = .087

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0150
2.000	.0206
3.000	.0248

RN/L (4) = 4.000 HAW/HT(2) = 1.000 MACH = 7.979 PO = 852.612 TO = 1360.299 HO = .087

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0135
2.000	.0185
3.000	.0225

CH13 B10C5WB7D7F4H5V5 (CPO003)

RN/L (5) = 6.000 HAW/HT(1) = .850 MACH = 8.038 PO = 1396.702 TO = 1363.365 HO = .108

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0177
2.000	.0211
3.000	.0252

RN/L (5) = 6.000 HAW/HT(2) = 1.000 MACH = 8.038 PO = 1396.702 TO = 1363.365 HO = .108

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0159
2.000	.0189
3.000	.0226

CH13 B10C9.87D7F4WSV5 WITH 900 DEG PAINT (CPC004) (20 JUL 74)

REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 35.000
BETA = .000 ELEVON = .000
RUDDER = .000

RNVL (1) = 3.000 HAW/HT(1) = .850 MACH = 7.950 PO = 670.937 TO = 1389.792 HO = .072

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0151
2.000	.0182
3.000	.0214

RNVL (1) = 3.000 HAW/HT(2) = 1.000 MACH = 7.950 PO = 670.937 TO = 1389.792 HO = .072

SECTION (1)CANOPY DEPENDENT VARIABLE H/HO

Y .0000

TAP NO	
1.000	.0136
2.000	.0164
3.000	.0192

CH13 B10C9W87D7F4H5V5 (BPOQ01) (20 JUL 74)

REFERENCE DATA

SREF = 2880.0000 SQ.FT. XMRP = .0000
LREF = 474.6000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = .000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 1.000 MACH (1) = 7.772 MACH = 7.772 PO = 182.026 TO = 1230.889 HO = .040

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y(SP) .0000 70.0000

X/L		
.080	.4579	
.100	.3902	
.125	.2877	
.150	.2281	
.175	.1925	
.200	.1711	
.250	.1690	
.300	.1480	
.350		.1828
.375		.1944
.400	.1297	.2201
.500	.1218	.1918
.600	.0895	.1695
.700		.1531
.800	.0865	.1142
.900	.0991	
1.000		.0789
1.025	.0495	

RN/L (2) = 2.000 MACH (1) = 7.885 MACH = 7.885 PO = 401.847 TO = 1312.202 HO = .081

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y(SP) .0000 70.0000

X/L		
.080	.8242	
.100	.8041	
.125	.5032	
.150	.4101	
.175	.3511	
.200	.3185	
.250	.2892	
.300	.2451	
.350		.3156
.375		.3383
.400	.2240	.3782
.900	.1870	.3546

CH13 B10C3LW707F4WSV5 (BPOQ01)

RN/L (2) = 2.000 MACH (1) = 7.865

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y(BP) .0000 70.0000

X/L		
.600	.1888	.3056
.700		.2457
.800	.1259	.2108
.900	.1065	
1.000		.1350
1.025	.0454	

RN/L (3) = 3.000 MACH (1) = 7.945 MACH = 7.945 PO = 646.050 TO = 1404.168 HO = .077

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y(BP) .0000 70.0000

X/L		
.088	1.2202	
.100	1.0182	
.125	.7522	
.150	.5725	
.175	.4678	
.200	.4307	
.250	.4001	
.300	.3455	
.350		.4534
.375		.4988
.400	.2988	.5491
.500	.2884	.5171
.600	.2342	.4256
.700		.3586
.800	.1804	.2839
.900	.1298	
1.000		.1764
1.025	.1290	

RN/L (4) = 4.000 MACH (1) = 7.980 MACH = 7.980 PO = 855.101 TO = 1374.570 HO = .087

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y(BP) .0000 70.0000

X/L	
.088	1.3291
.100	1.1042
.125	.7942
.150	.6093
.175	.4838

CH13 B10C3LBTD7F4NSV5 (BPOS01)

RNVL (4) = 4.000 MACH (1) = 7.980

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y(BP) .0000 70.0000

X/L		
.200	.4491	
.250	.4094	
.300	.3902	
.350		.4781
.375		.5146
.400	.3100	.5772
.500	.2791	.5395
.600	.2421	.4539
.700		.3686
.800	.1904	.2904
.900	.1527	
1.000		.1915
1.025	.1361	

RNVL (5) = 6.000 MACH (1) = 8.040 MACH = 8.040 PO = 1411.324 TO = 1421.927 HO = .108

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y(BP) .0000 70.0000

X/L		
.088	1.9835	
.100	1.5879	
.125	1.1318	
.150	.8656	
.175	.6919	
.200	.6294	
.250	.5754	
.300	.4801	
.350		.6980
.375		.7485
.400	.4344	.8274
.500	.3086	.7472
.600	.3505	.6420
.700		.5381
.800	.2807	.4197
.900	.2157	
1.000		.2416
1.025	.1975	

CH13 B10C3W7D7F4H3V3 (PROG02) (20 JUL 74)

REFERENCE DATA

SREF = 2880.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 30.000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 1.000 MACH (1) = 7.778 MACH = 7.778 PO = 189.790 TO = 1306.705 HO = .041

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y (BP) .0000 70.0000

X/L		
.080	2.1740	
.100	1.9472	
.125	1.6345	
.150	1.4253	
.175	1.3276	
.200	1.4228	
.250	1.4960	
.300	1.4185	
.350		1.3282
.375		1.0853
.400	1.5082	1.0080
.500	1.5440	1.0042
.600	1.4361	1.5251
.700		1.3085
.800	1.0088	.9451
.900	.7549	
1.000		.5741
1.025	.5134	

RN/L (2) = 2.000 MACH (1) = 7.863 MACH = 7.863 PO = 401.225 TO = 1340.005 HO = .060

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y (BP) .0000 70.0000

X/L		
.080	3.2301	
.100	2.9146	
.125	2.4755	
.150	2.1617	
.175	1.9980	
.200	2.1125	
.250	2.2084	
.300	2.0582	
.350		2.2196
.375		2.4515
.400	2.3641	2.8013
.500	2.3538	2.8020

CH13 B10C9W87D7F4H5V5 (BFOQ02)

RN/L (2) = 2.000 MACH (1) = 7.883

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y (BP) .0000 70.0000

X/L		
.600	2.1030	2.3542
.700		2.0351
.800	1.5367	1.4901
.900	1.1906	
1.000		.9363
1.025	.7453	

RN/L (3) = 3.000 MACH (1) = 7.946 MACH = 7.946 PO = 651.961 TO = 1383.661 HO = .075

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y (BP) .0000 70.0000

X/L		
.088	4.3622	
.100	3.9028	
.125	3.2474	
.150	2.8123	
.175	2.5795	
.200	2.7081	
.250	2.8193	
.300	2.6082	
.350		2.8171
.375		3.2210
.400	3.0280	3.6668
.500	3.0997	3.6787
.600	2.7949	2.9913
.700		2.7410
.800	2.3918	2.2240
.900	2.1138	
1.000		1.7431
1.025	1.8349	

RN/L (4) = 4.000 MACH (1) = 7.980 MACH = 7.980 PO = 857.278 TO = 1373.090 HO = .086

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y (BP) .0000 70.0000

X/L	
.088	5.1751
.100	4.6453
.125	3.8698
.150	3.3662
.175	3.1081

CH13 B10C9.87D7F4HSV5 (BPO902)

RN/L (4) = 4.000 MACH (1) = 7.980

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y(BP) .0000 70.0000

X/L		
.200	3.2124	
.250	3.3292	
.300	2.9906	
.350		3.3043
.375		3.7916
.400	3.4306	4.2614
.500	3.6671	4.2800
.600	3.3336	3.5396
.700		3.2587
.800	2.9821	2.7734
.900	2.7739	
1.000		2.4025
1.025	2.6536	

RN/L (5) = 6.000 MACH (1) = 8.040 MACH = 8.040 PO = 1422.212 TO = 1489.263 HO = .110

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y(BP) .0000 70.0000

X/L		
.080	7.8866	
.100	7.0178	
.125	5.7795	
.150	4.9531	
.175	4.5240	
.200	4.6768	
.250	4.8454	
.300	5.8189	
.350		4.2157
.375		5.4798
.400	5.0585	6.1545
.500	5.8614	6.2880
.600	5.8150	5.6396
.700		5.9914
.800	7.6438	6.3347
.900	7.7936	
1.000		7.0511
1.025	7.8044	

CH13 B10C9W87D7F4M3V5 (BFOQ03) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 35.000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 1.000 MACH (1) = 7.774 MACH = 7.774 PO = 183.902 TO = 1246.346 HO = .041

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y(BP) .0000 70.0000

X/L		
.088	1.8678	
.100	1.6901	
.125	1.4421	
.150	1.2707	
.175	1.1801	
.200	1.2663	
.250	1.3497	
.300	1.2561	
.350		1.3063
.375		1.4519
.400	1.3829	1.6195
.500	1.3856	1.5947
.600	1.3512	1.4024
.700		1.2067
.800	.9902	.9202
.900	.8003	
1.000		.5483
1.025	.5377	

RN/L (2) = 2.000 MACH (1) = 7.885 MACH = 7.885 PO = 407.136 TO = 1303.428 HO = .082

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y(BP) .0000 70.0000

X/L		
.088	3.4111	
.100	3.0528	
.125	2.5796	
.150	2.2699	
.175	2.1183	
.200	2.2406	
.250	2.4022	
.300	2.2376	
.350		2.2892
.375		2.5521
.400	2.4914	2.8720
.500	2.5092	2.8348

CH13 B10C9W87D7F4M5V5 (BPOQ03)

RN/L (2) = 2.000 MACH (1) = 7.885

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y (BP) .0000 70.0000

X/L		
.600	2.4408	2.4444
.700		2.2808
.800	1.7744	1.7392
.900	1.5097	
1.000		1.1407
1.025	1.0240	

RN/L (3) = 3.000 MACH (1) = 7.955 MACH = 7.955 PO = 698.624 TO = 1395.183 HO = .078

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y (BP) .0000 70.0000

X/L		
.088	4.9801	
.100	4.4426	
.125	3.6980	
.150	3.1774	
.175	2.9203	
.200	3.0576	
.250	3.3129	
.300	2.9190	
.350		3.0122
.375		3.3659
.400	3.5017	4.0900
.500	3.5335	3.9916
.600	3.4359	3.3846
.700		3.3597
.800	2.9292	2.8540
.900	2.9747	
1.000		2.6704
1.025	2.8034	

RN/L (4) = 4.000 MACH (1) = 7.979 MACH = 7.979 PO = 852.612 TO = 1360.299 HO = .087

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y (BP) .0000 70.0000

X/L	
.088	5.2991
.100	4.7579
.125	3.9735
.150	3.4422
.175	3.1343

CH13 B10C5M87D7F4M5V5 (BPO803)

RN/L (4) = 4.000 MACH (1) = 7.979

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y(BP) .0000 70.0000

X/L		
.200	3.2817	
.250	3.5052	
.300	2.8790	
.350		3.0183
.375		3.8360
.400	3.7704	4.3645
.500	3.8989	4.3423
.600	4.0537	3.8542
.700		4.3705
.800	4.6101	4.3129
.900	4.9855	
1.000		4.8143
1.025	4.7091	

RN/L (5) = 6.000 MACH (1) = 8.038 MACH = 8.038 PO = 1396.702 TO = 1363.365 HO = .108

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y(BP) .0000 70.0000

X/L		
.088	6.7196	
.100	6.0254	
.125	4.9912	
.150	4.2876	
.175	3.9322	
.200	4.0787	
.250	4.2936	
.300	2.9464	
.350		3.1253
.375		4.8085
.400	5.1266	5.5452
.500	6.3564	6.2968
.600	8.3190	7.2875
.700		9.6563
.800	9.9678	9.6949
.900	9.8641	
1.000		9.1631
1.025	8.3744	

CH13 B10C5W87D7F4M3V5 WITH 500 DEG PAINT (BPOQ04) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 35.000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 3.000 MACH (1) = 7.950 MACH = 7.950 PO = 670.937 TO = 1389.792 HO = .072

SECTION (1)BODY DEPENDENT VARIABLE QDOT

Y (BP) .0000 70.0000

X/L		
.088	4.4009	
.100	3.9270	
.125	3.3239	
.150	2.9253	
.175	2.7443	
.200	2.9165	
.250	3.0735	
.300	2.5922	
.350		2.5716
.375		3.1418
.400	3.1754	3.6158
.500	3.3043	3.6429
.600	3.2508	3.1846
.700		3.1364
.800	2.7106	2.6642
.900	2.7732	
1.000		2.8252
1.025	2.7562	

CH13 B10C5W87D7F4M3V5 (WPOQ01) (20 JUL 74)

REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = .000
BETA = .000 ELEVON = .000
RUDDER = .000

RNVL (1) = 1.000 MACH (1) = 7.772 MACH = 7.772 PO = 182.026 TO = 1230.889 HO = .040

SECTION (1)WING DEPENDENT VARIABLE QDOT

2Y/B	.4000	.6000	.8000
X/C			
.200		.8166	
.225	.4455		
.250	.5025		.9986
.300	.4743	.6353	.8714
.400	.3995	.5648	.7548
.500	.3405	.5227	.6091
.600	.2598	.4082	.5313
.700	.2124	.2826	.4142
.800	.1896		.3237
.850			.2602
.875		.1889	

RNVL (2) = 2.000 MACH (1) = 7.883 MACH = 7.883 PO = 401.847 TO = 1312.202 HO = .061

SECTION (1)WING DEPENDENT VARIABLE QDOT

2Y/B	.4000	.6000	.8000
X/C			
.200		1.1926	
.225	.8012		
.250	.6941		1.8101
.300	.8373	1.1467	1.5930
.400	.7178	1.0526	1.3923
.500	.5942	.9343	1.1360
.600	.4421	.7584	.9597
.700	.3699	.5250	.7893
.800	.3370		.6372
.850			.4837
.875		.3467	

CH13 B10C5W87D7F4M3V5 (WPOQ01)

RN/L (3) = 3.000 MACH (1) = 7.945 MACH = 7.945 PO = 646.050 TO = 1404.168 HO = .077

SECTION (1)WING DEPENDENT VARIABLE QDOT

2Y/B	.4000	.6000	.8000
X/C			
.200		2.2009	
.225	1.1847		
.250	1.3037		2.6495
.300	1.2177	1.6890	2.3232
.400	1.0408	1.5095	2.0152
.500	.8378	1.3765	1.6470
.600	.6270	1.1181	1.3968
.700	.5067	.7528	1.1421
.800	.4462		.8976
.850			.7136
.875		.4999	

RN/L (4) = 4.000 MACH (1) = 7.980 MACH = 7.980 PO = 855.101 TO = 1374.570 HO = .087

SECTION (1)WING DEPENDENT VARIABLE QDOT

2Y/B	.4000	.6000	.8000
X/C			
.200		2.4124	
.225	1.2800		
.250	1.4284		2.8573
.300	1.3196	1.8428	2.5170
.400	1.1255	1.6458	2.1549
.500	.8985	1.5127	1.7654
.600	.6433	1.2222	1.5101
.700	.5303	.8170	1.2271
.800	.4603		.9576
.850			.7564
.875		.5435	

RN/L (5) = 6.000 MACH (1) = 8.040 MACH = 8.040 PO = 1411.324 TO = 1421.927 HO = .108

SECTION (1)WING DEPENDENT VARIABLE QDOT

2Y/B	.4000	.6000	.8000
X/C			
.200		3.3376	
.225	1.8245		
.250	2.0211		3.9069
.300	1.8822	2.6224	3.4445
.400	1.5686	2.3789	3.0025
.500	1.2864	2.2197	2.5184
.600	.9503	1.8531	2.1954

OH13 B10C9W87D7F4H3V5 (WPOQD1)

RN/L (5) = 6.000 MACH (1) = 8.040

SECTION (1)WING DEPENDENT VARIABLE QDOT

2Y/B	.4000	.6000	.8000
X/C			
.700	.8047	1.2338	1.8037
.800	.7092		1.4091
.850			1.1245
.875		.8055	

CH13 B10C9W8707F4M3V5 (WPOQ02) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 30.000
BETA = .000 ELEVON = .000
RUDDER = .000

RNVL (1) = 1.000 MACH (1) = 7.778 MACH = 7.778 PO = 189.790 TO = 1306.705 HO = .041

SECTION (1)WING DEPENDENT VARIABLE QDOT

2Y/B	.4000	.6000	.8000
X/C			
.200		2.9119	
.225	1.6772		
.250	1.8981		2.8876
.300	1.8152	2.6199	2.6248
.400	1.7043	2.6697	2.4133
.500	1.5680	2.4472	2.0950
.600	1.2936	2.2075	1.8894
.700	1.2421	1.5904	1.6375
.800	1.2004		1.3274
.850			1.1060
.875		1.0903	

RNVL (2) = 2.000 MACH (1) = 7.883 MACH = 7.883 PO = 401.225 TO = 1340.003 HO = .060

SECTION (1)WING DEPENDENT VARIABLE QDOT

2Y/B	.4000	.6000	.8000
X/C			
.200		4.4026	
.225	2.5590		
.250	2.8750		4.3154
.300	2.7375	3.9541	3.9578
.400	2.6156	3.9993	3.5767
.500	2.4274	3.6587	3.1327
.600	2.0257	3.2810	2.8455
.700	1.8853	2.4203	2.5018
.800	1.8545		2.0584
.850			1.7095
.875		1.6888	

CH13 B10C9W87D7F4H3V5 (MPOQ02)

RNVL (3) = 3.000 MACH (1) = 7.946 MACH = 7.946 PO = 651.961 TO = 1383.661 HO = .075

SECTION (1)WING DEPENDENT VARIABLE QDOT

2Y/B	.4000	.6000	.8000
X/C			
.200		5.9213	
.225	3.3293		
.250	3.7790		5.8819
.300	3.6068	5.2802	5.4430
.400	3.4453	5.3455	5.0820
.500	3.2111	4.9704	4.4779
.600	2.7351	4.5359	4.0310
.700	2.6035	3.3055	3.4552
.800	2.6014		2.8463
.850			2.3907
.875		2.3185	

RNVL (4) = 4.000 MACH (1) = 7.980 MACH = 7.980 PO = 857.278 TO = 1373.090 HO = .086

SECTION (1)WING DEPENDENT VARIABLE QDOT

2Y/B	.4000	.6000	.8000
X/C			
.200		7.0868	
.225	3.9466		
.250	4.5758		7.4335
.300	4.4737	6.4045	6.7464
.400	4.6907	6.5465	6.4072
.500	4.9710	6.2838	5.5814
.600	4.5773	6.2253	5.1414
.700	4.7674	4.7156	4.5315
.800	4.4304		3.6868
.850			3.1851
.875		3.2864	

RNVL (5) = 6.000 MACH (1) = 8.040 MACH = 8.040 PO = 1422.212 TO = 1489.263 HO = .110

SECTION (1)WING DEPENDENT VARIABLE QDOT

2Y/B	.4000	.6000	.8000
X/C			
.200		11.6018	
.225	6.0042		
.250	7.9001		13.6835
.300	7.8649	12.6453	13.0214
.400	8.9582	14.5681	13.7933
.500	9.3077	15.5904	15.7574
.600	8.6702	14.1960	15.8058

CH13 B1DC9.87D7F4K5V5 (WPOS02)

RN/L (5) = 6.000 MACH (1) = 6.040

SECTION (1)WING DEPENDENT VARIABLE QDOT

2Y/B	.4000	.6000	.8000
X/C			
.700	9.2372	10.5914	13.5769
.800	8.9315		11.2270
.850			9.5899
.875		7.4934	

CH13 B10C5W87D7F4H3V5 (APOQ03) (20 JUL 74)

REFERENCE DATA

SREF = 2880.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 956.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 35.000
BETA = .000 ELEVON = .000
RUDDER = .000

RNVL (1) = 1.000 MACH (1) = 7.774 MACH = 7.774 PO = 183.902 TO = 1246.346 HO = .041

SECTION (1)WING DEPENDENT VARIABLE QDOT

Z Y/B	.4000	.6000	.8000
X/C			
.200		2.6901	
.225	1.3628		
.250	1.5727		2.6345
.300	1.9096	2.3902	2.4220
.400	1.4611	2.3588	2.2197
.500	1.3536	2.2087	1.9809
.600	1.1127	1.9558	1.8055
.700	1.0558	1.4517	1.5960
.800	1.0625		1.2983
.850			1.0774
.875		1.0076	

RNVL (2) = 2.000 MACH (1) = 7.885 MACH = 7.885 PO = 407.136 TO = 1305.428 HO = .062

SECTION (1)WING DEPENDENT VARIABLE QDOT

Z Y/B	.4000	.6000	.8000
X/C			
.200		4.8975	
.225	2.3169		
.250	2.6805		4.4081
.300	2.5827	4.1327	4.0748
.400	2.3263	4.1023	3.7314
.500	2.3620	3.8191	3.3471
.600	2.0258	3.4149	3.0802
.700	1.9317	2.5709	2.7253
.800	1.9646		2.2657
.850			1.9288
.875		1.8336	

CH13 B10C9.8707F4MSV5 (APOQ03)

RN/L (3) = 3.000 MACH (1) = 7.955 MACH = 7.955 PO = 698.624 TO = 1395.183 HO = .078

SECTION (1)WING DEPENDENT VARIABLE QDOT

Y/B	.4000	.6000	.8000
X/C			
.200		6.6369	
.225	3.3771		
.250	4.0585		6.3280
.300	4.1087	6.0651	5.8159
.400	4.4399	6.1366	5.3609
.500	4.4204	5.7879	4.8054
.600	3.8213	5.5505	4.4283
.700	3.8909	4.4051	3.9430
.800	3.7508		3.2557
.850			2.7929
.875		3.1703	

RN/L (4) = 4.000 MACH (1) = 7.979 MACH = 7.979 PO = 852.612 TO = 1360.299 HO = .087

SECTION (1)WING DEPENDENT VARIABLE QDOT

Y/B	.4000	.6000	.8000
X/C			
.200		7.5710	
.225	3.7974		
.250	4.5890		6.8298
.300	4.7123	6.8946	6.2476
.400	5.2589	7.1182	5.8250
.500	5.4778	6.9075	5.2912
.600	5.0176	6.7014	5.0757
.700	5.2338	5.3253	4.8666
.800	5.2334		4.1134
.850			3.9448
.875		3.8647	

RN/L (5) = 6.000 MACH (1) = 8.058 MACH = 8.058 PO = 1396.702 TO = 1363.365 HO = .108

SECTION (1)WING DEPENDENT VARIABLE QDOT

Y/B	.4000	.6000	.8000
X/C			
.200		11.2596	
.225	7.3199		
.250	9.4646		10.6237
.300	9.6799	11.6579	10.2734
.400	10.0746	13.3799	10.2785
.500	11.0378	14.1794	10.4638
.600	10.2806	13.3068	10.6700

CH13 B13C9W8T07F4M3V5 (WPOQ03)

RN/L (5) = 6.000 MACH (1) = 8.038

SECTION (1)WING DEPENDENT VARIABLE QDOT

Z/B	.4000	.6000	.8000
X/C			
.700	10.3781	10.1651	10.4998
.800	10.3009		8.9076
.850			8.3941
.875		7.3836	

CH13 B10C9W87D7F4M3V5 WITH 500 DEG PAINT (WPO804) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 35.000
BETA = .000 ELEVON = .000
RUDDER = .000

dV/L (1) = 3.000 MACH (1) = 7.950 MACH = 7.950 PO = 670.937 TO = 1389.792 HO = .072

SECTION (1)WING DEPENDENT VARIABLE QDOT

2Y/B	.4000	.6000	.8000
X/C			
.200		6.7043	
.225	3.3010		
.250	3.7720		5.8701
.300	3.6668	6.0443	5.3837
.400	3.5687	6.0735	4.9411
.500	3.4815	5.5802	4.4179
.600	3.1789	4.9701	4.1230
.700	3.3366	3.7806	3.6975
.800	3.4228		3.0912
.850			2.6783
.875		2.7296	

CH13 B10C5W67D7F4M5V5 (CPOQ01) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = .000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 1.000 MACH (1) = 7.772 MACH = 7.772 PO = 182.026 TO = 1230.889 HO = .040

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	2.0242
2.000	2.8597
3.000	3.5083

RN/L (2) = 2.000 MACH (1) = 7.883 MACH = 7.883 PO = 401.847 TO = 1312.202 HO = .061

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	3.9153
2.000	5.4697
3.000	6.4702

RN/L (3) = 3.000 MACH (.) = 7.945 MACH = 7.945 PO = 646.050 TO = 1404.168 HO = .077

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	6.1008
2.000	6.6041
3.000	7.7296

RN/L (4) = 4.000 MACH (1) = 7.980 MACH = 7.980 PO = 855.101 TO = 1374.570 HO = .087

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	7.2247
2.000	7.4703
3.000	8.7299

CH13 B10C5W87D7F4H3V5 (CPOQ01)

RN/L (5) = 6.000 MACH (1) = 8.040 MACH = 8.040 PO = 1411.324 TO = 1421.927 HO = .108

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	8.2190
2.000	10.3282
3.000	11.8698

CH13 B10C5W87D7F4M3V5 (CPOQ02) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 30.000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 1.000 MACH (1) = 7.778 MACH = 7.778 PO = 189.790 TO = 1306.705 HO = .041

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	.1556
2.000	.2151
3.000	.2916

RN/L (2) = 2.000 MACH (1) = 7.883 MACH = 7.883 PO = 401.225 TO = 1340.003 HO = .060

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	.3190
2.000	.4653
3.000	.6141

RN/L (3) = 3.000 MACH (1) = 7.946 MACH = 7.946 PO = 651.961 TO = 1383.661 HO = .075

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	.5339
2.000	.8023
3.000	.9798

RN/L (4) = 4.000 MACH (1) = 7.980 MACH = 7.980 PO = 857.278 TO = 1373.090 HO = .086

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	.7061
2.000	1.0625
3.000	1.3185

CH13 B10C5W87D7F4H3V5 (CPOQ02)

RN/L (5) = 6.000 MACH (1) = 8.040 MACH = 8.040 PO = 1422.212 TO = 1489.263 HO = .110

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	1.2467
2.000	1.8507
3.000	2.2611

CH13 B10C9W87D7F4M3V5 (CPOQ05) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 936.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 35.000
BETA = .000 ELEVON = .000
RUDDER = .000

RN/L (1) = 1.000 MACH (1) = 7.774 MACH = 7.774 PO = 183.902 TO = 1246.346 HO = .041

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	.1534
2.000	.1826
3.000	.2306

RN/L (2) = 2.000 MACH (1) = 7.885 MACH = 7.885 PO = 407.136 TO = 1303.428 HO = .062

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	.3879
2.000	.4611
3.000	.6525

RN/L (3) = 3.000 MACH (1) = 7.955 MACH = 7.955 PO = 698.624 TO = 1395.183 HO = .078

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	.6634
2.000	.9037
3.000	.9224

RN/L (4) = 4.000 MACH (1) = 7.979 MACH = 7.979 PO = 852.612 TO = 1360.299 HO = .087

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	.7927
2.000	1.0780
3.000	1.2923

CH13 B10C9W87D7F4M3V5 (CPOQD3)

RN/L (5) = 6.000 MACH (1) = 8.038 MACH = 8.038 PO = 1396.702 TO = 1363.365 HO = .108

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	1.1666
2.000	1.3575
3.000	1.6091

CH13 B10C5W87D7F4M3V5 WITH 500 DEG PAINT (CPQ004) (20 JUL 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000
LREF = 474.8000 IN. YMRP = .0000 IN.
BREF = 906.7000 IN. ZMRP = .0000 IN
SCALE = .0059 SCALE

PARAMETRIC DATA

MACH = 8.000 ALPHA = 35.000
BETA = .000 ELEVON = .000
RUDDER = .000

RNVL (1) = 3.000 MACH (1) = 7.950 MACH = 7.950 PO = 670.937 TO = 1389.792 HO = .072

SECTION (1)CANOPY DEPENDENT VARIABLE QDOT

Y .0000

TAP NO	
1.000	.6913
2.000	.8230
3.000	.9608