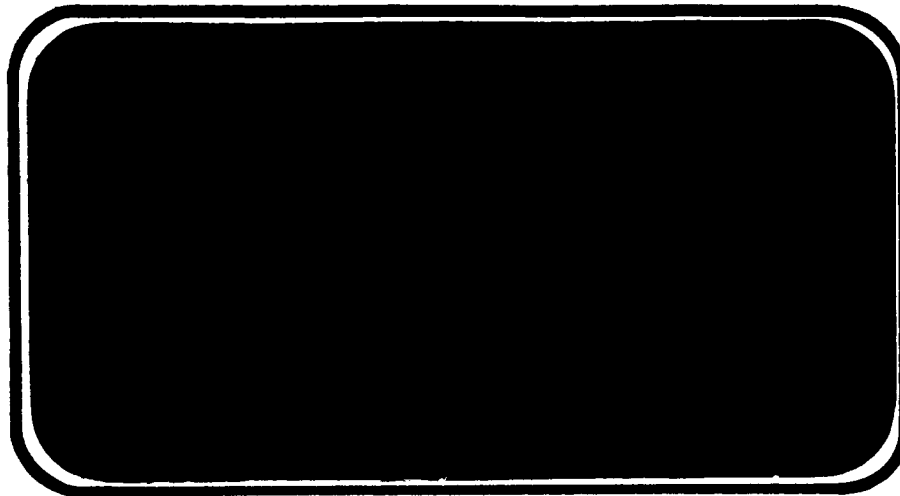




NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION  **CHRYSLER**
CORPORATION

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RESULTS OF HEAT TRANSFER TESTS
OF AN 0.0175-SCALE SPACE SHUTTLE
VEHICLE MODEL 22 OTS IN THE NASA-AMES
3.5-FOOT HYPERSONIC WIND TUNNEL (IH3)
VOLUME III

By

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Prepared under NASA Contract Number NAS9-13247

By

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Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number: ARC 3.5-178
NASA Series Number: IH3
Model Number: 22 OTS
Test Dates: October 31 to November 9, 1973

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ABSTRACT

Heat-transfer data for the 0.0175-scale Space Shuttle Vehicle 3 are presented in this data report. Interference heating effects were investigated by a model build-up technique of Orbiter alone, tank alone, second, and first stage configurations.

The test program was conducted in the NASA-Ames 3.5-Foot Hypersonic Wind Tunnel at Mach 5.3 for nominal free-stream Reynolds number per foot values of 1.5×10^6 and 5.0×10^6 .

This report is presented in four volumes. The contents of the volumes are as follows:

VOLUME I	PLOTTED EXTERNAL TANK DATA
VOLUME II	PLOTTED SRB DATA
VOLUME III	PLOTTED ORBITER DATA
VOLUME IV	TABULATED SOURCE DATA

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COEFFICIENT SCHEDULES:

- (A): H/HREF vs. X/L
- (B): H/HREF vs. PHI
- (C): HI/HU vs. X/L
- (D): HI/HU vs. PHI
- (E): H/HREF vs. X/C
- (F): H/HREF vs. 2Y/B
- (G): HI/HU vs. X/C
- (H): HI/HU vs. 2Y/B
- (I): H/HREF vs. S
- (J): HI/HU vs. S
- (K): H/HREF vs. Z/BV
- (L): HI/HU vs. Z/BV

INTRODUCTION

The experimental investigation documented in this report was performed to obtain aerodynamic heat-transfer rate data on the space shuttle vehicle 3 first and second stage configurations. A component build-up of orbiter alone, tank alone, orbiter plus tank, and fully mated launch configuration was utilized to investigate component interference effects.

The test program was conducted in the NASA-Ames 3.5-Foot Hypersonic Wind Tunnel at Mach 5.3 and nominal free-stream Reynolds number per foot values of 1.5×10^6 and 5.0×10^6 . The model angles of attack were 0° , -3° , -5° and 20° (SRB alone) and angles of yaw were 0° and -5° .

NOMENCLATURE

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
b		thickness of model skin
B		span length
C		specific heat of model skin material or OMS crease
c		chord length
C_0, C_1, C_2		constants in curve fit for C over model wall temperature range
c_p		specific heat of air stream (perfect gas value)
CHAN	CHAN	recording-system channel
H_{aw}	HAW	adiabatic wall enthalpy
H_t	HT	free-stream total enthalpy
	HO	average of free-stream total enthalpy values of all tunnel runs incorporated into an aero dataset
H_w	HW	enthalpy based on model wall temperature for given T/C location
h	H	heat-transfer coefficient at model wall for given T/C location
href	HREF	stagnation-point heat-transfer coefficient for reference sphere
h/href	H/HREF	ratio of model heat-transfer coefficient to heat-transfer coefficient of reference sphere for $H_{aw}/H_t = X.XXX$
	HI/HU	interference to undisturbed heat transfer coefficient ratio
IML		inner module line
L	Length	model reference length

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
M_{∞}	MACH	free-stream Mach number
P_t	PT	free-stream total pressure
	PO	average of free-stream total pressure values of all tunnel runs incorporated into an aero dataset
\dot{q}	Q	heat-transfer rate at model wall for given T/C location
\dot{q}_s	QS	stagnation-point heat-transfer rate for reference sphere at initial time
R_s	RS	reference sphere radius at model scale equivalent to 0.305 m (1 ft) for full-scale vehicle
Re_{∞}/ft		free-stream Reynolds number per foot
	RN/L	average of free-stream Reynolds number values (per foot) of all tunnel runs incorporated into an aero dataset
$Re_{\infty,L}$		free-stream Reynolds number based on model reference length, L
	S	assumed chordwise location (for Clusters Band C) - see Figure 2
St	ST	Stanton number based on free-stream flow conditions and the model heat-transfer coefficient for $H_{aw}/H_t = X.XXX$
T		temperature
T_t	TT	free-stream total temperature
	TO	average of free-stream total temperature values of all tunnel runs incorporated into an aero dataset

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
T_w	TW	model wall temperature for given T/C location
T/C	T/C	thermocouple
t		time
t_i	TIME	initial time (before model insertion into flow) extrapolated from $f(T_w)$ vs time
u, V		velocity
W		density of model skin material
X		axial distance measured from nose
	X/C	chordwise location, fraction of local chord
	X/L	longitudinal location, fraction of body length
Y		spanwise distance from centerline
	2Y/B	spanwise location, fraction of semi-span
Z		water plane distance
	Z/BV	spanwise location on vertical tail, fraction of exposed span
θ		tank radial position measured clockwise looking forward, 0 degrees at bottom centerline
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
μ		viscosity of air
ρ		density of air
ϕ		Orbiter radial position measured clockwise looking forward. 0 degrees at bottom centerline

NOMENCLATURE (Concluded)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
ψ		SRB radial position measured clockwise looking forward. 0 degrees at bottom centerline

SUBSCRIPTS

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

REMARKS

Tunnel blockage was suspected during the first stage (mated) $\alpha = -5^\circ$ runs, but could not be confirmed due to inconclusive shadowgraph data. Therefore, additional data were taken at $\alpha = -3^\circ$. Both $\alpha = -3^\circ$ and -5° data are presented in this report; however, the $\alpha = -5^\circ$ data are questionable.

Near the end of the test program the number of test runs used to obtain a complete mapping of the mated-vehicle heating rates was reduced from seven to five to conserve test time. The data acquisition capacity is 75 thermocouple channels per run. This reduced the number of recorded thermocouples from 525 to 375 for these runs (runs with T/C hook-up numbers 12 and 13).

A post-test analysis and dimensional check of the model were performed on the orbiter to investigate suspected incorrect data from wing leading edge clusters B and C. As a result of this investigation, the thermocouple locations and skin thicknesses presented in Table IV and figure 2a were found to be incorrect for clusters B and C. Figure 2b presents the correct locations and thicknesses. The data presented in the plots and tabulated listings reflect the pretest locations and skin thicknesses and should be scaled accordingly. Data reports for other tests of this model are also in error due to the clusters on the wing leading edge. These test data should be corrected for the test data publications of tests OH4B, IH20, and OH6.

CONFIGURATIONS INVESTIGATED

The 22-OTS model is a 0.0175-scale replica of the vehicle three configuration Rockwell International Space Shuttle orbiter, tank, and solid rocket boosters. The model is a thin-skin thermocouple model instrumented with 527 30-gauge iron-constantan thermocouples. The structural areas of the model were constructed of 15-5PH stainless steel with instrumented areas of 15-5PH and 17-7PH stainless steel.

Provisions have been made to test elevon deflections of -40° , 0° , $+5^\circ$, and $+10^\circ$; body flap deflections of 0° and $+10^\circ$; and rudder flare of 0° and 40° . For this ascent test, all control surfaces were tested at 0° deflection.

The configurations tested are described below with the component definitions given in table III.

Symbol

ORB	$B_{17} C_7 M_4 F_5 W_{103} E_{22} V_7 R_5$	Orbiter
ET	T_{10}	external tank
SRB	S_8	solid rocket booster
OTS	$B_{17} C_7 M_4 F_5 W_{103} E_{22} V_7 R_5 T_{10} S_8$	mated vehicle
TRIPS		.050" steel spheres spot welded to .005" shim stock band 1/4 inch wide. Center-line displacement between trips was 3 diameters

TEST FACILITY DESCRIPTION

The NASA-Ames 3.5-Foot Hypersonic Wind Tunnel is a closed-circuit, blowdown-type tunnel capable of operating at nominal Mach numbers of 5, 7, and 10 at pressures to 1800 psia and temperatures to 3400°R for run times to four minutes. The major components of the facility include a gas storage system where the test gas is stored at 3000 psi, a storage heater filled with aluminum-oxide pebbles capable of heating the test gas to 3400°R, axisymmetric contoured nozzles with exit diameters of 42 inches for generating the desired Mach number, and a 900,000 ft³ vacuum storage system which operates to pressures of 0.3 psia. The test section itself is an open-jet type enclosed within a chamber approximately 12-feet in diameter and 40-feet in length, arranged transversally to the flow direction.

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

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

TEST PROCEDURES

The data acquisition capability was 75 recorded thermocouples per run. Since there were 525 T/C's selected for mated launch-configuration testing, seven runs were necessary for a complete mated heating distribution. Cannon plugs with 15 thermocouples for full data acquisition capability were used at the model. A five plug junction (connector) box was constructed to mate the model plugs to the facility's 150°F reference box terminal posts. Most model changes were, therefore, simple plug changes between runs.

Due to the complexity of the mated configuration sting arrangement, oil-flow visualization techniques were employed to confirm that there were no sting-interference effects.

Shadowgraphs were taken for each run. Sting-effect shadowgraphs were also obtained for selected runs.

DATA REDUCTION

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

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

which neglects heat-conduction losses.

Assuming that W and h are constant and

$$C = C_0 + C_1 T_w + C_2 T_w^2 \text{ for } T_w \text{ ranges} \quad (2)$$

the integration of equation (1) for $t = t_i$ to t and $T_w = T_{wi}$

to T_w yields the linear equation:

$$f(T_w) = - \ln \left(\frac{T'_{aw} - T_w}{T'_{aw} - T_{wi}} \right) - \left[\frac{C_1}{C'_{aw}} + \frac{C_2}{C'_{aw}} \left(T'_{aw} + \frac{T_w + T_{wi}}{2} \right) \right] \\ (T_w - T_{wi}) = \frac{hc_p}{WC'_{aw}b} (t - t_i) \quad (3)$$

where it is defined that:

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

$$C'_{aw} \equiv C_0 + C_1 T'_{aw} + C_2 T'_{aw}{}^2 \quad (5)$$

\neq specific heat at adiabatic wall temperature

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

DATA REDUCTION (Continued)

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

$$h = \frac{WC'_{aw}b}{c_p} m \quad (6)$$

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

$$\dot{q} = \dot{q}_i = h (H_{aw} - H_{wi}) \equiv hH_t \left(\frac{H_{aw}}{H_t} - \frac{H_{wi}}{H_t} \right) \quad (7)$$

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

The reference sphere heating is also evaluated at the initial wall enthalpy by the method of Fay and Riddell (ref. 2):

$$\dot{q}_s = h_{ref} (H_t - H_{wi}) \equiv h_s H_t \left(1.0 - \frac{H_{wi}}{H_t} \right) \quad (8)$$

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

$$\frac{h}{h_{ref}} = \frac{\dot{q}_i}{\dot{q}_s} \left[\frac{1.0 - H_{wi}/H_t}{H_{aw}/H_t - H_{wi}/H_t} \right] \quad (9)$$

DATA REDUCTION (Concluded)

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

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

The Stanton number is defined as

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

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

The calculations of the model heating, reference sphere heating, and Reynolds number included the corrections of NACA report 1135 (ref. 3) for calorically imperfect thermally perfect air. Keyes' equation for viscosity (see ref. 4) was also used for the sphere heating and Reynolds number computations:

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

where the units for T and μ are $^\circ R$ and lb-sec/ft, respectively.

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

TEST: ARC 3.5 178 - IH3		DATA SET/RUN NUMBER COLLATION SUMMARY										DATE: November, 1973									
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES		NO. OF RUNS	THERMOCOUPLE SCHEDULE (T/C), X (SEE TABLE VIII)														
		α	β	RW/L	X ₁		X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉	X ₁₀						
REI(01)	ΦTS	0	0	1.5			9	3	10	5	11	7	8								
02	ΦTS	0	0	5.0			18	17	16	15	12	14	13								
03	ΦTS TRIPS	0	0	1.5			19	20	21	22	23	24	25								
04	ΦTS TRIPS	0	0	5.0			32	31	30	29	28	27	26								
05	ΦTS	0	-5	5.0			39	38	37	36	35	34	33								
06	ΦRB	0	0	1.5			40	41	42	43											
07	ΦRB	0	0	5.0			47	46	45	44											
08	ΦRB TRIPS	0	0	1.5			48	49	50	51											
09	ΦRB TRIPS	0	0	5.0			55	54	53	52											
10	ET	0	0	1.5																	
11	ET	0	0	5.0																	
12	ET TRIPS	0	0	5.0																	
13	ET TRIPS	0	0	1.5																	
14	SRB	0	0	1.5																64	
15	SRB	0	0	5.0																65	
16	SRB	20	0	5.0																66	
17	SRB TRIPS	0	0	1.5																68	
18	SRB TRIPS	0	0	5.0																69	

TEST RUN NUMBERS

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

HAW/HT REF MASH HAW/HT

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

COEFFICIENTS

* REI --- DATASETS, HAW/HT=1.0
 AEI --- DATASETS, HAW/HT=.9
 BEI --- DATASETS, HAW/HT=.85

** See Page 24 for key to 4th character of DATASET NAME.

TABLE III. - COMPONENT DIMENSIONAL DATA

MODEL COMPONENT: BODY - B17

GENERAL DESCRIPTION: Fuselage, 3 configuration, lightweight orbiter per

Rockwell lines drawing No. VL70-000139

MODEL SCALE: 0.0175

DRAWING NO.: VL70-000139

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length - In.	<u>1290.3</u>	<u>22.58025</u>
Max. width - In.	<u>267.6</u>	<u>4.6830</u>
Max. depth - In.	<u>244.5</u>	<u>4.27875</u>
Fineness Ratio	<u>4.82175</u>	<u>4.82175</u>
Area - ft ²		
Max. Cross-sectional	<u>386.67</u>	<u>0.11842</u>
Planform		
Wetted		
Base		

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: CANOPY - C7

GENERAL DESCRIPTION: Configuration 3 per Rockwell Lines VL70-000139

Insufficient information to complete dimensional data at this time.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length ($X_0 = 433$ to $X_0 = 670$) - in FS	<u>237</u>	<u>4.148</u>
Max. Width	_____	_____
Max. Depth ($Z_0 =$ to $Z_0 = 501$) in FS	_____	_____
Fineness ratio	_____	_____
Area - ft ²		
Max. Cross-sectional	_____	_____
Planform	_____	_____
Wetted	_____	_____
Base	_____	_____

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ELEVON- E22

GENERAL DESCRIPTION: 3 configuration per W103 Rockwell Lines Drawing

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

SCALE MODEL: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Area - ft ²	<u>205.52</u>	<u>0.06294</u>
Span (equivalent) - In.	<u>353.34</u>	<u>6.18345</u>
Inb'd equivalent chord	<u>114.78</u>	<u>2.00865</u>
Outb'd equivalent chord	<u>55.00</u>	<u>0.96250</u>
Ratio movable surface chord/ total surface chord		
At inb'd equiv. chord	<u>.208</u>	<u>.208</u>
At outb'd equiv. chord	<u>.400</u>	<u>.400</u>
Sweep-back angles, degrees		
Leading edge	<u>0.00</u>	<u>0.00</u>
Trailing edge	<u>- 10.24</u>	<u>- 10.24</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
Area Moment (Normal to hingeline) - ft ³ (Product of Area Moment)	<u>1548.07</u>	<u>0.00829</u>

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: BODY FLAP - F₅

GENERAL DESCRIPTION: 3 Configuration per Rockwell Lines VL70-000139

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length - In.	<u>84.70</u>	<u>1.48225</u>
Max. width - In.	<u>267.6</u>	<u>4.6830</u>
Max. Depth	<u> </u>	<u> </u>
Fineness Ratio	<u> </u>	<u> </u>
Area - ft ²		
Max Cross-sectional	<u> </u>	<u> </u>
Planform	<u>142.5195</u>	<u>0.04365</u>
Wetted	<u> </u>	<u> </u>
Base	<u>38.0958</u>	<u>0.01167</u>

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: OMS POD - M₁

GENERAL DESCRIPTION: Orbital maneuvering system pods located on the orbiter aft fuselage.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length - In.	<u>346.0</u>	<u>6.0550</u>
Max. Width - In.	<u>108.0</u>	<u>1.890</u>
Max. Depth - In.	<u>113.0</u>	<u>113.0</u>
Fineness Ratio	<u> </u>	<u> </u>
Area - ft ²	<u> </u>	<u> </u>
Max cross sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

⊙ of OMS Pod

WP = 463.9 In. FS; WP 400 + 63.9 = 463.9

BP = 80.0 In. FS

LENGTH: 1214.0 to 1560.0 = 346.0 In. FS

NOTE: M₁ is identical to M₃ of 2A configuration, except intersection to body.

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: RUDDER - R₅

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

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139, VL70-000095

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Area - ft ²	<u>106.38</u>	<u>0.03258</u>
Span (equivalent) - in.	<u>201.0</u>	<u>3.5175</u>
Inb'd equivalent chord	<u>91.585</u>	<u>1.60274</u>
Outb'd equivalent chord	<u>50.833</u>	<u>0.88958</u>
Ratio movable surface chord/ total surface chord		
At inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep-back angles, degrees		
Leading edge	<u>34.83</u>	<u>34.83</u>
Trailing edge	<u>26.25</u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>34.83</u>
Area Moment (normal to hingeline) - ft ³ Product of area and mean chord	<u>526.13</u>	<u>0.00282</u>

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: BOOSTER SOLID ROCKET MOTOR - S8

GENERAL DESCRIPTION: Booster solid rocket, 3 configuration, body of revolution, data for (1) of (2) sides per Rockwell Lines drawing

VL77-000036 and VL72-000088

MODEL SCALE: 0.0175

DRAWING NUMBER: VL72-000088, VL77-000036

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length (Includes nozzle) - In.	<u>1741.0</u>	<u>30.468</u>
Max. Width (Tank dia.) - In.	<u>142.0</u>	<u>2.485</u>
Max. Depth (Aft shroud) - In.	<u>205.0</u>	<u>3.588</u>
Fineness Ratio	<u>8.49268</u>	<u>8.49268</u>
Area - ft ²		
Max. Cross-sectional	<u>229.21</u>	<u>4.011</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>
WP of BSRM Centerline (Z_T) - In.	<u>400.0</u>	<u>7.00</u>
FS of BSRM Nose (X_T) - In.	<u>200.0</u>	<u>3.50</u>

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: EXTERNAL TANK - T₁₀

GENERAL DESCRIPTION: External Oxygen-hydrogen tank, 3 configuration, per
Rockwell Lines drawing VL78-000041 and VL72-000088

MODEL SCALE: 0.0175

DRAWING NUMBER: VL72-000088, VL78-000041

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length - In. (Nose @ X _T = 309)	<u>1865</u>	<u>32.63750</u>
Max. width (Dia) - In.	<u>324</u>	<u>5.670</u>
Max. depth	<u>--</u>	<u>--</u>
Fineness Ratio	<u>5.75617</u>	<u>5.75617</u>
Area - ft ²		
Max. Cross-Sectional	<u>572.555</u>	<u>0.17534</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>
WP of Tank Centerline (X _T) In.	<u>400.0</u>	<u>7.00</u>

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: VERTICAL, V₇ (Lightweight Orbiter Configuration)

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

NOTE: Same as V₅ but with manipulator housing removed.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139, VL70-000095

DIMENSIONS:

TOTAL DATA

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Area (Theo) - ft ²	<u>425.92</u>	<u>0.13044</u>
Planform		
Span (Theo) - In.	<u>315.72</u>	<u>5.52510</u>
Aspect ratio	<u>1.675</u>	<u>1.675</u>
Rate of taper	<u>0.507</u>	<u>0.507</u>
Taper ratio	<u>0.404</u>	<u>0.404</u>
Sweep-back angles, degrees		
Leading edge	<u>45.000</u>	<u>45.000</u>
Trailing edge	<u>26.249</u>	<u>26.249</u>
0.25 Element line	<u>41.130</u>	<u>41.130</u>
Chords:		
Root (Theo) WP	<u>268.50</u>	<u>4.69875</u>
Tip (Theo) WP	<u>108.47</u>	<u>1.89822</u>
MAC	<u>199.81</u>	<u>3.49667</u>
Fus. Sta. of .25 MAC	<u>1463.50</u>	<u>25.61125</u>
W.P. of .25 MAC	<u>635.522</u>	<u>11.12164</u>
B.L. of .25 MAC	<u>0.00</u>	<u>0.00</u>
Airfoil section:		
Leading wedge angle - deg.	<u>10.000</u>	<u>10.000</u>
Trailing wedge angle - deg.	<u>14.920</u>	<u>14.920</u>
Leading edge radius	<u>2.0</u>	<u>0.0350</u>
Void area - FT ²	<u>13.17</u>	<u>0.00403</u>
Blanketed area	<u>0.00</u>	<u>0.00</u>

TABLE III. -- COMPONENT DIMENSIONAL DATA - Concluded.

MODEL COMPONENT: WING-W 103

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

NOTE: Same planform as W87, except dihedral at TE

Scale Model = 0.0175

TEST NO.

DWG. NO. VL70-000139

DIMENSIONS:

FULL-SCALE

MODEL SCALE

TOTAL DATA

Area (Theo.) Ft²

Planform

Span (Theo In.

Aspect Ratio

Rate of Taper

Taper Ratio

Dihedral Angle, degrees (@ TE of Elevon)

Incidence Angle, degrees

Aerodynamic Twist, degrees

Sweep Back Angles, degrees

Leading Edge

Trailing Edge

0.25 Element Line

Chords:

Root (Theo) B.P.O.O.

Tip, (Theo) B.P.

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

EXPOSED DATA

Area (Theo) Ft²

Span, (Theo) In. BP108

Aspect Ratio

Taper Ratio

Chords

Root BP108

Tip 1.00 $\frac{b}{2}$

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

Airfoil Section (Rockwell Mod NASA)

XXXX-64

Root $\frac{b}{2}$ =

Tip $\frac{b}{2}$ =

Data for (1) of (2) Sides

Leading Edge Cuff 2

Planform Area Ft²

Leading Edge Intersects Fus M. L. @ Sta

Leading Edge Intersects Wing @ Sta

2690.00

0.82381

936.68

16.39190

2.265

2.265

1.177

1.177

0.200

0.200

3.500

3.500

3.000

3.000

+3.000

+3.000

45.000

45.000

-10.24

-10.24

35.209

35.209

689.24

12.06170

137.85

2.41238

474.81

8.30918

1136.89

19.89558

299.20

5.2360

182.13

3.18728

1752.29

0.53664

720.68

12.61190

2.058

2.058

0.2451

0.2451

562.40

9.8420

137.85

2.41238

393.03

6.87802

1185.31

20.74292

300.20

5.25350

251.76

2.51580

0.10

0.10

0.12

0.12

120.33

0.03685

560.0

9.800

1035.0

18.11250

Table IV. Orbiter T/C Locations
Model 22-OFS

T/C NO.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			ϕ	SKIN THICKNESS	REMARKS
		x_0	y	z	x FROM NOSE	y	z			
1	0	238.00	0	--	0	0	--	0	.034	BOTTOM ϕ
2	.005	244.45	▲	▲	.113	▲	▲	▲	.035	▲
3	.010	250.90			.226				.035	
4	.020	263.81			.452				.032	
5	.030	276.71			.677				.033	
6	.040	289.61			.903				.034	
7	.050	302.52			1.129				.033	
8	.060	315.42			1.355				.032	
9	.070	328.32			1.581				.034	
10	.080	341.22			1.806				.035	
11	.090	354.13			2.032				.035	▼
12	.100	367.03			2.258				.034	BOTTOM ϕ
13									—	OPEN
14	.120	392.84			2.710				.035	BOTTOM ϕ
15	.130	405.74			2.935				.035	▲
16	.140	418.64			3.161				.035	
17	.150	431.54			3.387				.034	
18	.160	444.45			3.613				.035	
19	.170	457.35			3.839				.035	
20	.180	470.25			4.064				.035	
21	.190	483.16			4.290				.035	
22	.200	496.06			4.516				.031	
23	.225	528.32			5.081				.031	
24	.250	560.58			5.645				.033	
25	.275	592.83			6.210				.033	
26	.300	625.09			6.774				.032	
27	.325	657.35			7.339				.033	
28	.350	689.60			7.903				.020	
29	.375	721.86			8.468				.028	
30	.400	754.12			9.032				.033	
31	.425	786.38	▼	▼	9.597	▼	▼	▼	.035	▼
32	.450	818.64	0	--	10.161	0	--	0	.034	BOTTOM ϕ

Table IV (Cont'd) Orbiter

T/C NO.	x/L	FULL SCALE			MODEL SCALE			φ	SKIN THICKNESS	REMARKS
		x ₀	y	z	(x FROM NOSE)	y	z			
33	.475	850.89	0	--	10.726	0	--	0	.030	BOTTOM \mathcal{E}
34	.500	883.15	↑	↑	11.290	↑	↑	↑	.030	↑
35	.525	915.41			11.855				.032	
36	.550	947.66			12.419				.031	
37	.575	979.92			12.984				.029	
38	.600	1012.18			13.548				.028	
39	.625	1044.44			14.113				.028	
40	.650	1076.70			14.677				.033	
41	.675	1108.95			15.242				.035	
42	.700	1141.21			15.806				.034	
43	.725	1173.47			16.371				.035	
44	.750	1205.72			16.935				.035	
45	.775	1237.98			17.500				.034	
46	.800	1270.24			18.064				.035	
47	.825	1302.50			18.624				.035	
48	.850	1334.76			19.193				.033	
49	.875	1367.01			19.758				.033	
50	.900	1399.27			20.322				.034	
51	.925	1431.53			20.887				.035	
52	.950	1463.78			21.451				.032	↓
53	.975	1496.04			22.016				.032	BOTTOM \mathcal{E}
54	1.000	1528.31			22.580				.029	$\frac{x}{L} = 1.008 @ \delta_{BF} = 10\%$.033
55	1.013	1541.56			22.812				.032	$\delta_{BF} 10^\circ$ ONLY ↑
56	1.025	1560.56			23.145				.032	BF ↓
57	1.038	1574.30			23.385			↓	.032	$\delta_{BF} 10^\circ$ ONLY ↓
58	1.050	1592.82			23.709			0	.030	↓ .032
59	.010	250.90			.226			180	.035	TOP \mathcal{E}
60	.025	270.26			.565			↑	.035	↑
61	.050	302.52			1.129			↑	.035	↑
62	.075	334.77			1.694			↑	.033	↑
63	.100	367.03	↓	↓	2.258	↓	↓	↓	.033	↓
64	.125	399.29	0	--	2.823	0	--	180	.031	TOP \mathcal{E}

Table IV (Cont'd) Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			ϕ	SKIN THICKNESS	REMARKS
		x_0	y	z	x FROM NOSE	y	z			
65	.150	431.54	0	--	3.387	0	--	180	.026	TOP ϕ
66	.160	444.45	↑	↑	3.613	↑	↑	↑	.031	↑
67	.170	457.35	↑	↑	3.839	↑	↑	↑	.031	↑
68	.180	470.25	↑	↑	4.064	↑	↑	↑	.030	↑
69	.200	496.06	↑	↑	4.516	↑	↑	↑	.033	↑
70	.250	560.58	↑	↑	5.645	↑	↑	↑	.030	↑
71	.300	625.09	↑	↑	6.774	↑	↑	↑	.030	↑
72	.400	754.12	↑	↑	9.032	↑	↑	↑	.030	↑
73	.500	883.15	↑	↑	11.290	↑	↑	↑	.030	↑
74	.600	1012.18	↑	↑	13.548	↑	↑	↑	.031	↑
75	.700	1141.21	↓	↓	15.806	↓	↓	↓	.032	↓
76	.800	1270.24	0	--	18.064	0	--	180	.030	TOP ϕ
77			29.60	478.00	WINDOW #1	0.518	8.365	--	.035	TOP LEFT
78			12.80	478.00	WINDOW #1	0.224	8.365	--	.035	TOP RIGHT
79			21.20	464.97	↑	0.371	8.137	↑	.033	CENTER
80			34.40	452.00	↓	0.602	7.910	↑	.035	BOTTOM LEFT
81			6.00	452.00	WINDOW #1	0.105	7.910		.034	BOTTOM RIGHT
82			43.20	478.00	WINDOW #2	0.756	8.365		.035	TOP LEFT
83			34.80	478.00	WINDOW #2	0.609	8.365		.035	TOP RIGHT
84			44.80	464.97	↑	0.784	8.137		.035	CENTER
85			59.20	452.00	↓	1.036	7.910	↓	.035	BOTTOM LEFT
86			40.40	452.00	WINDOW #2	0.707	7.910	--	.035	BOTTOM RIGHT
87			62.40	464.97	WINDOW #3	1.092	8.137	140	.032	CENTER
88	.100	367.03	20.00	--	2.258	0.350	--	10	.035	FUSELAGE BOTTOM SURFACE
89	.150	431.54	24.00	--	3.387	0.420	--	10	.035	↑
90	.050	302.52	25.00	↑	1.129	0.438	--	14	.033	↑
91	.200	496.06	25.00	↑	4.516	0.438	↑	11.5	.031	↑
92	.300	625.09	25.00	↑	6.774	0.438	↑	12	.033	↑
93	.200	496.06	50.00	↑	4.516	0.875	↑	24	.034	↑
94	.300	625.09	50.00	↑	6.774	0.875	↑	23	.036	↑
95	.400	754.12	50.00	↓	9.032	0.875	↓	21.5	.026	↓
96	.500	883.15	50.00	--	11.290	0.875	--	21.5	.026	FUSELAGE BOTTOM SURFACE

Table IV (Cont'd) Orbiter

T/C NO.	x/L	FULL SCALE			MODEL SCALE			φ	SKIN THICKNESS	REMARKS
		x _o	y	z	x FROM NOSE	y	z			
97	.600	1012.18	50.00		13.548	0.875		21.5	.021	FUSELAGE SIDE
98	.700	1141.21	50.00		15.806	0.875		↑	.033	
99	.800	1270.24	50.00		18.064	0.875		↓	.033	
100	.900	1399.27	50.00		20.322	0.875		21.5	.034	FUSELAGE SIDE
101	1.000	1528.30	100.00		22.580	1.75		39	.031	BODY FLAP $10^\circ = .034$
102	1.050	1592.82	100.00		23.704	1.75		39	.028	BODY FLAP $10^\circ = .033$
103	.100	367.03	39.20		2.258	0.686		20	.033	FUSELAGE SIDE
104	.150	431.54	40.80		3.387	0.714		20	.031	↑
105	.050	302.52		303.60	1.129	--	5.313	22	.031	C.C.L. TANGENT
106	.100	367.03	52.00	--	2.258	0.910		24.5	.033	↑
107	.150	431.54	62.00	--	3.387	1.085	--	25.5	.031	↓
108	.200	496.06	65.60	287.20	4.516	1.148	5.026	31.5	.035	C.C.L. TANGENT
109	.300	625.09	74.46	--	6.774	1.303		34	.033	
110	.200	496.06	75.60	292.00	4.516	1.323	5.110	35	.030	
111	.150	431.54	79.20	304.80	3.387	1.386	5.334	40	.030	
112	.200	496.06	85.20	298.80	4.516	1.491	5.229	40	.034	
113	.300	625.09	91.43		6.774	1.600		40	.026	
114	.300	625.09	102.86		6.774	1.800		45	.023	
115	.050	302.52		325.60	1.129		5.698	35	.030	M.H.B. TANGENT
116	.100	367.03		317.60	2.258		5.558	39	.030	M.H.B. TANGENT
117	.150	431.54	83.60	314.4	3.387	1.463	5.502	45.5	.030	M.H.B. TANGENT
118	.200	496.06		320.00	4.516		5.600	51	.030	
119	.300	625.09		330.00	6.774		5.775	57.5	.021	
120	.300	625.09		340.00	6.774		5.950	61	.027	
121	.076	336.51		350.00	1.724		6.125	--	.030	RCS CENTER
122	.300	625.09		350.00	6.774		6.125	65	.026	
123	.800	1270.24		350.00	18.064		6.125	65	.017	
124	.900	1399.27		350.00	20.322		6.125	65	.033	
125	.975	1496.04		350.00	22.016		6.125	68	.034	
126	.975	1496.04		300.00	22.016		5.250	52.5	.032	
127	.050	302.52		342.40	1.129		5.992	75	.030	↓ TANGENT (UPPER)

Table IV (Cont'd) Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			ϕ	SKIN THICKNESS	REMARKS
		x_0	y	z	x FROM NOSE	y	z			
128	.200	496.06	--	360.00	4.516	--	6.300	67.5	.026	FUSELAGE SIDE
129	.300	625.09	--	360.00	6.774		6.300	70	.023	
130	.600	1012.18		375.14	13.548		6.565	77	.031	
131	.050	302.52		378.40	1.129		6.622	60	.035	45° TANGENT
132	.100	367.03		410.00	2.258		7.175	119	.034	
133	.200	496.06		410.00	4.516		7.175	96.5	.028	
134	.300	625.09		430.00	6.774		7.525	106	.032	FUSELAGE SIDE
135	.400	754.12		430.00	9.032			105	.033	UPPER BODY
136	.500	883.15		430.00	11.290				.032	
137	.600	1012.18		430.00	13.548				.032	
138	.700	1141.21		430.00	15.806				.032	
139	.800	1270.24		430.00	18.064		7.525		.032	
140	.900	1399.27		370.00	20.322		6.475		.033	
141	.300	625.09		478.80	6.774		8.379	135	.031	
142	.400	754.12			9.032			135	.030	
143	.500	883.15			11.290			135	.033	
144	.600	1012.18			13.548			135	.033	
145	.700	1141.21			15.806			135	.032	
146	.600	1012.18		445.0	13.548		7.788	113	.032	
147	.600	1012.18		440.0	13.548		7.70	112	.032	
148	.750	1205.73		450.00	15.806		7.875	116	.032	
149	.750	1502.73		490.00	15.806		8.575	149	.034	UPPER BODY
150	.400	754.12			9.032			59.5	.031	WING UPPER CREASE
151	.500	883.15			11.290			63	.012	
152	.600	1012.18			13.548			65.5	.030	
153	.700	1141.21			15.806			64	.030	
154	.900	1399.27		332.0	20.322			--	.034	WING UPPER CREASE

Table IV (Continued) Orbiter

T/C NO.	$\frac{2y}{b}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICKNESS	REMARKS
			x_0	y	x_0	y		
155	.250	.025	640.650	117.085	7.043	2.049	.031	WING BOTTOM
156	↑	.153	754.120	↑	9.030	↑	.035	SURFACE
157	↑	.299	883.150	↑	11.288	↑	.028	↑
158	↑	.444	1012.180	↑	13.545	↑	.023	
159	↓	.590	1141.200	↓	15.802	↓	.034	
160	↓	.736	1270.230	↓	18.060	↓	.034	
161	.250	.900	1415.900	117.085	20.613	2.049	.034	
162	.301		754.000		9.030		.023	30° ROLL DOWN
163	.348		883.000		11.288		.028	30° ROLL DOWN
164	.400	.025	1002.063	187.336	13.364	3.278	.035	
165	↑	.100	1039.750	↑	14.031	↑	.034	
166	↑	.200	1090.000	↑	14.900	↑	.034	
167	↑	.302	1141.210	↑	15.802	↑	.035	
168	↓	.559	1270.230	↓	18.060	↓	.032	
169	↓	.700	1341.250	↓	19.307	↓	.032	
170	.400	.900	1441.750	187.336	21.065	3.278	.032	ELEVON
171	.500		1067.470	234.170	14.516	4.098	.033	30° ROLL DOWN
172	↑	.025	1077.913	↑	14.696	↑	.035	
173	↑	.177	1141.210	↑	15.802	↑	.030	
174	↑	.300	1192.450	↑	16.706	↑	.031	
175	↑	.487	1270.230	↑	18.060	↑	.034	
176	↑	.600	1317.428	↑	18.895	↑	.034	
177	↓	.700	1359.028	↓	19.618	↓	.033	
178	↓	.900	1442.350	234.170	21.075	4.098	.033	ELEVON
179	.600	.100	1152.000	281.004	15.995	4.918	.033	
180	↑	.200	1188.00	↑	16.625	↑	.031	
181	↑	.300	1224.000	↑	17.255	↑	.026	
182	↓	.428	1270.230	↓	18.064	↓	.026	↓
183	↓	.600	1332.000	↓	19.145	↓	.027	WING BOTTOM
184	.600	.700	1368.000	281.004	19.775	4.918	.024	SURFACE

Table IV (Continued) Orbiter

T/C NO.	$\frac{2y}{b}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICKNESS	REMARKS
			x_0	y	x (FROM NOSE)	y		
185	.600	.800	1404.000	281.004	20.404	4.918	.035	WING BOTTOM SURFACE
186	.600	.850	1422.000	↕	20.720		.033	ELEVON ↑
187	.600	.90	1440.000	281.004	21.034		.034	
188	.750		1186.5	351.255	16.599	6.147	.035	L.E. ROLLED
189	↑	.025	1193.428	↑	16.720	↑	.035	DOWN 30°
190		.100	1214.228		17.084		.032	
191		.303	1270.230		18.064		.032	
192		.500	1325.028		19.023		.032	
193		.700	1380.400		19.992		.027	
194		.800	1408.100		20.476		.031	
195	▼	.850	1422.000	▼	20.719	▼	.035	
196	.750	.900	1435.800	351.255	20.962	6.147	.035	
197	.850	.100	1255.200	398.089	17.801	6.967	.031	
198	.850	.300	1299.600	398.089	18.578	6.967	.034	
199	.850	.500	1344.000	398.089	19.355	6.967	.032	
200	.900	.60	1373.028	421.506	19.863	7.376	.024	
201	.900	.30	1314.743	421.506	18.846	7.376	.030	
202	.950			444.857		7.785	.035	L.E. ROLLED 30°
203	↑	.050	1295.925	↑	18.514	↑	.035	
204		.100	1303.828		18.652		.035	
205		.300	1335.543		19.207		.024	
206		.500	1367.257		19.762		.022	
207	▼	.700	1398.950		20.316	▼	.035	
208	.950	.900	1430.650	▼	20.870	7.785	.030	
209	.966	0.00	1307.000	452.416	18.708	7.917	.032	L.E.
210	.993	0.00	1398.950	464.914	20.316	8.136	.031	L.E.
211	.600			281.004		4.918	.035	CLUSTER B
212	↑			↑		↑	.035	
213	▼			▼		▼	.035	
214	.600			281.004		4.918	.035	WING BOTTOM SURFACE

Table IV (Continued) Orbiter

T/C NO.	$\frac{2y}{b}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICKNESS	REMARKS
			x_0	x	x (FROM NOSE)	y		
215	.600			281.054		4.918	.035	CLUSTER B SEE FIG. 2
216	.600			281.054		4.918	.035	
217	.600			281.054		4.918	.035	
218	.850			398.089		6.967	.020	CLUSTER C SEE FIG. 2
219	↑			↑		↑	.020	
220	↑			↑		↑	.020	
221	↓			↓		↓	.020	
222	↓			↓		↓	.020	
223	↓			↓		↓	.020	
224	.850			398.089		6.967	.020	
225	.400	.050	1015.114	187.336	13.599	3.278	.025	WING TOP SURFACE
226	↑	.200	1090.428	↑	14.918	↑	.024	↑
227	↓	.600	1291.171	↓		↓	.033	
228	.400	.950	1466.875	187.336		3.278	.031	ELEVON
229	.600	.050	1134.886	281.004	15.696	4.918	.032	
230	.600	.200	1188.657	↑	16.637	↑	.031	
231	.600	.600	1332.028	↑	19.146	↑	.031	
232	↑	.800	1404.000	↓	20.404	↓	.032	ELEVON
233	↓	.900	1440.000	↓	21.034	↓	.034	↑
234	.600	.950	1458.000	281.004	21.349	4.918	.033	↓
235	.800	.050	1223.057	374.672	17.239	6.557	.033	
236	↑	.200	1260.257	↑	17.889	↑	.033	
237	↑	.600	1359.514	↑	19.627	↑	.032	
238	↓	.800	1408.780	↓	20.488	↓	.030	ELEVON
239	↓	.900	1433.690	↓	20.924	↓	.030	ELEVON
240	.800	.950	1446.145	374.672	21.192	6.557	.030	ELEVON ↓

Table IV (Continued)

Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			ϕ	SKIN THICKNESS	REMARKS
		x_0	y	z	x (FROM NOSE)	y	z			
241	.829	1307			18.715				.026	BOTTOM CREASE OF OMS
242	.900	1399.27			20.318				.035	BOTTOM CREASE OF OMS
243	.975	1496.04			22.011				.030	BOTTOM CREASE OF OMS
244	1.000	1528.3			22.575				.034	BOTTOM OF RCS
245	1.014	1547.0			22.902				.035	BOTTOM OF RCS
246	.780	1245	95.0	474.0	17.608	1.662	8.295	127.9	.032	OMS PODS
247	.805	1276	112.9	474.0	18.173	1.976	8.295	123.8	.031	↑
248	.829	1307	124.5	474.0	18.715	2.179	8.295	120.8	.031	
249	.862	1350	132.6	↑	19.460	2.320	8.295	119.1	.035	
250	.963	1480	142.5	↓	21.740	2.494	8.295	117.5	.028	
251	1.000	1528.3	142.5	↓	22.575	2.494	8.295	117.5	.033	
252	1.014	1547.0		474.0	22.902		8.295		.033	
253	.805	1276	105.5	488	18.173	1.846	8.540	129.5	.032	
254	.829	1307	117.0	498.7	18.715	2.048	8.727	130.0	.033	
255	.862	1350	126.5	506	19.460	2.214	8.855	130.0	.031	
256	.963	1480	134.5	513	21.740	2.354	8.978	130.0	.028	
257	1.000	1528.3		500	22.575		8.750		.031	
258	1.014	1547.0		500	22.902		8.750		.032	
259	.805	1276	95.0	494.3	18.173	1.662	8.650	135.0	.033	
260	.829	1307	95.0	511.0	18.715	1.662	8.942	139.0	.034	
261	.862	1350	95.0	521.0	19.460	1.662	9.118	142.1	.031	
262	.963	1480	95.0	530.0	21.740	1.662	9.275	144.0	.027	
263	.862	1350	65	517.5	19.460	1.138	9.056	151.2	.031	↓
264	.963	1480	65	527.0	21.740	1.138	9.222	153	.026	OMS PODS

Table IV (CONCLUDED) Orbiter

T/C NO.	$\frac{z}{b_v}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICKNESS	REMARKS
			x_0	z	x (FROM NOSE)	z		
265	.159	.100	1353.00	550.20	19.513	9.628	.030	VERTICAL TAIL
266	↑	.300	1401.51	550.20	20.361	9.628	.030	↑
267	↓	.700	1498.66	550.20	22.062	9.628	.028	
268	.299	0.00		594.40		10.402	.033	L.E.
269	↑	.100	1394.94	↑	20.246	↑	.031	
270	↑	.300	1439.00	↑	21.018	↑	.031	
271	↑	.500	1483.06	↑	21.789	↑	.031	
272	↓	.700	1527.11	↓	22.559	↓	.022	
273	.299	.900	1571.17	594.40	23.330	10.402	.022	
274	.532	0.00		667.96		11.689	.034	L.E.
275	↑	.100	1538.31	↑	22.755	↑	.031	
276	↑	.300	1574.94	↑	23.396	↑	.032	
277	↑	.500	1611.57	↑	24.034	↑	.032	
278	↓	.700	1648.14	↓	24.677	↓	.023	
279	.532	.900	1684.77	667.96	25.318	11.689	.026	
280	.765	0.00		741.53		12.977	.034	L.E.
281	.765	.100	1461.00	↑	21.403	↑	.031	
282	↑	.300	1490.14	↑	21.912	↑	.031	
283	↑	.500	1519.29	↑	22.423	↑	.030	
284	↓	.700	1548.43	↓	22.933	↓	.024	
285	.765	.900	1577.57	741.53	23.442	12.977	.024	
286	.905	0.00		785.73		13.750	.033	L.E.
287	.905	.100	1576.49	785.73	23.424	13.750	.030	↓
288	.905	.500	1625.86	785.73	24.288	13.750	.030	VERTICAL TAIL

Table V Orbiter Left Main Nozzle T/C Locations
Model 22-OTS

T/C NO.	x FROM EXIT PLANE		SKIN THICKNESS	ϕ_n CLOCKWISE LOOKING FORWARD 0° BOTTOM ϵ
	F.S.	M.S.		
301	5"	0.088	.031	0°
302			.031	25°
303			.031	45°
304			.031	65°
305			.031	90°
306			.031	135°
307	▼	▼	.031	315°
308	10"	0.175	.031	0°
309			.031	25°
310			.031	45°
311			.031	65°
312	▼	▼	.031	90°
313	15"	0.263	.031	0°
314			.031	45°
315	▼	▼	.031	90°
316	25"	0.438	.031	0°
317			.031	45°
318			.031	65°
319	▼	▼	.031	90°
320	45"	0.788	.031	45°
321			.032	BASE PLATE
322			.034	
323			.031	
324			.032	▼

**Table VI Solid Rocket Booster T/C Locations
Model 22-OTS**

T/C NO.	x_s FS	x_{ms}^*	$\frac{x}{L}$	ψ	SKIN THICKNESS	REMARKS
701	200.000	0.000	0.000	90°	.022	NOSE
702	241.900	0.733	0.025	90°	.031	↓
703	283.800	1.467	0.050	90°	.031	
704	367.600	2.933	0.100	90°	.033	
705	870.400	11.732	0.400	90°	.029	
706	1373.200	20.531	0.700	90°	.030	
707	1507.280	22.877	0.780	90°	.030	
708	1540.800	23.464	0.800	90°	.029	
709	1708.400	26.397	0.900	90°	.031	
710	1758.680	27.277	0.930	90°	.034	
711	1859.240	29.037	0.990	90°	.036	
712	1373.200	20.531	0.700	135°	.030	
713	1708.400	26.397	0.900	135°	.030	
714	1758.680	27.277	0.930	135°	.034	
715	1859.240	29.037	0.990	135°	.035	
716	283.800	1.467	0.050	180°	.032	
717	367.600	2.933	0.100	180°	.034	
718	535.200	5.866	0.200	180°	.030	
719	870.400	11.732	0.400	180°	.030	
720	1038.000	14.665	0.500	180°	.029	
721	1205.600	17.598	0.600	180°	.030	
722	1289.400	19.065	0.650	180°	.030	
723	1373.200	20.531	0.700	180°	.029	
724	1457.000	21.998	0.750	180°	.029	
725	1507.280	22.877	0.780	180°	.030	
726	1540.800	23.464	0.800	180°	.028	
727	1624.600	24.931	0.850	180°	.028	
728	1708.400	26.397	0.900	180°	.028	
729	1758.680	27.277	0.930	180°	.032	SKIRT
730	1808.960	28.157	0.960	180°	.034	SKIRT
731	1859.240	29.037	0.990	180°	.034	SKIRT
732	1715.000	26.514	0.904	210°	.028	SEPARATION
733	1738.000	26.984	0.918	210°	.030	NOZZLES 15-5PH

*MEASURED FROM NOSE

Table VI (Continued)
(Solid Rocket Booster)

T/C NO.	x_s FS	x_{ms}^*	$\frac{x}{L}$	ψ	SKIN THICKNESS	REMARKS
734	1750.000	27.130	0.925	210°	.032	SEPARATION NOZZLES
735	1792.200	27.864	0.950	210°	.033	15-5PH
736	1825.720	28.450	0.970	210°	.032	
737	1750.300	27.130	0.925	≈ 215°	.032	
738	1775.440	27.570	0.940	≈ 215°	.032	
739	1808.960	28.157	0.960	≈ 215°	.033	
740	325.700	2.200	0.075	225°	.035	
741	367.600	2.933	0.100	225°	.034	
742	451.400	4.400	0.150	225°	.032	
743	535.200	5.866	0.200	225°	.030	
744	702.800	8.799	0.300	225°	.028	
745	870.400	11.732	0.400	225°	.030	
746	1038.000	14.665	0.500	225°	.030	
747	1205.600	17.598	0.600	225°	.030	
748	1373.200	20.531	0.700	225°	.030	
749	1507.280	22.877	0.780	225°	.030	
750	1540.800	23.464	0.800	225°	.029	
751	1624.600	24.931	0.850	225°	.029	
752	1708.400	26.397	0.900	225°	.027	
753	1758.680	27.277	0.930	225°	.031	SKIRT
754	1808.960	28.157	0.960	225°	.032	
755	1859.240	29.037	0.990	225°	.032	
756	1758.68	27.277	0.930	240°	.030	
757	1808.960	28.157	0.960	240°	.031	
758	1859.240	29.037	0.990	240°	.032	
759	702.800	8.799	0.300	247.5°	.028	
760	870.400	11.732	0.400	247.5°	.030	
761	1038.000	14.665	0.500	247.5°	.030	
762	1205.600	17.598	0.600	247.5°	.030	
763	1289.400	19.065	0.650	247.5°	.031	
764	1373.200	20.531	0.700	247.5°	.030	
765	1457.000	21.998	0.750	247.5°	.031	
766	392.740	3.373	0.115	260°	.032	

*MEASURED FROM NOSE

Table VI (Concluded)
(Solid Rocket Booster)

T/C NO.	x_s FS	x_{ms}^*	$\frac{x}{L}$	ψ	SKIN THICKNESS	REMARKS
767	203.816	0.067	0.002	270 ⁰	.035	ON 45 ⁰ RAY FROM NOSE RADIUS
768	241.900	0.733	0.025	270 ⁰	.033	
769	283.800	1.467	0.050	270 ⁰	.033	
770	325.700	2.200	0.075	270 ⁰	.036	
771	367.600	2.933	0.100	270 ⁰	.036	
772	384.360	3.226	0.110	270 ⁰	.036	
773	417.880	3.813	0.130	270 ⁰	.032	
774	451.400	4.400	0.150	270 ⁰	.032	
775	535.200	5.866	0.200	270 ⁰	.030	
776	619.000	7.333	0.250	270 ⁰	.030	
777	702.800	8.799	0.300	270 ⁰	.028	
778	870.400	11.732	0.400	270 ⁰	.029	
779	1038.000	14.665	0.500	270 ⁰	.030	
780	1205.600	17.598	0.600	270 ⁰	.031	
781	1289.400	19.065	0.650	270 ⁰	.031	
782	1373.200	20.531	0.700	270 ⁰	.030	
783	1457.000	21.998	0.750	270 ⁰	.030	
784	1507.280	22.877	0.780	270 ⁰	.030	
785	1540.800	23.464	0.800	270 ⁰	.030	
786	1624.600	24.931	0.850	270 ⁰	.030	
787	1708.400	26.397	0.900	270 ⁰	.027	
788	1758.680	27.277	0.930	270 ⁰	.029	SKIRT
789	1808.960	28.157	0.960	270 ⁰	.032	↓
790	1859.240	29.037	0.990	270 ⁰	.032	↓
791	702.800	8.799	0.300	315 ⁰	.029	
792	1038.000	14.665	0.500	315 ⁰	.030	
793	1373.000	20.531	0.700	315 ⁰	.029	
794	1507.280	22.877	0.780	315 ⁰	.028	
795	1540.800	23.464	0.800	315 ⁰	.028	
796	1708.400	26.397	0.900	315 ⁰	.028	
797	1758.680	27.277	0.930	315 ⁰	.030	
798	1859.240	29.037	0.990	315 ⁰	.032	

*MEASURED FROM NOSE

Table VII External Tank Locations

T/C NO.	x_T FS	x_{ms}^*	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
501	383.60	1.306	.040	0°	.034	NOSE
502	458.20	2.6110	.080	↑	.034	NOSE
503	588.75	4.896	.150		.035	NOSE
504	1055.00	13.055	.400		.035	
505	1428.00	19.582	.600	↓	.034	
506	1801.00	26.110	.800	0°	.035	
507	1055.00	13.055	.400	45°	.035	
508	1241.50	16.319	.500	↑	.035	
509	1428.00	19.582	.600		.034	
510	1614.50	22.846	.700	↓	.034	
511	1801.00	26.110	.800		.035	
512	1987.5	29.374	.900	45°	↑	
513	868.5	9.791	.300	67.5°		
514	961.75	11.423	.350	↑	↓	
515	1055.00	13.055	.400		.035	
516	1241.50	16.319	.500	↑	.034	
517	1428.00	19.582	.600		↑	
518	1521.25	21.214	.650	↓	↓	
519	1614.50	22.846	.700		.034	
520	1707.75	24.478	.750	↓	.035	
521	1801.00	26.110	.800		↑	
522	1987.5	29.374	.900	67.5°	↑	
523	682.00	6.528	.200	90°		
524	775.25	8.159	.250	↑		
525	821.88	8.975	.275			
526	868.50	9.791	.300	↑		
527	915.12	10.607	.325		↓	
528	961.75	11.423	.350	↑	.035	
529	1055.00	13.055	.400		.034	
530	1148.25	14.687	.450	↑	.035	
531	1241.5	16.319	.500		.034	
532	1334.75	17.951	.550	↓	.035	
533	1428.00	19.582	.600		90°	.034

*MEASURED FROM NOSE

Table VII(Continued)
(External Tank)

T/C NO.	x_T FS	x_{ms}^*	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
534	1521.25	21.214	.650	90°	.034	
535	1614.50	22.846	.700	↑	.034	
536	1707.75	24.478	.750	↑	.035	
537	1801.00	26.110	.800	↑	.035	
538	1894.25	27.742	.850	↓	.034	
539	1987.50	29.374	.900	90°		
540	821.88	8.975	.275	112.5°	.035	
541	968.50	9.791	.300	↑	↑	
542	915.12	10.607	.325	↑	↑	
543	961.75	11.423	.350	↑	↓	
544	1055.00	13.055	.400	↑	↓	
545	1148.25	14.687	.450	↑	.035	
546	1241.50	16.319	.500	↑	.034	
547	1334.75	17.951	.550	↑	.035	
548	1428.00	19.582	.600	↑	.034	
549	1521.25	21.214	.650	↑	.034	
550	1614.50	22.846	.700	↑	.034	
551	1707.75	24.478	.750	↑	.035	
552	1801.00	26.110	.800	↑	↑	
553	1894.25	27.742	.850	↓	↓	
554	1987.50	29.374	.900	112.5°	.035	
555	1847.62	26.926	.825	123°	.034	
556	1894.25	27.742	.850	↑	.035	
557	1940.88	28.558	.875	↑	.034	
558	1987.50	29.374	.900	↑	.035	
559	2034.12	30.190	.925	↓	.035	
560	2099.40	31.332	.960	123°	.034	
561	915.12	10.607	.325	135°	.035	
562	961.75	11.423	.350	↑	↑	
563	1008.38	12.239	.375	↑	↑	
564	1055.00	13.055	.400	↑	↓	
565	1148.25	14.687	.450	↑	.035	
566	1241.50	16.319	.500	↑	.034	
567	1334.75	17.951	.550	↑	.035	
568	1428.00	19.582	.600	↓	.034	
569	1521.25	21.214	.650	135°	.034	

*MEASURED FROM NOSE

Table VII (Continued)
(External Tank)

T/C NO.	x_T FS	x_{ms}	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
570	1614.50	22.846	.700	135°	.035	
571	1707.75	24.478	.750	↑	.034	
572	1801.00	26.110	.800	↓	.035	
573	1894.25	27.742	.850	↓	.034	
574	1987.50	29.374	.900	↓	.035	
575	2052.78	30.576	.935	135°		
576	1055.00	13.055	.400	151	.035	
577	1101.62	13.871	.425	157	↑	
578	1148.25	14.687	.450	↑	↓	
579	1194.88	15.503	.475	↑	.035	
580	1241.50	16.319	.500	↑	.034	
581	1334.75	17.951	.550	↑	.035	
582	1428.00	19.582	.600	↑	.034	
583	1521.25	21.214	.650	↑	.034	
584	1614.50	22.846	.700	↑	.035	
585	1707.75	24.478	.750	↑	.035	
586	1801.00	26.110	.800	↑	.035	
587	1894.25	27.742	.850	↓	.034	
588	1987.50	29.374	.900	157	.034	
589	1101.62	13.871	.425	161	.035	
590	1241.50	16.319	.500	165°	.034	
591	1614.50	22.846	.700	165°	.035	
592	1987.50	29.374	.900	165°	.034	
593	1055.00	13.055	.400	165°	.035	
594	309.00	0.000	0.000	180	.033	NOSE
595	318.32	0.163	.005	↑	.033	↓
596	327.65	0.326	.010	↑	.034	↓
597	383.60	1.306	.040	↓	.033	↓
598	458.20	2.611	.080	180°	.035	↓

*MEASURED FROM NOSE

Table VII (CONTINUED)
(External Tank)

T/C NO.	x_T FS	x_{ms}^*	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
599	588.75	4.896	.150	180°	.035	
600	682.00	6.528	.200	↑	.034	
601	775.25	8.159	.250	↑	.035	
602	868.50	9.791	.300	↑	↑	
603	961.75	11.423	.350	↑	↓	
604	1008.38	12.239	.375	↑	.035	
605	1055.00	13.055	.400	↑	.034	
606	1101.62	13.871	.425	↑	↑	
607	1148.25	14.687	.450	↑	↓	
608	1194.88	15.503	.475	↑	↓	
609	1241.50	16.319	.500	↑	.034	
610	1288.12	17.135	.525	↑	.035	
611	1334.75	17.951	.550	↑	.035	
612	1381.38	18.767	.575	↑	.034	
613	1428.00	19.582	.600	↑	↑	
614	1474.62	20.398	.625	↑	↓	
615	1521.25	21.214	.650	↑	↓	
616	1567.88	22.030	.675	↑	↓	
617	1614.50	22.846	.700	↑	.034	
618	1707.75	24.478	.750	↑	.035	
619	1801.00	26.110	.800	↑	.035	
620	1894.25	27.742	.850	↑	.035	
621	1987.5	29.374	.900	↑	.034	
622	2056.50	30.581	.937	↓	.034	
623	2127.38	31.822	.975	180°	.034	
624	458.20	2.611	.080	194°	.035	
625	587.75	4.896	.150	196°	.035	
626	868.50	9.791	.300	196°	.035	

*MEASURED FROM NOSE

Table VII (Concluded)
(External Tank)

T/C NO.	x_T FS	x_{ms}^*	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
627	1241.50	16.319	.500	196°	.034	
628	1614.50	22.846	.700	196°	.034	
629	1987.50	29.374	.900	197°	.034	
630	588.75	4.896	.150	208°	.033	
631	1055.00	13.055	.400	↑	.034	
632	1428.00	19.582	.600	↕	.035	
633	1801.00	26.110	.800	↓	.035	
634	2056.50	30.581		208	.035	
635	1055.00	13.055	.400	216°	.034	
636	1241.50	16.319	.500	216°	.034	
637	1614.50	22.846	.700	216°	.034	
638	933.78	10.934	.335	222.5°	.036	
639	1055.00	13.055	.400	229°	.034	
640	1428.00	19.582	.600	229°	.035	
641	1801.00	26.110	.800	229°	.035	

*MEASURED FROM NOSE

TABLE VIII

Thermocouple Schedule No. X1

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
1	1	48	26	91	51
2	2	50	27	92	52
3	3	52	28	93	53
4	4	54	29	94	54
6	5	56	30	95	55
8	6	58	31	96	56
10	7	59	32	97	57
12	8	60	33	98	58
14	9	61	34	99	59
16	10	62	35	100	60
18	11	63	36	101	61
20	12	64	37	102	62
22	13	65	38	104	63
24	14	66	39	105	64
26	15	67	40	111	65
28	16	68	41	115	66
30	17	69	42	116	67
32	18	71	43	134	68
34	19	72	44	135	69
36	20	74	45	150	70
38	21	79	46	155	71
40	22	84	47	156	72
42	23	87	48	157	73
44	24	88	49	158	74
46	25	90	50	159	75

TABLE VIII

Thermocouple Schedule No. X2

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
160	1	187	26	214	51
161	2	188	27	215	52
162	3	189	28	216	53
163	4	190	29	218	54
164	5	191	30	219	55
165	6	192	31	220	56
166	7	193	32	221	57
167	8	196	33	222	58
168	9	197	34	229	59
169	10	198	35	230	60
170	11	199	36	232	61
171	12	200	37	234	62
172	13	201	38	246	63
173	14	202	39	247	64
174	15	203	40	274	65
175	16	204	41	275	66
176	17	205	42	276	67
177	18	206	43	277	68
178	19	207	44	278	69
179	20	208	45	279	70
180	21	209	46	280	71
181	22	210	47	281	72
182	23	211	48	282	73
183	24	212	49	283	74
184	25	213	50	284	75

TABLE VIII

Thermocouple Schedule No. X3

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
5	1	57	26	119	51
7	2	70	27	120	52
9	3	73	28	121	53
11	4	75	29	122	54
15	5	76	30	123	55
17	6	77	31	124	56
19	7	78	32	125	57
21	8	80	33	126	58
23	9	81	34	127	59
25	10	82	35	128	60
27	11	83	36	129	61
29	12	85	37	130	62
31	13	86	38	131	63
33	14	89	39	132	64
35	15	103	40	133	65
37	16	106	41	136	66
39	17	107	42	137	67
41	18	108	43	138	68
43	19	109	44	139	69
45	20	110	45	140	70
47	21	112	46	141	71
49	22	113	47	142	72
51	23	114	48	143	73
53	24	117	49	144	74
55	25	118	50	145	75

TABLE VIII

Thermocouple Schedule No. X4

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
146	1	239	26	266	51
147	2	240	27	267	52
148	3	241	28	268	53
149	4	242	29	269	54
151	5	243	30	270	55
152	6	244	31	271	56
153	7	245	32	272	57
154	8	248	33	273	58
185	9	249	34	286	59
186	10	250	35	287	60
194	11	251	36	501	61
195	12	252	37	502	62
217	13	253	38	503	63
223	14	254	39	504	64
224	15	255	40	505	65
225	16	256	41	506	66
226	17	257	42	507	67
227	18	258	43	508	68
228	19	259	44	509	69
231	20	260	45	510	70
233	21	261	46	511	71
235	22	262	47	512	72
236	23	263	48	513	73
237	24	264	49	514	74
238	25	265	50	515	75

TABLE VIII

Thermocouple Schedule No. X5

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
516	1	541	26	566	51
517	2	542	27	567	52
518	3	543	28	568	53
519	4	544	29	569	54
520	5	545	30	570	55
521	6	546	31	571	56
522	7	547	32	572	57
523	8	548	33	573	58
524	9	549	34	574	59
525	10	550	35	575	60
526	11	551	36	576	61
527	12	552	37	577	62
528	13	553	38	578	63
529	14	554	39	579	64
530	15	555	40	580	65
531	16	556	41	581	66
532	17	557	42	582	67
533	18	558	43	583	68
534	19	559	44	584	69
535	20	560	45	585	70
536	21	561	46	586	71
537	22	562	47	587	72
538	23	563	48	588	73
539	24	564	49	589	74
540	25	565	50	590	75

TABLE VIII

Thermocouple Schedule No. X6

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
591	1	616	26	752	51
592	2	617	27	759	52
593	3	618	28	792	53
594	4	619	29	636	54
595	5	620	30	637	55
596	6	621	31	638	56
597	7	622	32	639	57
598	8	623	33	640	58
599	9	624	34	641	59
600	10	625	35	Open	60
601	11	626	36	701	61
602	12	627	37	702	62
603	13	628	38	703	63
604	14	629	39	704	64
605	15	630	40	705	65
606	16	631	41	708	66
607	17	632	42	709	67
608	18	633	43	710	68
609	19	634	44	711	69
610	20	635	45	714	70
611	21	706	46	715	71
612	22	707	47	716	72
613	23	713	48	717	73
614	24	744	49	718	74
615	25	749	50	719	75

TABLE VIII

Thermocouple Schedule No. X7

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
720	1	753	26	784	51
721	2	754	27	785	52
722	3	755	28	787	53
723	4	756	29	788	54
724	5	757	30	789	55
725	6	758	31	790	56
726	7	760	32	791	57
728	8	762	33	793	58
729	9	766	34	797	59
730	10	767	35	798	60
731	11	768	36	712	61
732	12	769	37	727	62
733	13	770	38	746	63
734	14	771	39	748	64
735	15	772	40	750	65
736	16	773	41	751	66
737	17	774	42	761	67
738	18	775	43	763	68
739	19	776	44	764	69
740	20	777	45	765	70
741	21	778	46	780	71
742	22	779	47	786	72
743	23	781	48	794	73
745	24	782	49	795	74
747	25	783	50	796	75

TABLE VIII

Thermocouple Schedule No. X8

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
501	1	526	26	551	51
502	2	527	27	552	52
503	3	528	28	553	53
504	4	529	29	554	54
505	5	530	30	555	55
506	6	531	31	556	56
507	7	532	32	557	57
508	8	533	33	558	58
509	9	534	34	559	59
510	10	535	35	560	60
511	11	536	36	561	61
512	12	537	37	562	62
513	13	538	38	563	63
514	14	539	39	564	64
515	15	540	40	565	65
516	16	541	41	566	66
517	17	542	42	567	67
518	18	543	43	568	68
519	19	544	44	569	69
520	20	545	45	570	70
521	21	546	46	571	71
522	22	547	47	572	72
523	23	548	48	573	73
524	24	549	49	574	74
525	25	550	50	575	75

TABLE VIII

Thermocouple Schedule No. X9

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
576	1	601	26	626	51
577	2	602	27	627	52
578	3	603	28	628	53
579	4	604	29	629	54
580	5	605	30	630	55
581	6	606	31	631	56
582	7	607	32	632	57
583	8	608	33	633	58
584	9	609	34	634	59
585	10	610	35	635	60
586	11	611	36	636	61
587	12	612	37	637	62
588	13	613	38	638	63
589	14	614	39	639	64
590	15	615	40	640	65
591	16	616	41	641	66
592	17	617	42	Open	67
593	18	618	43	Open	68
594	19	619	44	Open	69
595	20	620	45	Open	70
596	21	621	46	Open	71
597	22	622	47	Open	72
598	23	623	48	Open	73
599	24	624	49	Open	74
600	25	625	50	Open	75

TABLE VIII

Thermocouple Schedule No. X10

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
701	1	731	26	768	51
702	2	732	27	769	52
703	3	733	28	770	53
704	4	734	29	771	54
705	5	735	30	772	55
708	6	736	31	773	56
709	7	737	32	774	57
710	8	738	33	775	58
711	9	739	34	776	59
714	10	740	35	777	60
715	11	741	36	778	61
716	12	742	37	779	62
717	13	743	38	781	63
718	14	745	39	782	64
719	15	747	40	783	65
720	16	753	41	784	66
721	17	754	42	785	67
722	18	755	43	787	68
723	19	756	44	788	69
724	20	757	45	789	70
725	21	758	46	790	71
726	22	760	47	791	72
728	23	762	48	793	73
729	24	766	49	797	74
730	25	767	50	798	75

TABLE VIII

Thermocouple Schedule No. XII

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
37	1	106	26	521	51
39	2	107	27	522	52
41	3	108	28	523	53
43	4	109	29	524	54
45	5	110	30	525	55
47	6	129	31	526	56
49	7	130	32	527	57
51	8	131	33	528	58
53	9	132	34	529	59
Open	10	133	35	530	60
Open	11	136	36	531	61
70	12	137	37	532	62
73	13	138	38	533	63
75	14	139	39	534	64
76	15	140	40	535	65
77	16	141	41	536	66
78	17	142	42	537	67
80	18	143	43	538	68
81	19	144	44	539	69
82	20	145	45	540	70
83	21	516	46	541	71
85	22	517	47	542	72
86	23	518	48	543	73
89	24	519	49	544	74
103	25	520	50	545	75

TABLE VIII

Thermocouple Schedule No. X12

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
146	1	239	26	266	51
147	2	240	27	267	52
148	3	241	28	268	53
149	4	242	29	269	54
151	5	243	30	270	55
152	6	244	31	271	56
153	7	245	32	272	57
154	8	248	33	273	58
185	9	249	34	286	59
186	10	250	35	287	60
194	11	251	36	701	61
195	12	252	37	702	62
217	13	253	38	703	63
223	14	254	39	704	64
224	15	255	40	705	65
225	16	256	41	708	66
226	17	257	42	709	67
227	18	258	43	710	68
228	19	259	44	711	69
231	20	260	45	714	70
233	21	261	46	715	71
235	22	262	47	716	72
236	23	263	48	717	73
237	24	264	49	718	74
238	25	265	50	719	75

TABLE VIII

Thermocouple Schedule No. X13

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
546	1	586	26	611	51
547	2	587	27	612	52
548	3	588	28	613	53
549	4	589	29	614	54
550	5	590	30	615	55
551	6	591	31	616	56
552	7	592	32	617	57
553	8	593	33	618	58
554	9	594	34	619	59
555	10	595	35	620	60
556	11	596	36	621	61
557	12	597	37	622	62
558	13	598	38	623	63
559	14	599	39	624	64
560	15	600	40	625	65
576	16	601	41	626	66
577	17	602	42	627	67
578	18	603	43	628	68
579	19	604	44	629	69
580	20	605	45	630	70
581	21	606	46	631	71
582	22	607	47	632	72
583	23	608	48	633	73
584	24	609	49	634	74
585	25	610	50	635	75

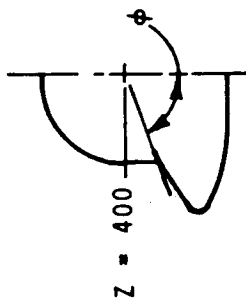
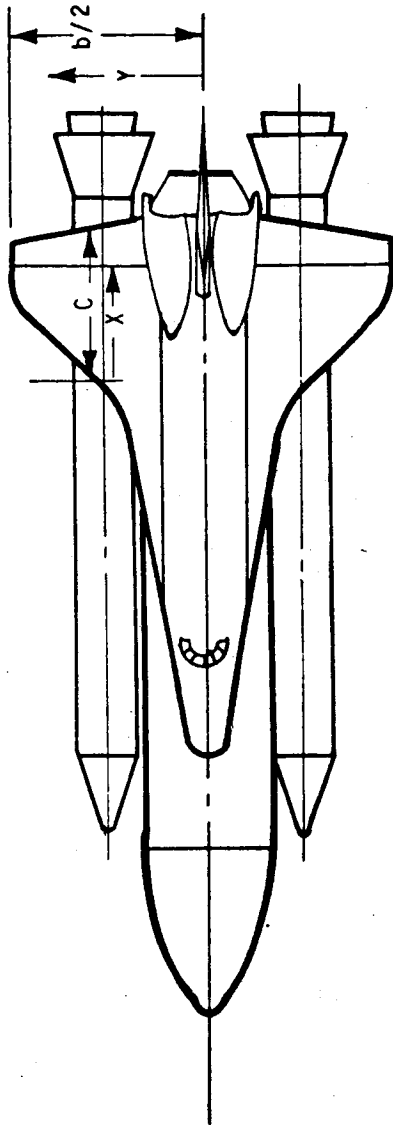
TABLE IX.
 RUN NUMBER/TUNNEL CONDITION SUMMARY

Run #	Re_{∞}/ft $\times 10^6$	PT (psi)	TT (°R)	HT (BTU/lb _m)
3	1.4909	165.58	1581.2	390.90
5	1.4111	141.88	1487.5	366.19
7	1.3945	119.68	1348.1	329.90
8	1.4341	120.04	1327.2	324.51
9	1.4762	122.81	1322.1	323.19
10	1.4540	118.76	1306.9	319.30
11	1.4993	121.26	1298.8	317.22
12	4.7266	405.72	1348.2	329.94
13	5.0370	405.98	1296.0	316.50
14	4.9672	403.68	1302.8	318.23
15	4.9723	405.35	1305.4	318.89
16	4.9533	406.35	1310.5	320.21
17	5.0060	405.69	1300.5	317.64
18	5.0979	404.88	1284.1	313.43
19	1.4998	122.63	1307.7	319.50
20	1.5374	121.33	1278.9	312.11
21	1.5232	122.04	1291.2	315.26
22	1.4696	122.08	1320.8	322.87
23	1.6062	119.90	1234.9	300.85
24	1.5275	122.10	1289.3	314.76
25	1.5757	119.48	1247.1	303.98
26	4.9504	405.67	1309.6	319.98
27	4.9770	406.03	1305.9	319.04
28	4.9574	405.59	1308.3	319.64
29	4.9770	406.32	1306.5	319.19
30	5.0055	406.22	1301.6	317.93
31	5.0063	406.42	1301.9	318.01
32	5.0389	406.71	1297.2	316.80
33	5.0961	405.17	1285.0	313.65
34	4.9856	405.20	1302.8	318.24
35	5.0750	405.72	1289.4	314.80
36	5.0306	406.14	1297.4	316.85
37	5.1486	401.85	1270.1	309.85
38	5.0550	406.03	1293.2	315.78
39	5.0452	406.22	1295.2	316.28
40	1.6365	130.40	1286.8	314.12

TABLE IX.
(Concluded)

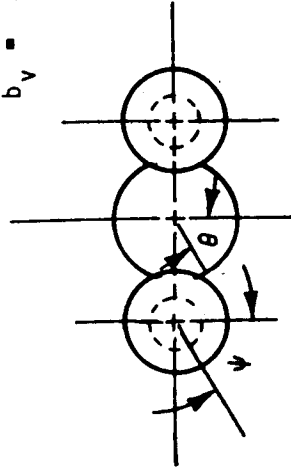
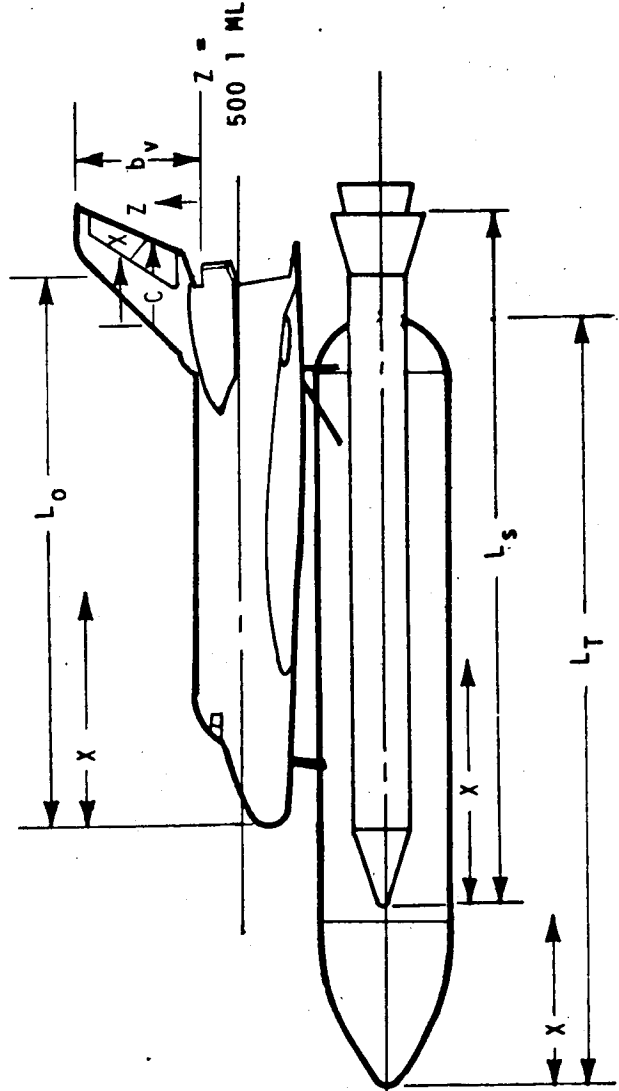
Run #	Re_{∞}/ft $\times 10^6$	PT (psi)	TT (°R)	HT (BTU/lb _m)
41	1.5819	126.58	1290.2	314.99
42	1.5224	122.73	1296.2	316.55
43	1.5160	123.06	1301.8	317.99
44	5.1123	406.40	1284.8	313.62
45	5.0361	406.22	1296.7	316.66
46	5.0028	405.88	1301.4	317.87
47	5.3924	404.93	1239.5	302.03
48	1.5328	123.06	1292.8	315.67
49	1.5263	122.69	1293.9	315.94
50	1.4308	118.69	1319.7	322.57
51	1.4952	121.64	1303.6	318.44
52	5.0533	405.46	1292.4	315.56
53	5.0265	406.40	1298.6	317.15
54	5.1372	405.09	1278.3	311.95
55	4.9871	402.92	1298.0	317.00
56	1.5132	121.59	1293.6	315.86
57	1.5033	121.59	1298.9	317.23
58	5.0864	405.30	1286.8	314.12
59	5.0929	405.30	1285.7	313.85
60	5.0577	405.30	1291.3	315.29
61	5.0730	405.64	1289.6	314.84
62	1.5553	137.52	1373.4	336.46
63	1.5070	123.06	1306.7	319.24
64	1.5093	122.73	1303.3	318.37
65	5.0737	406.22	1290.6	315.10
66	5.1122	406.32	1284.7	313.59
68	1.4966	120.98	1298.4	317.12
69	5.2179	406.16	1268.0	309.30
70	4.9056	407.29	1320.4	322.76
71	5.0011	406.76	1303.5	318.40
72	4.9871	403.86	1299.9	317.49
73	5.0038	405.88	1301.2	317.83
74	5.0508	406.74	1295.3	316.32
76	5.0175	406.92	1301.1	317.80
77	5.0556	410.46	1302.0	318.02
78	5.0607	406.58	1293.4	315.83
79	4.9699	406.92	1308.9	319.81

INSTRUMENTATION LOCATION SYSTEM



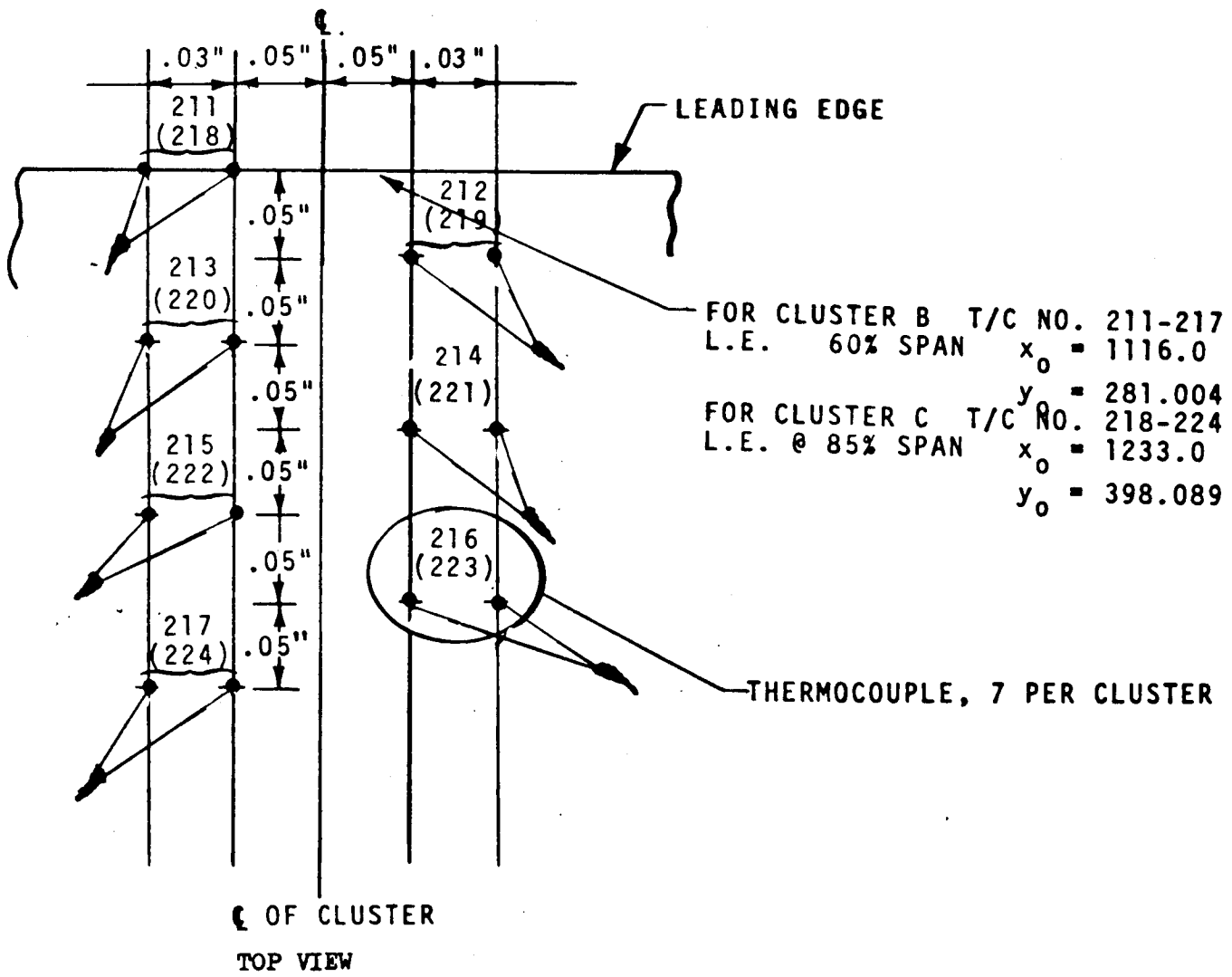
VIEW LOOKING FORWARD ψ ,
 θ AND ϕ MEASURED FROM
 BOTTOM & CLOCKWISE

- $L_0 = 1290.3$
- $L_T = 1865.0$
- $L_S = 1676.0$
- $b/2 = 468.34$
- $b_V = 315.72$



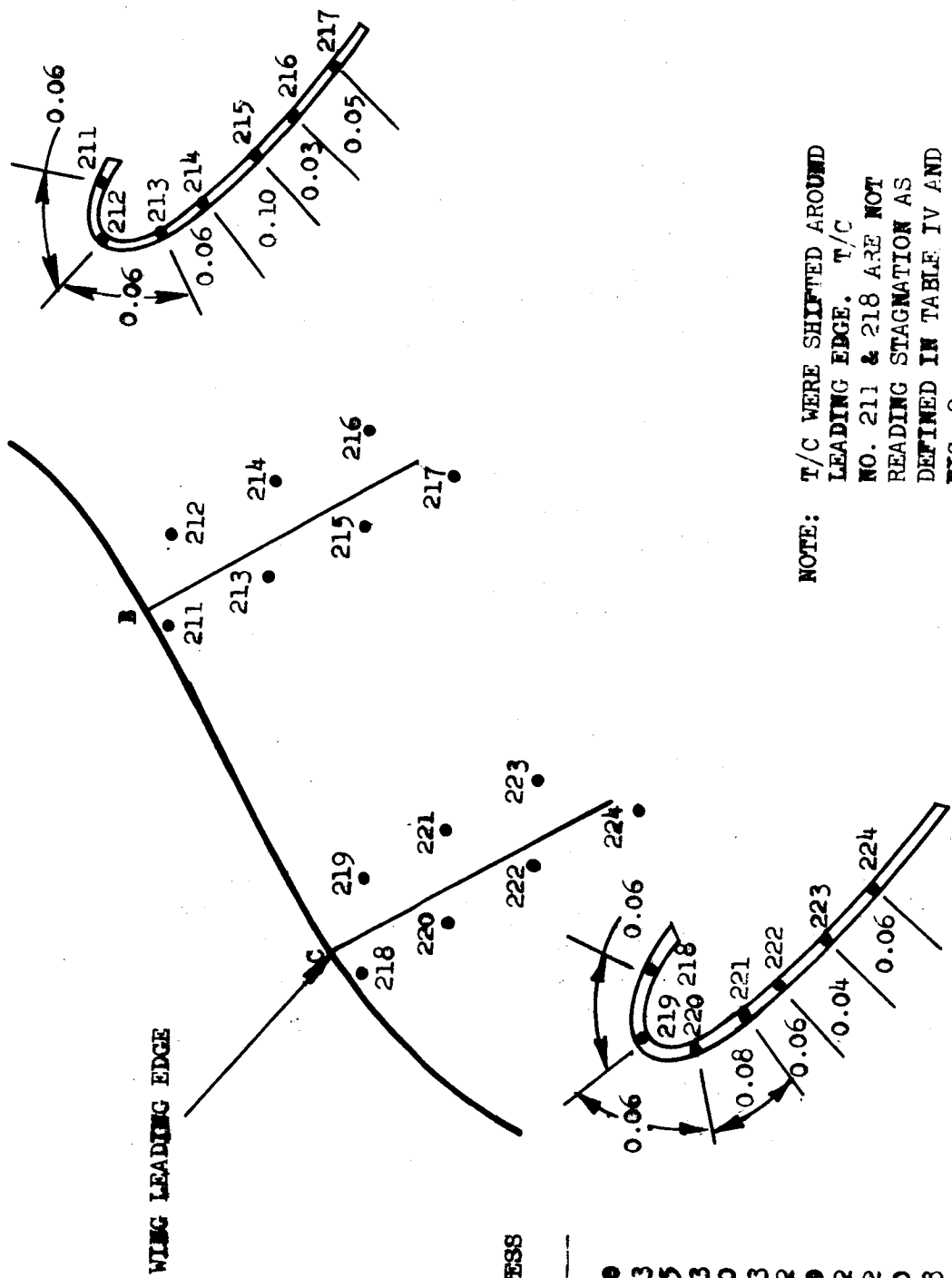
a. Model instrumentation reference system

Figure 1. - Concluded.



a. Assumed Plotted Wing Leading-Edge Clusters B & C T/C Locations,
(Used for Plotted and Tabulated Data Presentations)

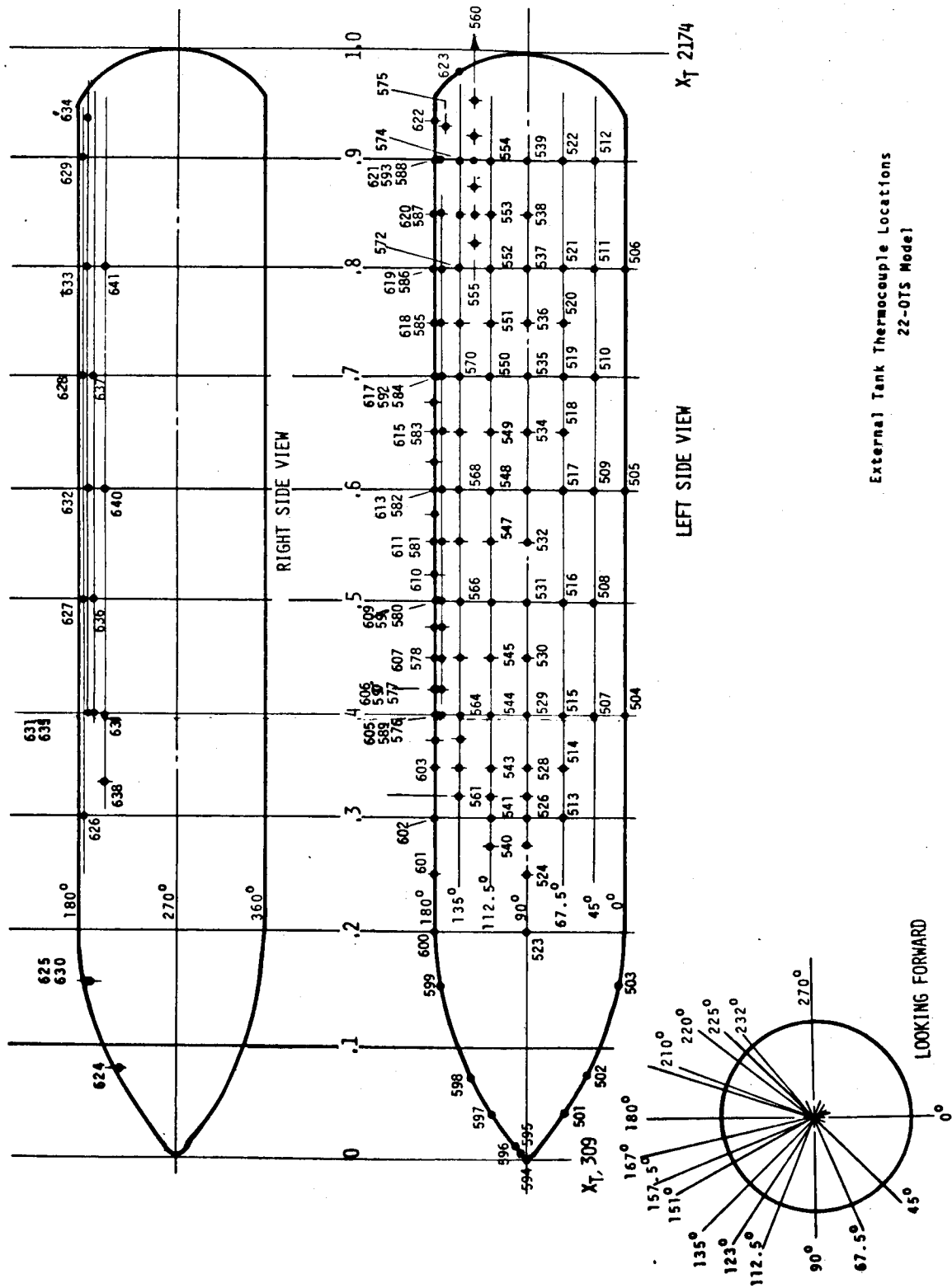
Figure 2. - Model instrumentation.



NOTE: T/C WERE SHIFTED AROUND LEADING EDGE. T/C NO. 211 & 218 ARE NOT READING STAGNATION AS DEFINED IN TABLE IV AND FIG. 2a

T/C No.	THICKNESS
211	0.030
212	0.023
213	0.035
214	0.033
215	0.030
216	0.033
217	0.032
218	0.040
219	0.032
220	0.052
221	0.040
222	0.033
223	0.034
224	0.032

b. Actual Wing Leading Edge Clusters B & C T/C Locations and Skin Thickness (post Test Dimensional Check)

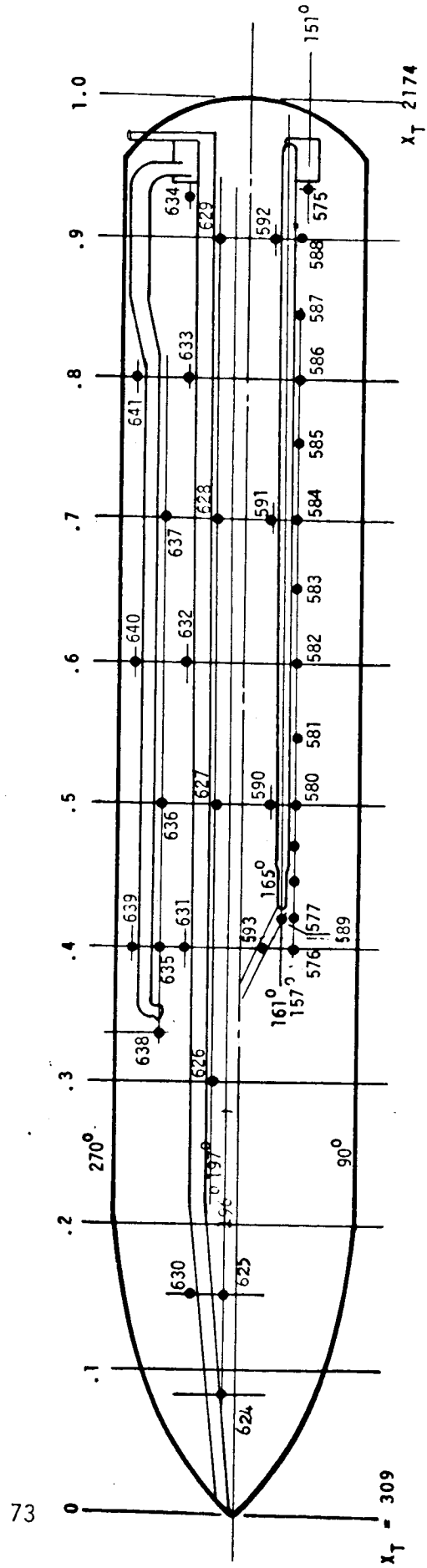


External Tank Thermocouple Locations
22-OTS Model

c. External Tank T/C Locations-Side Views

Figure 2. - Continued.

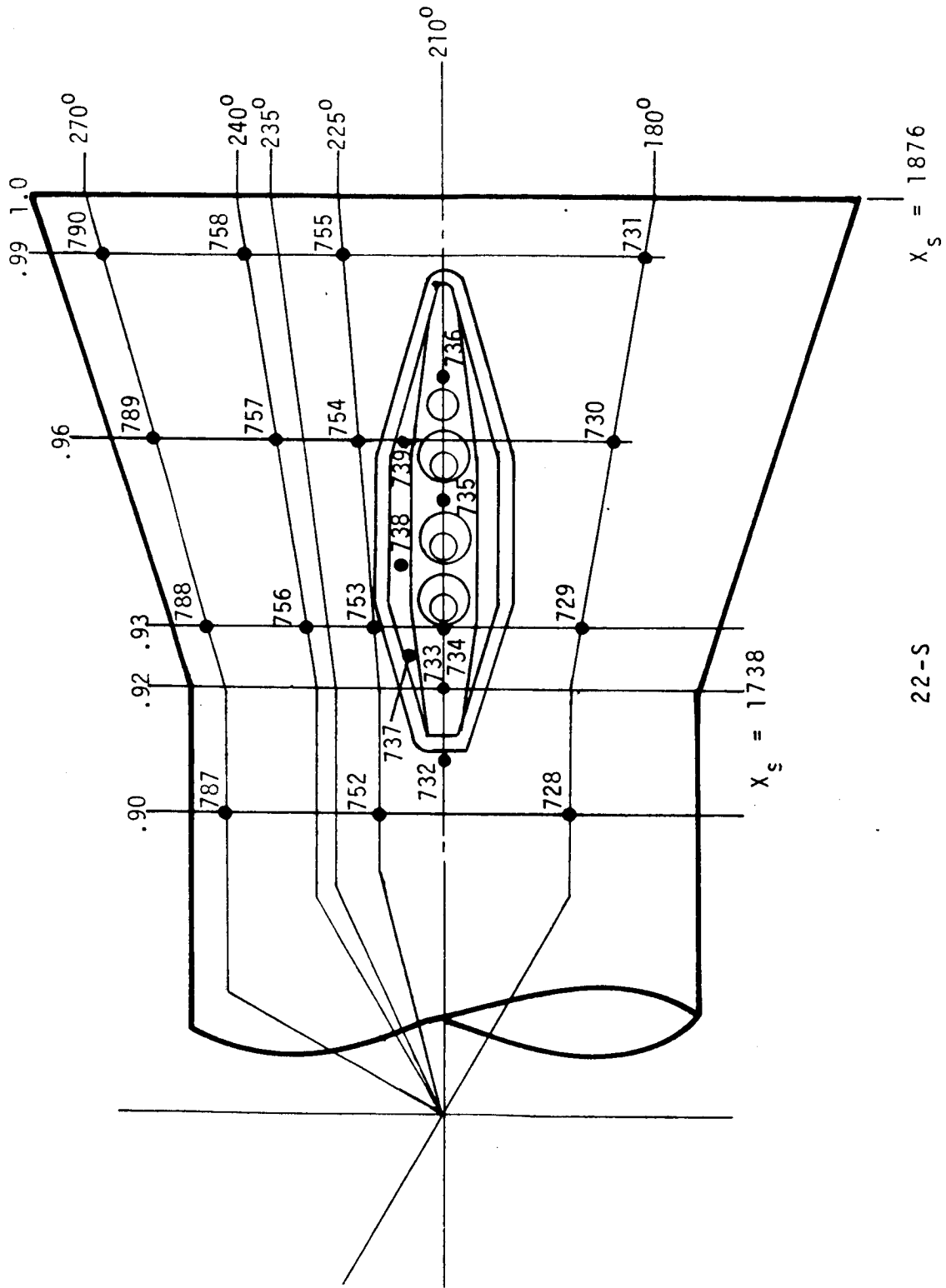
EXTERNAL TANK THERMOCOUPLE LOCATIONS
(LOCATIONS AROUND PLUMBING ONLY)
MODEL 22-0TS



TOP VIEW

d. External Tank T/C Locations (Locations Around Plumbing Lines) Top View

Figure 2. - Continued.

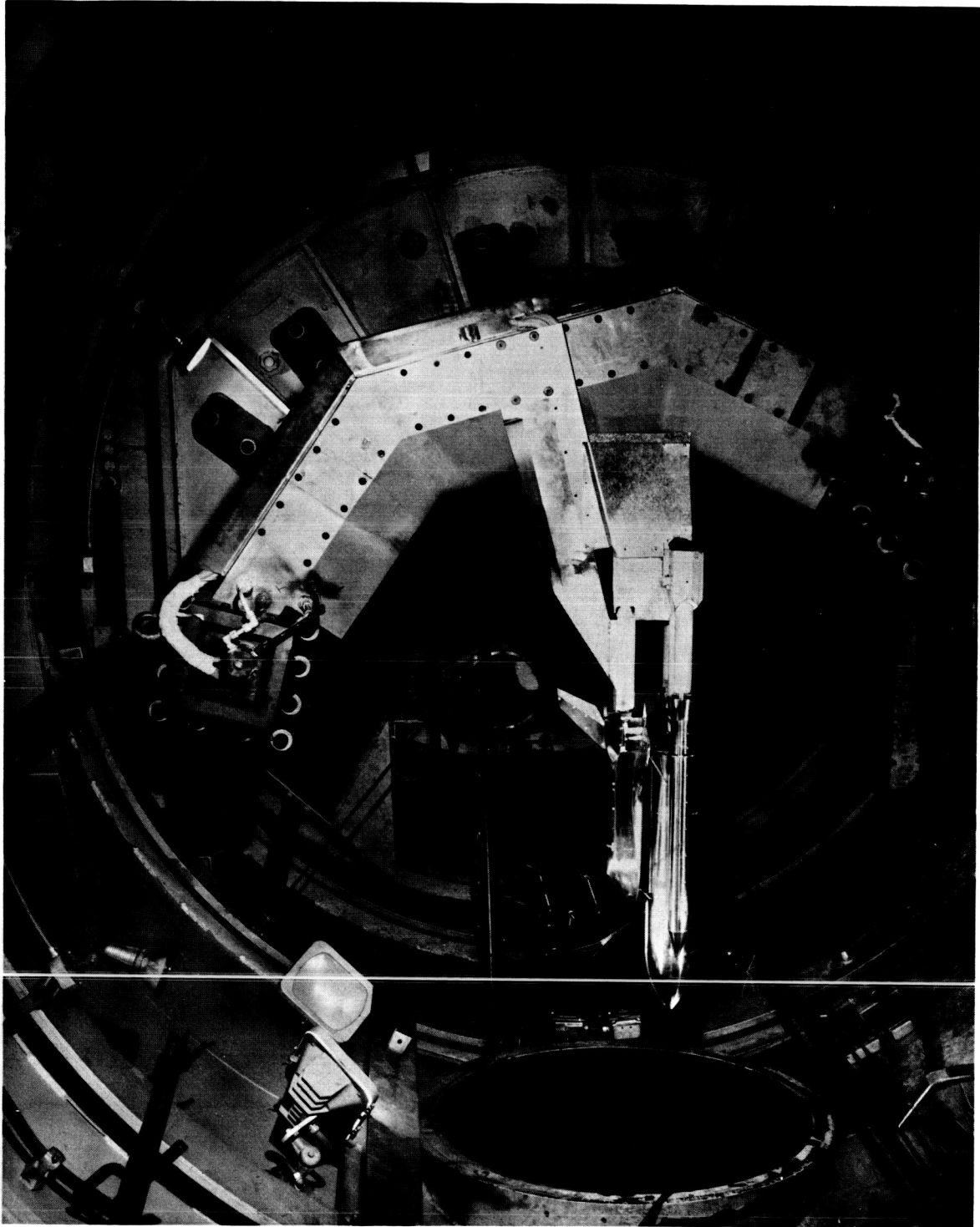


X_s = 1876

22-S

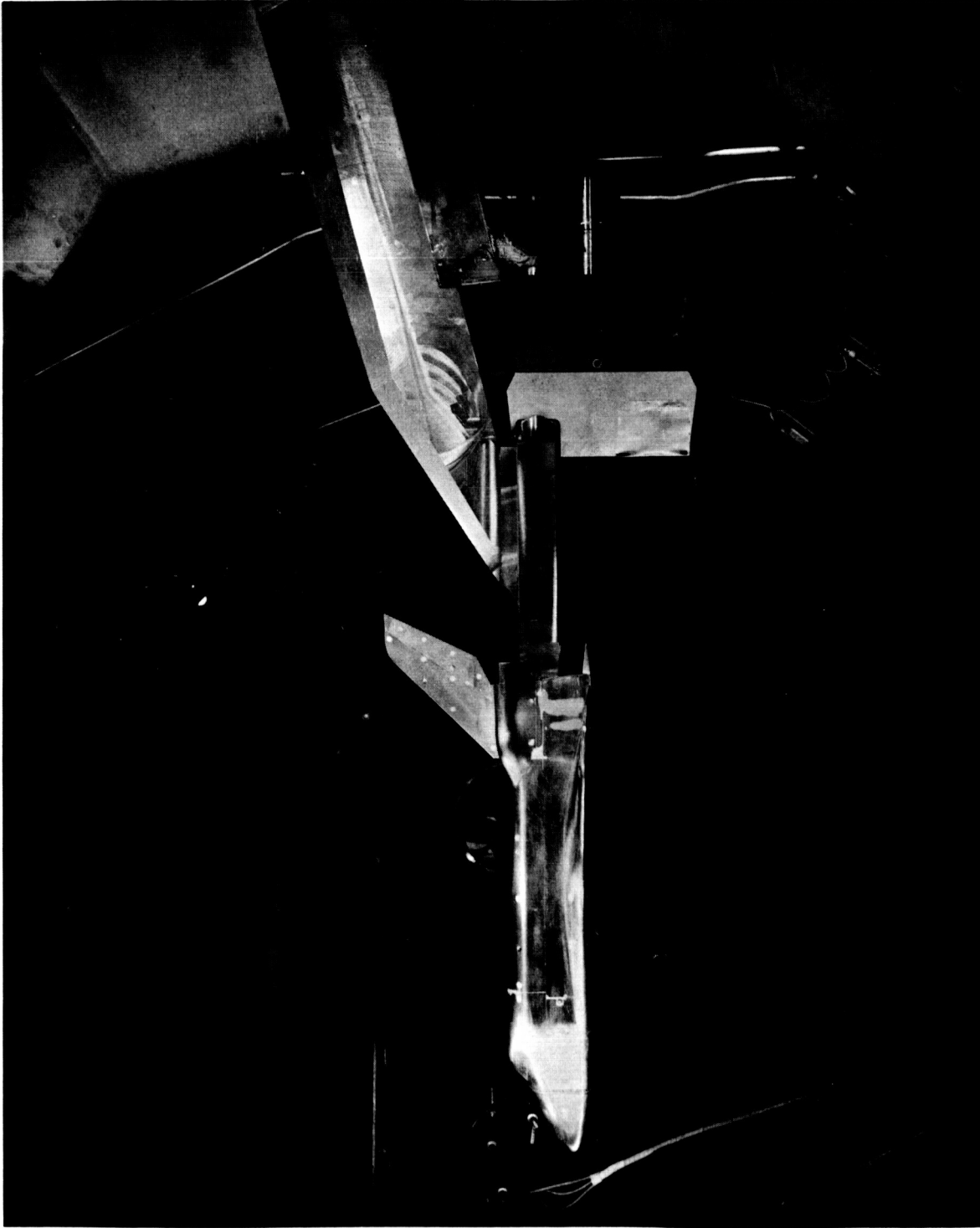
e. SRB Nozzle Skirt T/C Instrumentation

Figure 2. - Concluded.



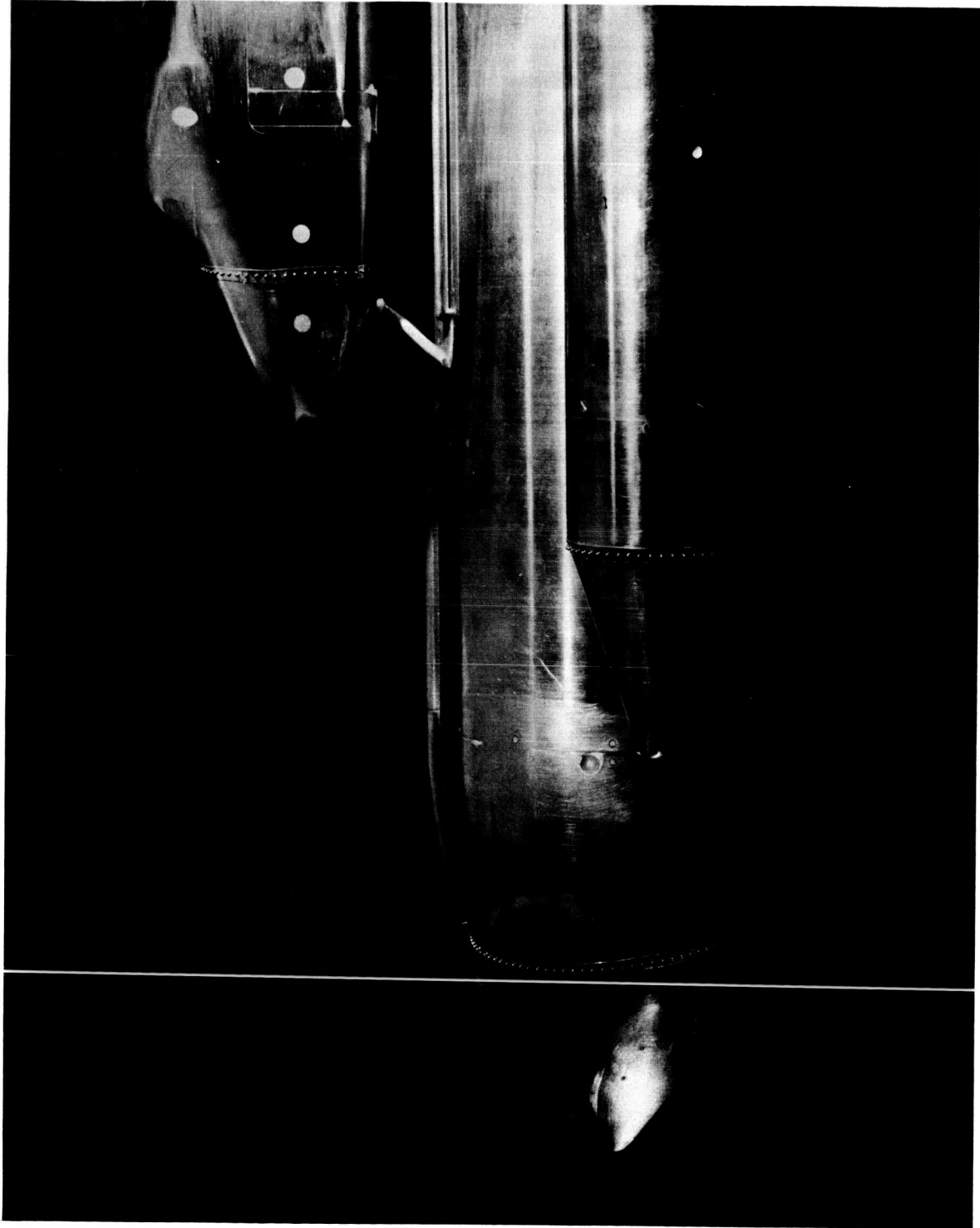
a. Mated Launch Configuration Installation

Figure 3. - Model photographs.



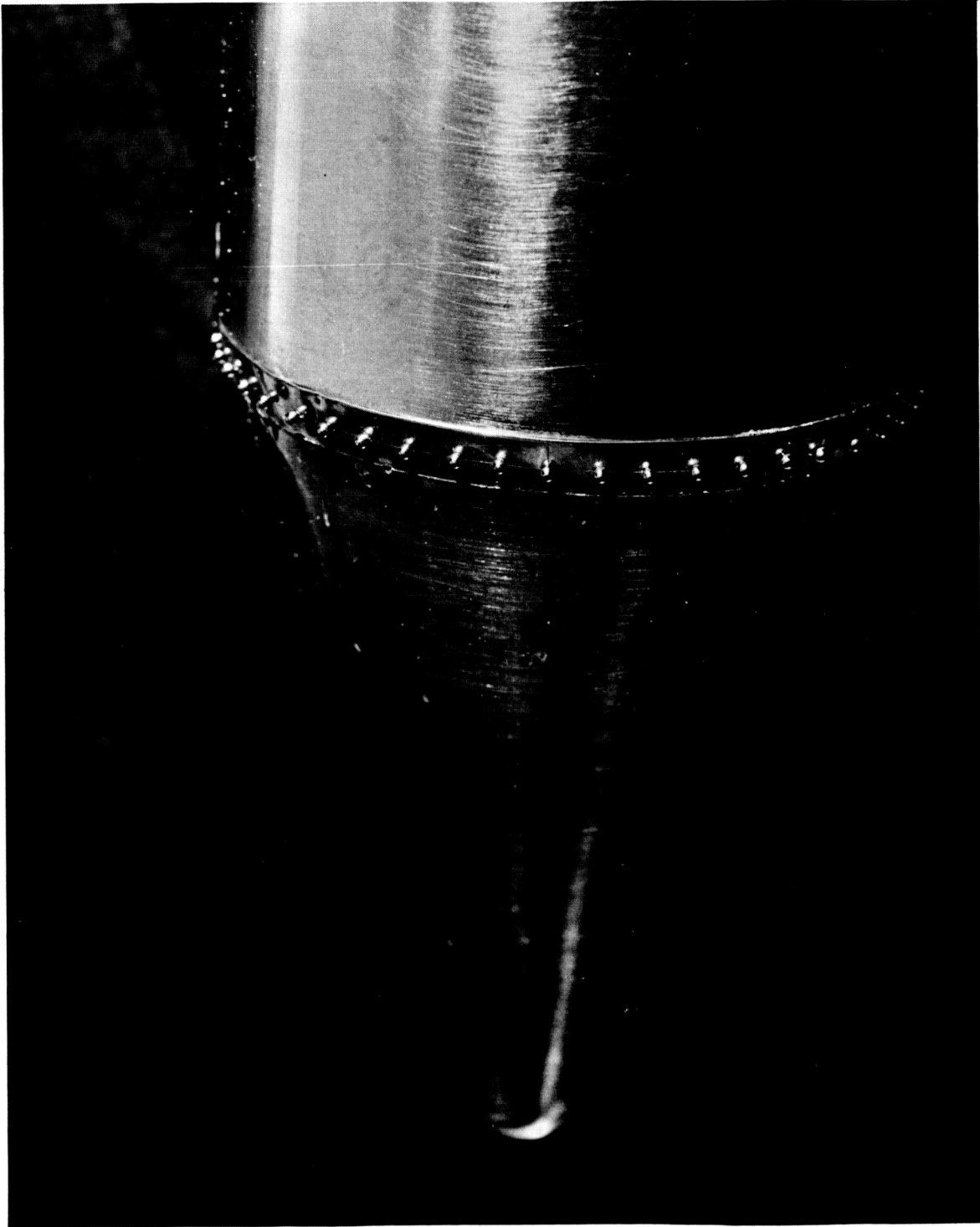
b. Orbiter Installation

Figure 3. - Continued.



c. Mated Configuration Boundary Layer Trips

Figure 3. - Continued.



d. SRB Boundary Layer Trips

Figure 3. - Concluded.

DATA FIGURES

ORBITER DATA
EXTERNAL TANK DATA (SEE VOLUME I)
SRB DATA (SEE VOLUME II)

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIBOS) ARC 3.5-178 IH3 ORBITER
 (AEIBOS) ARC 3.5-178 IH3 ORBITER
 (BEIBOS) ARC 3.5-178 IH3 ORBITER

ORBITER BOTTOM CL ORBITER BOTTOM CL ORBITER BOTTOM CL
 ORB BOTTOM CL ORB BOTTOM CL ORB BOTTOM CL
 ALPHA BETA R/V/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

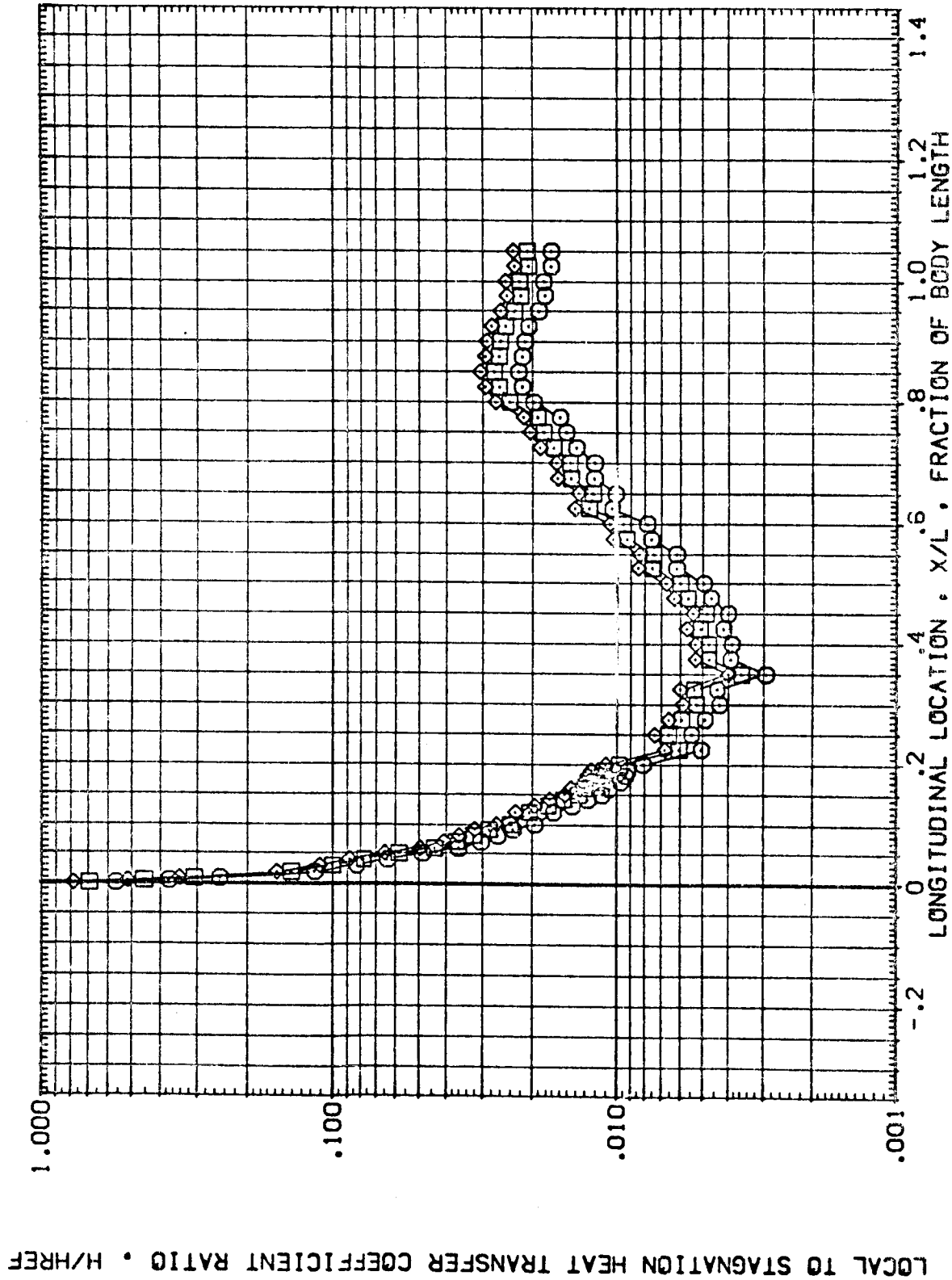


FIG. 10 ORBITER BOTTOM CENTERLINE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 PHI = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(RE1807) ARC 3.5-178 IH3 ORBITER .000 .000 5.000 1.000

(AE1807) ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .900

(BE1807) ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .850

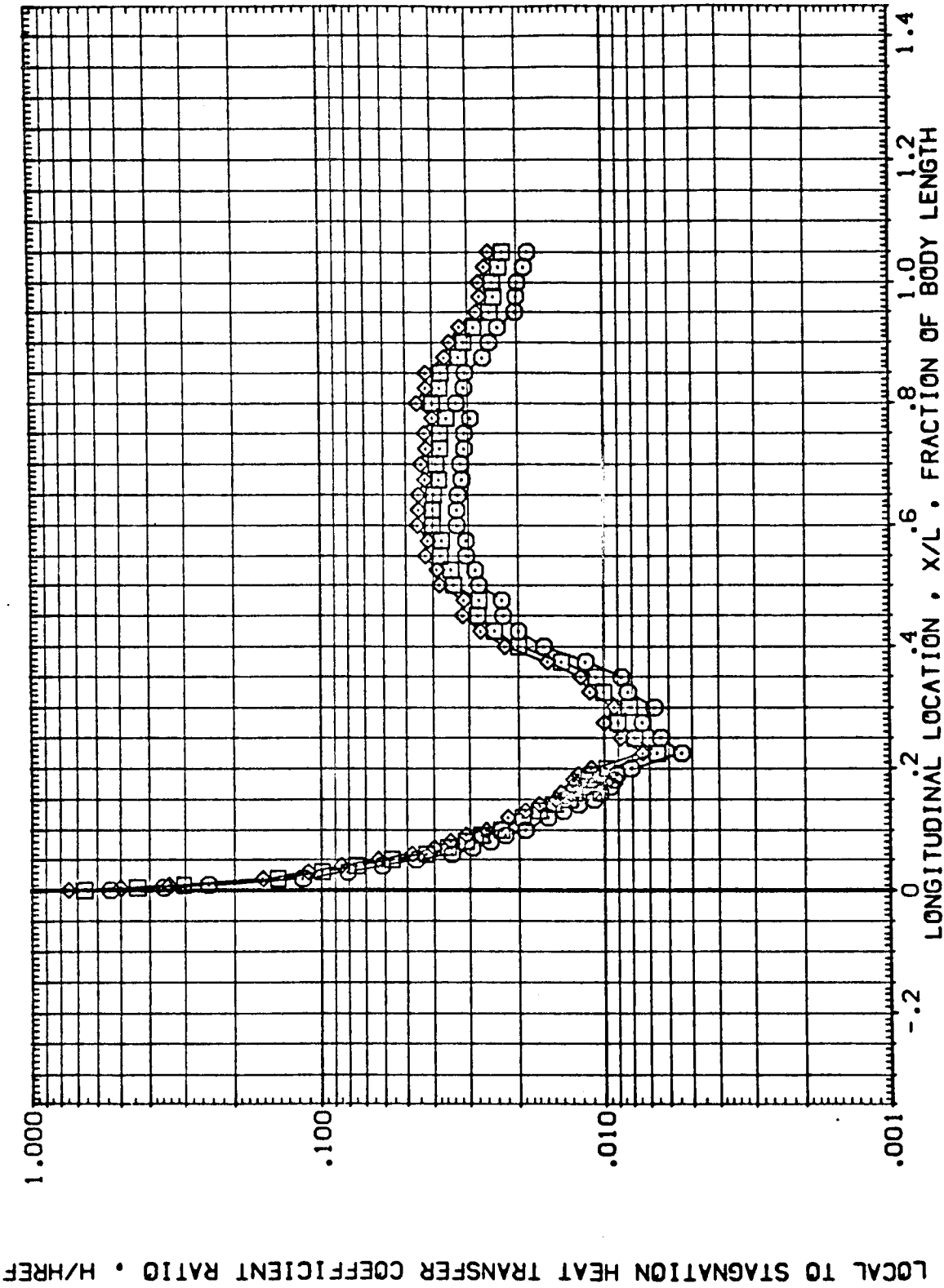


FIG. 10 ORBITER BOTTOM CENTERLINE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 PHI = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(RE|B08) ARC 3.5-178 IH3 ORBITER (TRIPS) .000 .000 1.500 1.000

(AE|B08) ARC 3.5-178 IH3 ORBITER (TRIPS) .000 .000 1.500 .900

(BE|B08) ARC 3.5-178 IH3 ORBITER (TRIPS) .000 .000 1.500 .850

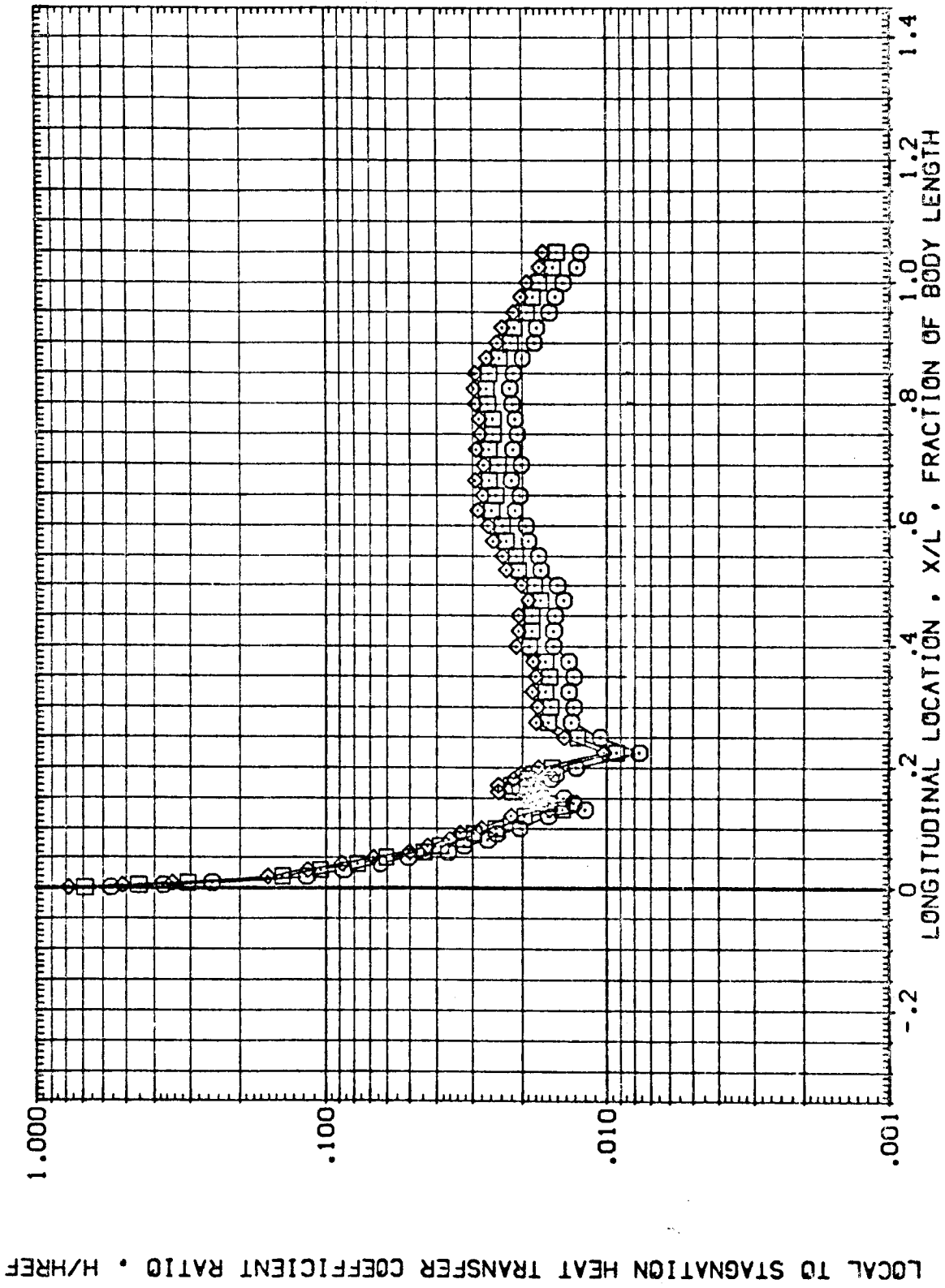


FIG. 10 ORBITER BOTTOM CENTERLINE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 PHI = .000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE BOS)	ARC 3.5-178 IH3 ORBITER (TR PS)	.000	.000	5.000	1.000
(AE BOS)	ARC 3.5-178 IH3 ORBITER (TR PS)	.000	.000	5.000	.900
(BE BOS)	ARC 3.5-178 IH3 ORBITER (TR PS)	.000	.000	5.000	.850

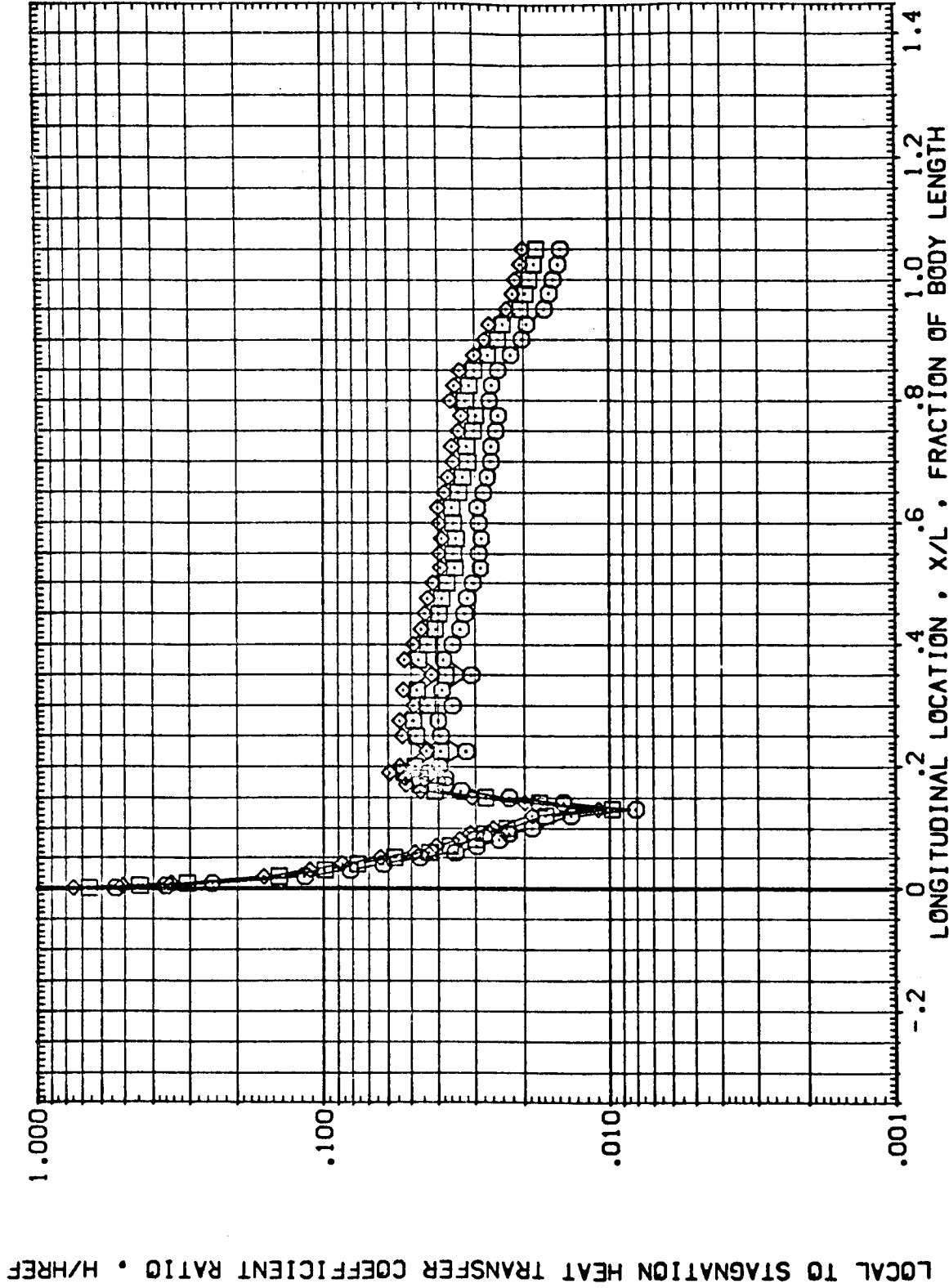


FIG. 10 ORBITER BOTTOM CENTERLINE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 PHI = .000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(RE B01)	ARC 3.5-178 IH3 0+T+S	.000	.000	1.500	1.000
(AE B01)	ARC 3.5-178 IH3 0+T+S	.000	.000	1.500	.900
(BE B01)	ARC 3.5-178 IH3 0+T+S	.000	.000	1.500	.850

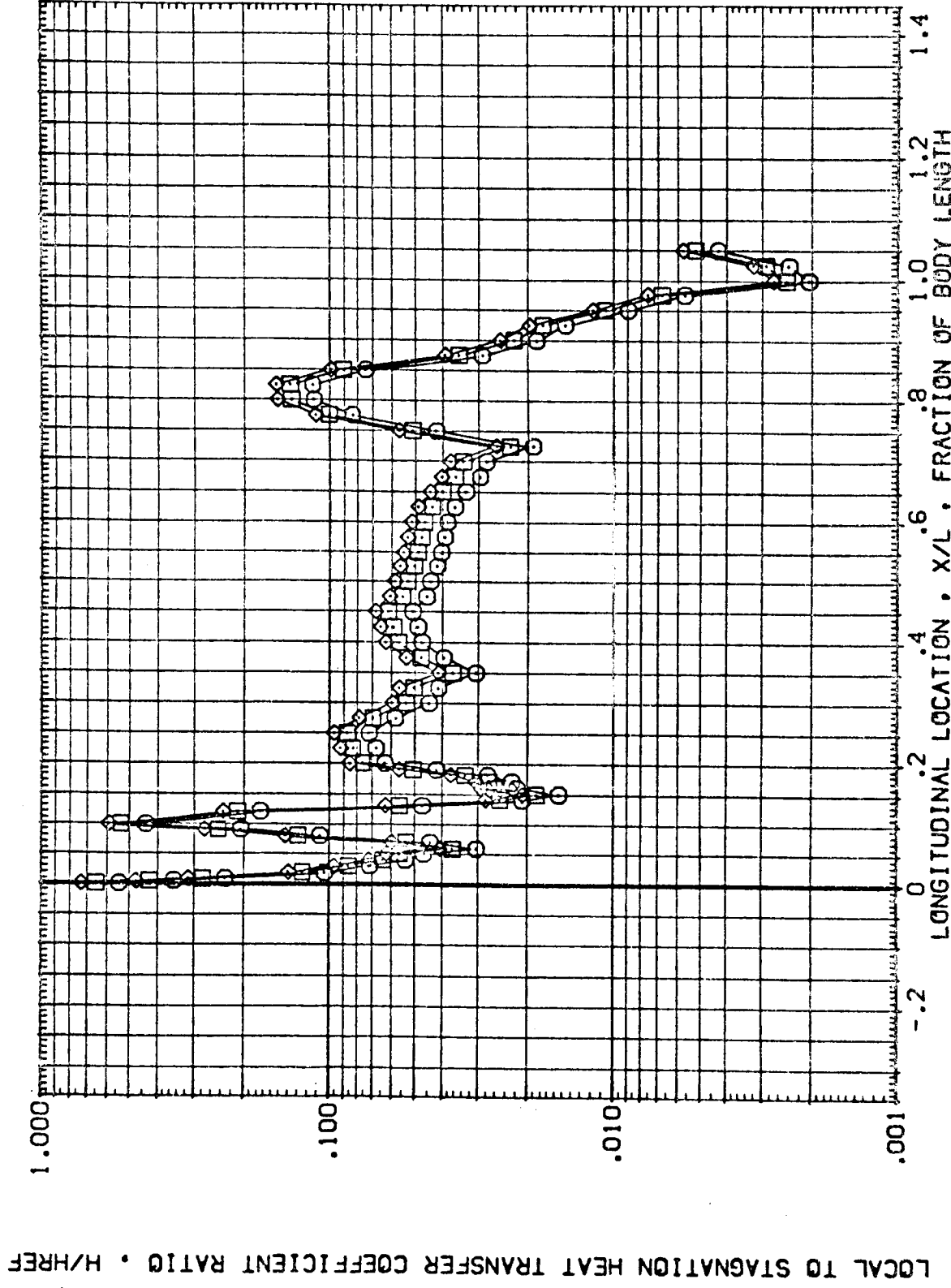


FIG. 11 ORBITER BOTTOM CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE|B02) ARC 3.5-178 IH3 0+T+S .000 .000 5.000 1.000

(AE|B02) ARC 3.5-178 IH3 0+T+S .000 .000 5.000 .900

(BE|B02) ARC 3.5-178 IH3 0+T+S .000 .000 5.000 .850

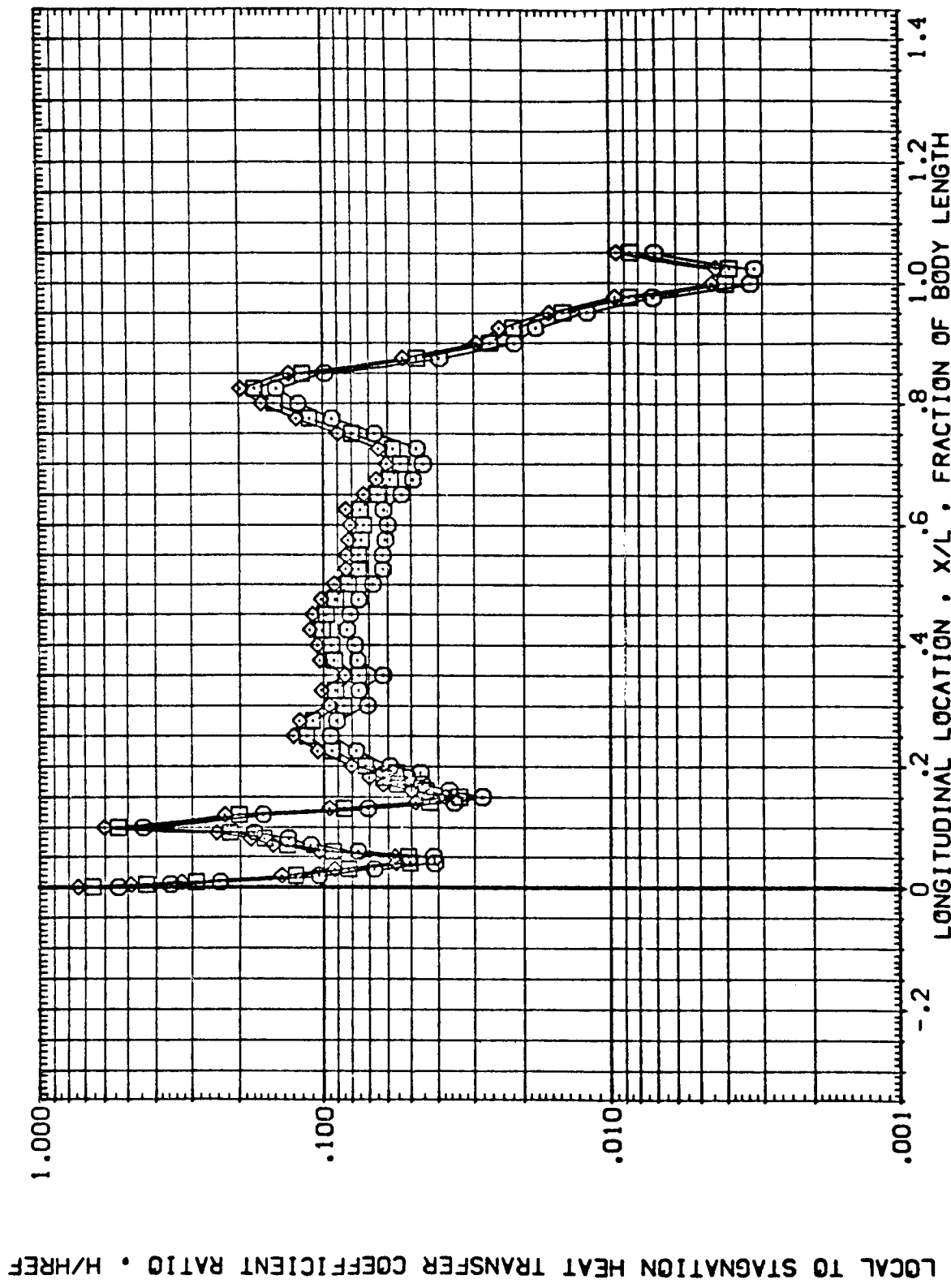


FIG. 11 ORBITER BOTTOM CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = .000 PAGE 1092

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	OR8 BOTTOM CL	ALPHA	BETA	RV/L	HAV/HT
(RE B03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	OR8 BOTTOM CL	.000	.000	1.500	1.000
(AE B03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	OR8 BOTTOM CL	.000	.000	1.500	.900
(BE B03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	OR8 BOTTOM CL	.000	.000	1.500	.850

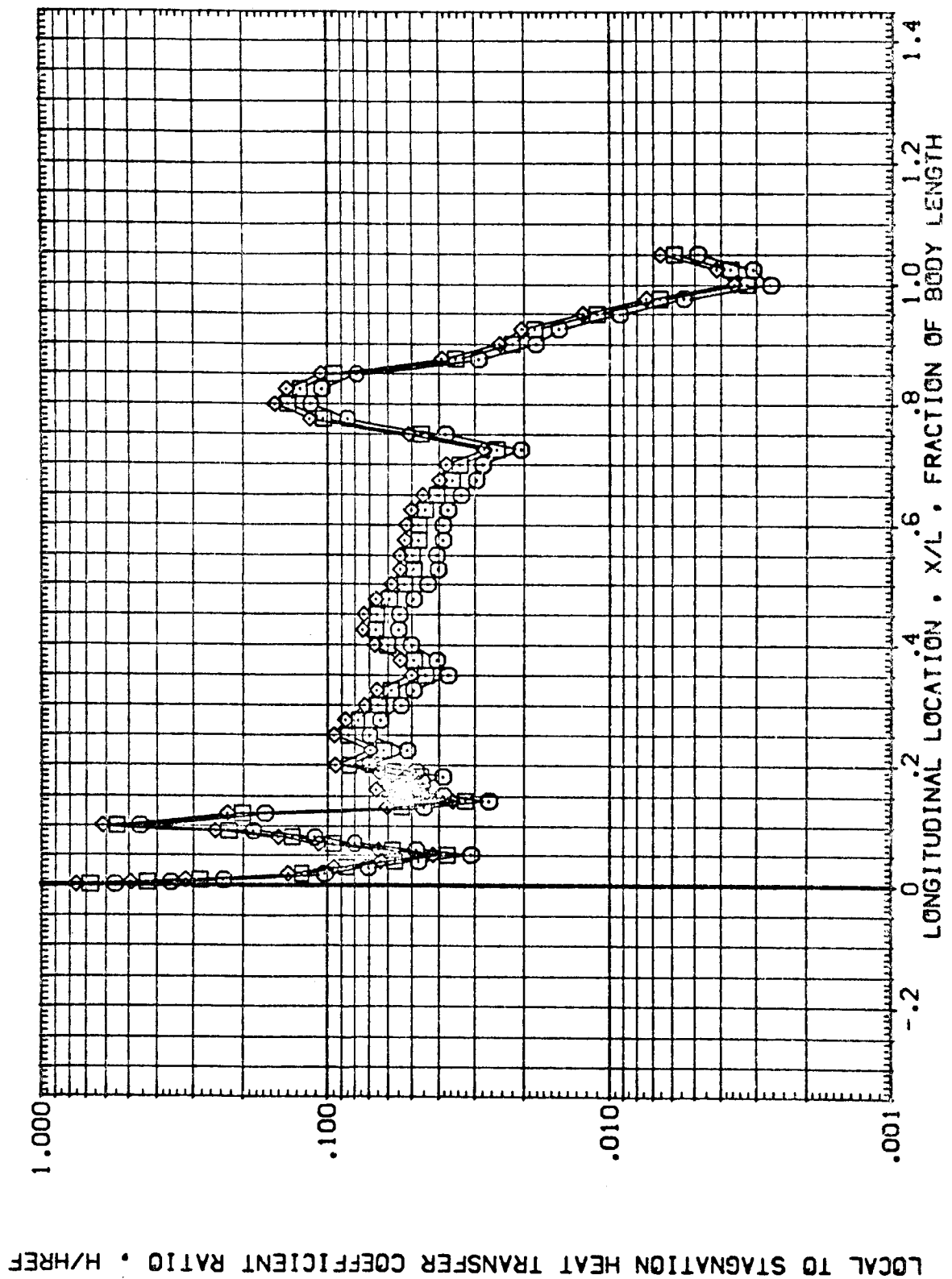


FIG. 11 ORBITER BOTTOM CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = .000

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT
 (RE|B04) ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 1.000
 (AE|B04) ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 .900
 (BE|B04) ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 .650

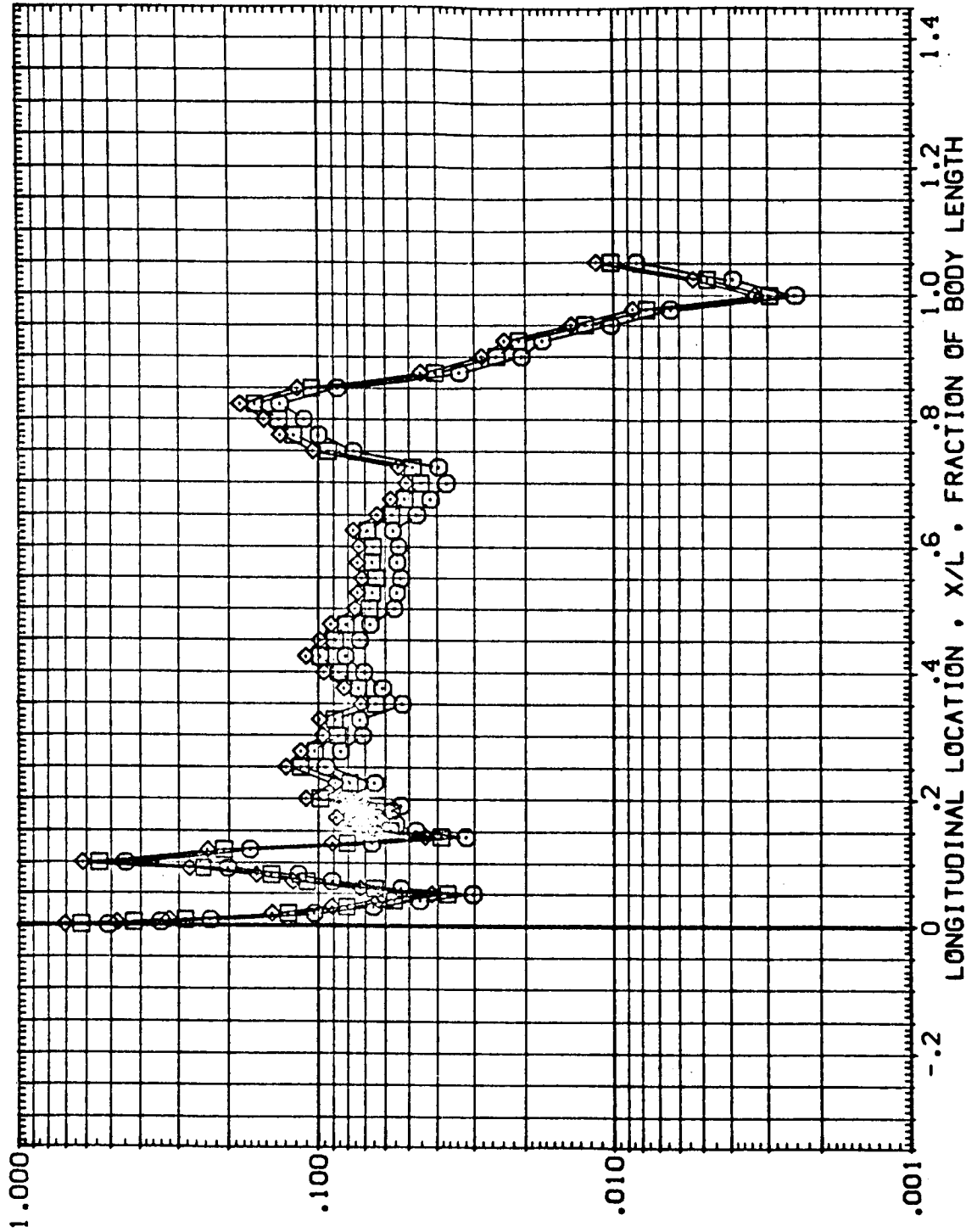


FIG. 11 ORBITER BOTTOM CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = .000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAW/HT
(REIB05)	ARC 3.5-178 IH3 0+1+S	.000	-5.000	5.000	1.000
(AEIB05)	ARC 3.5-178 IH3 0+1+S	.000	-5.000	5.000	.900
(BEIB05)	ARC 3.5-178 IH3 0+1+S	.000	-5.000	5.000	.850

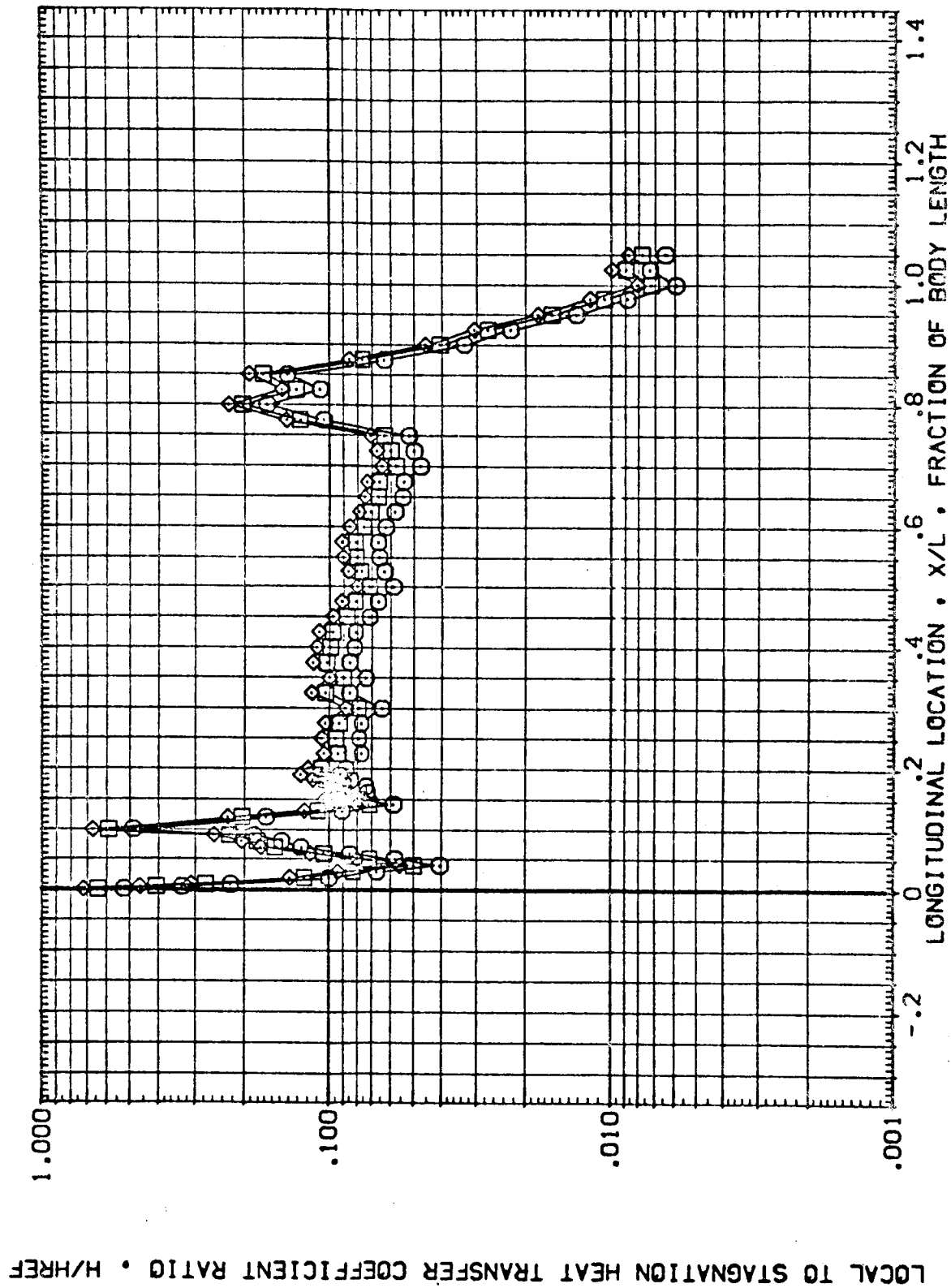


FIG. 11 ORBITER BOTTOM CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1B19) ARC 3.5-178 IH3 0+T+S
 (AE1B19) ARC 3.5-178 IH3 0+T+S
 (BE1B19) ARC 3.5-178 IH3 0+T+S

ORB BOTTOM CL ORB BOTTOM CL ORB BOTTOM CL
 ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

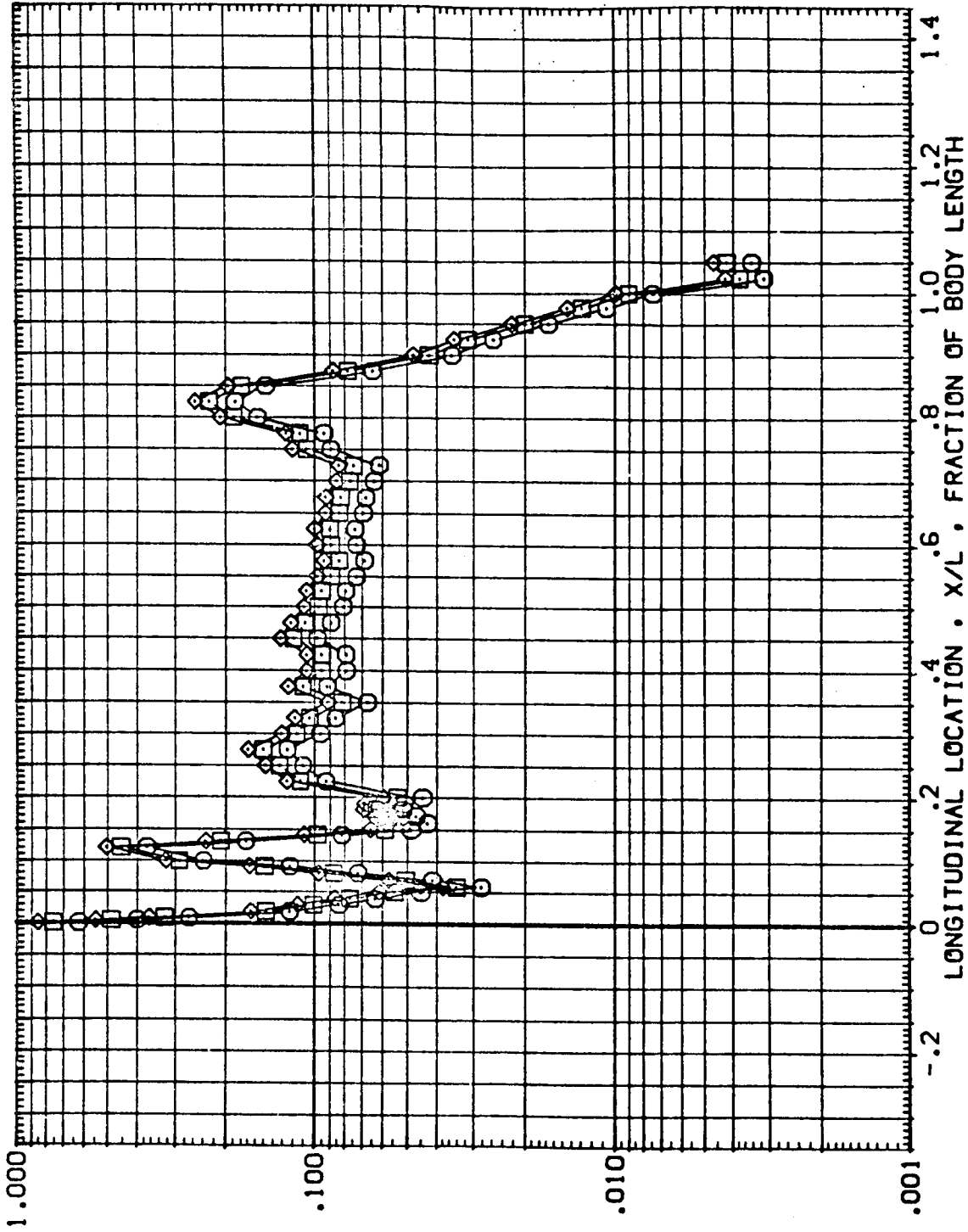


FIG. 11 ORBITER BOTTOM CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE|B20) ARC 3.5-178 IH3 0+T+S -3.000 .000 5.000 1.000

(AE|B20) ARC 3.5-178 IH3 0+T+S -3.000 .000 5.000 .900

(BE|B20) ARC 3.5-178 IH3 0+T+S -3.000 .000 5.000 .850

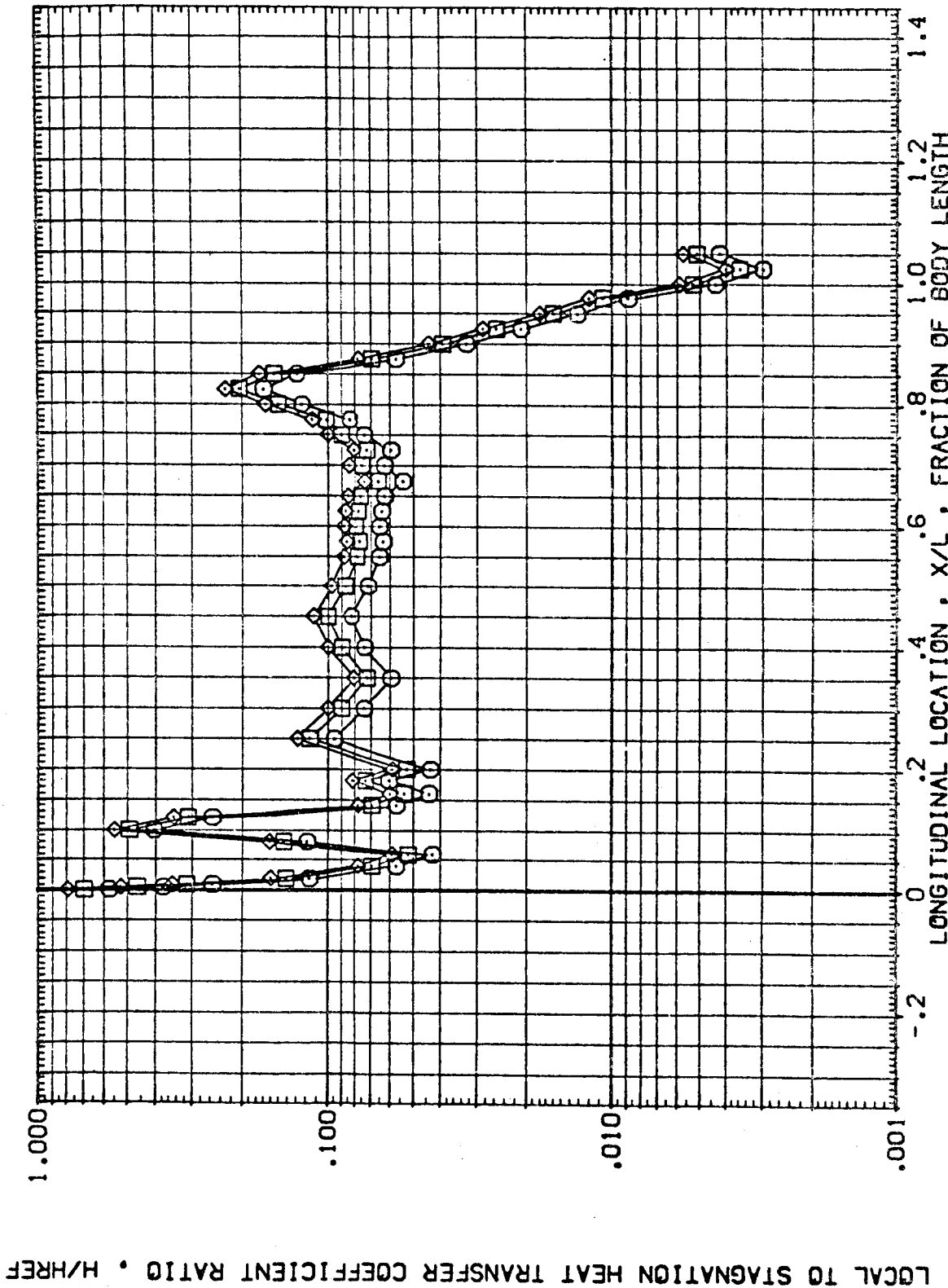


FIG. 11 ORBITER BOTTOM CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = .000

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ORB BOTTOM CL	ALPHA	BETA	RVL	HAV/HT
(EE1806)	ARC 3.5-178 IH3 0+1+S	ORB BOTTOM CL	.000	.000	1.500	.900
(EE1807)	ARC 3.5-178 IH3 0+1+S	ORB BOTTOM CL	.000	.000	5.000	.900
(EE1808)	ARC 3.5-178 IH3 0+1+S (TRIPS)	ORB BOTTOM CL	.000	.000	1.500	.900
(EE1809)	ARC 3.5-178 IH3 0+1+S (TRIPS)	ORB BOTTOM CL	.000	.000	5.000	.900

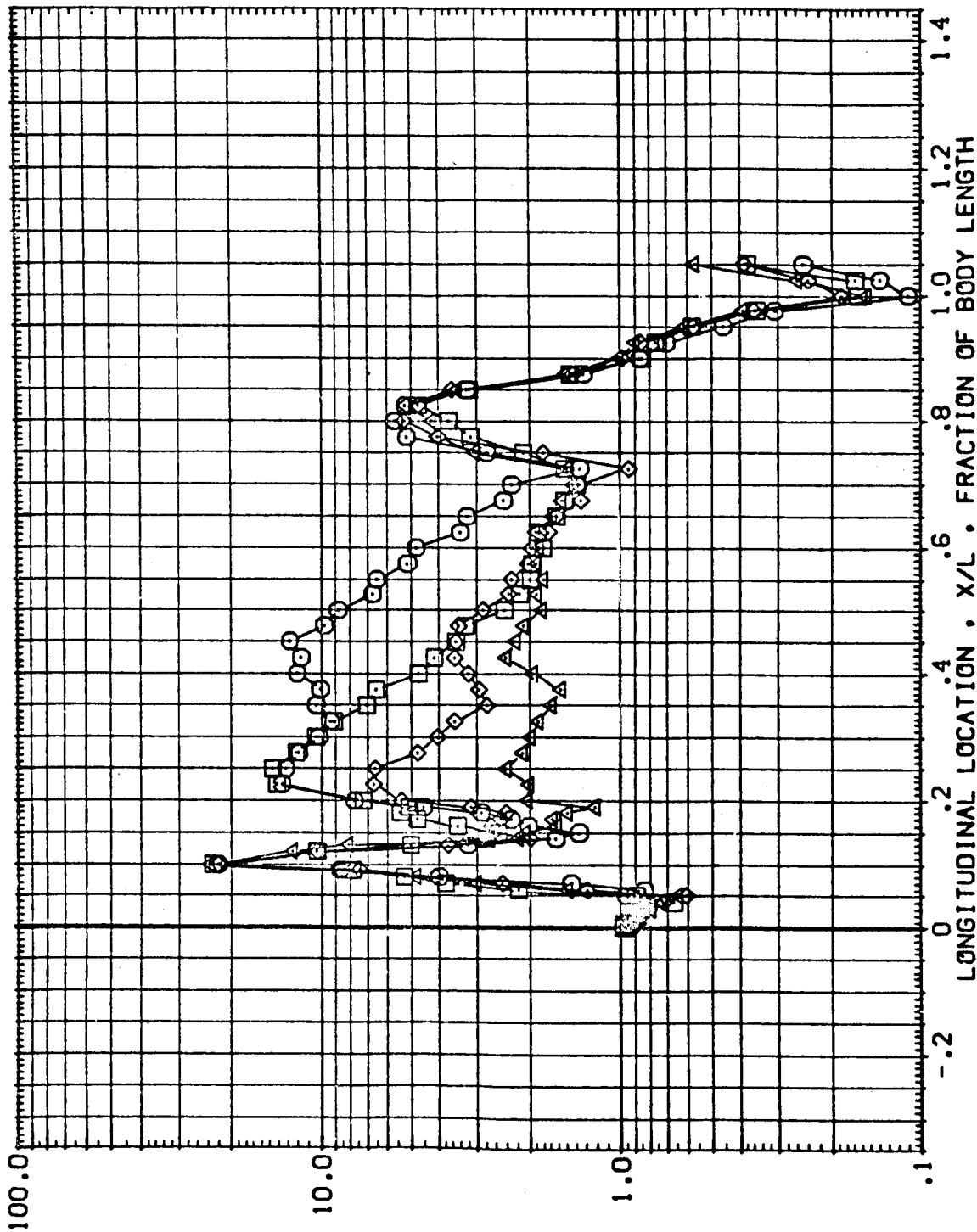


FIG. 12 ORBITER BOTTOM CENTERLINE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = .000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ORB TOP CL	ALPHA	BETA	RV/L	HAV/HT
(RE1A06)	ARC 3.5-178 IH3 ORBITER	ORB TOP CL	.000	.000	1.500	1.000
(AE1A06)	ARC 3.5-178 IH3 ORBITER	ORB TOP CL	.000	.000	1.500	.900
(BE1A06)	ARC 3.5-178 IH3 ORBITER	ORB TOP CL	.000	.000	1.500	.850

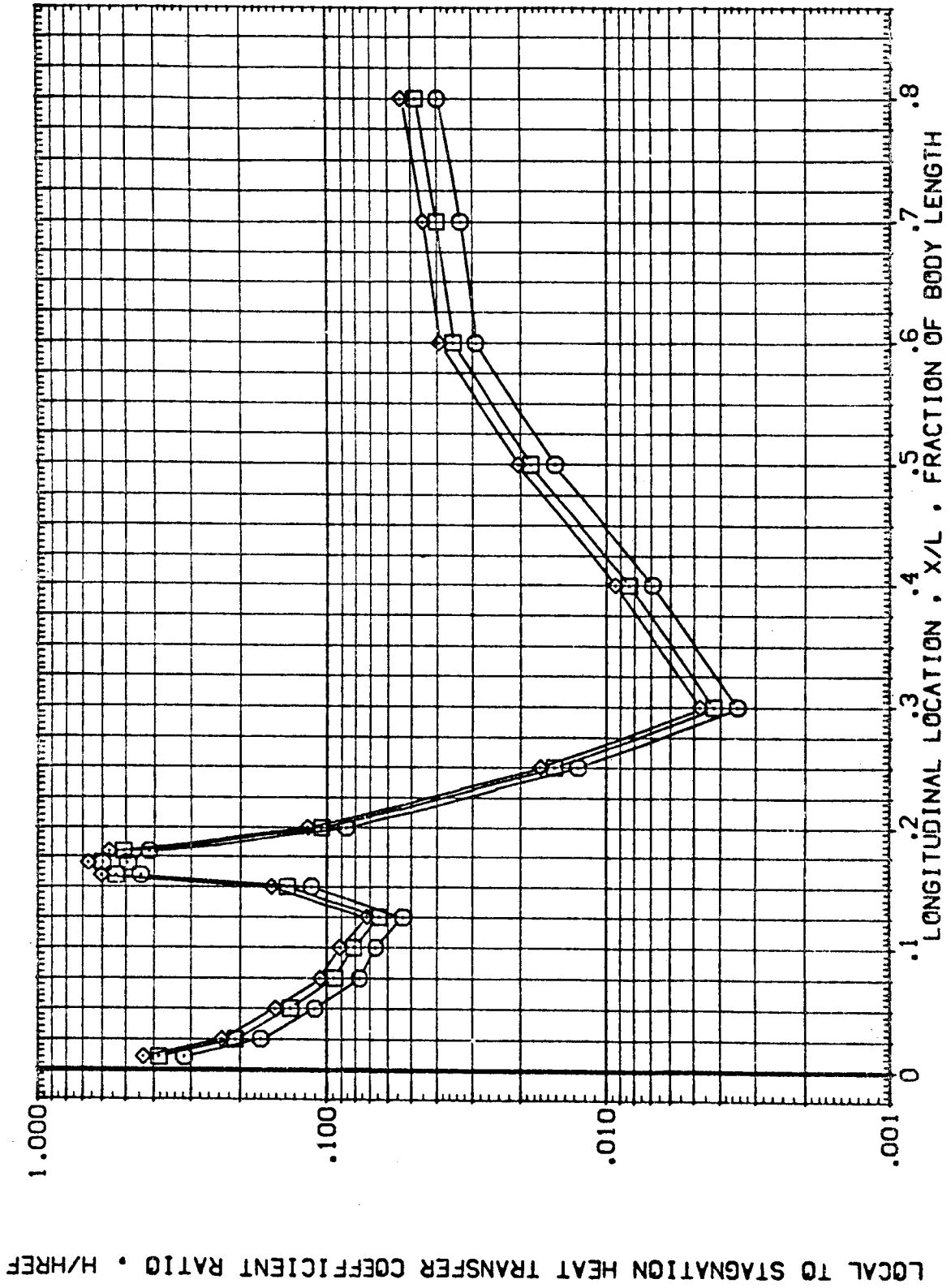


FIG. 13 ORBITER TOP CENTERLINE - ORBITER ALONE (UNDISTURBED)

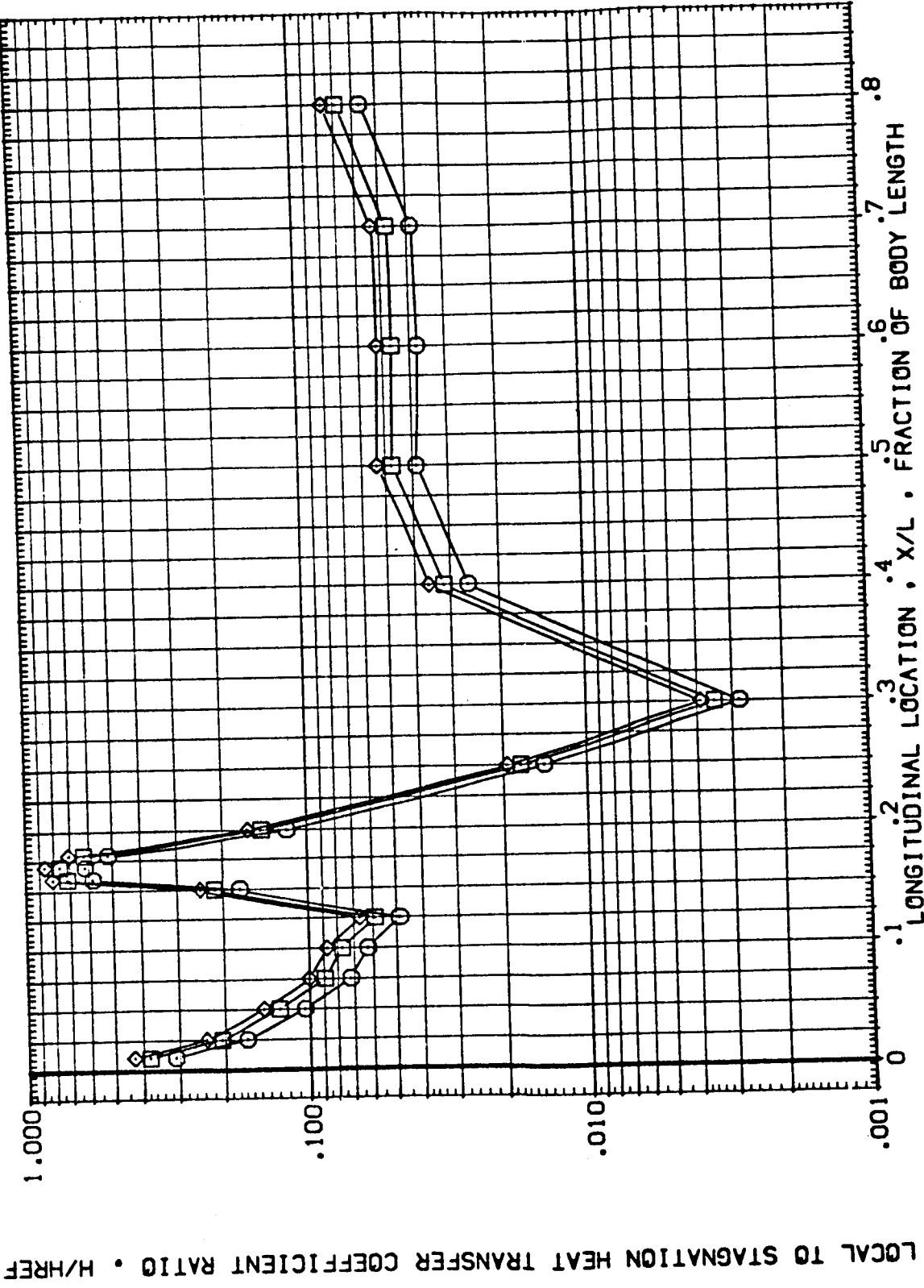


FIG. 13 ORBITER TOP CENTERLINE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 PHI = 180.000



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(RE/A08)	ARC 3.5-178 IH3 ORBITER (TRIPS)	.000	.000	1.500	1.000
(AE/A08)	ARC 3.5-178 IH3 ORBITER (TRIPS)	.000	.000	1.500	.900
(BE/A08)	ARC 3.5-178 IH3 ORBITER (TRIPS)	.000	.000	1.500	.850

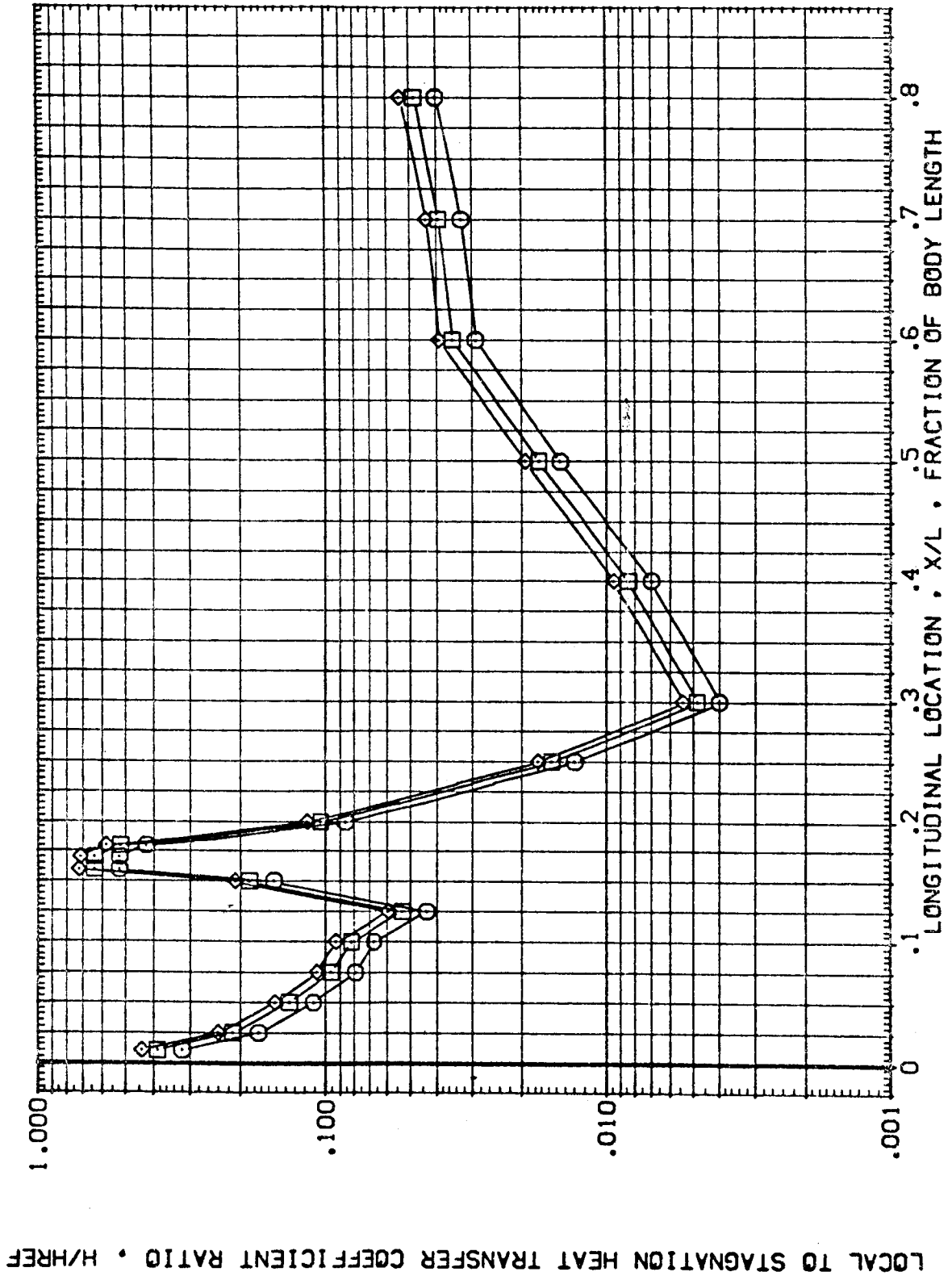


FIG. 13 ORBITER TOP CENTERLINE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 PHI = 180.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE|A09) ARC 3.5-178 IH3 ORBITER (TRIPS) ORB TOP CL .000 .000 5.000 1.000

(AE|A09) ARC 3.5-178 IH3 ORBITER (TRIPS) ORB TOP CL .000 .000 5.000 .900

(BE|A09) ARC 3.5-178 IH3 ORBITER (TRIPS) ORB TOP CL .000 .000 5.000 .850

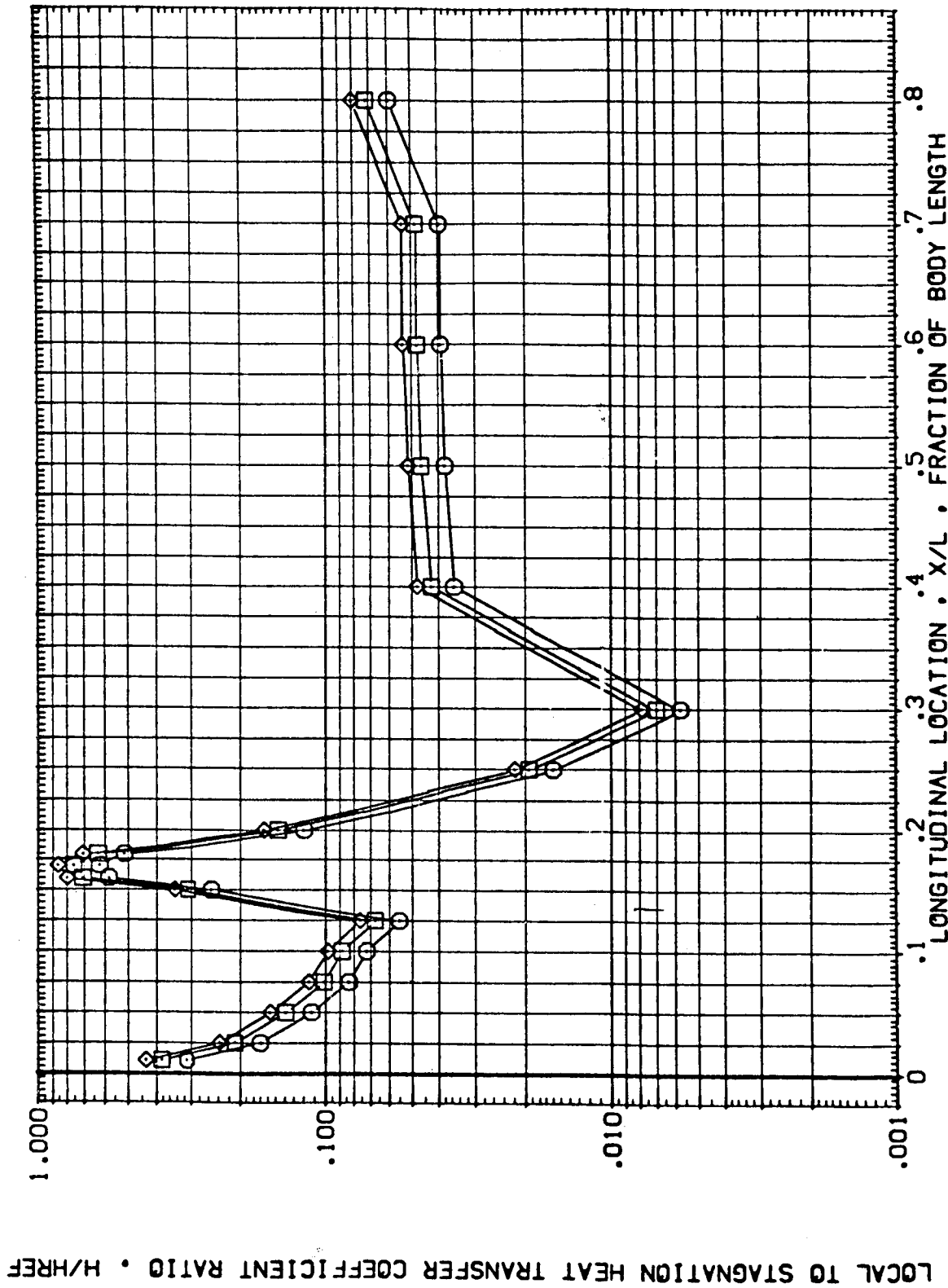
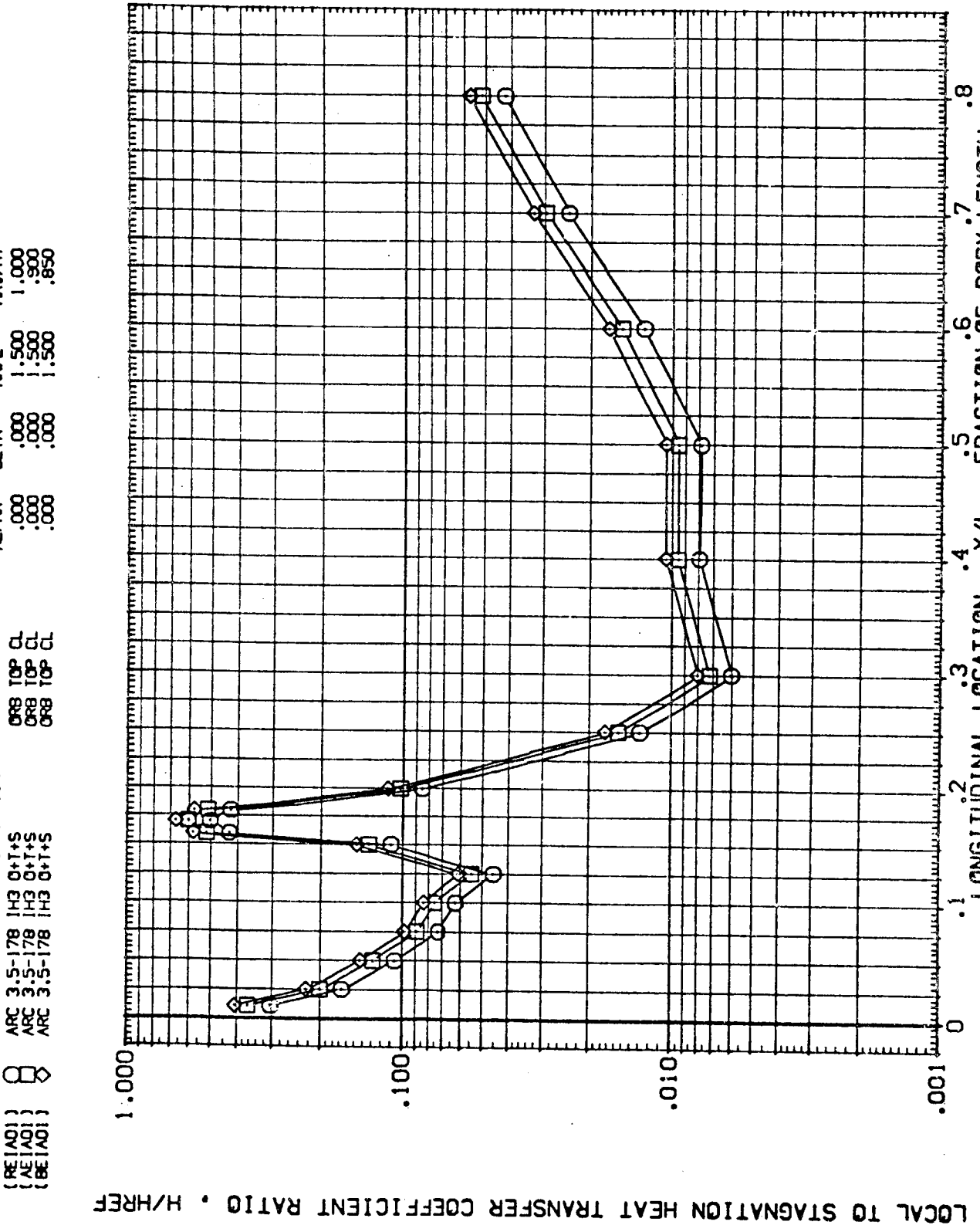


FIG. 13 ORBITER TOP CENTERLINE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 PHI = 180.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIA01) ARC 3.5-178 IH3 O+I+S
 (AEIA01) ARC 3.5-178 IH3 O+I+S
 (BEIA01) ARC 3.5-178 IH3 O+I+S

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

LONGITUDINAL LOCATION, X/L, FRACTION OF BODY LENGTH

FIG. 14 ORBITER TOP CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 180.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIAQ2) ARC 3.5-178 IH3 0+1+S
 (AEIAQ2) ARC 3.5-178 IH3 0+1+S
 (BEIAQ2) ARC 3.5-178 IH3 0+1+S

ORBIT TOP CL
 ORBIT TOP CL
 ORBIT TOP CL

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RV/L 5.000
 5.000
 5.000

HAV/HT 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

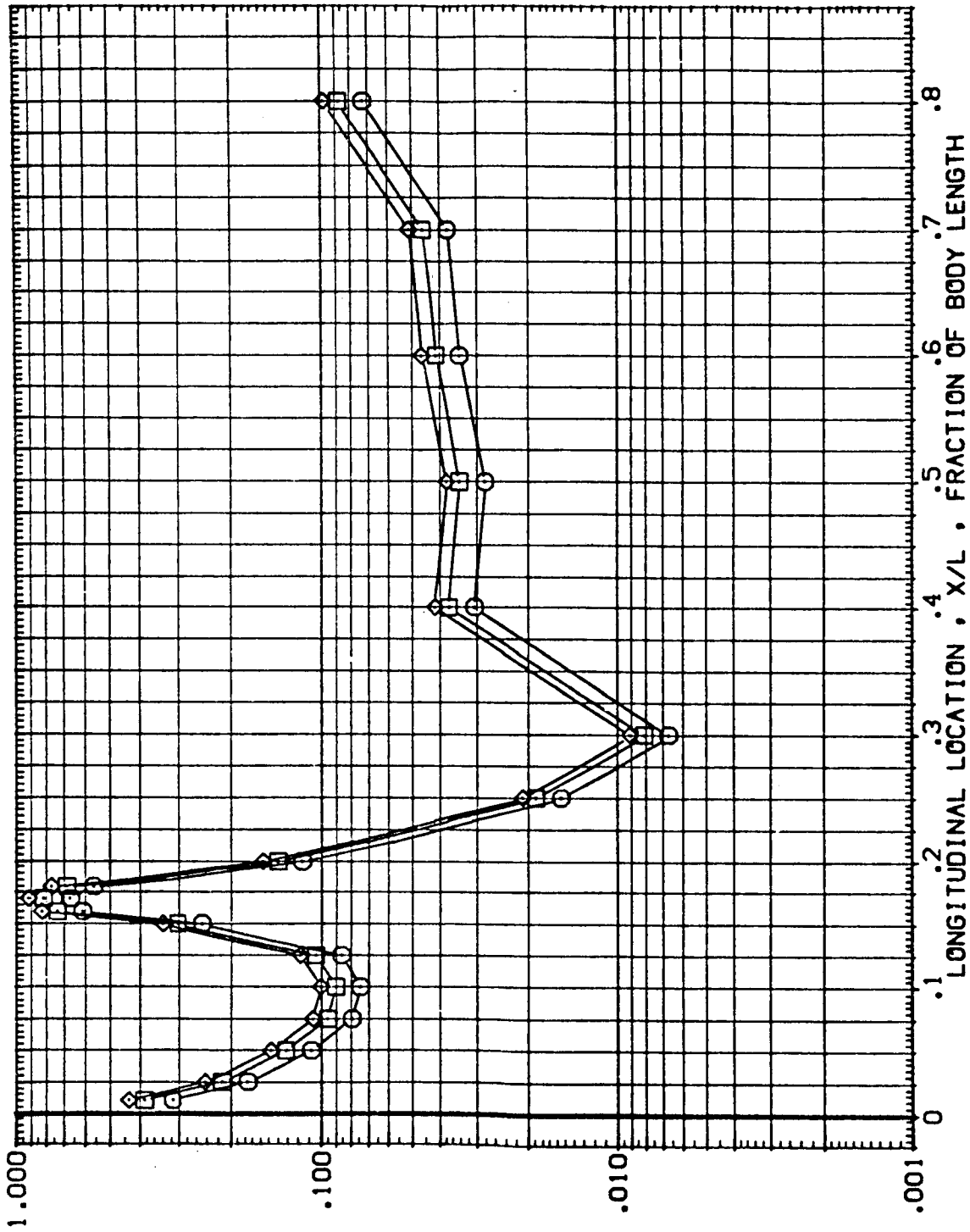


FIG. 14 ORBITER TOP CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 180.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ORB TOP CL	ALPHA	BETA	RN/L	HAV/HT
(RE)A03	ARC 3.5-178 IH3 0+1+S (TRIPS)	ORB TOP CL	.000	.000	1.500	1.000
(AE)A03	ARC 3.5-178 IH3 0+1+S (TRIPS)	ORB TOP CL	.000	.000	1.500	.900
(BE)A03	ARC 3.5-178 IH3 0+1+S (TRIPS)	ORB TOP CL	.000	.000	1.500	.850

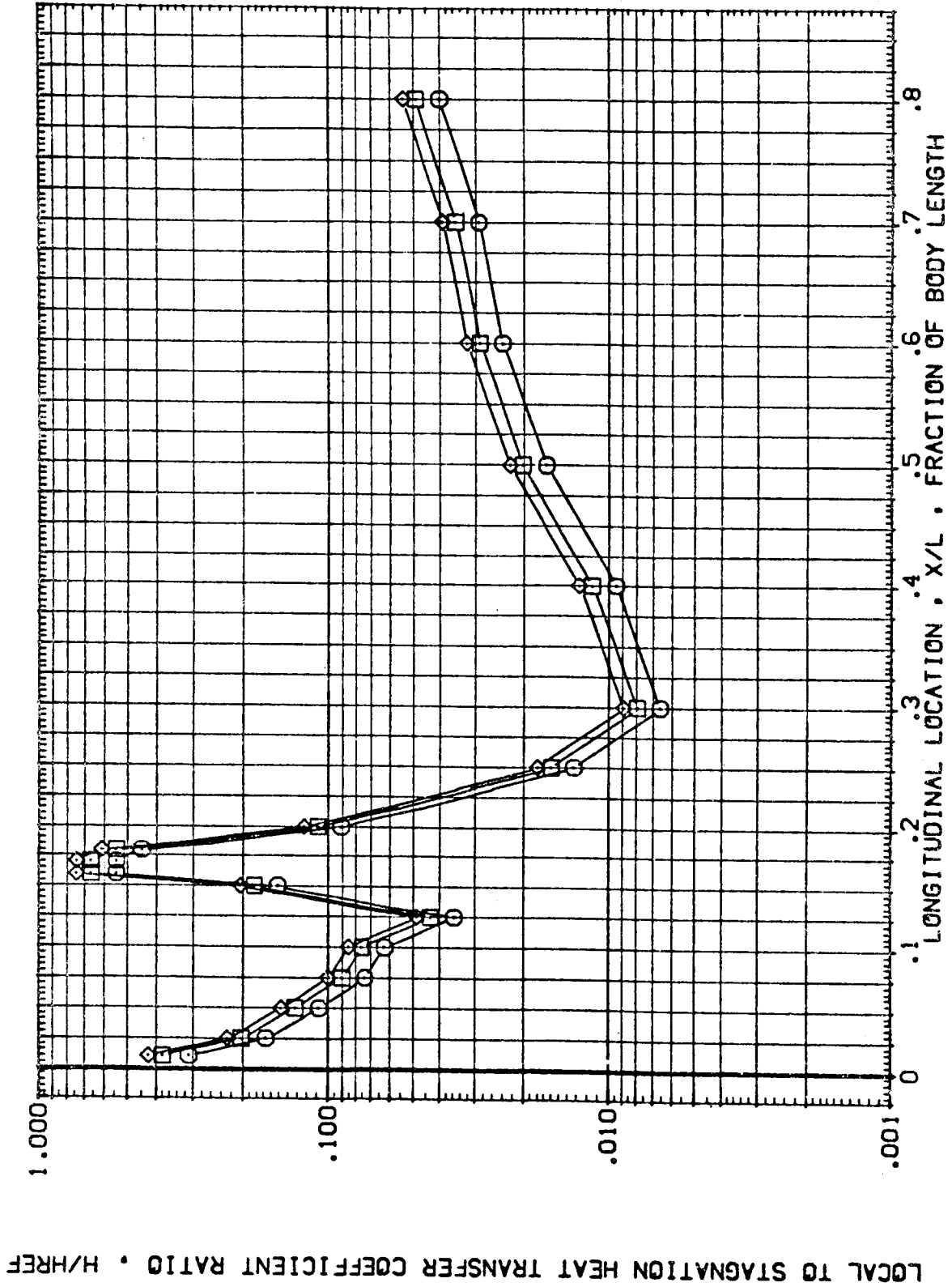


FIG. 14 ORBITER TOP CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 180.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ORB TOP CL ALPHA BETA RV/L HAV/HT

(REIA04) ARC 3.5-178 IH3 0+T+S (TRIPS) ORB TOP CL .000 .000 5.000 1.000

(AEIA04) ARC 3.5-178 IH3 0+T+S (TRIPS) ORB TOP CL .000 .000 5.000 .900

(BEIA04) ARC 3.5-178 IH3 0+T+S (TRIPS) ORB TOP CL .000 .000 5.000 .850

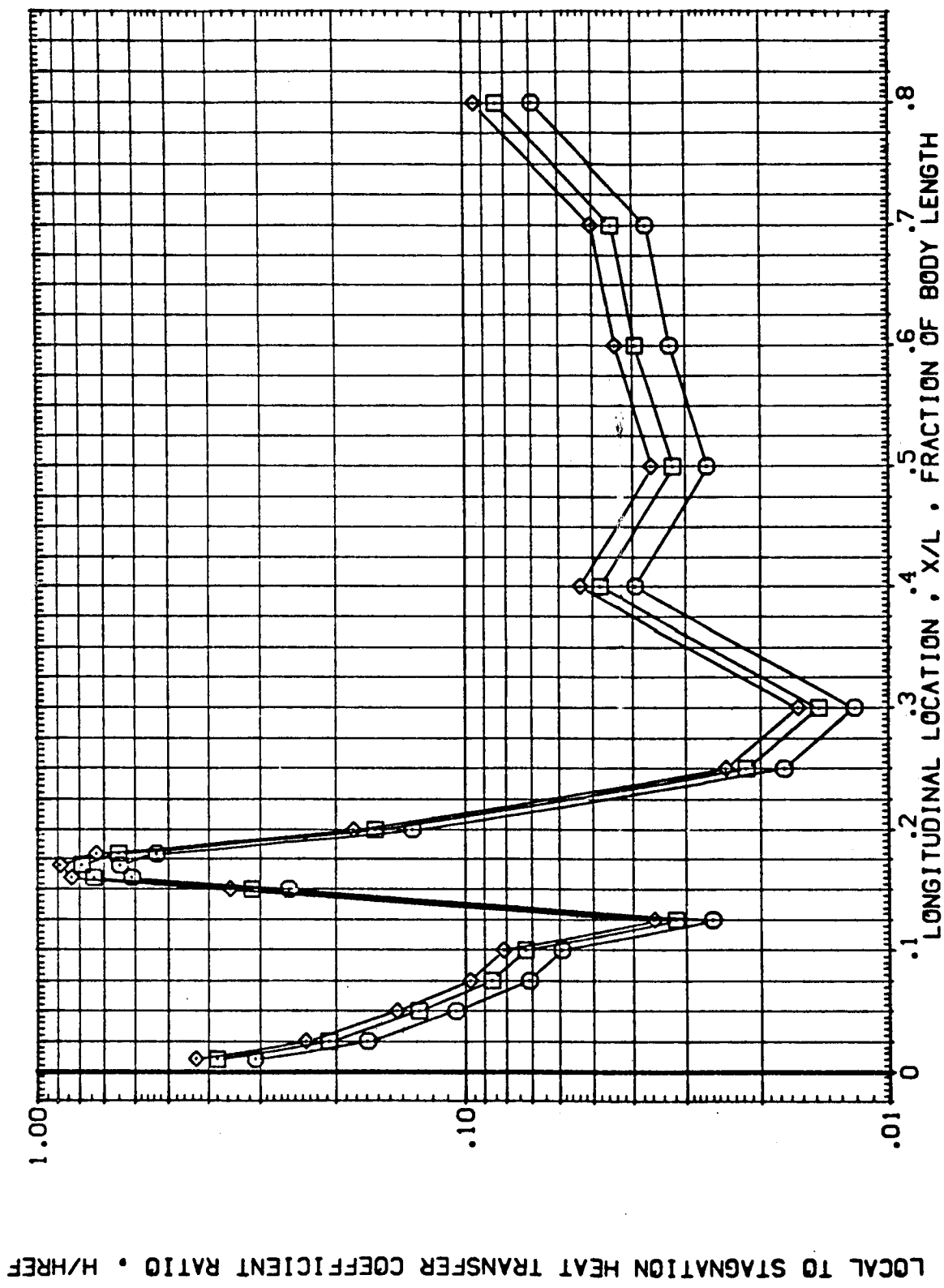


FIG. 14 ORBITER TOP CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 180.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RE/AD5) (AE/AD5) (BE/AD5)

ARC 3.5-178 IH3 0+T+S

ARC 3.5-178 IH3 0+T+S

ARC 3.5-178 IH3 0+T+S

ORB TOP CL ORB TOP CL ORB TOP CL

ALPHA BETA RM/L HAV/HT

.000 -5.000 5.000 1.000

.000 -5.000 5.000 .900

.000 -5.000 5.000 .850

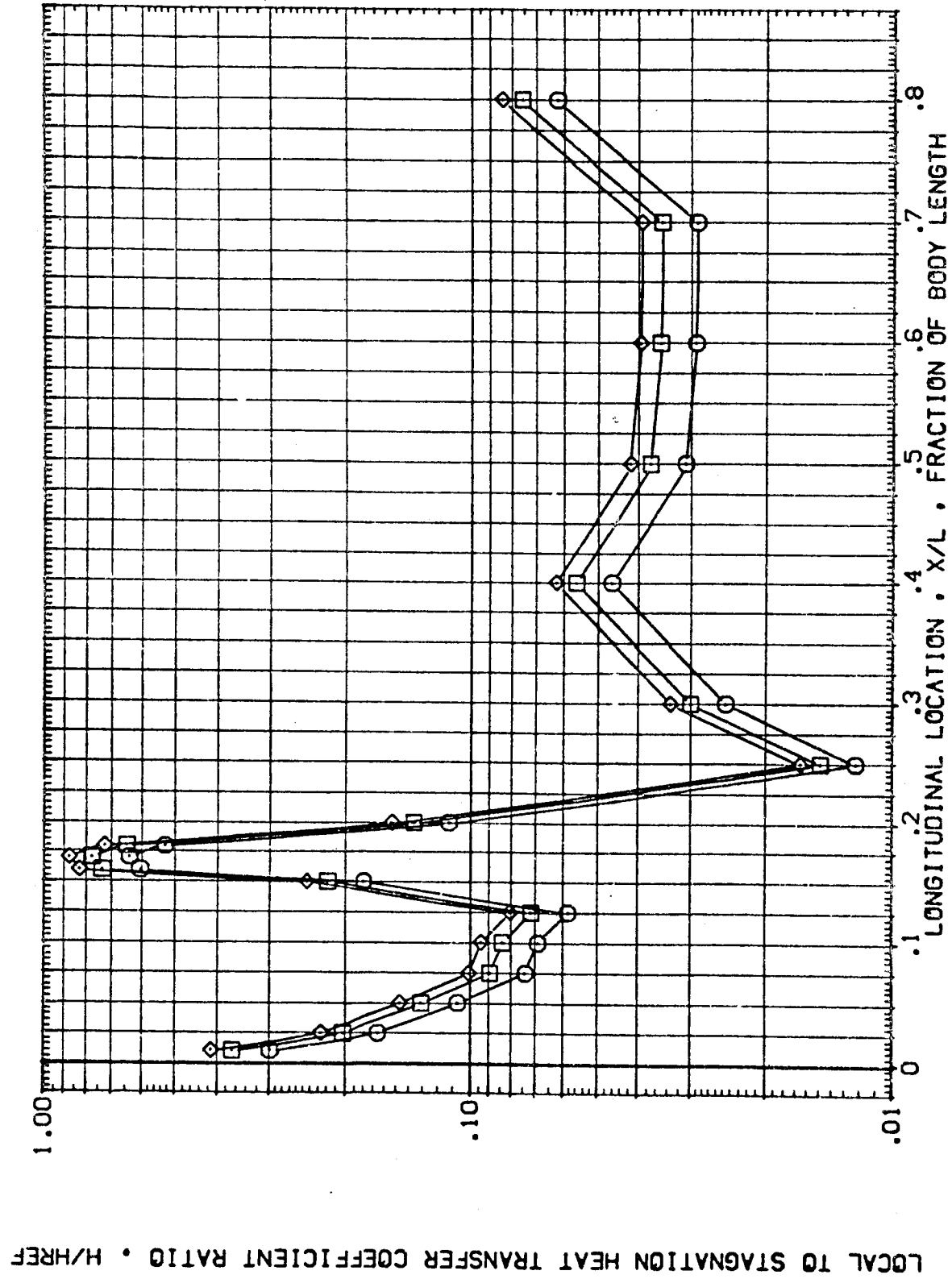


FIG. 14 ORBITER TOP CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 180.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI/A19) ARC 3.5-178 IH3 0+T+S
 (AEI/A19) ARC 3.5-178 IH3 0+T+S
 (BEI/A19) ARC 3.5-178 IH3 0+T+S

ORB TOP CL
 ORB TOP CL
 ORB TOP CL

ALPHA BETA R/V/L MACH/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

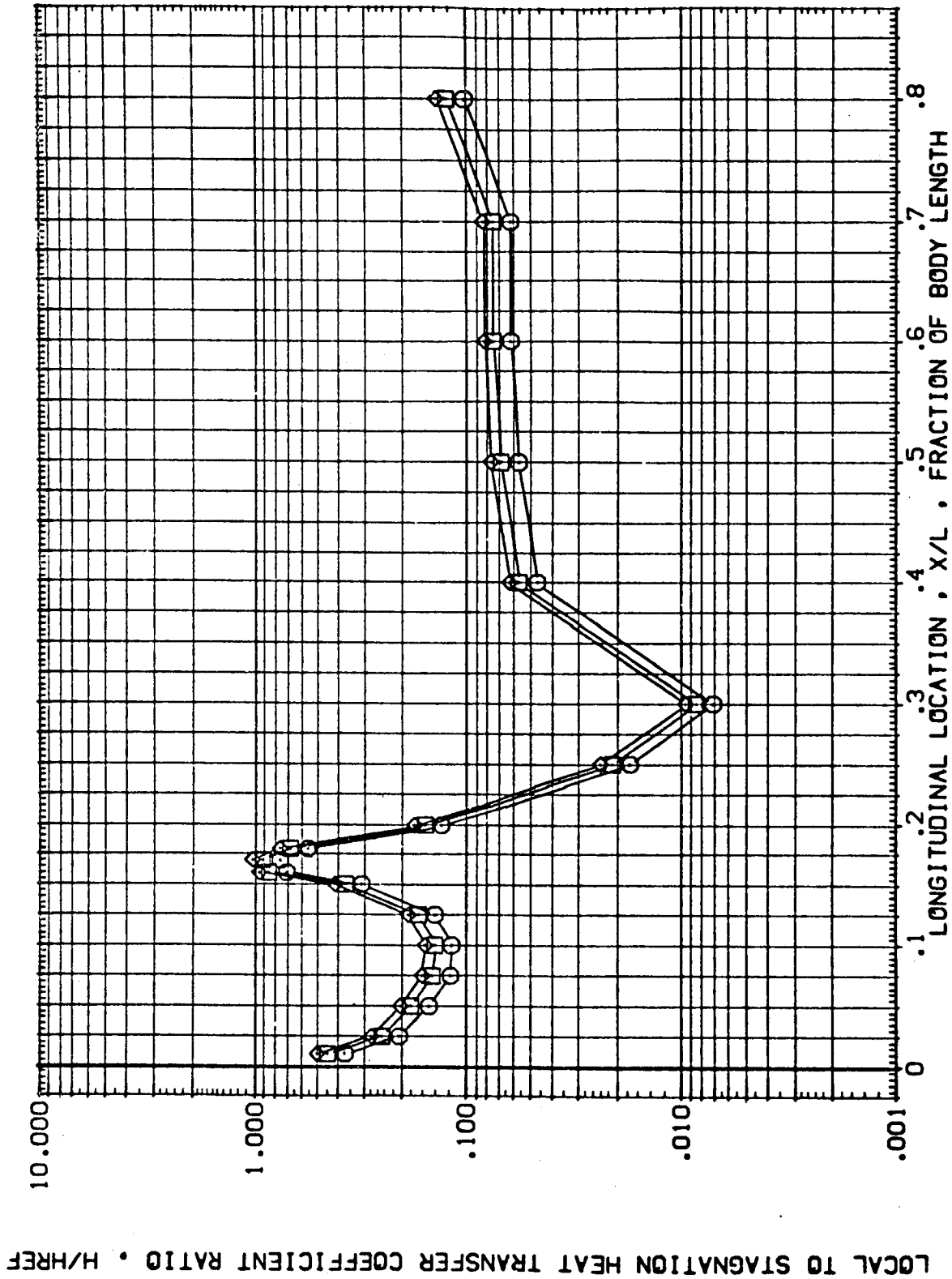


FIG. 14 ORBITER TOP CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 180.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ORB TOP CL	ALPHA	BETA	RN/L	HAW/HT
(REIAZ0)	ARC 3.5-178 IH3 0+T+S	ORB TOP CL	-3.000	.000	5.000	1.000
(AEIAZ0)	ARC 3.5-178 IH3 0+T+S	ORB TOP CL	-3.000	.000	5.000	.900
(BEIAZ0)	ARC 3.5-178 IH3 0+T+S	ORB TOP CL	-3.000	.000	5.000	.850

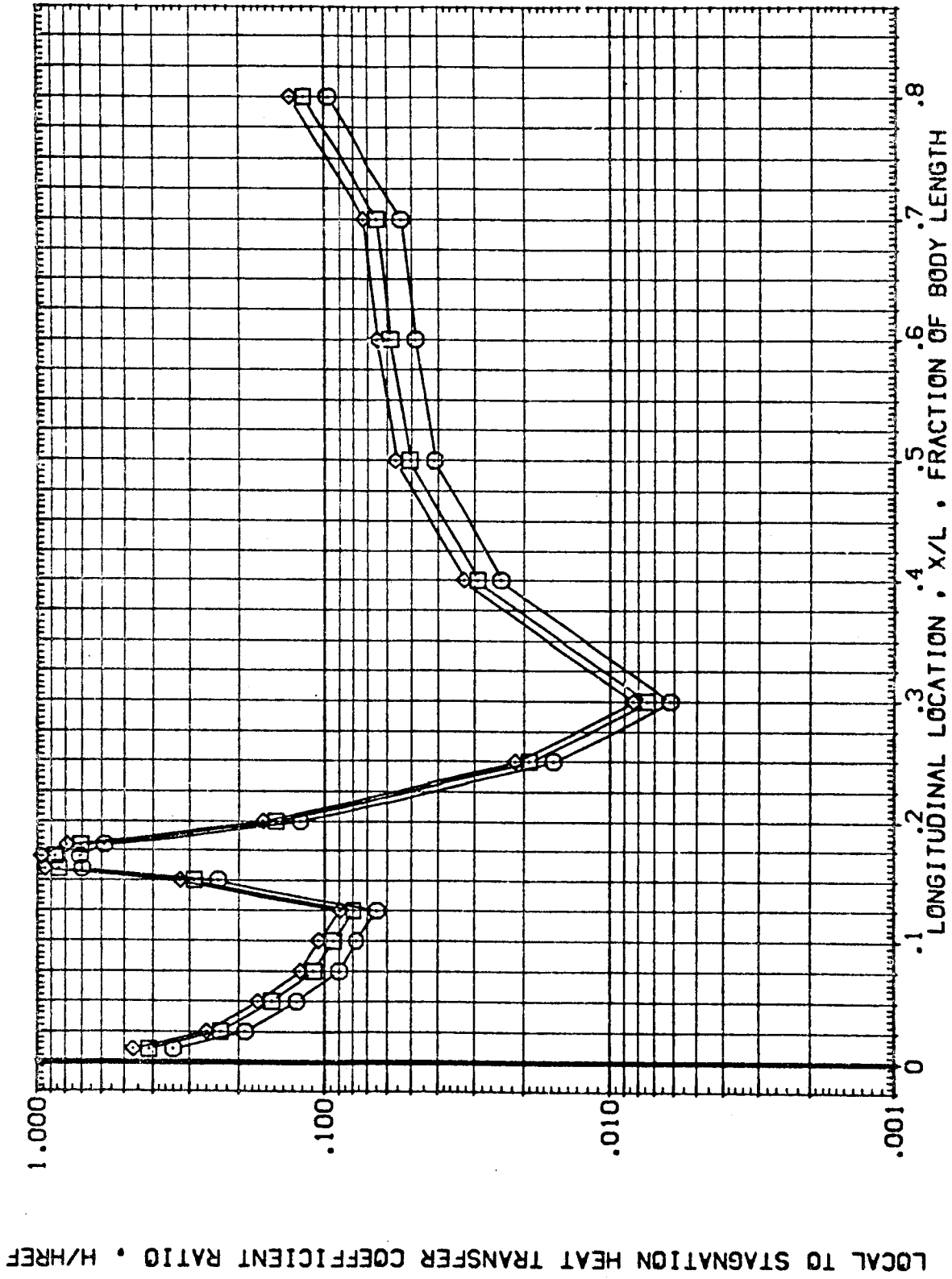


FIG. 14 ORBITER TOP CENTERLINE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 180.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ORB TOP CL	ALPHA	BETA	RN/L	HAW/HT
(EE/A06)	ARC 3.5-178 IH3 0+1+S	ORB TOP CL	.000	.000	1.500	.900
(EE/A07)	ARC 3.5-178 IH3 0+1+S	ORB TOP CL	.000	.000	5.000	.900
(EE/A08)	ARC 3.5-178 IH3 0+1+S (TRIPS)	ORB TOP CL	.000	.000	1.500	.900
(EE/A09)	ARC 3.5-178 IH3 0+1+S (TRIPS)	ORB TOP CL	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

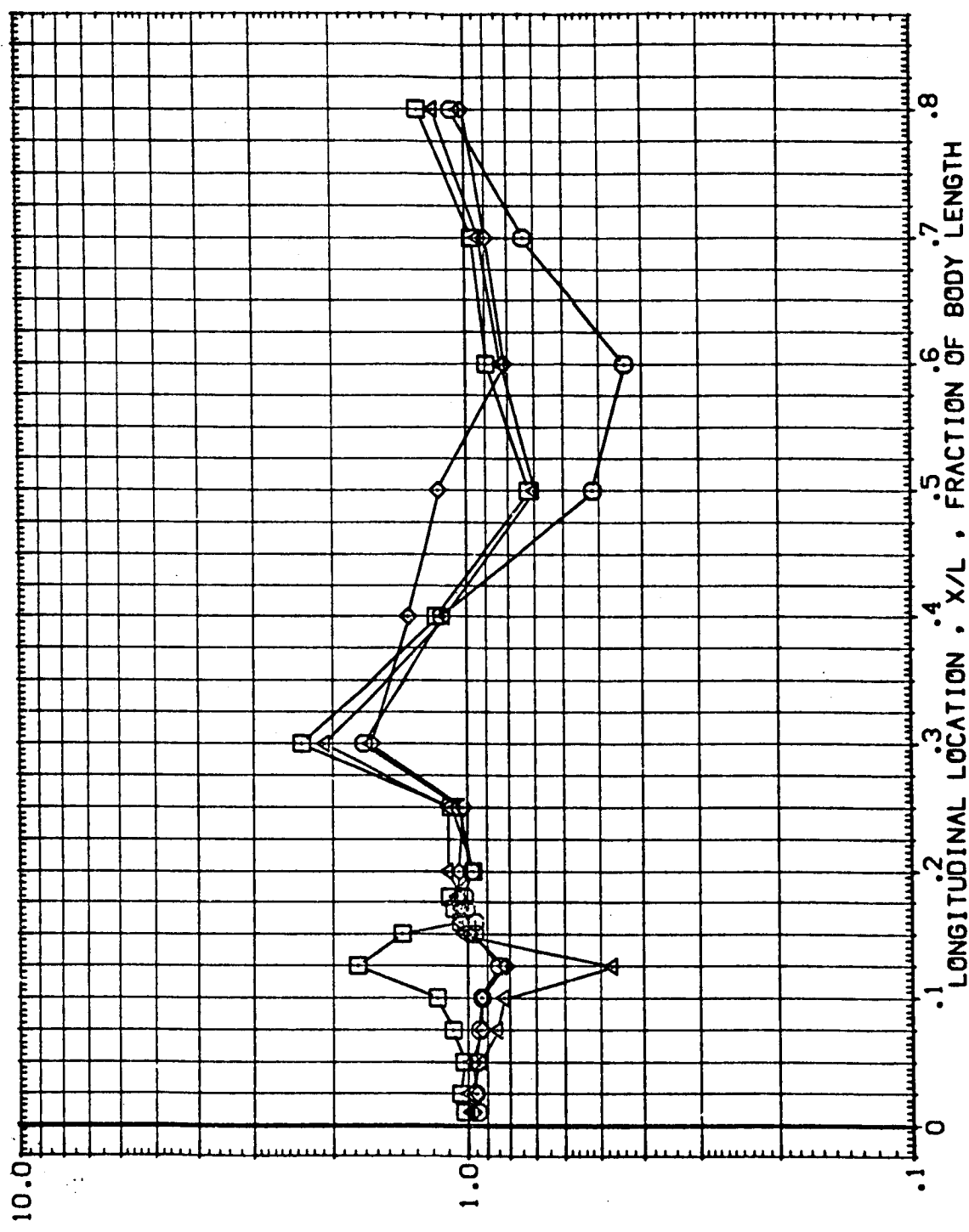


FIG. 15 ORBITER TOP CENTERLINE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 180.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(REID06)	ARC 3.5-178 IH3 ORBITER	ALPHA	BETA	RN/L	HAV/HT
(AEID06)	ARC 3.5-178 IH3 ORBITER	.000	.000	1.500	1.000
(BEID06)	ARC 3.5-178 IH3 ORBITER	.000	.000	1.500	.850

ORB BOTTH SURFACE
 ORB BOTTH SURFACE
 ORB BOTTH SURFACE

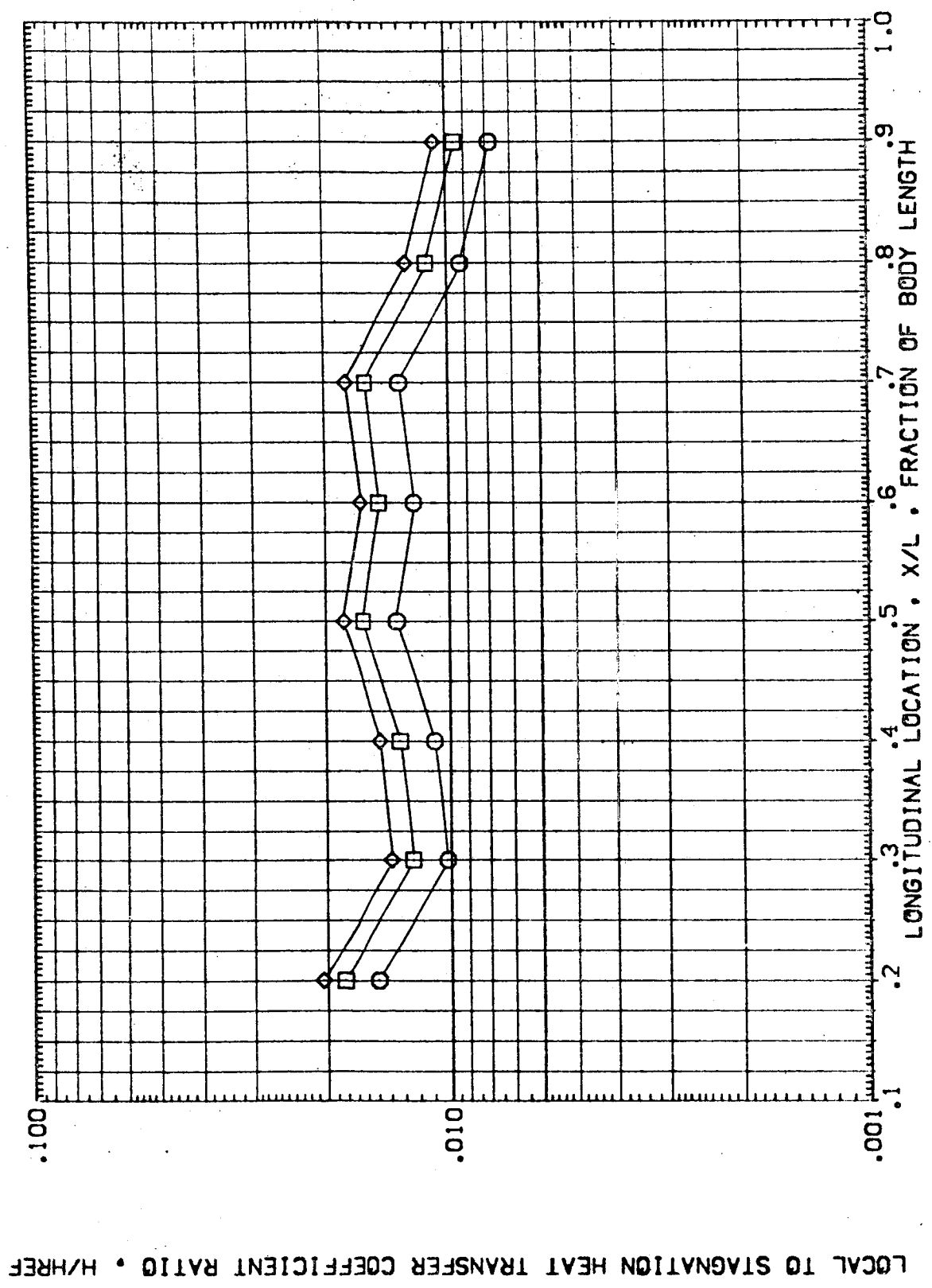


FIG. 16 ORBITER BOTTOM SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Y = 50.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE|DOT] ARC 3.5-178 [H3 ORBITER
 [AE|DOT] ARC 3.5-178 [H3 ORBITER
 [BE|DOT] ARC 3.5-178 [H3 ORBITER

ORBITER BOTTOM SURFACE
 ORBITER BOTTOM SURFACE
 ORBITER BOTTOM SURFACE
 ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 5.000 5.000 5.000
 HAV/HT 1.000 .900 .850

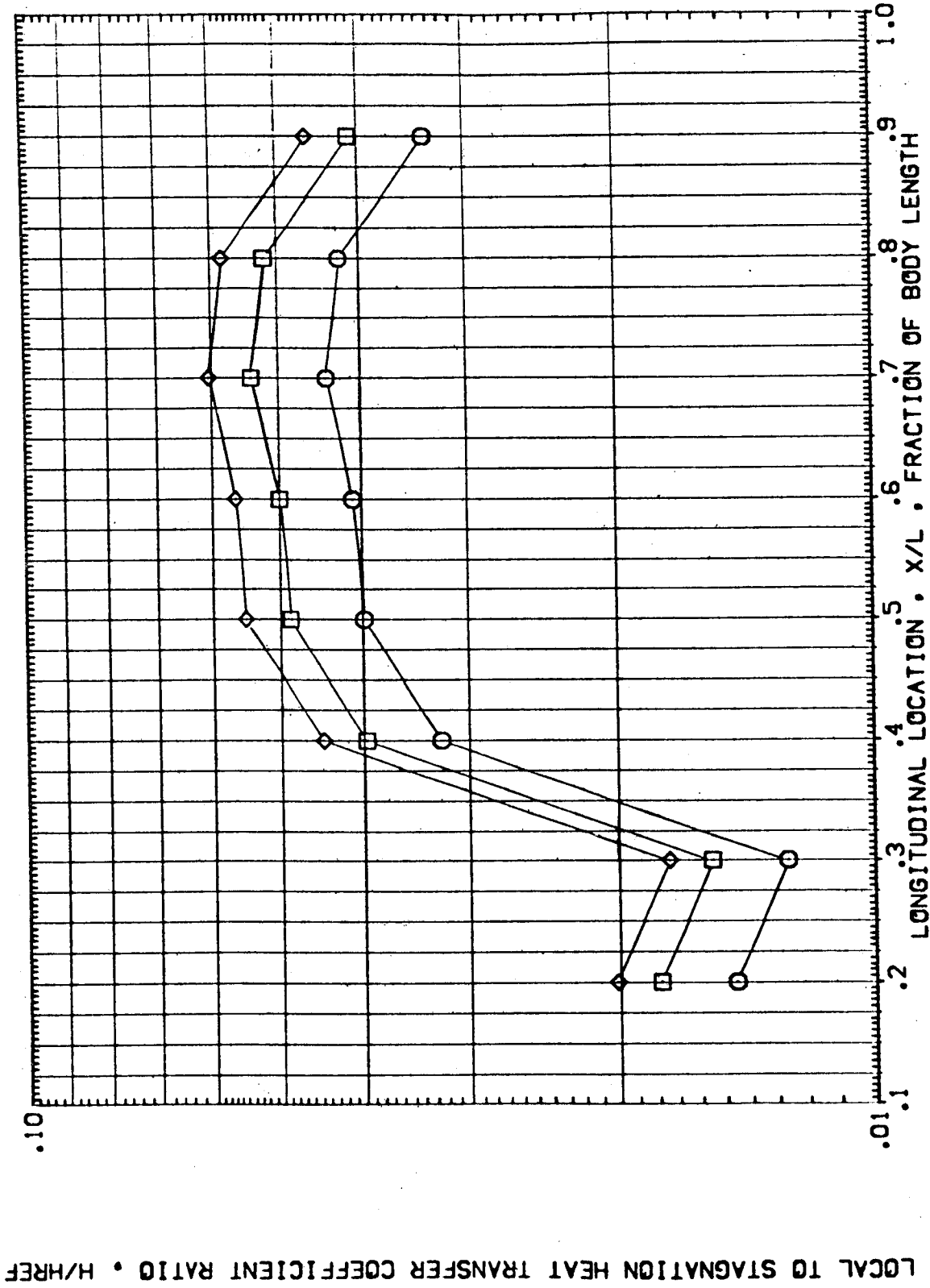


FIG. 16 ORBITER BOTTOM SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Y = 50.000

DATA SET SYMBOL. CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (RE|DOB) ARC 3.5-178 143 ORBITER (TRIPS)098 BOTTM SURFACE .000 .000 1.500 1.000
 (AE|DOB) ARC 3.5-178 143 ORBITER (TRIPS)098 BOTTM SURFACE .000 .000 1.500 .900
 (BE|DOB) ARC 3.5-178 143 ORBITER (TRIPS)098 BOTTM SURFACE .000 .000 1.500 .850

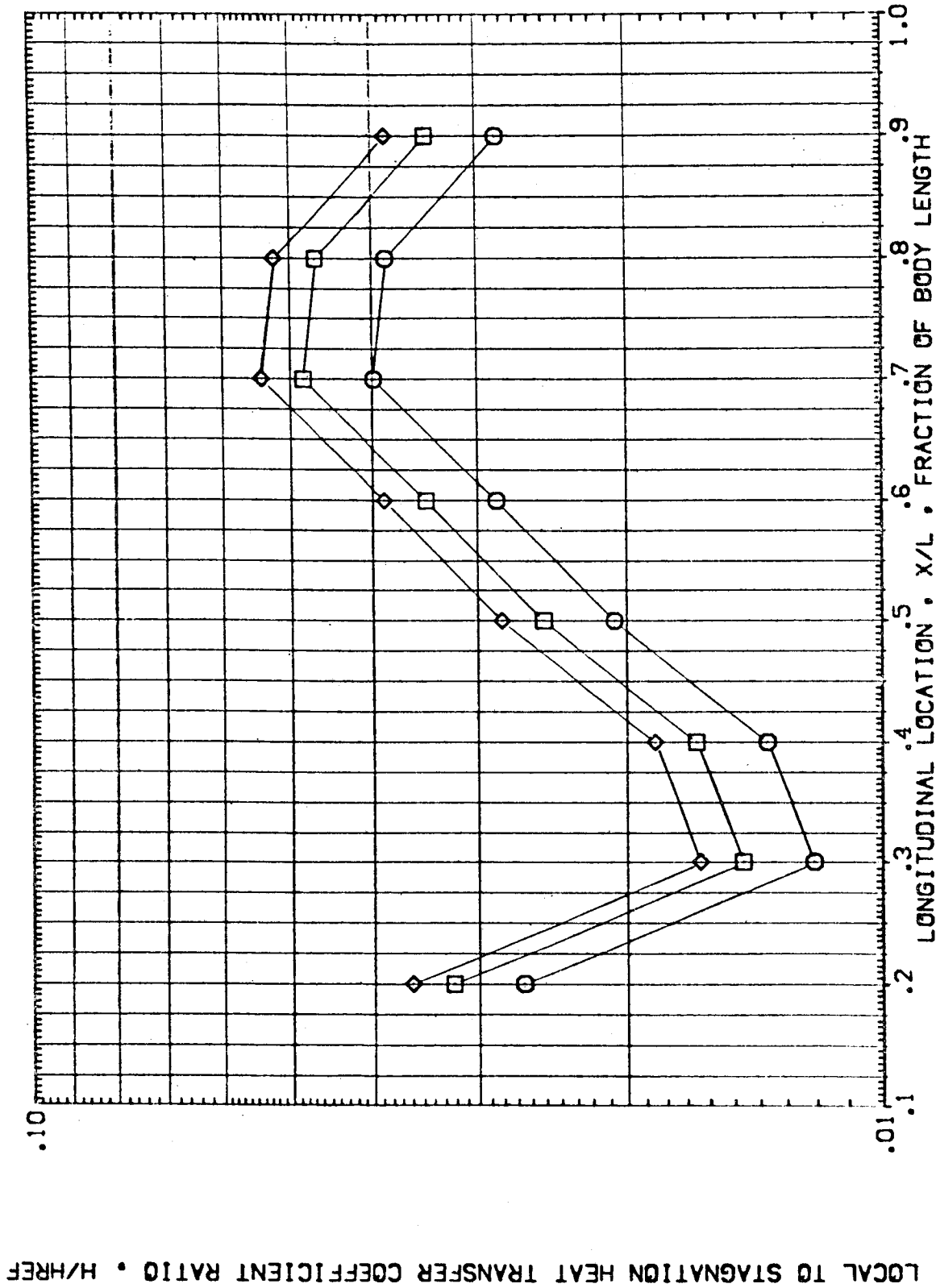


FIG. 16 ORBITER BOTTOM SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Y = 50.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 [RE|DOS] [H3 ORBITER (TR|PS|ORB .000 .000 5.000 1.000
 [AE|DOS] [H3 ORBITER (TR|PS|ORB .000 .000 5.000 .900
 [BE|DOS] [H3 ORBITER (TR|PS|ORB .000 .000 5.000 .650

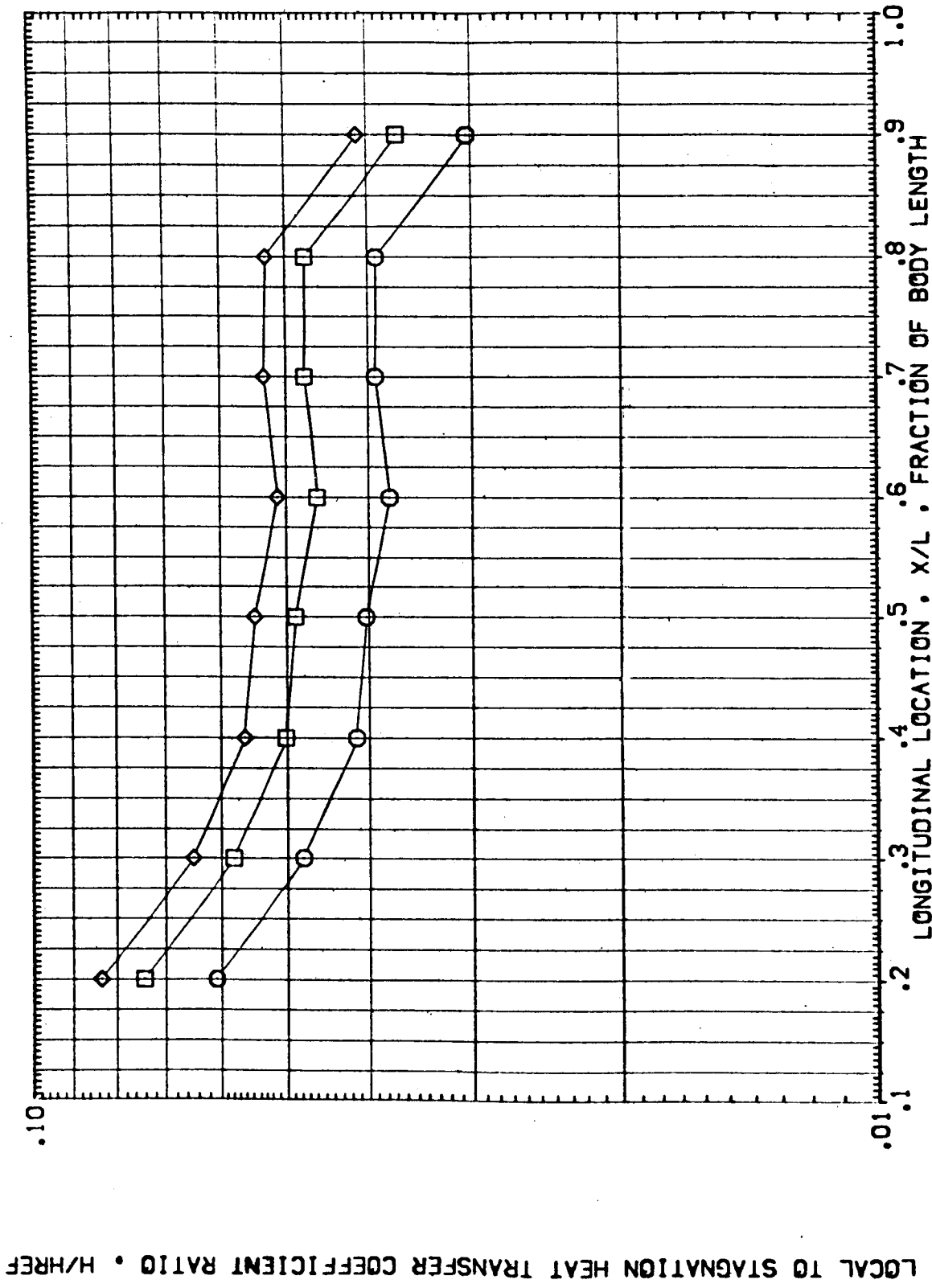


FIG. 16 ORBITER BOTTOM SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Y = 50.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

{RE|DO|} ARC 3.5-178 IH3 0+T+S .000 .000 1.500 1.000

{AE|DO|} ARC 3.5-178 IH3 0+T+S .000 .000 1.500 .900

{BE|DO|} ARC 3.5-178 IH3 0+T+S .000 .000 1.500 .850

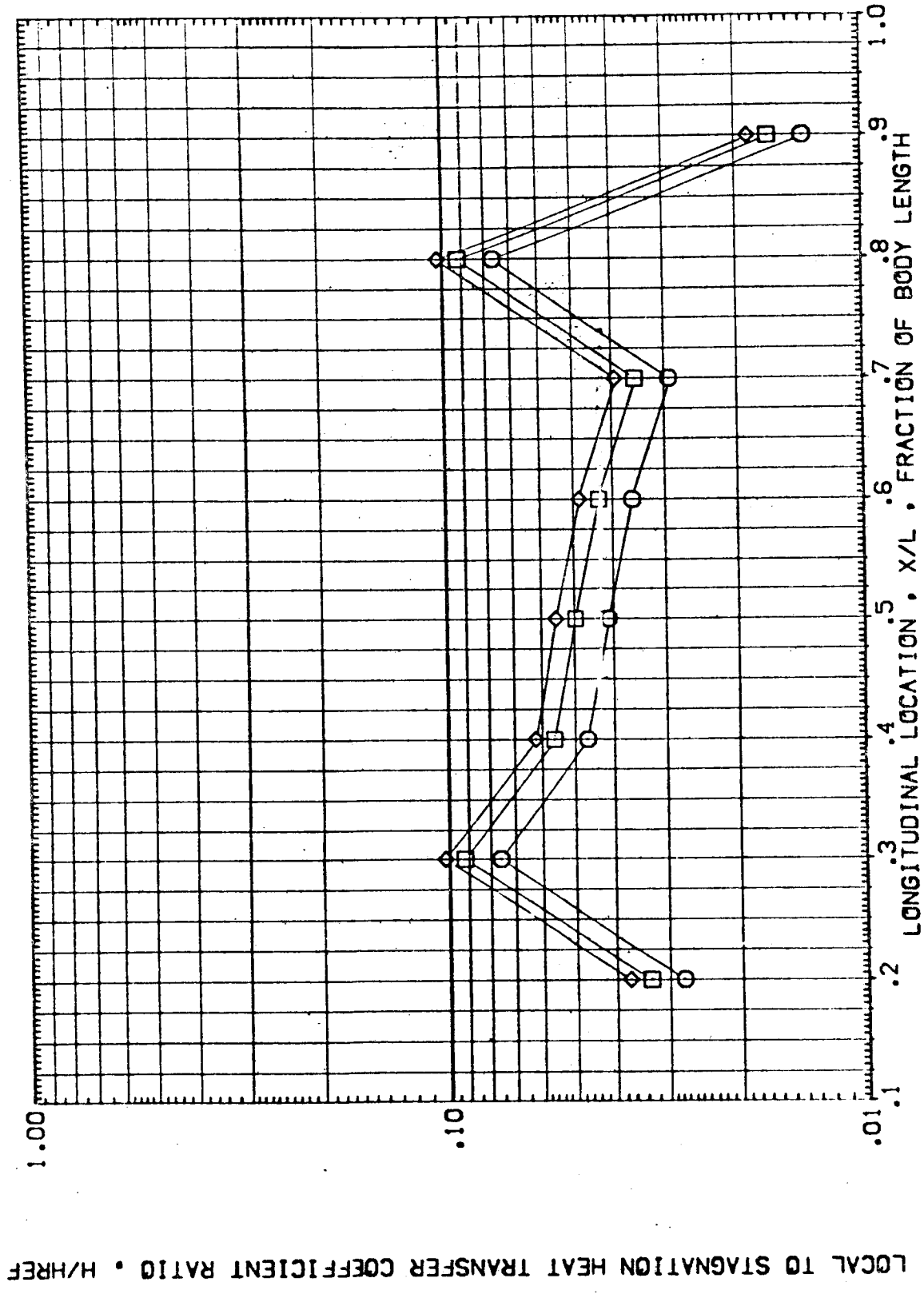


FIG. 17 ORBITER BOTTOM SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 50.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE1002} ARC 3.5-178 IH3 O+T+S .000 .000 5.000 1.000

{AE1002} ARC 3.5-178 IH3 O+T+S .000 .000 5.000 .900

{BE1002} ARC 3.5-178 IH3 O+T+S .000 .000 5.000 .850

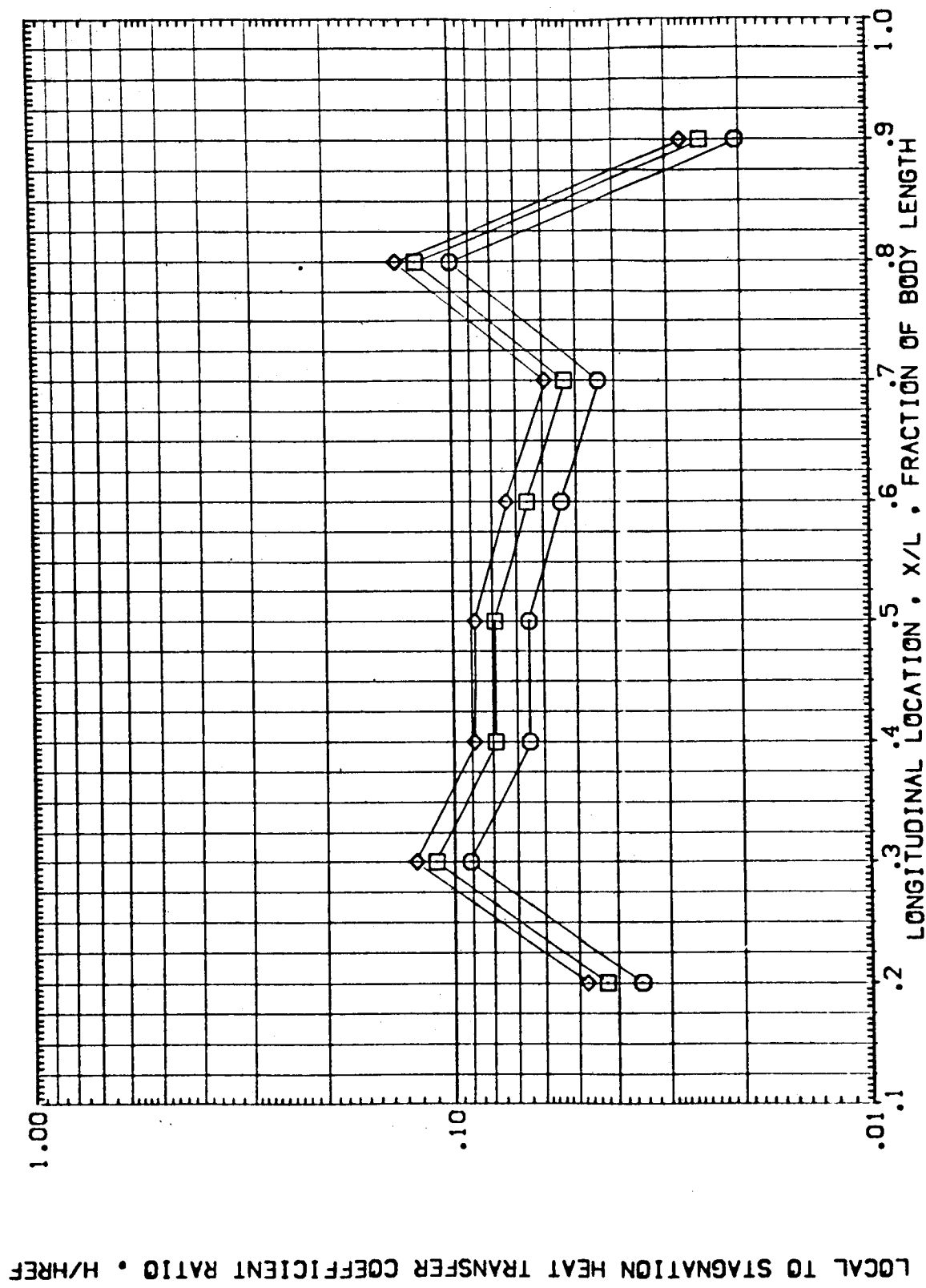


FIG. 17 ORBITER BOTTOM SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 50.000 PAGE 1116



DATA SET SYMBOL CONFIGURATION DESCRIPTION HAV/HT

{RE 003}	ARC 3.5-178	143	0+T+S	{TR PS}	ORB BOTTH SURFACE	ALPHA	BETA	RV/L	1.000
{AE 003}	ARC 3.5-178	143	0+T+S	{TR PS}	ORB BOTTH SURFACE	.000	.000	1.500	.900
{BE 003}	ARC 3.5-178	143	0+T+S	{TR PS}	ORB BOTTH SURFACE	.000	.000	1.500	.850

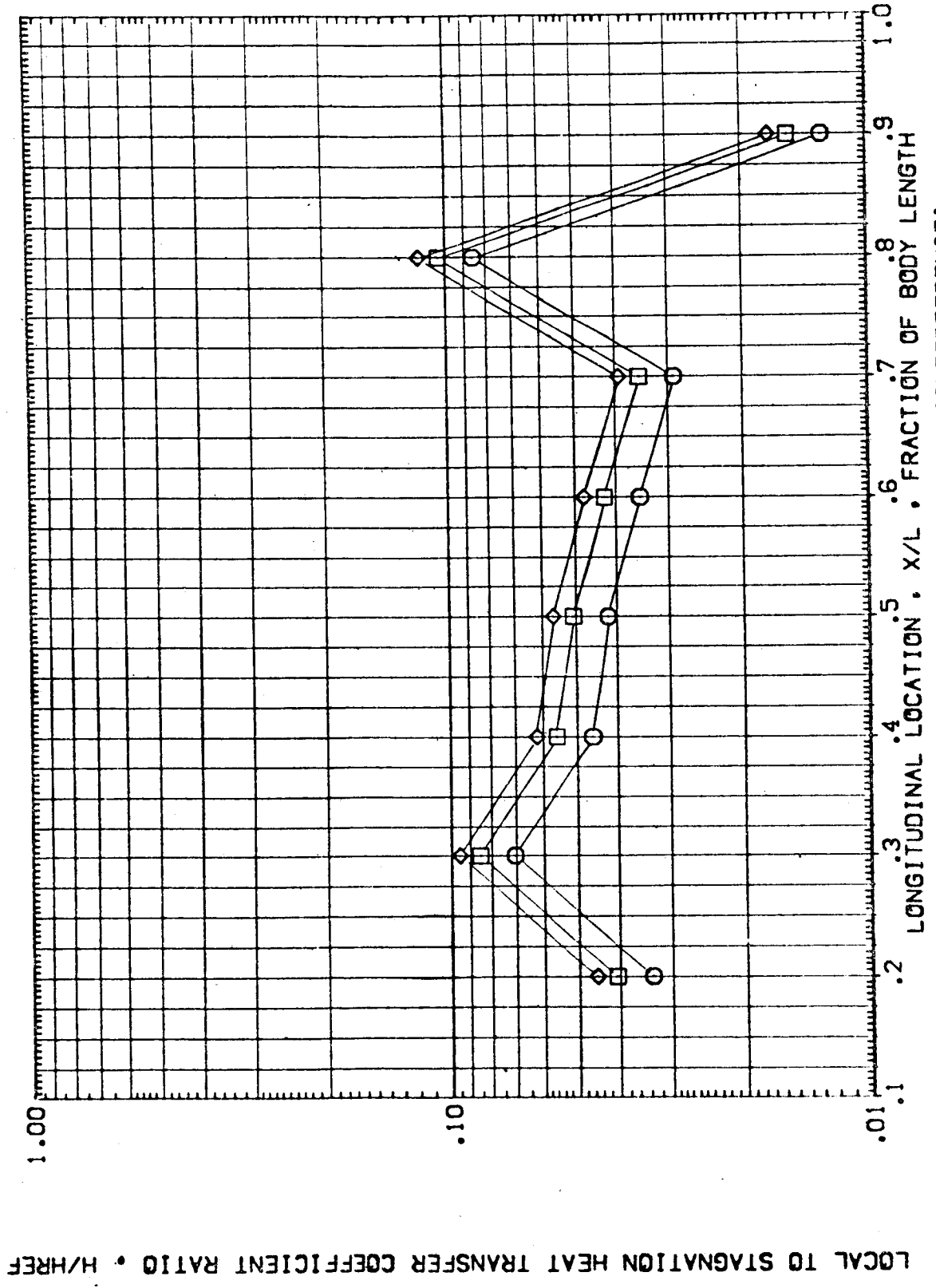


FIG. 17 ORBITER BOTTOM SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 50.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

{AE|DD4} ARC 3.5-178 1-3 0+1+S (TR|PS) .000 .000 5.000 1.000

{BE|DD4} ARC 3.5-178 1-3 0+1+S (TR|PS) .000 .000 5.000 .500

{CE|DD4} ARC 3.5-178 1-3 0+1+S (TR|PS) .000 .000 5.000 .850

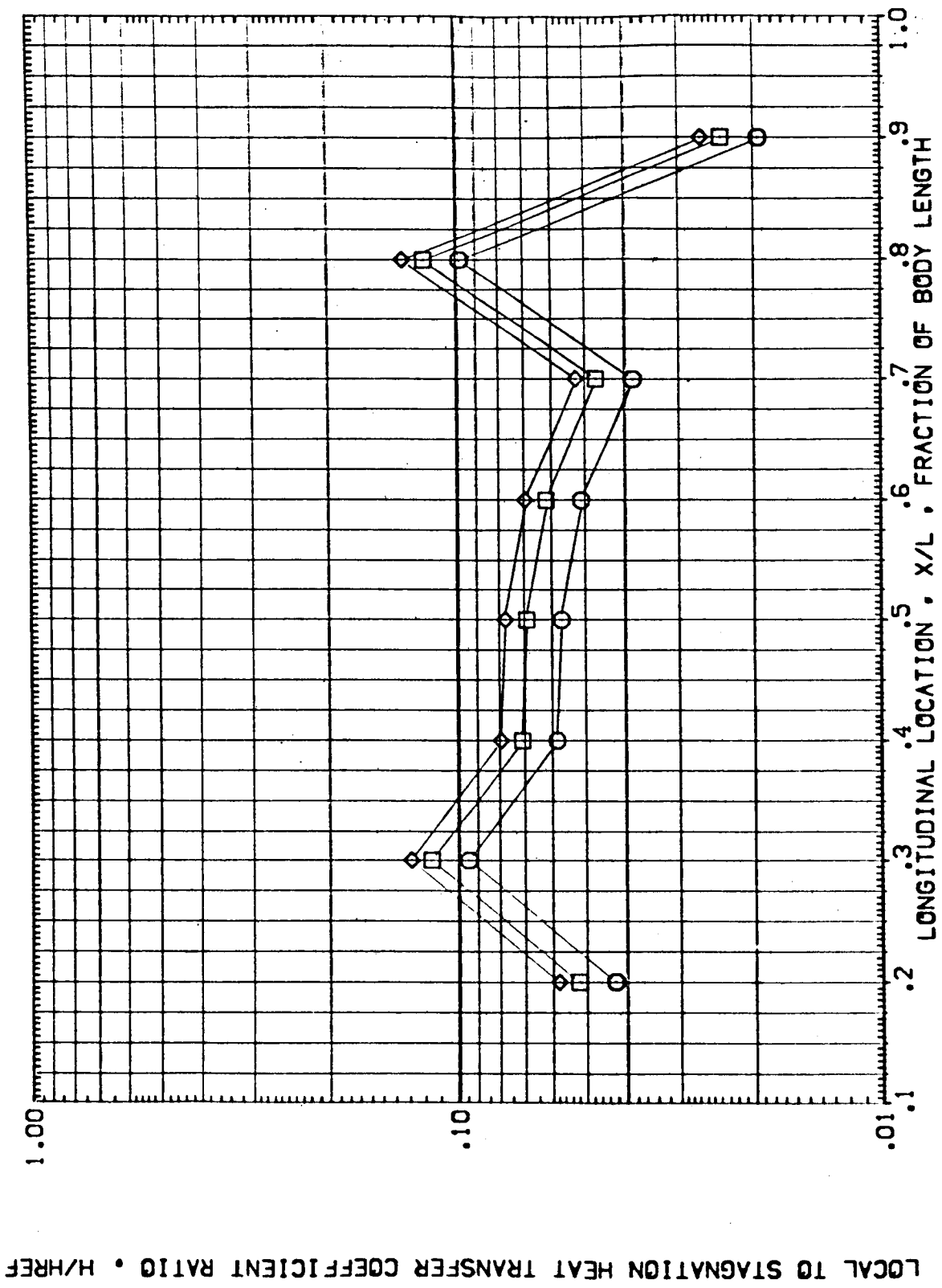


FIG. 17 ORBITER BOTTOM SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 50.000



DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (REIDDS) } ARC 3.5-178 IH3 0+T+S
 (AEIDDS) } ARC 3.5-178 IH3 0+T+S
 (BEIDDS) } ARC 3.5-178 IH3 0+T+S

ORBITER BOTTOM SURFACE
 ORBITER BOTTOM SURFACE
 ORBITER BOTTOM SURFACE

ALPHA .000
 .000
 .000

BETA -5.000
 -5.000
 -5.000

RN/L 5.000
 5.000
 5.000

HAW/HT 1.000
 .900
 .850

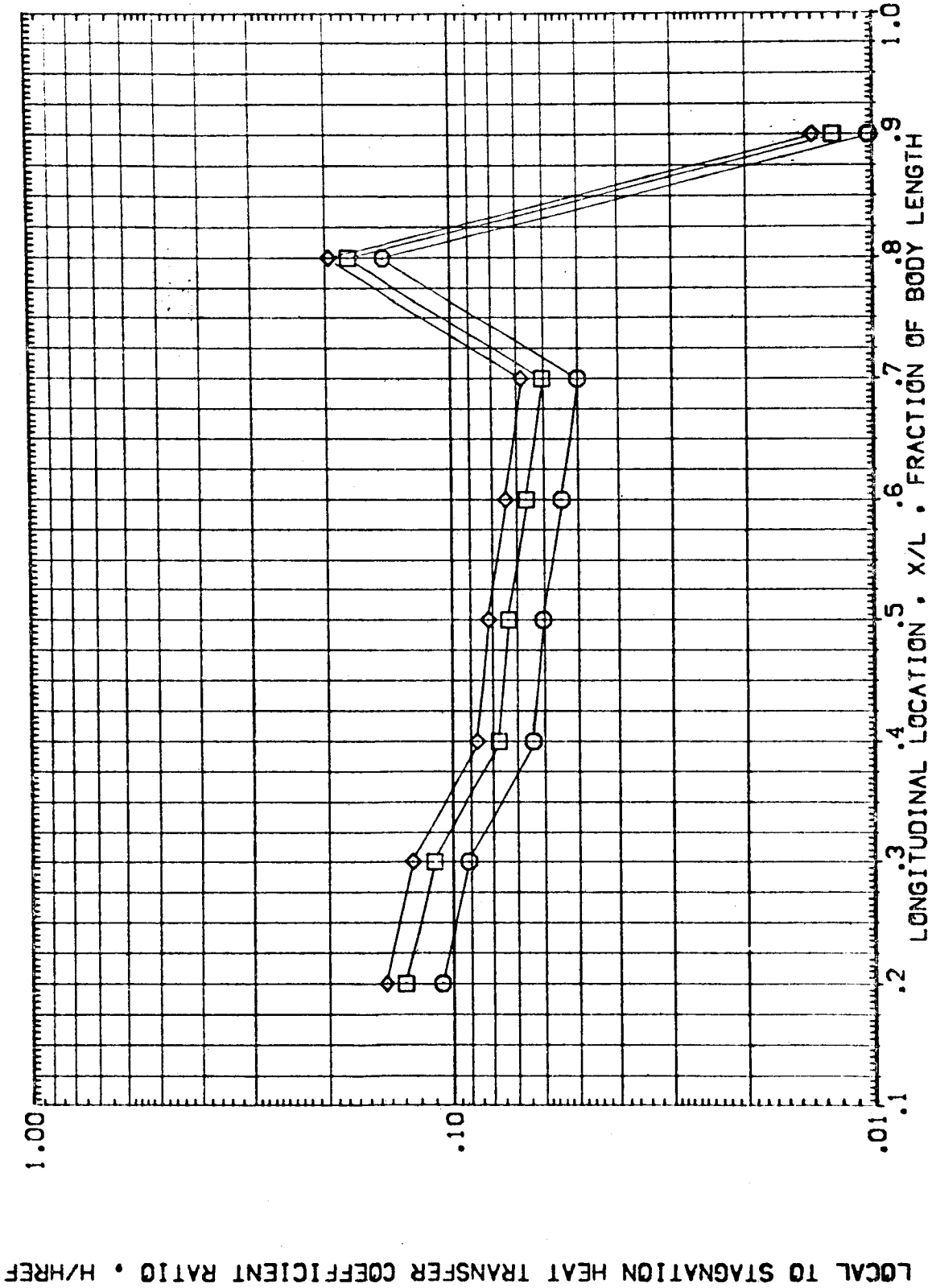


FIG. 17 ORBITER BOTTOM SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 50.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REID19) ARC 3.5-178 IH3 0+T+S
 (AEID19) ARC 3.5-178 IH3 0+T+S
 (BEID19) ARC 3.5-178 IH3 0+T+S

ORB BOTTM SURFACE
 ORB BOTTM SURFACE
 ORB BOTTM SURFACE

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RN/L 5.000
 5.000
 5.000

HAV/HT 1.000
 .900
 .650

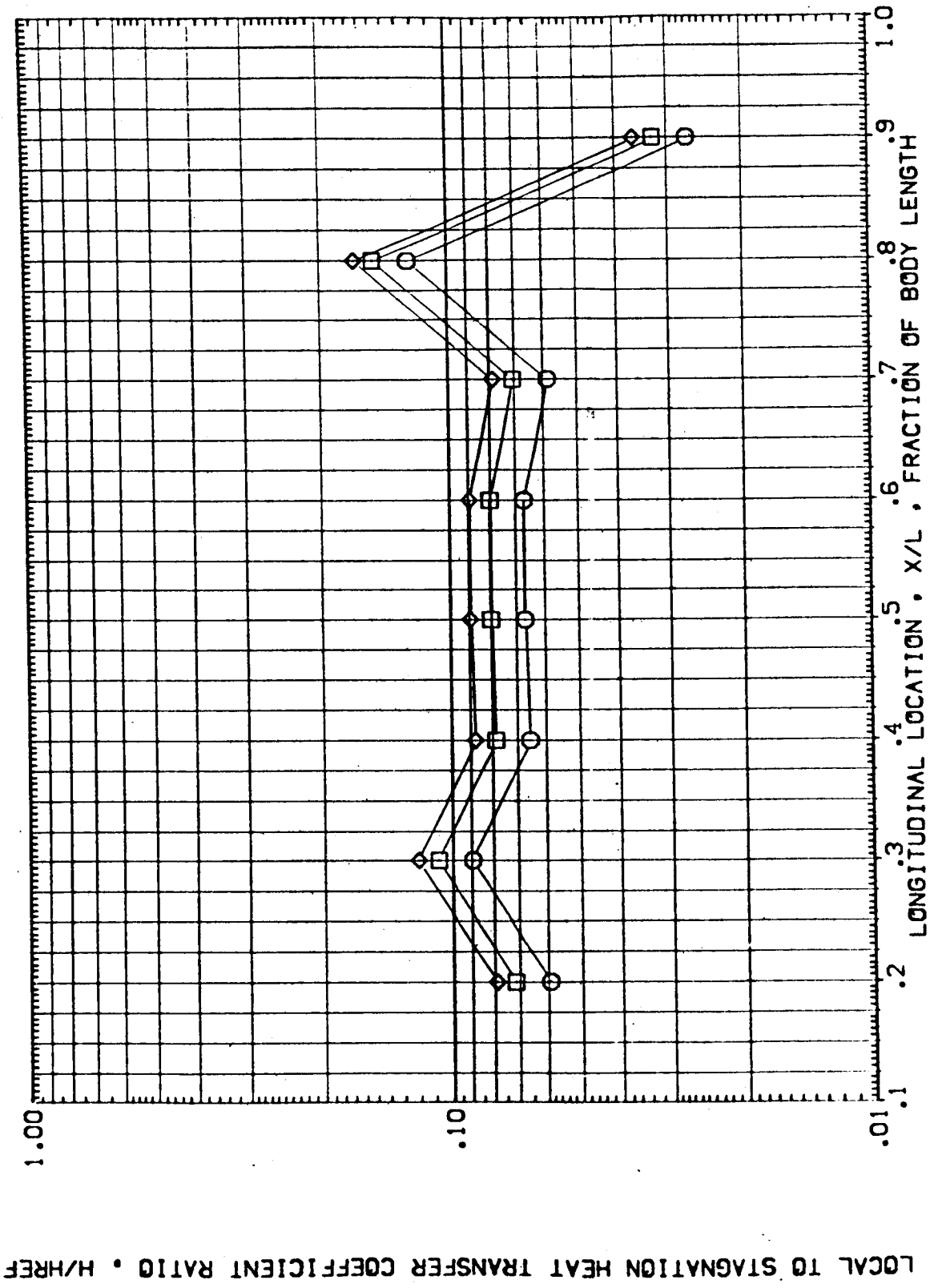


FIG. 17 ORBITER BOTTOM SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 50.000

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (RE1020) (AE1020) (BE1020) (H3 O+T+S)
 (H3 O+T+S)
 (H3 O+T+S)

ORB BOTTOM SURFACE
 ORB BOTTOM SURFACE
 ORB BOTTOM SURFACE
 ALPHA .000
 .000
 .000
 BETA .000
 .000
 .000
 RV/L 5.000
 5.000
 5.000
 HAV/HT. 1.000
 .900
 .850

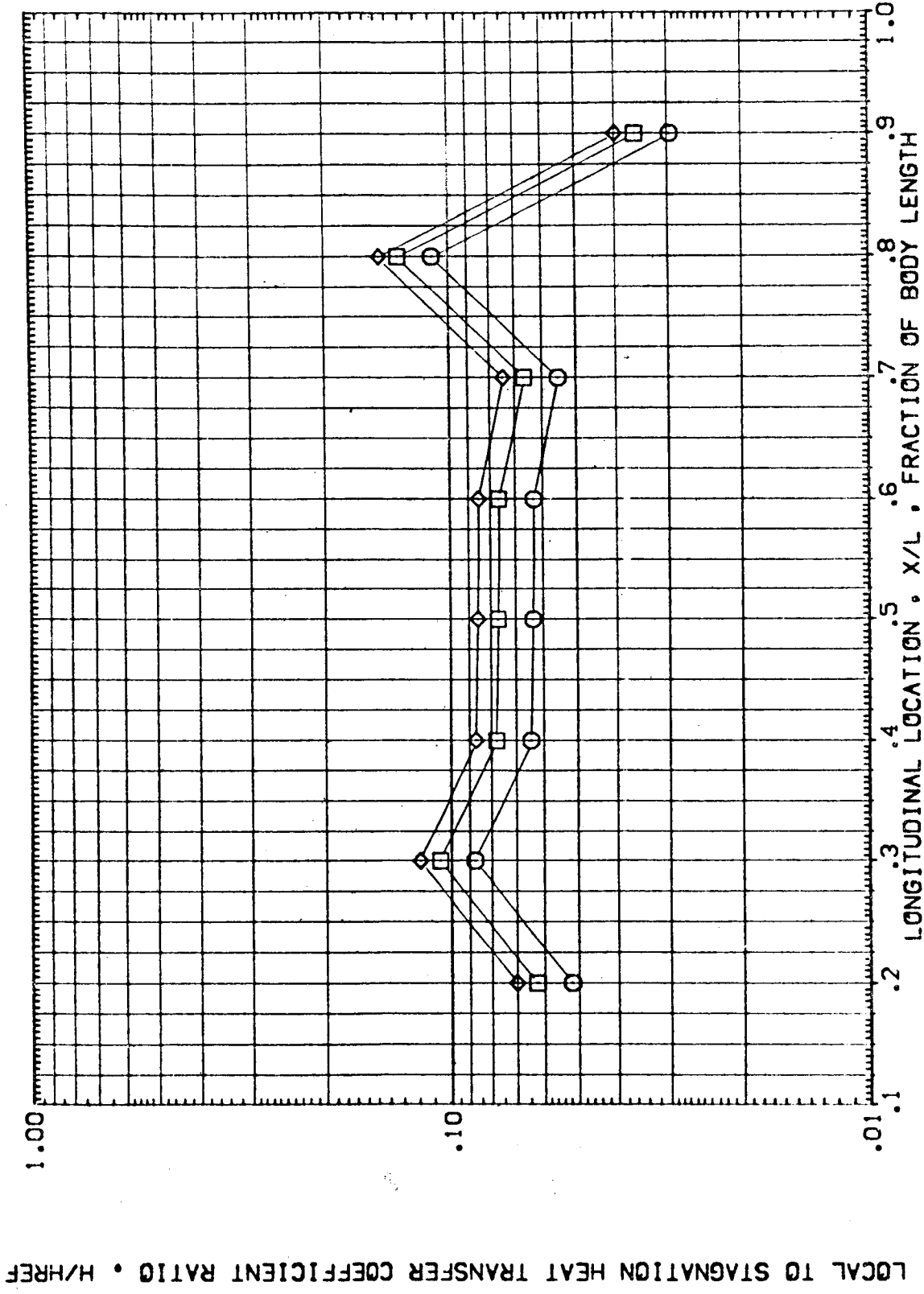


FIG. 17 ORBITER BOTTOM SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 50.000

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT
 (EE|D06) | H3 O+T+S .000 .000 1.500 .500
 (EE|D07) | H3 O+T+S .000 .000 5.000 .500
 (EE|D08) | H3 O+T+S (TRIPS) .000 .000 1.500 .900
 (EE|D09) | H3 O+T+S (TRIPS) .000 .000 5.000 .900

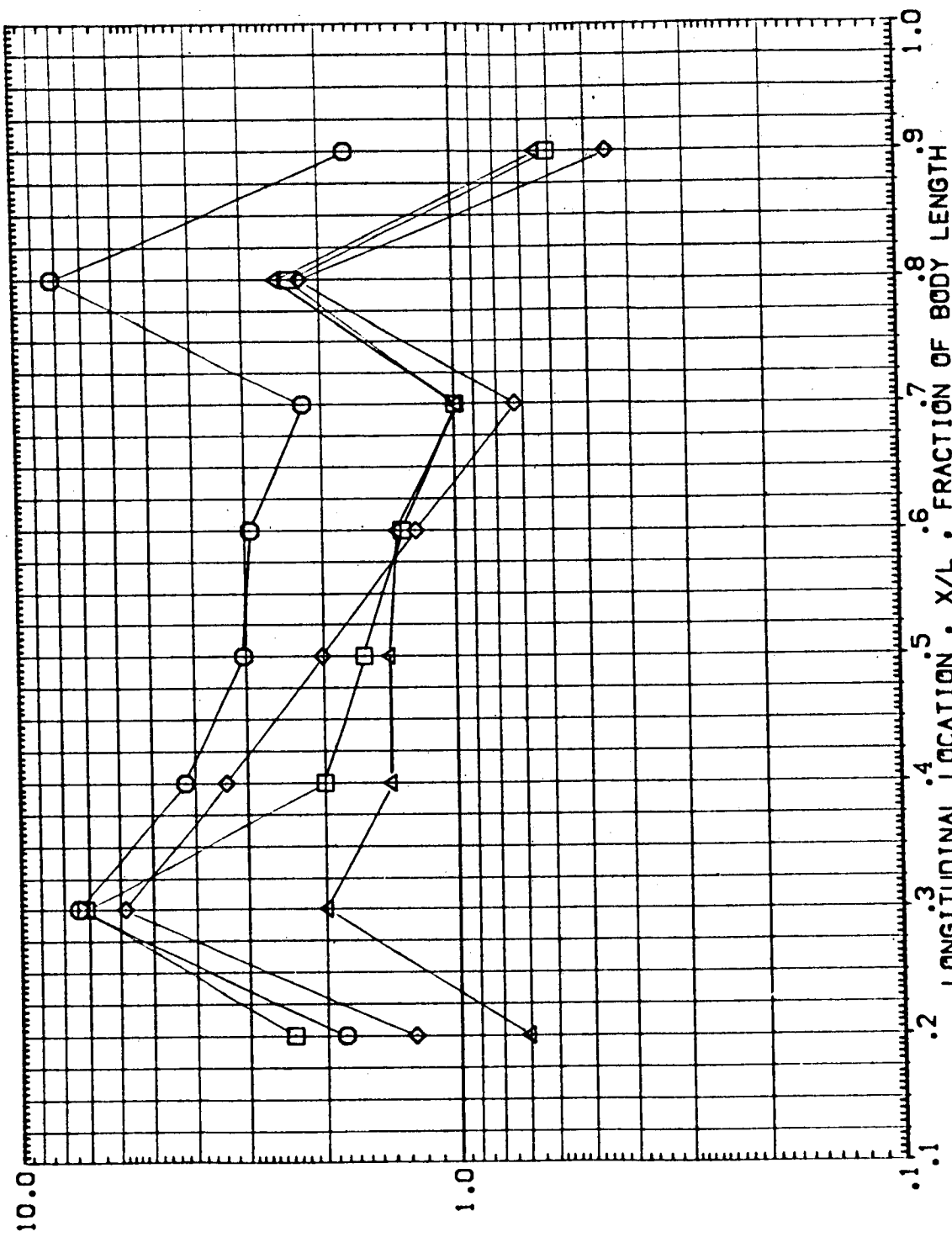


FIG. 18 ORBITER BOTTOM SURFACE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 Y = 50.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE]E0S } ARC 3.5-178 143 ORB|TER
 [AE]E0S } ARC 3.5-178 143 ORB|TER
 [BE]E0S } ARC 3.5-178 143 ORB|TER

ORB SIDE
 ORB SIDE
 ORB SIDE

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RM/L 1.500
 1.500
 1.500

HAV/HT 1.000
 1.000
 .850

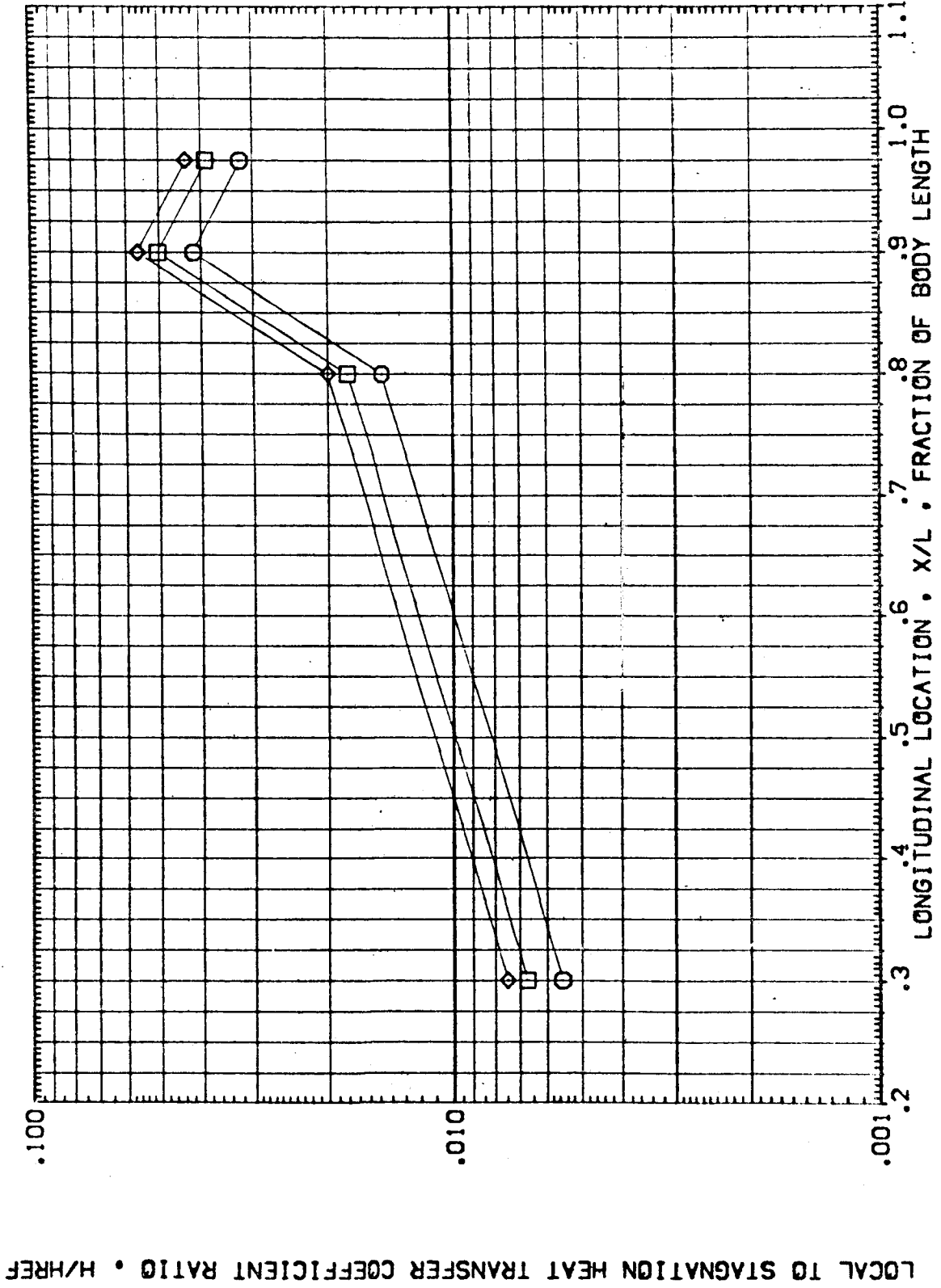


FIG. 19 ORBITER SIDE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 350.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 {RE|E0S} ARC 3.5-178 H3 ORBITER .000 .000 1.500 1.000
 {AE|E0S} ARC 3.5-178 H3 ORBITER .000 .000 1.500 .900
 {BE|E0S} ARC 3.5-178 H3 ORBITER .000 .000 1.500 .850

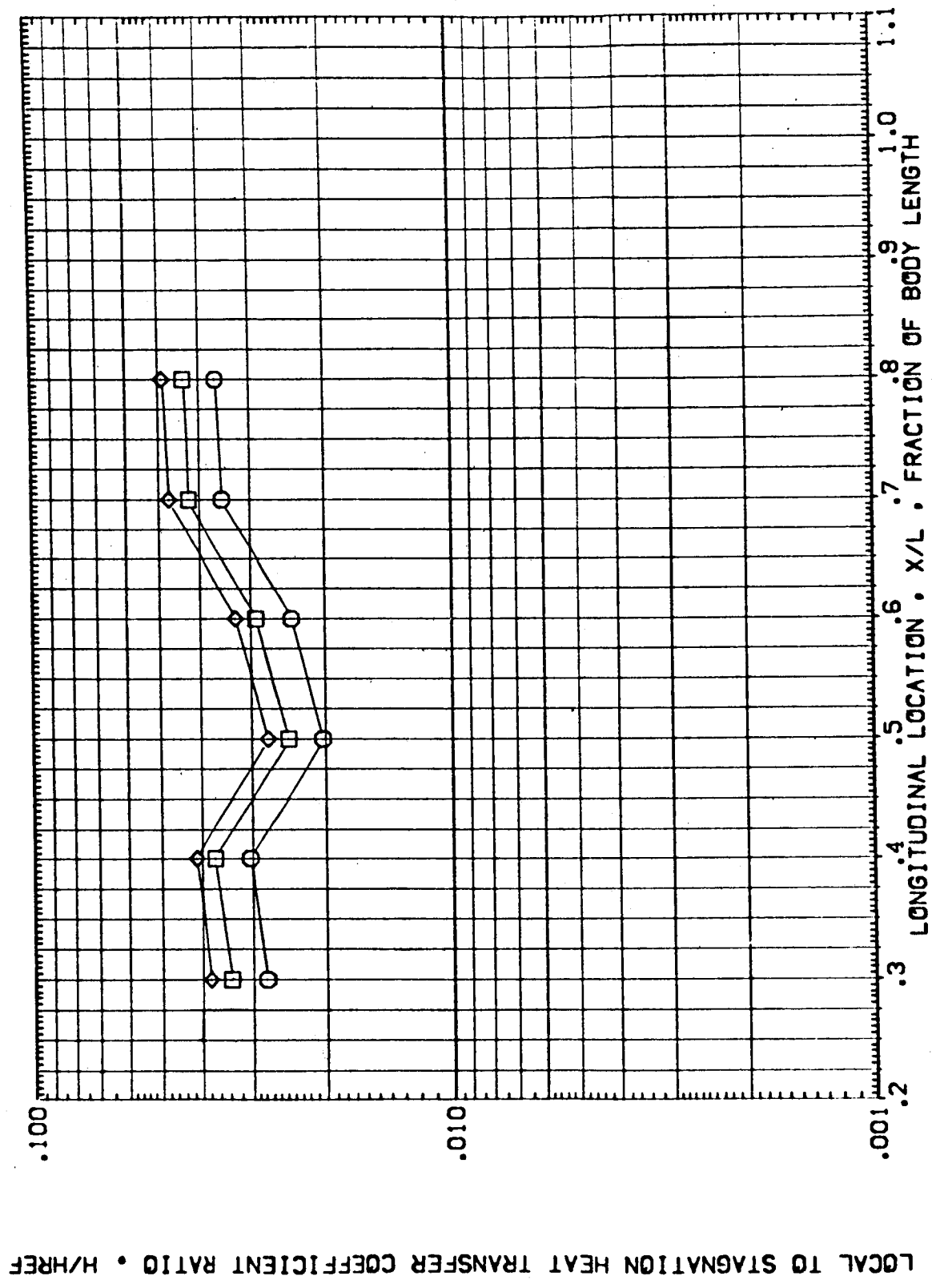


FIG. 19 ORBITER SIDE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 430.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION ORB SIDE ALPHA BETA RN/L MAV/HT

{ RELEOS } ARC 3.5-178 H3 ORBITER ORB SIDE .000 .000 1.500 1.000

{ AELEOS } ARC 3.5-178 H3 ORBITER ORB SIDE .000 .000 1.500 .900

{ BELEOS } ARC 3.5-178 H3 ORBITER ORB SIDE .000 .000 1.500 .850

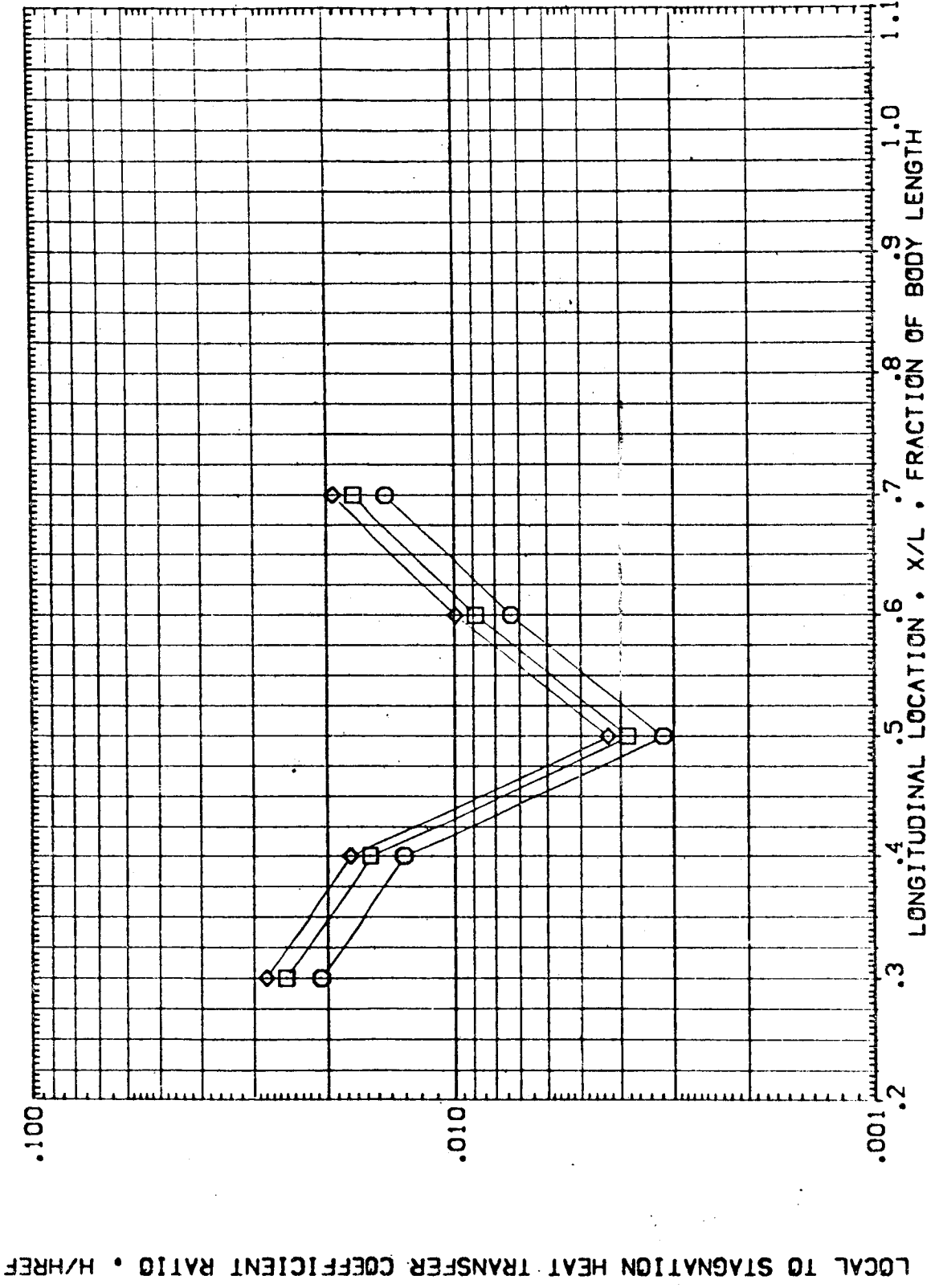


FIG. 19 ORBITER SIDE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 478.800

DATA SET SYMBOL

CONFIGURATION DESCRIPTION

ORBITER SIDE
ORBITER SIDE
ORBITER SIDE

ALPHA BETA RV/L MAV/HT
.000 .000 5.000 1.000
.000 .000 5.000 .900
.000 .000 5.000 .850

ARC 3.5-178 I43 ORBITER
ARC 3.5-178 I43 ORBITER
ARC 3.5-178 I43 ORBITER

{ REIE07 }
{ AEIE07 }
{ BEIE07 }

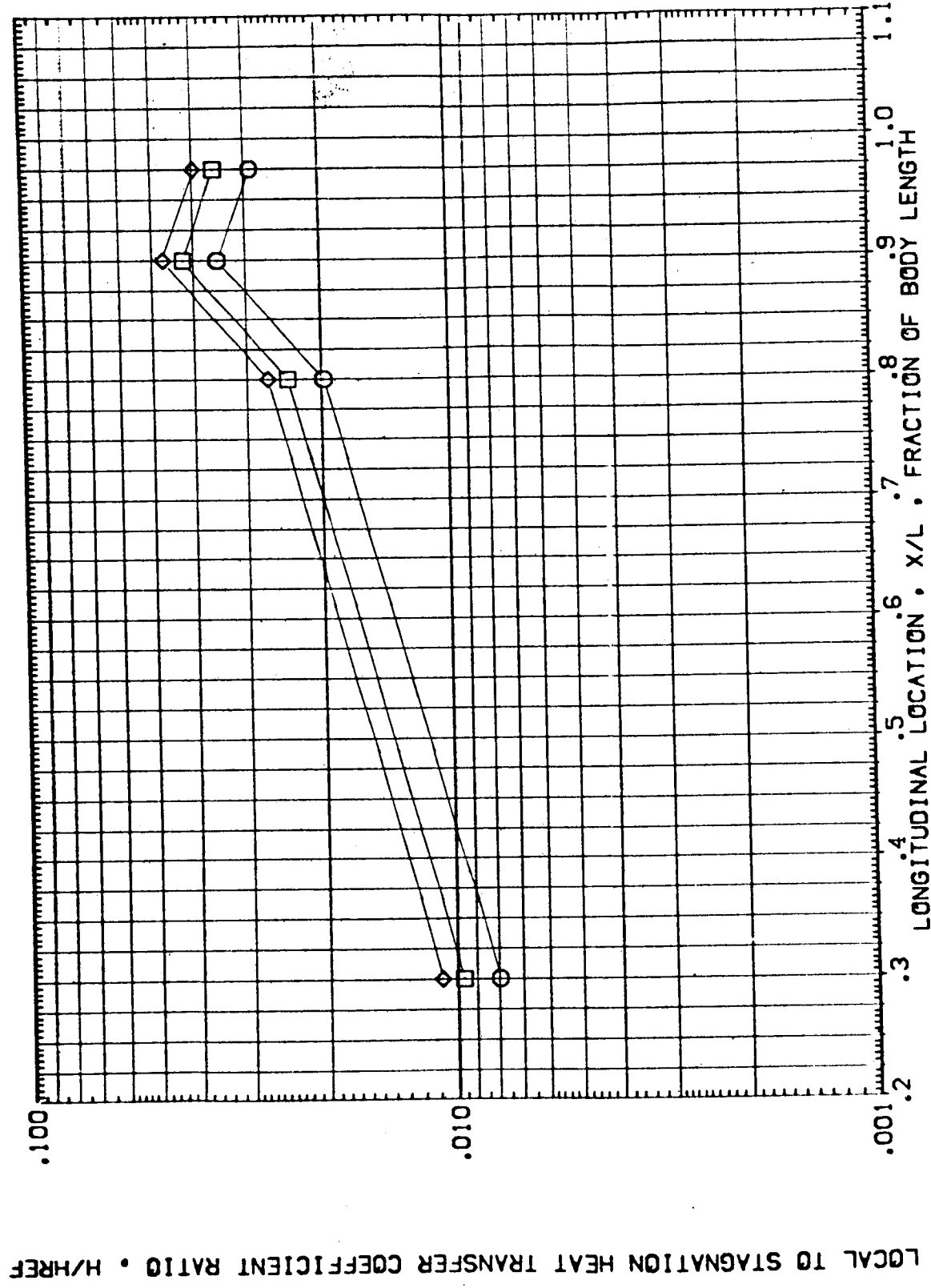


FIG. 19 ORBITER SIDE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 350.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT
 (RE1E07) (AE1E07) (BE1E07) ARC 3.5-178 IH3 ORBITER .000 .000 5.000 1.000
 (RE1E07) (AE1E07) (BE1E07) ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .900
 (RE1E07) (AE1E07) (BE1E07) ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .850

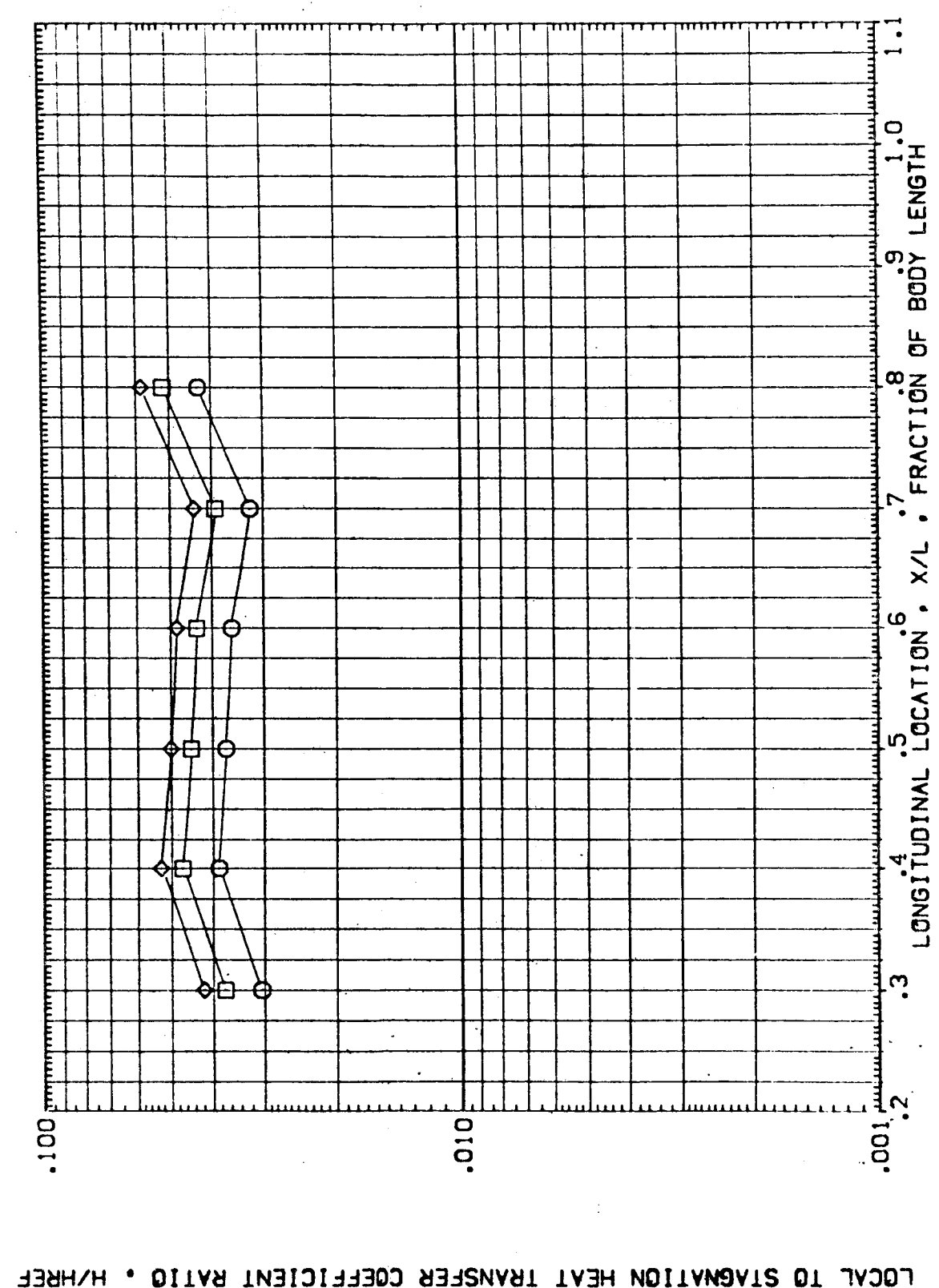


FIG. 19 ORBITER SIDE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 430.000

DATA SET SYMBOL: ALPHA BETA RV/L HAV/HT
 {RE|E07} .000 .000 5.000 1.000
 {AE|E07} .000 .000 5.000 .900
 {BE|E07} .000 .000 5.000 .850

ORBITER SIDE
 ORBITER SIDE
 ORBITER SIDE

CONFIGURATION DESCRIPTION
 ARC 3.5-178 |H3 ORBITER
 ARC 3.5-178 |H3 ORBITER
 ARC 3.5-178 |H3 ORBITER

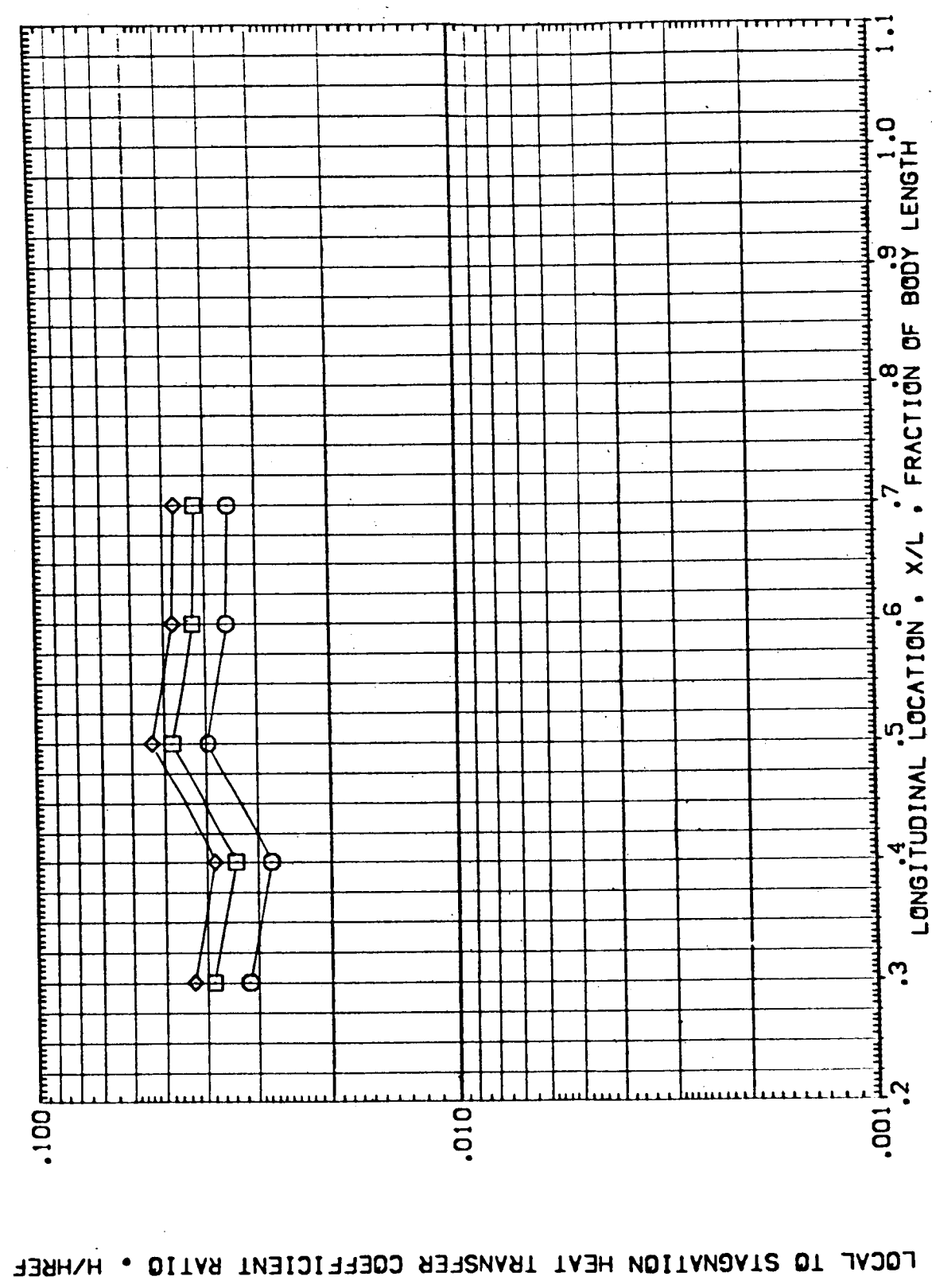


FIG. 19 ORBITER SIDE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 478.800

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (RE|E08) ARC 3.5-178 I43 ORBITER (TRIPS)OR8 SIDE .000 .000 1.500 1.000
 (AE|E08) ARC 3.5-178 I43 ORBITER (TRIPS)OR8 SIDE .000 .000 1.500 .900
 (BE|E08) ARC 3.5-178 I43 ORBITER (TRIPS)OR8 SIDE .000 .000 1.500 .850

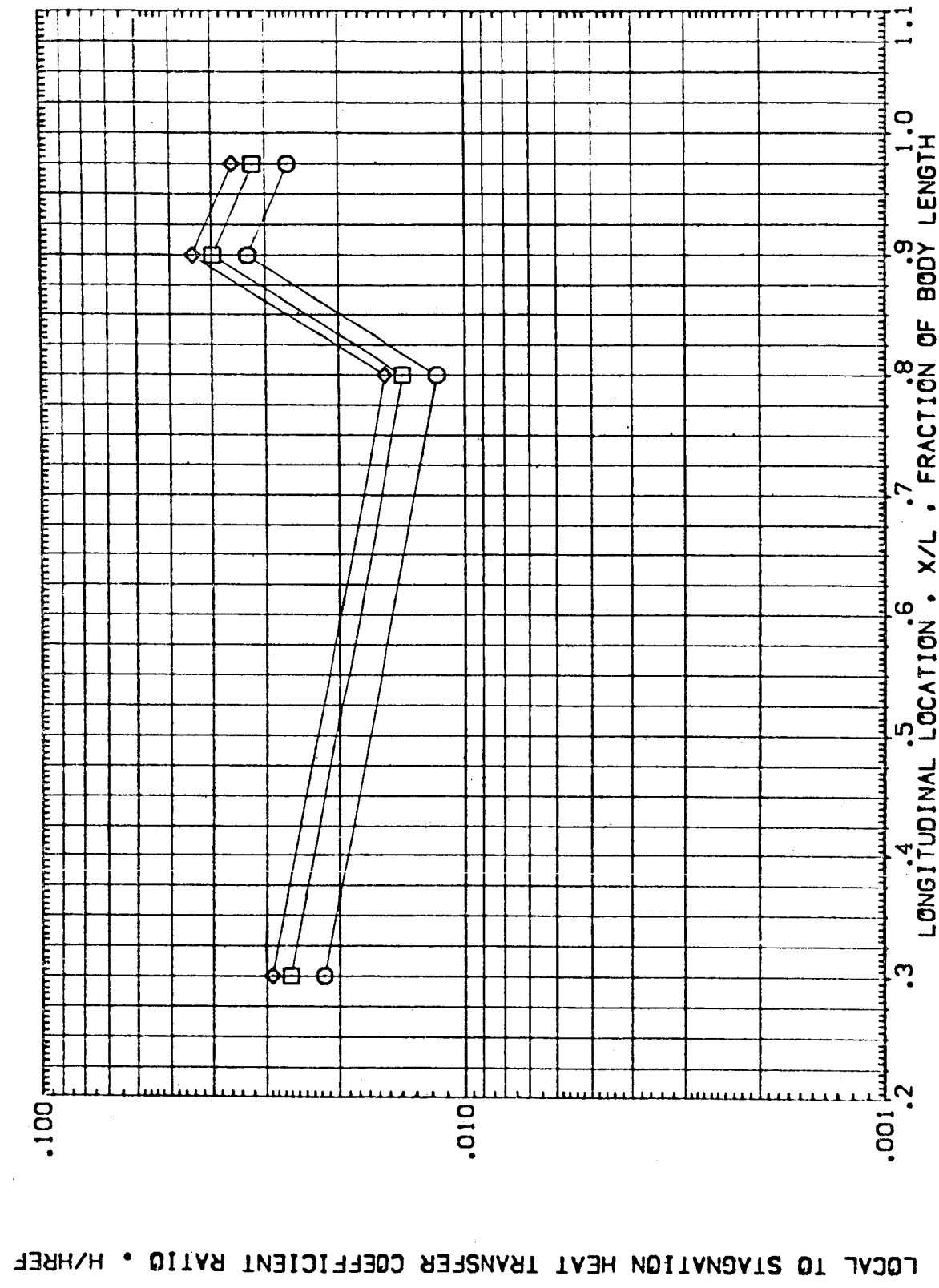


FIG. 19 ORBITER SIDE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 350.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|E08) (AE|E08) (BE|E08) H3 ORBITER (TR|PS|ORB) SIDE
 (RE|E08) (AE|E08) (BE|E08) H3 ORBITER (TR|PS|ORB) SIDE
 (RE|E08) (AE|E08) (BE|E08) H3 ORBITER (TR|PS|ORB) SIDE

ALPHA BETA RV/L HAV/HT
 .000 .000 .500 1.000
 .000 .000 .500 .900
 .000 .000 .500 .850

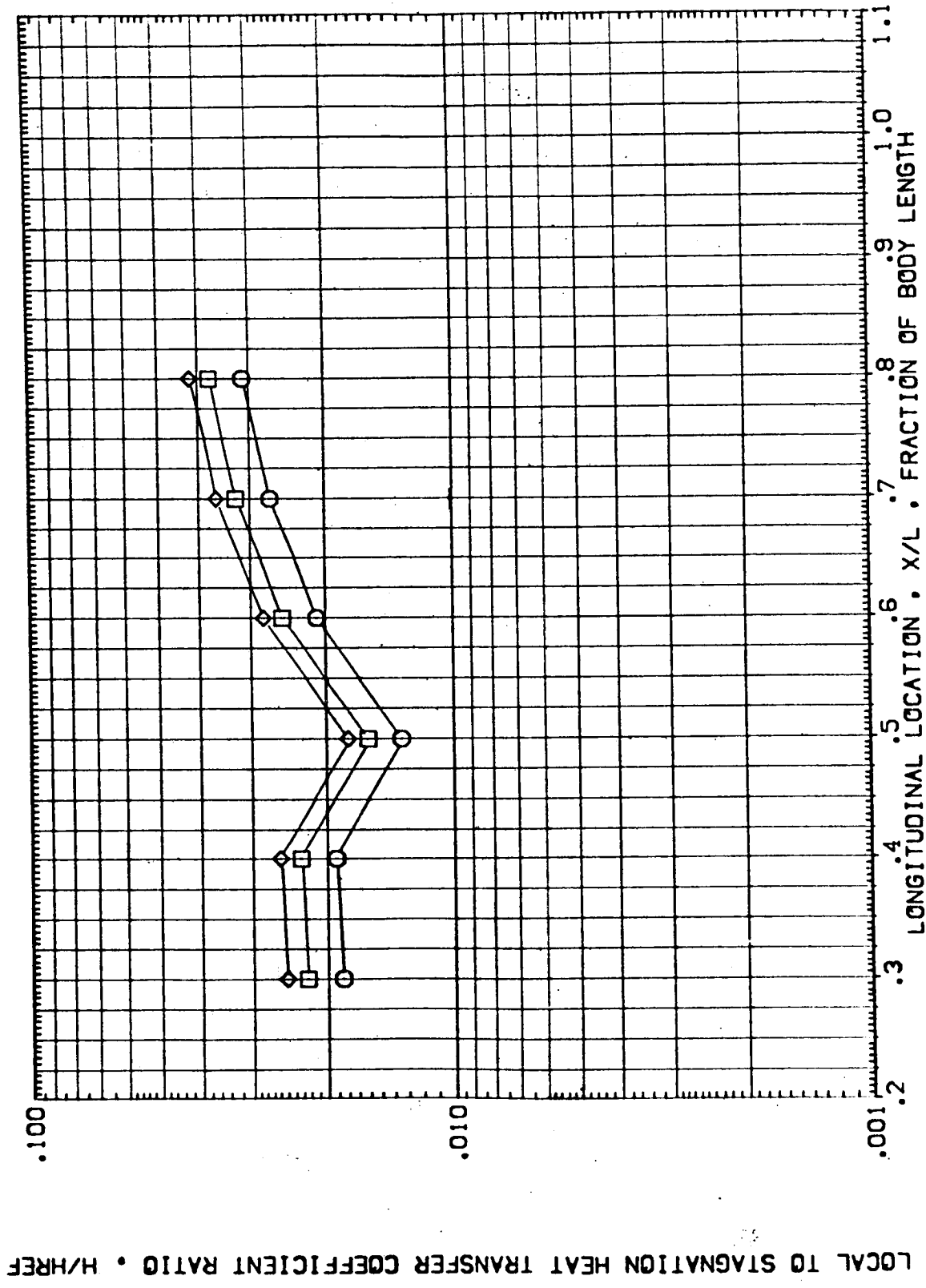


FIG. 19 ORBITER SIDE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 430.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{ REIEOB } ARC 3.5-178 IH3 ORBITER (TRIPS)ORB SIDE .000 .000 1.500 1.000

{ AEIEOB } ARC 3.5-178 IH3 ORBITER (TRIPS)ORB SIDE .000 .000 1.500 .900

{ BEIEOB } ARC 3.5-178 IH3 ORBITER (TRIPS)ORB SIDE .000 .000 1.500 .850

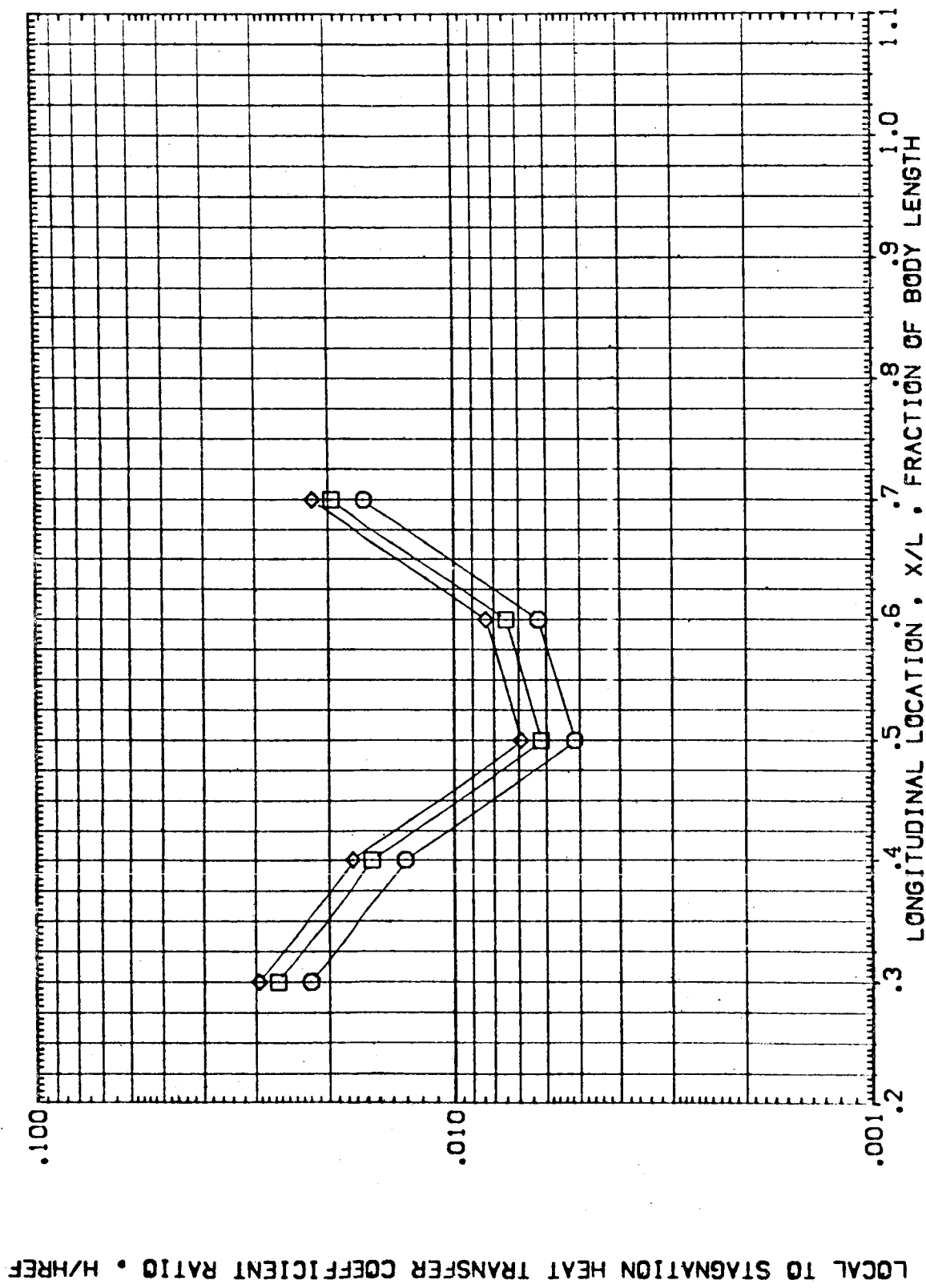


FIG. 19 ORBITER SIDE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 478.800

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 {REIEO9} [] ARC 3.5-178 [H3 ORBITER (TRIP)ORB SIDE] .000 .000 5.000 1.000
 {AEIEO9} [] ARC 3.5-178 [H3 ORBITER (TRIP)ORB SIDE] .000 .000 5.000 .900
 {BEIEO9} [] ARC 3.5-178 [H3 ORBITER (TRIP)ORB SIDE] .000 .000 5.000 .650

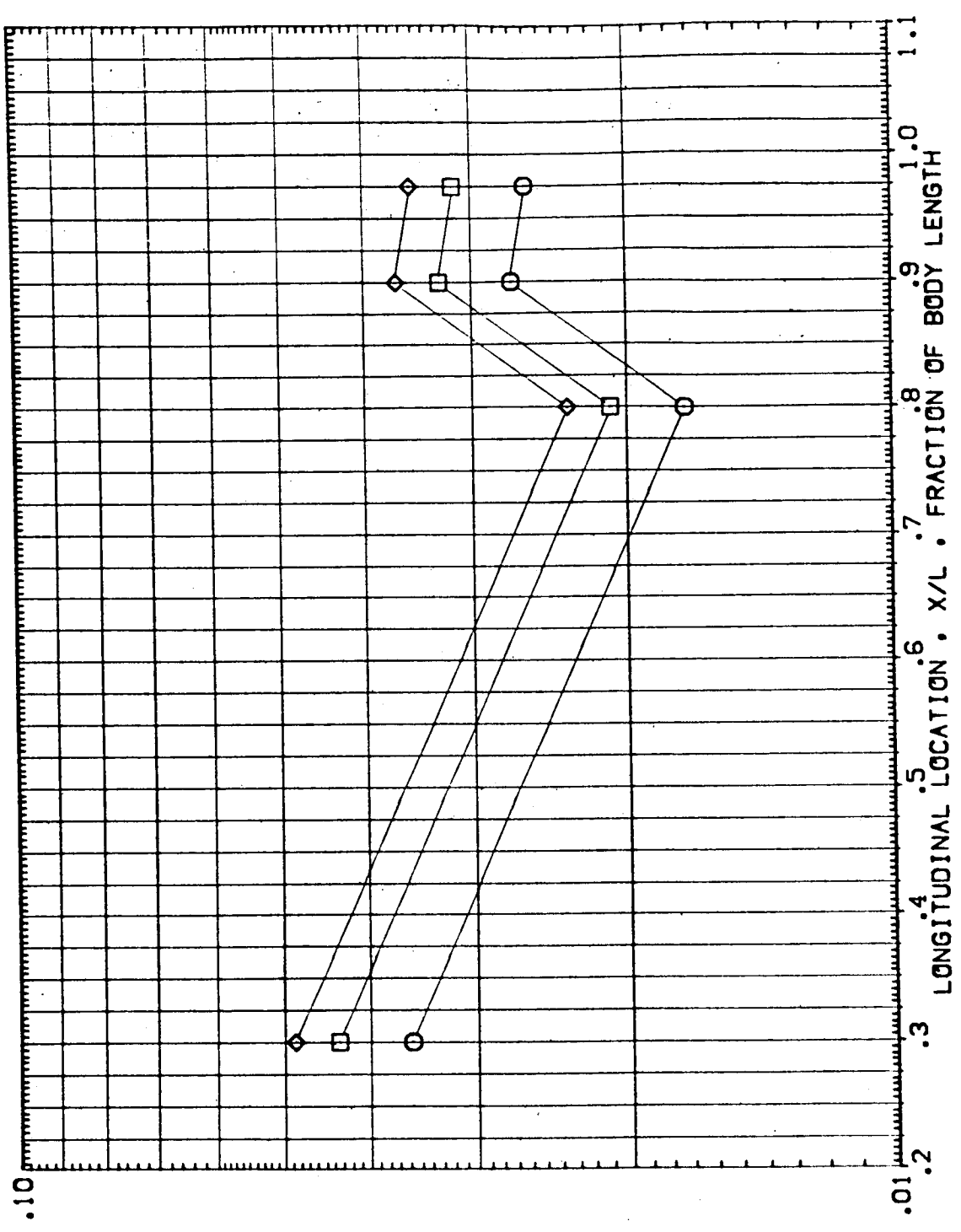
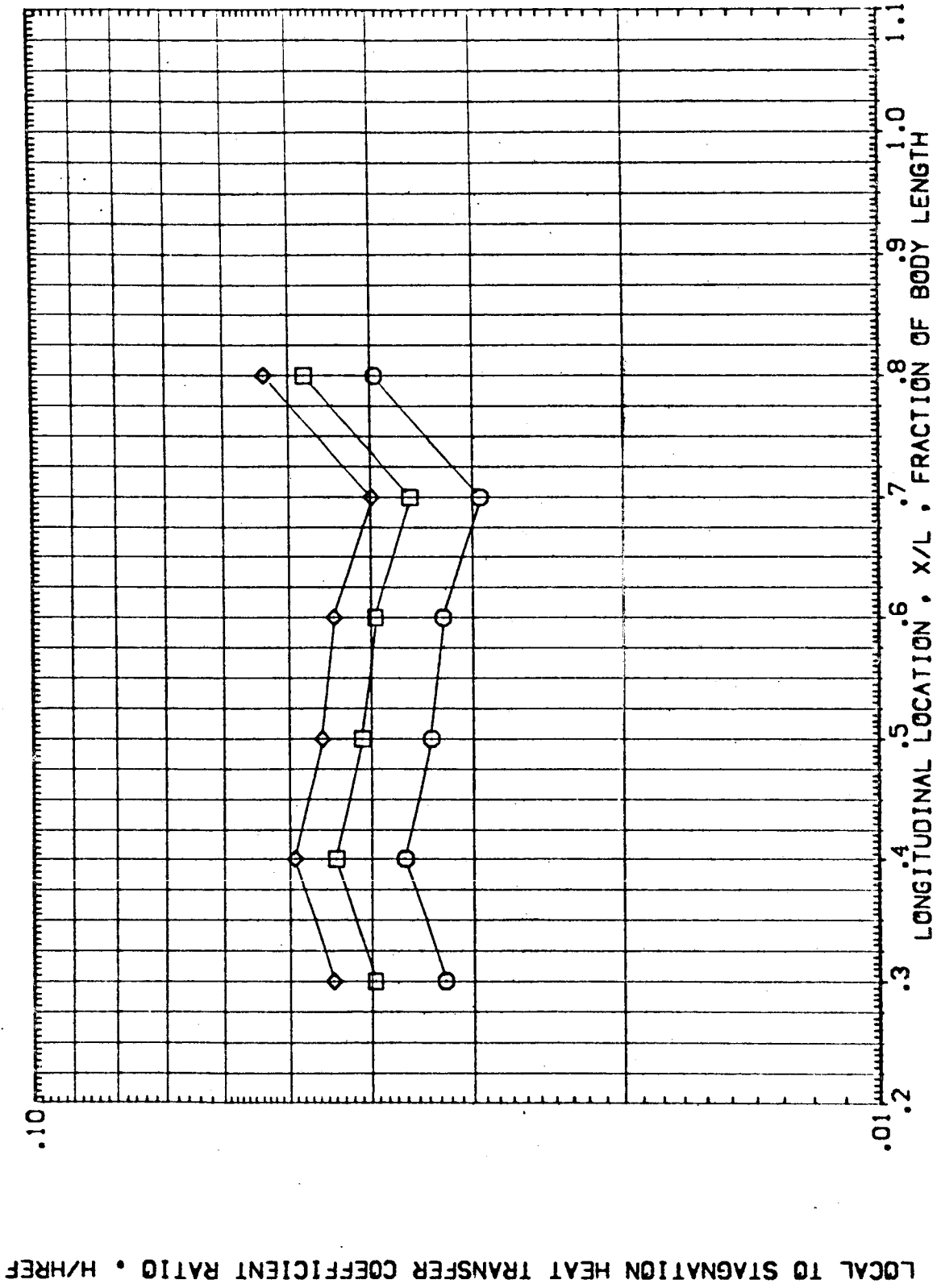


FIG. 19 ORBITER SIDE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 350.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 {RE|E09} [] ARC 3.5-178 [H]3 ORBITER (TRIP)S10R8 SIDE .000 .000 5.000 1.000
 {AE|E09} [] ARC 3.5-178 [H]3 ORBITER (TRIP)S10R8 SIDE .000 .000 5.000 .900
 {BE|E09} [] ARC 3.5-178 [H]3 ORBITER (TRIP)S10R8 SIDE .000 .000 5.000 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 19 ORBITER SIDE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 430.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE|E09) ARC 3.5-178 I43 ORBITTER (TR|PS|ORB SIDE) .000 .000 5.000 1.000

(AE|E09) ARC 3.5-178 I43 ORBITTER (TR|PS|ORB SIDE) .000 .000 5.000 .900

(BE|E09) ARC 3.5-178 I43 ORBITTER (TR|PS|ORB SIDE) .000 .000 5.000 .850

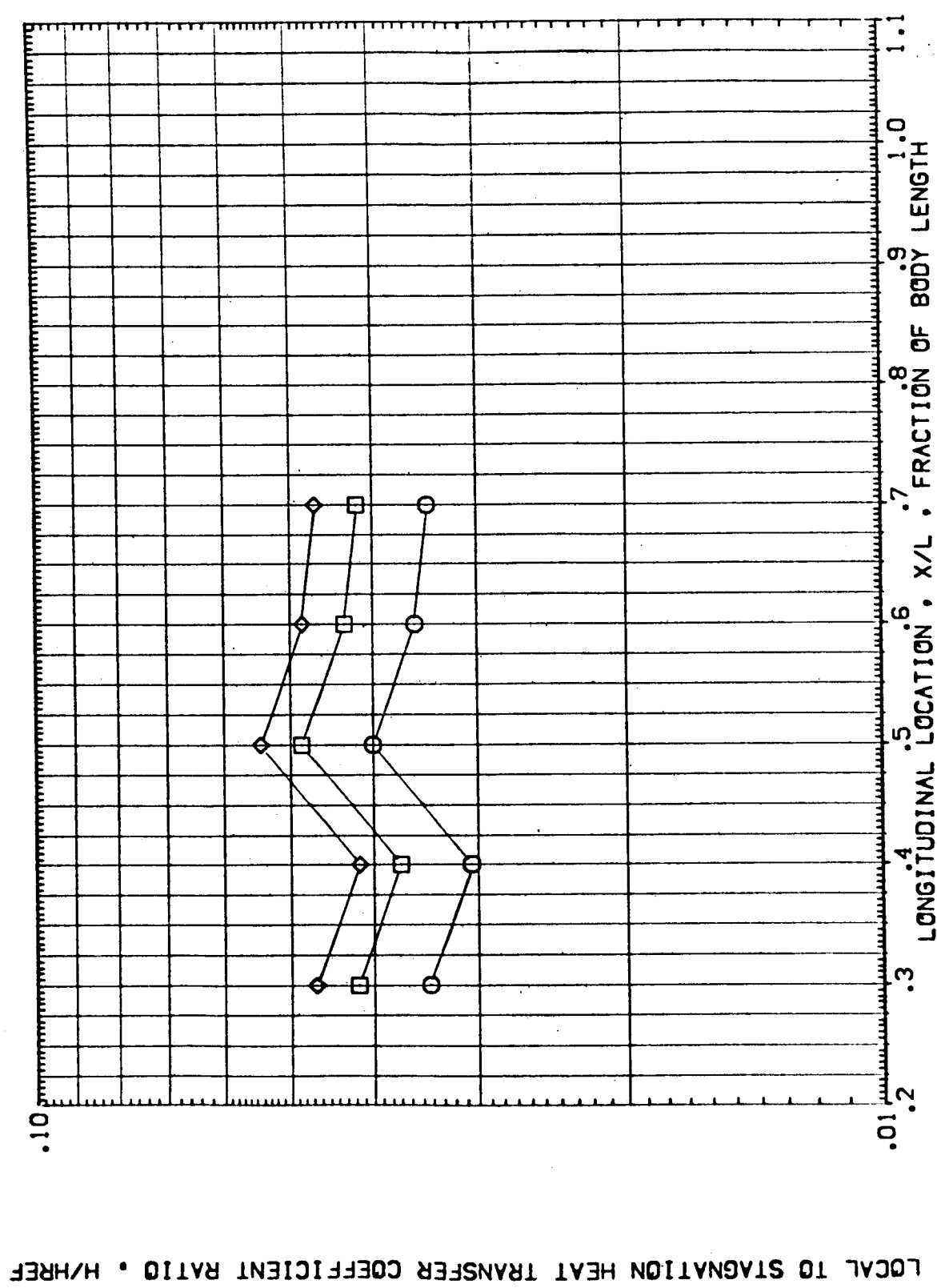


FIG. 19 ORBITTER SIDE - ORBITTER ALONE (UNDISTURBED)

MACH = 5.300 Z = 478.800

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|EO|) ARC 3.5-178 1/3 O+T+S
 (AE|EO|) ARC 3.5-178 1/3 O+T+S
 (BE|EO|) ARC 3.5-178 1/3 O+T+S

ORBITER SIDE ORBITER SIDE ORBITER SIDE
 ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

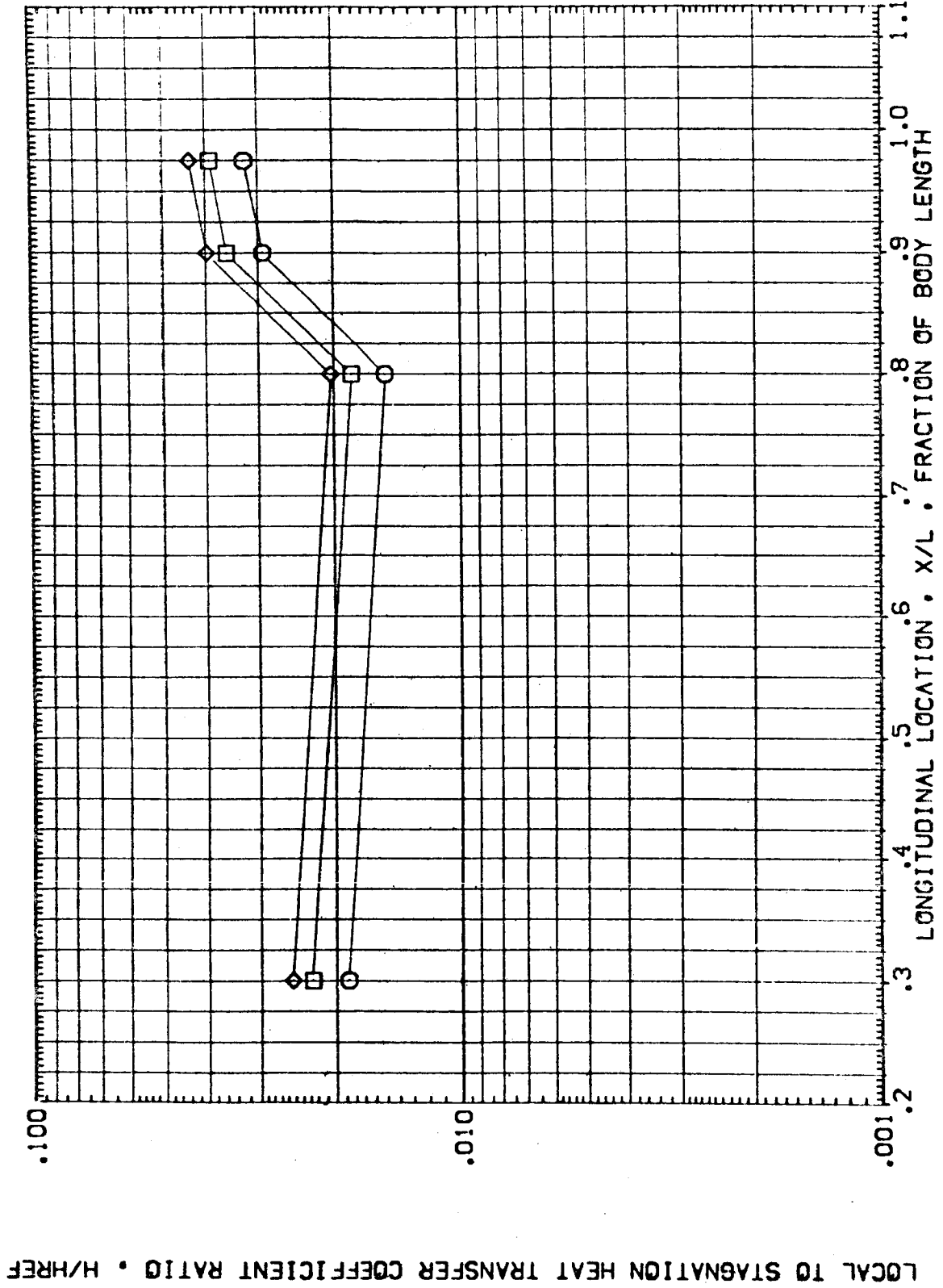


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 350.000

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 { RE | EO | } ARC 3.5-178 | H3 O-T+S
 { AE | EO | } ARC 3.5-178 | H3 O-T+S
 { BE | EO | } ARC 3.5-178 | H3 O-T+S

ORBITER SIDE
 ORBITER SIDE
 ORBITER SIDE

ALPHA BETA RV/L MAV/HT
 .000 .000 .500 1.000
 .000 .000 .500 .900
 .000 .000 .500 .850

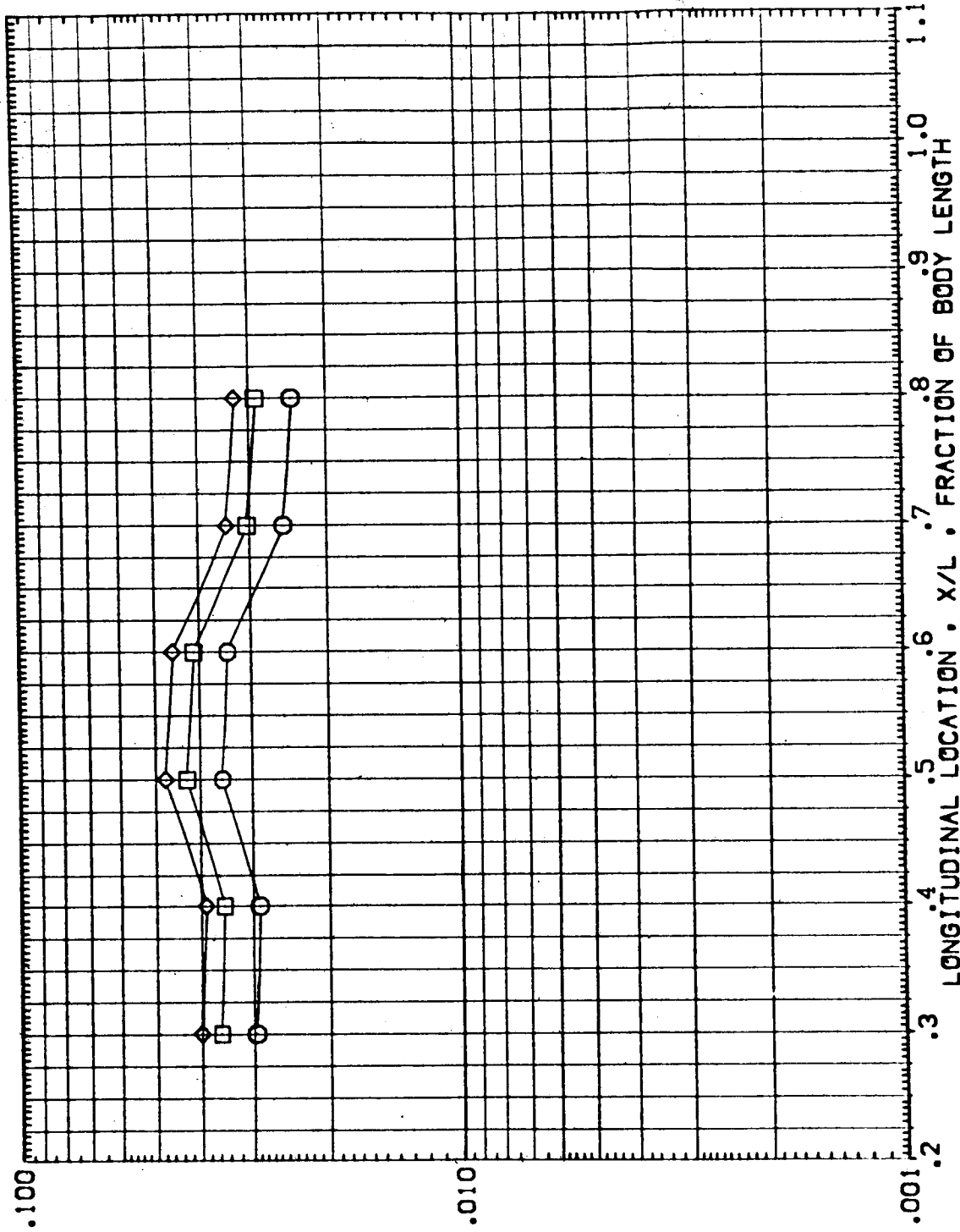


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 430.000



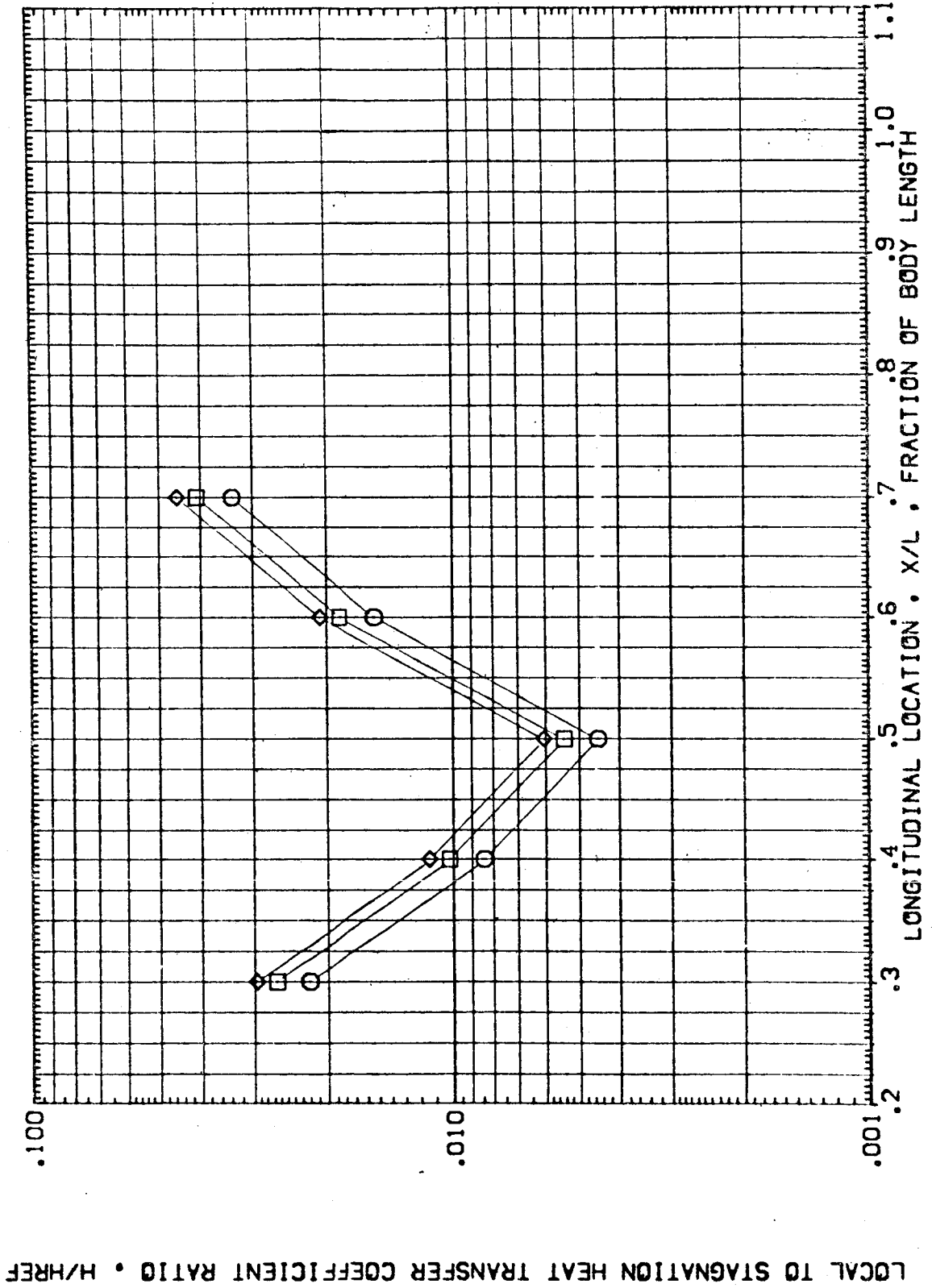
DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE|EO|} ARC 3.5-178 |H3 O+T+S .000 .000 1.500 1.000

{AE|EO|} ARC 3.5-178 |H3 O+T+S .000 .000 1.500 .900

{BE|EO|} ARC 3.5-178 |H3 O+T+S .000 .000 1.500 .650

CR8 SIDE CR8 SIDE CR8 SIDE



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 478.800

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE1E02} ARC 3.5-178 IH3 O+T+S .000 .000 5.000 1.000

{AE1E02} ARC 3.5-178 IH3 O+T+S .000 .000 5.000 .900

{BE1E02} ARC 3.5-178 IH3 O+T+S .000 .000 5.000 .850

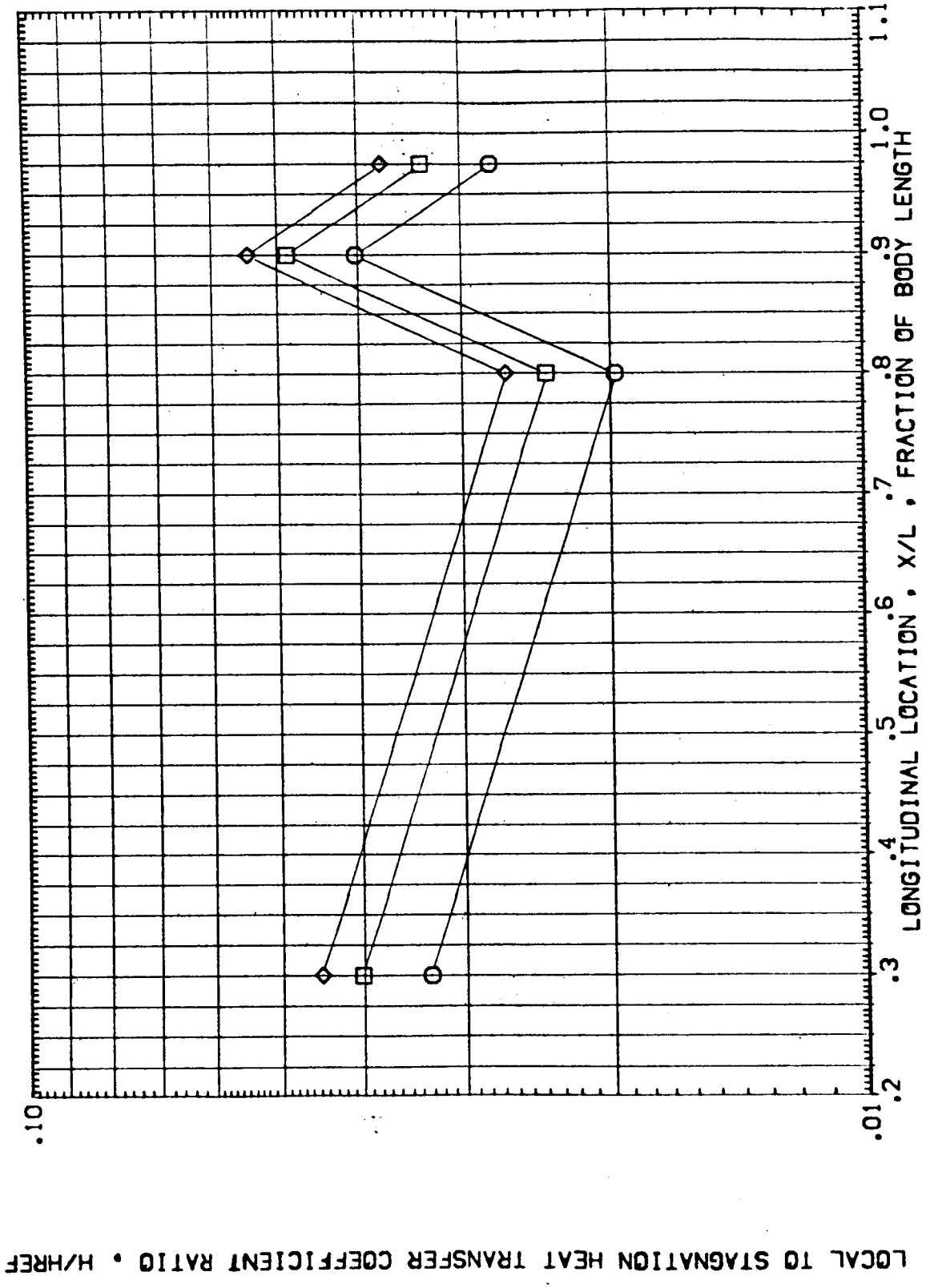


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 350.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION ORB SIDE ALPHA BETA RV/L HAV/HT

(RE|E02) ARC 3.5-178 |H3 O+T+S ORB SIDE .000 .000 5.000 1.000

(AE|E02) ARC 3.5-178 |H3 O+T+S ORB SIDE .000 .000 5.000 .900

(BE|E02) ARC 3.5-178 |H3 O+T+S ORB SIDE .000 .000 5.000 .850

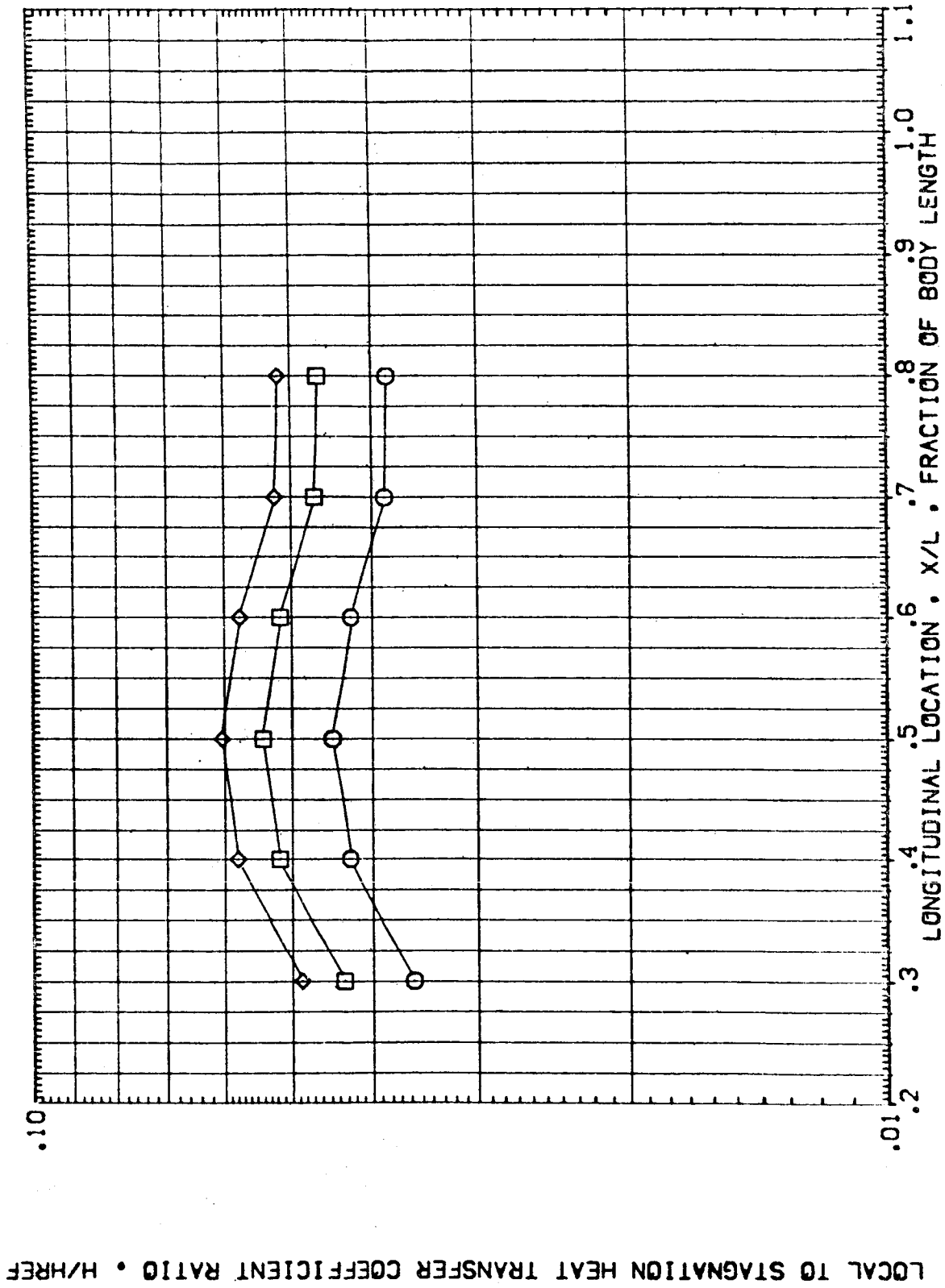


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 430.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ORB SIDE ALPHA BETA RV/L HAV/HT
 (RE|ED2) ARC 3.5-178 |H3 O-T+S ORB SIDE .000 .000 5.000 1.000
 (AE|ED2) ARC 3.5-178 |H3 O-T+S ORB SIDE .000 .000 5.000 .900
 (BE|ED2) ARC 3.5-178 |H3 O-T+S ORB SIDE .000 .000 5.000 .850

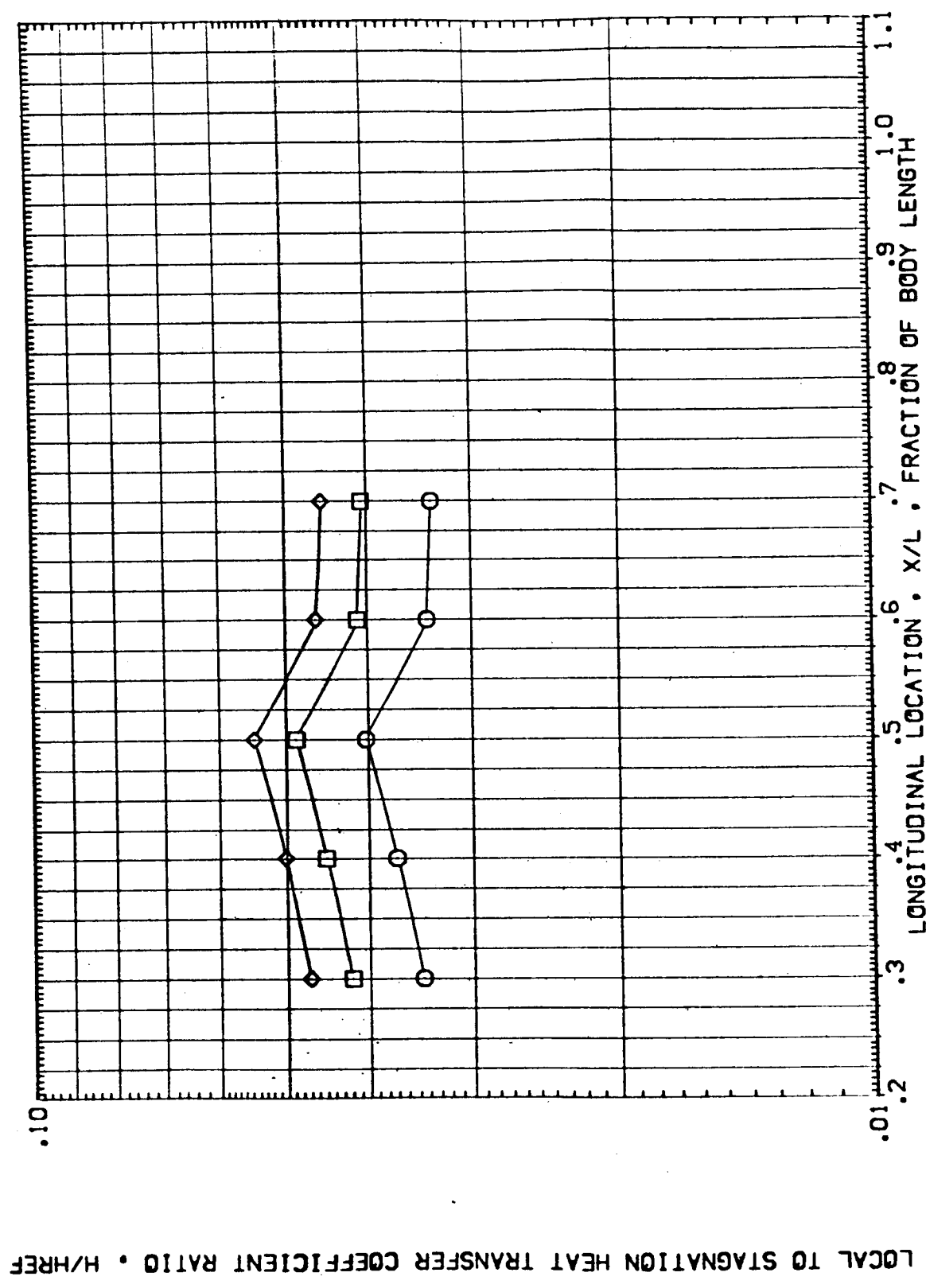


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 478.800

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT
 {RE|EO3} ○ ARC 3.5-178 I+3 O+T+S (TR|PS) ORB SIDE
 {AE|EO3} ○ ARC 3.5-178 I+3 O+T+S (TR|PS) ORB SIDE
 {BE|EO3} ◇ ARC 3.5-178 I+3 O+T+S (TR|PS) ORB SIDE

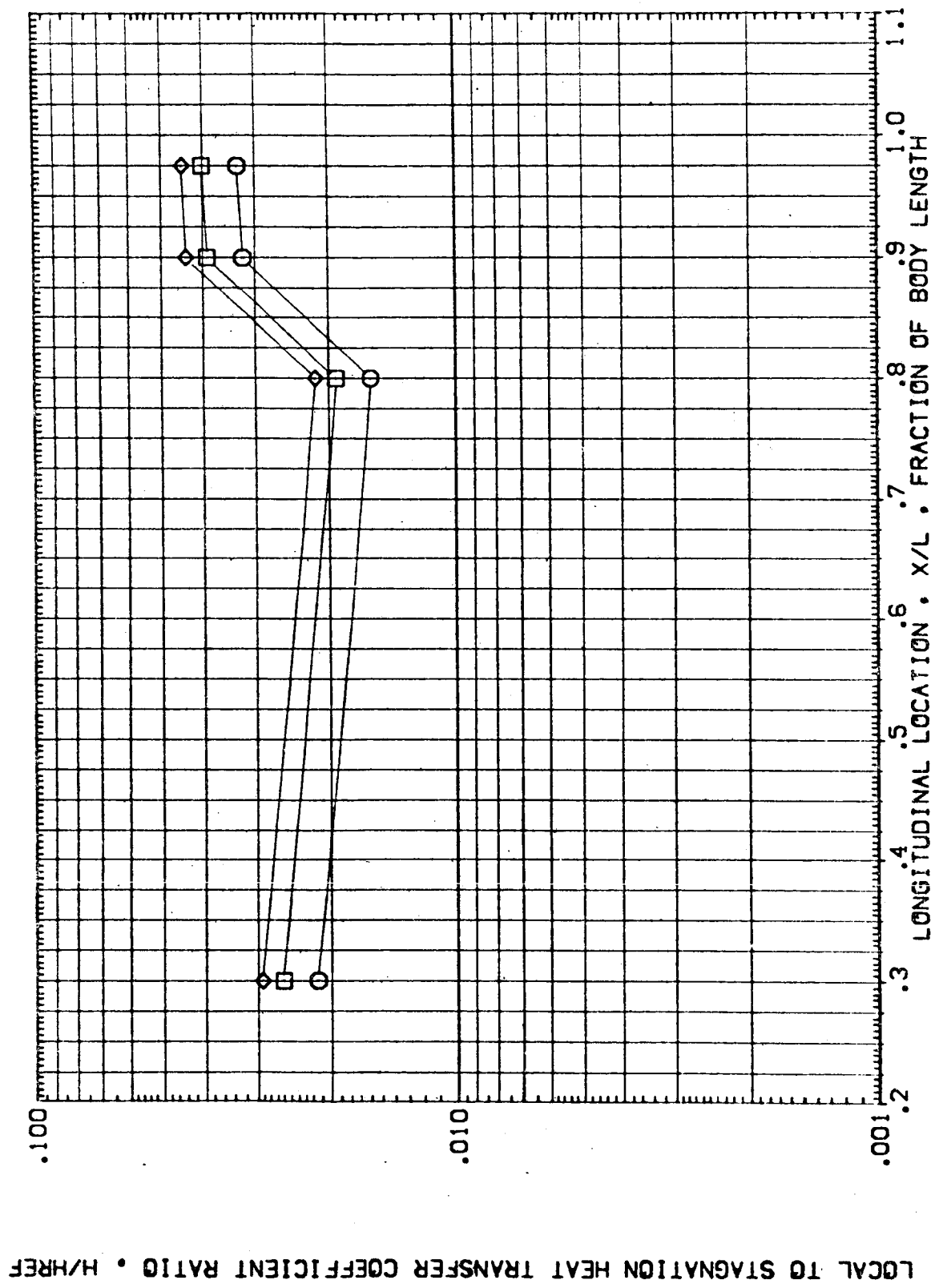


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 350.000

DATA SET SYMBOL: (RE|E03) (AE|E03) (BE|E03)

CONFIGURATION DESCRIPTION:
 ARC 3.5-178 |H3 O+T+S (TR|PS)
 ARC 3.5-178 |H3 O+T+S (TR|PS)
 ARC 3.5-178 |H3 O+T+S (TR|PS)

ORB SIDE
 ORB SIDE
 ORB SIDE

ALPHA: .000 .000 .000
 BETA: .000 .000 .000
 RV/L: 1.500 1.500 1.500
 HAV/HT: 1.000 .900 .650

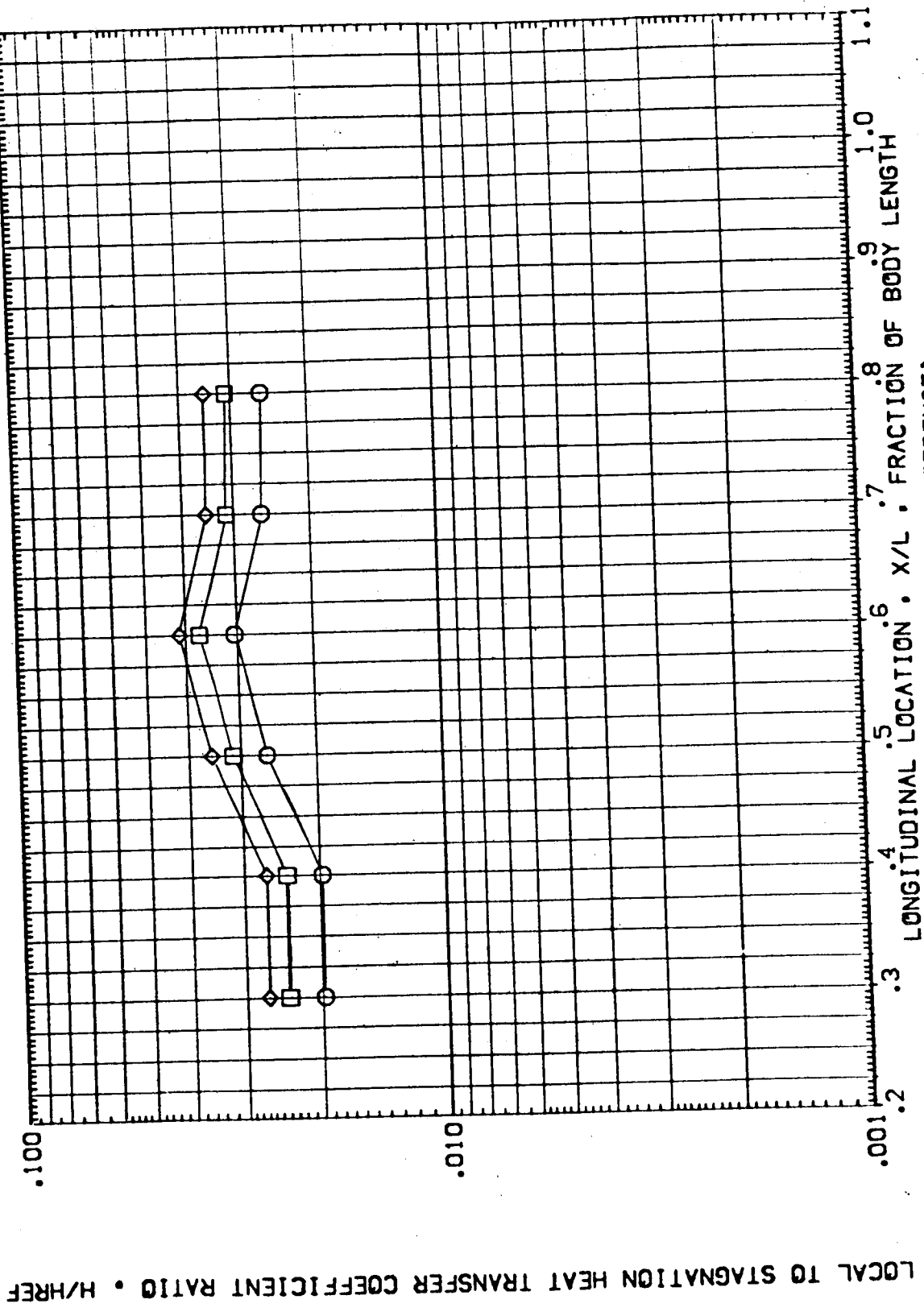


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 430.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION HAV/HT

Symbol	Configuration	Description	HAV/HT
○	ARC 3.5-178	H3 O+T+S (TRIPS)	1.000
□	ARC 3.5-178	H3 O+T+S (TRIPS)	.900
◇	ARC 3.5-178	H3 O+T+S (TRIPS)	.850

ORBITER SIDE ORBITER SIDE ORBITER SIDE

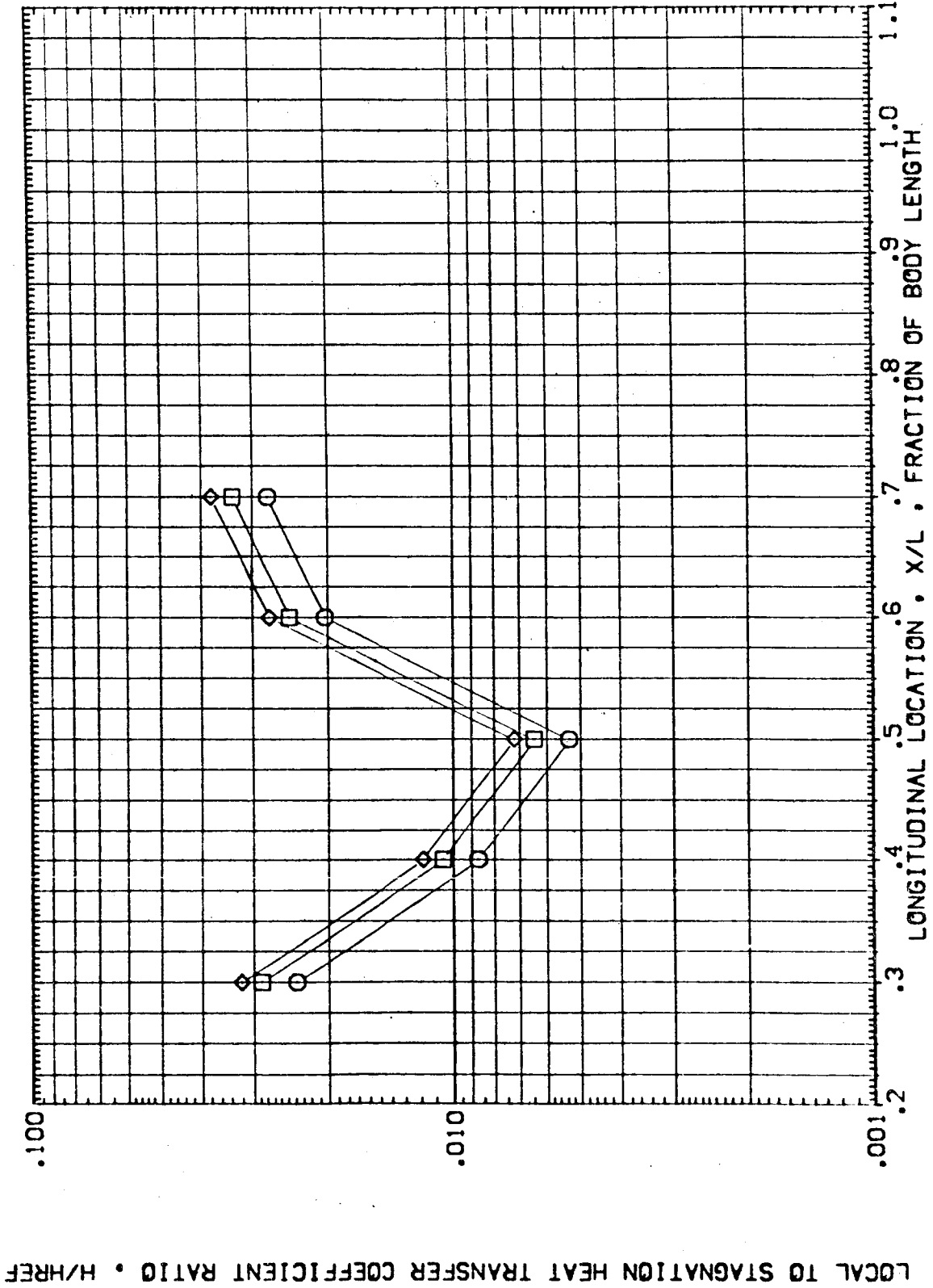


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 478.800

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DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RNV/L HAV/HT

{REIE04} ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 1.000

{AEIE04} ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .500

{BEIE04} ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .650

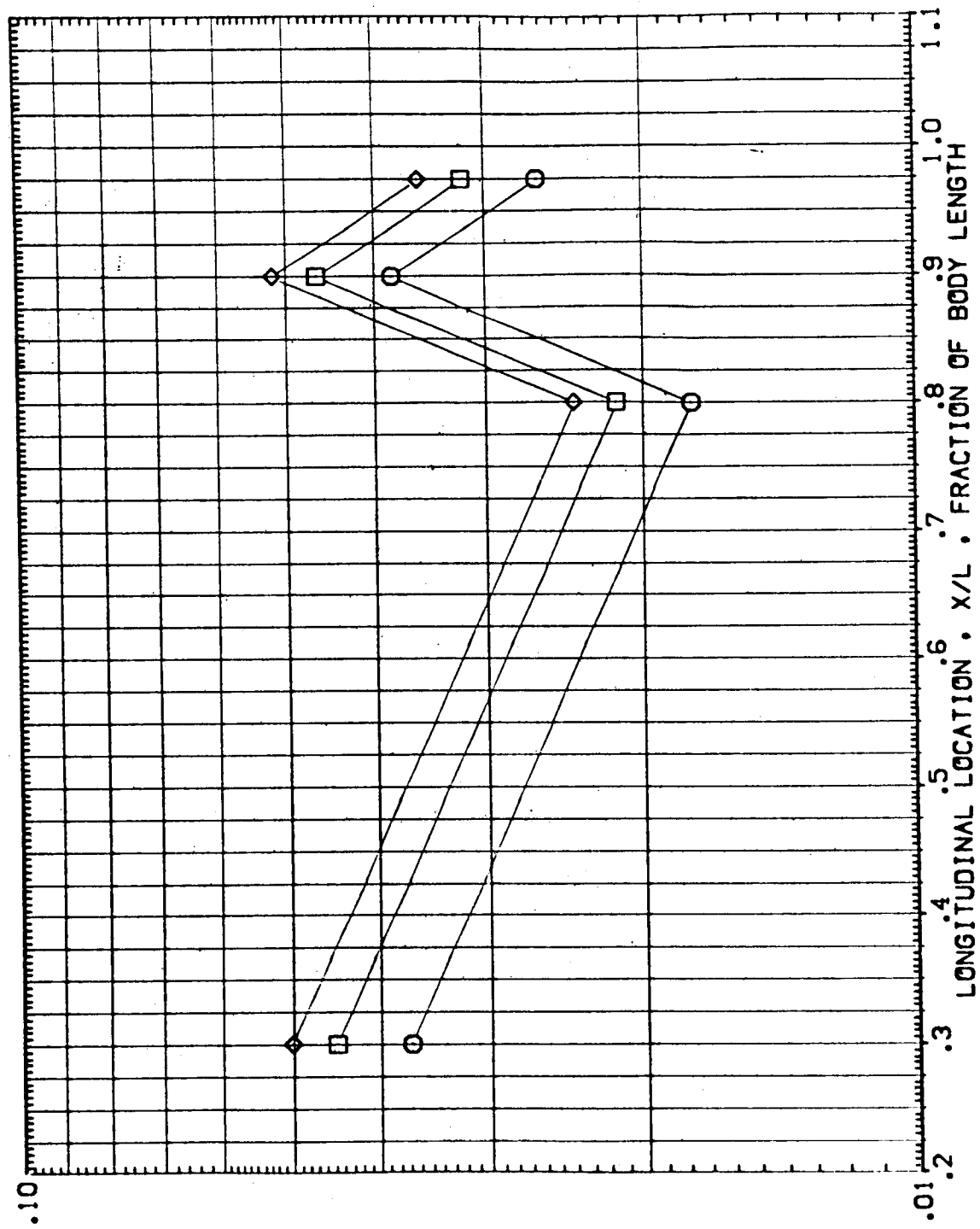


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 350.000

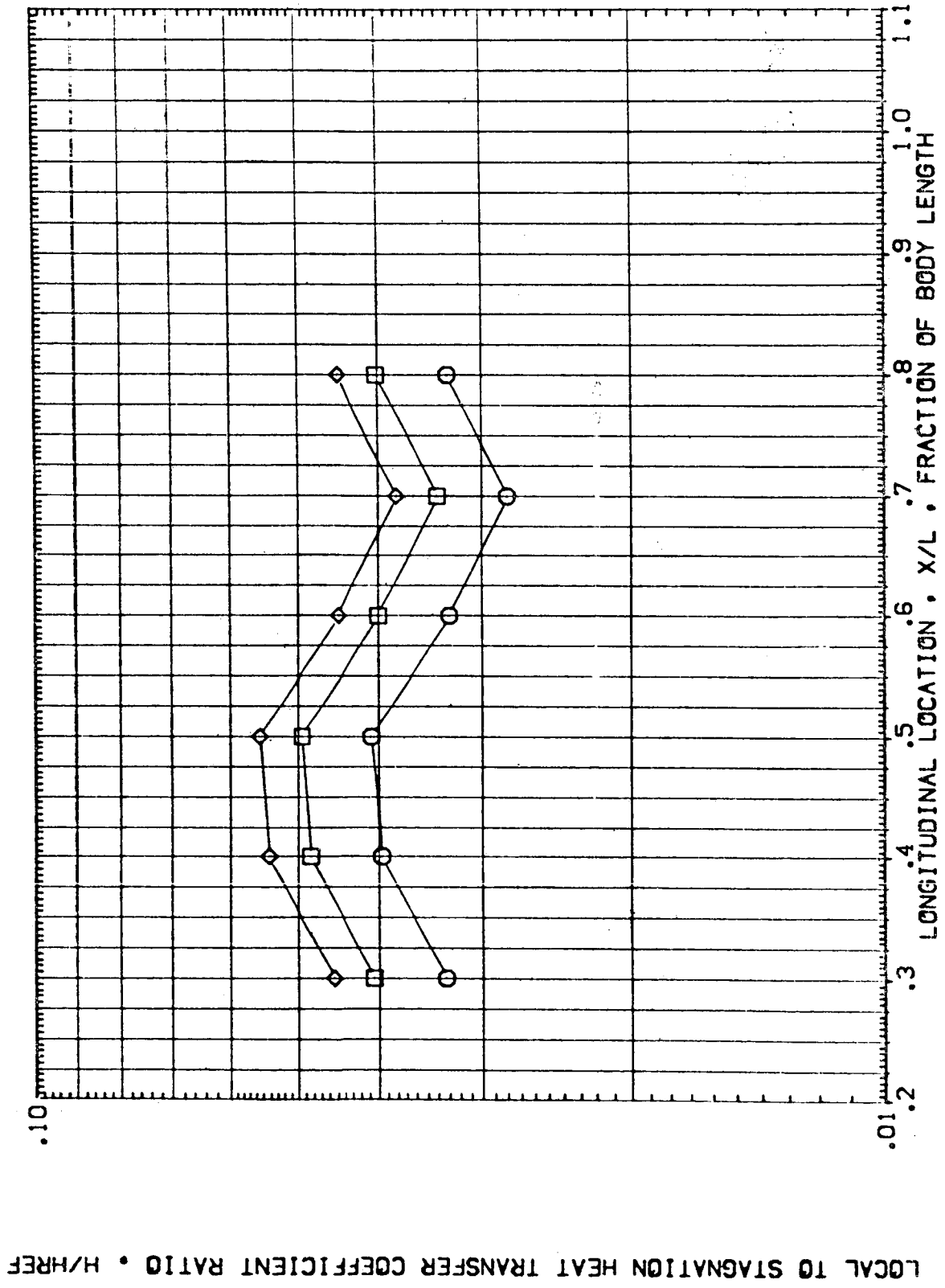


DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{REIE04} ARC 3.5-178 IM3 0+T+S (TRIPS) ORB SIDE .000 .000 5.000 1.000

{AEIE04} ARC 3.5-178 IM3 0+T+S (TRIPS) ORB SIDE .000 .000 5.000 .900

{BEIE04} ARC 3.5-178 IM3 0+T+S (TRIPS) ORB SIDE .000 .000 5.000 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 20 ORBITER SIDE -- INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 430.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE|E04} ARC 3.5-178 IH3 O-T+S (TRIPS) .000 .000 5.000 1.000

{AE|E04} ARC 3.5-178 IH3 O-T+S (TRIPS) .000 .000 5.000 .900

{BE|E04} ARC 3.5-178 IH3 O-T+S (TRIPS) .000 .000 5.000 .850

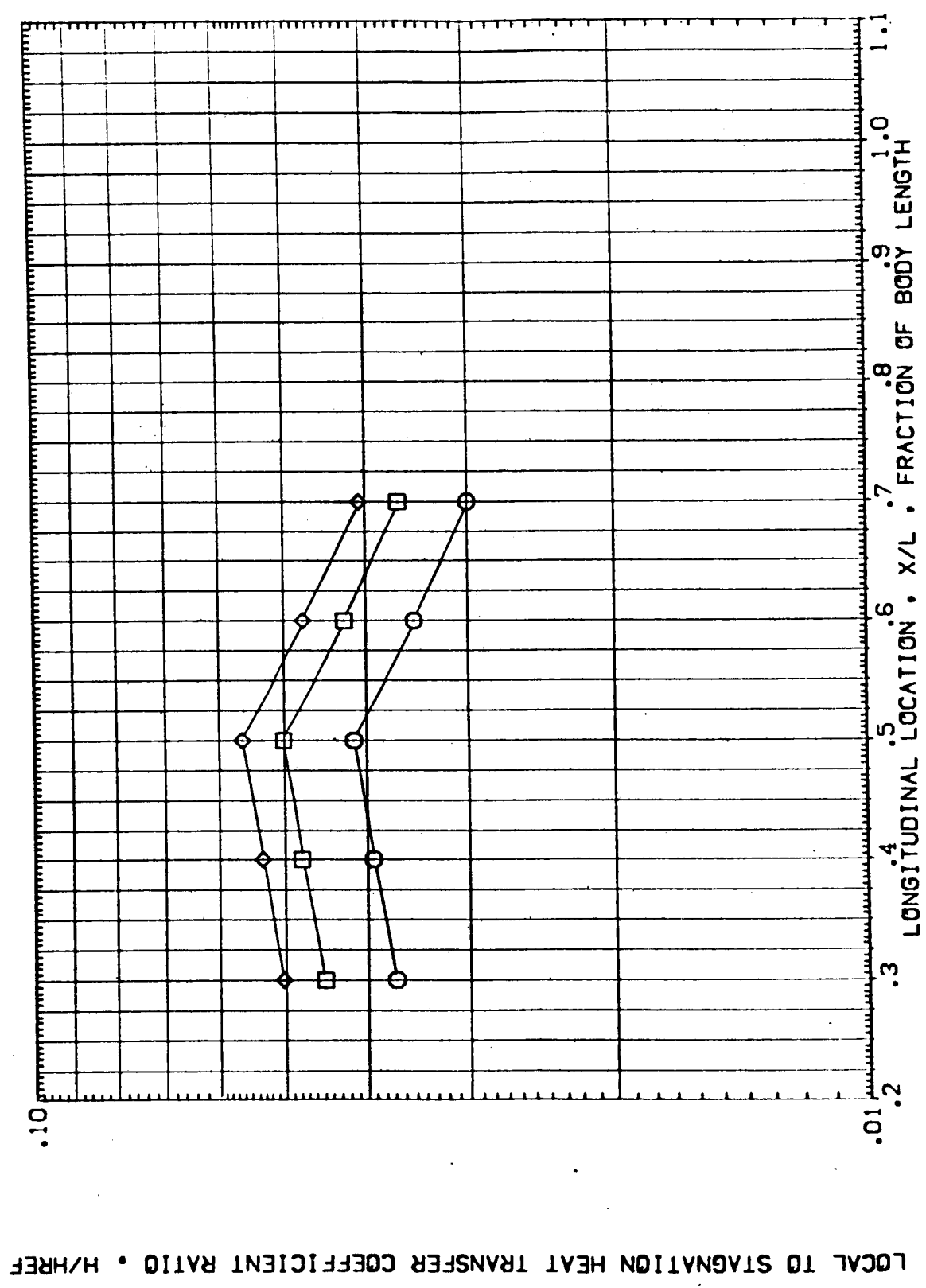


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 478.800



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RM/L HAV/HT

(RE|EUS) ARC 3.5-178 IH3 O+T+S .000 -5.000 5.000 1.000

(AE|EUS) ARC 3.5-178 IH3 O+T+S .000 -5.000 5.000 .900

(BE|EUS) ARC 3.5-178 IH3 O+T+S .000 -5.000 5.000 .850

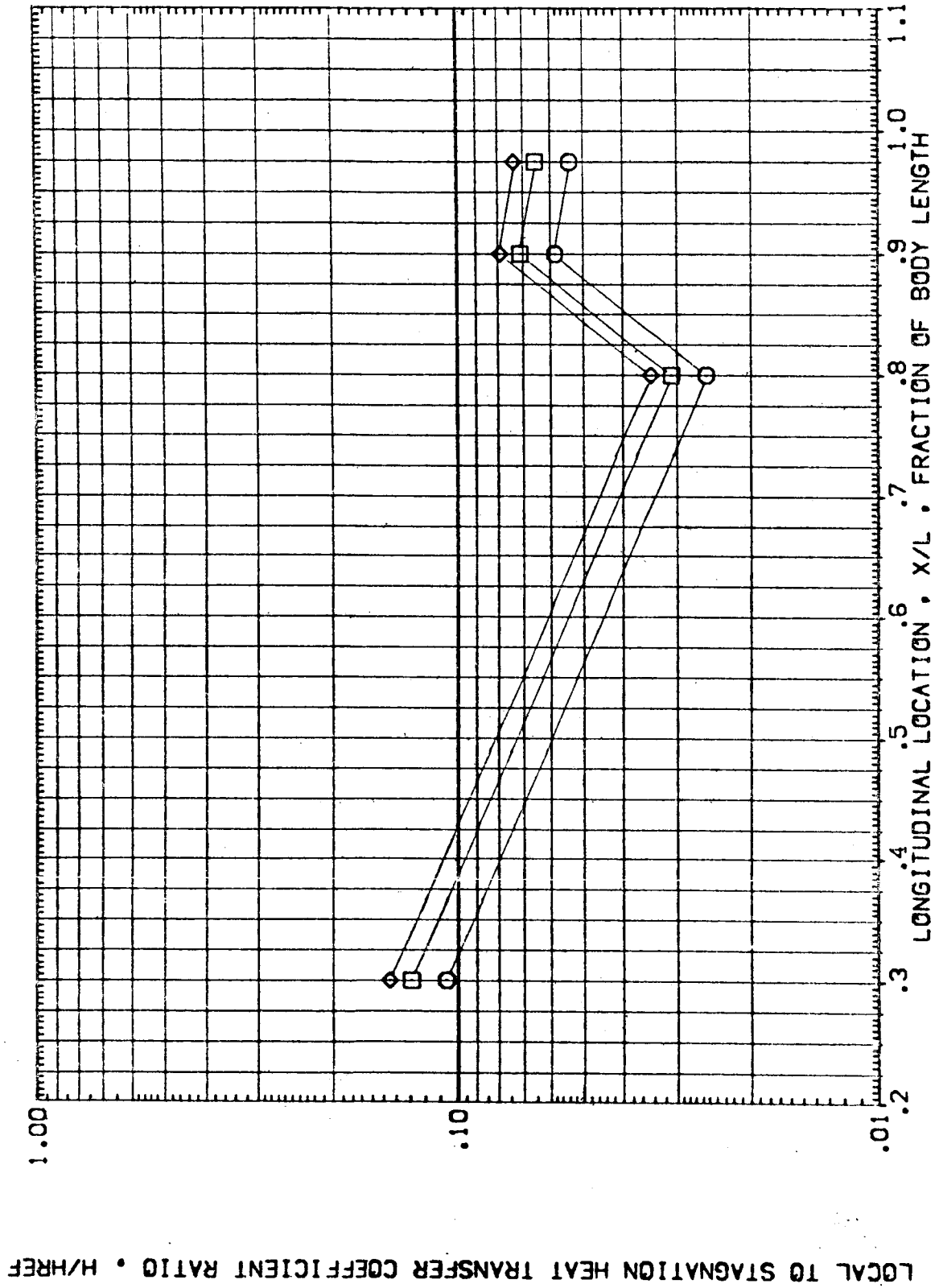


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 350.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [REIEOS] ARC 3.5-178 [H3 O+T+S]
 [AEIEOS] ARC 3.5-178 [H3 O+T+S]
 [BEIEOS] ARC 3.5-178 [H3 O+T+S]

ORBITER SIDE ORBITER SIDE ORBITER SIDE
 ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

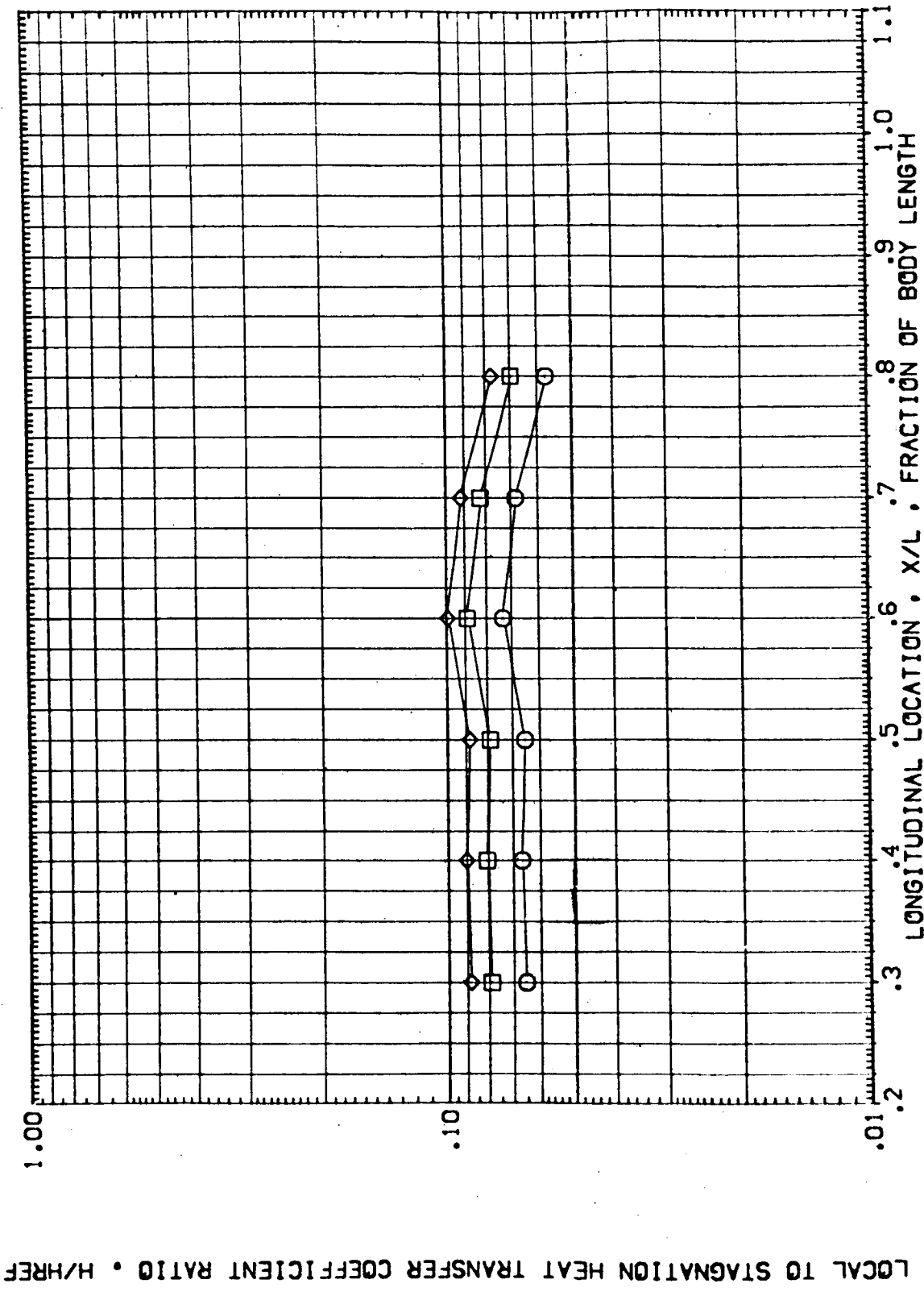


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 430.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RETEOS) ○ ARC 3.5-178 I+3 O+T+S
 (AEIETS) □ ARC 3.5-178 I+3 O+T+S
 (BEIETS) ◇ ARC 3.5-178 I+3 O+T+S

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

ORB SIDE
 ORB SIDE
 ORB SIDE

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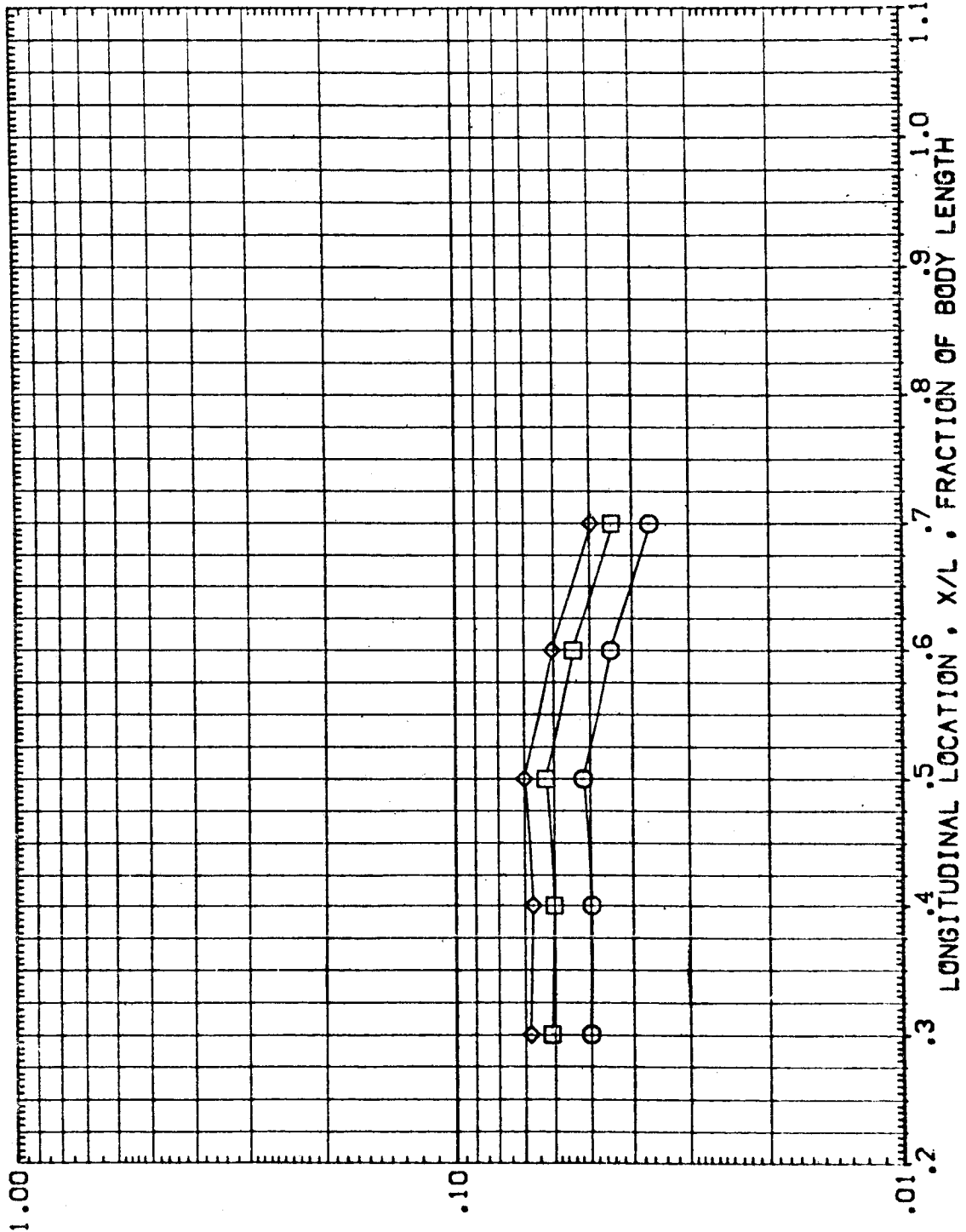


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 478.800

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT
 (RE|E|S) ARC 3.5-178 |H3 O+T+S -5.000 .000 5.000 1.000
 (AE|E|S) ARC 3.5-178 |H3 O+T+S -5.000 .000 5.000 .500
 (BE|E|S) ARC 3.5-178 |H3 O+T+S -5.000 .000 5.000 .650

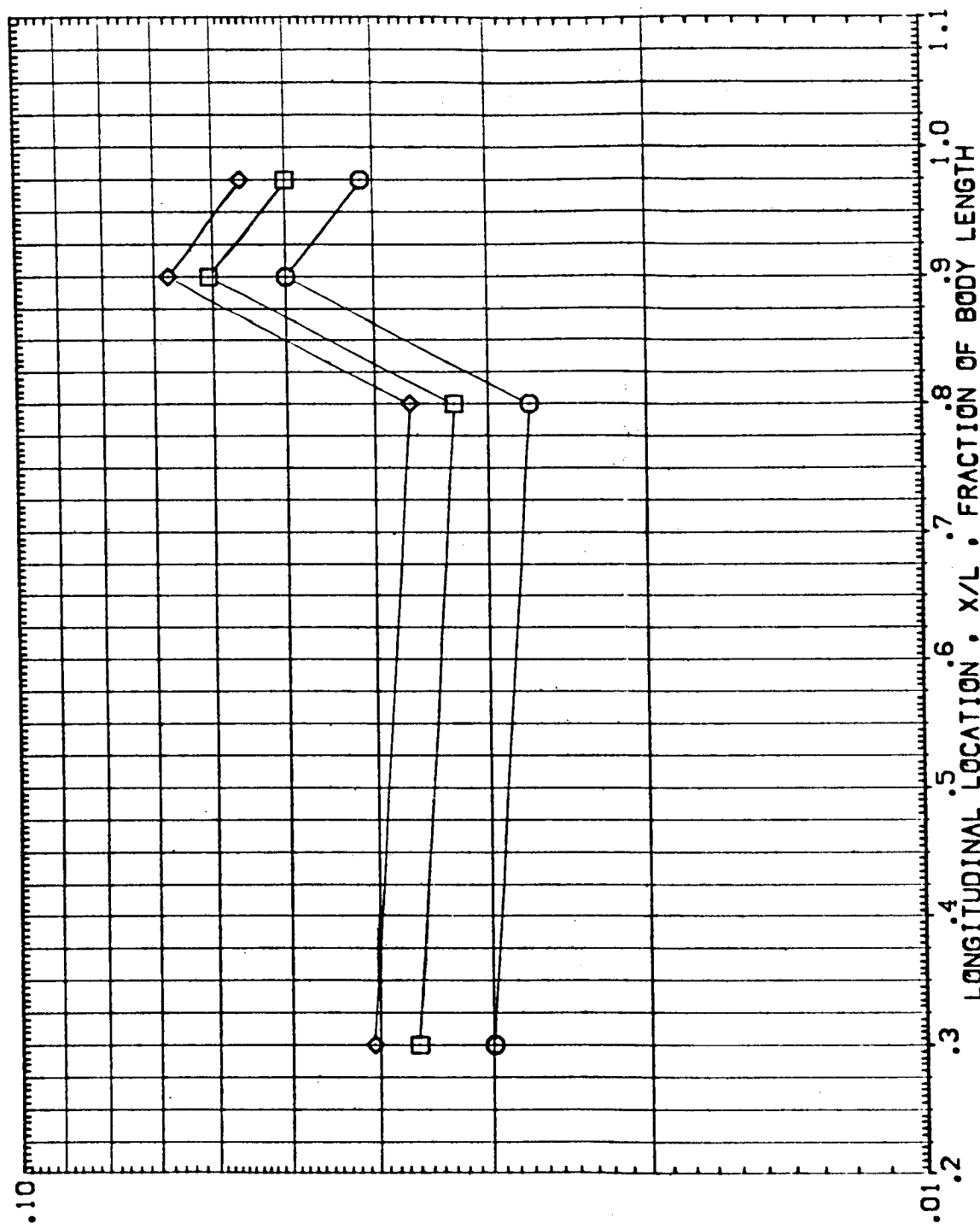


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 350.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ORB SIDE ALPHA BETA RV/L MAV/HT

(RE)E(9)	ARC 3.5-178 I-H3 O-T+S	ORB SIDE	-5.000	.000	5.000	1.000
(AE)E(9)	ARC 3.5-178 I-H3 O-T+S	ORB SIDE	-5.000	.000	5.000	.900
(BE)E(9)	ARC 3.5-178 I-H3 O-T+S	ORB SIDE	-5.000	.000	5.000	.650

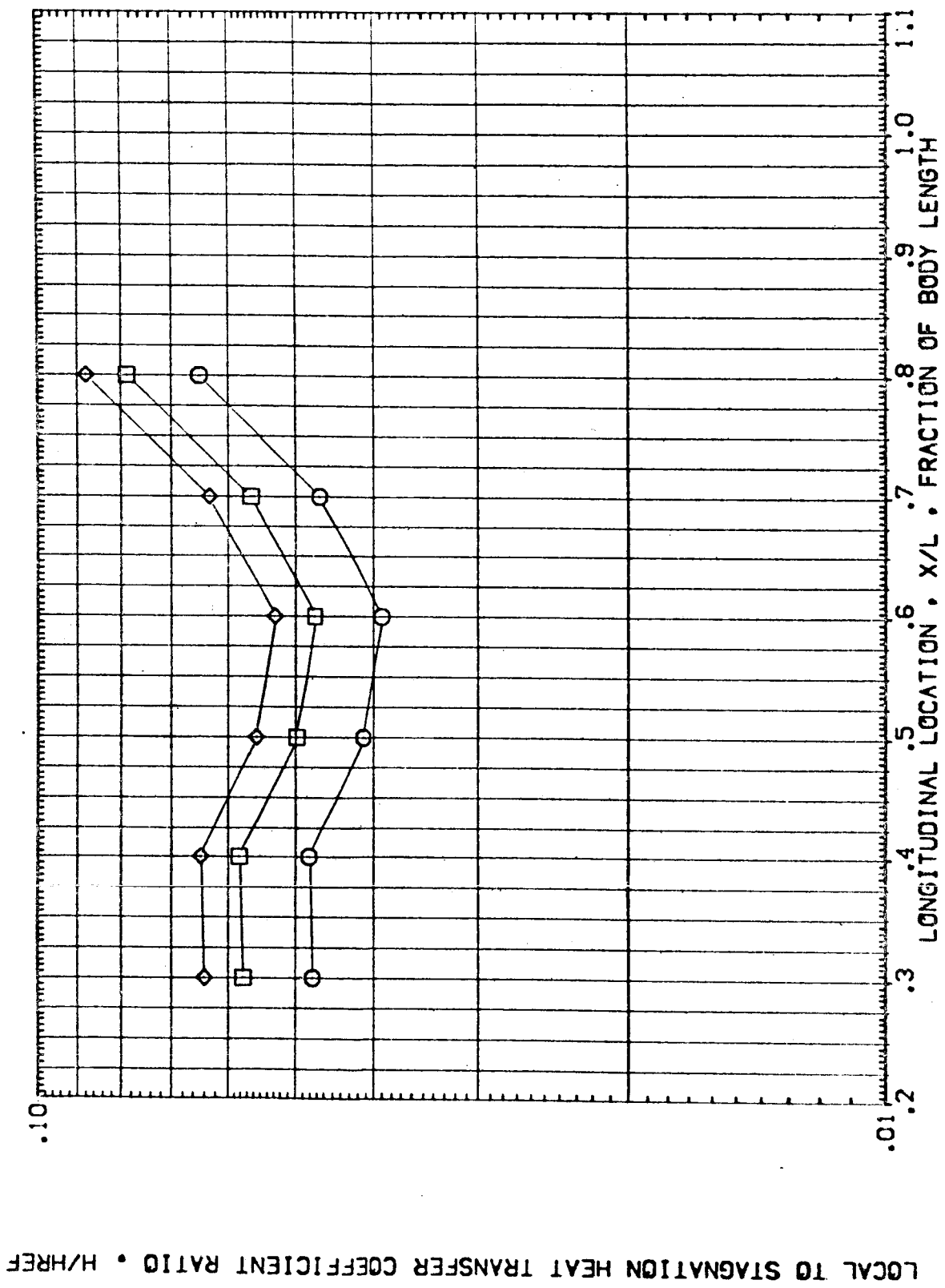


FIG. 20 ORBITER SIDE -- INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 430.000

DATA SET SYMBOL: [REIE19] [AEIE19] [BEIE19]
 CONFIGURATION DESCRIPTION: ARC 3.5-178 IH3 O+T+S
 ORB SIDE ORB SIDE ORB SIDE

ALPHA: -5.000, -5.000, -5.000
 BETA: .000, .000, .000
 RN/L: 5.000, 5.000, 5.000
 HAV/HT: 1.000, .500, .650

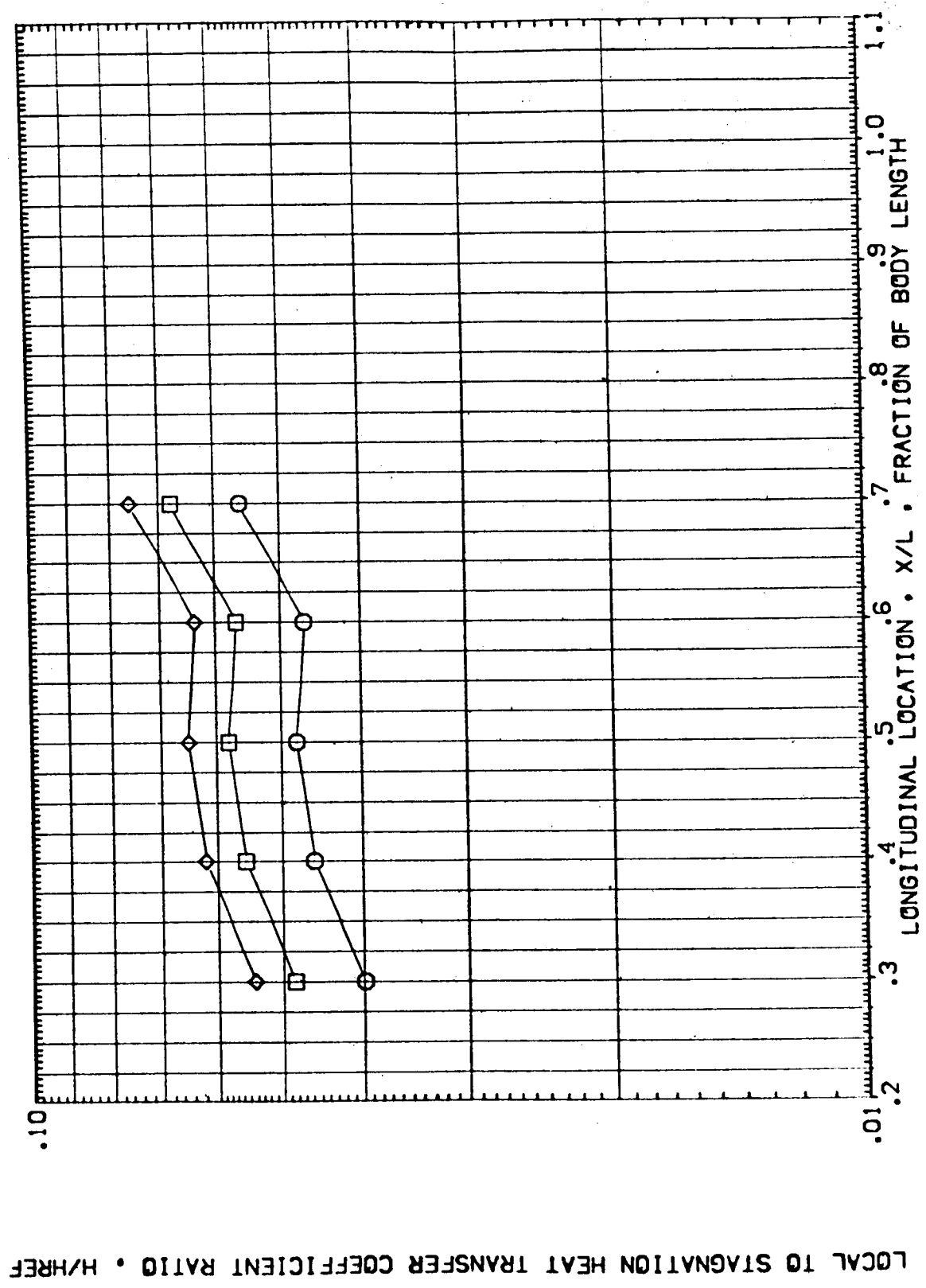


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 478.800



DATA SET SYMBOL CONFIGURATION DESCRIPTION ORB SIDE ALPHA BETA RV/L HAV/HT

(RE|E20) ARC 3.5-178 143 0+T+S ORB SIDE -3.000 .000 5.000 1.000

(AE|E20) ARC 3.5-178 143 0+T+S ORB SIDE -3.000 .000 5.000 .900

(BE|E20) ARC 3.5-178 143 0+T+S ORB SIDE -3.000 .000 5.000 .850

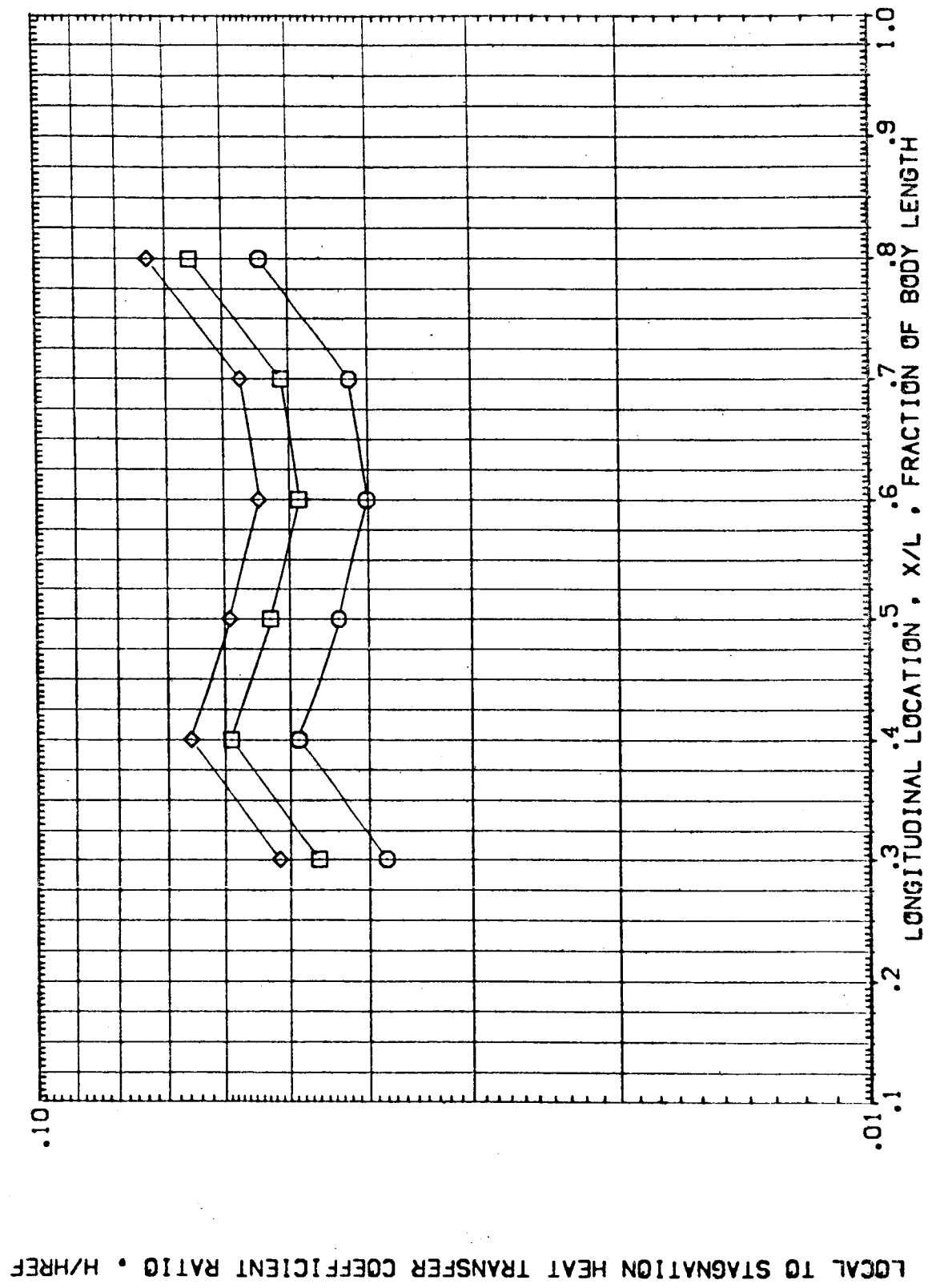
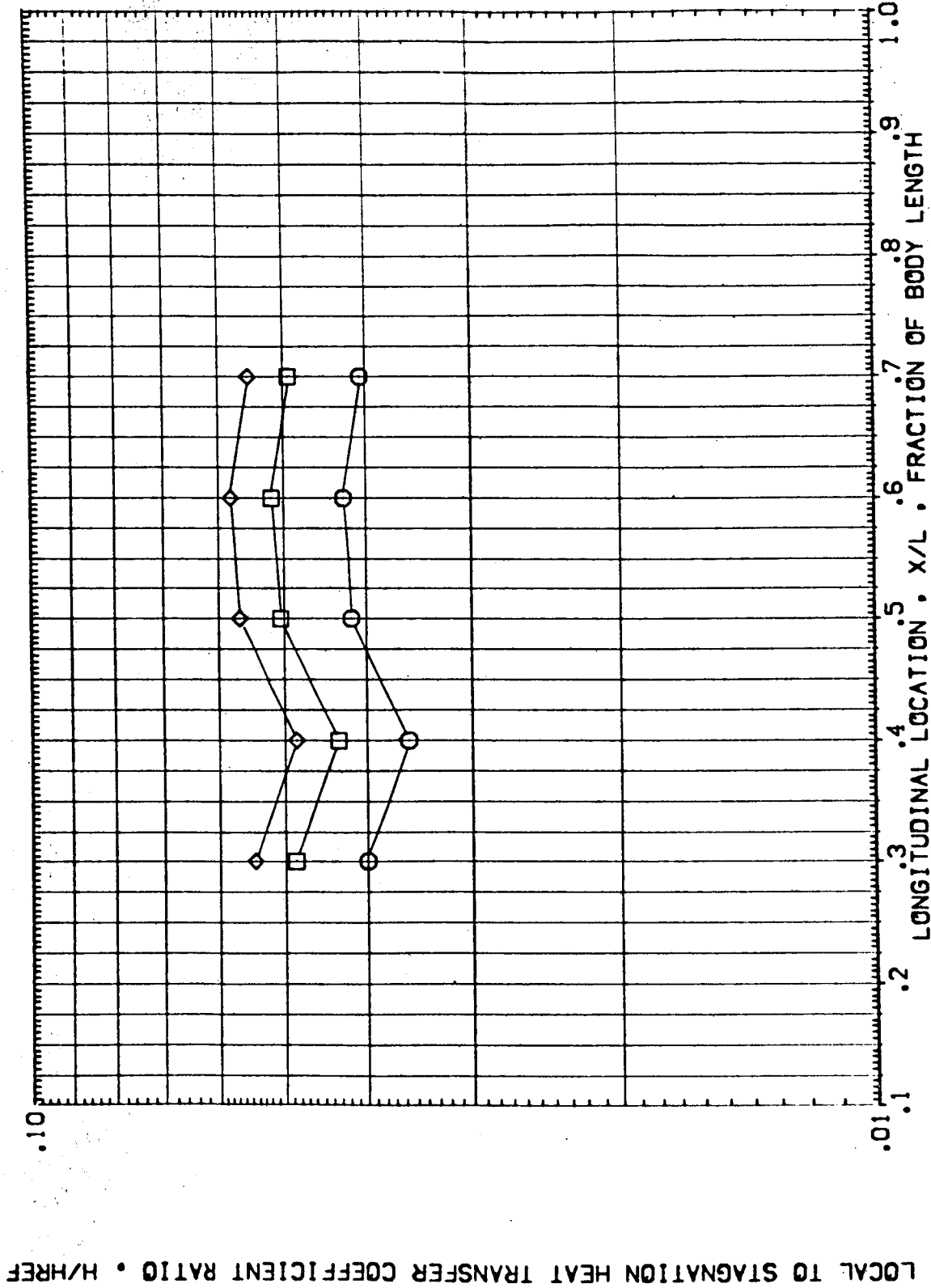


FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 430.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 {AE1E20} ARC 3.5-178 I43 O+T+S -3.000 .000 5.000 1.000
 {AE1E20} ARC 3.5-178 I43 O+T+S -3.000 .000 5.000 .900
 {BE1E20} ARC 3.5-178 I43 O+T+S -3.000 .000 5.000 .850



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FIG. 20 ORBITER SIDE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 478.800



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

(EE|E06) ARC 3.5-178 |H3 O+T+S .000 .000 1.500 .900

(EE|E07) ARC 3.5-178 |H3 O+T+S .000 .000 5.000 .900

(EE|E08) ARC 3.5-178 |H3 O+T+S (TRIPS) .000 .000 1.500 .900

(EE|E09) ARC 3.5-178 |H3 O+T+S (TRIPS) .000 .000 5.000 .900

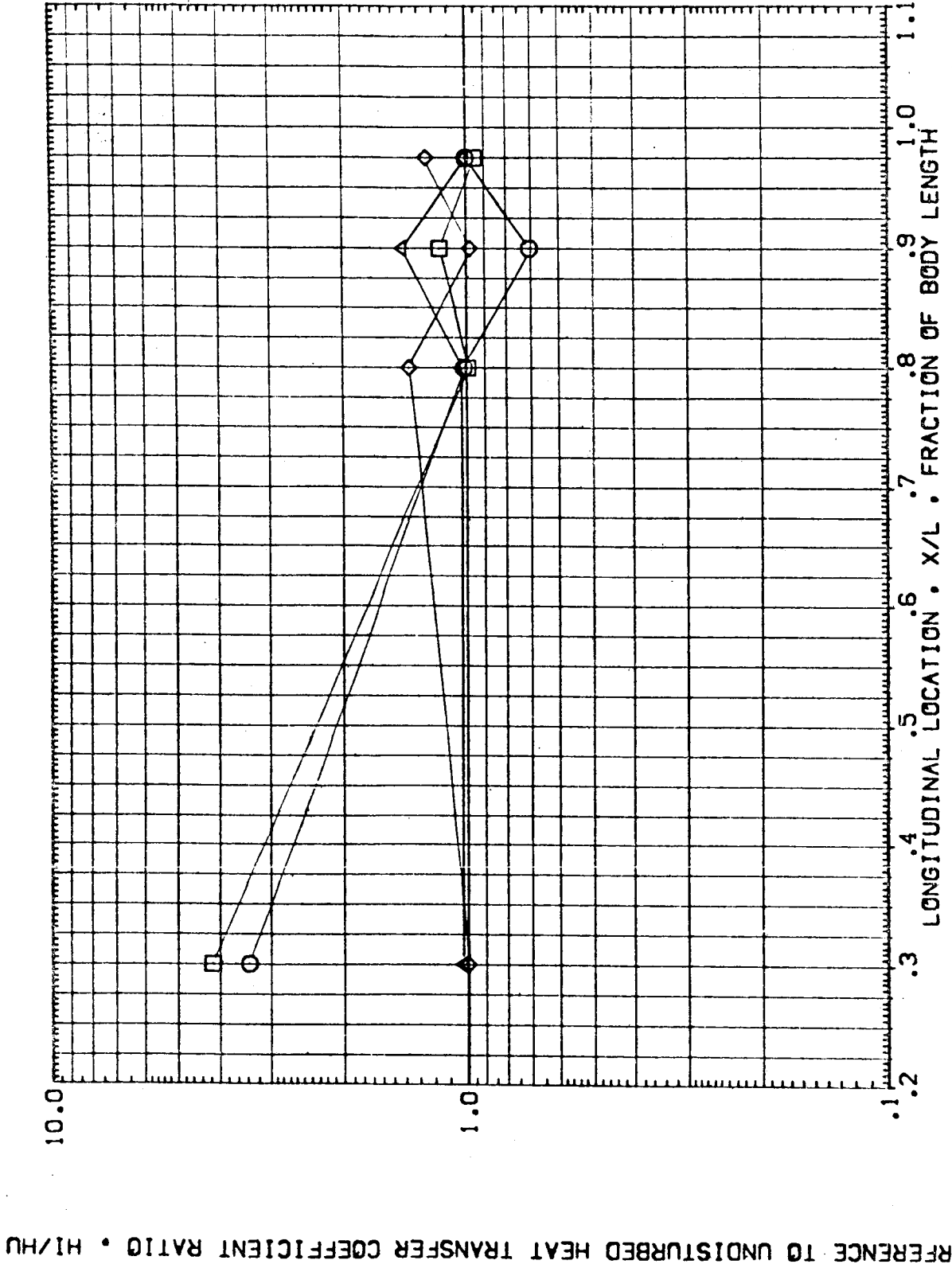


FIG. 21 ORBITER SIDE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 Z = 350.000

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ORB SIDE	ALPHA	BETA	RN/L	HAV/HT
(EE E06)	ARC 3.5-178 H3 C+T+S	ORB SIDE	.000	.000	1.500	.900
(EE E07)	ARC 3.5-178 H3 C+T+S	ORB SIDE	.000	.000	5.000	.900
(EE E08)	ARC 3.5-178 H3 C+T+S (TRIPS)	ORB SIDE	.000	.000	1.500	.900
(EE E09)	ARC 3.5-178 H3 C+T+S (TRIPS)	ORB SIDE	.000	.000	5.000	.900

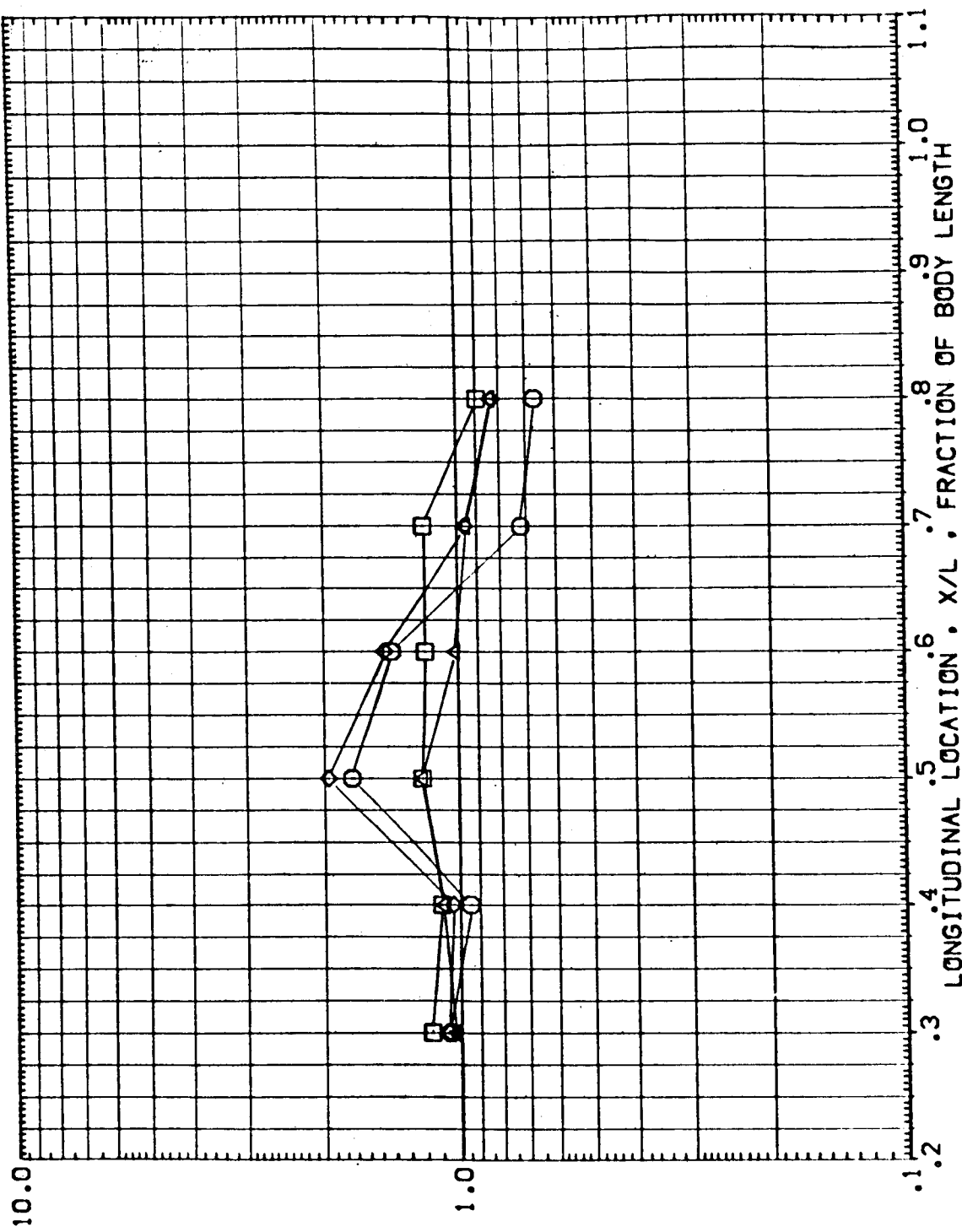


FIG. 21 ORBITER SIDE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 Z = 430.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(EE E06)	ARC 3.5-178 I43 O+T+S	.000	.000	1.500	.900
(EE E07)	ARC 3.5-178 I43 O+T+S	.000	.000	5.000	.900
(EE E08)	ARC 3.5-178 I43 O+T+S (TRIPS)	.000	.000	1.500	.900
(EE E09)	ARC 3.5-178 I43 O+T+S (TRIPS)	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

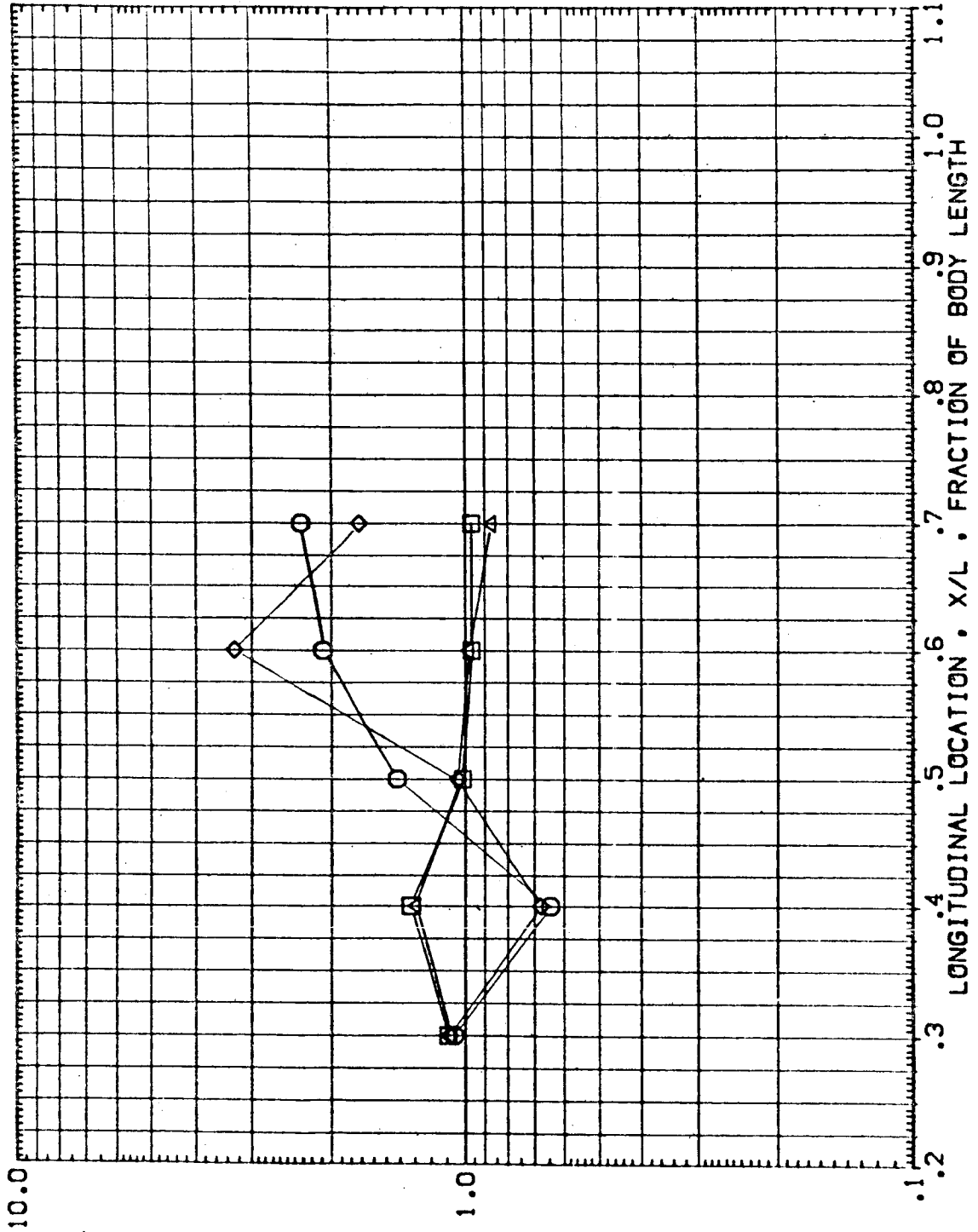


FIG. 21 ORBITER SIDE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 Z = 478.800

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 {RE|FOS} ARC 3.5-178 |H3 ORBITER .000 .000 1.500 1.000
 {AE|FOS} ARC 3.5-178 |H3 ORBITER .000 .000 1.500 .500
 {BE|FOS} ARC 3.5-178 |H3 ORBITER .000 .000 1.500 .850

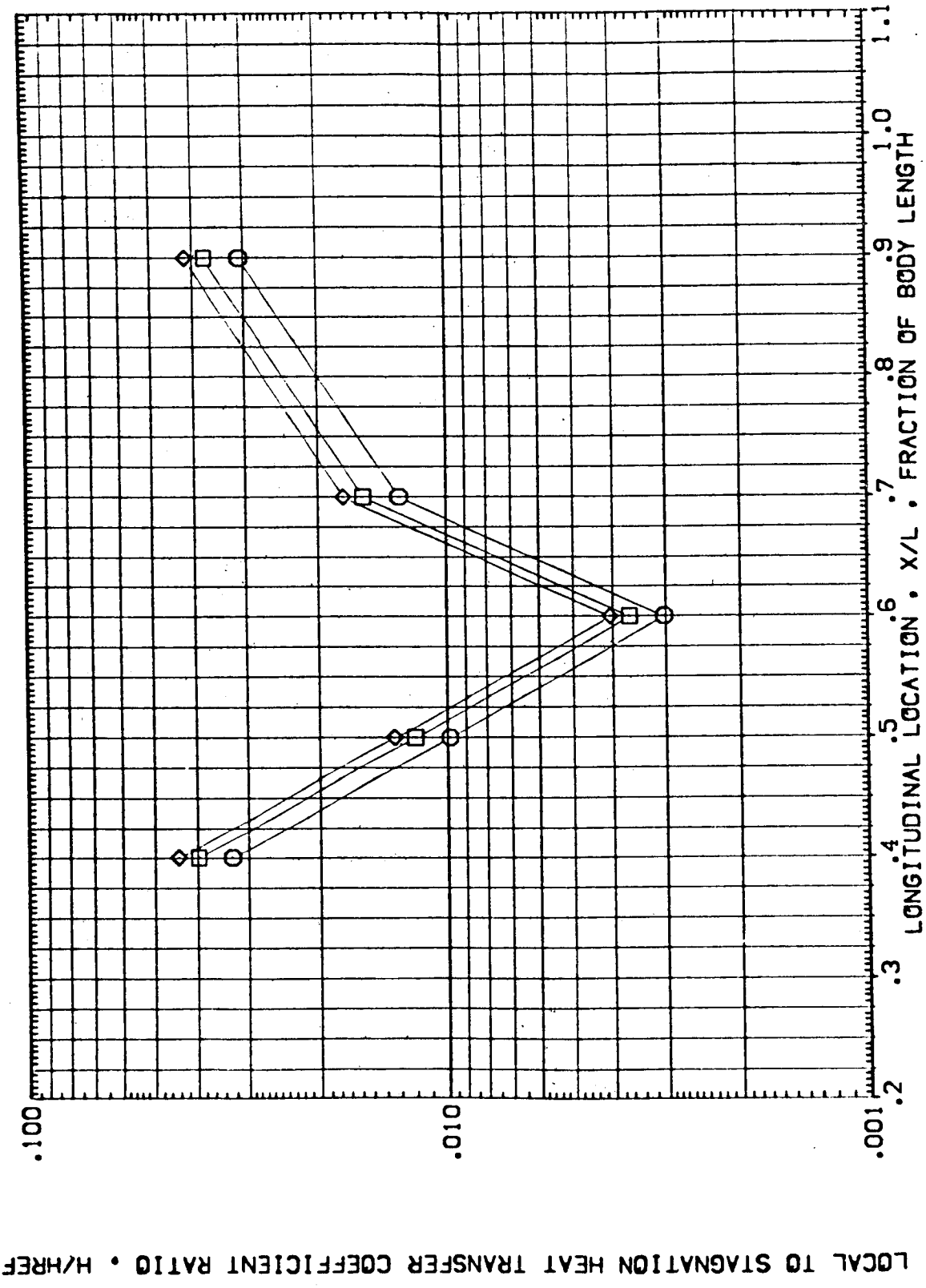


FIG. 22 WING UPPER SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 WING = 1.000



DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (RE|F07) [] H3 ORBITER
 (AE|F07) [] H3 ORBITER
 (BE|F07) [] H3 ORBITER

WING UPPER CREASE .000
 WING UPPER CREASE .000
 WING UPPER CREASE .000
 ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 5.000 5.000 5.000
 HAV/HT 1.000 .900 .850

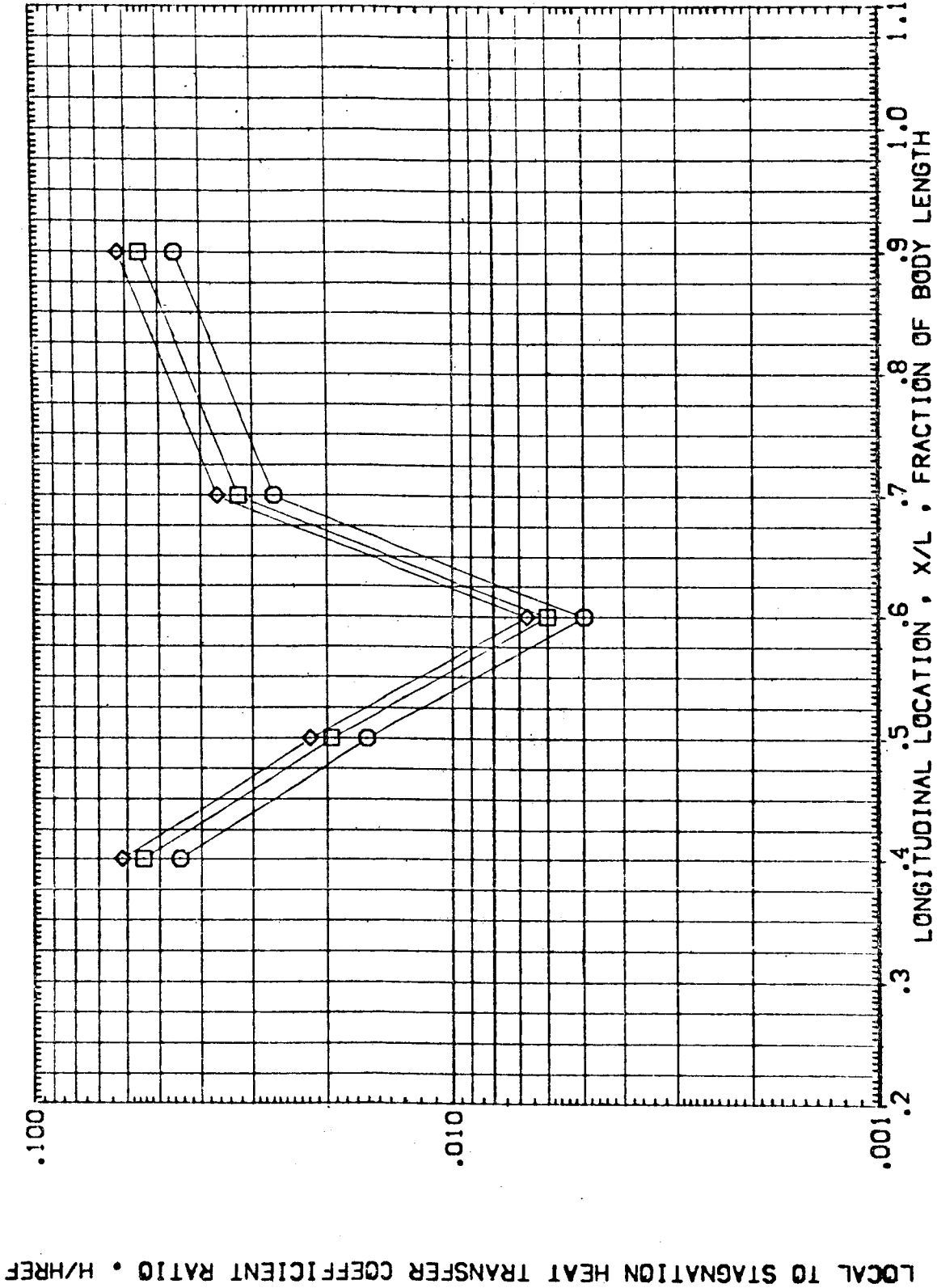


FIG. 22 WING UPPER SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 WING = 1.000

DATA SET SYMBO. CONFIGURATION DESCRIPTION ALPHA BETA RN/L MAV/HT
 (RE|FDB) (AE|FDB) (BE|FDB) ARC 3.5-178 [H3 ORBITTER (TRIPS)IVING UPPER CREASE] .000 .000 1.500 1.000
 (RE|FDB) (AE|FDB) (BE|FDB) ARC 3.5-178 [H3 ORBITTER (TRIPS)IVING UPPER CREASE] .000 .000 1.500 .900
 (RE|FDB) (AE|FDB) (BE|FDB) ARC 3.5-178 [H3 ORBITTER (TRIPS)IVING UPPER CREASE] .000 .000 1.500 .850

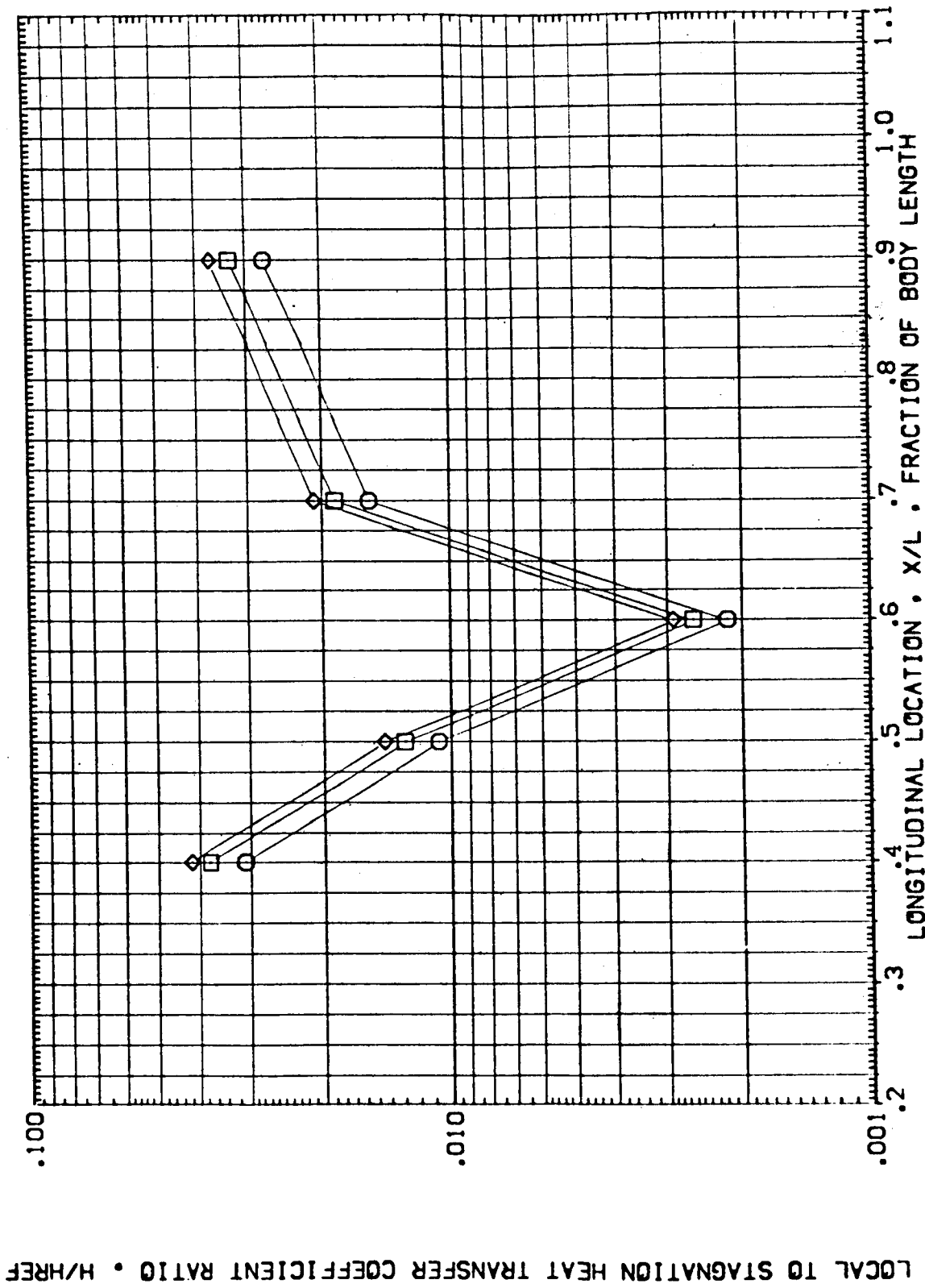


FIG. 22 WING UPPER SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 WING = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(RE|F09) ARC 3.5-178 H3 ORBITER (TR|PS|VING UPPER CREASE .000 .000 5.000 1.000

(AE|F09) ARC 3.5-178 H3 ORBITER (TR|PS|VING UPPER CREASE .000 .000 5.000 .900

(BE|F09) ARC 3.5-178 H3 ORBITER (TR|PS|VING UPPER CREASE .000 .000 5.000 .850

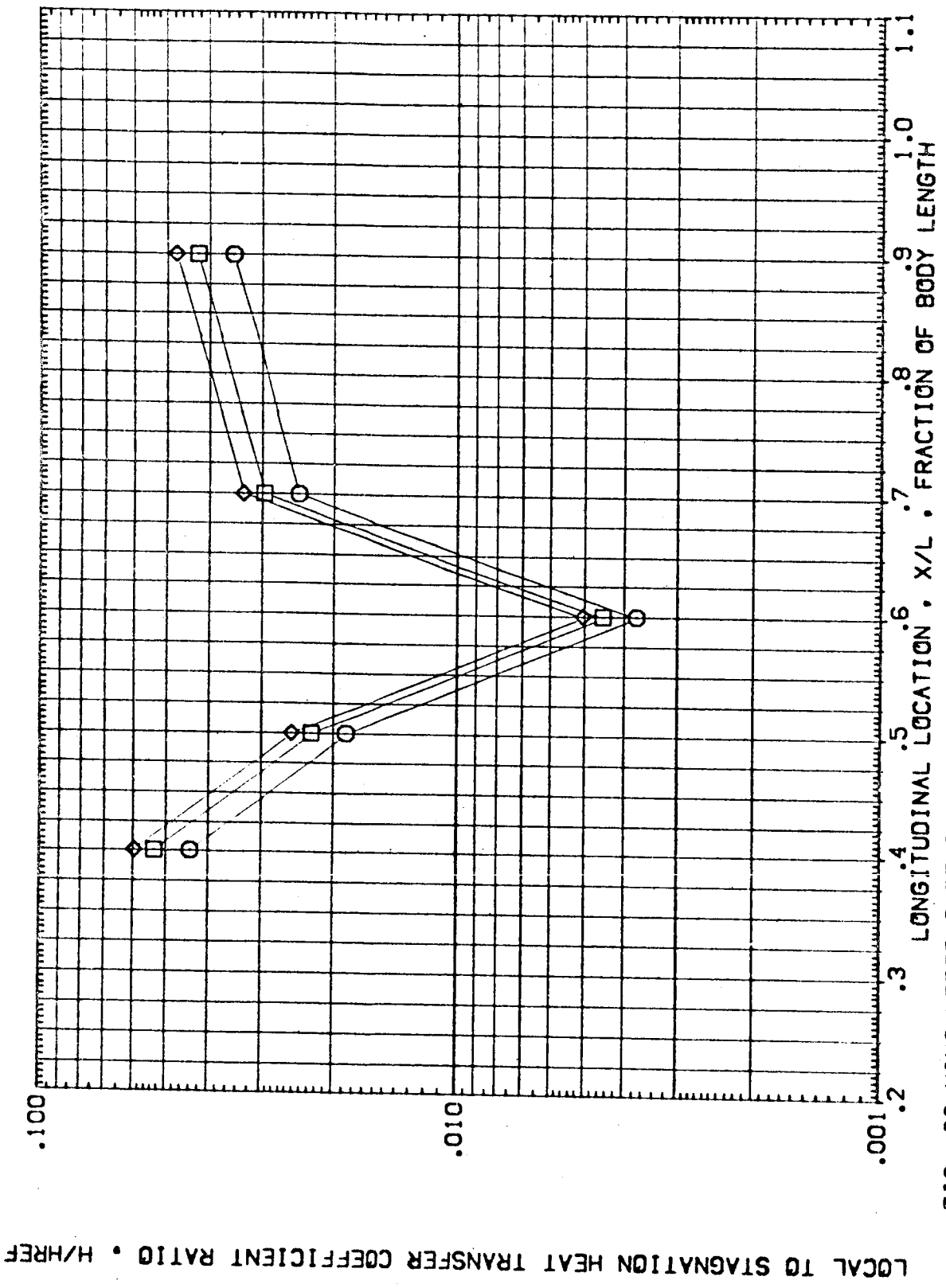


FIG. 22 WING UPPER SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 WING = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 { RE|FOI } ARC 3.5-178 IH3 0+T+S
 { AE|FOI } ARC 3.5-178 IH3 0+T+S
 { BE|FOI } ARC 3.5-178 IH3 0+T+S

WING UPPER CREASE .000 ALPHA .000 BETA .000 RVL 1.500 MAV/HT 1.000
 WING UPPER CREASE .000 ALPHA .000 BETA .000 RVL 1.500 MAV/HT .900
 WING UPPER CREASE .000 ALPHA .000 BETA .000 RVL 1.500 MAV/HT .850

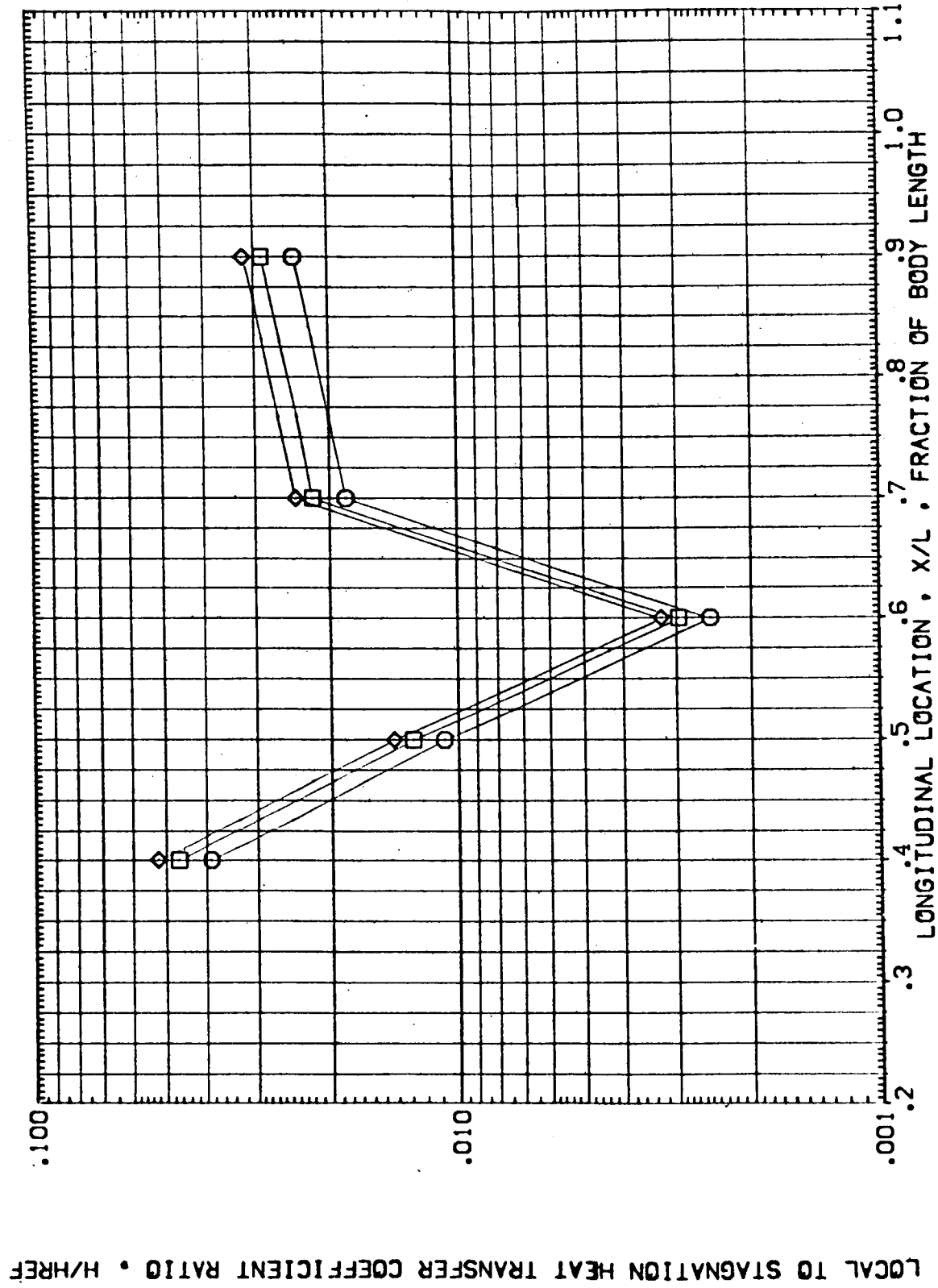


FIG. 23 WING UPPER SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 WING = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|FD2) (O) ARC 3.5-178 IH3 O+T+S
 (AE|FD2) (□) ARC 3.5-178 IH3 O+T+S
 (BE|FD2) (◇) ARC 3.5-178 IH3 O+T+S

WING UPPER CREASE ALPHA BETA RV/L MAV/HT
 WING UPPER CREASE .000 .000 5.000 1.000
 WING UPPER CREASE .000 .000 5.000 .900
 WING UPPER CREASE .000 .000 5.000 .850

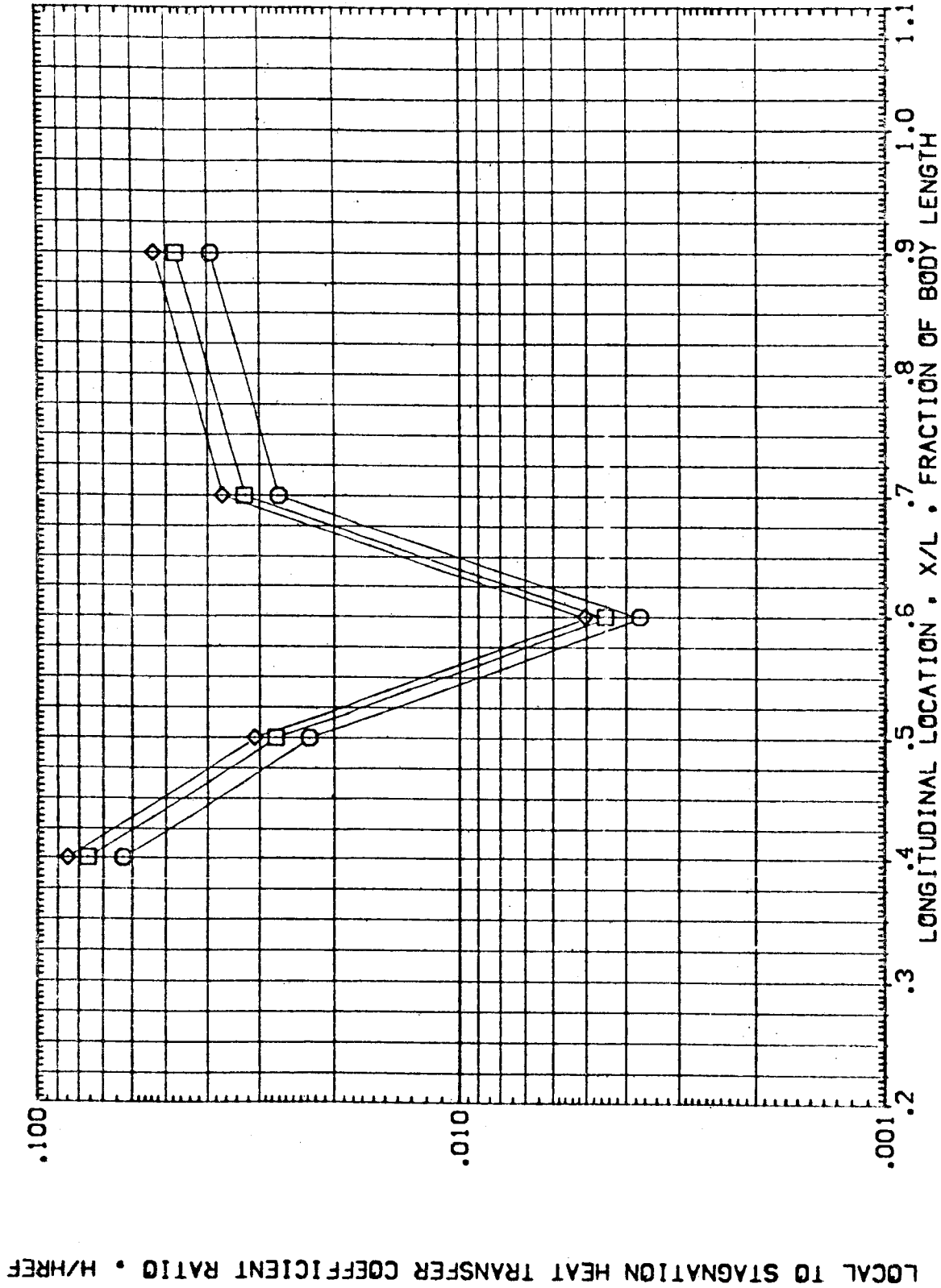


FIG. 23 WING UPPER SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 WING = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 {RE|FO3} ARC 3.5-178 |H3 O+T+S (TRIPS) .000 .000 1.500 1.000
 {AE|FO3} ARC 3.5-178 |H3 O+T+S (TRIPS) .000 .000 1.500 .900
 {BE|FO3} ARC 3.5-178 |H3 O+T+S (TRIPS) .000 .000 1.500 .850

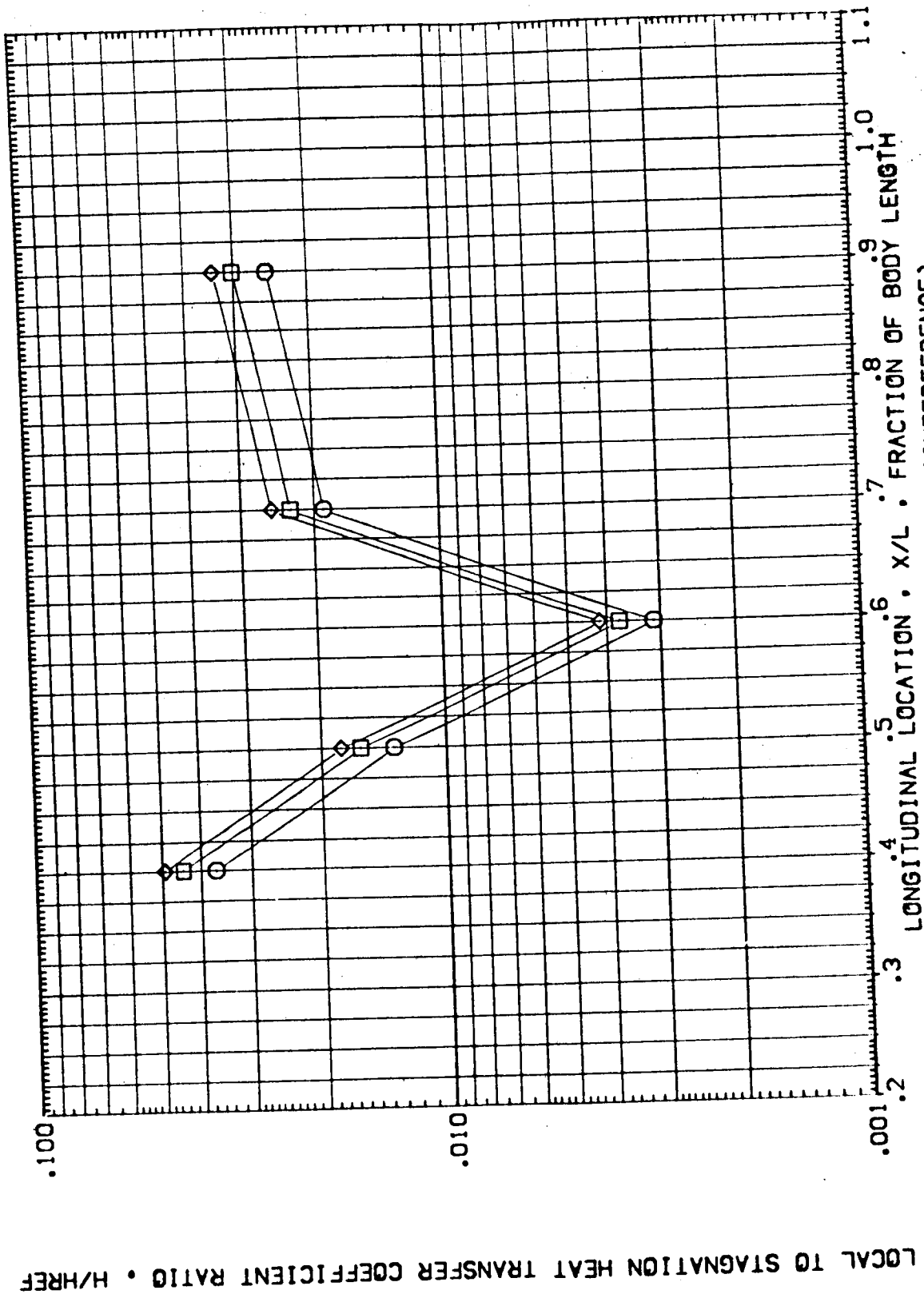


FIG. 23 WING UPPER SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 WING = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT
 (BE|FO4) ARC 3.5-178 I+3 O+I+S (TR|PS) .000 .000 5.000 1.000
 (AL|FO4) ARC 3.5-178 I+3 O+I+S (TR|PS) .000 .000 5.000 .900
 (BE|FO4) ARC 3.5-178 I+3 O+I+S (TR|PS) .000 .000 5.000 .850

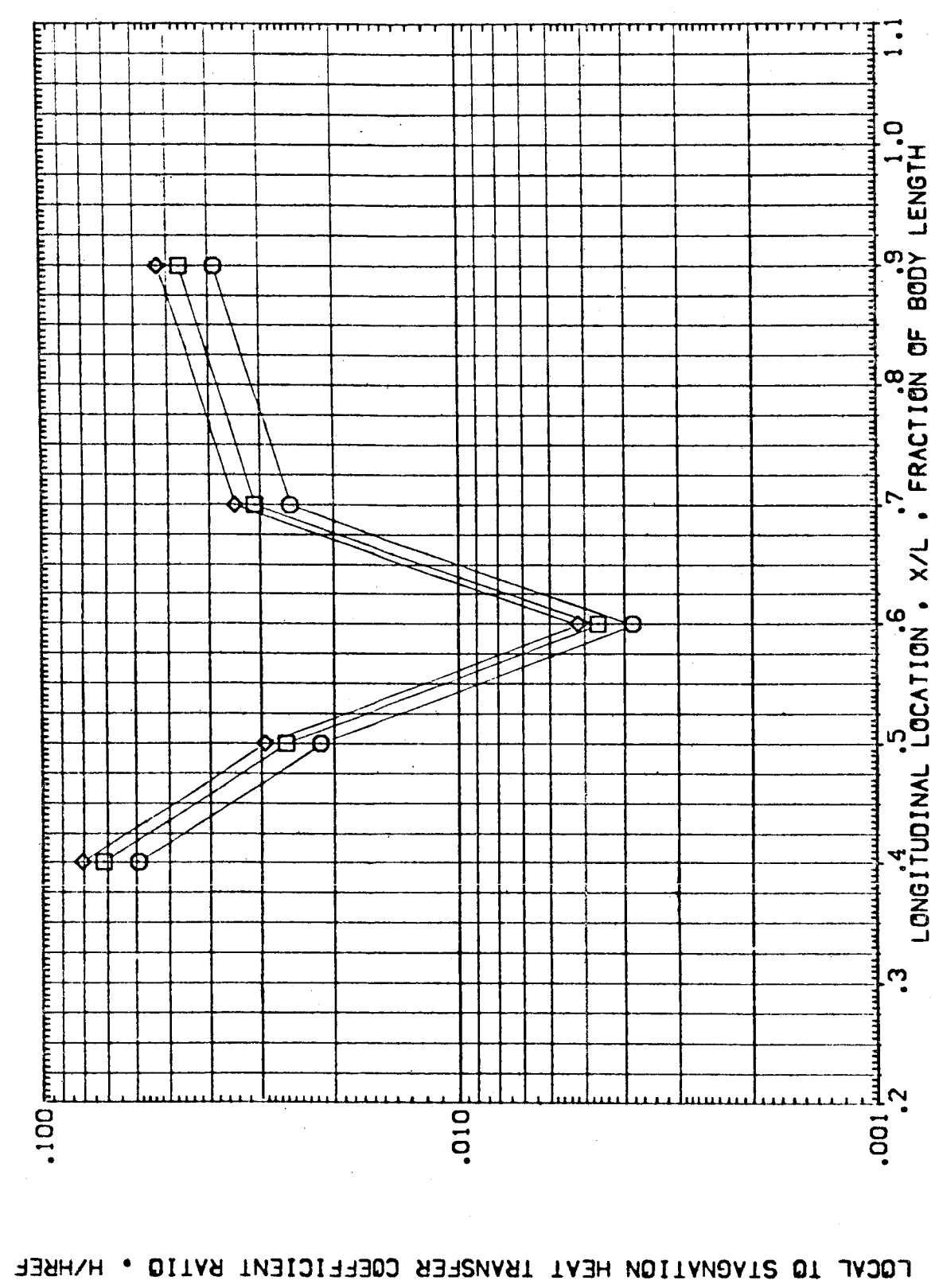


FIG. 23 WING UPPER SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 WING = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIFOS) ARC 3.5-178 I43 O+T+S
 (AEIFOS) ARC 3.5-178 I43 O+T+S
 (BEIFOS) ARC 3.5-178 I43 O+T+S

WING UPPER CREASE
 WING UPPER CREASE
 WING UPPER CREASE

ALPHA .000
 .000
 .000

BETA -5.000
 -5.000
 -5.000

RV/L 5.000
 5.000
 5.000

HAV/HT 1.000
 .900
 .850

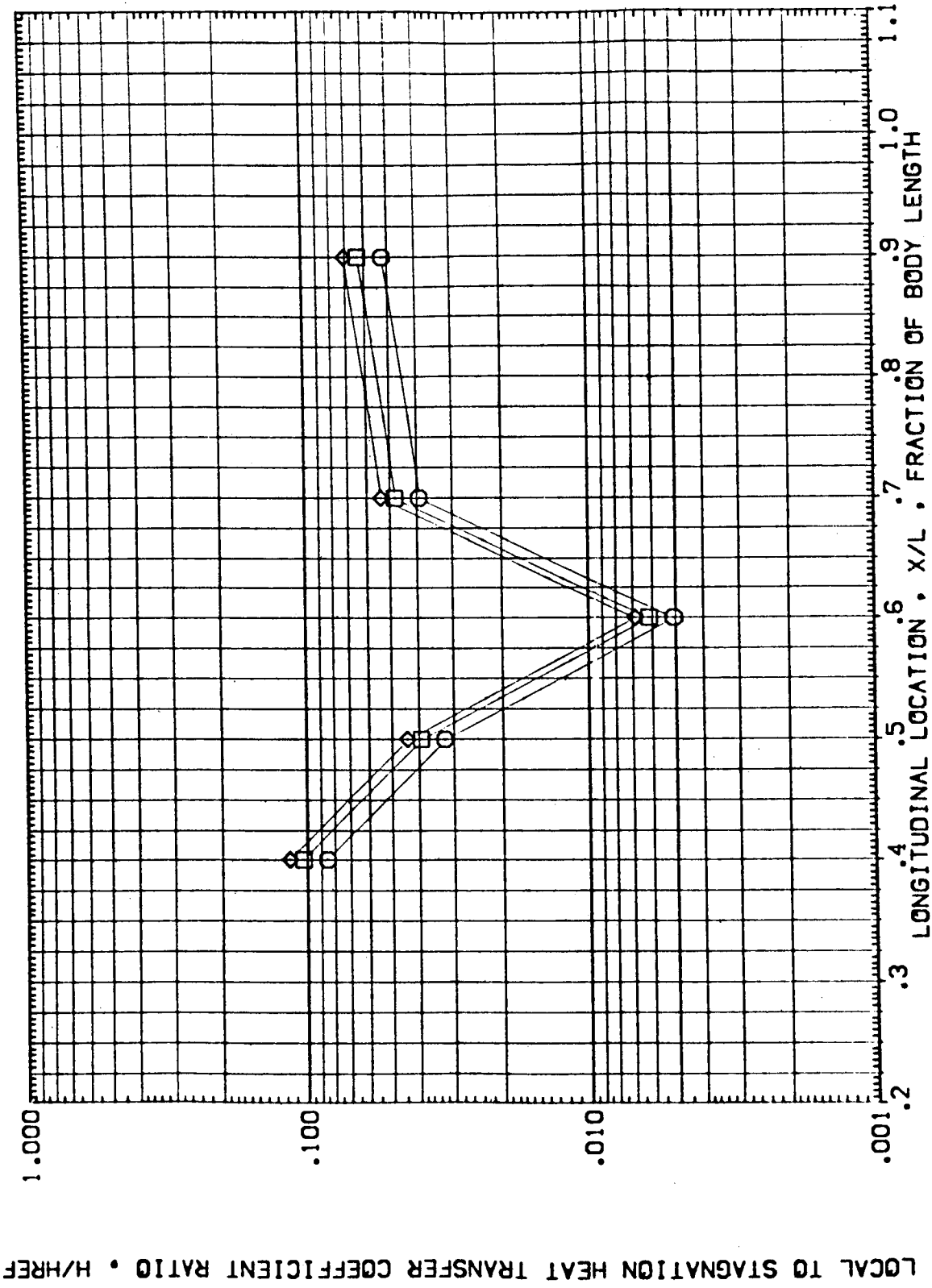


FIG. 23 WING UPPER SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 WING = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE|F|19] ARC 3.5-178 143 0+1+S HAV/HT 1.000
 [AE|F|19] ARC 3.5-178 143 0+1+S RV/L 5.000
 [BE|F|19] ARC 3.5-178 143 0+1+S ALPHA .000
 WING UPPER CREASE -5.000 BETA .000
 WING UPPER CREASE -5.000
 WING UPPER CREASE -5.000

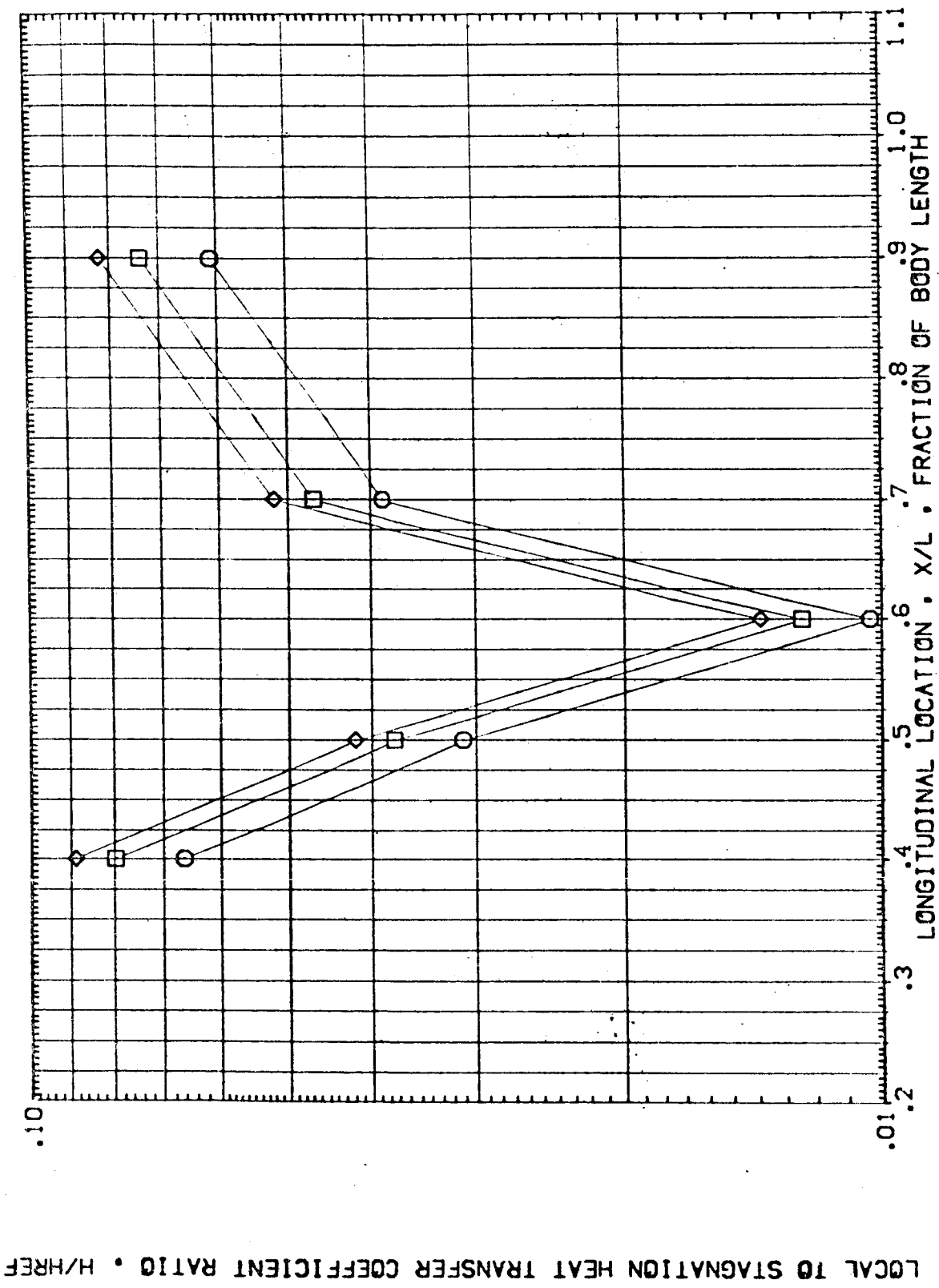


FIG. 23 WING UPPER SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 WING = 1.000

DATA SET SYMBO. CONFIGURATION DESCRIPTION
 { AE|F20 } □ ARC 3.5-178 |H3 O+T+S
 { BE|F20 } ◇ ARC 3.5-178 |H3 O+T+S

WING UPPER CREASE VING UPPER CREASE VING UPPER CREASE
 ALPHA BETA RV/L HAV/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

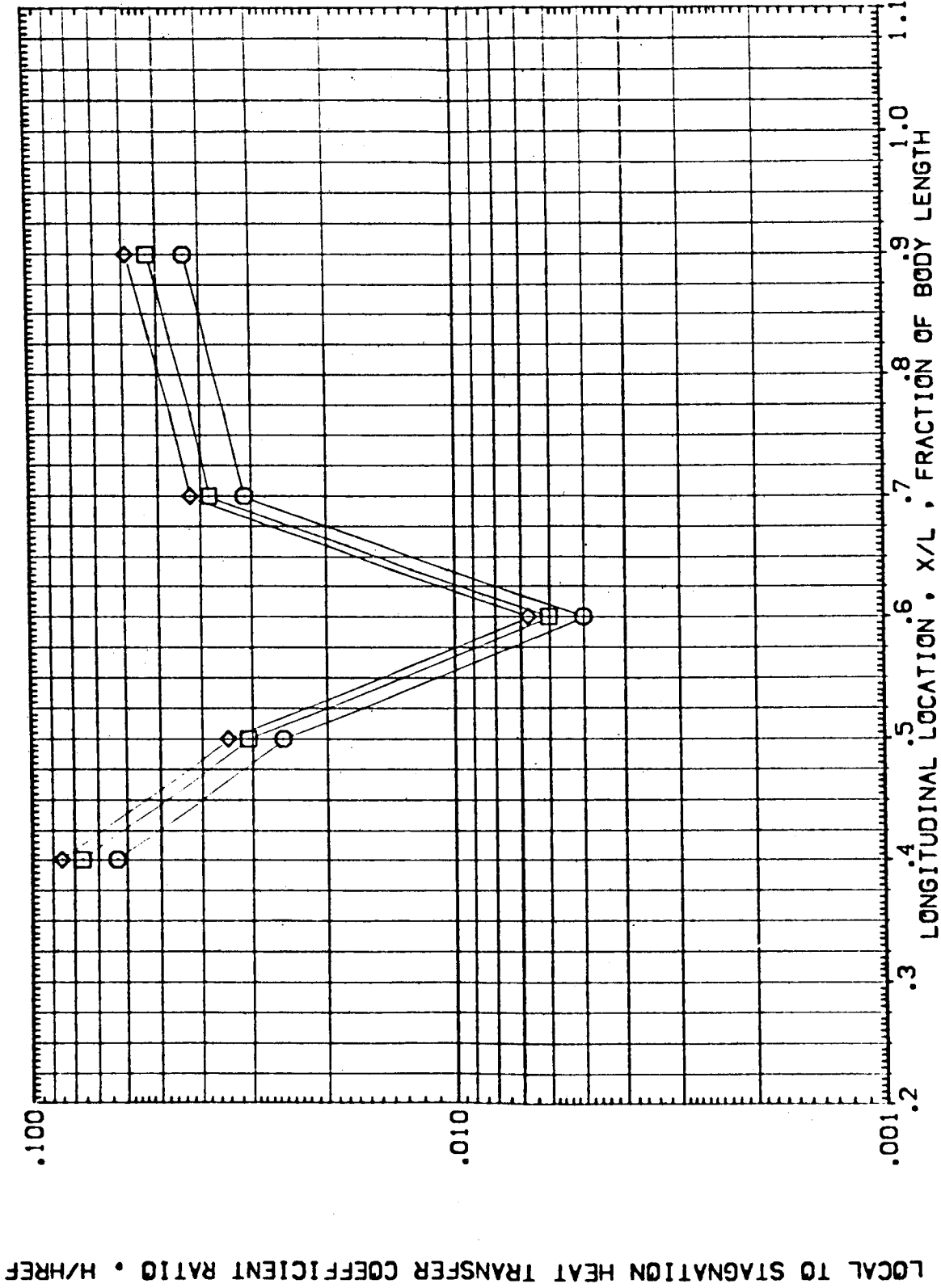
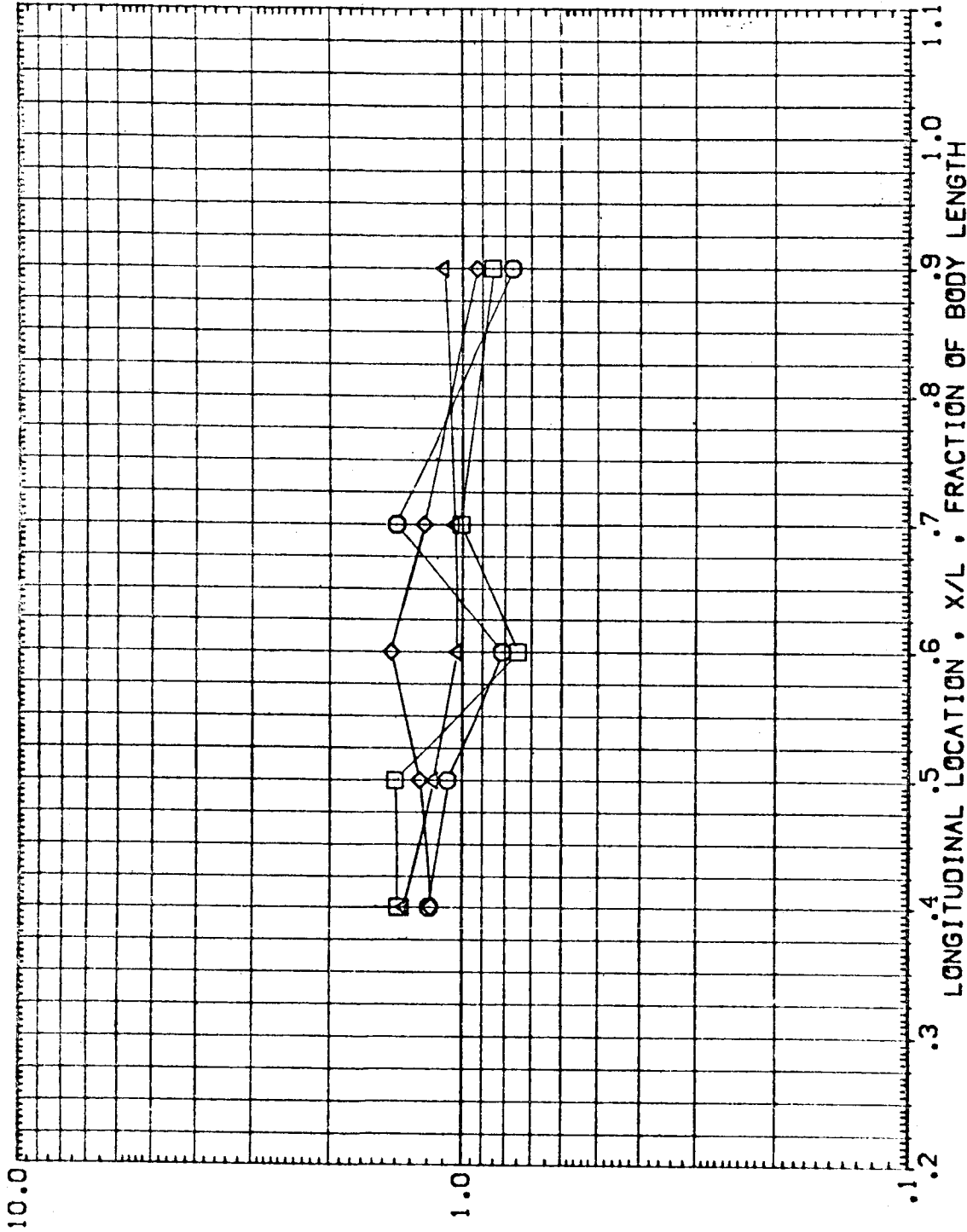


FIG. 23 WING UPPER SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 WING = 1.000

DATA SET SYMBOL. CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	VING UPPER CREASE	ALPHA	BETA	RN/L	HAV/HT
(EEIF06)	ARC 3.5-178 IH3 0-T+S	VING UPPER CREASE	.000	.000	1.500	.900
(EEIF07)	ARC 3.5-178 IH3 0-T+S	VING UPPER CREASE	.000	.000	5.000	.900
(EEIF08)	ARC 3.5-178 IH3 0-T+S (TRIPS)	VING UPPER CREASE	.000	.000	1.500	.900
(EEIF09)	ARC 3.5-178 IH3 0-T+S (TRIPS)	VING UPPER CREASE	.000	.000	5.000	.900



INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

FIG. 24 WING UPPER SURFACE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 WING = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L HAV/HT

{RE|GOS} ARC 3.5-178 IH3 ORBITER WING BOTTOM .000 .000 1.500 1.000

{AE|GOS} ARC 3.5-178 IH3 ORBITER WING BOTTOM .000 .000 1.500 .900

{BE|GOS} ARC 3.5-178 IH3 ORBITER WING BOTTOM .000 .000 1.500 .850

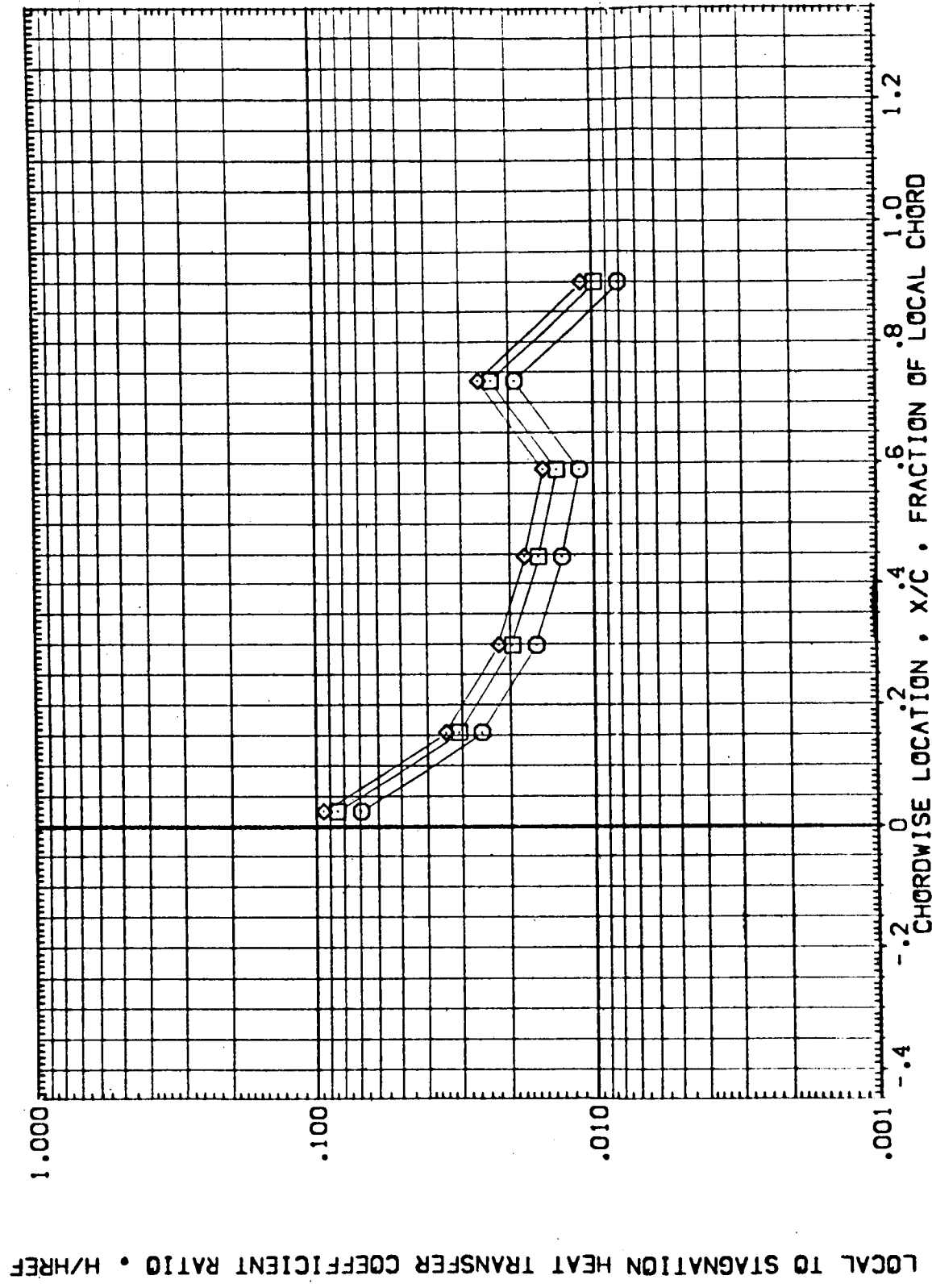


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .250



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|G06) ◊ ARC 3.5-178 143 ORBITER
 (AE|G06) ◊ ARC 3.5-178 143 ORBITER
 (BE|G06) ◊ ARC 3.5-178 143 ORBITER

WING BOTTOM WING BOTTOM WING BOTTOM
 WING BOTTOM WING BOTTOM WING BOTTOM
 ALPHA BETA RNU/L HAW/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

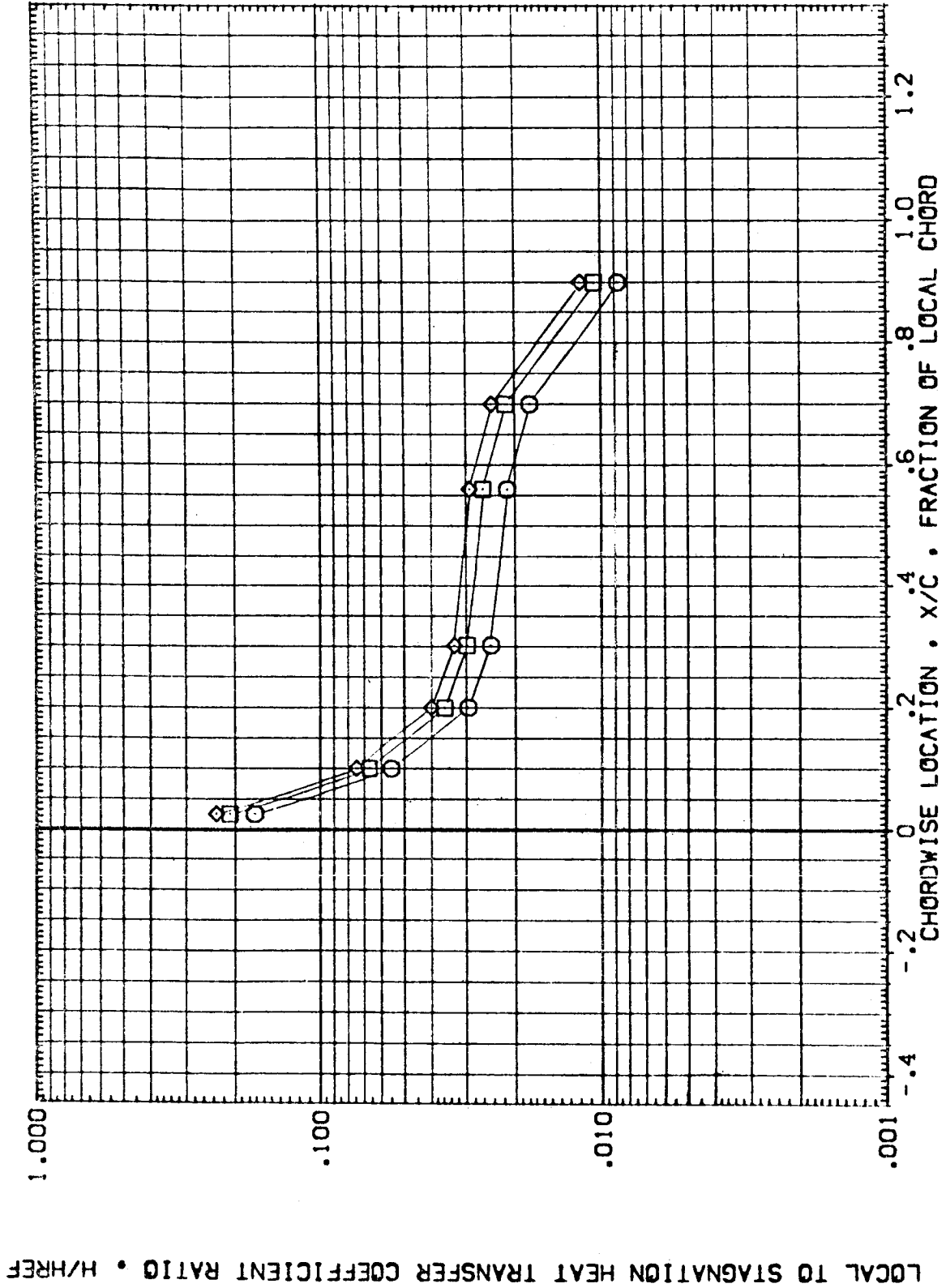


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (RE|GOG) ARC 3.5-178 |H3 ORBITER .000 .000 1.500 1.000
 (AE|GOG) ARC 3.5-178 |H3 ORBITER .000 .000 1.500 .900
 (BE|GOG) ARC 3.5-178 |H3 ORBITER .000 .000 1.500 .850

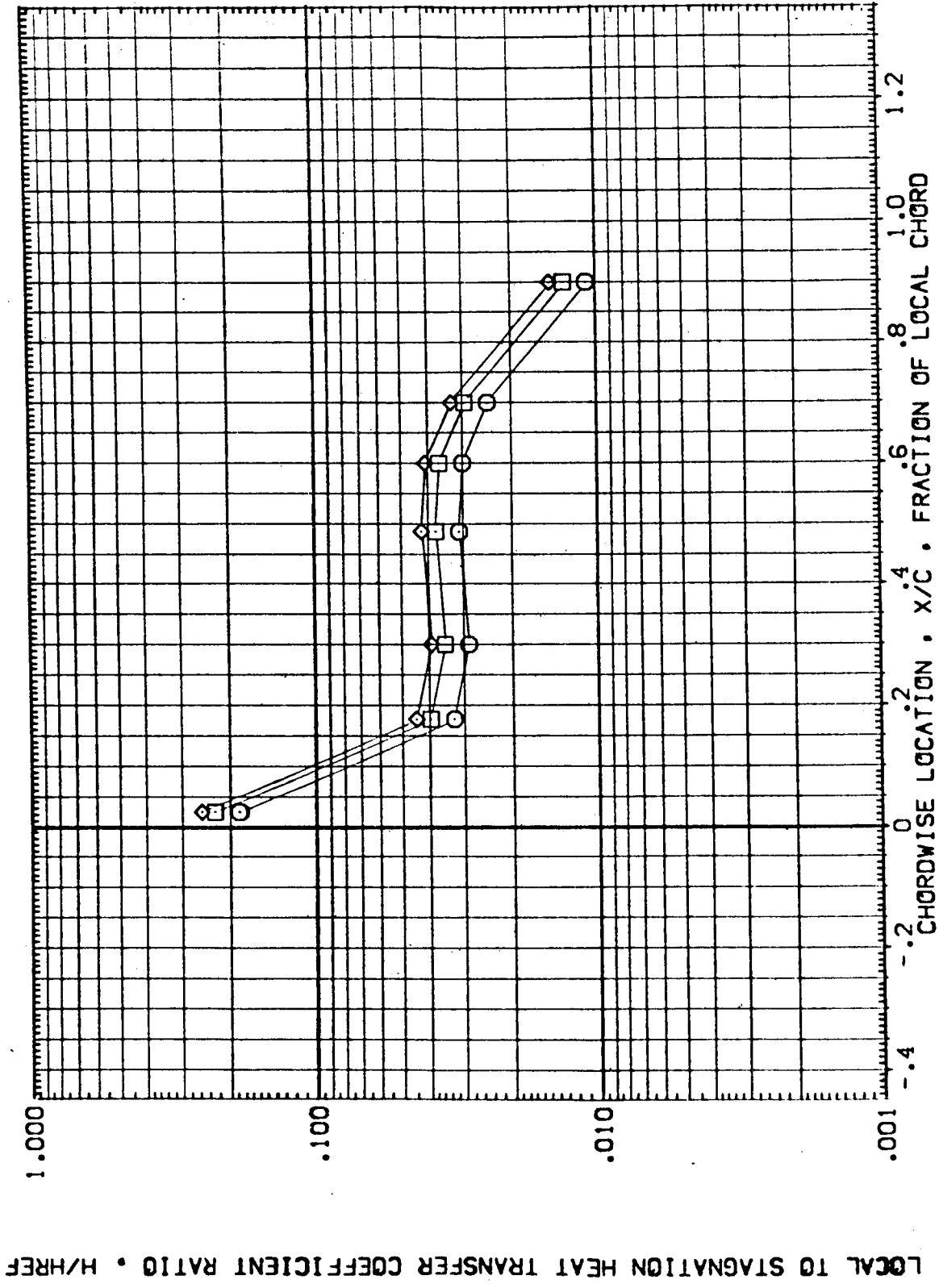


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

[RE] [006] ARC 3.5-178 [H3 ORBITER] .000 .000 1.500 1.000

[AE] [006] ARC 3.5-178 [H3 ORBITER] .000 .000 1.500 .900

[BE] [006] ARC 3.5-178 [H3 ORBITER] .000 .000 1.500 .850

VING BOTTOM VING BOTTOM VING BOTTOM

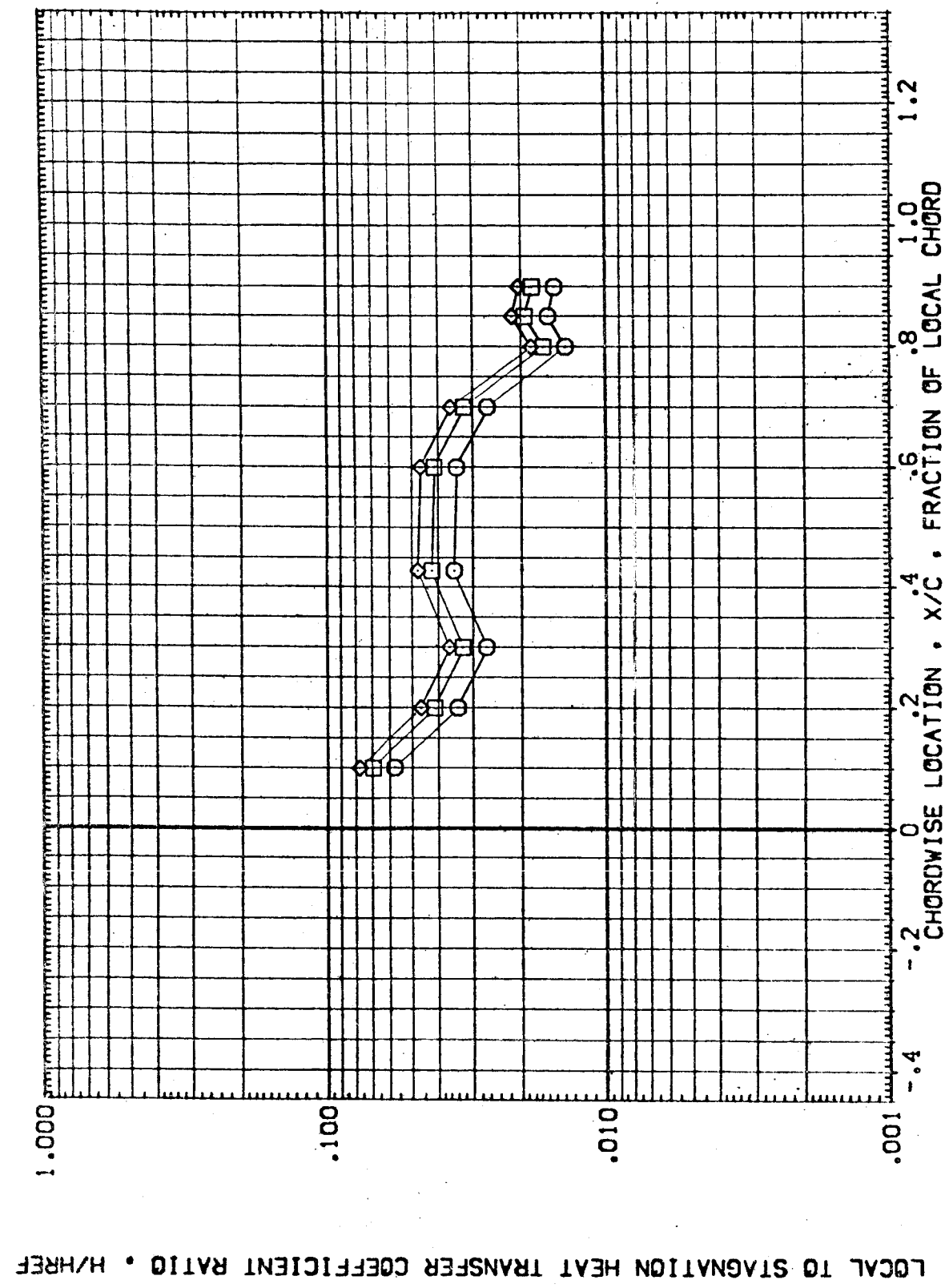


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 { REIG06 } ARC 3.5-178 I-3 ORBITER .000 .000 1.500 1.000
 { AEIG06 } ARC 3.5-178 I-3 ORBITER .000 .000 1.500 .900
 { BEIG06 } ARC 3.5-178 I-3 ORBITER .000 .000 1.500 .850

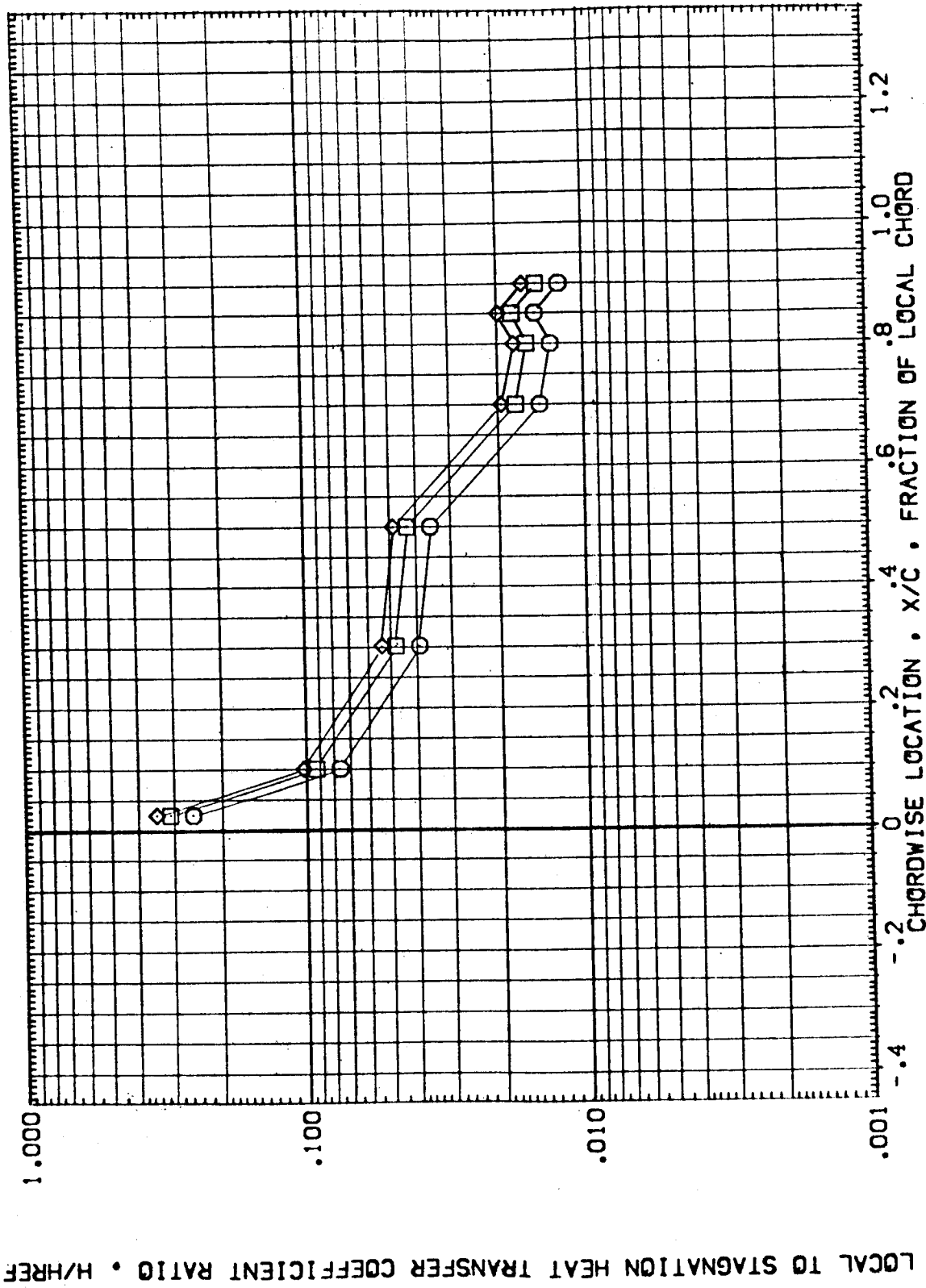


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .750

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|G06) (ARC 3.5-178) (H3 ORBITER)
 (AE|G06) (ARC 3.5-178) (H3 ORBITER)
 (BE|G06) (ARC 3.5-178) (H3 ORBITER)

ALPHA .000
 BETA .000
 RV/L 1.500
 HAV/HT 1.000

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

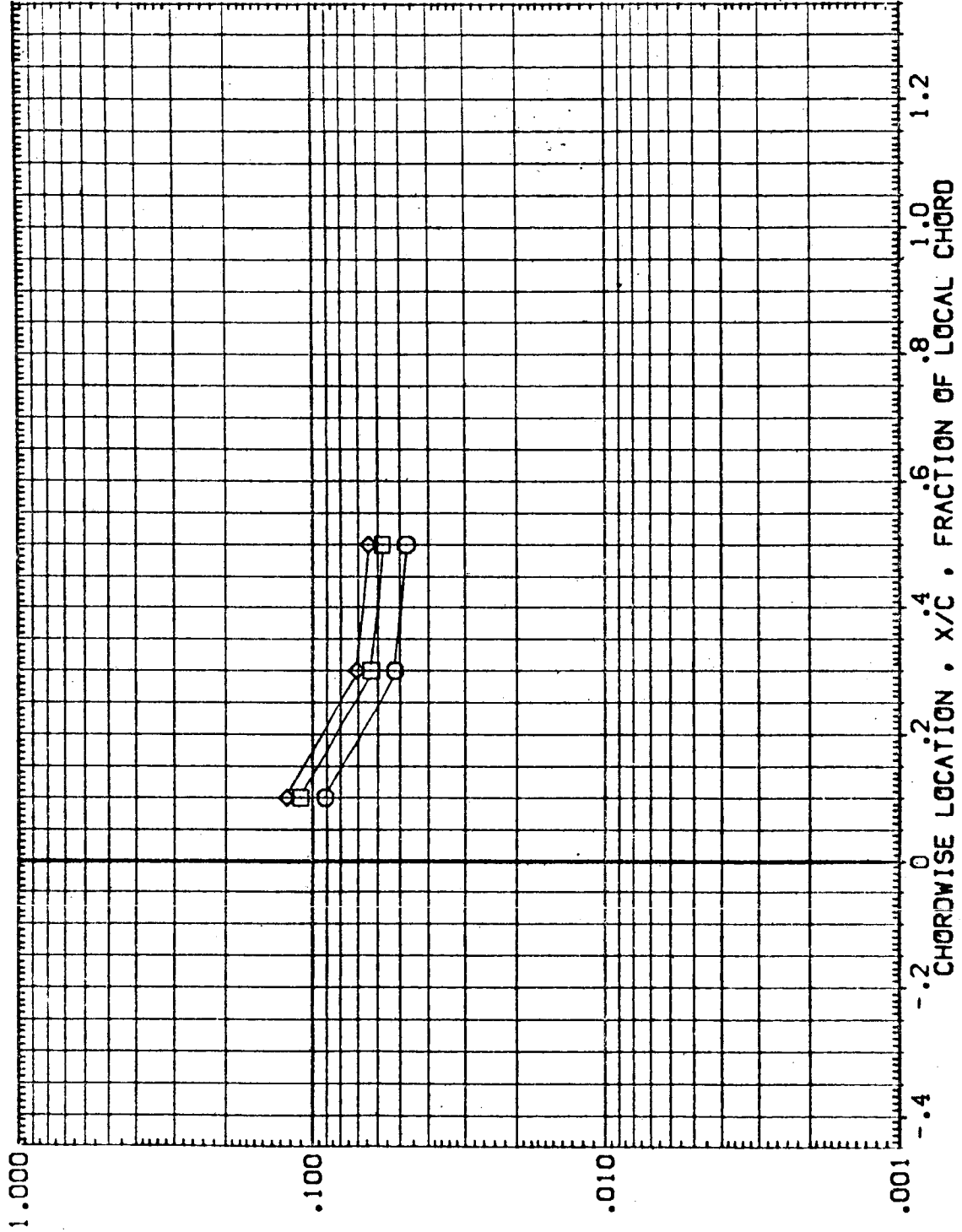


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

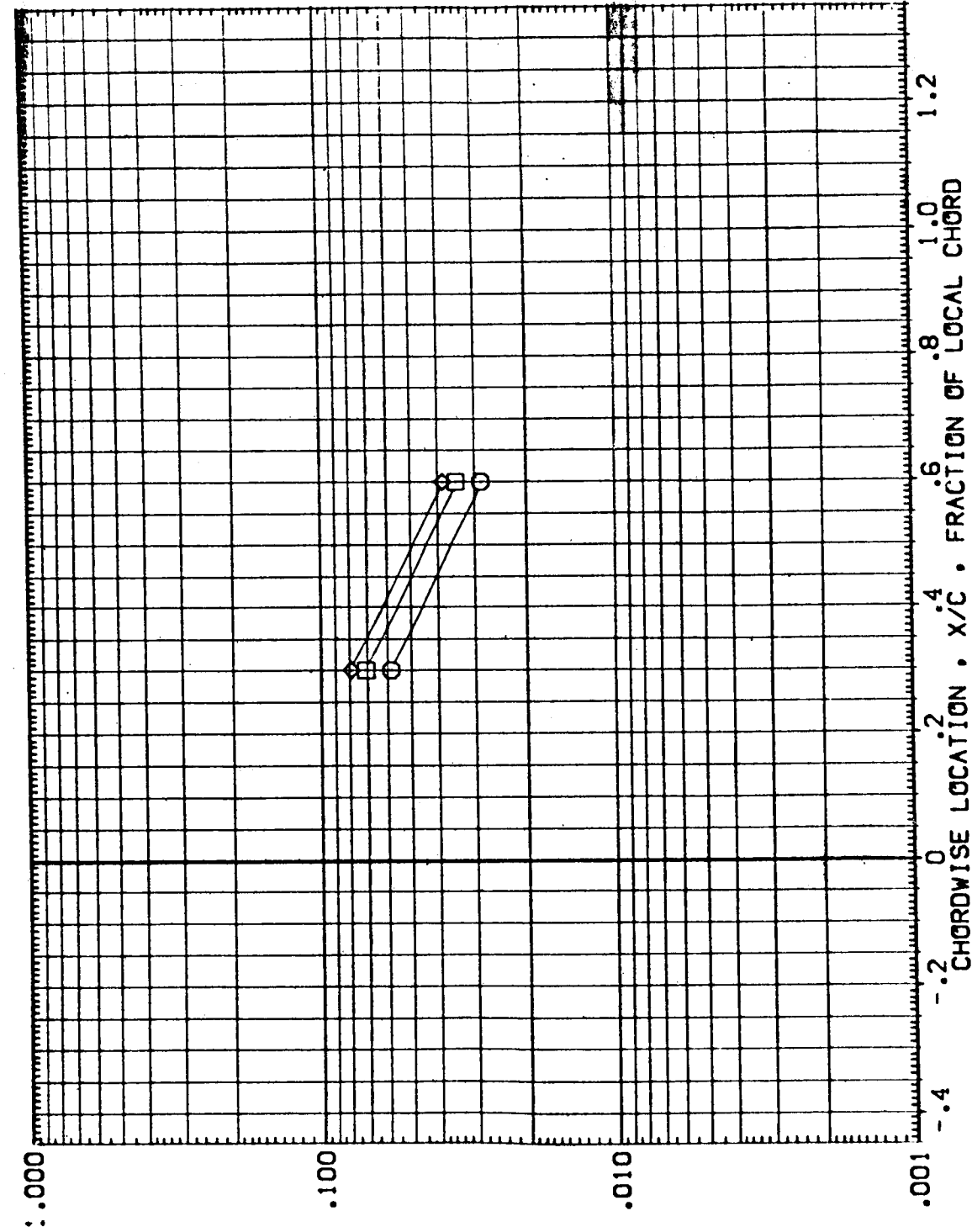


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .900

DATA SET SYMBOL: { REIGOS } □, { AEIGOS } ◇, { BEIGOS } ○

CONFIGURATION DESCRIPTION:
 ARC 3.5-178 143 ORBITER
 ARC 3.5-178 143 ORBITER
 ARC 3.5-178 143 ORBITER

WING BOTTOM: WING BOTTOM, WING BOTTOM, WING BOTTOM

ALPHA: .000, .000, .000

BETA: .000, .000, .000

RV/L: 1.500, 1.500, 1.500

HAV/HT: 1.000, .900, .850



DATA SET SYMBOL CONFIGURATION DESCRIPTION

{RE|GOS} ARC 3.5-178 IH3 ORBITER
 {AE|GOS} ARC 3.5-178 IH3 ORBITER
 {BE|GOS} ARC 3.5-178 IH3 ORBITER

VING BOTTOM
 VING BOTTOM
 VING BOTTOM

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 MAV/HT 1.000 .900 .850

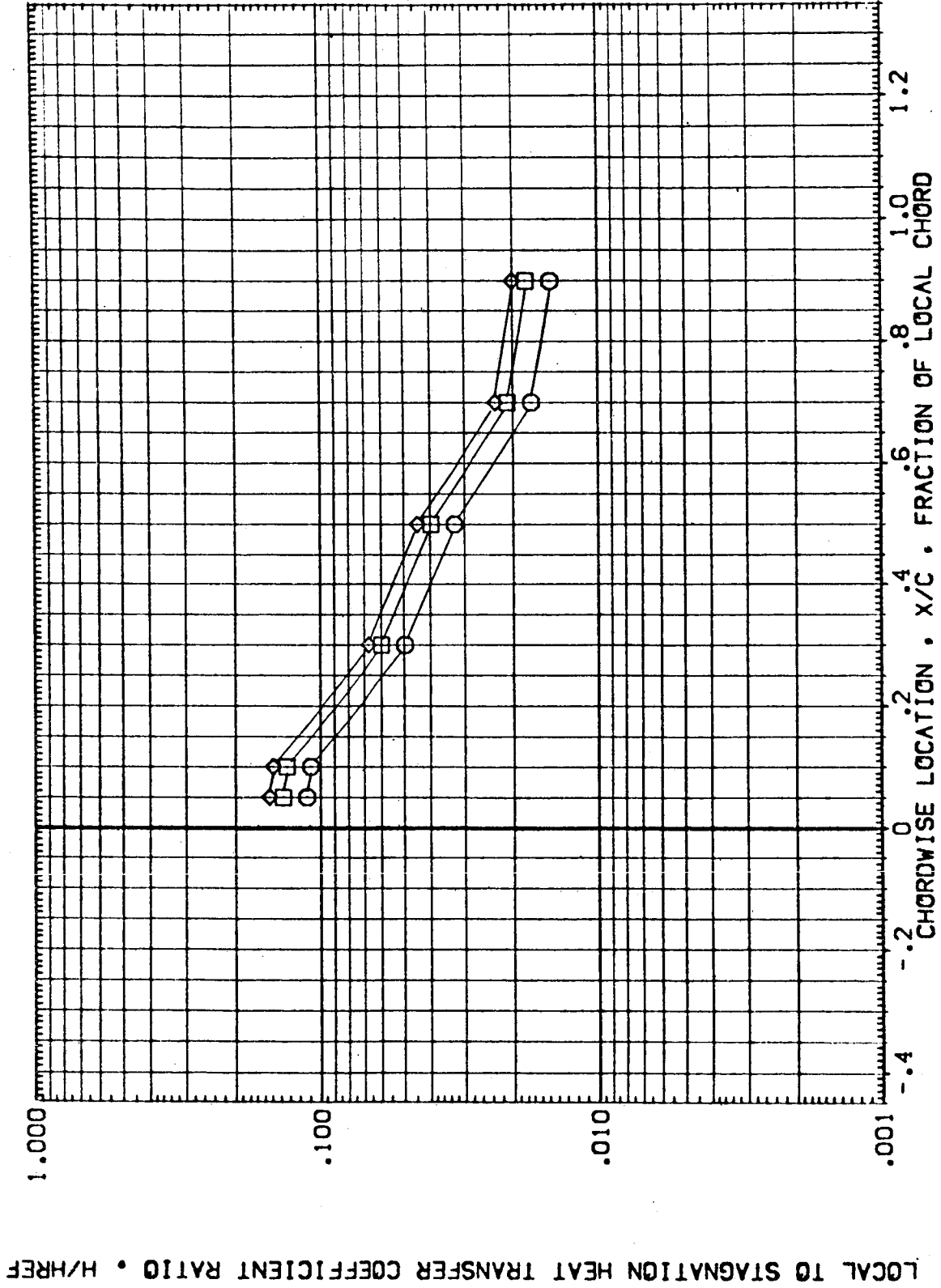


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .950

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE|006] [AE|006] [BE|006] [H3 ORBITER] [H3 ORBITER] [H3 ORBITER]
 [AE|006] [BE|006] [H3 ORBITER] [H3 ORBITER] [H3 ORBITER]

ALPHA BETA RV/L MAV/HT
 .000 .000 .500 1.000
 .000 .000 .500 .900
 .000 .000 .500 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

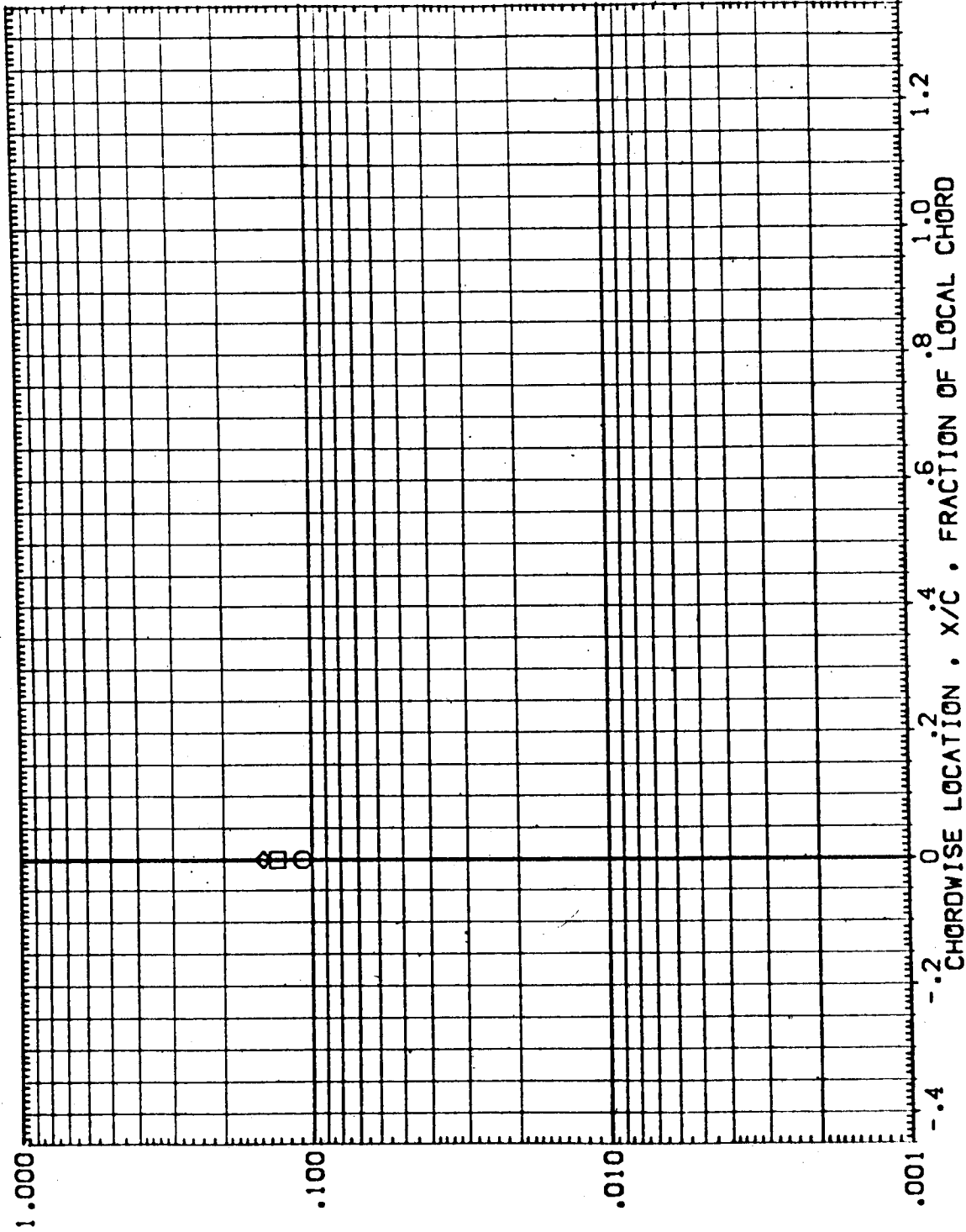


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 • 2Y/B = .966

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|GDS) ARC 3.5-178 143 ORBITER
 (AE|GDS) ARC 3.5-178 143 ORBITER
 (BE|GDS) ARC 3.5-178 143 ORBITER

ALPHA .000
 BETA .000
 RVL 1.500
 HAV/HT 1.000

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

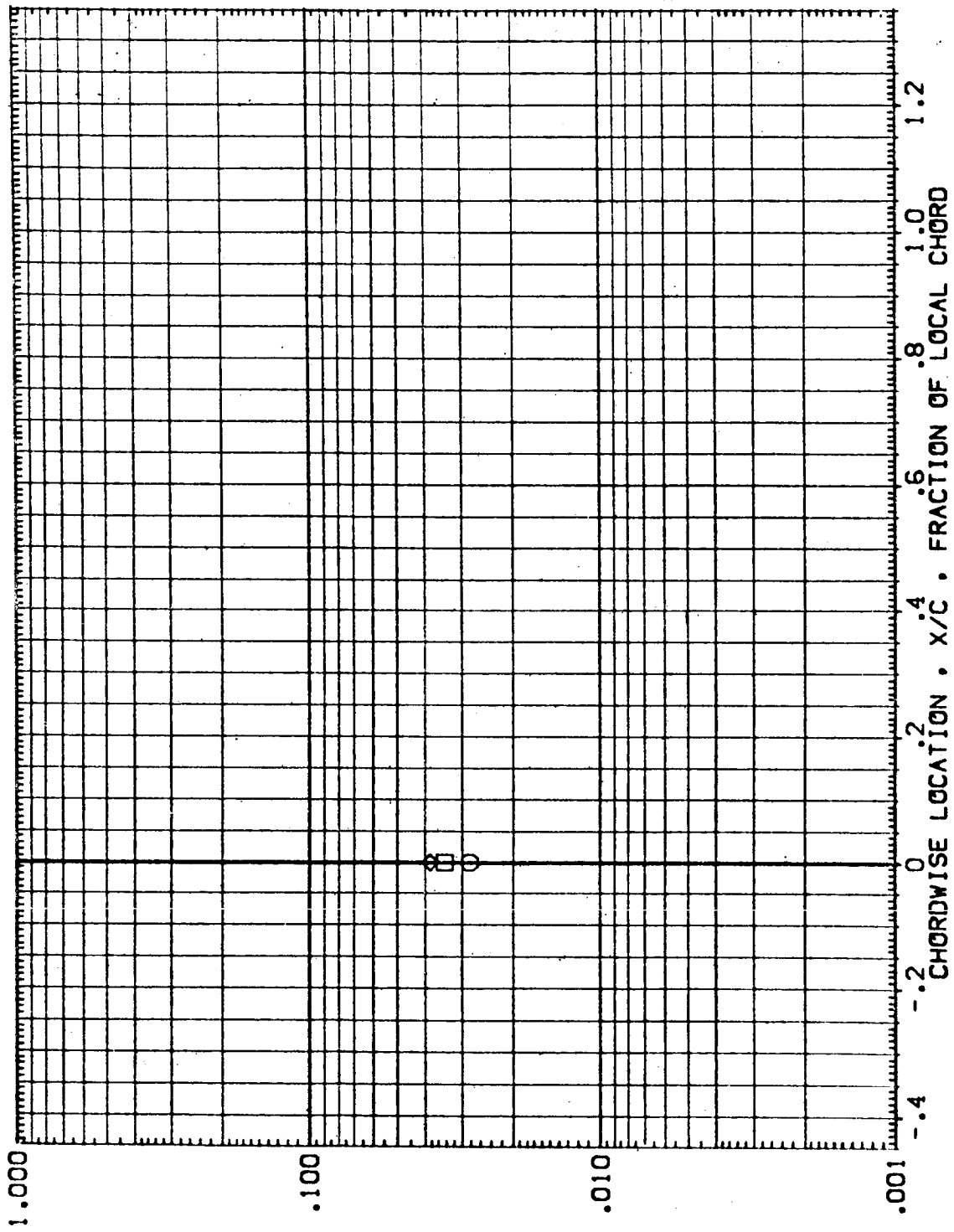


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .993

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL: [RE] [AE] [BE] {006} {006} {006}

CONFIGURATION DESCRIPTION: ARC 3.5-178 [H3] ORBITER, ARC 3.5-178 [H3] ORBITER, ARC 3.5-178 [H3] ORBITER

WING BOTTOM: WING BOTTOM, WING BOTTOM, WING BOTTOM

ALPHA: .000, .000, .000

BETA: .000, .000, .000

RNVL: 1.500, 1.500, 1.500

HAV/HT: 1.000, .900, .650

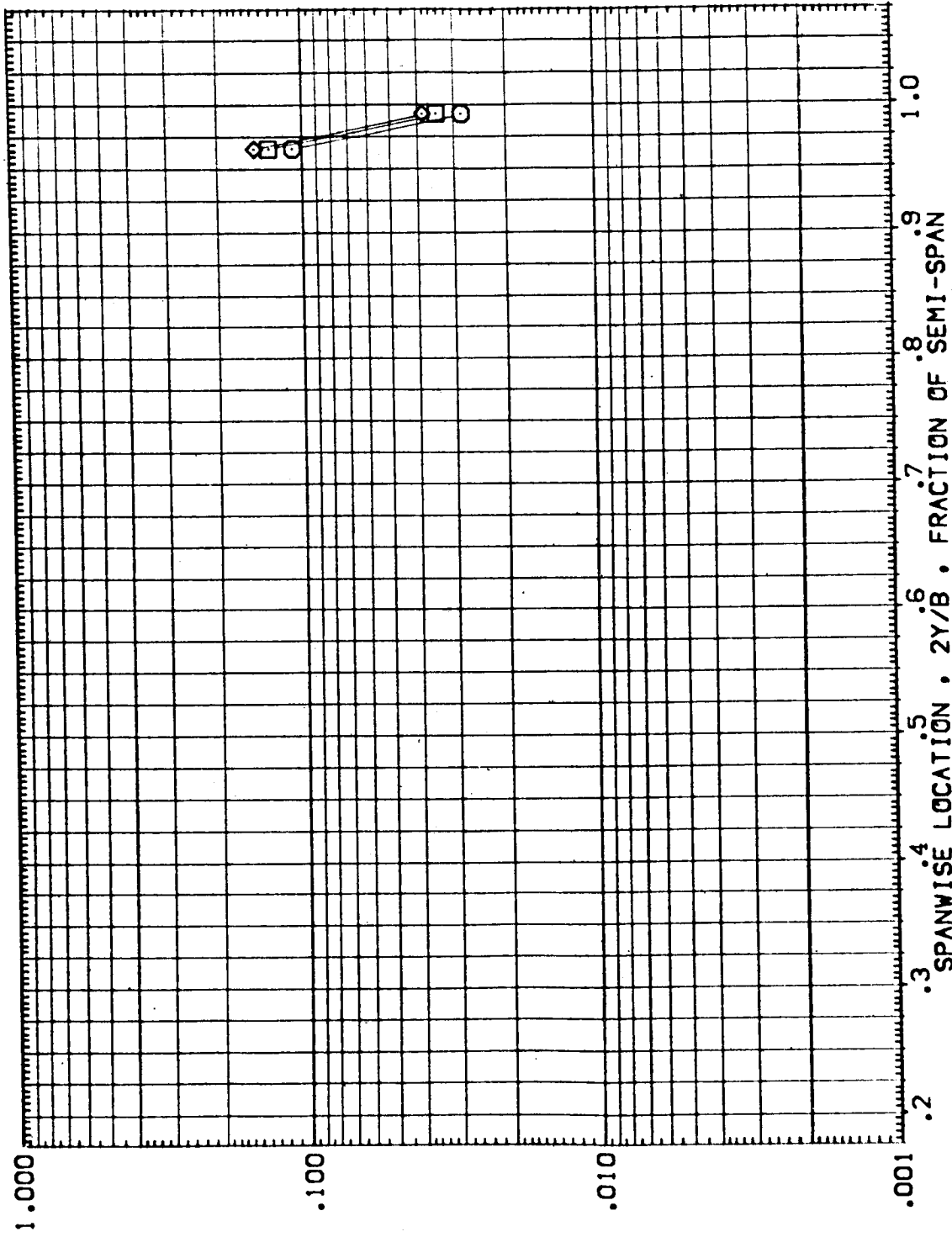


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .000



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE|G06) ARC 3.5-178 IH3 ORBITER .000 .000 1.500 1.000

(AE|G06) ARC 3.5-178 IH3 ORBITER .000 .000 1.500 .900

(BE|G06) ARC 3.5-178 IH3 ORBITER .000 .000 1.500 .850

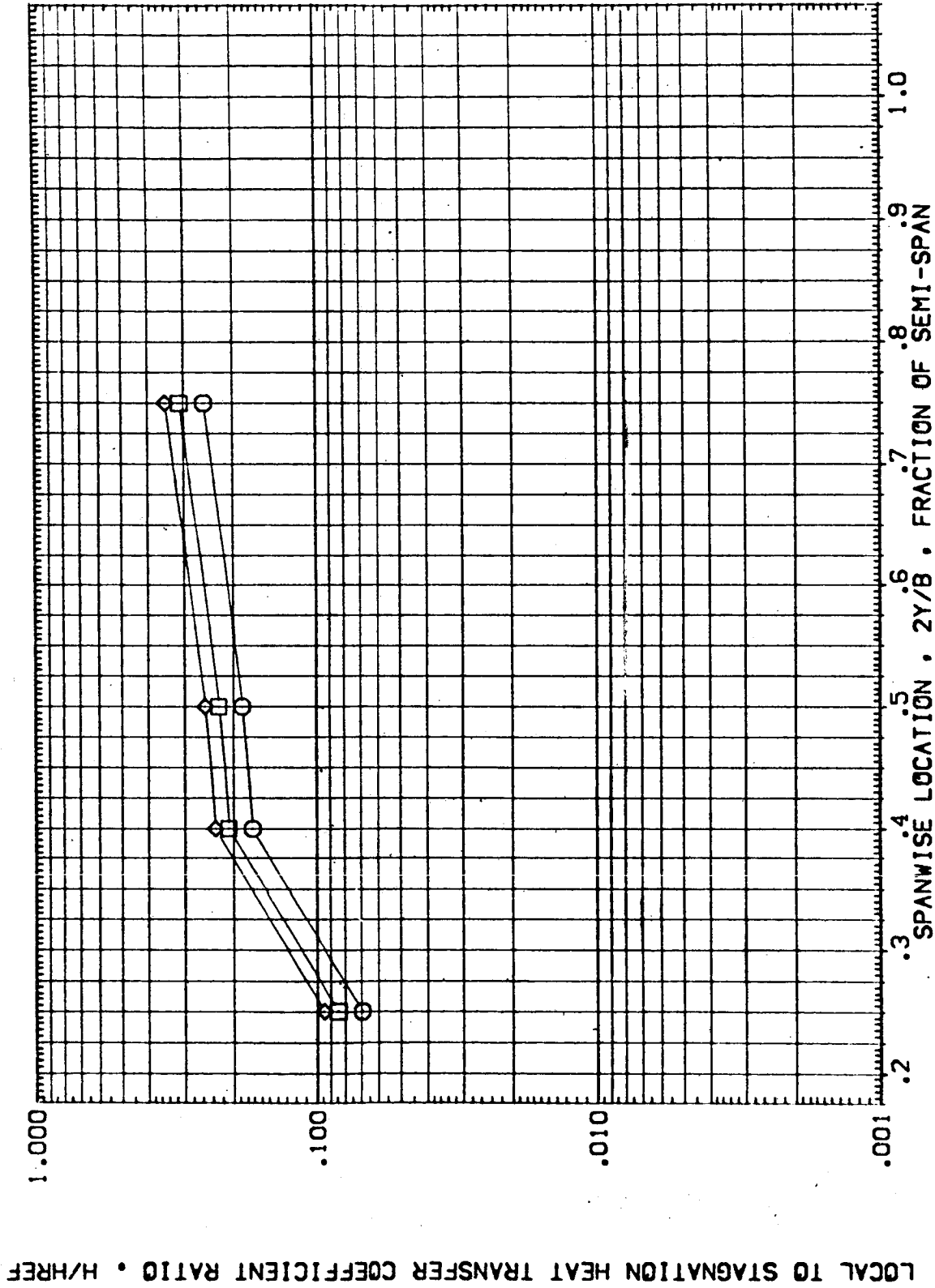


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .025

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT
 [RE|G06] [O] [O] ARC 3.5-178 H3 ORBITER .000 .000 1.500 1.000
 [AE|G06] [O] [O] ARC 3.5-178 H3 ORBITER .000 .000 1.500 .900
 [BE|G06] [O] [O] ARC 3.5-178 H3 ORBITER .000 .000 1.500 .850

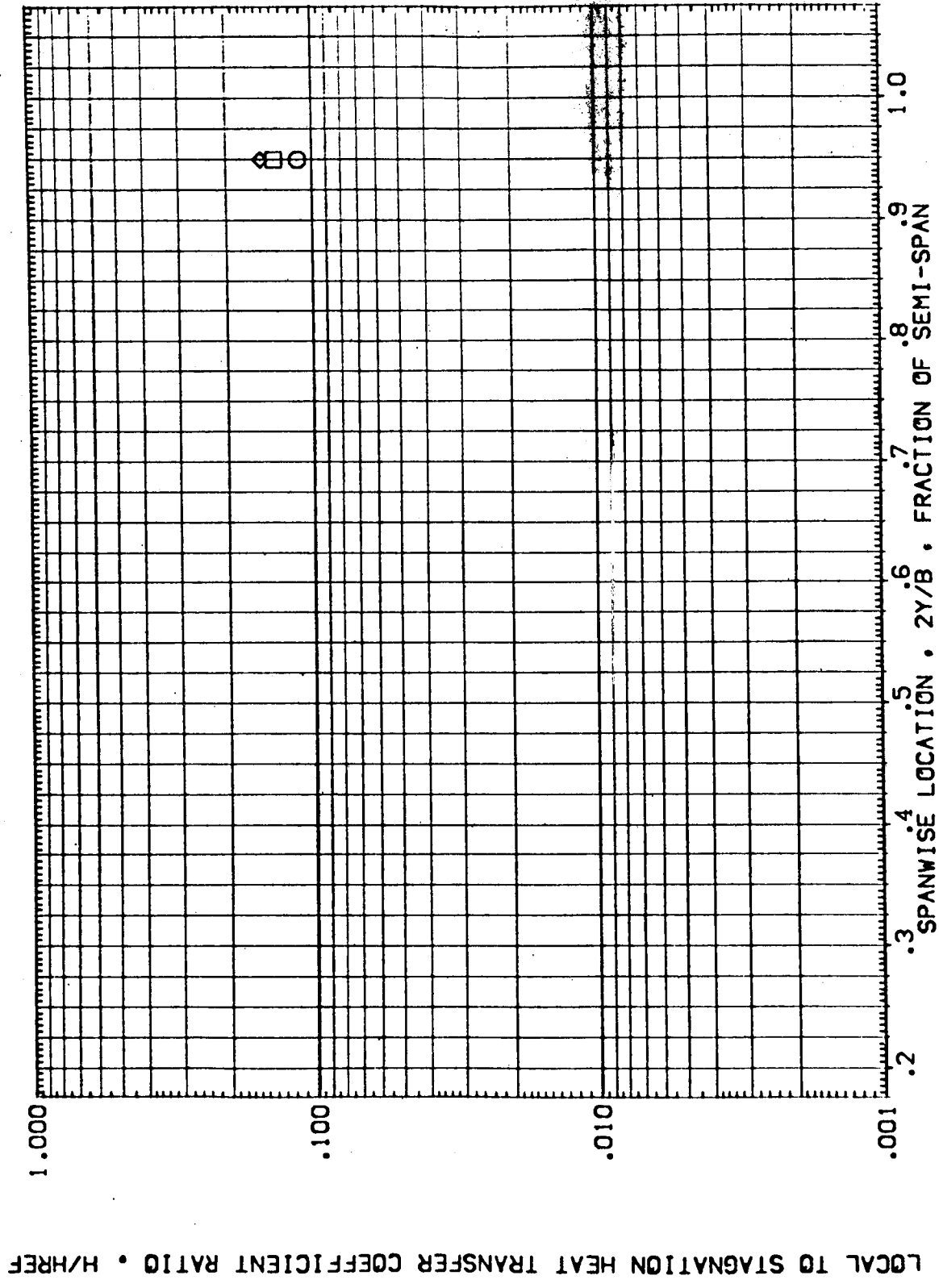


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .050



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE] [GOS] ARC 3.5-178 I-3 ORBITER
 [AE] [GOS] ARC 3.5-178 I-3 ORBITER
 [BE] [GOS] ARC 3.5-178 I-3 ORBITER

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAW/HT 1.000 1.000 .850

VING BOTTOM
 VING BOTTOM
 VING BOTTOM

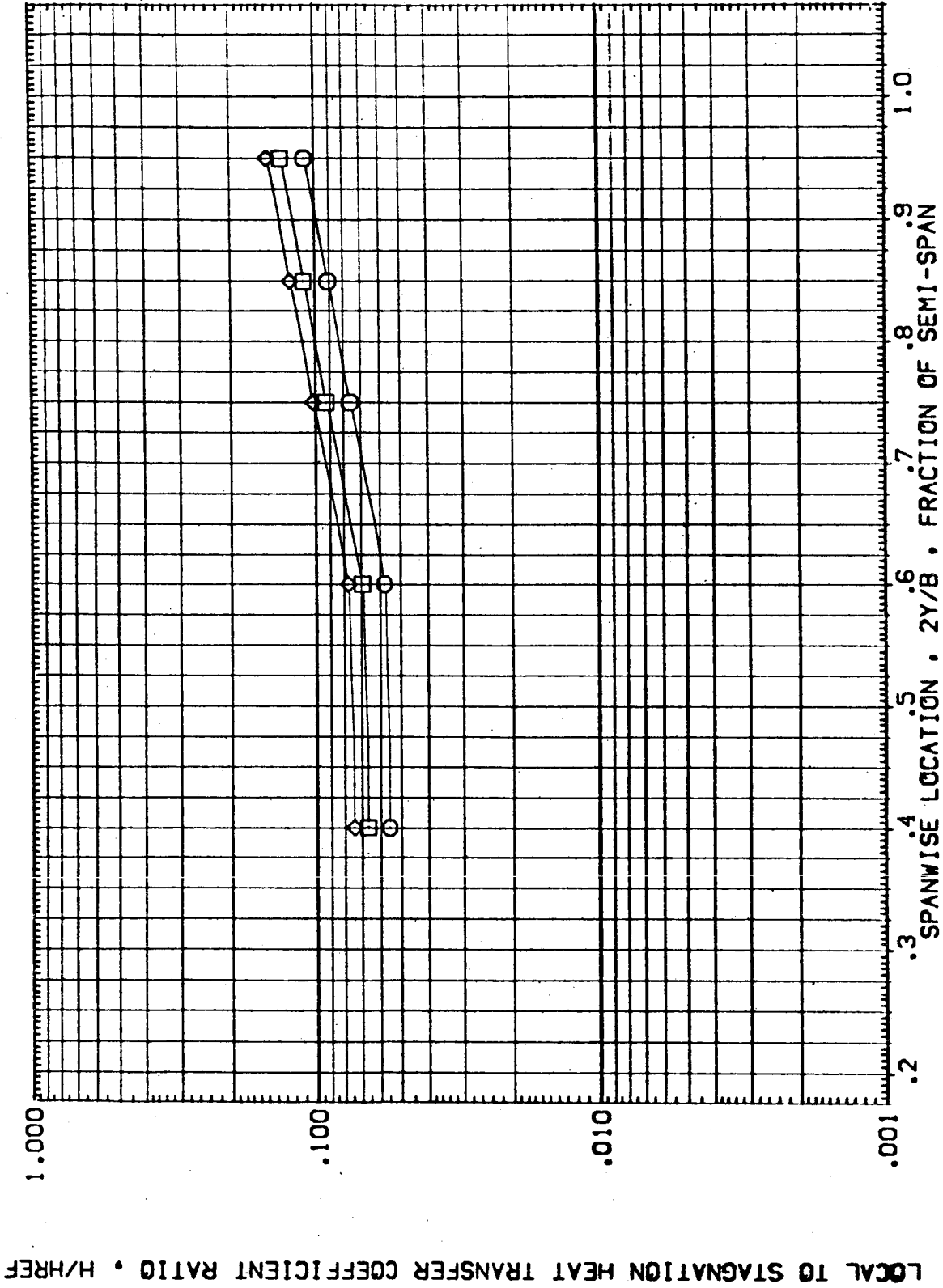


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .100

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 {RE1006} ARC 3.5-178 |H3 ORBITER .000 .000 |.500 1.000
 {AE1006} ARC 3.5-178 |H3 ORBITER .000 .000 |.500 .900
 {BE1006} ARC 3.5-178 |H3 ORBITER .000 .000 |.500 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

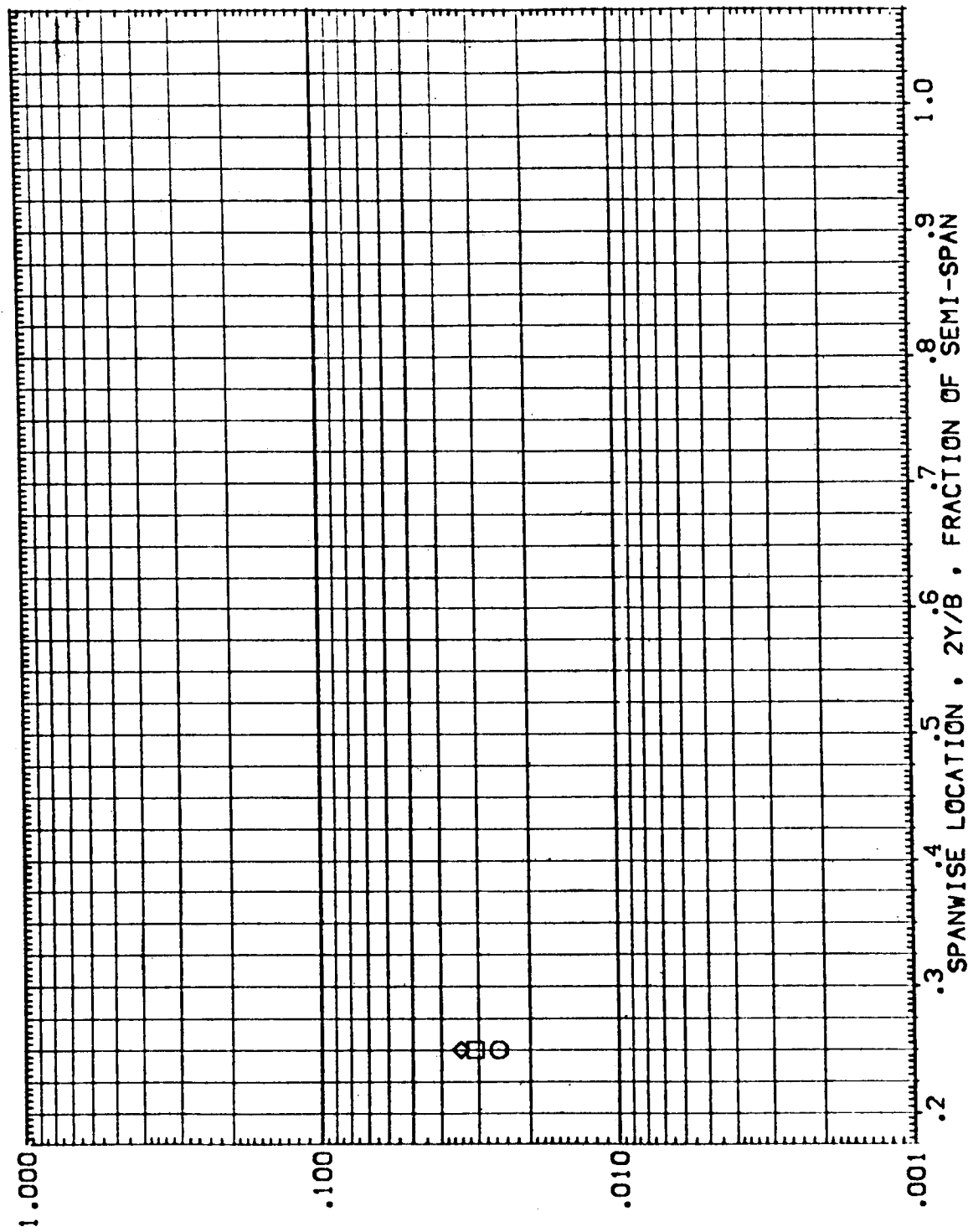


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .153

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING BOTTOM	ALPHA	BETA	RN/L	HAW/HT
{RE1006}	ARC 3.5-178 I-43 ORBITER	WING BOTTOM	.000	.000	1.500	1.000
{AE1006}	ARC 3.5-178 I-43 ORBITER	WING BOTTOM	.000	.000	1.500	.900
{BE1006}	ARC 3.5-178 I-43 ORBITER	WING BOTTOM	.000	.000	1.500	.850

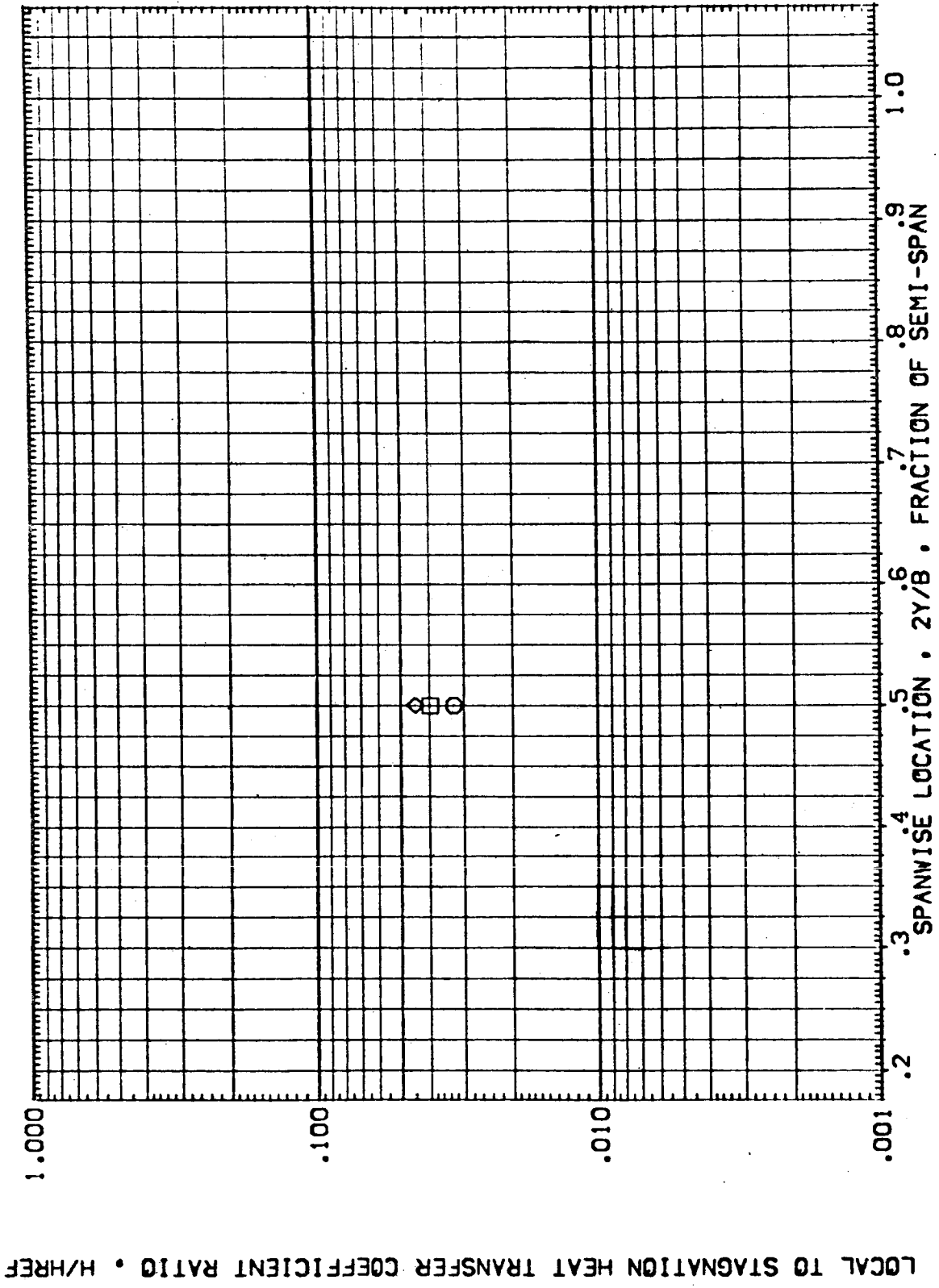


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .177

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT
 {RE1606} ARC 3.5-178 IH3 ORBITER .000 .000 1.500 1.000
 {AE1606} ARC 3.3-178 IH3 ORBITER .000 .000 1.500 .900
 {BE1606} ARC 3.5-178 IH3 ORBITER .000 .000 1.500 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

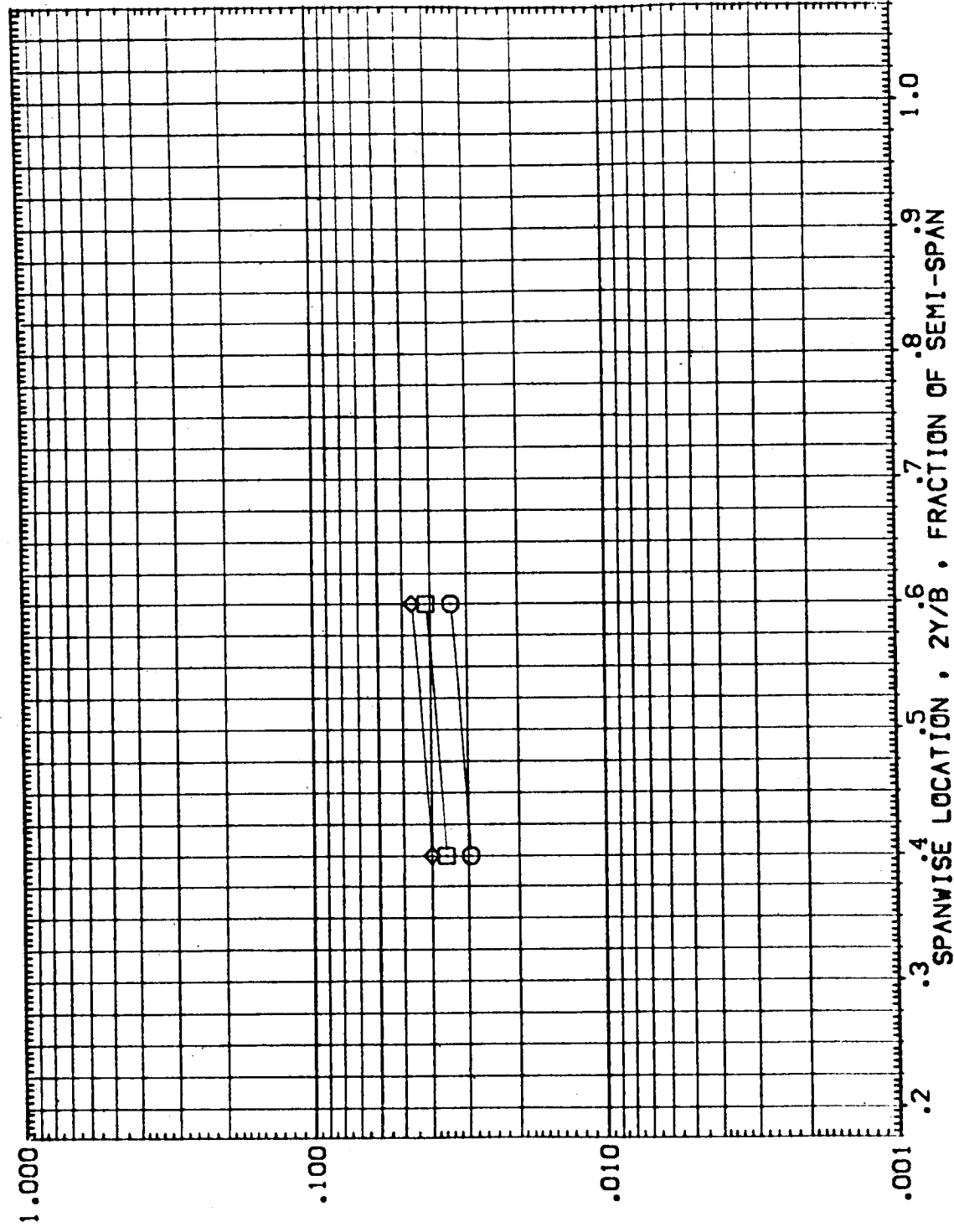


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .200



DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L HAV/HT

{ RE | G06 } ARC 3.5-178 I+3 ORBITER WING BOTTOM .000 .000 1.500 1.000

{ AE | G06 } ARC 3.5-178 I+3 ORBITER WING BOTTOM .000 .000 1.500 .900

{ BE | G06 } ARC 3.5-178 I+3 ORBITER WING BOTTOM .000 .000 1.500 .650

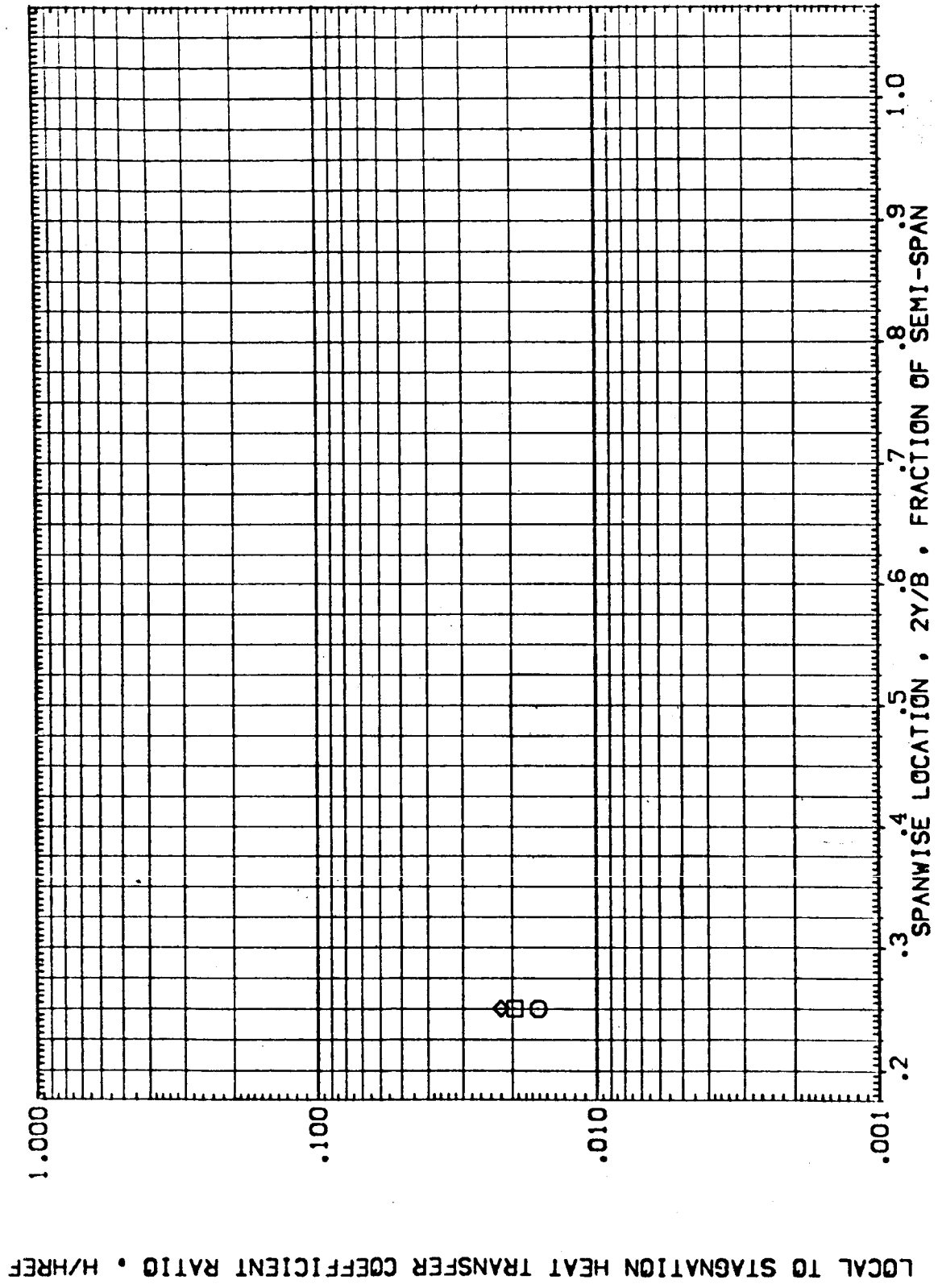


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1606) ARC 3.5-178 I-H3 ORBITER
 (AE1606) ARC 3.5-178 I-H3 ORBITER
 (BE1606) ARC 3.5-178 I-H3 ORBITER

ALPHA .000
 BETA .000
 RV/L 1.500
 HAV/HT 1.000

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

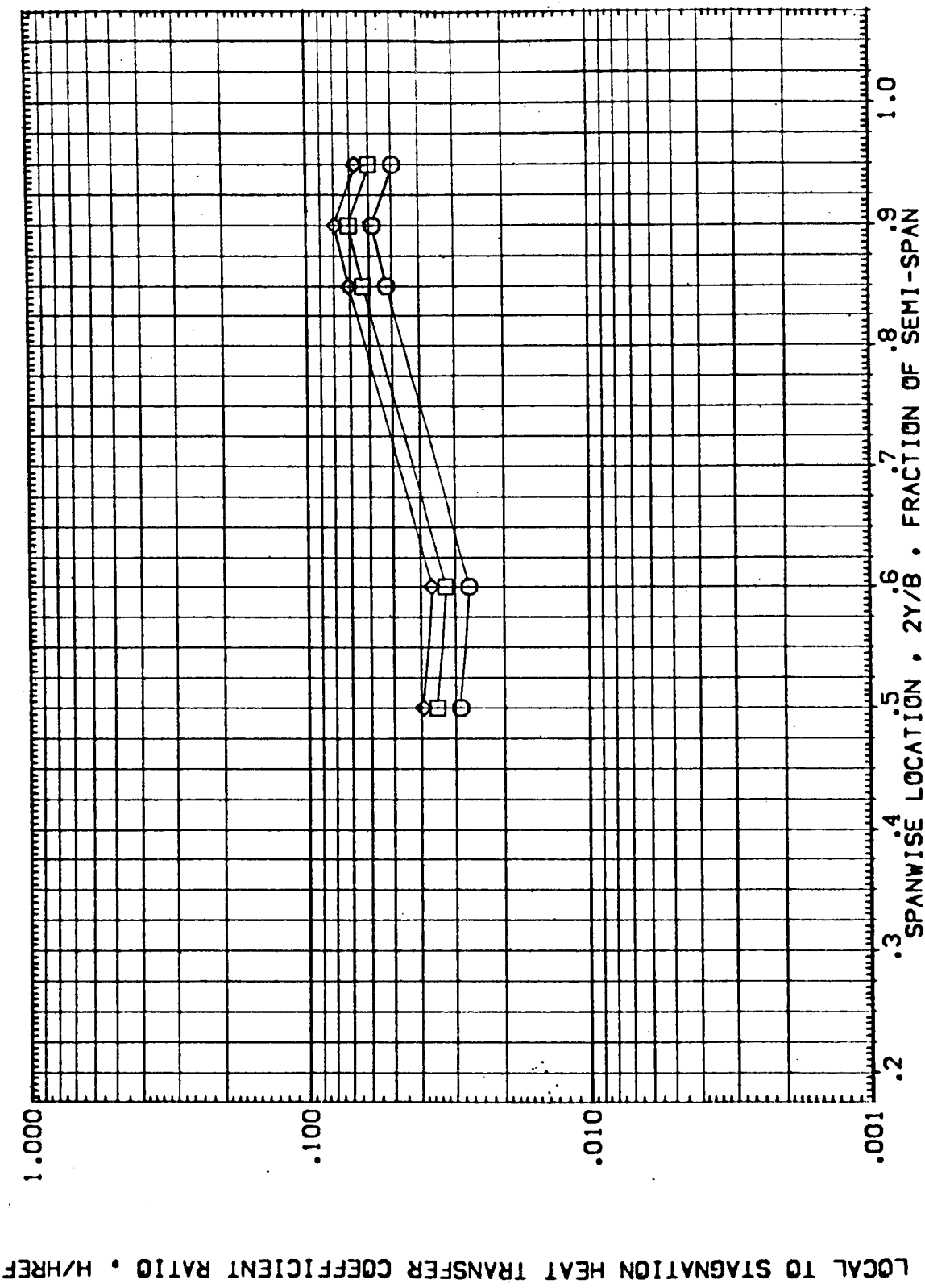


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .300



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

{ RE1006 } ARC 3.5-178 H3 ORBITER .000 .000 1.500 1.000

{ AE1006 } ARC 3.5-178 H3 ORBITER .000 .000 1.500 .500

{ BE1006 } ARC 3.5-178 H3 ORBITER .000 .000 1.500 .850

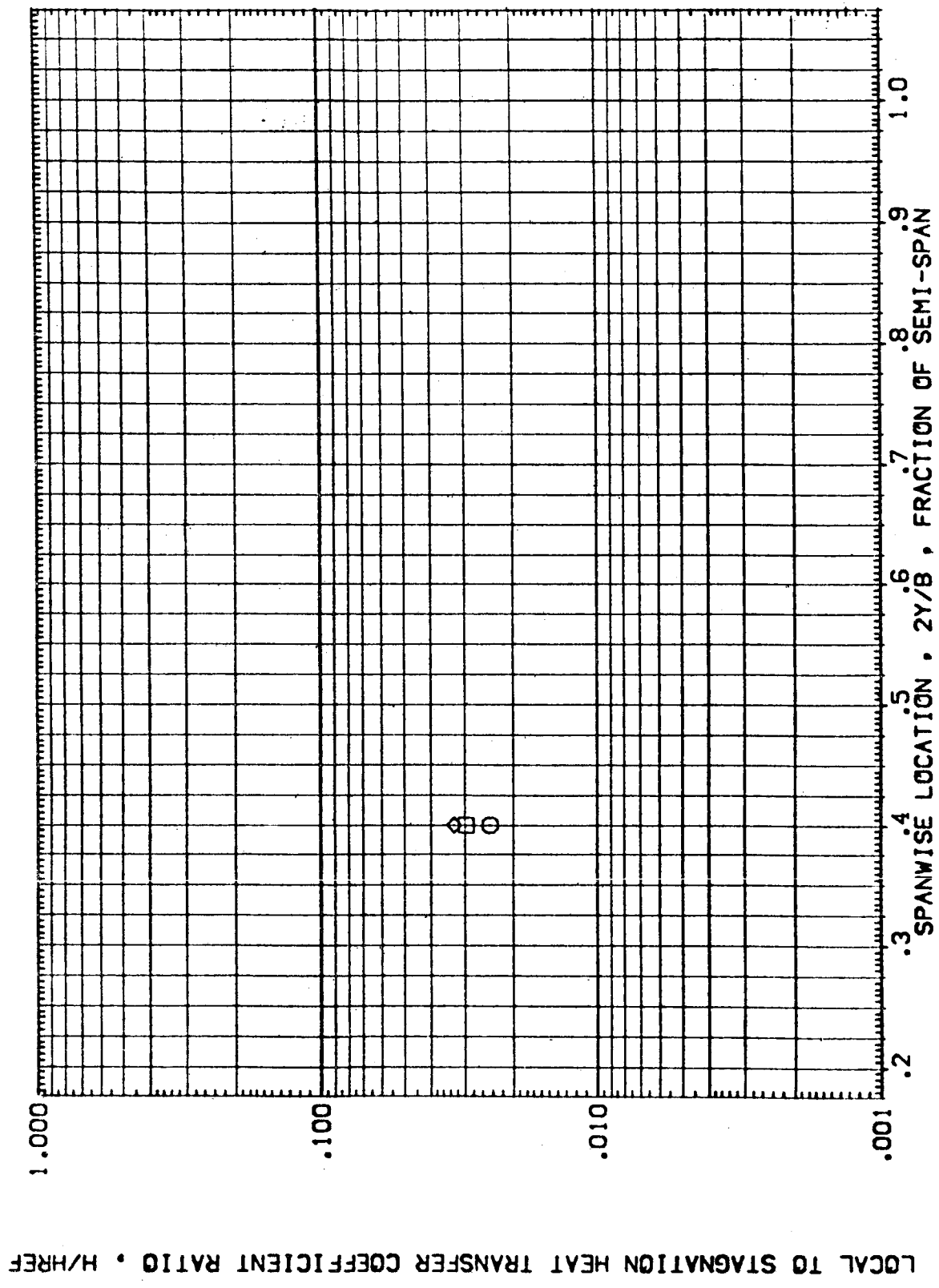


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .302

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING BOTTOM	ALPHA	BETA	RN/L	HAW/HT
{ RE1906 }	ARC 3.5-178 I-43 ORBITER	WING BOTTOM	.000	.000	1.500	1.000
{ AE1906 }	ARC 3.5-178 I-43 ORBITER	WING BOTTOM	.000	.000	1.500	.900
{ BE1906 }	ARC 3.5-178 I-43 ORBITER	WING BOTTOM	.000	.000	1.500	.850

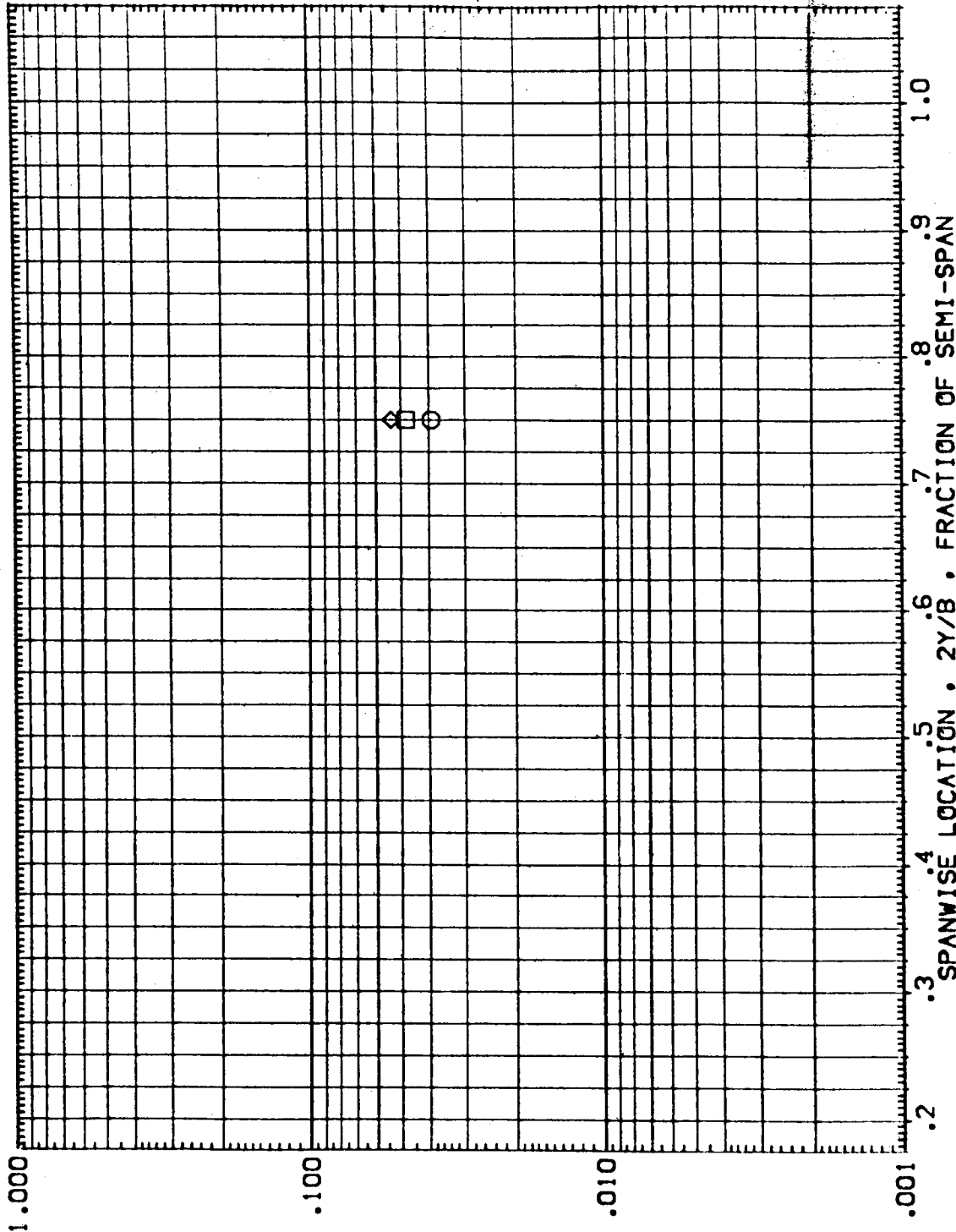


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .303



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE1606] [H3 ORBITER]
 [AE1606] [H3 ORBITER]
 [BE1606] [H3 ORBITER]

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA BETA
 .000 .000
 .000 .000

RN/VL HAV/HT
 1.500 1.000
 1.500 .900
 1.500 .850

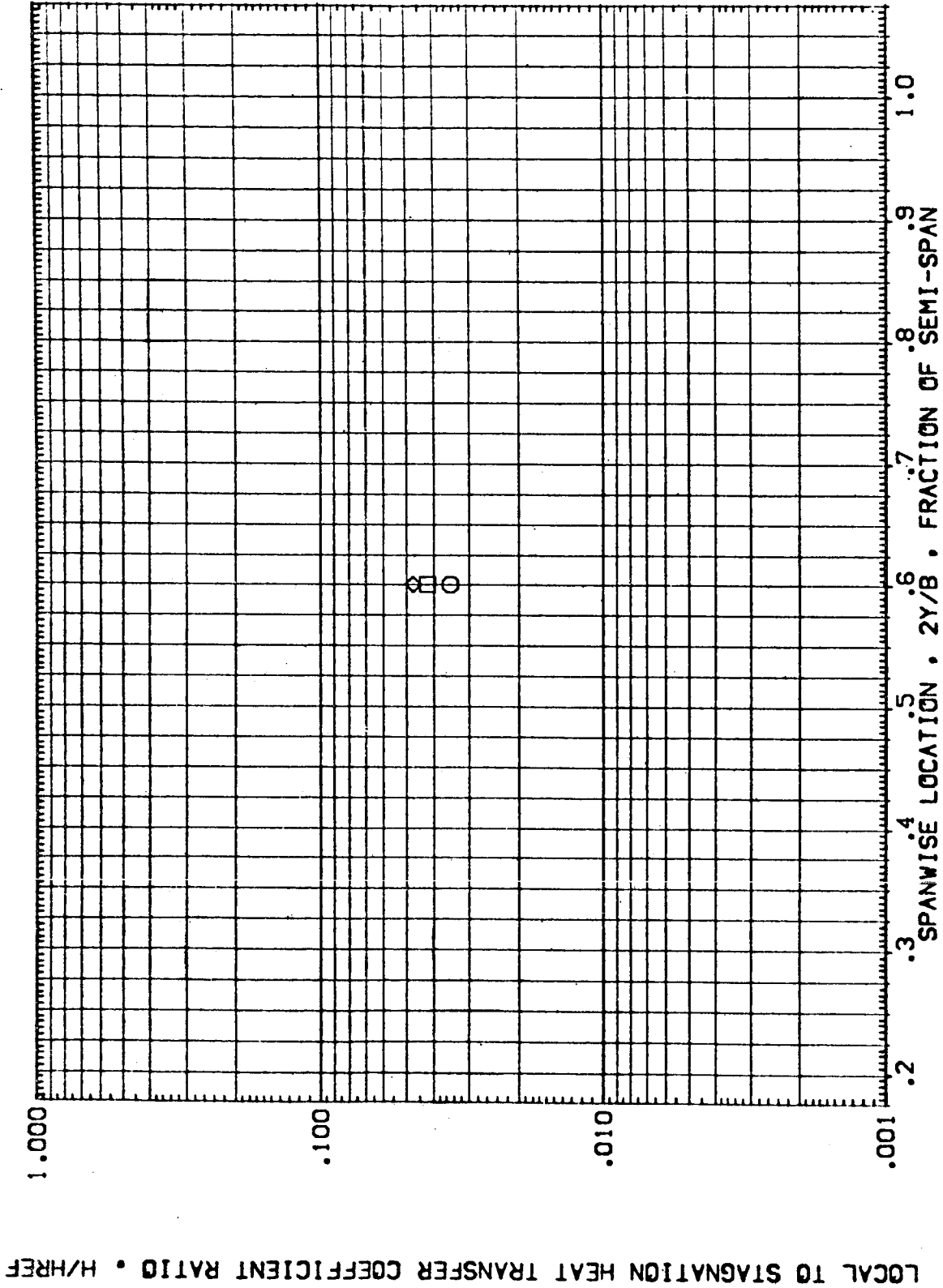
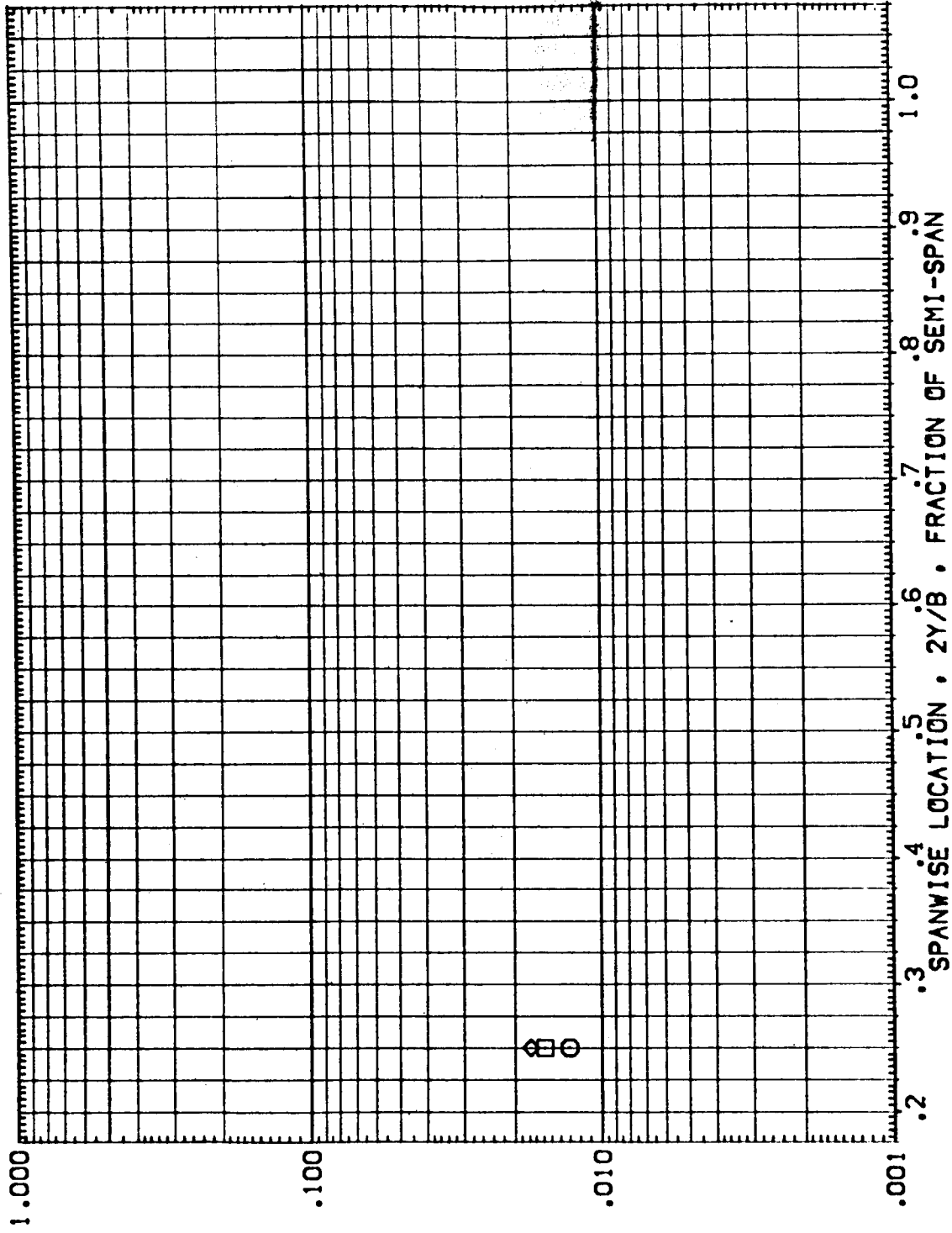


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .428

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



DATA SET SYMBOL: { REIC06 } { AEIC06 } { BEIC06 }
CONFIGURATION DESCRIPTION: ARC 3.5-178 I-H3 ORBITER
WING BOTTOM: WING BOTTOM
WING BOTTOM: WING BOTTOM
WING BOTTOM: WING BOTTOM
ALPHA: .000
BETA: .000
RV/L: 1.500
HAW/HT: 1.000

FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .444



DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L HAV/HT

{RE|006} ARC 3.5-178 IH3 ORBITER WING BOTTOM .000 .000 1.500 1.000

{AE|006} ARC 3.5-178 IH3 ORBITER WING BOTTOM .000 .000 1.500 .900

{BE|006} ARC 3.5-178 IH3 ORBITER WING BOTTOM .000 .000 1.500 .850

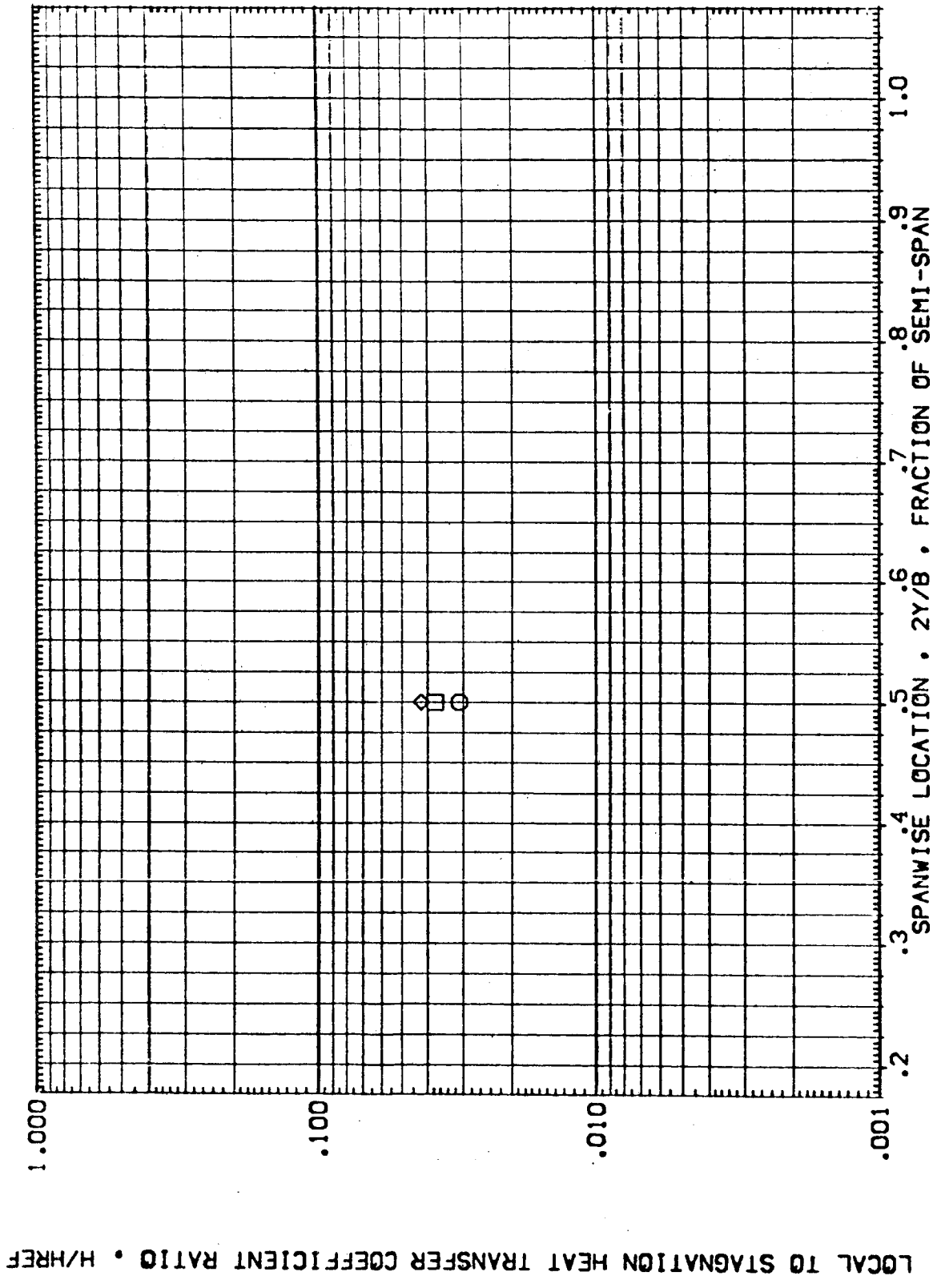


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .487

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE|006} ARC 3.5-178 |H3 ORBITER
 {AE|006} ARC 3.5-178 |H3 ORBITER
 {BE|006} ARC 3.5-178 |H3 ORBITER

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RV/L 1.500
 1.500
 1.500

HAV/HT 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

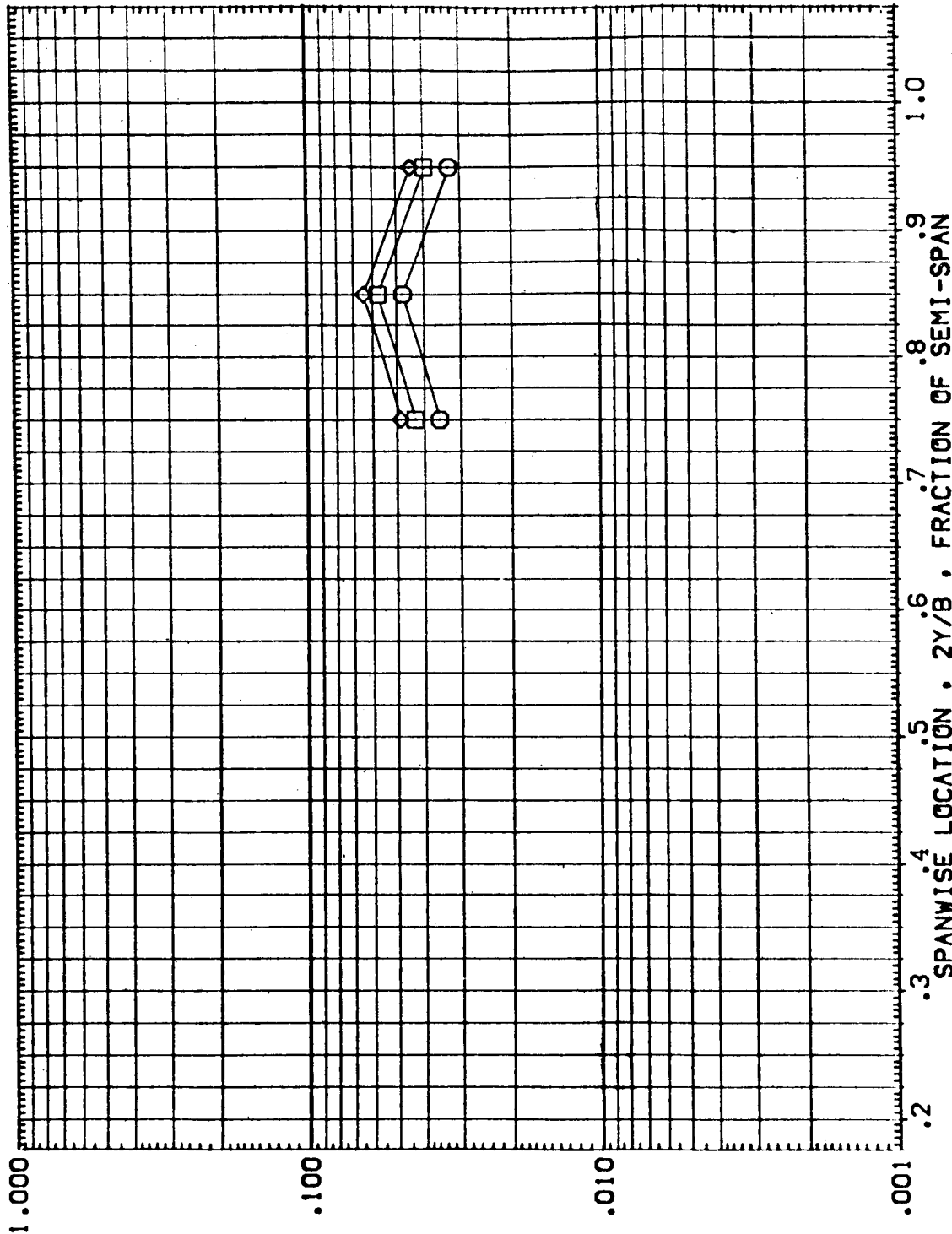


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .500



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIG06) ARC 3.5-178 H3 ORBITER
 (AEIG06) ARC 3.3-178 H3 ORBITER
 (BEIG06) ARC 3.5-178 H3 ORBITER

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

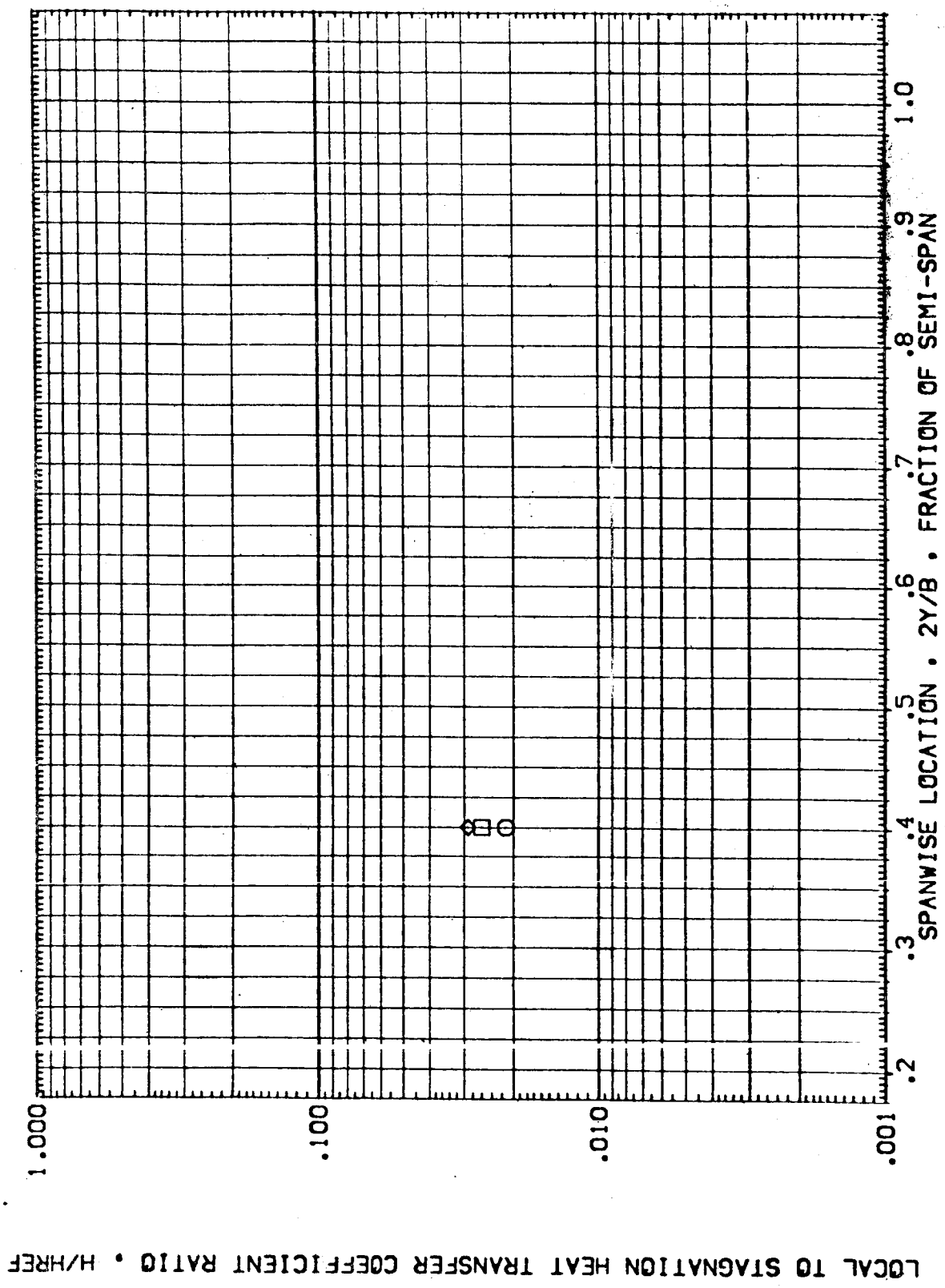


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.301 X/C = .559

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 { REIGOS }  ARC 3.5-178 143 ORBITER
 { AEIGOS }  ARC 3.5-178 143 ORBITER
 { BEIGOS }  ARC 3.5-178 143 ORBITER

ALPHA BETA RV/L MAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .800
 .000 .000 1.500 .650

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

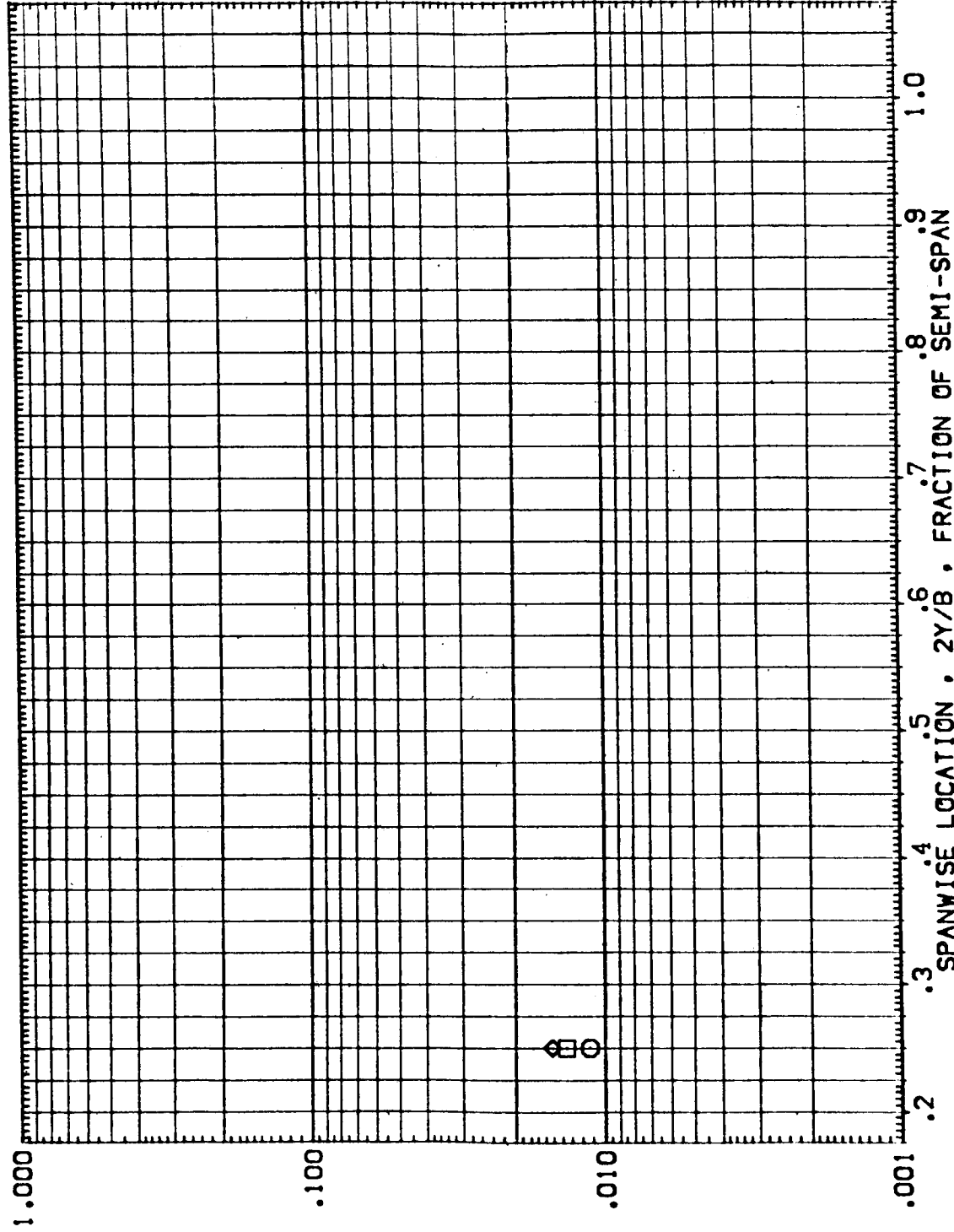


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .590



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|G06) ARC | 5-178 | H3 ORBITER
 (RE|G06) ARC | 5-178 | H3 ORBITER
 (BE|G06) ARC | 5-178 | H3 ORBITER

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 MAV/HT 1.000 1.000 .850

VING BOTTOM
 VING BOTTOM
 VING BOTTOM

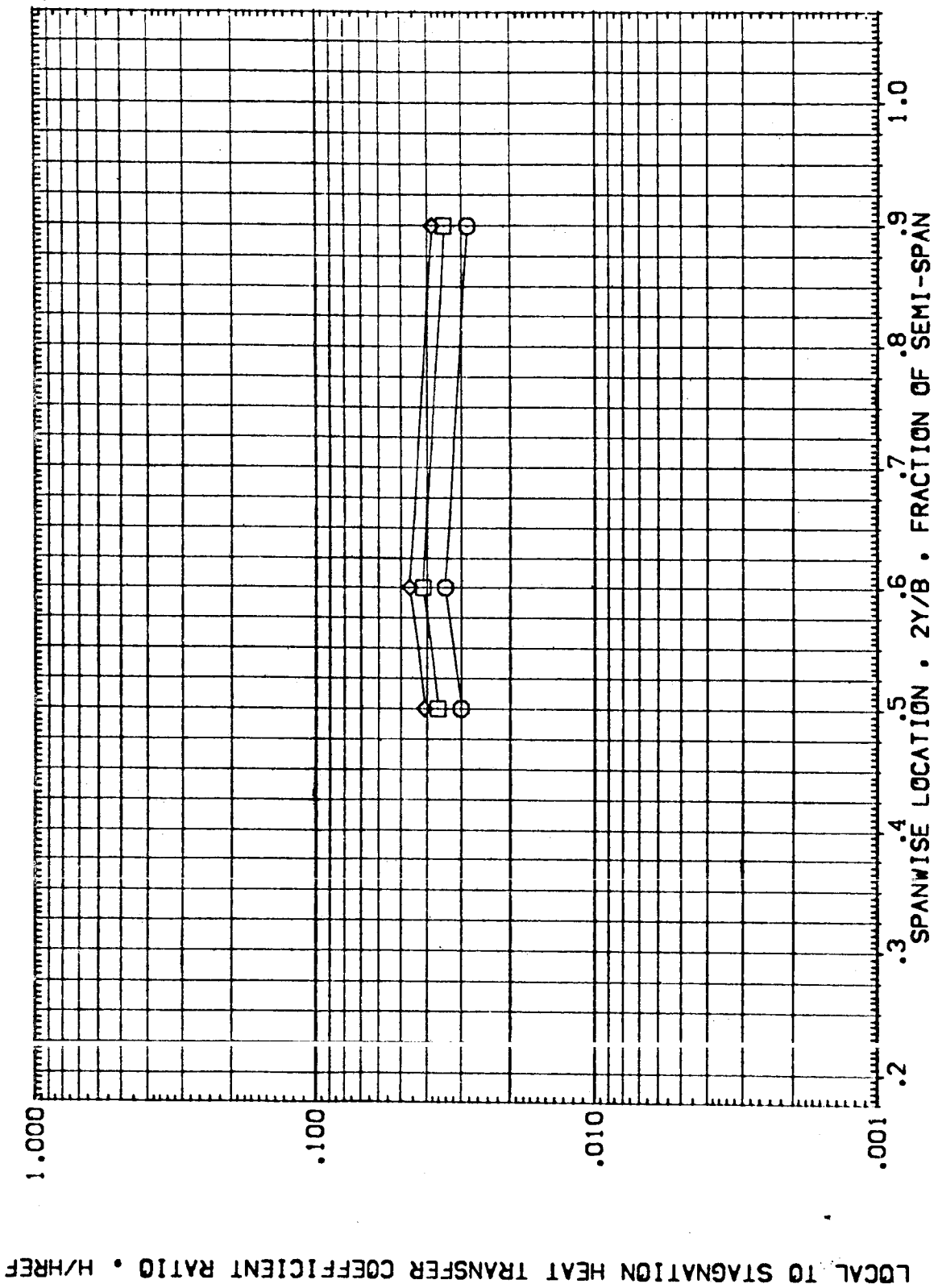


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE) (GOS) ARC 3.5-178 143 ORBITER
 (AL) (GOS) ARC 3.5-178 143 ORBITER
 (BE) (GOS) ARC 3.5-178 143 ORBITER

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RV/L 1.500
 1.500
 1.500

HAV/HT 1.000
 .900
 .650

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

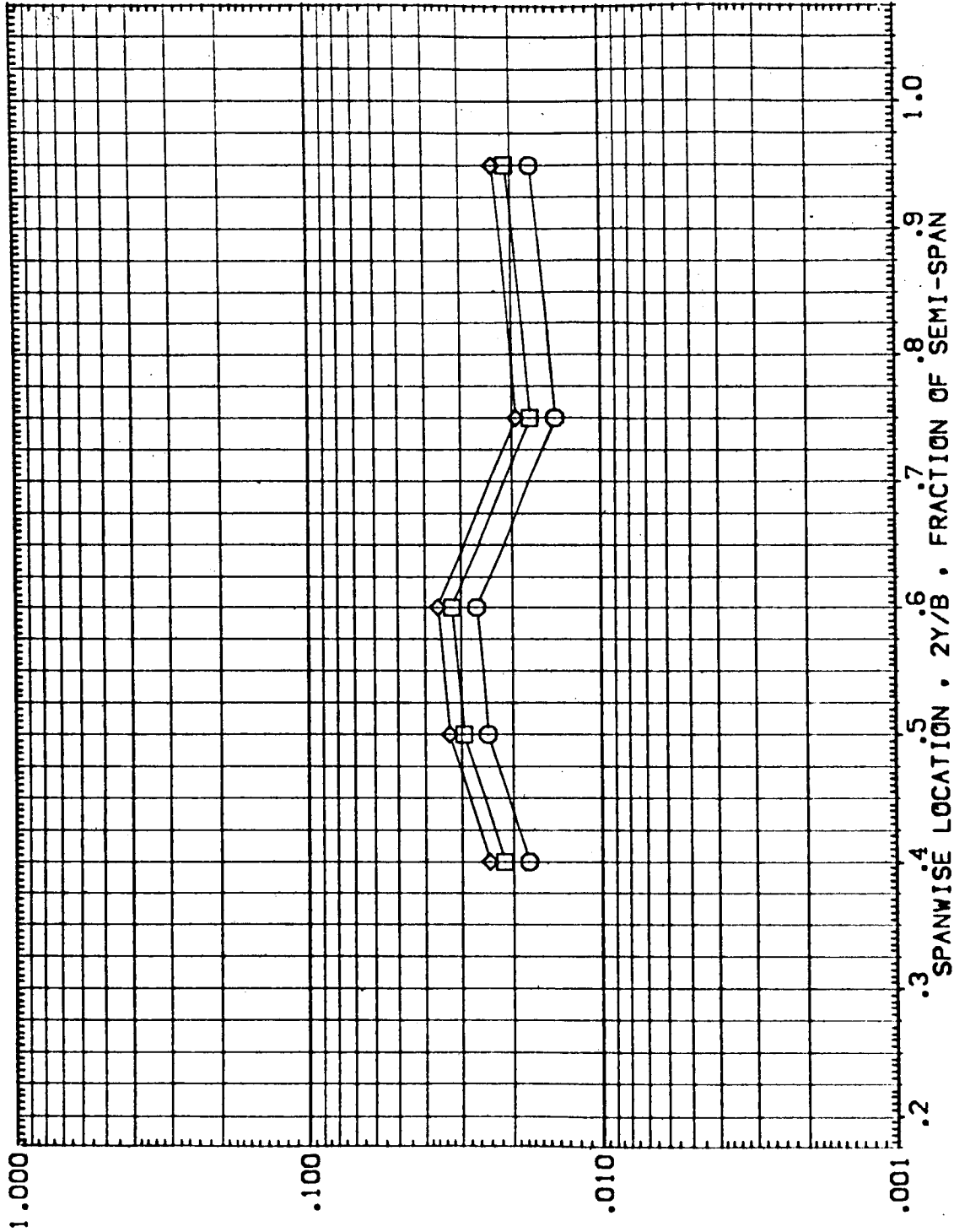


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .700

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L HAV/HT
 [RE]G06 ARC 1.5-178 I-3 ORBITER WING BOTTOM .000 .000 1.500 1.000
 [AE]G06 ARC 1.5-178 I-3 ORBITER WING BOTTOM .000 .000 1.500 .900
 [BE]G06 ARC 1.5-178 I-3 ORBITER WING BOTTOM .000 .000 1.500 .850

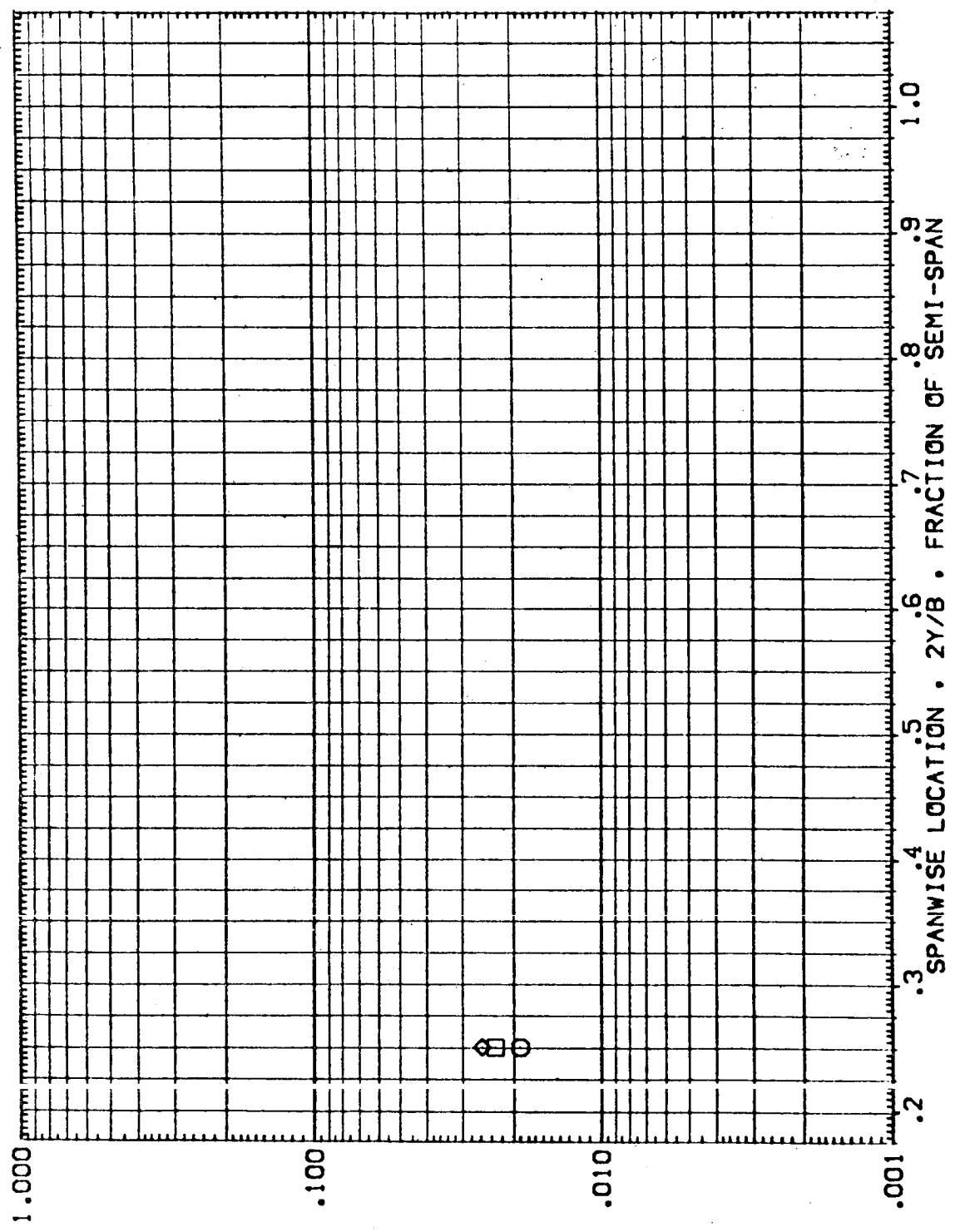


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.303 X/C = .736

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (REIG06) ARC 3.5-178 I+3 ORBITER .000 .000 1.500 1.000
 (AEIG06) ARC 3.5-178 I+3 ORBITER .000 .000 1.500 .900
 (BEIG06) ARC 3.5-178 I+3 ORBITER .000 .000 1.500 .850

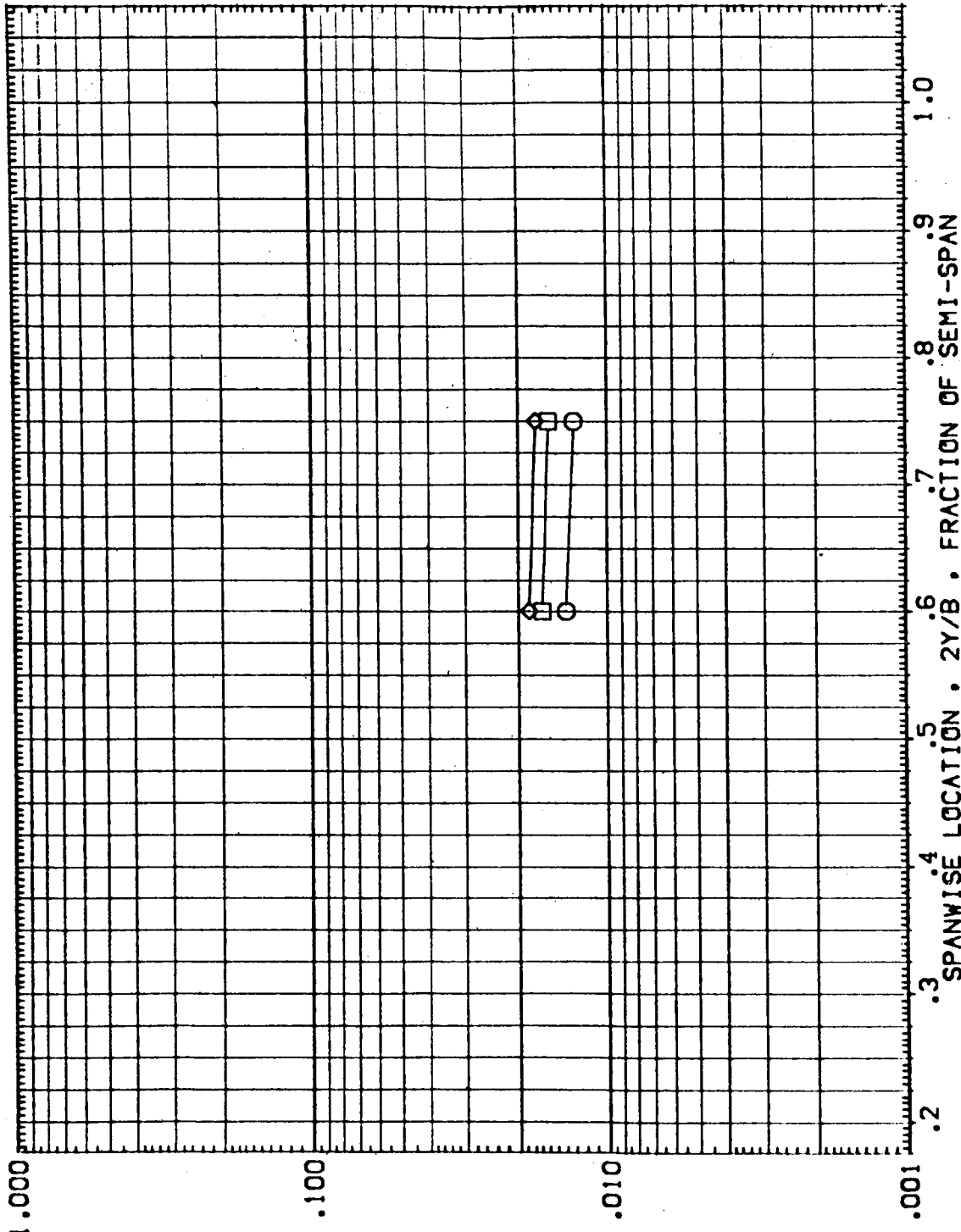


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .800



DATA SET SYMBO
 (REIGOS) [O] [X]
 (AEIGOS) [O] [X]
 (BEIGOS) [O] [X]

CONFIGURATION DESCRIPTION
 ARC 1.5-178 [H3 ORBITER]
 ARC 1.5-178 [H3 ORBITER]
 ARC 1.5-178 [H3 ORBITER]

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA BETA RVL HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

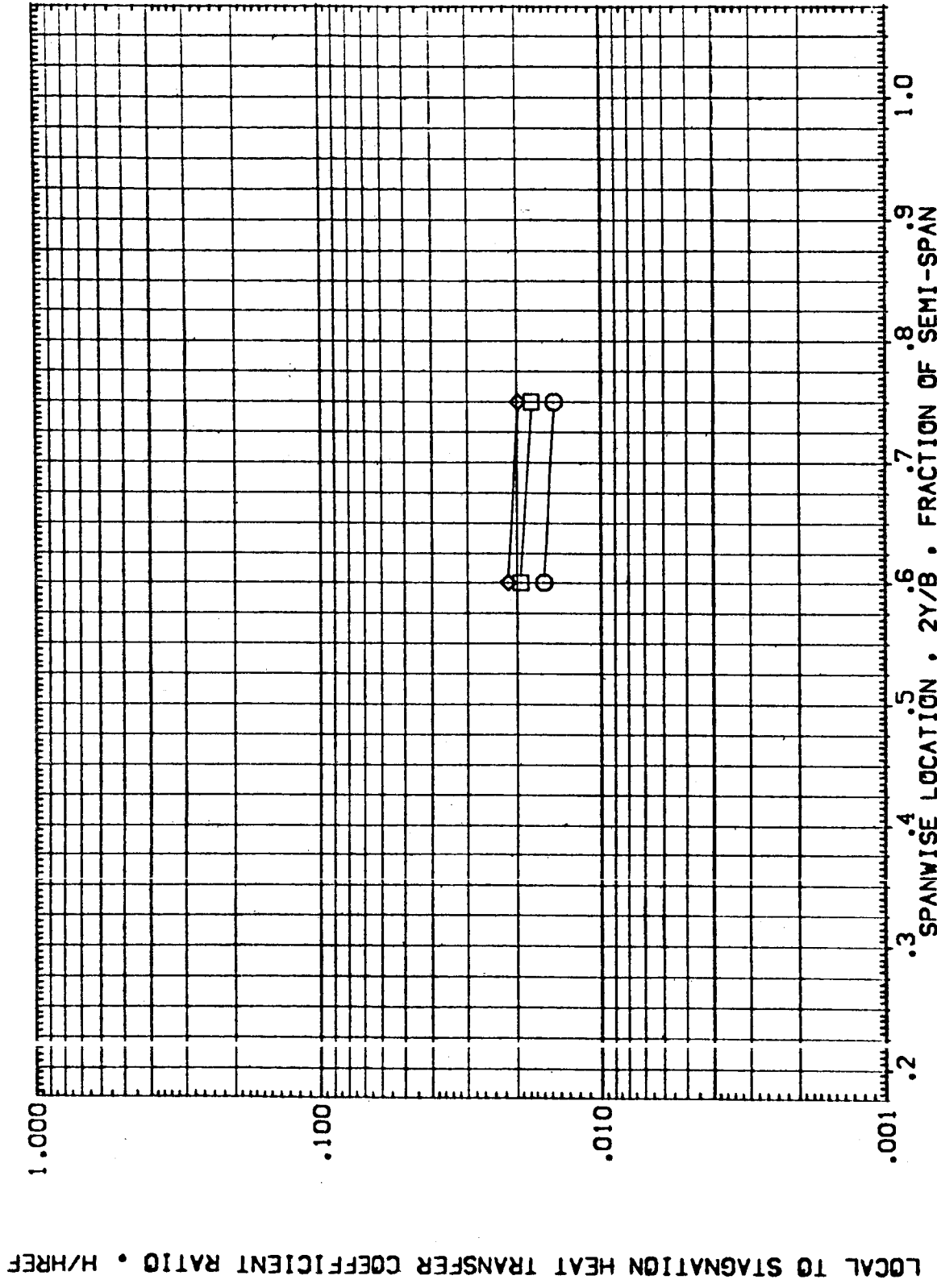


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE1G06} ARC 3.5-178 143 ORBITER .000 .000 1.500 1.000

{AE1G06} ARC 3.5-178 143 ORBITER .000 .000 1.500 .900

{BE1G06} ARC 3.5-178 143 ORBITER .000 .000 1.500 .850

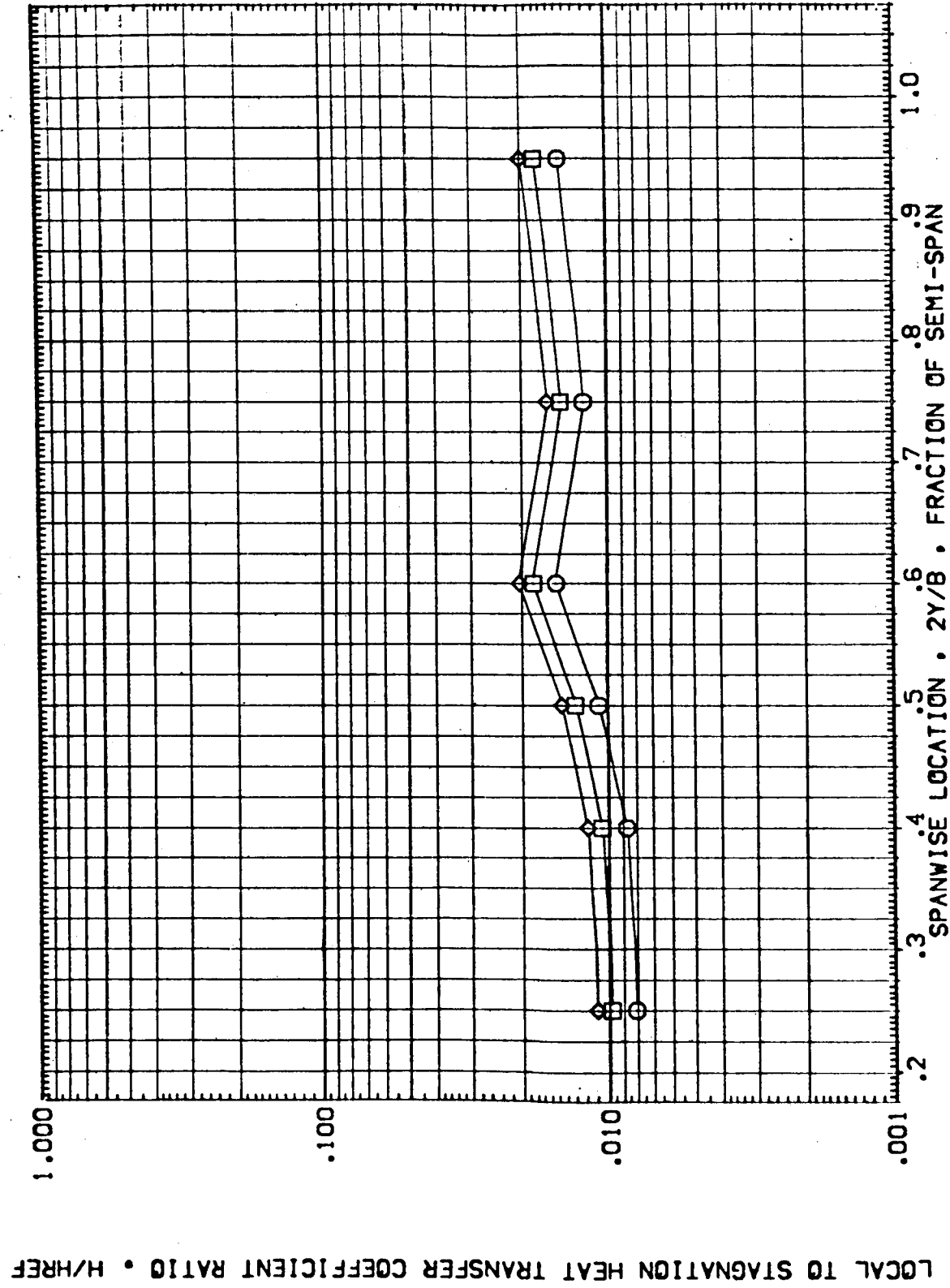


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .900



DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 {RE1607} ARC 3.5-178 IH3 ORBITER
 {AE1607} ARC 3.5-178 IH3 ORBITER
 {BE1607} ARC 3.5-178 IH3 ORBITER

ALPHA BETA RN/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

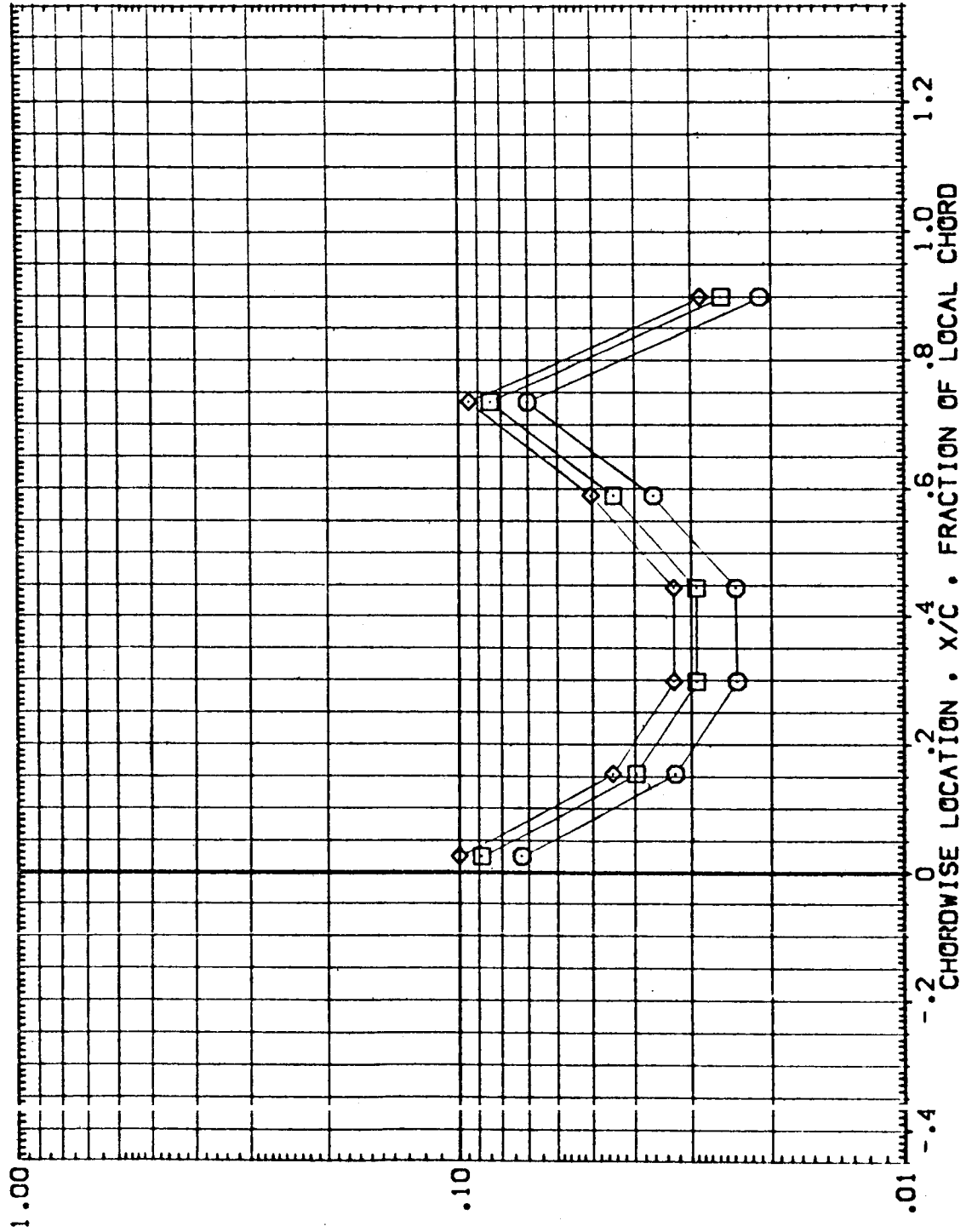


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .250

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

{RE|G07} ○ ARC 3.5-178 143 ORBITER .000 .000 5.000 1.000

{AE|G07} □ ARC 3.5-178 143 ORBITER .000 .000 5.000 .900

{BE|G07} ◇ ARC 3.5-178 143 ORBITER .000 .000 5.000 .850

WING BOTTOM VING BOTTOM VING BOTTOM

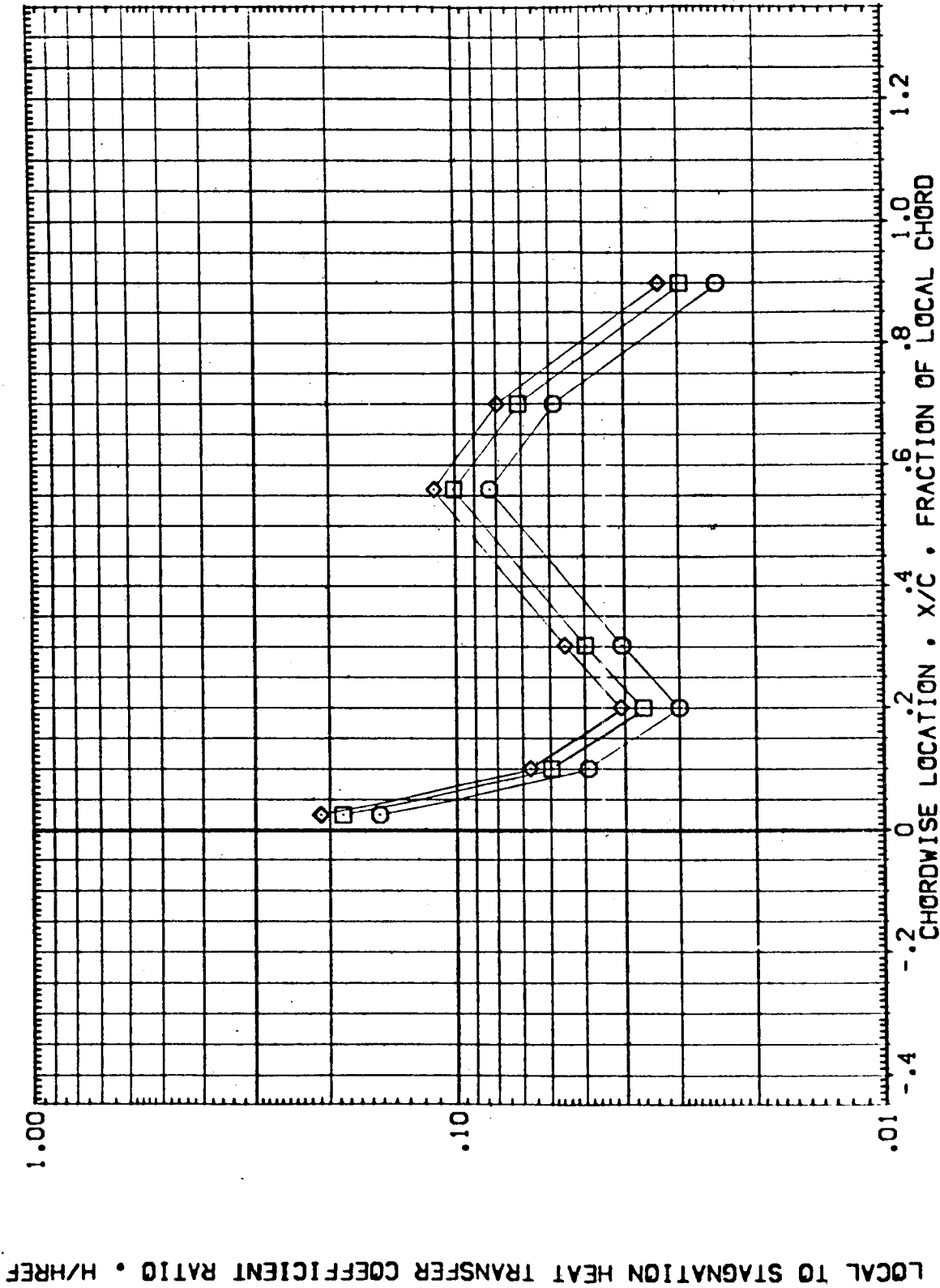


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

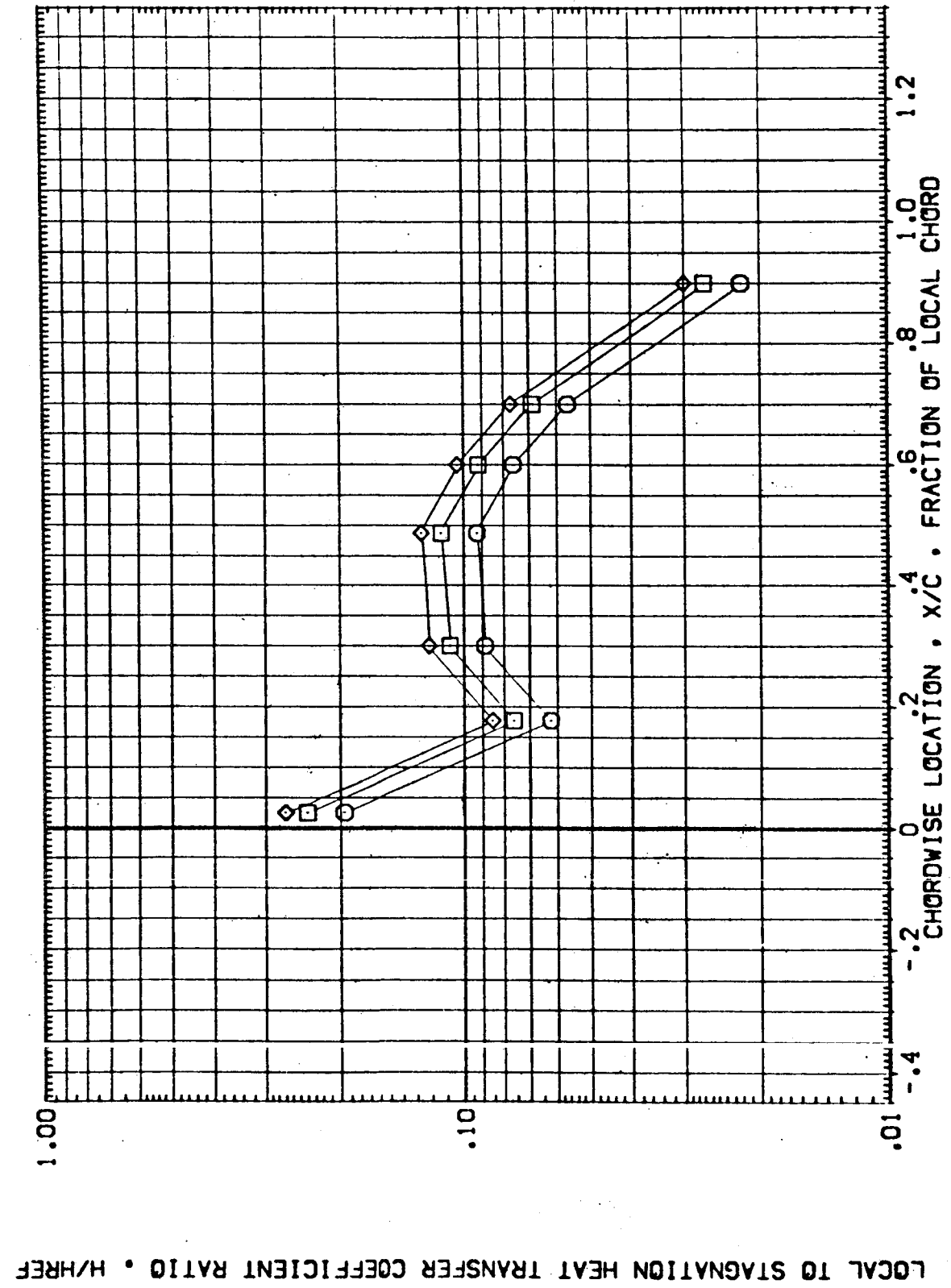
MACH = 5.300 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION VING BOTTOM ALPHA BETA RV/L MAV/HT

[RE|G07] ARC | 5-178 | H3 ORBITER VING BOTTOM .000 .000 5.000 1.000

[AE|G07] ARC | 5-178 | H3 ORBITER VING BOTTOM .000 .000 5.000 .900

[BE|G07] ARC | 5-178 | H3 ORBITER VING BOTTOM .000 .000 5.000 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.30 2Y/B = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM WING BOTTOM ALPHA BETA RV/L HAV/HIT
 {RE1007} ARC 3.5-178 IH3 ORBITER VING BOTTOM VING BOTTOM .000 .000 5.000 1.000
 {AE1007} ARC 3.5-178 IH3 ORBITER VING BOTTOM VING BOTTOM .000 .000 5.000 .900
 {BE1007} ARC 3.5-178 IH3 ORBITER VING BOTTOM VING BOTTOM .000 .000 5.000 .850

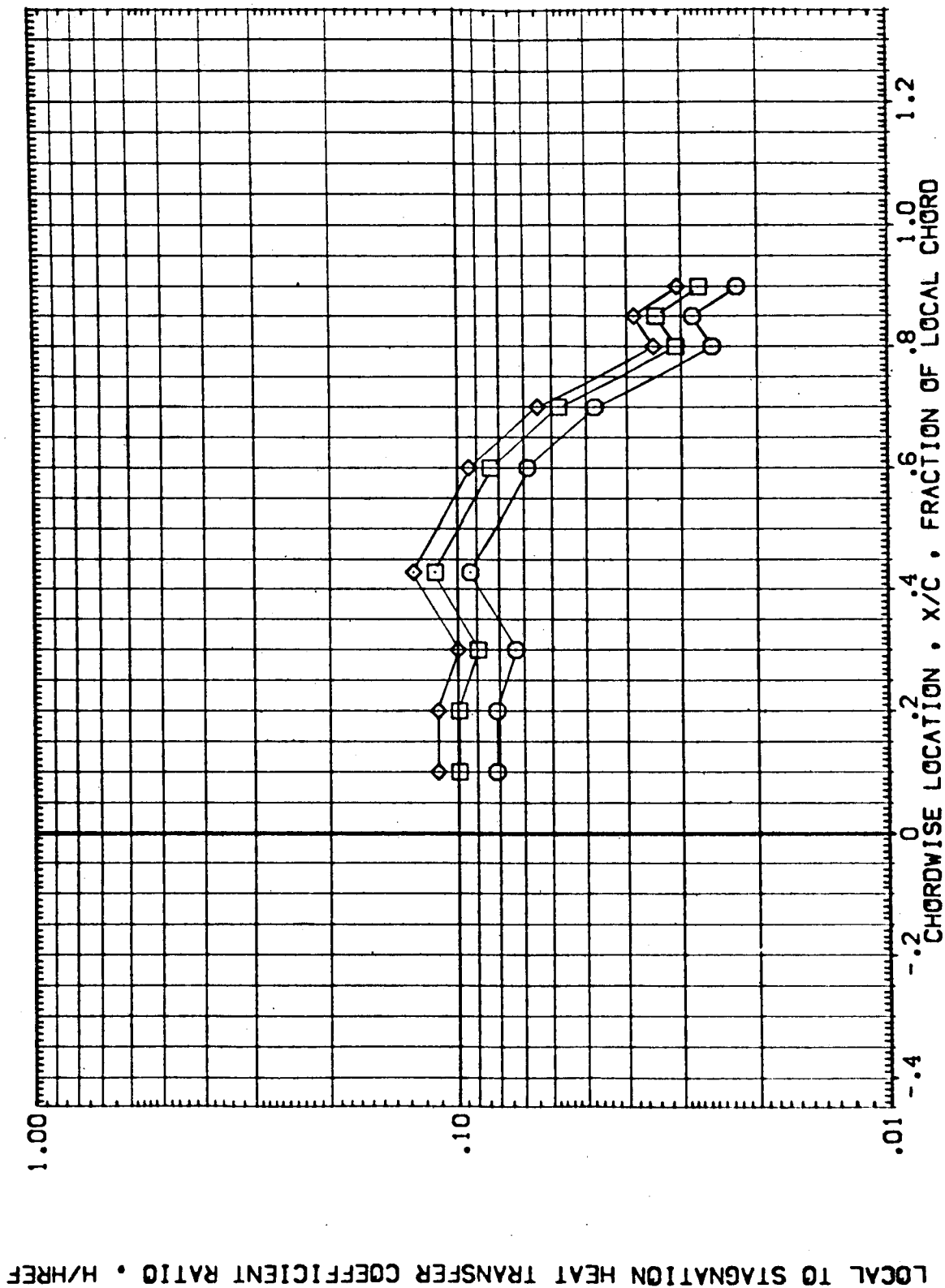


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .600



DATA SET SYMBOL CD CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

{RE1607} ARC 3.5-178 IH3 ORBITER .000 .000 5.000 1.000

{AE1607} ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .900

{BE1607} ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .850

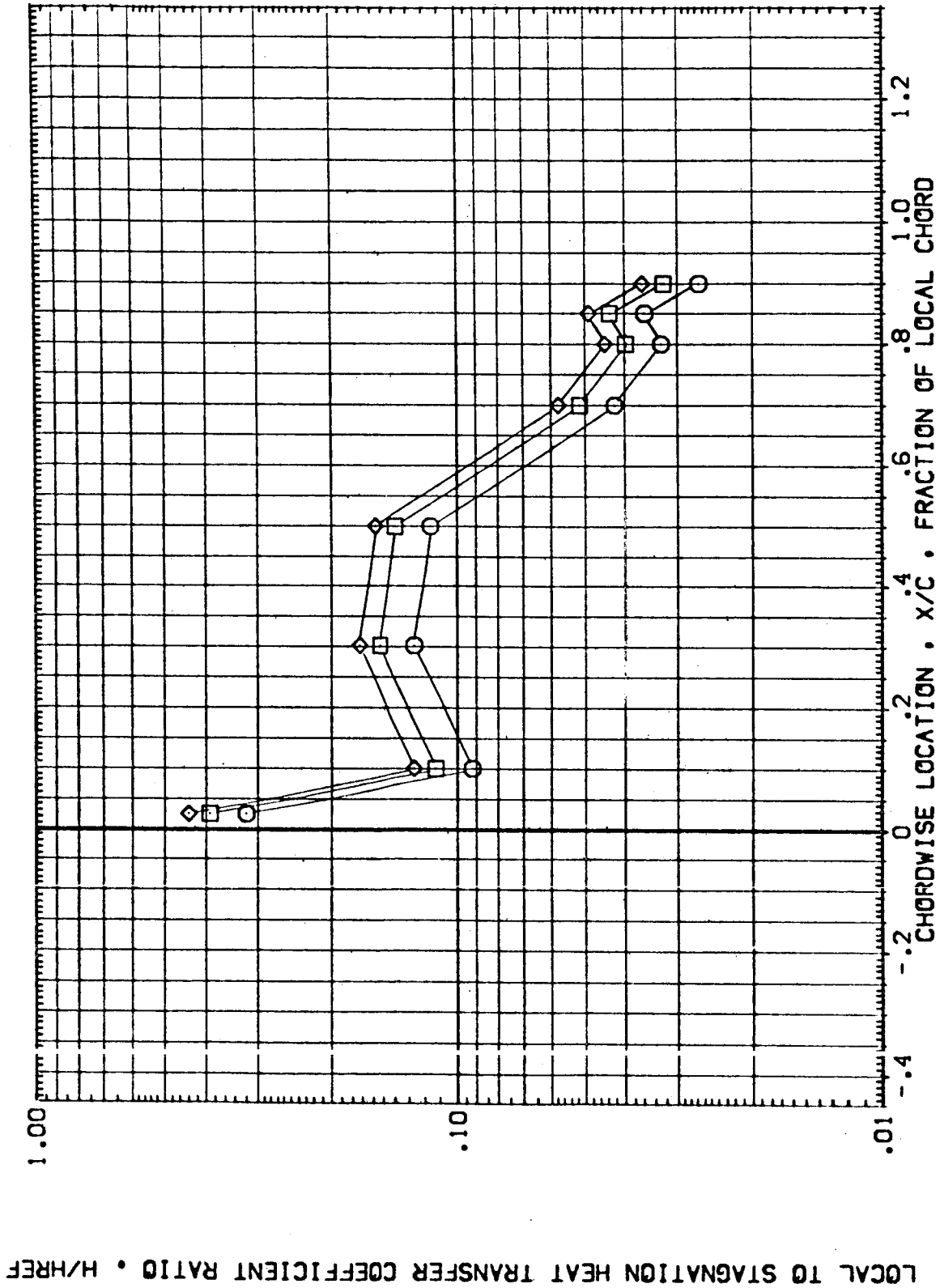


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/Y/B = .750

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE|G07] [O] ARC 3.5-178 [H3 ORBITER]
 [AE|G07] [◇] ARC 3.5-178 [H3 ORBITER]
 [BE|G07] [◇] ARC 3.5-178 [H3 ORBITER]

WING BOTTOM WING BOTTOM WING BOTTOM
 WING BOTTOM WING BOTTOM WING BOTTOM

ALPHA BETA RV/L MAV/MT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

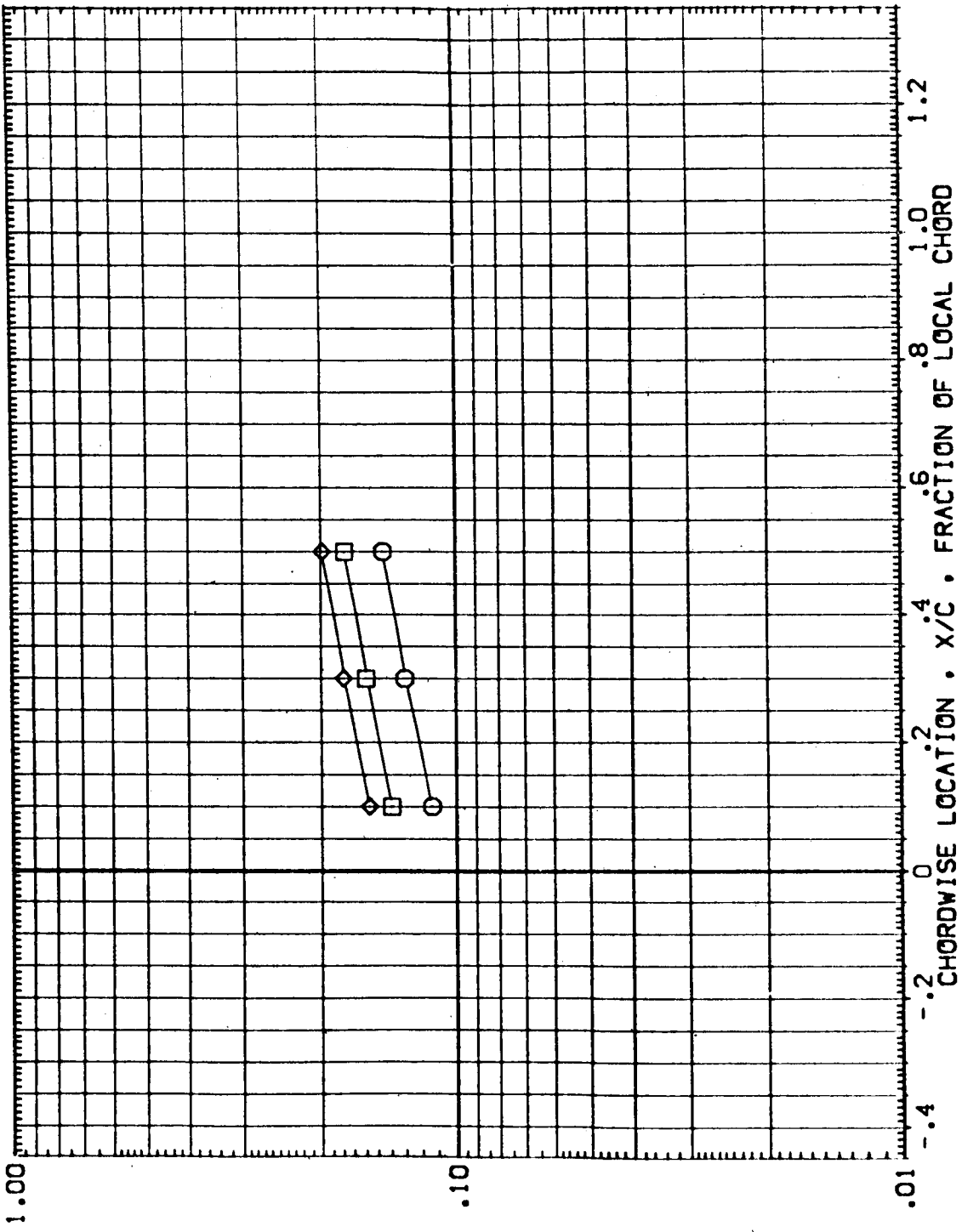


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

[RE 007]	ARC 1:5-178 IN3 ORBITER	.000	.000	5.000	1.000
[AE 007]	ARC 1:5-178 IN3 ORBITER	.000	.000	5.000	.900
[BE 007]	ARC 1:5-178 IN3 ORBITER	.000	.000	5.000	.850

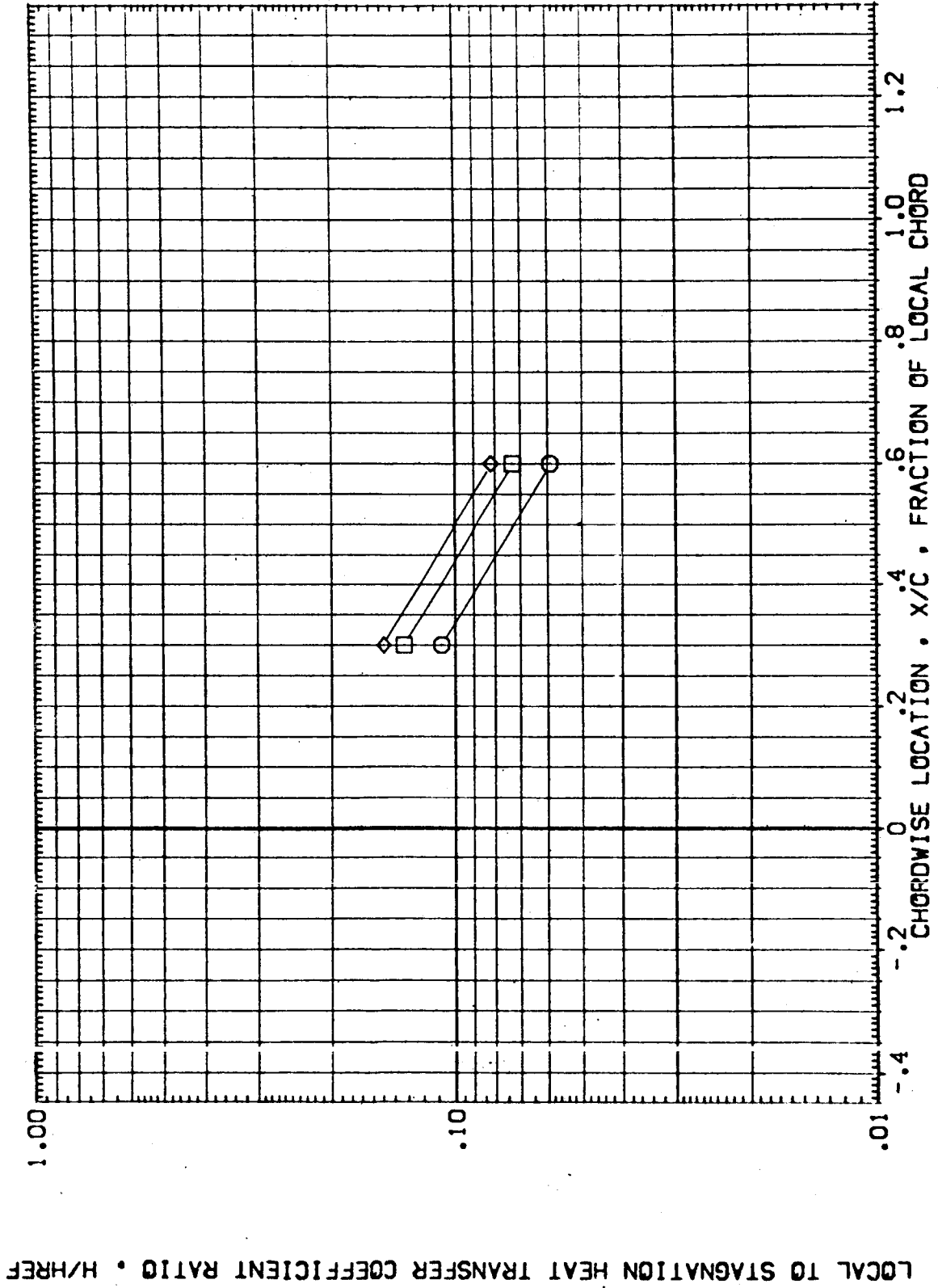


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RNU/L HAW/HT

(RE|G07) ARC 3.5-178 143 ORBITER .000 .000 5.000 1.000

(AE|G07) ARC 3.5-178 143 ORBITER .000 .000 5.000 .900

(BE|G07) ARC 3.5-178 143 ORBITER .000 .000 5.000 .850

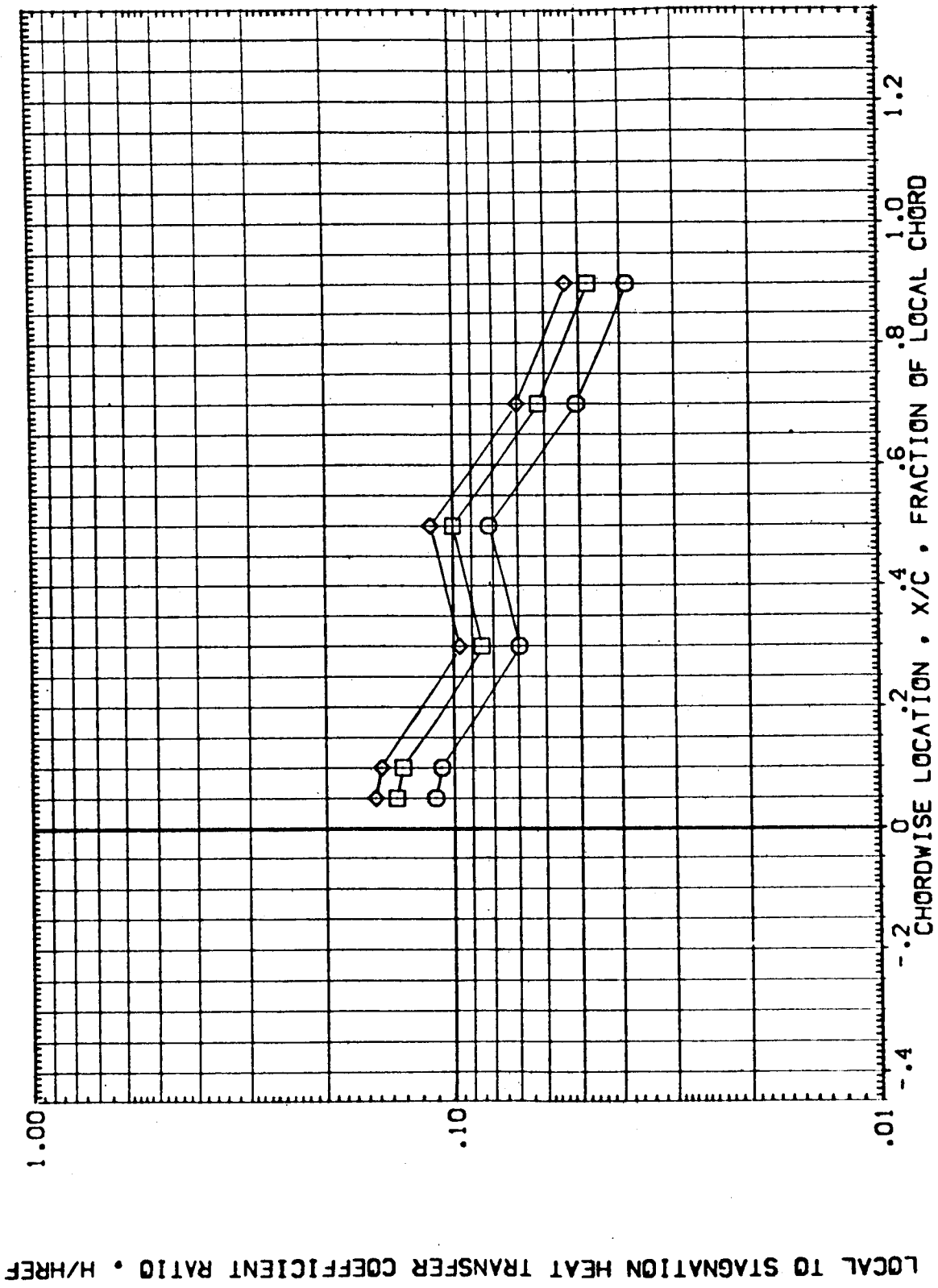


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .950

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

ARC : S-178 143 ORBITER
 ARC : S-178 143 ORBITER
 ARC : S-178 143 ORBITER

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

.000 .000 .000 1.000
 .000 .000 .000 .900
 .000 .000 .000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

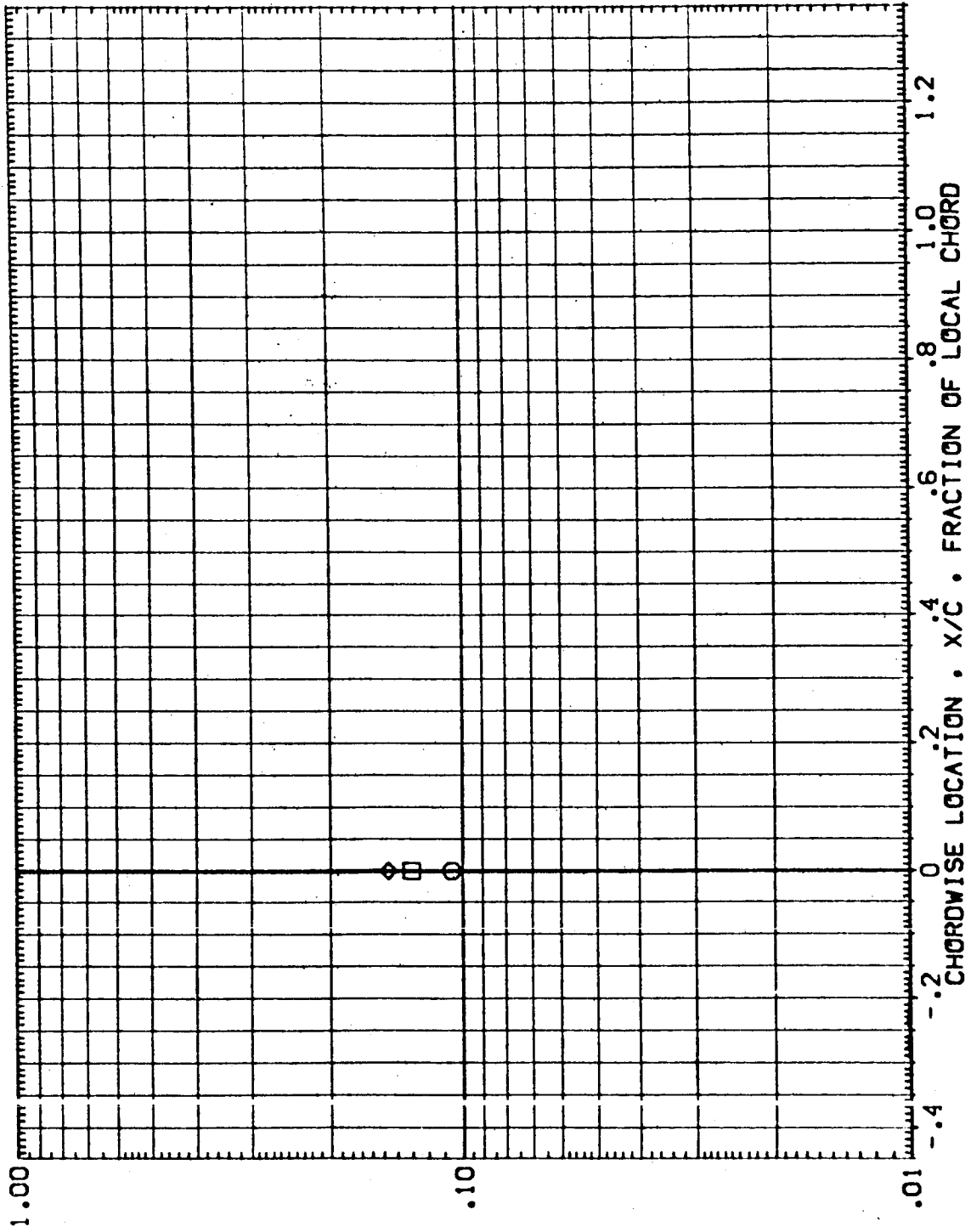


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .966

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBO. CONFIGURATION DESCRIPTION
 [RE|G07] [AE|G07] [BE|G07] [DI] [D] [DI] [D]
 ARC 3.5-178 |H3 ORBITER |H3 ORBITER |H3 ORBITER
 ARC 3.5-178 |H3 ORBITER |H3 ORBITER |H3 ORBITER
 ALPHA BETA FN/L HAV/HT
 .000 .000 .000 1.000
 .000 .000 .000 1.900
 .000 .000 .000 .850

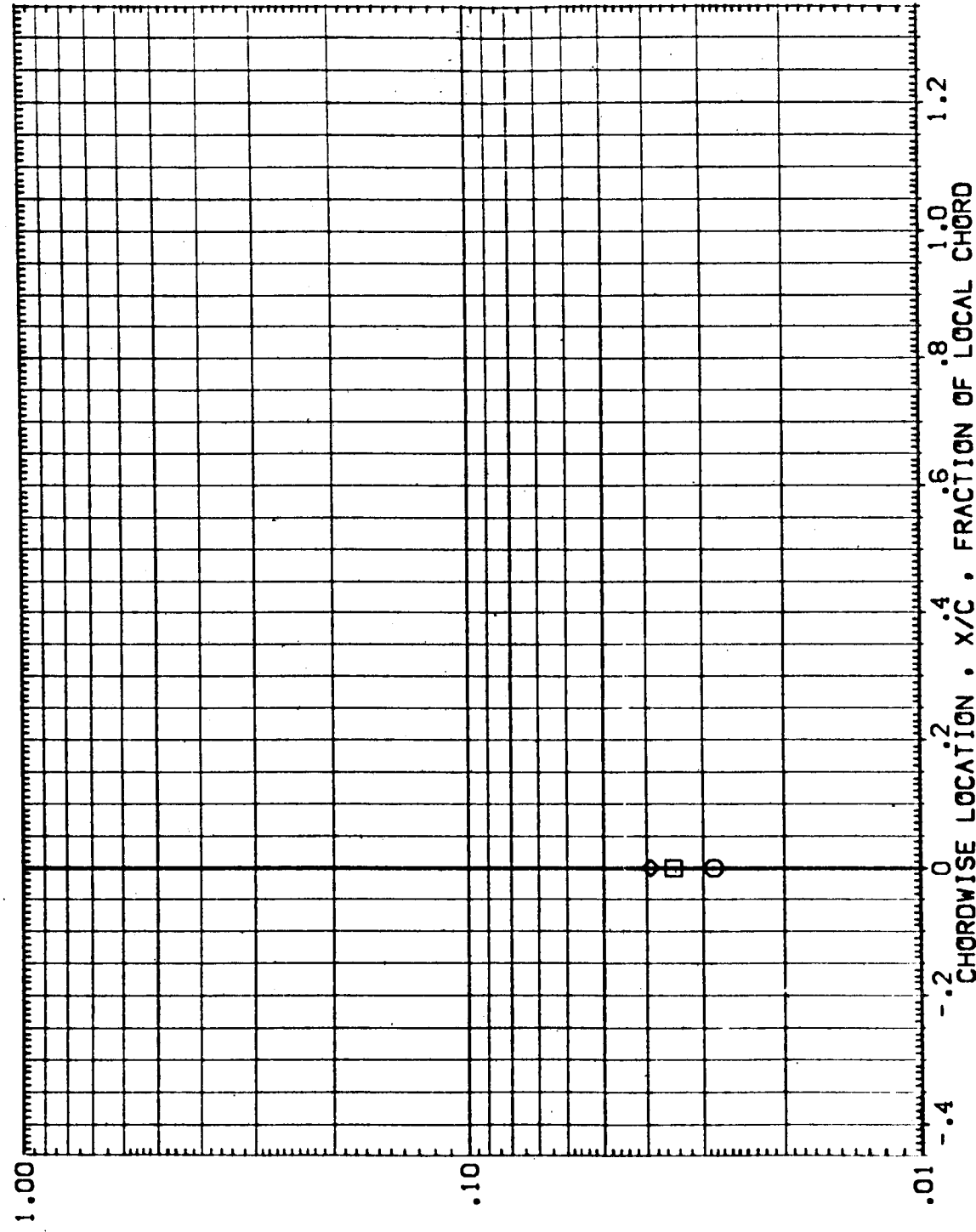


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .993

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM WING BOTTOM WING BOTTOM ALPHA BETA RV/L HAW/HT

{RE1907} ARC 3.5-178 I-43 ORBITER WING BOTTOM WING BOTTOM WING BOTTOM .000 .000 5.000 1.000

{AE1907} ARC 3.5-178 I-43 ORBITER WING BOTTOM WING BOTTOM WING BOTTOM .000 .000 5.000 .900

{BE1907} ARC 3.5-178 I-43 ORBITER WING BOTTOM WING BOTTOM WING BOTTOM .000 .000 5.000 .850

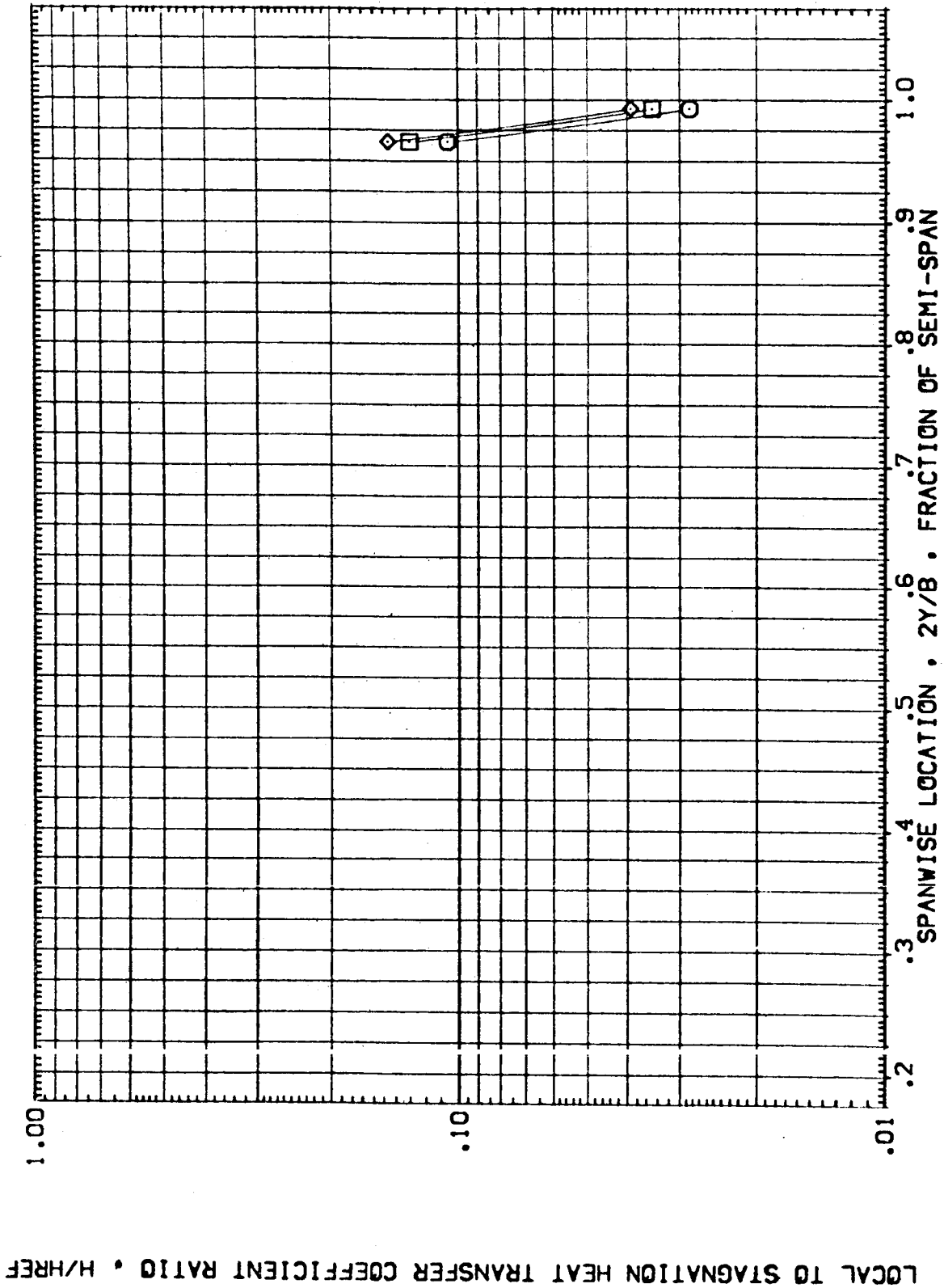


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION VING BOTTOM VING BOTTOM ALPHA BETA RV/L HAV/HT
 {RE1607} ARC 3.5-178 IH3 ORBITER VING BOTTOM VING BOTTOM .000 .000 5.000 1.000
 {AE1607} ARC 3.5-178 IH3 ORBITER VING BOTTOM VING BOTTOM .000 .000 5.000 .900
 {BE1607} ARC 3.5-178 IH3 ORBITER VING BOTTOM VING BOTTOM .000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

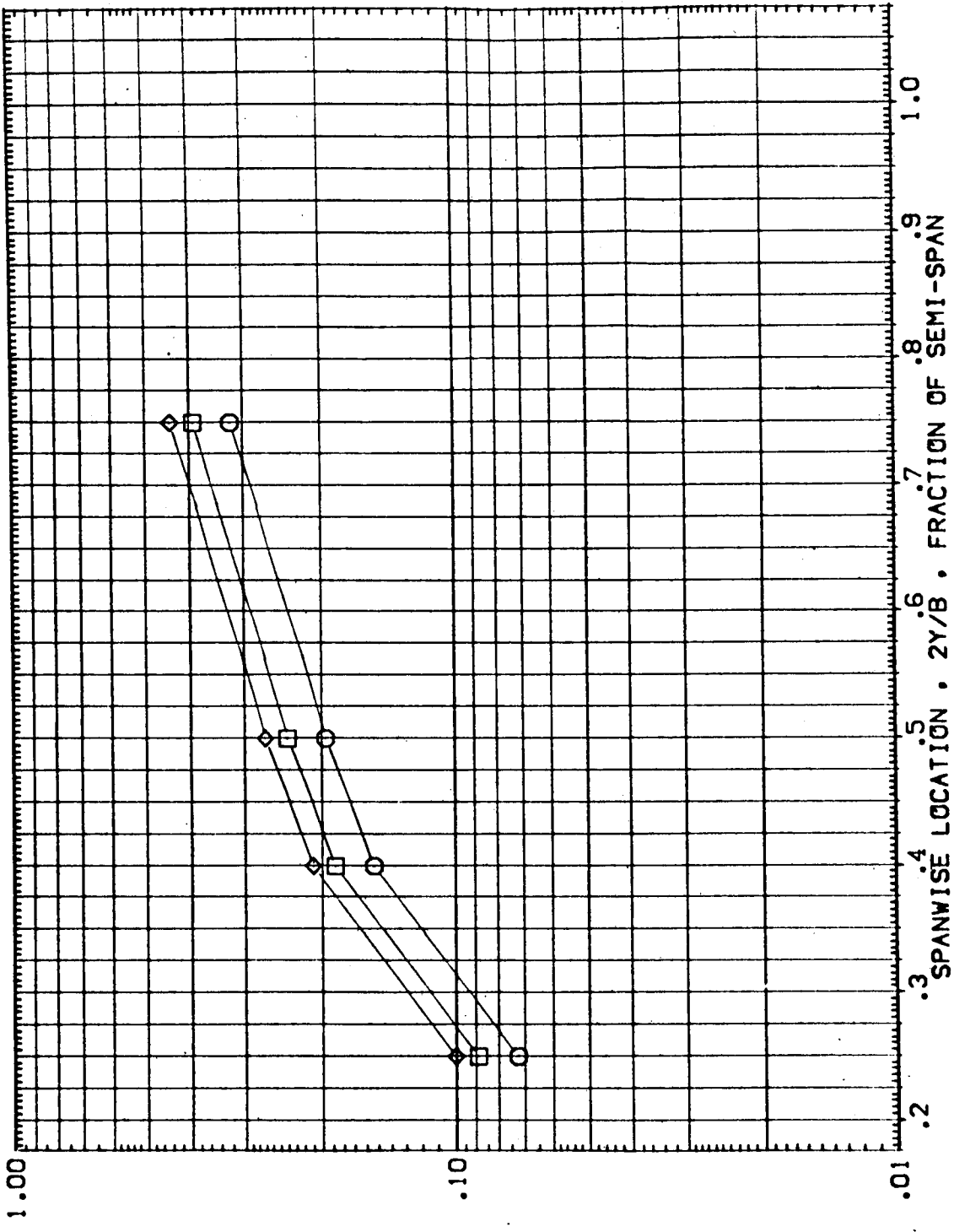


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .025



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE|007] [AE|007] [BE|007] [ARC|1.5-178|143|ORB|ITER] [WING|BOTTOM|WING|BOTTOM|WING|BOTTOM] [ALPHA|.000|.000|.000] [BETA|.000|.000|.000] [RV/L|5.000|5.000|5.000] [HAW/HT|1.000|.900|.850]

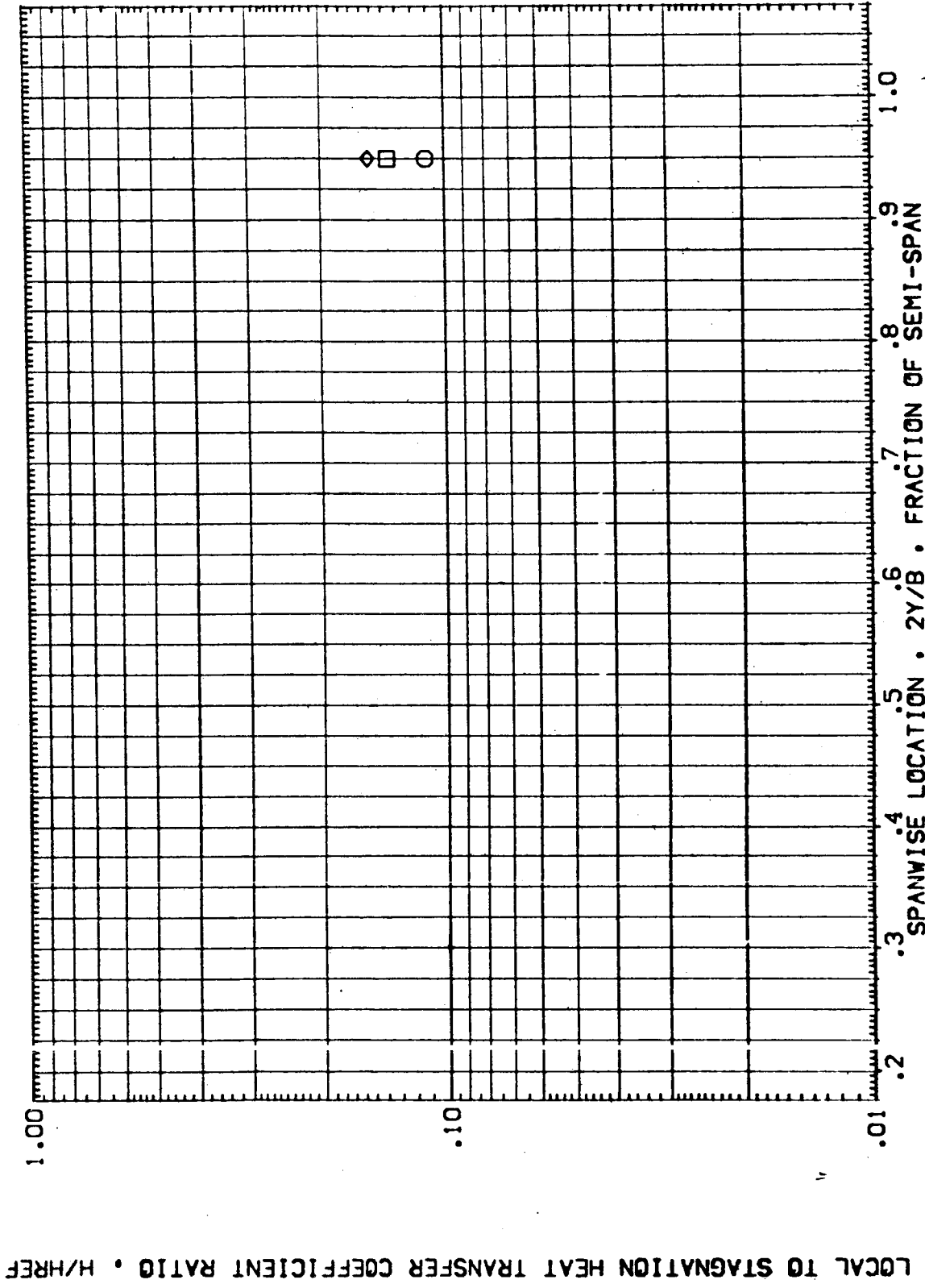


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE|G07] [O] ARC 3.5-178 [H3 ORBITER]
 [AE|G07] [◇] ARC 3.5-178 [H3 ORBITER]
 [BE|G07] [◇] ARC 3.5-178 [H3 ORBITER]

WING BOTTOM WING BOTTOM WING BOTTOM
 ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 5.000 5.000 5.000
 HAV/HT 1.000 .900 .850

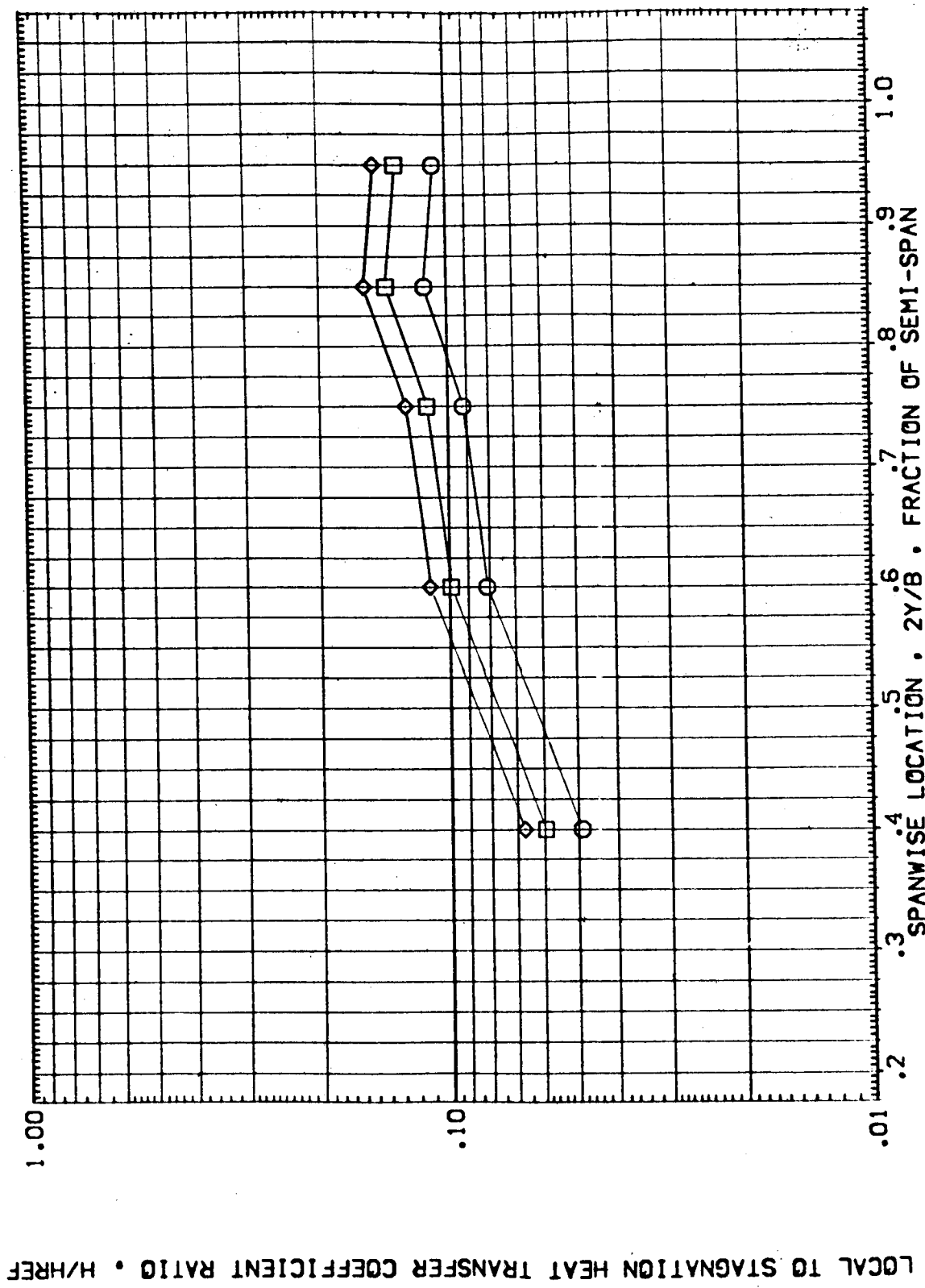


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .100



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [REIG07] ARC 1.5-178 IH3 ORBITER
 [AEIG07] ARC 1.5-178 IH3 ORBITER
 [BEIG07] ARC 1.5-178 IH3 ORBITER

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA BETA
 .000 .000
 .000 .000
 .000 .000

RM/L HAV/HT
 5.000 1.000
 5.000 .900
 5.000 .850

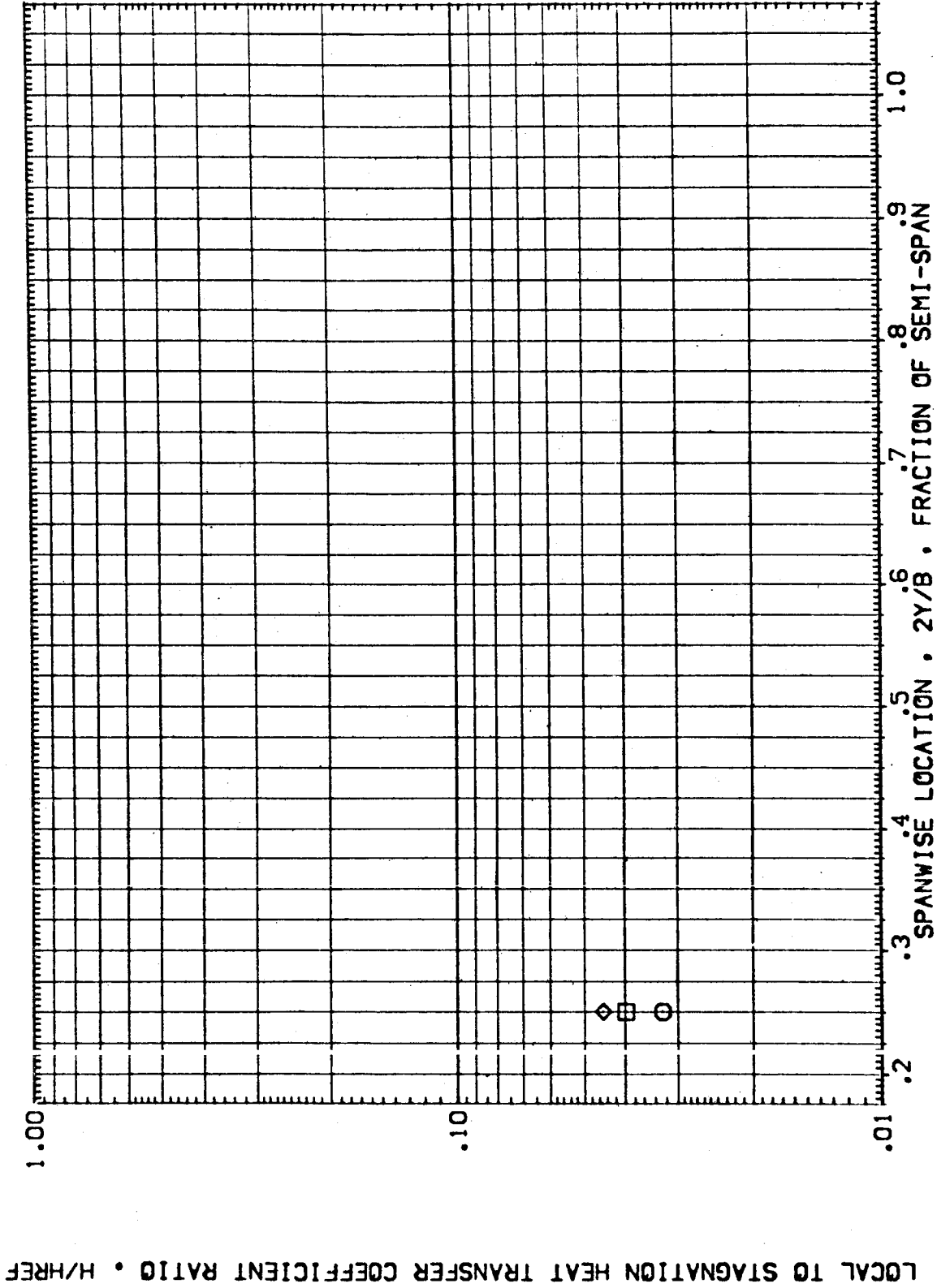


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .153

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BE|007) ARC 3.5-178 IH3 ORBITER
 (AE|007) ARC 3.5-178 IH3 ORBITER
 (BE|007) ARC 3.5-178 IH3 ORBITER

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RN/L 5.000
 5.000
 5.000

HAW/HT 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

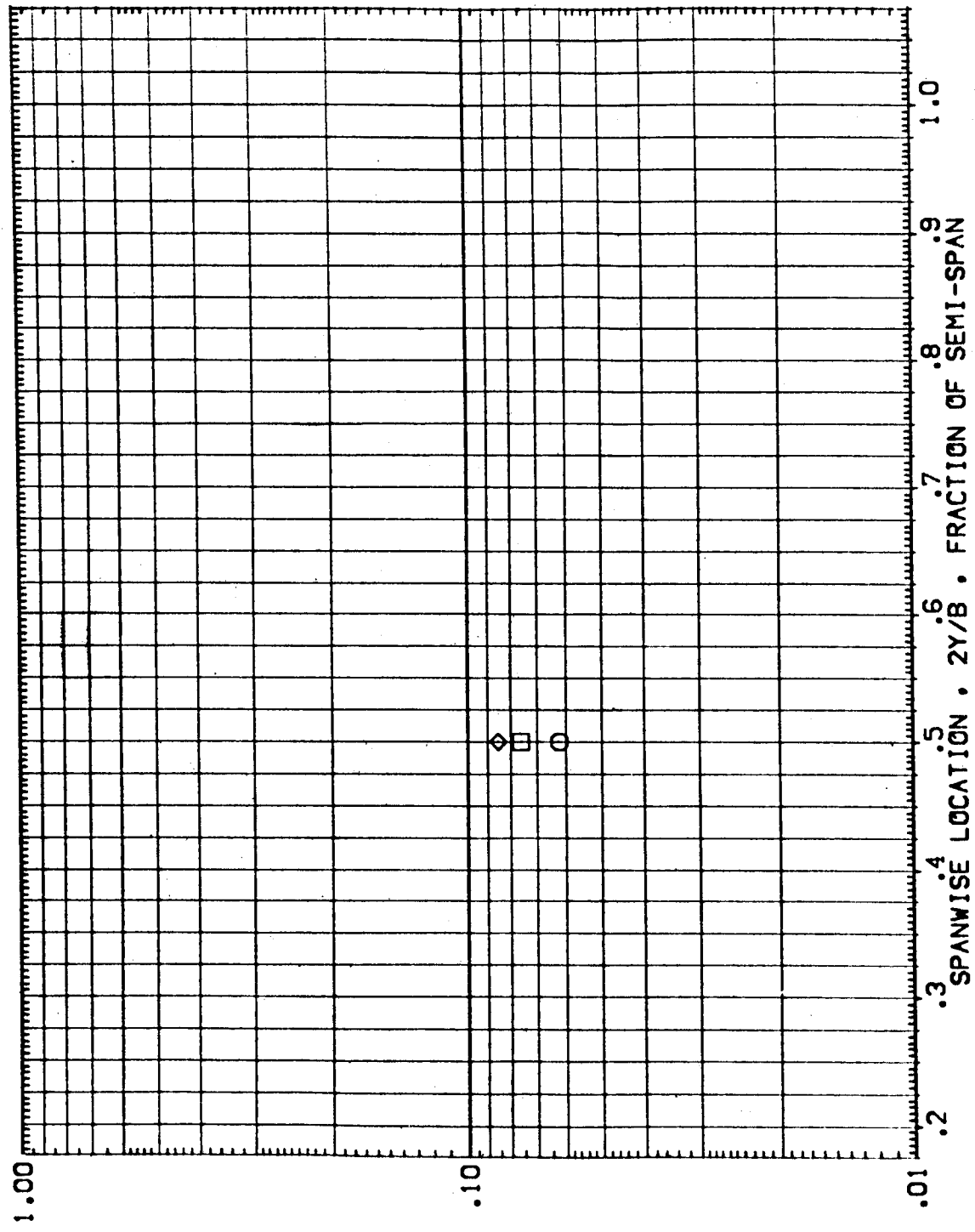


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .177

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA ANGLE HAV/HT

{RE|007} {AE|007} {BE|007} H3 ORBITER .000 .000 5.000 1.000

ARC : .5-178 H3 ORBITER .000 .000 5.000 .500

ARC : .5-178 H3 ORBITER .000 .000 5.000 .850

ARC : .5-178 H3 ORBITER .000 .000 5.000 .950

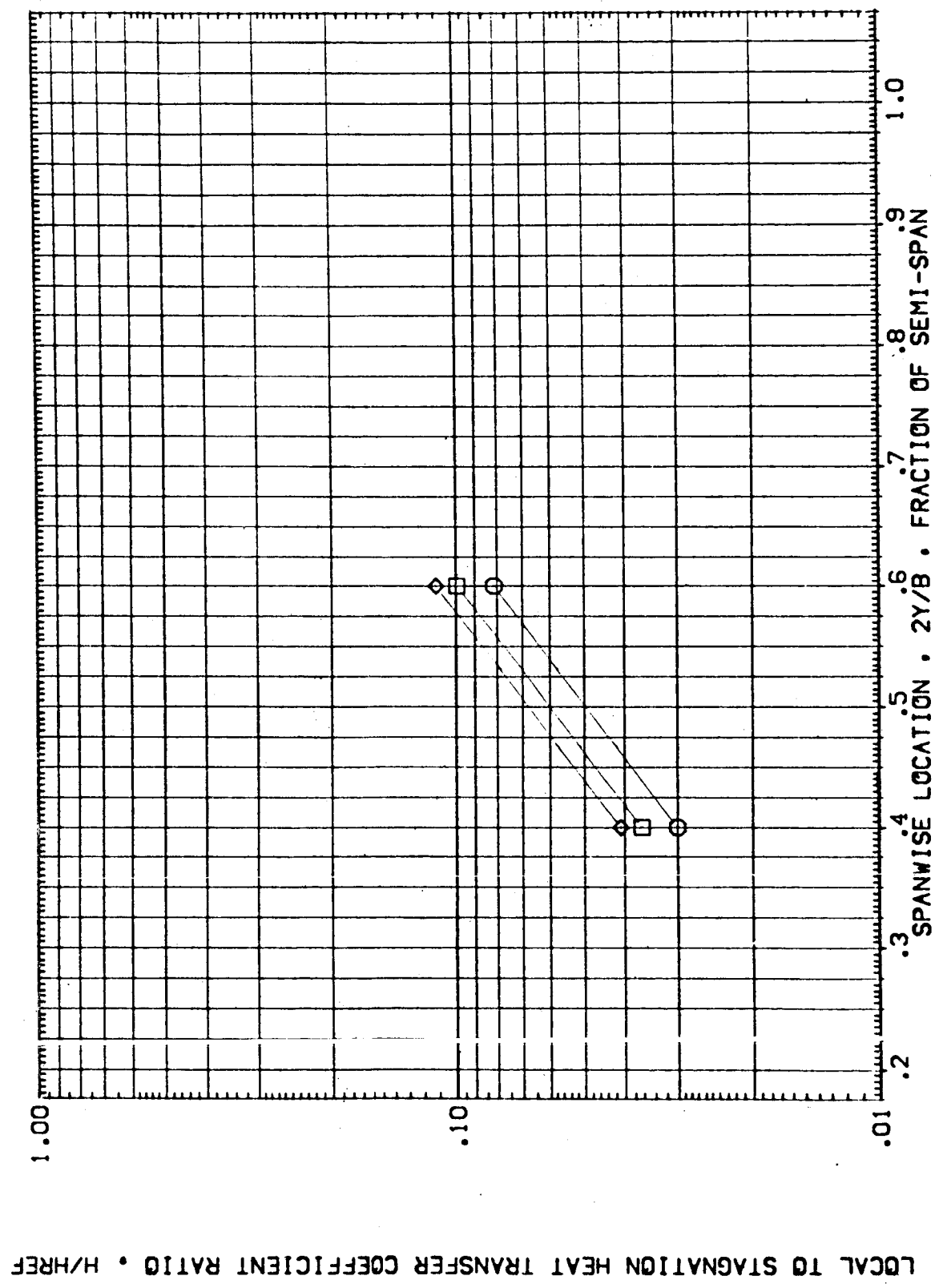


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

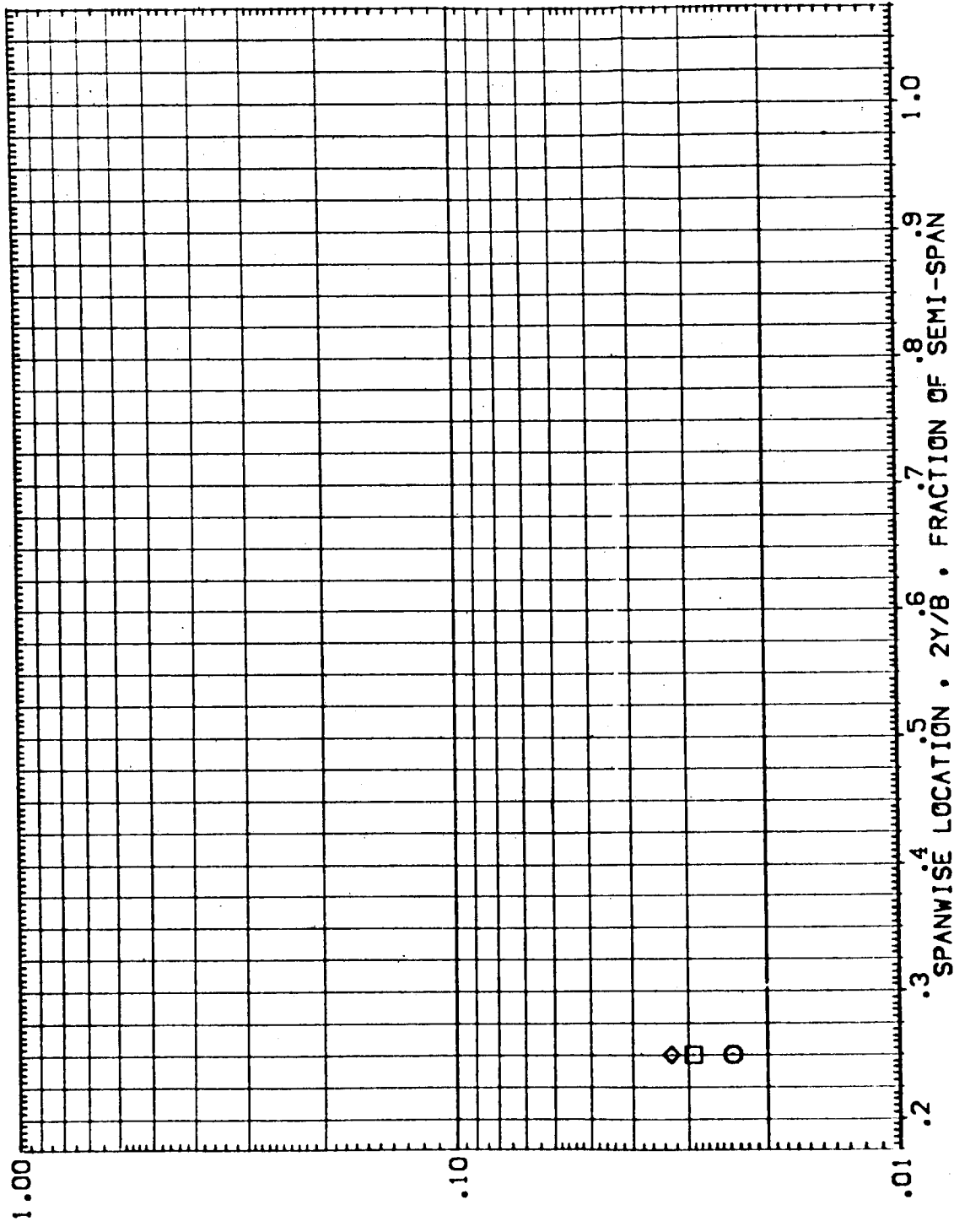
MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE] [607] } ARC 3.5-178 I-H3 ORBITER
 [AE] [607] } ARC 3.5-178 I-H3 ORBITER
 [BE] [607] } ARC 3.5-178 I-H3 ORBITER

ALPHA BETA RNV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .500
 .000 .000 5.000 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



SPANWISE LOCATION • 2Y/B • FRACTION OF SEMI-SPAN
 .2 .3 .4 .5 .6 .7 .8 .9 1.0

FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .299



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE|607] ARC 3.5-178 H3 ORBITER
 [AE|607] ARC 3.5-178 H3 ORBITER
 [BE|607] ARC 3.5-178 H3 ORBITER

WING BOTTOM WING BOTTOM WING BOTTOM
 VING BOTTOM VING BOTTOM VING BOTTOM

ALPHA BETA RNU/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

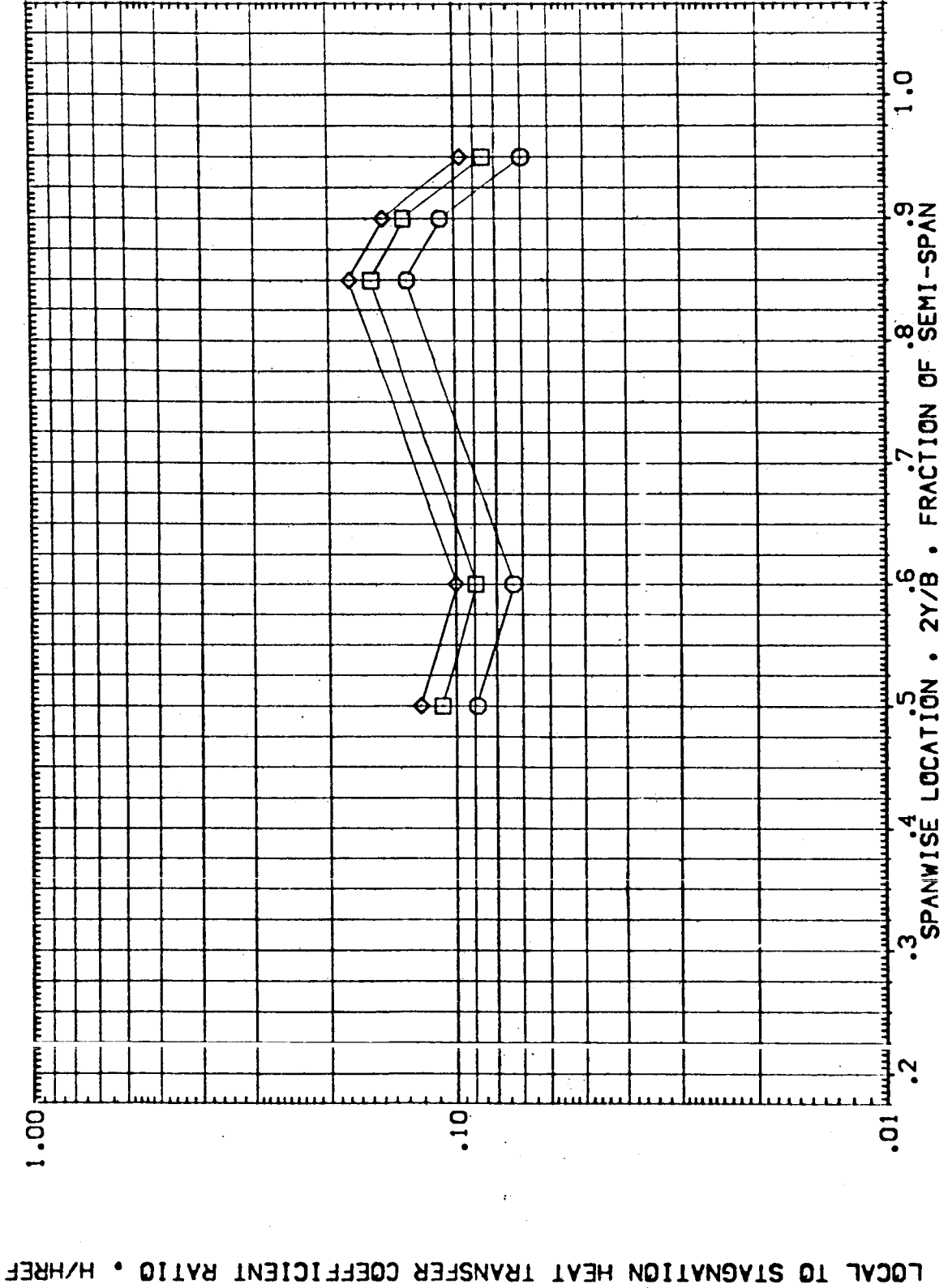


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|007) (AE|007) (BE|007) ARC 3.5-178 |H3 ORBITER
 (AE|007) (BE|007) ARC 3.5-178 |H3 ORBITER
 (RE|007) (AE|007) (BE|007) ARC 3.5-178 |H3 ORBITER

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 5.000 5.000 5.000
 HAV/HT 1.000 .900 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

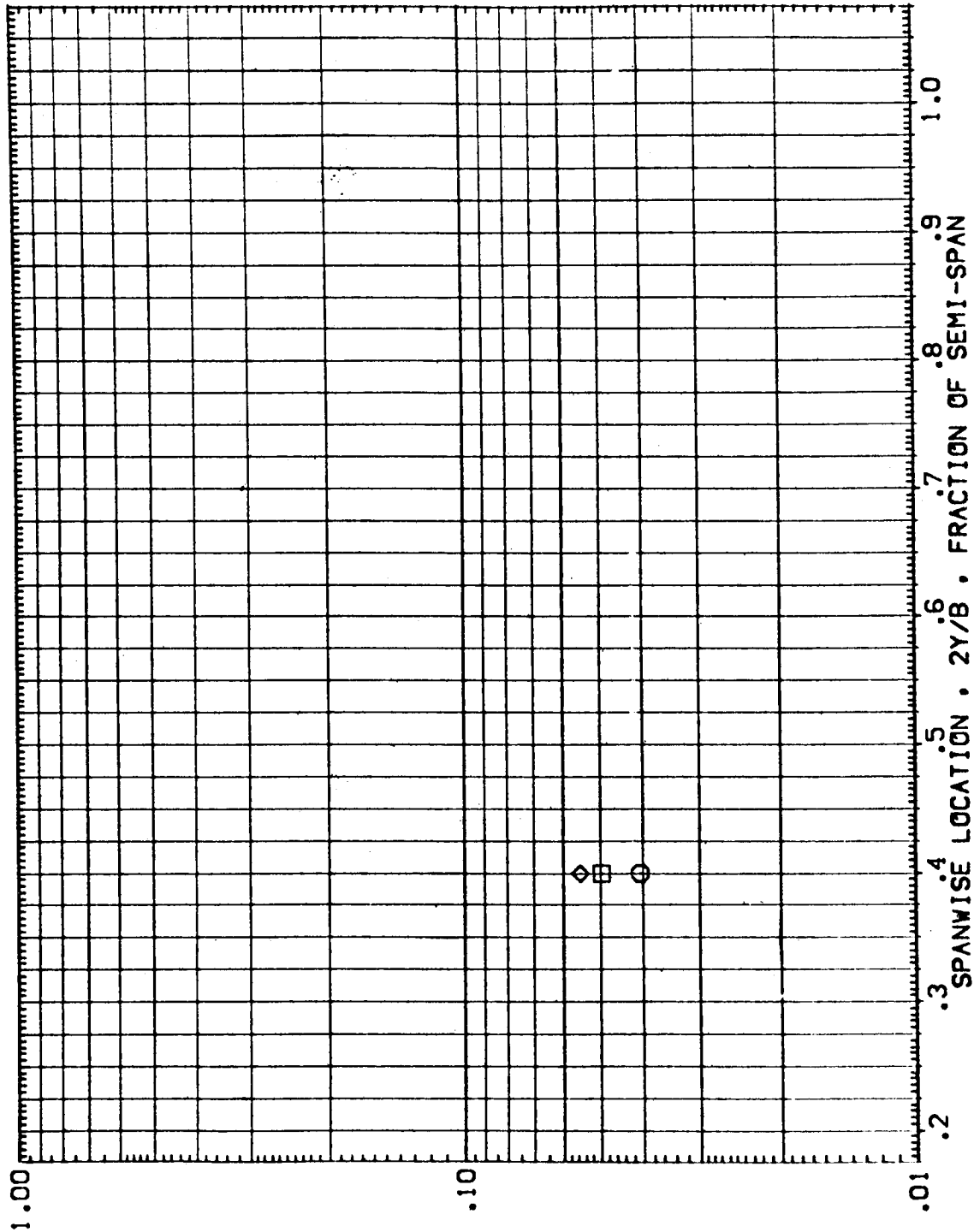


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .302



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1607) [RE] 1.5-178 [H3] ORBITER
 (AE1607) [AE] 1.5-178 [H3] ORBITER
 (BE1607) [BE] 1.5-178 [H3] ORBITER

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RM/VL 5.000
 5.000
 5.000

HAV/HT 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

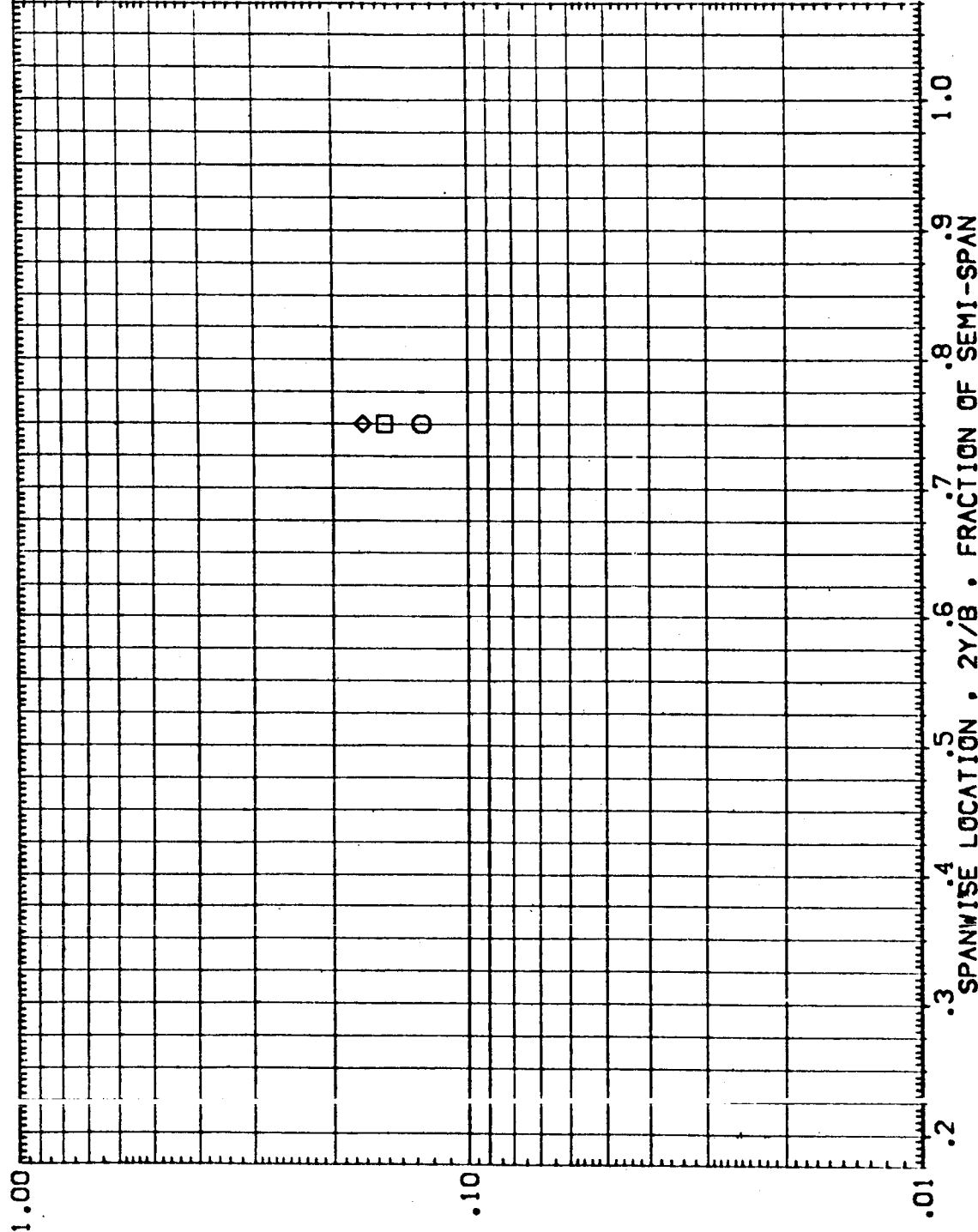


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

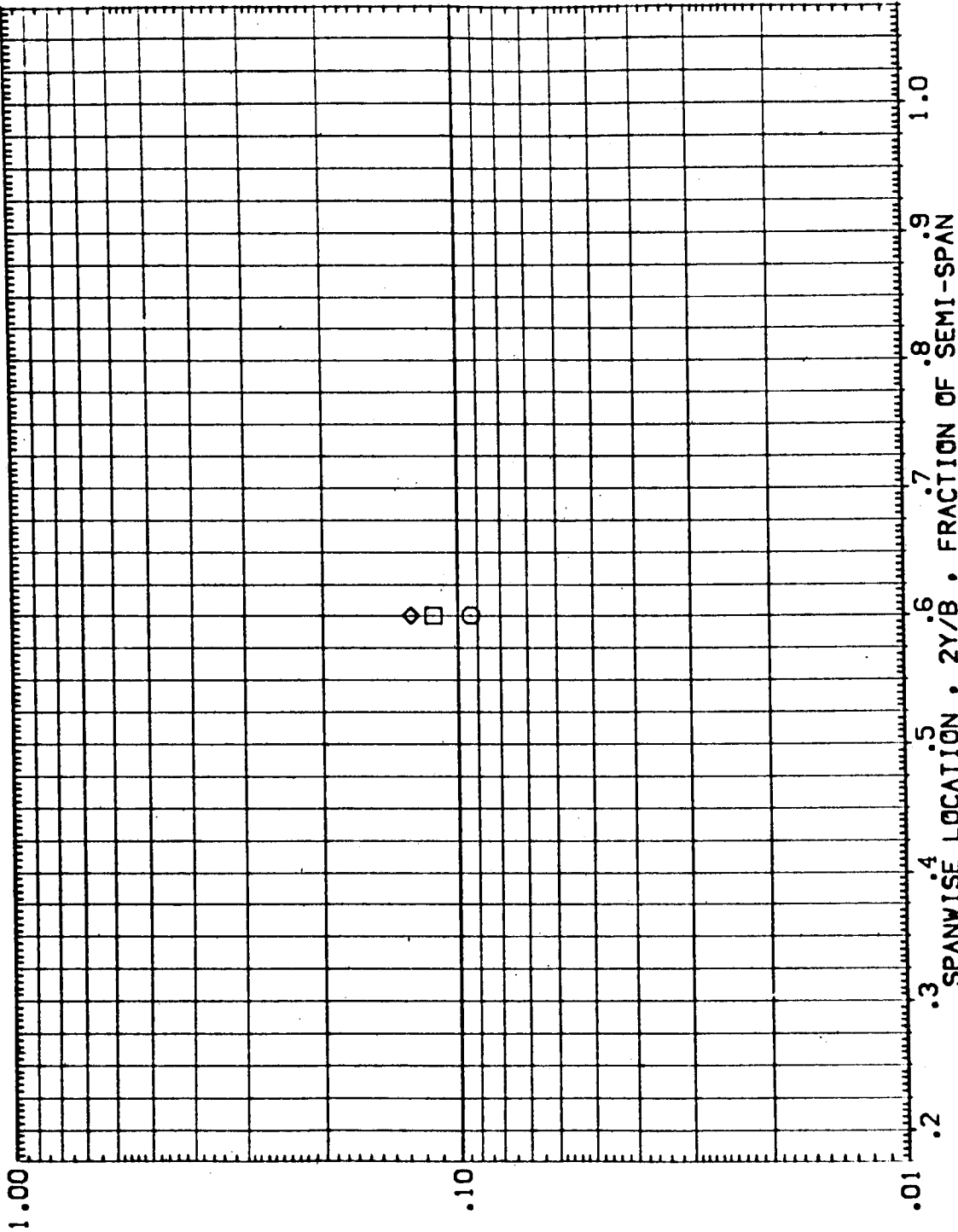
MACH = 5.300 X/YC = .303

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE|007} ARC 3.5-178 |H3 ORBITER
 {AE|007} ARC 3.5-178 |H3 ORBITER
 {BE|007} ARC 3.5-178 |H3 ORBITER

VING BOTTOM
 VING BOTTOM
 VING BOTTOM

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850



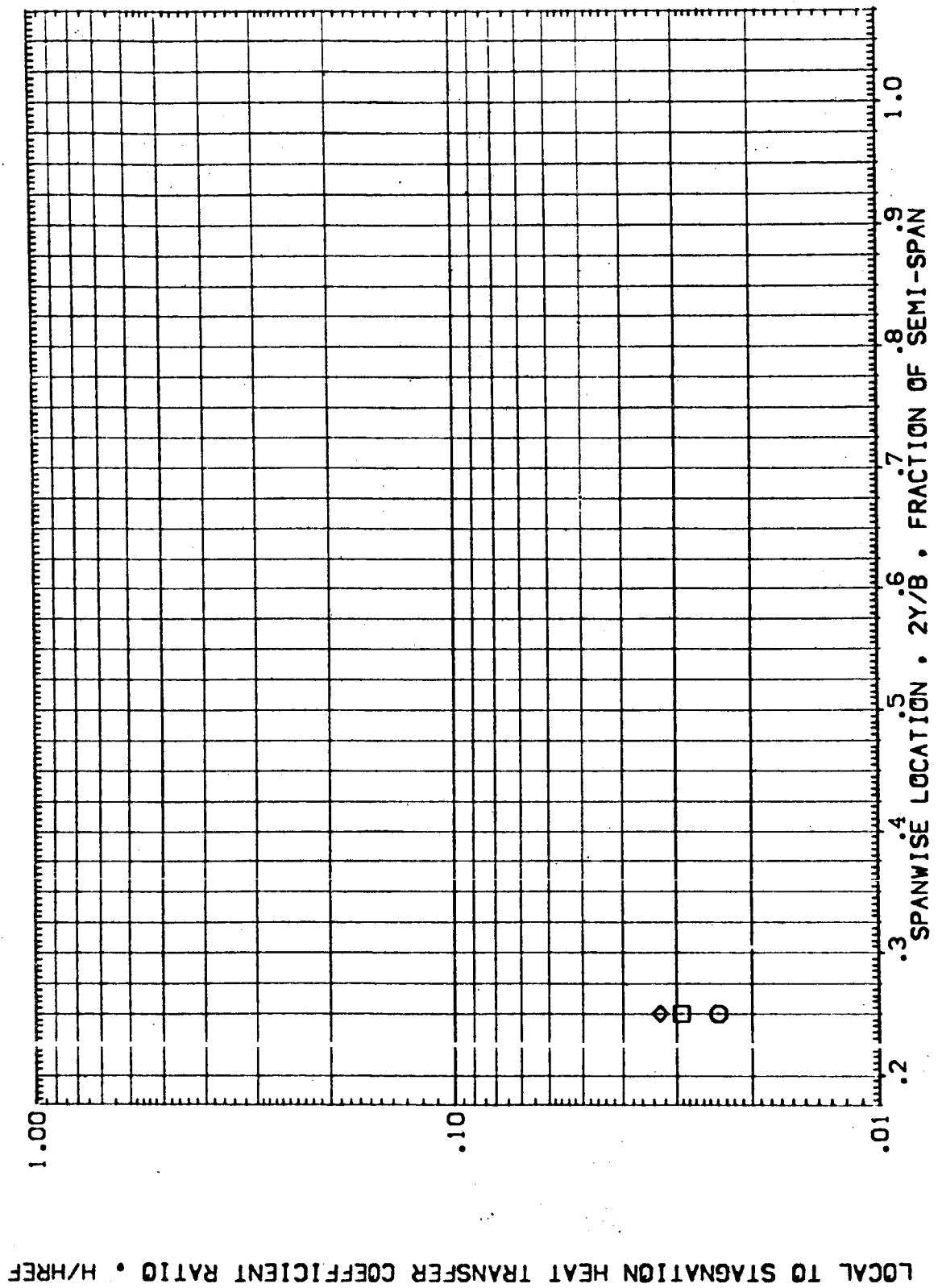
SPANWISE LOCATION • 2Y/B • FRACTION OF SEMI-SPAN

FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .428



DATA SET SYMBOL	CON'IGURATION DESCRIPTION	WING BOTTOM	ALPHA	BETA	RV/L	HAV/HT
(RE 607)	ARC 3.5-178 H3 ORBITER	WING BOTTOM	.000	.000	5.000	1.000
(AE 607)	ARC 3.5-178 H3 ORBITER	WING BOTTOM	.000	.000	5.000	.900
(BE 607)	ARC 3.5-178 H3 ORBITER	WING BOTTOM	.000	.000	5.000	.850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .444

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM WING BOTTOM ALPHA BETA RV/L HAV/HT

{RE1007} ARC 3.5-178 143 ORBITER WING BOTTOM WING BOTTOM .000 .000 5.000 1.000

{AE1007} ARC 3.5-178 143 ORBITER WING BOTTOM WING BOTTOM .000 .000 5.000 .900

{BE1007} ARC 3.5-178 143 ORBITER WING BOTTOM WING BOTTOM .000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

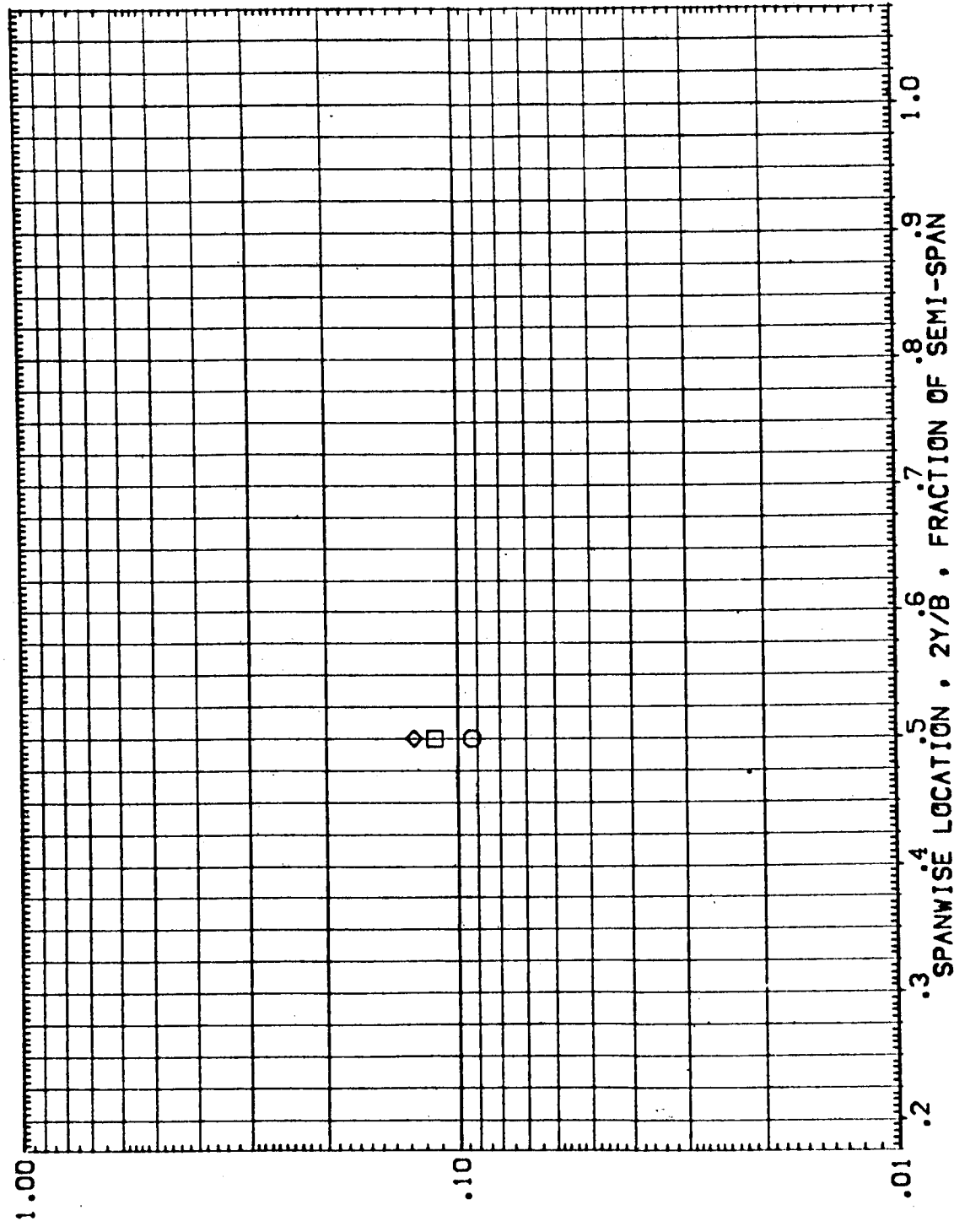


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .487



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE|607} {AE|607} {BE|607} ARC 3.5-178 IH3 ORBITER
 ARC 3.5-178 IH3 ORBITER
 ARC 3.5-178 IH3 ORBITER

WING BOTTOM WING BOTTOM WING BOTTOM
 ALPHA BETA R/V/L HAV/HT
 .000 .000 .000 1.000
 .000 .000 .000 0.900
 .000 .000 .000 0.850

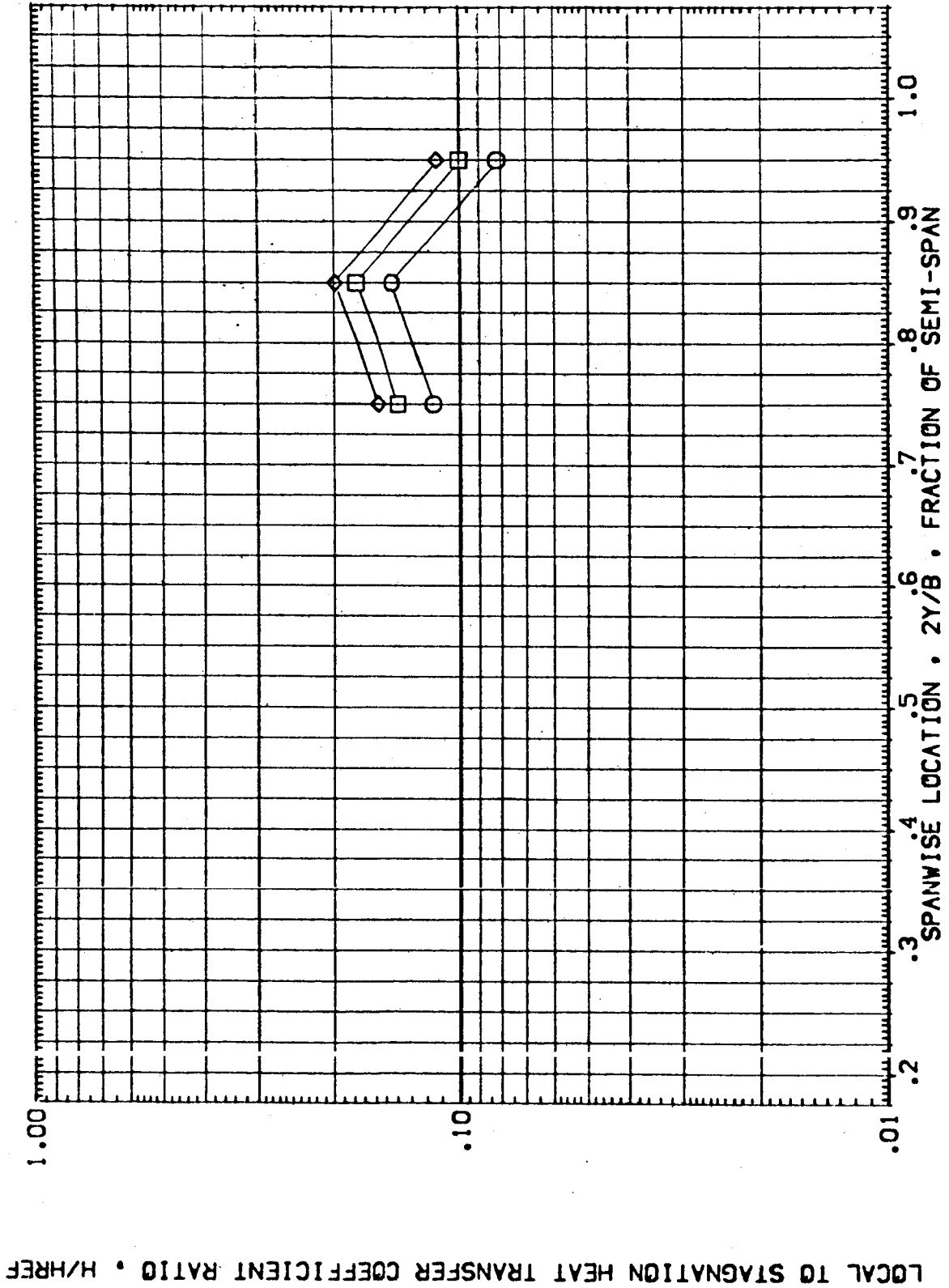


FIG. 6 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .500

DATA SET SYMBOL: (RE1007) (AE1007) (BE1007)

CONFIGURATION DESCRIPTION: ARC 3.5-178 IH3 ORBITER, ARC 3.5-178 IH3 ORBITER, ARC 3.5-178 IH3 ORBITER

WING BOTTOM: WING BOTTOM, WING BOTTOM, WING BOTTOM

ALPHA: .000, .000, .000

BETA: .000, .000, .000

RV/L: 5.000, 5.000, 5.000

HAV/HT: 1.000, .900, .850

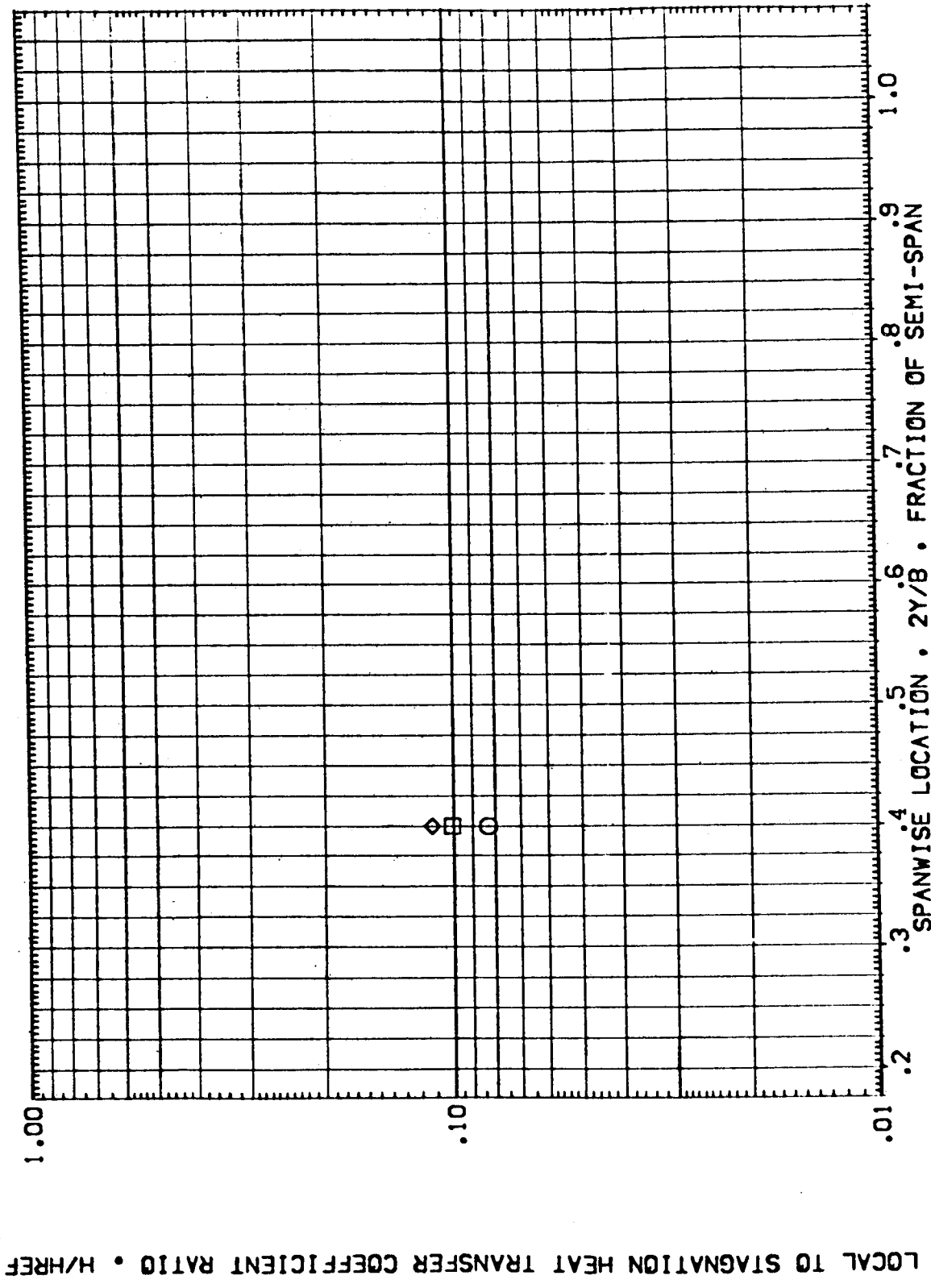


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .559



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 {RE|G07} ARC |.5-178 |H3 ORBITER .000 .000 5.000 1.000
 {AE|G07} ARC |.5-178 |H3 ORBITER .000 .000 5.000 .900
 {BE|G07} ARC |.5-178 |H3 ORBITER .000 .000 5.000 .850

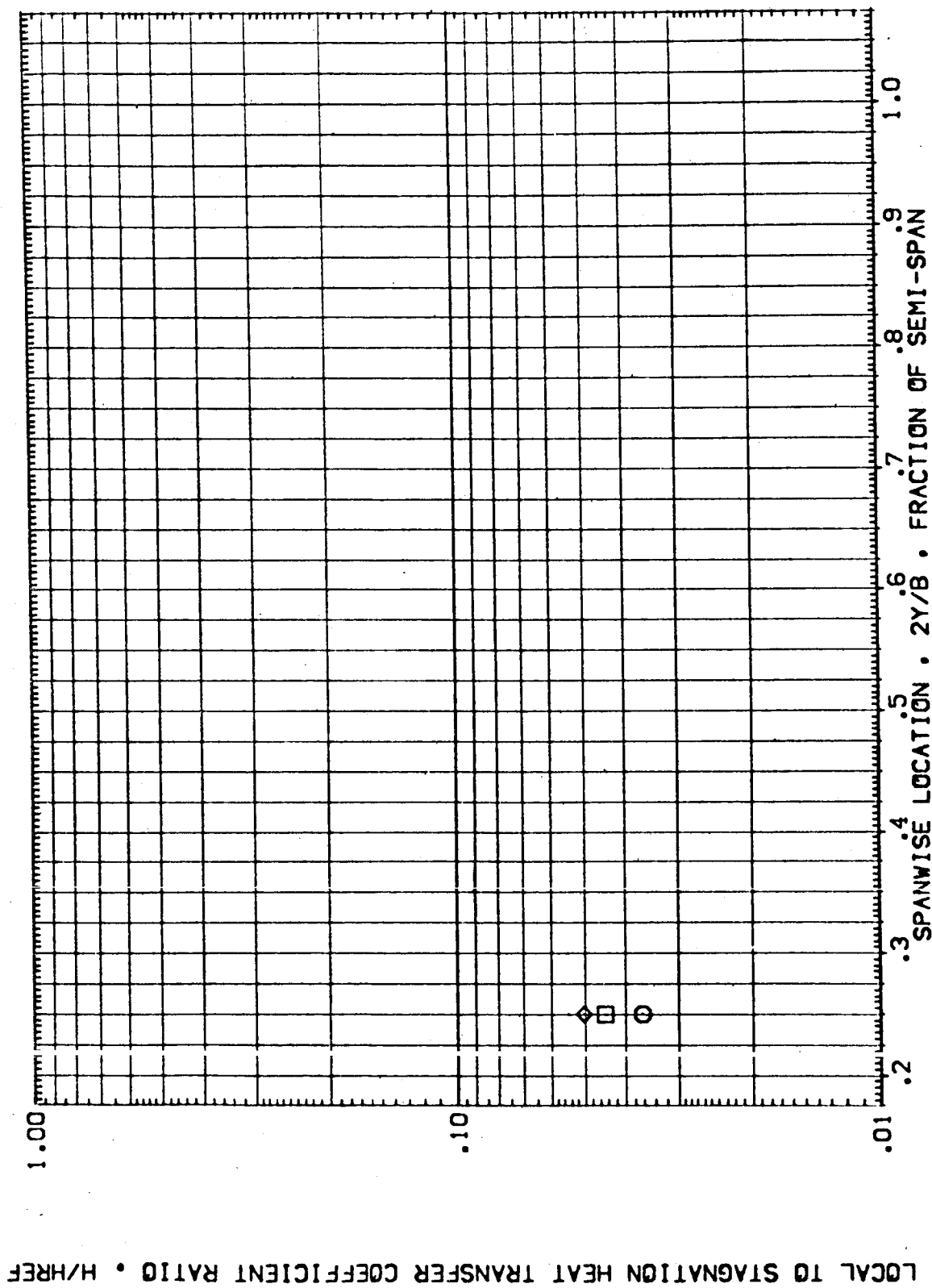


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .590

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RNVL HAV/HT
 [RE|G07] ARC 3.5-178 |H3 ORBITER .000 .000 5.000 1.000
 [AE|G07] ARC 3.5-178 |H3 ORBITER .000 .000 5.000 .900
 [BE|G07] ARC 3.5-178 |H3 ORBITER .000 .000 5.000 .850

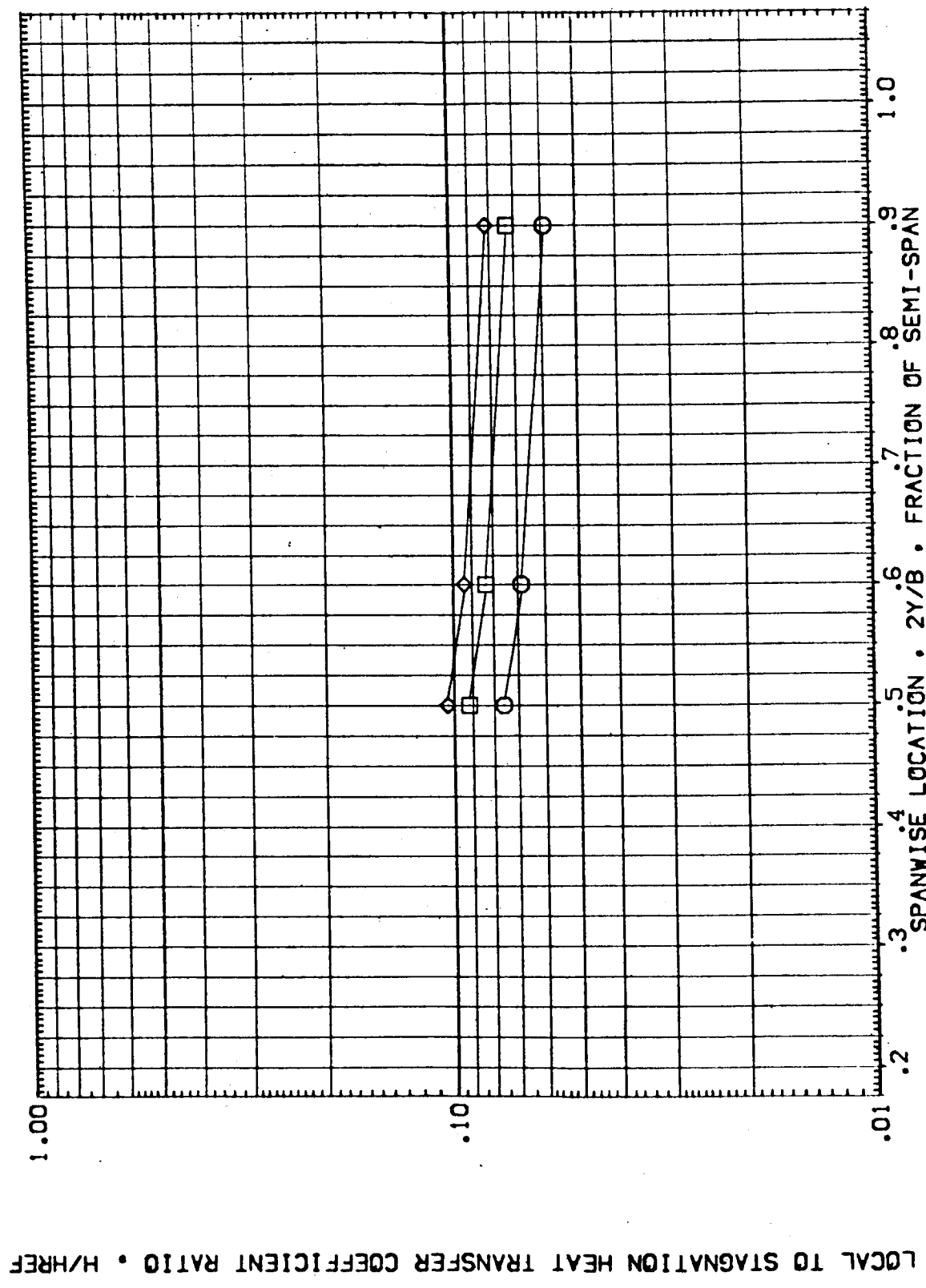


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L HAV/HT

{RE|G07} ARC 3.5-178 |H3 OXB|TER WING BOTTOM .000 .000 5.000 1.000

{AE|G07} ARC 3.5-178 |H3 OXB|TER WING BOTTOM .000 .000 5.000 .900

{BE|G07} ARC 3.5-178 |H3 OXB|TER WING BOTTOM .000 .000 5.000 .850

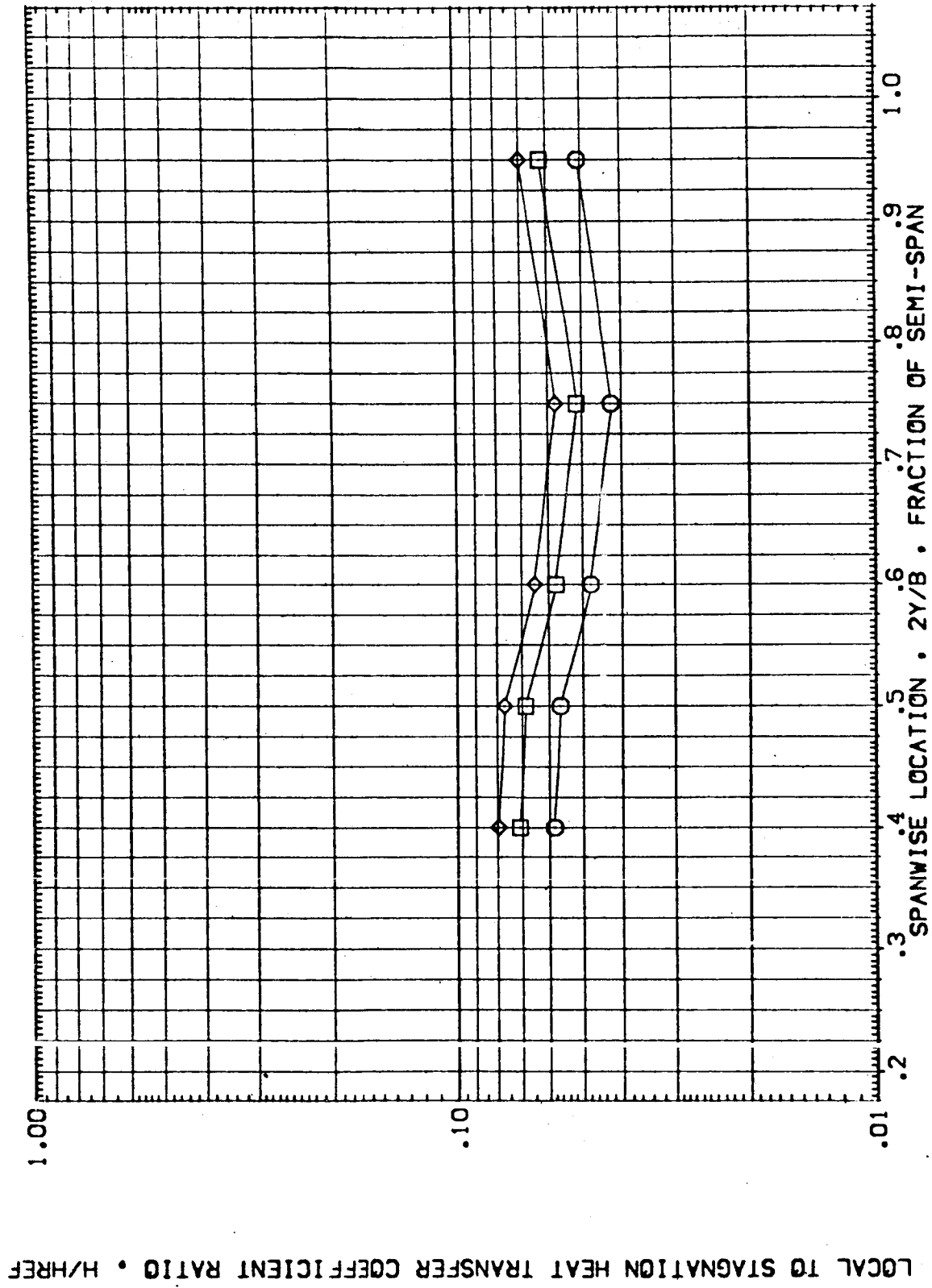


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

{ REIG07 } ARC 3.5-178 1+3 ORBITER .000 .000 5.000 1.000

{ AEIG07 } ARC 3.5-178 1+3 ORBITER .000 .000 5.000 .900

{ BEIG07 } ARC 3.5-178 1+3 ORBITER .000 .000 5.000 .850

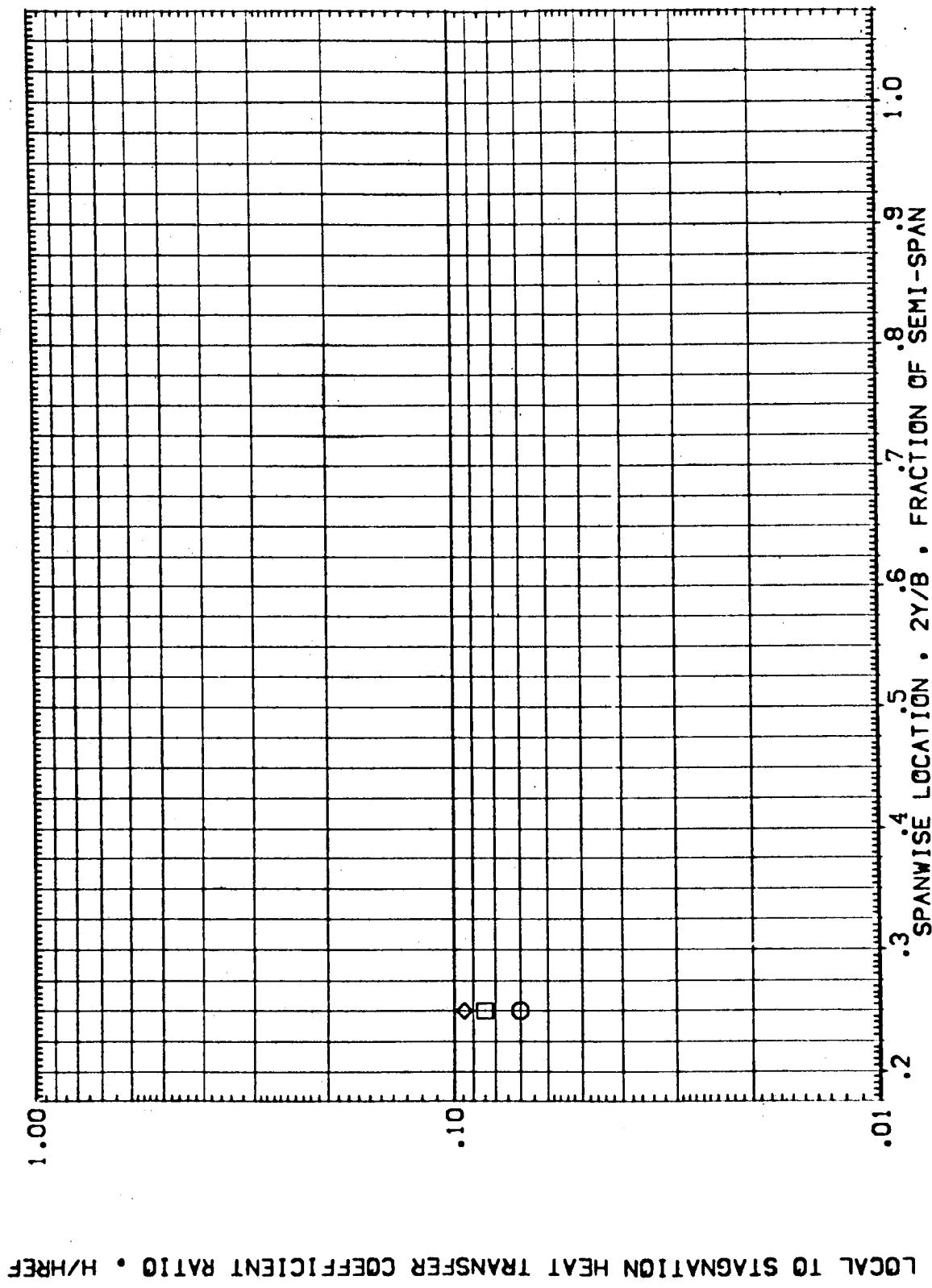


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .736

DATA SET SYMBOL CONFIGURATION DESCRIPTION VING BOTTOM VING BOTTOM ALPHA BETA RV/L HAV/HT
 {RE1607} ARC 3.5-178 IH3 ORBITER VING BOTTOM VING BOTTOM .000 .000 5.000 1.000
 {AE1607} ARC 3.5-178 IH3 ORBITER VING BOTTOM VING BOTTOM .000 .000 5.000 .900
 {BE1607} ARC 3.5-178 IH3 ORBITER VING BOTTOM VING BOTTOM .000 .000 5.000 .850

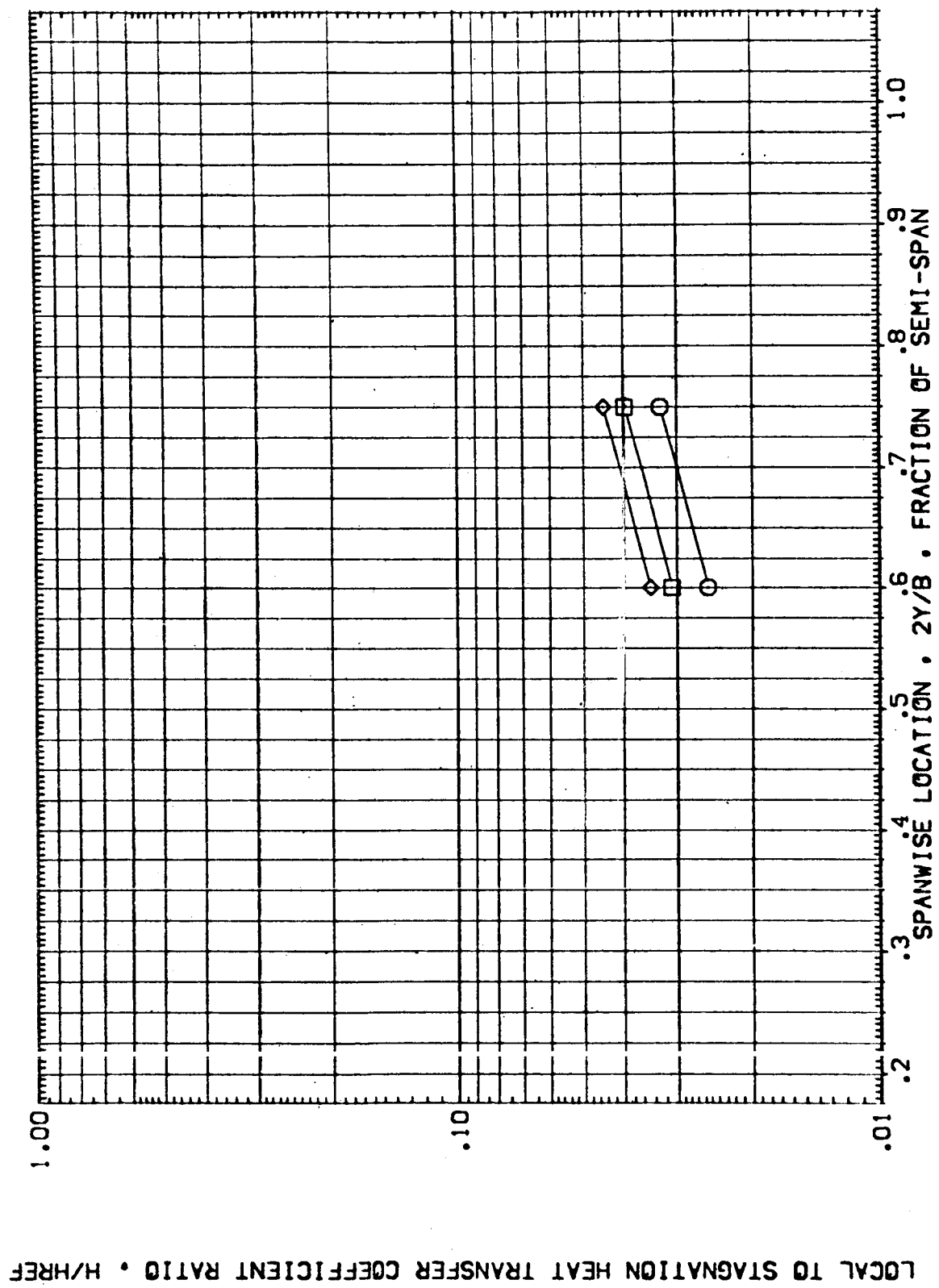


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .800

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT
 {RE1607} ARC 3.5-178 IH3 ORBITER .000 .000 5.000 1.000
 {AE1607} ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .900
 {BE1607} ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .850

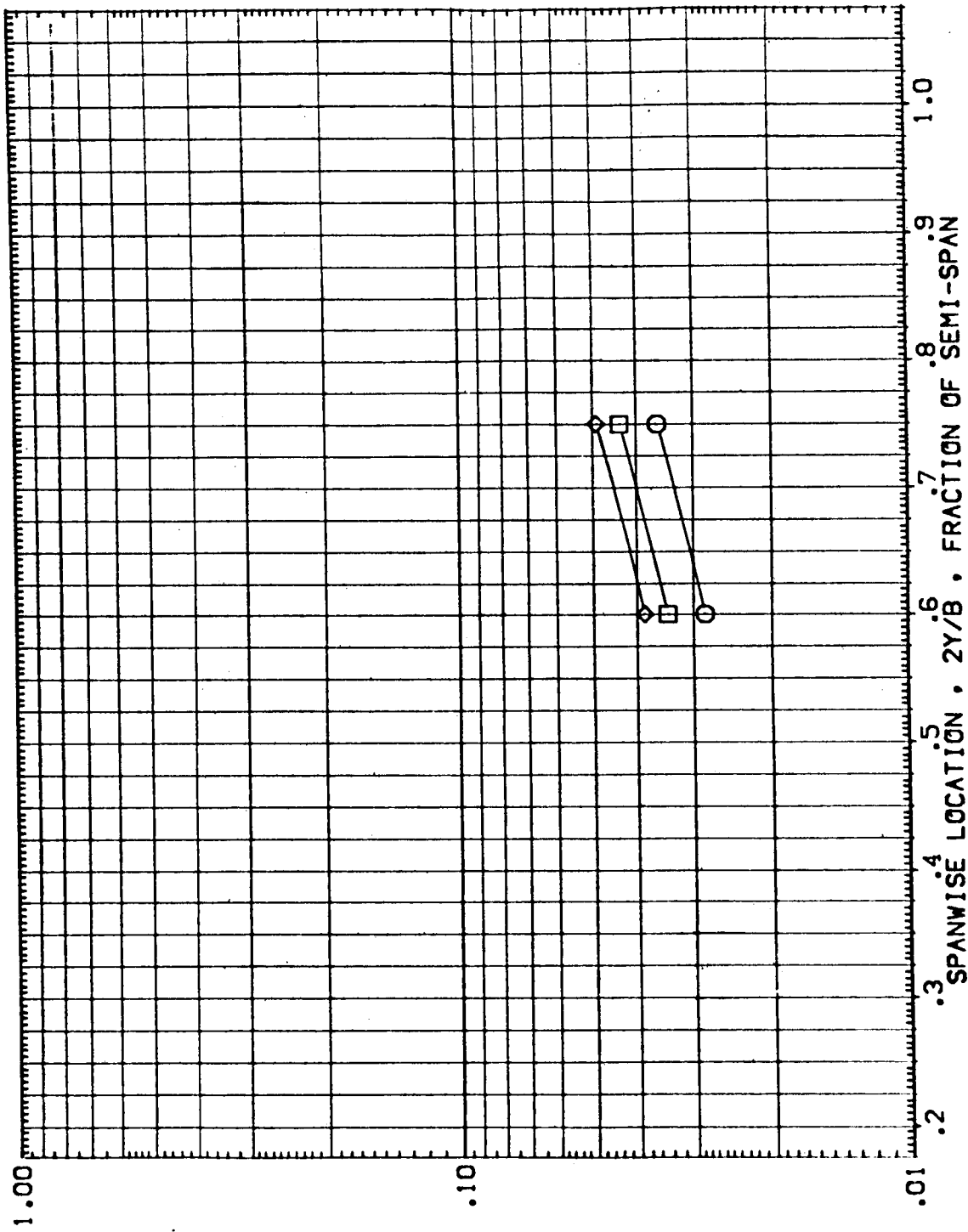


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .850



DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RN/L HAV/HT
 [REIG07] ARC 1.5-178 I-43 ORBITER VING BOTTOM .000 .000 5.000 1.000
 [AEIG07] ARC 1.5-178 I-43 ORBITER VING BOTTOM .000 .000 5.000 .900
 [BEIG07] ARC 1.5-178 I-43 ORBITER VING BOTTOM .000 .000 5.000 .850

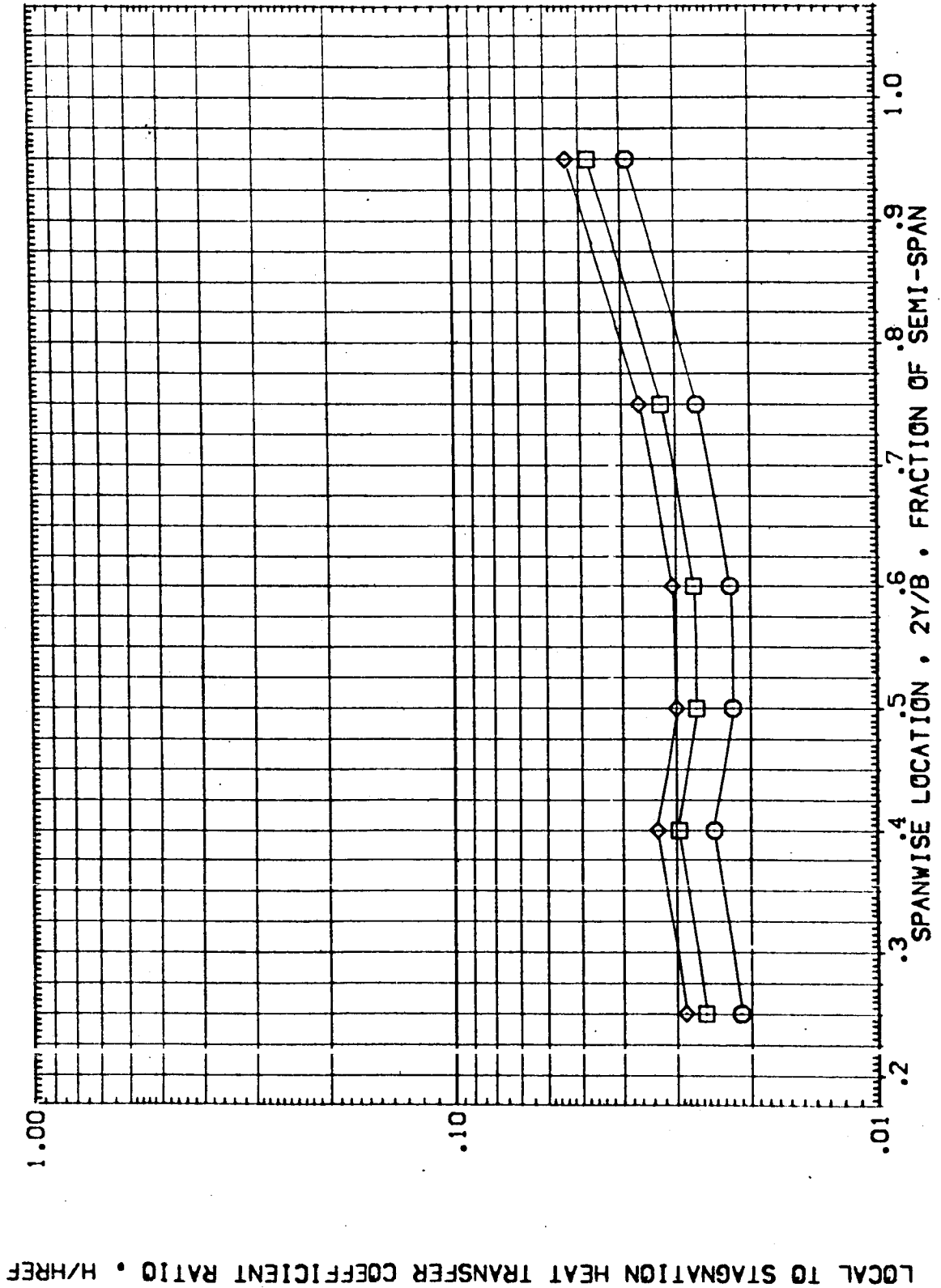


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

[RE|G08] ARC 3-5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 1.000

[AE|G08] ARC 3-5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .900

[BE|G08] ARC 3-5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .850

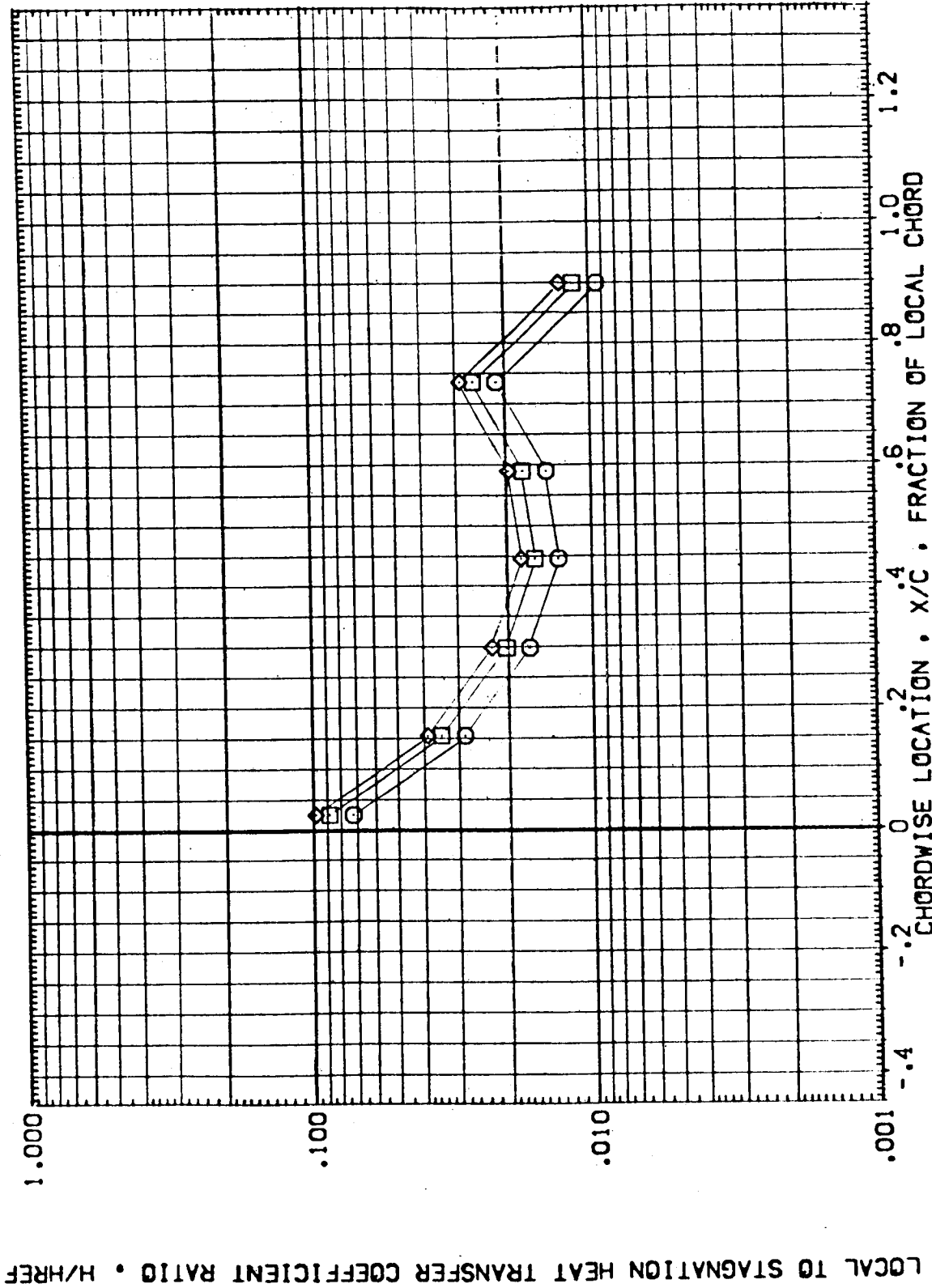


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .250

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT
 {REIGOB} ARC 1.5-178 H3 ORBITER (TRIPS) WING BOTTOM .000 .000 1.500 1.000
 {AEIGOB} ARC 1.5-178 H3 ORBITER (TRIPS) WING BOTTOM .000 .000 1.500 .500
 {BEIGOB} ARC 1.5-178 H3 ORBITER (TRIPS) WING BOTTOM .000 .000 1.500 .850

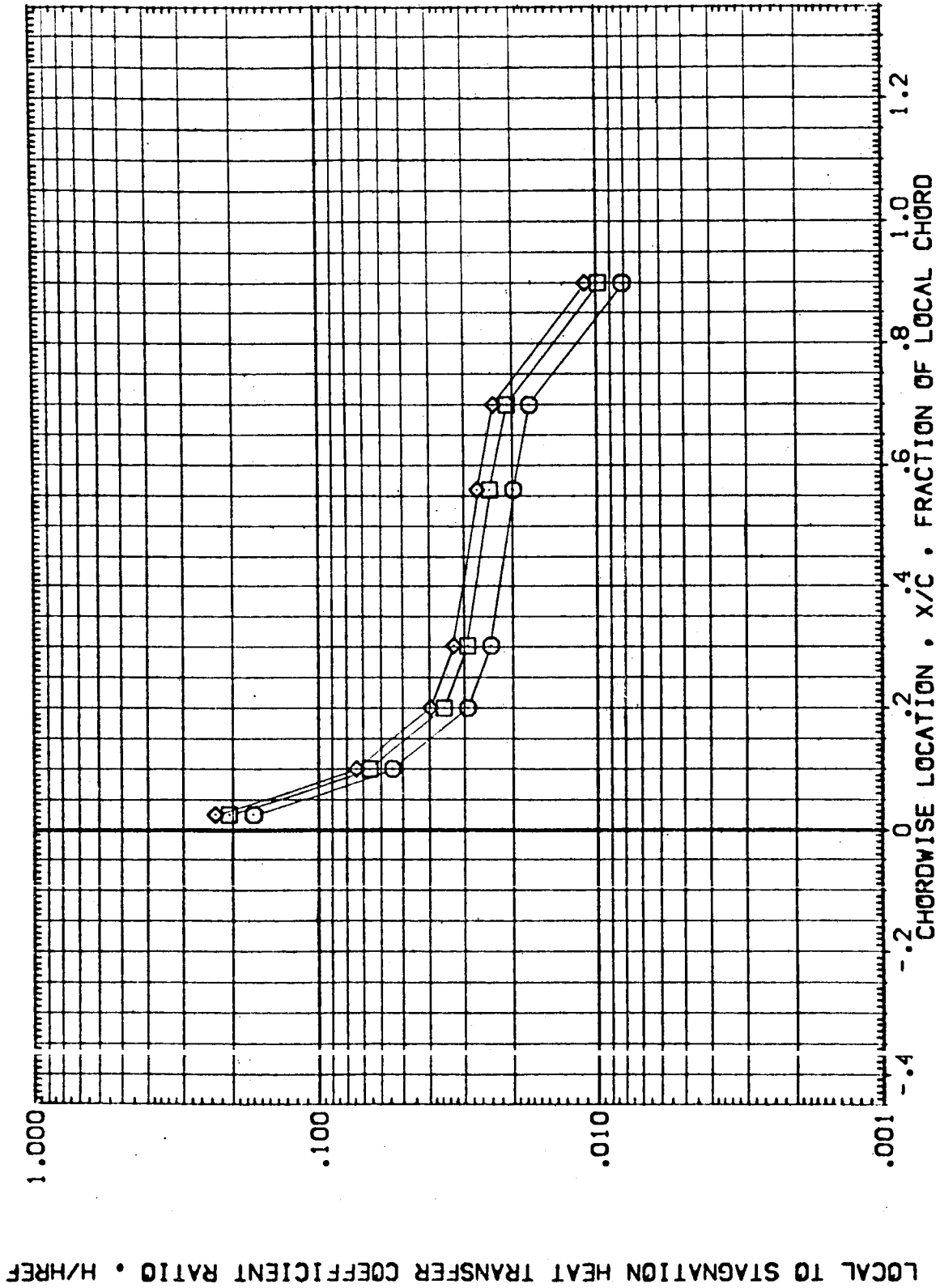


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT
 {REIGOB} ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 1.000
 {AEIGOB} ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .900
 {BEIGOB} ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .850

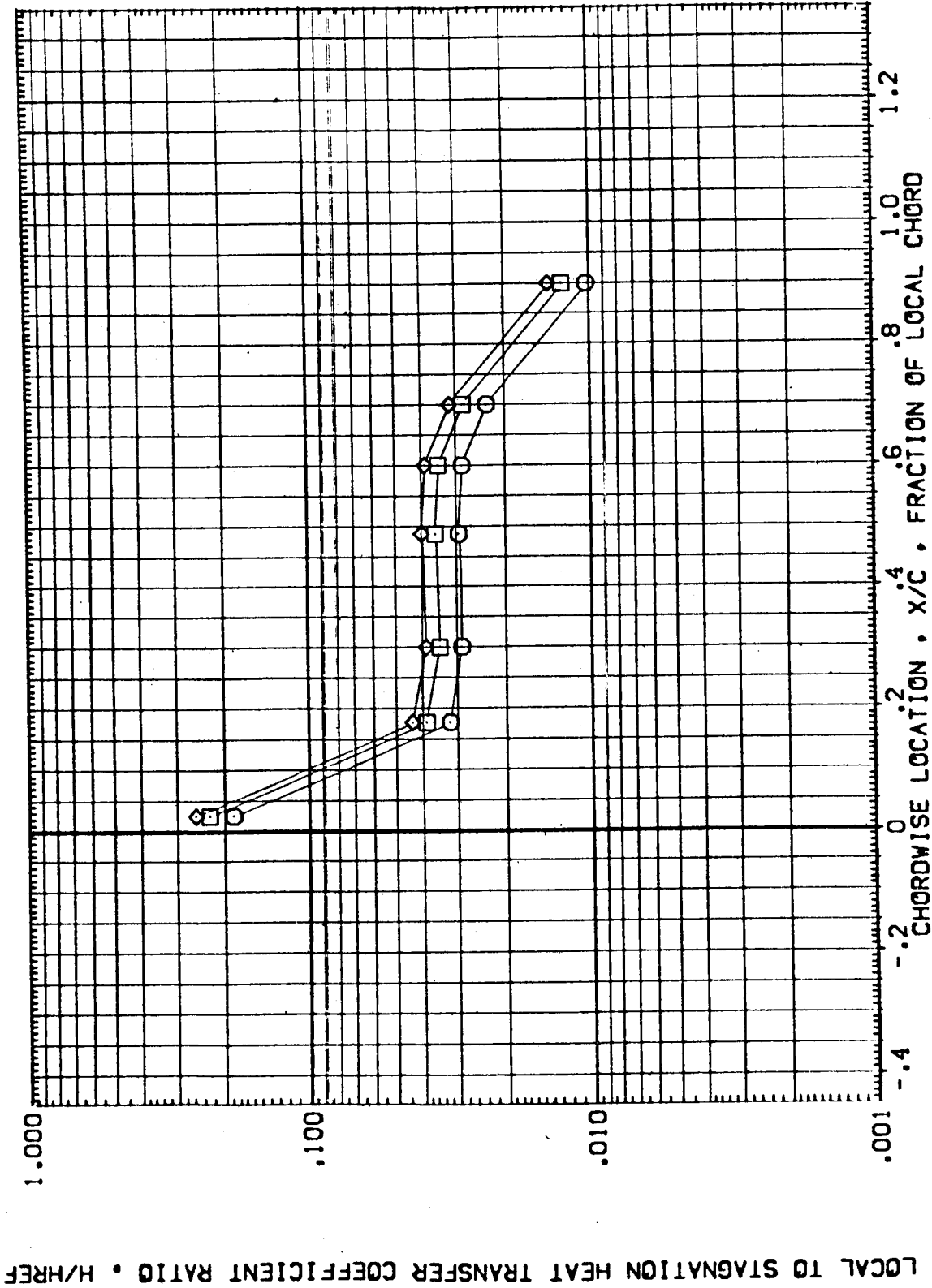


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .500



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

{BE|G08} ARC 1.5-178 I-3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 1.000

{AL|G08} ARC 1.5-178 I-3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .900

{BE|G08} ARC 1.5-178 I-3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .850

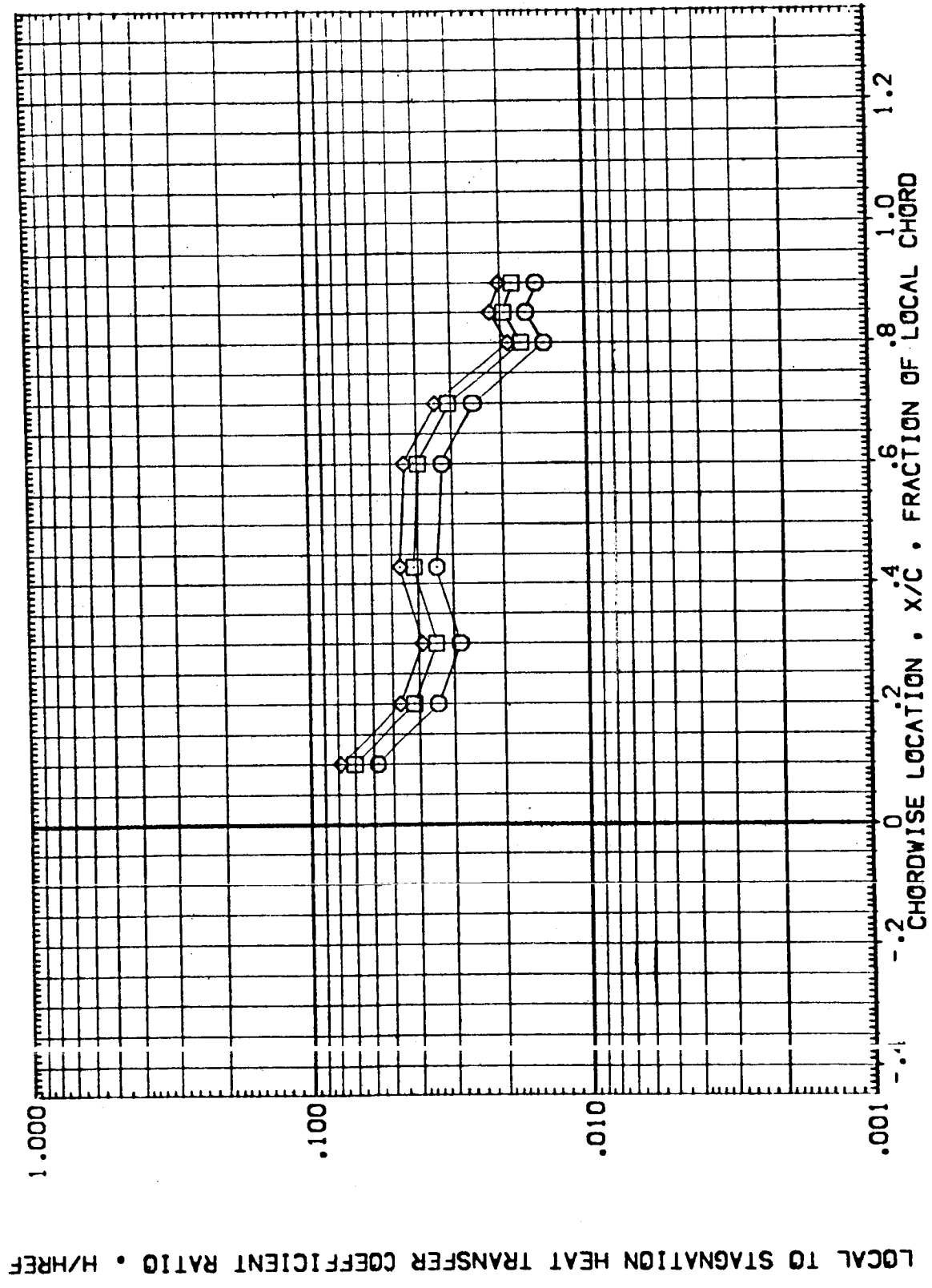


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.310 2Y/B = .600

DATA SET SYMBO. CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (RE) (G08) (AE) (G08) (BE) (G08) ARC 3.5-178 (H3 ORBITER (TRIPS) (VING BOTTOM) .000 .000 1.500 1.000
 (AE) (G08) (BE) (G08) ARC 3.5-178 (H3 ORBITER (TRIPS) (VING BOTTOM) .000 .000 1.500 .900
 (AE) (G08) (BE) (G08) ARC 3.5-178 (H3 ORBITER (TRIPS) (VING BOTTOM) .000 .000 1.500 .850

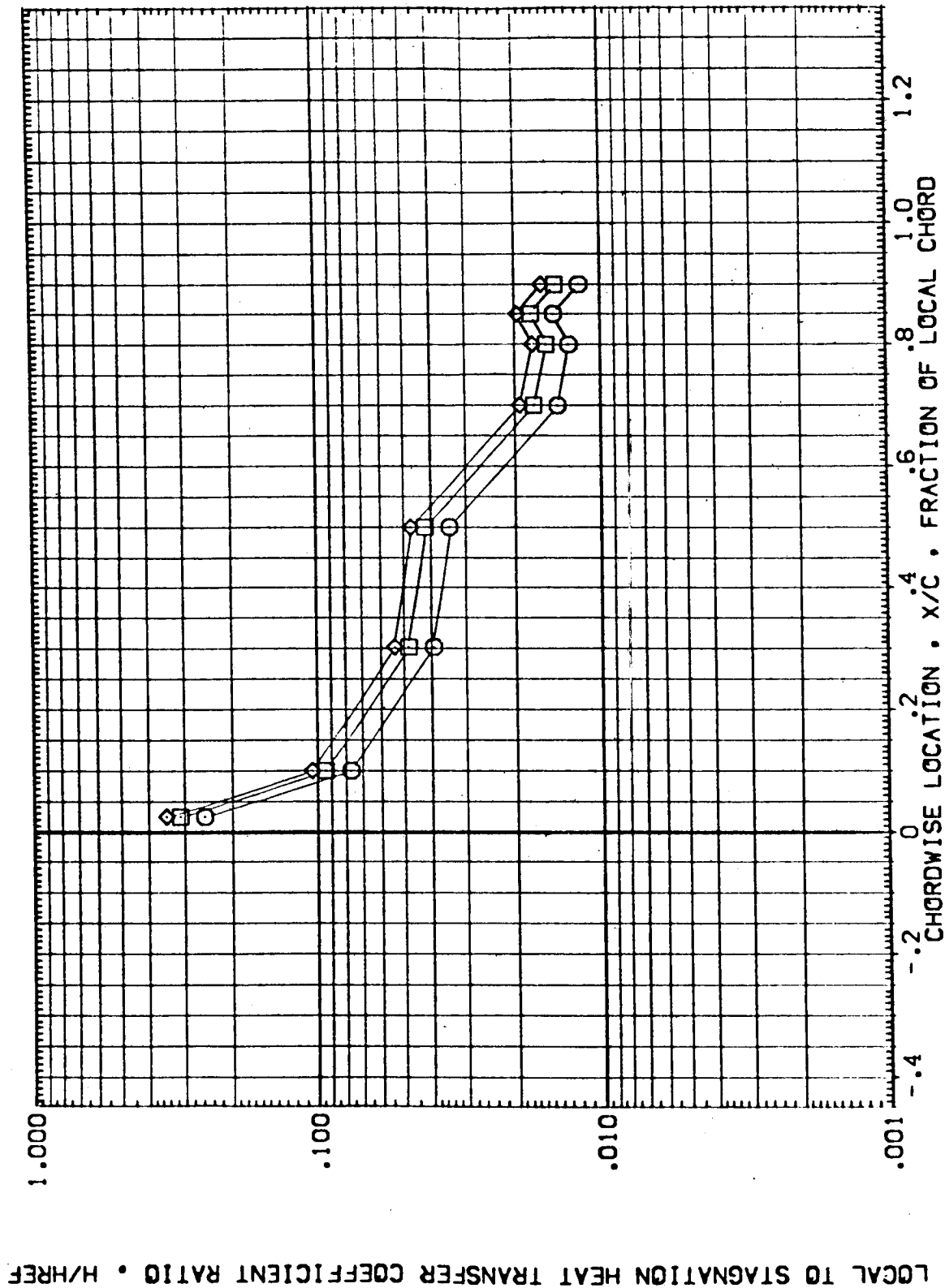


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .750



DATA SET SYMBOL CD CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

{RE|G08} ARC 3.5-178 I-H3 ORBITER (TRIPS) WING BOTTOM .000 .000 1.500 1.000

{AE|G08} ARC 3.5-178 I-H3 ORBITER (TRIPS) WING BOTTOM .000 .000 1.500 .900

{BE|G08} ARC 3.5-178 I-H3 ORBITER (TRIPS) WING BOTTOM .000 .000 1.500 .850

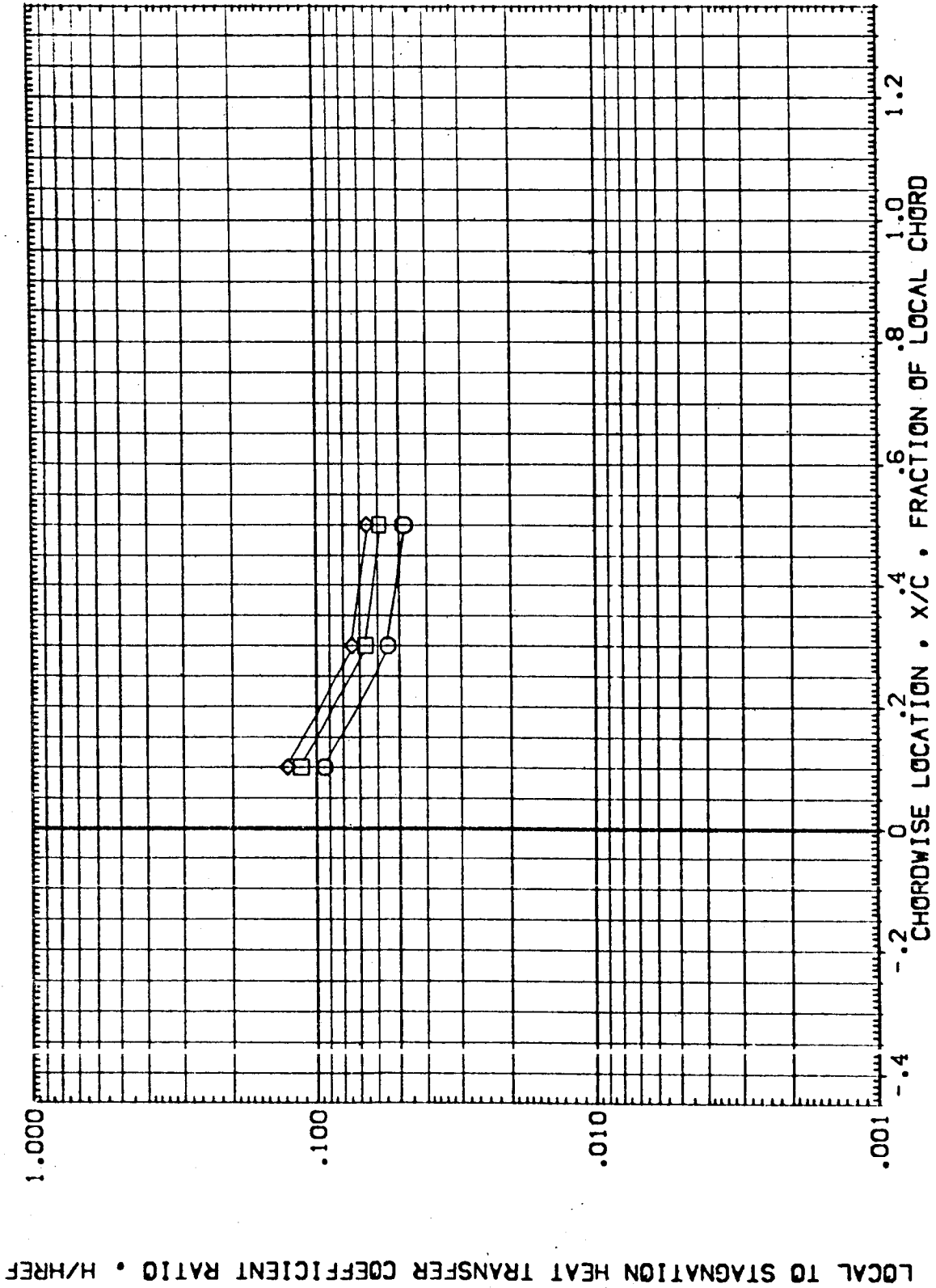


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT
 {RE|G08} ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 1.000
 {AE|G08} ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .900
 {BE|G08} ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .850

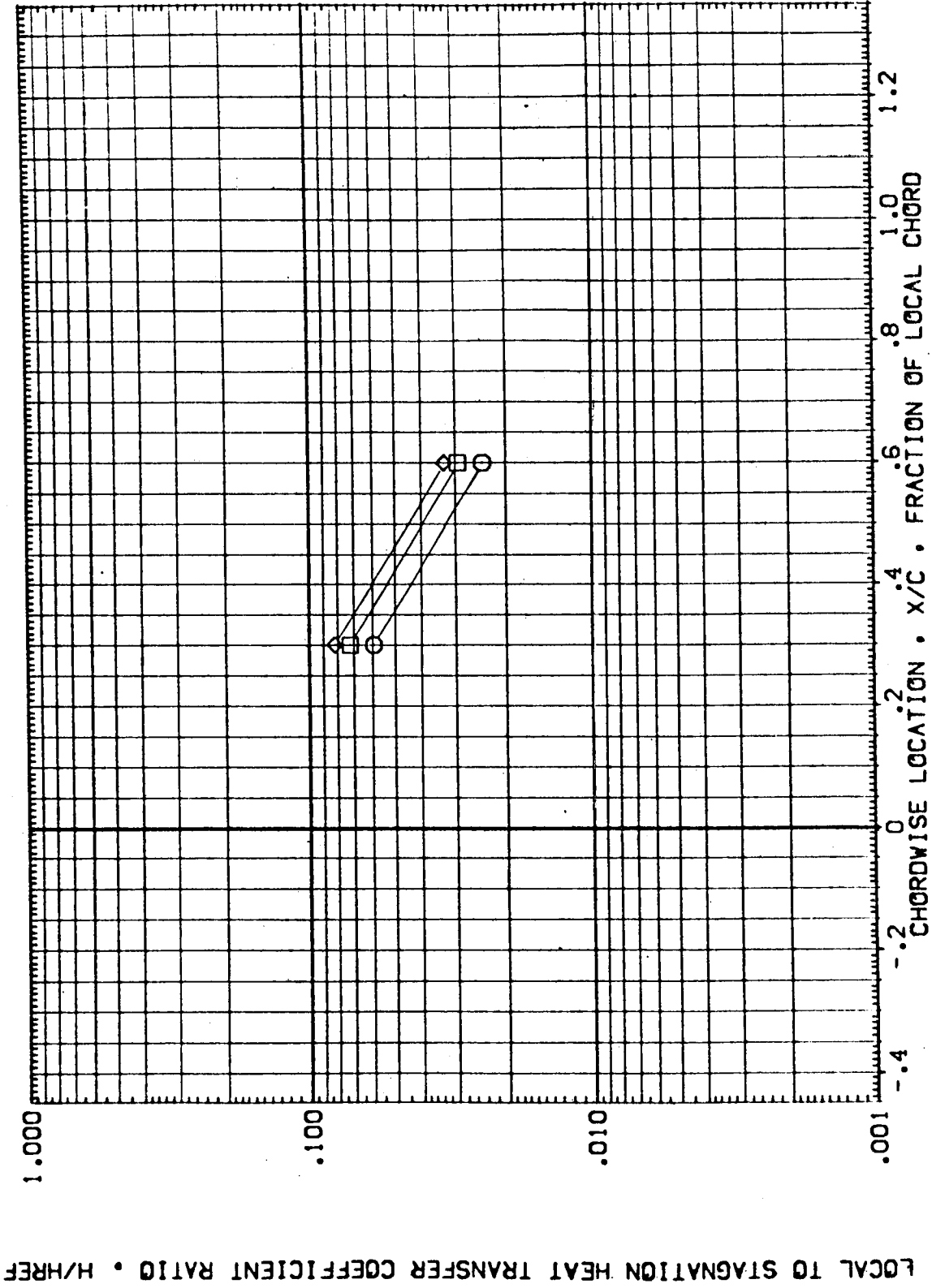


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .900



DATA SET SYMBOL CONFIGURATION DESCRIPTION HAV/HT
 [RE|GOB] ARC 3.5-178 H3 ORBITER (TRIPS) WING BOTTOM 1.000
 [AE|GOB] ARC 3.5-178 H3 ORBITER (TRIPS) WING BOTTOM .500
 [BE|GOB] ARC 3.5-178 H3 ORBITER (TRIPS) WING BOTTOM .850

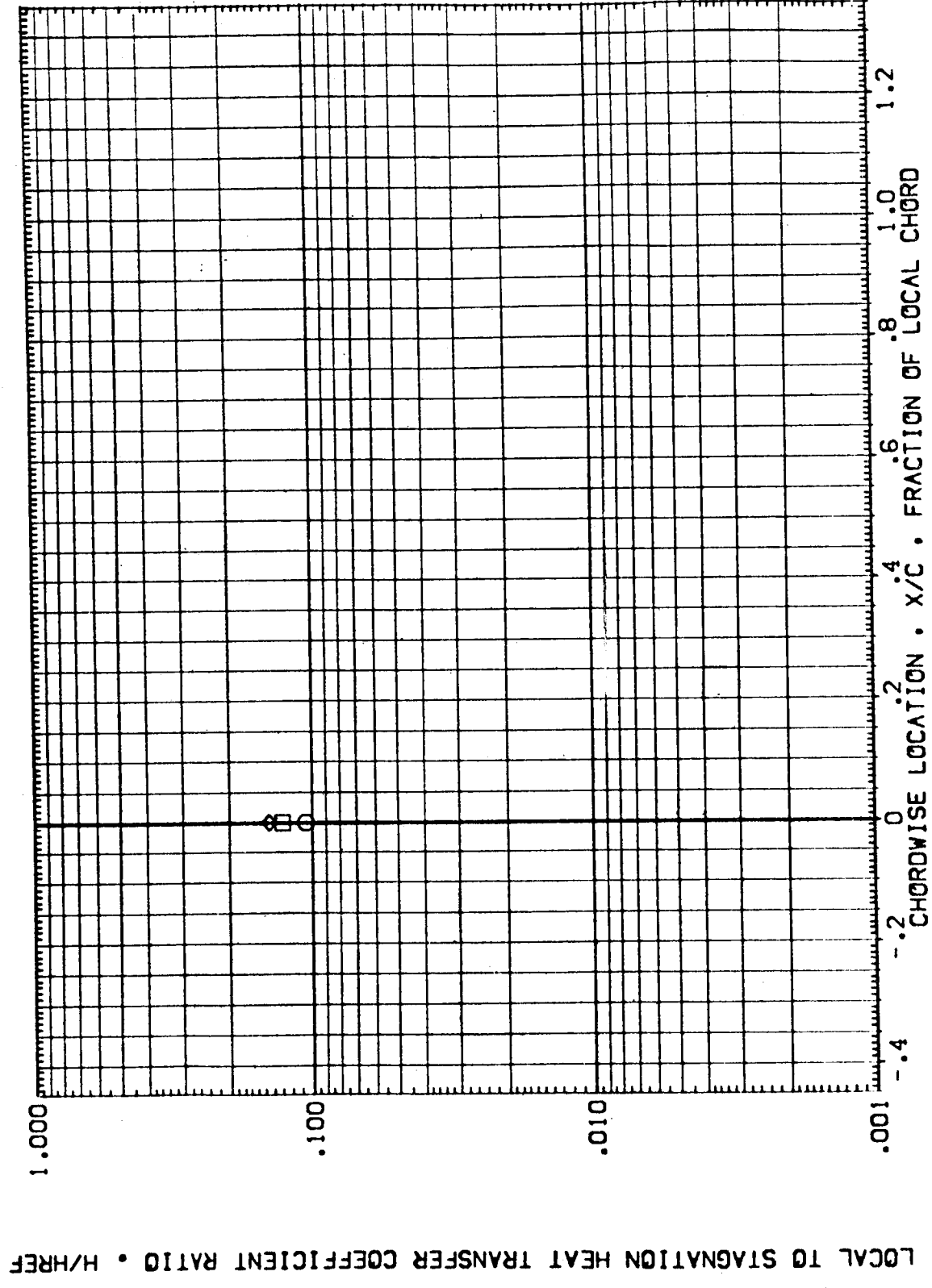


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .966

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{ RE | G08 } ○ ARC 3.5-178 IH3 ORBITER (TRIPS) VING BOTTOM .000 .000 1.500 1.000

{ AE | G08 } ○ ARC 3.5-178 IH3 ORBITER (TRIPS) VING BOTTOM .000 .000 1.500 .900

{ BE | G08 } ○ ARC 3.5-178 IH3 ORBITER (TRIPS) VING BOTTOM .000 .000 1.500 .850

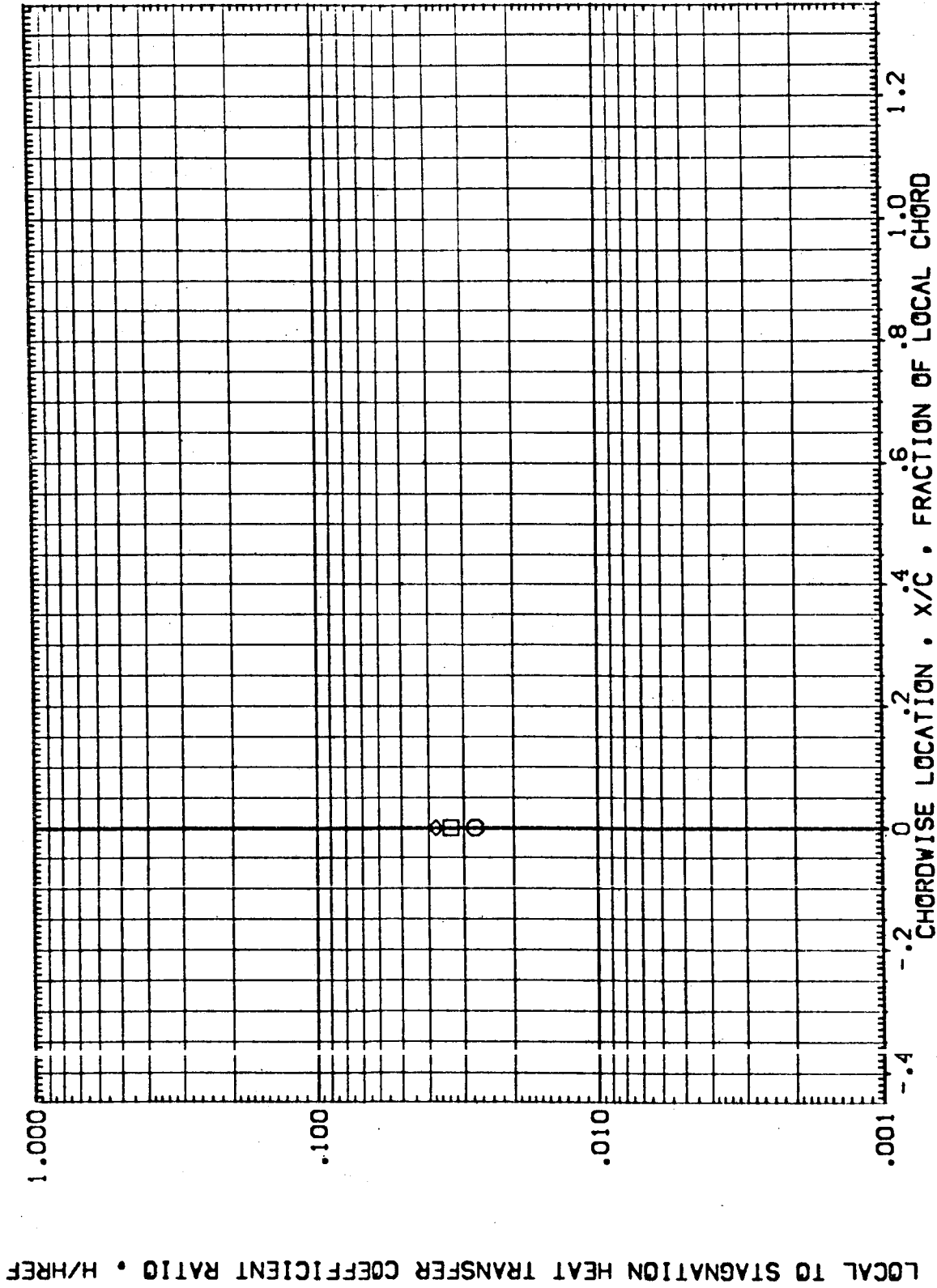


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .993

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

{RE|G08} ARC 3.5-178 I43 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 1.000

{AE|G08} ARC 3.5-178 I43 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .900

{BE|G08} ARC 3.5-178 I43 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .850

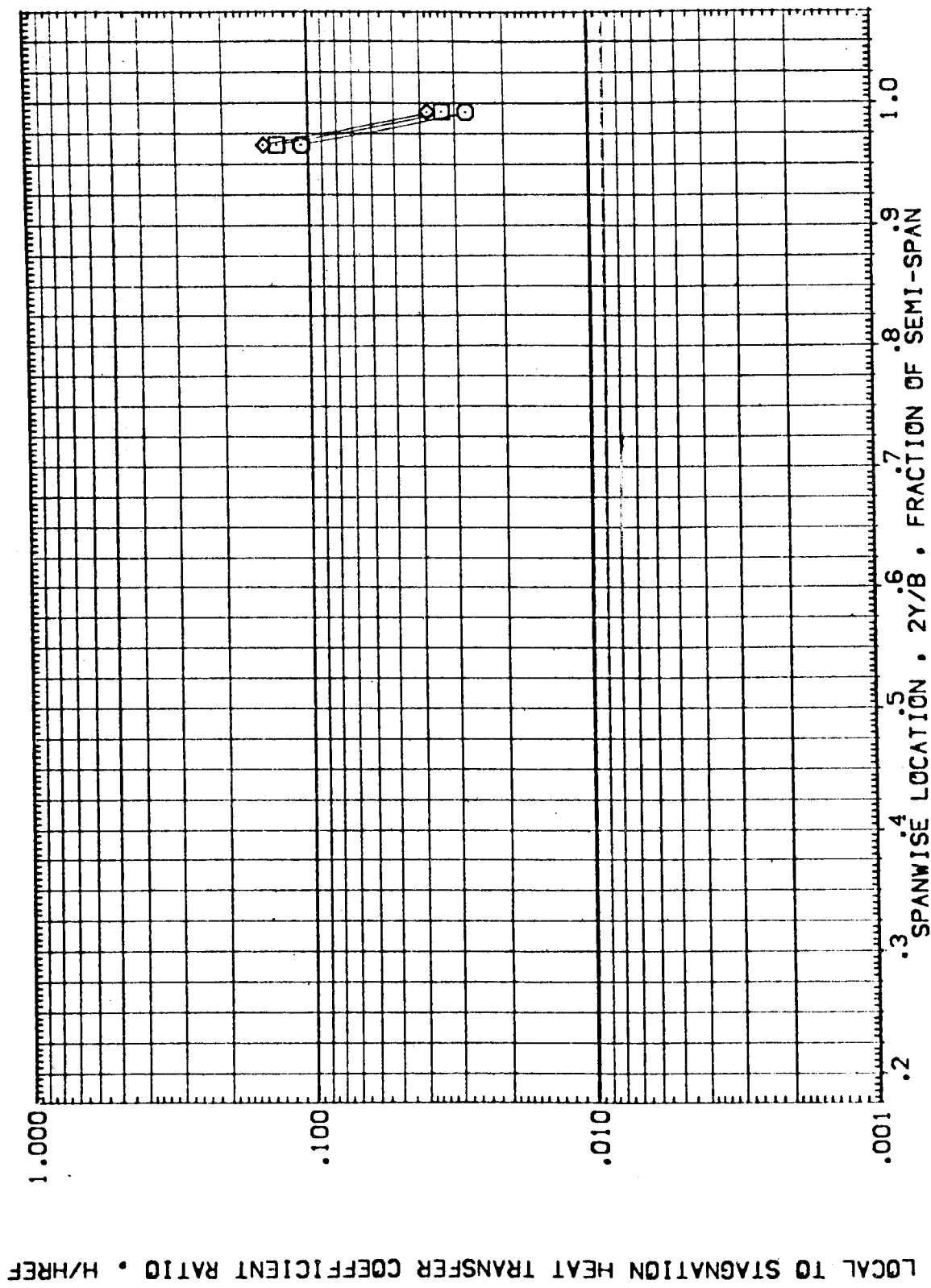


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .000



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{ REIGOB } ARC 1.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 1.500 1.000

{ AEIGOB } ARC 1.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 1.500 .900

{ BEIGOB } ARC 1.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 1.500 .850

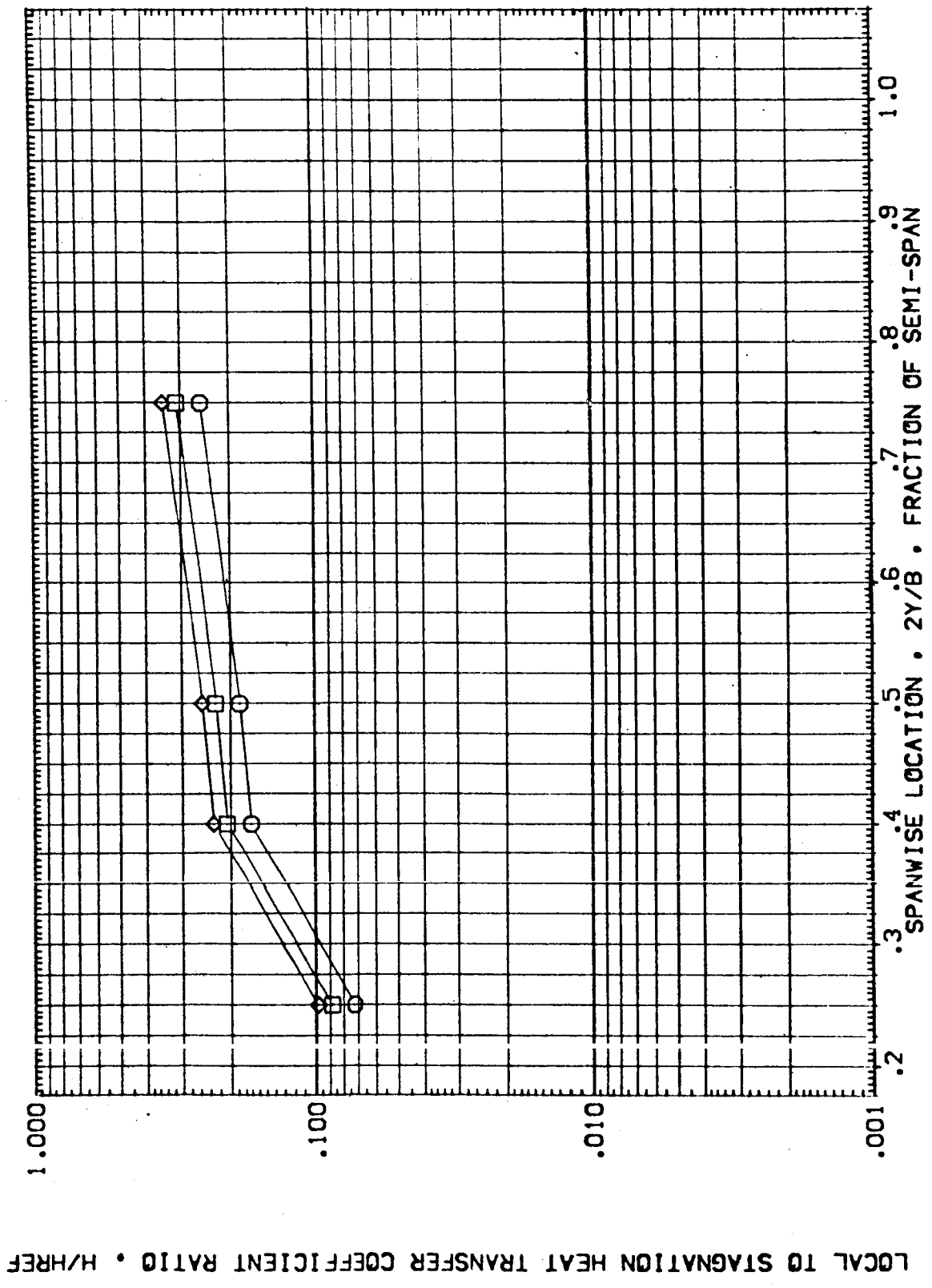


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .025

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RNU/L HAV/HT
 {RE|G08} [RE|G08] ARC 3.5-178 [H3 ORB] TER (TRIPS) WING BOTTOM .000 .000 1.500 1.000
 {AE|G08} [AE|G08] ARC 3.5-178 [H3 ORB] TER (TRIPS) WING BOTTOM .000 .000 1.500 .900
 {BE|G08} [BE|G08] ARC 3.5-178 [H3 ORB] TER (TRIPS) WING BOTTOM .000 .000 1.500 .850

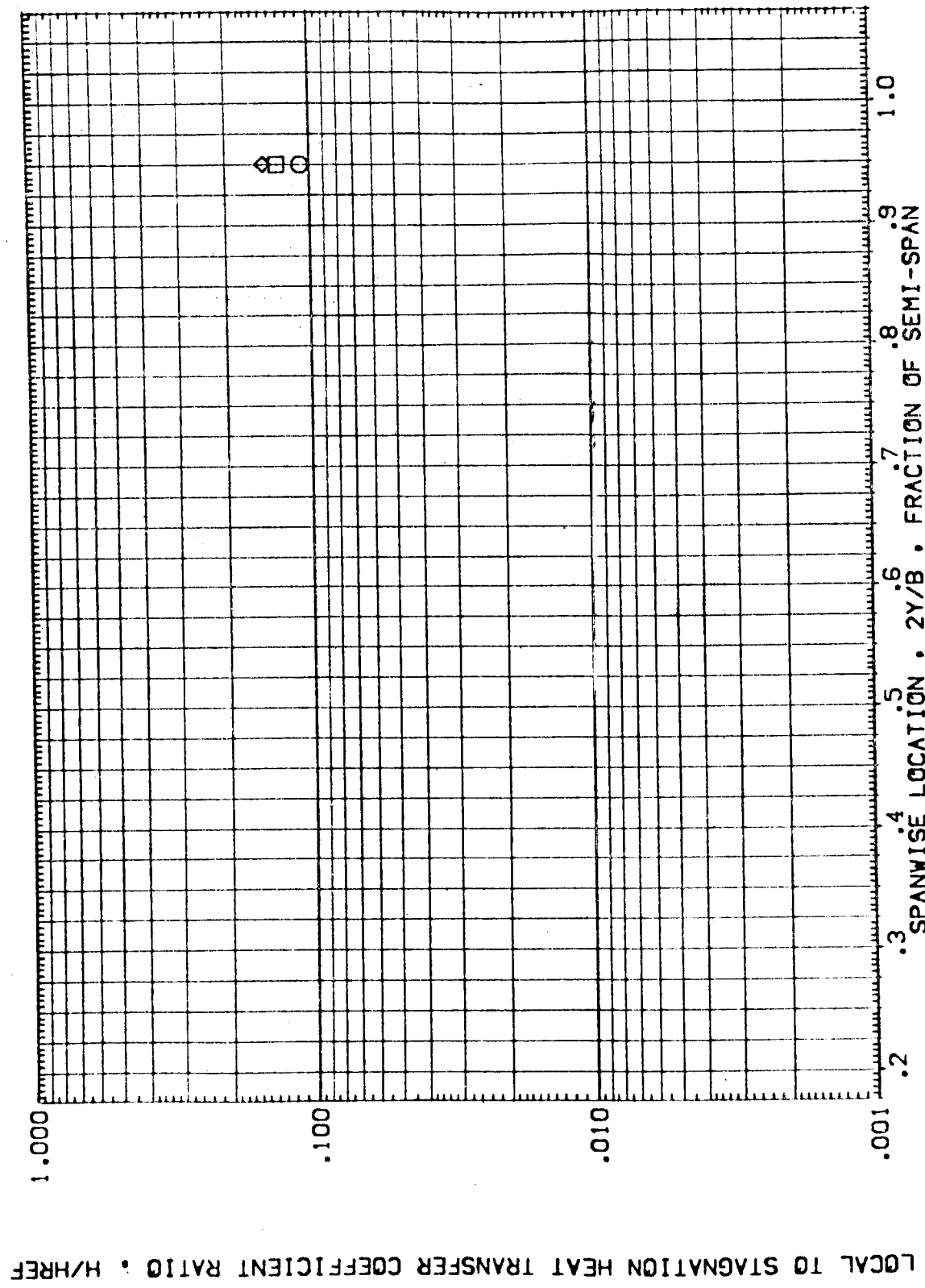


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .050



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE[G08]) ARC 1.5-178 H3 ORBITER (TRIP) SURF BOTTOM .000 .000 1.500 1.000

(AE[G08]) ARC 1.5-178 H3 ORBITER (TRIP) SURF BOTTOM .000 .000 1.500 .900

(BE[G08]) ARC 1.5-178 H3 ORBITER (TRIP) SURF BOTTOM .000 .000 1.500 .850

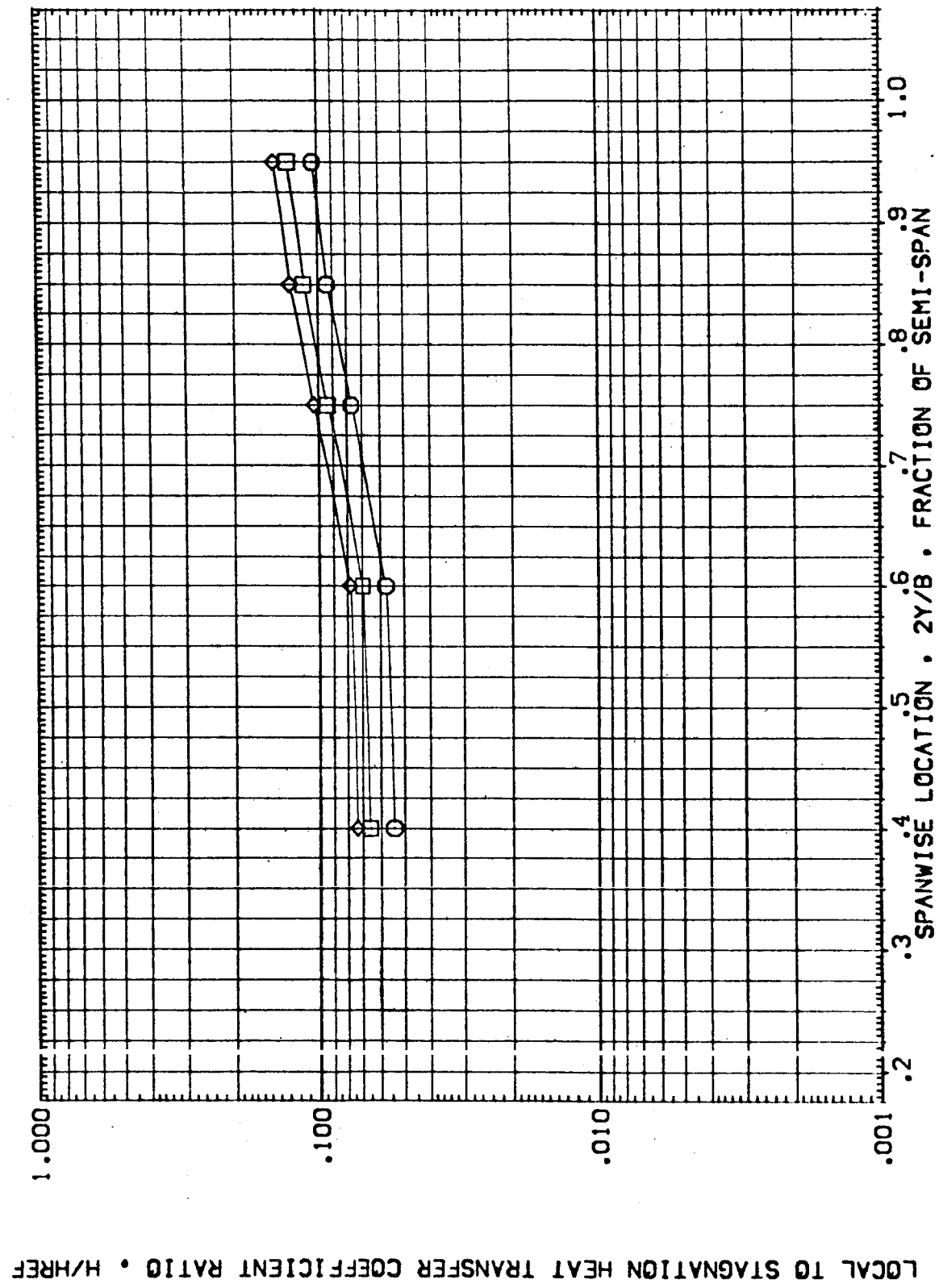


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (REIGOB) (REIGOB) ARC 3.5-178 143 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 1.000
 (AEIGOB) (AEIGOB) ARC 3.5-178 143 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .900
 (BEIGOB) (BEIGOB) ARC 3.5-178 143 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .850

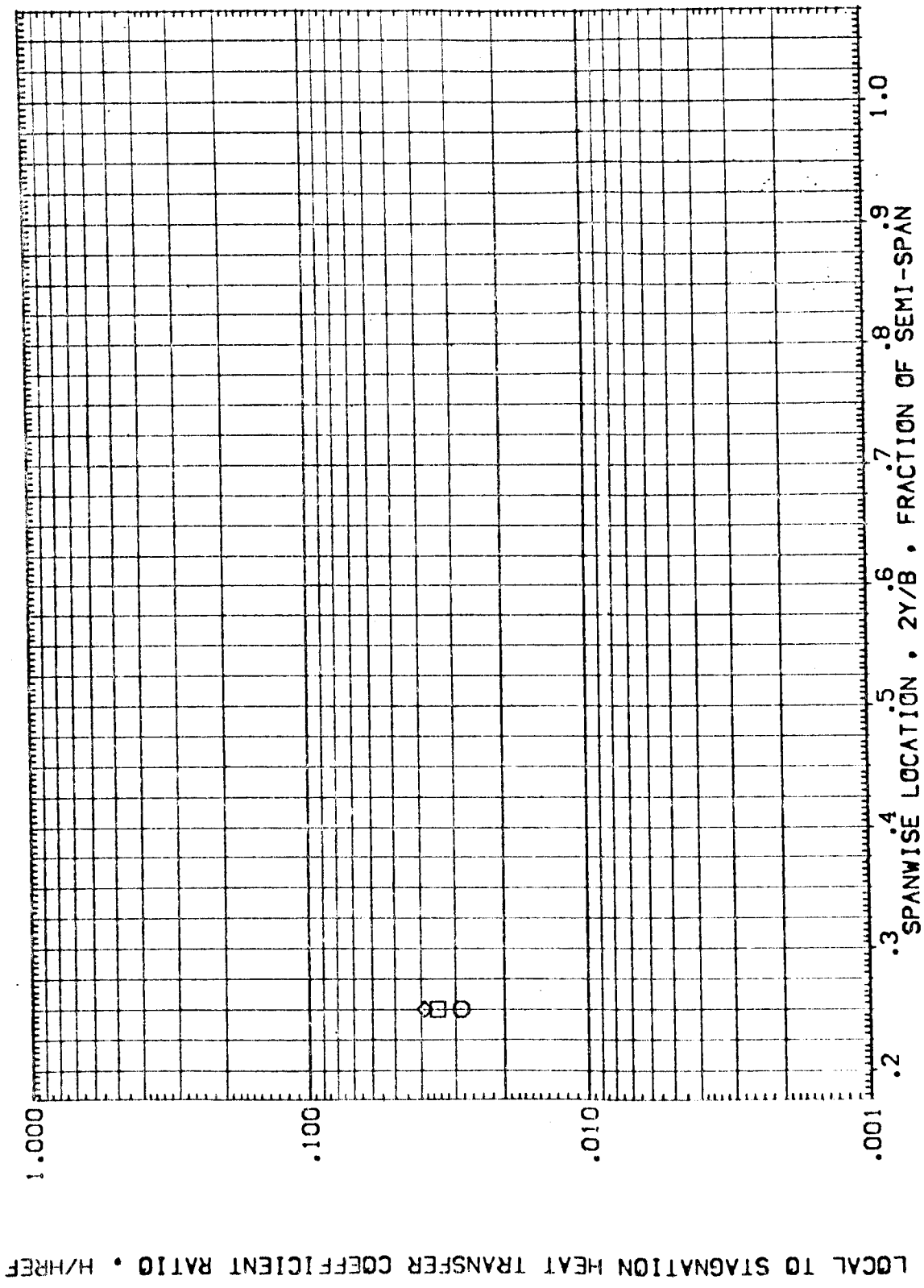


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .153



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE|GOB} ◊ ARC .5-178 I43 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 1.000

{AE|GOB} ◊ ARC .5-178 I43 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .900

{BE|GOB} ◊ ARC .5-178 I43 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .850

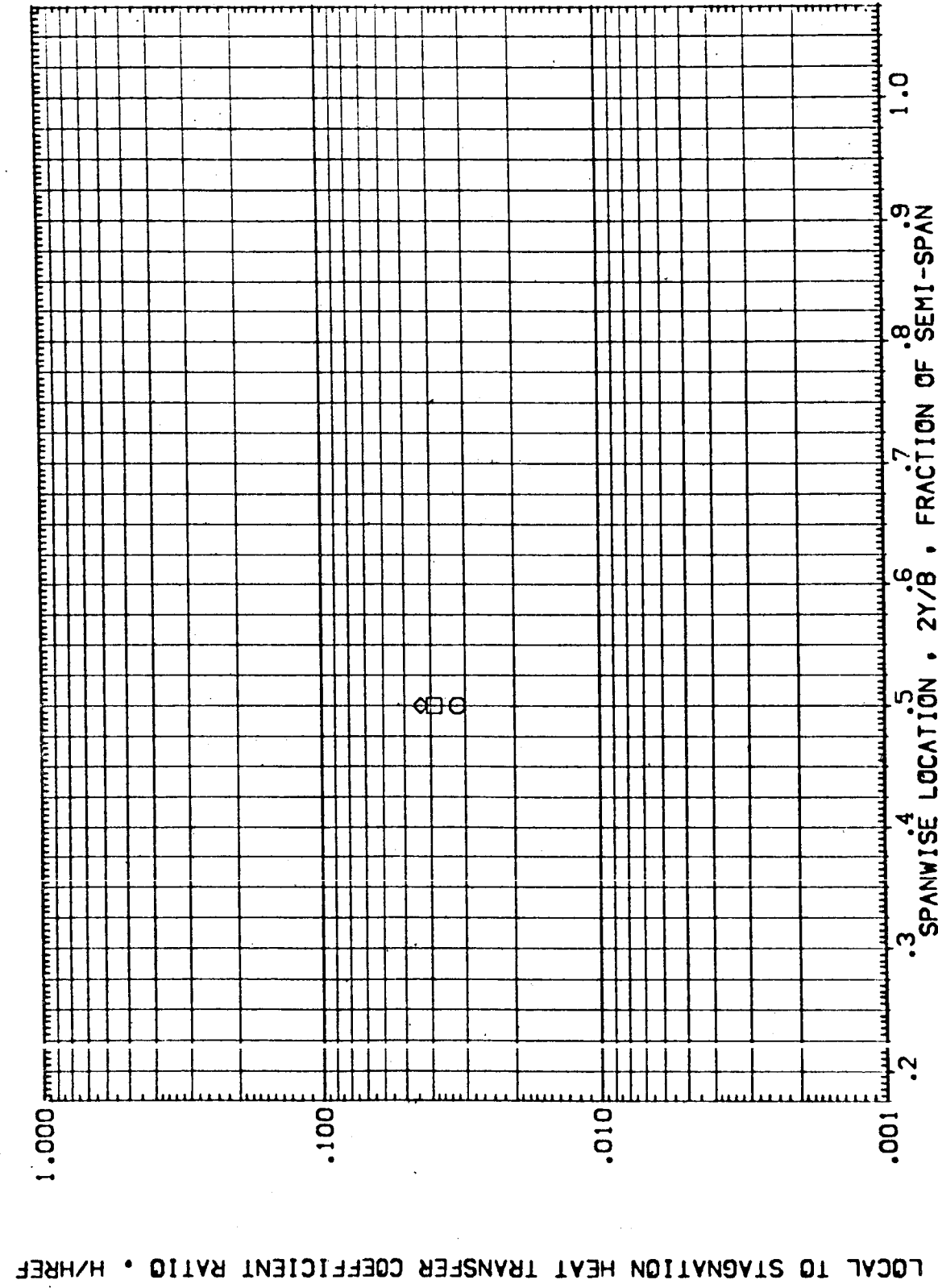


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .177

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

(AE|G08) ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 1.000

(BE|G08) ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .800

(BE|G08) ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .650

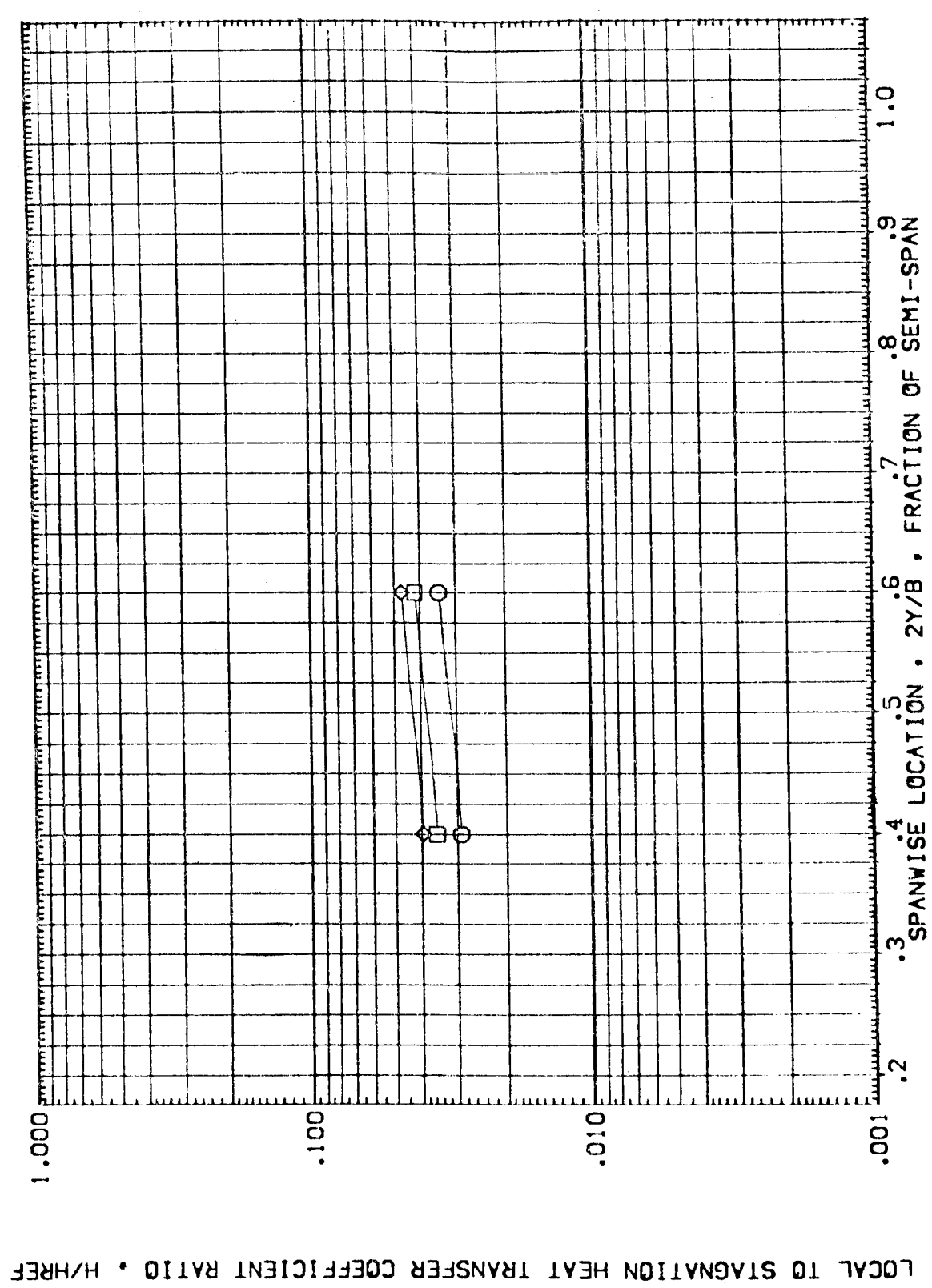


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .200



DATA SET SYMBOL. CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT
 (RE1008) (AE1008) (BE1008) ARC 3.5-178 H3 ORBITER (TRIP) SIVING BOTTOM .000 .000 1.500 1.000
 (RE1008) (AE1008) (BE1008) ARC 3.5-178 H3 ORBITER (TRIP) SIVING BOTTOM .000 .000 1.500 .900
 (RE1008) (AE1008) (BE1008) ARC 3.5-178 H3 ORBITER (TRIP) SIVING BOTTOM .000 .000 1.500 .850

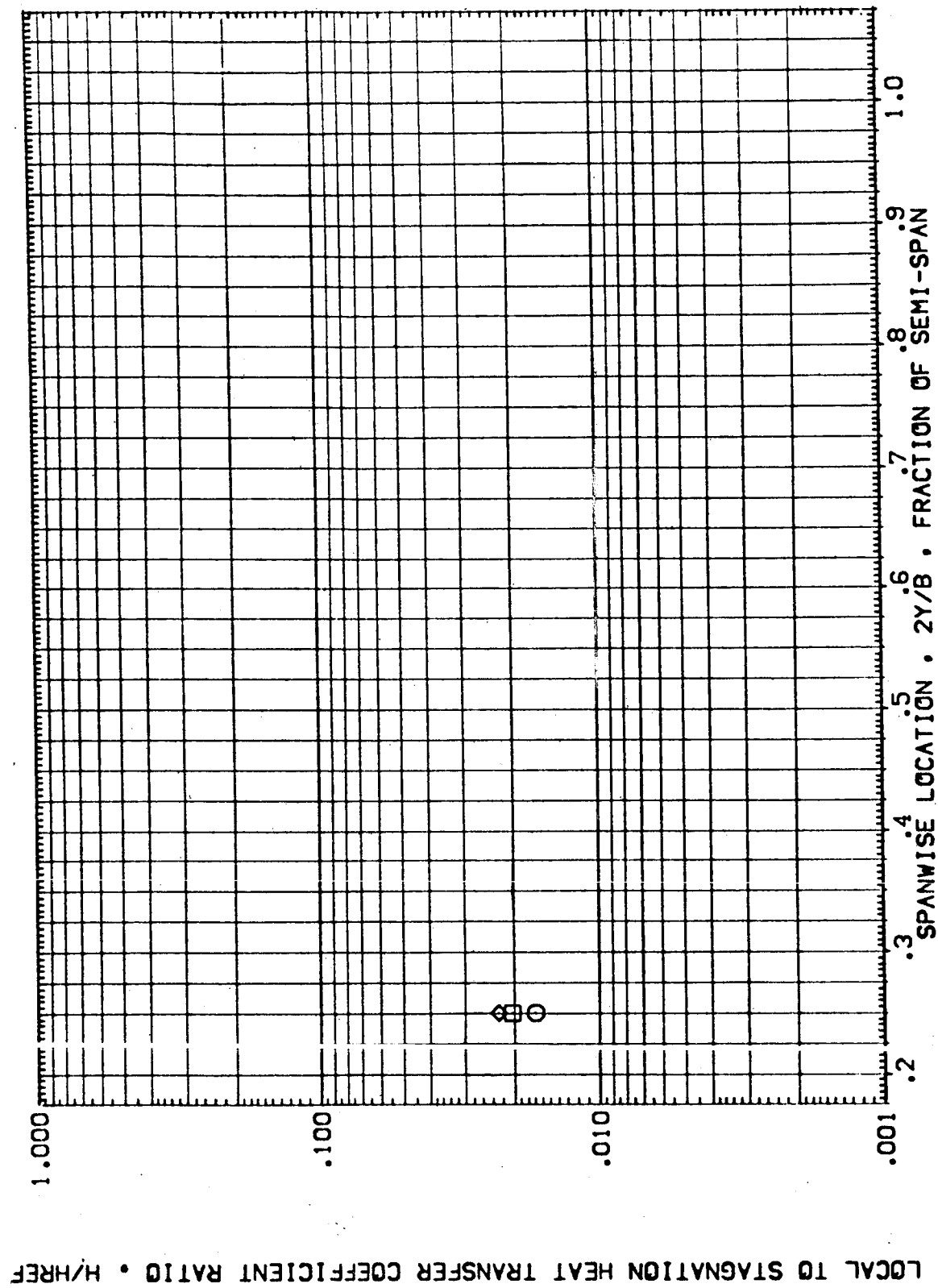


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .299

DATA SET SYMBOL

CONFIGURATION DESCRIPTION

ALPHA BETA RV/L HAV/HT

{RE|G08}
{AE|G08}
{BE|G08}

ARC 3.5-178 |H3 ORBITER |TR|PS|VING BOTTOM
ARC 3.5-178 |H3 ORBITER |TR|PS|VING BOTTOM
ARC 3.5-178 |H3 ORBITER |TR|PS|VING BOTTOM

.000 .000 .500 1.000
.000 .000 .500 .900
.000 .000 .500 .850

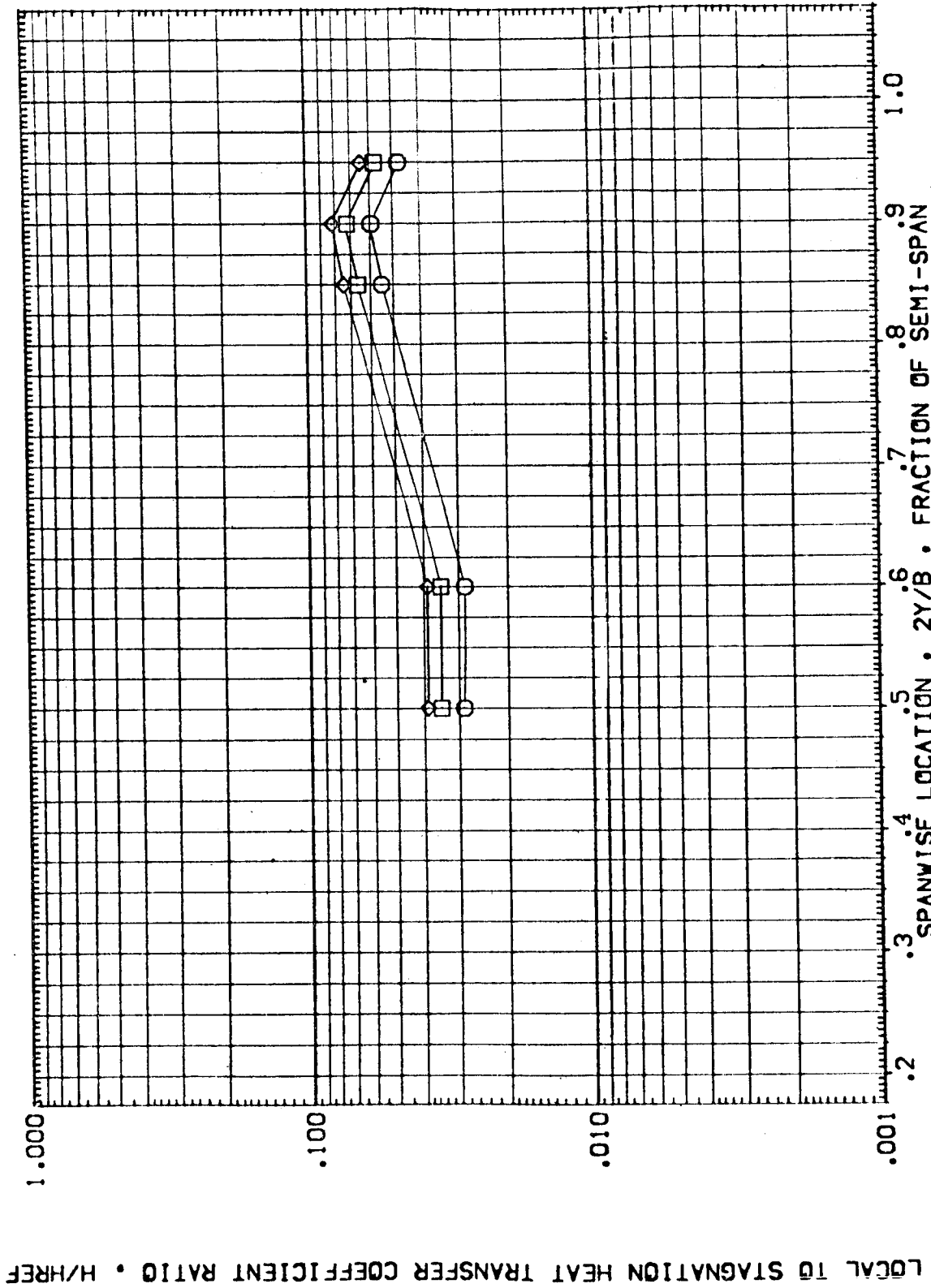


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .300



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE|G08} ◻ ARC 1.5-178 143 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 1.000

{AE|G08} ◻ ARC 1.5-178 143 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .900

{BE|G08} ◻ ARC 1.5-178 143 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .850

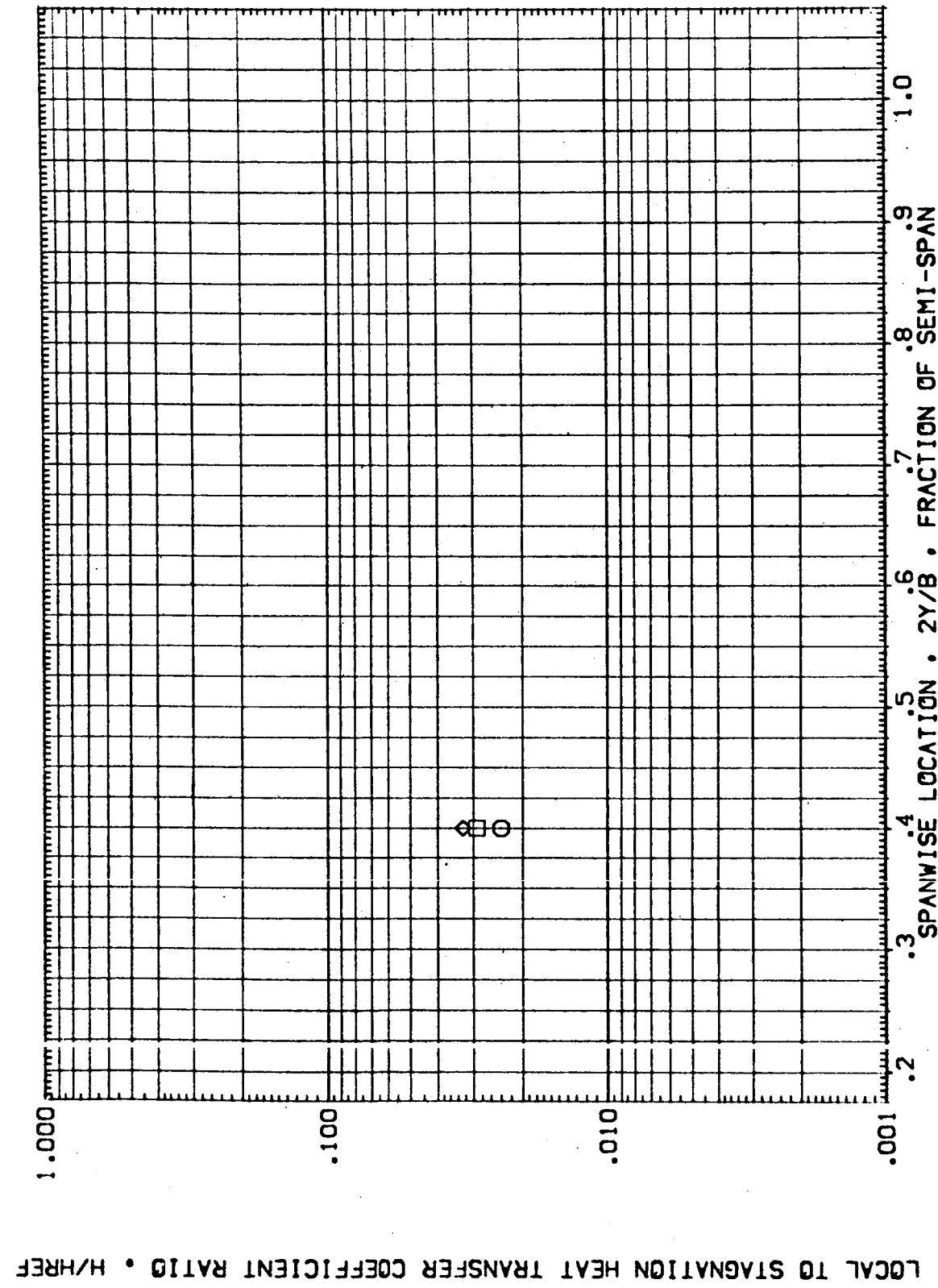


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.302 X/C = .302

DATA SET SYMBO. CONFIGURATION DESCRIPTION
 [RE|G08] [AE|G08] [BE|G08] ARC 3.5-178 143 ORBITER (TRIPS)WING BOTTOM
 [RE|G08] [AE|G08] [BE|G08] ARC 3.5-178 143 ORBITER (TRIPS)WING BOTTOM

ALPHA BETA RV/L HWV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

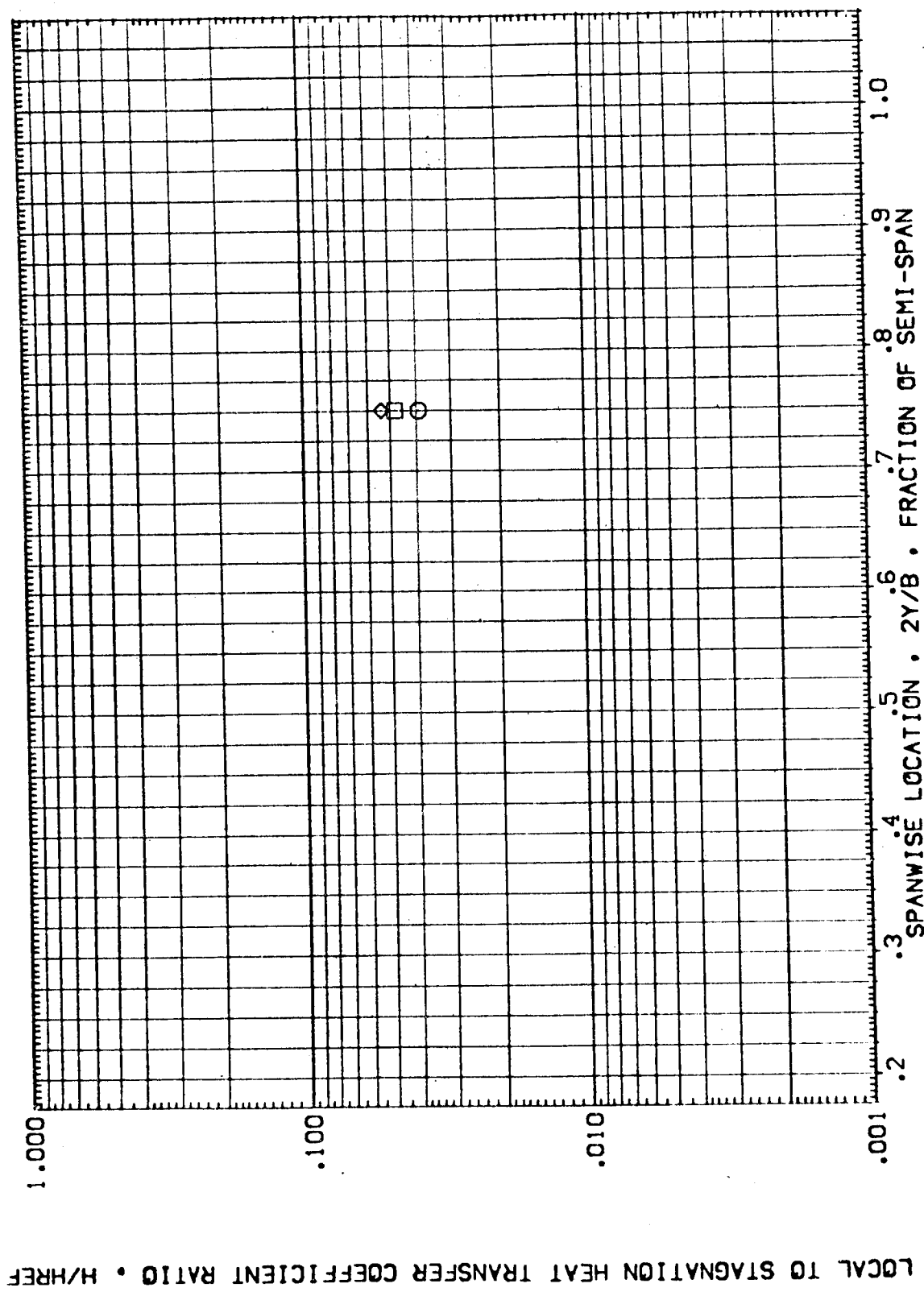


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .303



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(REIGOB)	ARC 3.5-178 IH3 ORBITER (TRIP) WING BOTTOM	.000	.000	1.500	1.000
(AEIGOB)	ARC 3.5-178 IH3 ORBITER (TRIP) WING BOTTOM	.000	.000	1.500	.900
(BEIGOB)	ARC 3.5-178 IH3 ORBITER (TRIP) WING BOTTOM	.000	.000	1.500	.650

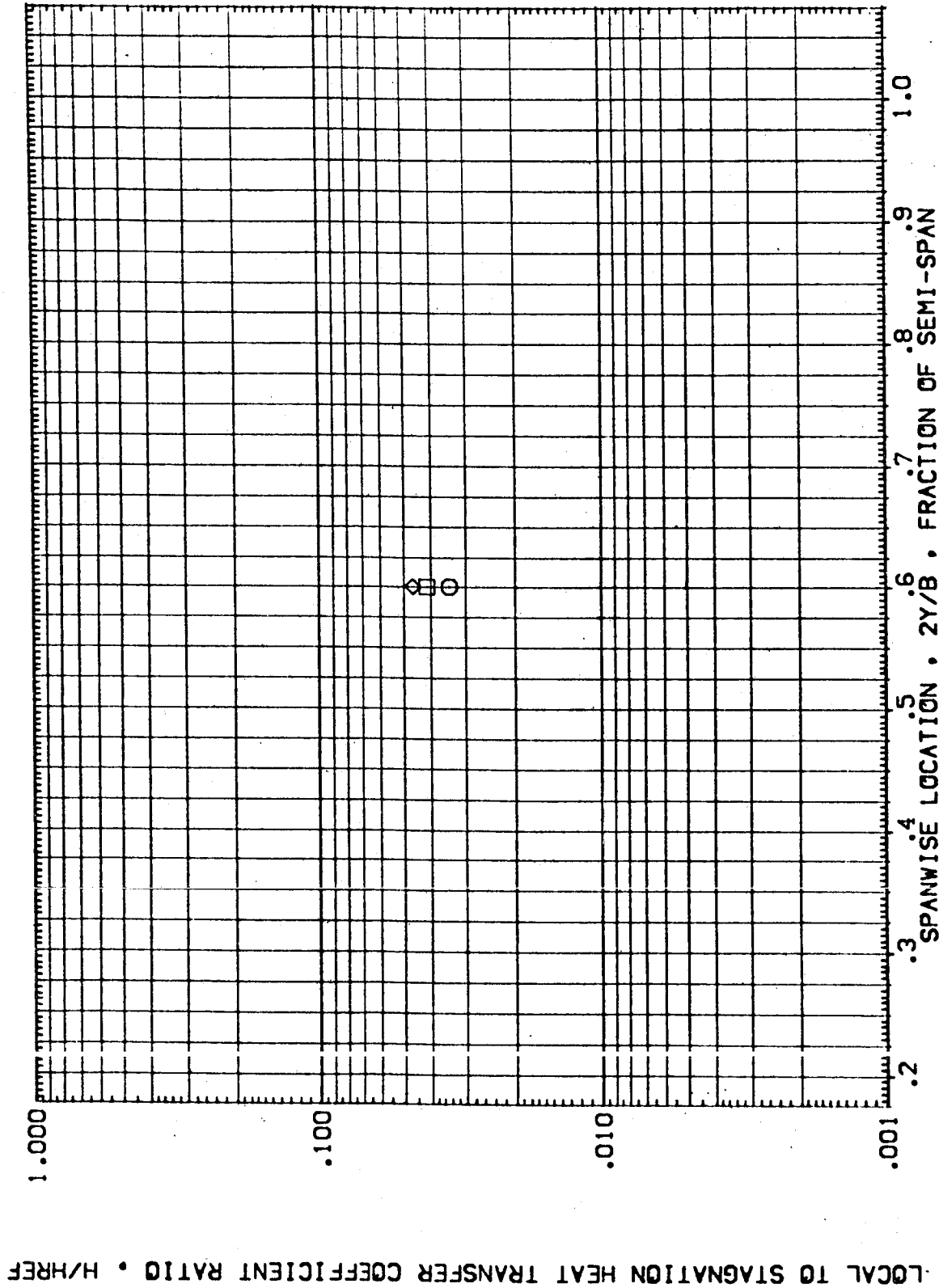


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .428

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA R/V/L HAV/HT

{RE|G08} ARC 3.5-178 |H3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 1.000

{AE|G08} ARC 3.5-178 |H3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .900

{BE|G08} ARC 3.5-178 |H3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .850

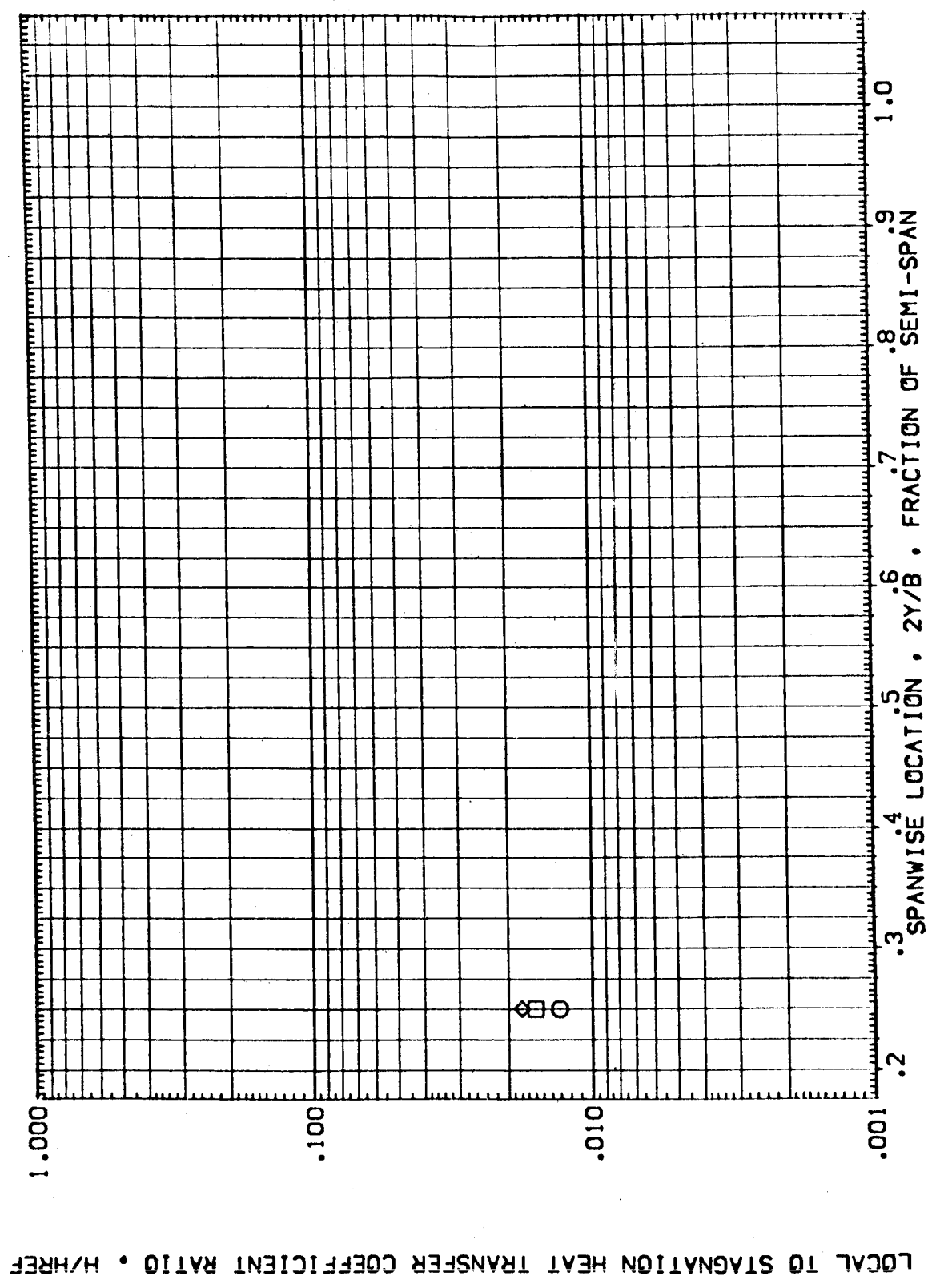


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .444



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

(RE|G08) ARC |.5-178 |43 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 1.000

(AE|G08) ARC |.5-178 |43 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .900

(BE|G08) ARC |.5-178 |43 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .850

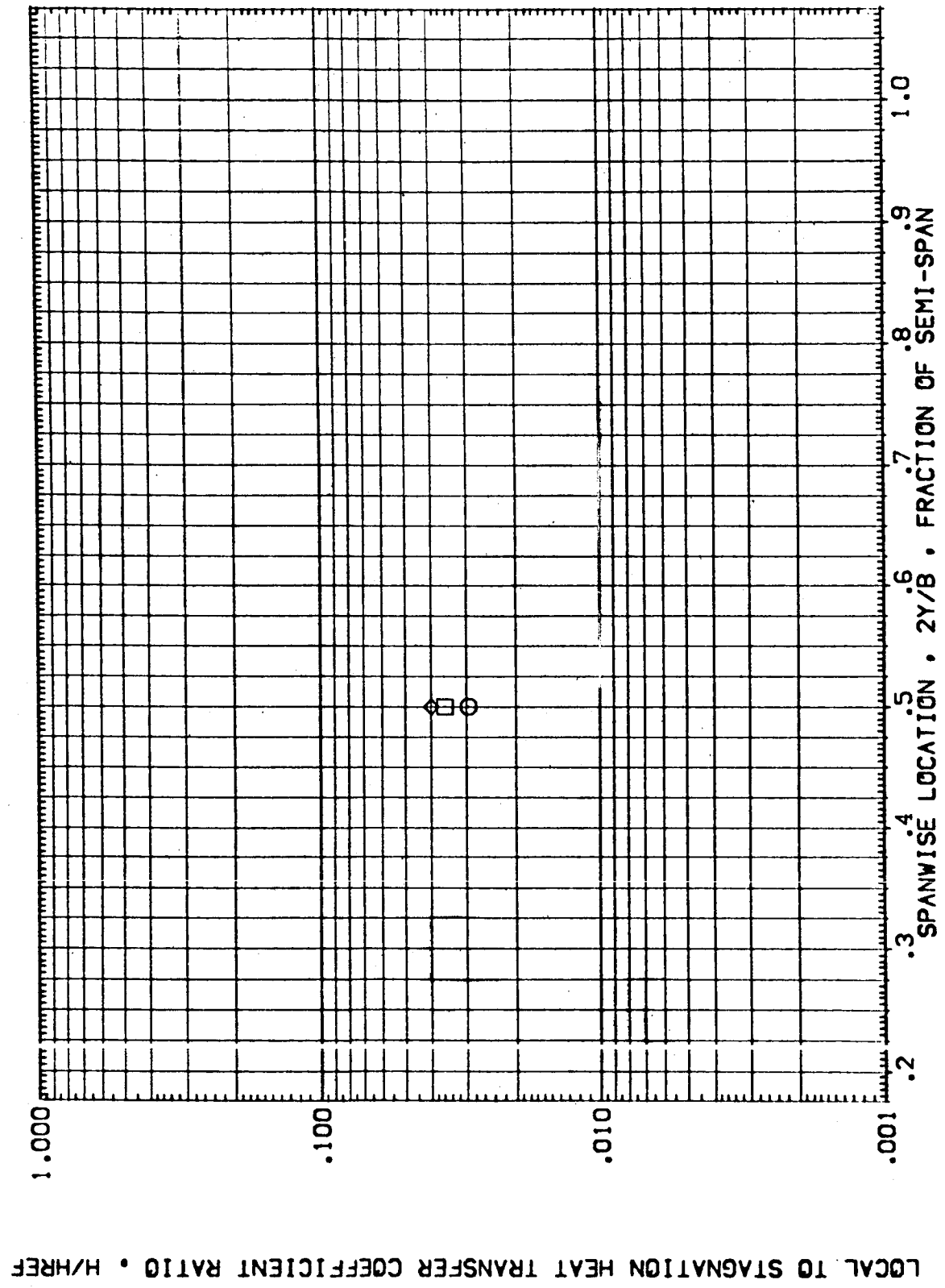


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .487

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

[RE1008] ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 1.500 1.000

[AE1008] ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 1.500 .900

[BE1008] ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 1.500 .850

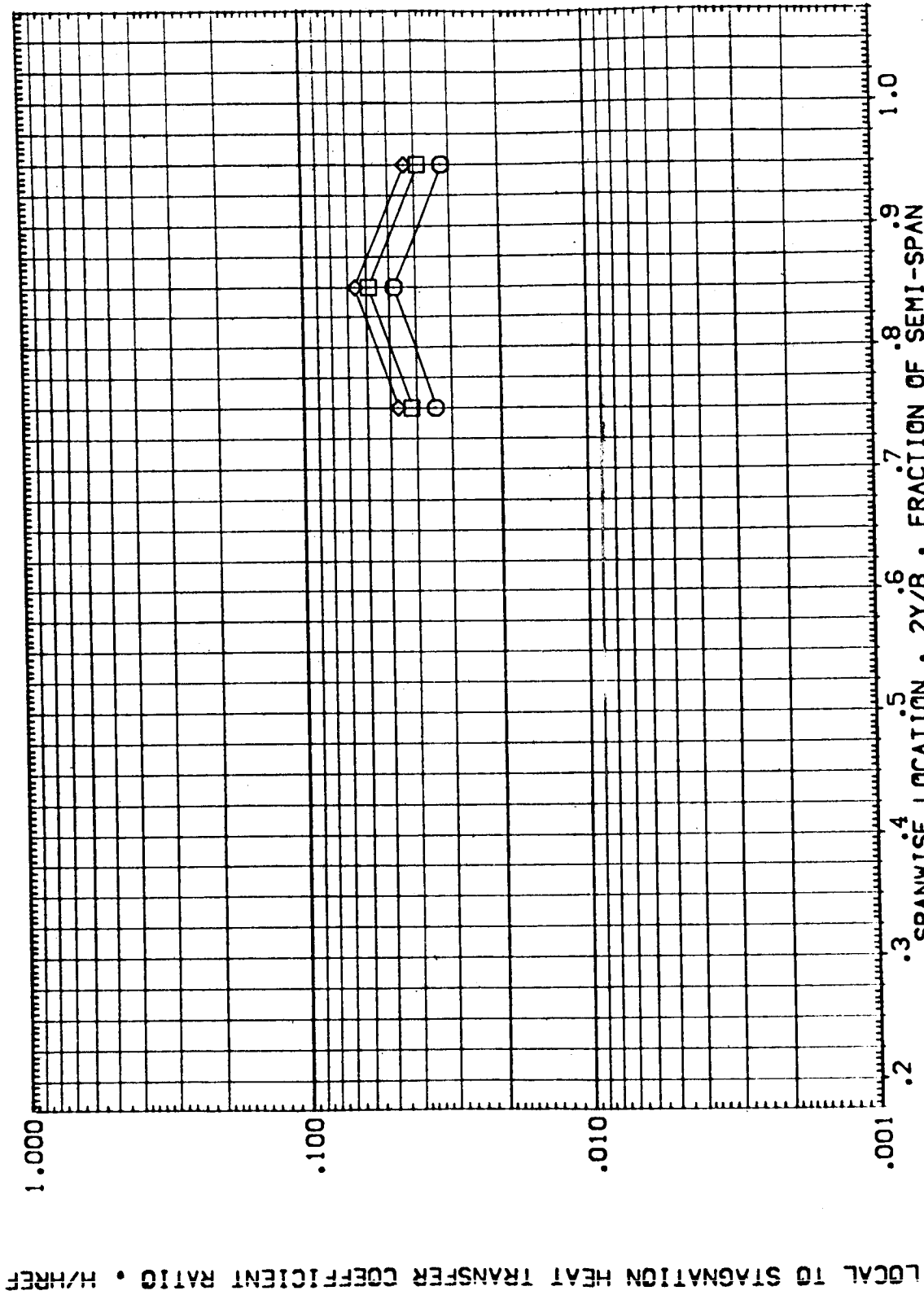


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .500

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(RE GOB)	ARC .5- 78 H3 ORBITER (TRIPS)WING BOTTOM	.000	.000	1.500	1.000
(AE GOB)	ARC .5- 78 H3 ORBITER (TRIPS)WING BOTTOM	.000	.000	1.500	.900
(BE GOB)	ARC .5- 78 H3 ORBITER (TRIPS)WING BOTTOM	.000	.000	1.500	.850

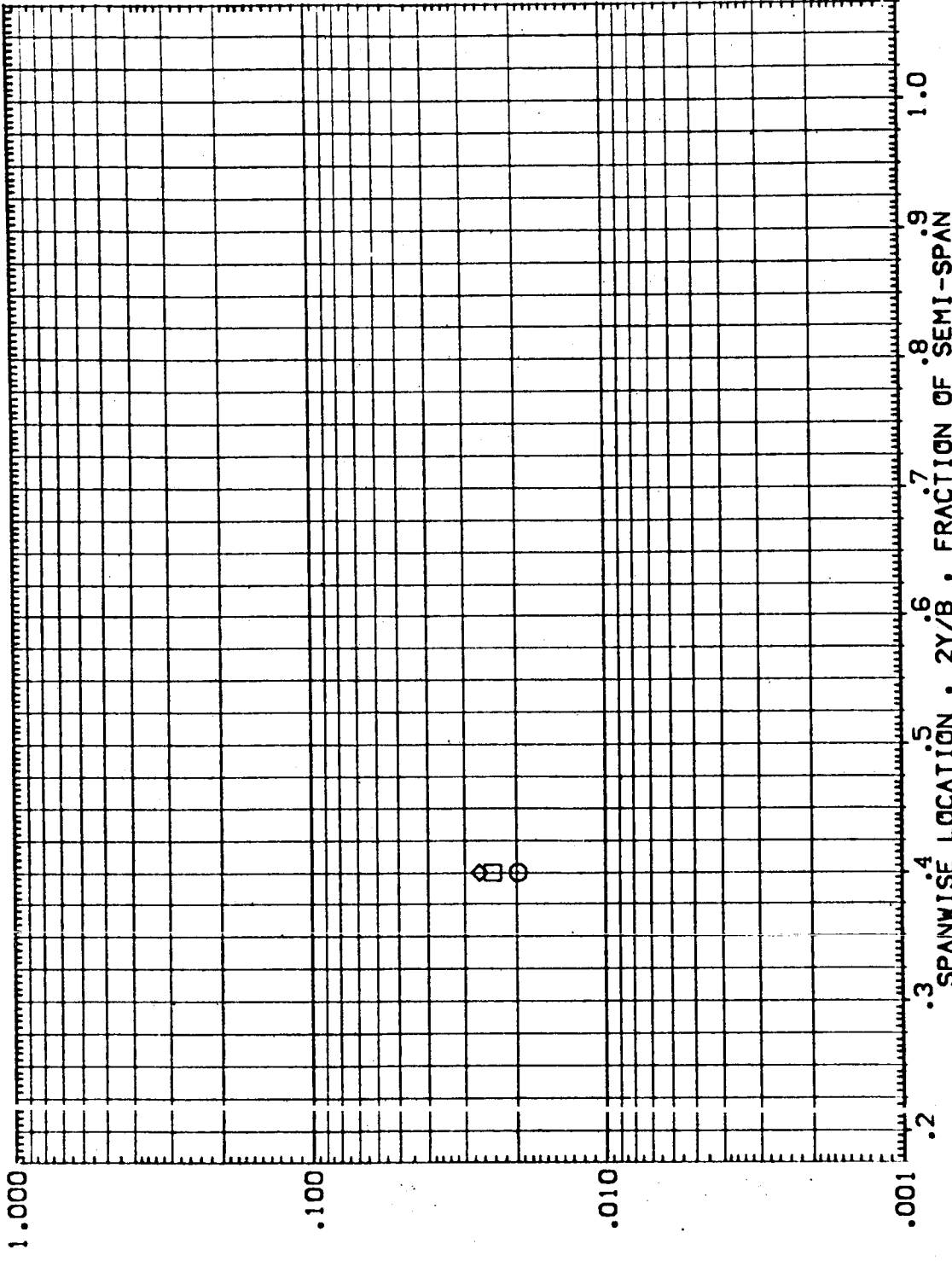


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.3(10) X/C = .559

DATA SET SYMBL. CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

{RE|G08} [O] ARC 3.5-178 [H3 ORBITER (TRIPS) WING BOTTOM] .000 .000 1.500 1.000

{AE|G08} [O] ARC 3.5-178 [H3 ORBITER (TRIPS) WING BOTTOM] .000 .000 1.500 .900

{BE|G08} [O] ARC 3.5-178 [H3 ORBITER (TRIPS) WING BOTTOM] .000 .000 1.500 .850

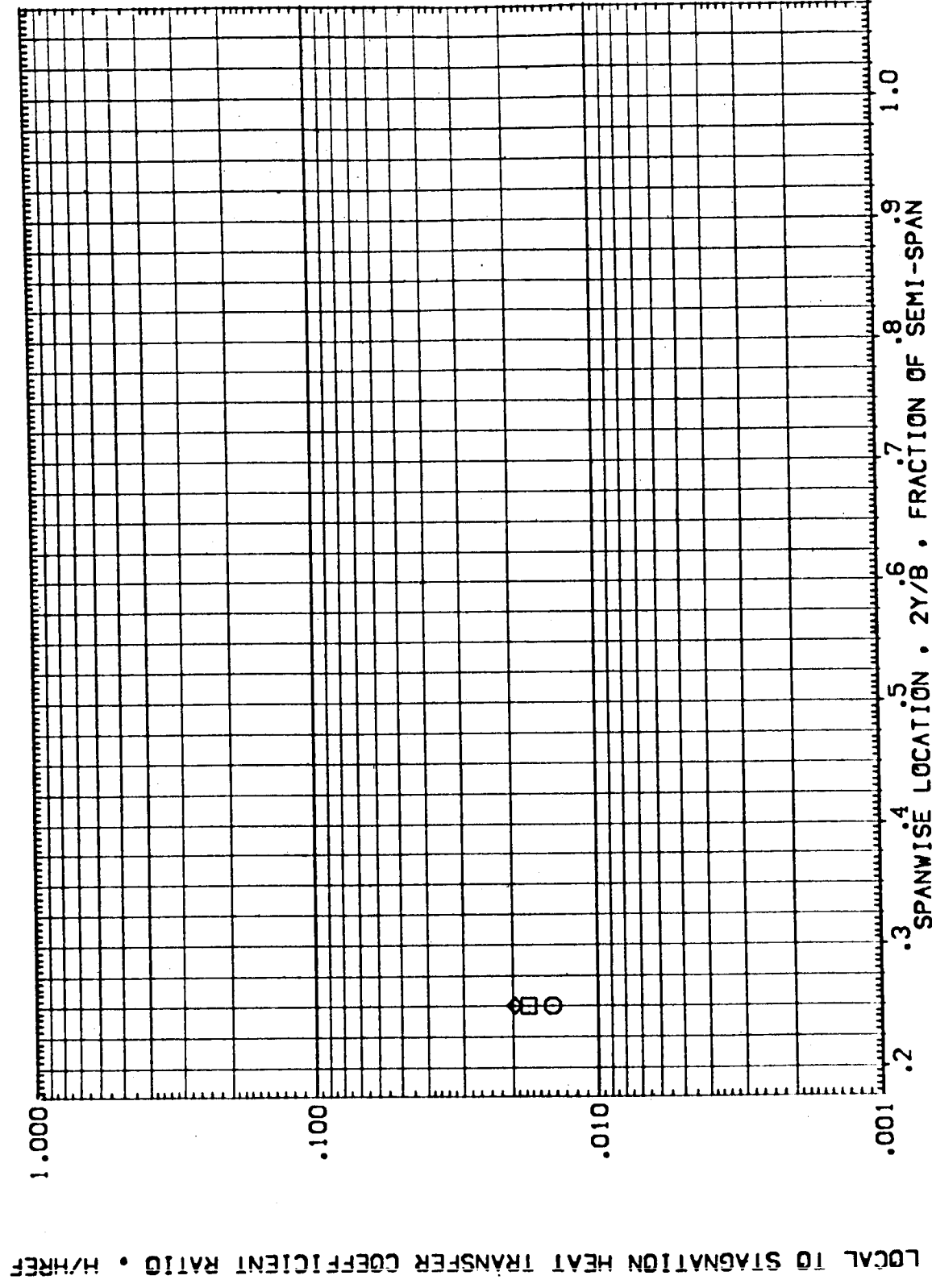


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .590

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REIGOB) ARC 1.5-178 I-3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 1.000

(AEIGOB) ARC 1.5-178 I-3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .900

(BEIGOB) ARC 1.5-178 I-3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .850

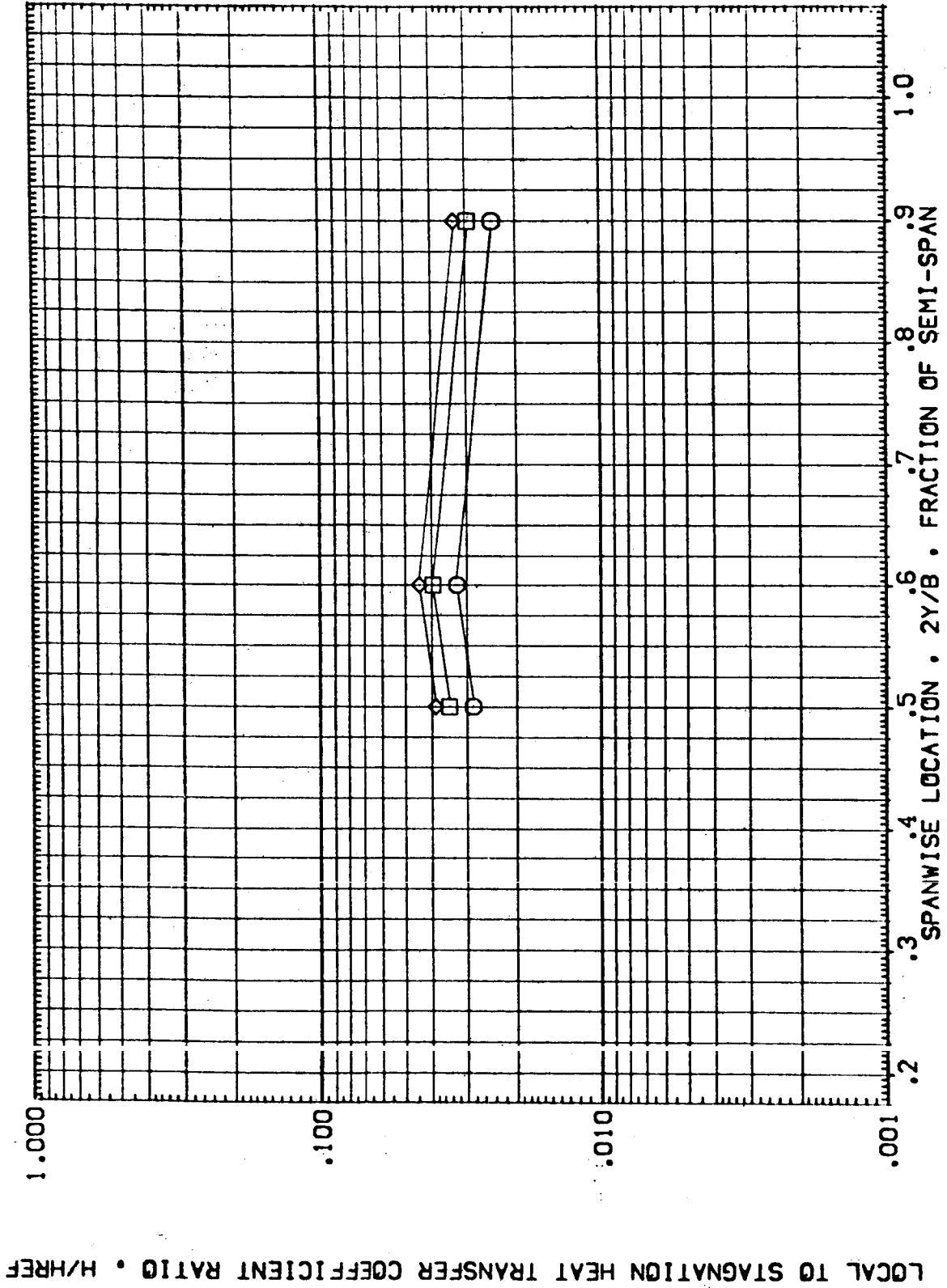


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

{RE|G08} ARC 3.5-178 |H3 ORBITER (TRIP)WING BOTTOM .000 .000 1.500 1.000

{AE|G08} ARC 3.5-178 |H3 ORBITER (TRIP)WING BOTTOM .000 .000 1.500 .900

{BE|G08} ARC 3.5-178 |H3 ORBITER (TRIP)WING BOTTOM .000 .000 1.500 .800

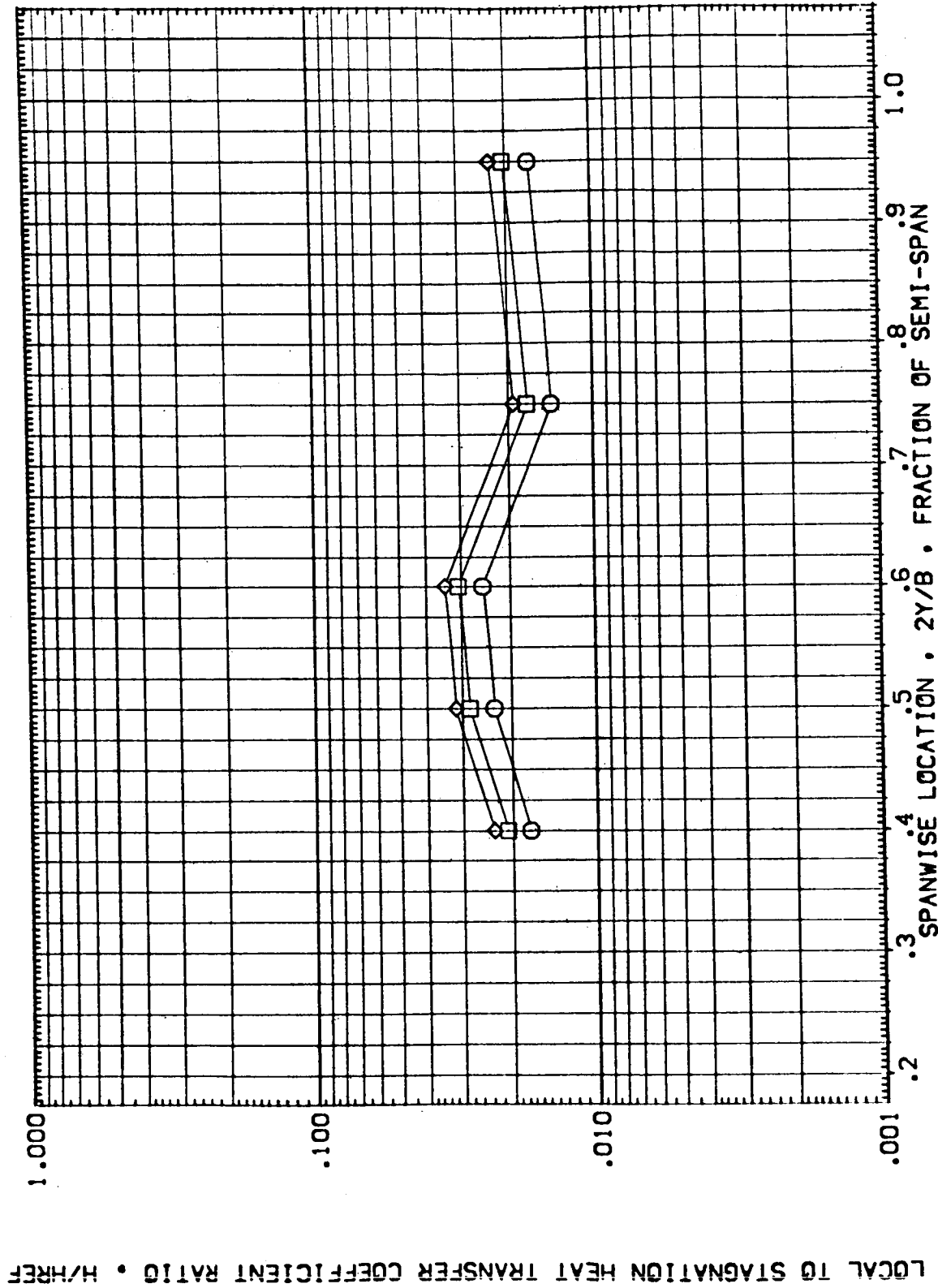


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

(RE G08)	ARC .5- 78 H3 ORBITER (TRIPS) WING BOTTOM	.000	.000	1.500	1.000
(AE G08)	ARC .5- 78 H3 ORBITER (TRIPS) WING BOTTOM	.000	.000	1.500	.900
(BE G08)	ARC .5- 78 H3 ORBITER (TRIPS) WING BOTTOM	.000	.000	1.500	.850

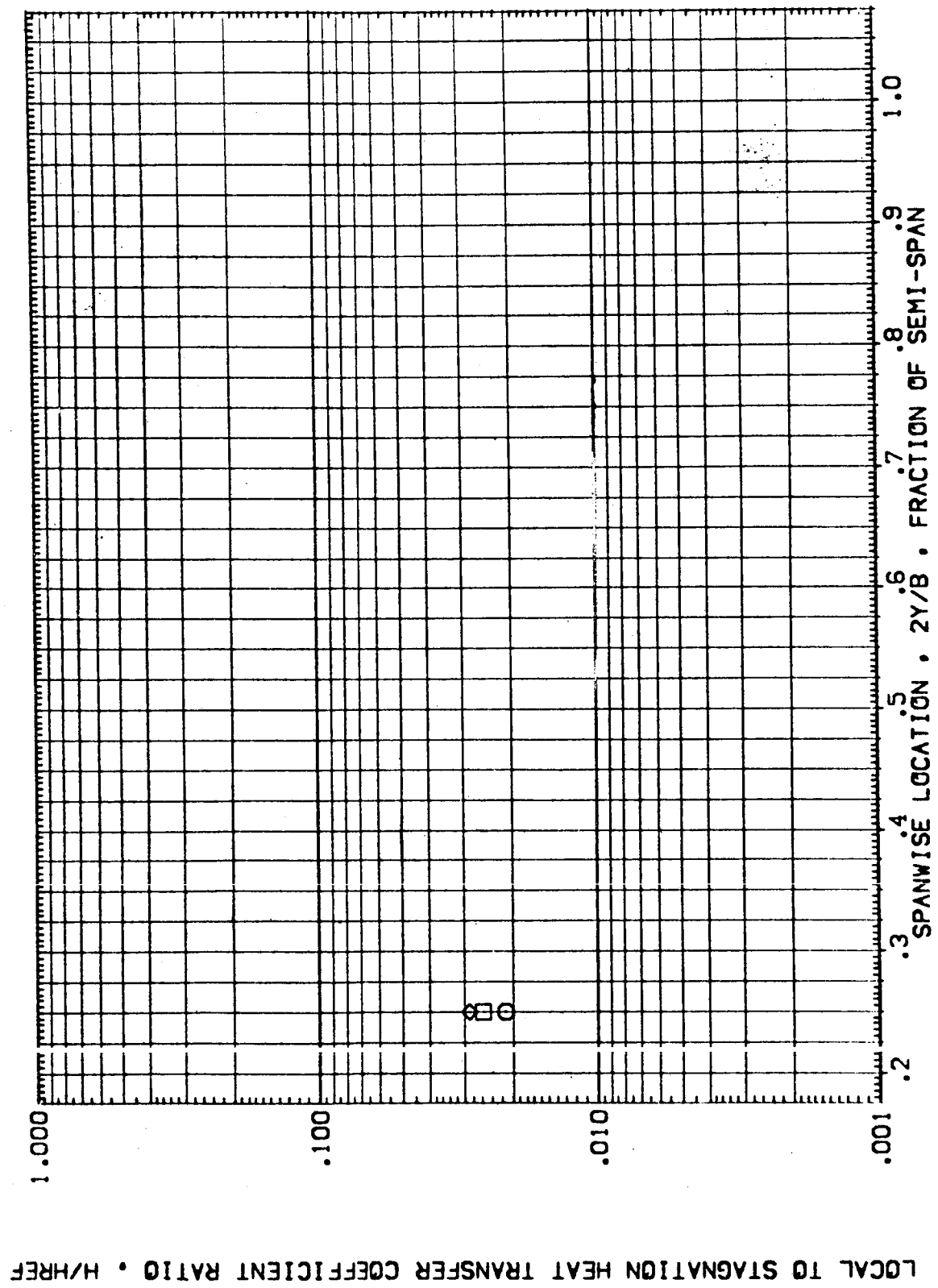


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .736

DATA SET SYMBO. CONFIGURATION DESCRIPTION ALPHA BETA FRN/VL HAY/HT
 {RE|G08} [O] ARC 3.5-178 [H3] ORBITER [TRIP]S/WING BOTTOM .000 .000 1.500 1.000
 {AE|G08} [O] ARC 3.5-178 [H3] ORBITER [TRIP]S/WING BOTTOM .000 .000 1.500 .900
 {BE|G08} [O] ARC 3.5-178 [H3] ORBITER [TRIP]S/WING BOTTOM .000 .000 1.500 .800

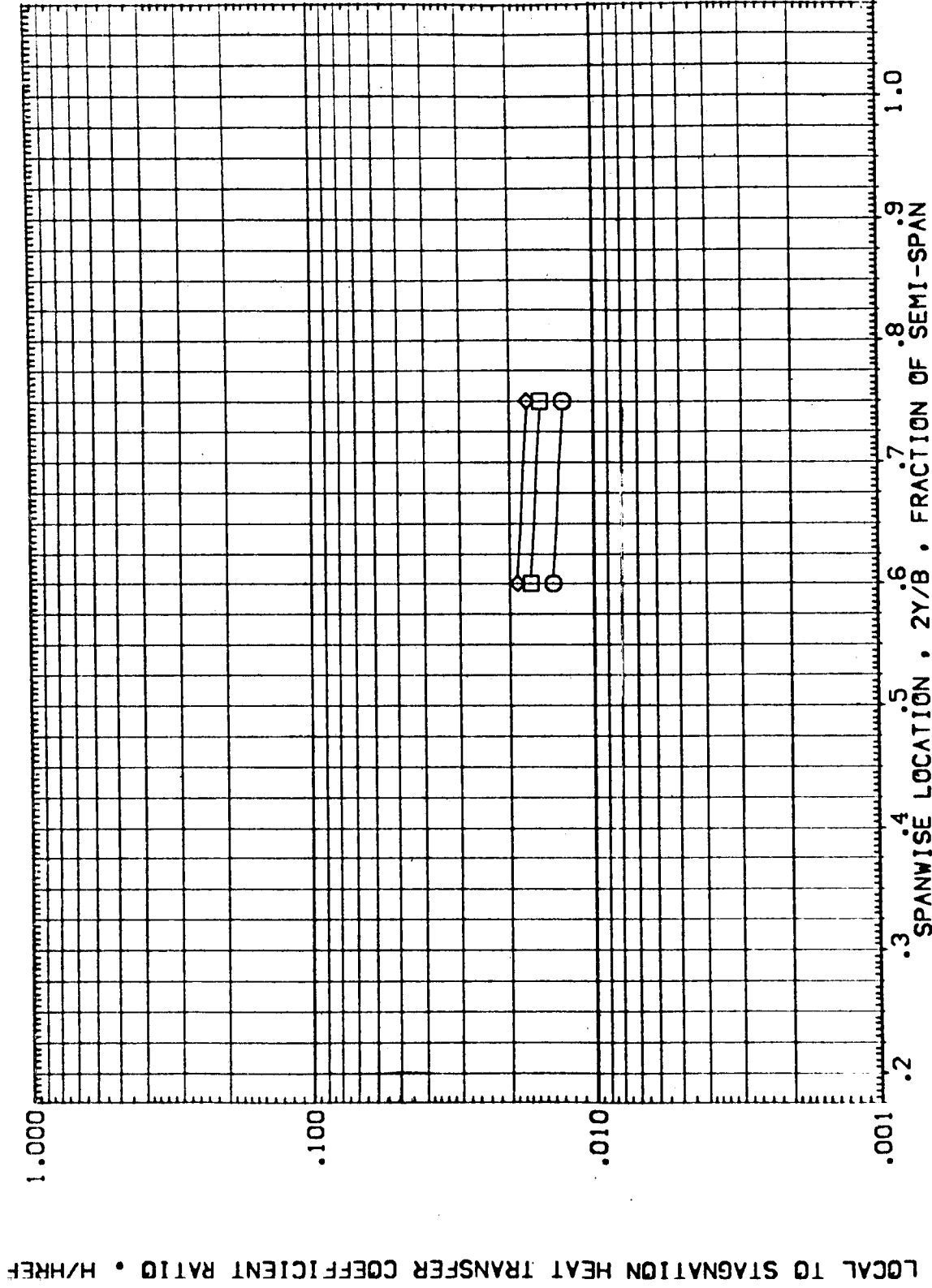


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .800



DATA SET SYMBOL:   CONFIGURATION DESCRIPTION

ARC	5-178	143	ORBITER	(TRIPS)	WING	BOTTOM
[RE G08]			ORBITER	(TRIPS)	WING	BOTTOM
[AE G08]			ORBITER	(TRIPS)	WING	BOTTOM
[BE G08]			ORBITER	(TRIPS)	WING	BOTTOM

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

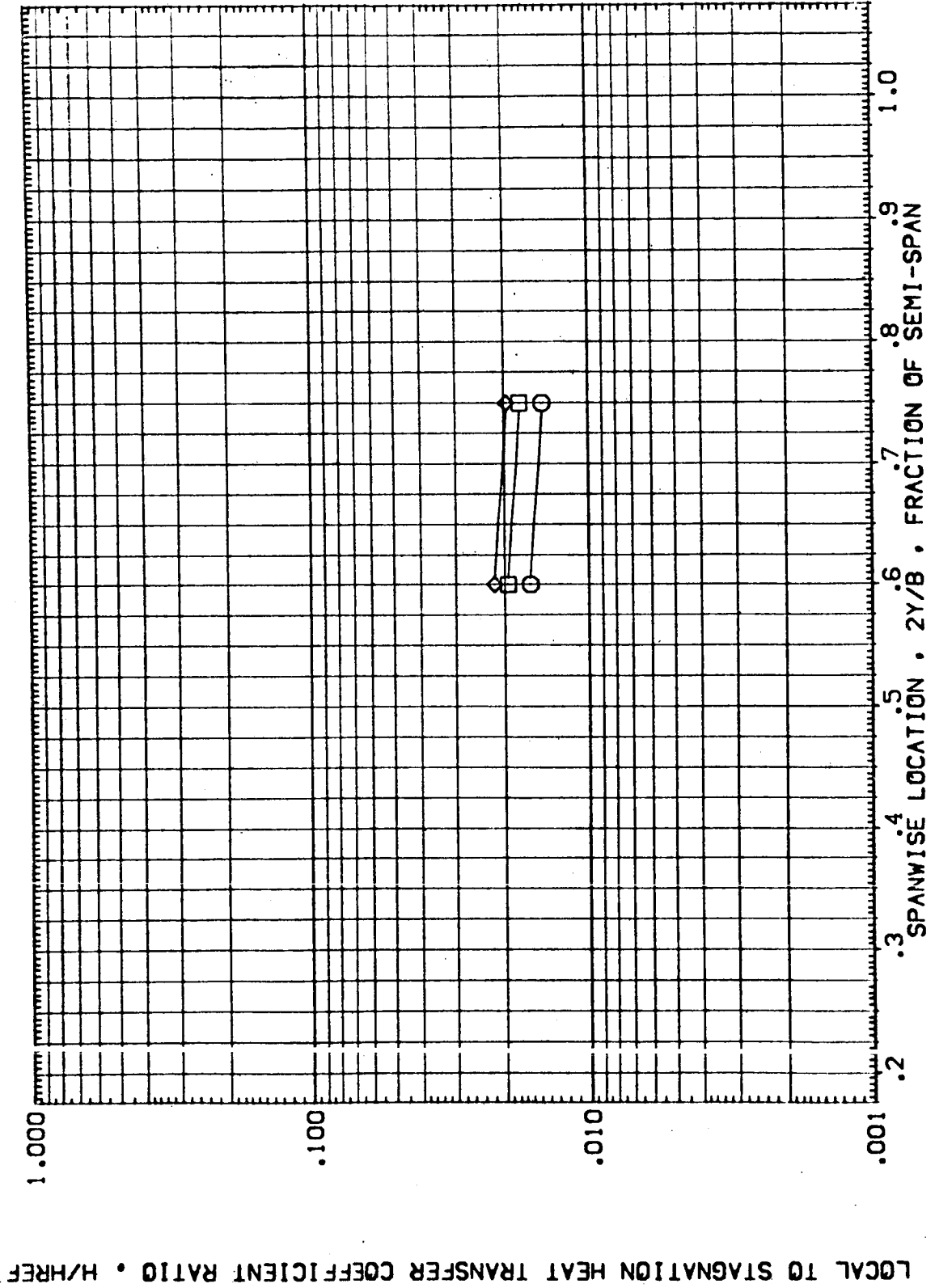


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA R/V/L H/W/H/T
 (BE|LOB) (BE|LOB) ARC 3.5-178 |H3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 1.000
 (AE|G08) (AE|G08) ARC 3.5-178 |H3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .900
 (BE|G08) (BE|G08) ARC 3.5-178 |H3 ORBITER (TRIPS)WING BOTTOM .000 .000 1.500 .850

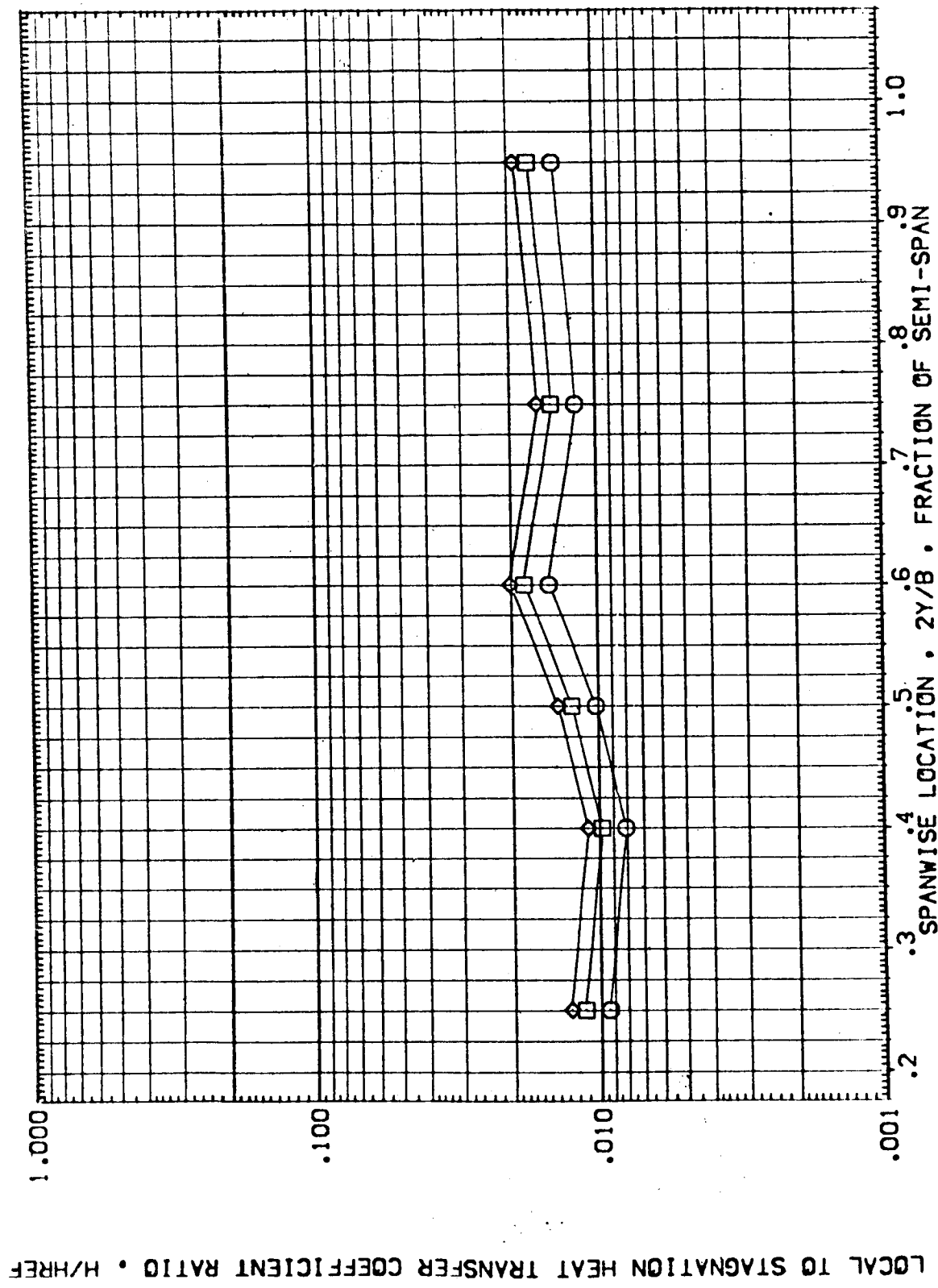


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{REIGOS} ○ ARC 1.5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 5.000 1.000

{AEIGOS} ◇ ARC 1.5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 5.000 .900

{BEIGOS} ◊ ARC 1.5-178 IH3 ORBITER (TRIPS)WING BOTTOM .000 .000 5.000 .850

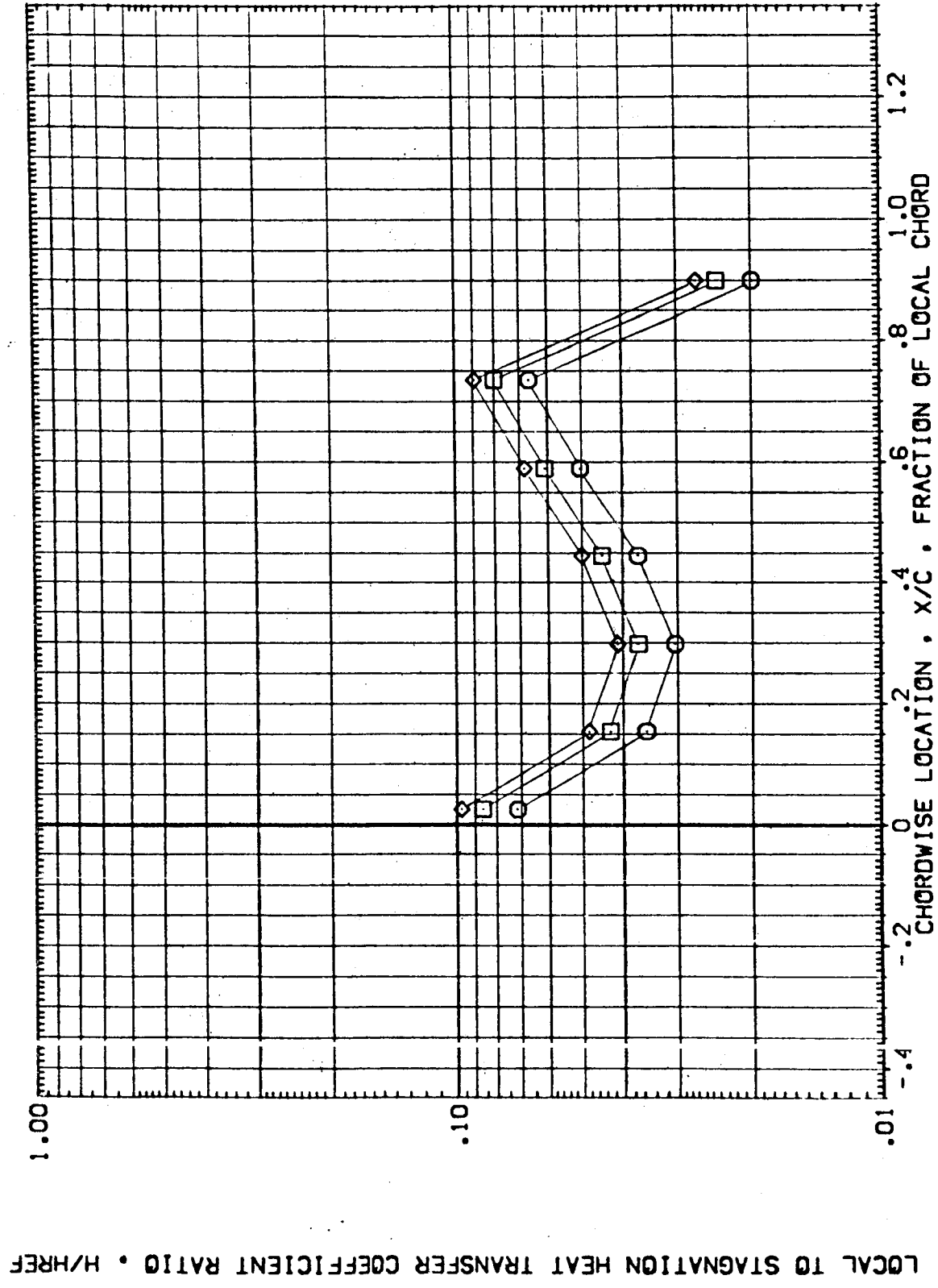


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .250

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RAYL HSW/HT
 [RE1509] O ARC 3.5-178 [H3 ORBITER (TRIPS)] WING BOTTOM .000 .000 5.000 1.000
 [AE1609] O ARC 3.5-178 [H3 ORBITER (TRIPS)] WING BOTTOM .000 .000 5.000 .900
 [BE1609] O ARC 3.5-178 [H3 ORBITER (TRIPS)] WING BOTTOM .000 .000 5.000 .950

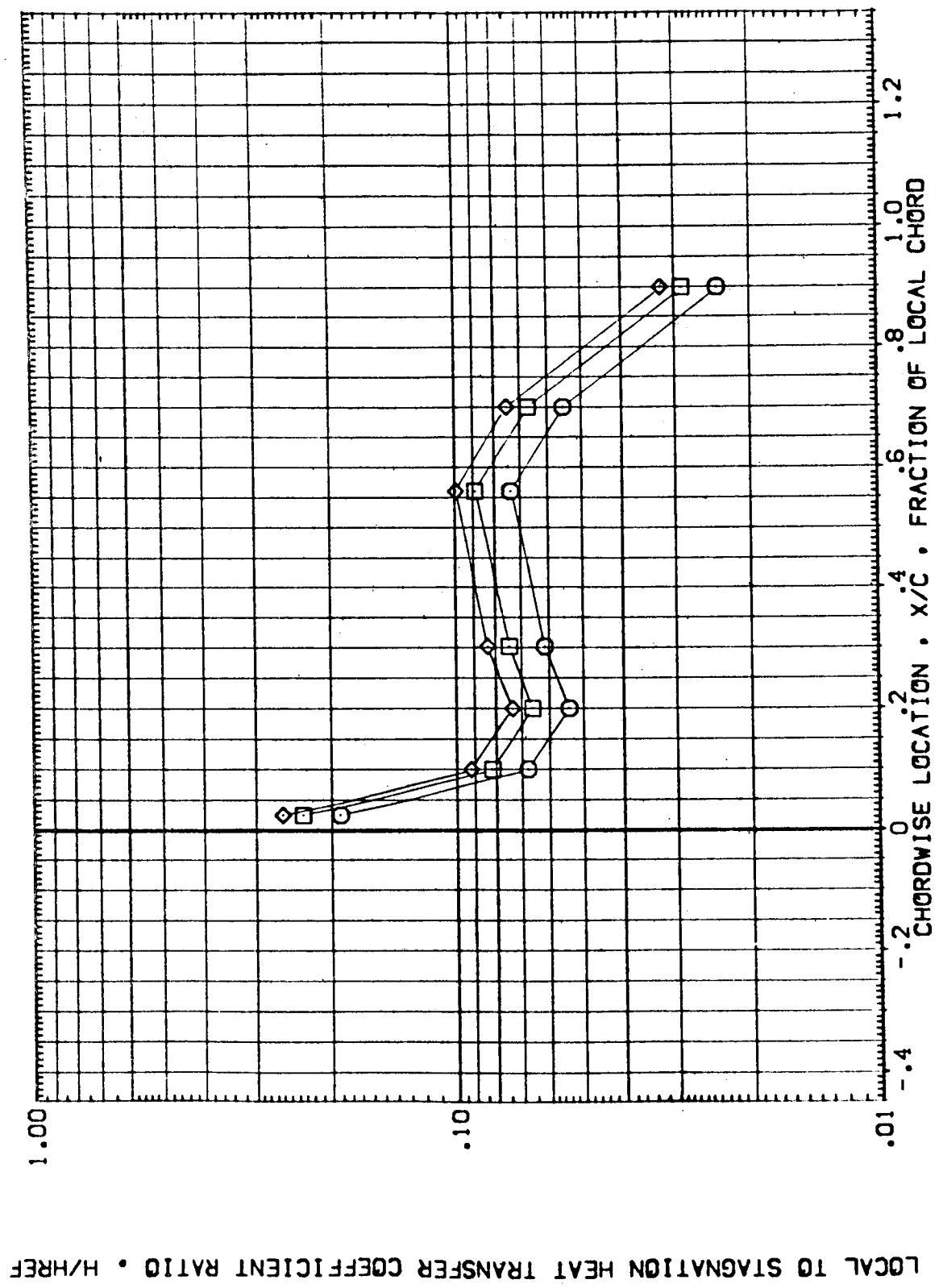


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .400



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA R/V/L HAW/HT

ARC	5-178	143	ORB	ITER	(TRIPS)	VING	BOTTOM	.000	.000	5.000	1.000
ARC	5-178	143	ORB	ITER	(TRIPS)	VING	BOTTOM	.000	.000	5.000	.900
ARC	5-178	143	ORB	ITER	(TRIPS)	VING	BOTTOM	.000	.000	5.000	.850

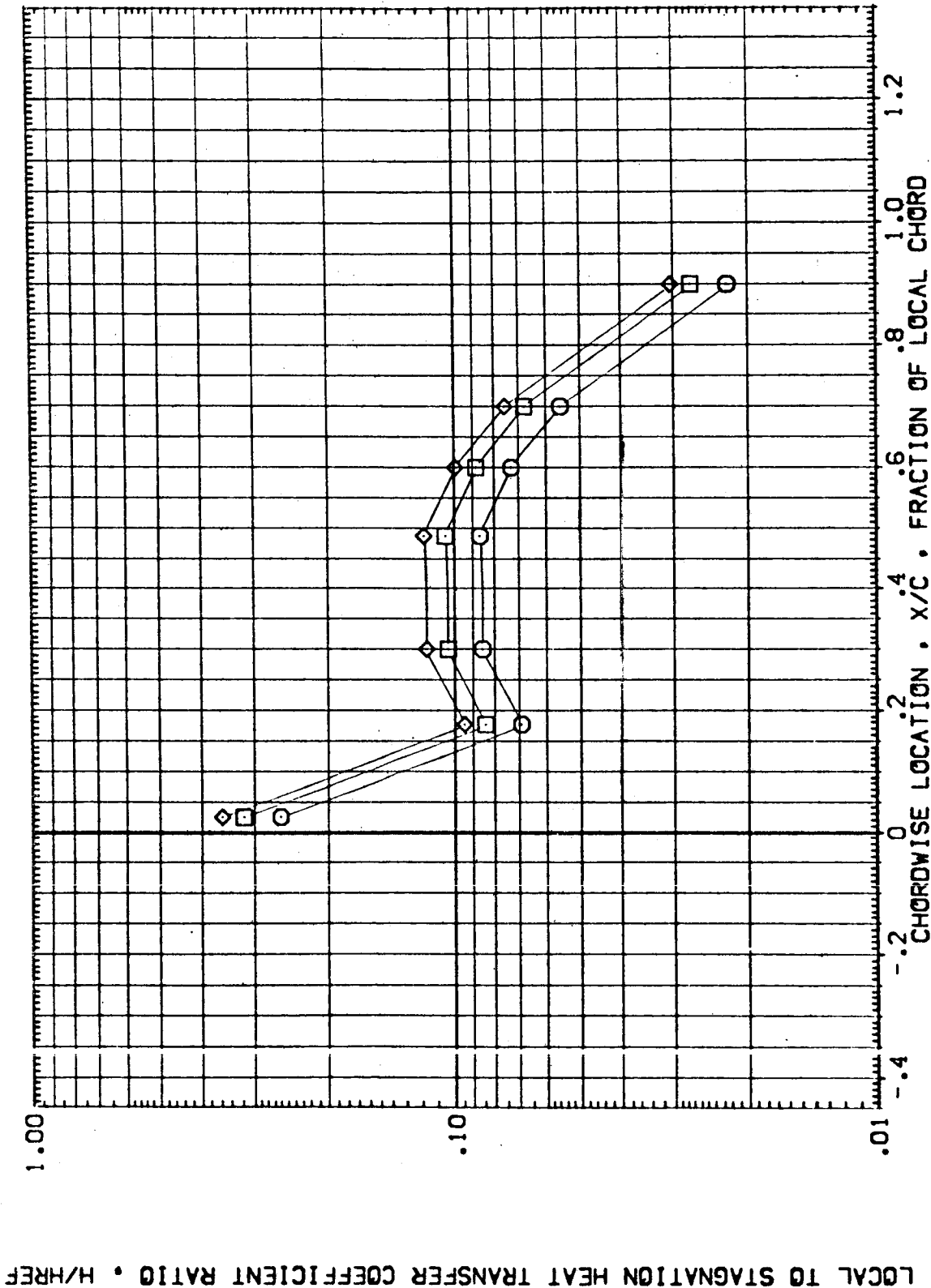


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.30J 2Y/B = .500

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, h/h_{REF}

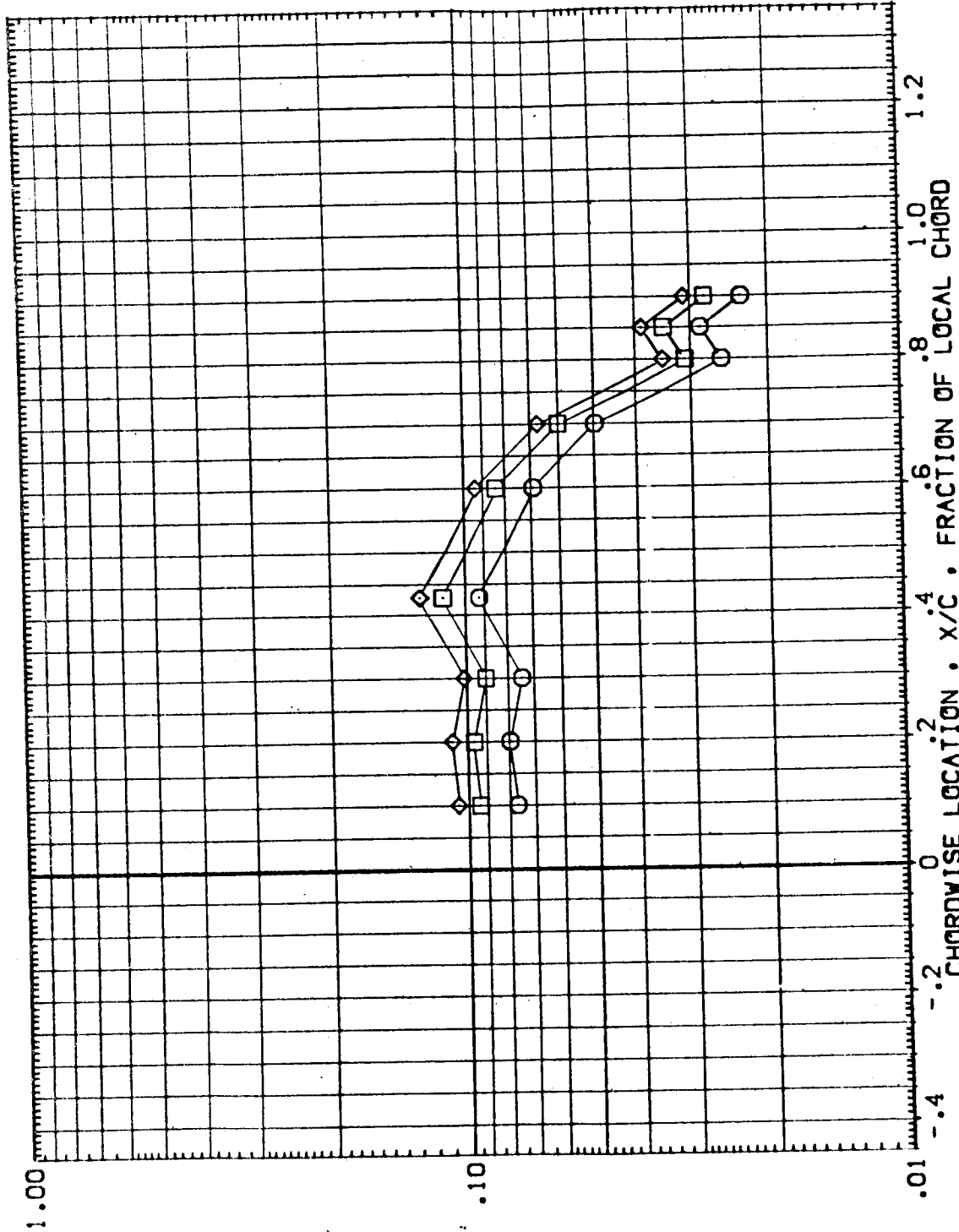


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA ANGLE MACH/HT
 (RE) (03) (03) ARC 3.5-178 HQ ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 1.000
 (AE) (03) (03) ARC 3.5-178 HQ ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 1.000
 (BE) (03) (03) ARC 3.5-178 HQ ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 1.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAY/HT
 [RE1609] [H3 ORBITER (TRIPSIVING BOTTOM)] .000 .000 5.000 1.000
 [AE1609] [H3 ORBITER (TRIPSIVING BOTTOM)] .000 .000 5.000 .900
 [BE1609] [H3 ORBITER (TRIPSIVING BOTTOM)] .000 .000 5.000 .850

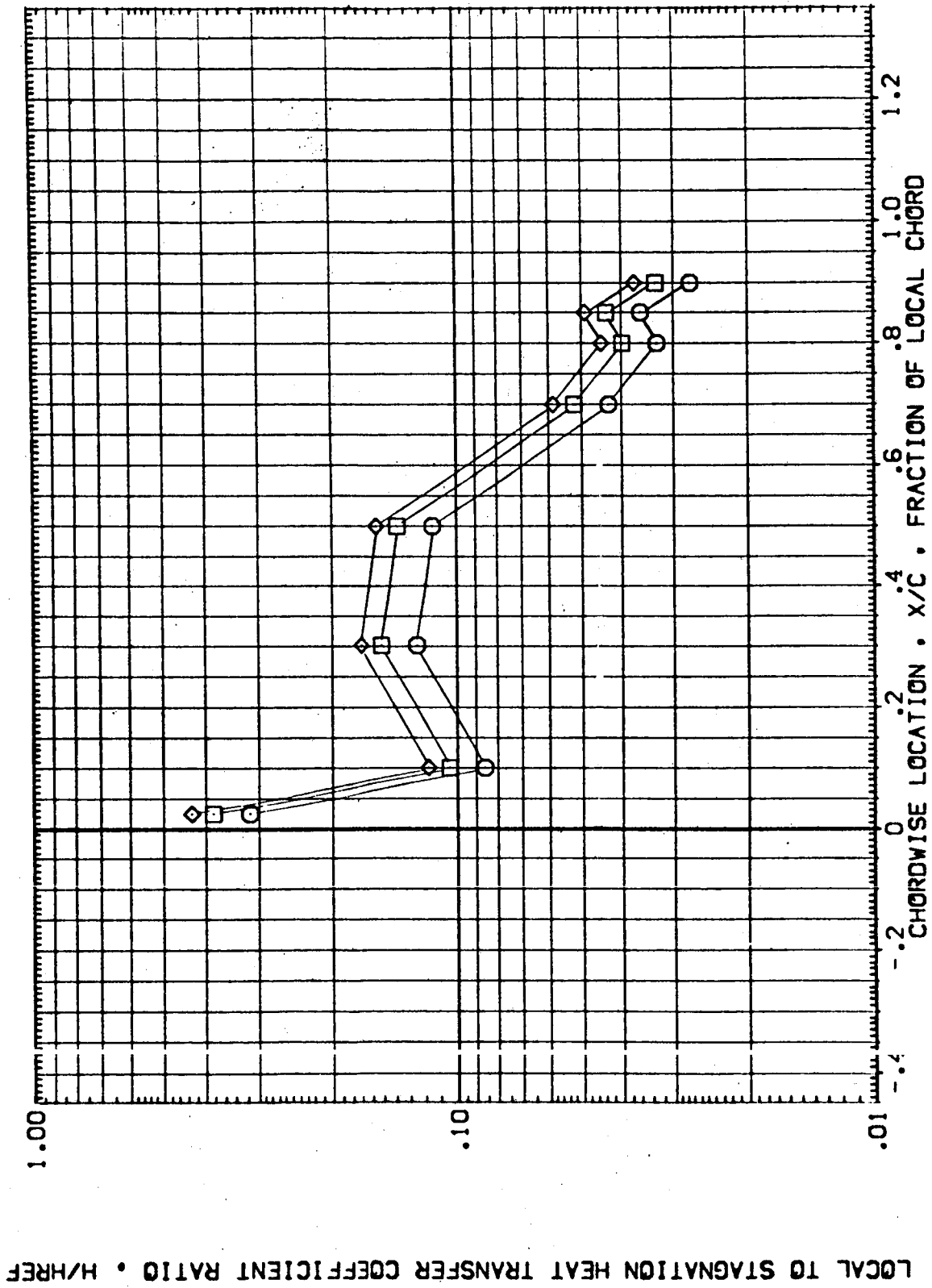


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .750

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(AE|009) (O) ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 1.000

(BE|009) (◇) ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 .900

(BE|009) (□) ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 .850

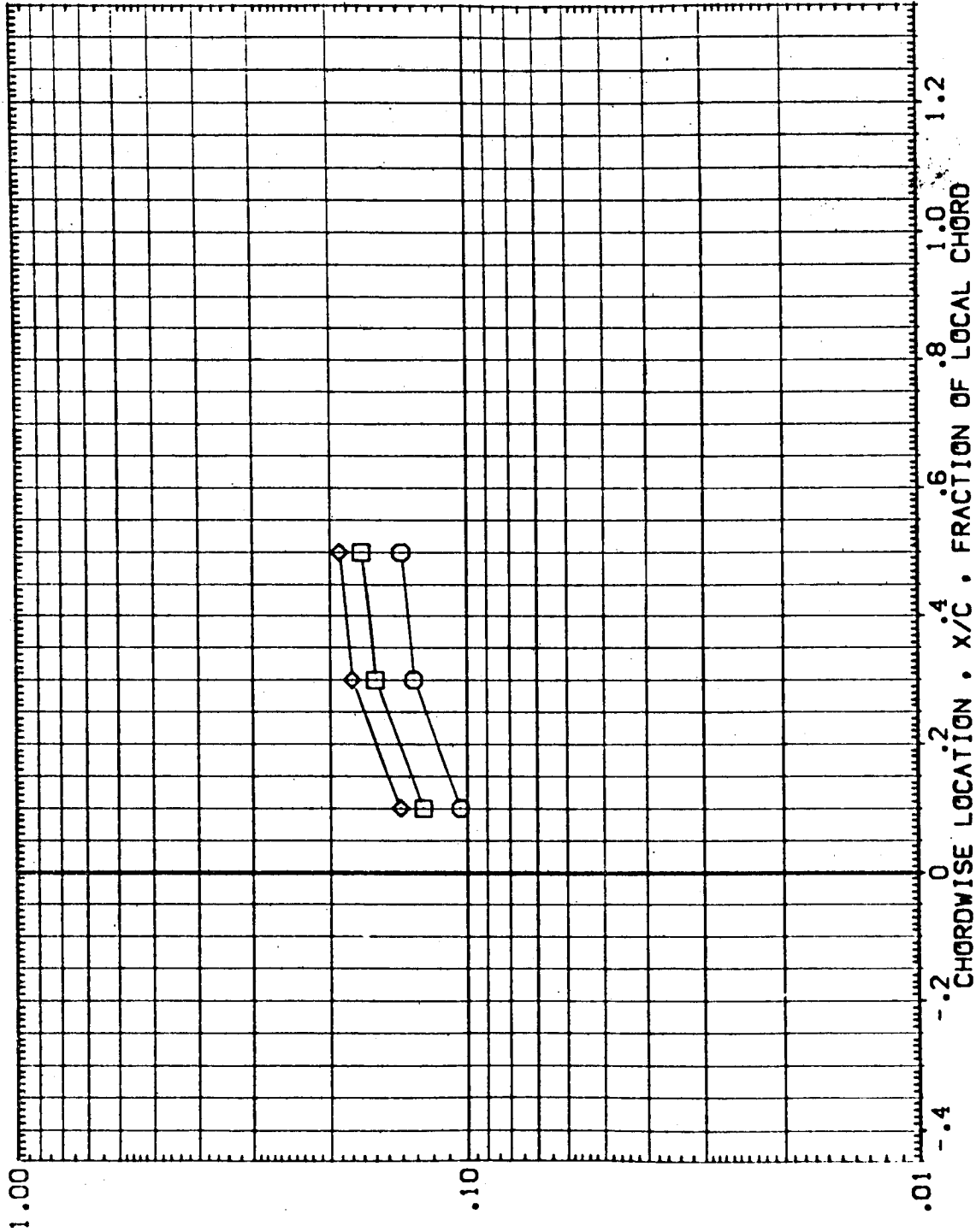


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .850



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE|G09} ARC 1.5-178 143 ORBITER (TRIPS)WING BOTTOM .000 .000 5.000 1.000

{AE|C09} ARC 1.5-178 143 ORBITER (TRIPS)WING BOTTOM .000 .000 5.000 .900

{BE|G09} ARC 1.5-178 143 ORBITER (TRIPS)WING BOTTOM .000 .000 5.000 .850

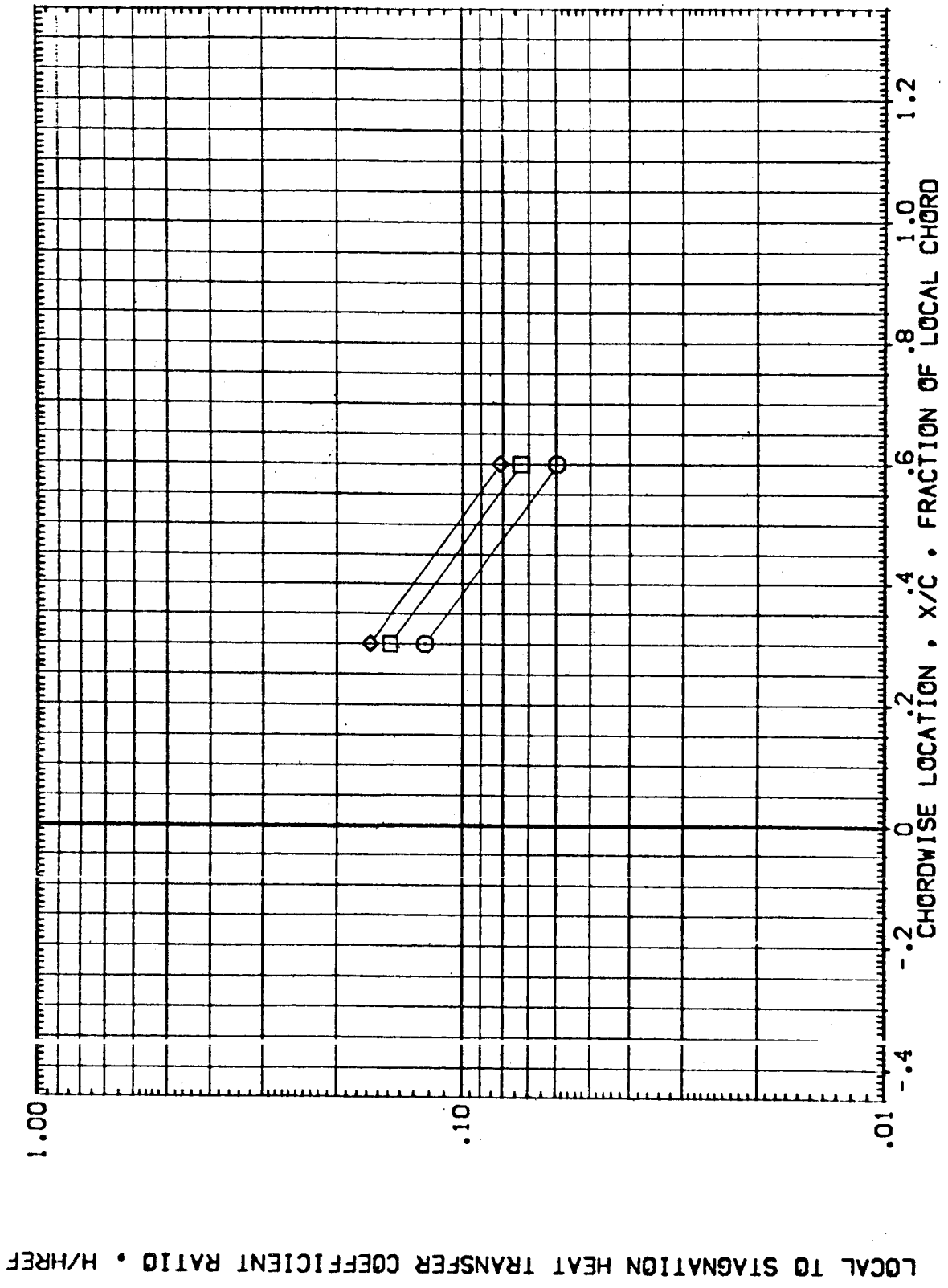


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.301) 2Y/B = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

{BE|G09} ARC 3.5-178 I-H3 ORBITER (TRIPS/JVING BOTTOM) .000 .000 5.000 1.000

{AL|G09} ARC 3.5-178 I-H3 ORBITER (TRIPS/JVING BOTTOM) .000 .000 5.000 .900

{BE|G09} ARC 3.5-178 I-H3 ORBITER (TRIPS/JVING BOTTOM) .000 .000 5.000 .850

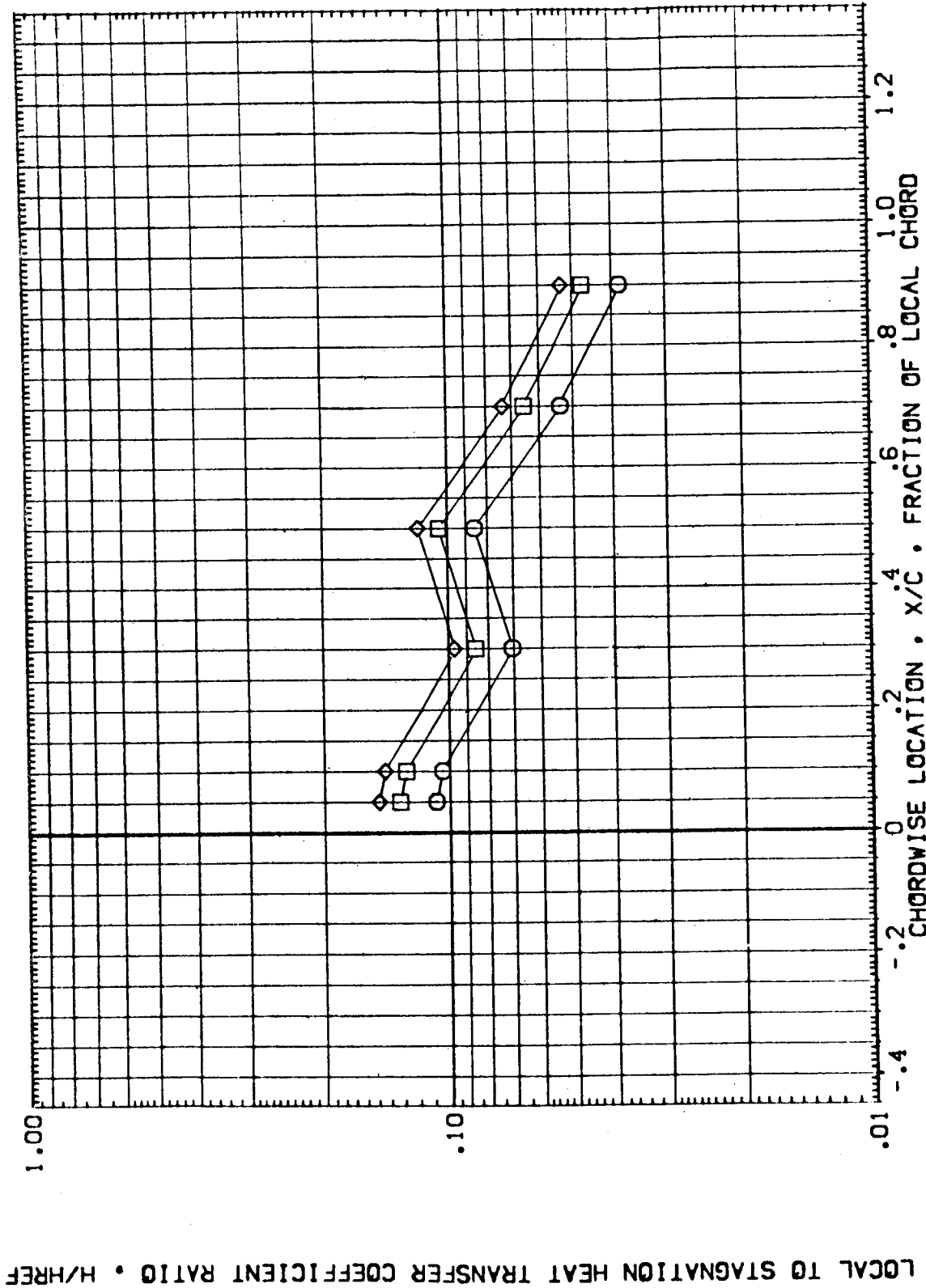


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .950

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 [RE|009] [AE|009] [BE|009] ARC 3.5-178 H3 ORBITER (TRIP) WING BOTTOM .000 .000 5.000 1.000
 [RE|009] [AE|009] [BE|009] ARC 3.5-178 H3 ORBITER (TRIP) WING BOTTOM .000 .000 5.000 .900
 [RE|009] [AE|009] [BE|009] ARC 3.5-178 H3 ORBITER (TRIP) WING BOTTOM .000 .000 5.000 .850

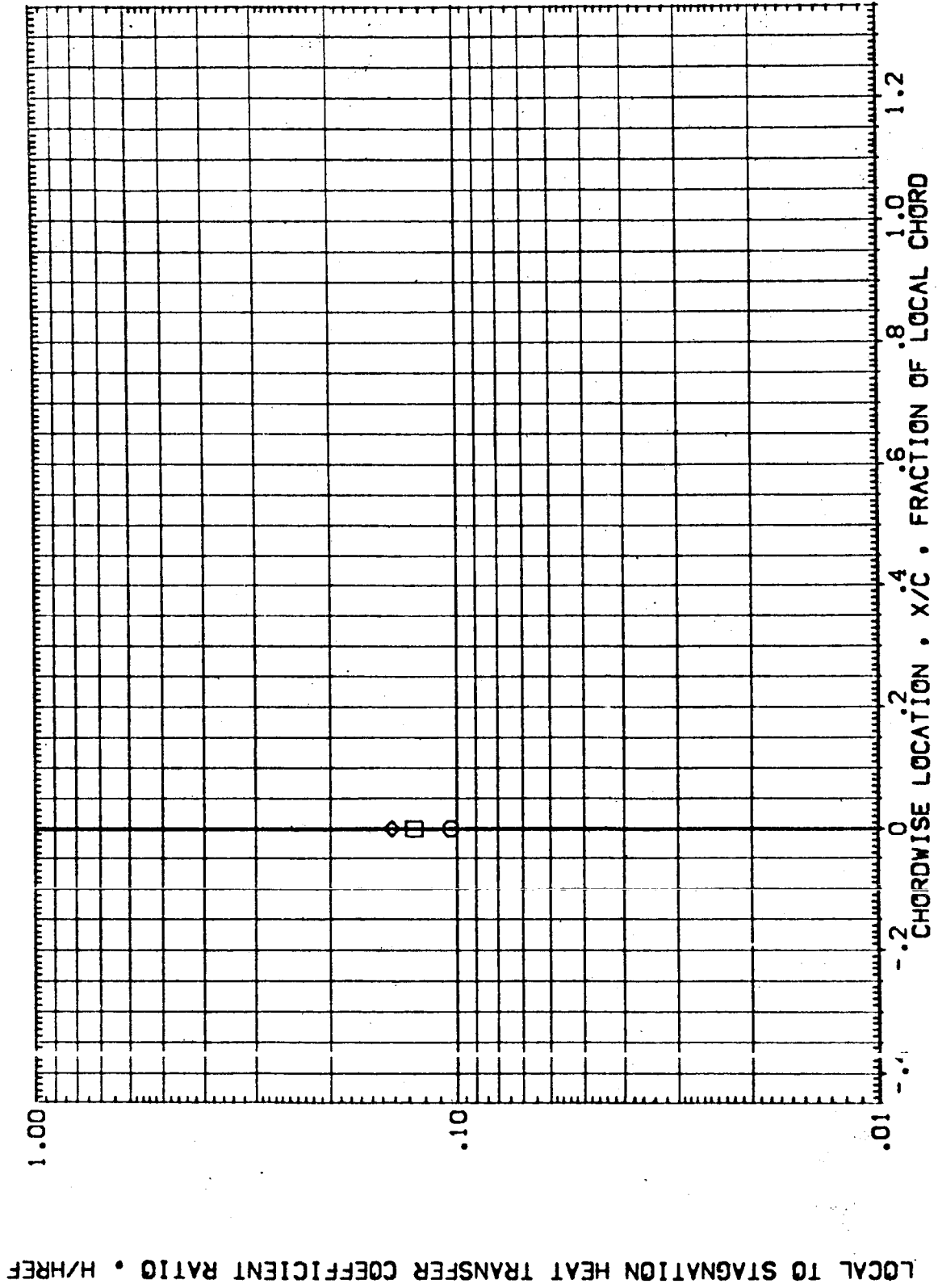


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.310 2Y/B = .966

DATA SET 517333
 (REIGOS) (AEIGOS) (BEIGOS)
 (BEIGOS) (AEIGOS) (REIGOS)

CONFIGURATION DESCRIPTION
 ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM
 ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM
 ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM

ALPHA BETA FAN/L HAW/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

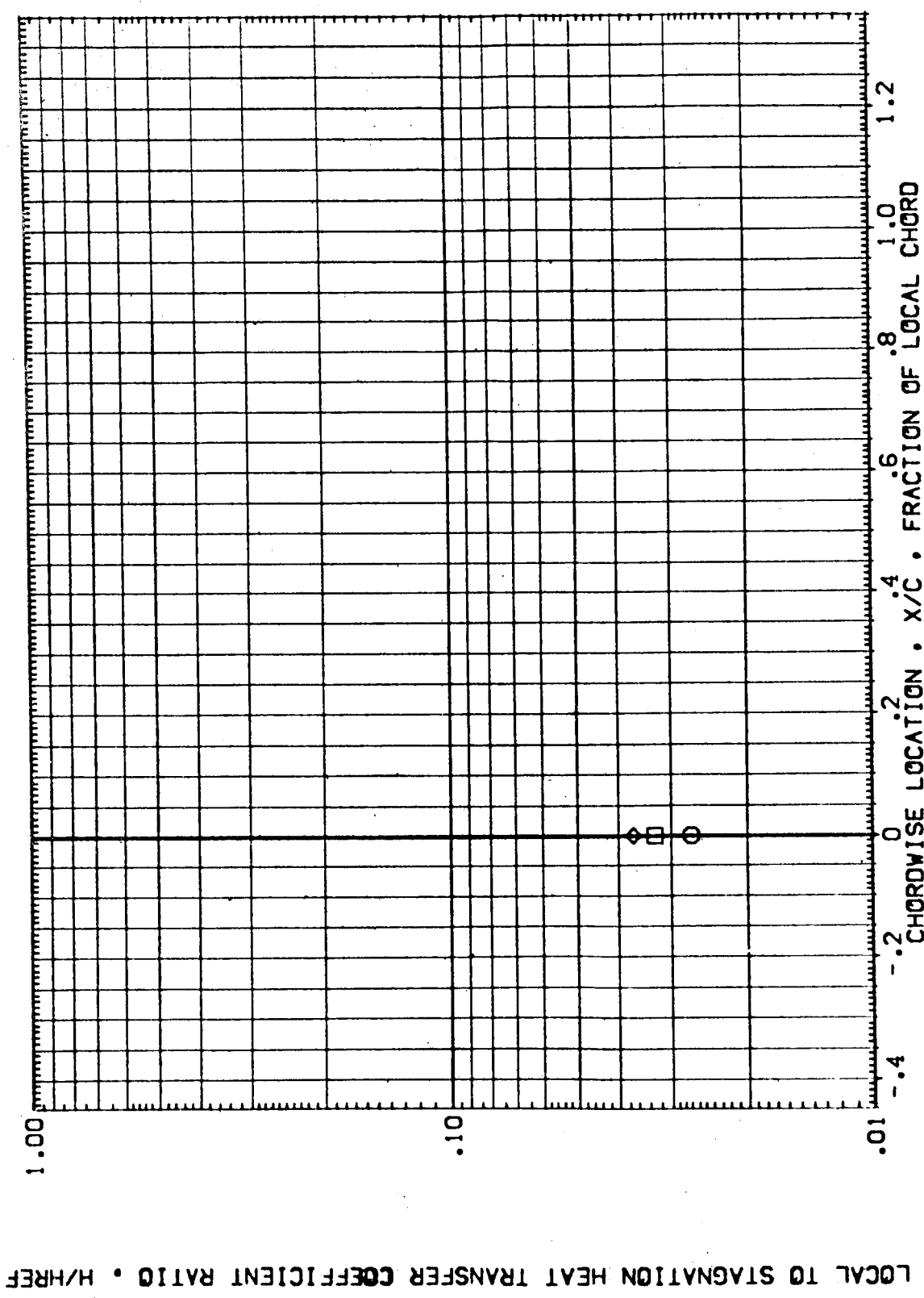


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .993



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 [REIGOS] ARC 1.5-178 H3 ORBITER (TRIPSPIVING BOTTOM) .000 .000 5.000 1.000
 [AEIGOS] ARC 1.5-178 H3 ORBITER (TRIPSPIVING BOTTOM) .000 .000 5.000 .900
 [BEIGOS] ARC 1.5-178 H3 ORBITER (TRIPSPIVING BOTTOM) .000 .000 5.000 .650

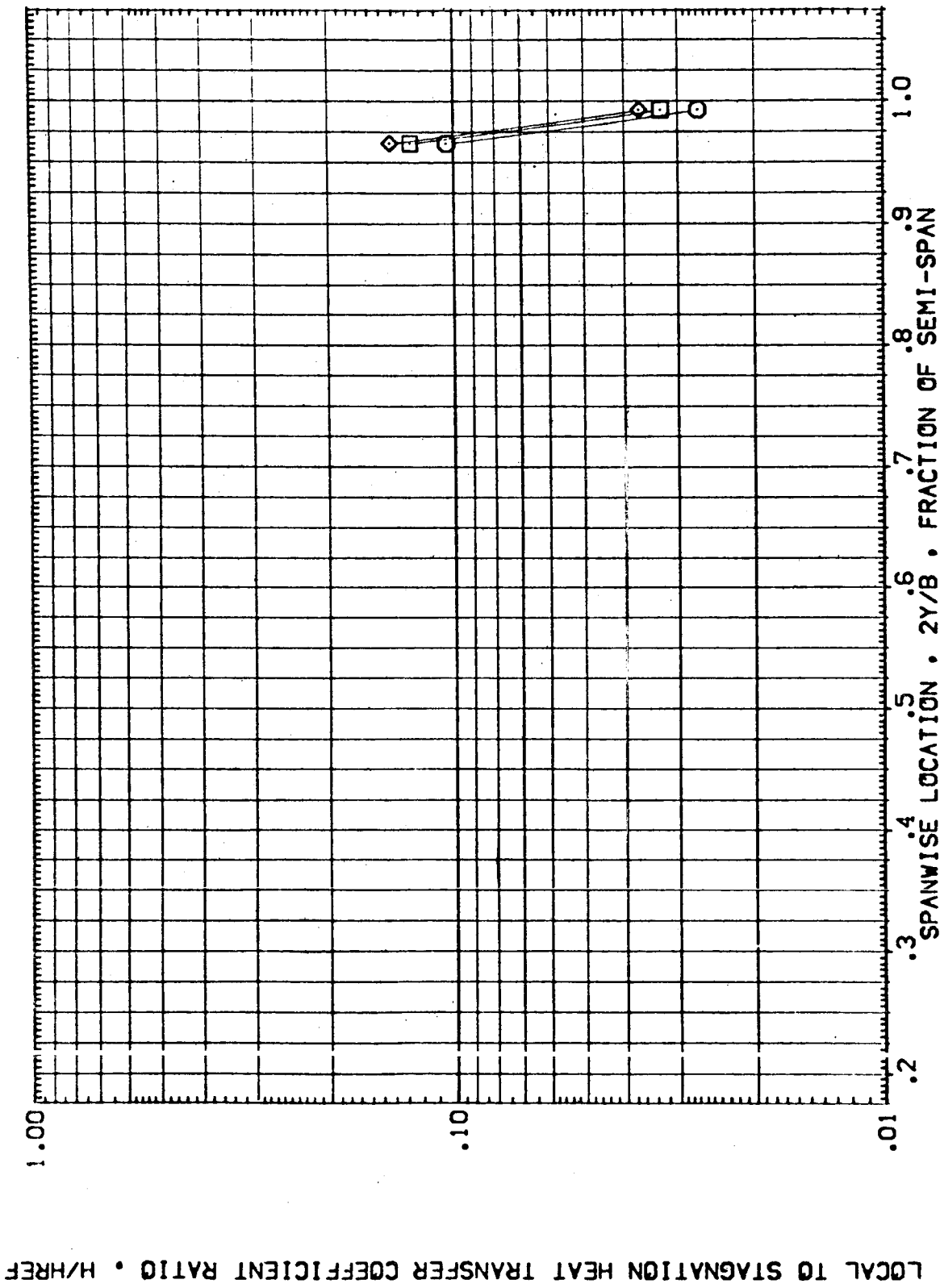


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{ RC { 009 } ARC 3.5-178 143 ORBITER (TRIPS) WING BOTTOM .000 .000 3.000 1.000

{ AE { 009 } ARC 3.5-178 143 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 .900

{ BE { 009 } ARC 3.5-178 143 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 .650

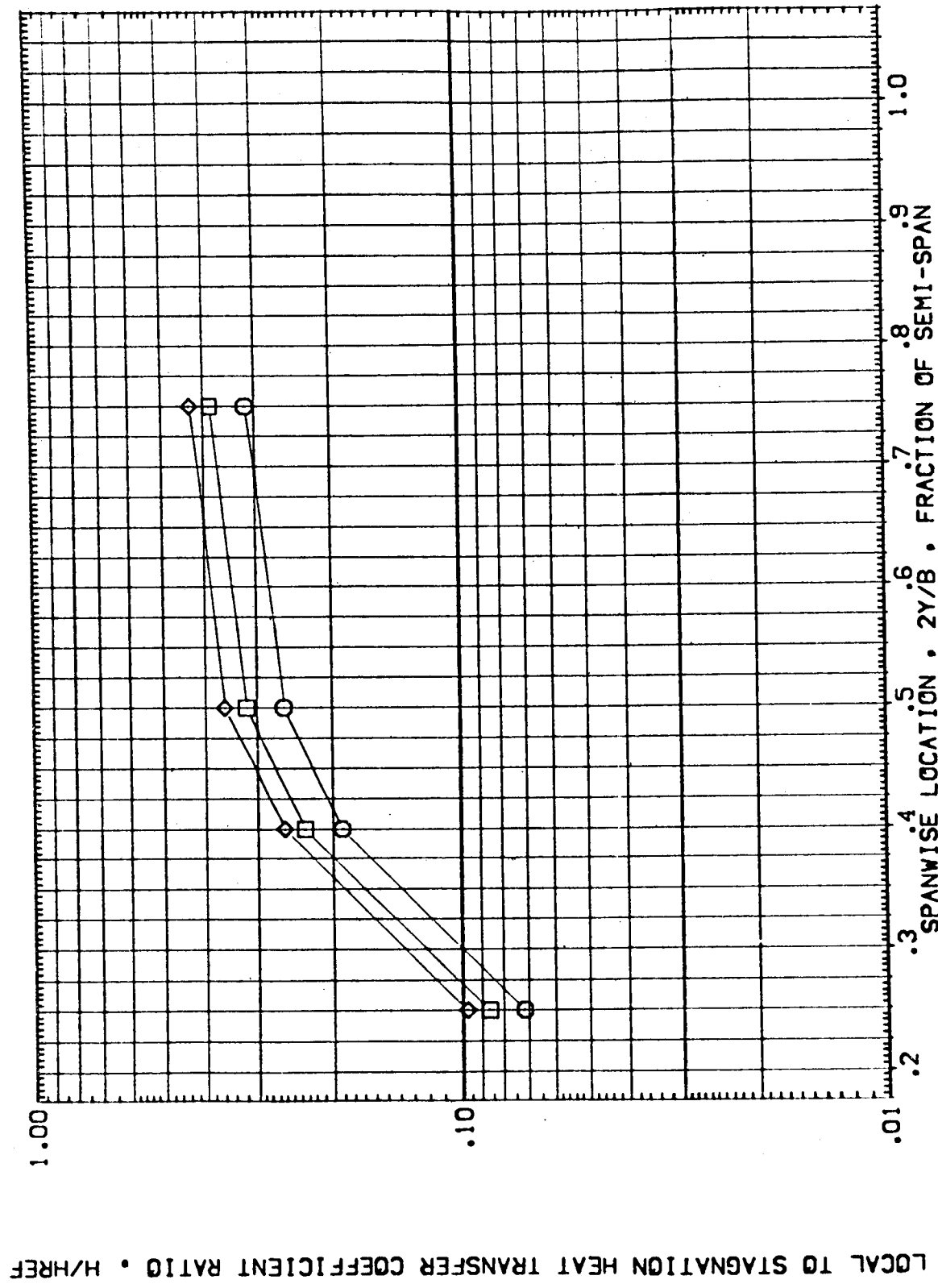
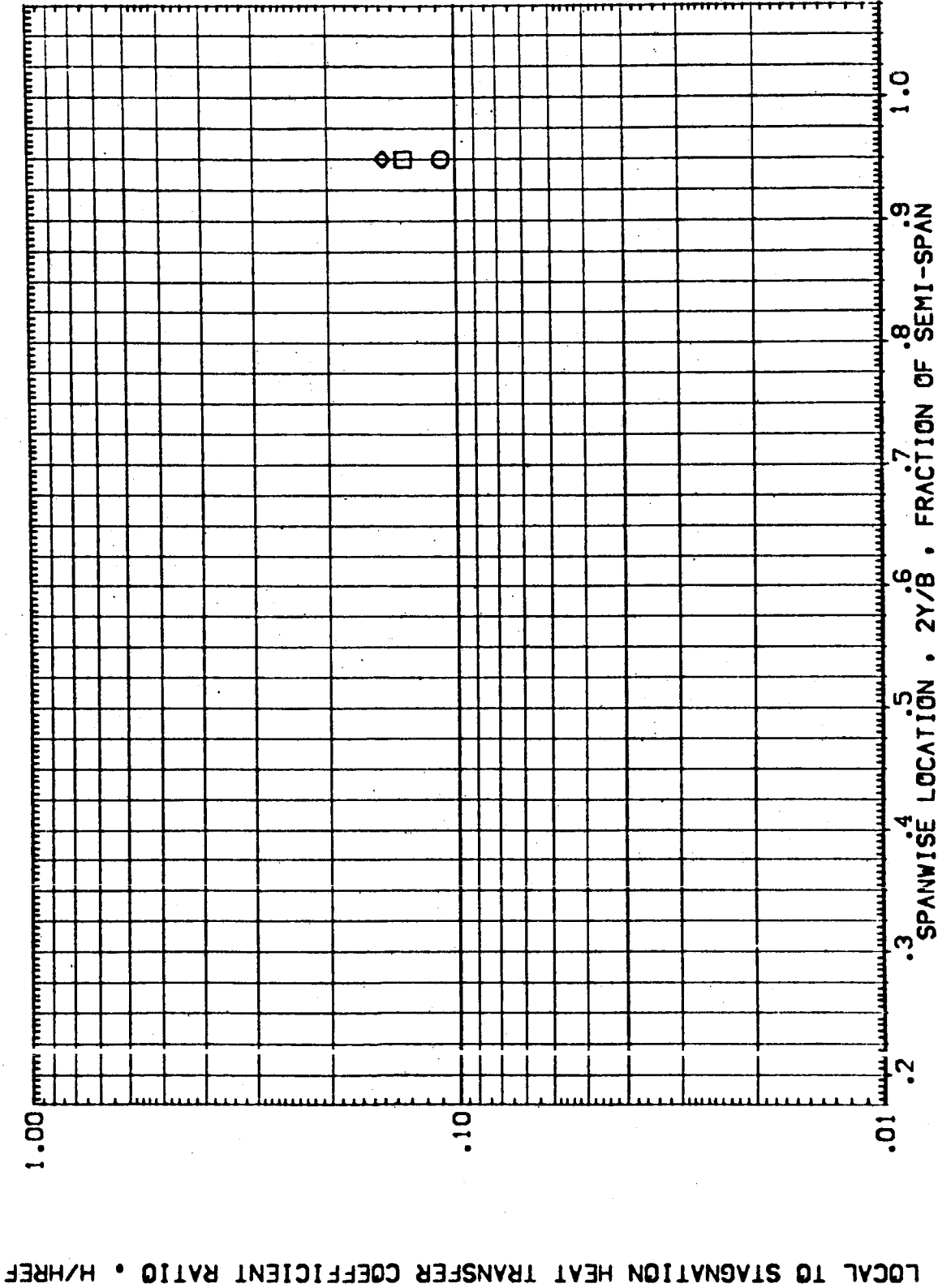


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .025



DATA SET SYMBOL. CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (REIGOS) [] ARC 1.5-178 143 ORBITER (TRIPS) VING BOTTOM .000 .000 5.000 1.000
 (AEIGOS) [] ARC 1.5-178 143 ORBITER (TRIPS) VING BOTTOM .000 .000 5.000 .900
 (BEIGOS) [] ARC 1.5-178 143 ORBITER (TRIPS) VING BOTTOM .000 .000 5.000 .850



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FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (RE|G03) ARC 3.5-178 |H3 ORBITER (TRIPS)WING BOTTOM .000 .000 5.000 1.000
 (AE|G03) ARC 3.5-178 |H3 ORBITER (TRIPS)WING BOTTOM .000 .000 5.000 .900
 (BE|G03) ARC 3.5-178 |H3 ORBITER (TRIPS)WING BOTTOM .000 .000 5.000 .850

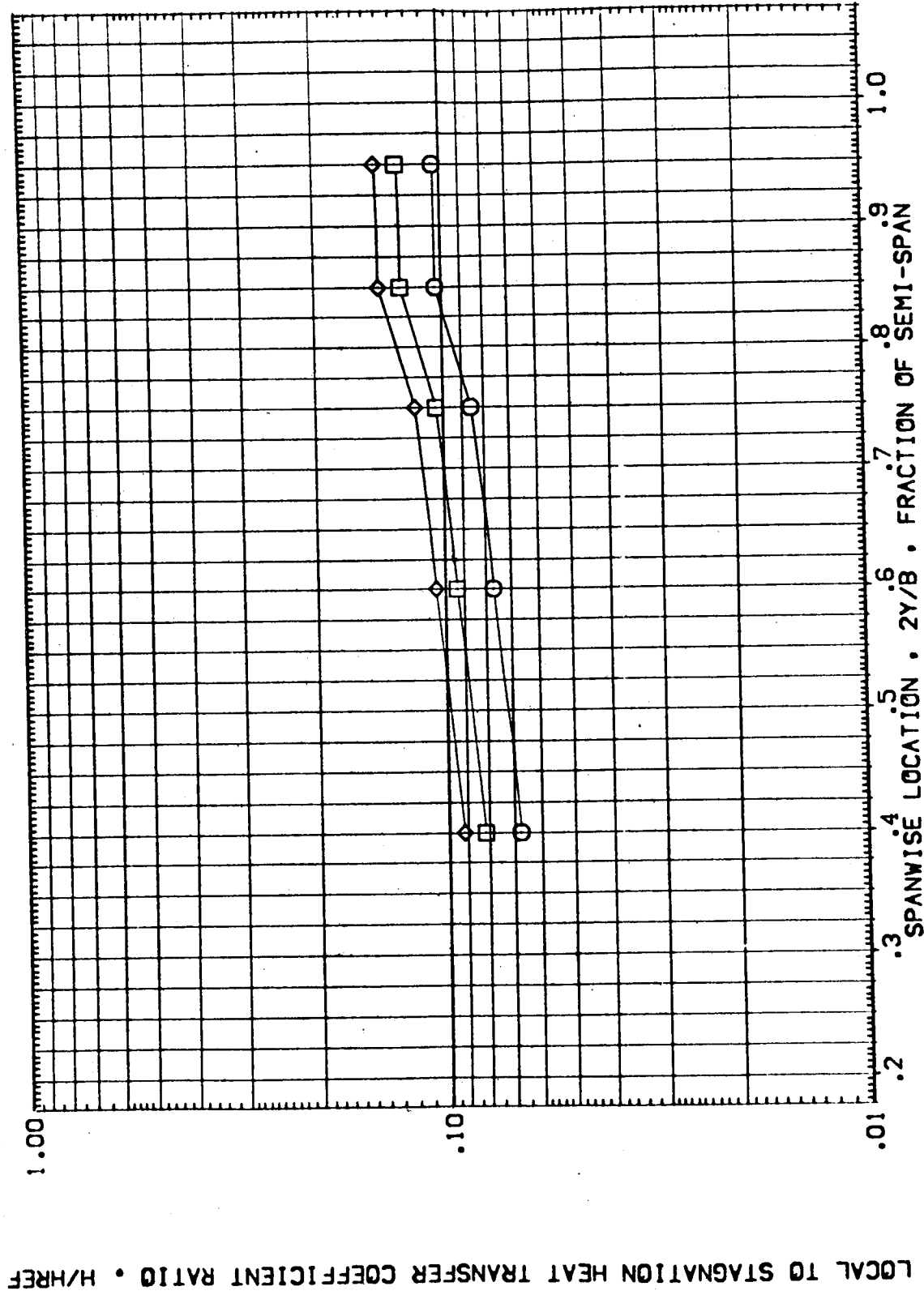


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .100



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(REIGCS) [O] ARC 3.3-178 [H3 ORBITER (TRIPSWING BOTTOM) .000 .000 5.000 1.000
 (AEIGCS) [X] ARC 3.3-178 [H3 ORBITER (TRIPSWING BOTTOM) .000 .000 5.000 .500
 (BEIGCS) [◇] ARC 3.3-178 [H3 ORBITER (TRIPSWING BOTTOM) .000 .000 5.000 .850

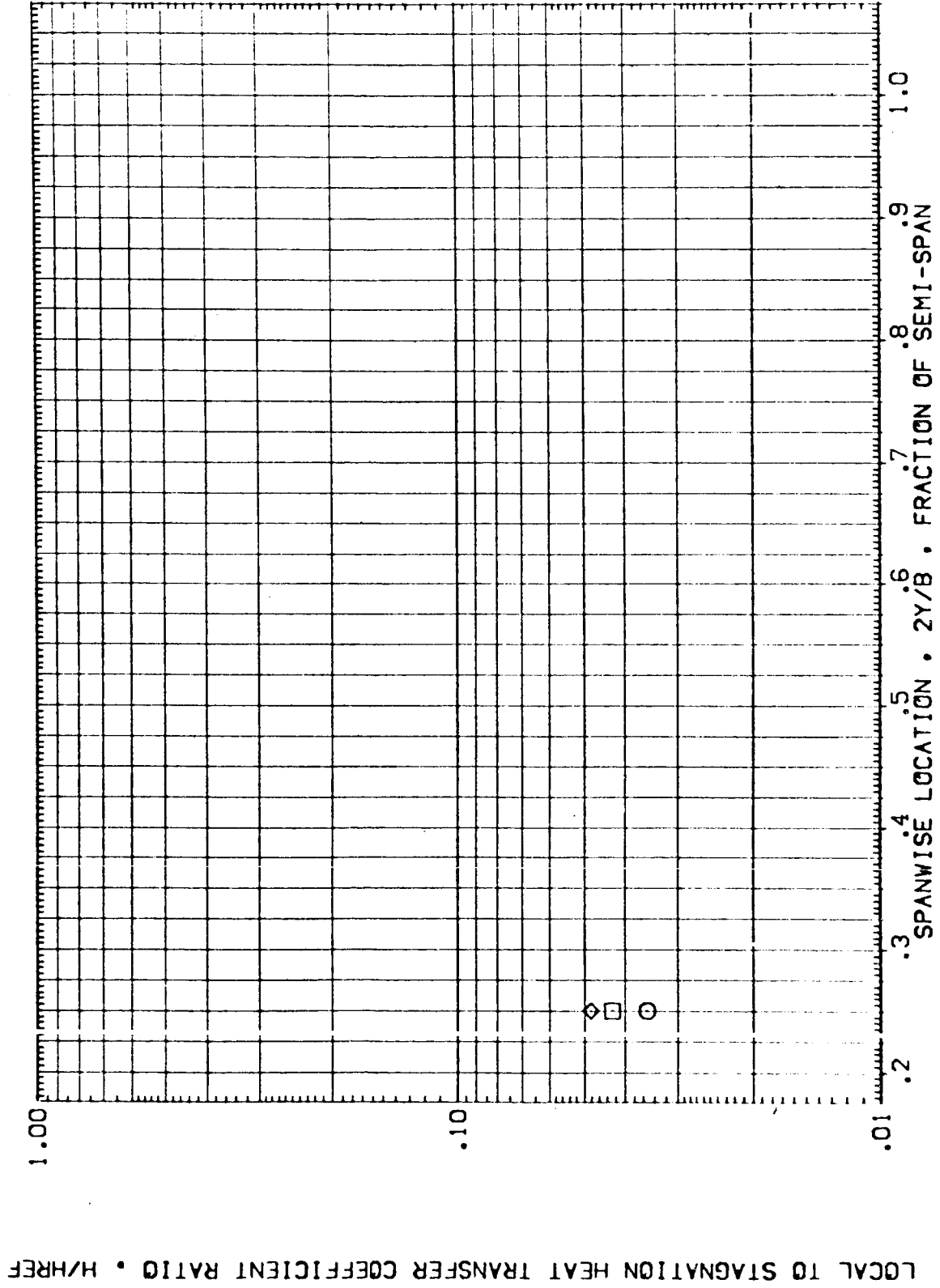


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.30C X/C = .153

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

CONFIGURATION DESCRIPTION
 ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM
 ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM
 ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM

DATA SET SYMBOL
 (RE:GOS) \square
 (AE:GOS) \diamond
 (BE:GOS) \circ

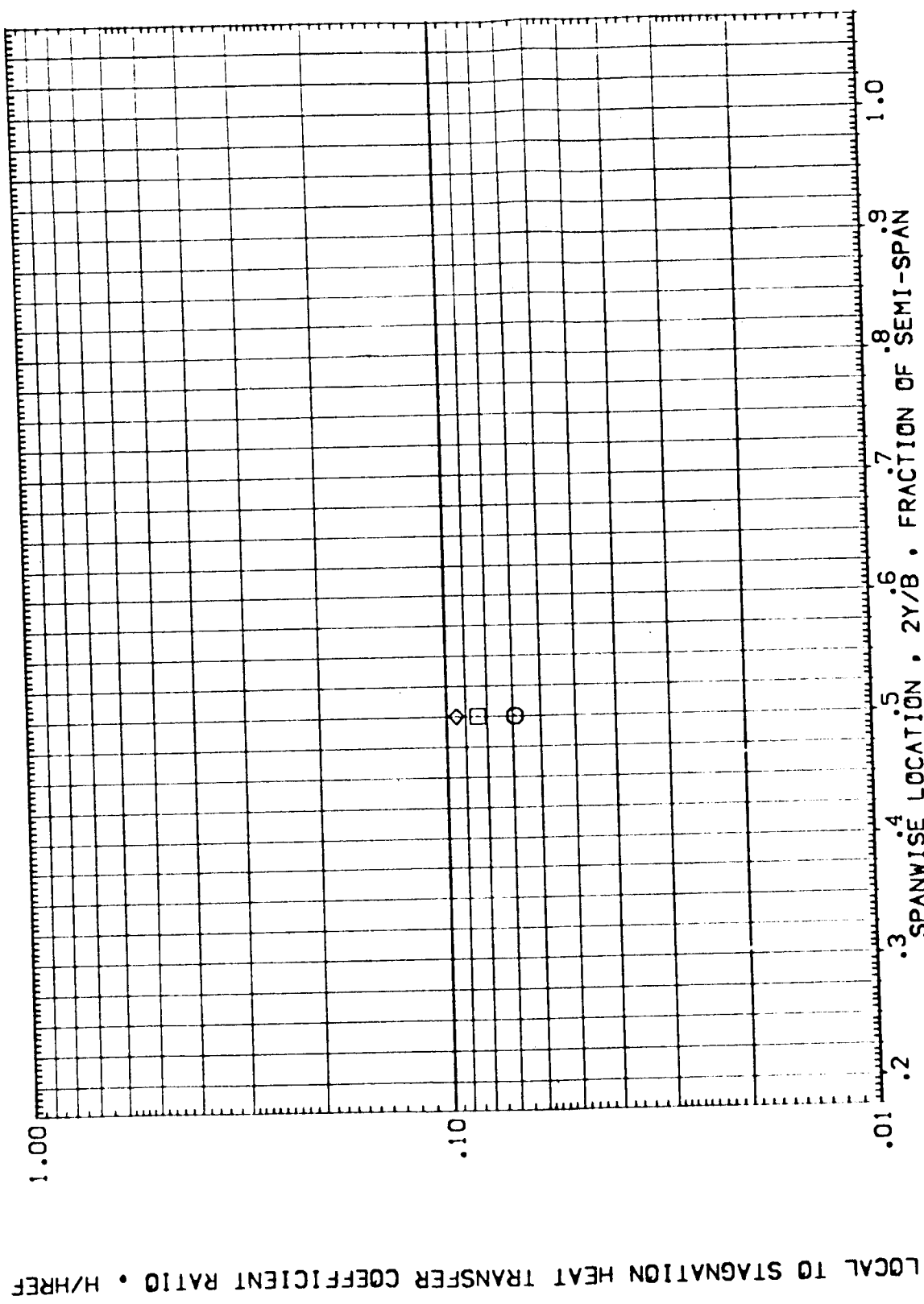


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .177

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(REIG08) (REIG08) (BEIG09) (BEIG09) (BEIG09) (BEIG09)

ARC 3.5-178 H3 ORBITER (TRIPSPRING BOTTOM) .000 .000 5.000 1.000

ARC 3.5-178 H3 ORBITER (TRIPSPRING BOTTOM) .000 .000 5.000 .900

ARC 3.5-178 H3 ORBITER (TRIPSPRING BOTTOM) .000 .000 5.000 .850

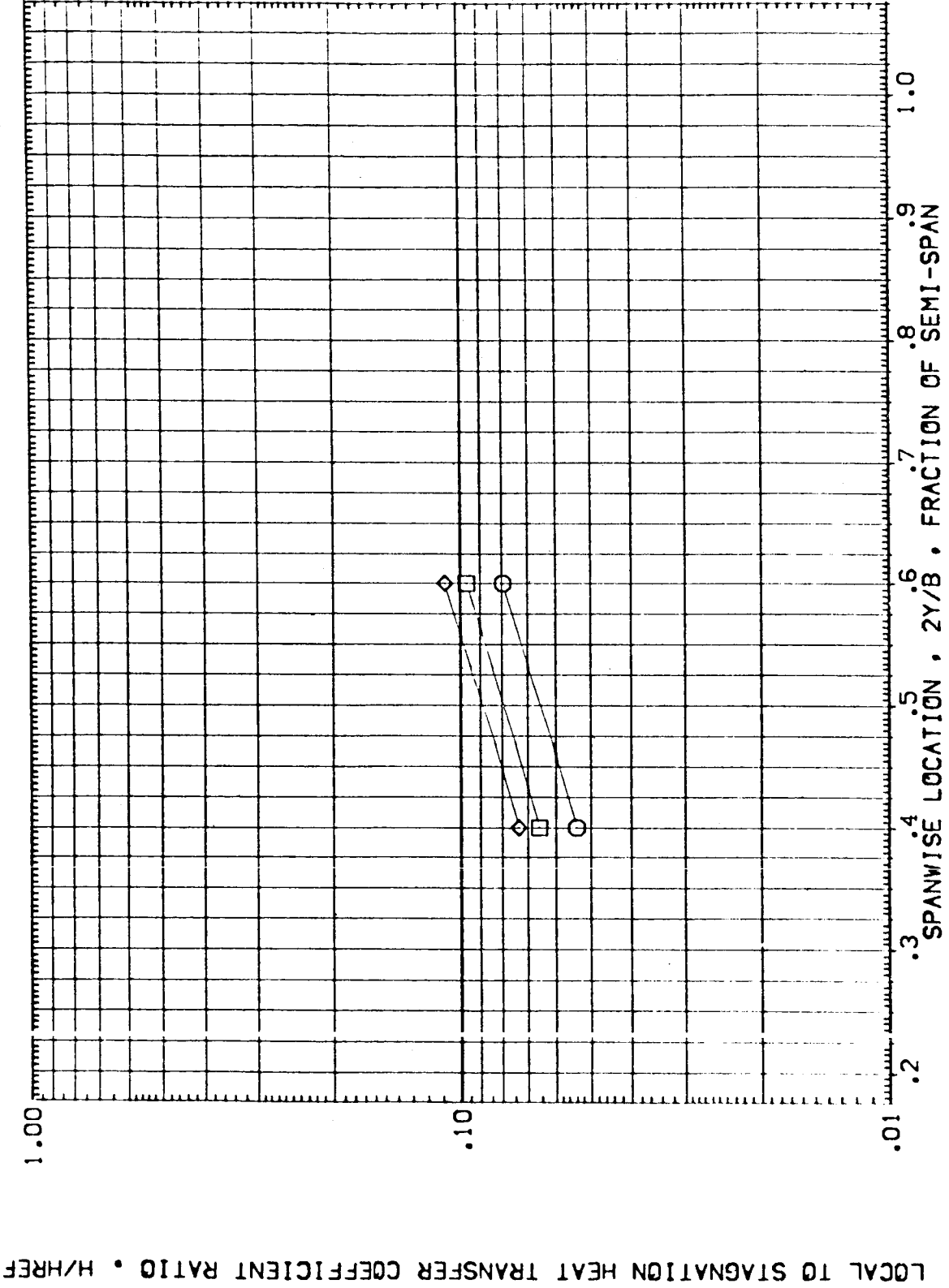


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

(RE|GOS) ARC 3.5-178 |H3 ORBITER (TRIPS|WING BOTTOM .000 .000 5.000 1.000

(AE|GOS) ARC 3.5-178 |H3 ORBITER (TRIPS|WING BOTTOM .000 .000 5.000 .900

(BE|GOS) ARC 3.5-178 |H3 ORBITER (TRIPS|WING BOTTOM .000 .000 5.000 .850

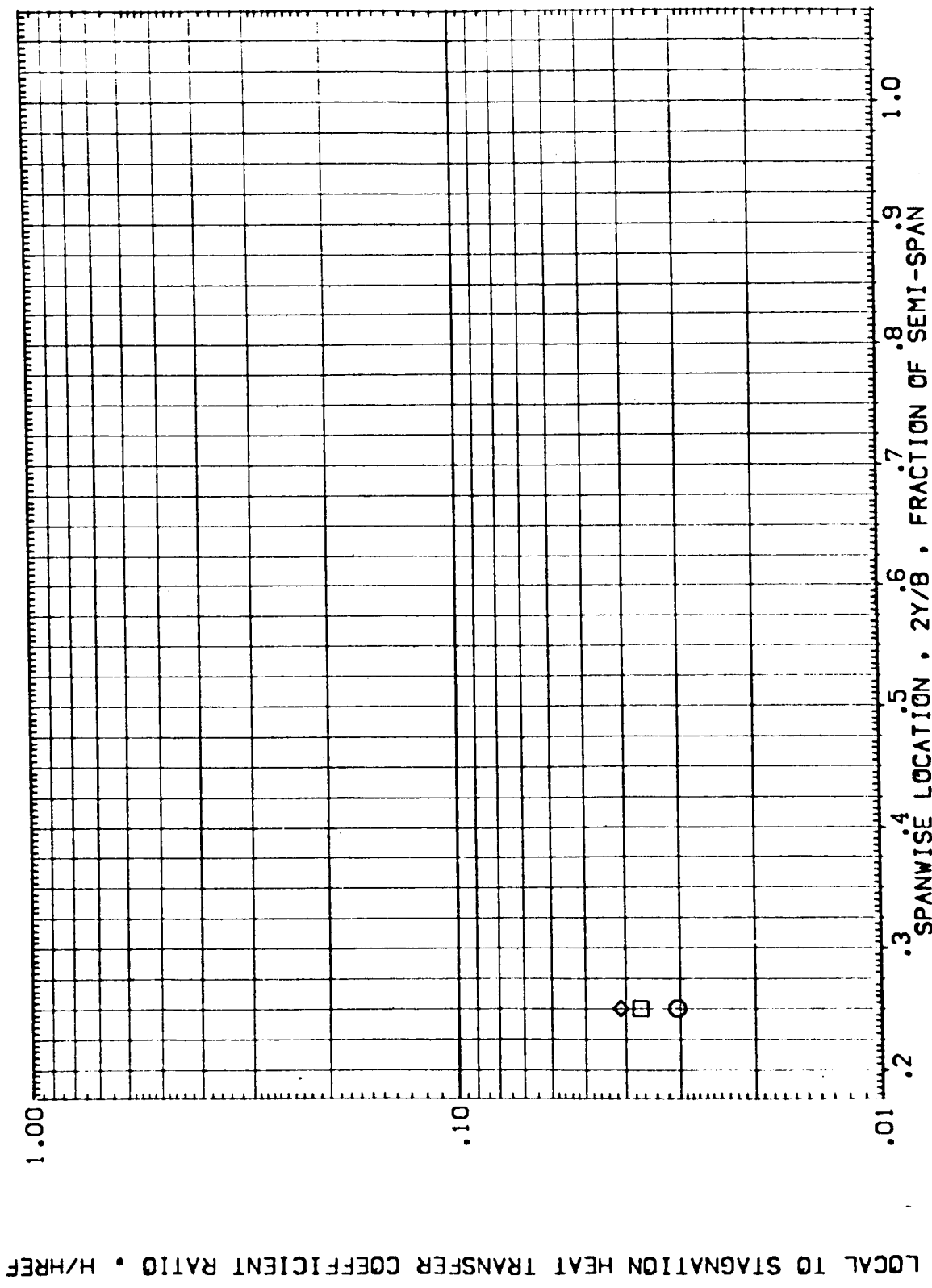


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

{RE{009} } ARC 3 5-178 I-H3 ORBITER (TRIPSIVING BOTTOM) .000 .000 5.000 1.000

{AE{009} } ARC 3 5-178 I-H3 ORBITER (TRIPSIVING BOTTOM) .000 .000 5.000 .900

{BE{009} } ARC 3 5-178 I-H3 ORBITER (TRIPSIVING BOTTOM) .000 .000 5.000 .850

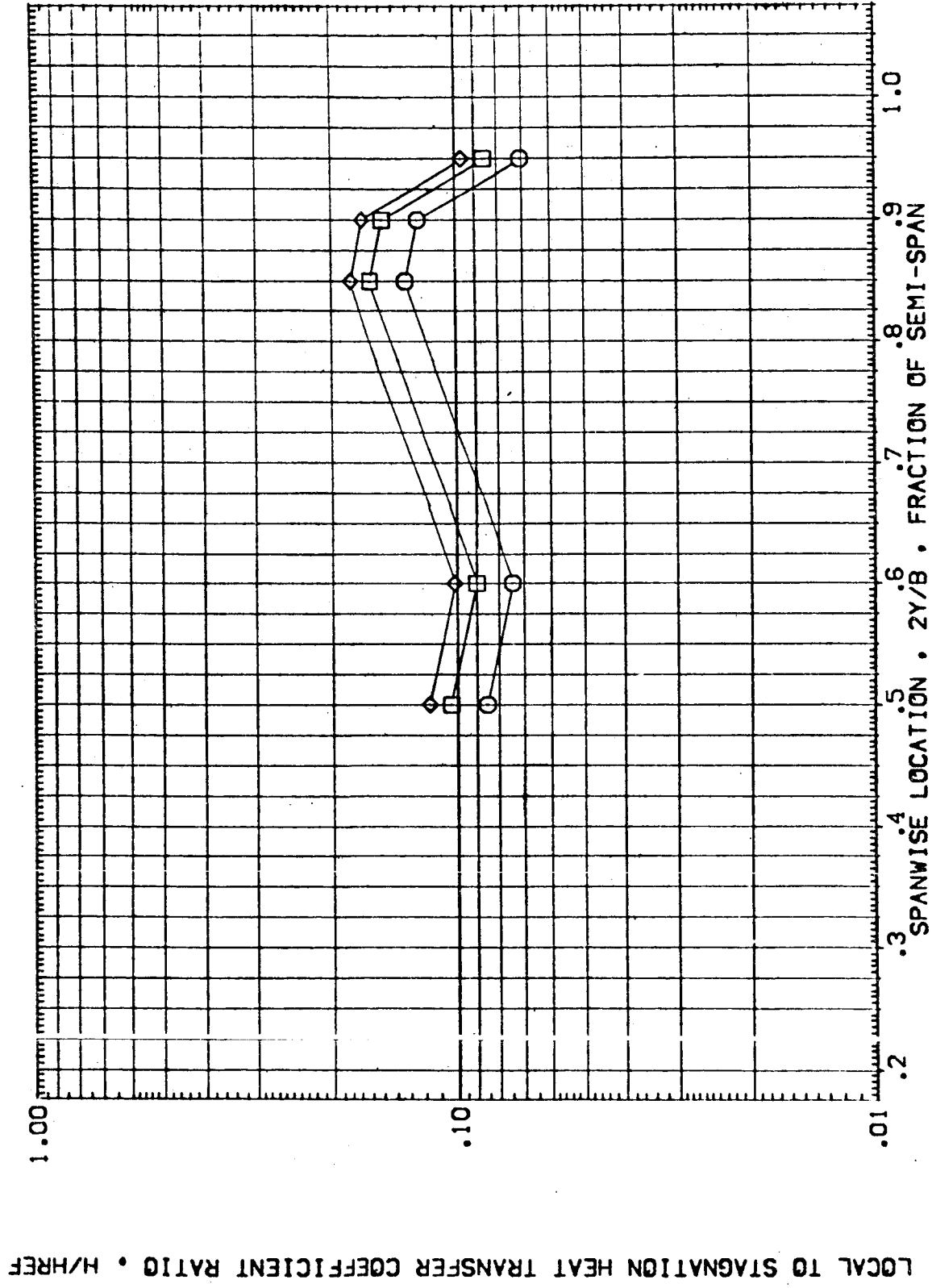


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

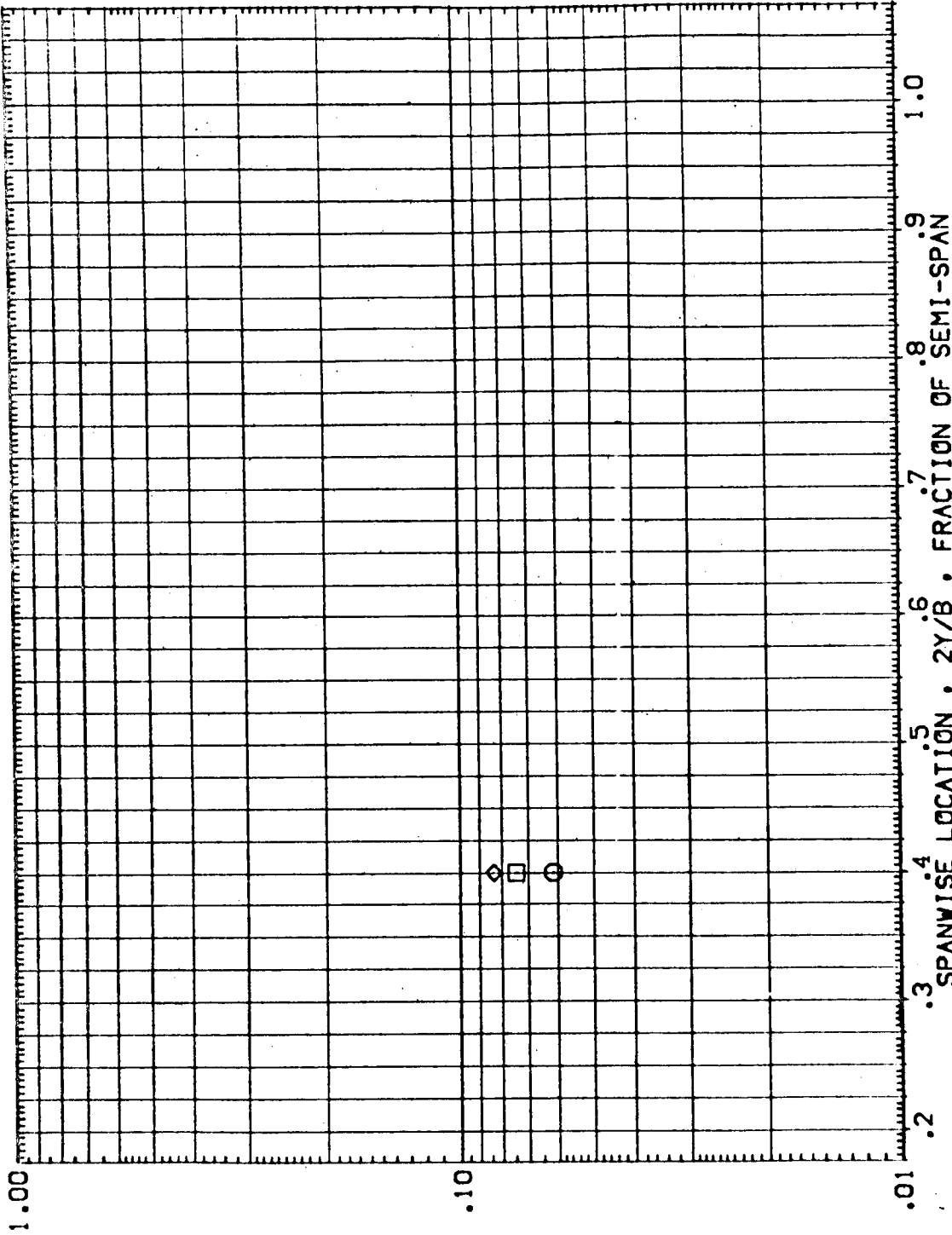
MACH = 5.300 X/C = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RE|G09) [] ARC 3.5-178 IH3 ORBITER [TRIP]SIVING BOTTCM
 (AE|G09) [] ARC 3.5-178 IH3 ORBITER [TRIP]SIVING BOTTCM
 (BE|G09) [] ARC 3.5-178 IH3 ORBITER [TRIP]SIVING BOTTCM

ALPHA .000
 BETA .000
 RAY/L 5.000
 HAY/HT 1.000

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



SPANWISE LOCATION • 2Y/B • FRACTION OF SEMI-SPAN

FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .302



DATA SET SYMBO. CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 {REIG09} [O] ARC 3.5-178 H3 ORBITER {TRIPSIVING BOTTOM} .000 .000 5.000 1.000
 {AEIG09} [□] ARC 3.5-178 H3 ORBITER {TRIPSIVING BOTTOM} .000 .000 5.000 .500
 {BEIG09} [◇] ARC 3.5-178 H3 ORBITER {TRIPSIVING BOTTOM} .000 .000 5.000 .650

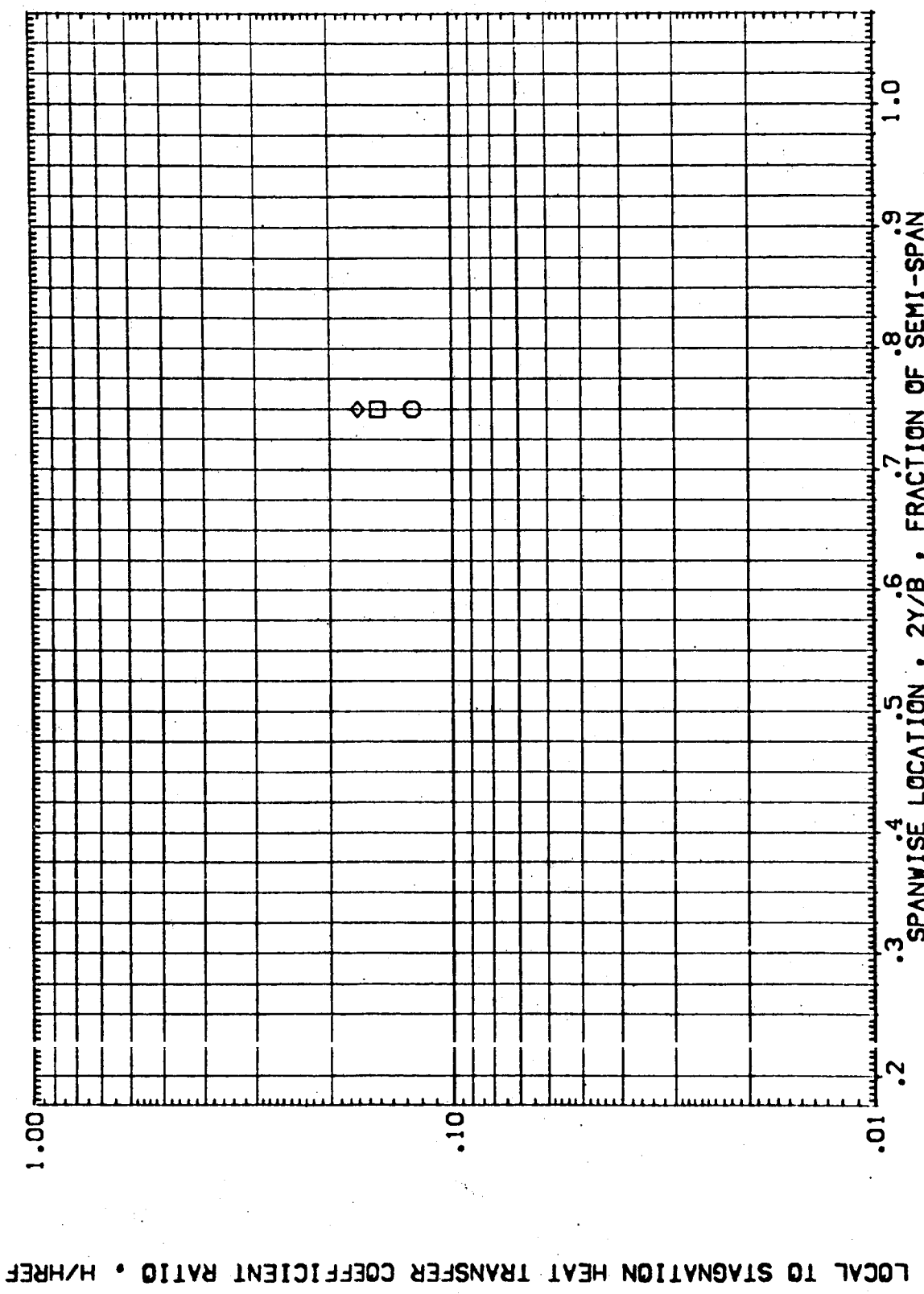


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .303

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA FN/L HAW/HT

{RE|GOS} ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM

{AL|GOS} ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM

{BE|GOS} ARC 3.5-178 IH3 ORBITER (TRIPS)WING BOTTOM

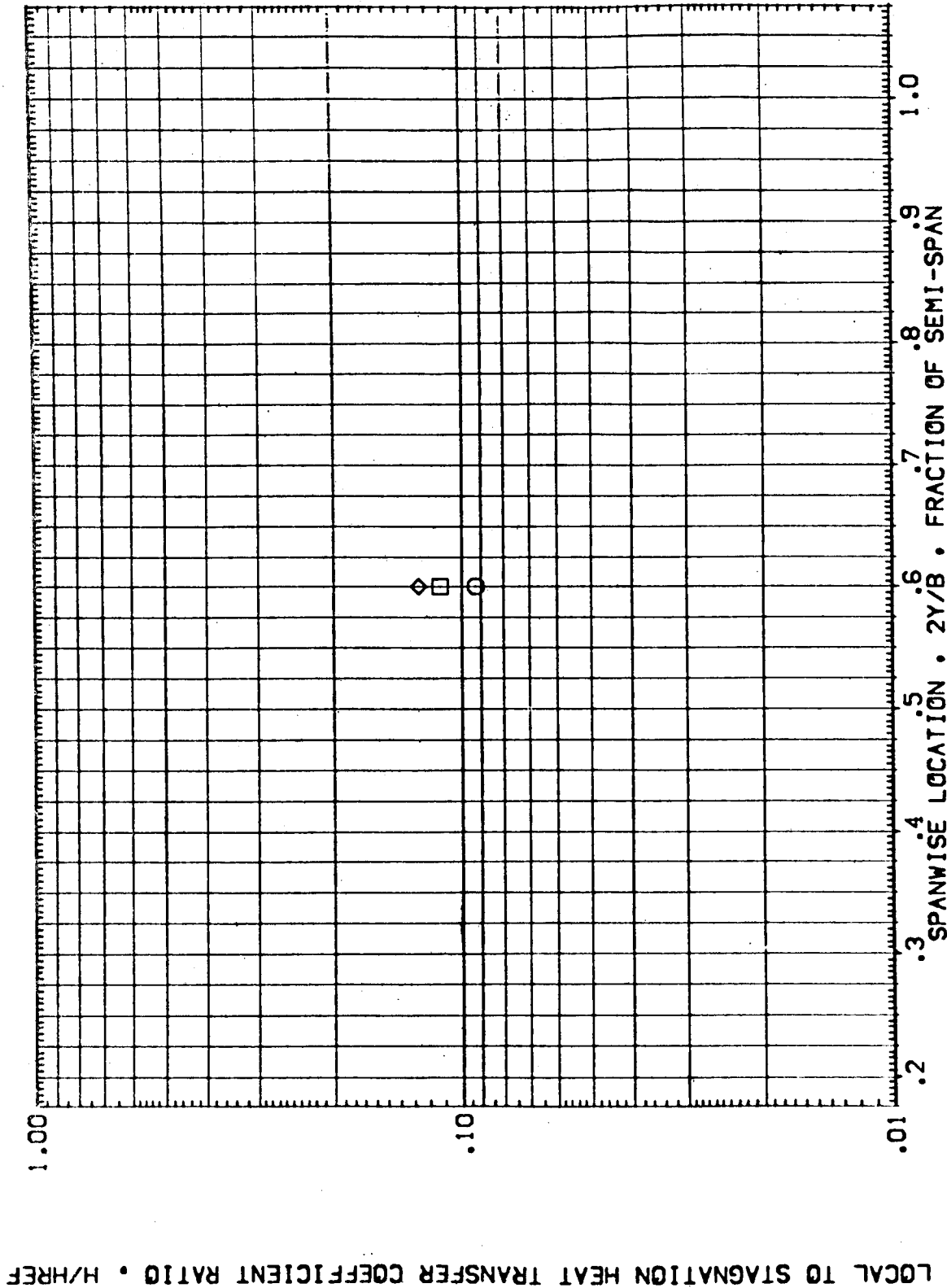


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .428

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
[REIGOS]	ARC 1.5-178 [H3 ORBITER (TRIP) WING BOTTOM	.000	.000	5.000	1.000
[AEIGOS]	ARC 1.5-178 [H3 ORBITER (TRIP) WING BOTTOM	.000	.000	5.000	.900
[BEIGOS]	ARC 1.5-178 [H3 ORBITER (TRIP) WING BOTTOM	.000	.000	5.000	.850

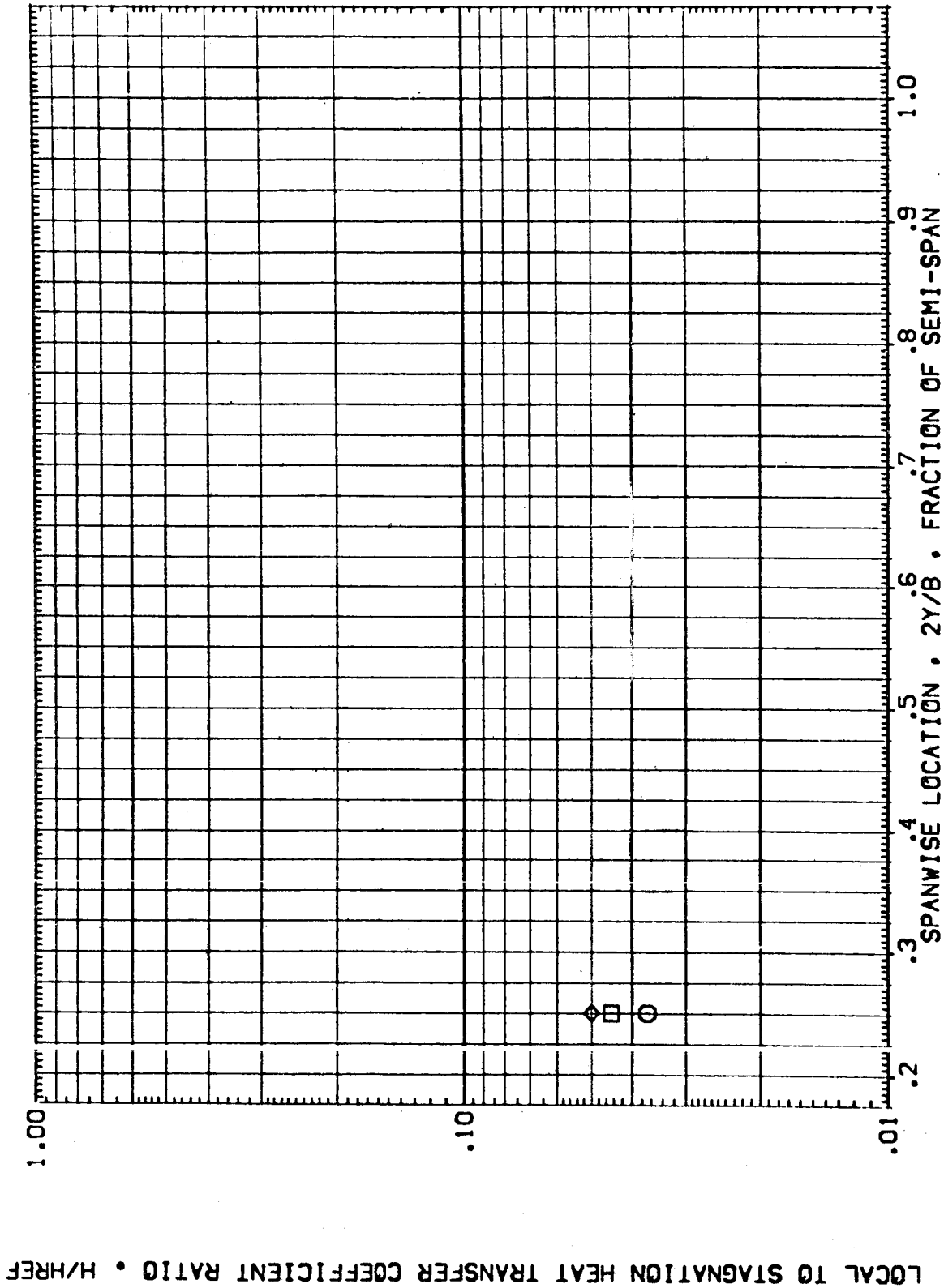


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.30) X/C = .444

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 [RE:009] [AE:009] [BE:009] ARC 3.5-178 [H3 ORBITER (TRIPS)WING BOTTOM] .000 .000 5.000 1.000
 [AE:009] [BE:009] ARC 3.5-178 [H3 ORBITER (TRIPS)WING BOTTOM] .000 .000 5.000 .950
 [BE:009] [BE:009] ARC 3.5-178 [H3 ORBITER (TRIPS)WING BOTTOM] .000 .000 5.000 .900

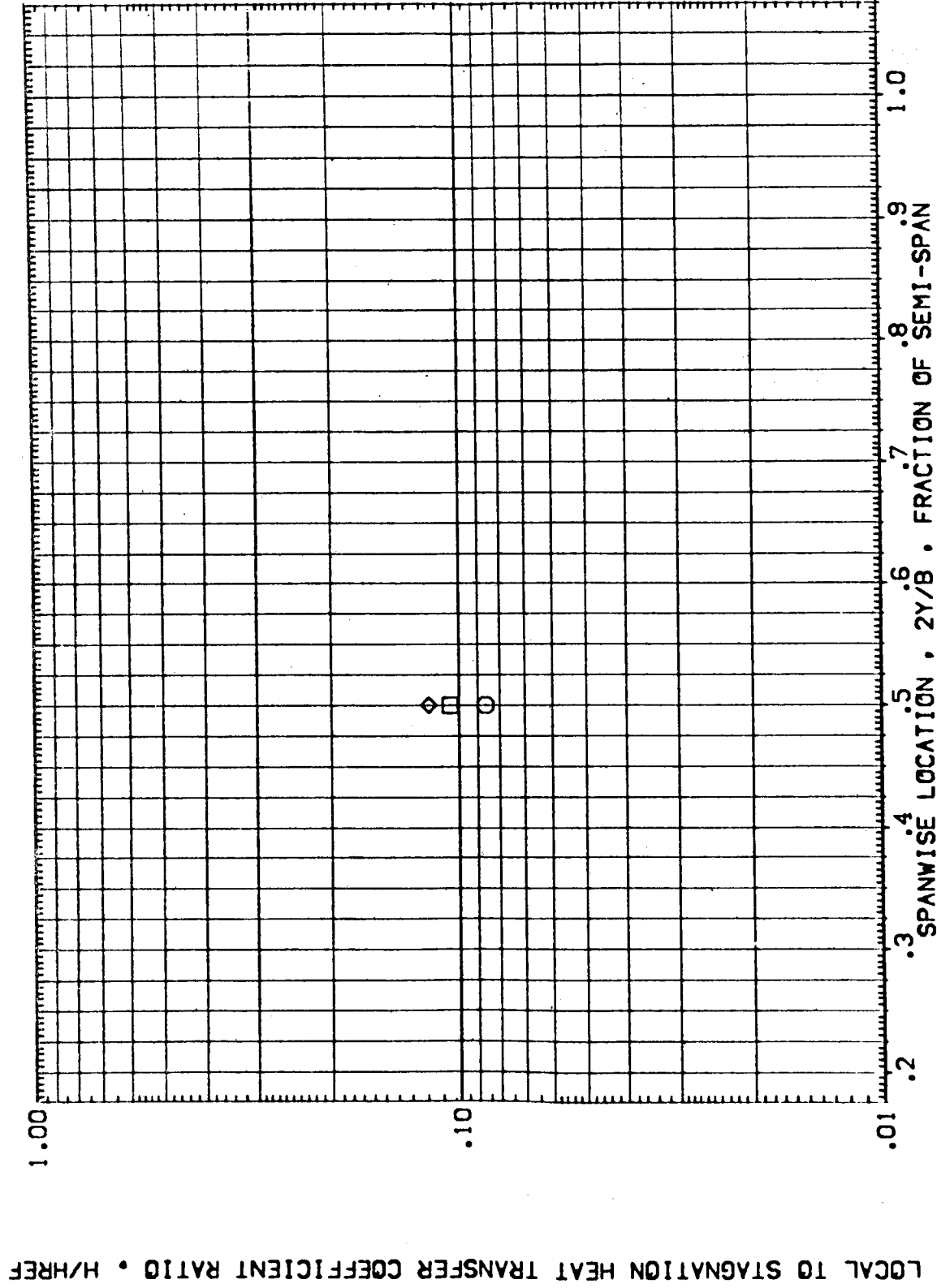


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .487



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE|G09} ARC 3.5-178 I-M3 ORBITER (TRIPS) VING BOTTOM .000 .000 5.000 1.000

{AE|G09} ARC 3.5-178 I-M3 ORBITER (TRIPS) VING BOTTOM .000 .000 5.000 .900

{BE|G09} ARC 3.5-178 I-M3 ORBITER (TRIPS) VING BOTTOM .000 .000 5.000 .850

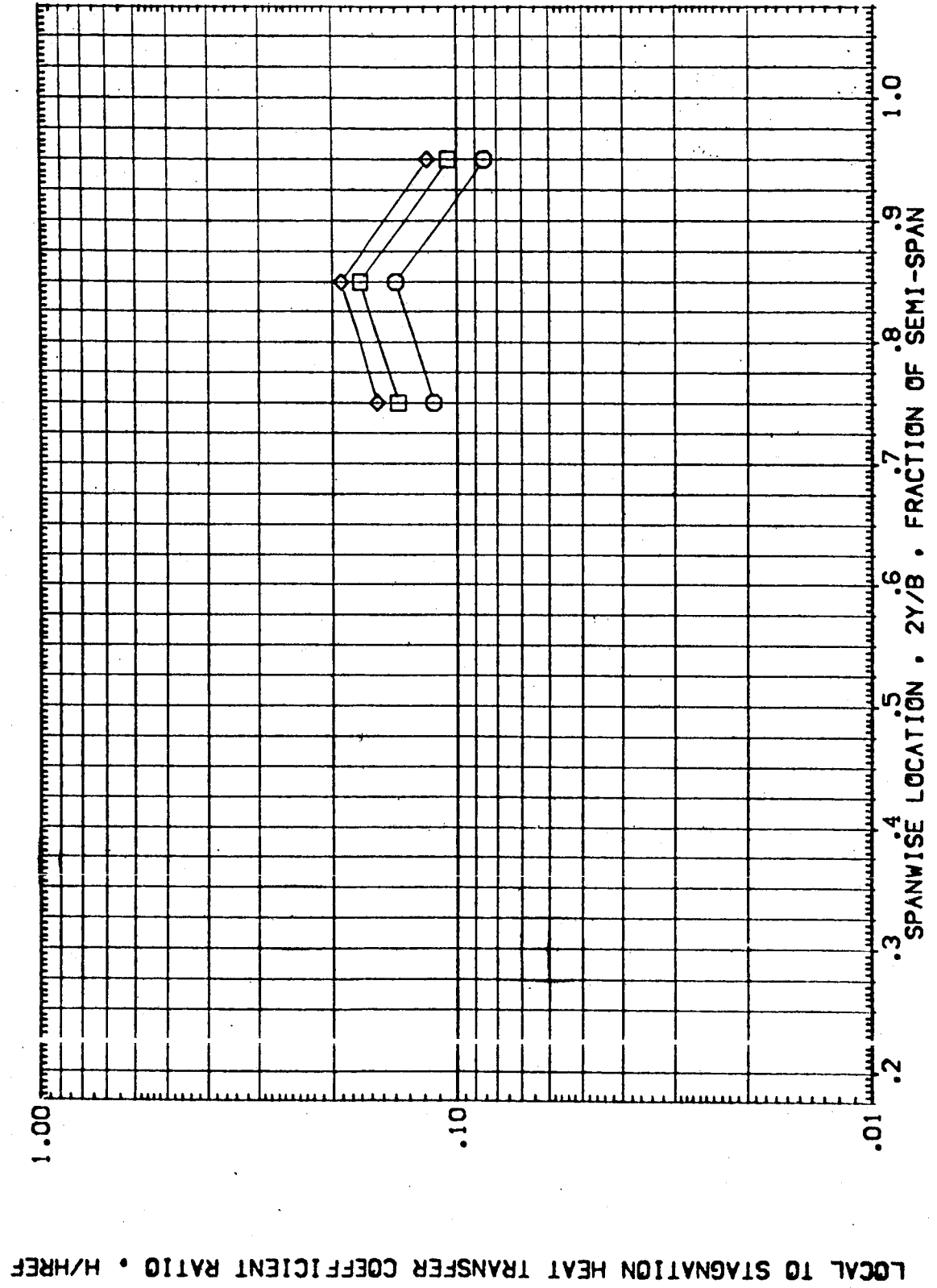


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.30(1) X/C = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RM/L MAW/HT

{ RE1109 } ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 1.000

{ AE1109 } ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 .900

{ BE1109 } ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 .850

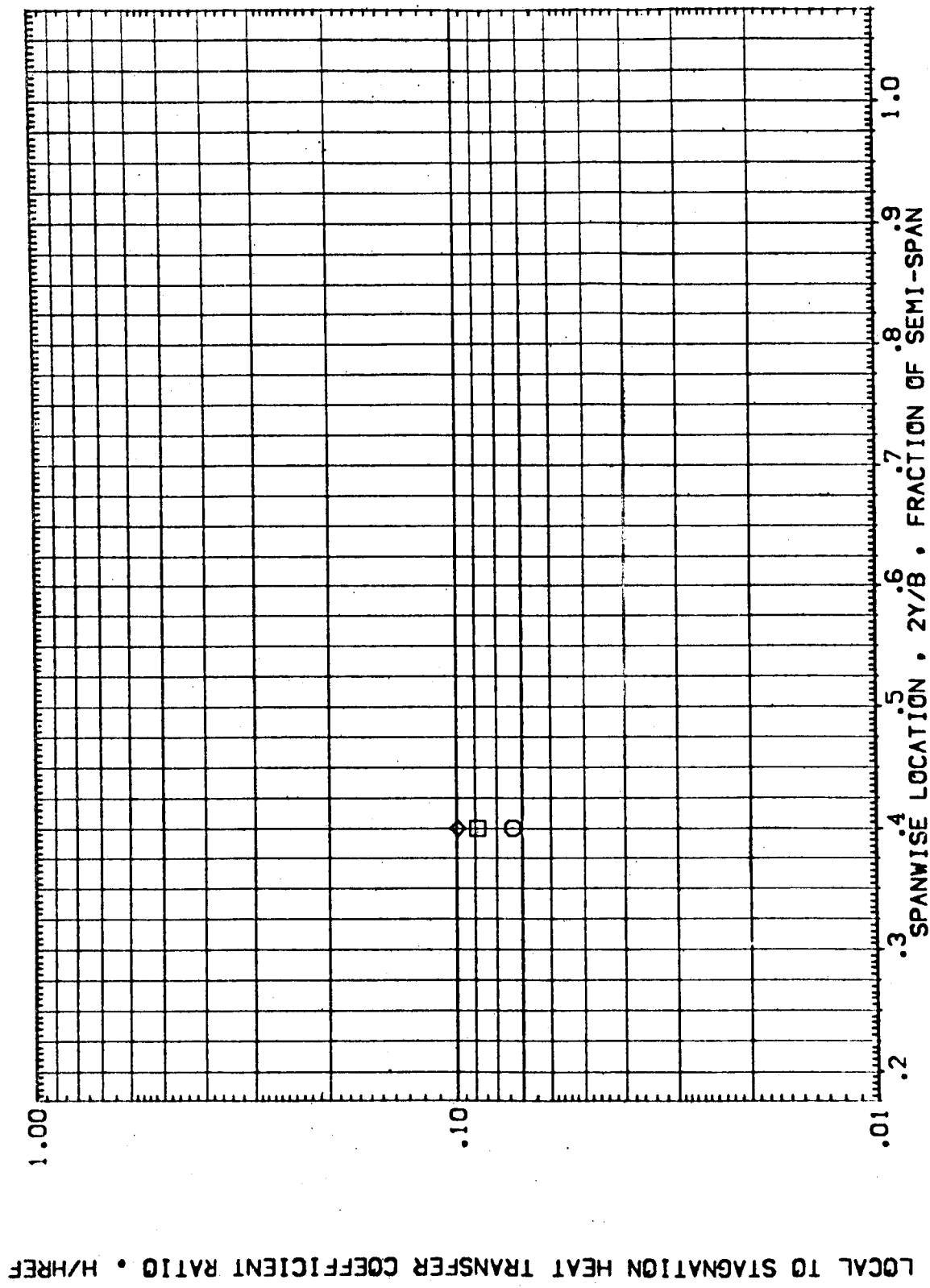


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .559



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE|009) ARC |.5-|78 |H3 ORBITER (TRIPS|VING BOTTOM) .000 .000 5.000 1.000

(AE|009) ARC |.5-|78 |H3 ORBITER (TRIPS|VING BOTTOM) .000 .000 5.000 .900

(BE|009) ARC |.5-|78 |H3 ORBITER (TRIPS|VING BOTTOM) .000 .000 5.000 .850

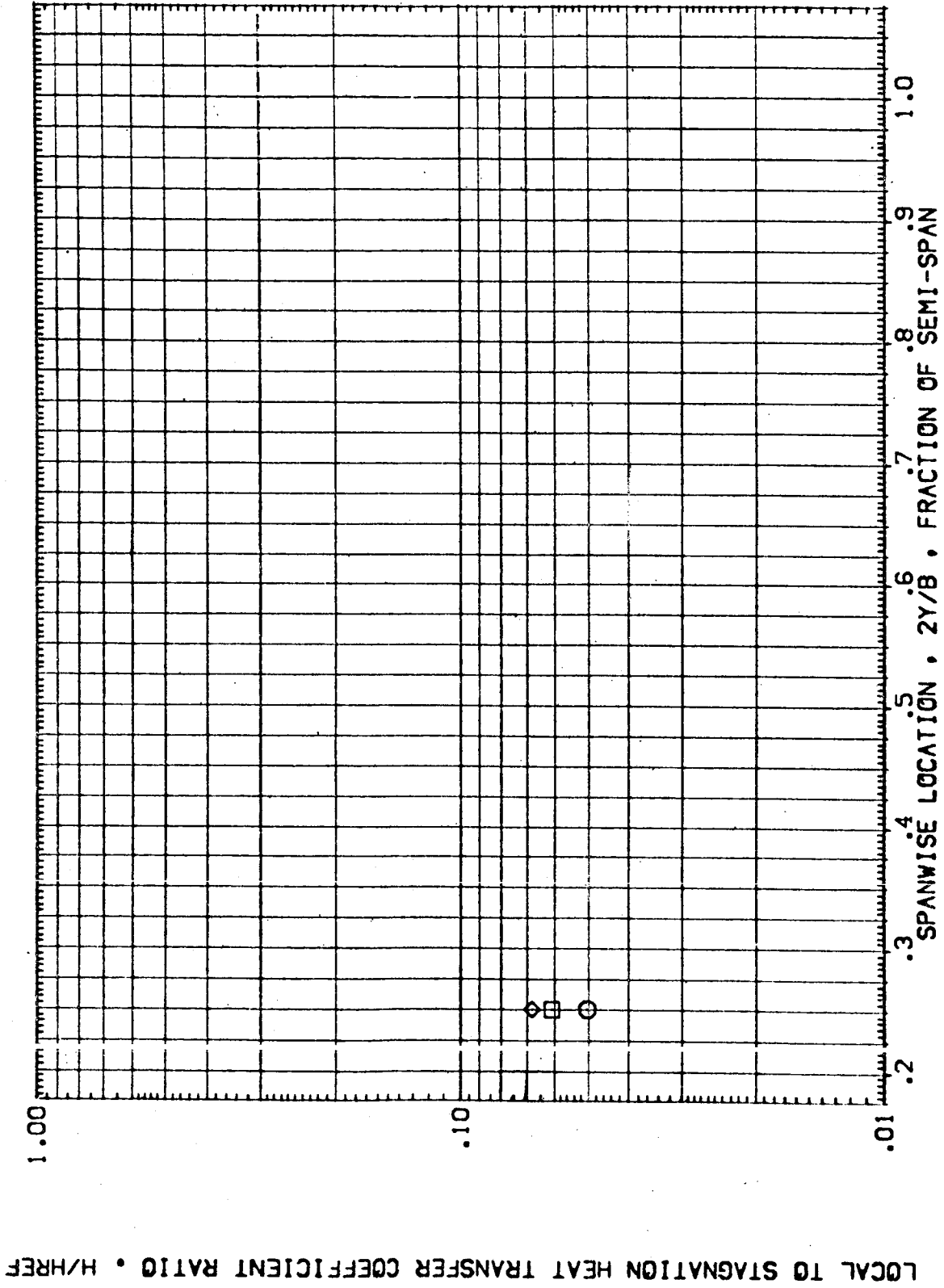


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .590

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA IMVL HAV/HT

{RE1609} ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 1.000

{AE1609} ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 .900

{BE1609} ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 .850

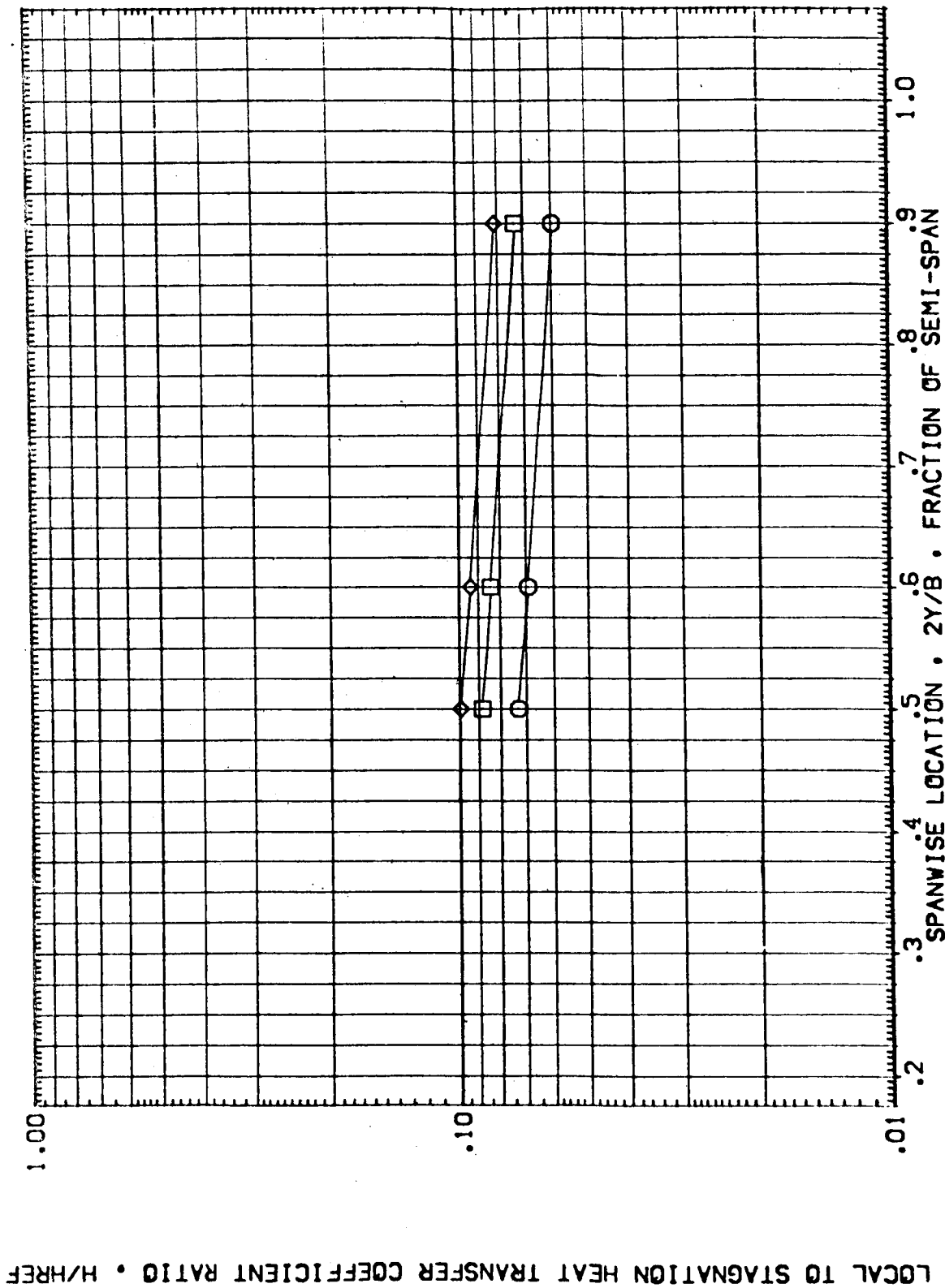


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .600



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE|GOS} ARC 1.5-178 I-H3 ORBITER (TRIPS) VING BOTTOM .000 .000 5.000 1.000

{AE|GOS} ARC 1.5-178 I-H3 ORBITER (TRIPS) VING BOTTOM .000 .000 5.000 .900

{BE|GOS} ARC 1.5-178 I-H3 ORBITER (TRIPS) VING BOTTOM .000 .000 5.000 .850

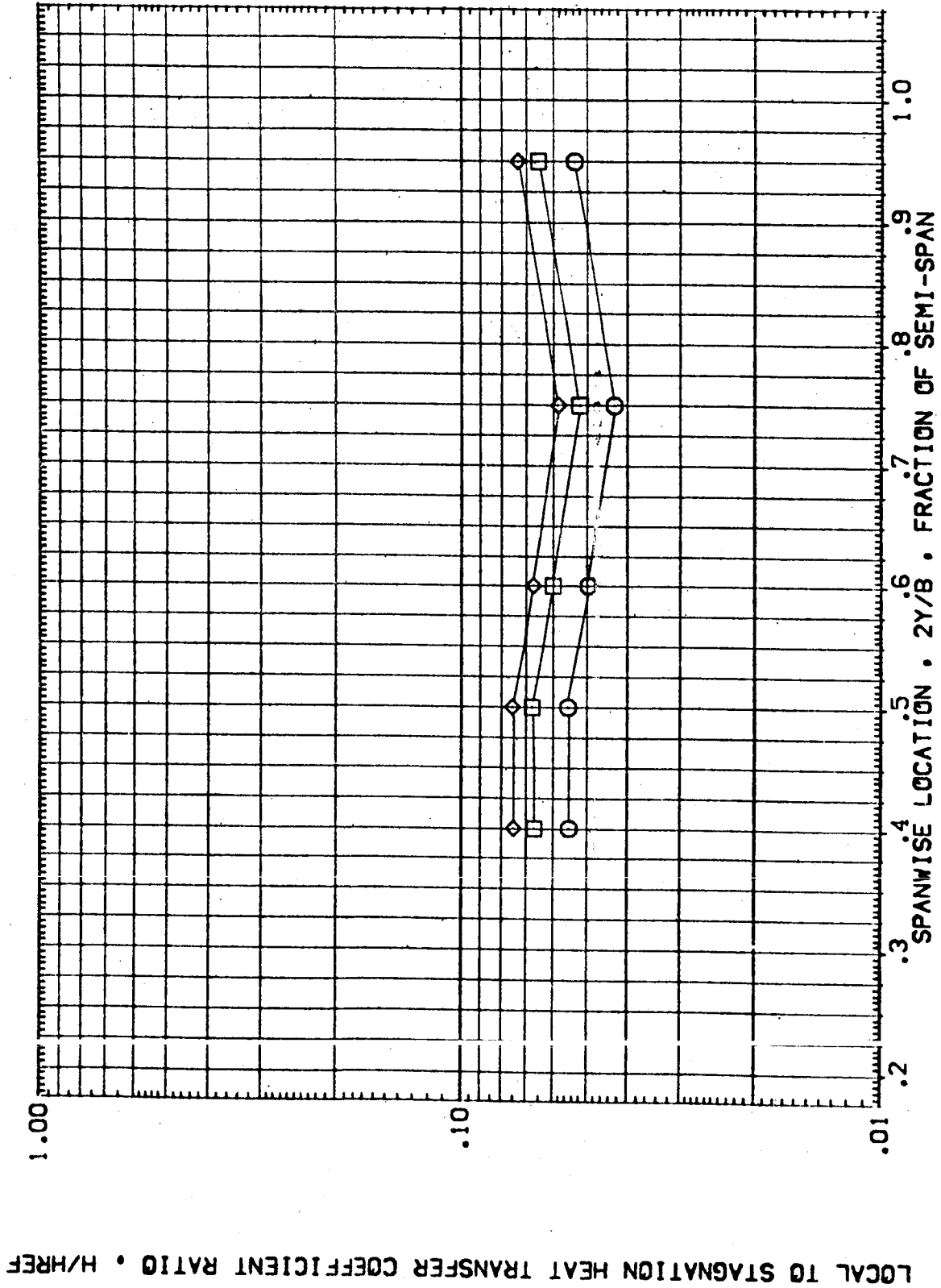


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RAU/L HAW/HI

[RE] [509] ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 1.000

[AL] [509] ARC 3.5-173 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 .900

[BE] [509] ARC 3.5-178 IH3 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 .650

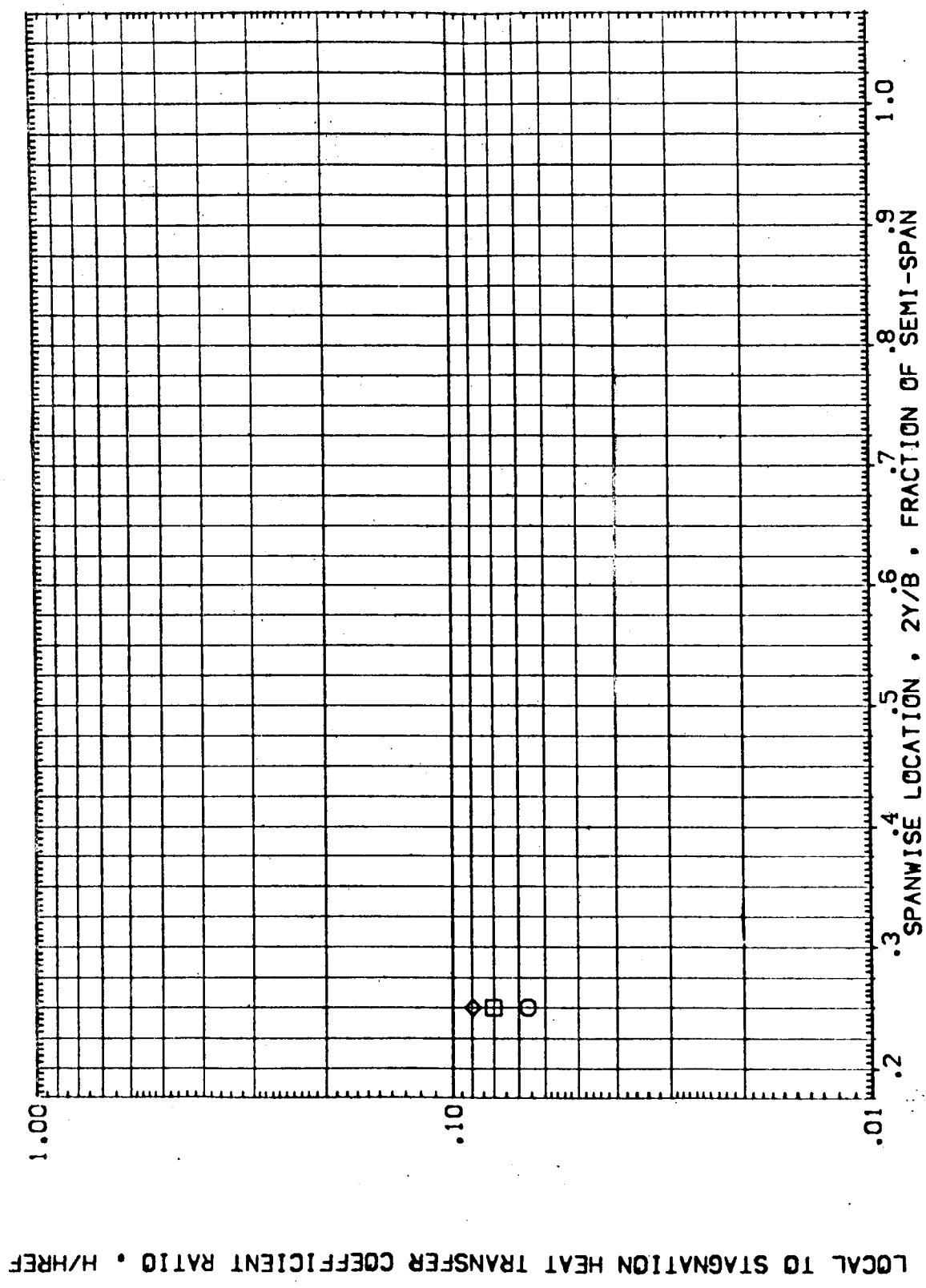


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .736



DATA SET SYMBOL CON FIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE|009) ARC 3 5-178 143 ORBITER (TRIPS)WING BOTTOM .000 .000 5.000 1.000

(AE|009) ARC 3 5-178 143 ORBITER (TRIPS)WING BOTTOM .000 .000 5.000 .900

(BE|009) ARC 3 5-178 143 ORBITER (TRIPS)WING BOTTOM .000 .000 5.000 .850

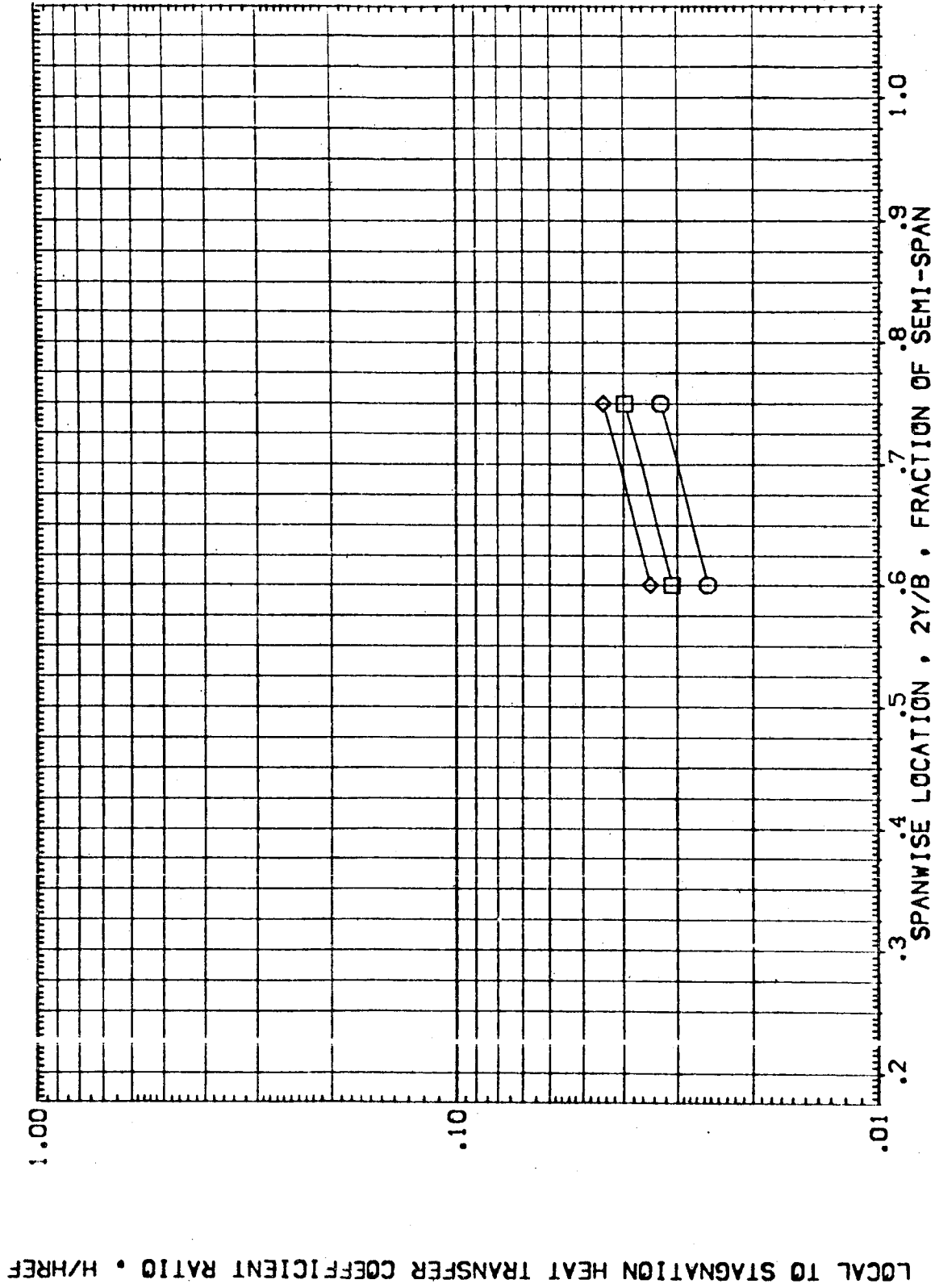


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.30() X/C = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RAYL HAW/HT

(PE) (G09) ARC 3.5-178 143 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 1.000

(AE) (G09) ARC 3.5-178 143 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 .900

(BE) (G09) ARC 3.5-178 143 ORBITER (TRIPS) WING BOTTOM .000 .000 5.000 .850

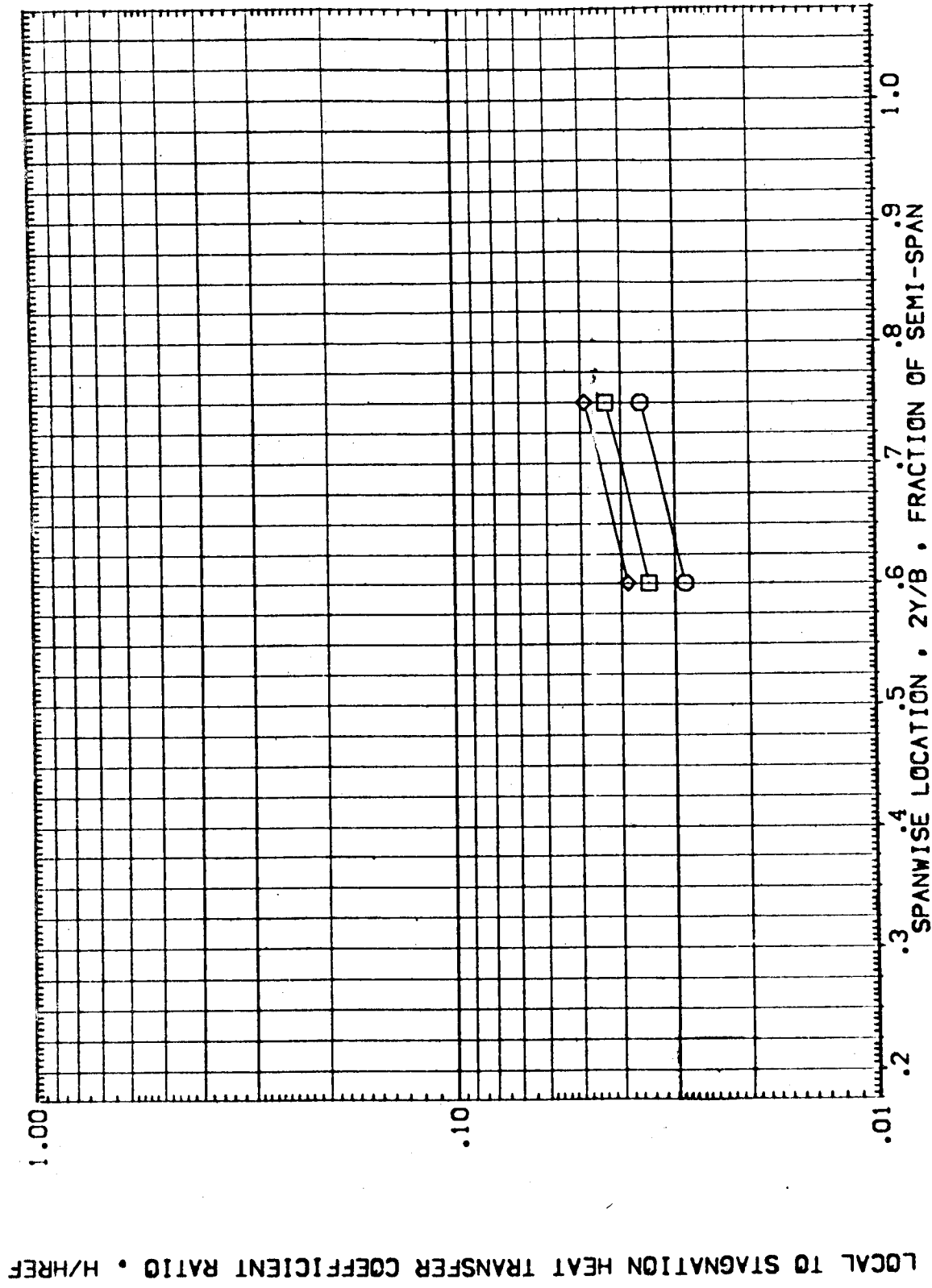


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .850



DATA SET SYMBOL. CONFIGURATION DESCRIPTION

RE (GOS)	AE (GOS)	BE (GOS)	ARC	H3	ORBITER	(TRIPS)	VING	BOTTOM	ALPHA	BETA	RNVL	HAV/HT
○	○	○	1.5-178	H3	ORBITER	(TRIPS)	VING	BOTTOM	.000	.000	5.000	1.000
○	○	○	1.5-178	H3	ORBITER	(TRIPS)	VING	BOTTOM	.000	.000	5.000	.500
○	○	○	1.5-178	H3	ORBITER	(TRIPS)	VING	BOTTOM	.000	.000	5.000	.850

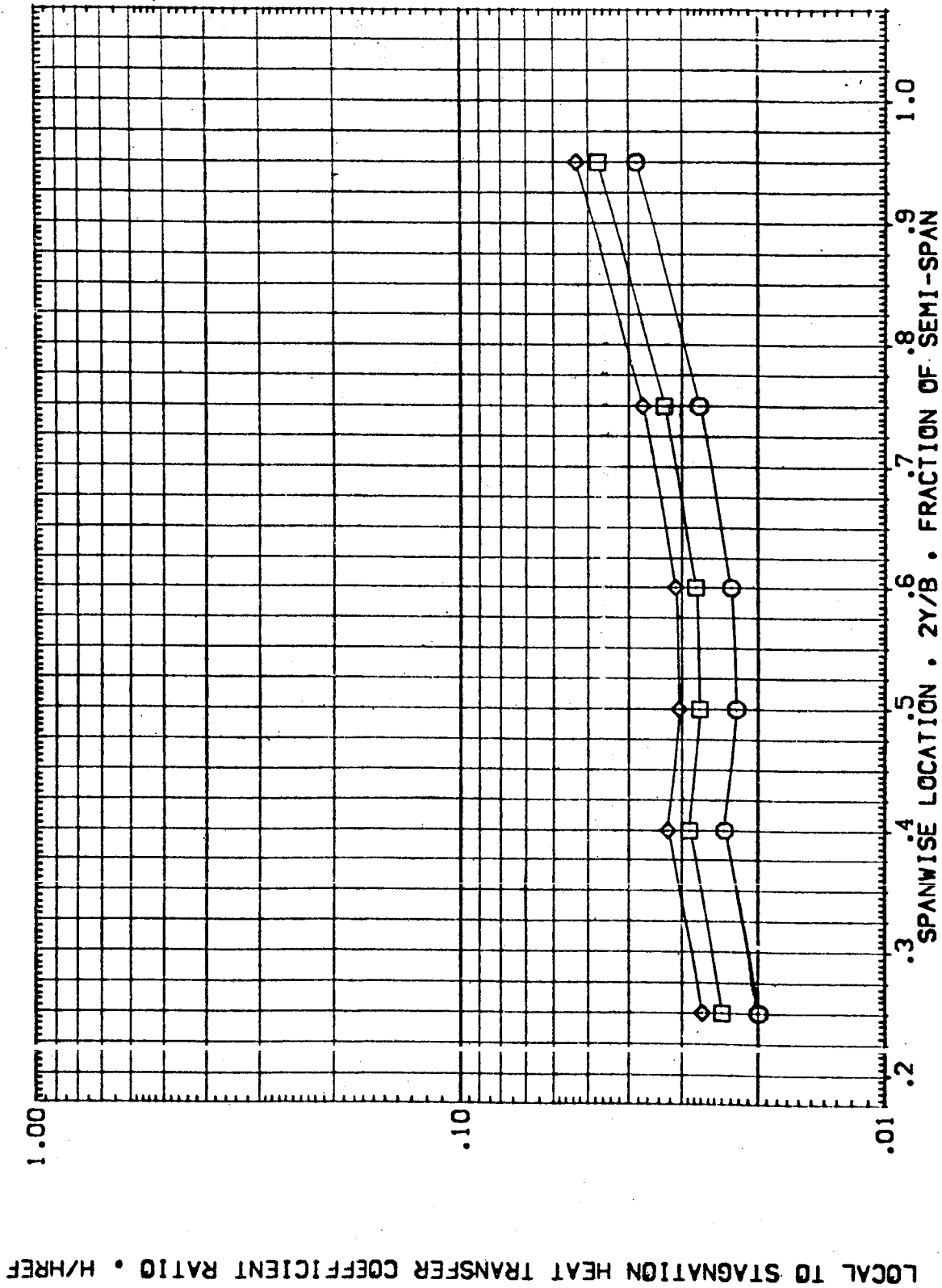


FIG. 25 WING BOTTOM - ORBITER ALONE (UNDISTURBED)

MACH = 5.30 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RAYL MACH HREF

[RE100] ARC 3.5-178 IH3 0+T+S .000 .000 1.500 1.000 1.000

[AE100] ARC 3.5-178 IH3 0+T+S .000 .000 1.500 .900 .900

[BE100] ARC 3.5-178 IH3 0+T+S .000 .000 1.500 .850 .850

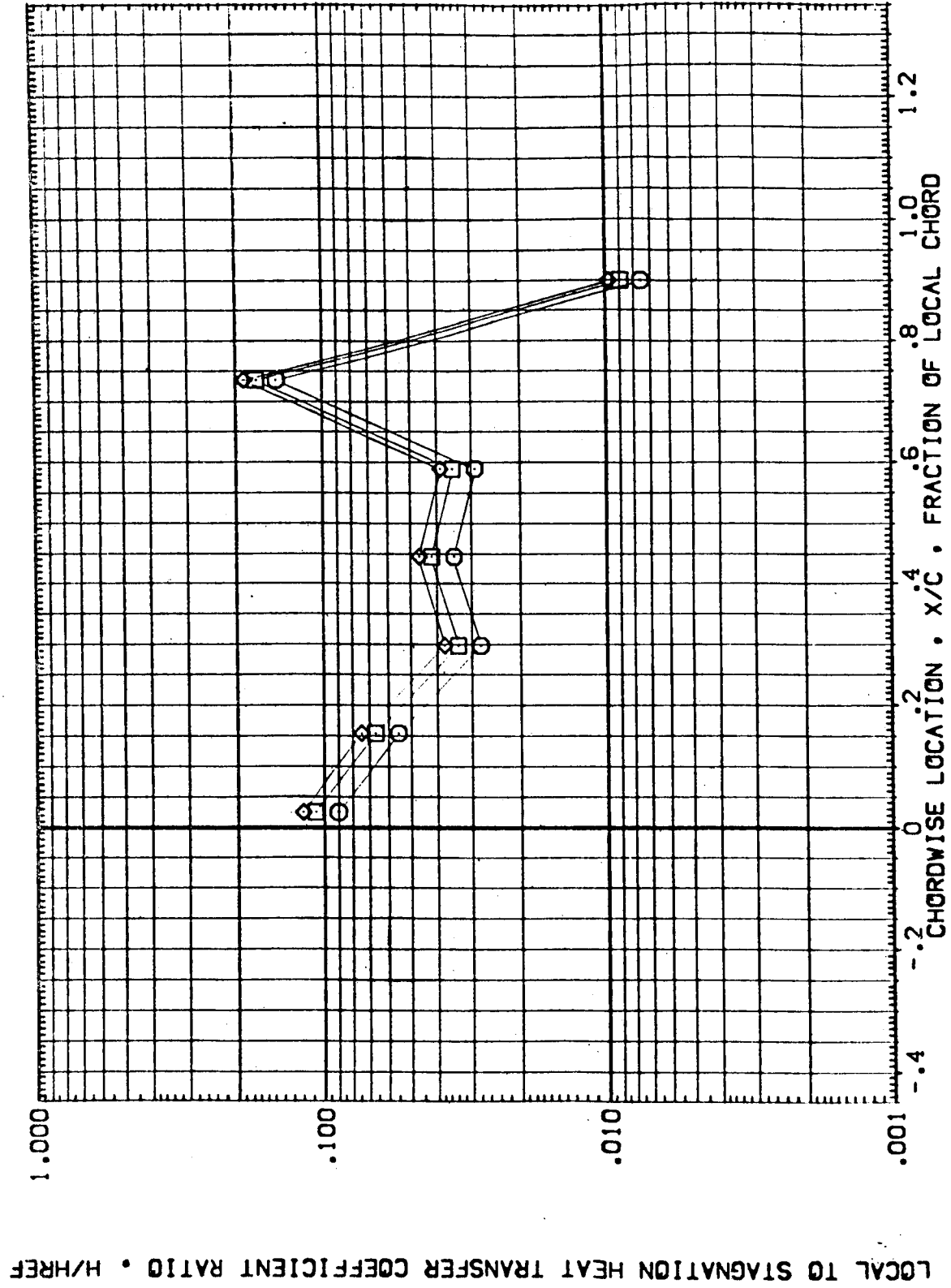


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .250

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RNVL	HAV/HT
[RE] (GO)]	ARC [5-178] H3 0+1+S	.000	.000	1.500	1.000
[AE] (GO)]	ARC [5-178] H3 0+1+S	.000	.000	1.500	.900
[BE] (GO)]	ARC [5-178] H3 0+1+S	.000	.000	1.500	.850

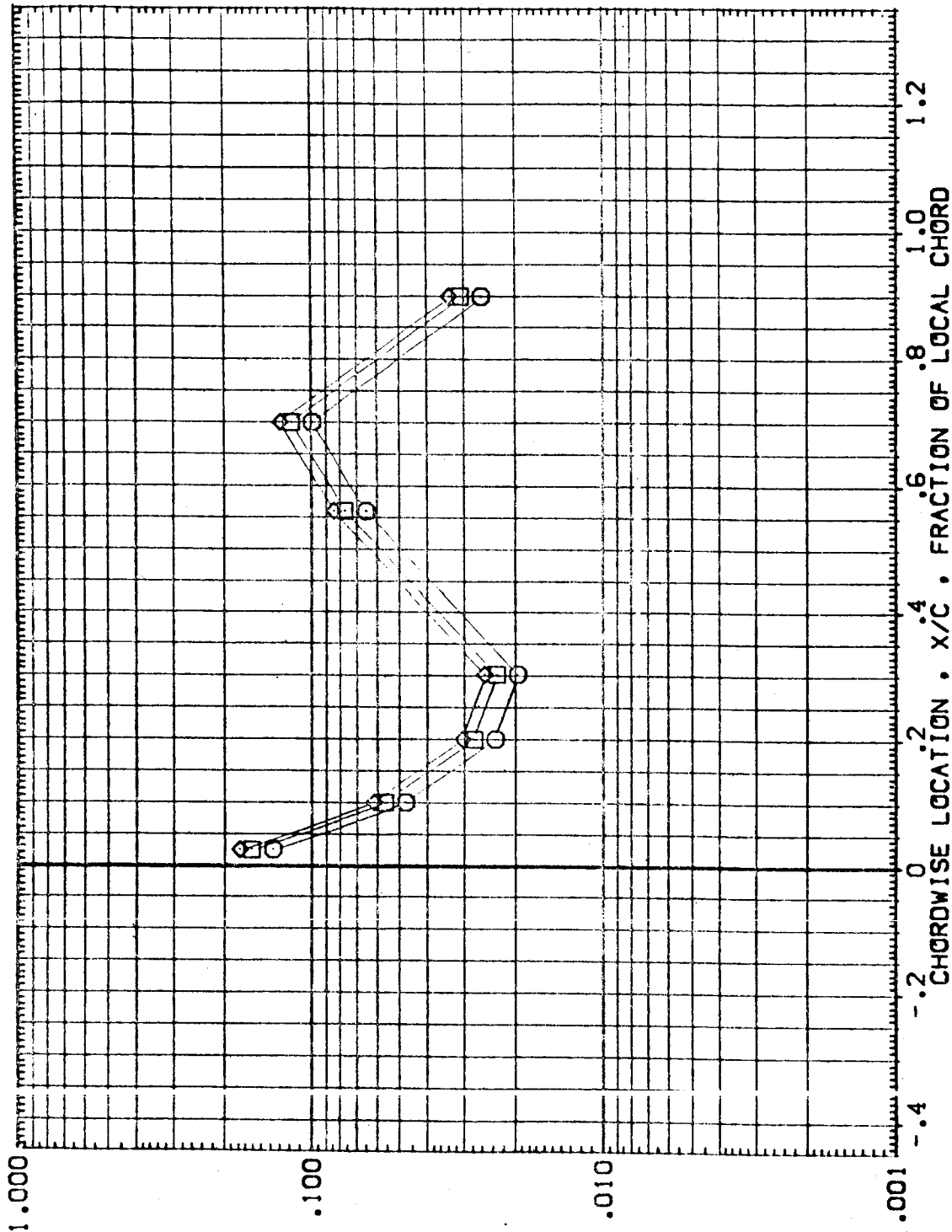





FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.30() 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIG01)  ARC 3.5-178 IH3 D+T+S
 (AEIG01)  ARC 3.5-178 IH3 D+T+S
 (BEIG01)  ARC 3.5-178 IH3 D+T+S

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

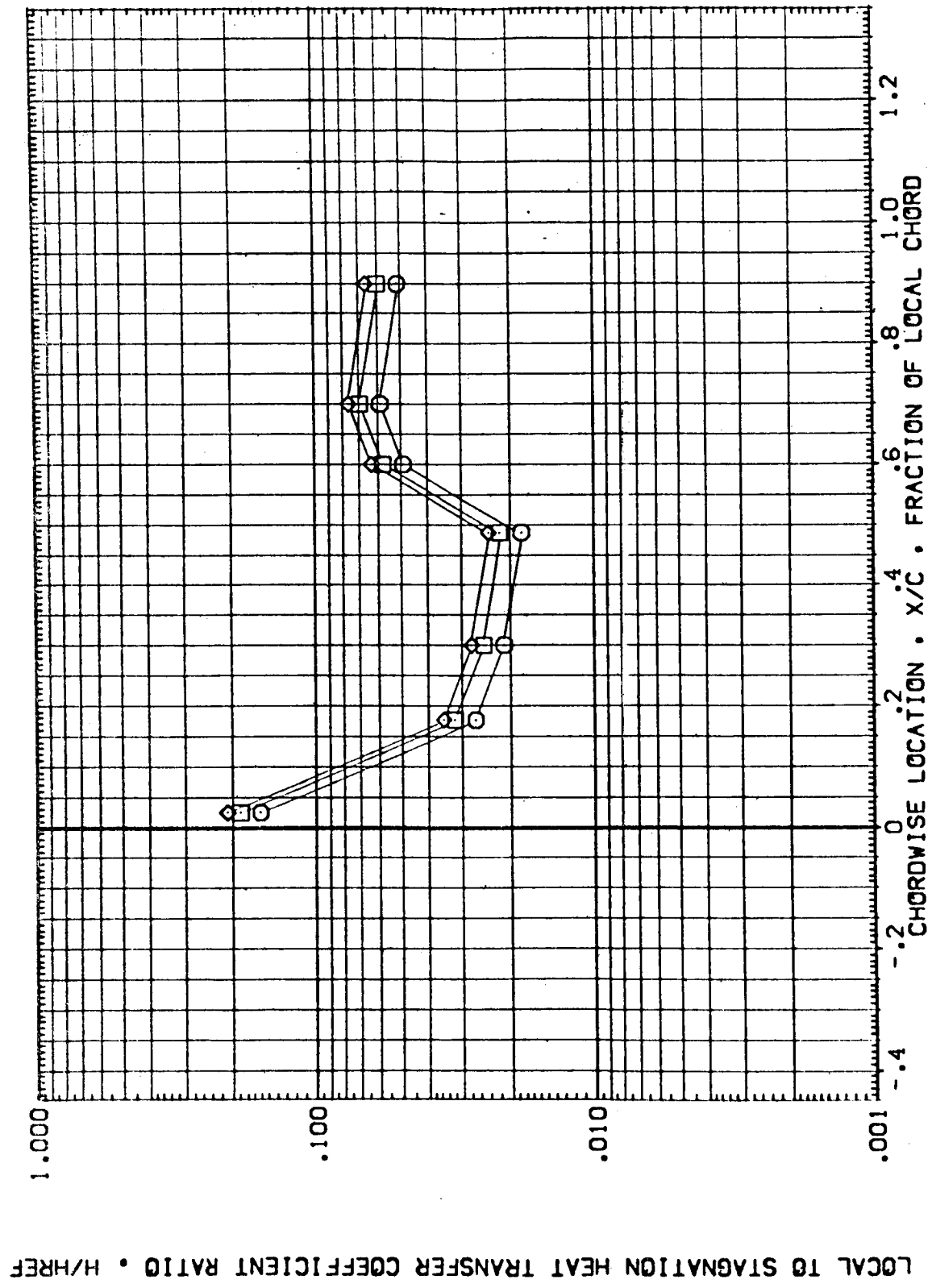


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .500

DATA SET SYMBO. CONFIGURATION DESCRIPTION
 [BE1001] [AE1001] [BE1001] [AE1001] [BE1001]
 ARC 11.5-178 143 O-T+S
 ARC 11.5-178 143 O-T+S
 ARC 11.5-178 143 O-T+S

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

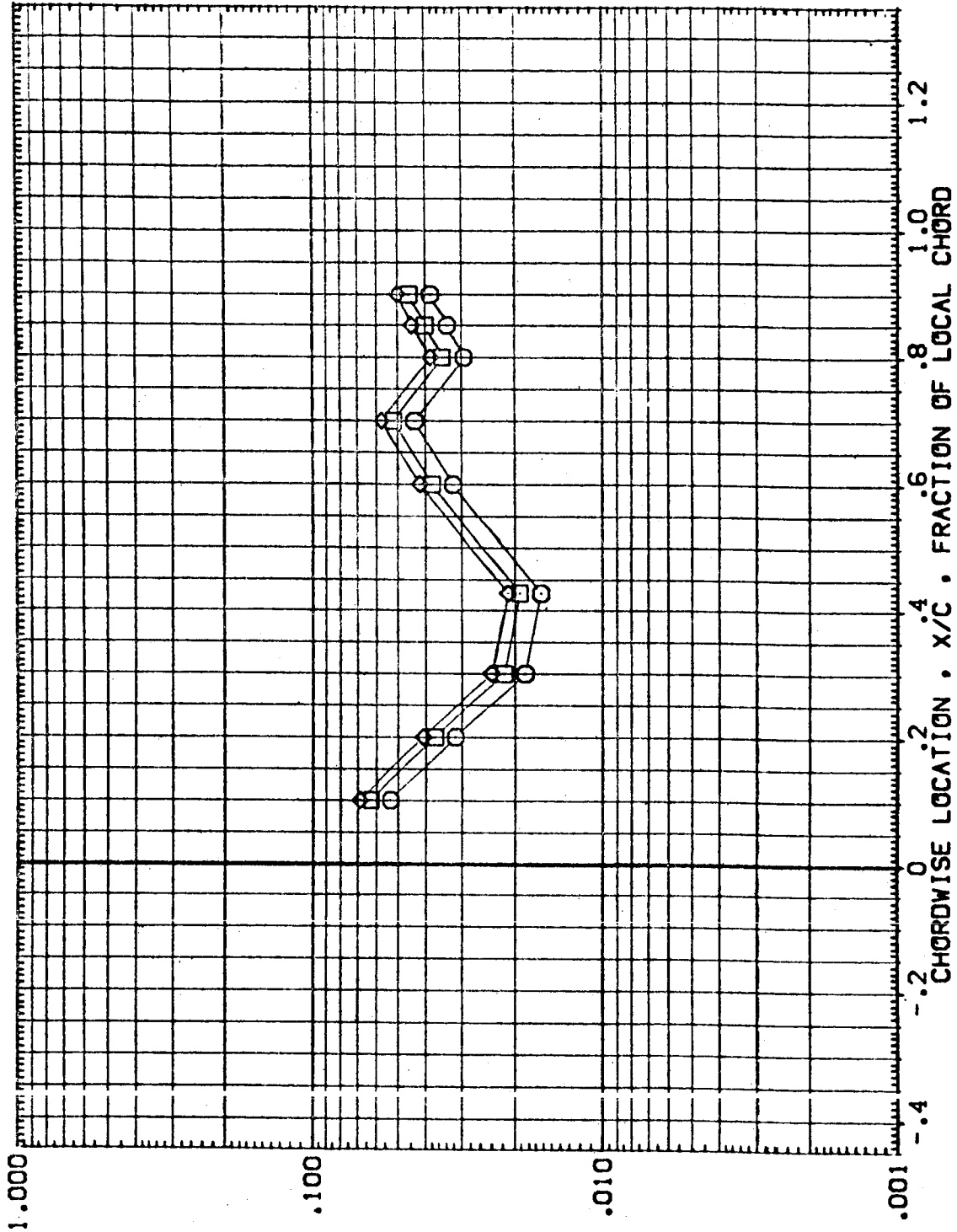


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIGG) } ARC 3.5-178 IH3 O+T+S
 (AEIGG) } ARC 3.5-178 IH3 O+T+S
 (BEIGG) } ARC 3.5-178 IH3 O+T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RV/L 1.500
 1.500
 1.500

HAV/HT 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

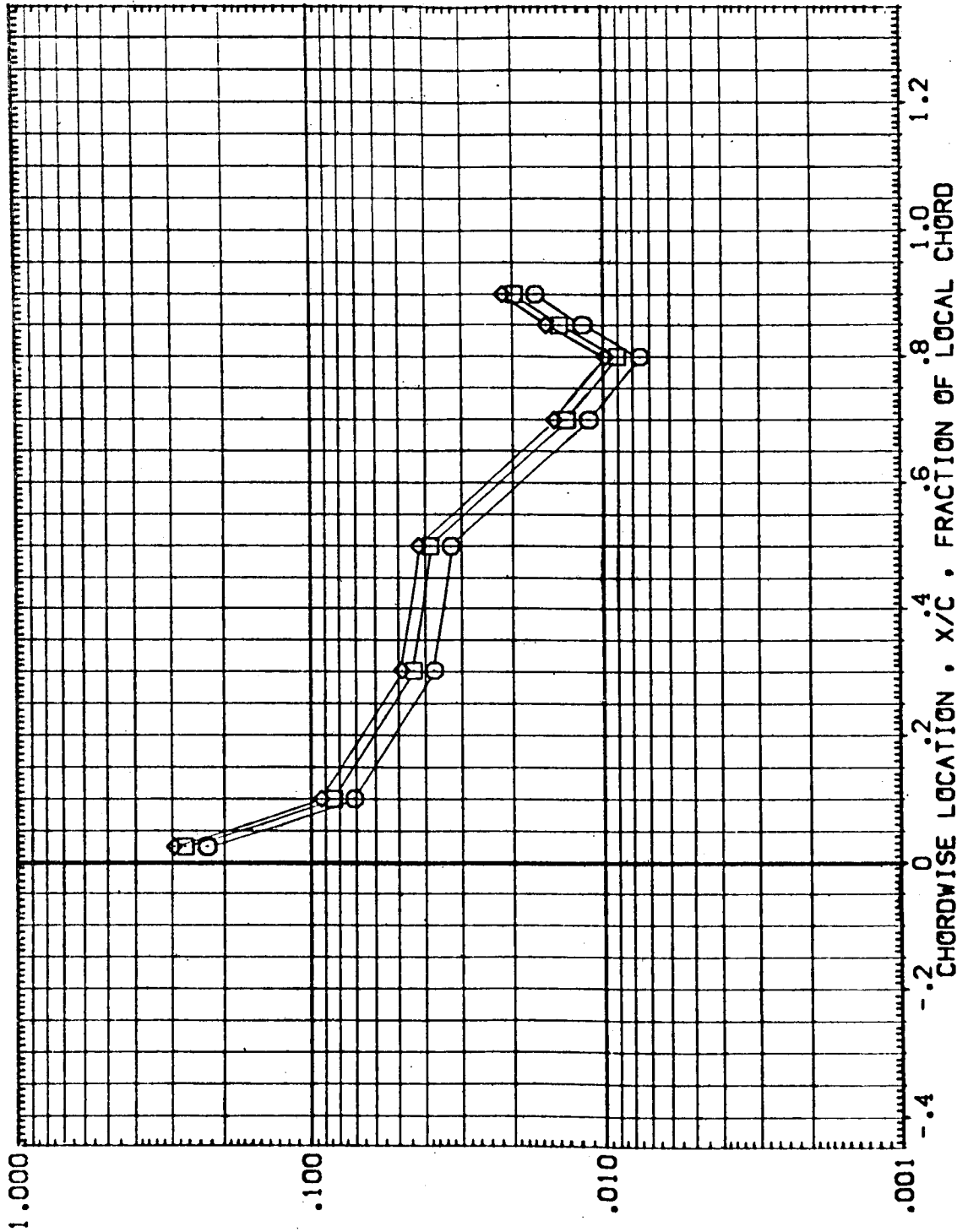


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .750

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CO FIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L MAV/HT
 [RE]001 ARC 1.5-178 IH3 O-T+S WING BOTTOM .000 .000 1.500 1.000
 [AE]001 ARC 1.5-178 IH3 O-T+S WING BOTTOM .000 .000 1.500 .900
 [BE]001 ARC 1.5-178 IH3 O-T+S WING BOTTOM .000 .000 1.500 .850

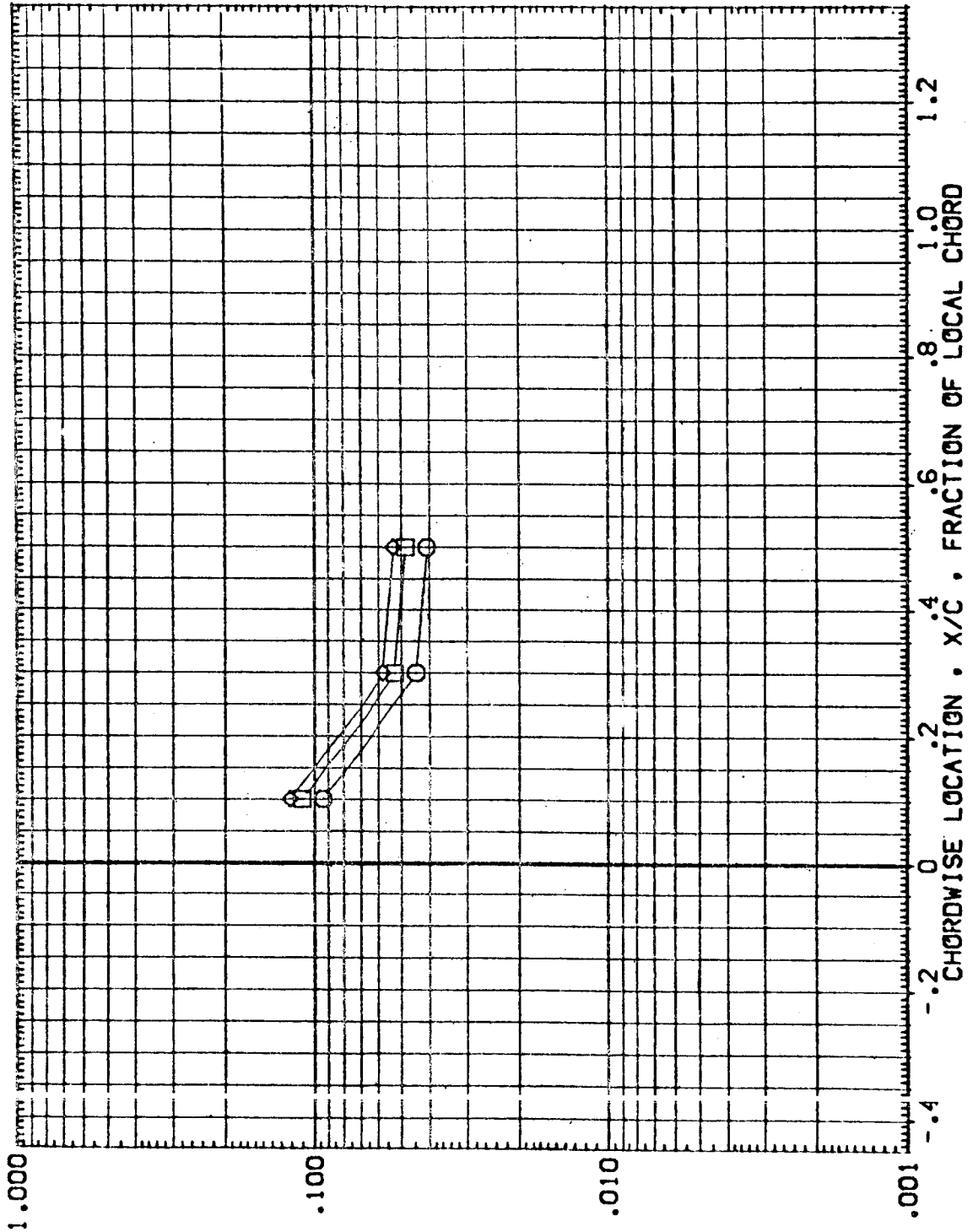


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE]GO [] ARC 3.5-178 IH3 O+T+S
 [AE]GO [] ARC 3.5-178 IH3 O+T+S
 [BE]GO [] ARC 3.5-178 IH3 O+T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAY/HT 1.000 .900 .850

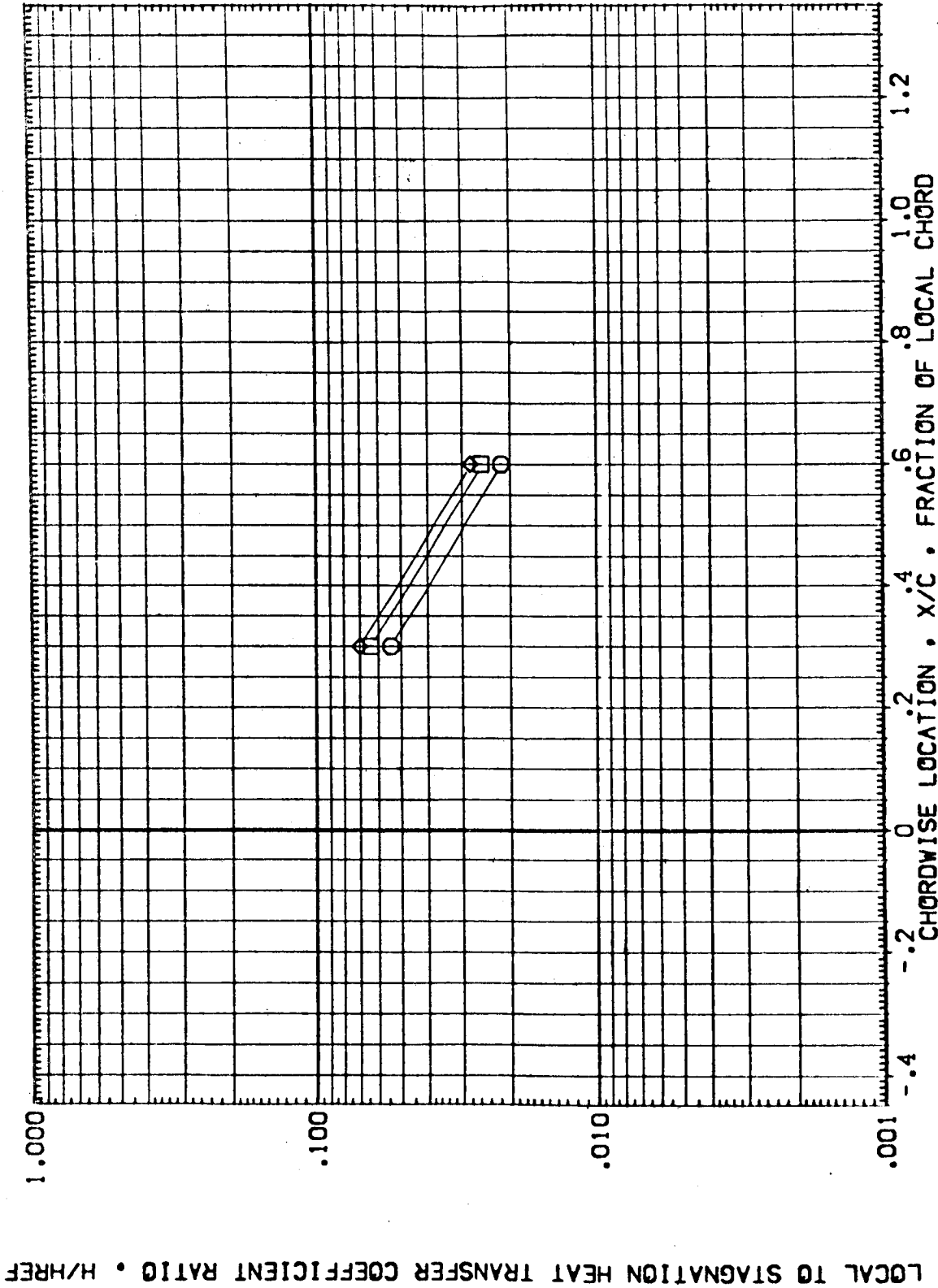


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

[RE100] } ARC 1.5-178 143 0+1+5 .000 .000 1.500 1.000

[AE100] } ARC 1.5-178 143 0+1+5 .000 .000 1.500 .900

[BE100] } ARC 1.5-178 143 0+1+5 .000 .000 1.500 .850

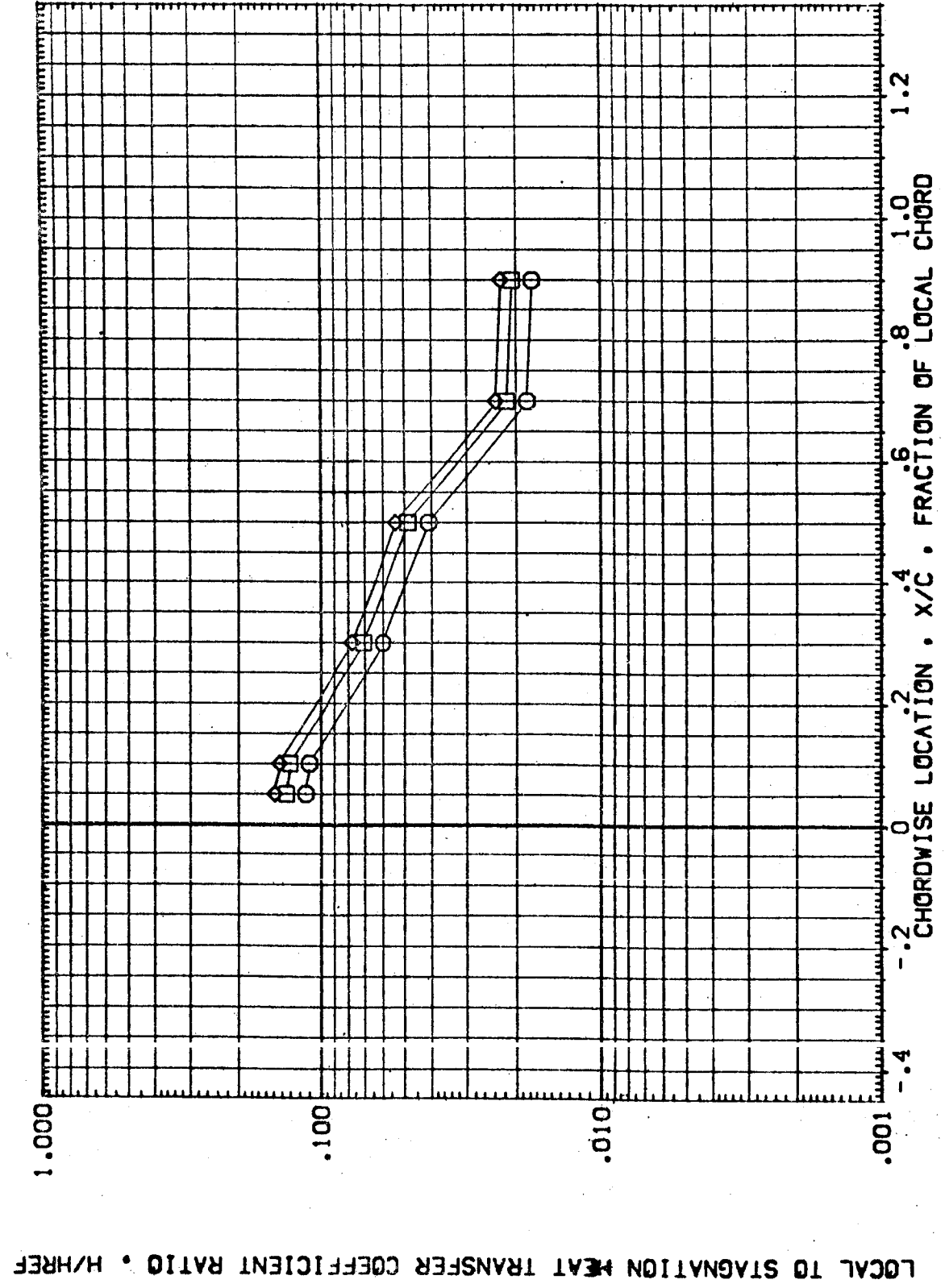


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.30 2Y/B = .950

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE) (01) } ARC 3.5-178 IH3 0+1+S
 (AE) (00) } ARC 3.5-178 IH3 0+1+S
 (BE) (00) } ARC 3.5-178 IH3 0+1+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RM/L 1.500 1.500 1.500
 HAW/HT 1.000 .500 .950

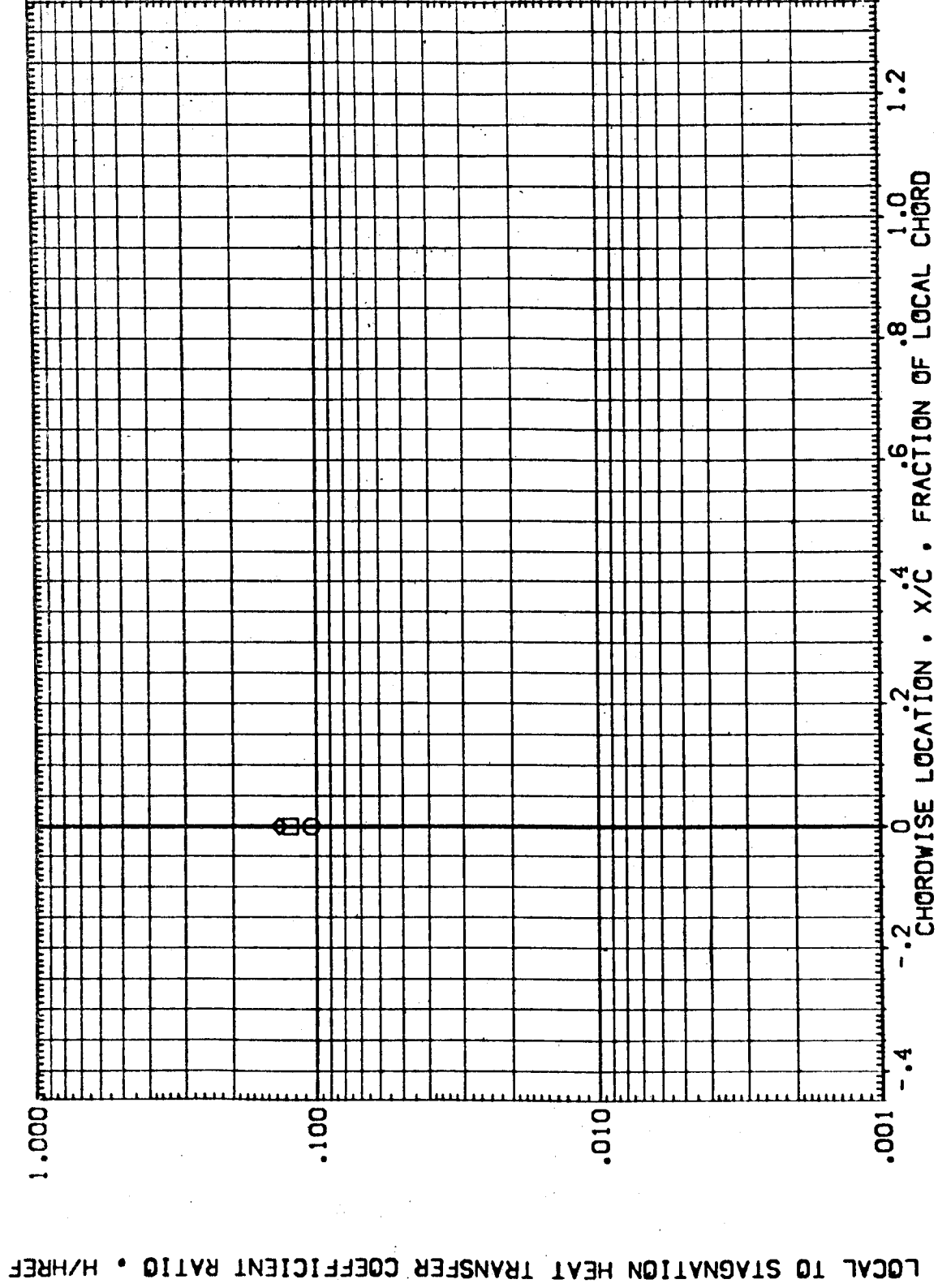


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .966



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE|GO|} □ ARC 3.5-178 1-3 O+T+S
 {AE|GO|} □ ARC 3.5-178 1-3 O+T+S
 {BE|GO|} ◇ ARC 3.5-178 1-3 O+T+S

ALPHA .000
 BETA .000
 RV/L 1.500
 HAV/HT 1.000

VING BOTTOM
 VING BOTTOM
 VING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

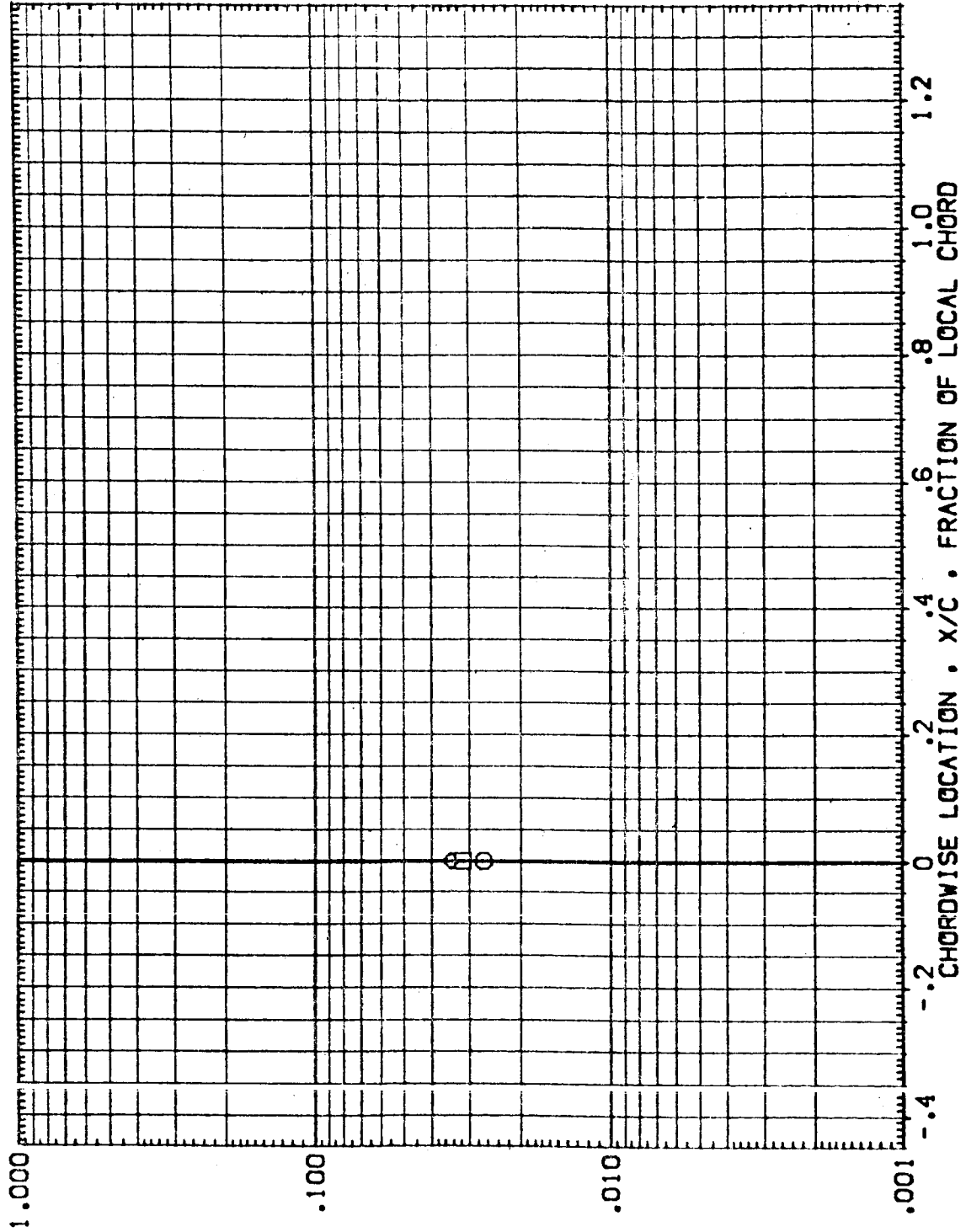


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .993

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE100) } ARC 3.5-178 IH3 0+T+S
 (AE100) } ARC 3.5-178 IH3 0+T+S
 (BE100) } ARC 3.5-178 IH3 0+T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA BETA RV/L HAW/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

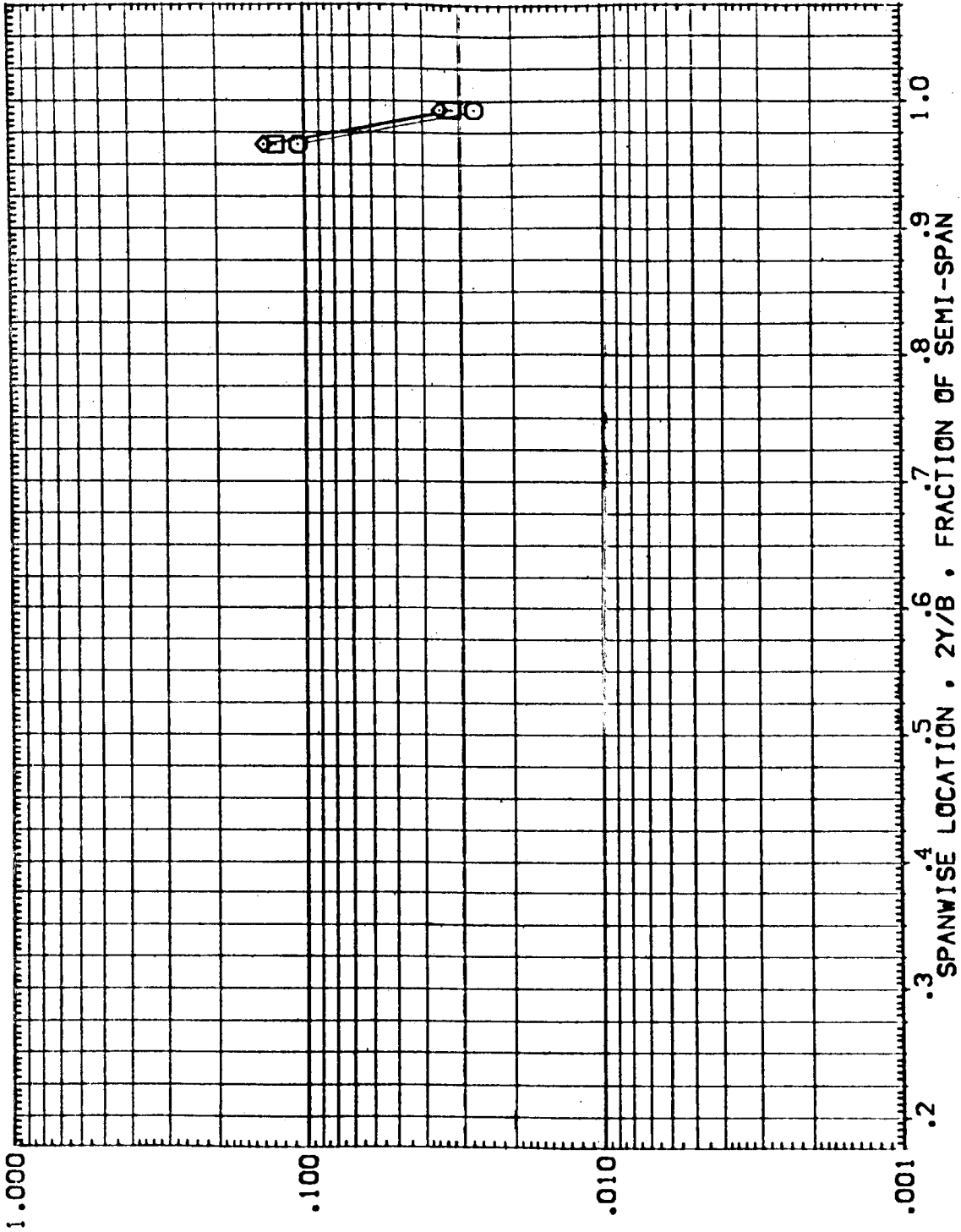


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

{RE1001} ARC 1.5-178 IH3 O+T+S .000 .000 1.500 1.000

{AE1001} ARC 1.5-178 IH3 O+T+S .000 .000 1.500 .500

{BE1001} ARC 1.5-178 IH3 O+T+S .000 .000 1.500 .650

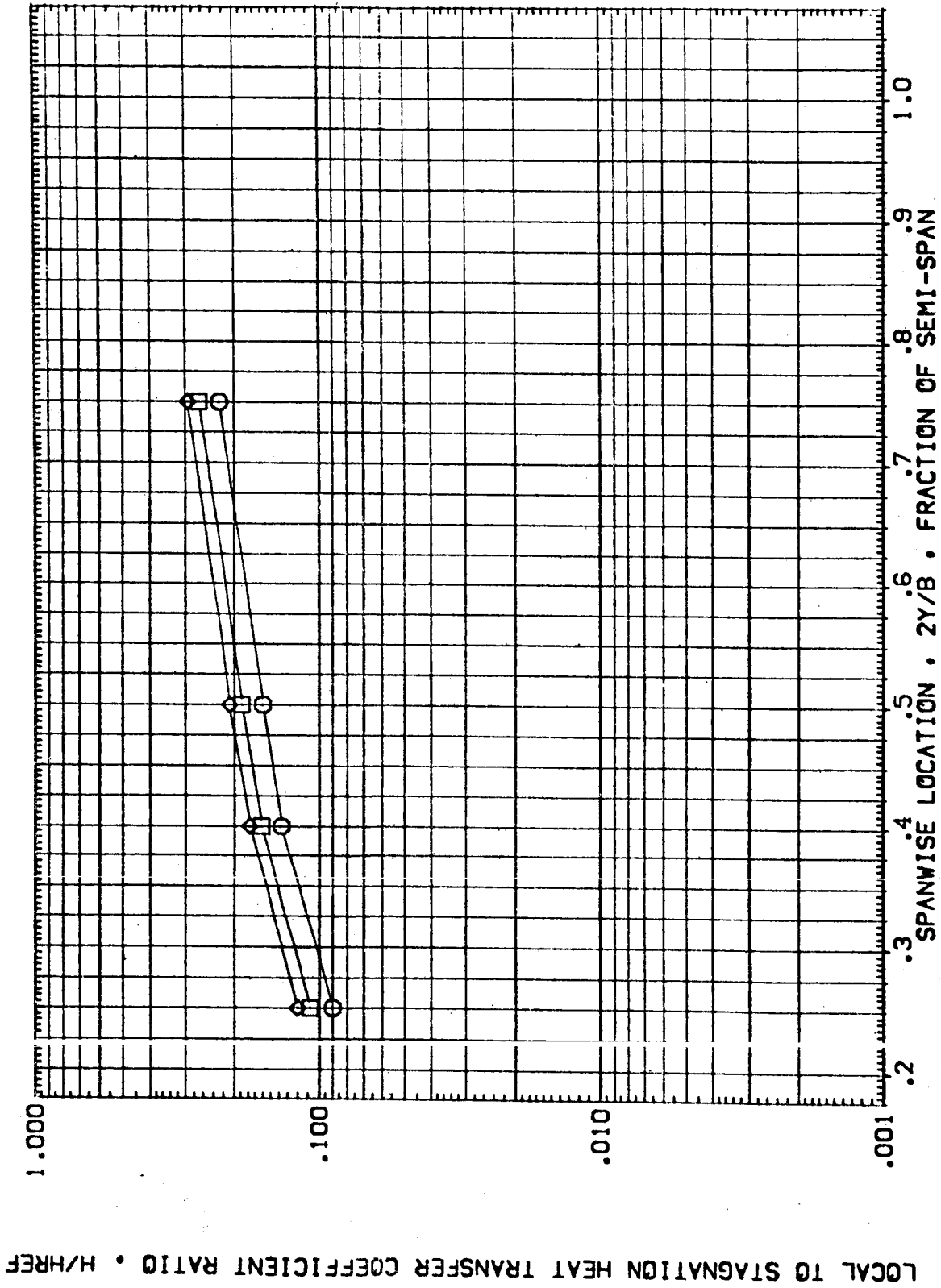


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

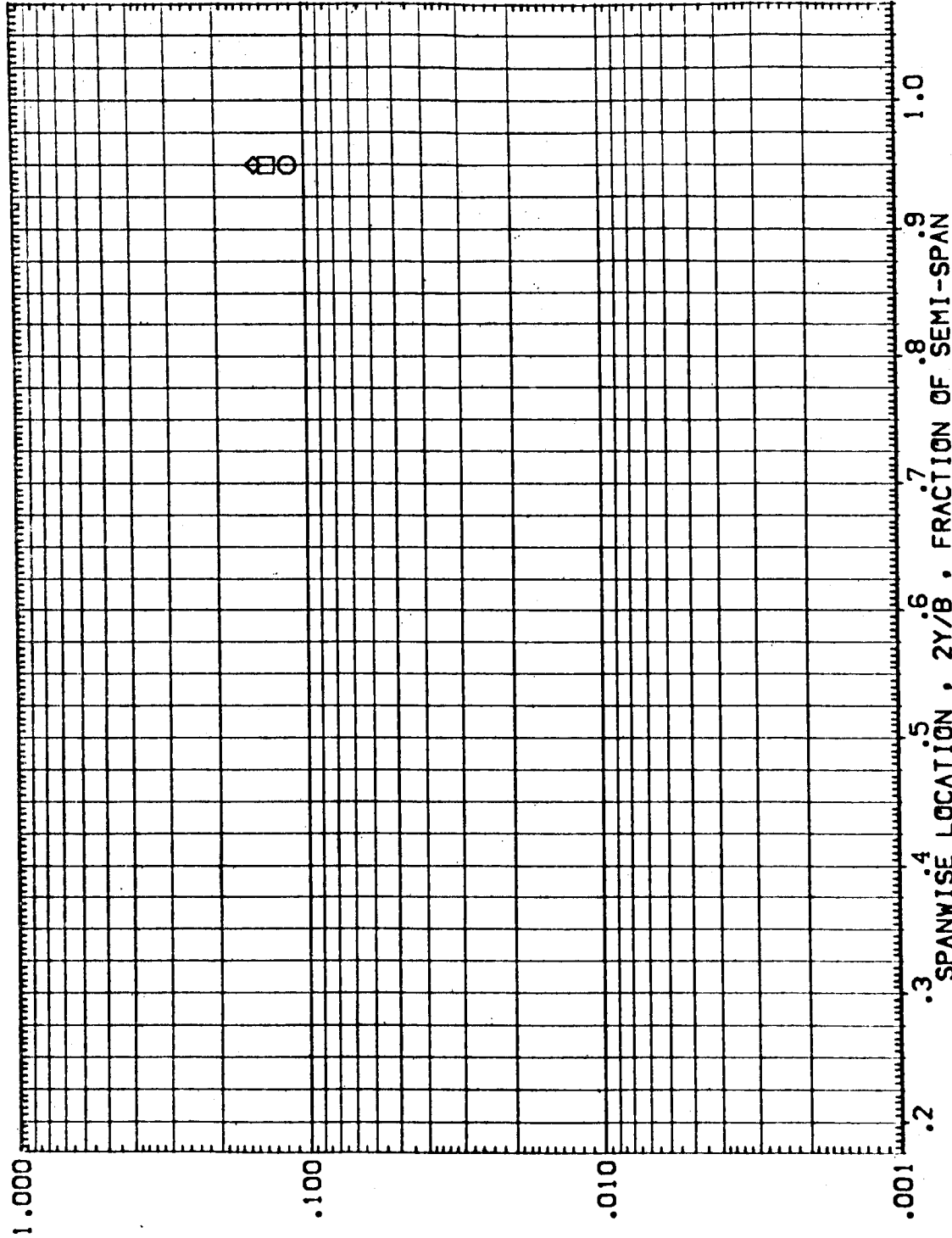
MACH = 5.30(1) X/C = .025

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE]GO]] ARC 3.5-178 IHG 0-T+S
 [AE]GO]] ARC 3.5-178 IHG 0-T+S
 [BE]GO]] ARC 3.5-178 IHG 0-T+S

ALPHA .000
 BETA .000
 RV/L 1.500
 MAV/HT 1.000

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



.3 SPANWISE LOCATION • 2Y/B • FRACTION OF SEMI-SPAN

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .050



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE[00]] [AE[00]] [BE[00]] [RE[00]] [AE[00]] [BE[00]]
 ARC 1.5-178 IH3 O-T+S
 ARC 1.5-178 IH3 O-T+S
 ARC 1.5-178 IH3 O-T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

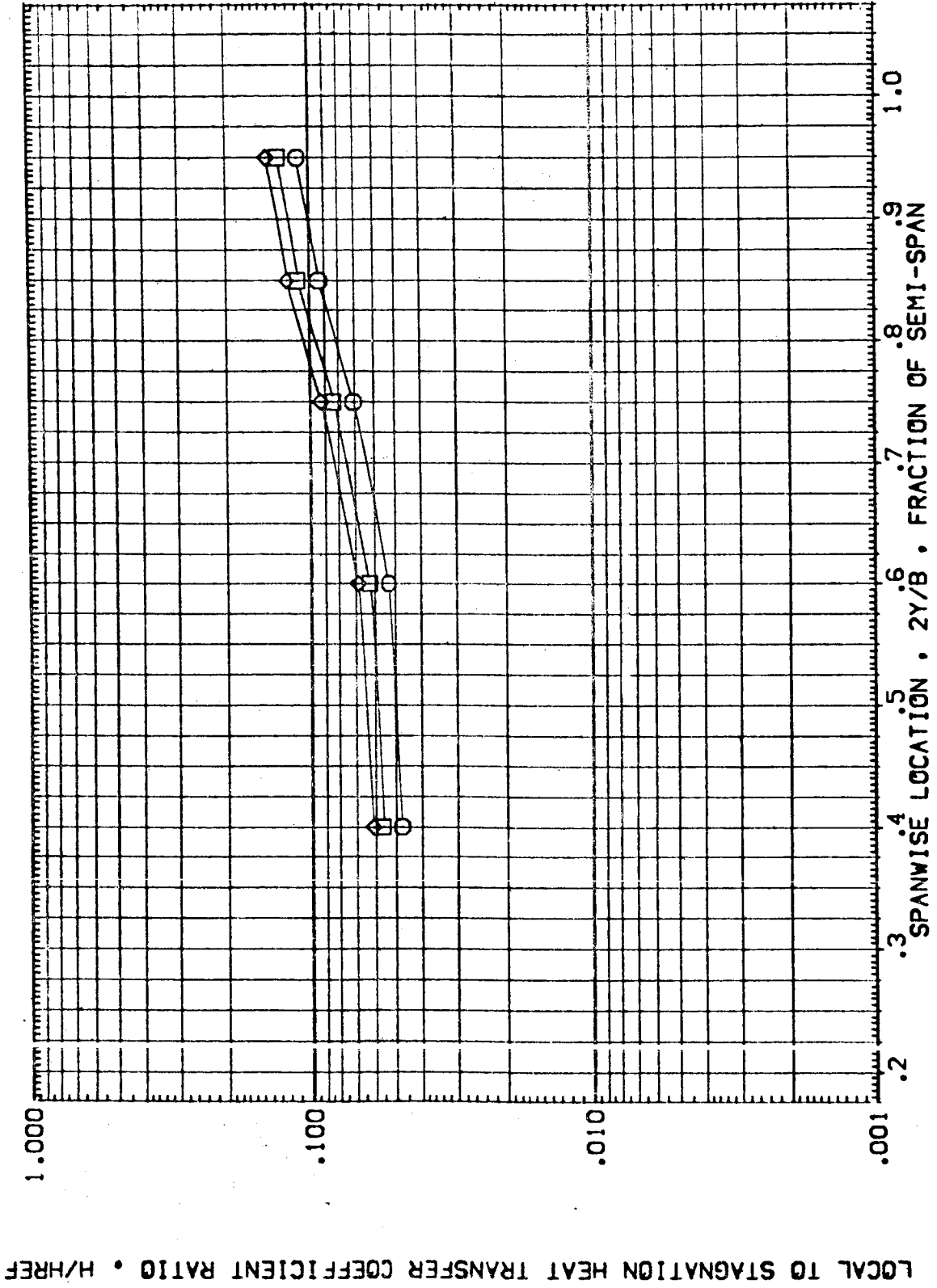


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .100

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RN/L HAV/HT
 (RE|GO|) ARC 3.5-178 |H3 O+T+S WING BOTTOM .000 .000 1.500 1.000
 (AE|GO|) ARC 3.5-178 |H3 O+T+S WING BOTTOM .000 .000 1.500 .800
 (BE|GO|) ARC 3.5-178 |H3 O+T+S WING BOTTOM .000 .000 1.500 .650

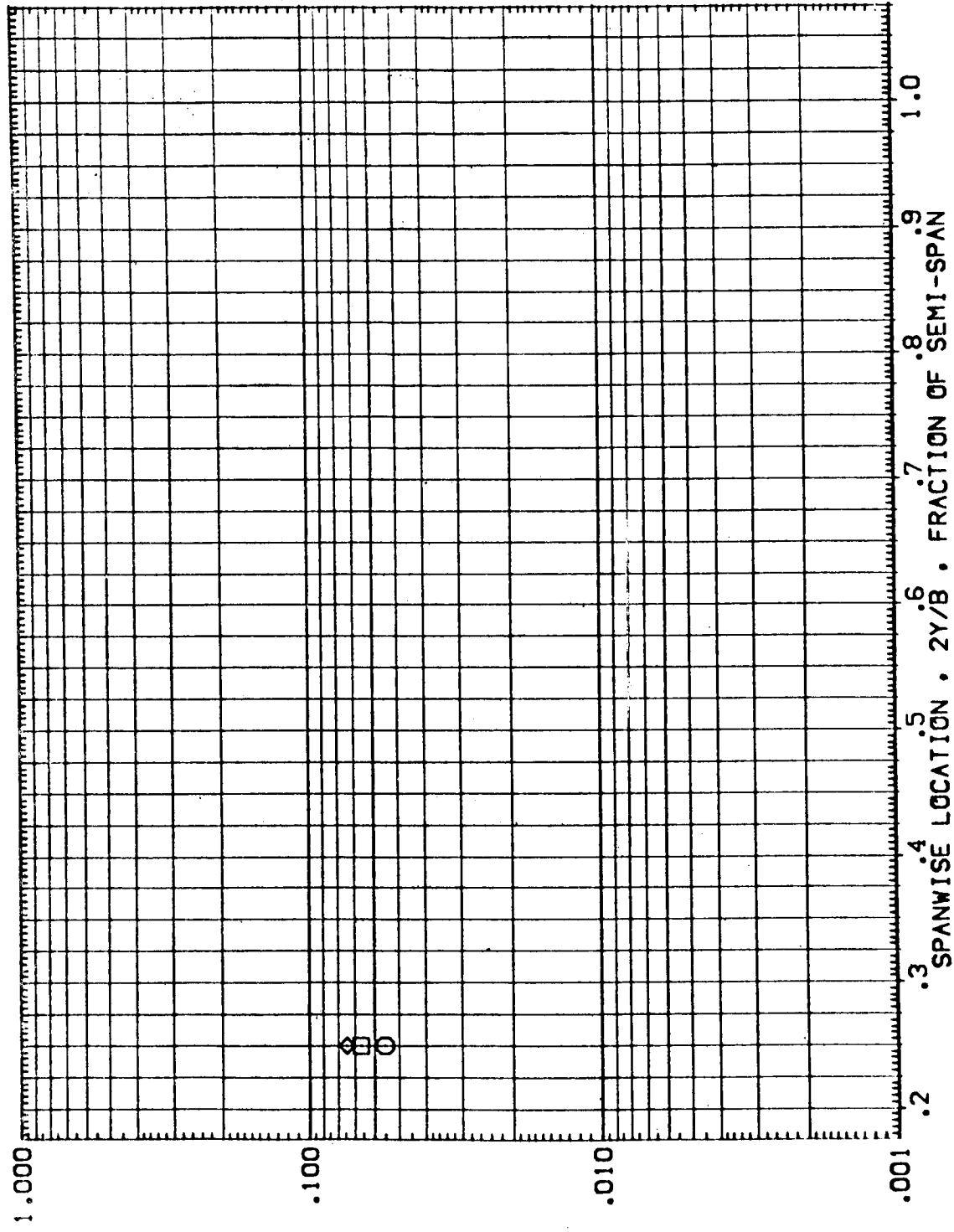


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .153



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{ RE | 00 | } ARC 3.5-178 | H3 0+1+S .000 .000 1.500 1.000

{ AE | 00 | } ARC 3.5-178 | H3 0+1+S .000 .000 1.500 .900

{ BE | 00 | } ARC 3.5-178 | H3 0+1+S .000 .000 1.500 .850

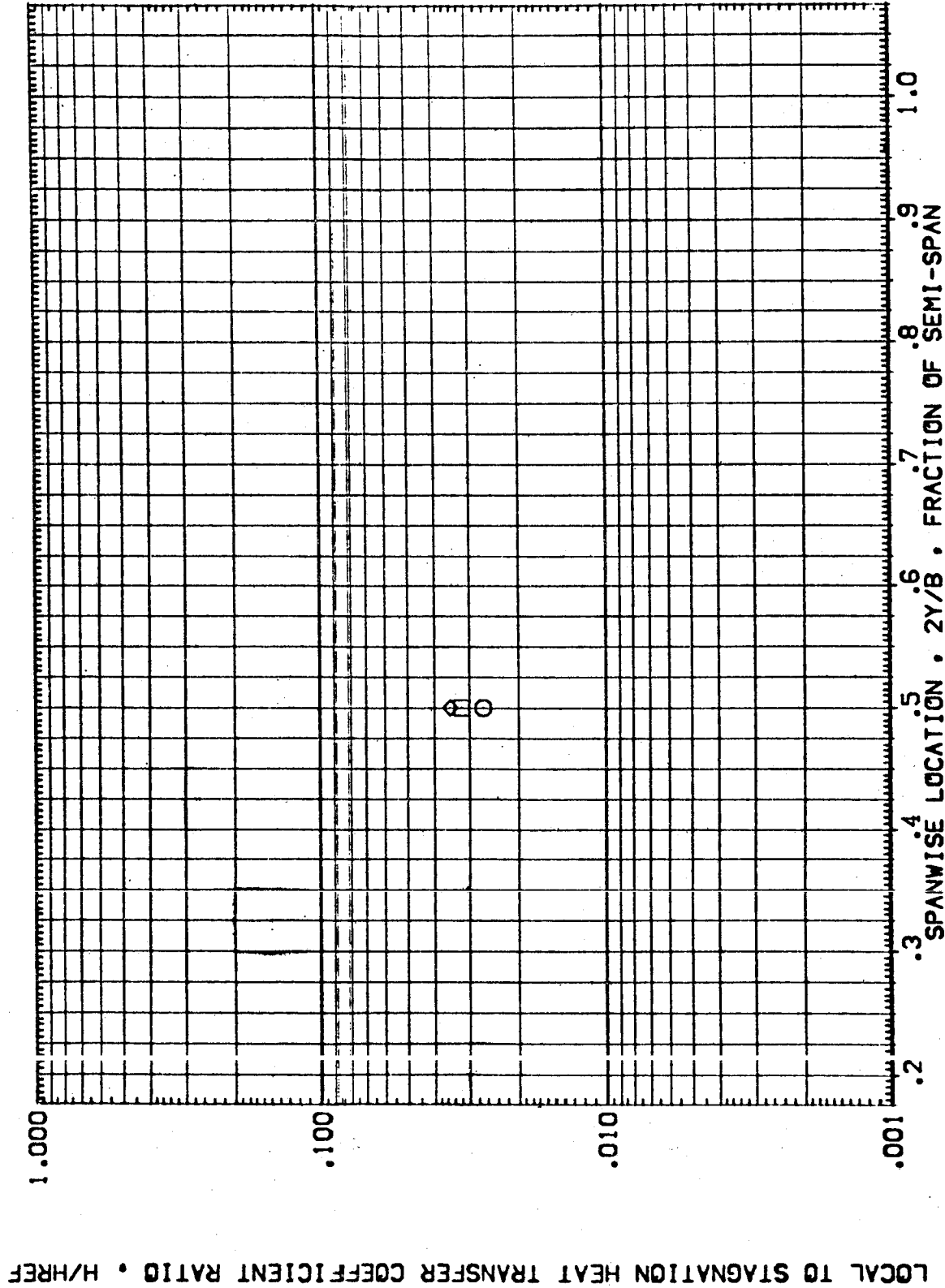


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.310 X/C = .177

DATA SET SYMBOL CONFIGURATION DESCRIPTION HAV/HT RVL BETA ALPHA VING BOTTOM VING BOTTOM VING BOTTOM

{ RE GO }	ARC 3.5-178	143	0+T+S	1.000	.000	.000	.500	1.000
{ AE GO }	ARC 3.5-178	143	0+T+S	.900	.000	.000	.500	.900
{ BE GO }	ARC 3.5-178	143	0+T+S	.850	.000	.000	.500	.850

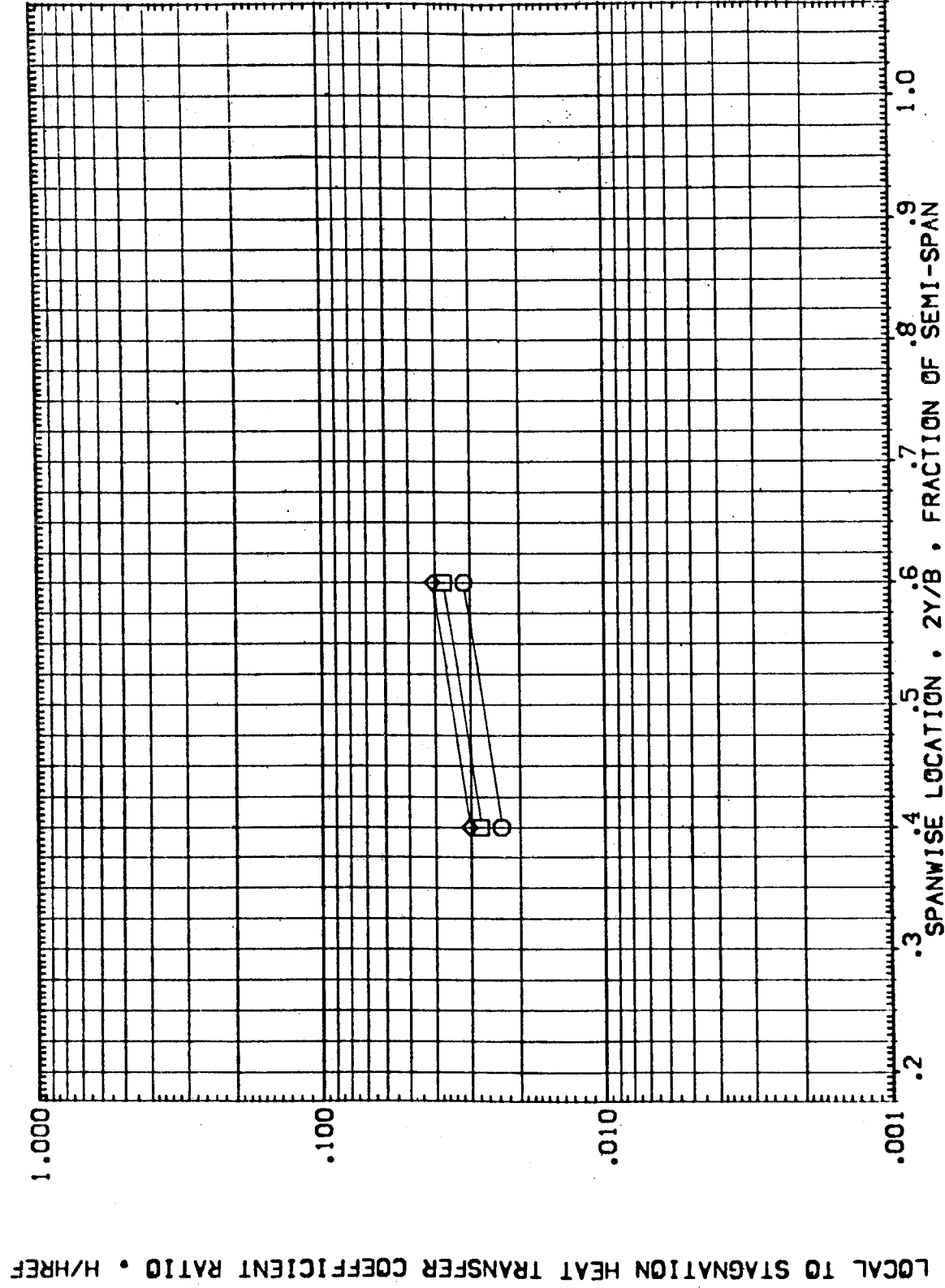


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .200



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIG01) } ARC 1.5-178 IH3 O-T+S
 (AEIG01) } ARC 1.5-178 IH3 O-T+S
 (BEIG01) } ARC 1.5-178 IH3 O-T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA BETA
 .000 .000
 .000 .000
 .000 .000

RM/L HAV/HT
 .500 1.000
 .500 .500
 .500 .650

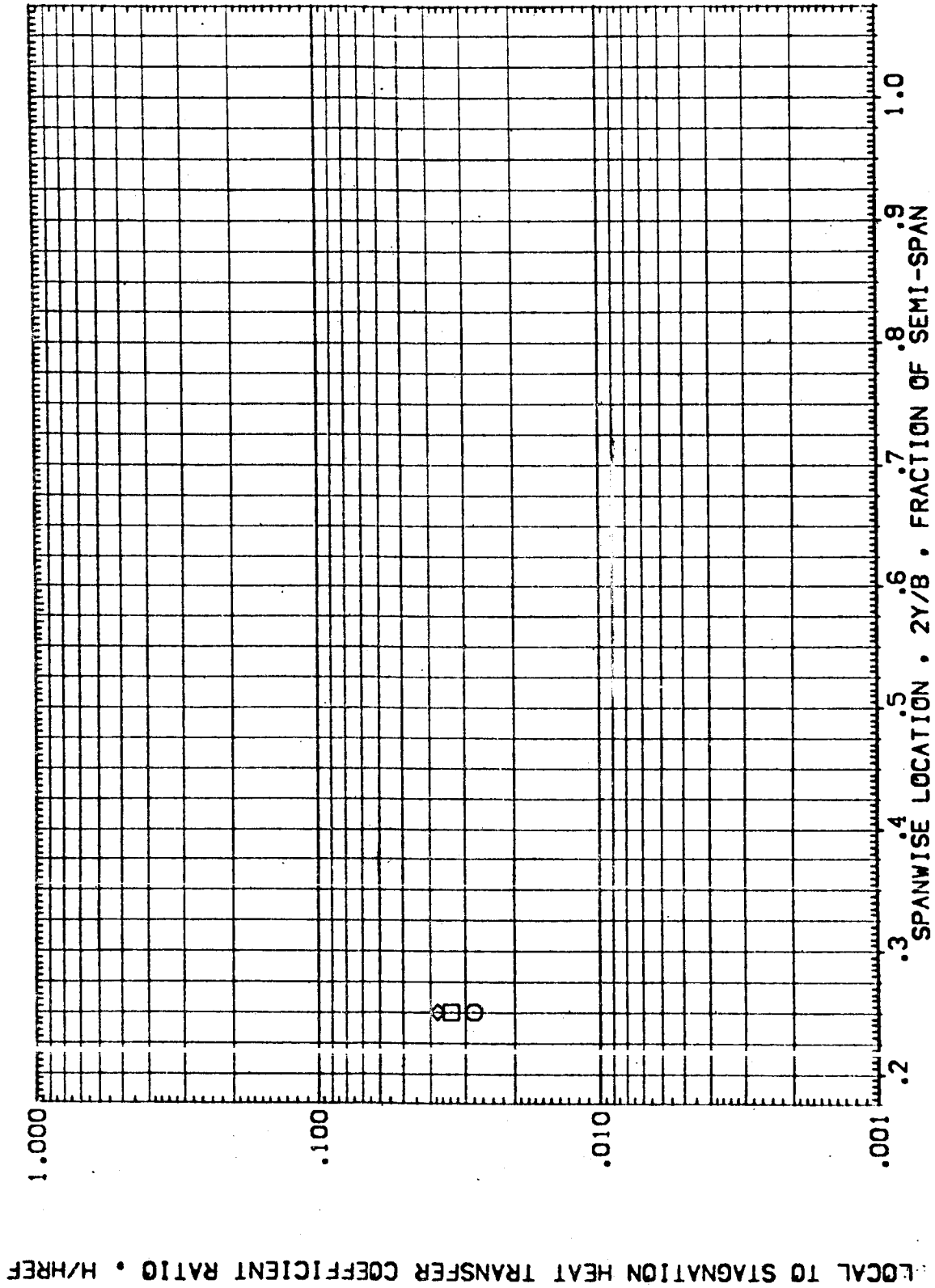



FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .299

DATA SET SYMBOL:  CONFIGURATION DESCRIPTION: ARC 3.5-178 |H3 0+1+S
 [RE100] }
 [AE100] }
 [BE100] }
 ALPHA: .000
 BETA: .000
 RV/L: 1.500
 HAV/HT: 1.000

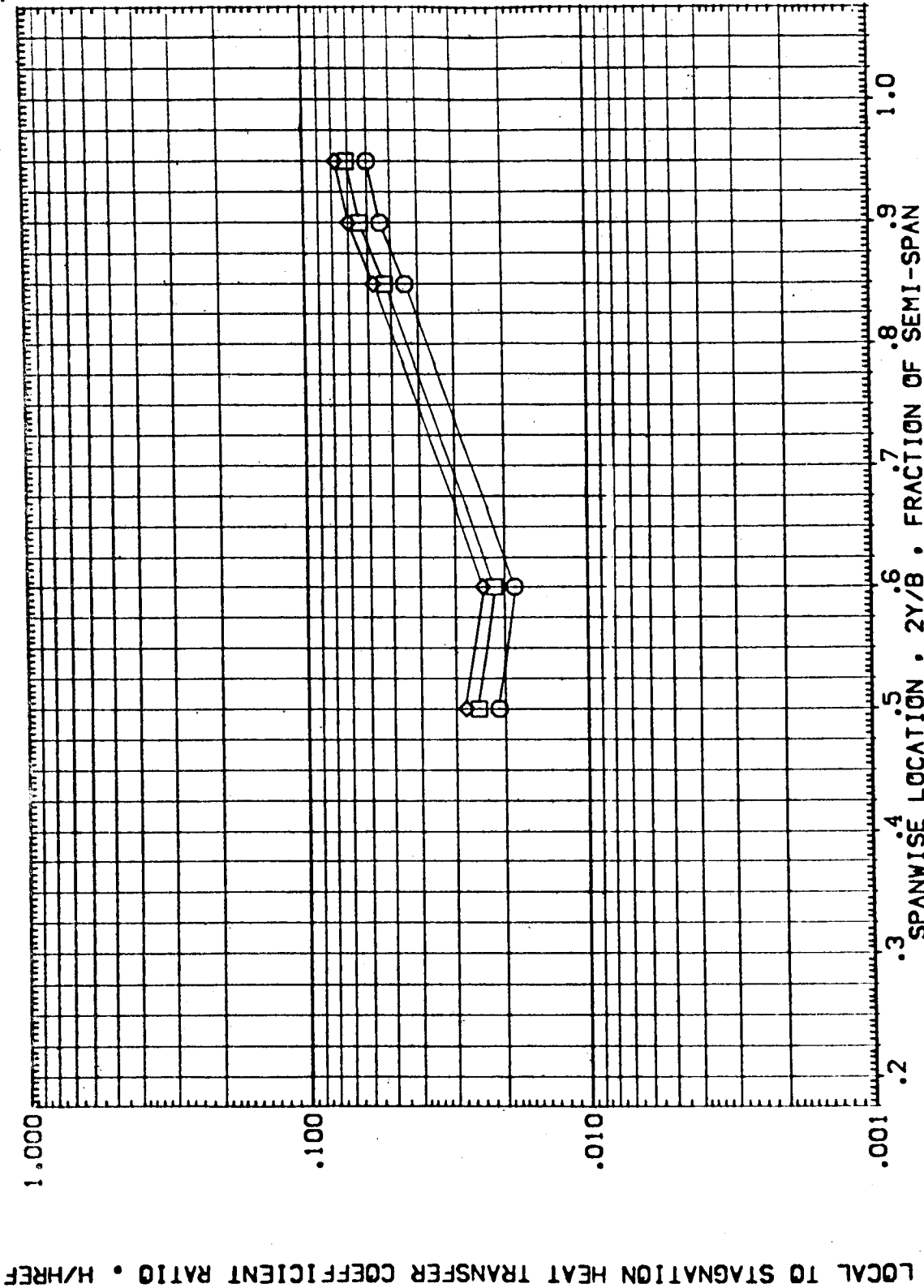


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .300



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|GO|) ARC 1.5-178 IN3 0+1+S
 (AL|GO|) ARC 1.5-178 IN3 0+1+S
 (BE|GO|) ARC 1.5-178 IN3 0+1+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RV/L 1.500
 1.500
 1.500

H/W/H/T 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

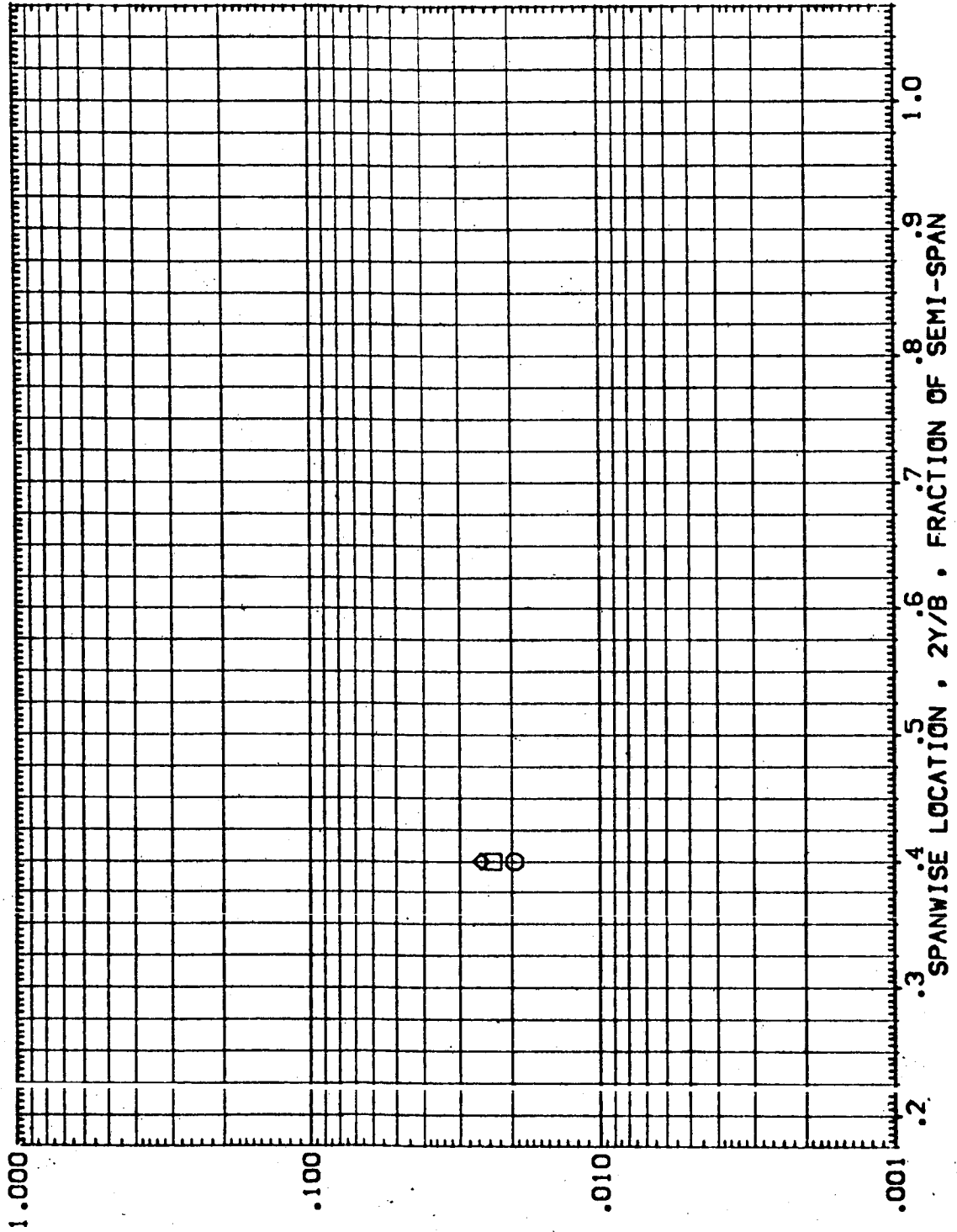


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.302 X/C = .302

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	MAV/HT
{ RE100 }	ARC 3.5-178 I+3 O+T+S	.000	.000	1.500	1.000
{ AE100 }	ARC 3.5-178 I+3 O+T+S	.000	.000	1.500	.500
{ BE100 }	ARC 3.5-178 I+3 O+T+S	.000	.000	1.500	.850

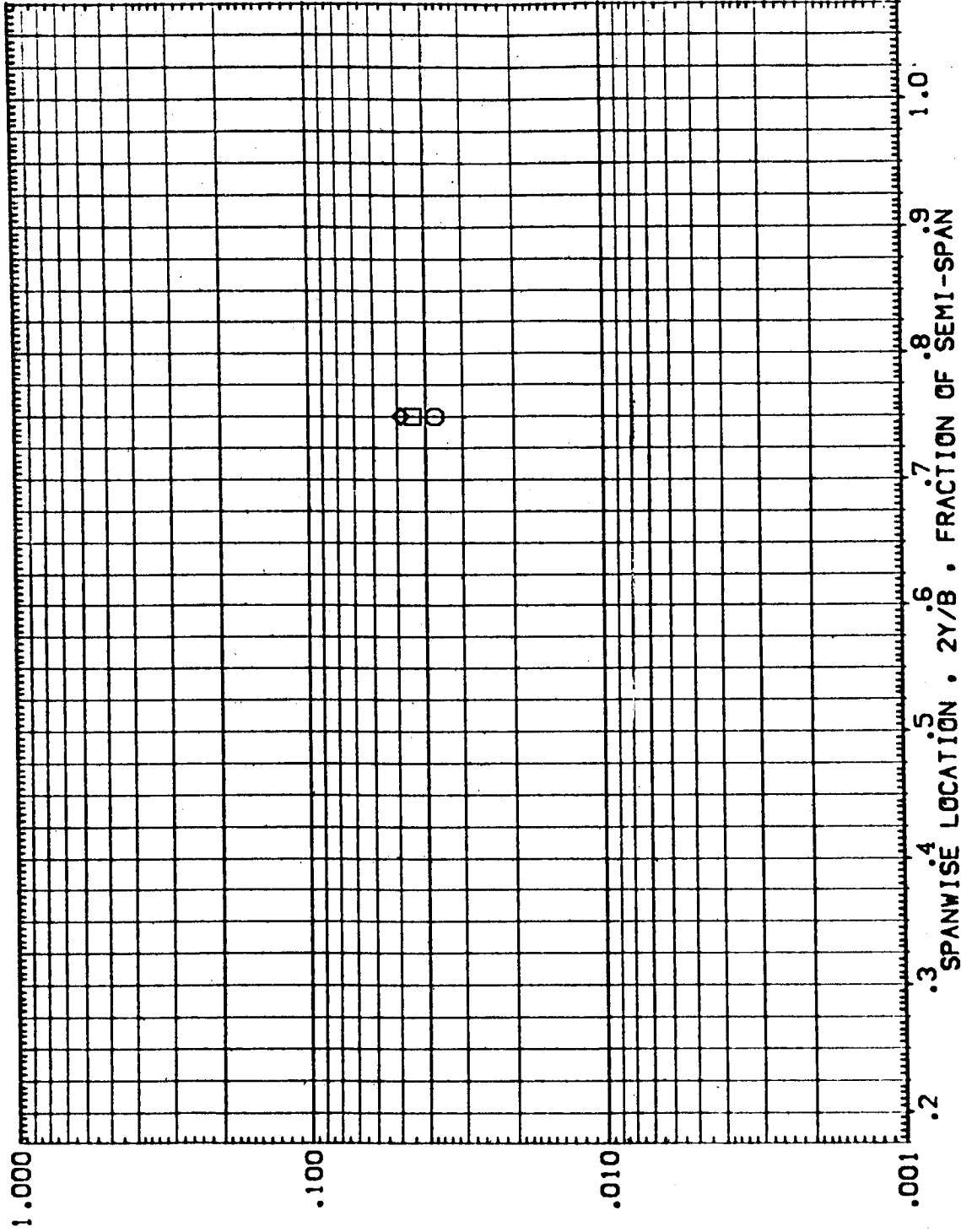


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .303



DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (RE100) }
 (AE100) }
 (BE100) }
 ARC 3.5-178 IH3 O+T+S
 ARC 3.5-178 IH3 O+T+S
 ARC 3.5-178 IH3 O+T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM
 ALPHA .000
 .000
 .000
 BETA .000
 .000
 .000
 RV/L 1.500
 1.500
 1.500
 MAV/HT 1.000
 .900
 .850

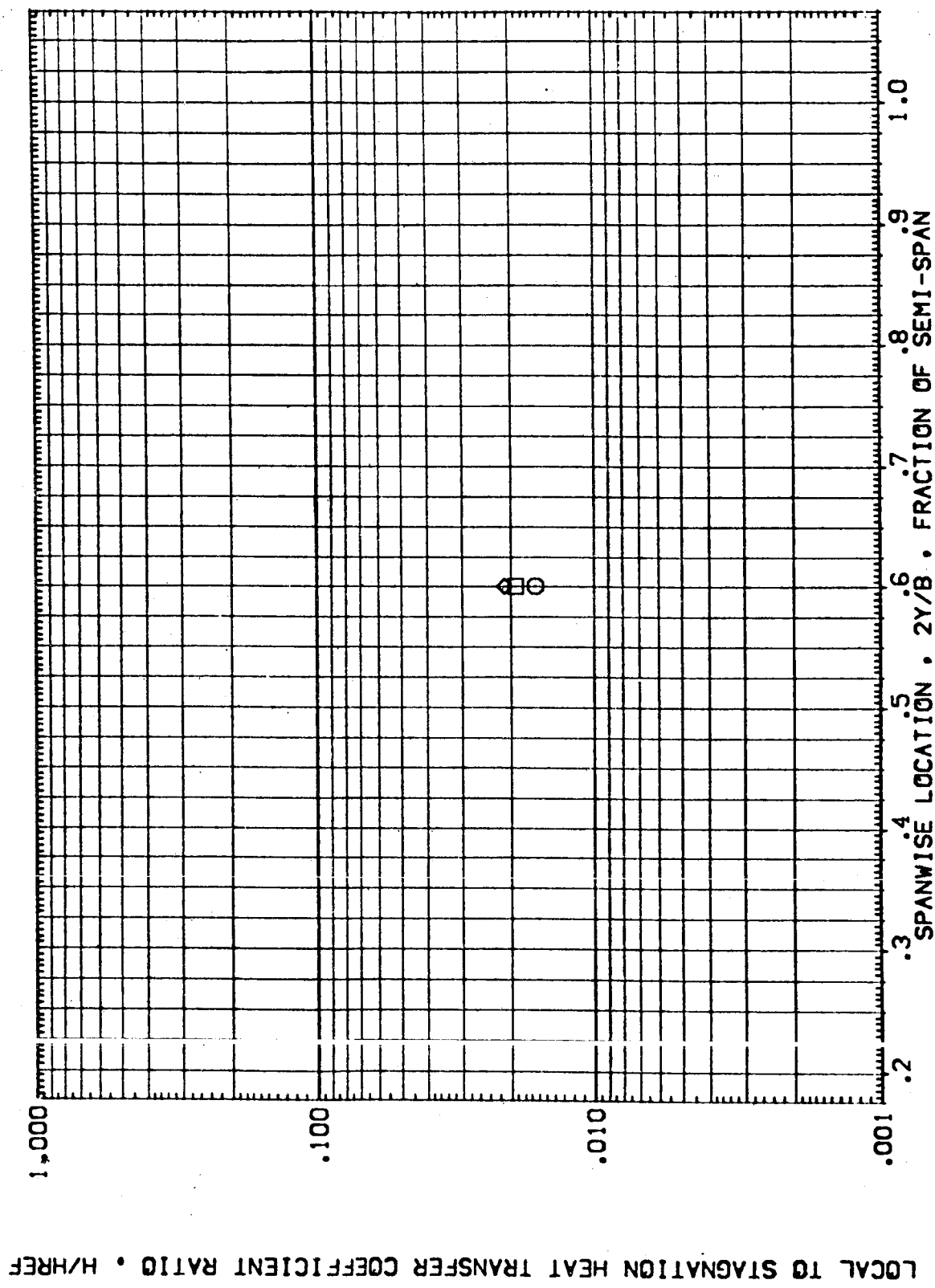


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.30) X/C = .428

DATA SET SYMBO. CONFIGURATION DESCRIPTION
 [RE|GO]] [O] ARC 3.5-178 I-M3 O-T+S
 [AE|GO]] [O] ARC 3.5-178 I-M3 O-T+S
 [BE|GO]] [O] ARC 3.5-178 I-M3 O-T+S

ALPHA .000
 BETA .000
 RV/L 1.500

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

HAW/HT 1.000
 1.900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

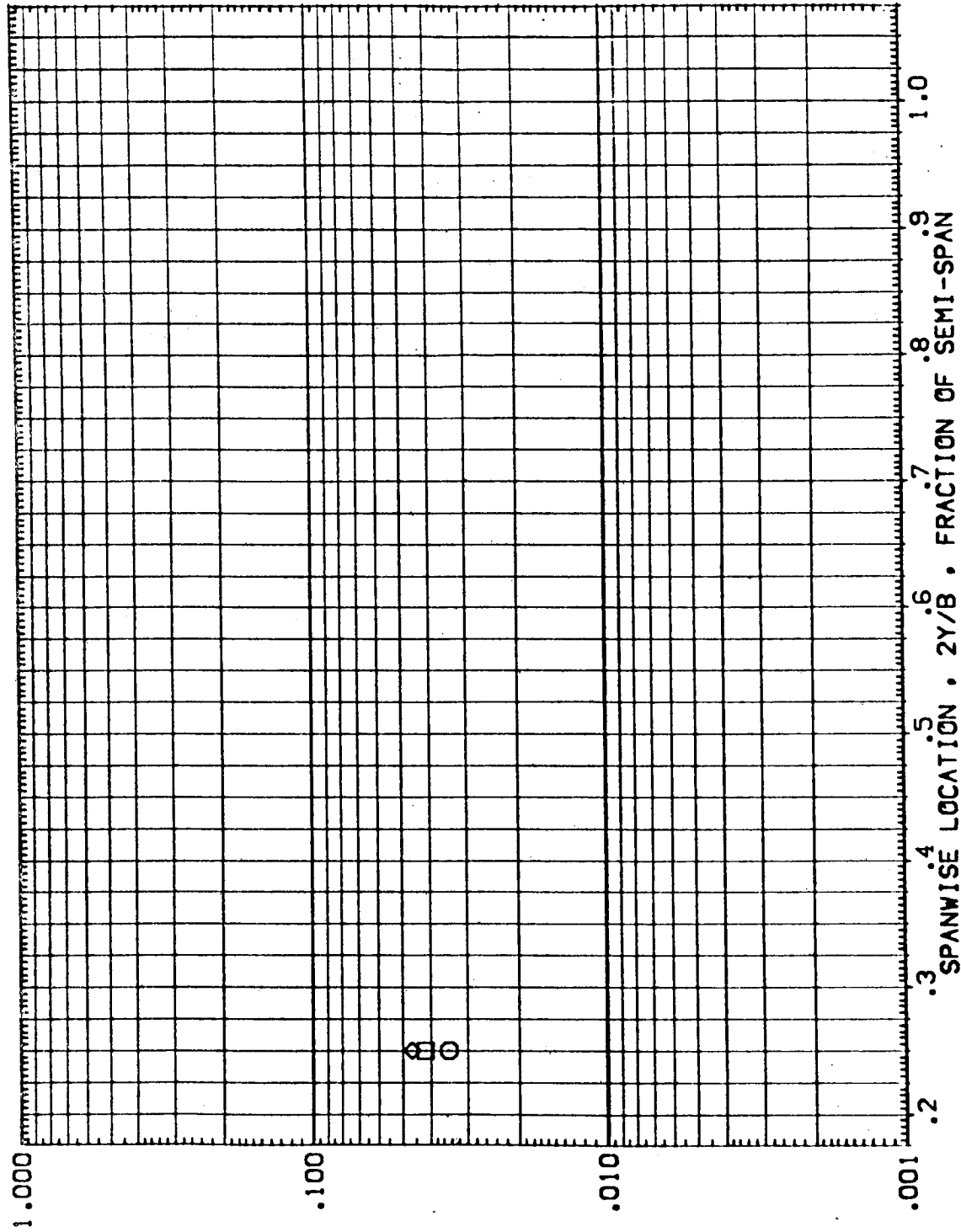


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .444



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE100] }
 [AE100] }
 [BE100] }
 ARC 3 5-178 IH3 0-T+S
 ARC 3 5-178 IH3 0-T+S
 ARC 3 5-178 IH3 0-T+S

ALPHA BETA RN/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

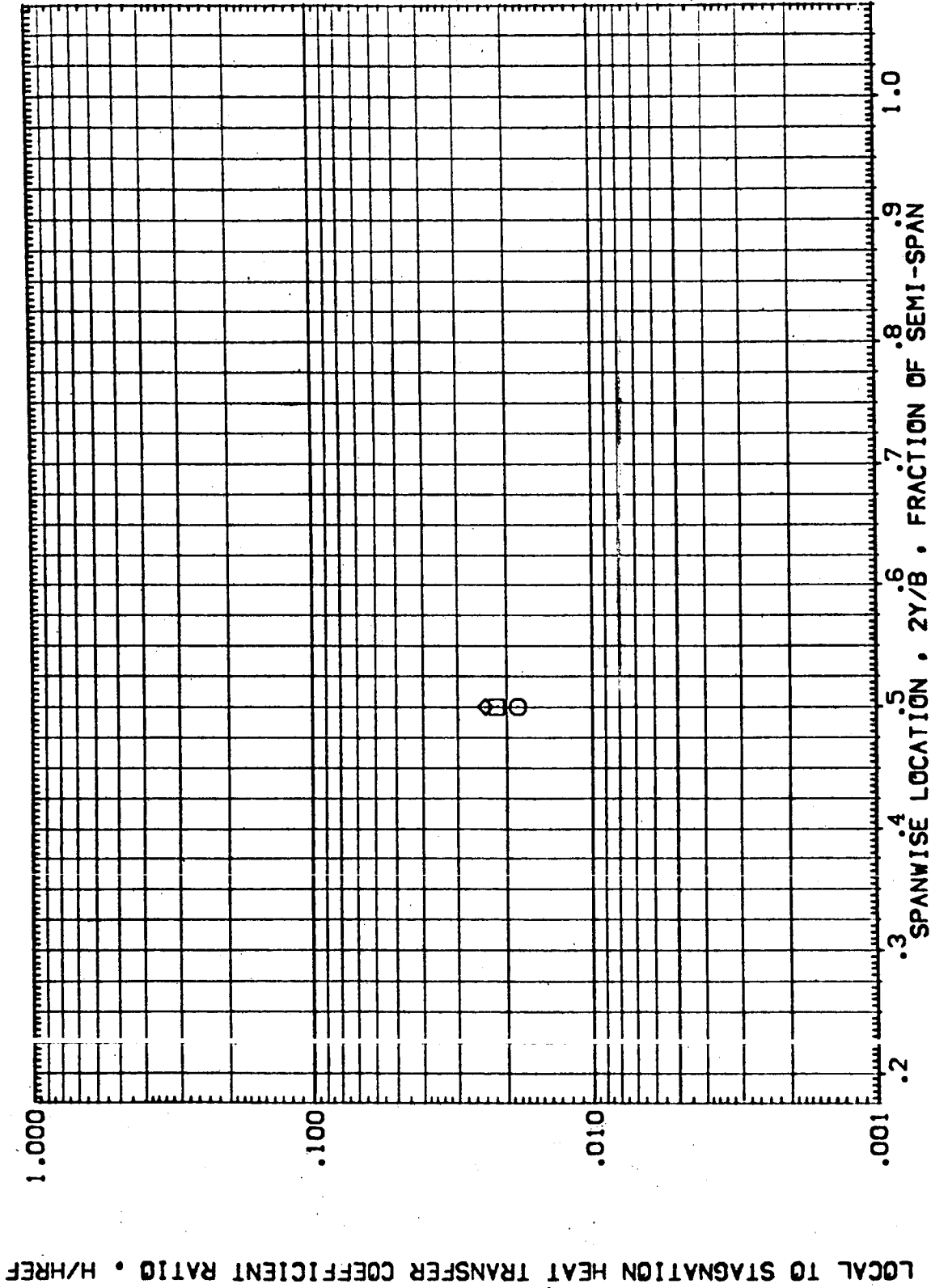


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .487

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (RE|001) ARC 3.5-178 IH3 0+T+S
 (AE|001) ARC 3.5-178 IH3 0+T+S
 (BE|001) ARC 3.5-178 IH3 0+T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RV/L 1.500
 1.500
 1.500

HAW/HT 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

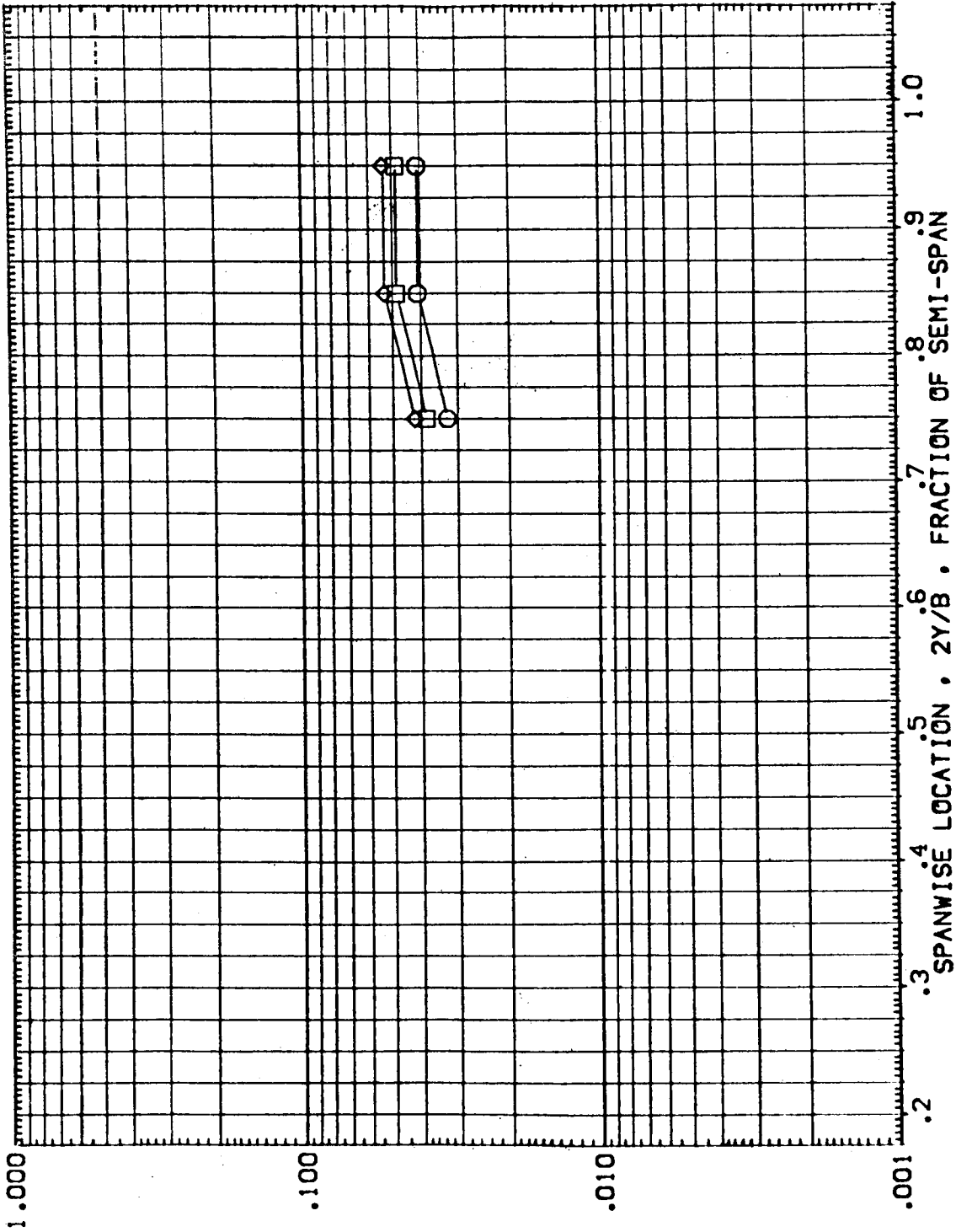


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .500



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE|GO|} ARC |.5-178 |M3 O+T+S
 {AE|GO|} ARC |.5-178 |M3 O+T+S
 {BE|GO|} ARC |.5-178 |M3 O+T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RN/L 1.500
 1.500
 1.500

HAV/HT 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

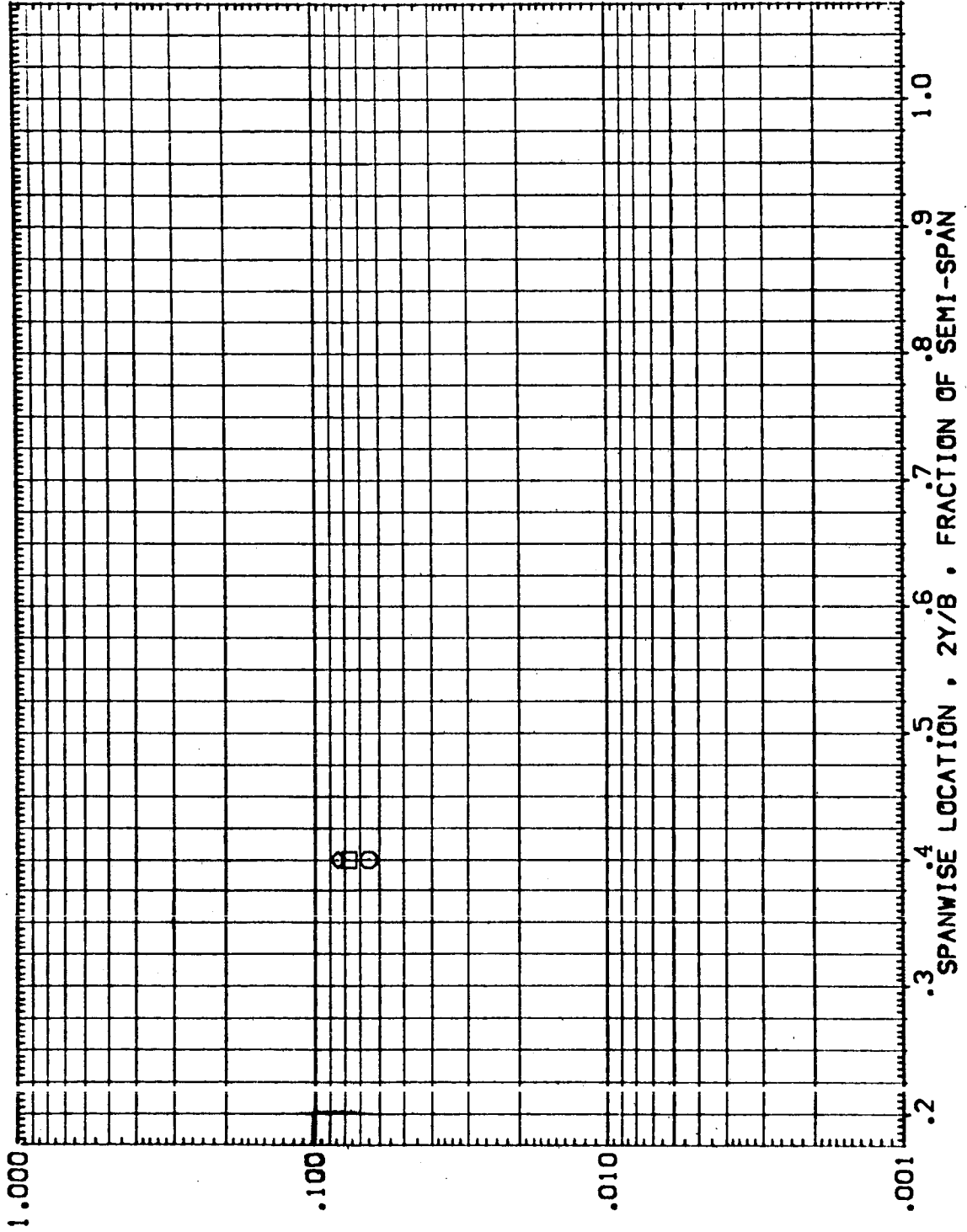


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .559

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

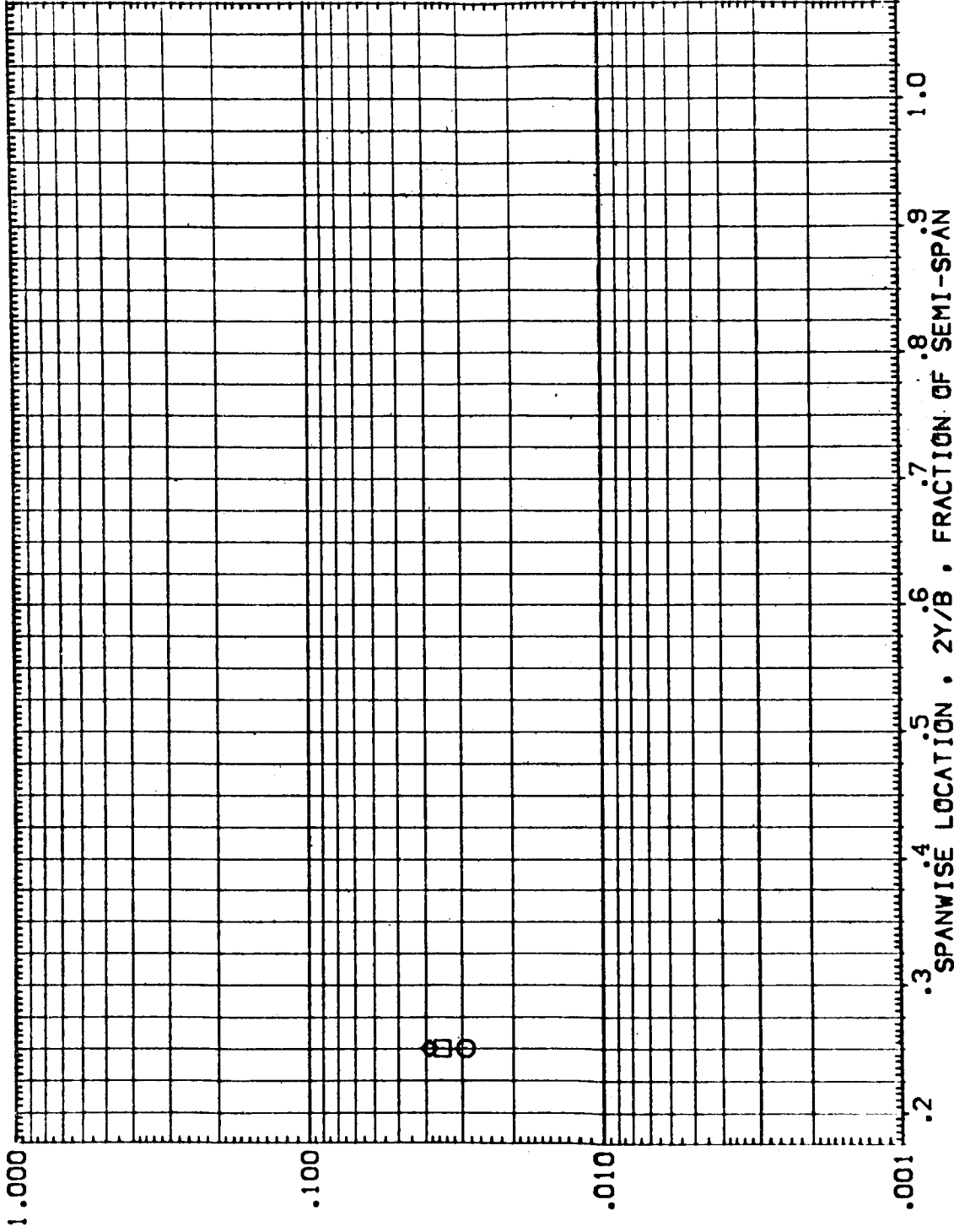
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 { RE100 } } ARC 3.5-178 I+G O+T+S
 { AE100 } } ARC 3.5-178 I+G O+T+S
 { BE100 } } ARC 3.5-178 I+G O+T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA-BETA ALPHA-BETA ALPHA-BETA
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000

RNVL RNVL RNVL
 1.500 1.500 1.500
 1.500 1.500 1.500
 1.500 1.500 1.500

HAV/HT HAV/HT HAV/HT
 1.000 1.000 1.000
 .900 .900 .900
 .850 .850 .850




SPANWISE LOCATION • 2Y/B • FRACTION OF SEMI-SPAN
 .2 .3 .4 .5 .6 .7 .8 .9 1.0

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .590



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

DATA SET SYMBOL:  CONFIGURATION DESCRIPTION: ALPHA BETA RV/L HAV/HT
 {RE{00}} ARC 1.5-178 143 0+1+S .000 .000 1.500 1.000
 {AE{00}} ARC 1.5-178 143 0+1+S .000 .000 1.500 .900
 {BE{00}} ARC 1.5-178 143 0+1+S .000 .000 1.500 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

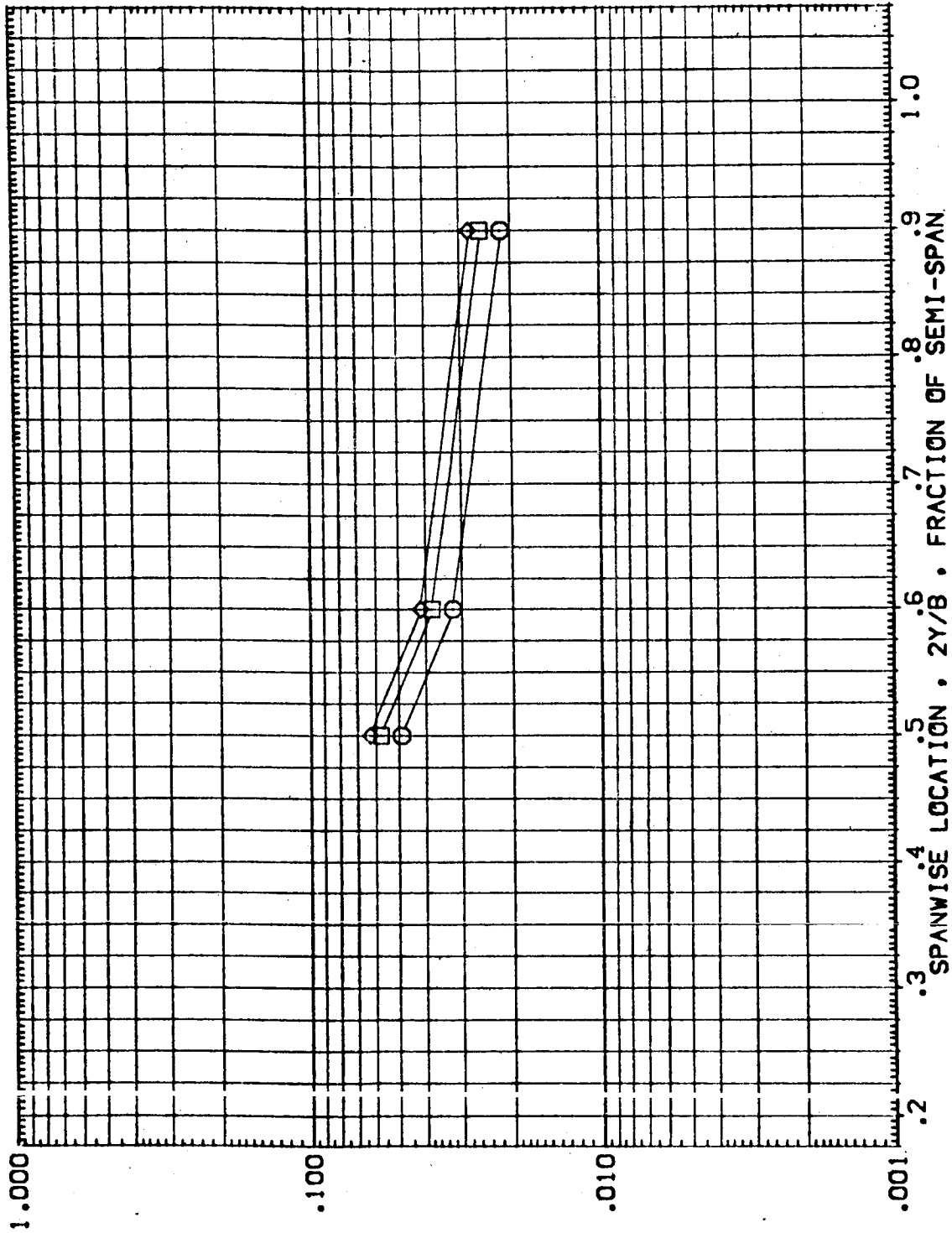


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.310 X/C = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

{ RE | GO | } ARC 3.5-178 IH3 0-T+S .000 .000 1.500 1.000

{ AE | GO | } ARC 3.5-178 IH3 0-T+S .000 .000 1.500 .900

{ BE | GO | } ARC 3.5-178 IH3 0-T+S .000 .000 1.500 .850

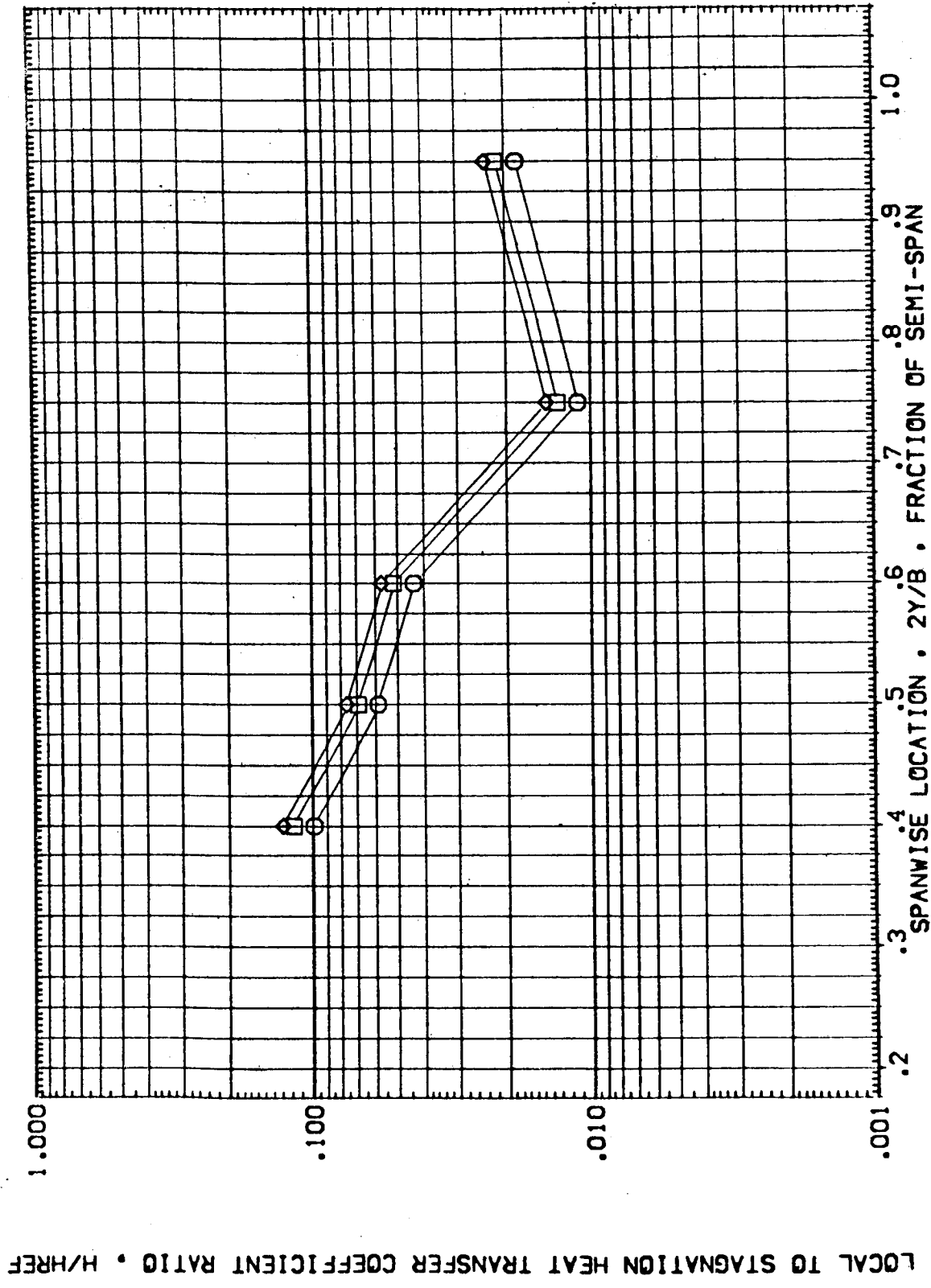


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .700



DATA SET SYMB. CONFIGURATION DESCRIPTION
 {RE1001} ARC 3.5-178 IH3 0-T+S
 {AE1001} ARC 3.5-178 IH3 0-T+S
 {BE1001} ARC 3.5-178 IH3 0-T+S

VING BOTTOM
 VING BOTTOM
 VING BOTTOM

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RM/L 1.500
 1.500
 1.500

HAV/HT 1.000
 .900
 .850

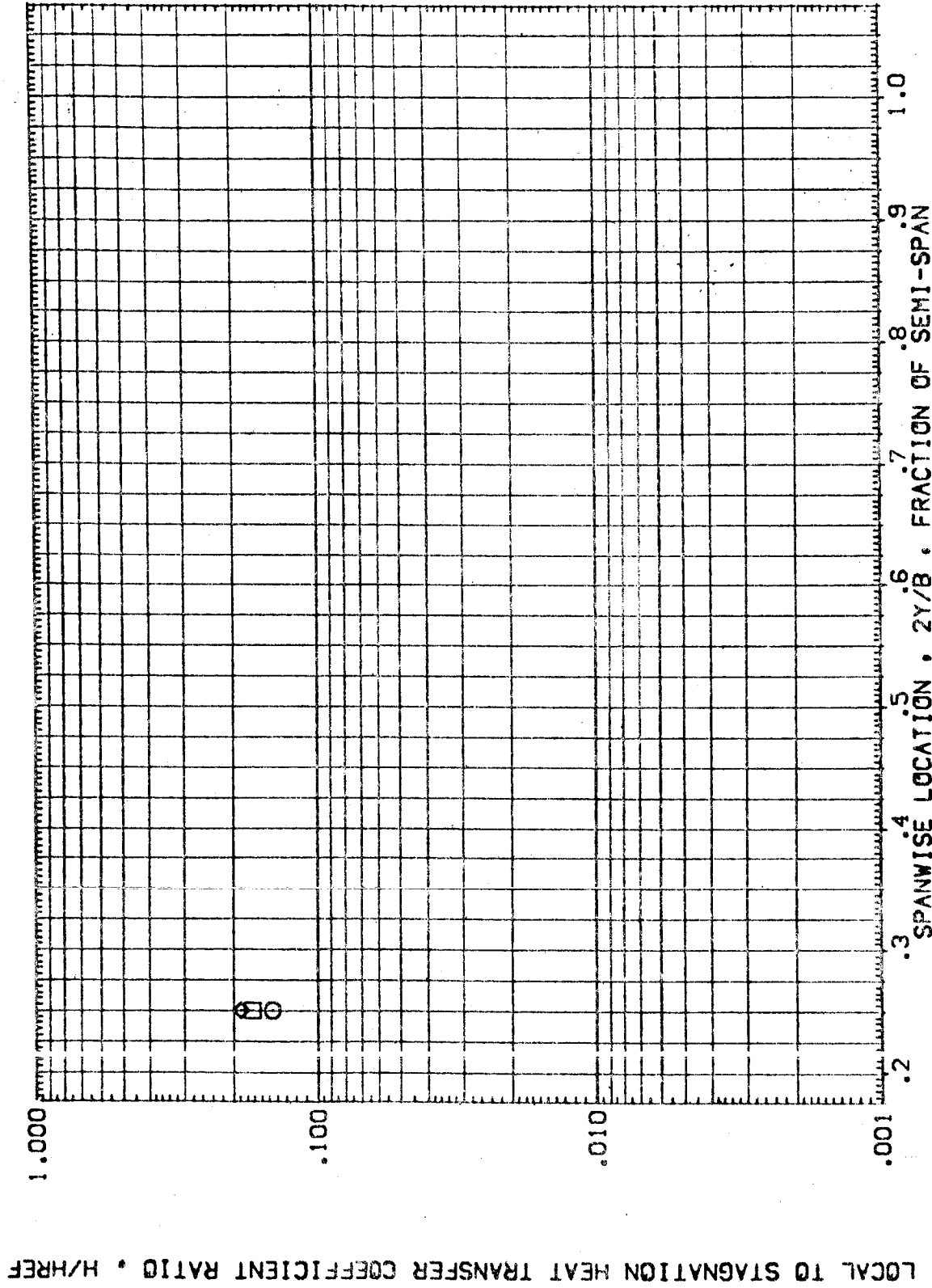


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .736

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

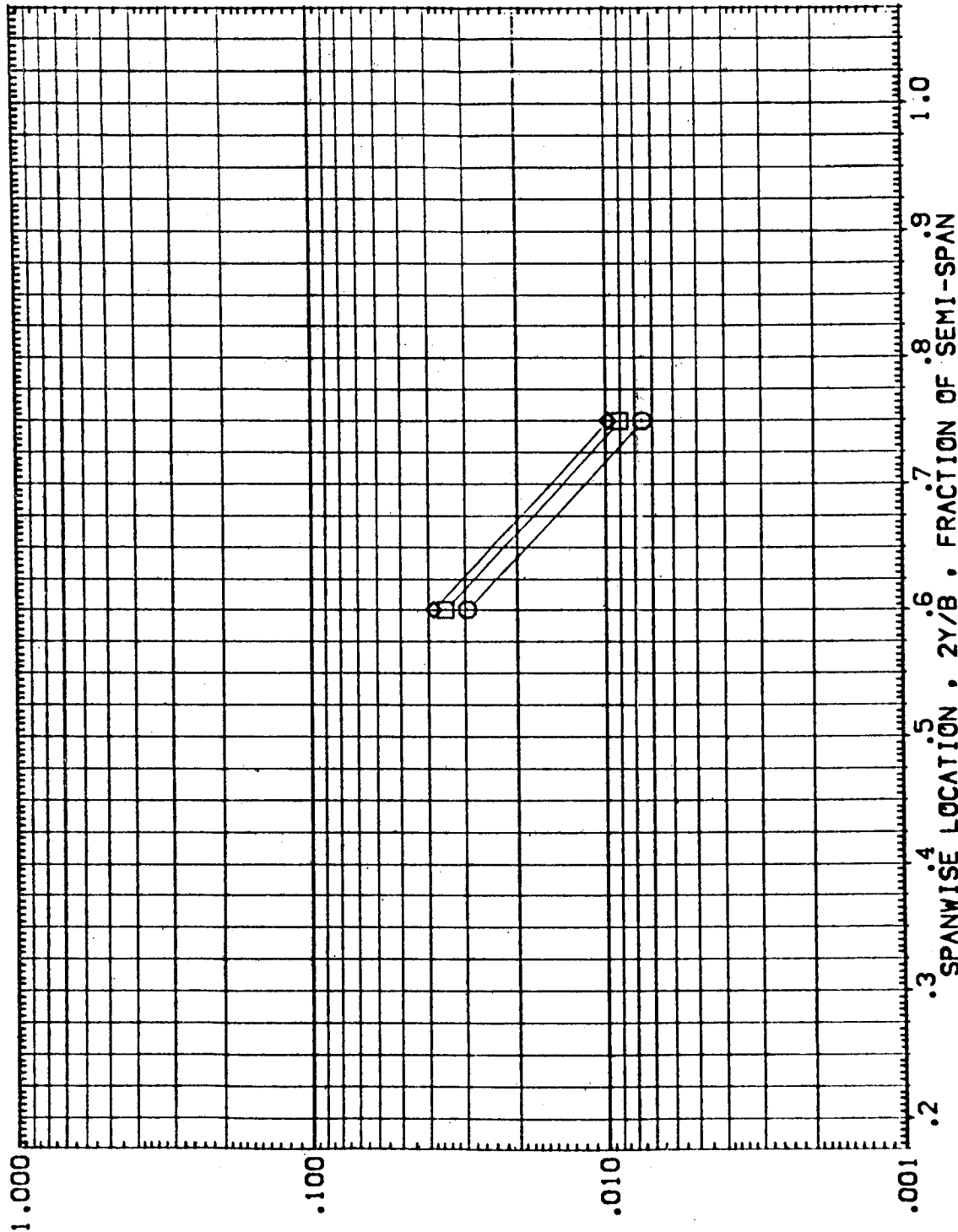


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .800

DATA SET SYMBOL: {RE|00|} {AE|00|} {BE|00|} CONFIGURATION DESCRIPTION: ARC 3.5-178 H3 O-T+S, ARC 3.5-178 H3 O-T+S, ARC 3.5-178 H3 O-T+S WING BOTTOM: WING BOTTOM, WING BOTTOM ALPHA: .000, .000, .000 BETA: .000, .000, .000 RNAL: 1.500, 1.500, 1.500 HAV/HT: 1.000, .900, .850



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|001} ARC 3.5-178 I+3 0+1+S
 (AE|001} ARC 3.5-178 I+3 0+1+S
 (BE|001} ARC 3.5-178 I+3 0+1+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RV/L 1.500
 1.500
 1.500

HAV/HT 1.000
 .900
 .850

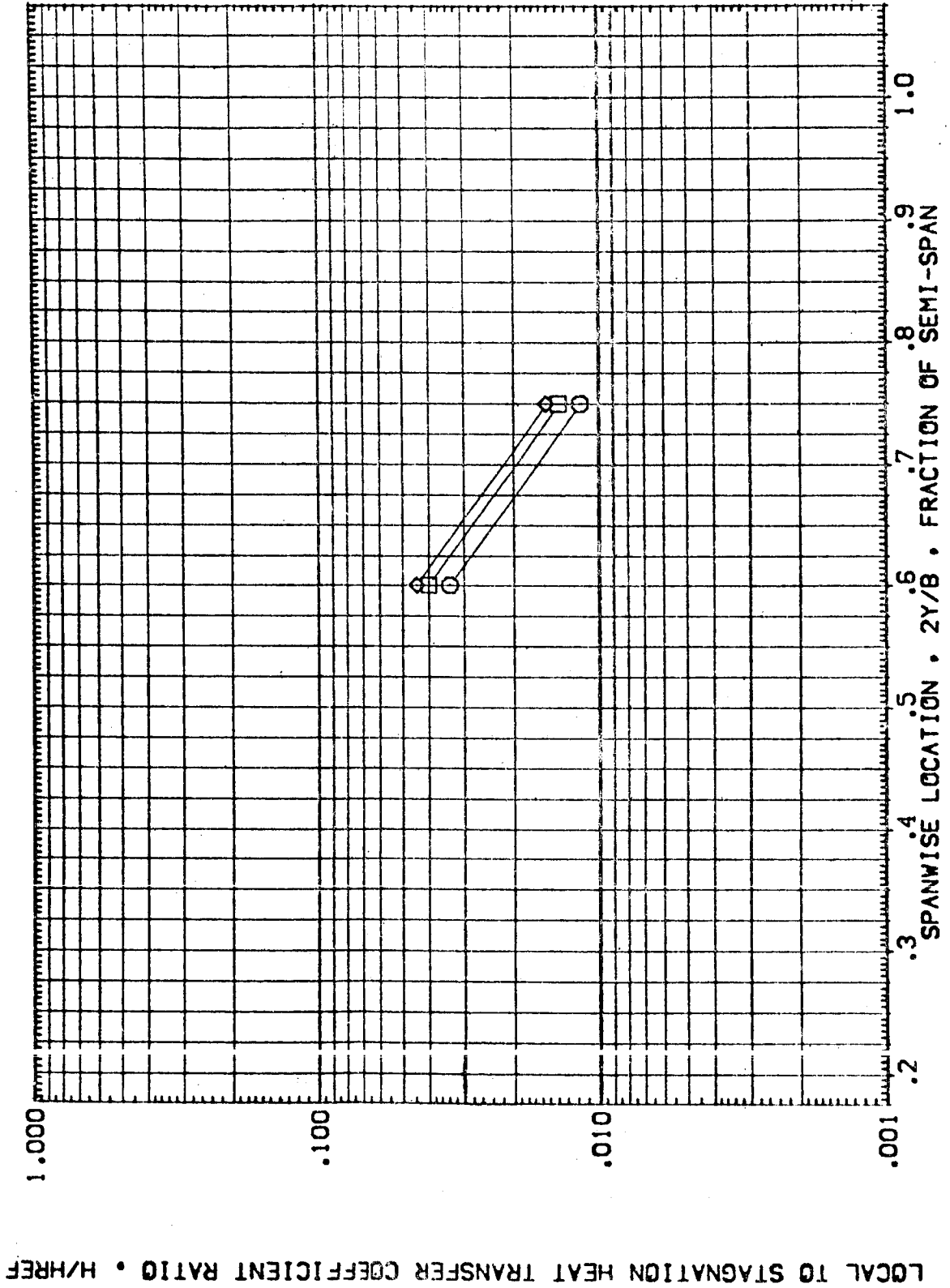


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 { RE | GO } { } ARC 3.5-178 I+3 O+T+S
 { AE | GO } { } ARC 3.5-178 I+3 O+T+S
 { BE | GO } { } ARC 3.5-178 I+3 O+T+S

WING BOTTOM WING BOTTOM WING BOTTOM
 WING BOTTOM WING BOTTOM WING BOTTOM

ALPHA BETA RVL MAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

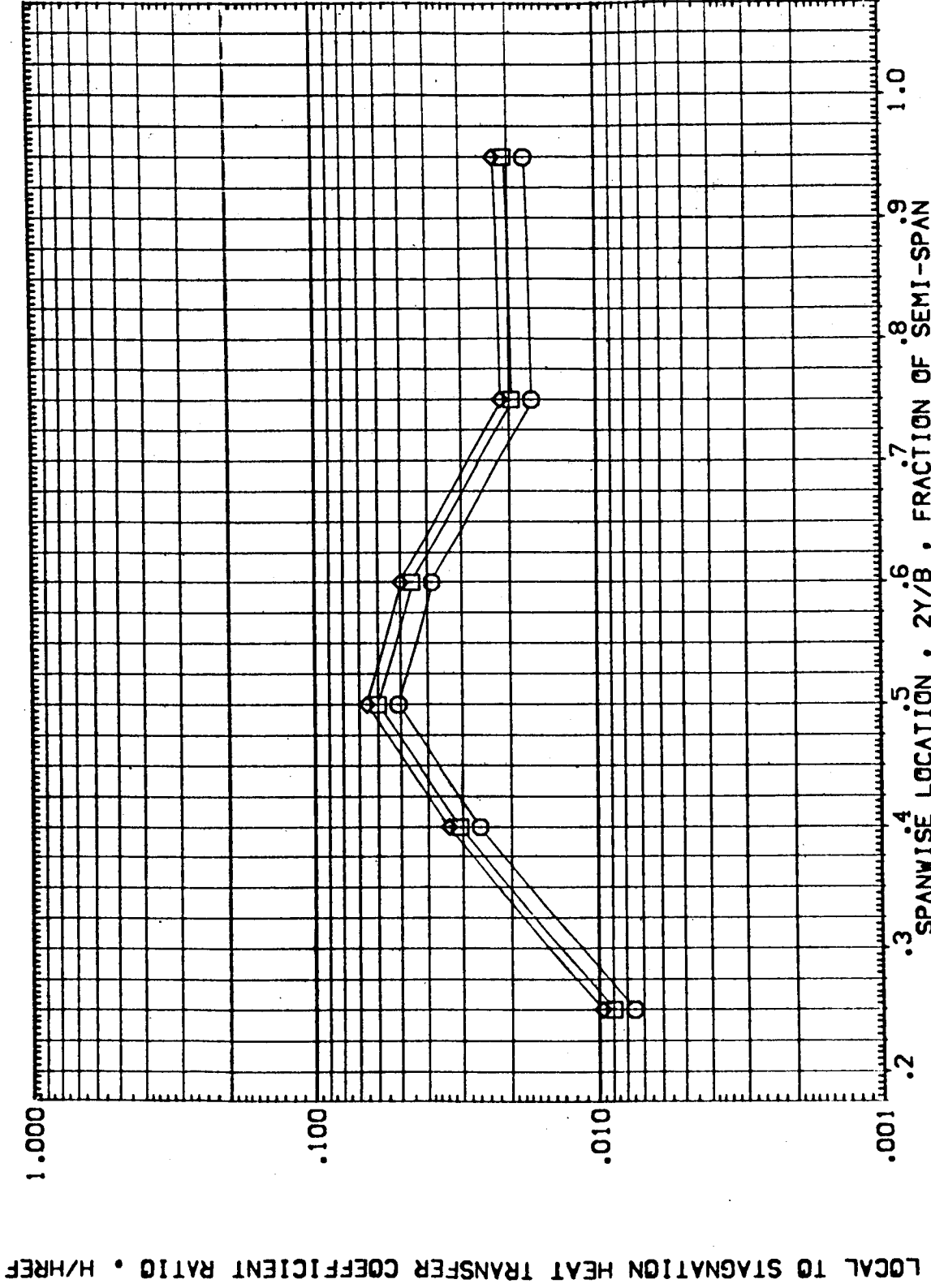


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|002) | 5-178 | H3 O+T+S
 (AE|002) | 5-178 | H3 O+T+S
 (BE|002) | 5-178 | H3 O+T+S

WING BOTTOM WING BOTTOM WING BOTTOM
 ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 5.000 5.000 5.000
 HAV/HT 1.000 .900 .850

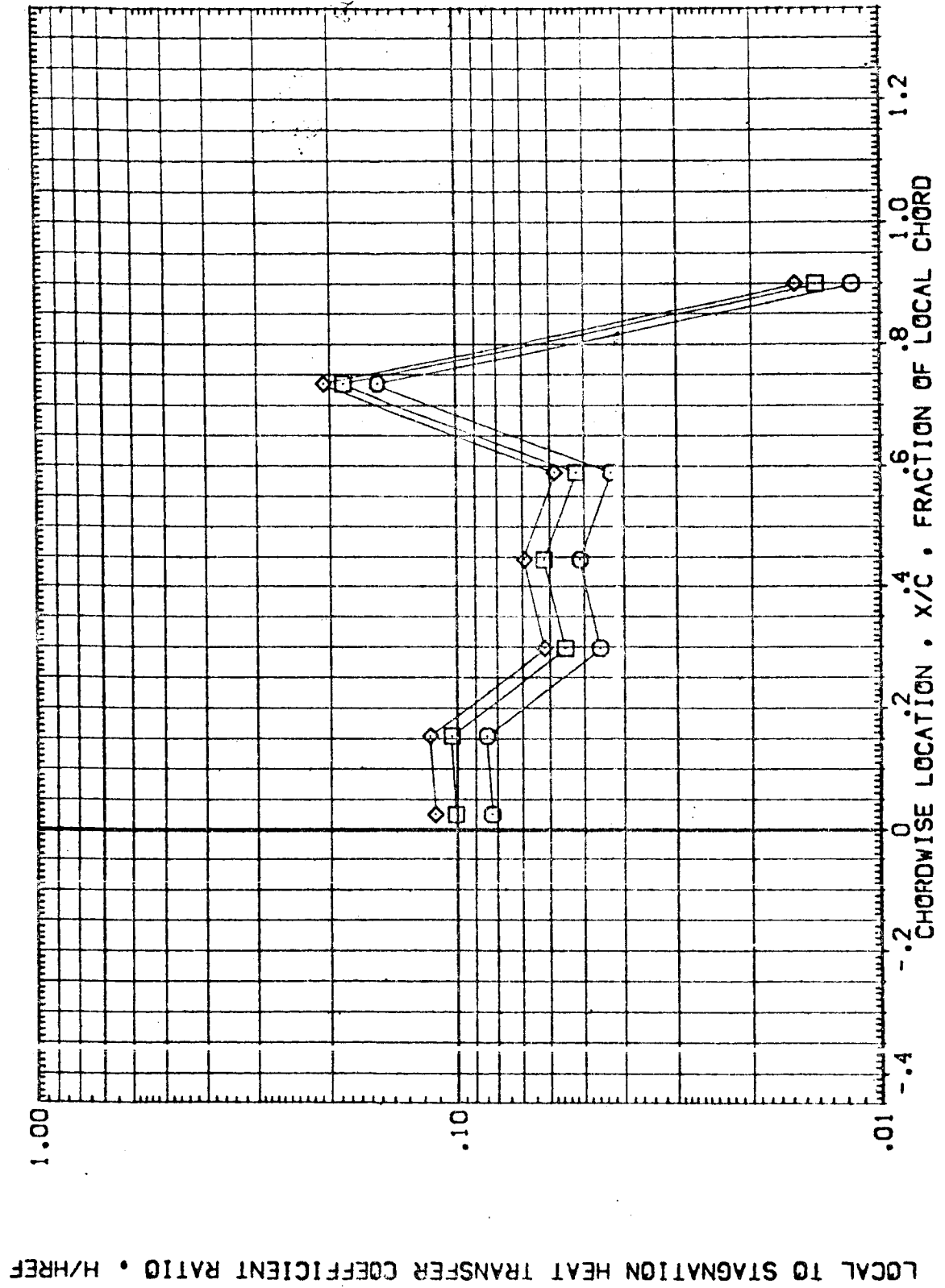


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .250

DATA SET SYMBOL CONFIGURATION DESCRIPTION VING BOTTOM ALPHA BETA RV/L MAV/HT
 {RE|G02} ARC 3.5-178 |H3 O-T+S VING BOTTOM .000 .000 5.000 1.000
 {AE|G02} ARC 3.5-178 |H3 O-T+S VING BOTTOM .000 .000 5.000 .900
 {BE|G02} ARC 3.5-178 |H3 O-T+S VING BOTTOM .000 .000 5.000 .850

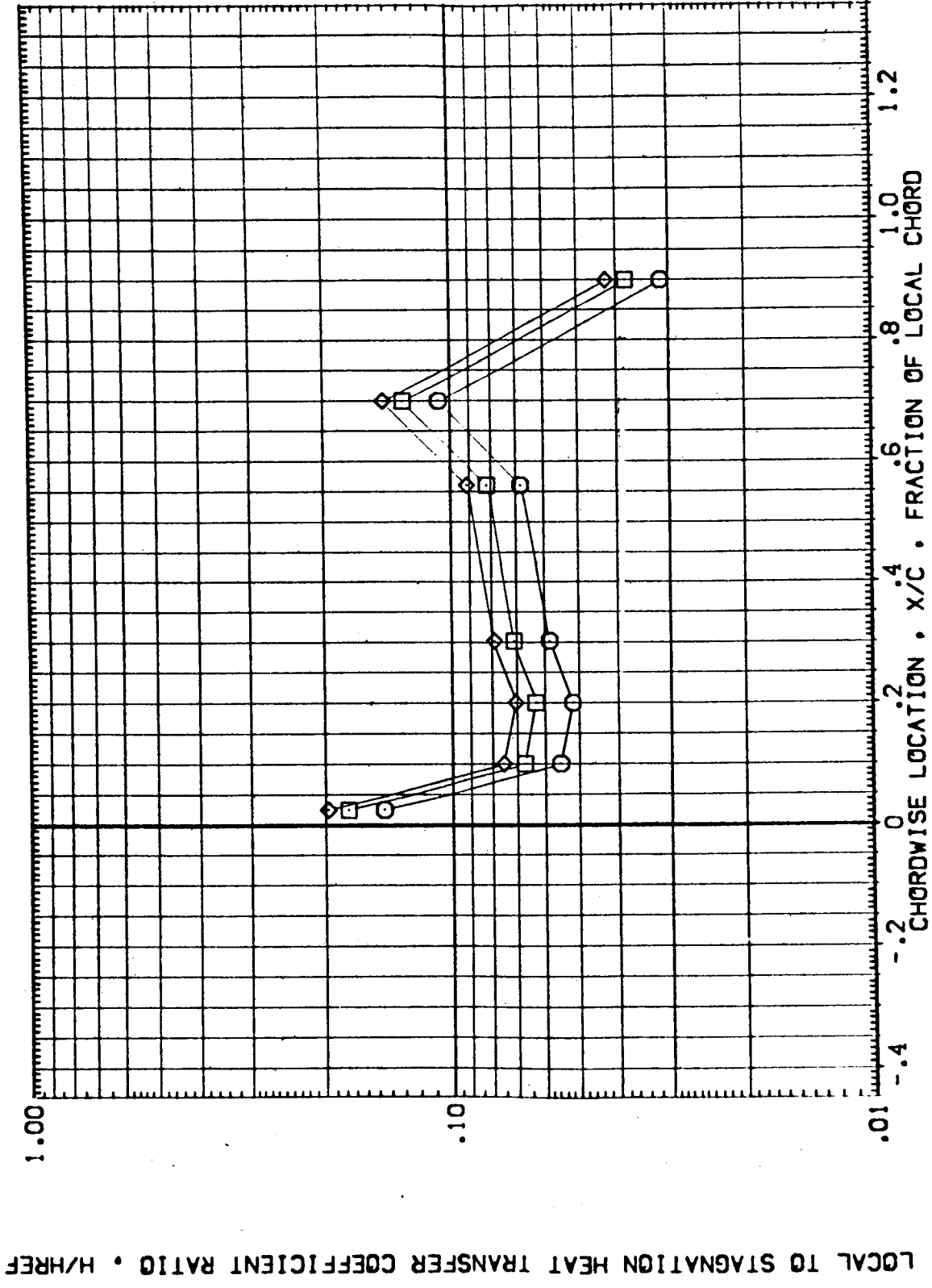


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .400



DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (RE|002} (AE|002} (BE|002}
 ARC 1:5-178 [H3 O+T+S
 ARC 1:5-178 [H3 O+T+S
 ARC 1:5-178 [H3 O+T+S

VING BOTTOM
 VING BOTTOM
 VING BOTTOM

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

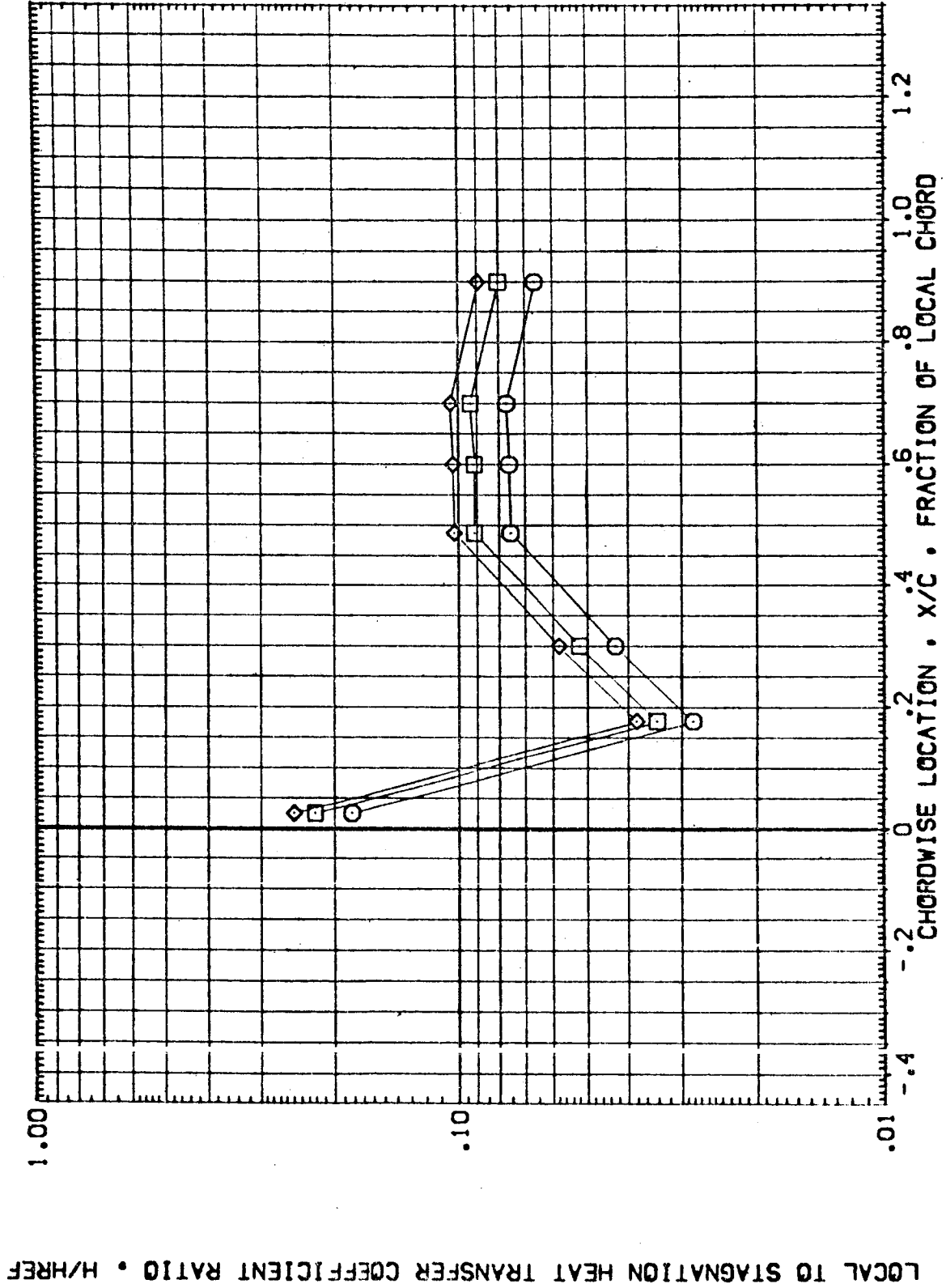


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM WING BOTTOM ALPHA BETA RV/L MAV/HT
 { RE1602 } ARC 3.5-178 I+3 O+T+S VING BOTTOM VING BOTTOM .000 .000 5.000 1.000
 { AE1602 } ARC 3.5-178 I+3 O+T+S VING BOTTOM VING BOTTOM .000 .000 5.000 .900
 { BE1602 } ARC 3.5-178 I+3 O+T+S VING BOTTOM VING BOTTOM .000 .000 5.000 .850

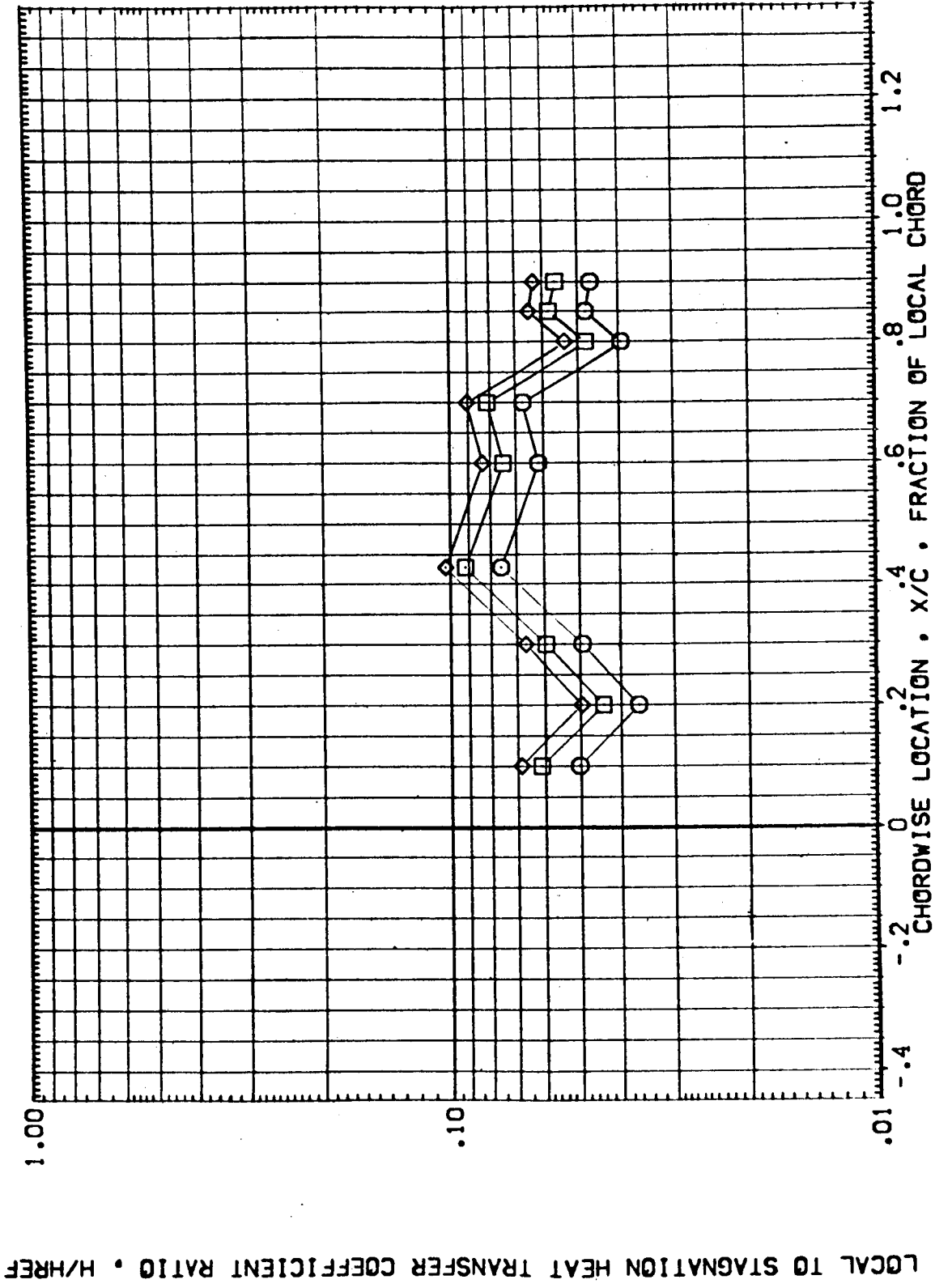


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

[RE] [G02] ARC 1:5-178 143 0+1+S .000 .000 5.000 1.000

[AE] [G02] ARC 1:5-178 143 0+1+S .000 .000 5.000 .900

[BE] [G02] ARC 1:5-178 143 0+1+S .000 .000 5.000 .850

WING BOTTOM VING BOTTOM VING BOTTOM

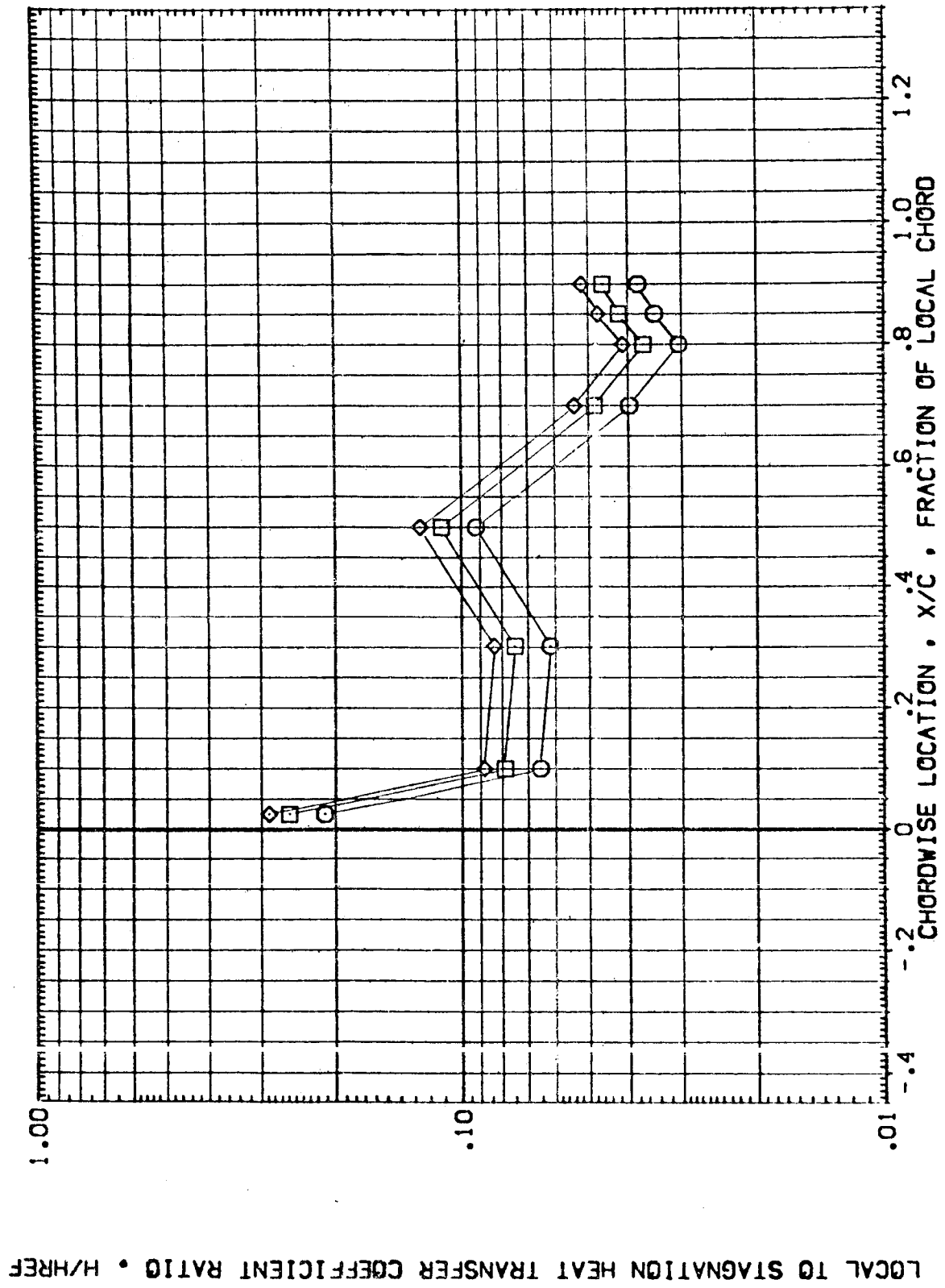


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .750

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|002) | H3 O+T+S
 (AE|002) | H3 O+T+S
 (BE|002) | H3 O+T+S

ALPHA BETA RV/L MAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .800
 .000 .000 5.000 .650

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

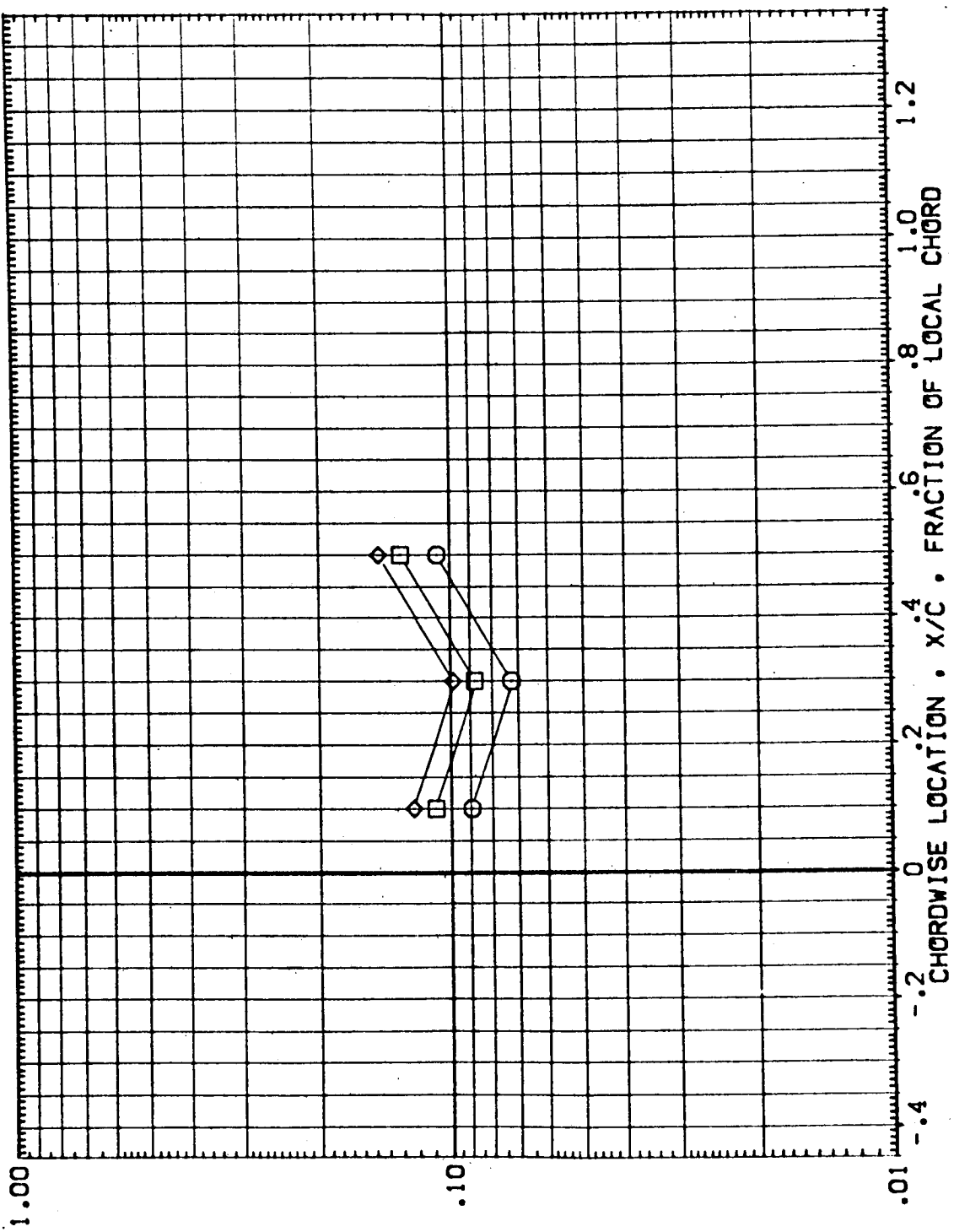


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .850



DATA SET SYMBOL CD CONFIGURATION DESCRIPTION ALPHA BETA RM/L HAW/HT

{REIG02} O ARC 1.5-178 IH3 0+T+S .000 .000 5.000 1.000

{ABIG02} O ARC 1.5-178 IH3 0+T+S .000 .000 5.000 .900

{BEIG02} O ARC 1.5-178 IH3 0+T+S .000 .000 5.000 .850

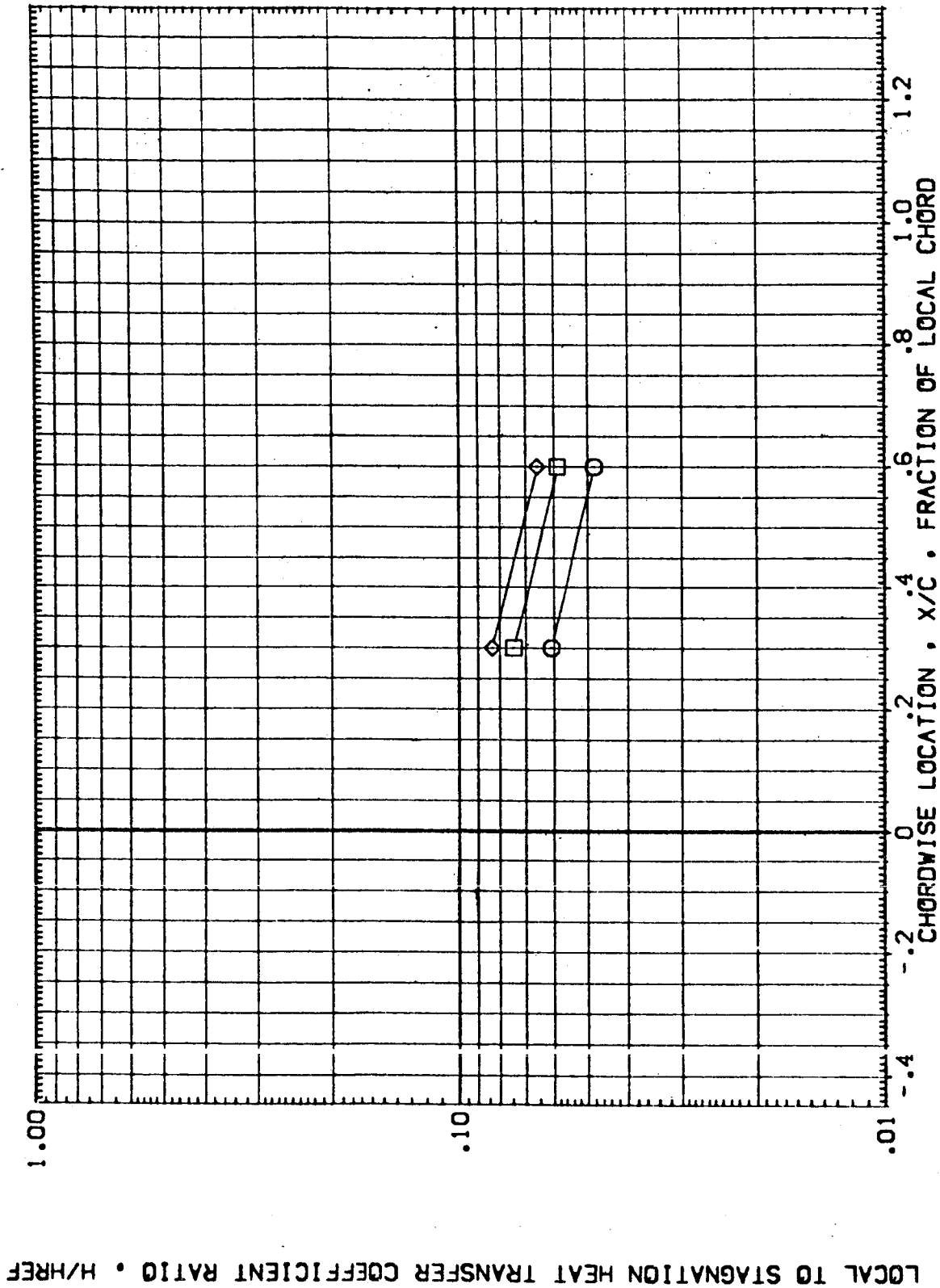


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION / ALPHA BETA RNU/L MAV/HT
 [RE|002] ARC 3.5-178 |H3 O-T+S VING BOTTOM .000 .000 5.000 1.000
 [AE|002] ARC 3.5-178 |H3 O-T+S VING BOTTOM .000 .000 5.000 .900
 [BE|002] ARC 3.5-178 |H3 O-T+S VING BOTTOM .000 .000 5.000 .850

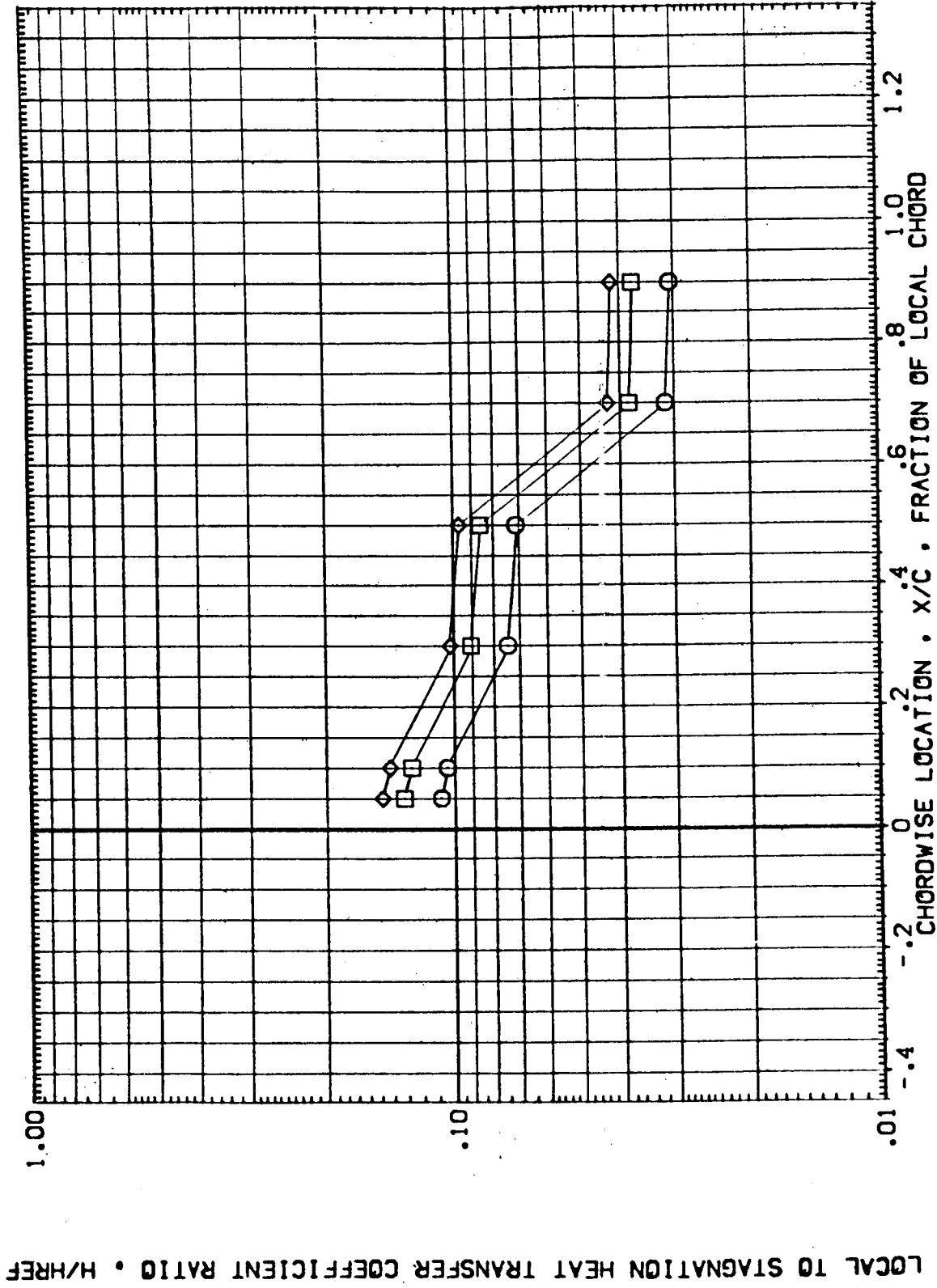


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .950

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|002) (RC|1.5-178|H3|0+1+S
 (AS|002) (RC|1.5-178|H3|0+1+S
 (BE|002) (RC|1.5-178|H3|0+1+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

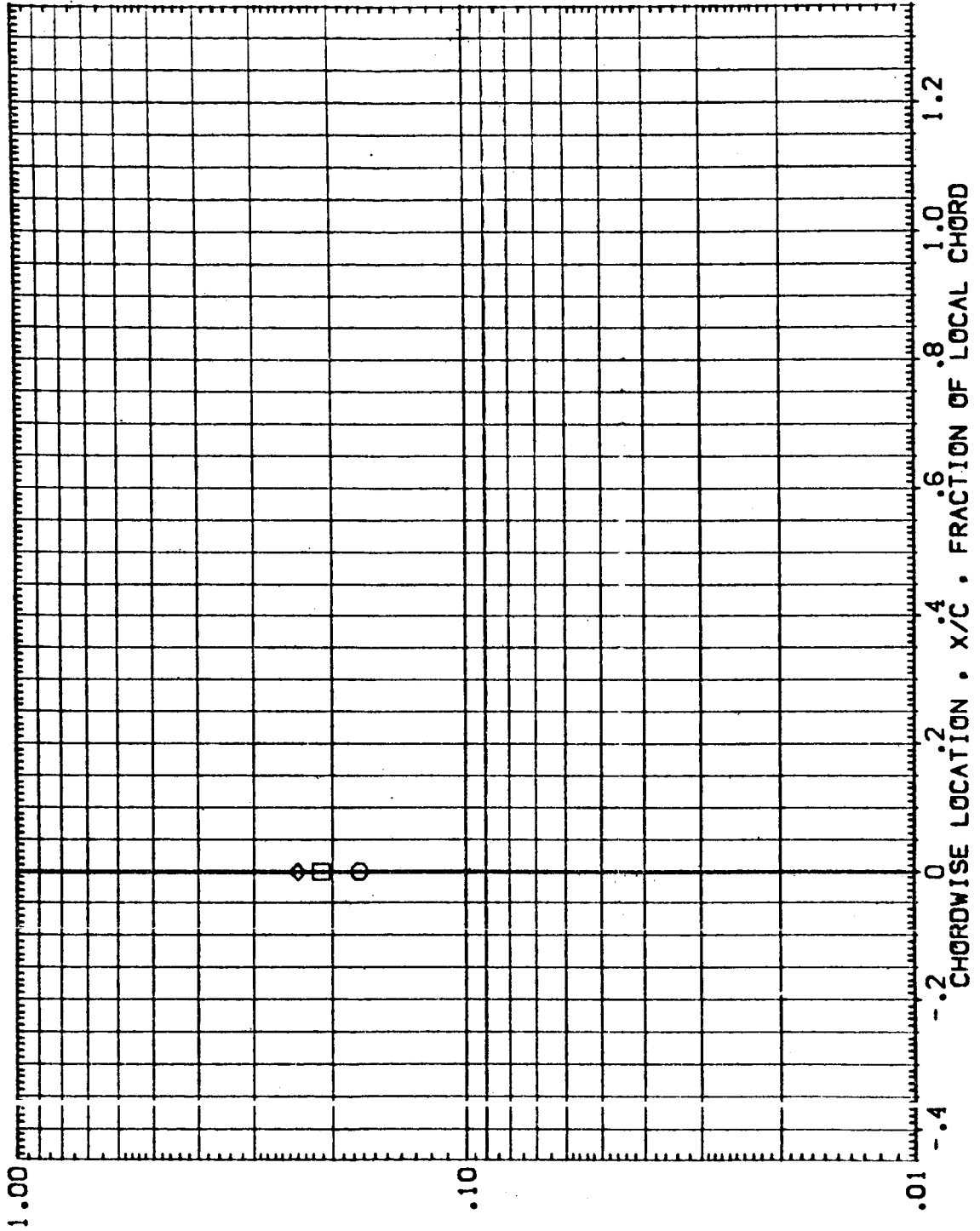


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .966

DATA SET SYMBOL: [RE] [AE] [BE] [002] [002] [002]
 CONFIGURATION DESCRIPTION: ARC 3.5-178 | H3 C+T+S | H3 C+T+S | H3 C+T+S
 WING BOTTOM: WING BOTTOM | WING BOTTOM | WING BOTTOM
 ALPHA: .000 | .000 | .000
 BETA: .000 | .000 | .000
 RN/VL: 5.000 | 5.000 | 5.000
 HAV/HT: 1.000 | .900 | .850

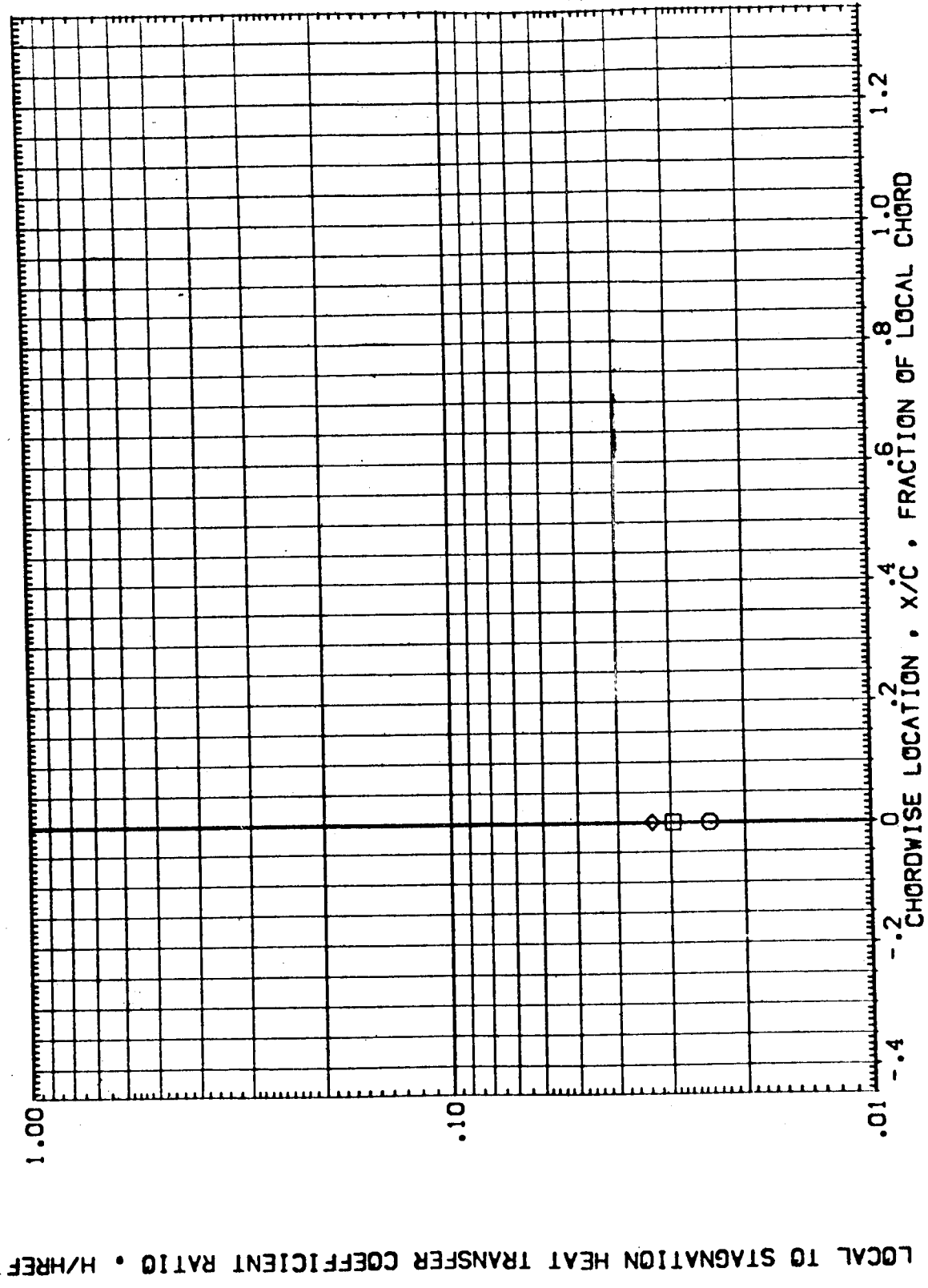


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .993



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE|002} ARC 3.5-178 IH3 O-T+S
 {AE|002} ARC 3.5-178 IH3 O-T+S
 {BE|002} ARC 3.5-178 IH3 O-T+S

ALPHA BETA RV/L MAV/RT
 .000 .000 5.000 1.000
 .000 .000 2.000 .900
 .000 .000 5.000 .850

VING BOTTOM
 VING BOTTOM
 VING BOTTOM

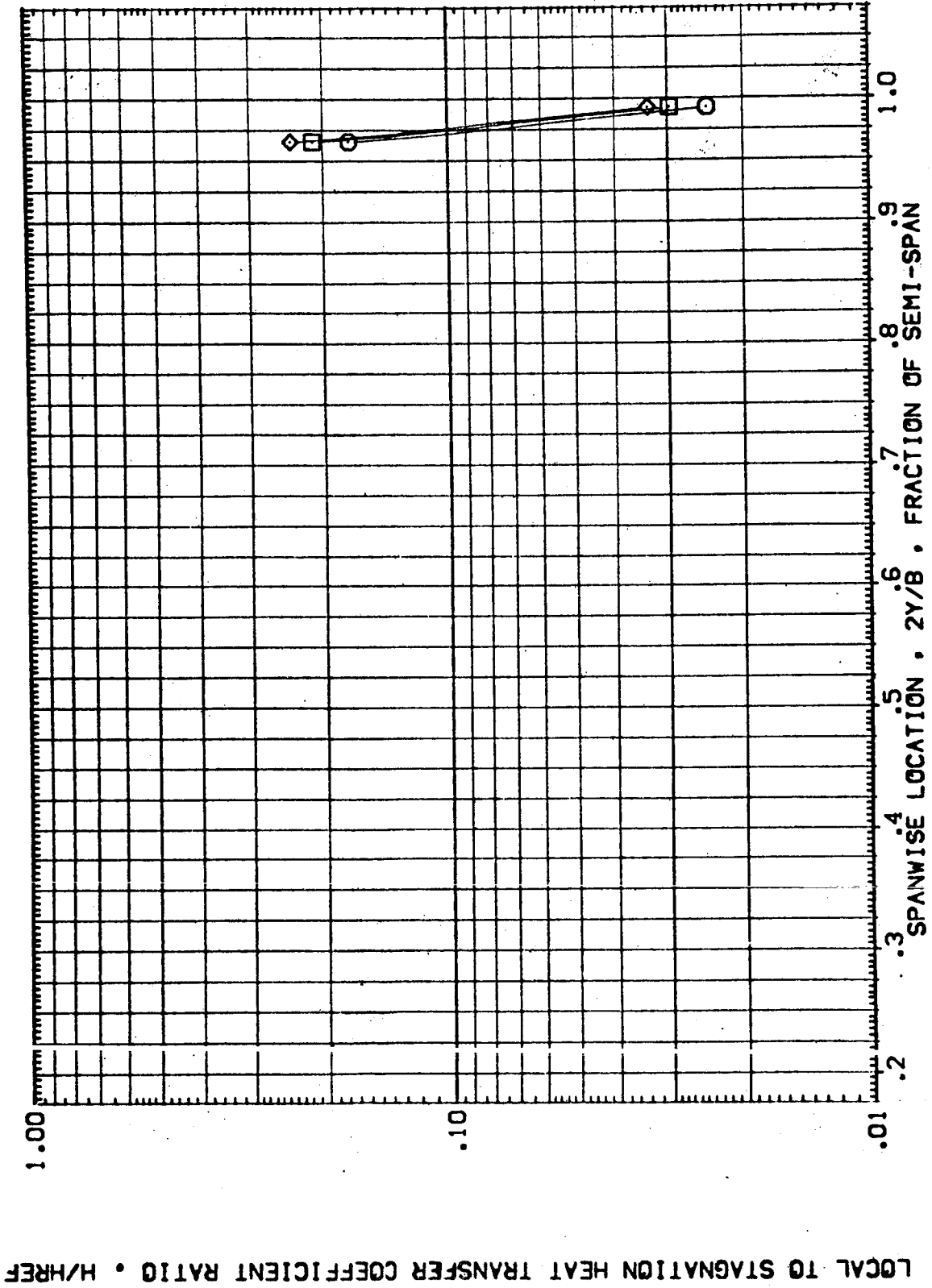


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.310 X/C = .000

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBO. CONFIGURATION DESCRIPTION
 (RE|002) ARC 3.5-178 IH3 O+T+S
 (AE|002) ARC 3.5-178 IH3 O+T+S
 (BE|002) ARC 3.5-178 IH3 O+T+S

VING BOTTOM
 VING BOTTOM
 VING BOTTOM

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

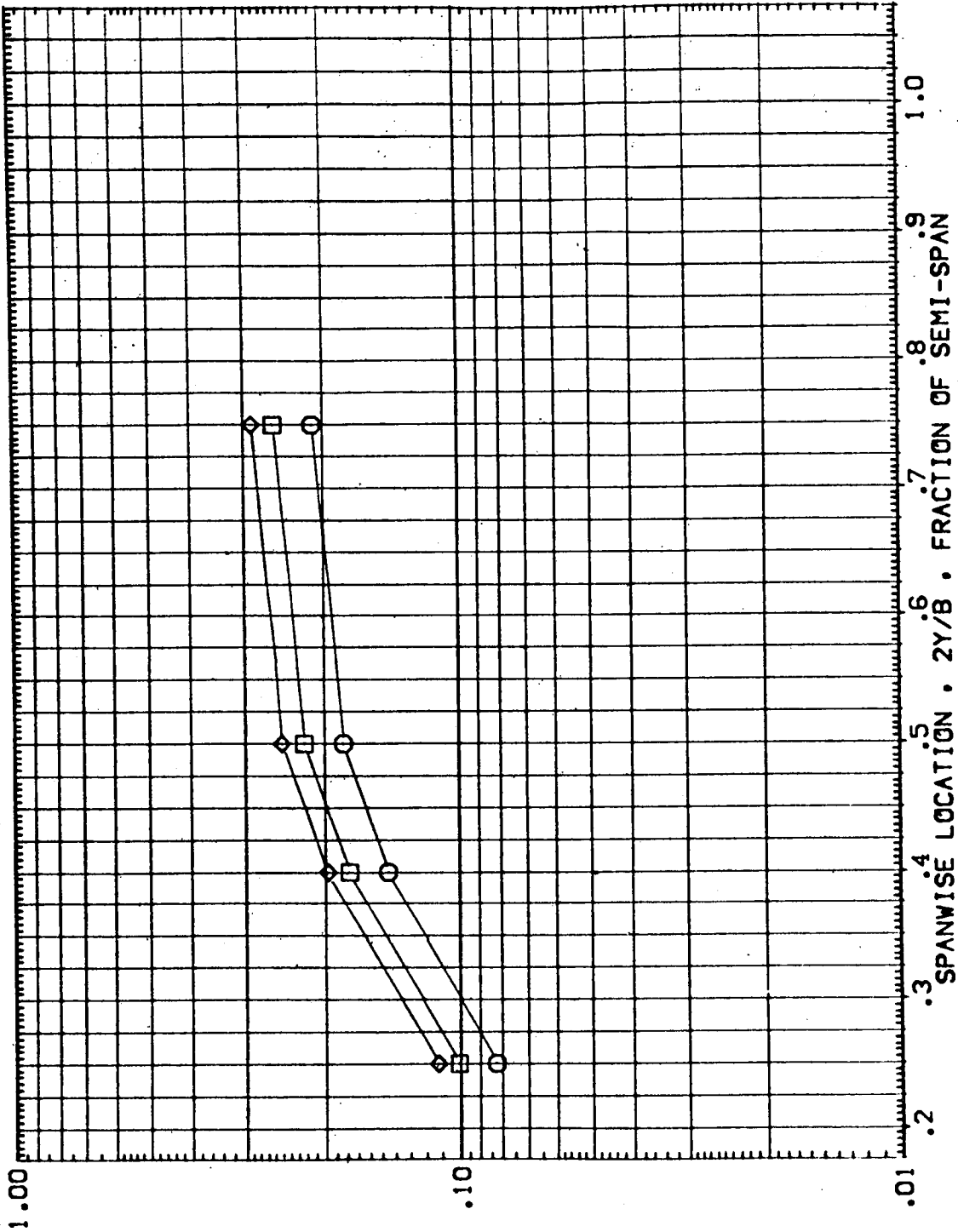


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .025

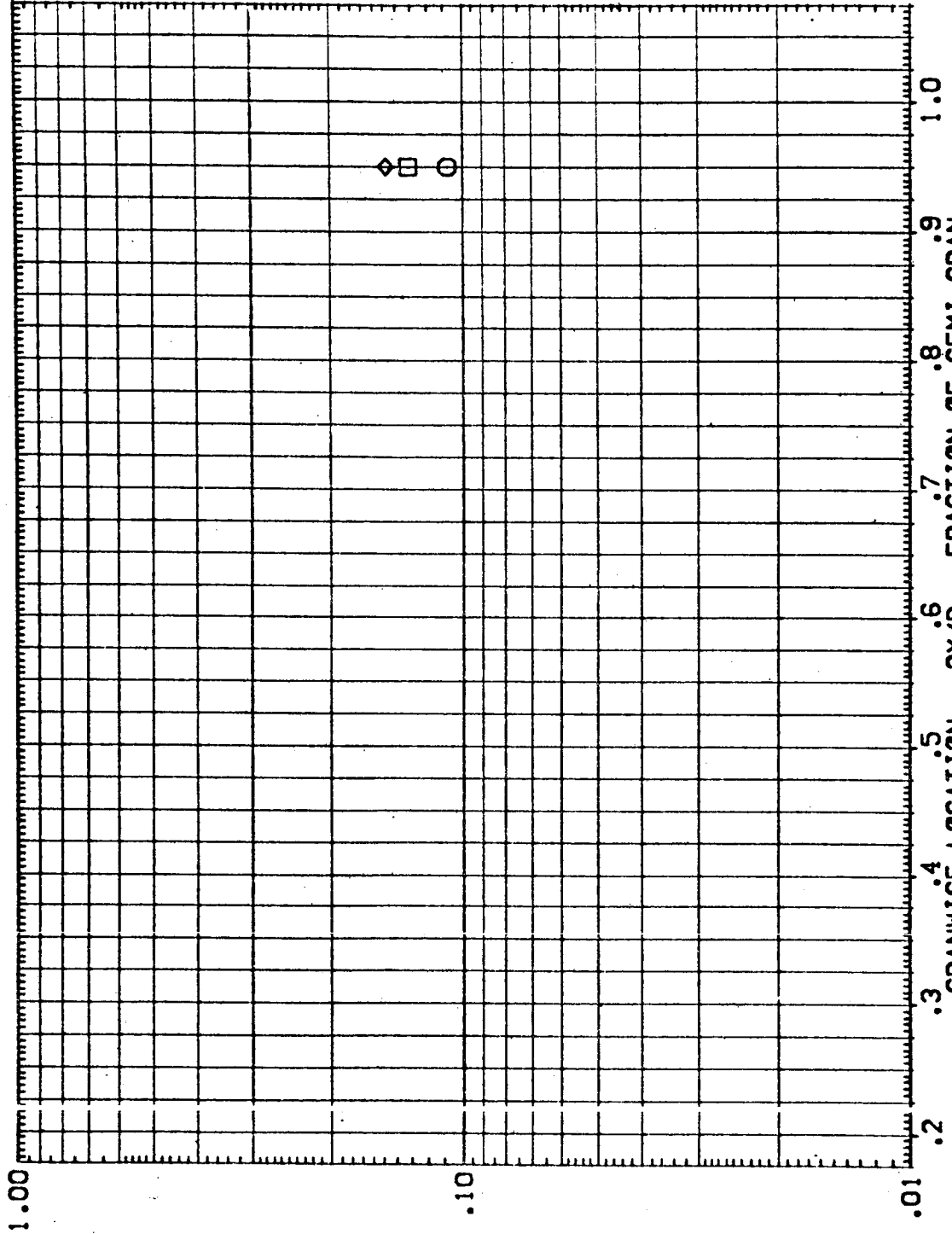


DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE] 002 [AE] 002 [BE] 002
 ARC 1.5-178 [H3] 0+1+S
 ARC 1.5-178 [H3] 0+1+S
 ARC 1.5-178 [H3] 0+1+S

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

VING BOTTOM
 VING BOTTOM
 VING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



SPANWISE LOCATION, 2Y/B • FRACTION OF SEMI-SPAN

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .050

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

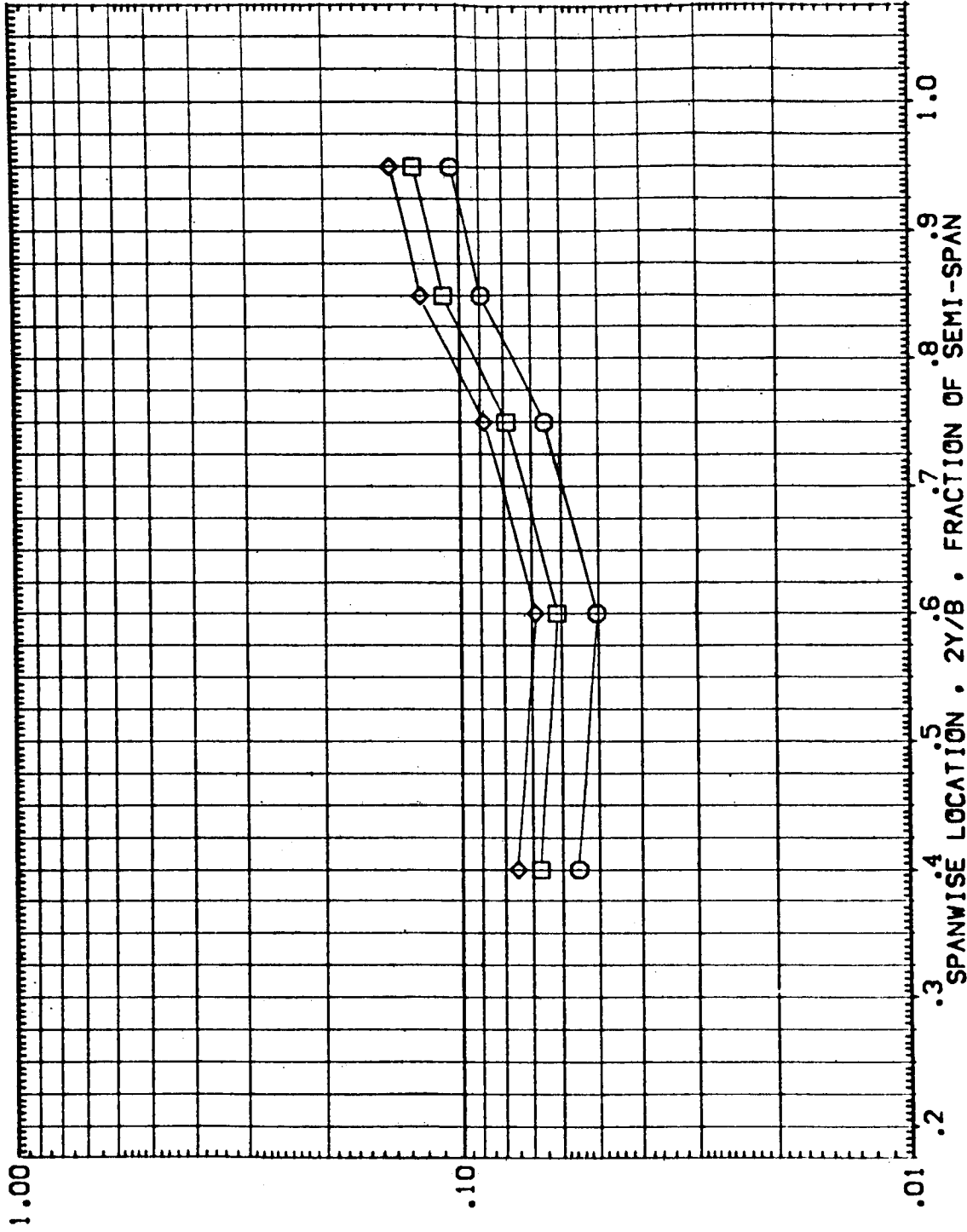


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 { RE | 002 } ARC 3.5-178 I-H3 0+1+S
 { AE | 002 } ARC 3.5-178 I-H3 0+1+S
 { BE | 002 } ARC 3.5-178 I-H3 0+1+S

WING BOTTOM WING BOTTOM WING BOTTOM
 ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 5.000 5.000 5.000
 MAV/MT 1.000 .900 .850



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {AE|002} ARC | 5-178 |HG 0-T+S
 {AE|002} ARC | 5-178 |HG 0-T+S
 {BE|002} ARC | 5-178 |HG 0-T+S

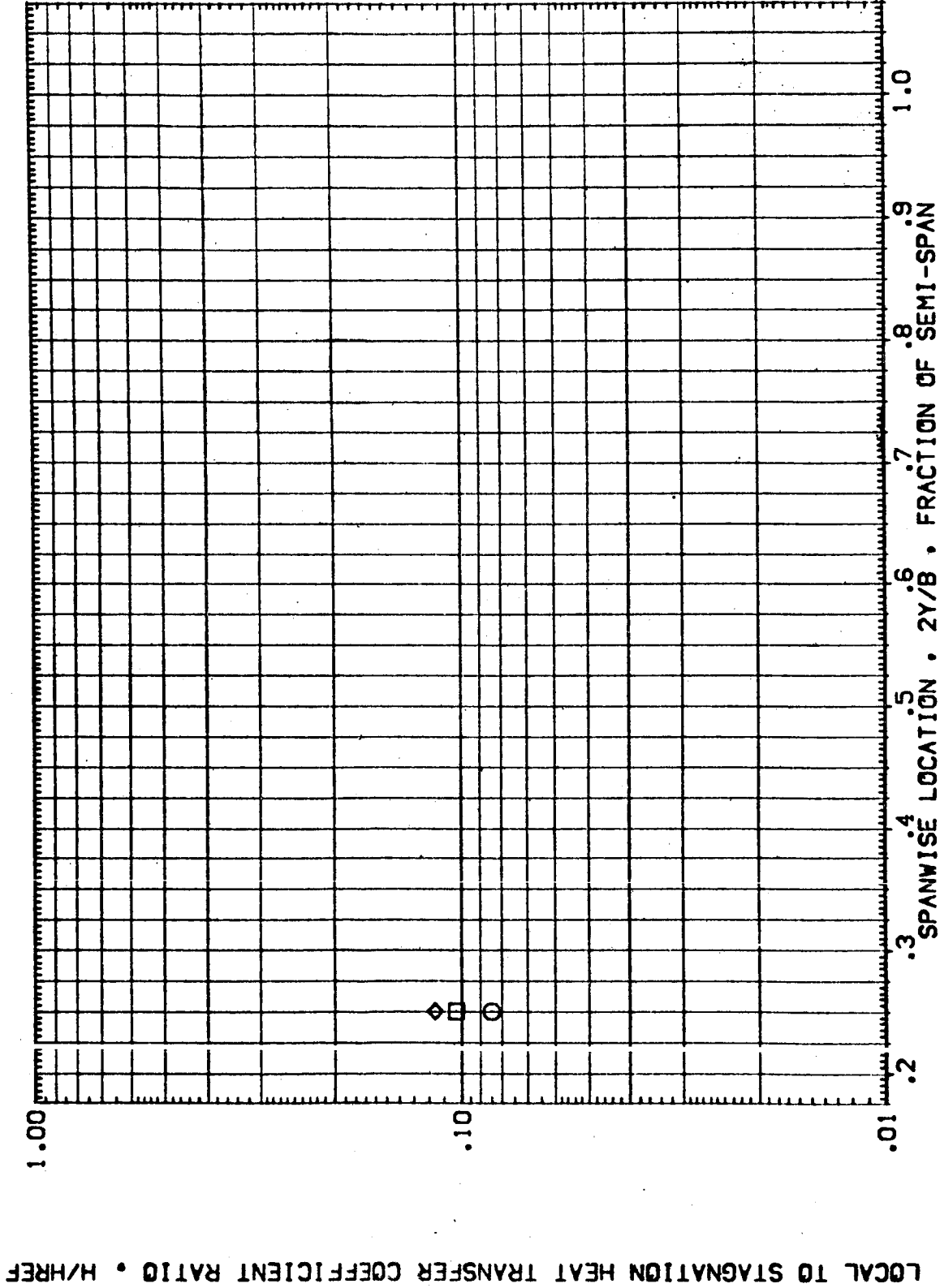
WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RM/VL 5.000
 5.000
 5.000

HAV/HT 1.000
 .900
 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

.3 SPANWISE LOCATION • 2Y/B • FRACTION OF SEMI-SPAN

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .153

DATA SET SYMBL. CONFIGURATION DESCRIPTION

SYMBOL	DESCRIPTION	WING BOTTOM	ALPHA	BETA	RV/L	HAV/HT
{RE G2}	ARC 3.5-178 H3 O+T+S	WING BOTTOM	.000	.000	5.000	1.000
{AE G2}	ARC 3.5-178 H3 O+T+S	WING BOTTOM	.000	.000	5.000	.900
{BE G2}	ARC 3.5-178 H3 O+T+S	WING BOTTOM	.000	.000	5.000	.850

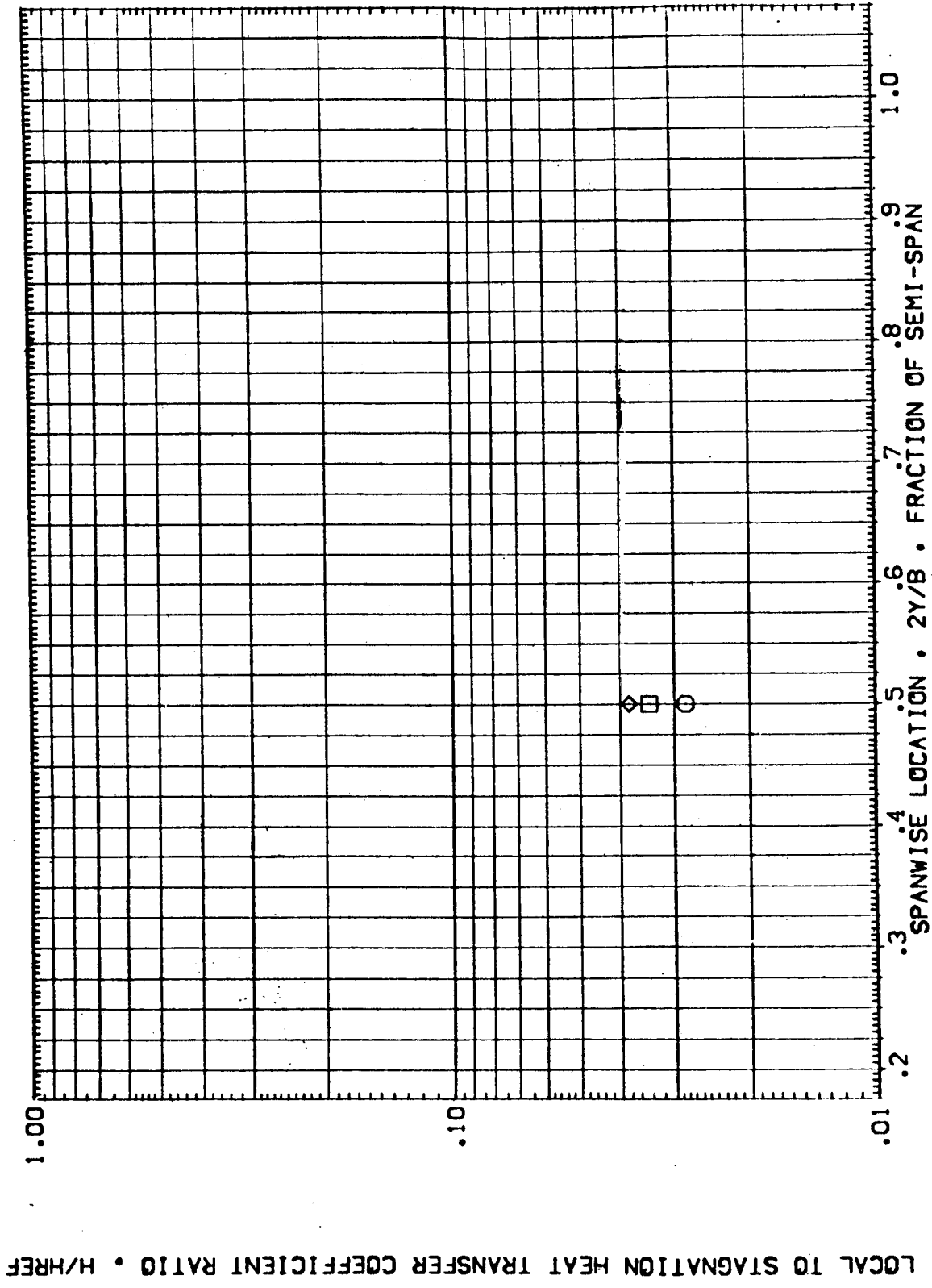


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .177



DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM WING BOTTOM ALPHA BETA RV/L HAV/HT

{RE1002} ARC 3 5-178 IH3 0+T+S WING BOTTOM WING BOTTOM .000 .000 5.000 1.000

{AE1002} ARC 3 3-178 IH3 0+T+S WING BOTTOM WING BOTTOM .000 .000 5.000 .900

{BE1002} ARC 3 5-178 IH3 0+T+S WING BOTTOM WING BOTTOM .000 .000 5.000 .850

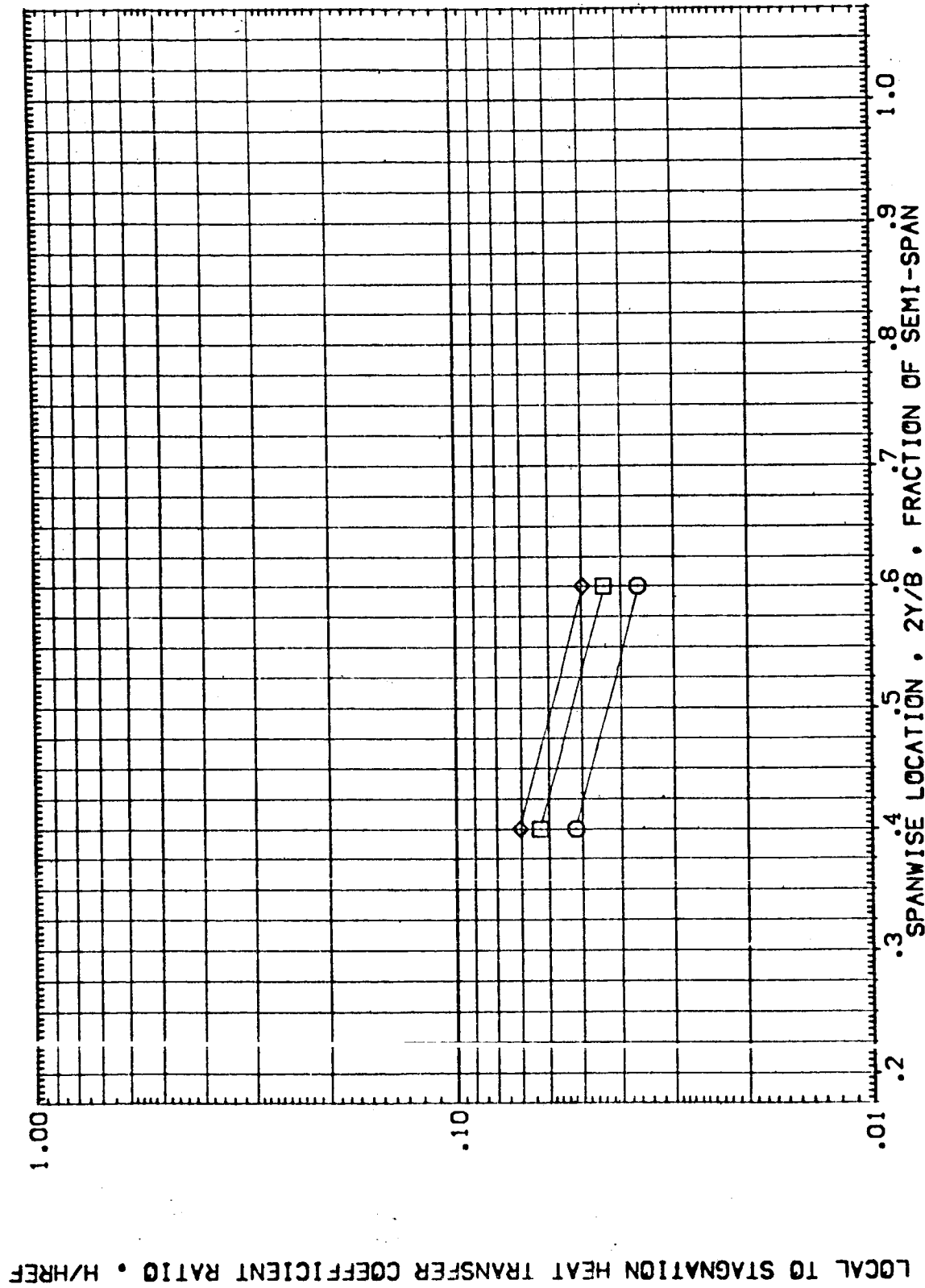


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 { RE {002} } ARC 3.5-178 IH3 0-T+S
 { AE {002} } ARC 3.5-178 IH3 0-T+S
 { BE {002} } ARC 3.5-178 IH3 0-T+S

ALPHA BETA RV/L MAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

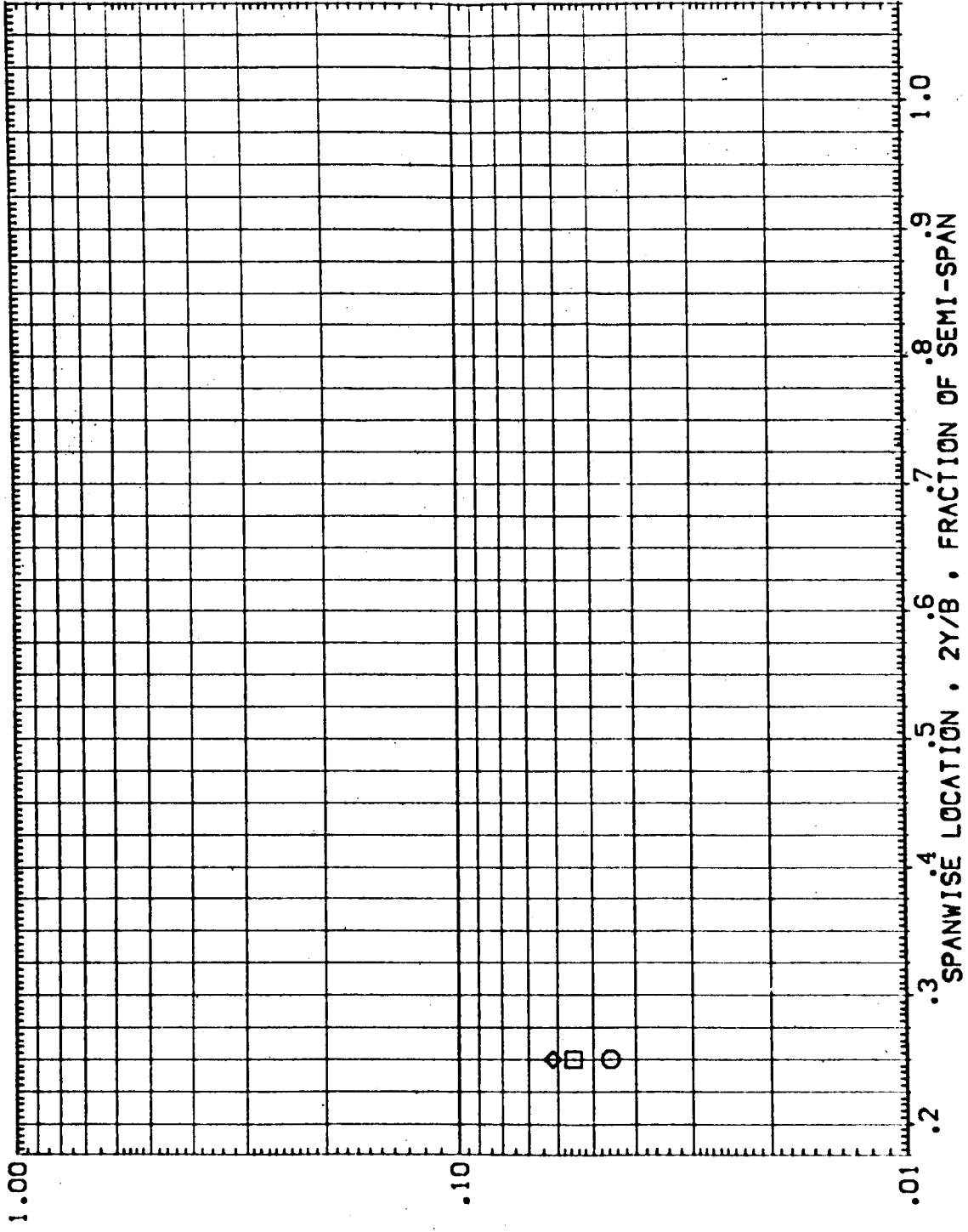


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .299



DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RNU/L MAV/HT

{RE|G02} ARC 1:5-178 I43 0-T+S WING BOTTOM .000 .000 5.000 1.000

{AE|G02} ARC 1:5-178 I43 0-T+S WING BOTTOM .000 .000 5.000 .900

{BE|G02} ARC 1:5-178 I43 0-T+S WING BOTTOM .000 .000 5.000 .850

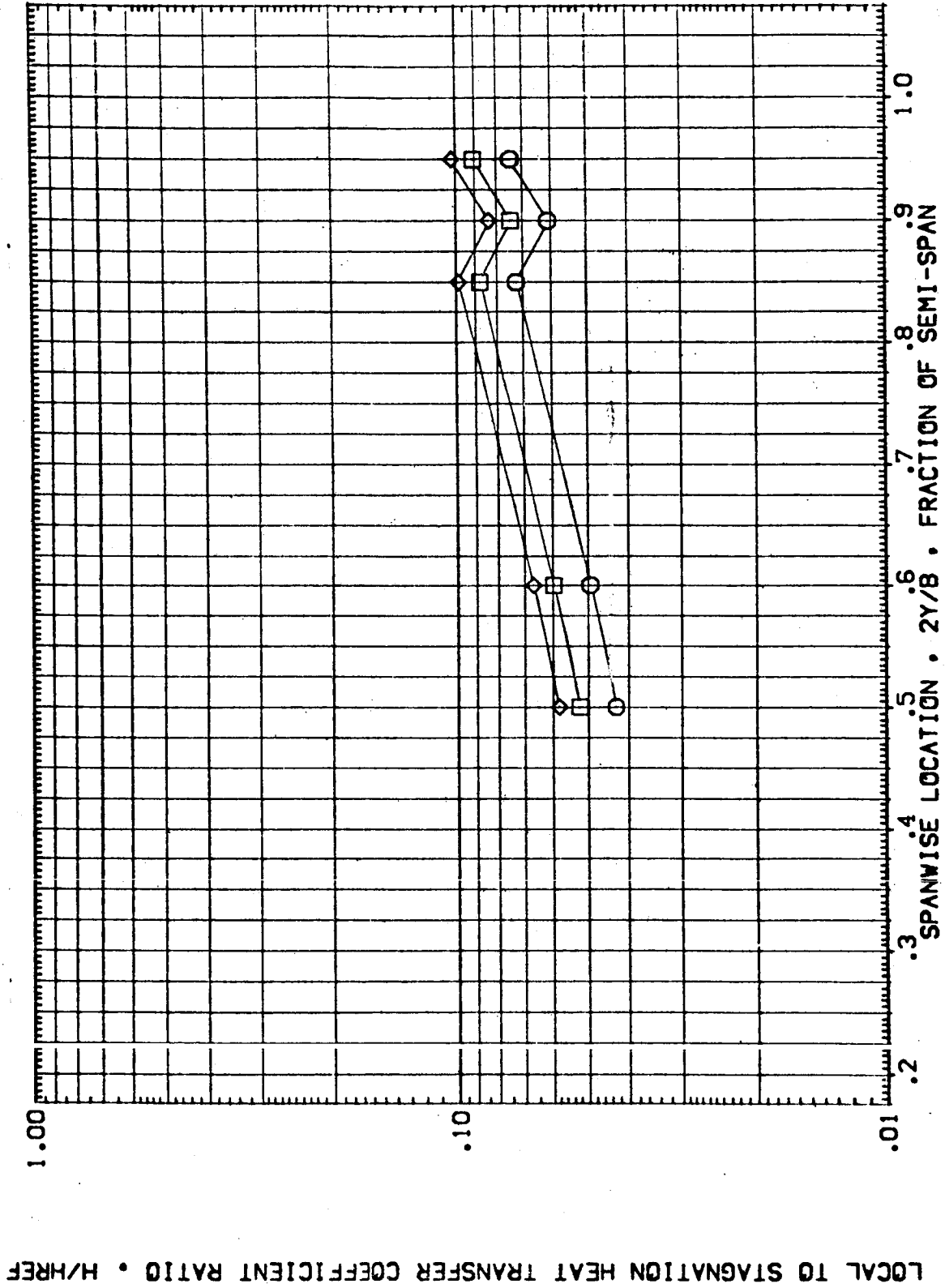


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 { RE {002} } ARC 3.5-178 I+G O+T+S
 { AE {002} } ARC 3.5-178 I+G O+T+S
 { BE {002} } ARC 3.5-178 I+G O+T+S

WING BOTTOM WING BOTTOM WING BOTTOM
 ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

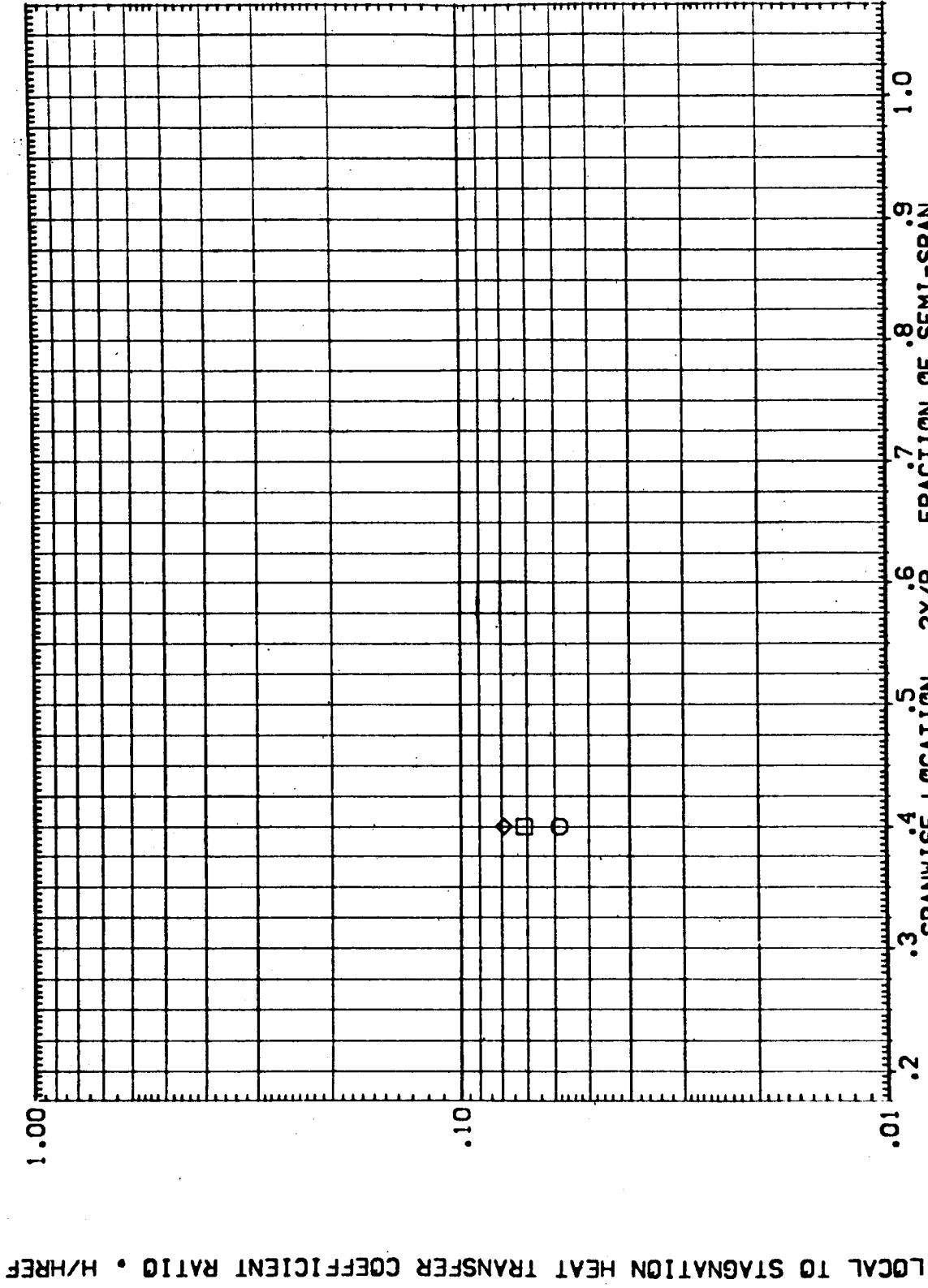


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .302

DATA SET SYMBOL. CONFIGURATION DESCRIPTION

Symbol	Configuration	Description
[RE G02]	ARC 3.5-178	143 0-T+S
[AE G02]	ARC 3.5-178	143 0-T+S
[BE G02]	ARC 3.5-178	143 0-T+S

WING BOTTOM WING BOTTOM WING BOTTOM

ALPHA BETA R/V/L HAV/HT

Alpha	Beta	R/V/L	HAV/HT
.000	.000	5.000	1.000
.000	.000	5.000	.900
.000	.000	5.000	.850

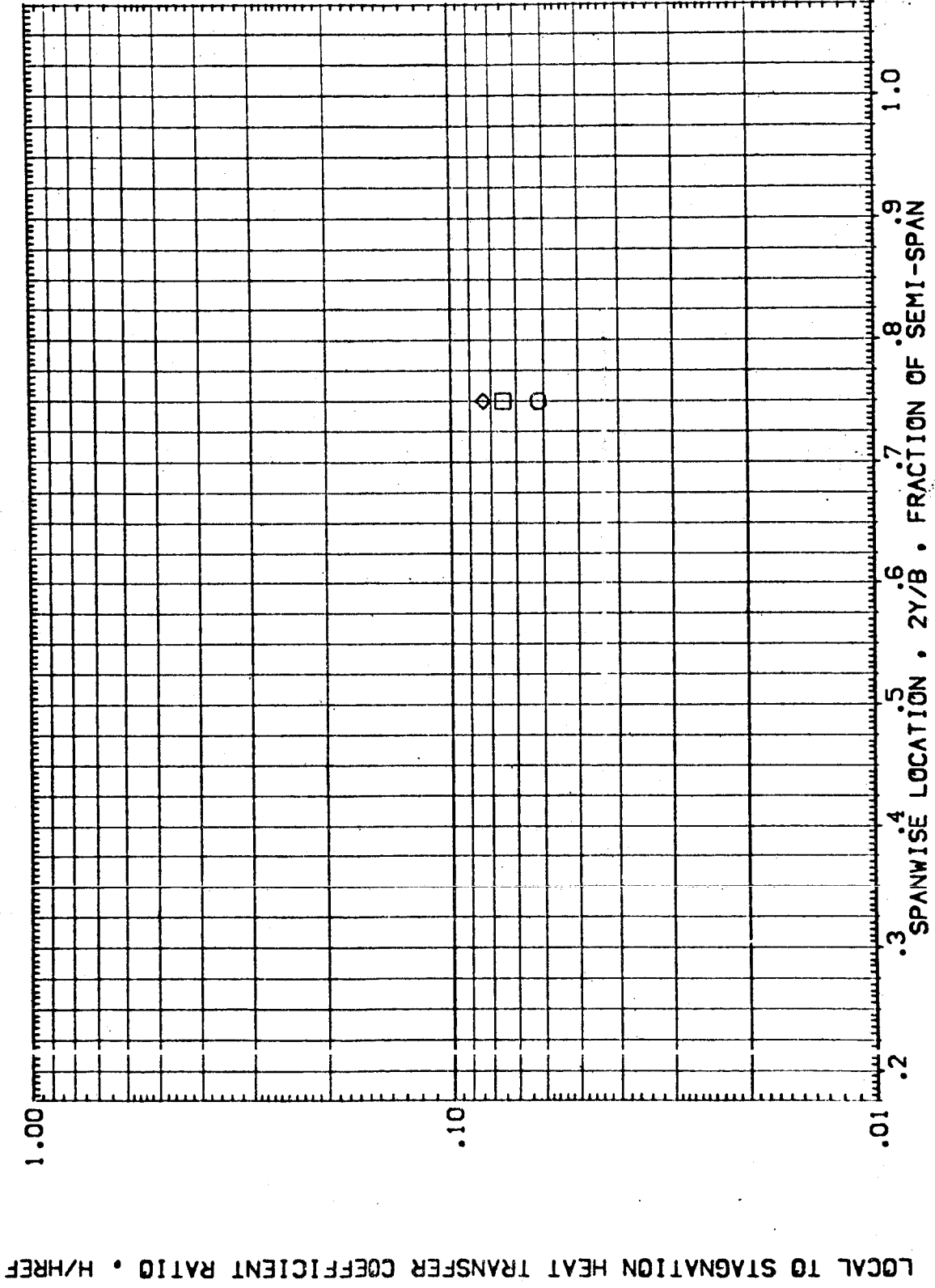


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.310 X/C = .303

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 {RE1002} ARC 3.5-178 IH3 0+T+S
 {AE1002} ARC 3.5-178 IH3 0+T+S
 {BE1002} ARC 3.5-178 IH3 0+T+S

ALPHA BETA R/V/L MAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

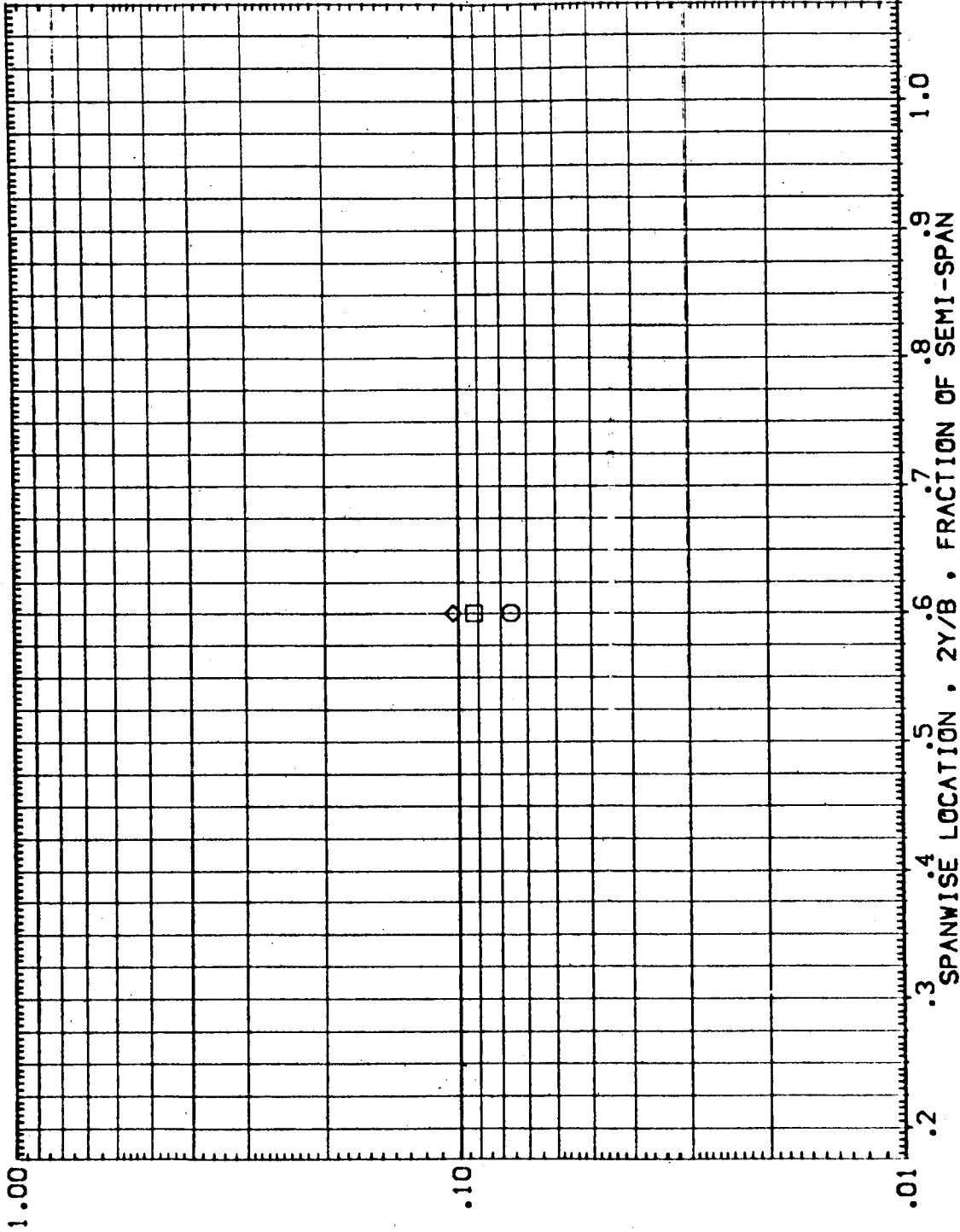


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .428



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

{ RE1602 } ARC 1.5-178 I43 O+T+S .000 .000 5.000 1.000

{ AE1602 } ARC 1.5-178 I43 O+T+S .000 .000 5.000 .900

{ BE1602 } ARC 1.5-178 I43 O+T+S .000 .000 5.000 .850

WING BOTTOM
WING BOTTOM
WING BOTTOM

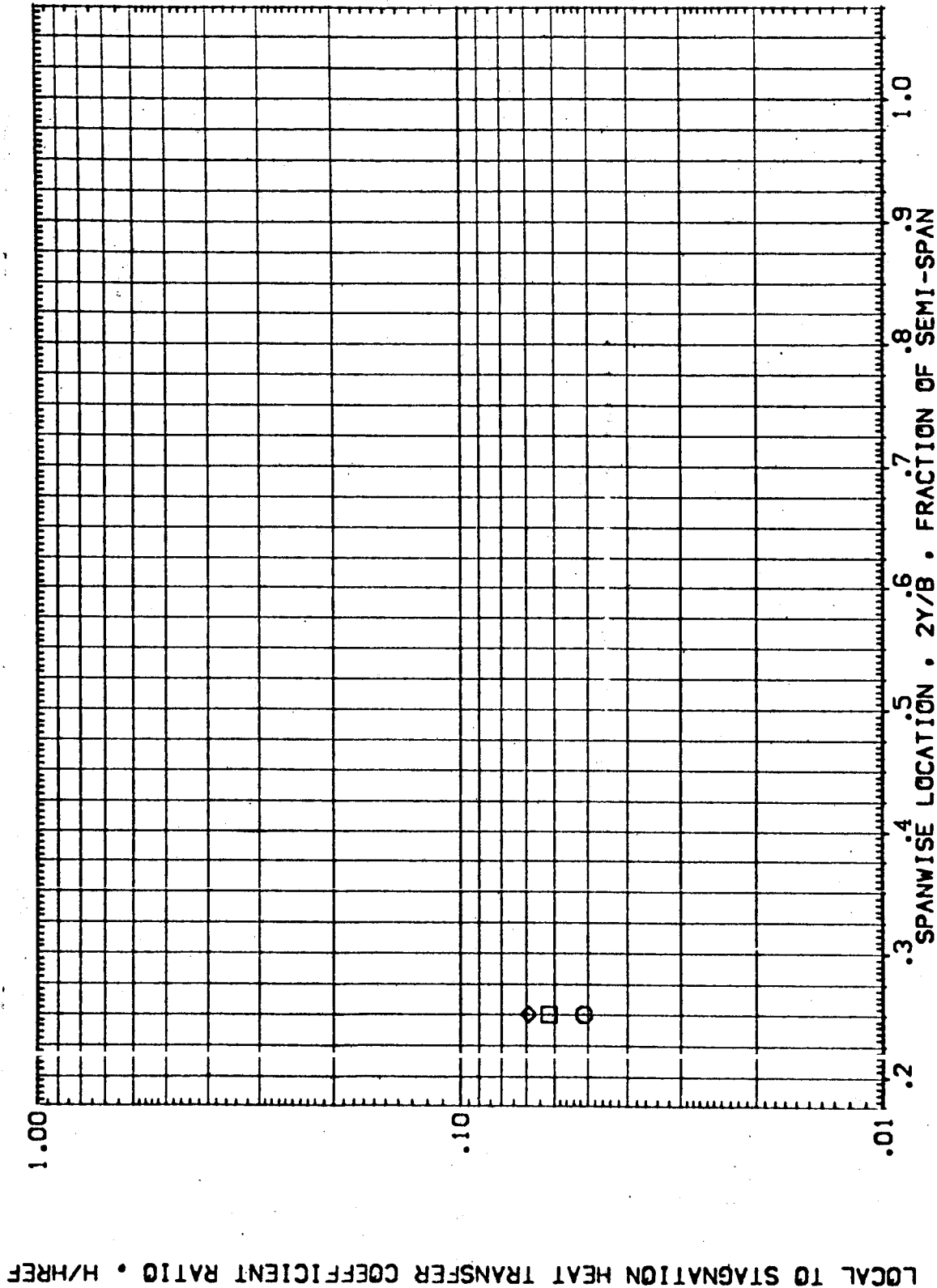


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .444

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 { RE | 002 } ARC 3.5-178 I+3 O+T+S
 { AE | 002 } ARC 3.5-178 I+3 O+T+S
 { BE | 002 } ARC 3.5-178 I+3 O+T+S

WING BOTTOM WING BOTTOM WING BOTTOM
 ALPHA BETA RV/L HAV/HT
 .000 .000 .000 1.000
 .000 .000 .000 .900
 .000 .000 .000 .850

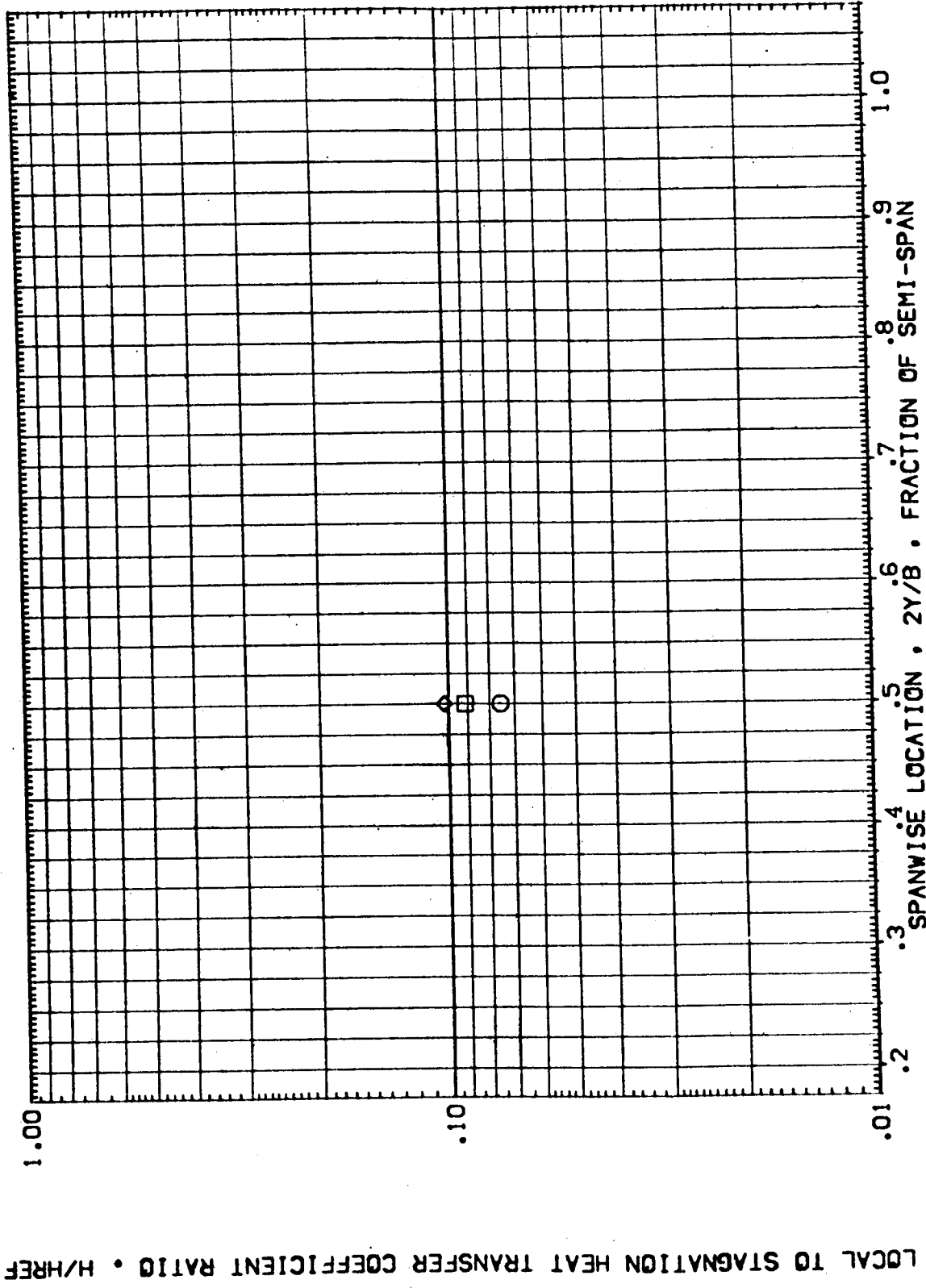


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .487

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RN/L HAV/HT
 {RE|002} ARC |1.5-|78 |H3 O-T+S WING BOTTOM .000 .000 5.000 1.000
 {AE|002} ARC |1.5-|78 |H3 O-T+S WING BOTTOM .000 .000 5.000 .900
 {BE|002} ARC |1.5-|78 |H3 O-T+S WING BOTTOM .000 .000 5.000 .850

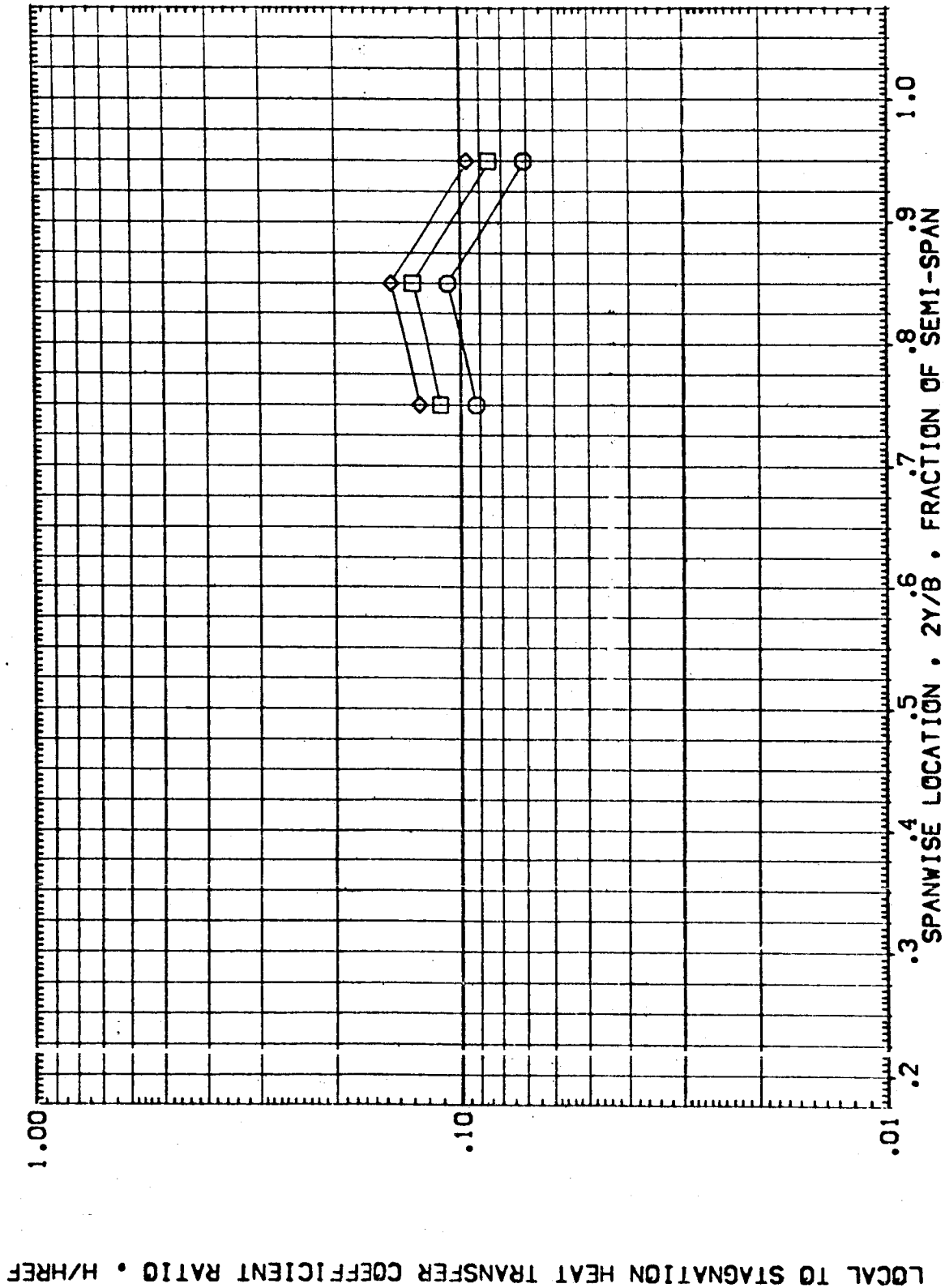


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RM/L MAV/MT

{ REIG02 } ARC 3.5-178 IHG O-T+S WING BOTTOM .000 .000 5.000 1.000

{ AEIG02 } ARC 3.5-178 IHG O-T+S WING BOTTOM .000 .000 5.000 .900

{ BEIG02 } ARC 3.5-178 IHG O-T+S WING BOTTOM .000 .000 5.000 .850

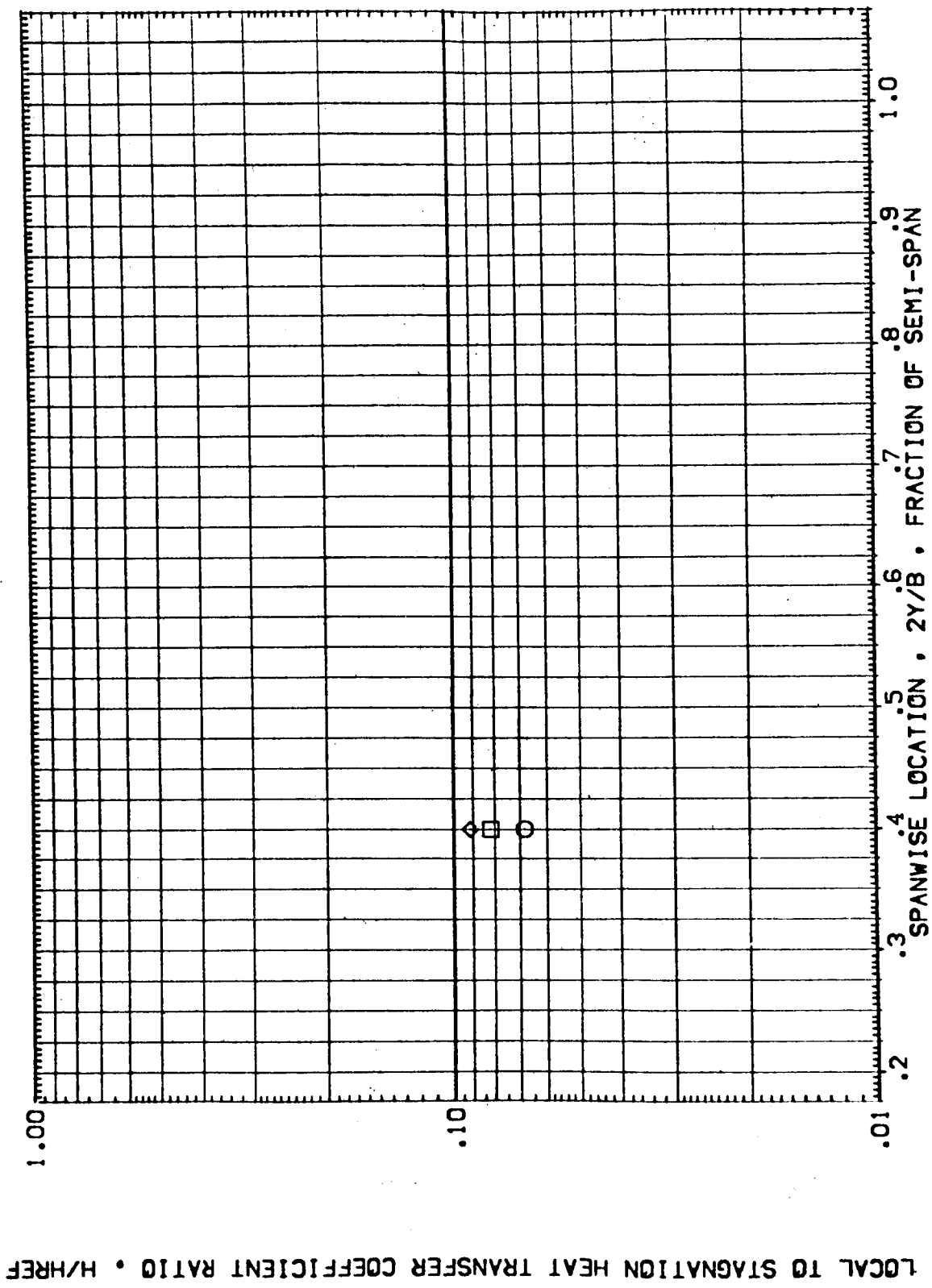


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .559

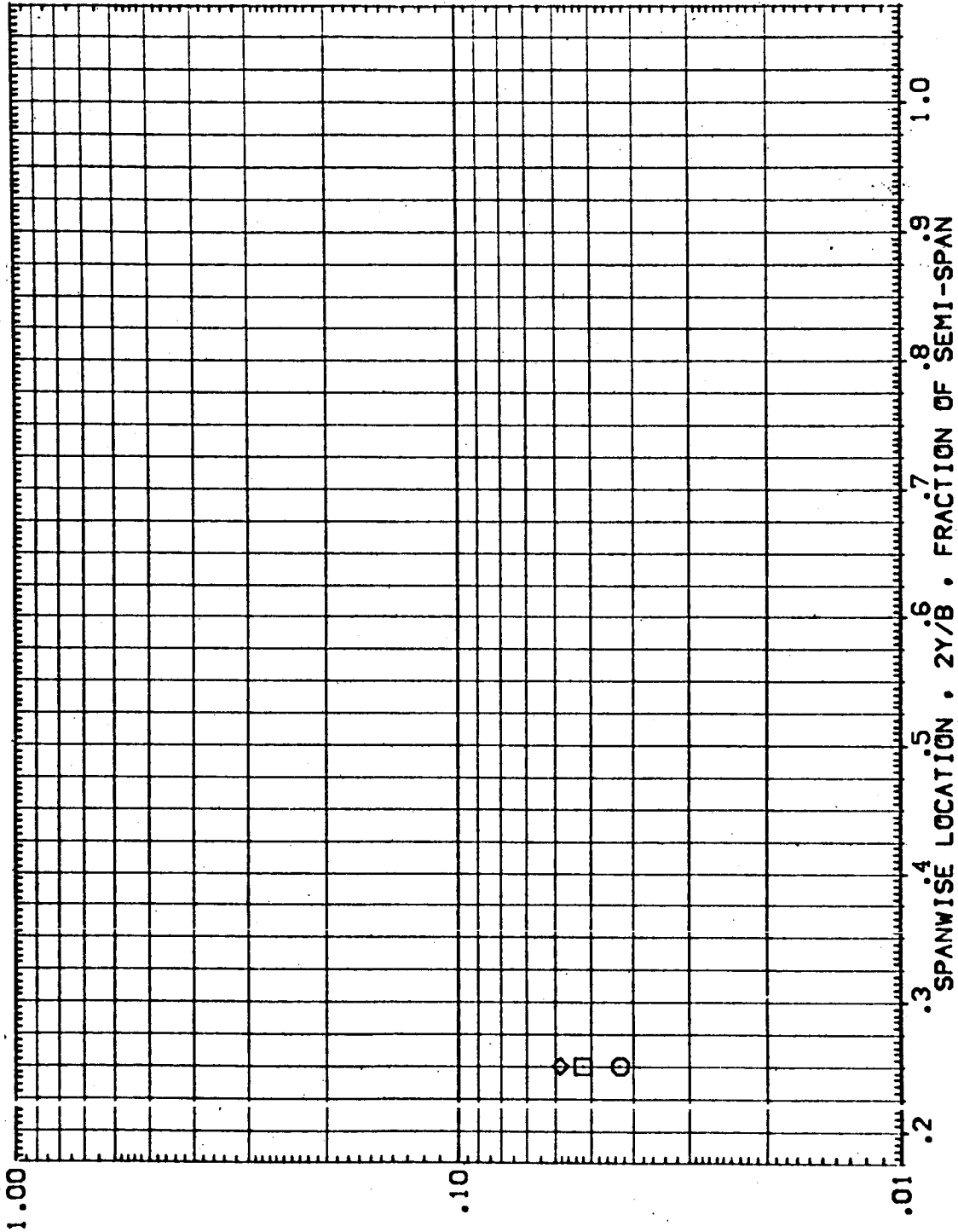


DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE1002} □ ARC 1.5-178 I-H3 O-T+S
 {AE1002} □ ARC 1.5-178 I-H3 O-T+S
 {BE1002} ◇ ARC 1.5-178 I-H3 O-T+S

ALPHA BETA RNV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .500
 .000 .000 5.000 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



SPANWISE LOCATION • 2Y/B • FRACTION OF SEMI-SPAN

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .590

DATA SET SYMBOL: [RE|002] [AE|002] [BE|002] CONFIGURATION DESCRIPTION: ARC 3.5-178 IH3 O-T+S VING BOTTOM: VING BOTTOM VING BOTTOM
 ALPHA: .000 BETA: .000 RV/L: 5.000 HAV/AT: 1.000
 .000 .000 5.000 .500
 .000 .000 5.000 .650

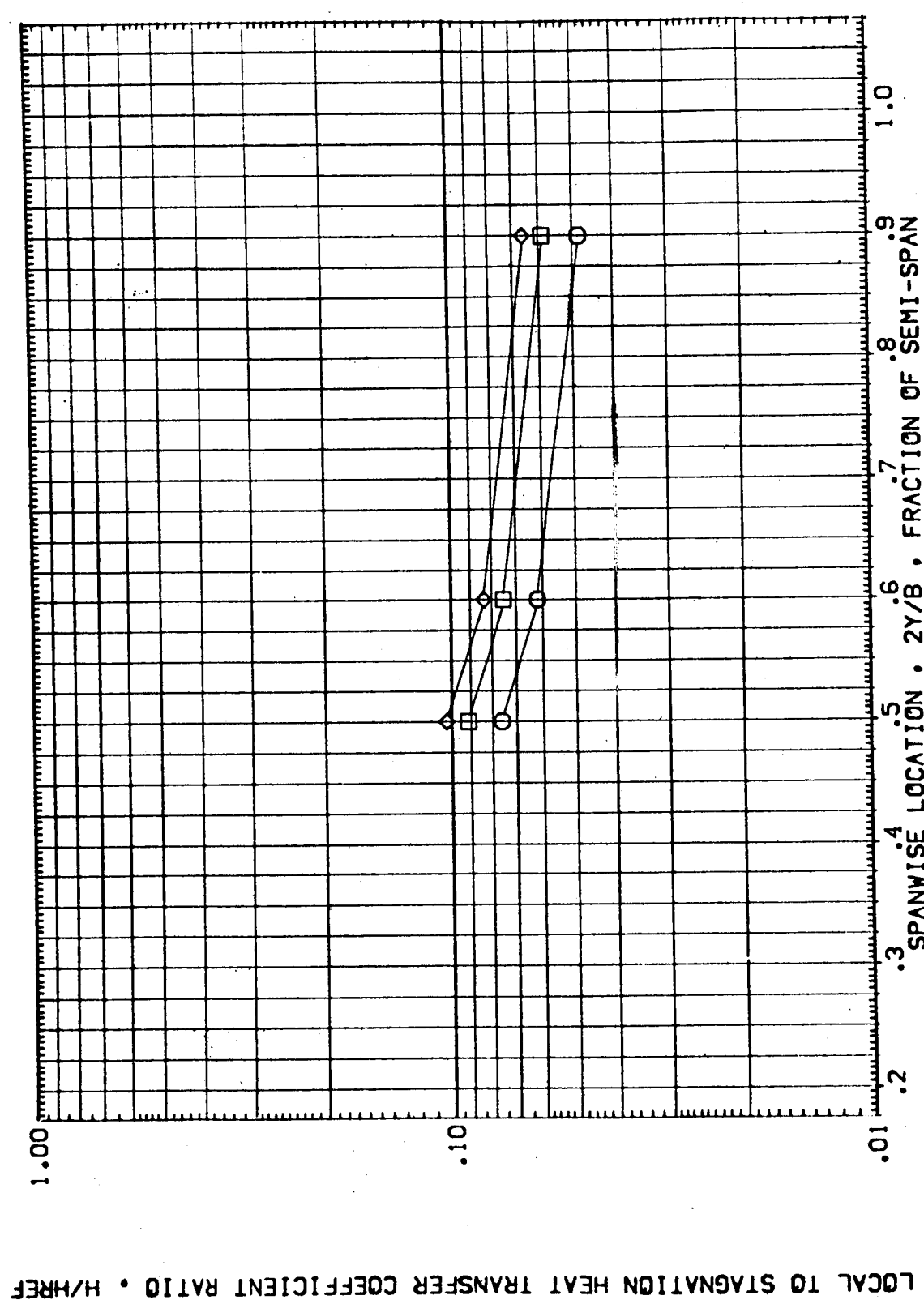


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .600



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE]G02] ARC 3.5-178 IH3 0+1+S
 [AE]G02] ARC 3.5-178 IH3 0+1+S
 [BE]G02] ARC 3.5-178 IH3 0+1+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

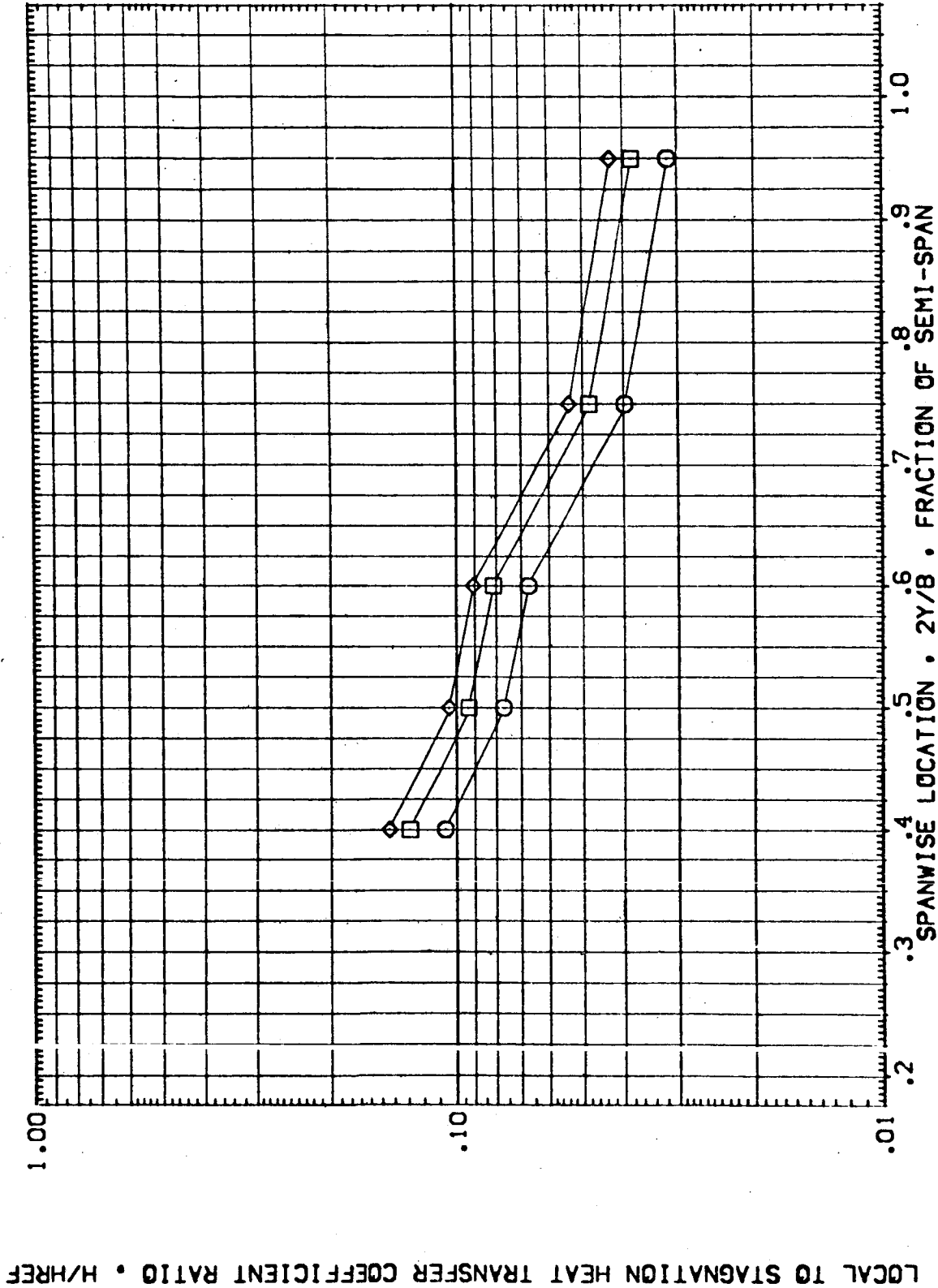


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.303 X/C = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L HAV/HT
 {RE|G02} ARC 3.5-178 IH3 O+T+S WING BOTTOM .000 .000 5.000 1.000
 {AE|G02} ARC 3.5-178 IH3 O+T+S WING BOTTOM .000 .000 5.000 .900
 {BE|G02} ARC 3.5-178 IH3 O+T+S WING BOTTOM .000 .000 5.000 .850

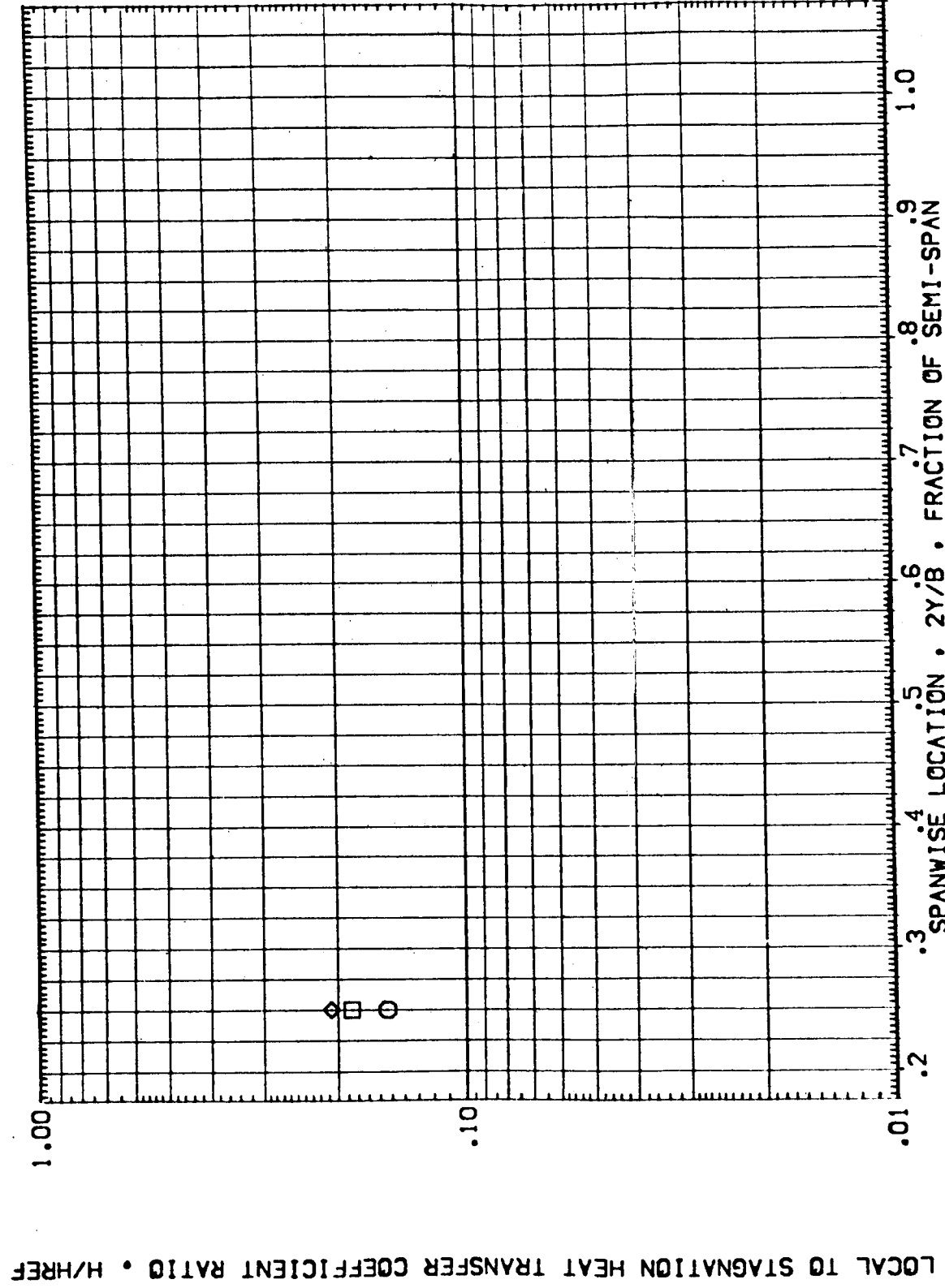


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .736



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1002) ARC 1:5-178 143 O-T-S
 (AE1002) ARC 1:5-178 143 O-T-S
 (BE1002) ARC 1:5-178 143 O-T-S

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .500
 .000 .000 5.000 .650

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

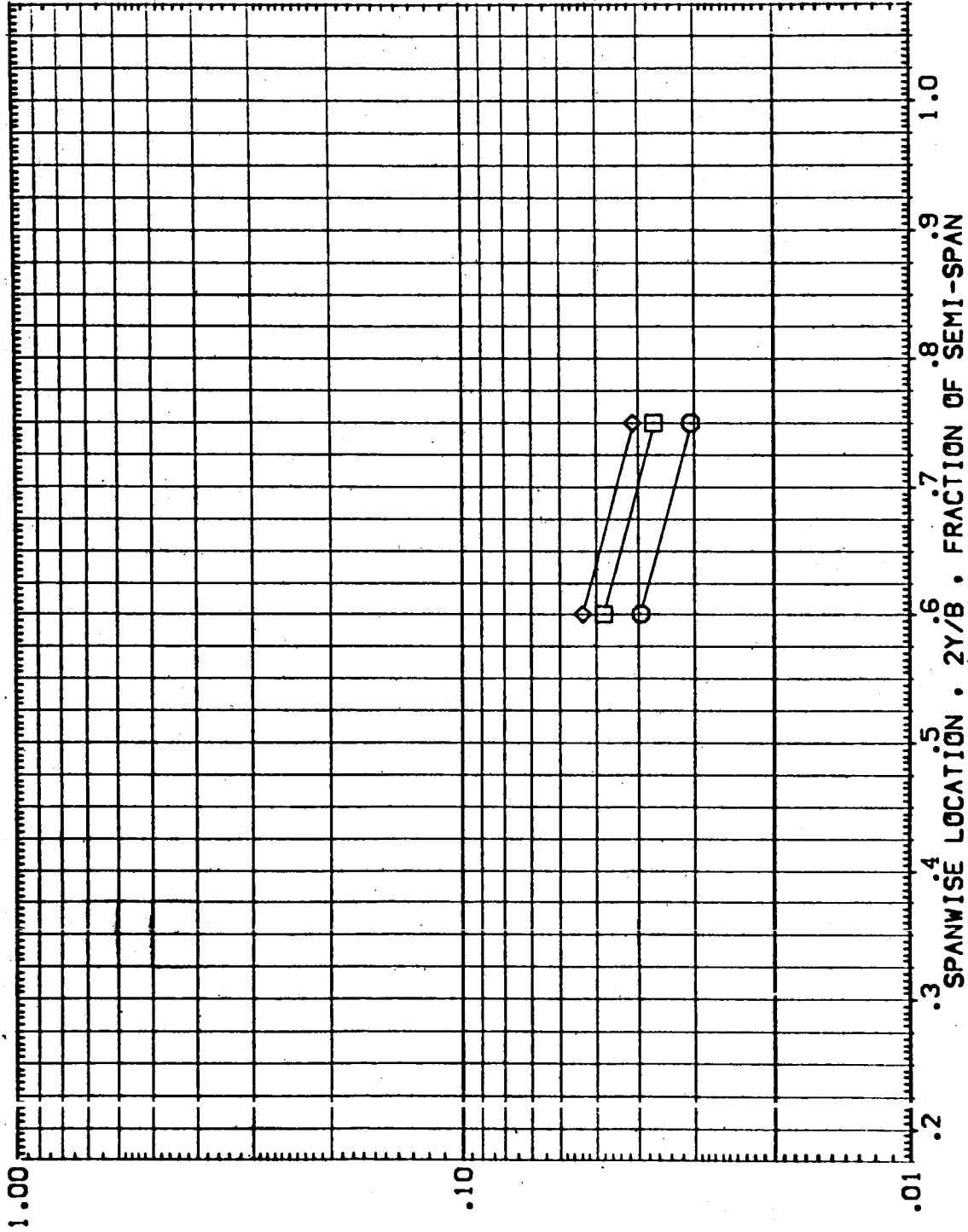


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.303 X/C = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE|G02} [AE|G02] [BE|G02] [H3 O-T+S]
 [H3 O-T+S]
 [H3 O-T+S]

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA BETA RV/L
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000

HAV/NT
 1.000
 .500
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

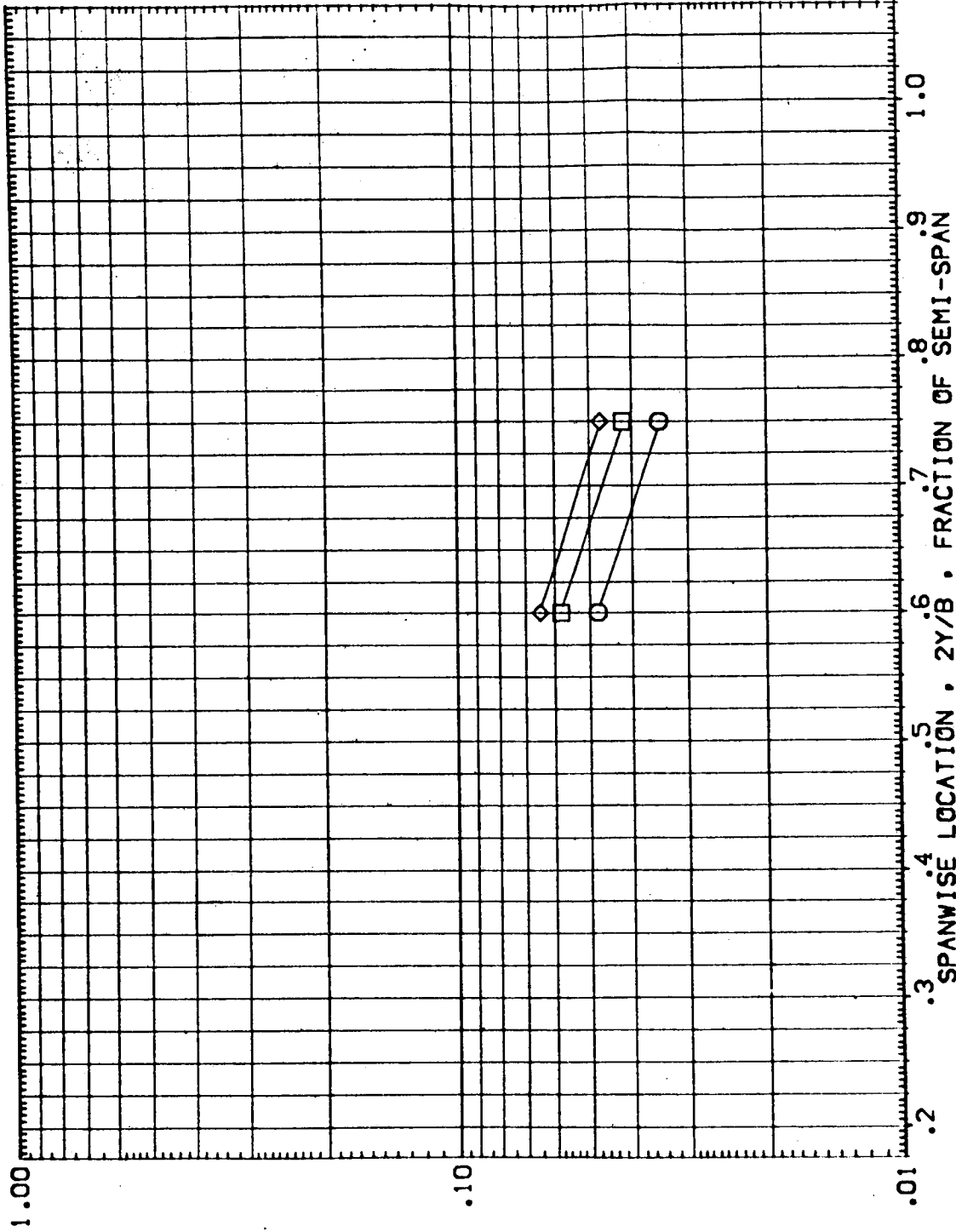


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .850



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1002) ARC 3 5-178 I43 O+T+S
 (AE1002) ARC 3 5-178 I43 O+T+S
 (BE1002) ARC 3 5-178 I43 O+T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RM/L 5.000
 5.000
 5.000

HAW/HT 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

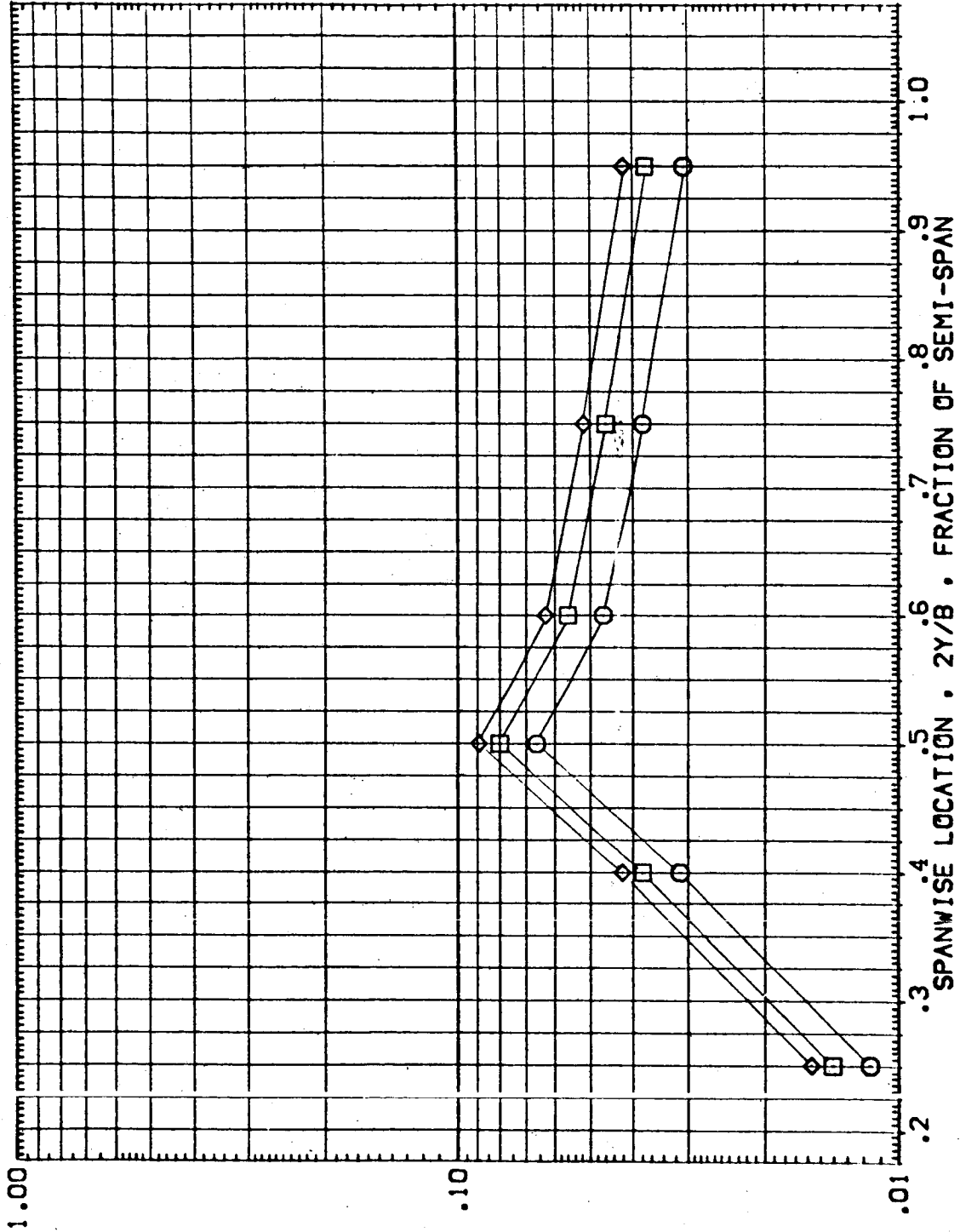


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL

ALPHA BETA RV/L MAV/HT

WING BOTTOM

CONFIGURATION DESCRIPTION

ARC 3.5-178 IH3 O-T+S (TRIPS)

ARC 3.5-178 IH3 O-T+S (TRIPS)

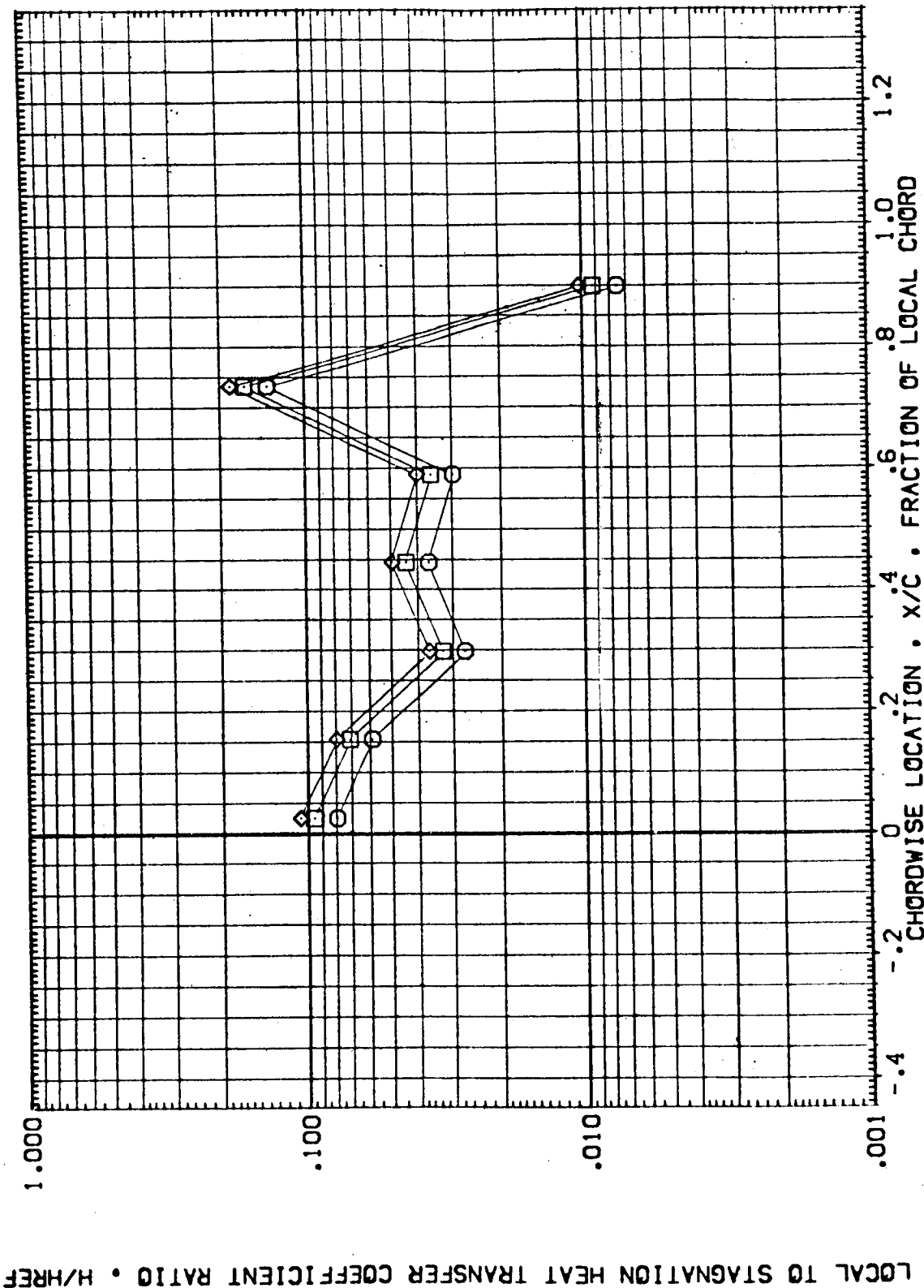


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .250



DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (REIG03) ARC 1:5-178 IH3 0+T+S (TRIPS) WING BOTTOM
 (AEIG03) ARC 1:5-178 IH3 0+T+S (TRIPS) WING BOTTOM
 (BEIG03) ARC 1:5-178 IH3 0+T+S (TRIPS) WING BOTTOM
 ALPHA BETA RV/L HAV/HT
 .000 .000 .500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

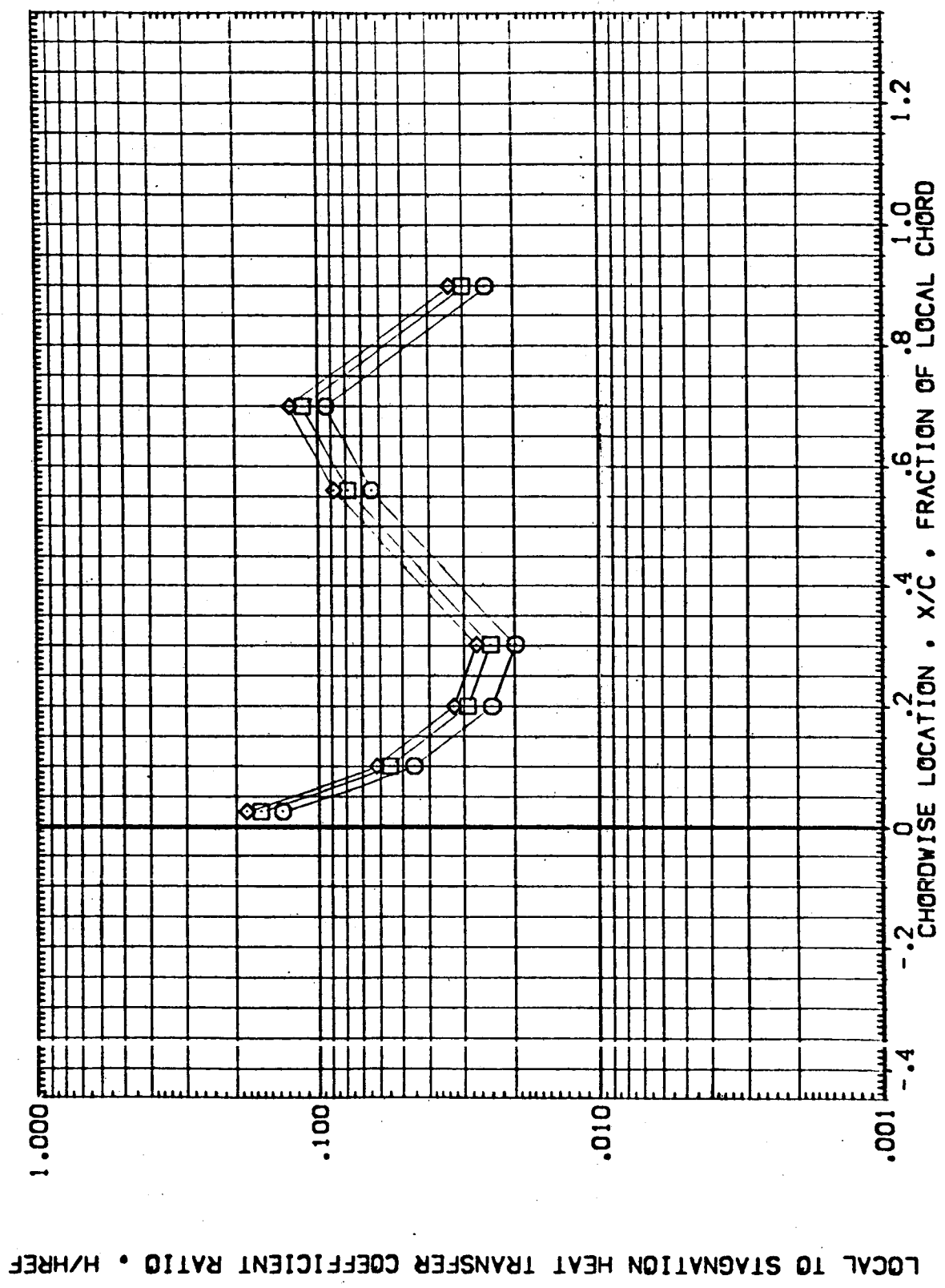


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.30 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT
 {RE1003} ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 1.500 1.000
 {AE1003} ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 1.500 .900
 {BE1003} ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 1.500 .850

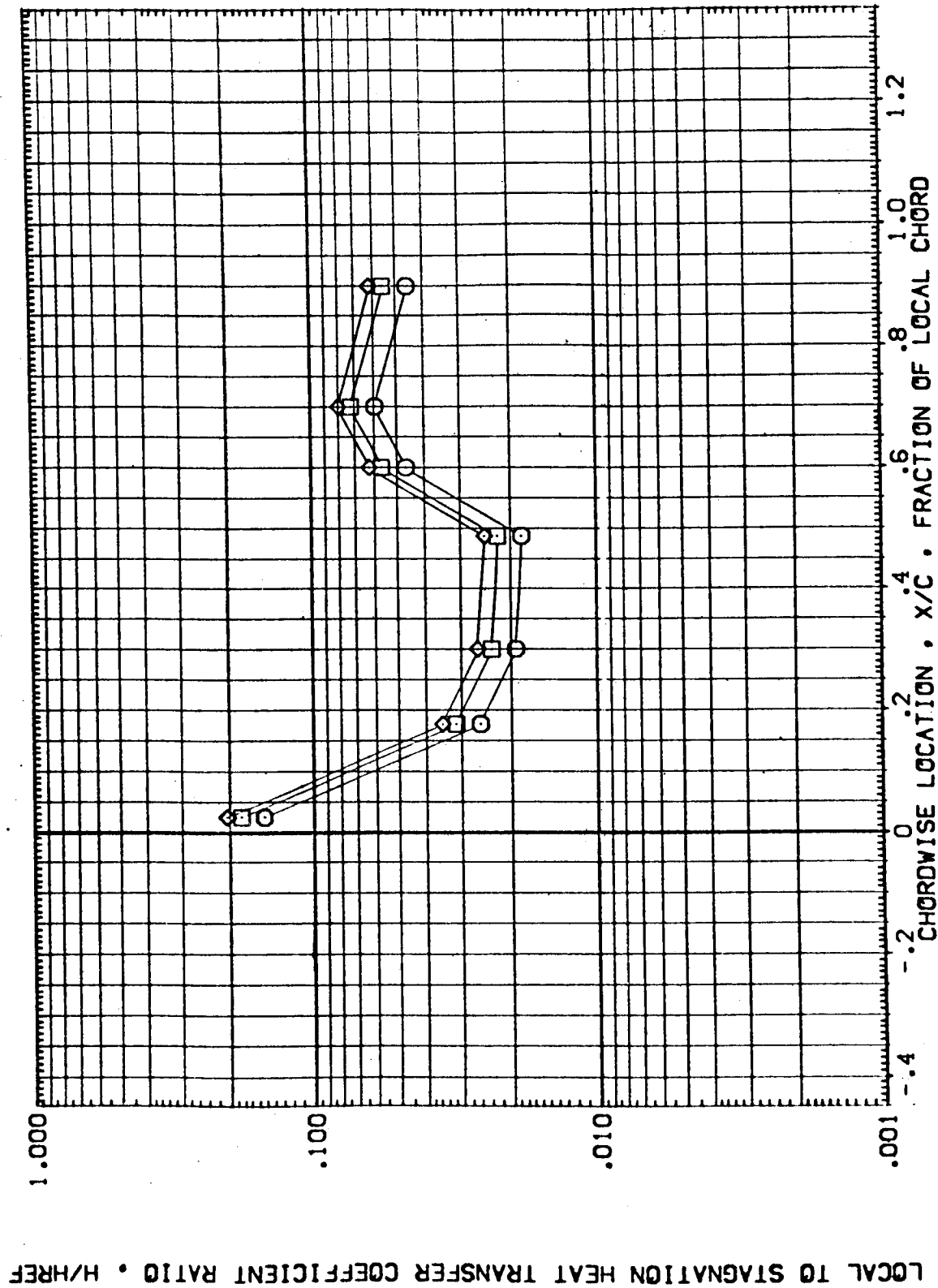


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .500

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
[RE] [003]	ARC 3.5-178 I+3 O+1+S (TR/PS)	.000	.000	1.500	1.000
[AE] [003]	ARC 3.5-178 I+3 O+1+S (TR/PS)	.000	.000	1.500	.900
[BE] [003]	ARC 3.5-178 I+3 O+1+S (TR/PS)	.000	.000	1.500	.850

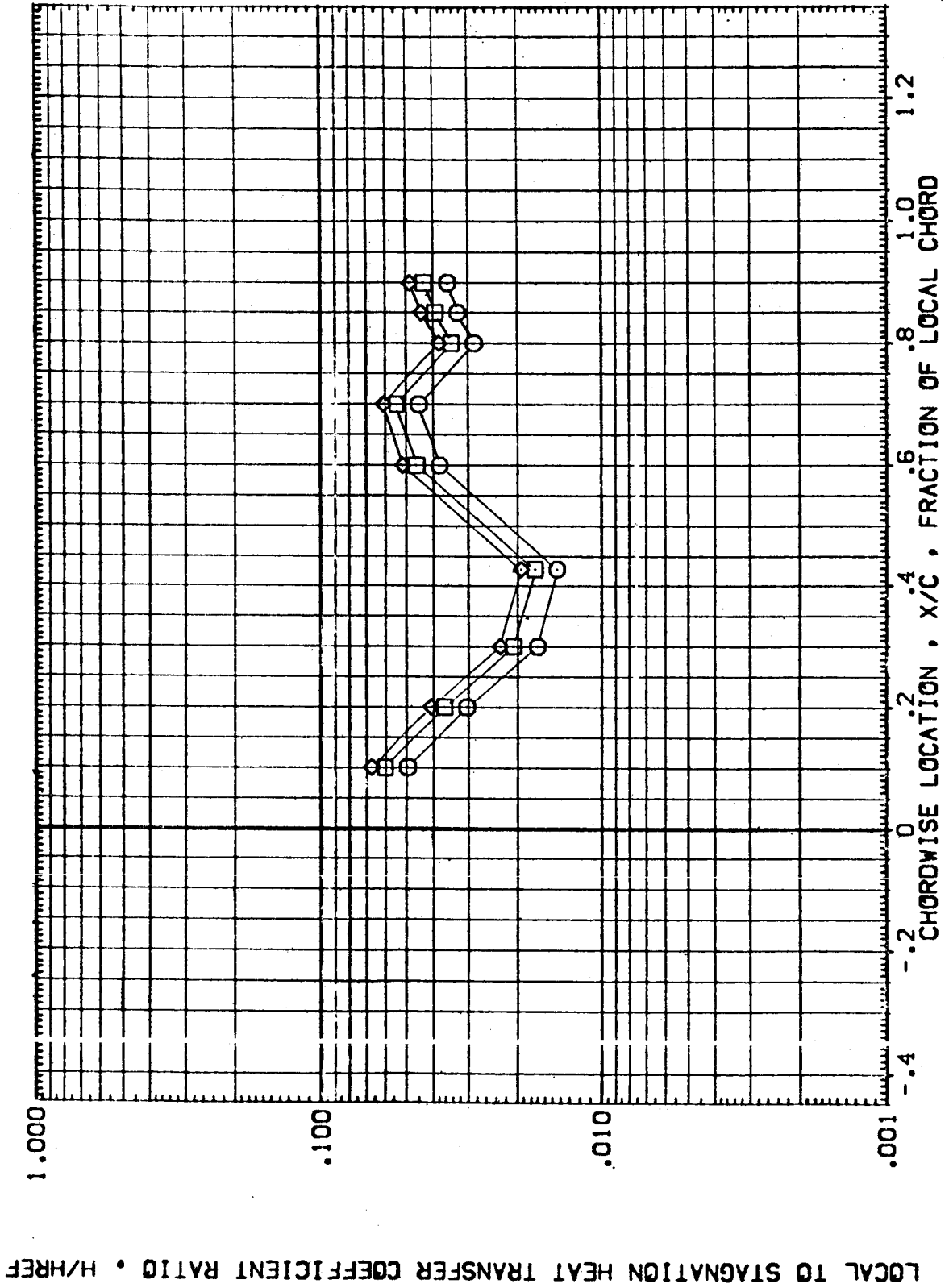


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.30(1) 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 {BE|003} ARC 3.5-178 143 O-T+S (TRIPS) .000 .000 1.500 1.000
 {AL|003} ARC 3.5-178 143 O-T+S (TRIPS) .000 .000 1.500 .900
 {BE|003} ARC 3.5-178 143 O-T+S (TRIPS) .000 .000 1.500 .850

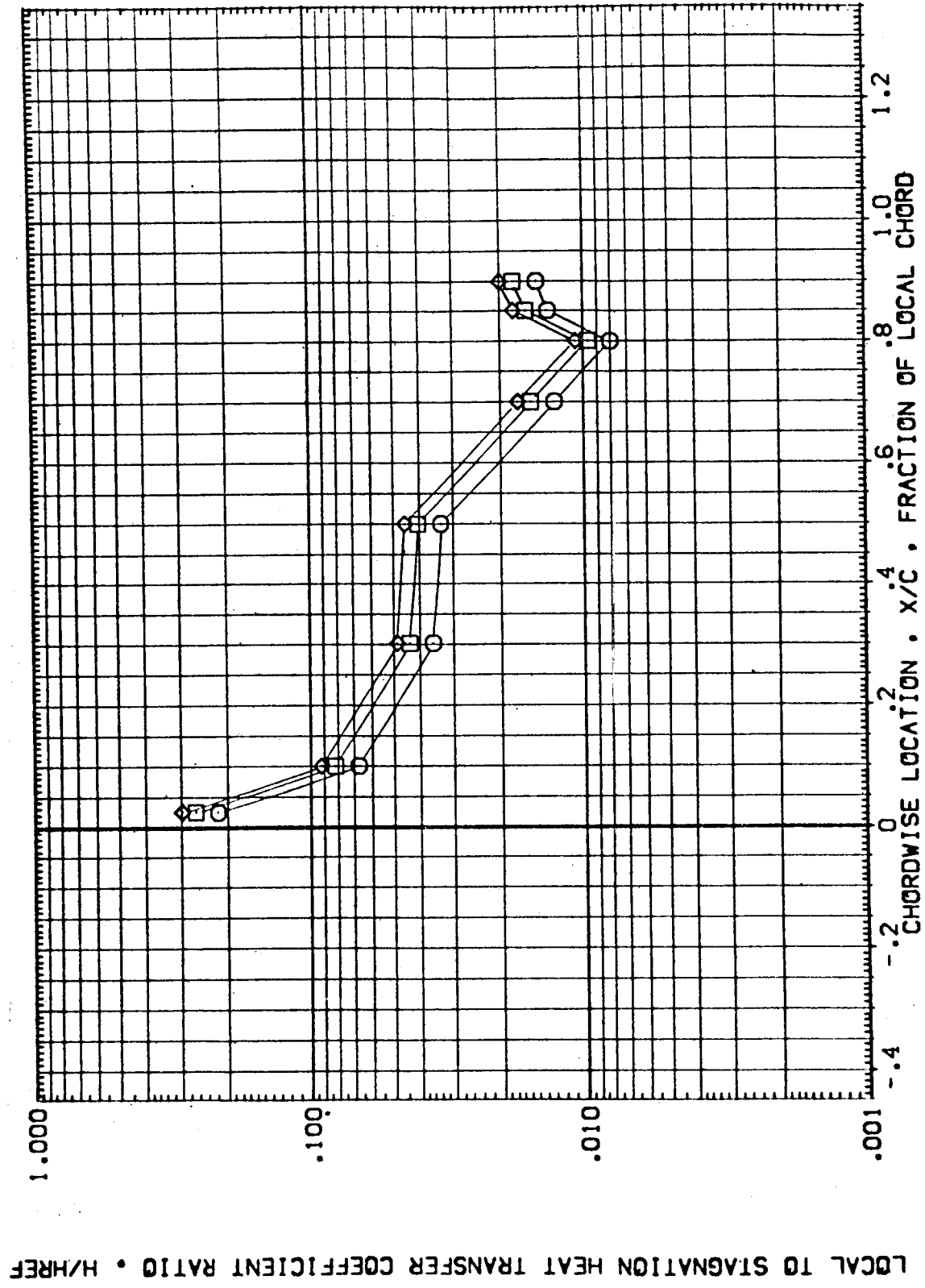


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .750



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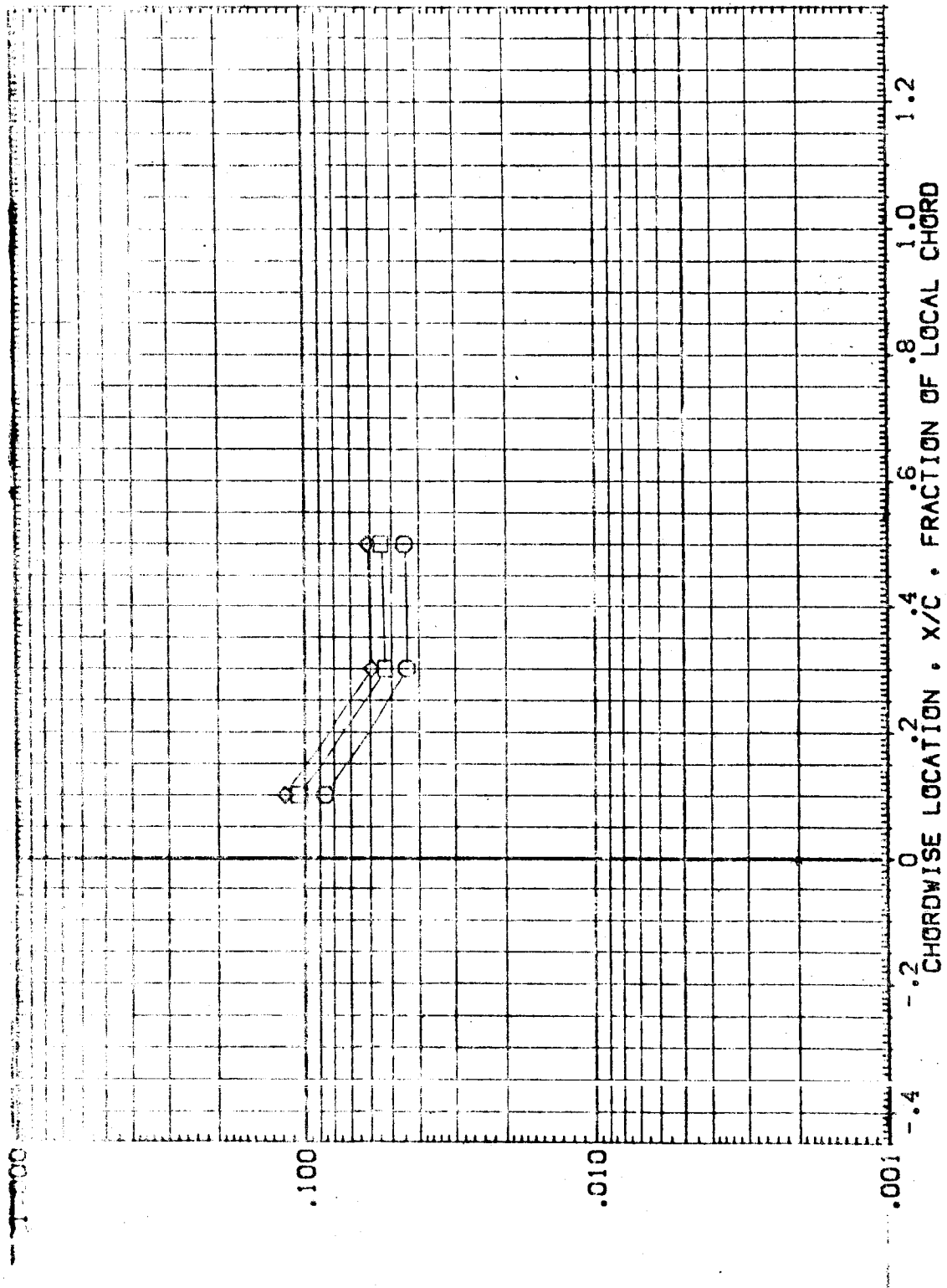


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.30 2Y/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 { RE | 603 } ARC 3.5-178 I43 O-T+S (TRIPS) .000 .000 1.500 1.000
 { AE | 603 } ARC 3.5-178 I43 O-T+S (TRIPS) .000 .000 1.500 .900
 { BE | 603 } ARC 3.5-178 I43 O-T+S (TRIPS) .000 .000 1.500 .650

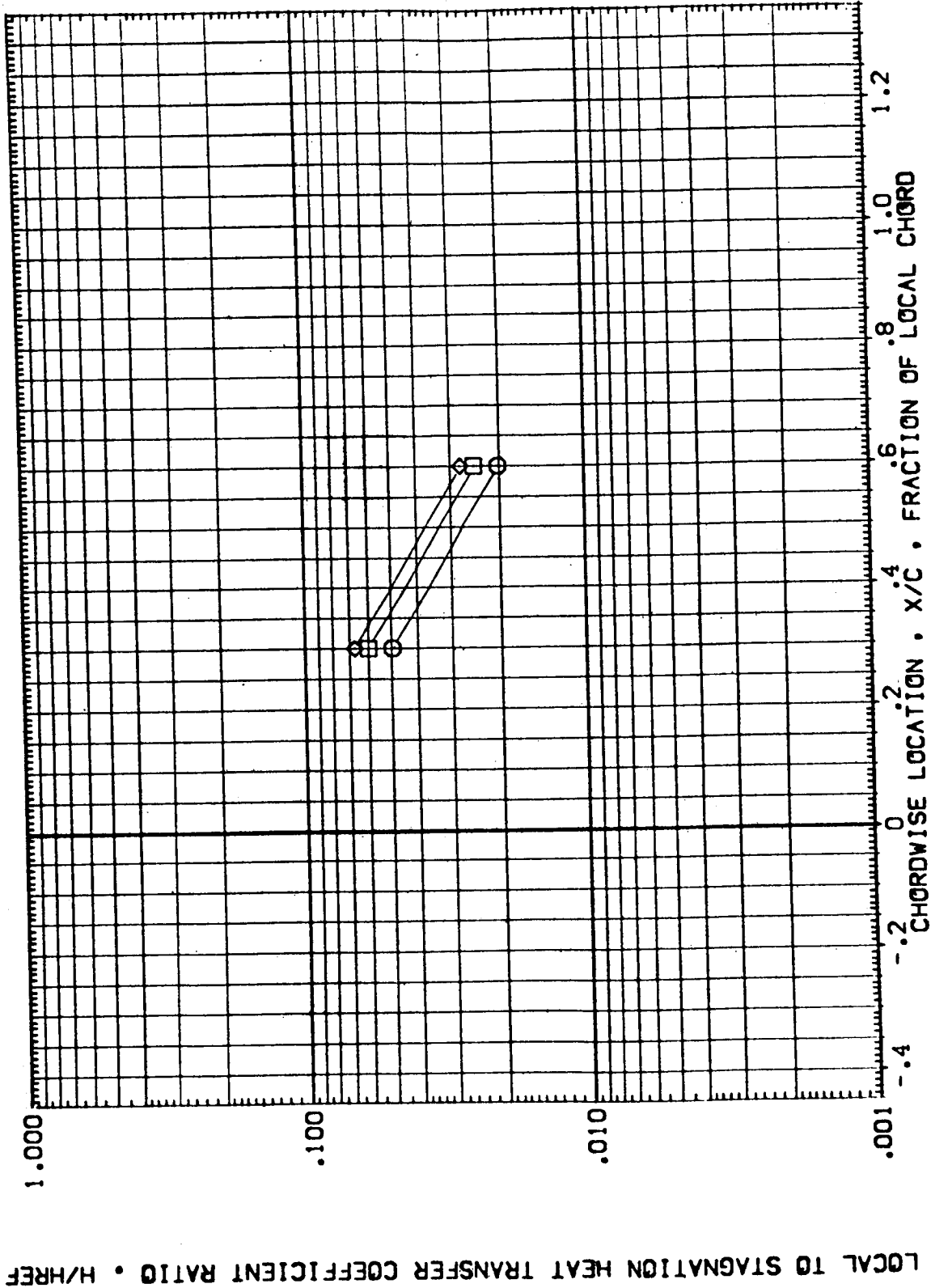


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/Y/B = .900



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
[RE]003	ARC 3.5-178 IH3 O-T+S (TRIPS)	.000	.000	1.500	1.000
[AE]003	ARC 3.5-178 IH3 O-T+S (TRIPS)	.000	.000	1.500	.900
[BE]003	ARC 3.5-178 IH3 O-T+S (TRIPS)	.000	.000	1.500	.850

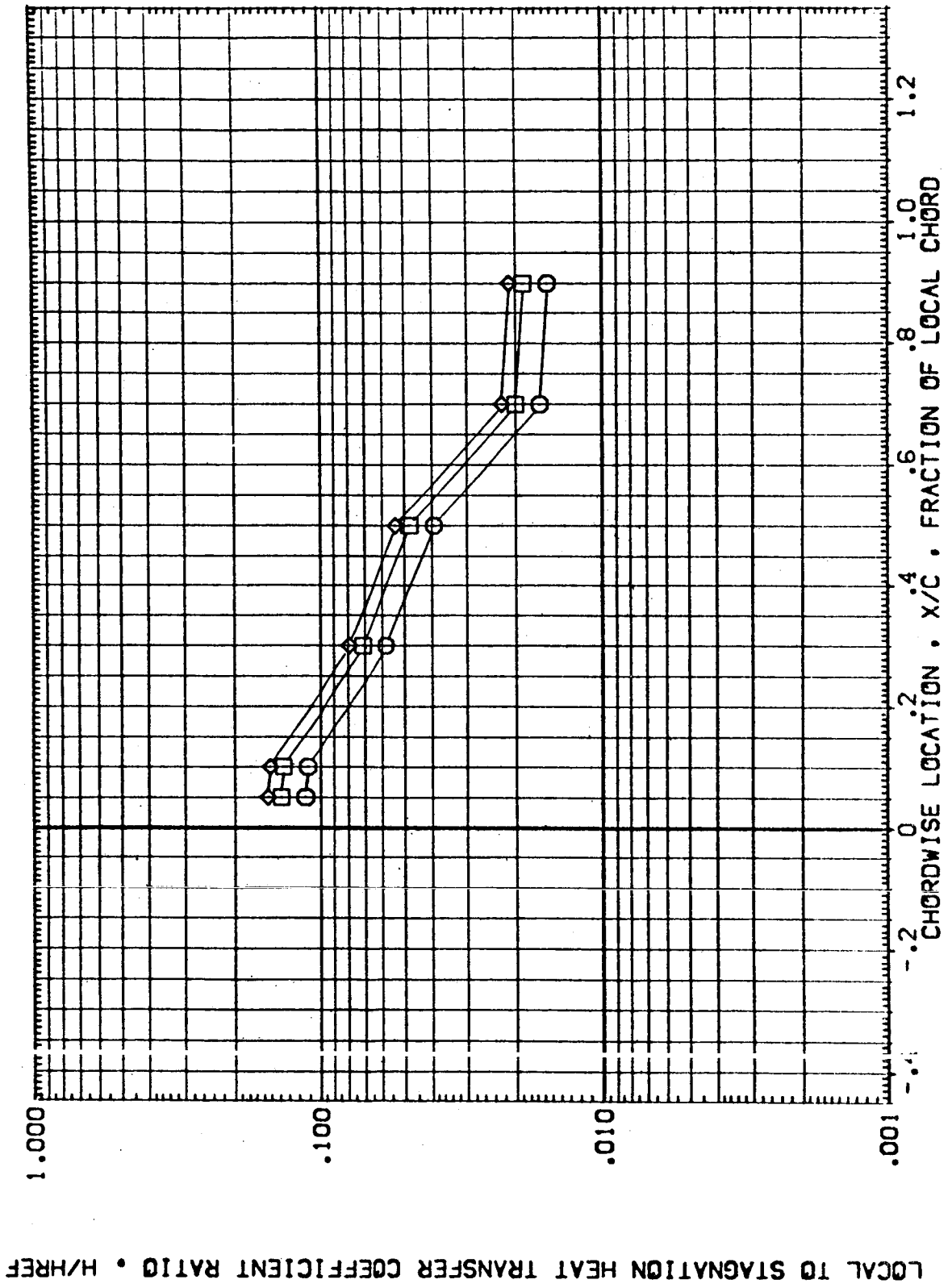


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .950

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE|003} ARC 3.5-178 |H3 O-T+S (TRIPS) .000 .000 1.500 1.000

{AE|003} ARC 3.5-178 |H3 O-T+S (TRIPS) .000 .000 1.500 .900

{BE|003} ARC 3.5-178 |H3 O-T+S (TRIPS) .000 .000 1.500 .850

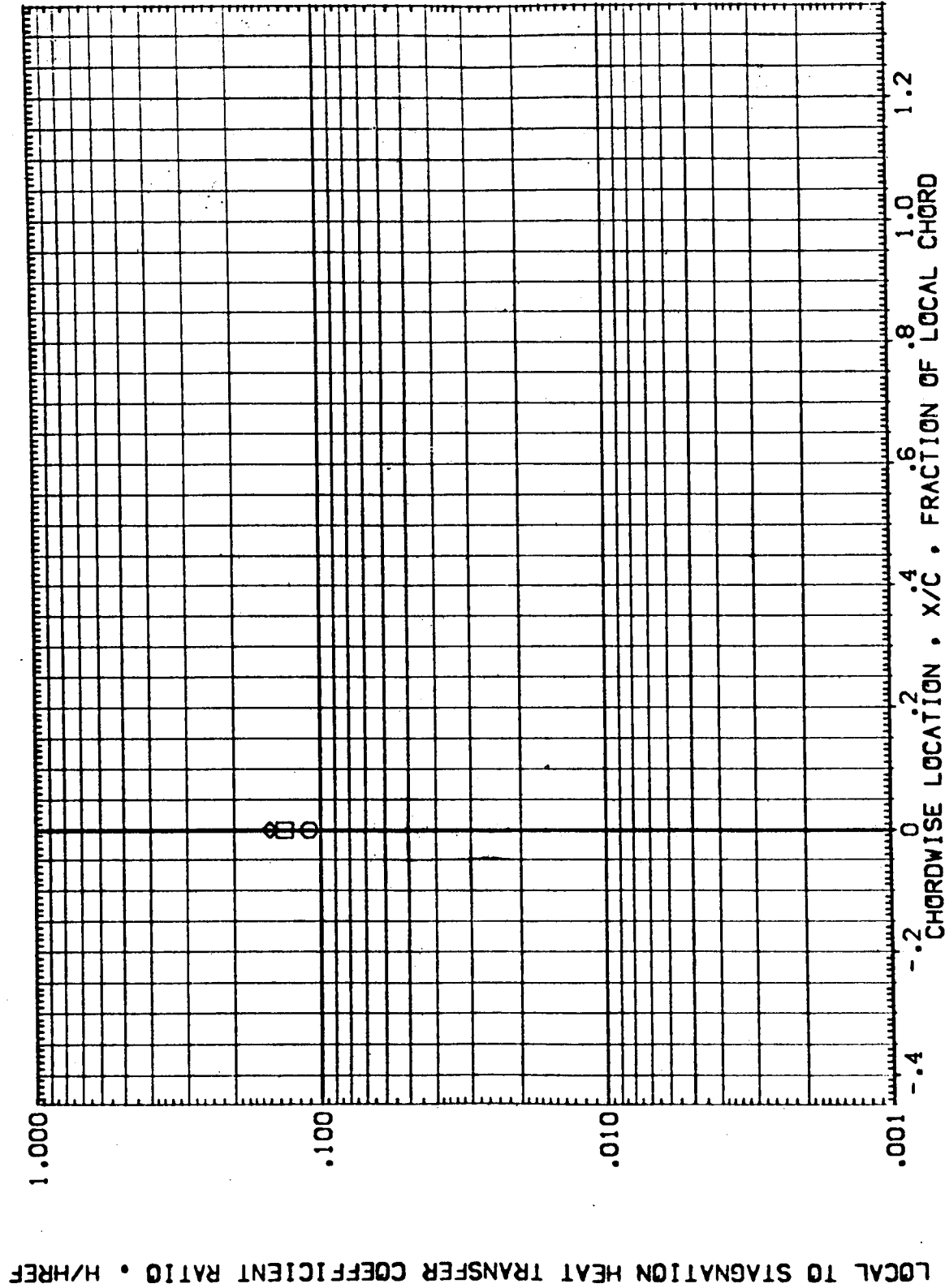


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .966



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT
 (REIG03) ARC 3 5-178 H3 O-T+S (TRIPS) WING BOTTOM WING BOTTOM
 (AEIG03) ARC 3 5-178 H3 O-T+S (TRIPS) WING BOTTOM WING BOTTOM
 (BEIG03) ARC 3 5-178 H3 O-T+S (TRIPS) WING BOTTOM WING BOTTOM

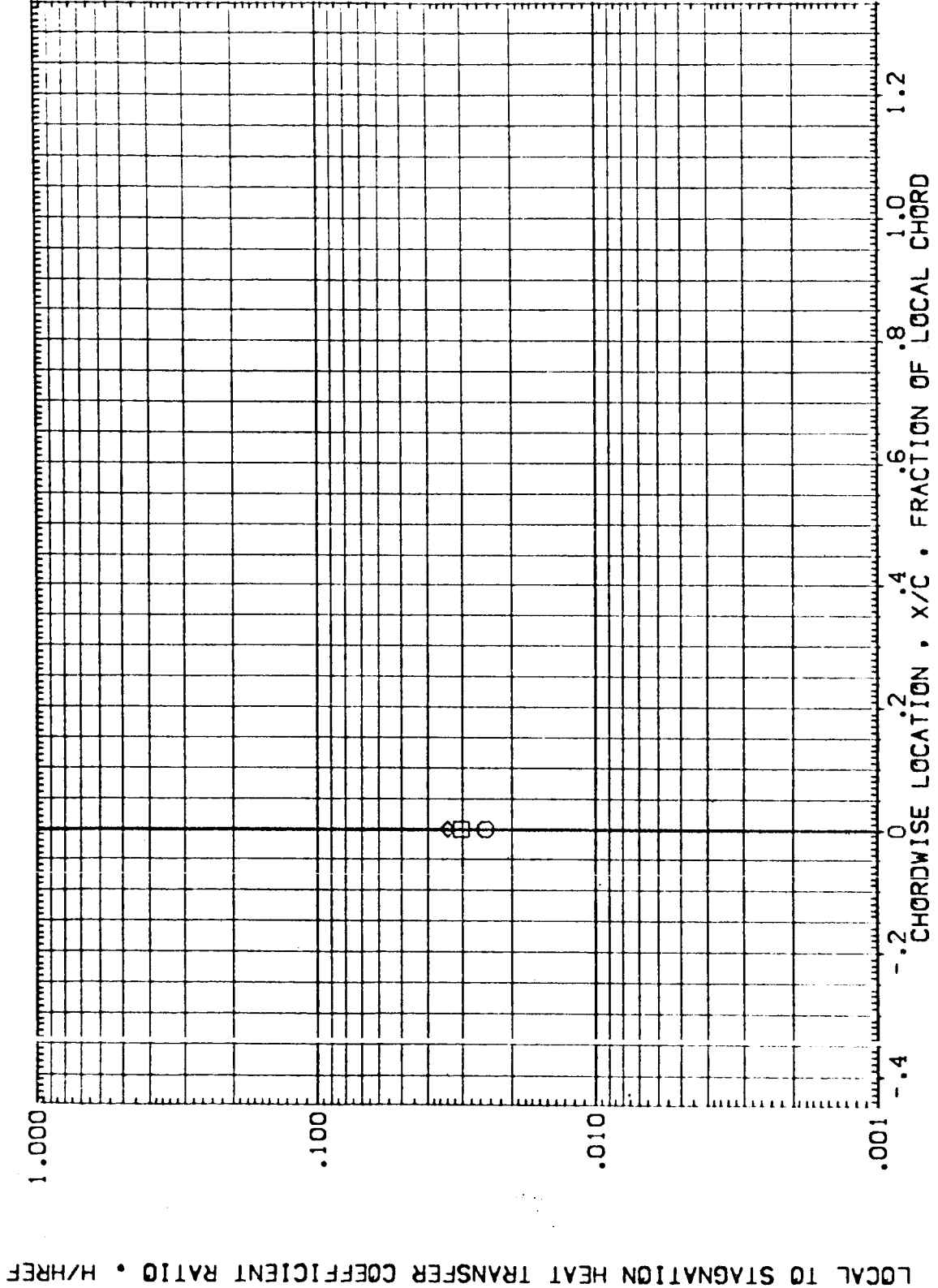


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .993

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE:G03) ARC 3.5-178 |H3 O-T+S (TRIPS) .000 .000 1.500 1.000

(AE:G03) ARC 3.5-178 |H3 O-T+S (TRIPS) .000 .000 1.500 .900

(BE:G03) ARC 3.5-178 |H3 O-T+S (TRIPS) .000 .000 1.500 .850

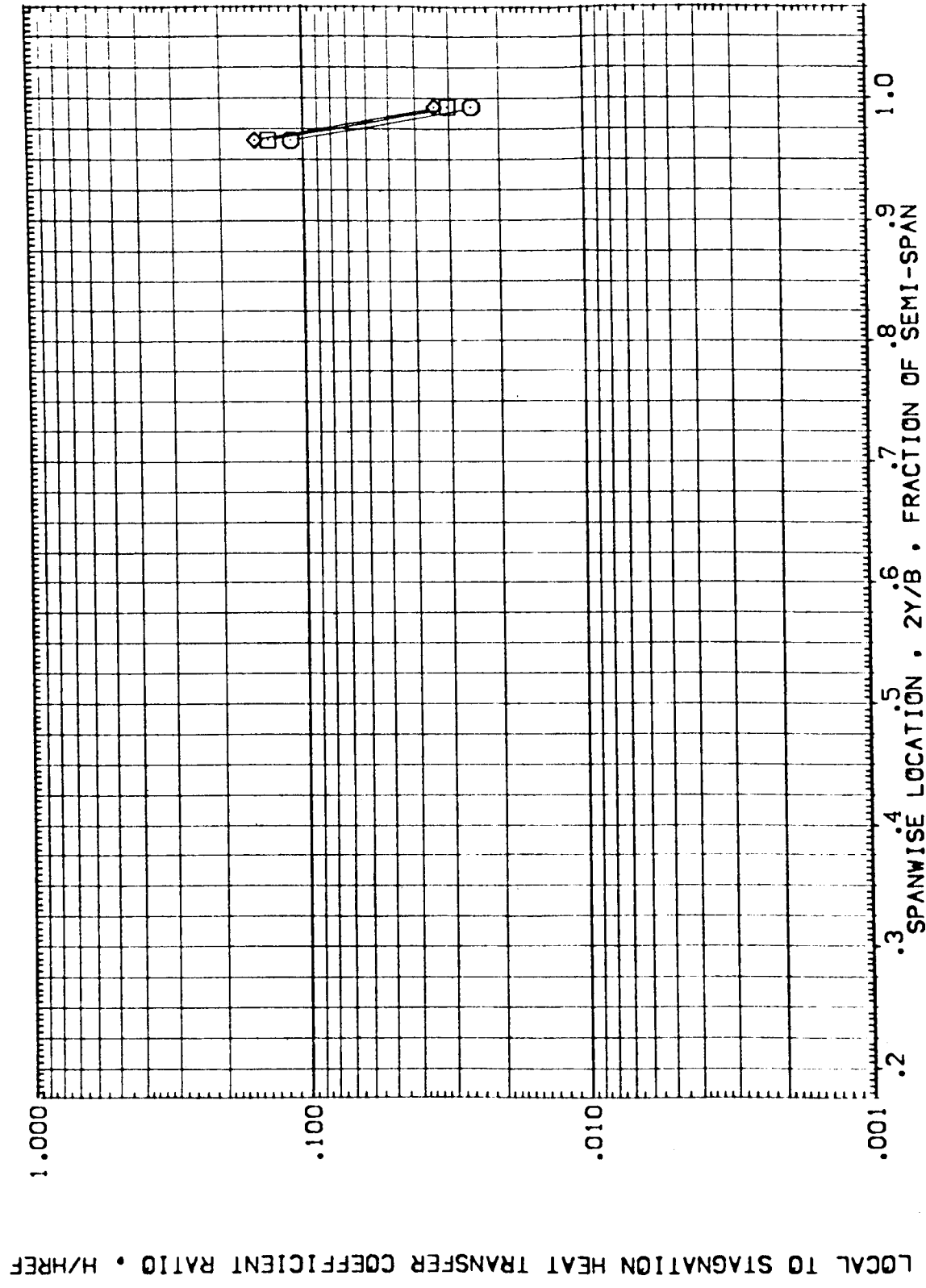
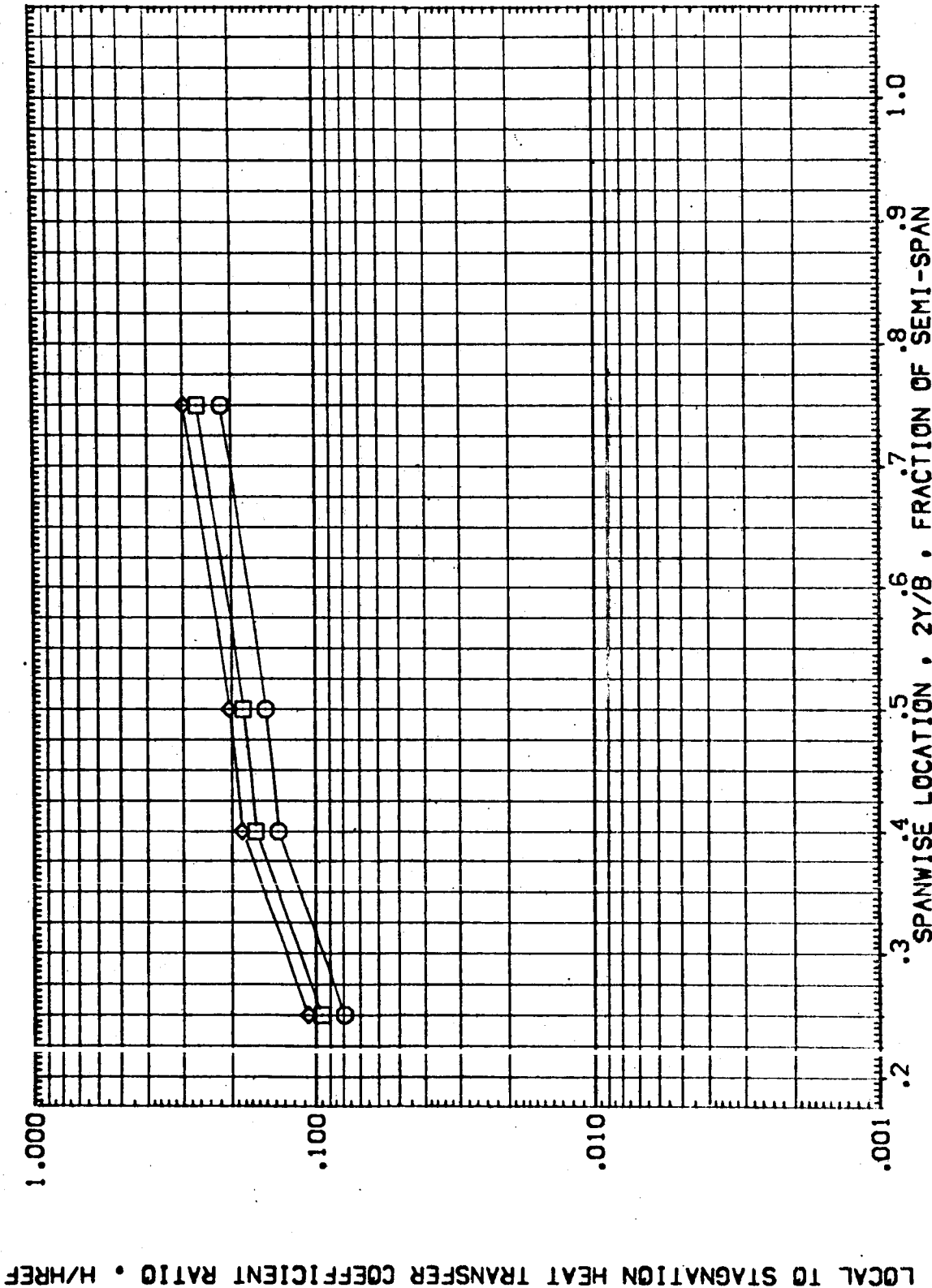


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .000

DATA SET SYMBOL: \square \circ CONFIGURATION DESCRIPTION: ARC 1.5-178 I-3 O+I+S (TRIPS) VING BOTTOM
 [RE] [003] [AE] [003] [BE] [003] ARC 1.5-178 I-3 O+I+S (TRIPS) VING BOTTOM
 [RE] [003] [AE] [003] [BE] [003] ARC 1.5-178 I-3 O+I+S (TRIPS) VING BOTTOM

ALPHA .000
 BETA .000
 RV/L 1.500
 HAV/HT 1.000



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FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .025

DATA SET SYMBOL

CONFIGURATION DESCRIPTION

ALPHA BETA RV/L MAV/MT

WING BOTTOM WING BOTTOM

ARC 3.5-178 IH3 O+T+S (TRIPS)

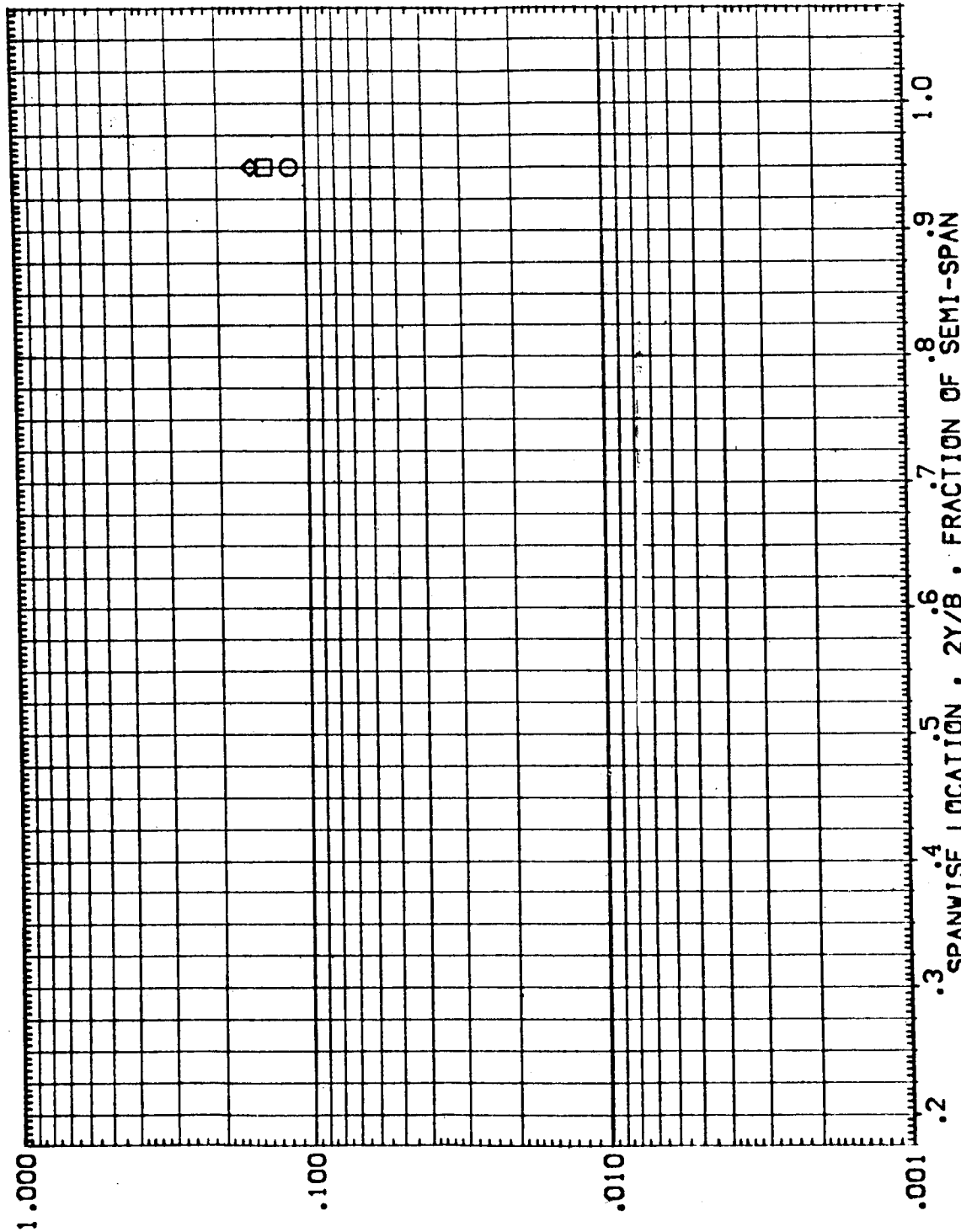
ARC 3.5-178 IH3 O+T+S (TRIPS)

ARC 3.5-178 IH3 O+T+S (TRIPS)

ARC 3.5-178 IH3 O+T+S (TRIPS)

ARC 3.5-178 IH3 O+T+S (TRIPS)

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



SPANWISE LOCATION • 2Y/B • FRACTION OF SEMI-SPAN

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .050



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 {RE{603} ARC 1.5-178 I+3 0+1+S (TRIPS) WING BOTTOM .000 .000 1.500 1.000
 {AE{603} ARC 1.5-178 I+3 0+1+S (TRIPS) WING BOTTOM .000 .000 1.500 .900
 {BE{603} ARC 1.5-178 I+3 0+1+S (TRIPS) WING BOTTOM .000 .000 1.500 .850

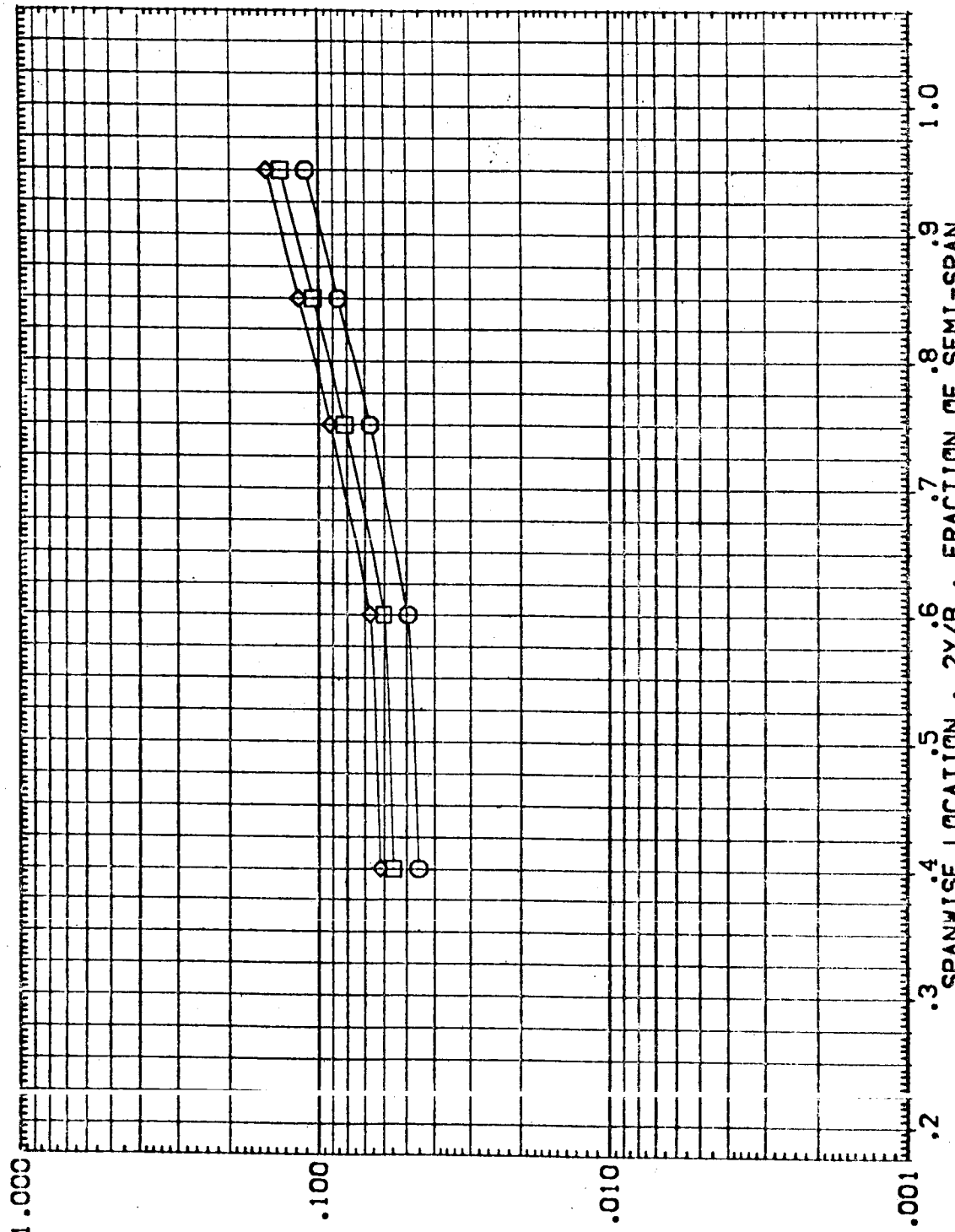


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .100

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

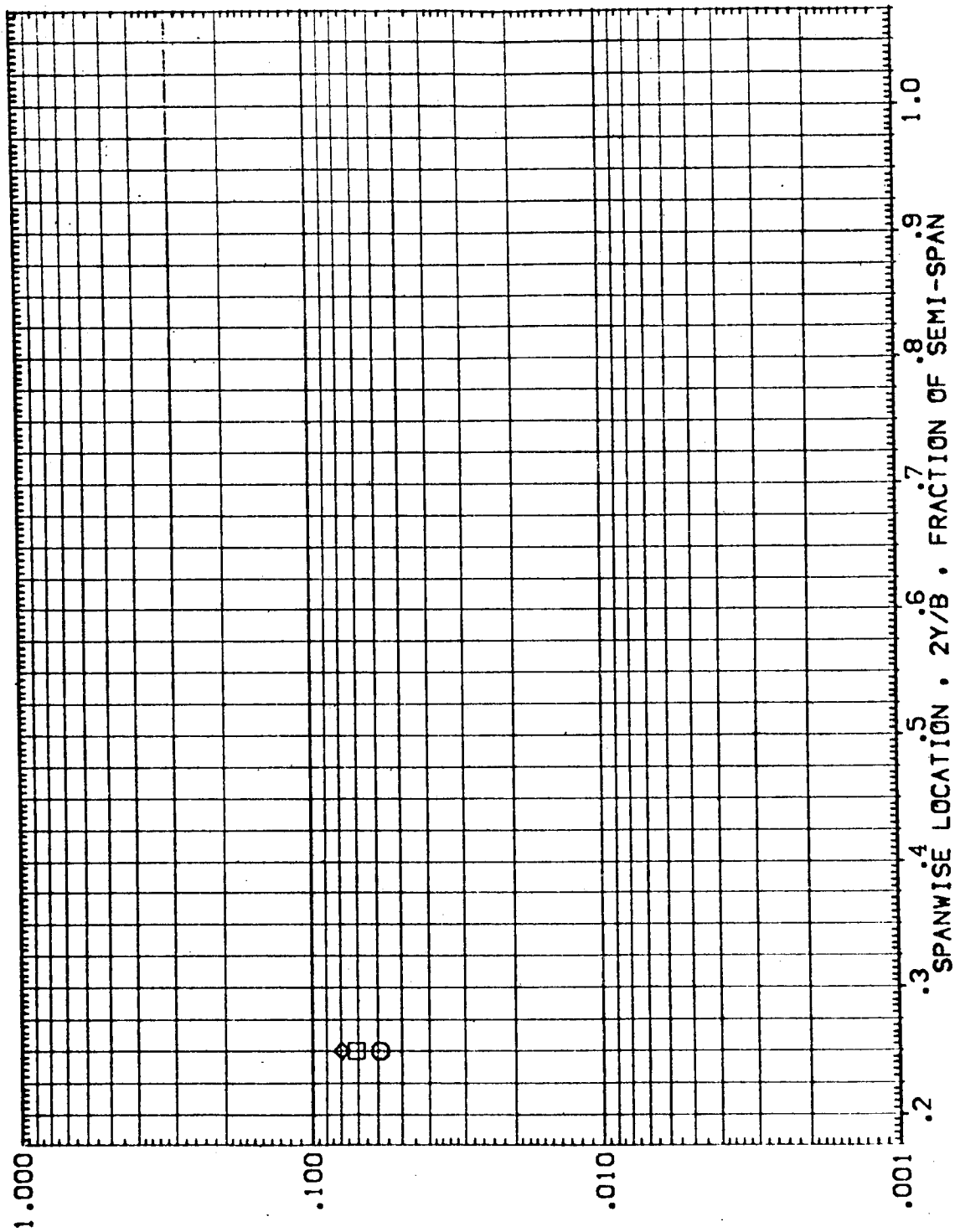


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .153

DATA SET SYMBOL: [RE] [003] [AE] [003] [BE] [003]

CONFIGURATION DESCRIPTION: ARC 3.5-178 [H3 O-T+S] [TR] [PS] WING BOTTOM

ALPHA: .000 BETA: .000 RVL: 1.500 MAV/HT: 1.000

WING BOTTOM: .000 WING BOTTOM: .900 WING BOTTOM: .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAW/HT
(RE G03)	ARC 1 5-178 143 0-T+S (TR PS)	.000	.000	1.500	1.000
(AE G03)	ARC 2 5-178 143 0-T+S (TR PS)	.000	.000	1.500	.900
(BE G03)	ARC 3 5-178 143 0-T+S (TR PS)	.000	.000	1.500	.850

WING BOTTOM
WING BOTTOM
WING BOTTOM

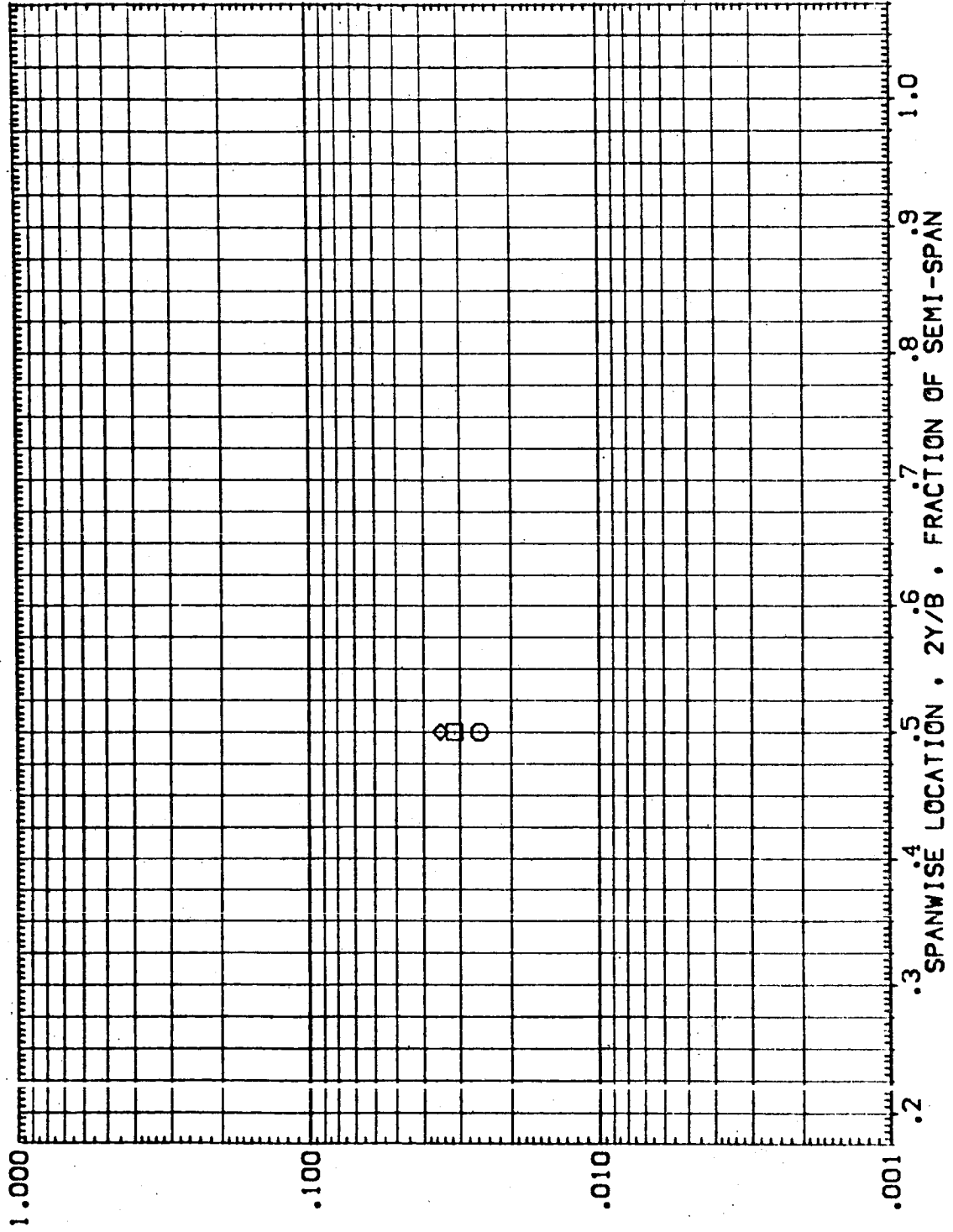


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .177

DATA SET SYMBO. CONFIGURATION DESCRIPTION HAV/HT RAV/L BETA ALPHA

[BE[G03] ARC 3.5-178 143 0-T+S (TRIPS) VING BOTTOM .000 .000 .000 .000

[AL[G03] ARC 3.5-178 143 0-T+S (TRIPS) VING BOTTOM .000 .000 .000 .000

[BE[G03] ARC 3.5-178 143 0-T+S (TRIPS) VING BOTTOM .000 .000 .000 .000

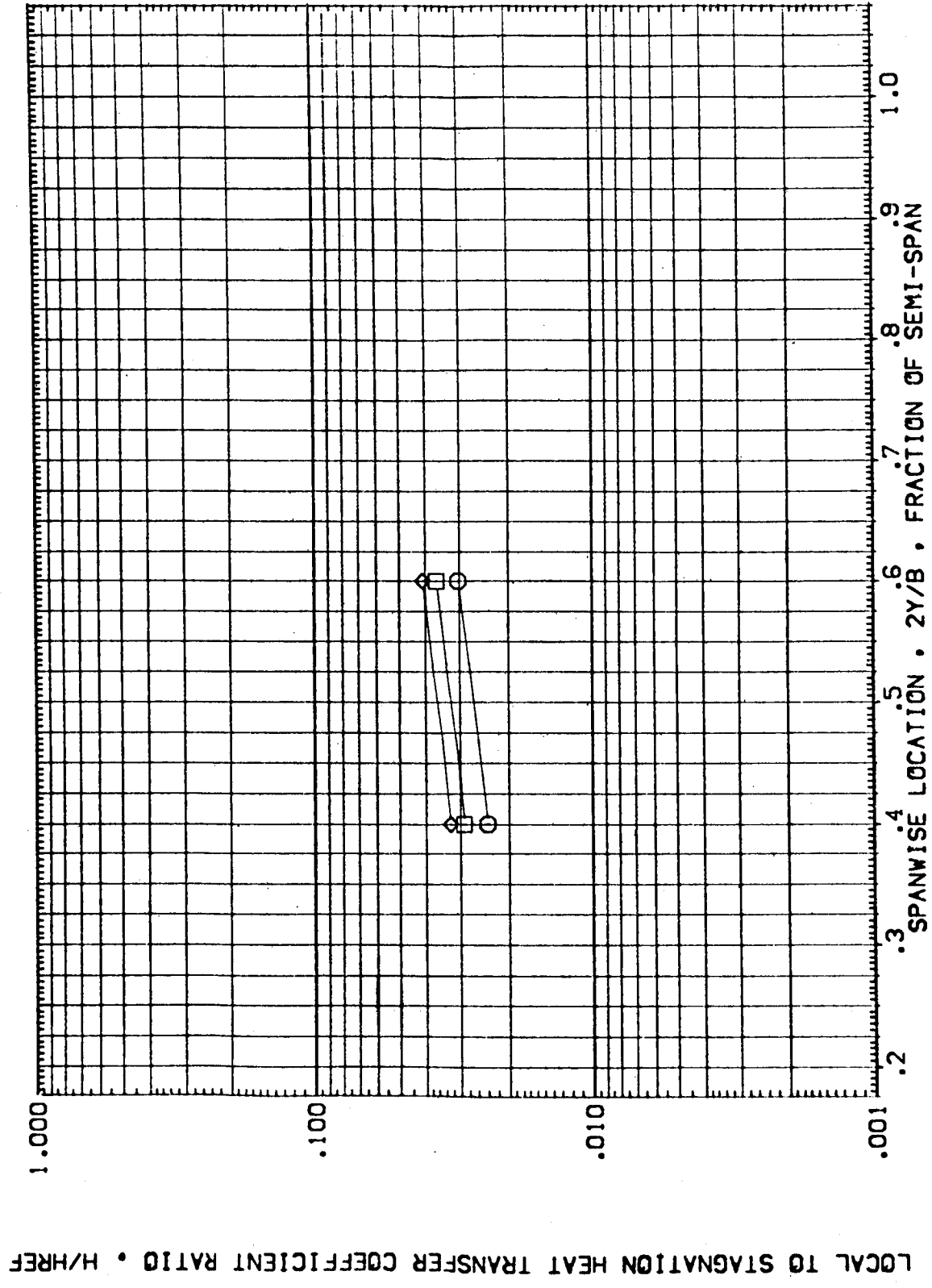


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT
 (RE1603) [] ARC 3.5-178 IH3 O-T+S (TRIPS) WING BOTTOM .000 .000 1.500 1.000
 (AE1603) [] ARC 3.5-178 IH3 O-T+S (TRIPS) WING BOTTOM .000 .000 1.500 .900
 (BE1603) [] ARC 3.5-178 IH3 O-T+S (TRIPS) WING BOTTOM .000 .000 1.500 .850

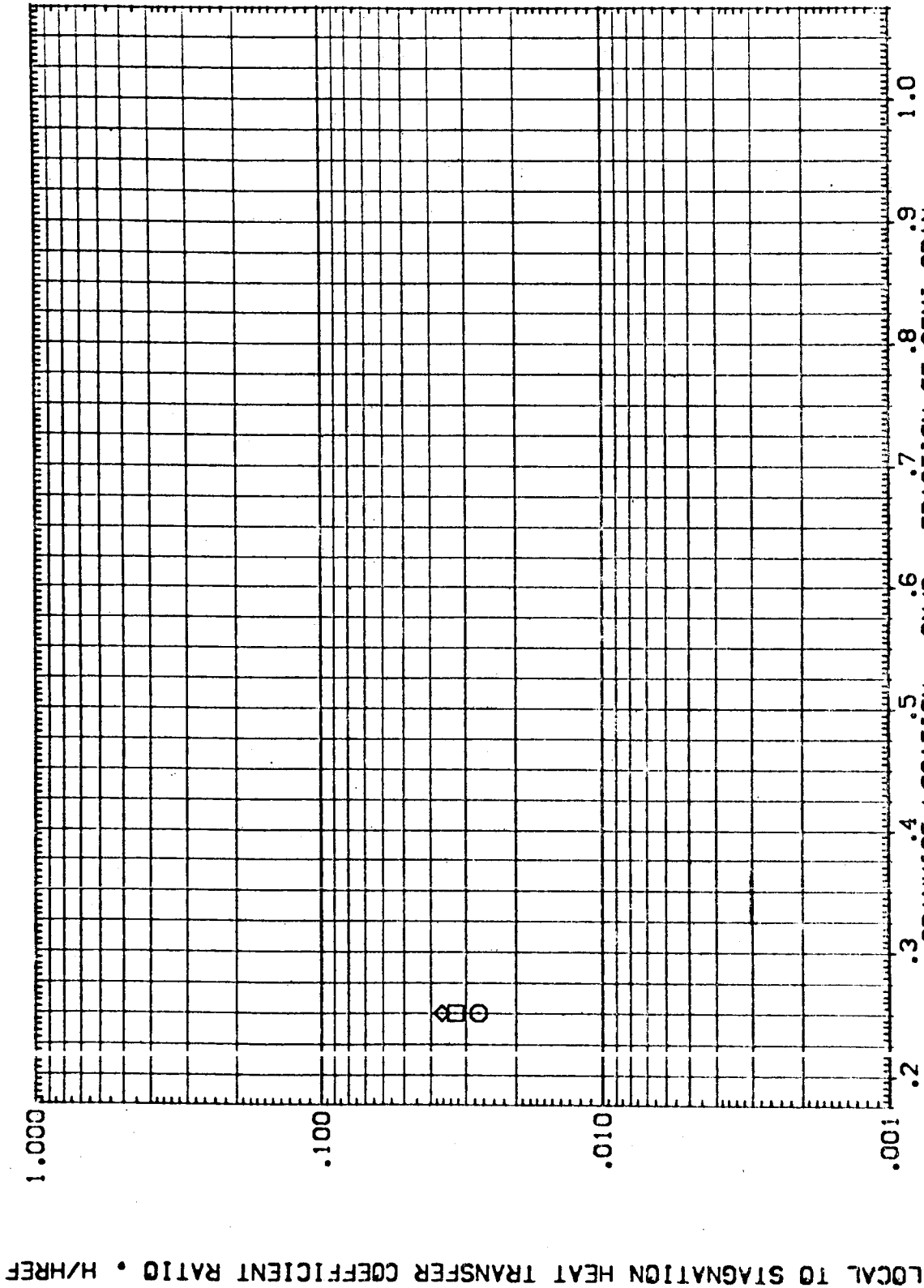


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT
 [RE] [603] ARC 3.5-178 | H3 O+T+S (TRIPS) .000 .000 1.500 1.000
 [AE] [603] ARC 3.5-178 | H3 O+T+S (TRIPS) .000 .000 1.500 .900
 [BE] [603] ARC 3.5-178 | H3 O+T+S (TRIPS) .000 .000 1.500 .850

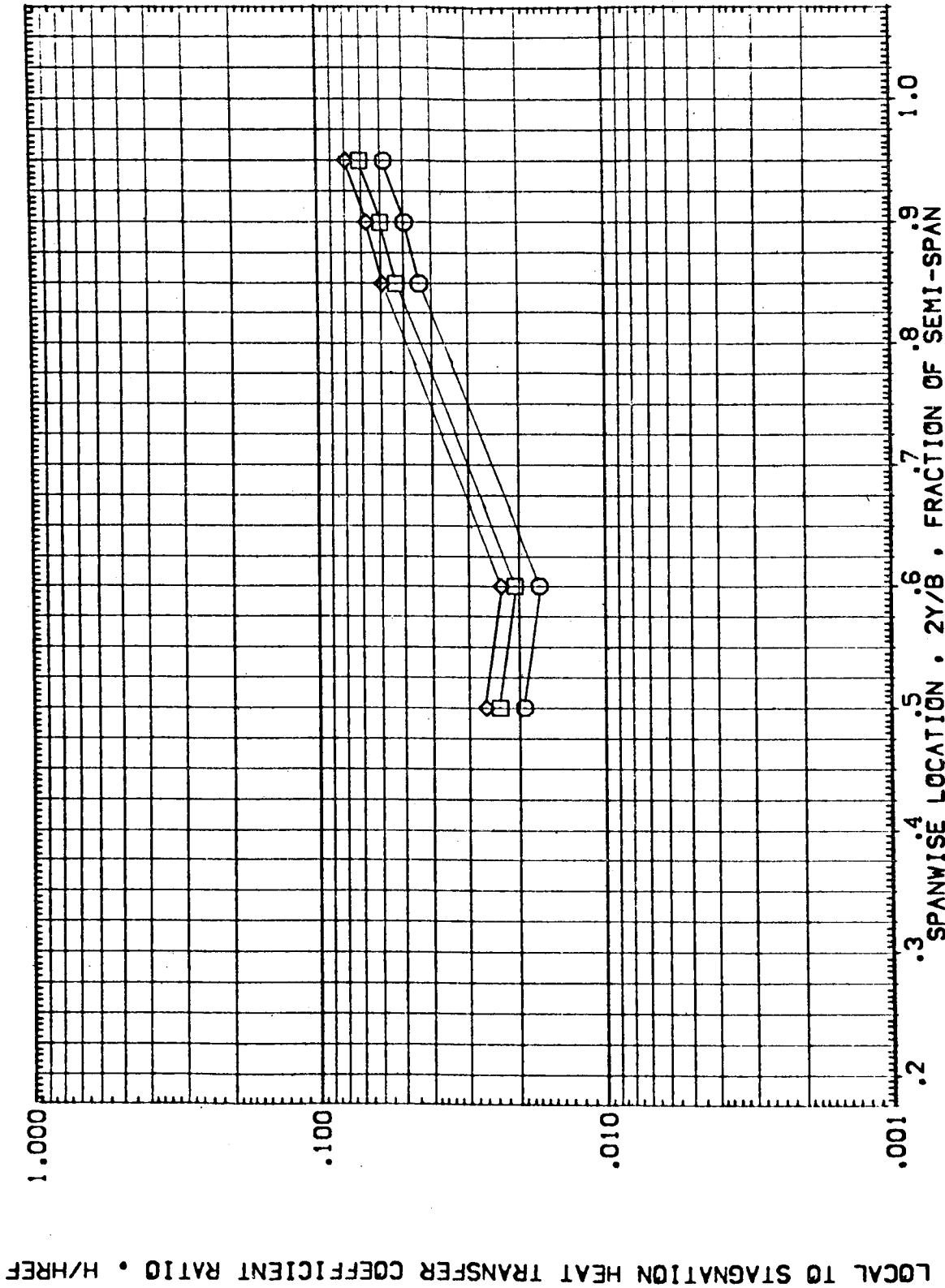


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .300



DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM WING BOTTOM ALPHA BETA RV/L HAV/HIT

{RE{003} ARC 1.5-178 I43 0+1+S (TRIPS) WING BOTTOM .000 .000 1.500 1.000

{AE{003} ARC 1.5-178 I43 0+1+S (TRIPS) WING BOTTOM .000 .000 1.500 .900

{BE{003} ARC 1.5-178 I43 0+1+S (TRIPS) WING BOTTOM .000 .000 1.500 .850

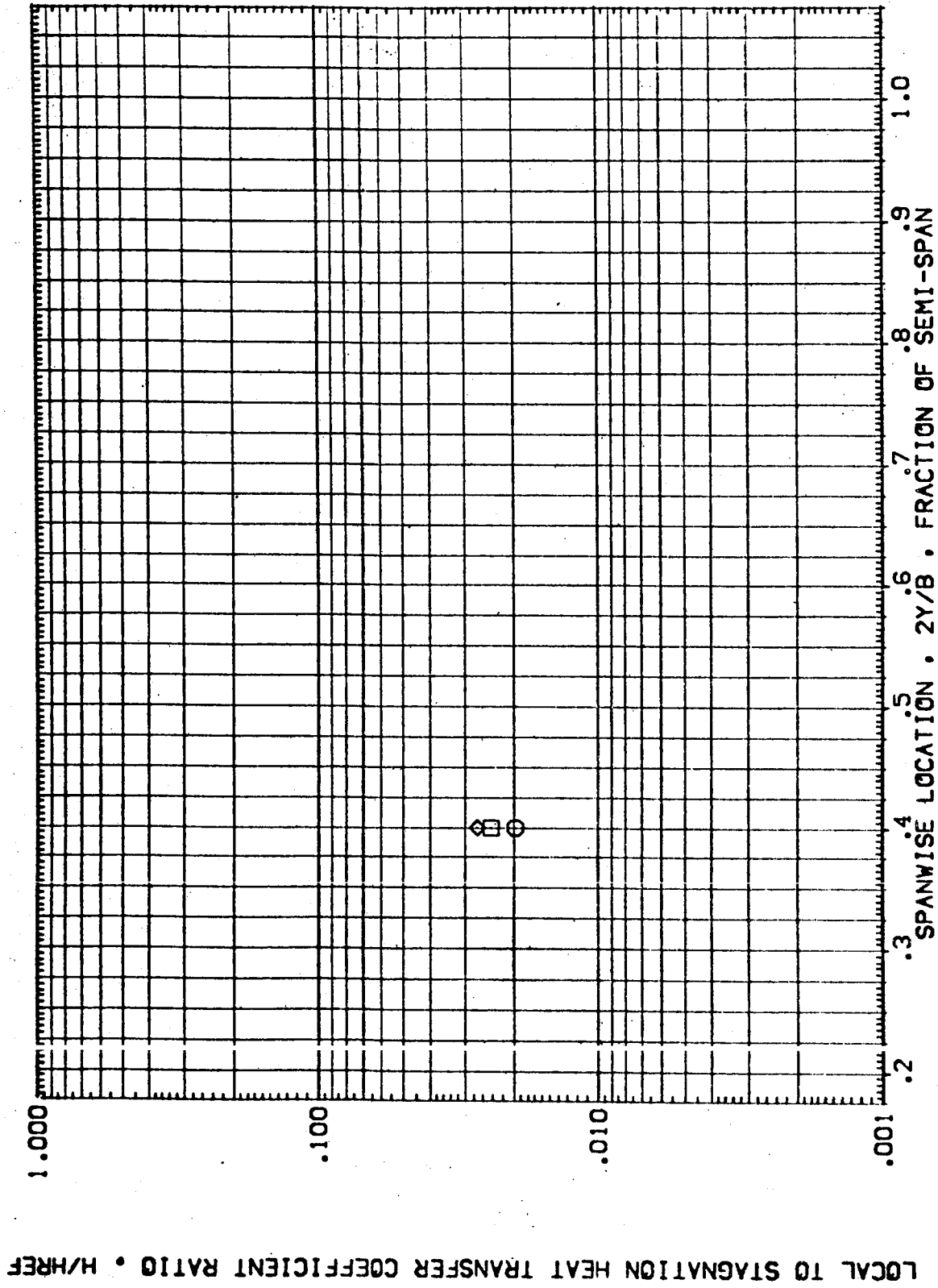


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .302

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL: [RE] [G03] [AE] [G03] [BE] [G03]
 CONFIGURATION DESCRIPTION: ARC 3.5-178 IH3 O-T+S (TRIPS) WING BOTTOM
 ARC 3.5-178 IH3 O-T+S (TRIPS) WING BOTTOM
 ARC 3.5-178 IH3 O-T+S (TRIPS) WING BOTTOM
 ALPHA: .000 .000 .000
 BETA: .000 .000 .000
 RV/L: 1.500 1.500 1.500
 MAV/HT: 1.000 .900 .850

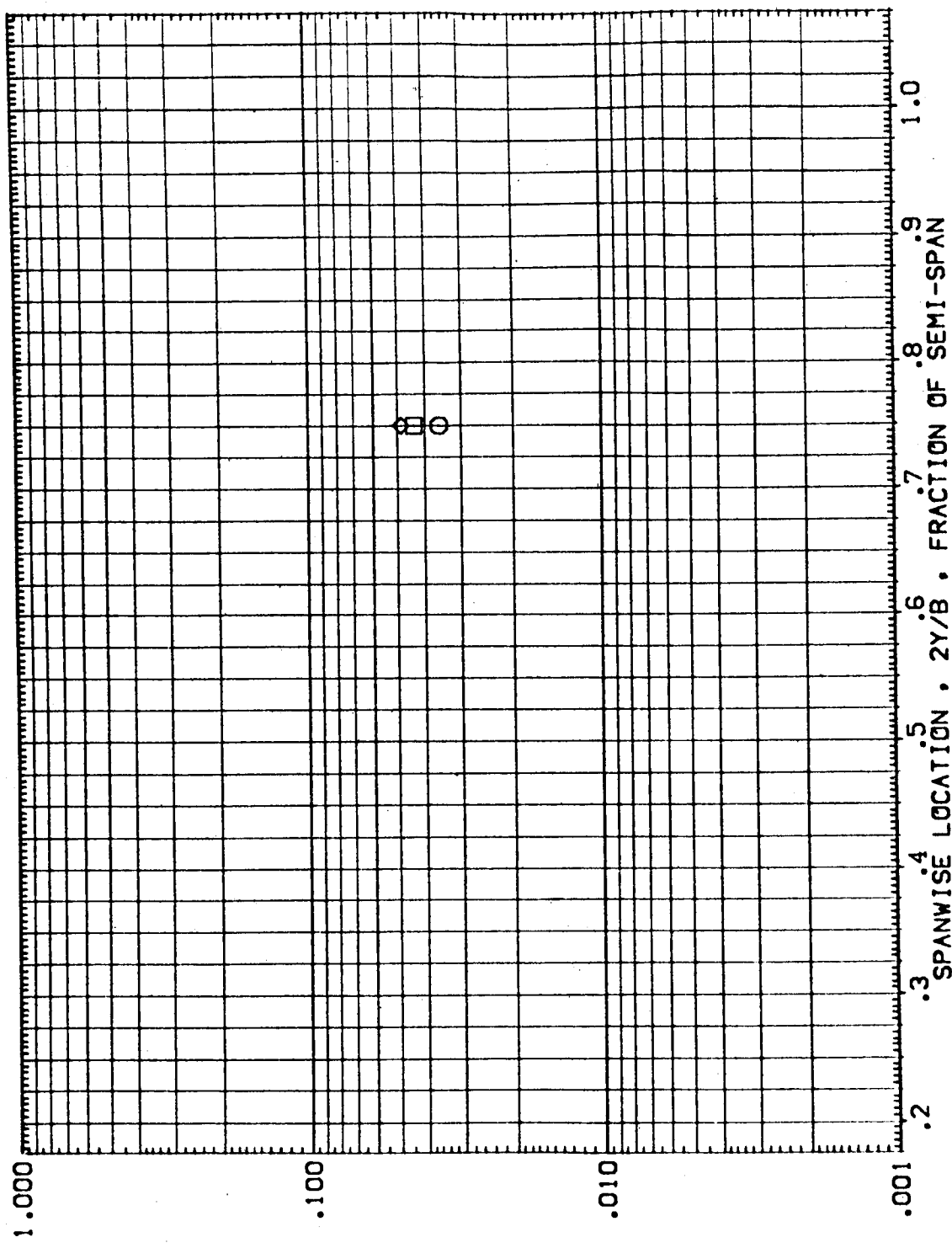


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .303



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

[RE]003 ARC 3.5-178 [H3 O-T+S (TRIPS)] .000 .000 1.500 1.000

[AE]003 ARC 3.5-178 [H3 O-T+S (TRIPS)] .000 .000 1.500 .900

[BE]003 ARC 3.5-178 [H3 O-T+S (TRIPS)] .000 .000 1.500 .850

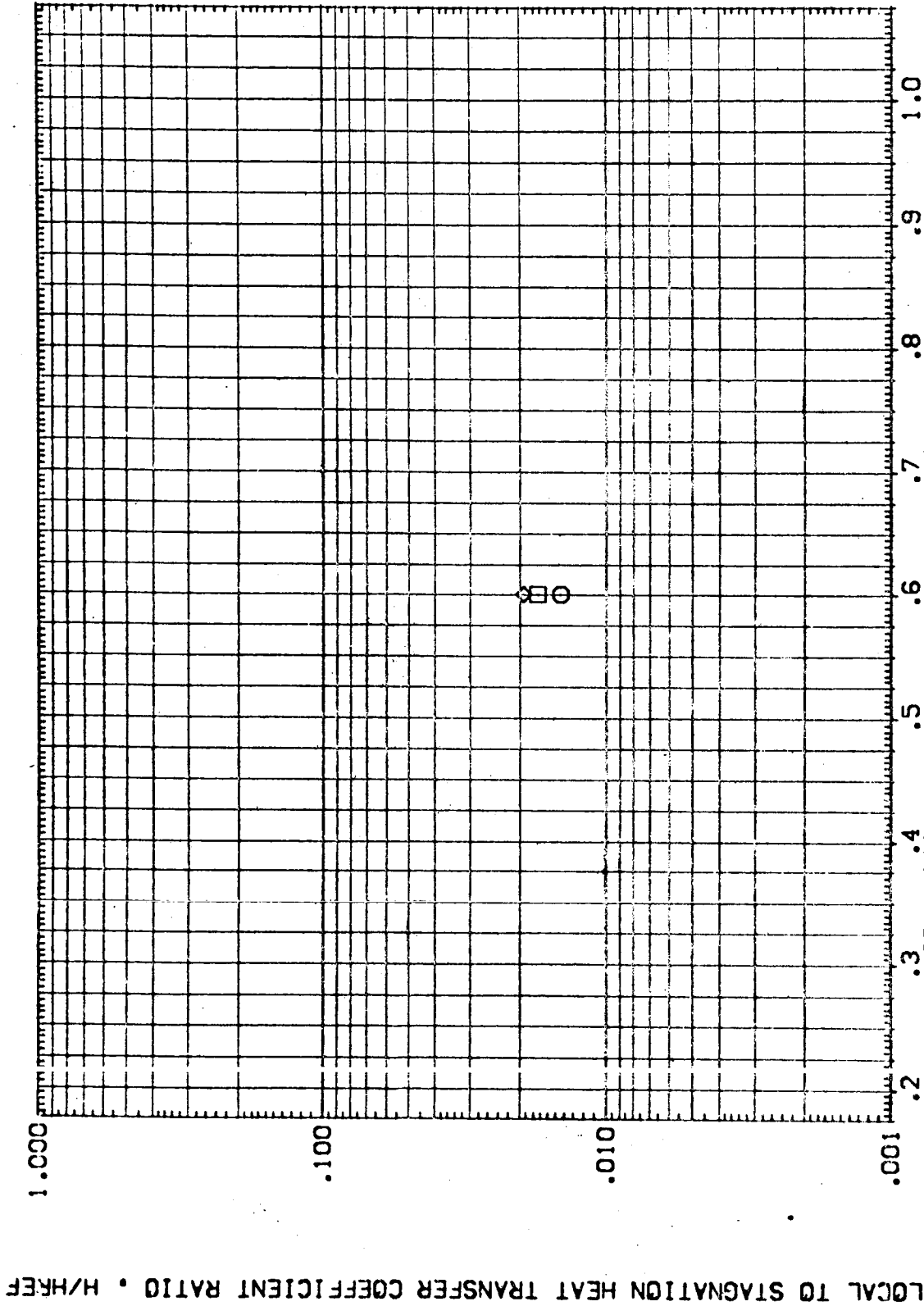
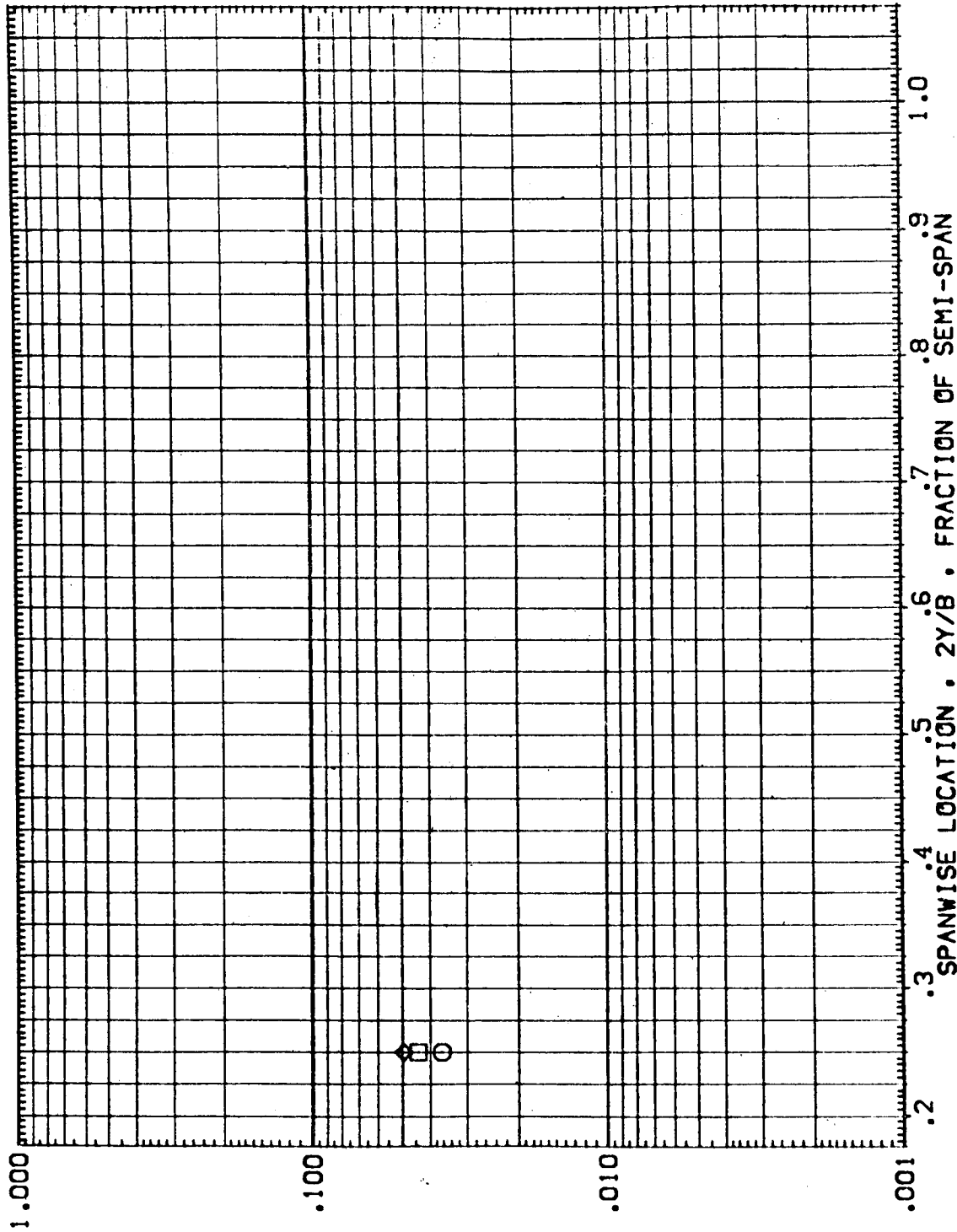


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .428

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(RE1003)	ARC 3.5-178 I+3 O+T+S (TRIPS)	.000	.000	1.500	1.000
(AE1003)	ARC 3.5-178 I+3 O+T+S (TRIPS)	.000	.000	1.500	.900
(BE1003)	ARC 3.5-178 I+3 O+T+S (TRIPS)	.000	.000	1.500	.850

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .444



DATA SET SYMBOL. CO FIGURATION DESCRIPTION

DATA SET SYMBOL	CO FIGURATION	DESCRIPTION
(RE1003)	ARC 1.5-178 IH3 0-T+S	(TRIPS) WING BOTTOM
(AE1003)	ARC 1.5-178 IH3 0-T+S	(TRIPS) WING BOTTOM
(BE1003)	ARC 1.5-178 IH3 0-T+S	(TRIPS) WING BOTTOM

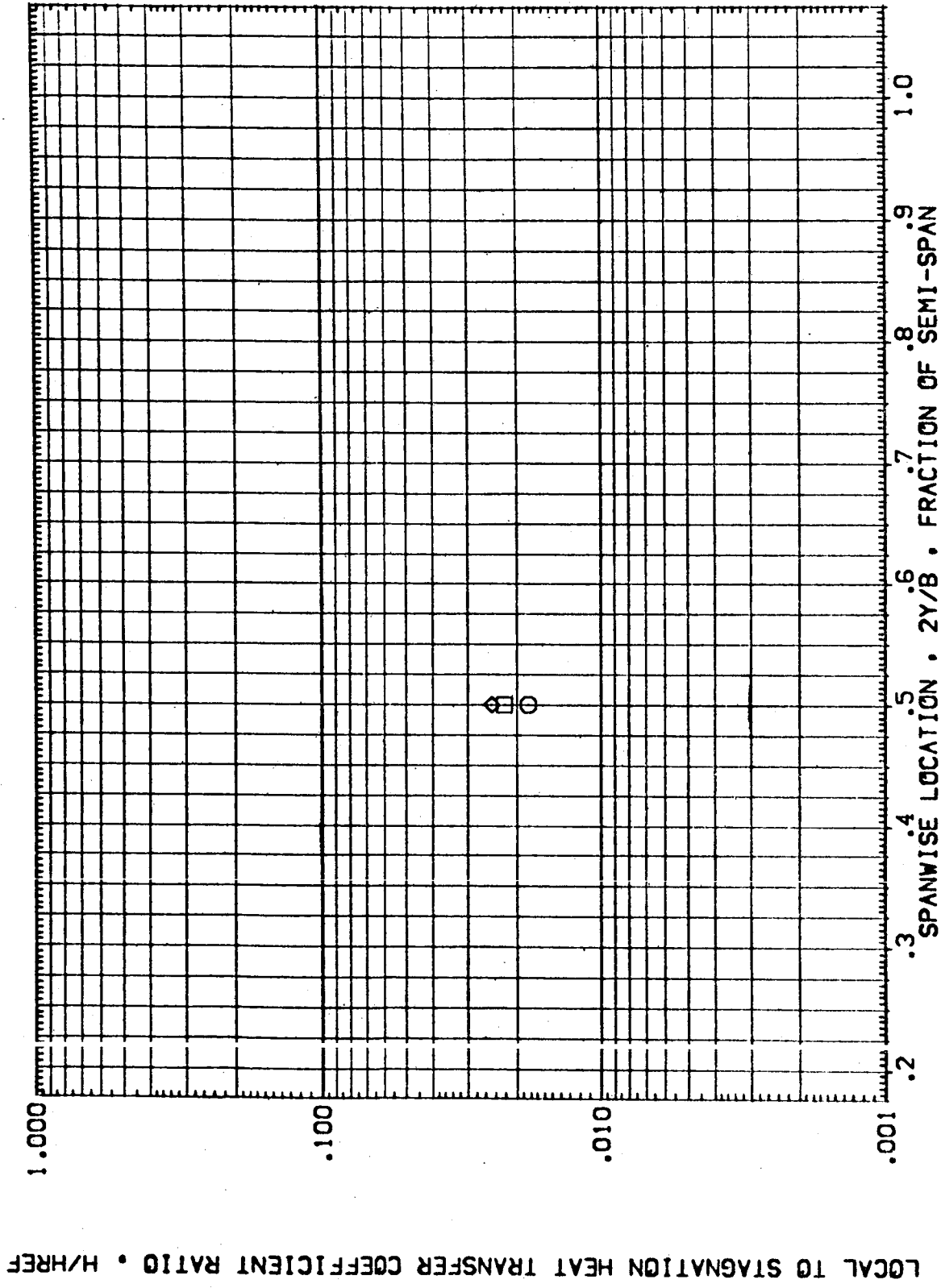


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .487

DATA SET SYMBO. CONFIGURATION DESCRIPTION ALPHA BETA RVL HAV/HT
 {RE|003} ARC 3.5-178 |H3 O-T+S (TRIPS) .000 .000 1.500 1.000
 {AE|003} ARC 3.5-178 |H3 O-T+S (TRIPS) .000 .000 1.500 .900
 {BE|003} ARC 3.5-178 |H3 O-T+S (TRIPS) .000 .000 1.500 .850

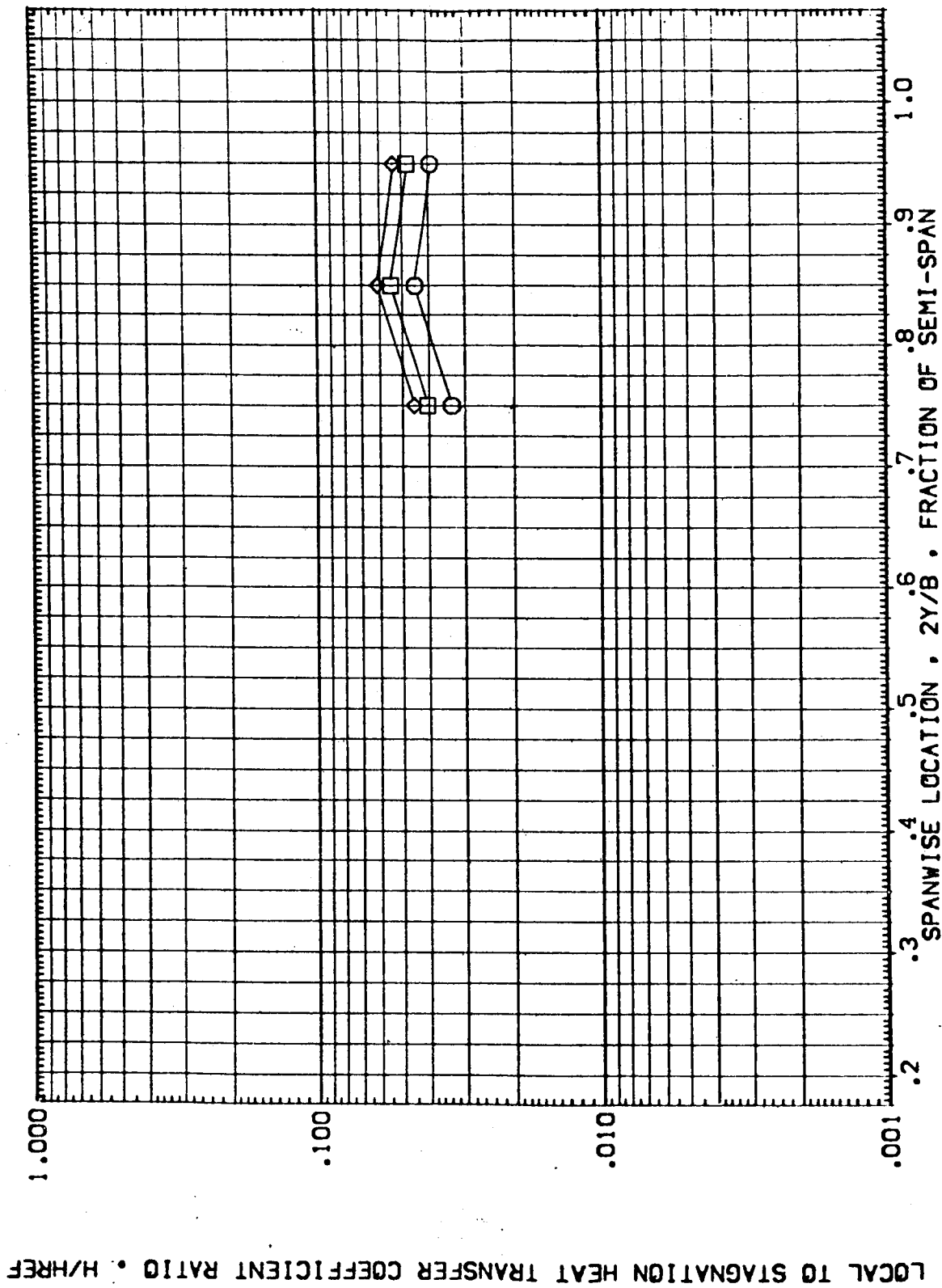


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .500

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAW/HT
RE [003]	ARC 1.5-178 IH3 0-T+S (TRIPS)	.000	.000	1.500	1.000
AE [003]	ARC 1.5-178 IH3 0-T+S (TRIPS)	.000	.000	1.500	.900
BE [003]	ARC 1.5-178 IH3 0-T+S (TRIPS)	.000	.000	1.500	.850

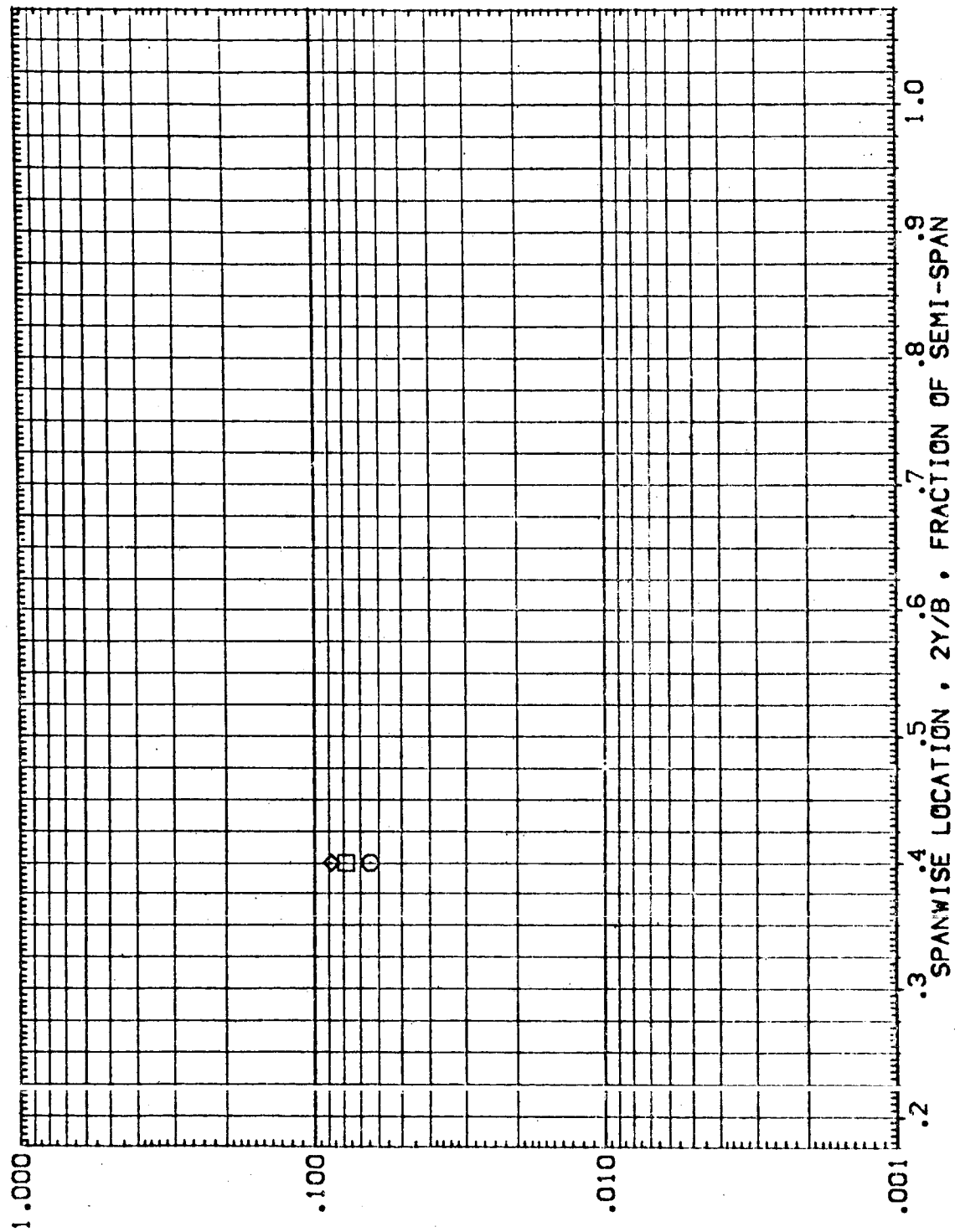


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .559

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 [REIG03] [AEIG03] [BEIG03] ARC 3.5-178 143 O+T+S (TRIPS) WING BOTTOM WING BOTTOM
 ARC 3.5-178 143 O+T+S (TRIPS) WING BOTTOM WING BOTTOM
 ARC 3.5-178 143 O+T+S (TRIPS) WING BOTTOM WING BOTTOM

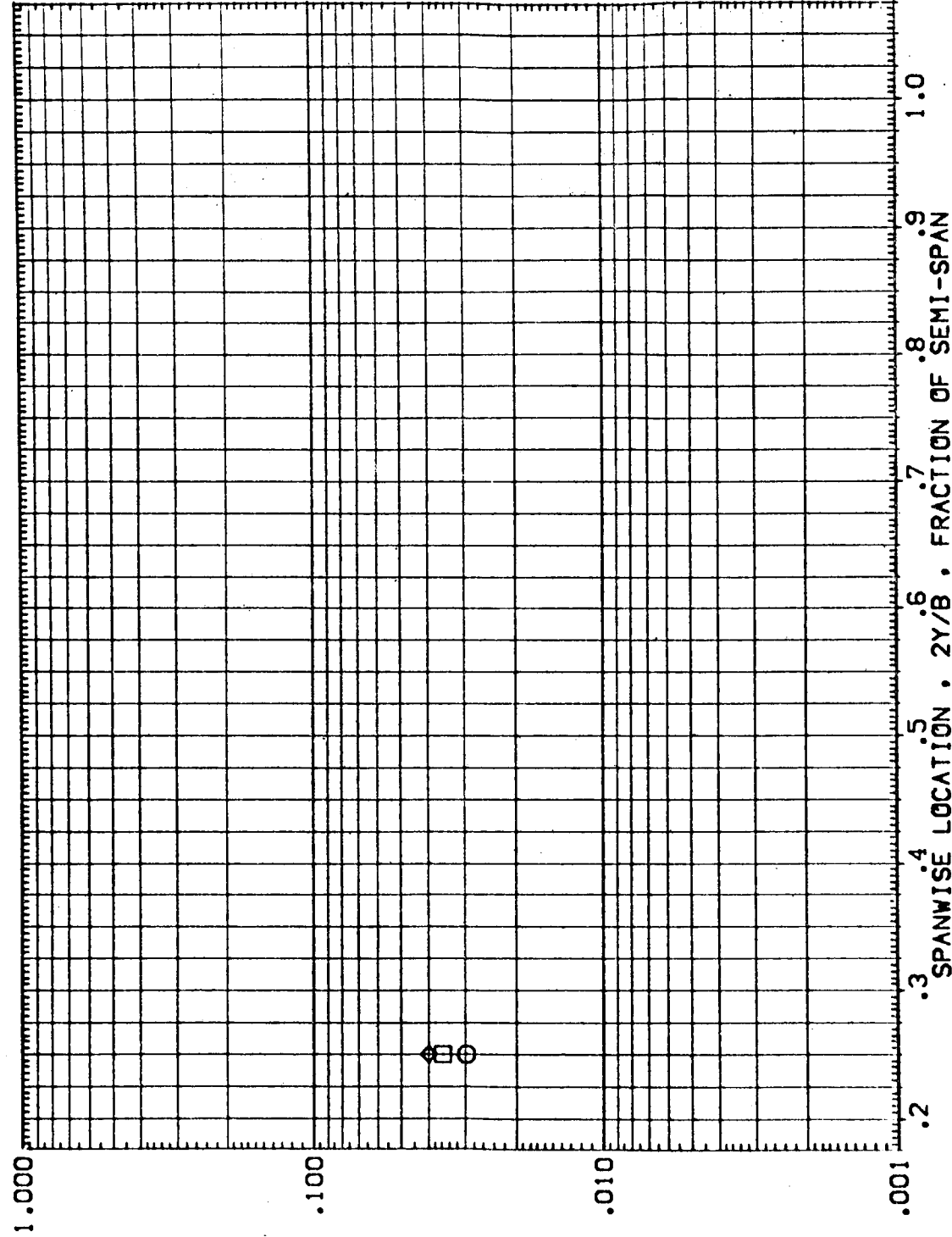


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .590



DATA SET SYMBOL CONF. LOCATION DESCRIPTION ALPHA BETA MACH

[RE|603] [O] ARC 3.5-178 [H3] O-T+S (TRIPS) .000 .000 1.000

[AE|603] [O] ARC 3.5-178 [H3] O-T+S (TRIPS) .000 .000 .900

[BE|603] [◇] ARC 3.5-178 [H3] O-T+S (TRIPS) .000 .000 .850

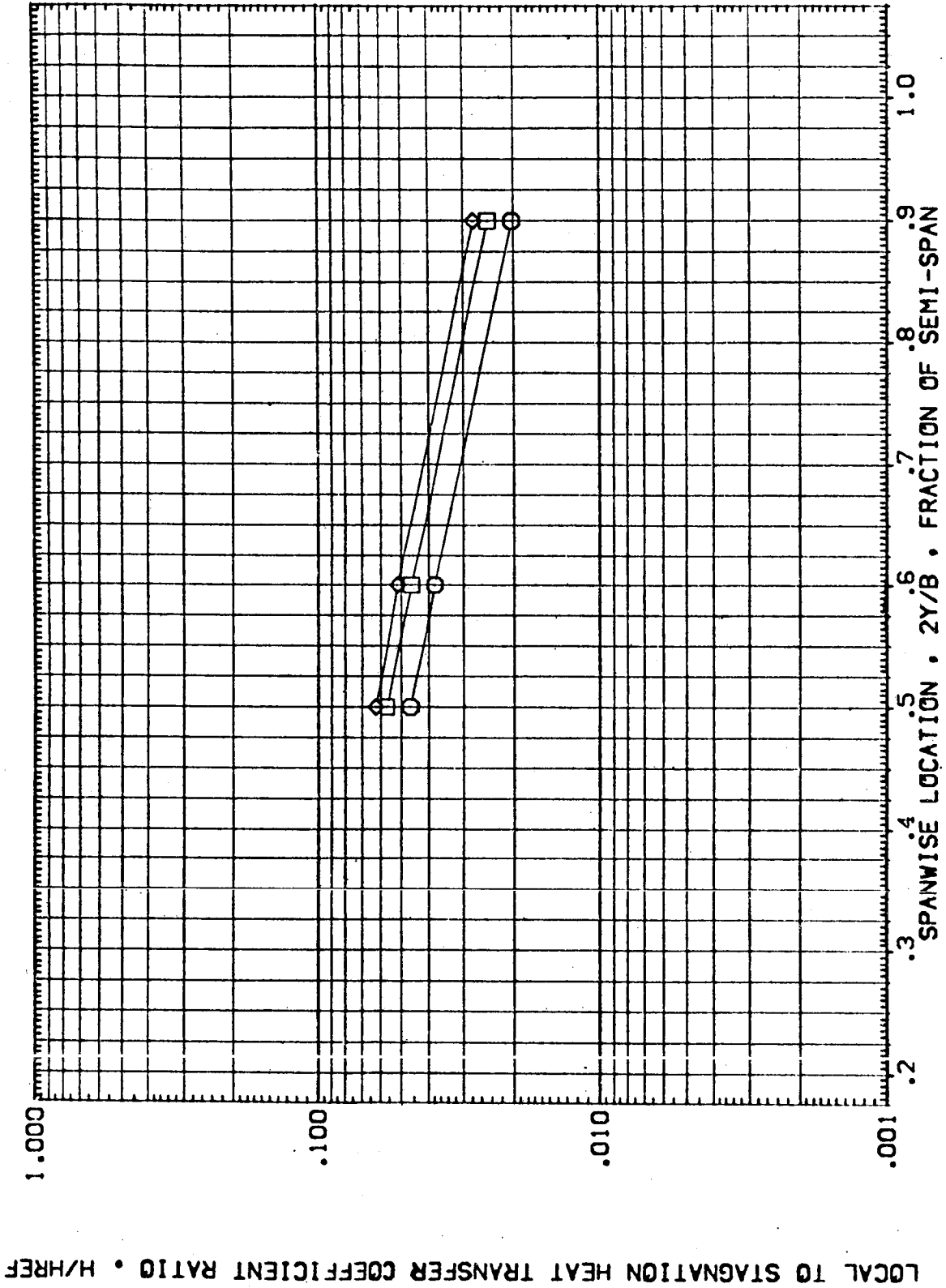


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .600

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
[RE]003	ARC 3.5-178 [H3 O+T+S (TRIPS)]	.000	.000	1.500	1.000
[AE]003	ARC 3.5-178 [H3 O+T+S (TRIPS)]	.000	.000	1.500	.500
[BE]003	ARC 3.5-178 [H3 O+T+S (TRIPS)]	.000	.000	1.500	.650

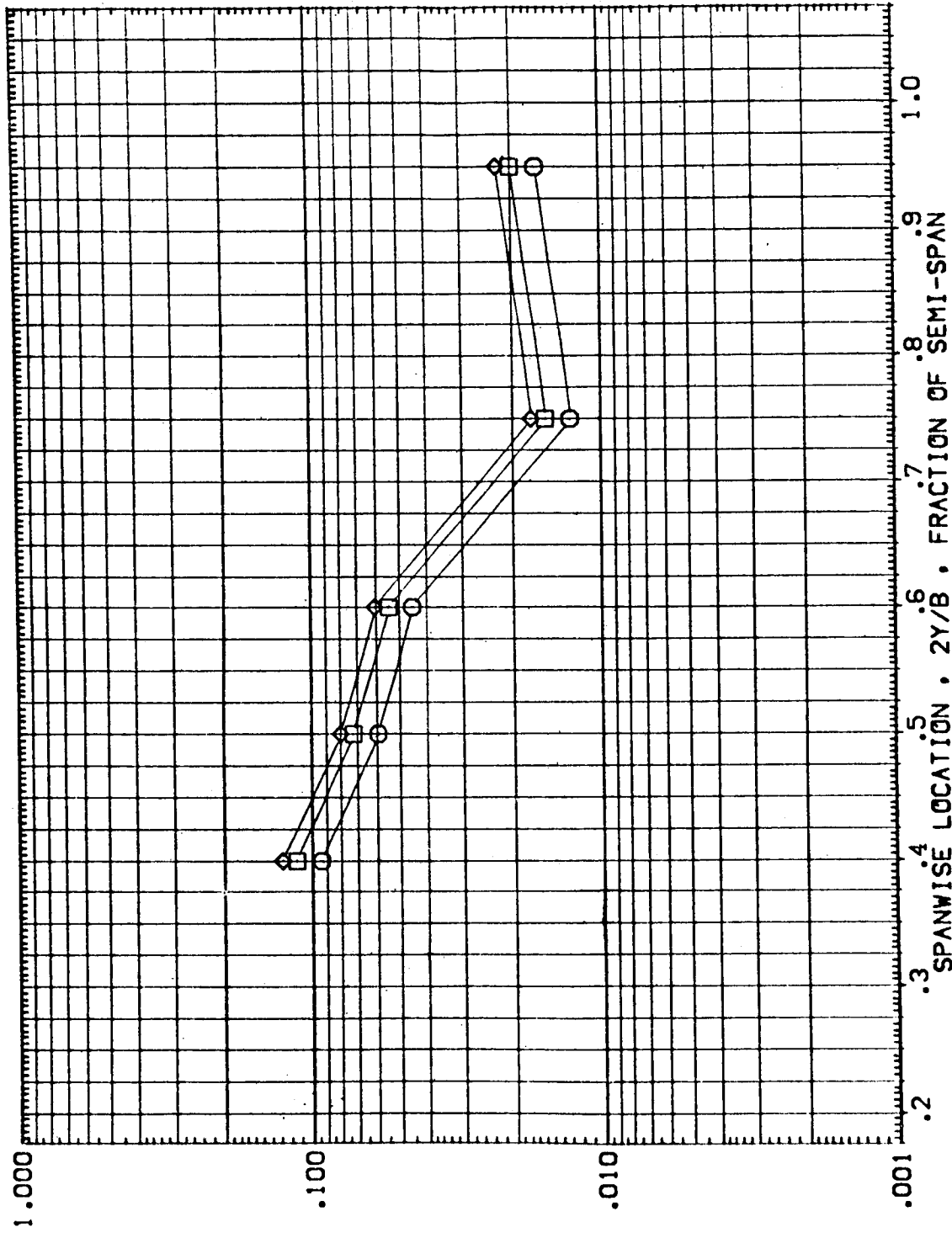


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .700



DATA SET SYMBO. CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 [RE] [G3] } ARC 3.5-178 [H3] 0+1+S (TRIPS) .000 .000 1.500 1.000
 [AE] [G3] } ARC 3.5-178 [H3] 0+1+S (TRIPS) .000 .000 1.500 .900
 [BE] [G3] } ARC 3.5-178 [H3] 0+1+S (TRIPS) .000 .000 1.500 .850

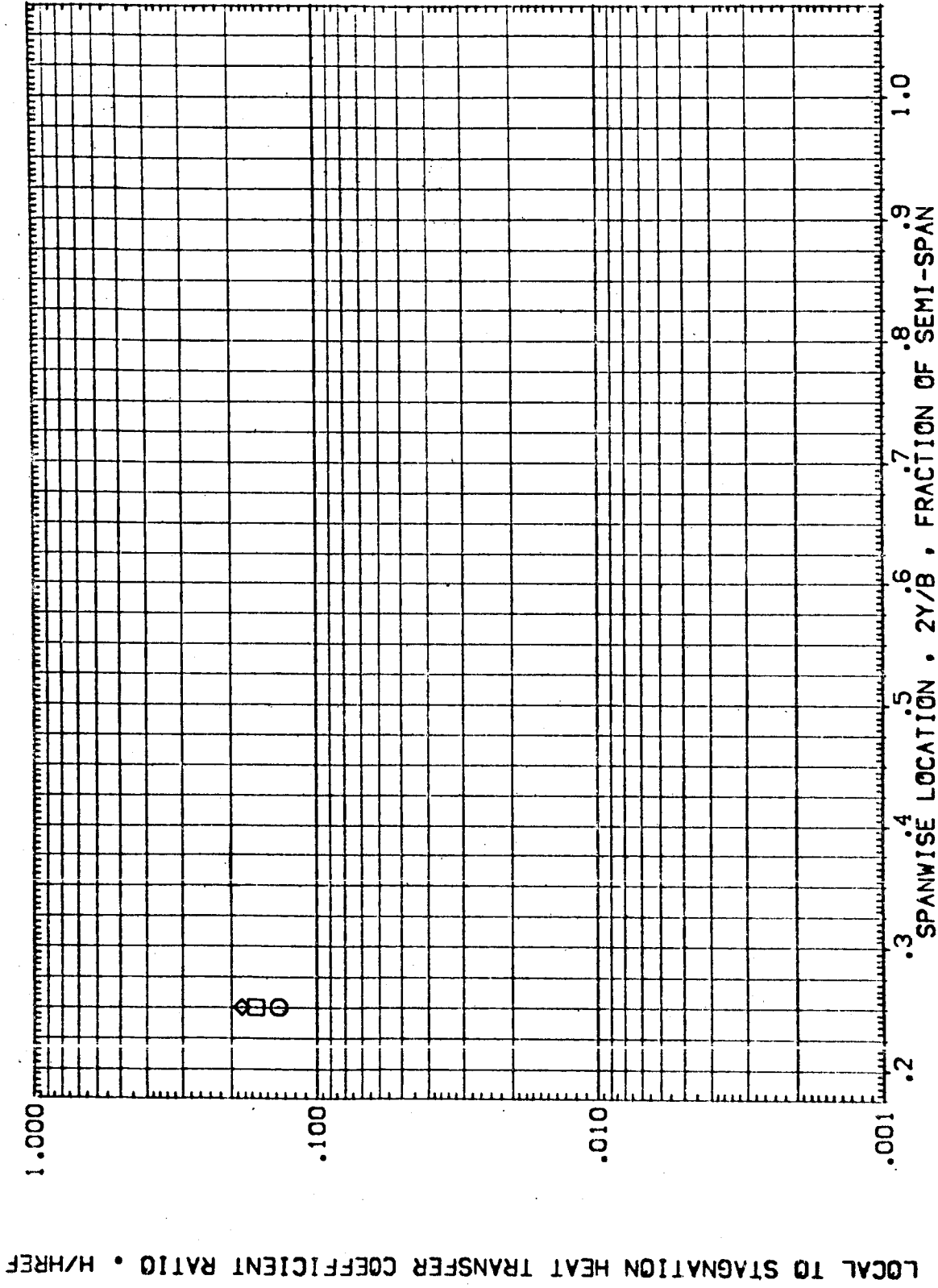


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .736

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE{603} ARC 3.5-178 I-3 C+I+S (TRIPS) .000 .000 1.500 1.000

{AE{603} ARC 3.5-178 I-3 C+I+S (TRIPS) .000 .000 1.500 .900

{BE{603} ARC 3.5-178 I-3 C+I+S (TRIPS) .000 .000 1.500 .850

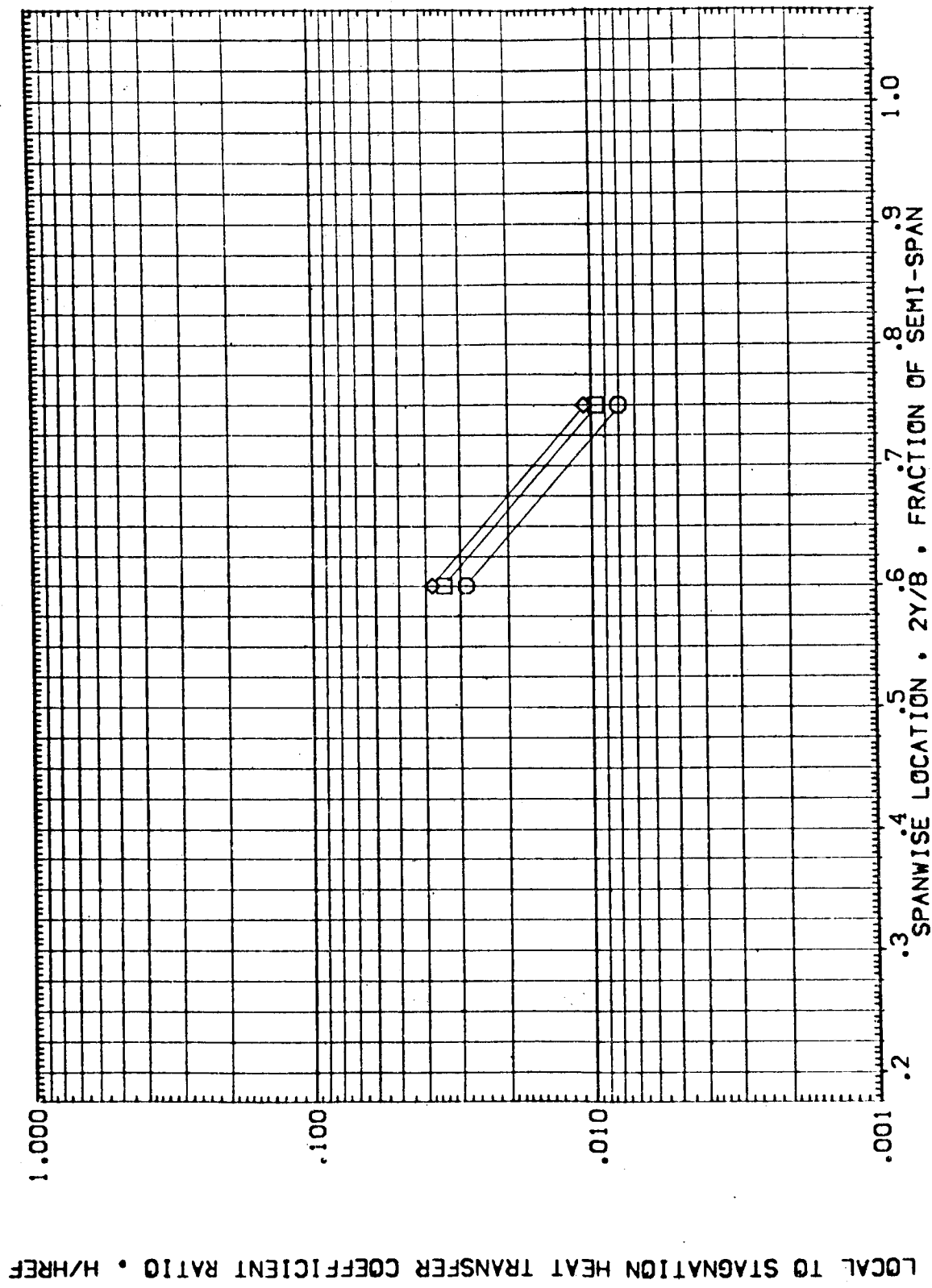


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .800



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{ REI003 } ARC 1:5-178 1+3 0+1+S (TRIPS) .000 .000 1.500 1.000

{ AEI003 } ARC 1:5-178 1+3 0+1+S (TRIPS) .000 .000 1.500 .900

{ BEI003 } ARC 1:5-178 1+3 0+1+S (TRIPS) .000 .000 1.500 .850

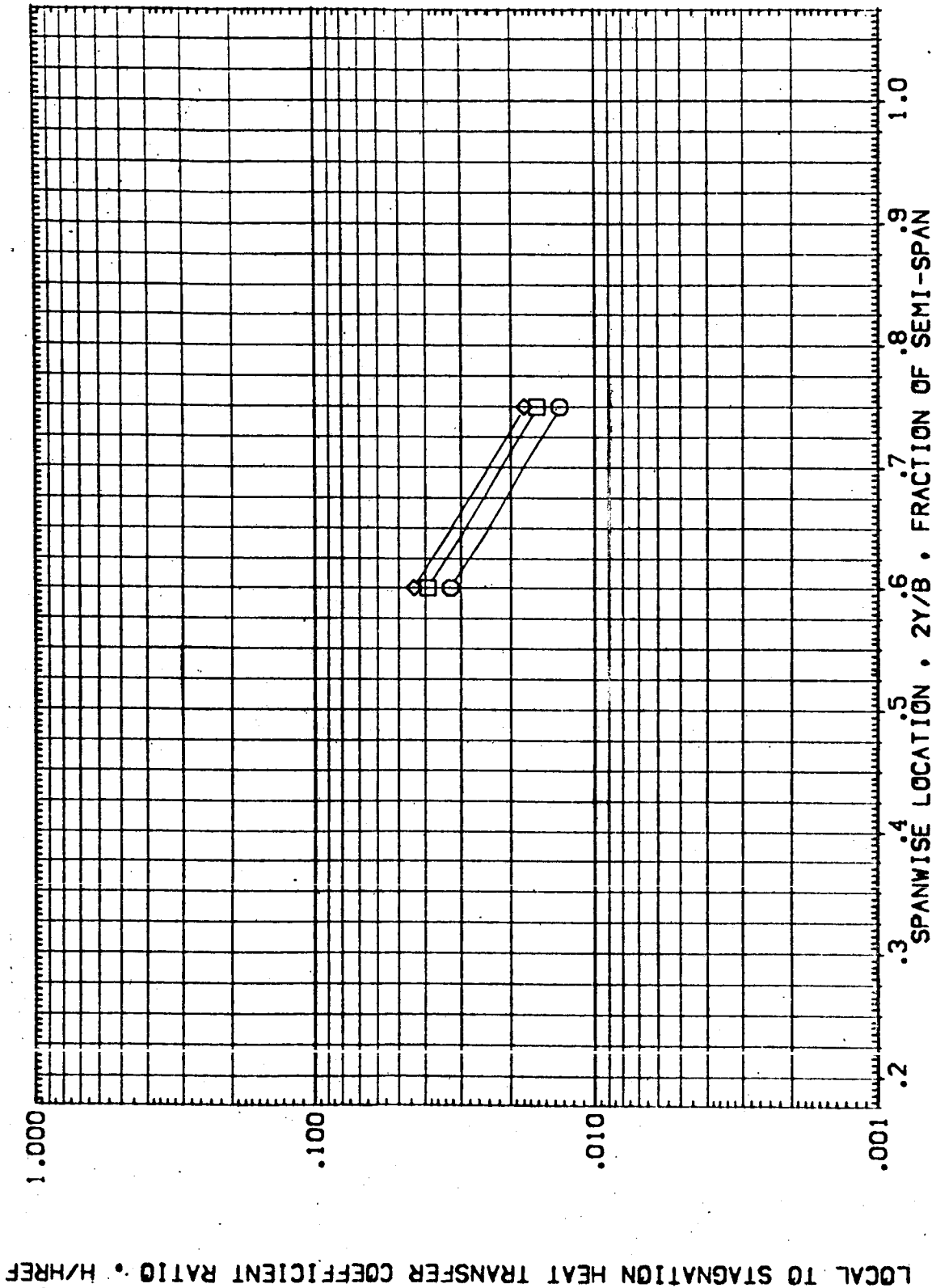


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE|003} □ ARC 3.5-178 I43 O-T+S (TRIPS) .000 .000 1.500 1.000

{AE|003} ○ ARC 3.5-178 I43 O-T+S (TRIPS) .000 .000 1.500 .900

{BE|003} ◇ ARC 3.5-178 I43 O-T+S (TRIPS) .000 .000 1.500 .850

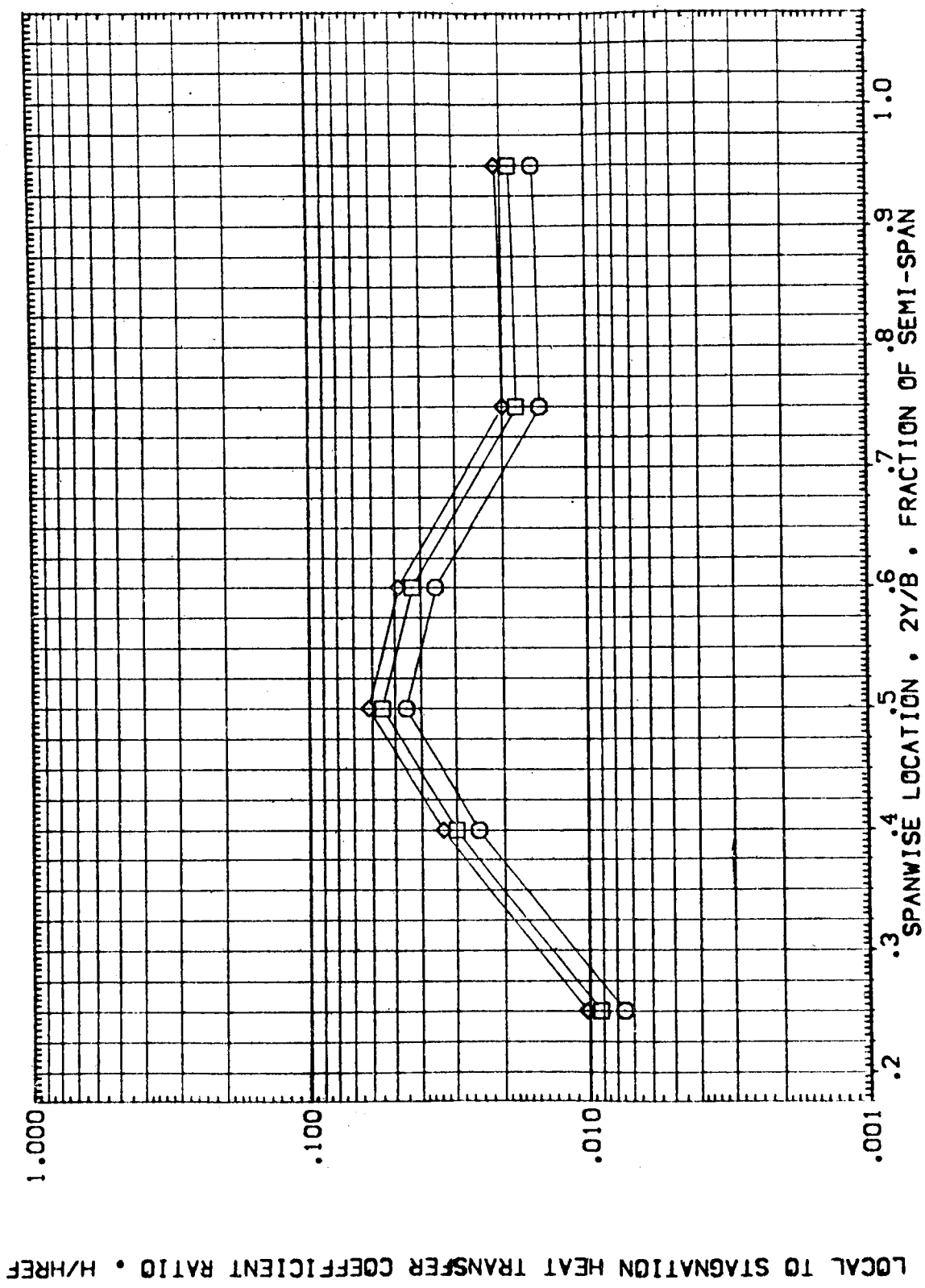


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RM/L HAV/HT

[REIG04] ARC 3.5-178 [H3 0+1+S (TRIPS)] .000 .000 5.000 1.000

[AEIG04] ARC 3.5-178 [H3 0+1+S (TRIPS)] .000 .000 5.000 .900

[BEIG04] ARC 3.5-178 [H3 0+1+S (TRIPS)] .000 .000 5.000 .850

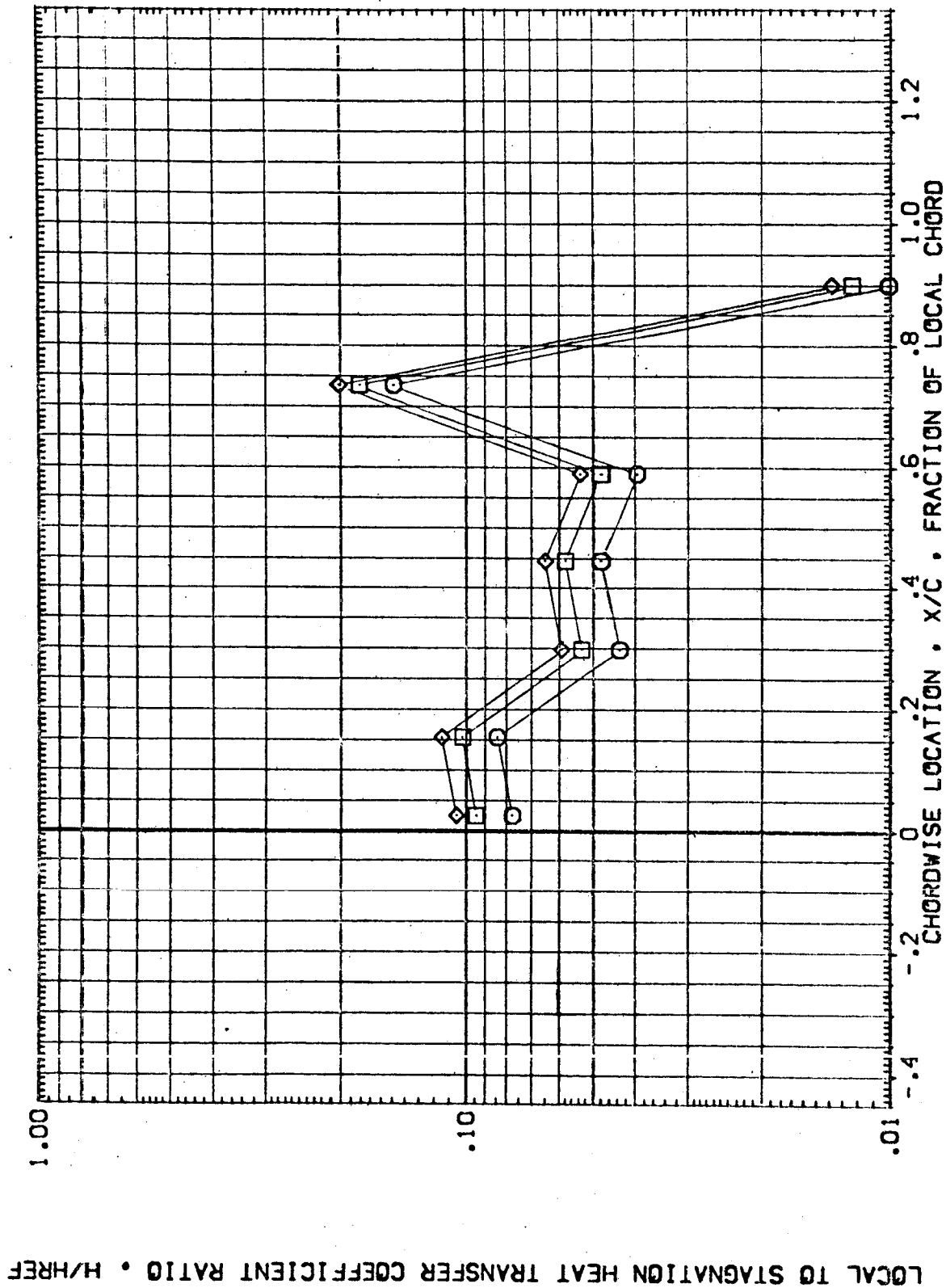


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .250

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM WING BOTTOM ALPHA BETA RN/L HAV/HT
 {RE|G04} ARC 3.5-178 IH3 O-T+S (TRIPS) WING BOTTOM WING BOTTOM .000 .000 5.000 1.000
 {AE|G04} ARC 3.5-178 IH3 O-T+S (TRIPS) WING BOTTOM WING BOTTOM .000 .000 5.000 .900
 {BE|G04} ARC 3.5-178 IH3 O-T+S (TRIPS) WING BOTTOM WING BOTTOM .000 .000 5.000 .850

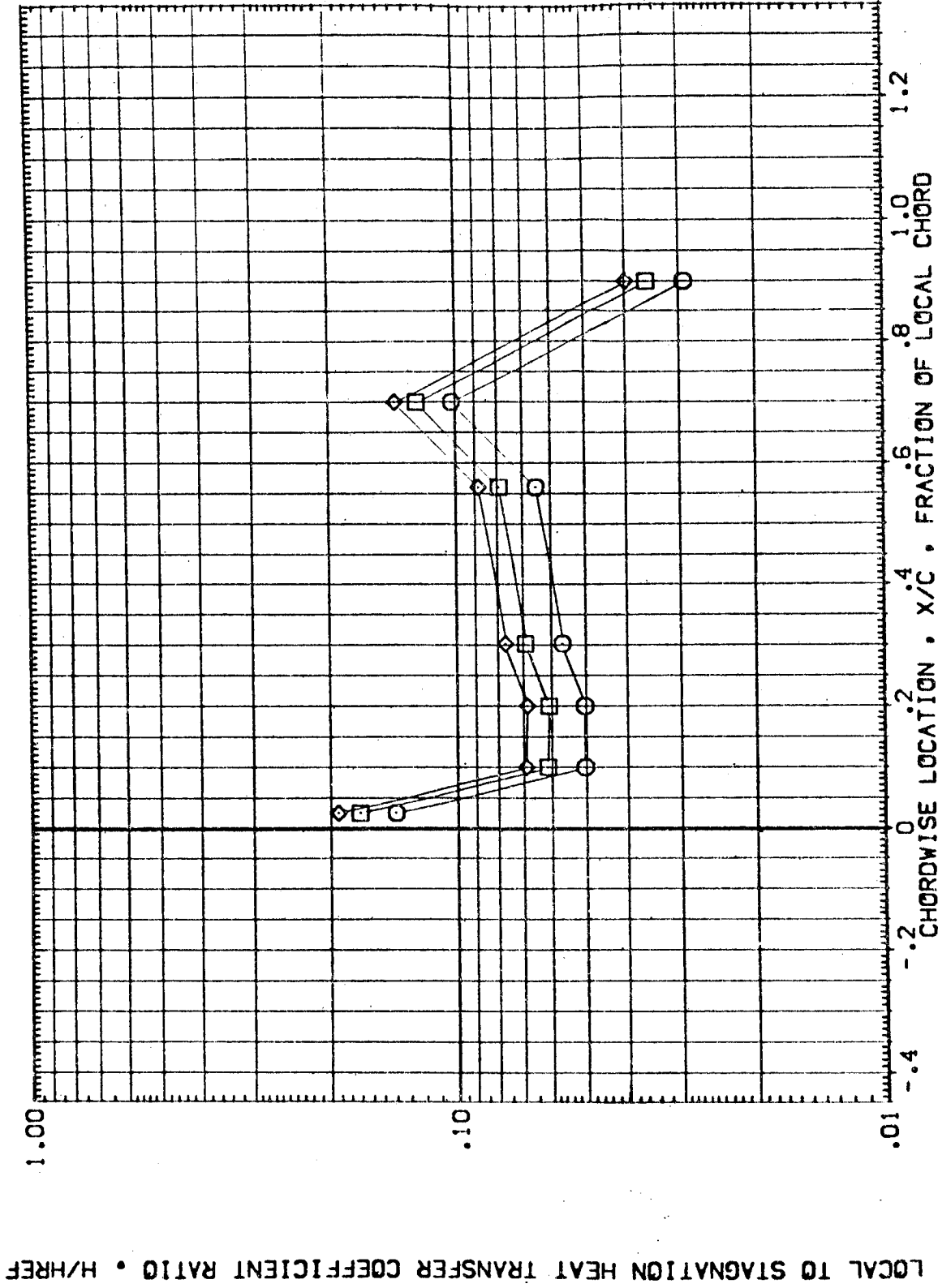


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE|004} ARC 3.5-178 |H3 0-T+S (TRIPS) .000 .000 5.000 1.000

{AE|004} ARC 3.5-178 |H3 0-T+S (TRIPS) .000 .000 5.000 .900

{BE|004} ARC 3.5-178 |H3 0-T+S (TRIPS) .000 .000 5.000 .850

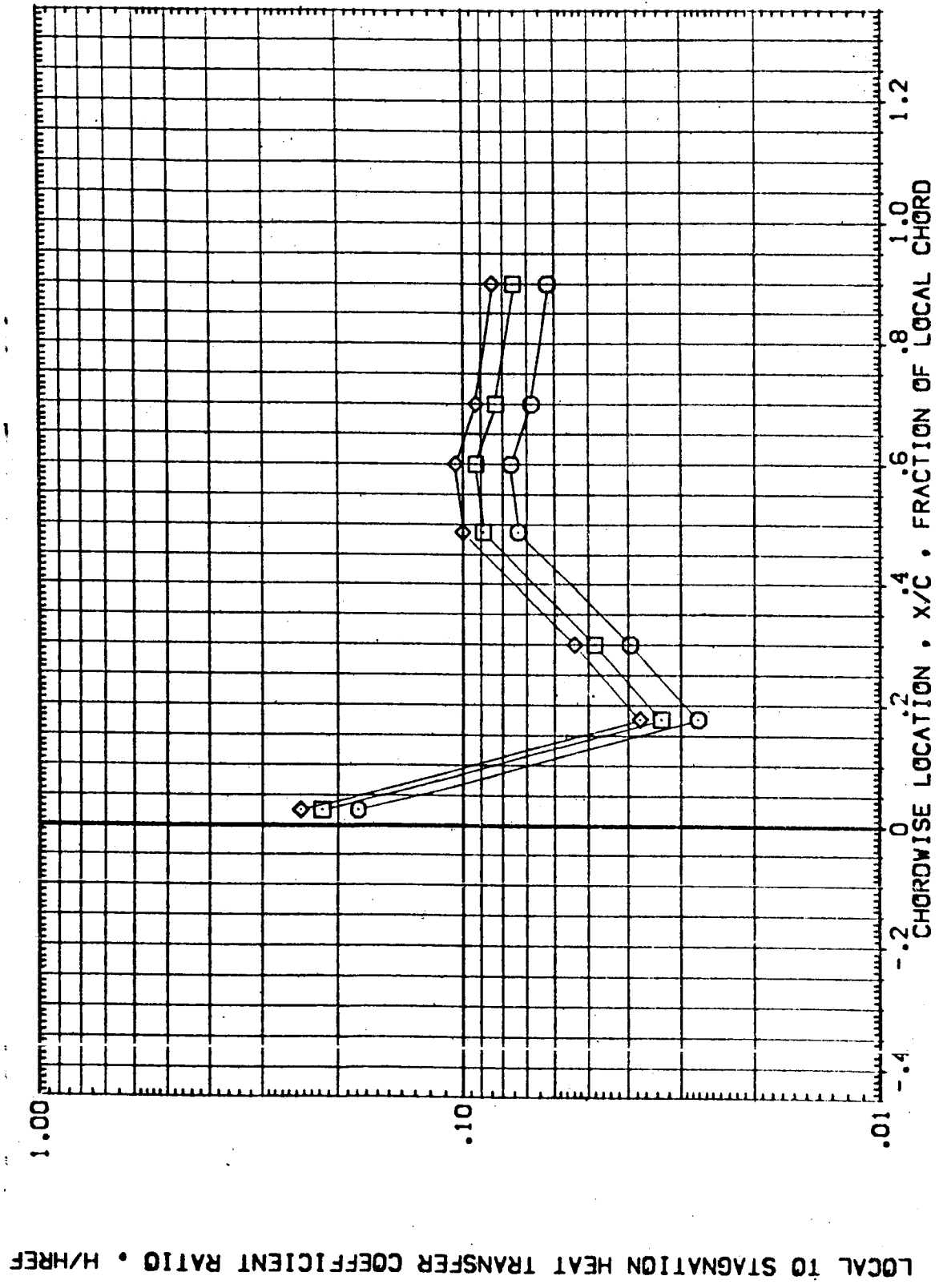


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .500

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

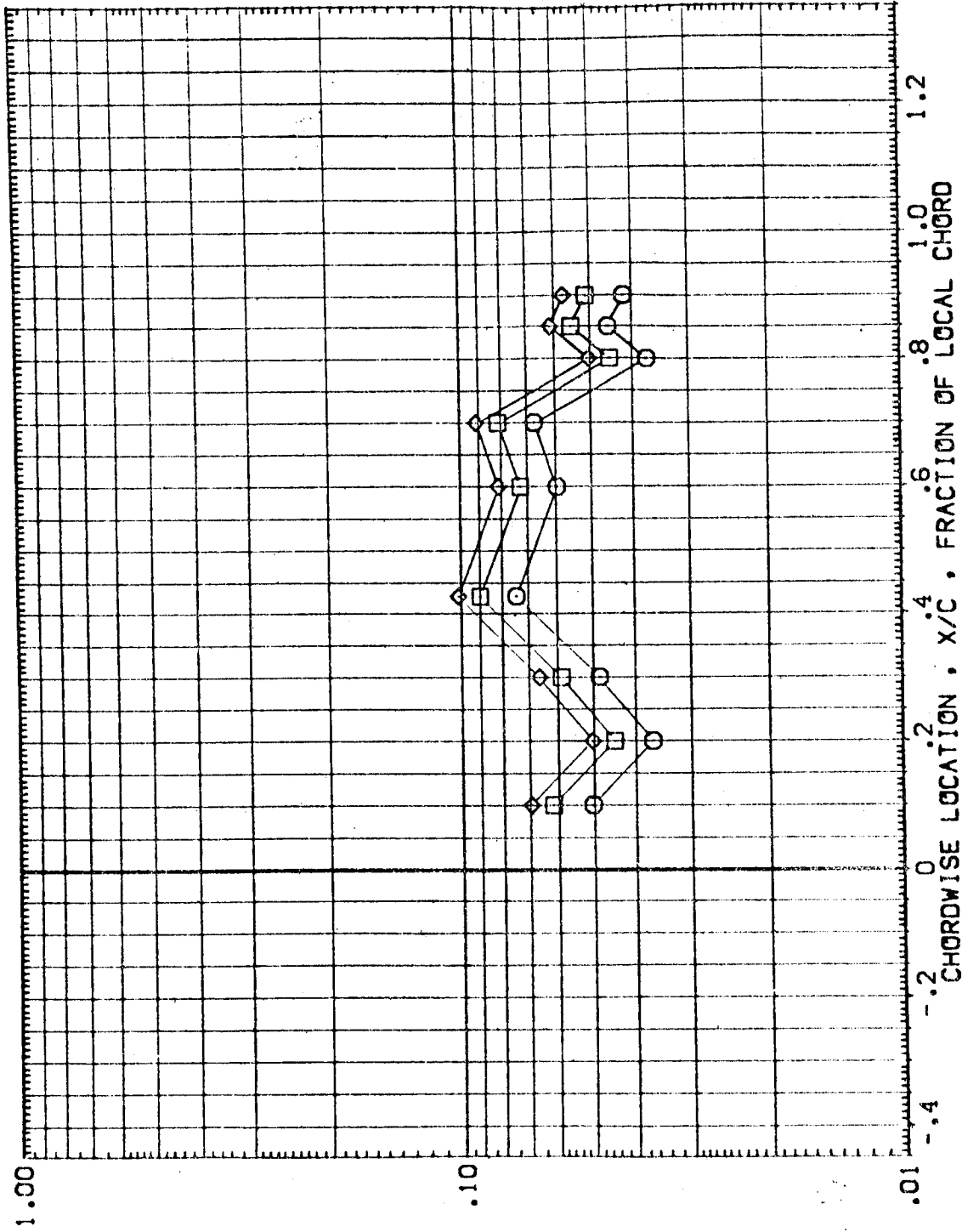


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL: [RE]G04, [AE]G04, [BE]G04
 CONFIGURATION DESCRIPTION: ARC 3.5-178 H3 C+T+S (TRIPS), ARC 3.5-178 H3 C+T+S (TRIPS), ARC 3.5-178 H3 C+T+S (TRIPS)
 WING BOTTOM: WING BOTTOM, WING BOTTOM, WING BOTTOM
 ALPHA: .000, .000, .000
 BETA: .000, .000, .000
 RV/L: 5.000, 5.000, 5.000
 HAW/HT: 1.000, .500, .650



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT
 [RE|G04] [AE|G04] [BE|G04] ARC 1:5-178 IH3 0-T+S (TR|PS) VING BOTTOM .000 .000 5.000 1.000
 [AE|G04] [BE|G04] ARC 1:5-178 IH3 0-T+S (TR|PS) VING BOTTOM .000 .000 5.000 .900
 [BE|G04] [AE|G04] ARC 1:5-178 IH3 0-T+S (TR|PS) VING BOTTOM .000 .000 5.000 .850

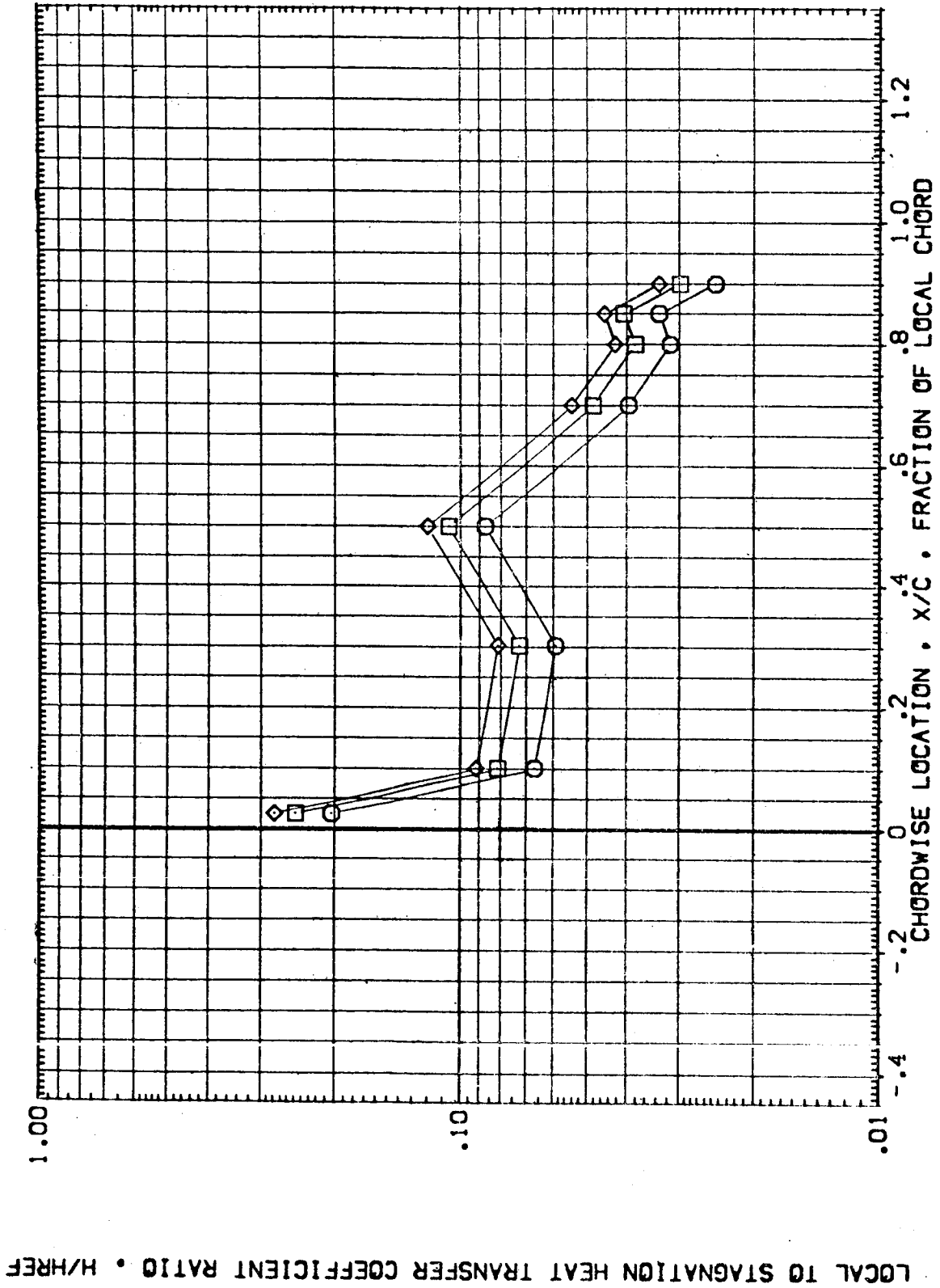


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .750

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA $RNVL$ HAV/HT
 [BE] [G04] ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 1.000
 [AL] [G04] ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 .900
 [BE] [G04] ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 .850

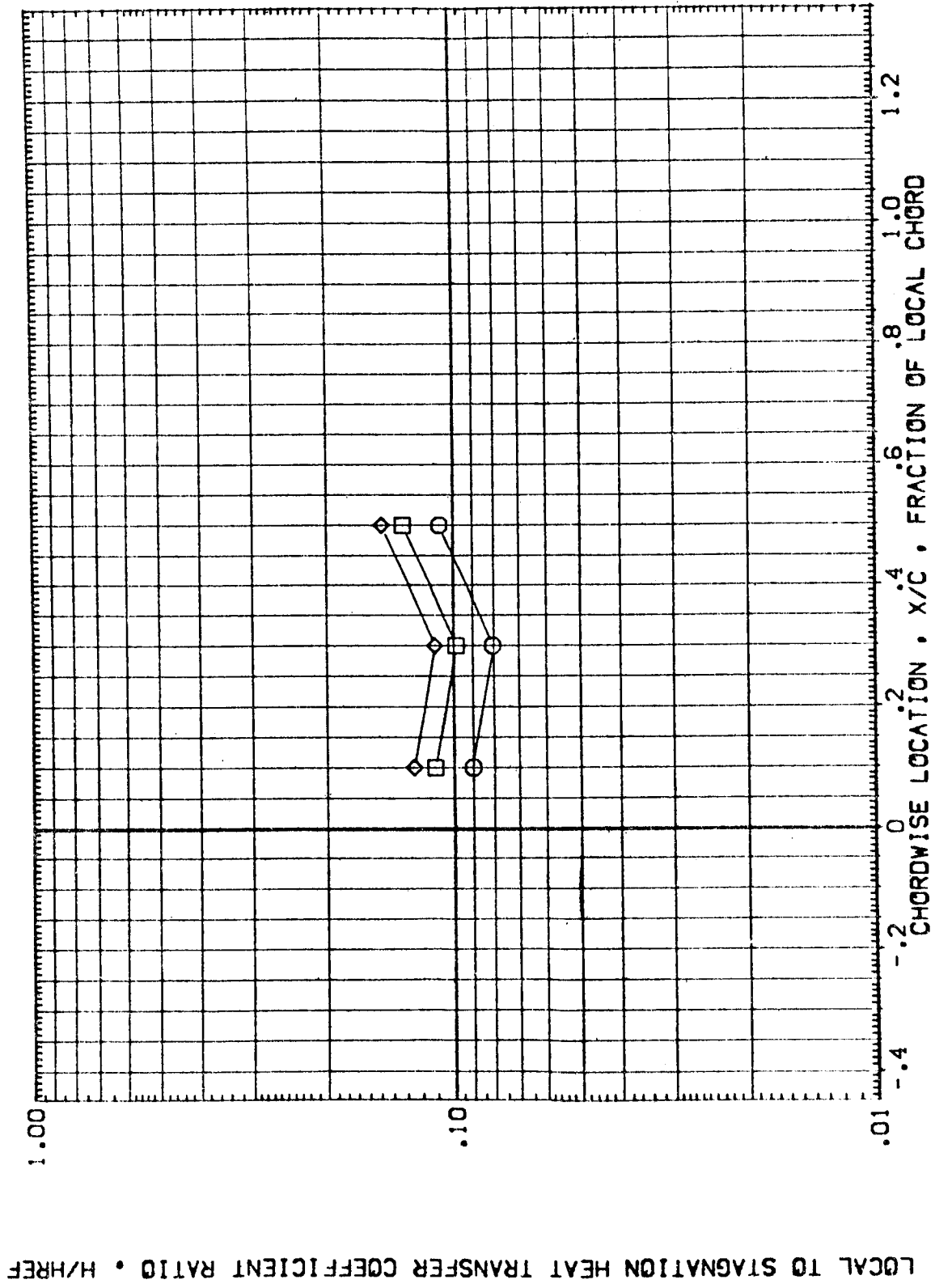


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 $2Y/B = .850$

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE] [G04] [O] ARC 3.5-178 143 O-T+S (TRIPS) WING BOTTOM
 [AE] [G04] [O] ARC 3.5-178 143 O-T+S (TRIPS) WING BOTTOM
 [BE] [G04] [O] ARC 3.5-178 143 O-T+S (TRIPS) WING BOTTOM

ALPHA BETA R/C L MACH/REF
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

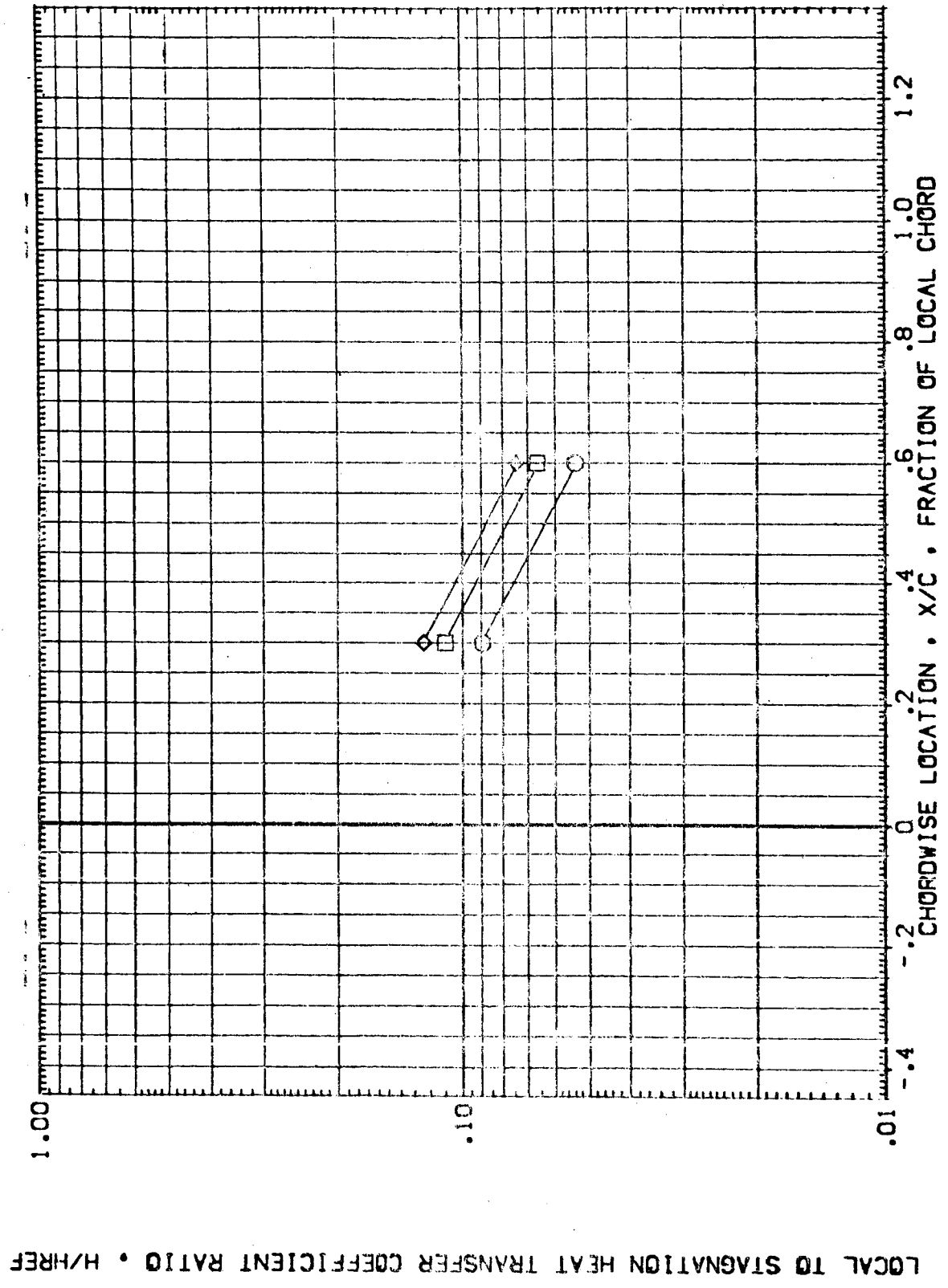


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .900

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

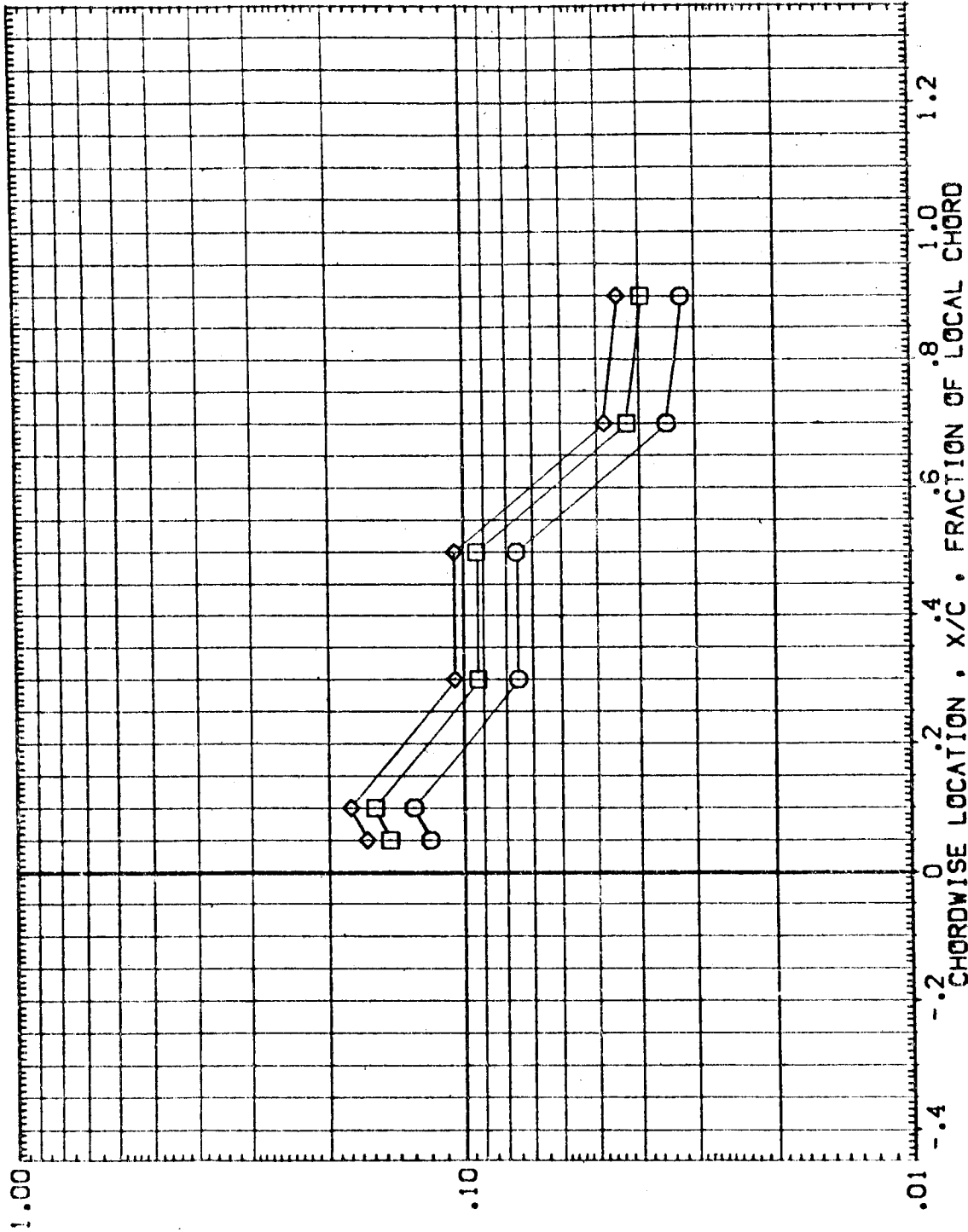


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .950

DATA SET SYMBOL: (RE|G04) (AE|G04) (BE|G04) CONFIGURATION DESCRIPTION: ARC 3.5-178 |H3 O+I+S (TR|PS) WING BOTTOM VING BOTTOM ALPHA: .000 BETA: .000 HAV/HI: 1.000 RSVL: 5.000 FSVL: 5.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT
 [RE|GO4] [AE|GO4] [BE|GO4] ARC 3.5-178 I+3 0+1+S (TRIPS) VING BOTTOM 1.000
 [RE|GO4] [AE|GO4] [BE|GO4] ARC 3.5-178 I+3 0+1+S (TRIPS) VING BOTTOM .900
 [RE|GO4] [AE|GO4] [BE|GO4] ARC 3.5-178 I+3 0+1+S (TRIPS) VING BOTTOM .850

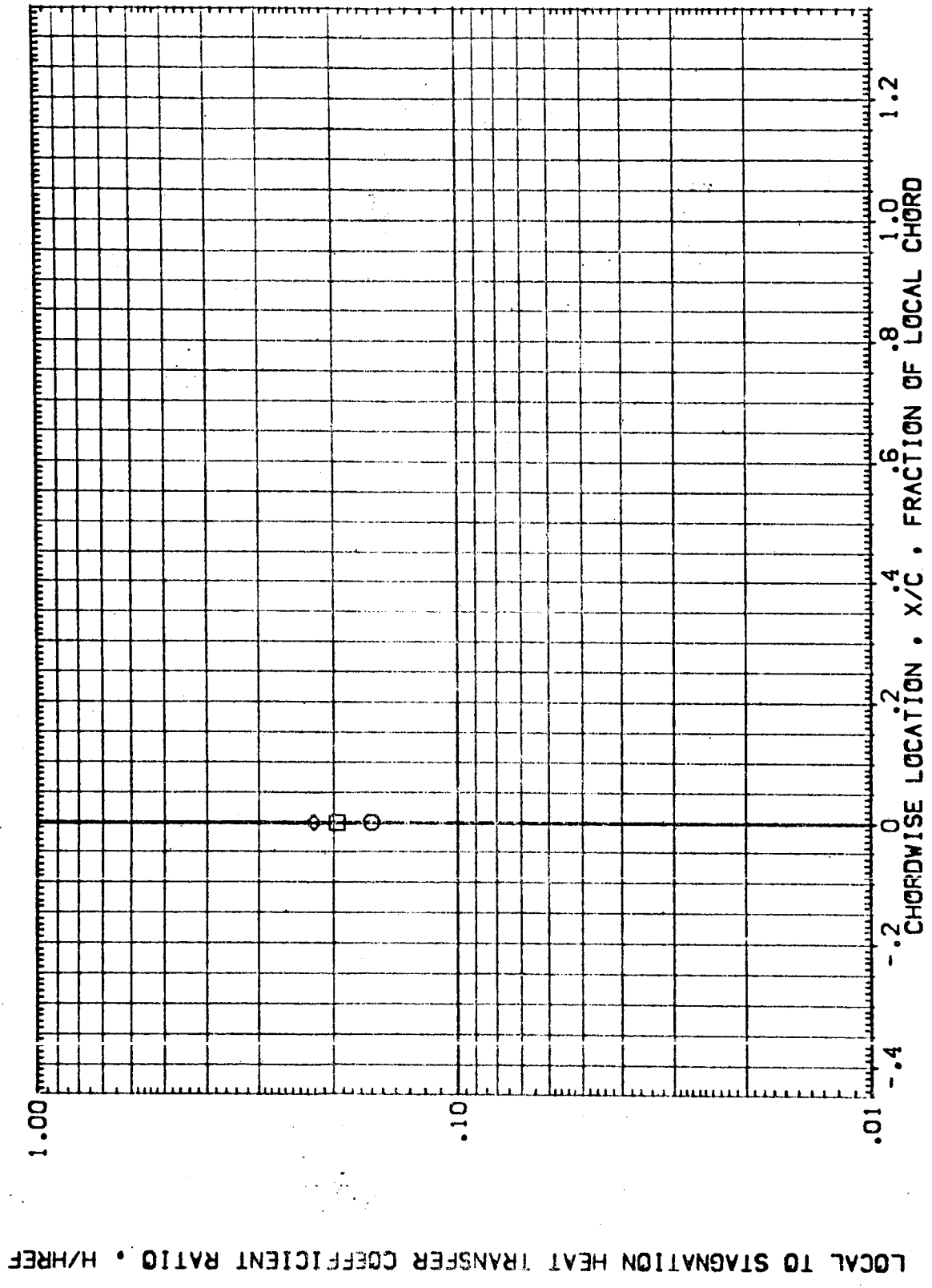


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .966

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

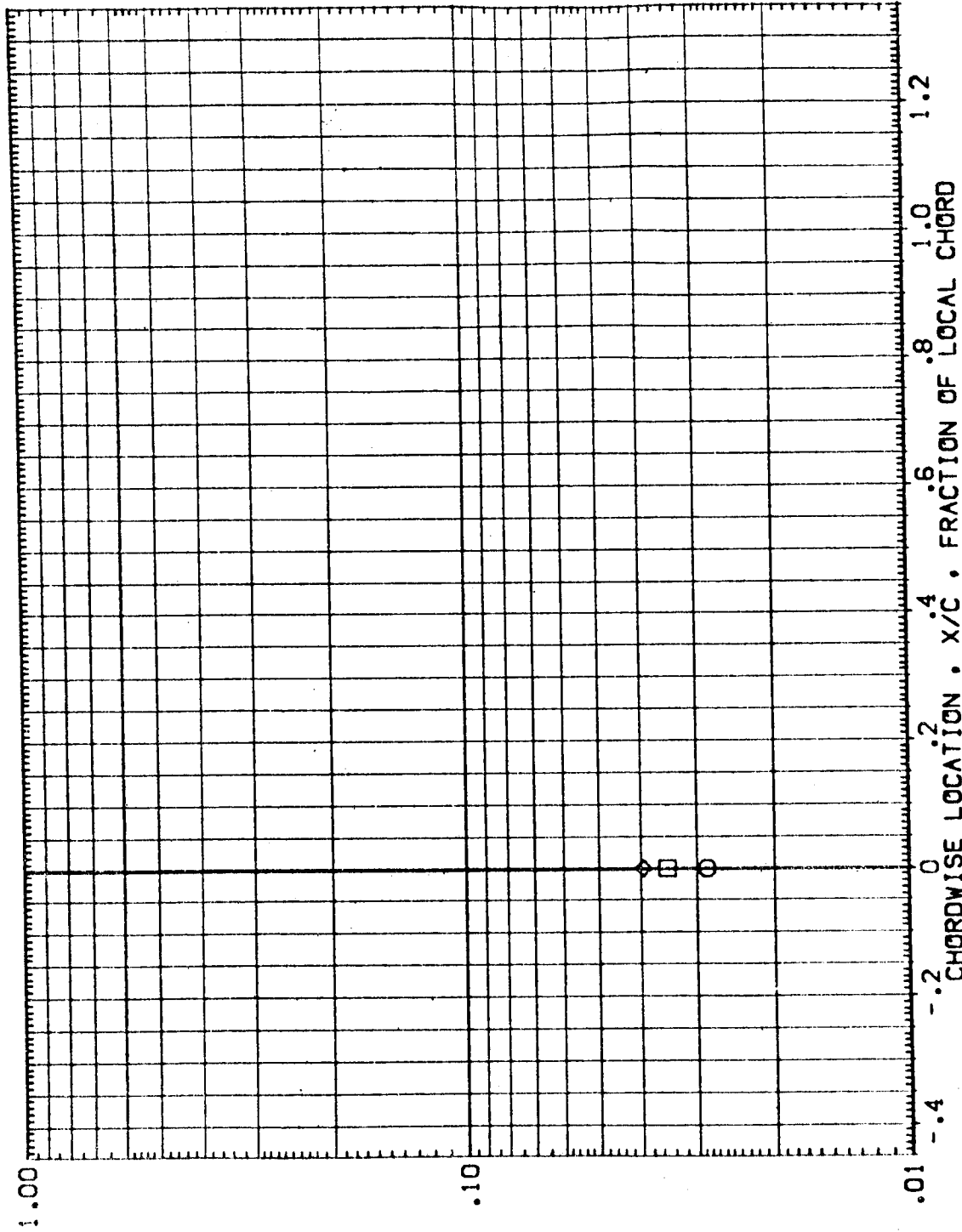


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .993

ALPHA .000
 BETA .000
 RNM/L 5.000
 HAW/FT 1.000

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

CONFIGURATION DESCRIPTION
 ARC 3.5-178 H3 0+1+S (TRIPS)
 ARC 3.5-178 H3 0+1+S (TRIPS)
 ARC 3.5-178 H3 0+1+S (TRIPS)

DATA SET SYMBOL
 [RE104] □
 [AE104] ◇
 [BE104] ○



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBO.	CONFIGURATION DESCRIPTION	WING BOTTOM	WING BOTTOM	WING BOTTOM	ALPHA	BETA	RV/L	HAY/HT
{RE G04}	ARC 3.5-178 IH3 0+1+S (TRIPS)	VING BOTTOM	VING BOTTOM	VING BOTTOM	.000	.000	5.000	1.000
{AE G04}	ARC 3.5-178 IH3 0+1+S (TRIPS)	VING BOTTOM	VING BOTTOM	VING BOTTOM	.000	.000	5.000	.900
{BE G04}	ARC 3.5-178 IH3 0+1+S (TRIPS)	VING BOTTOM	VING BOTTOM	VING BOTTOM	.000	.000	5.000	.850

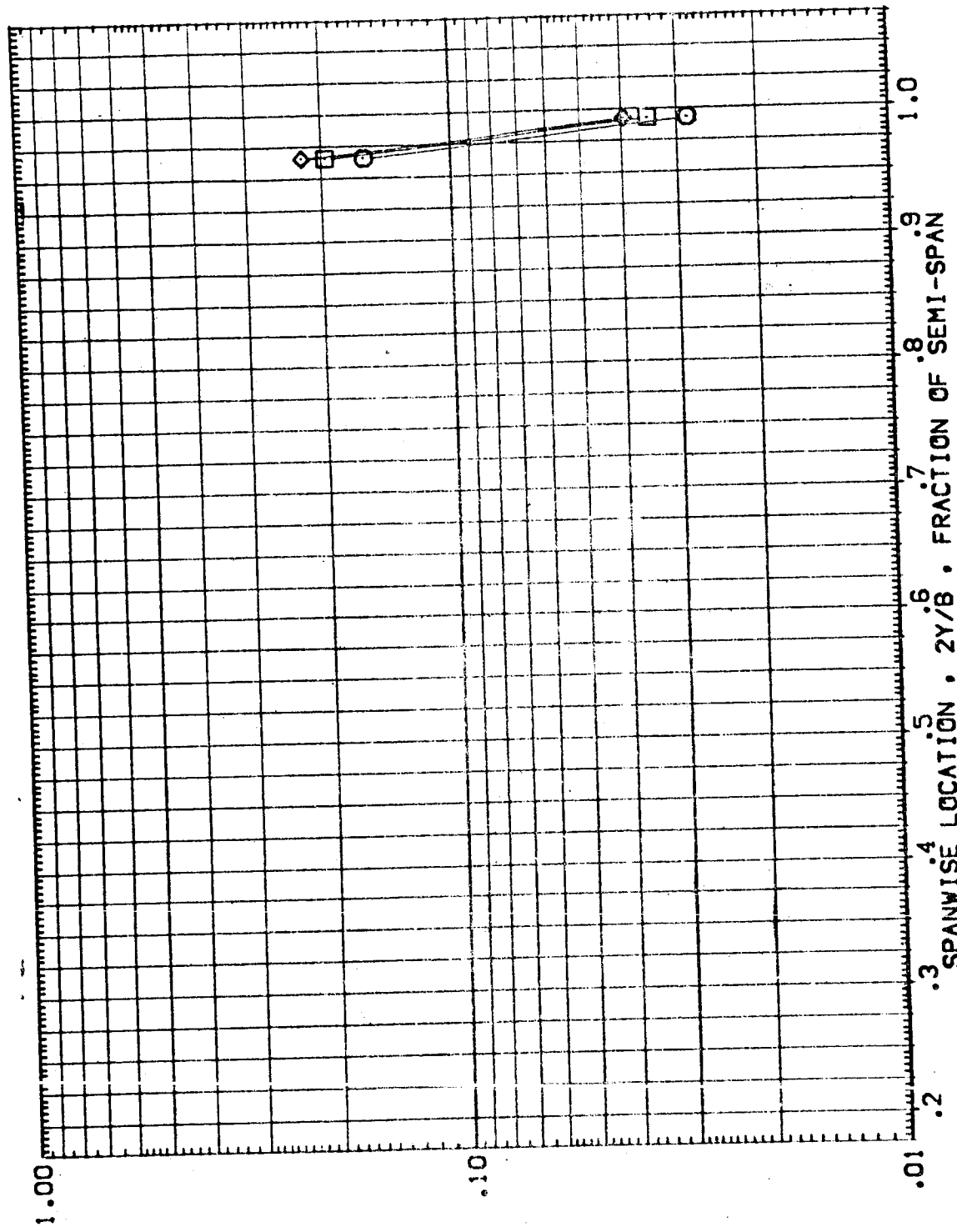


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .000

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[RE|004] [AE|004] [BE|004]

○ □ ◇

ARC 3.5-178 [H3 O+T+S [TRIPS] WING BOTTOM

ARC 3.5-178 [H3 O+T+S [TRIPS] WING BOTTOM

ALPHA .000 .000 .000

BETA .000 .000 .000

RN/L 5.000 5.000 5.000

HAW/HT 1.000 .900 .850

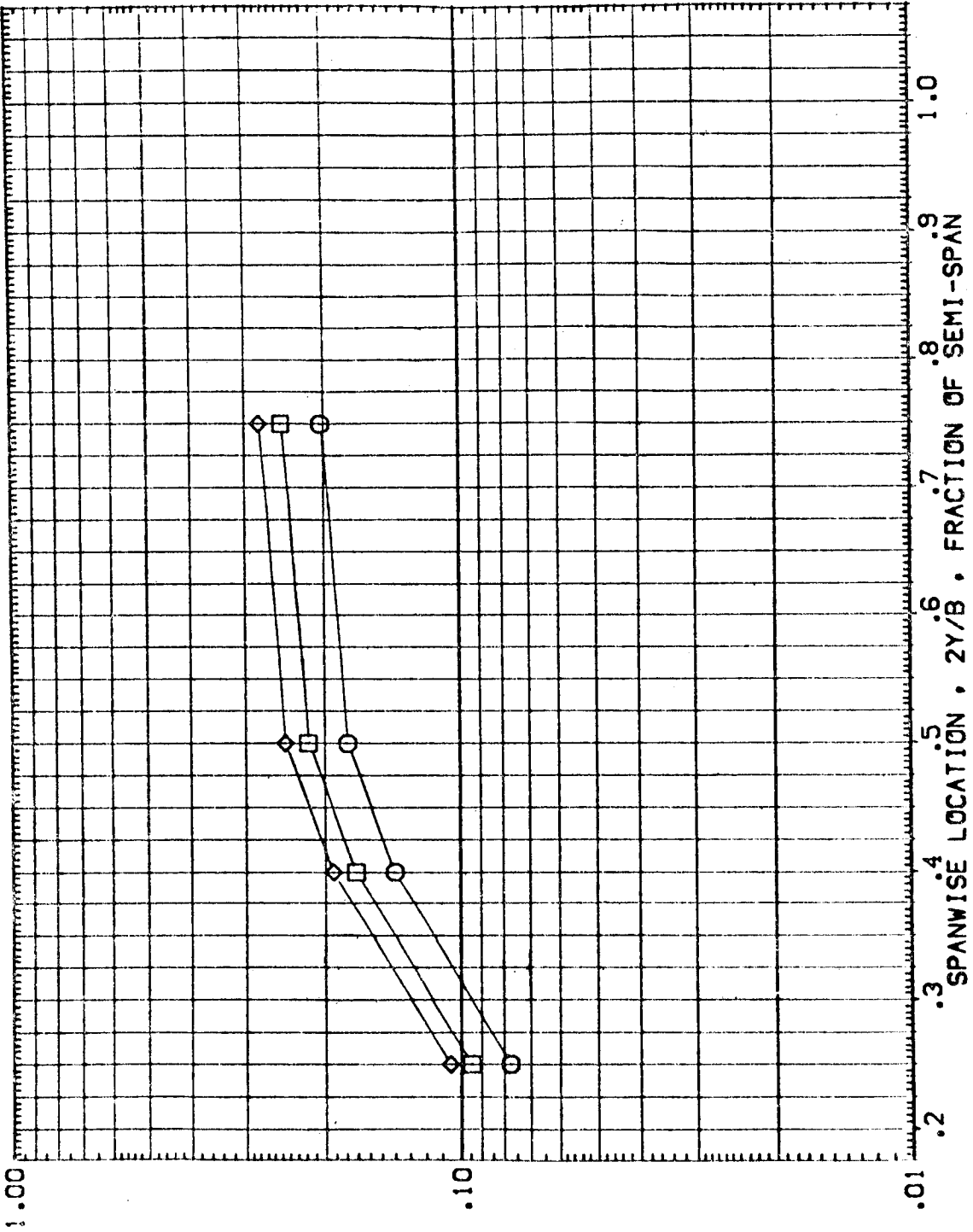


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .025

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE1G04) ARC 3.5-178 [H3 O+T+S (TRIPS)] .000 .000 5.000 1.000

(AE1G04) ARC 3.5-178 [H3 O+T+S (TRIPS)] .000 .000 5.000 .500

(BE1G04) ARC 3.5-178 [H3 O+T+S (TRIPS)] .000 .000 5.000 .650

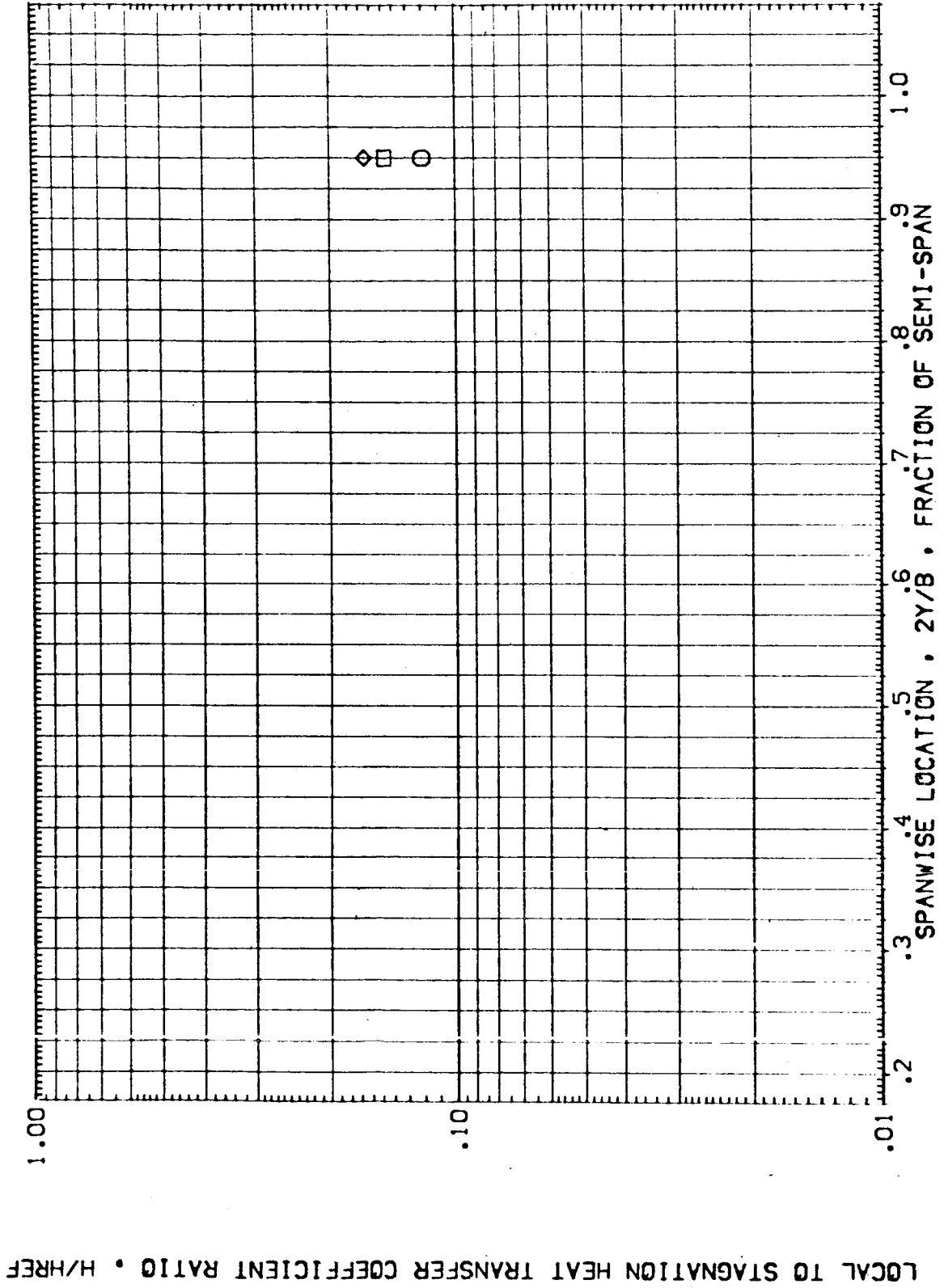


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L HAV/HT
 [RE1604] ARC 3.5-178 [H3 0+1+S (TRIPS)] WING BOTTOM .000 .000 5.000 1.000
 [AE1604] ARC 3.5-178 [H3 0+1+S (TRIPS)] WING BOTTOM .000 .000 5.000 .900
 [BE1604] ARC 3.5-178 [H3 0+1+S (TRIPS)] WING BOTTOM .000 .000 5.000 .850

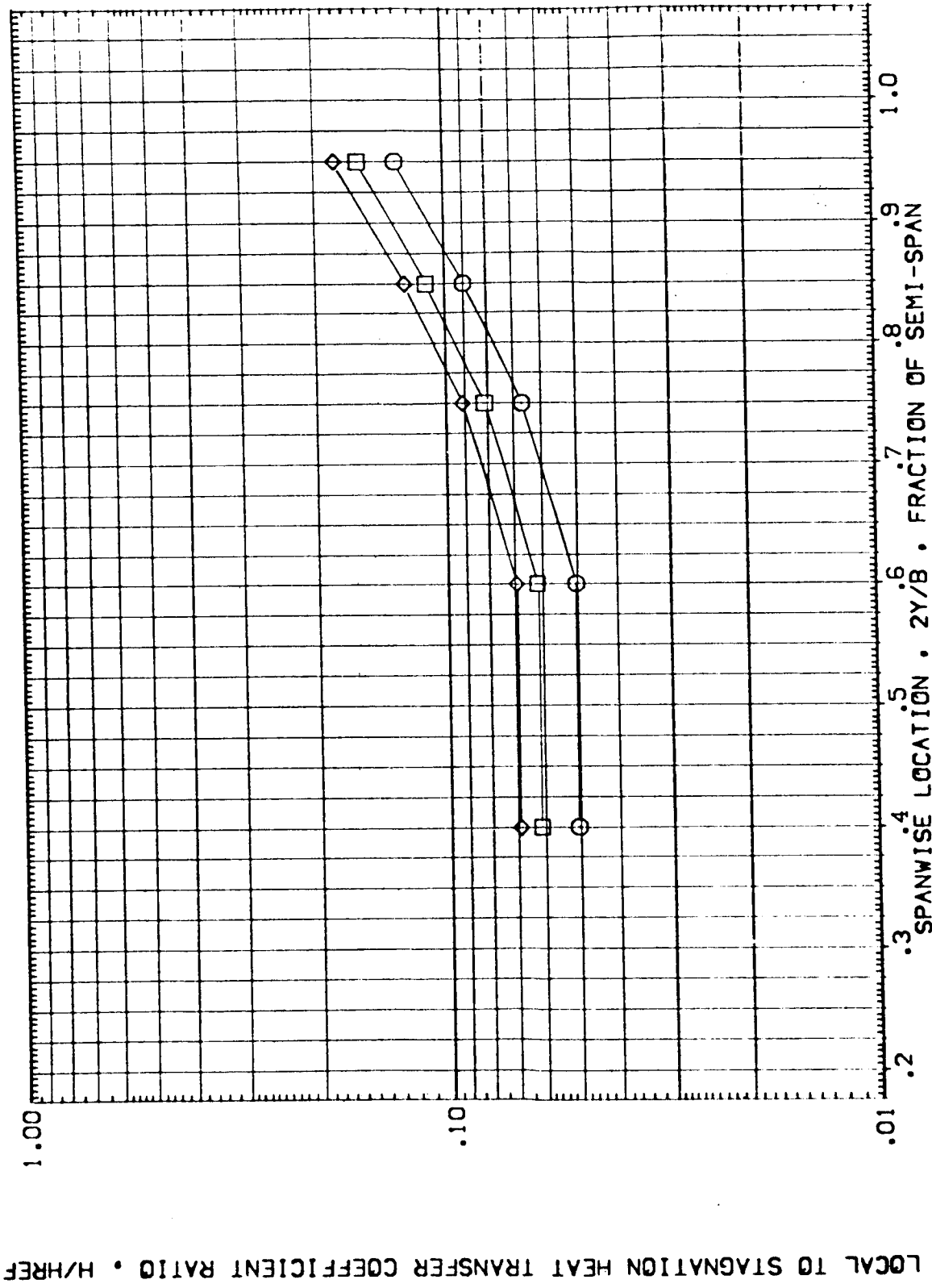


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAW/HT

(RE|GO4) ARC 3.5-178 I43 O+T+S (TRIPS) .000 .000 5.000 1.000

(AE|GO4) ARC 3.5-178 I43 O+T+S (TRIPS) .000 .000 5.000 .900

(BE|GO4) ARC 3.5-178 I43 O+T+S (TRIPS) .000 .000 5.000 .850

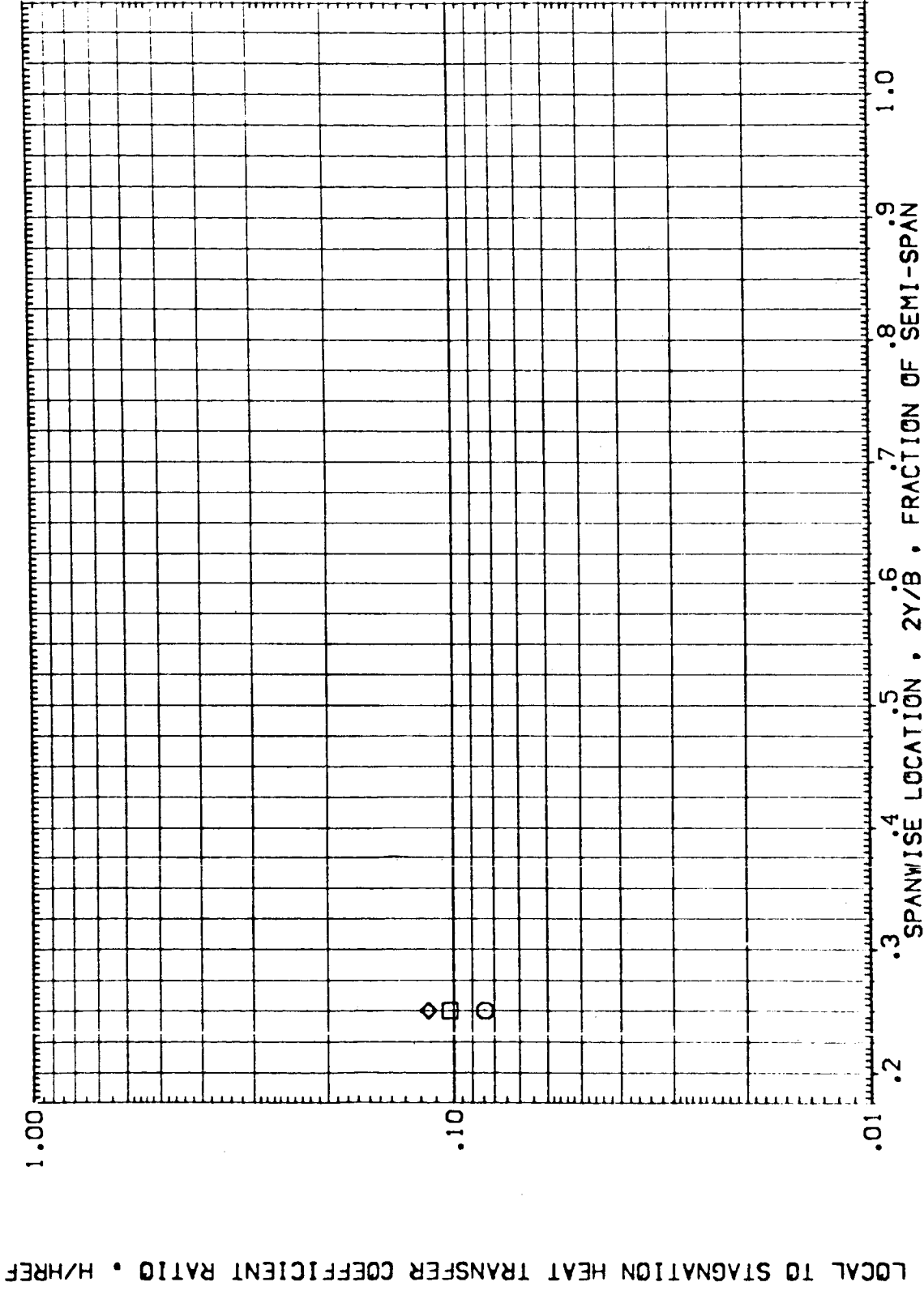


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .153

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L HAV/HT
 (BE:G04) ARC 3.5-178 I43 O+T+S (TRIPS) WING BOTTOM .000 .000 5.000 1.000
 (AE:G04) ARC 3.5-178 I43 O+T+S (TRIPS) WING BOTTOM .000 .000 5.000 .900
 (BE:G04) ARC 3.5-178 I43 O+T+S (TRIPS) WING BOTTOM .000 .000 5.000 .850

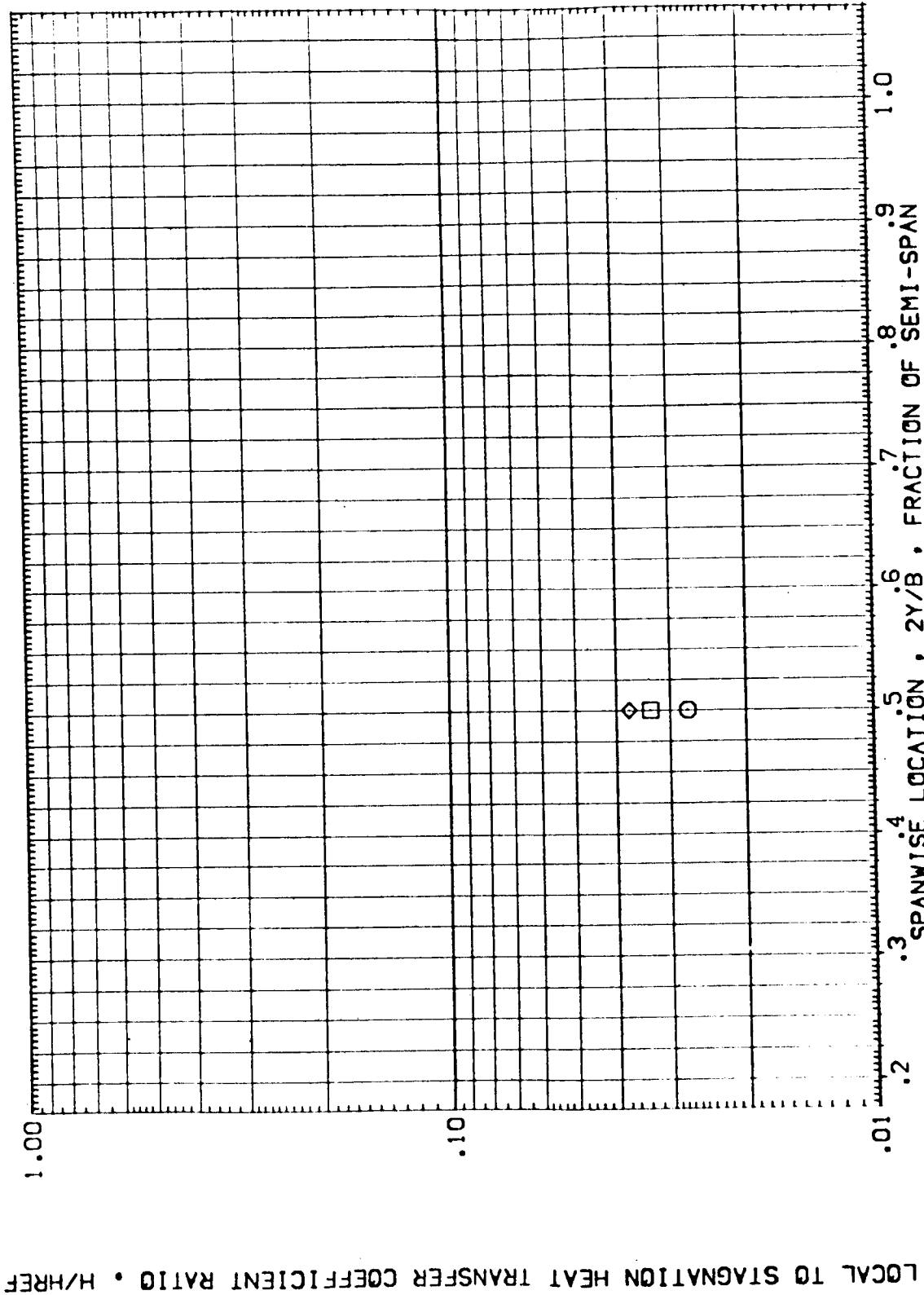


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .177

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

(RE|G04) ARC 3.5-178 I+3 0+1+S (TRIPS) .000 .000 5.000 1.000

(AF|G04) ARC 3.5-178 I+3 0+1+S (TRIPS) .000 .000 5.000 .900

(BE|G04) ARC 3.5-178 I+3 0+1+S (TRIPS) .000 .000 5.000 .850

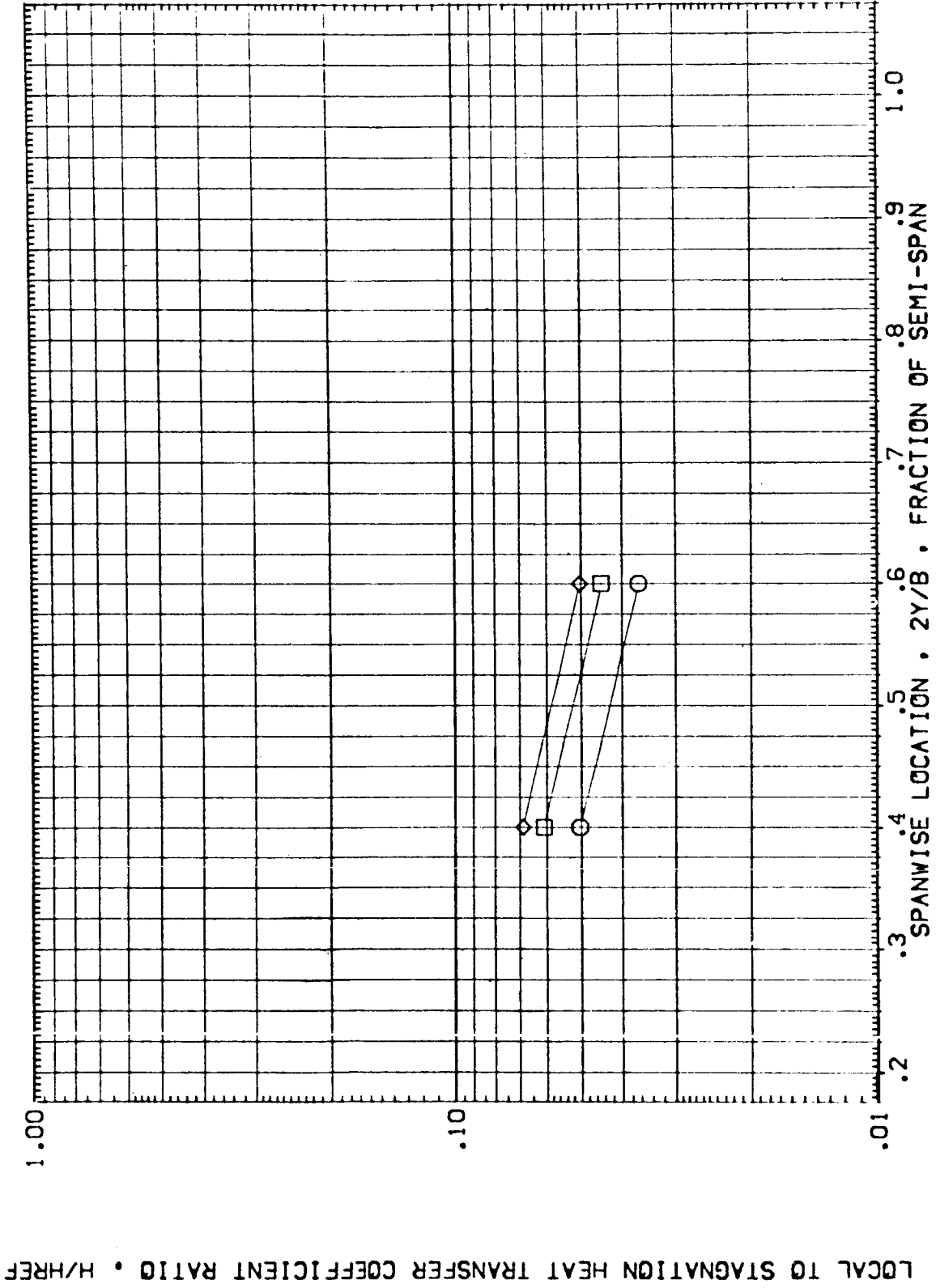


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

{RE|G04} [H3 0-T+S (TRIPS)] .000 .000 5.000 1.000

{AE|G04} [H3 0-T+S (TRIPS)] .000 .000 5.000 .900

{BE|G04} [H3 0-T+S (TRIPS)] .000 .000 5.000 .650

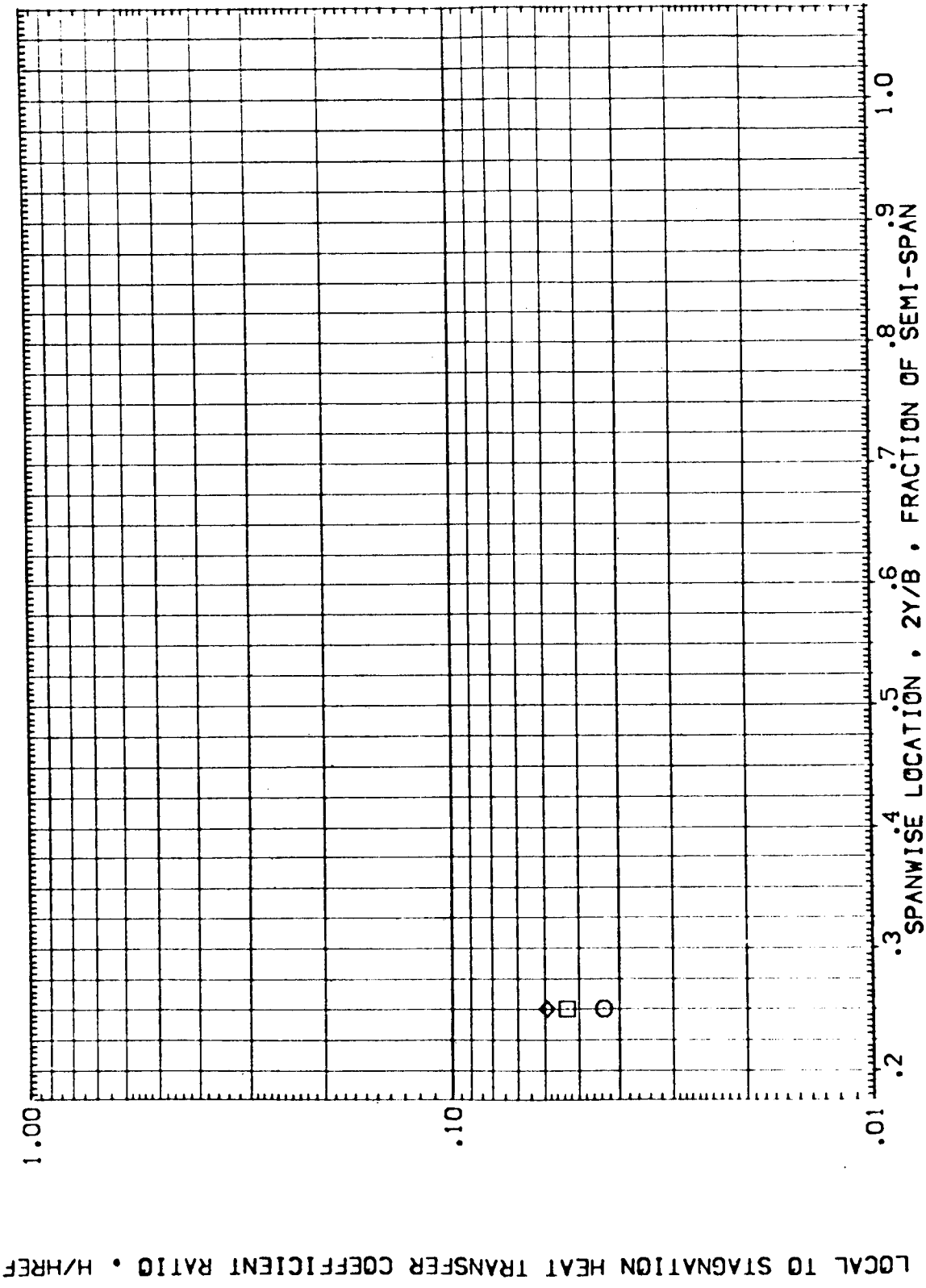


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .299

DATA SET SYMBOL. CONFIGURATION DESCRIPTION. ALPHA BETA RNU/L MAV/HT
 [RE:G04] [AE:G04] [BE:G04] ARC 3.5-178 [H3 O+T+S (TRIPS)] .000 .000 5.000 1.000
 [RE:G04] [AE:G04] [BE:G04] ARC 3.3-178 [H3 O+T+S (TRIPS)] .000 .000 5.000 .900
 [RE:G04] [AE:G04] [BE:G04] ARC 3.3-178 [H3 O+T+S (TRIPS)] .000 .000 5.000 .850

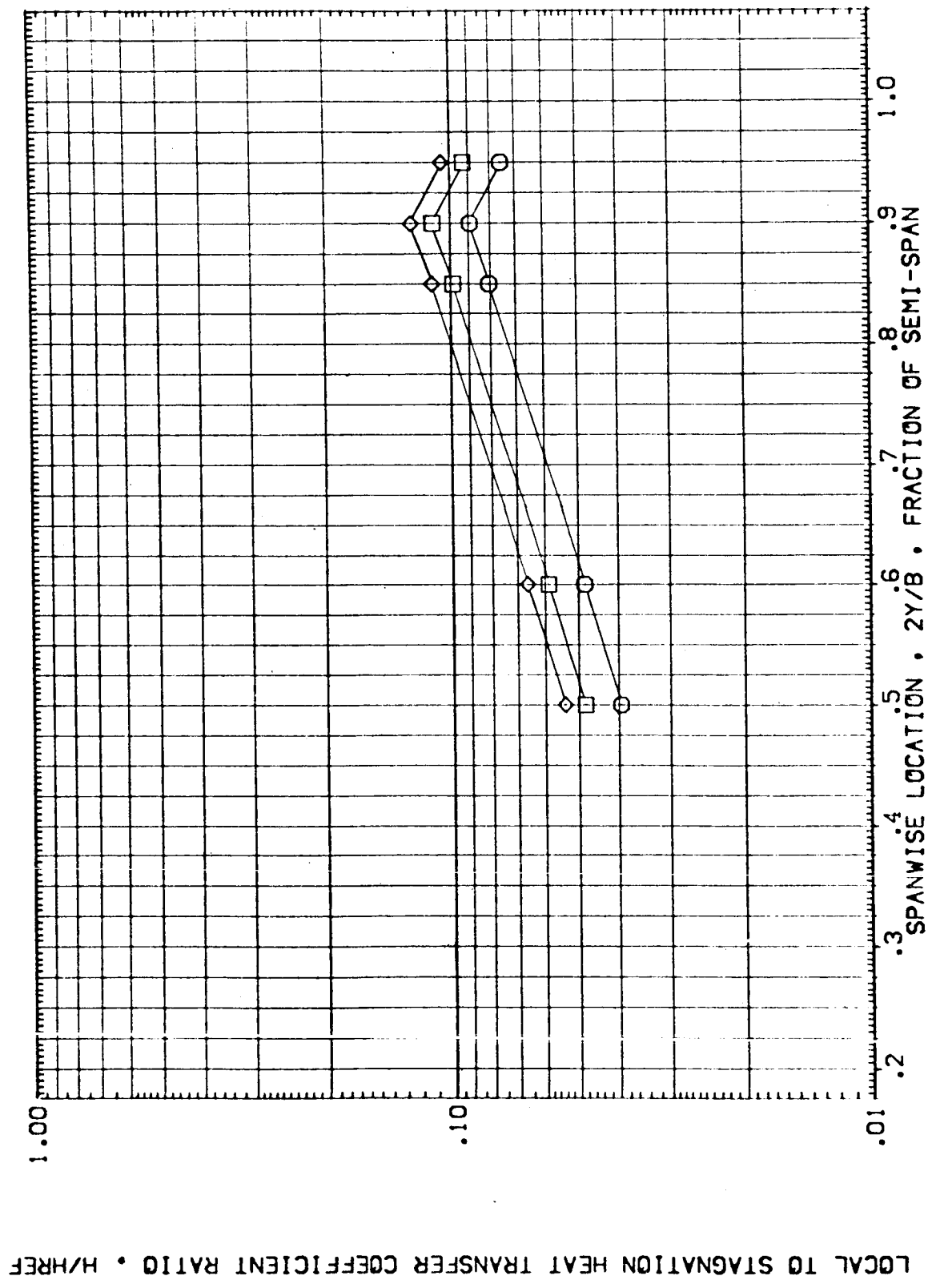


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .300

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING BOTTOM	ALPHA	BETA	RN/L	HAV/HT
[REIG04]	ARC 3.5-178 [H3 O-T+S (TRIPS)]	WING BOTTOM	.000	.000	5.000	1.000
[AEIG04]	ARC 3.5-178 [H3 O-T+S (TRIPS)]	WING BOTTOM	.000	.000	5.000	.900
[BEIG04]	ARC 3.5-178 [H3 O-T+S (TRIPS)]	WING BOTTOM	.000	.000	5.000	.650

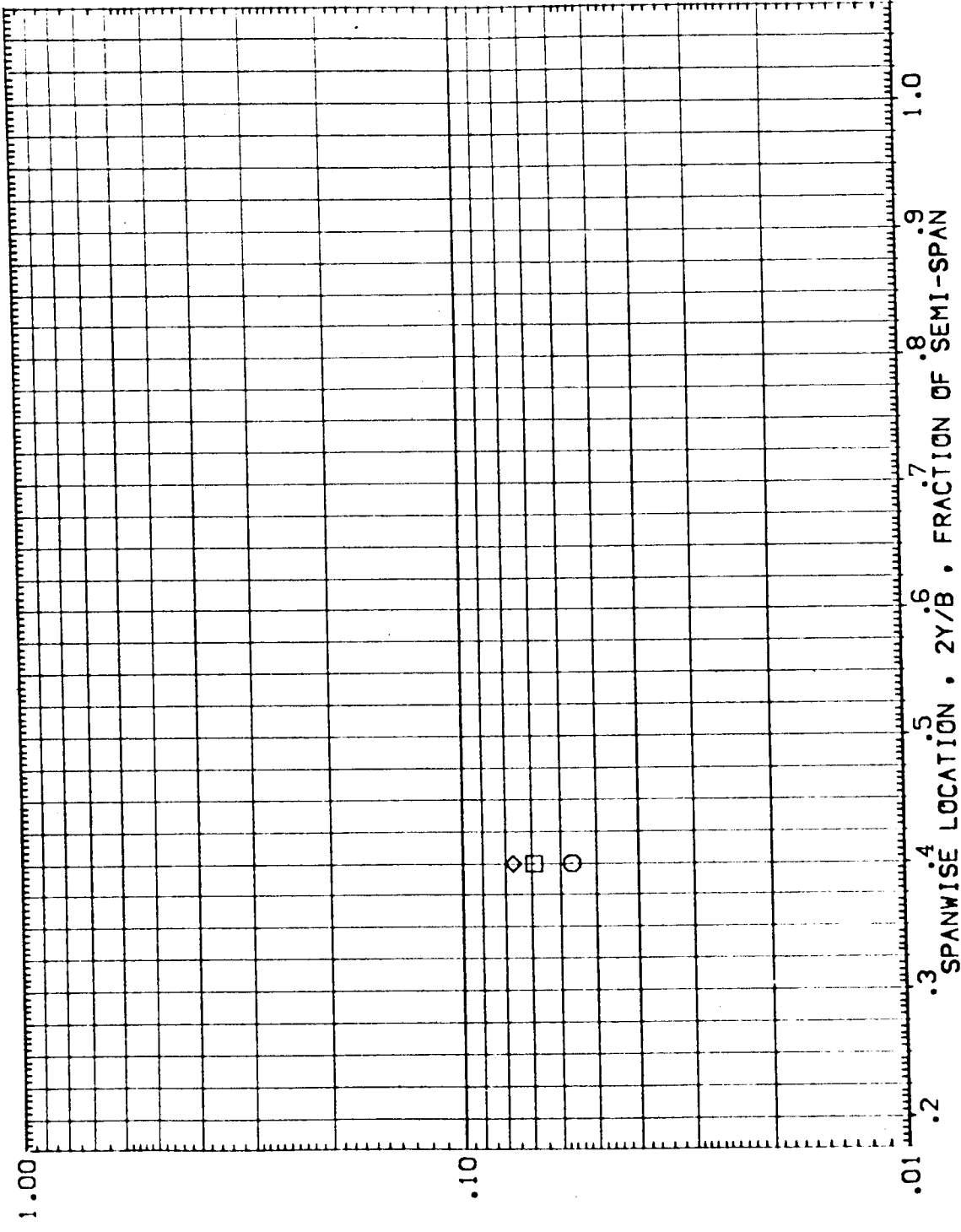


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .302

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{BE|G04} ARC 3.5-178 I+3 0+1+S [TRIPS] .000 .000 5.000 1.000

{AE|G04} ARC 3.5-178 I+3 0+1+S [TRIPS] .000 .000 5.000 .900

{BE|G04} ARC 3.5-178 I+3 0+1+S [TRIPS] .000 .000 5.000 .850

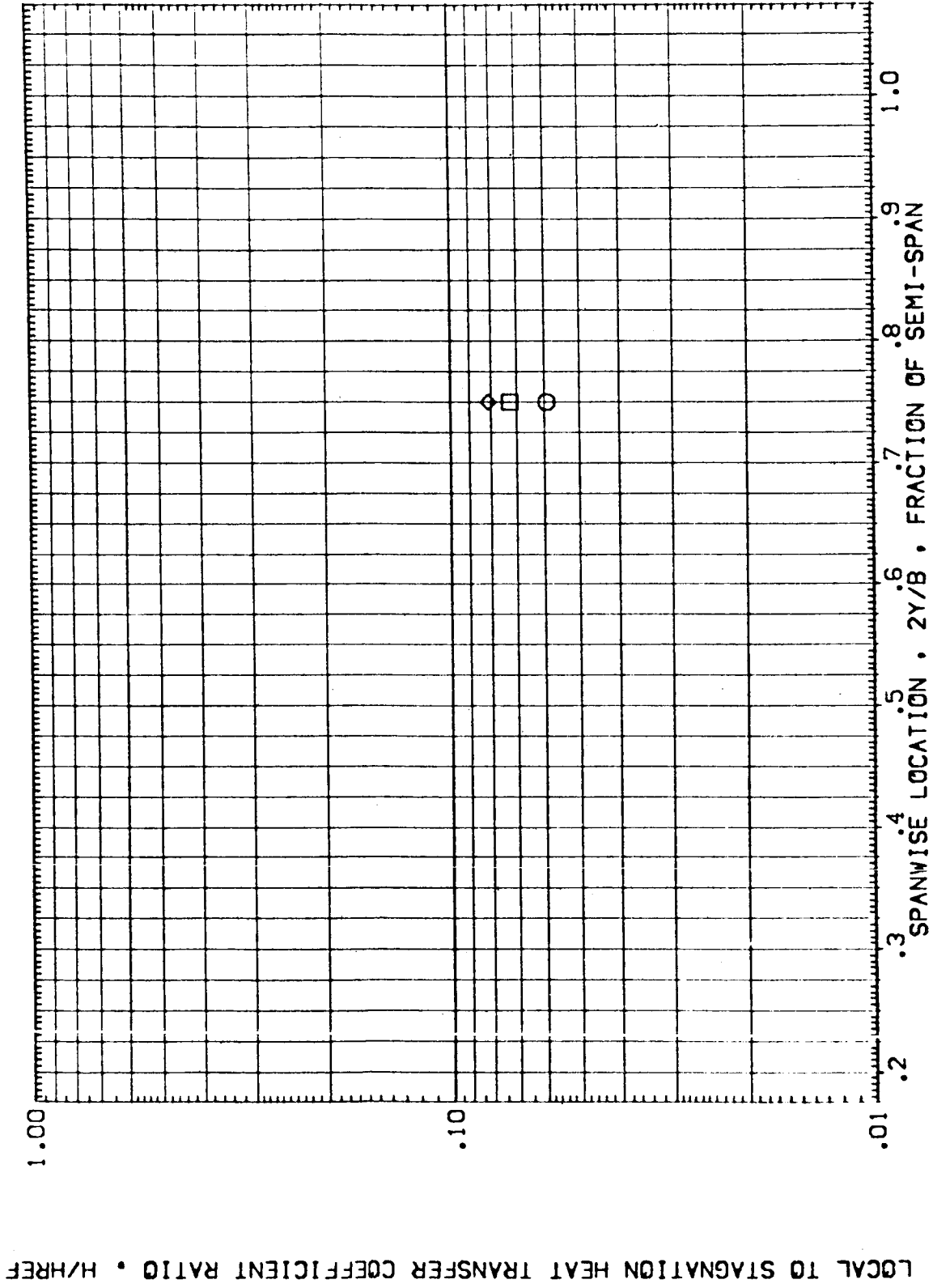


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .303

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAW/HT

(RE1G04) ARC 3.5-178 143 O+T+S (TRIPS) .000 .000 5.000 1.000
 (AE1G04) ARC 3.5-178 143 O+T+S (TRIPS) .000 .000 5.000 .900
 (BE1G04) ARC 3.5-178 143 O+T+S (TRIPS) .000 .000 5.000 .850

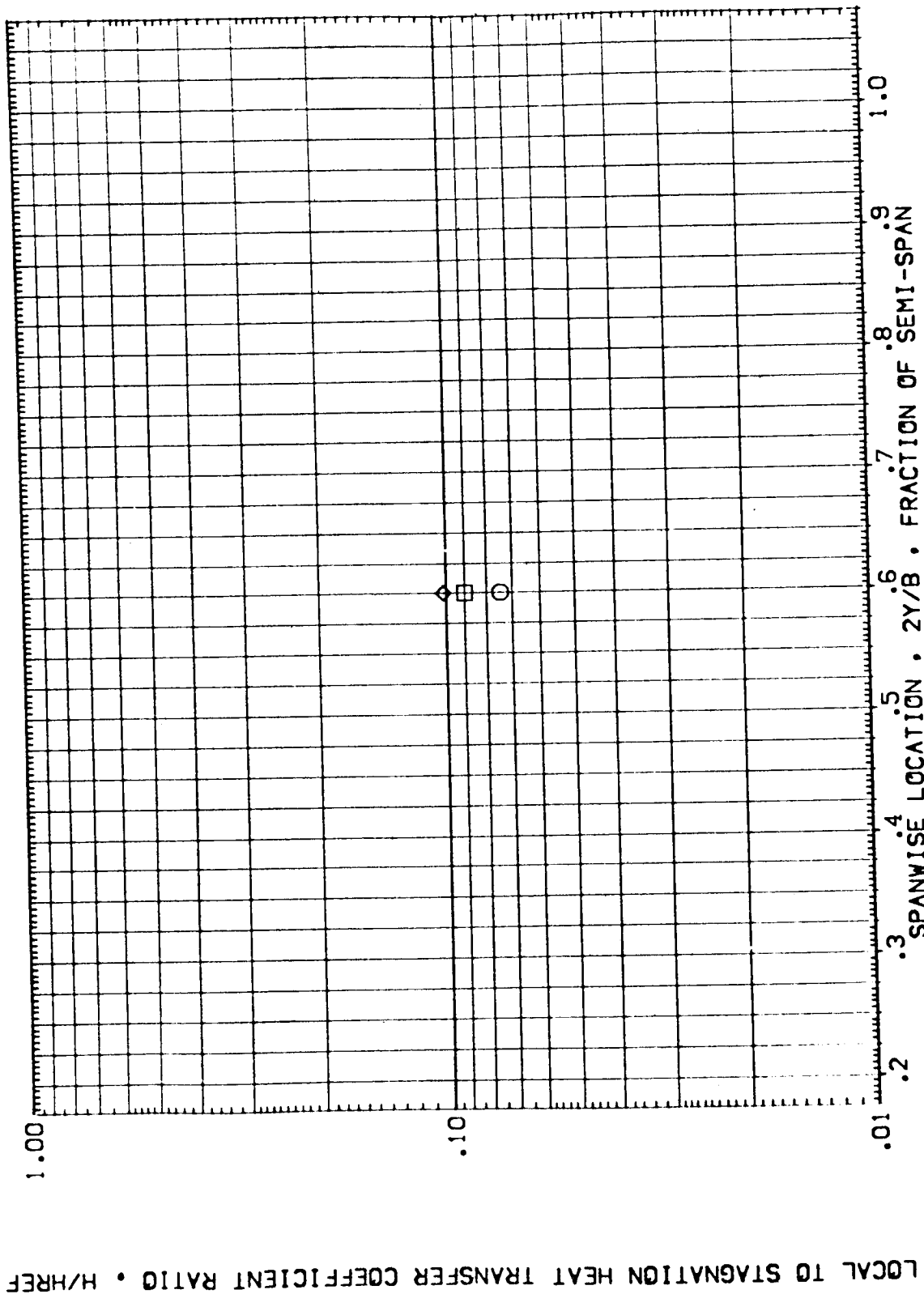


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .428

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
{RE G04}	ARC 3.5-178 H3 O+T+S (TRIPS)	.000	.000	5.000	1.000
{AE G04}	ARC 3.5-178 H3 O+T+S (TRIPS)	.000	.000	5.000	.900
{BE G04}	ARC 3.5-178 H3 O+T+S (TRIPS)	.000	.000	5.000	.850

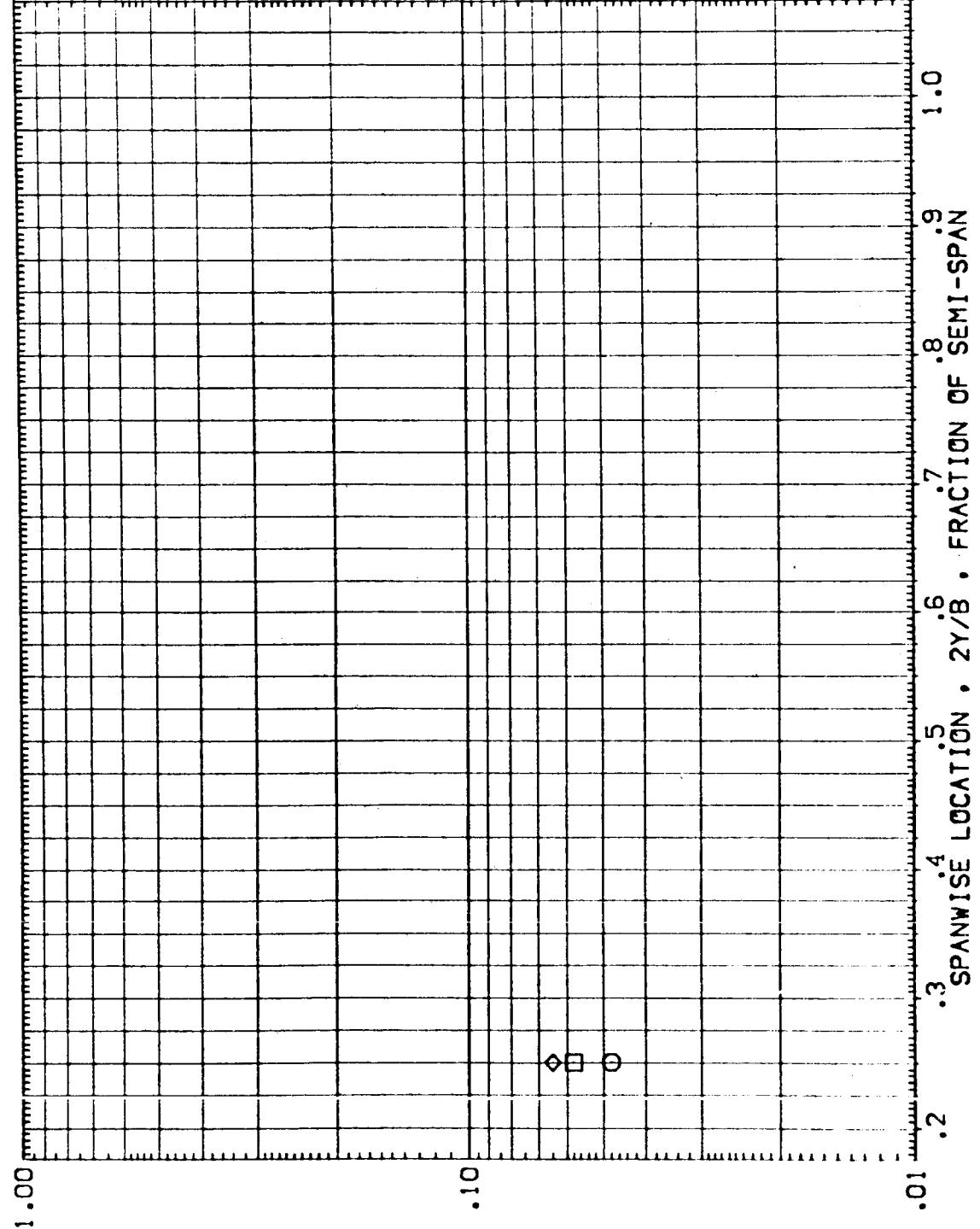


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .444

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT
 (RE:G04) [O] ARC 3.5-178 [H3 O+T+S (TR)PS] VING BOTTOM 1.000
 (AE:G04) [O] ARC 3.5-178 [H3 O+T+S (TR)PS] VING BOTTOM .900
 (BE:G04) [O] ARC 3.5-178 [H3 O+T+S (TR)PS] VING BOTTOM .850

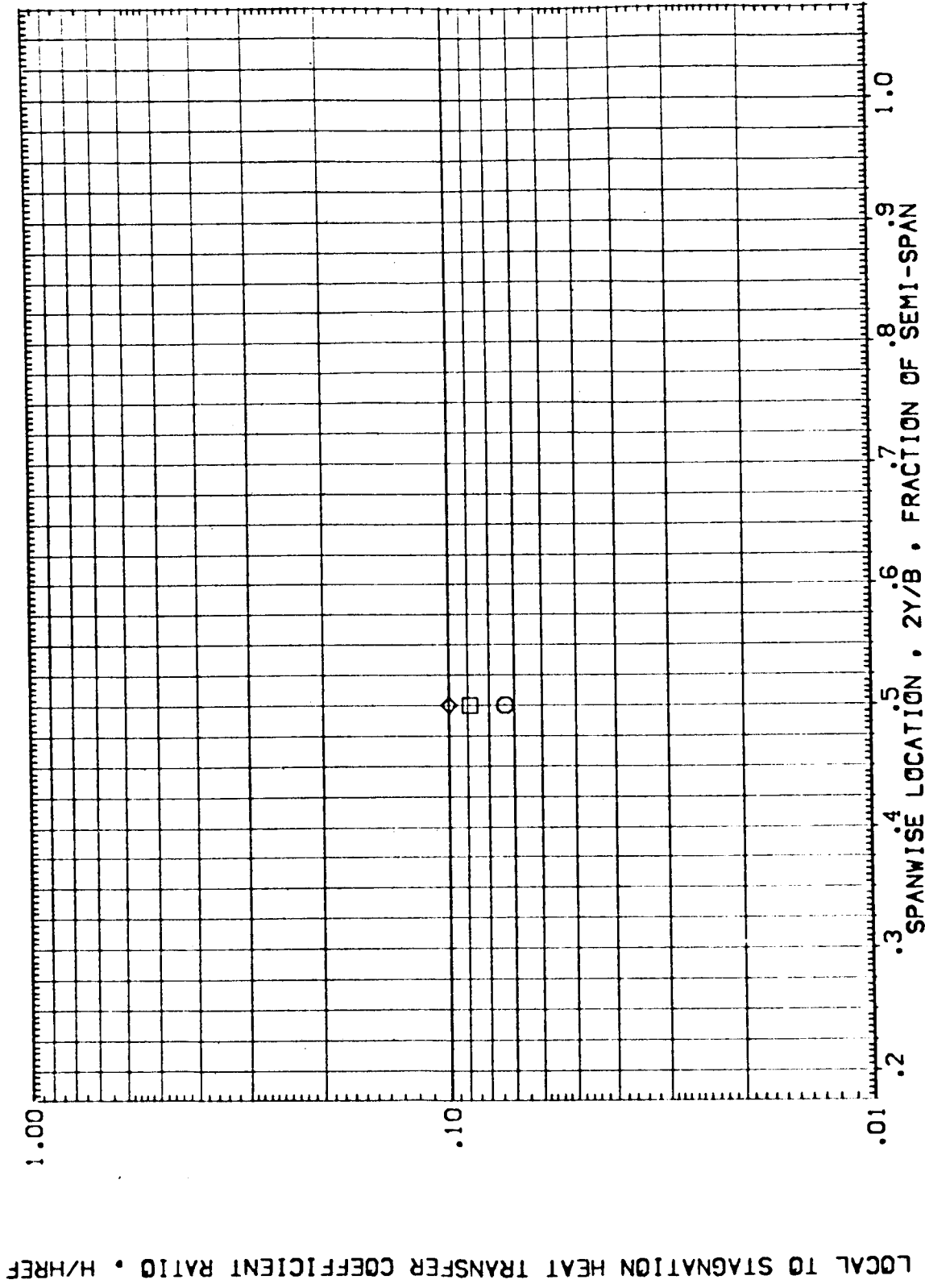


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

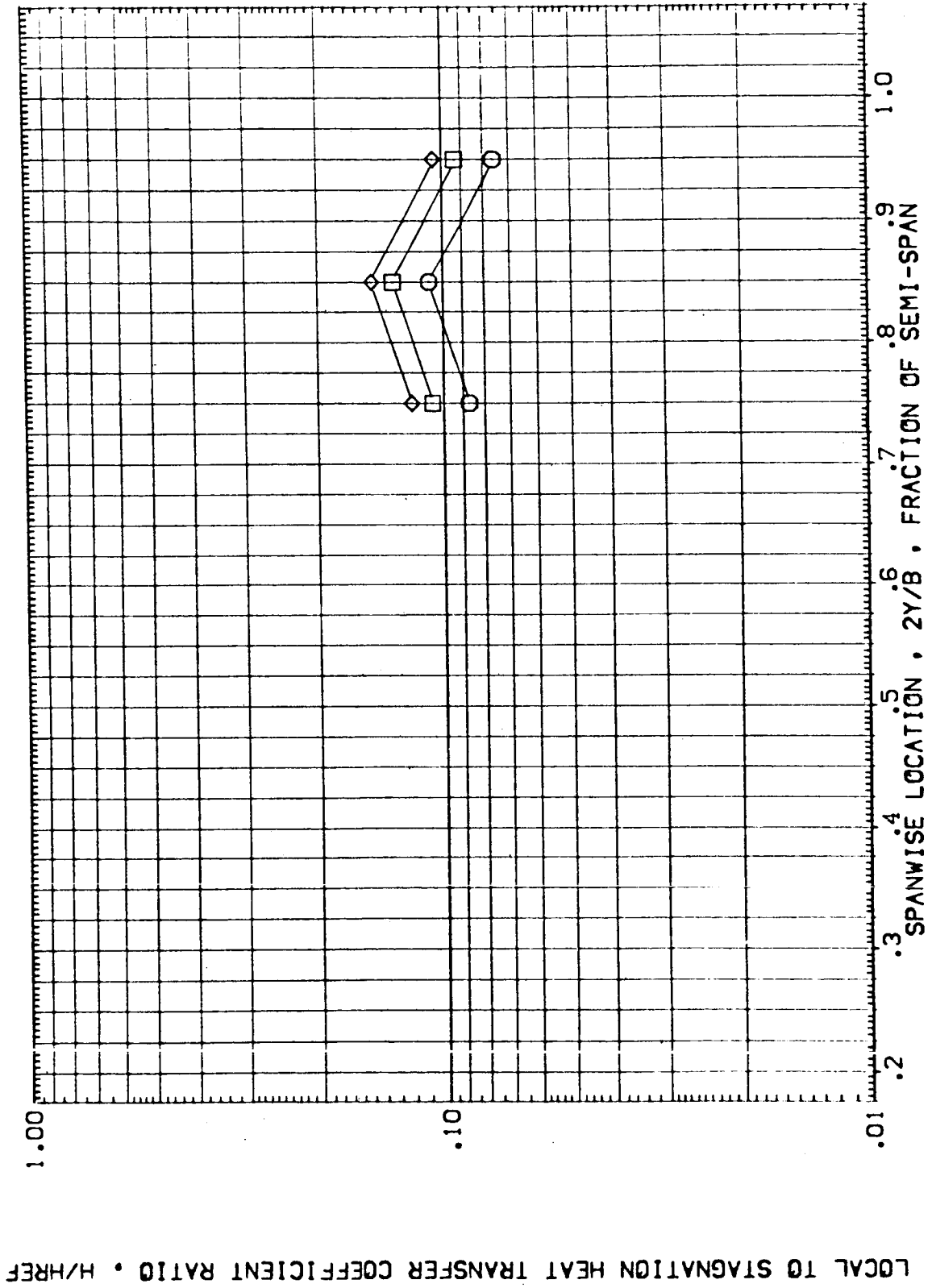
MACH = 5.300 X/C = .487

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RNU/L HAV/HT

(RE)G04 ARC 3.5-178 [H3 O+T+S (TRIPS)] .000 .000 5.000 1.000

(AE)G04 ARC 3.5-178 [H3 O+T+S (TRIPS)] .000 .000 5.000 .900

(BE)G04 ARC 3.5-178 [H3 O+T+S (TRIPS)] .000 .000 5.000 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .500

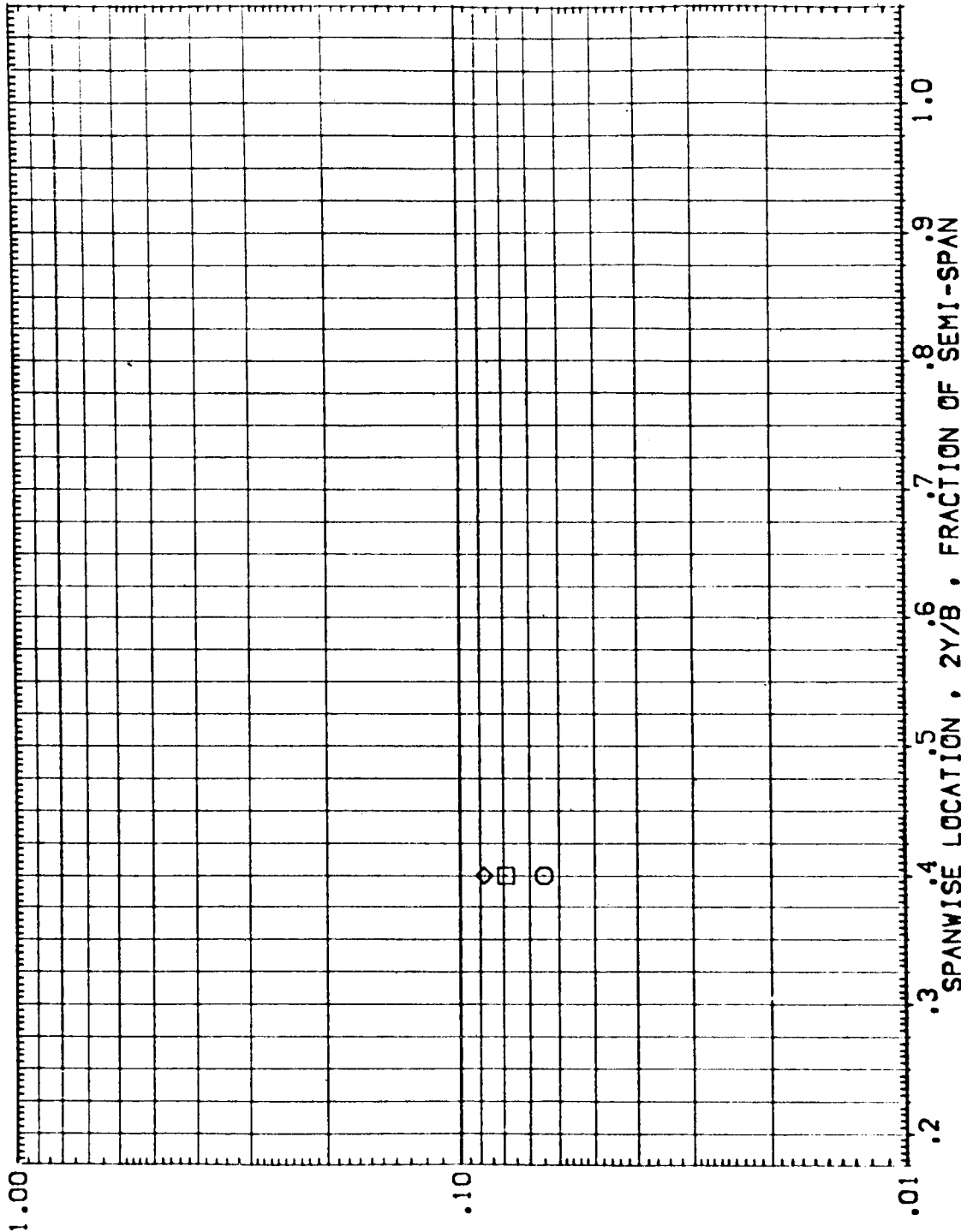
DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE|G04) ARC 3.5-178 I+3 O+T+S (TR|PS) .000 .000 5.000 1.000

(AE|G04) ARC 3.5-178 I+3 O+T+S (TR|PS) .000 .000 5.000 .900

(BE|G04) ARC 3.5-178 I+3 O+T+S (TR|PS) .000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



SPANWISE LOCATION • 2Y/B • FRACTION OF SEMI-SPAN

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .559



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

{RE1004} ARC 3.5-178 H3 O+T+S (TRIPS) VING BOTTOM

{AE1004} ARC 3.5-178 H3 O+T+S (TRIPS) VING BOTTOM

{BE1004} ARC 3.5-178 H3 O+T+S (TRIPS) VING BOTTOM

1.000
1.000
.850

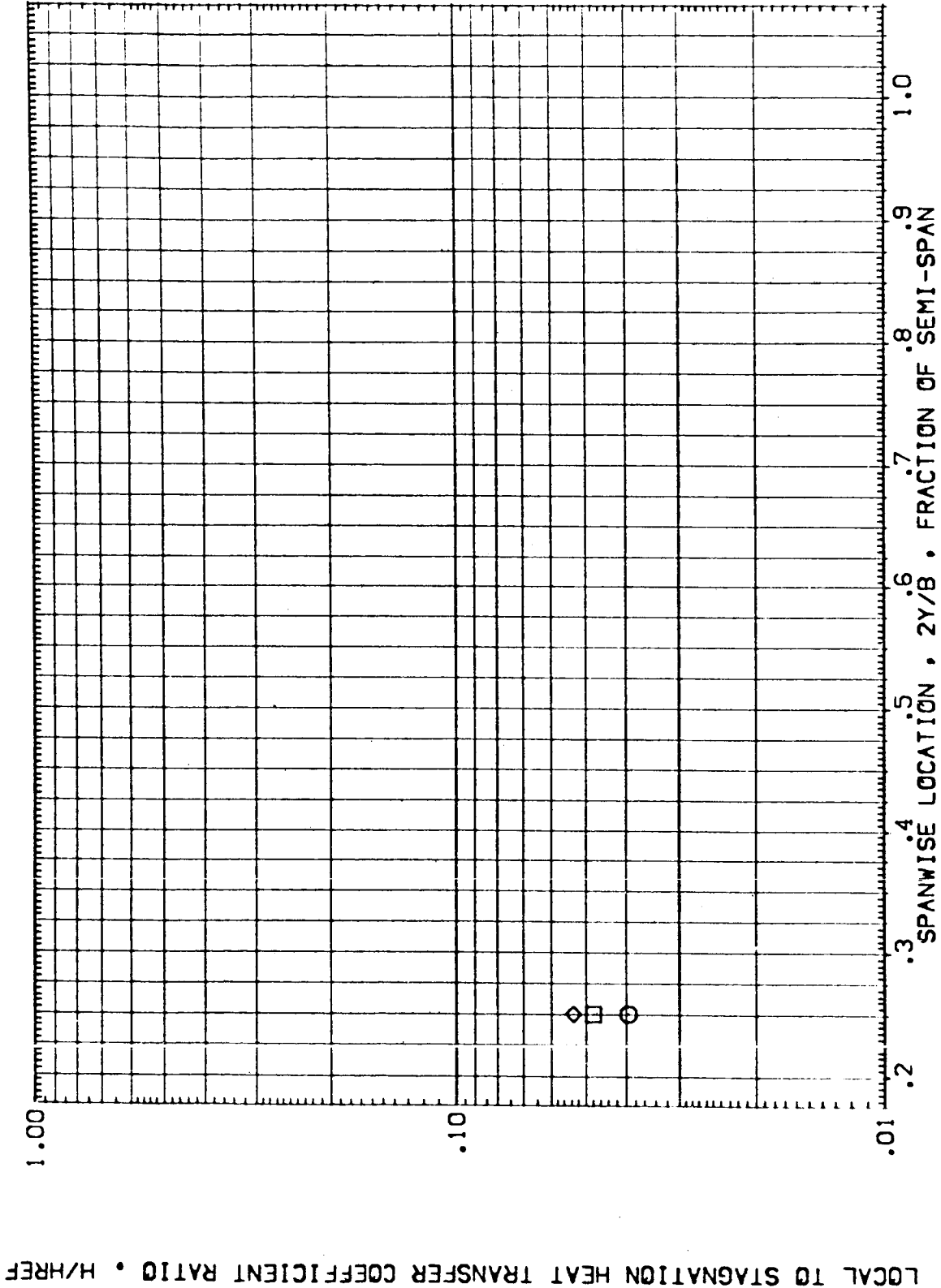


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .590

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RN/L HAW/HT

(RE1G04) ARC 3.5-178 IH3 0+1+S (TRIPS) WING BOTTOM .000 .000 5.000 1.000

(AE1G04) ARC 3.5-178 IH3 0+1+S (TRIPS) WING BOTTOM .000 .000 5.000 .900

(BE1G04) ARC 3.5-178 IH3 0+1+S (TRIPS) WING BOTTOM .000 .000 5.000 .850

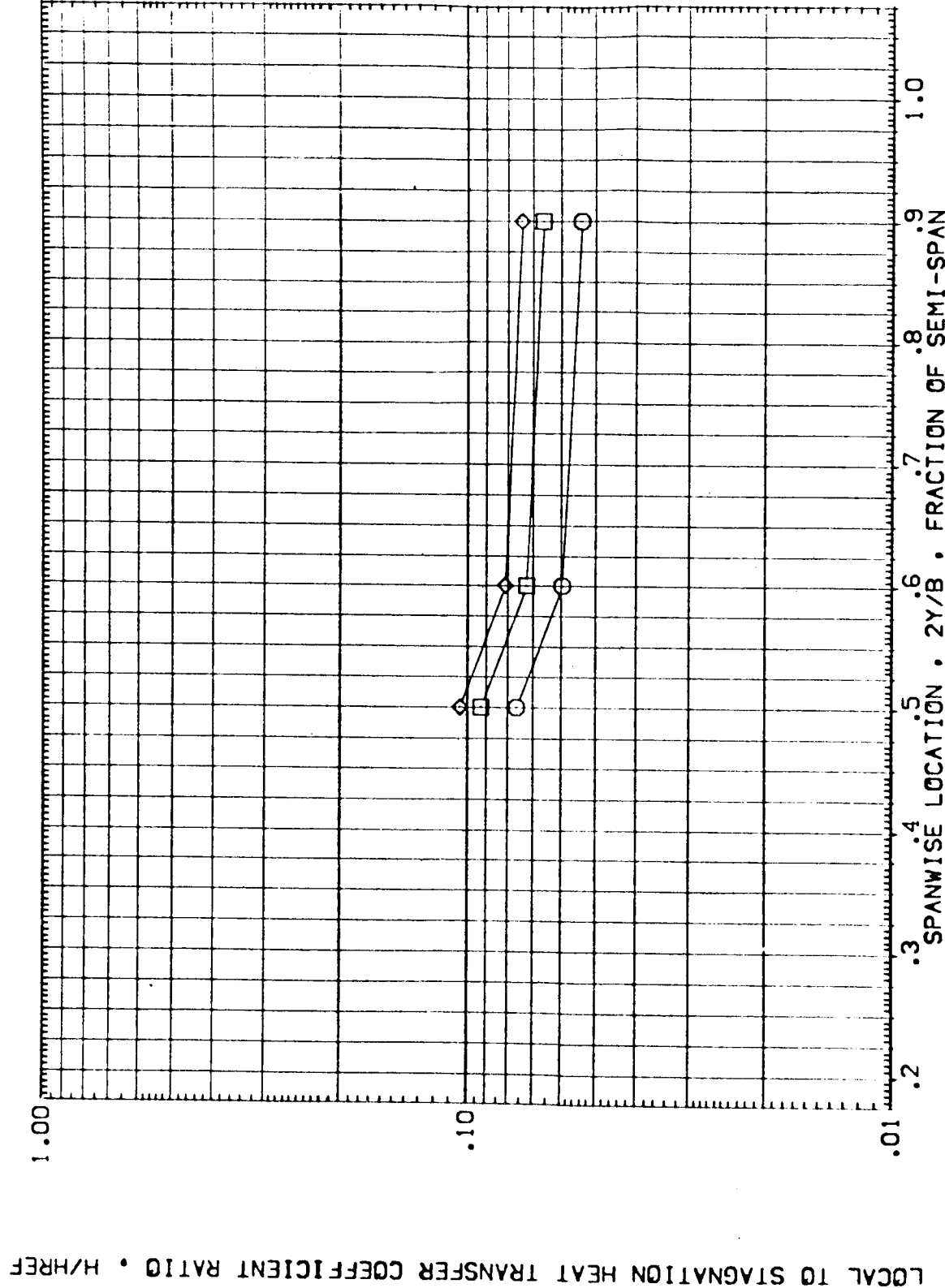


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .600



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA $Re_{x/L}$ h_{AW}/h_T
 (RE|G04) ARC 3.5-178 IH3 C+T+S (TRIPS) .000 .000 5.000 1.000
 (AE|G04) ARC 3.5-178 IH3 C+T+S (TRIPS) .000 .000 5.000 .900
 (BE|G04) ARC 3.5-178 IH3 C+T+S (TRIPS) .000 .000 5.000 .850

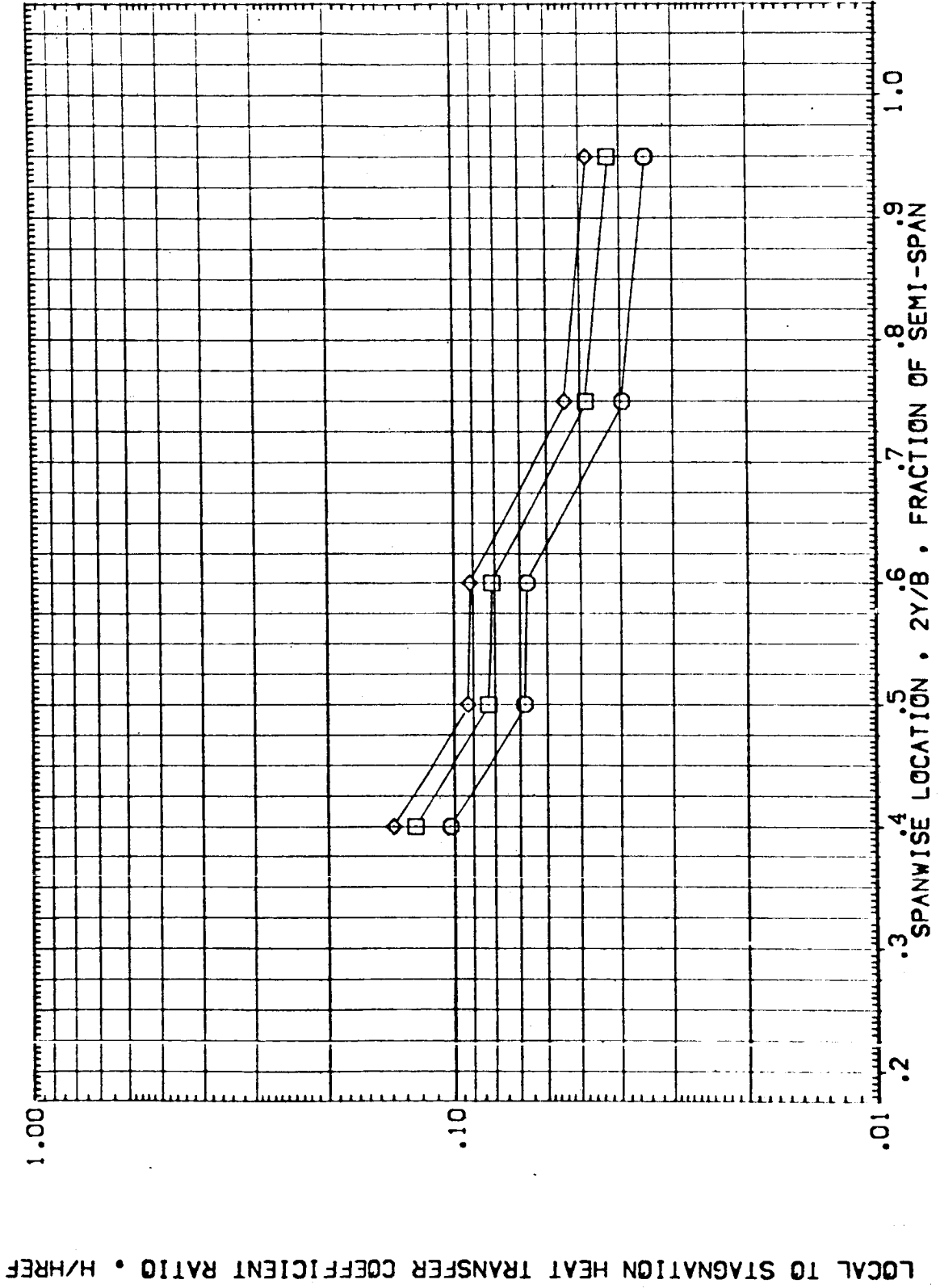


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.303 X/C = .700

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(RE G04)	ARC 3.5-178 H3 0+T+S (TRIPS)	.000	.000	5.000	1.000
(AE G04)	ARC 3.5-178 H3 0+T+S (TRIPS)	.000	.000	5.000	.900
(BE G04)	ARC 3.5-178 H3 0+T+S (TRIPS)	.000	.000	5.000	.850

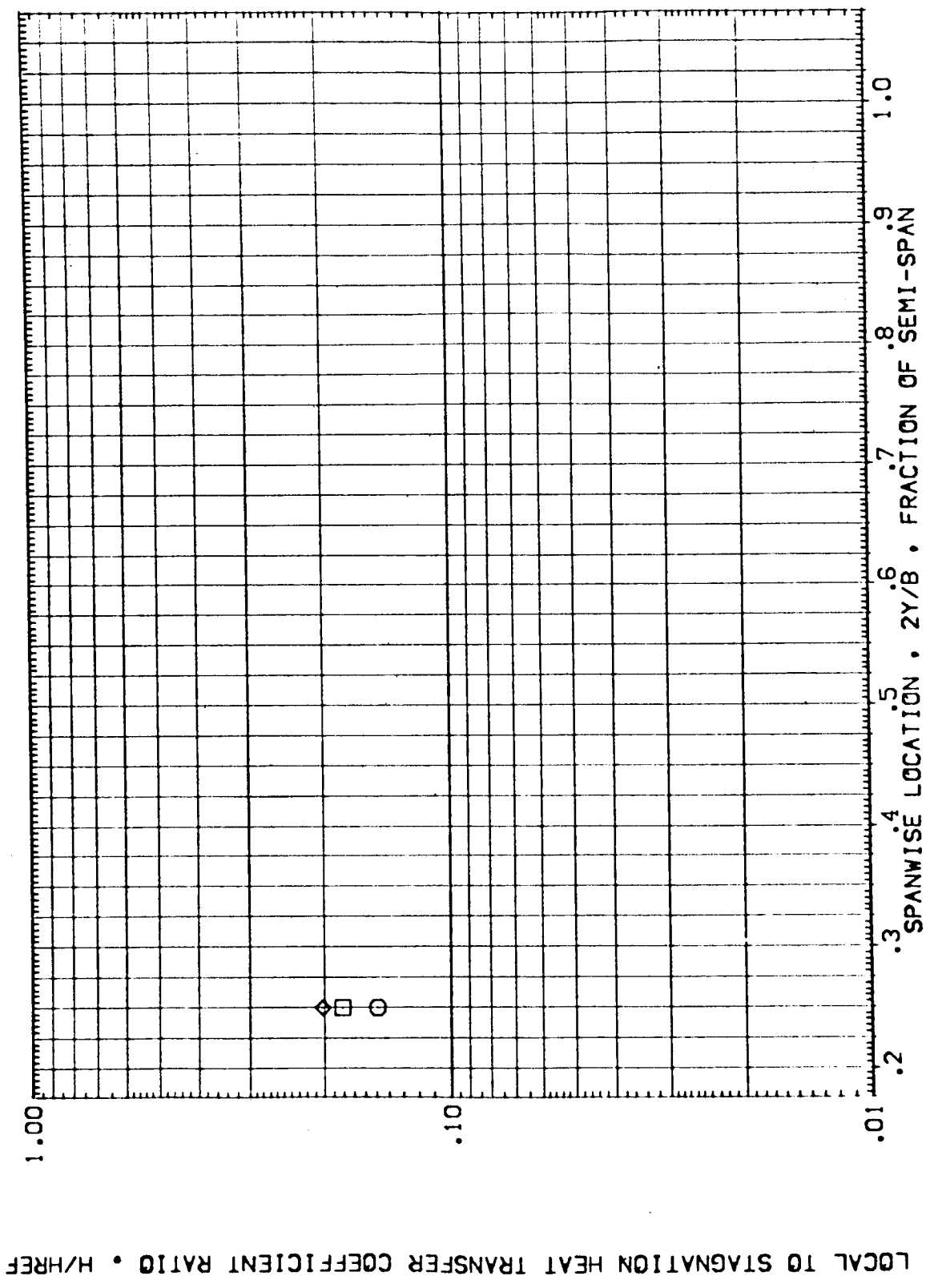


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .736

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REIG04) ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 1.000

(AEIG04) ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 .900

(BEIG04) ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 .850

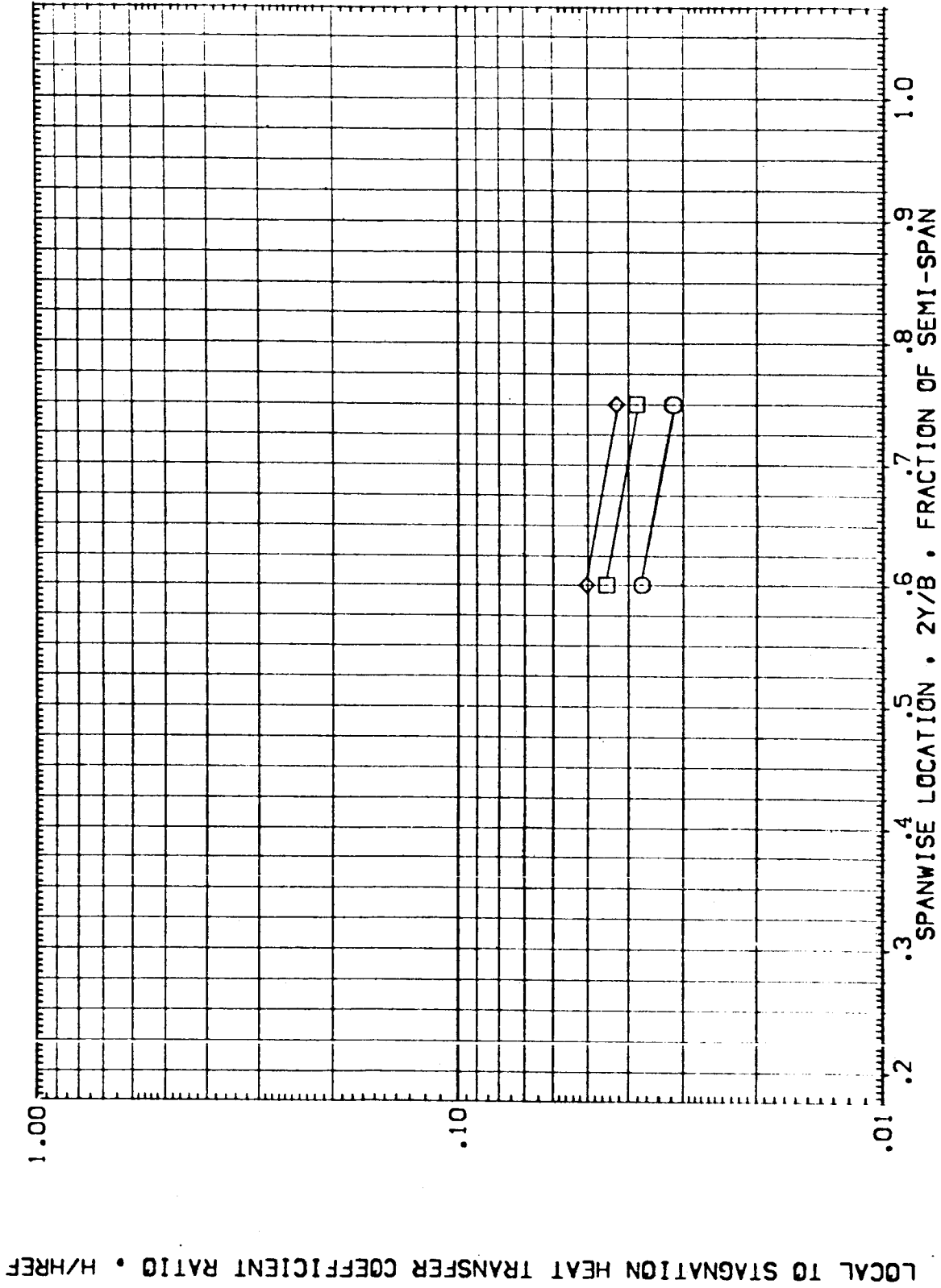


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (RE1604) Q ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 1.000
 (AE1604) X ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 .900
 (BE1604) X ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 .850

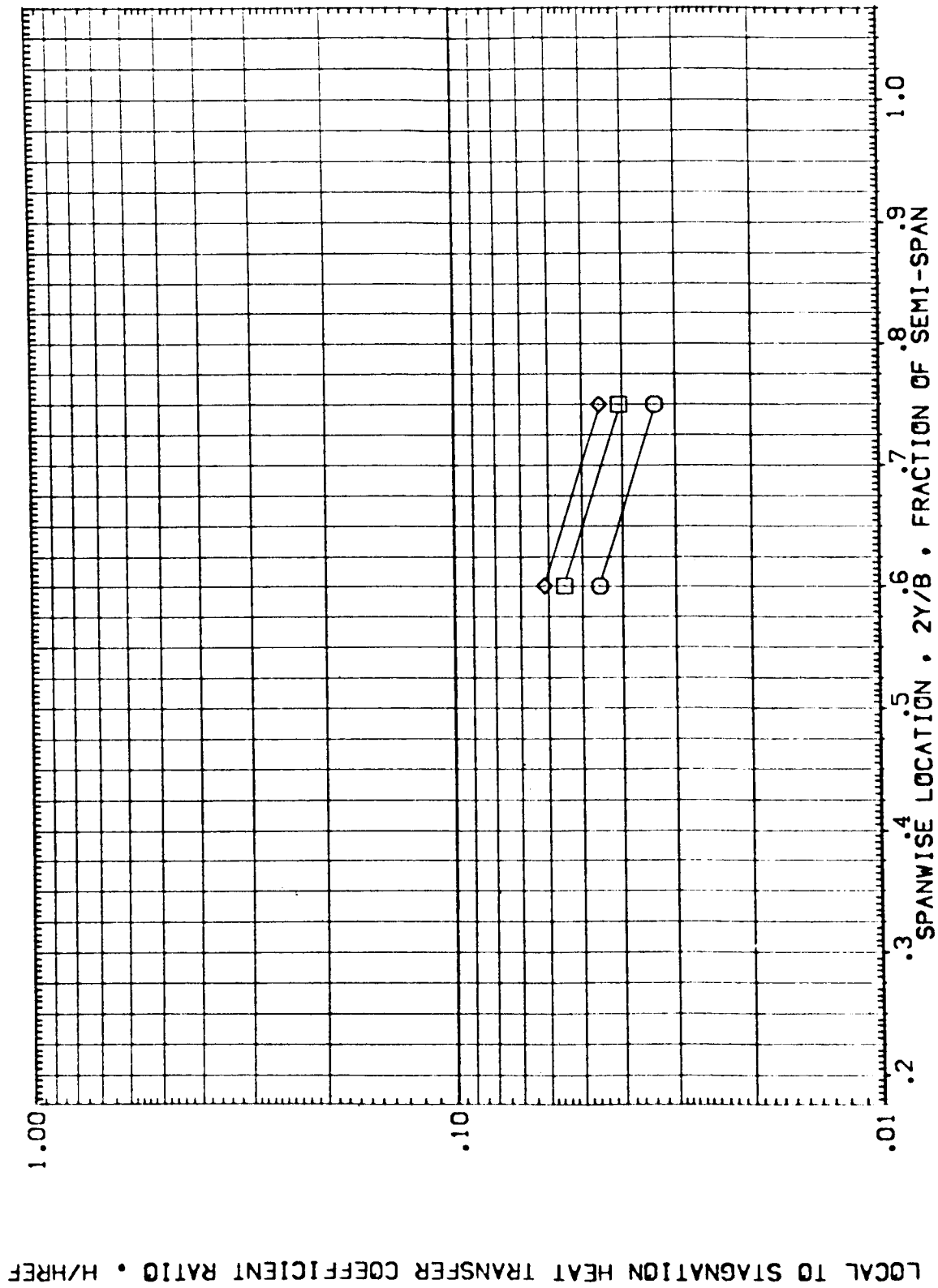


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .850



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RNU/L HAV/HT

{RE|G04} ARC 3.5-178 IH3 0-T+S (TRIPS) .000 .000 5.000 1.000

{AE|G04} ARC 3.5-178 IH3 0-T+S (TRIPS) .000 .000 5.000 .900

{BE|G04} ARC 3.5-178 IH3 0-T+S (TRIPS) .000 .000 5.000 .850

○ WING BOTTOM WING BOTTOM

◇ WING BOTTOM WING BOTTOM

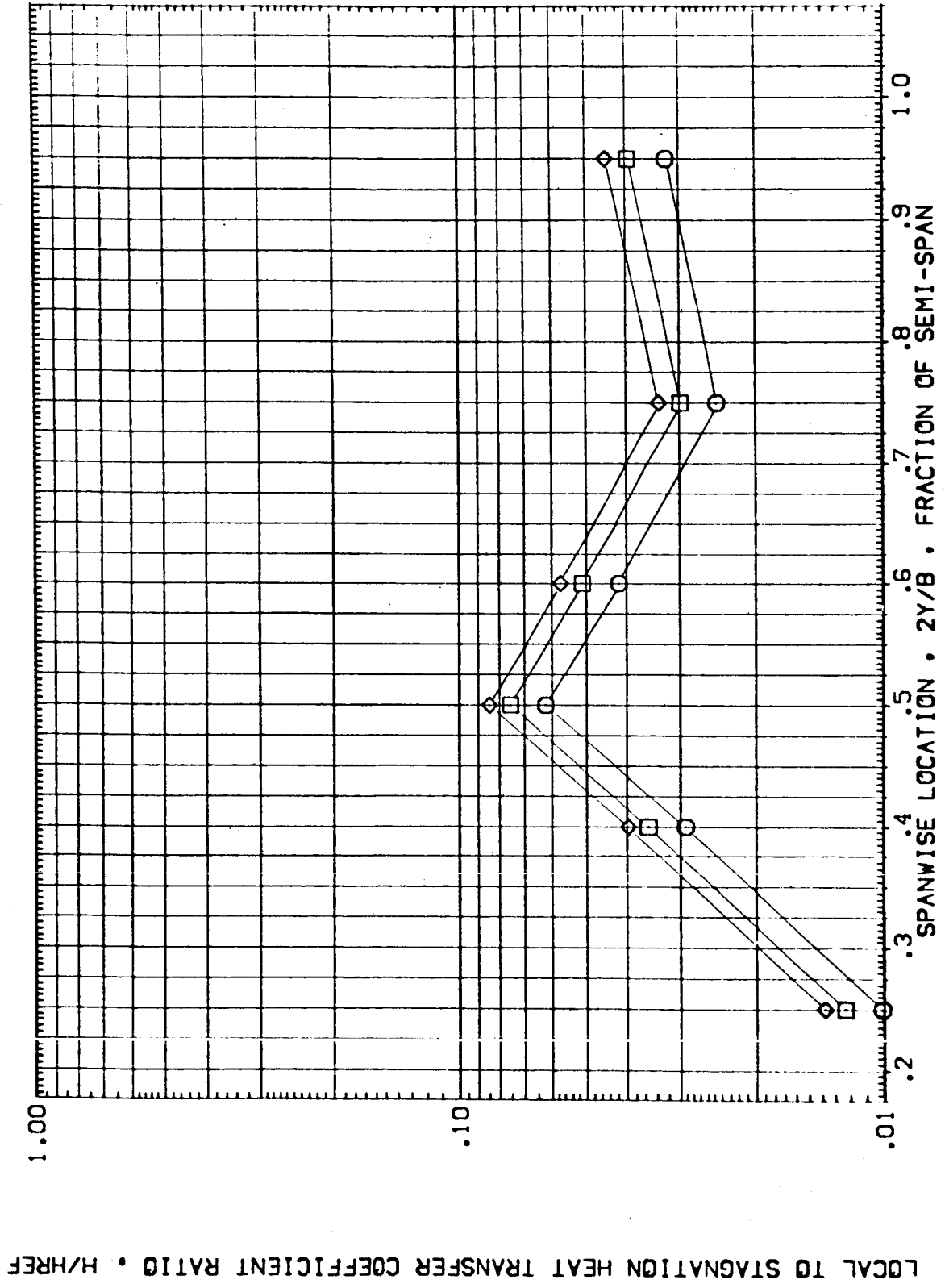


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE] [GOS] [ARC 3.5-178] [H3 0+T+S]
 [AE] [GOS] [ARC 3.5-178] [H3 0+T+S]
 [BE] [GOS] [ARC 3.5-178] [H3 0+T+S]

WING BOTTOM WING BOTTOM WING BOTTOM
 WING BOTTOM WING BOTTOM WING BOTTOM

ALPHA BETA RN/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

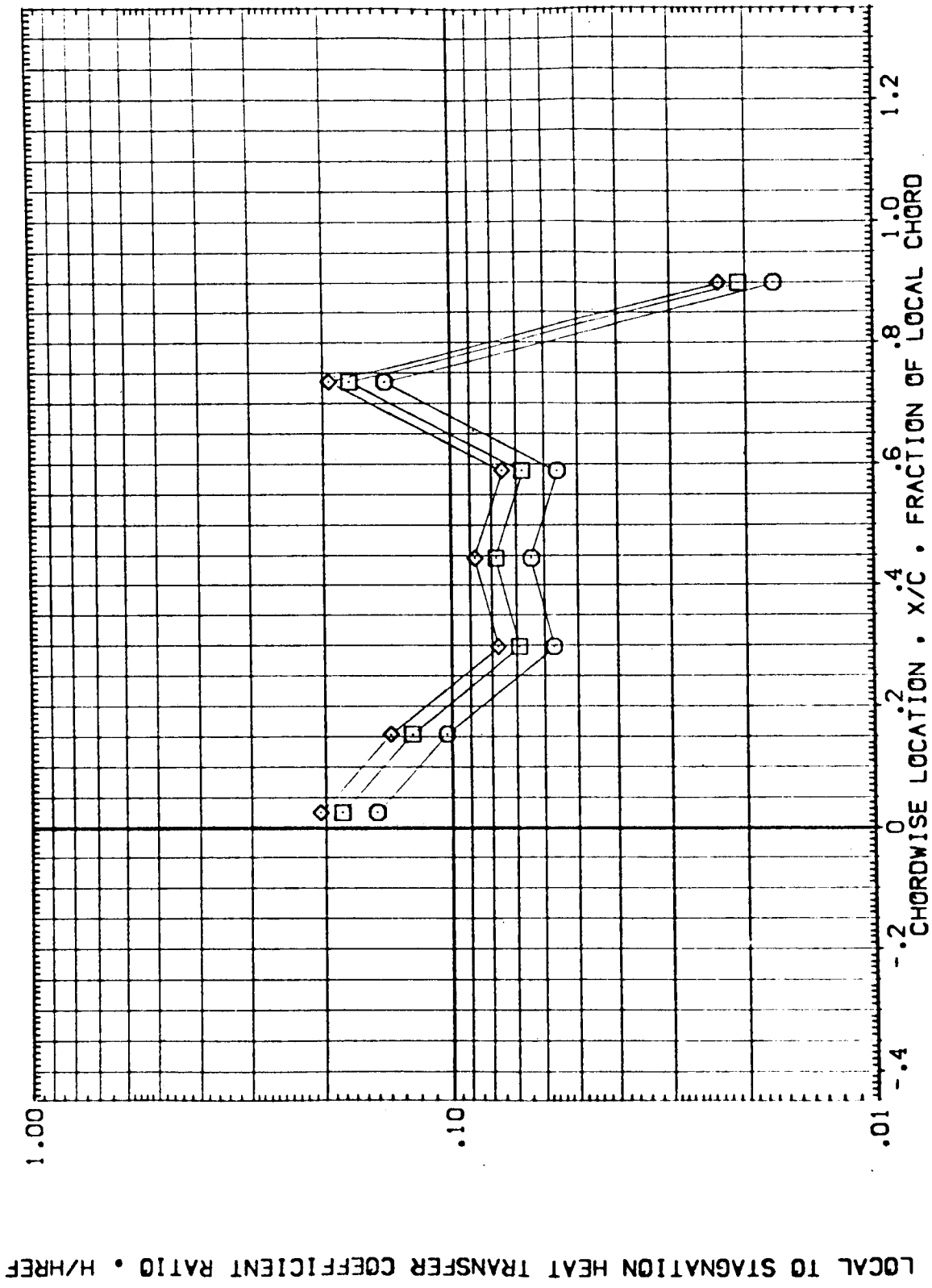


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .250

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L HAV/HT

(REIGOS) ARC 3.5-178 IH3 O+T+S VING BOTTOM .000 -5.000 5.000 1.000

(AEIGOS) ARC 3.5-178 IH3 O+T+S VING BOTTOM .000 -5.000 5.000 .900

(BEIGOS) ARC 3.5-178 IH3 O+T+S VING BOTTOM .000 -5.000 5.000 .850

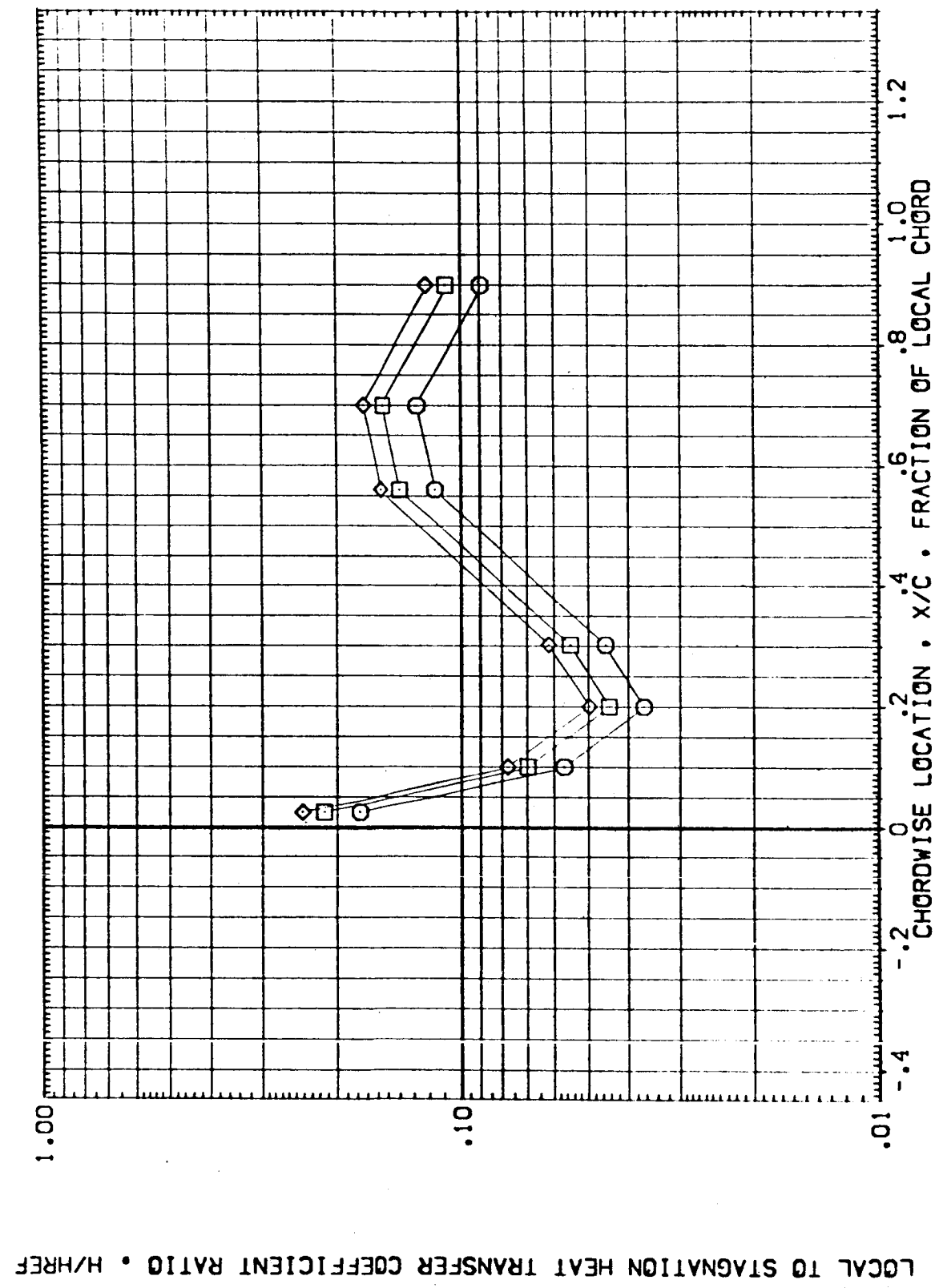


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [REIGOS] [O] ARC 3.5-178 [H3 0+T+S]
 [AEIGOS] [O] ARC 3.5-178 [H3 0+T+S]
 [BEIGOS] [O] ARC 3.5-178 [H3 0+T+S]

ALPHA BETA RV/L HAW/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

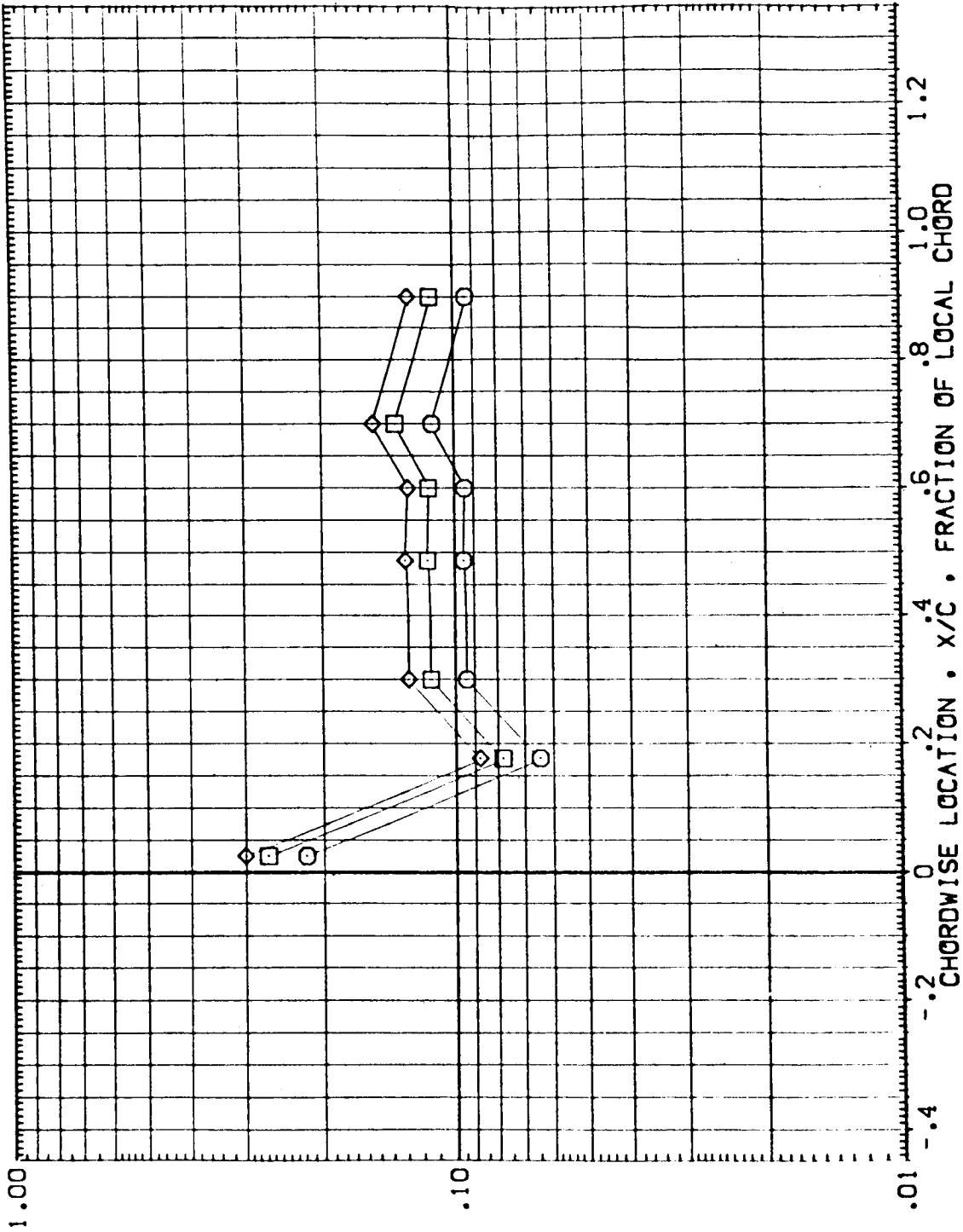


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .500



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/RT
 [REIGOS] [AEIGOS] [BEIGOS] ARC 3.5-178 IH3 0+1+3 .000 -5.000 5.000 1.000
 VING BOTTOM VING BOTTOM VING BOTTOM .000 -5.000 5.000 .900
 VING BOTTOM VING BOTTOM VING BOTTOM .000 -5.000 5.000 .850

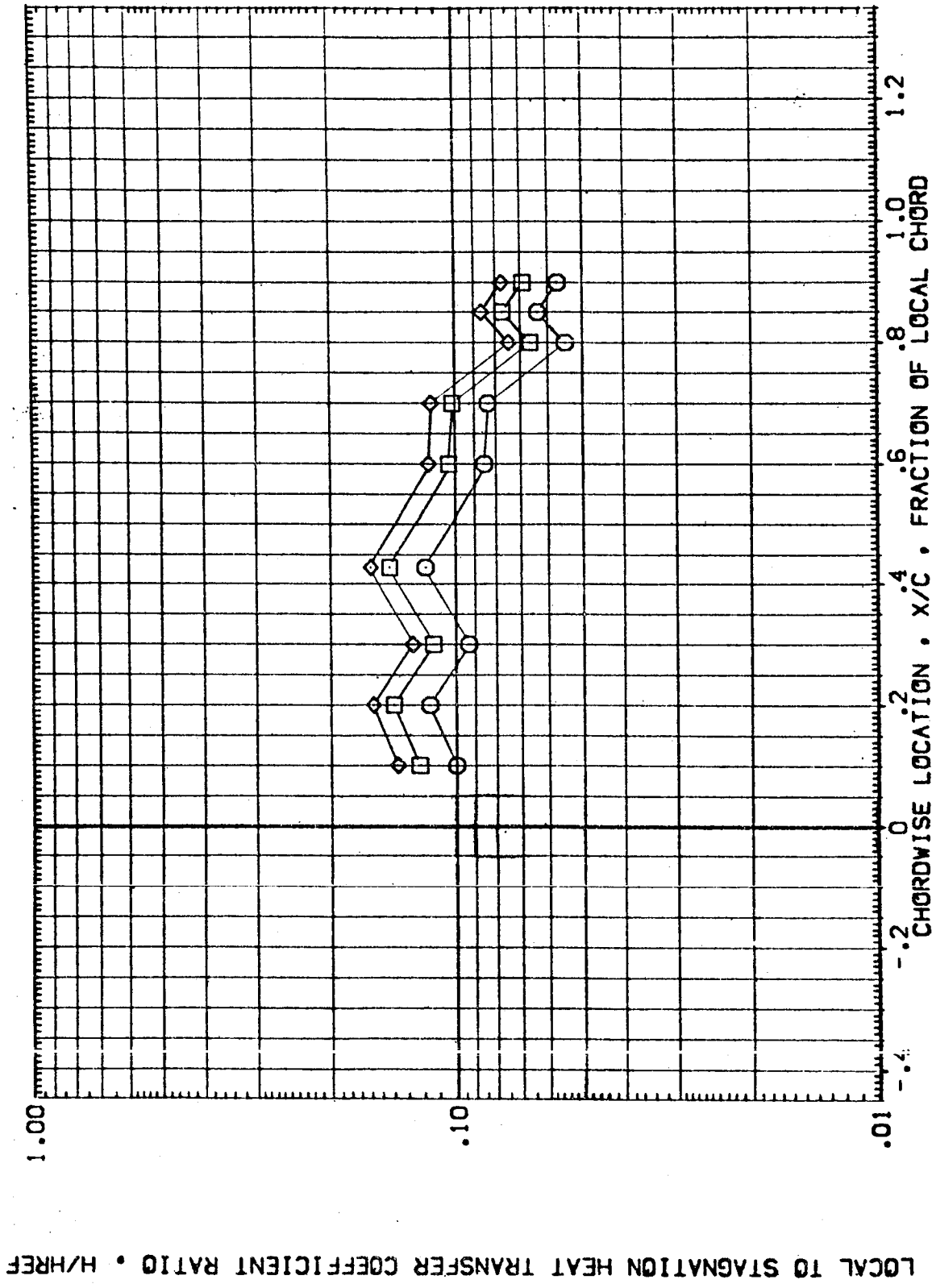


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 [RE] [505] [ARC 3.5-178] [H3] [0+T+S] .000 -5.000 5.000 1.000
 [AE] [505] [ARC 3.5-178] [H3] [0+T+S] .000 -5.000 5.000 .900
 [BE] [505] [ARC 3.5-178] [H3] [0+T+S] .000 -5.000 5.000 .850

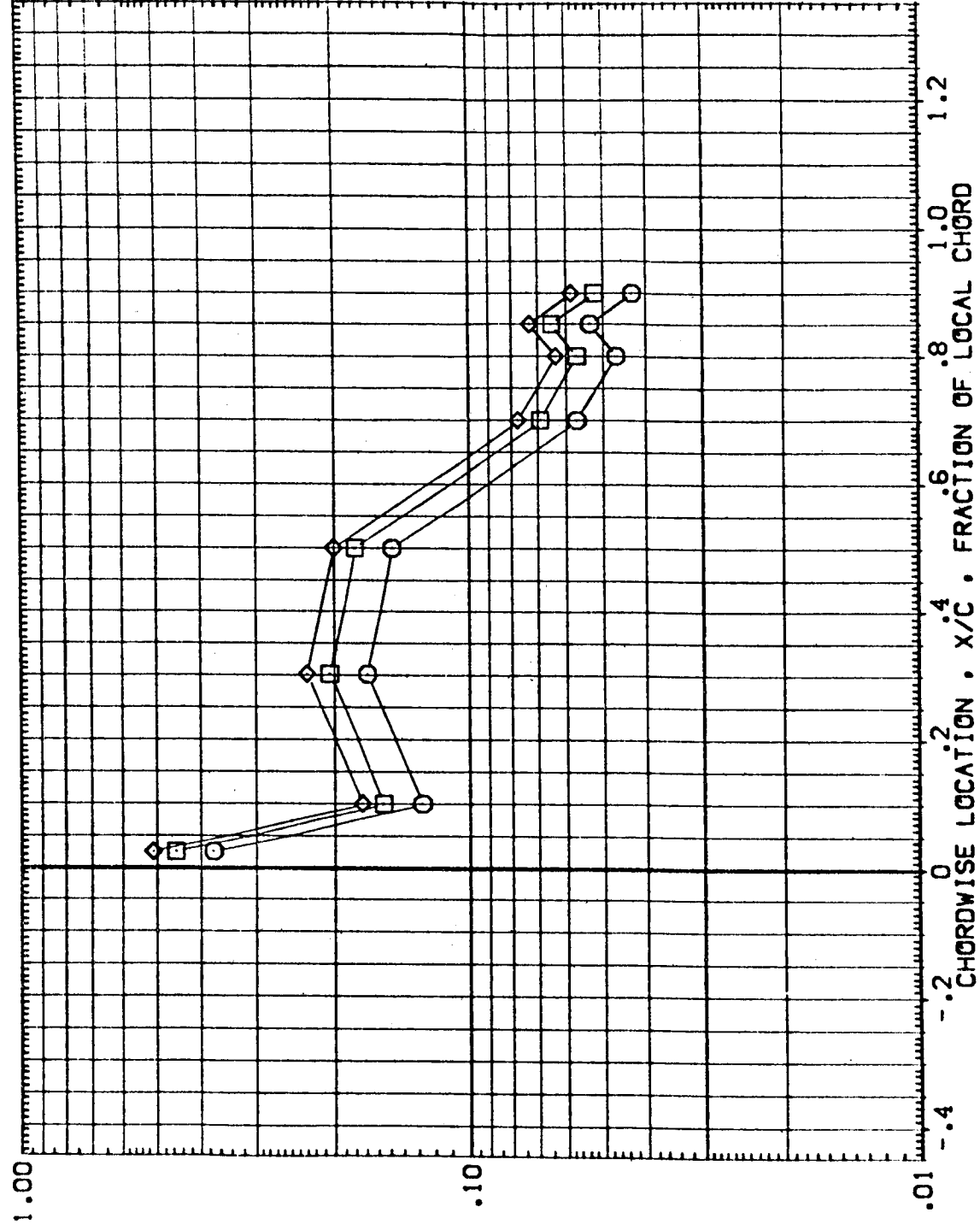


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .750



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1605) [] ARC 3.5-178 IH3 0+1+S
 (AE1605) [] ARC 3.5-178 IH3 0+1+S
 (BE1605) [] ARC 3.5-178 IH3 0+1+S

ALPHA BETA RV/L MAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

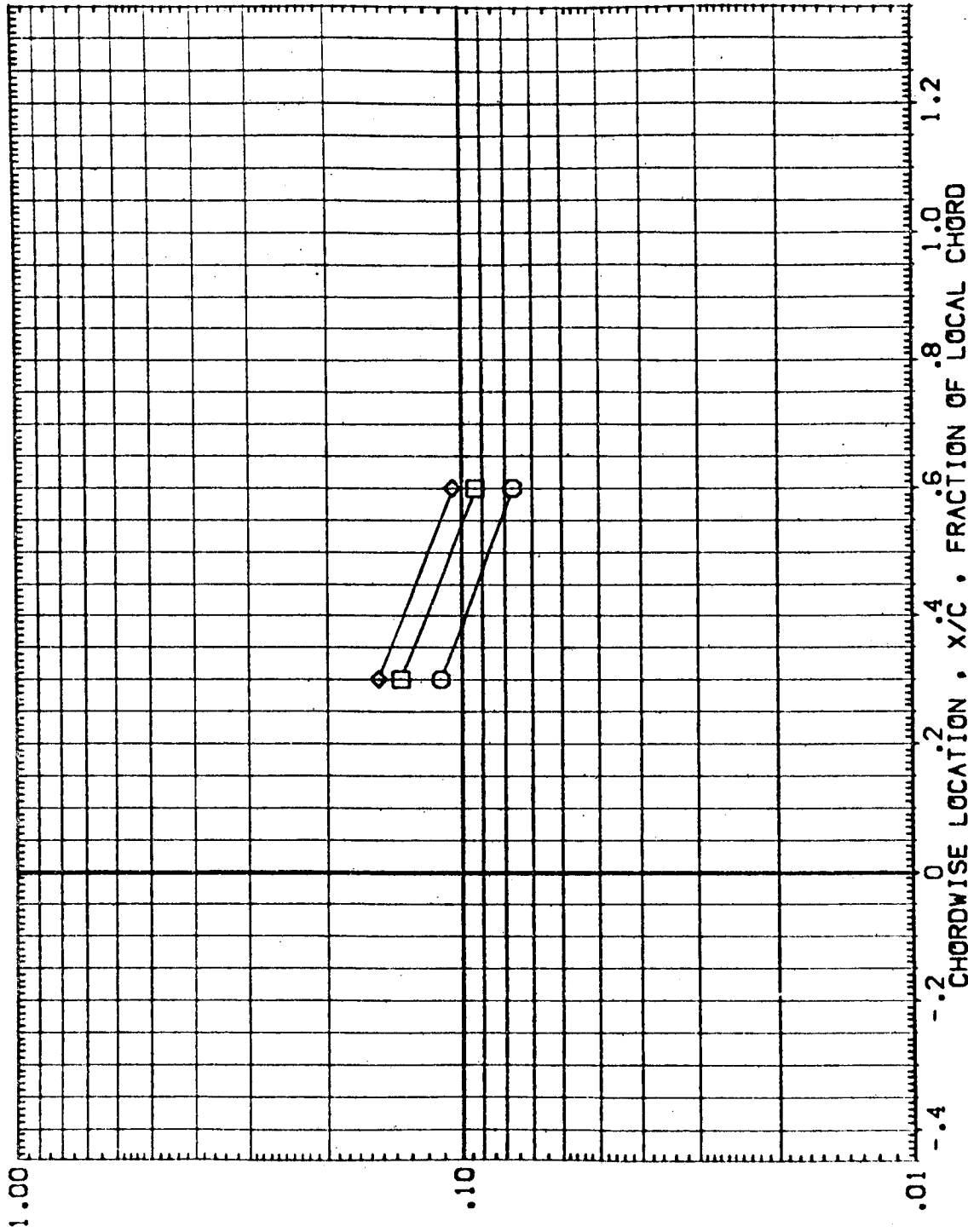


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT
 (RE1605) ARC 3.5-178 IH3 O+T+S .000 -5.000 5.000 1.000
 (AE1605) ARC 3.5-178 IH3 O+T+S .000 -3.000 5.000 .900
 (BE1605) ARC 3.5-178 IH3 O+T+S .000 -5.000 5.000 .850

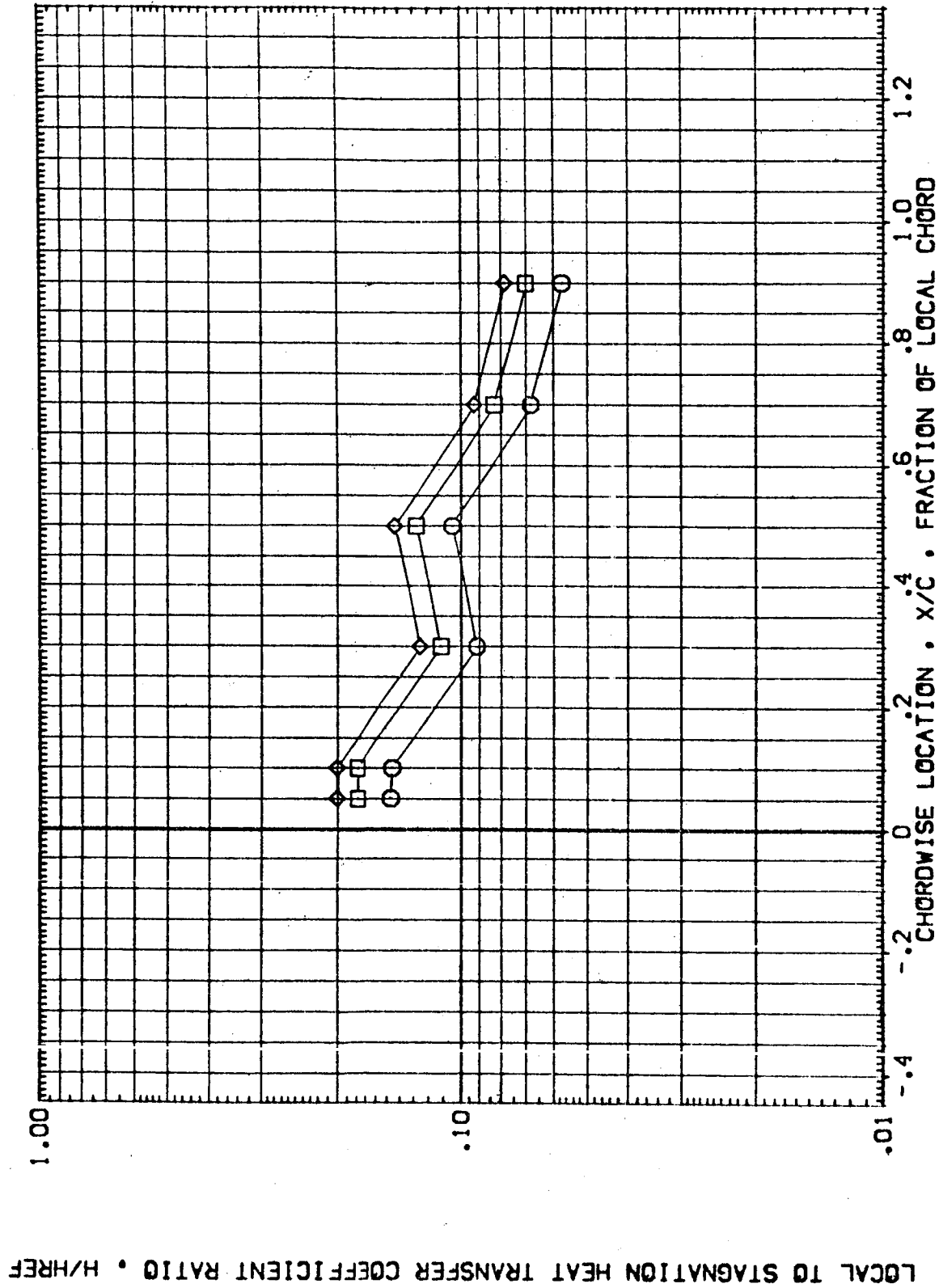


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .950

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMB. CONFIGURATION DESCRIPTION
 [RE] [005] [] [H3] [0-T+S]
 [AE] [005] [] [H3] [0-T+S]
 [BE] [005] [] [H3] [0-T+S]

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

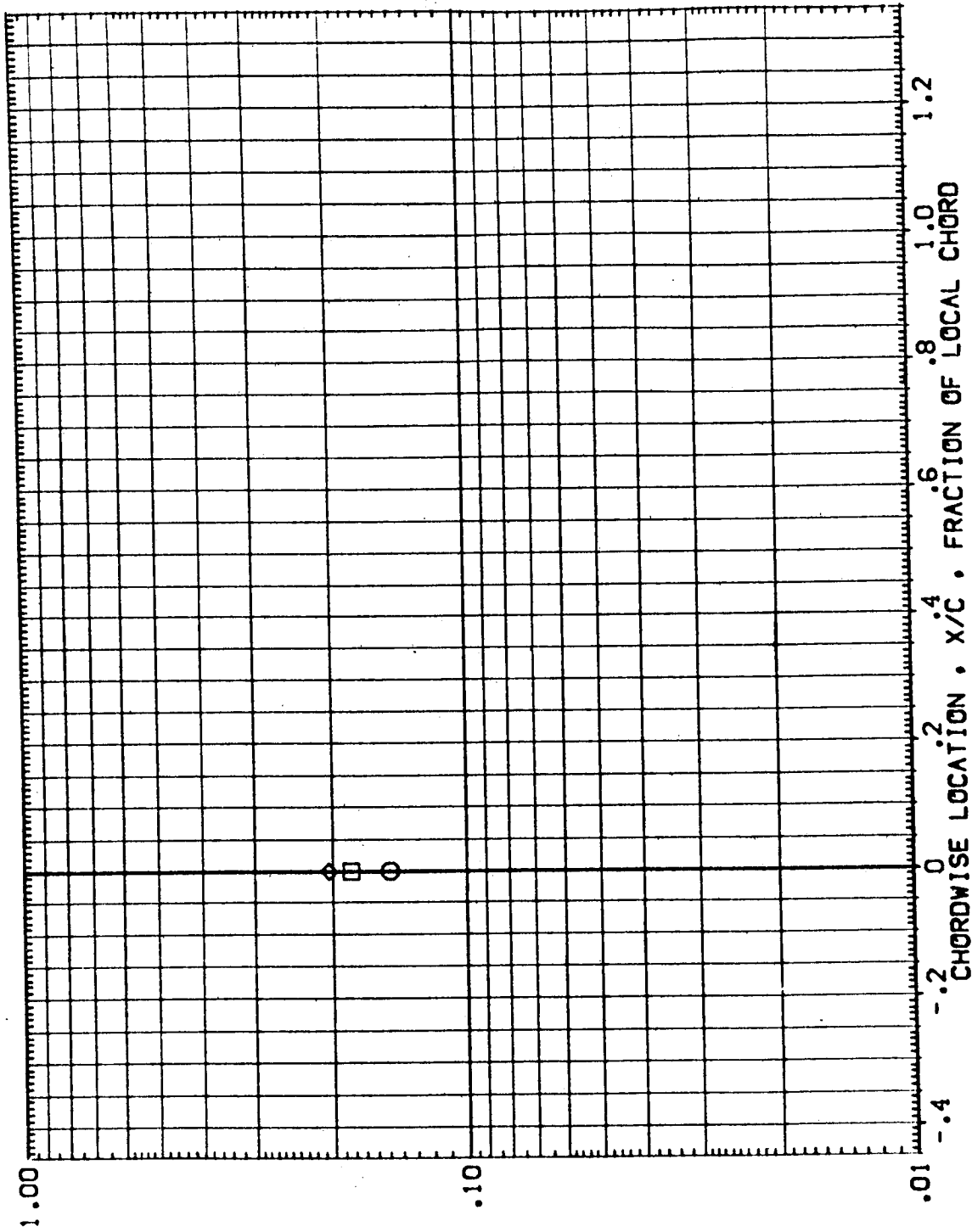


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .966



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

ARC [COS]	ARC [SIN]	ARC [TAN]	ARC [COS]	ARC [SIN]	ARC [TAN]	BETA	RM/L	RM/RC
1.000	0.000	0.000	1.000	0.000	0.000	-5.000	5.000	1.000
0.999	0.000	0.000	0.999	0.000	0.000	-5.000	5.000	0.999
0.995	0.000	0.000	0.995	0.000	0.000	-5.000	5.000	0.995

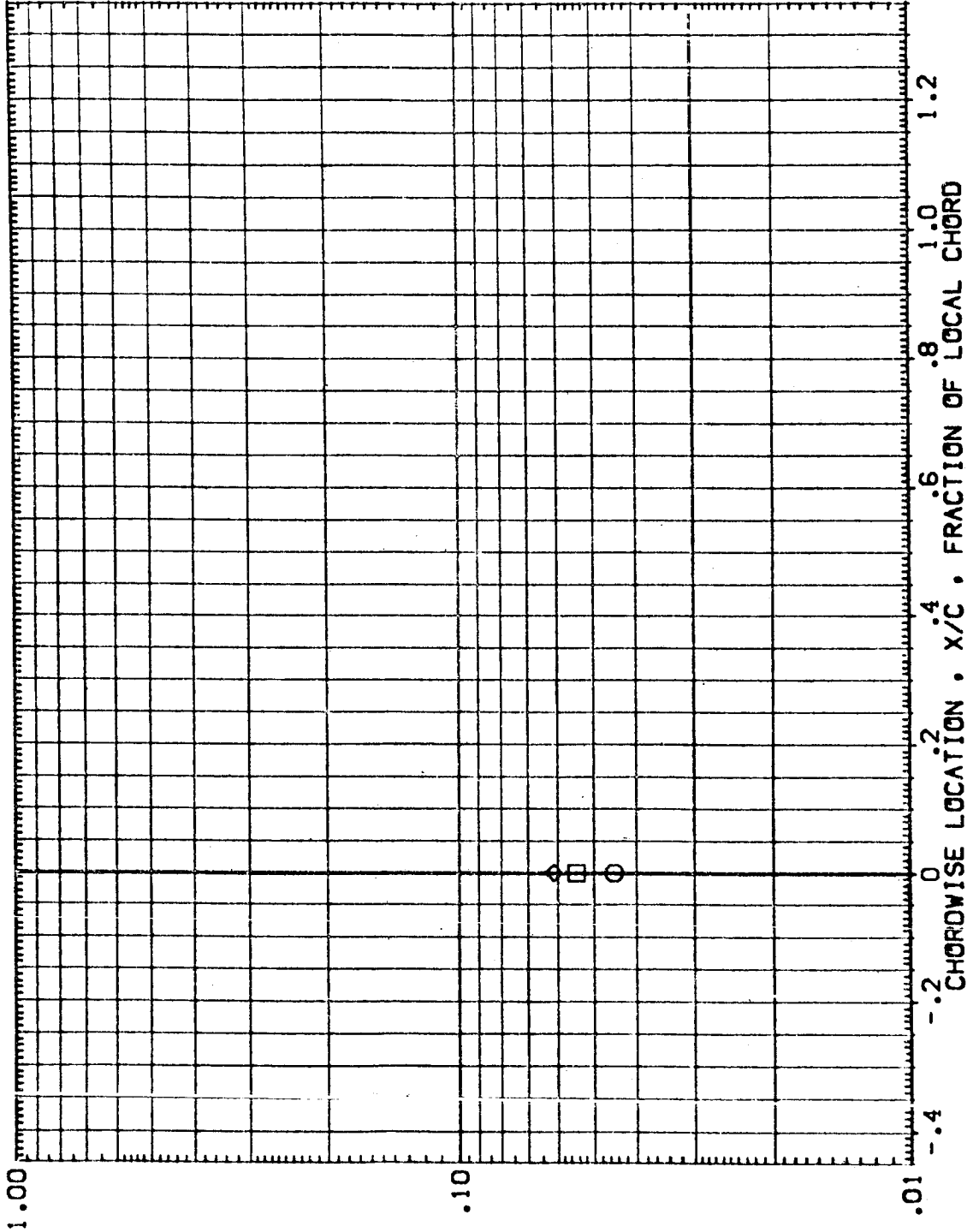


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

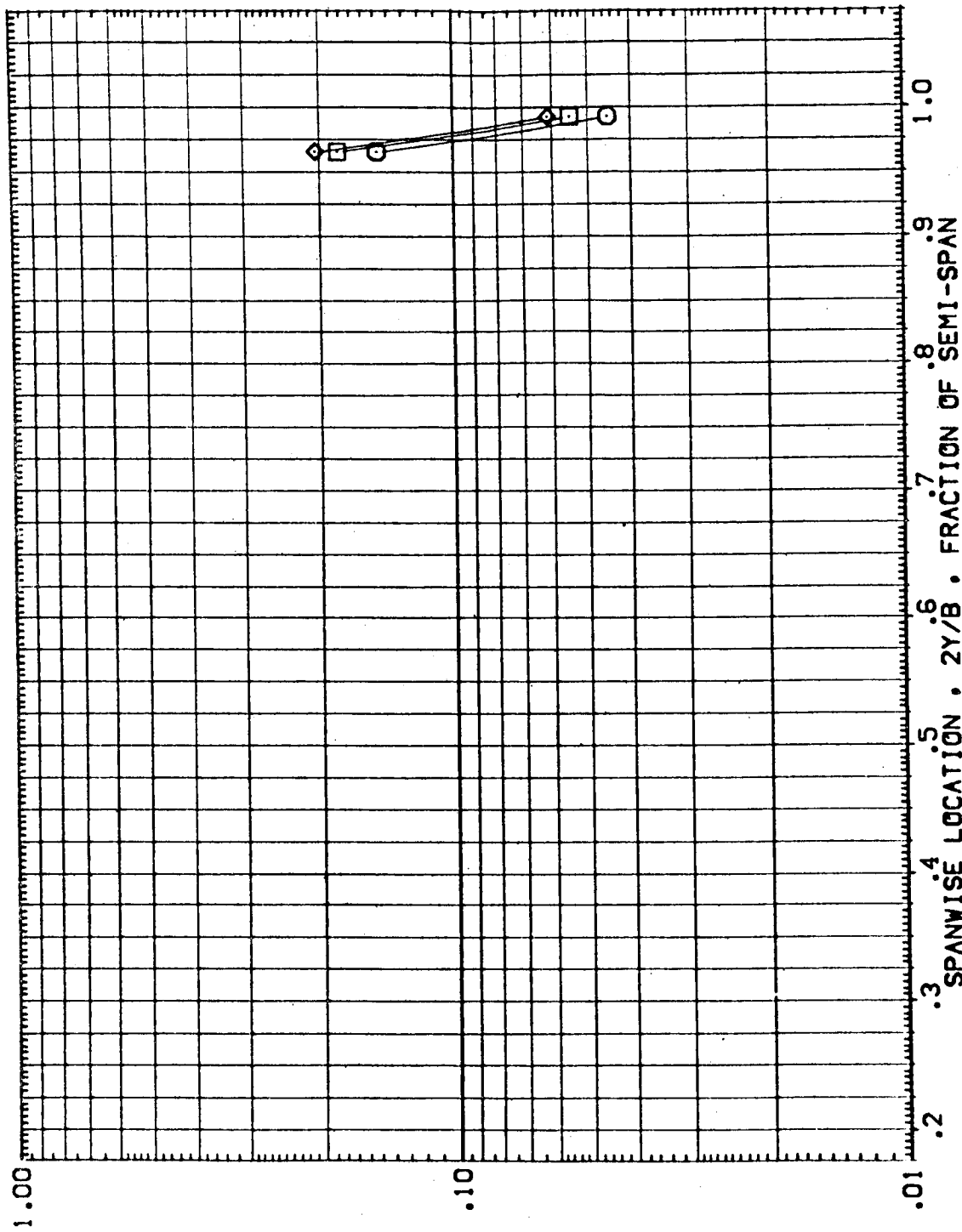
MACH = 5.300 2Y/B = .993

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 [RE] [GOS] ARC 3.5-178 [H3] [O+T+S]
 [AE] [GOS] ARC 3.5-178 [H3] [O+T+S]
 [BE] [GOS] ARC 3.5-178 [H3] [O+T+S]

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA BETA RN/VL HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850



SPANWISE LOCATION • 2Y/8 • FRACTION OF SEMI-SPAN

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .000



DATA SET SYMBO: CONFIGURATION DESCRIPTION
 (RE) (OS) [] ARC 3.5-178 IH3 0+1+S
 (AL) (OS) [] ARC 3.5-178 IH3 0+1+S
 (BE) (OS) [] ARC 3.5-178 IH3 0+1+S

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

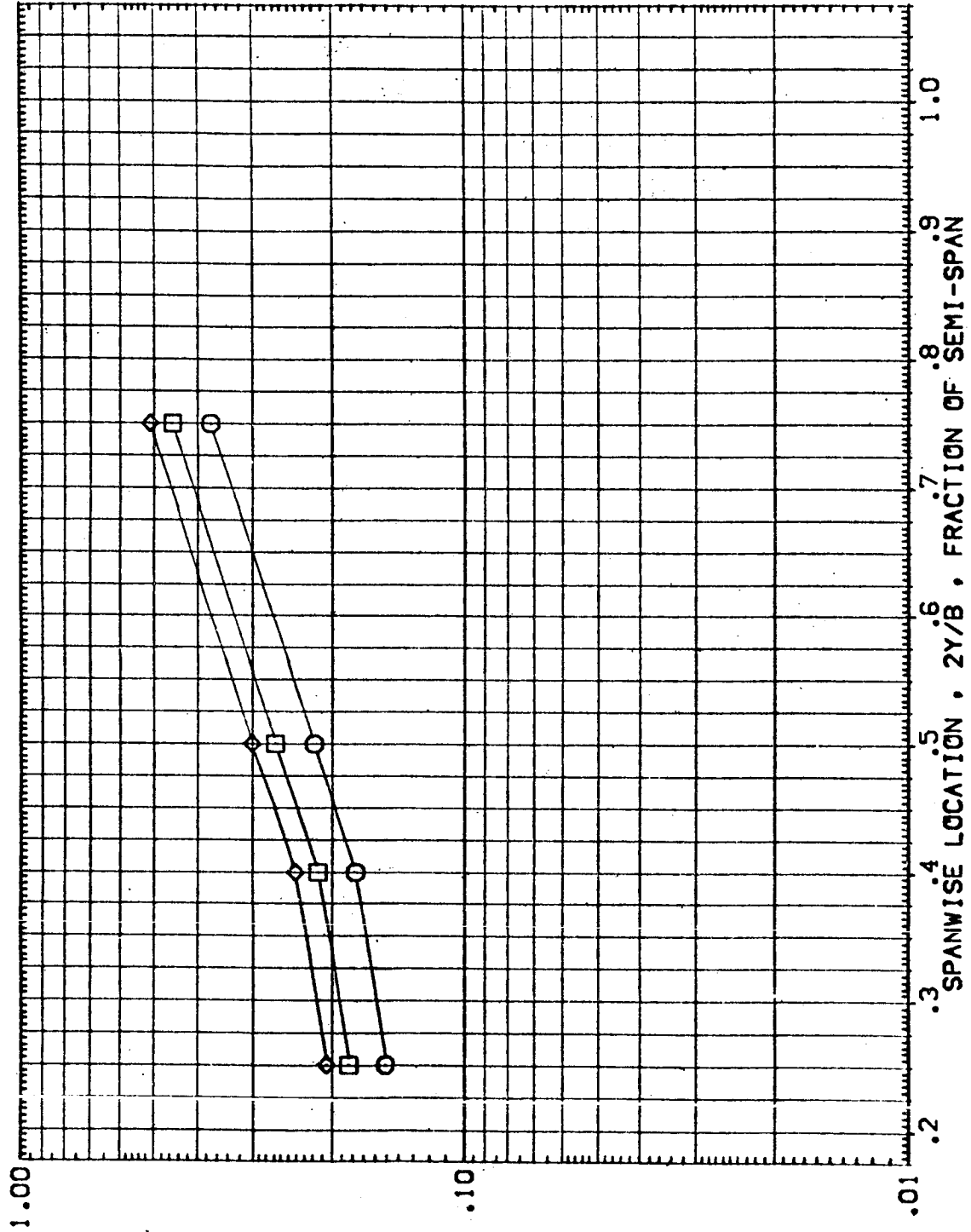


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .025

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

[RE]GOS ARC 3.5-178 143 O+T+S .000 -5.000 5.000 1.000

[AE]GOS ARC 3.5-178 143 O+T+S .000 -5.000 5.000 .900

[BE]GOS ARC 3.5-178 143 O+T+S .000 -5.000 5.000 .850

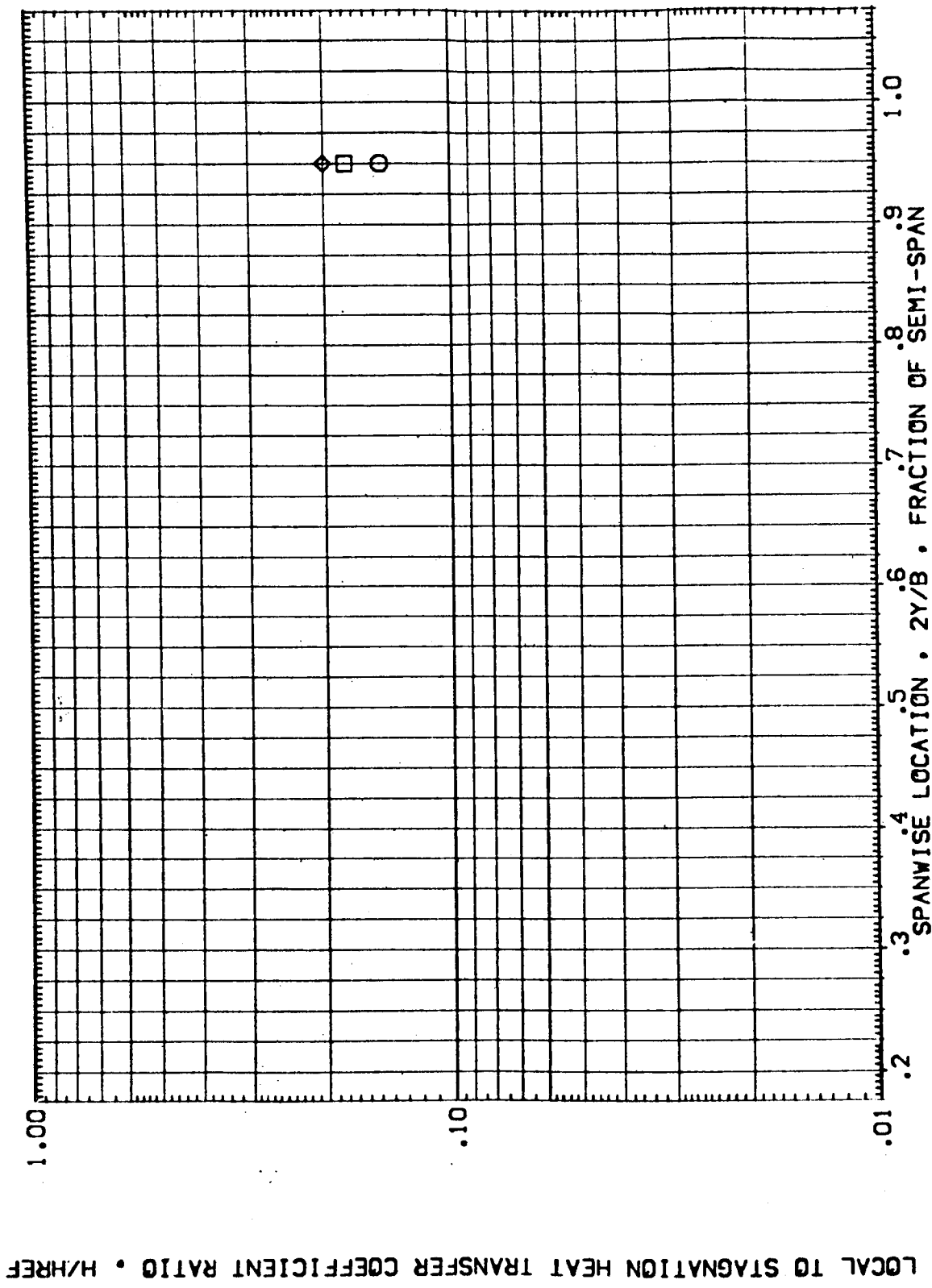


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .050



DATA SET SYMBOL COEF. SUBSTITUTION DESCRIPTION
 [RE] [605] [RE] [605] ARC 3.5-178 [H3 0+1+5]
 [AE] [605] [AE] [605] ARC 3.5-178 [H3 0+1+5]
 [BE] [605] [BE] [605] ARC 3.5-178 [H3 0+1+5]

VING BOTTOM
 VING BOTTOM
 VING BOTTOM

ALPHA BETA RV/L HAV/H*
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .800
 .000 -5.000 5.000 .650

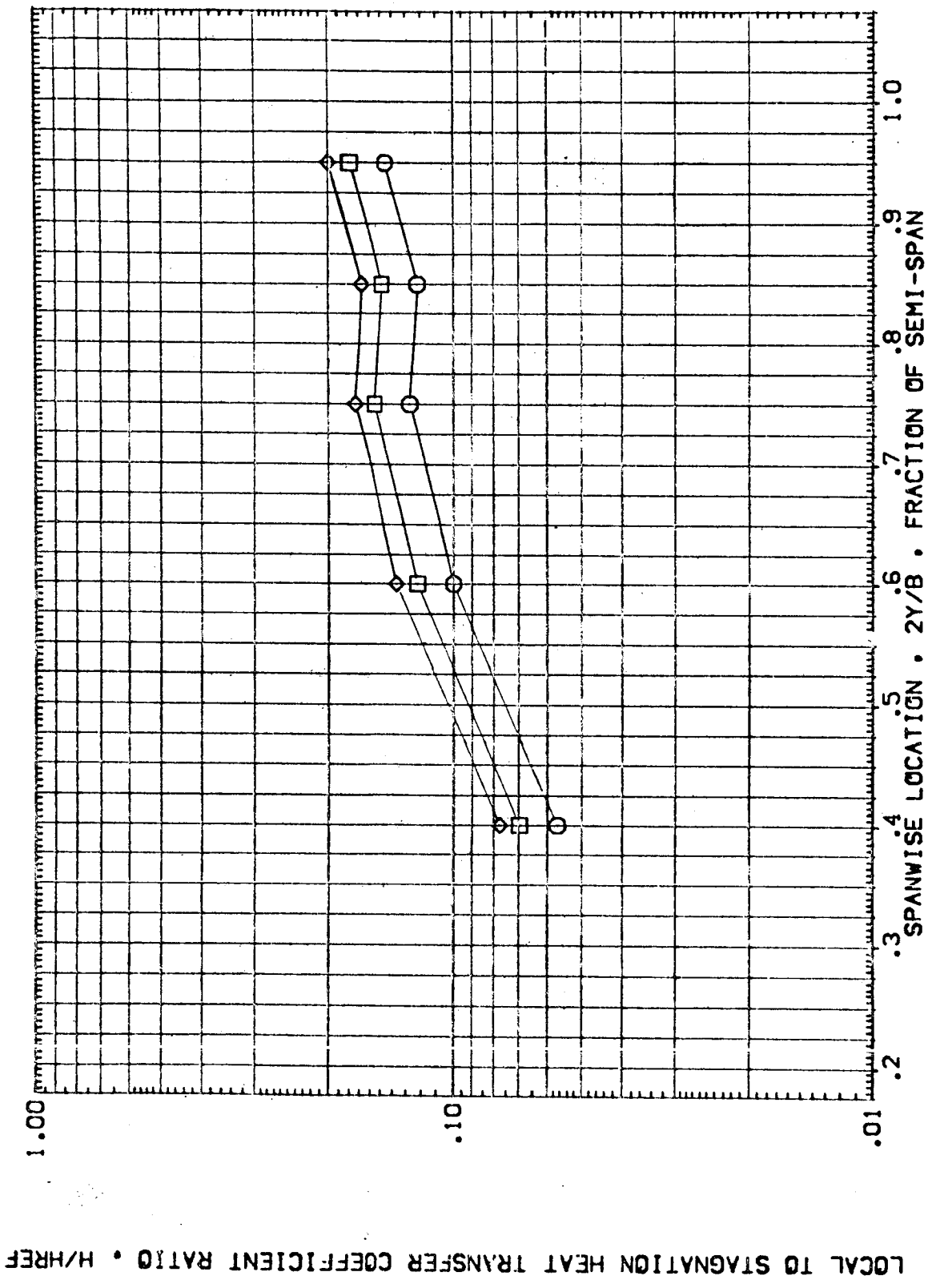


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .100

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE|GOS} □ ARC 3.5-178 |H3 0+T+S
 {AE|GOS} ◇ ARC 3.5-178 |H3 0+T+S
 {BE|GOS} ◊ ARC 3.5-178 |H3 0+T+S

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

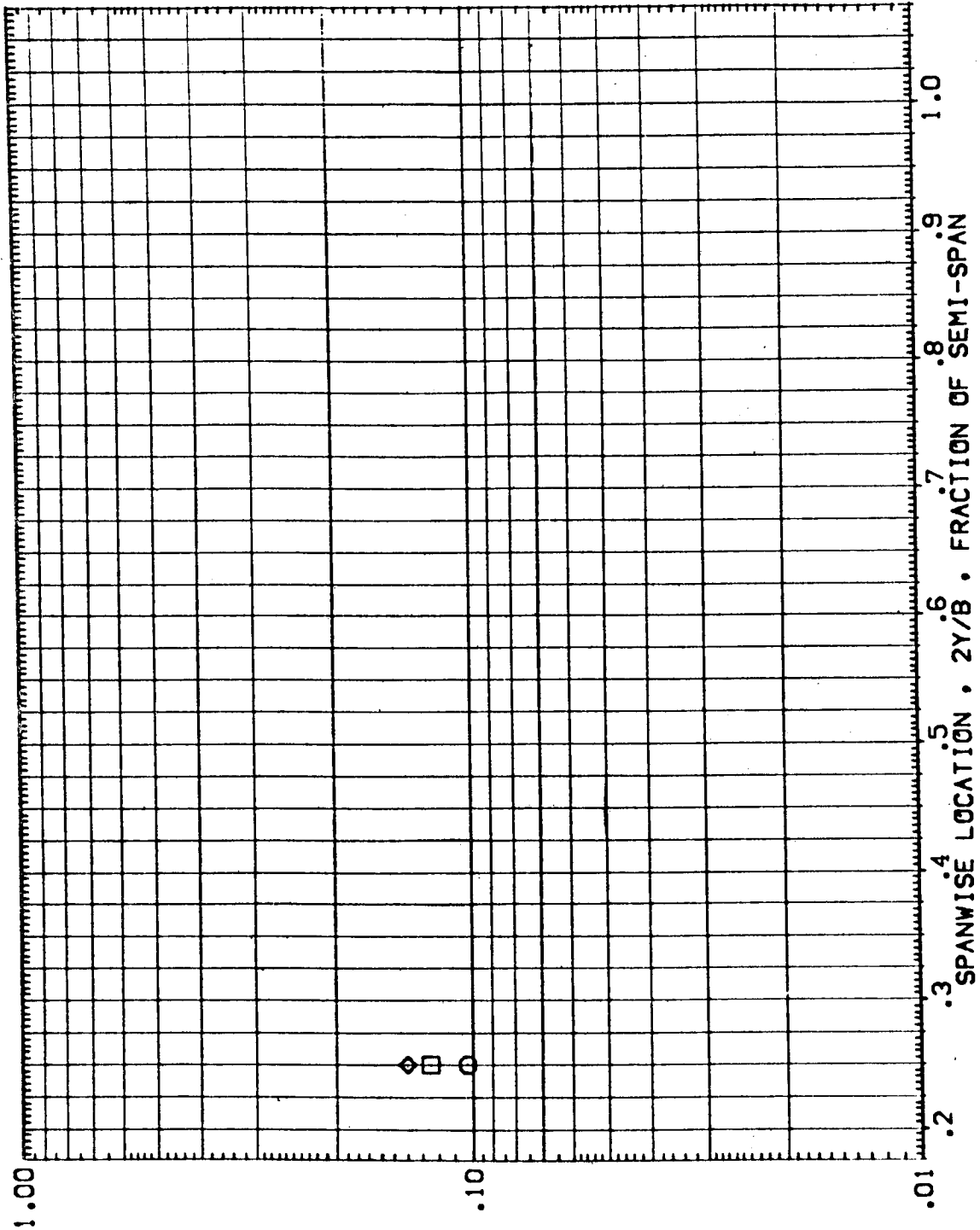


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .153



DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RN/L HAV/HT
 { REIGOS } ARC 1:5-178 I43 O+T+S WING BOTTOM .000 -5.000 5.000 1.000
 { AEIGOS } ARC 1:5-178 I43 O+T+S WING BOTTOM .000 -5.000 5.000 .500
 { BEIGOS } ARC 1:5-178 I43 O+T+S WING BOTTOM .000 -5.000 5.000 .650

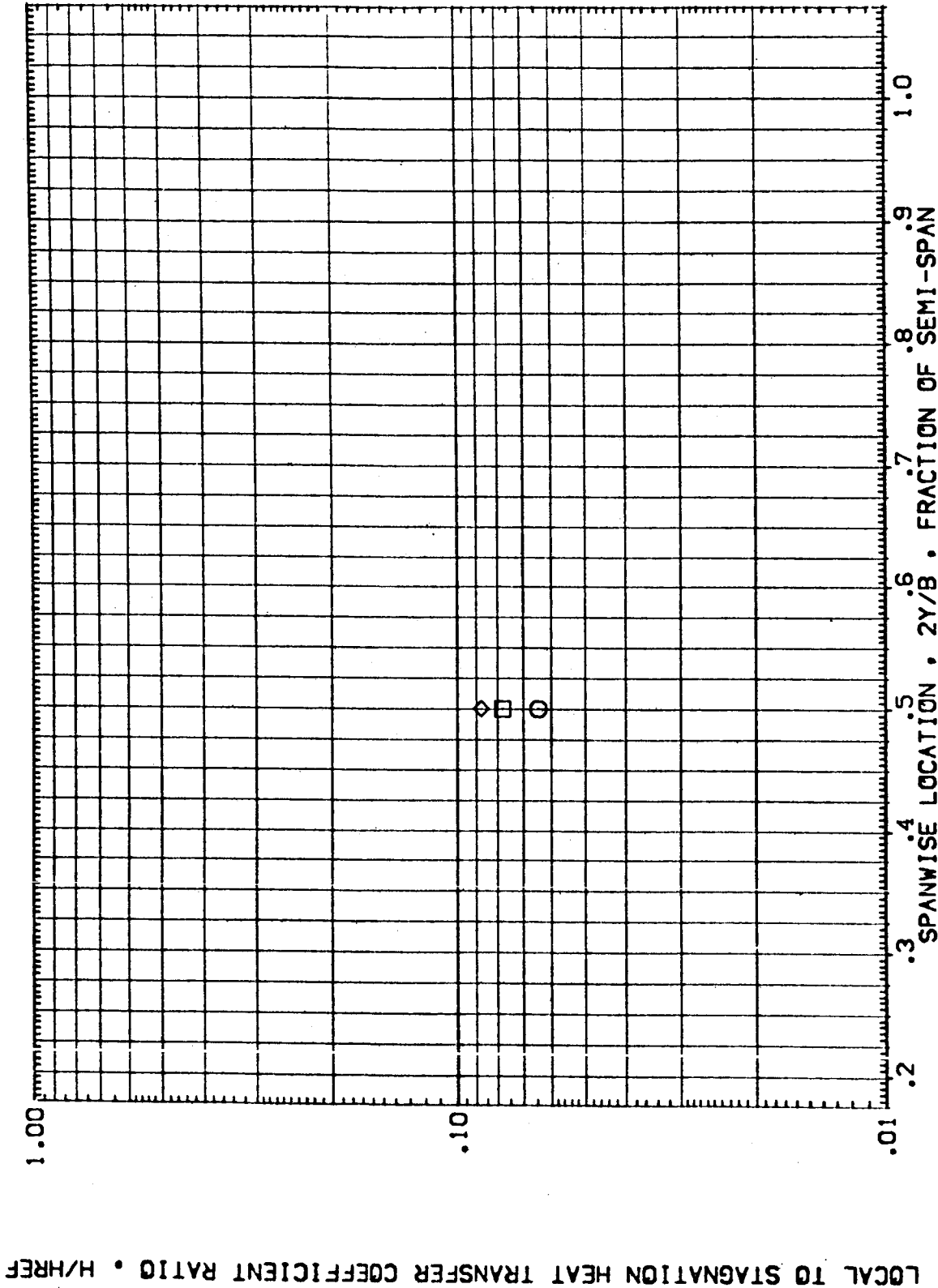


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .177

DATA SET SYMBOL CONFIGURATION DESCRIPTION VING BOTTOM VING BOTTOM VING BOTTOM ALPHA BETA RV/L HAV/HT

{RE|GOS} ARC 3.5-178 |H3 O+T+S VING BOTTOM VING BOTTOM VING BOTTOM .000 -5.000 5.000 1.000

{AL|GOS} ARC 3.5-178 |H3 O+T+S VING BOTTOM VING BOTTOM VING BOTTOM .000 -5.000 5.000 .900

{BE|GOS} ARC 3.5-178 |H3 O+T+S VING BOTTOM VING BOTTOM VING BOTTOM .000 -5.000 5.000 .850

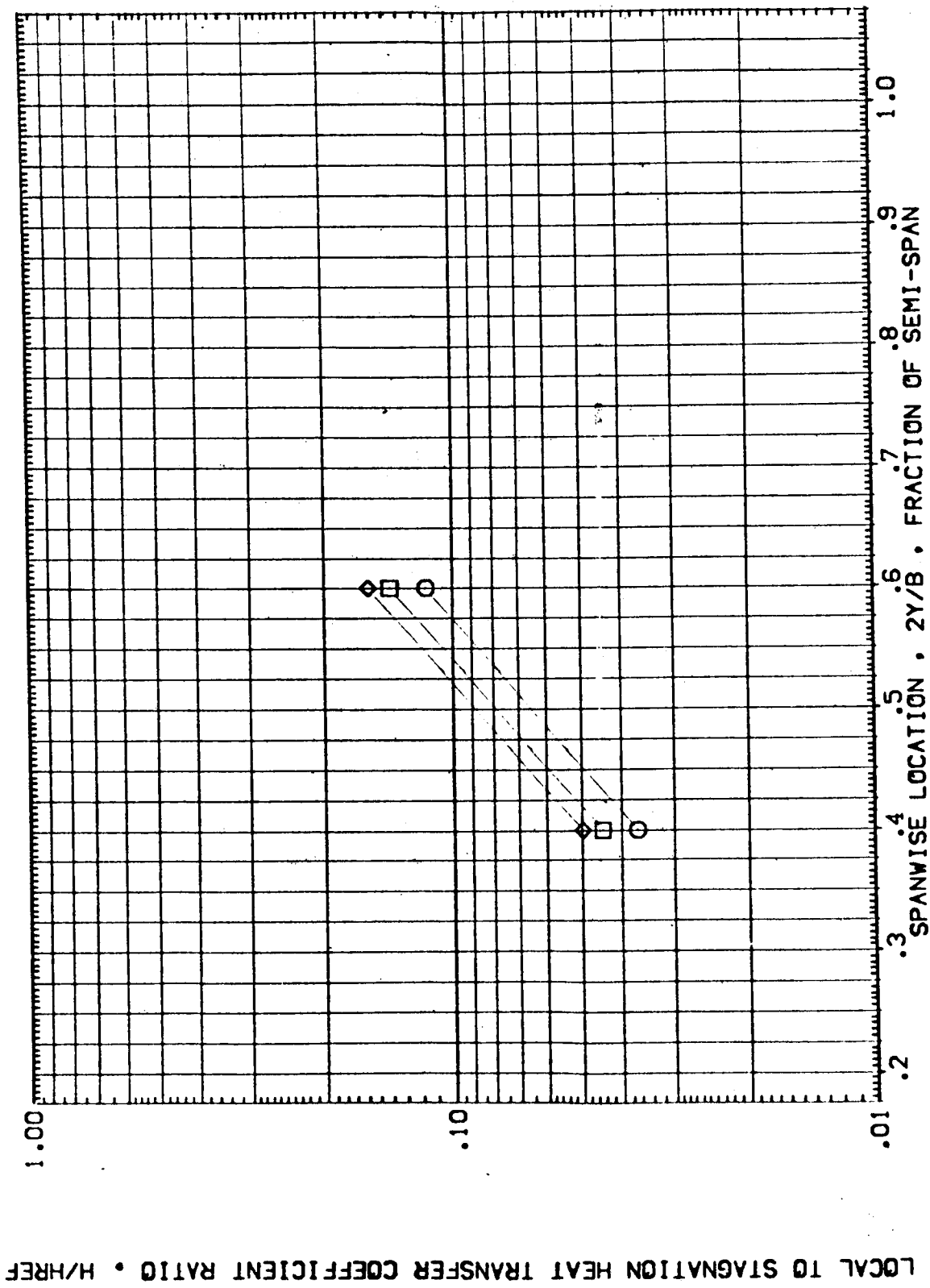


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION

{ REIGOS } ARC 3.5-178 |H3 O-T+S
 { AEIGOS } ARC 3.5-178 |H3 O-T+S
 { BEIGOS } ARC 3.5-178 |H3 O-T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

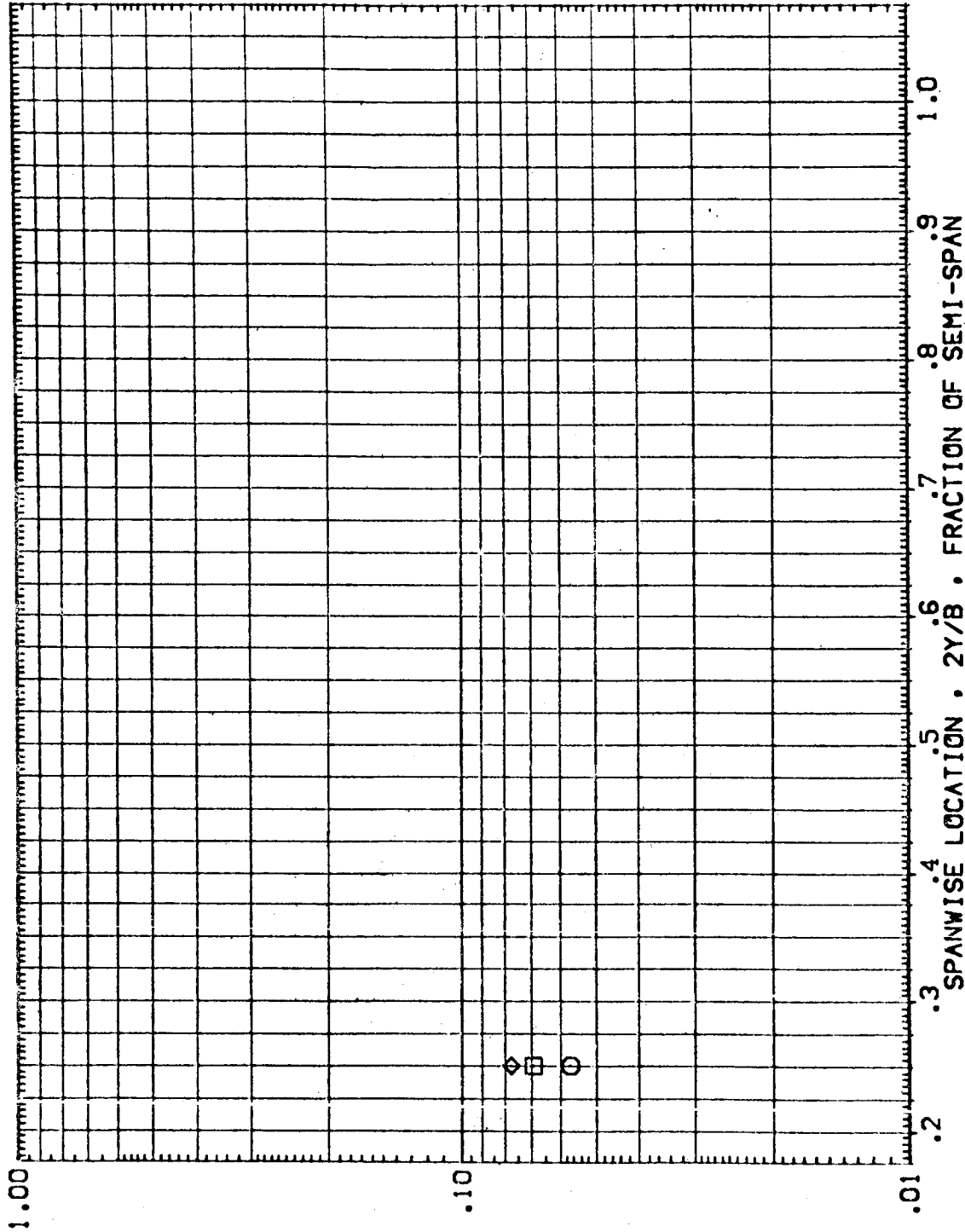
ALPHA .000
 .000
 .000

BETA -5.000
 -5.000
 -5.000

RN/L 5.000
 5.000
 5.000

HAV/HT 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



SPANWISE LOCATION • 2Y/B • FRACTION OF SEMI-SPAN

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1005) ARC 3.5-178 1+3 0+1+S
 (AE1005) ARC 3.5-178 1+3 0+1+S
 (BE1005) ARC 3.5-178 1+3 0+1+S

WING BOTTOM WING BOTTOM WING BOTTOM
 WING BOTTOM WING BOTTOM WING BOTTOM

ALPHA .000 .000 .000
 BETA -5.000 -5.000 -5.000

RV/L 5.000 5.000 5.000

HAV/HT 1.000 .900 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

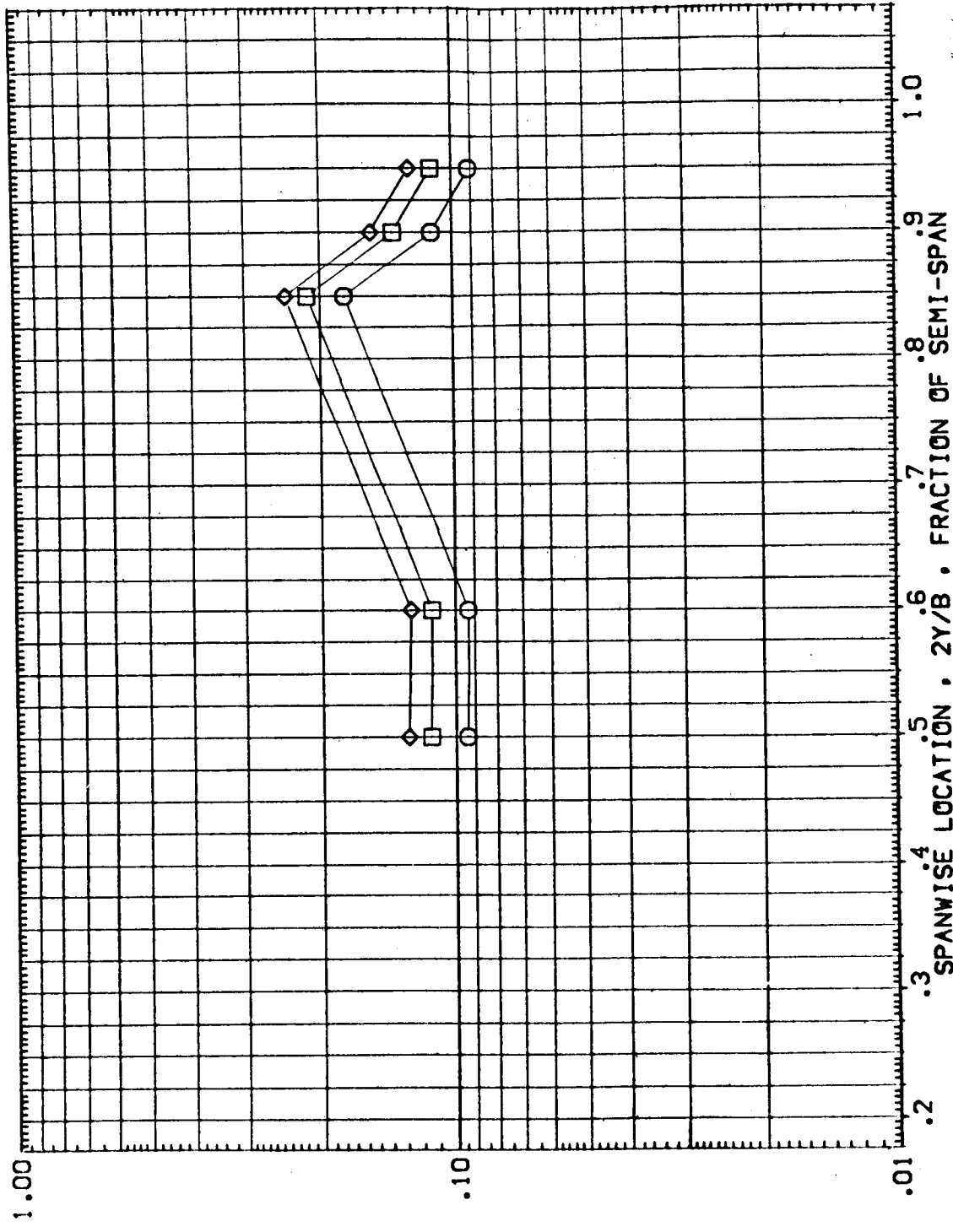


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

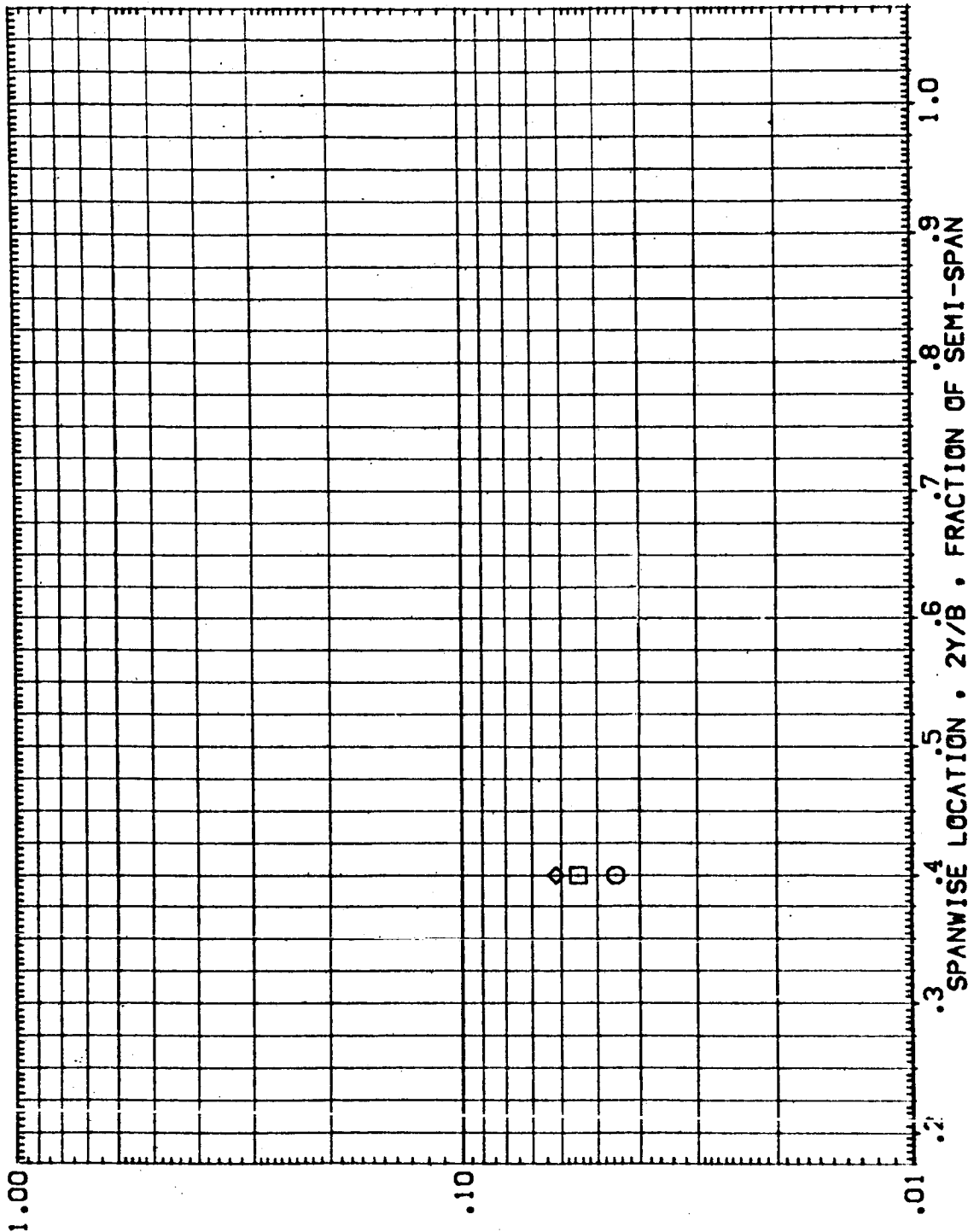
MACH = 5.300 X/C = .300



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
{ RE1005 }	ARC 3.5-178 H3 O+T+S	.000	-5.000	5.000	1.000
{ AE1005 }	ARC 3.5-178 H3 O+T+S	.000	-5.000	5.000	.900
{ BE1005 }	ARC 3.5-178 H3 O+T+S	.000	-5.000	5.000	.850

VING BOTTOM
VING BOTTOM
VING BOTTOM



.3 SPANWISE LOCATION • 2Y/B • FRACTION OF SEMI-SPAN

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .302

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L HAV/HT

(RE) (GOS) ARC 3.5-178 (H3 O-T+S) WING BOTTOM .000 -5.000 5.000 1.000

(AE) (GOS) ARC 3.5-178 (H3 O-T+S) WING BOTTOM .000 -5.000 5.000 .900

(BE) (GOS) ARC 3.5-178 (H3 O-T+S) WING BOTTOM .000 -5.000 5.000 .850

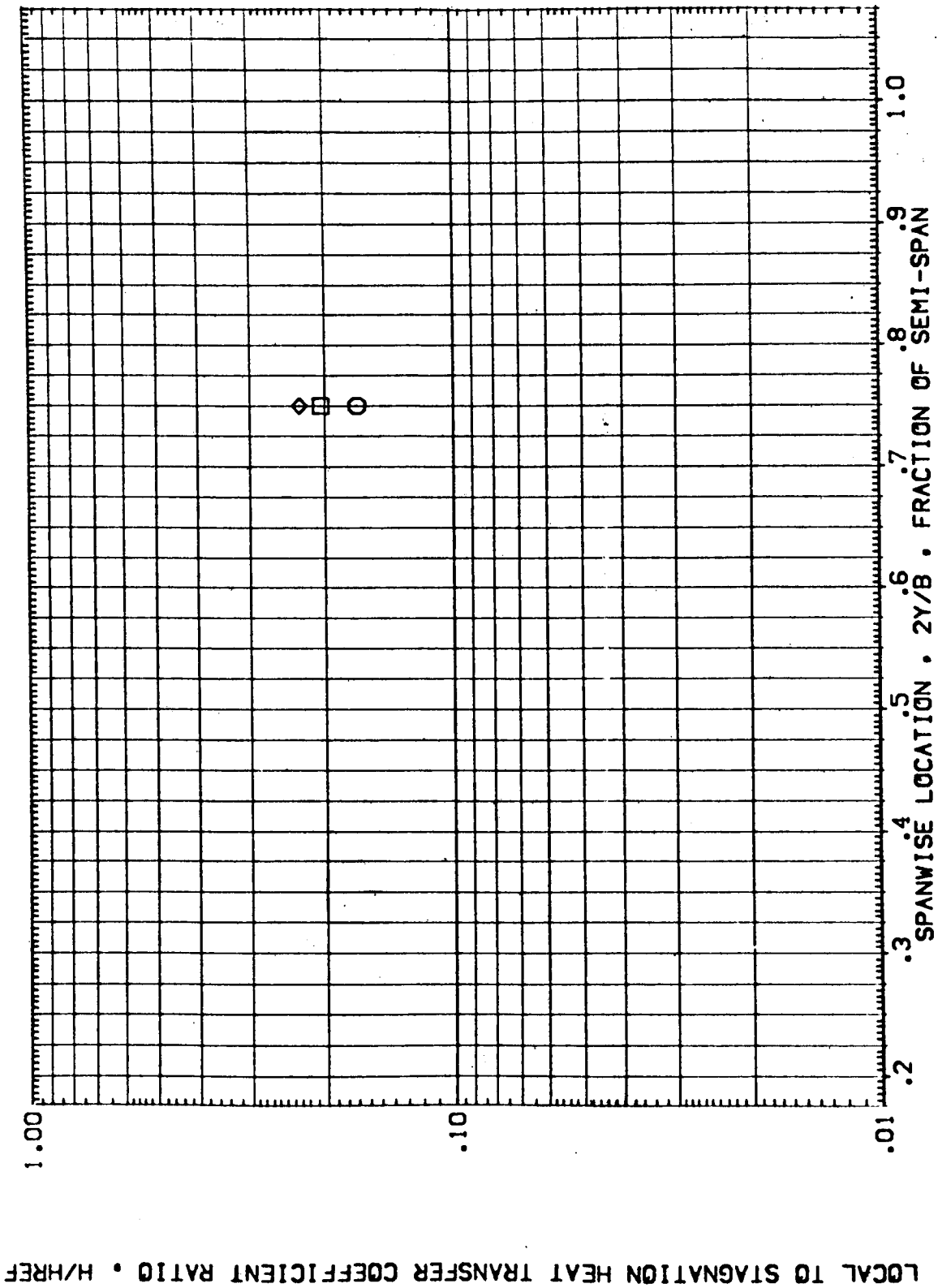


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .303

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(RE1605)	ARC 3.5-178 IH3 O+T+S	.000	-5.000	5.000	1.000
(AE1605)	ARC 3.5-178 IH3 O+T+S	.000	-5.000	5.000	.900
(BE1605)	ARC 3.5-178 IH3 O+T+S	.000	-5.000	5.000	.650

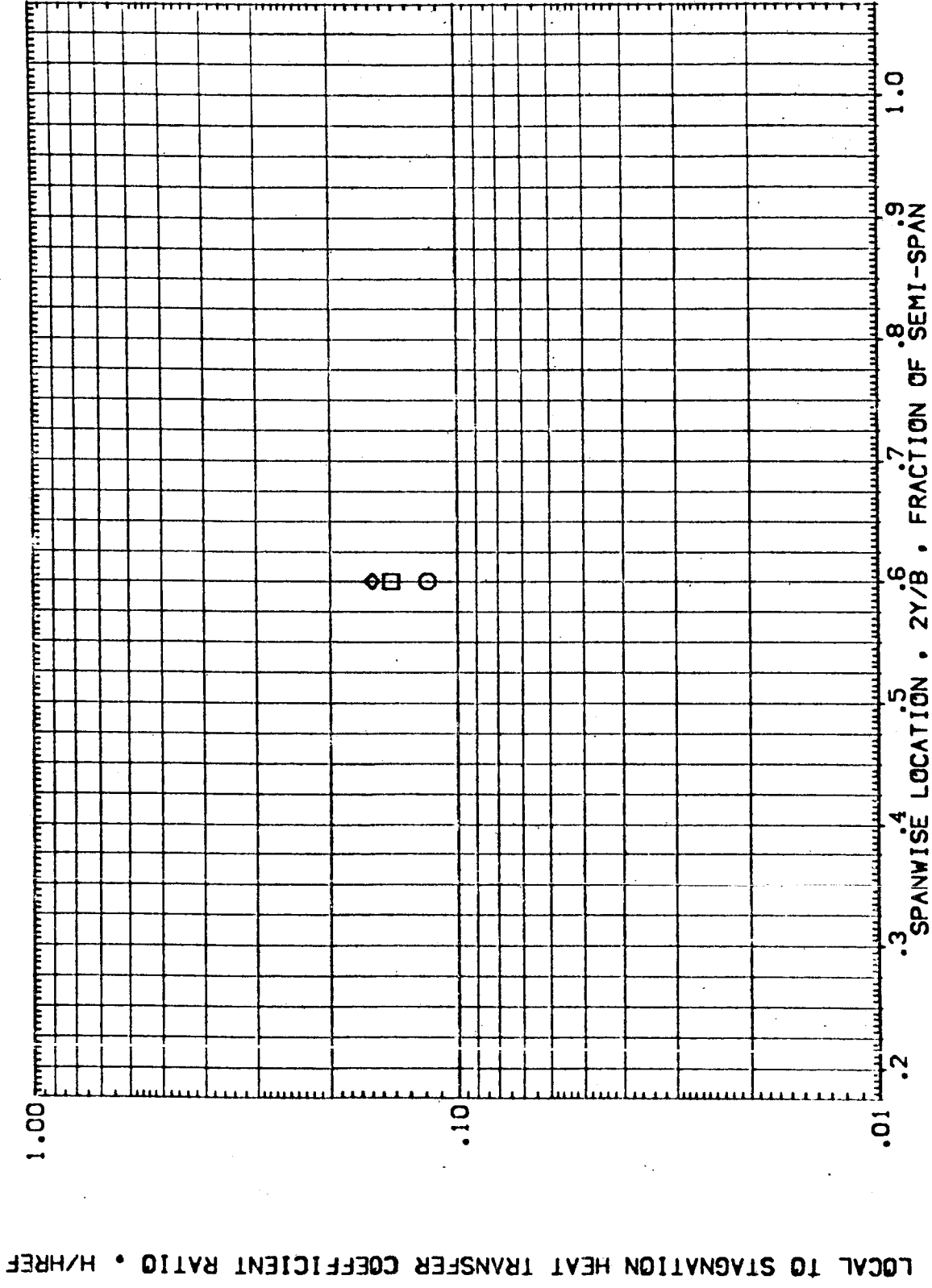


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .428

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

[RE] [005] ARC 3.5-178 143 0+T+S .000 -5.000 5.000 1.000

[AE] [005] ARC 3.5-178 143 0+T+S .000 -5.000 5.000 .900

[BE] [005] ARC 3.5-178 143 0+T+S .000 -5.000 5.000 .850

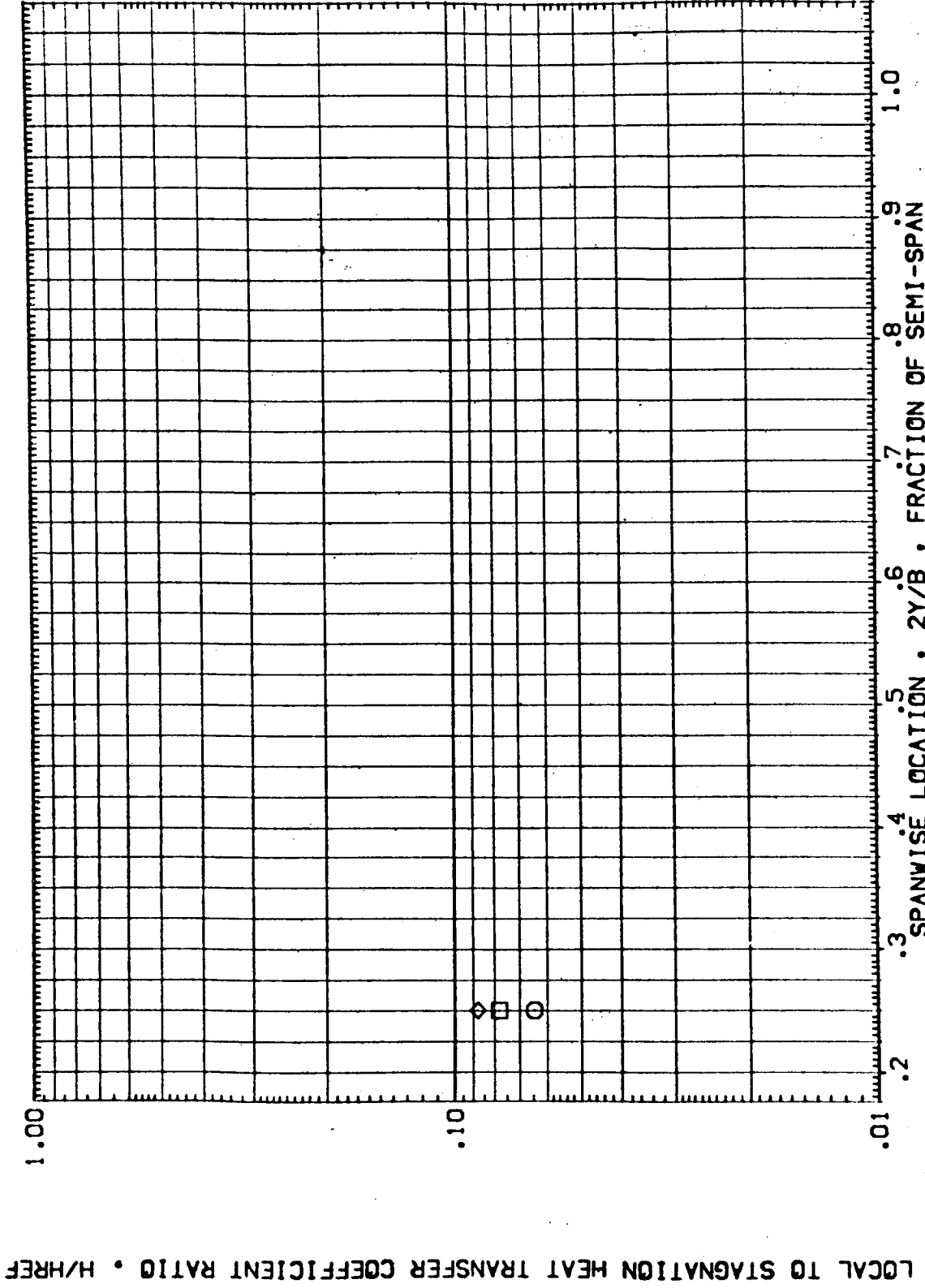


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .444



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1605) ARC 3.5-178 IH3 0+T+S
 (AE1605) ARC 3.5-178 IH3 0+T+S
 (BE1605) ARC 3.5-178 IH3 0+T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA BETA RNV/L MAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

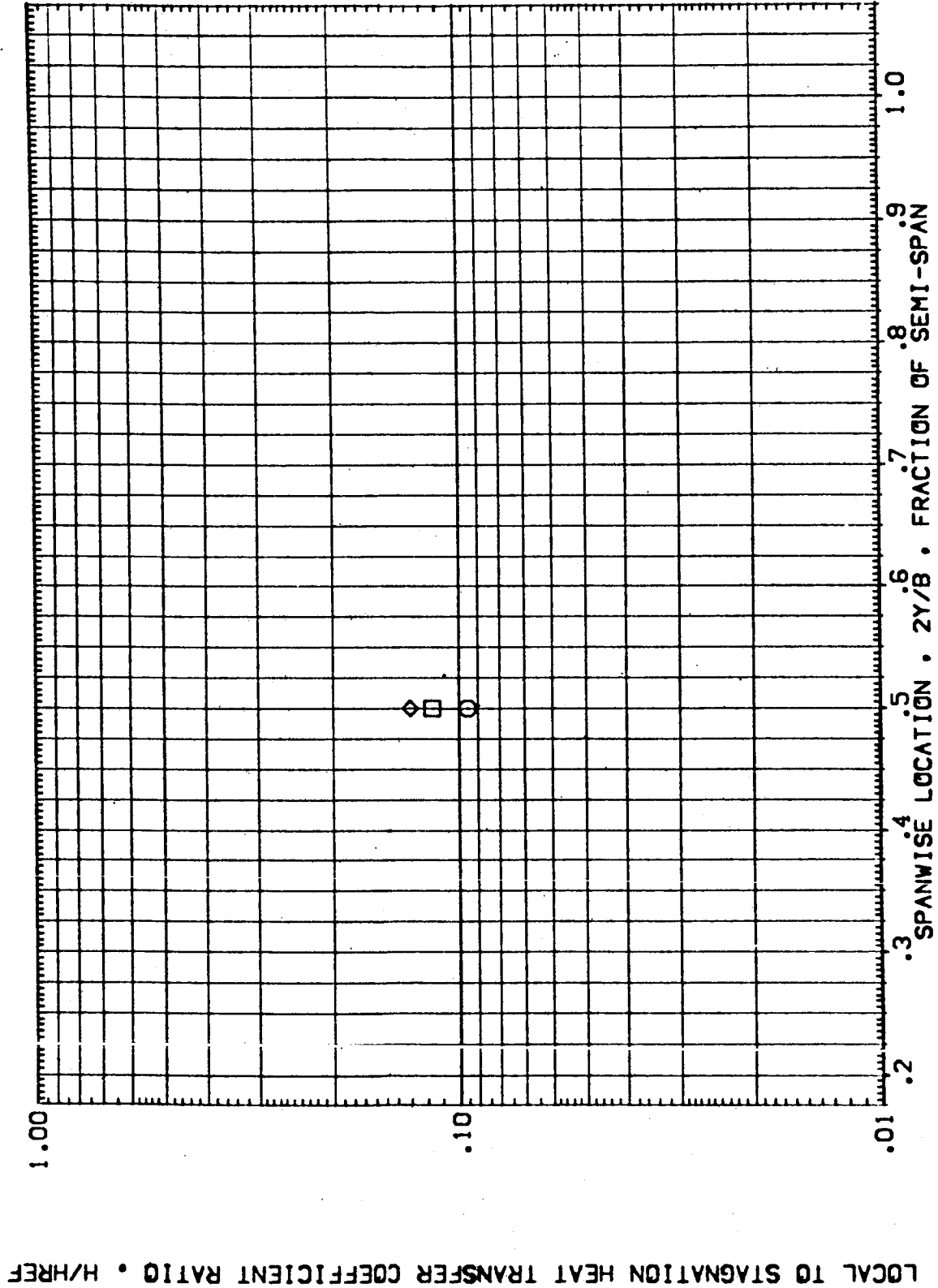


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .487

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE|G25} ARC 3.5-178 IH3 0+T+S
 {AE|G05} ARC 3.5-178 IH3 0+T+S
 {BE|G05} ARC 3.5-178 IH3 0+T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA .000
 .000
 .000

BETA -5.000
 -5.000
 -5.000

RN/L 5.000
 5.000
 5.000

HAV/HT 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

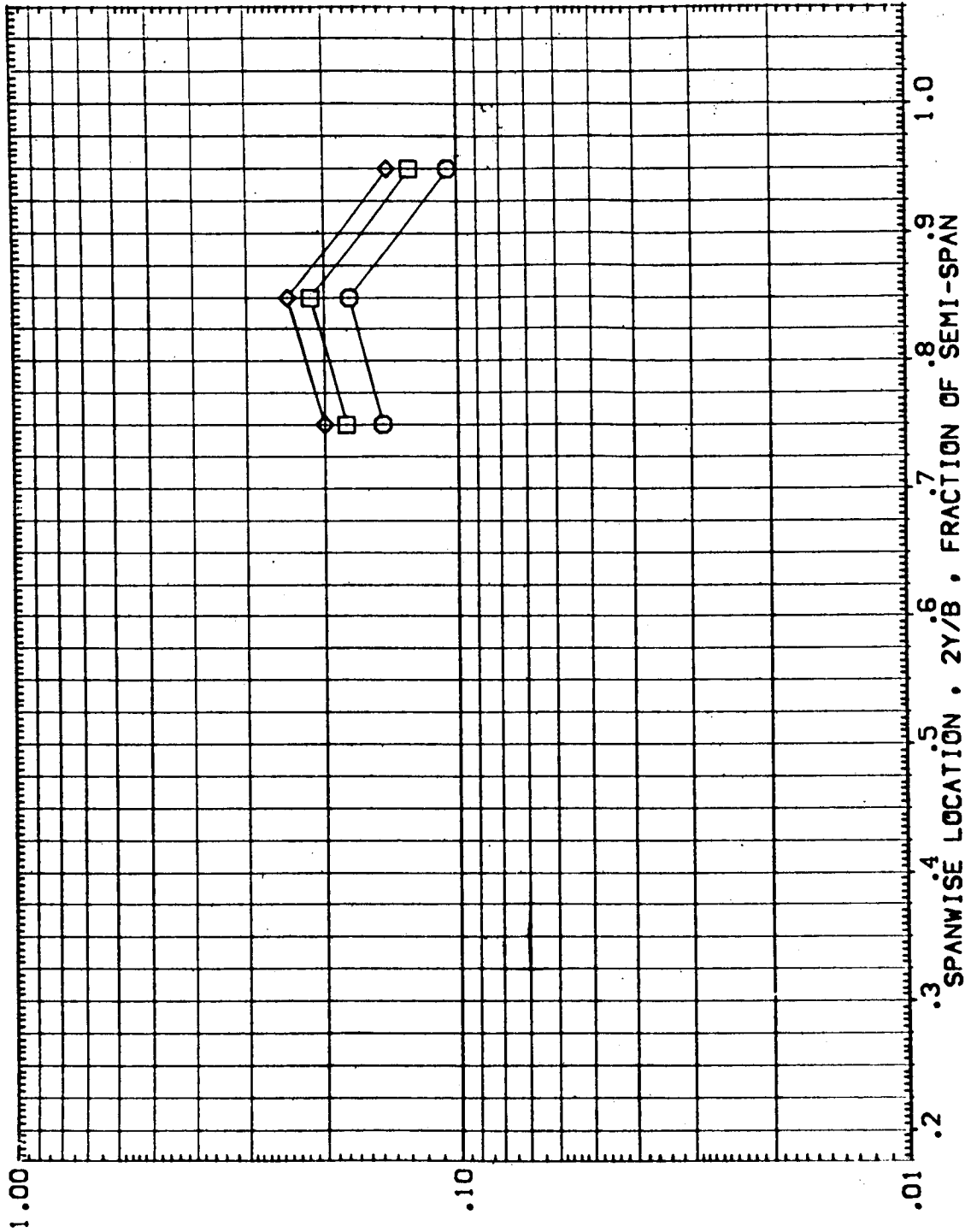


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .500



DATA SET SYMBOL. CONFIGURATION DESCRIPTION

Symbol	ARC	Spanwise Location	Configuration
□	1.5-178	1/3	0+1+S
◇	1.5-178	1/3	0+1+S
○	1.5-178	1/3	0+1+S

WING BOTTOM
WING BOTTOM
WING BOTTOM

ALPHA .000
.000
.000

BETA -5.000
-5.000
-5.000

RV/L 5.000
5.000
5.000

HAV/HT 1.000
.900
.850

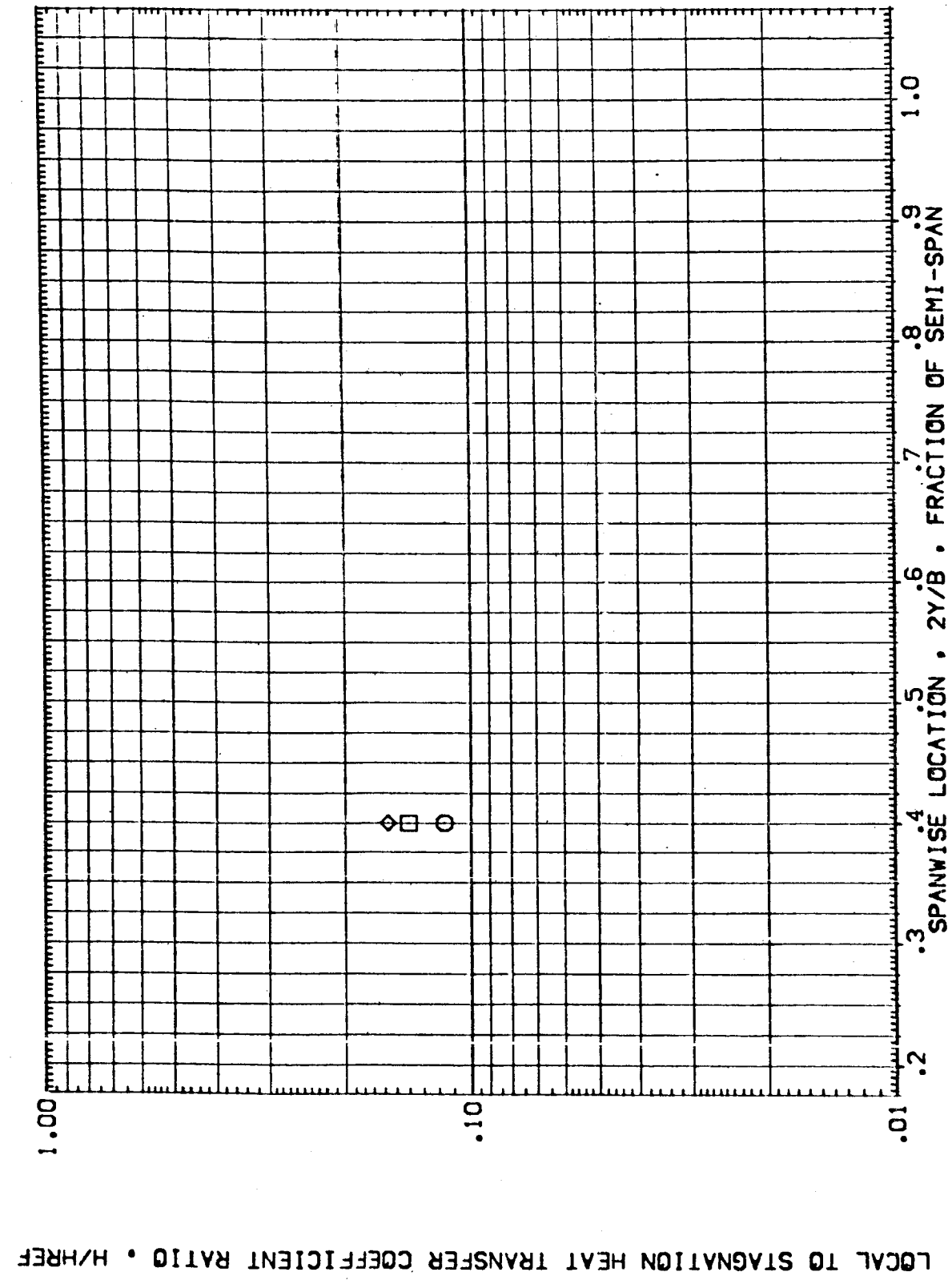


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .559

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L HAV/HT
 [RE]GOS) ARC 3.5-178 IH3 0+T+S WING BOTTOM .000 -5.000 5.000 1.000
 [AE]GOS) ARC 3.5-178 IH3 0+T+S WING BOTTOM .000 -5.000 5.000 .900
 [BE]GOS) ARC 3.5-178 IH3 0+T+S WING BOTTOM .000 -5.000 5.000 .850

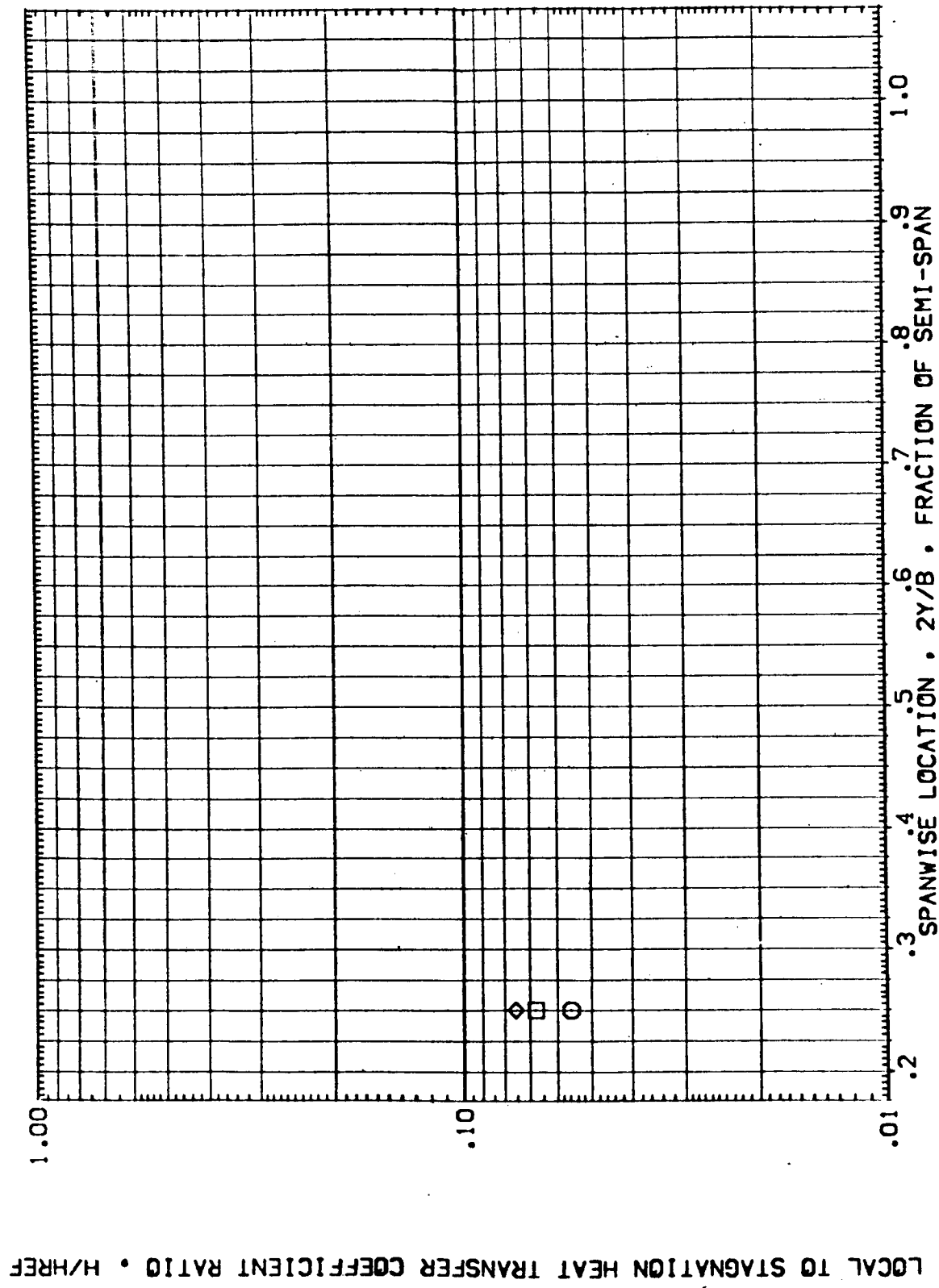


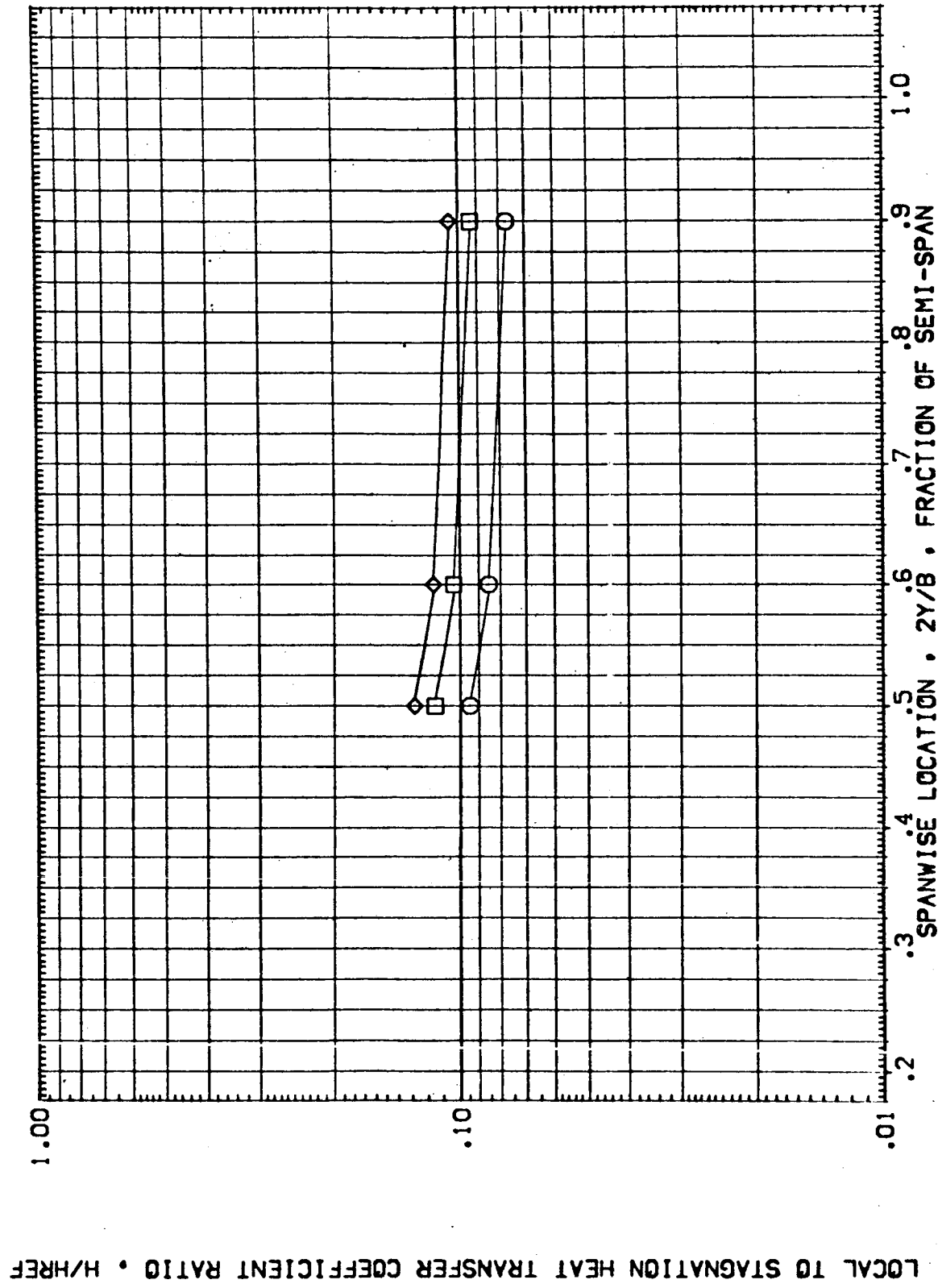
FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .590

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE] [GOS] ARC 3.5-178 143 0-T+S
 [AE] [GOS] ARC 3.5-178 143 0-T+S
 [BE] [GOS] ARC 3.5-178 143 0-T+S

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .600

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|G05) [O] ARC 3.5-178 IH3 O-T+S
 (AE|G05) [◇] ARC 3.5-178 IH3 O-T+S
 (BE|G05) [○] ARC 3.5-178 IH3 O-T+S

WING BOTTOM WING BOTTOM WING BOTTOM
 ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

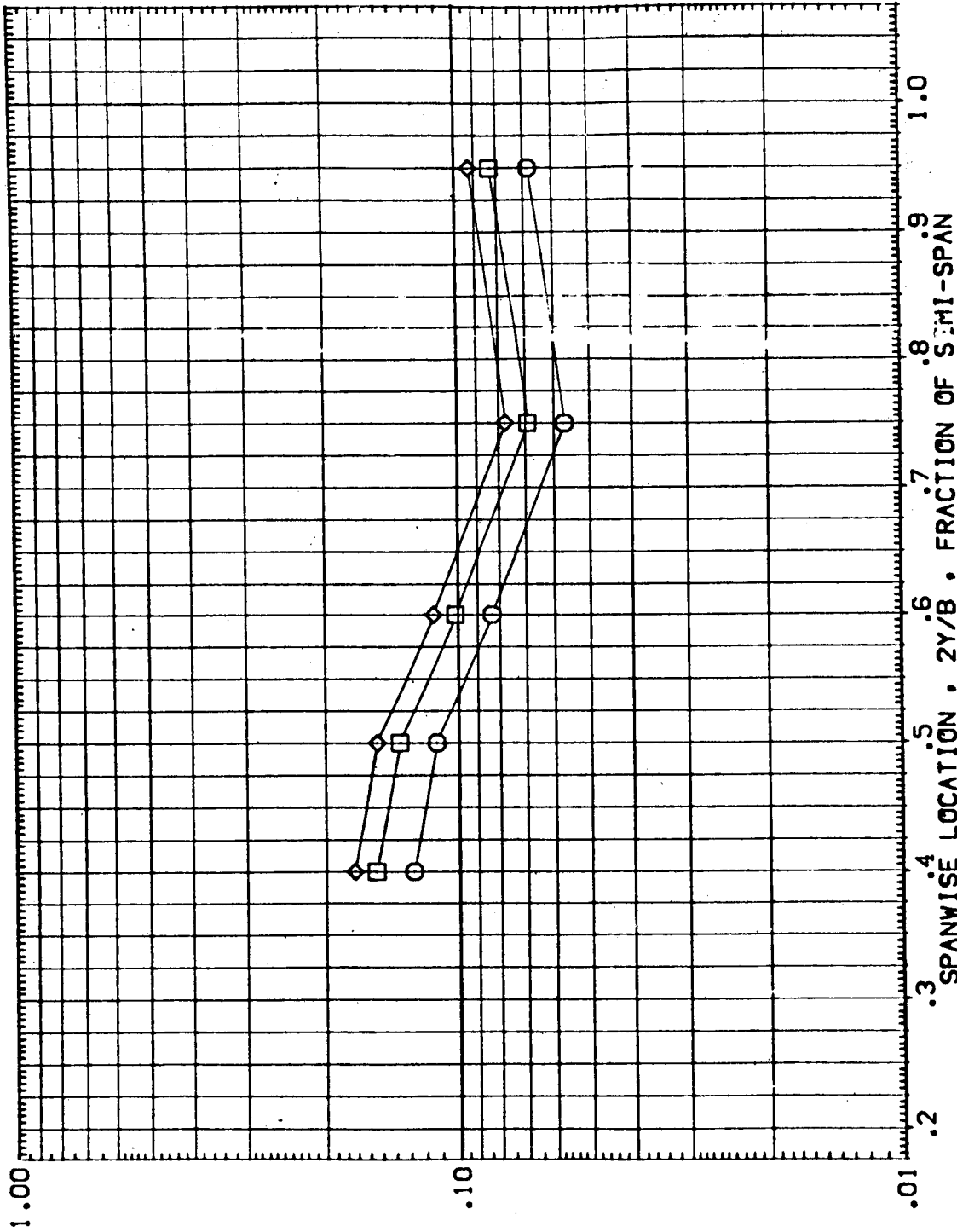


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .700



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE]GOS } ARC 3.5-178 IH3 O-T+S
 [AE]GOS } ARC 3.5-178 IH3 O-T+S
 [BE]GOS } ARC 3.5-178 IH3 O-T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA BETA R/V/L HAW/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

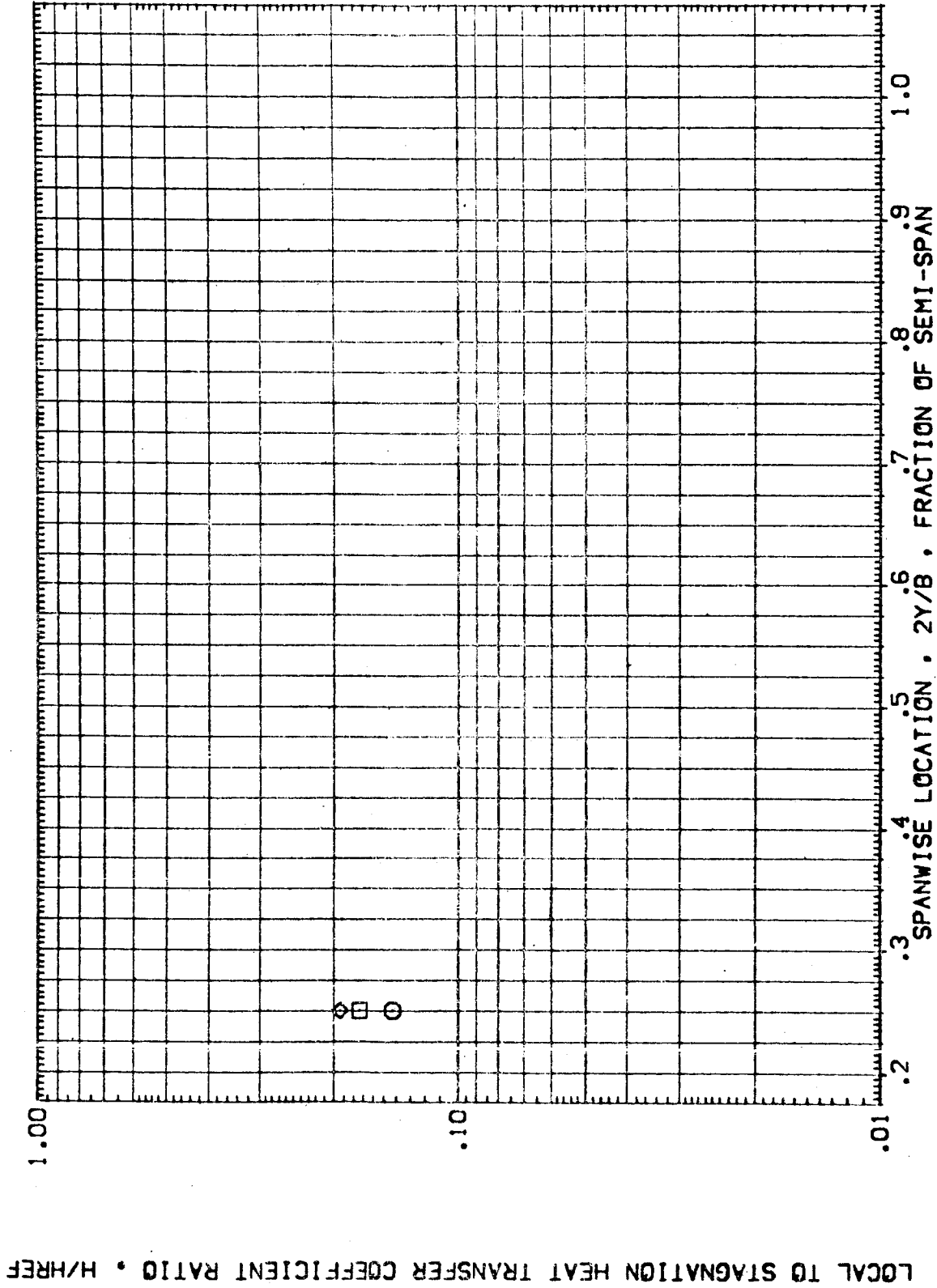





FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .736

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIGOS)  ARC 3.5-178 1-3 0-T+S
 (AEIGOS)  ARC 3.5-178 1-3 0-T+S
 (BEIGOS)  ARC 3.5-178 1-3 0-T+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA-BETA R/V/L
 .000 -5.000 5.000
 .000 -5.000 5.000
 .000 -5.000 5.000

HAW/HT
 1.000
 .900
 .850

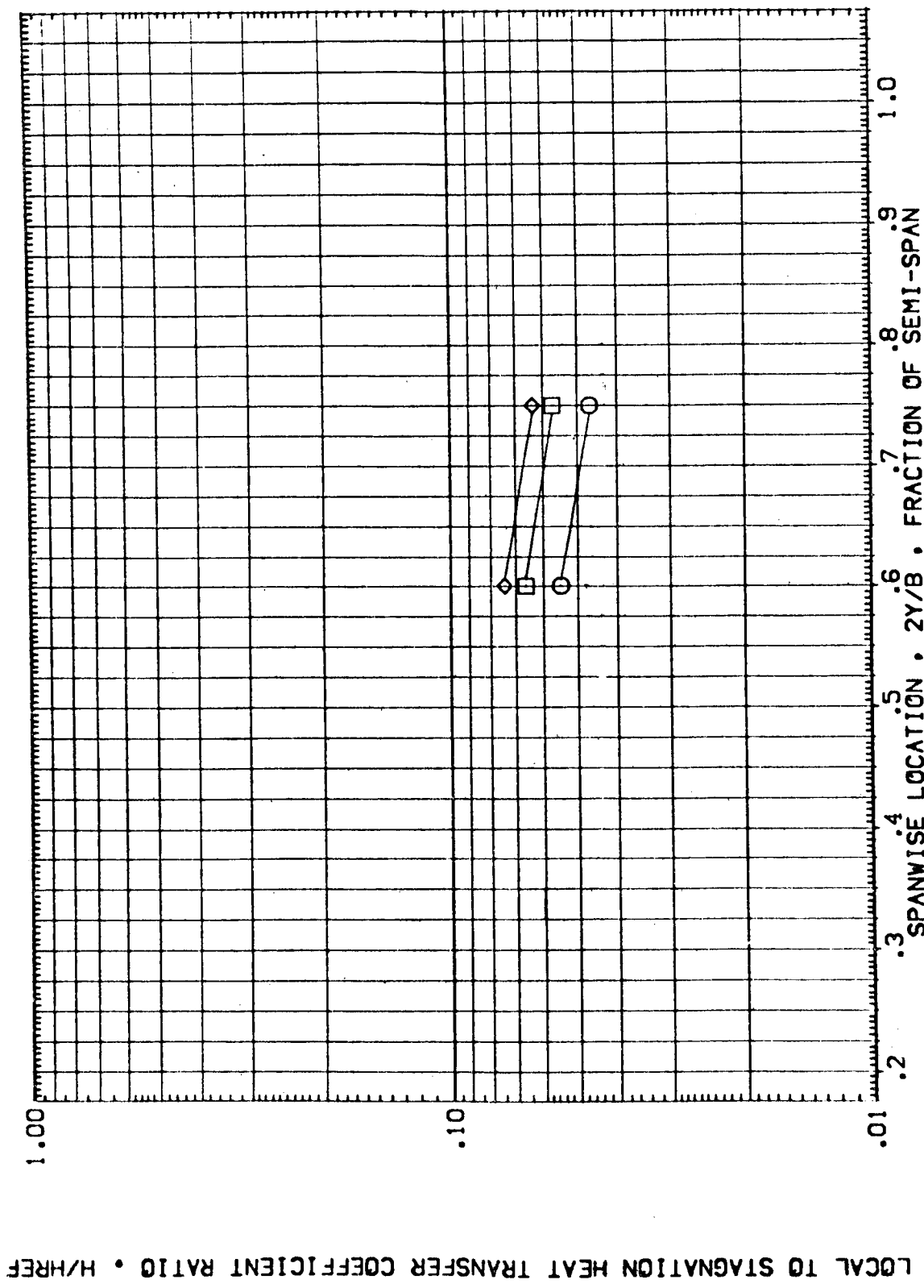


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .800



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HIT
 {REIGOS} ARC 3.5-178 IH3 0+T+S .000 -5.000 5.000 1.000
 {AEIGOS} ARC 3.5-178 IH3 0+T+S .000 -5.000 5.000 .900
 {BEIGOS} ARC 3.5-178 IH3 0+T+S .000 -5.000 5.000 .850

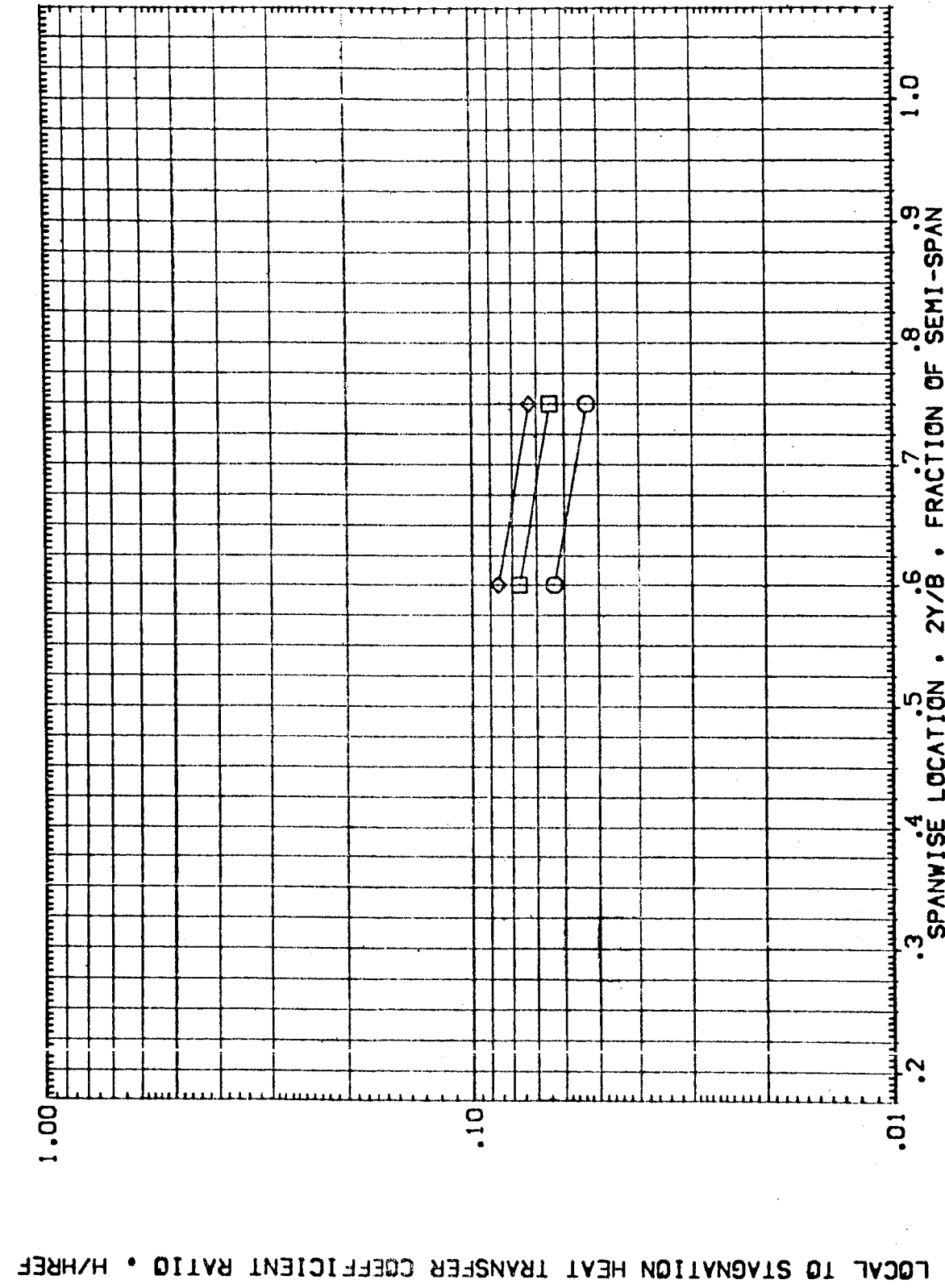


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

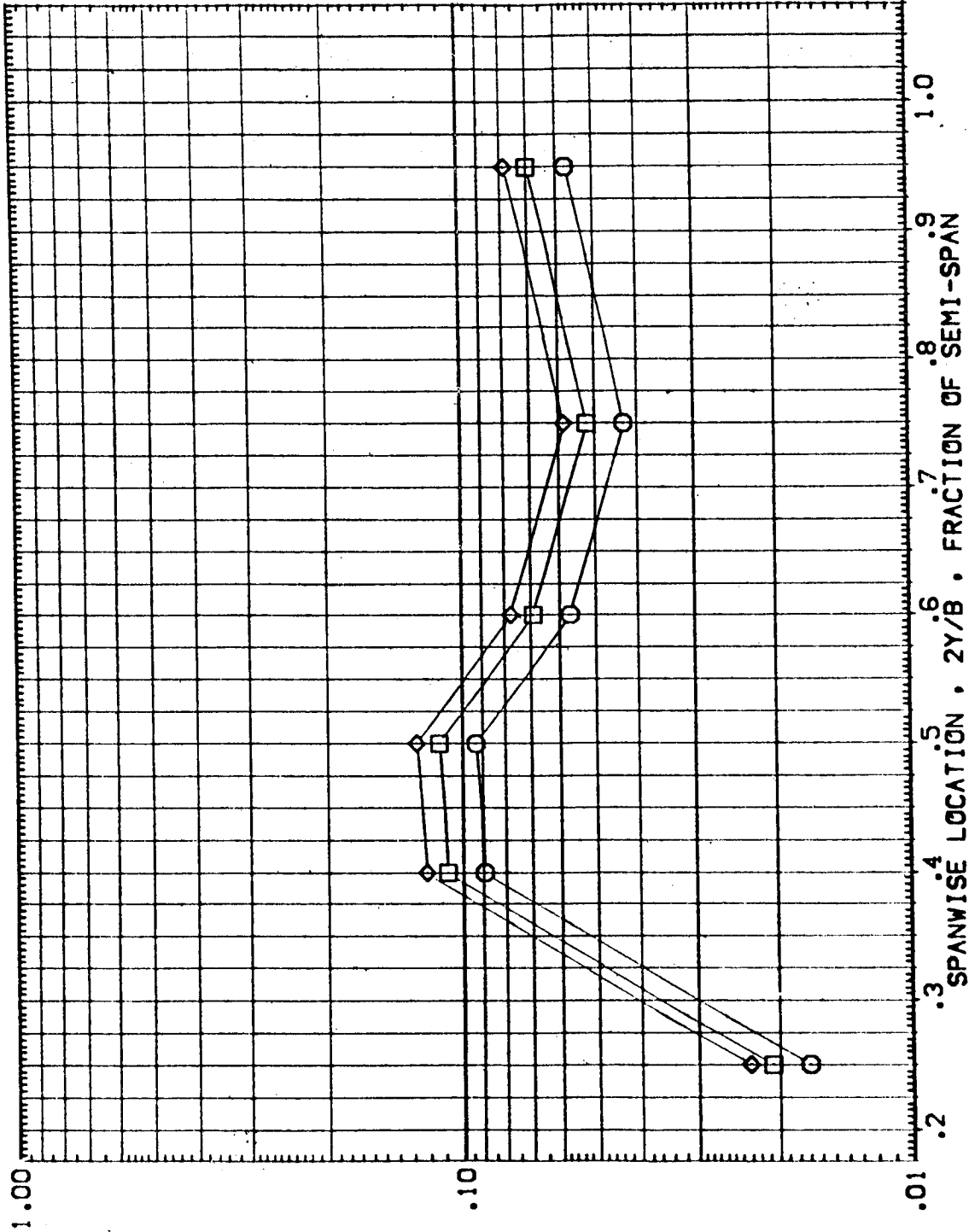


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 {RE|GOS} ARC 3.5-178 |H3 O+T+S .000 -5.000 5.000 1.000
 {AE|GOS} ARC 3.5-178 |H3 O+T+S .000 -5.000 5.000 .900
 {BE|GOS} ARC 3.5-178 |H3 O+T+S .000 -5.000 5.000 .850



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE|G|9} ARC 3.5-178 IH3 0+1+S -5.000 .000 5.000 1.000

{AE|G|9} ARC 3.5-178 IH3 0+1+S -5.000 .000 5.000 .500

{BE|G|9} ARC 3.5-178 IH3 0+1+S -5.000 .000 5.000 .850

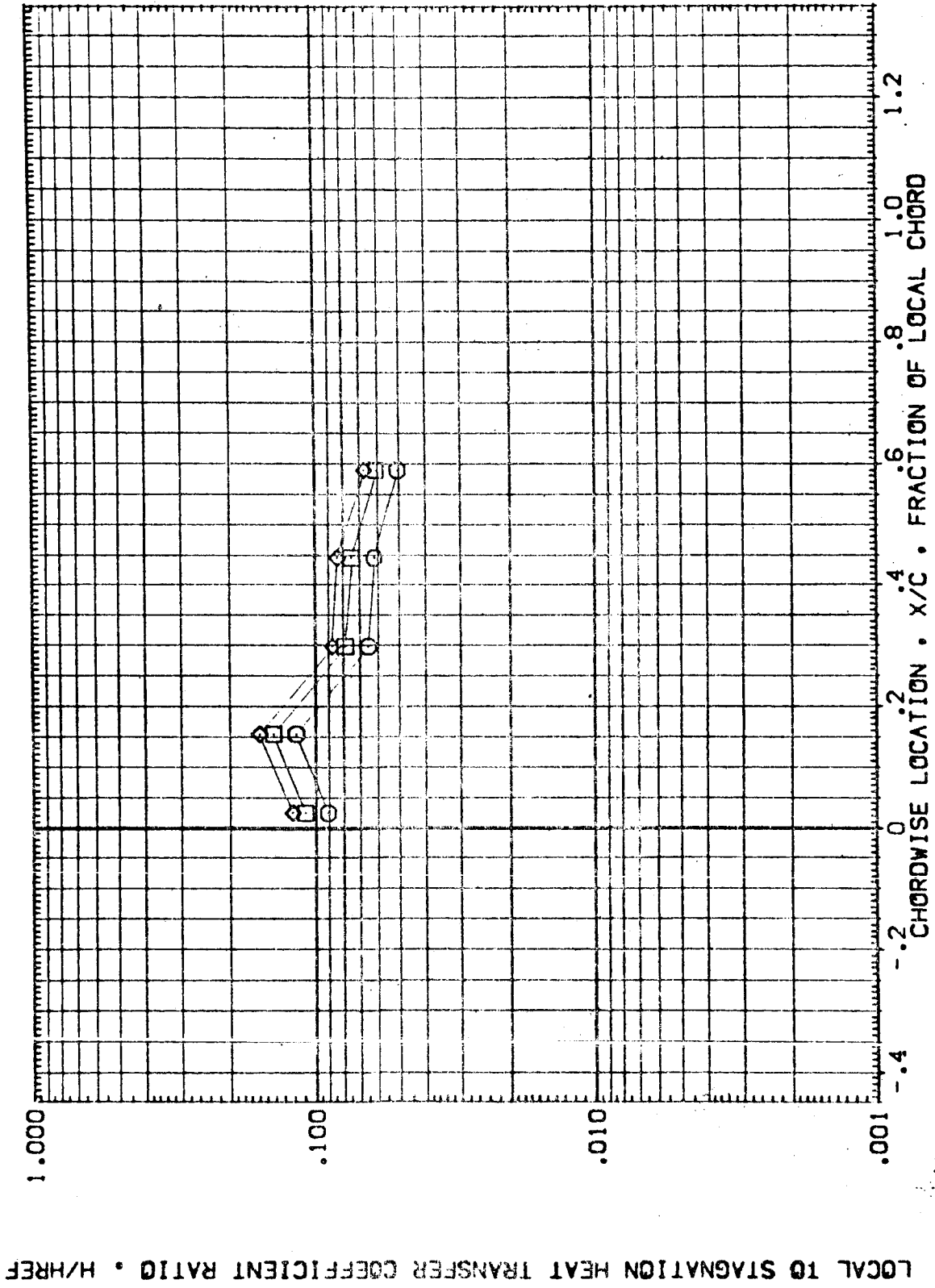


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .250

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE|G|S} ARC 3.5-178 |H3 O+T+S
 {AE|G|S} ARC 3.5-178 |H3 O+T+S
 {BE|G|S} ARC 3.5-178 |H3 O+T+S

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

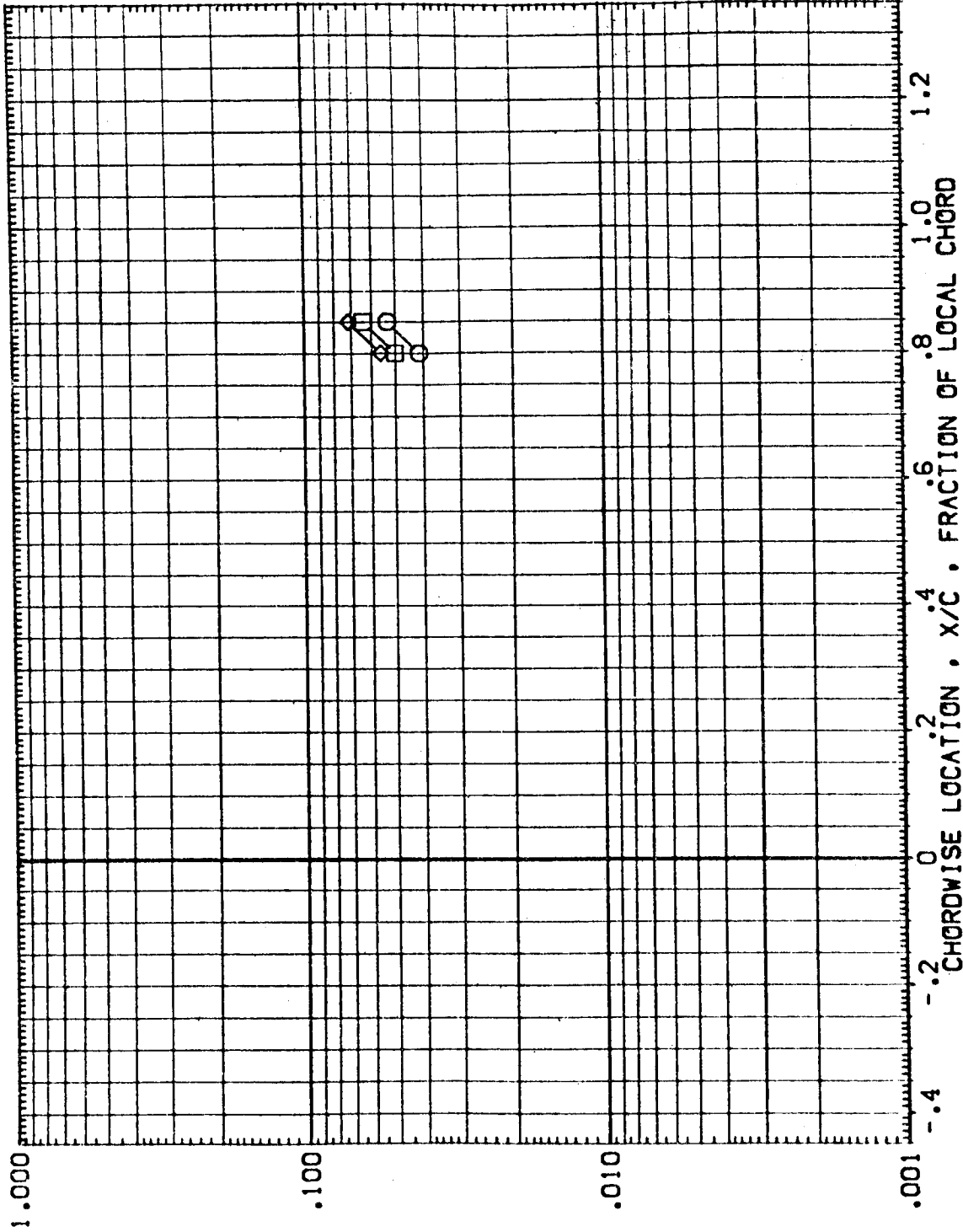


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{ RE|019 } ARC 1.5-178 IH3 0+1+S -5.000 .000 5.000 1.000

{ AE|019 } ARC 1.5-178 IH3 0+1+S -5.000 .000 5.000 .900

{ BE|019 } ARC 1.5-178 IH3 0+1+S -5.000 .000 5.000 .850

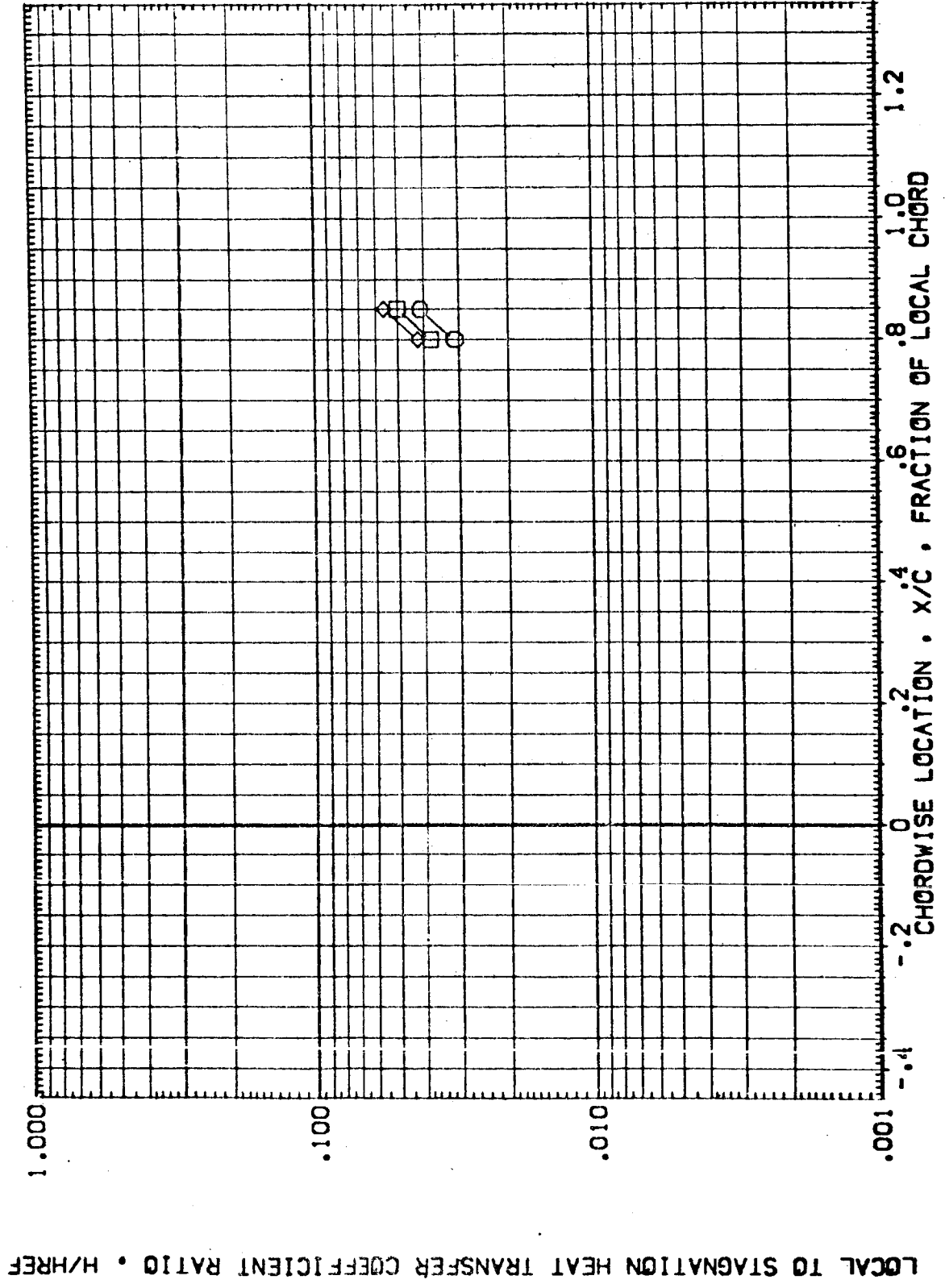


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .750

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1619) ARC 3.5-178 IH3 0+T+S
 (AE1619) ARC 3.5-178 IH3 0+T+S
 (BE1619) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAW/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

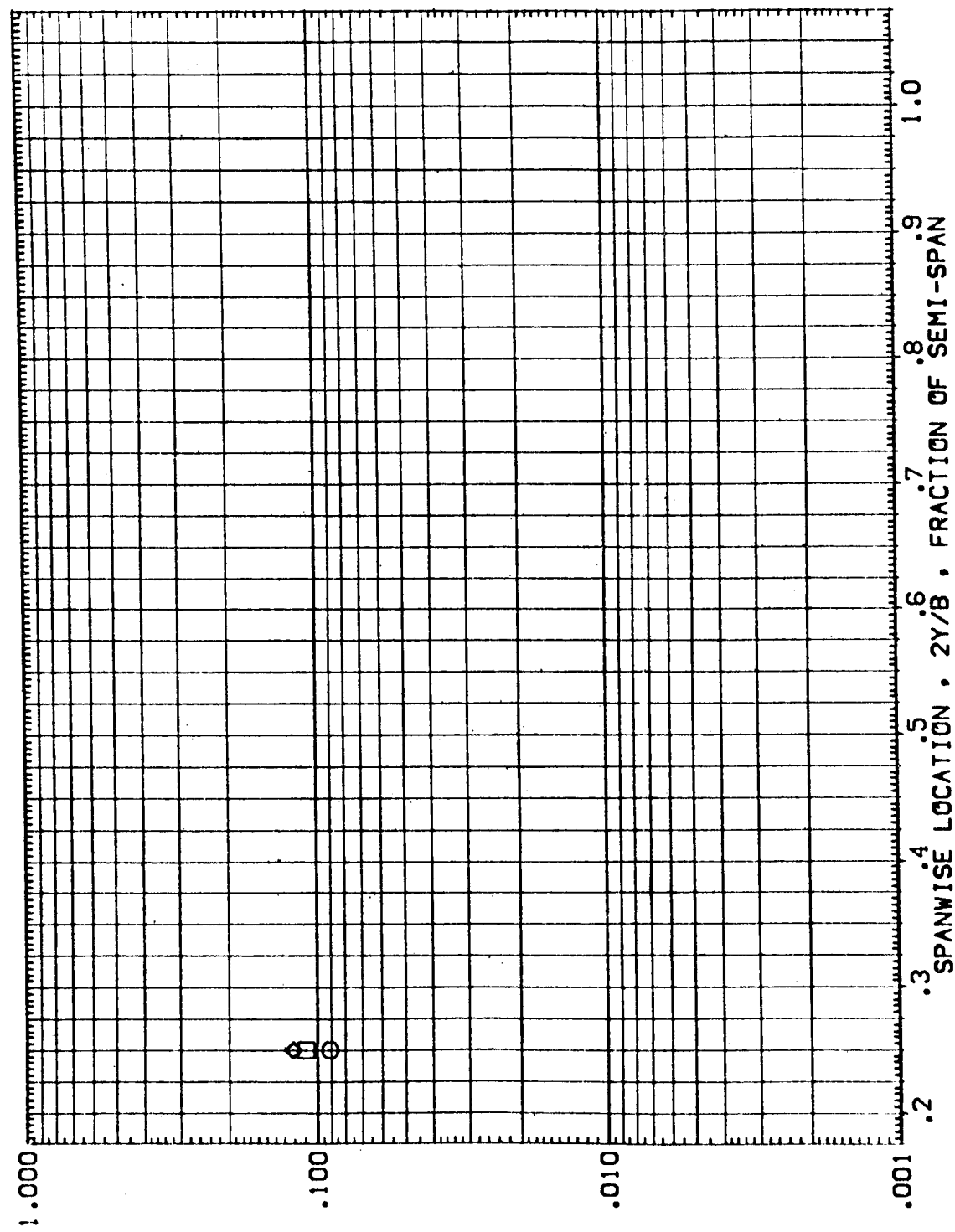


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .025



DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (REIG19) [RE] ARC 1.5-178 143 0+1+S
 (AEIG19) [AE] ARC 1.5-178 143 0+1+S
 (BEIG19) [BE] ARC 1.5-178 143 0+1+S

VING BOTTOM
 VING BOTTOM
 VING BOTTOM

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

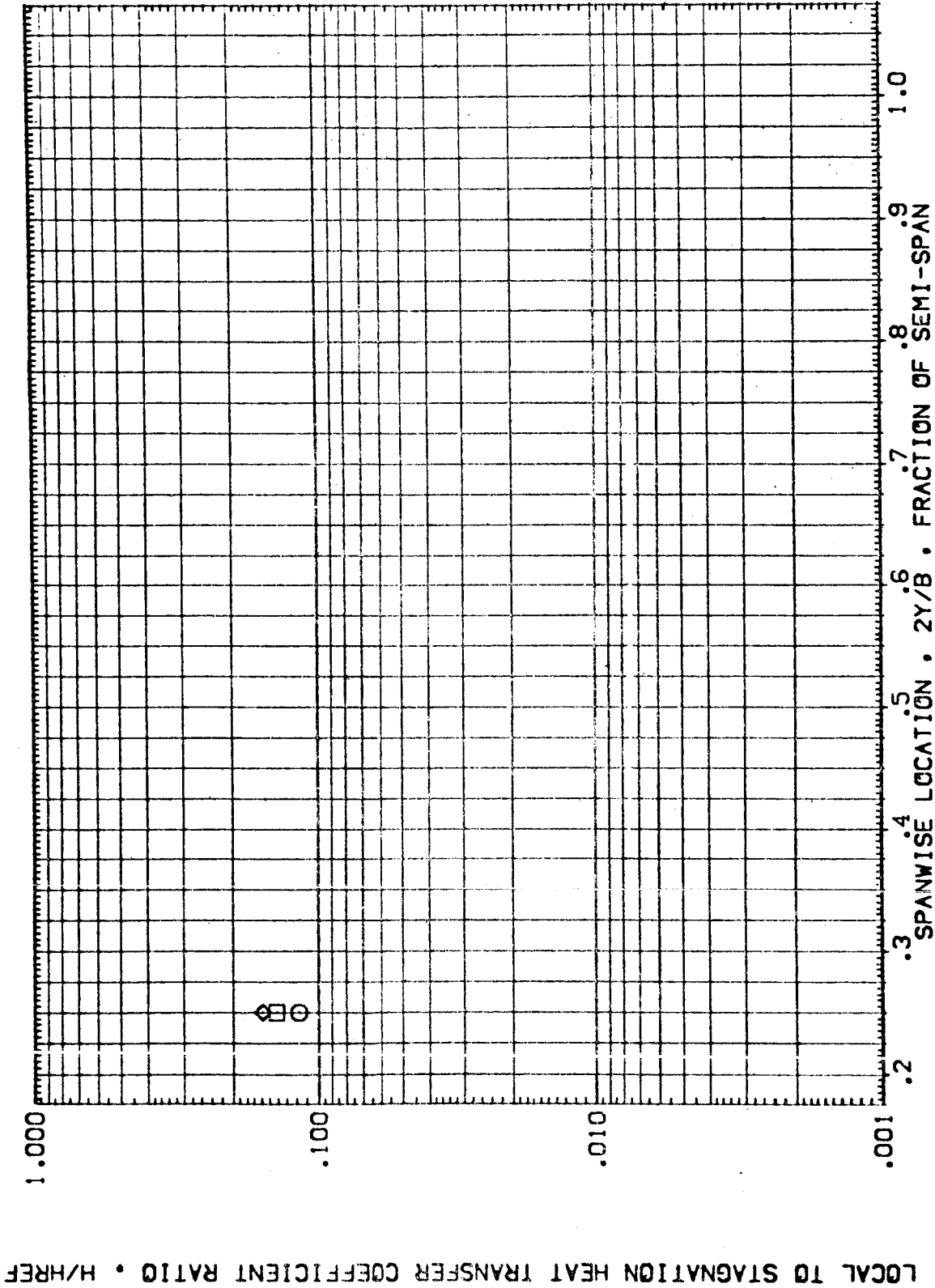


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .153

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE1G19} Ⓚ ARC 3.5-178 I-M3 O-T+S
 {AE1G19} Ⓚ ARC 3.5-178 I-M3 O-T+S
 {BE1G19} Ⓚ ARC 3.5-178 I-M3 O-T+S

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

VING BOTTOM
 VING BOTTOM
 VING BOTTOM

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

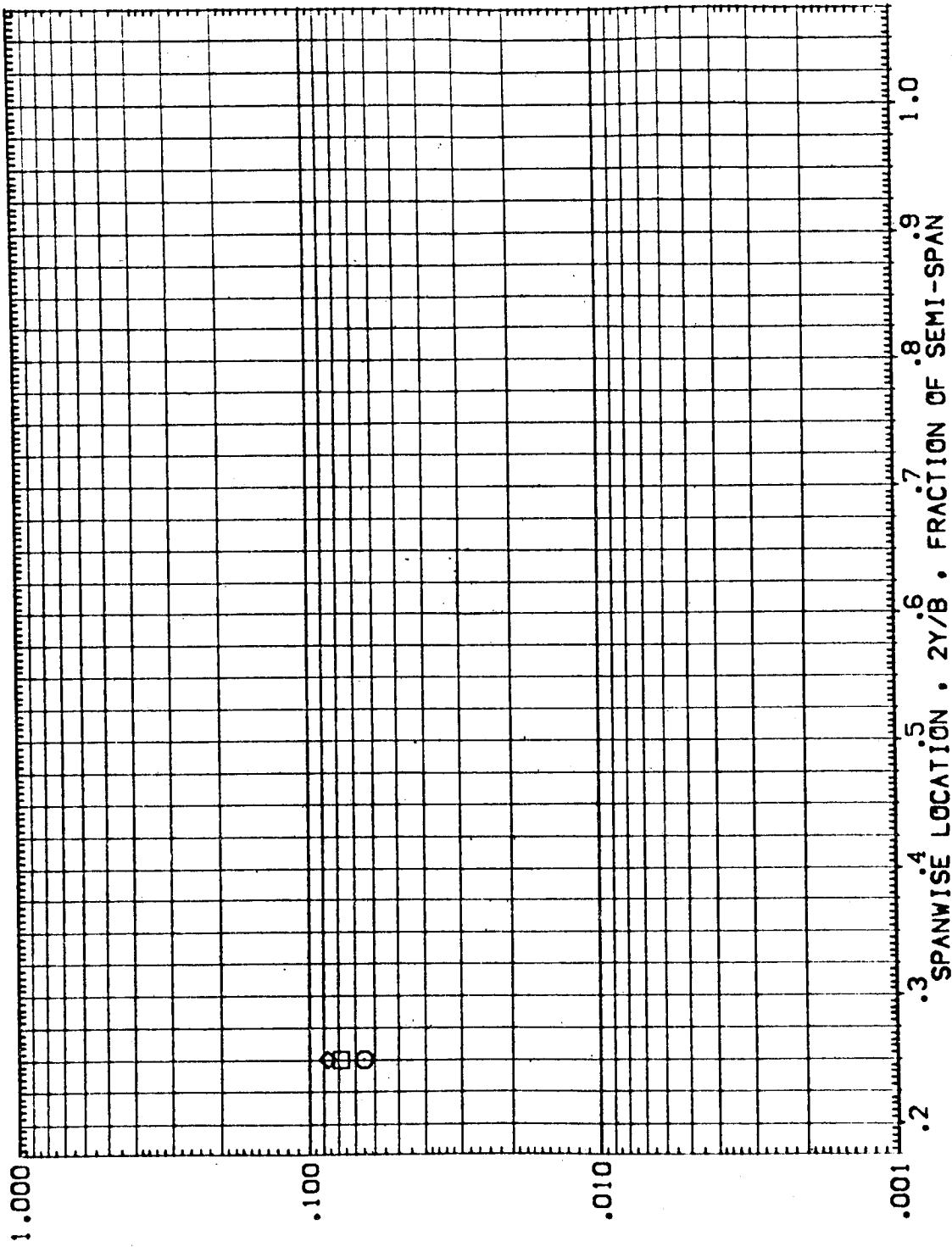


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .299



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RM/L HAV/HT

{RE1G19} ARC 3.5-178 IH3 0+T+S -5.000 .000 5.000 1.000

{AE1G19} ARC 3.5-178 IH3 0+T+S -5.000 .000 5.000 .900

{BE1G19} ARC 3.5-178 IH3 0+T+S -5.000 .000 5.000 .850

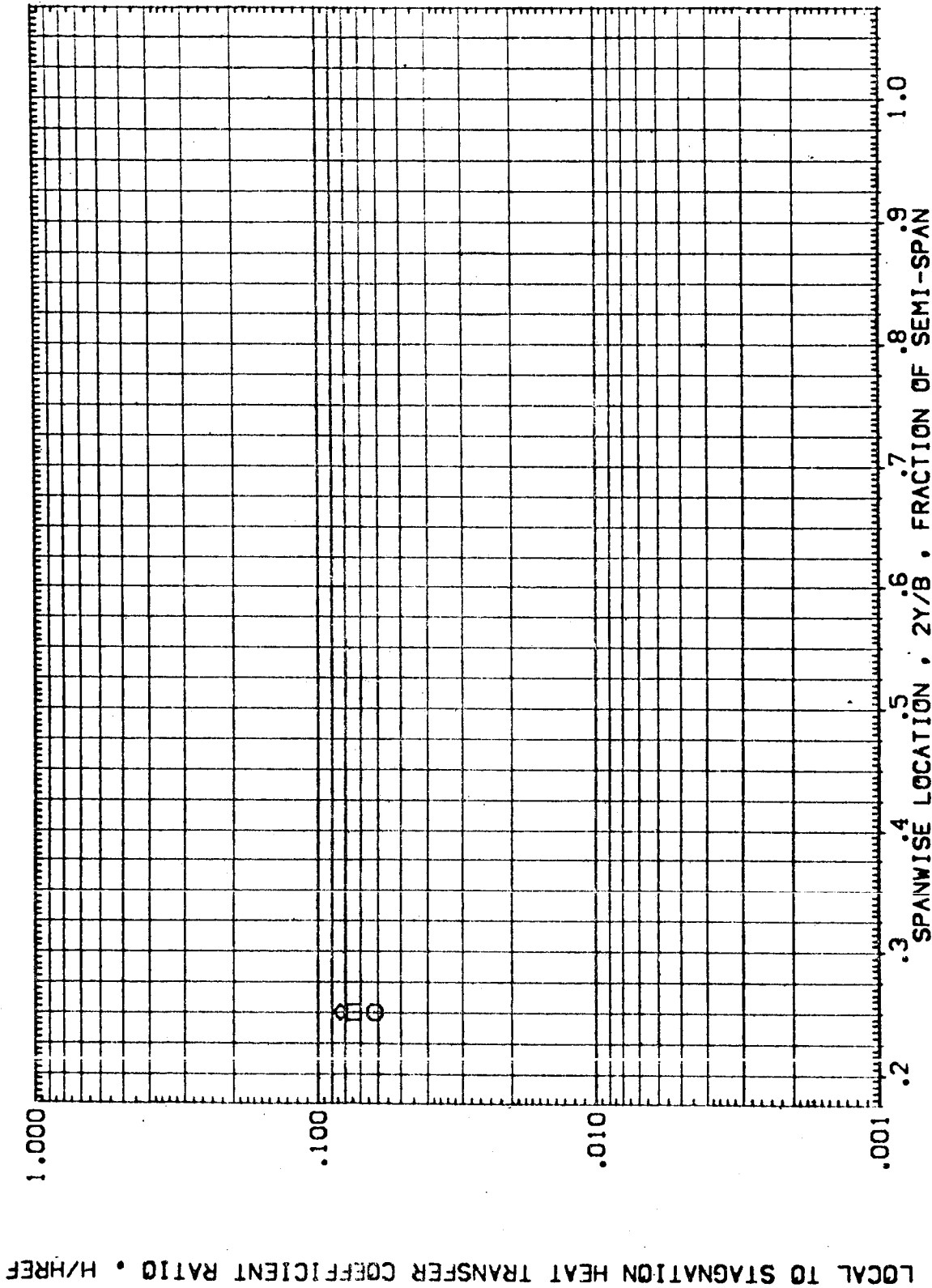


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .444

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM WING BOTTOM ALPHA BETA RV/L HAV/HT

{ REIG19 } ARC 3.5-178 I-H3 O+I+S WING BOTTOM WING BOTTOM -5.000 .000 5.000 1.000

{ AEIG19 } ARC 3.5-178 I-H3 O+I+S WING BOTTOM WING BOTTOM -5.000 .000 5.000 .900

{ BEIG19 } ARC 3.5-178 I-H3 O+I+S WING BOTTOM WING BOTTOM -5.000 .000 5.000 .850

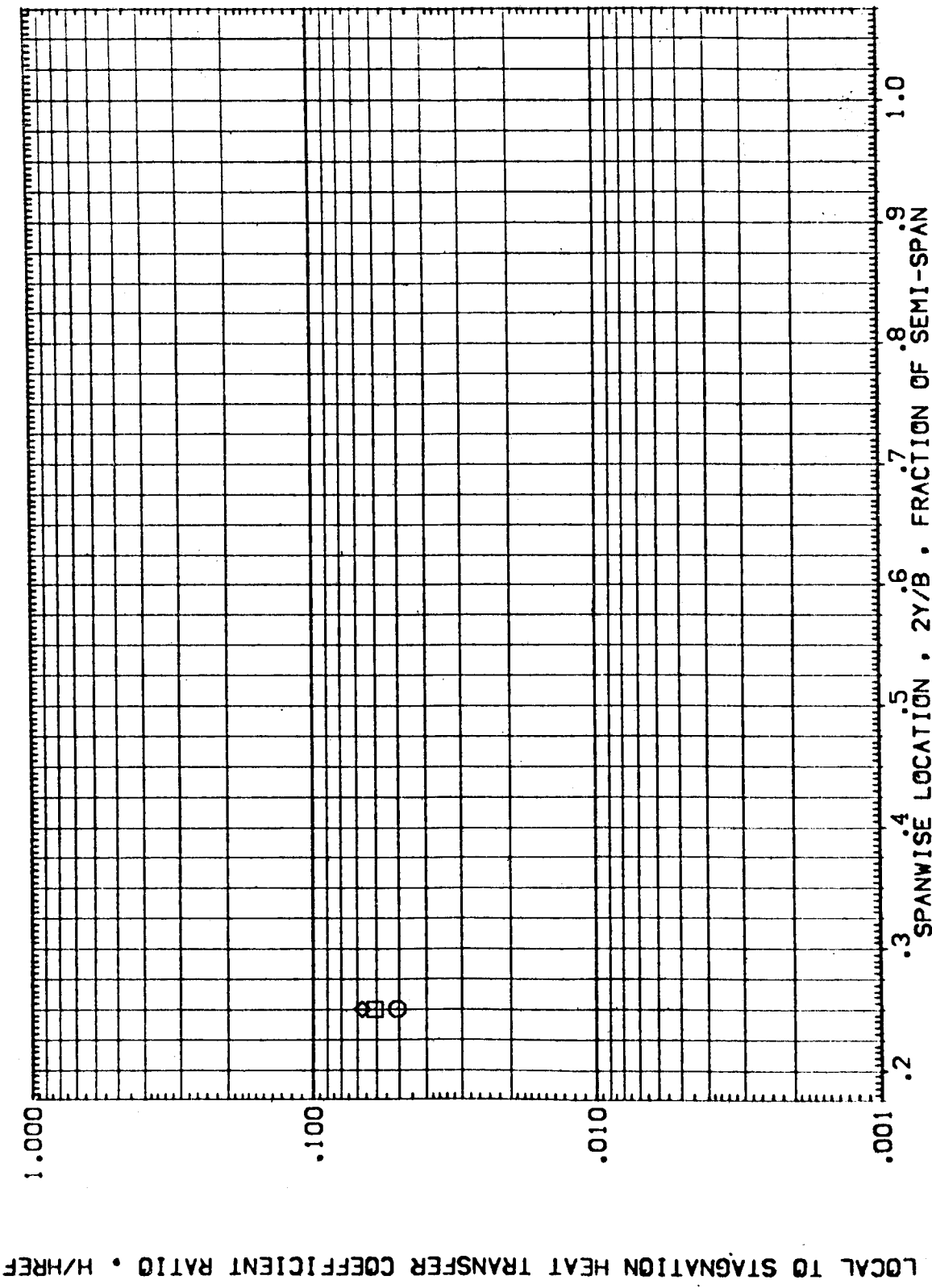


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .590

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1019) ARC 3.5-178 I-3 O+I+S
 (AL1019) ARC 3.5-178 I-3 O+I+S
 (BE1019) ARC 3.5-178 I-3 O+I+S

WING BOTTOM
 WING BOTTOM
 WING BOTTOM

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

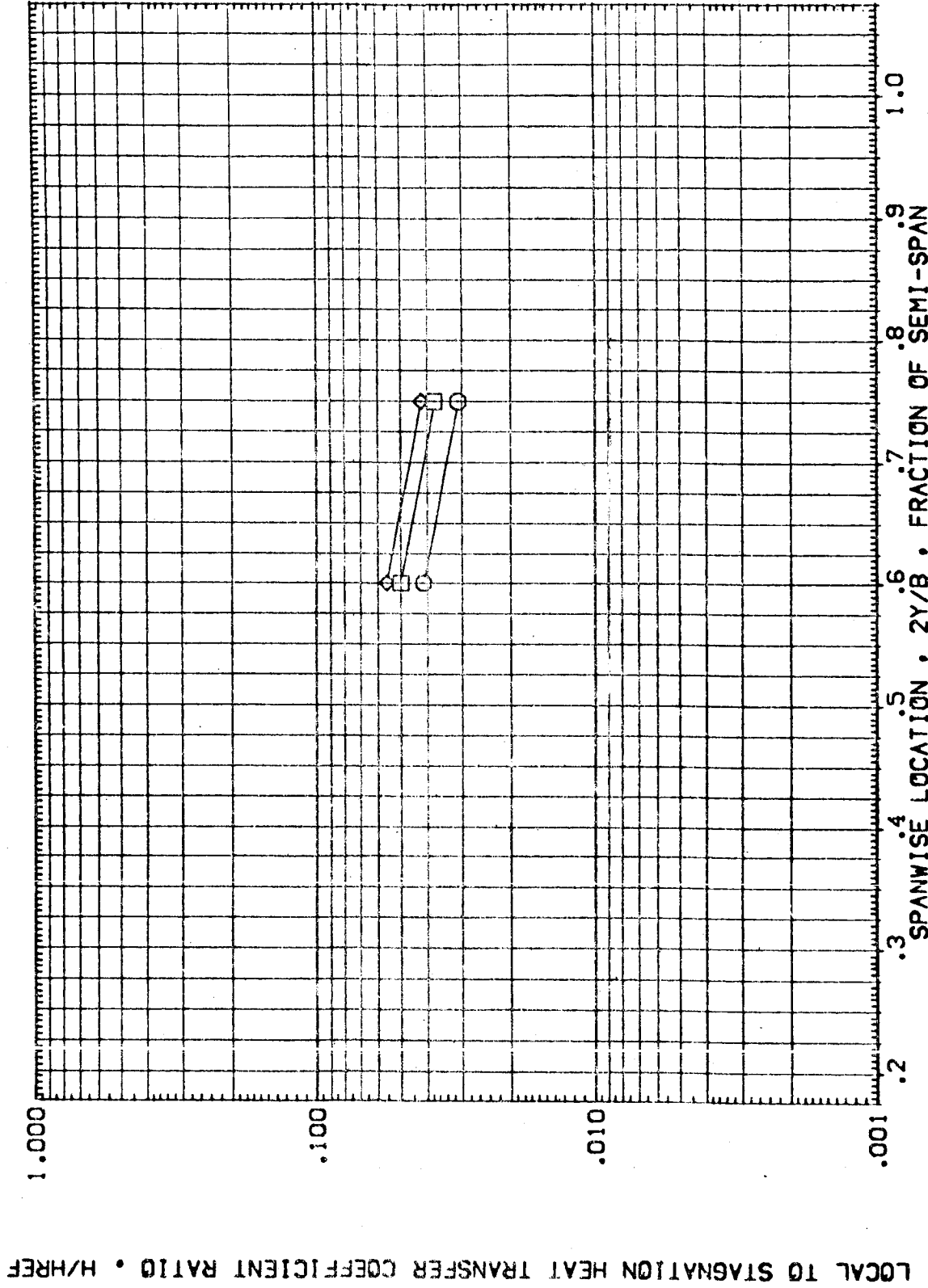


FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .800

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|G19) ARC 3.5-178 IH3 O+T+S
 (AE|G19) ARC 3.5-178 IH3 O+T+S
 (BE|G19) ARC 3.5-178 IH3 O+T+S

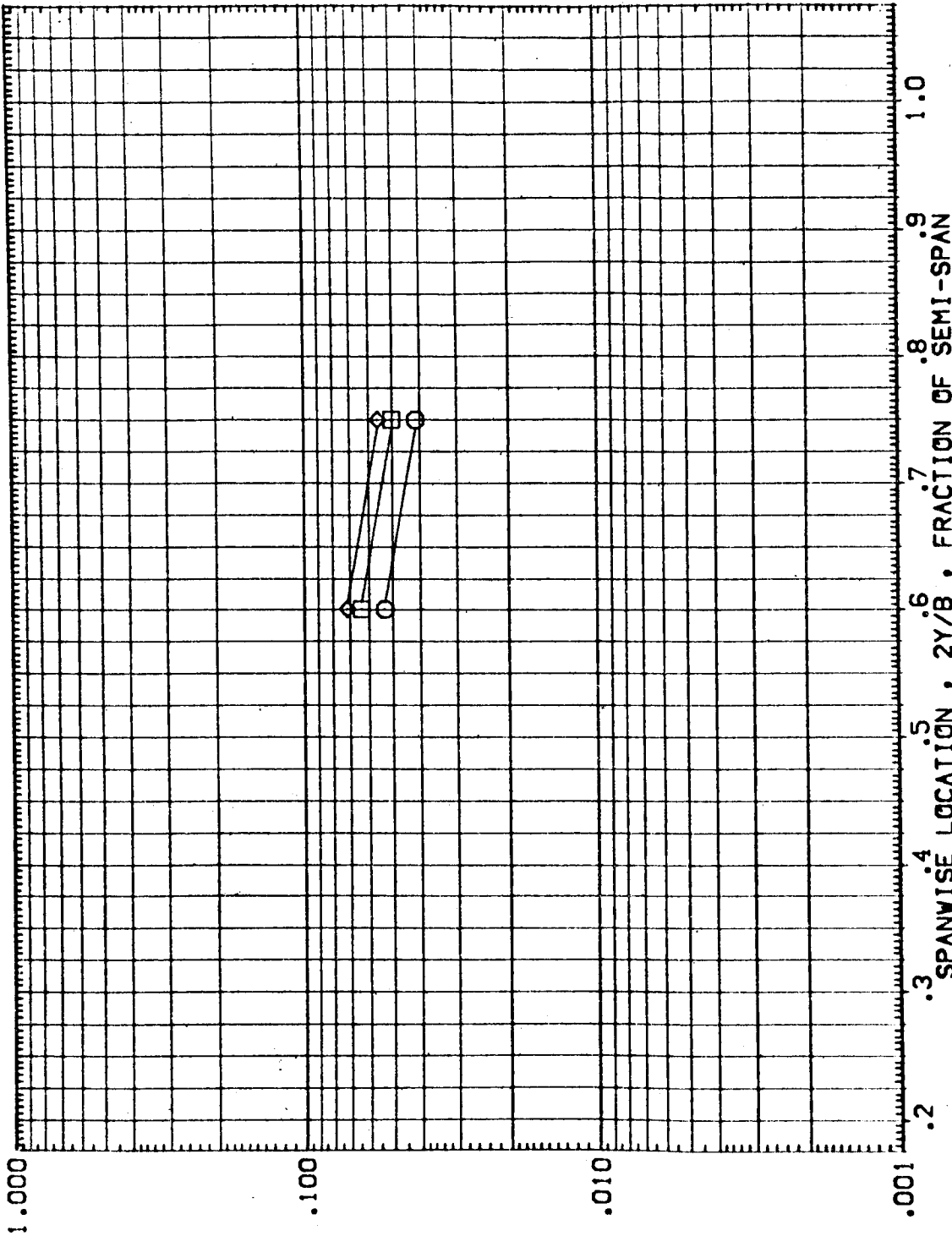
VING BOTTOM
 VING BOTTOM
 VING BOTTOM

ALPHA
 -5.000
 -5.000
 -5.000

BETA
 .000
 .000
 .000

RV/L
 5.000
 5.000
 5.000

HAV/HT
 1.000
 .900
 .850



SPANWISE LOCATION • 2Y/8 • FRACTION OF SEMI-SPAN

FIG. 26 WING BOTTOM - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .850



DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RN/L HAV/HT

{EE|005} ARC 3.5-178 H3 O-T+S VING BOTTOM .000 .000 1.500 .500

{EE|007} ARC 3.5-178 H3 O-T+S VING BOTTOM .000 .000 5.000 .500

{EE|008} ARC 3.5-178 H3 O-T+S (TRIPS) VING BOTTOM .000 .000 1.500 .500

{EE|009} ARC 3.5-178 H3 O-T+S (TRIPS) VING BOTTOM .000 .000 5.000 .500

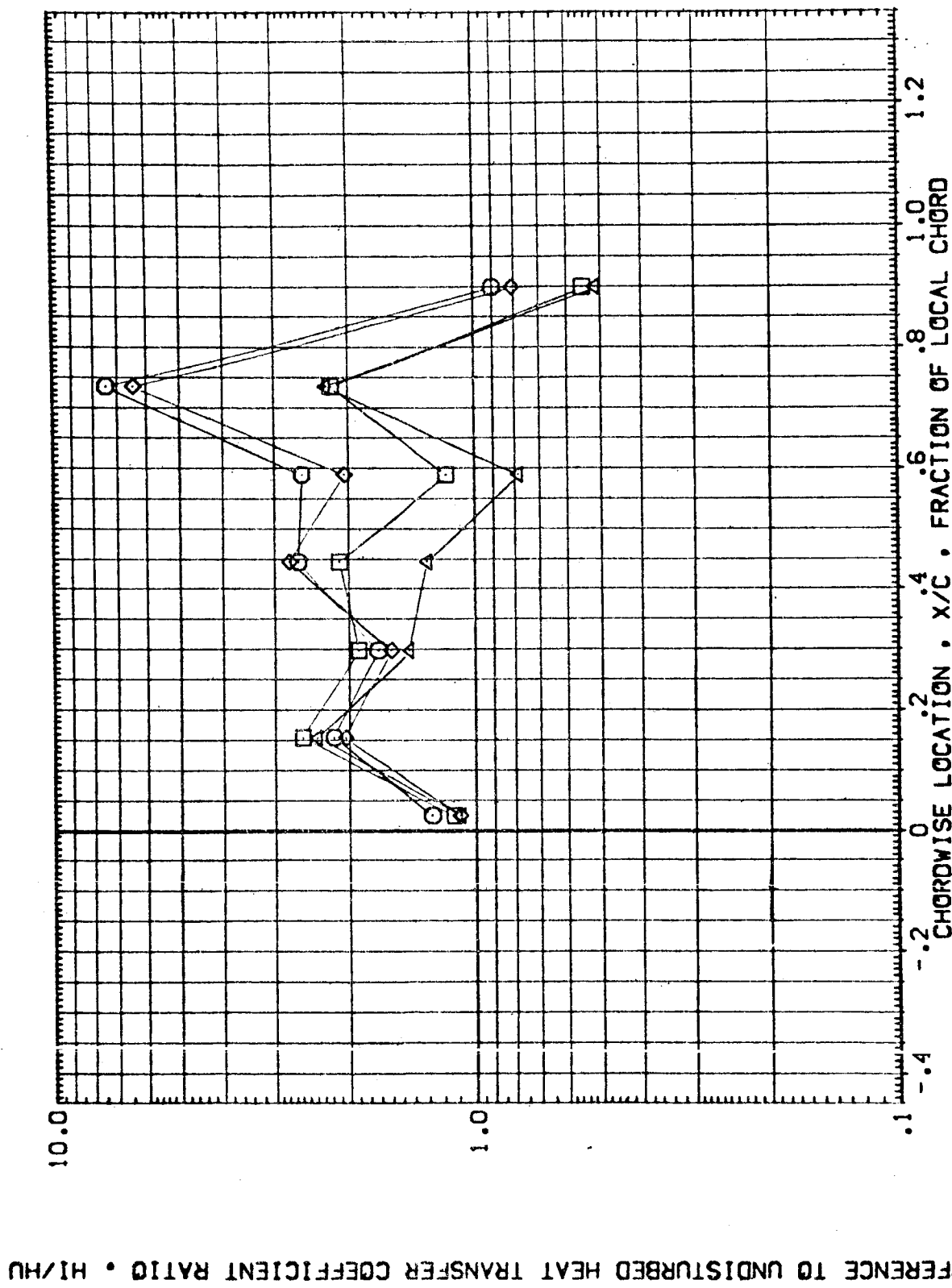


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .250

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT
 (EE1006) ARC 3.5-178 143 0+T+S .000 .000 1.500 .900
 (EE1007) ARC 3.5-178 143 0+T+S .000 .000 5.000 .900
 (EE1008) ARC 3.5-178 143 0+T+S (TRIPS) .000 .000 1.500 .900
 (EE1009) ARC 3.5-178 143 0+T+S (TRIPS) .000 .000 5.000 .900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

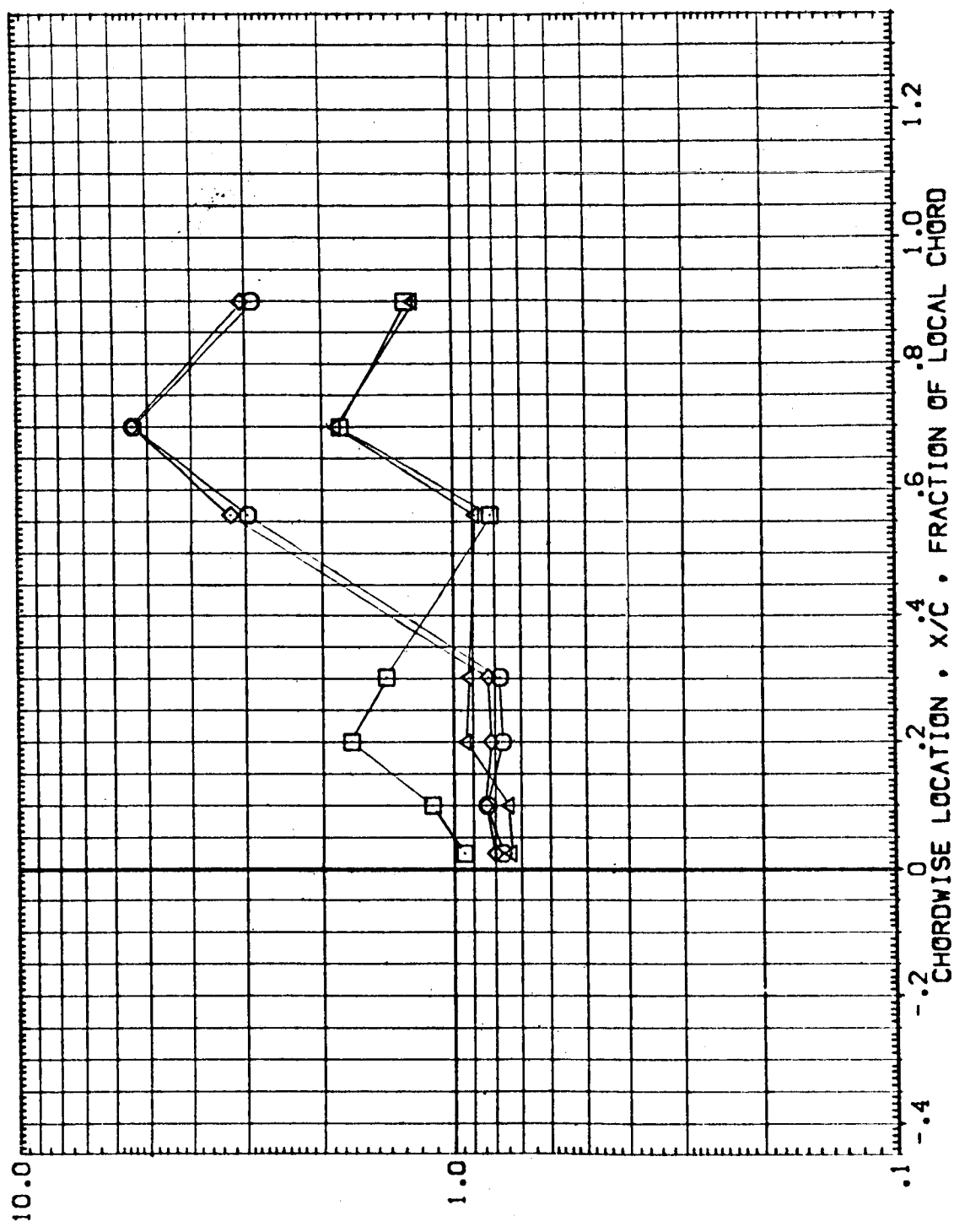


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(EE)G06	ARC 1.5-178 143 0+T+S	.000	.000	1.500	.900
(EE)G07	ARC 1.5-178 143 0+T+S	.000	.000	5.000	.900
(EE)G08	ARC 1.5-178 143 0+T+S (TRIPS)	.000	.000	1.500	.900
(EE)G09	ARC 1.5-178 143 0+T+S (TRIPS)	.000	.000	5.000	.900

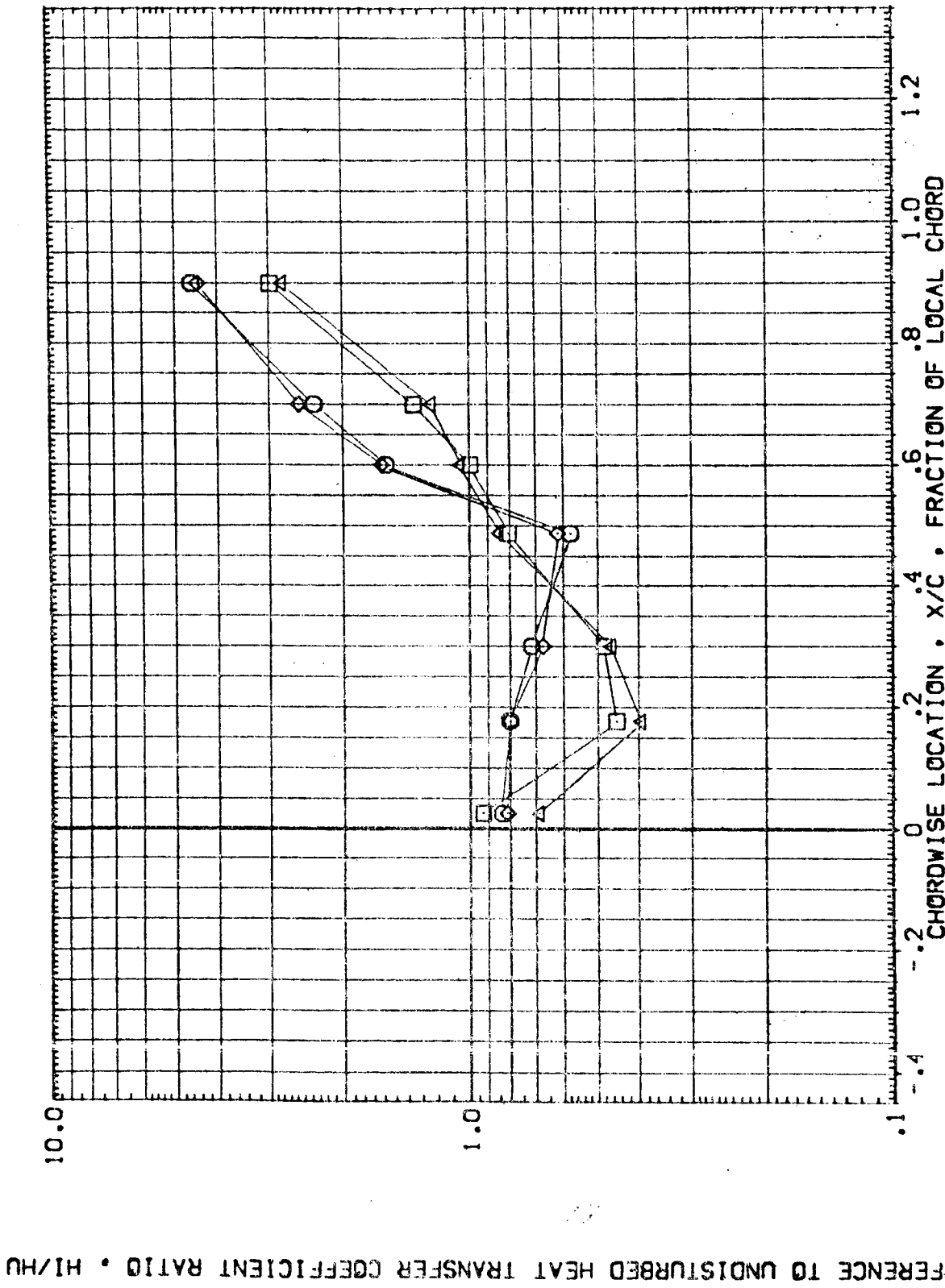


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L HAW/HT
 {EE|G06} ARC 3.5-178 143 O-T+S WING BOTTOM .000 .000 1.500 .900
 {EE|G07} ARC 3.5-178 143 O-T+S WING BOTTOM .000 .000 5.000 .900
 {EE|G08} ARC 3.5-178 143 O-T+S (TRIPS) WING BOTTOM .000 .000 1.500 .900
 {EE|G09} ARC 3.5-178 143 O-T+S (TRIPS) WING BOTTOM .000 .000 5.000 .900

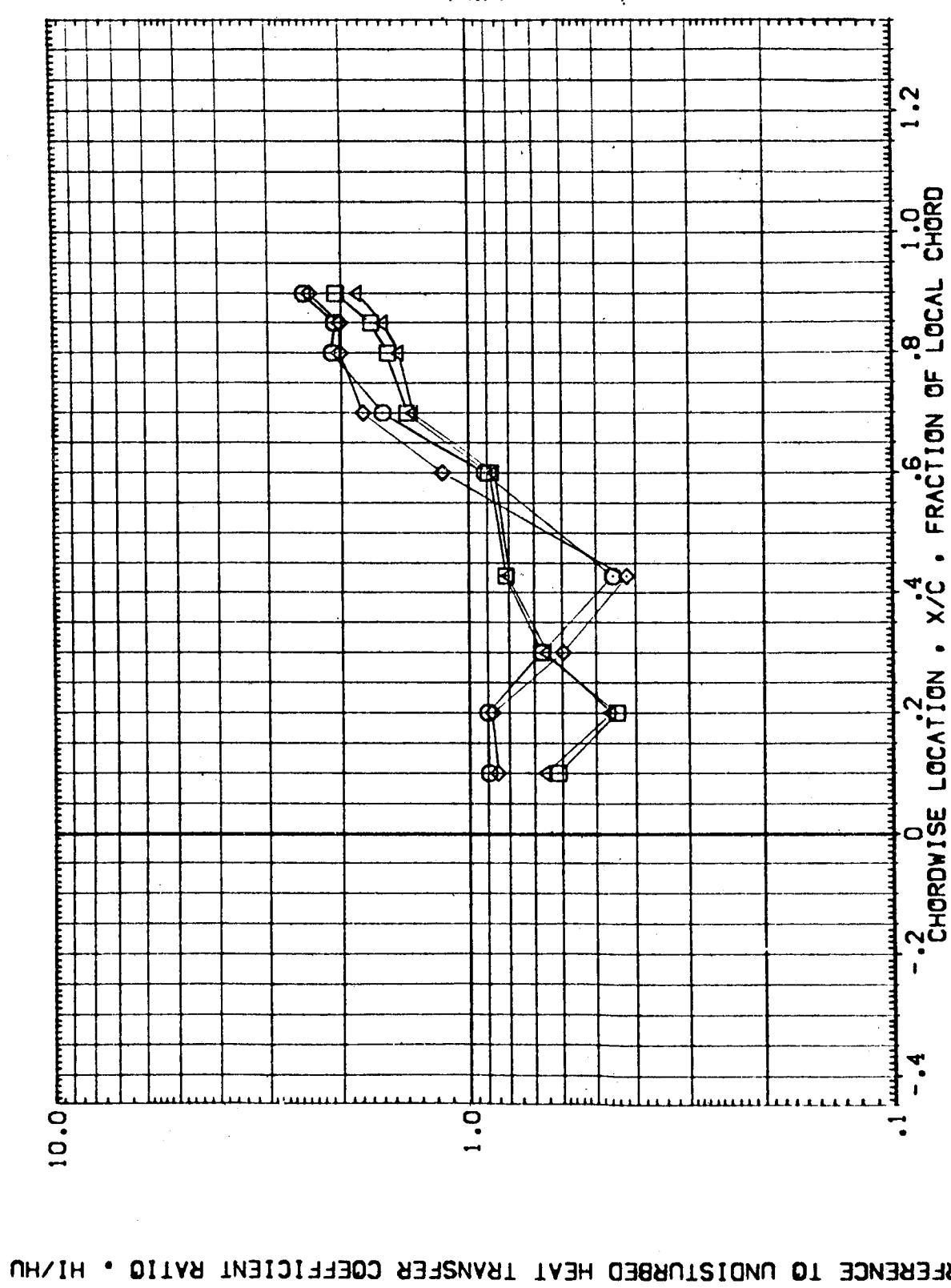


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING	ALPHA	BETA	RV/L	HAW/HT
(EE1006)	ARC 3:5-178 IH3 0+T+S	BOTTOM	.000	.000	1.500	.900
(EE1007)	ARC 3:5-178 IH3 0+T+S	BOTTOM	.000	.000	5.000	.900
(EE1008)	ARC 3:5-178 IH3 0+T+S (TRIPS)	BOTTOM	.000	.000	1.500	.900
(EE1009)	ARC 3:5-178 IH3 0+T+S (TRIPS)	BOTTOM	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

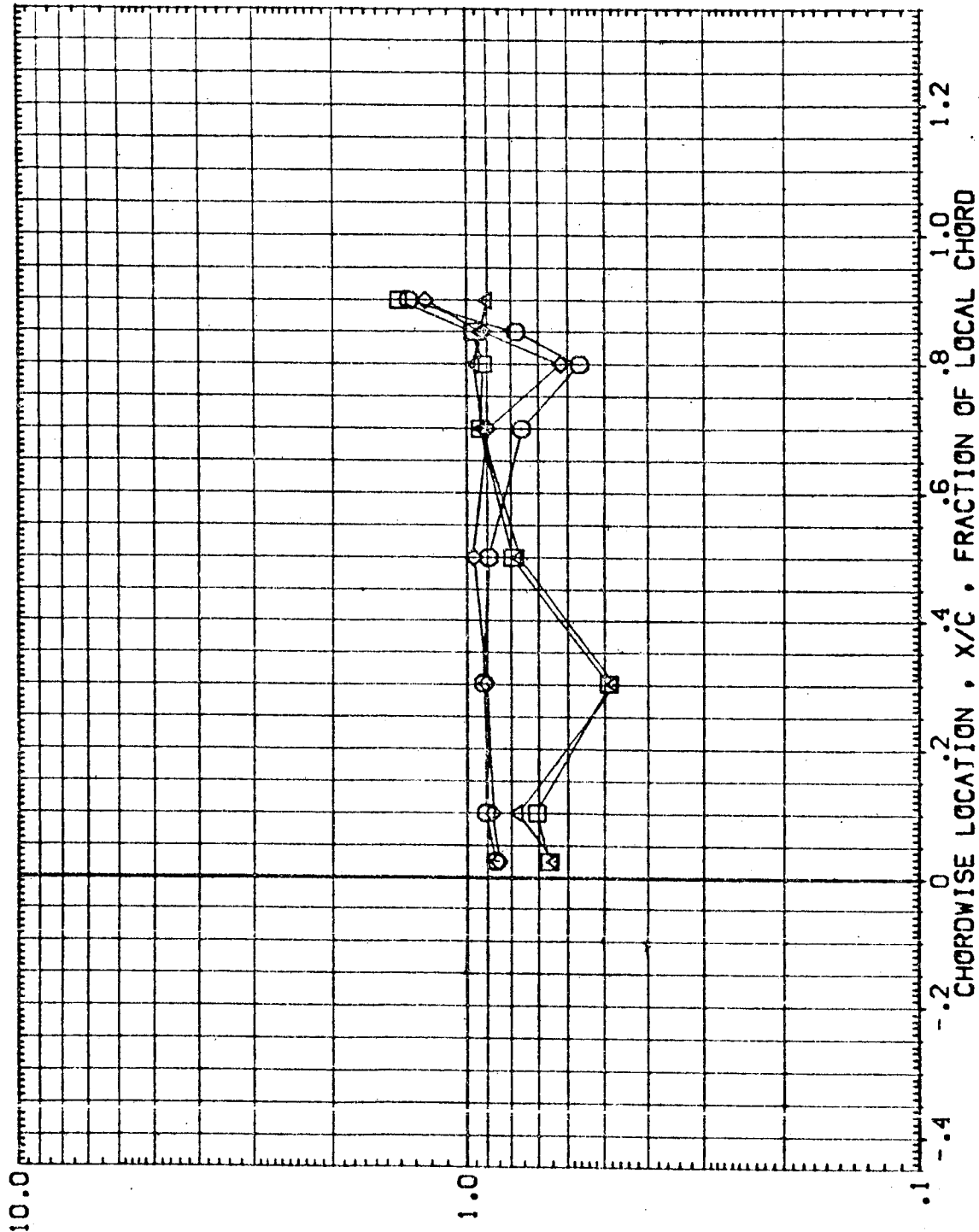


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .750

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(EE1606) ARC 3.5-178 IH3 0-T+S .000 .000 1.500 .900

(EE1607) ARC 3.5-178 IH3 0-T+S .000 .000 5.000 .900

(EE1608) ARC 3.5-178 IH3 0-T+S (TRIPS) .000 .000 1.500 .900

(EE1609) ARC 3.5-178 IH3 0-T+S (TRIPS) .000 .000 5.000 .900

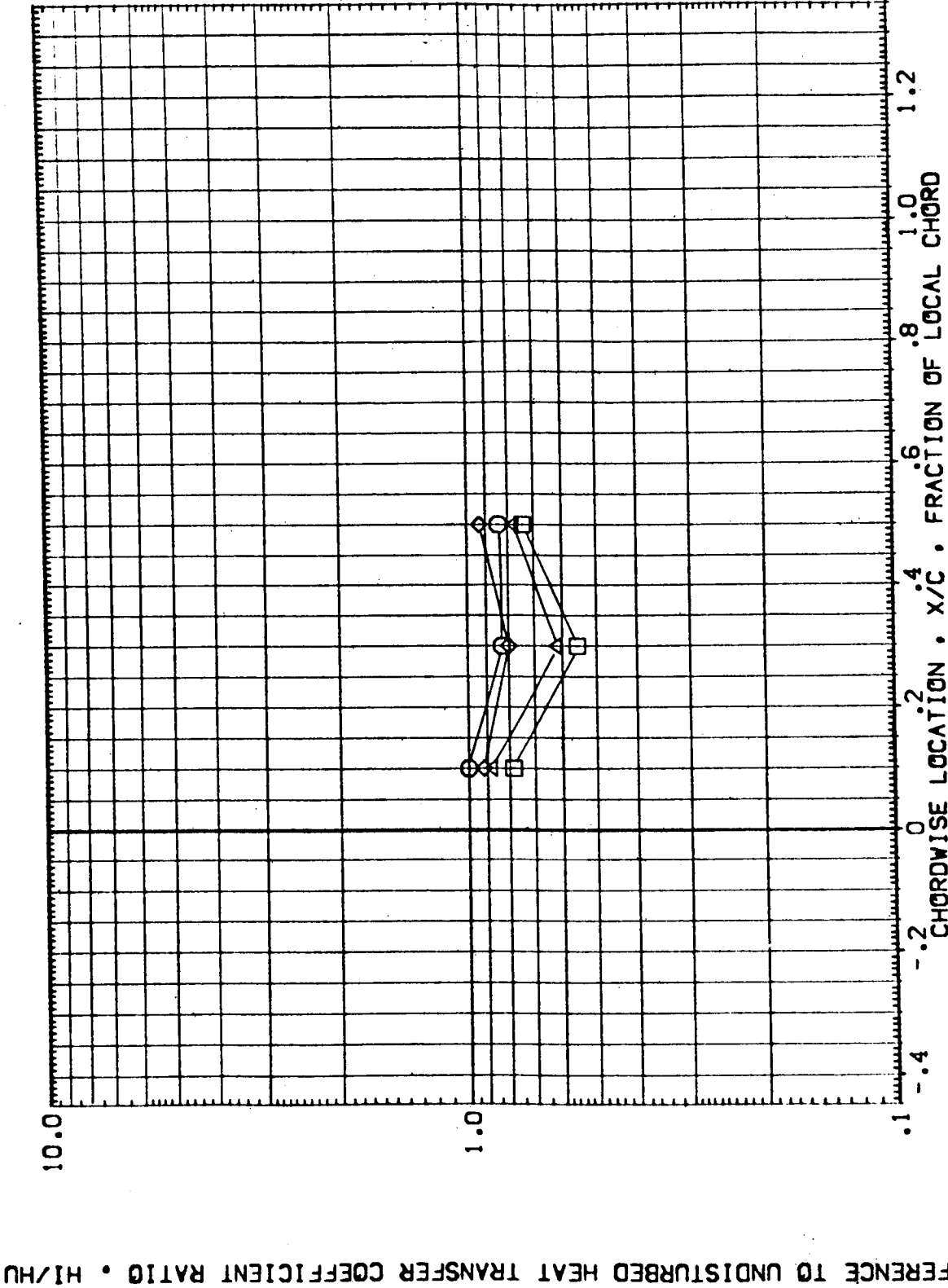


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .850



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	VING	WING BOTTOM	ALPHA	BETA	RV/L	HAV/HT
{EE G06}	ARC 3.5-178 IH3 D+T+S	VING	BOTTOM	.000	.000	1.500	.900
{EE G07}	ARC 3.5-178 IH3 D+T+S	VING	BOTTOM	.000	.000	5.000	.900
{EE G08}	ARC 3.5-178 IH3 D+T+S (TRIPS)	VING	BOTTOM	.000	.000	1.500	.900
{EE G09}	ARC 3.5-178 IH3 D+T+S (TRIPS)	VING	BOTTOM	.000	.000	5.000	.900

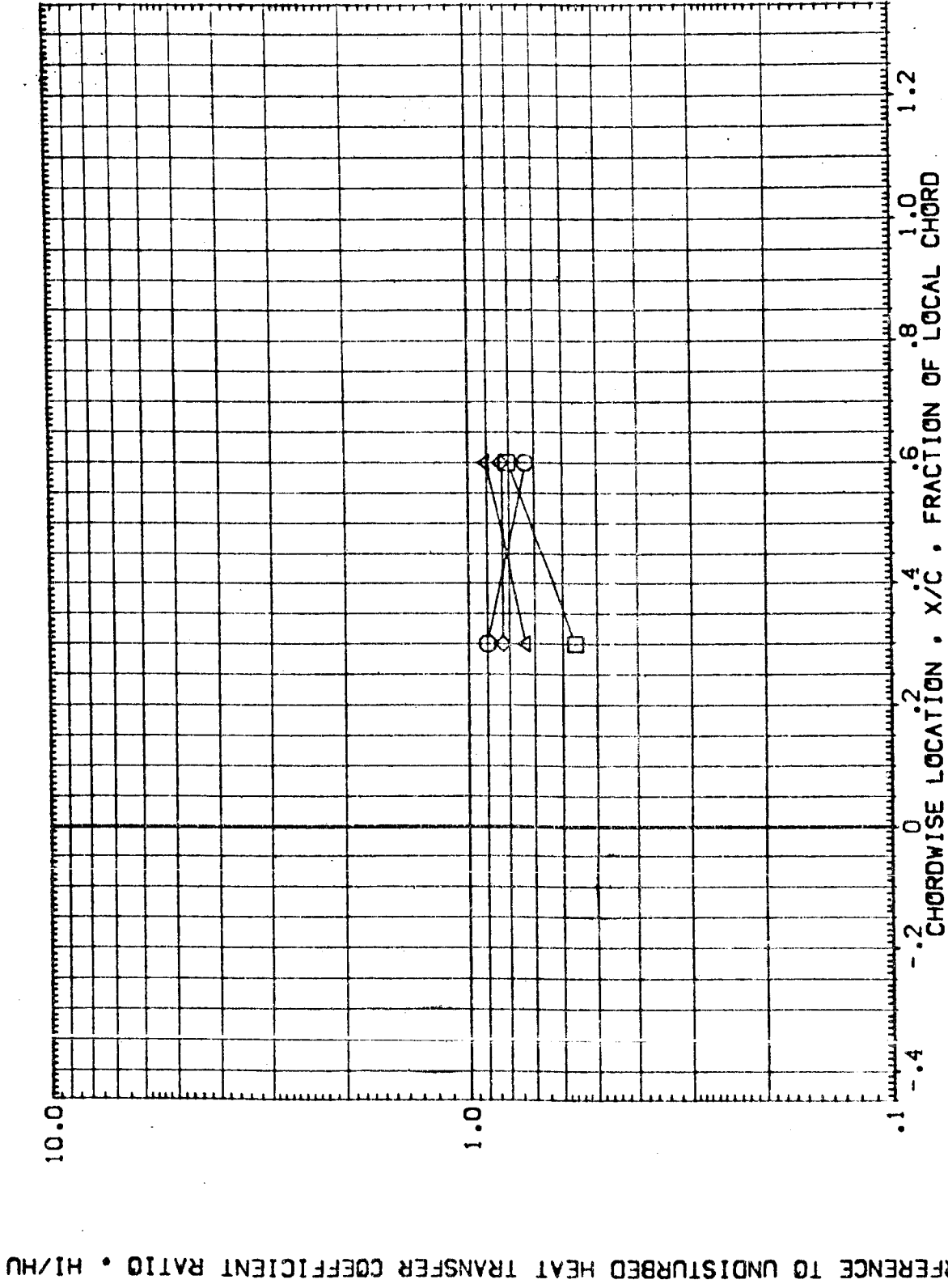


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT
 (EE|G06) ARC 3.5-178 1-3 0+1+S .000 .000 1.500 .900
 (EE|G07) ARC 3.5-178 1-3 0+1+S .000 .000 5.000 .900
 (EE|G08) ARC 3.5-178 1-3 0+1+S (TRIPS) .000 .000 1.500 .900
 (EE|G09) ARC 3.5-178 1-3 0+1+S (TRIPS) .000 .000 5.000 .900

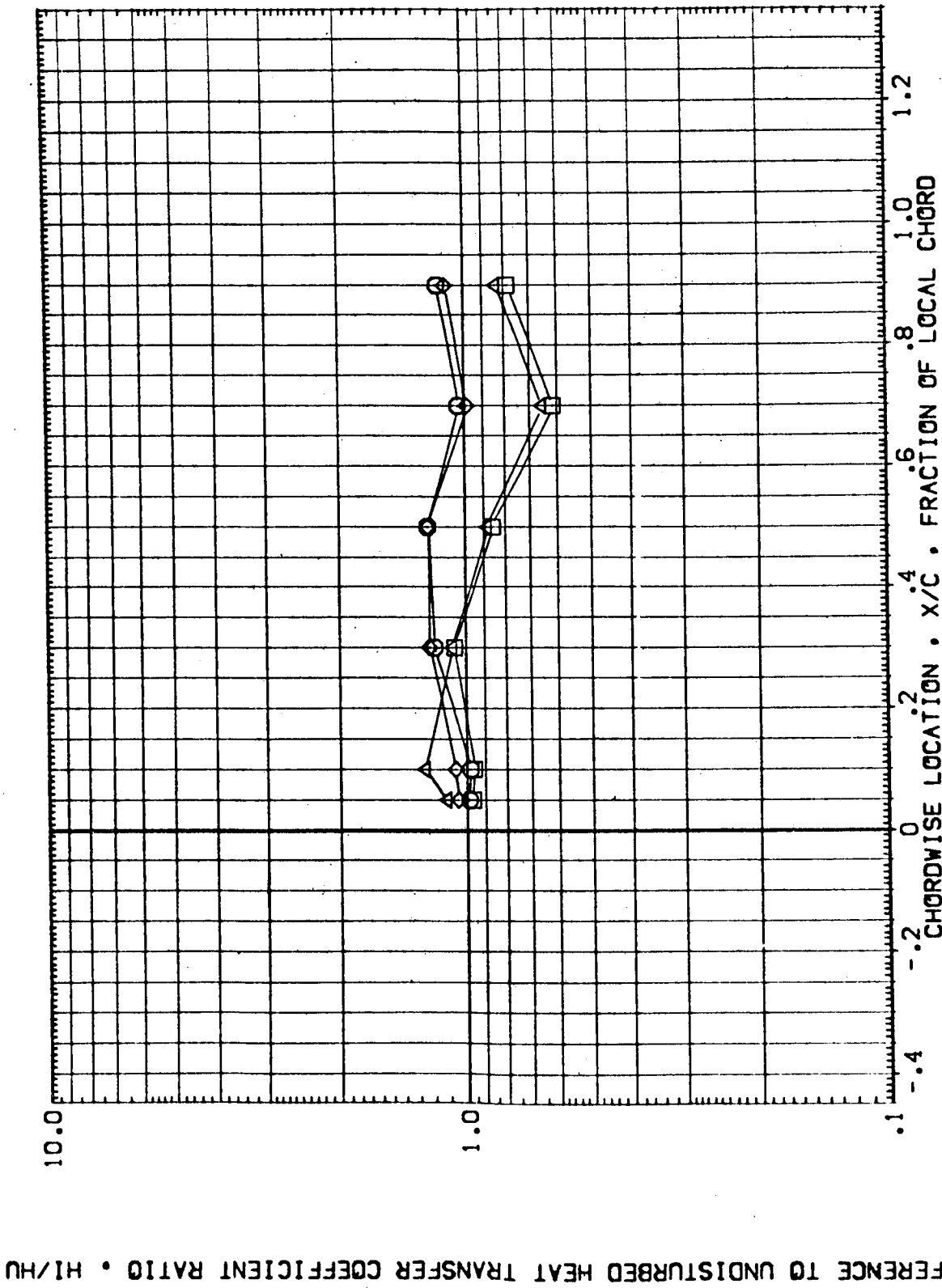


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .950



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	VING BOTTOM	ALPHA	BETA	RV/L	HAV/HT
(EE1606)	ARC 3.5-178 IH3 O-T+S	VING BOTTOM	.000	.000	1.500	.900
(EE1607)	ARC 3.5-178 IH3 O-T+S	VING BOTTOM	.000	.000	5.000	.900
(EE1608)	ARC 3.5-178 IH3 O-T+S (TRIPS)	VING BOTTOM	.000	.000	1.500	.900
(EE1609)	ARC 3.5-178 IH3 O-T+S (TRIPS)	VING BOTTOM	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

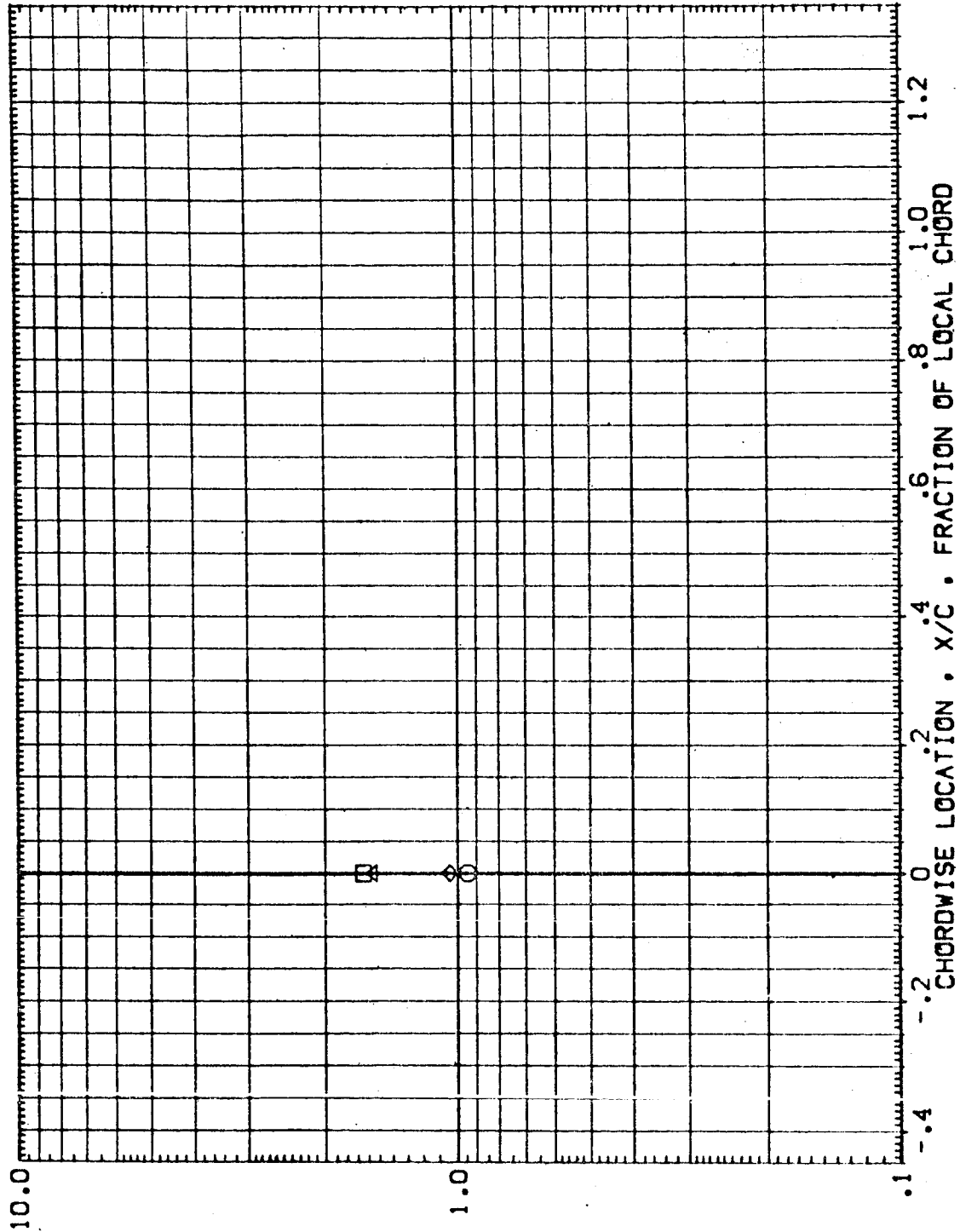


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .966

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RNVL HAV/HT

{EE G06}	ARC 3.5-178	143	0-T+S	.000	.000	1.500	.500
{EE G07}	ARC 3.5-178	143	0-T+S	.000	.000	5.000	.500
{EE G08}	ARC 3.5-178	143	0-T+S	.000	.000	1.500	.500
{EE G09}	ARC 3.5-178	143	0-T+S	.000	.000	5.000	.500

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

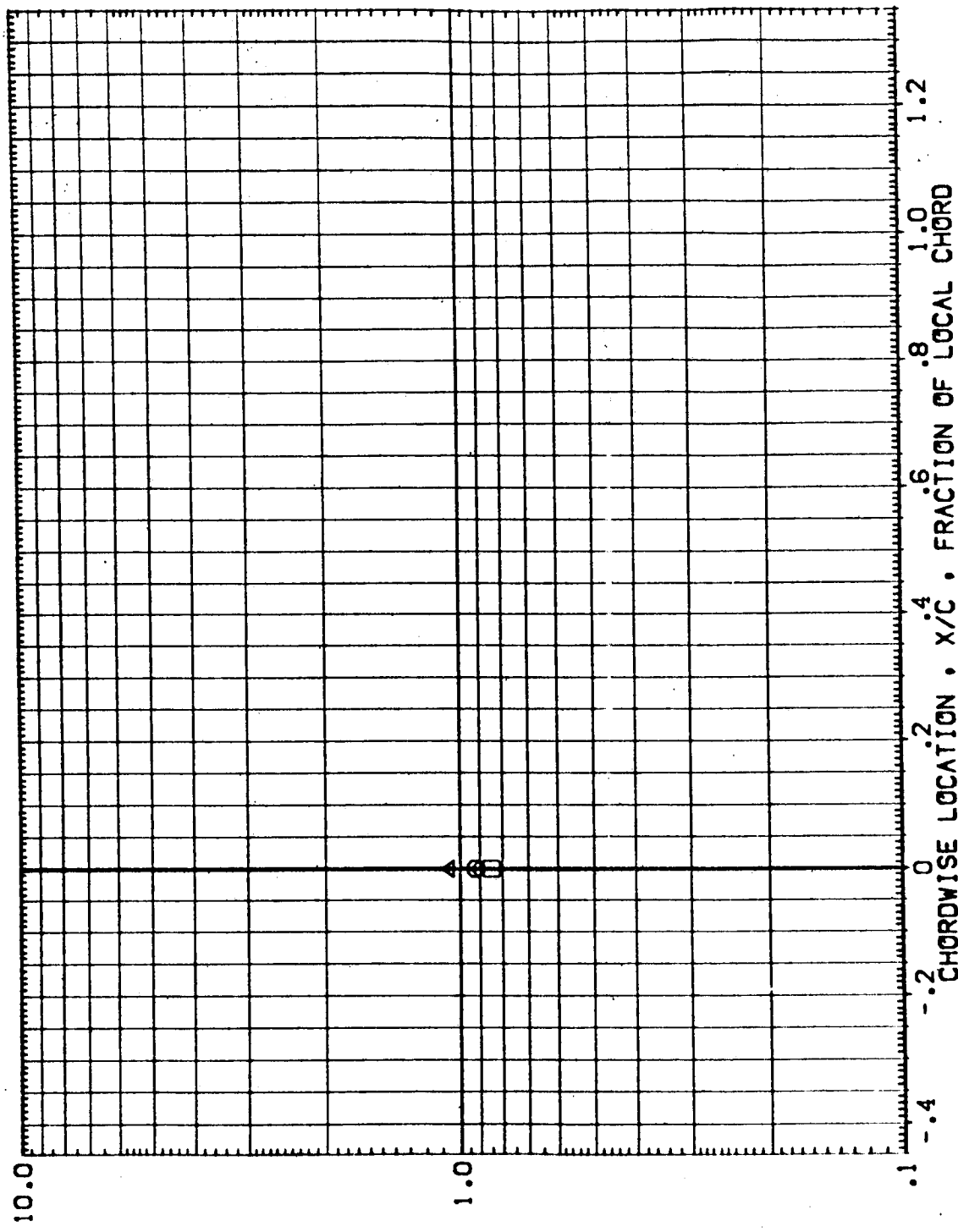


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .993

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
{EE 006}	ARC 3.5-178 H3 0+T+S	.000	.000	1.500	.900
{EE 007}	ARC 3.5-178 H3 0+T+S	.000	.000	5.000	.900
{EE 008}	ARC 3.5-178 H3 0+T+S (TRIPS)	.000	.000	1.500	.900
{EE 009}	ARC 3.5-178 H3 0+T+S (TRIPS)	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

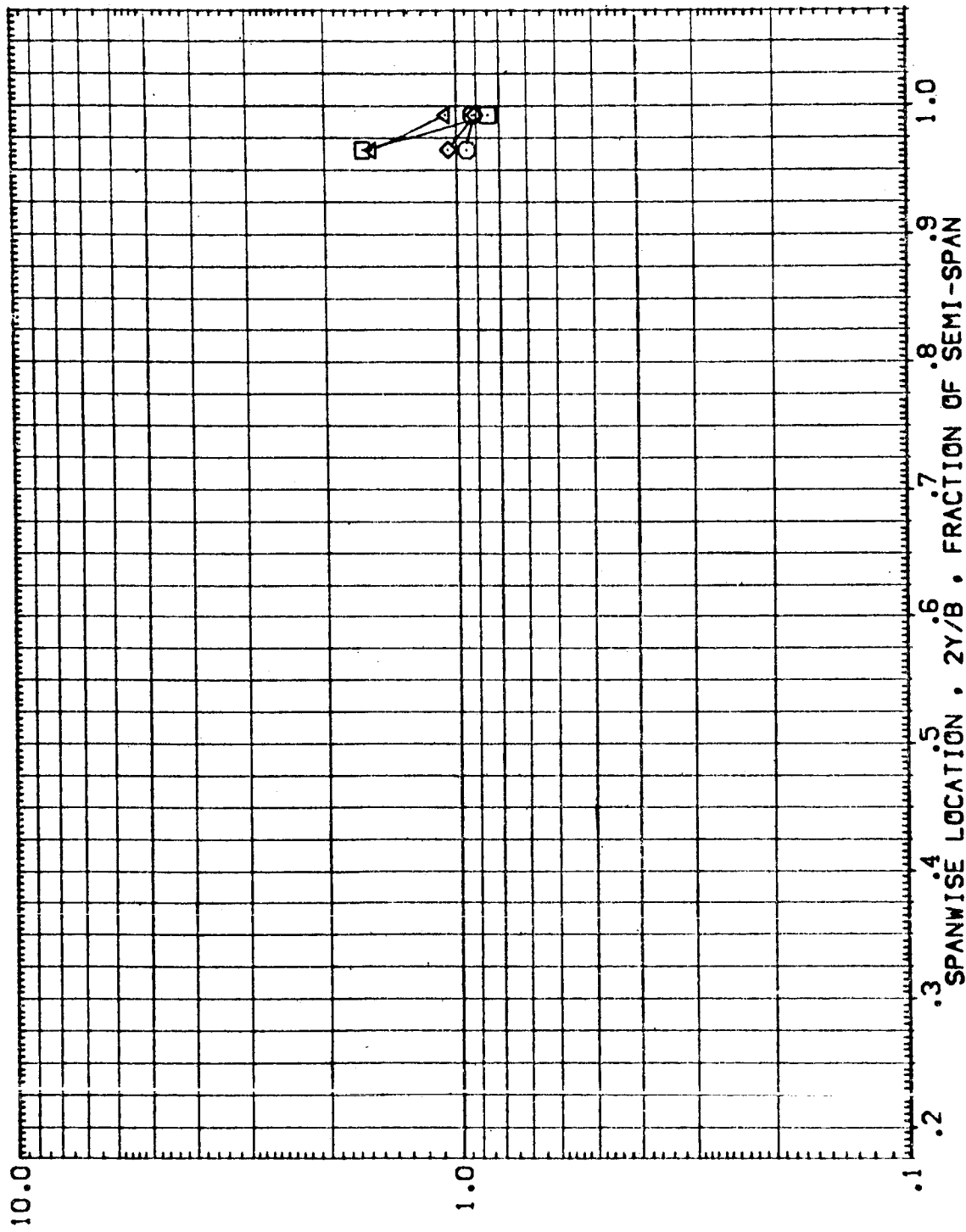


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING BOTTOM ALPHA BETA RV/L HAV/HT
 (EE1006) ARC 3.5-178 IH3 0+1+S VING BOTTOM .000 .000 1.500 .900
 (EE1007) ARC 3.5-178 IH3 0+1+S VING BOTTOM .000 .000 5.000 .900
 (EE1008) ARC 3.5-178 IH3 0+1+S (TRIPS) VING BOTTOM .000 .000 1.500 .900
 (EE1009) ARC 3.5-178 IH3 0+1+S (TRIPS) VING BOTTOM .000 .000 5.000 .900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

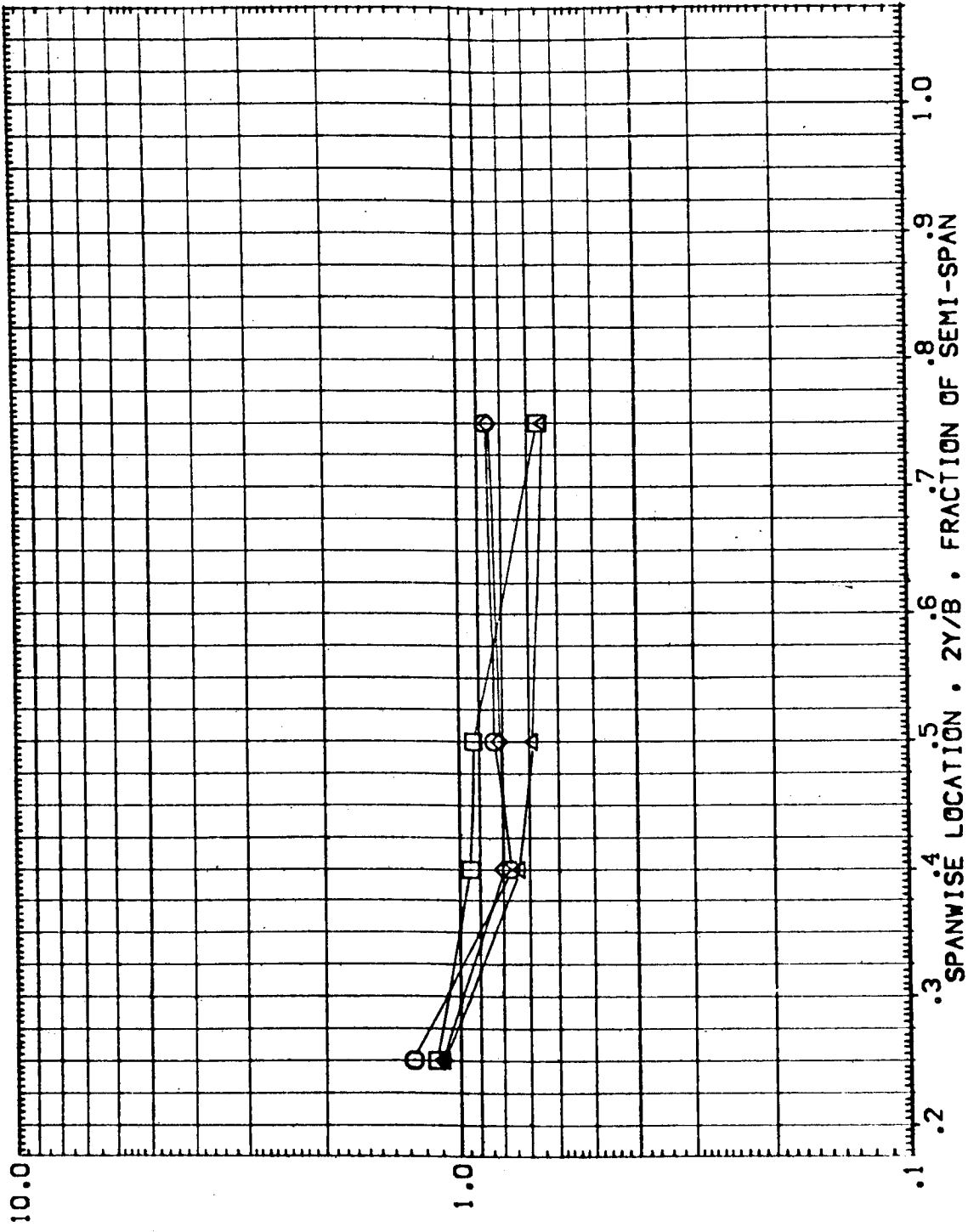


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .025

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RVL	HAV/HT
(EE 005)	ARC 3.5-178 IH3 0+T+S	.000	.000	1.500	.900
(EE 007)	ARC 3.5-178 IH3 0+T+S	.000	.000	5.000	.900
(EE 008)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(EE 009)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

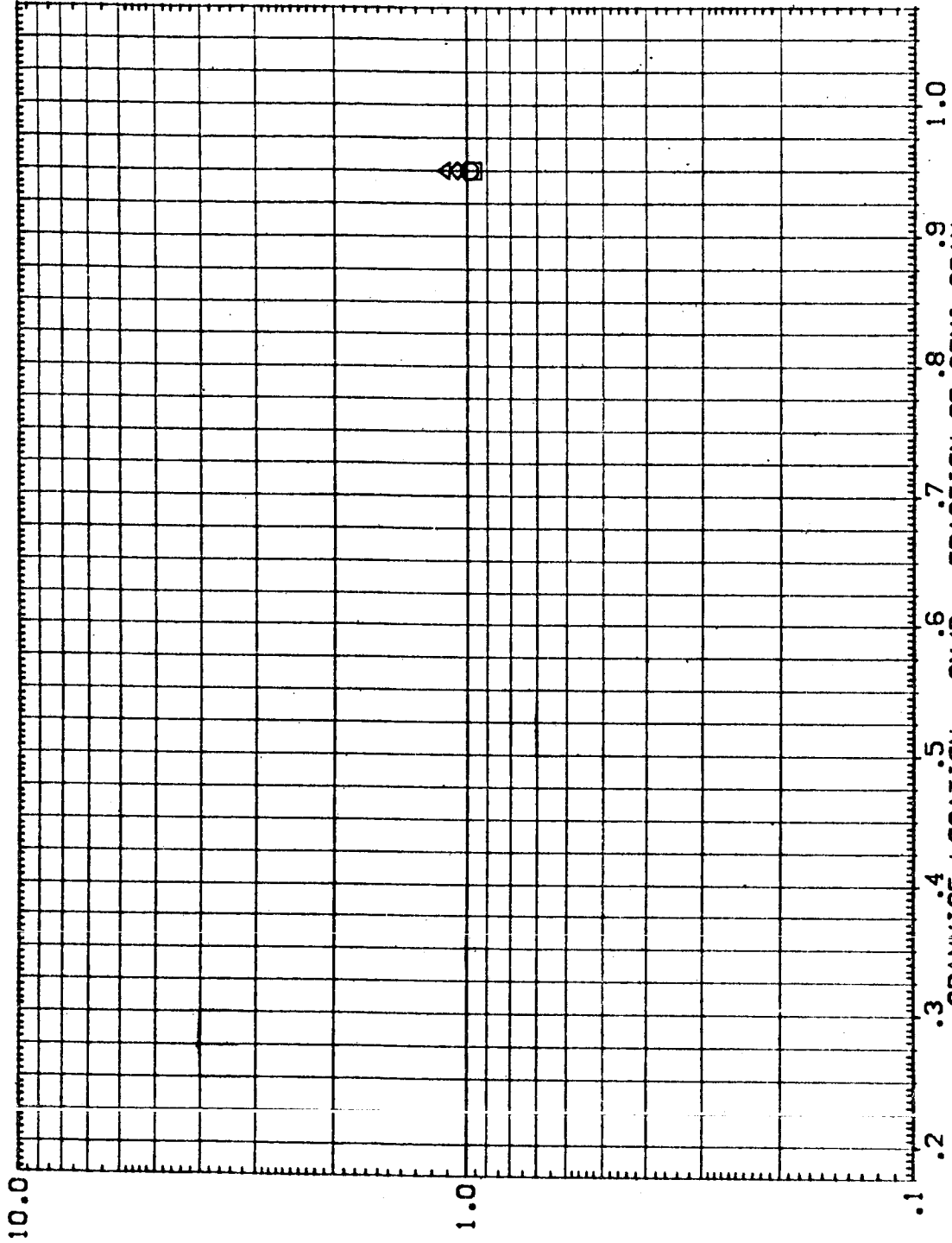


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (EE1G06) ARC 3.5-178 IH3 O+T+S .000 .000 1.500 .900
 (EE1G07) ARC 3.5-178 IH3 O+T+S .000 .000 5.000 .900
 (EE1G08) ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 1.500 .900
 (EE1G09) ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 .900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

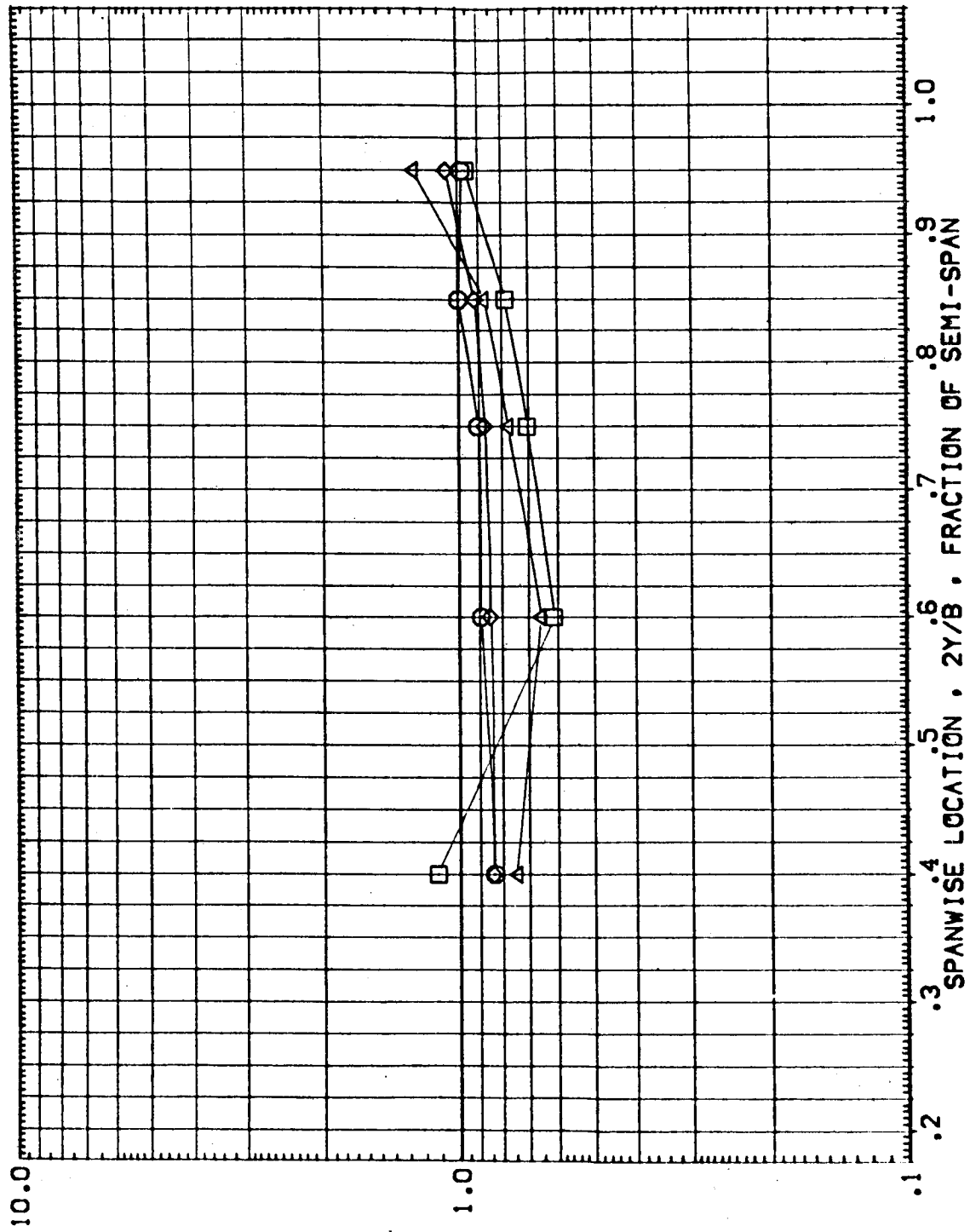


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .100



DATA SET SYMBO	CONFIGURATION DESCRIPTION	ALPHA	BETA	RM/L	HAW/HT
{EE G06}	ARC 3 5-178 IH3 0-T+S	.000	.000	1.500	.900
{EE G07}	ARC 3 5-178 IH3 0-T+S	.000	.000	5.000	.900
{EE G08}	ARC 3 5-178 IH3 0-T+S (TRIPS)	.000	.000	1.500	.900
{EE G09}	ARC 3 5-178 IH3 0-T+S (TRIPS)	.000	.000	5.000	.900

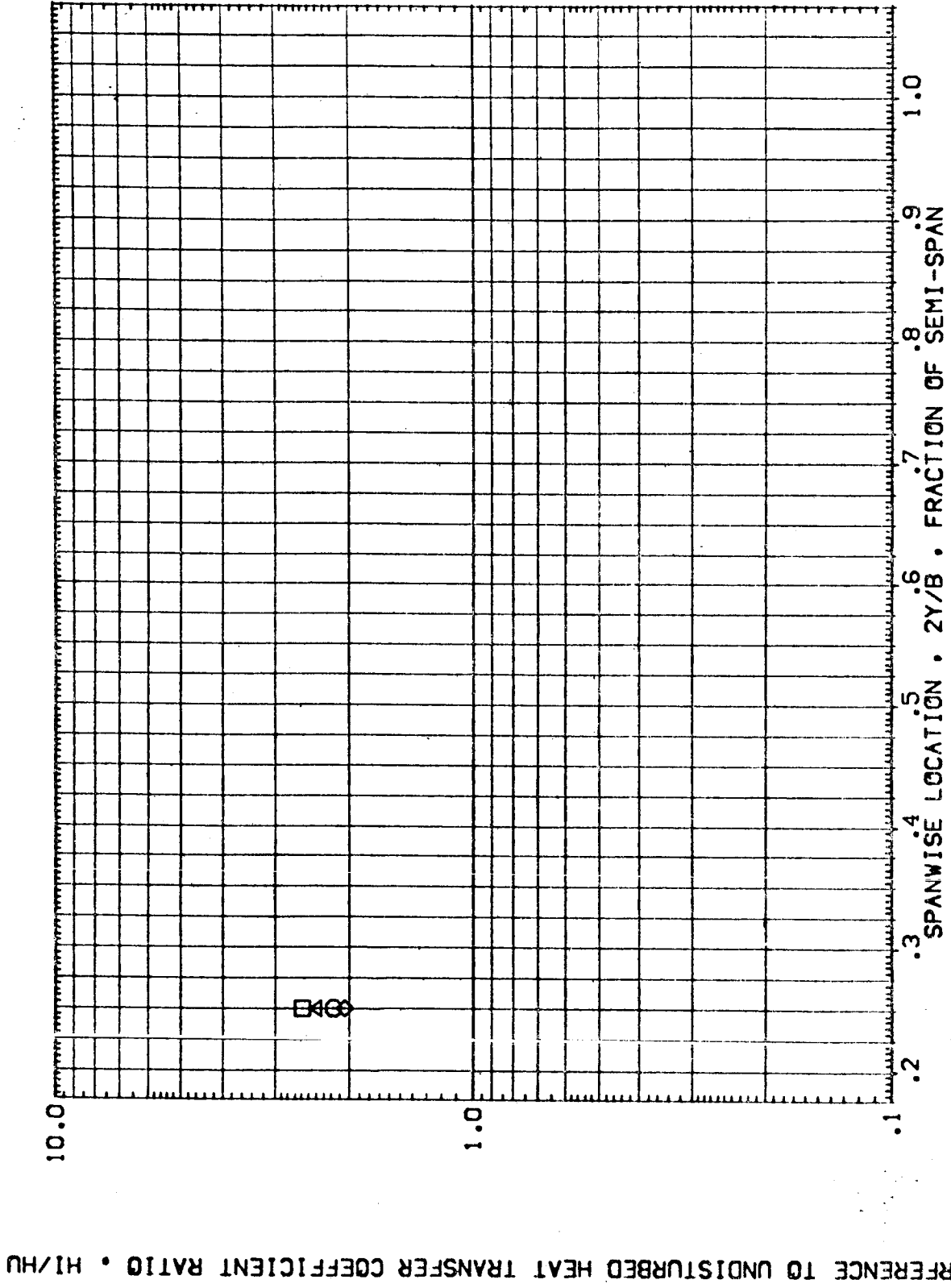


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .153

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (EE1008) [] ARC 3.5-178 I+3 O+1+S .000 .000 1.500 .900
 (EE1007) [] ARC 3.5-178 I+3 O+1+S .000 .000 5.000 .900
 (EE1008) [] ARC 3.5-178 I+3 O+1+S (TRIPS) .000 .000 1.500 .900
 (EE1009) [] ARC 3.5-178 I+3 O+1+S (TRIPS) .000 .000 5.000 .900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

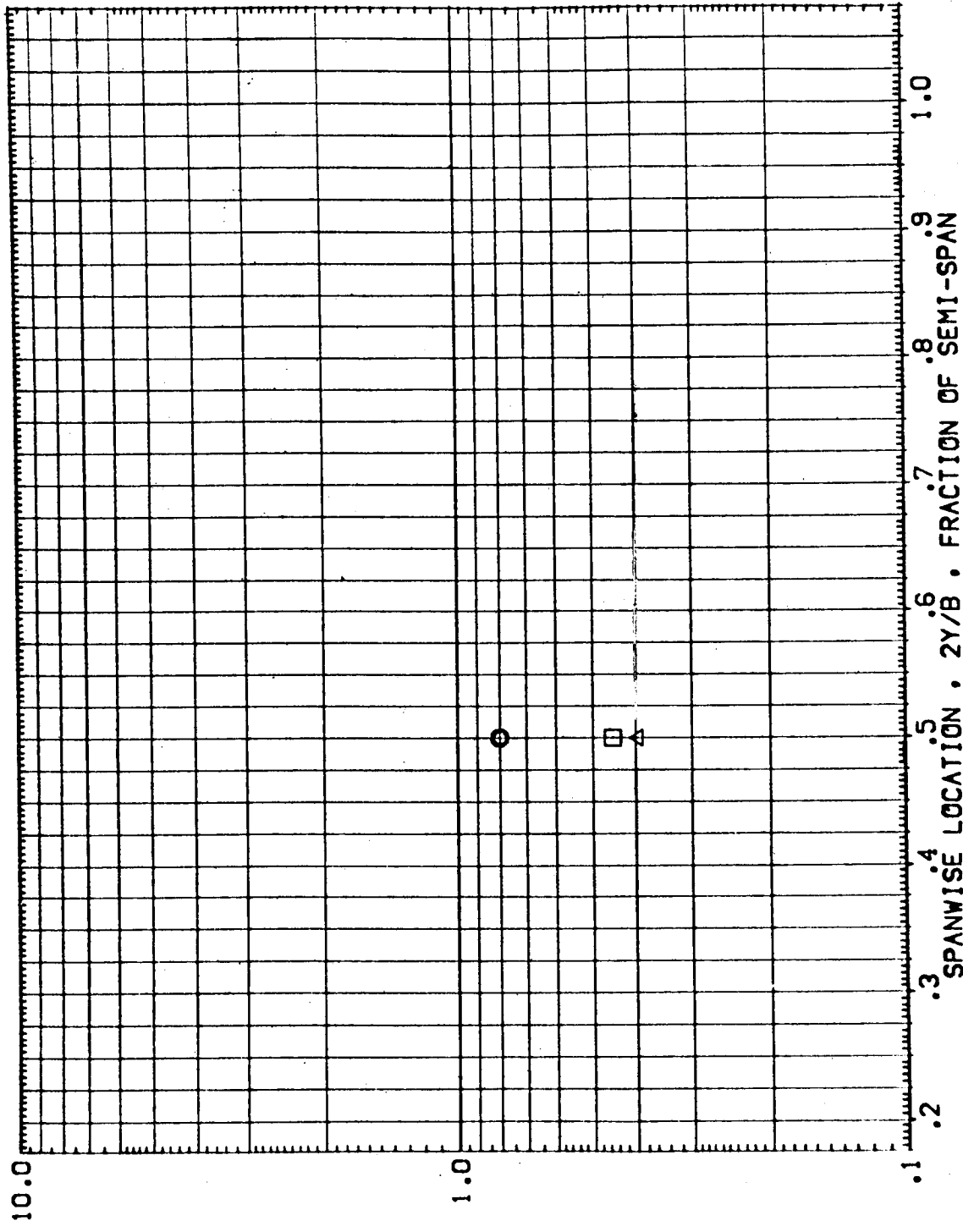


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .177



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
{EE1606}	ARC 3.5-178 H3 O+T+S	.000	.000	1.500	.900
{EE1607}	ARC 3.5-178 H3 O+T+S	.000	.000	5.000	.900
{EE1608}	ARC 3.5-178 H3 O+T+S (TRIPS)	.000	.000	1.500	.900
{EE1609}	ARC 3.5-178 H3 O+T+S (TRIPS)	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

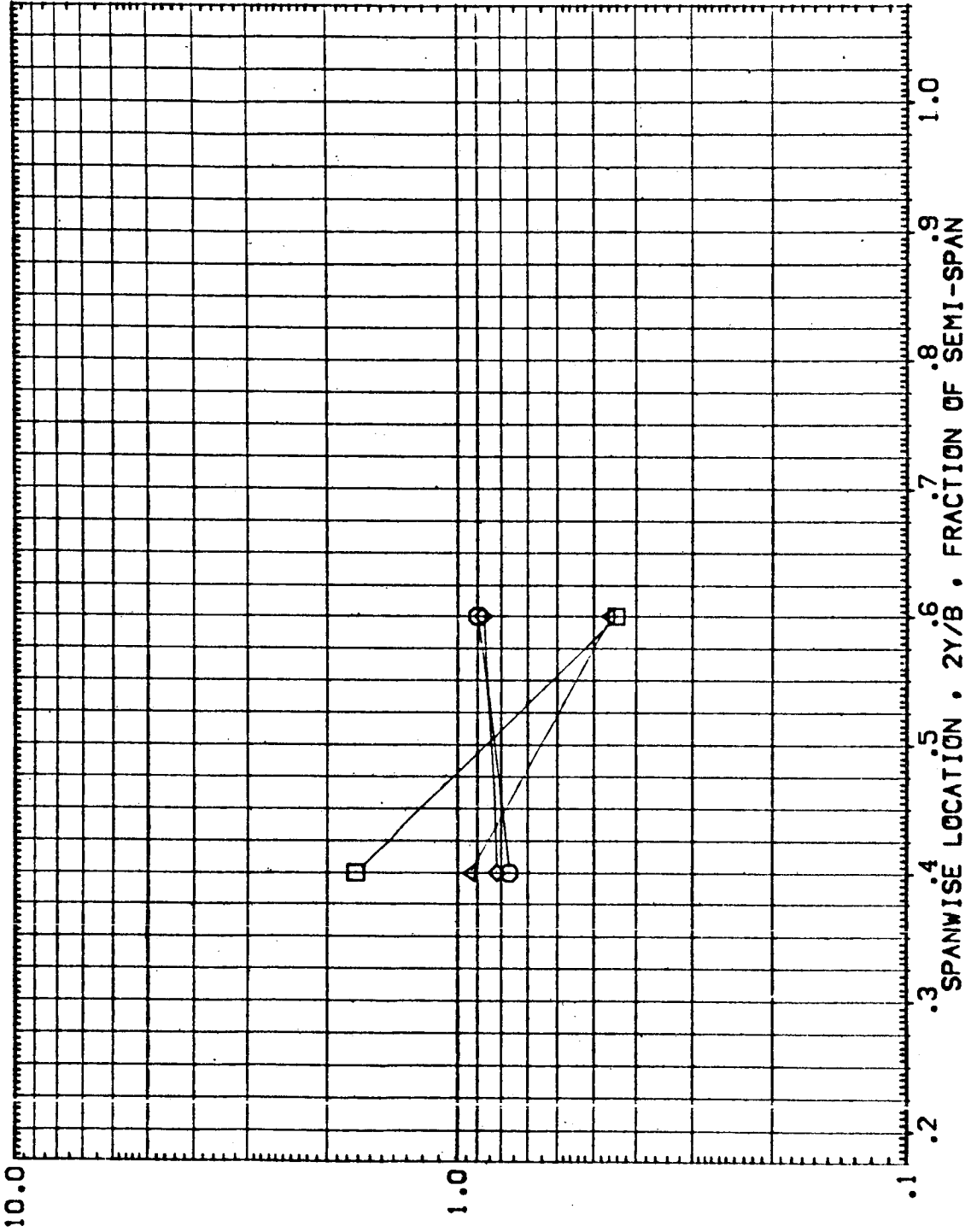


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

{EE 006}	ARC 3.5-178	H3 O-T+S	.000	.000	1.500	.900
{EE 007}	ARC 3.5-178	H3 O-T+S	.000	.000	5.000	.900
{EE 008}	ARC 3.5-178	H3 O-T+S (TRIPS)	.000	.000	1.500	.900
{EE 009}	ARC 3.5-178	H3 O-T+S (TRIPS)	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

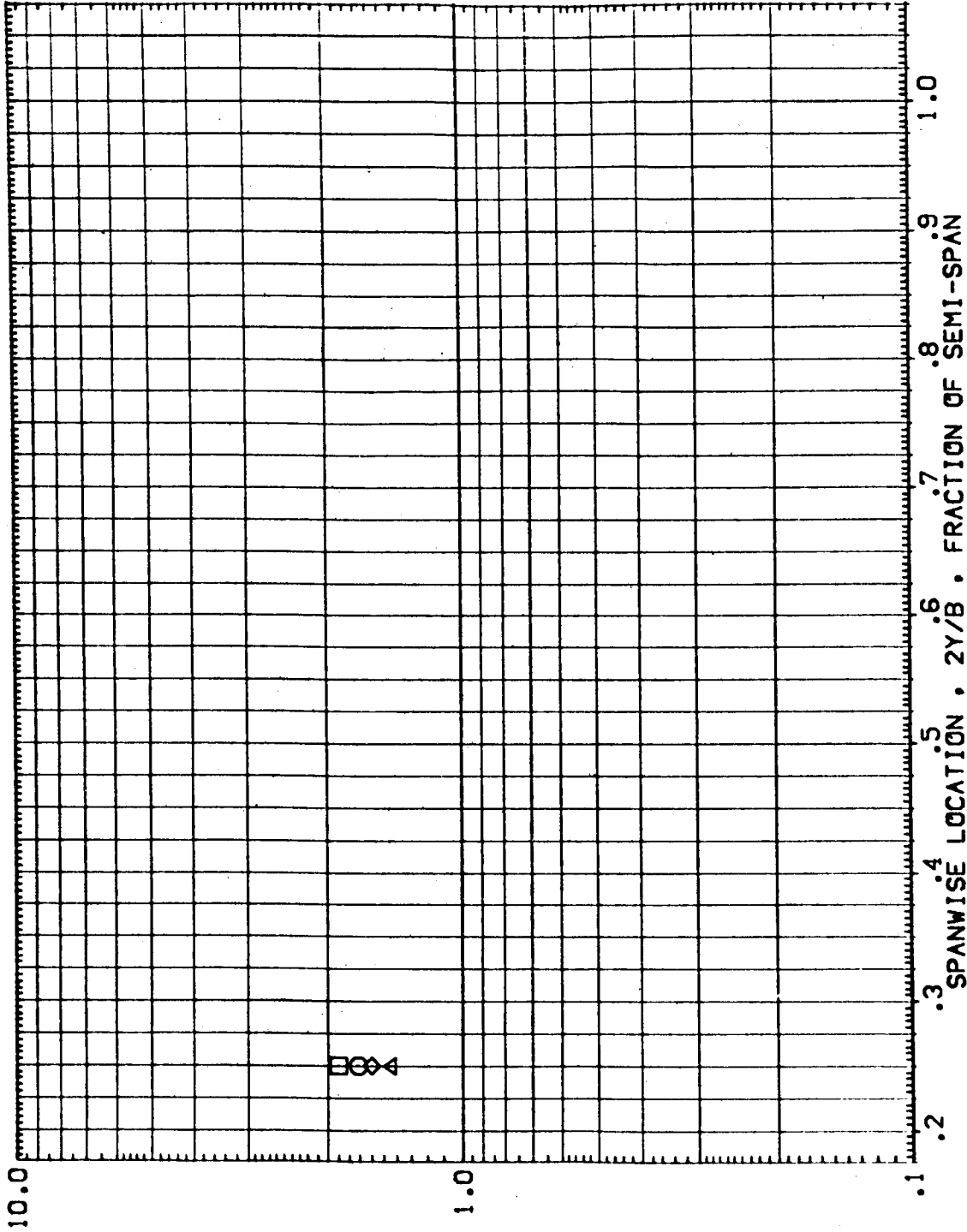


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .299

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
[EE]606	ARC 3.5-178 IH3 0+1+S	.000	.000	1.500	.900
[EE]607	ARC 3.5-178 IH3 0+1+S	.000	.000	5.000	.900
[EE]608	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	1.500	.900
[EE]609	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	.900

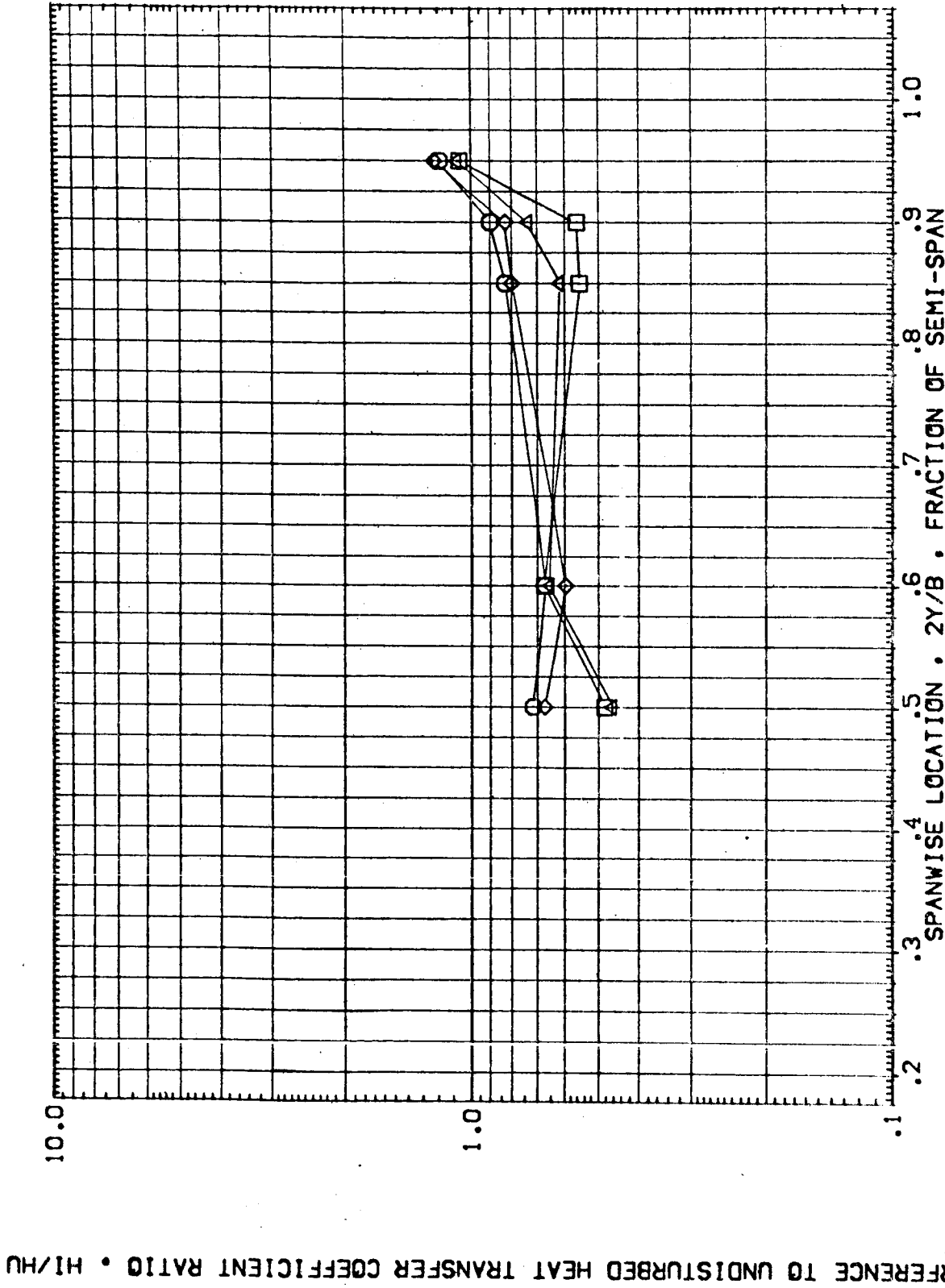


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .300

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(EE1006)	ARC 3.5-178 IH3 O-T+S	.000	.000	1.500	.900
(EE1007)	ARC 3.5-178 IH3 O-T+S	.000	.000	5.000	.900
(EE1008)	ARC 3.5-178 IH3 O-T+S (TRIPS)	.000	.000	1.500	.900
(EE1009)	ARC 3.5-178 IH3 O-T+S (TRIPS)	.000	.000	5.000	.900

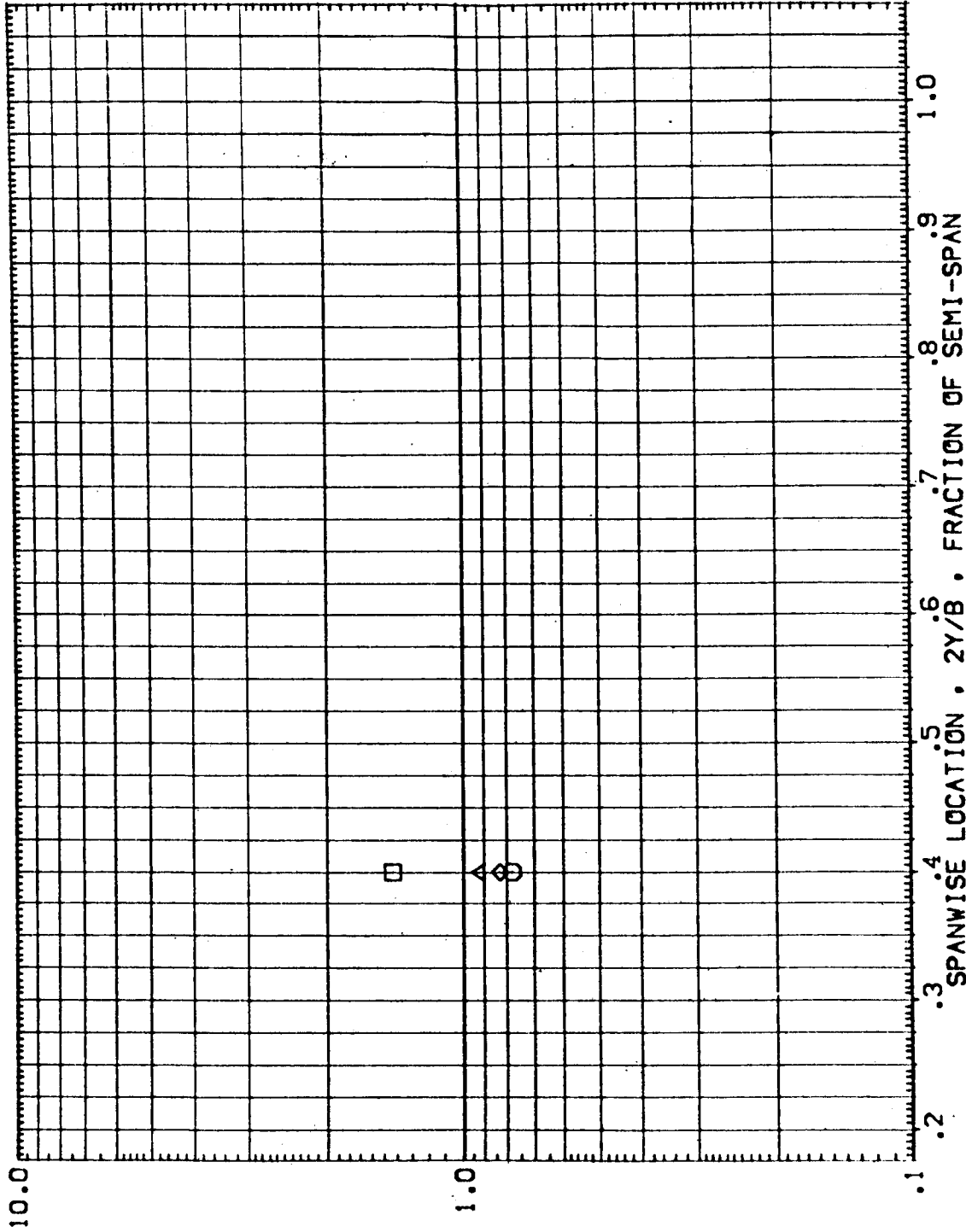



FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .302

DATA SET SYMBOL:  CONFIGURATION DESCRIPTION: ALPHA BETA RV/L MAV/HT

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	MAV/HT
(EE 005)	ARC 3.5-176 IH3 0-T+S	.000	.000	1.500	.900
(EE 007)	ARC 3.5-178 IH3 0-T+S	.000	.000	5.000	.900
(EE 008)	ARC 3.5-178 IH3 0-T+S (TRIPS)	.000	.000	1.500	.900
(EE 009)	ARC 3.5-178 IH3 0-T+S (TRIPS)	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

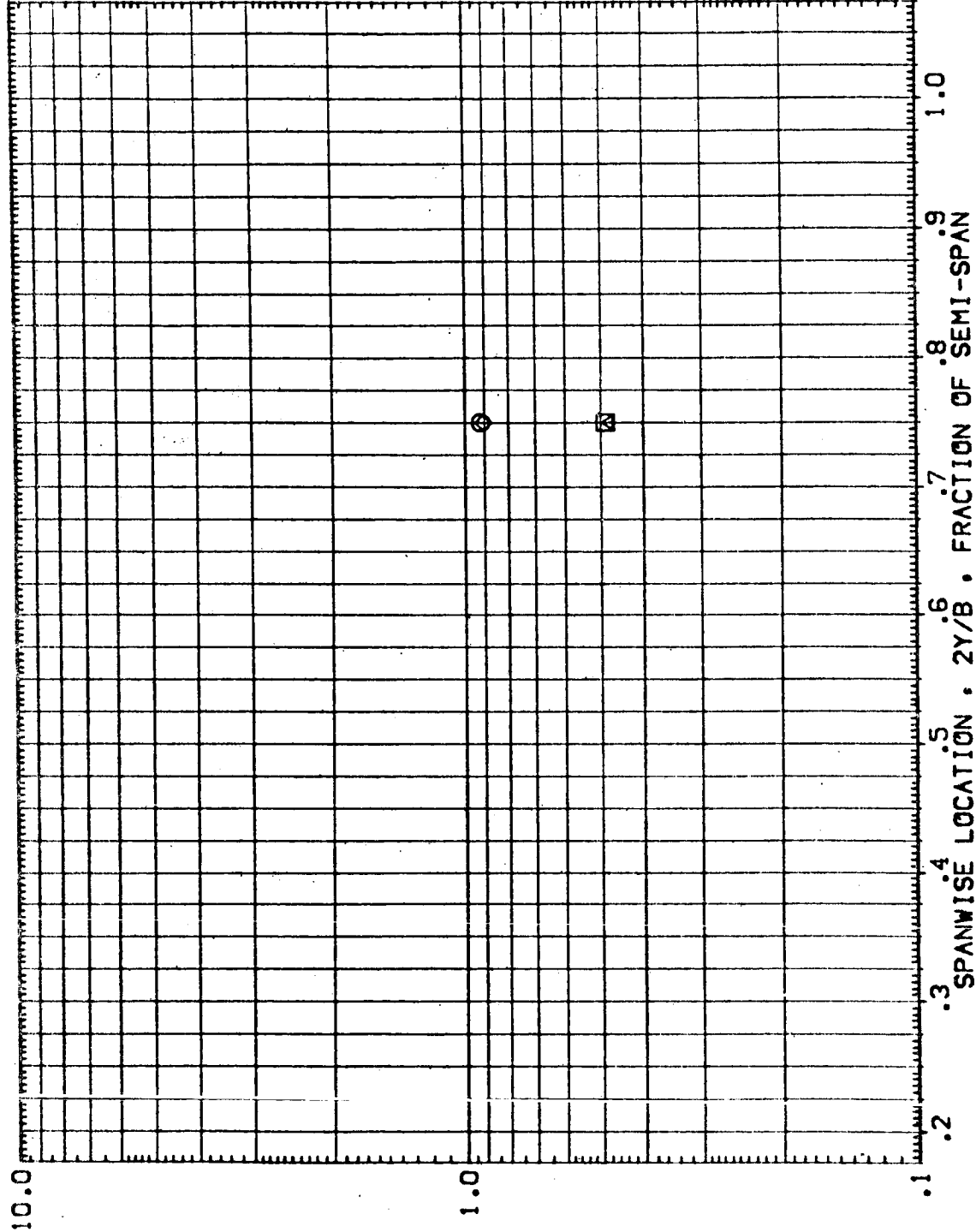


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .303

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING BOTTOM	ALPHA	BETA	RN/L	HAV/HT
(EE1006)	ARC 3.5-178 IH3 O+I+S	WING BOTTOM	.000	.000	1.500	.900
(EE1007)	ARC 3.5-178 IH3 O+I+S	WING BOTTOM	.000	.000	5.000	.900
(EE1008)	ARC 3.5-178 IH3 O+I+S (TRIPS)	WING BOTTOM	.000	.000	1.500	.900
(EE1009)	ARC 3.5-178 IH3 O+I+S (TRIPS)	WING BOTTOM	.000	.000	5.000	.900

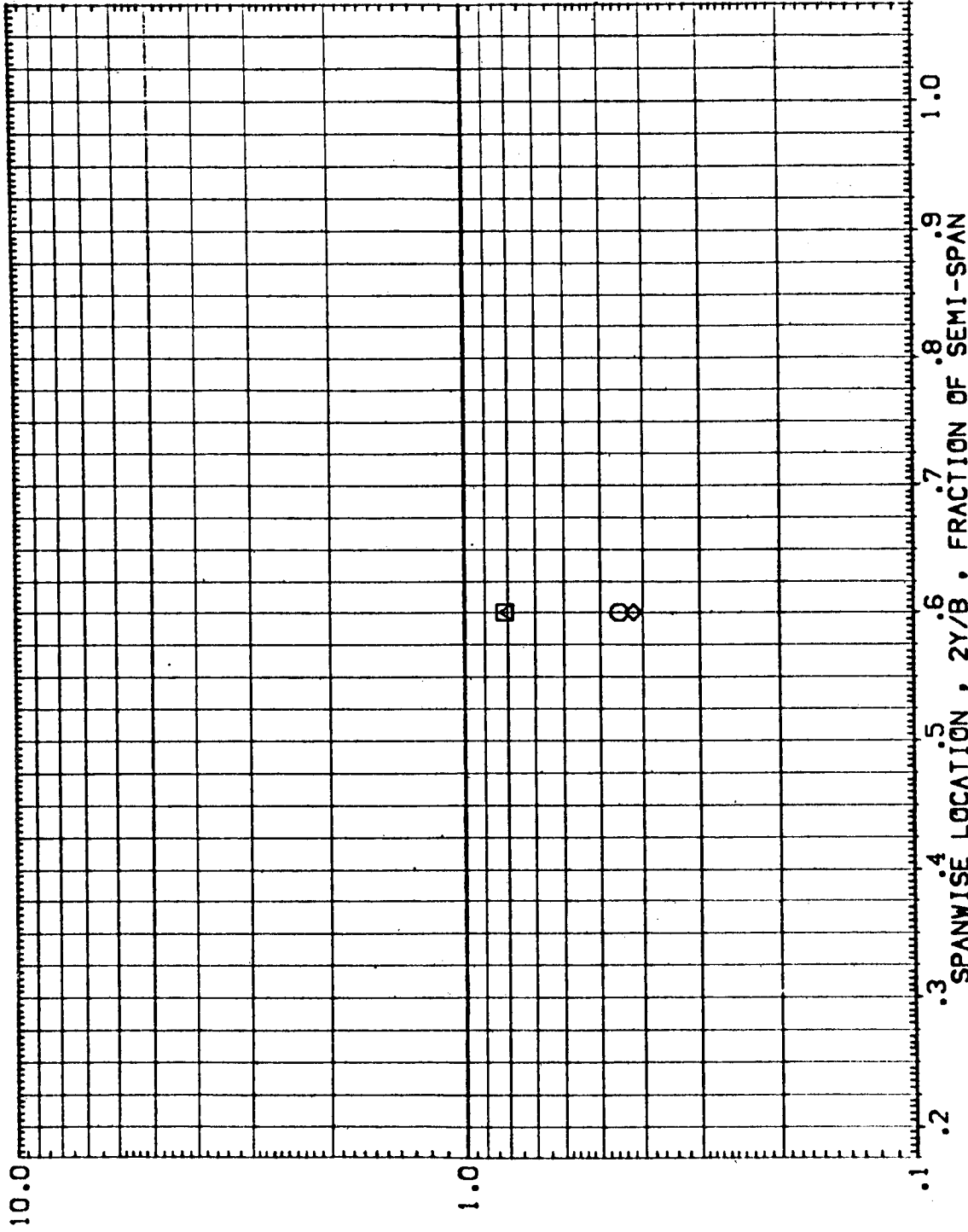


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .428

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(EE)G06	ARC 1.5-178	H3 0+1+S	.000	.000	1.500	.900
(EE)G07	ARC 1.5-178	H3 0+1+S	.000	.000	5.000	.900
(EE)G08	ARC 1.5-178	H3 0+1+S (TRIPS)	.000	.000	1.500	.900
(EE)G09	ARC 1.5-178	H3 0+1+S (TRIPS)	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

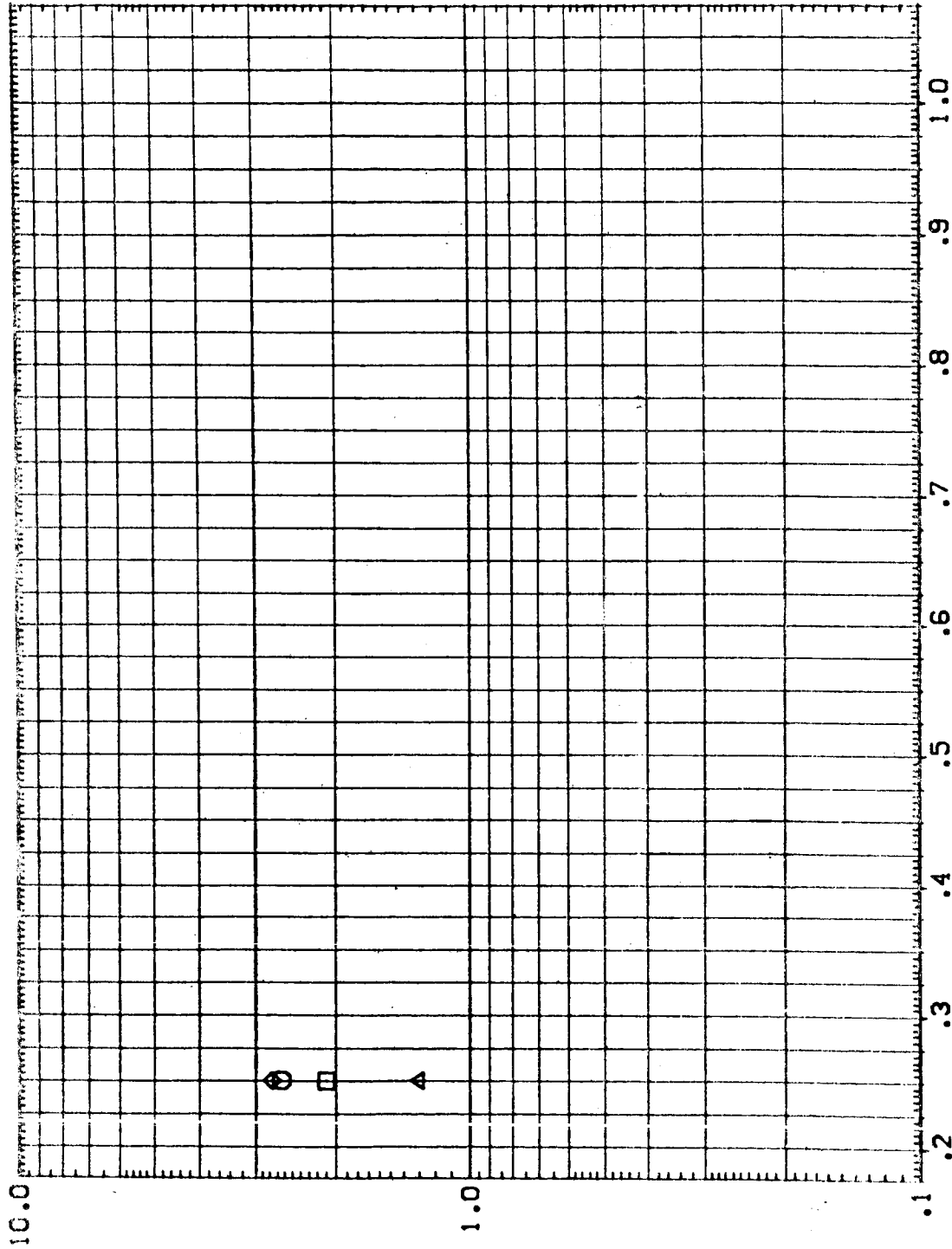


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .444

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING BOTTOM	ALPHA	BETA	RN/L	HAW/HT
{EE G06}	ARC 3.5-178 I+G O+I+S	VING BOTTOM	.000	.000	1.500	.900
{EE G07}	ARC 3.5-178 I+G O+I+S	VING BOTTOM	.000	.000	5.000	.900
{EE G08}	ARC 3.5-178 I+G O+I+S (TRIPS)	VING BOTTOM	.000	.000	1.500	.900
{EE G09}	ARC 3.5-178 I+G O+I+S (TRIPS)	VING BOTTOM	.000	.000	5.000	.900

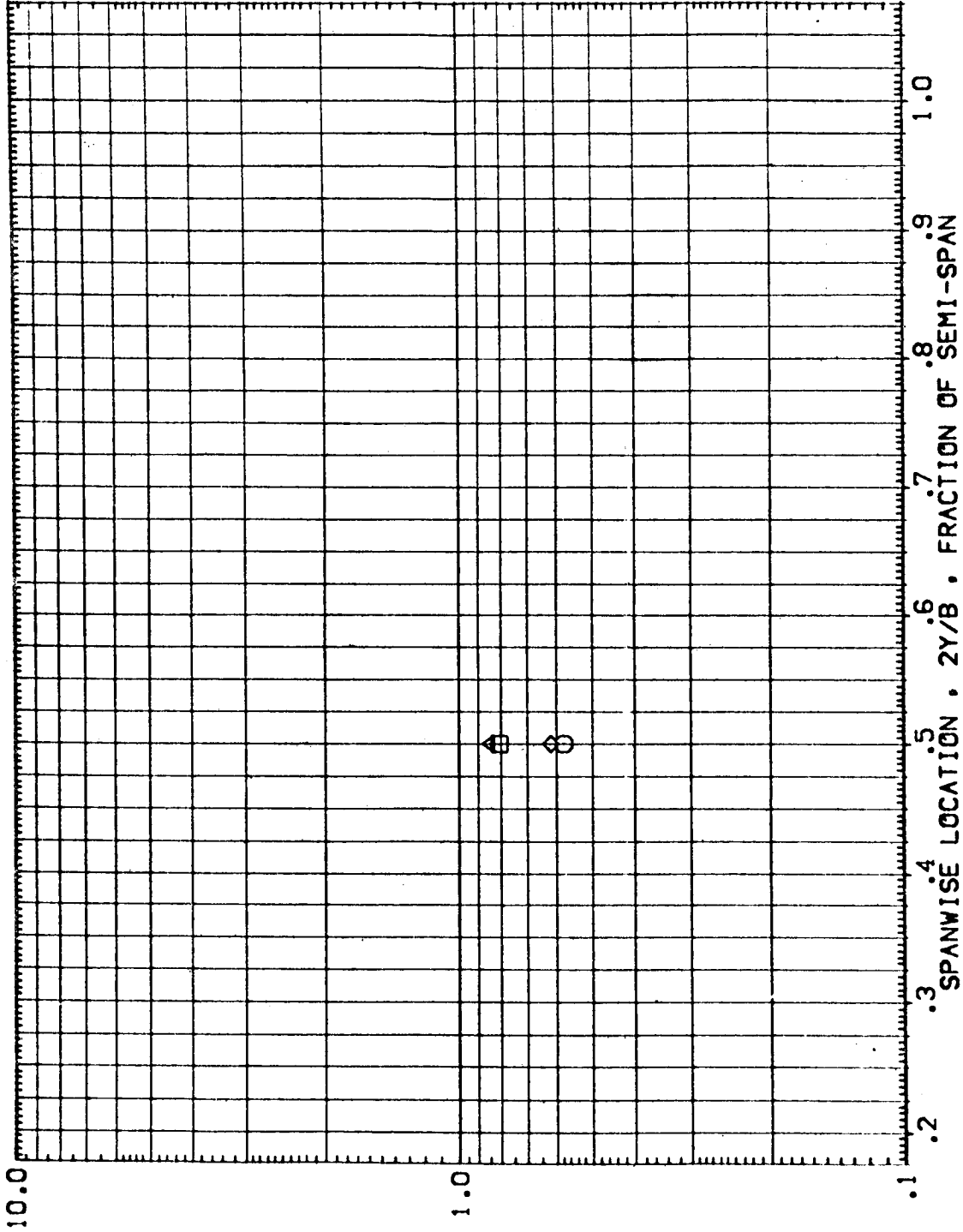


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .487

DATA SET SYMBO.	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAN/HT
(EE G06)	ARC 3.5-178 IH3 0+1+S	.000	.000	1.500	.900
(EE G07)	ARC 3.5-178 IH3 0+1+S	.000	.000	5.000	.900
(EE G08)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	1.500	.900
(EE G09)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	.900

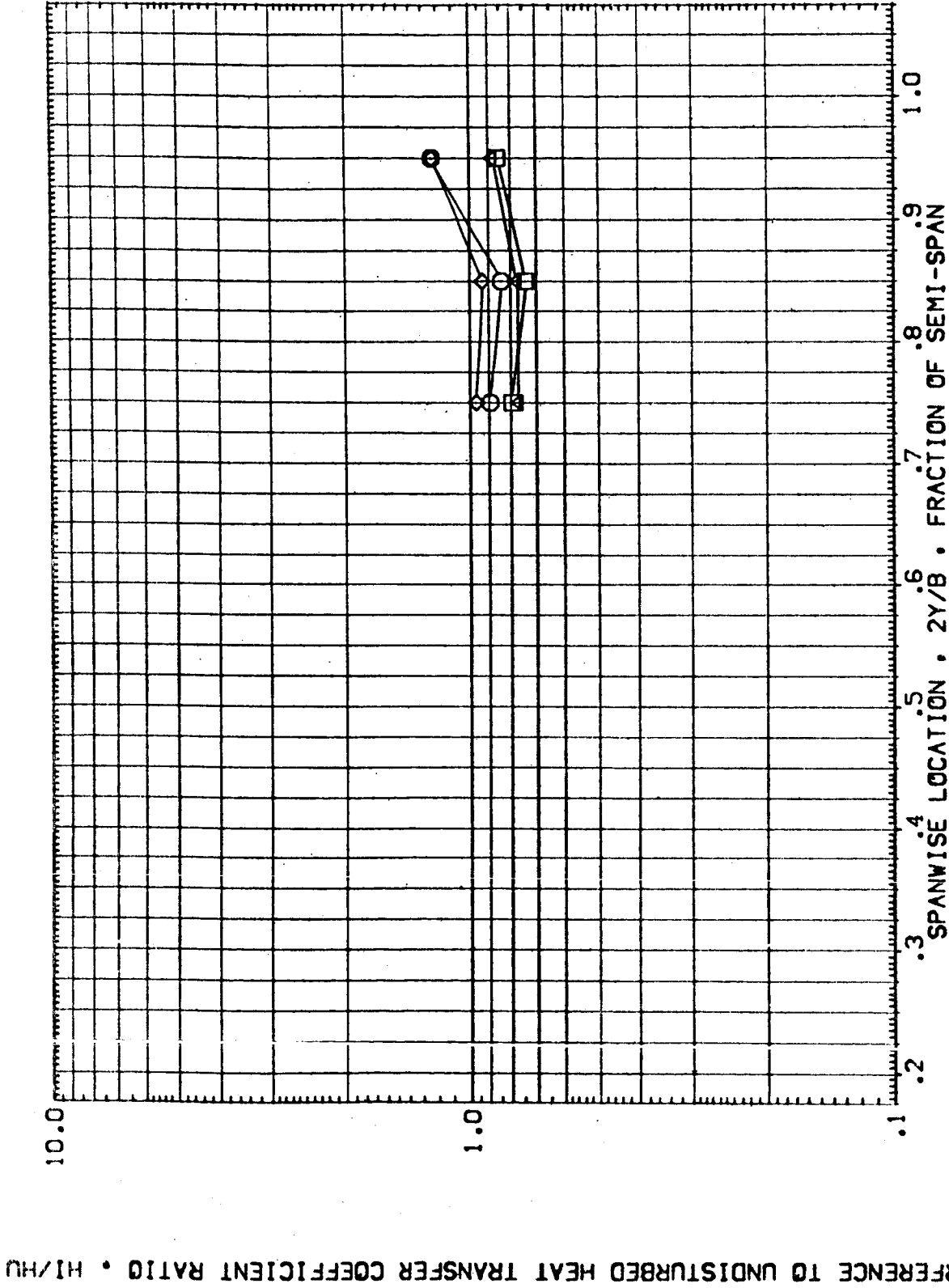


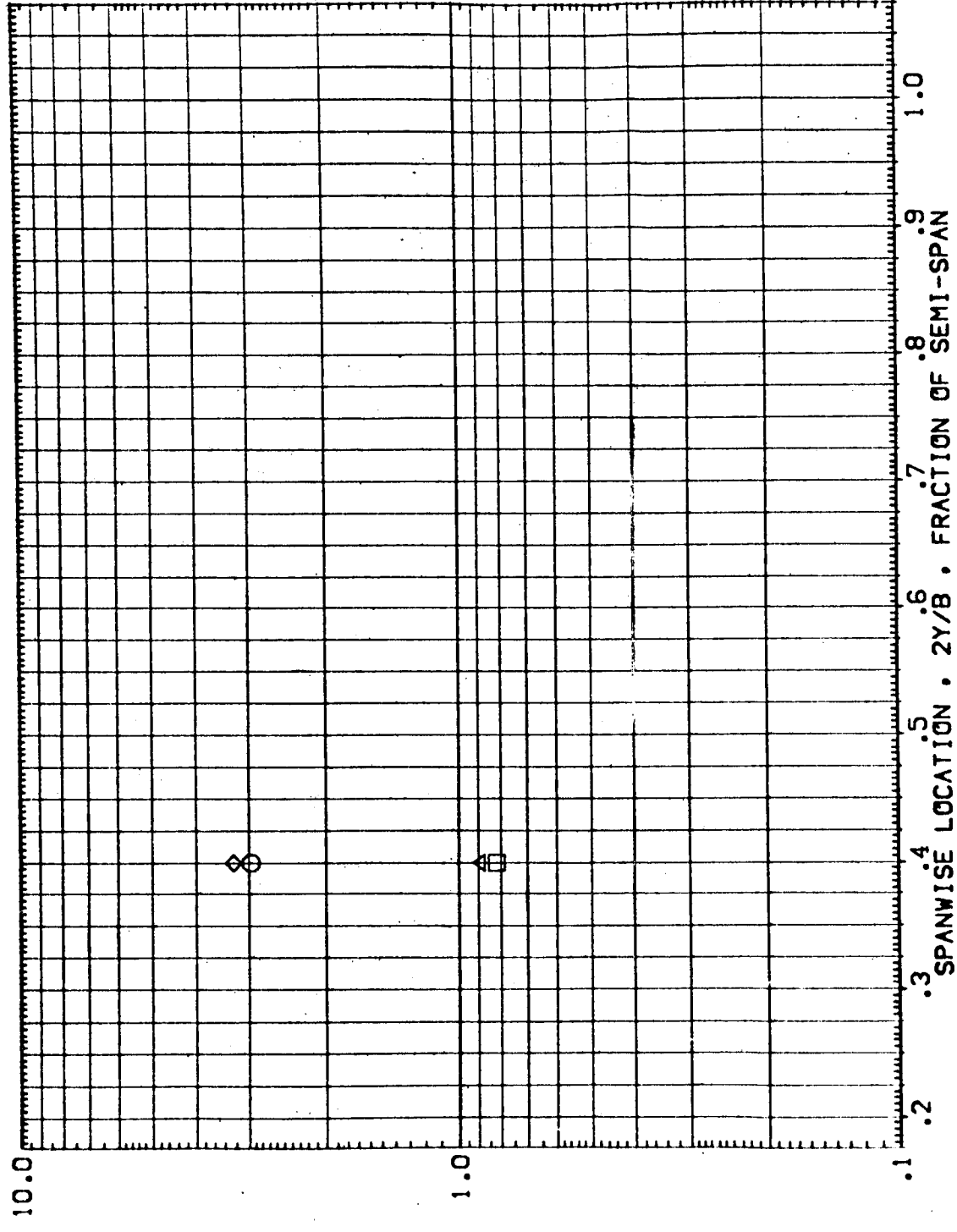
FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .500

DATA SET SYMB. CONFIGURATION DESCRIPTION

SYMB.	CONFIGURATION DESCRIPTION	ALPHA	BETA	RM/L	HAW/HT
(EE1606)	ARC 3.5-178 H3 O+T+S	.000	.000	1.500	.900
(EE1607)	ARC 3.5-178 H3 O+T+S	.000	.000	5.000	.900
(EE1608)	ARC 3.5-178 H3 O+T+S (TRIPS)	.000	.000	1.500	.900
(EE1609)	ARC 3.5-178 H3 O+T+S (TRIPS)	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU



.3 SPANWISE LOCATION • 2Y/B • FRACTION OF SEMI-SPAN

FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .559

DATA SET SYMBO	CONFIGURATION DESCRIPTION	ALPHA	BETA	RM/L	HAW/HT
(EE 606)	ARC 3.5-178 IH3 0+1+S	.000	.000	1.500	.900
(EE 607)	ARC 3.5-178 IH3 0+1+S	.000	.000	5.000	.900
(EE 608)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	1.500	.900
(EE 609)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	.900

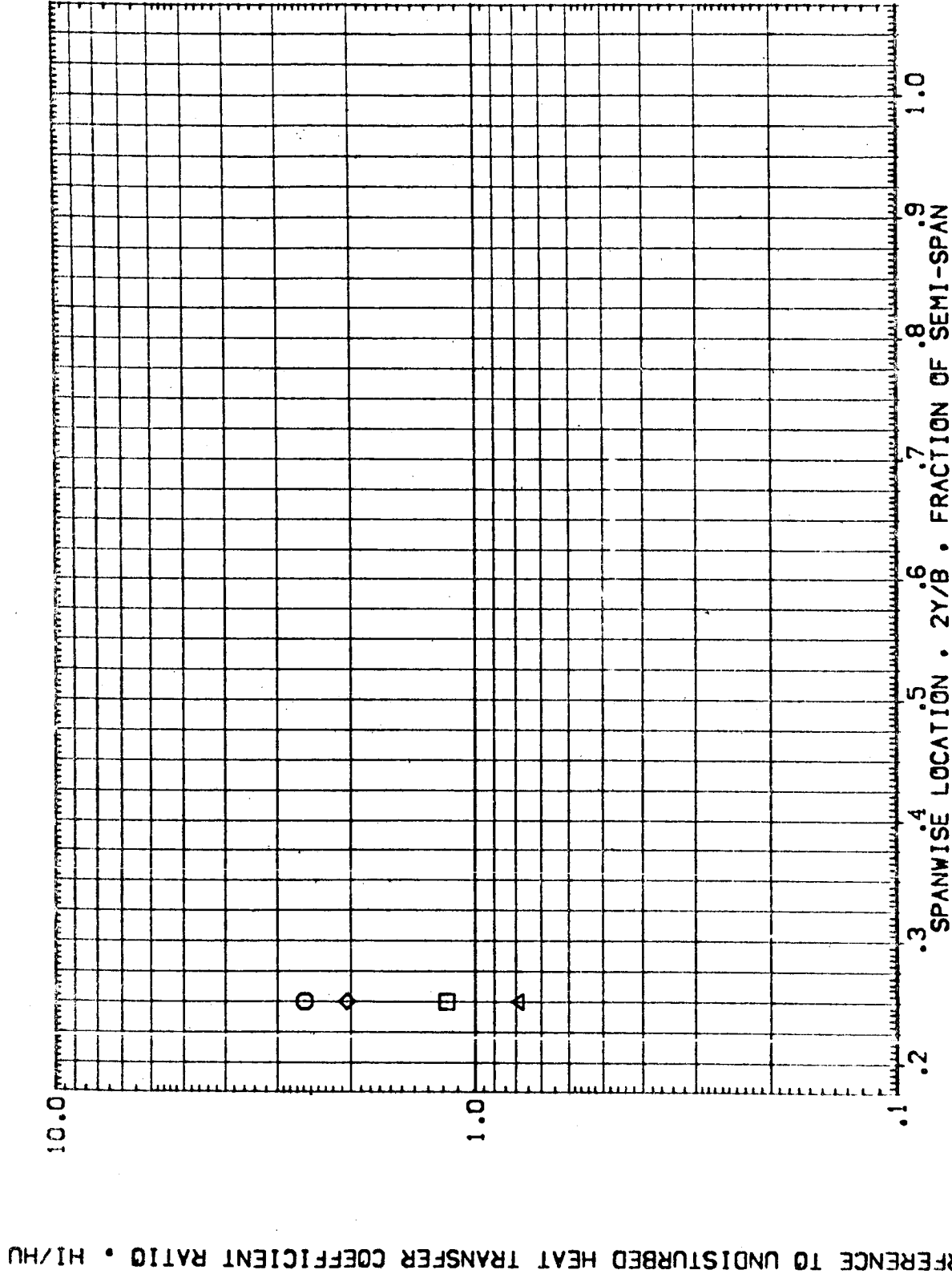


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .590

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING BOTTOM	ALPHA	BETA	RVL	HAW/HT
{EE 006}	ARC 3.5-178 [H3 O+T+S	WING BOTTOM	.000	.000	1.500	.900
{EE 007}	ARC 3.5-178 [H3 O+T+S	WING BOTTOM	.000	.000	5.000	.900
{EE 008}	ARC 3.5-178 [H3 O+T+S (TRIPS)	WING BOTTOM	.000	.000	1.500	.900
{EE 009}	ARC 3.5-178 [H3 O+T+S	WING BOTTOM	.000	.000	5.000	.900

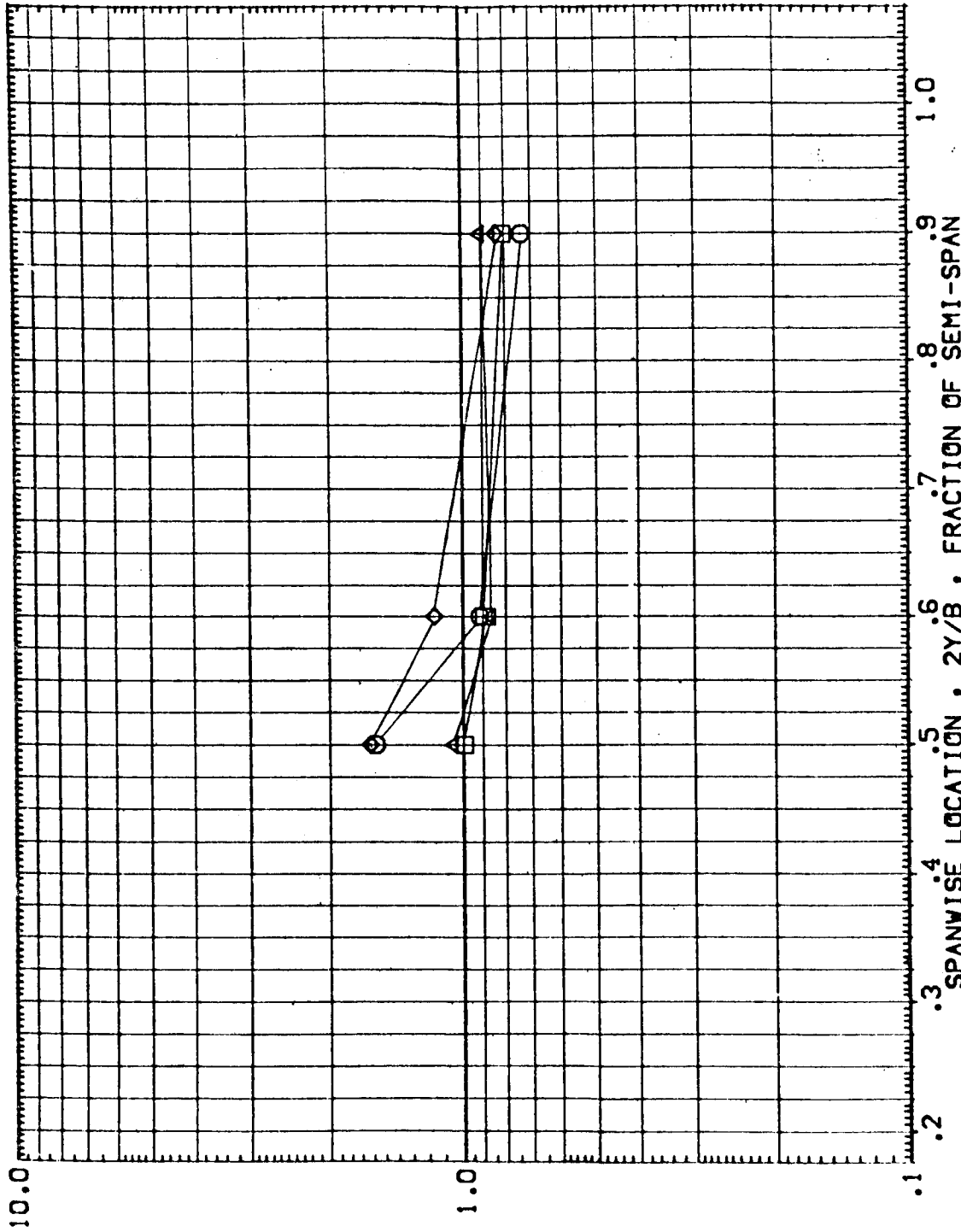


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .600

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAW/HT
(EE 006)	ARC 1.5-178 143 O+T+S	.000	.000	1.500	.900
(EE 007)	ARC 1.5-178 143 O+T+S	.000	.000	5.000	.900
(EE 008)	ARC 1.5-178 143 O+T+S (TRIPS)	.000	.000	1.500	.900
(EE 009)	ARC 1.5-178 143 O+T+S (TRIPS)	.000	.000	5.000	.900

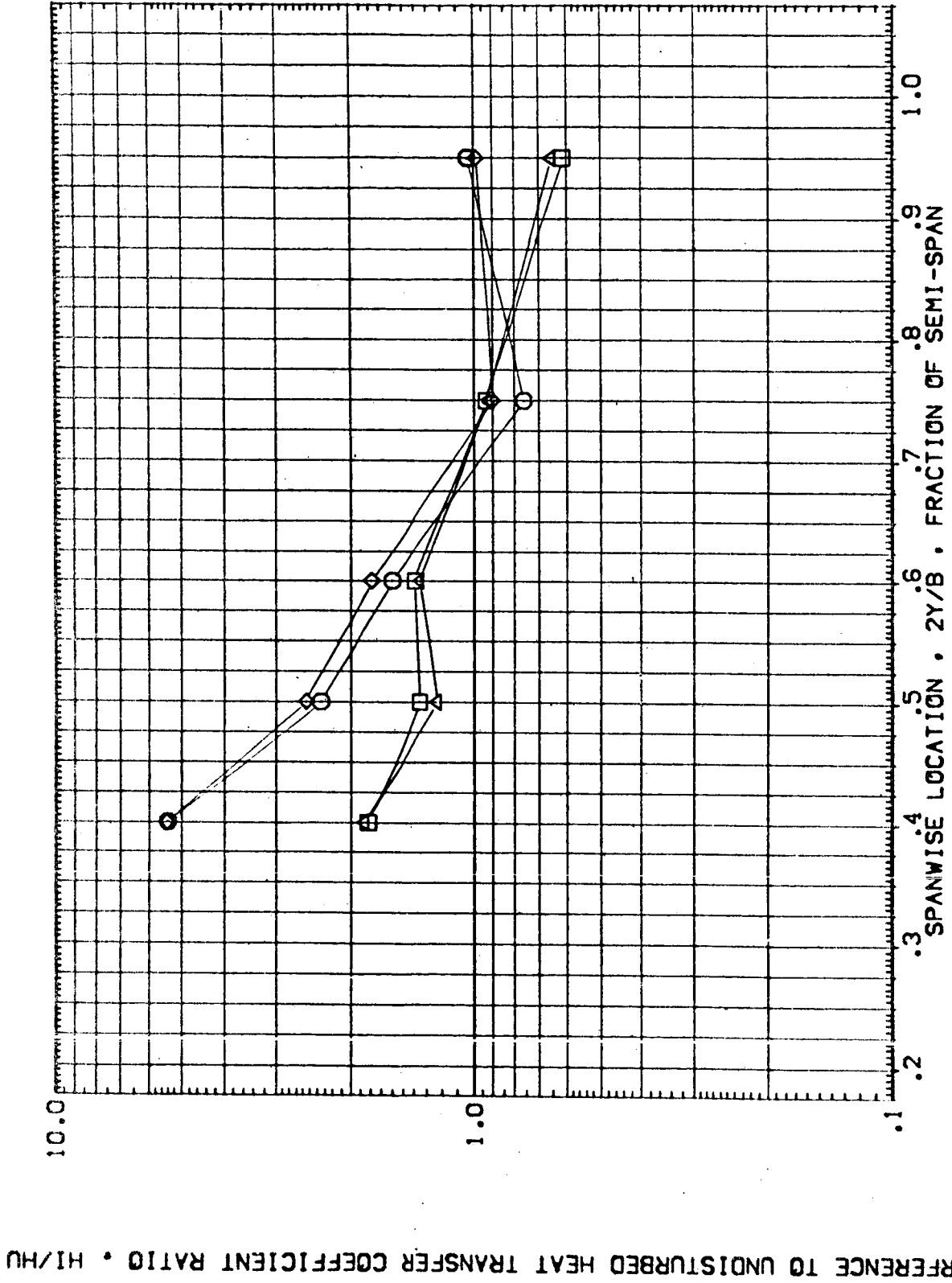
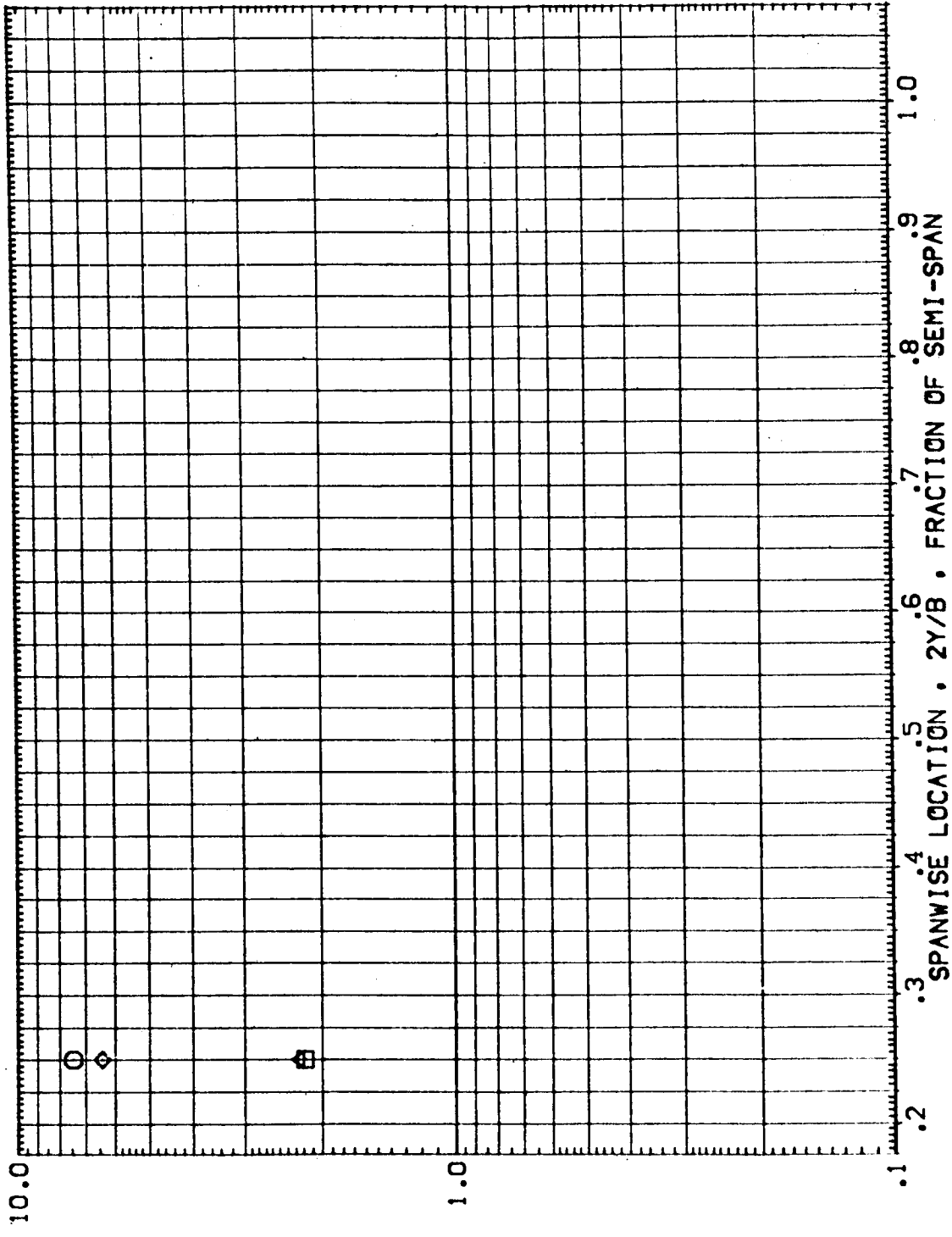


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .700

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RAVL	HAV/HT
(EE1005)	ARC 3.5-178 IH3 0-T+S	.000	.000	1.500	.900
(EE1007)	ARC 3.5-178 IH3 0-T+S	.000	.000	5.000	.900
(EE1008)	ARC 3.5-178 IH3 0-T+S (TRIPS)	.000	.000	1.500	.900
(EE1009)	ARC 3.5-178 IH3 0-T+S (TRIPS)	.000	.000	5.000	.900



INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .736



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING BOTTOM	ALPHA	BETA	RN/L	HAY/HT
(EE1G06)	ARC 3.5-178 H3 0-T+S	WING BOTTOM	.000	.000	1.500	.900
(EE1G07)	ARC 3.5-178 H3 0-T+S	WING BOTTOM	.000	.000	5.000	.900
(EE1G08)	ARC 3.5-178 H3 0-T+S (TRIPS)	WING BOTTOM	.000	.000	1.500	.900
(EE1G09)	ARC 3.5-178 H3 0-T+S (TRIPS)	WING BOTTOM	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

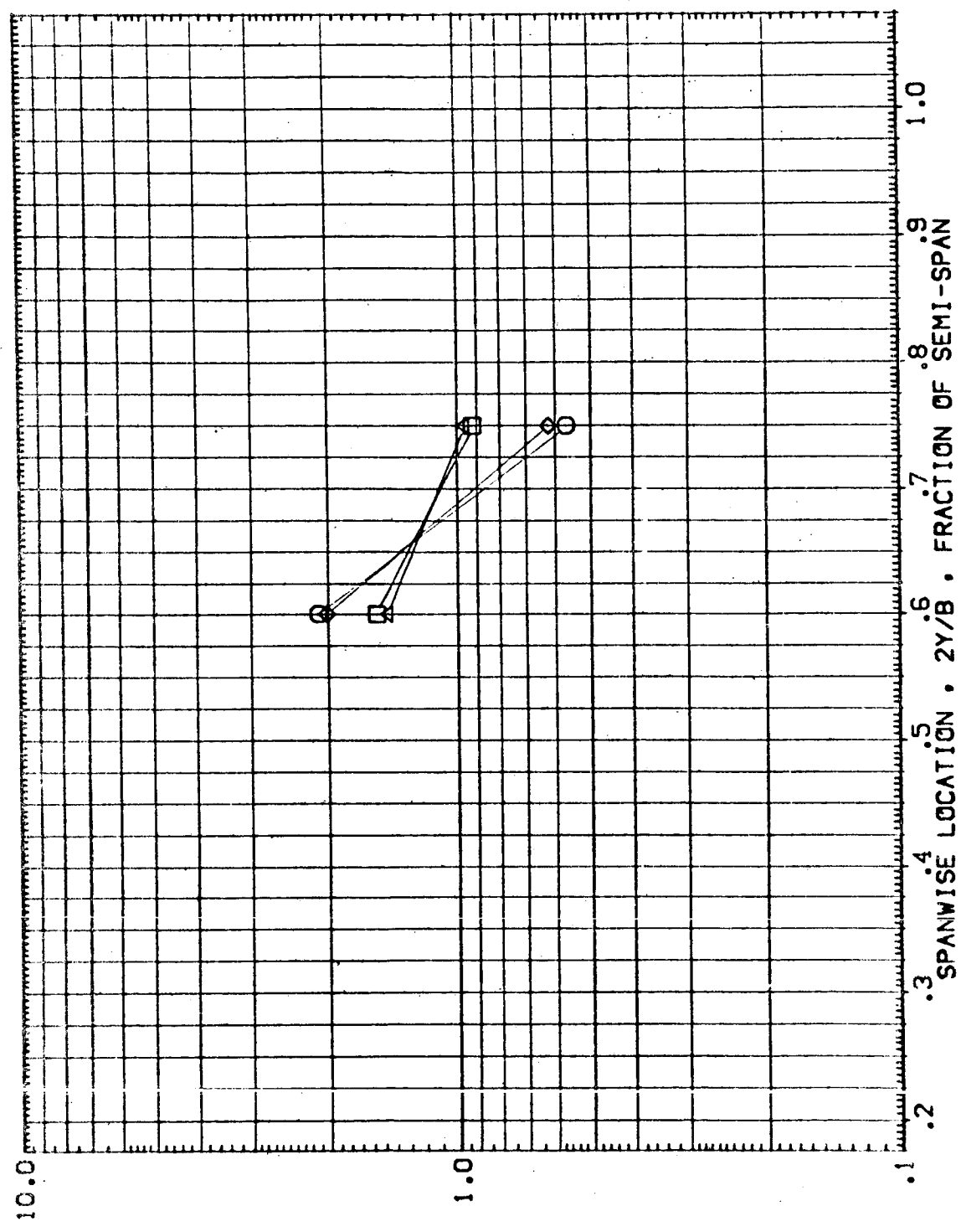


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.303 X/C = .800

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING BOTTOM	ALPHA	BETA	RV/L	HAW/HT
{EE1506}	ARC 3.5-178 I-H3 O-T+S	WING BOTTOM	.000	.000	1.500	.900
{EE1507}	ARC 3.5-178 I-H3 O-T+S	WING BOTTOM	.000	.000	5.000	.900
{EE1508}	ARC 3.5-178 I-H3 O-T+S (TRIPS)	WING BOTTOM	.000	.000	1.500	.900
{EE1509}	ARC 3.5-178 I-H3 O-T+S (TRIPS)	WING BOTTOM	.000	.000	5.000	.900

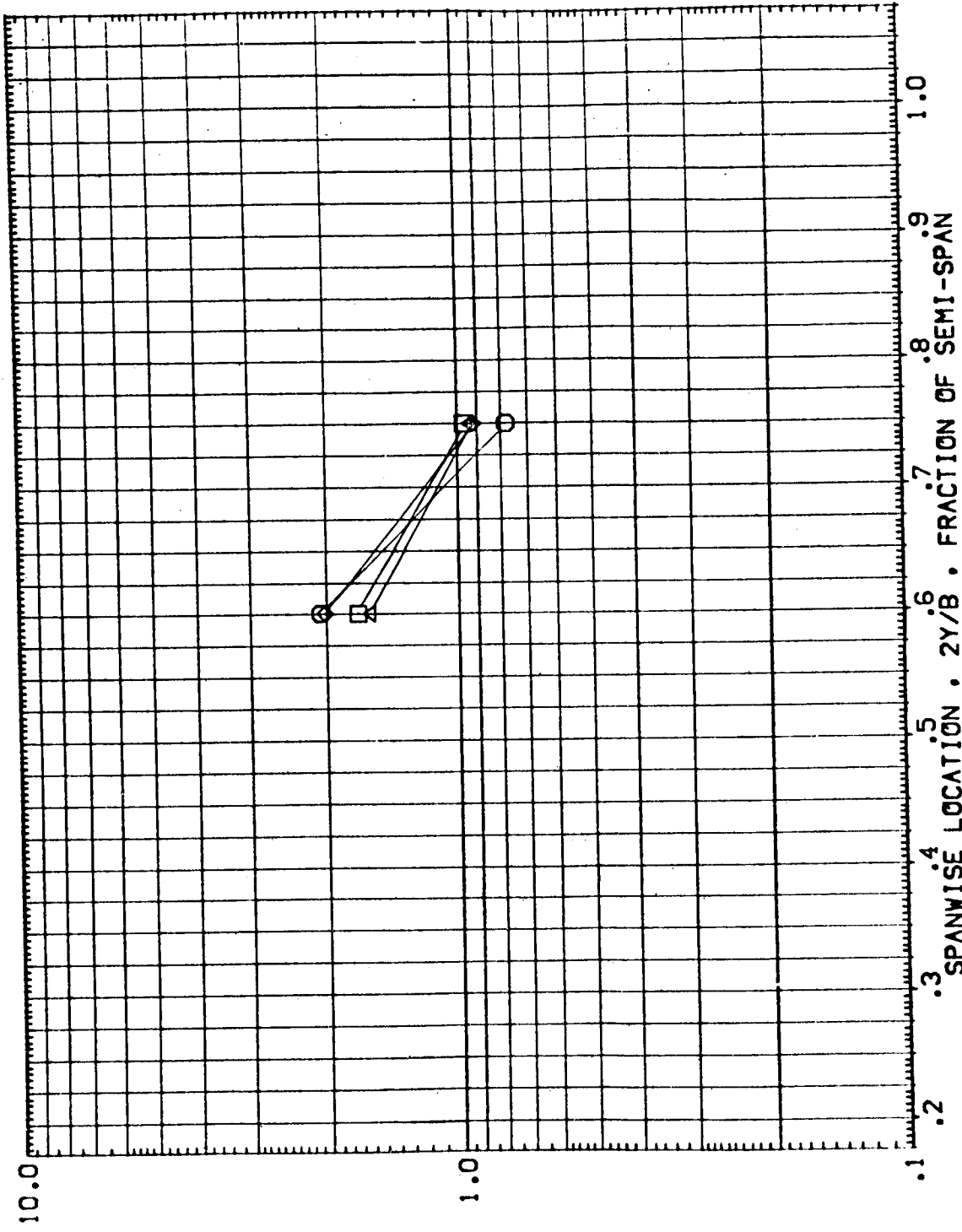


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .850

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(EE 006)	ARC 3.5-178 IH3 0-T+S	.000	.000	1.500	.900
(EE 007)	ARC 3.5-178 IH3 0-T+S	.000	.000	5.000	.900
(EE 008)	ARC 3.5-178 IH3 0-T+S (TRIPS)	.000	.000	1.500	.900
(EE 009)	ARC 3.5-178 IH3 0-T+S (TRIPS)	.000	.000	5.000	.900

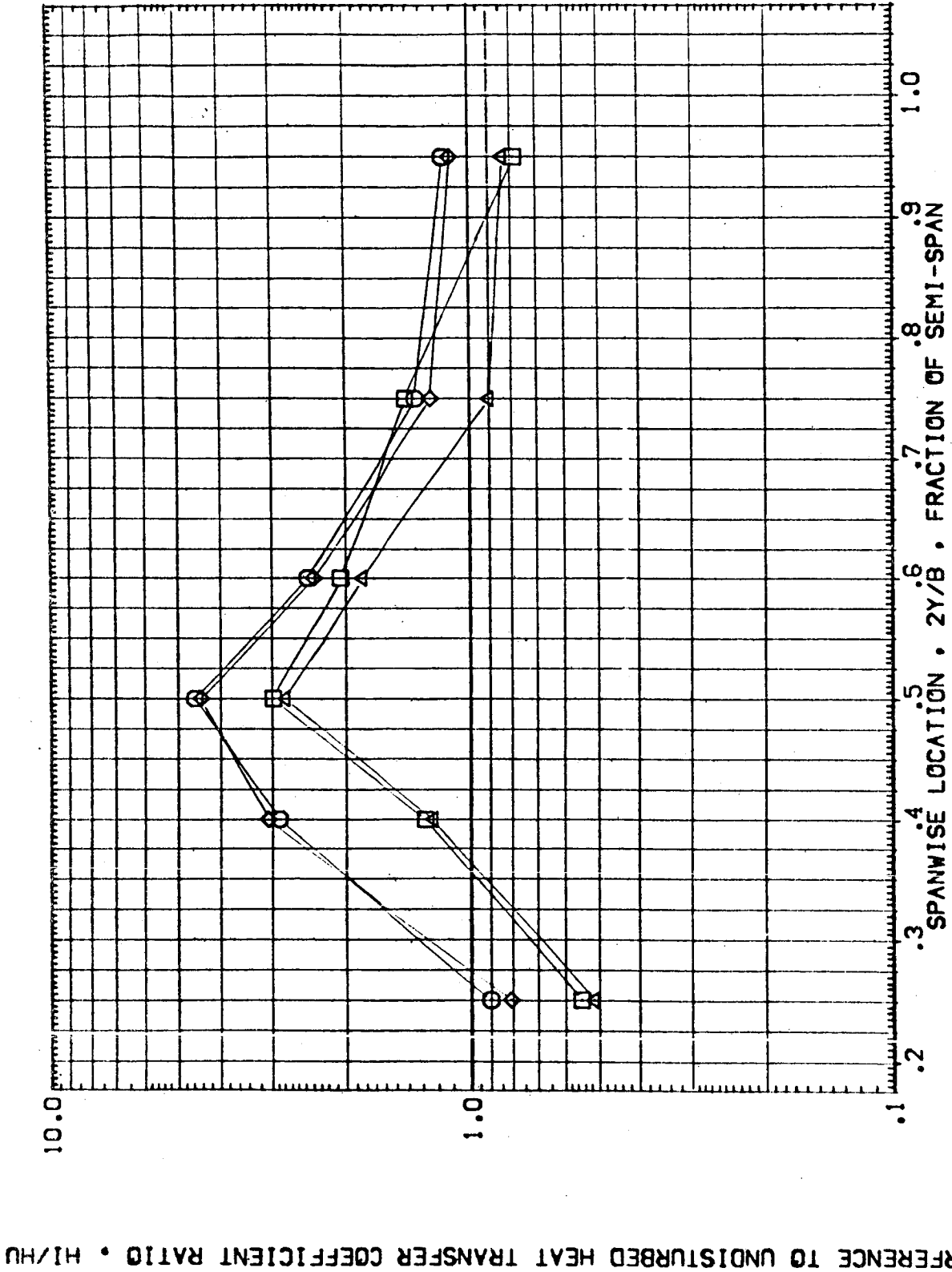


FIG. 27 WING BOTTOM - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE1406} ARC 3.5-178 I43 ORBITER .000 .000 1.500 1.000

{AE1406} ARC 3.5-178 I43 ORBITER .000 .000 1.500 .900

{BE1406} ARC 3.5-178 I43 ORBITER .000 .000 1.500 .850

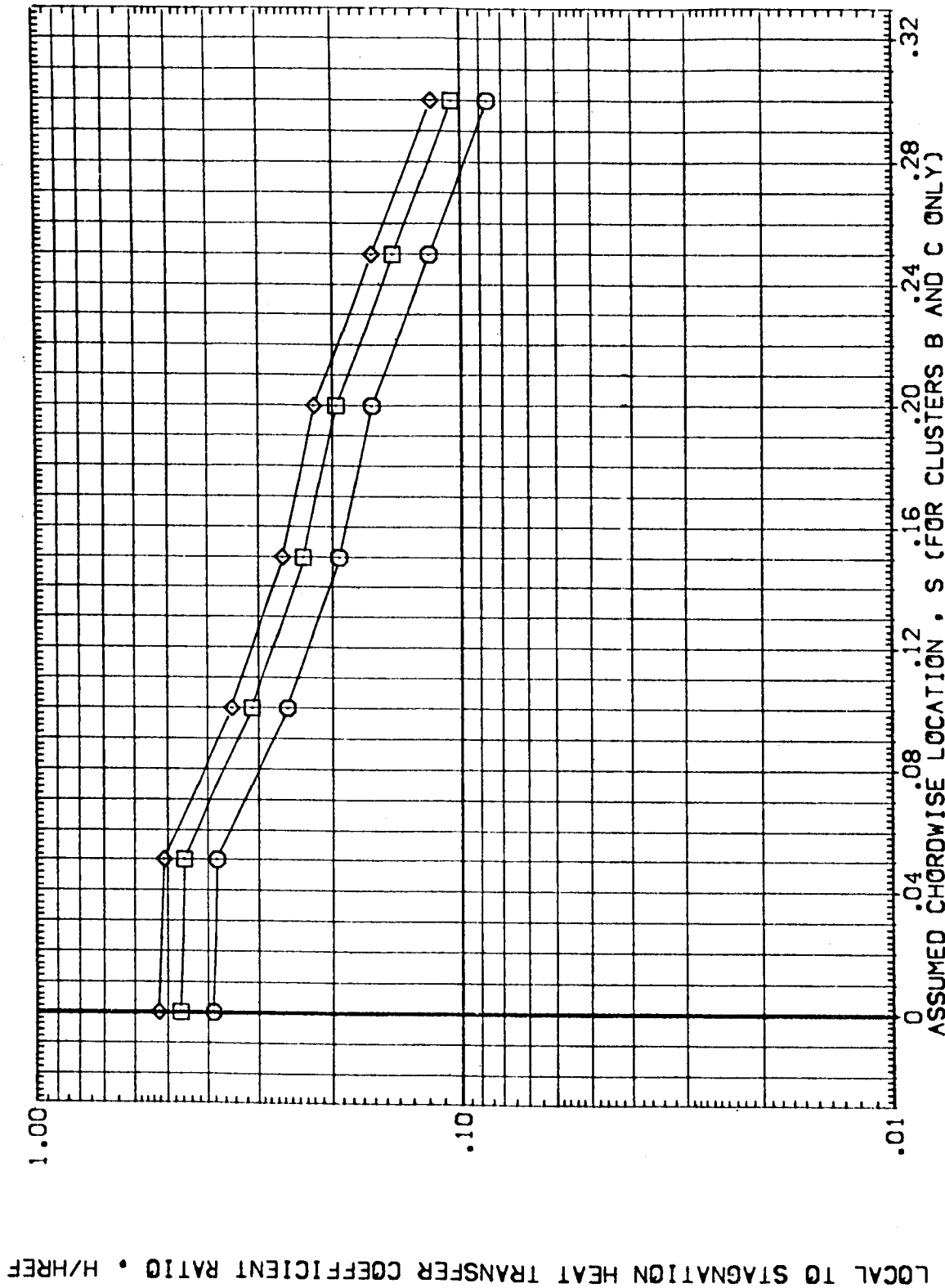


FIG. 28 CLUSTERS B AND C - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION CLUSTER B AND C ALPHA BETA RN/L HAV/HT

{RE1406} ARC 3.5-178 H3 ORBITTER CLUSTER B AND C .000 .000 1.500 1.000

{AE1406} ARC 3.5-178 H3 ORBITTER CLUSTER B AND C .000 .000 1.500 .900

{BE1406} ARC 3.5-178 H3 ORBITTER CLUSTER B AND C .000 .000 1.500 .850

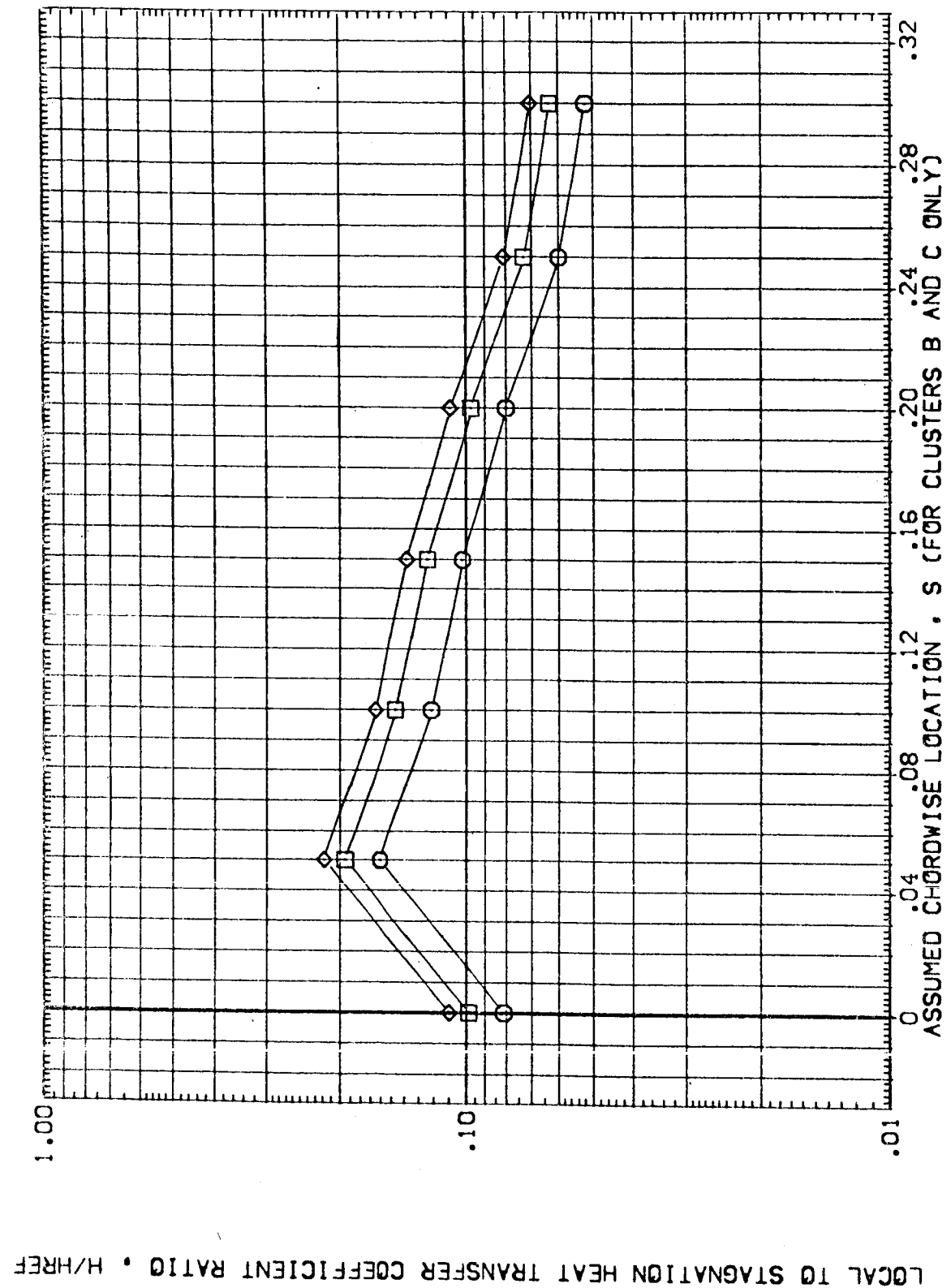


FIG. 28 CLUSTERS B AND C - ORBITTER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1407) ARC 3.5-178 I-H3 ORBITER
 (AE1407) ARC 3.5-178 I-H3 ORBITER
 (BE1407) ARC 3.5-178 I-H3 ORBITER

CLUSTER B AND C
 CLUSTER B AND C
 CLUSTER B AND C

ALPHA BETA RV/L HAW/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

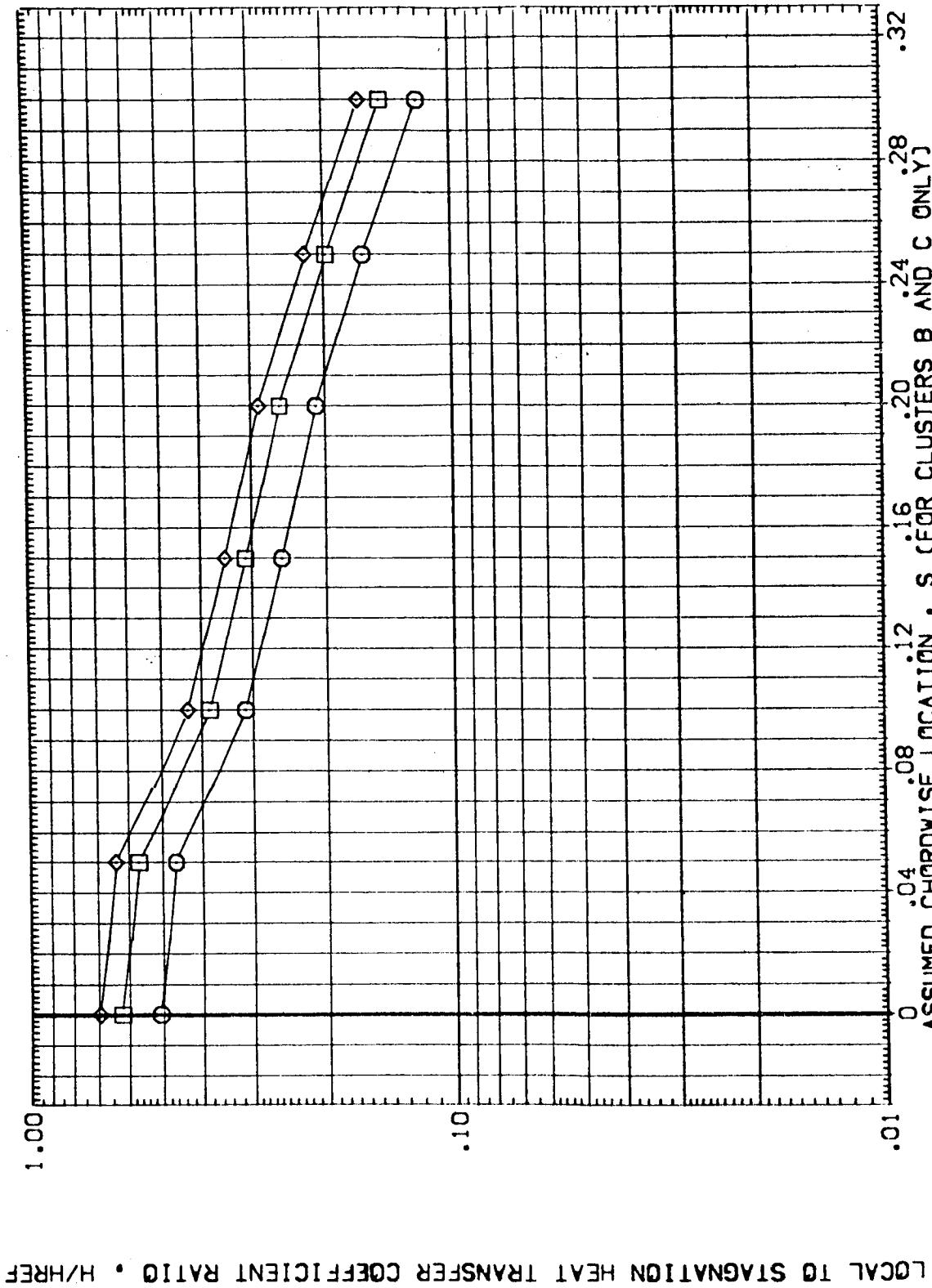


FIG. 28 CLUSTERS B AND C - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE|H07] [O] ARC 3.5-178 [H3 ORBITTER
 [AE|H07] [◇] ARC 3.5-178 [H3 ORBITTER
 [BE|H07] [○] ARC 3.5-178 [H3 ORBITTER

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

CLUSTER B AND C
 CLUSTER B AND C
 CLUSTER B AND C

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

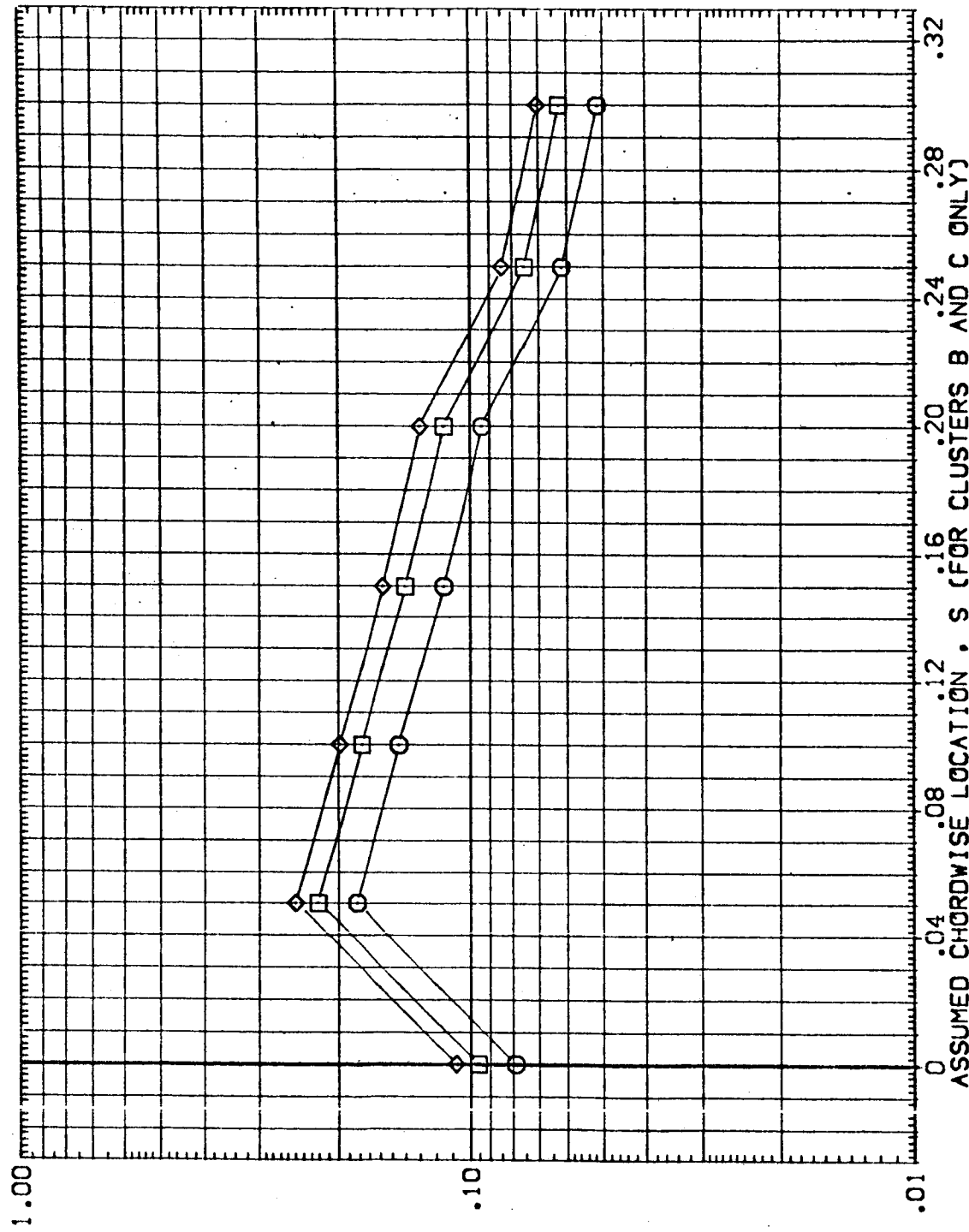


FIG. 28 CLUSTERS B AND C - ORBITTER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE1-H08) ARC 3.5-178 IH3 ORBITER (TRIPS) CLUSTER B AND C .000 .000 1.500 1.000

(AE1-H08) ARC 3.5-178 IH3 ORBITER (TRIPS) CLUSTER B AND C .000 .000 1.500 .900

(BE1-H08) ARC 3.5-178 IH3 ORBITER (TRIPS) CLUSTER B AND C .000 .000 1.500 .850

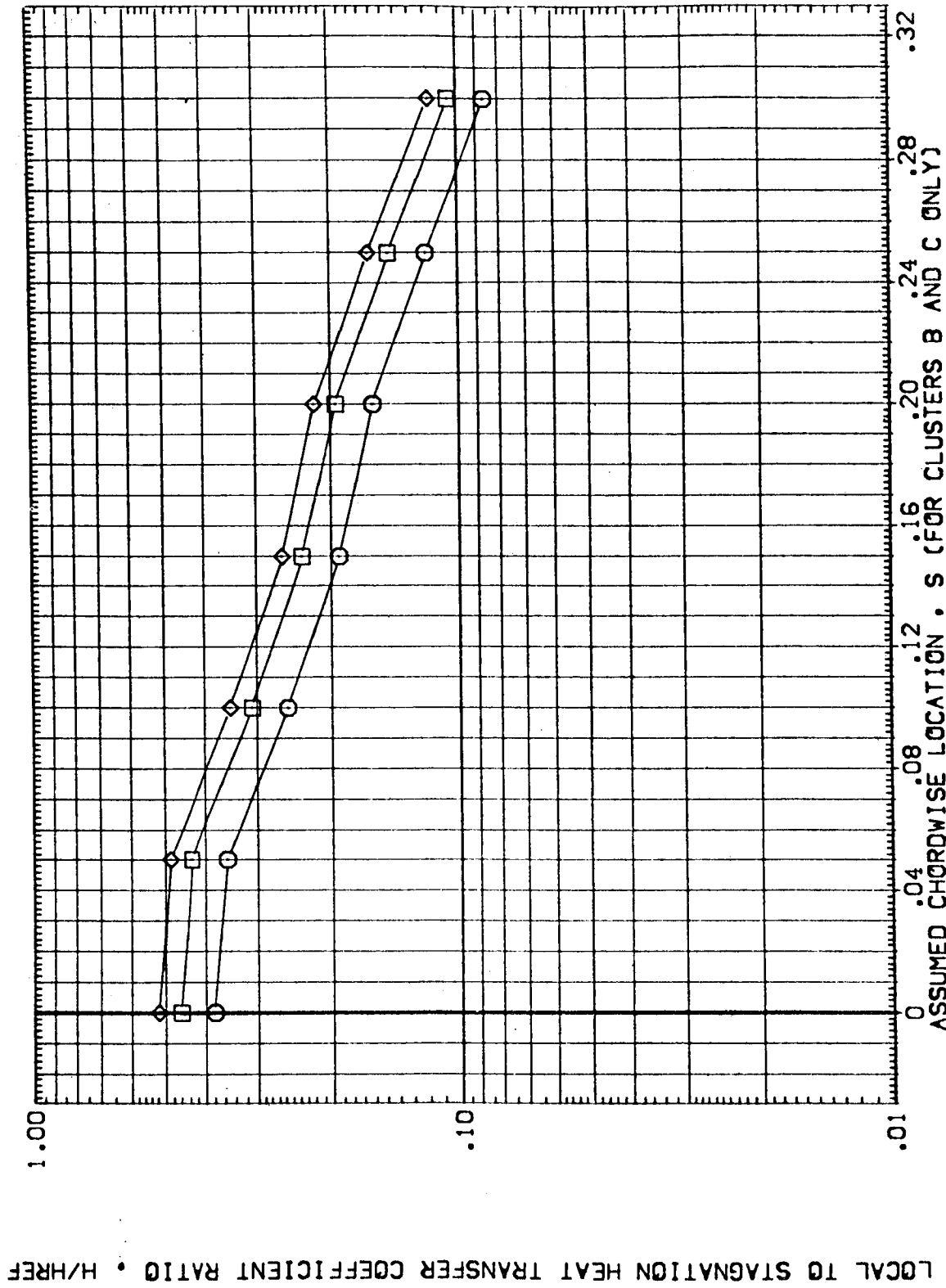


FIG. 28 CLUSTERS B AND C - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RNL HAV/HT

(RE)H08	ARC 3.5-178	H3 ORBITER (TRIP)CLUSTER B AND C	.000	.000	1.500	1.000
(AE)H06	ARC 3.5-178	H3 ORBITER (TRIP)CLUSTER B AND C	.000	.000	1.500	.900
(BE)H08	ARC 3.5-178	H3 ORBITER (TRIP)CLUSTER B AND C	.000	.000	1.500	.850

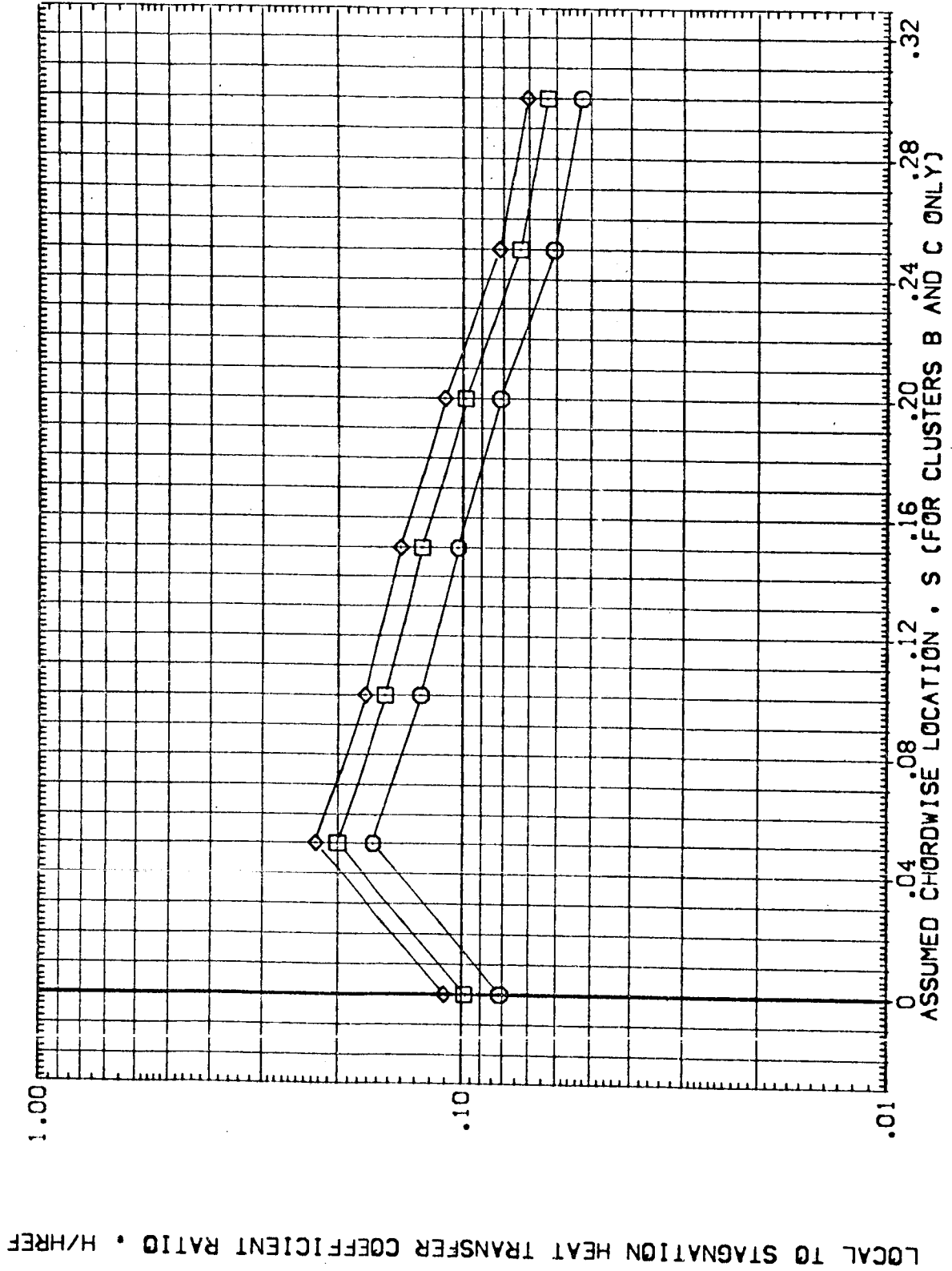


FIG. 28 CLUSTERS B AND C - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(RE1-09) ARC 3.5-178 I-H3 ORBITER (TRIP) CLUSTER B AND C .000 .000 5.000 1.000

(AE1-08) ARC 3.5-178 I-H3 ORBITER (TRIP) CLUSTER B AND C .000 .000 5.000 .500

(BE1-09) ARC 3.5-178 I-H3 ORBITER (TRIP) CLUSTER B AND C .000 .000 5.000 .850

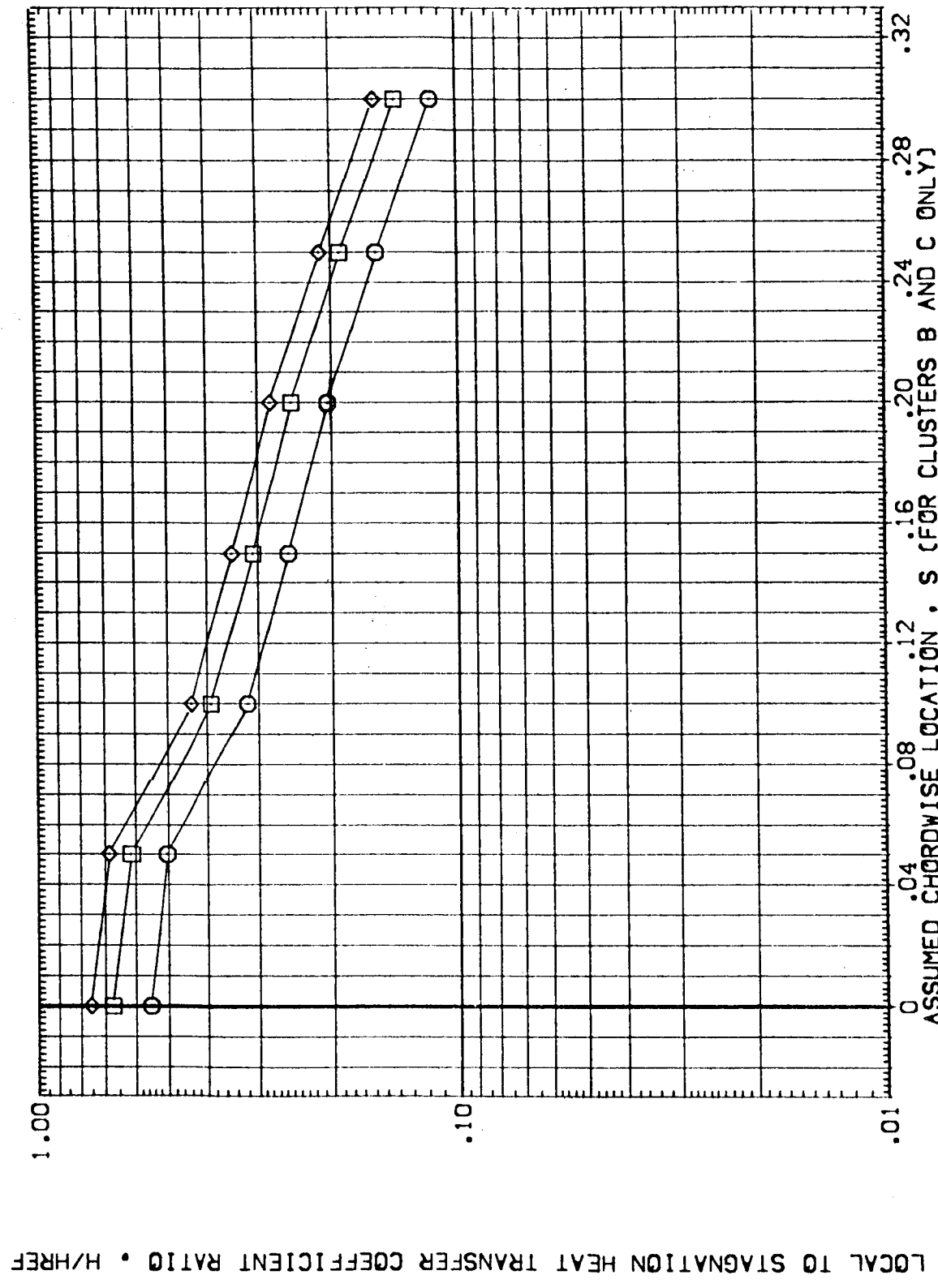


FIG. 28 CLUSTERS B AND C - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAW/HT

(RE|HOS) ARC 3.5-178 IH3 ORBITER (TRIPS) CLUSTER B AND C .000 .000 5.000 1.000

(AE|HOS) ARC 3.5-178 IH3 ORBITER (TRIPS) CLUSTER B AND C .000 .000 5.000 .900

(BE|HOS) ARC 3.5-178 IH3 ORBITER (TRIPS) CLUSTER B AND C .000 .000 5.000 .850

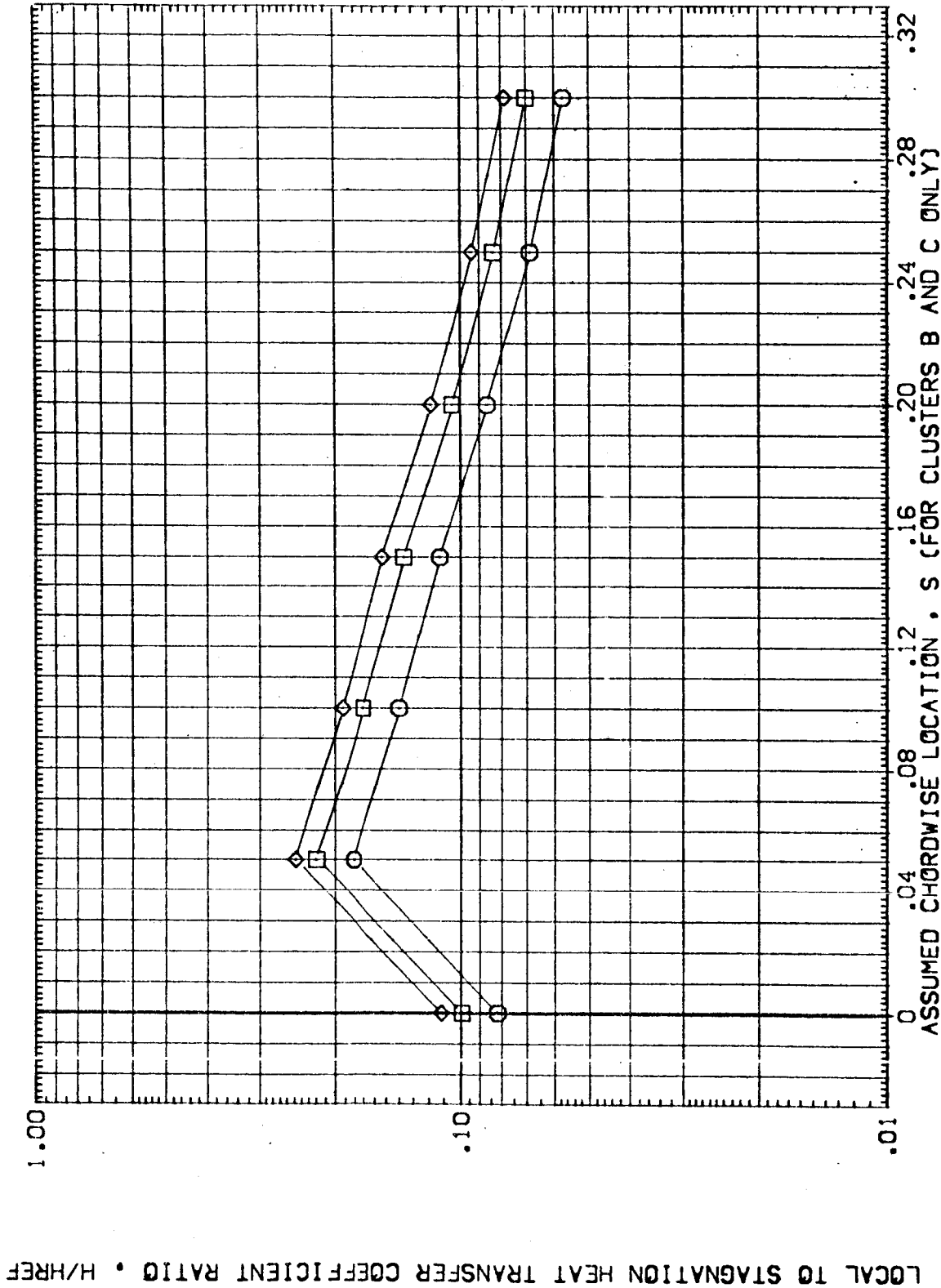


FIG. 28 CLUSTERS B AND C - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [REIHOI] ARC 3.5-178 I43 O-T+S
 [AEIHOI] ARC 3.5-178 I43 O-T+S
 [BEIHOI] ARC 3.5-178 I43 O-T+S

CLUSTER B AND C
 CLUSTER B AND C
 CLUSTER B AND C

ALPHA BETA RNV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .650

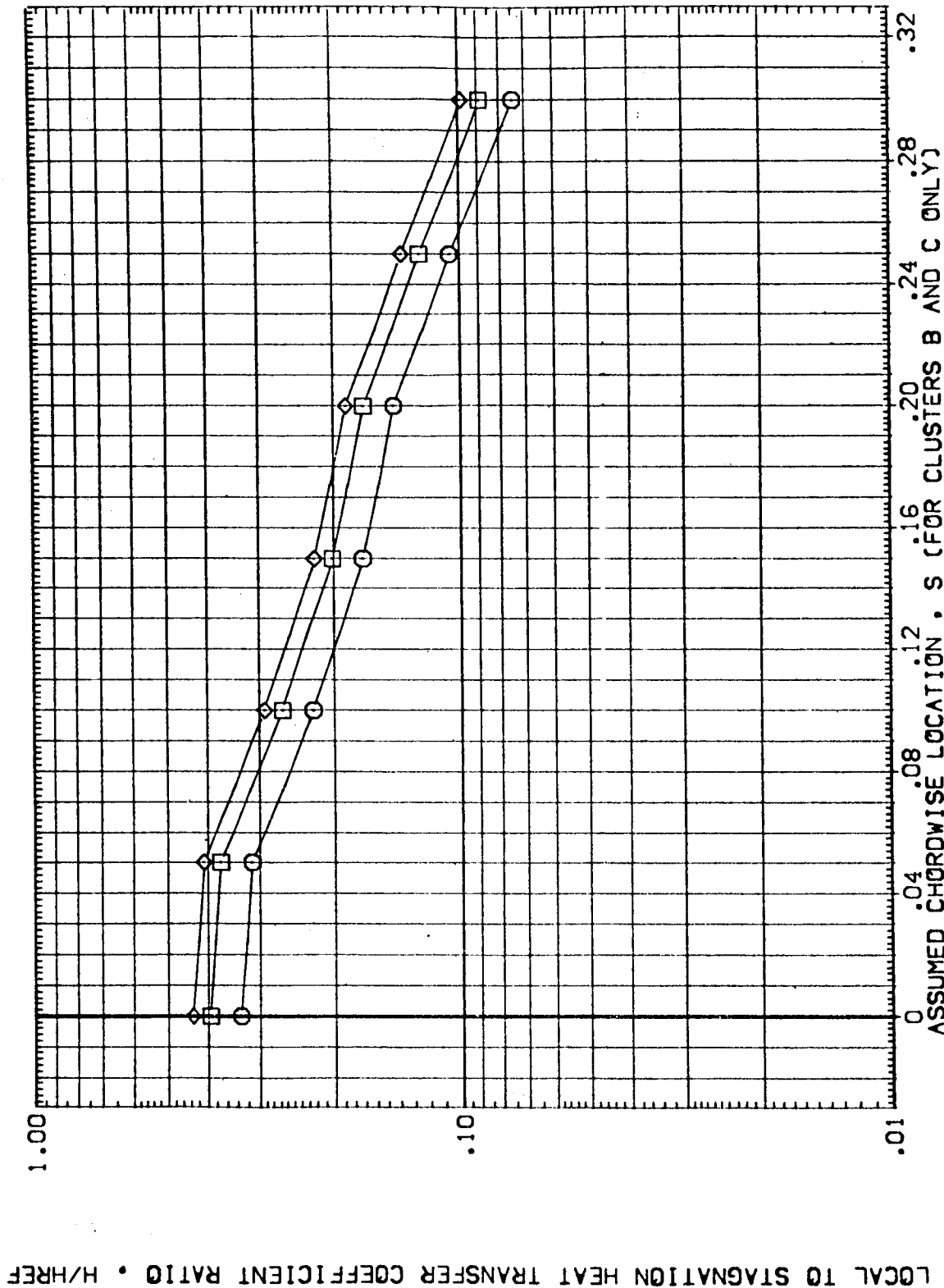


FIG. 29 CLUSTERS B AND C - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI)H01) ARC 3.5-178 IH3 O+T+S
 (AEI)H01) ARC 3.5-178 IH3 O+T+S
 (BEI)H01) ARC 3.5-178 IH3 O+T+S

ALPHA BETA RN/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

CLUSTER B AND C
 CLUSTER B AND C
 CLUSTER B AND C

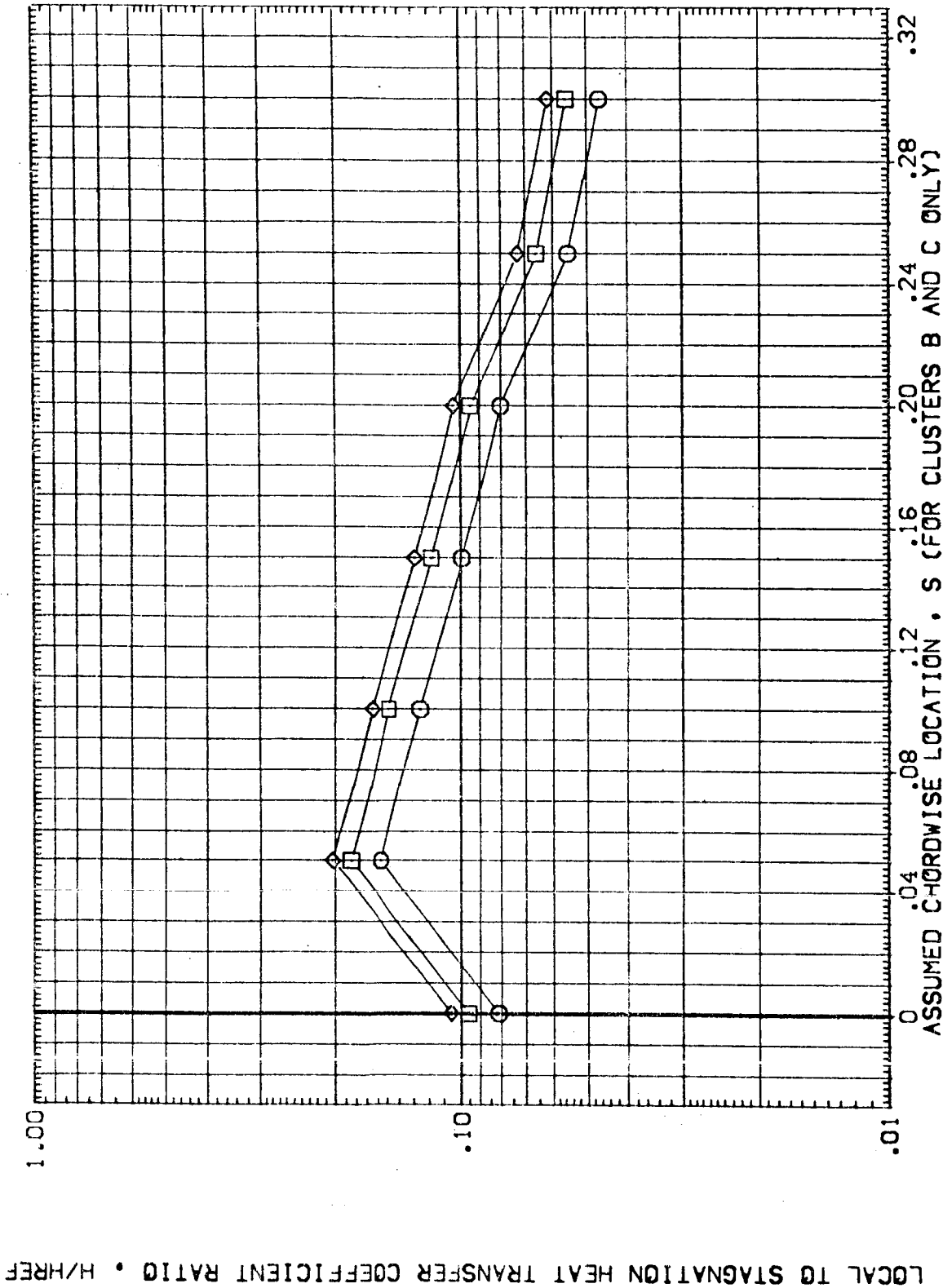


FIG. 29 CLUSTERS B AND C - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE]H02} O ARC 3.5-178 IH3 O+T+S
 [AE]H02} □ ARC 3.5-178 IH3 O+T+S
 [BE]H02} ◇ ARC 3.5-178 IH3 O+T+S

CLUSTER B AND C
 CLUSTER B AND C
 CLUSTER B AND C

ALPHA BETA R/V/L HAW/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

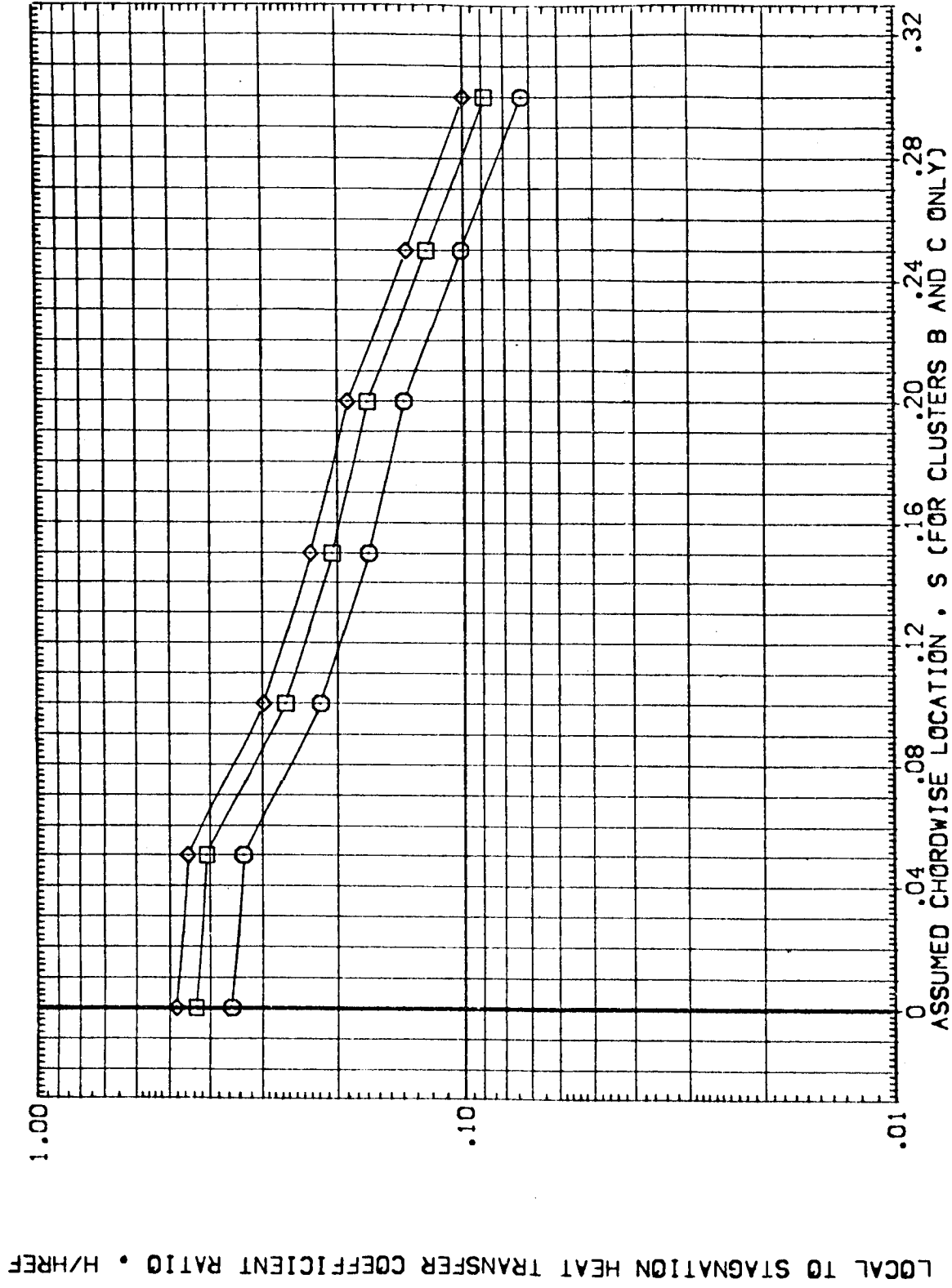


FIG. 29 CLUSTERS B AND C - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION CLUSTER B AND C ALPHA BETA RN/L HAW/HT

(RE11-02) ARC 3.5-178 IH3 0-T+S .000 .000 5.000 1.000

(AE11-02) ARC 3.5-178 IH3 0-T+S .000 .000 5.000 .900

(BE11-02) ARC 3.5-178 IH3 0-T+S .000 .000 5.000 .850

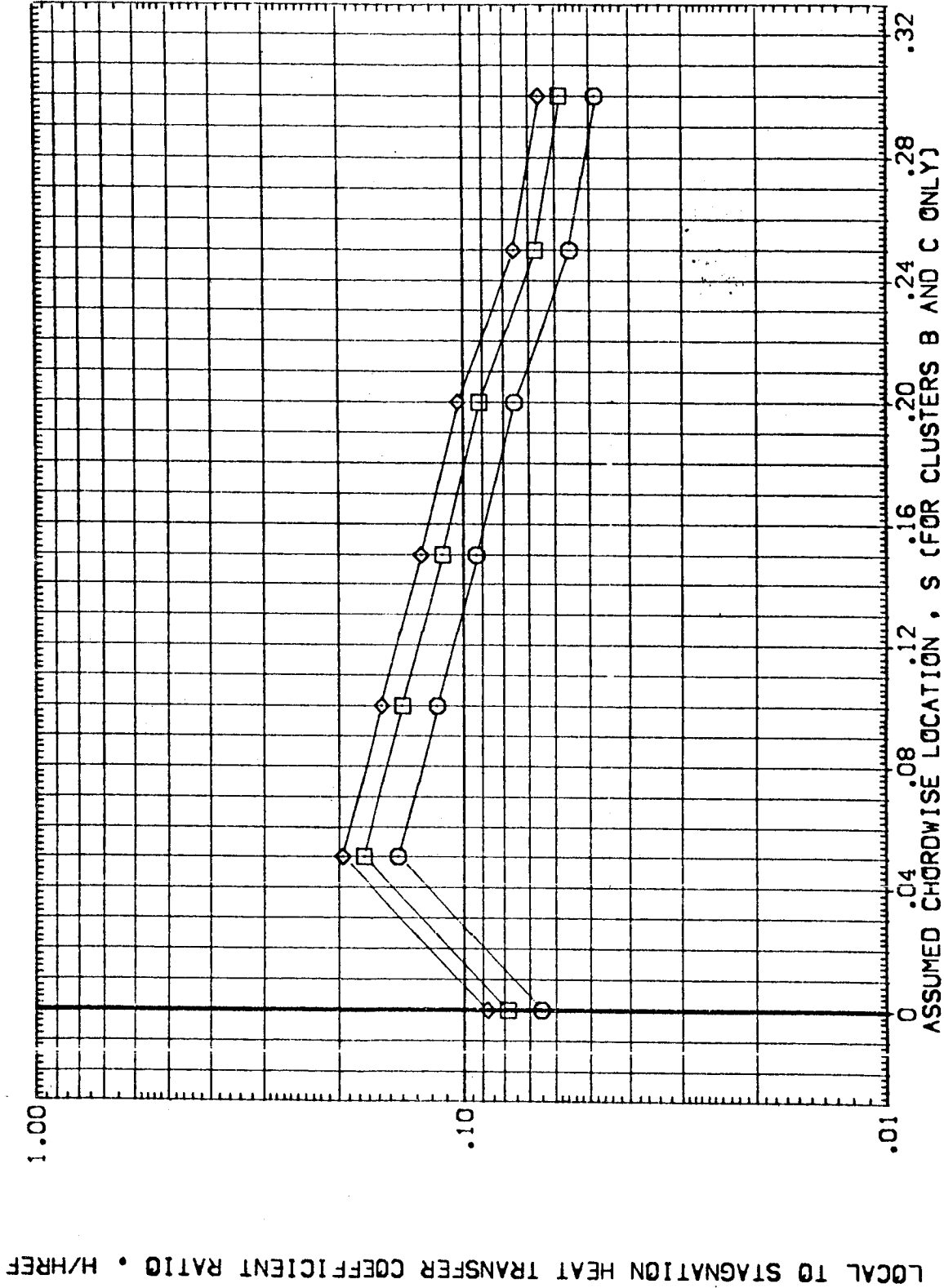


FIG. 29 CLUSTERS B AND C - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION CLUSTER B AND C ALPHA BETA RNV/L HAV/HT
 (RE1-03) O ARC 3.5-178 I-H3 O-T+S (TRIPS) CLUSTER B AND C .000 .000 1.500 1.000
 (AE1-03) O ARC 3.5-178 I-H3 O-T+S (TRIPS) CLUSTER B AND C .000 .000 1.500 .900
 (BE1-03) O ARC 3.5-178 I-H3 O-T+S (TRIPS) CLUSTER B AND C .000 .000 1.500 .850

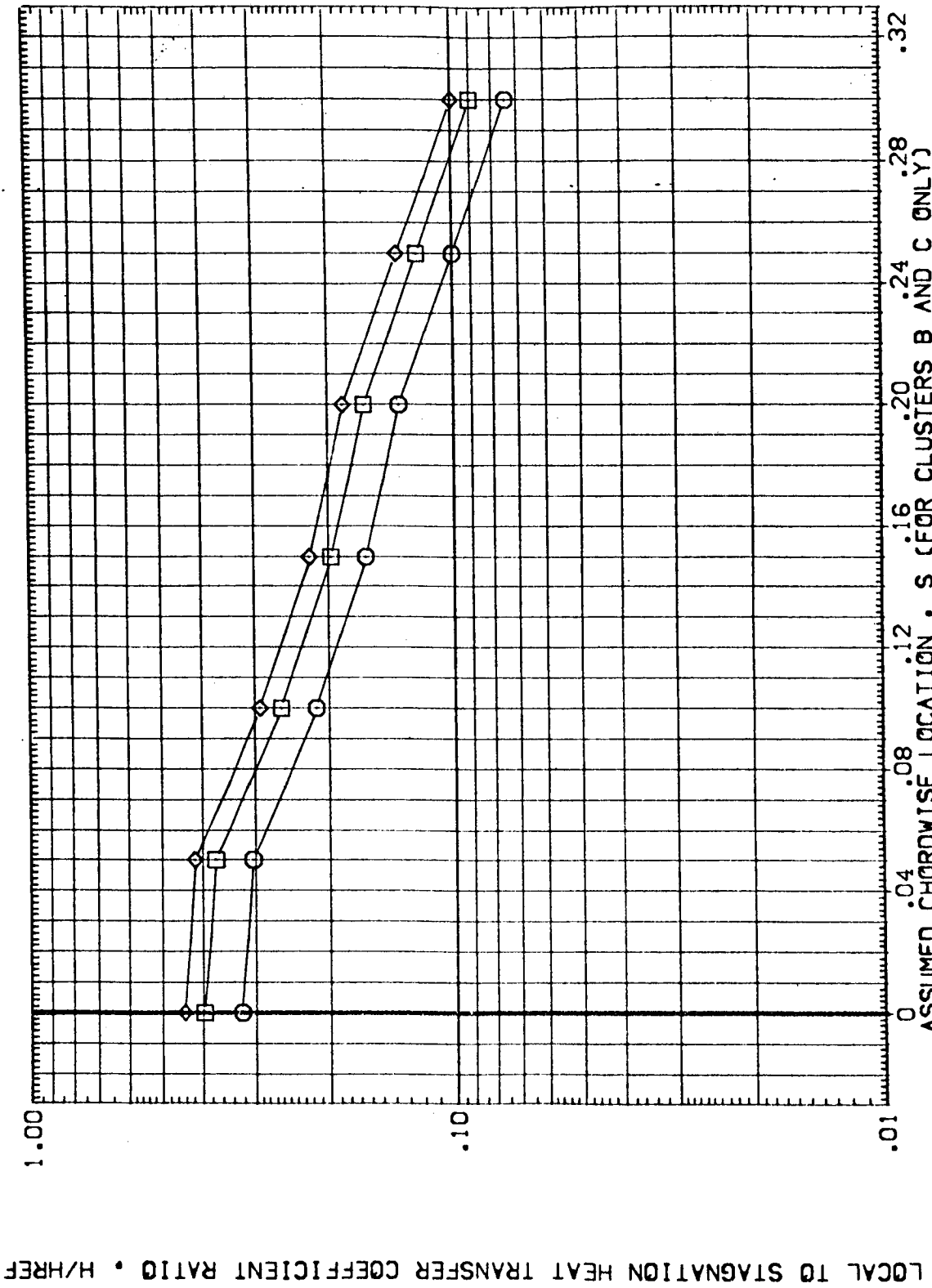


FIG. 29 CLUSTERS B AND C - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REIH03) ARC 1.5-176 IH3 Q+T+S (TRIPS) .000 .000 1.500 1.000

(AEIH03) ARC 1.5-176 IH3 Q+T+S (TRIPS) .000 .000 1.500 .900

(BEIH03) ARC 1.5-176 IH3 Q+T+S (TRIPS) .000 .000 1.500 .850

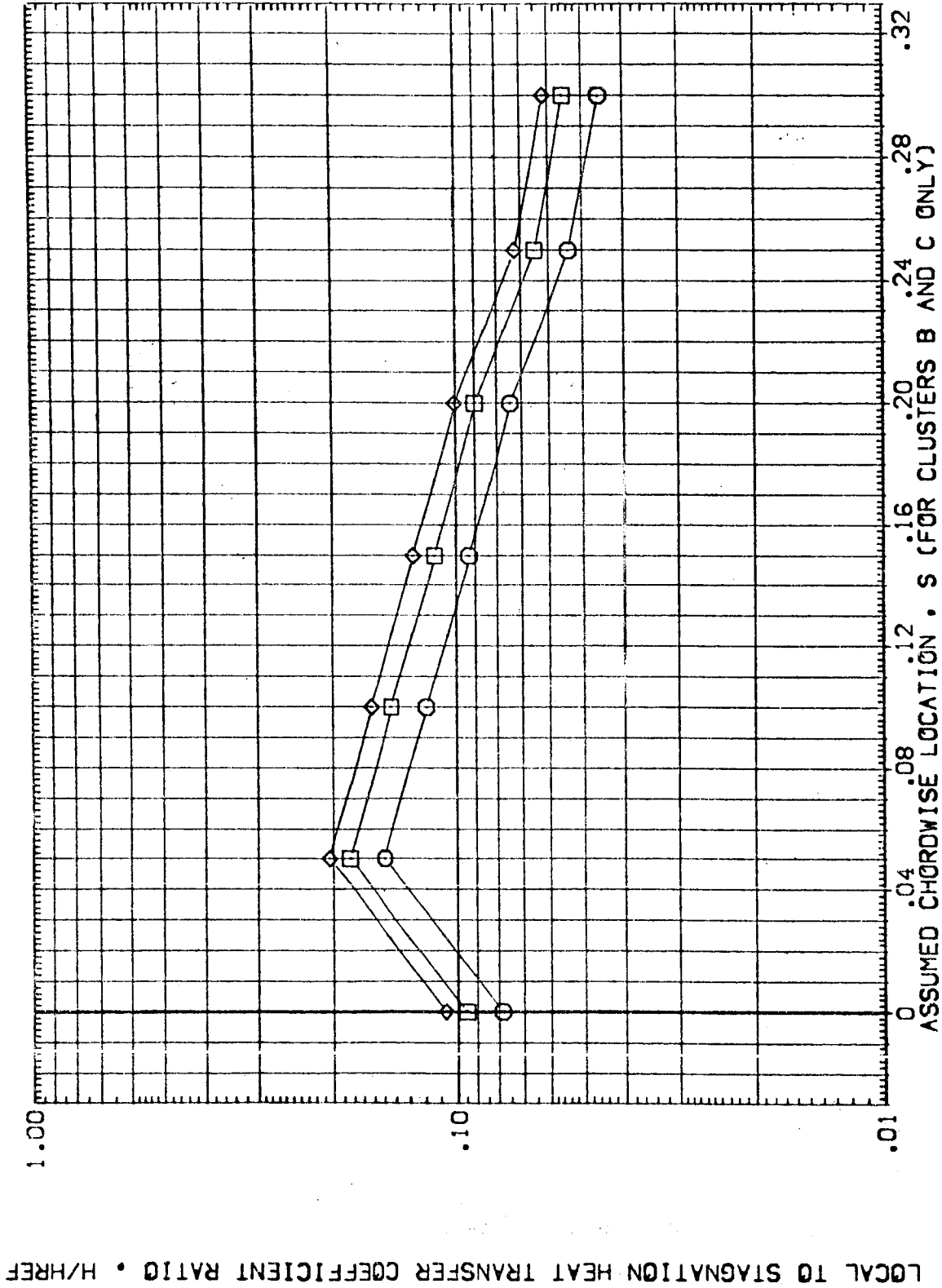


FIG. 29 CLUSTERS B AND C - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAW/HT

{REIHO4} ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 1.000

{AETHO4} ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 .900

{BEIHO4} ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 .850

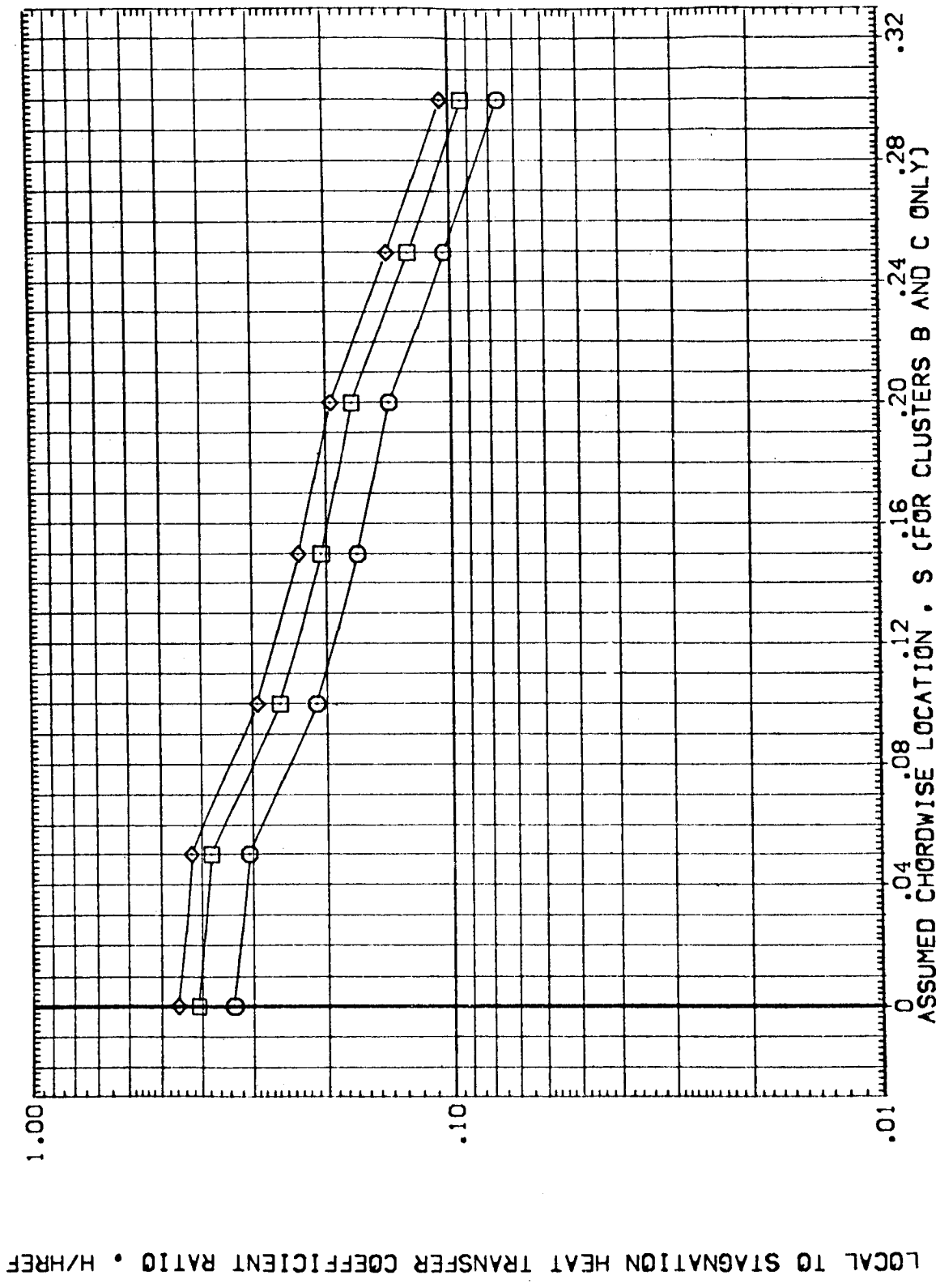


FIG. 29 CLUSTERS B AND C - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(BE|HO4) ARC 3.5-178 1H3 O-T+S (TRIPS) .000 .000 5.000 1.000

(AE|HO4) ARC 3.5-178 1H3 O-T+S (TRIPS) .000 .000 5.000 .900

(BE|HO4) ARC 3.5-178 1H3 O-T+S (TRIPS) .000 .000 5.000 .850

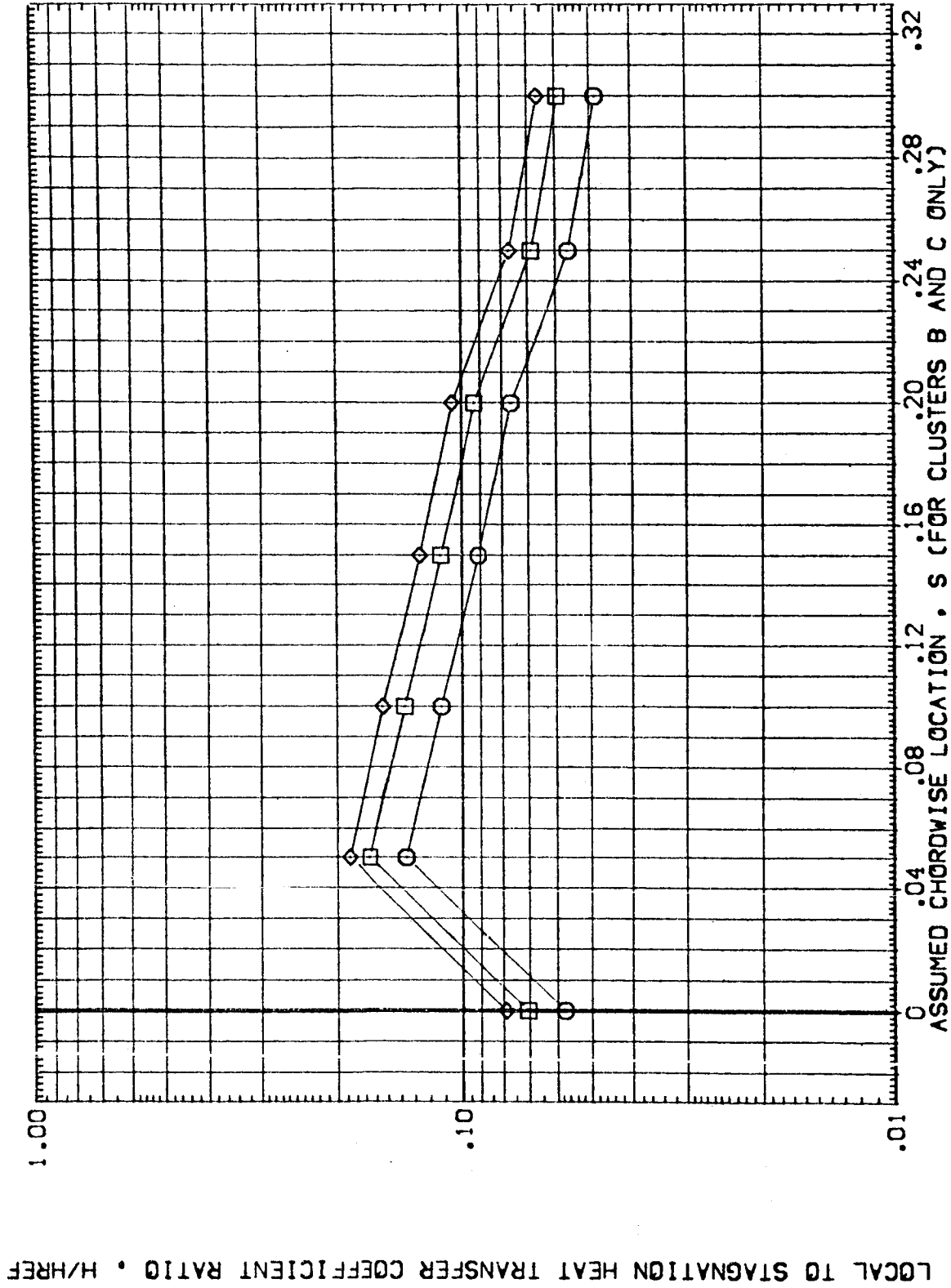


FIG. 29 CLUSTERS B AND C - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 ZY/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE)HOS } \square ARC 3.5-178 IH3 O+T+S
 (AE)HOS } \diamond ARC 3.5-178 IH3 O+T+S
 (BE)HOS } \circ ARC 3.5-178 IH3 O+T+S

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

CLUSTER B AND C
 CLUSTER B AND C
 CLUSTER B AND C

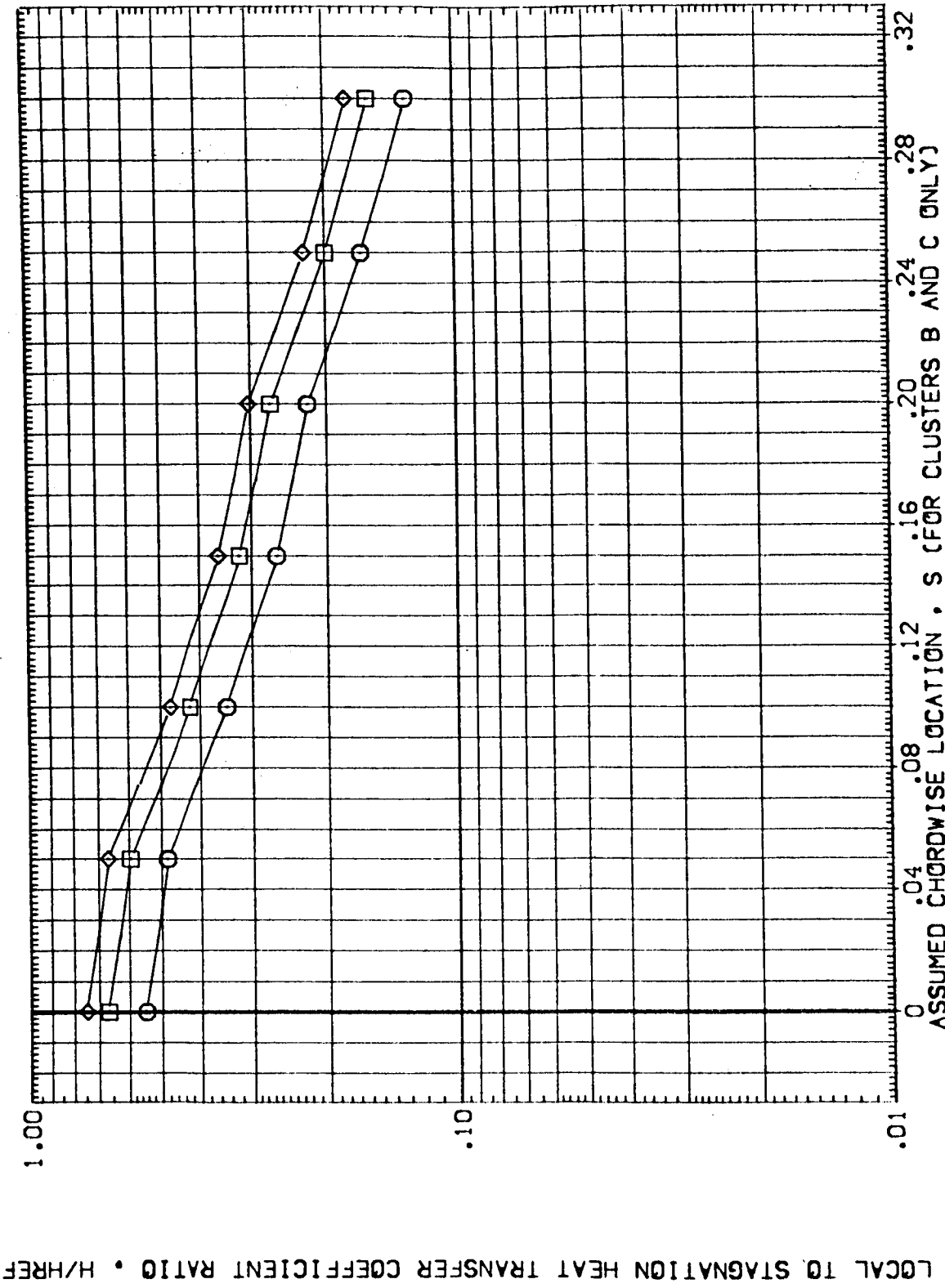


FIG. 29 CLUSTERS B AND C - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAW/HT

(REI-05) ARC 3.5-178 IH3 0+T+S .000 -5.000 5.000 1.000

(AEI-05) ARC 3.5-178 IH3 0+T+S .000 -5.000 5.000 .900

(BEI-05) ARC 3.5-178 IH3 0+T+S .000 -5.000 5.000 .850

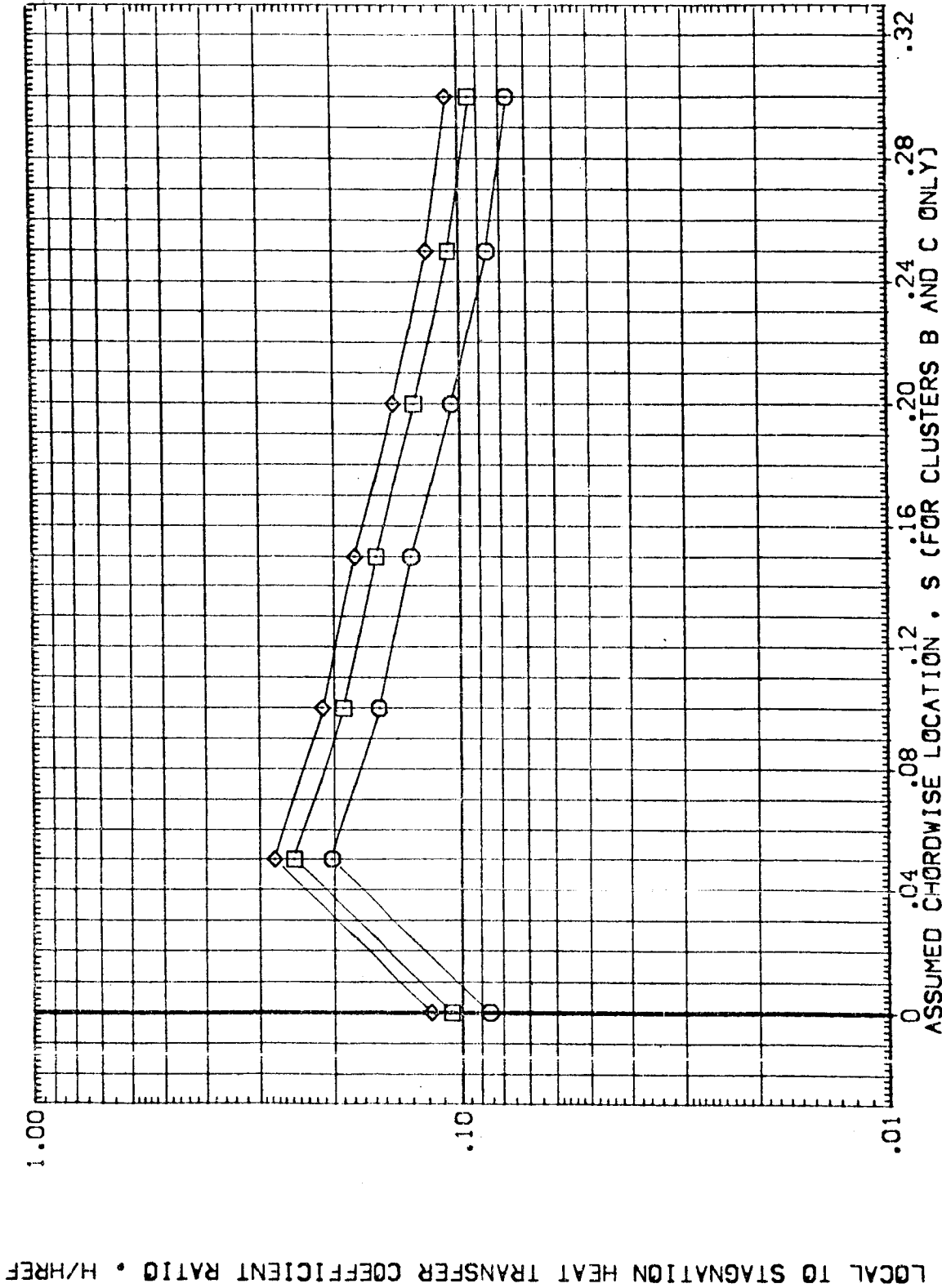


FIG. 29 CLUSTERS B AND C - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 ZY/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

{RE|H|S} ARC 3.5-178 IH3 C+T+S -5.000 .000 5.000 1.000

{AE|H|S} ARC 3.5-178 IH3 C+T+S -5.000 .000 5.000 .900

{BE|H|S} ARC 3.5-178 IH3 C+T+S -5.000 .000 5.000 .850

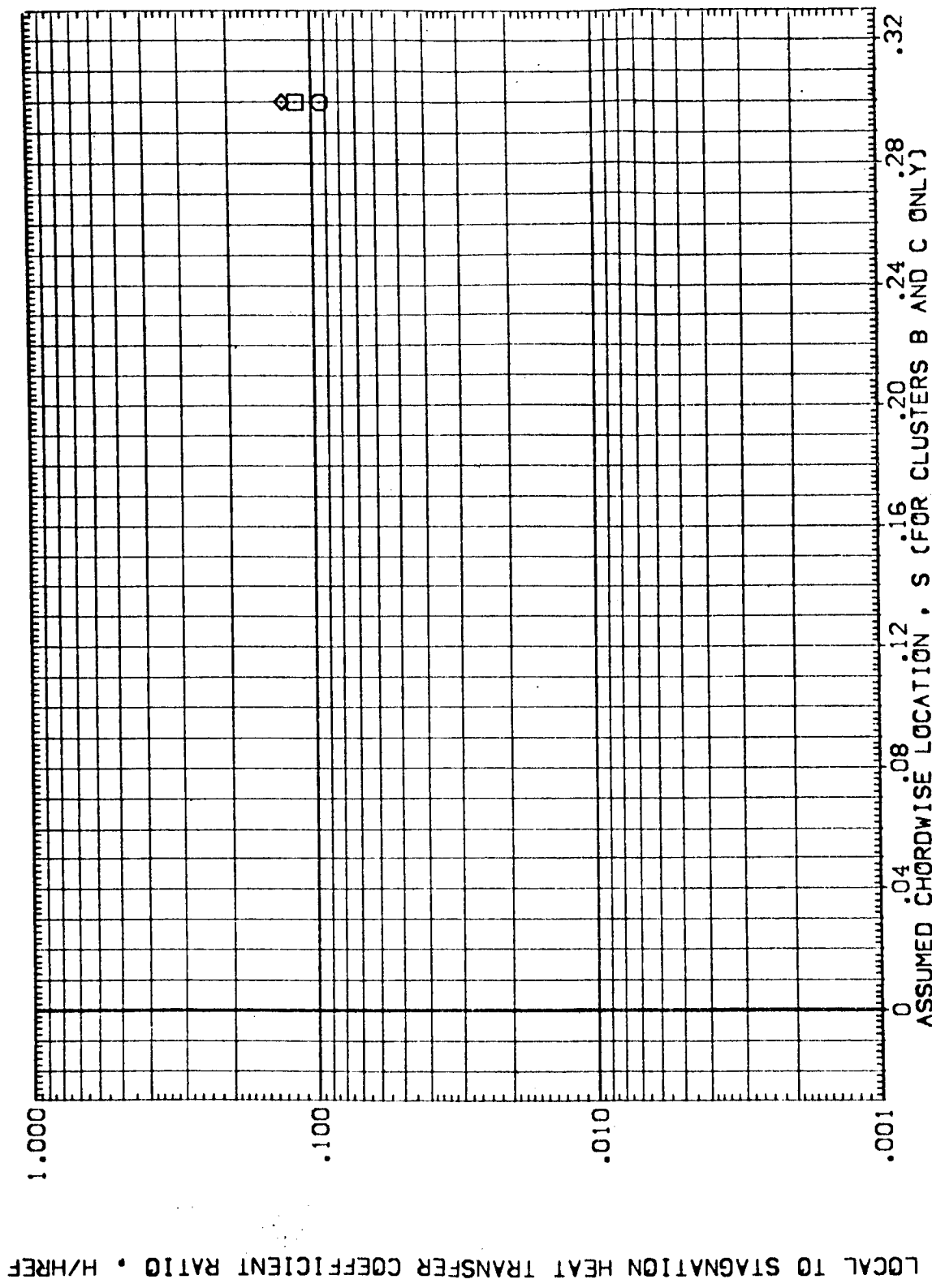


FIG. 29 CLUSTERS B AND C - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 ZY/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION CLUSTER B AND C ALPHA BETA RNVL HAV/HT

(RE|HIS) ARC 3.5-178 IH3 0+T+S CLUSTER B AND C -5.000 .000 5.000 1.000

(AE|HIS) ARC 3.5-178 IH3 0+T+S CLUSTER B -5.000 .000 5.000 .900

(BE|HIS) ARC 3.5-178 IH3 0+T+S CLUSTER B AND C -5.000 .000 5.000 .850

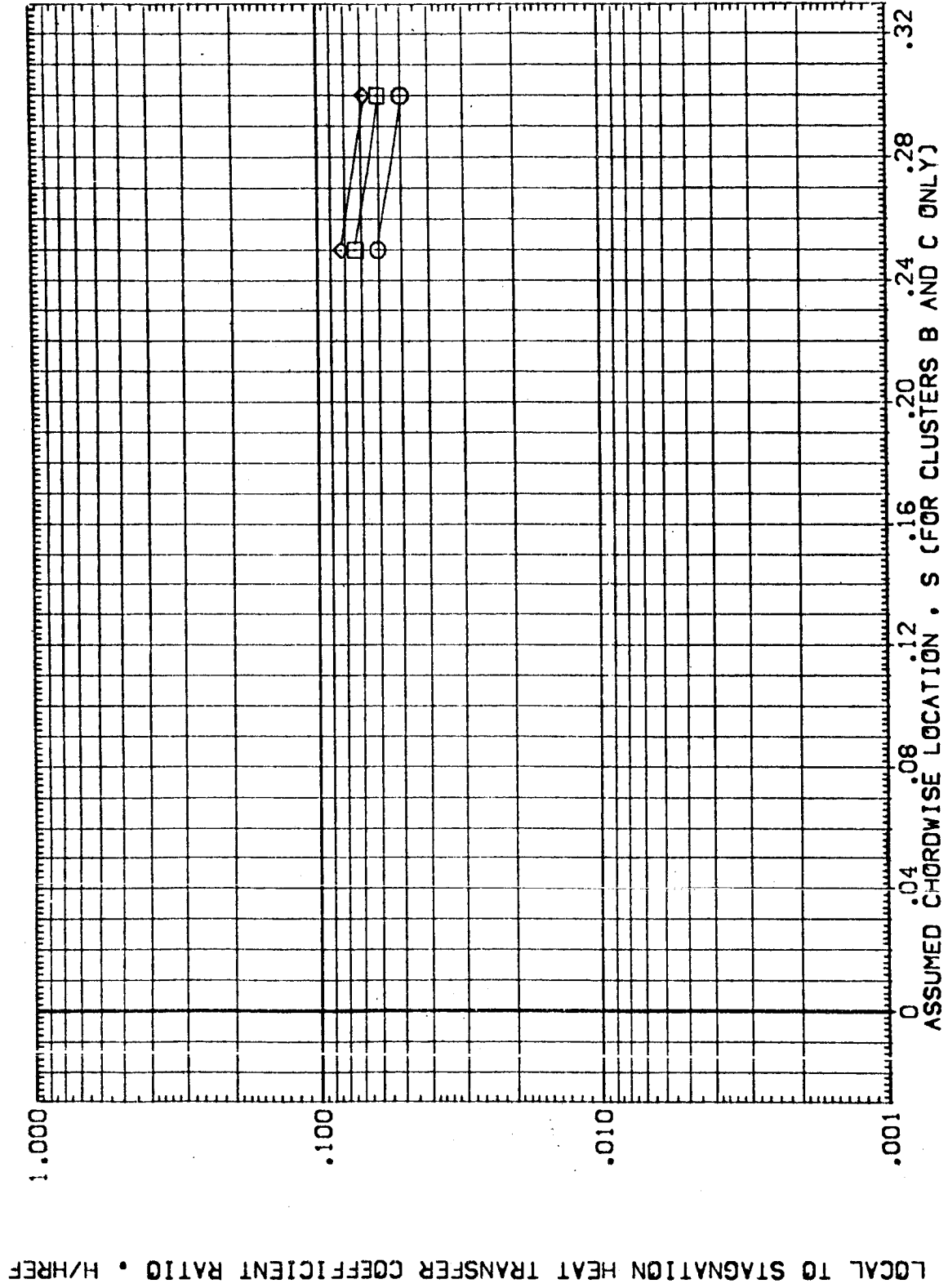


FIG. 29 CLUSTERS B AND C - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (EE1406) ARC 3.5-178 I43 O+T+S .000 .000 1.500 .900
 (EE1407) ARC 3.5-178 I43 O+T+S .000 .000 5.000 .900
 (EE1408) ARC 3.5-178 I43 O+T+S (TRIPS) .000 .000 1.500 .900
 (EE1409) ARC 3.5-178 I43 O+T+S (TRIPS) .000 .000 5.000 .900

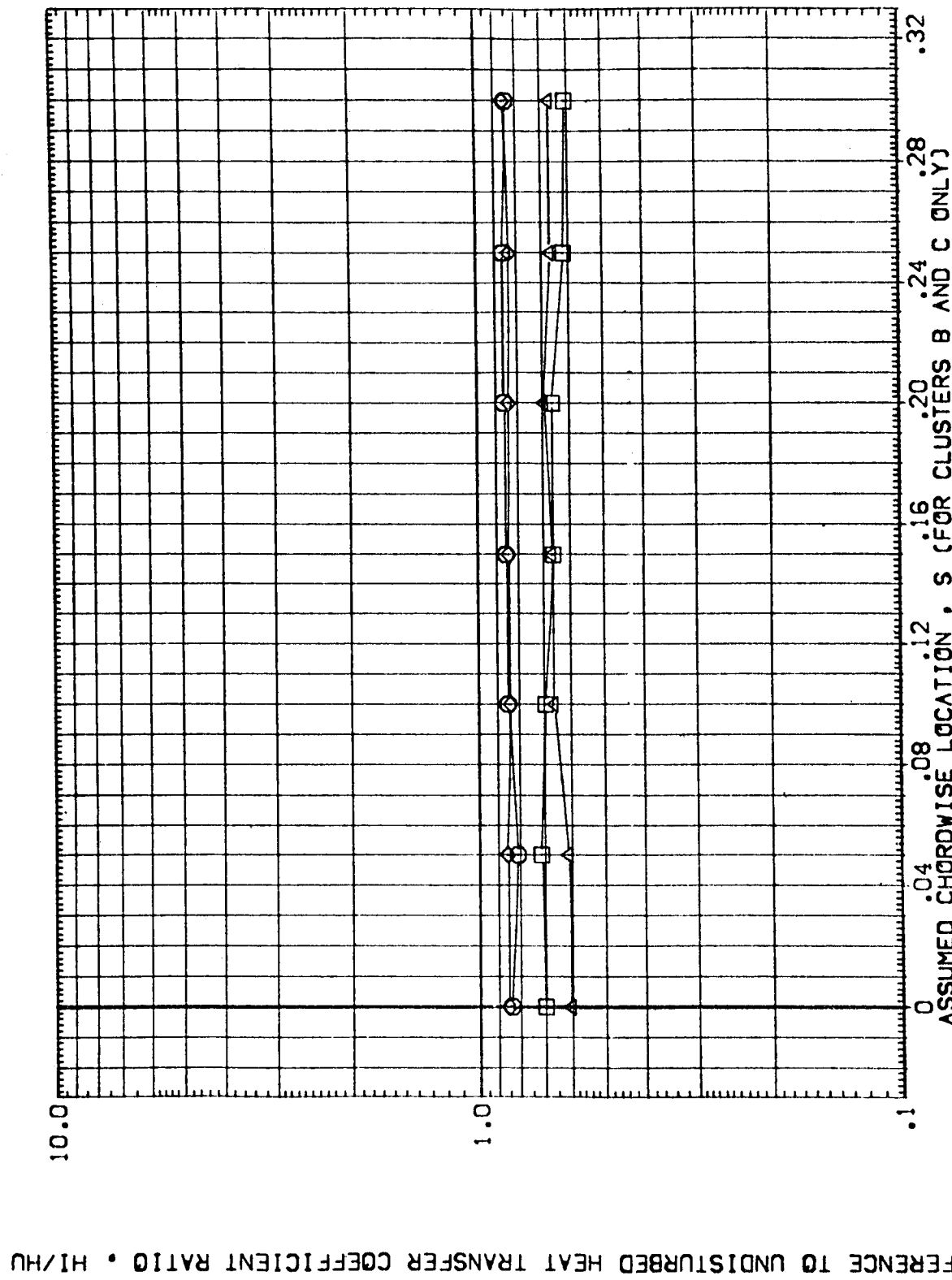


FIG. 30 CLUSTERS B AND C - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 ZY/B = .600

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(EE1406)	ARC 3.5-178 I-H3 O-T-S	.000	.000	1.500	.900
(EE1407)	ARC 3.5-178 I-H3 O-T-S	.000	.000	5.000	.900
(EE1408)	ARC 3.5-178 I-H3 O-T-S (TRIPS)	.000	.000	1.500	.900
(EE1409)	ARC 3.5-178 I-H3 O-T-S (TRIPS)	.000	.000	5.000	.900

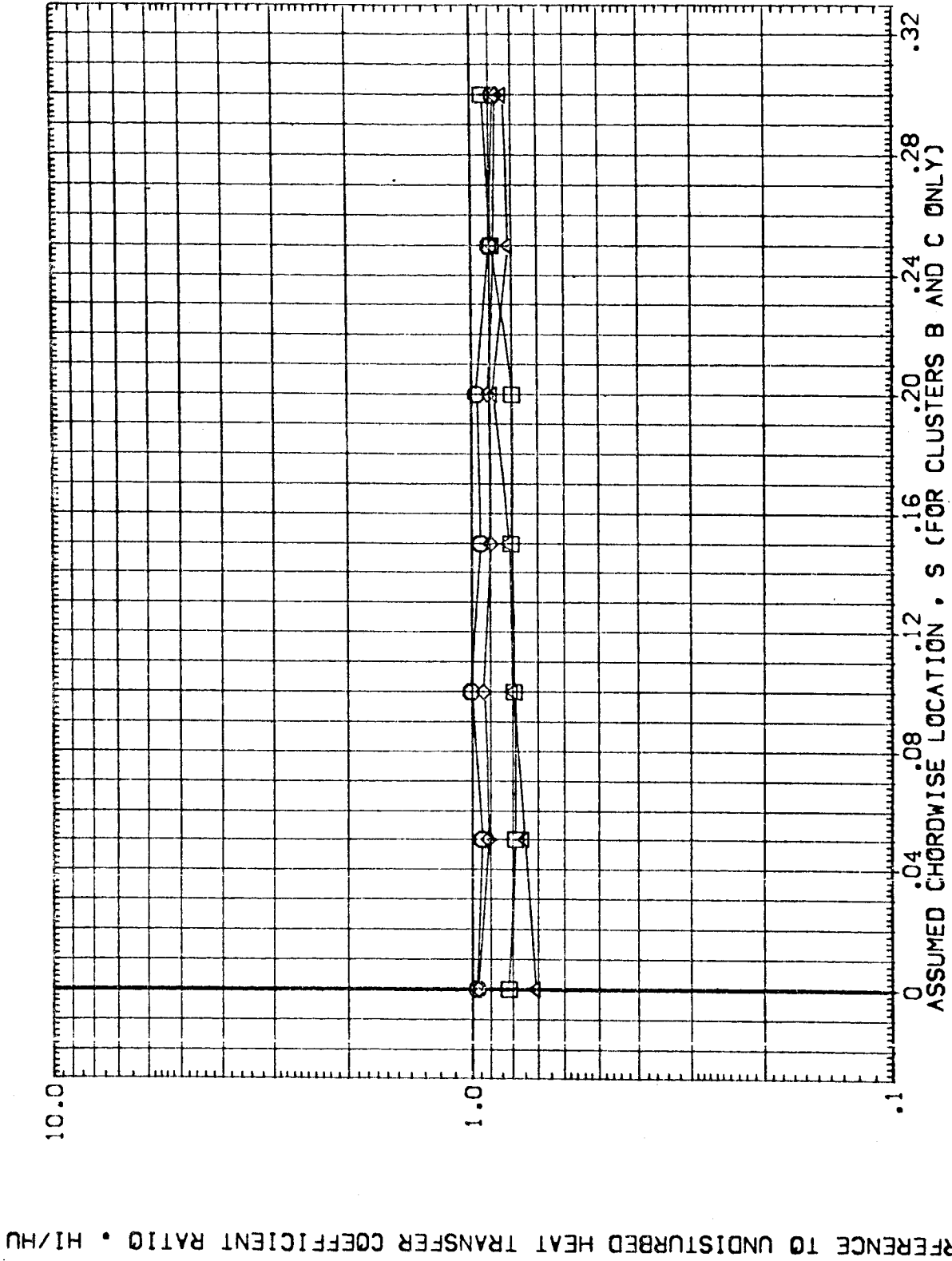


FIG. 30 CLUSTERS B AND C - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .850

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE:106] Q ARC 3.5-178 IH3 ORBITER
 [AE:106] Q ARC 3.5-178 IH3 ORBITER
 [BE:106] Q ARC 3.5-178 IH3 ORBITER

ALPHA .000
 BETA .000
 RV/L 1.500
 HAW/HT 1.000

WING TOP
 WING TOP
 WING TOP

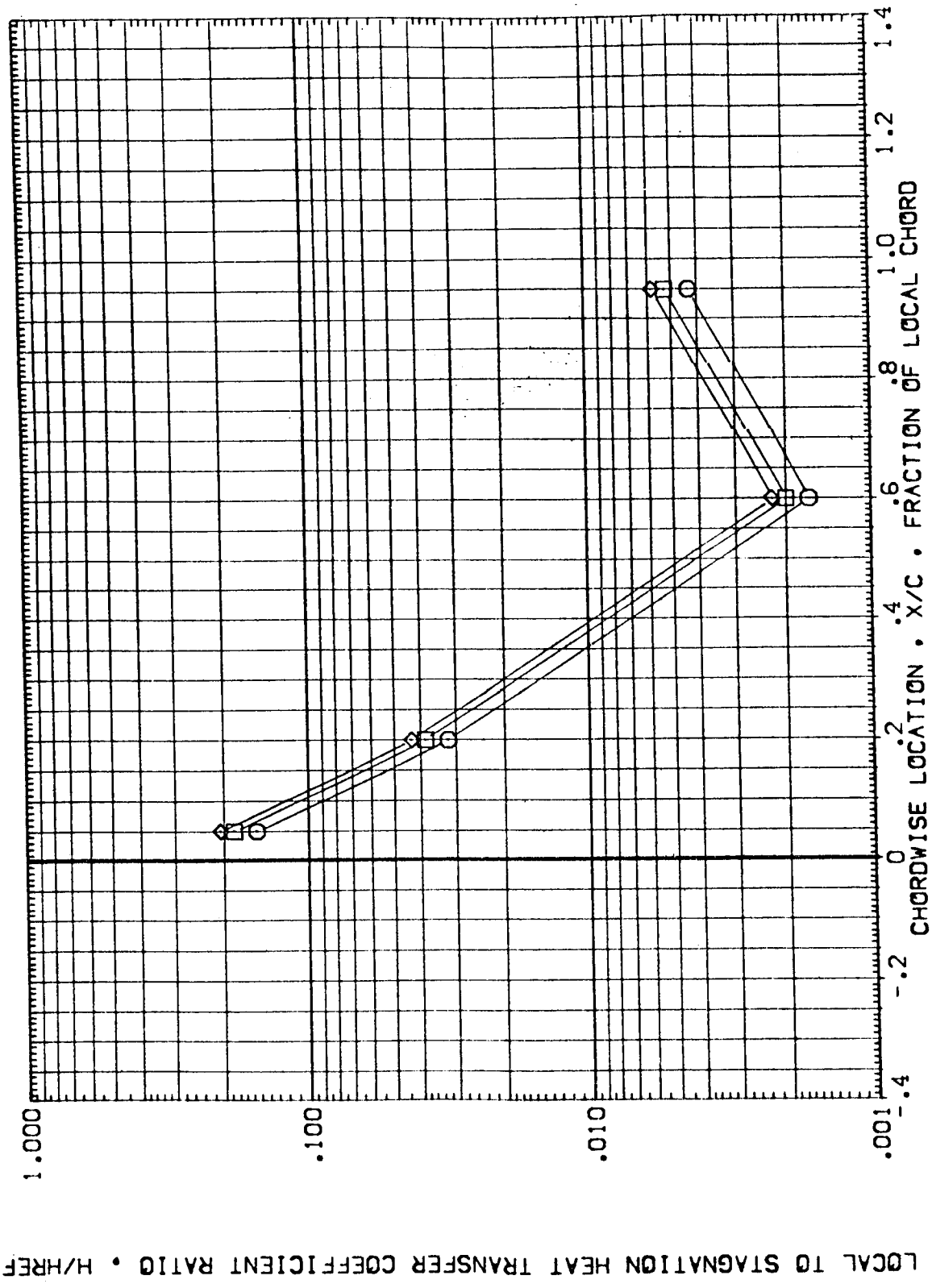


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING TOP ALPHA BETA RV/L HAV/HT

{RE1106} ARC 3.5-178 H3 ORBITER WING TOP .000 .000 1.500 1.000

{AE1106} ARC 3.5-178 H3 ORBITER WING TOP .000 .000 1.500 .900

{BE1106} ARC 3.5-178 H3 ORBITER WING TOP .000 .000 1.500 .850

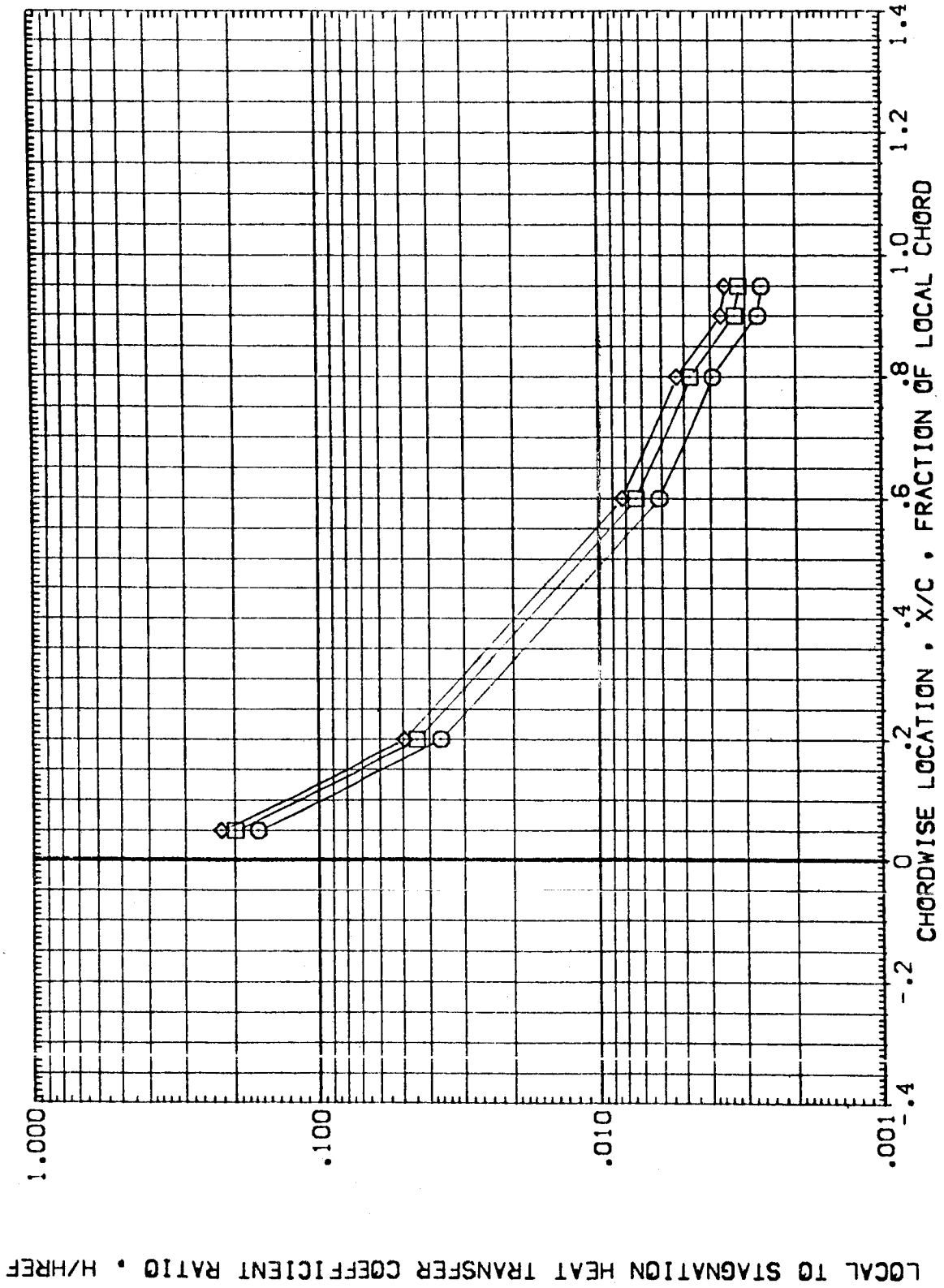


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 ZY/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING TOP ALPHA BETA RV/L HAV/HT

{RE1106} ARC 3.5-178 IH3 ORBITER WING TOP .000 .000 1.500 1.000

{AE1106} ARC 3.5-178 IH3 ORBITER WING TOP .000 .000 1.500 .900

{BE1106} ARC 3.5-178 IH3 ORBITER WING TOP .000 .000 1.500 .850

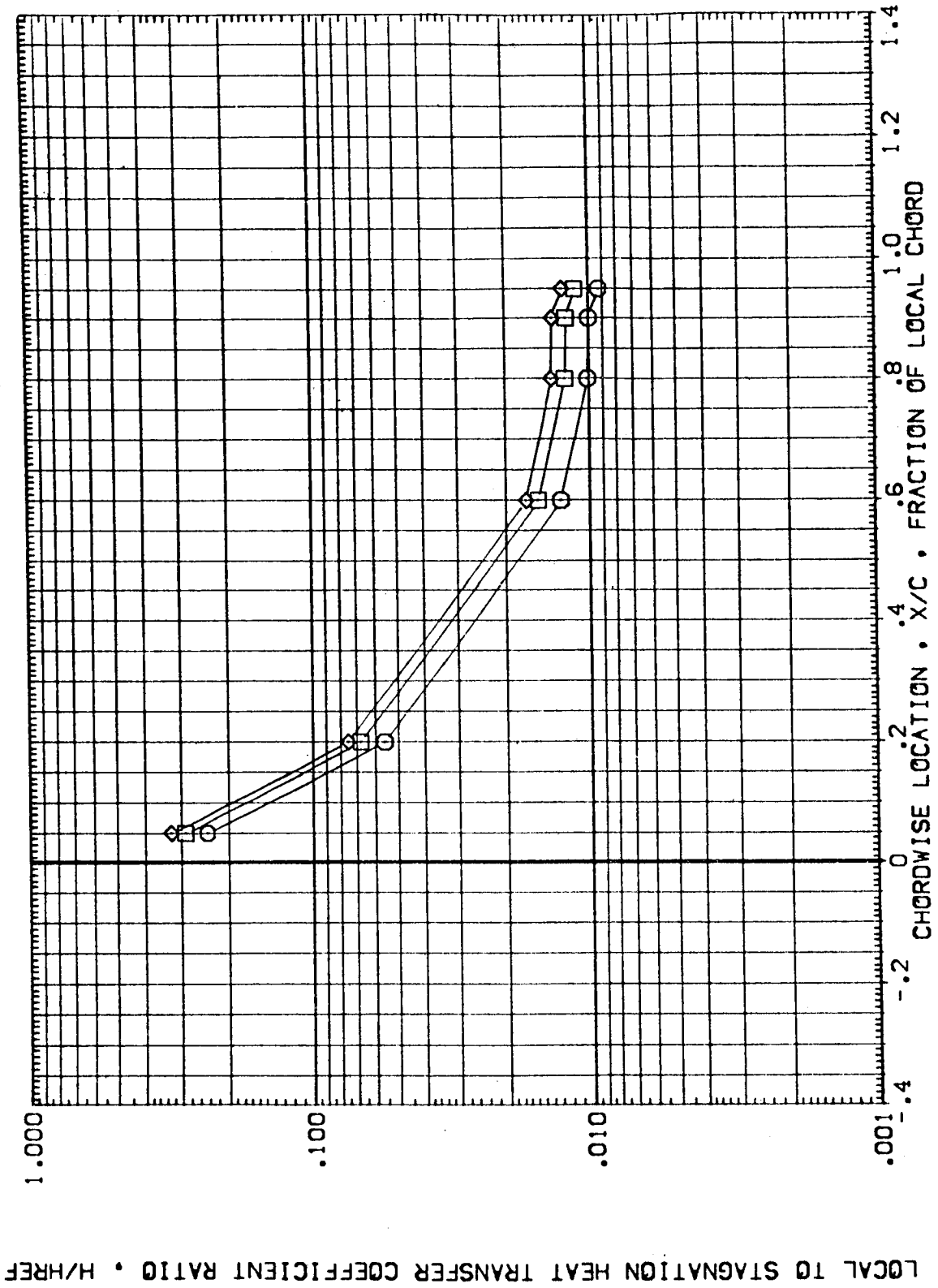


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .800



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1106) ARC 3.5-178 IH3 ORBITER
 (AE1106) ARC 3.5-178 IH3 ORBITER
 (BE1106) ARC 3.5-178 IH3 ORBITER

ALPHA .000
 .000
 .000
 BETA .000
 .000
 .000
 RV/L 1.500
 1.500
 1.500
 HAV/HT 1.000
 .900
 .850

WING TOP
 WING TOP
 WING TOP

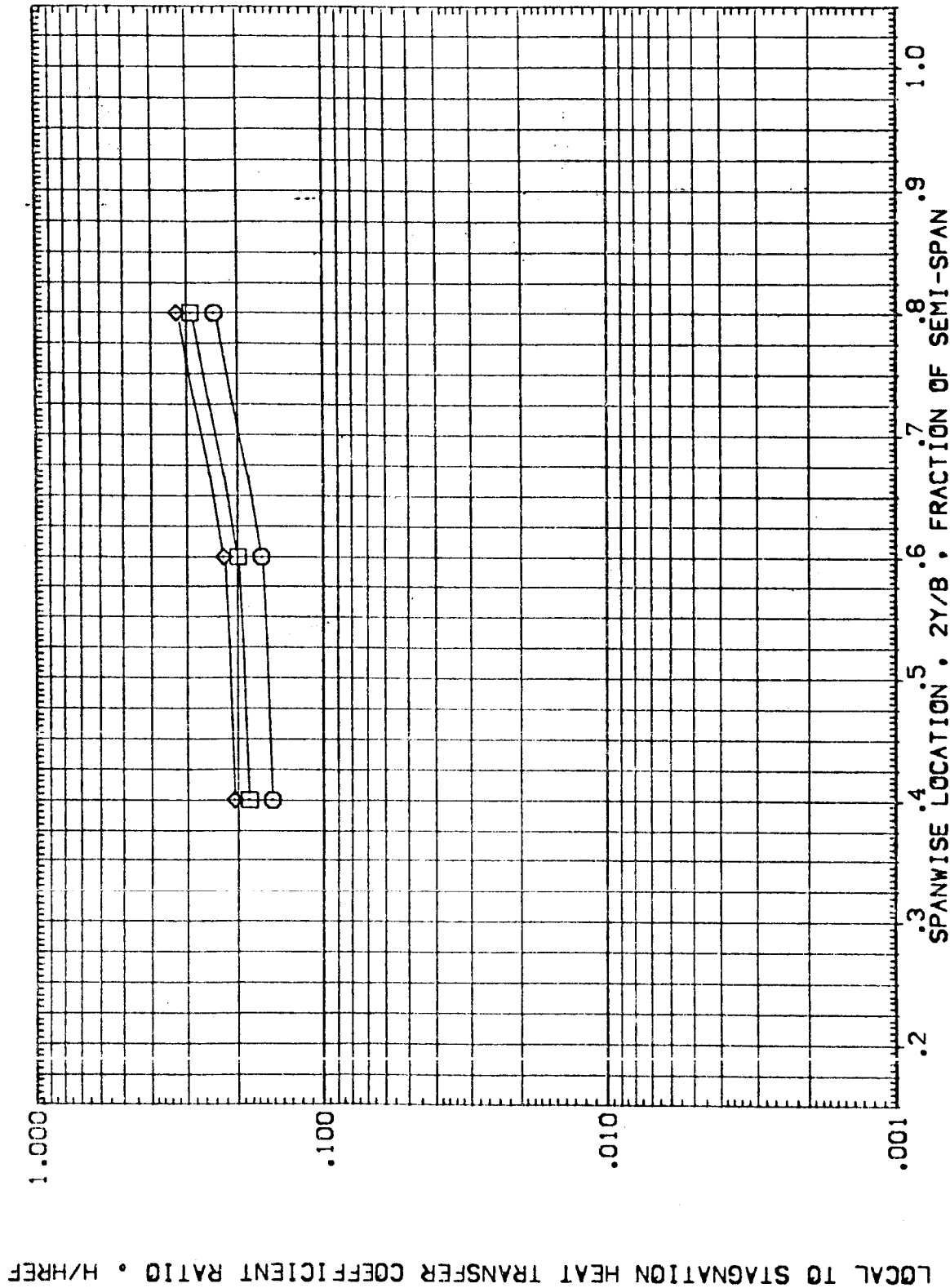
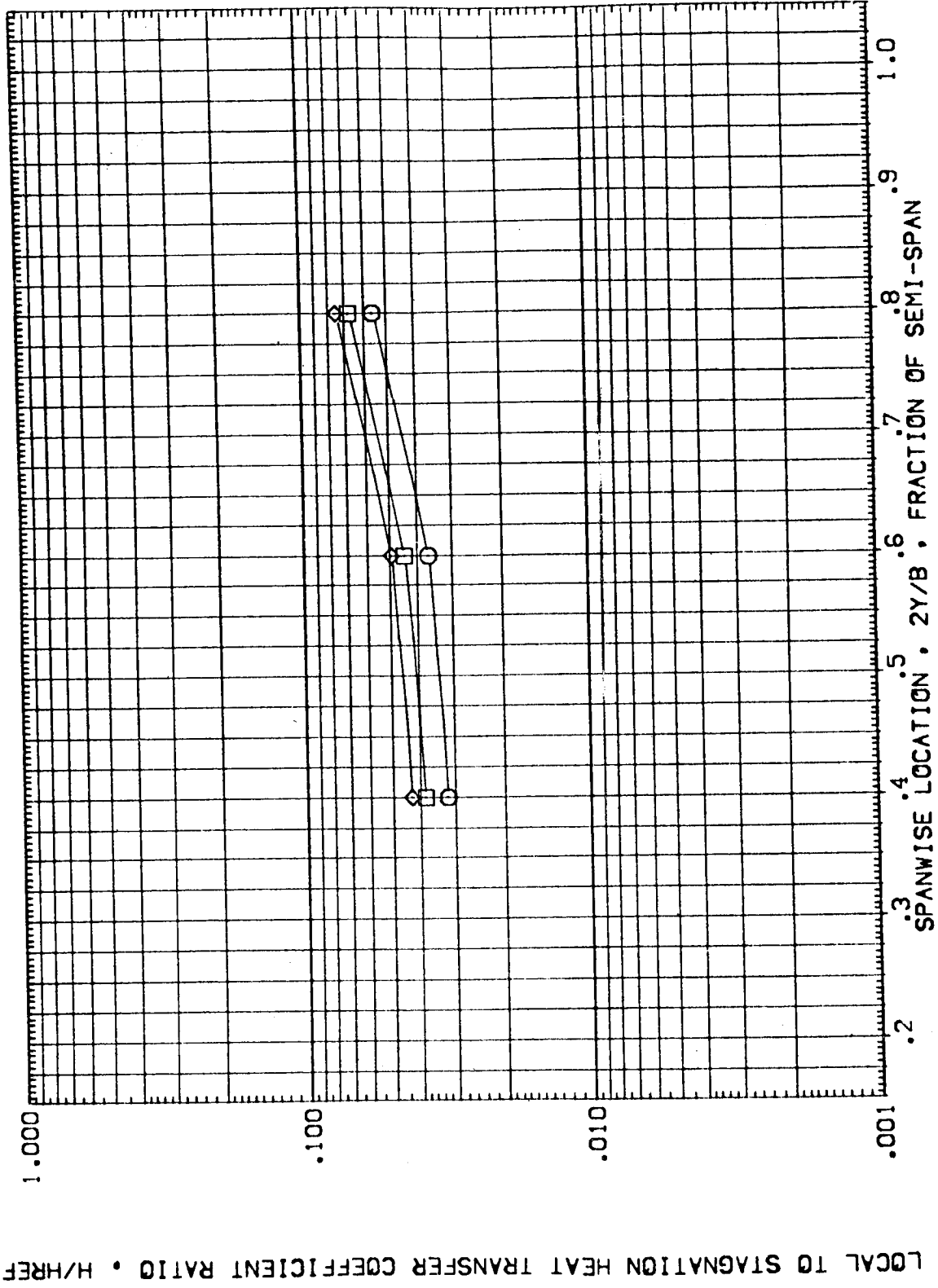


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .050



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1106) ARC 3.5-178 I-H3 ORBITER
 (AE1106) ARC 3.5-178 I-H3 ORBITER
 (BE1106) ARC 3.5-178 I-H3 ORBITER

ALPHA BETA RV/L HAV/HT
 .000 .000 .500 1.000
 .000 .000 .500 .800
 .000 .000 1.500 .650

WING TOP
 WING TOP
 WING TOP

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE1106] □ ARC 3.5-178 IH3 ORBITER
 [AE1106] □ ARC 3.5-178 IH3 ORBITER
 [BE1106] ◇ ARC 3.5-178 IH3 ORBITER

ALPHA BETA R/V/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

WING TOP
 WING TOP
 WING TOP

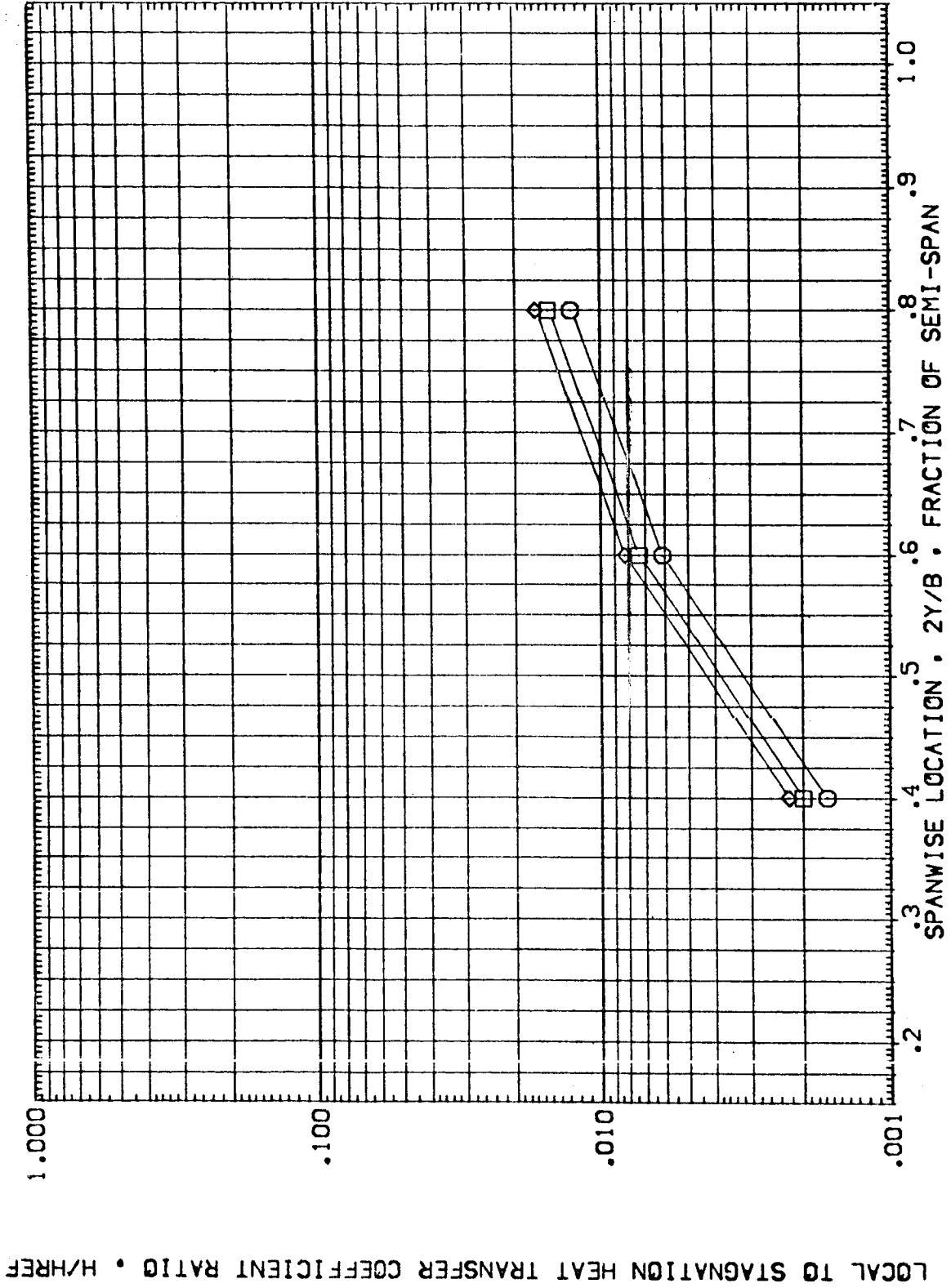


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .600

DATA SET SYMBOL: \square \diamond CONFIGURATION DESCRIPTION: ARC 3.5-178 I43 ORBITER, ARC 3.5-178 I43 ORBITER, ARC 3.5-178 I43 ORBITER

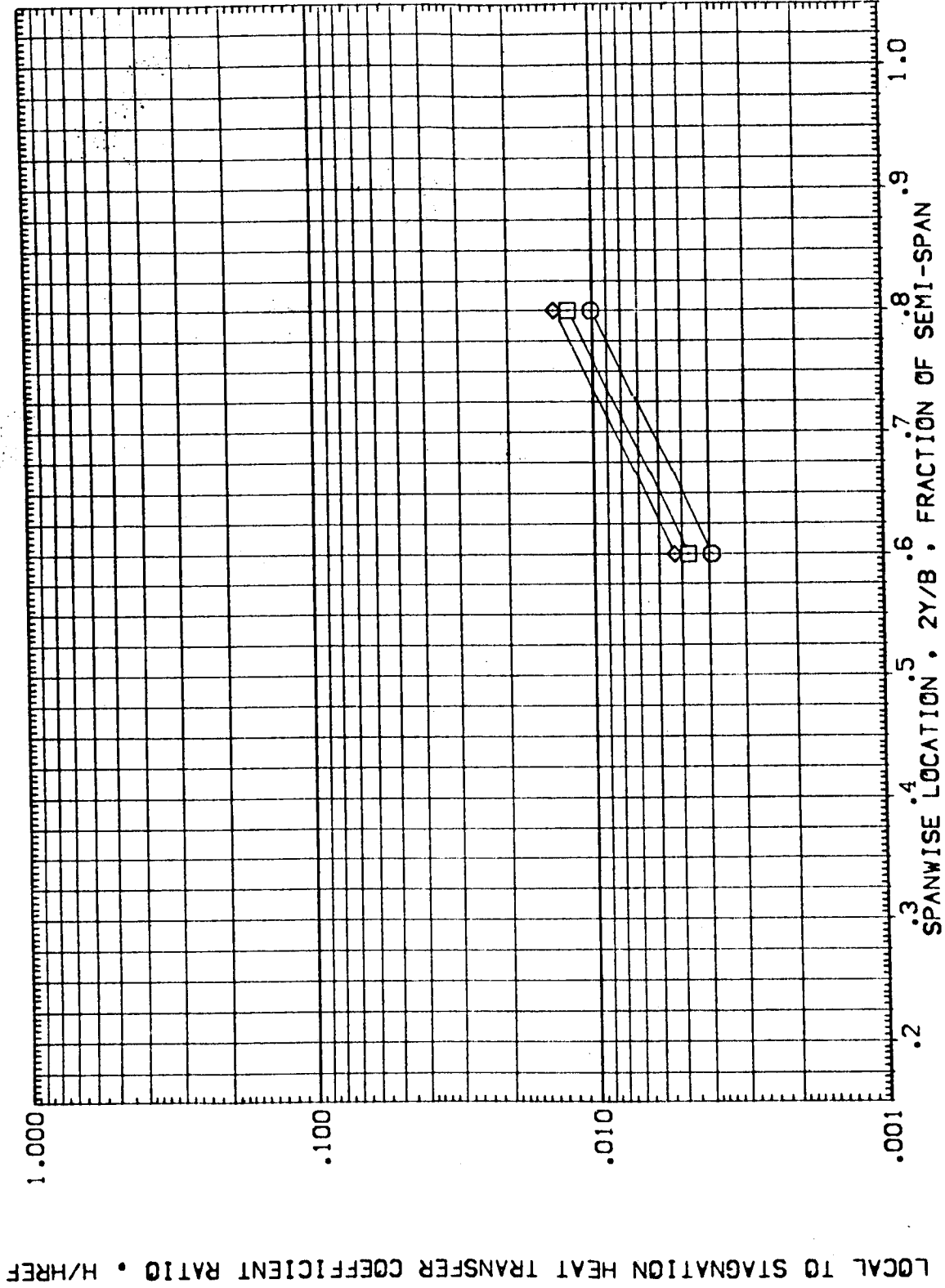


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .800

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (RE1106) ARC 3.5-178 IH3 ORBITER
 (AE1106) ARC 3.5-178 IH3 ORBITER
 (BE1106) ARC 3.5-178 IH3 ORBITER

WING TOP WING TOP WING TOP
 ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

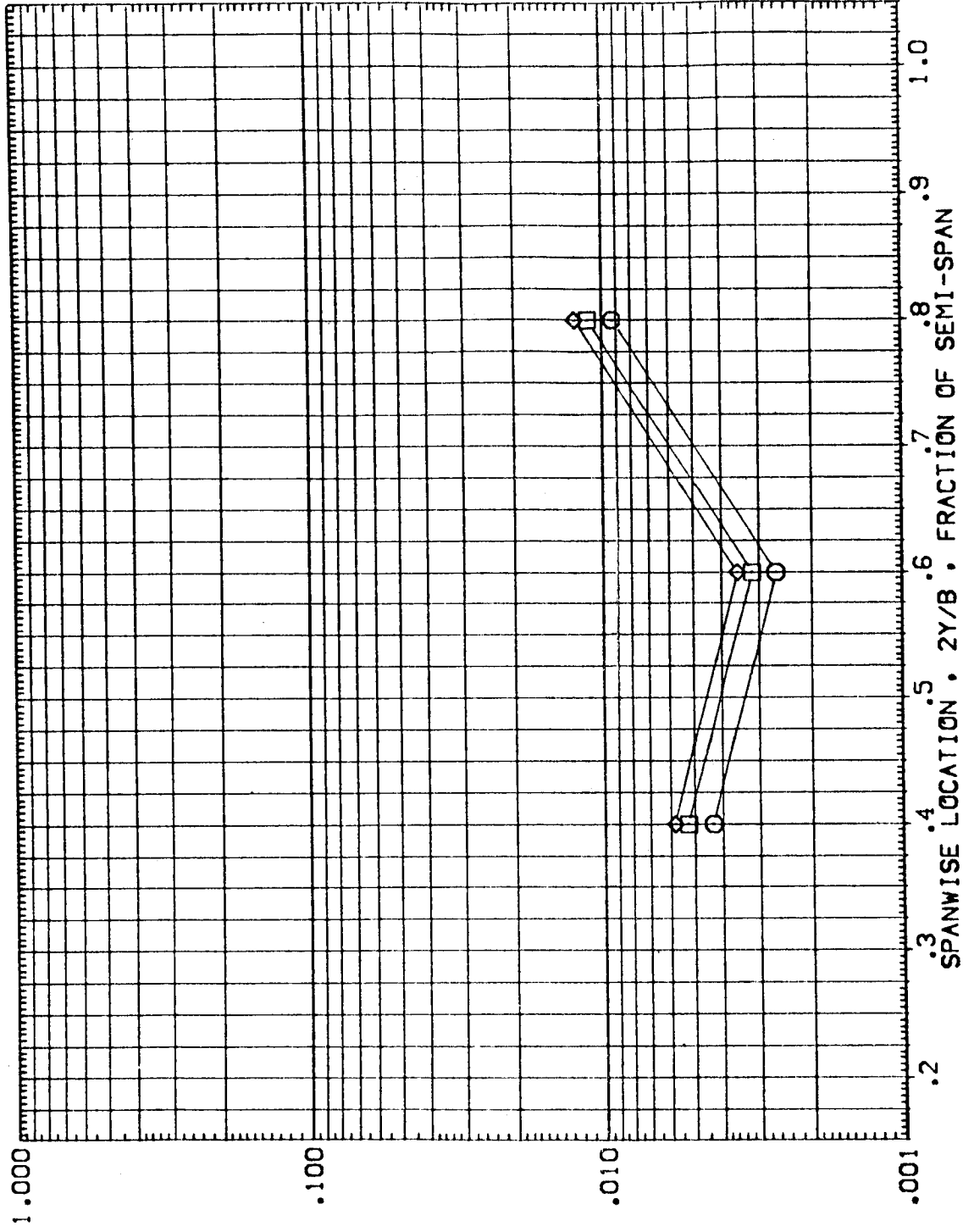


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .950



DATA SET SYMBOL CONFIGURATION DESCRIPTION VING TOP ALPHA BETA RN/L HAW/HT

{RE||07} ARC 3.5-178 143 ORB|TER VING TOP .000 .000 5.000 1.000

{AE||07} ARC 3.5-178 143 ORB|TER VING TOP .000 .000 5.000 .900

{BE||07} ARC 3.5-178 143 ORB|TER VING TOP .000 .000 5.000 .850

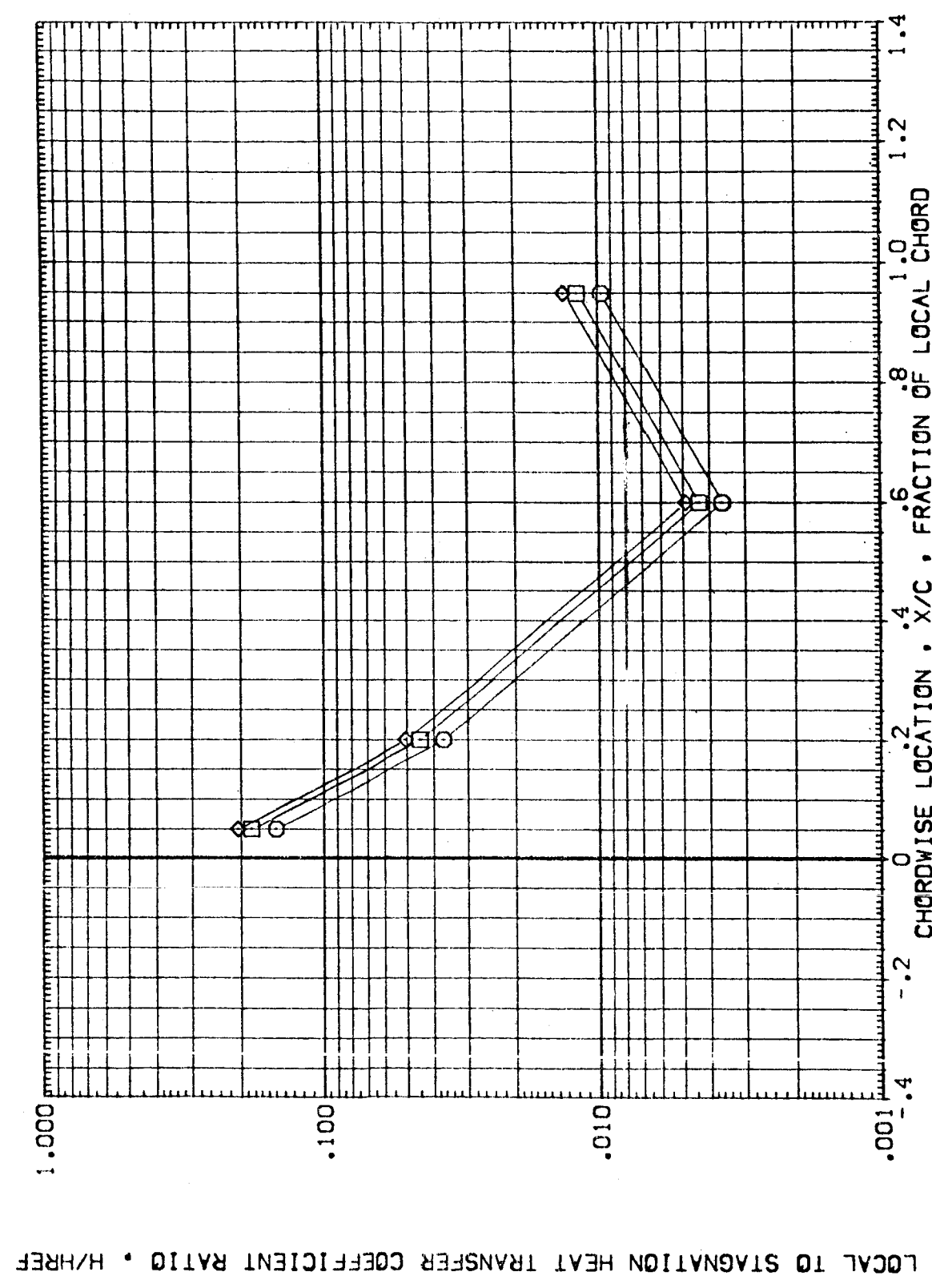


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING TOP ALPHA BETA RN/L HAV/HT
 (RE||07) ARC 3.5-178 IH3 CRBITER WING TOP .000 .000 5.000 1.000
 (AE||07) ARC 3.5-178 IH3 CRBITER WING TOP .000 .000 5.000 .900
 (BE||07) ARC 3.5-178 IH3 CRBITER WING TOP .000 .000 5.000 .850

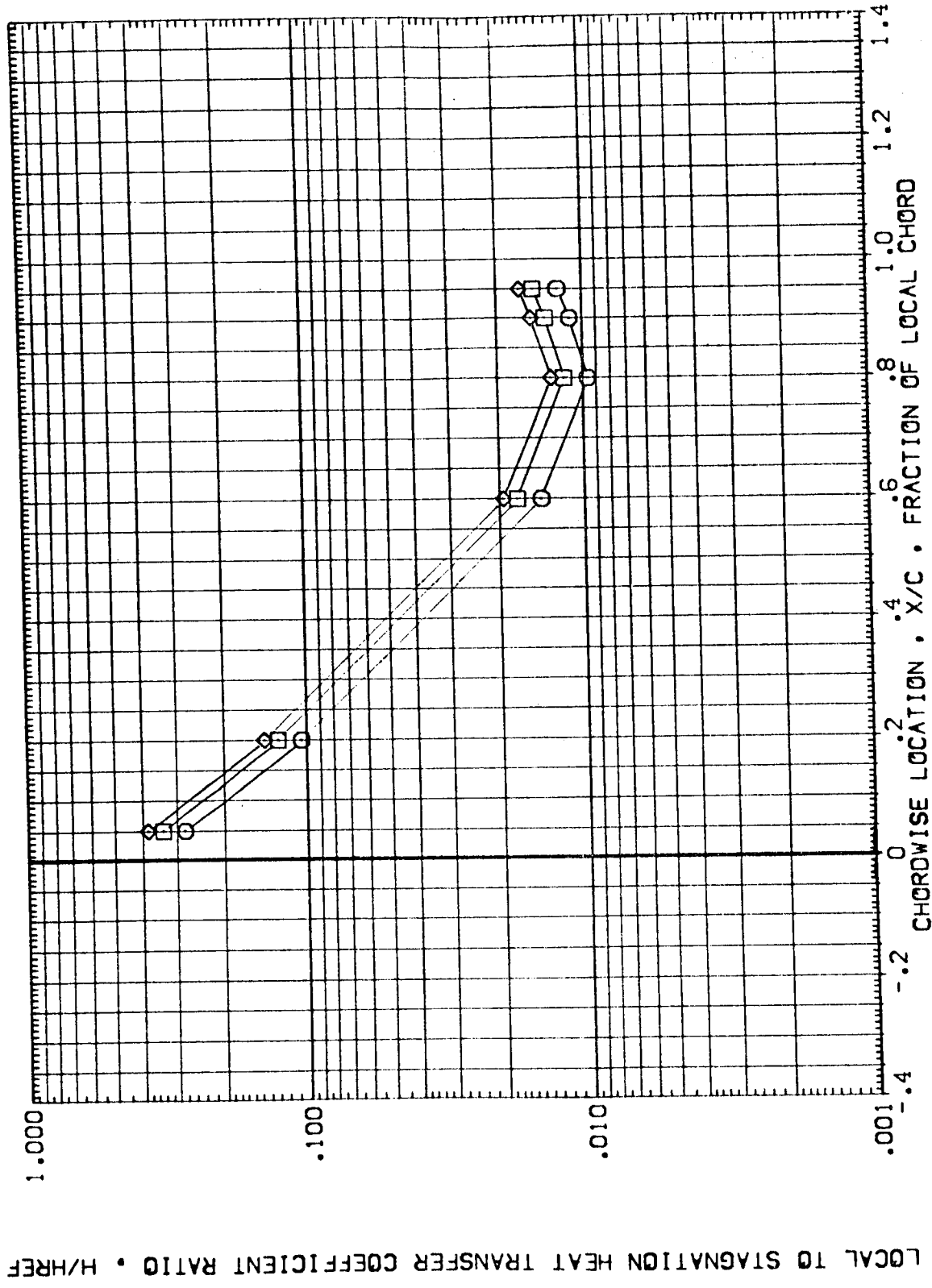


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .600



DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 [RE1107] [] H3 ORBITER
 [AE1107] [] H3 ORBITER
 [BE1107] [] H3 ORBITER
 ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 5.000 5.000 5.000
 HAV/HT 1.000 .900 .850
 VING TOP VING TOP VING TOP

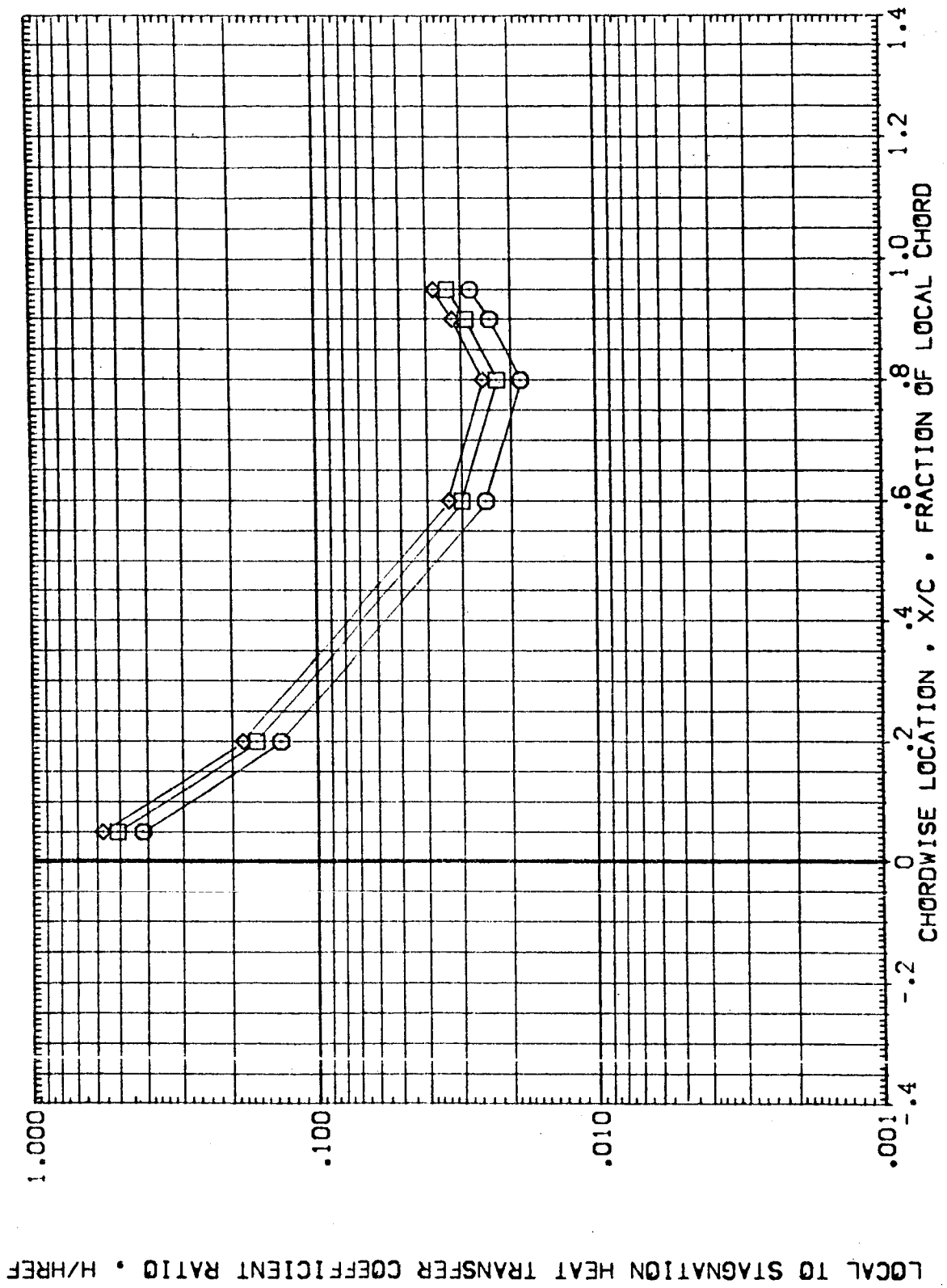


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .800

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 [RE1107] ARC 3.5-178 IH3 ORBITER
 [AE1107] ARC 3.5-178 IH3 ORBITER
 [BE1107] ARC 3.5-178 IH3 ORBITER

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

WING TOP
 WING TOP
 WING TOP

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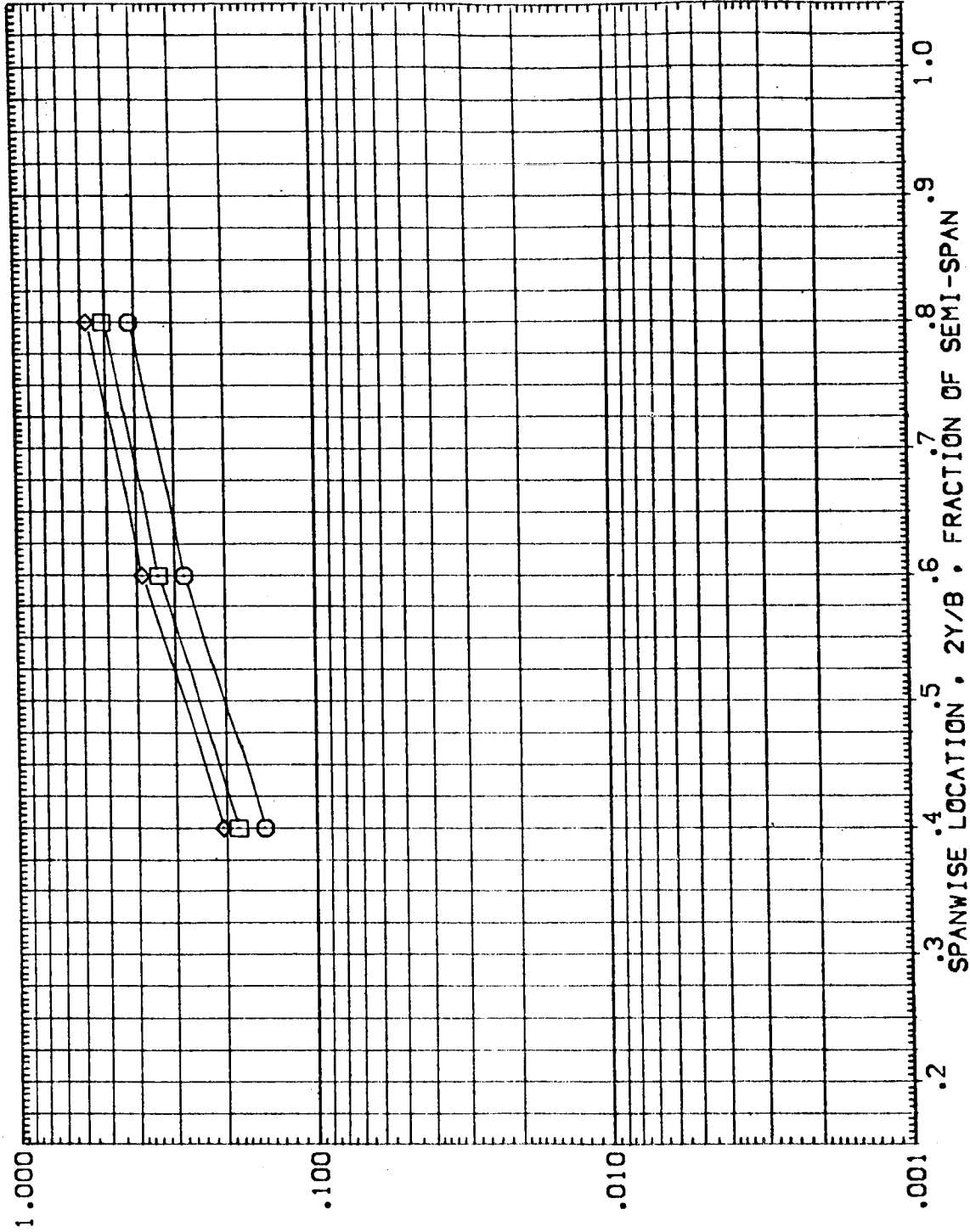


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1107) ARC 3.5-178 IH3 ORBITER
 (AE1107) ARC 3.5-178 IH3 ORBITER
 (BE1107) ARC 3.5-178 IH3 ORBITER

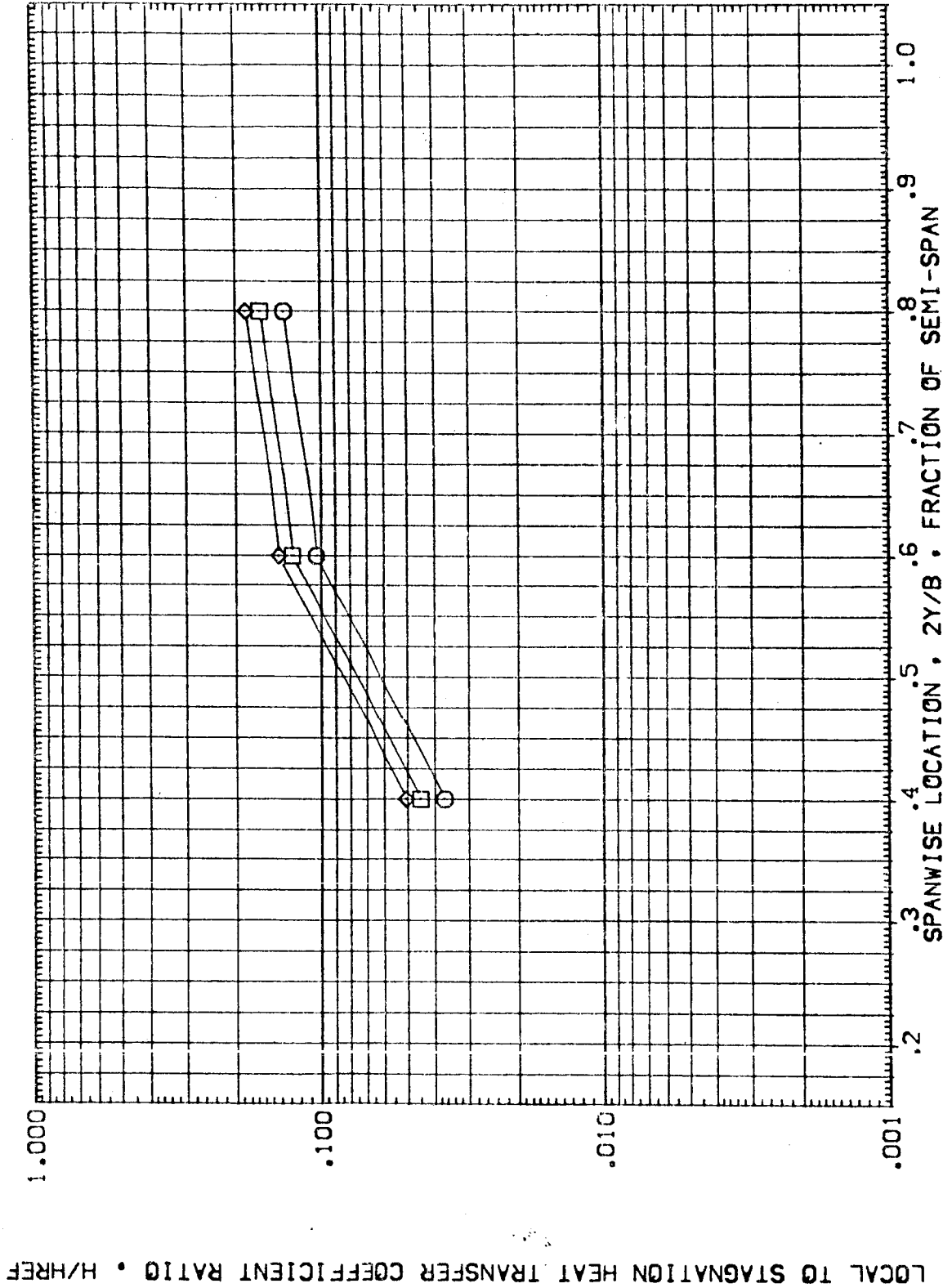
ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RN/VL 5.000
 5.000
 5.000

HAW/HT 1.000
 .900
 .850




WING TOP
 WING TOP
 WING TOP



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FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .200

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (RE1107)  ARC 3.5-178 I-H3 ORBITER
 (AE1107)  ARC 3.5-178 I-H3 ORBITER
 (BE1107)  ARC 3.5-178 I-H3 ORBITER

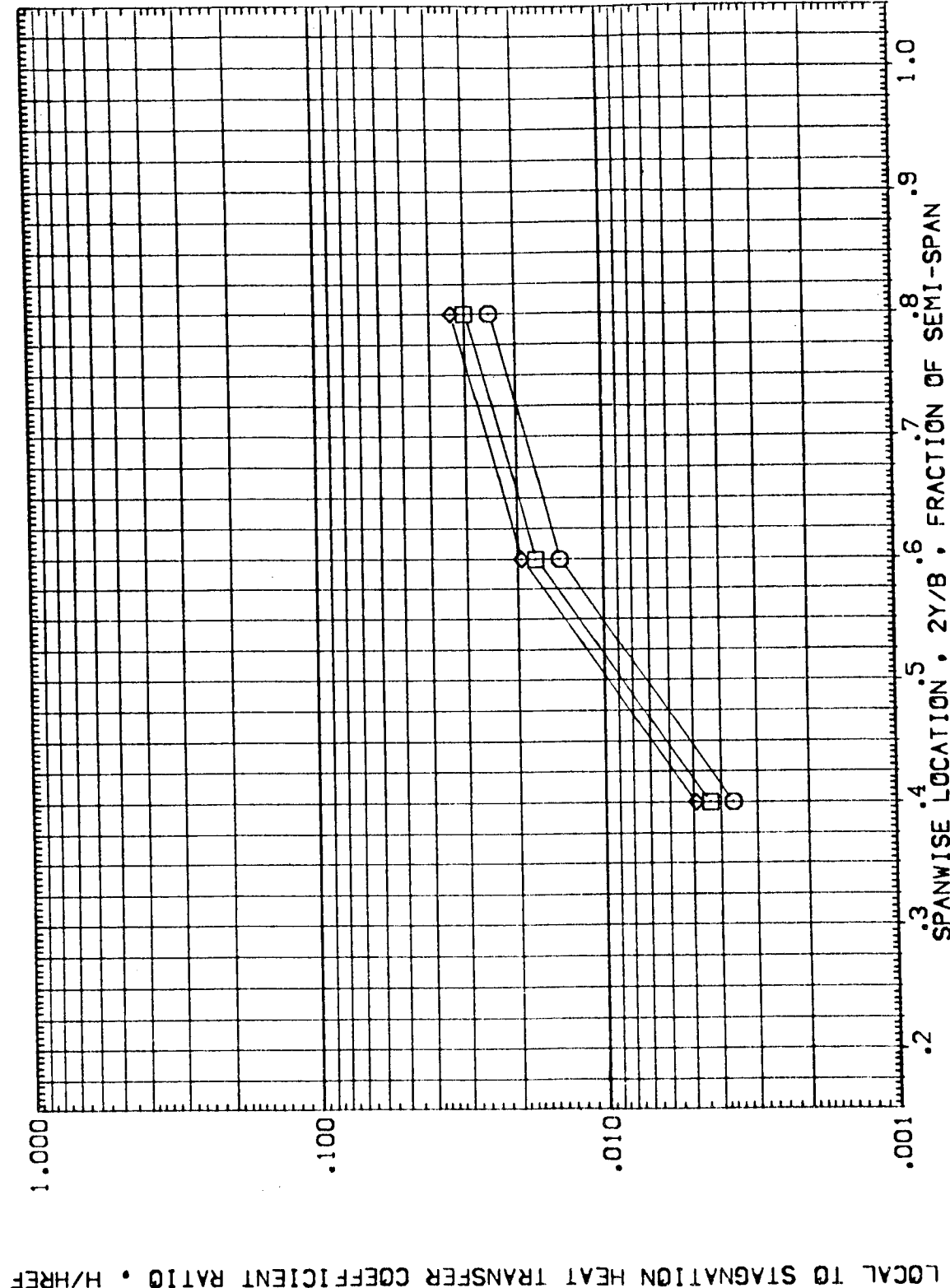


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .600



DATA SET SYMBOL CONFIGURATION DESCRIPTION WING TOP ALPHA BETA RV/L HAV/HT

(RE:107) ARC 1:5-176 H3 ORBITER WING TOP .000 .000 5.000 1.000

(AE:107) ARC 1:5-178 H3 ORBITER WING TOP .000 .000 5.000 .900

(BE:107) ARC 1:5-178 H3 ORBITER WING TOP .000 .000 5.000 .850

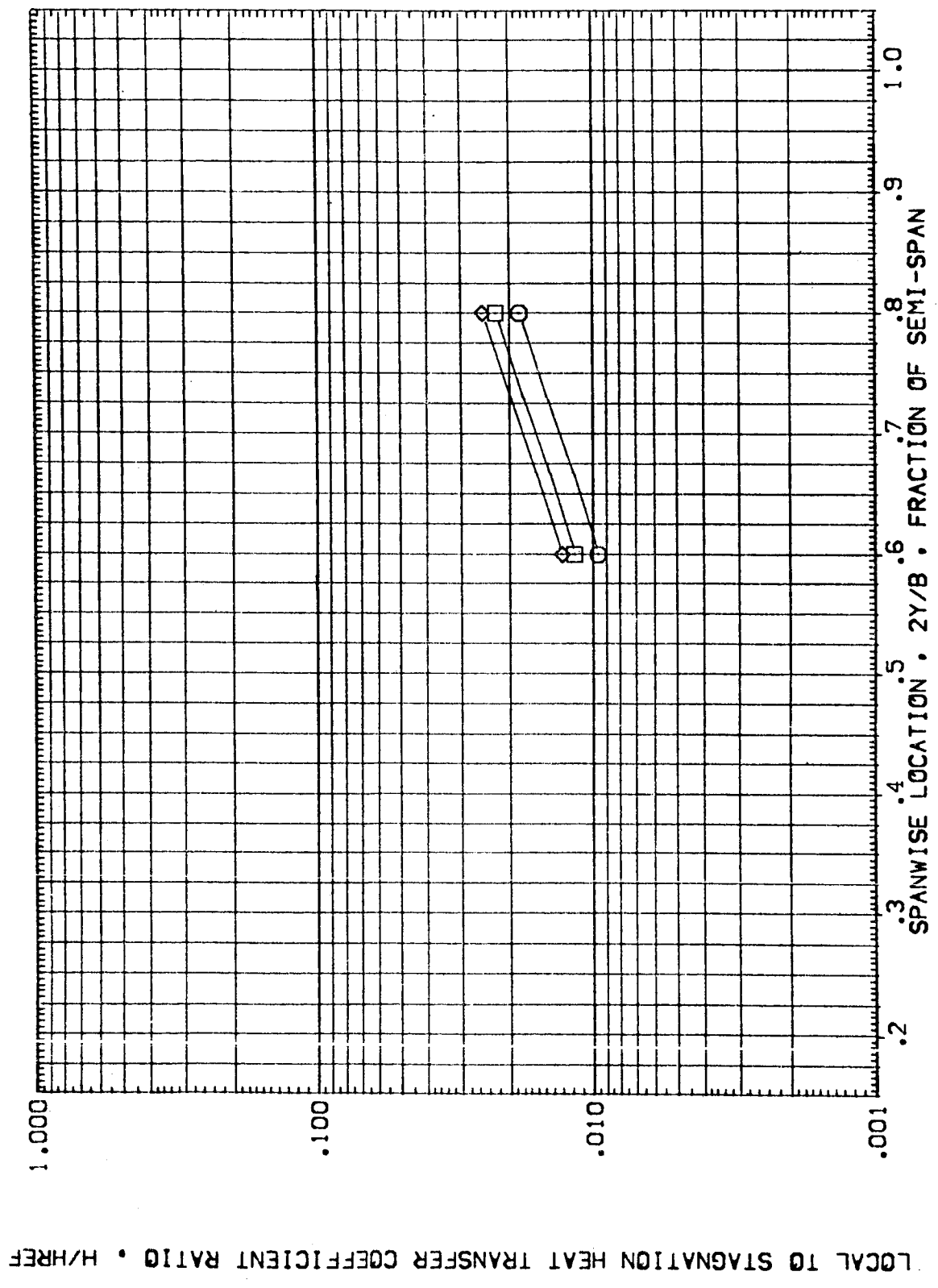


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE1107} O ARC 3.5-178 IH3 ORBITER .000 .000 5.000 1.000

{AE1107} □ ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .900

{BE1107} ◇ ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .850

WING TOP VING TOP

WING TOP VING TOP

WING TOP VING TOP

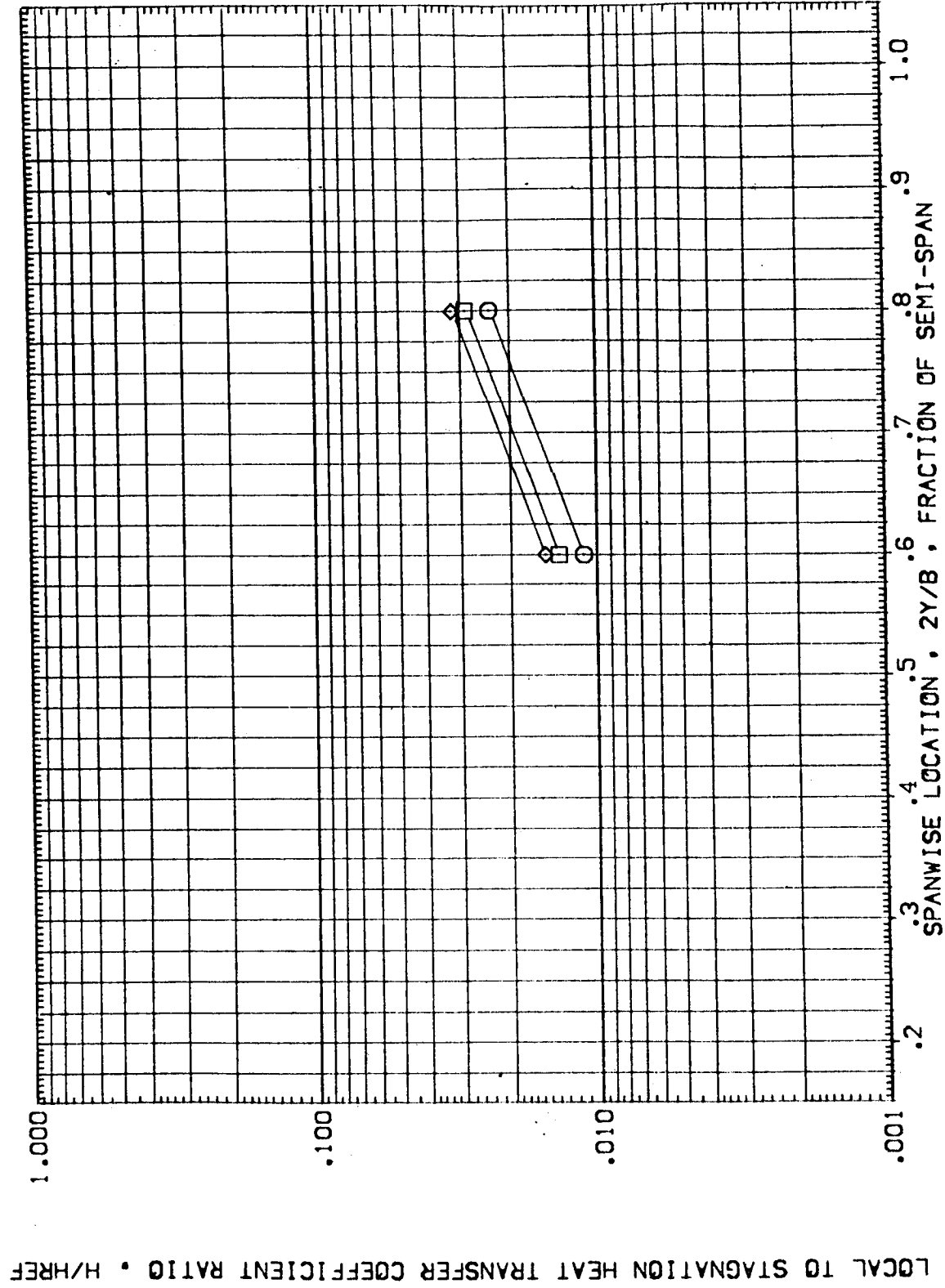


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .900



DATA SET SYMBOL CONFIGURATION DESCRIPTION WING TOP ALPHA BETA RN/L HAW/HT

(RE1107) O ARC 3.5-178 IH3 ORBITER VING TOP .000 .000 5.000 1.000

(AE1107) O ARC 3.5-178 IH3 ORBITER VING TOP .000 .000 5.000 .900

(BE1107) O ARC 3.5-178 IH3 ORBITER VING TOP .000 .000 5.000 .650

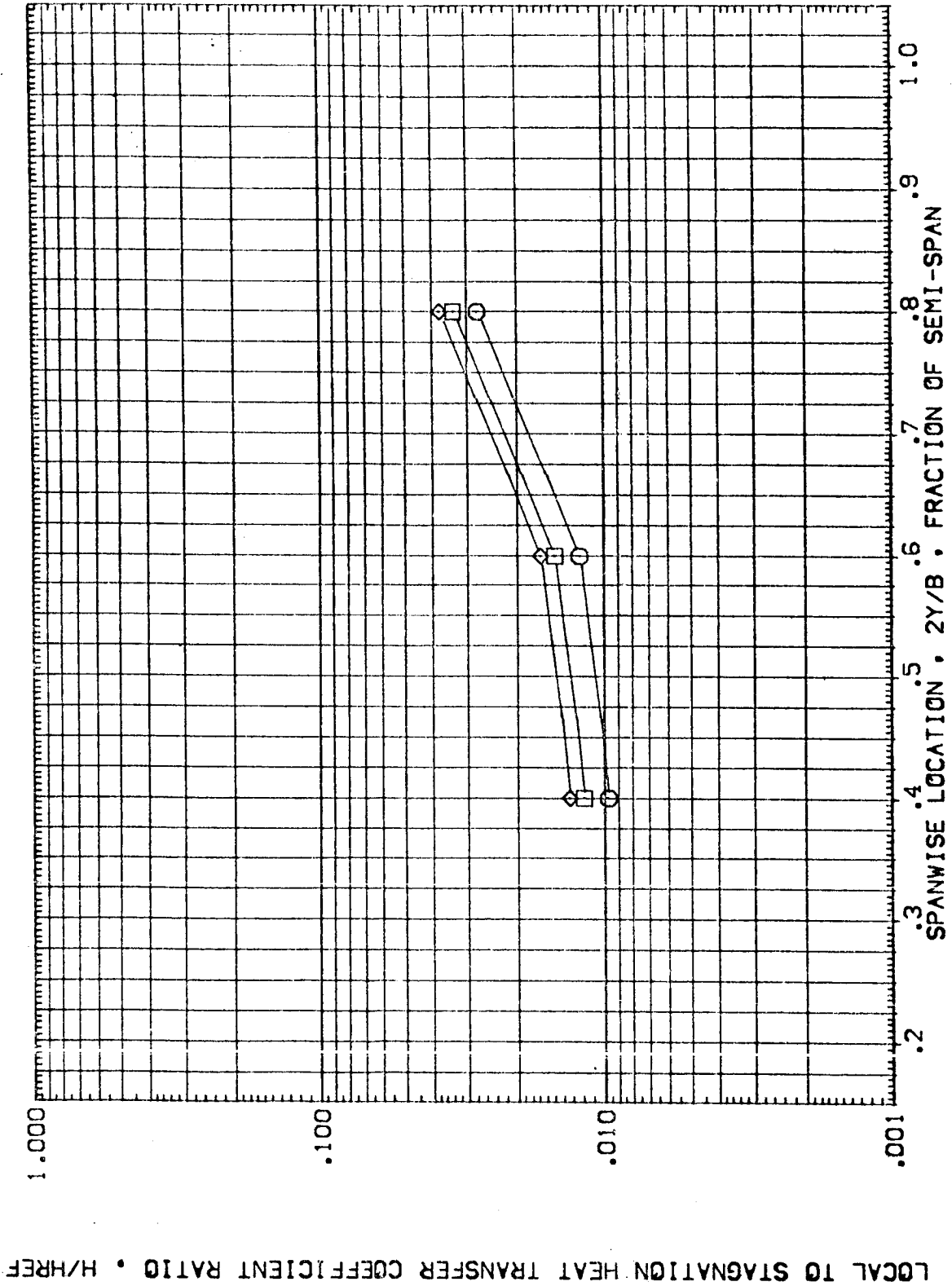


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .950

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 [RE] [108] [ARC 3.5-178 IH3 ORBITER (TRIPS) WING TOP
 [AE] [108] [ARC 3.5-178 IH3 ORBITER (TRIPS) WING TOP
 [BE] [108] [ARC 3.5-178 IH3 ORBITER (TRIPS) WING TOP

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

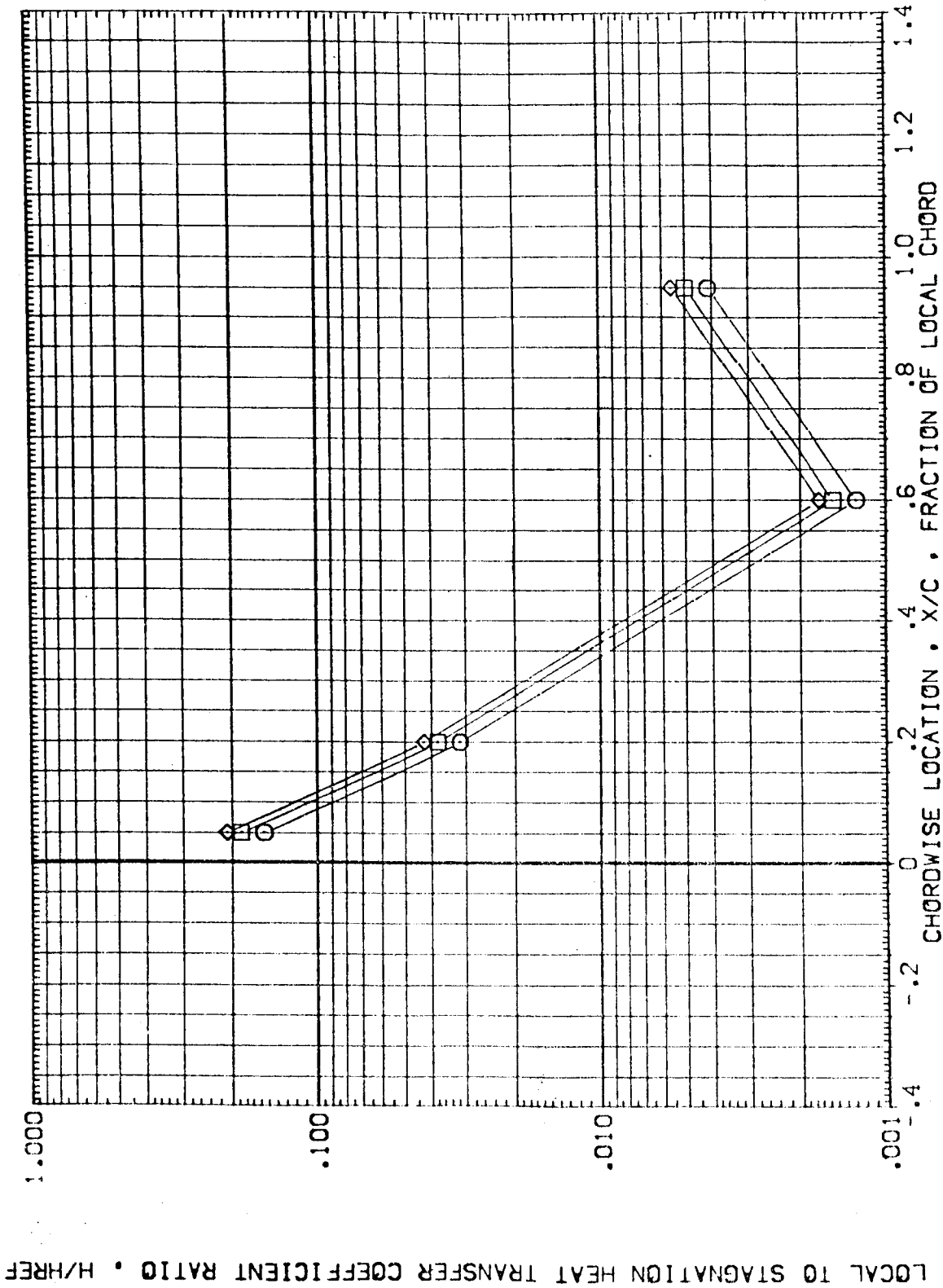


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .400



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAW/HT

(RE1108) ARC 3.5-178 143 ORBITER (TRIPS)WING TOP .000 .000 1.500 1.000

(AE1108) ARC 3.5-178 143 ORBITER (TRIPS)WING TOP .000 .000 1.500 .900

(BE1108) ARC 3.5-178 143 ORBITER (TRIPS)WING TOP .000 .000 1.500 .850

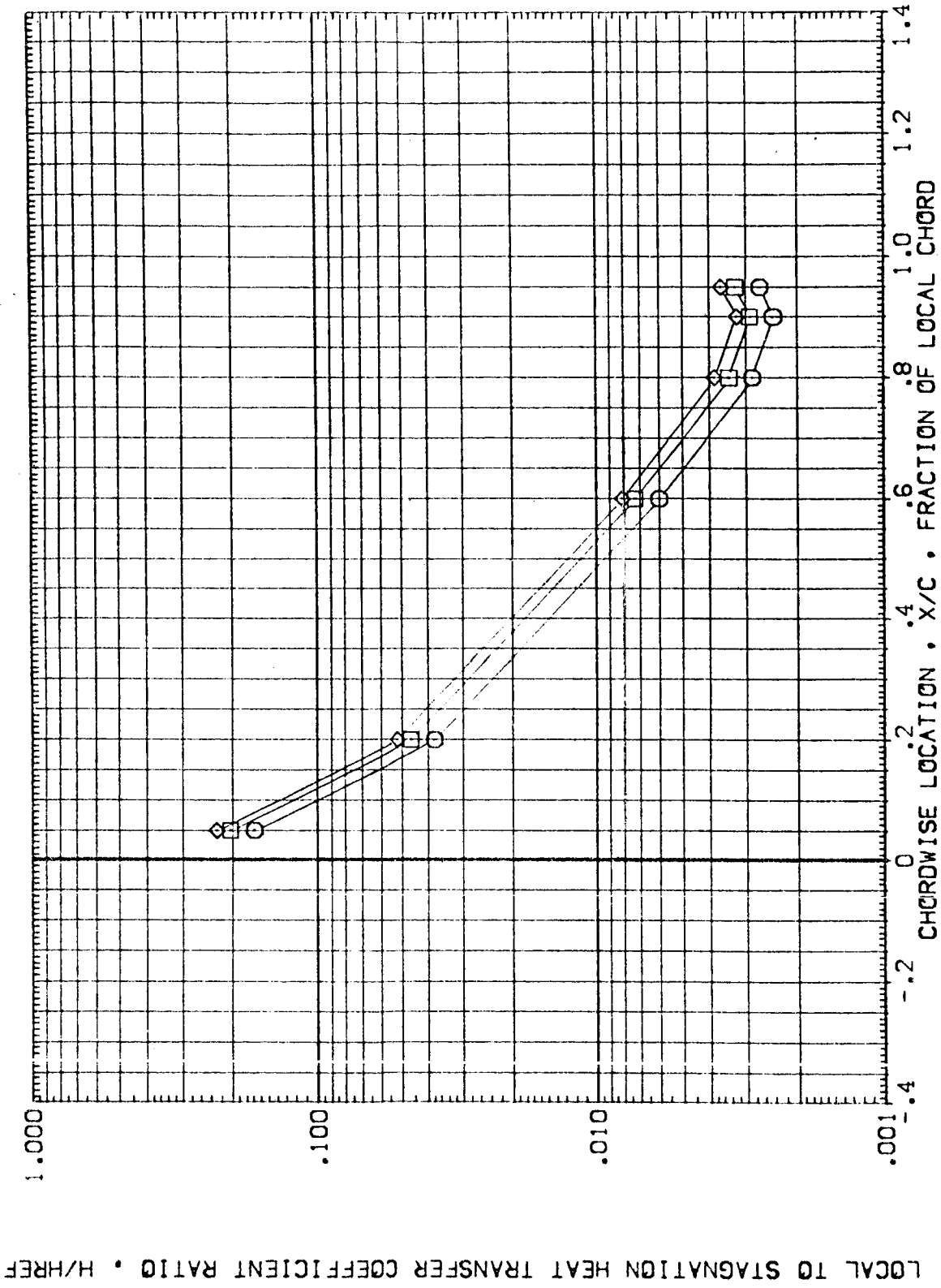


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE][08] [H3 ORBITER (TRIP) WING TOP
 [AE][08] [H3 ORBITER (TRIP) WING TOP
 [BE][08] [H3 ORBITER (TRIP) WING TOP

ALPHA BETA RV/L HAW/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

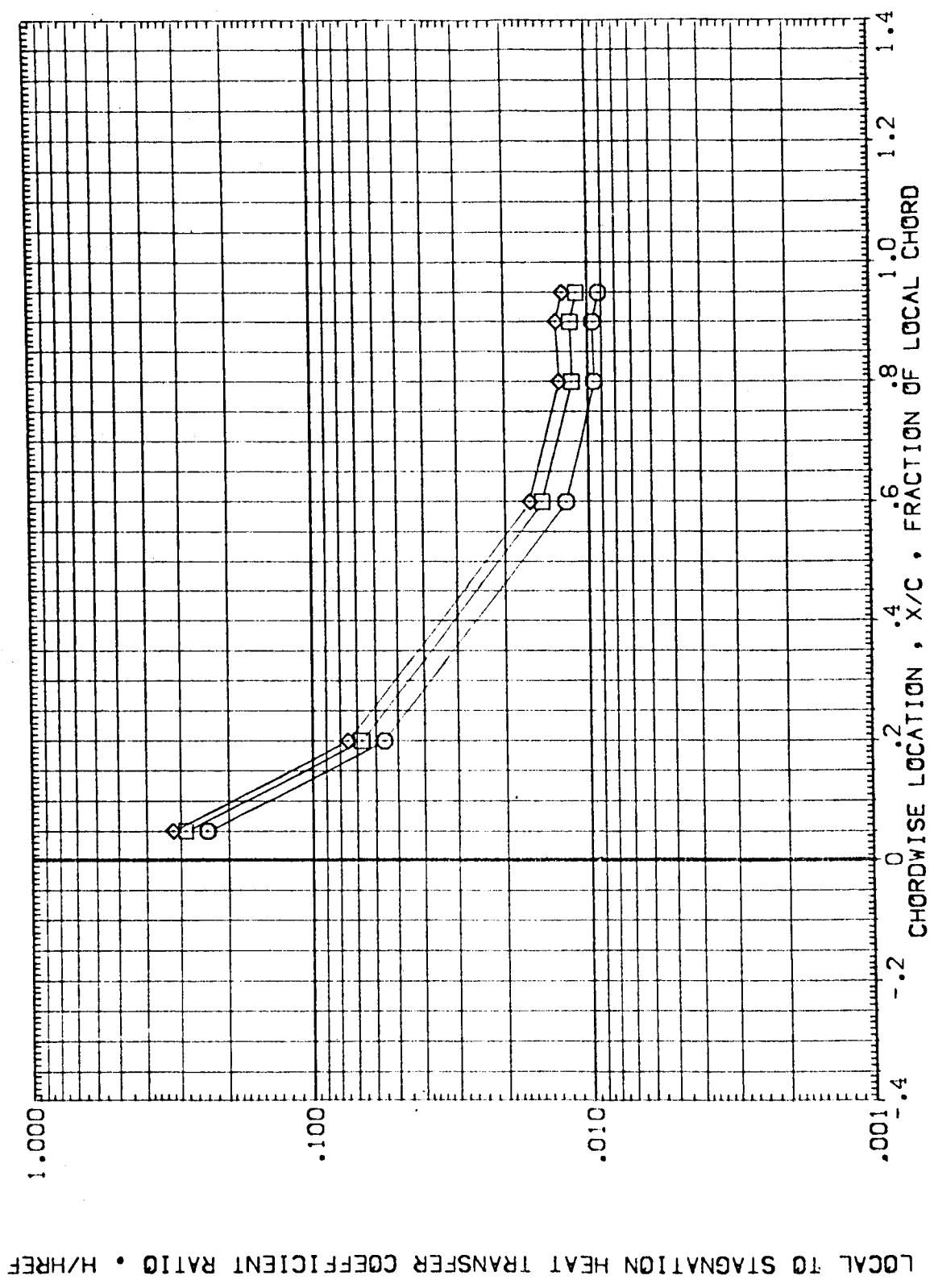


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT
 (RE||08) ○ ARC 3.5-178 I43 ORBITER (TRIPSWING TOP) .000 .000 1.500 1.000
 (AE||08) □ ARC 3.5-178 I43 ORBITER (TRIPSWING TOP) .000 .000 1.500 .900
 (BE||08) ◇ ARC 3.5-178 I43 ORBITER (TRIPSWING TOP) .000 .000 1.500 .850

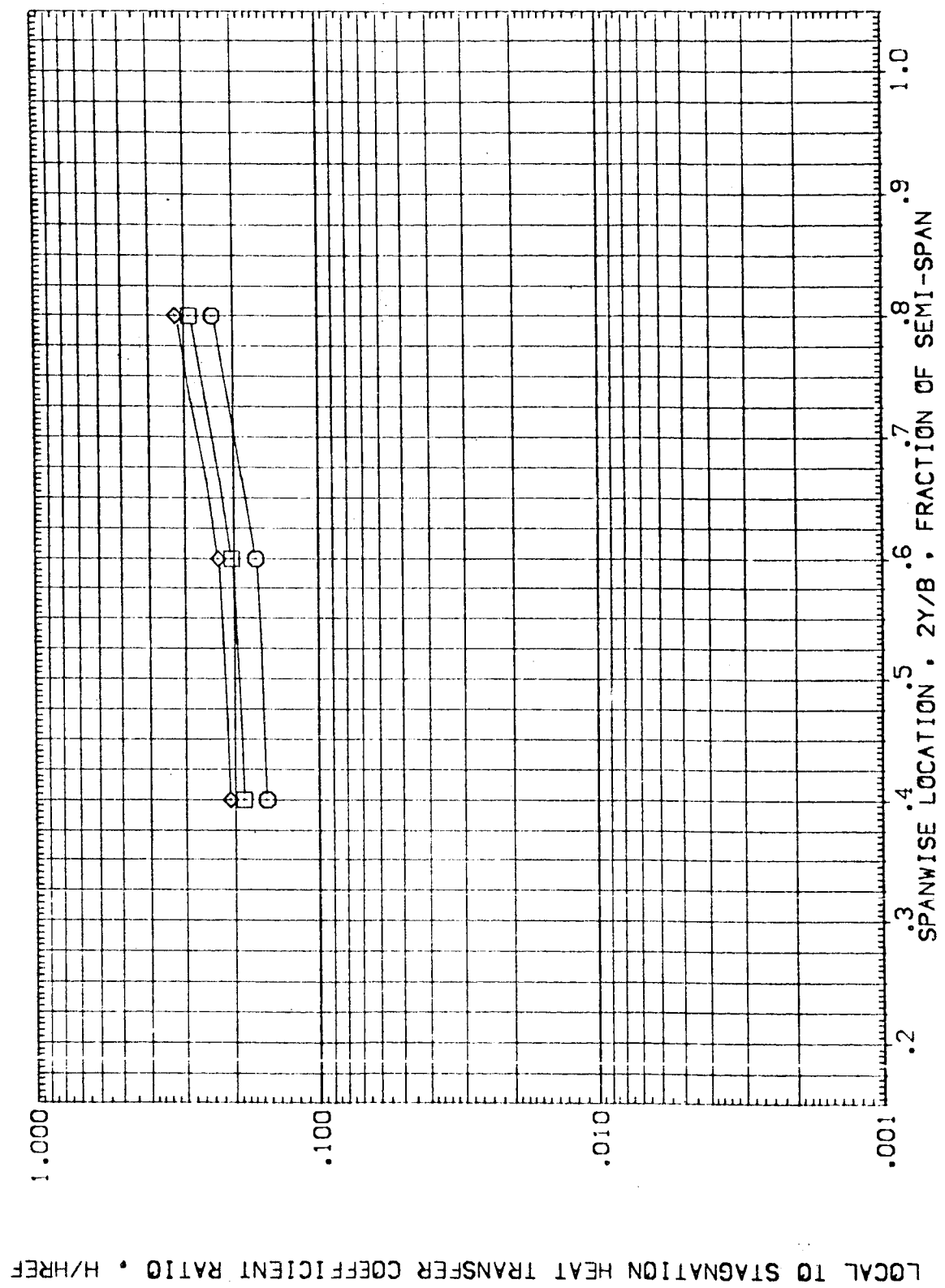


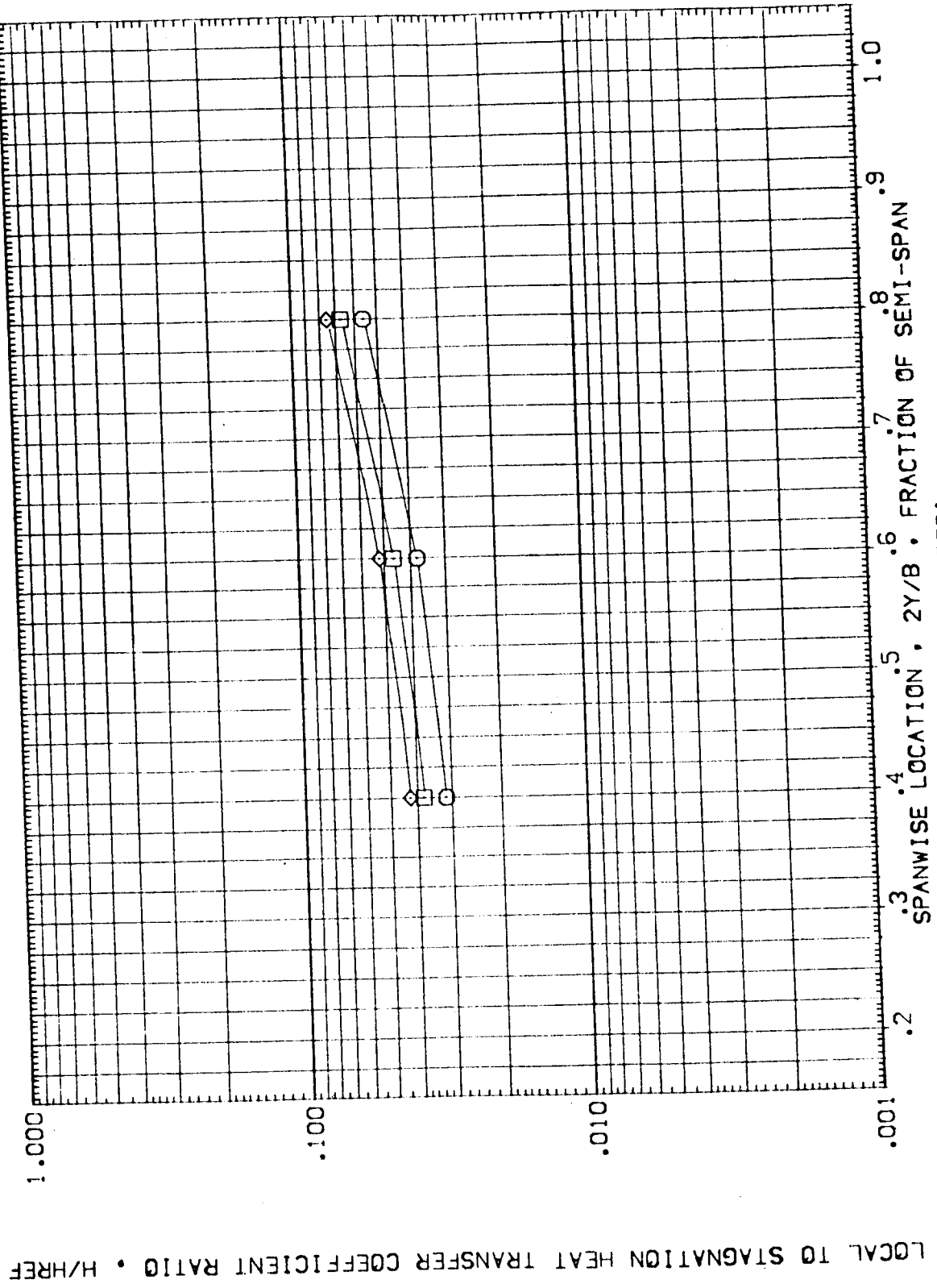
FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .050

ALPHA BETA RN/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

CONFIGURATION DESCRIPTION
 ARC 3.5-178 I-H3 ORBITER (TRIPS) WING TOP
 ARC 3.5-178 I-H3 ORBITER (TRIPS) WING TOP
 ARC 3.5-178 I-H3 ORBITER (TRIPS) WING TOP

DATA SET SYMBOL
 {RE|||08} □
 {AE|||08} ◇
 {BE|||08}



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FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE1108) Q ARC 3.5-178 [H3 ORBITER (TRIPS) WING TOP] .000 .000 1.500 1.000

(AE1108) Q ARC 3.5-178 [H3 ORBITER (TRIPS) WING TOP] .000 .000 1.500 .900

(BE1108) Q ARC 3.5-178 [H3 ORBITER (TRIPS) WING TOP] .000 .000 1.500 .850

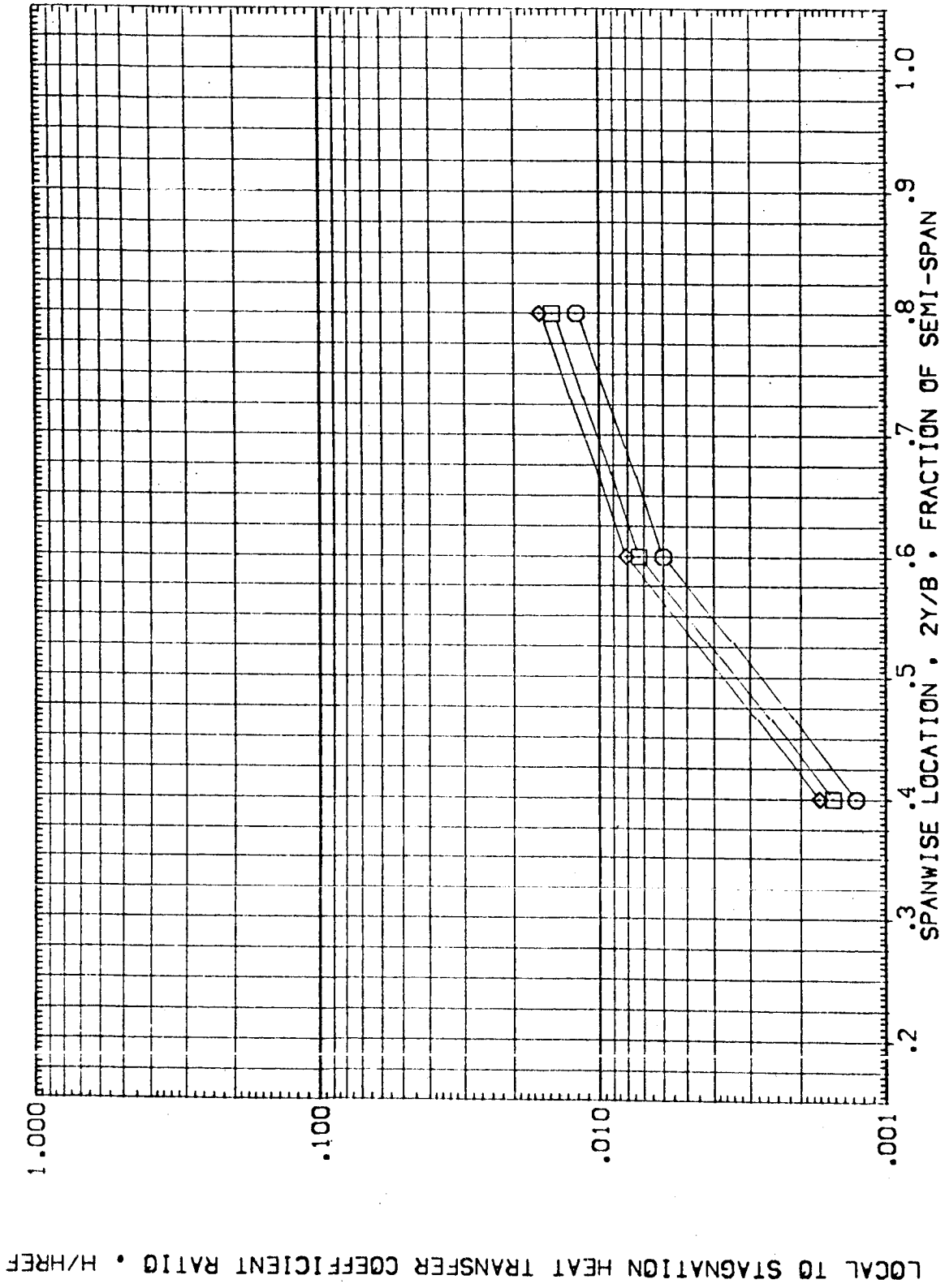





FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1108)  ARC 3.5-178 I13 ORBITER (TRIP)WING TOP
 (AE1108)  ARC 3.5-178 I13 ORBITER (TRIP)WING TOP
 (BE1108)  ARC 3.5-178 I13 ORBITER (TRIP)WING TOP

ALPHA .000
 BETA .000
 RV/L 1.500
 HAV/HT 1.000

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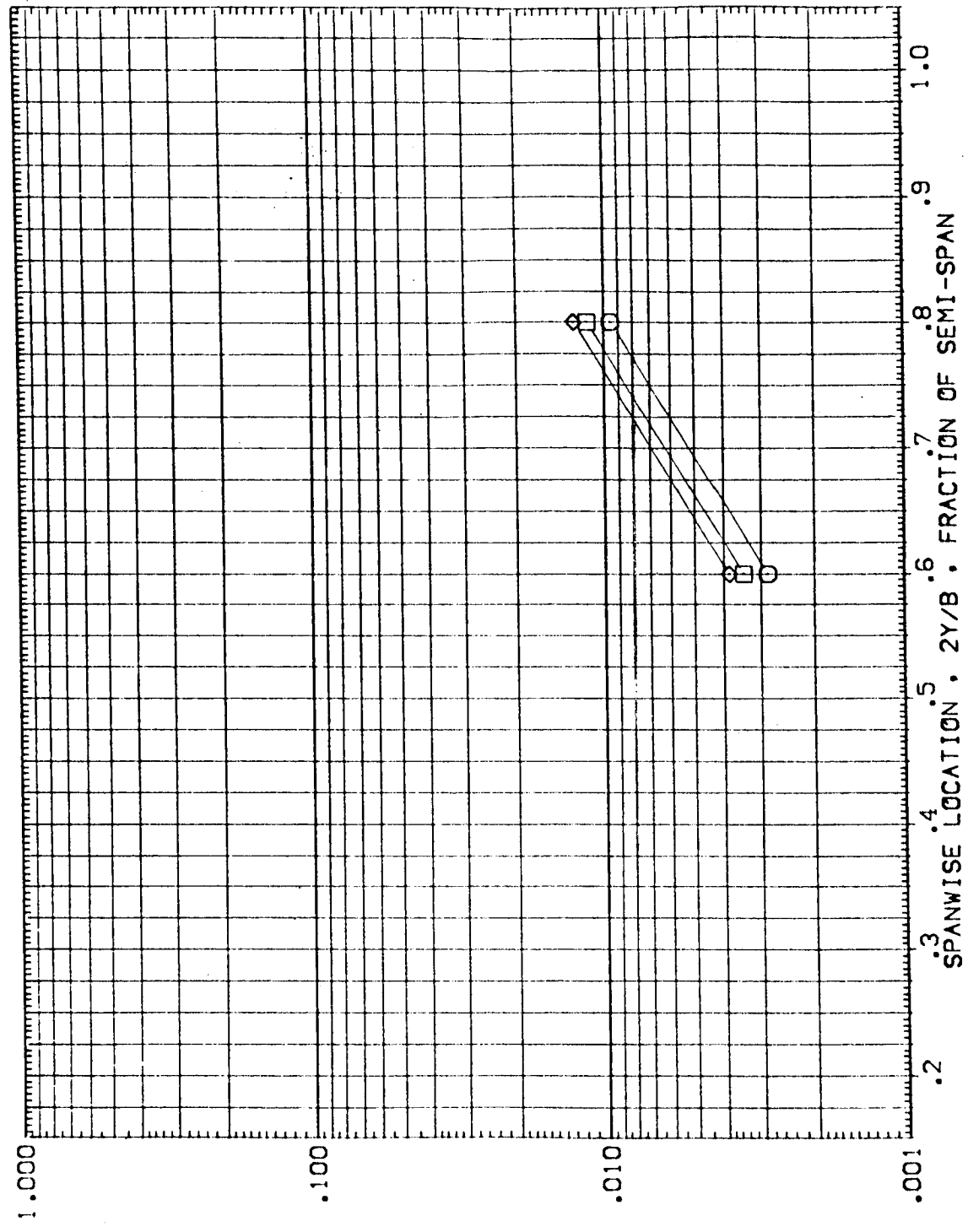


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .800



DATA SET SYMBOL: CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

(RE1108)	ARC 3.5-178	H3 ORBITER (TRIPS) WING TOP	.000	.000	1.500	1.000
(AE1108)	ARC 3.5-178	H3 ORBITER (TRIPS) WING TOP	.000	.000	1.500	.900
(BE1108)	ARC 3.5-178	H3 ORBITER (TRIPS) WING TOP	.000	.000	1.500	.850

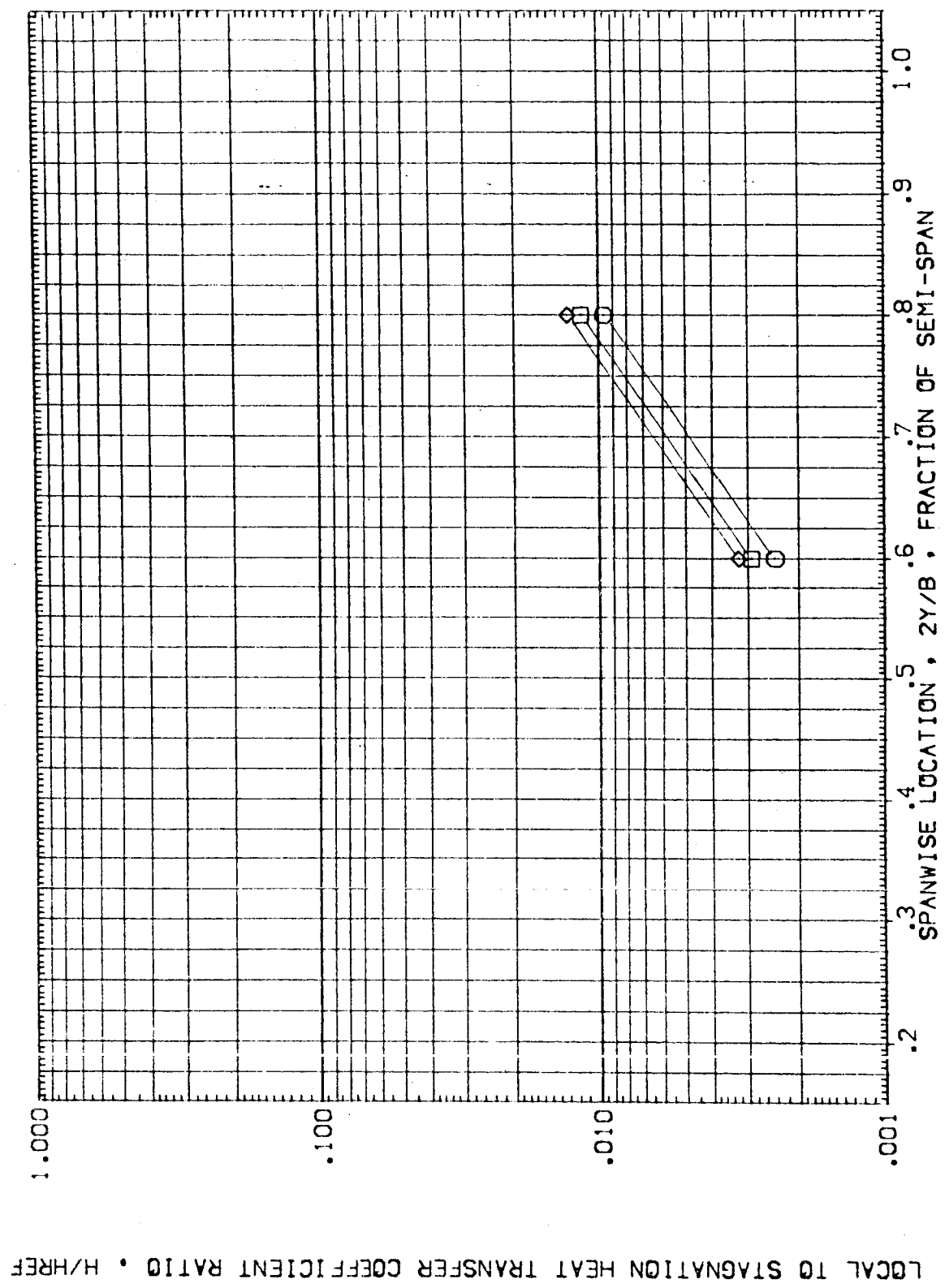


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE1108) O ARC 3.5-178 IH3 ORBITER (TRIPS)WING TOP .000 .000 1.500 1.000

(AE1108) O ARC 3.5-178 IH3 ORBITER (TRIPS)WING TOP .000 .000 1.500 .900

(BE1108) O ARC 3.5-178 IH3 ORBITER (TRIPS)WING TOP .000 .000 1.500 .850

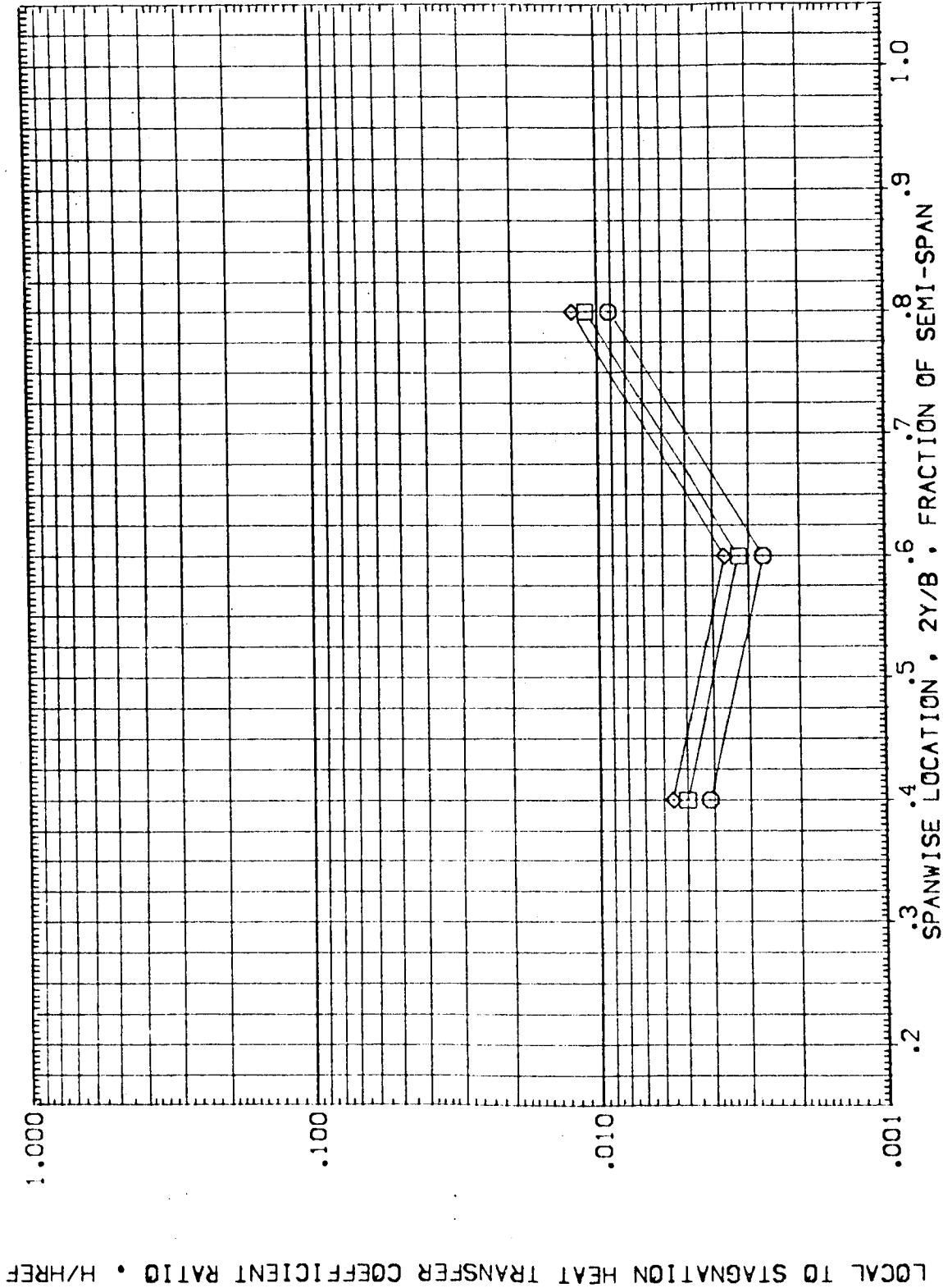


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .950



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE1109) O ARC 3.5-178 IH3 ORBITER (TRIPS) WING TOP .000 .000 5.000 1.000

(AE1109) O ARC 3.5-178 IH3 ORBITER (TRIPS) WING TOP .000 .000 5.000 .900

(BE1109) X ARC 3.5-178 IH3 ORBITER (TRIPS) WING TOP .000 .000 5.000 .850

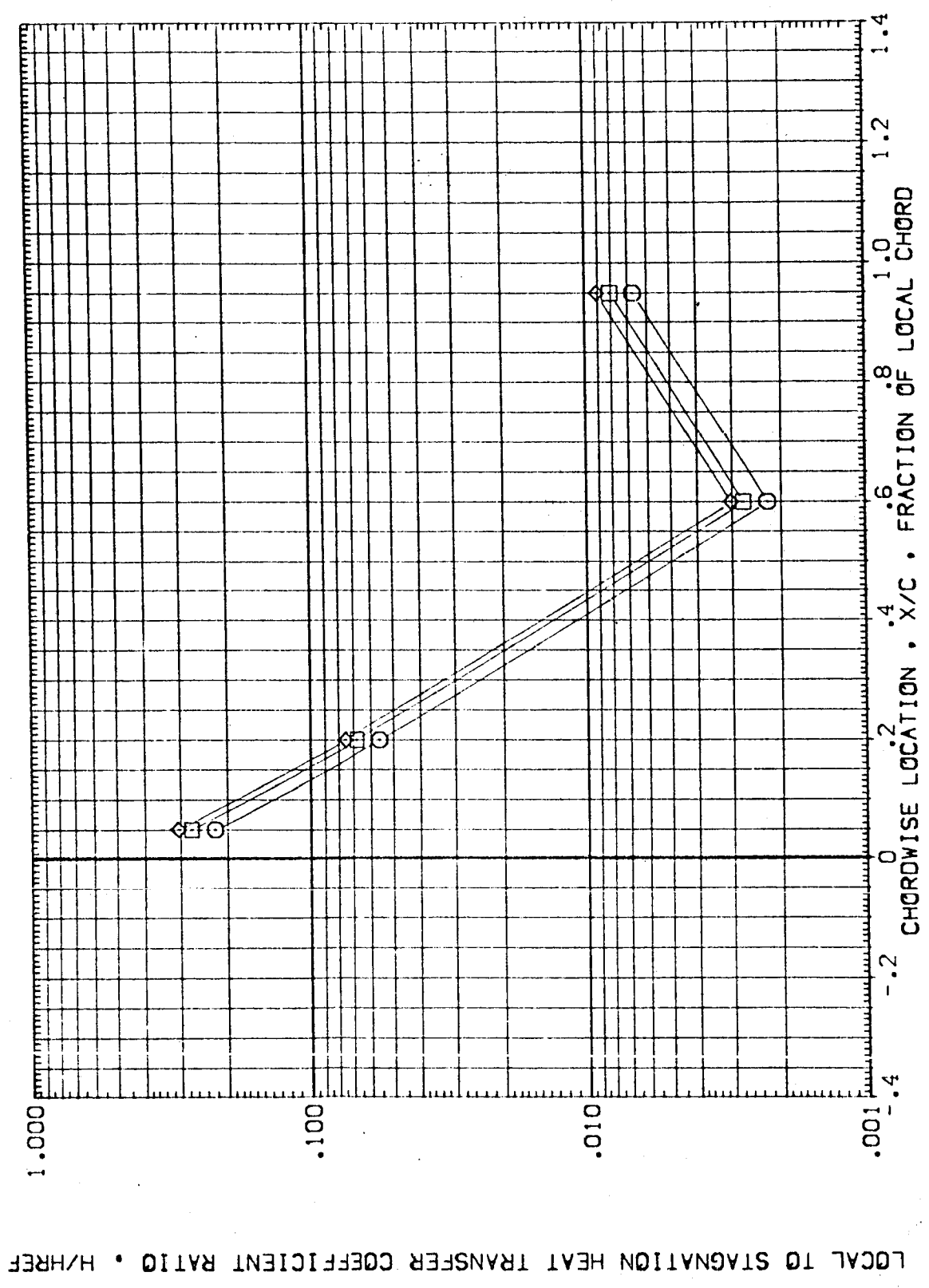


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/Z HAW/HT

(RE||09) O ARC 3.5-178 IH3 ORBITER (TRIPS)WING TOP

(AE||09) ◊ ARC 3.5-178 IH3 ORBITER (TRIPS)WING TOP

(BE||09) ◊ ARC 3.5-178 IH3 ORBITER (TRIPS)WING TOP

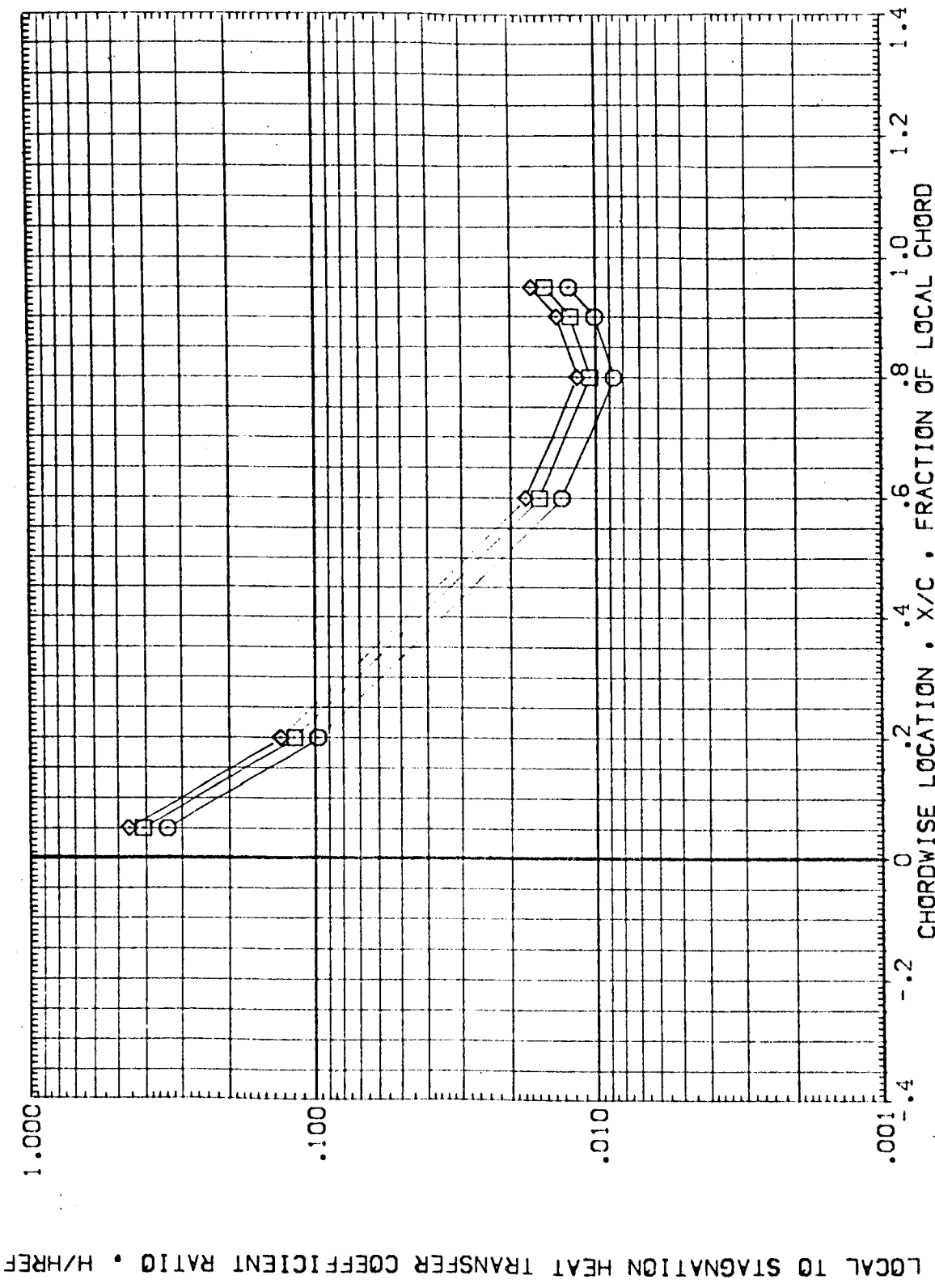


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT
 (RE1109) O ARC 3.5-178 H3 ORBITER (TRIPS) WING TOP .000 .000 5.000 1.000
 (AE1109) O ARC 3.5-178 H3 ORBITER (TRIPS) WING TOP .000 .000 5.000 .900
 (BE1109) O ARC 3.5-178 H3 ORBITER (TRIPS) WING TOP .000 .000 5.000 .850

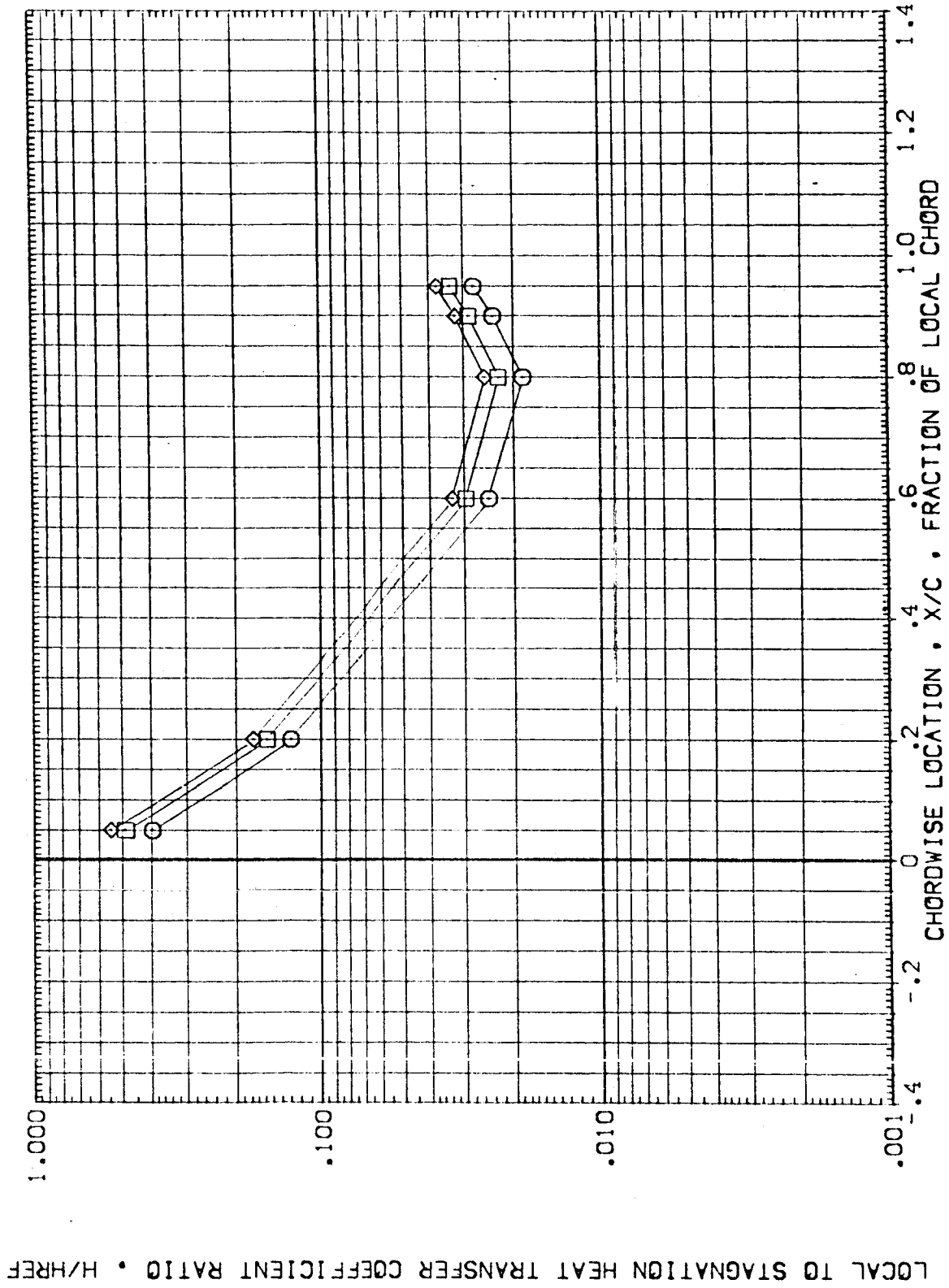
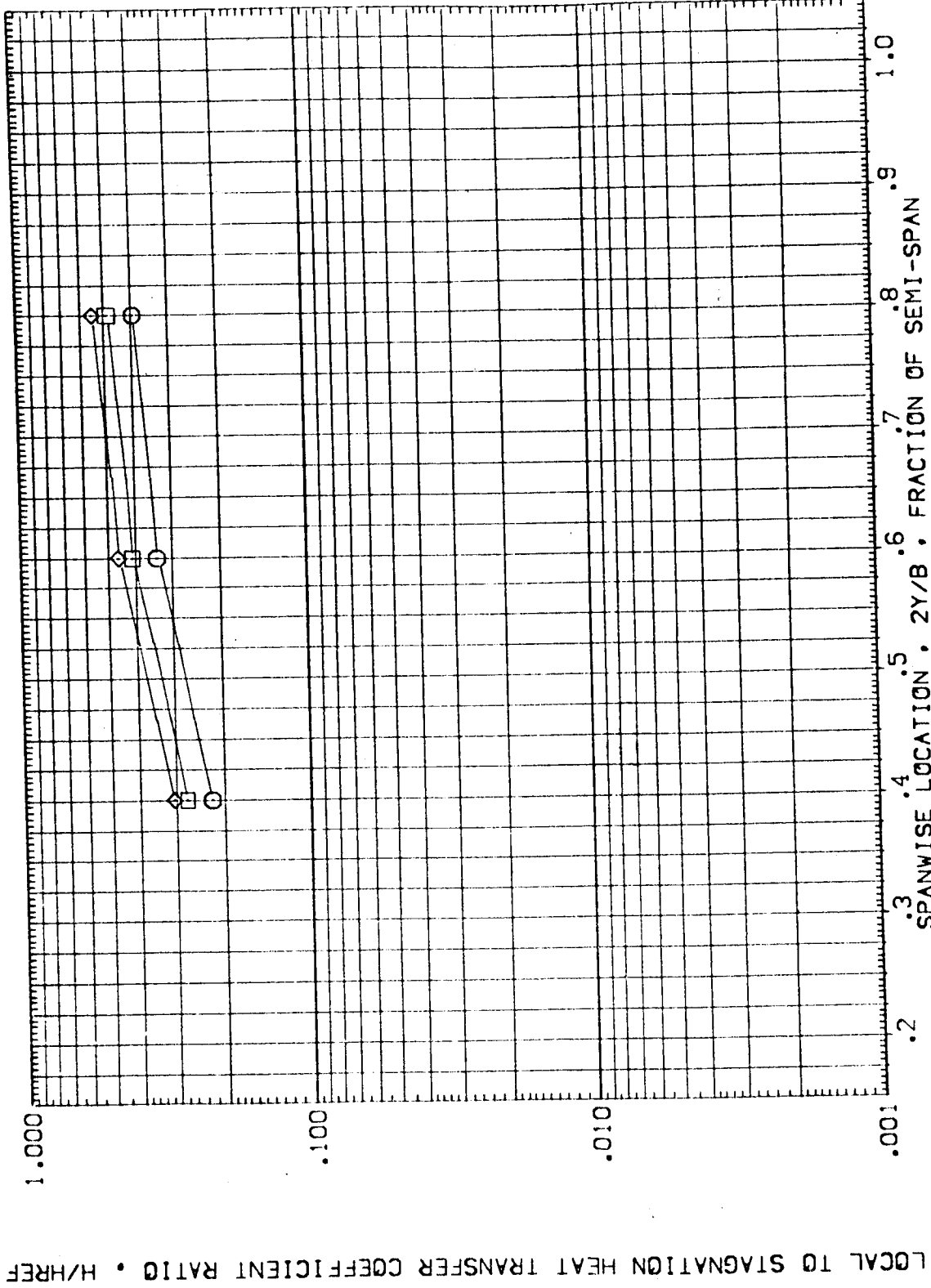


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 2Y/B = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1109) O ARC 3.5-178 I-3 ORBITER (TRIPS)WING TOP
 (AE1109) X ARC 3.5-178 I-3 ORBITER (TRIPS)WING TOP
 (BE1109) O ARC 3.5-178 I-3 ORBITER (TRIPS)WING TOP

ALPHA BETA RN/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850



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FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .050



DATA SET SYMBOL. CONFIGURATION DESCRIPTION ALPHA BETA RVN/L MAV/HT
 [RE1109] [O] ARC 3.5-178 IH3 ORBITER (TRIPS) WING TOP .000 .000 5.000 1.000
 [AE1109] [◇] ARC 3.5-178 IH3 ORBITER (TRIPS) WING TOP .000 .000 5.000 .900
 [BE1109] [◇] ARC 3.5-178 IH3 ORBITER (TRIPS) WING TOP .000 .000 5.000 .850

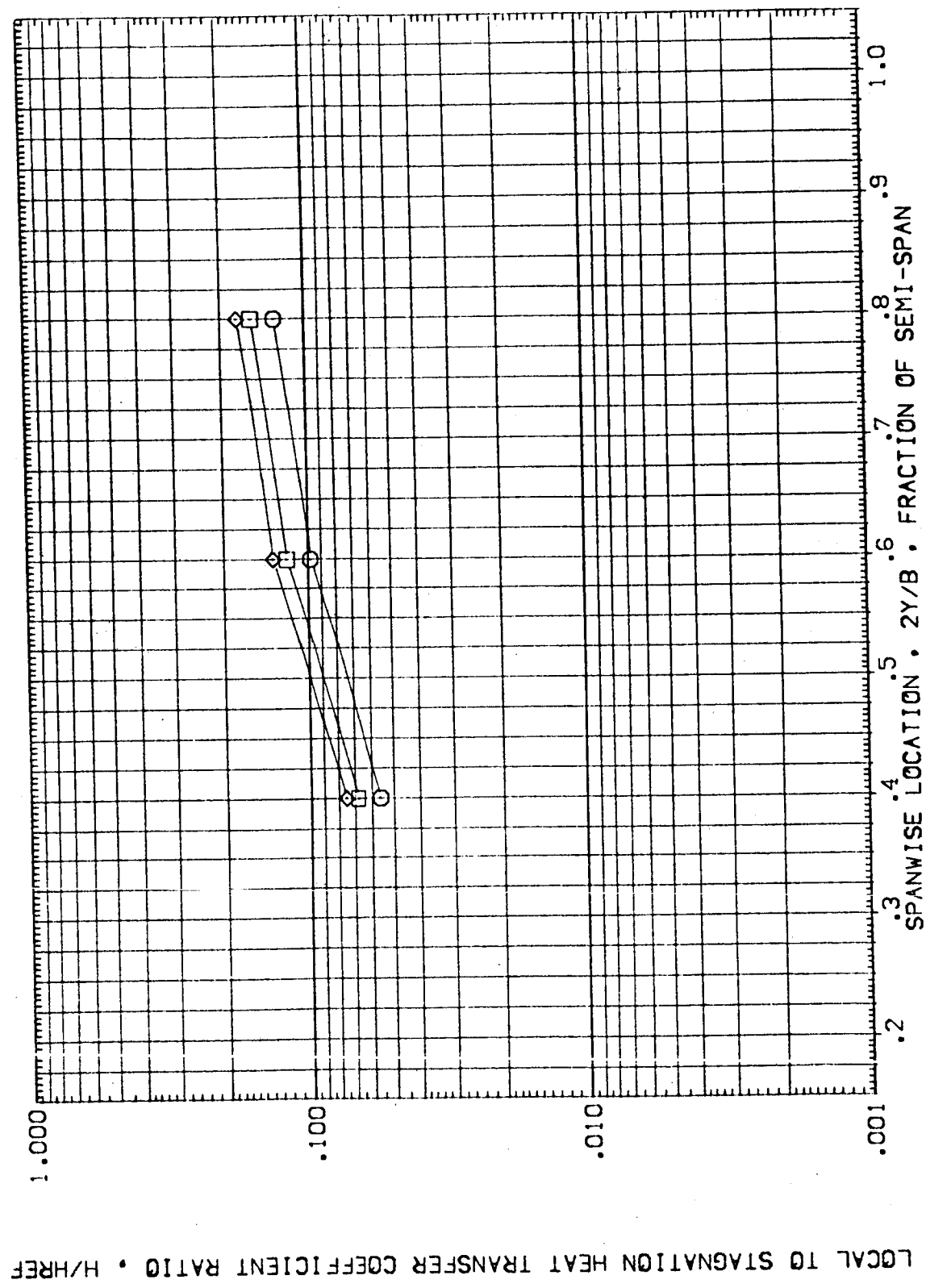


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE1109) O ARC 3.5-178 IH3 ORBITER (TRIPS)WING TOP .000 .000 5.000 1.000

(AE1109) X ARC 3.5-178 IH3 ORBITER (TRIPS)WING TOP .000 .000 5.000 .900

(BE1109) diamond ARC 3.5-178 IH3 ORBITER (TRIPS)WING TOP .000 .000 5.000 .850

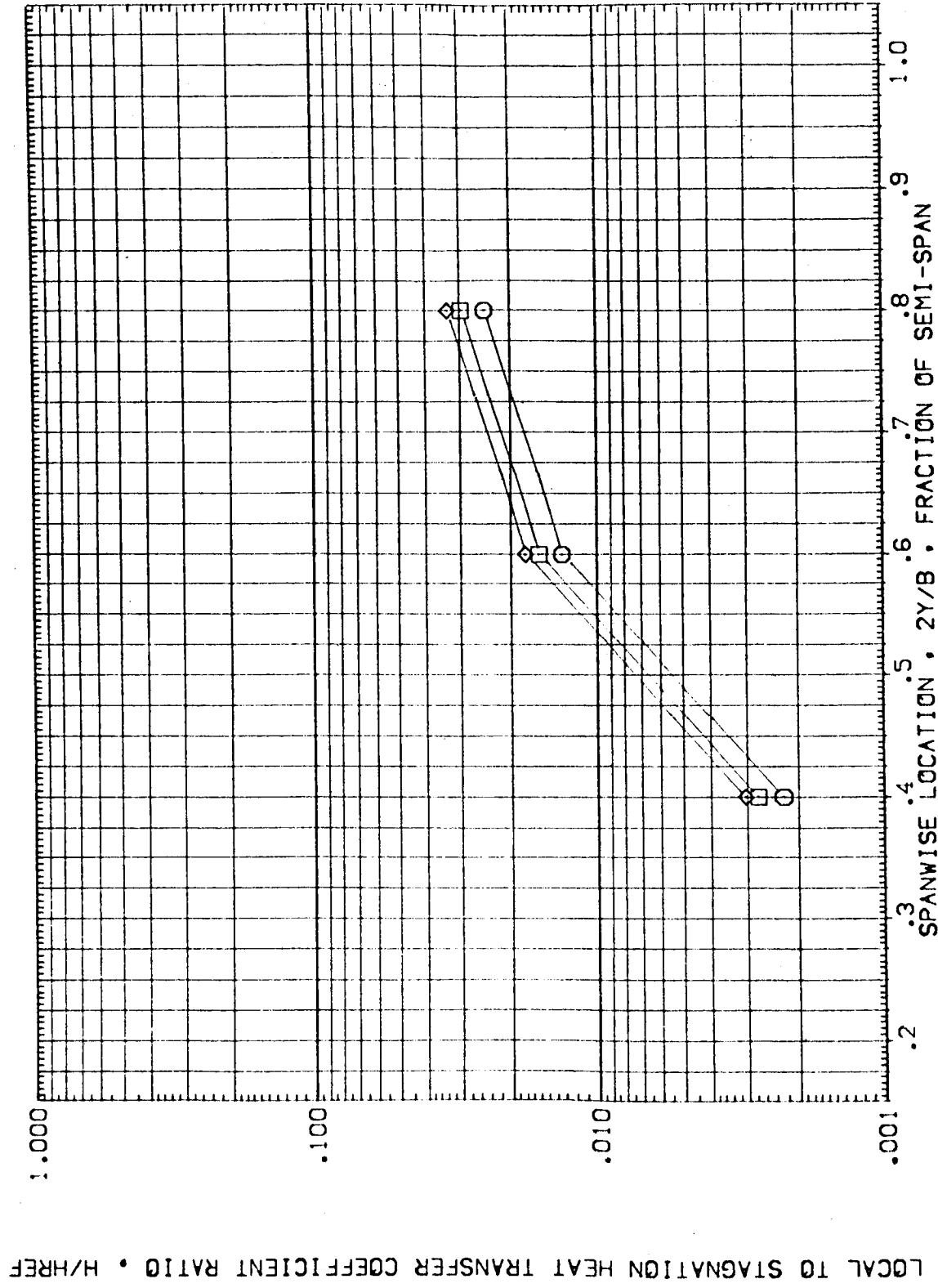


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

[RE][08]	○	ARC 3.5-178 H3 ORBITER (TRIP) WING TOP	.000	.000	5.000	1.000
[AE][08]	◇	ARC 3.5-178 H3 ORBITER (TRIP) WING TOP	.000	.000	5.000	.900
[BE][08]	◇	ARC 3.5-178 H3 ORBITER (TRIP) WING TOP	.000	.000	5.000	.850

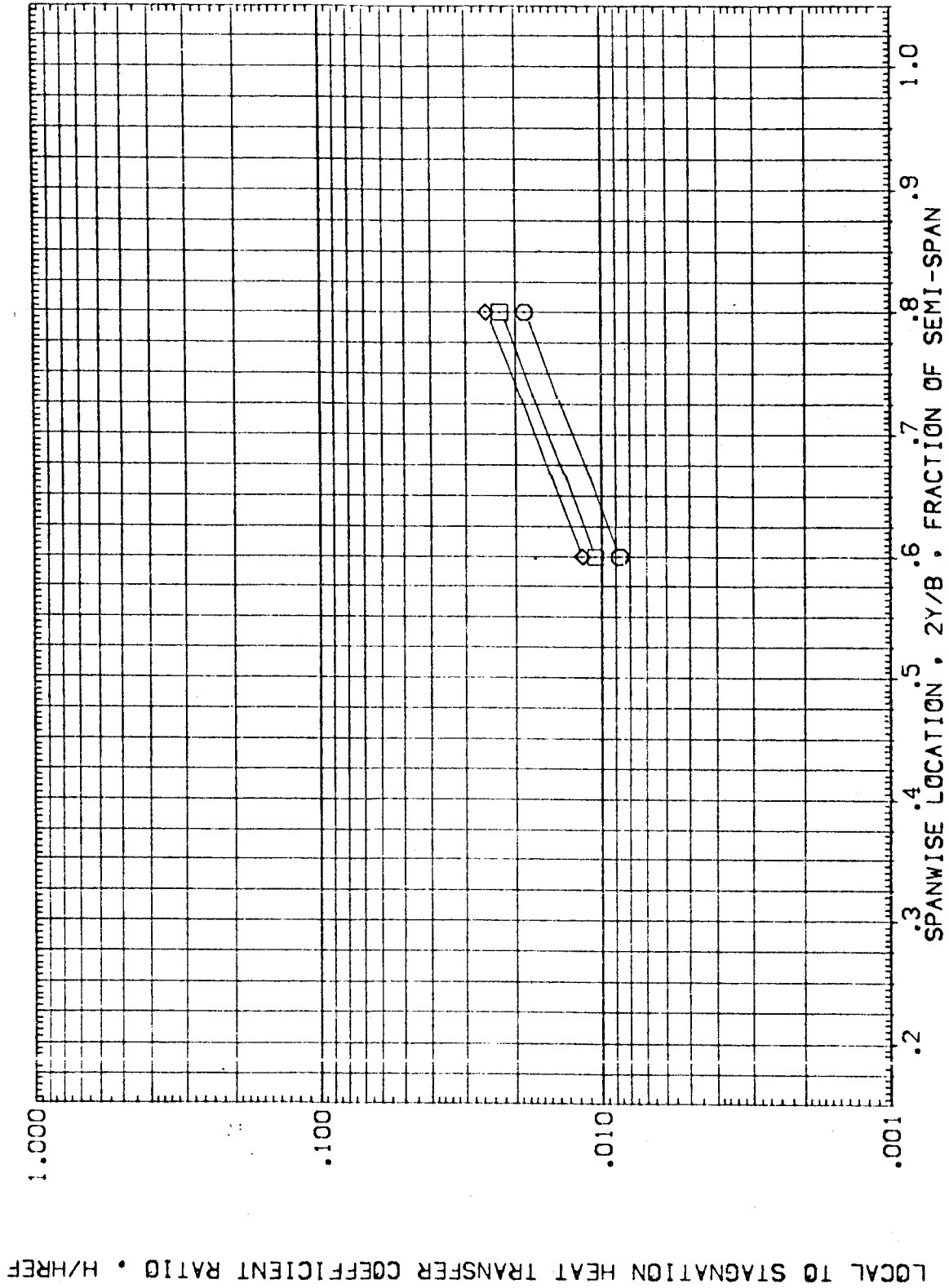


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .800

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DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAW/HT
 (RE:109) O ARC 3.5-178 H3 ORBITER (TRIPS)WING TOP .000 .000 5.000 1.000
 (AE:109) X ARC 3.5-178 H3 ORBITER (TRIPS)WING TOP .000 .000 5.000 .900
 (BE:109) X ARC 3.5-178 H3 ORBITER (TRIPS)WING TOP .000 .000 5.000 .850

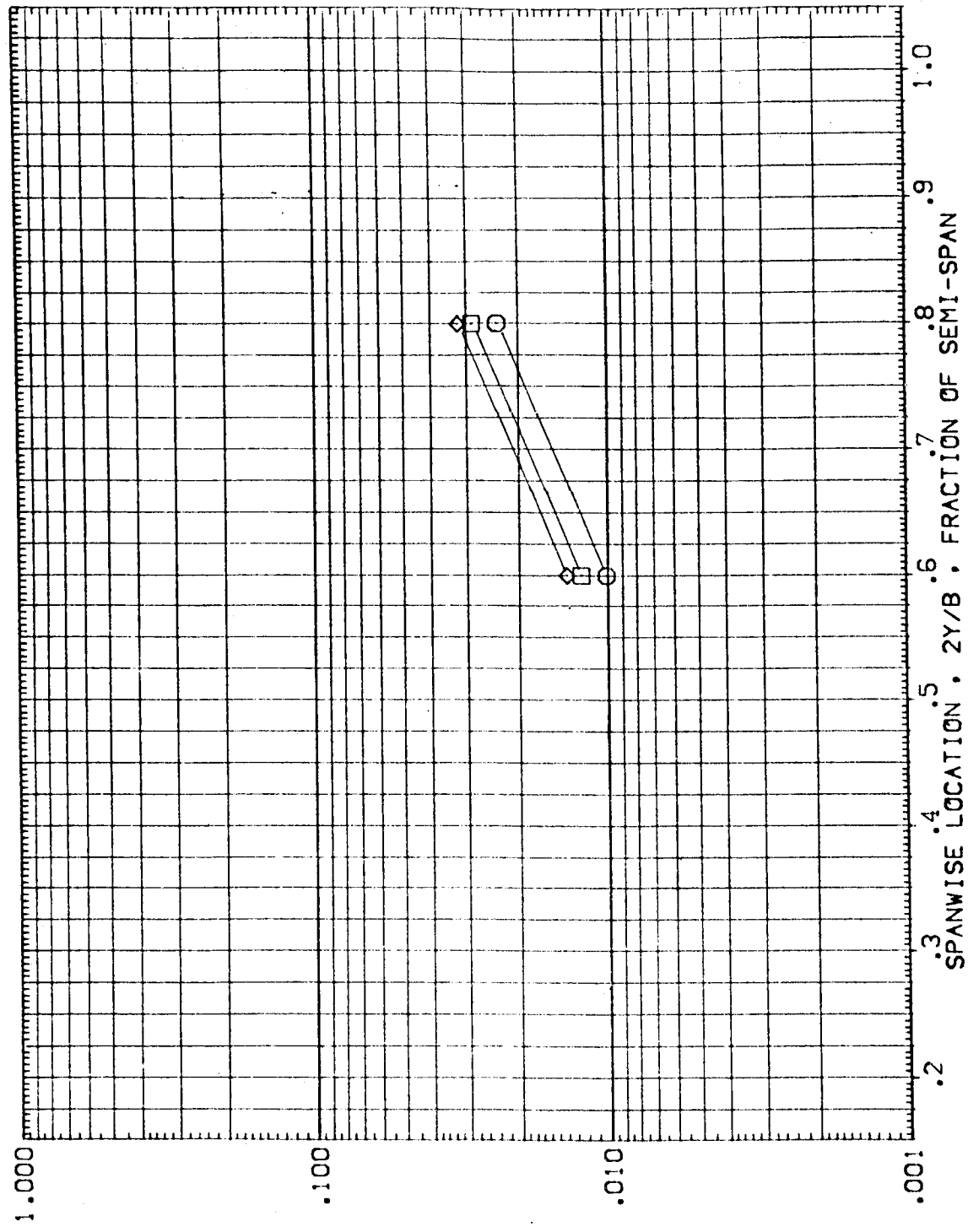




FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)


MACH = 5.300 X/C = .900



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

(RE1109)  A 3.5-178 I-H3 ORBITER (TRIPS) VING TOP .000 .000 5.000 1.000

(AE1109)  ARC 3.5-178 I-H3 ORBITER (TRIPS) VING TOP .000 .000 5.000 .900

(BE1109)  ARC 3.5-178 I-H3 ORBITER (TRIPS) VING TOP .000 .000 5.000 .850

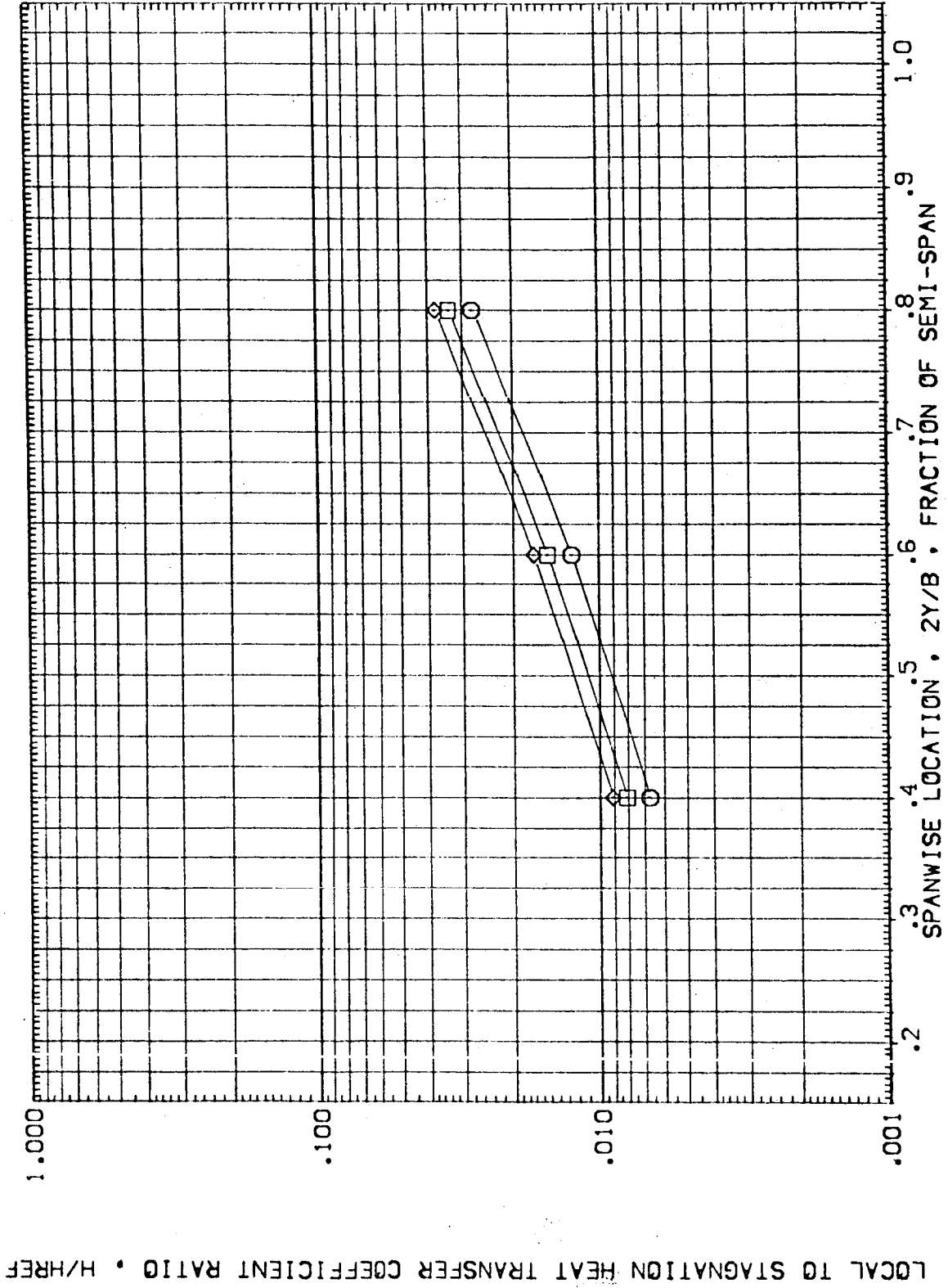


FIG. 31 WING TOP - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .950

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (RE1101) \square ARC 3.5-178 IH3 0+1+S
 (AE1101) \square ARC 3.5-178 IH3 0+1+S
 (BE1101) \diamond ARC 3.5-178 IH3 0+1+S

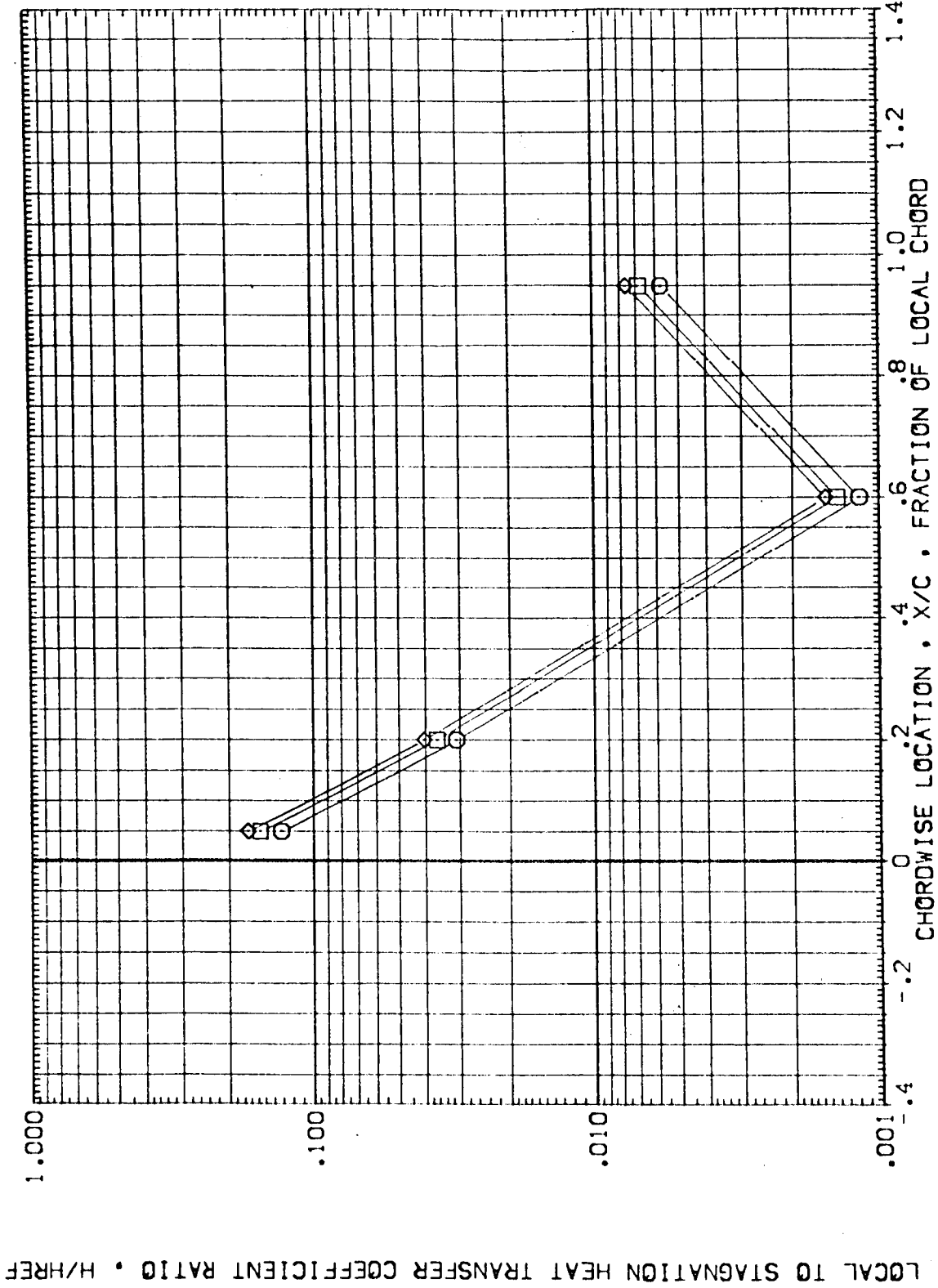
ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RN/L 1.500
 1.500
 1.500

HAV/HT 1.000
 .900
 .850

WING TOP
 WING TOP
 WING TOP



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CHORDWISE LOCATION • X/C • FRACTION OF LOCAL CHORD

FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .400



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE] [01] [ARC 3.5-178] [H3 0-T+S]
 [AE] [01] [ARC 3.5-178] [H3 0-T+S]
 [BE] [01] [ARC 3.5-178] [H3 0-T+S]

VING TOP
 VING TOP
 VING TOP

ALPHA BETA
 .000 .000
 .000 .000
 .000 .000

RN/L HAW/HT
 1.500 1.000
 1.500 .900
 1.500 .850

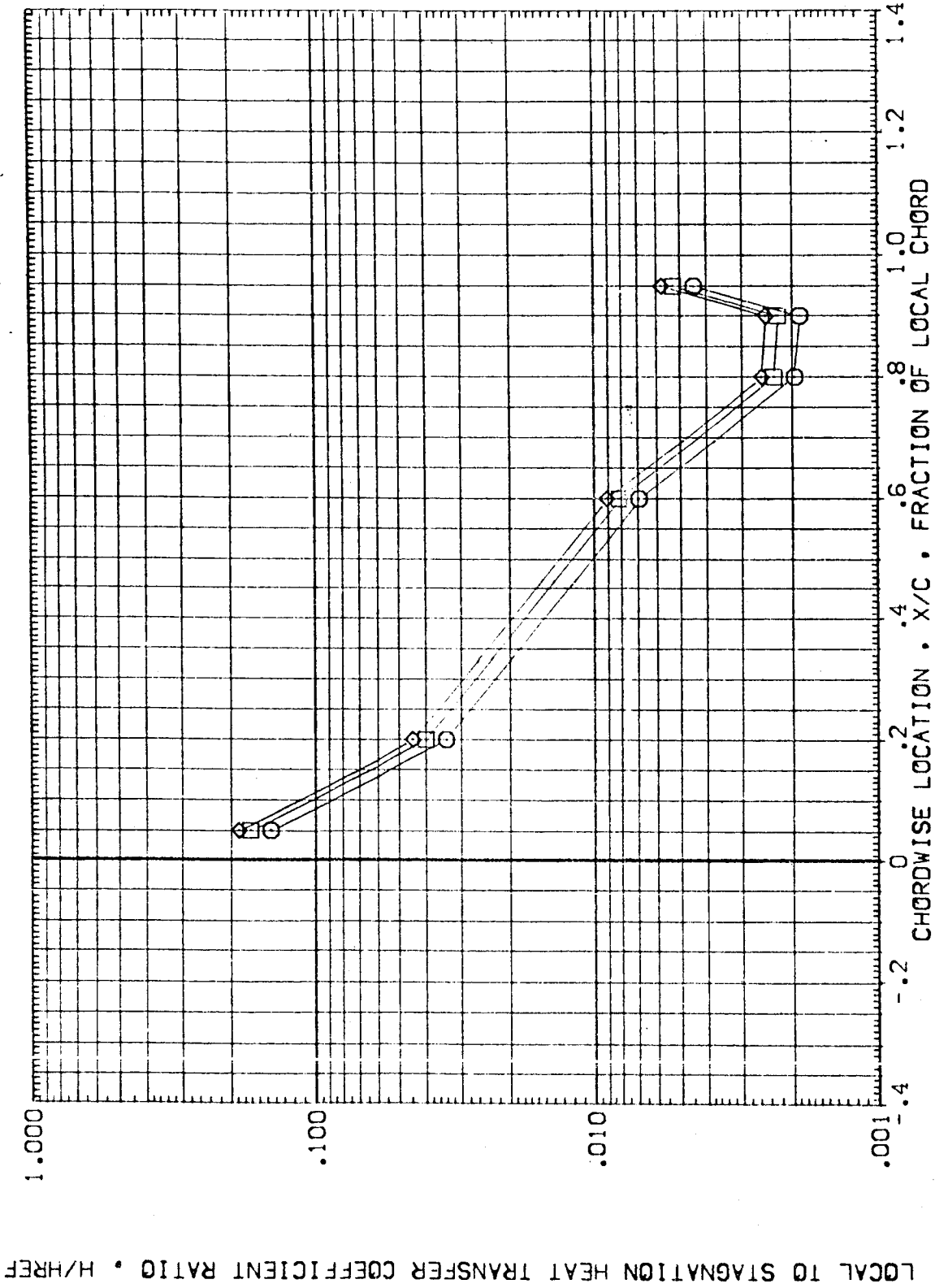


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE||0|) ARC 3.5-178 |H3 C+I+S
 (AE||0|) ARC 3.5-178 |H3 C+I+S
 (BE||0|) ARC 3.5-178 |H3 C+I+S

WING TOP
 WING TOP
 WING TOP

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

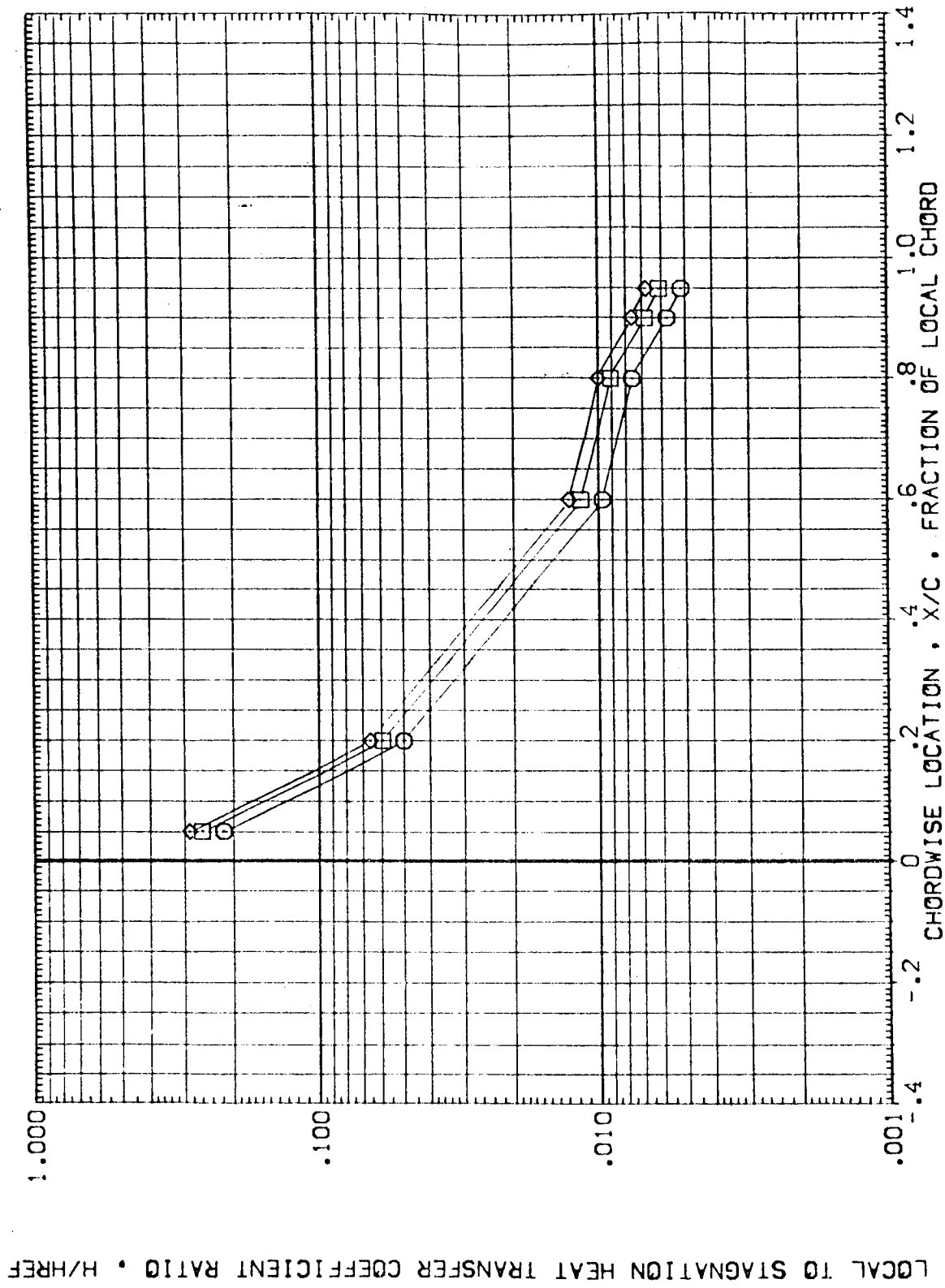


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

[RE||01] ARC 3.5-178 IH3 O+T+S .000 .000 1.500 1.000

[AE||01] ARC 3.5-178 IH3 O+T+S .000 .000 1.500 .900

[BE||01] ARC 3.5-178 IH3 O+T+S .000 .000 1.500 .850

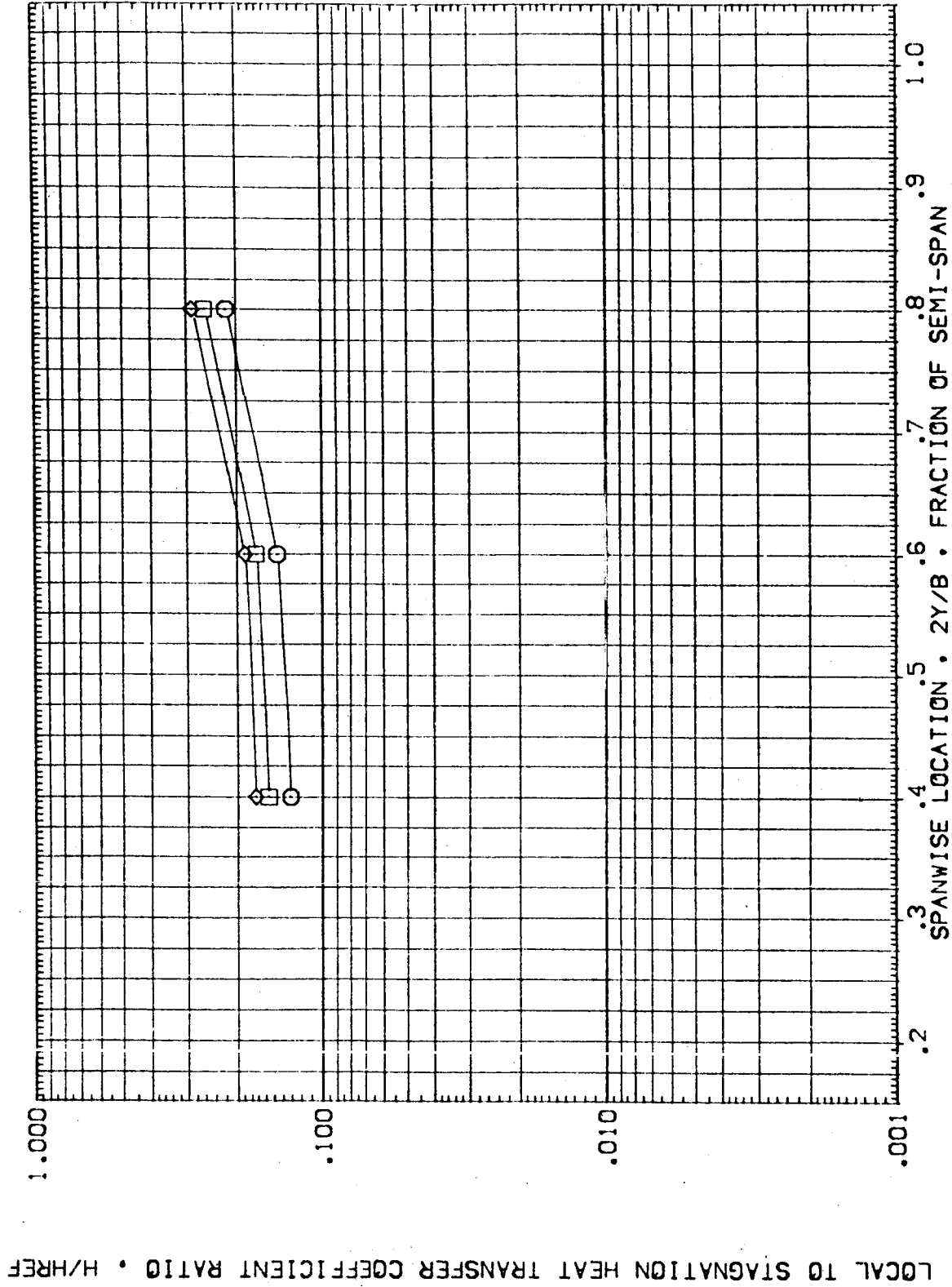


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE||101) O ARC 3.5-178 |H3 0-T+S
 (AE||101) O ARC 3.5-178 |H3 0-T+S
 (BE||101) O ARC 3.5-178 |H3 0-T+S

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

WING TOP
 WING TOP
 WING TOP

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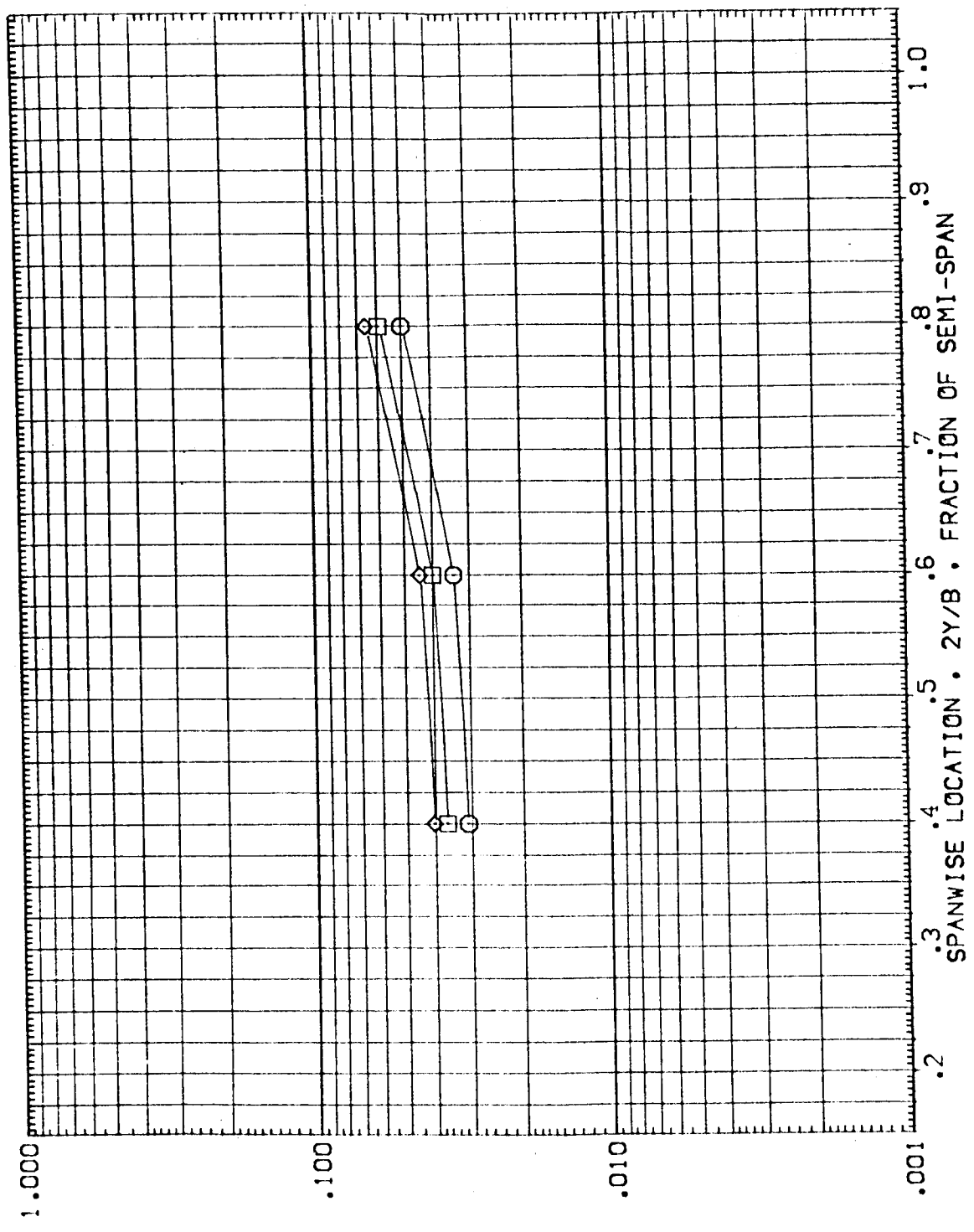


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .200

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING TOP	ALPHA	BETA	RN/L	HAW/HT
{RE }	ARC 3.5-178 H3 0+T+S	WING TOP	.000	.000	1.500	1.000
{AE }	ARC 3.5-178 H3 0+T+S	WING TOP	.000	.000	1.500	.900
{BE }	ARC 3.5-178 H3 0+T+S	WING TOP	.000	.000	1.500	.850

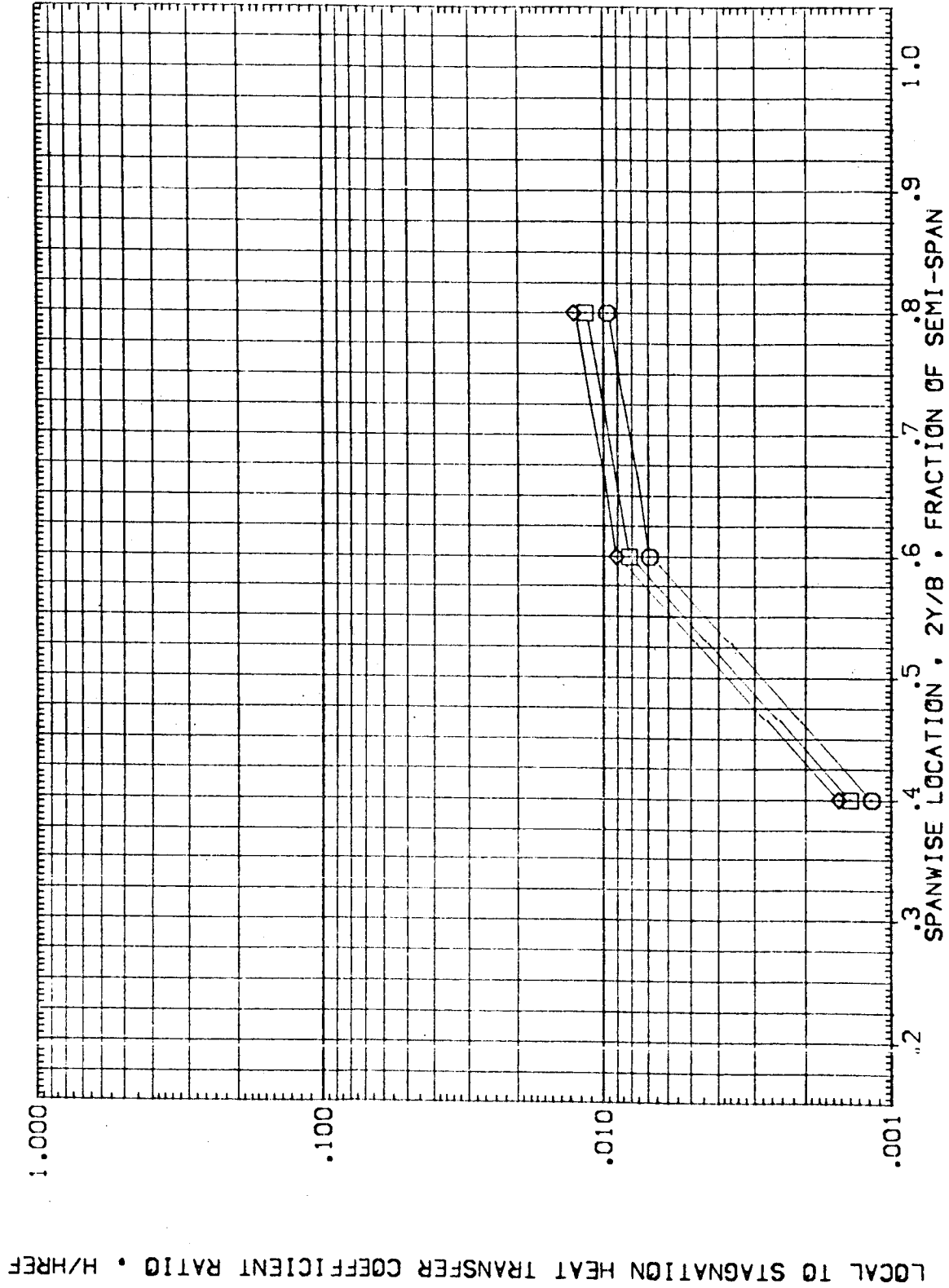


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

{RE||0|} ARC 3.5-178 IH3 0+T+S .000 .000 1.500 1.000

{AE||0|} ARC 3.5-178 IH3 0+T+S .000 .000 1.500 .900

{BE||0|} ARC 3.5-178 IH3 0+T+S .000 .000 1.500 .850

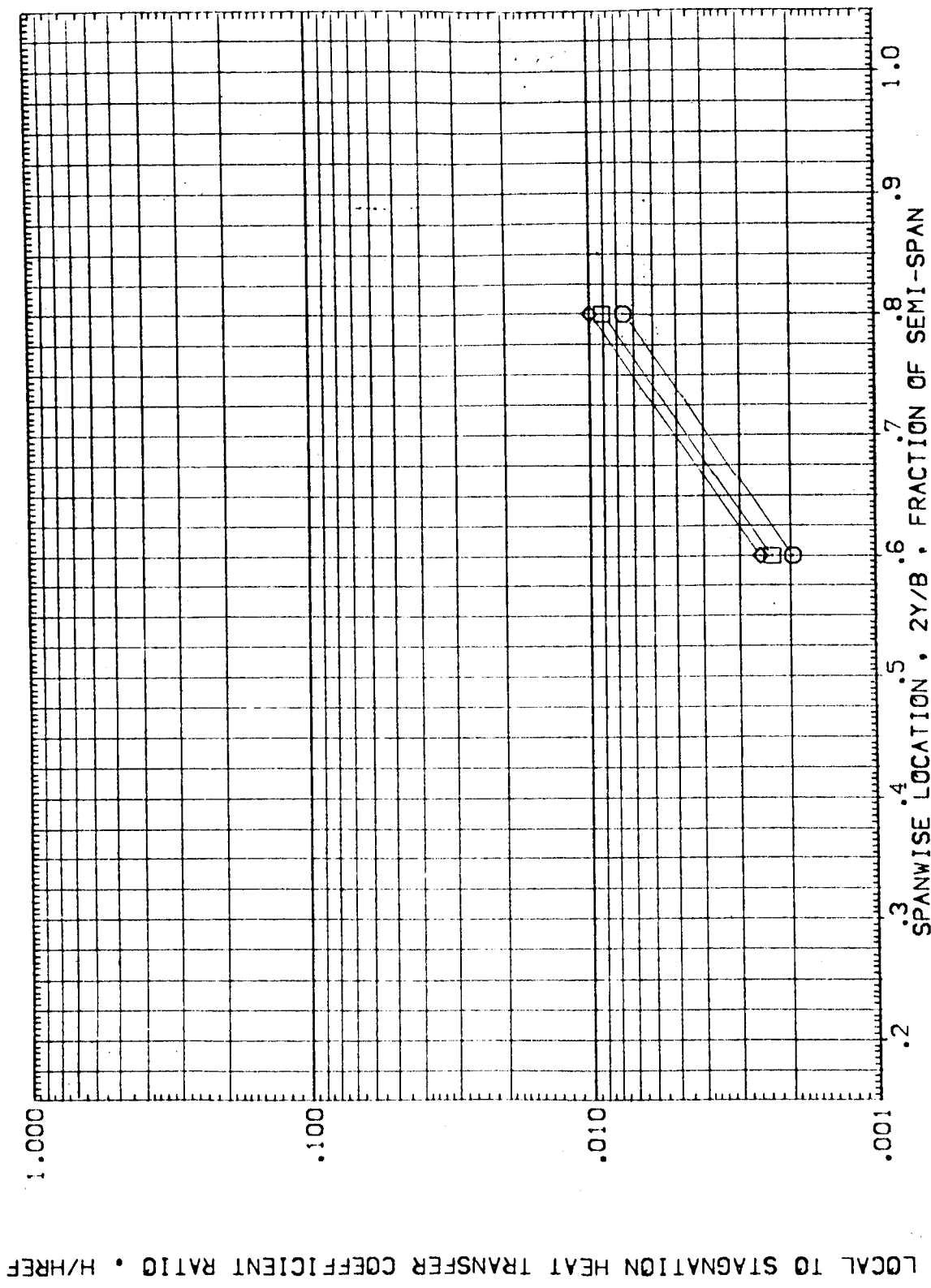


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .800



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

{RE|||0|} Q ARC 3.5-178 143 O+T+S .000 .000 1.500 1.000

{AE|||0|} O ARC 3.5-178 143 O+T+S .000 .000 1.500 .900

{BE|||0|} X ARC 3.5-178 143 O+T+S .000 .000 1.500 .850

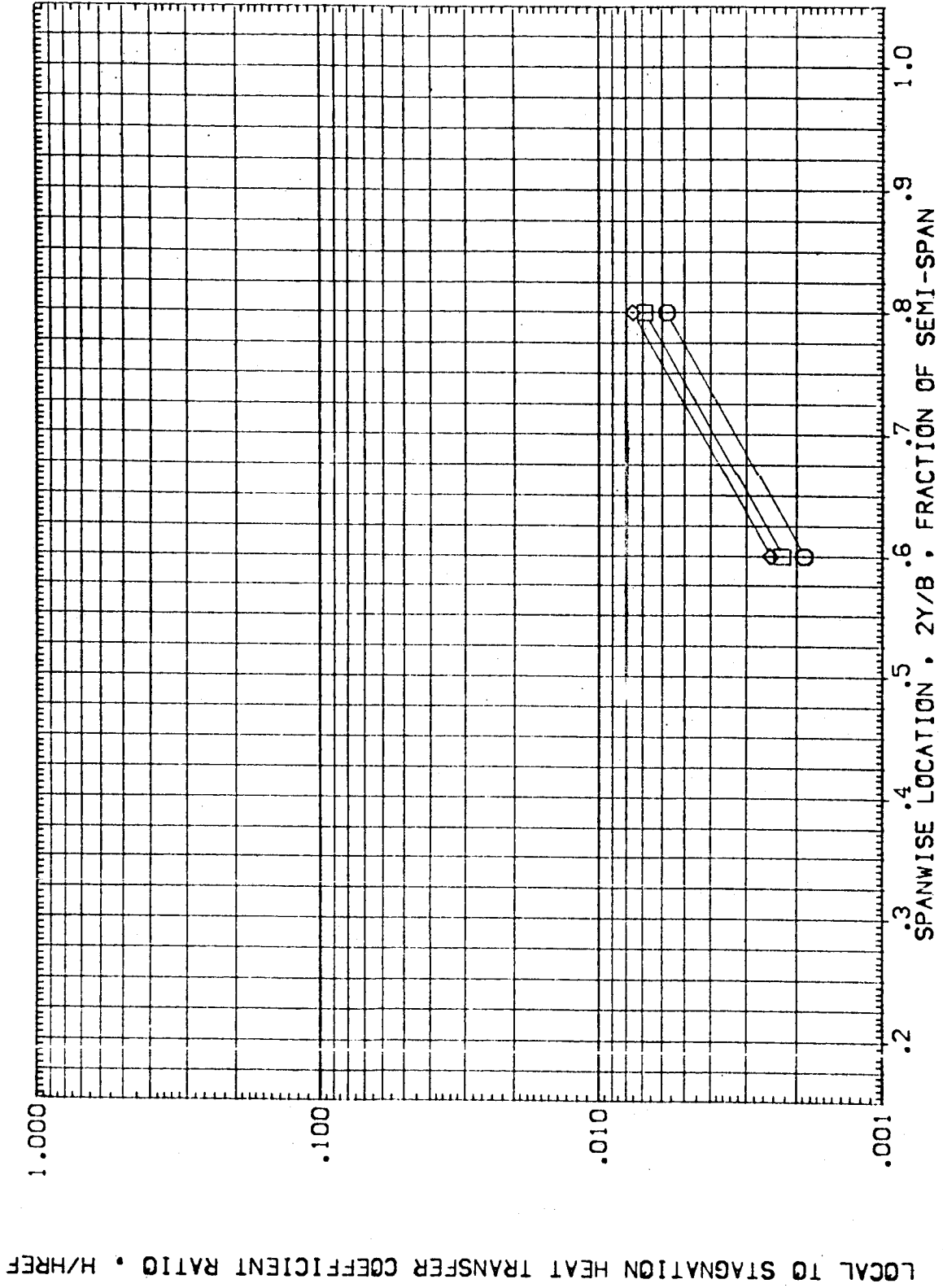


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING TOP ALPHA BETA RV/L HAV/HT

{RE||01} ARC 3.5-178 IH3 0+T+S WING TOP .000 .000 1.500 1.000

{AE||01} ARC 3.5-178 IH3 0+T+S WING TOP .000 .000 1.500 .900

{BE||01} ARC 3.5-178 IH3 0+T+S WING TOP .000 .000 1.500 .850

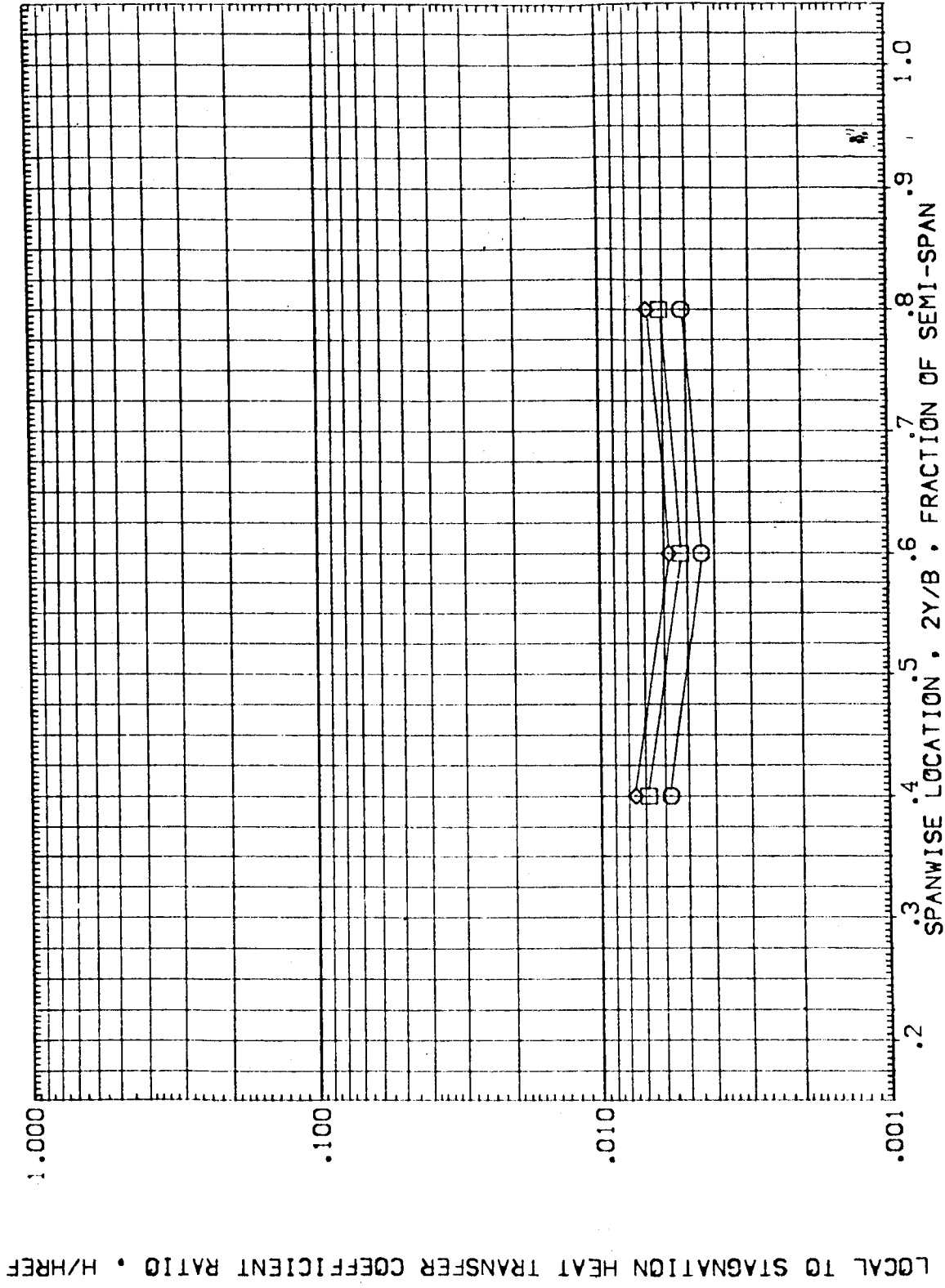


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .950

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(RE||02) O ARC 3.5-178 IH3 O+T+S .000 .000 5.000 1.000

(RE||02) L ARC 3.5-178 IH3 O+T+S .000 .000 5.000 .900

(BE||02) ◇ ARC 3.5-178 IH3 O+T+S .000 .000 5.000 .650

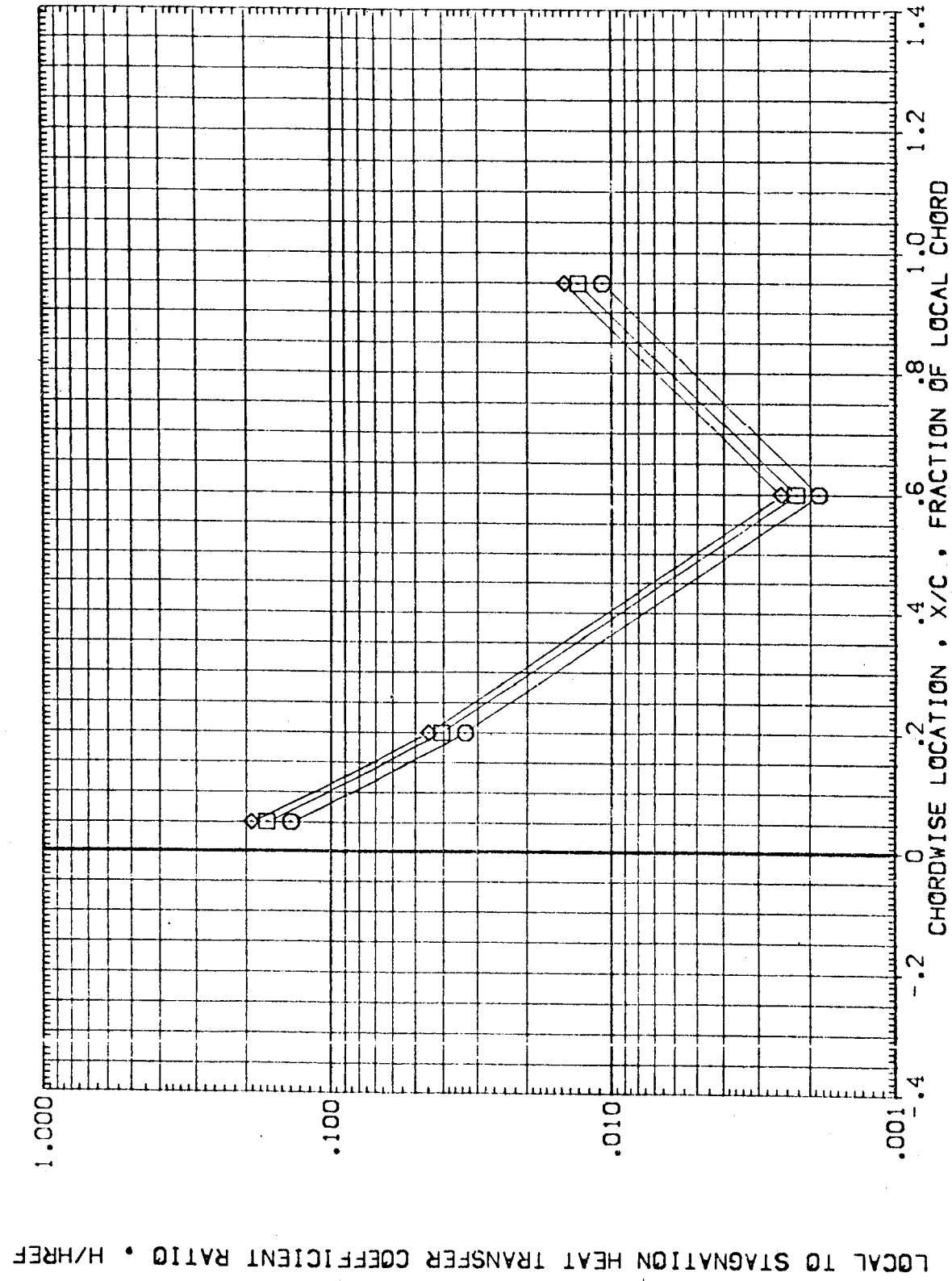


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE||02} ARC 3.5-178 |H3 C+T+S
 {AE||02} ARC 3.5-178 |H3 C+T+S
 {BE||02} ARC 3.5-178 |H3 C+T+S

ALPHA BETA RN/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

WING TOP
 WING TOP
 WING TOP

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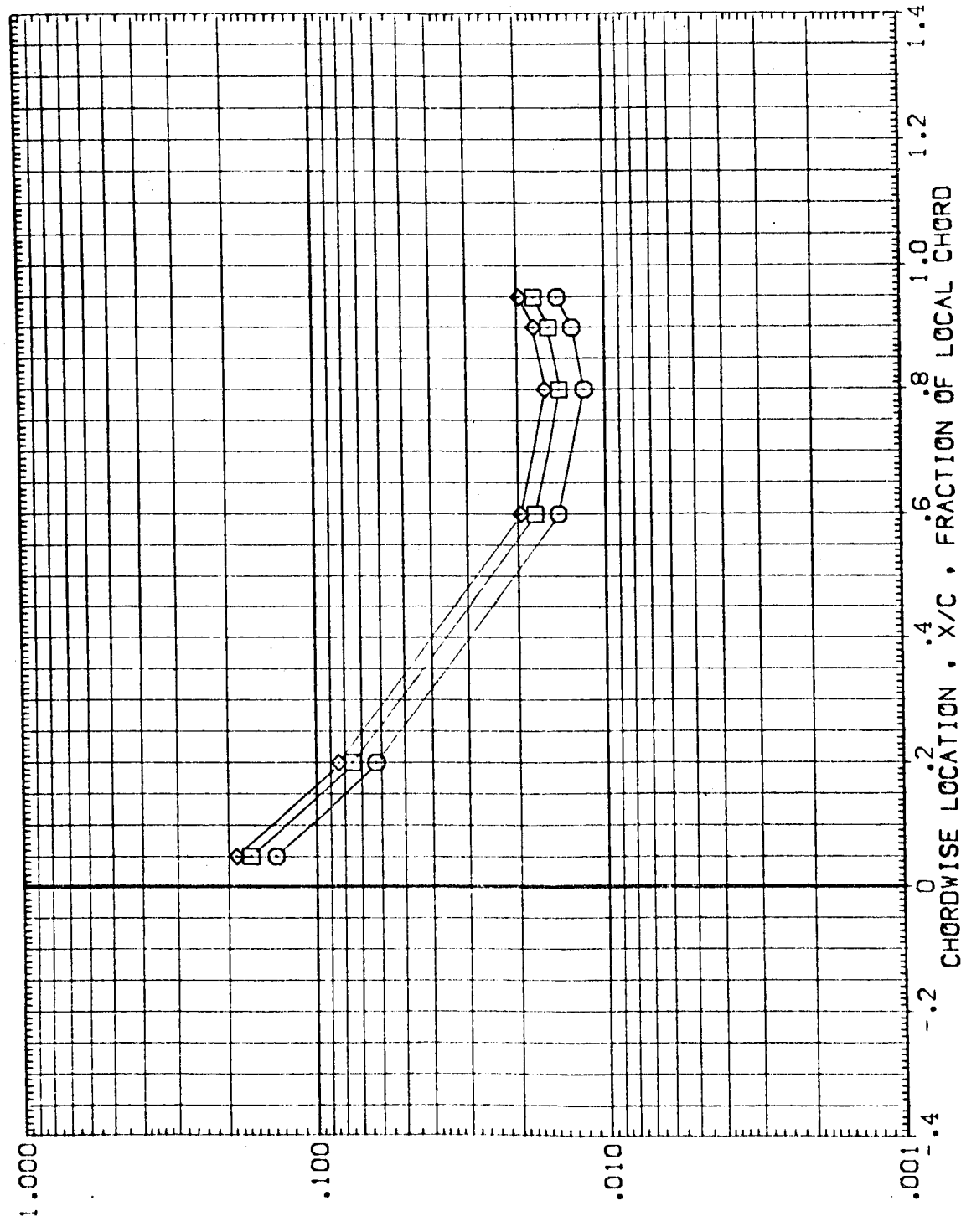


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

{RE1102} Q ARC 3.5-178 143 O+T+S .000 .000 5.000 1.000

{AE1102} O ARC 3.5-178 143 O+T+S .000 .000 5.000 .500

{BE1102} ◇ ARC 3.5-178 143 O+T+S .000 .000 5.000 .850

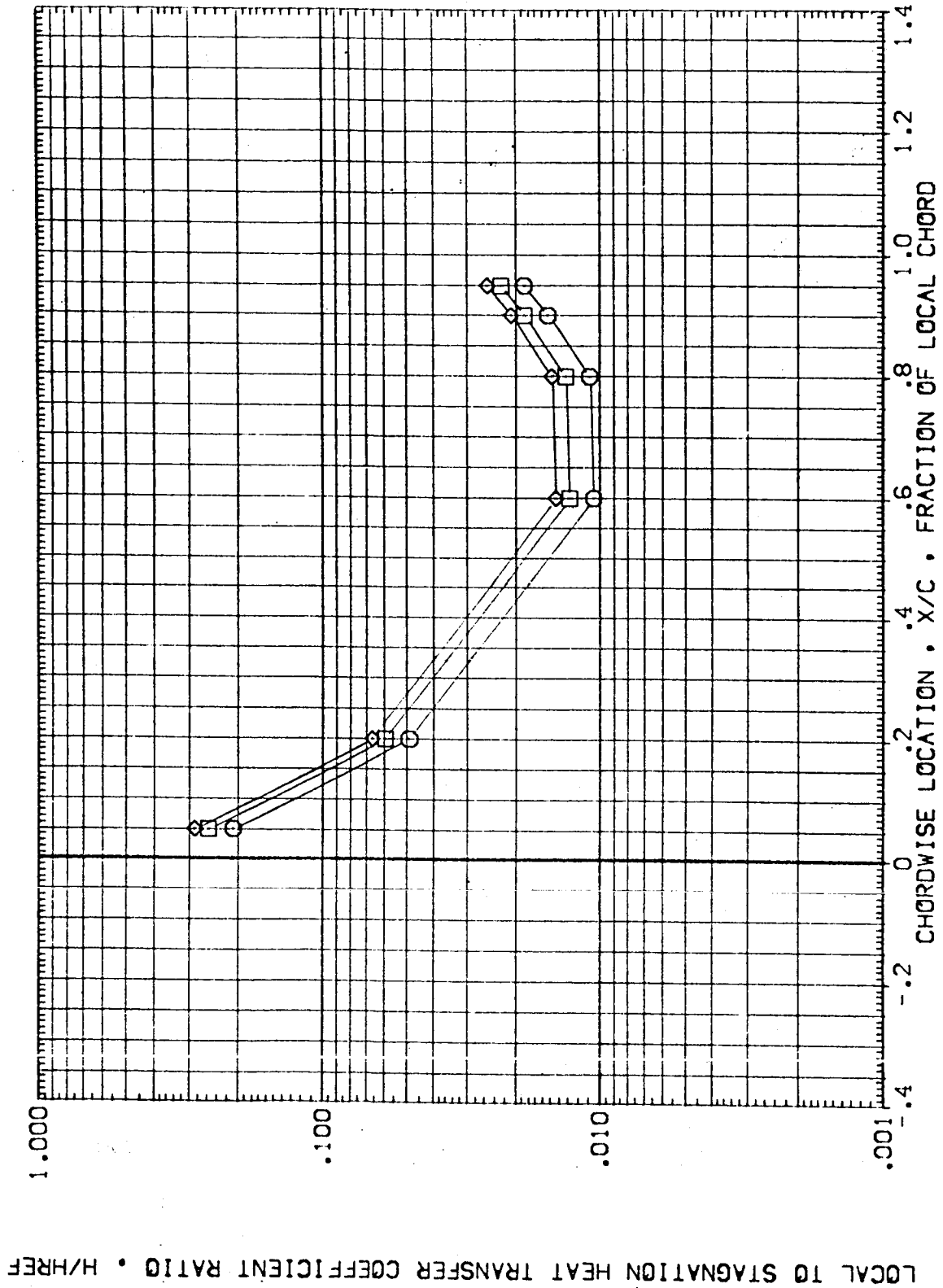


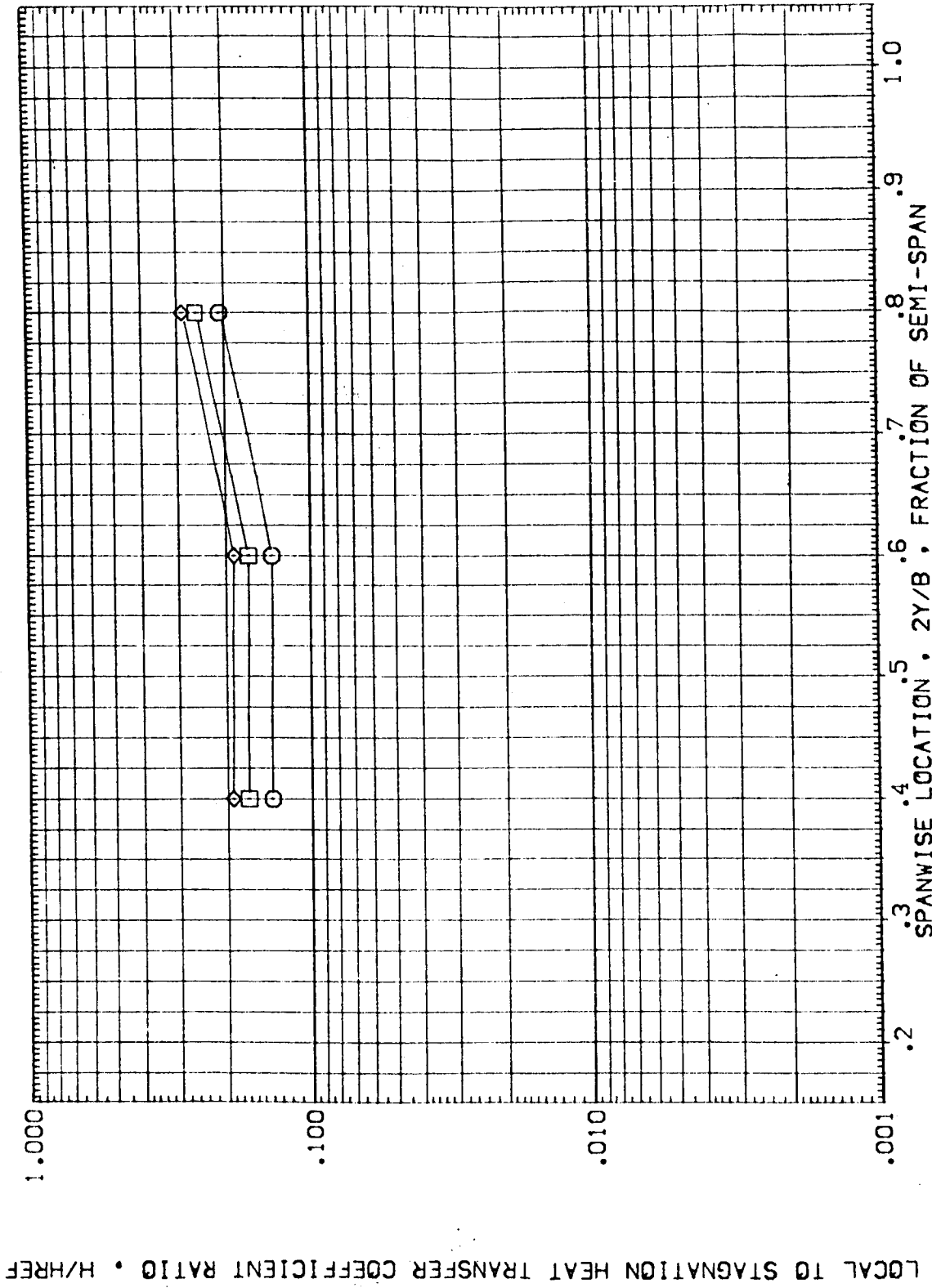
FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1102) ◯ ARC 3.5-178 IH3 O-T+S
 (AE1102) ◻ ARC 3.5-178 IH3 O-T+S
 (BE1102) ◇ ARC 3.5-178 IH3 O-T+S

WING TOP
 WING TOP
 WING TOP

ALPHA BETA RN/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .050



DATA SET SYMBOL CONFIGURATION DESCRIPTION WING TOP ALPHA BETA RVL HAV/HT

{RE1102} ARC 1.5-178 H3 O+T+S WING TOP .000 .000 5.000 1.000

{AE1102} ARC 1.5-178 H3 O+T+S WING TOP .000 .000 5.000 .900

{BE1102} ARC 1.5-178 H3 O+T+S WING TOP .000 .000 5.000 .850

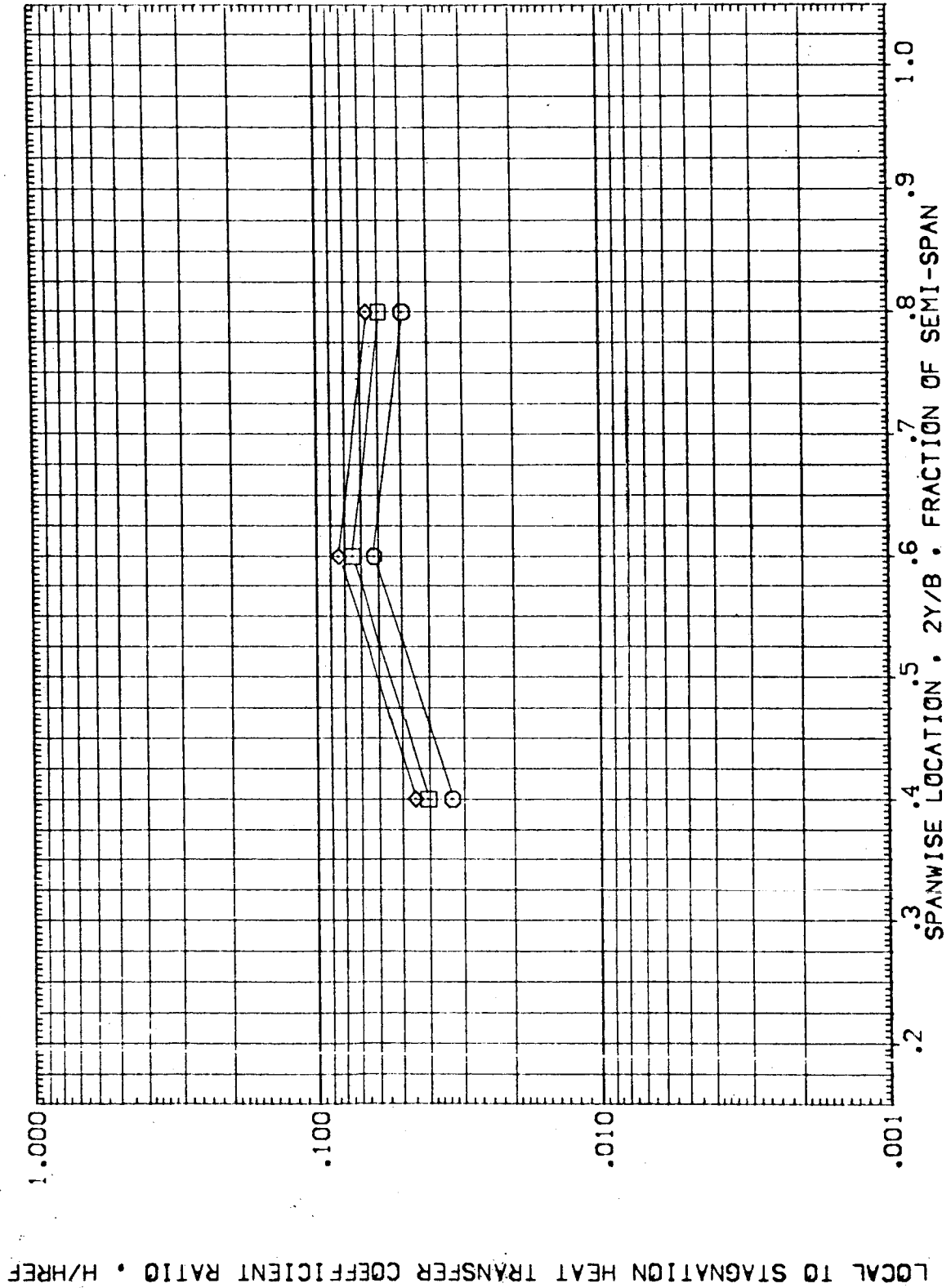


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .200

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING TOP	ALPHA	BETA	RN/L	HAV/HT
{RE1102}	ARC 3.5-178 H3 0+T+S	WING TOP	.000	.000	5.000	1.000
{AE1102}	ARC 3.5-178 H3 0+T+S	WING TOP	.000	.000	5.000	.900
{BE1102}	ARC 3.5-178 H3 0+T+S	WING TOP	.000	.000	5.000	.850

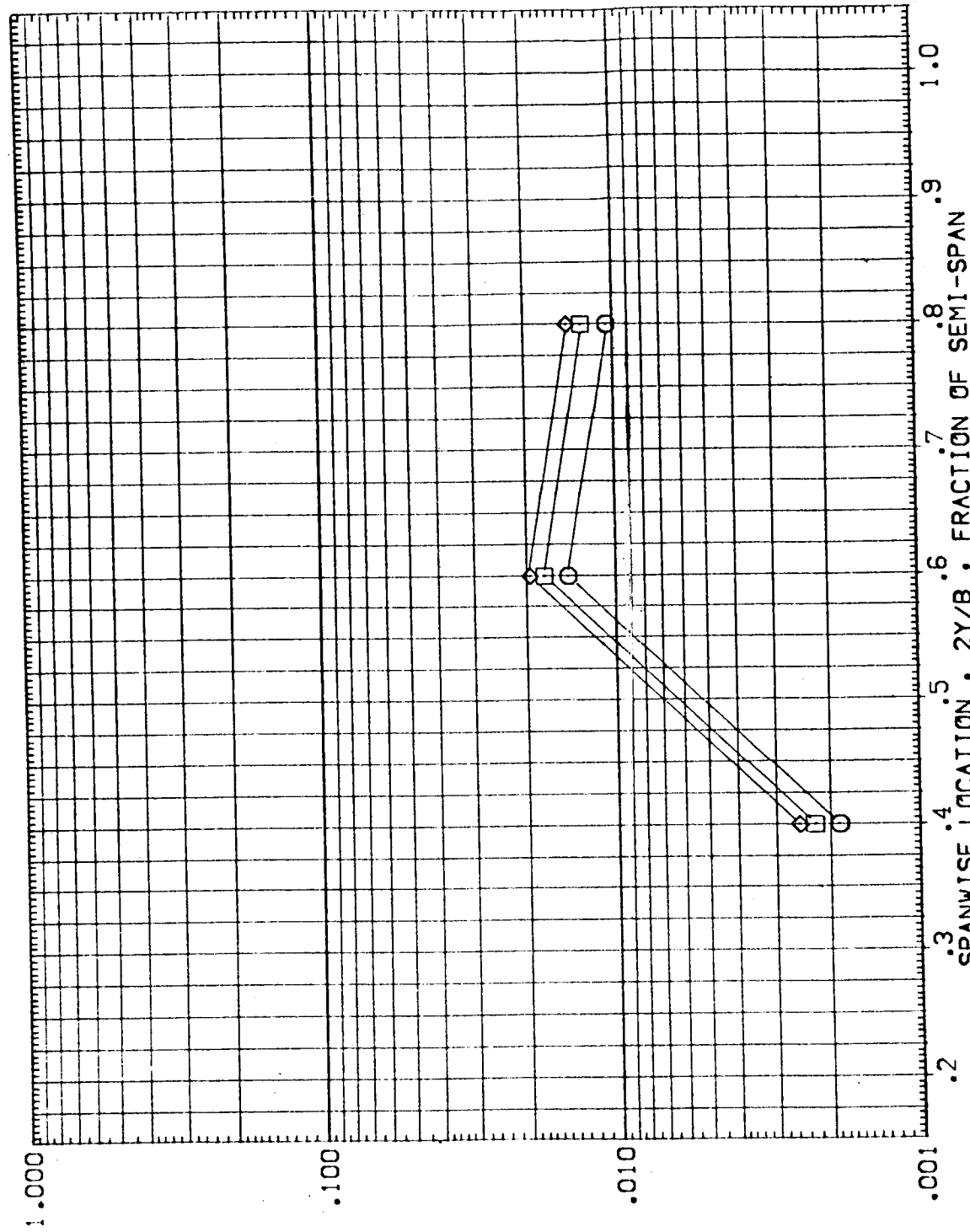


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .600

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(RE1102)	ARC 3.5-178 IH3 O+T+S	.000	.000	5.000	1.000
(AE1102)	ARC 3.5-178 IH3 O+T+S	.000	.000	5.000	.900
(BE1102)	ARC 3.5-178 IH3 O+T+S	.000	.000	5.000	.850

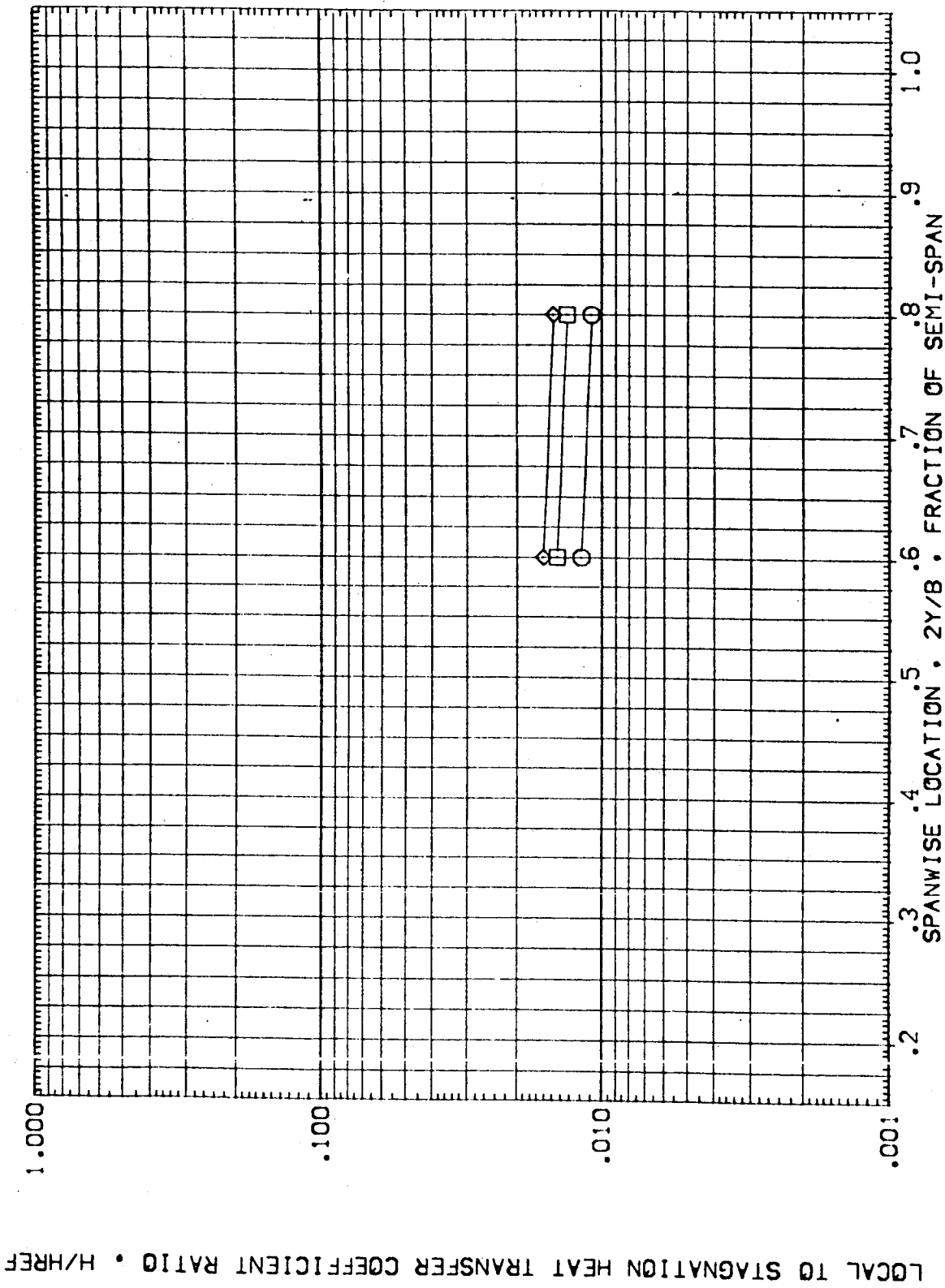


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1102) O ARC 3.5-178 H3 C+T+S
 (AE1102) X ARC 3.5-178 H3 C+T+S
 (BE1102) X ARC 3.5-178 H3 C+T+S

ALPHA BETA RN/L HAW/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

WING TOP
 WING TOP
 WING TOP

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

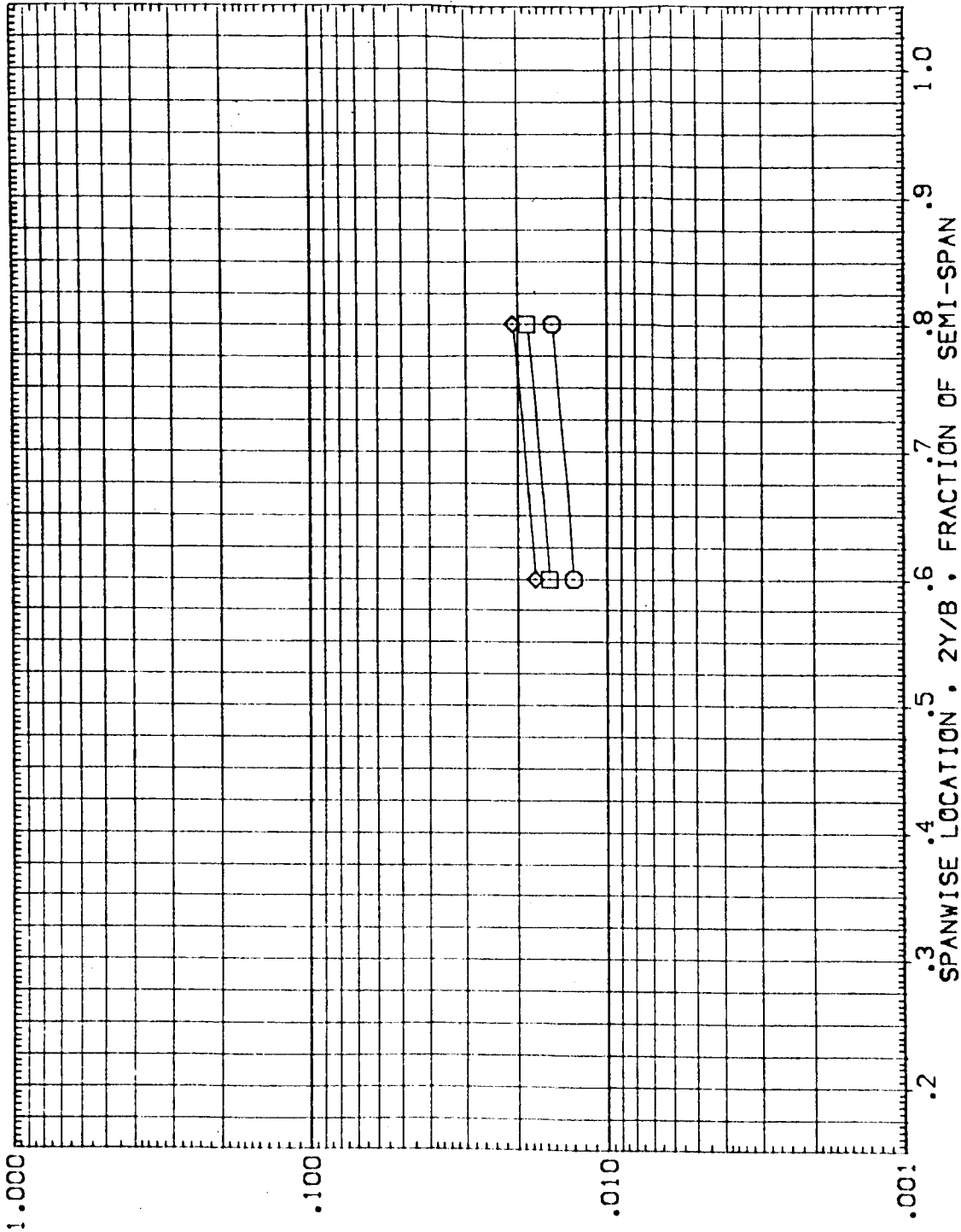


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE||02) [O] ARC 3.5-178 [H3] O+T+S
 (AE||02) [O] ARC 3.5-178 [H3] O+T+S
 (BE||02) [O] ARC 3.5-178 [H3] O+T+S

WING TOP WING TOP WING TOP
 ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 5.000 5.000 5.000
 HAW/HT 1.000 .500 .650

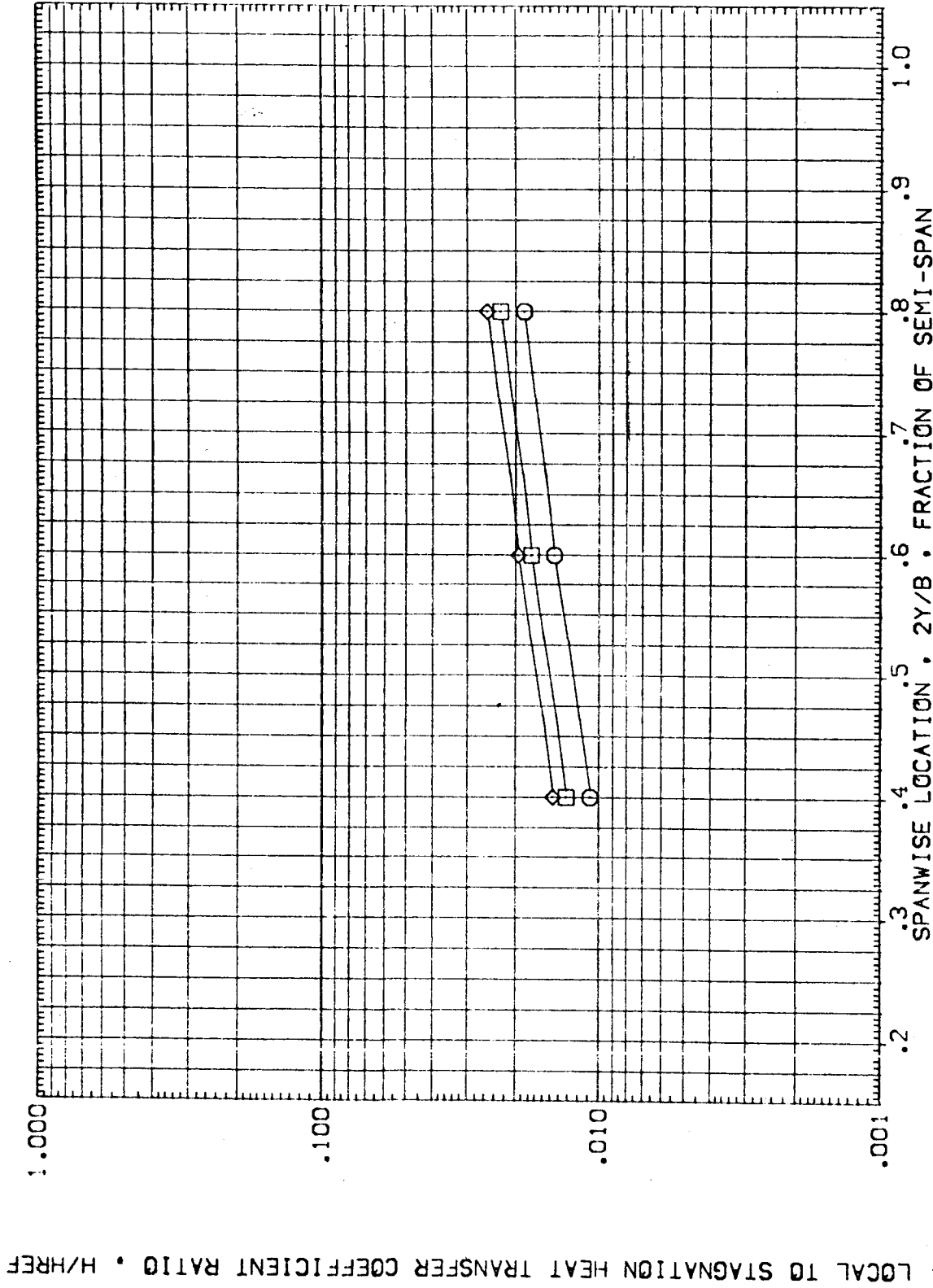


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .950

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE||03} O ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 1.500 1.000

{AE||03} O ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 1.500 .900

{BE||03} O ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 1.500 .850

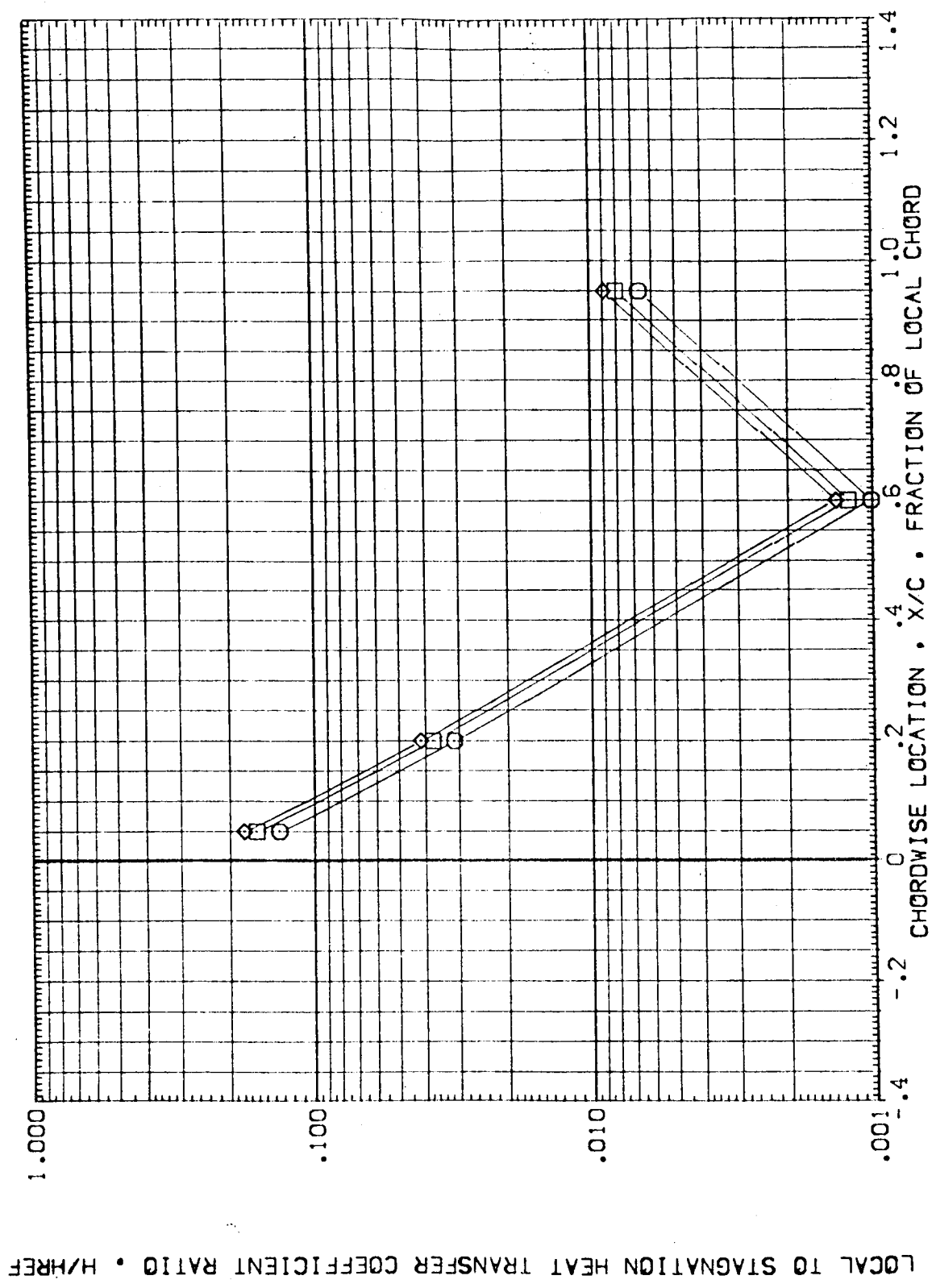


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .400

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1103)	ARC 3.5-178 IH3 O+T+S (TRIPS) WING TOP	.000	.000	1.500	1.000
(AE1103)	ARC 3.5-178 IH3 O+T+S (TRIPS) WING TOP	.000	.000	1.500	.900
(BE1103)	ARC 3.5-178 IH3 O+T+S (TRIPS) WING TOP	.000	.000	1.500	.850

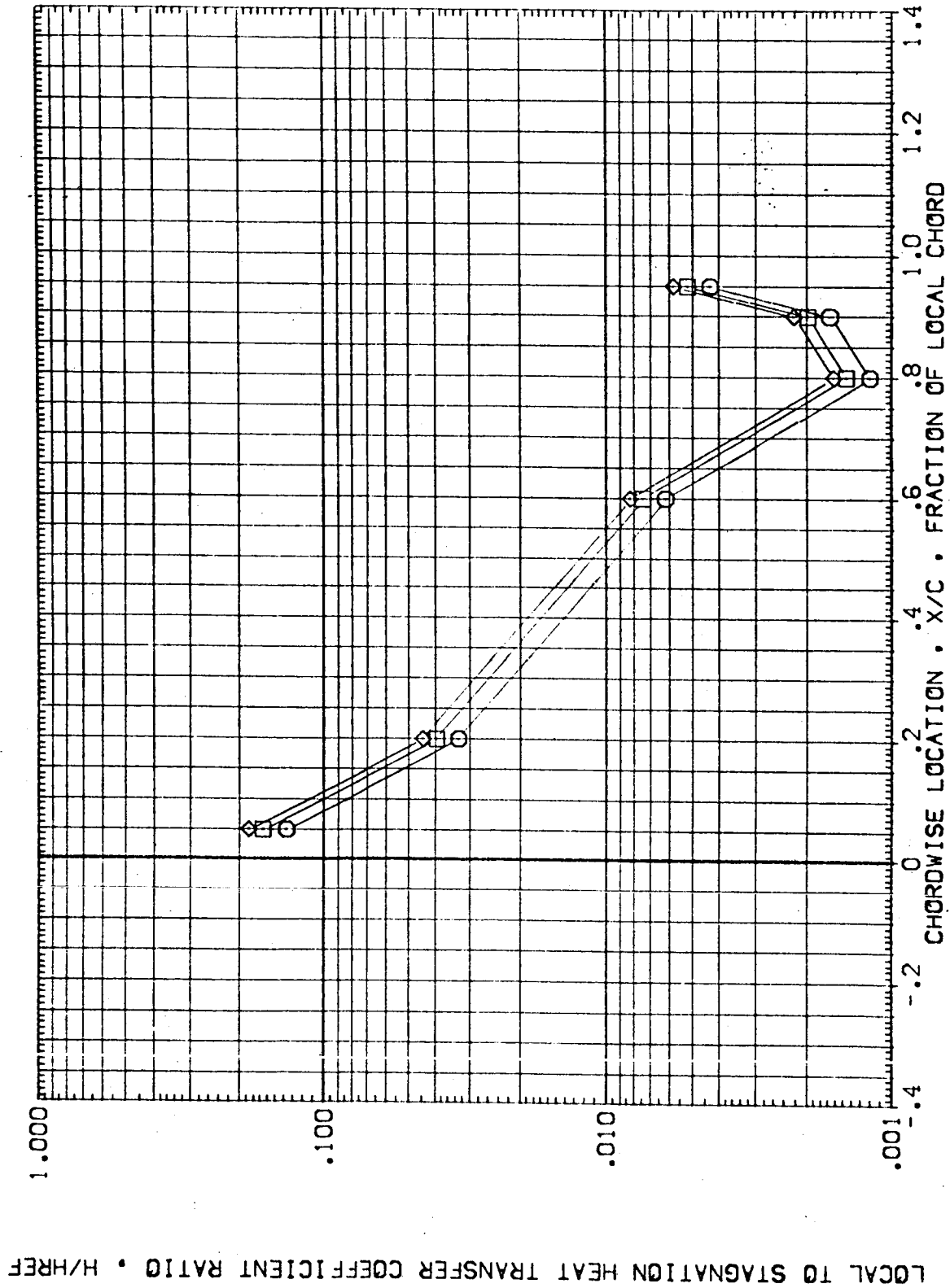


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (RE1103) □ ARC 3.5-178 143 O+T+S (TRIPS) .000 .000 1.500 1.000
 (AE1103) ○ ARC 3.5-178 143 O+T+S (TRIPS) .000 .000 1.500 .900
 (BE1103) ◇ ARC 3.5-178 143 O+T+S (TRIPS) .000 .000 1.500 .850

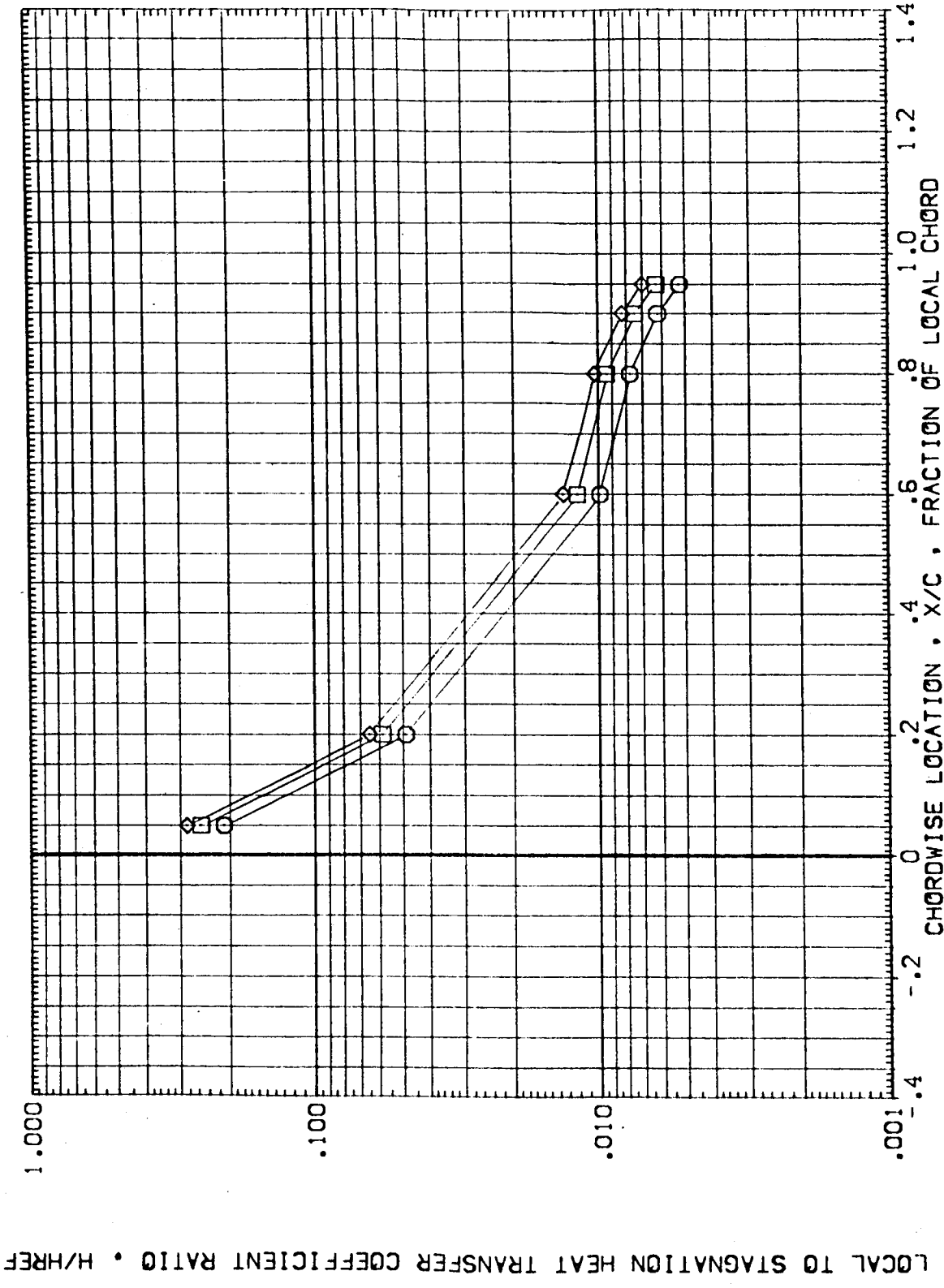


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (RE1103) (AE1103) (BE1103) ARC 3:5-178 IH3 O+T+S (TRIPS) WING TOP WING TOP WING TOP
 (RE1103) (AE1103) (BE1103) ARC 3:5-178 IH3 O+T+S (TRIPS) WING TOP WING TOP WING TOP
 (RE1103) (AE1103) (BE1103) ARC 3:5-178 IH3 O+T+S (TRIPS) WING TOP WING TOP WING TOP

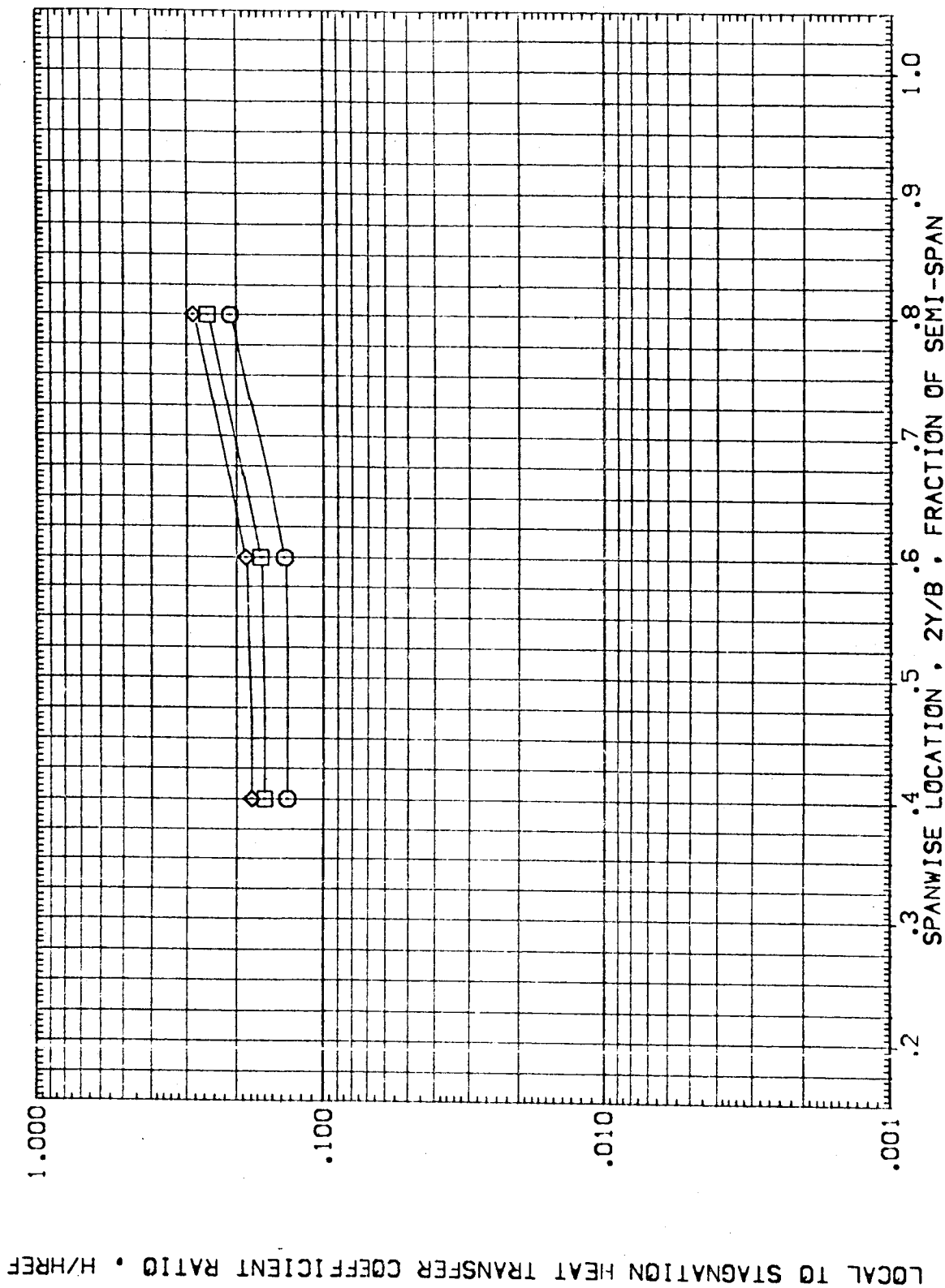


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RM/L HAW/HT

(RE1103) O ARC 3.5-178 |H3 0+T+S (TRIPS) WING TOP .000 .000 1.500 1.000

(AE1103) O ARC 3.5-178 |H3 0+T+S (TRIPS) WING TOP .000 .000 1.500 .900

(BE1103) O ARC 3.5-178 |H3 0+T+S (TRIPS) WING TOP .000 .000 1.500 .850

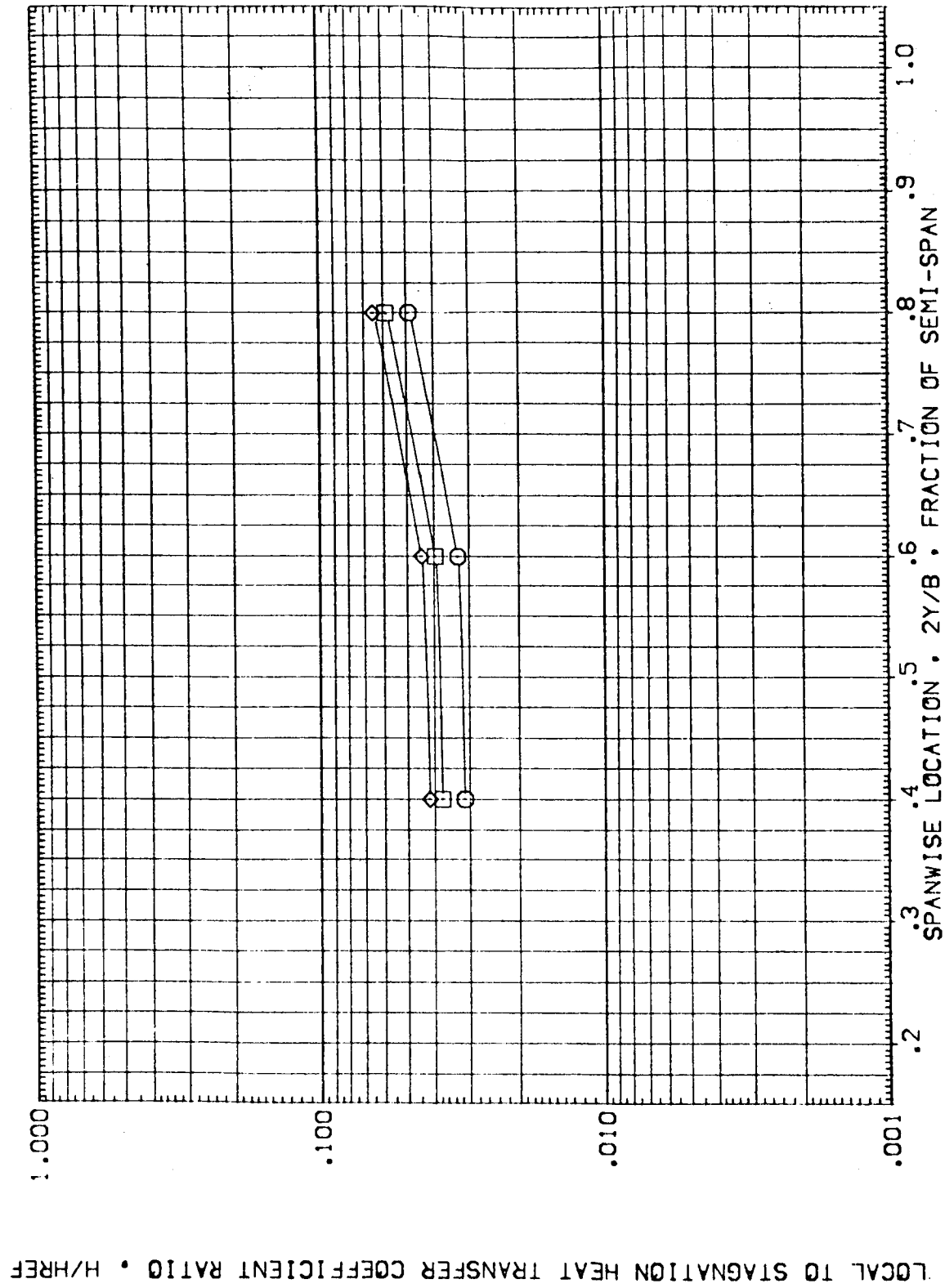


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .200



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
{RE 03}	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	1.000
{AE 03}	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	.900
{BE 03}	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	.850

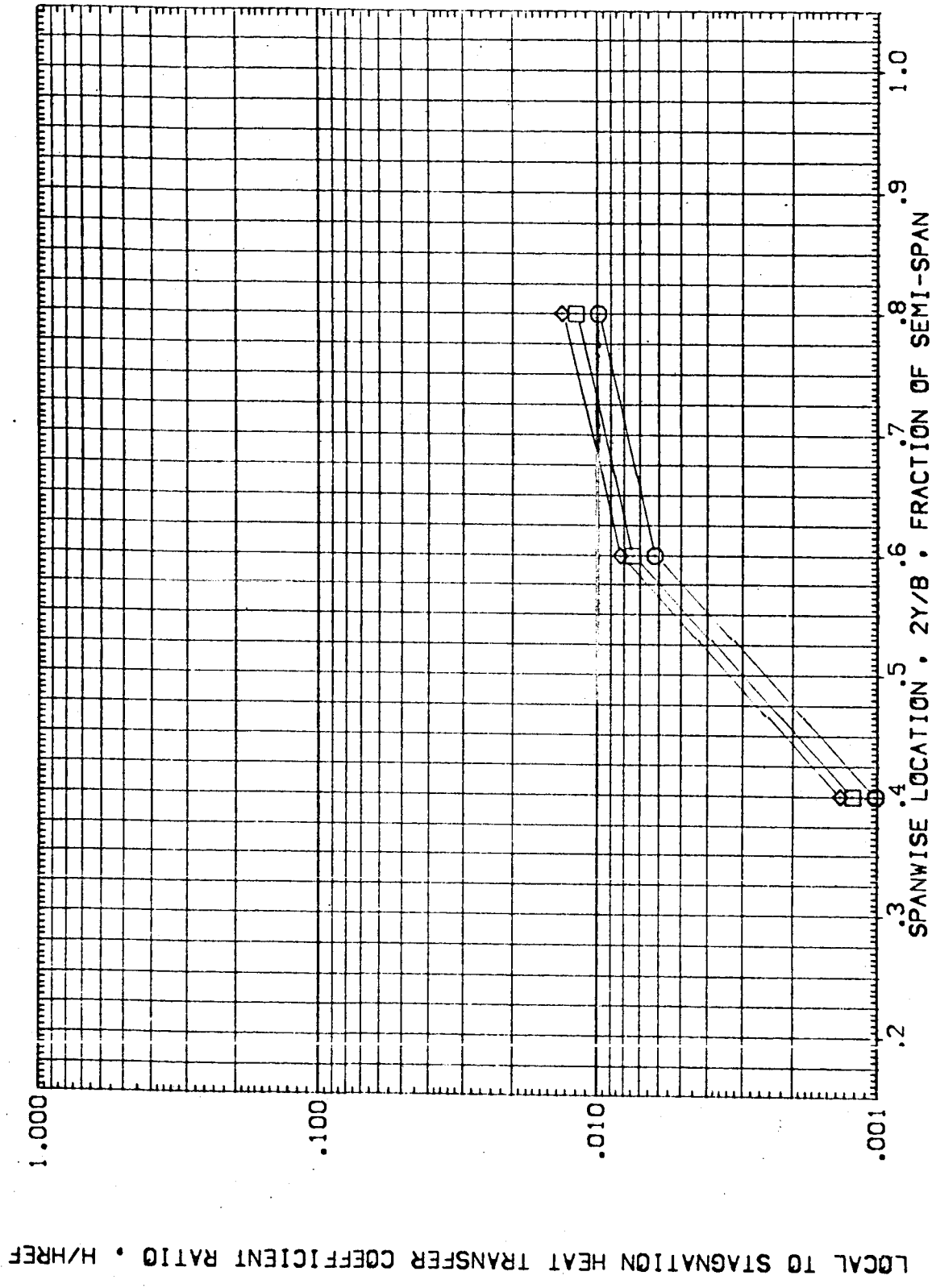


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .600

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
{RE 03}	ARC 3.5-178 H3 O-T+S (TRIPS)	.000	.000	1.500	1.000
{AE 03}	ARC 3.5-178 H3 O-T+S (TRIPS)	.000	.000	1.500	.900
{BE 03}	ARC 3.5-178 H3 O-T+S (TRIPS)	.000	.000	1.500	.850

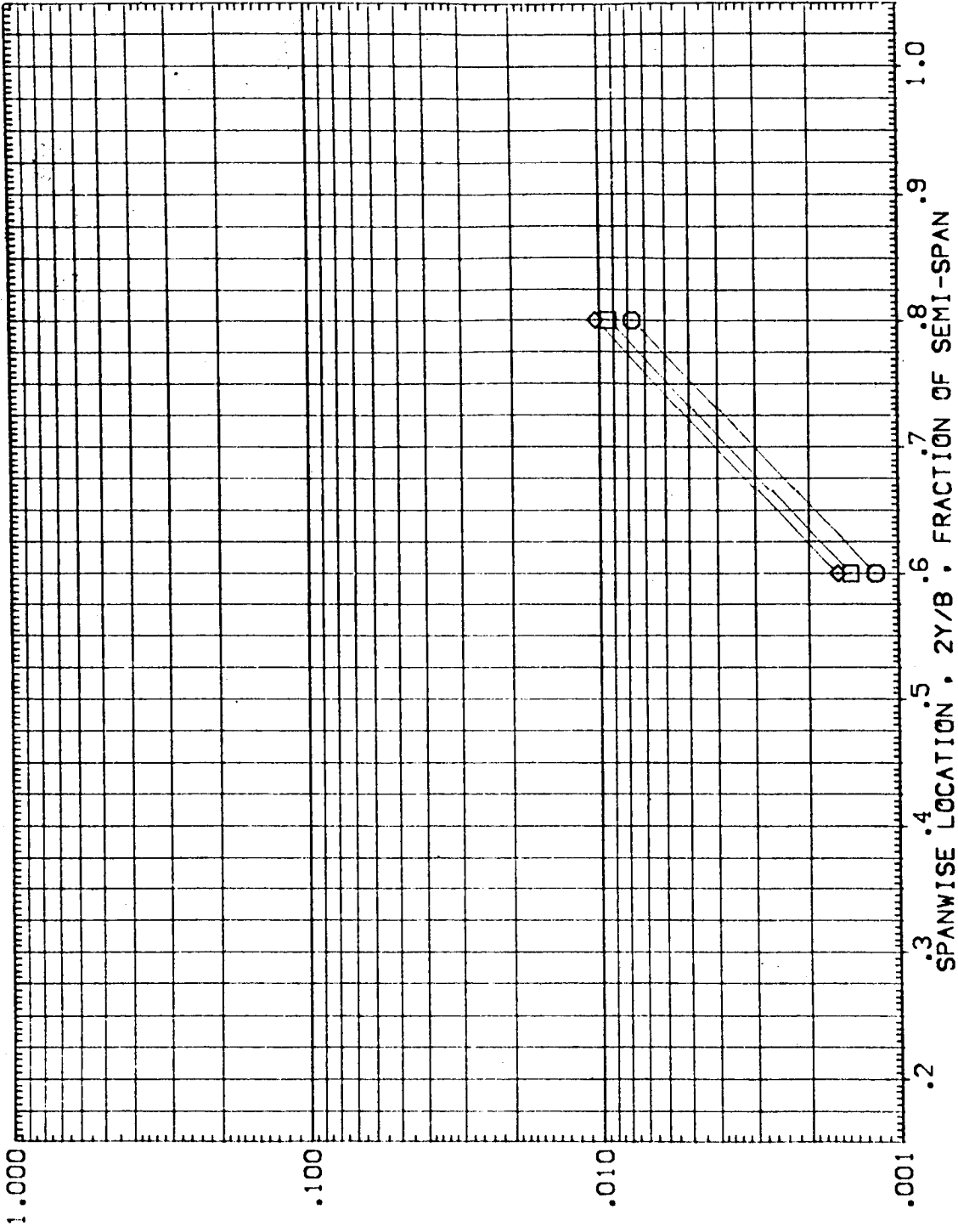


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .800

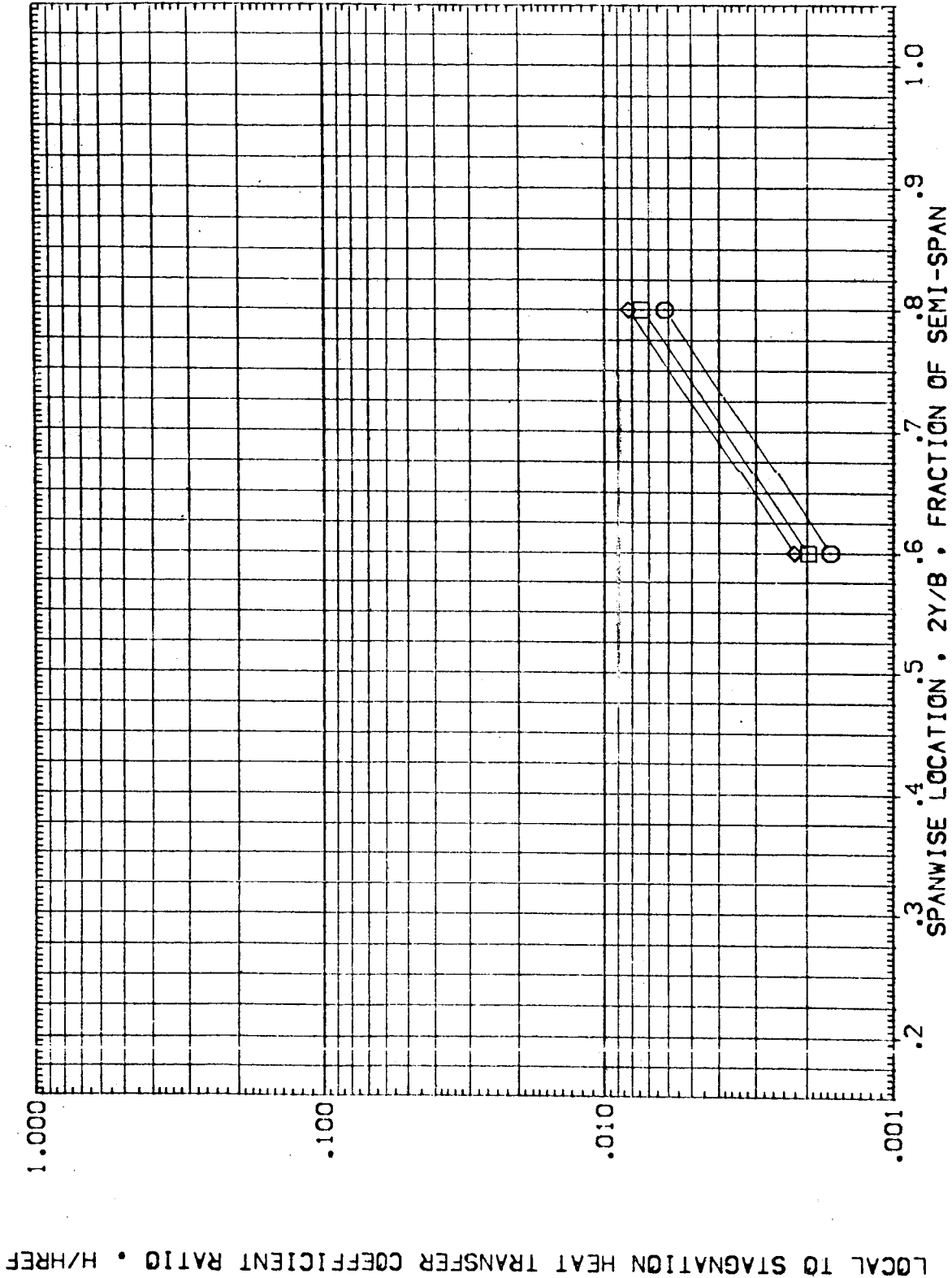


DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

{RE1103} ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 1.500 1.000

{AE1103} ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 1.500 .900

{BE1103} ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 1.500 .650



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FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

{RE1103} O ARC 3.5-178 IH3 O-T+S (TRIPS) .000 .000 1.500 1.000

{AE1103} O ARC 3.5-178 IH3 O-T+S (TRIPS) .000 .000 1.500 .900

{BE1103} O ARC 3.5-178 IH3 O-T+S (TRIPS) .000 .000 1.500 .850

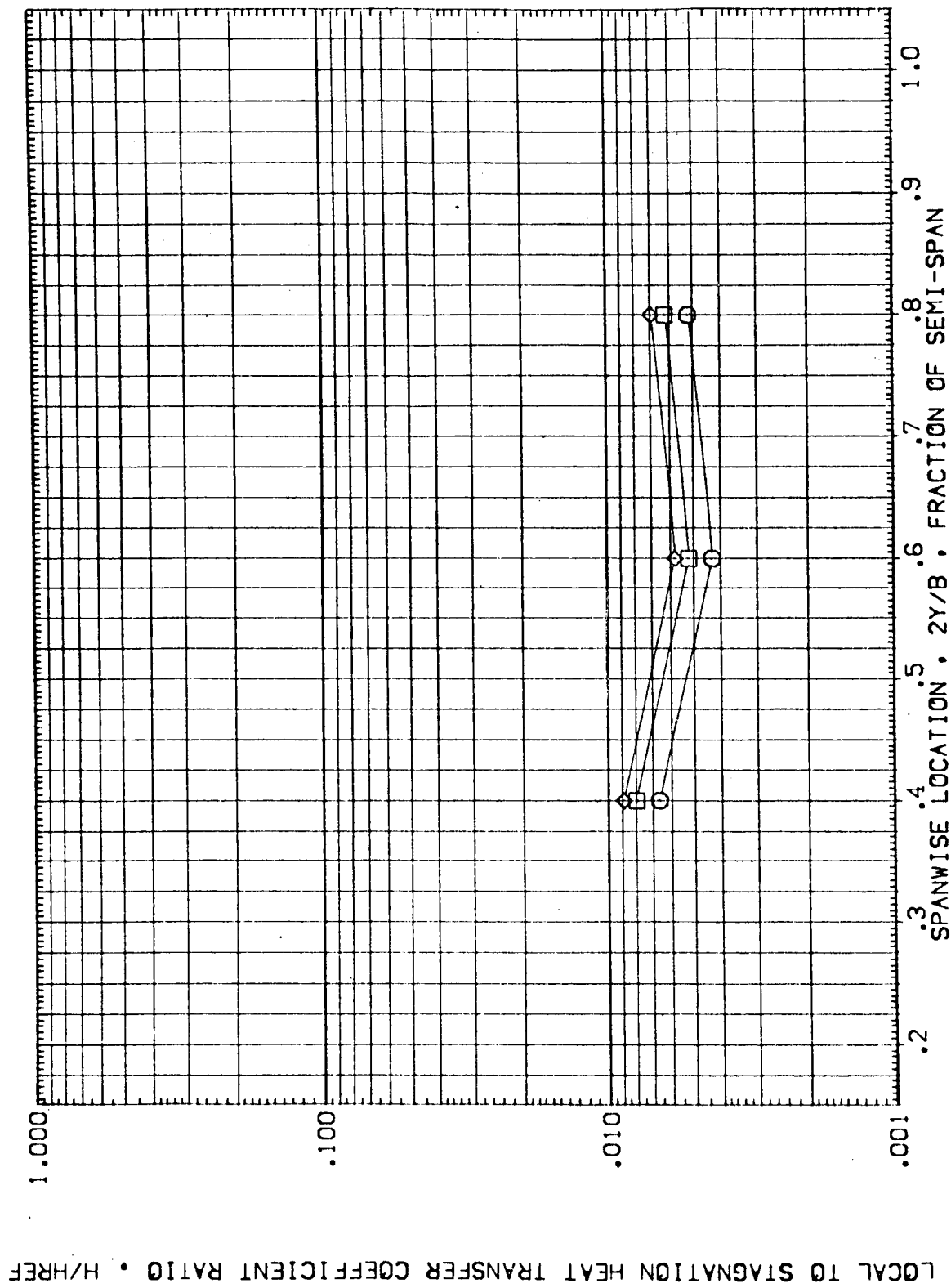


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .950

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(RE1104)	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	5.000	1.000
(AE1104)	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	5.000	.900
(BE1104)	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	5.000	.850

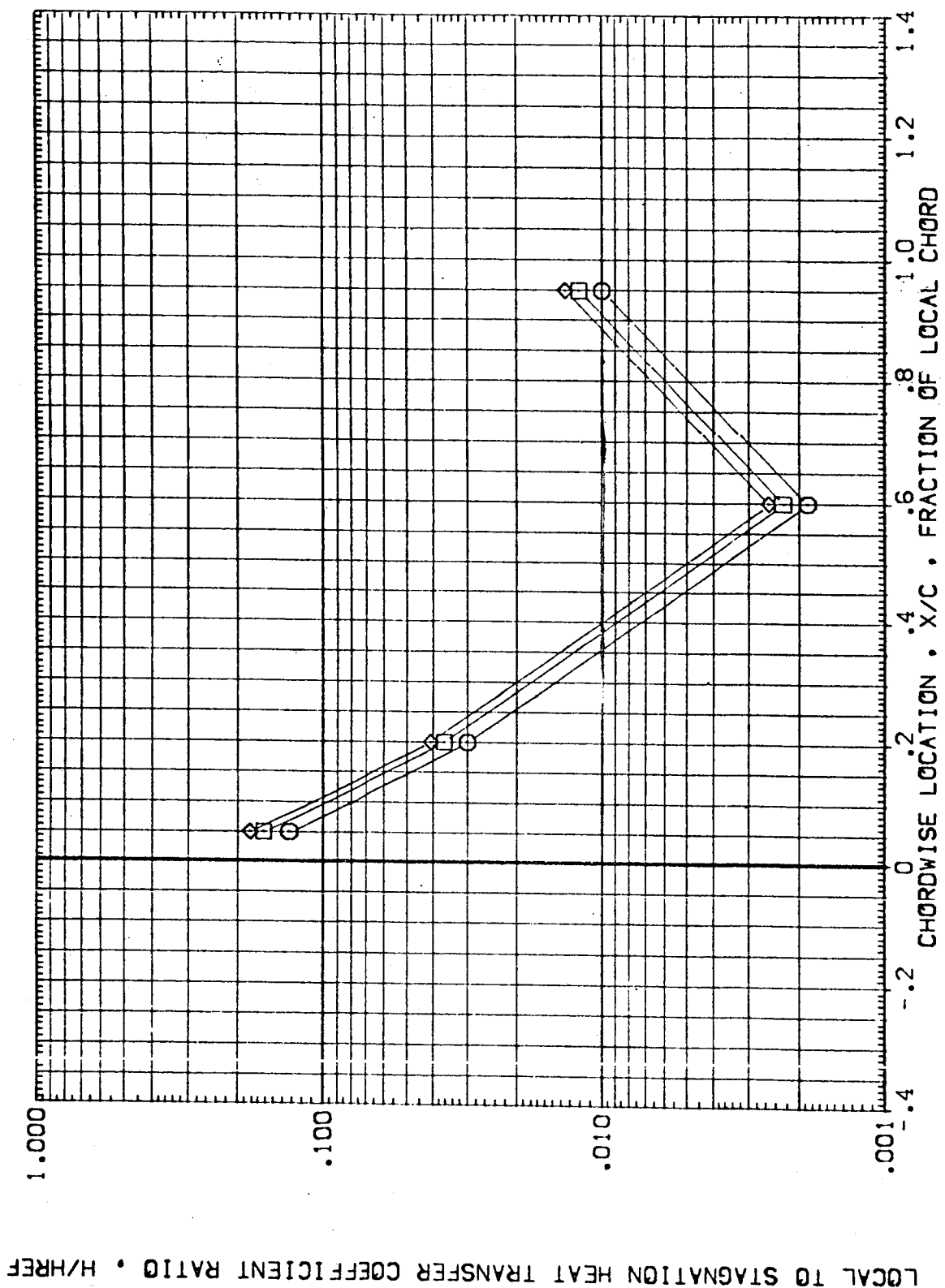


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{RE||04} O ARC 3.5-178 |H3 0+T+S [TR|PS] WING TOP .000 .000 5.000 1.000

{AE||04} O ARC 3.5-178 |H3 0+T+S [TR|PS] WING TOP .000 .000 5.000 .900

{BE||04} X ARC 3.5-178 |H3 0+T+S [TR|PS] WING TOP .000 .000 5.000 .850

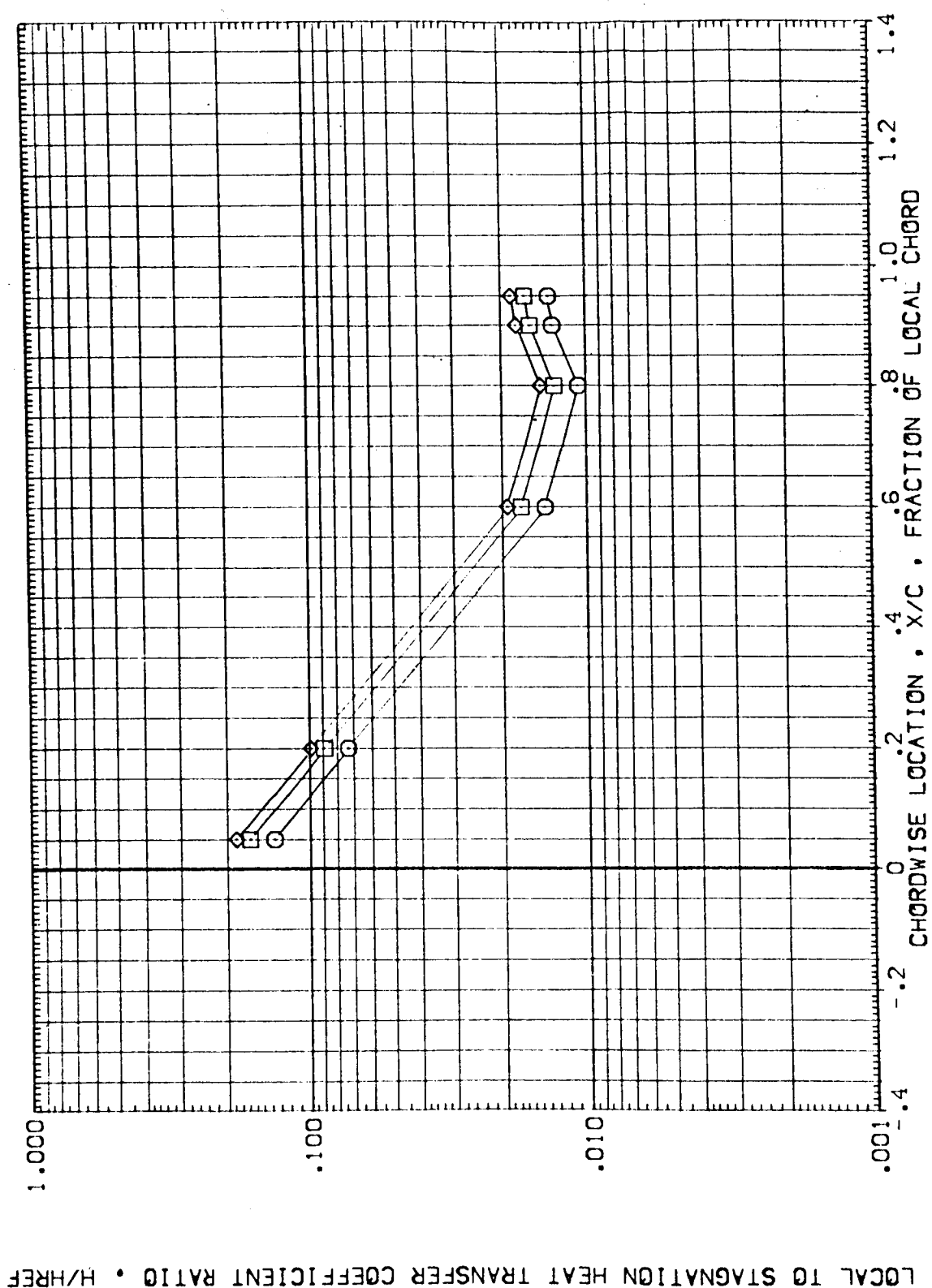


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(RE1104) O ARC 3.5-178 I43 O+T+S (TR)PS VING TOP .000 .000 5.000 1.000

(AE1104) L ARC 3.5-178 I43 O+T+S (TR)PS VING TOP .000 .000 5.000 .900

(BE1104) D ARC 3.5-178 I43 O+T+S (TR)PS VING TOP .000 .000 5.000 .850

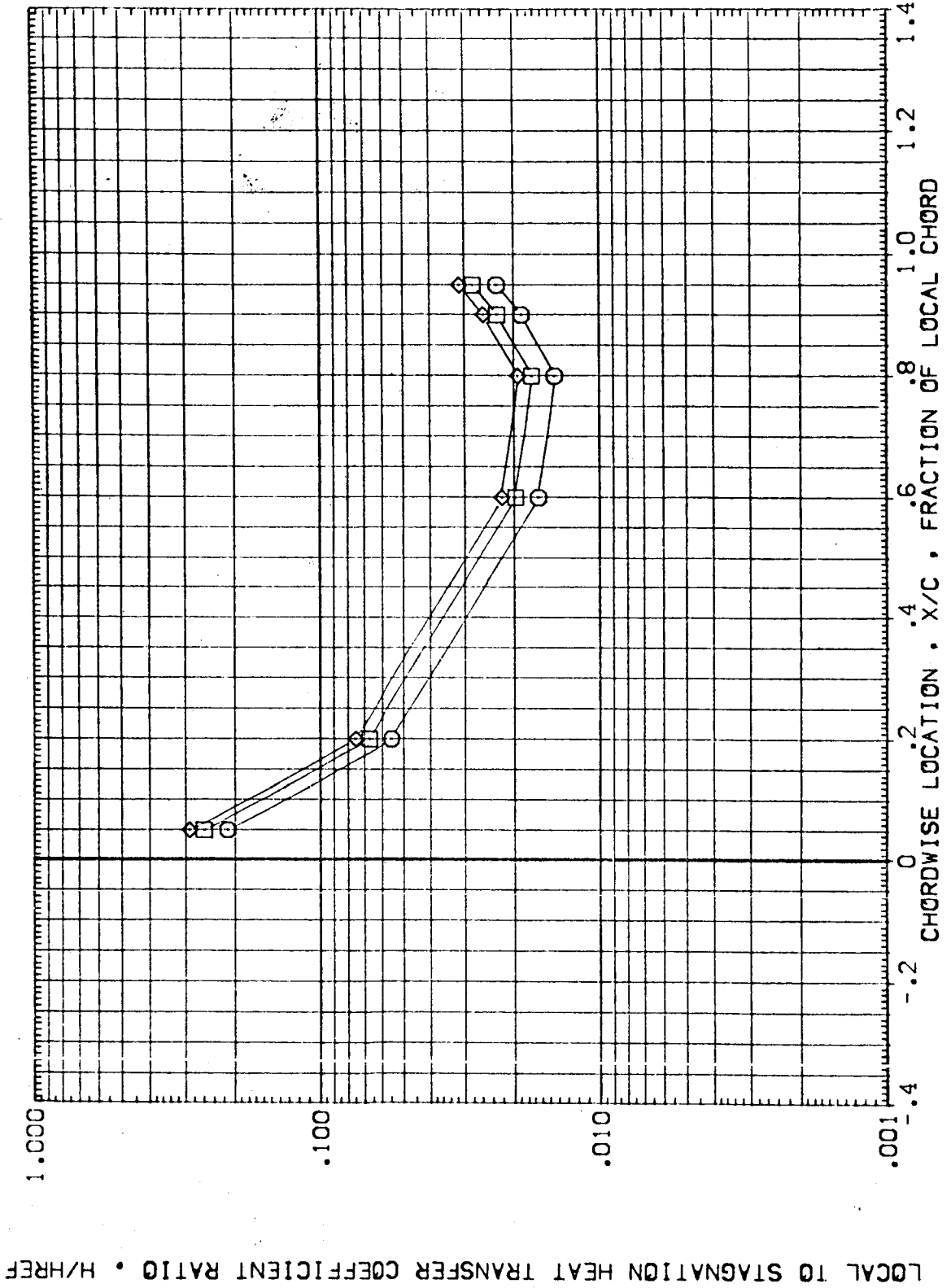


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .800

DATA SET SYMBOL: CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

ARC 3.5-178 IH3 0+1+S (TR|PS) WING TOP
 ARC 3.5-178 IH3 0+1+S (TR|PS) WING TOP
 ARC 3.5-178 IH3 0+1+S (TR|PS) WING TOP

.000 .000
 .000 .000
 .000 .000

5.000 5.000
 5.000 5.000
 5.000 5.000

1.000 1.000
 .900 .900
 .850 .850

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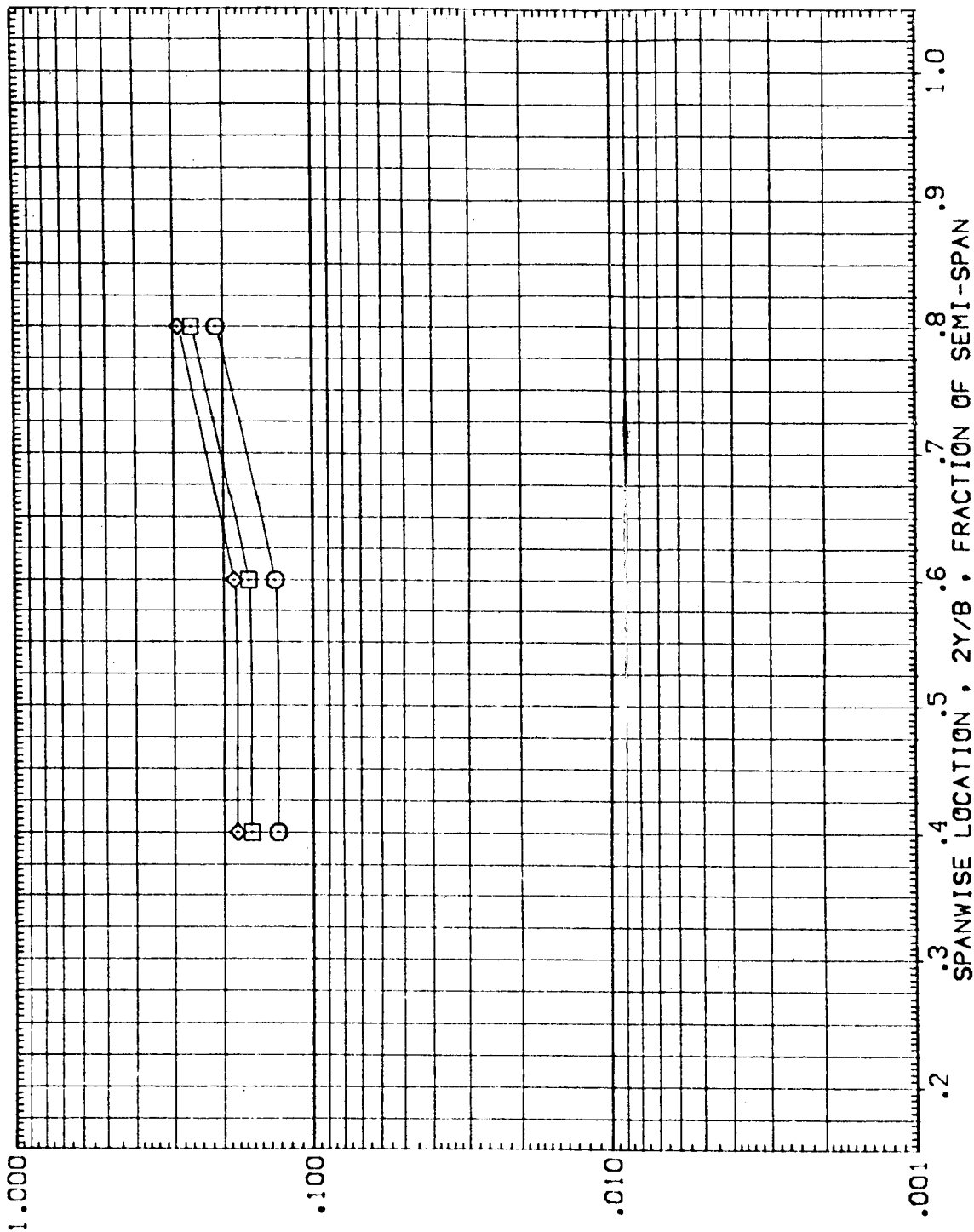


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .050



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RM/L	HAV/HT
(RE1104)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	5.000	1.000
(AE1104)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	5.000	.900
(BE1104)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	5.000	.850

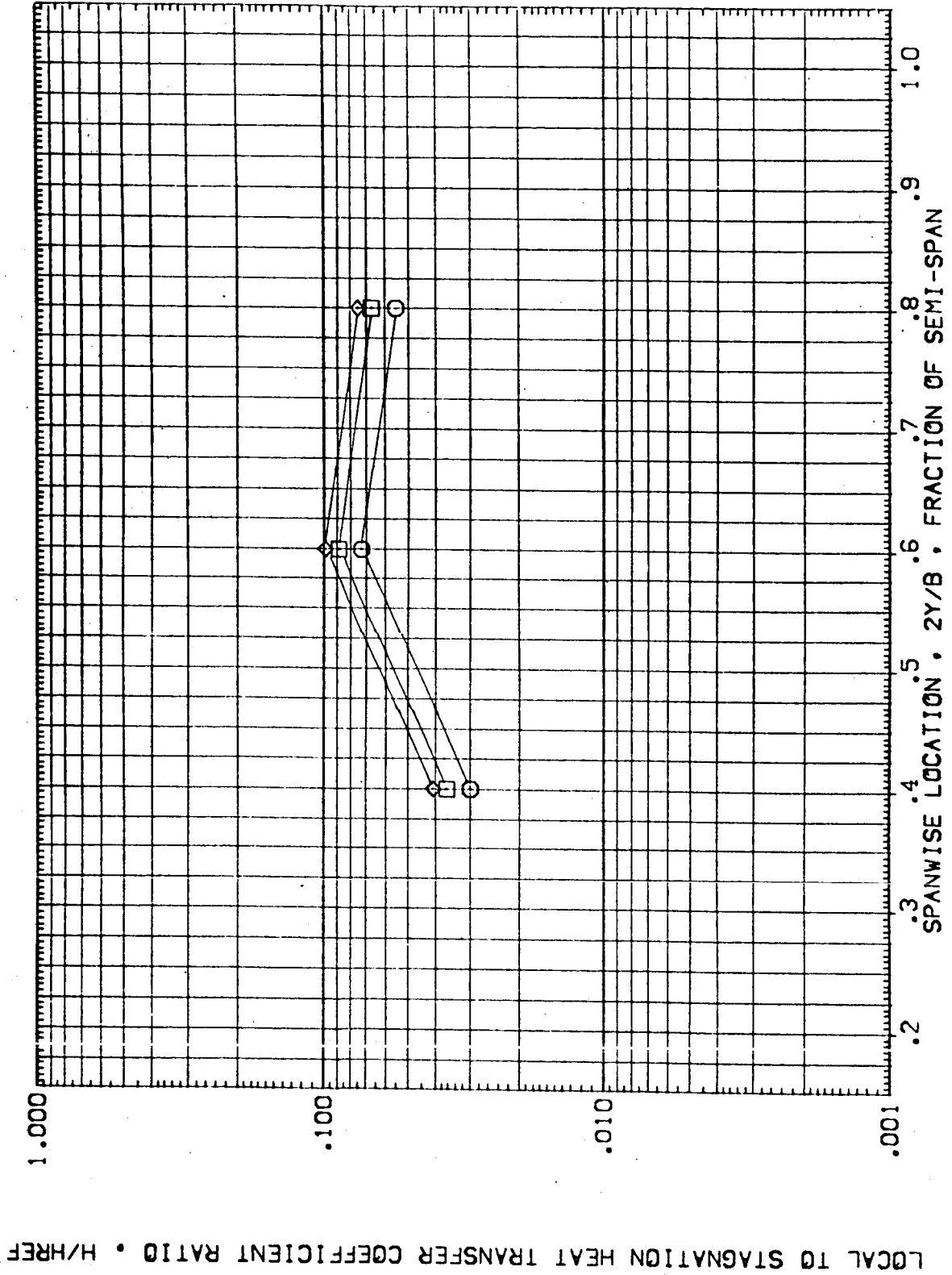


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING TOP ALPHA BETA RN/L HAV/HT

(RE1104) ARC 3.5-178 [H3 0-T+S (TRIPS)] WING TOP

(AE1104) ARC 3.5-178 [H3 0-T+S (TRIPS)] WING TOP

(BE1104) ARC 3.5-178 [H3 0-T+S (TRIPS)] WING TOP

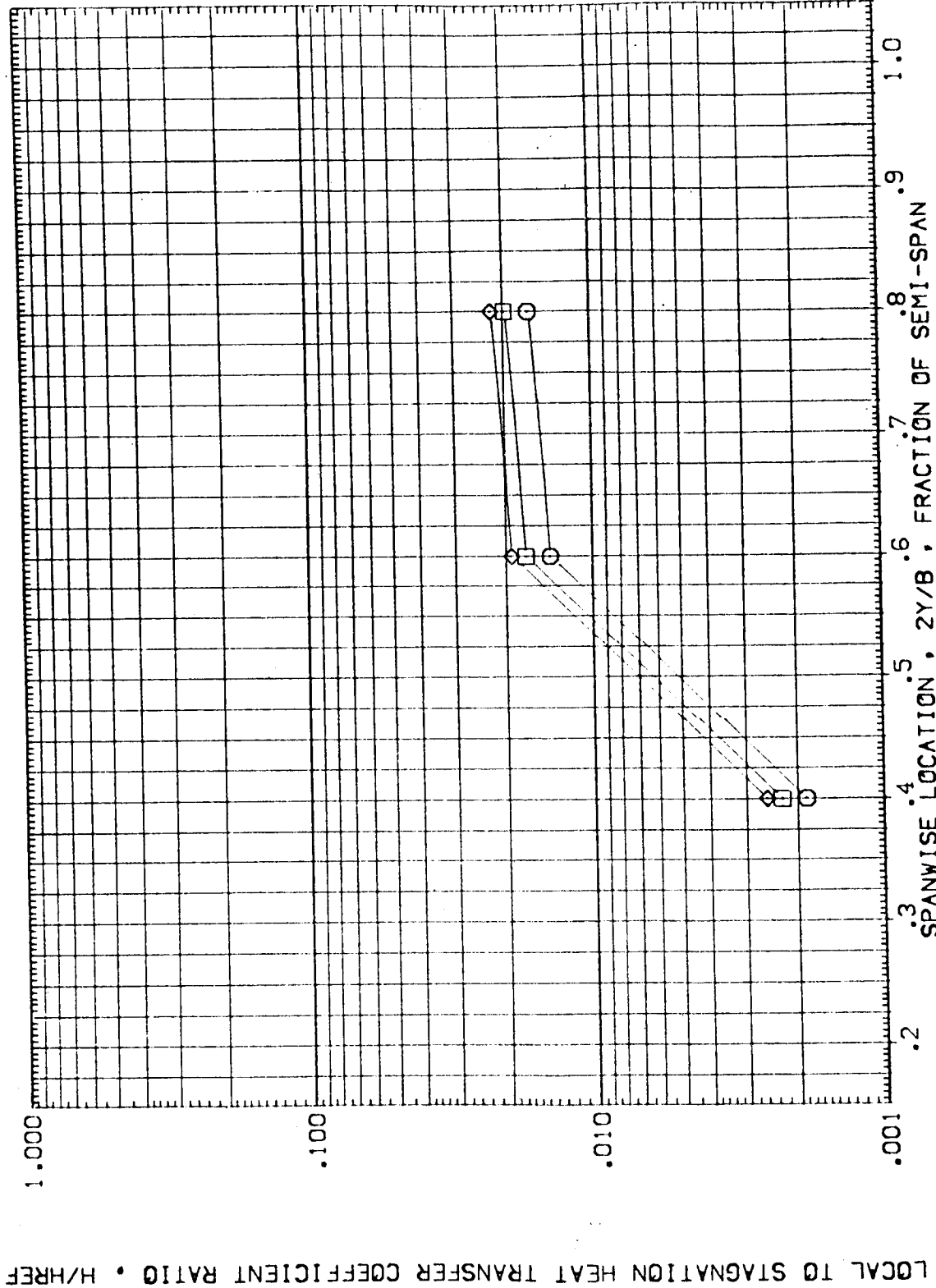


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .600



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA R/V/L HAV/HT

{RE1104} □ ARC 3.5-178 IH3 O-T+S (TRIPS) .000 .000 5.000 1.000

{AE1104} ◇ ARC 3.5-178 IH3 O-T+S (TRIPS) .000 .000 5.000 .500

{BE1104} ◇ ARC 3.5-178 IH3 O-T+S (TRIPS) .000 .000 5.000 .850

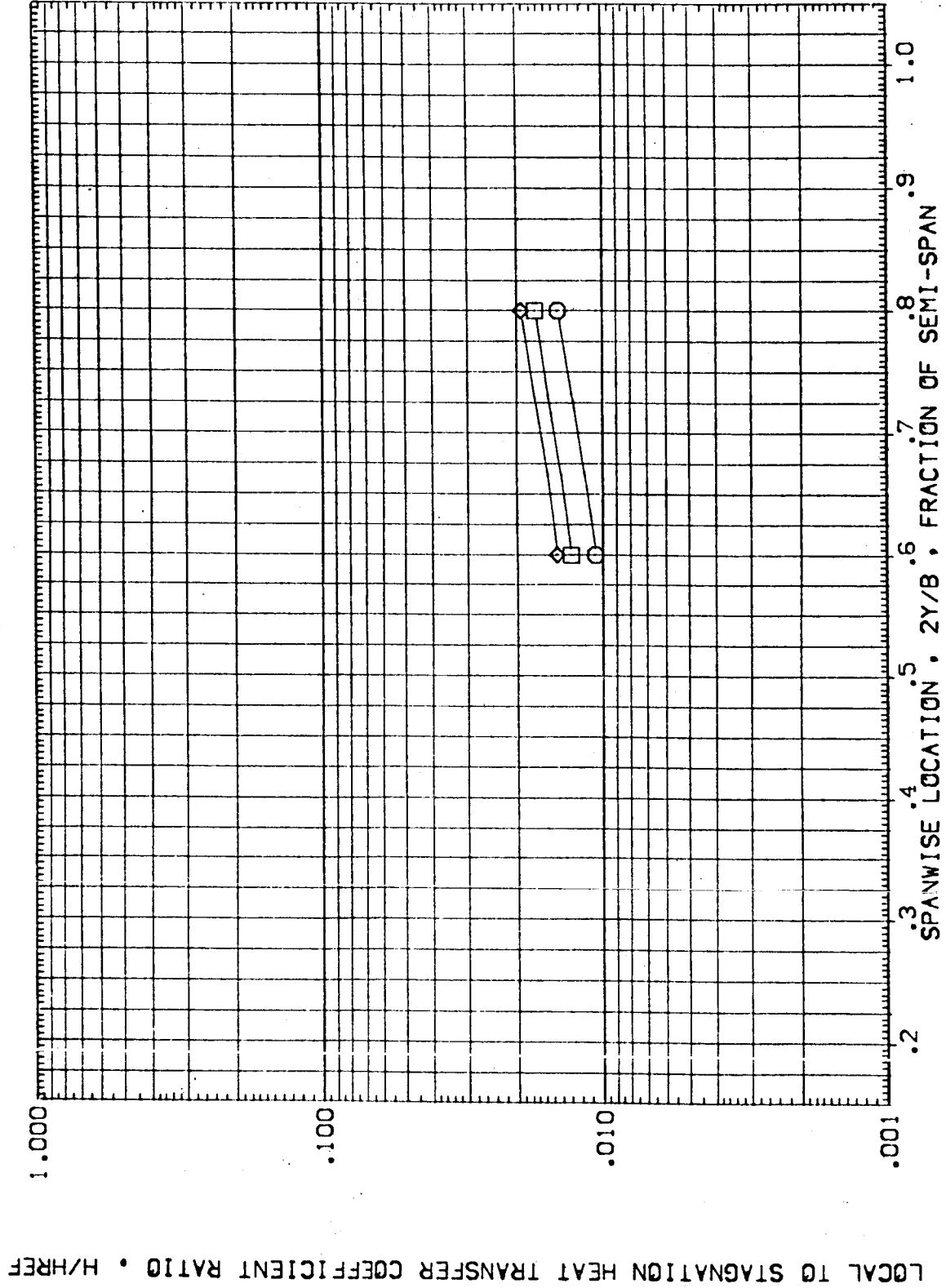


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .800

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DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	WING TOP	ALPHA	BETA	RV/L	HAV/HT
(RE1104)	ARC 3.5-178	[H3 0+T+S (TRIPS)]	WING TOP	.000	.000	5.000	1.000
(AE1104)	ARC 3.5-178	[H3 0+T+S (TRIPS)]	WING TOP	.000	.000	5.000	.900
(BE1104)	ARC 3.5-178	[H3 0+T+S (TRIPS)]	WING TOP	.000	.000	5.000	.850

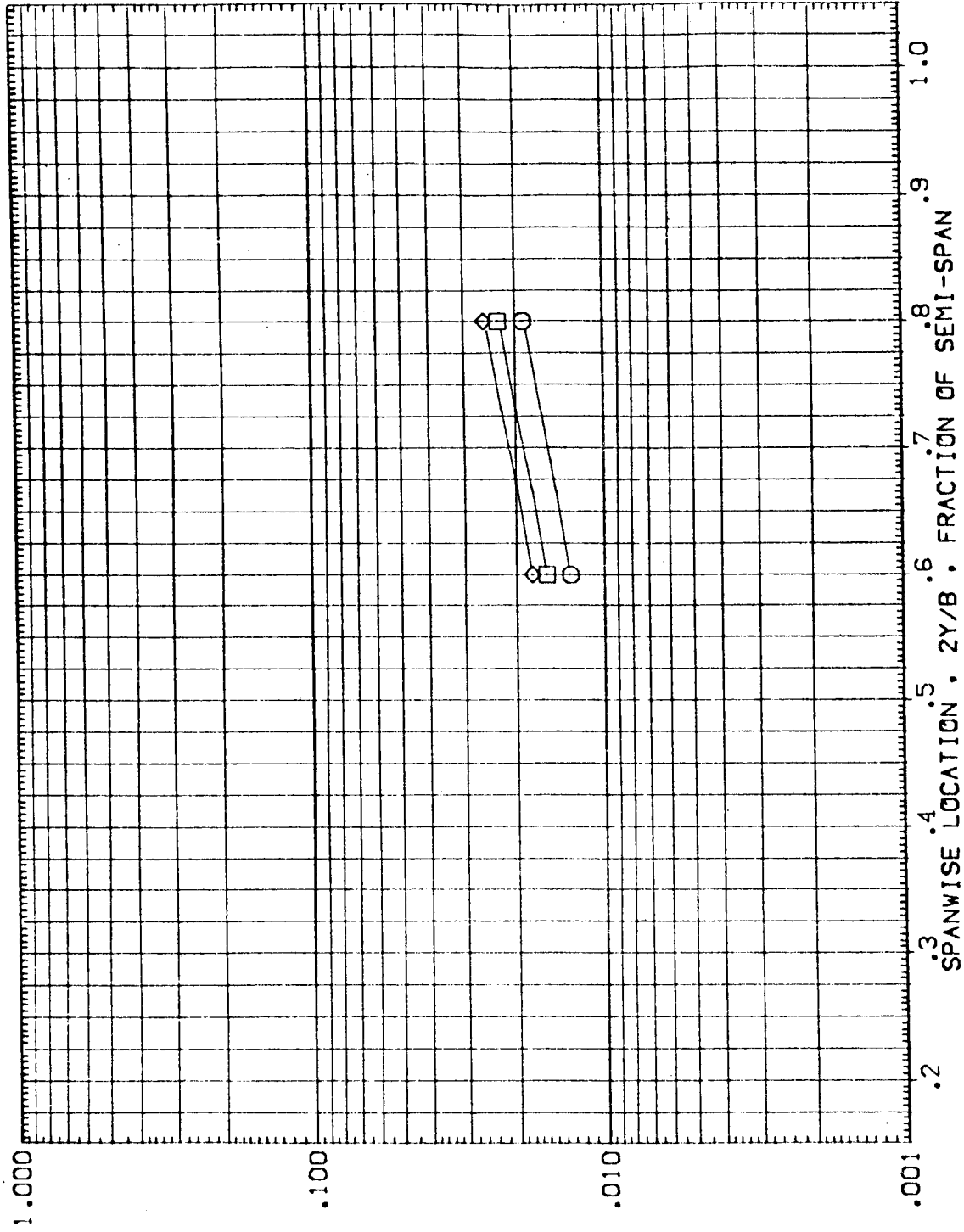


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900



DATA SET SYMBOL: [RE:104] [AE:104] [BE:104] CONFIGURATION DESCRIPTION: ARC 3.5-178 IH3 O-T-S (TRIPS) WING TOP HAW/HT
 [RE:104] [AE:104] [BE:104] ARC 3.5-178 IH3 O-T-S (TRIPS) WING TOP 1.000
 [RE:104] [AE:104] [BE:104] ARC 3.5-178 IH3 O-T-S (TRIPS) WING TOP .900
 [RE:104] [AE:104] [BE:104] ARC 3.5-178 IH3 O-T-S (TRIPS) WING TOP .850

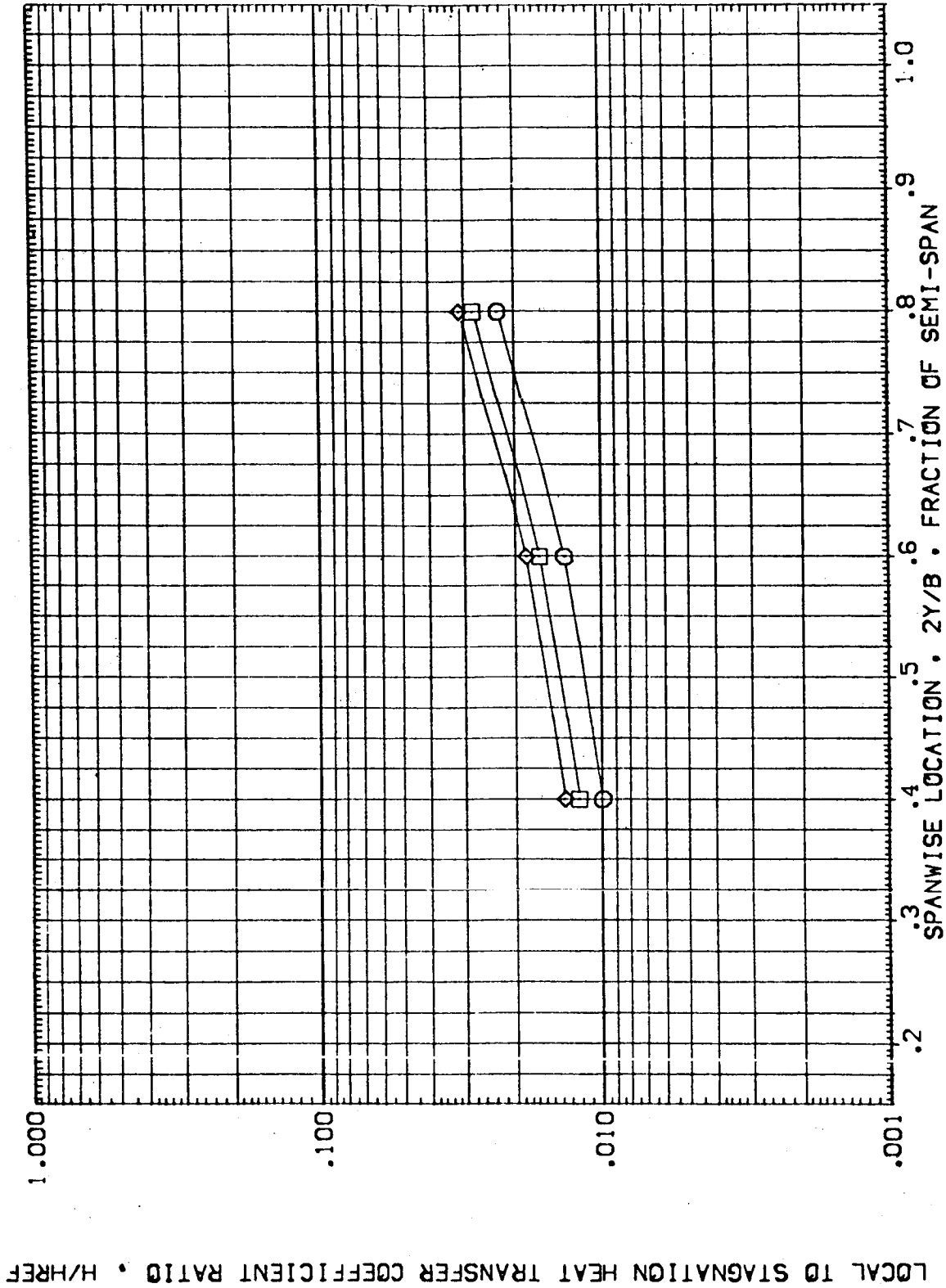


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .950

DATA SET SYMBOL: {RE||05} {AE||02} {BE||05}
 CONFIGURATION DESCRIPTION: ARC 3.5-178 |H3 0+T+S |H3 0+T+S |H3 0+T+S
 WING TOP: WING TOP WING TOP WING TOP
 ALPHA: .000 .000 .000
 BETA: -5.000 -5.000 -5.000
 RN/L: 5.000 5.000 5.000
 HAW/HT: 1.000 .900 .850

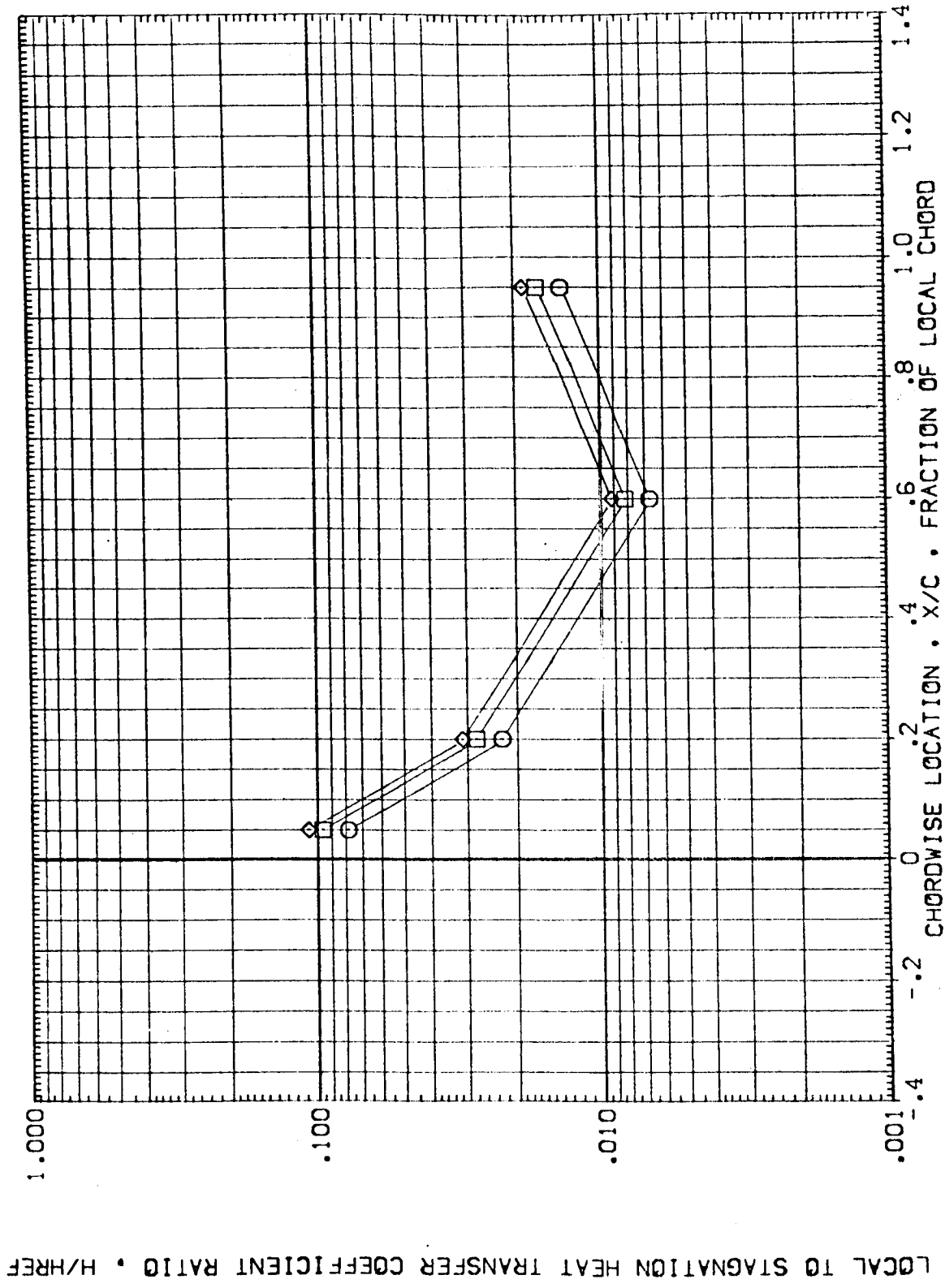





FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .400

DAT/ SET SYMBOL CONFIGURATION DESCRIPTION WING TOP ALPHA BETA R/V/L HAV/HT
 (RE1105)  ARC 3.5-178 IH3 0+T+S .000 -5.000 5.000 1.000
 (AE1105)  ARC 3.5-178 IH3 0+T+S .000 -5.000 5.000 .900
 (BE1105)  ARC 3.5-178 IH3 0+T+S .000 -5.000 5.000 .850

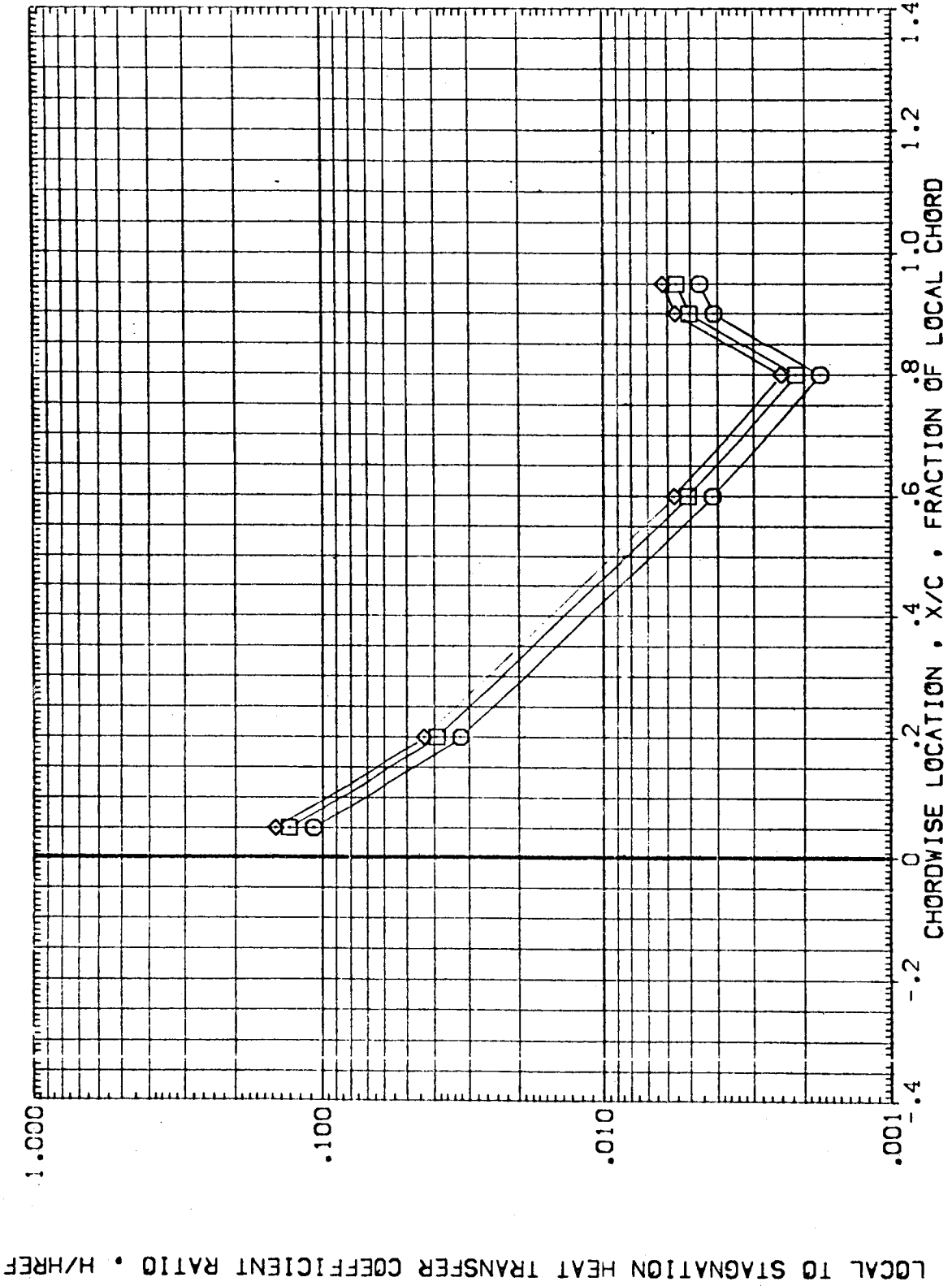


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.3100 2Y/B = .600

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAW/HT
 (RE1105) ARC 3.5-178 IH3 O+T+S .000 -5.000 5.000 1.000
 (AE1105) ARC 3.5-178 IH3 O+T+S .000 -5.000 5.000 .900
 (BE1105) ARC 3.5-178 IH3 O+T+S .000 -5.000 5.000 .850

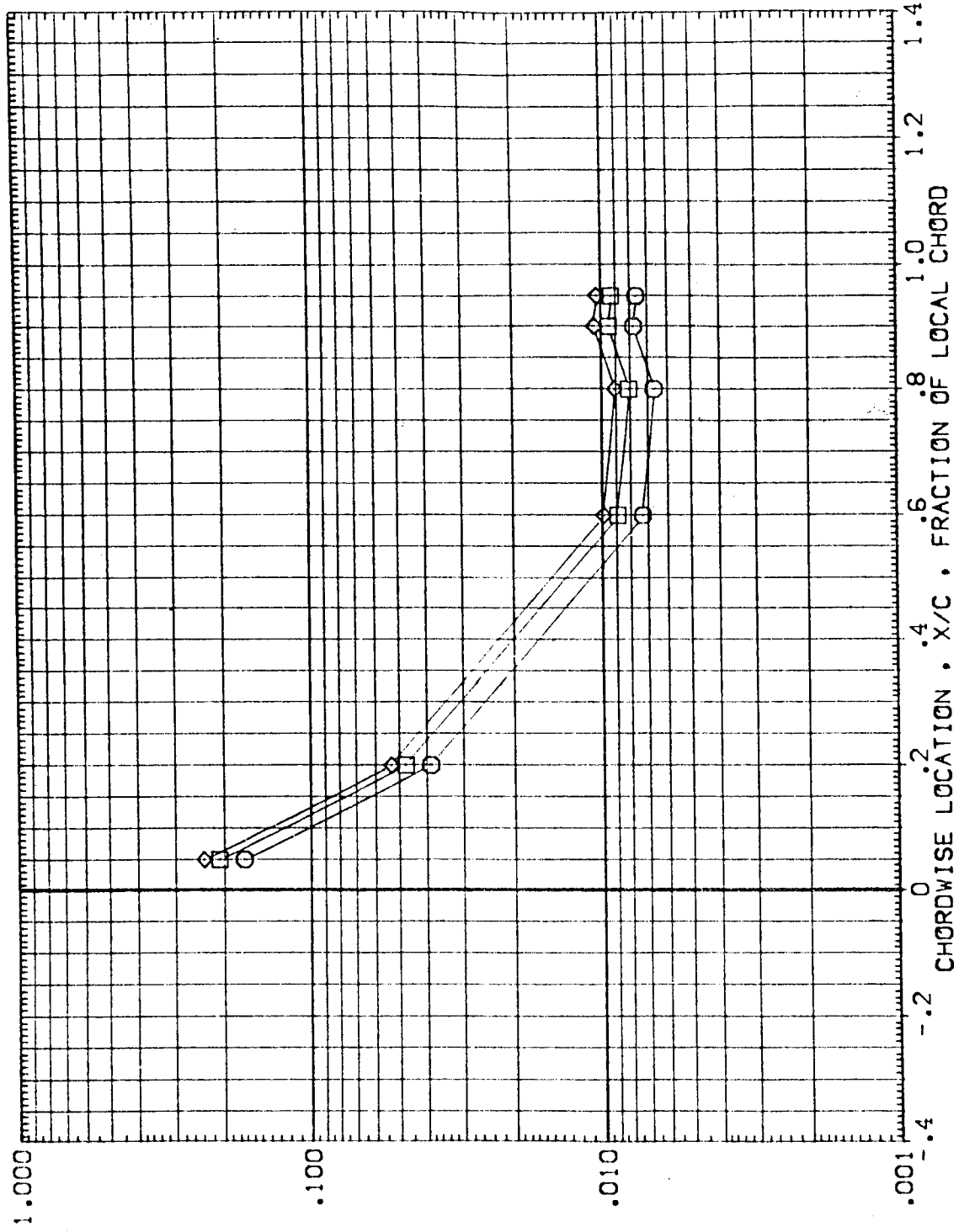


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .800



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE||05) □ ARC 3.5-178 I43 O+T+S VING TOP
 (AE||05) ◇ ARC 3.5-178 I43 O+T+S VING TOP
 (BE||05) □ ARC 3.5-178 I43 O+T+S VING TOP

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .500
 .000 -5.000 5.000 .650

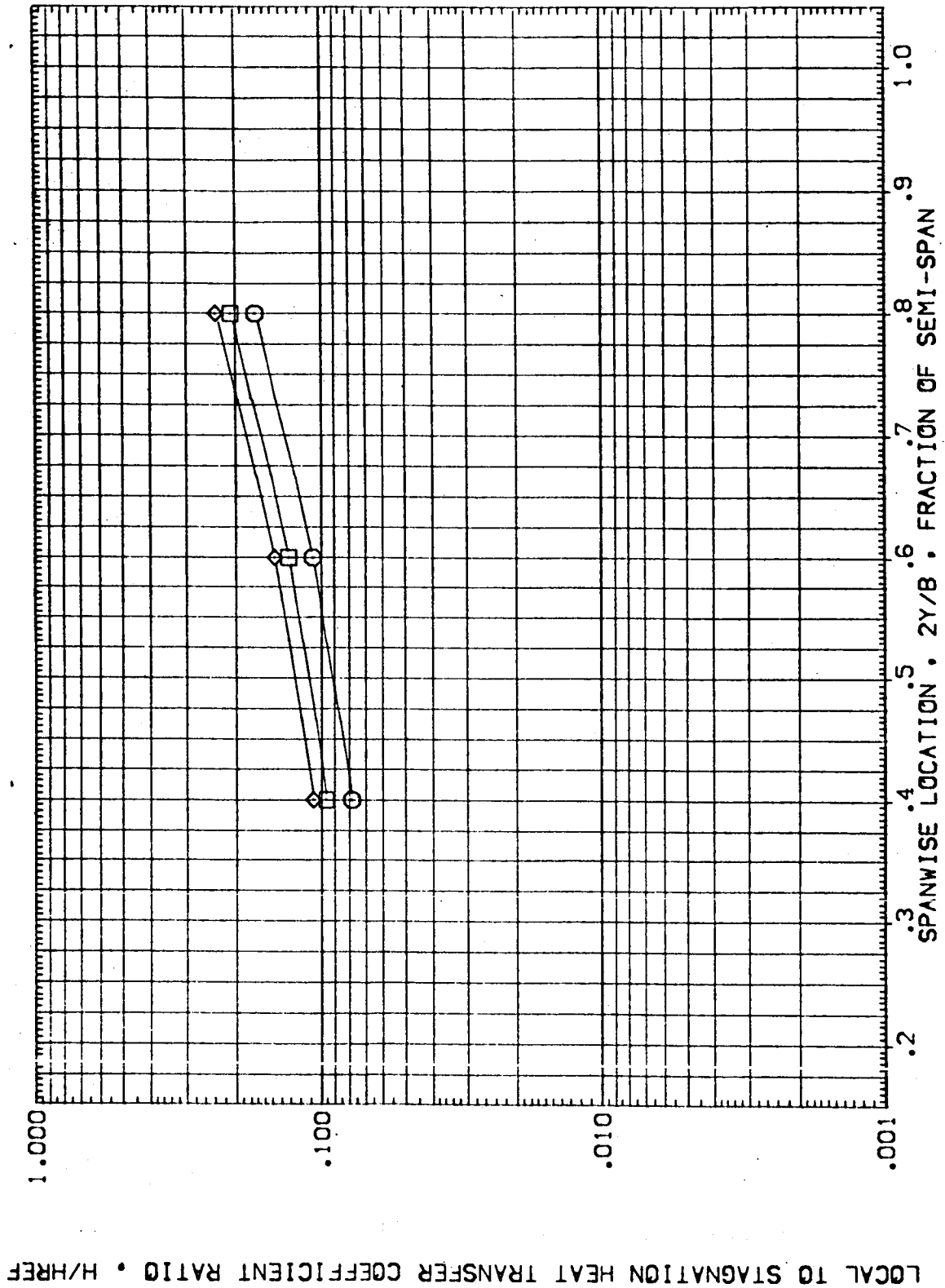


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|||OS) □ ARC 3.5-178 IH3 0+T+S
 (AE|||OS) ○ ARC 3.5-178 IH3 0+T+S
 (BE|||OS) ◇ ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

WING TOP
 WING TOP
 WING TOP

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

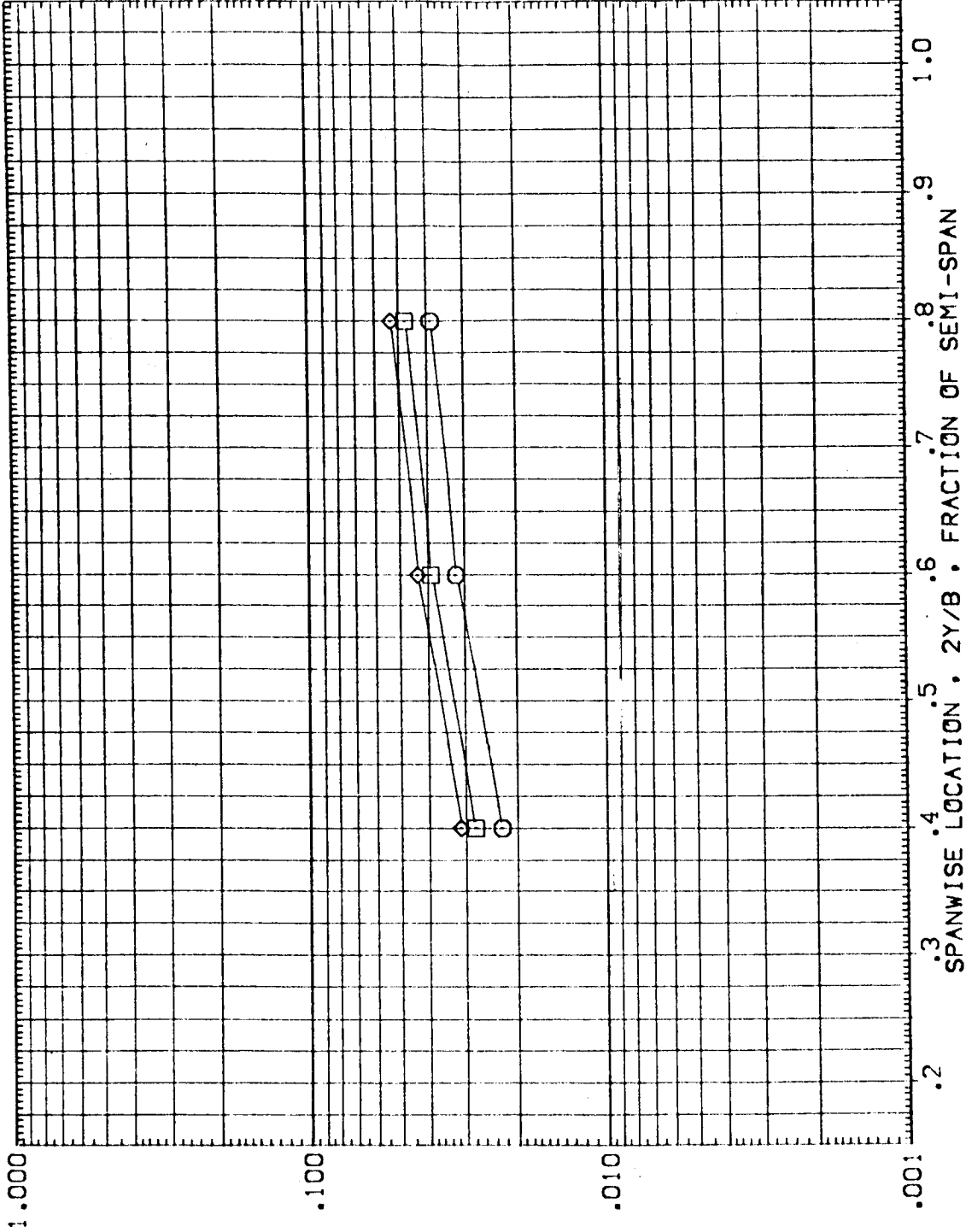


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE1105] ○ ARC 3.5-178 IH3 O+T+S
 [AE1105] ◇ ARC 3.5-178 IH3 O+T+S
 [BE1105] ◊ ARC 3.5-178 IH3 O+T+S

WING TOP
 WING TOP
 WING TOP

ALPHA
 .000
 .000

BETA
 -5.000
 -5.000

RN/L
 5.000
 5.000

HAW/HT
 1.000
 .850

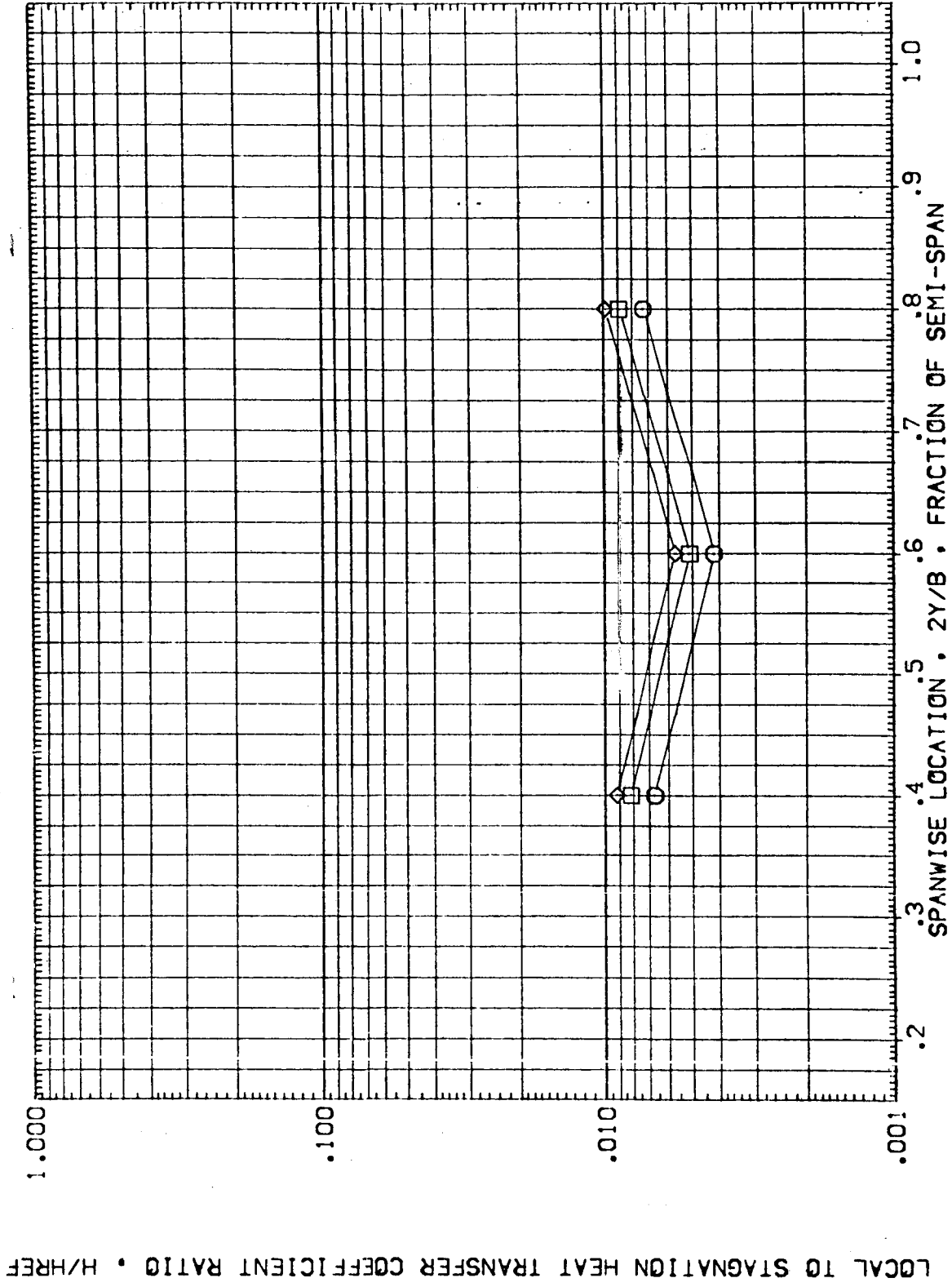


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1105) Q ARC 3.5-178 I43 C+T+S
 (AE1105) O ARC 3.5-178 I43 C+T+S
 (BE1105) X ARC 3.5-178 I43 C+T+S

ALPHA BETA RN/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

WING TOP
 WING TOP
 WING TOP

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

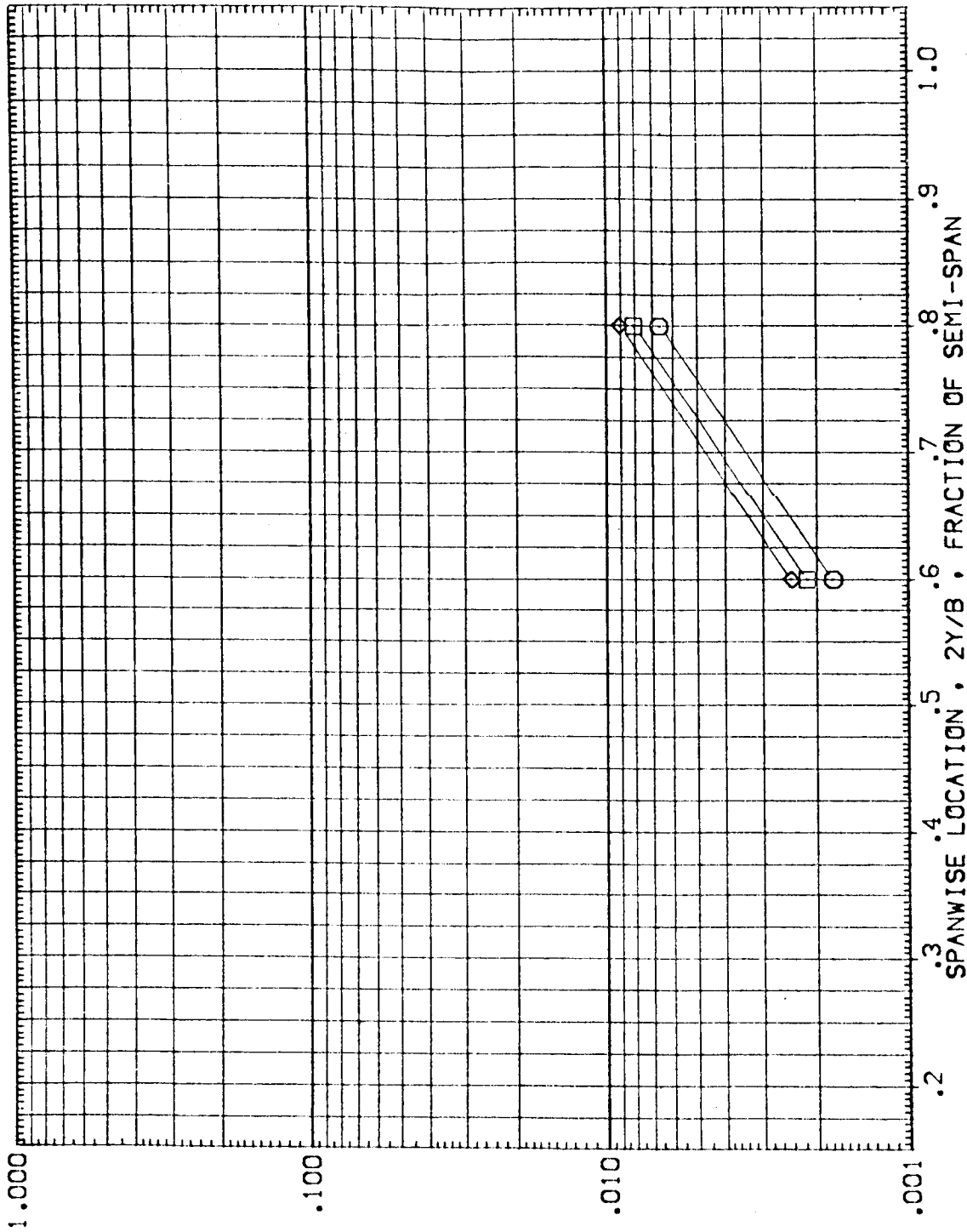


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .800

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(RE 05)	ARC 3.5-178 IH3 0-T+S	.000	-5.000	5.000	1.000
(AE 05)	ARC 3.5-178 IH3 0-T+S	.000	-5.000	5.000	.900
(BE 05)	ARC 3.5-178 IH3 0-T+S	.000	-5.000	5.000	.850

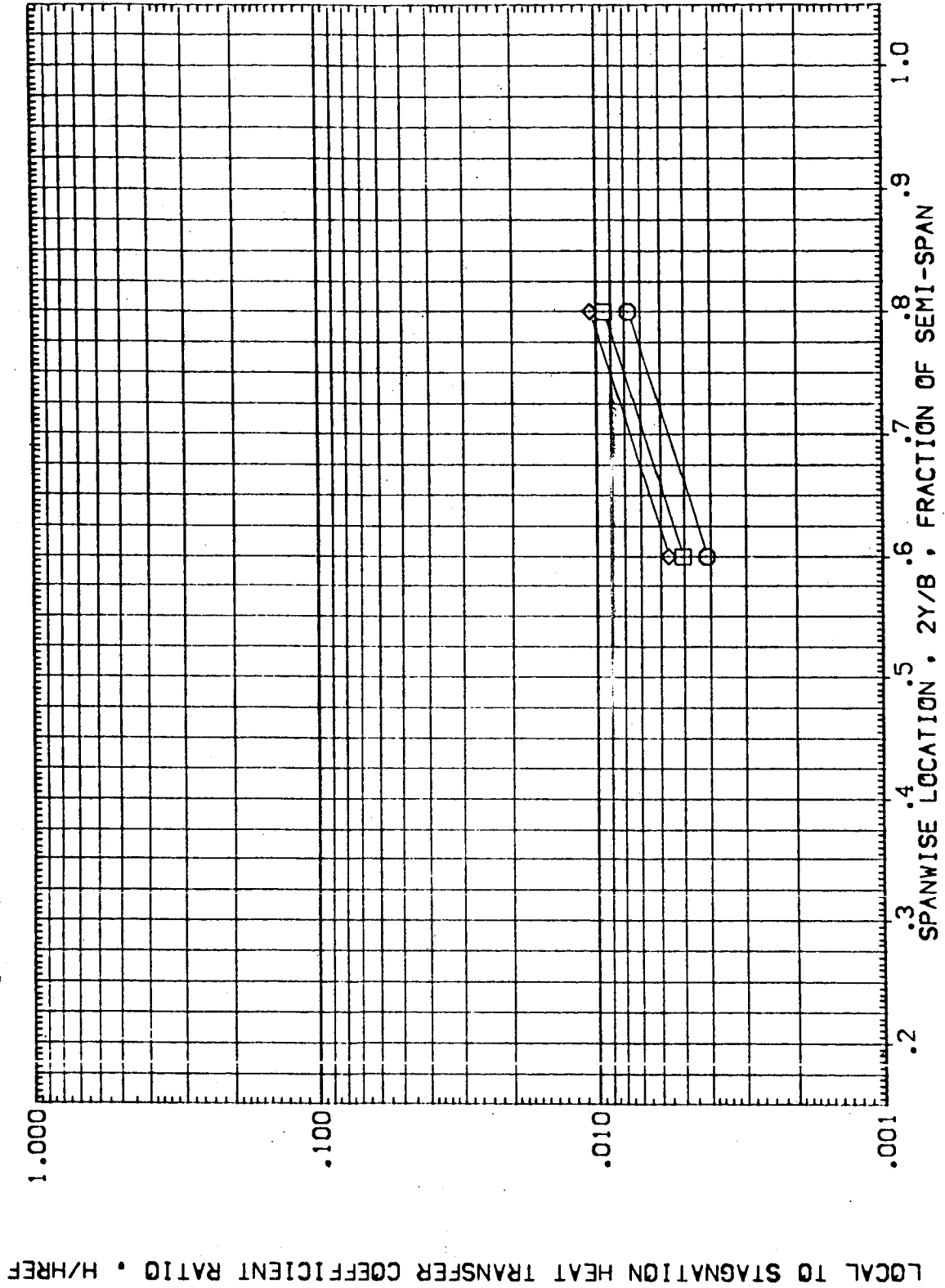


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (PRE||05) O ARC 3.5-178 |H3 O+T+S
 (AE||05) X ARC 3.5-178 |H3 O+T+S
 (BE||05) X ARC 3.5-178 |H3 O+T+S

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

WING TOP
 WING TOP
 WING TOP

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

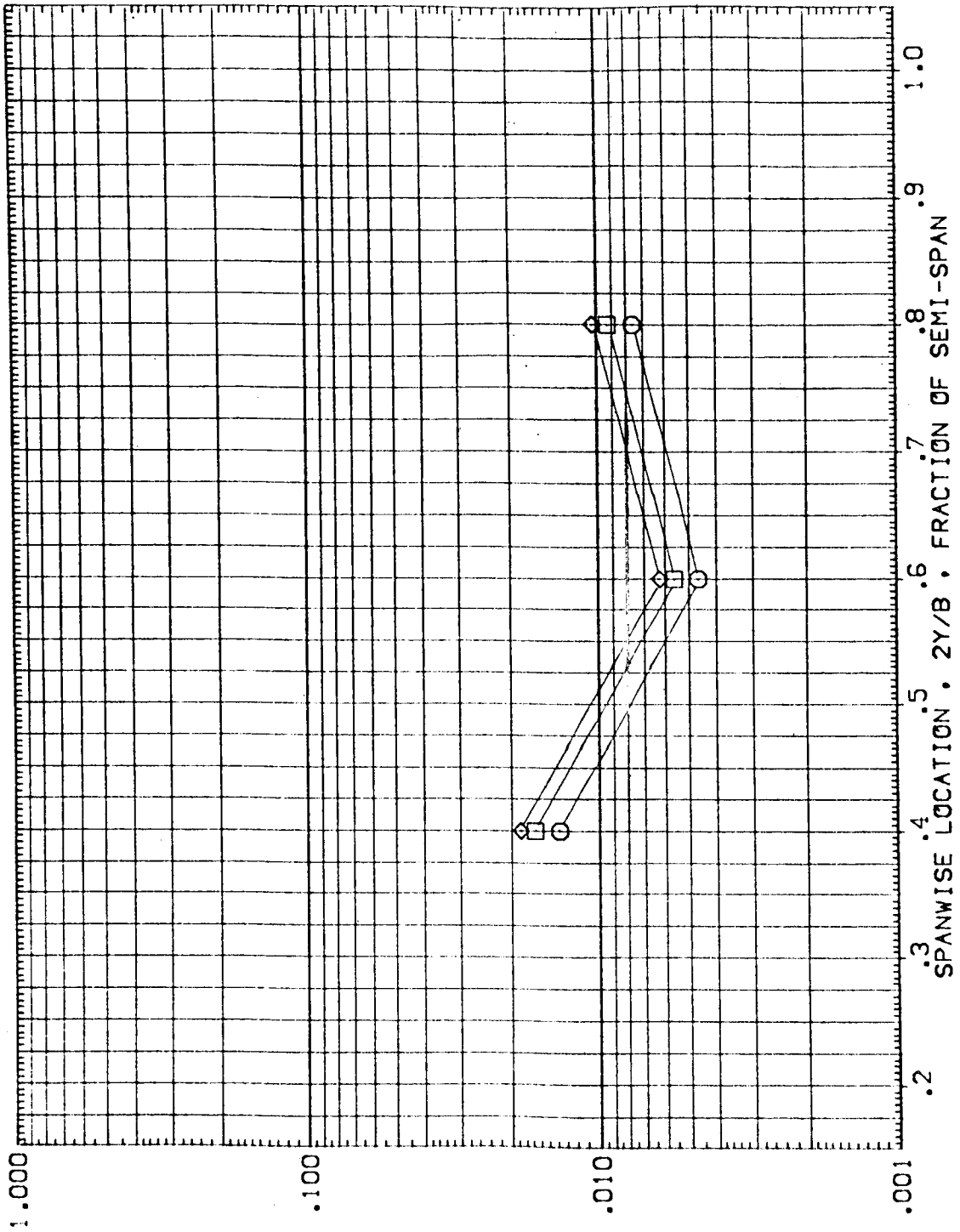


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .950



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE1119] [AE1119] [BE1119] [RC1119]
 ARC 3.5-178 [H3 O+T+S] VING TOP
 ARC 3.5-178 [H3 O+T+S] VING TOP
 ARC 3.5-178 [H3 O+T+S] VING TOP

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

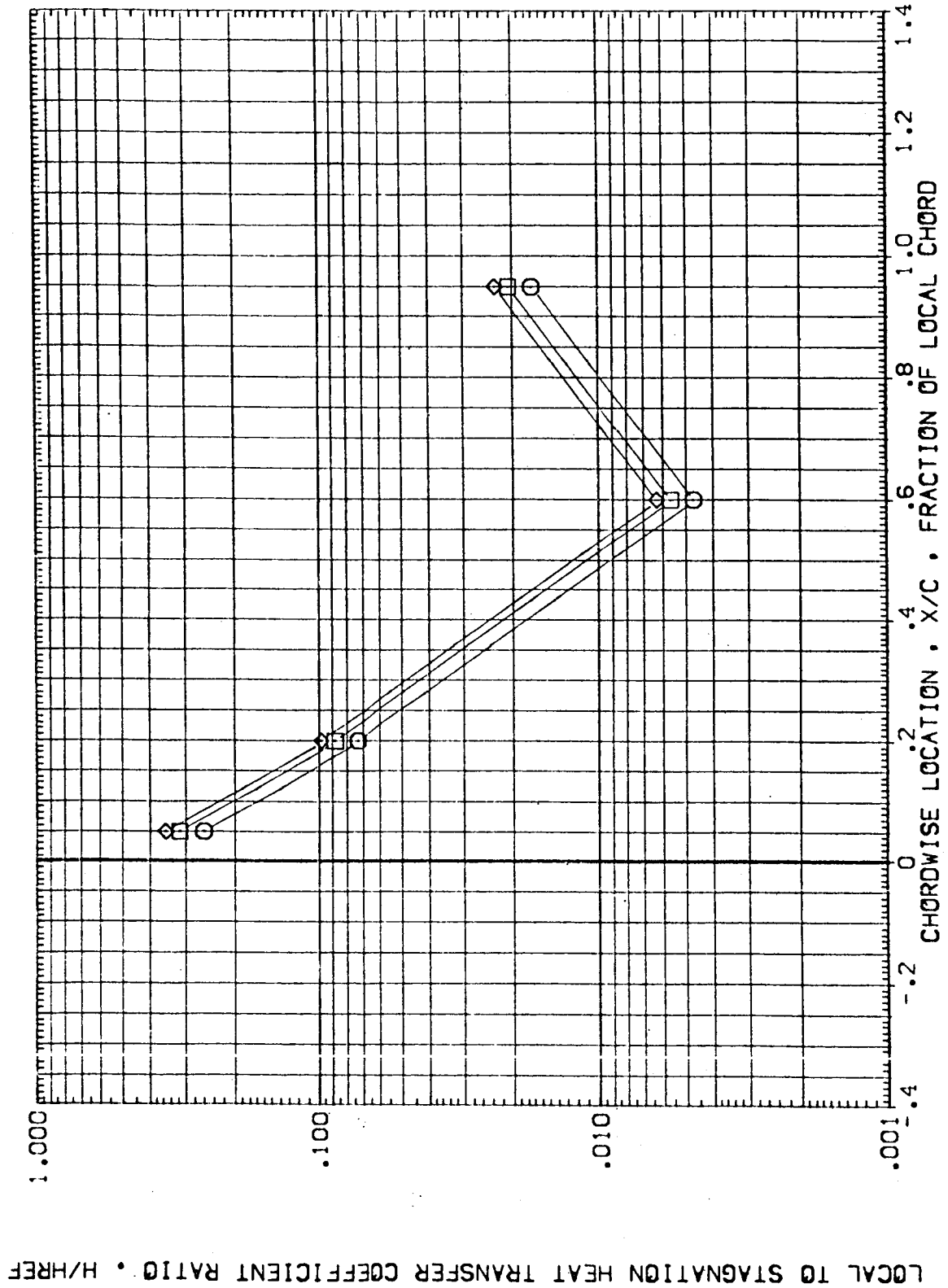


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE1119] [O] ARC 3.5-178 IH3 0+T+S
 [AE1119] [O] ARC 3.5-178 IH3 0+T+S
 [BE1119] [O] ARC 3.5-178 IH3 0+T+S

ALPHA BETA RN/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

WING TOP
 WING TOP
 WING TOP

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

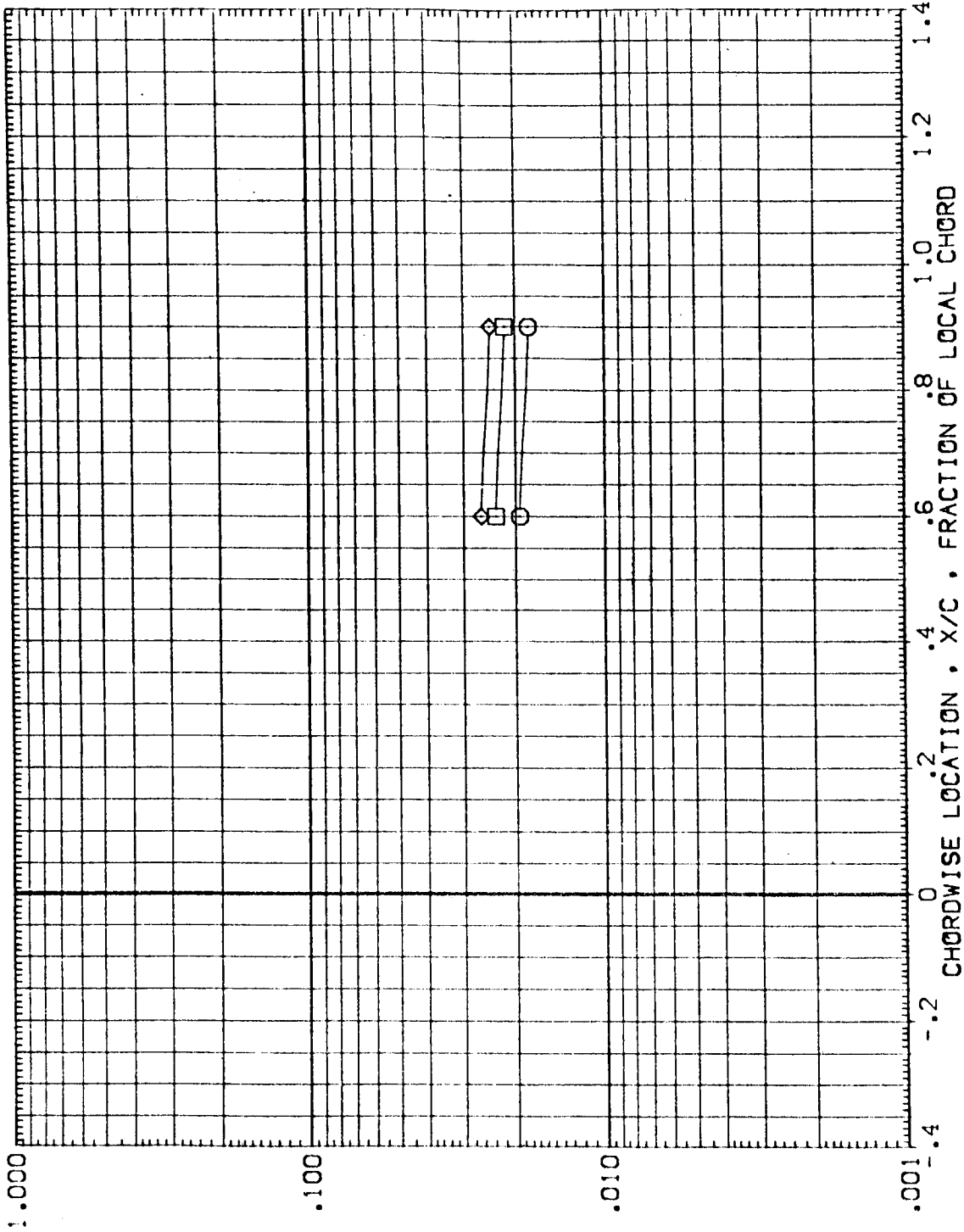


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L MAV/HT

(RE1119) ARC 3.5-178 IH3 0+T+S -5.000 .000 5.000 1.000

(AE1119) ARC 3.5-178 IH3 0+T+S -5.000 .000 5.000 .900

(BE1119) ARC 3.5-178 IH3 0+T+S -5.000 .000 5.000 .850

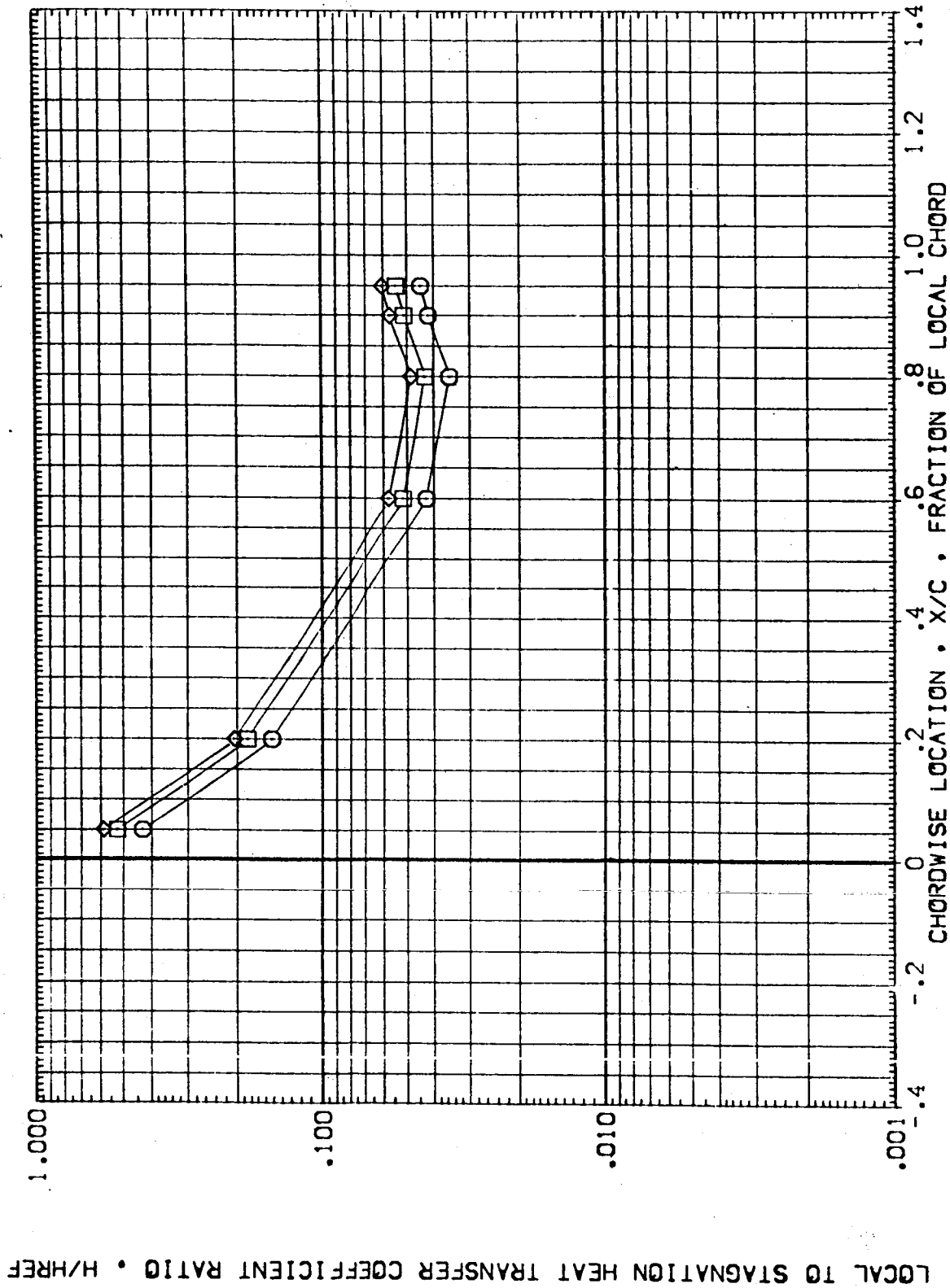


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|||19) O ARC 3.5-178 IH3 0+T+S WING TOP
 (AE|||19) O ARC 3.5-178 IH3 0+T+S WING TOP
 (BE|||19) O ARC 3.5-178 IH3 0+T+S WING TOP

ALPHA BETA RMA/L HAW/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

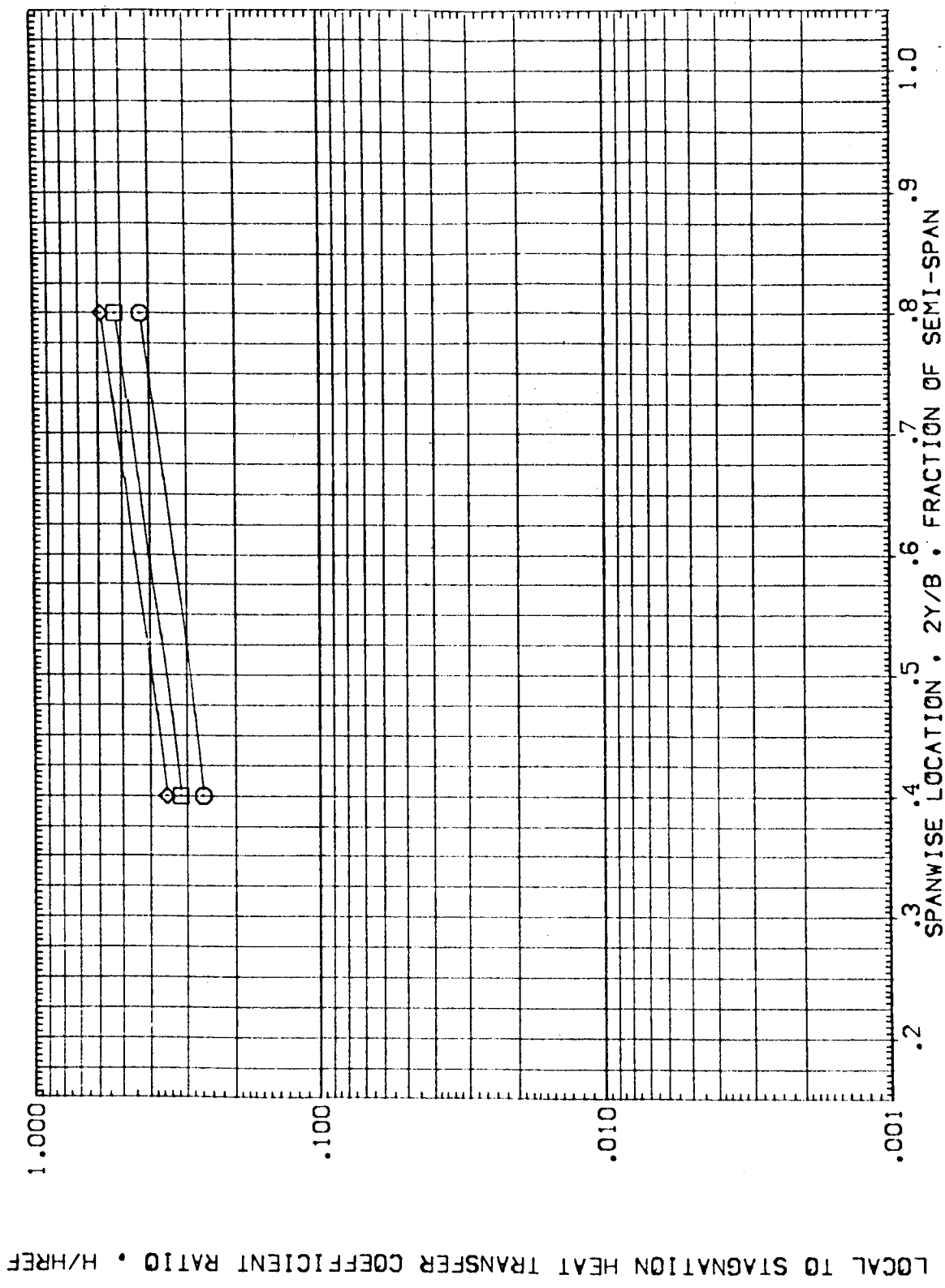


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .050



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(RE1119) Q ARC 3.5-178 IH3 O+T+S -5.000 .000 5.000 1.000

(AE1119) X ARC 3.5-178 IH3 O+T+S -5.000 .000 5.000 .900

(BE1119) X ARC 3.5-178 IH3 O+T+S -5.000 .000 5.000 .650

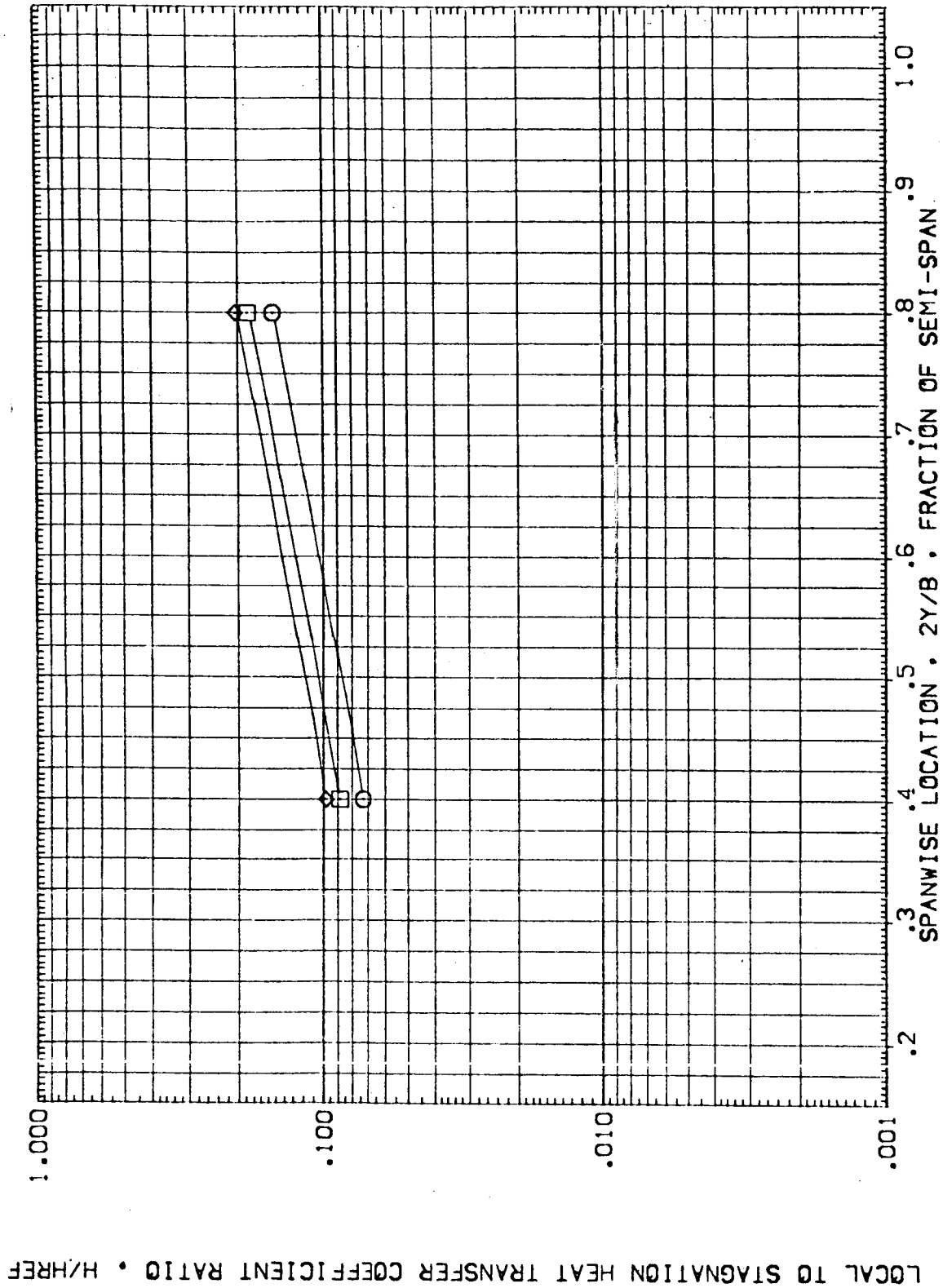


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE||19} O ARC 3.5-178 IH3 0+T+S
 {AE||19} O ARC 3.5-178 IH3 0+T+S
 {BE||19} O ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

WING TOP
 WING TOP
 WING TOP

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

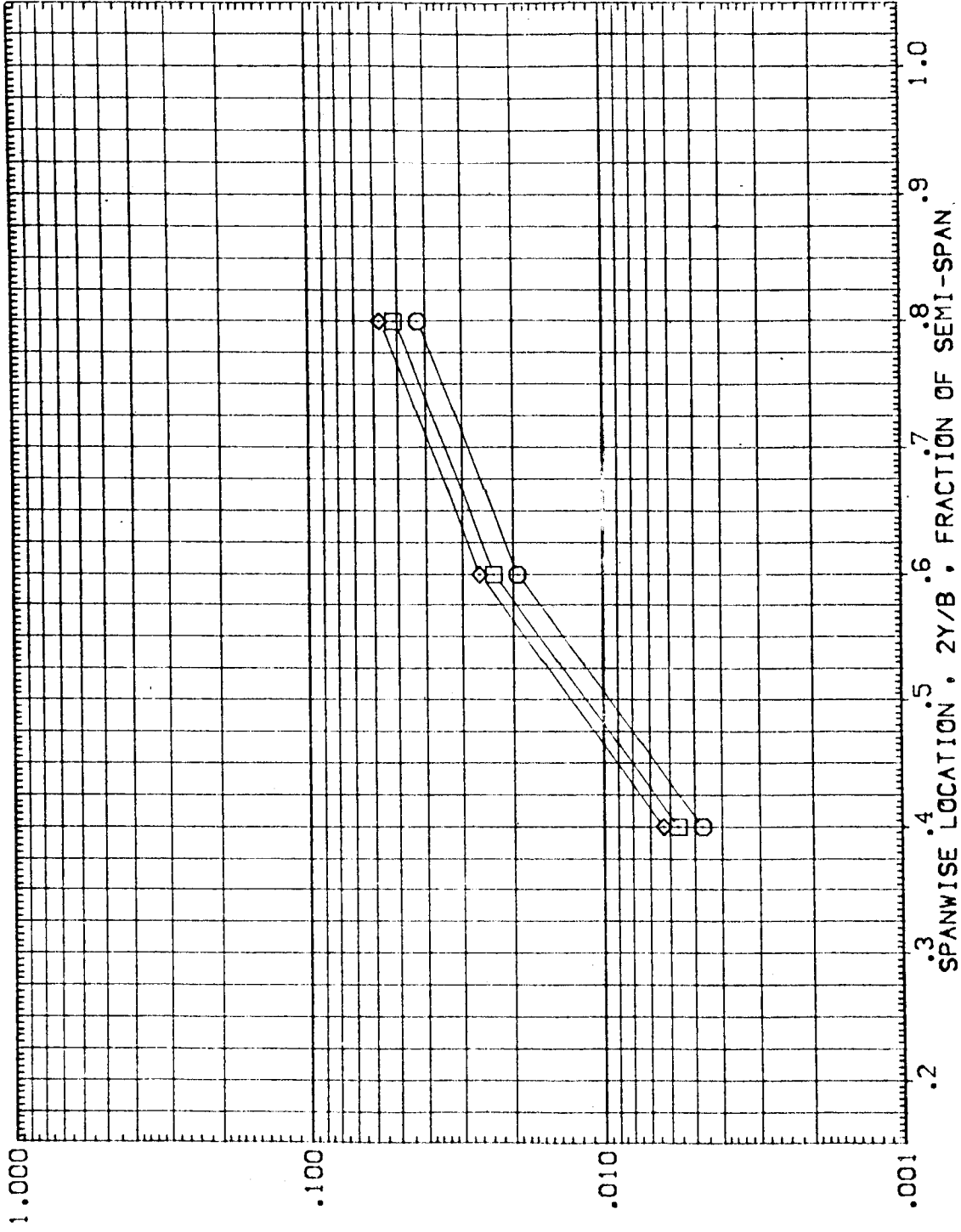


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE|||19] ARC 3.5-178 IH3 O+T+S
 [AE|||19] ARC 3.5-178 IH3 O+T+S
 [BE|||19] ARC 3.5-178 IH3 O+T+S

WING TOP WING TOP WING TOP
 ALPHA BETA RN/L MAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

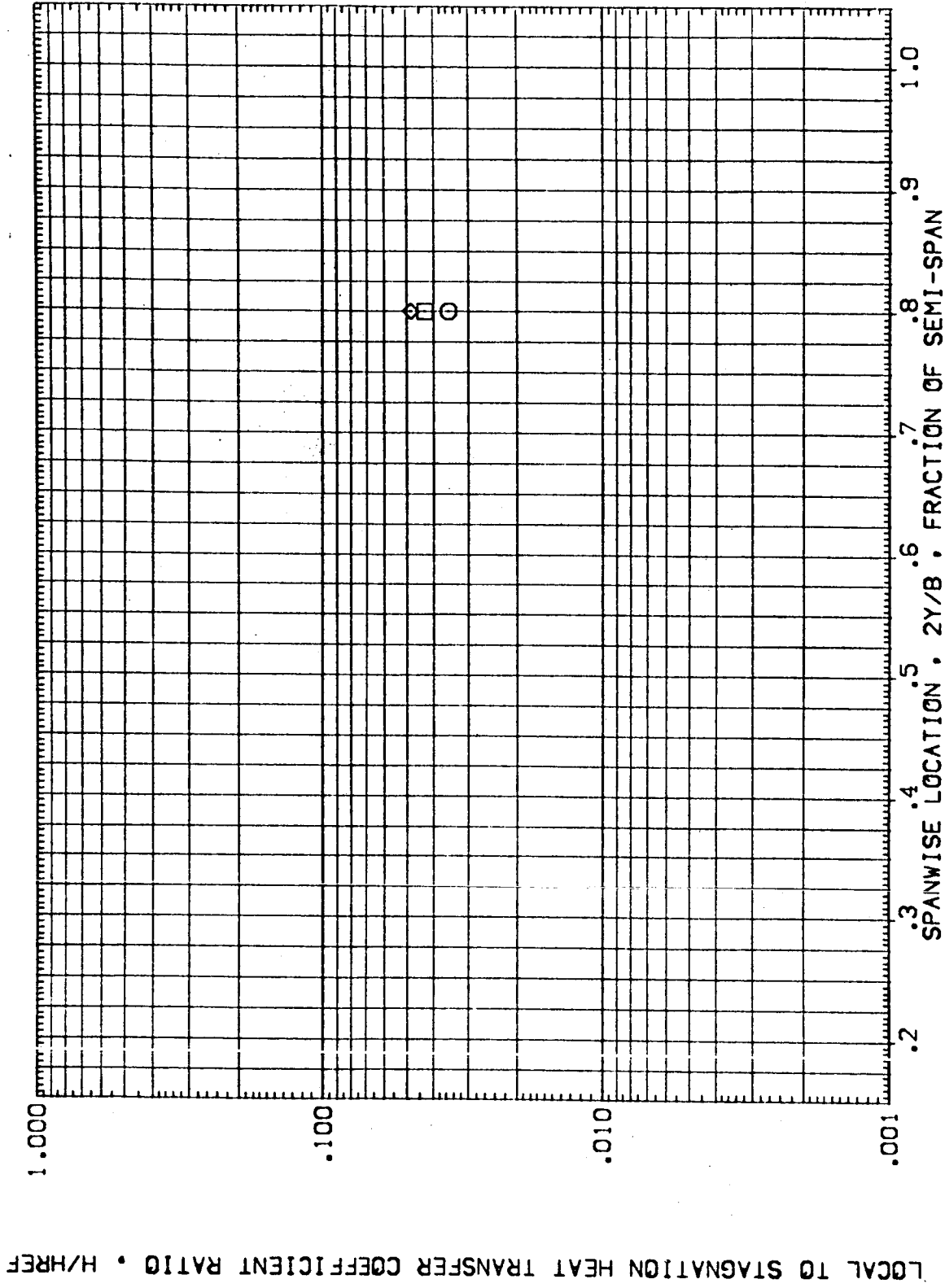


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .800

DATA SET SYMBOL: (RE1119) (AE1119) (BE1119)

CONFIGURATION DESCRIPTION: ARC 3.5-178 IH3 0+T+S

WING TOP: WING TOP WING TOP WING TOP

ALPHA: .000 .000 .000
 -5.000 -5.000 -5.000

BETA: .000 .000 .000

RN/L: 5.000 5.000 5.000

HAW/HT: 1.000 .900 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

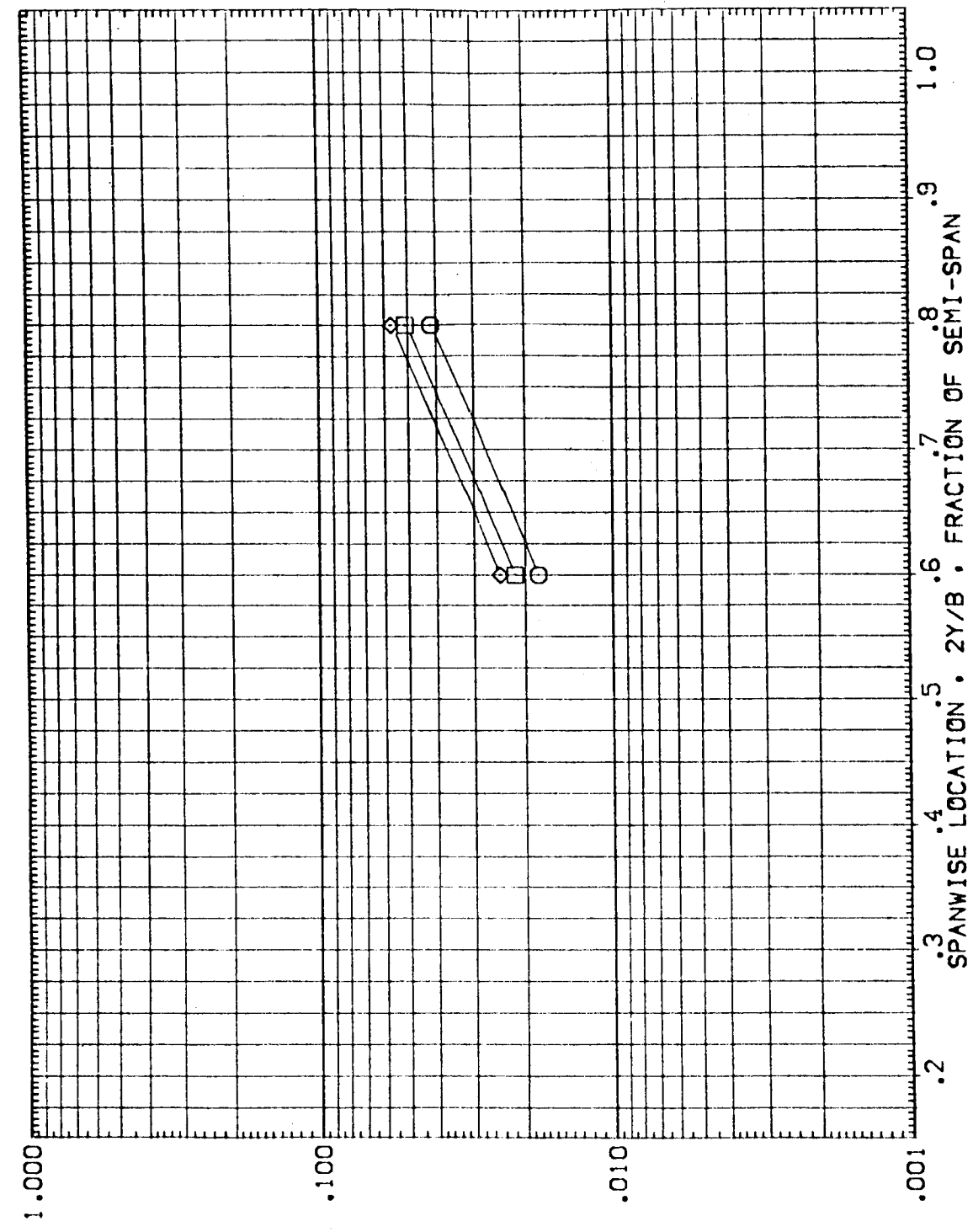


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

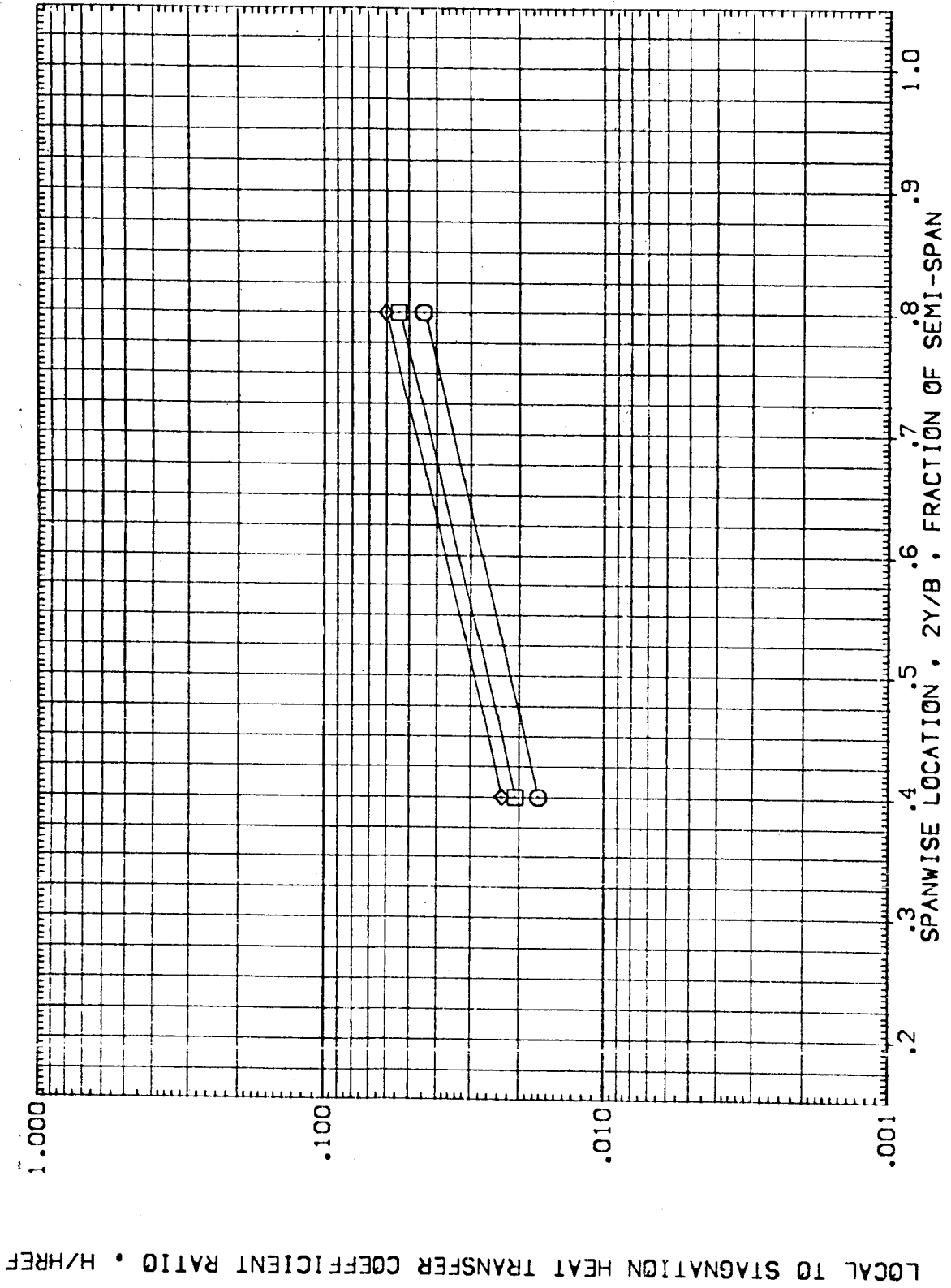
MACH = 5.300 X/C = .900



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1119) ARC 3.5-178 143 O+T+S
 (AE1119) ARC 3.5-178 143 O+T+S
 (BE1119) ARC 3.5-178 143 O+T+S

WING TOP
 WING TOP
 WING TOP

ALPHA BETA RN/L HAW/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .950

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RE||20} ARC 3.5-178 |H3 0+1+S
 {AE||20} ARC 3.5-178 |H3 0+1+S
 {BE||20} ARC 3.5-178 |H3 0+1+S

WING TOP
 WING TOP
 WING TOP

ALPHA BETA RN/L HAW/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .650

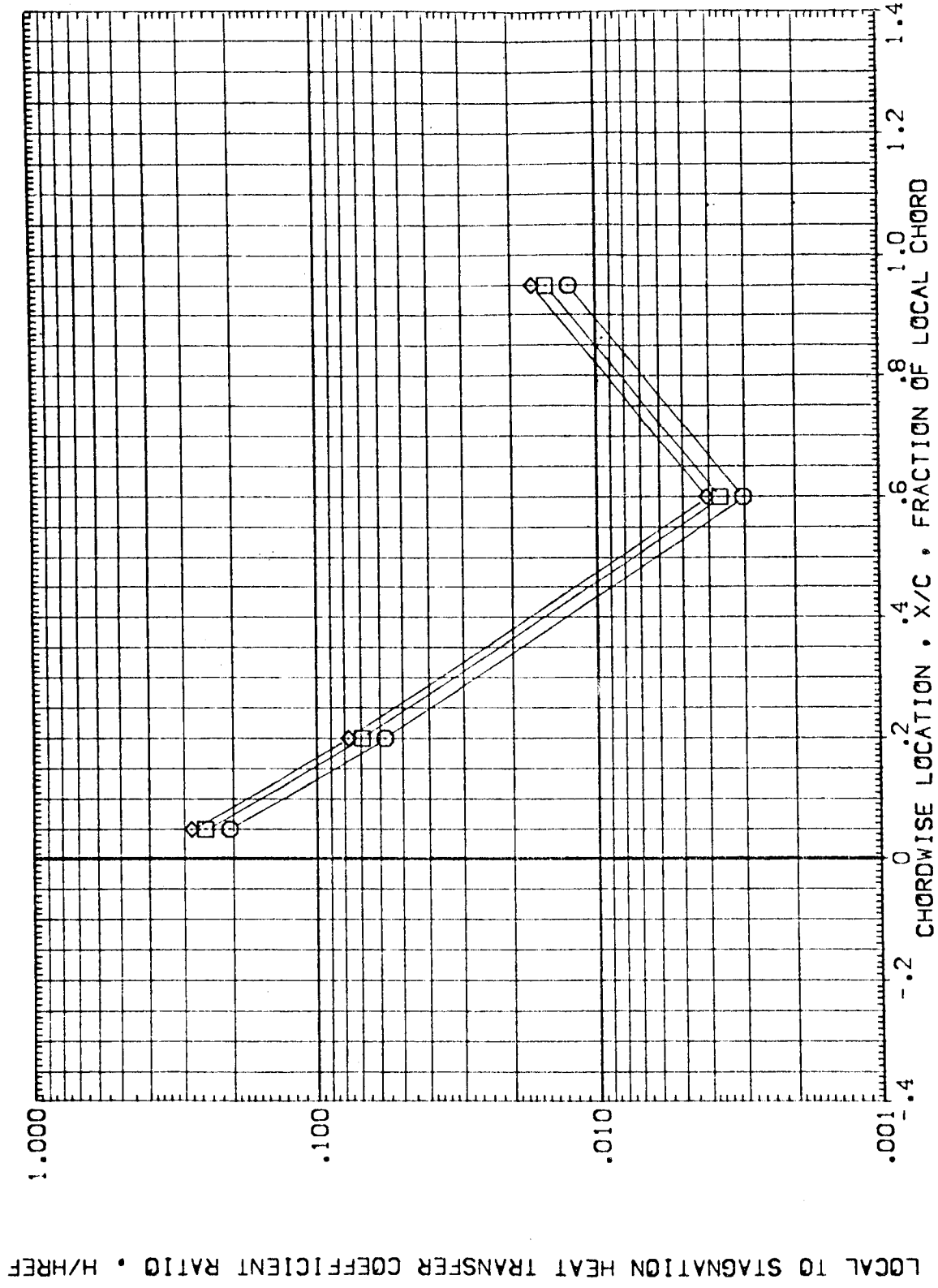


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .400

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING TOP	ALPHA	BETA	RN/L	HAY/HT
(RE:120)	ARC 3.5-178 IH3 O+T+S	WING TOP	-3.000	.000	5.000	1.000
(AE:120)	ARC 3.5-178 IH3 O+T+S	WING TOP	-3.000	.000	5.000	.900
(BE:120)	ARC 3.5-178 IH3 O+T+S	WING TOP	-3.000	.000	5.000	.850

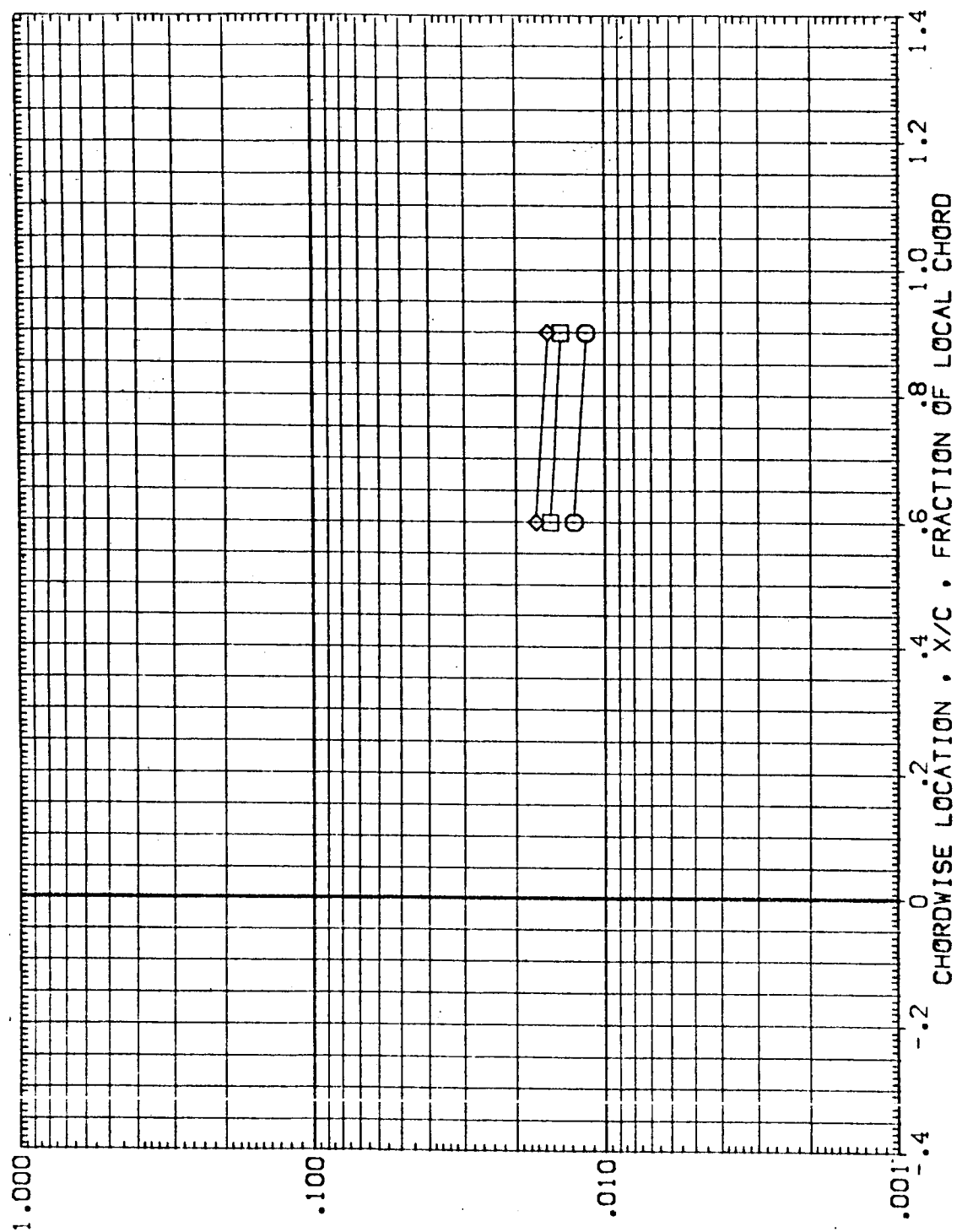


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1120) [O] ARC 3.5-178 [H3 0+1+S]
 (AE1120) [◇] ARC 3.5-178 [H3 0+1+S]
 (BE1120) [◇] ARC 3.5-178 [H3 0+1+S]

ALPHA BETA RV/L HAV/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

WING TOP
 WING TOP
 WING TOP

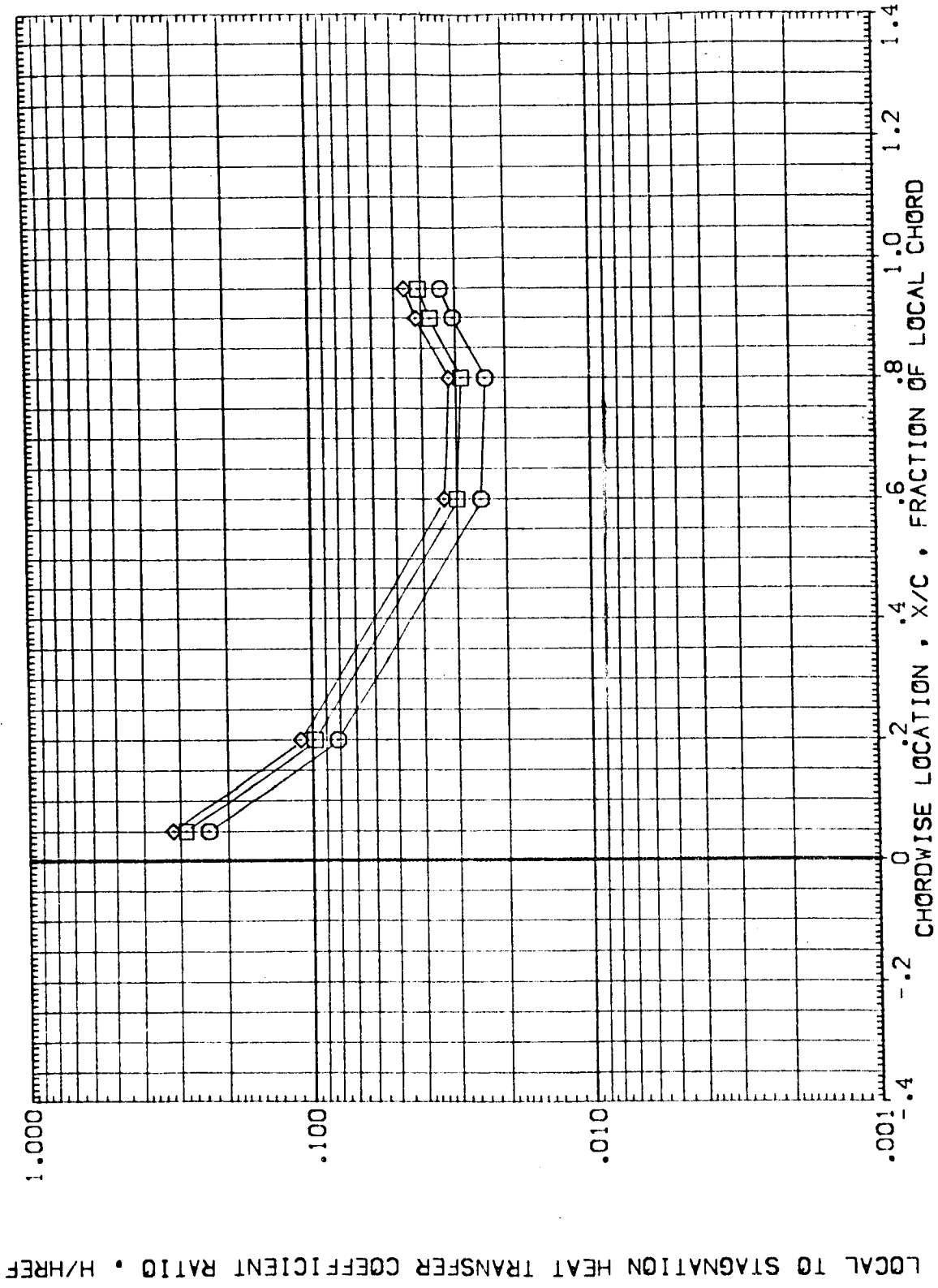


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 2Y/B = .800



DATA SET SYMBOL CONFIGURATION DESCRIPTION

{RE 20}	ARC 3.5-178	H3	0+T+S	WING TOP	ALPHA	BETA	RN/L	HAV/HT
{AE 20}	ARC 3.5-178	H3	0+T+S	WING TOP	-3.000	.000	5.000	1.000
{BE 20}	ARC 3.5-178	H3	0+T+S	WING TOP	-3.000	.000	5.000	.500
								.650

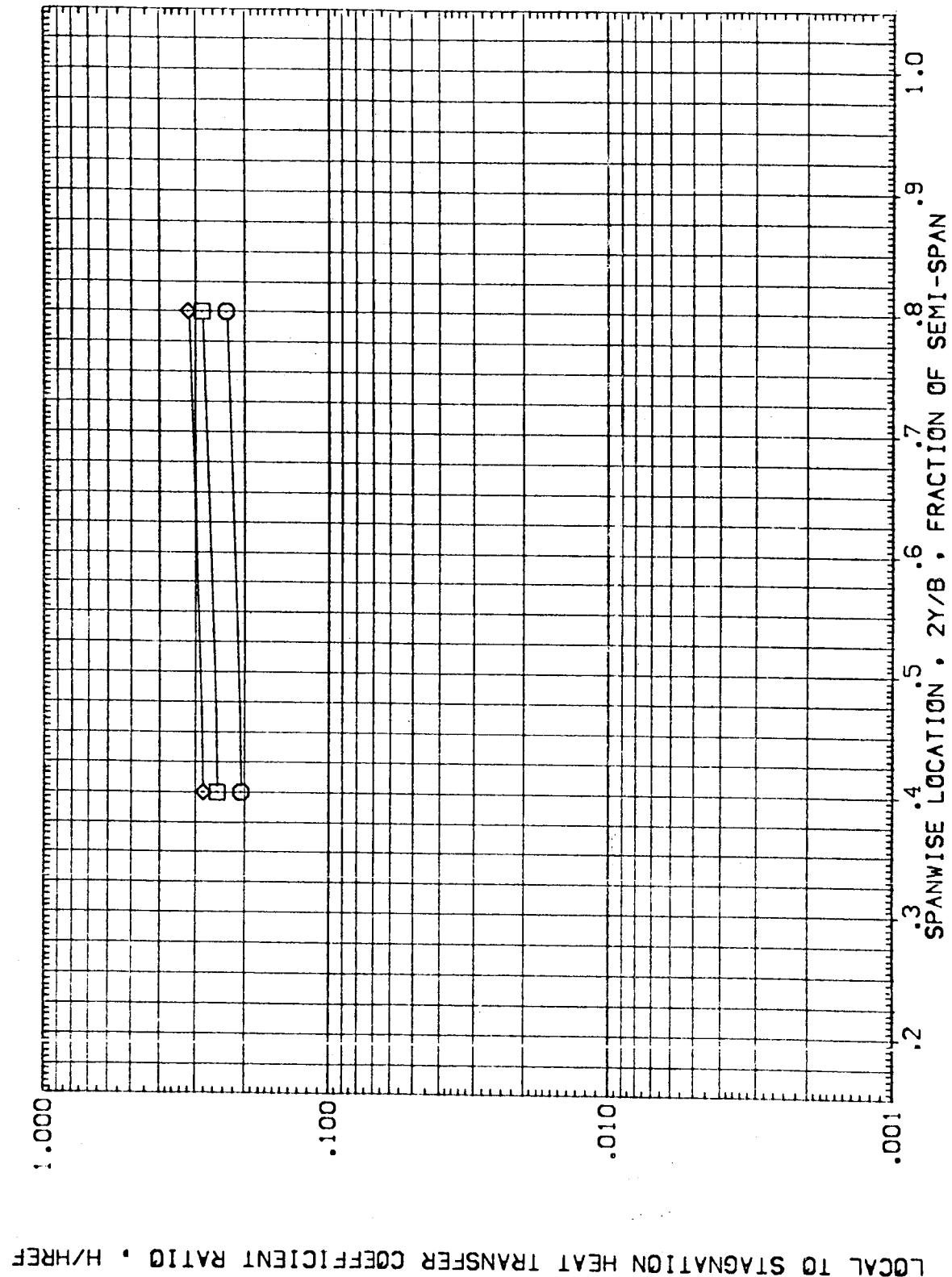


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE1120] [H3 0+T+S]
 [AE1120] [H3 0+T+S]
 [BE1120] [H3 0+T+S]

WING TOP
 WING TOP
 WING TOP

ALPHA BETA

RN/L

HAY/HT

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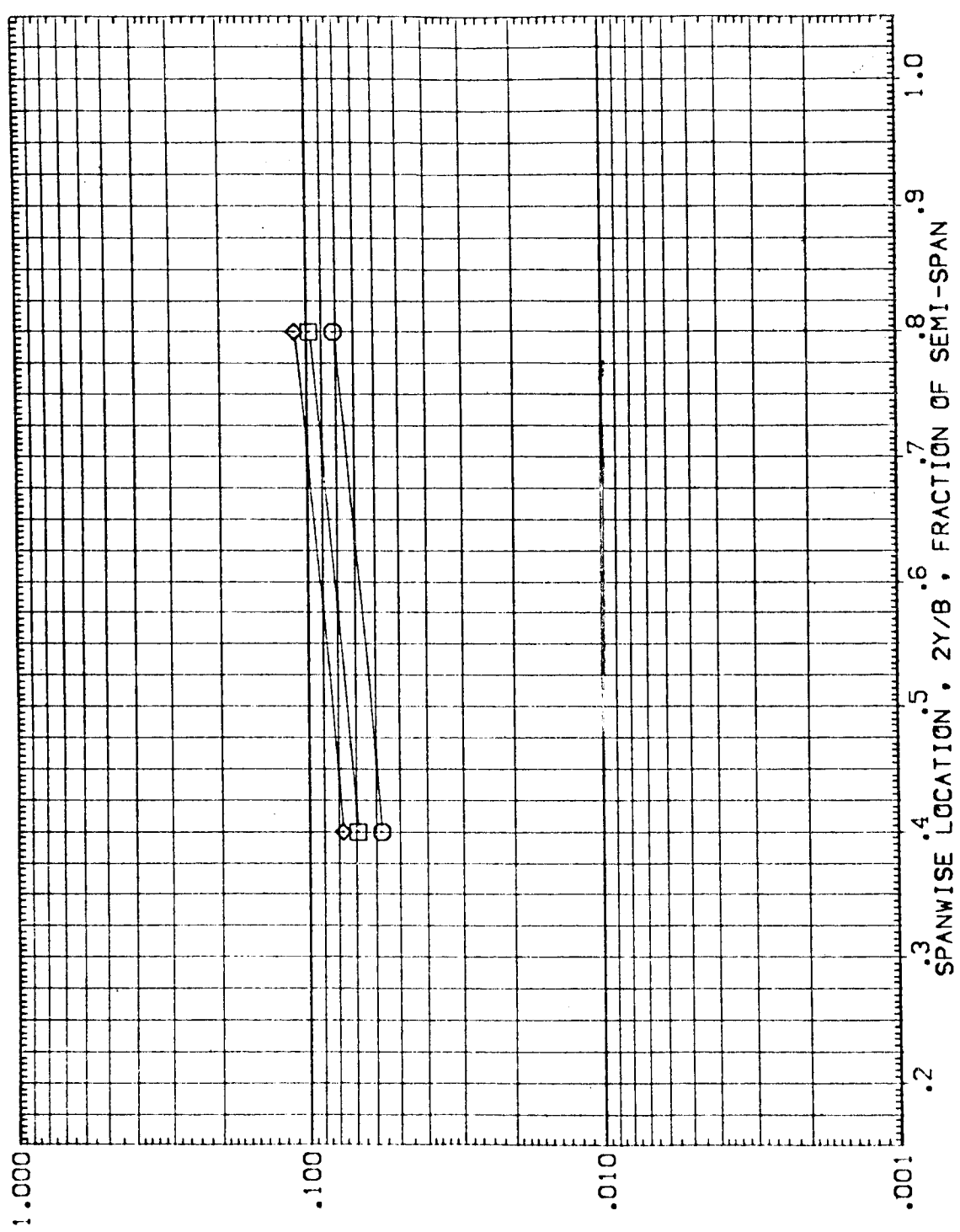


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1120) [RE] ARC 3.5-178 IH3 C+T+S
 (AE1120) [AE] ARC 3.5-178 IH3 C+T+S
 (BE1120) [BE] ARC 3.5-178 IH3 C+T+S

WING TOP
 WING TOP
 WING TOP

ALPHA
 -3.000
 -3.000
 -3.000

BETA
 .000
 .000
 .000

RN/VL
 5.000
 5.000
 5.000

HAV/HT
 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

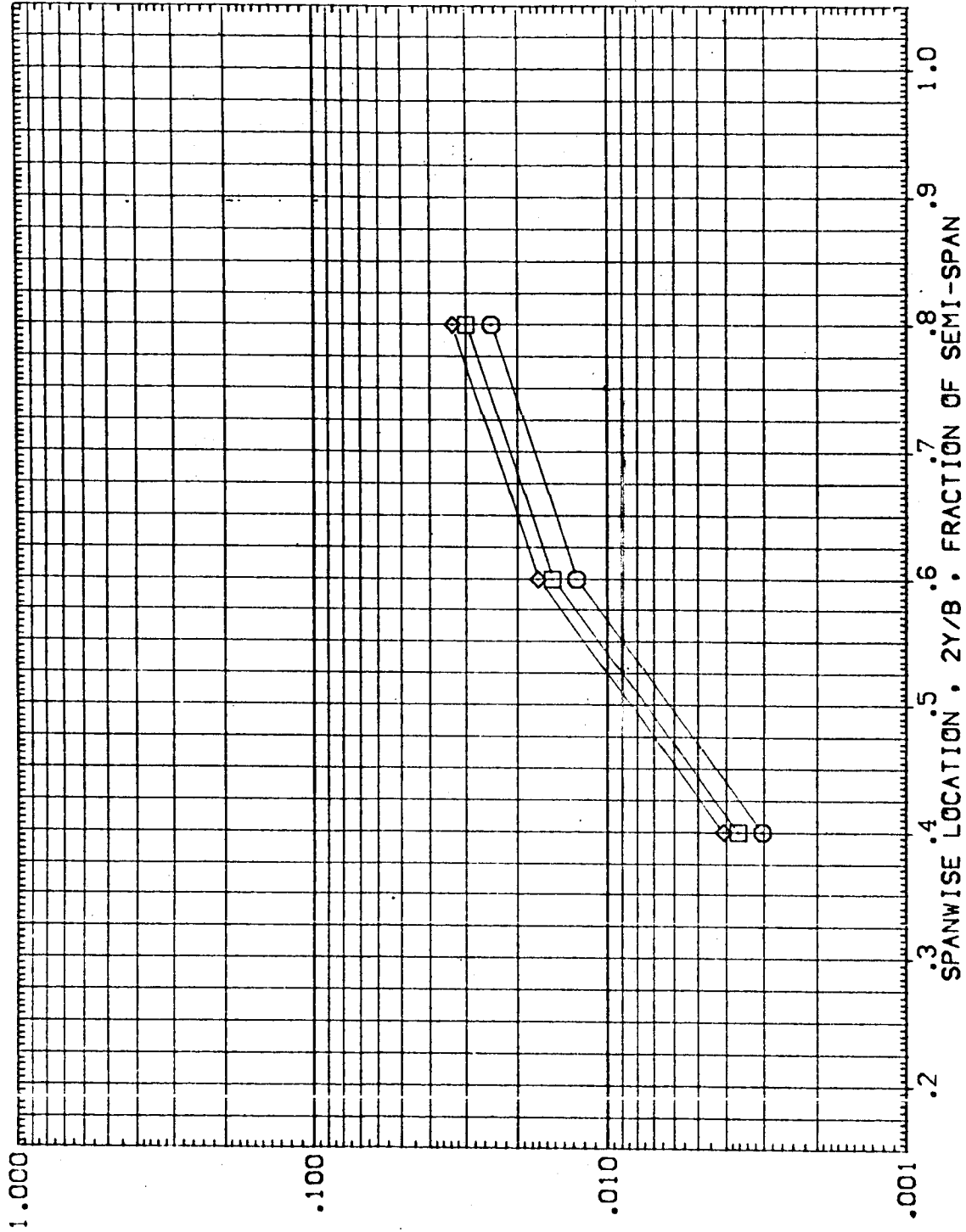


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE1120] □ ARC 3.5-178 IH3 0+I+S
 [AE1120] ◇ ARC 3.5-178 IH3 0+I+S
 [BE1120] ◇ ARC 3.5-178 IH3 0+I+S

WING TOP
 WING TOP
 WING TOP

ALPHA
 -3.000
 -3.000
 -3.000

BETA
 .000
 .000
 .000

RV/L
 5.000
 5.000
 5.000

HAV/HT
 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

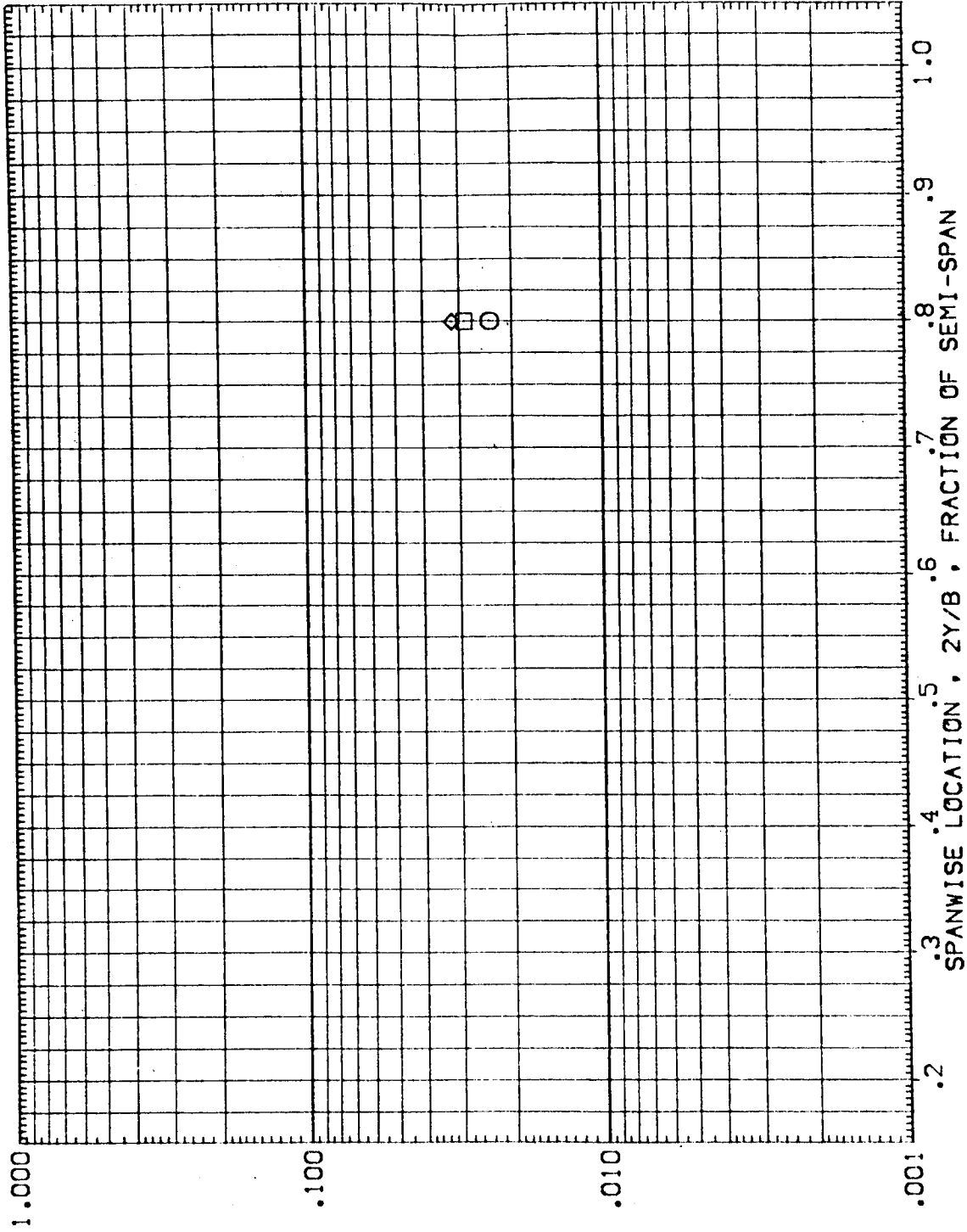


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAW/HT

{RE||20} ARC 3.5-178 I+3 O+T+S -3.000 .000 5.000 1.000

{AE||20} ARC 3.5-178 I+3 O+T+S -3.000 .000 5.000 .900

{BE||20} ARC 3.5-178 I+3 O+T+S -3.000 .000 5.000 .850

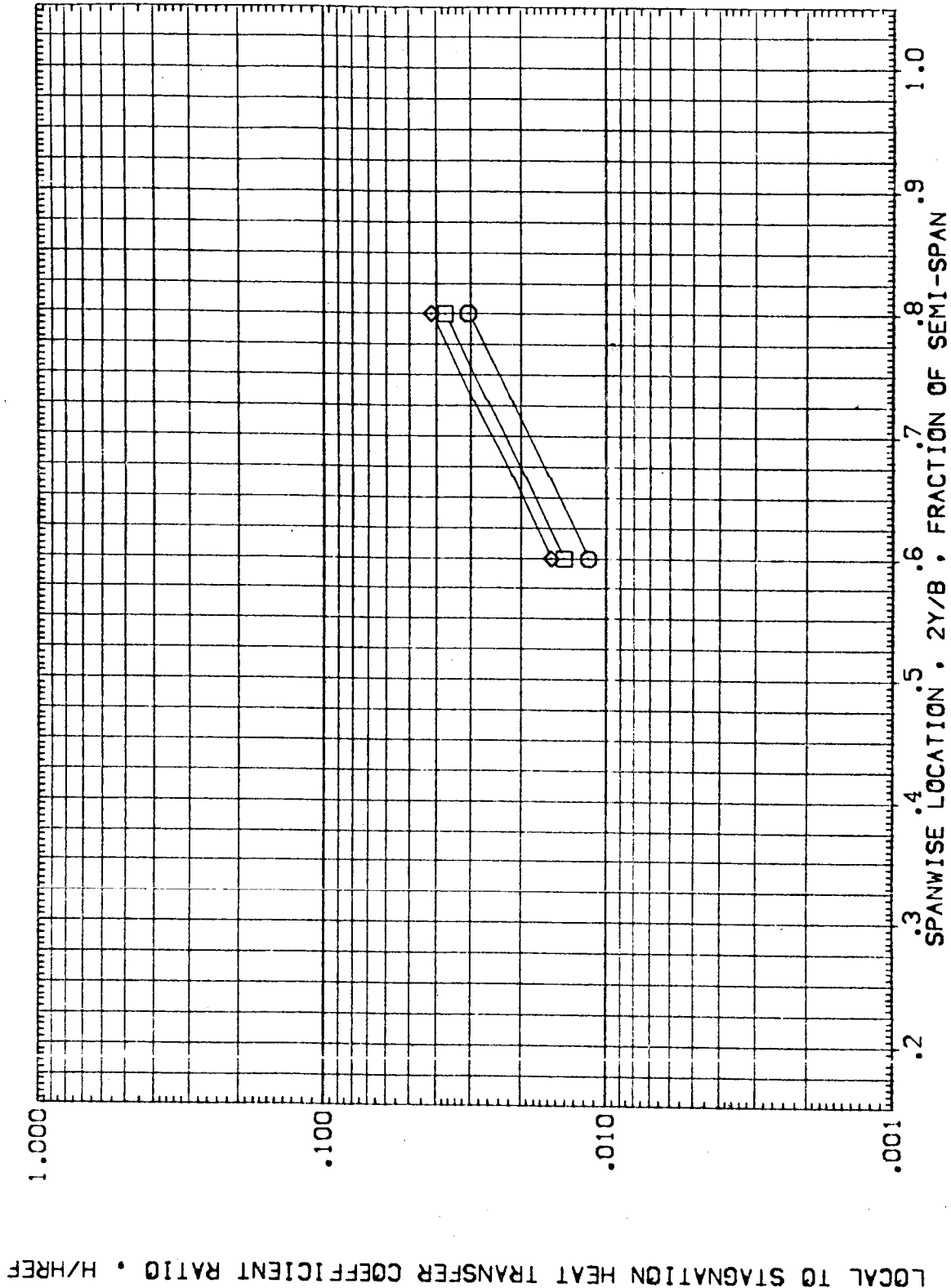


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1120) ◯ ARC 3.5-178 IH3 O+T+S
 (AE1120) ◻ ARC 3.5-178 IH3 O+T+S
 (BE1120) ◇ ARC 3.5-178 IH3 O+T+S

ALPHA BETA RN/L HAW/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

WING TOP
 WING TOP
 WING TOP

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

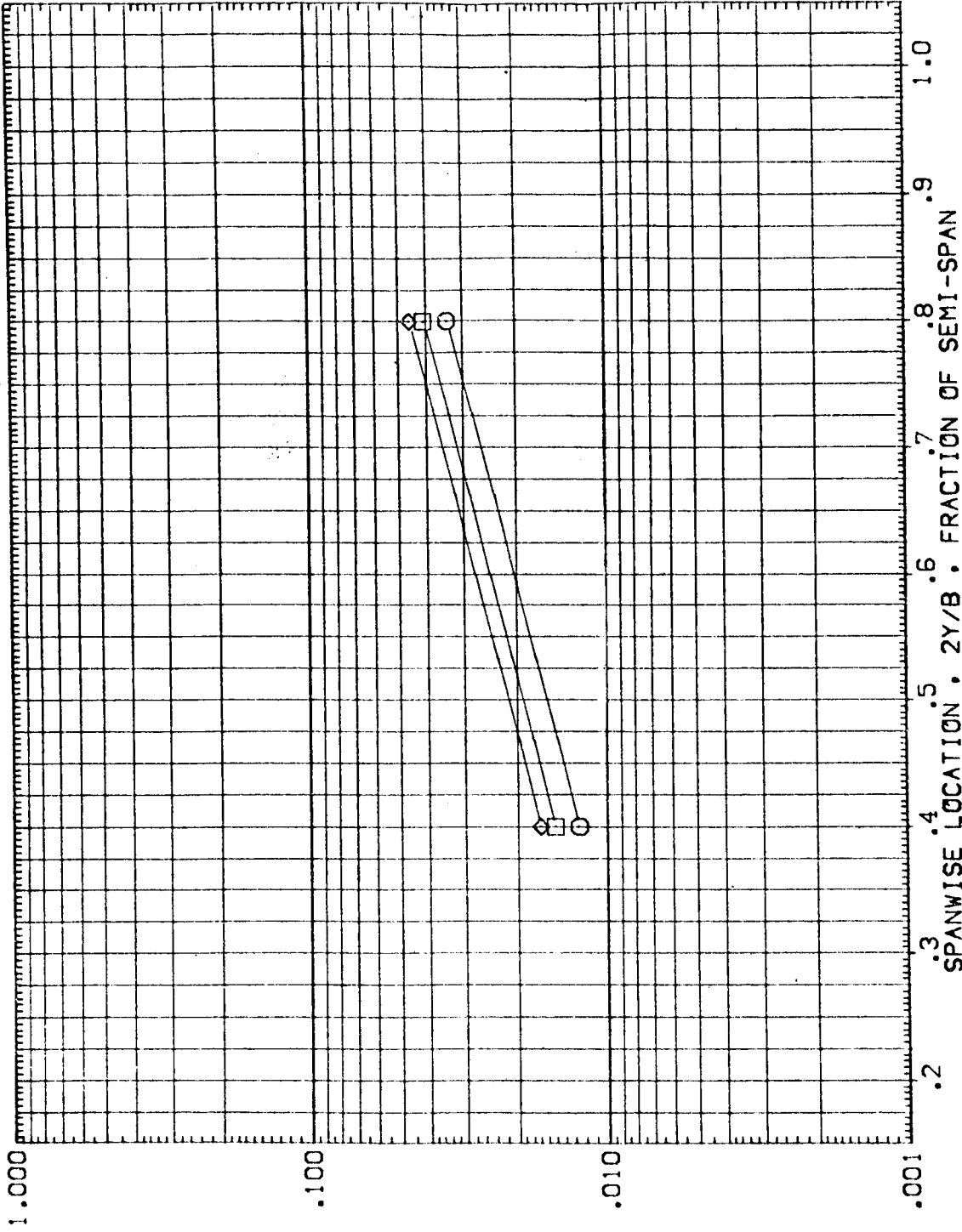


FIG. 32 WING TOP - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .950

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING TOP	ALPHA	BETA	RV/L	HAW/HT
(EE1106)	ARC 3.5-178 143 O+T+S	WING TOP	.000	.000	1.500	.900
(EE1107)	ARC 3.5-178 143 O+T+S	WING TOP	.000	.000	5.000	.900
(EE1108)	ARC 3.5-178 143 O+T+S (TRIPS)	WING TOP	.000	.000	1.500	.900
(EE1109)	ARC 3.5-178 143 O+T+S (TRIPS)	WING TOP	.000	.000	5.000	.900

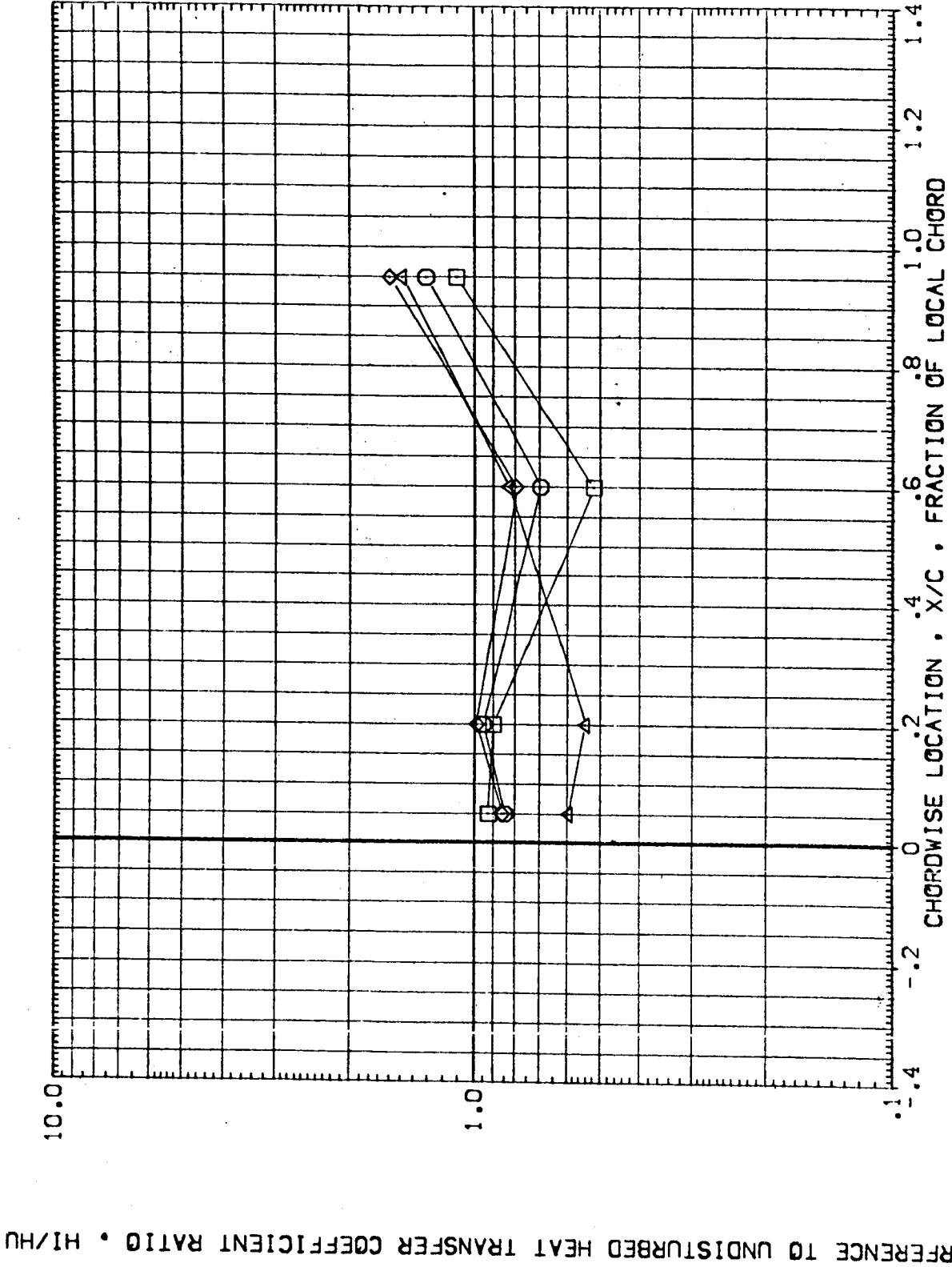


FIG. 33 WING TOP - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION WING TOP ALPHA BETA RN/L HAV/HT

(EE1106) ARC 3.5-178 I43 0+T+S WING TOP .000 .000 1.500 .900

(EE1107) ARC 3.5-178 I43 0+T+S WING TOP .000 .000 5.000 .900

(EE1108) ARC 3.5-178 I43 0+T+S (TRIPS) WING TOP .000 .000 1.500 .900

(EE1109) ARC 3.5-178 I43 0+T+S (TRIPS) WING TOP .000 .000 5.000 .900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

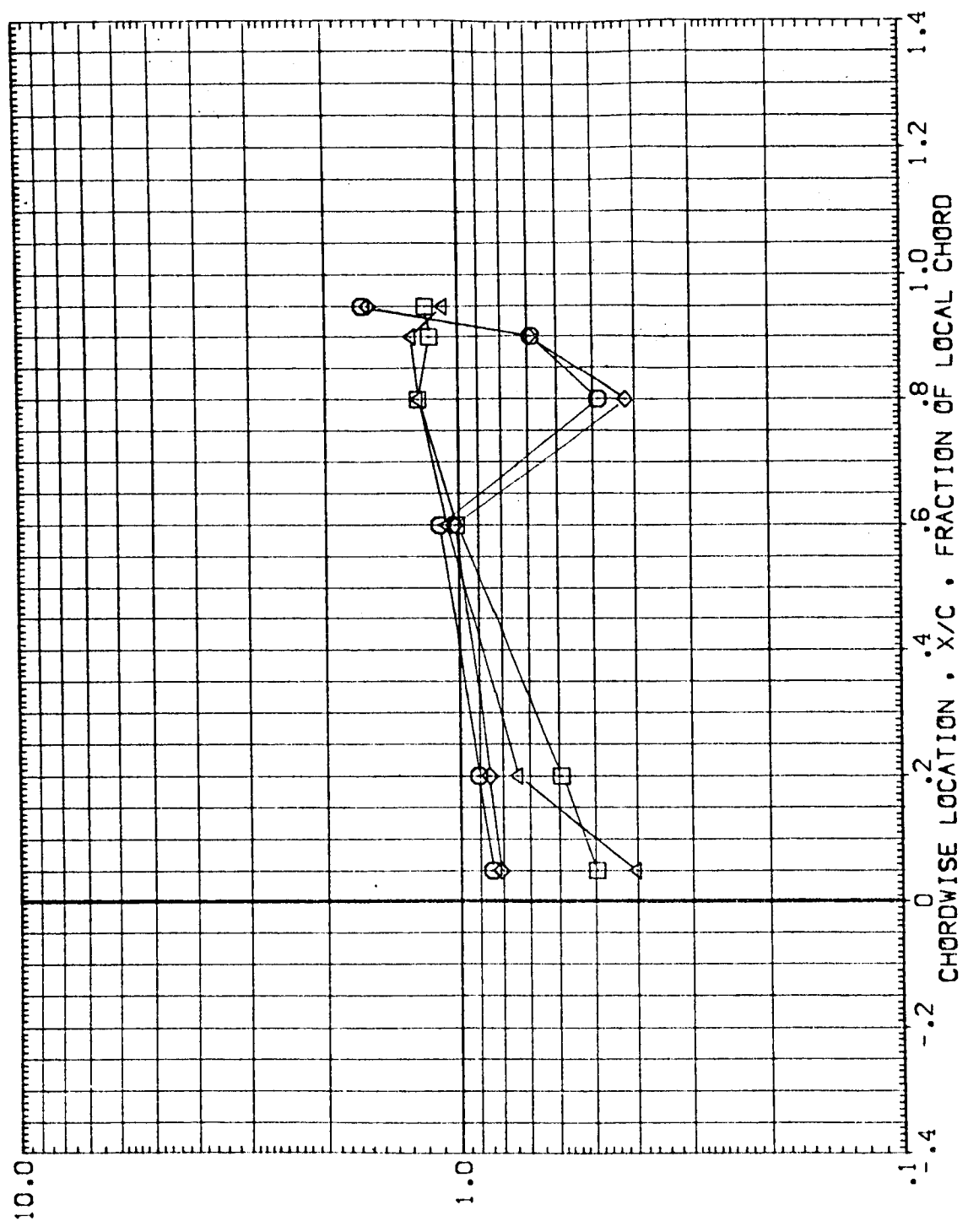


FIG. 33 WING TOP - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .600



DATA SET SYMBOL CONFIGURATION DESCRIPTION WING TOP ALPHA BETA RN/L HAV/HT

(EE1106) ARC 3.5-178 H3 O+T+S WING TOP .000 .000 1.500 .900

(EE1107) ARC 3.5-178 H3 O+T+S WING TOP .000 .000 5.000 .900

(EE1108) ARC 3.5-178 H3 O+T+S (TRIPS) WING TOP .000 .000 1.500 .900

(EE1109) ARC 3.5-178 H3 O+T+S (TRIPS) WING TOP .000 .000 5.000 .900

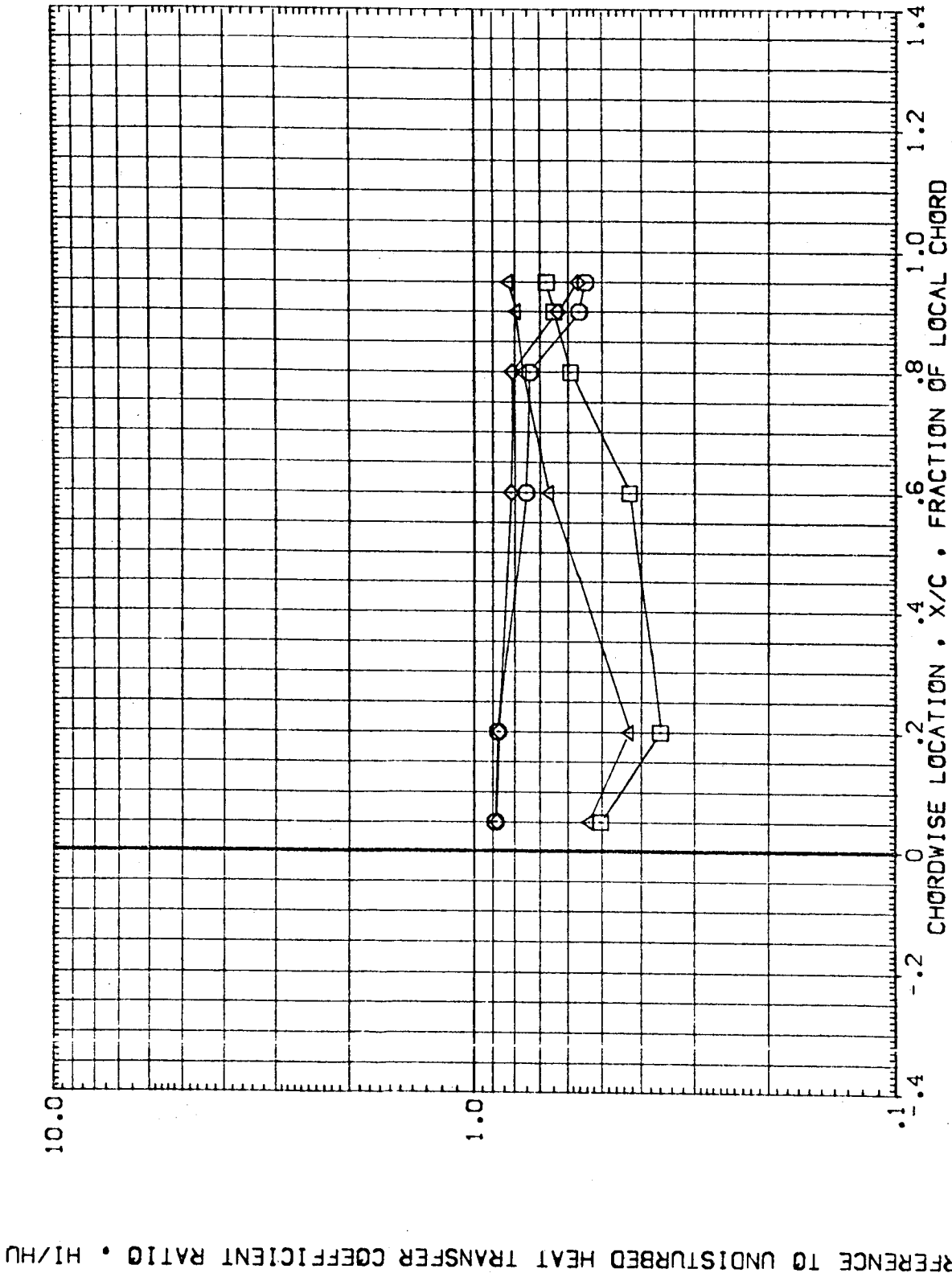


FIG. 33 WING TOP - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 2Y/B = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 {EE}106} O ARC 3.5-178 H3 O+T+S .000 .000 1.500 .900
 {EE}107} X ARC 3.5-178 H3 O+T+S .000 .000 5.000 .900
 {EE}108} X ARC 3.5-178 H3 O+T+S (TRIPS) .000 .000 1.500 .900
 {EE}109} X ARC 3.5-178 H3 O+T+S (TRIPS) .000 .000 5.000 .300

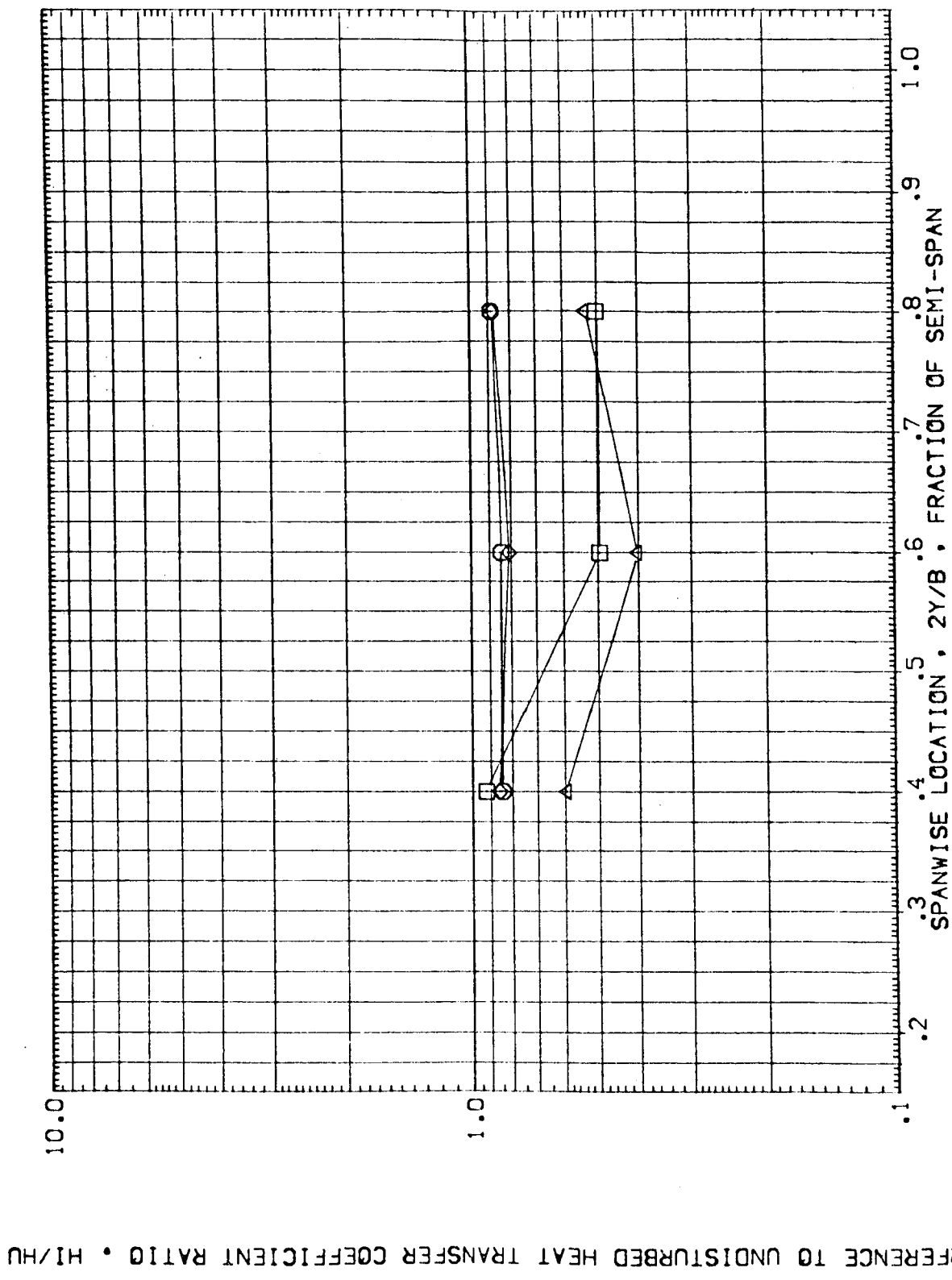
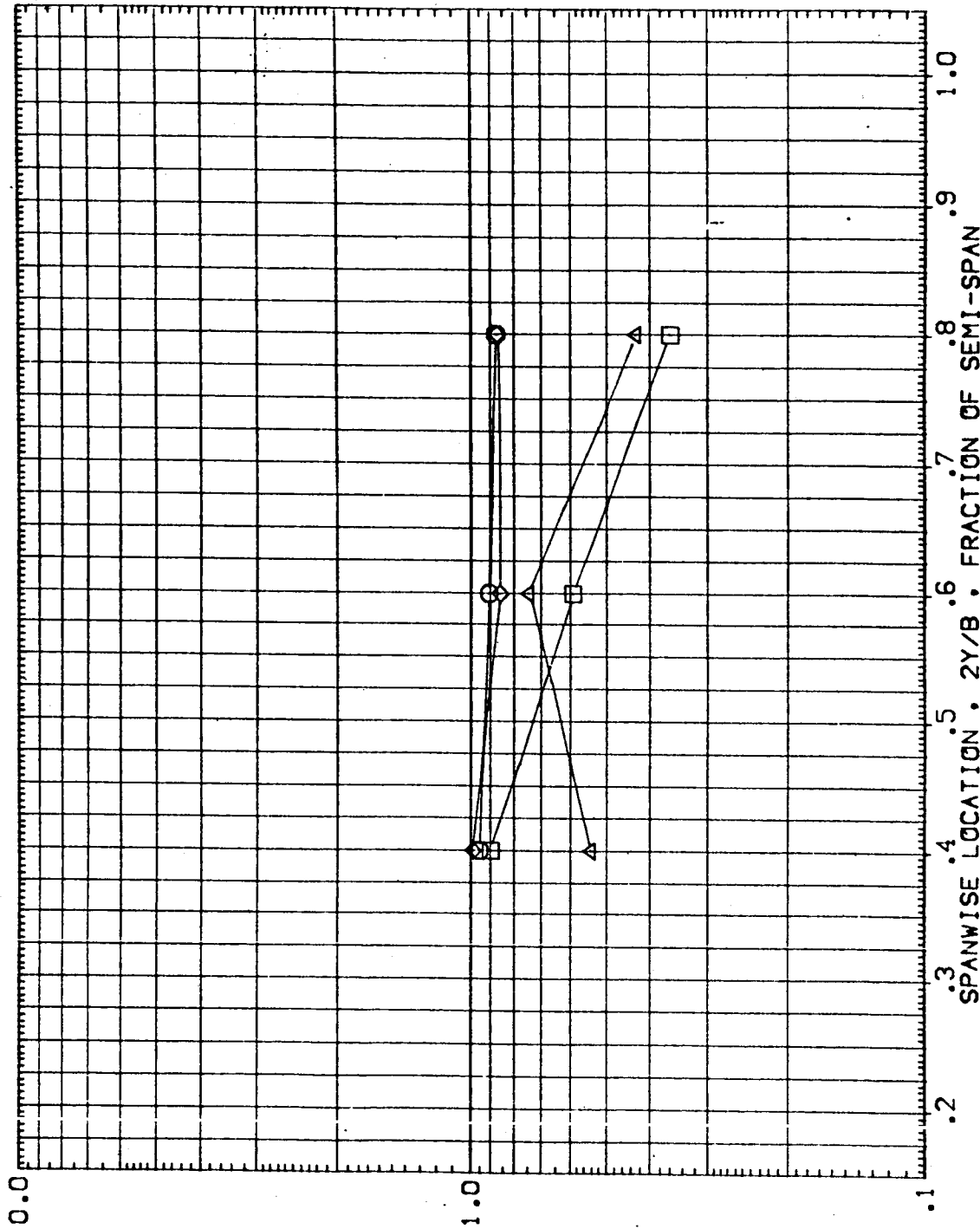


FIG. 33 WING TOP - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .050

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING TOP	ALPHA	BETA	RN/L	HAW/HT
(EE1106)	ARC 3.5-178 IH3 O+T+S	WING TOP	.000	.000	1.500	.900
(EE1107)	ARC 3.5-178 IH3 O+T+S	WING TOP	.000	.000	5.000	.900
(EE1108)	ARC 3.5-178 IH3 O+T+S (TRIPS)	WING TOP	.000	.000	1.500	.900
(EE1109)	ARC 3.5-178 IH3 O+T+S (TRIPS)	WING TOP	.000	.000	5.000	.900



INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

FIG. 33 WING TOP - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .200

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING TOP	ALPHA	BETA	RN/L	HAV/HT
(EE1106)	ARC 3.5-178 IH3 O+T+S	WING TOP	.000	.000	1.500	.900
(EE1107)	ARC 3.5-178 IH3 O+T+S	WING TOP	.000	.000	5.000	.900
(EE1108)	ARC 3.5-178 IH3 O+T+S (TRIPS)	WING TOP	.000	.000	1.500	.900
(EE1109)	ARC 3.5-178 IH3 O+T+S (TRIPS)	WING TOP	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

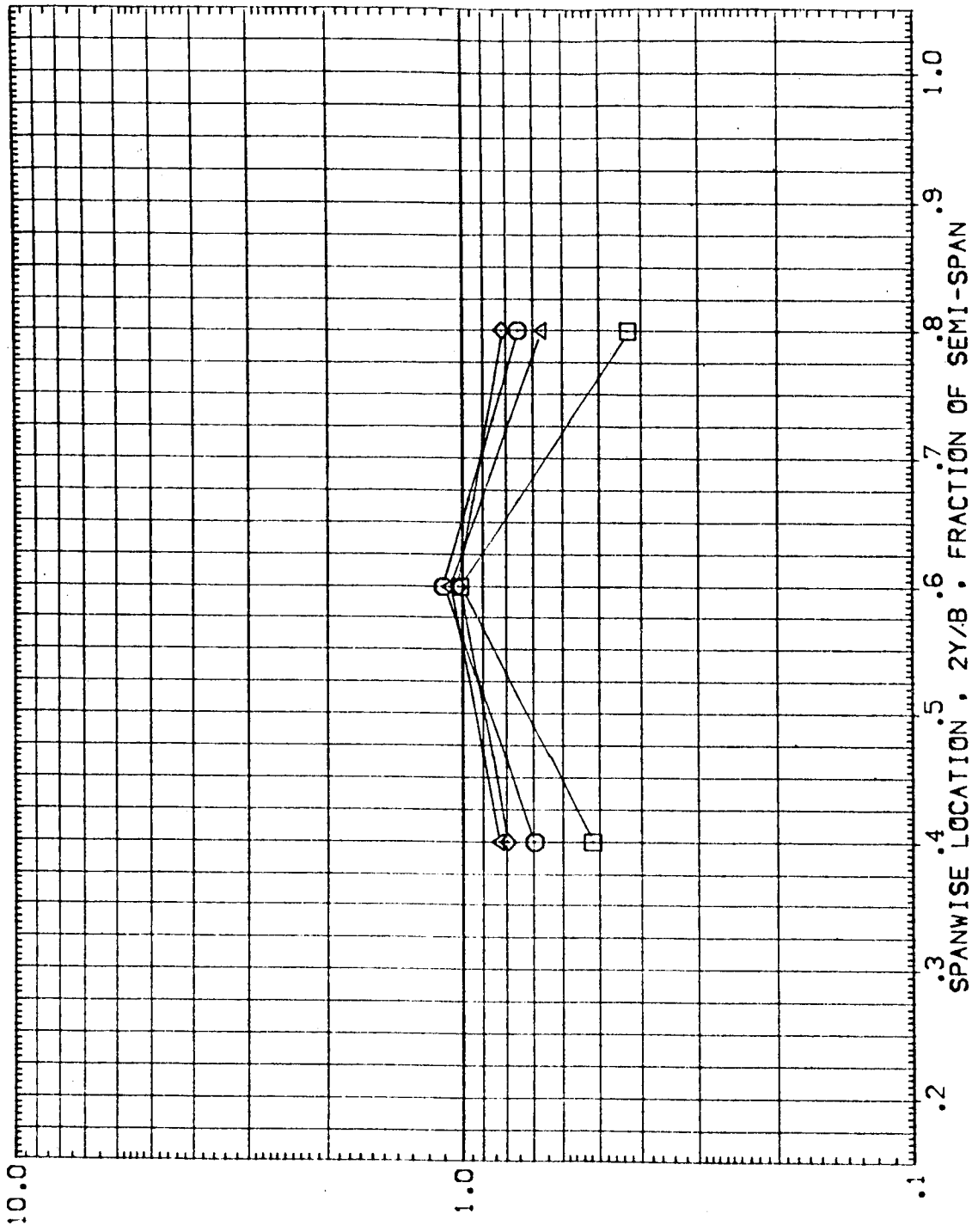


FIG. 33 WING TOP - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .600

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING TOP	ALPHA	BETA	RN/L	HAW/HT
(EE1106)	ARC 3.5-178 H3 O+T+S	WING TOP	.000	.000	1.500	.900
(EE1107)	ARC 3.5-178 H3 O+T+S	WING TOP	.000	.000	5.000	.900
(EE1108)	ARC 3.5-178 H3 O+T+S (TRIPS)	WING TOP	.000	.000	1.500	.900
(EE1109)	ARC 3.5-178 H3 O+T+S (TRIPS)	WING TOP	.000	.000	5.000	.900

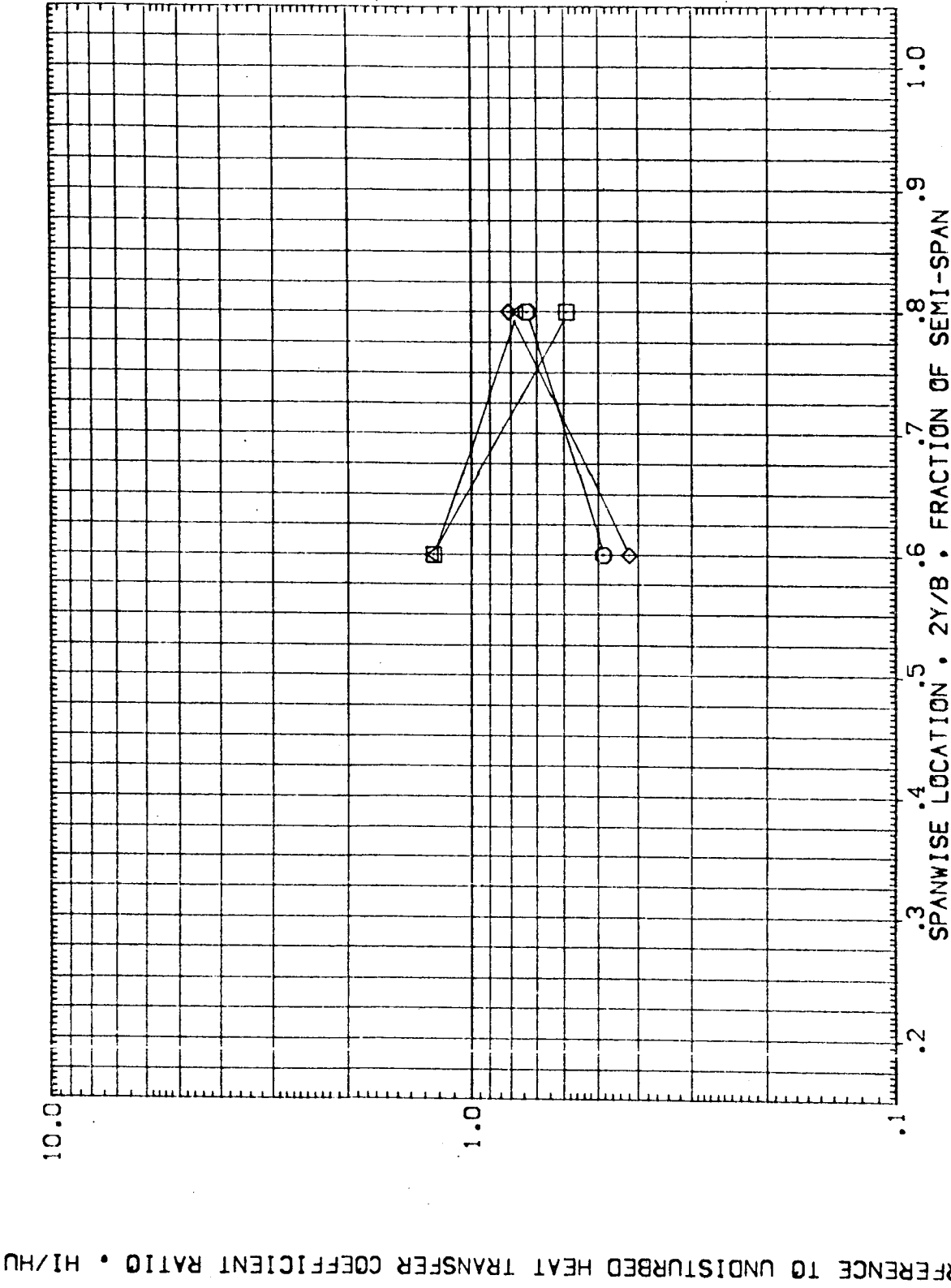


FIG. 33 WING TOP - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .800

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	WING TOP	ALPHA	BETA	RN/L	HAW/HT
(EE1106)	ARC 3.5-178 IH3 O+I+S	WING TOP	.000	.000	1.500	.900
(EE1107)	ARC 3.5-178 IH3 O+I+S	WING TOP	.000	.000	5.000	.900
(EE1108)	ARC 3.5-178 IH3 O+I+S (TRIPS)	WING TOP	.000	.000	1.500	.900
(EE1109)	ARC 3.5-178 IH3 O+I+S (TRIPS)	WING TOP	.000	.000	5.000	.900

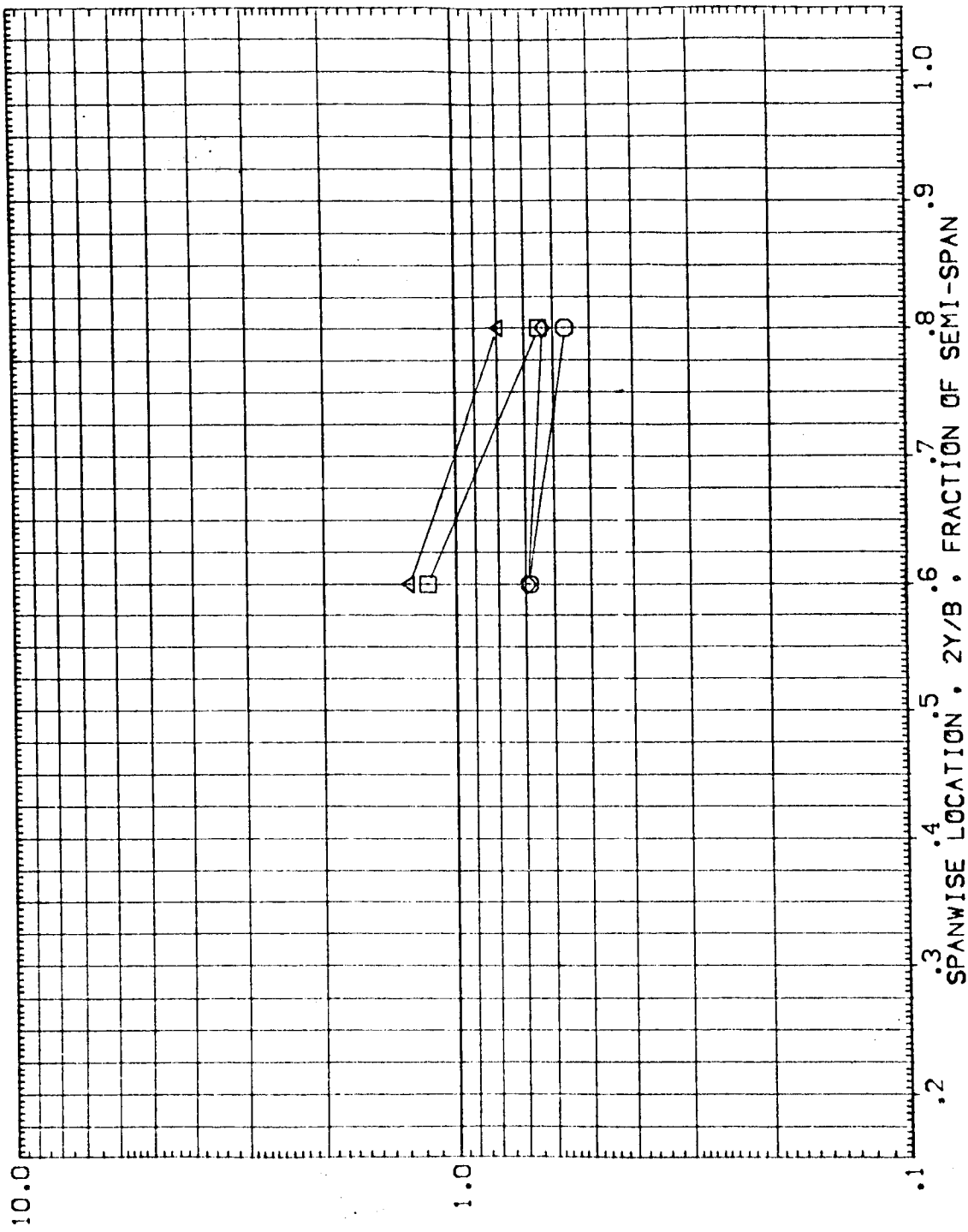


FIG. 33 WING TOP - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(EE1106)	ARC 1:5-178 [H3 O+T+S	.000	.000	1.500	.900
(EE1107)	ARC 1:5-178 [H3 O+T+S	.000	.000	5.000	.900
(EE1108)	ARC 1:5-178 [H3 O+T+S (TRIPS)	.000	.000	1.500	.900
(EE1109)	ARC 1:5-178 [H3 O+T+S (TRIPS)	.000	.000	5.000	.900

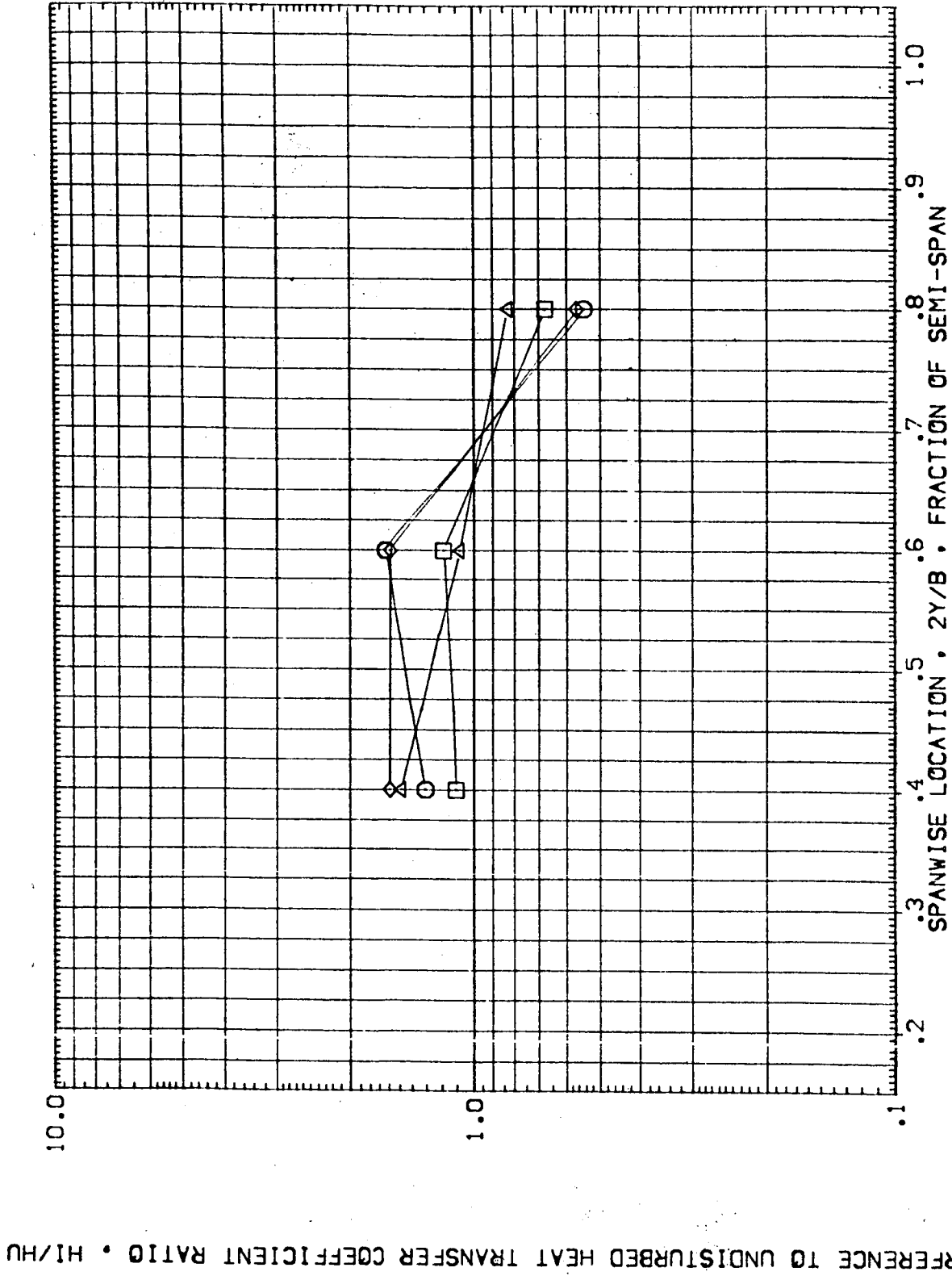


FIG. 33 WING TOP - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .950

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (RE|J06) ARC 3.5-178 |H3 ORBITER .000 .000 1.500 1.000
 (AE|J06) ARC 3.5-178 |H3 ORBITER .000 .000 1.500 .900
 (BE|J06) ARC 3.5-178 |H3 ORBITER .000 .000 1.500 .850

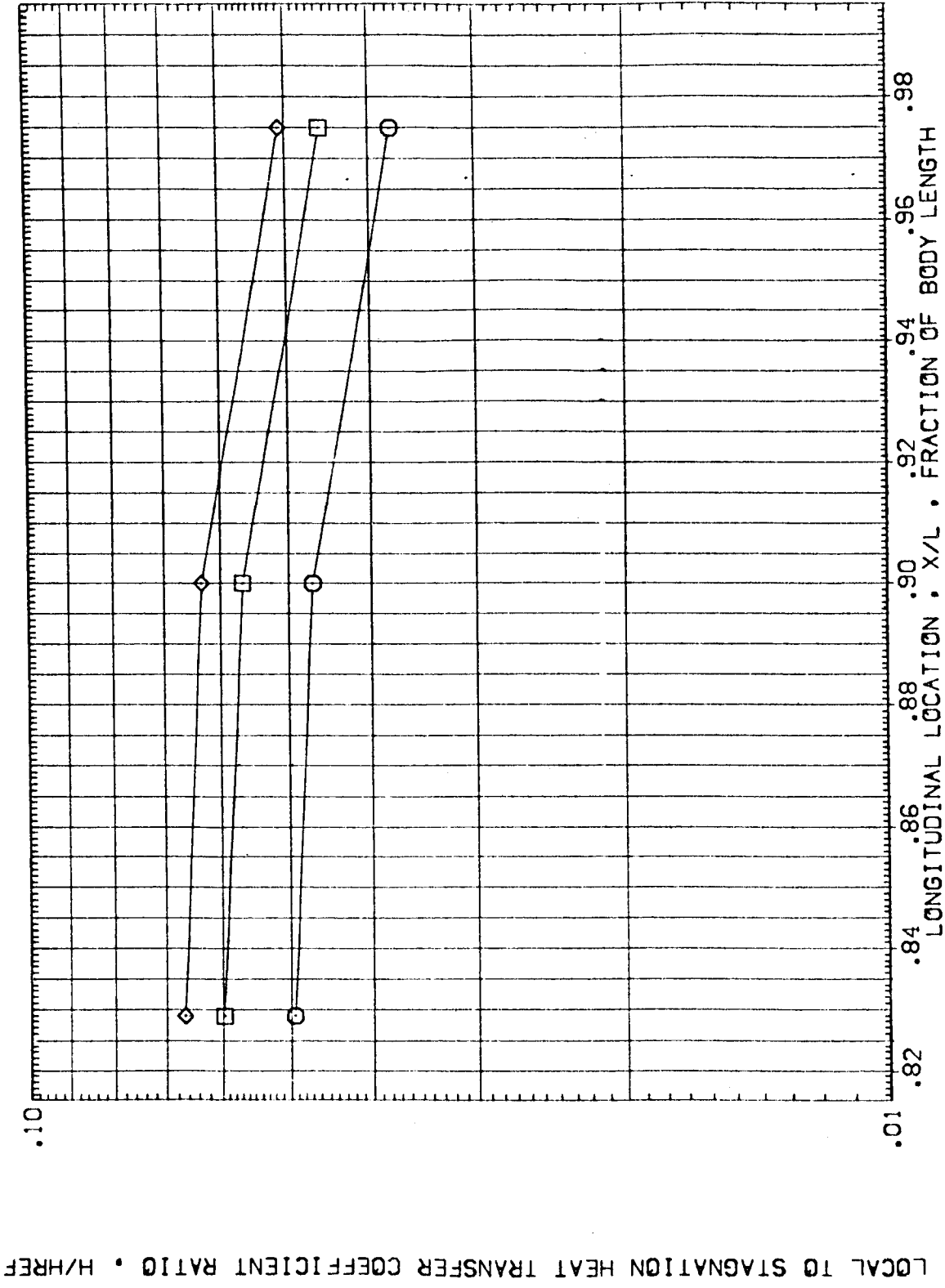


FIG. 34 OMS BOTTOM CREASE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 C = 1.000'



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RE1J07] [O] ARC 3.5-178 143 ORBITER
 [AE1J07] [◇] ARC 3.5-178 143 ORBITER
 [BE1J07] [□] ARC 3.5-178 143 ORBITER

ALPHA .000
 BETA .000
 RN/L 5.000

ONS BOTTOM CREASE
 ONS BOTTOM CREASE
 ONS BOTTOM CREASE

HAV/HT 1.000
 .500
 .850

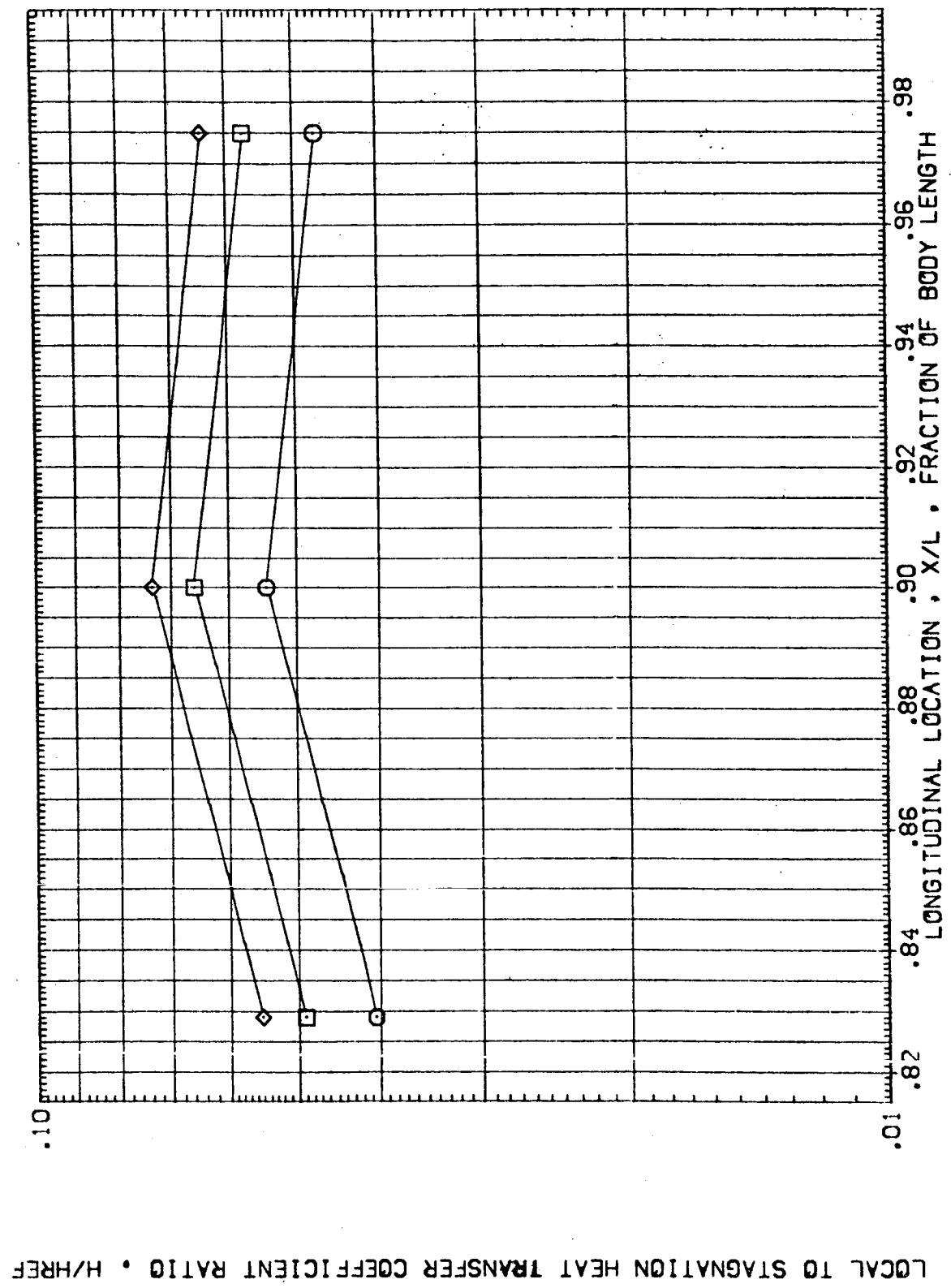


FIG. 34 ONS BOTTOM CREASE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 C = 1.000

DATA SET SYMBO. CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT
 {RE|JOB} O H3 ORBITER (TR|PS|OMS BOTTOM CREASE .000 .000 1.500 1.000
 {AE|JOB} O H3 ORBITER (TR|PS|OMS BOTTOM CREASE .000 .000 1.500 .900
 {BE|JOB} O H3 ORBITER (TR|PS|OMS BOTTOM CREASE .000 .000 1.500 .850

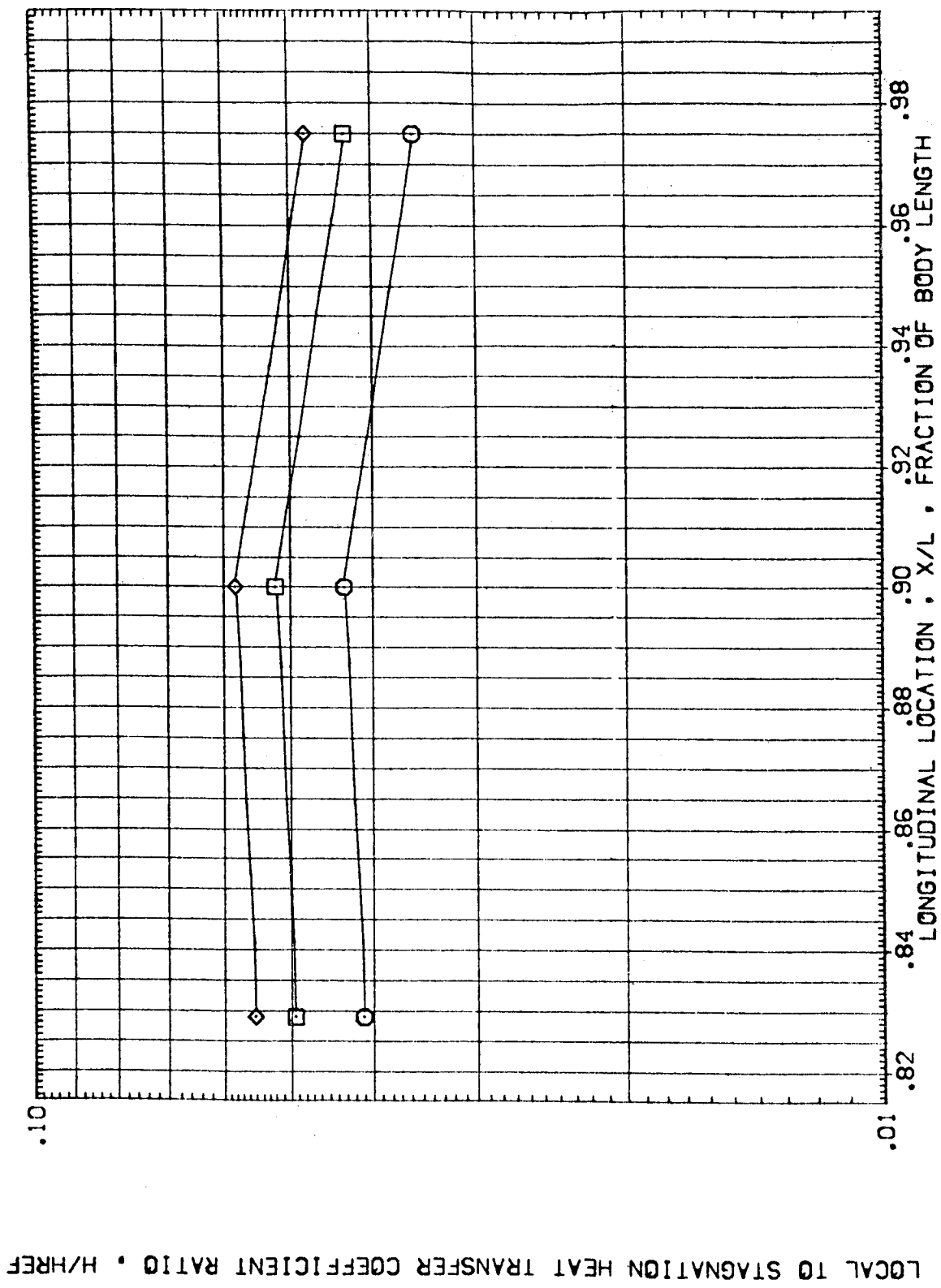


FIG. 34 OMS BOTTOM CREASE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 C = 1.000 PAGE 1642



DATA SET SYMBO. CONFIGURATION DESCRIPTION ALPHA BETA FN/L MAV/HT
 (RE109) (AE109) (BE109) ARC 3.5-178 IH3 ORBITER (TRIPS)ONS BOTTOM CREASE .000 .000 5.000 1.000
 (RE109) (AE109) (BE109) ARC 3.5-178 IH3 ORBITER (TRIPS)ONS BOTTOM CREASE .000 .000 5.000 .900
 (RE109) (AE109) (BE109) ARC 3.5-178 IH3 ORBITER (TRIPS)ONS BOTTOM CREASE .000 .000 5.000 .850

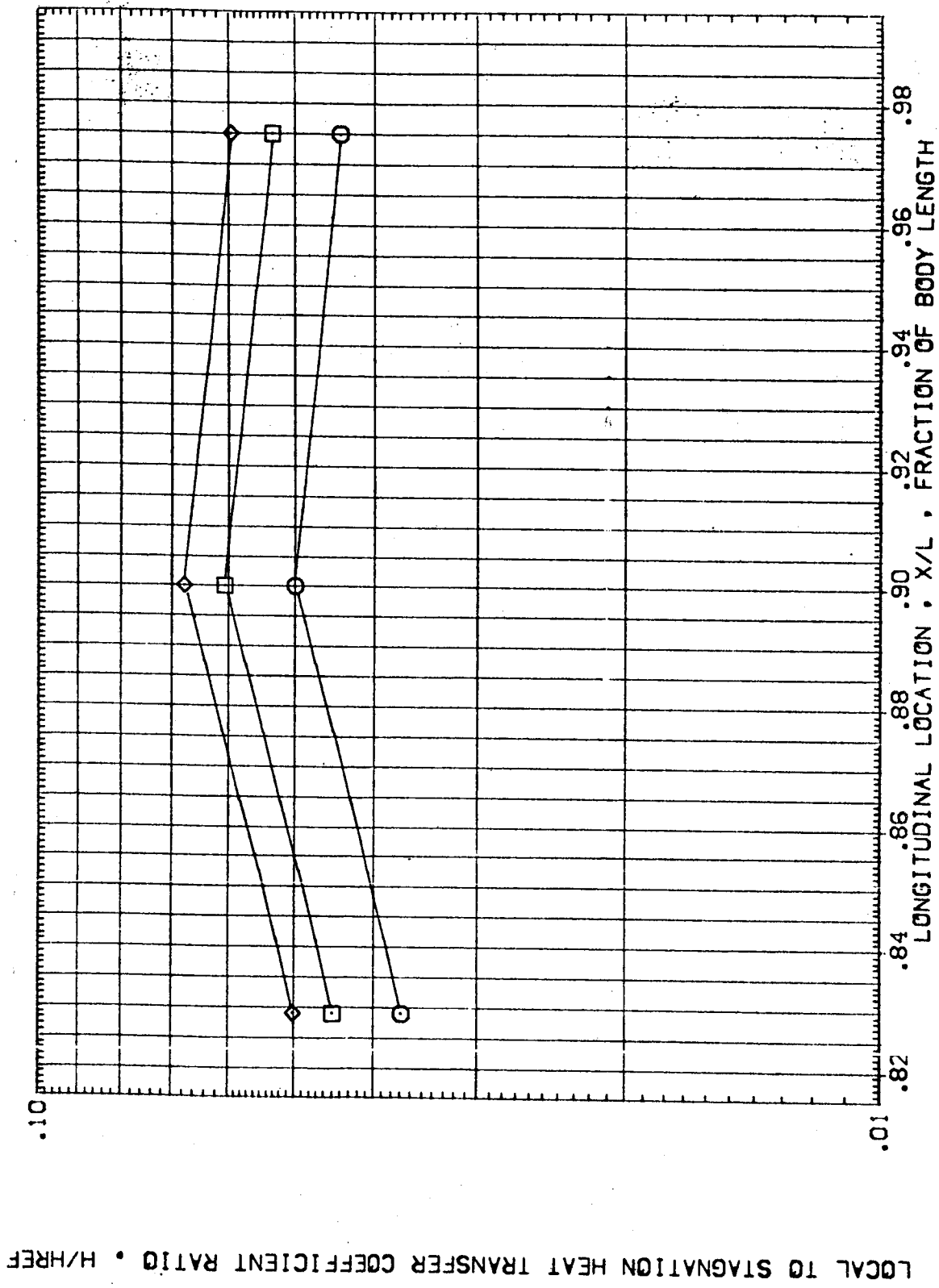


FIG. 34 0MS BOTTOM CREASE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 C = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (REIJO1) ARC 3.5-178 IH3 O+T+S .000 .000 1.500 1.000
 (AEIJO1) ARC 3.5-178 IH3 O+T+S .000 .000 1.500 .900
 (BEIJO1) ARC 3.5-178 IH3 O+T+S .000 .000 1.500 .850

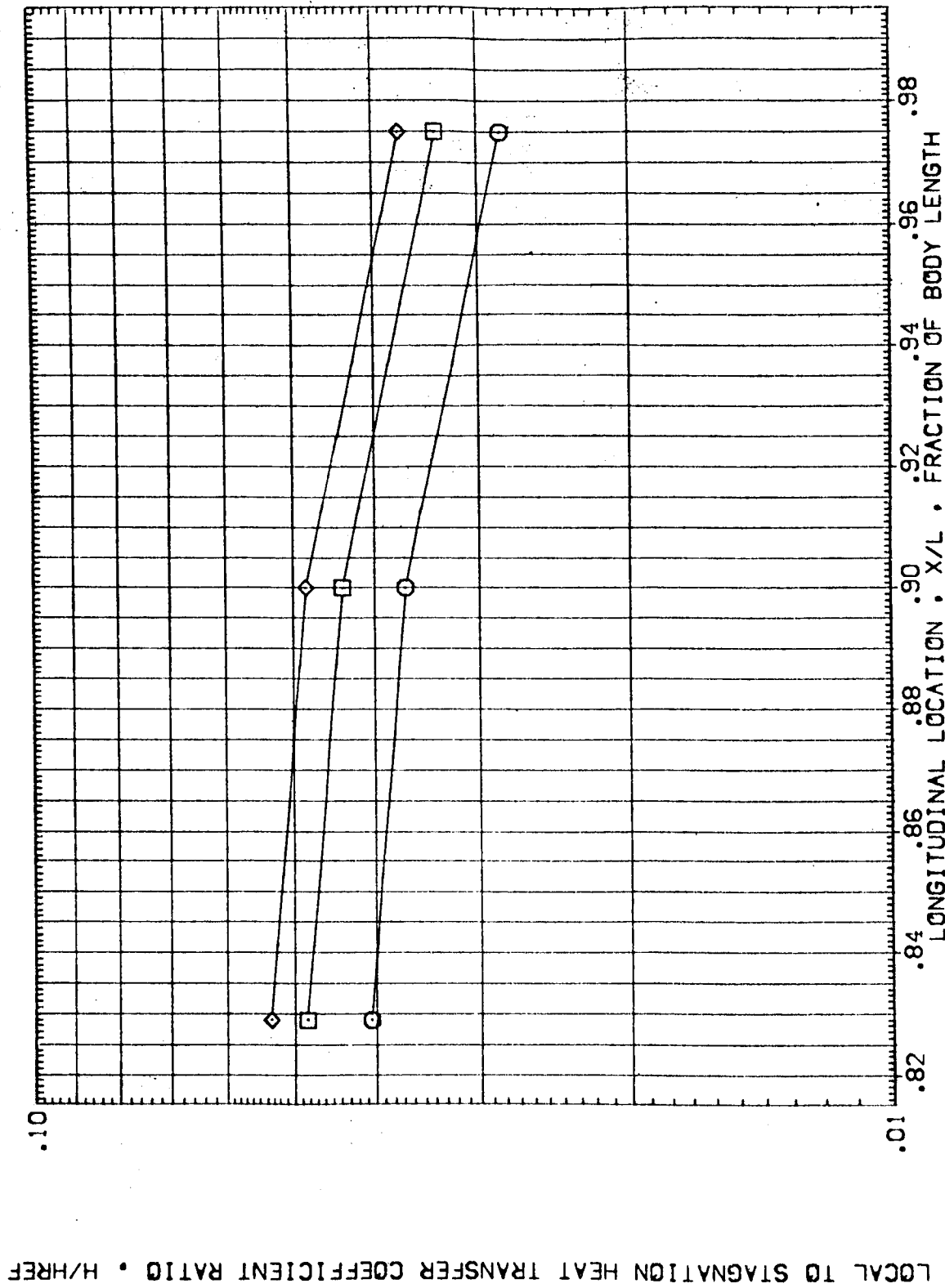


FIG. 35 OMS BOTTOM CREASE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1402) ARC 3.5-178 IH3 0+T+S
 (AE1402) ARC 3.5-178 IH3 3+T+S
 (BE1402) ARC 3.5-178 IH3 0+T+S

ALPHA .000
 BETA .000
 RN/L 5.000
 HAW/HT 1.000
 .900
 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

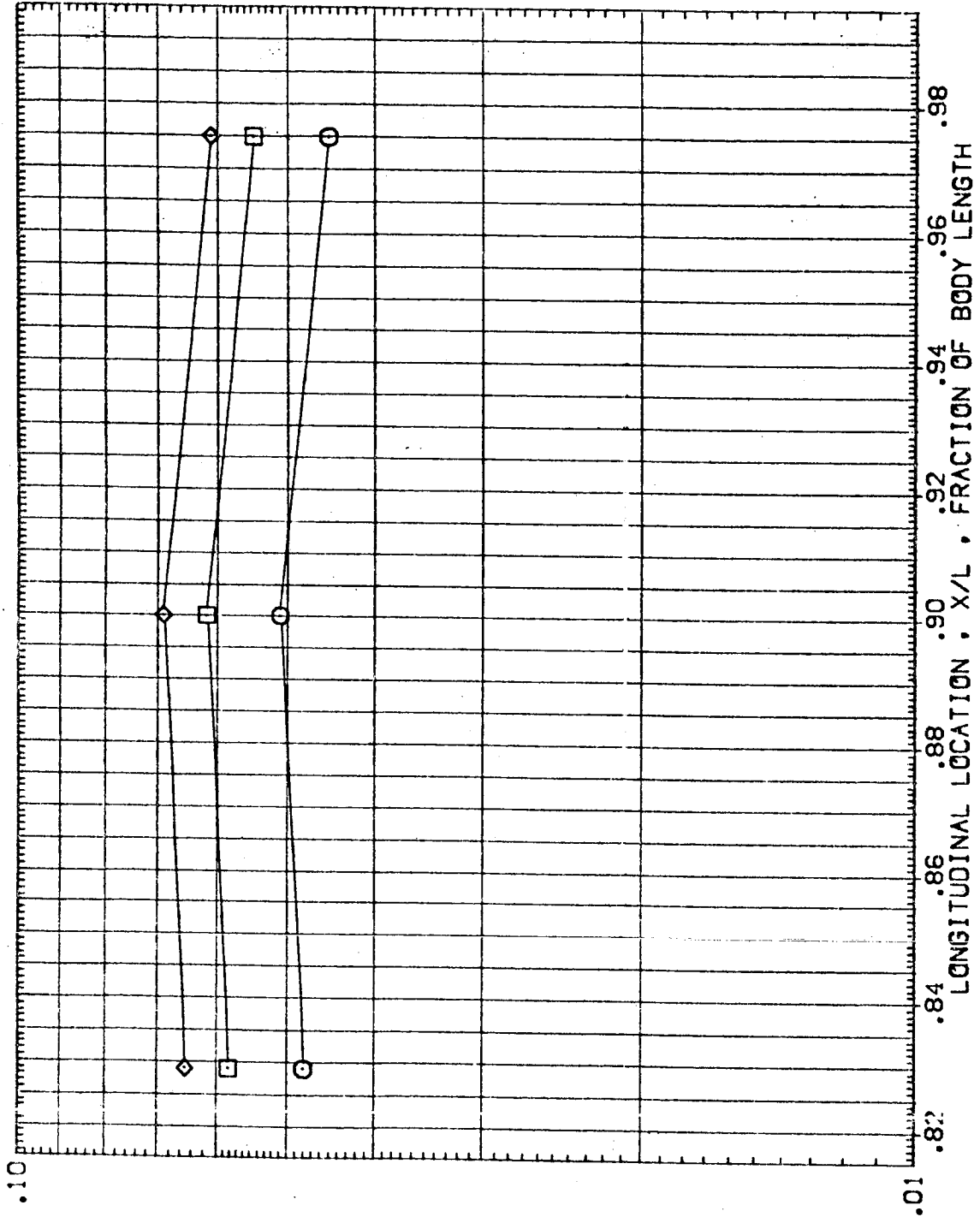


FIG. 35 35 OMS BOTTOM CREASE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HIT

(BE1J03) ARC 3.5-178 IH3 O+I+S(TR)PS .000 .000 .500 1.000

(AE1J03) ARC 3.5-178 IH3 O+T+S(TR)PS .000 .000 .500 .900

(BE1J03) ARC 3.5-178 IH3 O+T+S(TR)PS .000 .000 .500 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

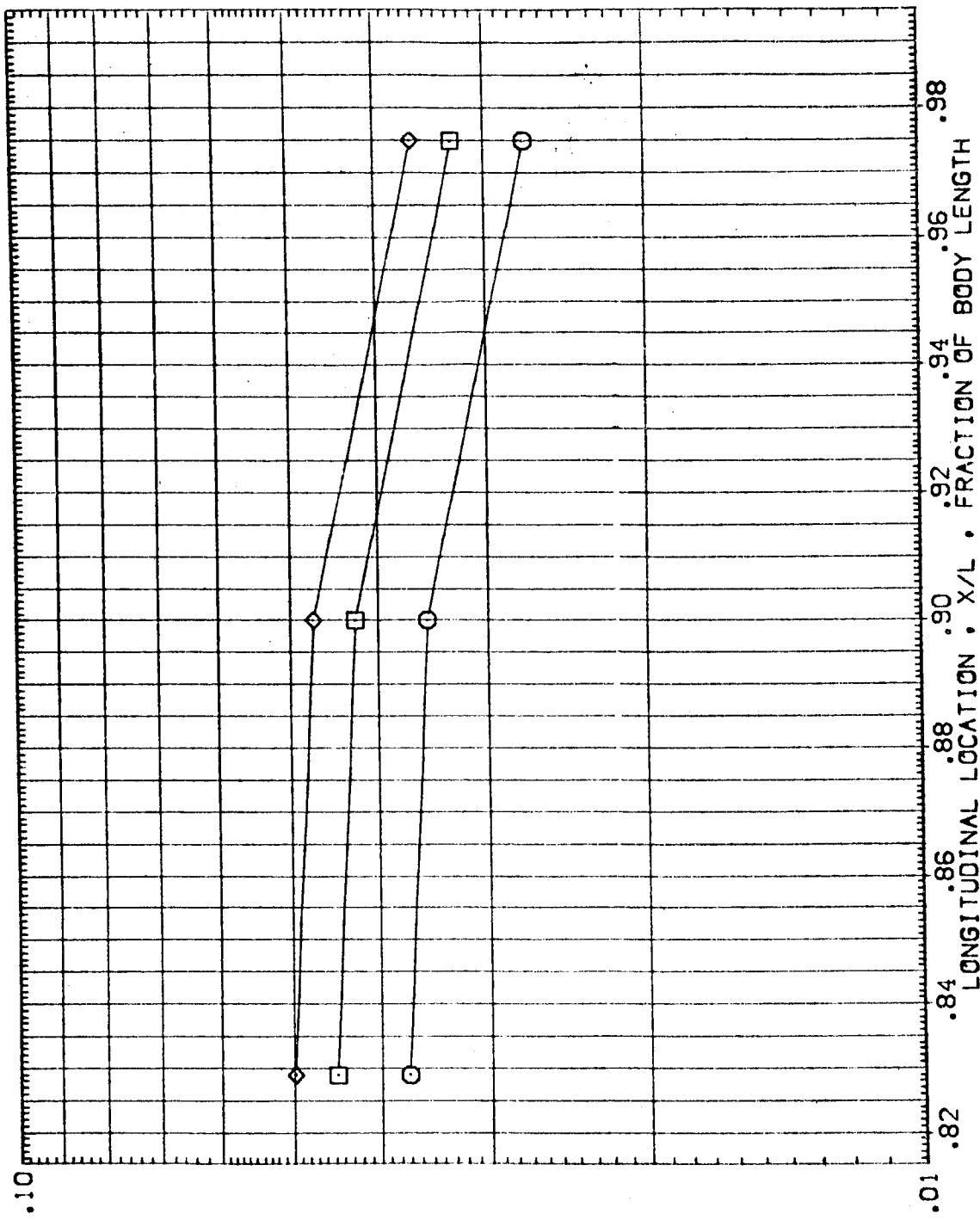


FIG. 35 0MS BOTTOM CREASE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000

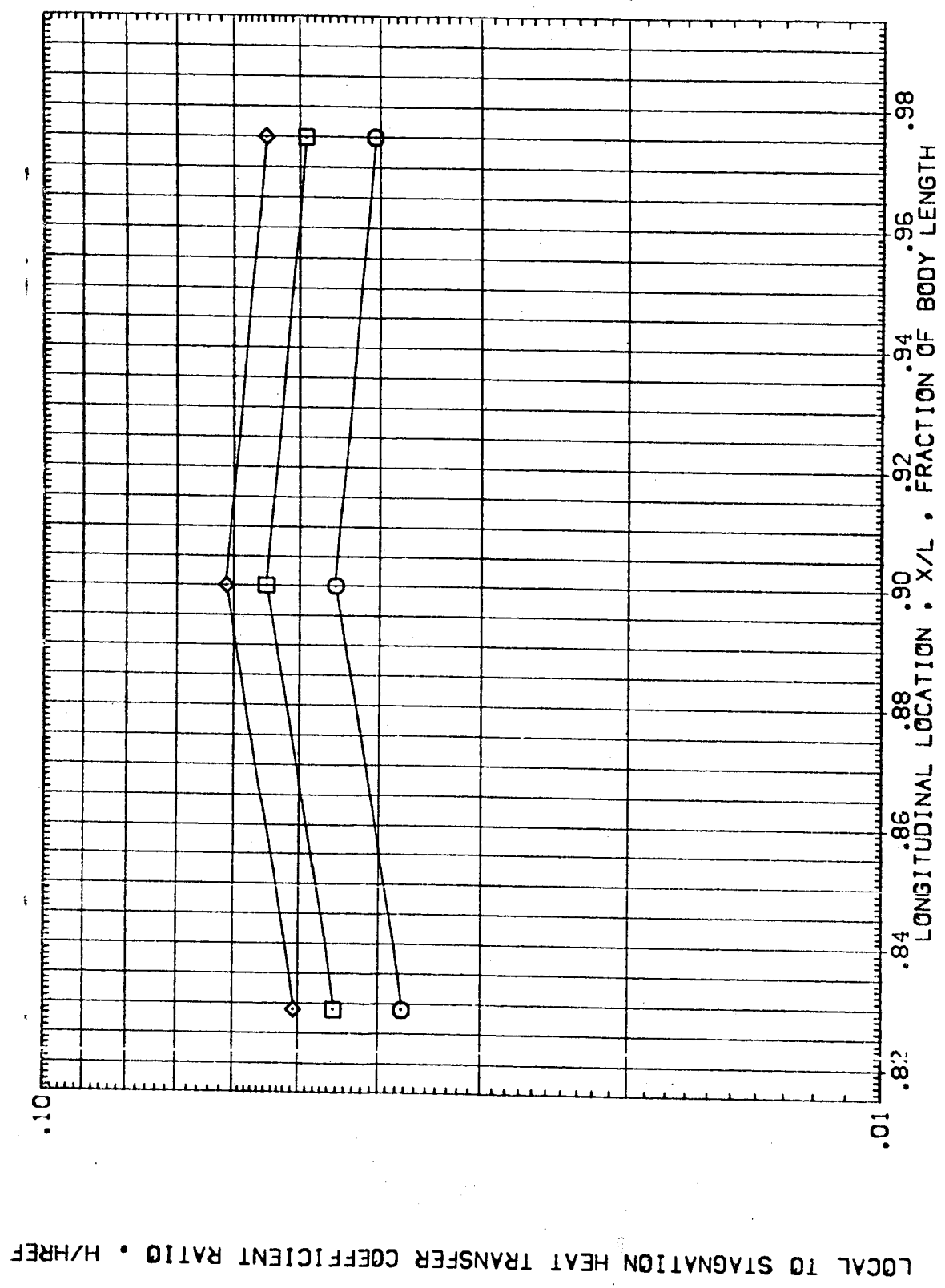


DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAW/HT

(REI)04 } ARC 3.5-178 IH3 0-T+S(STRIPS) .000 .000 5.000 1.000

(AEI)04 } ARC 3.5-178 IH3 0-T+S(STRIPS) .000 .000 5.000 .900

(BEI)04 } ARC 3.5-178 IH3 0-T+S(STRIPS) .000 .000 5.000 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 35 0MS BOTTOM CREASE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIJD5) ARC 3.5-178 IH3 O+T+S
 (AEIJD5) ARC 3.5-178 IH3 O+T+S
 (BEIJD5) ARC 3.5-178 IH3 O+T+S

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

OMS BOTTOM CREASE
 OMS BOTTOM CREASE
 OMS BOTTOM CREASE

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

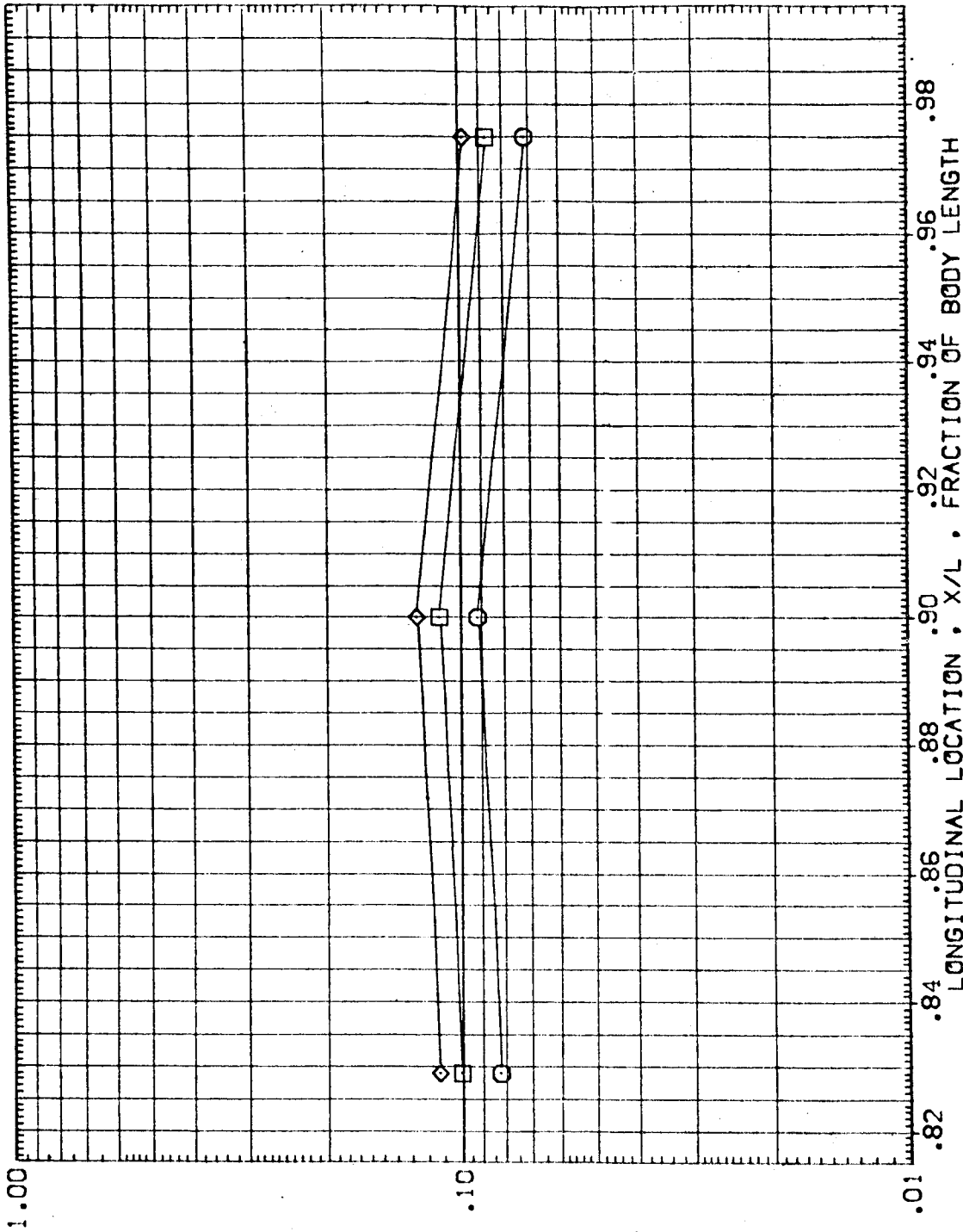


FIG. 35 OMS BOTTOM CREASE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(REI)19) ARC 3.5-178 I+3 0+T+S
 (AEI)19) ARC 3.5-178 I+3 0+T+S
 (BEI)19) ARC 3.5-178 I+3 0+T+S

0MS BOTTOM CREASE
 0MS BOTTOM CREASE
 0MS BOTTOM CREASE

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

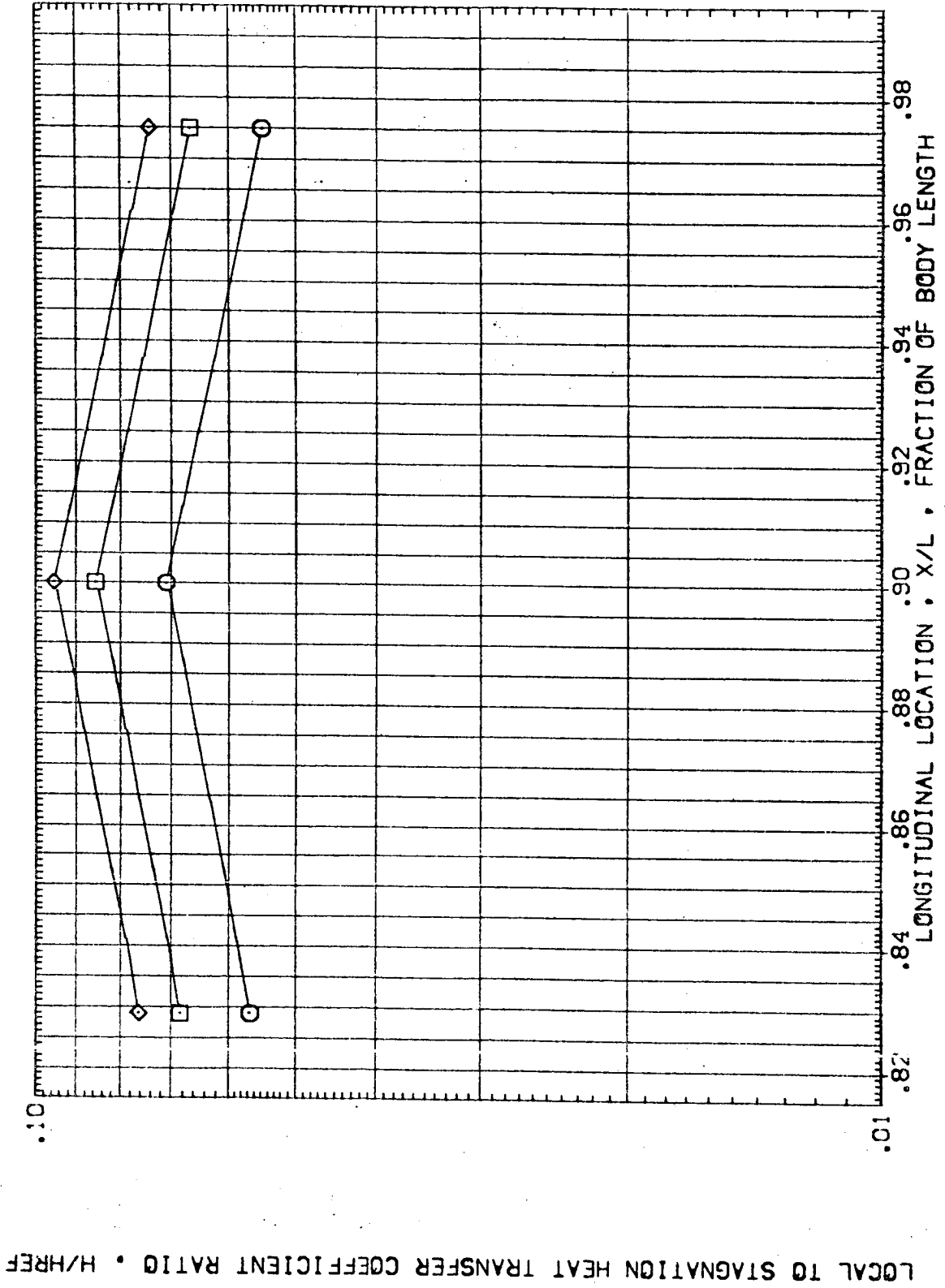


FIG. 35 0MS BOTTOM CREASE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT
 {RE|J20} ARC 3.5-178 IH3 0+T+S -3.000 .000 5.000 1.000
 {AE|J20} ARC 3.5-178 IH3 0+T+S -3.000 .000 5.000 .900
 {BE|J20} ARC 3.5-178 IH3 0+T+S -3.000 .000 5.000 .850

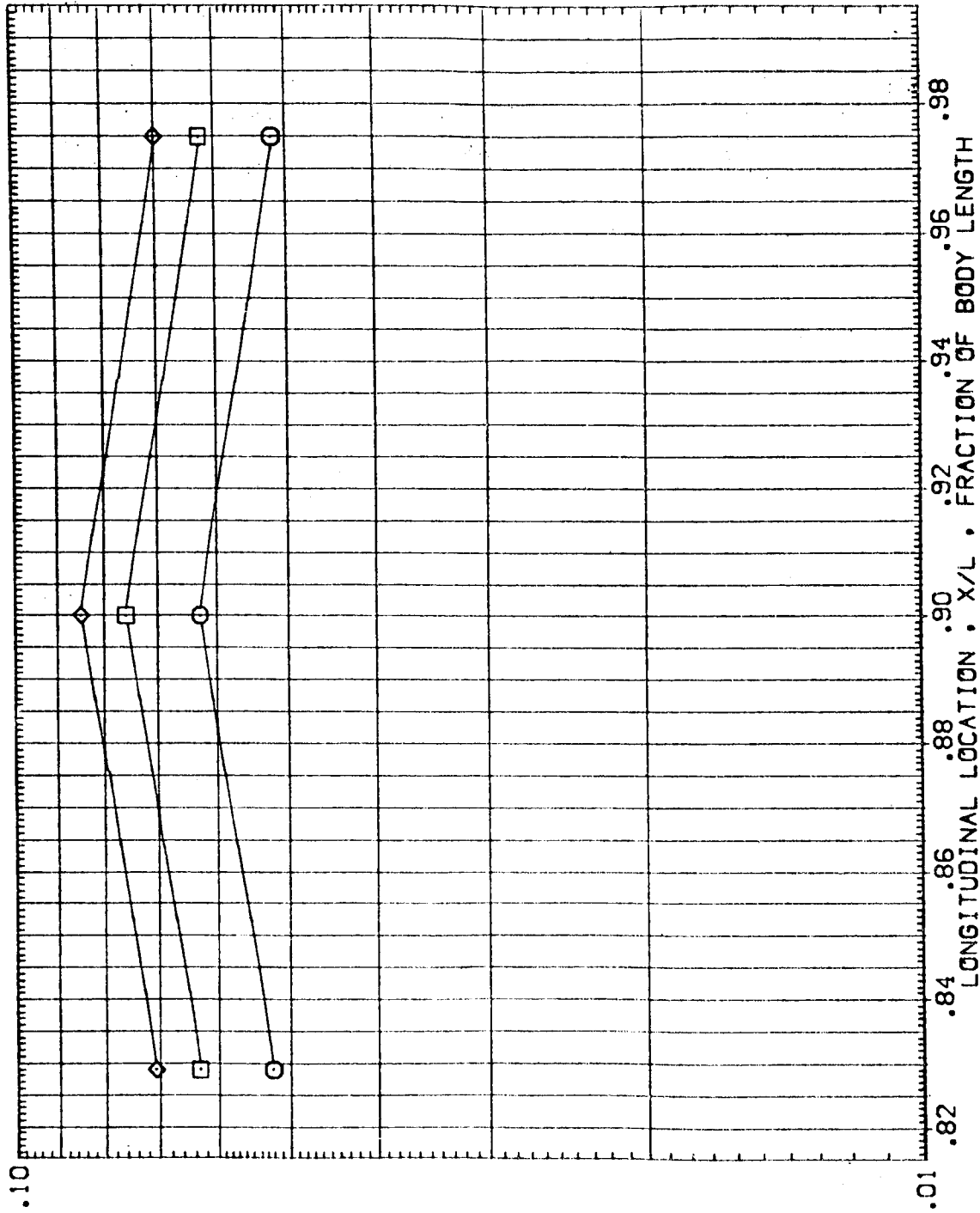


FIG. 35 OMS BOTTOM CREASE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAW/HT
(EE J06)	ARC 3.5-178 IH3 0+T-S	.000	.000	1.500	.900
(EE J07)	ARC 3.5-178 IH3 0+T-S	.000	.000	5.000	.900
(EE J08)	ARC 3.5-178 IH3 0+T-S(TRIPS)	.000	.000	1.500	.900
(EE J09)	ARC 3.5-178 IH3 0+T-S(TRIPS)	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

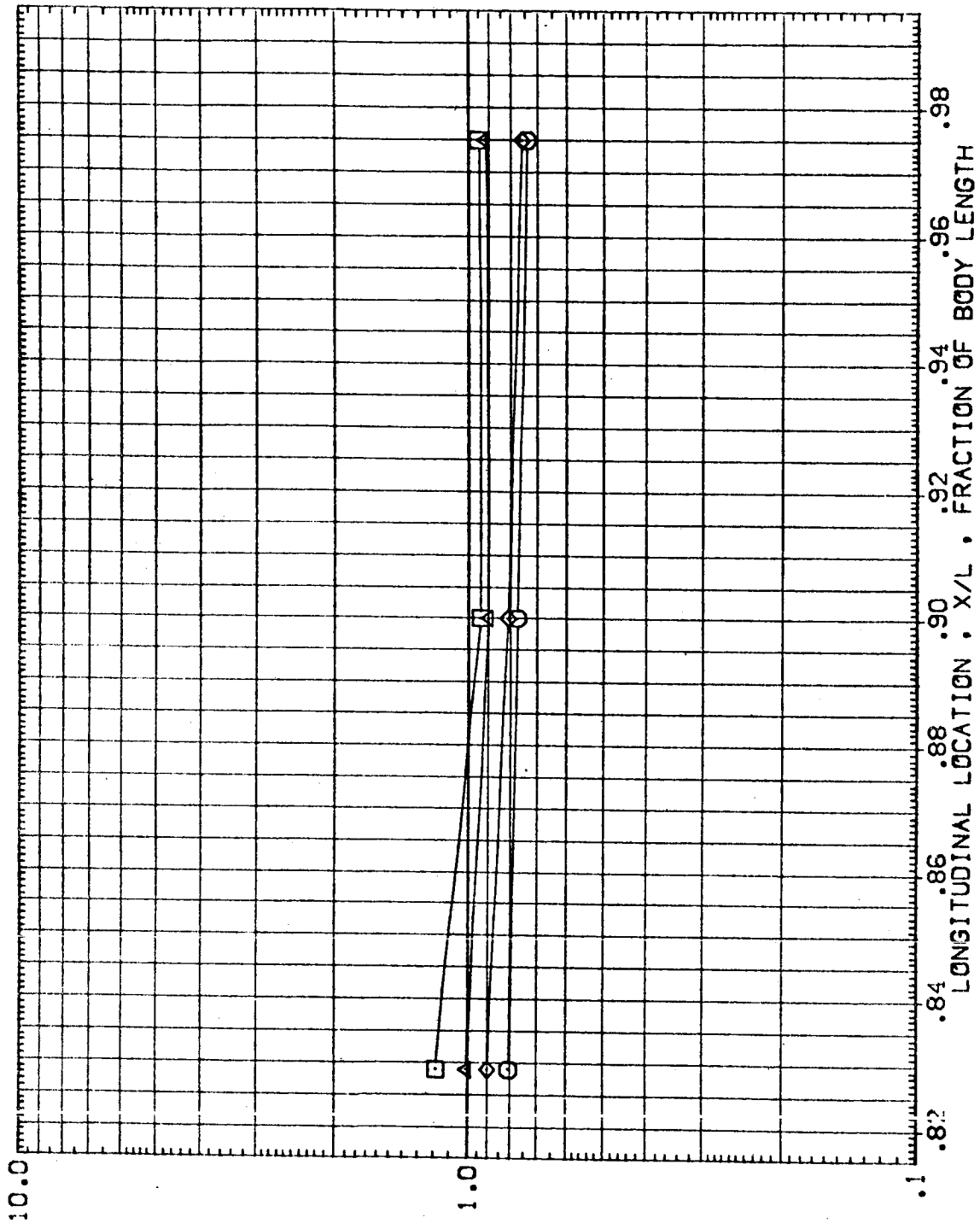


FIG. 36 0MS BOTTOM CREASE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 C = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 { REIKOS } ARC 3.5-178 IH3 ORBITTER
 { AEIKOS } ARC 3.5-178 IH3 ORBITTER
 { BEIKOS } ARC 3.5-178 IH3 ORBITTER

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

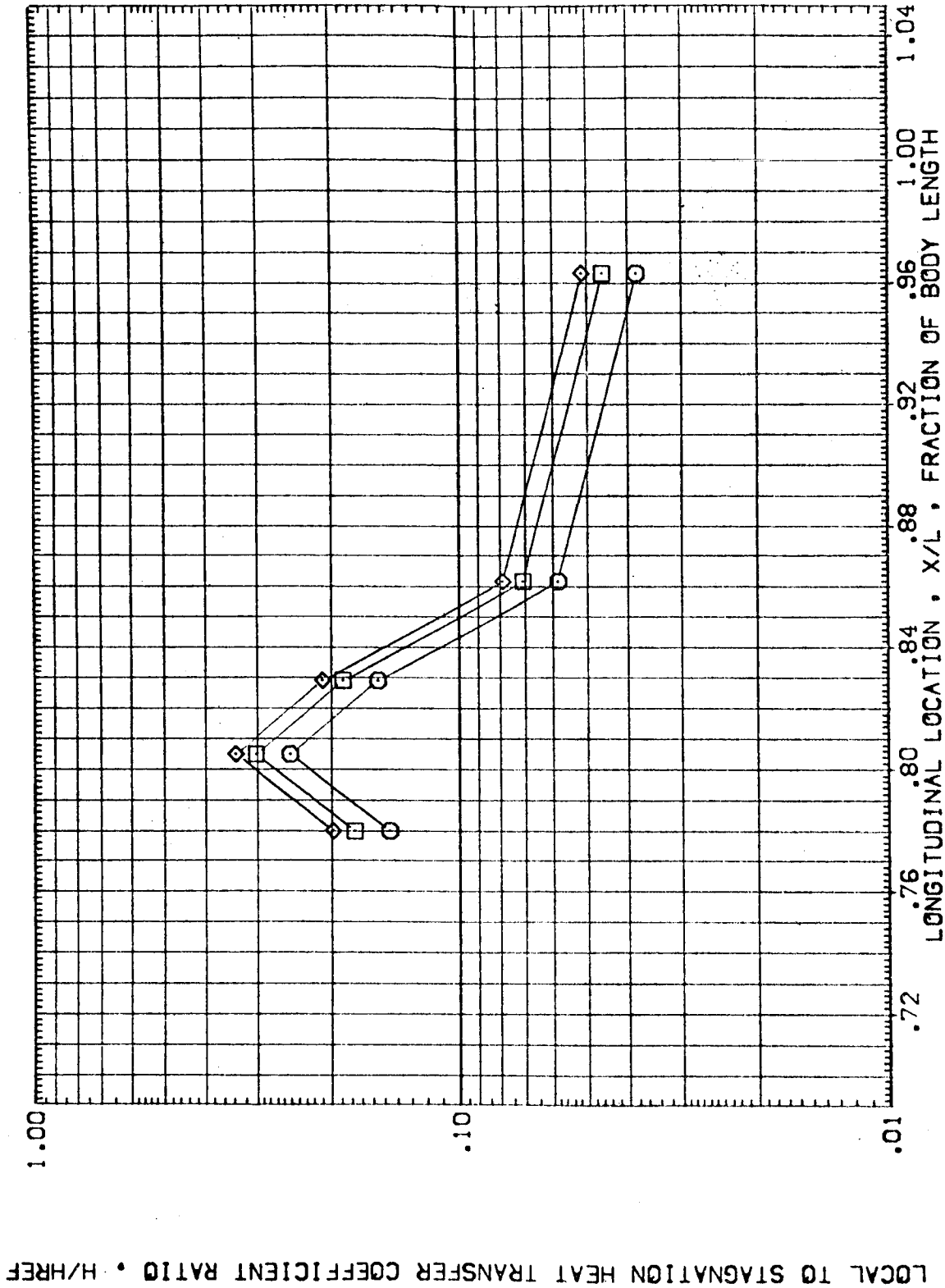


FIG. 37 OMS SIDE SURFACE - ORBITTER ALONE (UNDISTURBED)

MACH = 5.300 C = 1.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIK07) (AEIK07) (BEIK07) ○ □ ◇
 ARC 3.5-178 1-3 ORBITER
 ARC 3.5-178 1-3 ORBITER
 ARC 3.5-178 1-3 ORBITER

OWS SIDE SURFACE
 OWS SIDE SURFACE
 OWS SIDE SURFACE

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RN/L 5.000 5.000 5.000
 HAW/HT 1.000 .900 .850

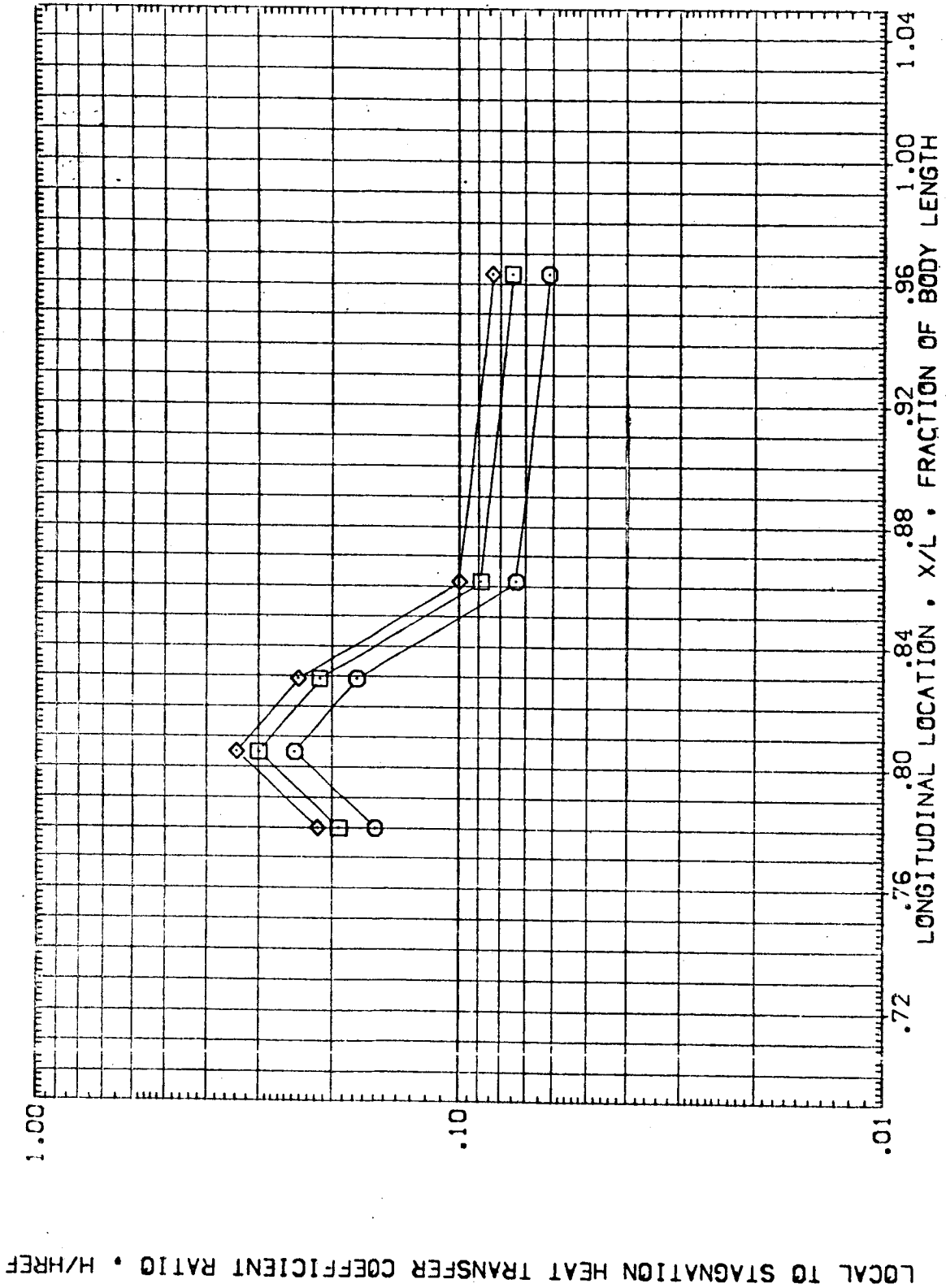


FIG. 37 OWS SIDE SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 C = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REIKOB) ARC 3.5-178 I43 ORBITER (TRIP) .000 .000 1.500 1.000

(AEIKOB) ARC 3.5-178 I43 ORBITER (TRIP) .000 .000 1.500 .900

(BEIKOB) ARC 3.5-178 I43 ORBITER (TRIP) .000 .000 1.500 .850

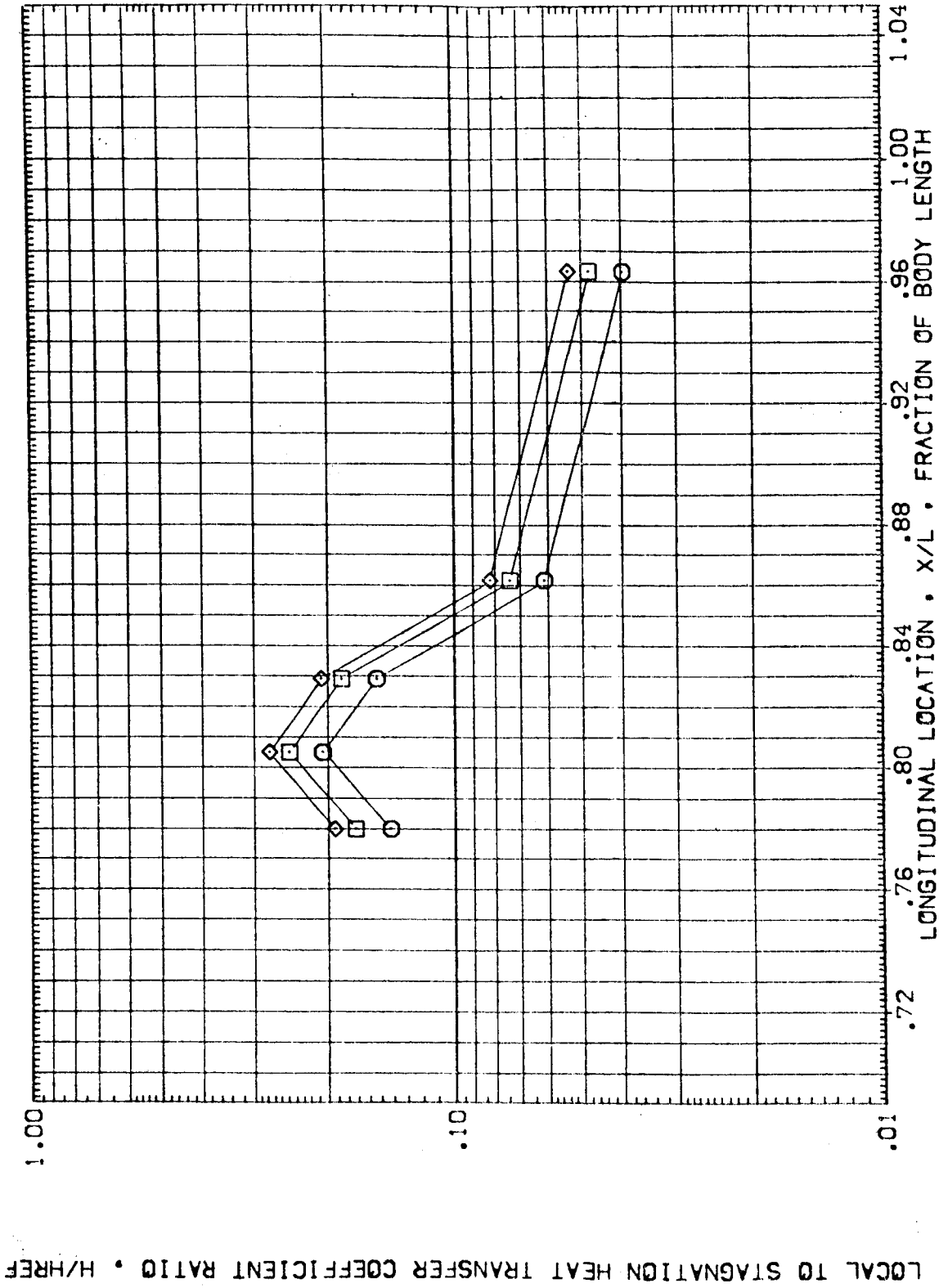


FIG. 37 OMS SIDE SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 C = 1.000



DATA SET SYMBOL. CONFIGURATION DESCRIPTION HAV/HT ALPHA BETA RN/L HAV/HT

[RE]K09 } ARC 3.5-178 H3 ORBITTER (TRIP)S/DMS SIDE SURFACE .000 .000 5.000 1.000

[AE]K09 } ARC 3.5-178 H3 ORBITTER (TRIP)S/DMS SIDE SURFACE .000 .000 5.000 .900

[BE]K09 } ARC 3.5-178 H3 ORBITTER (TRIP)S/DMS SIDE SURFACE .000 .000 5.000 .850

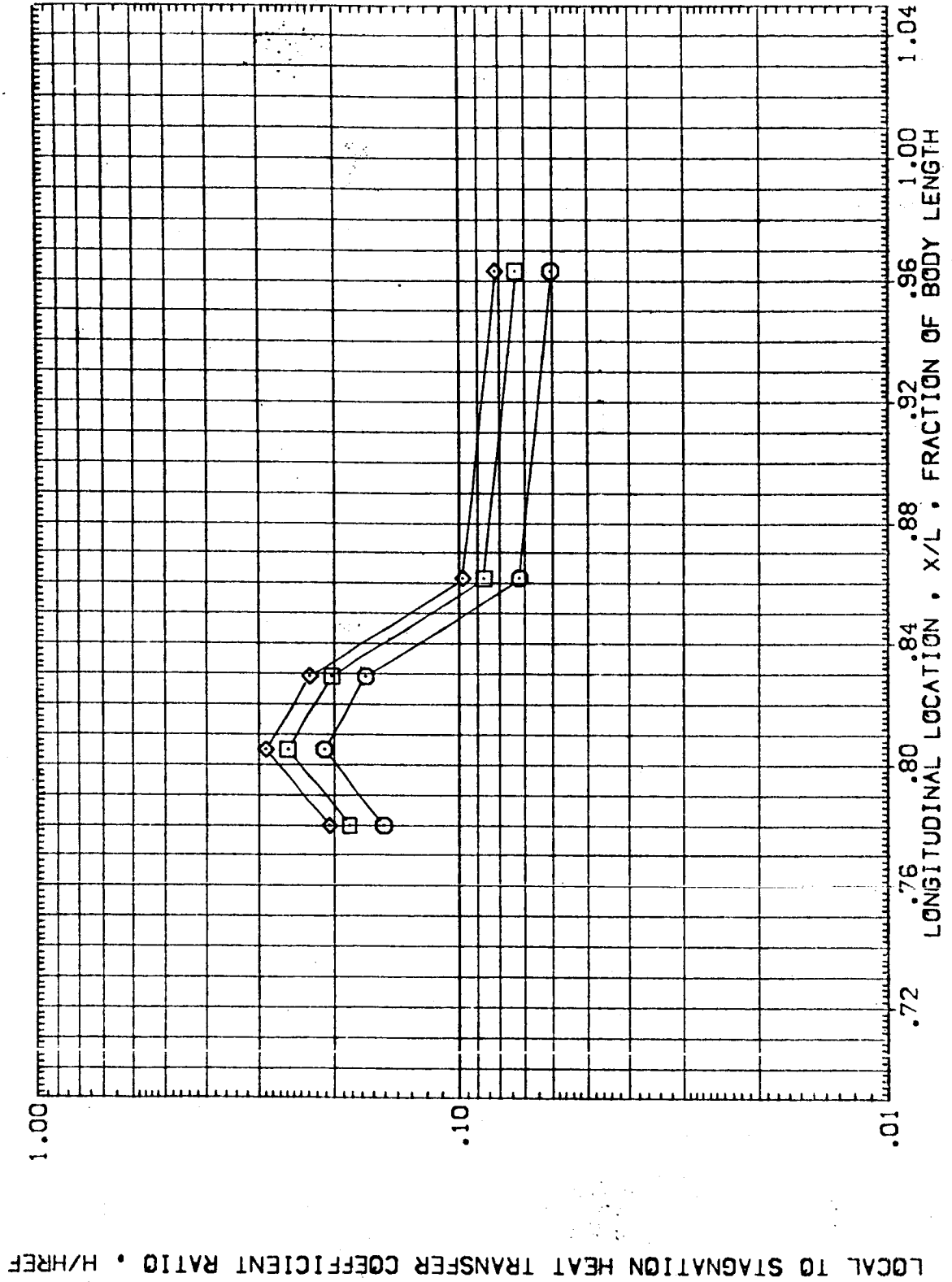


FIG. 37 OMS SIDE SURFACE - ORBITTER ALONE (UNDISTURBED)

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [REIKOI] [O] ARC 3.5-178 [H3] O+T+S
 [AEIKOI] [◇] ARC 3.5-178 [H3] O+T+S
 [BEIKOI] [○] ARC 3.5-178 [H3] O+T+S

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

OMS SIDE SURFACE
 OMS SIDE SURFACE
 OMS SIDE SURFACE

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

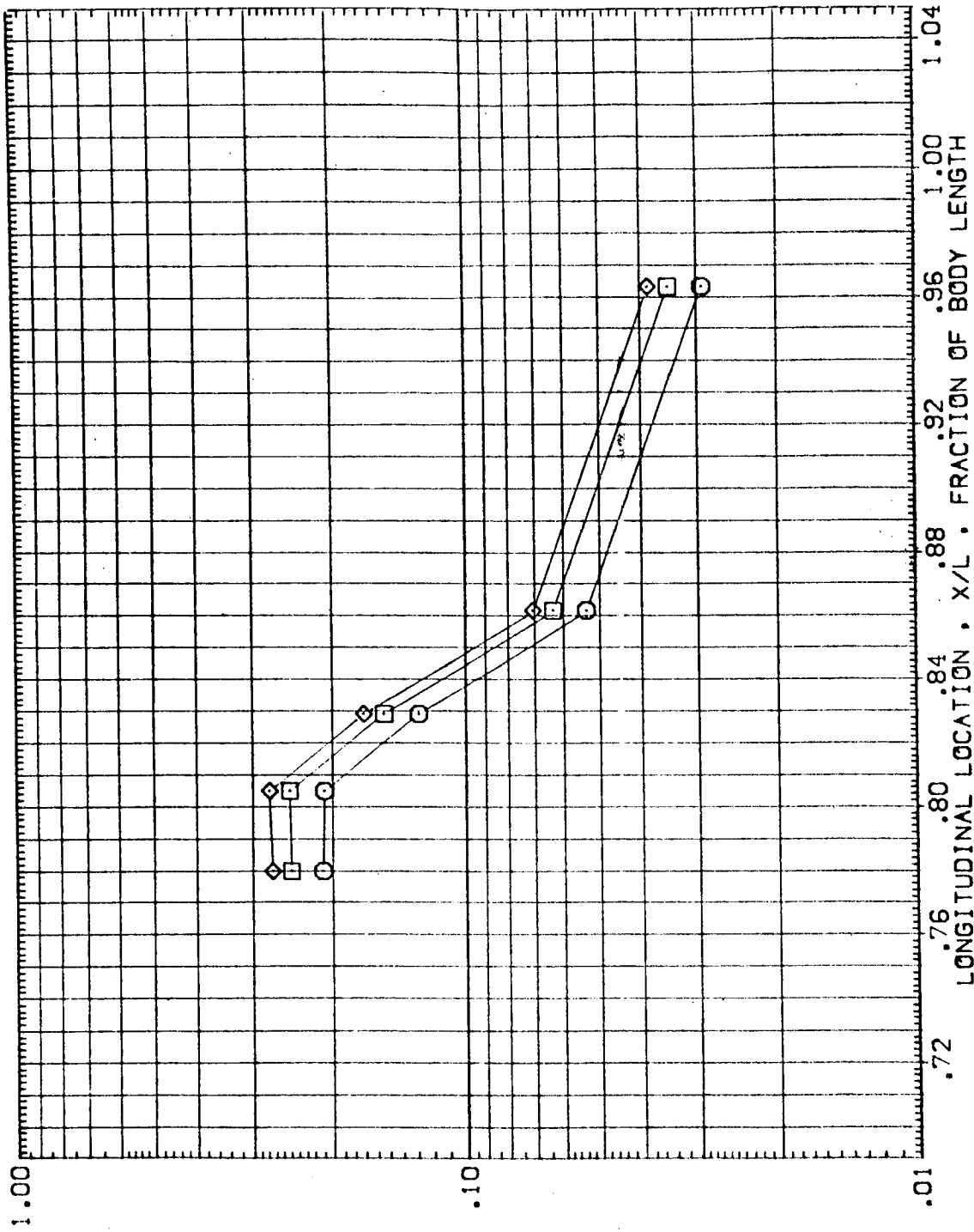


FIG. 38 OMS SIDE SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT
 [RE[K02] ARC 3.5-178 IH3 C+T+S .000 .000 5.000 1.000
 [AE[K02] ARC 3.5-178 IH3 C+T+S .000 .000 5.000 .900
 [BE[K02] ARC 3.5-178 IH3 C+T+S .000 .000 5.000 .850

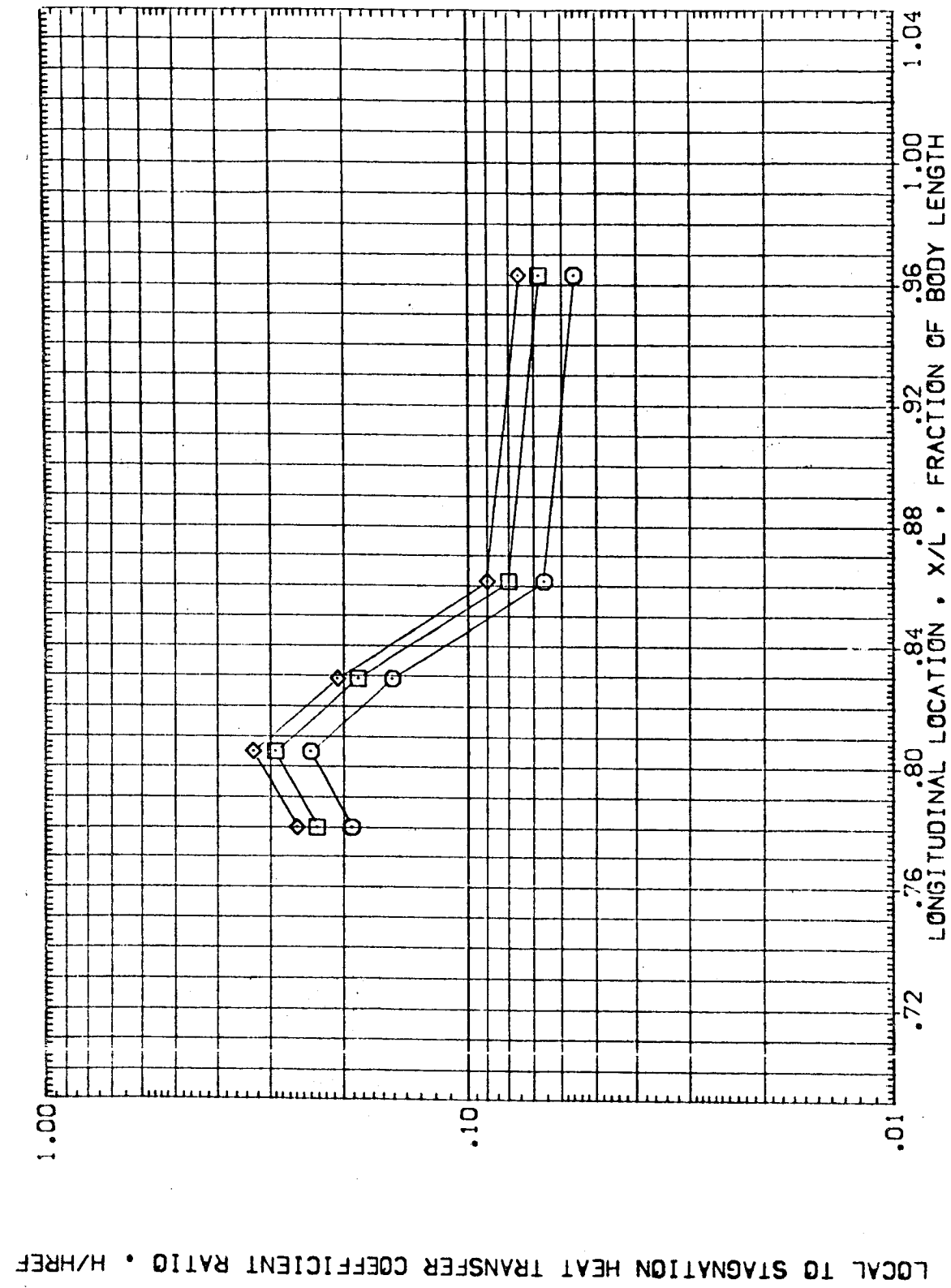


FIG. 38 OMS SIDE SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000

DATA SET SYMBOL: [RE:K03] [AE:K03] [BE:K03]
 CONFIGURATION DESCRIPTION: ARC 3.5-178 IH3 0-T+S (TRIPS)
 ARC 3.5-178 IH3 0-T+S (TRIPS)
 ARC 3.5-178 IH3 0-T+S (TRIPS)
 ALPHA: .000
 BETA: .000
 RV/L: 1.500
 HAV/HT: 1.000
 OMS SIDE SURFACE: OMS SIDE SURFACE
 OMS SIDE SURFACE: OMS SIDE SURFACE
 OMS SIDE SURFACE: OMS SIDE SURFACE

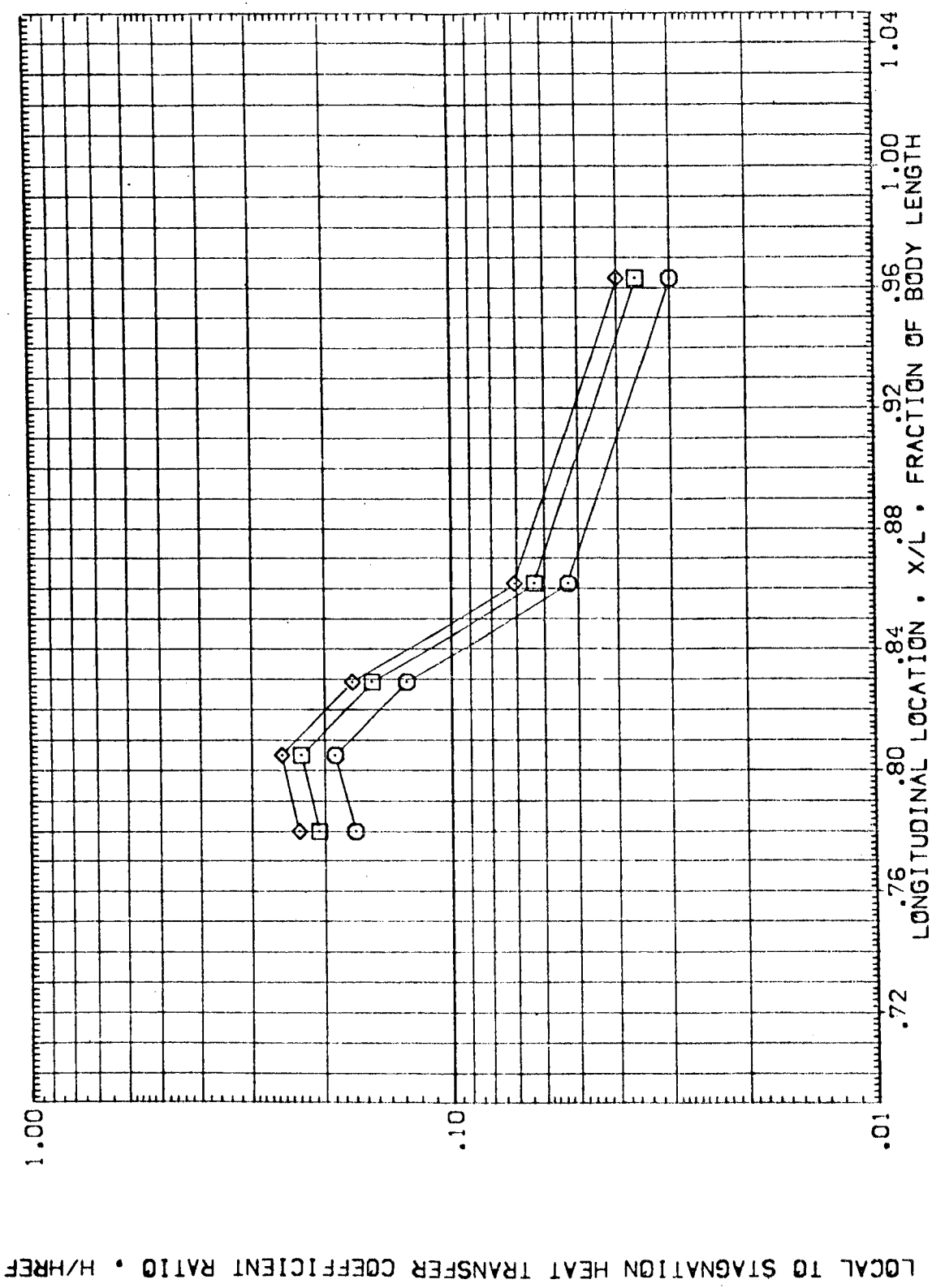


FIG. 38 OMS SIDE SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000



DATA SET SYMBOL. CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REIKO4) [AEIKO4] [BEIKO4] ARC 3.5-178 IH3 0+1+S (TRIPS) 0MS SIDE SURFACE .000 .000 5.000 1.000

(AEIKO4) [BEIKO4] ARC 3.5-178 IH3 0+1+S (TRIPS) 0MS SIDE SURFACE .000 .000 5.000 .900

(BEIKO4) [AEIKO4] [BEIKO4] ARC 3.5-178 IH3 0+1+S (TRIPS) 0MS SIDE SURFACE .000 .000 5.000 .850

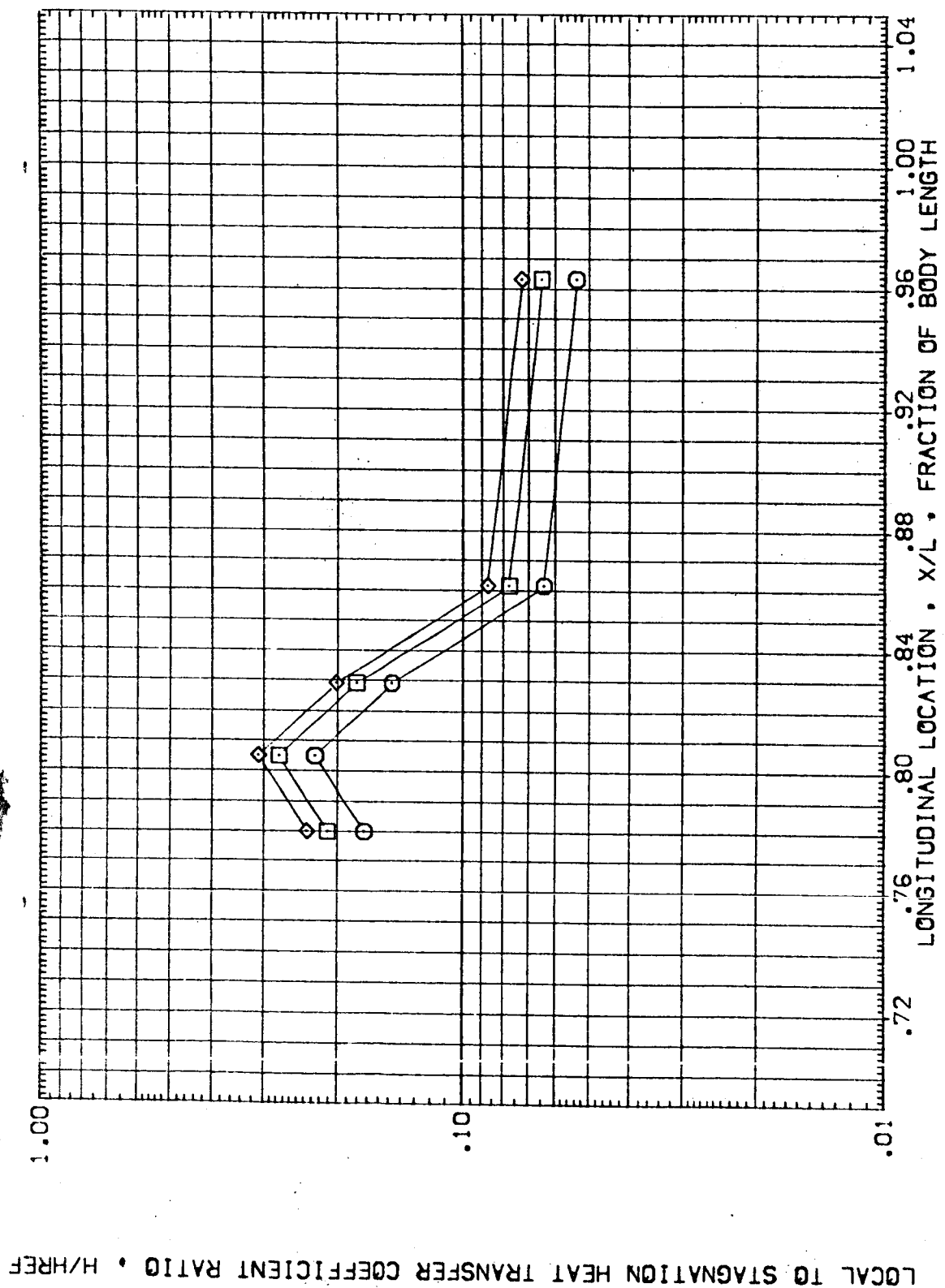


FIG. 38 0MS SIDE SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIKOS) ARC 3.5-178 IH3 O+T+S
 (AEIKOS) ARC 3.5-178 IH3 O+T+S
 (BEIKOS) ARC 3.5-178 IH3 O+T+S

QMS SIDE SURFACE ALPHA BETA RN/L HAV/HT
 QMS SIDE SURFACE .000 -5.000 5.000 1.000
 QMS SIDE SURFACE .000 -5.000 5.000 .900
 QMS SIDE SURFACE .000 -5.000 5.000 .850

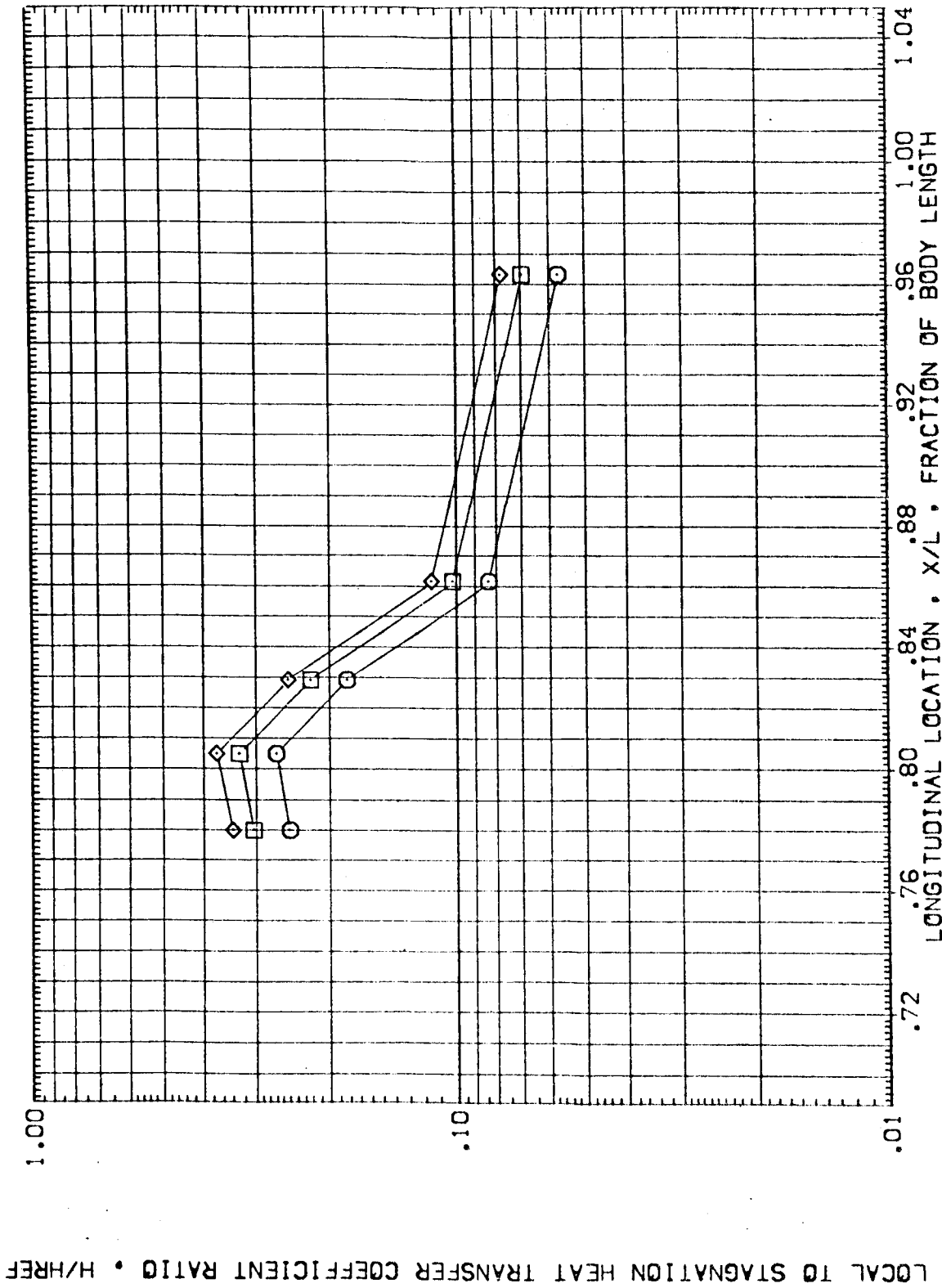


FIG. 38 QMS SIDE SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(REIK19)	ARC 3.5-178	H3	O+T+S	0MS SIDE SURFACE	ALPHA	BETA	RN/L	HAW/HT
(AEIK19)	ARC 3.5-178	H3	O+T+S	0MS SIDE SURFACE	-5.000	.000	5.000	1.000
(BEIK19)	ARC 3.5-178	H3	O+T+S	0MS SIDE SURFACE	-5.000	.000	5.000	.850

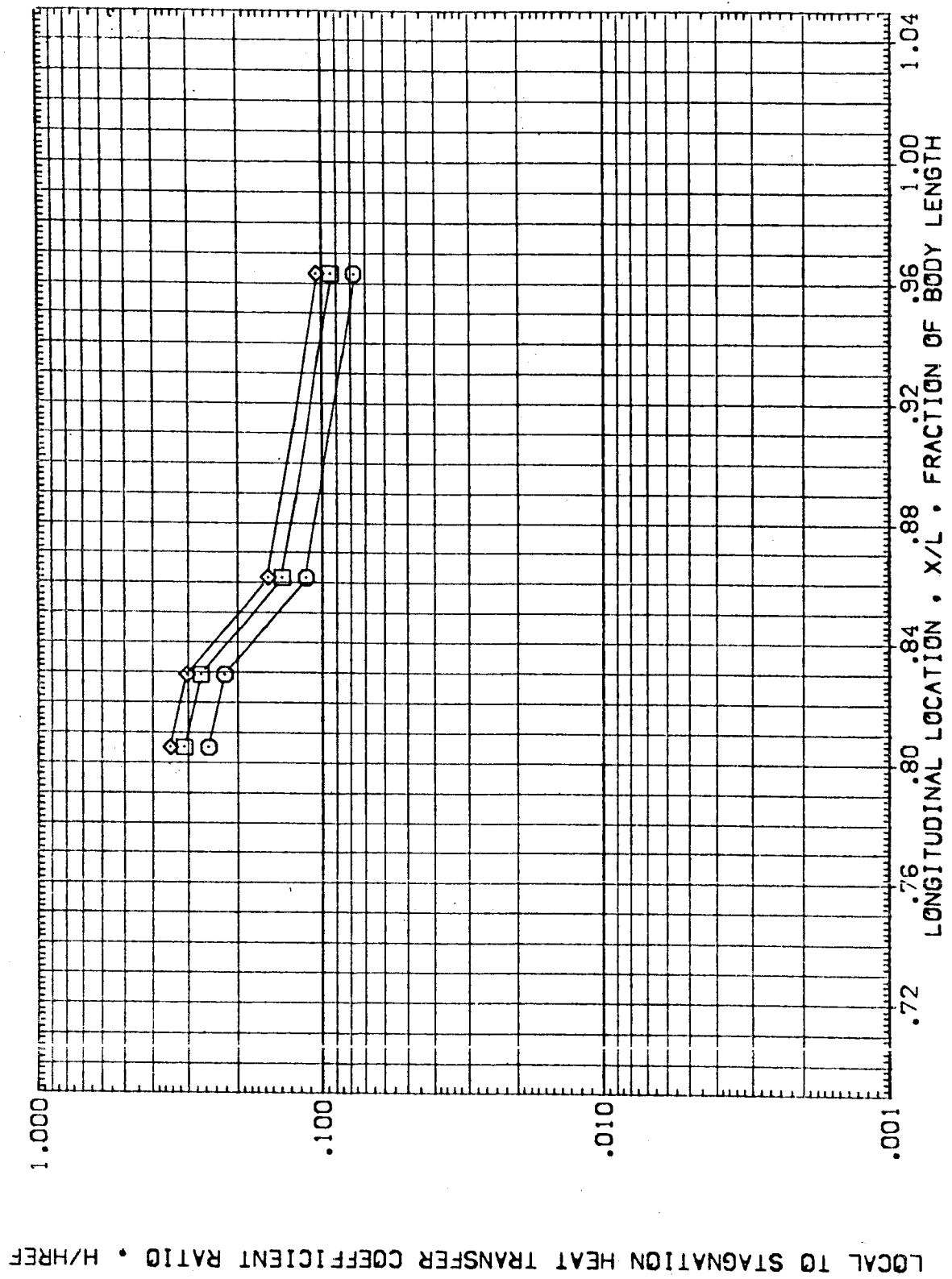


FIG. 38 0MS SIDE SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIK20) O ARC 3.5-178 IH3 O+T+S
 (AEIK20) O ARC 3.5-178 IH3 O+T+S
 (BEIK20) O ARC 3.5-178 IH3 O+T+S

0MS SIDE SURFACE ALPHA BETA RV/L HAW/HT
 0MS SIDE SURFACE -3.000 .000 5.000 1.000
 0MS SIDE SURFACE -3.000 .000 5.000 .900
 0MS SIDE SURFACE -3.000 .000 5.000 .850

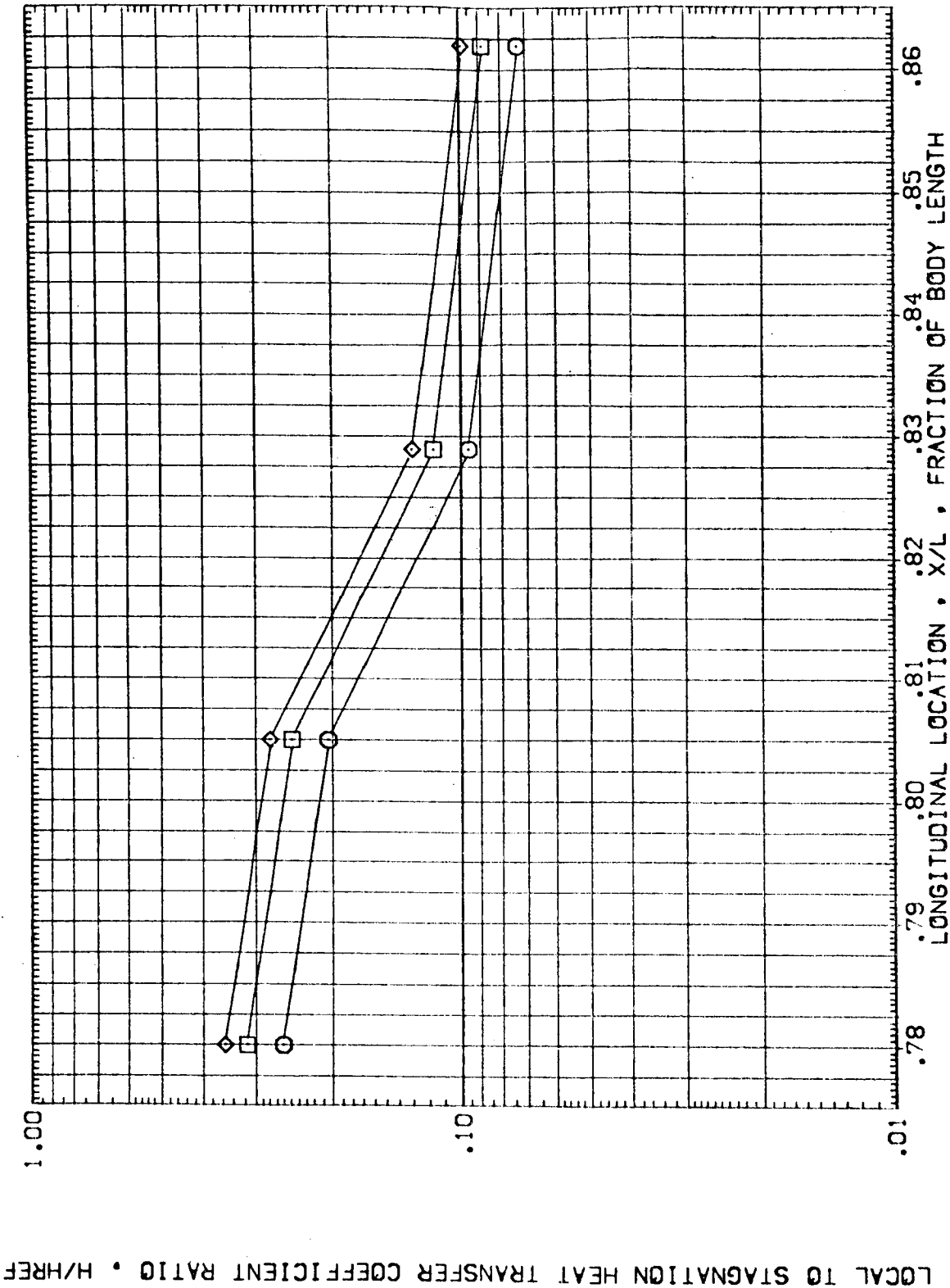


FIG. 38 0MS SIDE SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 C = 1.000

DATA SET SYMBO: CONFIGURATION DESCRIPTION: ALPHA BETA RV/L HAV/HF

(EEIK06)	ARC 3.5-178 IH3 0+1+5	.000	.000	1.500	.900
(EEIK07)	ARC 3.5-178 IH3 0+1+5	.000	.000	5.000	.900
(EEIK08)	ARC 3.5-178 IH3 0+1+5 (TRIPS)	.000	.000	1.500	.900
(EEIK09)	ARC 3.5-178 IH3 0+1+5 (TRIPS)	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO, HI/HU

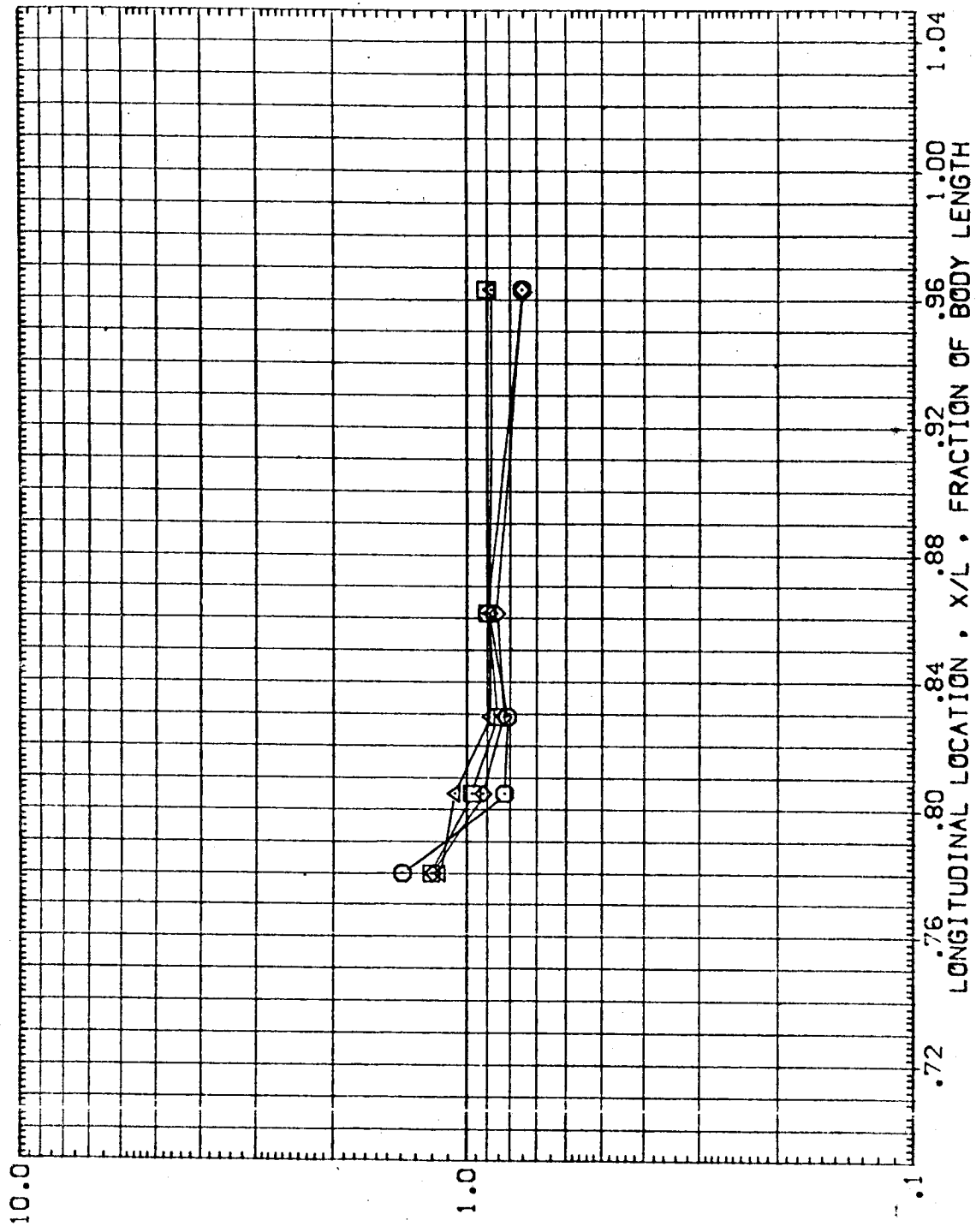


FIG. 39 OMS SIDE SURFACE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 C = 1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIL06) ARC 3.5-178 IH3 ORBITER
 (AEIL06) ARC 3.5-178 IH3 ORBITER
 (BEIL06) ARC 3.5-178 IH3 ORBITER

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

ONS TOP SURFACE
 ONS TOP SURFACE
 ONS TOP SURFACE

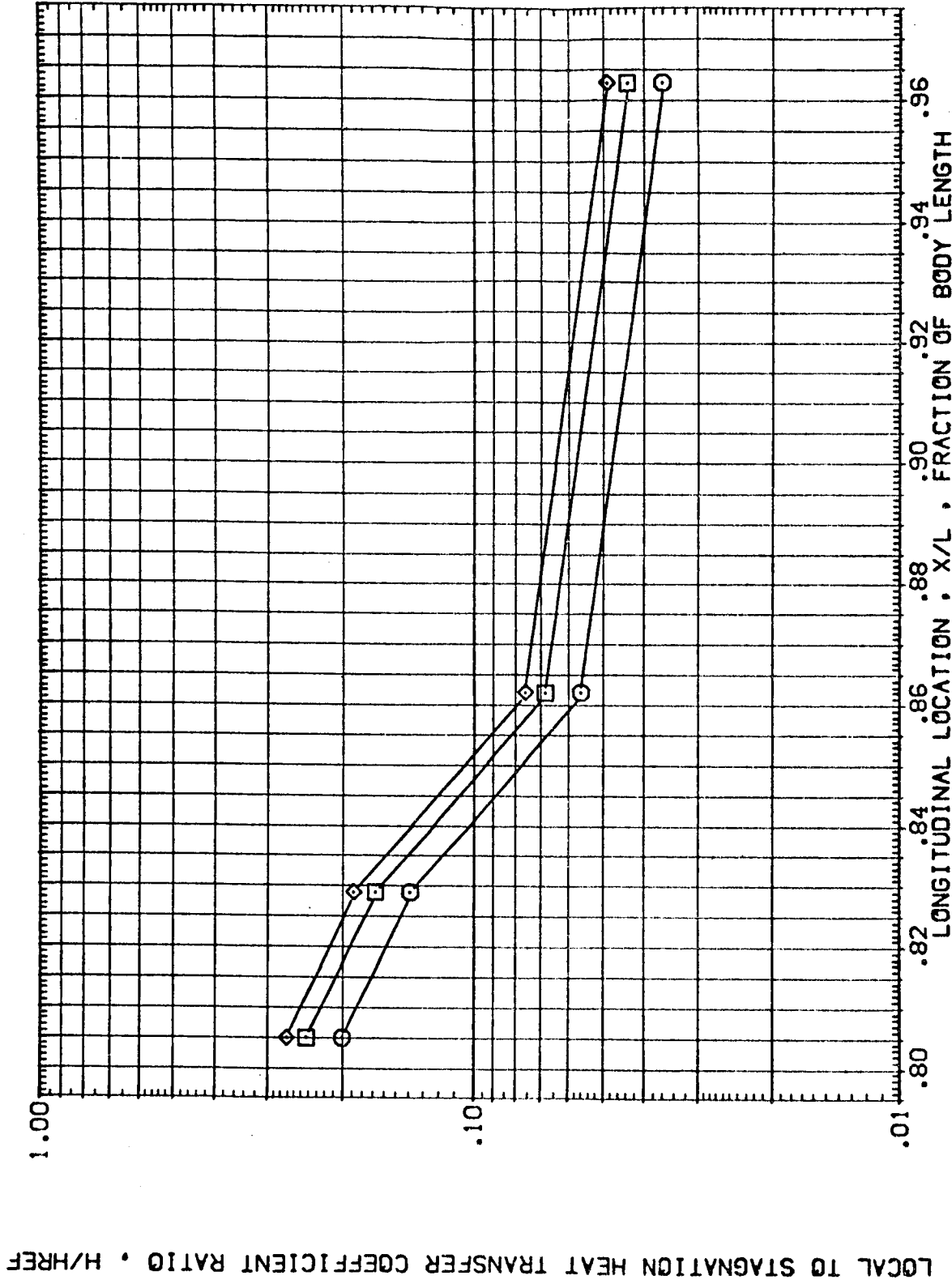


FIG. 40 ONS TOP SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Y = 95.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REILO7) (AEILO7) (BEILO7) (ARC 3.5-178 IH3 ORBITER)
 (ARC 3.5-178 IH3 ORBITER)
 (ARC 3.5-178 IH3 ORBITER)

ALPHA BETA RVL HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

ONS TOP SURFACE
 ONS TOP SURFACE
 ONS TOP SURFACE

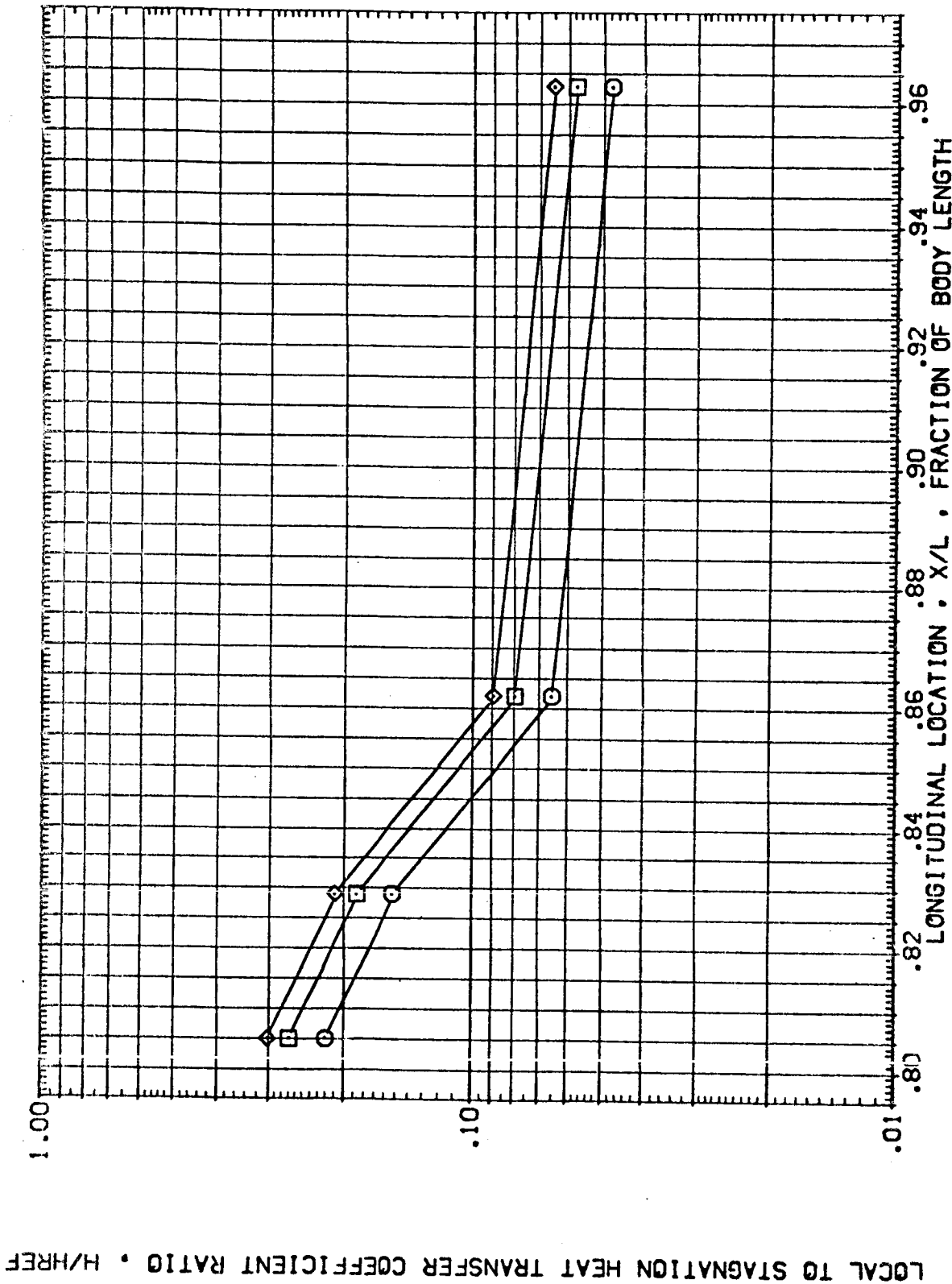


FIG. 40 ONS TOP SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Y = 95.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RVAL MAV/HT
 (REILOB) ARC 3.5-178 IH3 ORBITER (TRIPS)ONS TOP SURFACE .000 .000 1.500 1.000
 (AEILOB) ARC 3.5-178 IH3 ORBITER (TRIPS)ONS TOP SURFACE .000 .000 1.500 .900
 (BEILOB) ARC 3.5-178 IH3 ORBITER (TRIPS)ONS TOP SURFACE .000 .000 1.500 .850

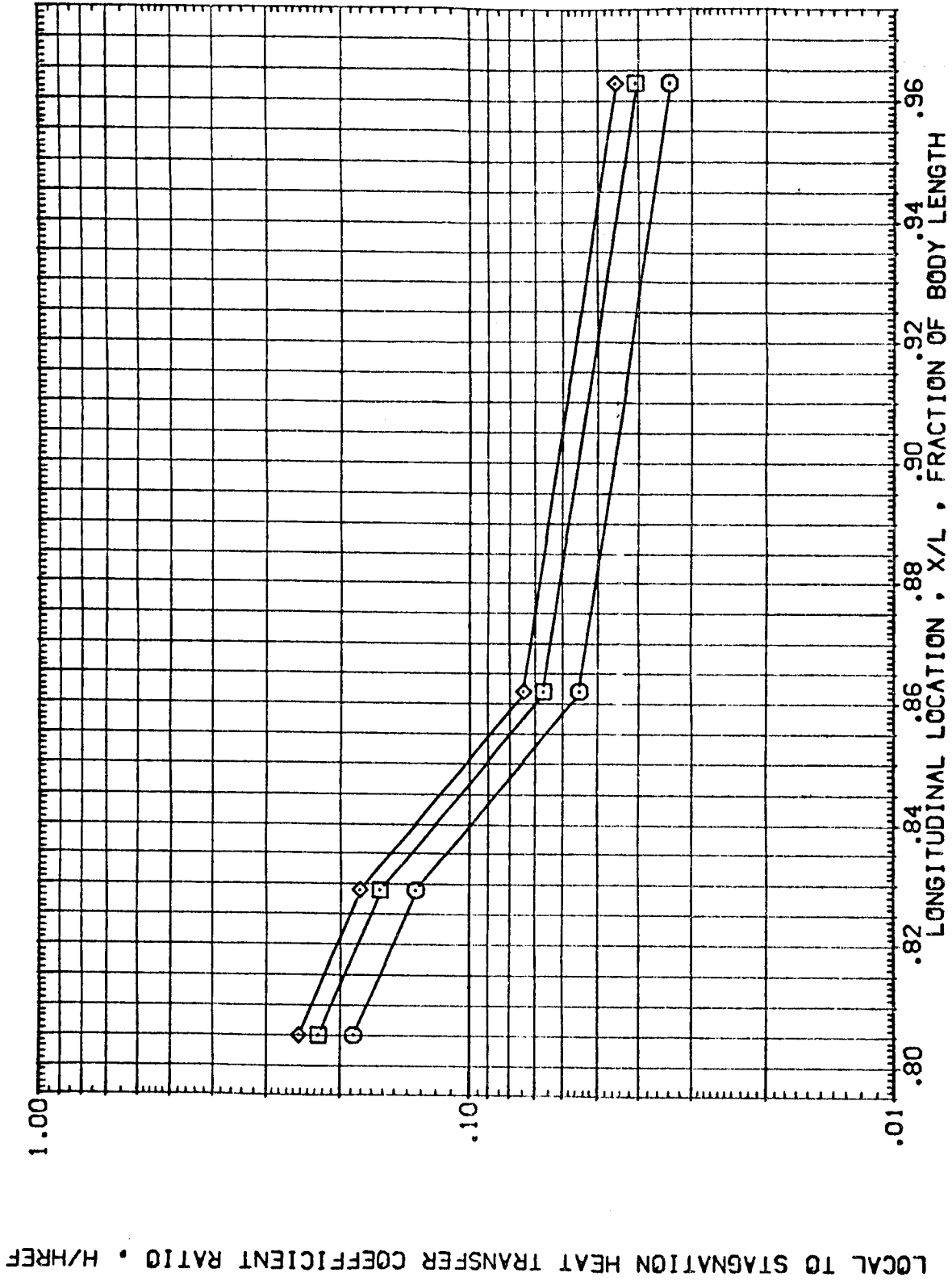


FIG. 40 OMS TOP SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Y = 95.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/NT

(REILDS) [] ARC 3.5-176 IH3 ORBITER (TRIPS)ONS TOP SURFACE .000 .000 5.000 1.000

(AEILDS) [] ARC 3.5-176 IH3 ORBITER (TRIPS)ONS TOP SURFACE .000 .000 5.000 .900

(BEILDS) [] ARC 3.5-176 IH3 ORBITER (TRIPS)ONS TOP SURFACE .000 .000 5.000 .850

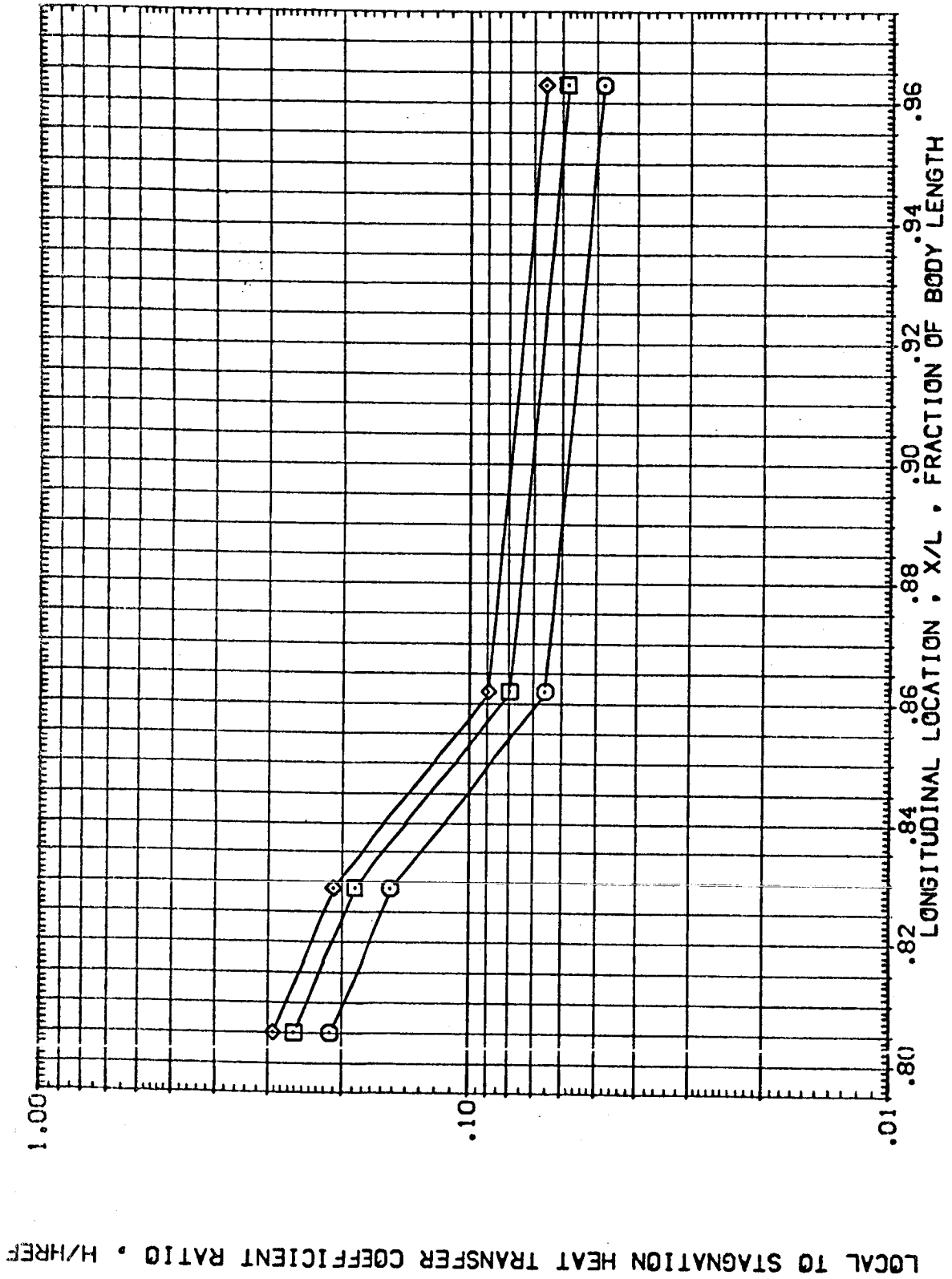


FIG. 40 0MS TOP SURFACE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Y = 95.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BE1LO1) ARC 3.5-178 IH3 0+T+S
 (AE1LO1) ARC 3.5-178 IH3 0+T+S
 (BE1LO1) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RVAL HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .500
 .000 .000 1.500 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

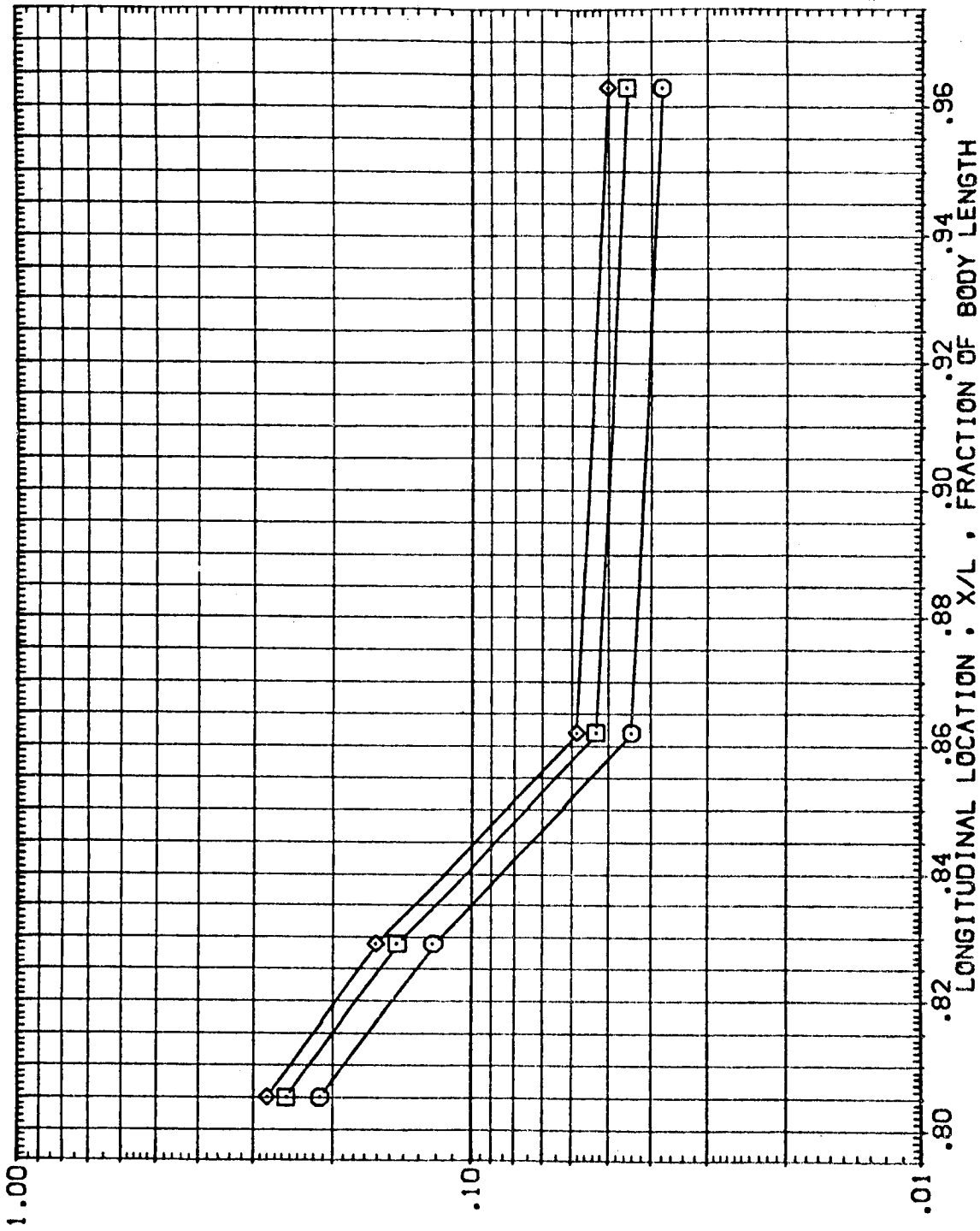


FIG. 41 0MS TOP SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 95.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BE1L02) ARC 3.5-178 IH3 0+T+S
 (AE1L02) ARC 3.5-178 IH3 0+T+S
 (BE1L02) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAW/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

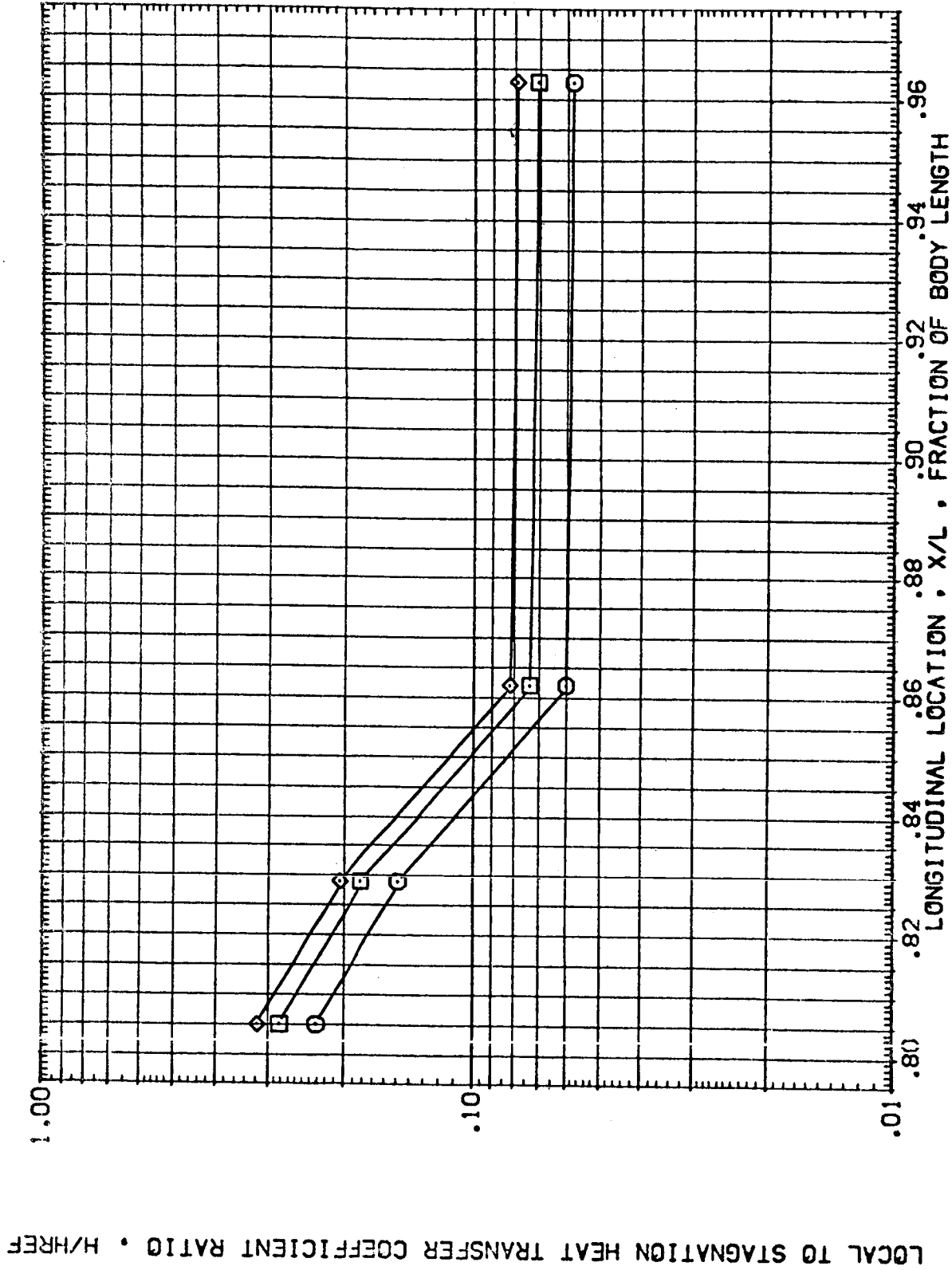


FIG. 41 OMS TOP SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 95.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REIL03) ARC 3.5-178 IH3 0+T+S (TRIPS) 0.000 0.000 1.500 1.000

(AEIL03) ARC 3.5-178 IH3 0+T+S (TRIPS) 0.000 0.000 1.500 0.900

(BEIL03) ARC 3.5-178 IH3 0+T+S (TRIPS) 0.000 0.000 1.500 0.850

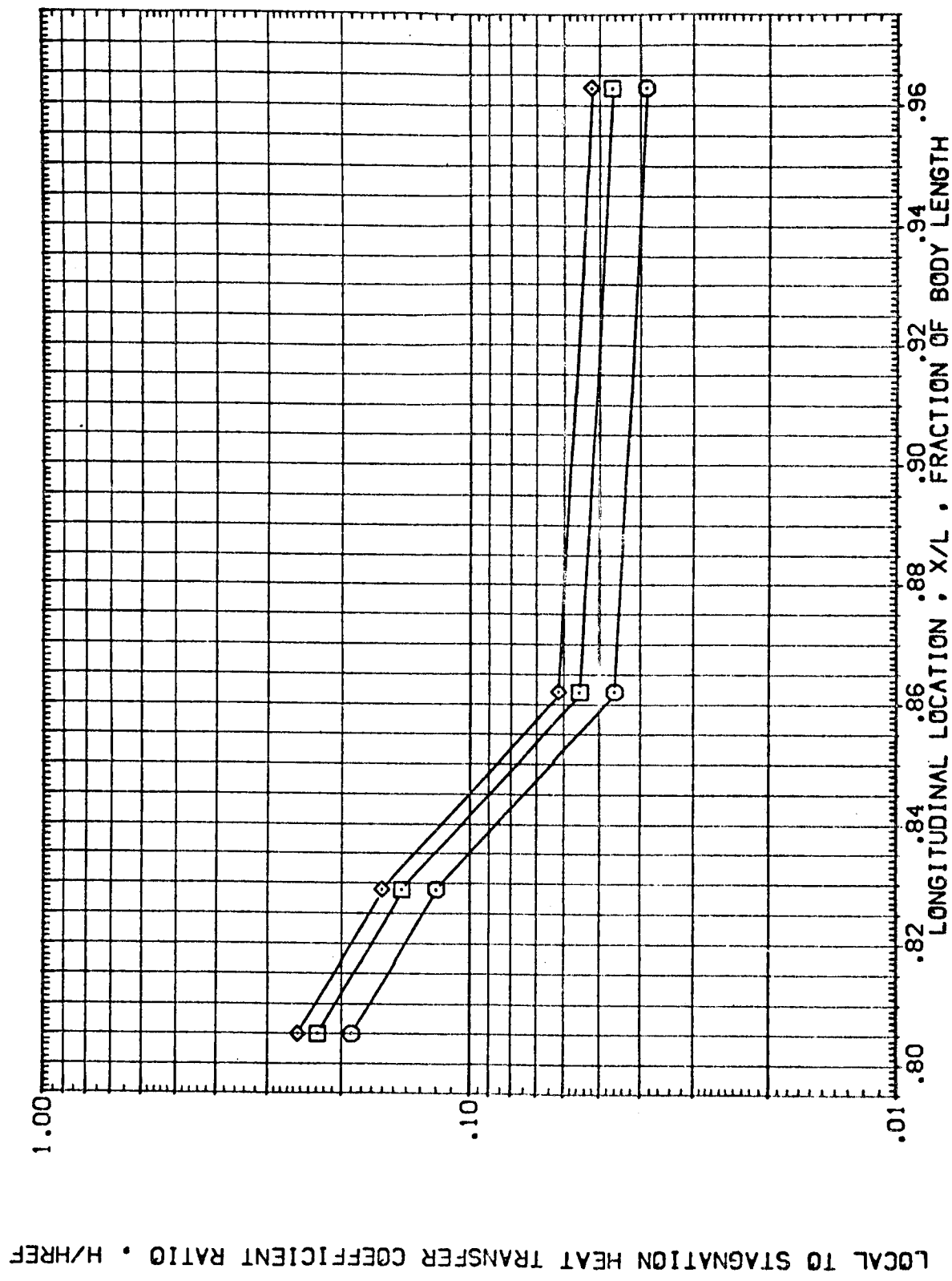


FIG. 41 0MS TOP SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 95.000

DATA SET SYMBOL. CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REILO4) (AEILO4) (BEILO4) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 1.000

ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .900

ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .850

ONS TOP SURFACE ONS TOP SURFACE ONS TOP SURFACE

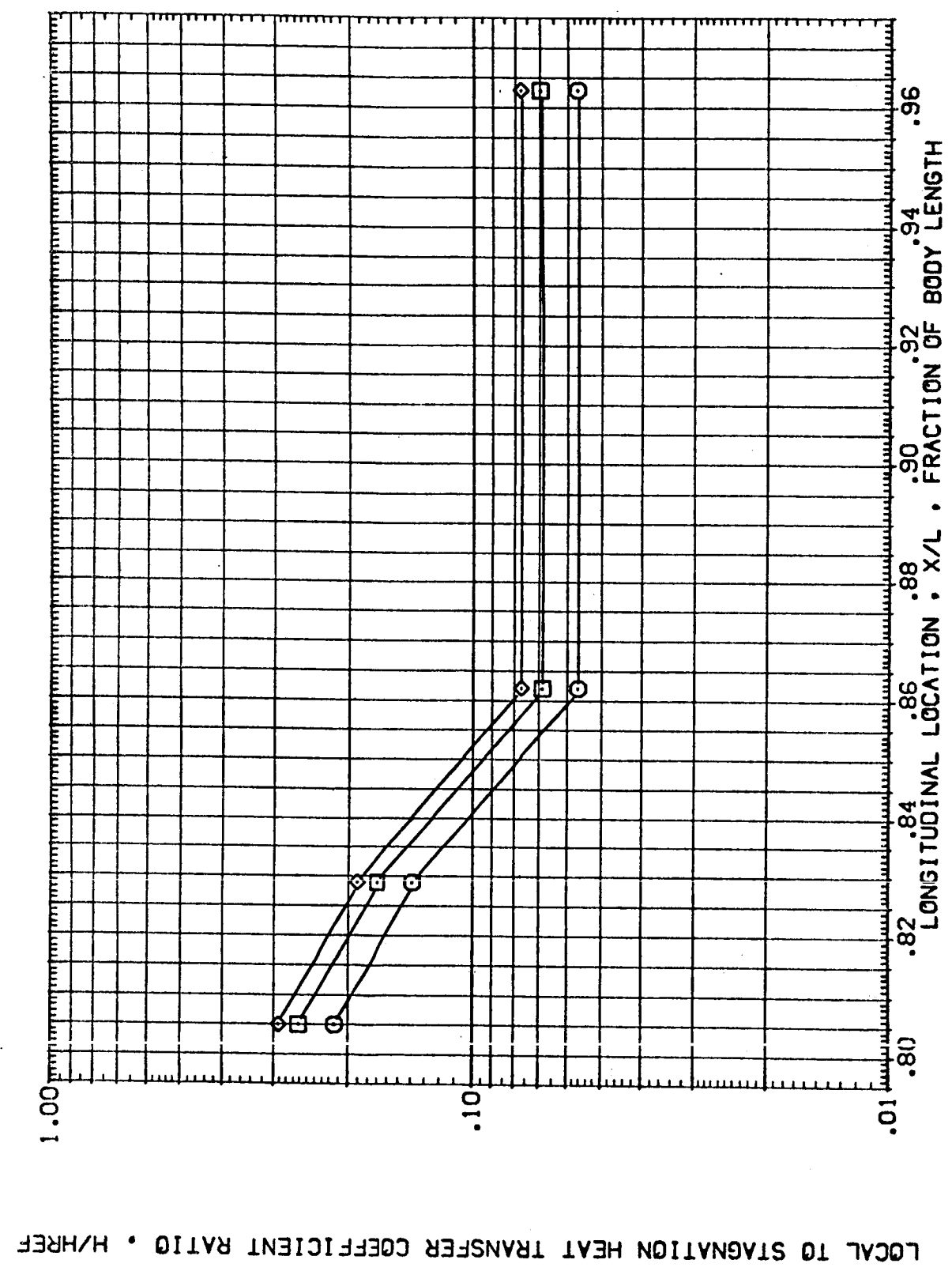


FIG. 41 OMS TOP SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 95.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REILO5) ARC 3.5-178 IH3 0+1+S
 (AEILO5) ARC 3.5-178 IH3 0+1+S
 (BEILO5) ARC 3.5-178 IH3 0+1+S

ALPHA .000
 BETA -5.000
 RMA/L 5.000
 HAV/HT 1.000

ONS TOP SURFACE
 ONS TOP SURFACE
 ONS TOP SURFACE

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

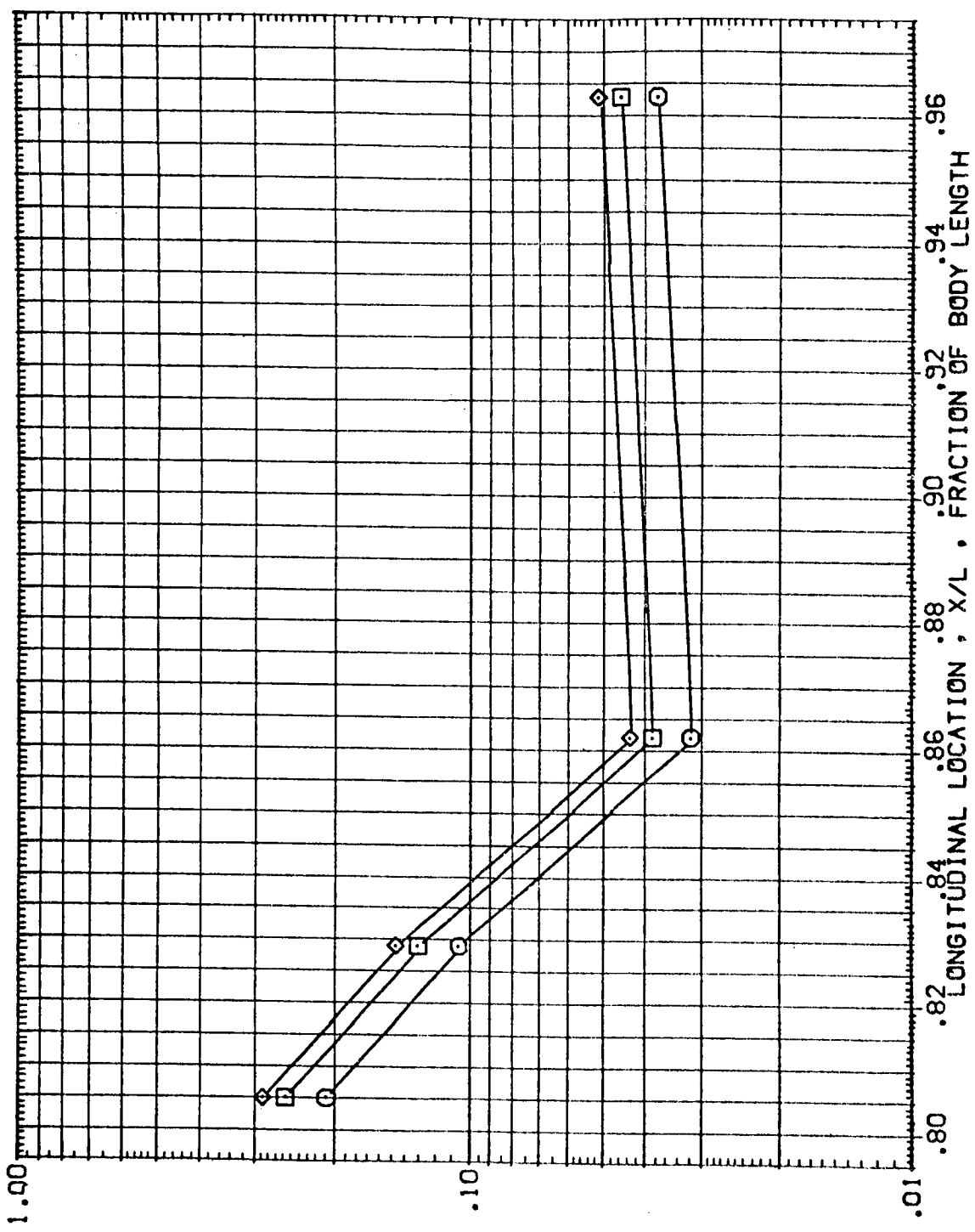


FIG. 41 ONS TOP SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 95.000



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(REIL19)	ARC 3.5-178 IH3 O+T+S	-5.000	.000	5.000	1.000
(AEIL19)	ARC 3.5-178 IH3 O+T+S	-5.000	.000	5.000	.900
(BEIL19)	ARC 3.5-178 IH3 O+T+S	-5.000	.000	5.000	.850

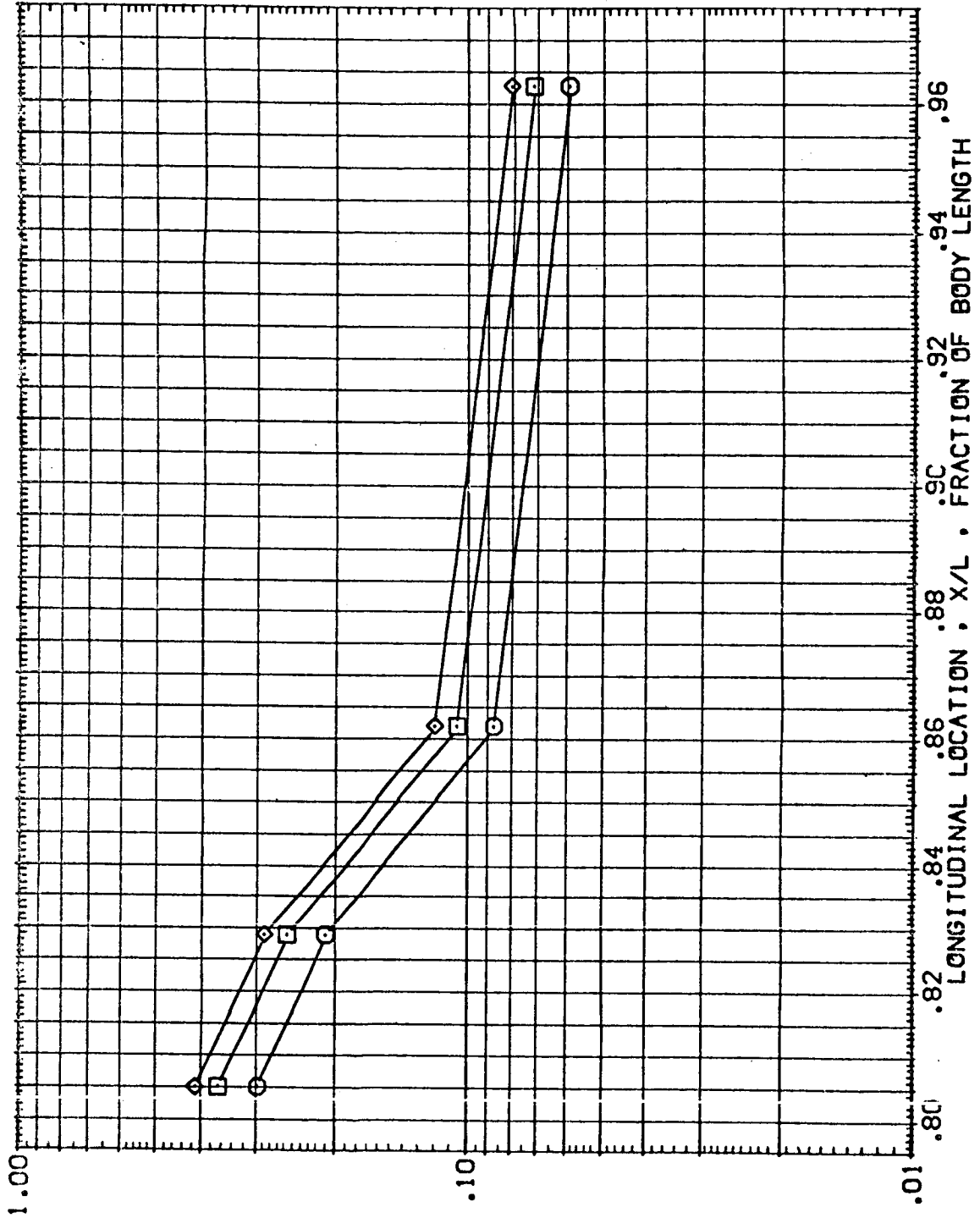


FIG. 41 OMS TOP SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 95.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIL20) ARC 3.5-178 IH3 0+T+S
 (AEIL20) ARC 3.5-178 IH3 0+T+S
 (BEIL20) ARC 3.5-178 IH3 0+T+S

QMS TOP SURFACE
 QMS TOP SURFACE
 QMS TOP SURFACE

ALPHA BETA RV/L HAV/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .650

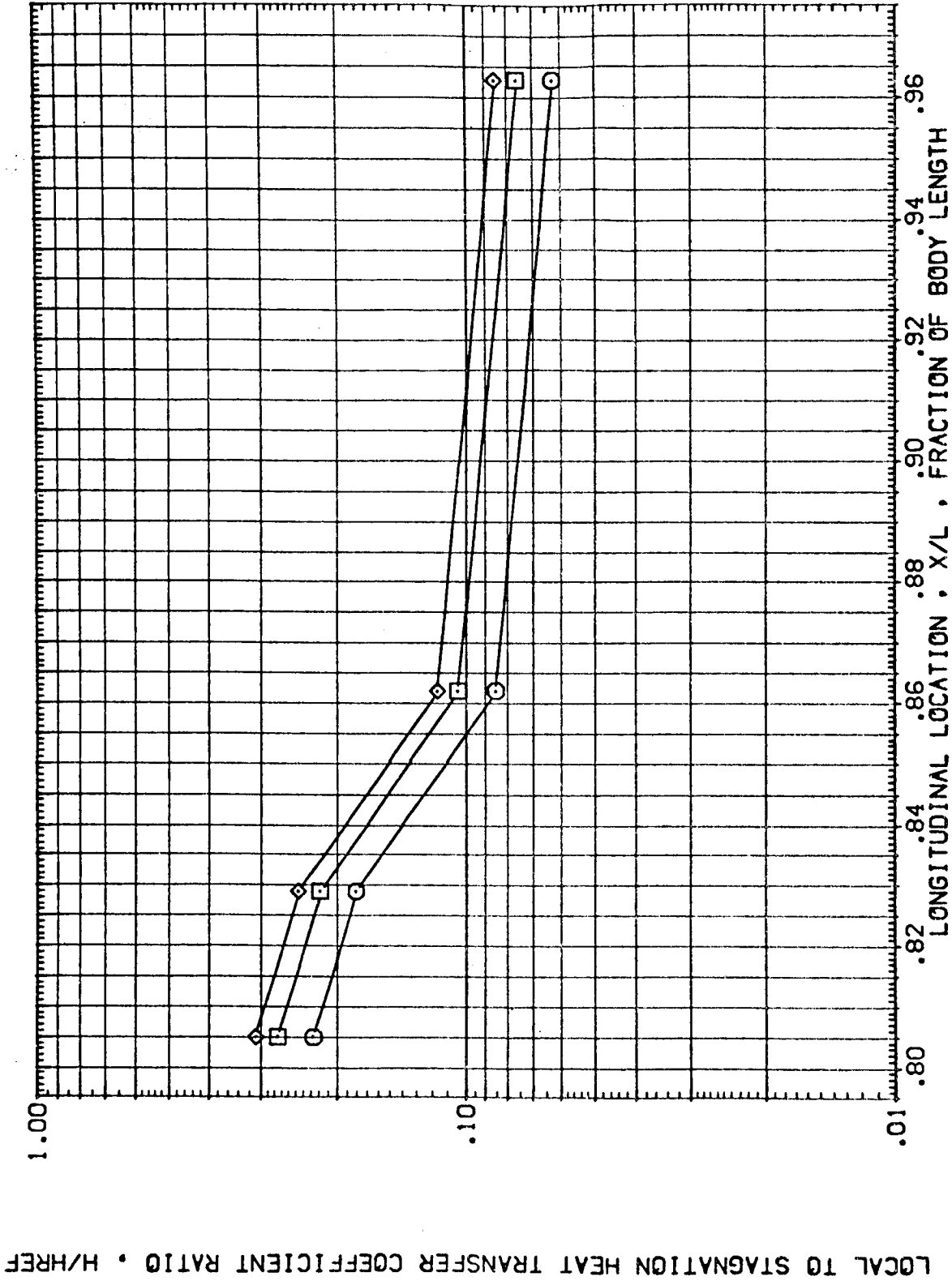


FIG. 41 QMS TOP SURFACE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Y = 95.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RM/L	HAW/HT
(EEIL06)	ARC 3.5-178 IH3 0+1+S	.000	.000	1.500	.900
(EEIL07)	ARC 3.5-178 IH3 0+1+S	.000	.000	5.000	.900
(EEIL08)	ARC 3.5-178 IH3 0+1+S (TR PS)	.000	.000	1.500	.900
(EEIL09)	ARC 3.5-178 IH3 0+1+S (TR PS)	.000	.000	5.000	.900

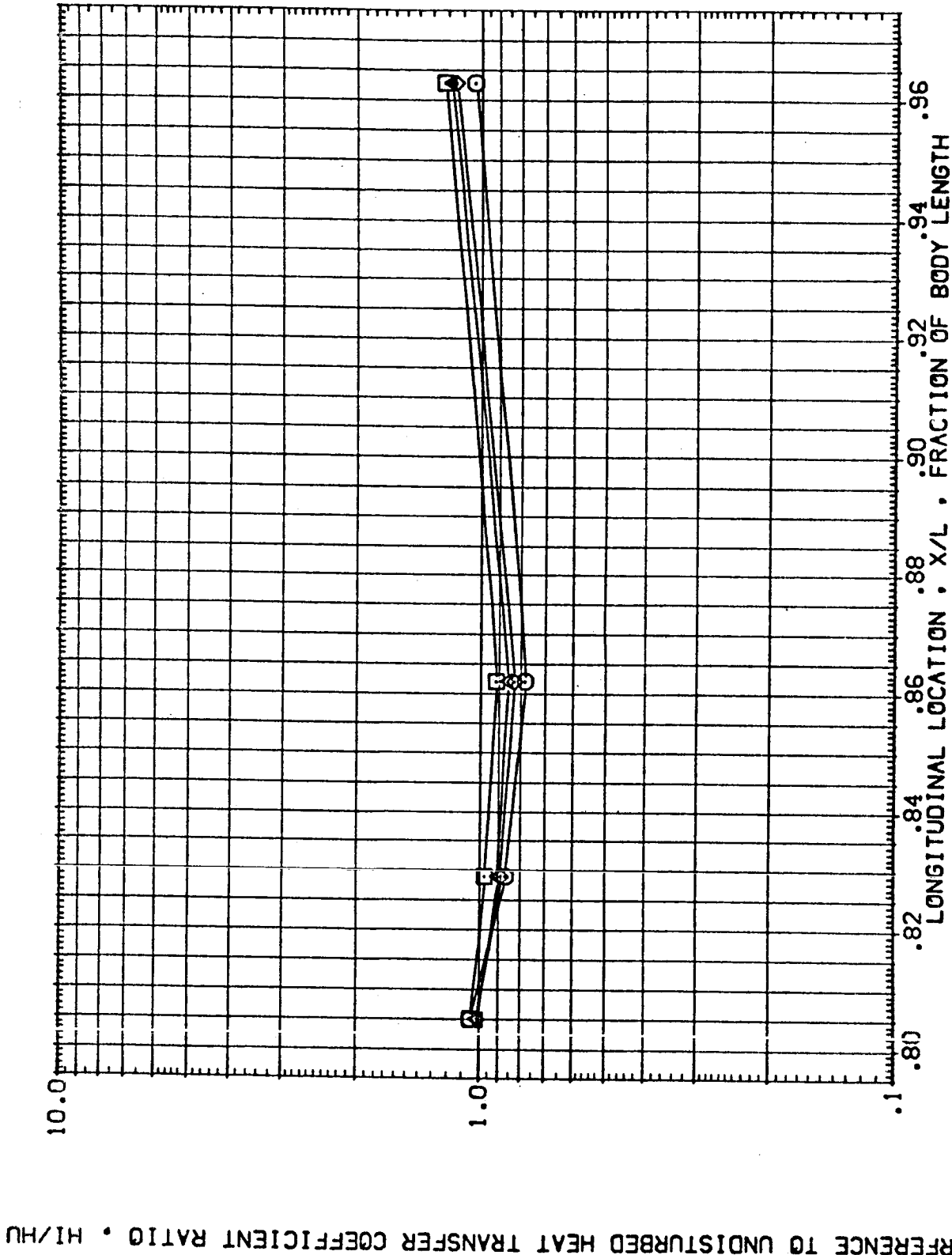


FIG. 42 0MS TOP SURFACE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 Y = 95.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI106) ARC 3.5-178 IH3 ORBITER
 (AEI106) ARC 3.5-178 IH3 ORBITER
 (BEI106) ARC 3.5-178 IH3 ORBITER

OMS VL 474
 OMS VL 474
 OMS VL 474

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

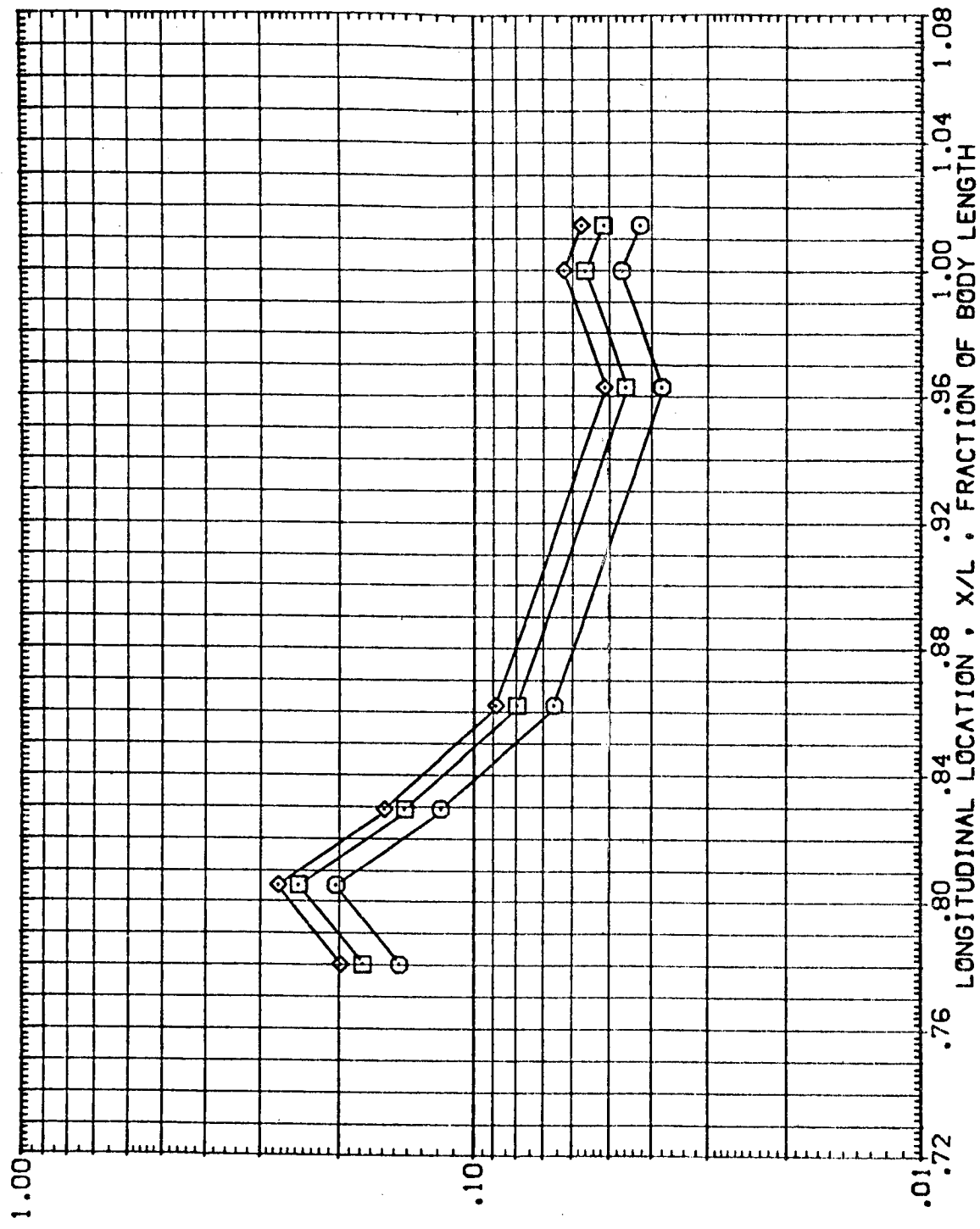


FIG. 43 OMS WL 474 - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 474.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RVAL HAV/HT
 (REIM07) (AEIM07) (BEIM07) ○ ◆
 ARC 3.5-178 IH3 ORBITER .000 .000 5.000 1.000
 ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .900
 ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .850
 OMS VL 474
 OMS VL 474
 OMS VL 474

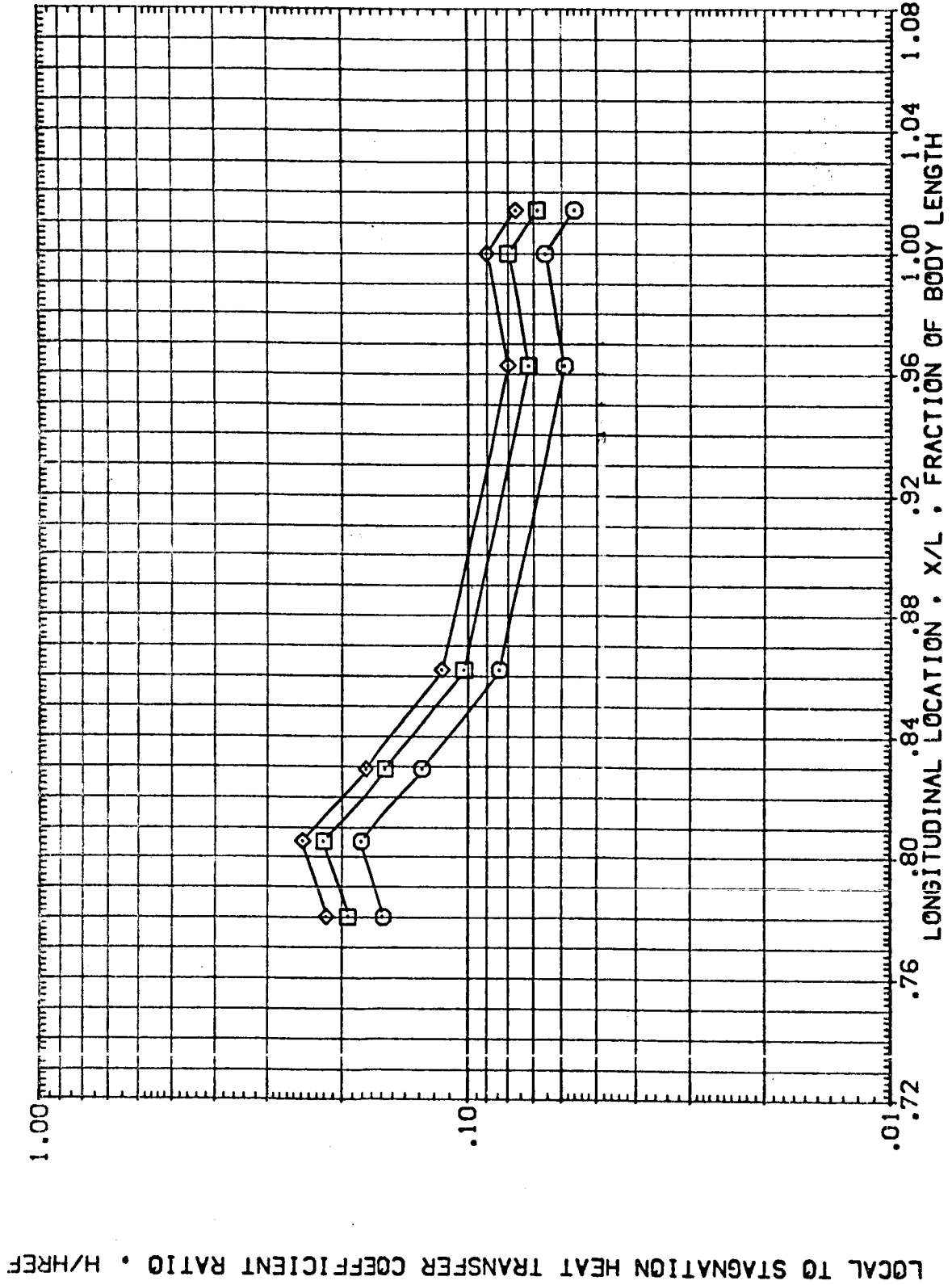


FIG. 43 OMS WL 474 - ORBITER ALONE (UNDISTURBED)

MACH = 5.310 Z = 474.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

(REIMOB) ARC 3.5-178 IH3 ORBITER (TRIPS)OVS WL 474 .000 .000 1.500 1.000

(AEIMOB) ARC 3.5-178 IH3 ORBITER (TRIPS)OVS WL 474 .000 .000 1.500 .900

(BEIMOB) ARC 3.5-178 IH3 ORBITER (TRIPS)OVS WL 474 .000 .000 1.500 .850

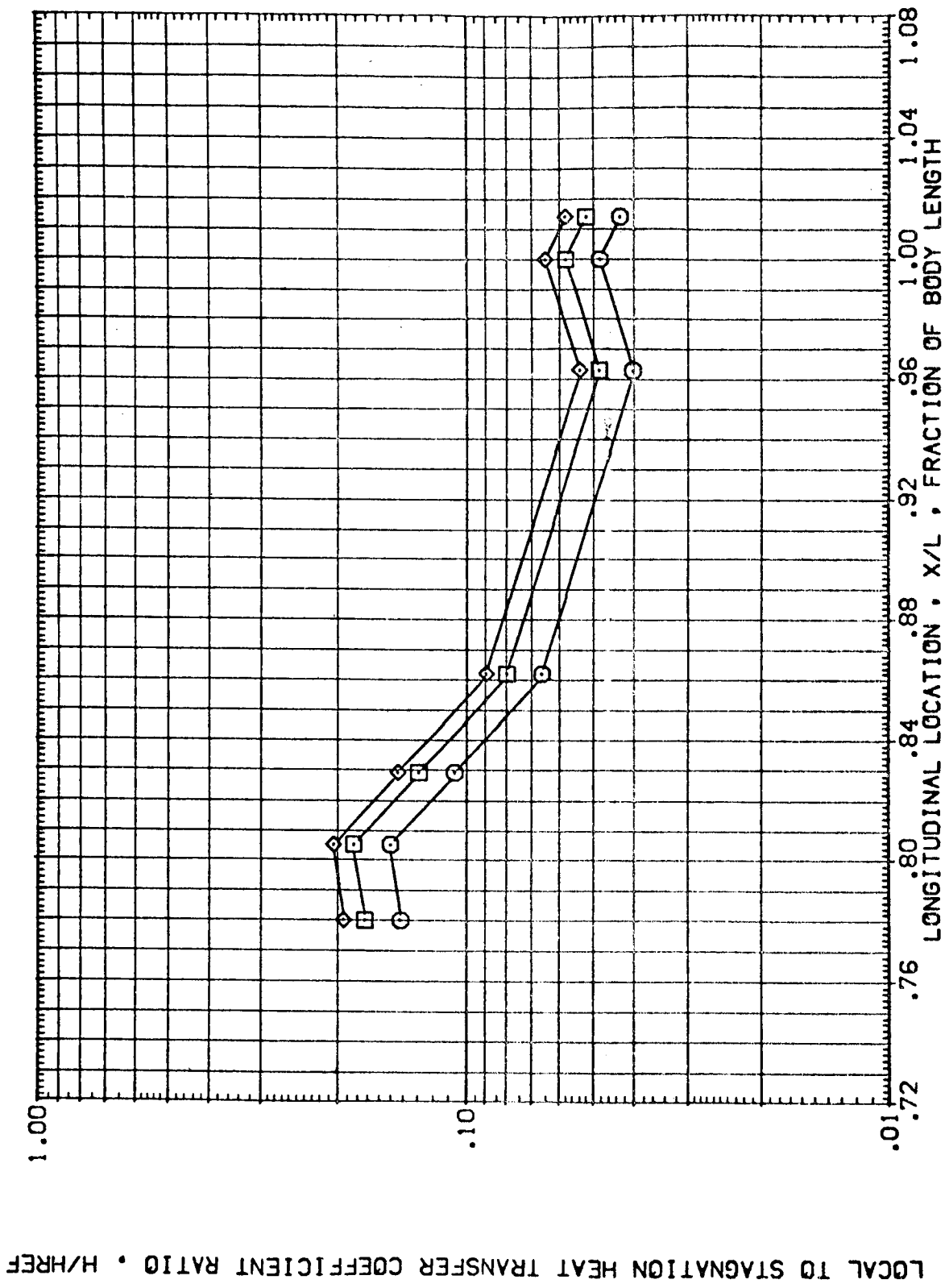


FIG. 43 OMS WL 474 - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 474.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RVAL HAV/HT
 (REIMOS) ○ ARC 3.5-178 IH3 ORBITER (TRIPS)ONS VL 474 .000 .000 5.000 1.000
 (ALIMOS) □ ARC 3.5-178 IH3 ORBITER (TRIPS)ONS VL 474 .000 .000 5.000 .900
 (BEIMOS) ◇ ARC 3.5-178 IH3 ORBITER (TRIPS)ONS VL 474 .000 .000 5.000 .850

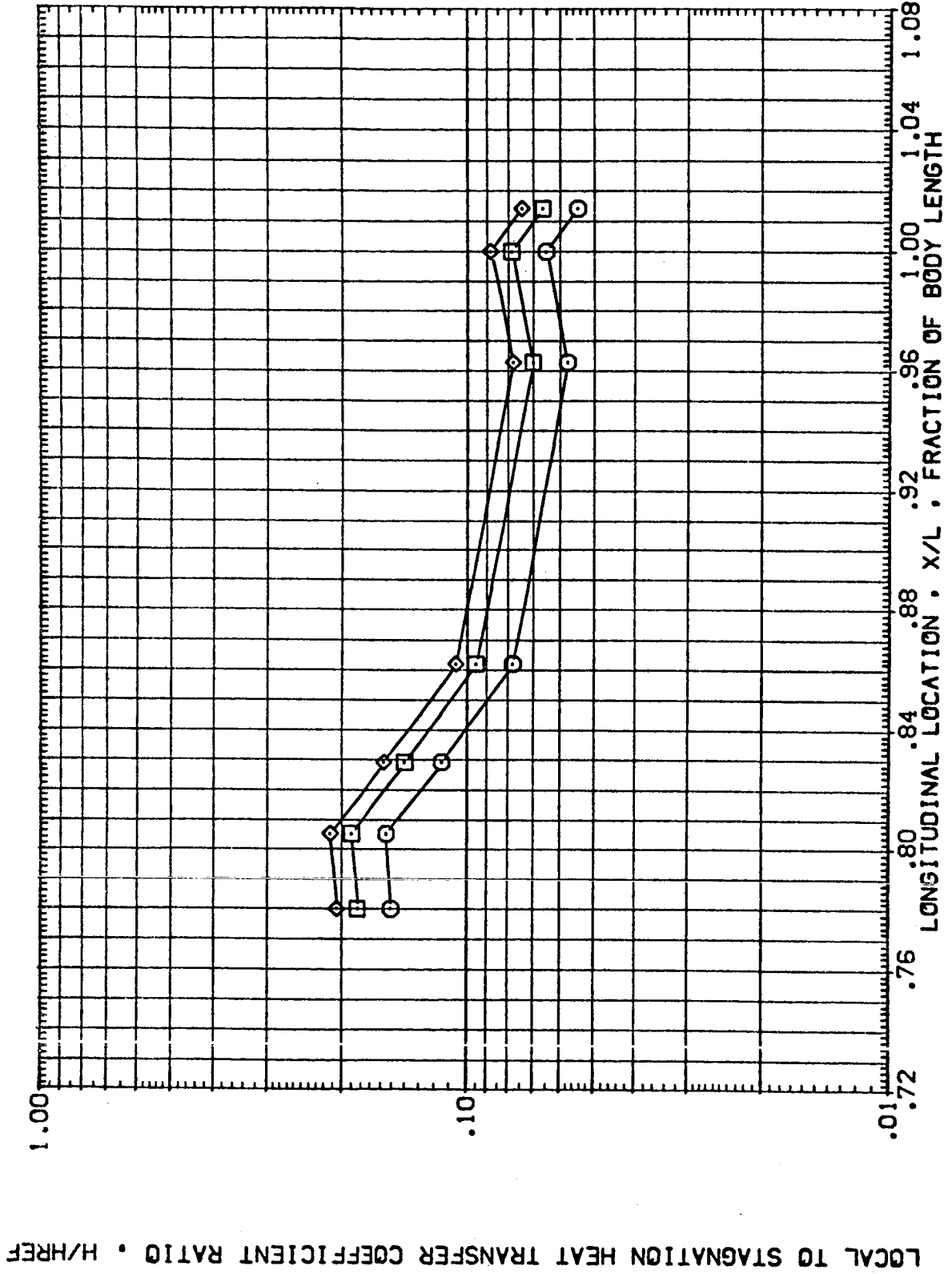


FIG. 43 OMS VL 474 - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z = 474.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE) (NO) ARC 3.5-178 IH3 0+T+S
 (AE) (NO) ARC 3.5-178 IH3 0+T+S
 (BE) (NO) ARC 3.5-178 IH3 0+T+S

QMS VL 474
 QMS VL 474
 QMS VL 474

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .650

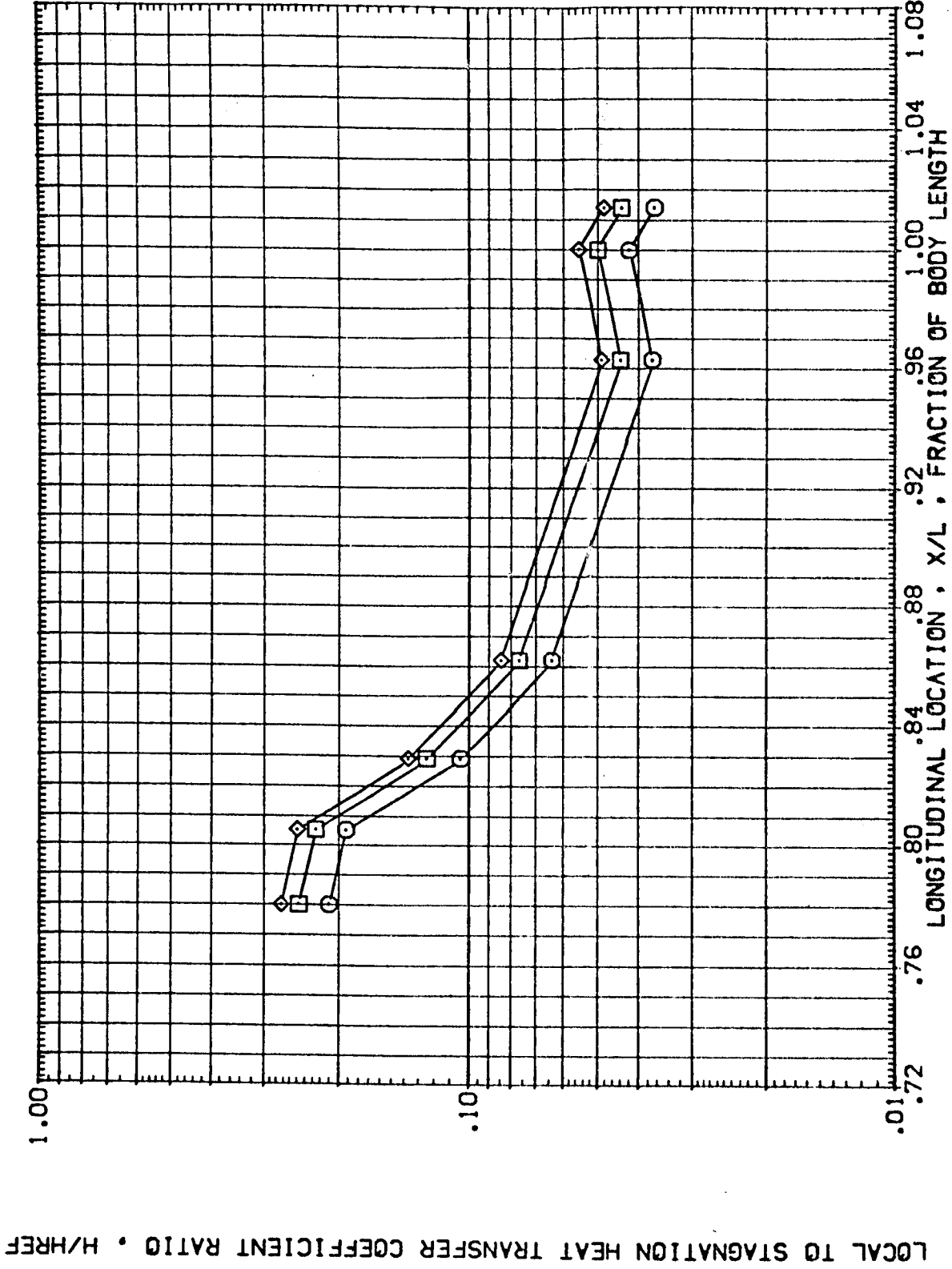


FIG. 44 QMS VL 474 - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 474.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REIM04) ARC 3.5-178 IH3 0+T+S (TRIPS) 0MS WL 474 .000 .000 5.000 1.000

(AEIM04) ARC 3.5-178 IH3 0+T+S (TRIPS) 0MS WL 474 .000 .000 5.000 .900

(BEIM04) ARC 3.5-178 IH3 0+T+S (TRIPS) 0MS WL 474 .000 .000 5.000 .850

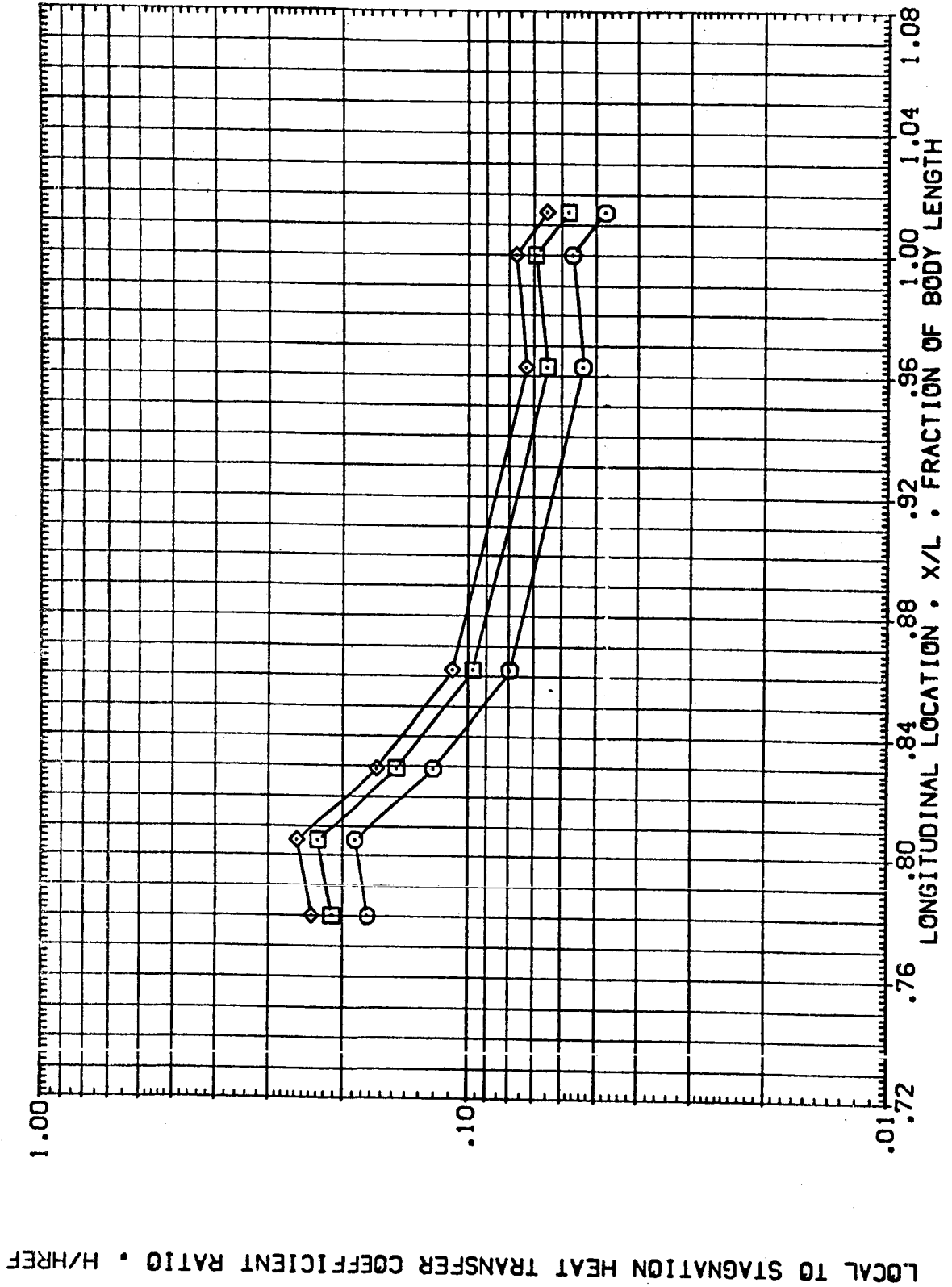


FIG. 44 0MS WL 474 - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 474.000

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIMOS) ARC 3.5-178 IH3 0-T+S
 (AEIMOS) ARC 3.5-178 IH3 0-T+S
 (BEIMOS) ARC 3.5-178 IH3 0-T+S

QMS VL 474
 QMS VL 474
 QMS VL 474

ALPHA BETA RAVL HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

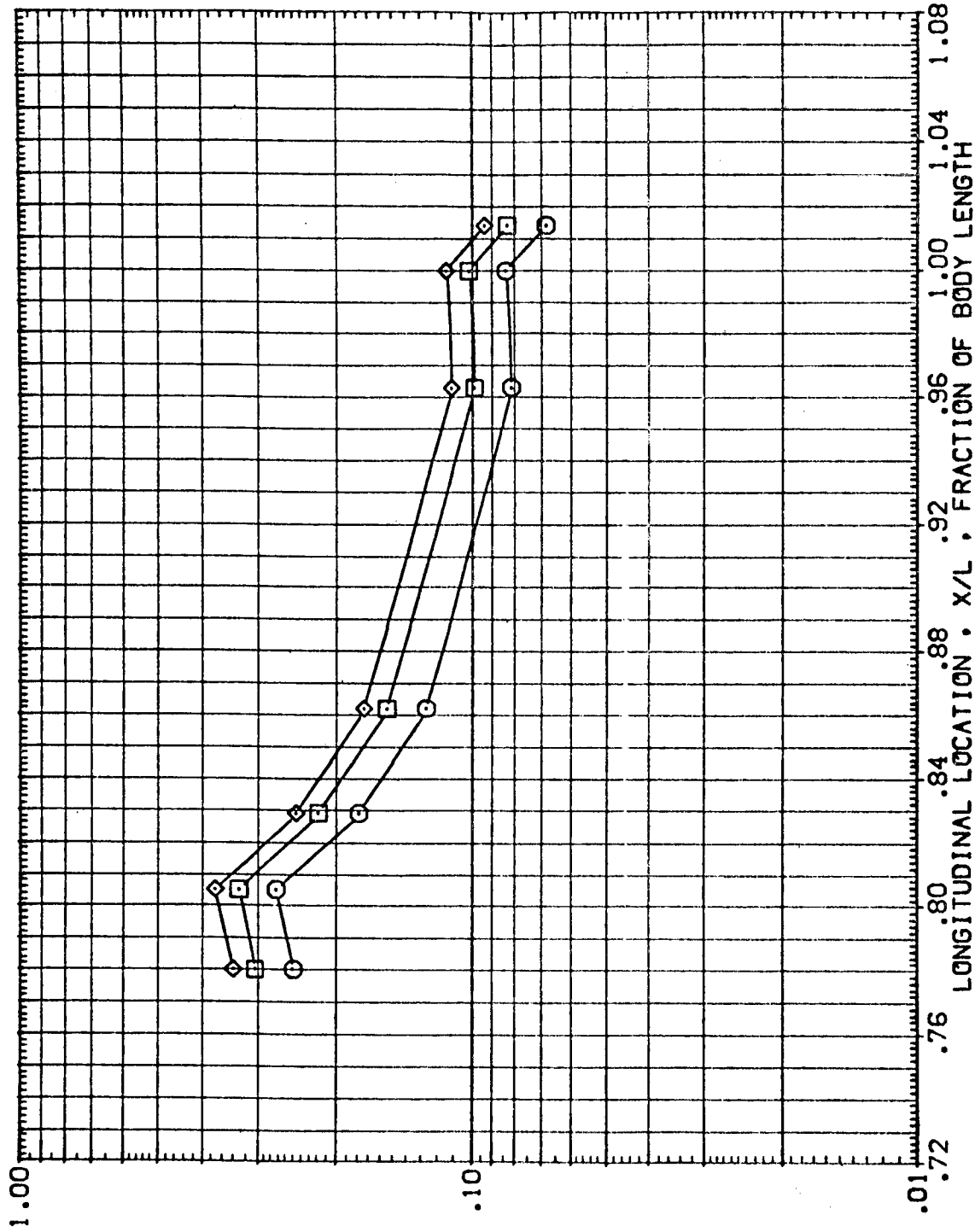


FIG. 44 QMS VL 474 - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 474.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIM19) ARC 3.5-178 IH3 O+T+S
 (AEIM19) ARC 3.5-178 IH3 O+T+S
 (BEIM19) ARC 3.5-178 IH3 O+T+S

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .650

OMS VL 474
 OMS VL 474
 OMS VL 474

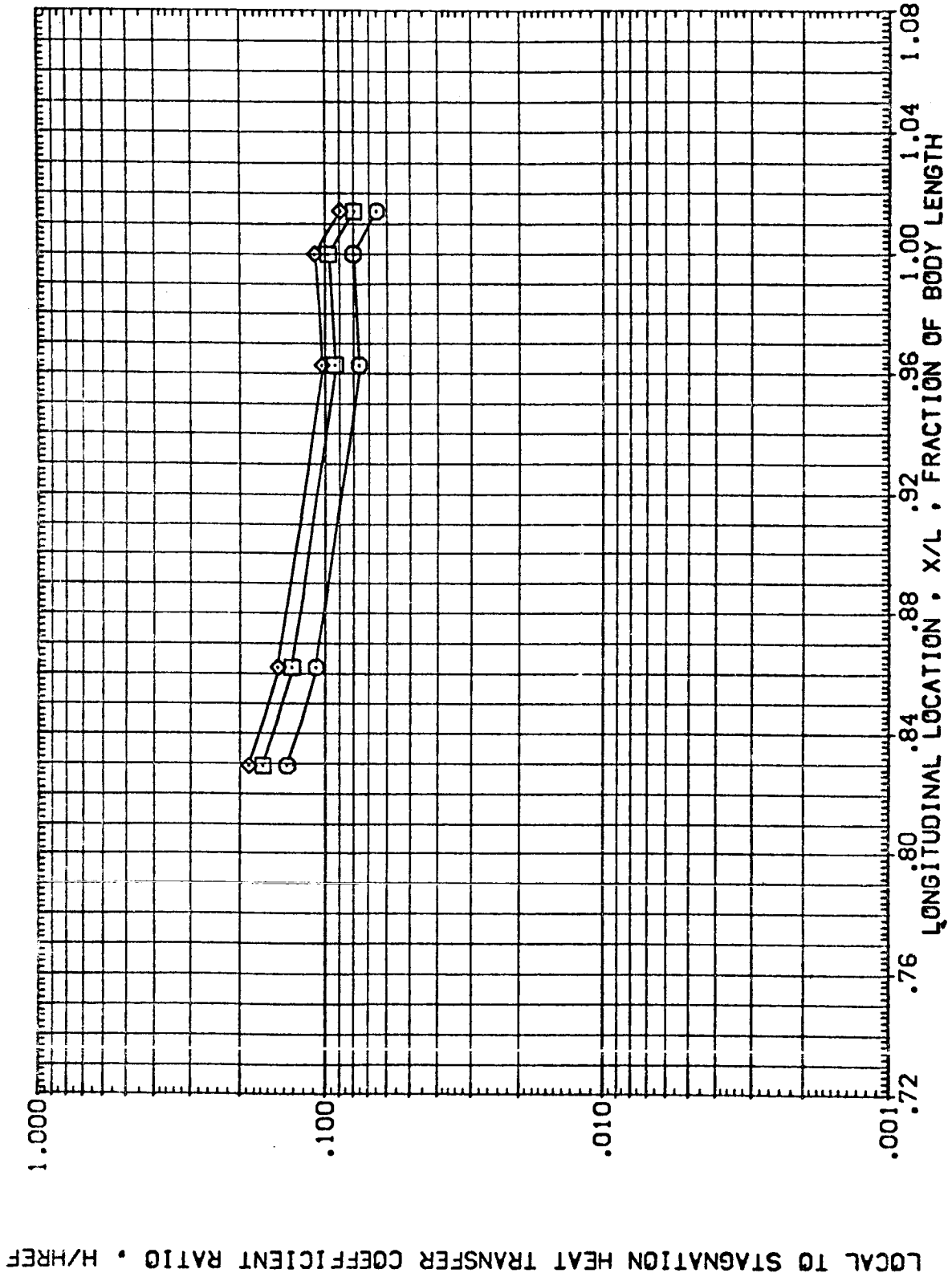


FIG. 44 OMS WL 474 - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 474.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI)MZO) ARC 3.5-178 IH3 0+T+S
 (AEI)MZO) ARC 3.5-178 IH3 0+T+S
 (BEI)MZO) ARC 3.5-178 IH3 0+T+S

ONS WL 474
 ONS WL 474
 ONS WL 474

ALPHA BETA RV/L HAV/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

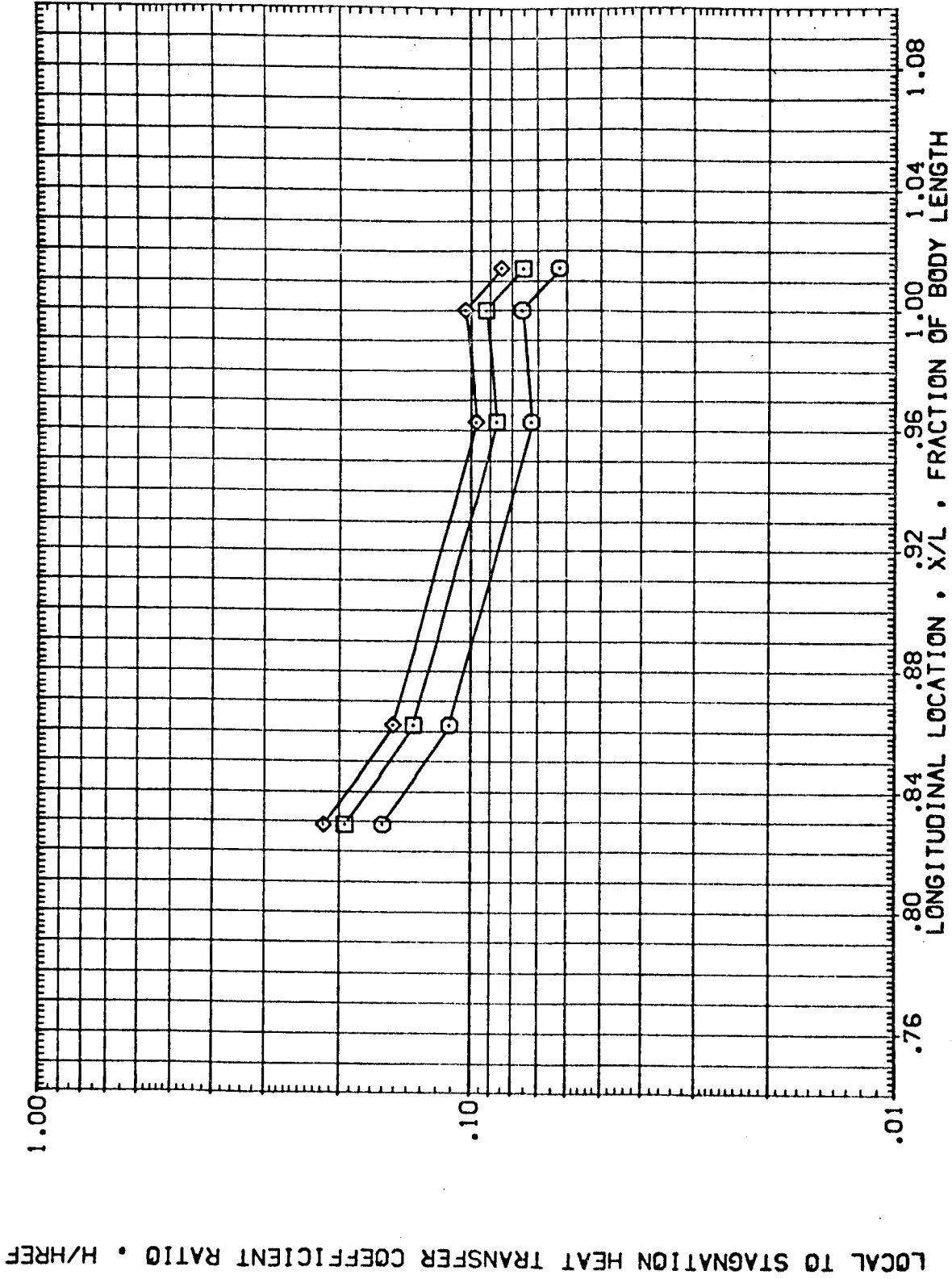


FIG. 44 ONS WL 474 - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z = 474.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (EE1M06) ARC 3.5-178 IH3 0+T+S OMS VL 474
 (EE1M07) ARC 3.5-178 IH3 0+T+S OMS VL 474
 (EE1M08) ARC 3.5-178 IH3 0+T+S (TRIPS) OMS VL 474
 (EE1M08) ARC 3.5-178 IH3 0+T+S (TRIPS) OMS VL 474

ALPHA BETA RNVL HAV/HT
 .000 .000 1.500 .900
 .000 .000 5.000 .900
 .000 .000 1.500 .900
 .000 .000 5.000 .900

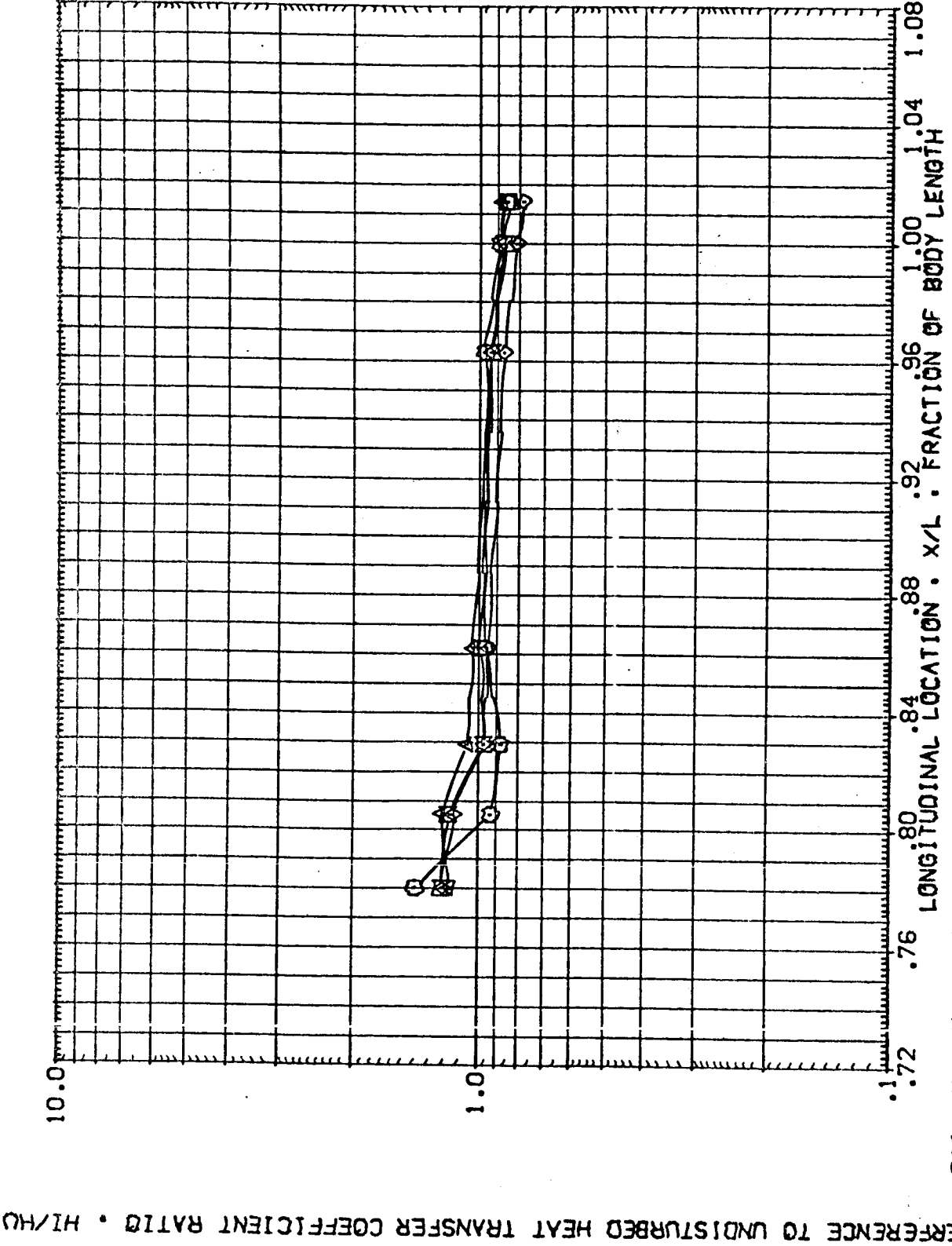


FIG. 45 OMS VL 474 - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 Z = 474.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIPOS) ARC 3.5-178 IH3 ORBITER
 (AEIPOS) ARC 3.5-178 IH3 ORBITER
 (BEIPOS) ARC 3.5-178 IH3 ORBITER

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE
 ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

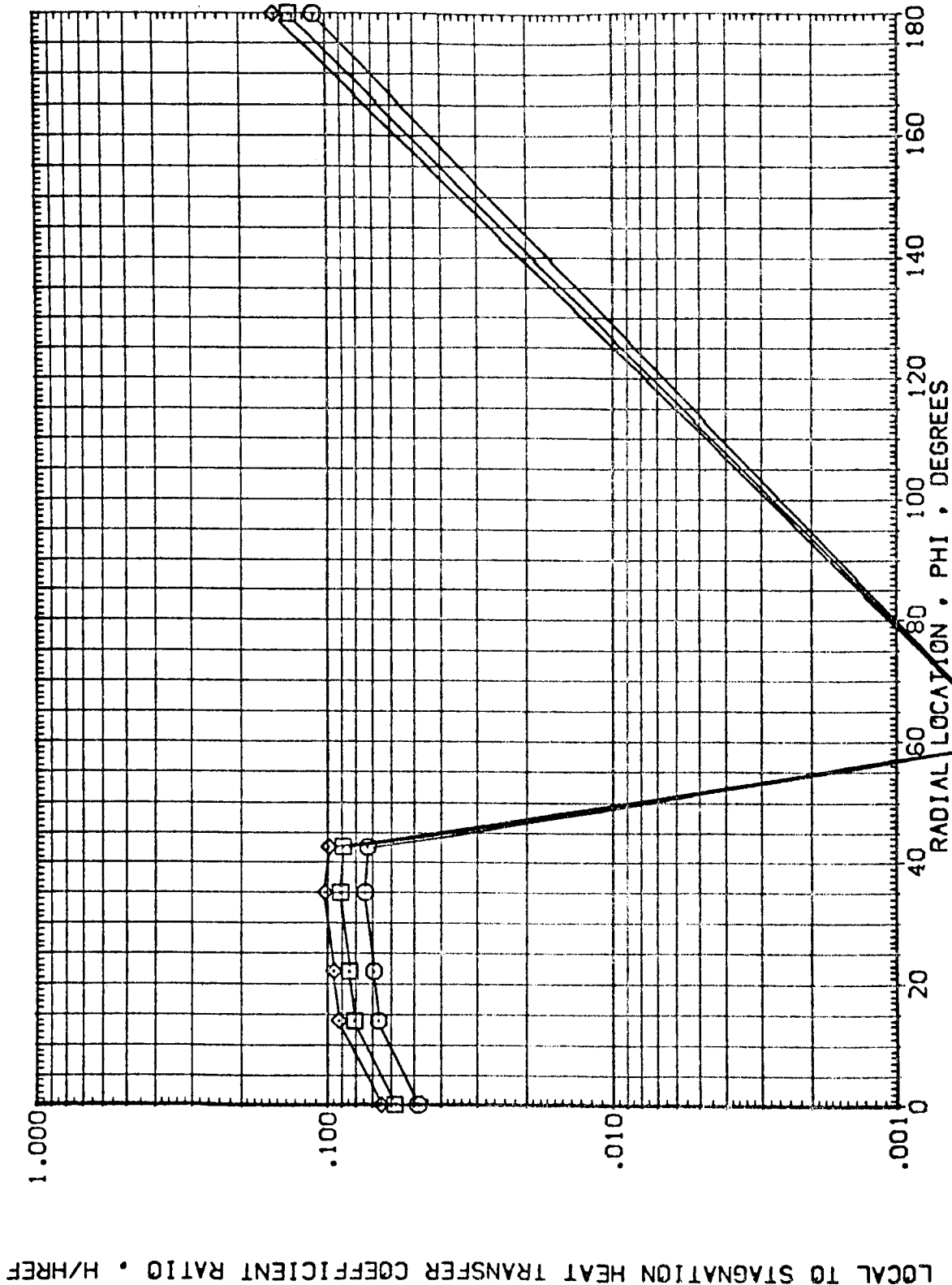


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .050

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ORBITER FUSELAGE	ALPHA	BETA	RN/L	HAW/HT
(REIPO6)	ARC 3.5-178 IH3 ORBITER	ORBITER FUSELAGE	.000	.000	1.500	1.000
(AEIPO6)	ARC 3.5-178 IH3 ORBITER	ORBITER FUSELAGE	.000	.000	1.500	.900
(BEIPO6)	ARC 3.5-178 IH3 ORBITER	ORBITER FUSELAGE	.000	.000	1.500	.850

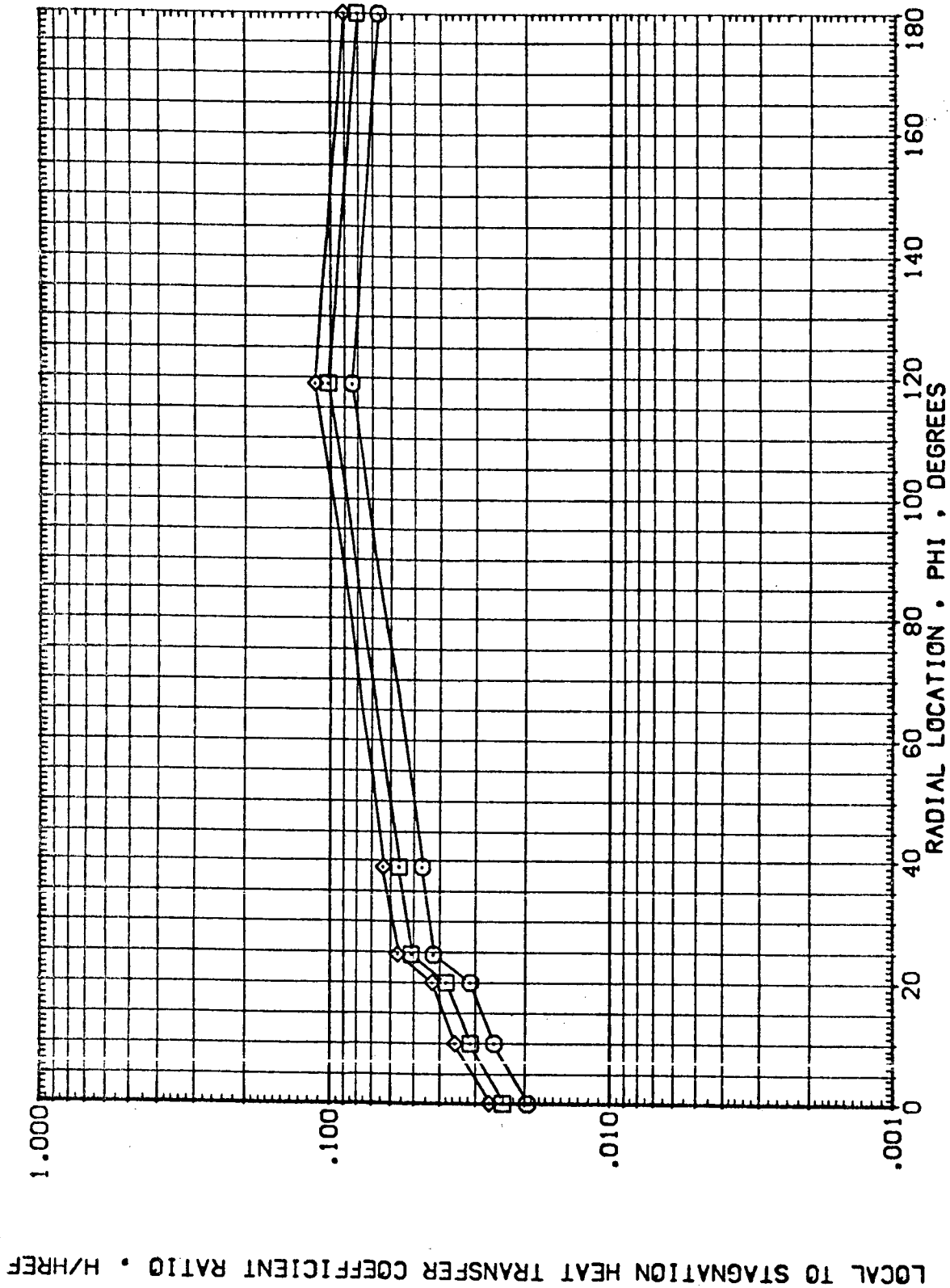


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIPOS) \square ARC 3.5-178 IH3 ORBITER
 (AEIPOS) \square ARC 3.5-178 IH3 ORBITER
 (BEIPOS) \diamond ARC 3.5-178 IH3 ORBITER

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000
 BETA .000
 RV/L 1.500
 HAV/HT 1.000

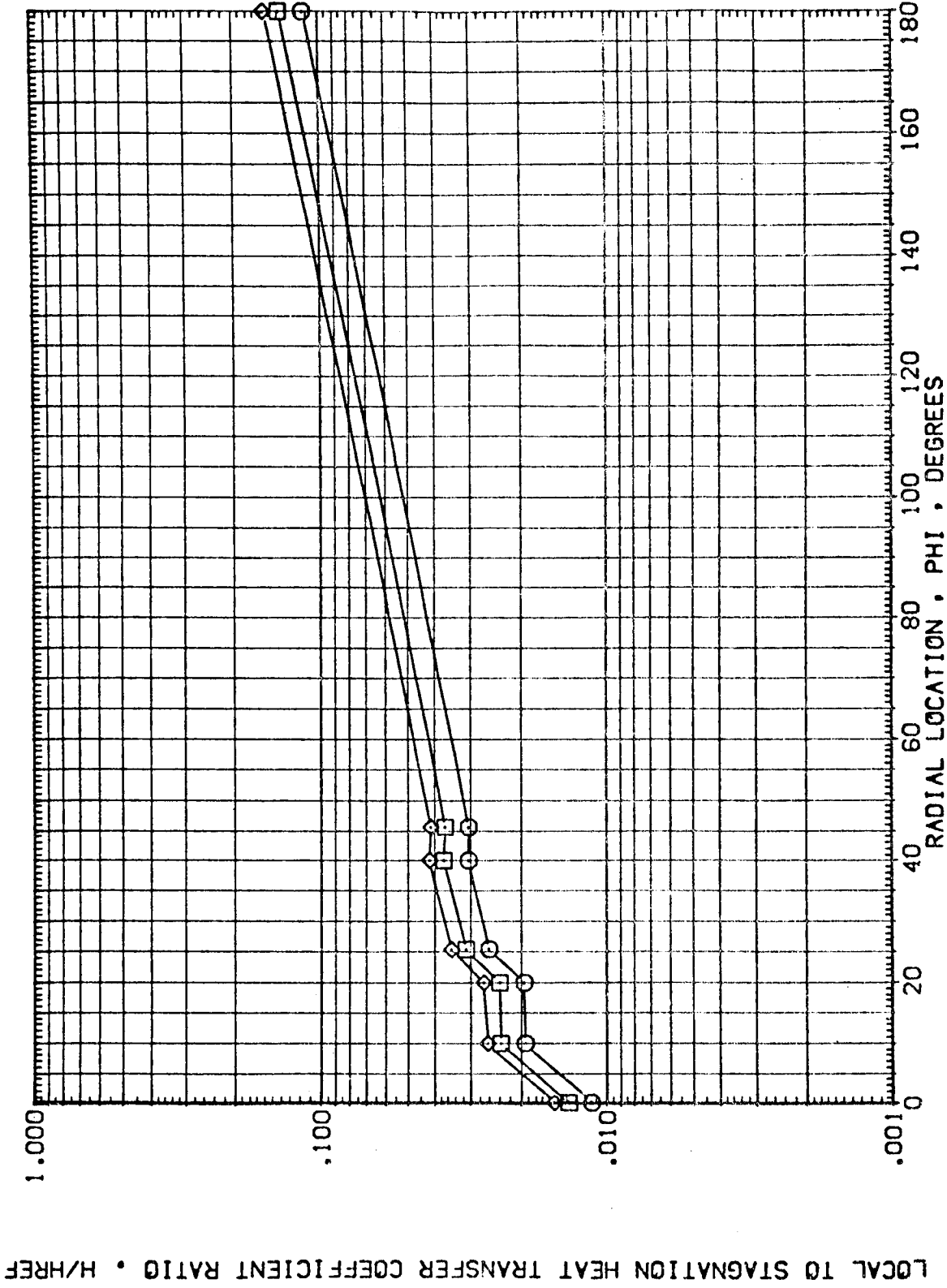


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .150

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI P06) AR: 3.5-178 IH3 ORBITER
 (AEI P06) AR: 3.5-178 IH3 ORBITER
 (BEI P06) AR: 3.5-178 IH3 ORBITER

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RN/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

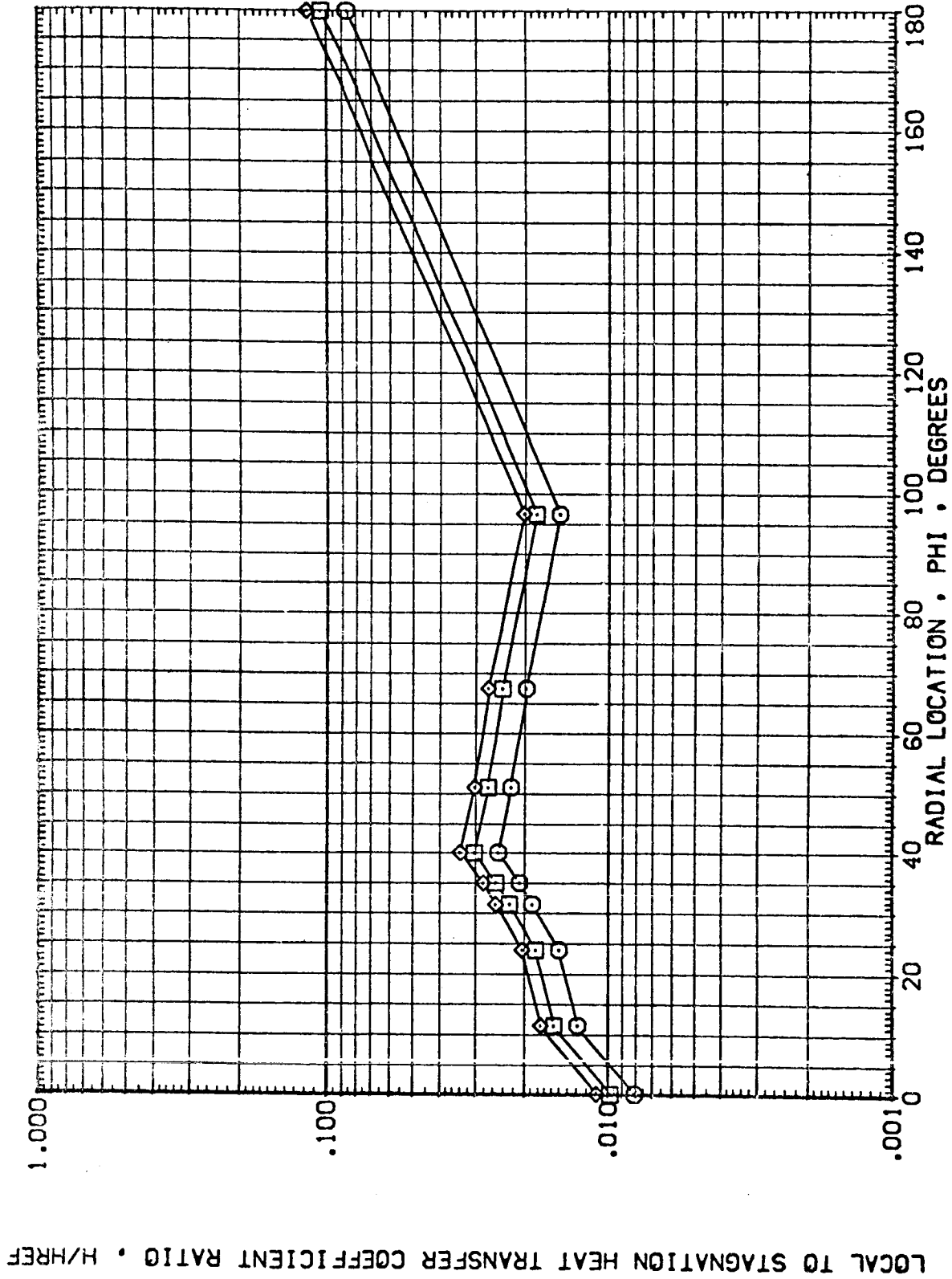


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIPOS) ○ ARC 3.5-178 IH3 ORBITER
 (AEIPOS) □ ARC 3.5-178 IH3 ORBITER
 (BEIPOS) ◇ ARC 3.5-178 IH3 ORBITER

ALPHA BETA RW/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

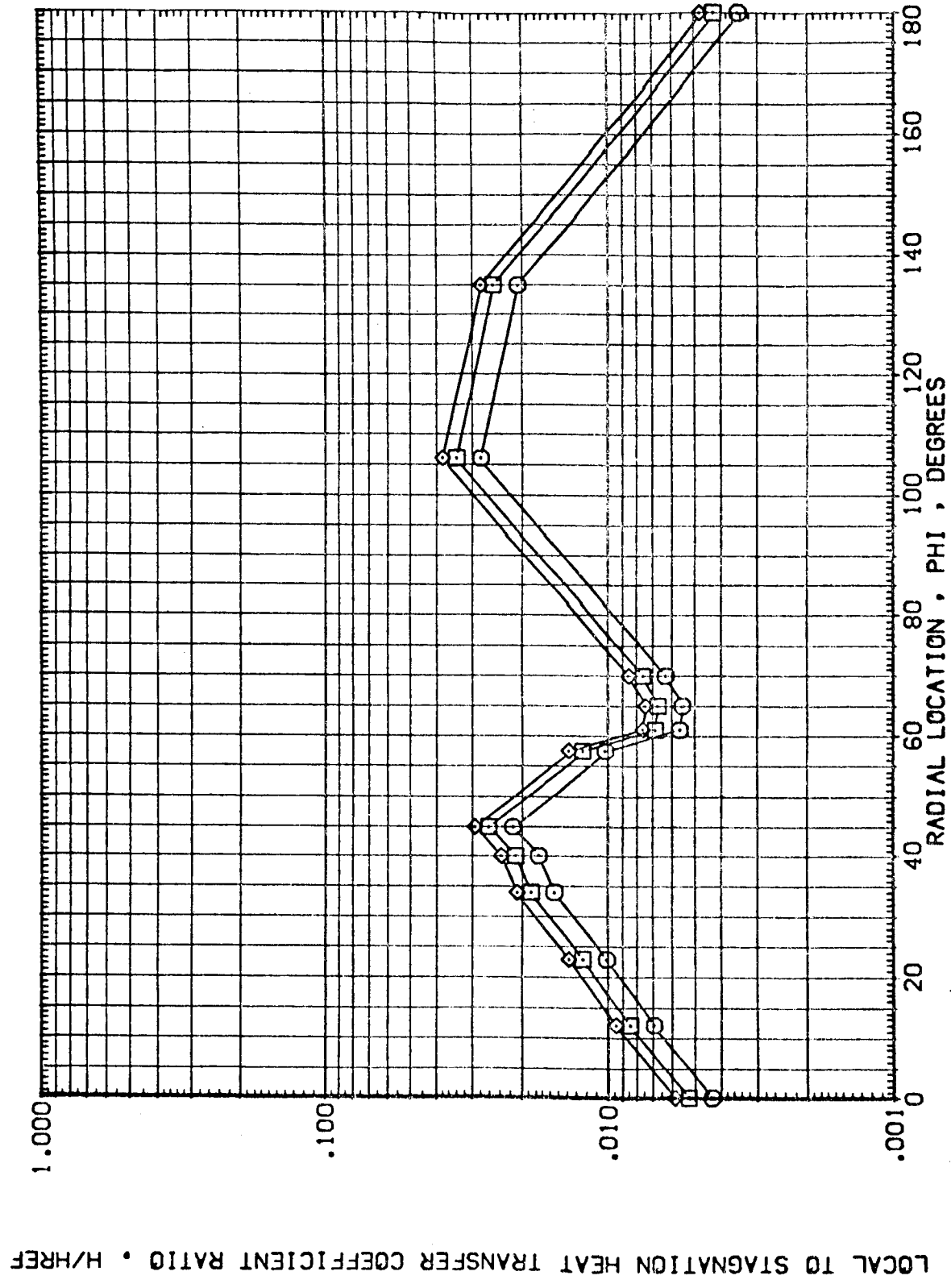


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIPOS) (AEIPOS) (BEIPOS)

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RV/L 1.500
 1.500
 1.500

HAW/HT 1.000
 .900
 .850

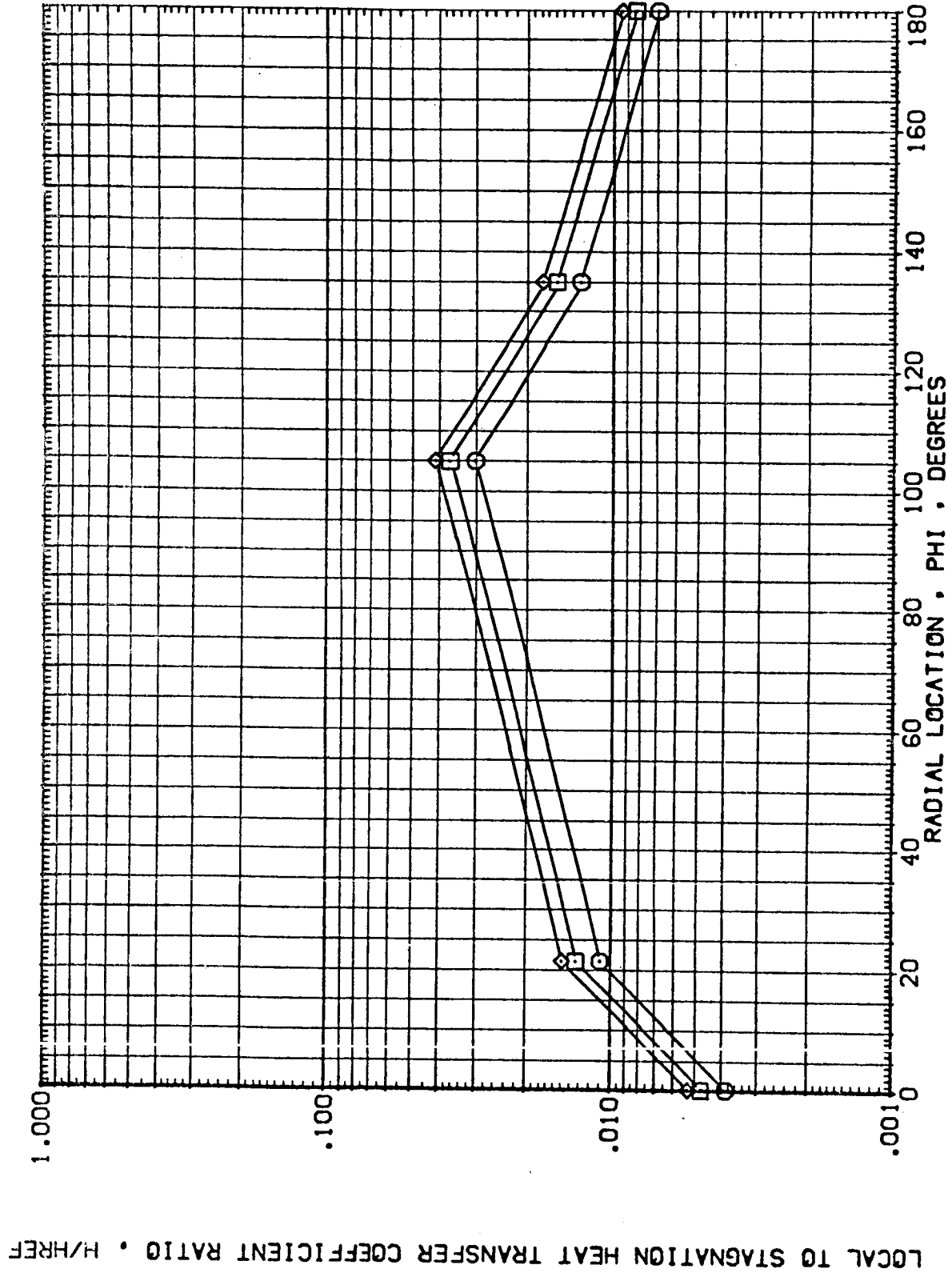


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(REIPOS) □
 (AEIPOS) ○
 (BEIPOS) ◇

ARC 3.5-178 IH3 ORBITER
 ARC 3.5-178 IH3 ORBITER
 ARC 3.5-178 IH3 ORBITER

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000
 BETA .000
 RV/L 1.500
 HAV/HT 1.000

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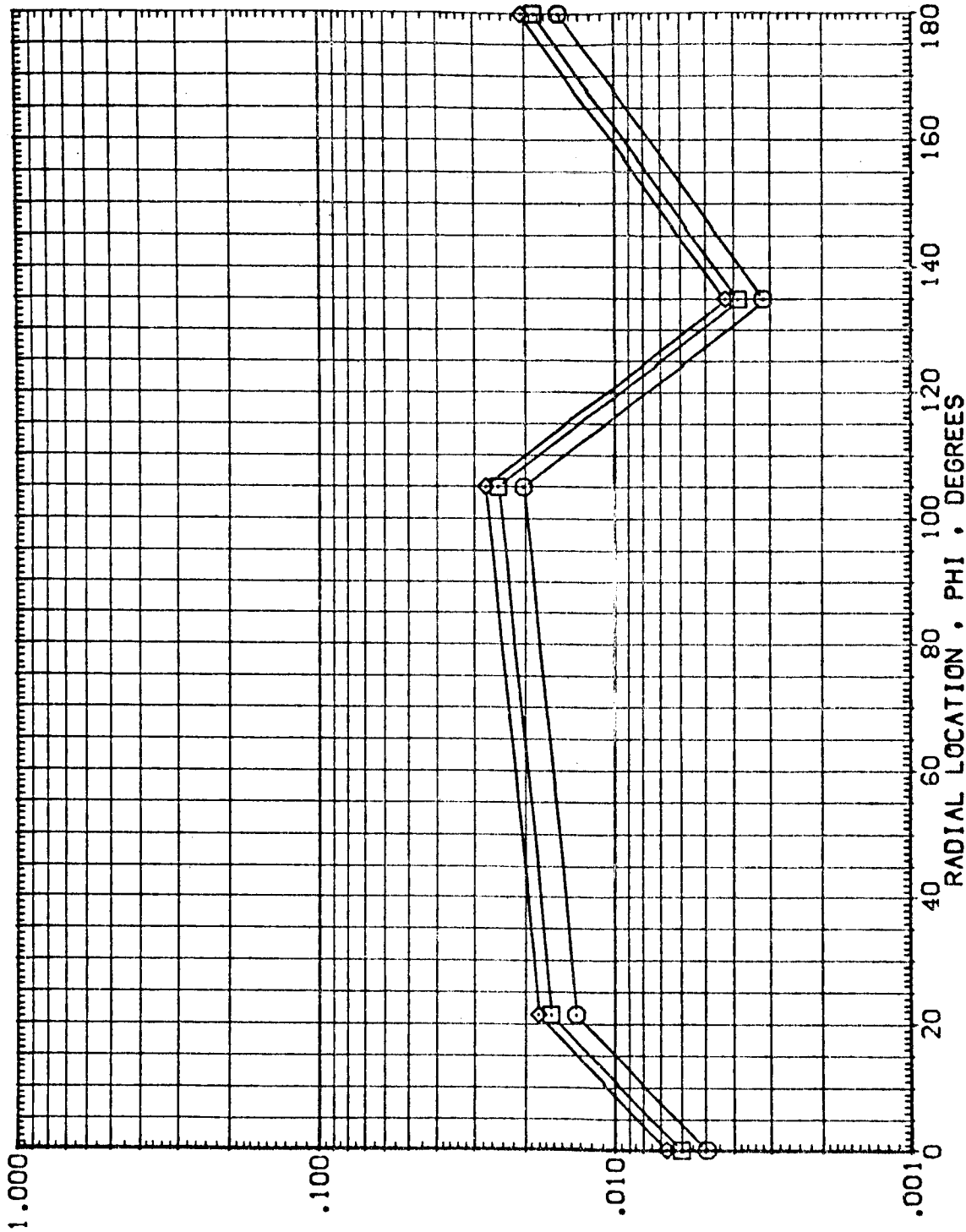


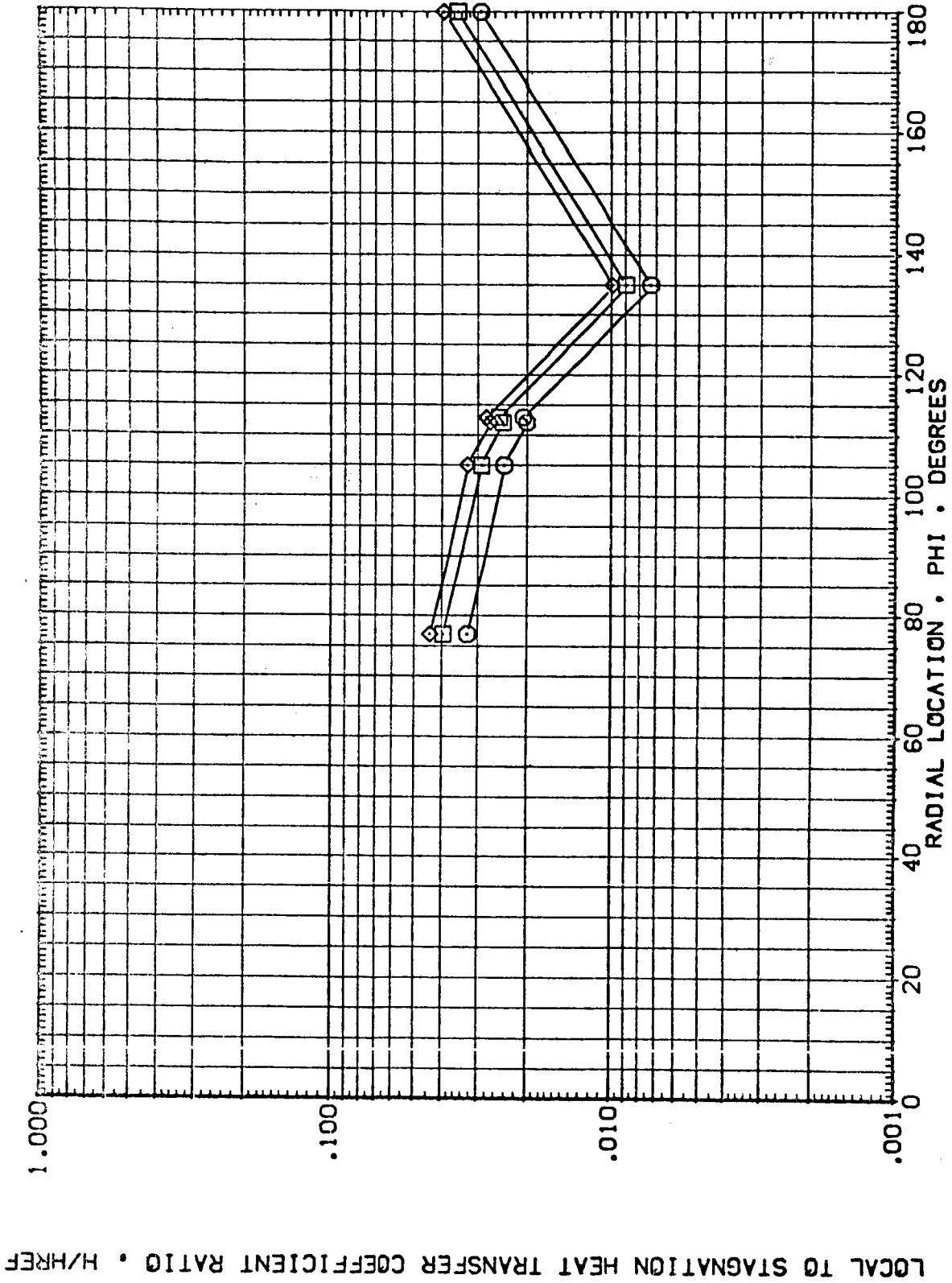
FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP06) ARC 3.5-178 IH3 ORBITER
 (AEIP06) ARC 3.5-178 IH3 ORBITER
 (BEIP06) ARC 3.5-178 IH3 ORBITER

ALPHA BETA RN/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|POS) ARC 3.5-178 IH3 ORBITER
 (AE|POS) ARC 3.5-178 IH3 ORBITER
 (BE|POS) ARC 3.5-178 IH3 ORBITER

ALPHA BETA RVL HAW/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

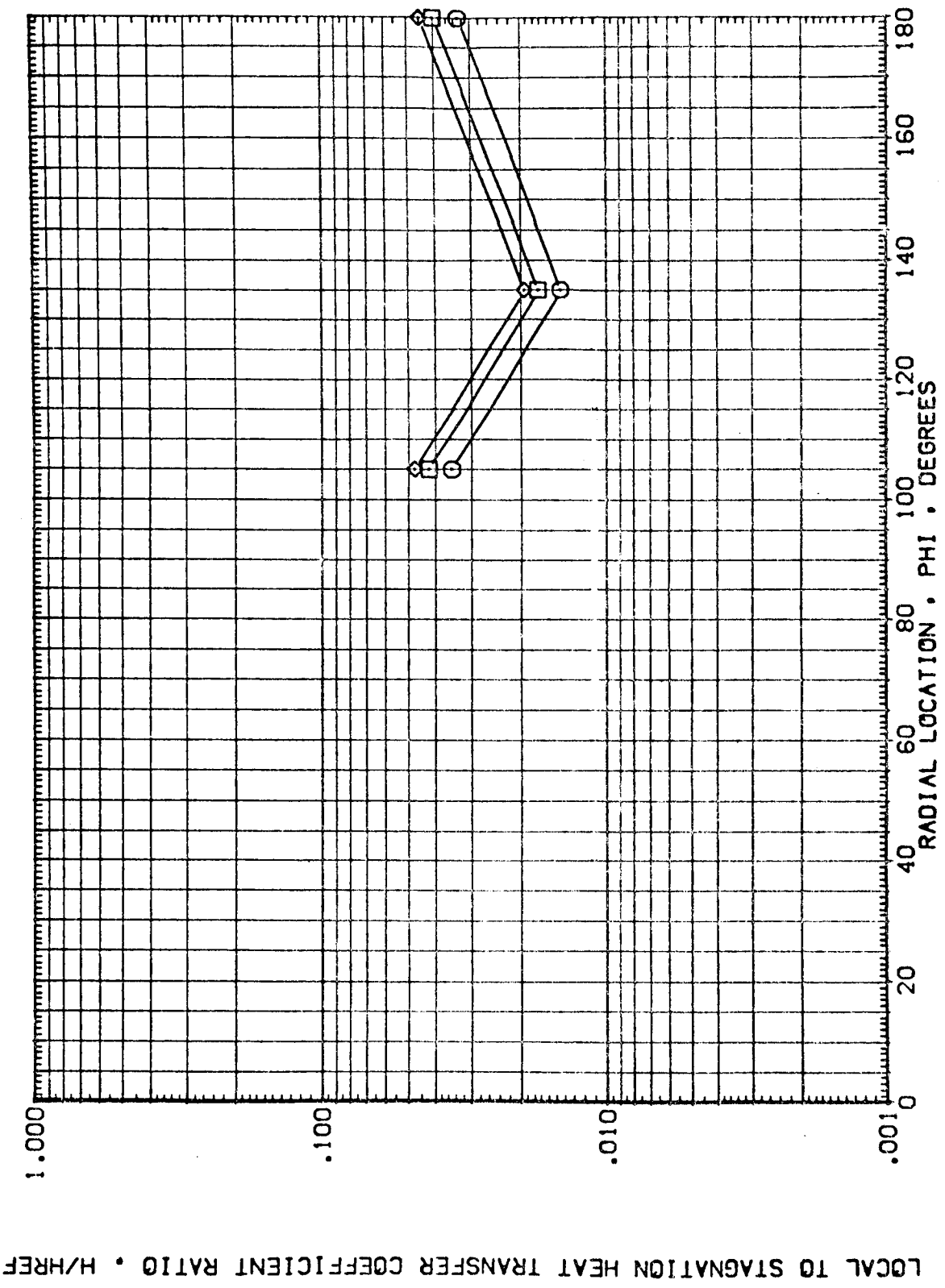


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .700

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REIPOS)	ARC 3.5-178 IH3 ORBITER	.000	.000	1.500	1.000
(AEIPOS)	ARC 3.5-178 IH3 ORBITER	.000	.000	1.500	.900
(BEIPOS)	ARC 3.5-178 IH3 ORBITER	.000	.000	1.500	.850

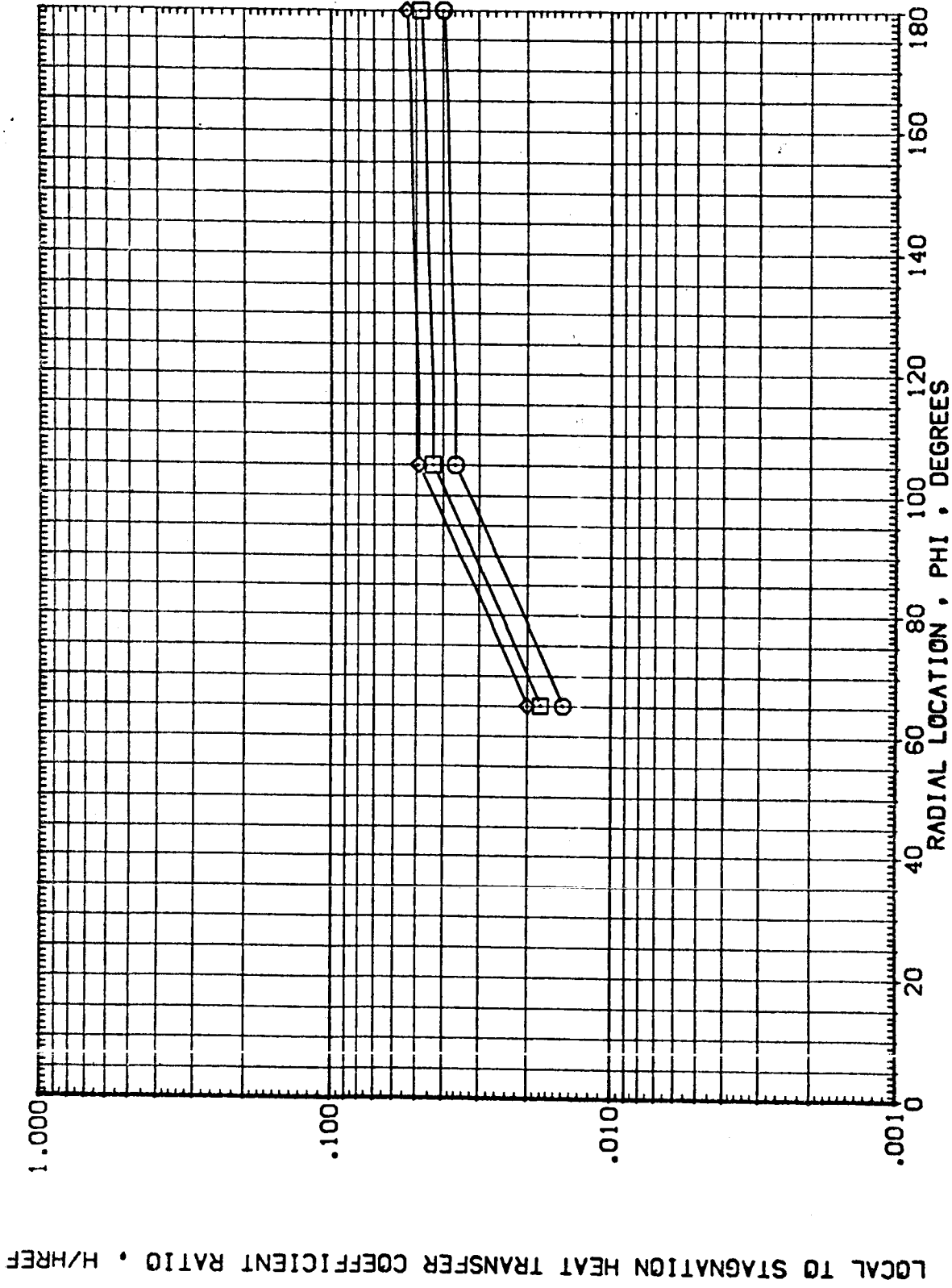


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .800

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|POS) ARC 3.5-178 IH3 ORBITER
 (AE|POS) ARC 3.5-178 IH3 ORBITER
 (BE|POS) ARC 3.5-178 IH3 ORBITER

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

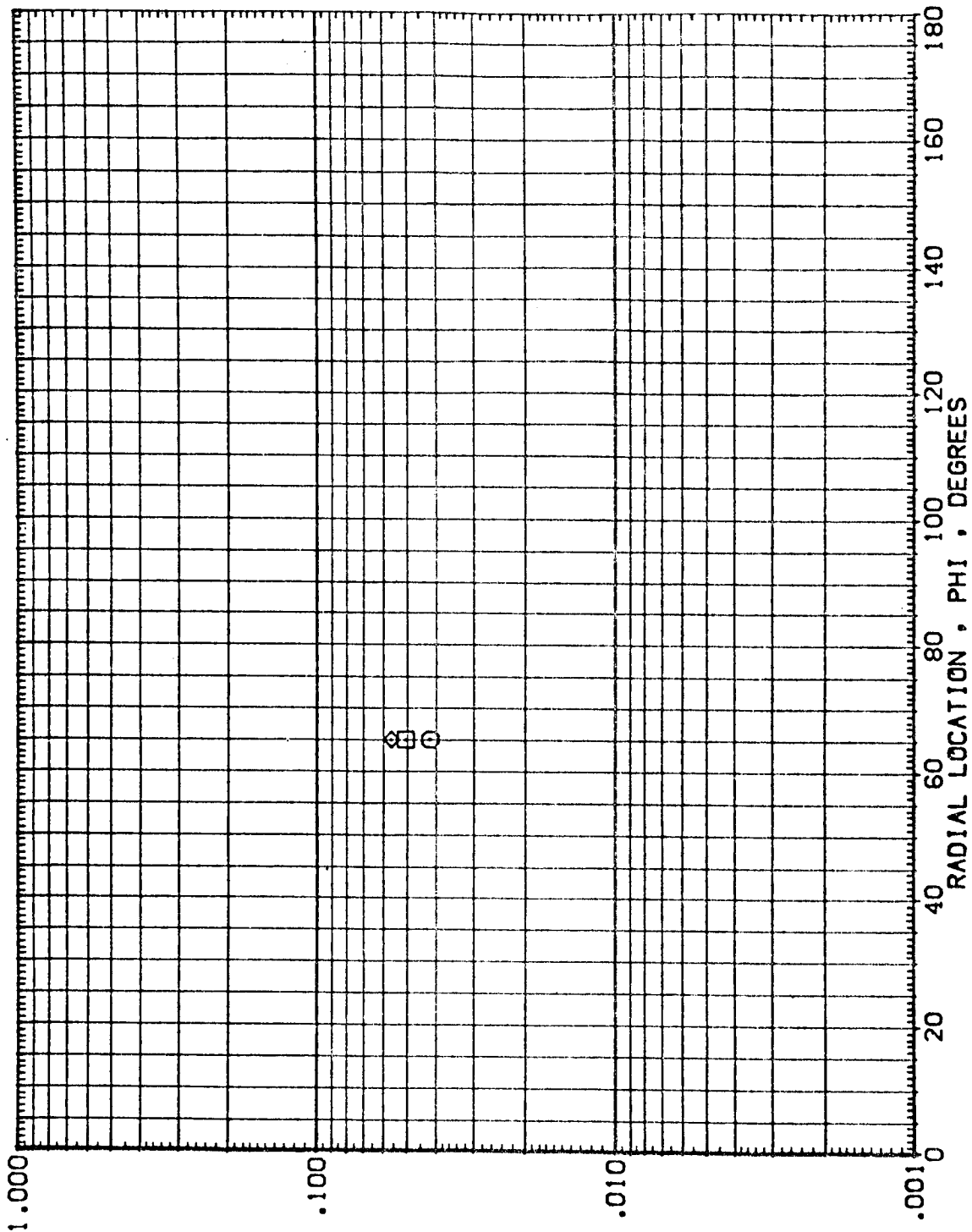


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP07) ○ ARC 3.5-178 IH3 ORBITER
 (AEIP07) □ ARC 3.5-178 IH3 ORBITER
 (BEIP07) ◇ ARC 3.5-178 IH3 ORBITER

ORBITER FUSELAGE ALPHA BETA RV/L HAV/HT
 ORBITER FUSELAGE .000 .000 5.000 1.000
 ORBITER FUSELAGE .000 .000 5.000 .900
 ORBITER FUSELAGE .000 .000 5.000 .850

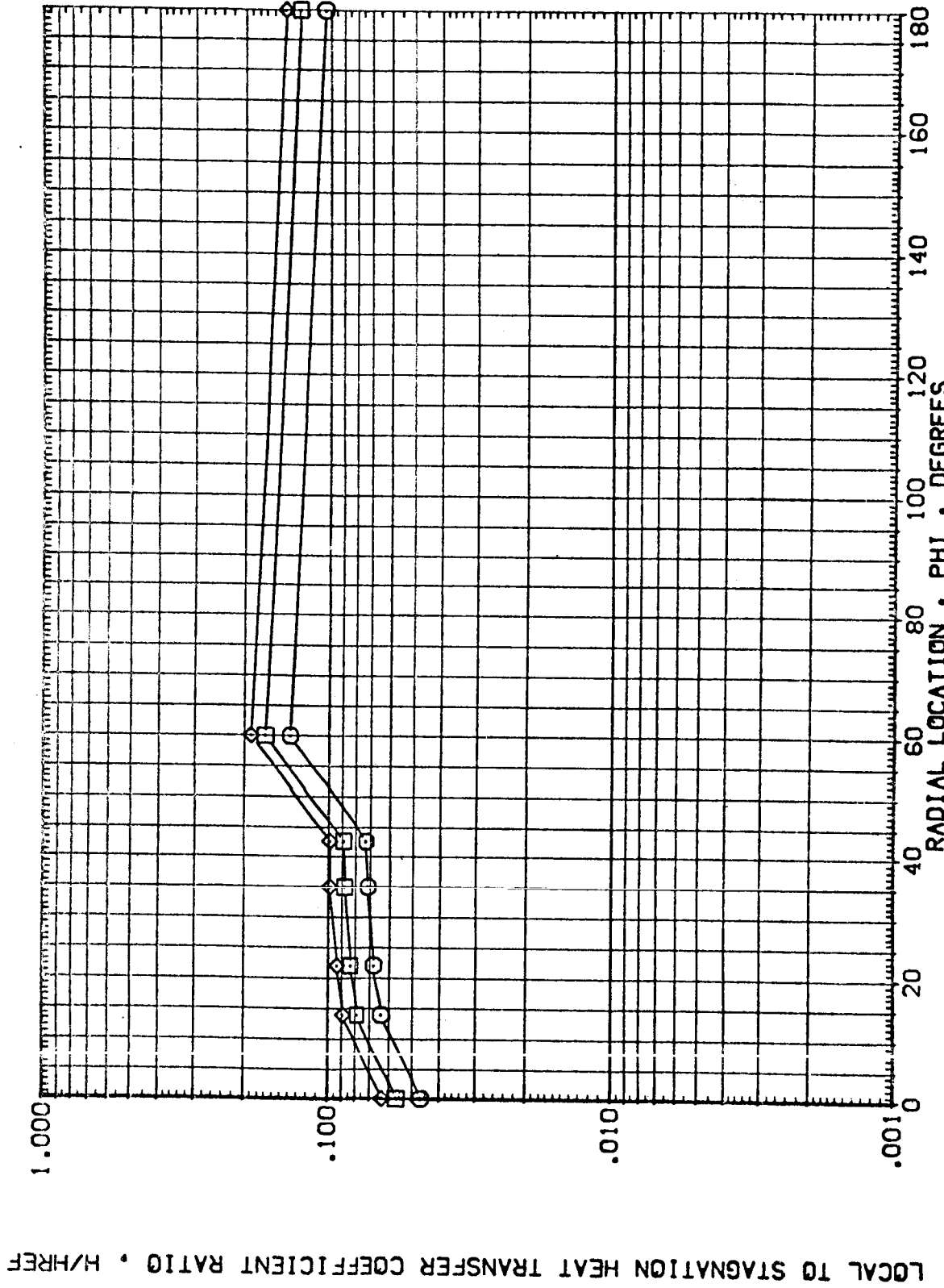





FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(REIP07)  (AEIP07)  (BEIP07) 

ARC 3.5-178 IH3 ORBITER
 ARC 3.5-178 IH3 ORBITER
 ARC 3.5-178 IH3 ORBITER

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 5.000 5.000 5.000
 HAV/HT 1.000 .900 .850

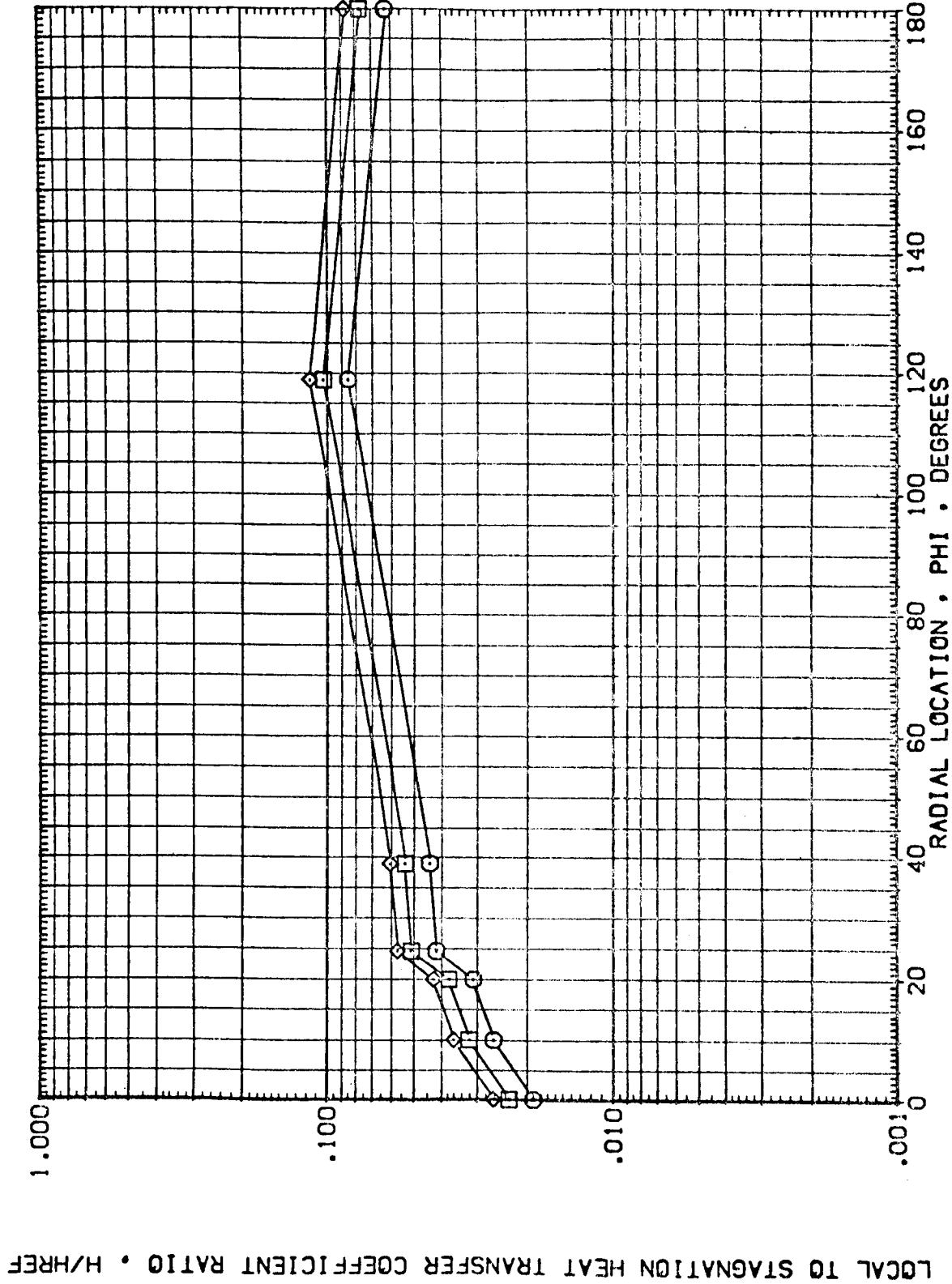


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .100

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(REIP07)	ARC 3.5-178 IH3 ORBITER	.000	.000	5.000	1.000
(SEIP07)	ARC 3.5-178 IH3 ORBITER	.000	.000	5.000	.900
(BEIP07)	ARC 3.5-178 IH3 ORBITER	.000	.000	5.000	.850

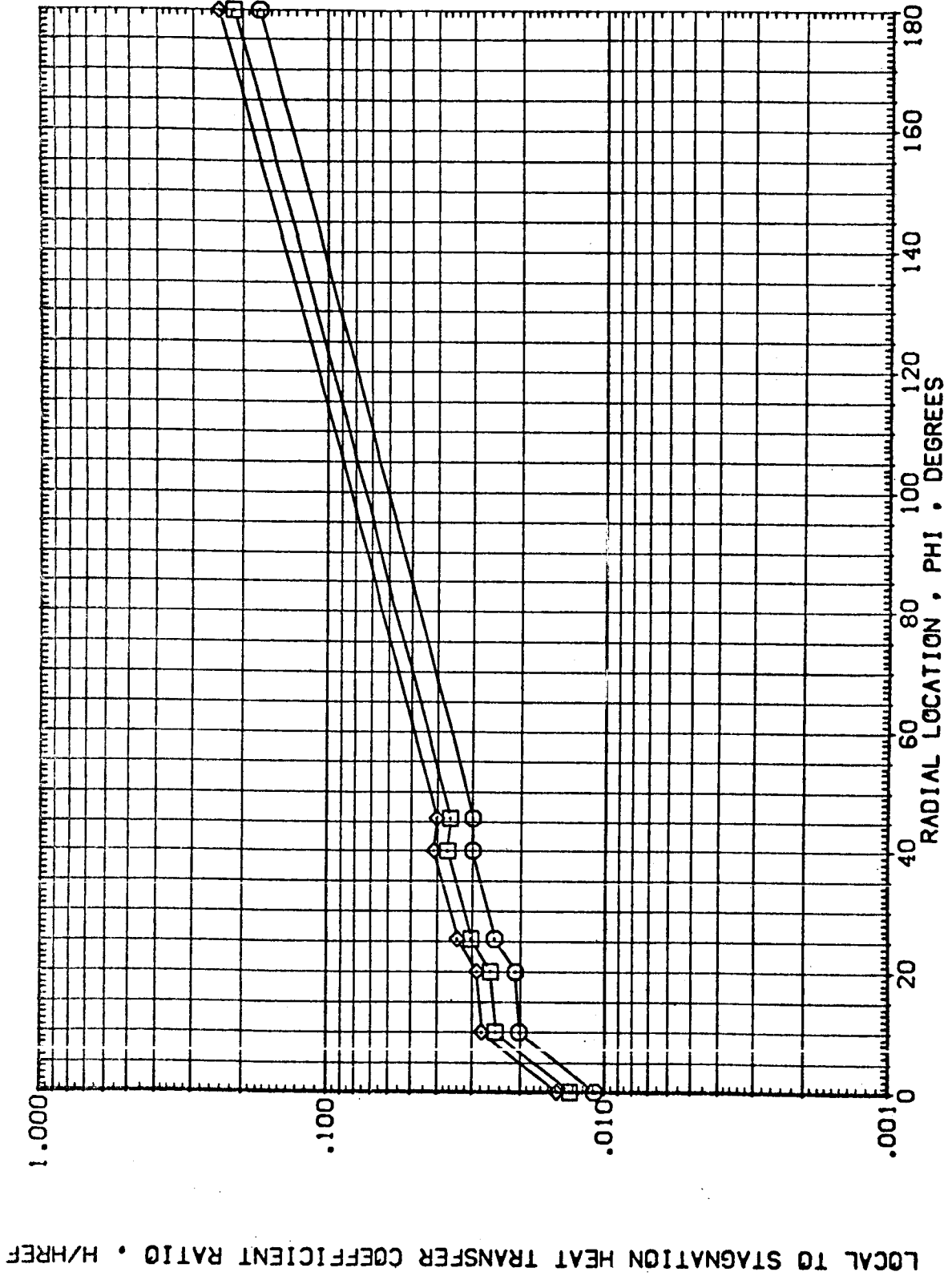


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .150

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP07) ○ ARC 3.5-178 IH3 ORBITER
 (AEIP07) ◻ ARC 3.5-178 IH3 ORBITER
 (BEIP07) ◇ ARC 3.5-178 IH3 ORBITER

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RN/L 5.000
 5.000
 5.000

HAV/HT 1.000
 .900
 .850

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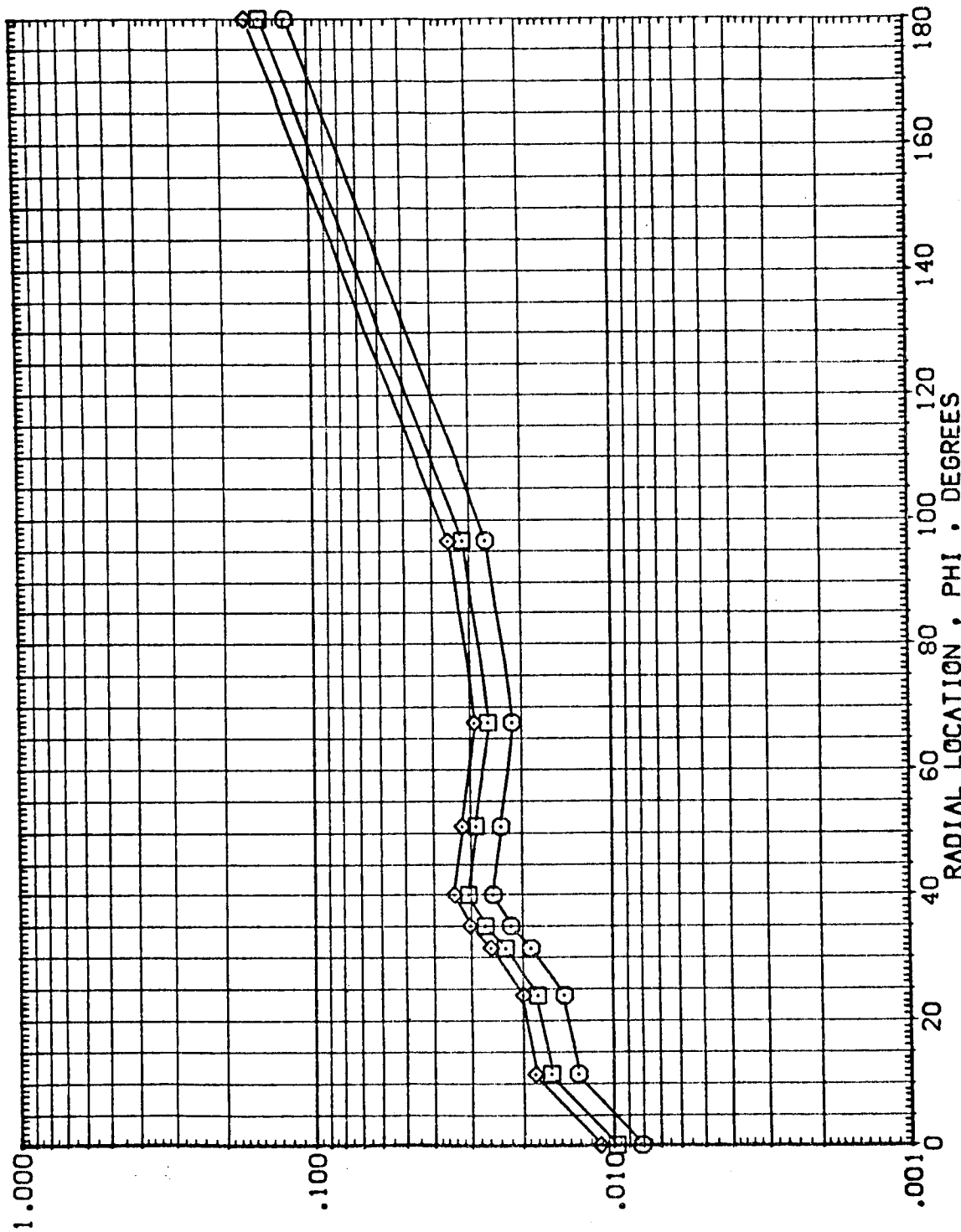
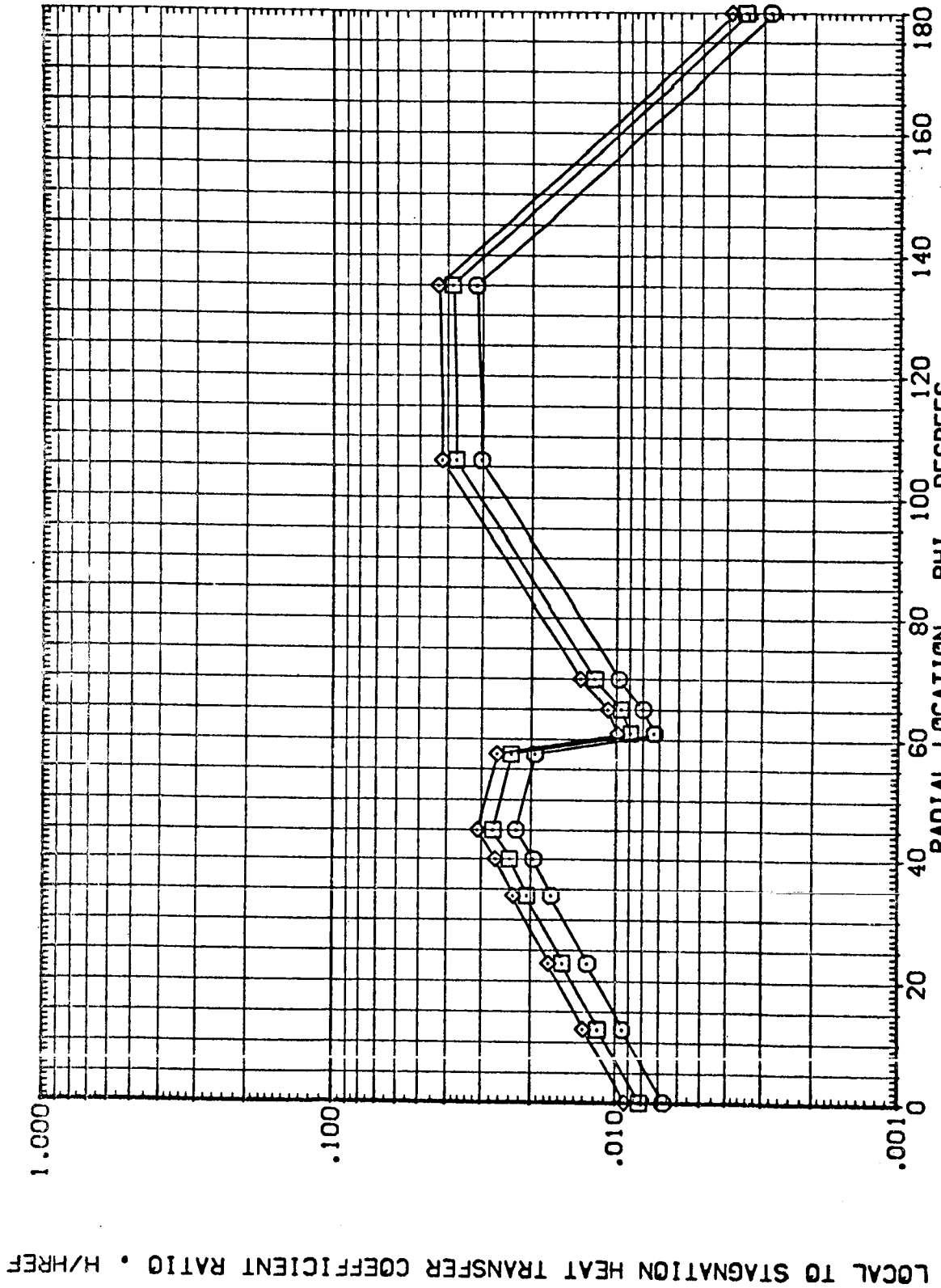


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP07) ○ ARC 3.5-178 IH3 ORBITER
 (AEIP07) □ ARC 3.5-178 IH3 ORBITER
 (BEIP07) ◇ ARC 3.5-178 IH3 ORBITER

ORBITER FUSELAGE ALPHA BETA RML HAV/HT
 ORBITER FUSELAGE .000 .000 5.000 1.000
 ORBITER FUSELAGE .000 .000 5.000 .900
 ORBITER FUSELAGE .000 .000 5.000 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP07) ARC 3.5-178 IH3 ORBITER
 (AEIP07) ARC 3.5-178 IH3 ORBITER
 (BEIP07) ARC 3.5-178 IH3 ORBITER

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE
 ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 5.000 5.000 5.000
 HAV/HT 1.000 .900 .650

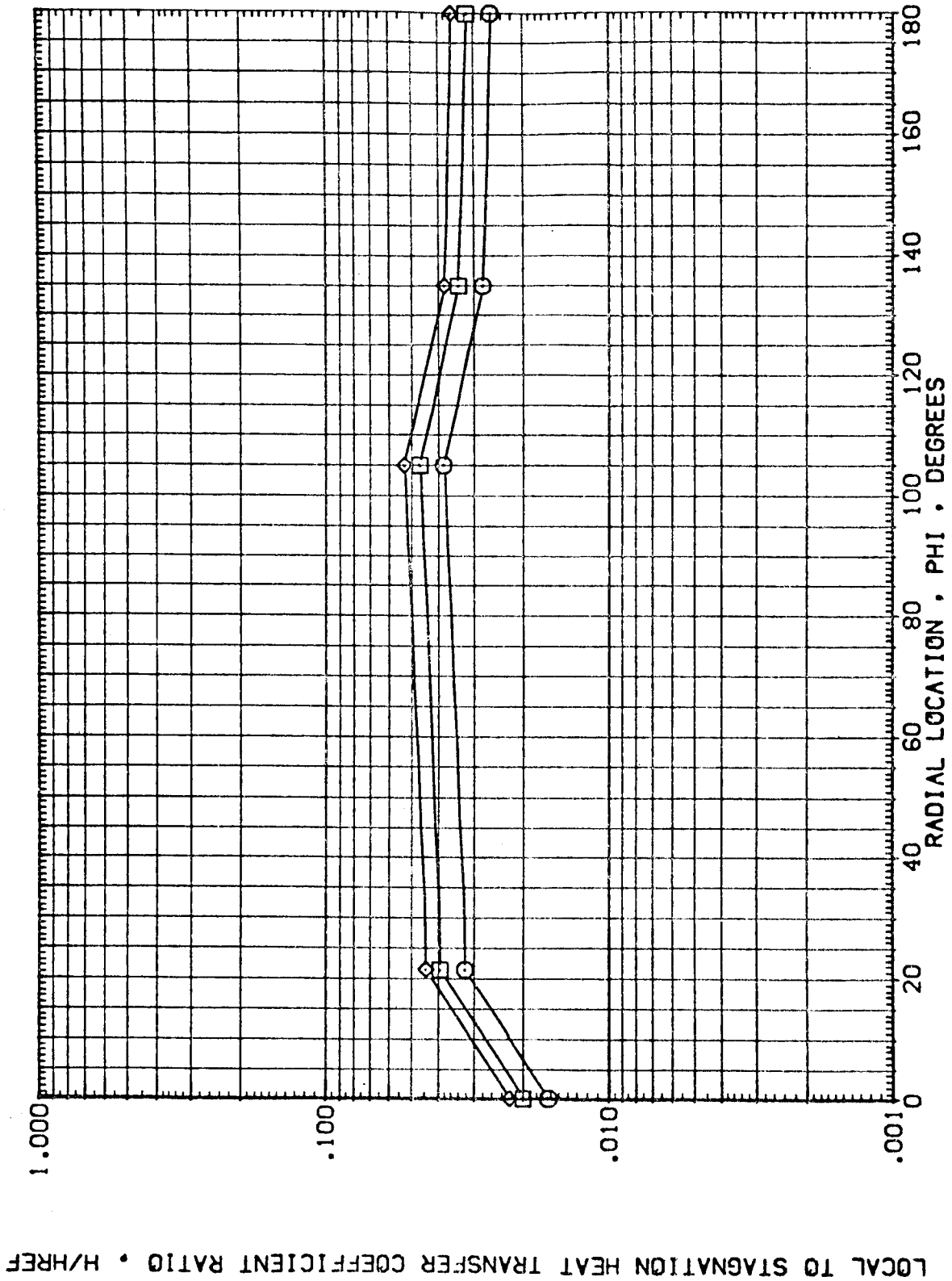


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .400

DATA SET SYMBOL (CONFIGURATION DESCRIPTION)
 (REIP07) ARC 3.5-178 IH3 ORBITER
 (AEIP07) ARC 3.5-178 IH3 ORBITER
 (BEIP07) ARC 3.5-178 IH3 ORBITER

ALPHA .000
 BETA .000
 RN/L 5.000
 HAW/HT 1.000

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

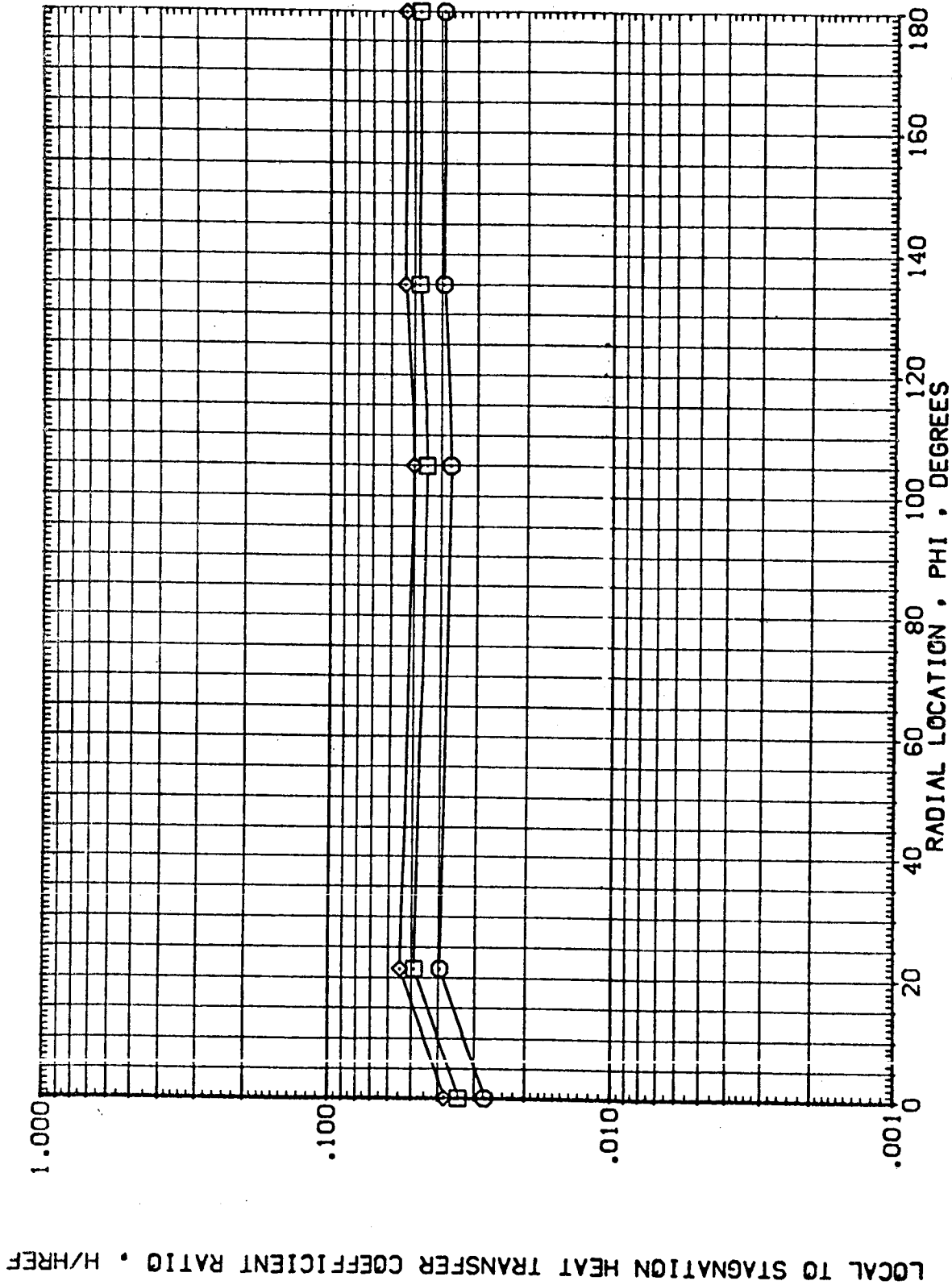


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP07) □ ARC 3.5-178 IH3 ORBITER
 (AEIP07) ○ ARC 3.5-178 IH3 ORBITER
 (BEIP07) ◇ ARC 3.5-178 IH3 ORBITER

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA R/V/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

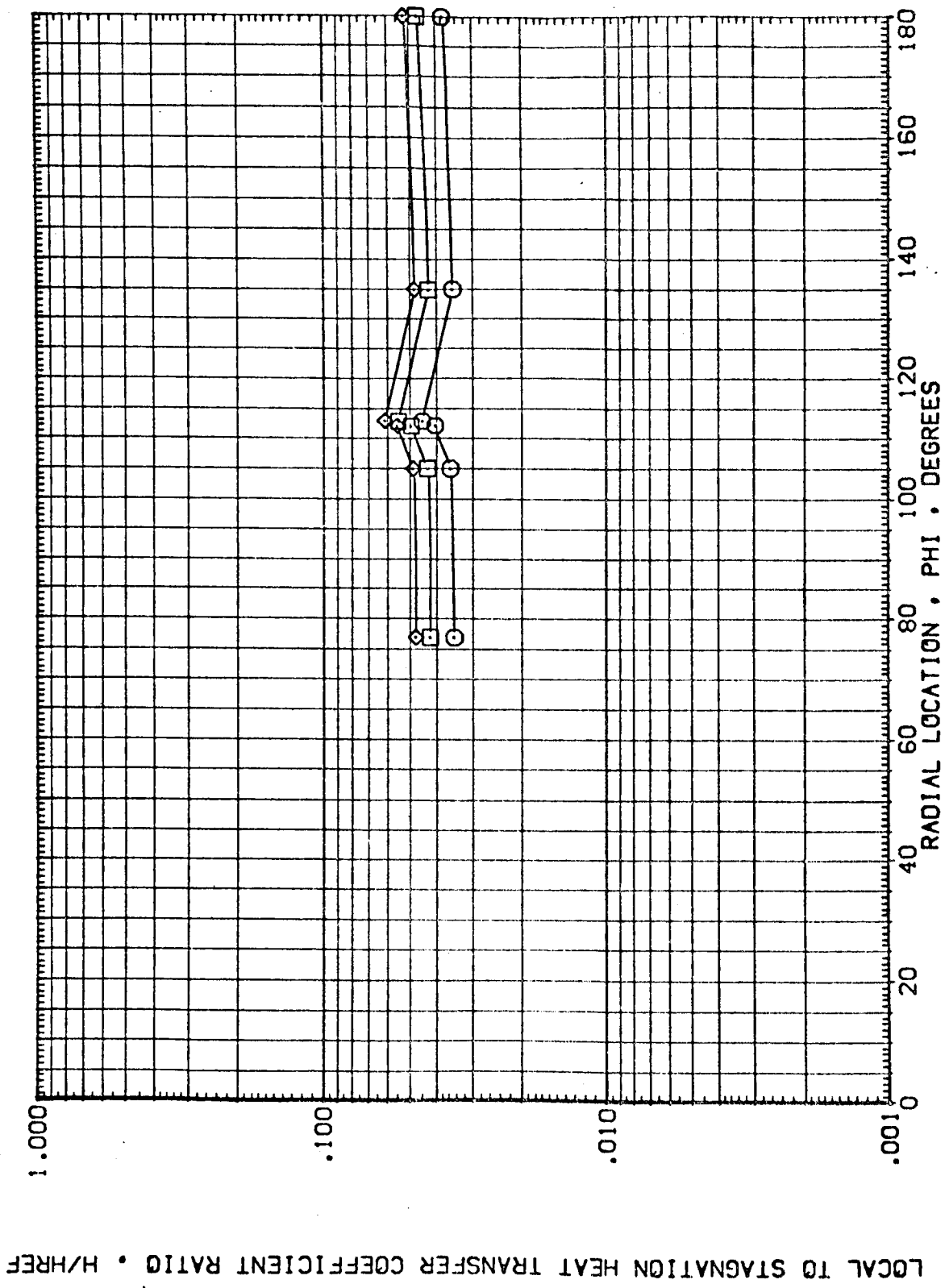


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .600

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ORBITER FUSELAGE	BETA	RN/L	HAW/HT
(REIP07)	ARC 3.5-178 IH3 ORBITER	ORBITER FUSELAGE	.000	5.000	1.000
(AEIP07)	ARC 3.5-178 IH3 ORBITER	ORBITER FUSELAGE	.000	5.000	.900
(BEIP07)	ARC 3.5-178 IH3 ORBITER	ORBITER FUSELAGE	.000	5.000	.850

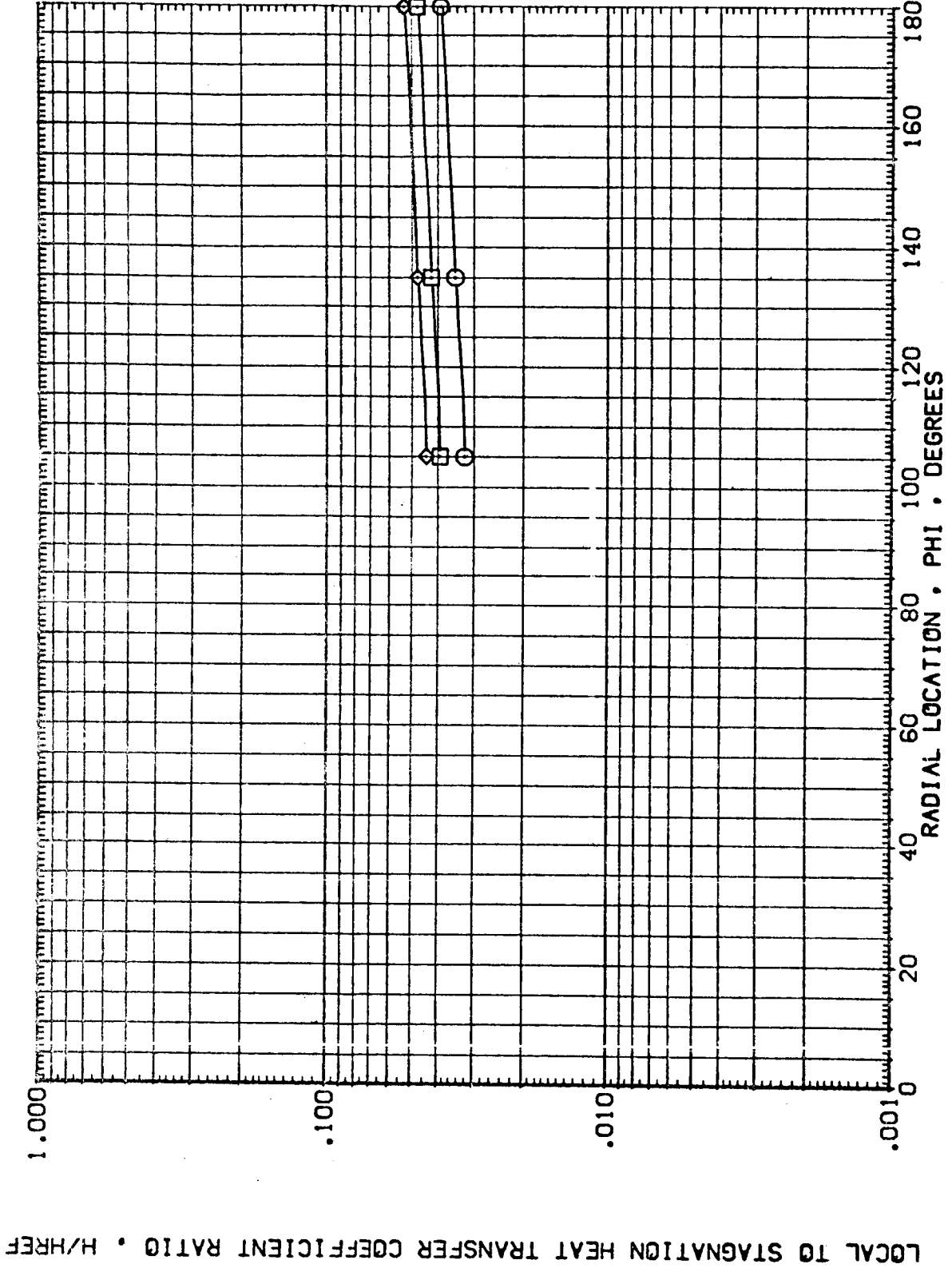


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP07) ARC 3.5-178 IH3 ORBITER
 (AEIP07) ARC 3.5-178 IH3 ORBITER
 (BEIP07) ARC 3.5-178 IH3 ORBITER

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 5.000 5.000 5.000
 HAV/HT 1.000 .900 .850

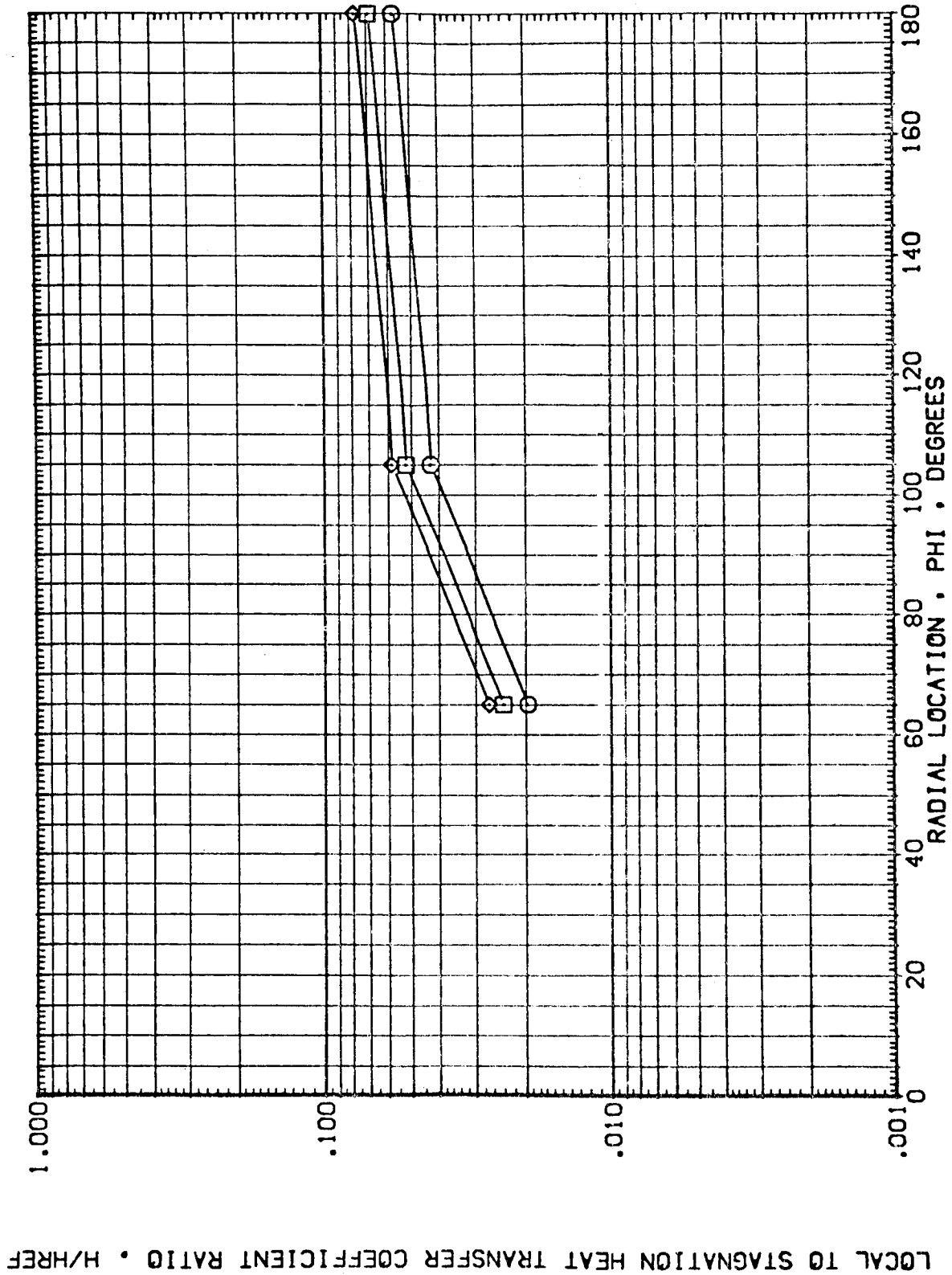





FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP07)  ARC 3.5-178 IH3 ORBITER
 (AEIP07)  ARC 3.5-178 IH3 ORBITER
 (BEIP07)  ARC 3.5-178 IH3 ORBITER

ALPHA BETA RV/L MAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

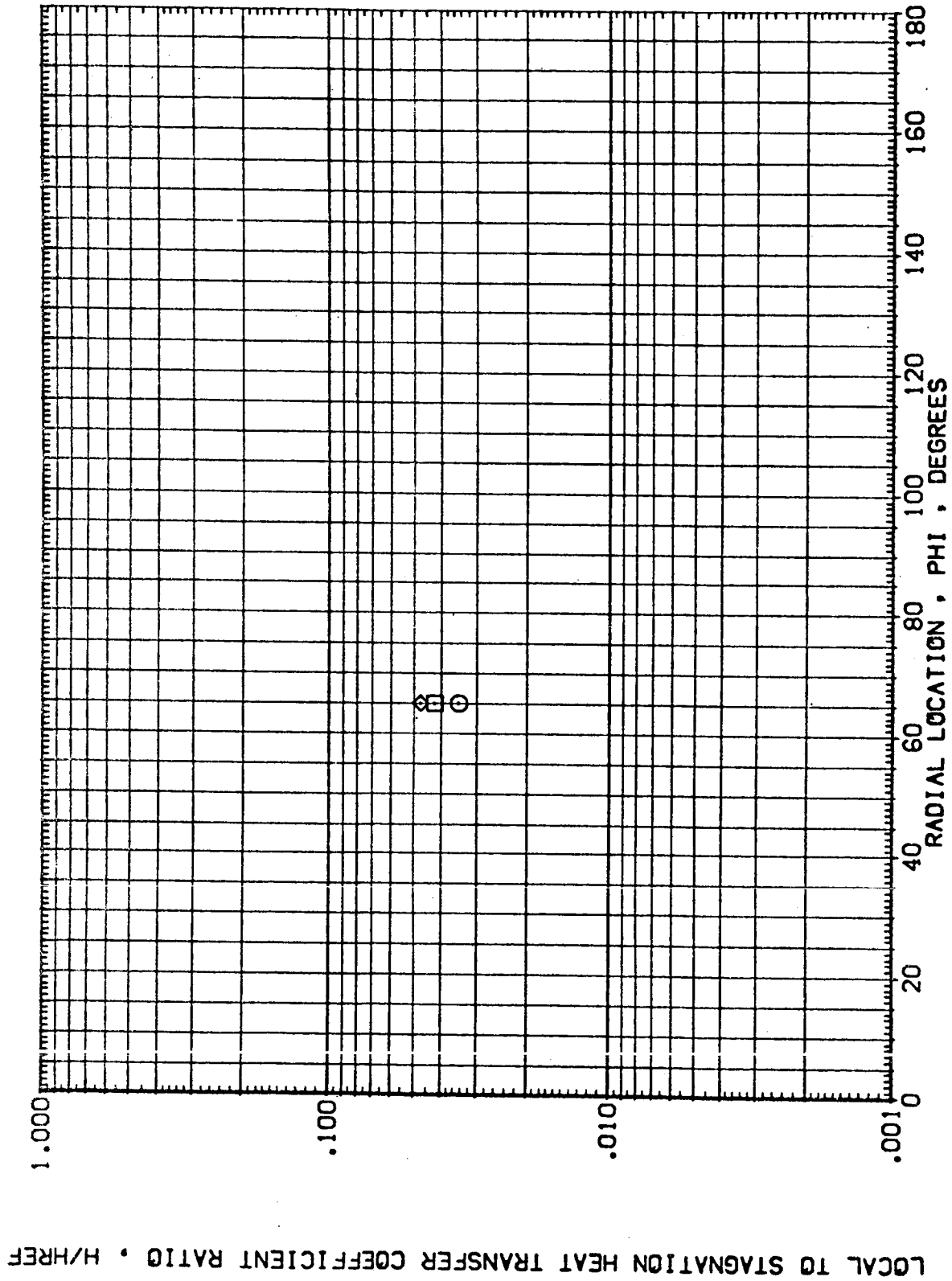


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REIPOB) ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 1.500 1.000

(AEIPOB) ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 1.500 .900

(BEIPOB) ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 1.500 .850

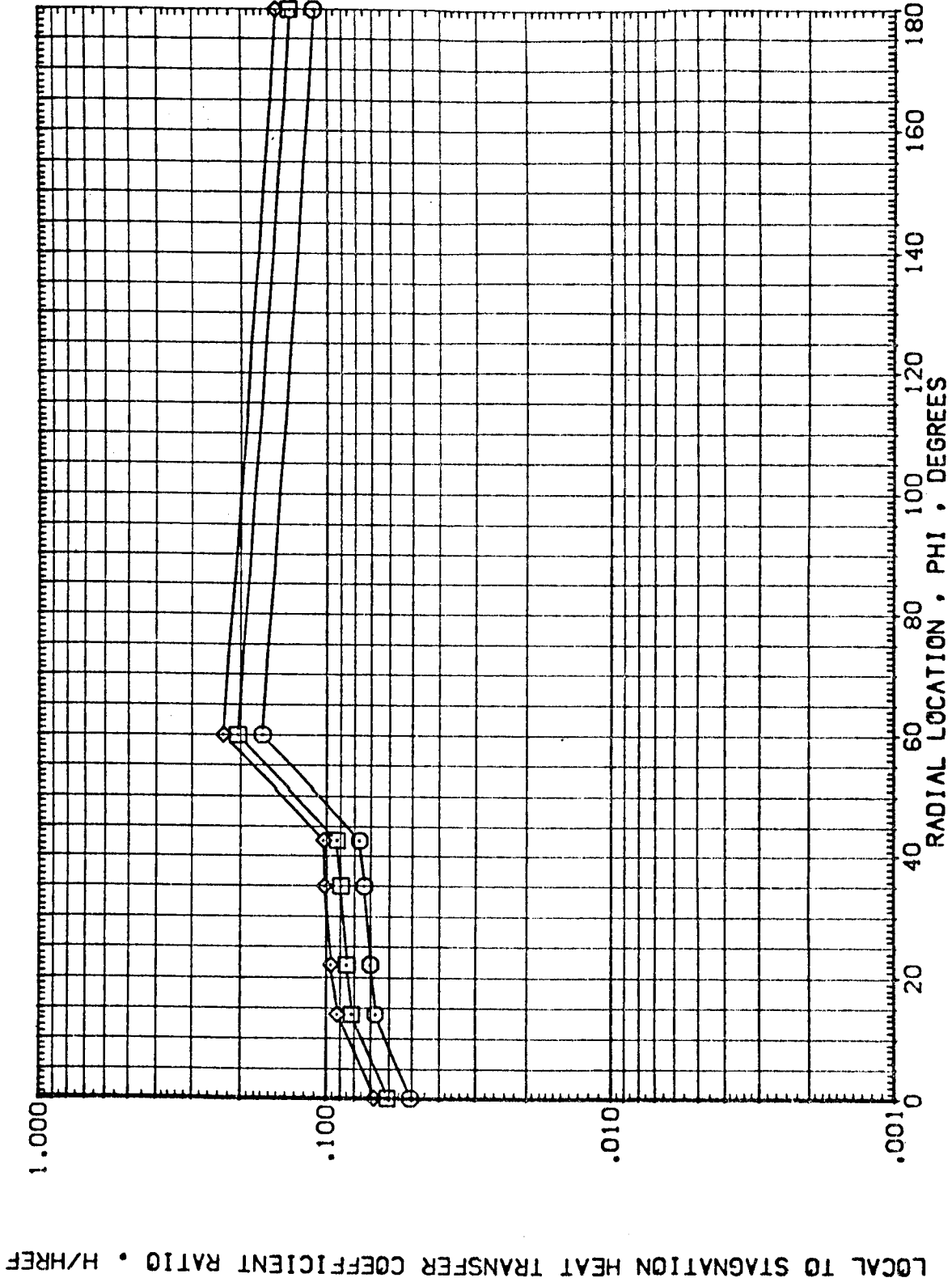


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .050

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(REIPOB)	ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE	.000	.000	1.500	1.000
(AEIPOB)	ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE	.000	.000	1.500	.900
(BEIPOB)	ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE	.000	.000	1.500	.850

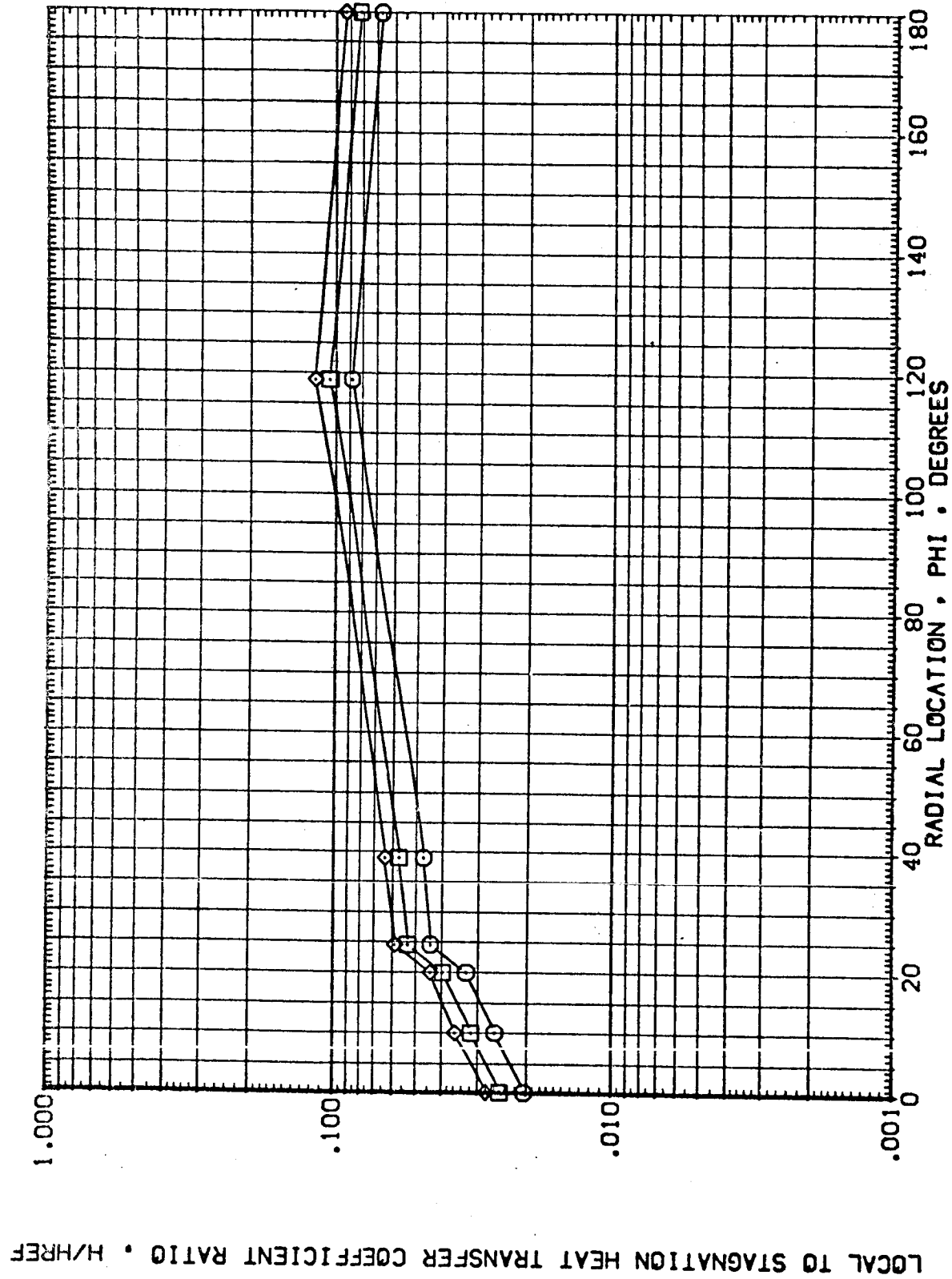


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RNL MAV/HT

(RE|POB) ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 1.500 1.000

(AE|POB) ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 1.500 .900

(BE|POB) ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 1.500 .850

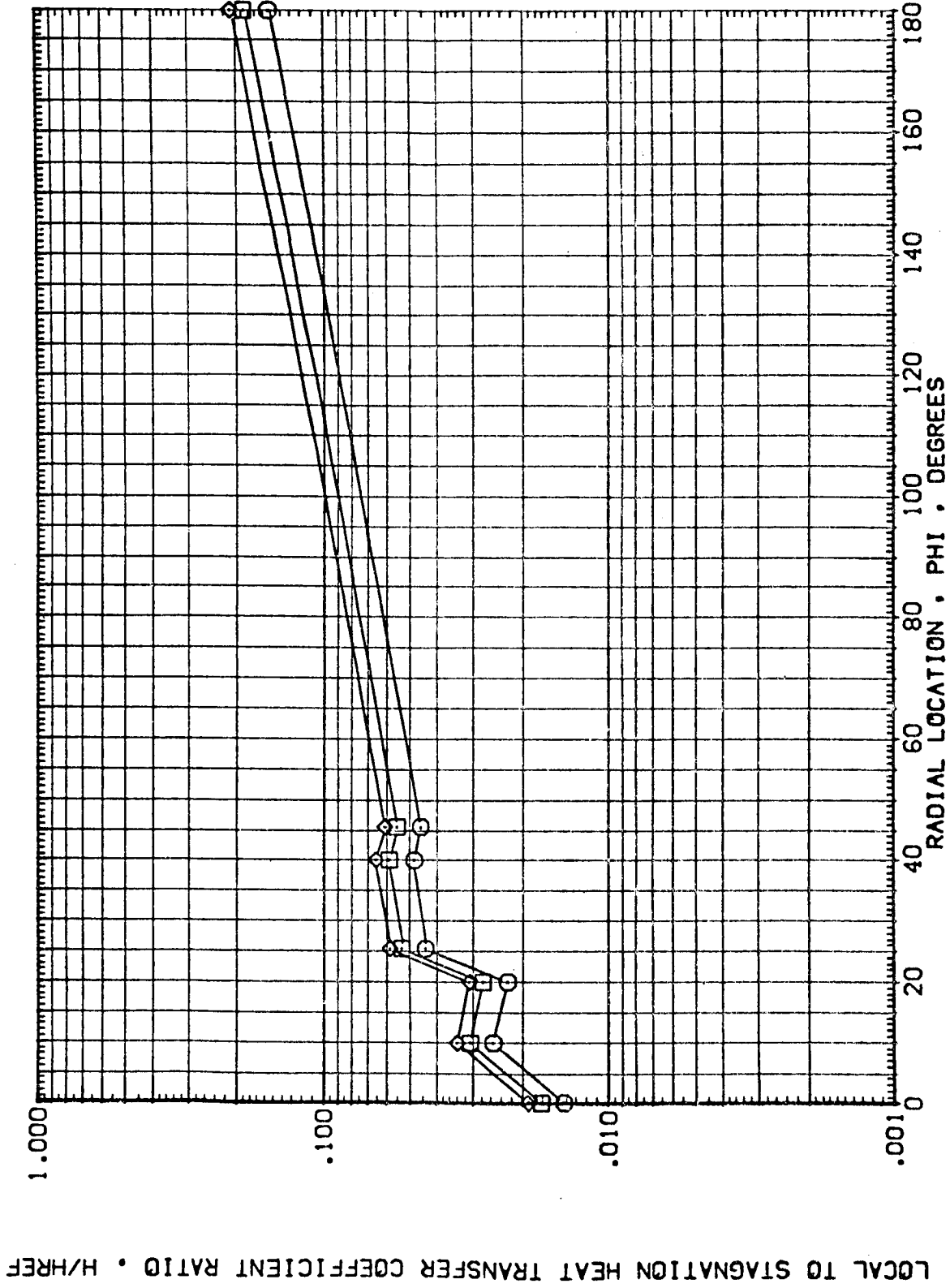


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .150

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

(RE|POB) ○ ARC 3.5-178 IH3 ORBITER (TR|PS|ORB)ITER FUSELAGE .000 .000 1.500 1.000

(AE|POB) ◊ ARC 3.5-178 IH3 ORBITER (TR|PS|ORB)ITER FUSELAGE .000 .000 1.500 .900

(BE|POB) ◊ ARC 3.5-178 IH3 ORBITER (TR|PS|ORB)ITER FUSELAGE .000 .000 1.500 .850

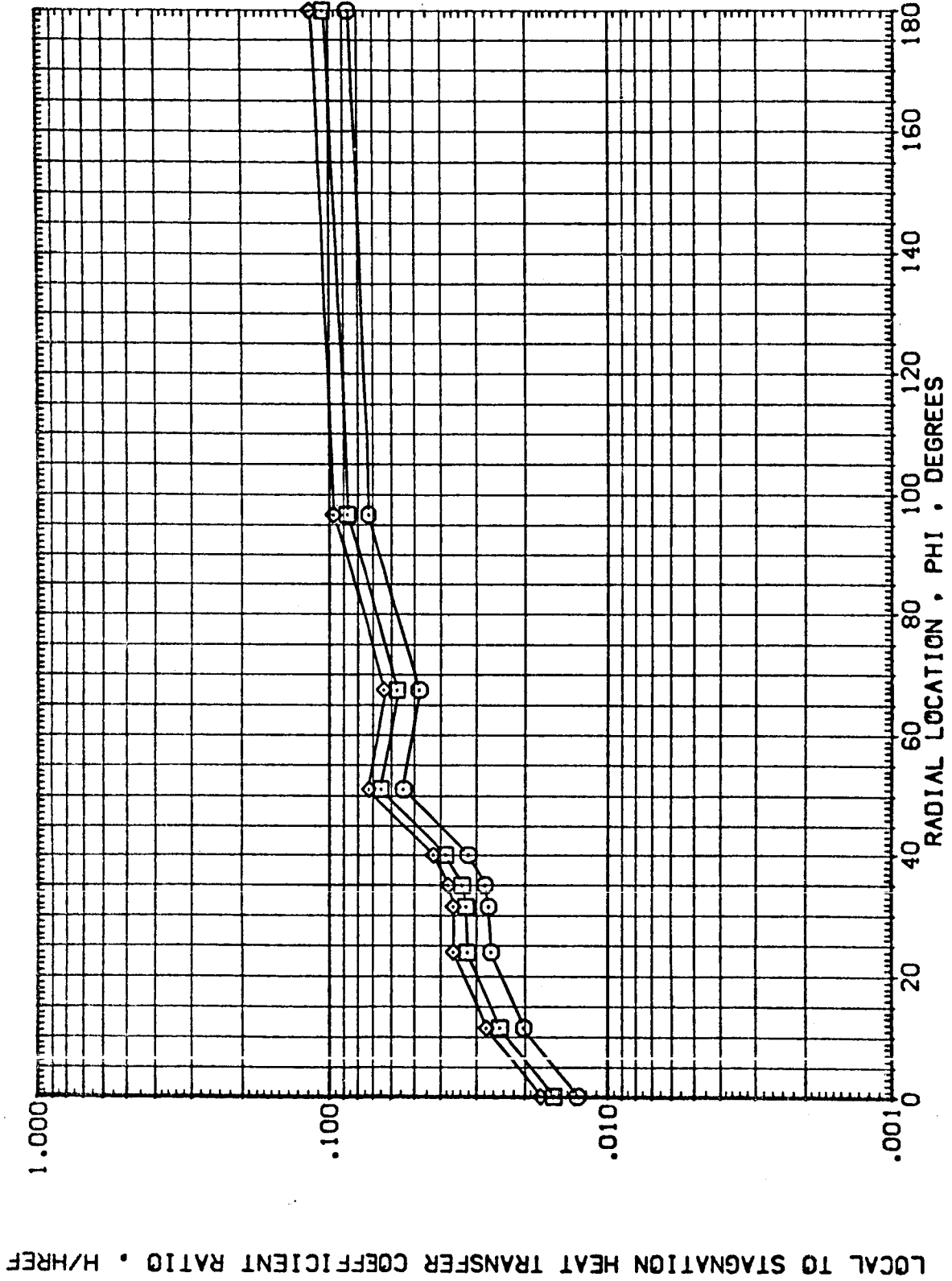


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE|PO8) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 1.500 1.000

(AE|PO8) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 1.500 .900

(BE|PO8) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 1.500 .850

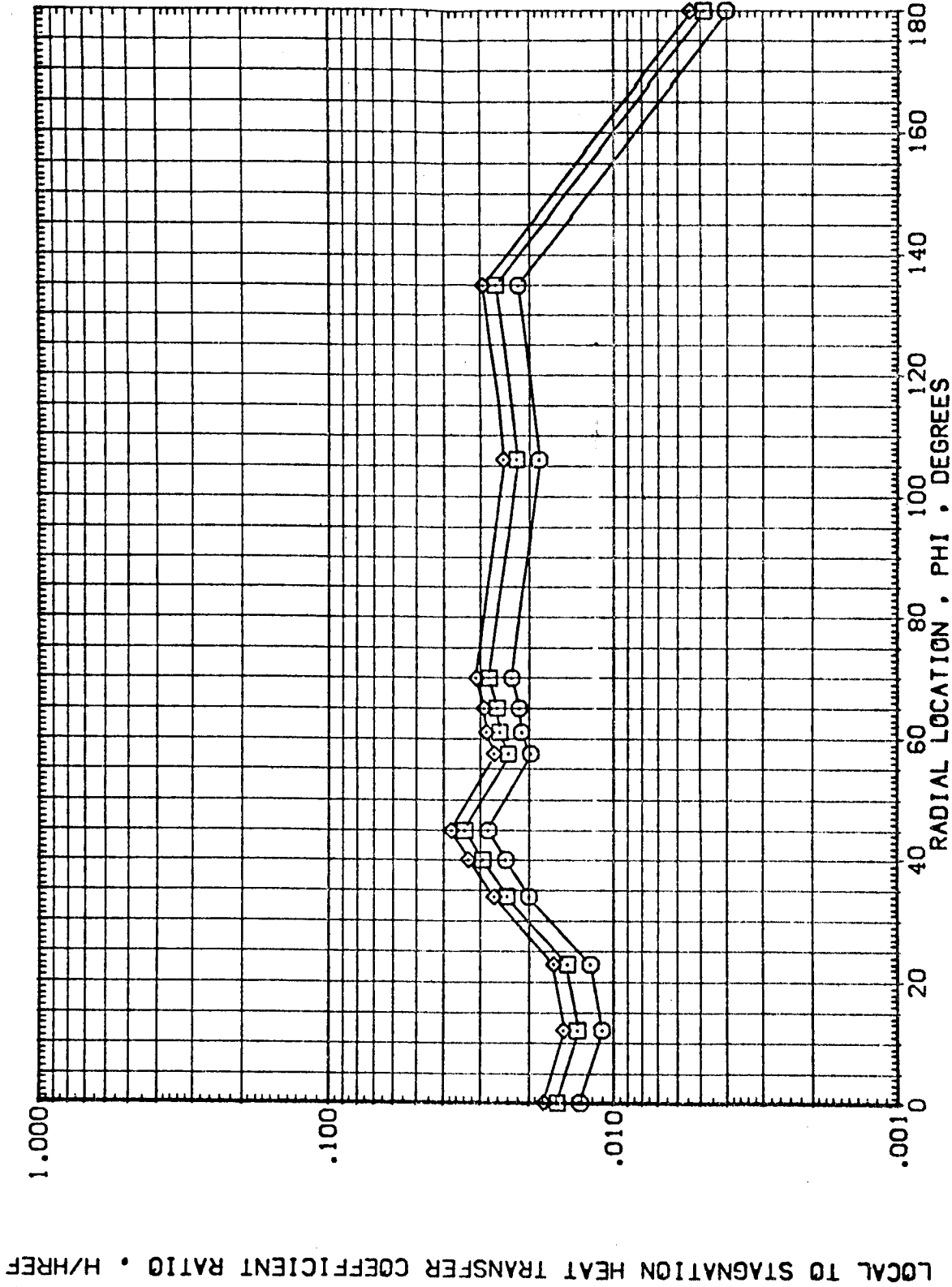


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HIT

(REIP08) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 1.500 1.000

(AEIP08) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 1.500 .900

(BEIP08) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 1.500 .850

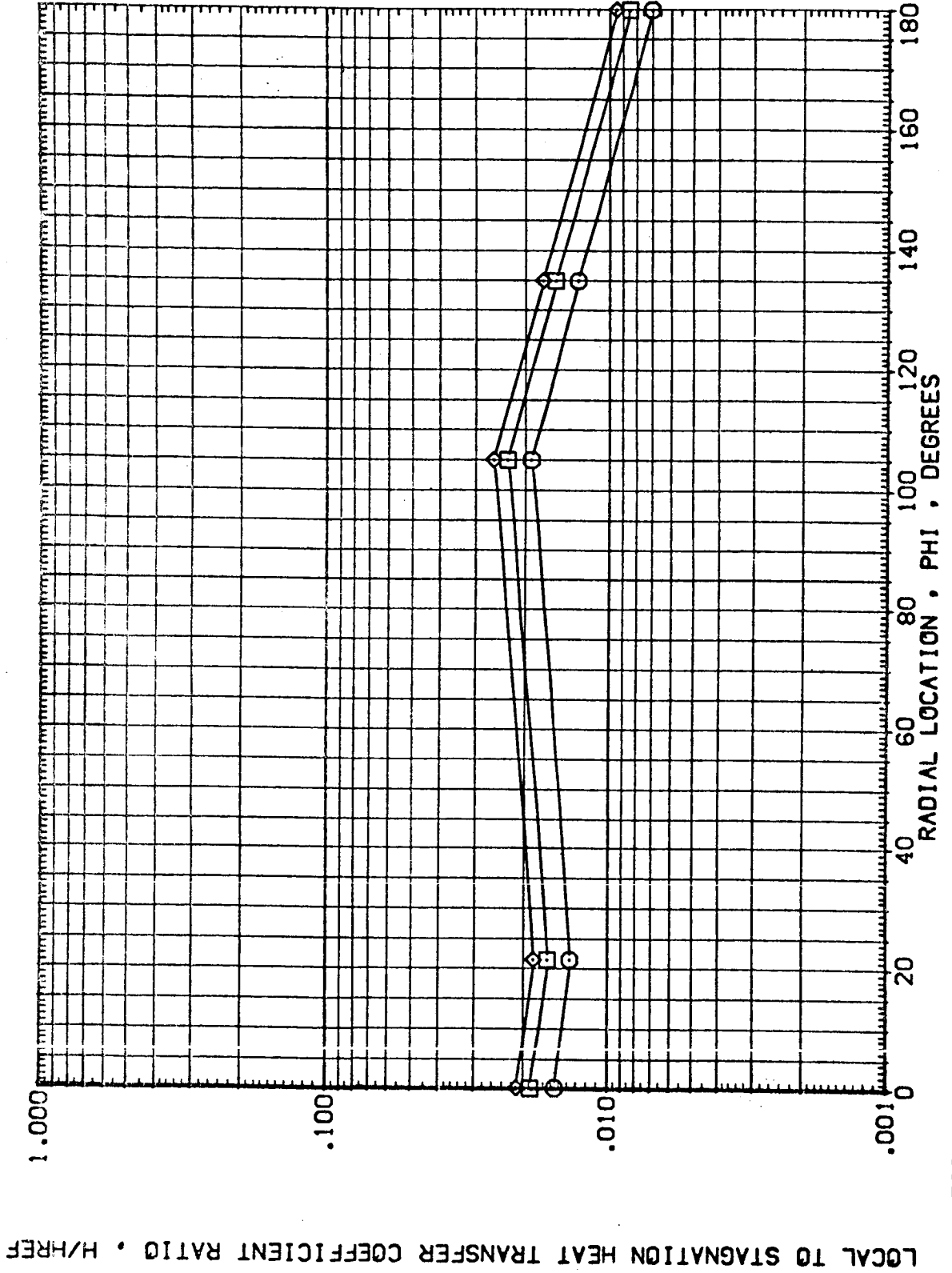


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RNVL HAW/HIT

(RE|POB) ◻ ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 1.500 1.000

(AE|POB) ◻ ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 1.500 .900

(BE|POB) ◊ ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 1.500 .850

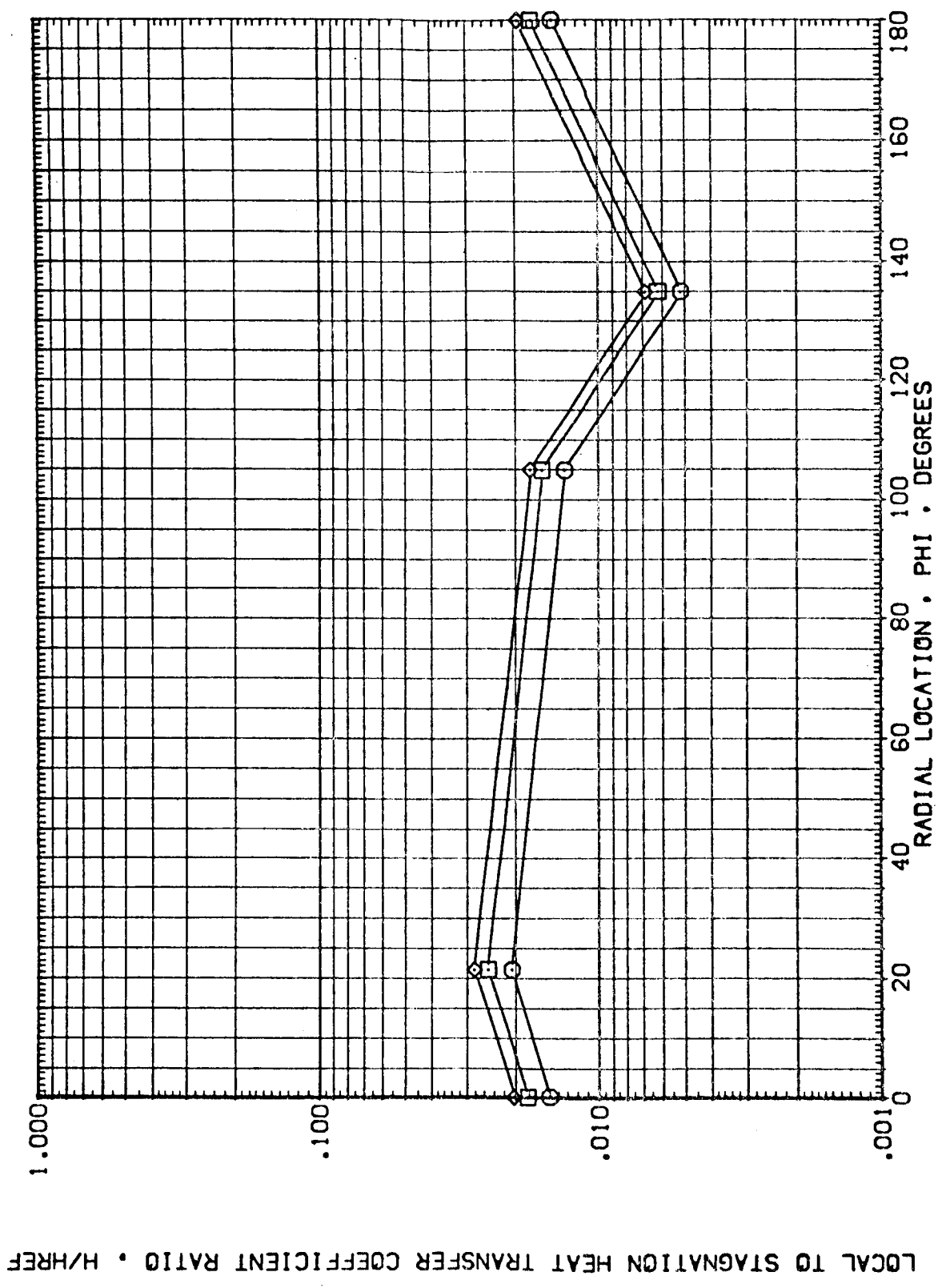


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .500

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE P08)	ARC 3.5-178 IH3 ORB TER (TR PS ORB TER FUSELAGE	.000	.000	1.500	1.000
(AE P08)	ARC 3.5-178 IH3 ORB TER (TR PS ORB TER FUSELAGE	.000	.000	1.500	.900
(BE P08)	ARC 3.5-178 IH3 ORB TER (TR PS ORB TER FUSELAGE	.000	.000	1.500	.850

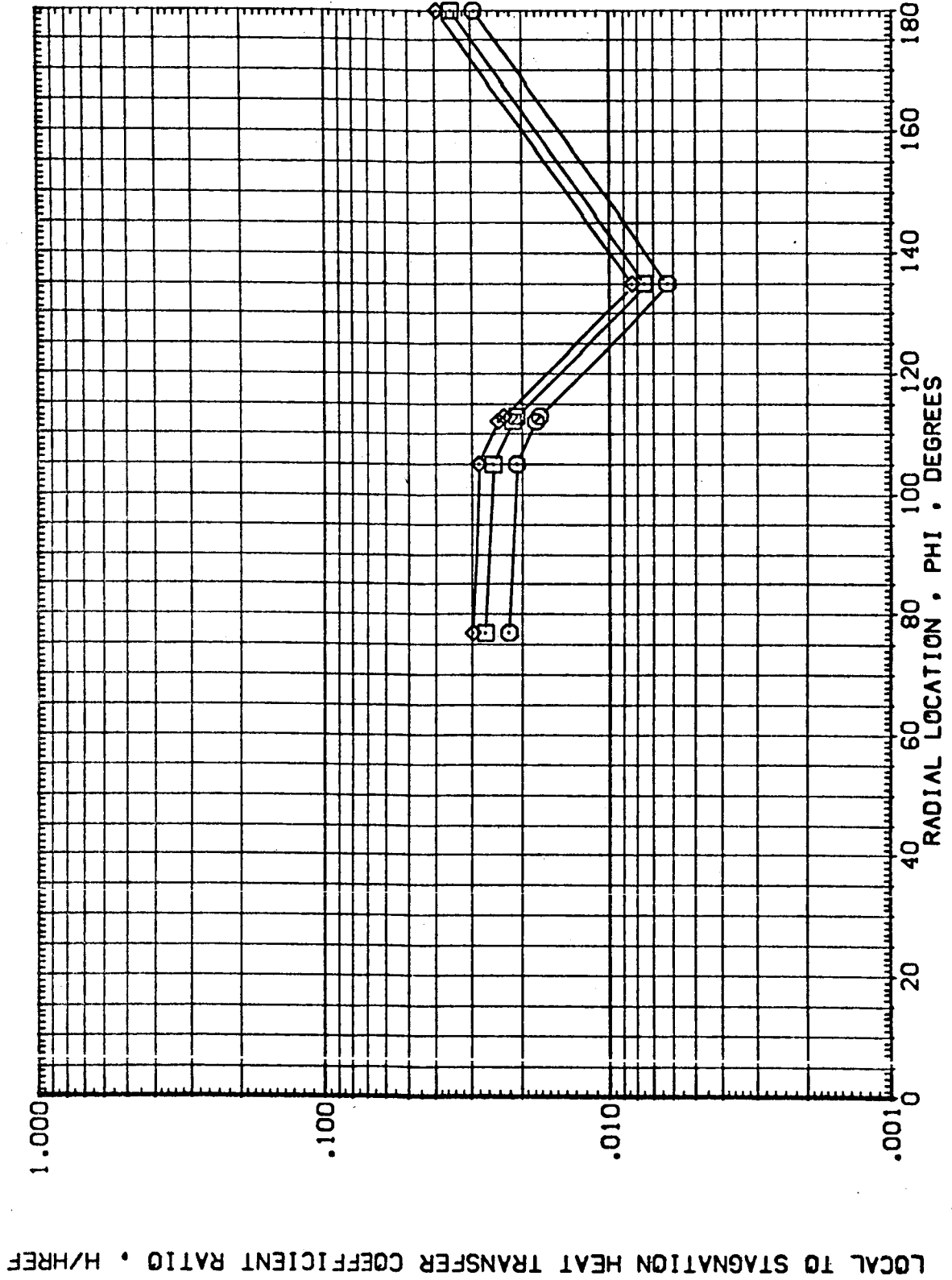


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA R/V/L HAV/HT

(RE|POB) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 1.500 1.000

(AE|POB) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 1.500 .900

(BE|POB) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 1.500 .850

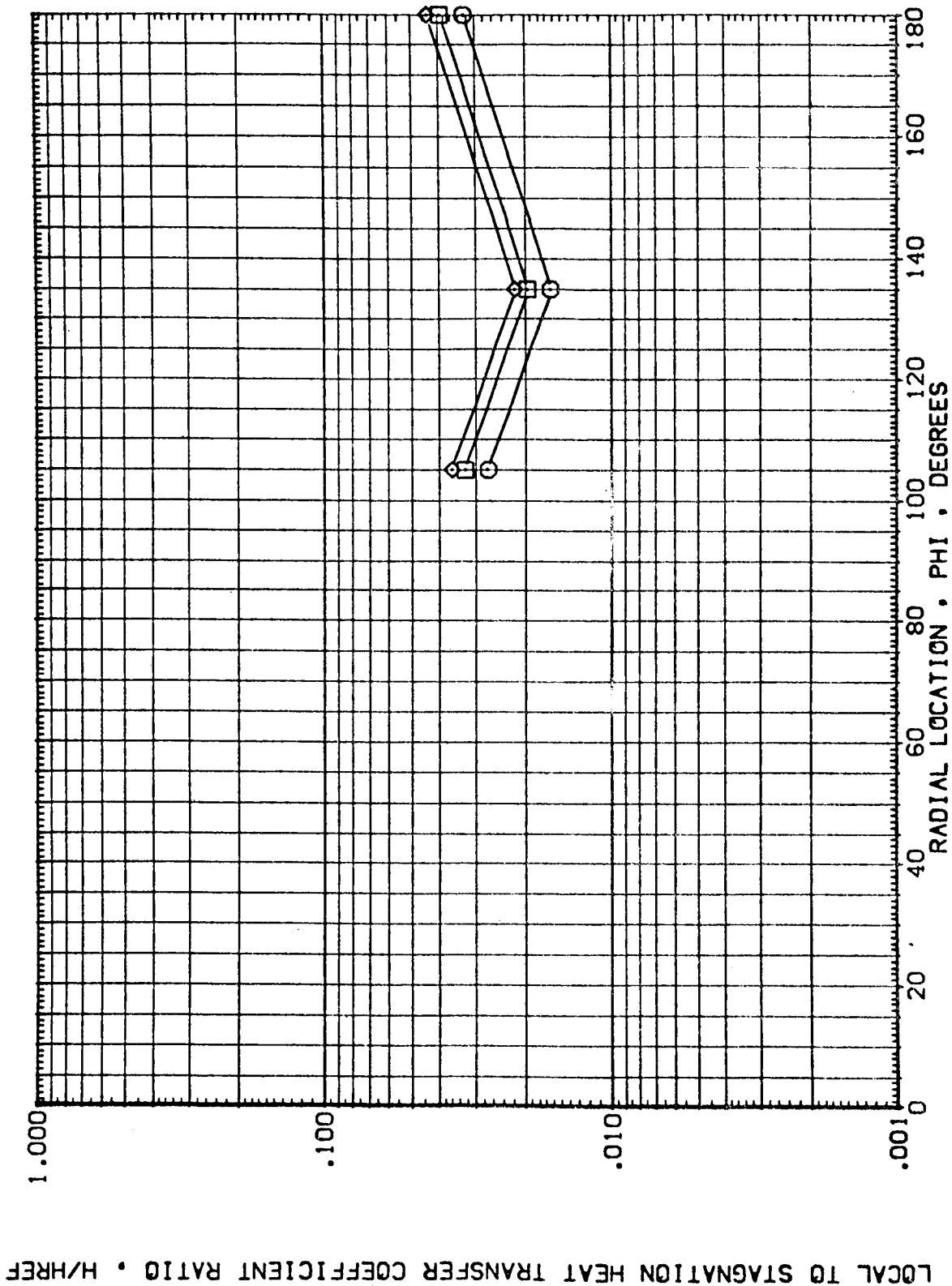


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .700

DATA SET SYMBOL. CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(#)P08	AIRC 3.5-178 H3 ORBITER (TRIPS)ORBITER FUSELAGE	.000	.000	1.500	1.000
(A)P08	AIRC 3.5-178 H3 ORBITER (TRIPS)ORBITER FUSELAGE	.000	.000	1.500	.900
(B)P08	AIRC 3.5-178 H3 ORBITER (TRIPS)ORBITER FUSELAGE	.000	.000	1.500	.800

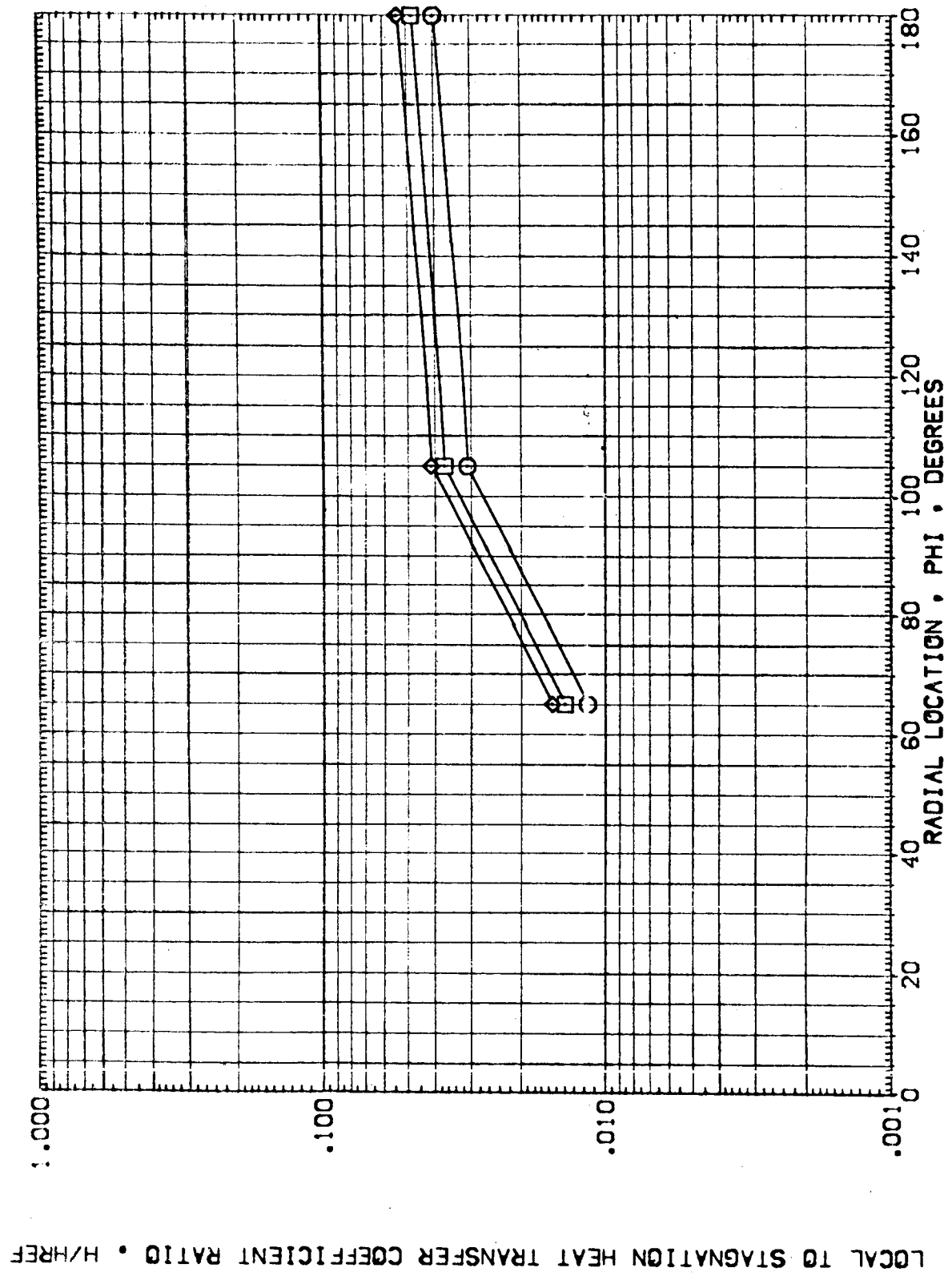


FIG. 46 (ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED))

MACH = 5.300 X/L = .800

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
[RE] [POB]	ARC 3.5-178 [H3 ORBITER (TRIP)] ORBITER FUSELAGE	.000	.000	1.500	1.000
[AE] [POB]	ARC 3.5-178 [H3 ORBITER (TRIP)] ORBITER FUSELAGE	.000	.000	1.500	.900
[BE] [POB]	ARC 3.5-178 [H3 ORBITER (TRIP)] ORBITER FUSELAGE	.000	.000	1.500	.850

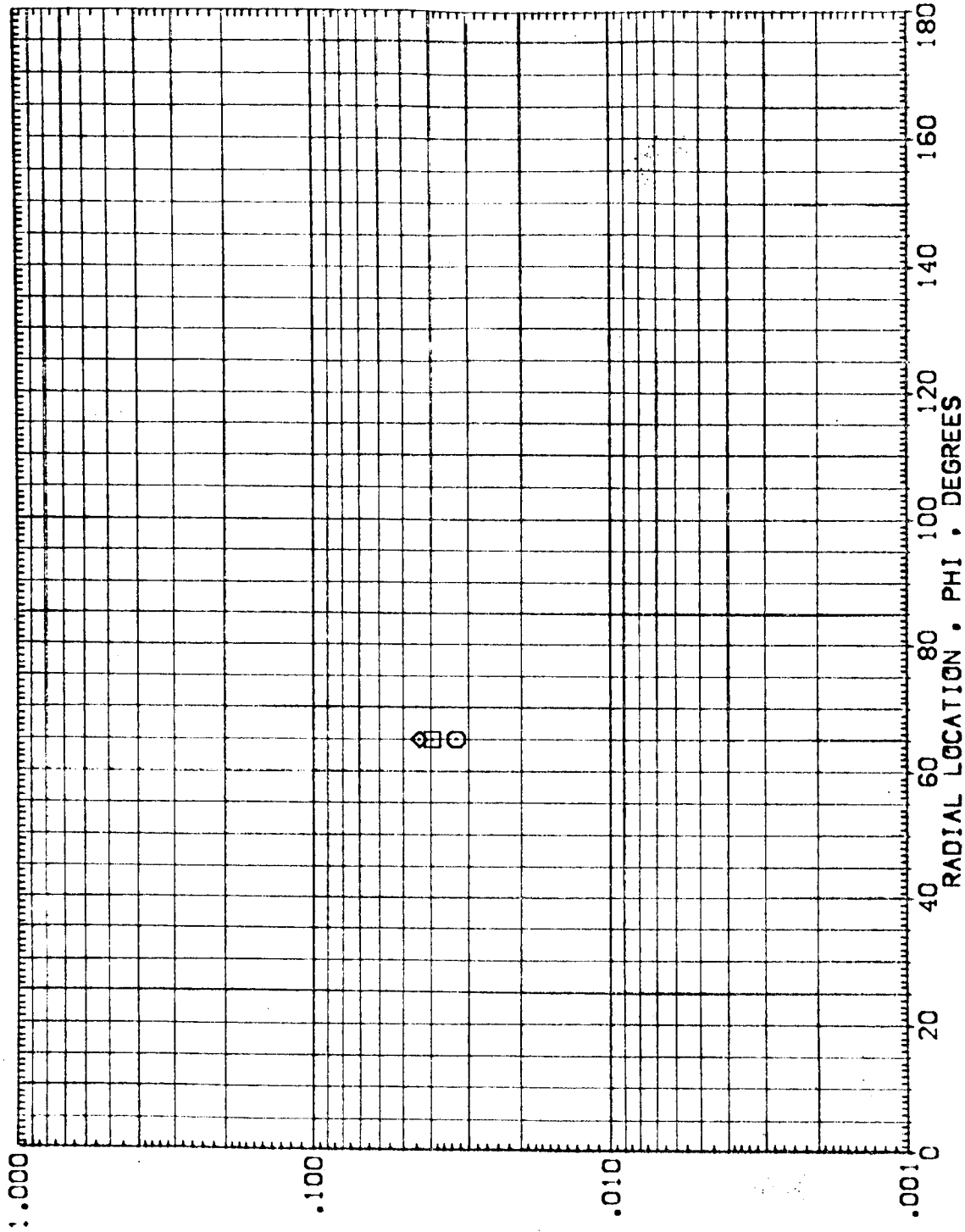


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE|POS) □ ARC 3.5-178 IH3 ORB|TER (TRIPS)ORB|TER FUSELAGE .000 .000 5.000 1.000

(AE|POS) ○ ARC 3.5-178 IH3 ORB|TER (TRIPS)ORB|TER FUSELAGE .000 .000 5.000 .900

(BE|POS) ◇ ARC 3.5-178 IH3 ORB|TER (TRIPS)ORB|TER FUSELAGE .000 .000 5.000 .850

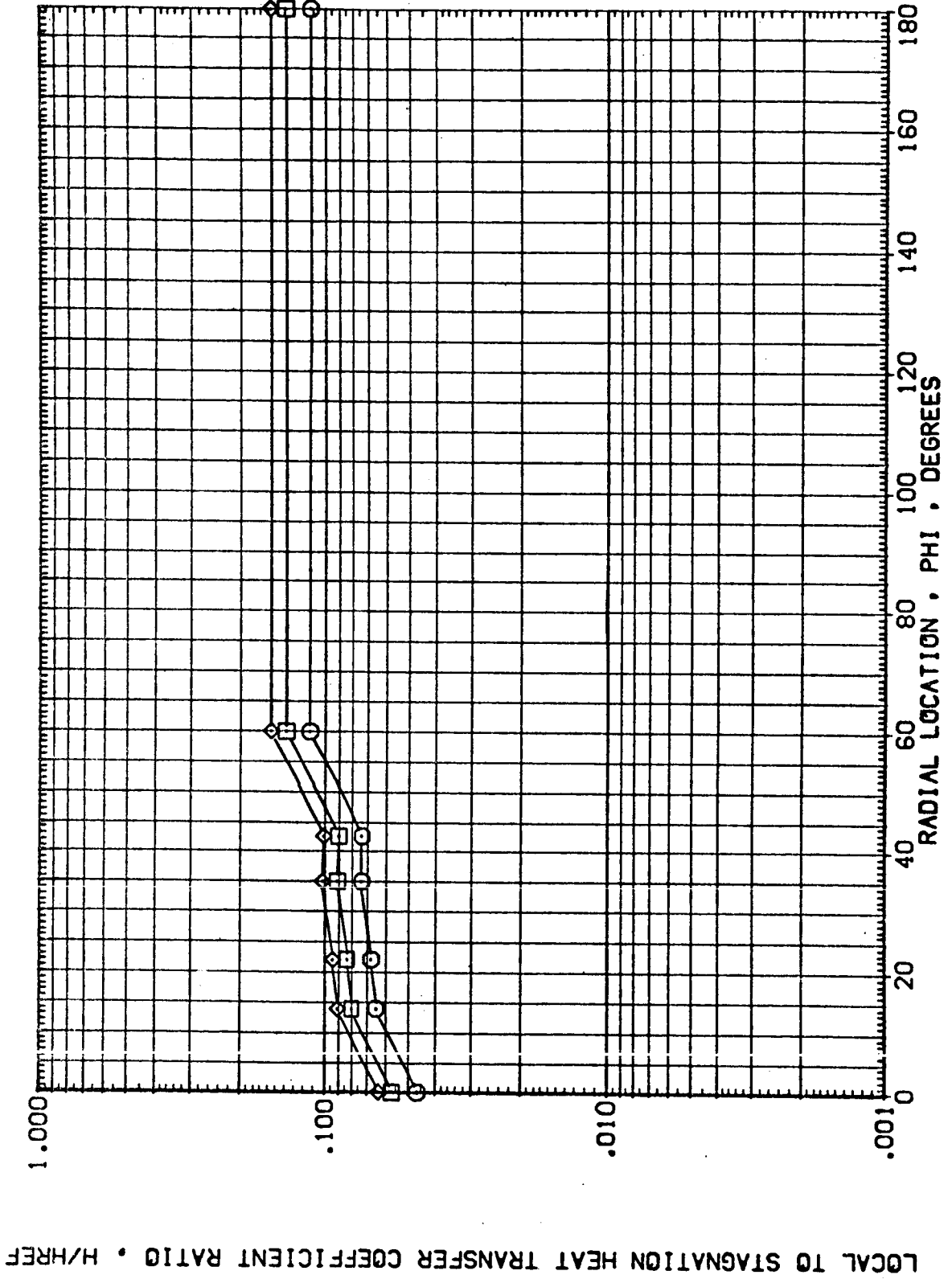


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAW/HT
 [RE:PC9] ○ ARC 3.5-78 H3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 5.000 1.000
 [AE:PC9] ◇ ARC 3.5-78 H3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 5.000 .900
 [BE:PC9] ◇ ARC 3.5-78 H3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 5.000 .850

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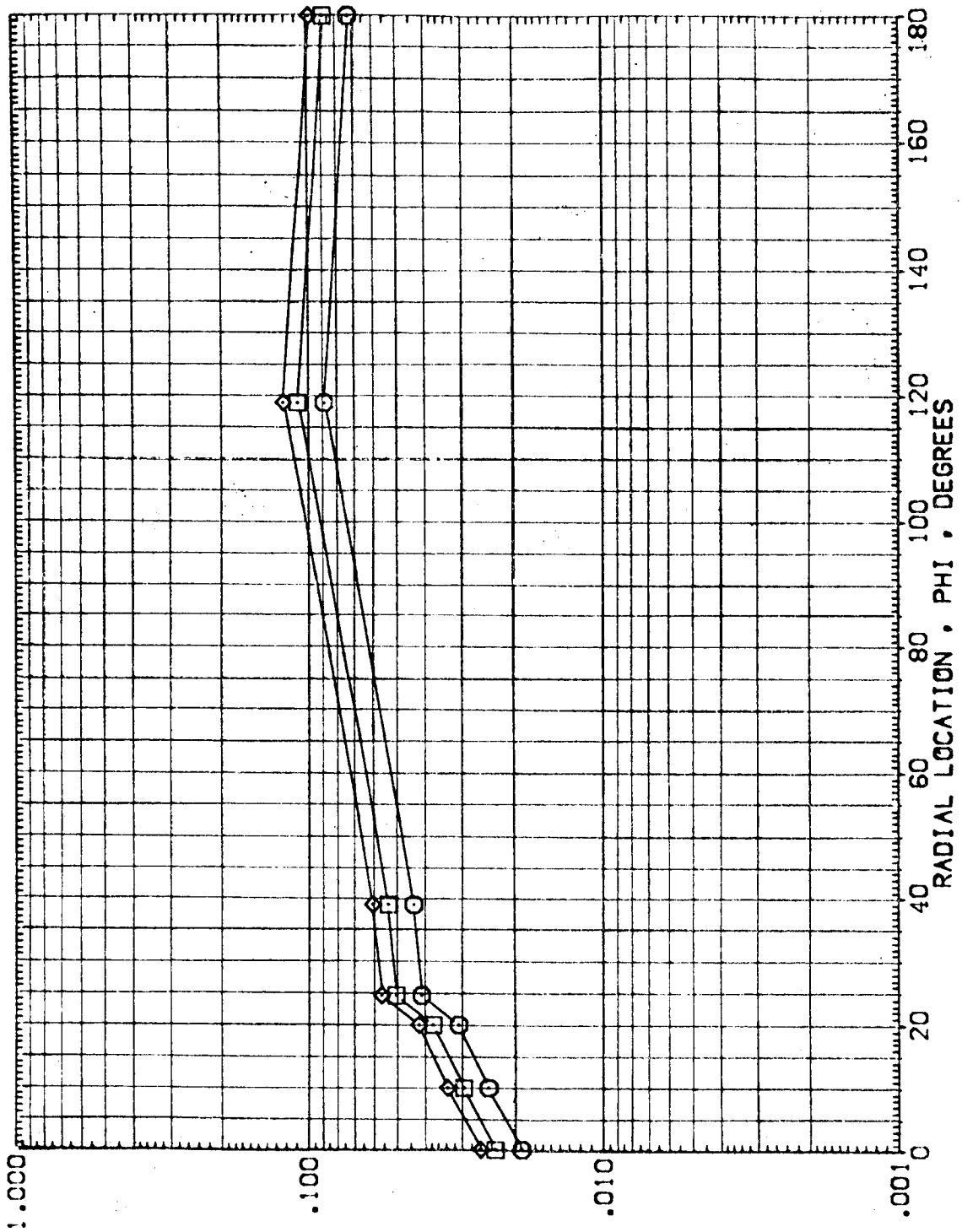


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .100

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REIP09)	ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE	.000	.000	5.000	1.000
(AEIP09)	ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE	.000	.000	5.000	.900
(BEIP09)	ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE	.000	.000	5.000	.850

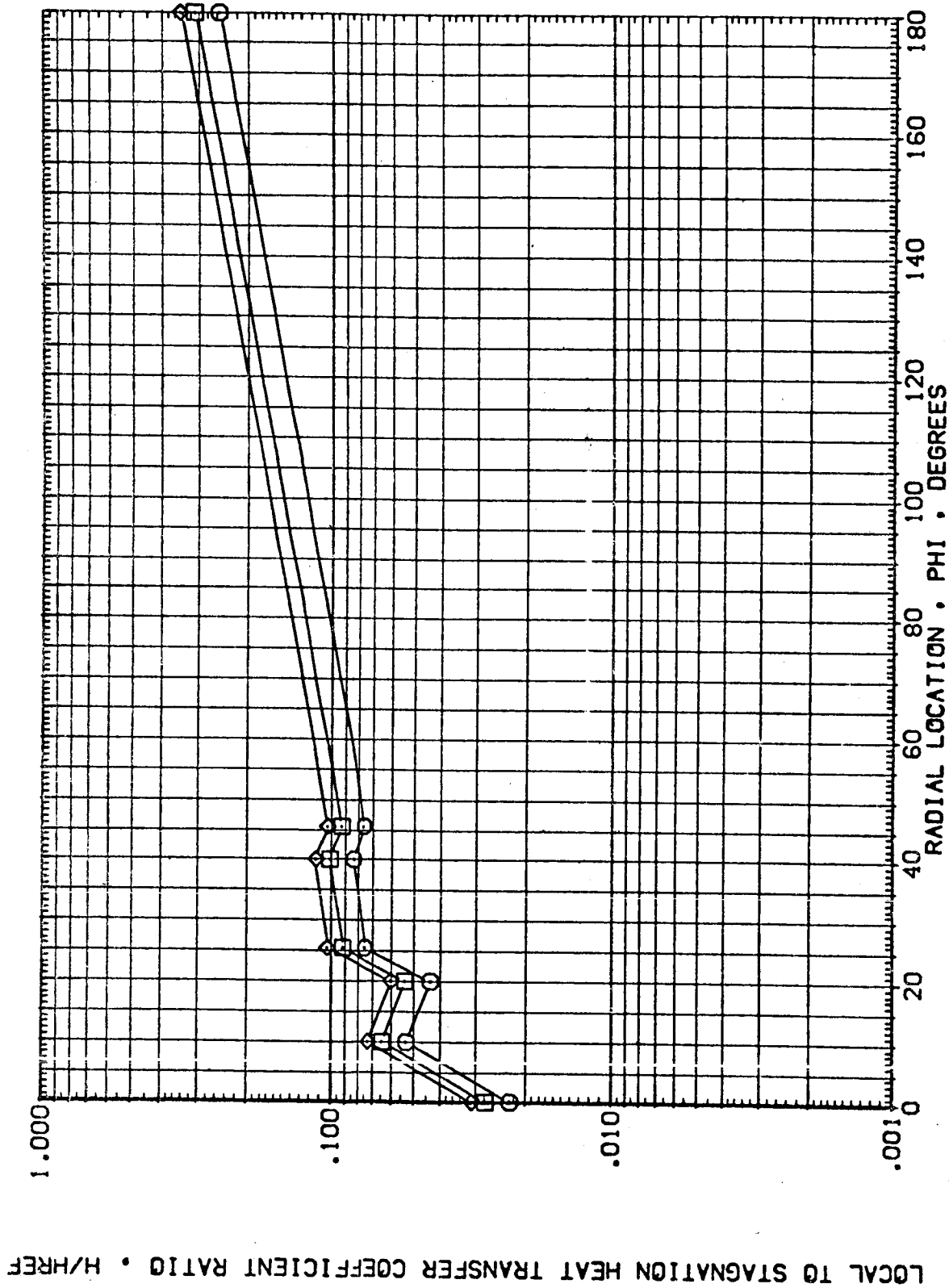


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .150

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(REIPOS) □ ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 5.000 1.000

(AEIPOS) ○ ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 5.000 .500

(BEIPOS) ◇ ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 5.000 .650

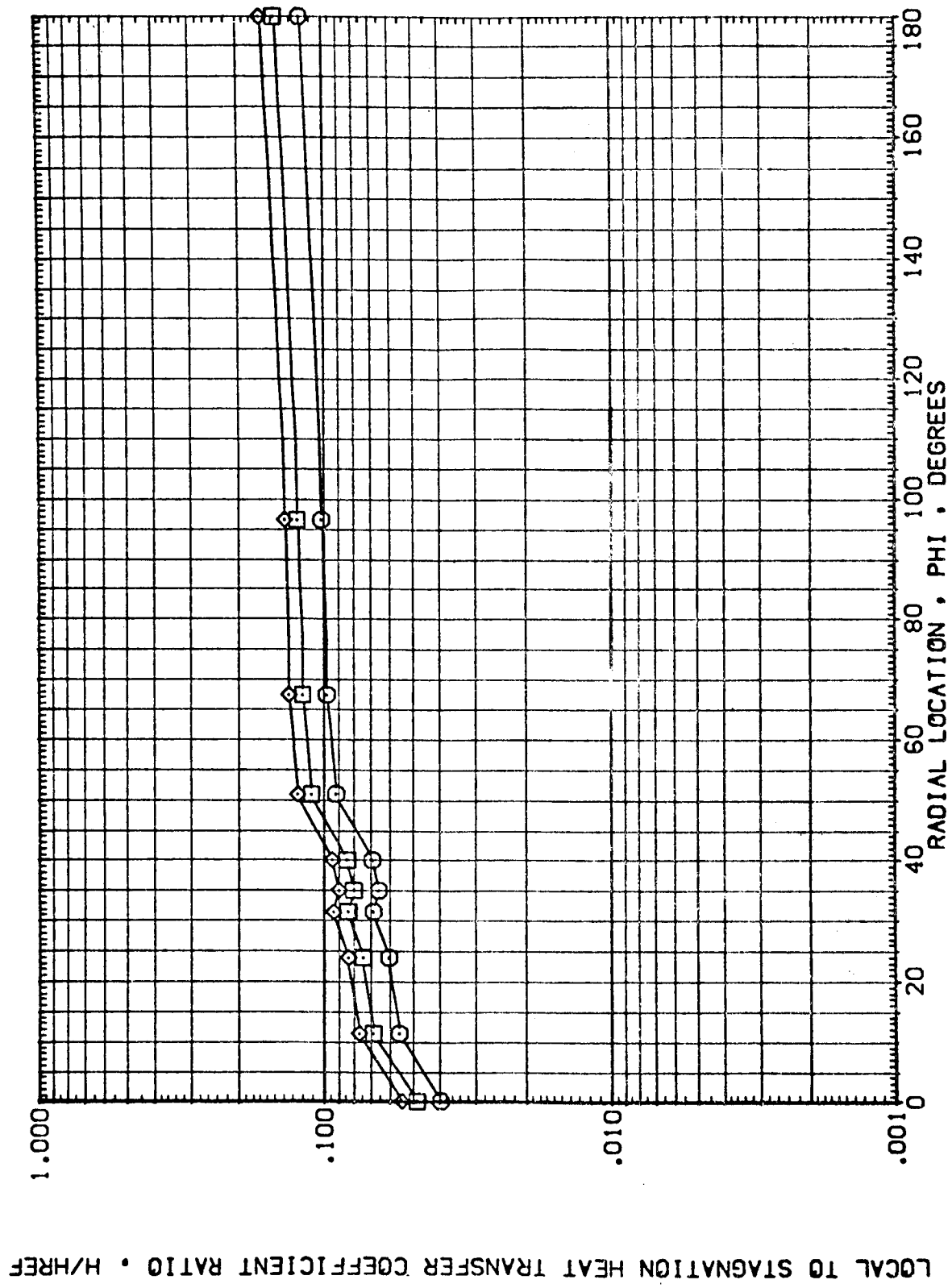


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE)POS) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE
 (AE)POS) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE
 (BE)POS) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RN/L 5.000 5.000 5.000
 HAV/HT 1.000 .500 .850

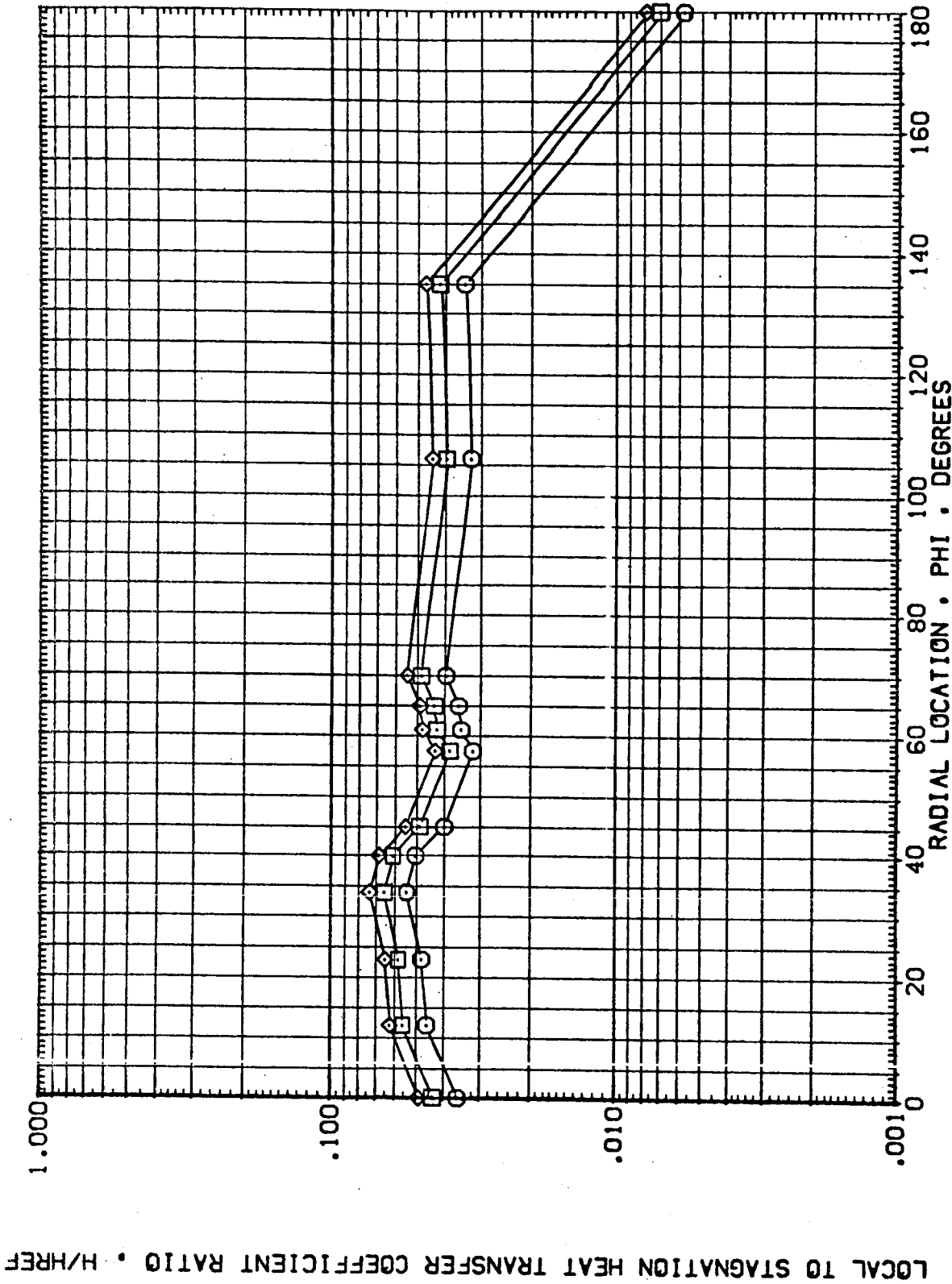


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(BE|POS) □ ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 5.000 1.000

(AE|POS) □ ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 5.000 .900

(BE|POS) ◇ ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 5.000 .850

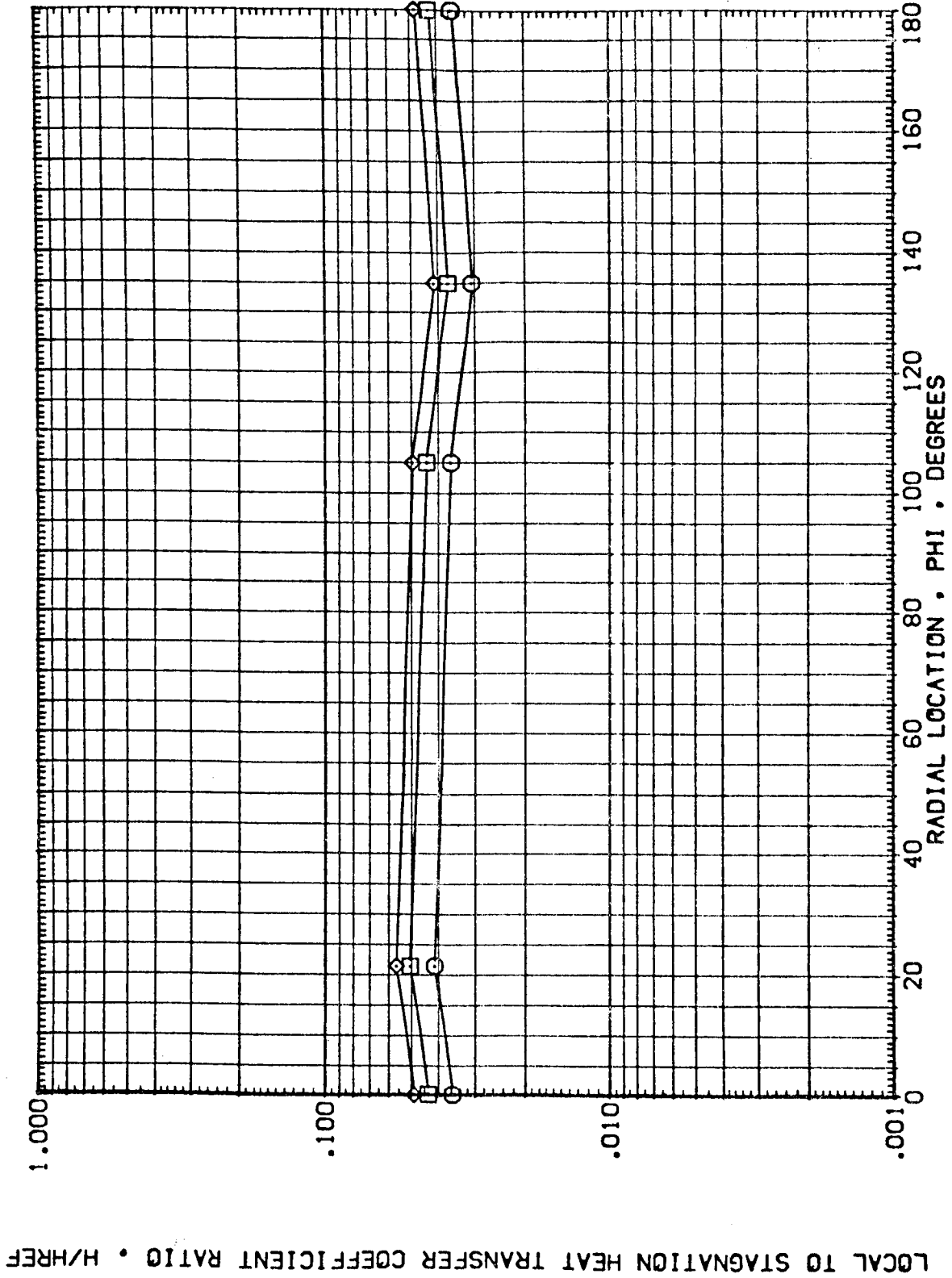


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(REIPOS) □ ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 5.000 1.000

(AEIPOS) ○ ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 5.000 .900

(BEIPOS) ◇ ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 5.000 .850

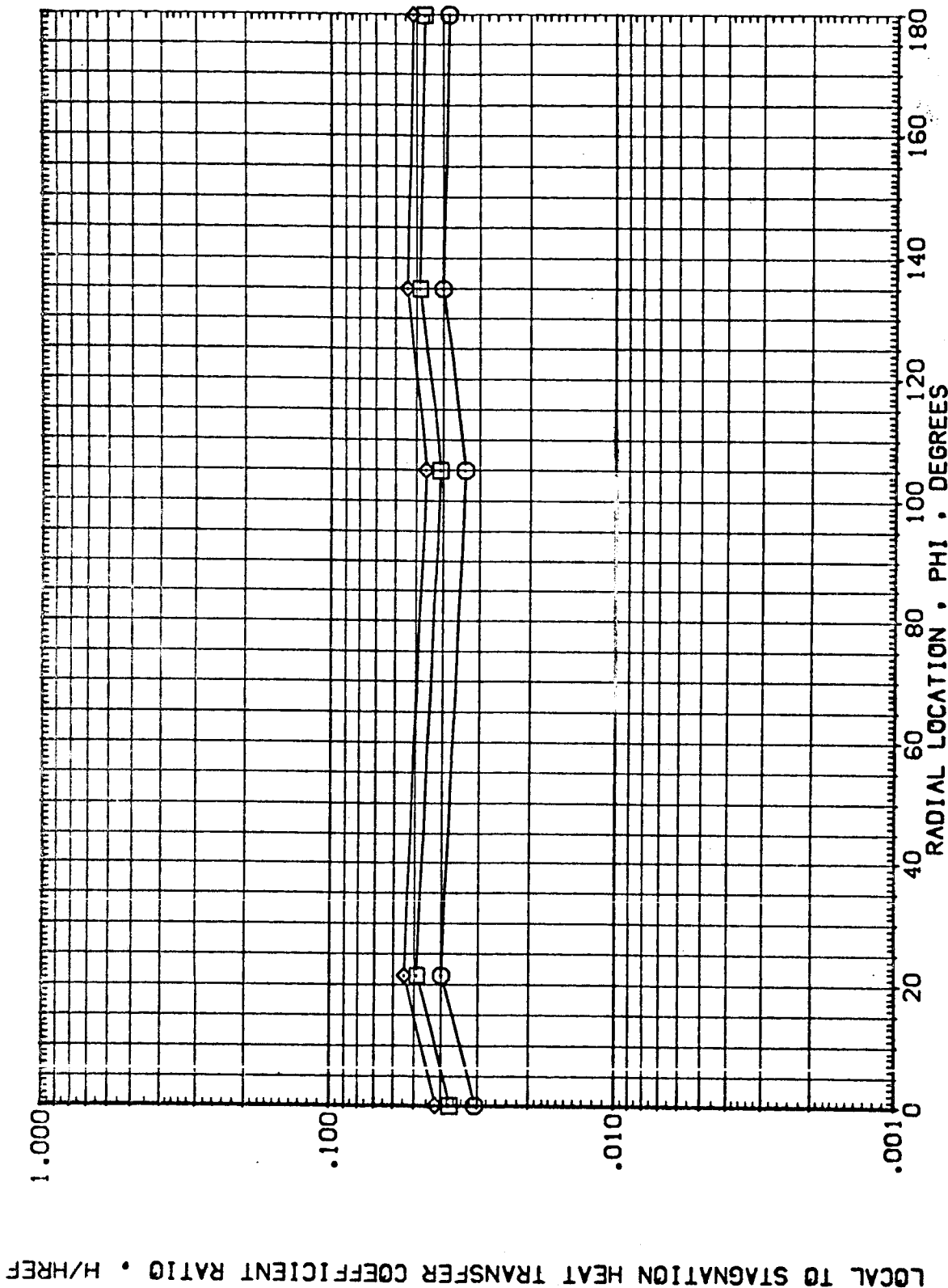


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .500

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(RE POS)	ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE	.000	.000	5.000	1.000
(AE POS)	ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE	.000	.000	5.000	.900
(BE POS)	ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE	.000	.000	5.000	.850

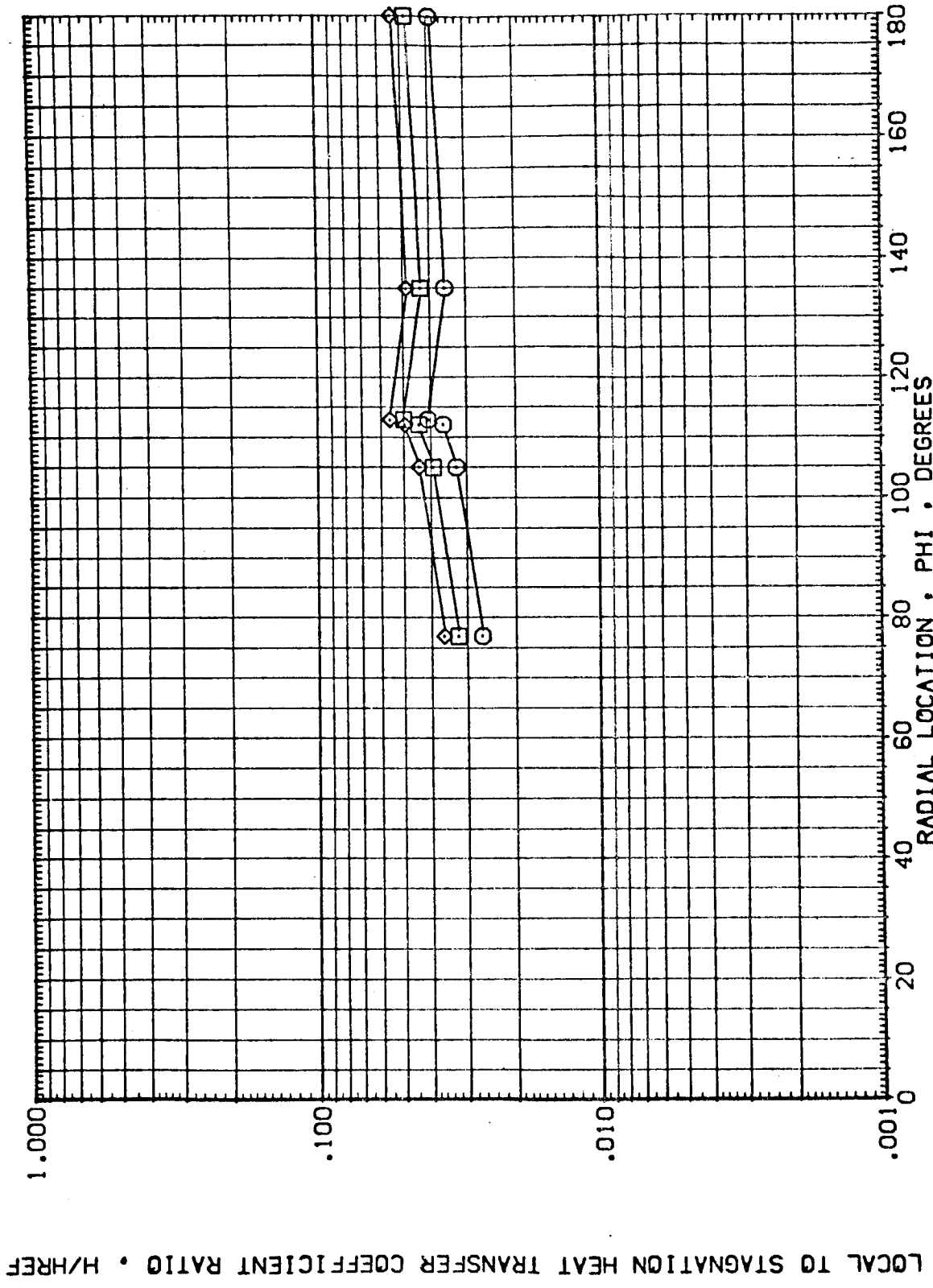


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT
 (REIPOS) ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 5.000 1.000
 (AEIPOS) ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 5.000 .900
 (BEIPOS) ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE .000 .000 5.000 .650

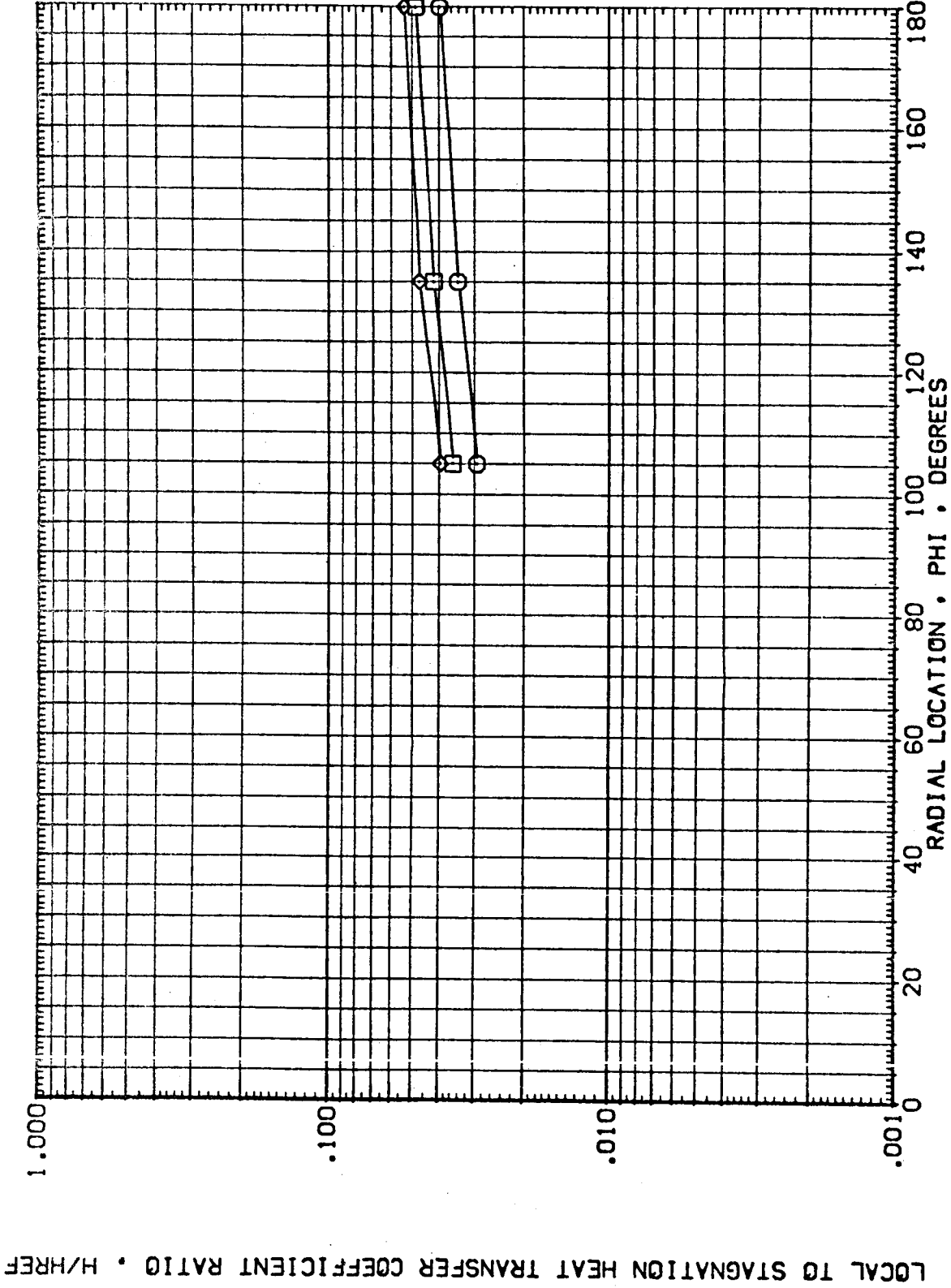


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(BE|POS) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 5.000 1.000

(AL|POS) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 5.000 .900

(BE|POS) ARC 3.5-178 IH3 ORBITER (TRIPS)ORBITER FUSELAGE .000 .000 5.000 .650

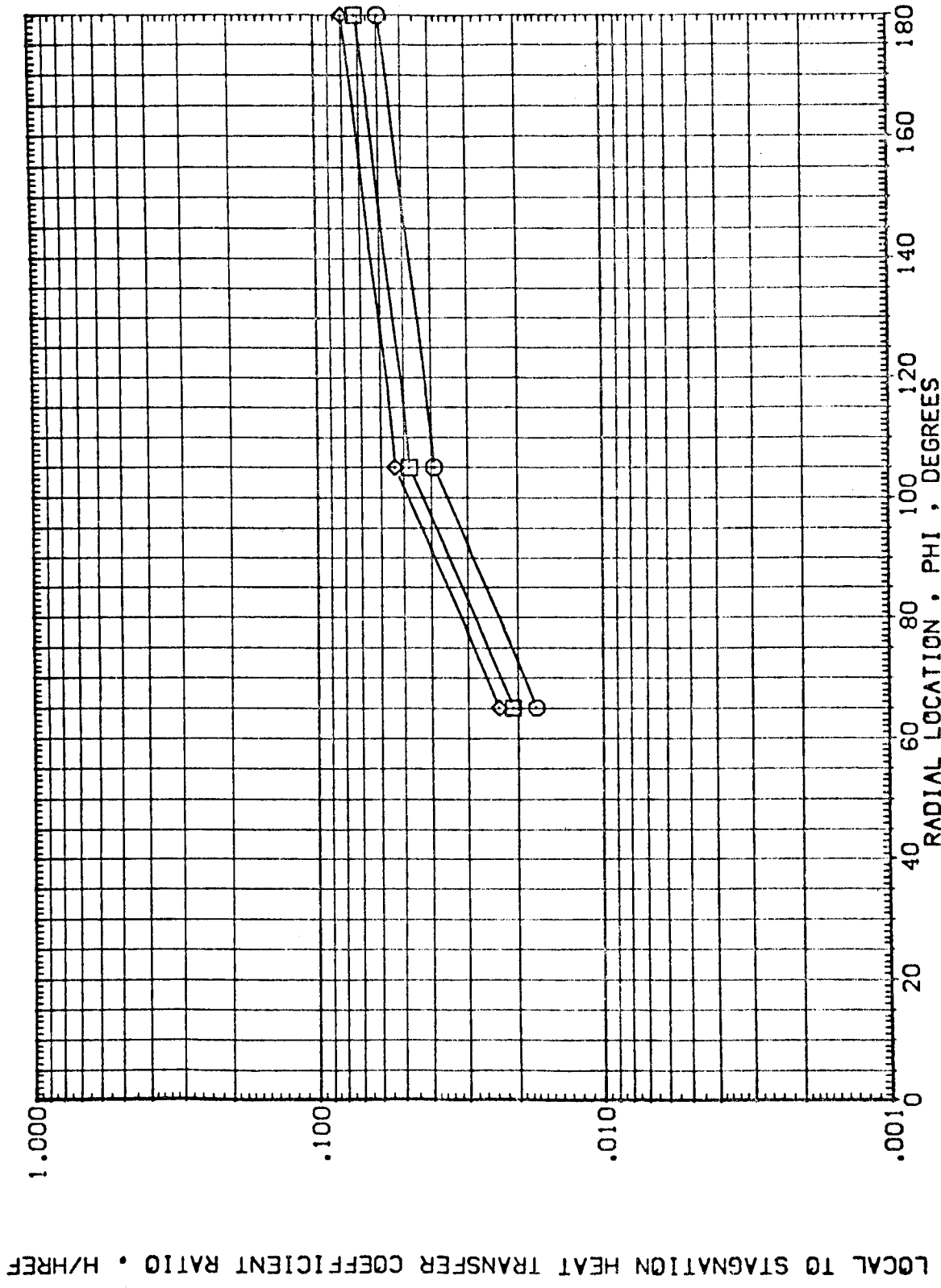


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .800

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REIP09)	ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE	.000	.000	5.000	1.000
(AEIP09)	ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE	.000	.000	5.000	.900
(BEIP09)	ARC 3.5-178 IH3 ORBITER (TRIPS) ORBITER FUSELAGE	.000	.000	5.000	.850

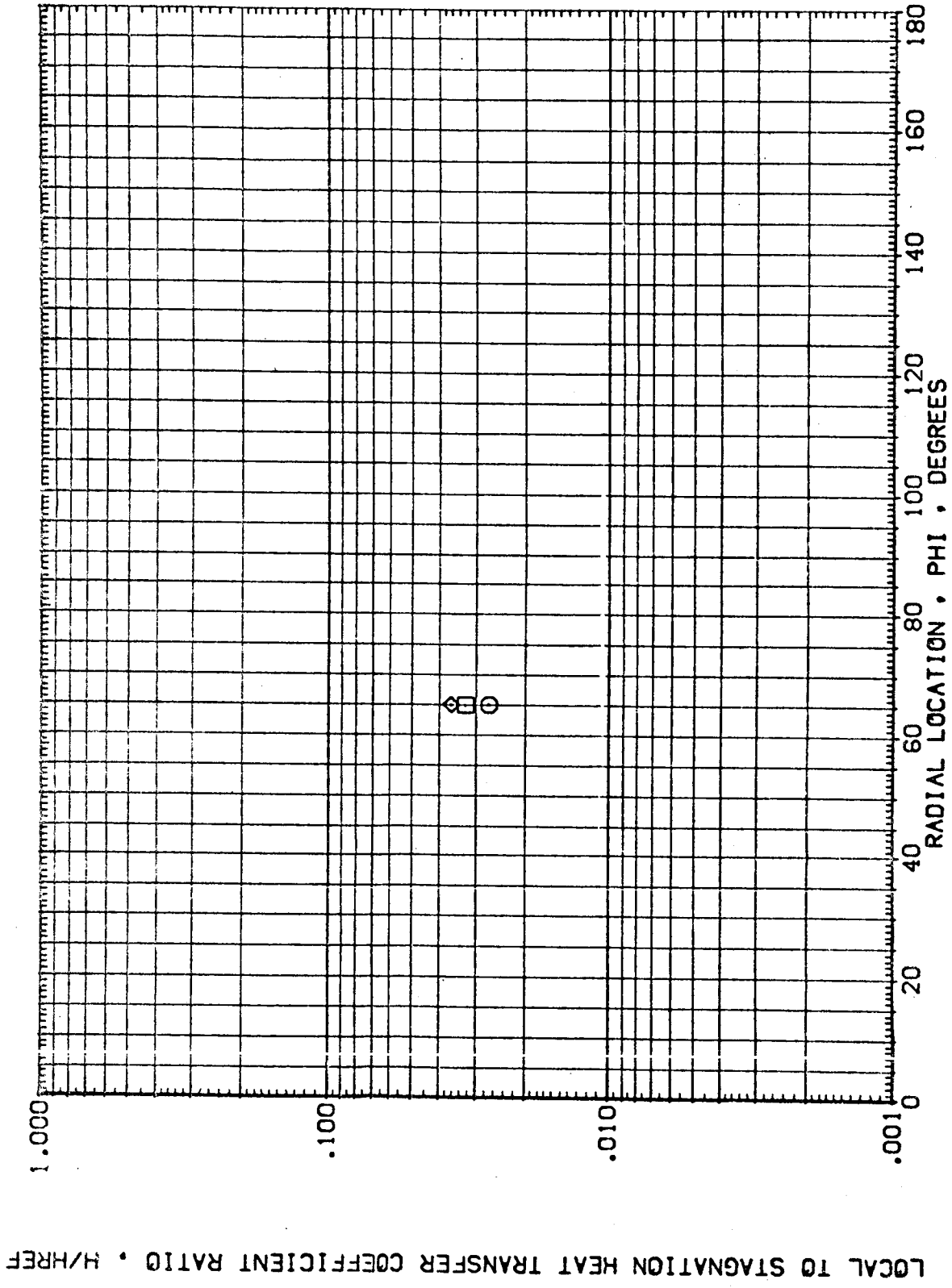


FIG. 46 ORBITER FUSELAGE - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/L = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|PO|) ARC 3.5-178 IH3 0+T+S
 (AE|PO|) ARC 3.5-178 IH3 0+T+S
 (BE|PO|) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RVL 1.500
 1.500
 1.500

HAW/HT 1.000
 .900
 .850

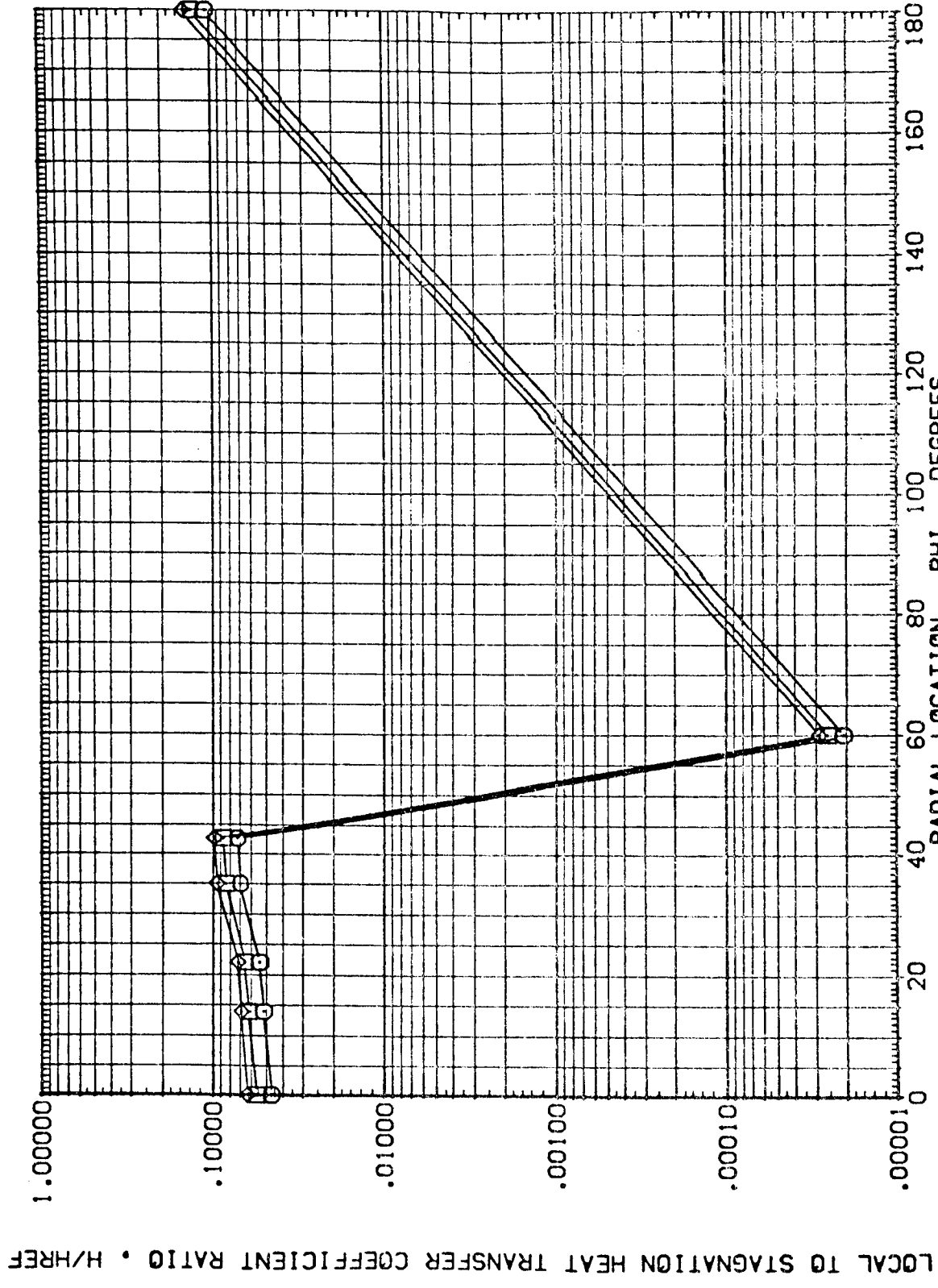


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RE|PO1) ARC 3.5-178 IH3 0+T+S
 (AE|PO1) ARC 3.5-178 IH3 0+T+S
 (BE|PO1) ARC 3.5-178 IH3 0+T+S

ORBITTER FUSELAGE
 ORBITTER FUSELAGE
 ORBITTER FUSELAGE

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

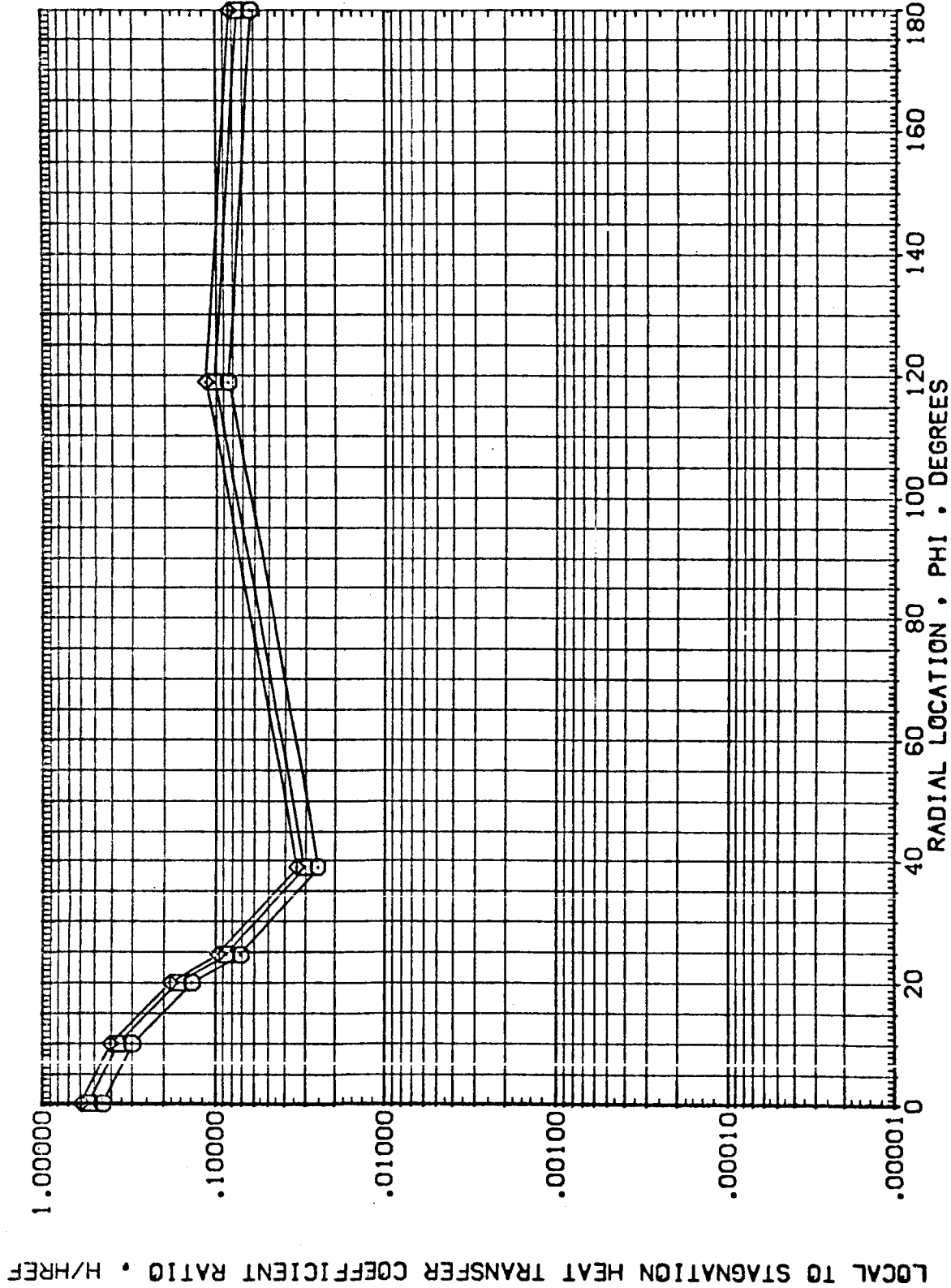


FIG. 47 ORBITTER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.320 X/L = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|POI) ARC 3.5-178 IH3 0+T+S
 (AE|POI) ARC 3.5-178 IH3 0+T+S
 (BE|POI) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RN/L 1.500
 1.500
 1.500

HAV/HT 1.000
 .900
 .850

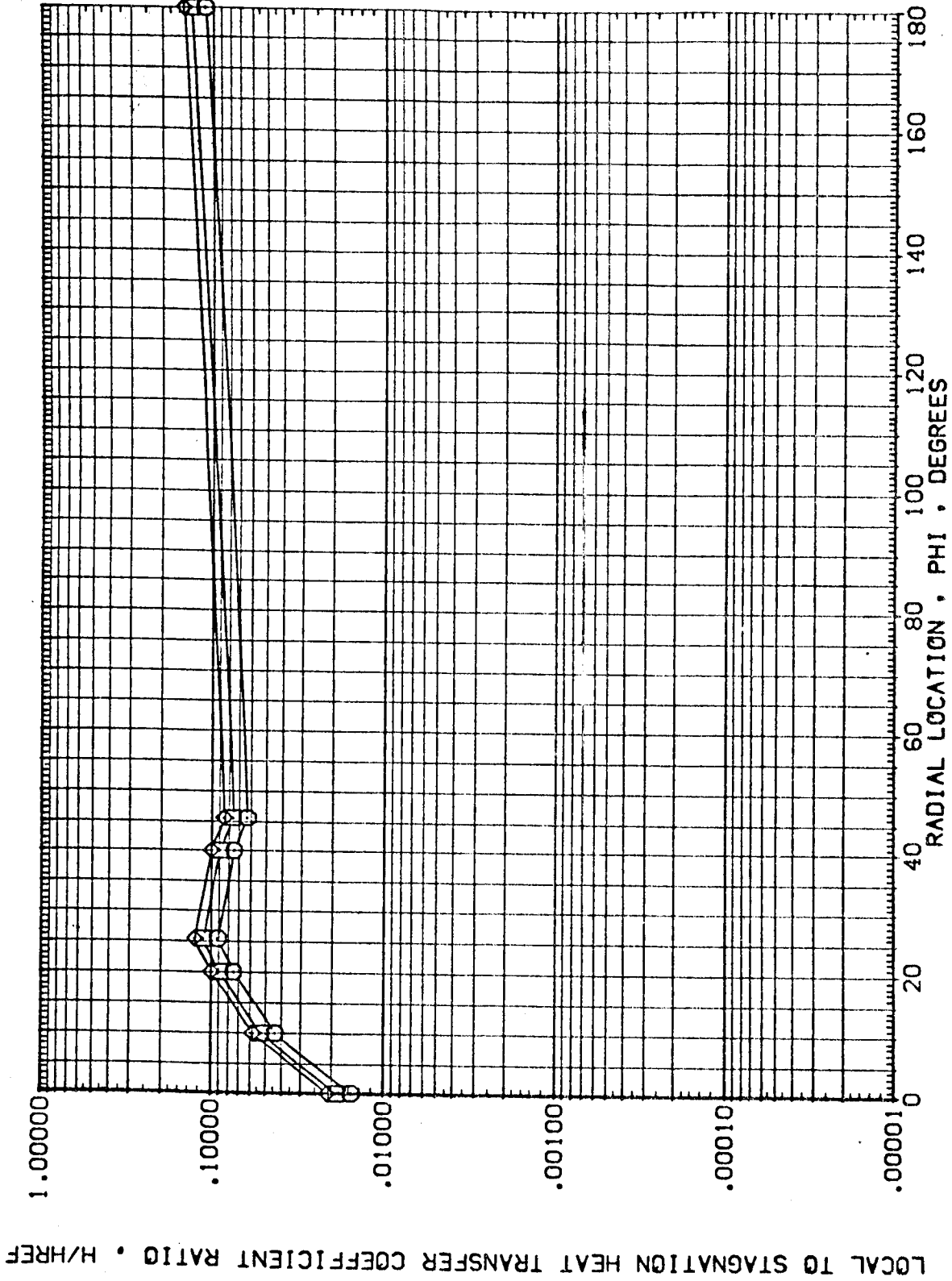


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIPOI) ARC 3.5-178 IH3 0+1+S
 (AEIPOI) ARC 3.5-178 IH3 0+1+S
 (BEIPOI) ARC 3.5-178 IH3 0+1+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RVL MAV/HT

.000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

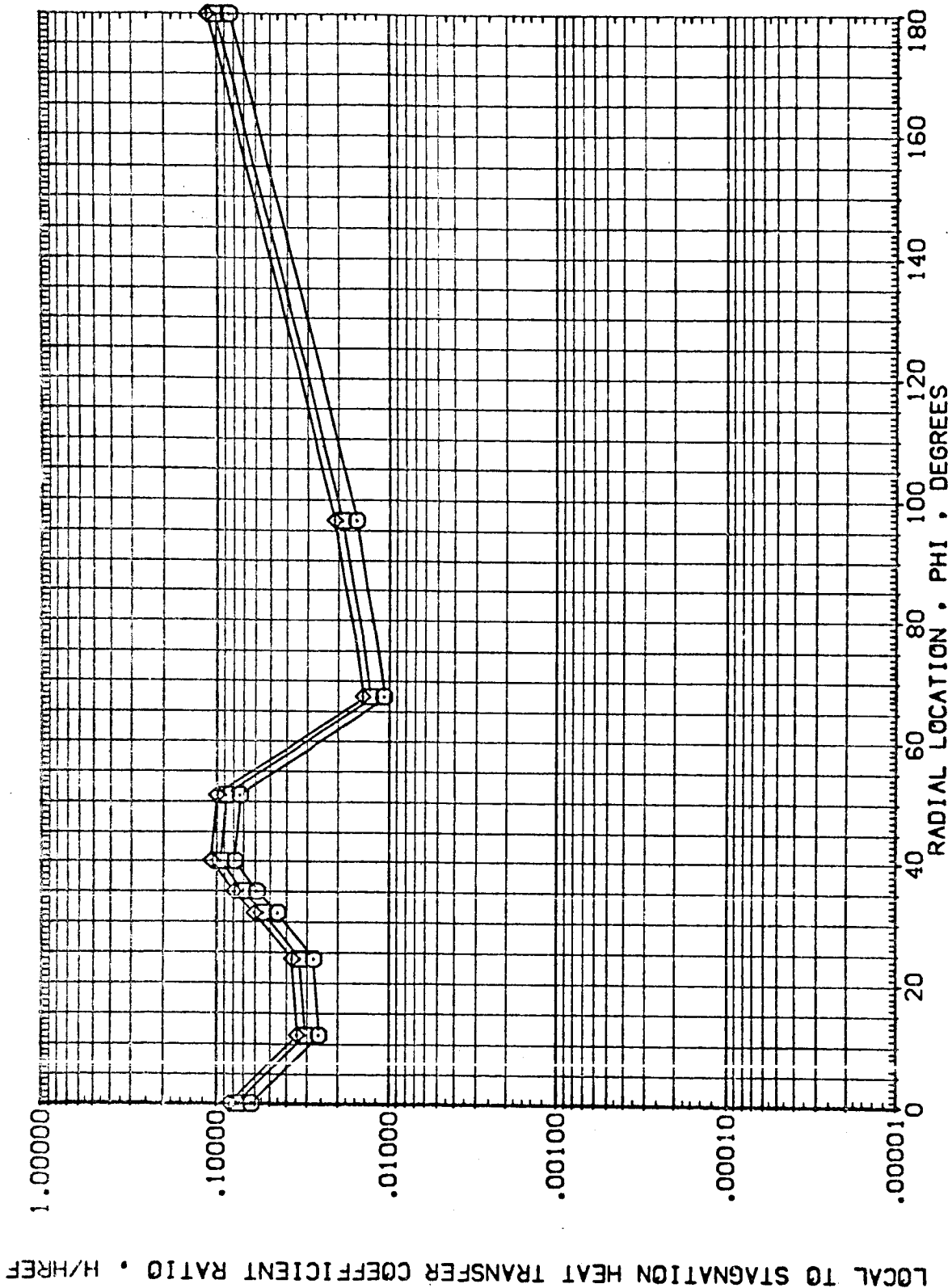


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI|POI) ARC 3.5-178 IH3 O+T+S
 (AEI|POI) ARC 3.5-178 IH3 O+T+S
 (BEI|POI) ARC 3.5-178 IH3 O+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

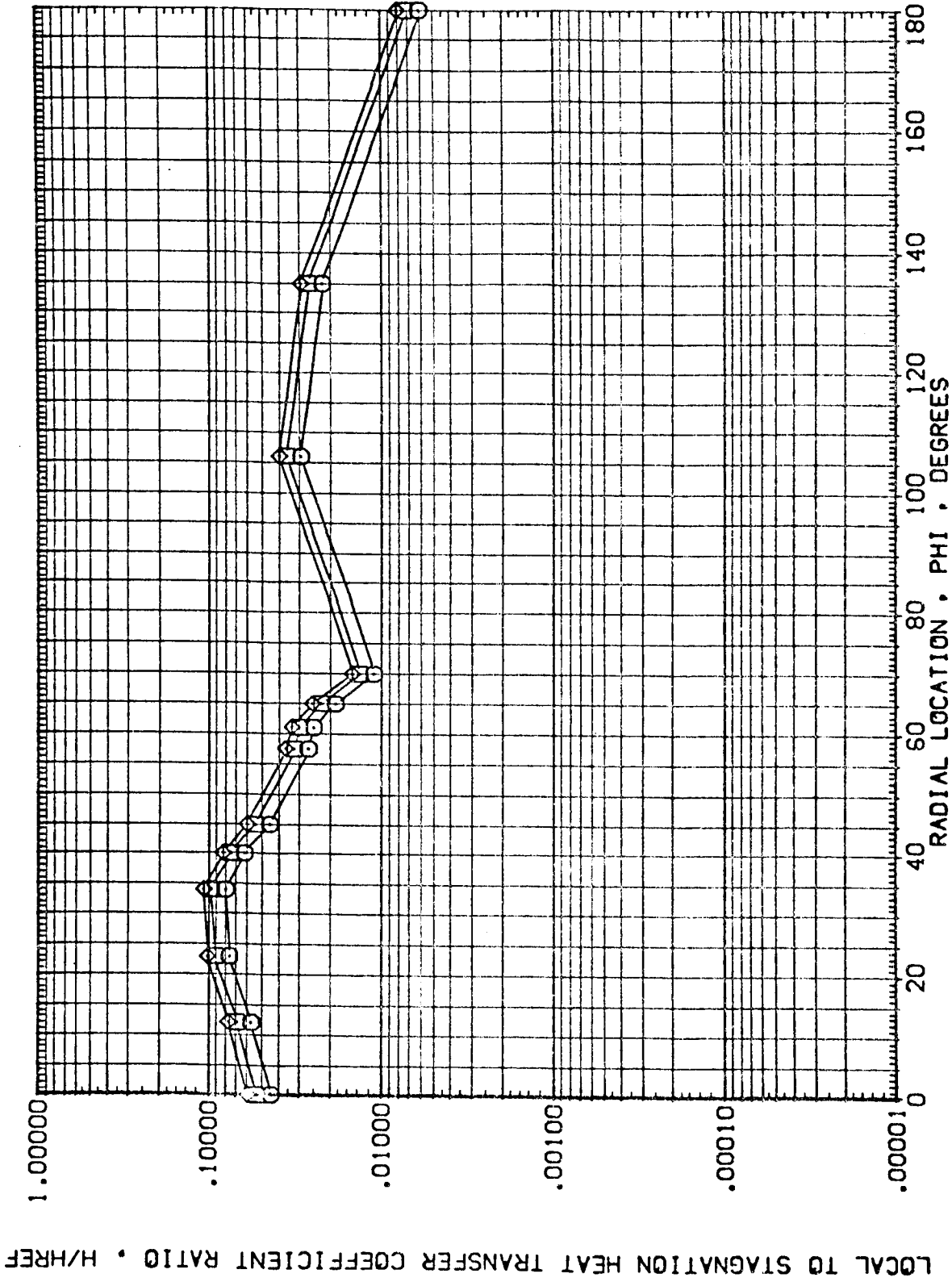


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|PO|) ARC 3.5-178 IH3 O+T+S
 (AE|PO|) ARC 3.5-178 IH3 O+T+S
 (BE|PO|) ARC 3.5-178 IH3 O+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000
 BETA .000
 RV/L 1.500

HAW/HT
 1.000
 .900
 .850

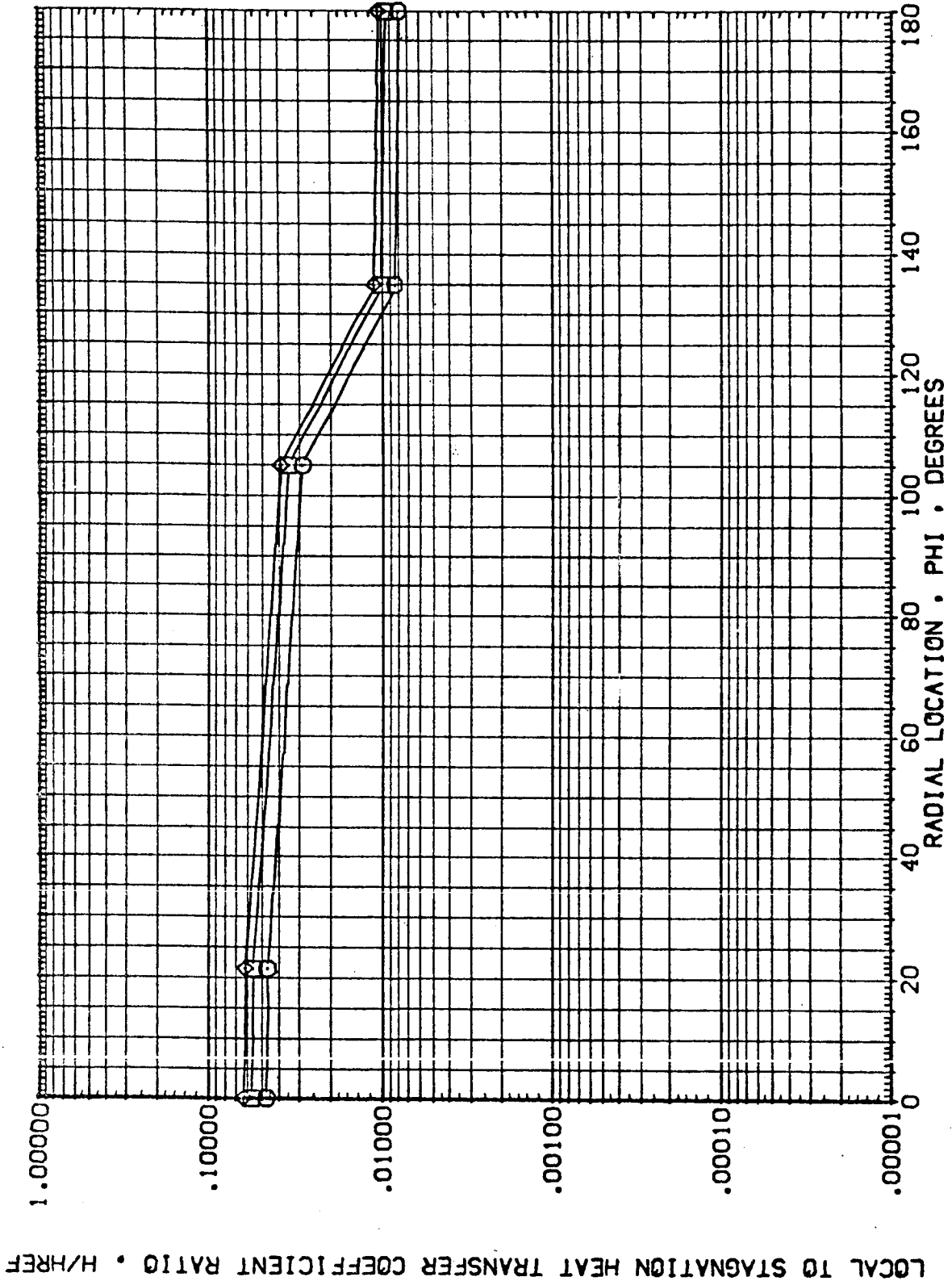


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI|P0|) ARC 3.5-178 IH3 0+1+S
 (AE|P0|) ARC 3.5-178 IH3 0+1+S
 (BE|P0|) ARC 3.5-178 IH3 0+1+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA R/V/L

HAV/HT
 1.000
 .900
 .850

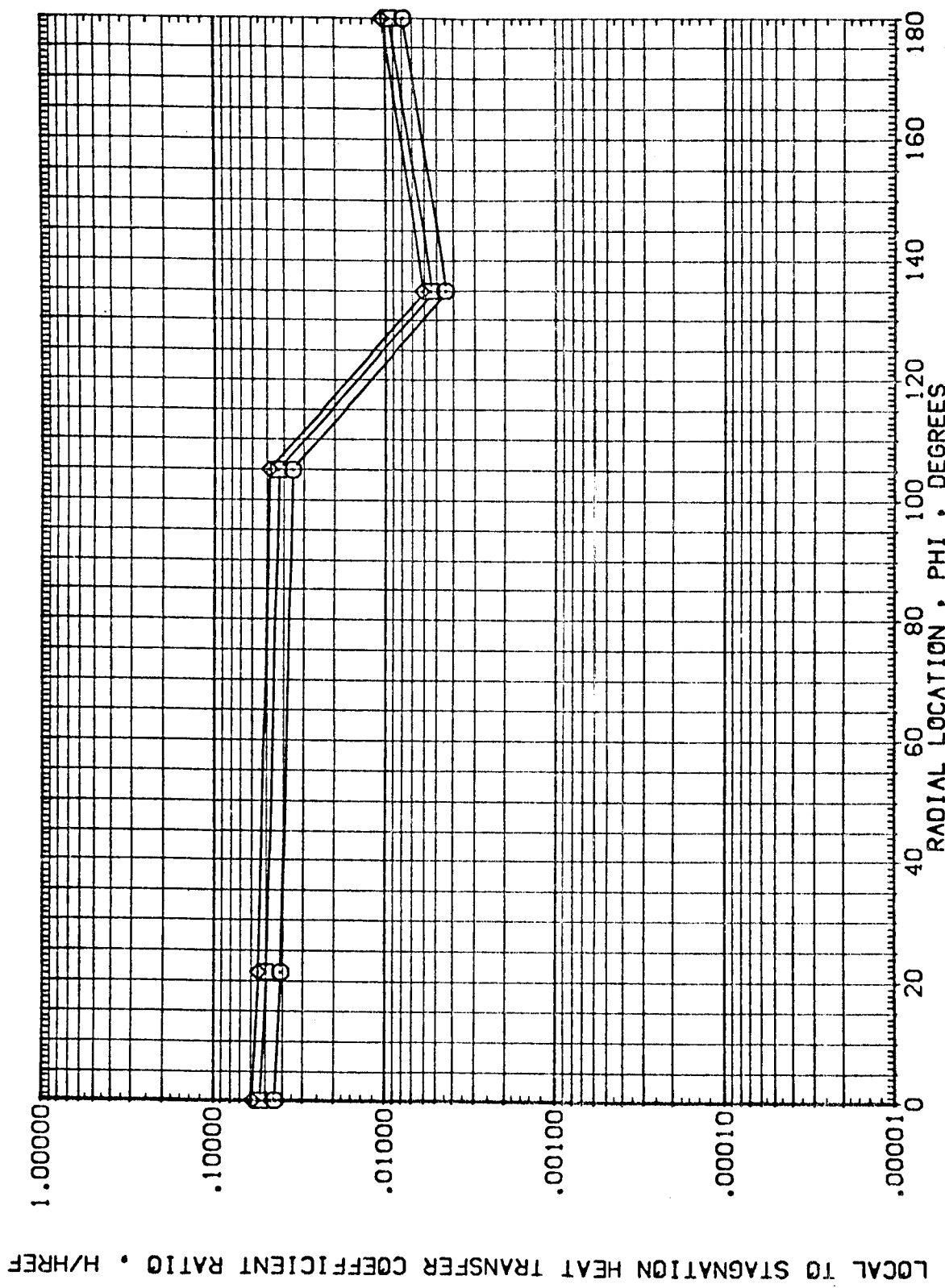


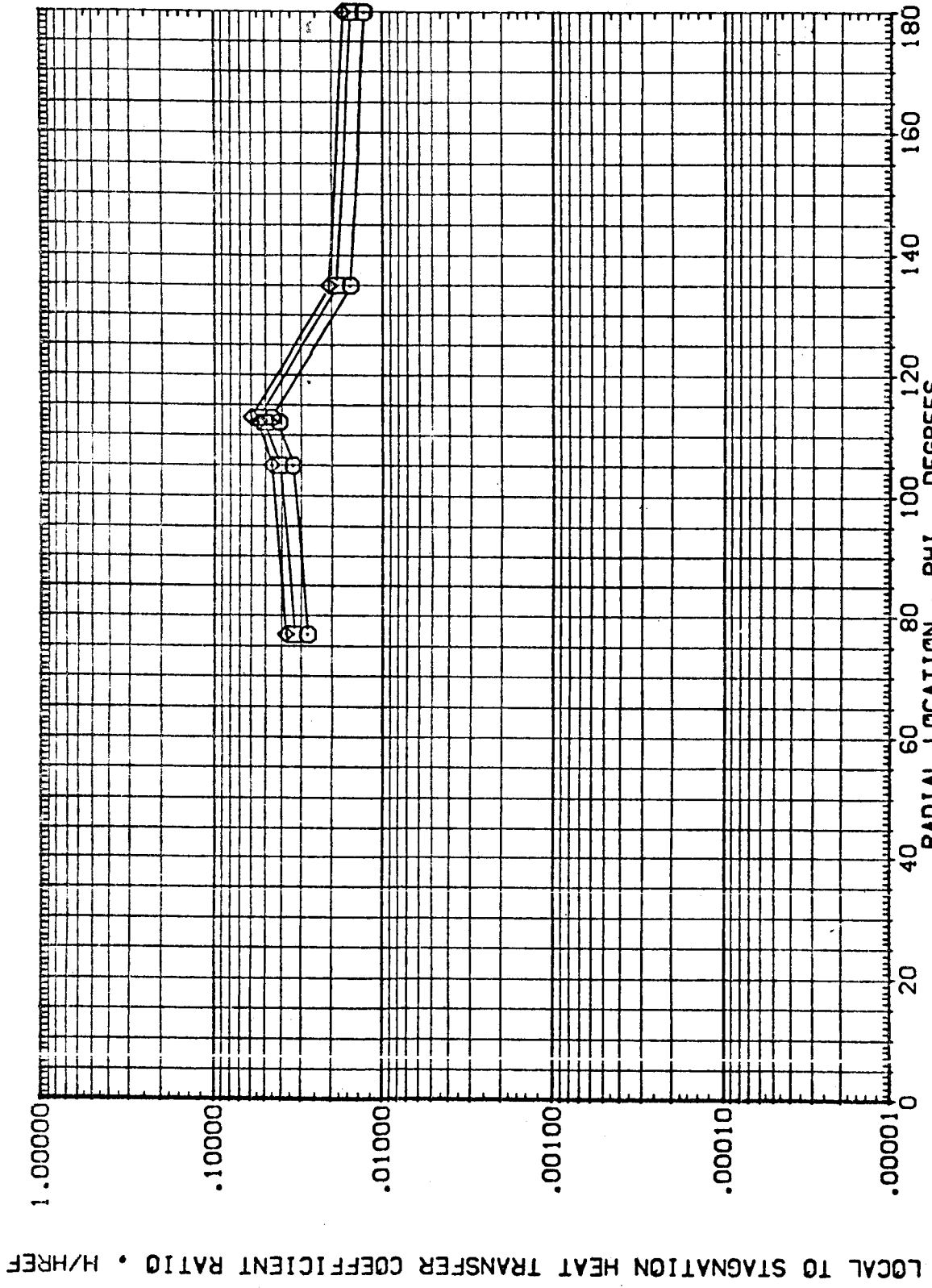
FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|PO1) □ ARC 3.5-178 IH3 0+T+S
 (AE|PO1) □ ARC 3.5-178 IH3 0+T+S
 (BE|PO1) ◇ ARC 3.5-178 IH3 0+T+S

ALPHA BETA R/V/L H/V/H/T
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .650

ORBITTER FUSELAGE
 ORBITTER FUSELAGE
 ORBITTER FUSELAGE



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FIG. 47 ORBITTER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIPOI) ARC 3.5-178 IH3 O+T+S
 (AEIPOI) ARC 3.5-178 IH3 O+T+S
 (BEIPOI) ARC 3.5-178 IH3 O+T+S

ORBITER FUSELAGE ALPHA BETA RV/L HAV/HT
 ORBITER FUSELAGE .000 .000 1.500 1.000
 ORBITER FUSELAGE .000 .000 1.500 .900
 ORBITER FUSELAGE .000 .000 1.500 .850

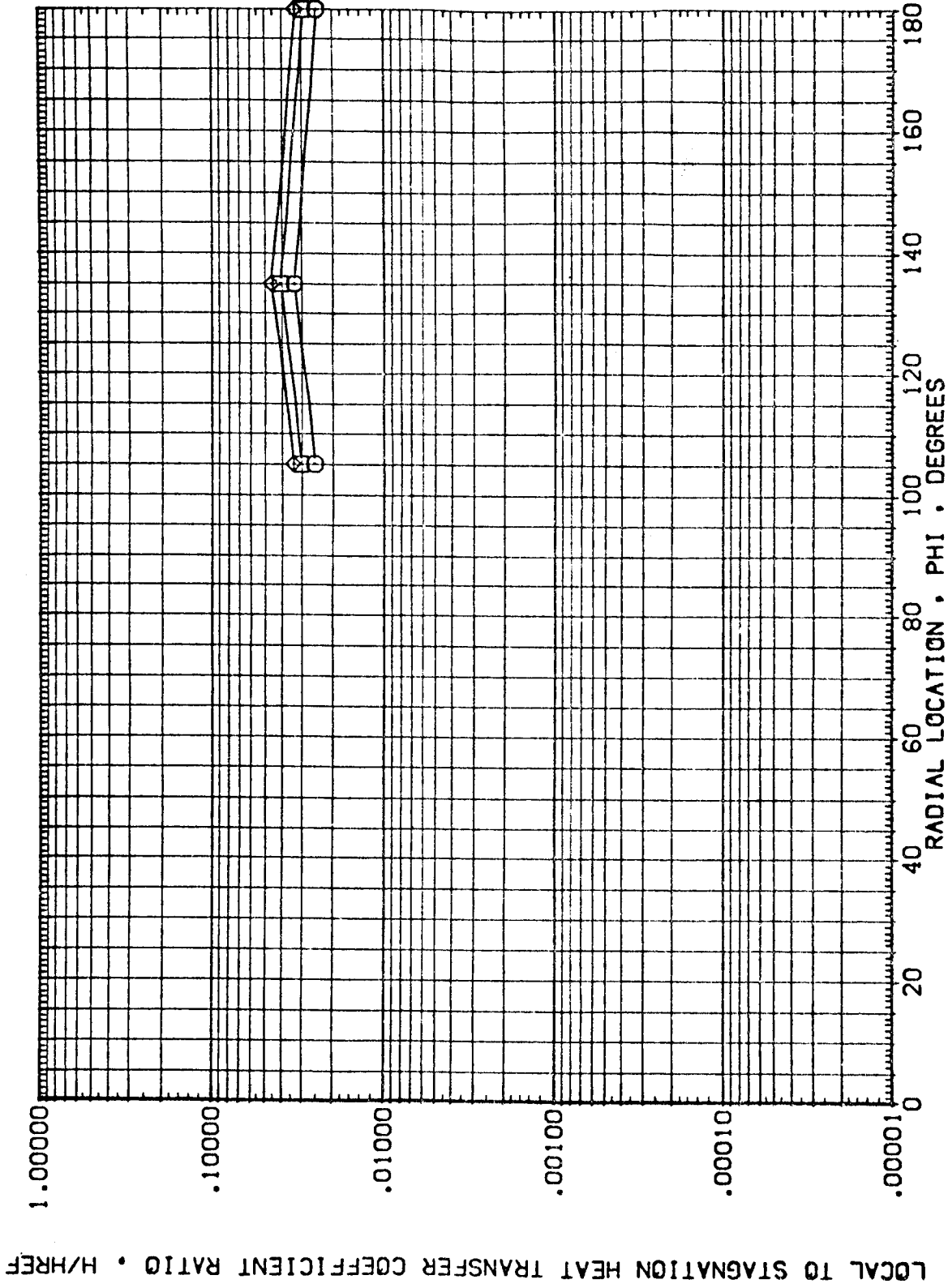


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIPOI) AR: 3.5-178 IH3 0+1+S
 (AEIPOI) AR: 3.5-178 IH3 0+1+S
 (BEIPOI) AR: 3.5-178 IH3 0+1+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

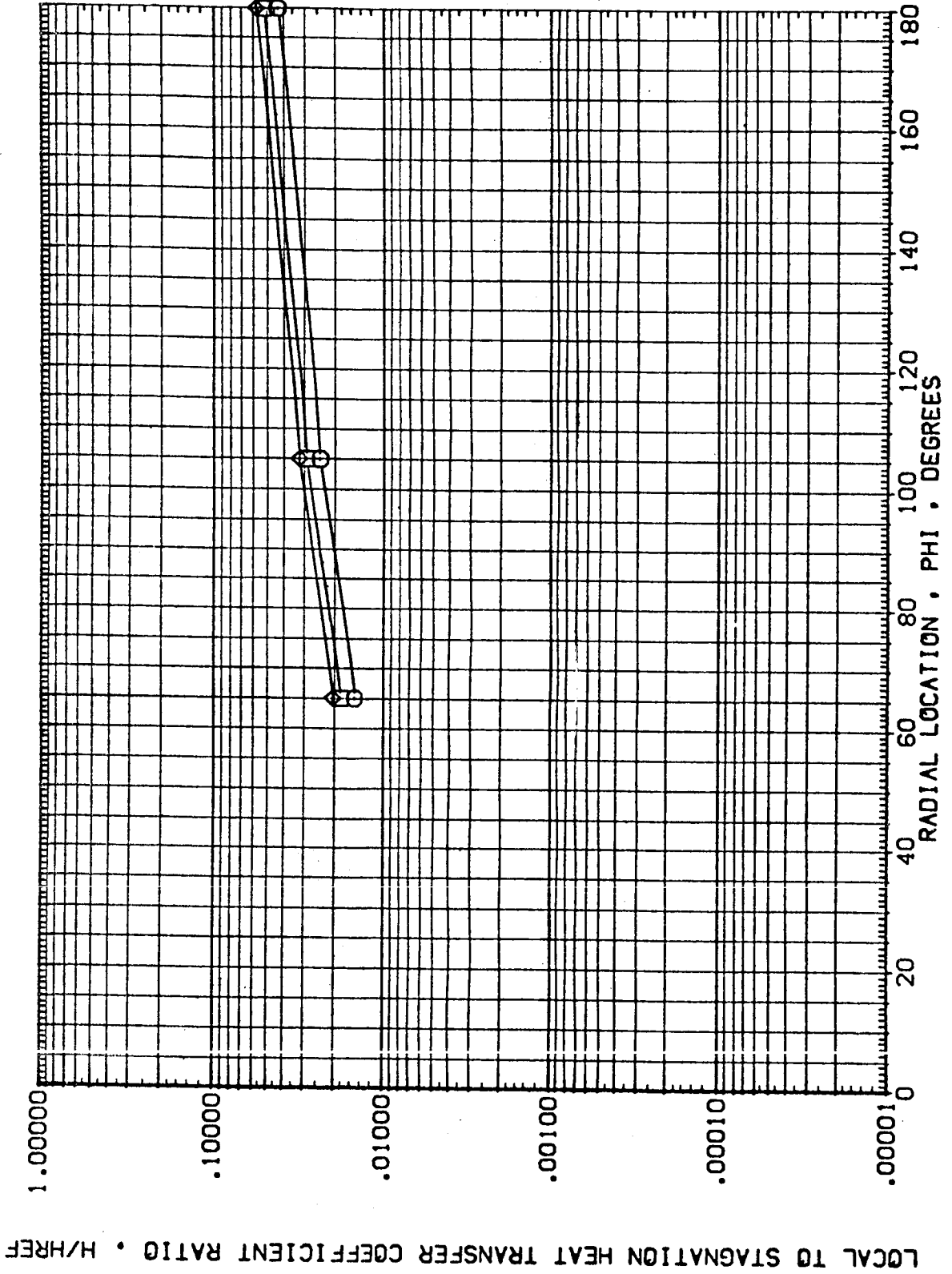


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|PO1) ARC 3.5-178 IH3 0+T+S
 (AE|PO1) ARC 3.5-178 IH3 0+T+S
 (BE|PO1) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RAVL HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

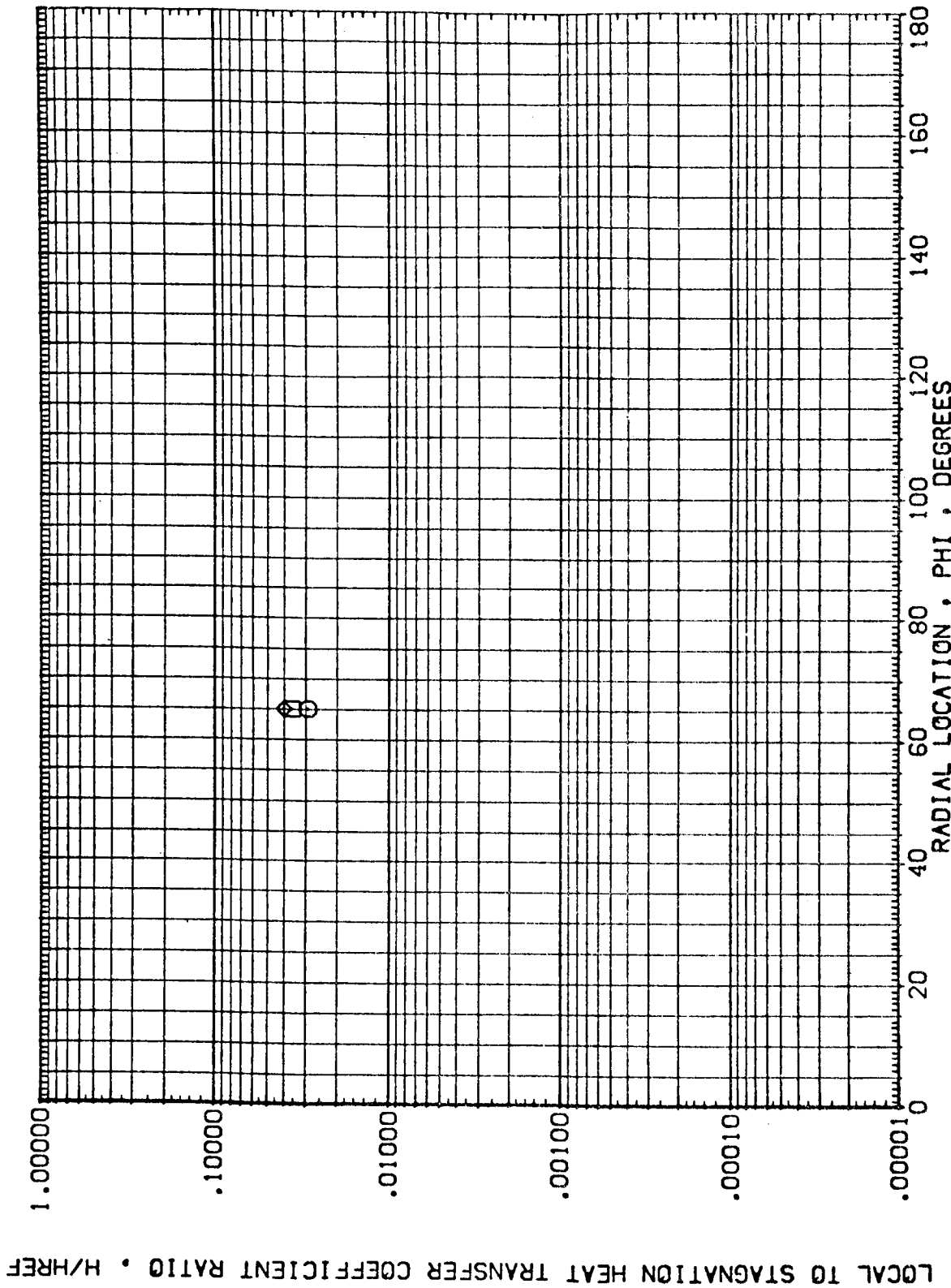


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .900

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(RE P02)	ARC 3.5-178 IH3 0+T+S	.000	.000	5.000	1.000
(AE P02)	ARC 3.5-178 IH3 0+T+S	.000	.000	5.000	.900
(BE P02)	ARC 3.5-178 IH3 0+T+S	.000	.000	5.000	.850

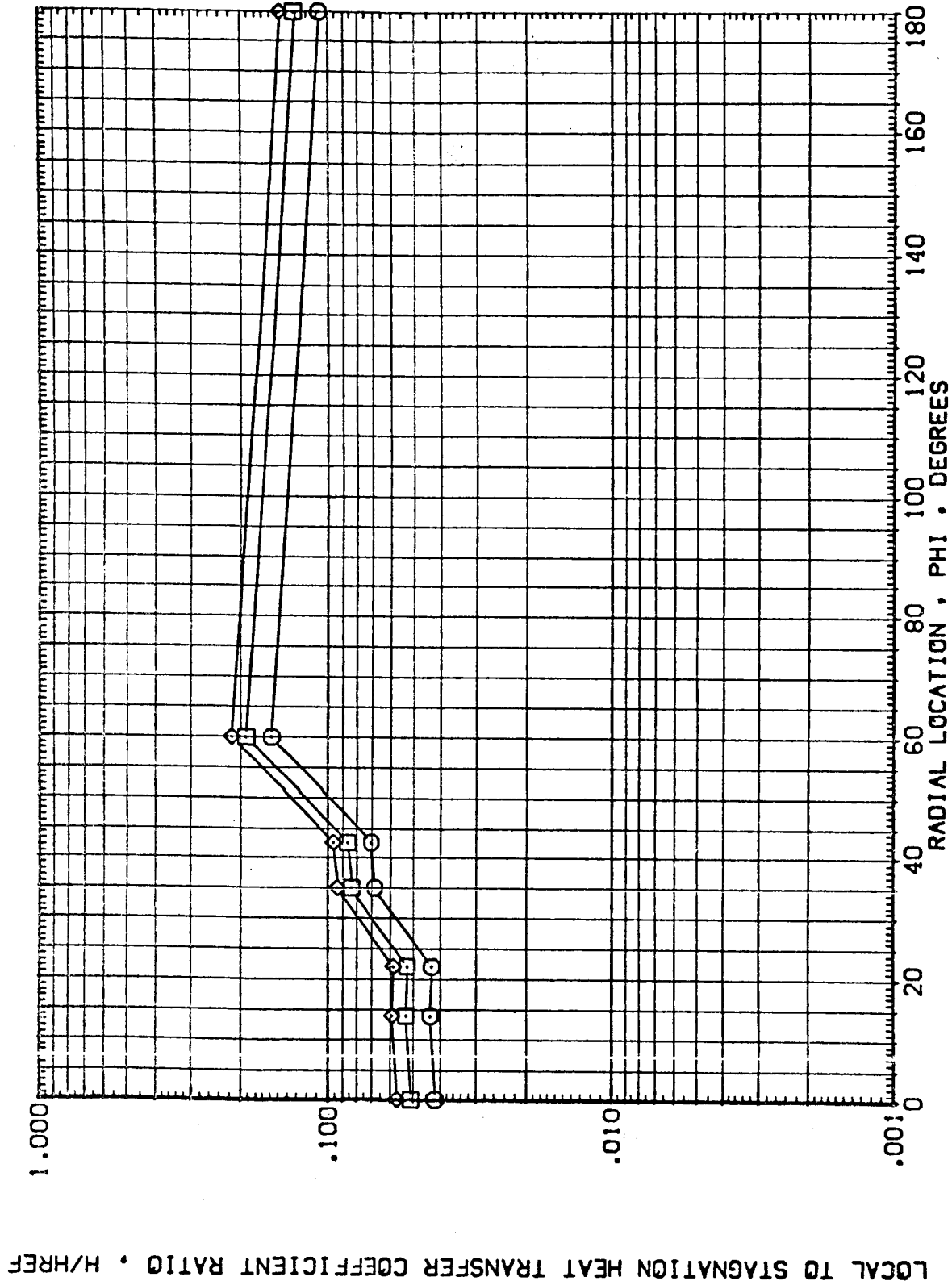


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|PO2) ARC 3.5-178 IH3 0+T+S
 (AE|PO2) ARC 3.5-178 IH3 0+T+S
 (BE|PO2) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAW/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

ORBITTER FUSELAGE
 ORBITTER FUSELAGE
 ORBITTER FUSELAGE

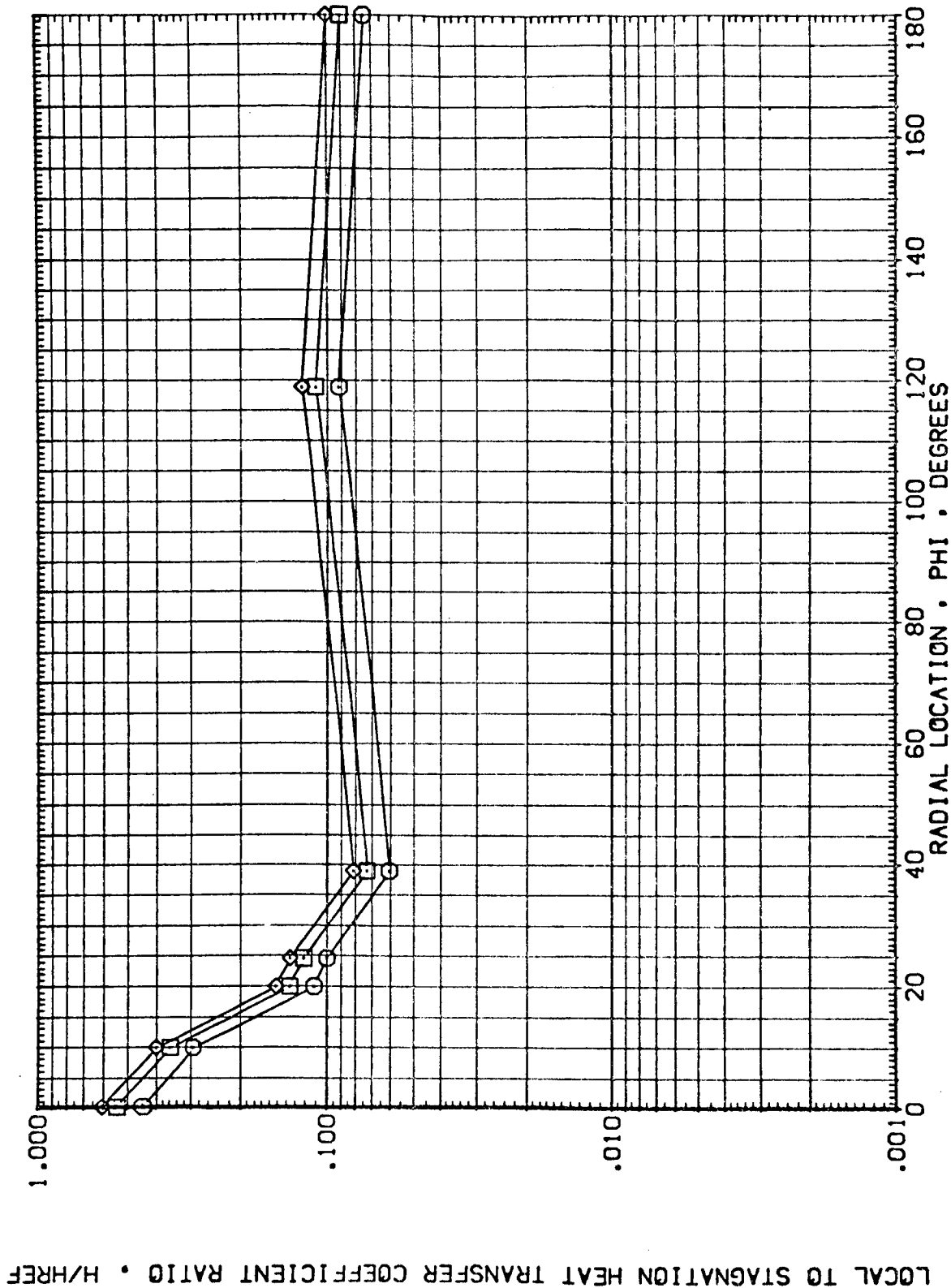





FIG. 47 ORBITTER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP02)  ARC 3.5-178 IH3 0+T+S
 (AEIP02)  ARC 3.5-178 IH3 0+T+S
 (BEIP02)  ARC 3.5-178 IH3 0+T+S

ALPHA .000
 BETA .000
 RV/L 5.000
 HAW/HT 1.000
 .900
 .850

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

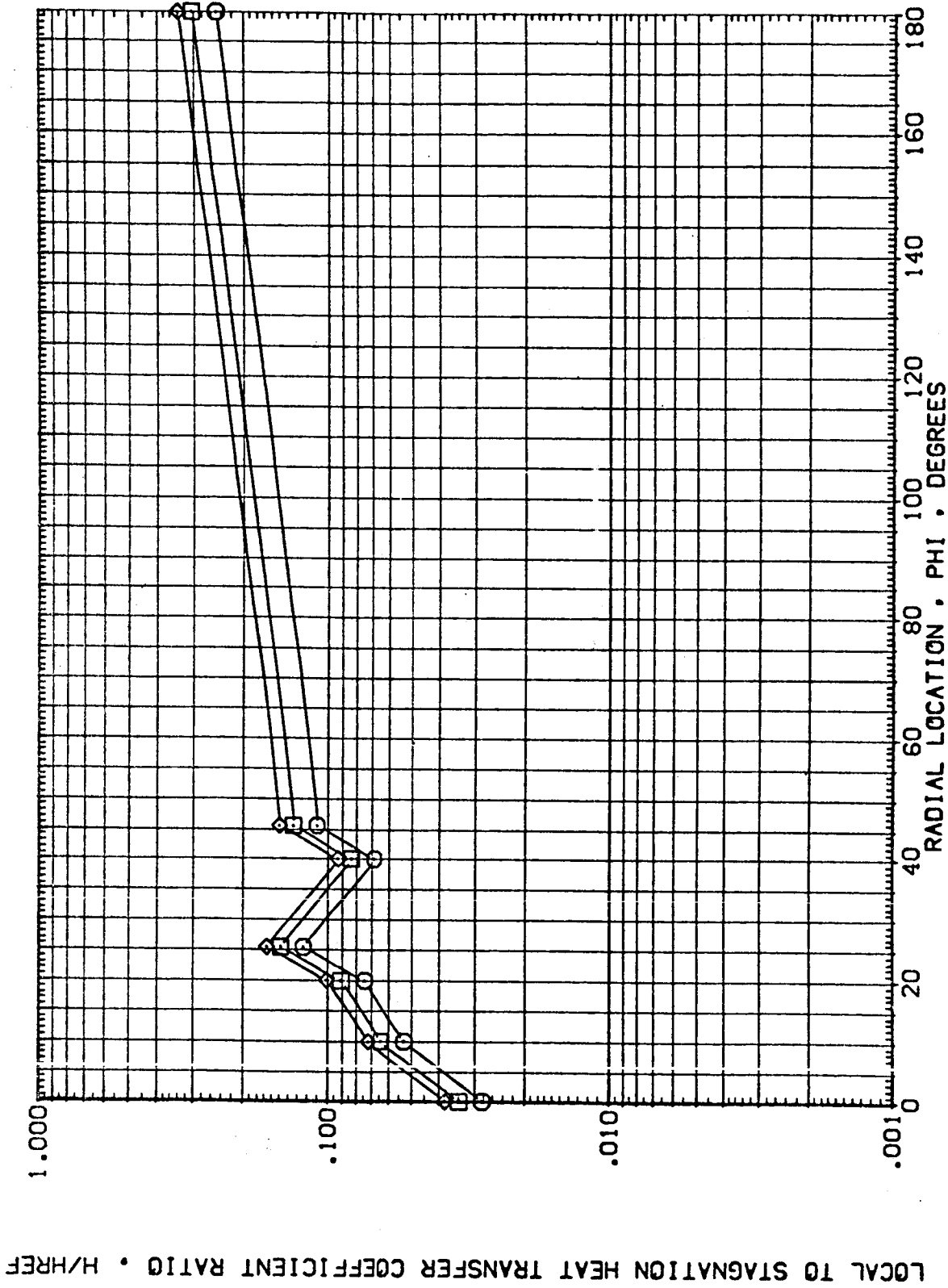


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIPO2) ARC 3.5-178 IH3 0+1+S
 (AEIPO2) ARC 3.5-178 IH3 0+1+S
 (BEIPO2) ARC 3.5-178 IH3 0+1+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

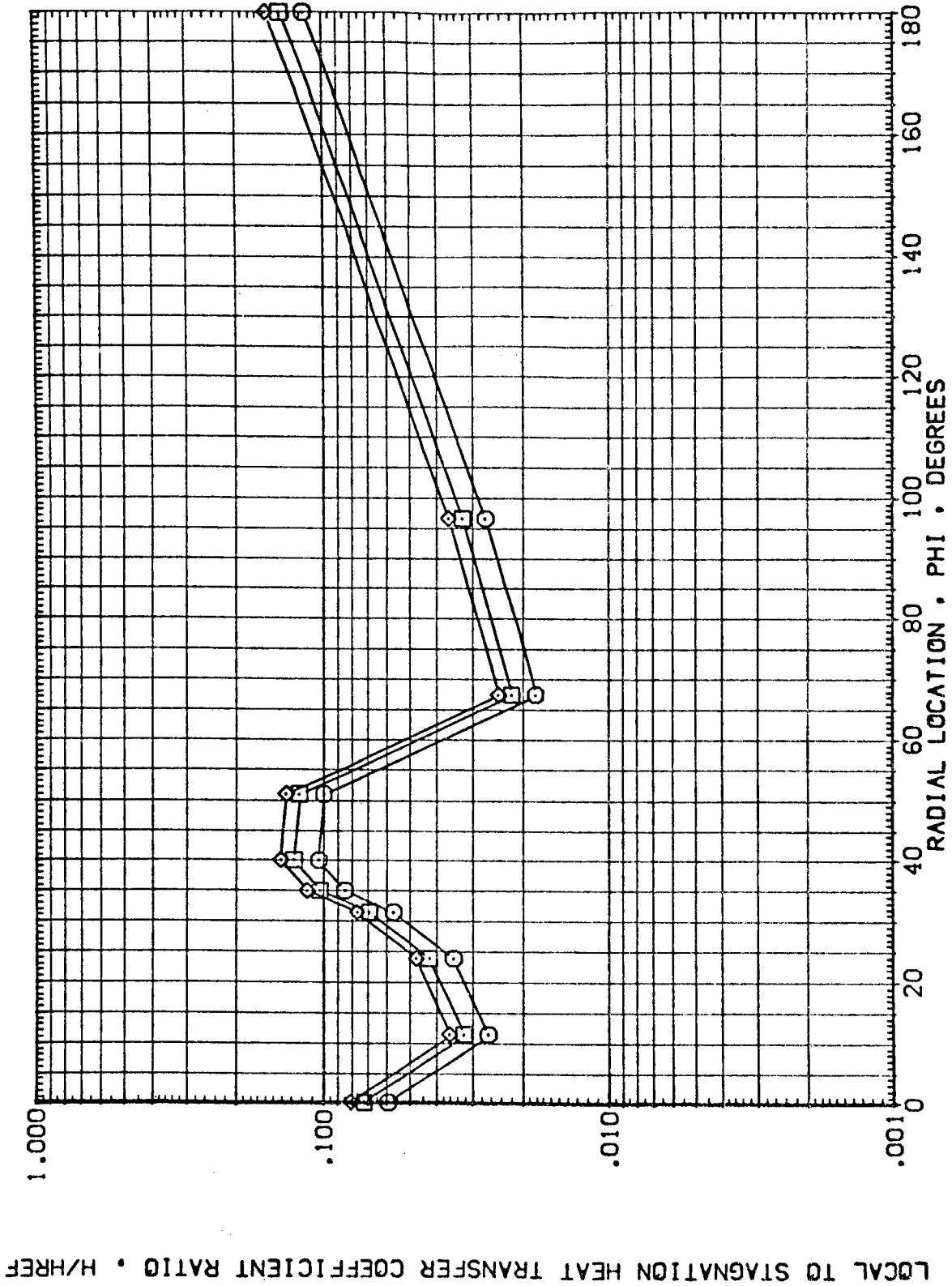


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .200

DATA SET SYMBOL (CONFIGURATION DESCRIPTION)
 (RE)PO2) ARC 3.5-178 IH3 0+T+S
 (AE)PO2) ARC 3.5-178 IH3 0+T+S
 (BE)PO2) ARC 3.5-178 IH3 0+T+S

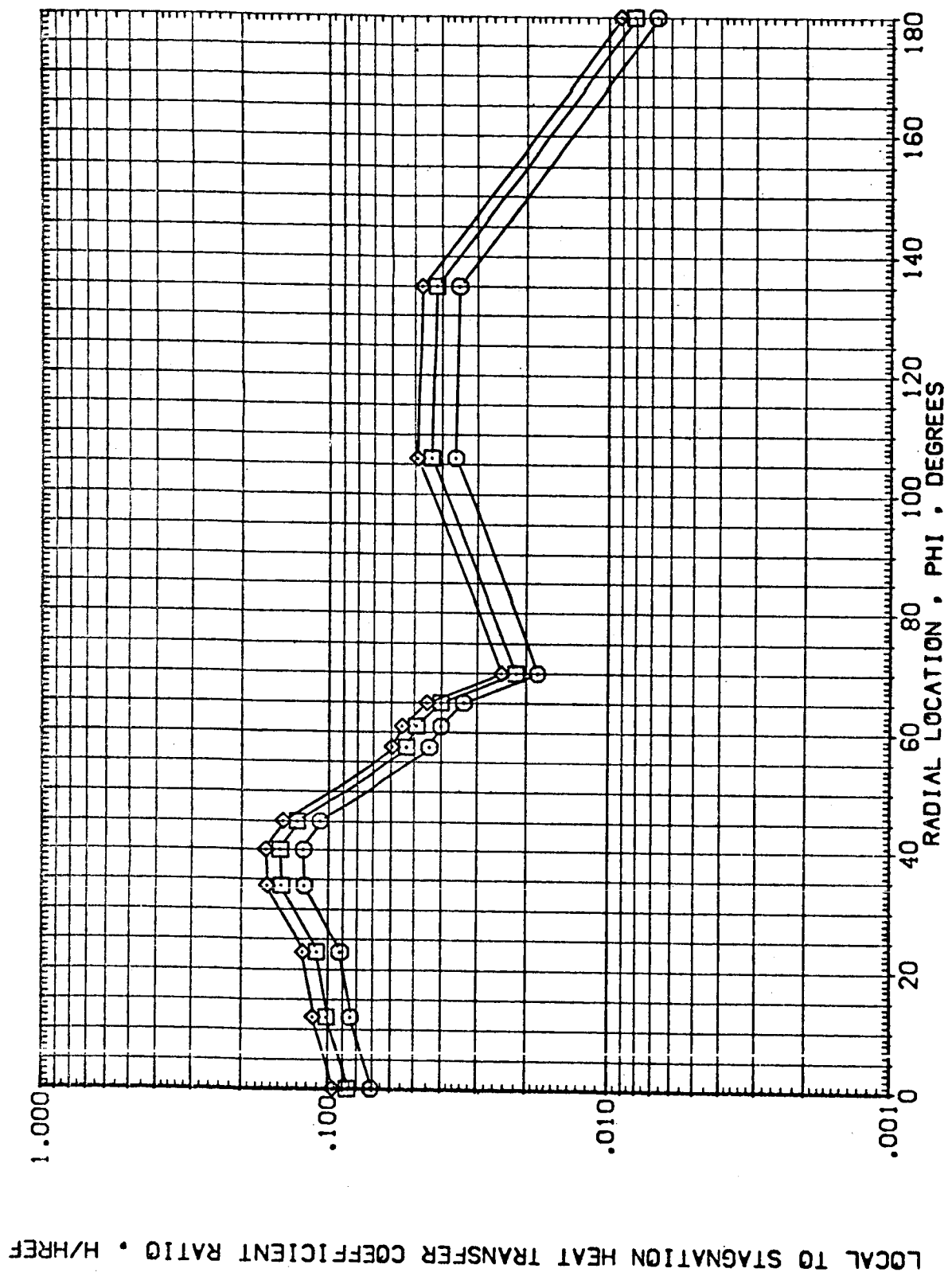
ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RN/VL 5.000
 5.000
 5.000

HAV/HT 1.000
 .900
 .850



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FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI/PO2) ARC 3.5-178 IH3 0+T+S
 (AEI/PO2) ARC 3.5-178 IH3 0+T+S
 (BEI/PO2) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RN/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

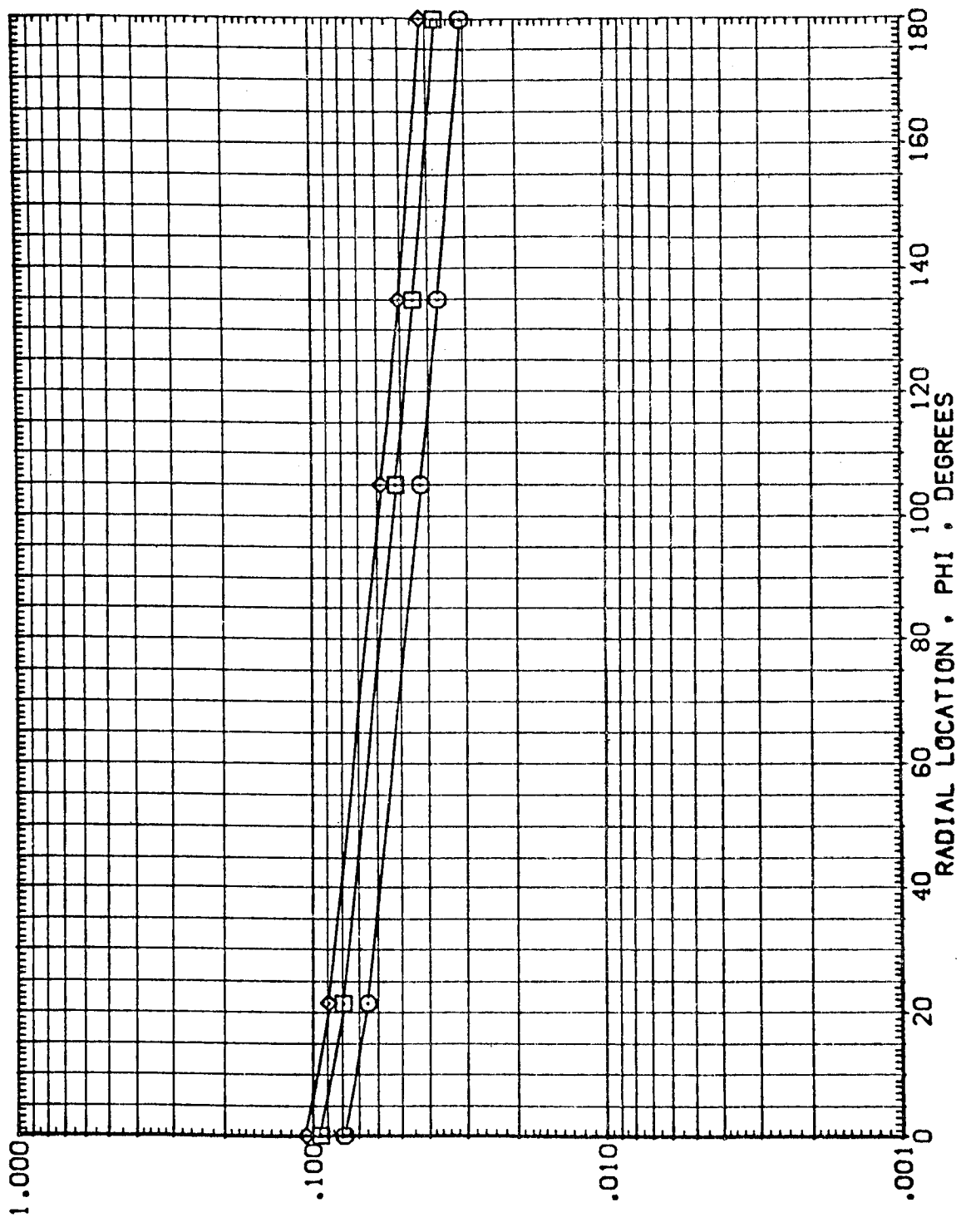
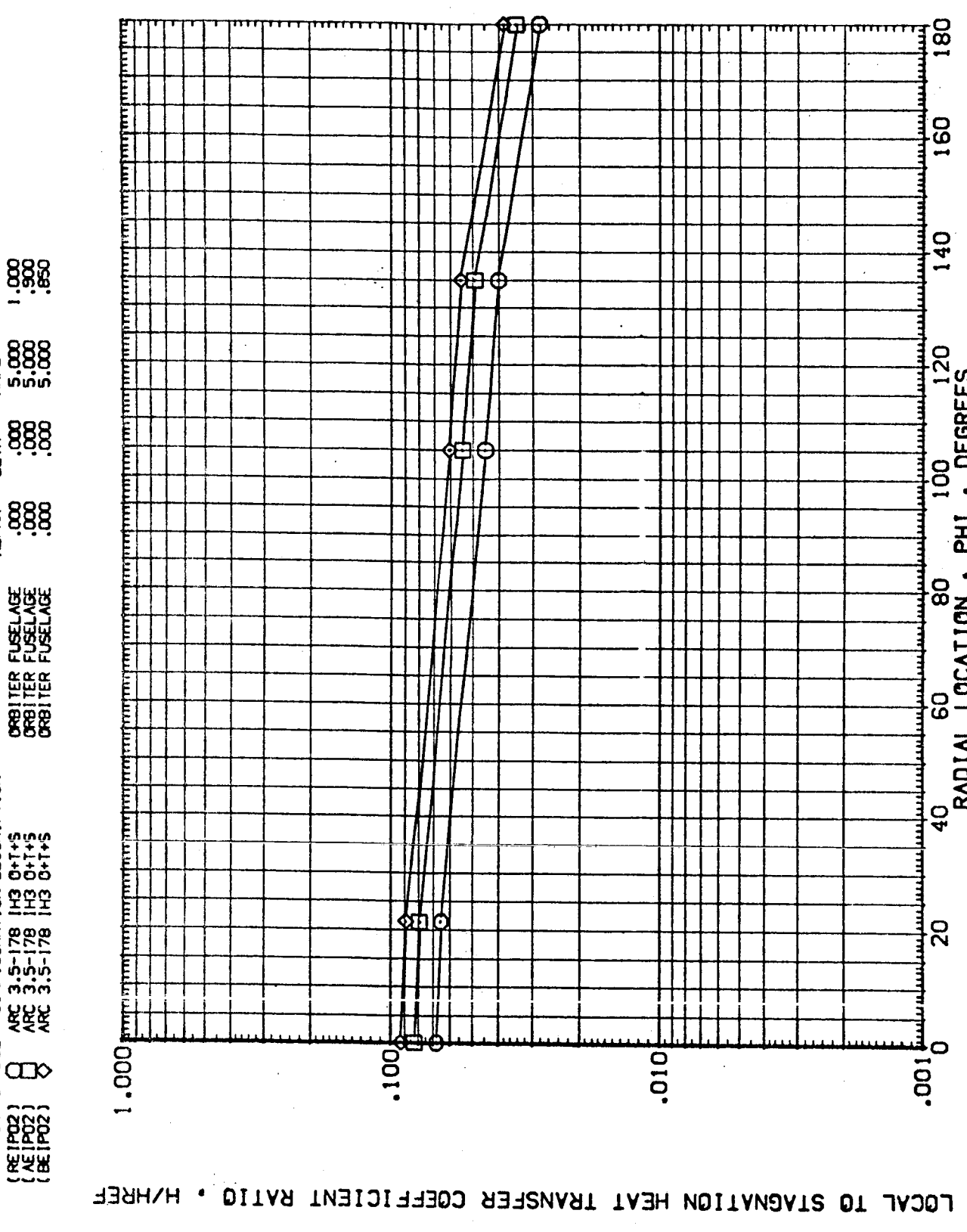


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIPO2) □ ARC 3.5-178 IH3 0+T+S
 (AEIPO2) □ ARC 3.5-178 IH3 0+T+S
 (BEIPO2) ◇ ARC 3.5-178 IH3 0+T+S

ALPHA BETA R/V/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .500
 .000 .000 5.000 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE)PO2 ARC 3.5-178 IH3 0+T+S
 (AE)PO2 ARC 3.5-178 IH3 0+T+S
 (BE)PO2 ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

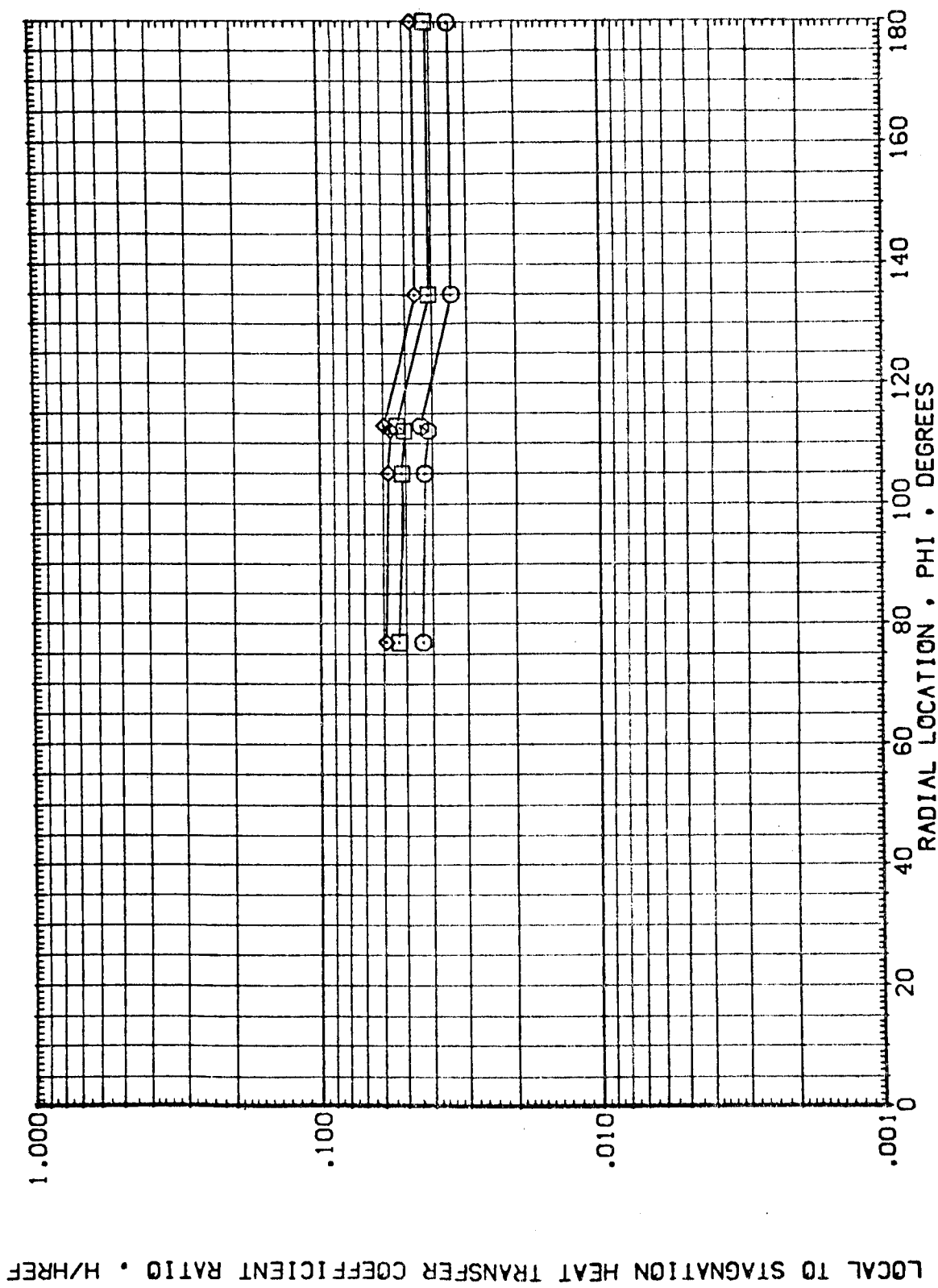


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|PO2) ◯ ARC 3.5-178 IH3 O+T+S
 (AE|PO2) ◻ ARC 3.5-178 IH3 O+T+S
 (BE|PO2) ◇ ARC 3.5-178 IH3 O+T+S

ALPHA BETA RNVL HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

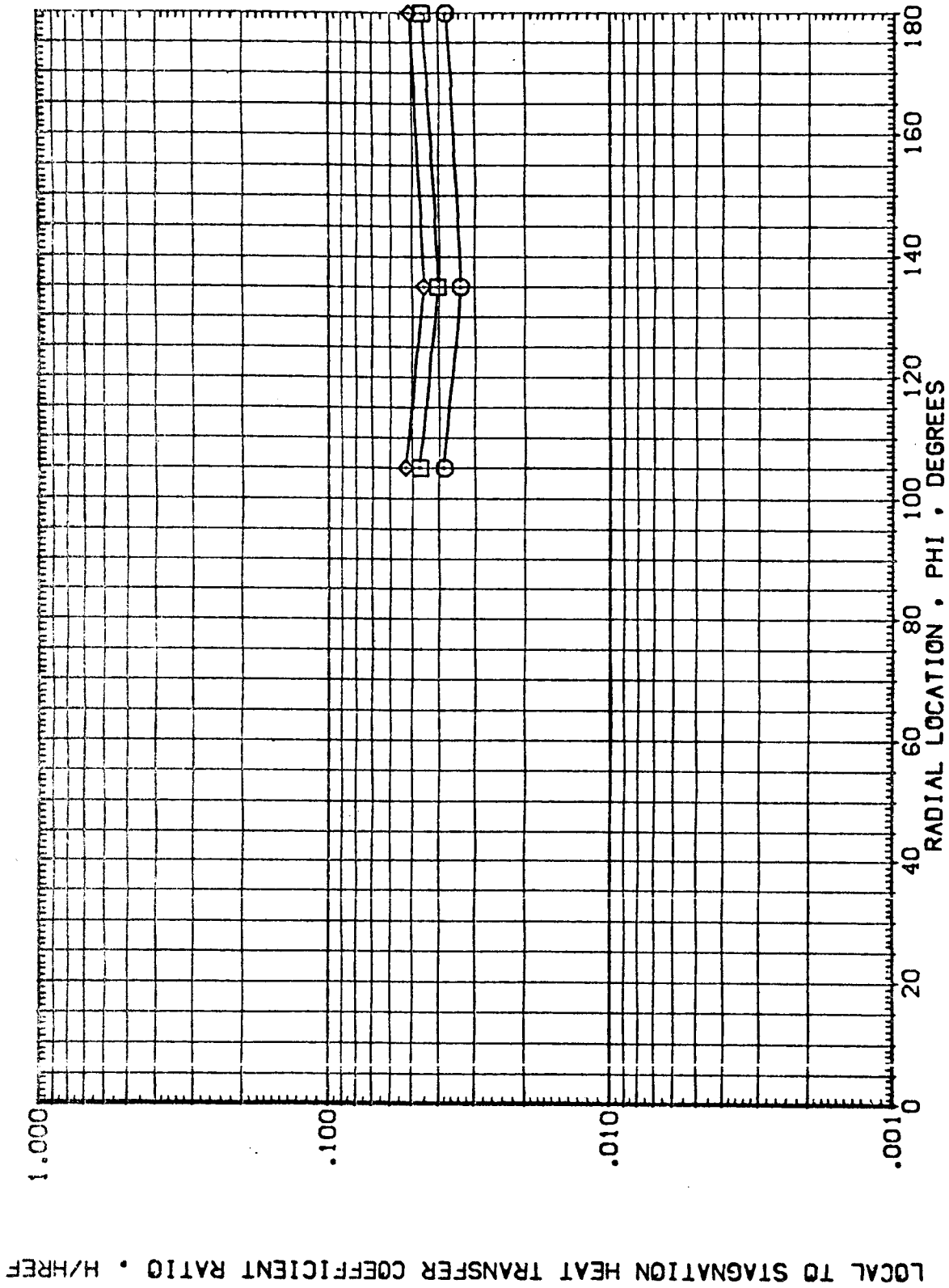


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|PO2) □ ARC 3.5-178 IH3 0+T+S
 (AE|PO2) ◇ ARC 3.5-178 IH3 0+T+S
 (BE|PO2) ◊ ARC 3.5-178 IH3 0+T+S

ALPHA BETA RNL HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

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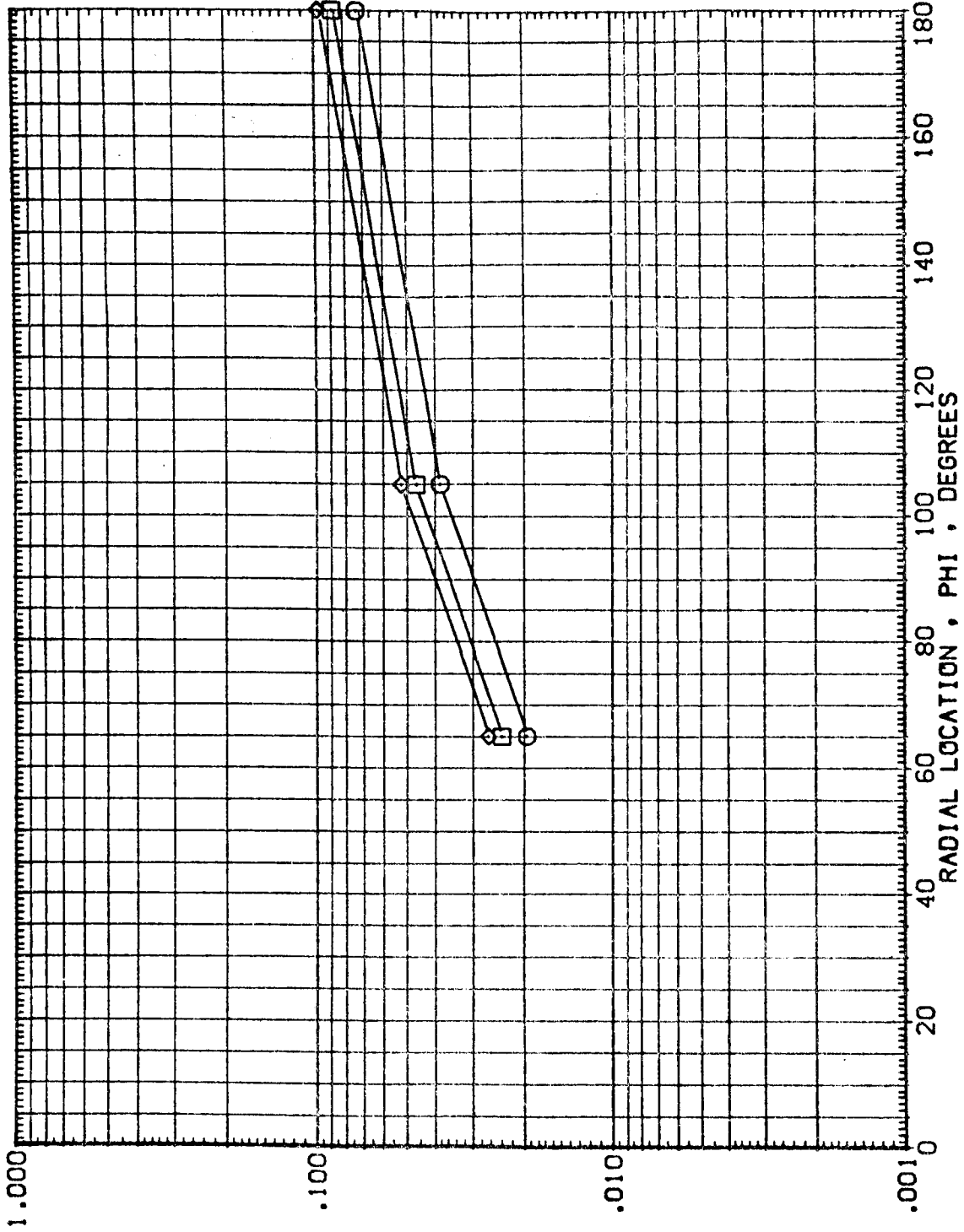


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI P02) ARC 3.5-178 IH3 O+T+S
 (AEI P02) ARC 3.5-178 IH3 O+T+S
 (BEI P02) ARC 3.5-178 IH3 O+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RN/L 5.000
 5.000
 5.000

HAW/HT 1.000
 .900
 .850

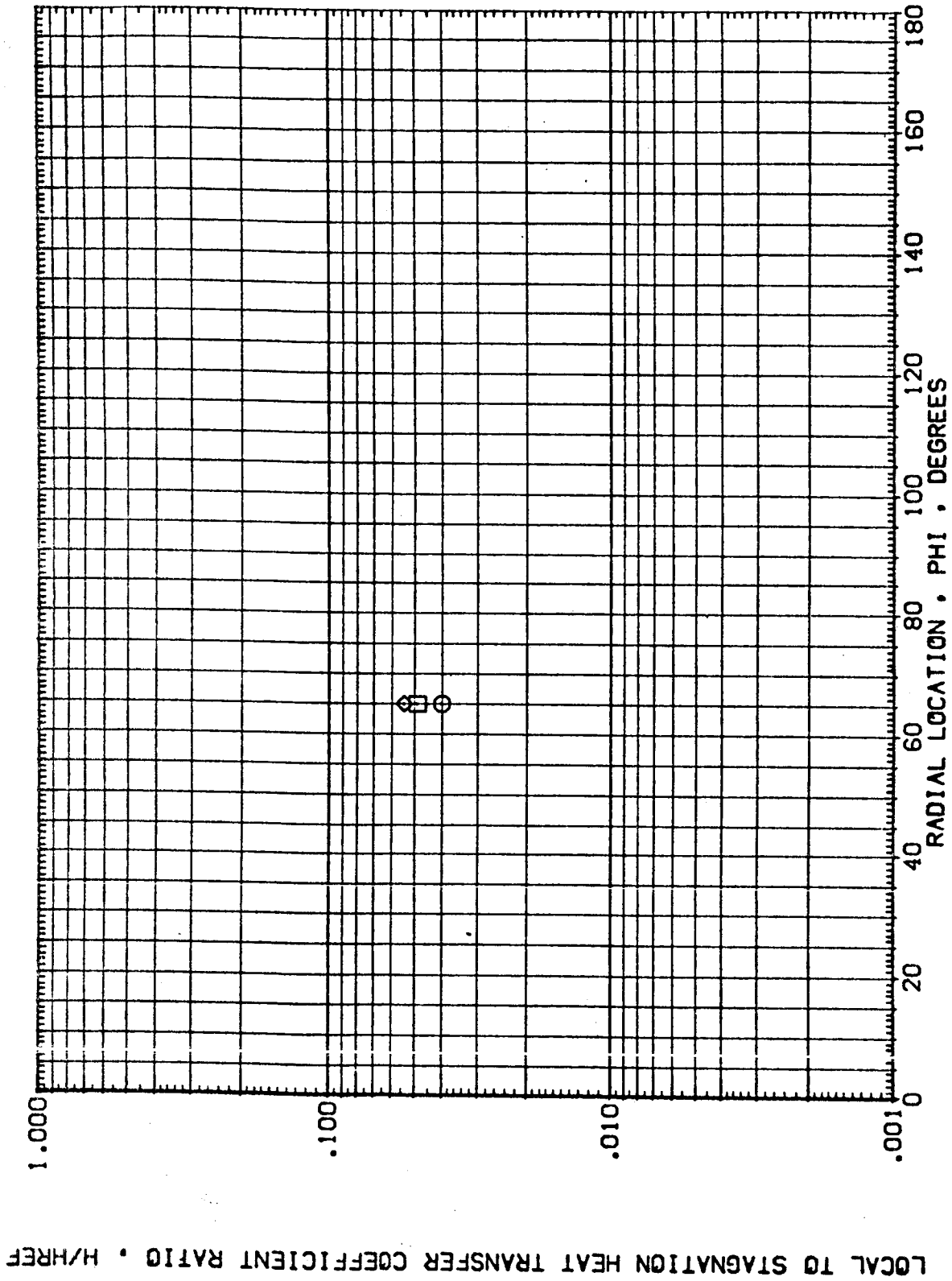


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .900

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REIP03)	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	1.000
(AEIP03)	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	.500
(BEIP03)	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	.950

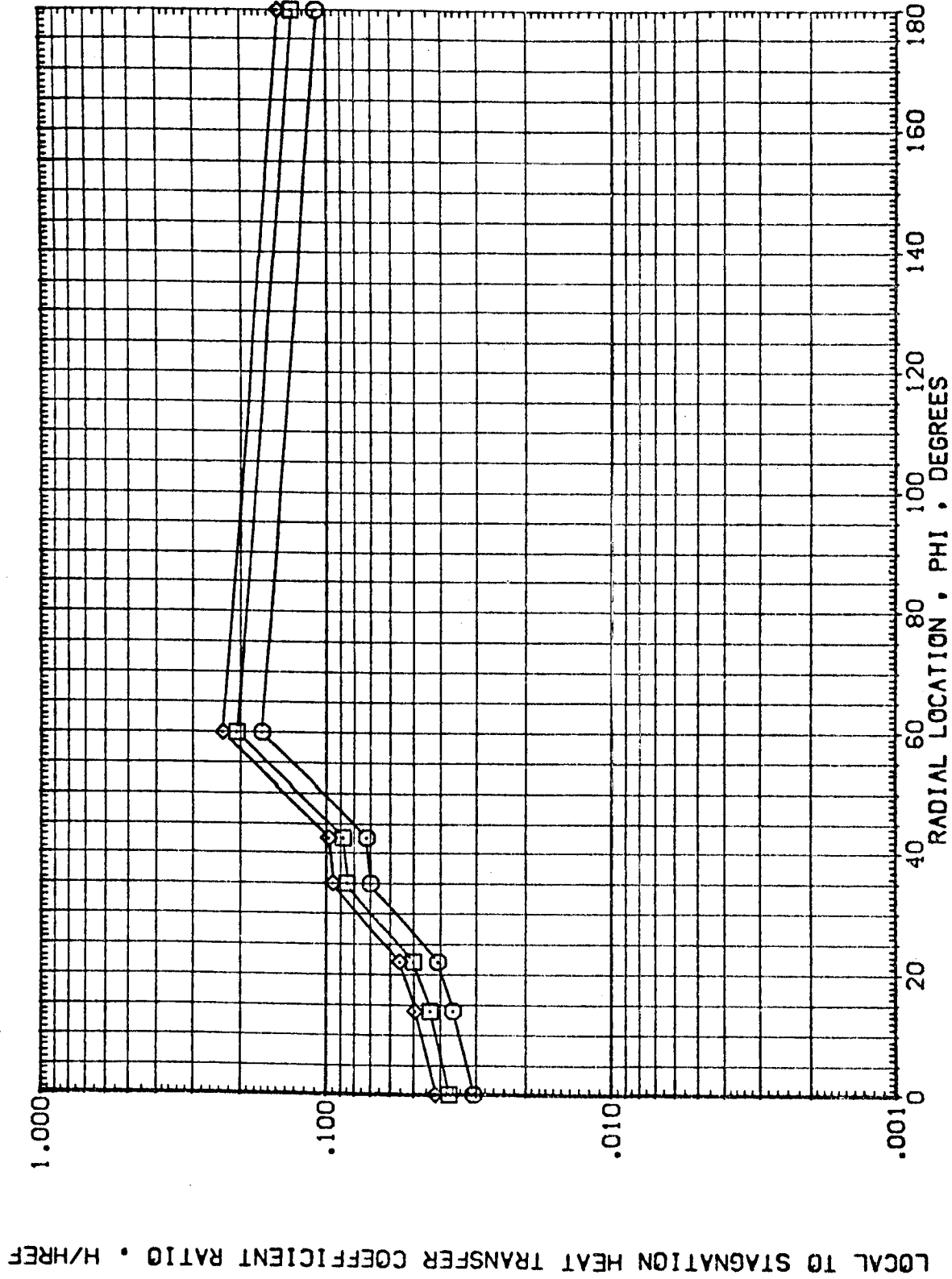


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .050

DATA SET SYMBO	CONFIGURATION DESCRIPTION	ALPHA	BETA	RVL	HAV/HT
(RE) (P03)	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	1.000
(AL) (P03)	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	.900
(BE) (P03)	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	.650

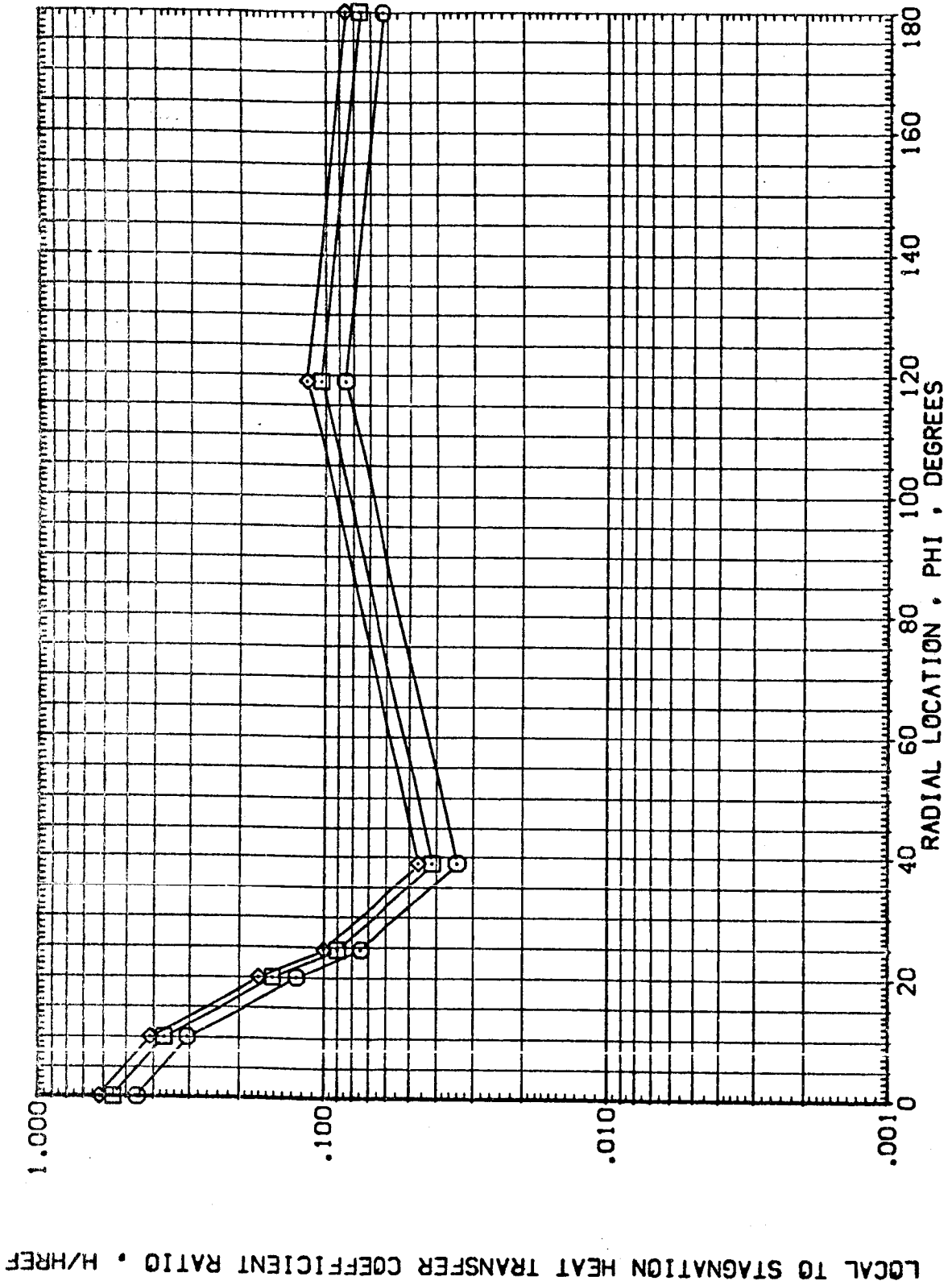


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (REIP03) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 1.000
 (AEIP03) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 .900
 (BEIP03) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 .850

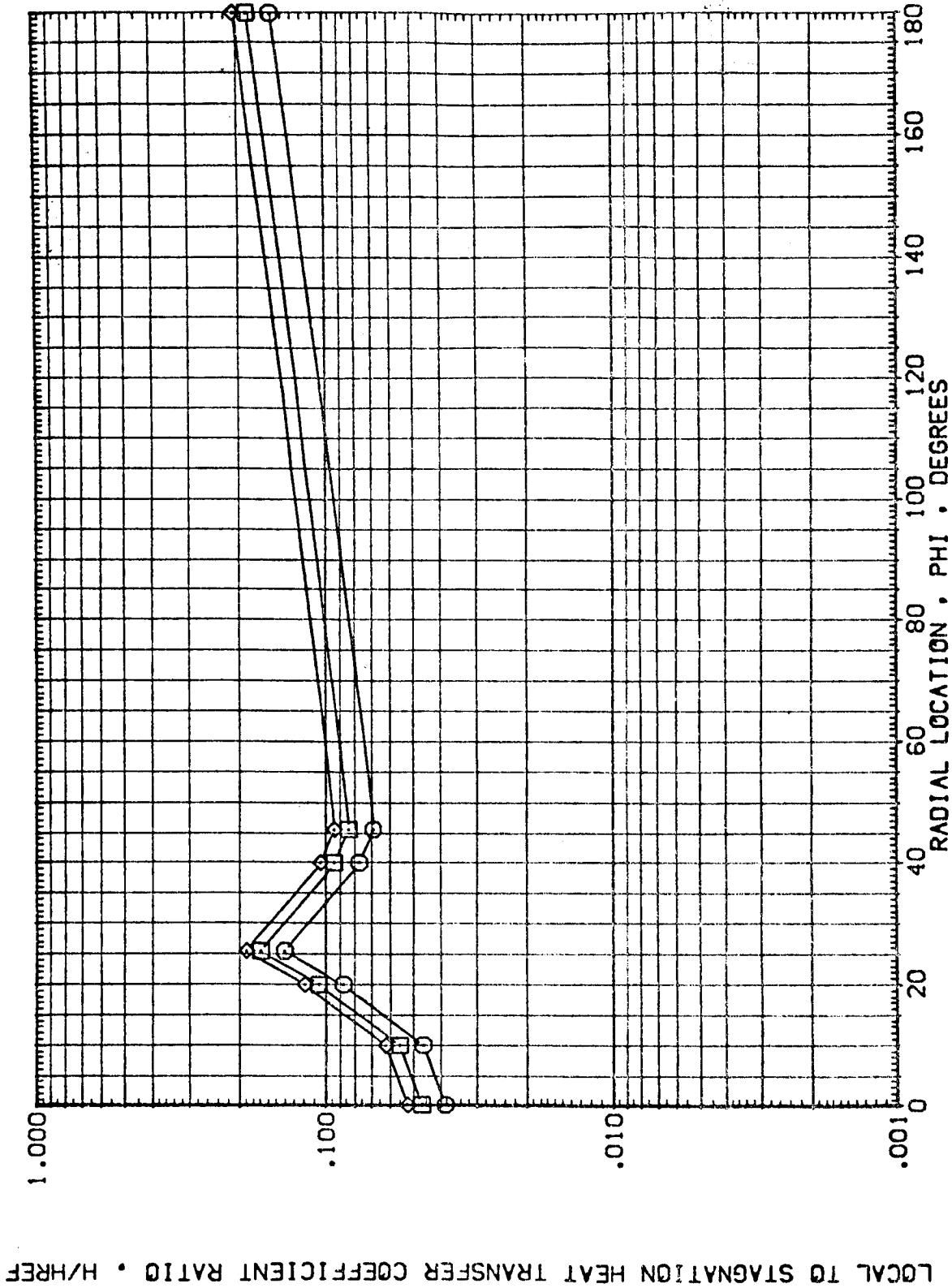


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA R/V/L HAV/HT

(RE)P03 AR: 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 1.000

(AE)P03 AR: 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 .900

(BE)P03 AR: 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 .850

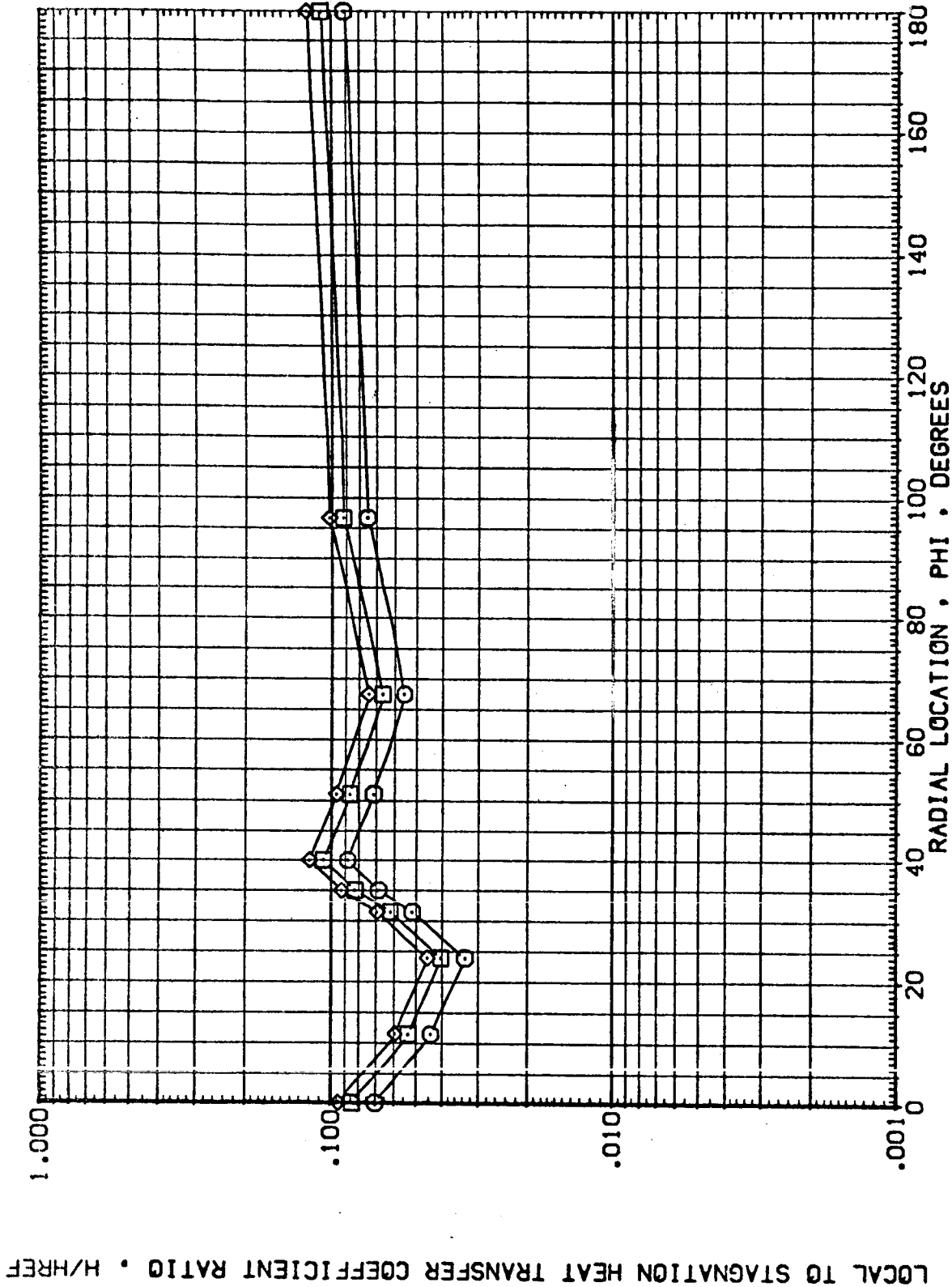


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

(RE|PO3) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 1.000

(AE|PO3) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 .900

(BE|PO3) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 .850

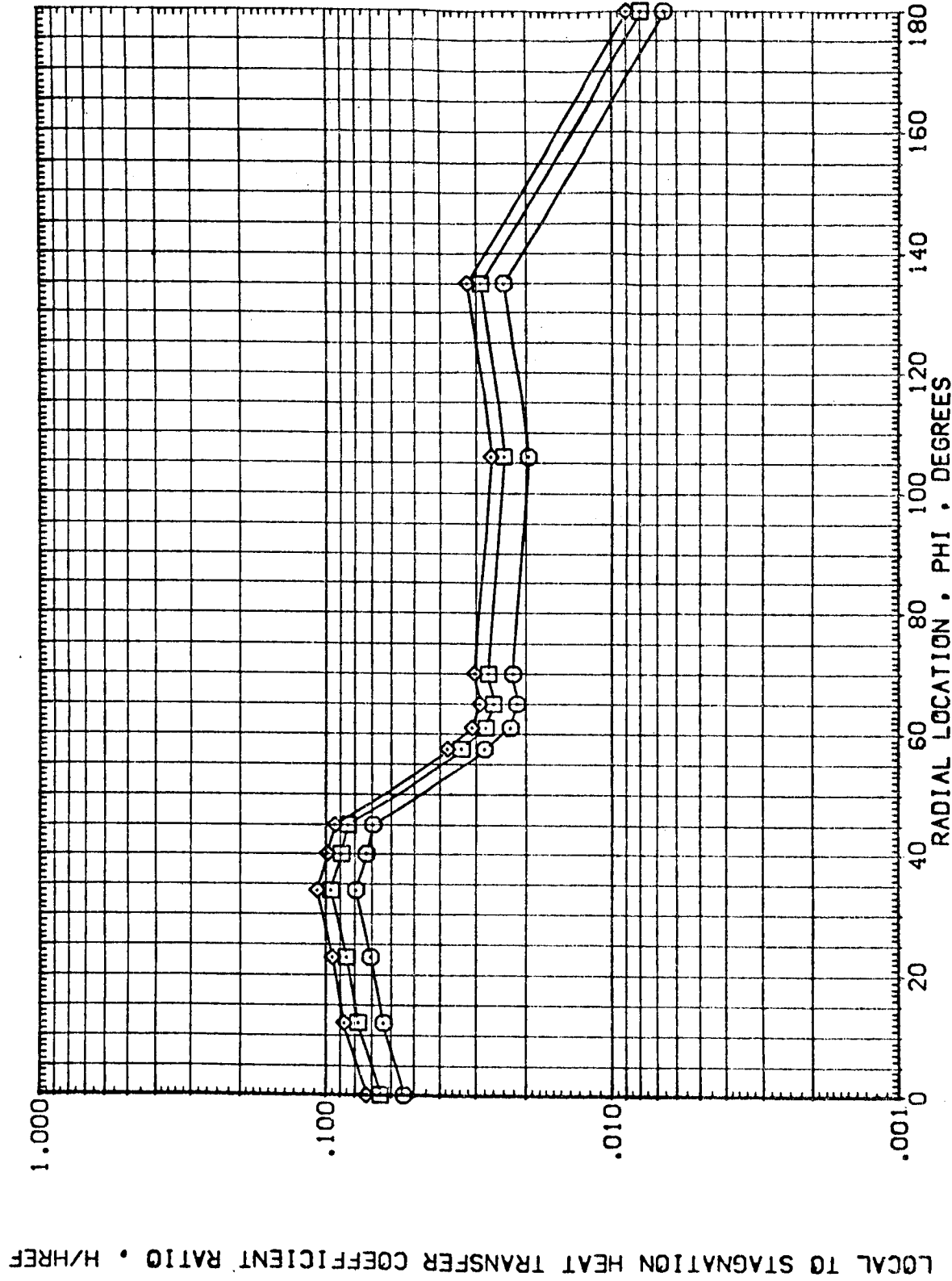


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HIT
(REIP03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	1.000
(AEIP03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(BEIP03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.850

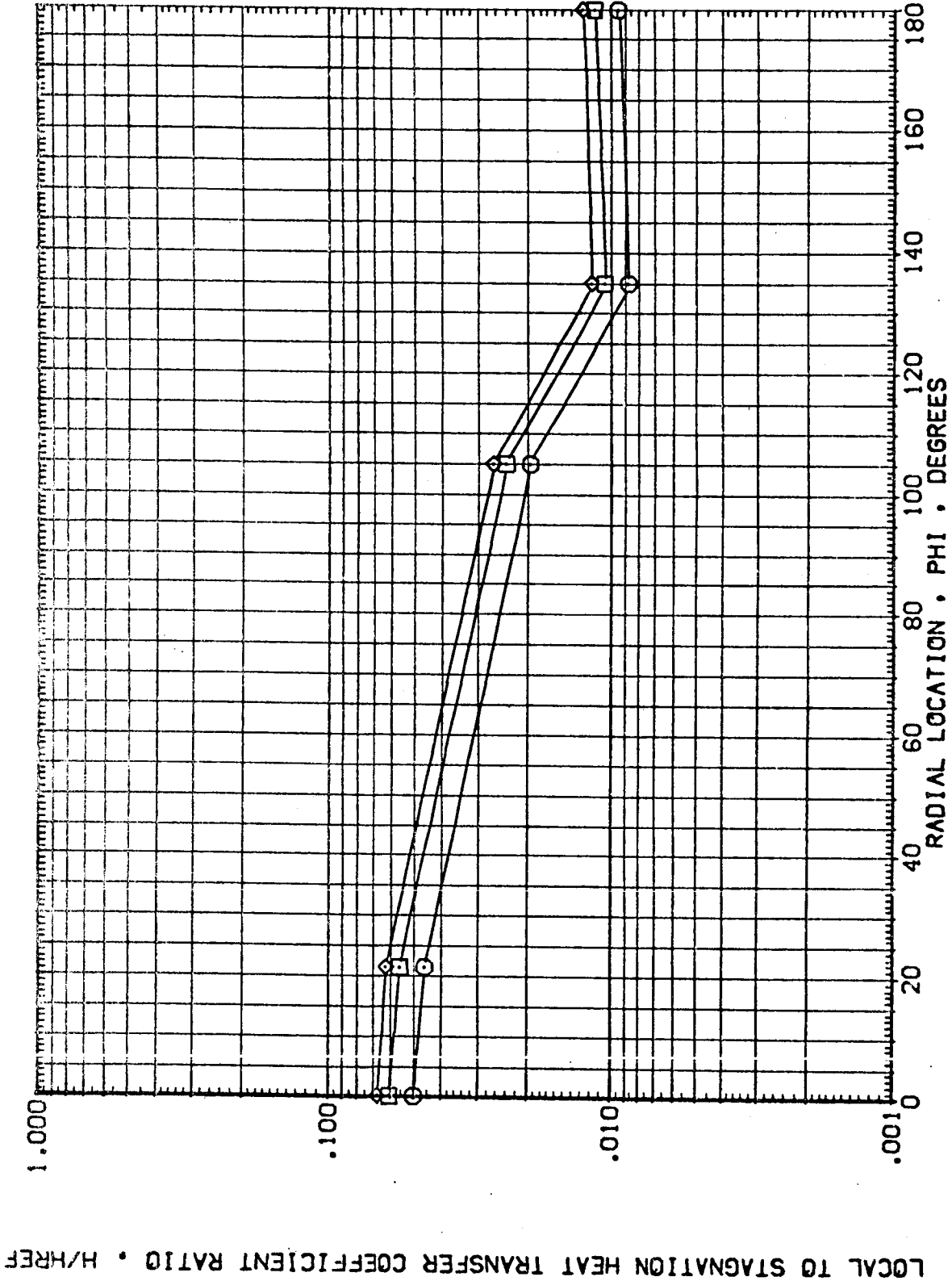


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.30C X/L = .400

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(REIP03)	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	1.000
(AEIP03)	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	.900
(BEIP03)	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	.850

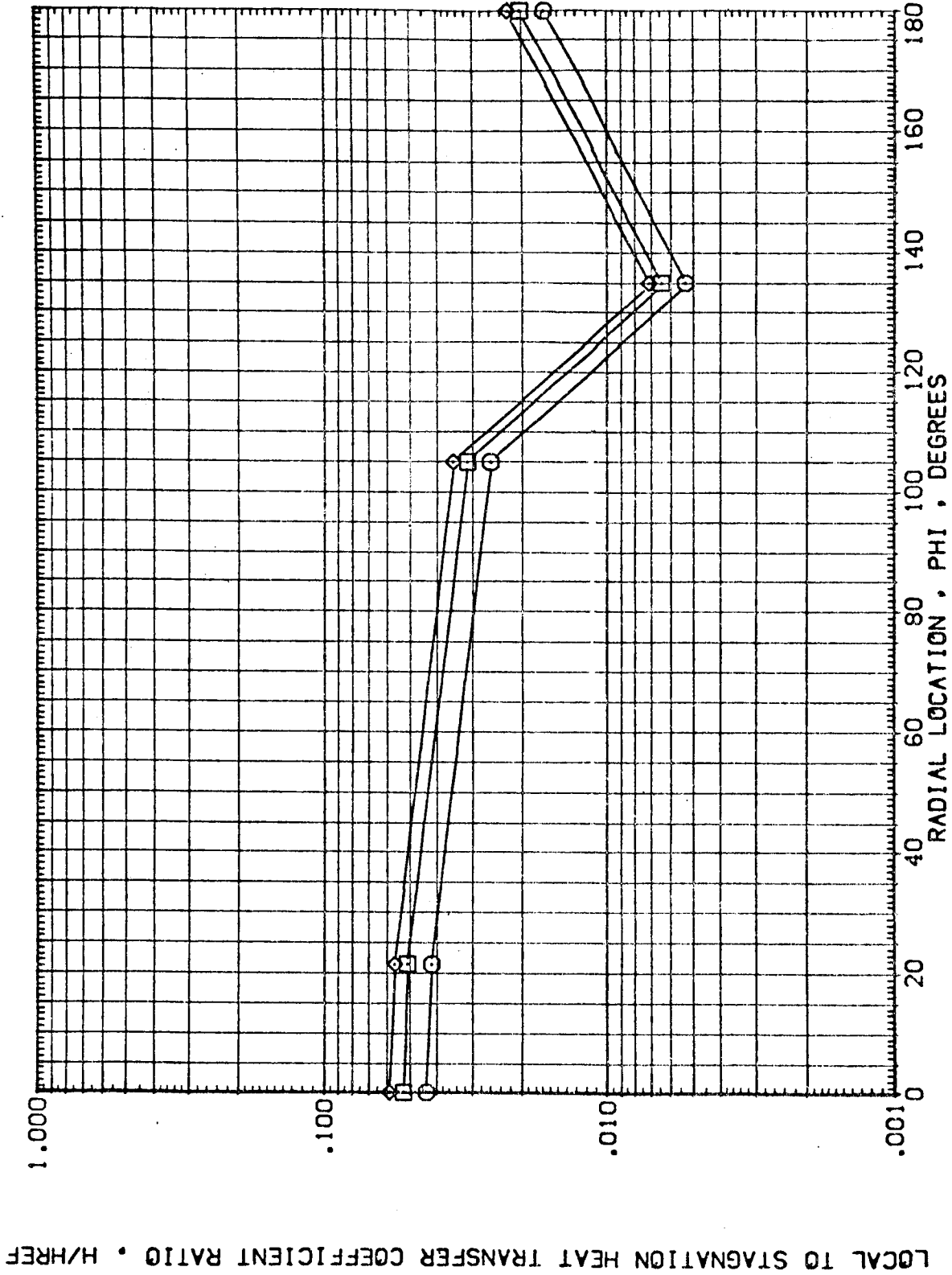


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REIPO3) ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 1.500 1.000

(AEIPO3) ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 1.500 .900

(BEIPO3) ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 1.500 .850

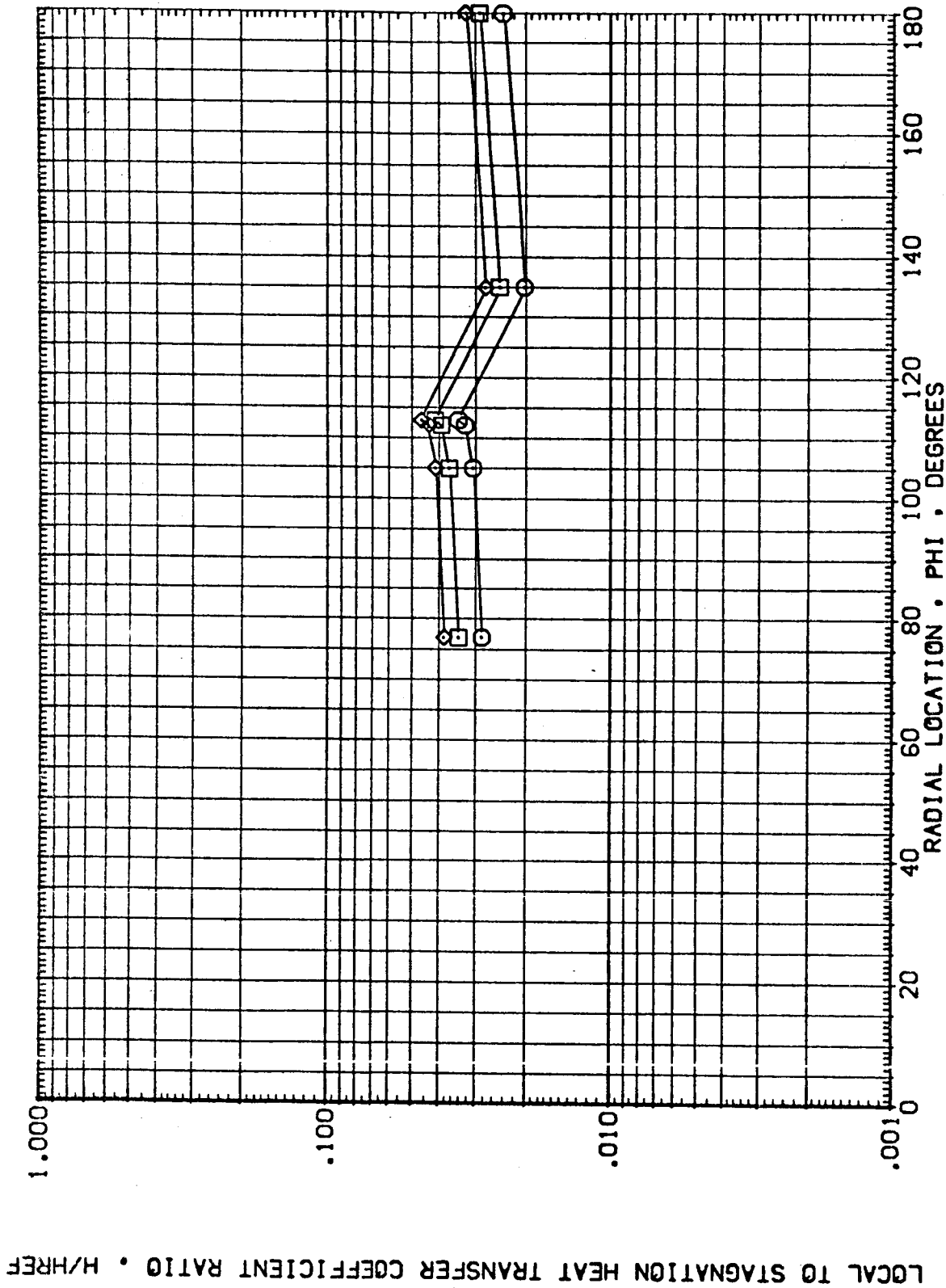


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(REIP03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	1.000
(AEIP03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(BEIP03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.850

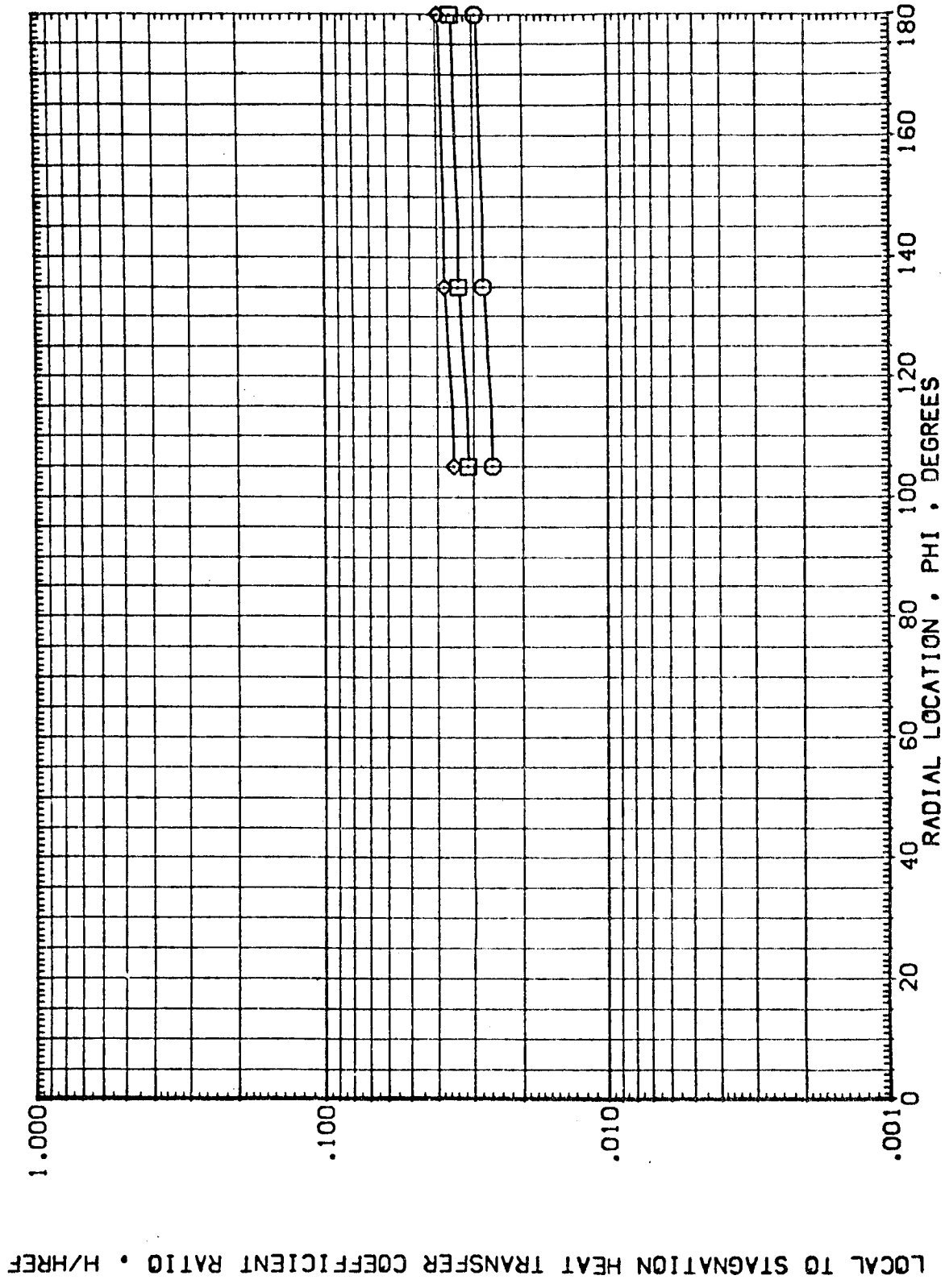


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(RE)P03	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	1.000
(AE)P03	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	.900
(BE)P03	ARC 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	.850

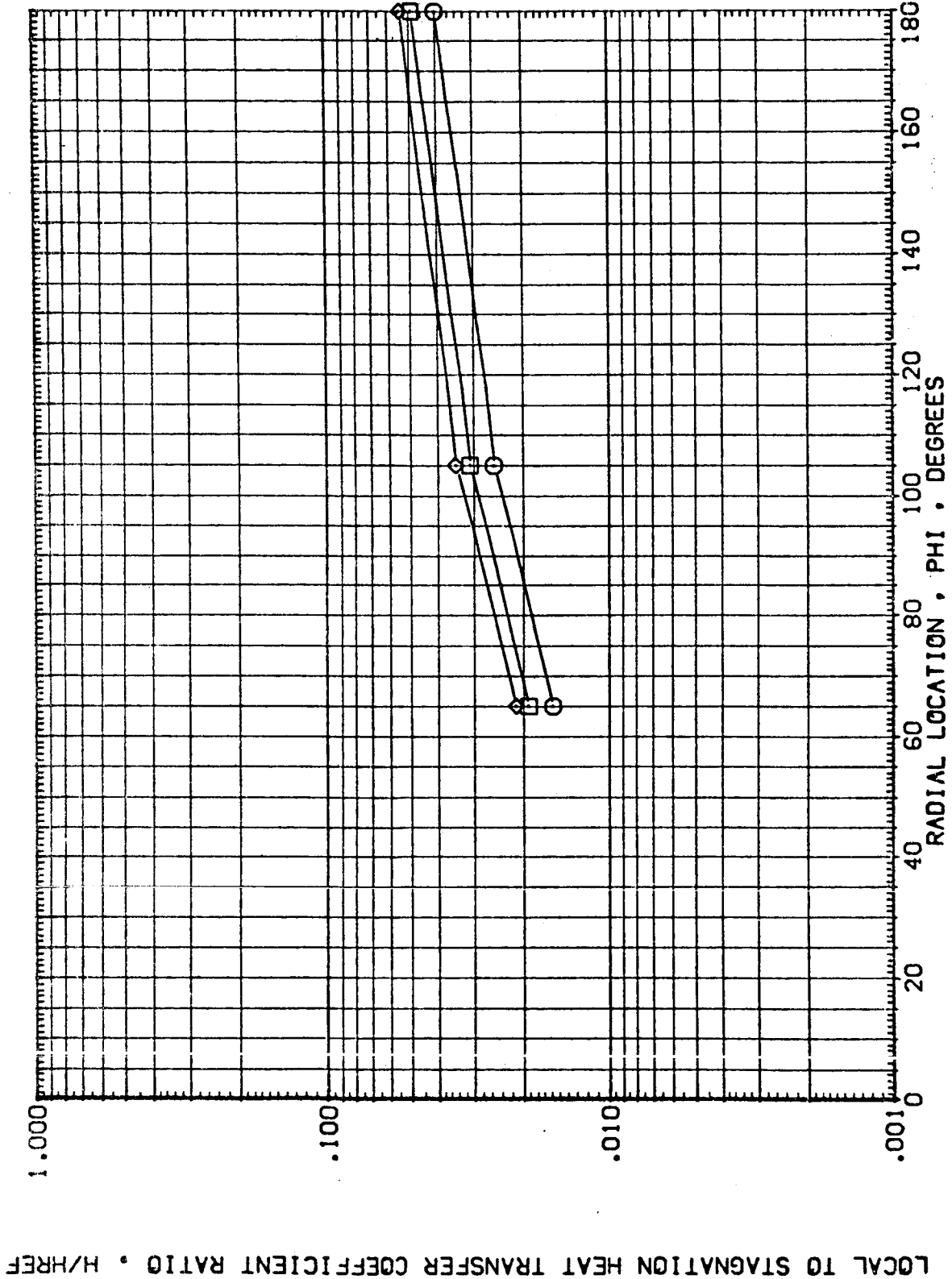


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .800

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(RE P03)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	1.500	1.000
(AE P03)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	1.500	.900
(BE P03)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	1.500	.650

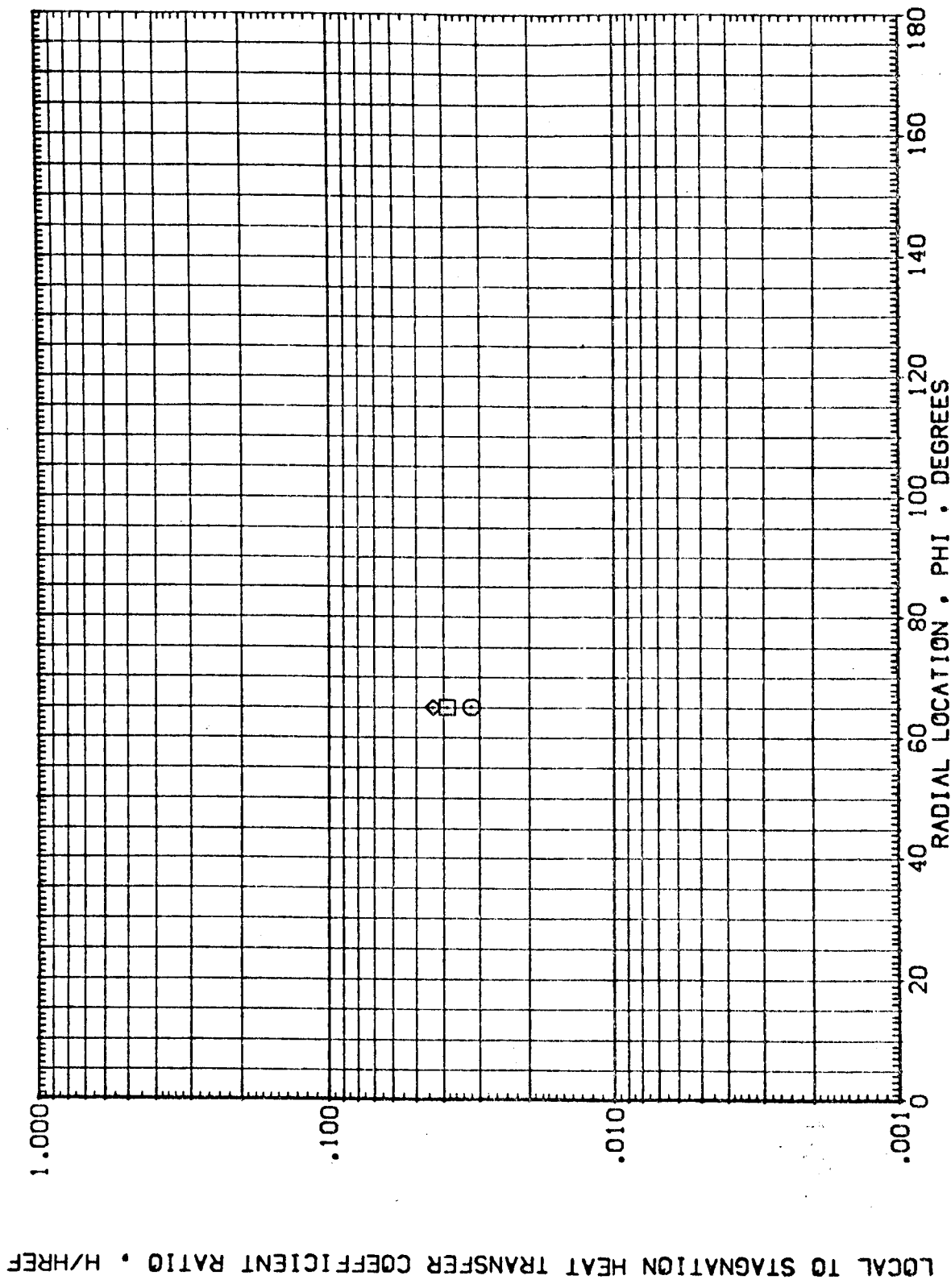


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

(RE/PO4) ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 1.000

(AE/PO4) ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 .900

(BE/PO4) ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 .850

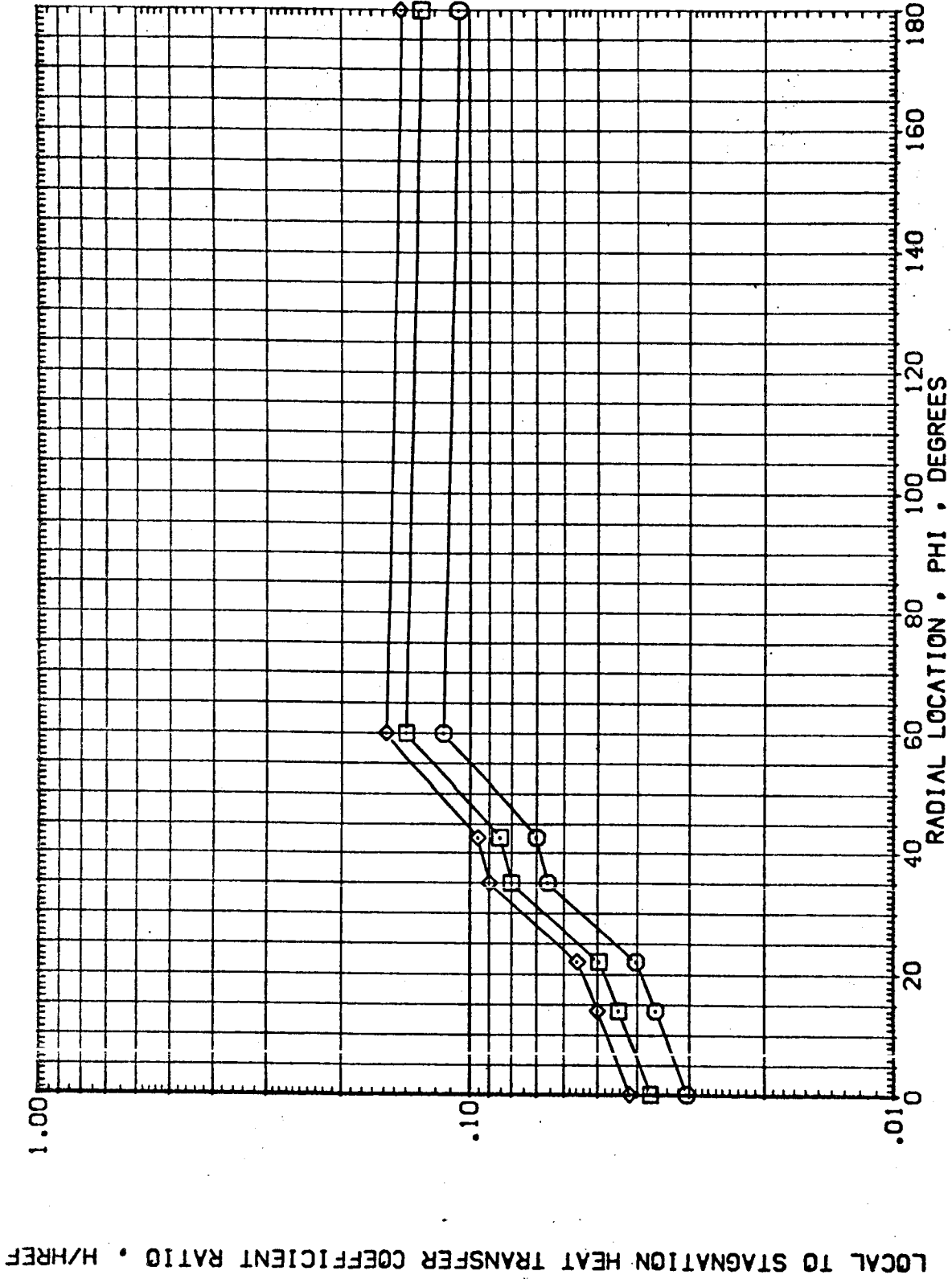


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE|P04) (AE|P04) (BE|P04) (RE|P04) (AE|P04) (BE|P04) (RE|P04) (AE|P04) (BE|P04) (RE|P04) (AE|P04) (BE|P04)

ARC 3.5-178 IH3 0-T+S (TRIPS) .000 .000 5.000 1.000

ARC 3.5-178 IH3 0-T+S (TRIPS) .000 .000 5.000 .900

ARC 3.5-178 IH3 0-T+S (TRIPS) .000 .000 5.000 .850

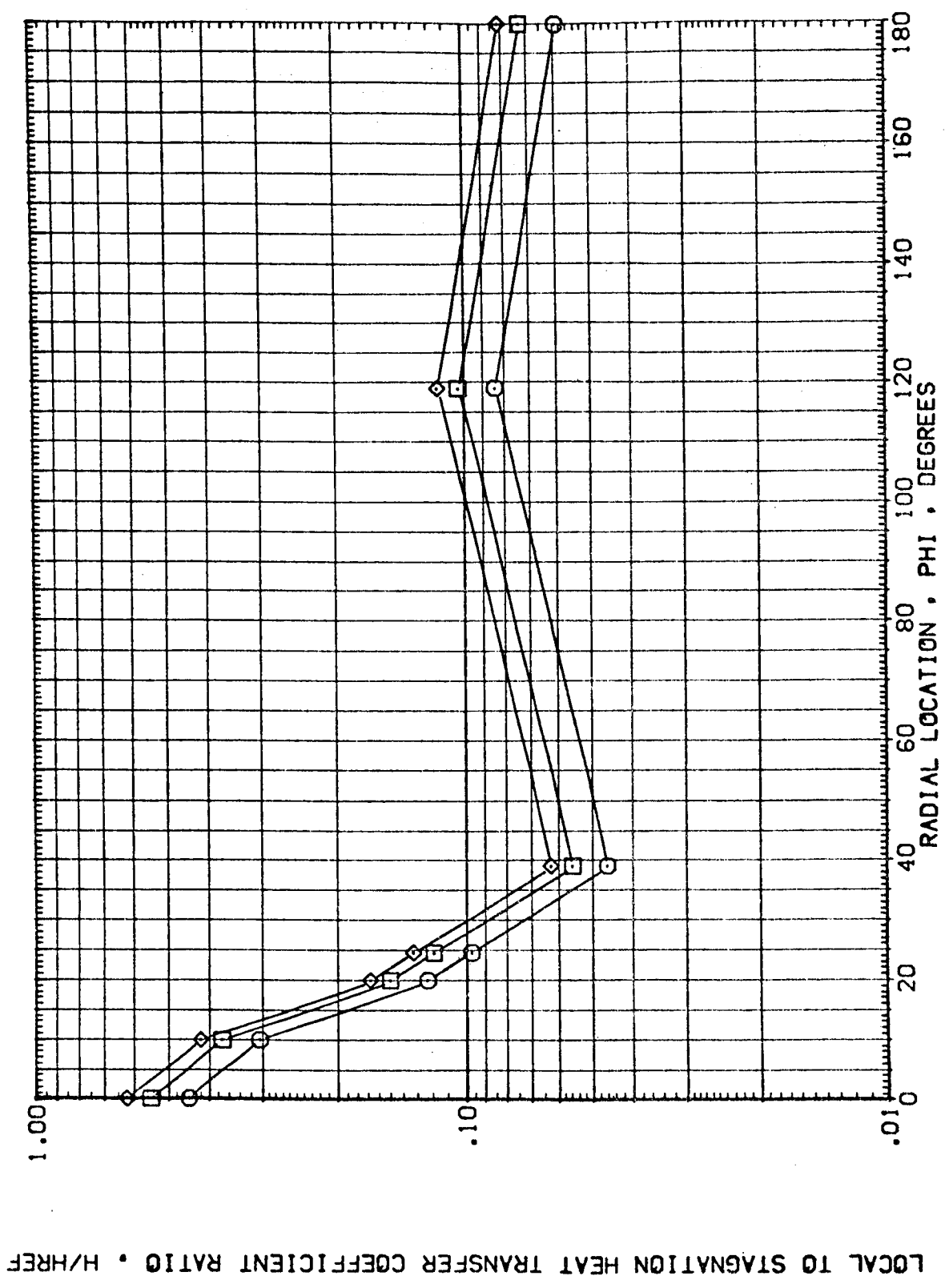


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .100

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(RE P04)	ARC 3.5-178 IH3 O+I+S (TRIPS)	.000	.000	5.000	1.000
(AE P04)	ARC 3.5-178 IH3 O+I+S (TRIPS)	.000	.000	5.000	.900
(BE P04)	ARC 3.5-178 IH3 O+I+S (TRIPS)	.000	.000	5.000	.850

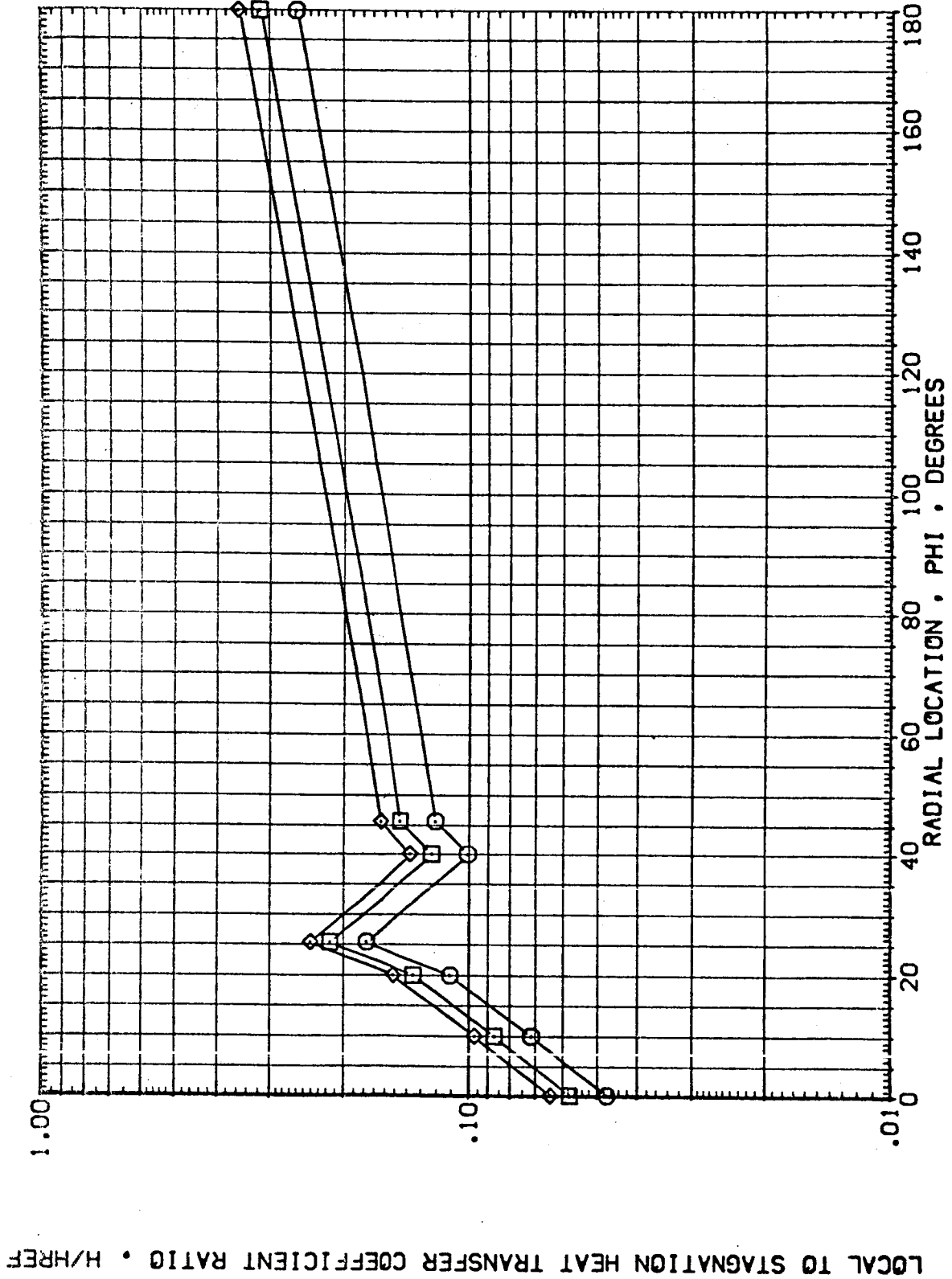


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT
 (REIP04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 1.000
 (AEIP04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .900
 (BEIP04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .850

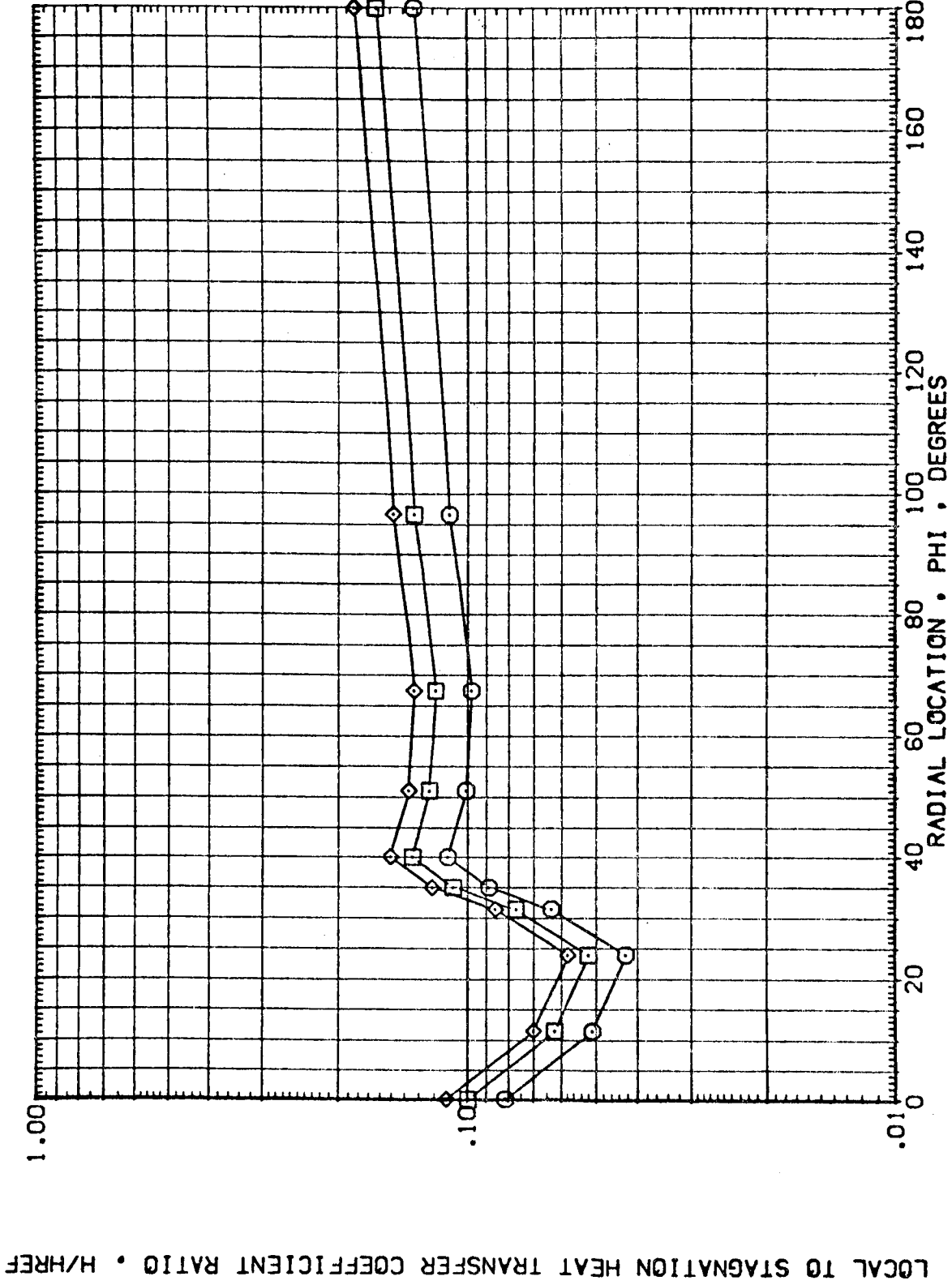


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

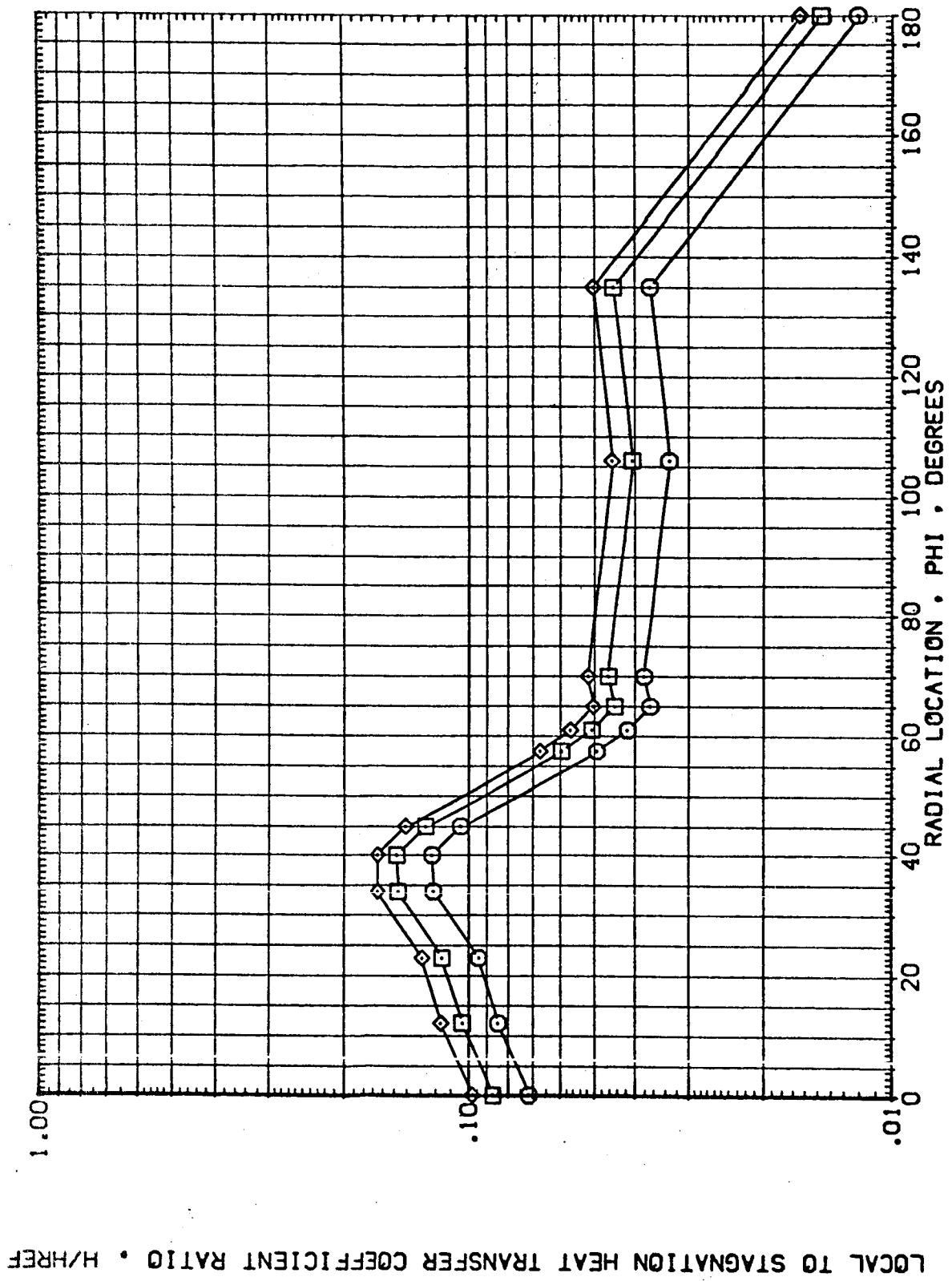
MACH = 5.300 X/L = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REIP04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 1.000

(AEIP04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .900

(BEIP04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REIP04) ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 1.000

(AEIP04) ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 .900

(BEIP04) ARC 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 .850

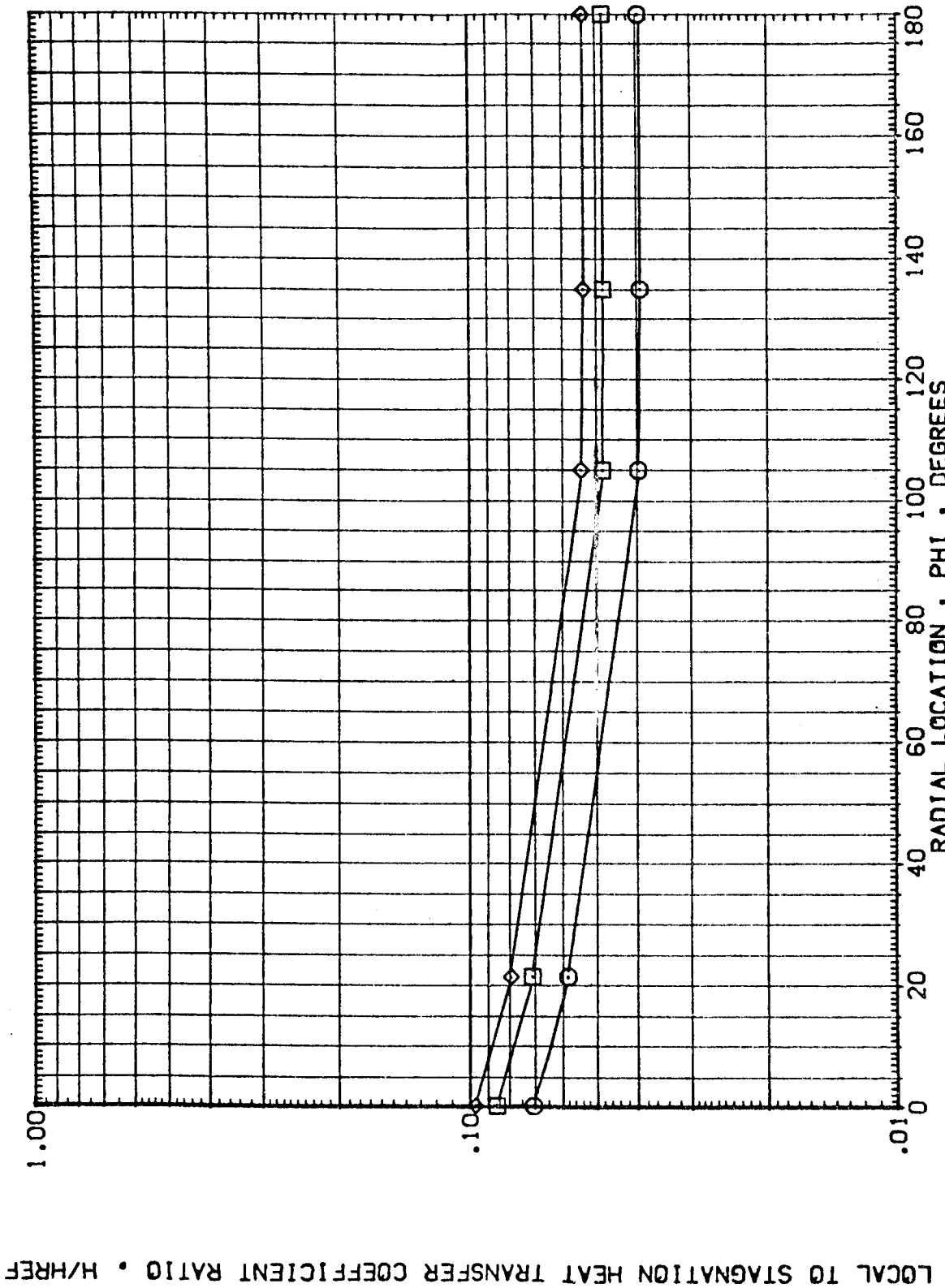


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .400

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(REIP04)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	5.000	1.000
(AEIP04)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	5.000	.900
(BEIP04)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	5.000	.850

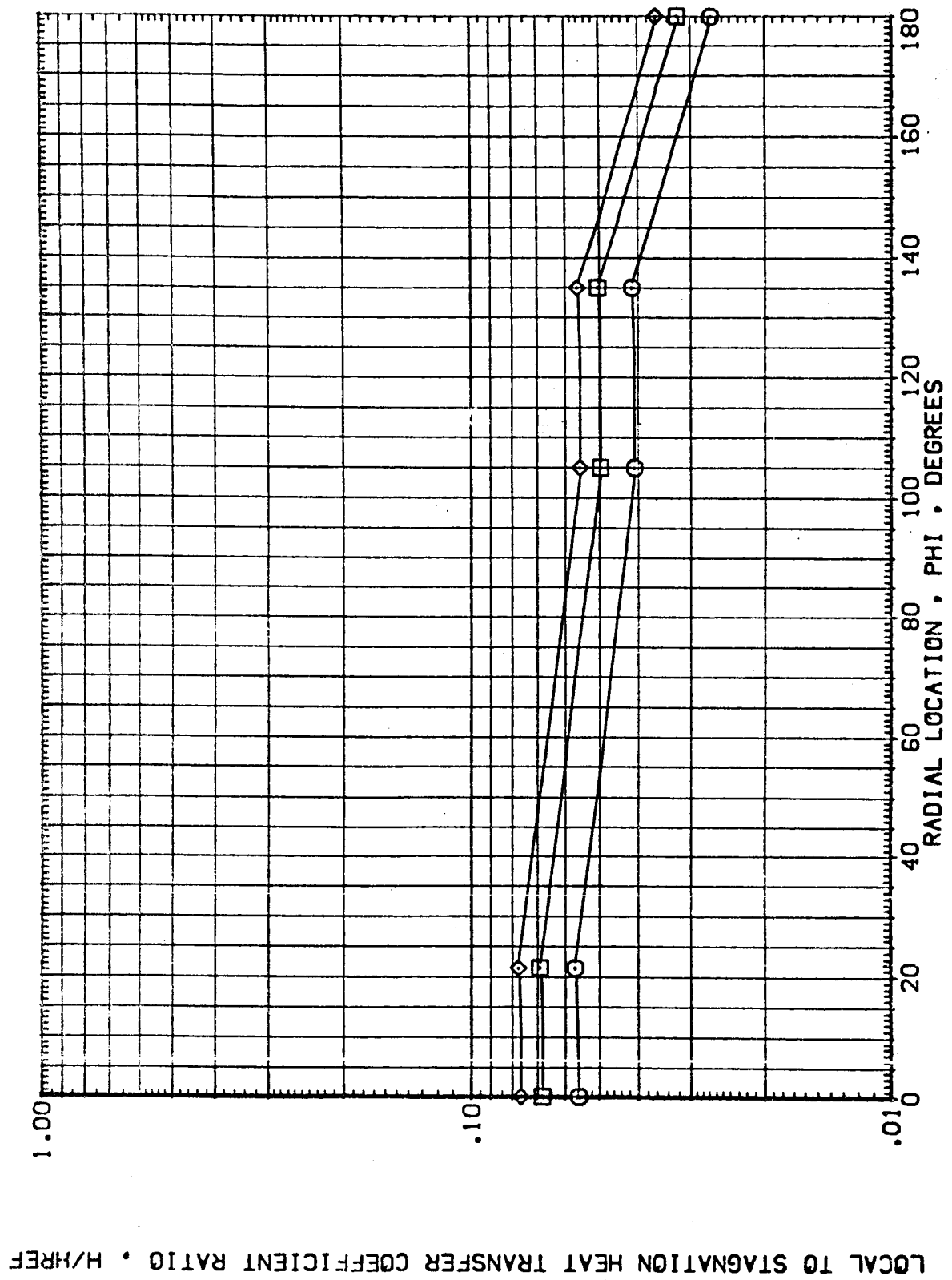


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	FN/L	HAV/HT
(RE/PO4)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	1.000
(AE/PO4)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	.900
(BE/PO4)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	.850

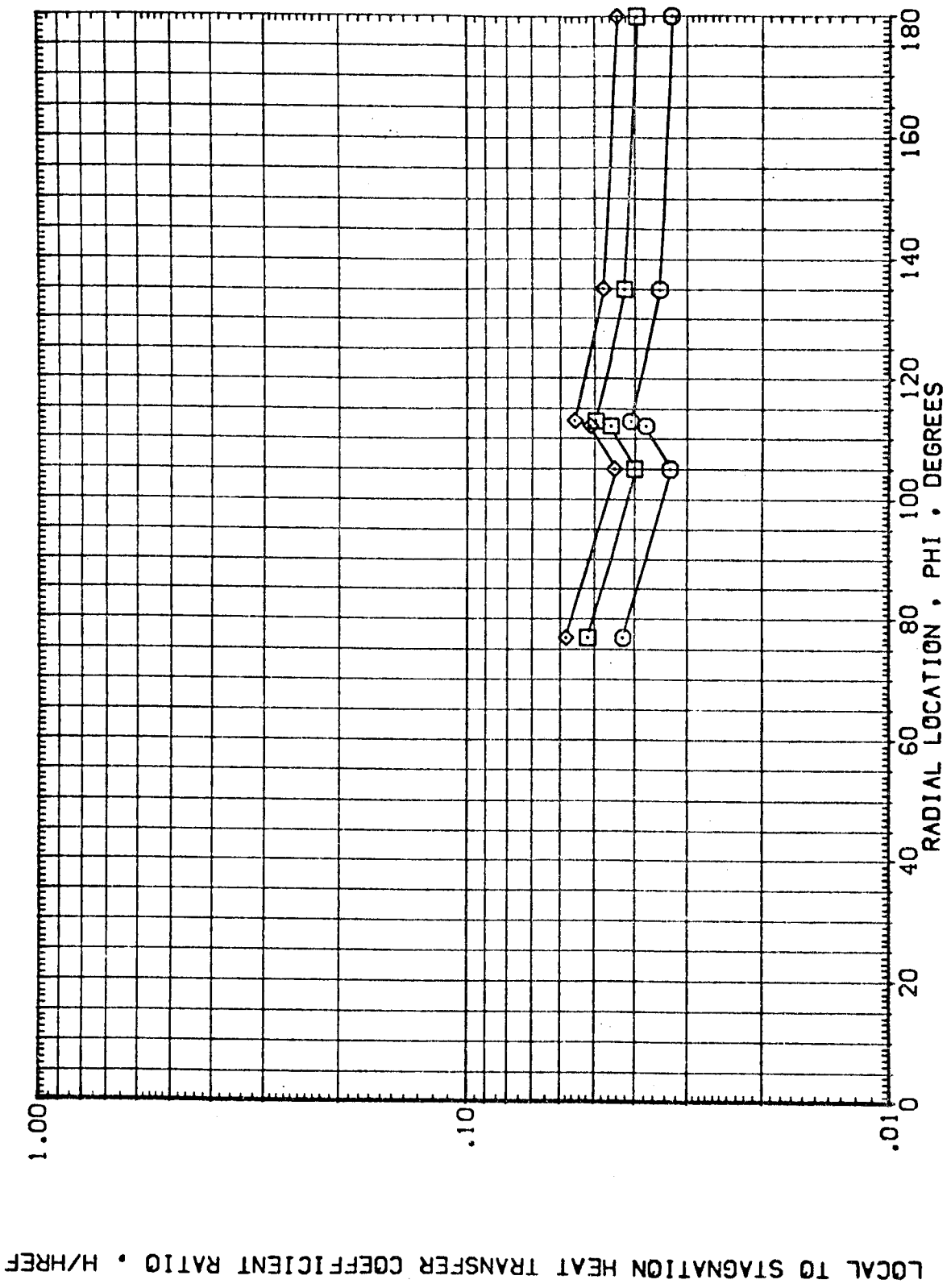


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RNVL HAV/HIT

(REIP04) ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 1.000

(AEIP04) ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 .900

(BEIP04) ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 .850

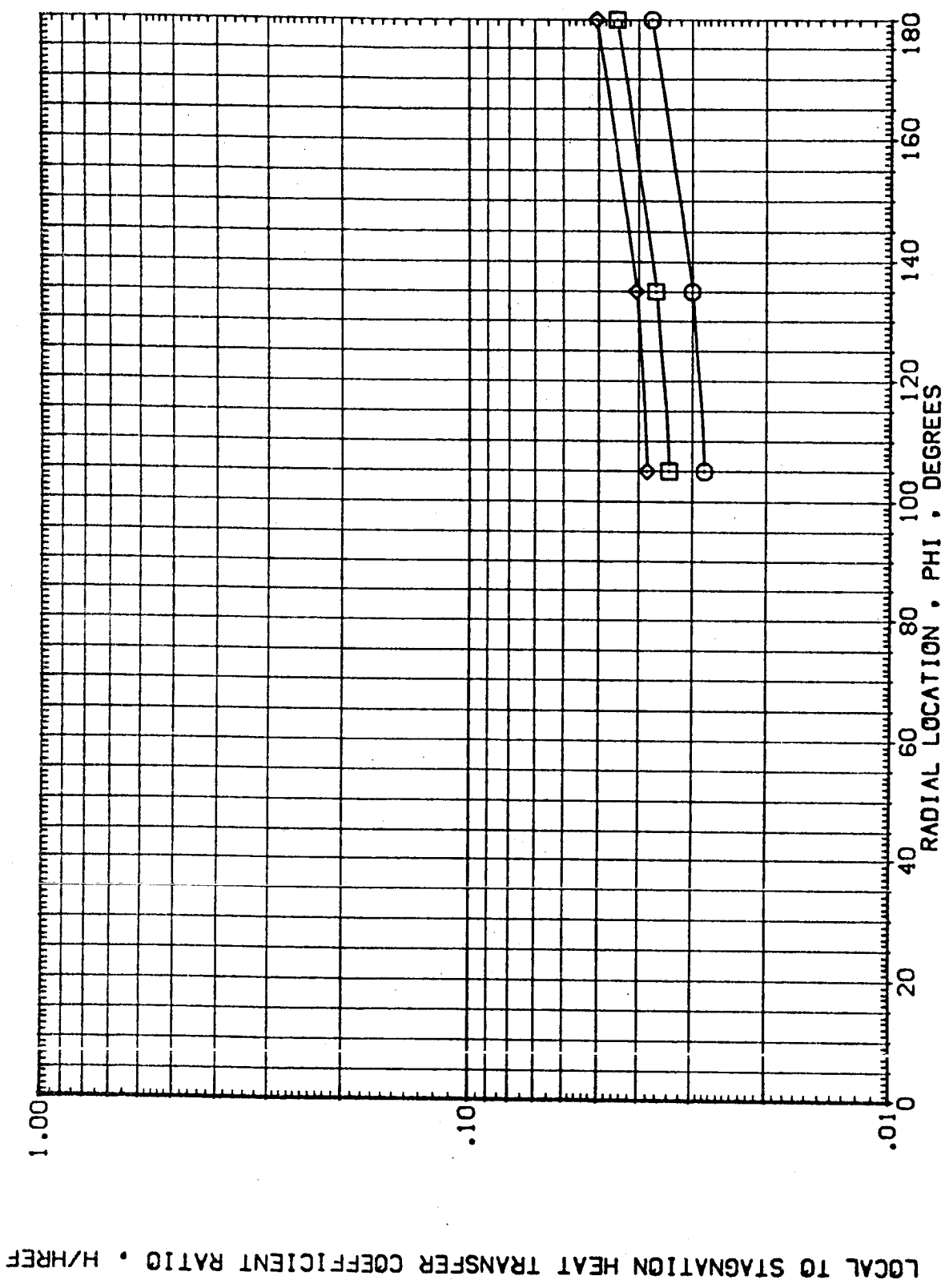


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (REIP04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 1.000
 (AEIP04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .900
 (BEIP04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .850

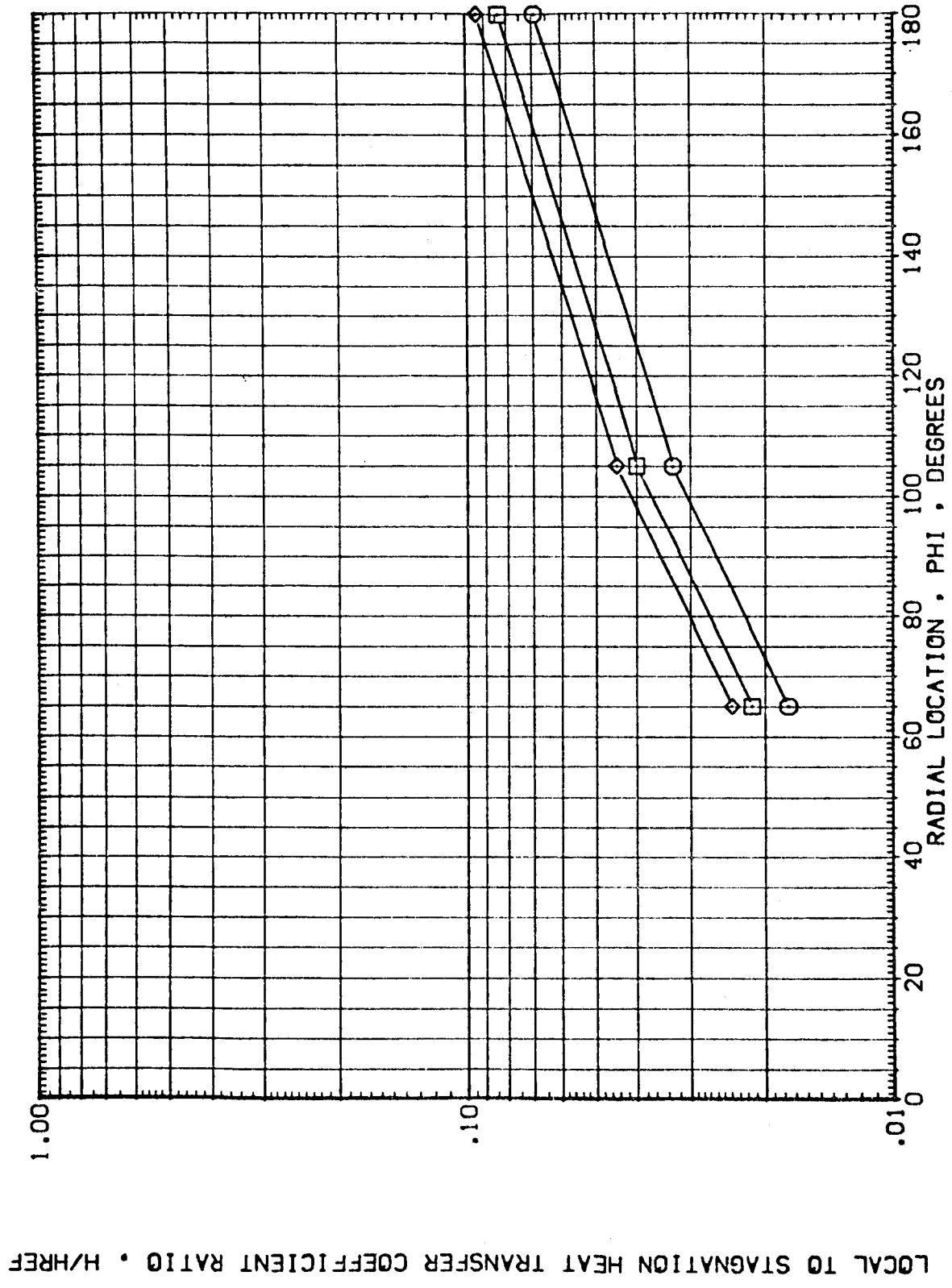


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .800



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(RE)P04 } (AE)P04 } (BE)P04 }	ARC 3.5-178 IH3 O+T+S (TRIPS) ARC 3.5-178 IH3 O+T+S (TRIPS) ARC 3.5-178 IH3 O+T+S (TRIPS)	.000 .000 .000	.000 .000 .000	5.000 5.000 5.000	1.000 .900 .850

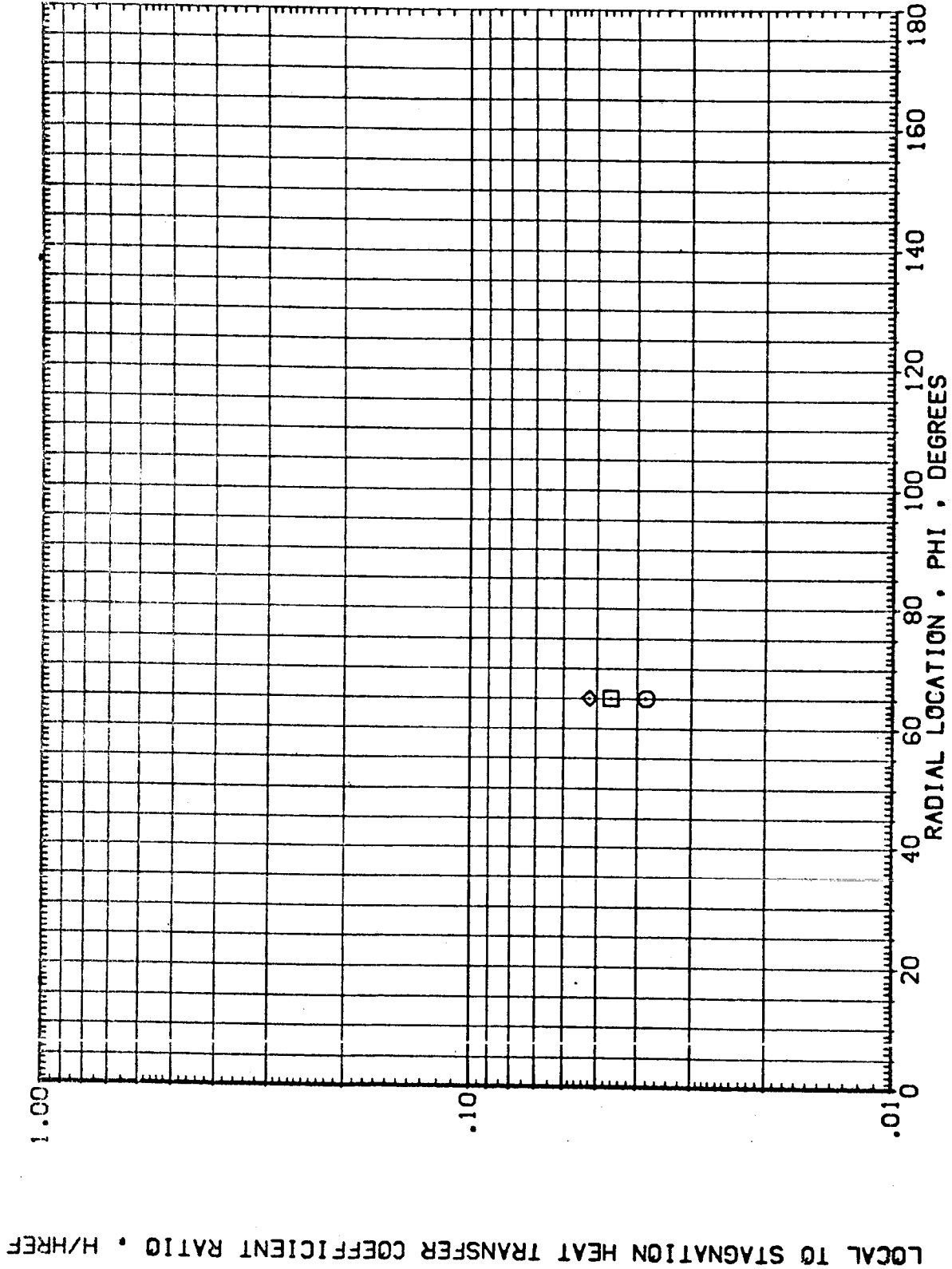


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE IPOS) ARC 3.5-178 IH3 0+T+S
 (AE IPOS) ARC 3.5-178 IH3 0+T+S
 (BE IPOS) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE ORBITER FUSELAGE ORBITER FUSELAGE
 ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

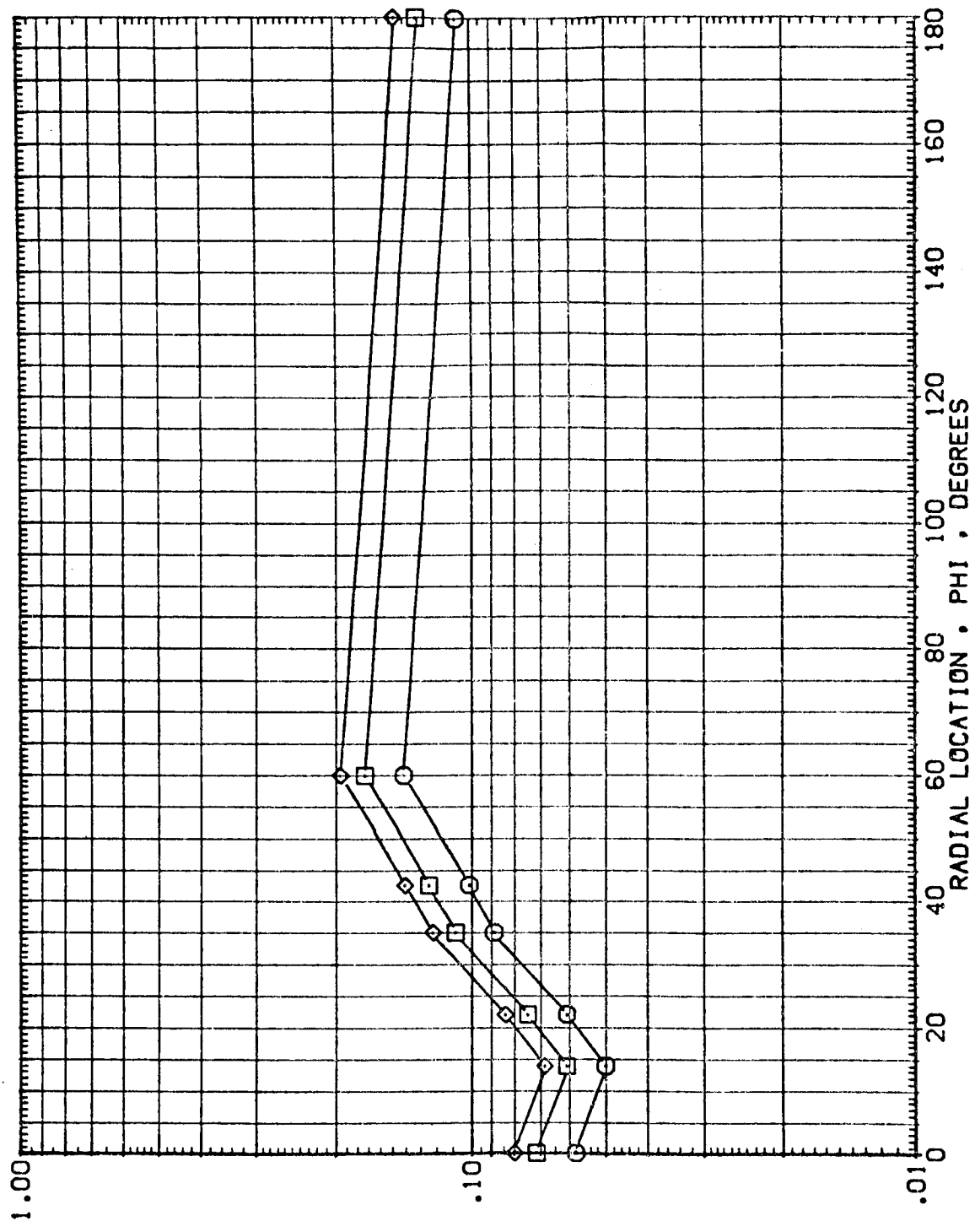


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .050

DATA SET SYMBOL (CONFIGURATION DESCRIPTION)
 (REIPOS) (ARC: 3.5-178 IH3 0+T+S)
 (AEIPOS) (ARC: 3.5-178 IH3 0+T+S)
 (BEIPOS) (ARC: 3.5-178 IH3 0+T+S)

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA R/V/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

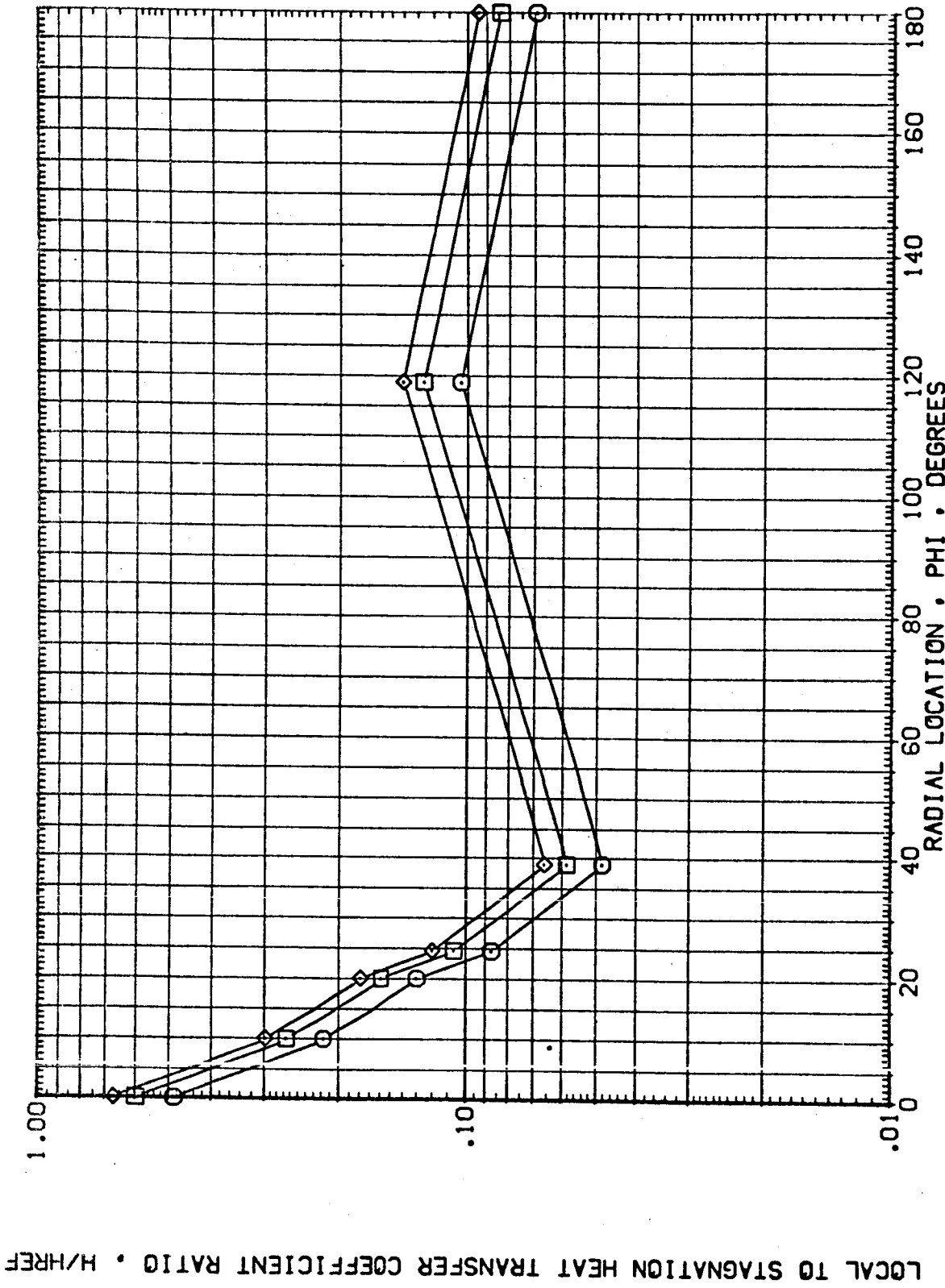


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|POS) ARC 3.5-178 IH3 0+T+S
 (AE|POS) ARC 3.5-178 IH3 0+T+S
 (BE|POS) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE ORBITER FUSELAGE ORBITER FUSELAGE
 ALPHA BETA RV/L HAW/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

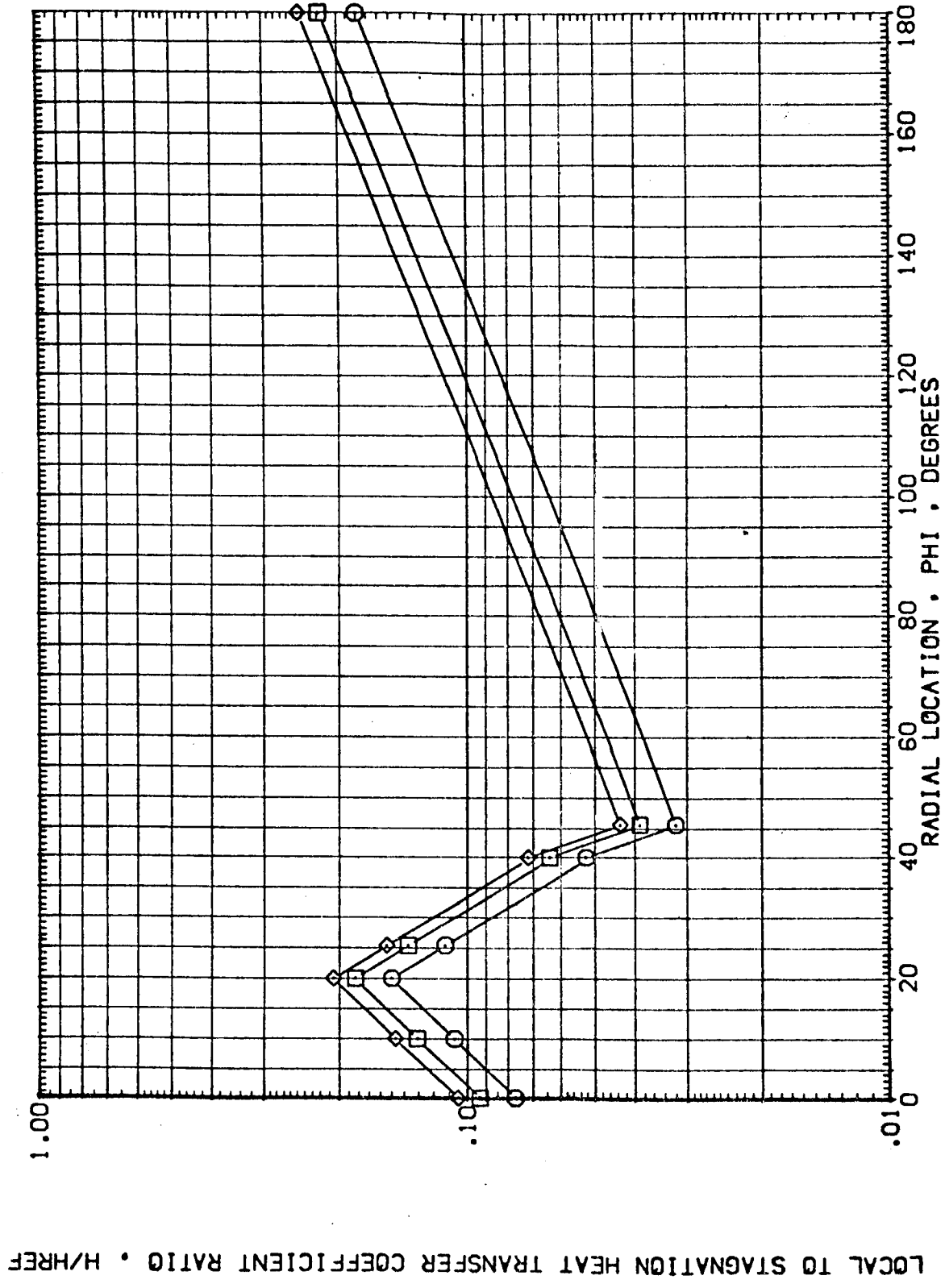


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIPOS) ○ ARC 3.5-178 IH3 0+1-S
 (AEIPOS) □ ARC 3.5-178 IH3 0+1-S
 (BEIPOS) ◇ ARC 3.5-178 IH3 0+1-S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RN/L HAW/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

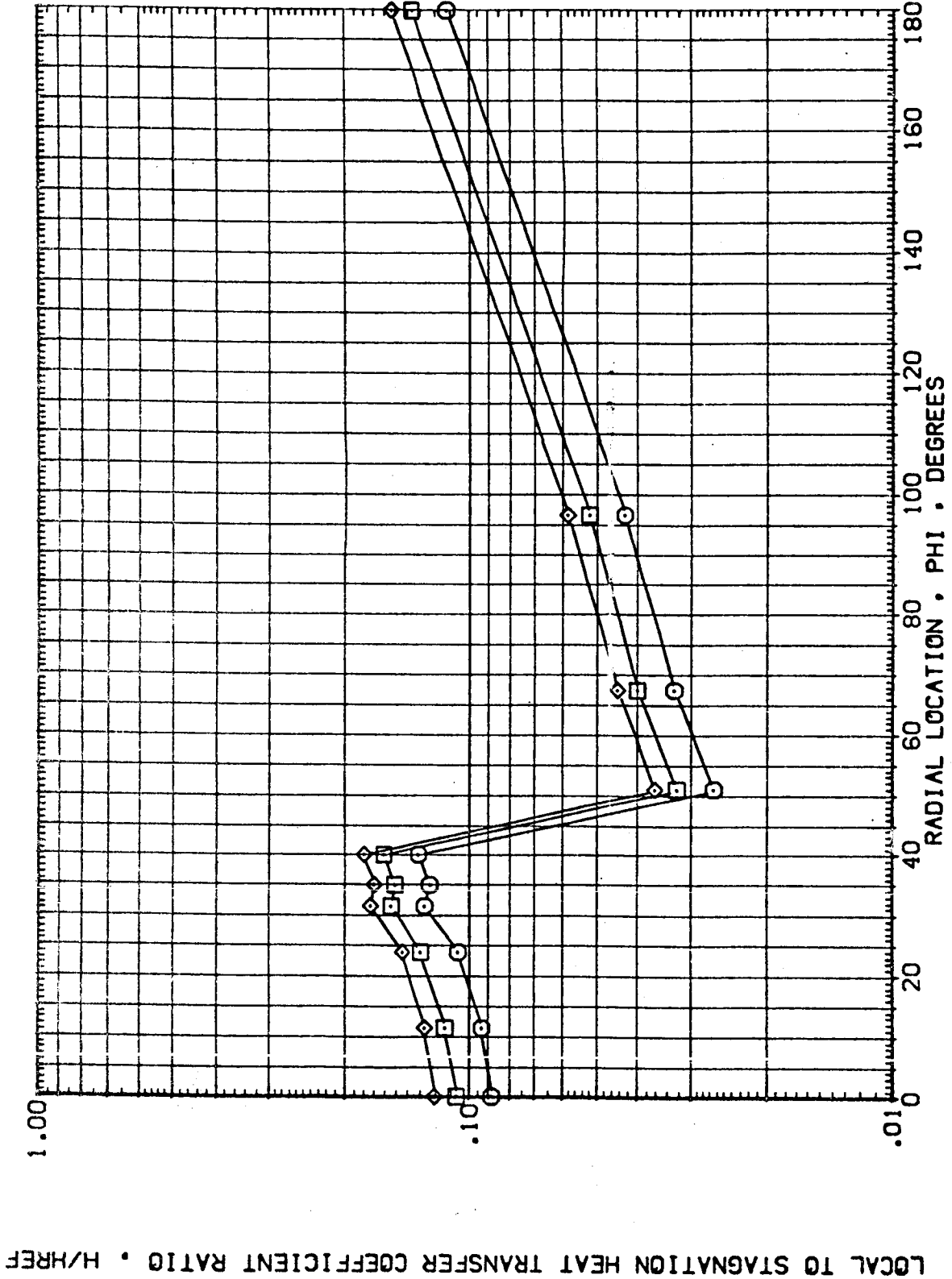


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|POS) ARC 3.5-178 IH3 0+T+S
 (AE|POS) ARC 3.5-178 IH3 0+T+S
 (BE|POS) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .650

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

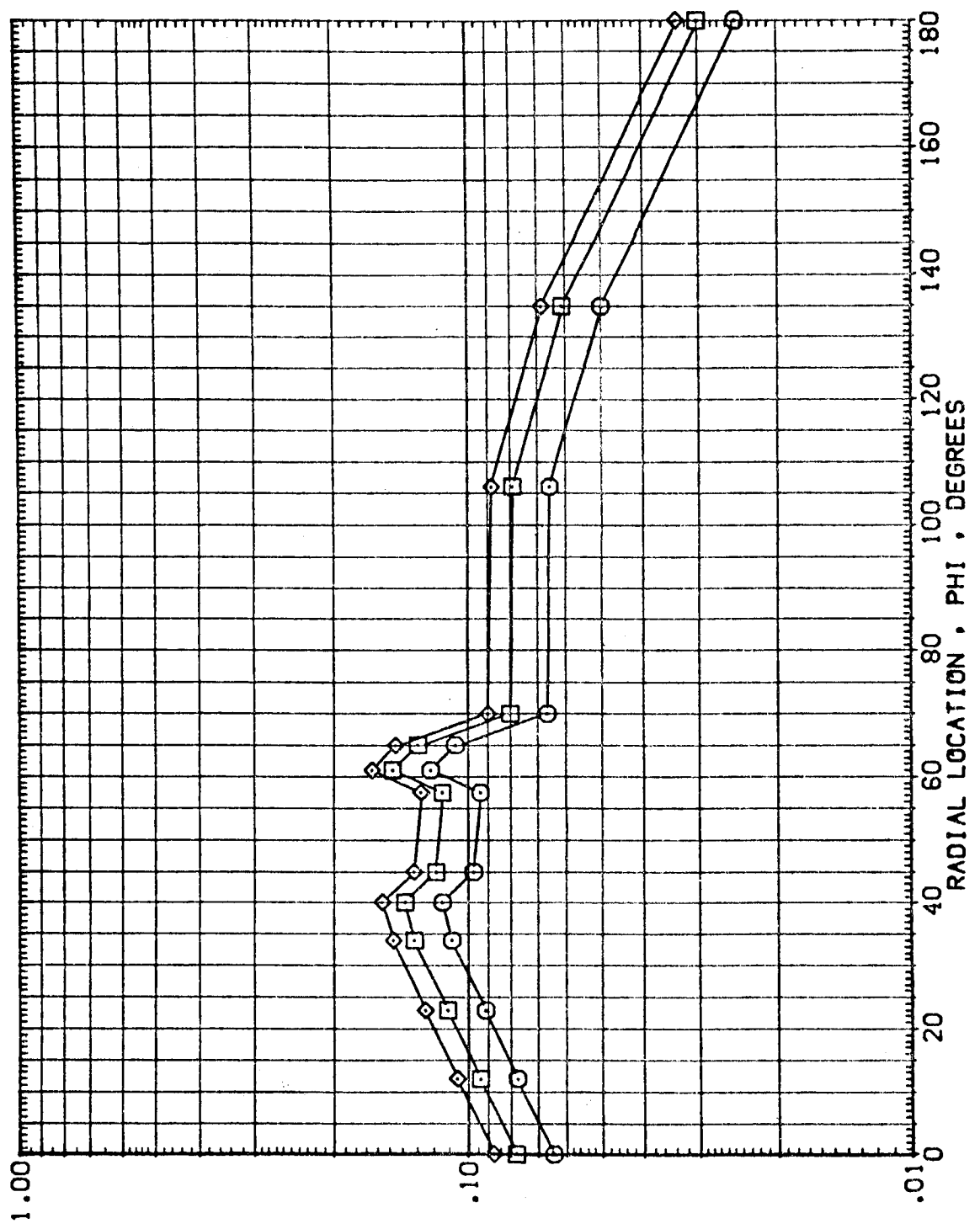


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300

DATA SET SYMBOL (CONFIGURATION DESCRIPTION)
 (REIPOS) ARC: 3.5-178 IH3 0+T+S
 (AEIPOS) ARC: 3.5-178 IH3 0+T+S
 (BEIPOS) ARC: 3.5-178 IH3 0+T+S

ALPHA .000
 BETA -5.000
 RVL 5.000
 HAW/HT 1.000
 .900
 .850

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

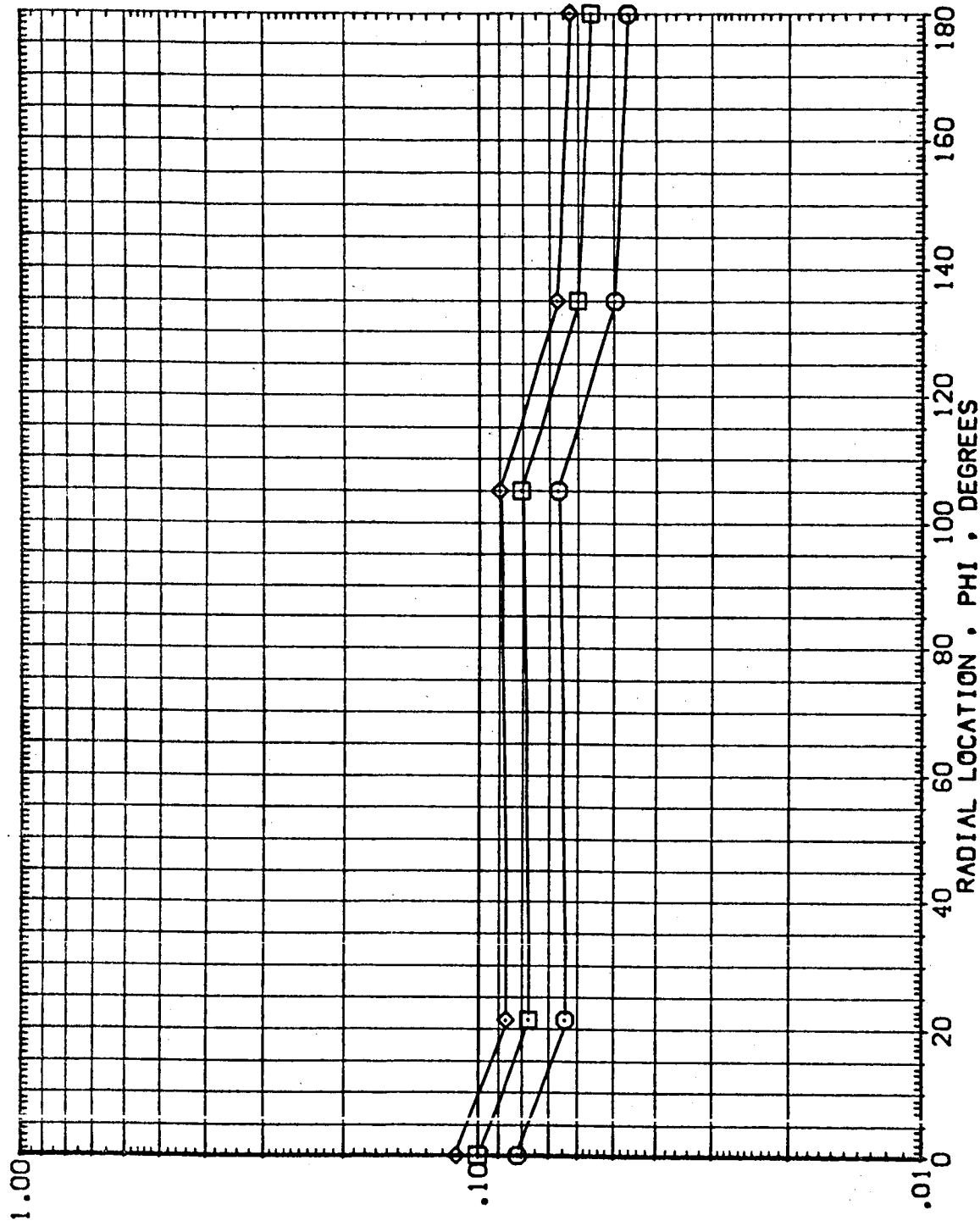


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BE|POS) ARC 3.5-178 IH3 O+T+S
 (AL|POS) ARC 3.5-178 IH3 O+T+S
 (BE|POS) ARC 3.5-178 IH3 O+T+S

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

ORBITTER FUSELAGE
 ORBITTER FUSELAGE
 ORBITTER FUSELAGE

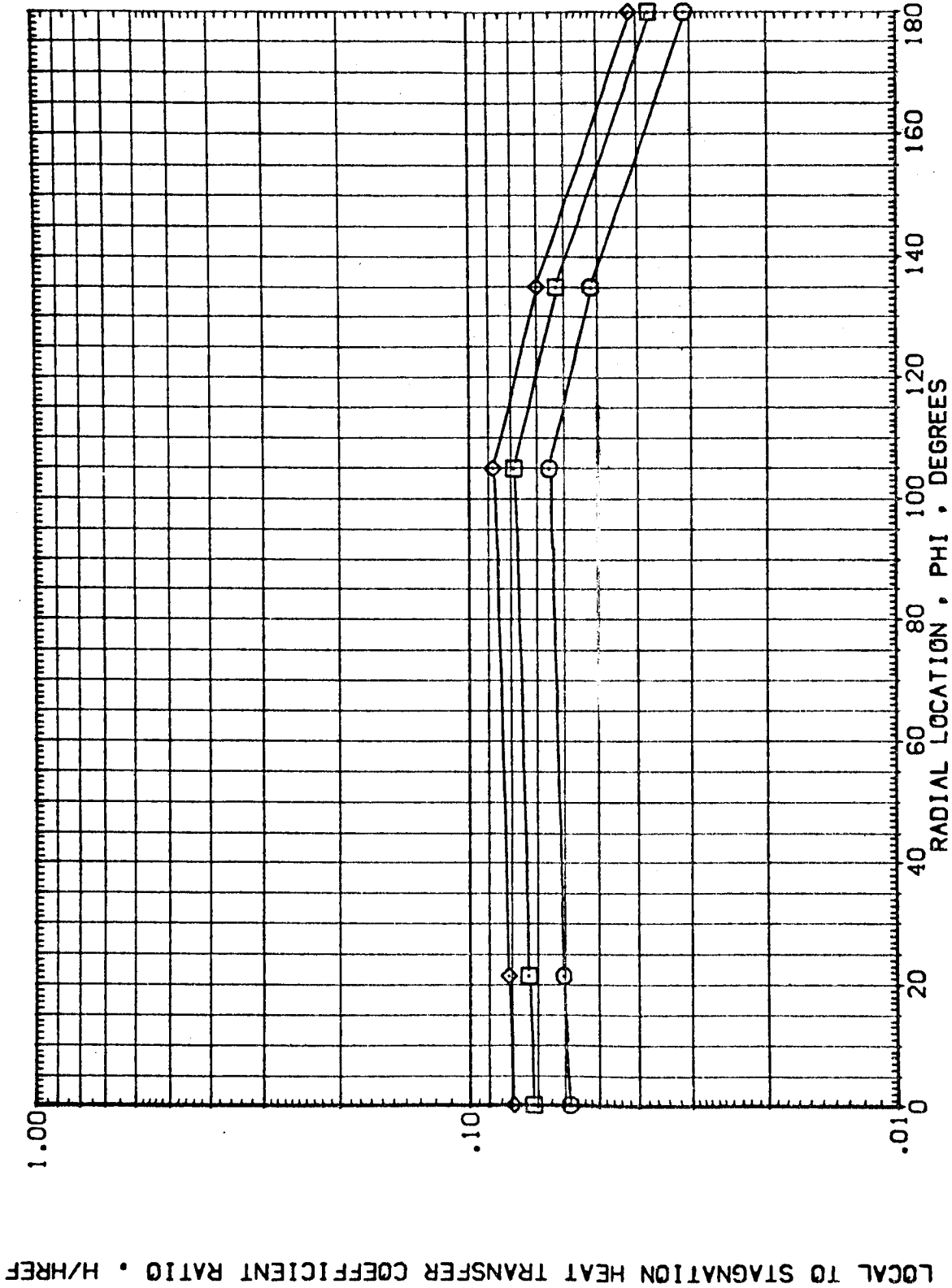


FIG. 47 ORBITTER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIPOS) ARC 3.5-178 IH3 0+1+S
 (AEIPOS) ARC 3.5-178 IH3 0+1+S
 (BEIPOS) ARC 3.5-178 IH3 0+1+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000 .000 .000
 BETA -5.000 -5.000 -5.000
 RV/L 5.000 5.000 5.000
 HAV/HT 1.000 .900 .850

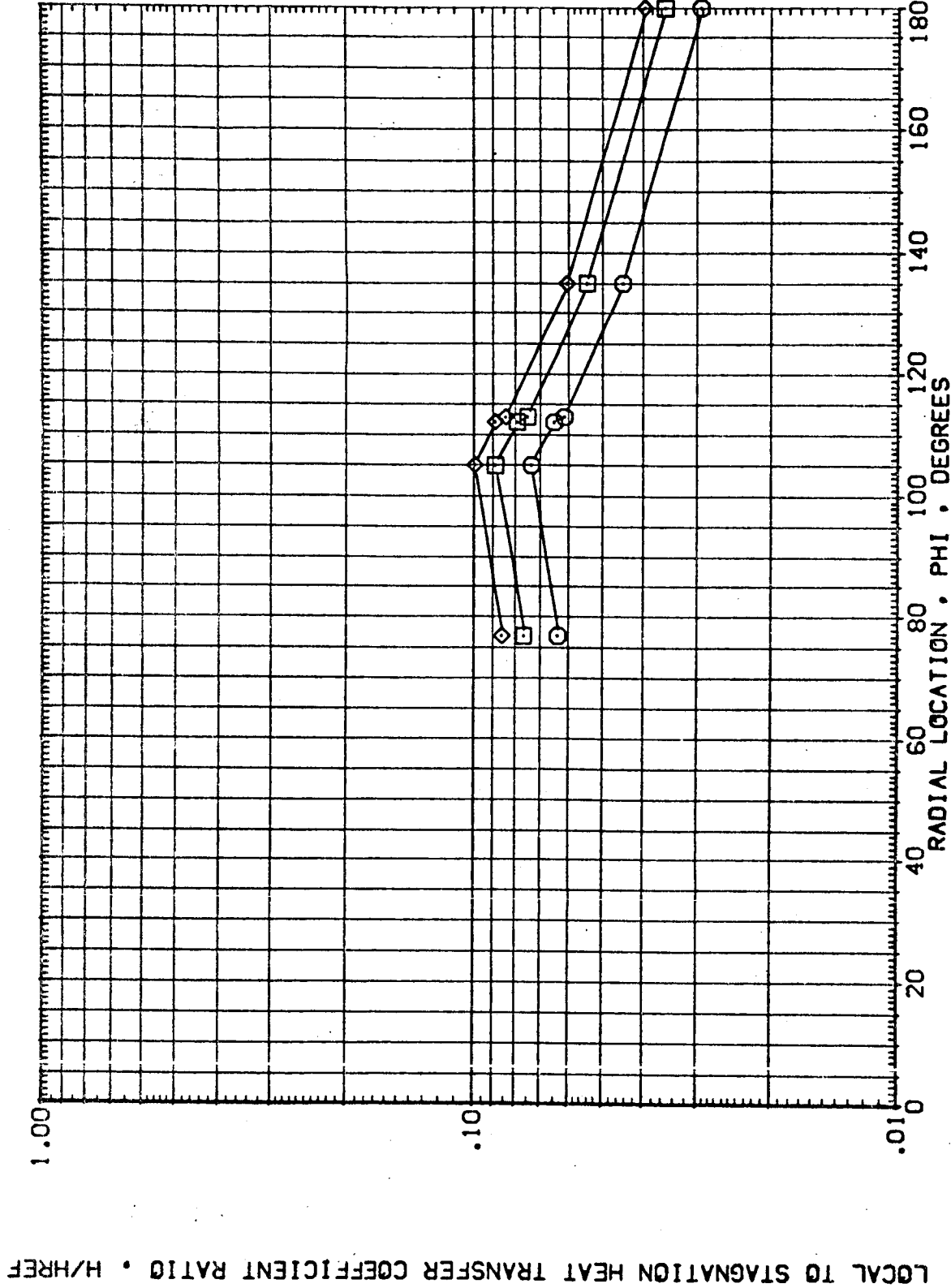


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|POS) ARC 3.5-178 IH3 0+T+S
 (AE|POS) ARC 3.5-178 IH3 0+T+S
 (BE|POS) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA R/V/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

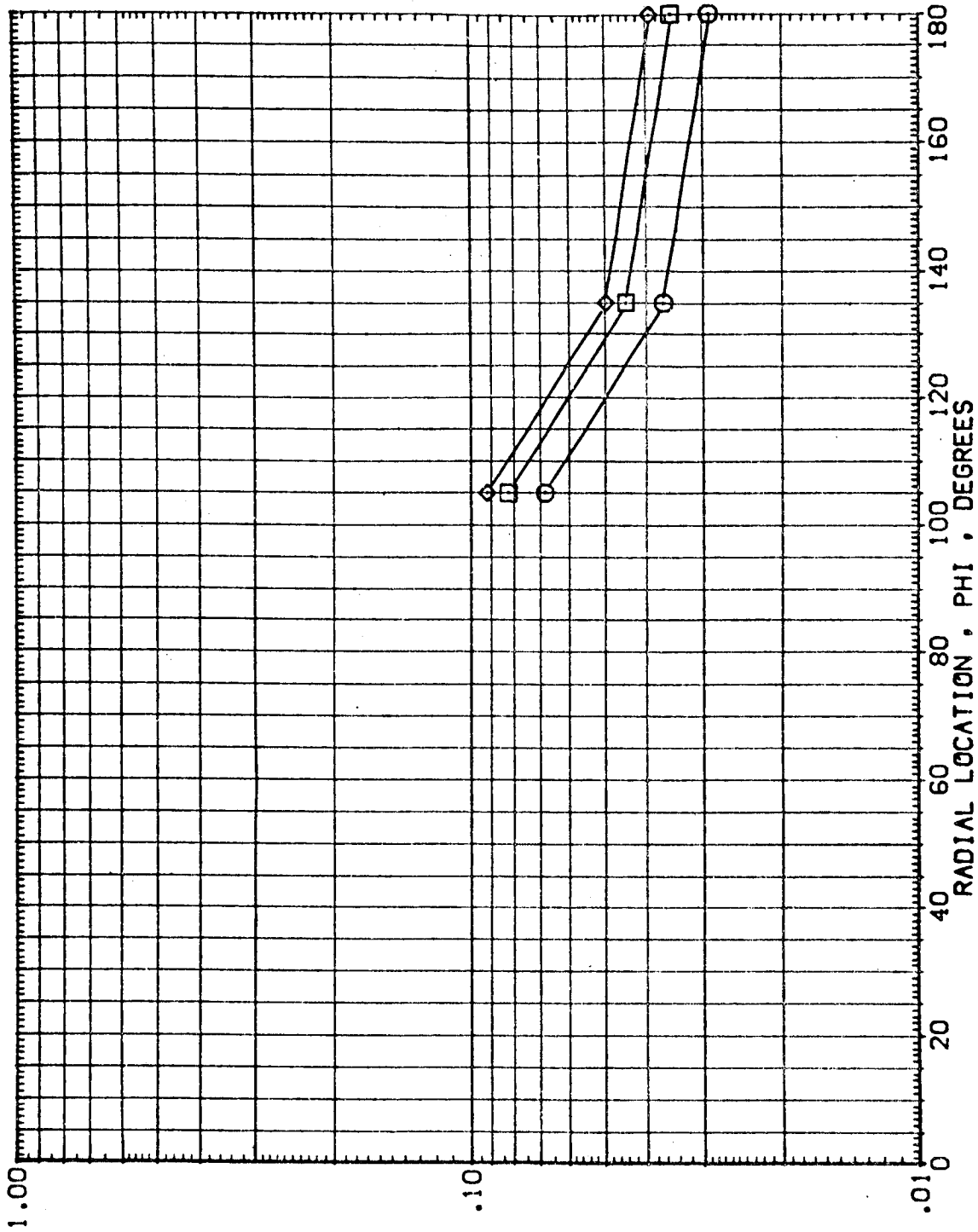


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|POS) ARC 3.5-178 IH3 0+T+S
 (AE|POS) ARC 3.5-178 IH3 0+T+S
 (BE|POS) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

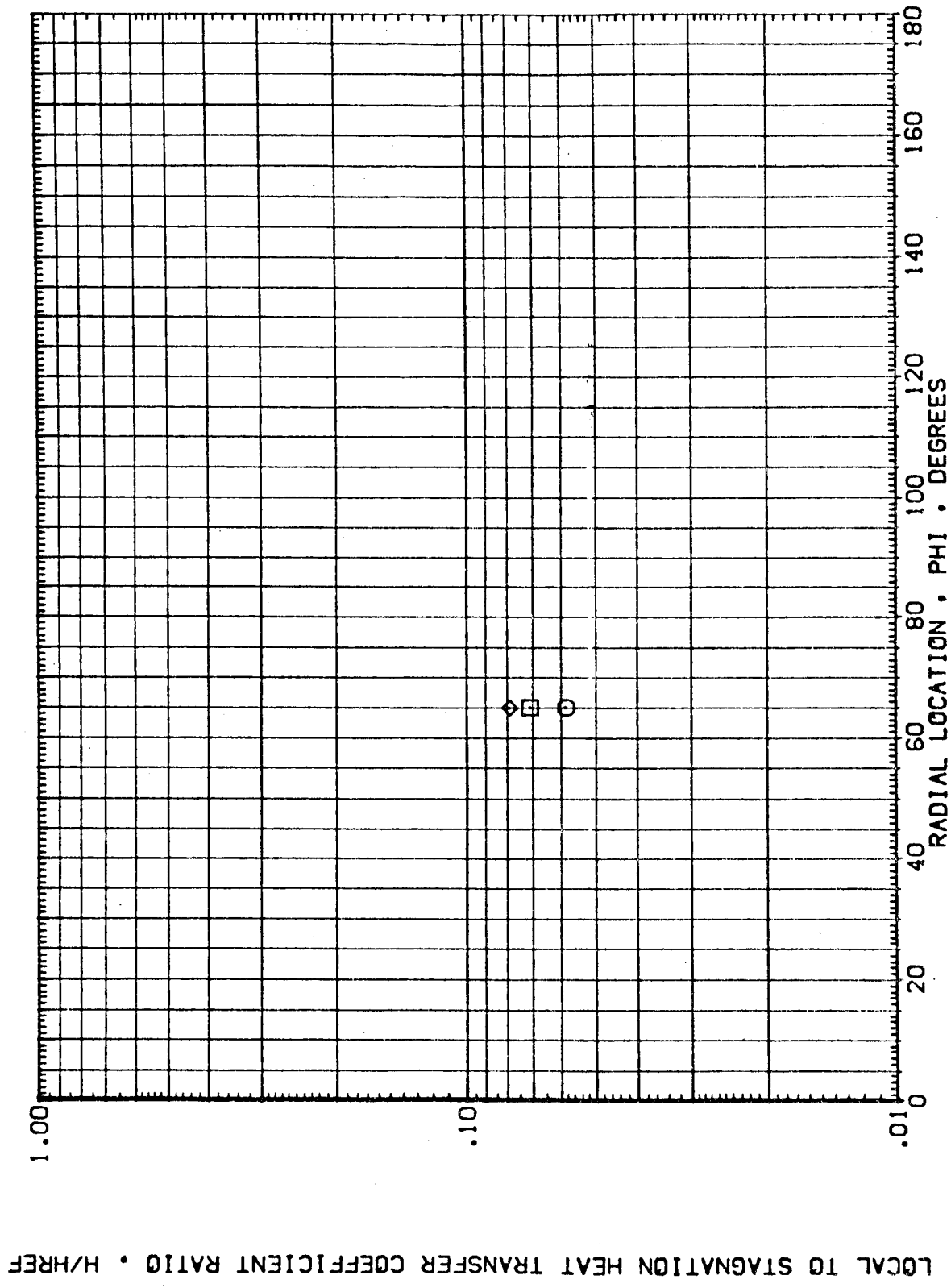


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE/P19) ARC 3.5-178 IH3 O-T+S
 (AE/P19) ARC 3.5-178 IH3 O-T+S
 (BE/P19) ARC 3.5-178 IH3 O-T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RVL HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

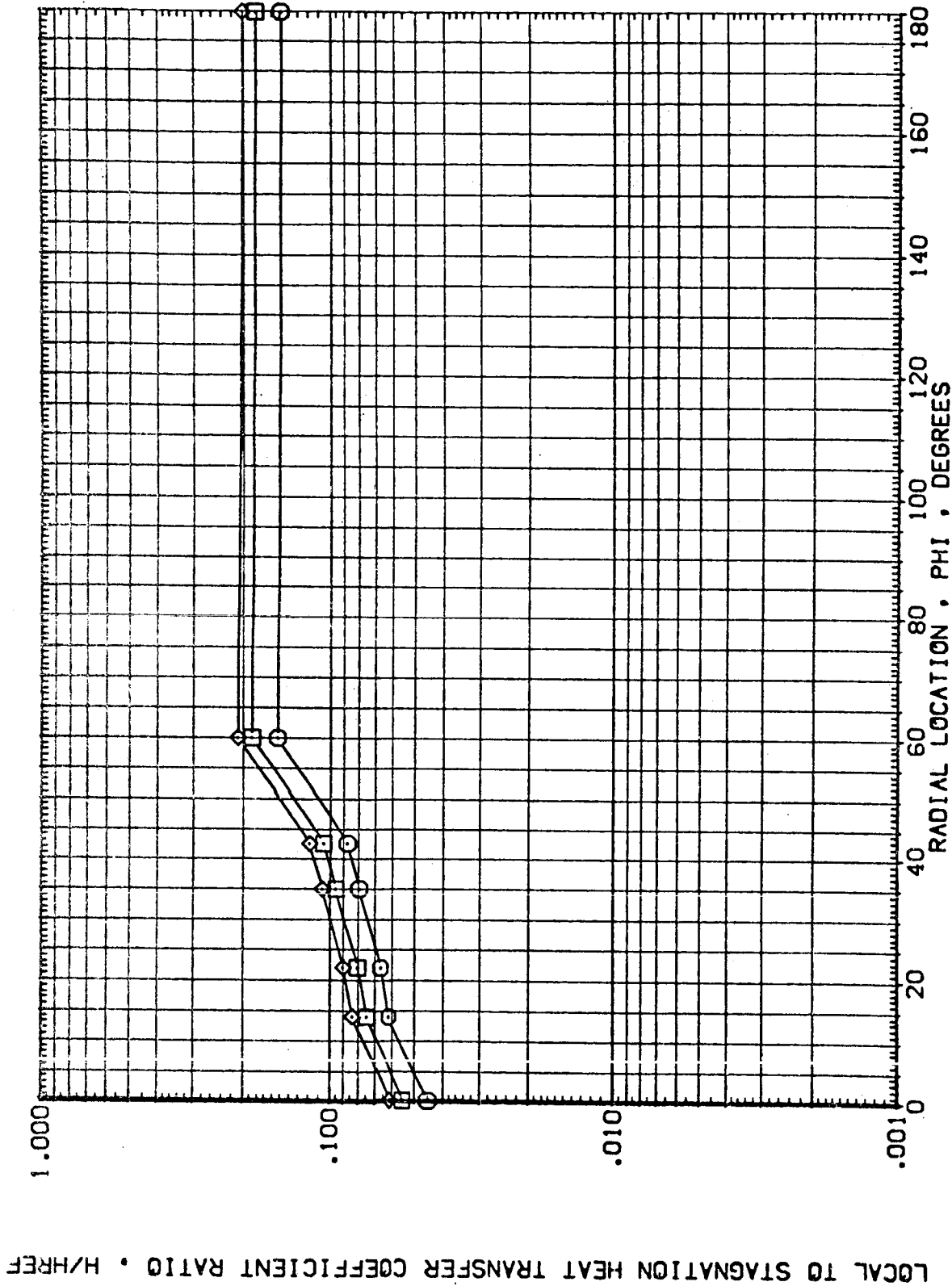


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP19) ARC 3.5-178 IH3 O+T+S
 (AEIP19) ARC 3.5-178 IH3 O+T+S
 (BEIP19) ARC 3.5-178 IH3 O+T+S

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

ORBITTER FUSELAGE
 ORBITTER FUSELAGE
 ORBITTER FUSELAGE

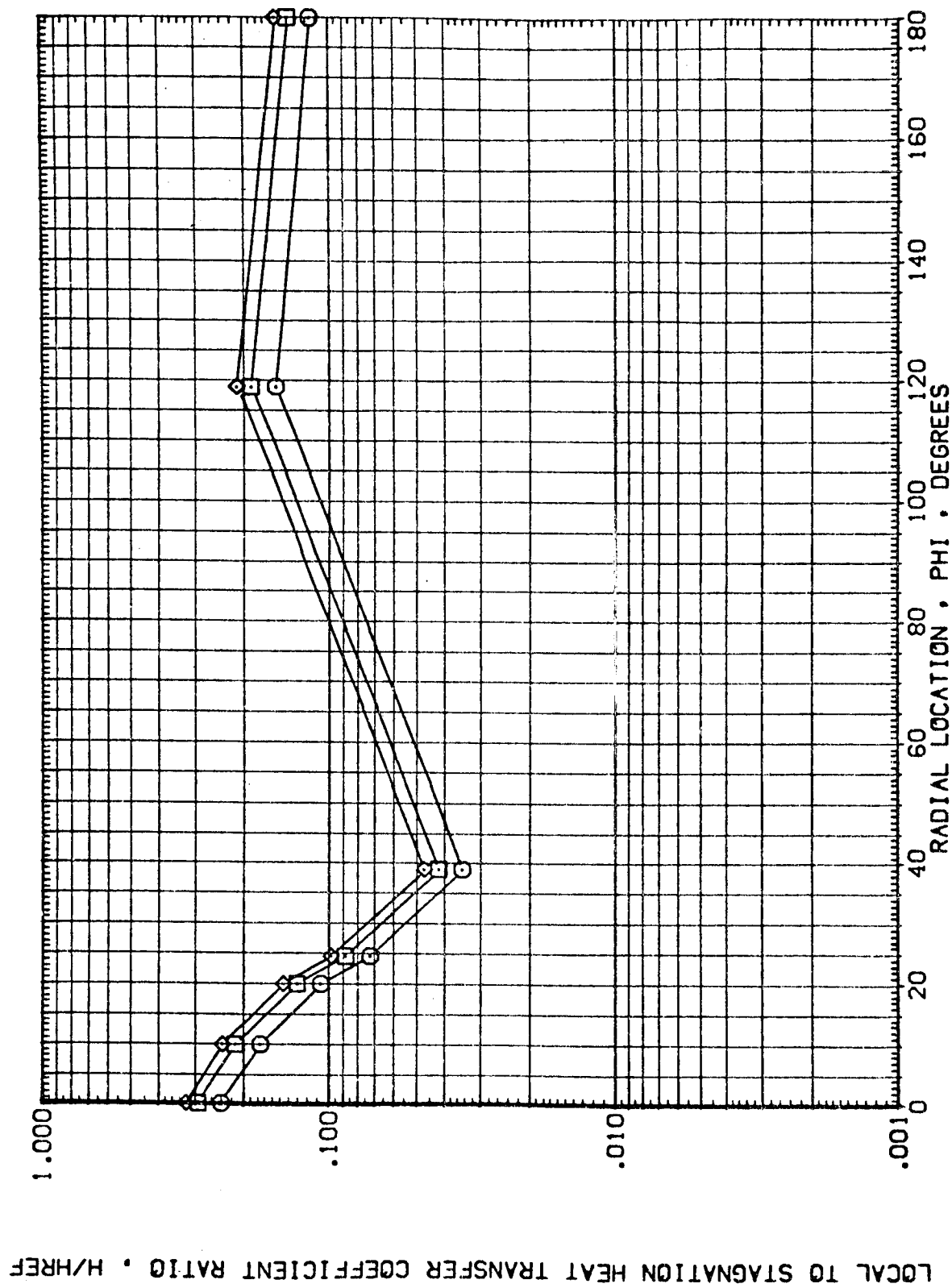


FIG. 47 ORBITTER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP19) ARC 3.5-178 IH3 0+T+S
 (AEIP19) ARC 3.5-178 IH3 0+T+S
 (BEIP19) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE ALPHA BETA RV/L HAV/HT
 ORBITER FUSELAGE -5.000 .000 5.000 1.000
 ORBITER FUSELAGE -5.000 .000 5.000 .900
 ORBITER FUSELAGE -5.000 .000 5.000 .850

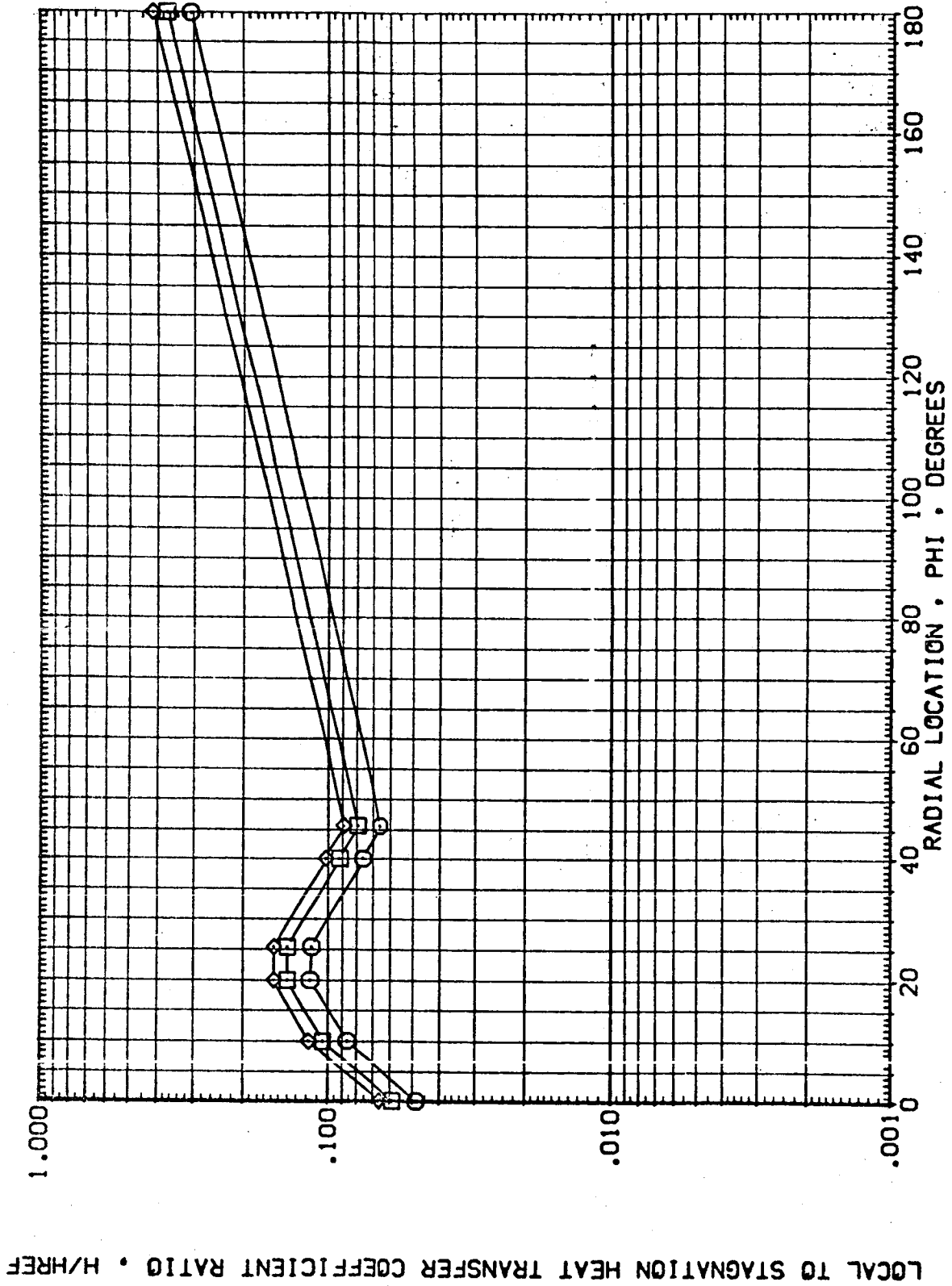


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|PI9) ARC 3.5-178 IH3 0+T+S
 (AE|PI9) ARC 3.5-178 IH3 0+T+S
 (BE|PI9) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE ORBITER FUSELAGE ORBITER FUSELAGE
 ALPHA BETA RVL HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

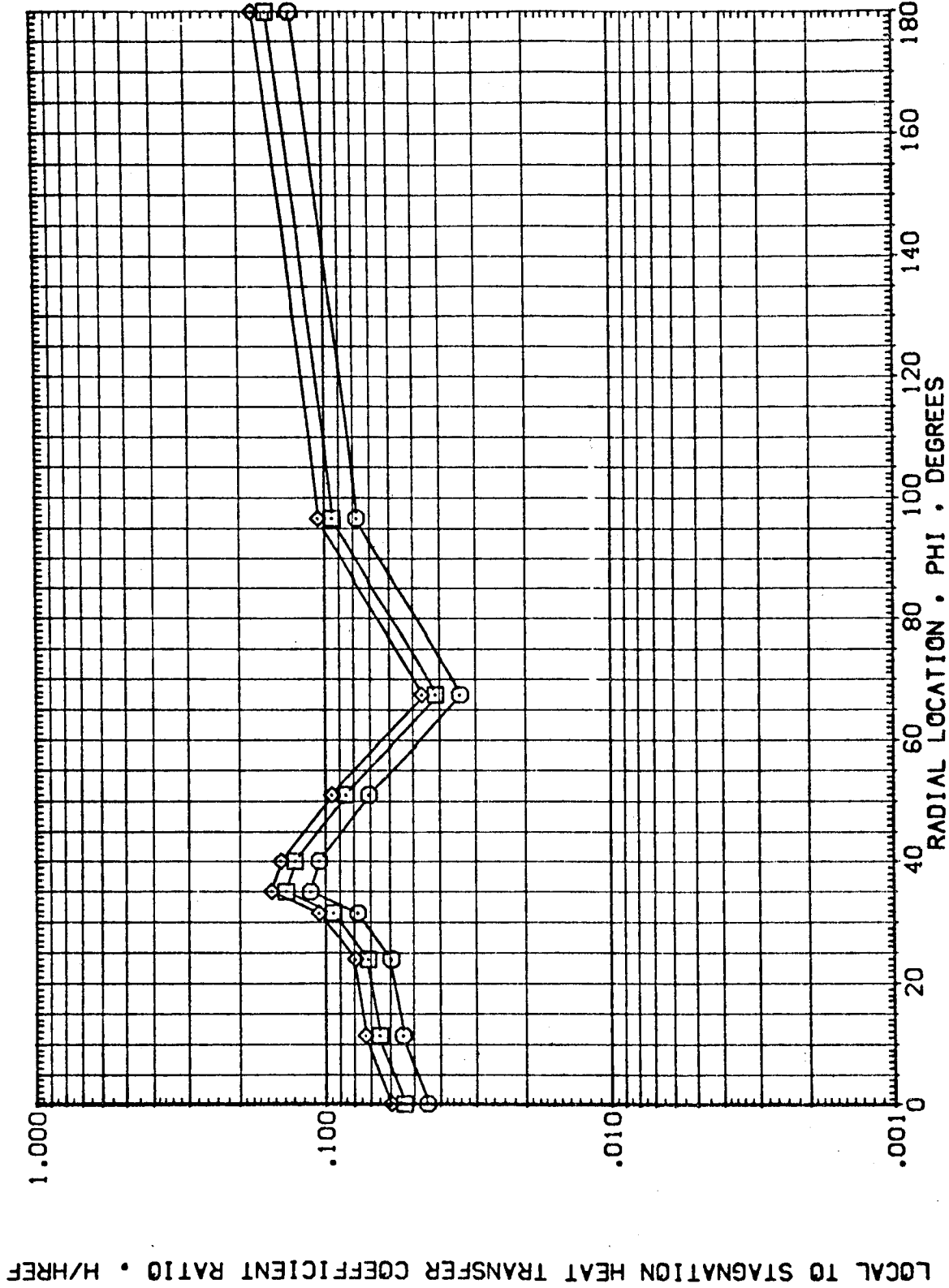


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .200

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (REIP19) □ ARC 3.5-178 IH3 O+T+S
 (AEIP19) ○ ARC 3.5-178 IH3 O+T+S
 (BEIP19) ◇ ARC 3.5-178 IH3 O+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

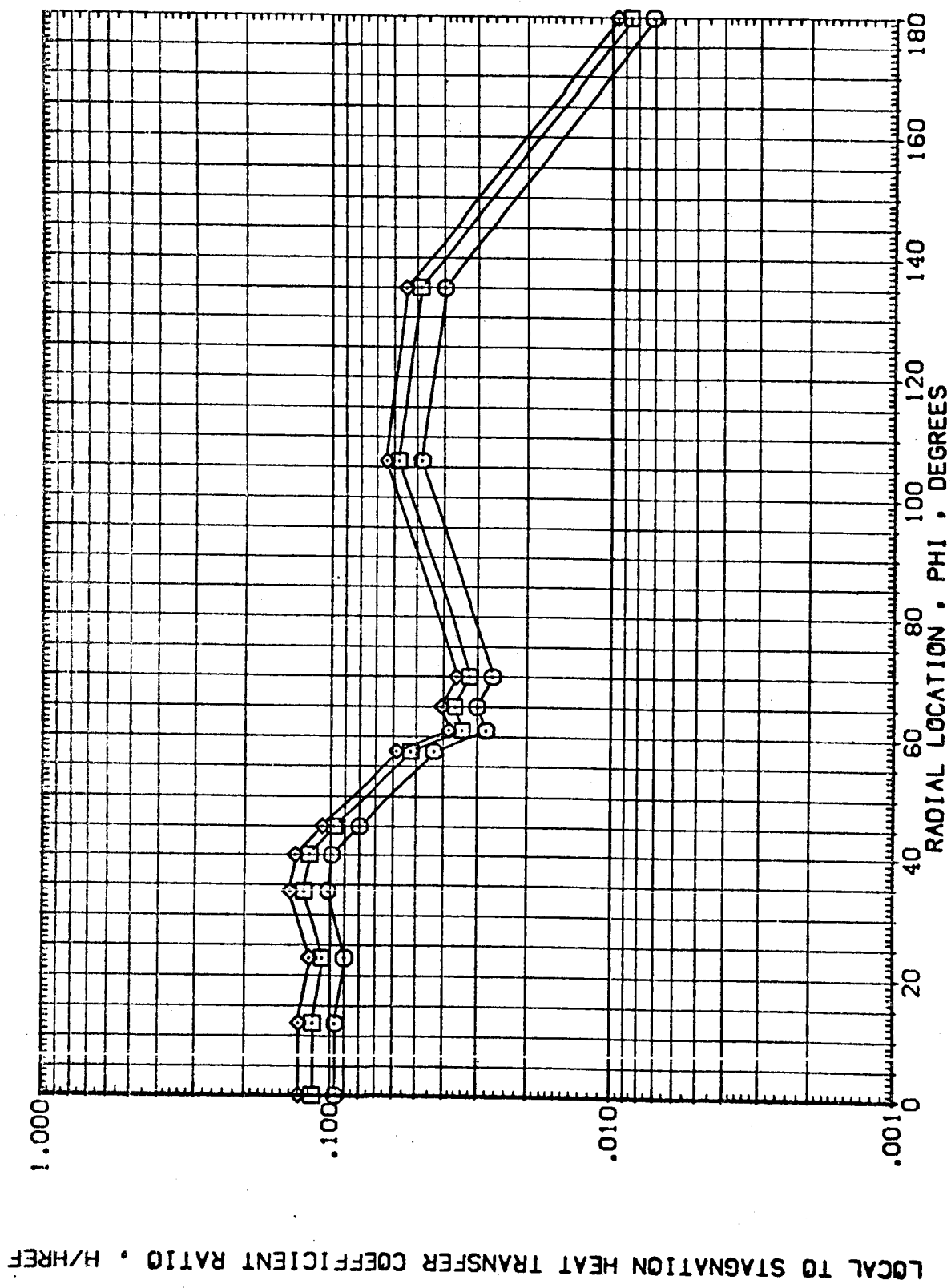


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP19) ARC 3.5-178 IH3 0+1+S
 (AEIP19) ARC 3.5-178 IH3 0+1+S
 (BEIP19) ARC 3.5-178 IH3 0+1+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

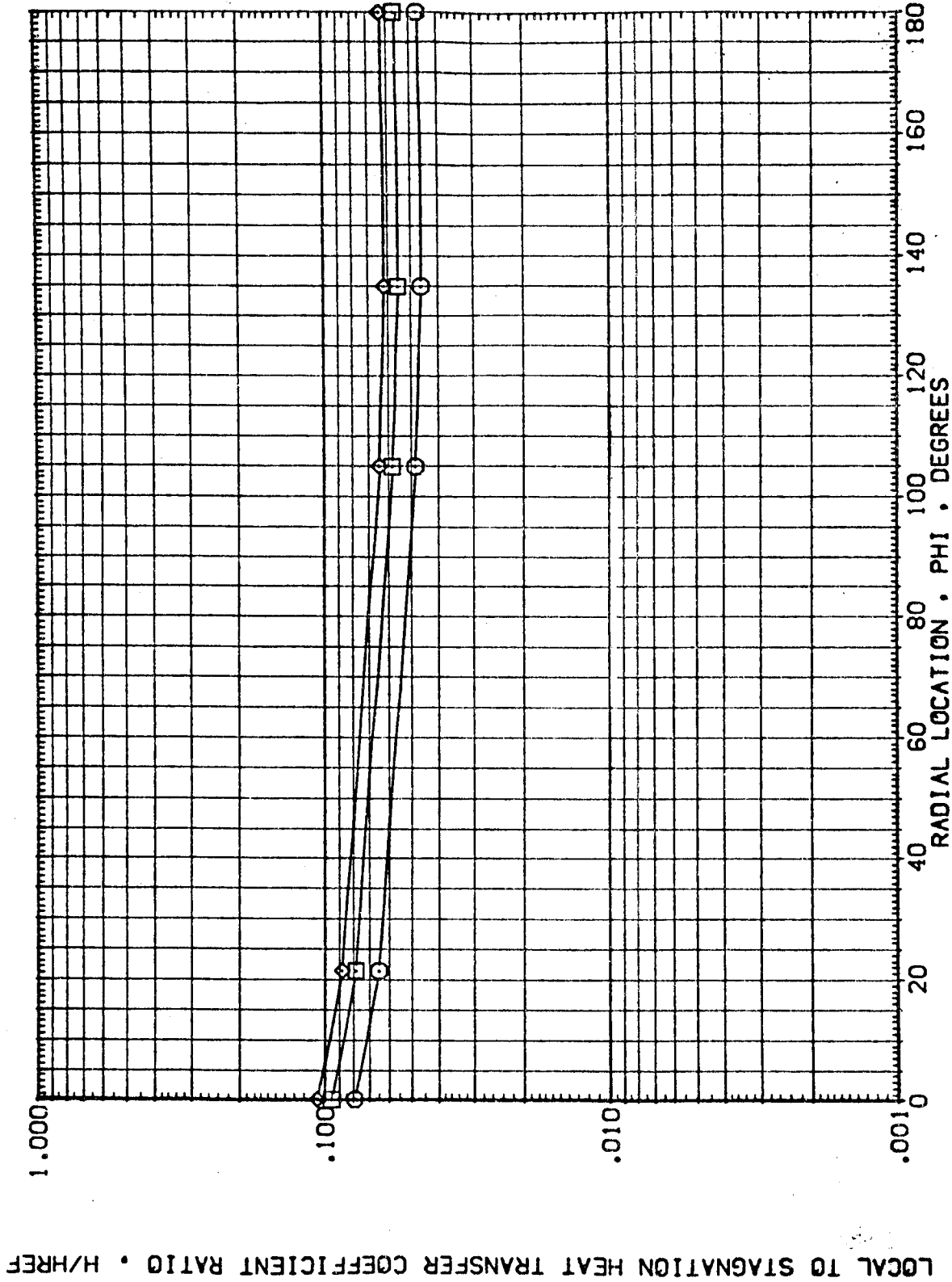


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .400



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP19) ARC 3.5-178 IH3 O+T+S
 (AEIP19) ARC 3.5-178 IH3 O+T+S
 (BEIP19) ARC 3.5-178 IH3 O+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RV/L MAV/HT

-5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

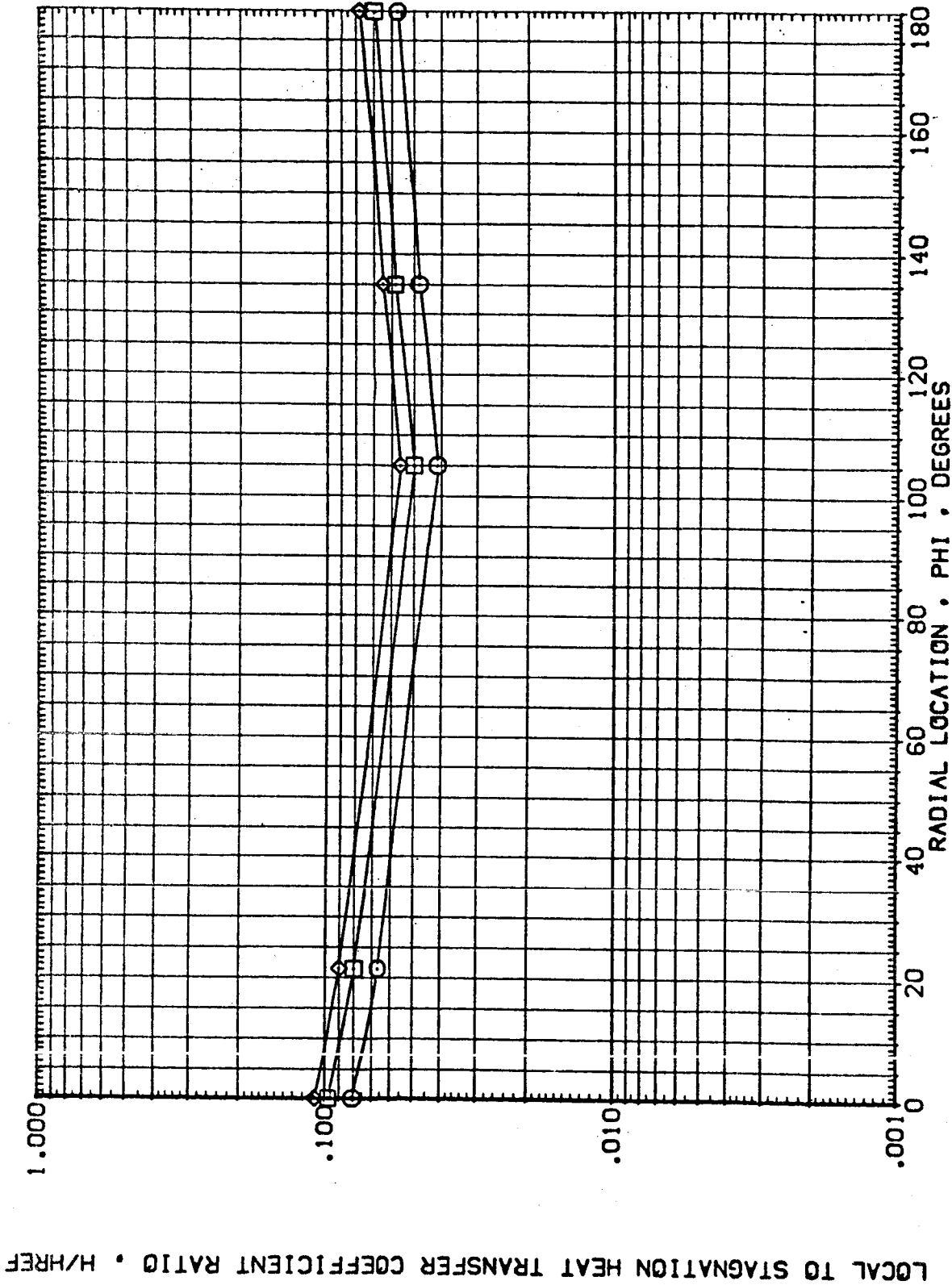


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIPI9) ARC 3.5-178 IH3 0+T+S
 (AEIPI9) ARC 3.5-178 IH3 0+T+S
 (BEIPI9) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

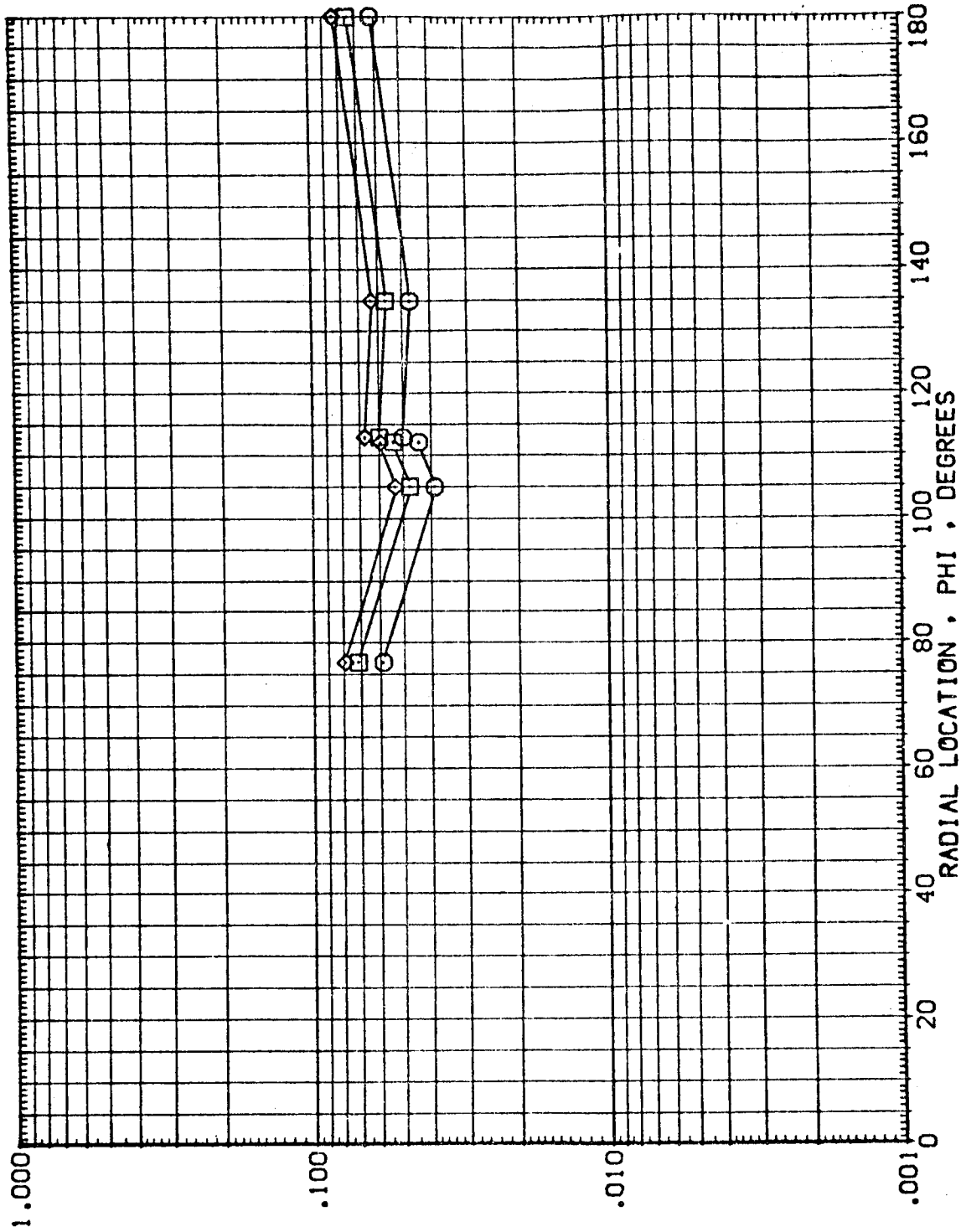


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP19) ARC 3.5-178 IH3 O+I+S
 (AEIP19) ARC 3.5-178 IH3 O+I+S
 (BEIP19) ARC 3.5-178 IH3 O+I+S

ALPHA BETA R/V/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

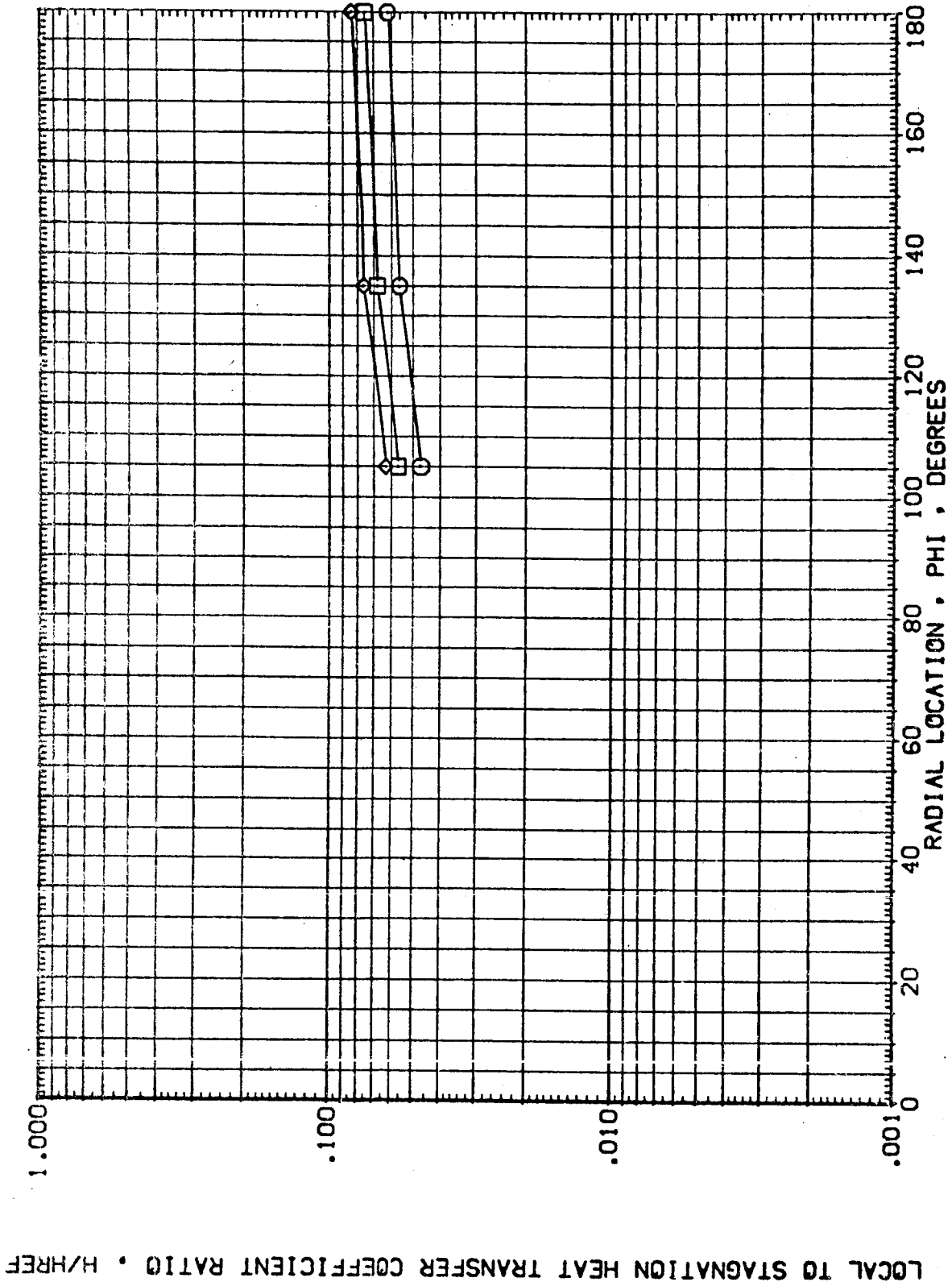


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIP19) ARC 3.5-178 IH3 0+T+S
 (AEIP19) ARC 3.5-178 IH3 0+T+S
 (BEIP19) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RVL HAW/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

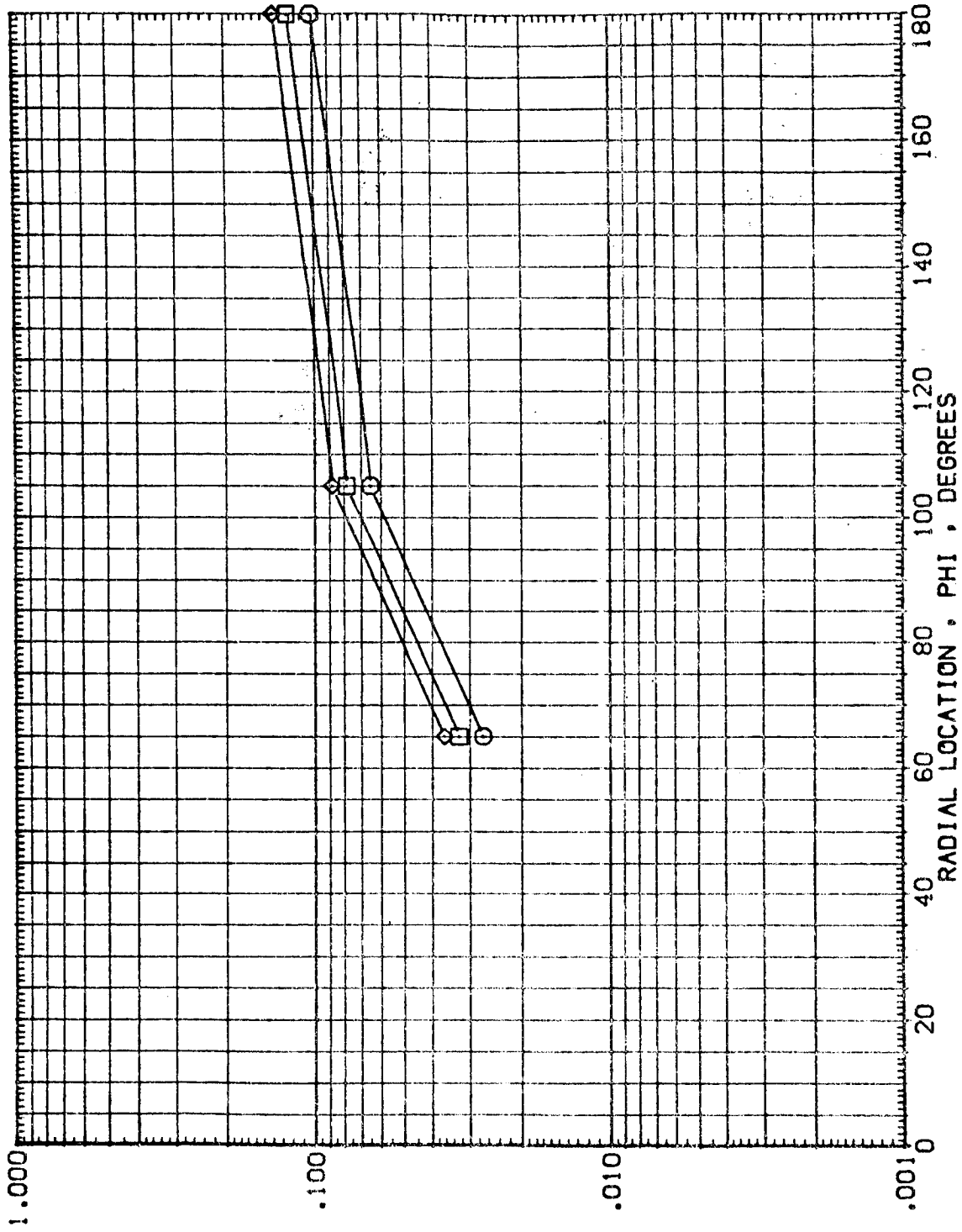





FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIPI9)  ORI: 3.5-178 IH3 0+1+S
 (AEIPI9)  ORI: 3.5-178 IH3 0+1+S
 (BEIPI9)  ORI: 3.5-178 IH3 0+1+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA R/V/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

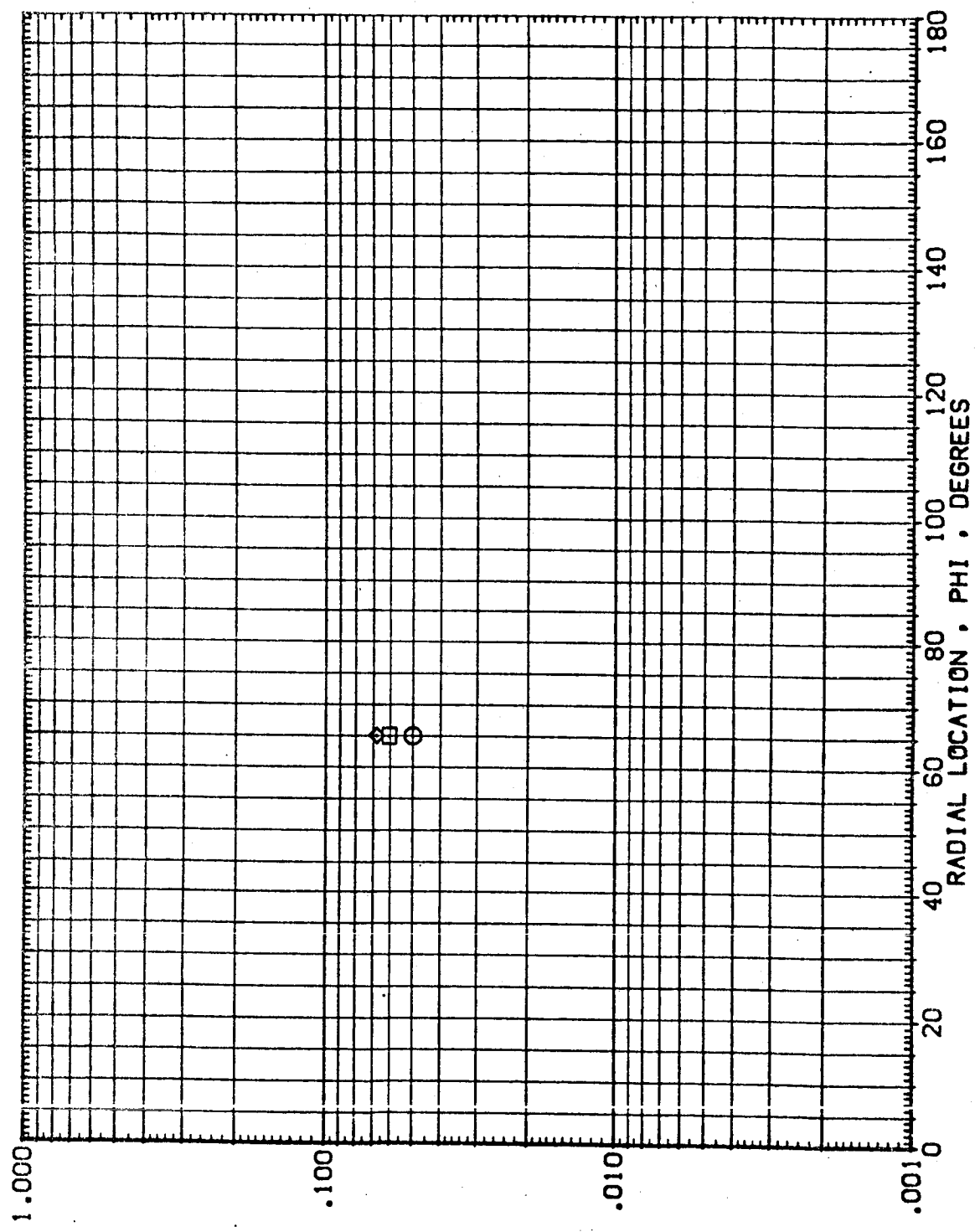


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI/P20) ARC 3.5-178 IH3 0+T+S
 (AEI/P20) ARC 3.5-178 IH3 0+T+S
 (BEI/P20) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RN/L HAV/AT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .500
 -3.000 .000 5.000 .850

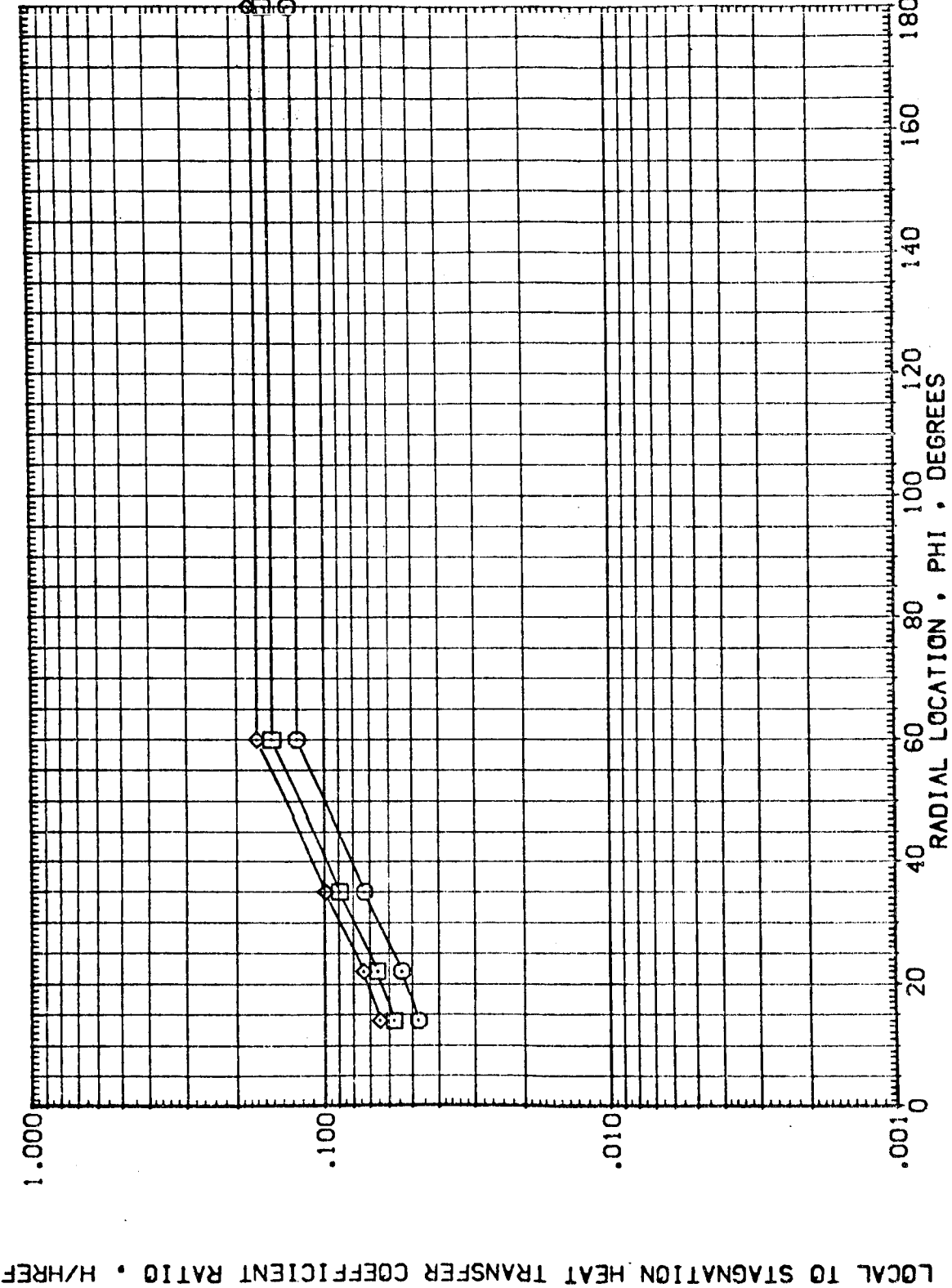


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .050

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|P20) ARC 3.5-178 IH3 0+T+S
 (AE|P20) ARC 3.5-178 IH3 0+T+S
 (BE|P20) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAV/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

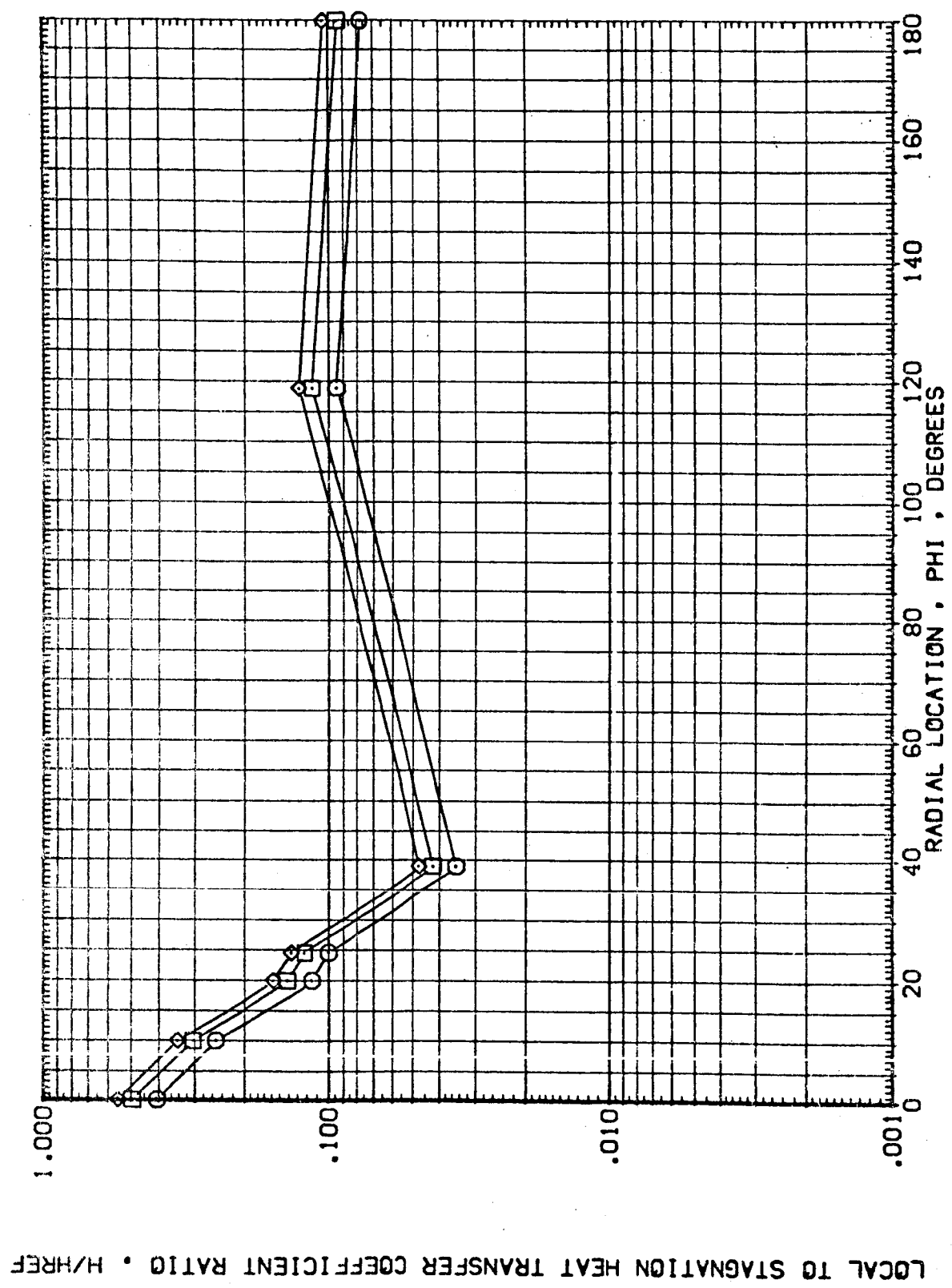


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|P20) ARC 3.5-178 IH3 0+T+S
 (AL|P20) ARC 3.5-178 IH3 0+T+S
 (BE|P20) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE ORBITER FUSELAGE ORBITER FUSELAGE
 ALPHA BETA RV/L HAV/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

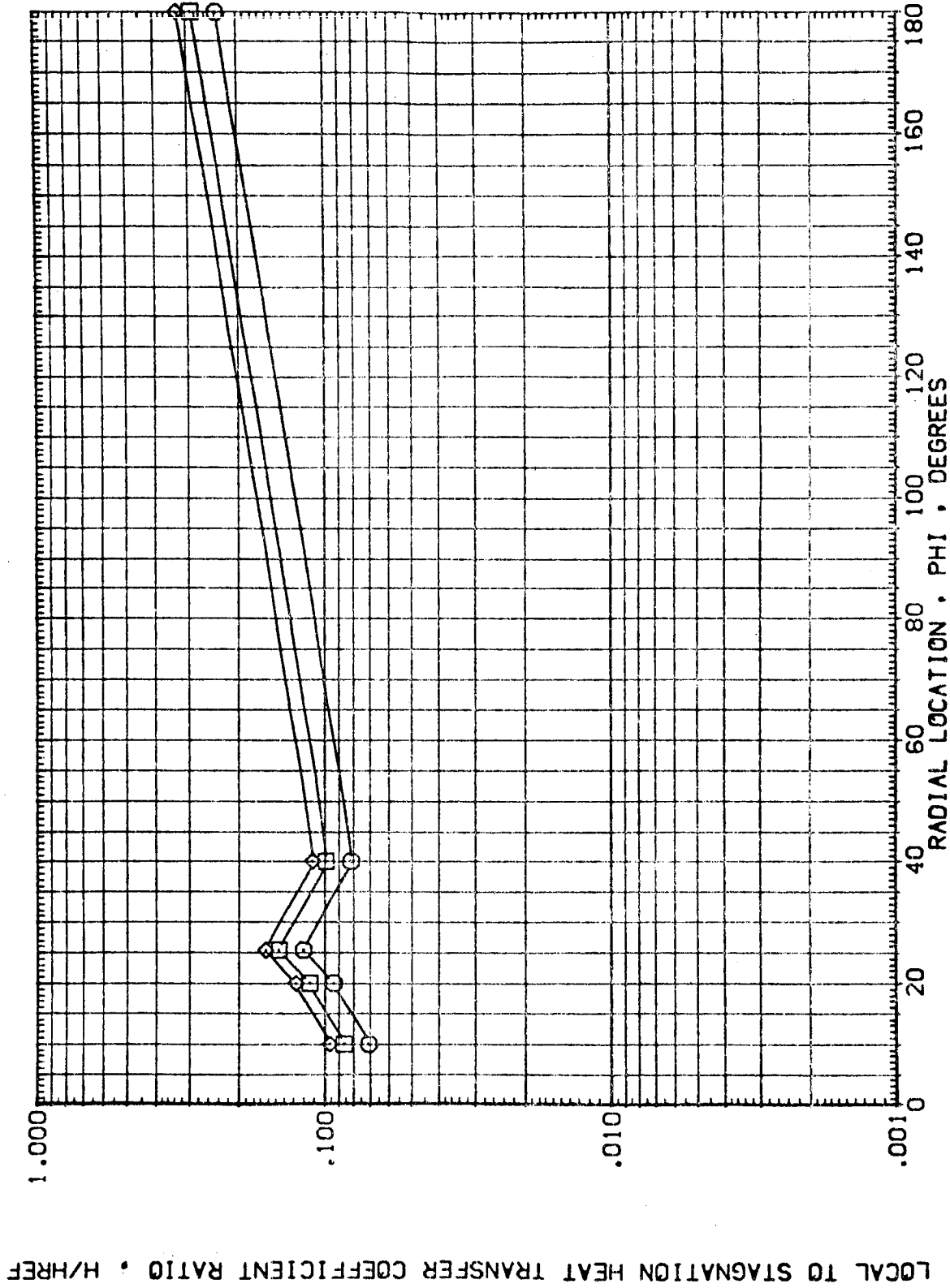


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|P20) ◻ ARC 3.5-178 IH3 0+T+S
 (AL|P20) ◻ ARC 3.5-178 IH3 0+T+S
 (BE|P20) ◊ ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RV/L MAV/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

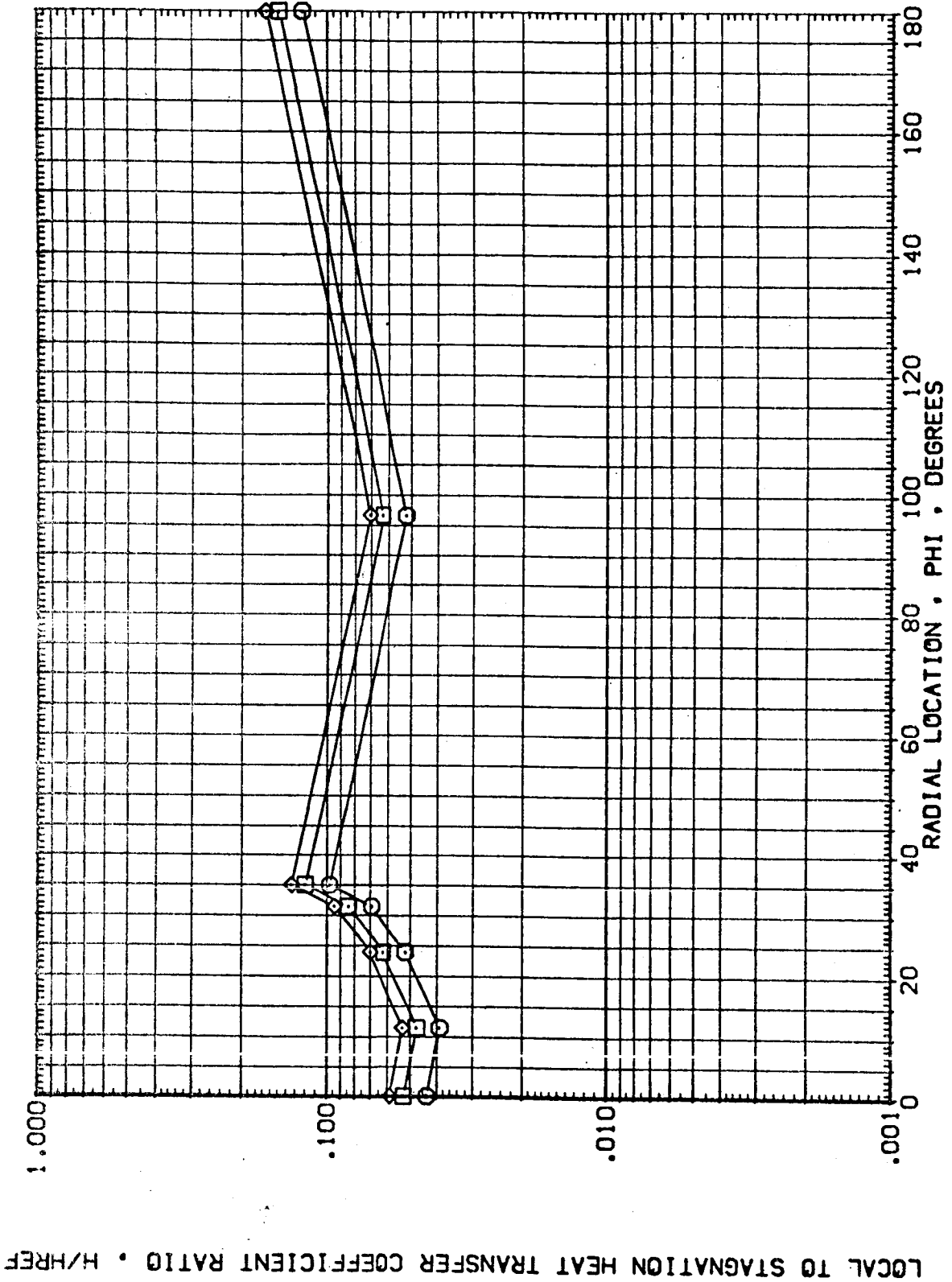


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .200

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAY/HT
 (REF:20) ARC 3.5-178 IH3 0+T+S -3.000 .000 5.000 1.000
 (AE:20) ARC 3.5-178 IH3 0+T+S -3.000 .000 5.000 .900
 (BE:20) ARC 3.5-178 IH3 0+T+S -3.000 .000 5.000 .850

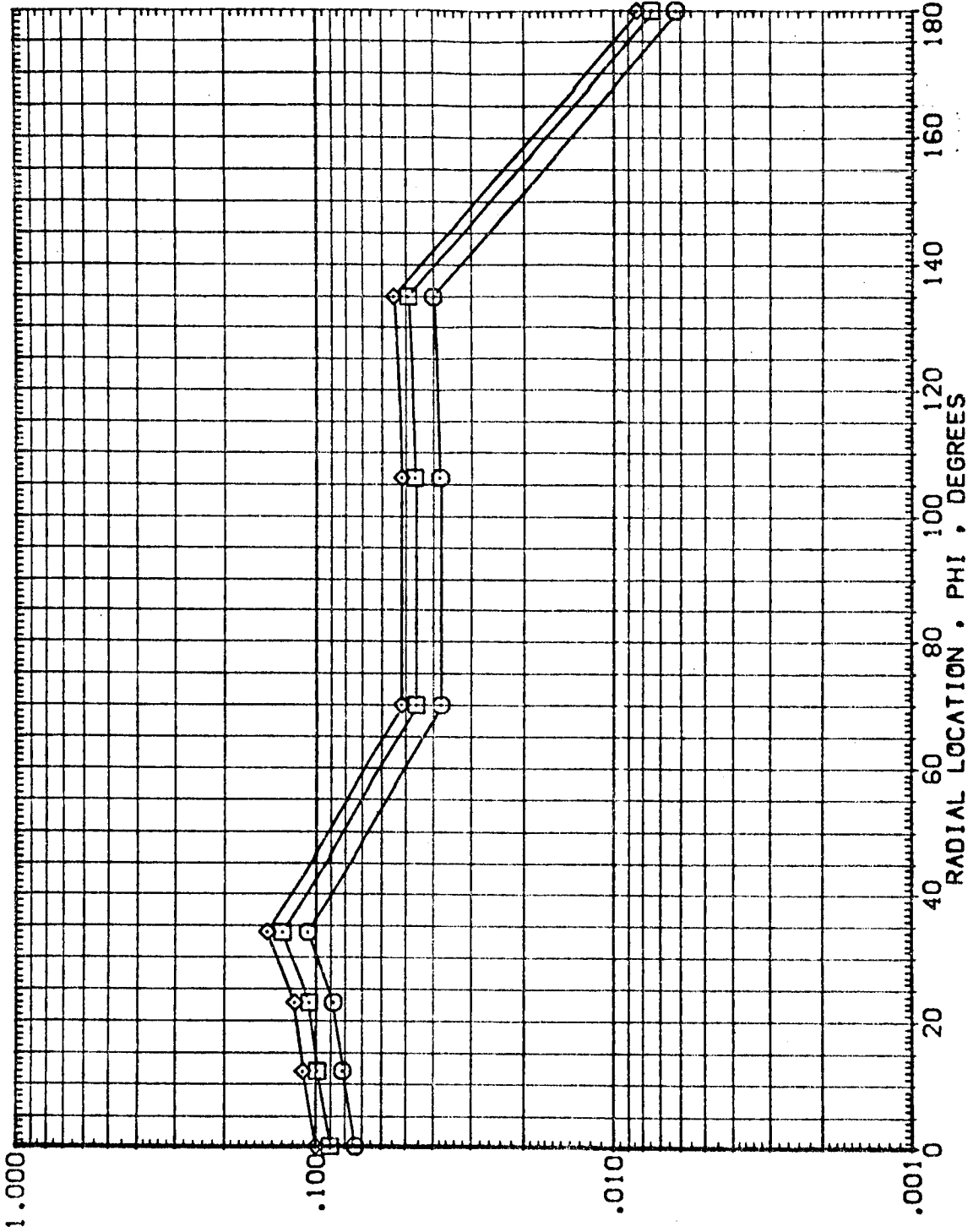


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300



DATA SET SYMBOL (CONFIGURATION DESCRIPTION)
 (REIP20) ARC 3.5-178 IH3 0+1+S
 (AEIP20) ARC 3.5-178 IH3 0+1+S
 (BEIP20) ARC 3.5-178 IH3 0+1+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA RV/L MAV/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

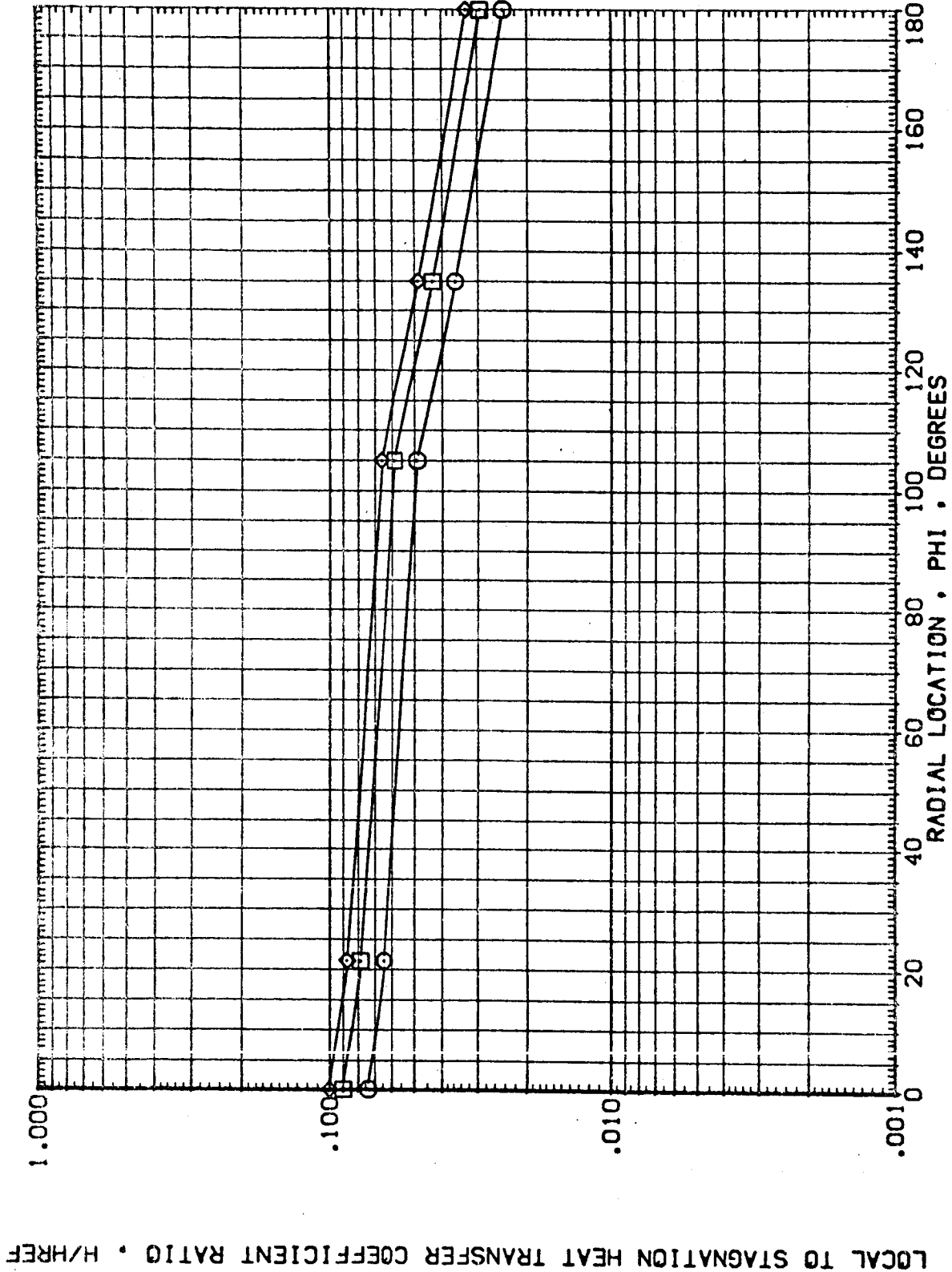


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .400

DATA SET SYMBOLS: CONFIGURATION DESCRIPTION
 (RE|P20) ARC 3.5-178 IH3 0+T+S
 (AE|P20) ARC 3.5-178 IH3 0+T+S
 (BE|P20) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA R/V/L HAV/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

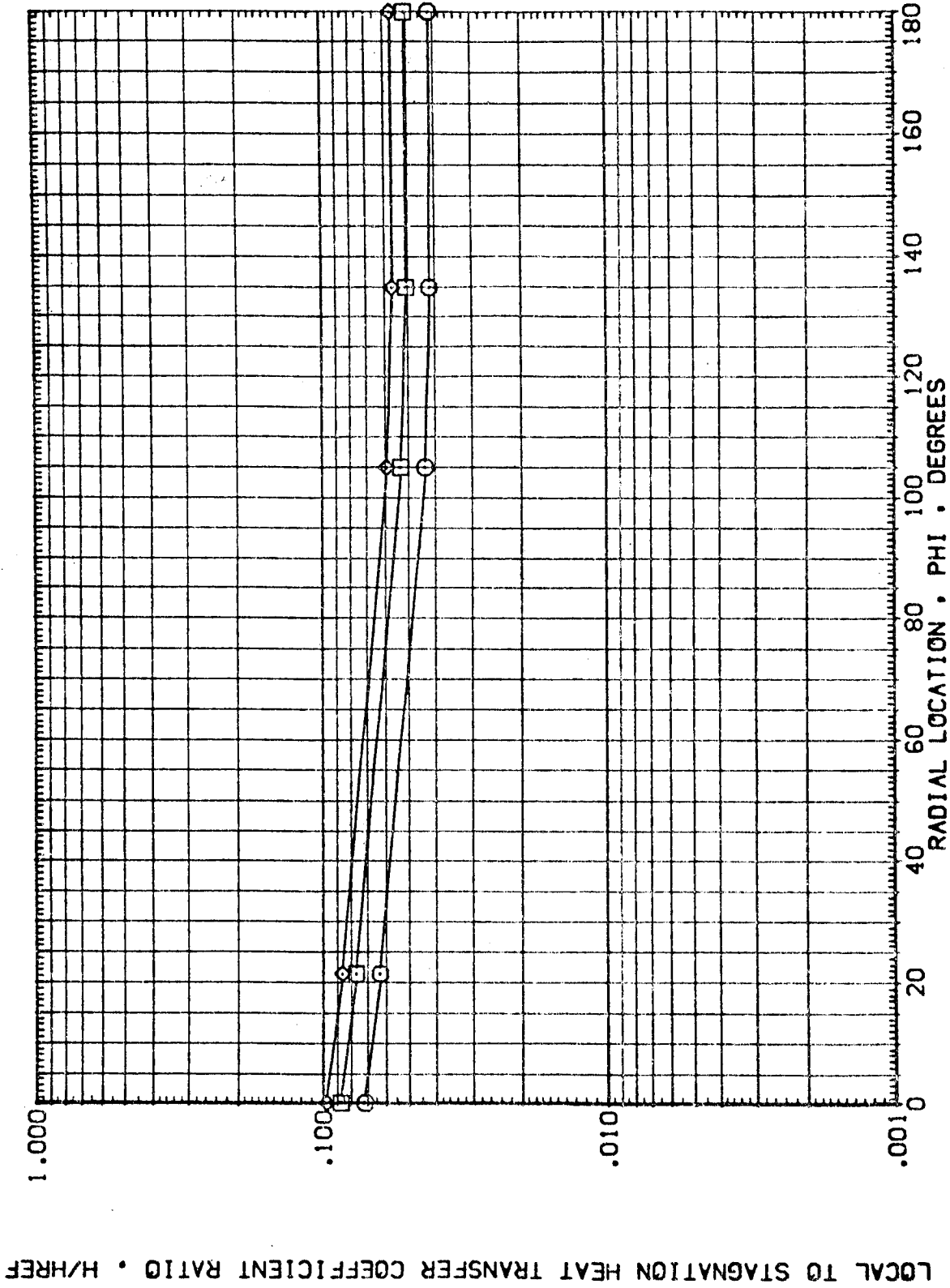
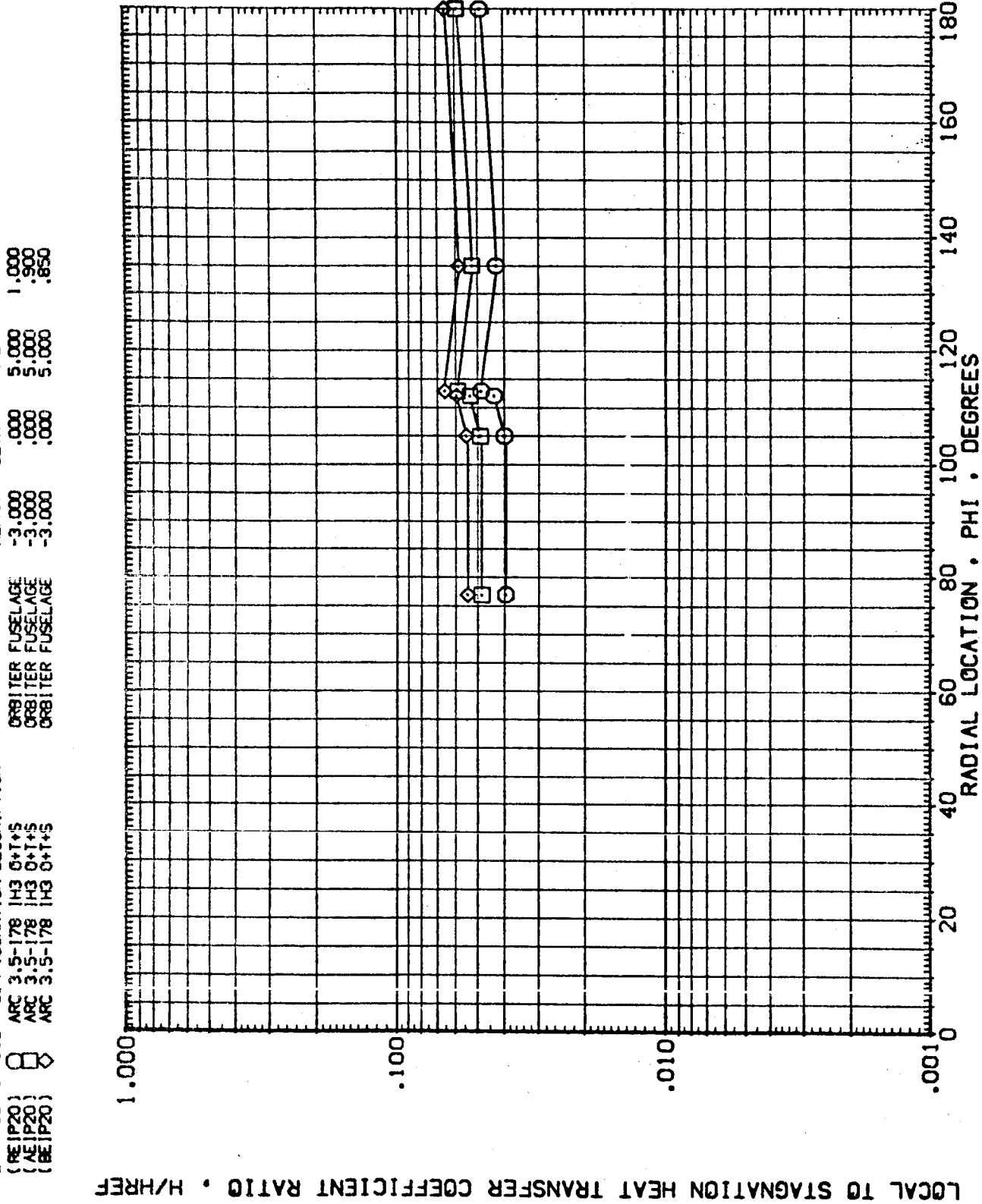


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE/JP20) ARC 3.5-178 IH3 0+T+S
 (AE/JP20) ARC 3.5-178 IH3 0+T+S
 (BE/JP20) ARC 3.5-178 IH3 0+T+S

ALPHA BETA R/V/L HAV/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

RADIAL LOCATION, PHI, DEGREES

FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|P20) ARC 3.5-178 IH3 0+T+S
 (AE|P20) ARC 3.5-178 IH3 0+T+S
 (BE|P20) ARC 3.5-178 IH3 0+T+S

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA BETA R_N/L HAV/HIT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

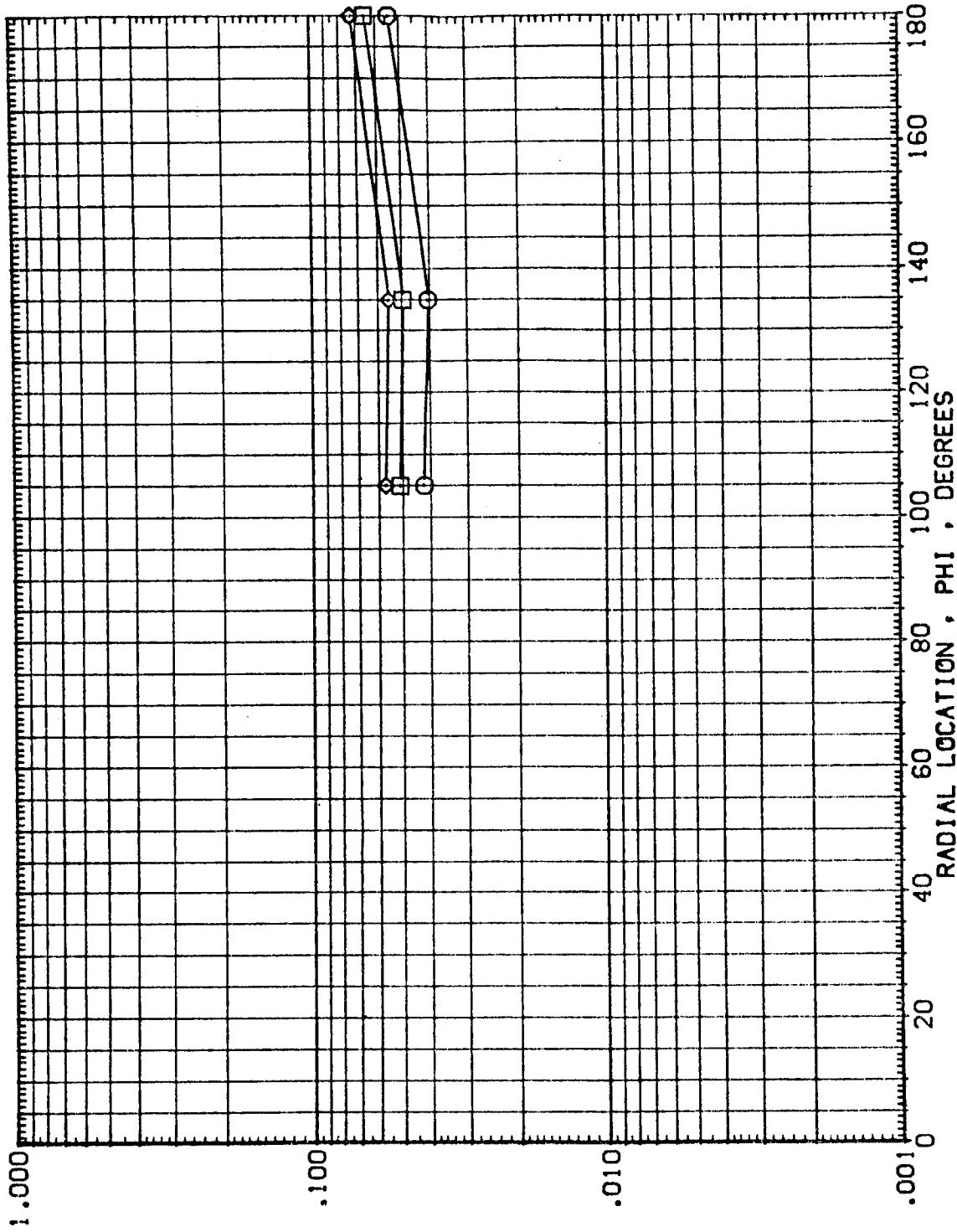


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(RE P20)	ARC 3.5-178 IHG 0+T+S	-3.000	.000	5.000	1.000
(AE P20)	ARC 3.5-178 IHG 0+T+S	-3.000	.000	5.000	.900
(BE P20)	ARC 3.5-178 IHG 0+T+S	-3.000	.000	5.000	.850

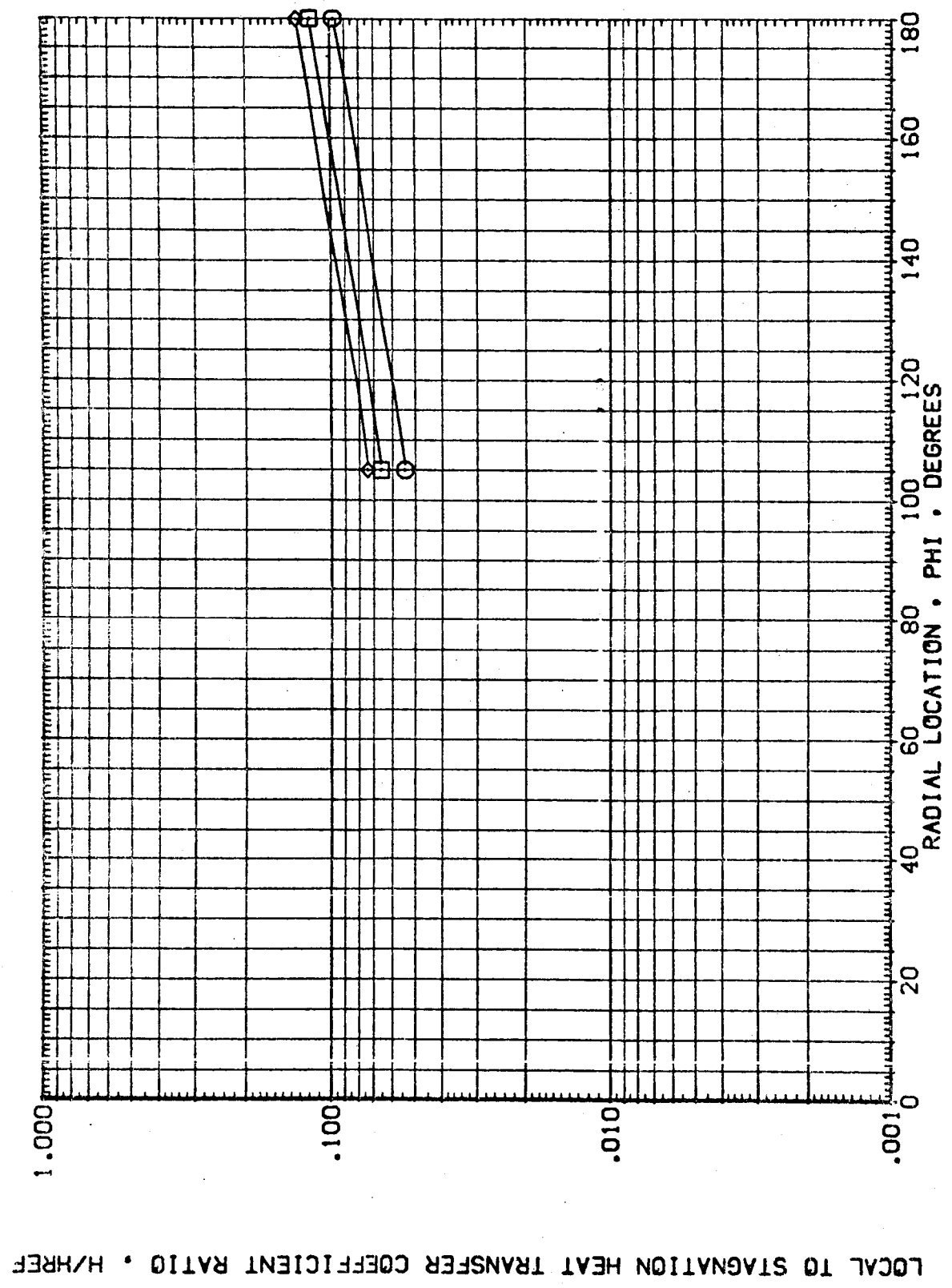


FIG. 47 ORBITER FUSELAGE - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(EEIP06) ARC 3.5-178 IH3 O+I+S .000 .000 1.500 .900

(EEIP07) ARC 3.5-178 IH3 O+I+S .000 .000 5.000 .900

(EEIP08) ARC 3.5-178 IH3 O+I+S (TRIPS) .000 .000 1.500 .900

(EEIP09) ARC 3.5-178 IH3 O+I+S (TRIPS) .000 .000 5.000 .900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

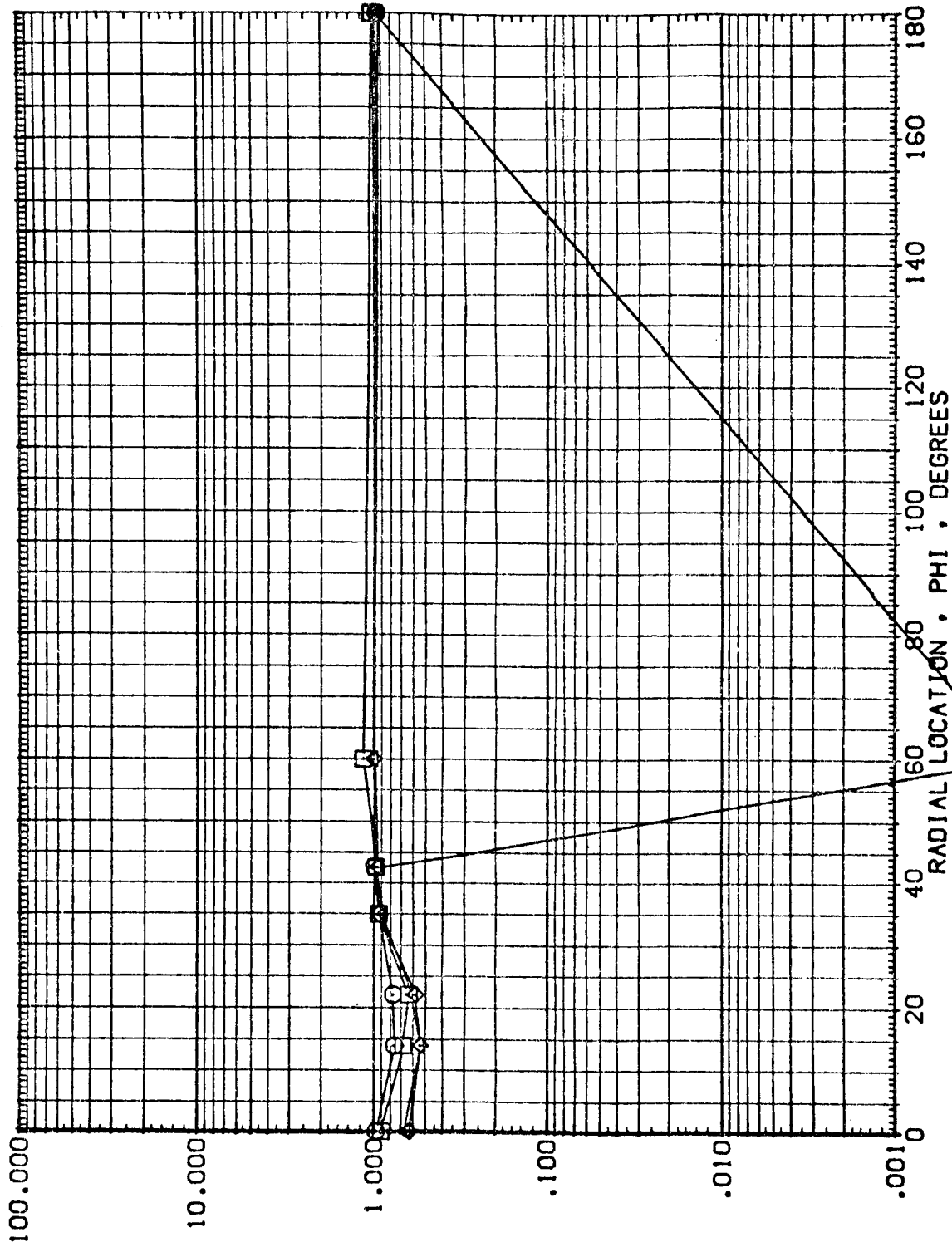


FIG. 48 ORBITER FUSELAGE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .050

DATA SET SYMBOL (CONFIGURATION DESCRIPTION)

(EEI P06)	ARI: 3.5-178 IH3 0-T+S
(EEI P07)	ARI: 3.5-178 IH3 0-T+S
(EEI P08)	ARI: 3.5-178 IH3 0-T+S (TRIPS)
(EEI P09)	ARI: 3.5-178 IH3 0-T+S (TRIPS)

ORBITER FUSELAGE
ORBITER FUSELAGE
ORBITER FUSELAGE
ORBITER FUSELAGE

ALPHA .000 .000 .000 .000

BETA .000 .000 .000 .000

RN/L 1.500 5.000 1.500 5.000

HAV/HF .900 .900 .900 .900

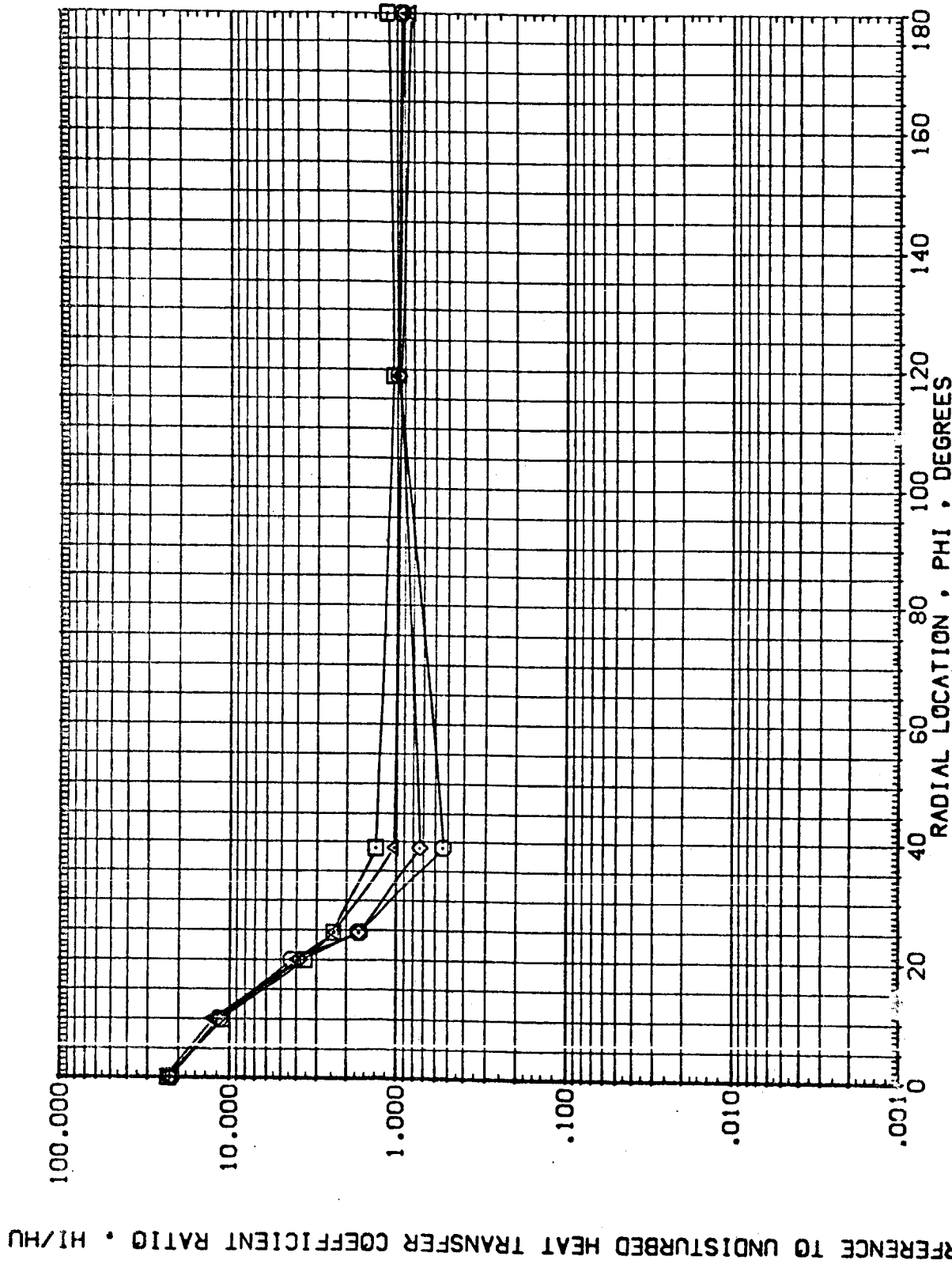


FIG. 48 ORBITER FUSELAGE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA REYN HAW/HT
 (EE|POS) ARC 3.5-178 IH3 0+T+S .000 .000 1.500 .500
 (EE|POS) ARC 3.5-178 IH3 0+T+S .000 .000 5.000 .500
 (EE|POS) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 .500
 (EE|POS) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .500

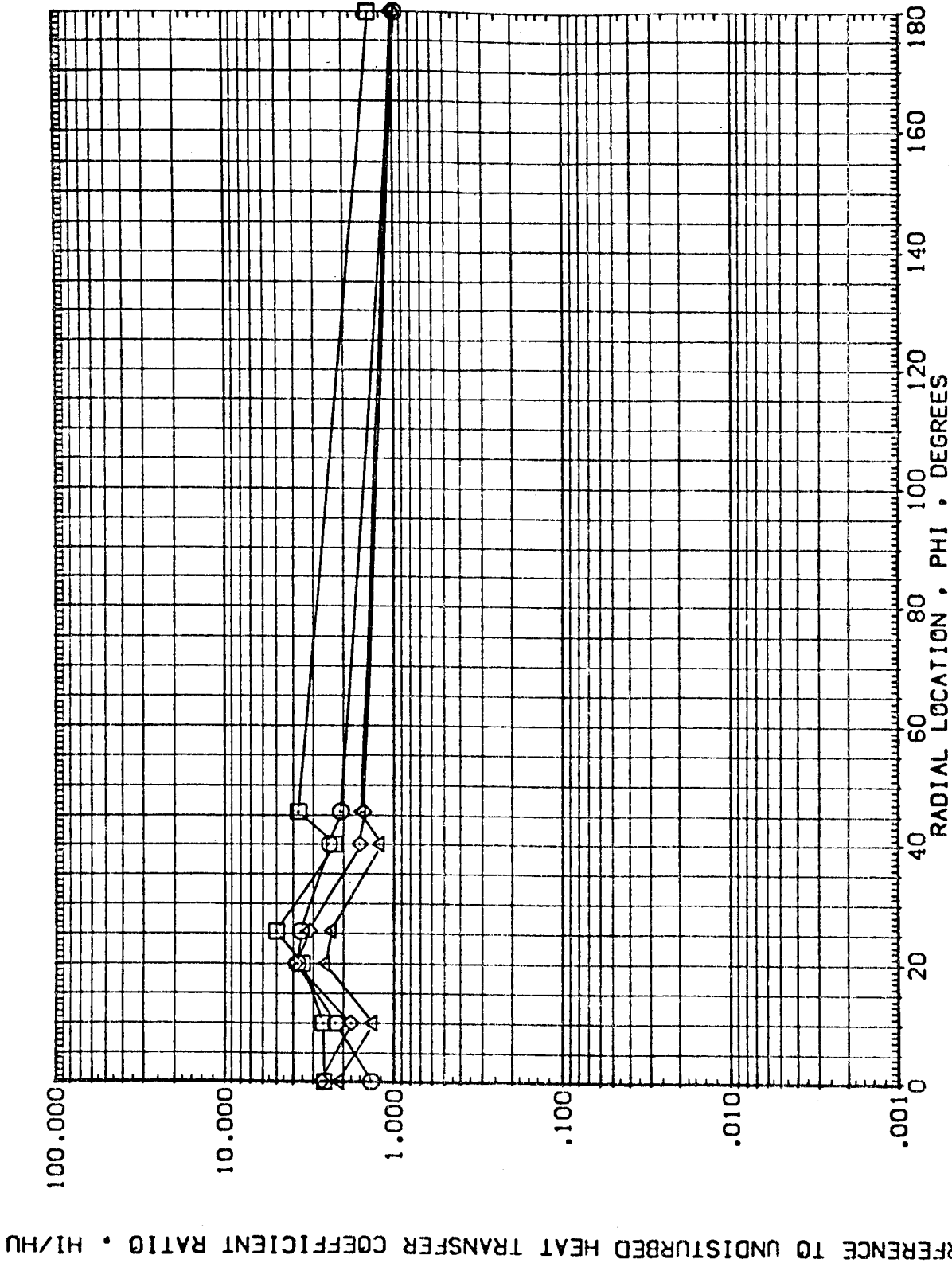
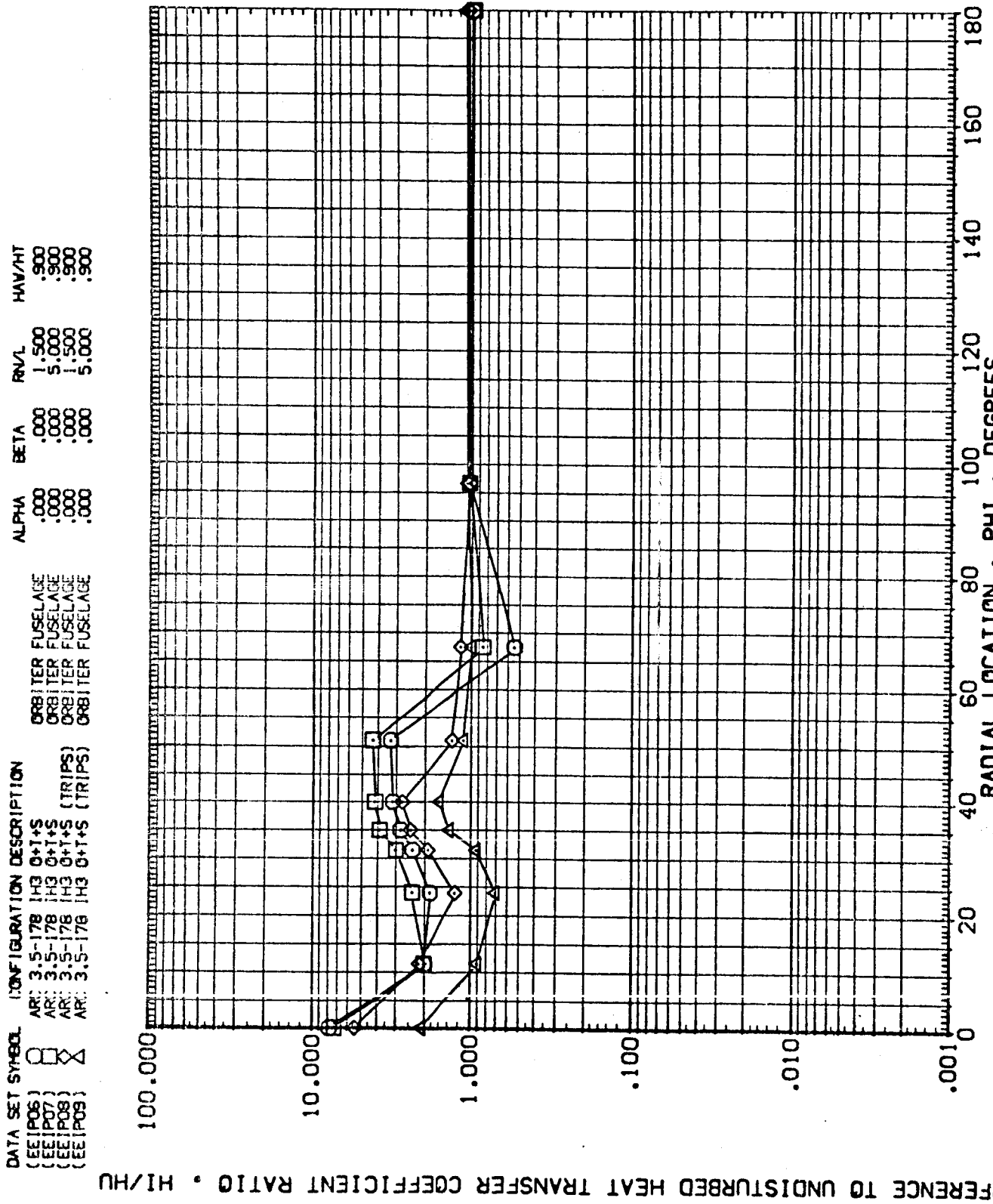


FIG. 48 ORBITER FUSELAGE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .150



INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (EE|POS) ARC: 3.5-178 IH3 O+T+S .000 .000 1.500 .900
 (EE|POS) ARC: 3.5-178 IH3 O+T+S .000 .000 5.000 .900
 (EE|POS) ARC: 3.5-178 IH3 O+T+S (TRIPS) .000 .000 1.500 .900
 (EE|POS) ARC: 3.5-178 IH3 O+T+S (TRIPS) .000 .000 5.000 .900

FIG. 48 ORBITER FUSELAGE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .200

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA FN/L HAV/HT
 (EE) (P05) ARC 3.5-178 [H3 0+T+S] .000 .000 1.500 .900
 (EE) (P07) ARC 3.5-178 [H3 0+T+S] .000 .000 5.000 .300
 (EE) (P08) ARC 3.5-178 [H3 0+T+S] (TRIPS) .000 .000 1.500 .900
 (EE) (P09) ARC 3.5-178 [H3 0+T+S] (TRIPS) .000 .000 5.000 .900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

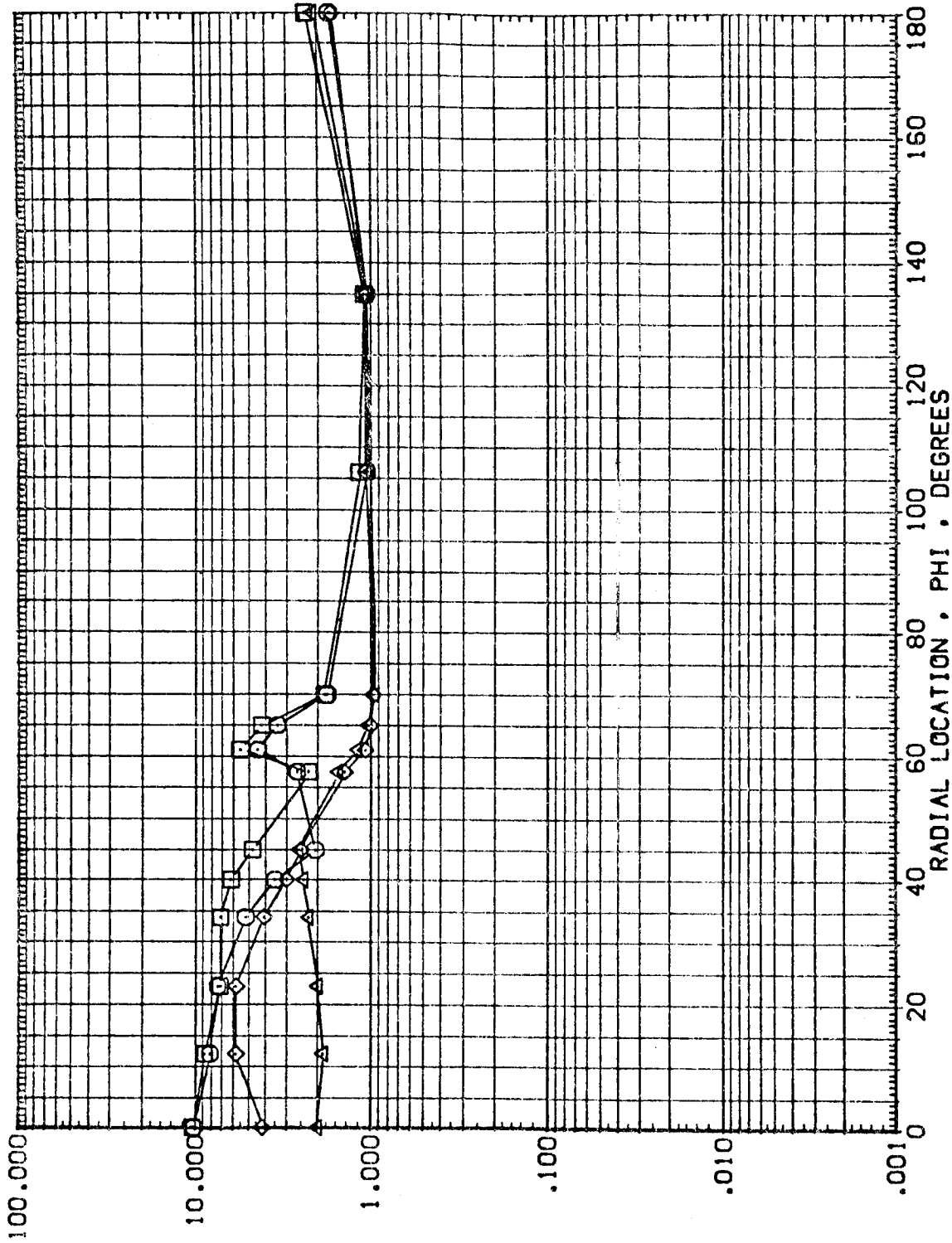


FIG. 48 ORBITER FUSELAGE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .300

DATA SET SYMBOL (CONFIGURATION DESCRIPTION)
 (EEIP06) AR: 3.5-178 IH3 0+1+S
 (EEIP07) AR: 3.5-178 IH3 0+1+S
 (EEIP08) AR: 3.5-178 IH3 0+1+S (TRIPS)
 (EEIP09) AR: 3.5-178 IH3 0+1+S (TRIPS)

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000
 BETA .000
 RV/L 1.500
 MAV/HT .900

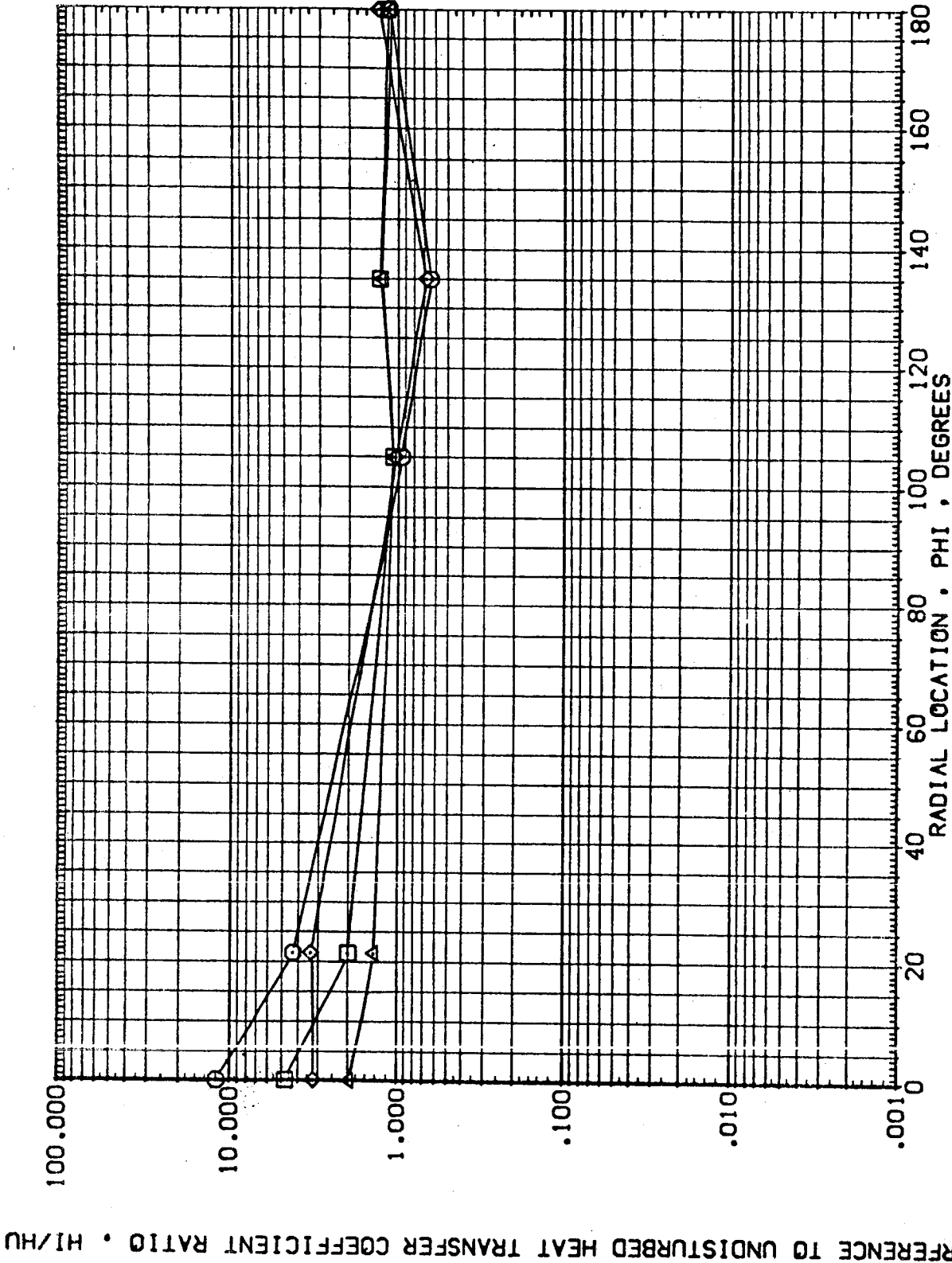


FIG. 48 ORBITER FUSELAGE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .400

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (EE|P06) ARC 3.5-178 IH3 0+1+S
 (EE|P07) ARC 3.5-178 IH3 0+1+S
 (EE|P08) ARC 3.5-178 IH3 0+1+S (TR|PS)
 (EE|P09) ARC 3.5-178 IH3 0+1+S (TR|PS)

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000
 BETA .000
 GAMMA .000
 HAWAII .900

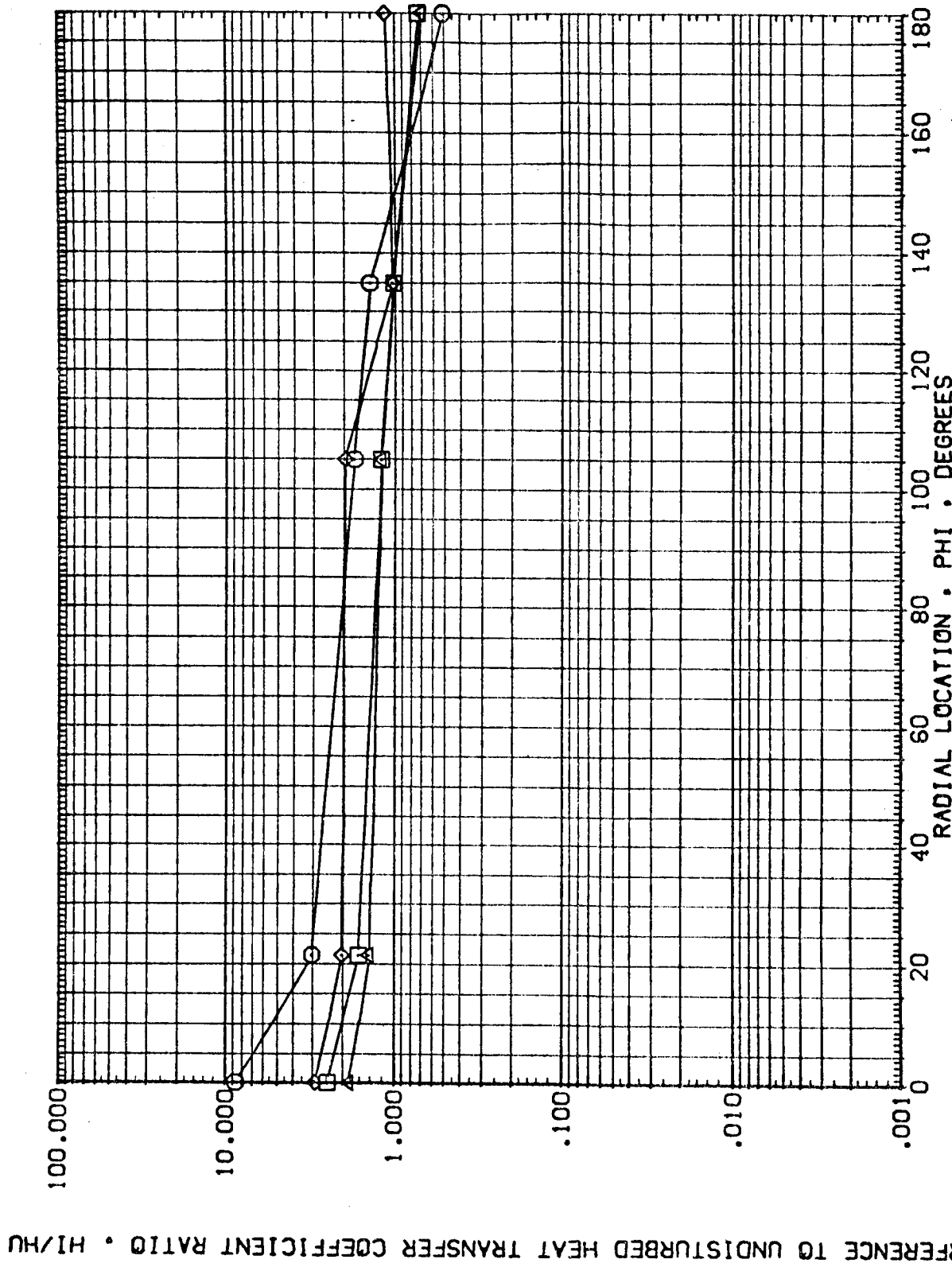


FIG. 48 ORBITER FUSELAGE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .500

DATA SET SYMBOL (CONFIGURATION DESCRIPTION)

(EE P06)	ARC 3.5-178 IH3 O+T+S
(EE P07)	ARC 3.5-178 IH3 O+T+S
(EE P08)	ARC 3.5-178 IH3 O+T+S (TRIPS)
(EE P09)	ARC 3.5-178 IH3 O+T+S (TRIPS)

ORBITER FUSELAGE
ORBITER FUSELAGE
ORBITER FUSELAGE
ORBITER FUSELAGE

ALPHA .000 .000 .000 .000
BETA .000 .000 .000 .000
RV/L 1.500 5.000 1.500 5.000
HAW/HT .900 .900 .900 .900

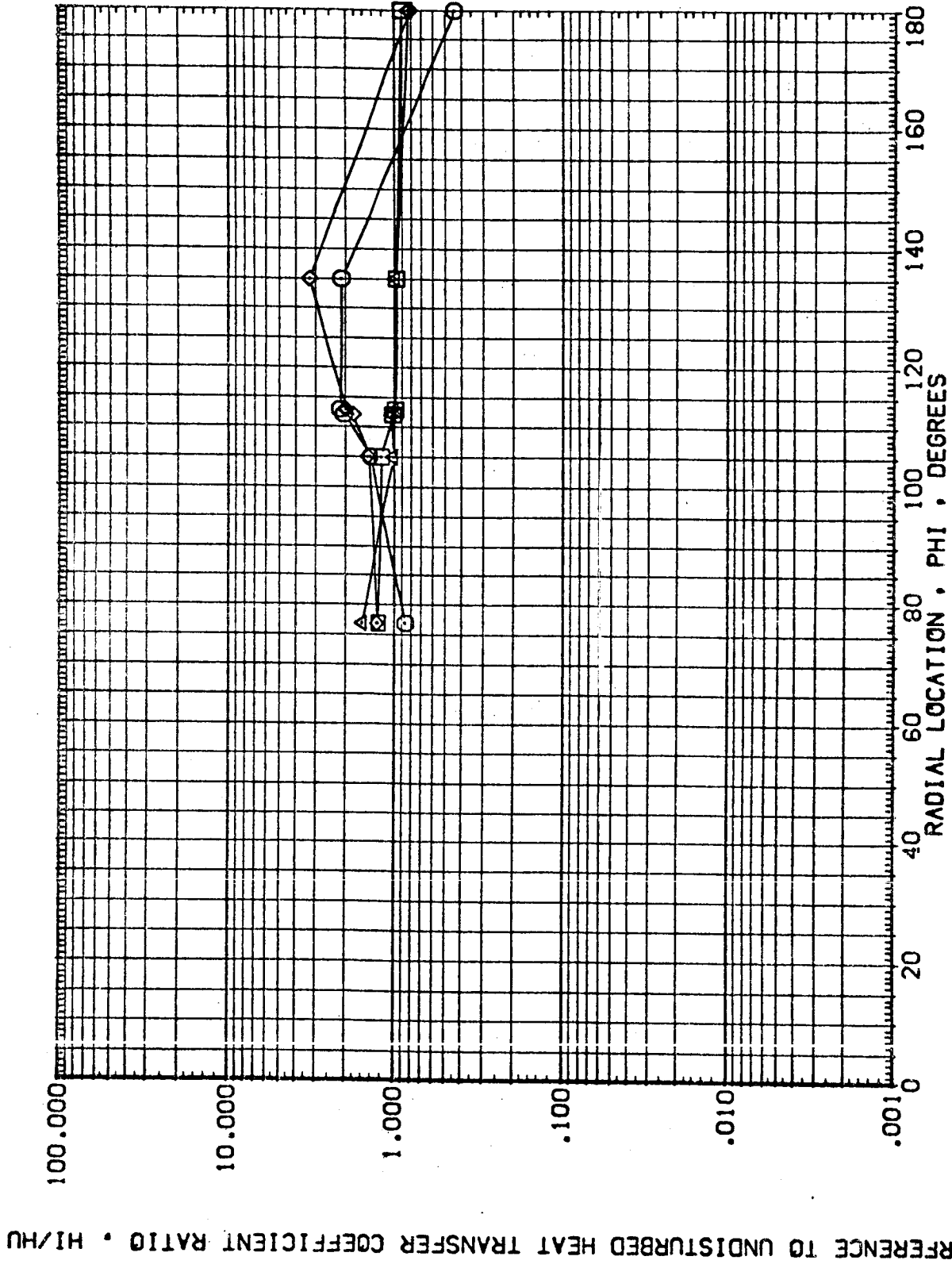


FIG. 48 ORBITER FUSELAGE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .600

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ORBITER FUSELAGE	ALPHA	BETA	RN/L	HAW/HT
(EE P06)	ARC 3.5-178 IH3 0+T+S	ORBITER FUSELAGE	.000	.000	1.500	.500
(EE P07)	ARC 3.5-178 IH3 0+T+S	ORBITER FUSELAGE	.000	.000	5.000	.900
(EE P08)	ARC 3.5-178 IH3 0+T+S (TRIPS)	ORBITER FUSELAGE	.000	.000	1.500	.900
(EE P09)	ARC 3.5-178 IH3 0+T+S (TRIPS)	ORBITER FUSELAGE	.000	.000	5.000	.900

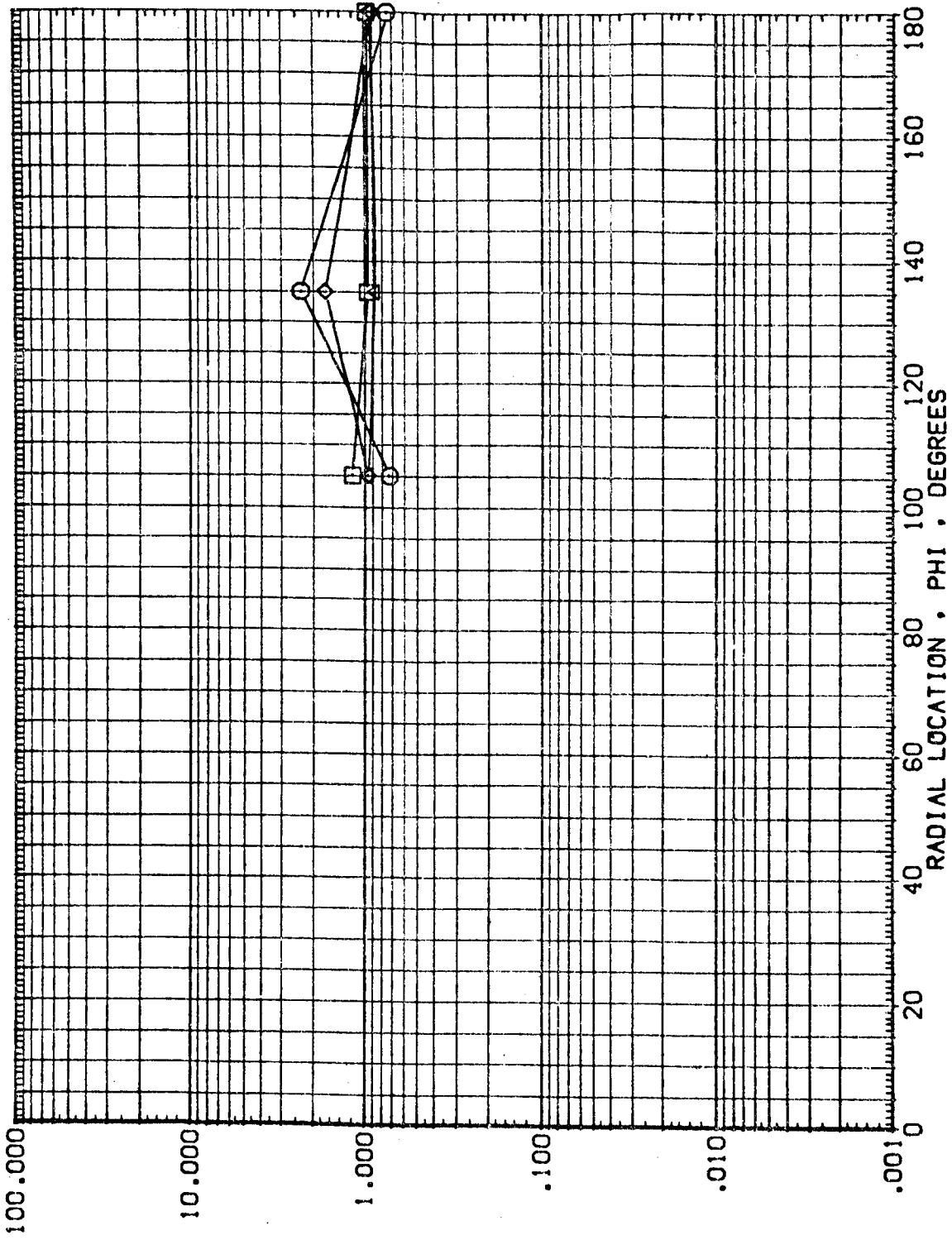


FIG. 48 ORBITER FUSELAGE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .700

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RVA	HAV/HT
{EE P06}	ARI: 3.5-178 IH3 O+T+S	.000	.000	1.500	.900
{EE P07}	ARI: 3.5-178 IH3 O+T+S	.000	.000	5.000	.900
{EE P08}	ARI: 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	1.500	.900
{EE P09}	ARI: 3.5-178 IH3 O+T+S (TRIPS)	.000	.000	5.000	.900

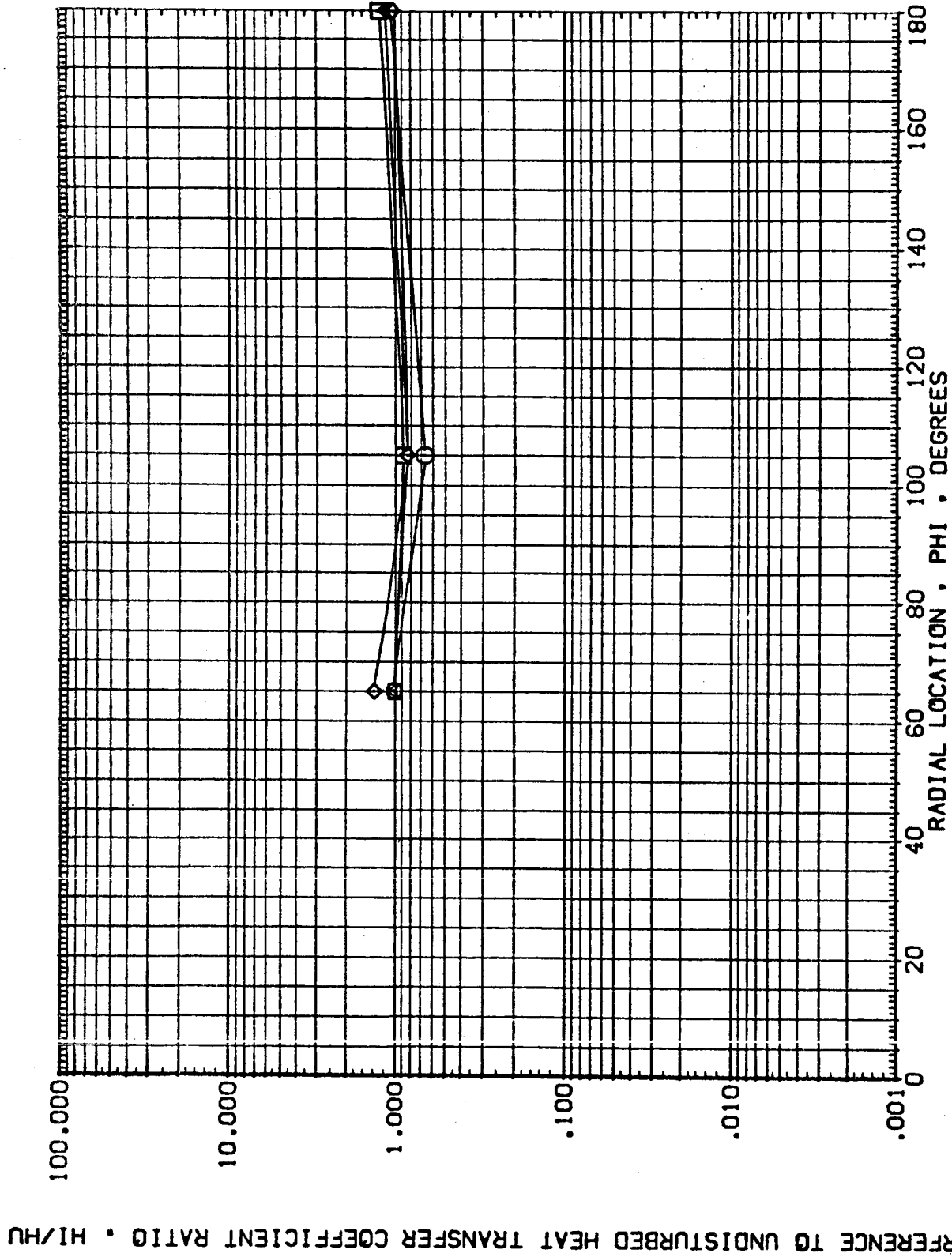


FIG. 48 ORBITER FUSELAGE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .800

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (EEIP06) ARC 3.5-178 IH3 O+T+S
 (EEIP07) ARC 3.5-178 IH3 O+T+S
 (EEIP08) ARC 3.5-178 IH3 O+T+S (TRIPS)
 (EEIP09) ARC 3.5-178 IH3 O+T+S (TRIPS)

ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE
 ORBITER FUSELAGE

ALPHA .000
 BETA .000
 RV/L 1.500
 HAV/HT .900

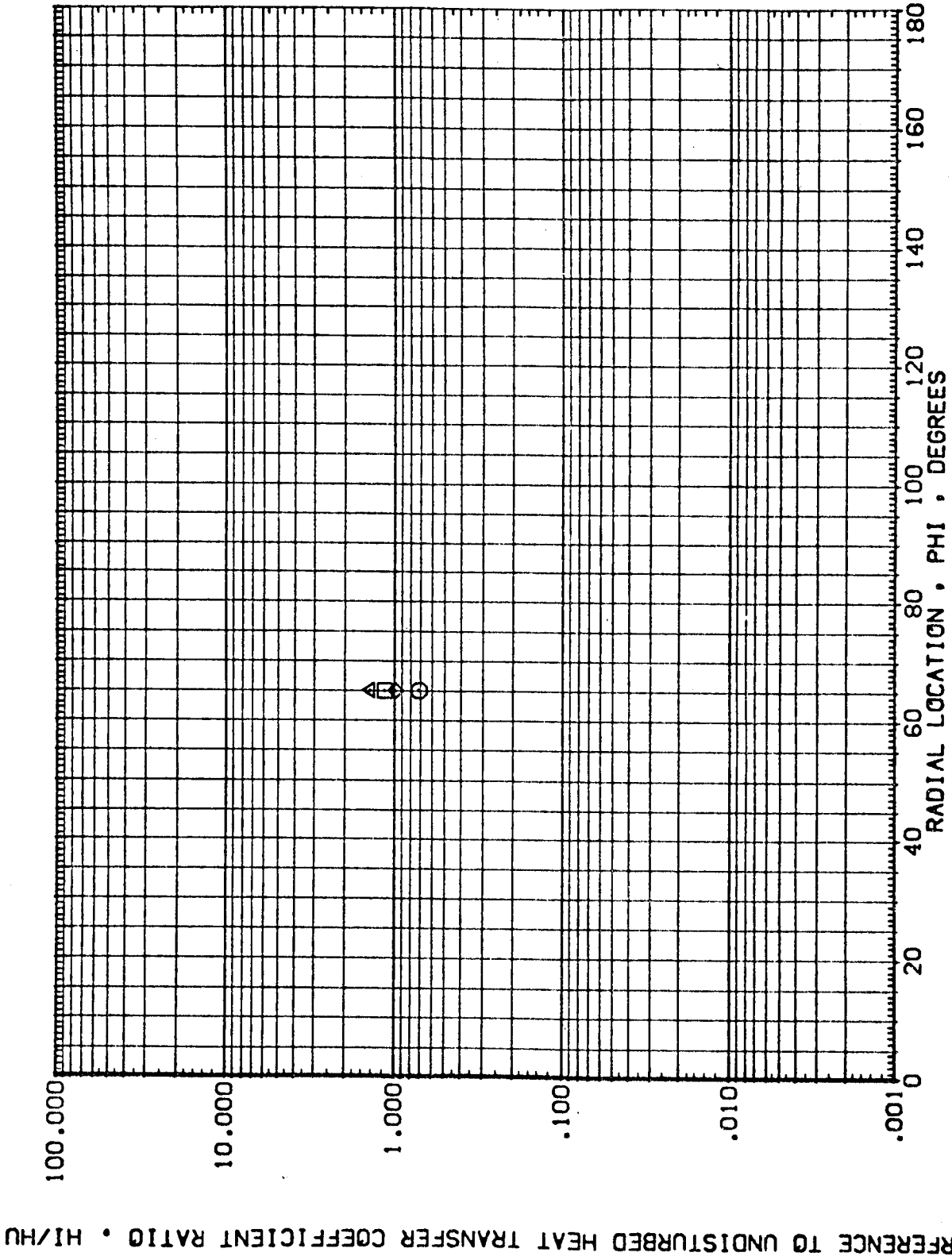


FIG. 48 ORBITER FUSELAGE - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1006) ARC 3.5-178 IH3 ORBITER
 (AE1006) ARC 3.5-178 IH3 ORBITER
 (BE1006) ARC 3.5-178 IH3 ORBITER

L.E. ROLLED DOWN 30 L.E. ROLLED DOWN 30 L.E. ROLLED DOWN 30
 ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 1.000 .850

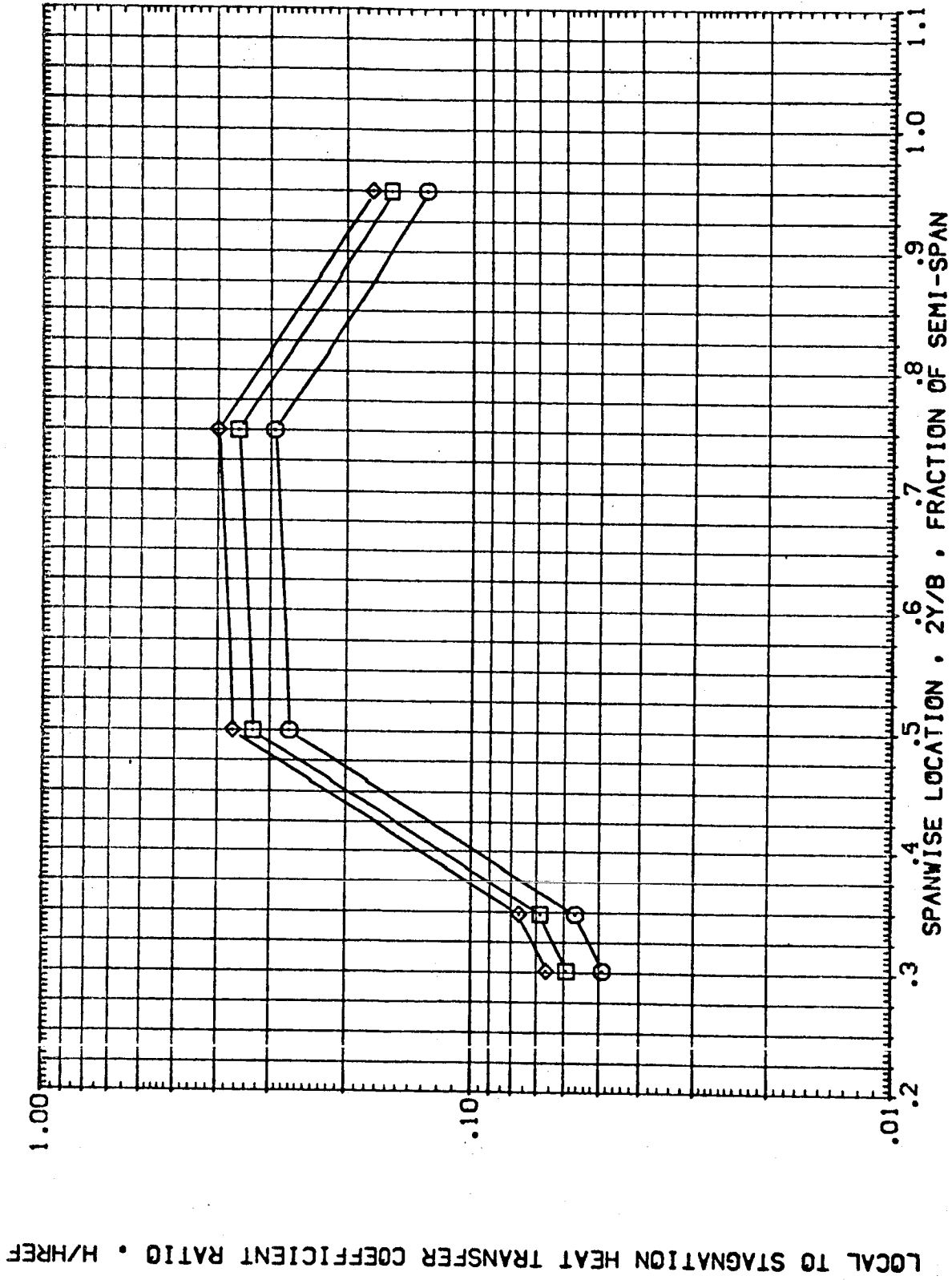


FIG. 49 LEADING EDGE ROLLED DOWN 30 DEGREES - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 ROLL = 30.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|007) ARC 3.5-178 IH3 ORBITER
 (AE|007) ARC 3.5-178 IH3 ORBITER
 (BE|007) ARC 3.5-178 IH3 ORBITER

L.E. ROLLED DWN 30
 L.E. ROLLED DWN 30
 L.E. ROLLED DWN 30

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 5.000 5.000 5.000
 HAV/HT 1.000 .900 .850

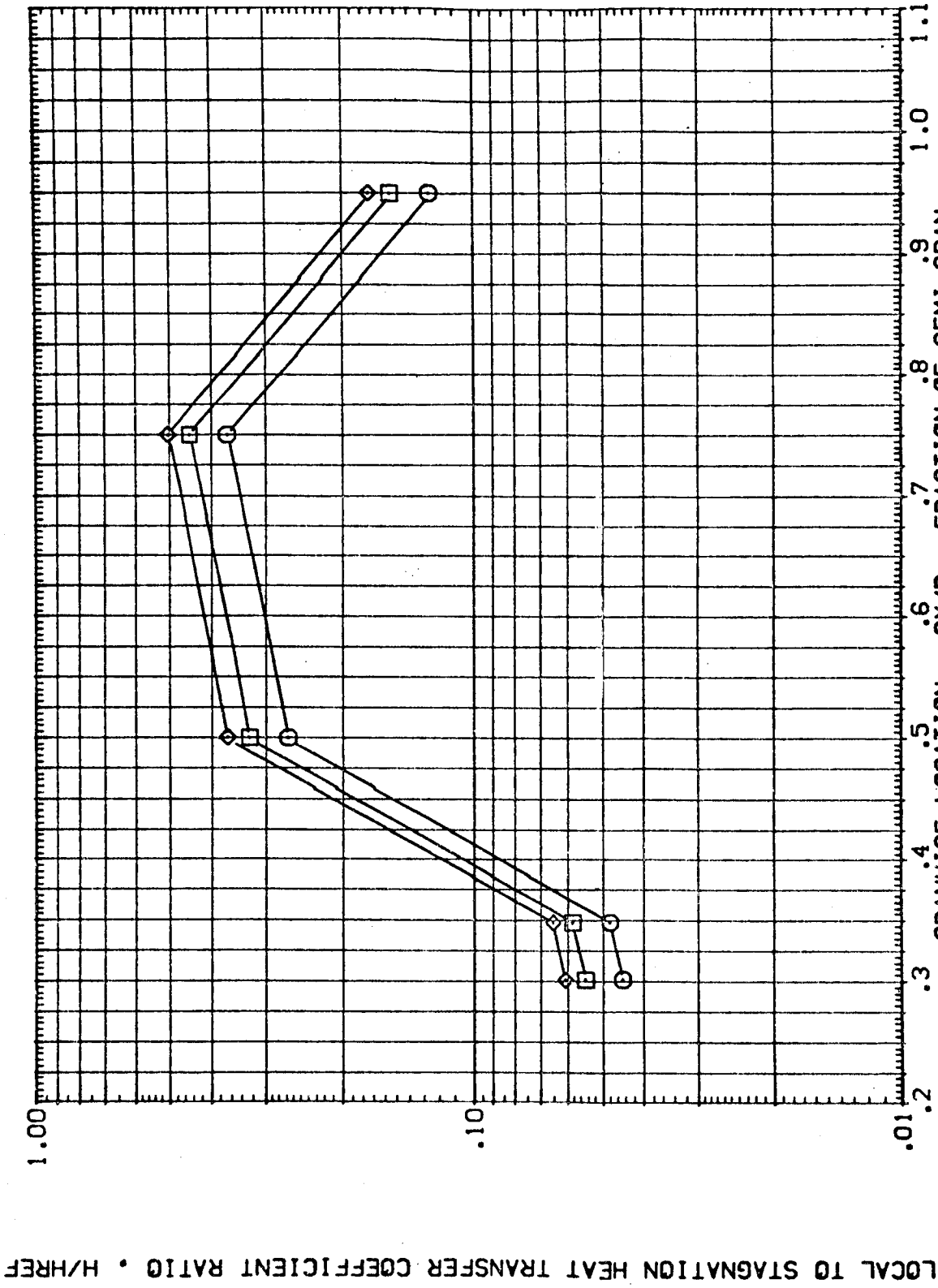


FIG. 49 LEADING EDGE ROLLED DOWN 30 DEGREES - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 ROLL = 30.000

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RNVL	HAV/HT
(RE1008)	ARC 3.5-178 IH3 ORBITER (TRIPSI).E.ROLLED DWN 30	.000	.000	1.500	1.000
(AE1008)	ARC 3.5-178 IH3 ORBITER (TRIPSI).E.ROLLED DWN 30	.000	.000	1.500	.900
(BE1008)	ARC 3.5-178 IH3 ORBITER (TRIPSI).E.ROLLED DWN 30	.000	.000	1.500	.850

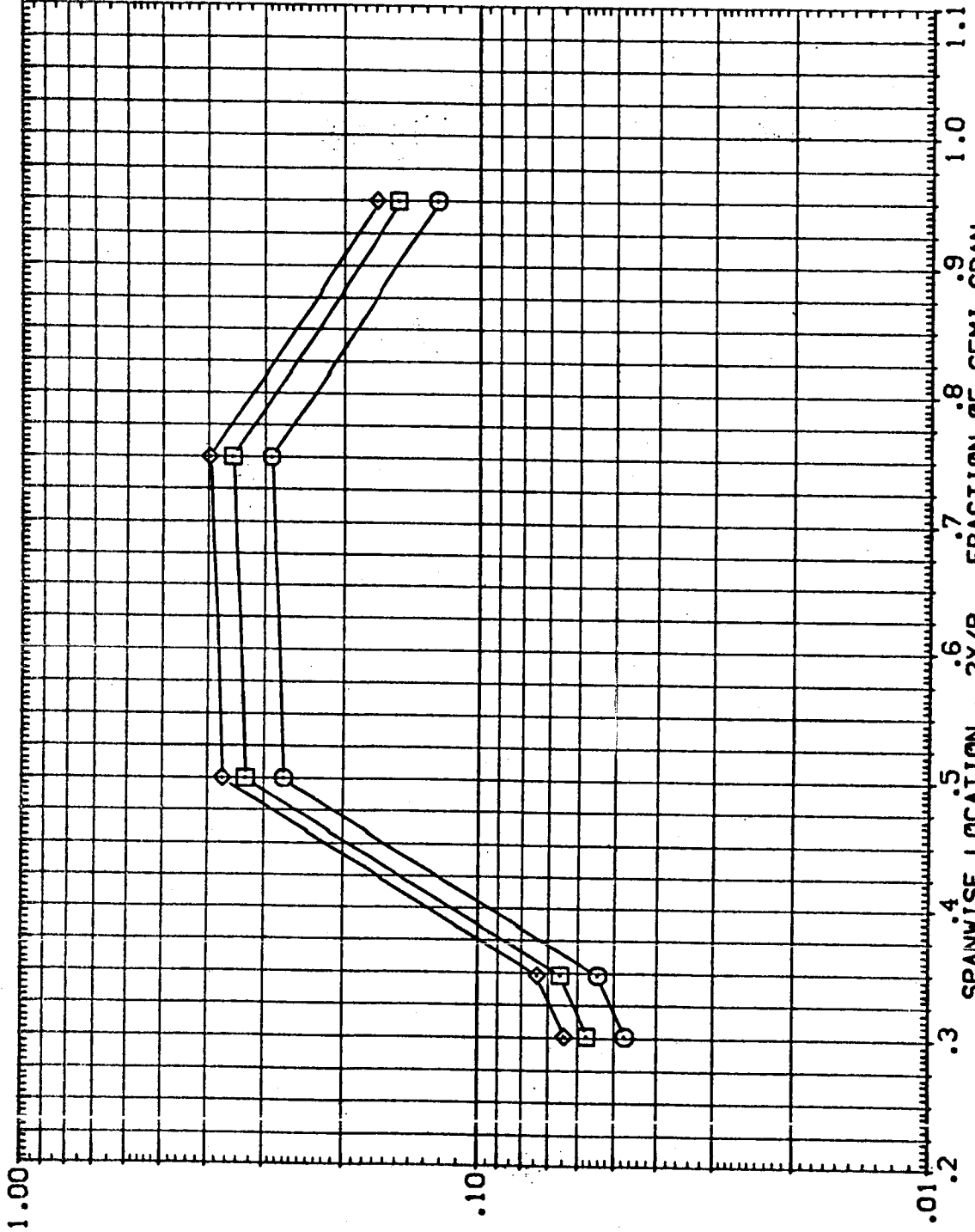


FIG. 49 LEADING EDGE ROLLED DOWN 30 DEGREES - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 ROLL = 30.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA FN/VL HAV/HT

(RE1009) ARC 3.5-178 1HG ORBITER (TRIPS) L.E. ROLLED DWN 30 .000 .000 5.000 1.000

(AE1009) ARC 3.5-178 1HG ORBITER (TRIPS) L.E. ROLLED DWN 30 .000 .000 5.000 .900

(BE1009) ARC 3.5-178 1HG ORBITER (TRIPS) L.E. ROLLED DWN 30 .000 .000 5.000 .850

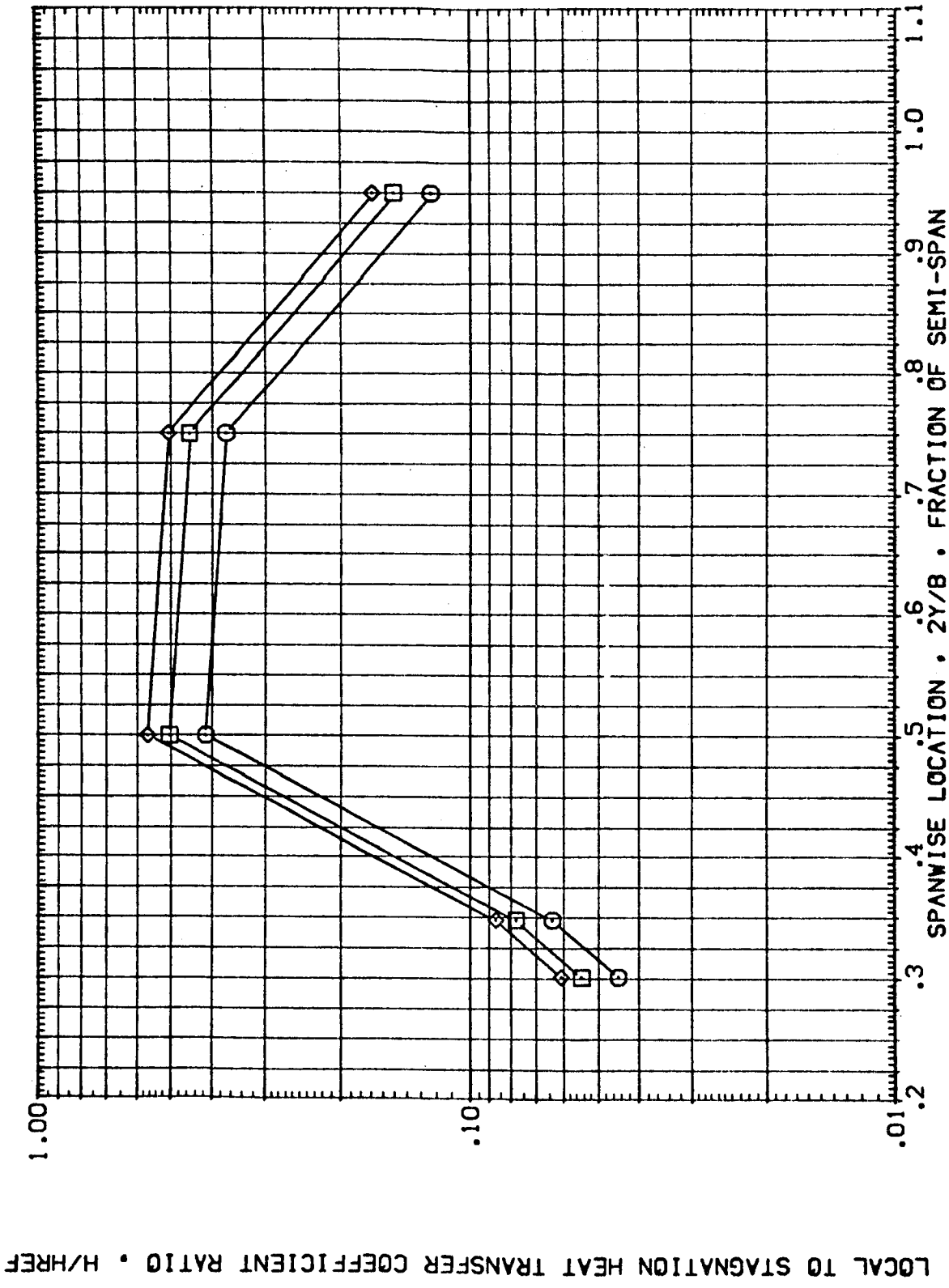


FIG. 49 LEADING EDGE ROLLED DOWN 30 DEGREES - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 ROLL = 30.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|001) ARC 3.5-178 IH3 0+T+S
 (AE|001) ARC 3.5-178 IH3 0+T+S
 (BE|001) ARC 3.5-178 IH3 0+T+S

L.E. ROLLED DOWN 30
 L.E. ROLLED DOWN 30
 L.E. ROLLED DOWN 30

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

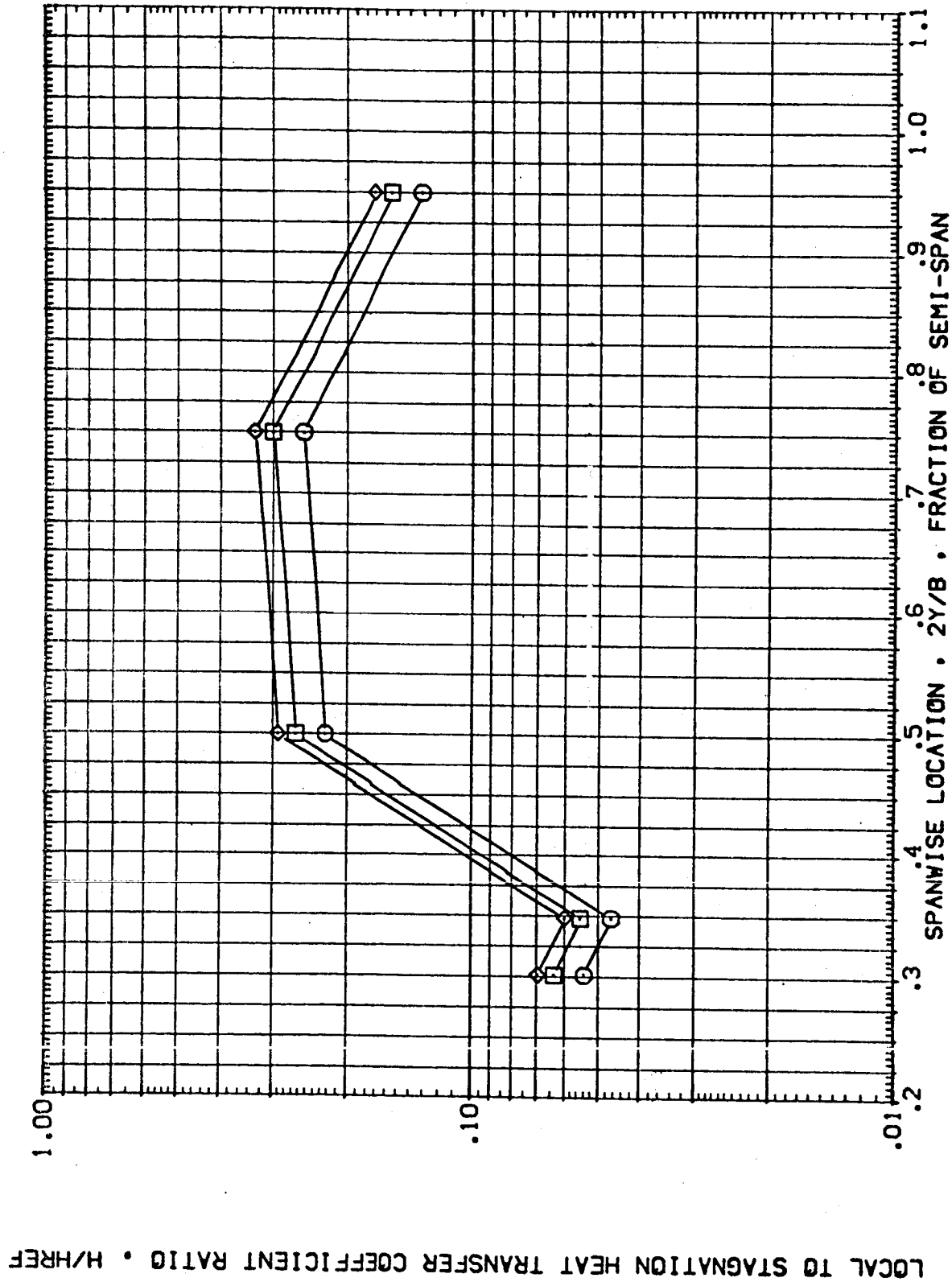


FIG. 50 LEADING EDGE ROLLED DOWN 30 DEGREES - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 ROLL = 30.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1002) ARC 3.5-178 IH3 0+T+S
 (AE1002) ARC 3.5-178 IH3 0+T+S
 (BE1002) ARC 3.5-178 IH3 0+T+S

L.E. ROLLED DWN 30
 L.E. ROLLED DWN 30
 L.E. ROLLED DWN 30

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RNVL 5.000 5.000 5.000
 HAW/HT 1.000 .900 .850

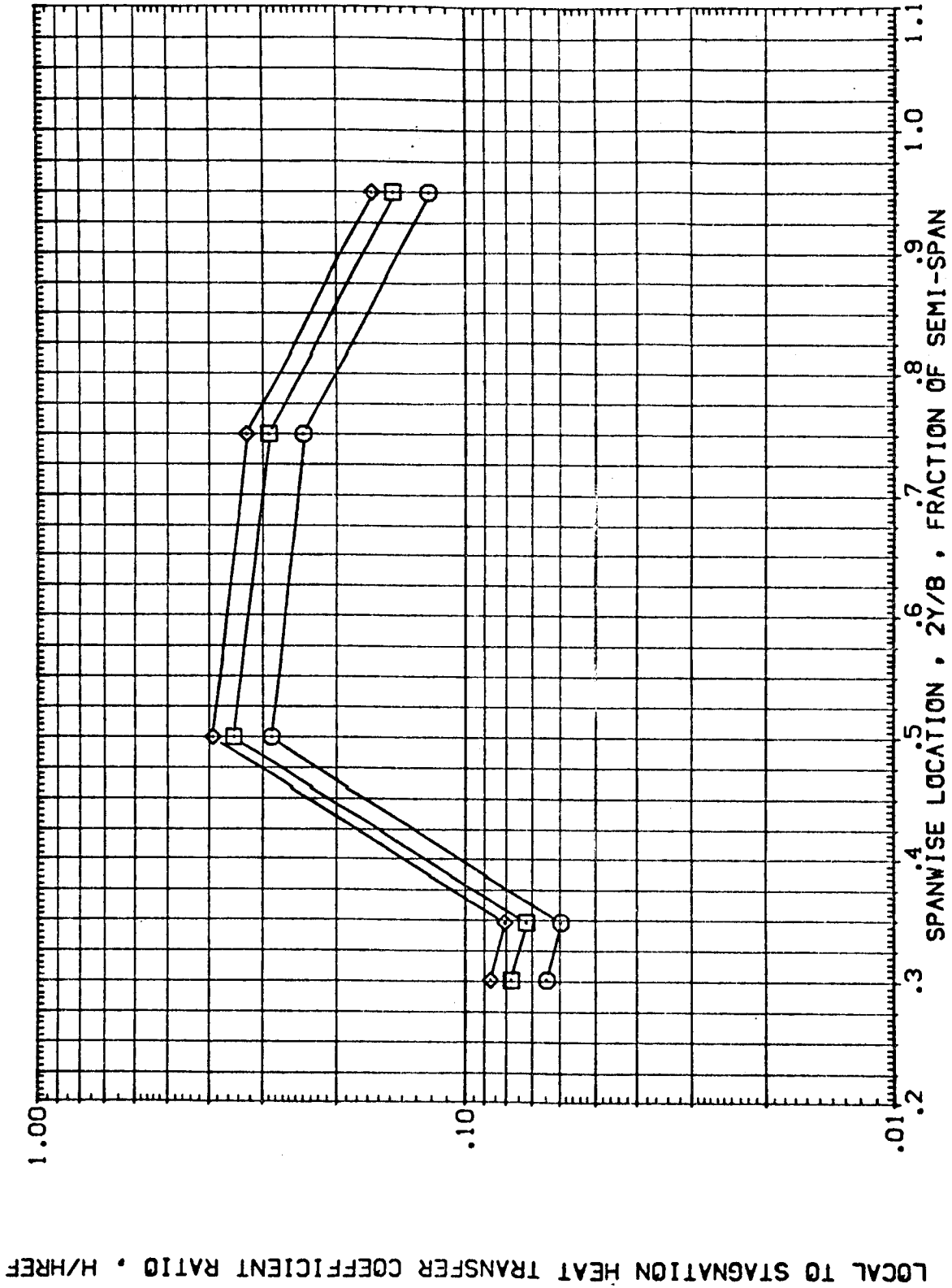


FIG. 50 LEADING EDGE ROLLED DOWN 30 DEGREES - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 ROLL = 30.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HW/HHT

(RE1003) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 1.000

(AE1003) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 .900

(BE1003) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 .850

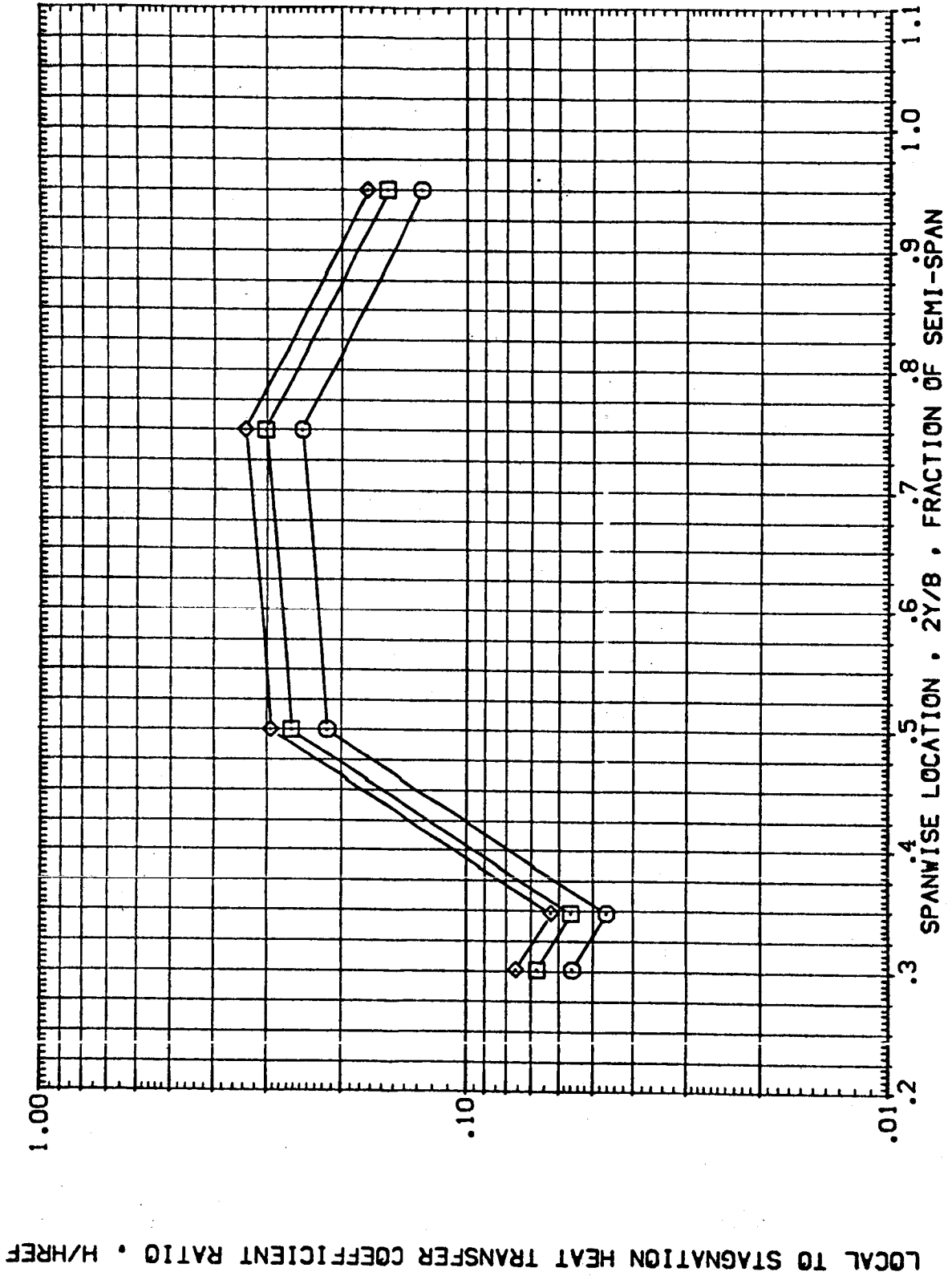


FIG. 50 LEADING EDGE ROLLED DOWN 30 DEGREES - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 ROLL = 30.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAW/HT

(RE|004) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 1.000

(AE|004) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .900

(BE|004) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

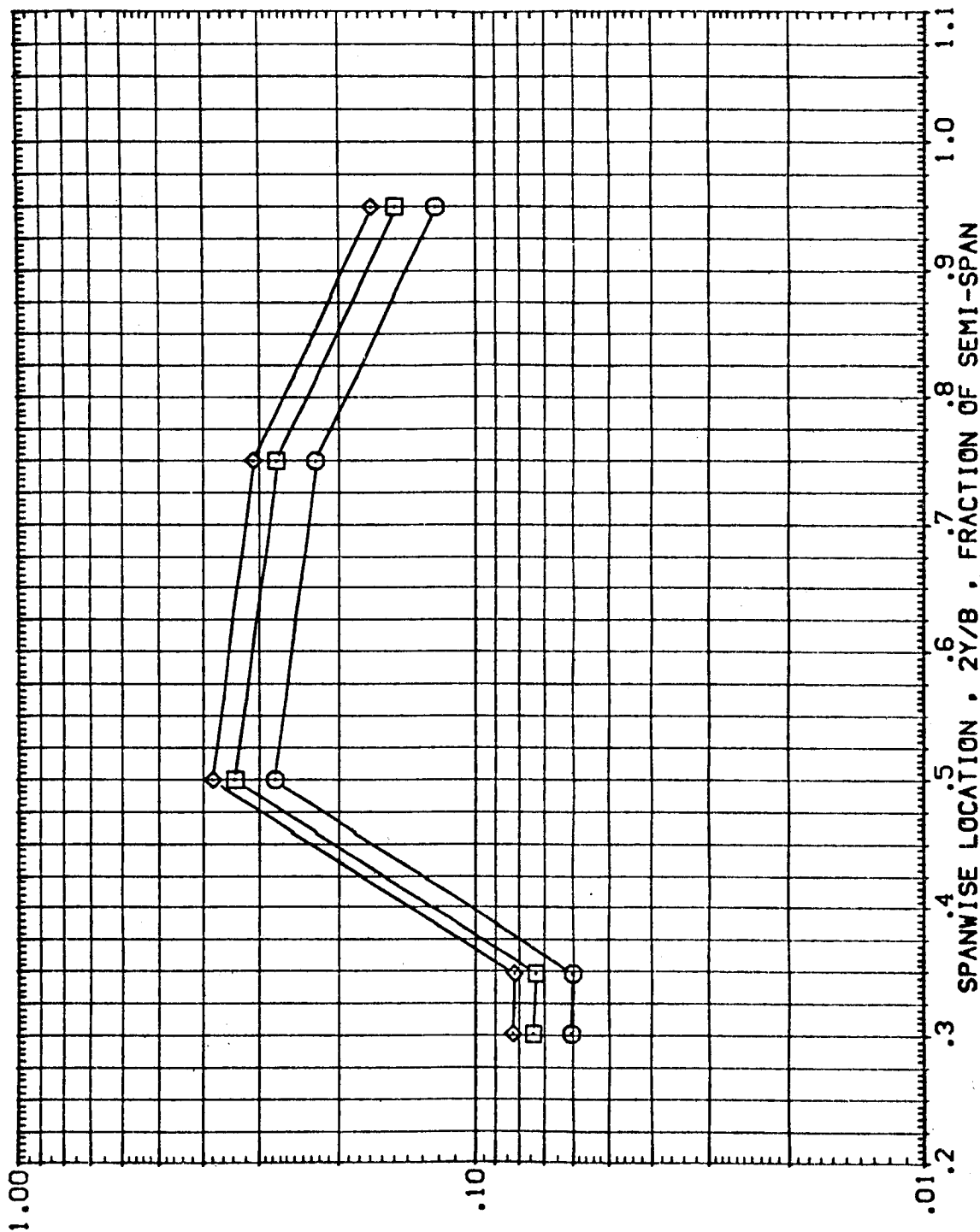


FIG. 50 LEADING EDGE ROLLED DOWN 30 DEGREES - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 ROLL = 30.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1005) ARC 3.5-178 IH3 0+T+S
 (AE1005) ARC 3.5-178 IH3 0+T+S
 (BE1005) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

L.E. ROLLED DOWN 30
 L.E. ROLLED DOWN 30
 L.E. ROLLED DOWN 30

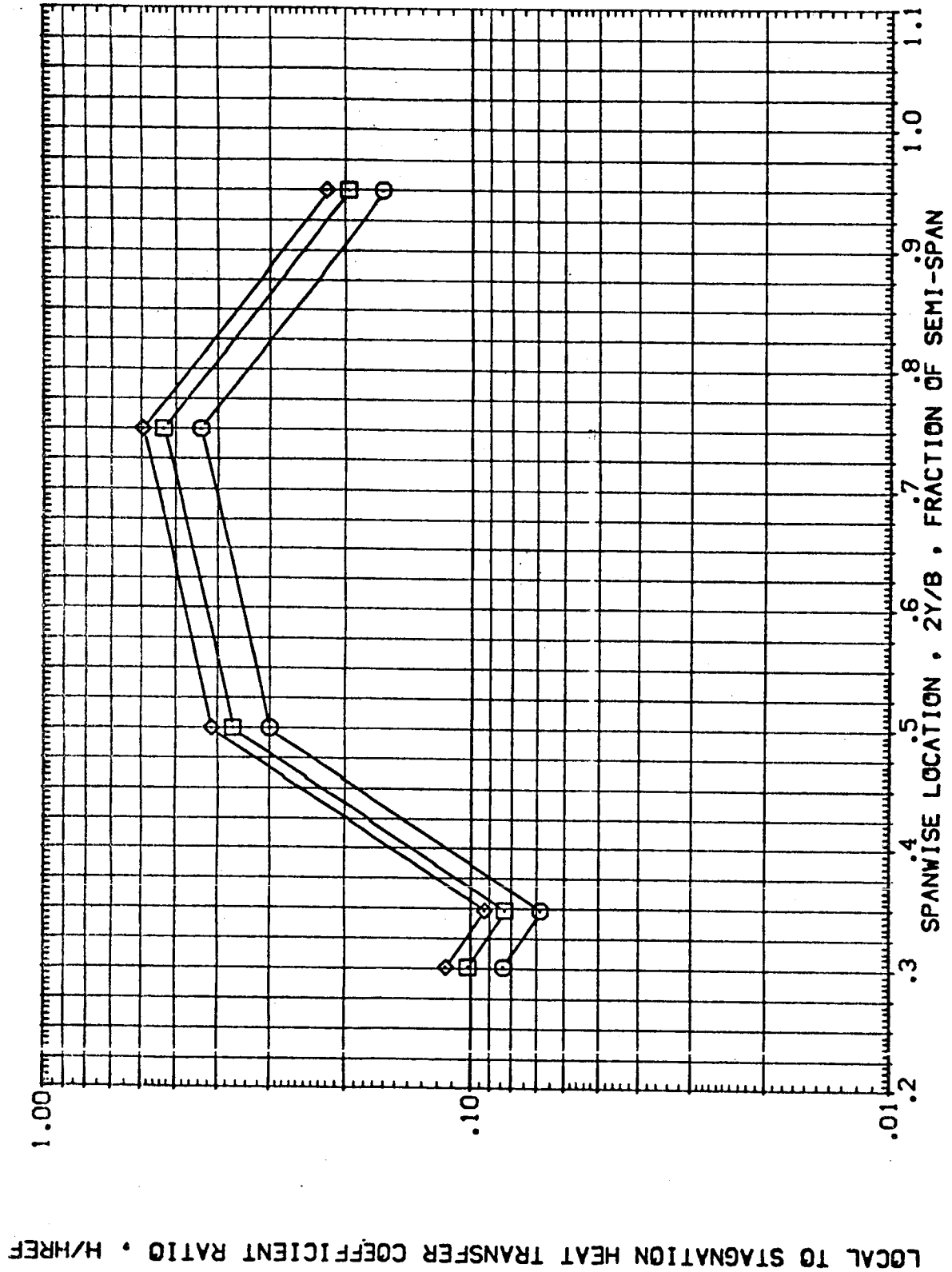


FIG. 50 LEADING EDGE ROLLED DOWN 30 DEGREES - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 ROLL = 30.000

DAT. SET SYMBOL CONFIGURATION DESCRIPTION
 (EE1006) ARC 3.5-178 IH3 0+T+S
 (EE1007) ARC 3.5-178 IH3 0+T+S
 (EE1008) ARC 3.5-178 IH3 0+T+S (TRIPS)
 (EE1009) ARC 3.5-178 IH3 0+T+S (TRIPS)

L.E. ROLLED DWN 30
 L.E. ROLLED DWN 30
 L.E. ROLLED DWN 30
 L.E. ROLLED DWN 30
 ALPHA .000 .000 .000 .000
 BETA .000 .000 .000 .000
 RV/L 1.500 5.000 1.500 5.000
 HAV/HT .900 .900 .900 .900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

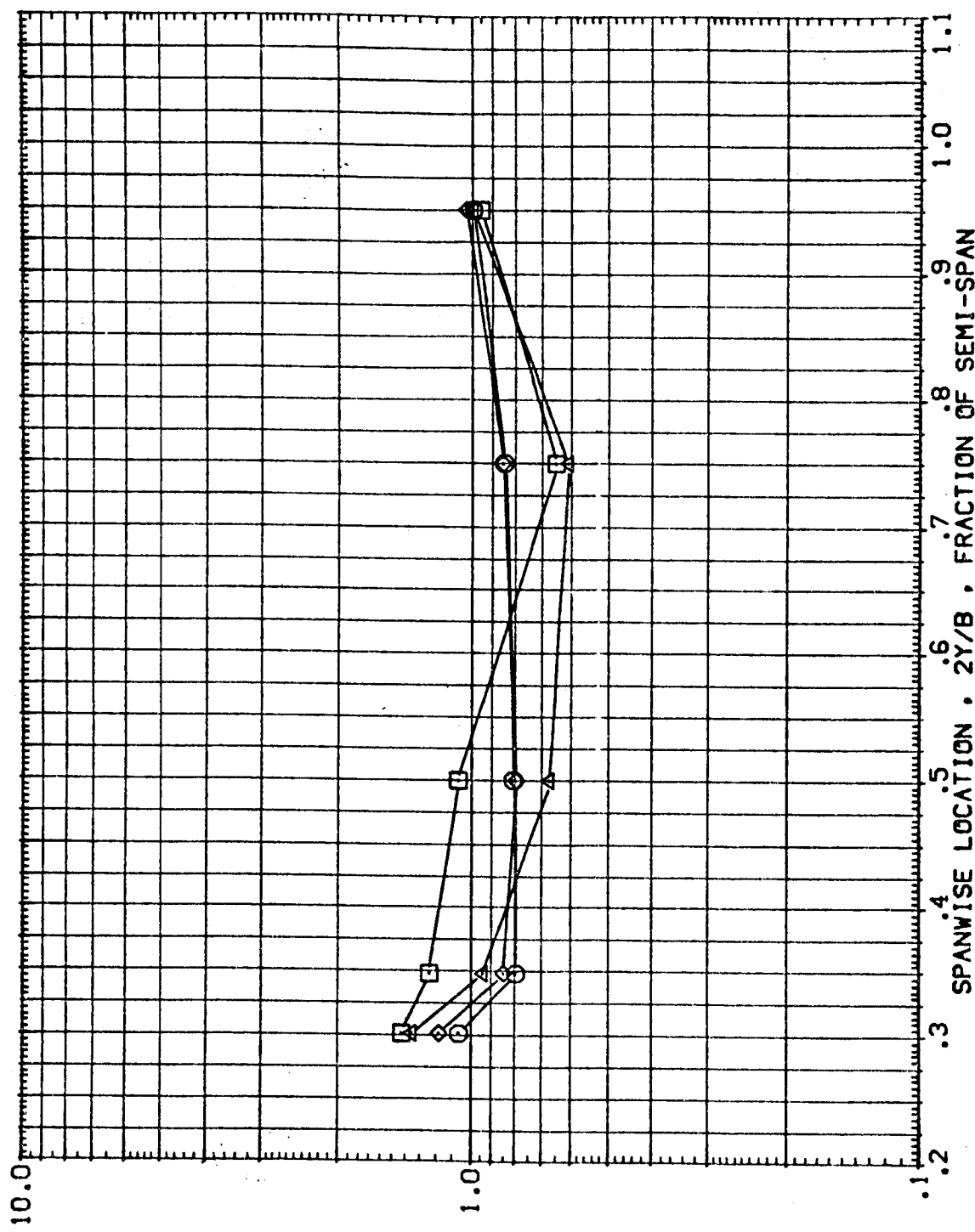


FIG. 51 LEADING EDGE ROLLED DOWN 30 DEGREES - INTERFERENCE TO UNDISTURBED RATIO
 MACH = 5.300 ROLL = 30.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV06) ARC 3.5-178 IH3 ORBITER
 (AEIV06) ARC 3.5-178 IH3 ORBITER
 (BEIV06) ARC 3.5-178 IH3 ORBITER

ALPHA BETA RV/L HAW/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

VERTICAL
 VERTICAL
 VERTICAL

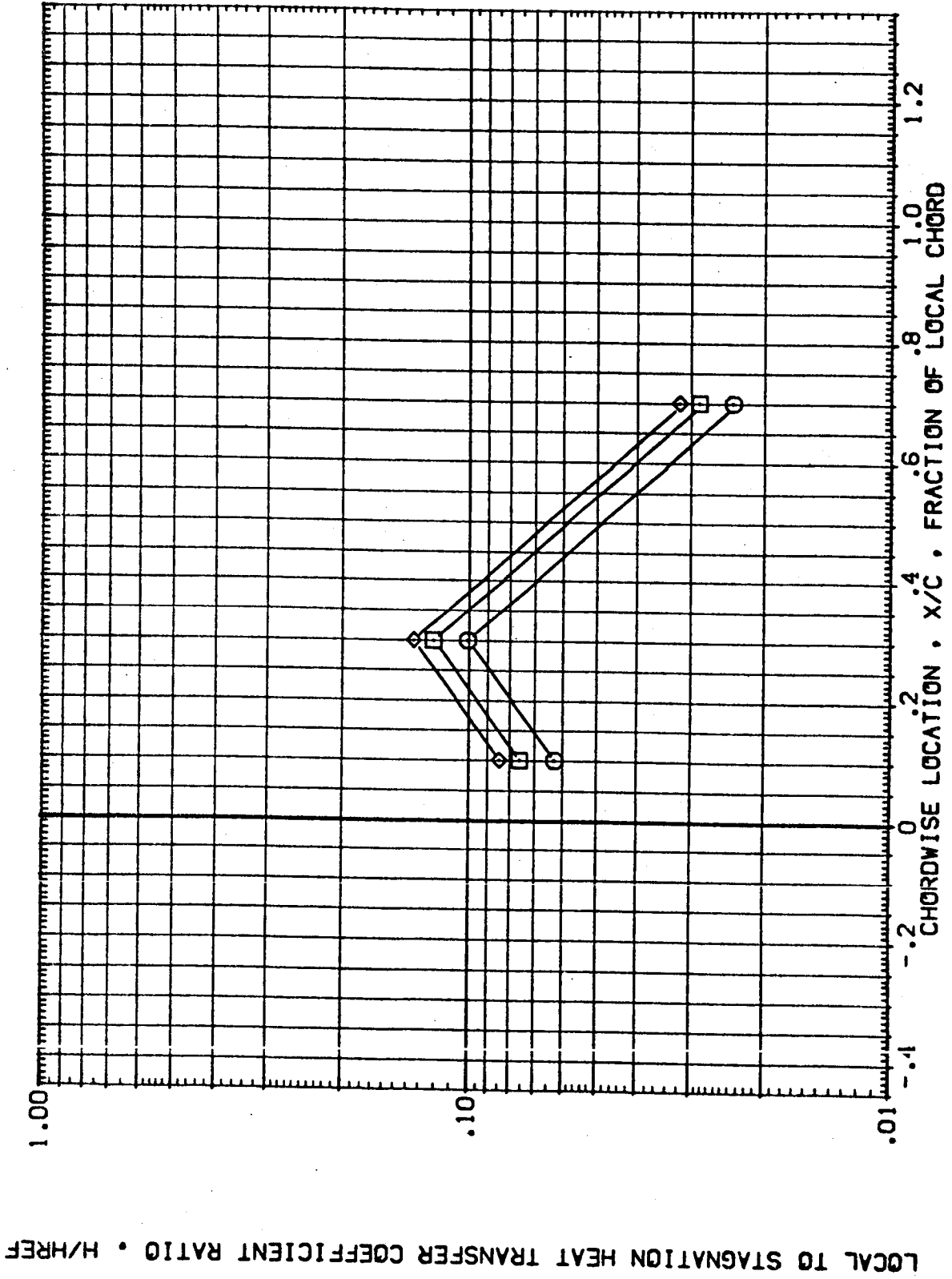


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .159

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|V06) ARC 3.5-178 IH3 ORBITER
 (AE|V06) ARC 3.5-178 IH3 ORBITER
 (BE|V06) ARC 3.5-178 IH3 ORBITER

ALPHA BETA RAYL HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

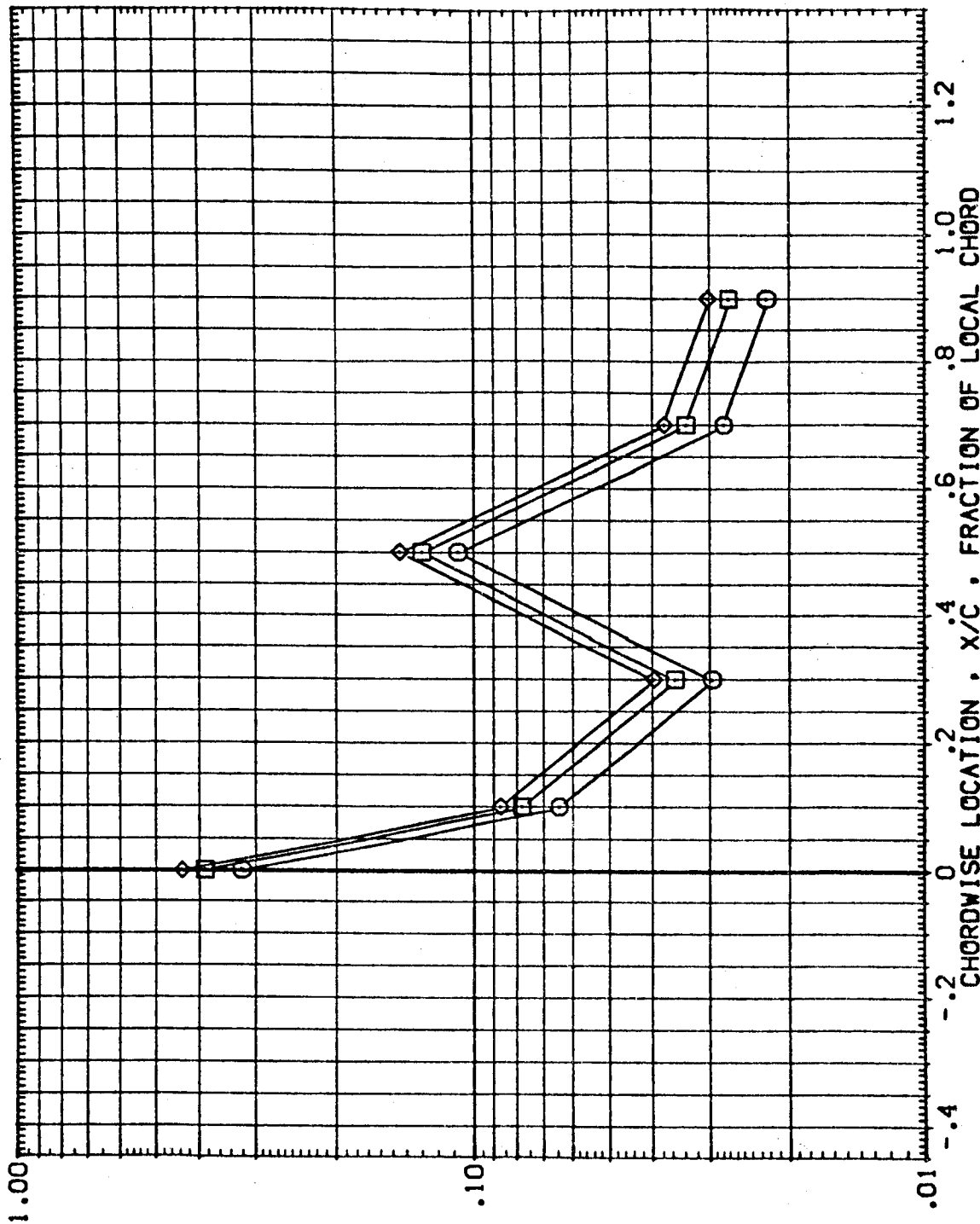


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (BE1V06) ARC 3.5-178 IH3 ORBITER .000 .000 1.500 1.000
 (AE1V06) ARC 3.5-178 IH3 ORBITER .000 .000 1.500 .900
 (BE1V06) ARC 3.5-178 IH3 ORBITER .000 .000 1.500 .850

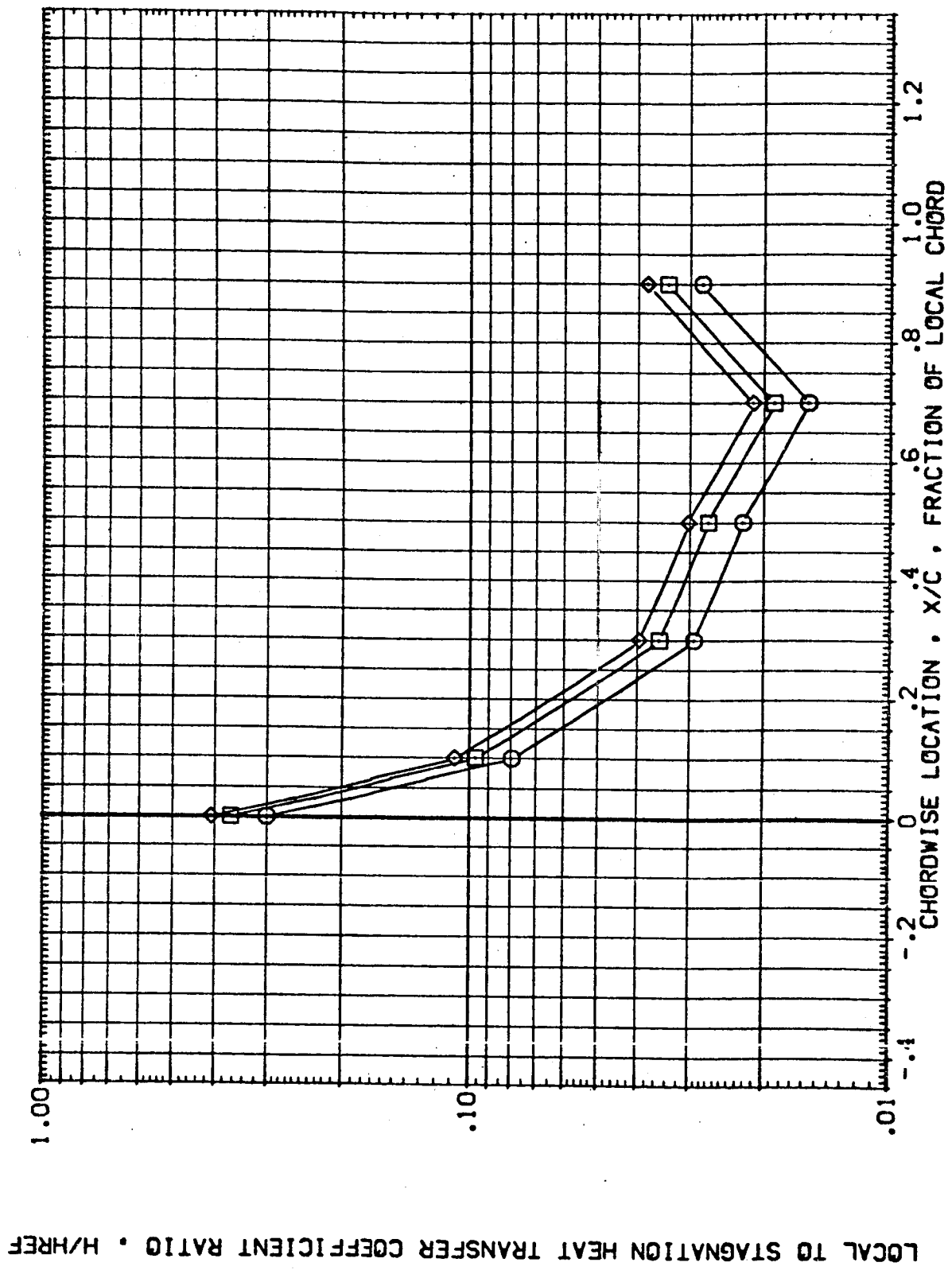


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .532

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|V06) ARC 3.5-178 IH3 ORBITTER
 (AE|V06) ARC 3.5-178 IH3 ORBITTER
 (BE|V06) ARC 3.5-178 IH3 ORBITTER

ALPHA BETA R_N/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

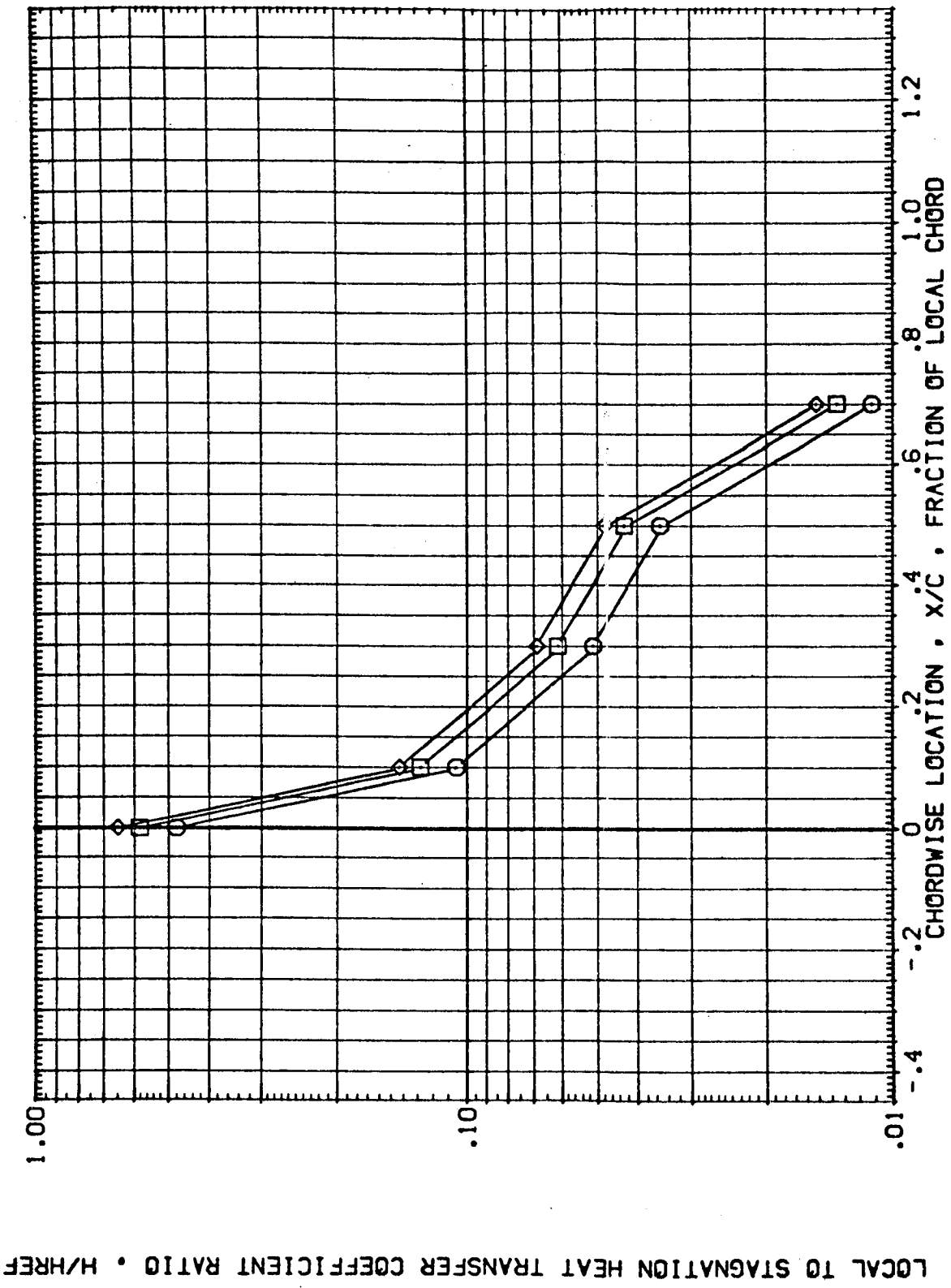


FIG. 52 VERTICAL - ORBITTER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .765

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|V06) ARC 3.5-178 IH3 ORBITTER
 (AE|V06) ARC 3.5-178 IH3 ORBITTER
 (BE|V06) ARC 3.5-178 IH3 ORBITTER

VERTICAL
 VERTICAL
 VERTICAL

ALPHA .000
 .000
 .000
 BETA .000
 .000
 .000
 RV/L 1.500
 1.500
 1.500
 HAV/HT 1.000
 .900
 .850

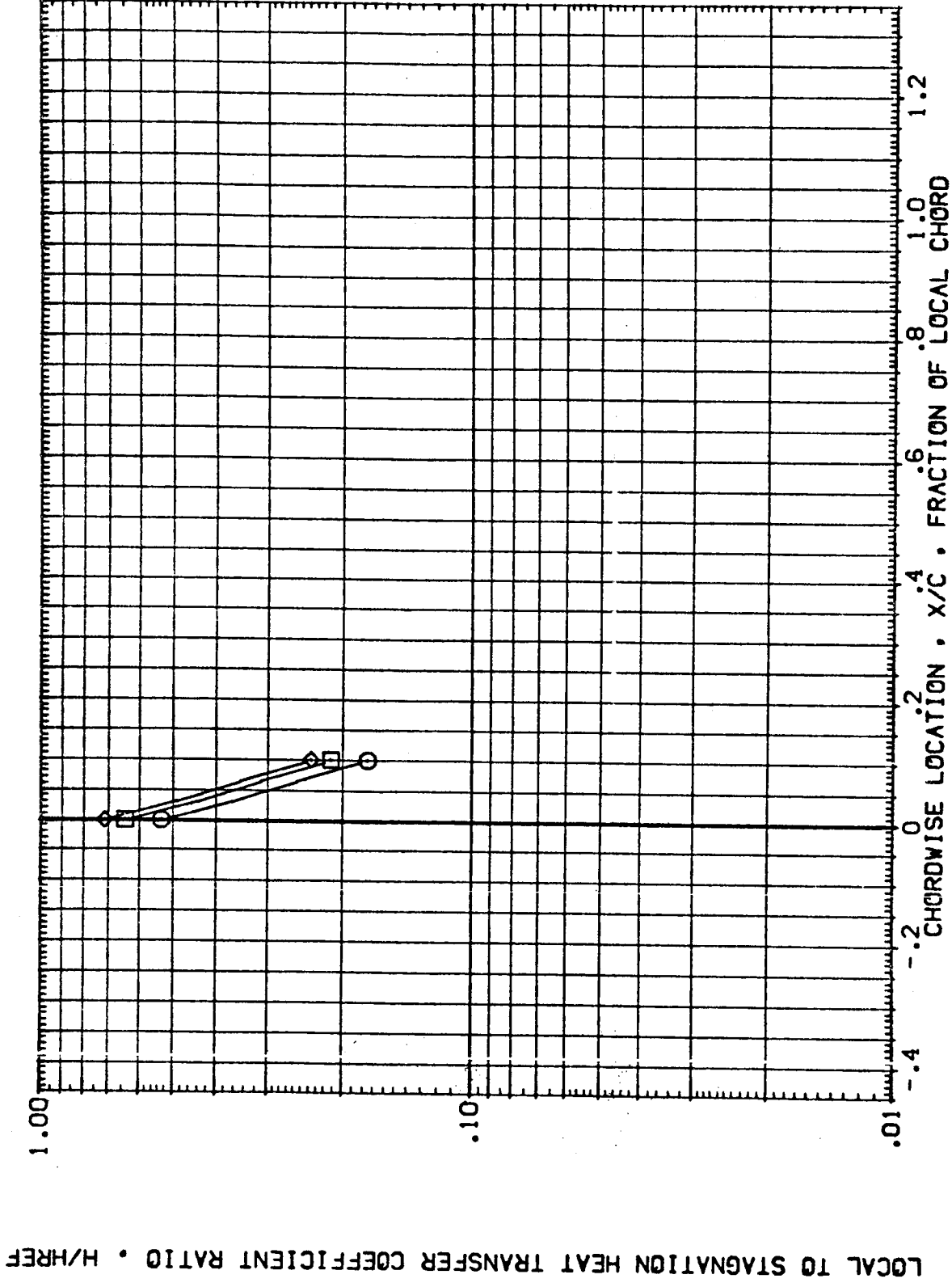


FIG. 52 VERTICAL - ORBITTER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .905

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (AE|VDS) (BE|VDS) (AE|VDS) (BE|VDS)
 (AE|VDS) (BE|VDS) (AE|VDS) (BE|VDS)

ARC 3.5-178 IH3 ORBITER
 ARC 3.5-178 IH3 ORBITER
 ARC 3.5-178 IH3 ORBITER

VERTICAL
 VERTICAL
 VERTICAL

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RNVL 1.500
 1.500
 1.500

HAV/AHT 1.000
 .900
 .850

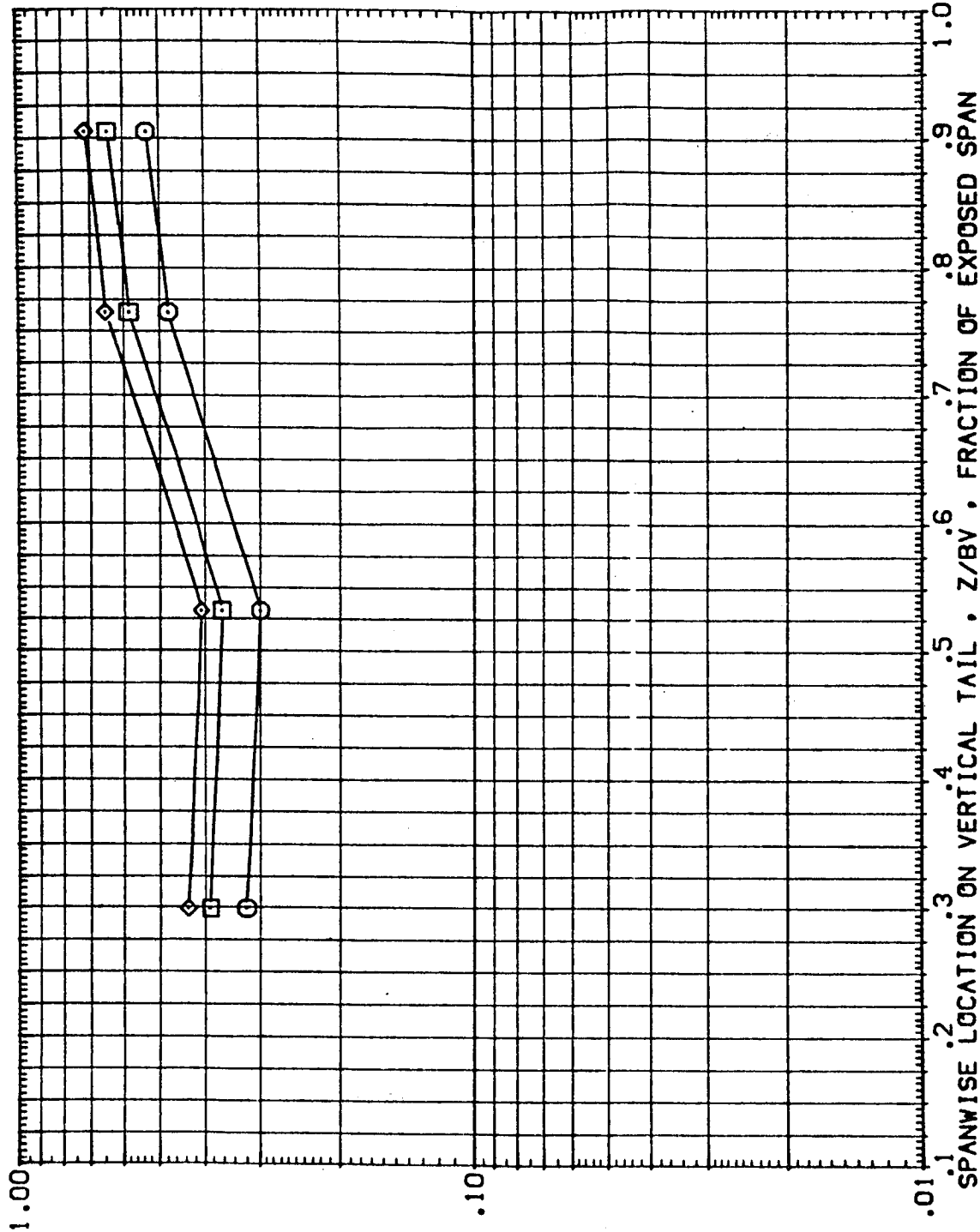


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI V06) ARC 3.5-178 IH3 ORBITER
 (AEI V06) ARC 3.5-178 IH3 ORBITER
 (BEI V06) ARC 3.5-178 IH3 ORBITER

ALPHA BETA RV/L HW/H/T
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

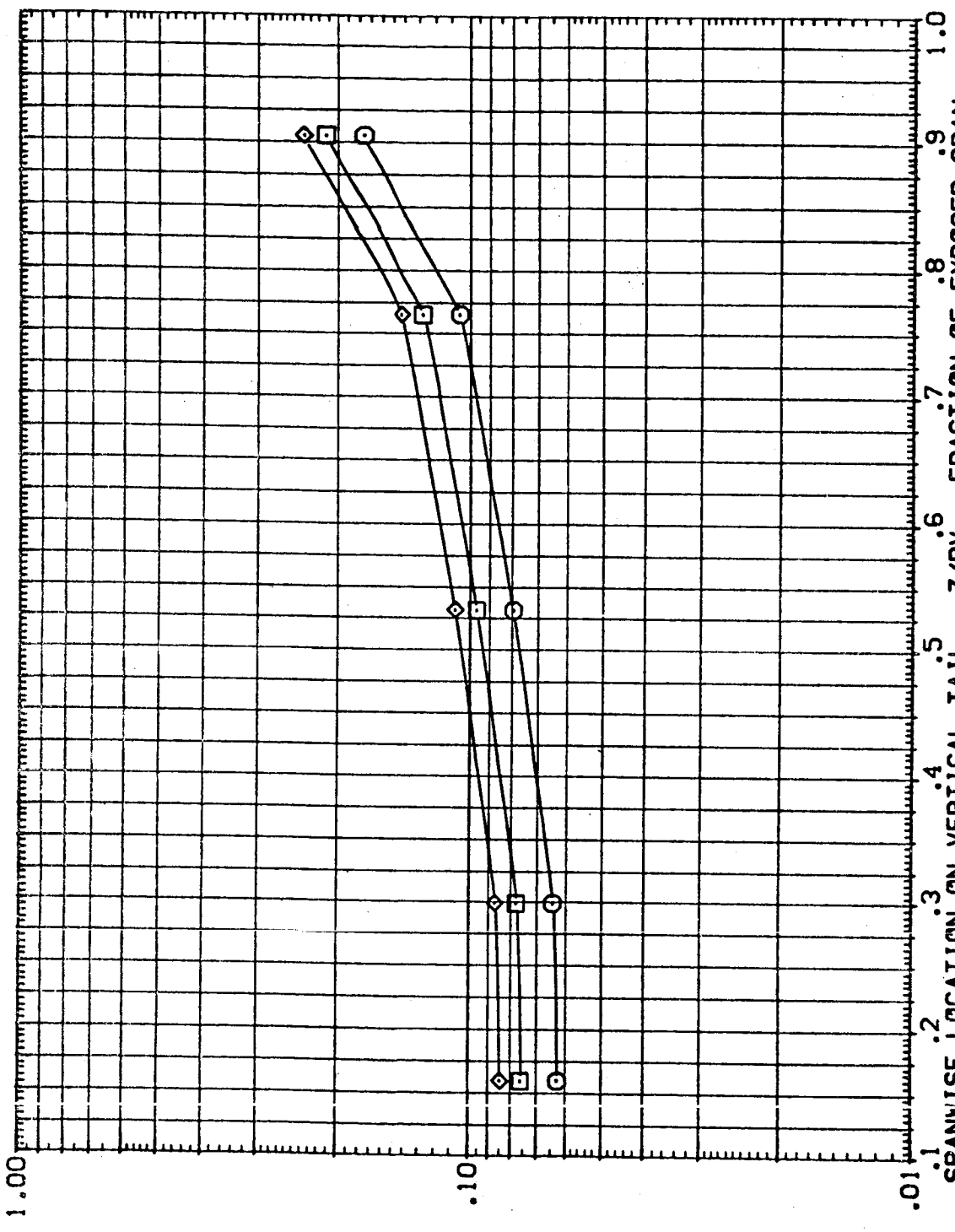


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI V06) ARC 3.5-178 IH3 ORBITER
 (AEI V06) ARC 3.5-178 IH3 ORBITER
 (BEI V06) ARC 3.5-178 IH3 ORBITER

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

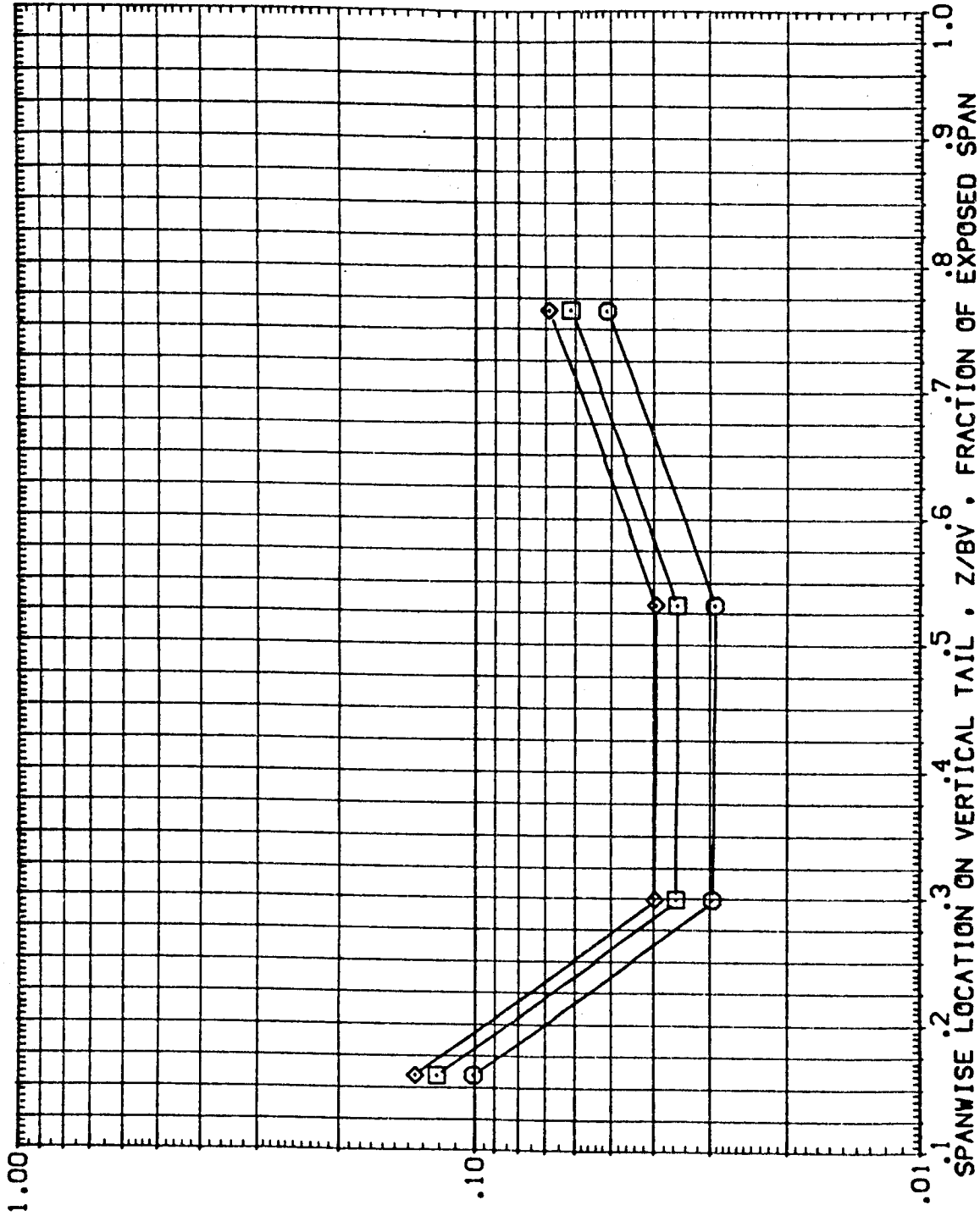


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI V06) ARC 3.5-178 IH3 ORBITER
 (AEI V06) ARC 3.5-178 IH3 ORBITER
 (BEI V06) ARC 3.5-178 IH3 ORBITER

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

VERTICAL
 VERTICAL
 VERTICAL

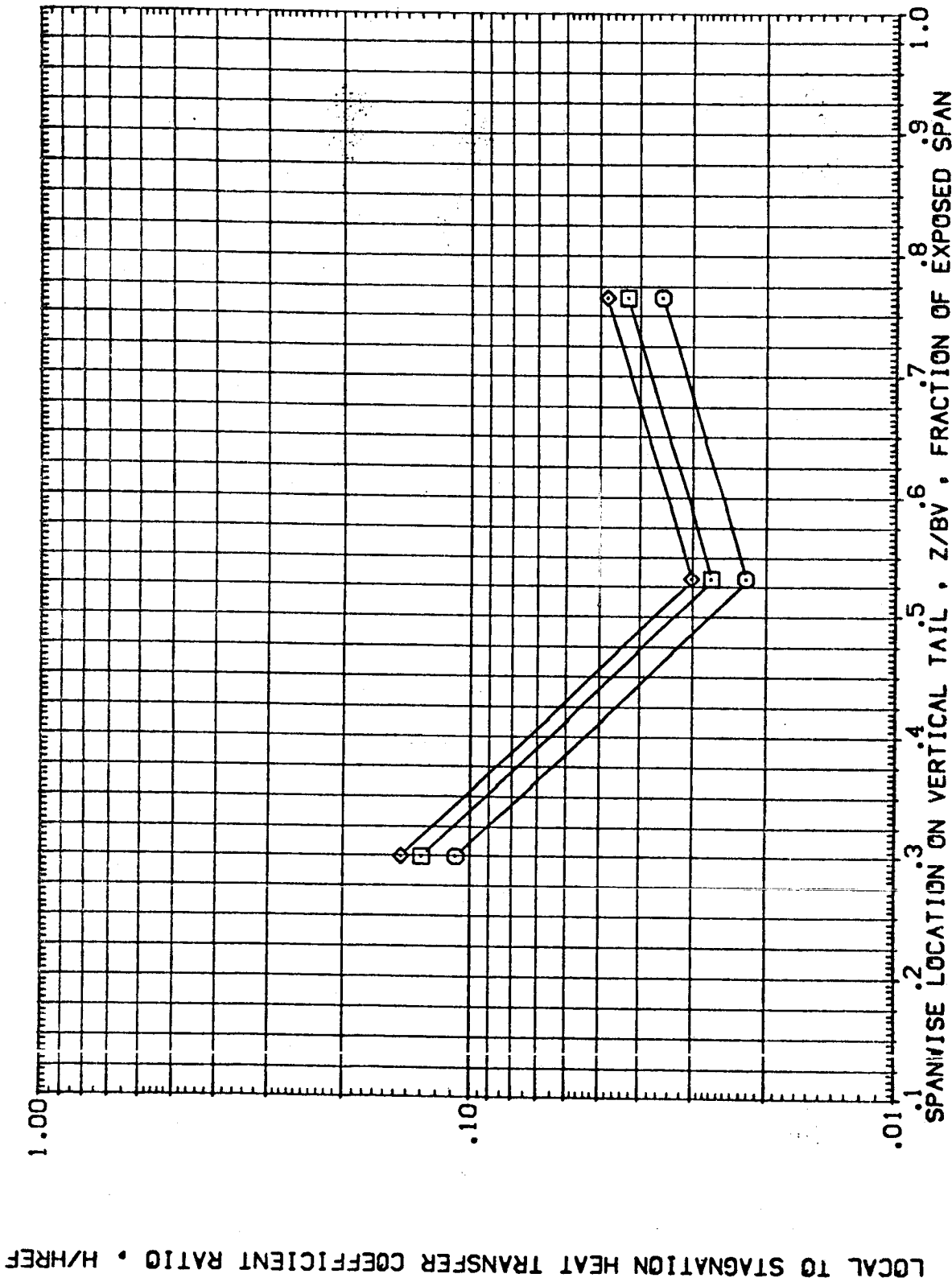





FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BE1V06)  ARC 3.5-178 IH3 ORBITER
 (AE1V06)  ARC 3.5-178 IH3 ORBITER
 (BE1V06)  ARC 3.5-178 IH3 ORBITER

ALPHA BETA RVL HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

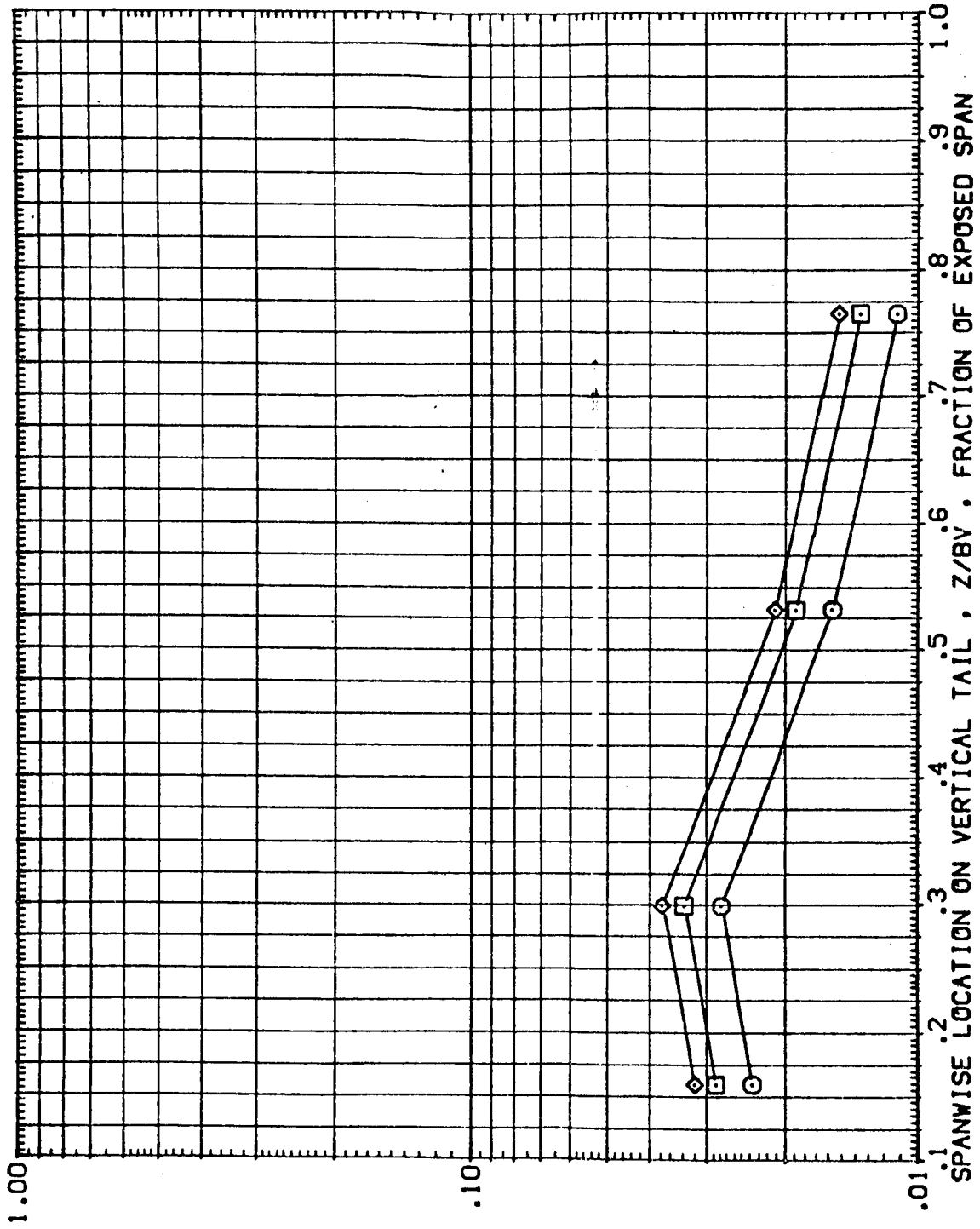


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV06) □ ARC 3.5-178 IH3 ORBITER
 (AEIV06) ◇ ARC 3.5-178 IH3 ORBITER
 (BEIV06) ○ ARC 3.5-178 IH3 ORBITER

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

VERTICAL
 VERTICAL
 VERTICAL

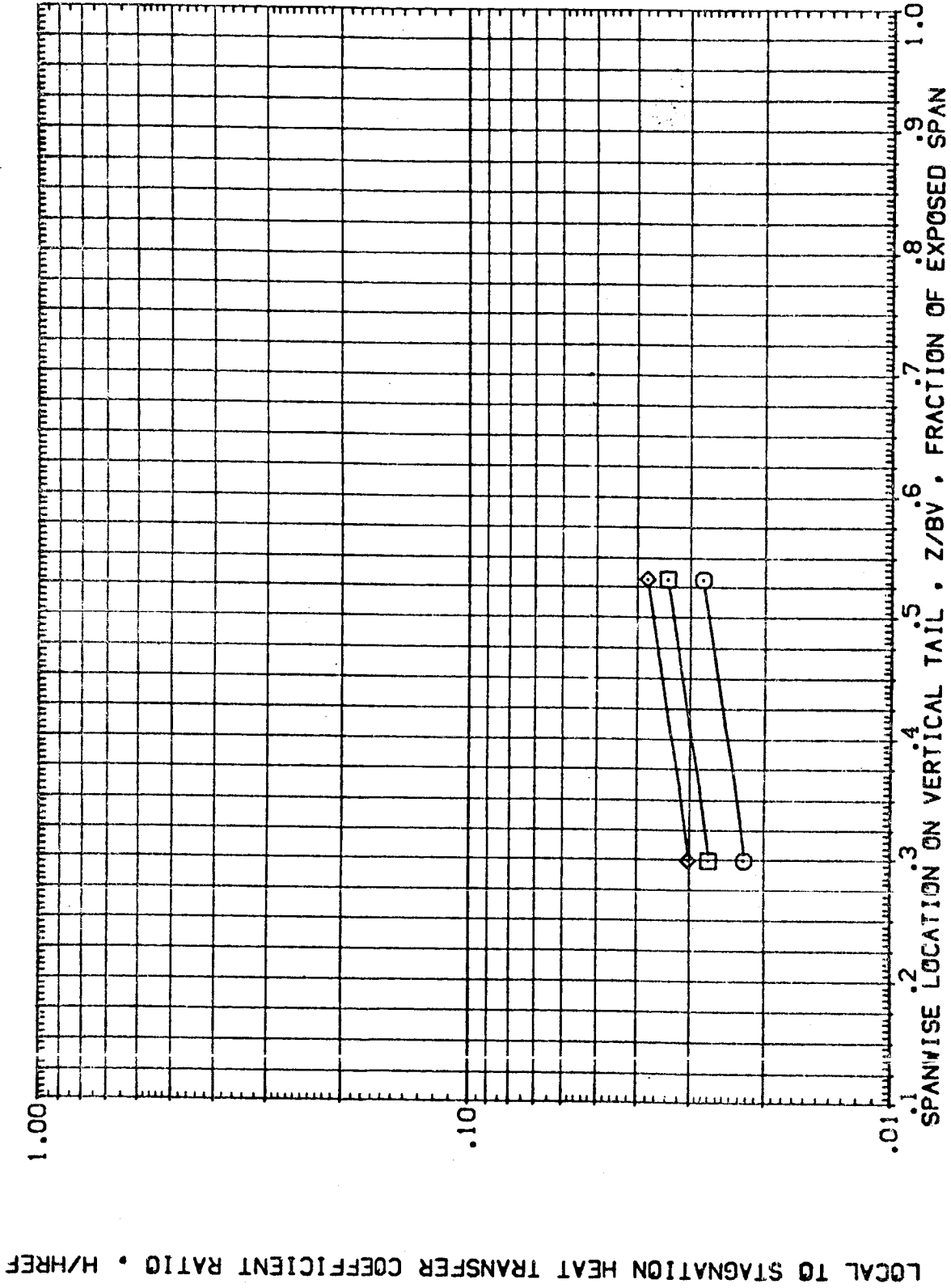


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|V07) ◻ ARC 3.5-178 IH3 ORBITTER
 (AE|V07) ◻ ARC 3.5-178 IH3 ORBITTER
 (BE|V07) ◻ ARC 3.5-178 IH3 ORBITTER

ALPHA BETA RNU/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

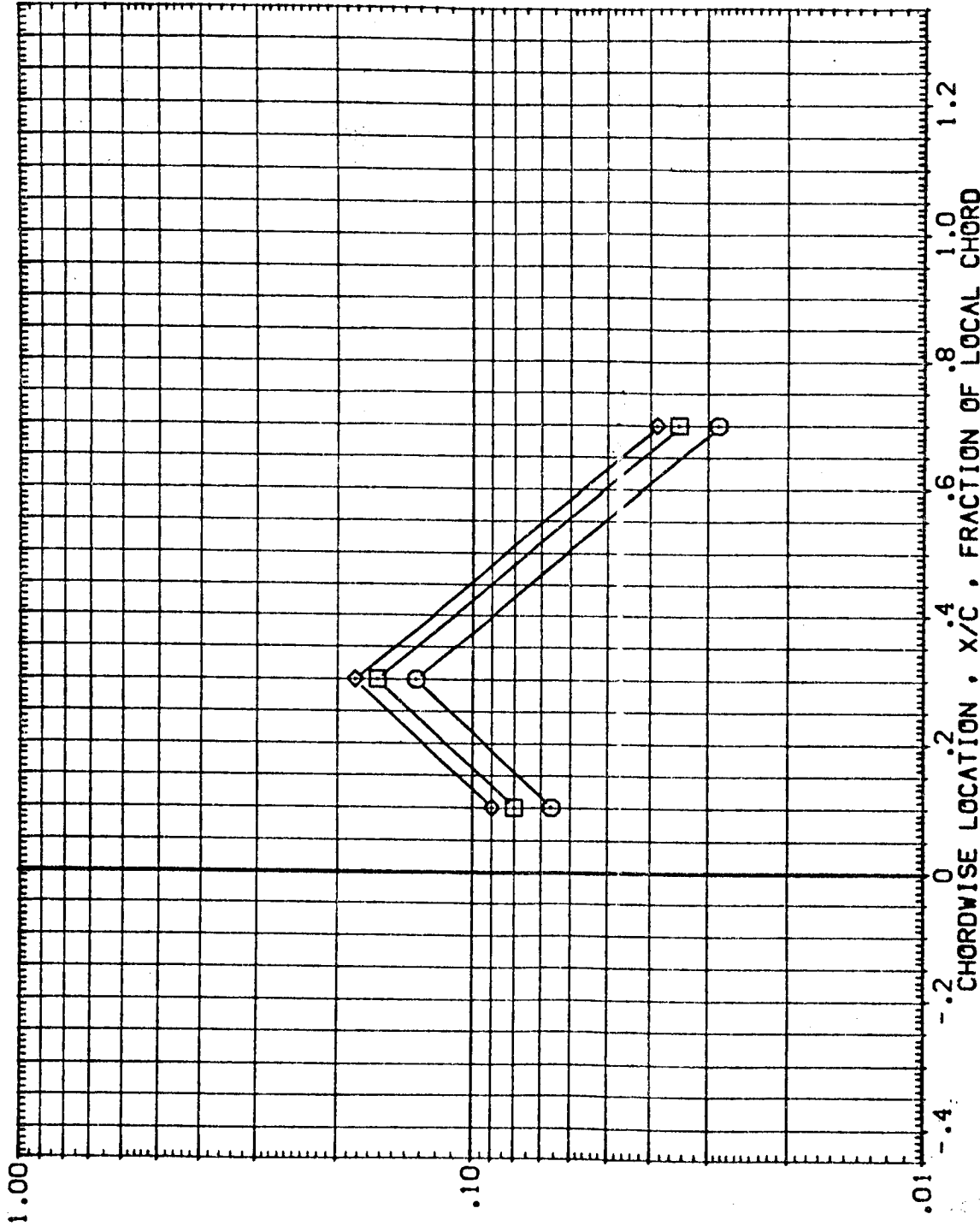


FIG. 52 VERTICAL - ORBITTER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .159

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	VERTICAL	ALPHA	BETA	RN/L	HAV/HT
(REIV07)	ARC 3.5-178 IH3 ORBITER	VERTICAL	.000	.000	5.000	1.000
(AEIV07)	ARC 3.5-178 IH3 ORBITER	VERTICAL	.000	.000	5.000	.900
(BEIV07)	ARC 3.5-178 IH3 ORBITER	VERTICAL	.000	.000	5.000	.850

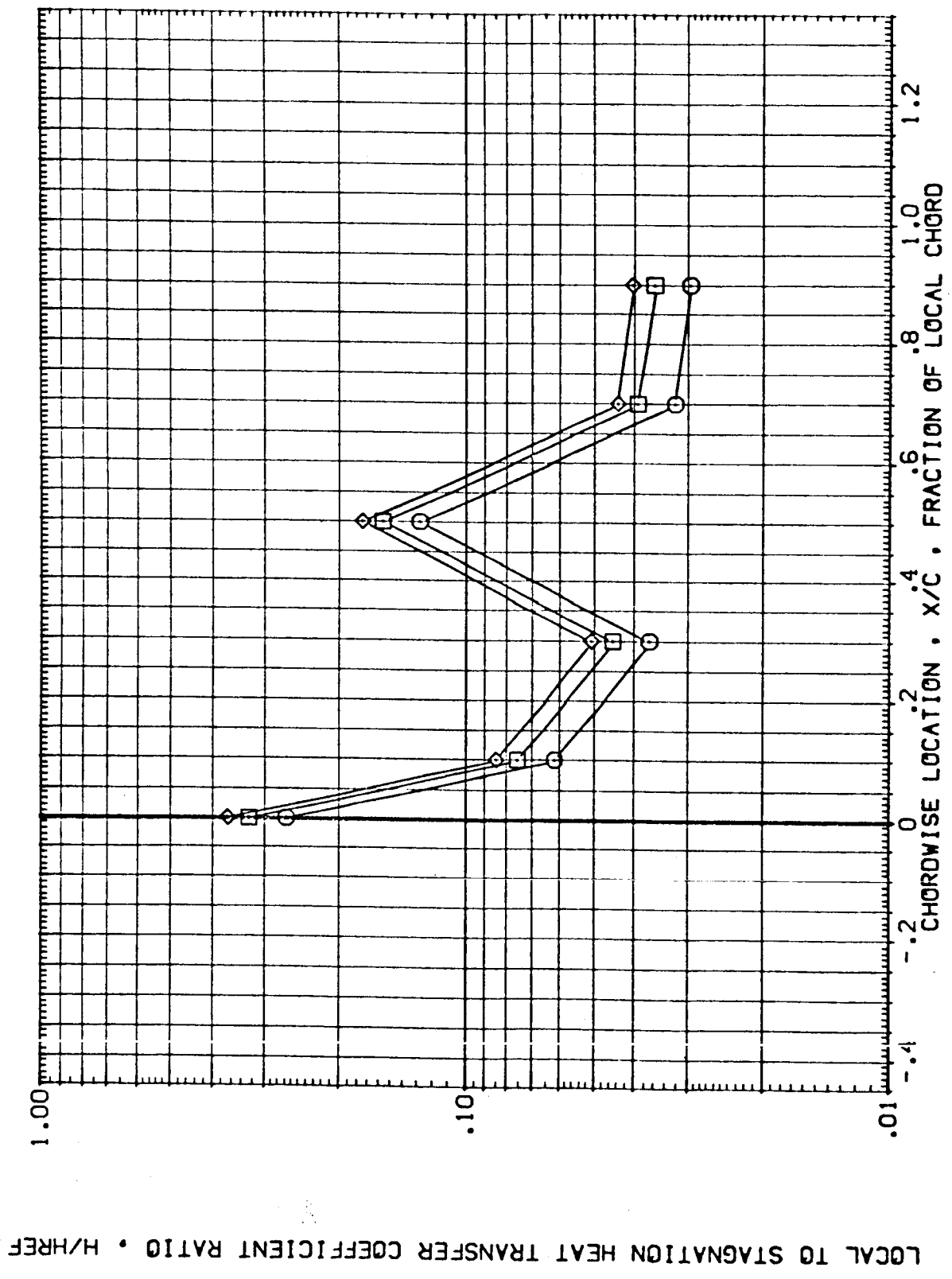


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1V07) ARC 3.5-178 IH3 ORBITER
 (AE1V07) ARC 3.5-178 IH3 ORBITER
 (BE1V07) ARC 3.5-178 IH3 ORBITER

ALPHA BETA RN/L HAW/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

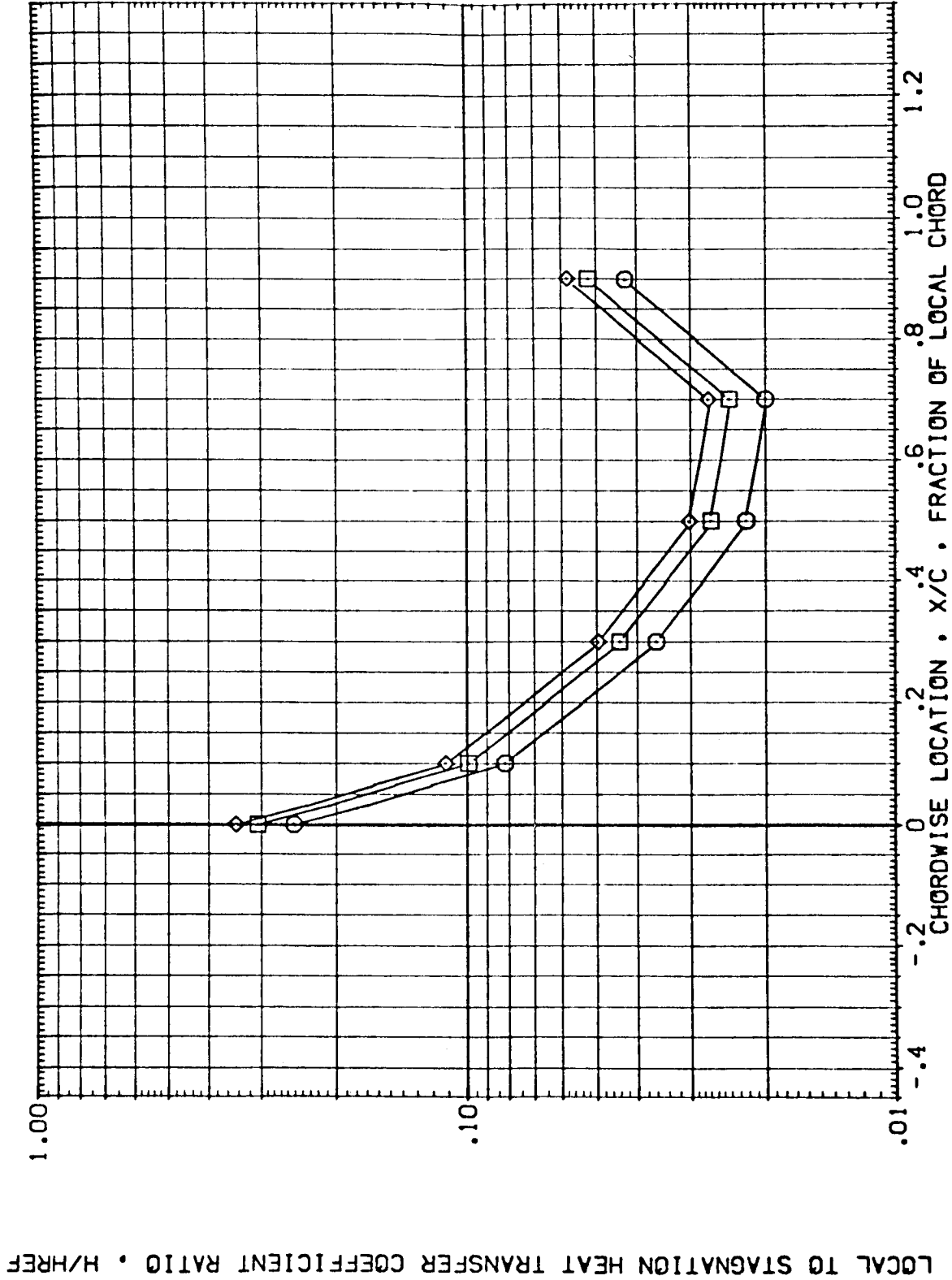


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .532

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV07) ARC 3.5-178 IH3 ORBITER
 (AEIV07) ARC 3.5-178 IH3 ORBITER
 (BEIV07) ARC 3.5-178 IH3 ORBITER

ALPHA BETA RVL HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

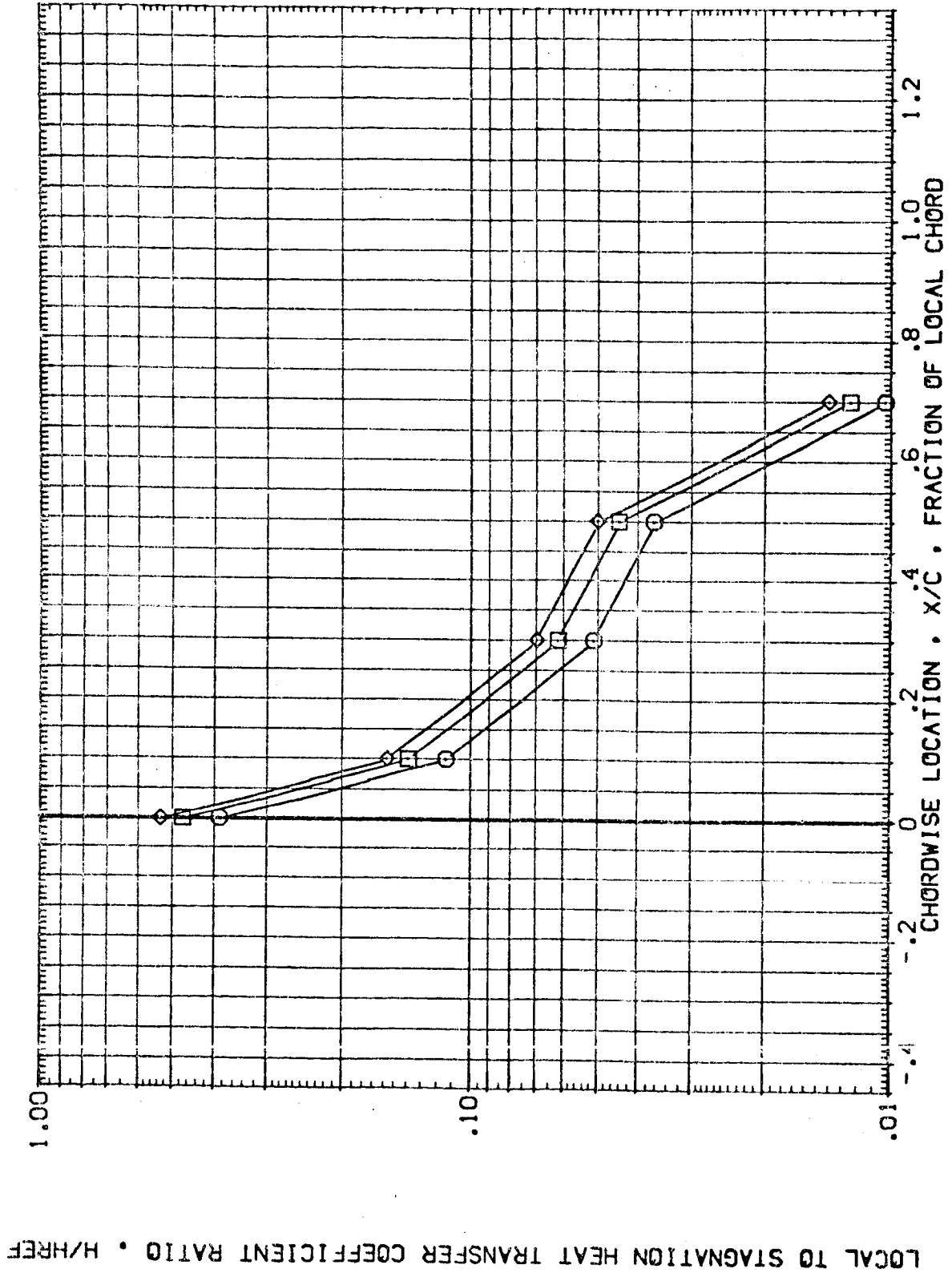


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .765

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BE1V07) ARC 3.5-178 IH3 ORBITER
 (AE1V07) ARC 3.5-178 IH3 ORBITER
 (BE1V07) ARC 3.5-178 IH3 ORBITER

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

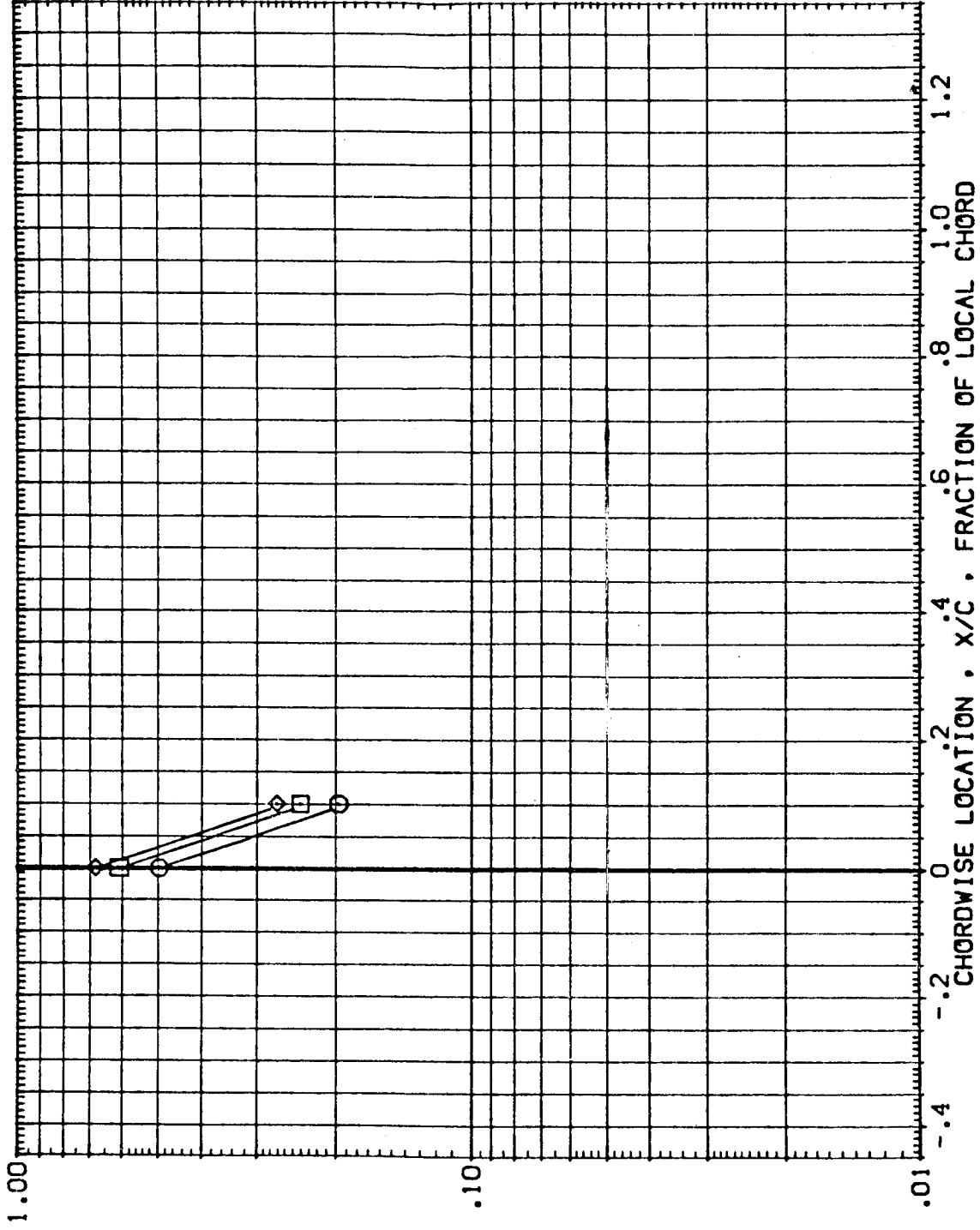


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .905

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE V07)	ARC 3.5-178 IH3 ORB TER	.000	.000	5.000	1.000
(AE V07)	ARC 3.5-178 IH3 ORB TER	.000	.000	5.000	.900
(BE V07)	ARC 3.5-178 IH3 ORB TER	.000	.000	5.000	.850

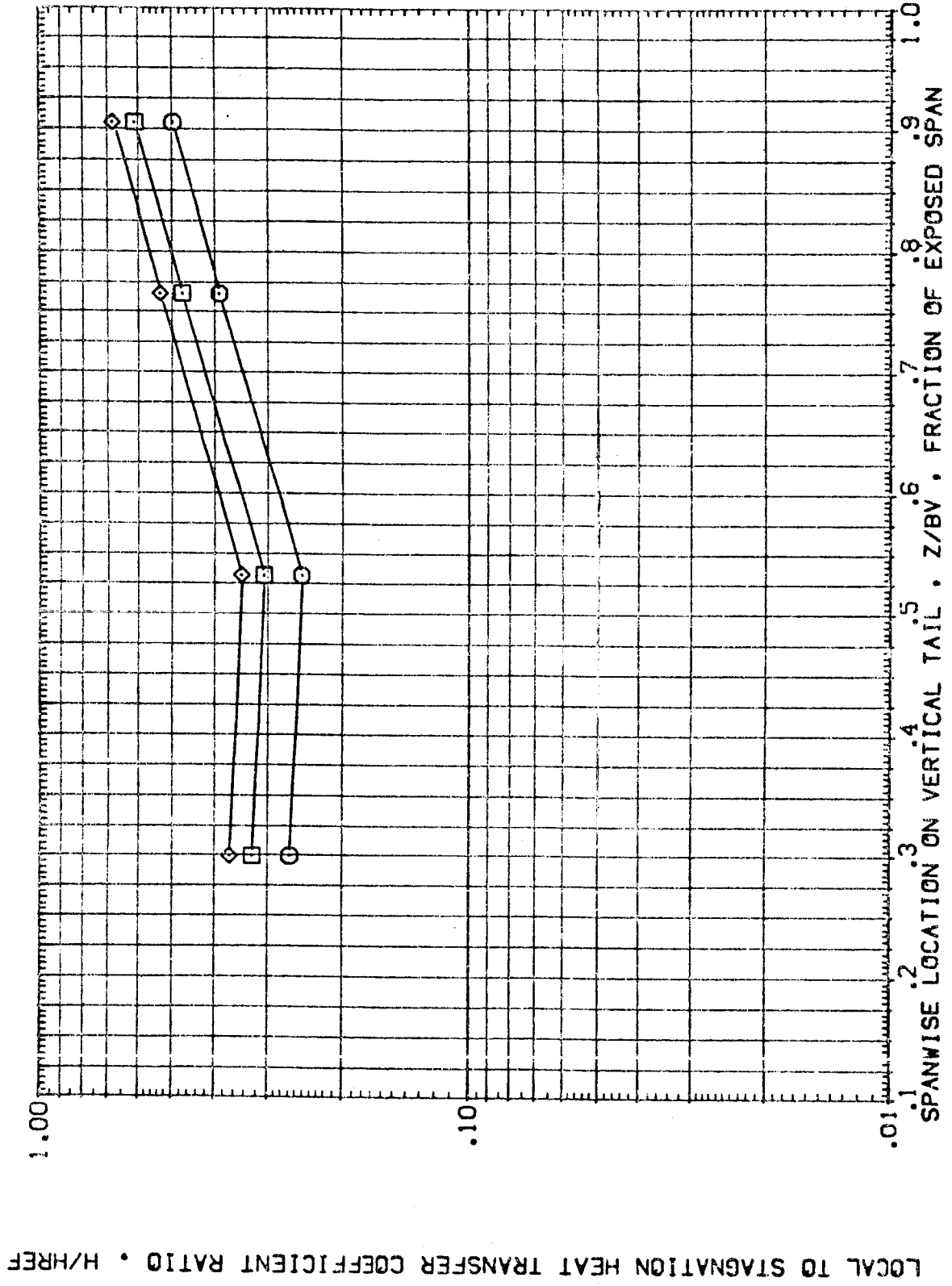


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .000

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV07) ARC 3.5-178 IH3 ORBITER
 (AEIV07) ARC 3.5-178 IH3 ORBITER
 (BEIV07) ARC 3.5-178 IH3 ORBITER

VERTICAL
 VERTICAL
 VERTICAL

ALPHA .000
 .000
 .000

BETA .000
 .000
 .000

RN/L 5.000
 5.000
 5.000

HAV/HT 1.000
 .900
 .850

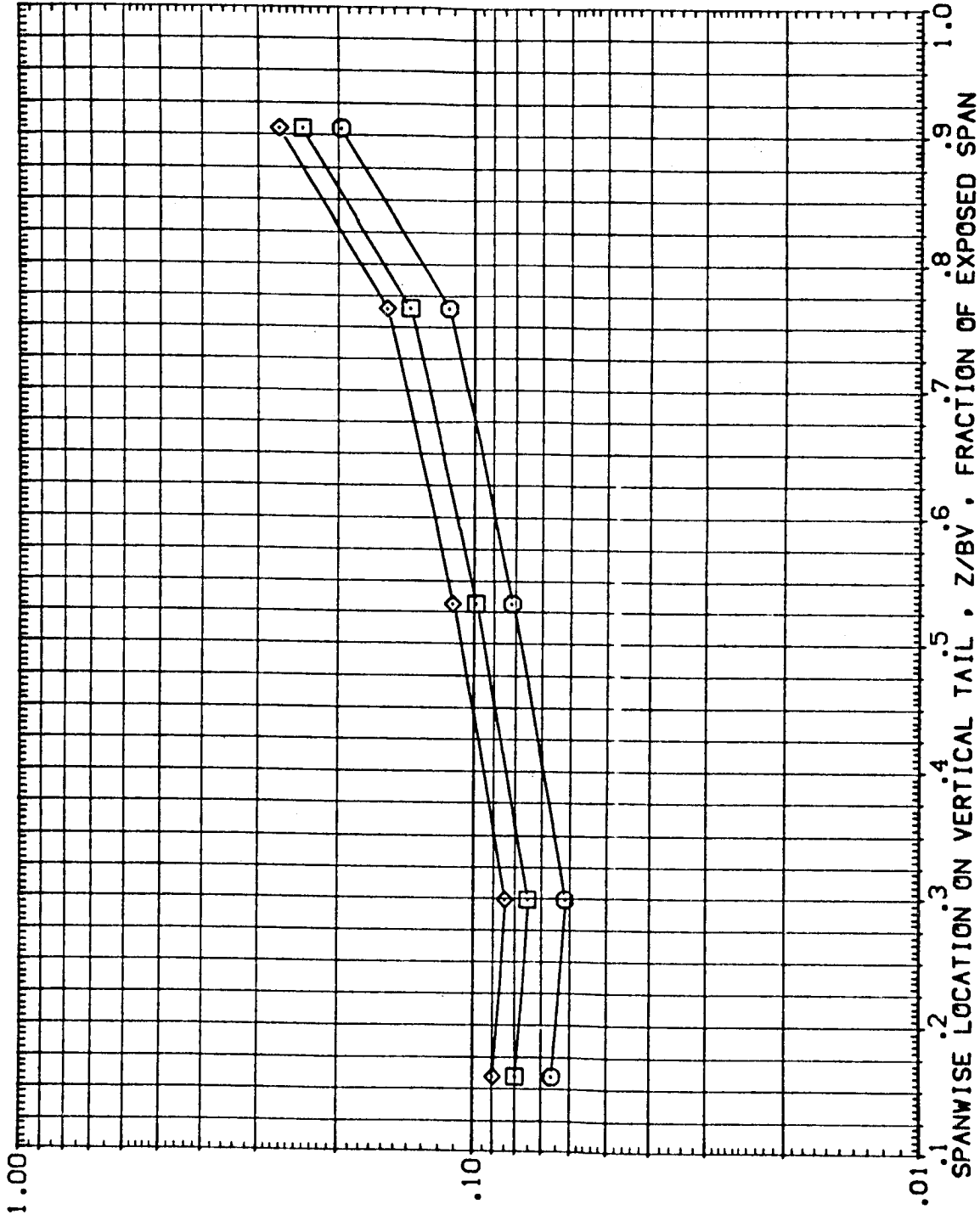


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE1V07) ARC 3.5-178 IH3 ORBITER .000 .000 5.000 1.000

(AE1V07) ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .900

(BE1V07) ARC 3.5-178 IH3 ORBITER .000 .000 5.000 .850

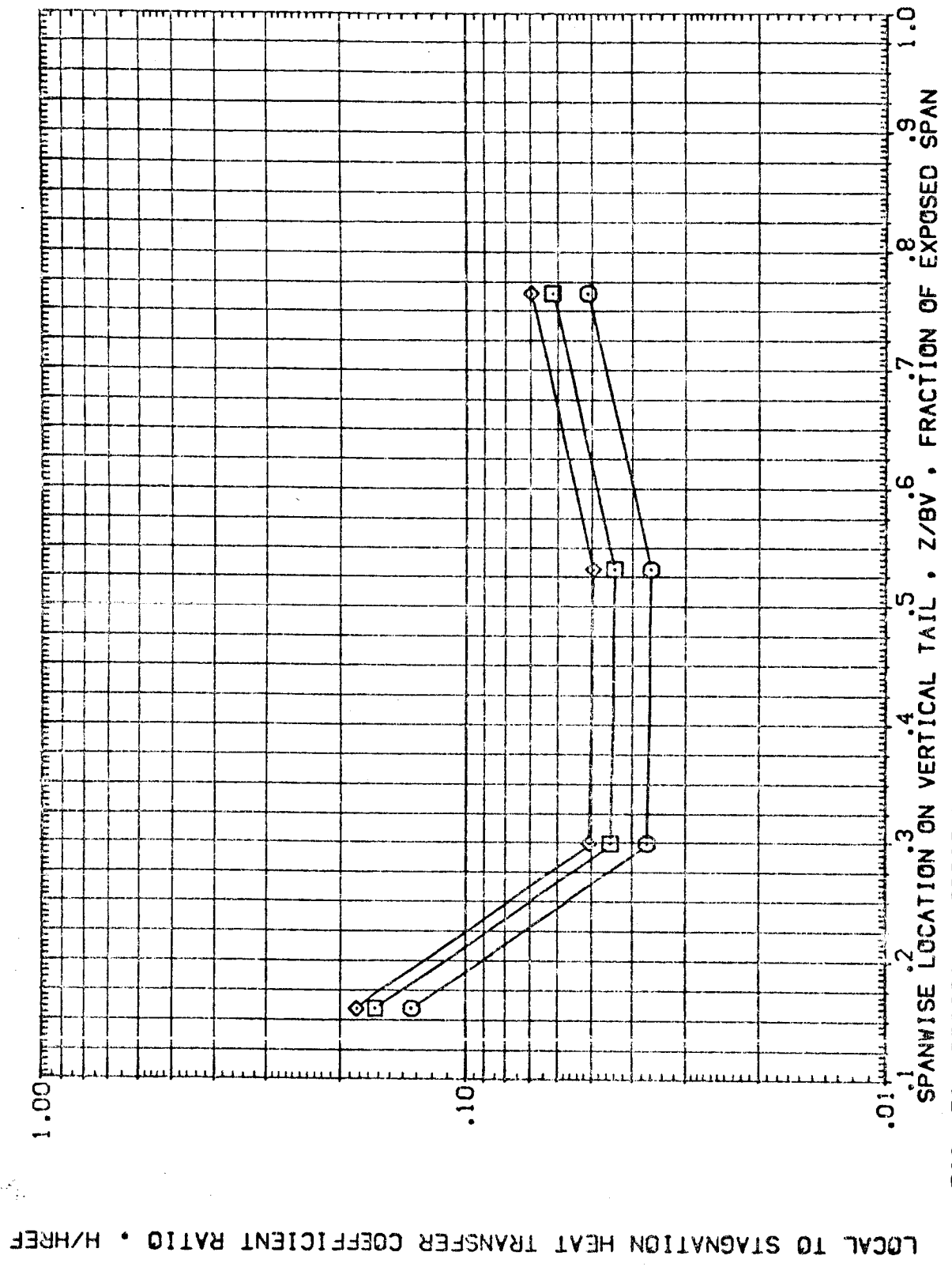


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .300

DATA SET SYMBOL. CONFIGURATION DESCRIPTION

(RE1V07)
(AE1V07)
(BE1V07)

ARC 3.5-178 IH3 ORBITER
ARC 3.5-178 IH3 ORBITER
ARC 3.5-178 IH3 ORBITER

VERTICAL
VERTICAL
VERTICAL

ALPHA .000
BETA .000
RVL/L 5.000
HAW/HT 1.000

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

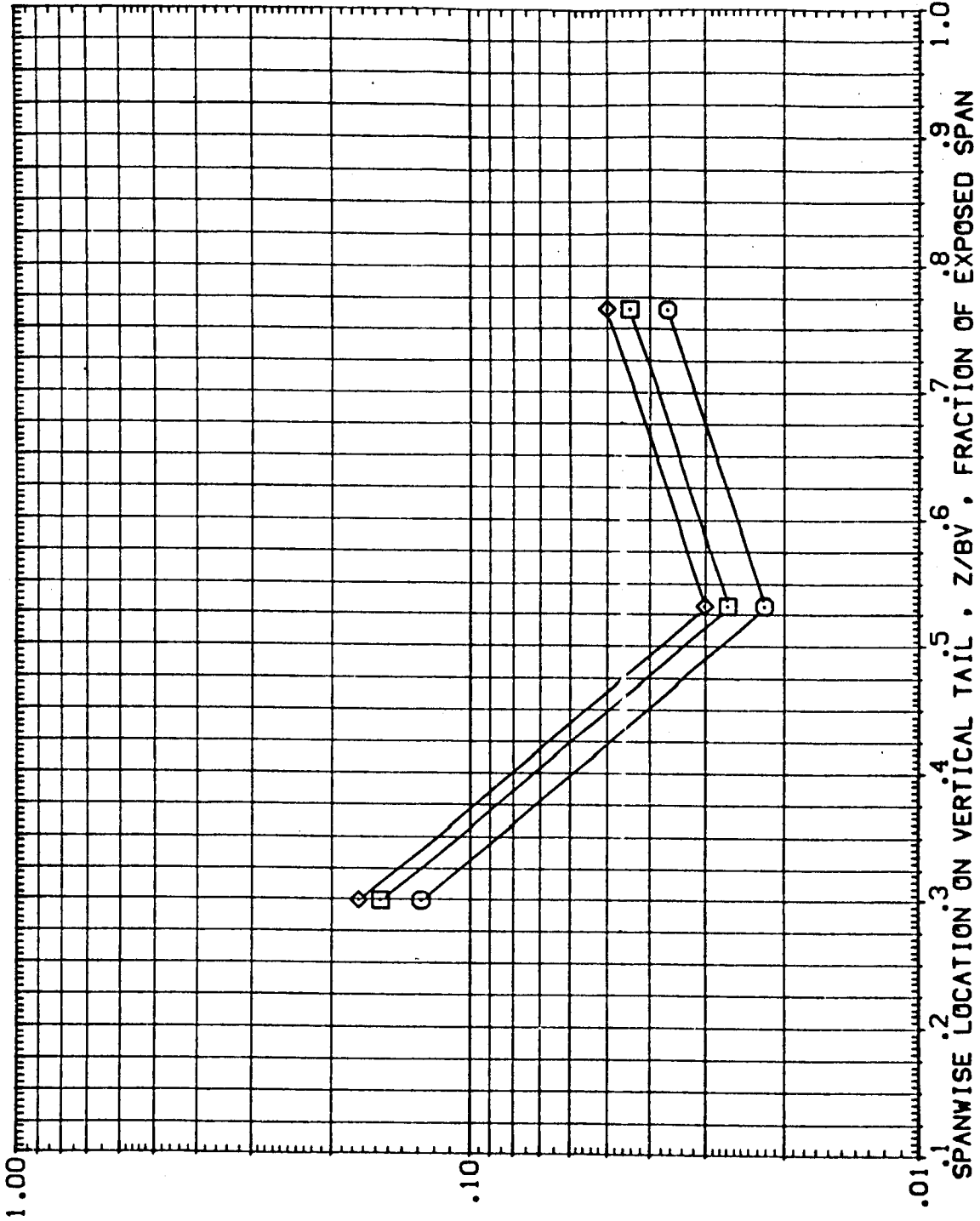


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .500

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RNVL	HAW/HT
(RE V07)	ARC 3.5-178 IH3 ORBITER	.000	.000	5.000	1.000
(AE V07)	ARC 3.5-178 IH3 ORBITER	.000	.000	5.000	.900
(BE V07)	ARC 3.5-178 IH3 ORBITER	.000	.000	5.000	.850

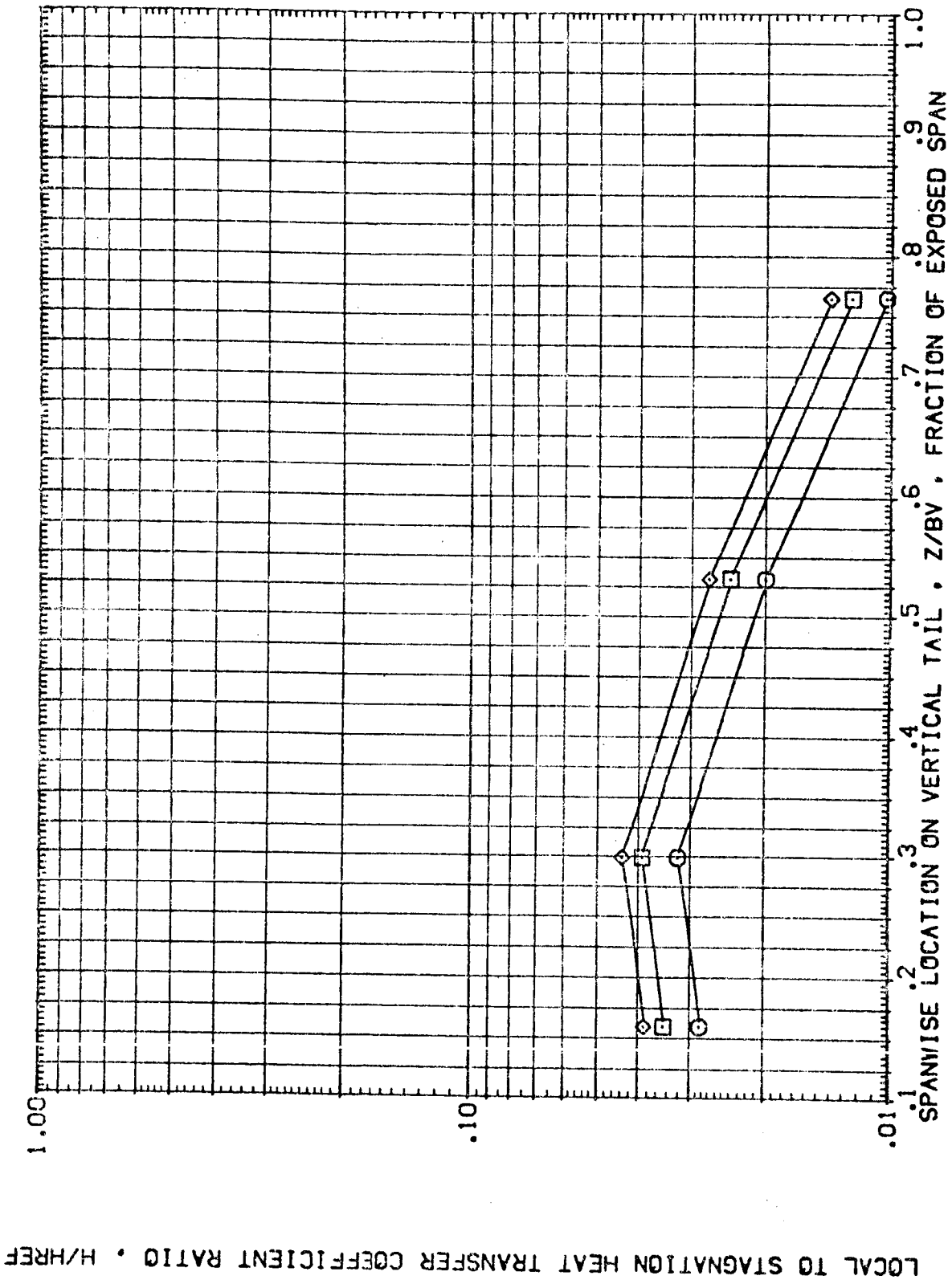


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .700

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1V07) □ ARC 3.5-178 IH3 ORBITER
 (AE1V07) ◇ ARC 3.5-178 IH3 ORBITER
 (BE1V07) ○ ARC 3.5-178 IH3 ORBITER

VERTICAL
 VERTICAL
 VERTICAL

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 5.000 5.000 5.000
 HAV/HT 1.000 .900 .850

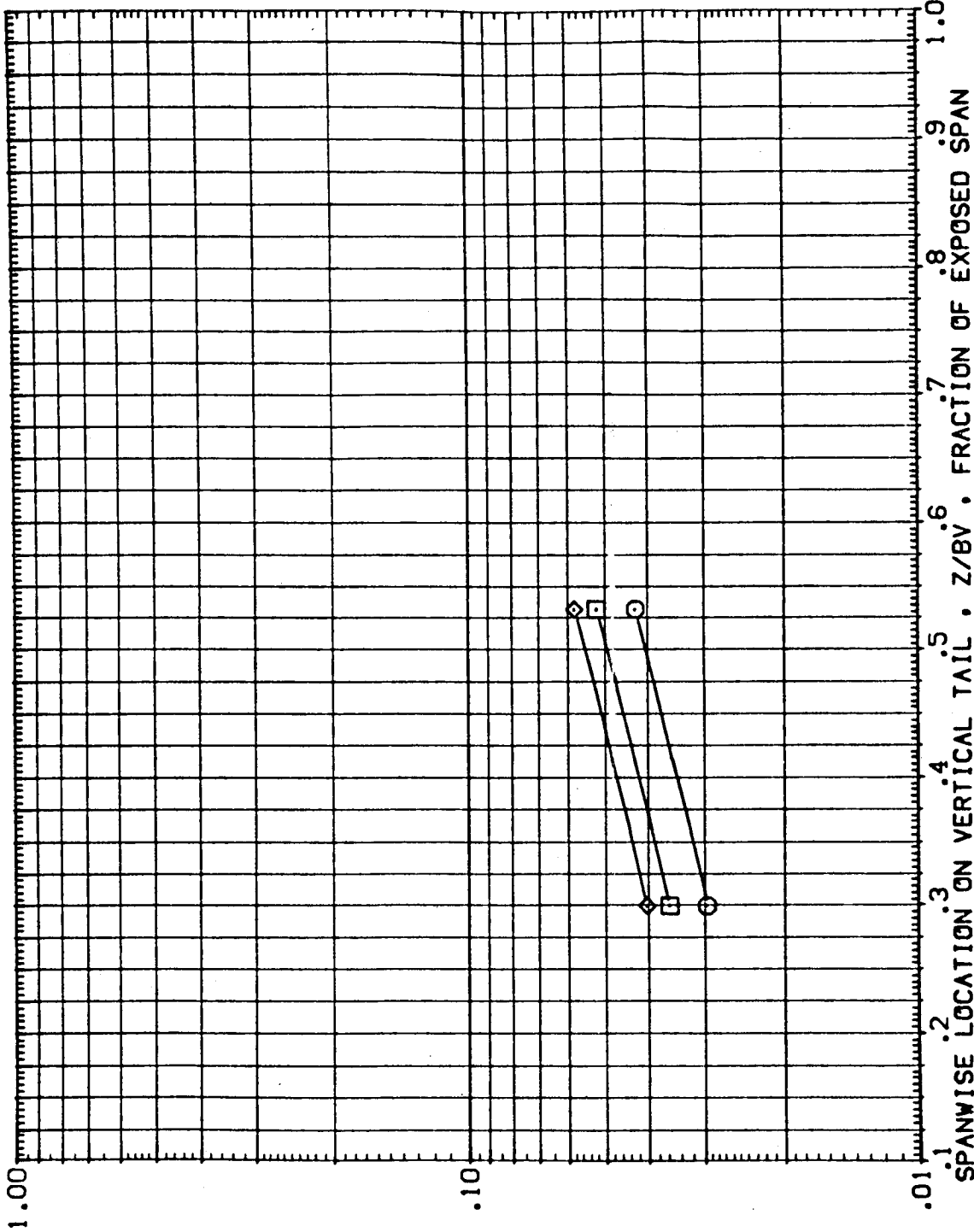


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .900



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	MAV/HT
(REIV08)	ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL	.000	.000	1.500	1.000
(AEIV08)	ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL	.000	.000	1.500	.900
(BEIV08)	ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL	.000	.000	1.500	.850

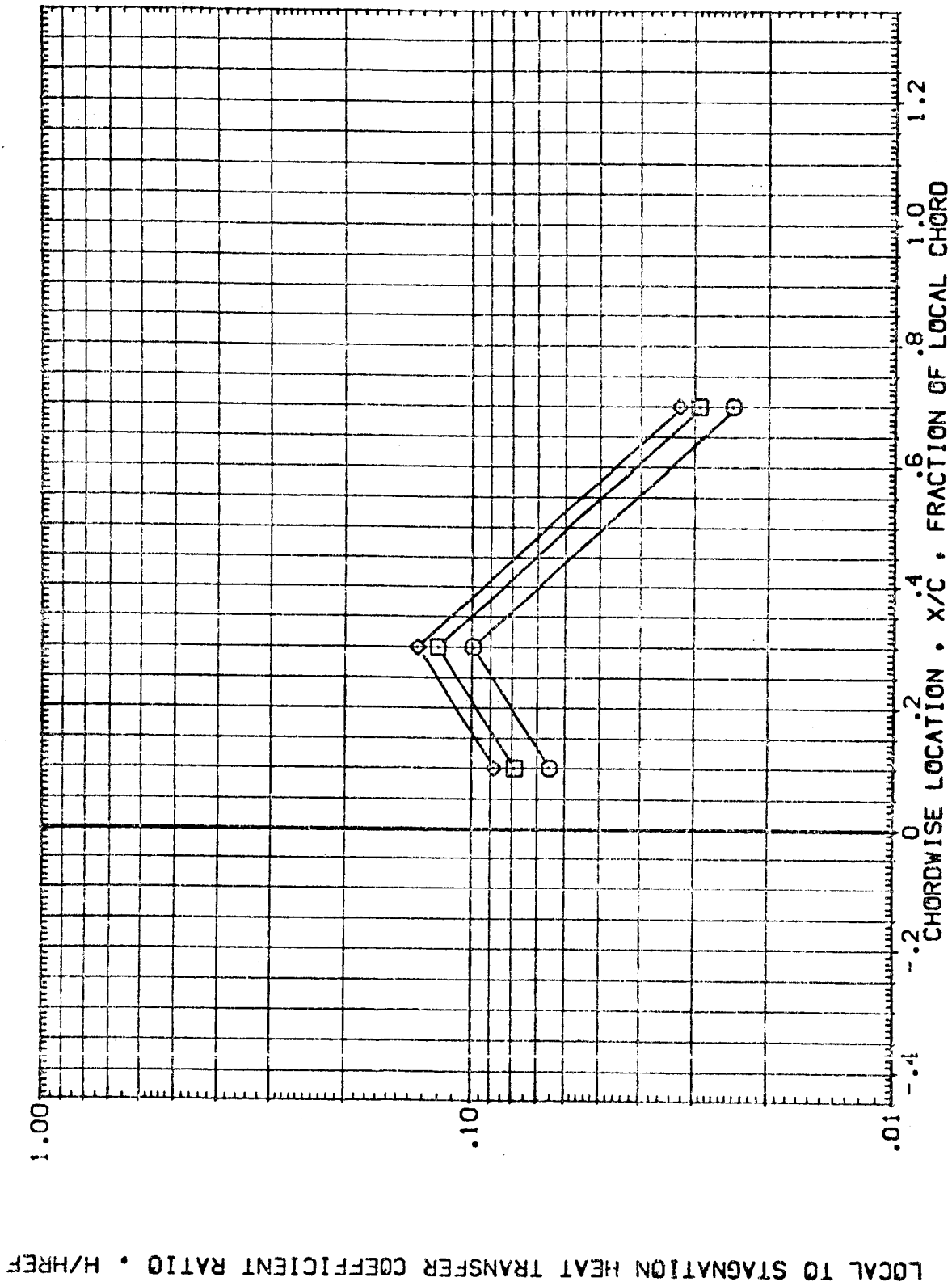


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .159

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

(RE1V08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 1.500 1.000

(AE1V08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 1.500 .900

(BE1V08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 1.500 .850

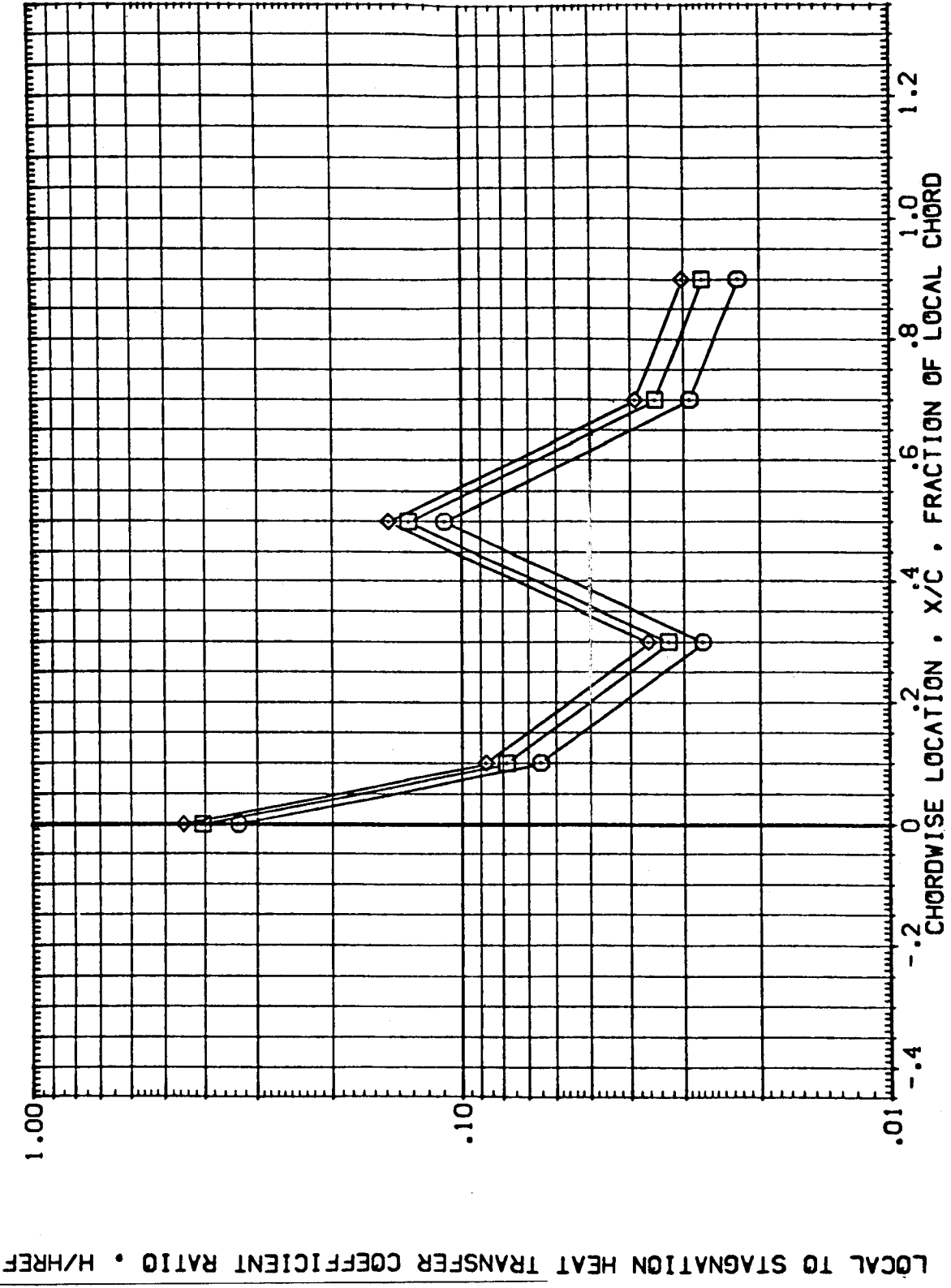


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HW/H/T

(RE|V08) ARC 3.5-178 |H3 ORBITER (TRIPS|VERTICAL

(AE|V08) ARC 3.5-178 |H3 ORBITER (TRIPS|VERTICAL

(BE|V08) ARC 3.5-178 |H3 ORBITER (TRIPS|VERTICAL

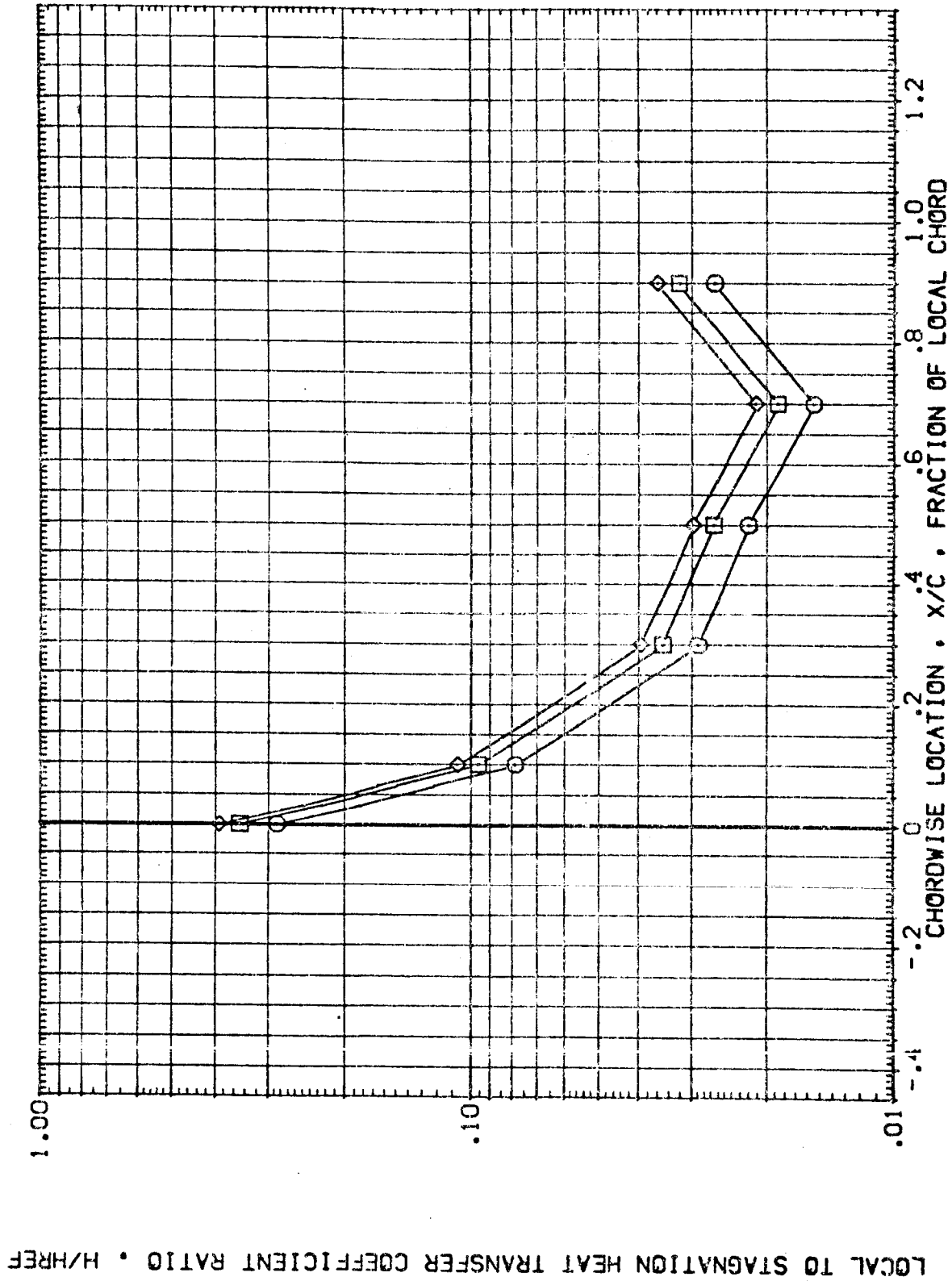


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .532

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RNL HAW/HT
 (REIV08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 1.500 1.000
 (AEIV08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 1.500 .900
 (SEIV08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 1.500 .850

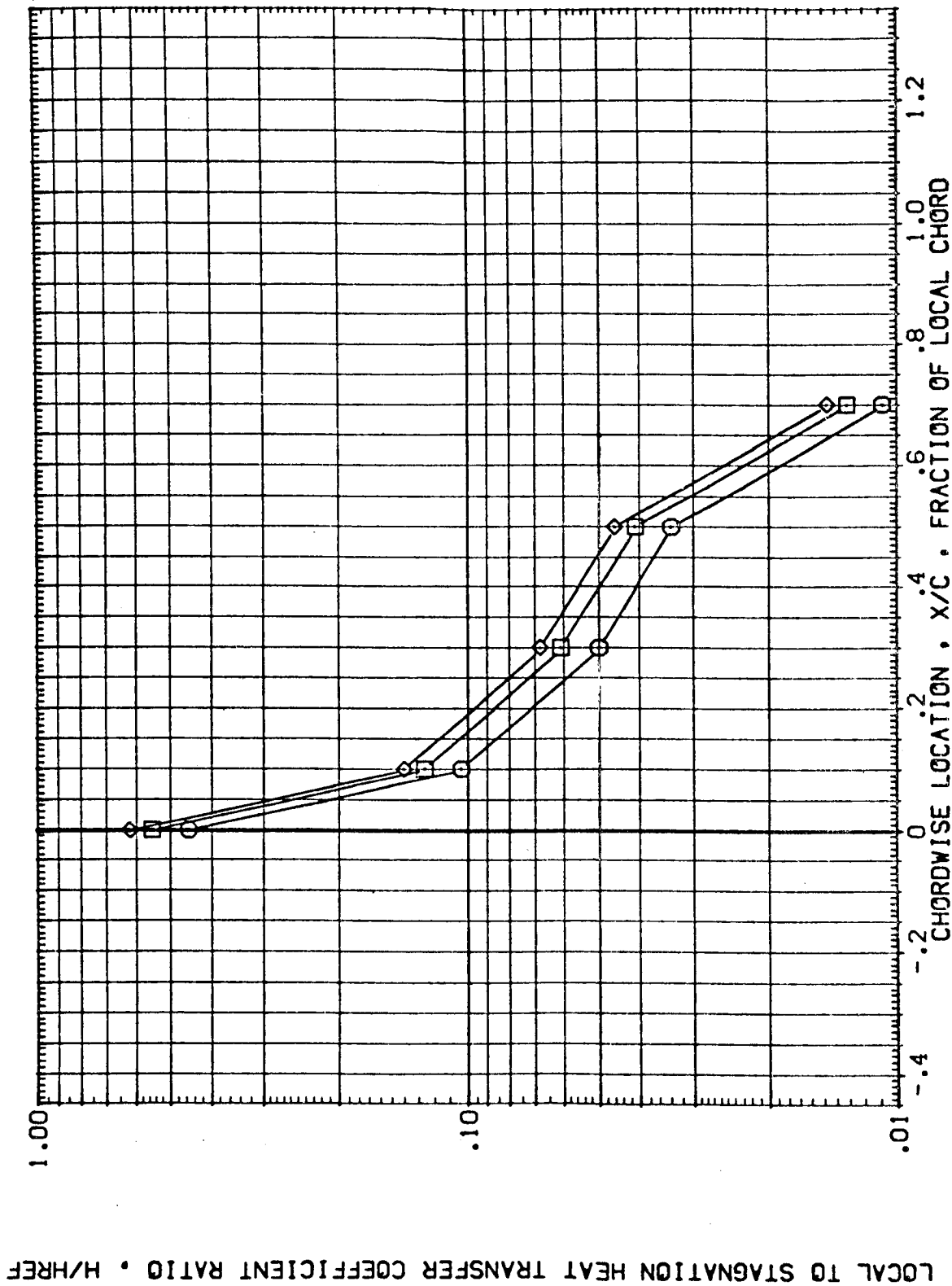


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .765

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE V08)	ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL	.000	.000	1.500	1.000
(AE V08)	ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL	.000	.000	1.500	.900
(BE V08)	ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL	.000	.000	1.500	.850

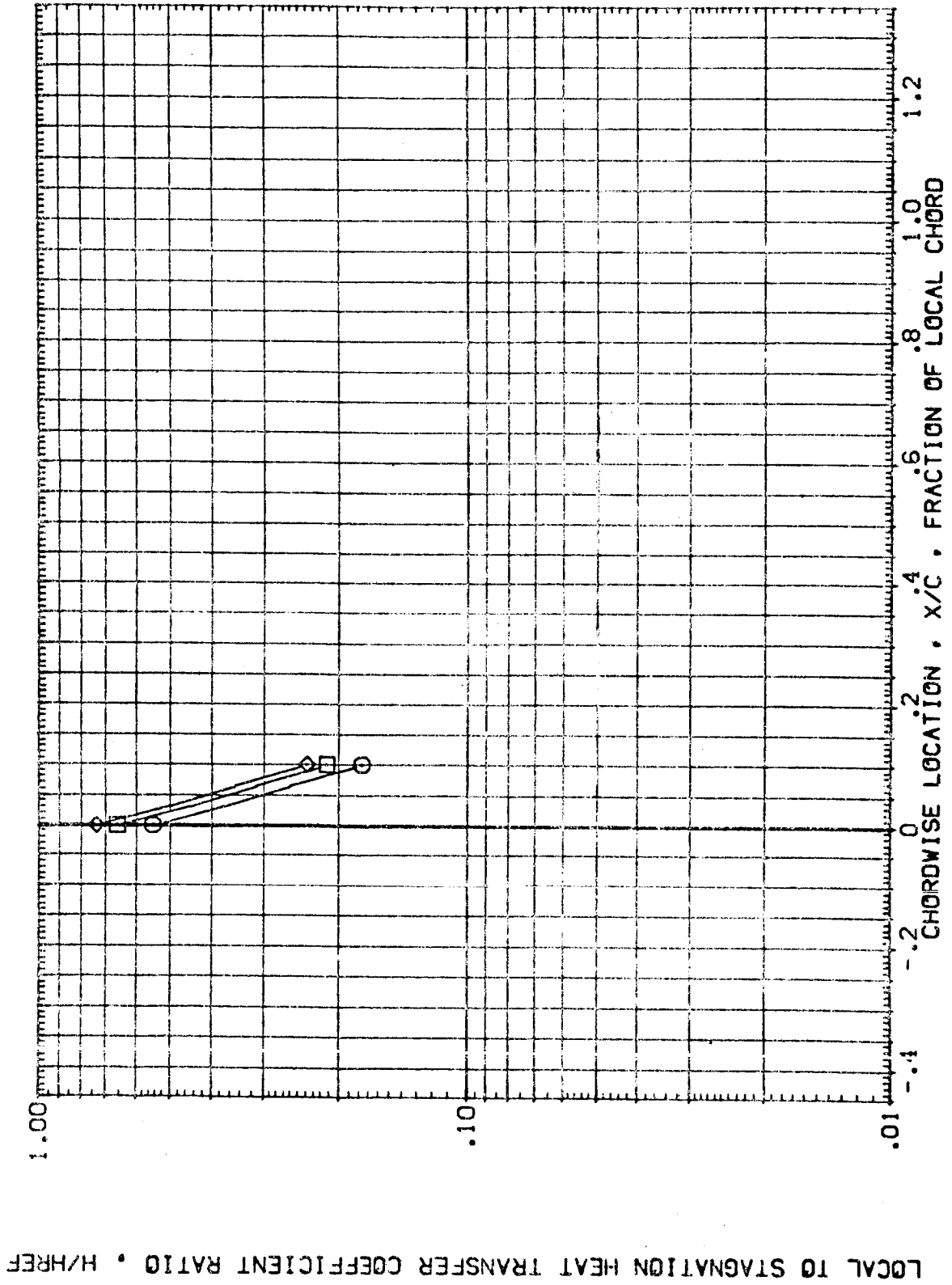


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .905

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RE|V08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL

(AE|V08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL

(BE|V08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL

ALPHA BETA FNVL HAV/HT

.000 .000 1.500 1.000

.000 .000 1.500 .900

.000 .000 1.500 .850

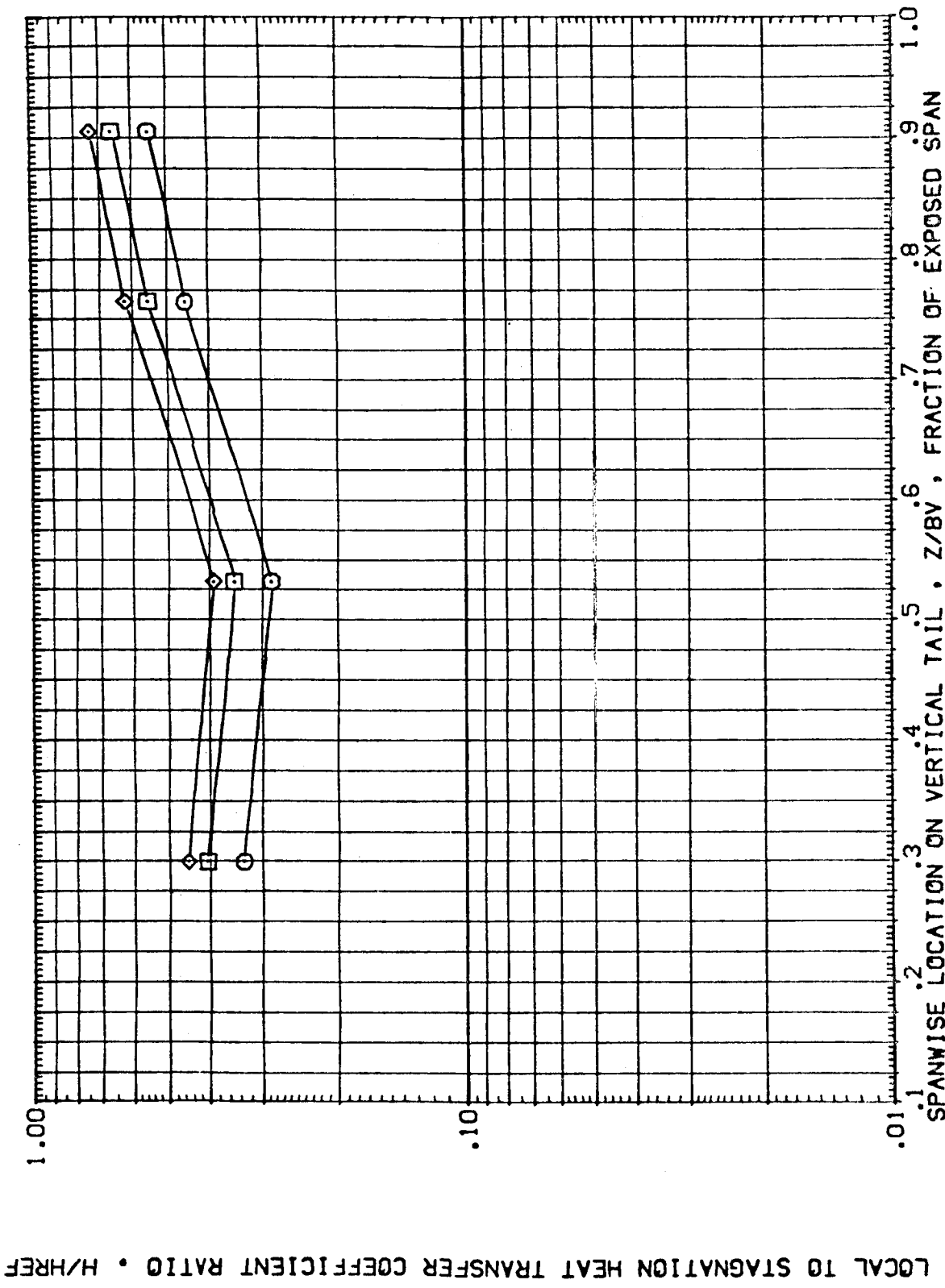


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (AEIV08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (BEIV08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

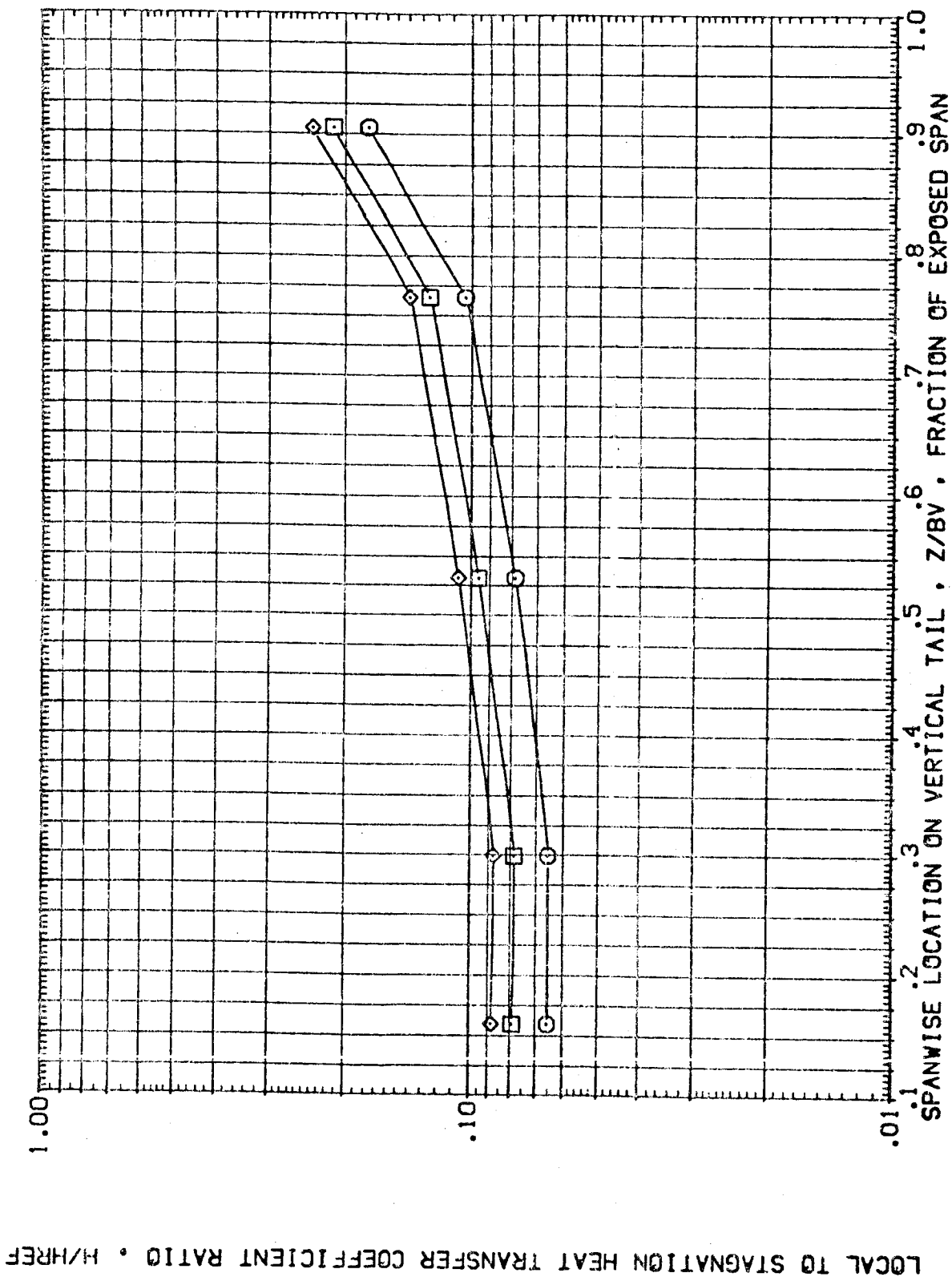


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1V08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (AE1V08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (BE1V08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL

ALPHA BETA RNL HAW/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

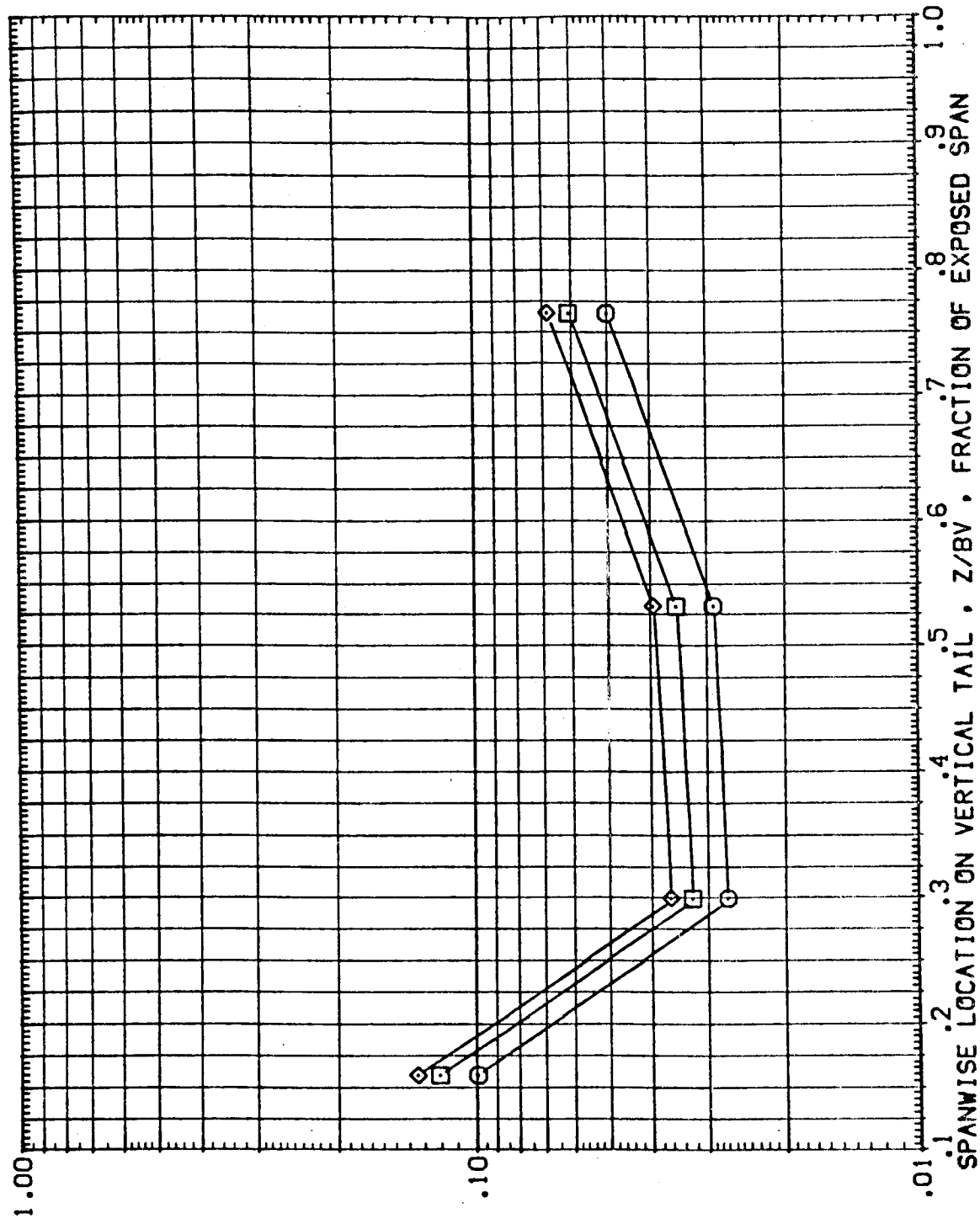


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(REIV08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 1.500 1.000

(AEIV08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 1.500 .900

(BEIV08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 1.500 .850

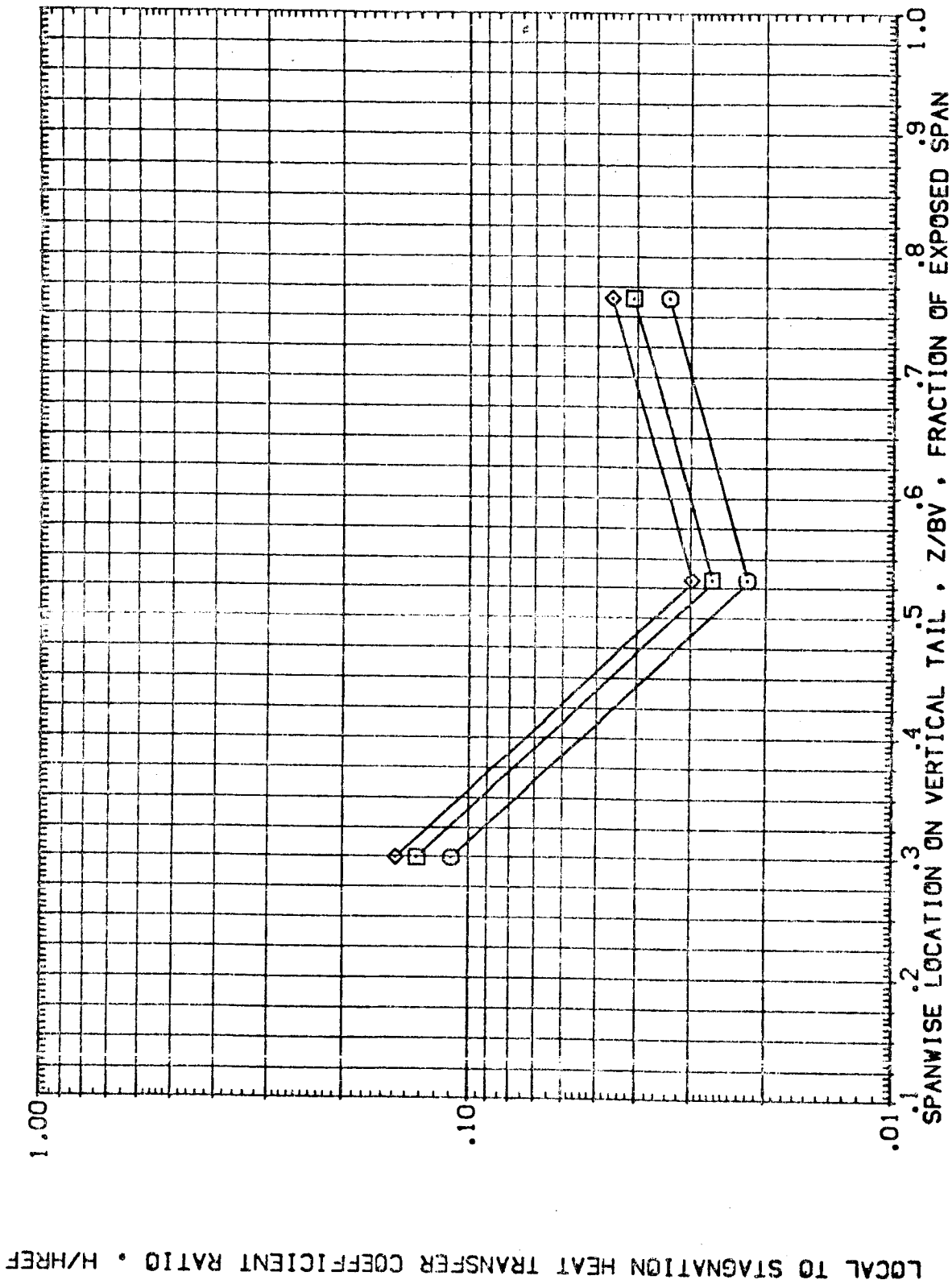


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (AE|V08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (AE|V08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (BE|V08) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .650

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

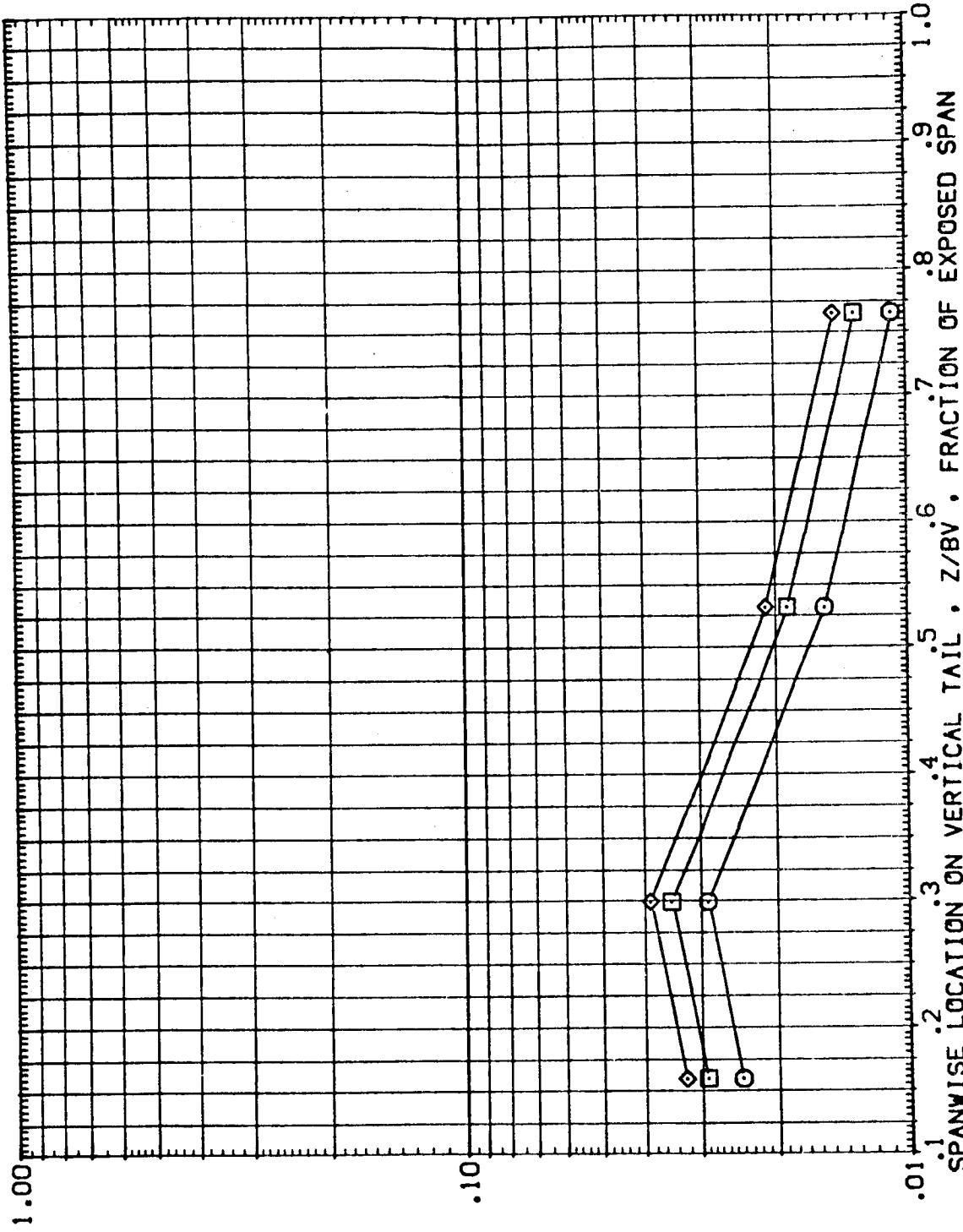


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV08) ○ ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (AEIV08) □ ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (BEIV08) ◇ ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL

ALPHA BETA RVL HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

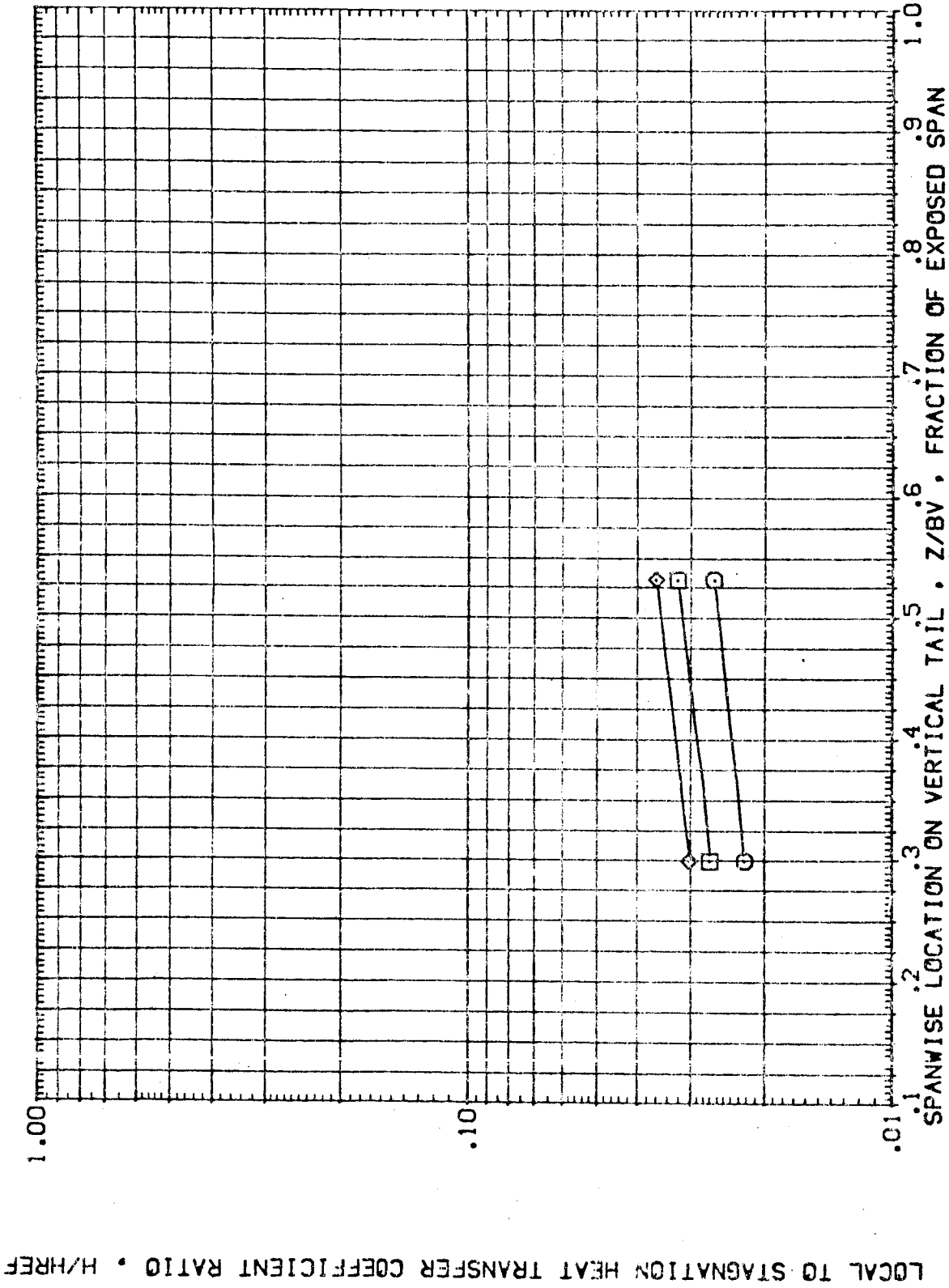


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA FN/VL HAV/HT

(REIV09) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 5.000 1.000

(AEIV09) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 5.000 .900

(BEIV09) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 5.000 .850

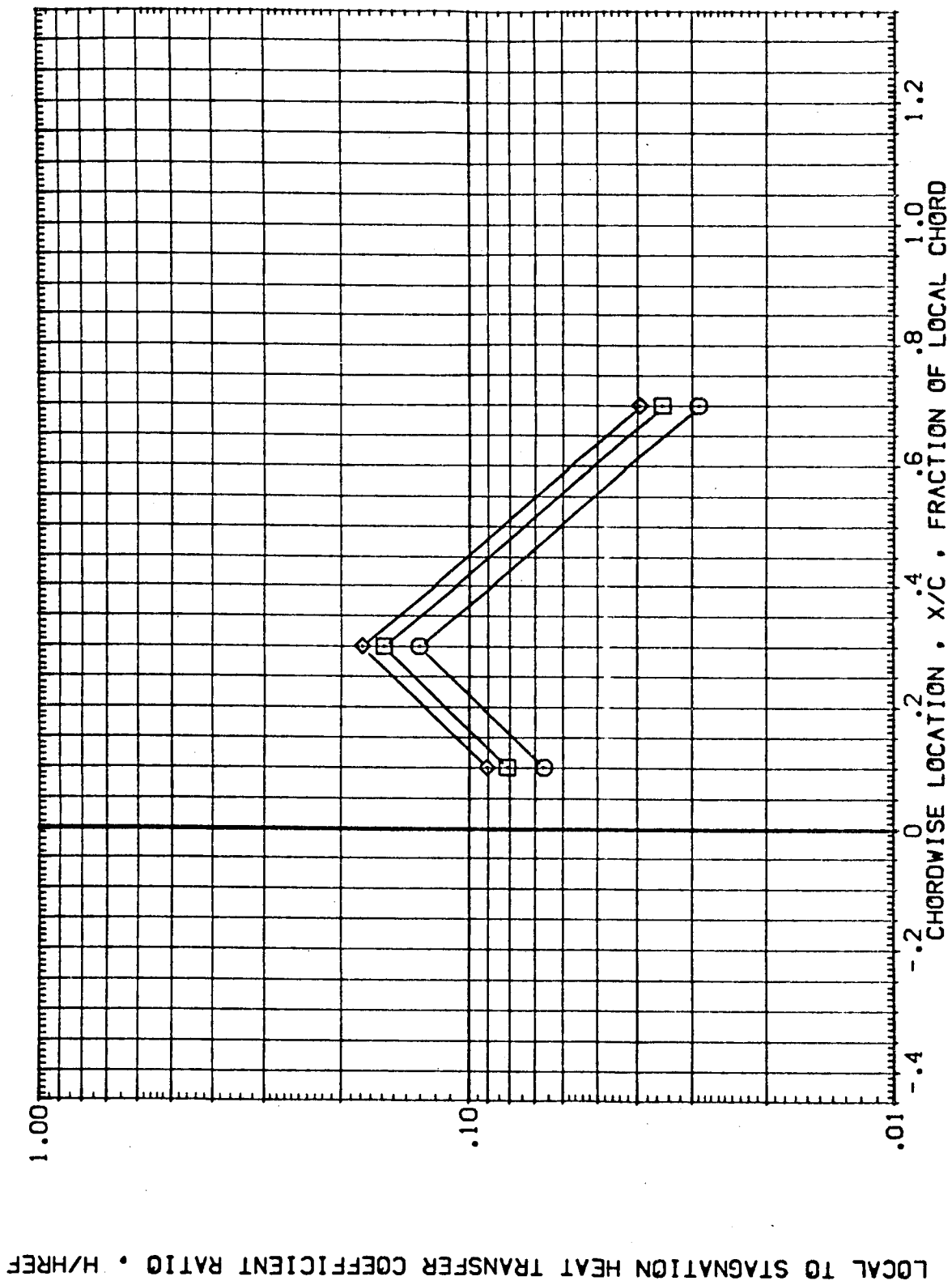


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .159



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAV/HT

(REIV09) (AEIV09) (BEIV09) \square \diamond \circ

ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 5.000 1.000

ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 5.000 .900

ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 5.000 .850

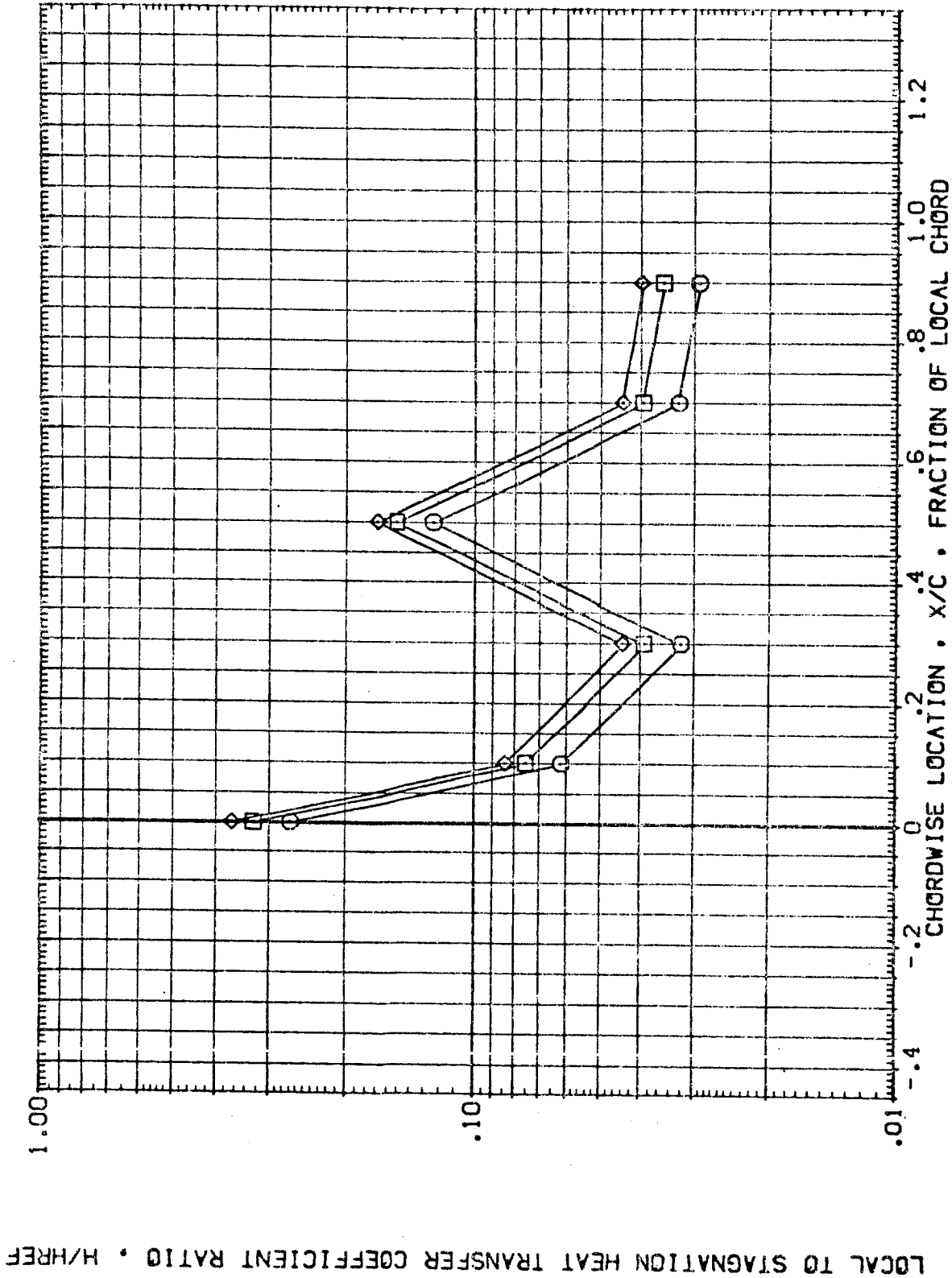


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (REIV09) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 5.000 1.000
 (AEIV09) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 5.000 .900
 (BEIV09) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 5.000 .850

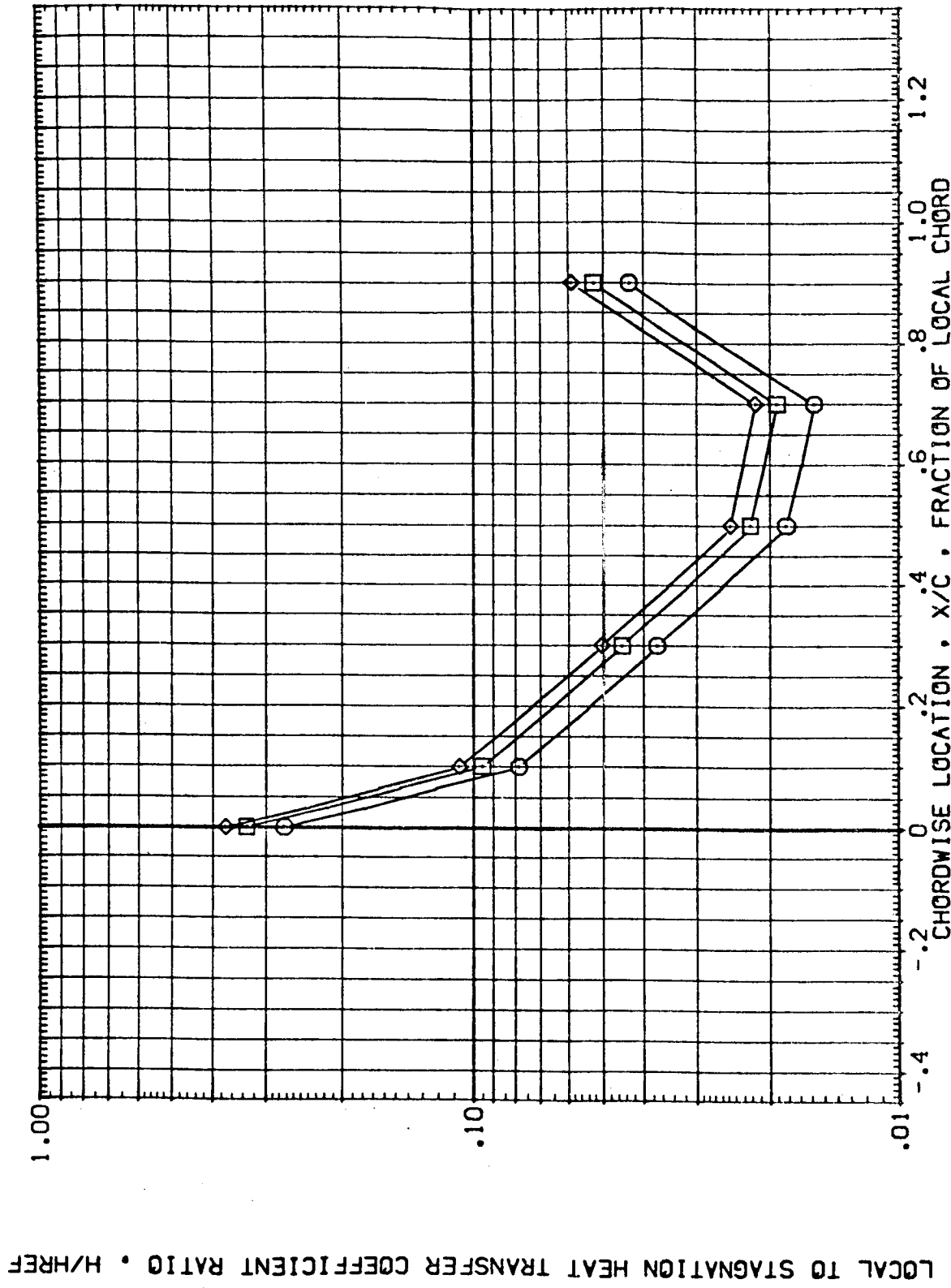


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .532

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV09) ○ ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (AEIV09) □ ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (BEIV09) ◇ ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL

ALPHA .000
 BETA .000
 RN/L 5.000
 HAV/HT 1.000

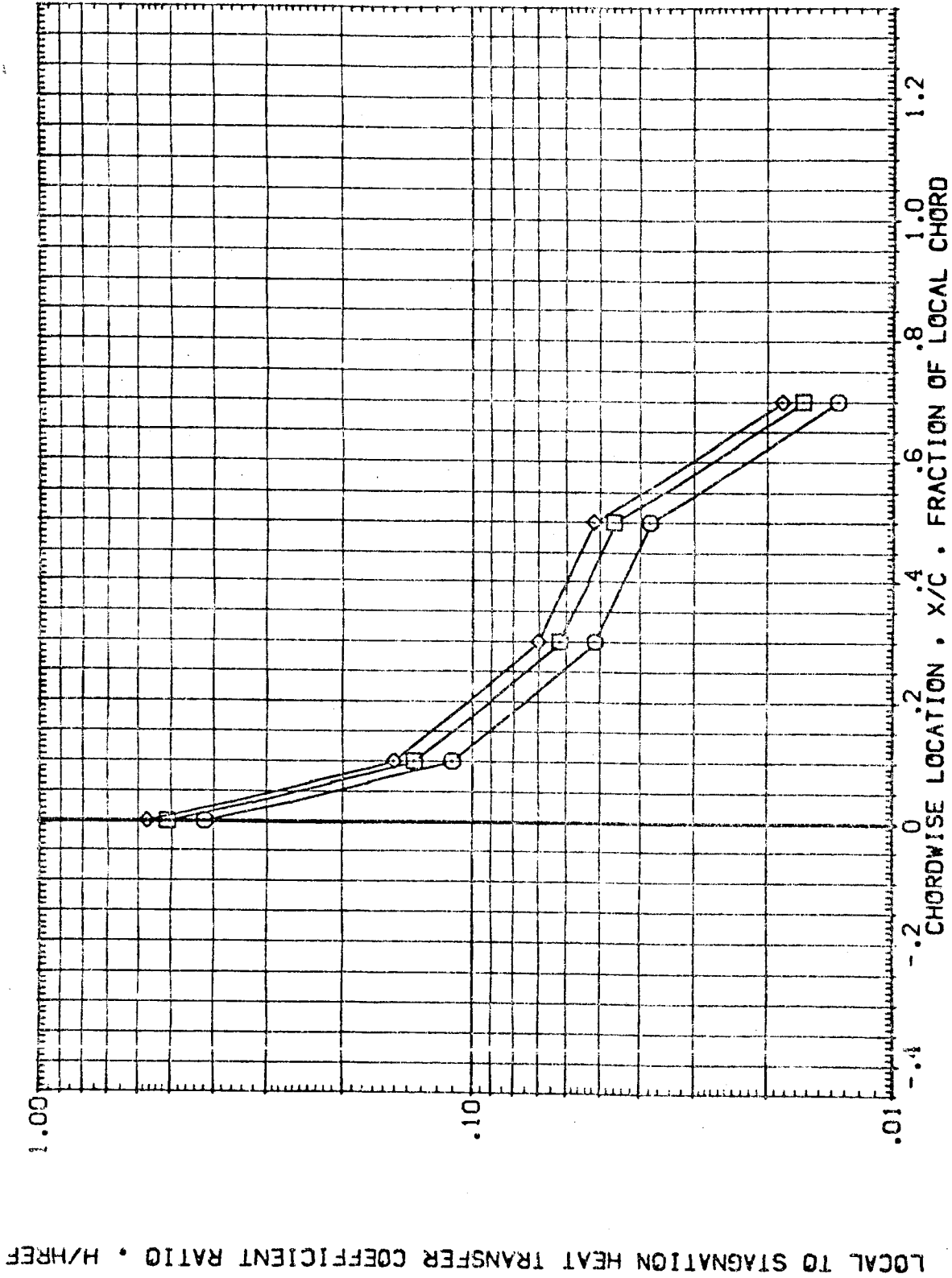


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .765

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (AE1V09) ◻ ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (BE1V09) ◊ ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (BE1V09) ◉ ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

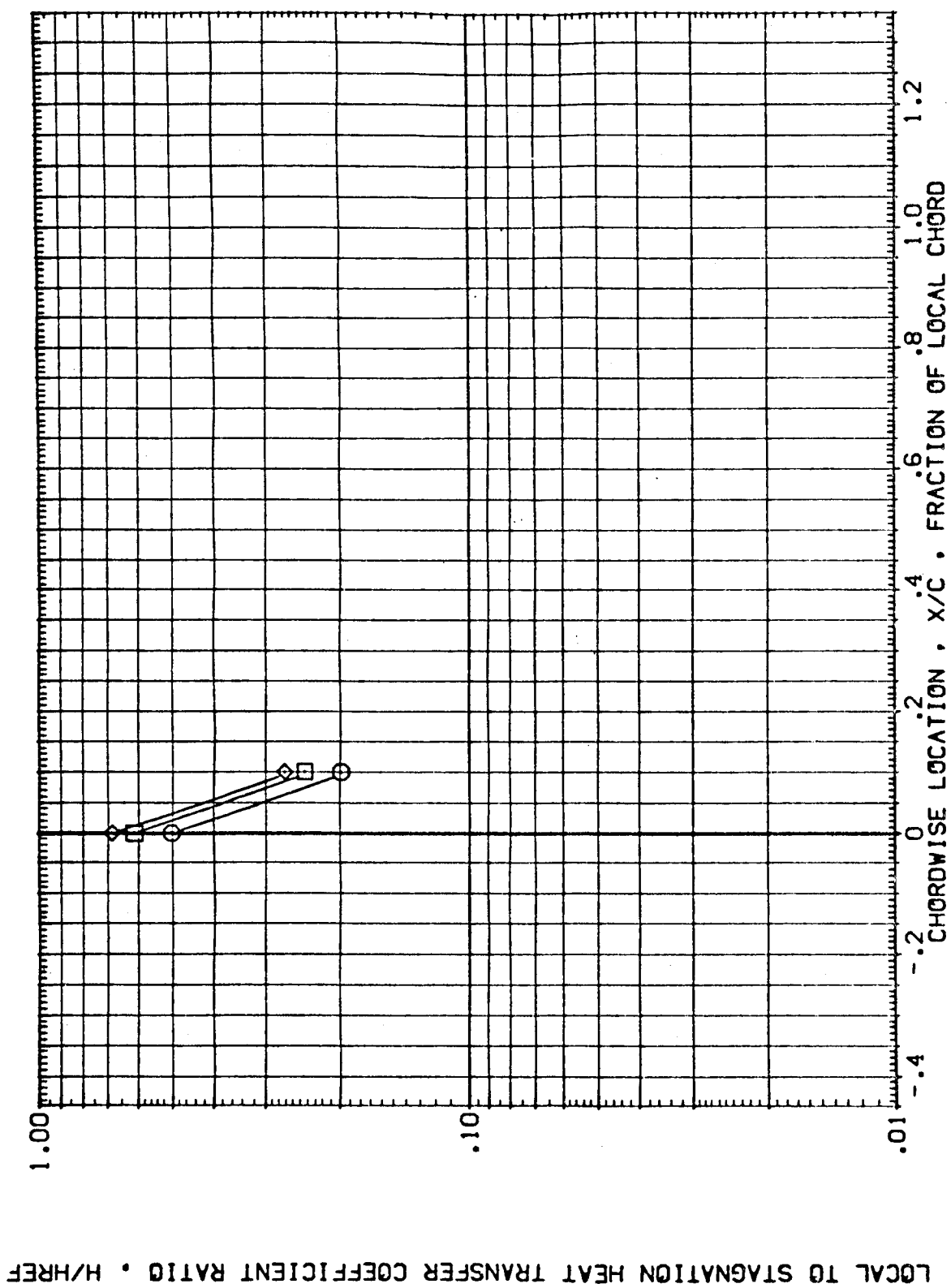


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 Z/BV = .905

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIVOS) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (AEIVOS) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (BEIVOS) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL

ALPHA BETA RV/L MAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

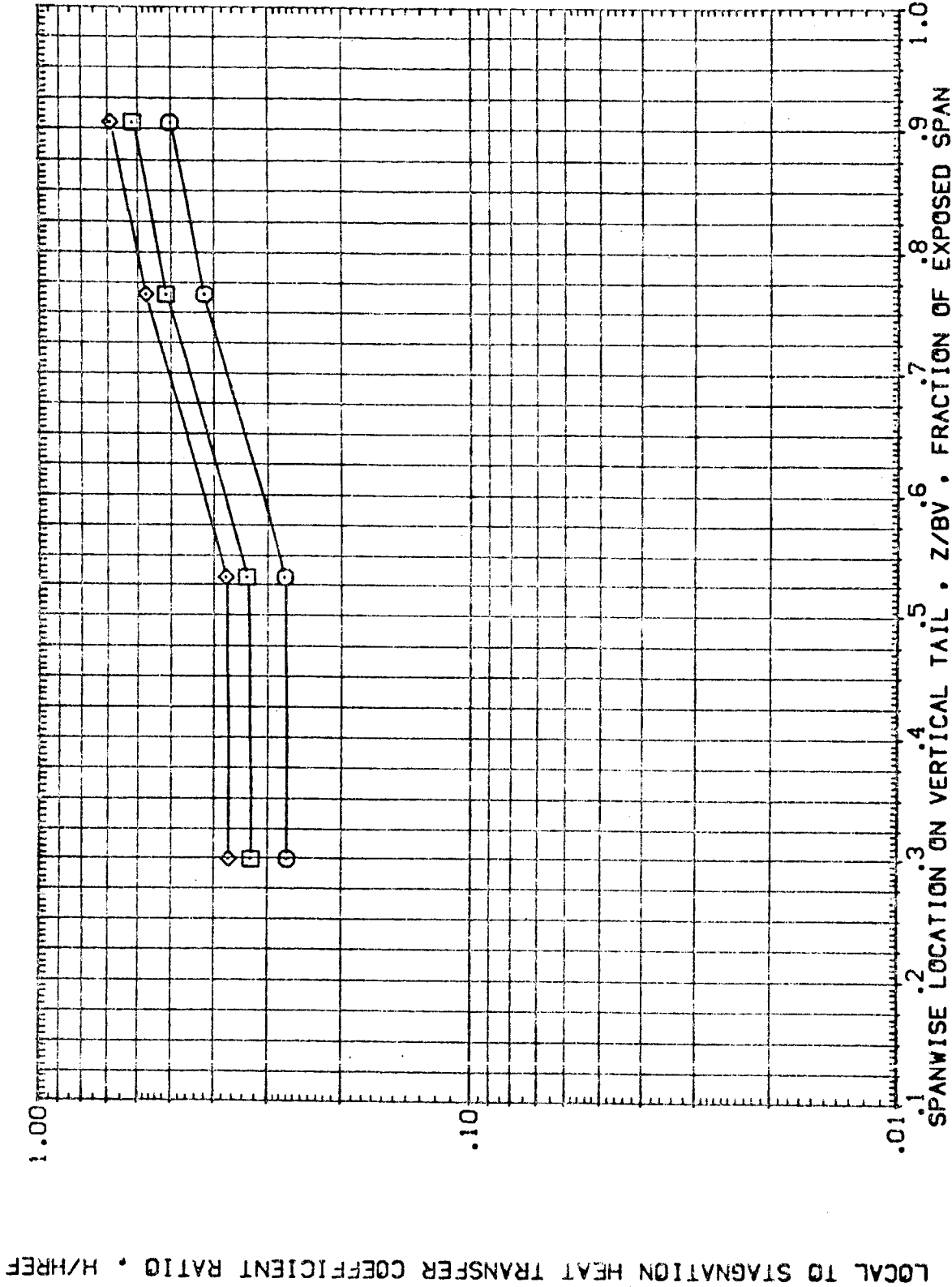





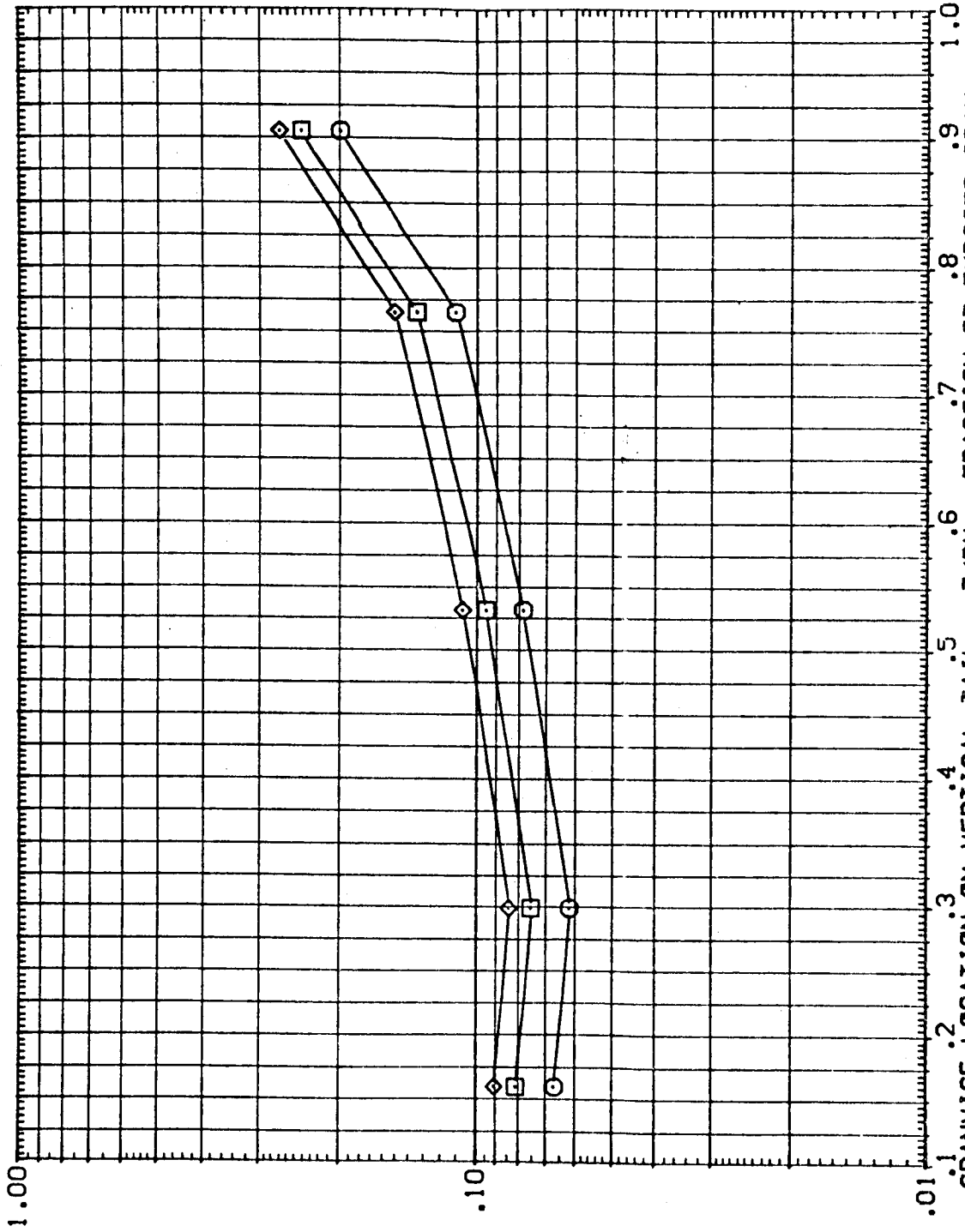
FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1V09)  ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (AE1V09)  ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (BE1V09)  ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



SPANWISE LOCATION ON VERTICAL TAIL, Z/BV, FRACTION OF EXPOSED SPAN

FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (REIVDS) (AEIVDS) (BEIVDS) □ ◇

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
ARC 3.5-178 IH3 ORBITER	(TRIPS)VERTICAL	.000	.000	5.000	1.000
ARC 3.5-178 IH3 ORBITER	(TRIPS)VERTICAL	.000	.000	5.000	.900
ARC 3.5-178 IH3 ORBITER	(TRIPS)VERTICAL	.000	.000	5.000	.850

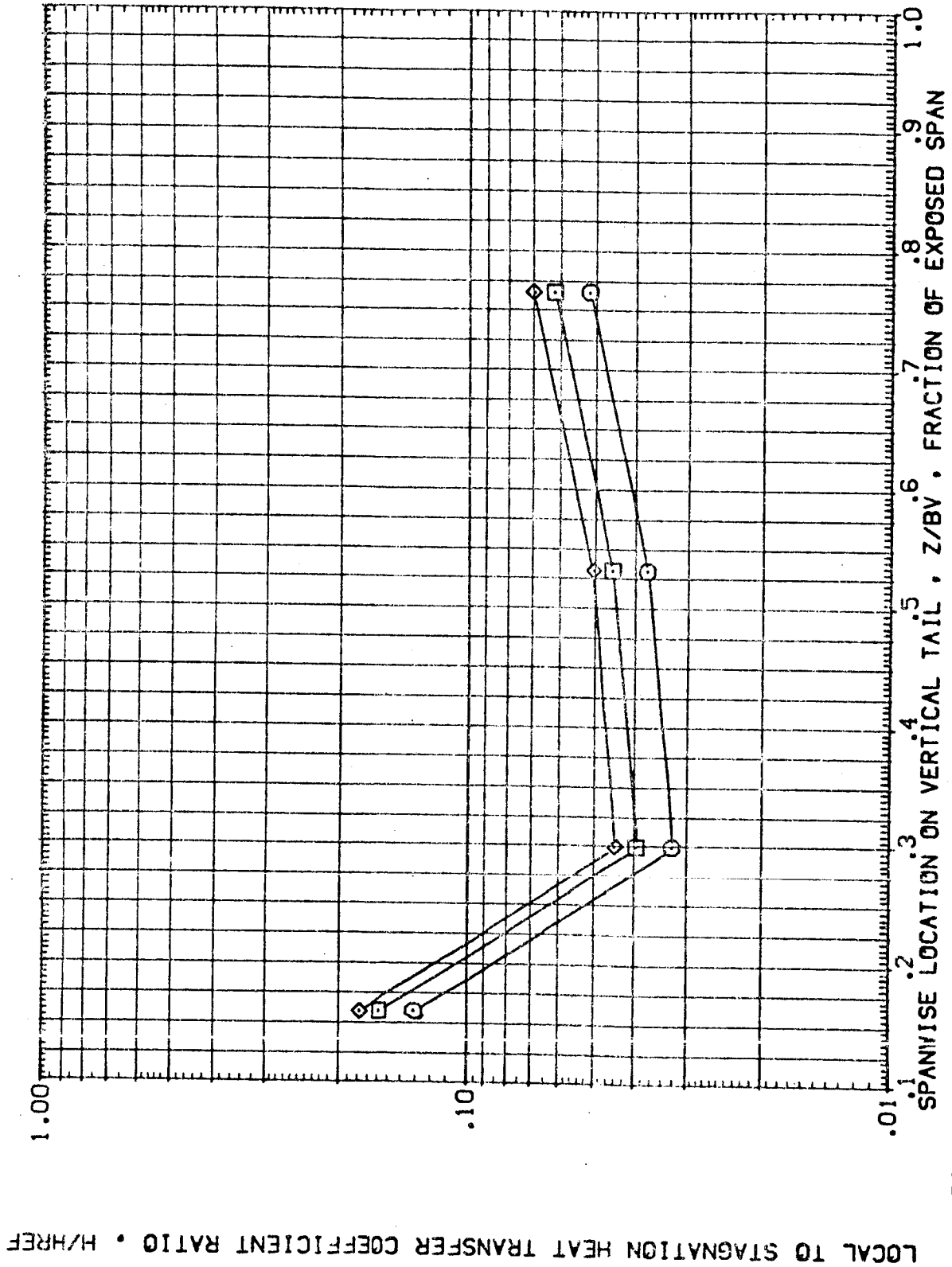


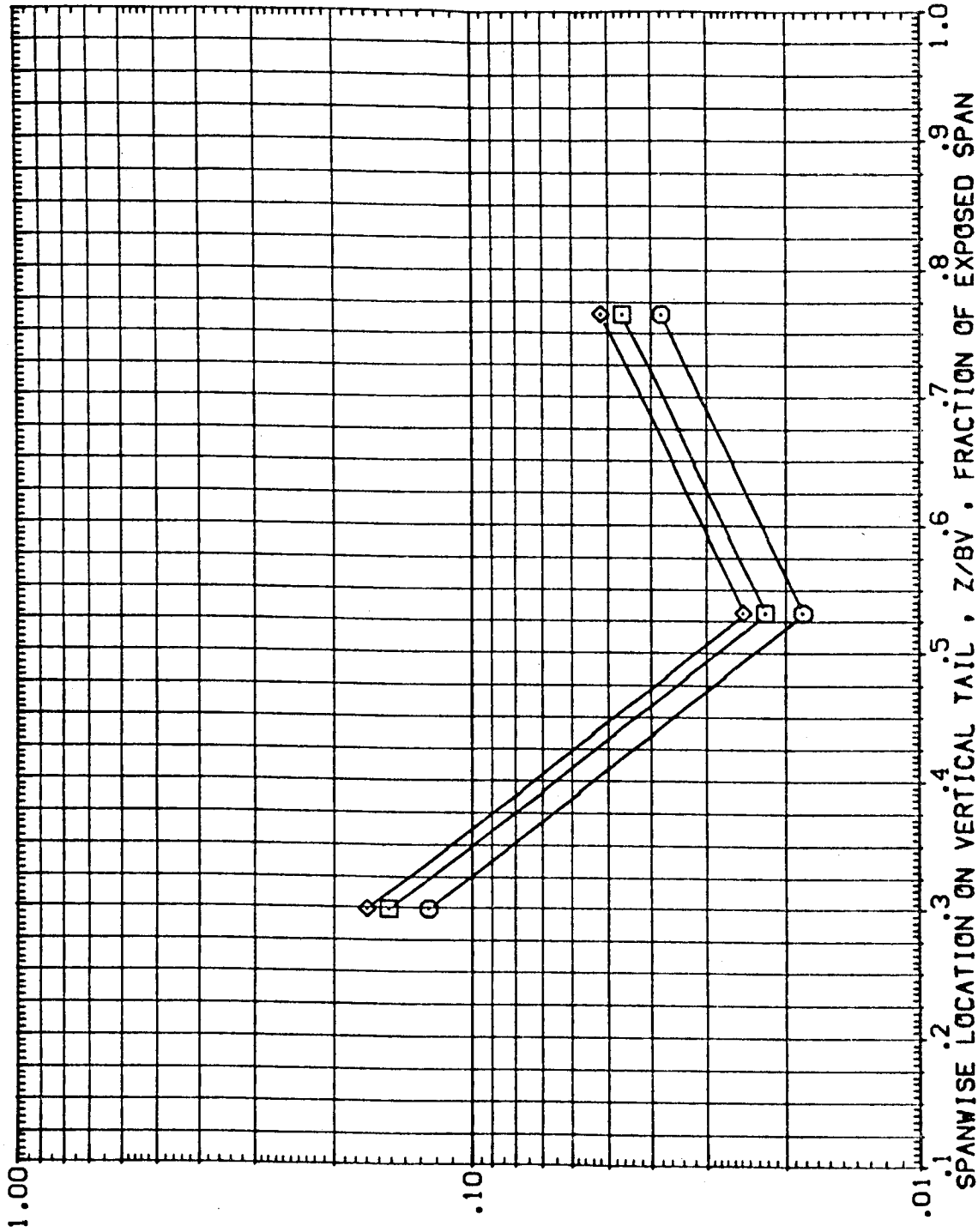
FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV09) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (AEIV09) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL
 (BEIV09) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL

ALPHA BETA R/V/L HAV/HI
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



SPANWISE LOCATION ON VERTICAL TAIL • Z/BV • FRACTION OF EXPOSED SPAN

FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .500

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(REIV09)	ARC 3.5-178 IH3 ORBITER (TRIPS) VERTICAL	.000	.000	5.000	1.000
(AEIV09)	ARC 3.5-178 IH3 ORBITER (TRIPS) VERTICAL	.000	.000	5.000	.900
(BEIV09)	ARC 3.5-178 IH3 ORBITER (TRIPS) VERTICAL	.000	.000	5.000	.850

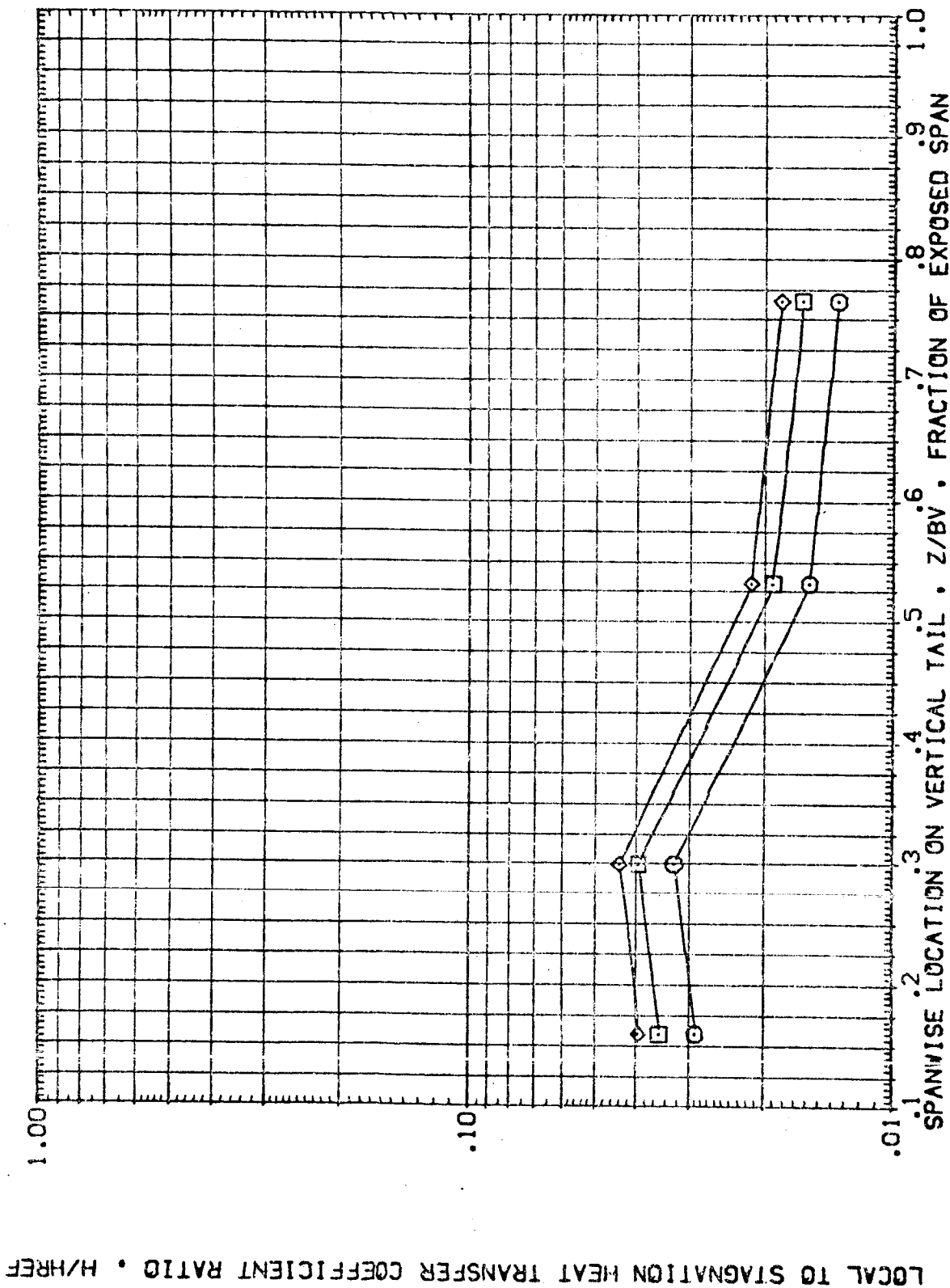


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RA/L HAV/HT

(REIVOS) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 5.000 1.000

(AEIVOS) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 5.000 .500

(BEIVOS) ARC 3.5-178 IH3 ORBITER (TRIPS)VERTICAL .000 .000 5.000 .850

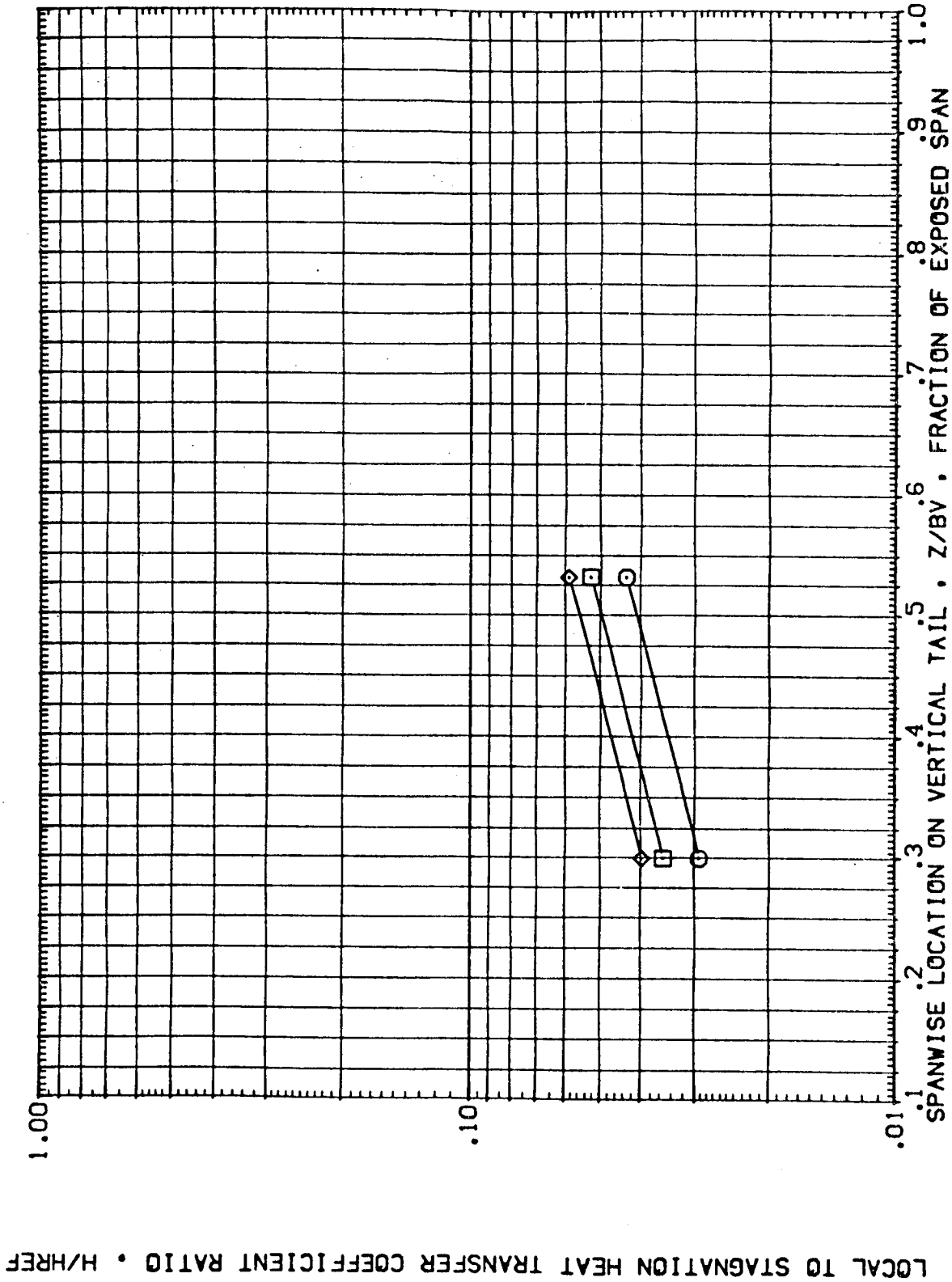


FIG. 52 VERTICAL - ORBITER ALONE (UNDISTURBED)

MACH = 5.300 X/C = .900



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV01) ARC 3.5-178 IH3 0+I+S
 (AEIV01) ARC 3.5-178 IH3 0+I+S
 (BEIV01) ARC 3.5-178 IH3 0+I+S

ALPHA BETA RV/L MAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

VERTICAL
 VERTICAL
 VERTICAL

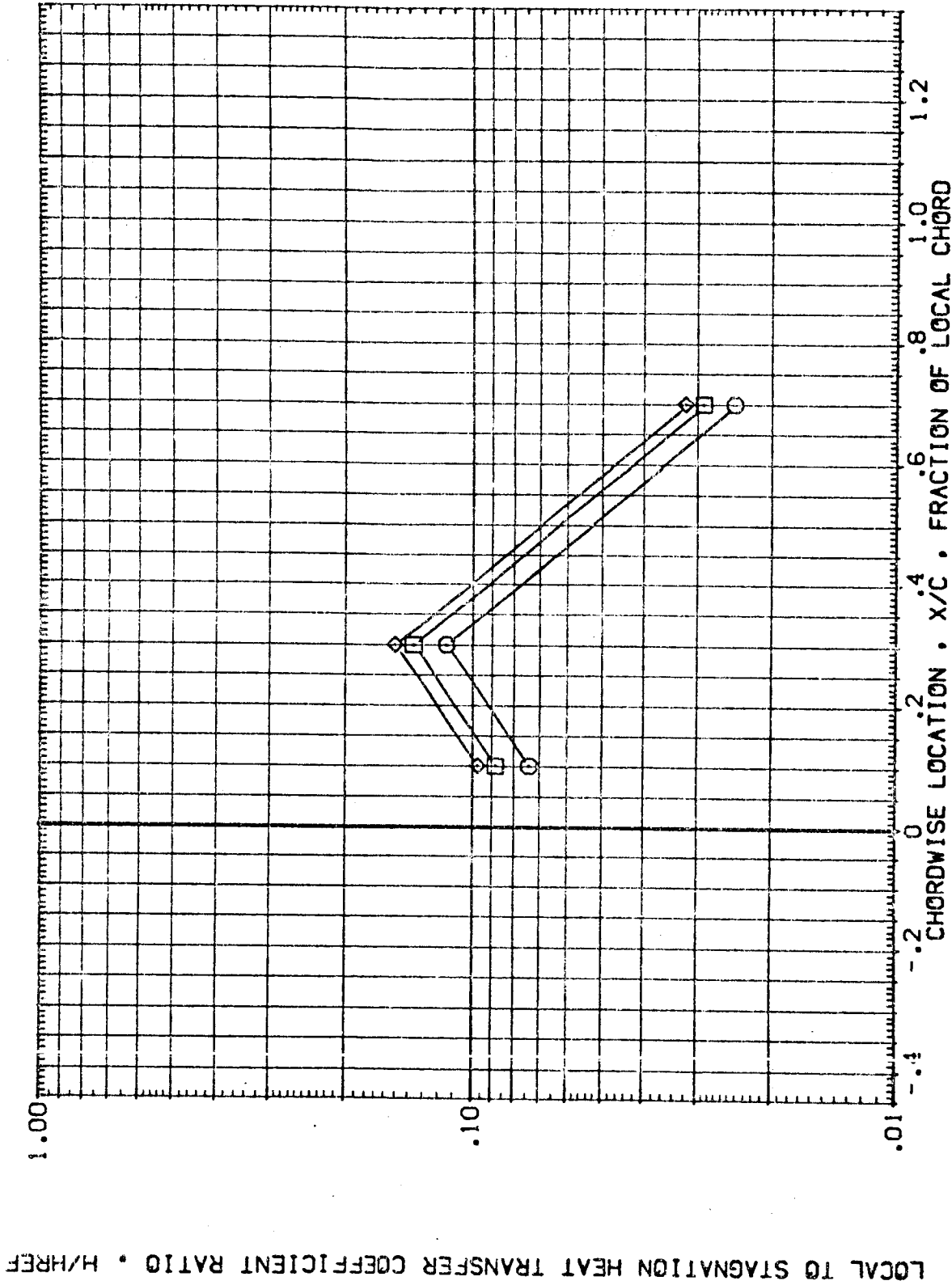


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .159

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|VOI) ARC 3.5-178 IH3 0+T+S
 (AE|VOI) ARC 3.5-178 IH3 0+T+S
 (BE|VOI) ARC 3.5-178 IH3 0+T+S

VERTICAL
 VERTICAL
 VERTICAL

ALPHA BETA FRVL HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

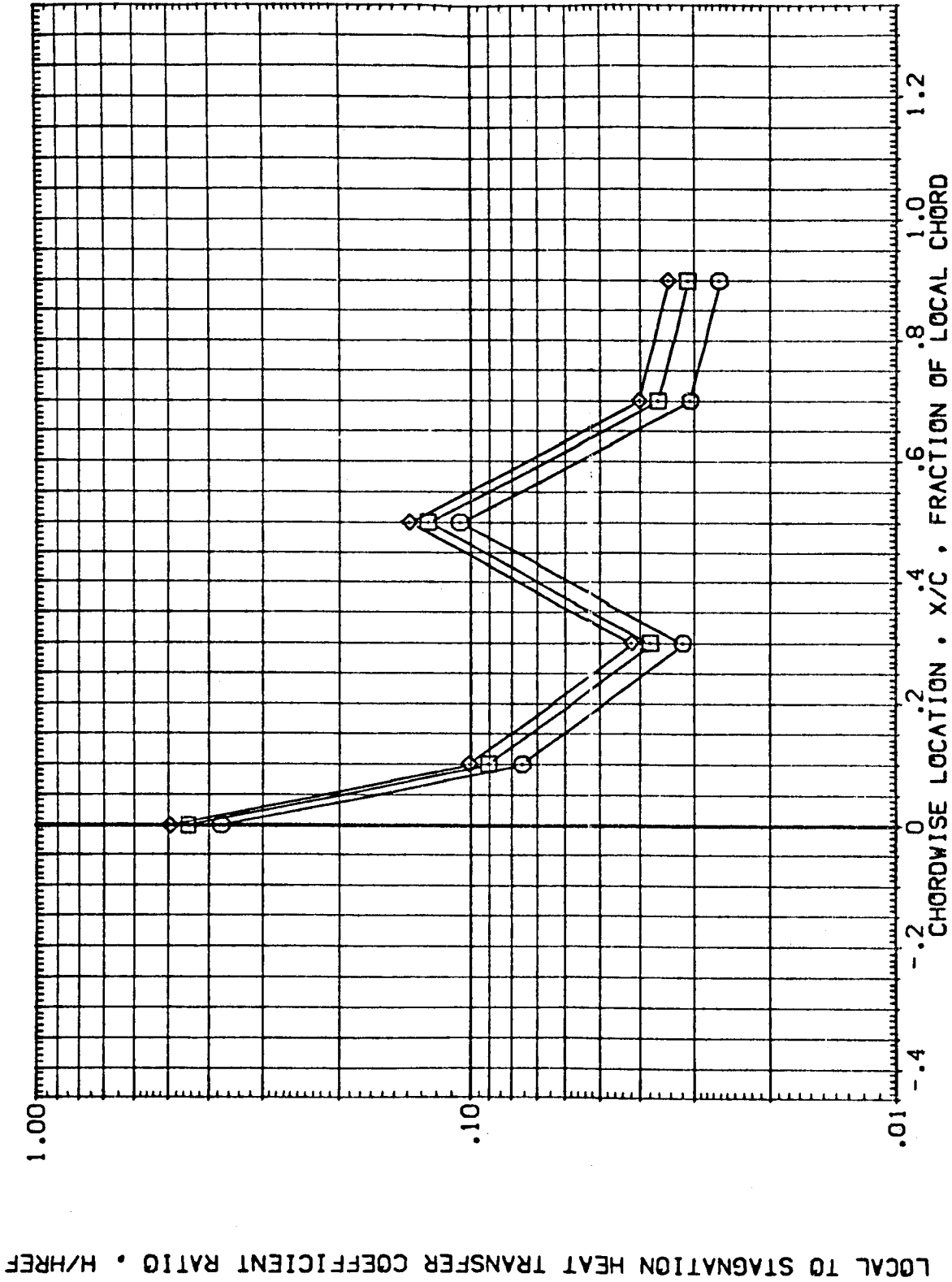


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .299

DATA SET SYMBOL (CONFIGURATION DESCRIPTION)
 (RE|VDI) } ARC 3.5-178 IH3 0+1+S
 (AE|VDI) } ARC 3.5-178 IH3 0+1+S
 (BE|VDI) } ARC 3.5-178 IH3 0+1+S

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 1.000 .850

VERTICAL
 VERTICAL

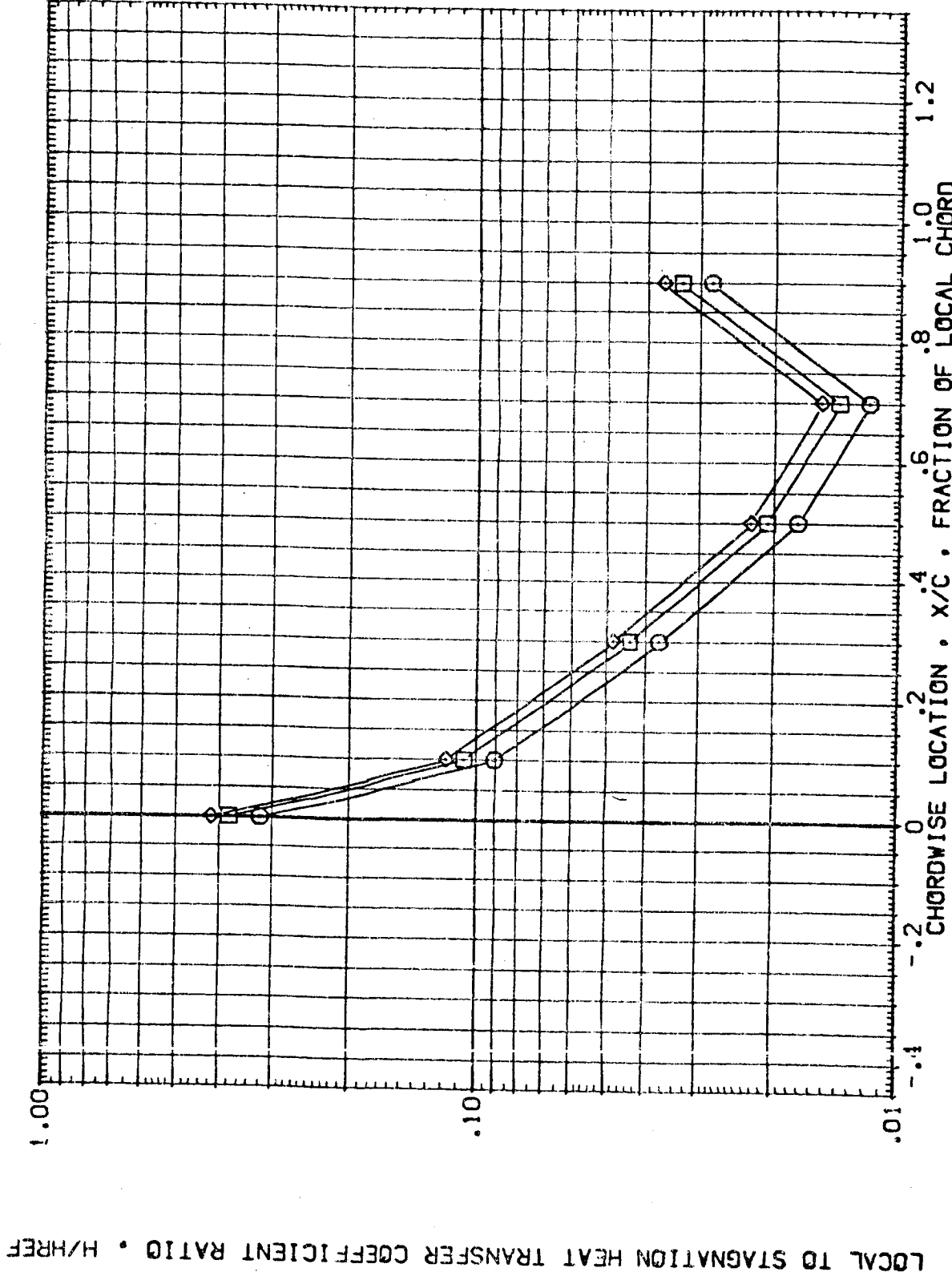


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .532

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV01) ARC 3.5-178 IH3 0+1+S
 (AEIV01) ARC 3.5-178 IH3 0+1+S
 (BEIV01) ARC 3.5-178 IH3 0+1+S

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .650

VERTICAL
 VERTICAL
 VERTICAL

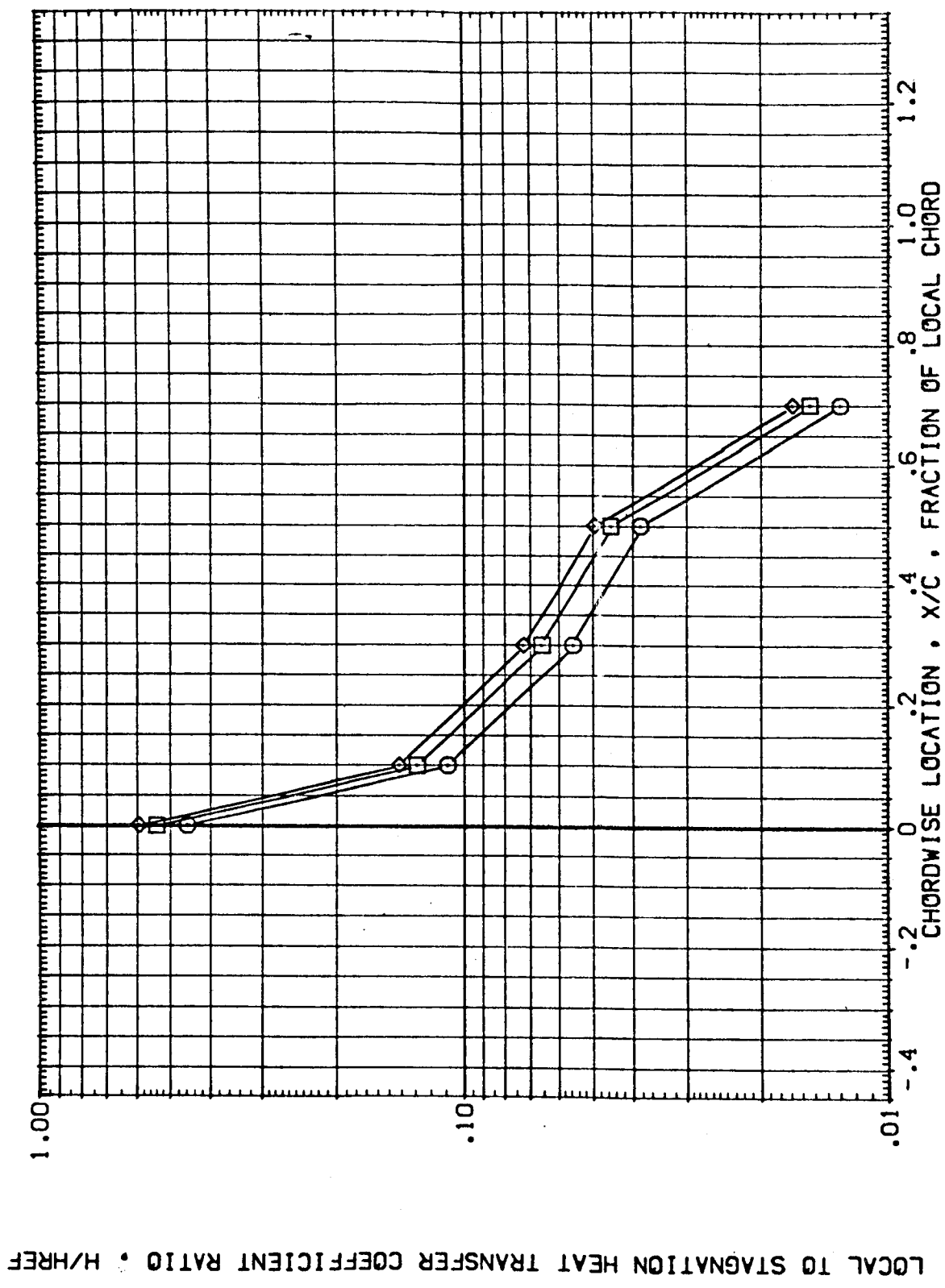


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .765

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RN/L HAW/HT

(BE1V01) ARC 3.5-178 IH3 0+T+S .000 .000 1.500 1.000

(AE1V01) ARC 3.5-178 IH3 0+T+S .000 .000 1.500 .900

(BE1V01) ARC 3.5-178 IH3 0+T+S .000 .000 1.500 .850

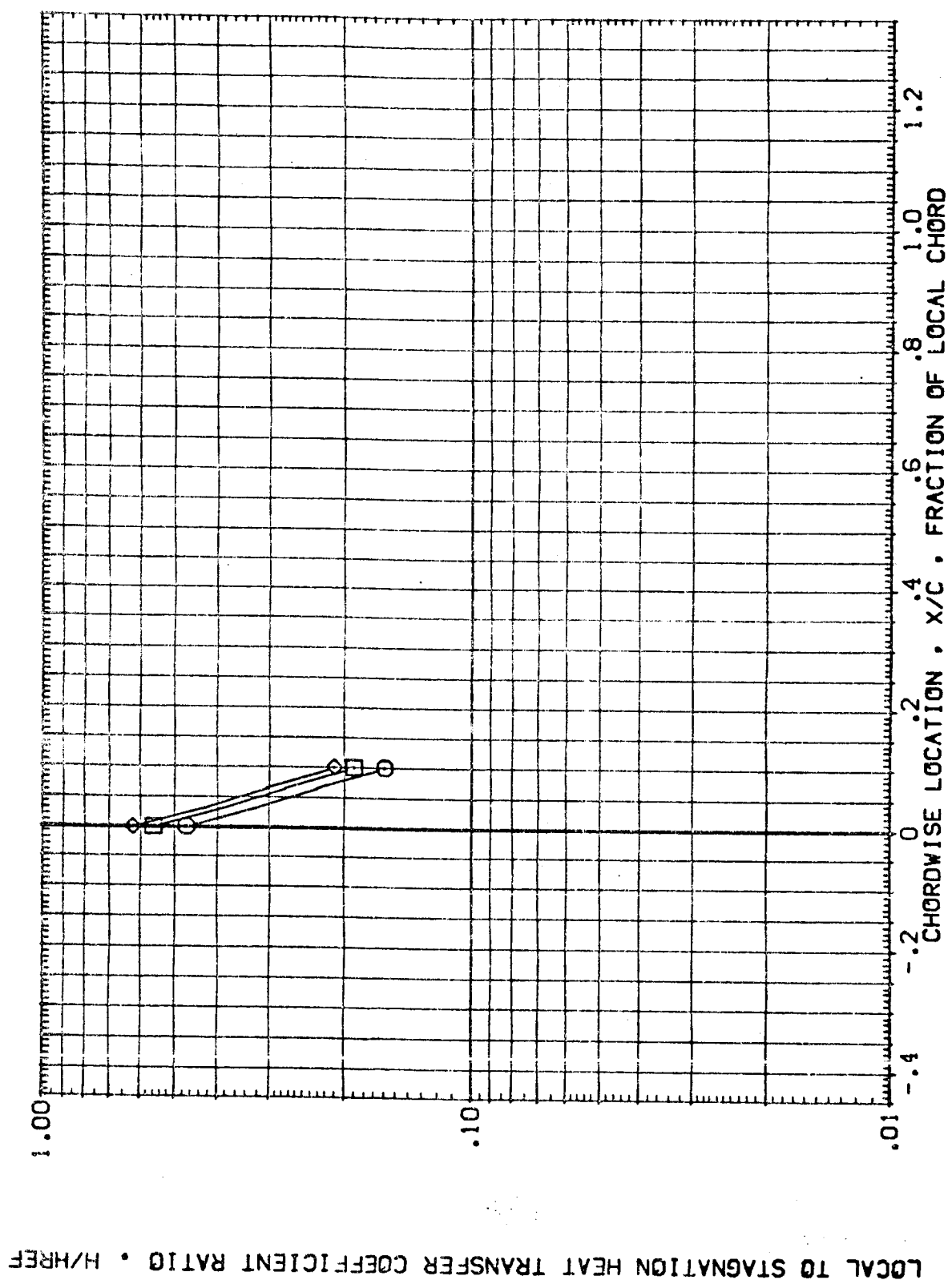


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .905

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV01) ARC 3.5-178 IH3 0+T+S
 (AEIV01) ARC 3.5-178 IH3 0+T+S
 (BEIV01) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RNI/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

VERTICAL
 VERTICAL
 VERTICAL

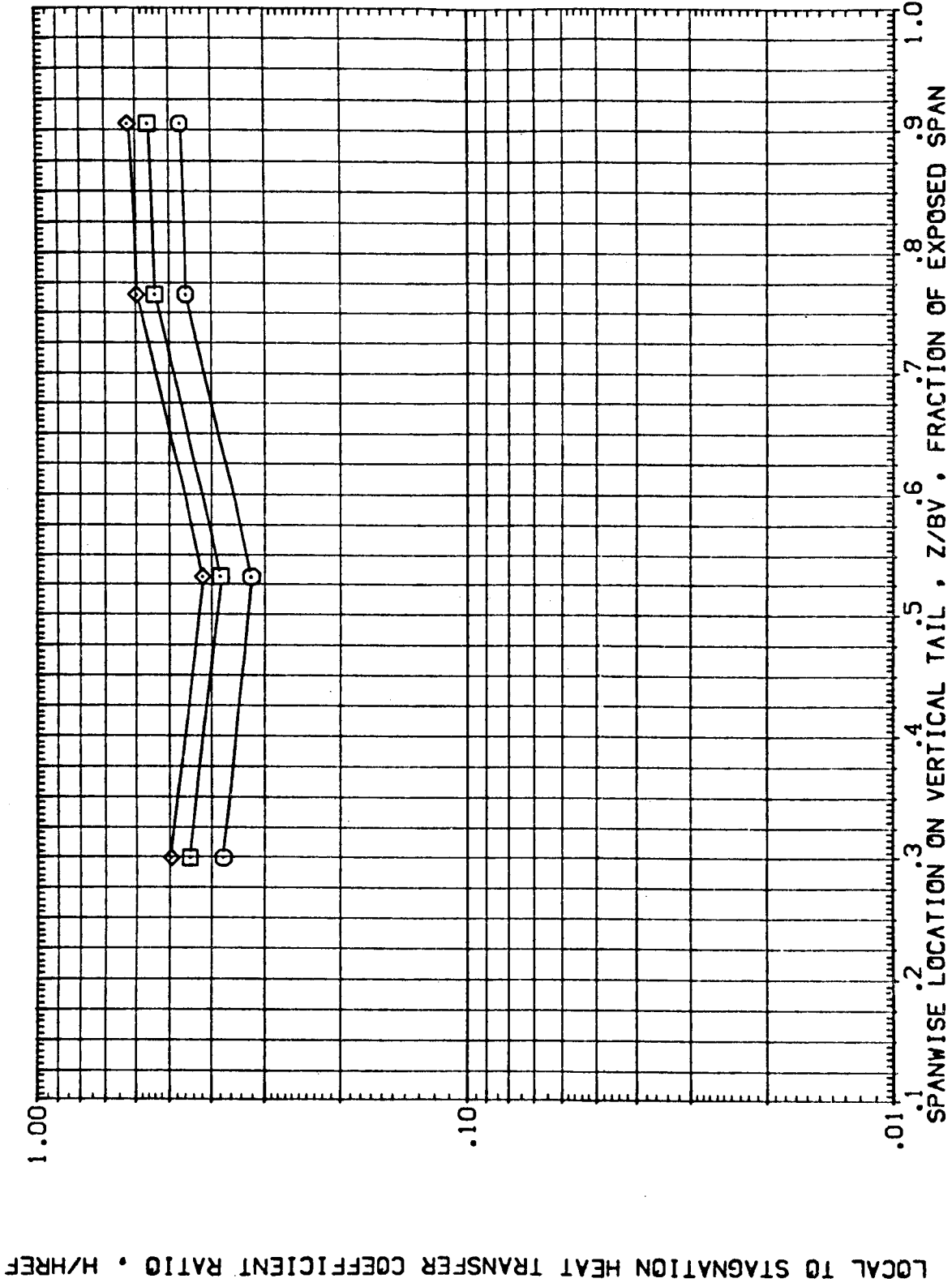


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV01) ARC 3.5-178 IH3 0+1+S
 (AEIV01) ARC 3.5-178 IH3 0+1+S
 (BEIV01) ARC 3.5-178 IH3 0+1+S

VERTICAL
 VERTICAL
 VERTICAL

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

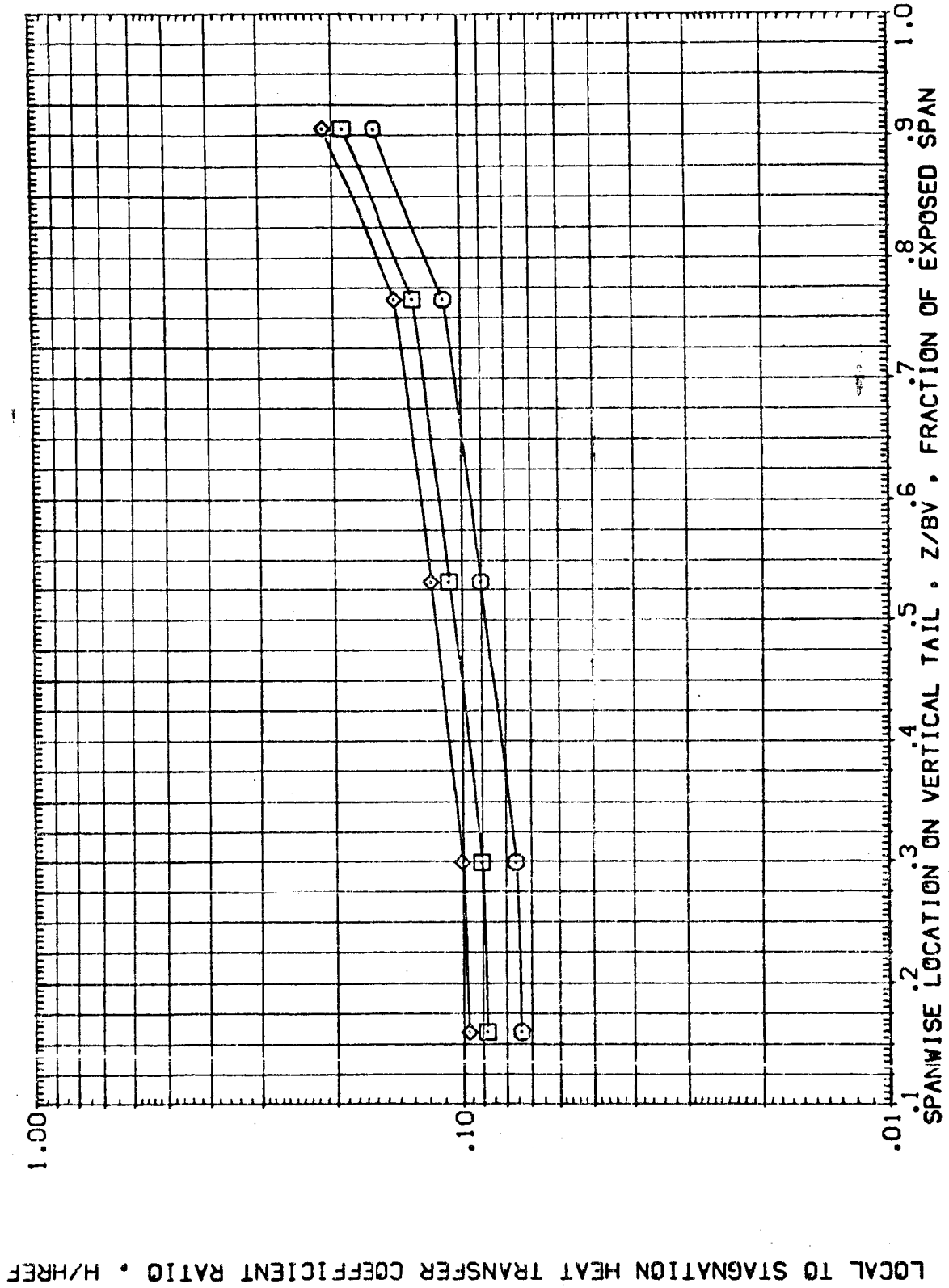


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

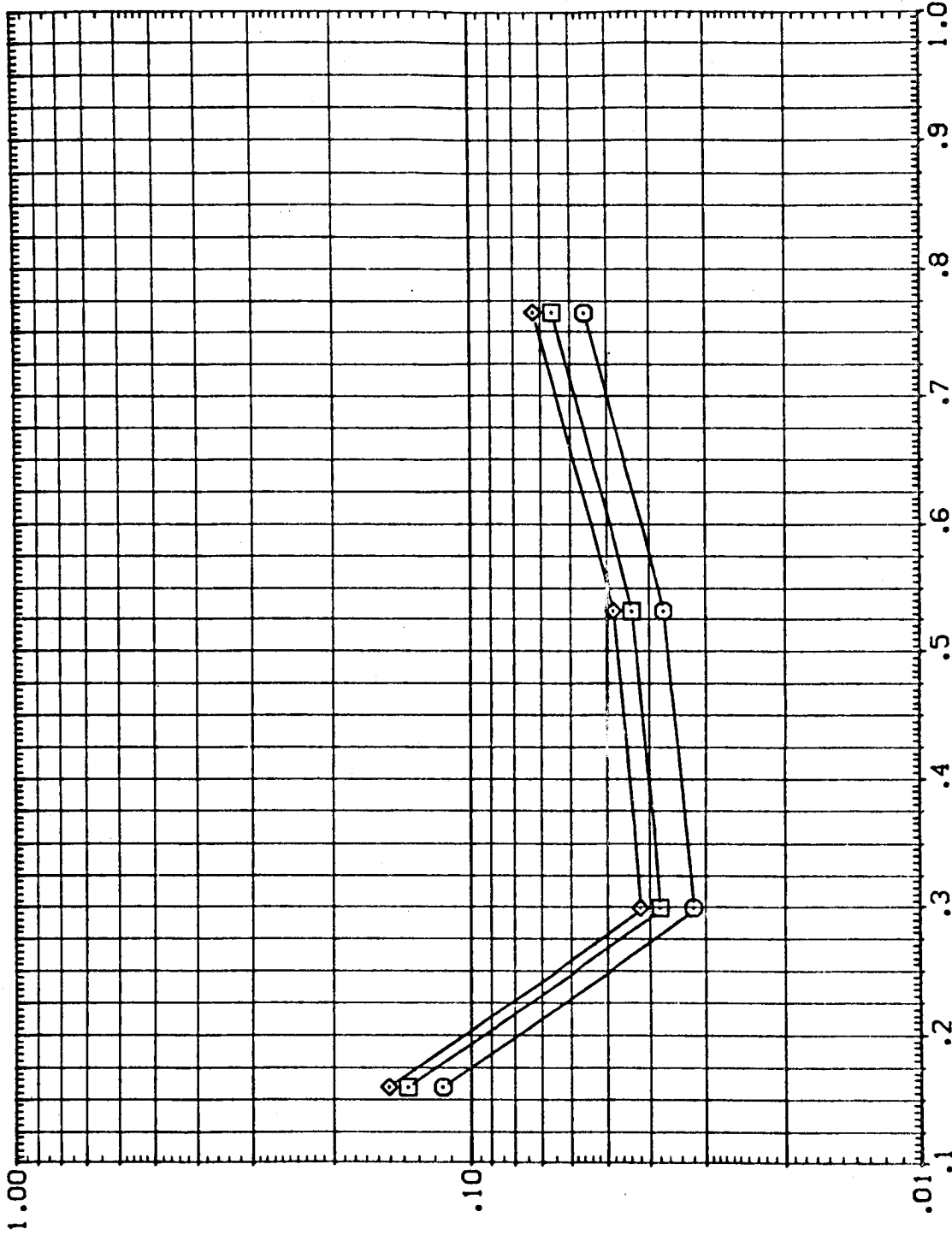
MACH = 5.300 X/C = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|VO|) ARC 3.5-178 IH3 0+T+S
 (AE|VO|) ARC 3.5-178 IH3 0+T+S
 (BE|VO|) ARC 3.5-178 IH3 0+T+S

ALPHA .000 .000 .000
 BETA .000 .000 .000
 RV/L 1.500 1.500 1.500
 HAV/HT 1.000 .900 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF



SPANWISE LOCATION ON VERTICAL TAIL, Z/BV, FRACTION OF EXPOSED SPAN

FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI V01) ARC 3.5-178 IH3 0+1+S
 (AEI V01) ARC 3.5-178 IH3 0+1+S
 (BEI V01) ARC 3.5-178 IH3 0+1+S

ALPHA BETA RV/L HAW/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, h/h_{REF}

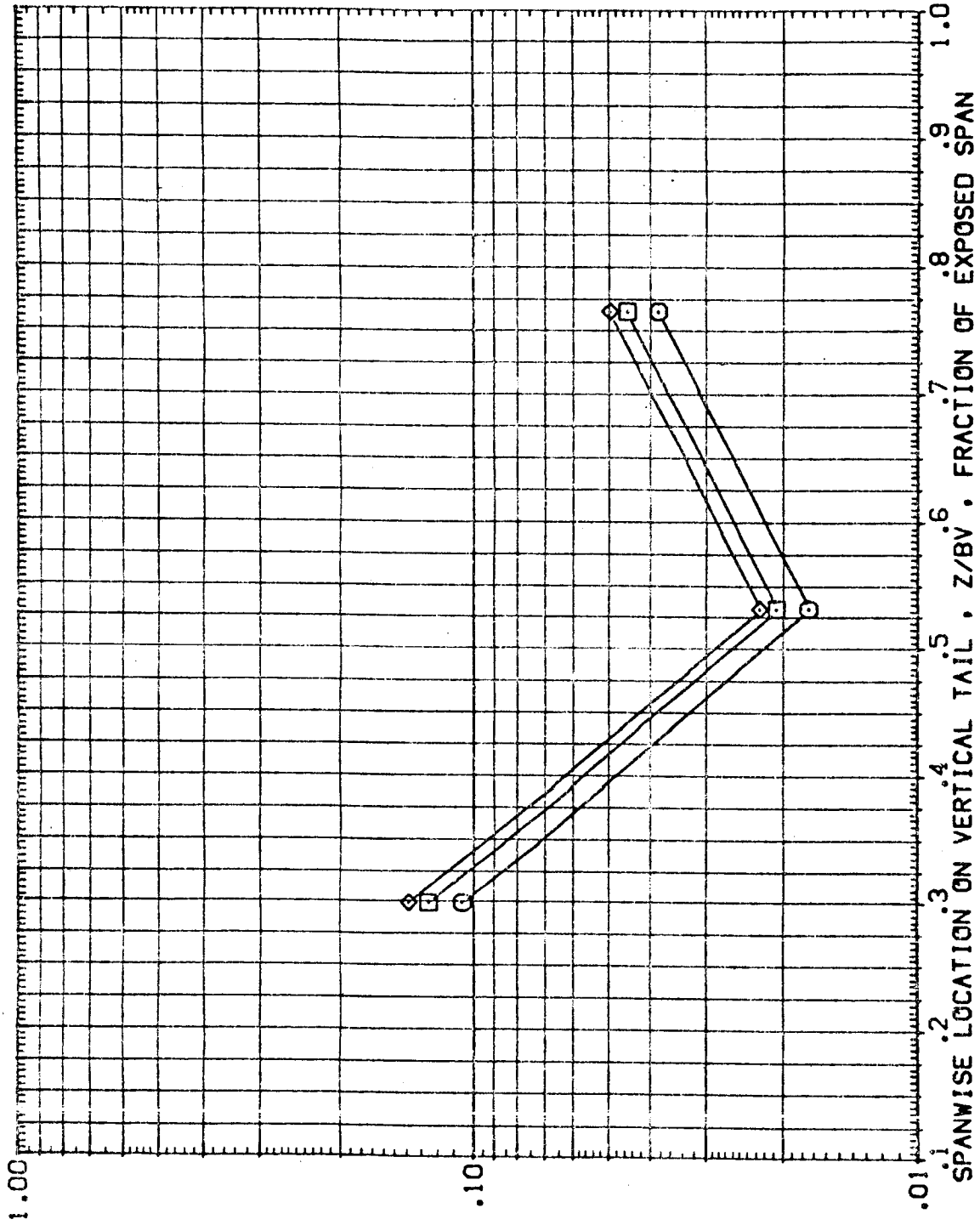


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI V01) ARC 3.5-178 IH3 0+T+S
 (AEI V01) ARC 3.5-178 IH3 0+T+S
 (BEI V01) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAV/HT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .650

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

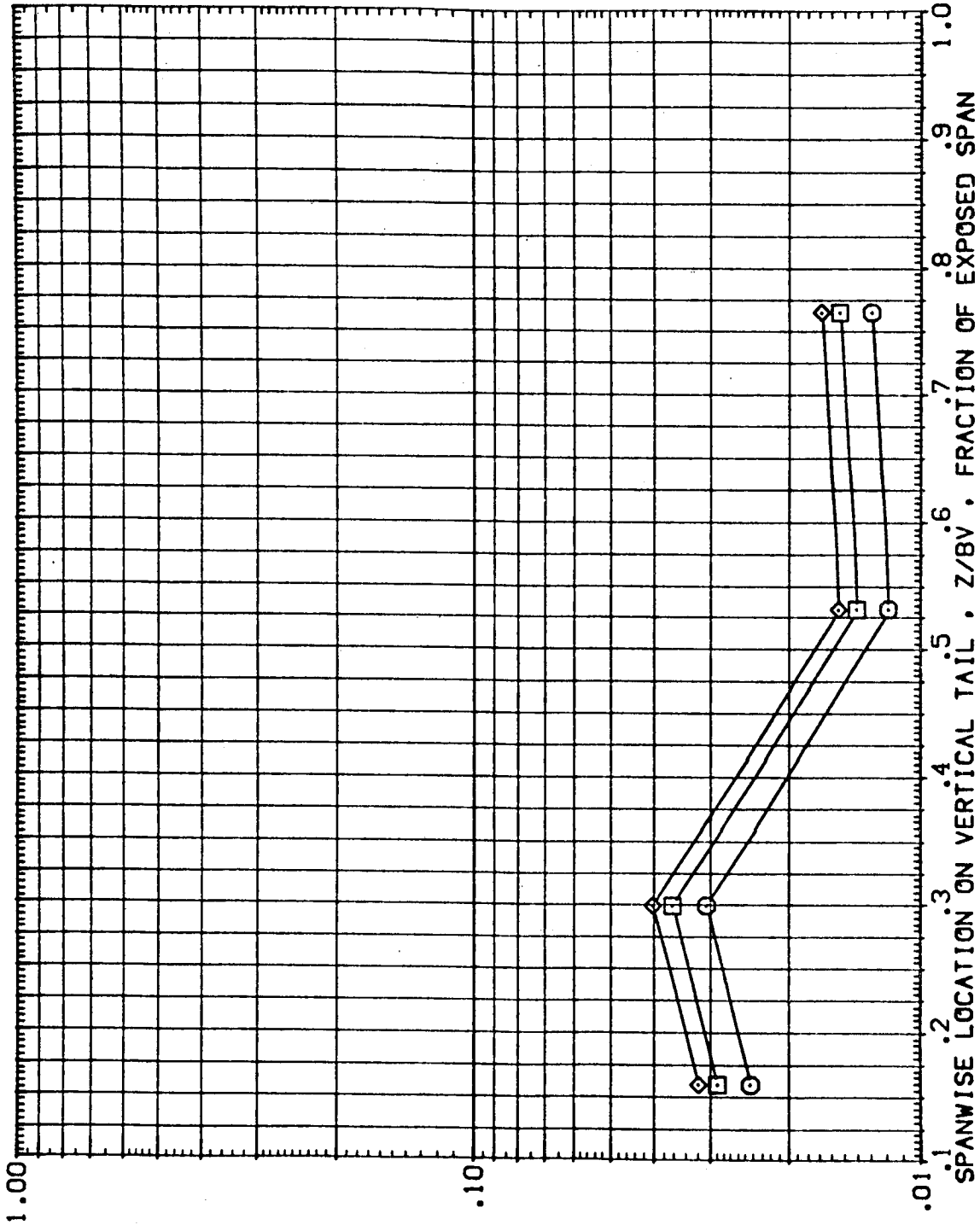


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .700

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|VO|) ARC 3.5-178 IH3 0+1+S
 (AE|VO|) ARC 3.5-178 IH3 0+1+S
 (BE|VO|) ARC 3.5-178 IH3 0+1+S

VERTICAL
 VERTICAL
 VERTICAL

ALPHA BETA RNU/L MAV/AT
 .000 .000 1.500 1.000
 .000 .000 1.500 .900
 .000 .000 1.500 .850

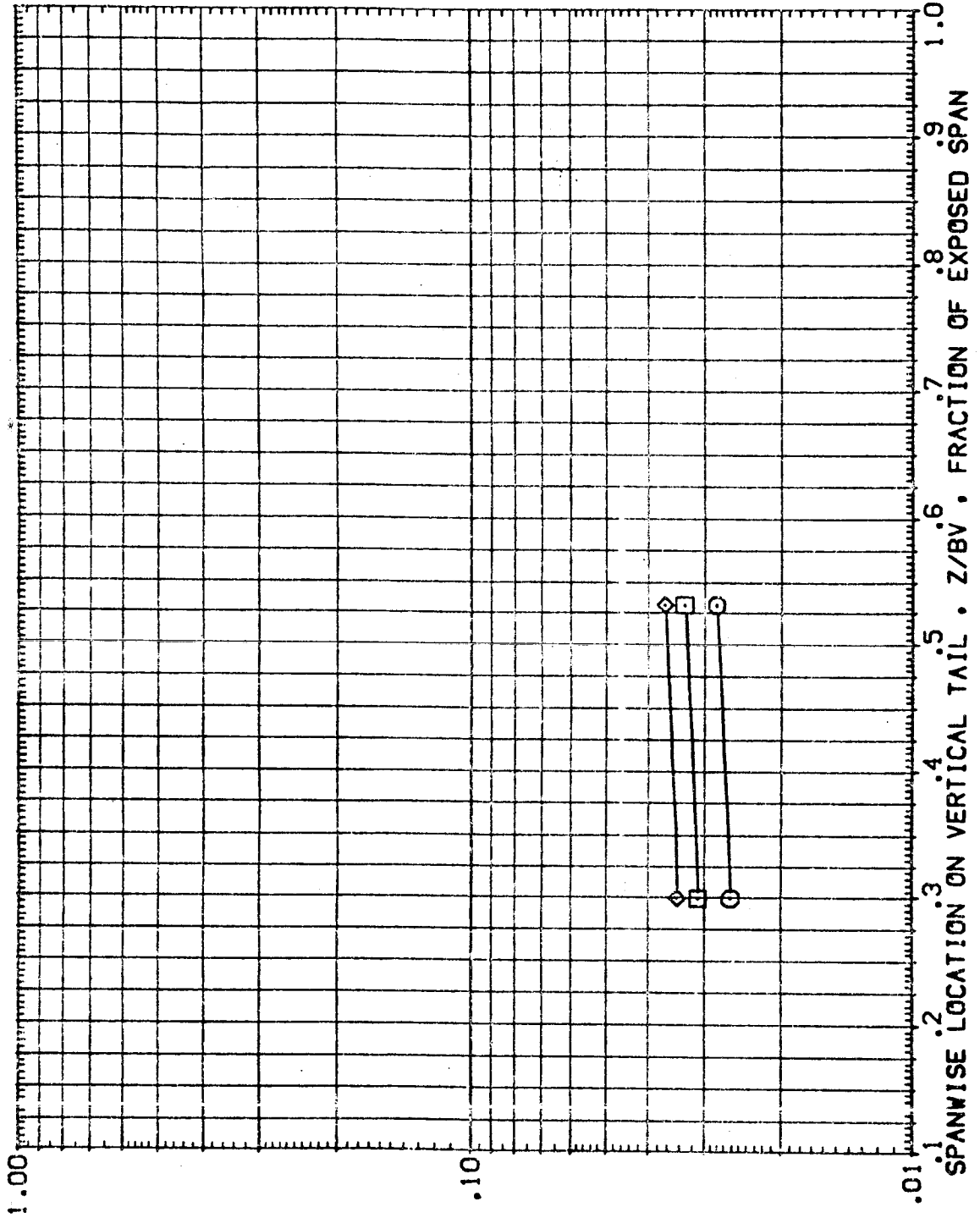


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1V02) ARC 3.5-178 IH3 0+T+S
 (AE1V02) ARC 3.5-178 IH3 0+T+S
 (BE1V02) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RAVL HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

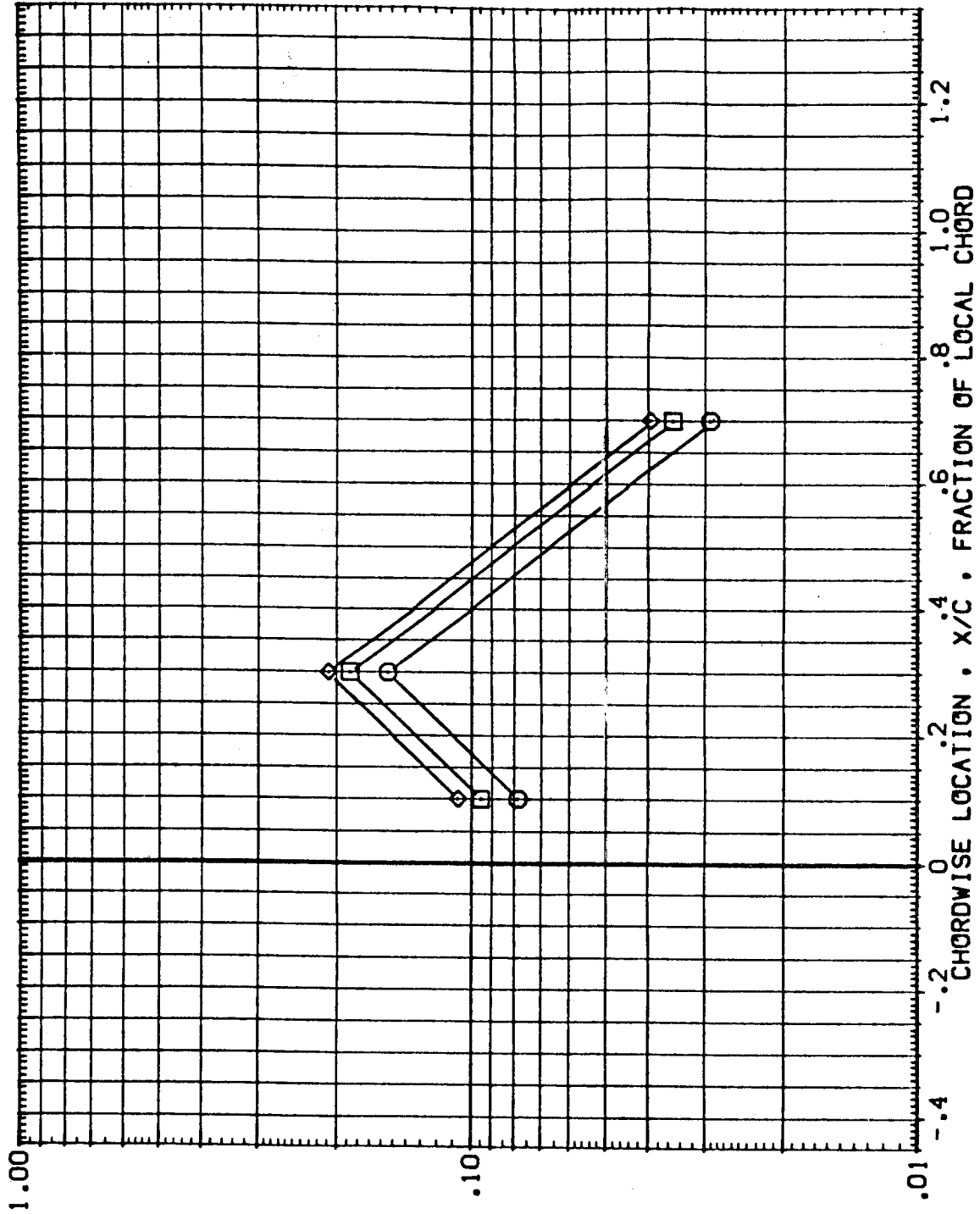


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .159

DATA SET SYMBOL (CONFIGURATION DESCRIPTION) ALPHA BETA RVL HAV/HT
 (REIV02) (AEIV02) (BEIV02) AR: 3.5-178 IH3 0+T+S VERTICAL VERTICAL HAV/HT
 AR: 3.5-178 IH3 0+T+S VERTICAL VERTICAL 5.000 1.000
 AR: 3.5-178 IH3 0+T+S VERTICAL VERTICAL .000 .000 .000 .900
 .000 .000 .000 .850

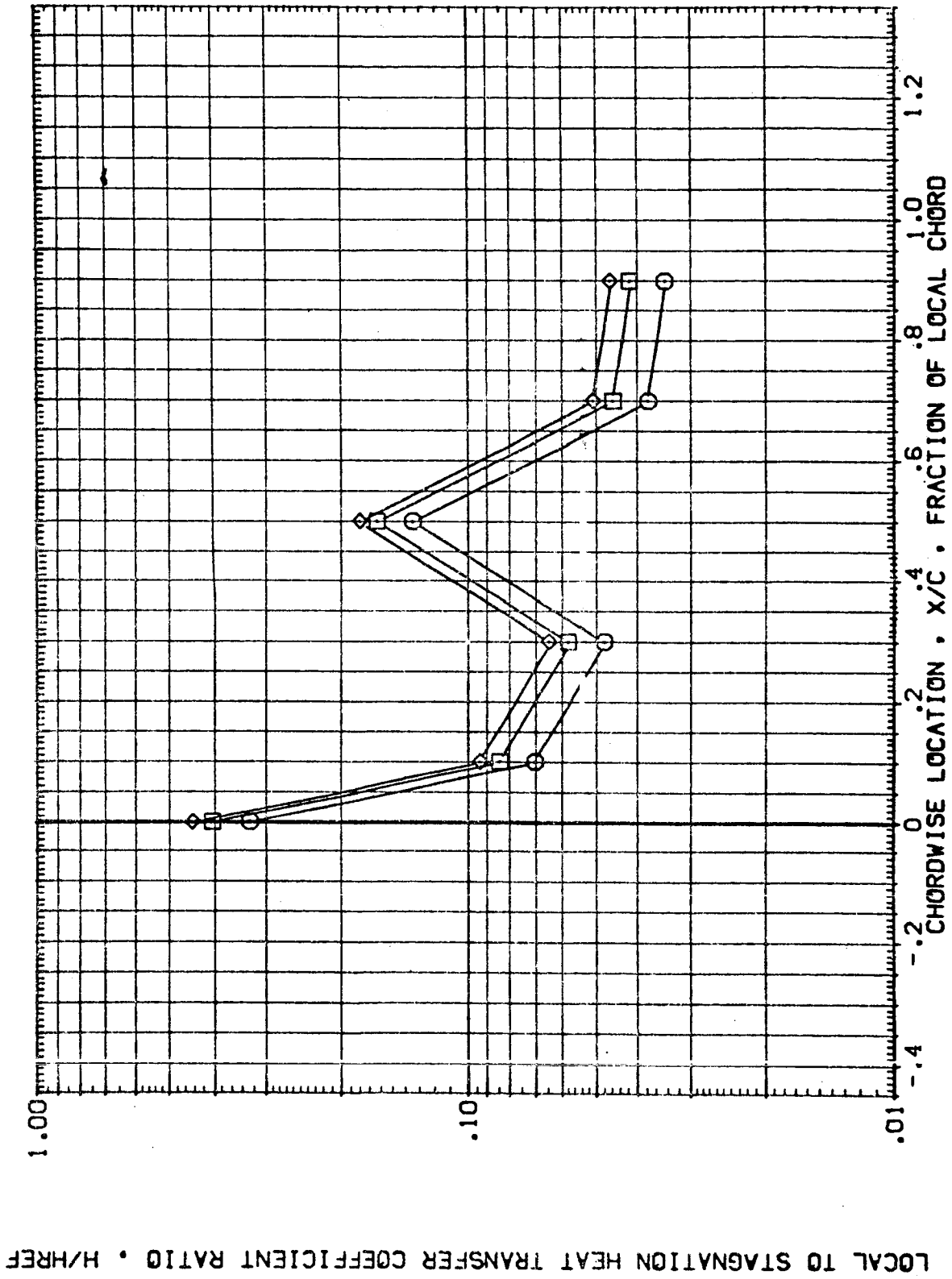


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE1V02) ARC 3.5-178 IH3 0+T+S
 (AE1V02) ARC 3.5-178 IH3 0+T+S
 (BE1V02) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

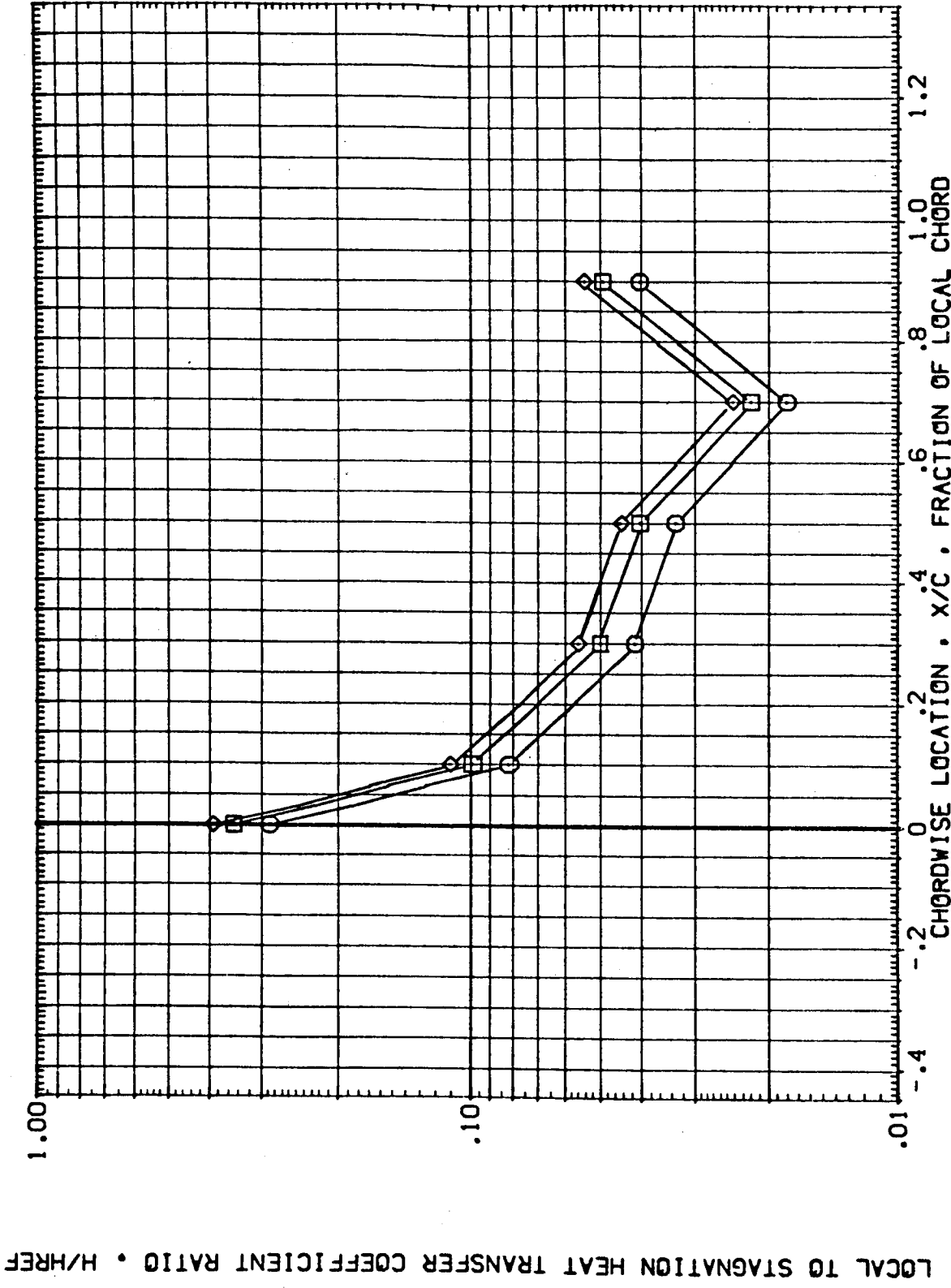


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .532

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE|V02) ARC 3.5-178 IH3 0+T+S .000 .000 5.000 1.000

(AE|V02) ARC 3.5-178 IH3 0+T+S .000 .000 5.000 .900

(BE|V02) ARC 3.5-178 IH3 0+T+S .000 .000 5.000 .850

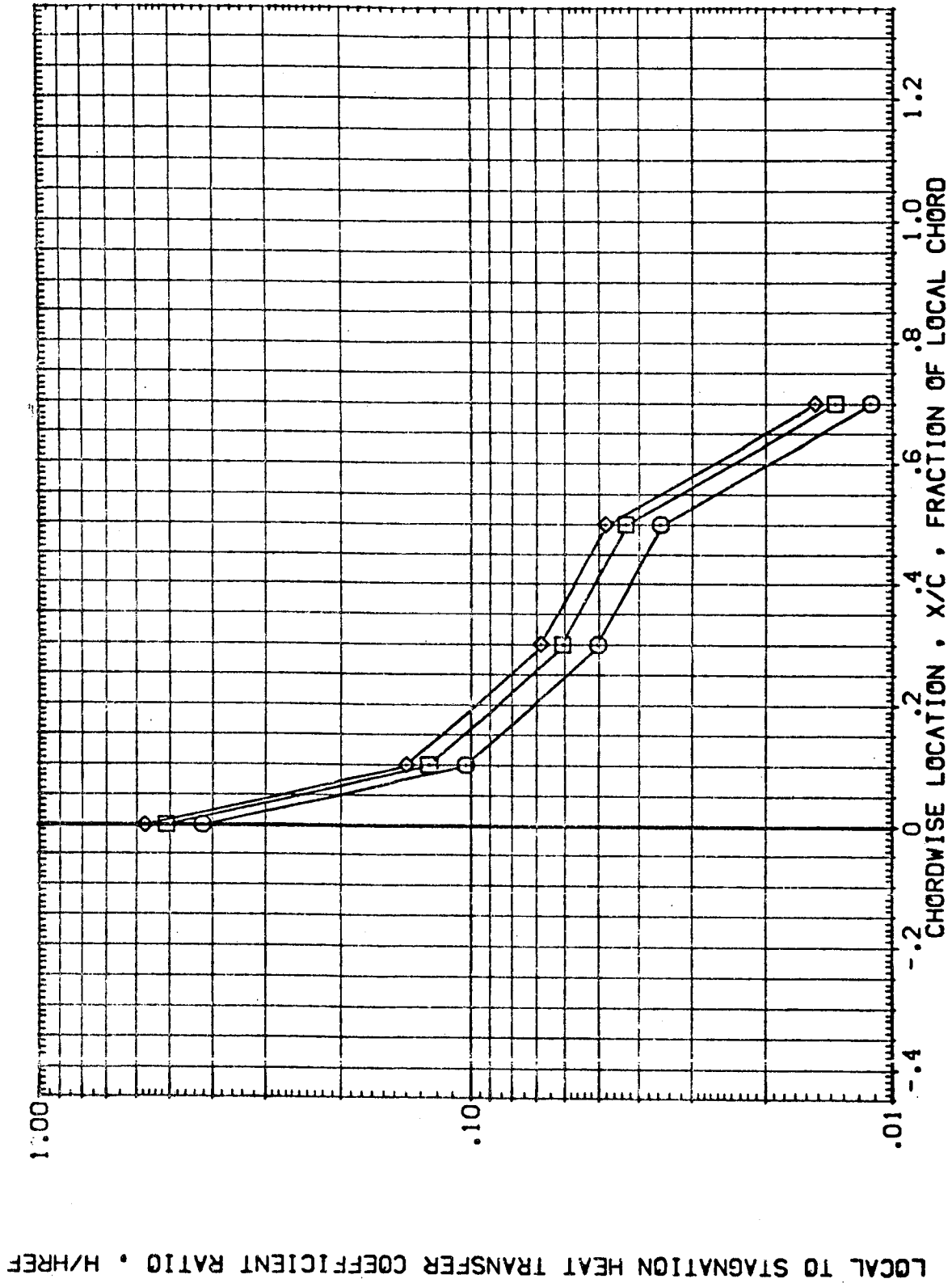


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .765

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|V02) ARC 3.5-178 IH3 0+T+S
 (AE|V02) ARC 3.5-178 IH3 0+T+S
 (BE|V02) ARC 3.5-178 IH3 0+T+S

ALPHA BETA R_{N/L} HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

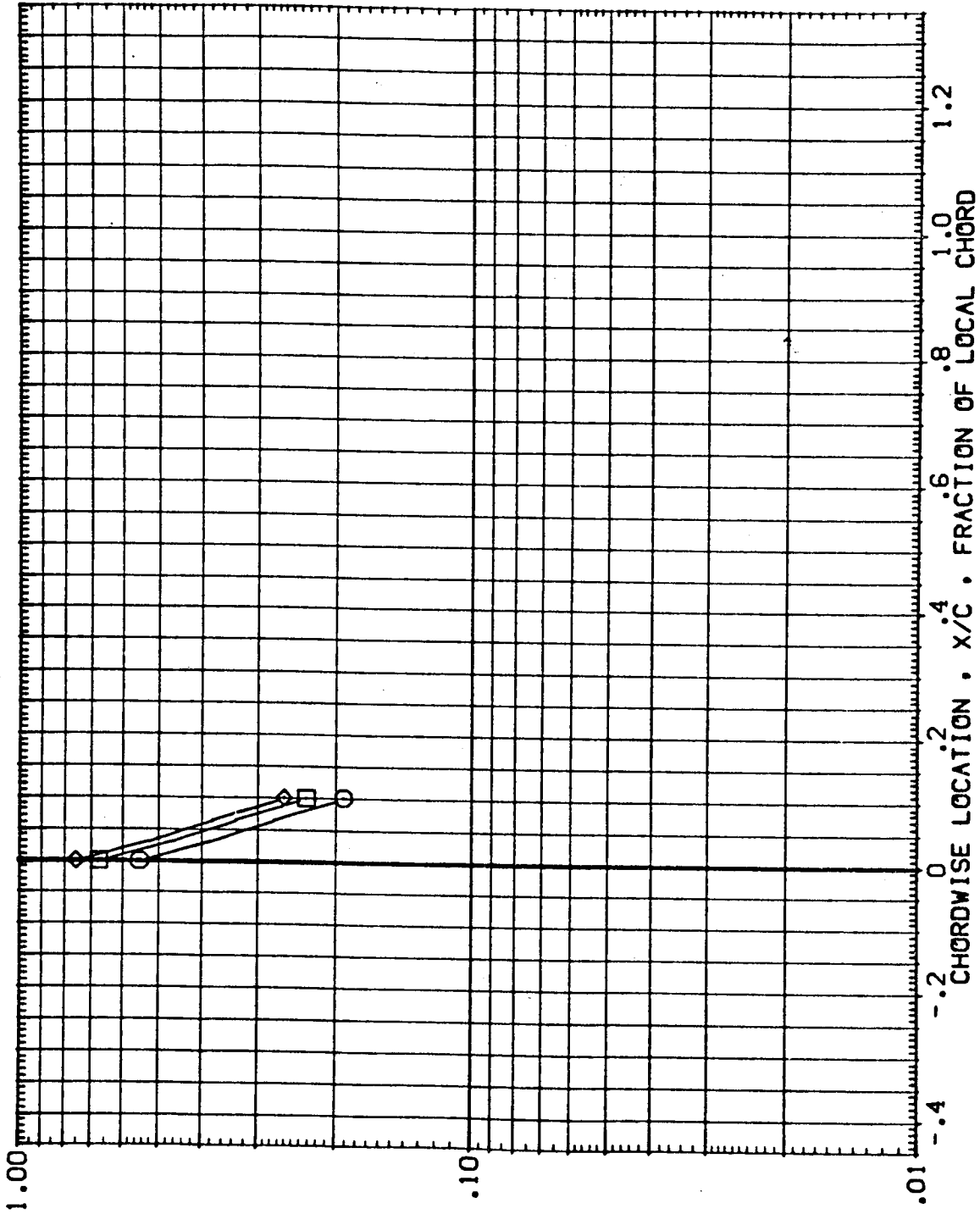


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .905

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RE1V02) ○ ARC 3.5-178 IH3 0+T+S

(AE1V02) ◊ ARC 3.5-178 IH3 0+T+S

(BE1V02) ◻ ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAV/HT

.000 .000 5.000 1.000

.000 .000 5.000 .900

.000 .000 5.000 .850

VERTICAL

VERTICAL

VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

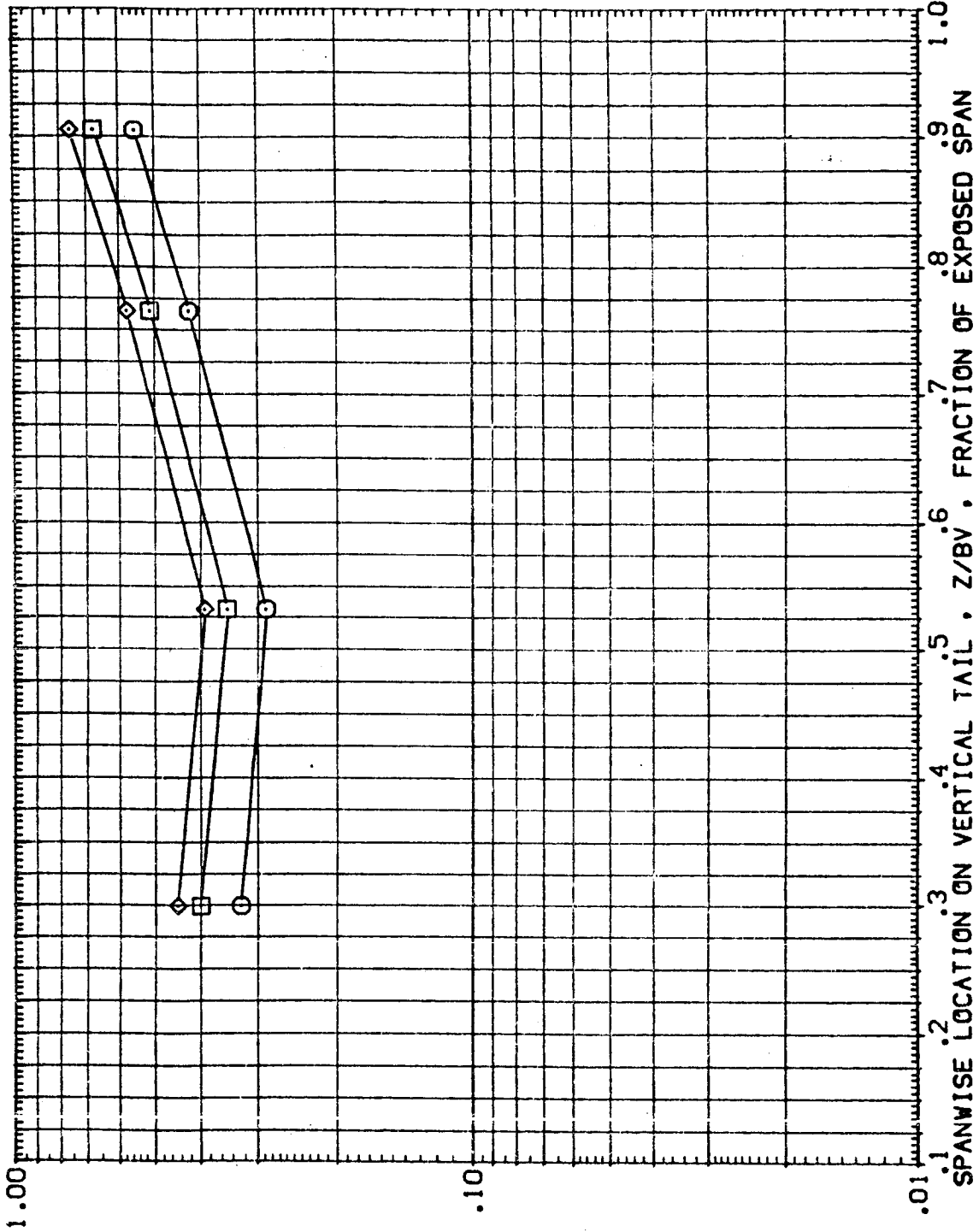


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

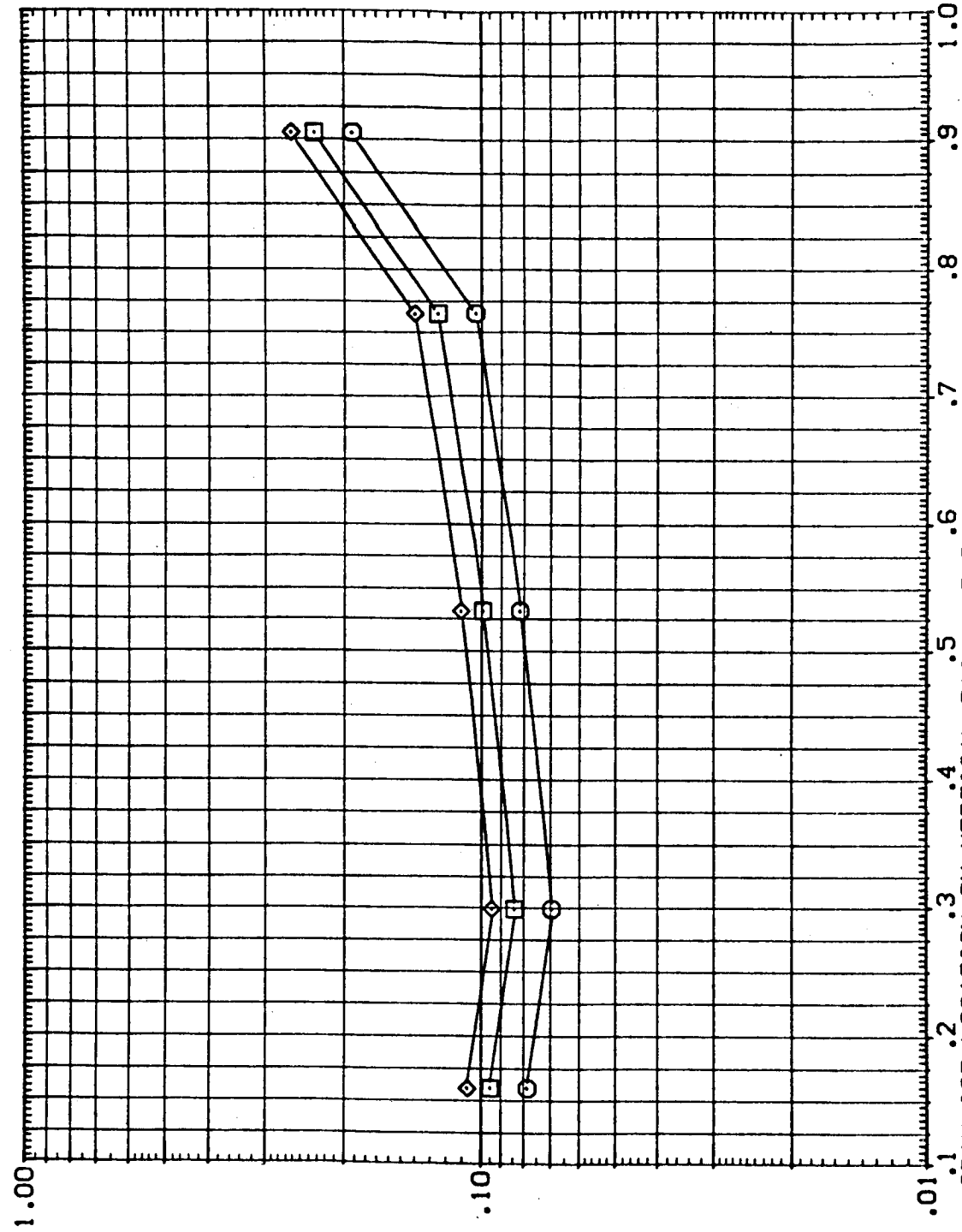
MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI V02) ARC 3.5-178 IH3 0+T+S
 (AEI V02) ARC 3.5-178 IH3 0+T+S
 (BEI V02) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



SPANWISE LOCATION ON VERTICAL TAIL, Z/BV, FRACTION OF EXPOSED SPAN

FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|V02) ARC 3.5-178 IH3 0+T+S
 (AE|V02) ARC 3.5-178 IH3 0+T+S
 (BE|V02) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

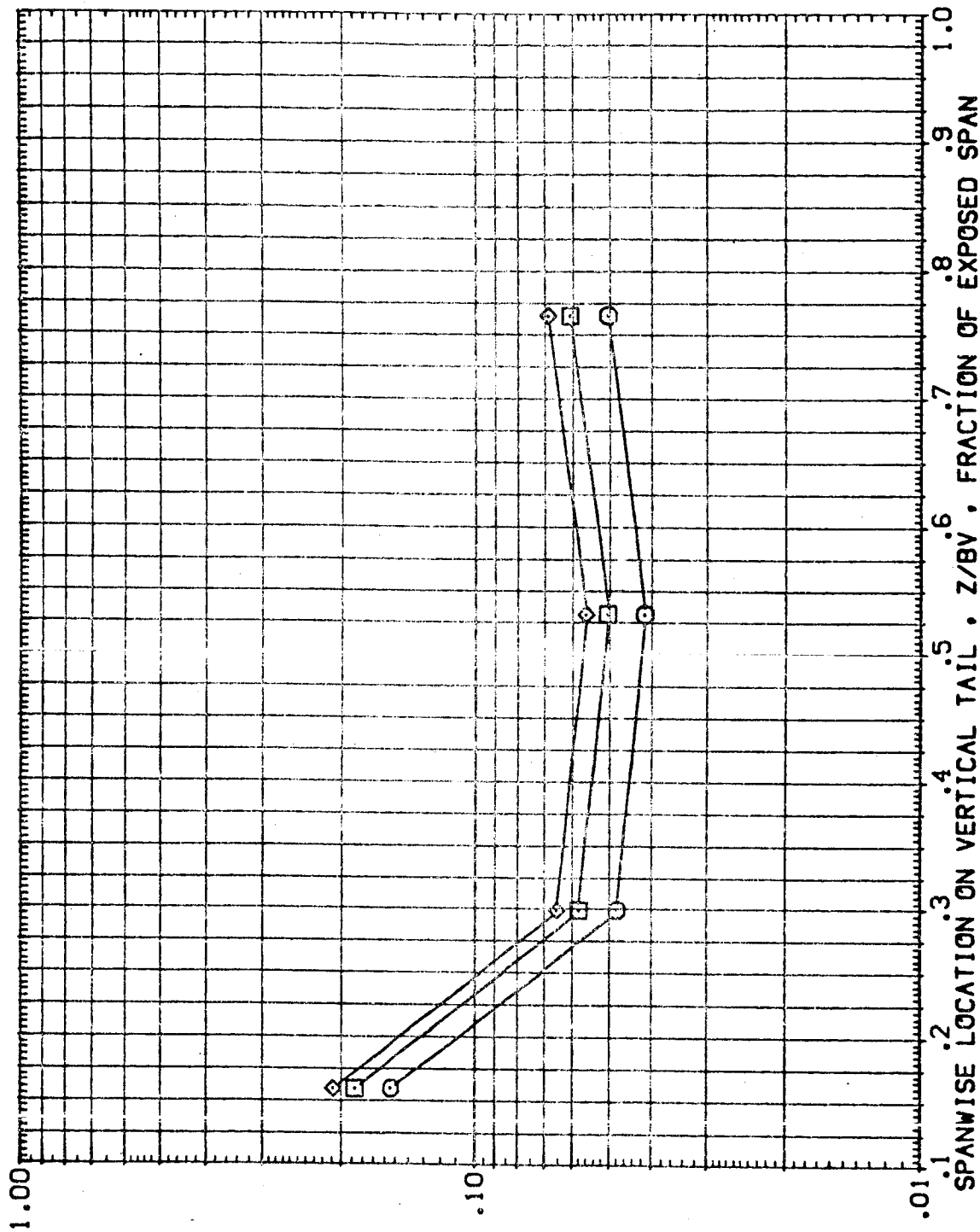


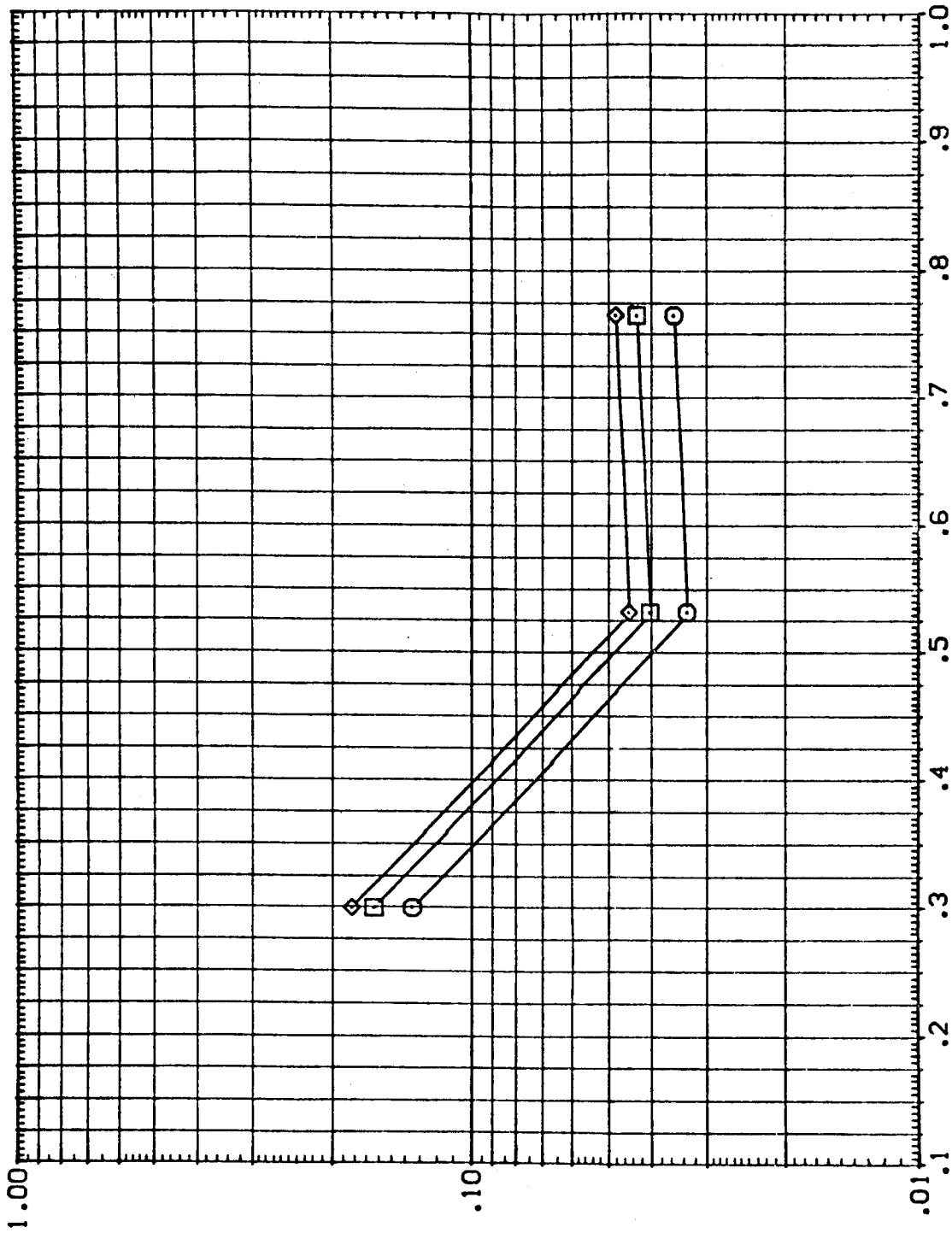
FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .300

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|V02) ARC 3.5-178 IH3 0+T+S
 (AE|V02) ARC 3.5-178 IH3 0+T+S
 (BE|V02) ARC 3.5-178 IH3 0+T+S

ALPHA BETA FN/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850



SPANWISE LOCATION ON VERTICAL TAIL • Z/BV • FRACTION OF EXPOSED SPAN

FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .500



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RNVL	HAV/HT
(RE V02)	ARC 3.5-178 IH3 0+T+S	.000	.000	5.000	1.000
(AE V02)	ARC 3.5-178 IH3 0+T+S	.000	.000	5.000	.900
(BE V02)	ARC 3.5-178 IH3 0+T+S	.000	.000	5.000	.850

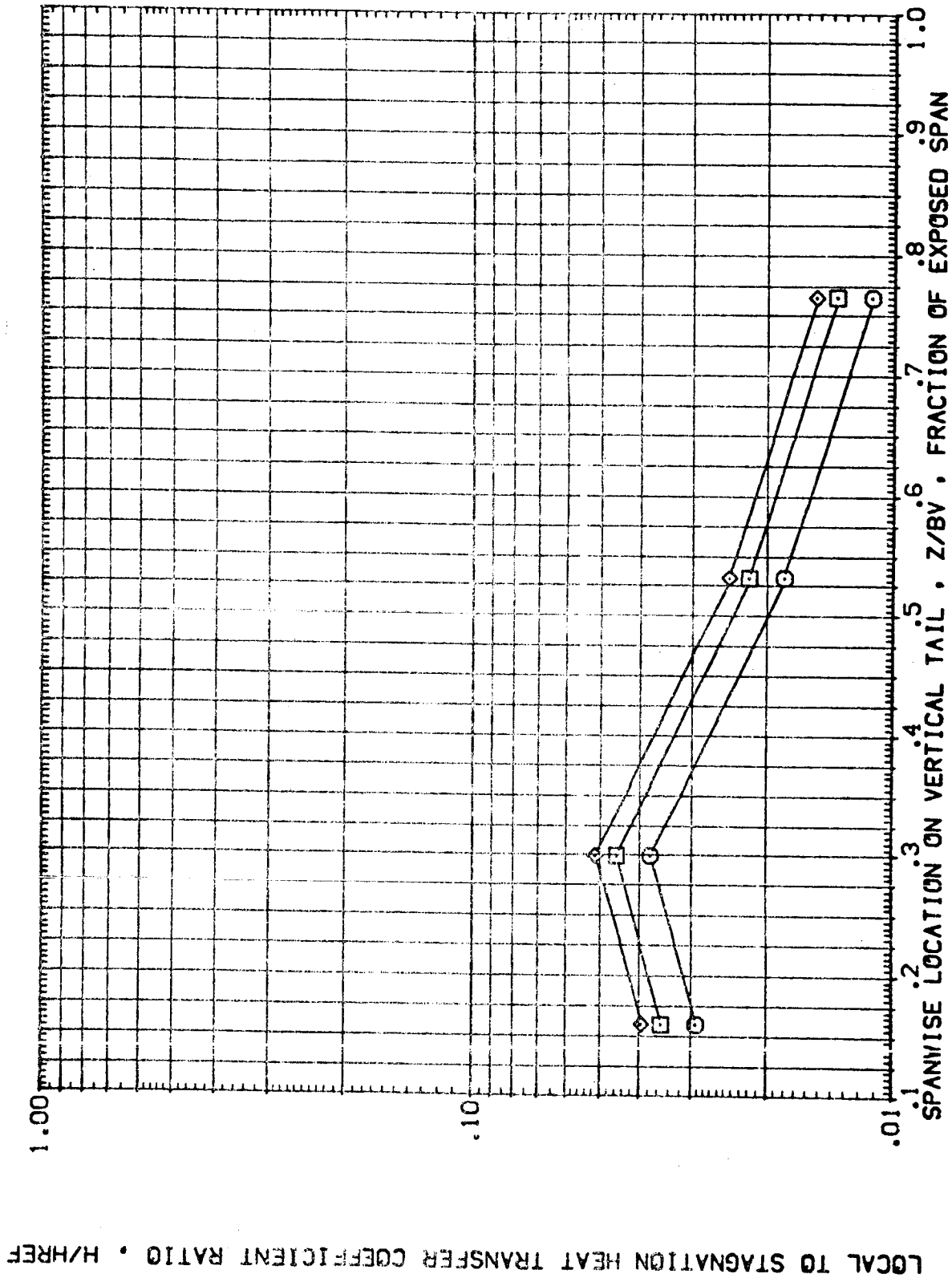


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|V02) ARC 3.5-178 IH3 0+T+S
 (AE|V02) ARC 3.5-178 IH3 0+T+S
 (BE|V02) ARC 3.5-178 IH3 0+T+S

ALPHA BETA R/V/L HAV/HT
 .000 .000 5.000 1.000
 .000 .000 5.000 .900
 .000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

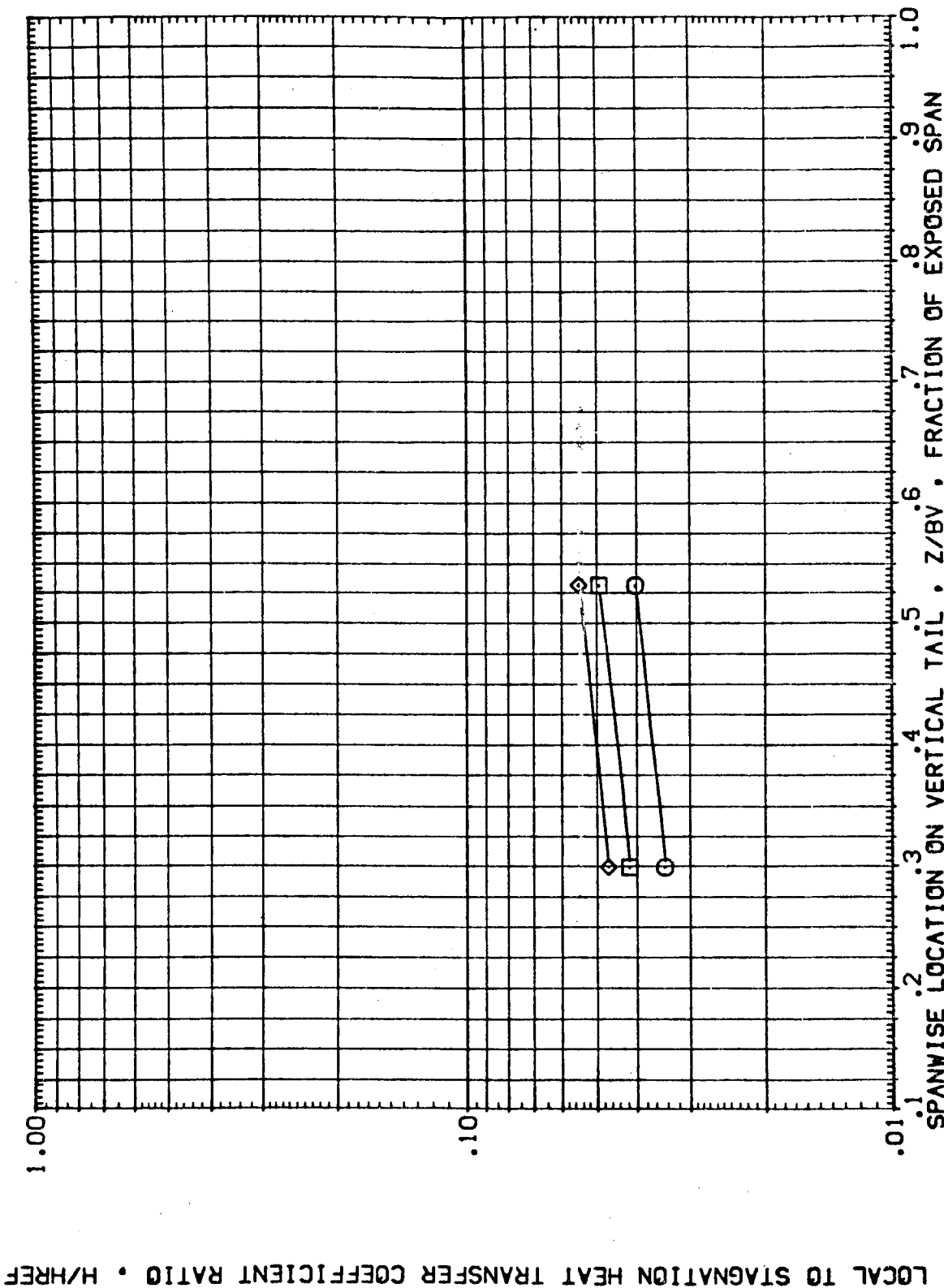


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(RE V03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	1.000
(AE V03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(BE V03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.850

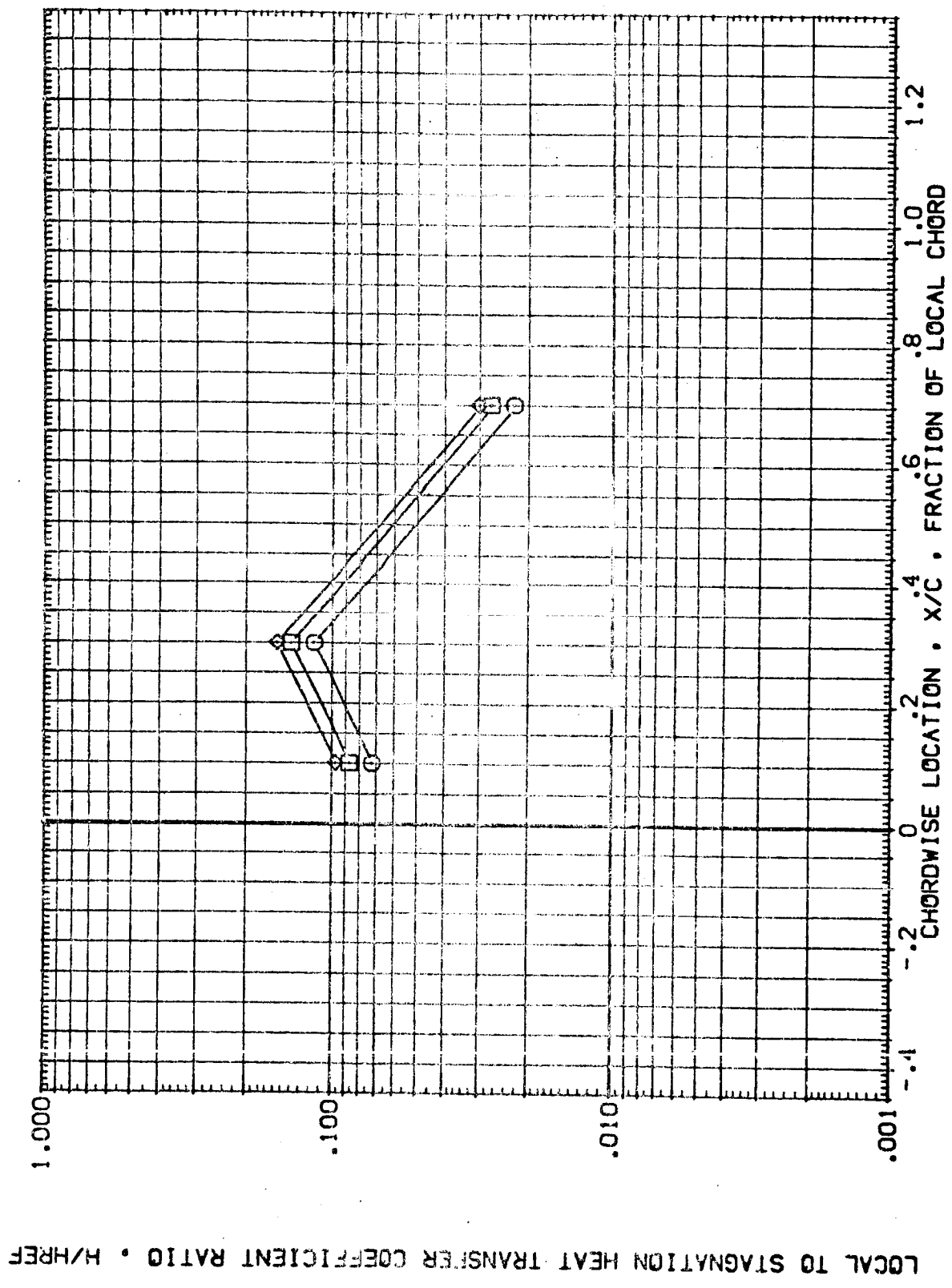


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .159

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RVL	HAV/HT
(REIV03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	1.000
(AEIV03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(BEIV03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.850

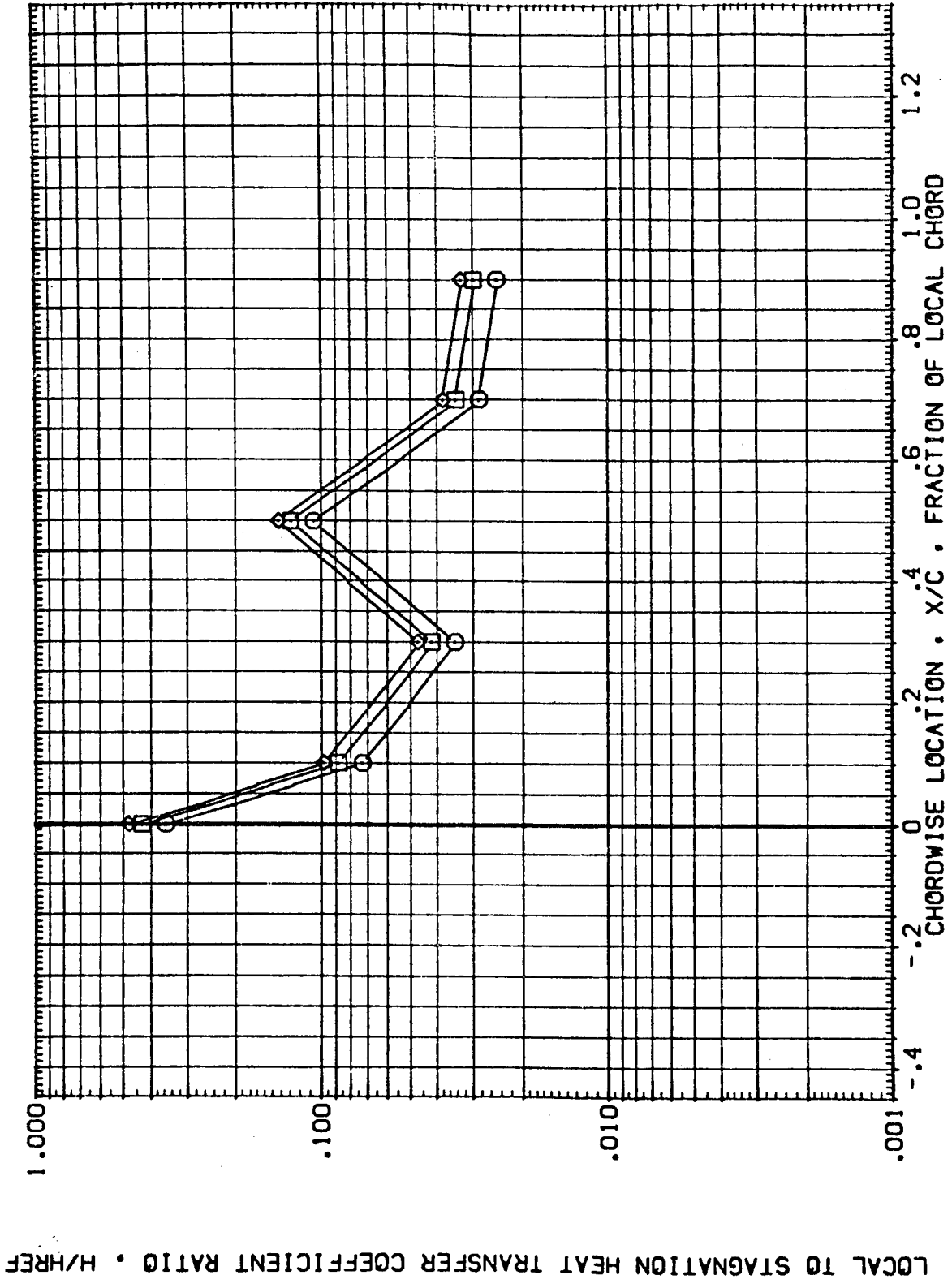


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .299

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REIV03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	1.000
(AEIV03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(BEIV03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.850

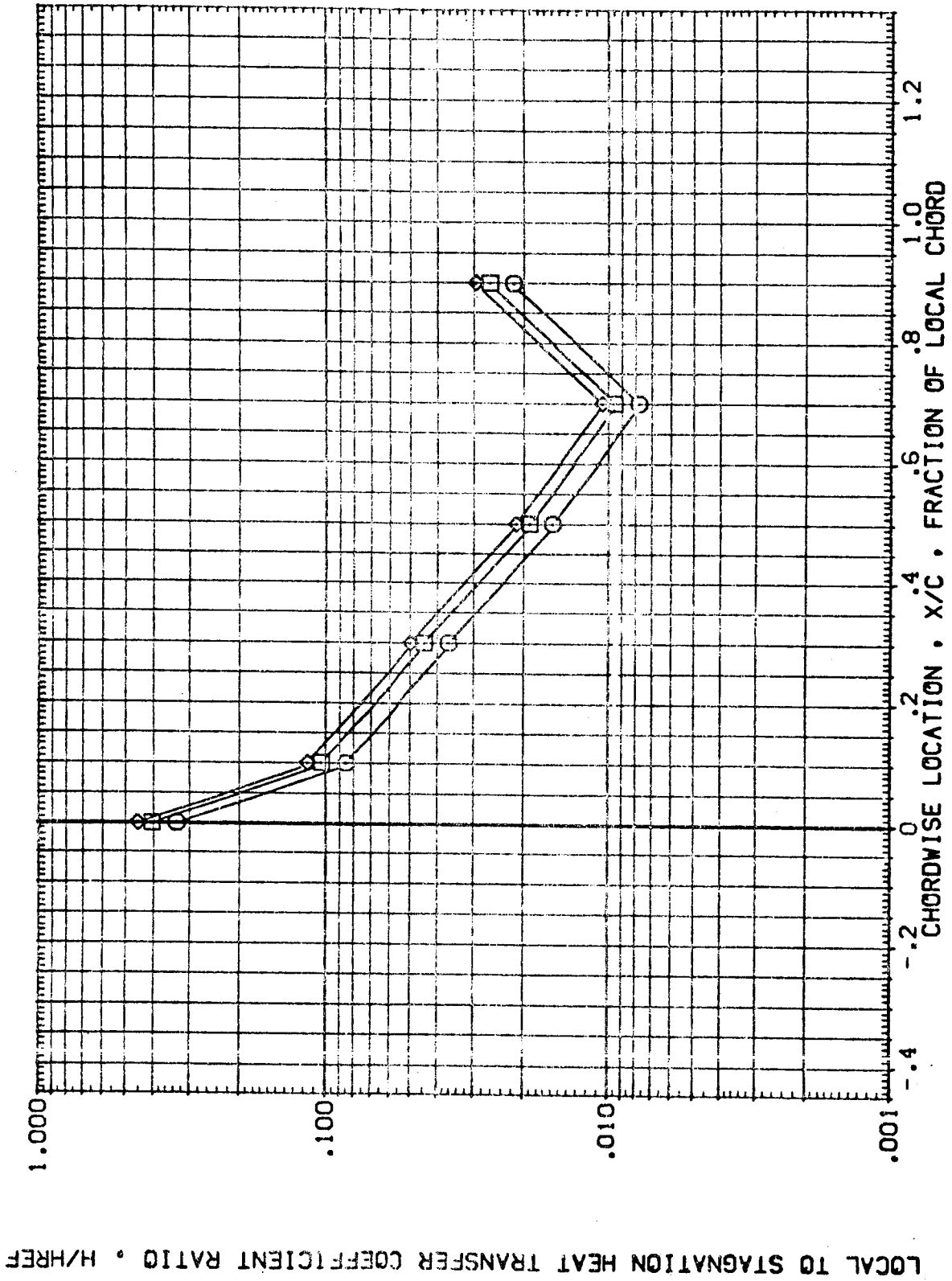


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .532

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RVL	HAV/HT
(RE1V03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	1.000
(AE1V03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(BE1V03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.850

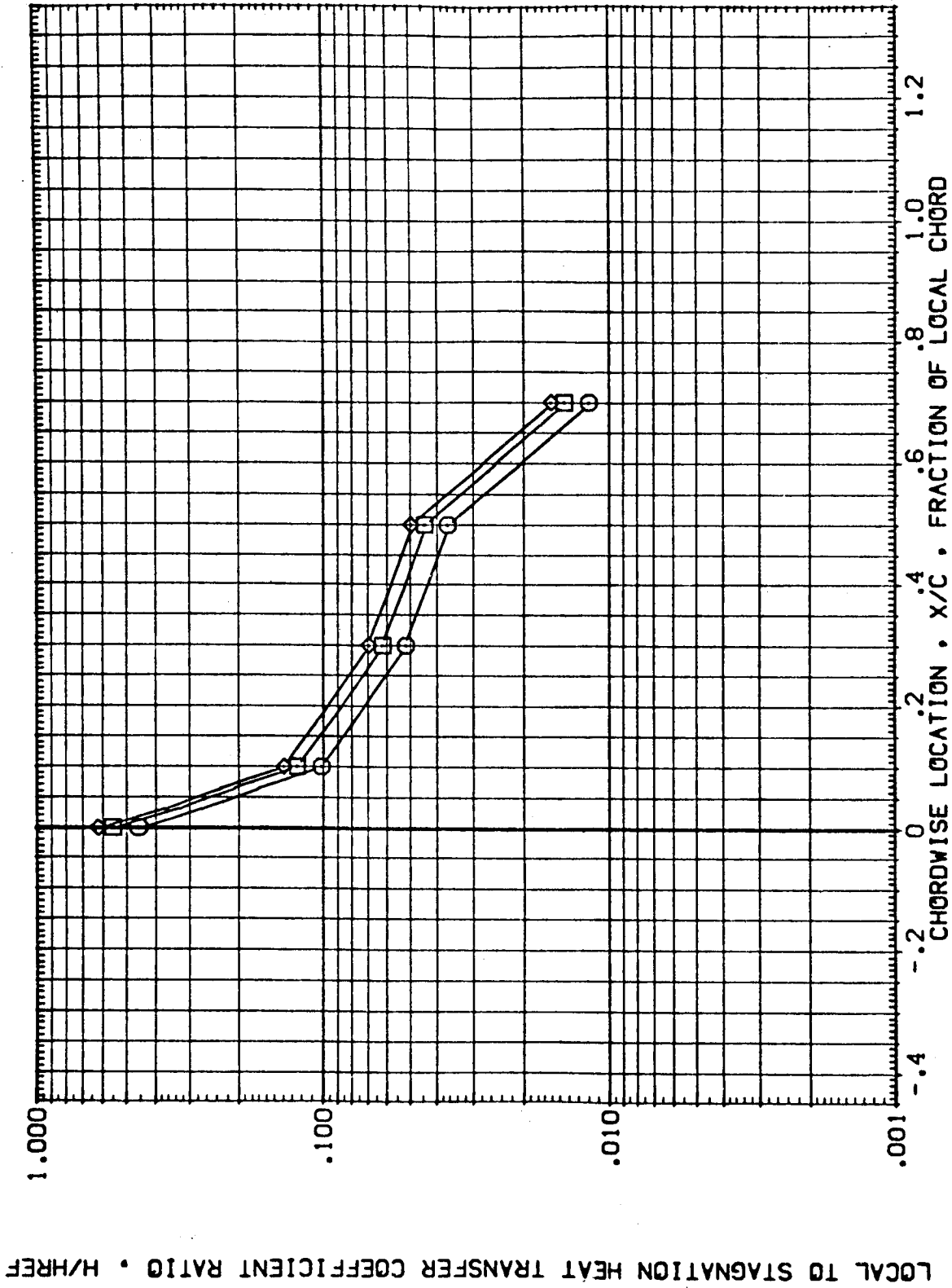


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .765

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(REIV03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	1.000
(AEIV03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(BEIV03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.850

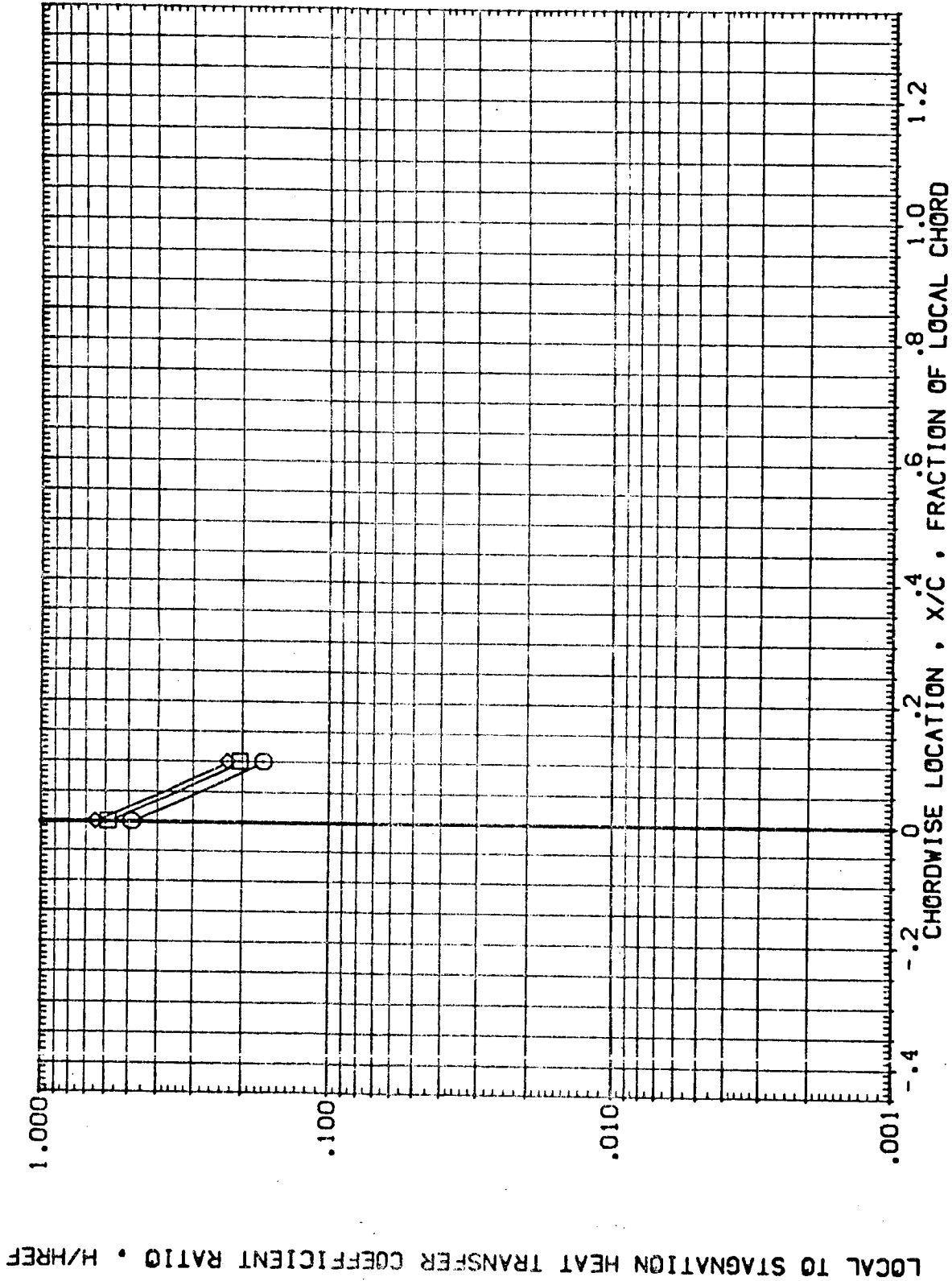


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .905

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE1V03) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 1.000

(AE1V03) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 .900

(BE1V03) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 .850

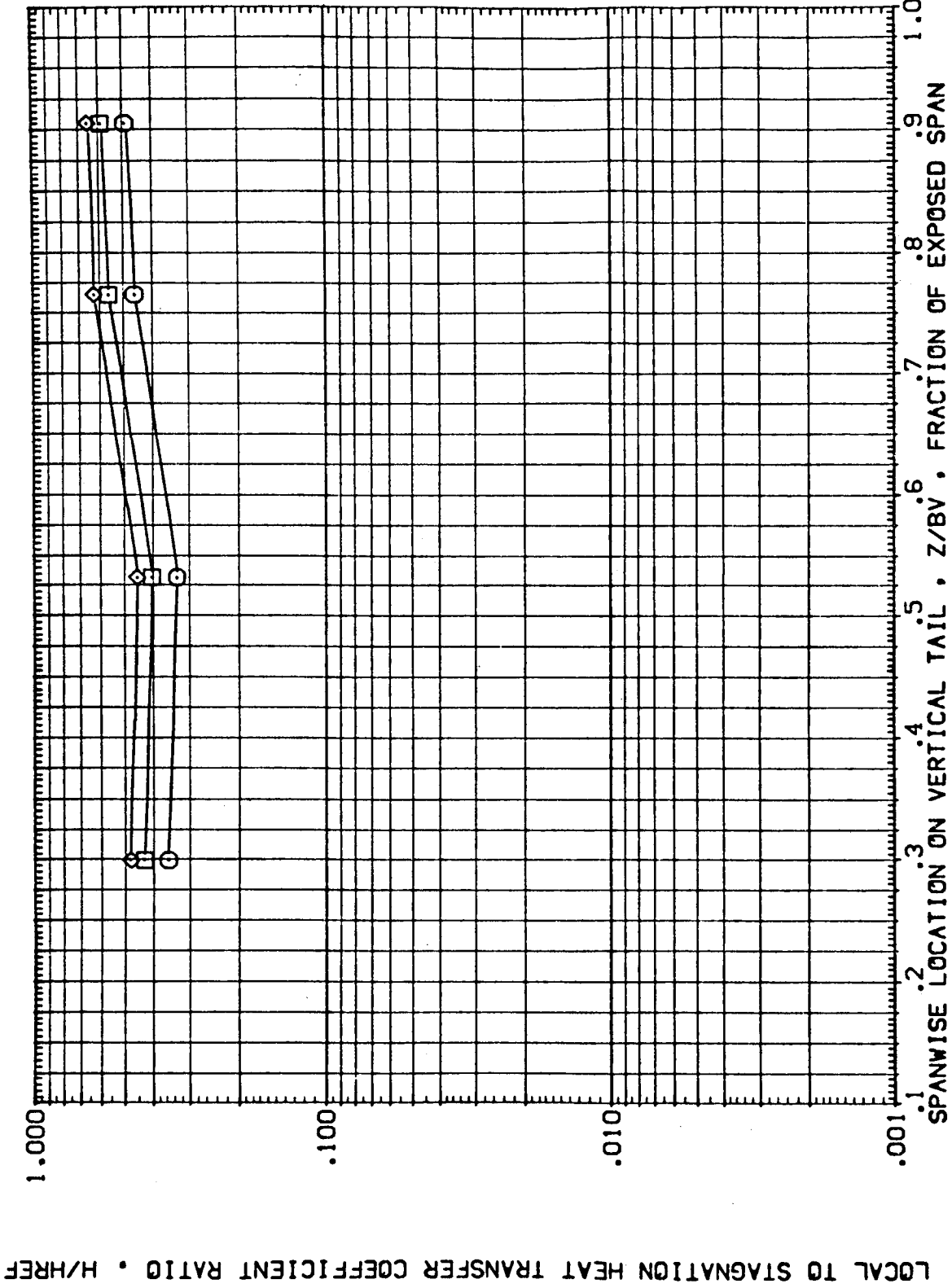


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{REIV03} ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 1.500 1.000

{AEIV03} ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 1.500 .900

{BEIV03} ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 1.500 .850

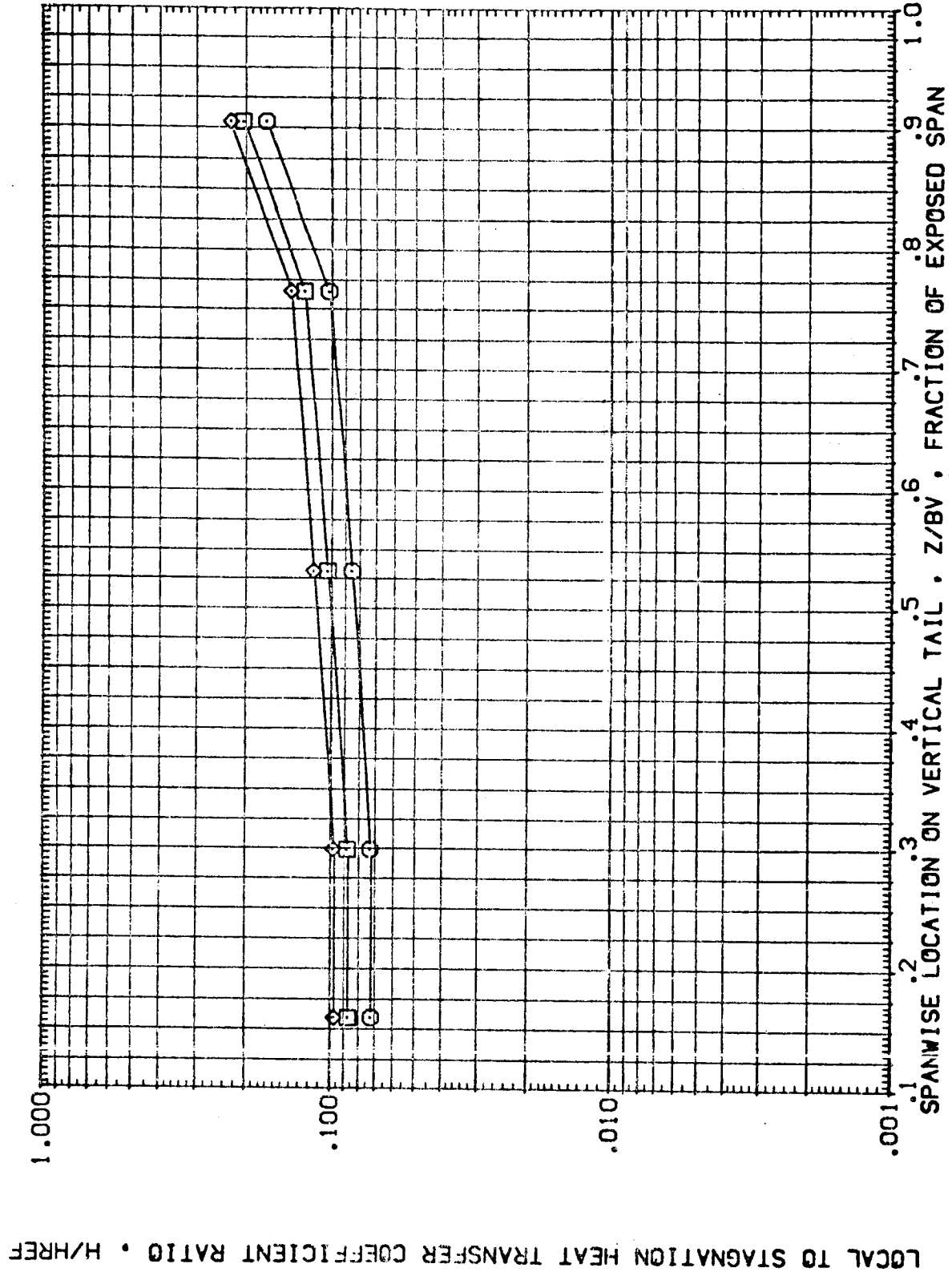


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE1V03) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 1.000

(AE1V03) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 .900

(BE1V03) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 1.500 .850

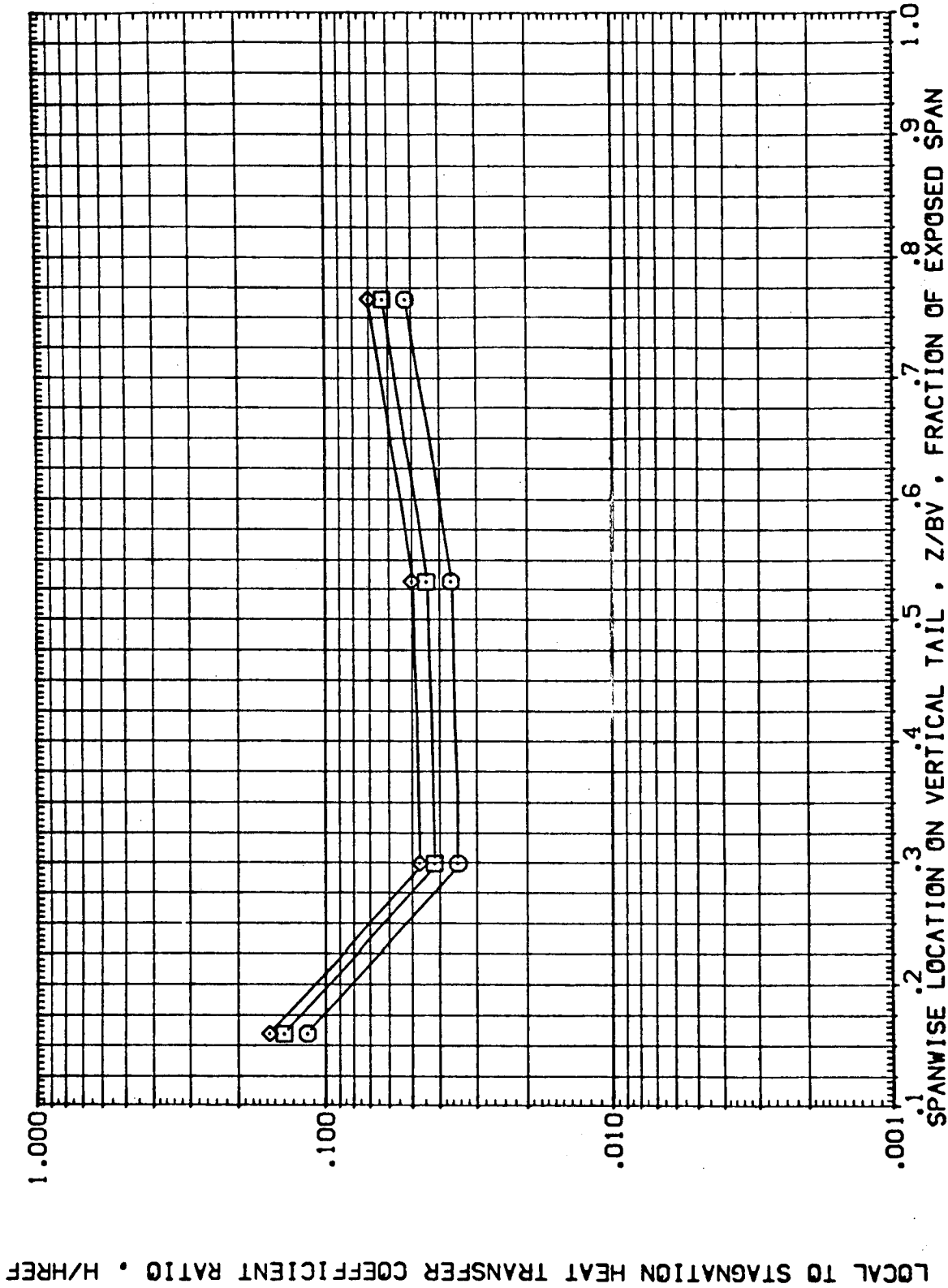


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RM/L HAV/HT

(REIV03) AR: 3.5-178 IH3 0+1+S (TRIPS) .000 .000 1.500 1.000

(AEIV03) AR: 3.5-178 IH3 0+1+S (TRIPS) .000 .000 1.500 .900

(BEIV03) AR: 3.5-178 IH3 0+1+S (TRIPS) .000 .000 1.500 .850

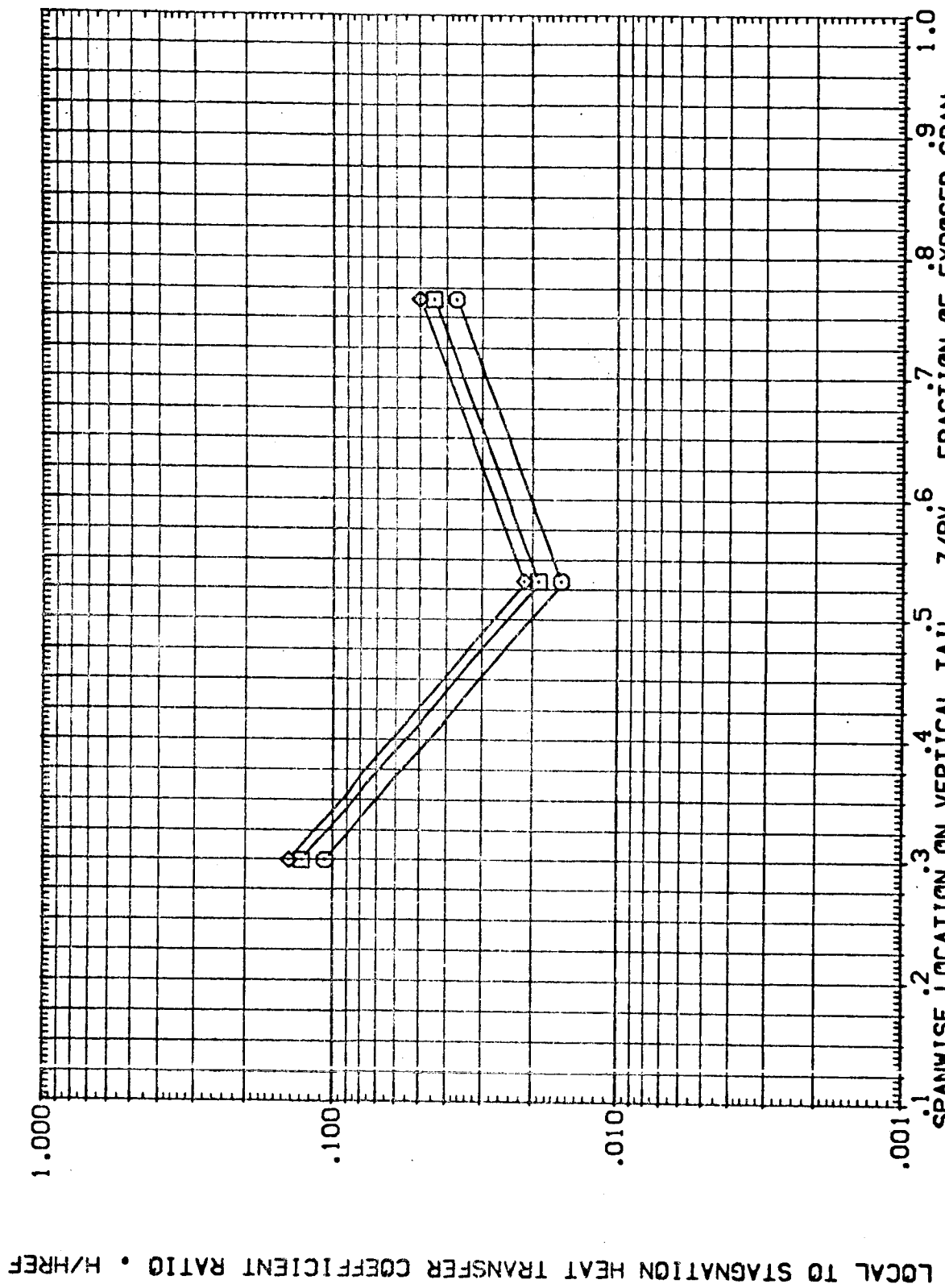
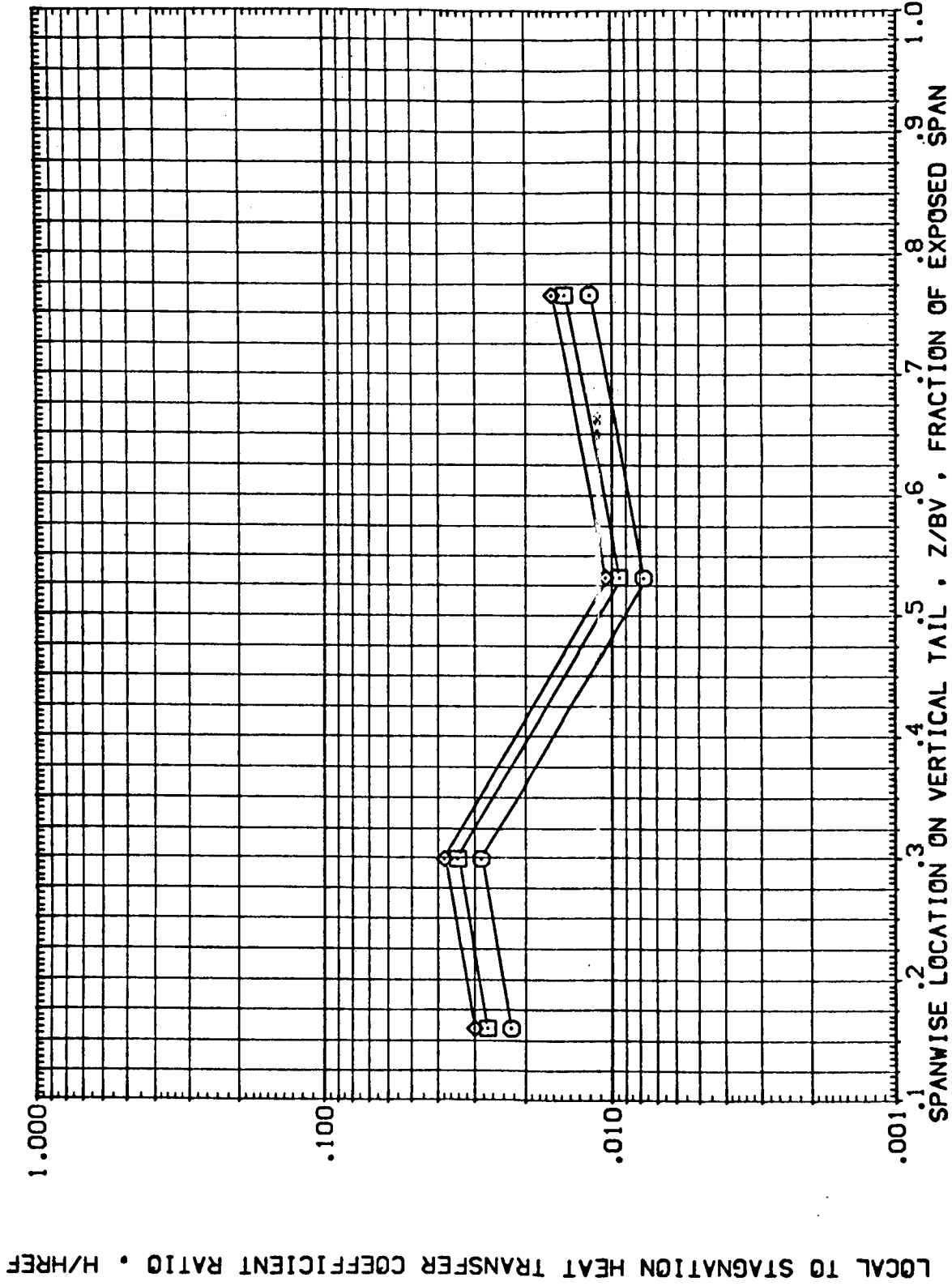


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .500

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(RE1V03)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	1.500	1.000
(AE1V03)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	1.500	.900
(BE1V03)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	1.500	.850



MACH = 5.300 X/C = .700

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(REIV03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	1.000
(AEIV03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(BEIV03)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.850

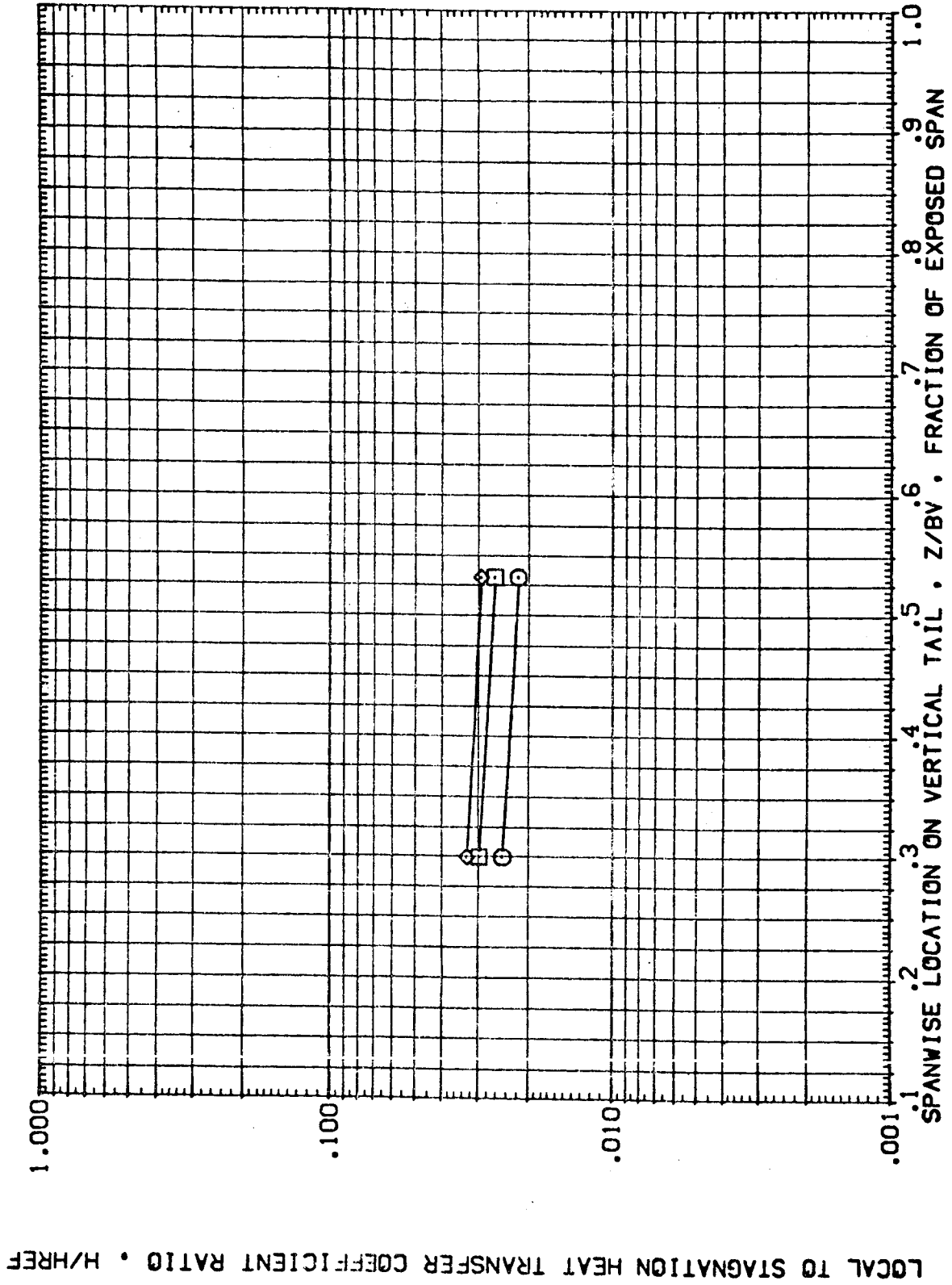


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT
 (REIV04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 1.000
 (AEIV04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .900
 (BEIV04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .850

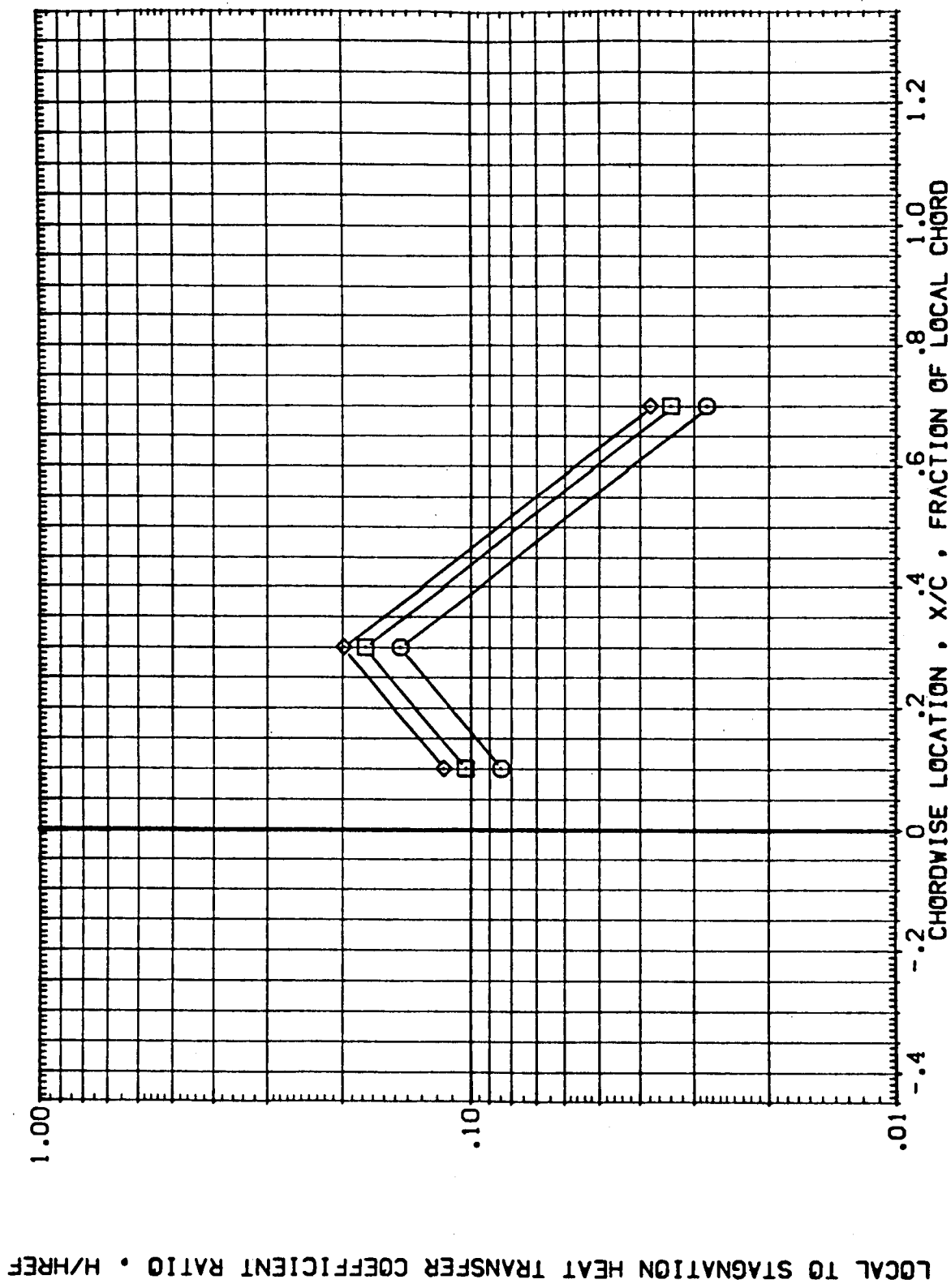


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .159

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RM/L MAV/HT

(REIV04) ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 1.000

(AEIV04) ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 .900

(BEIV04) ARC 3.5-178 IH3 0+1+S (TRIPS) .000 .000 5.000 .850

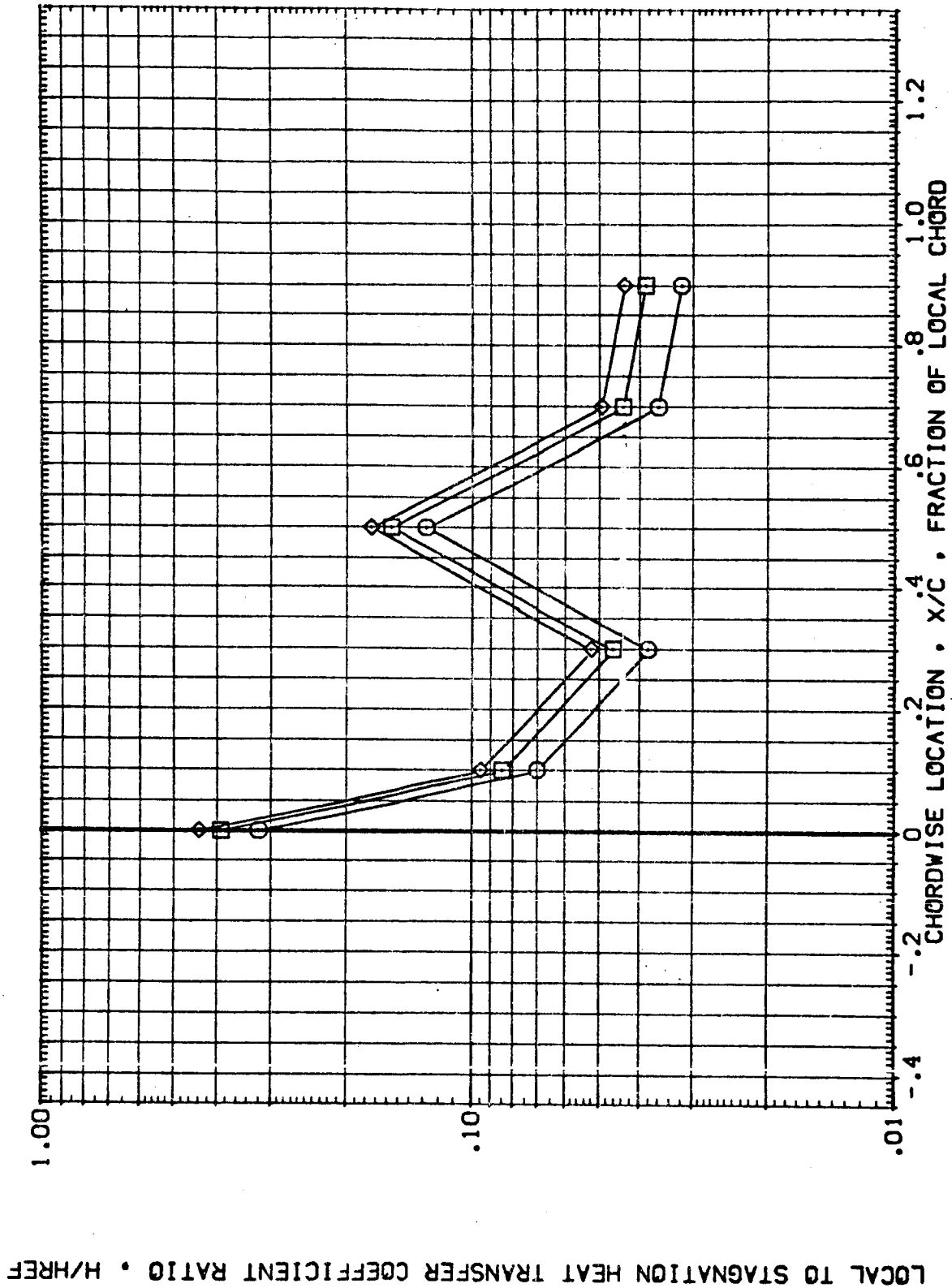


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .299

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(REIV04)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	1.000
(AEIV04)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	.900
(BEIV04)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	.850

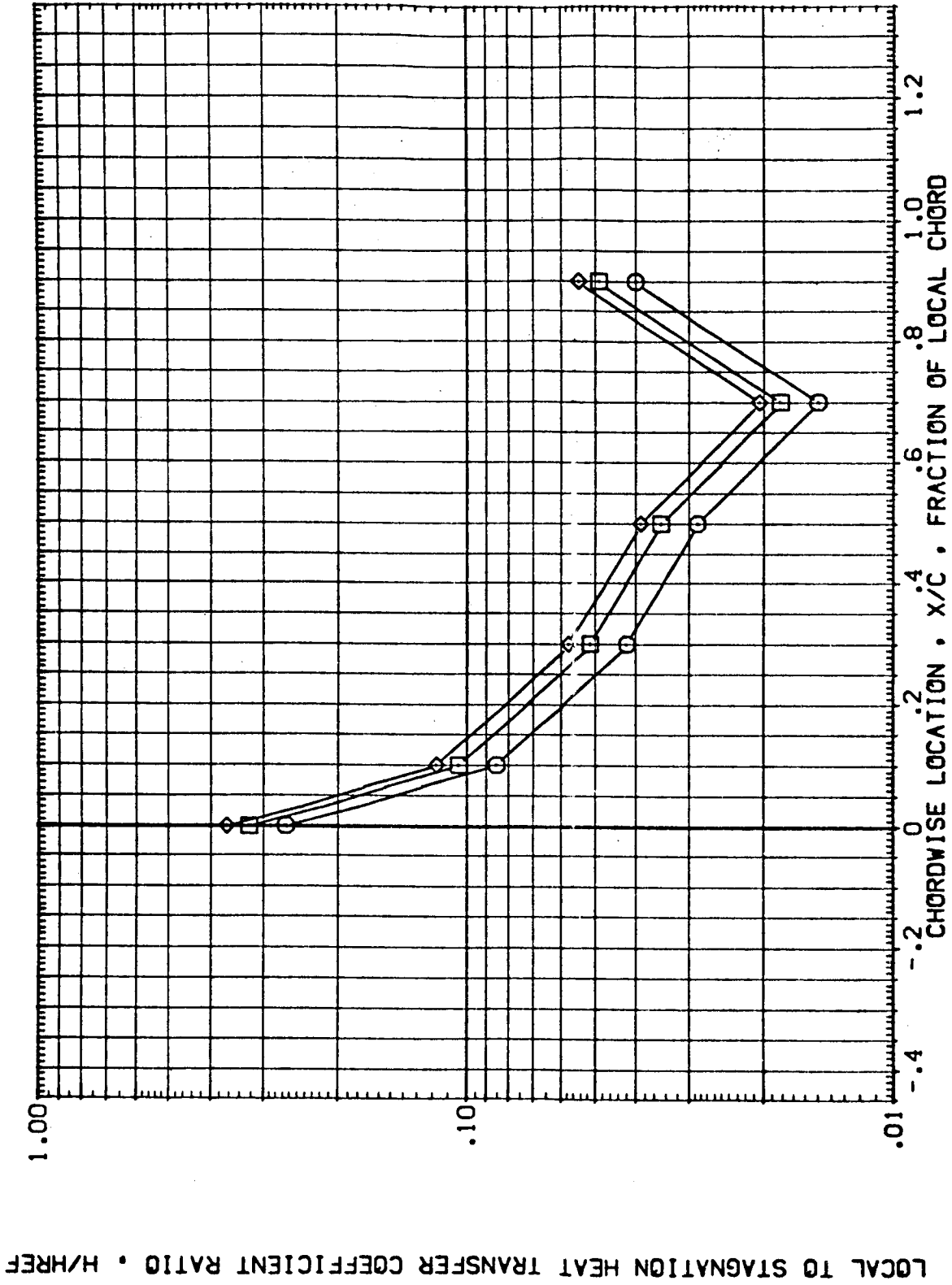


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .532

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L MAV/HT

(BE1V04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 1.000

(AE1V04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .900

(BE1V04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .850

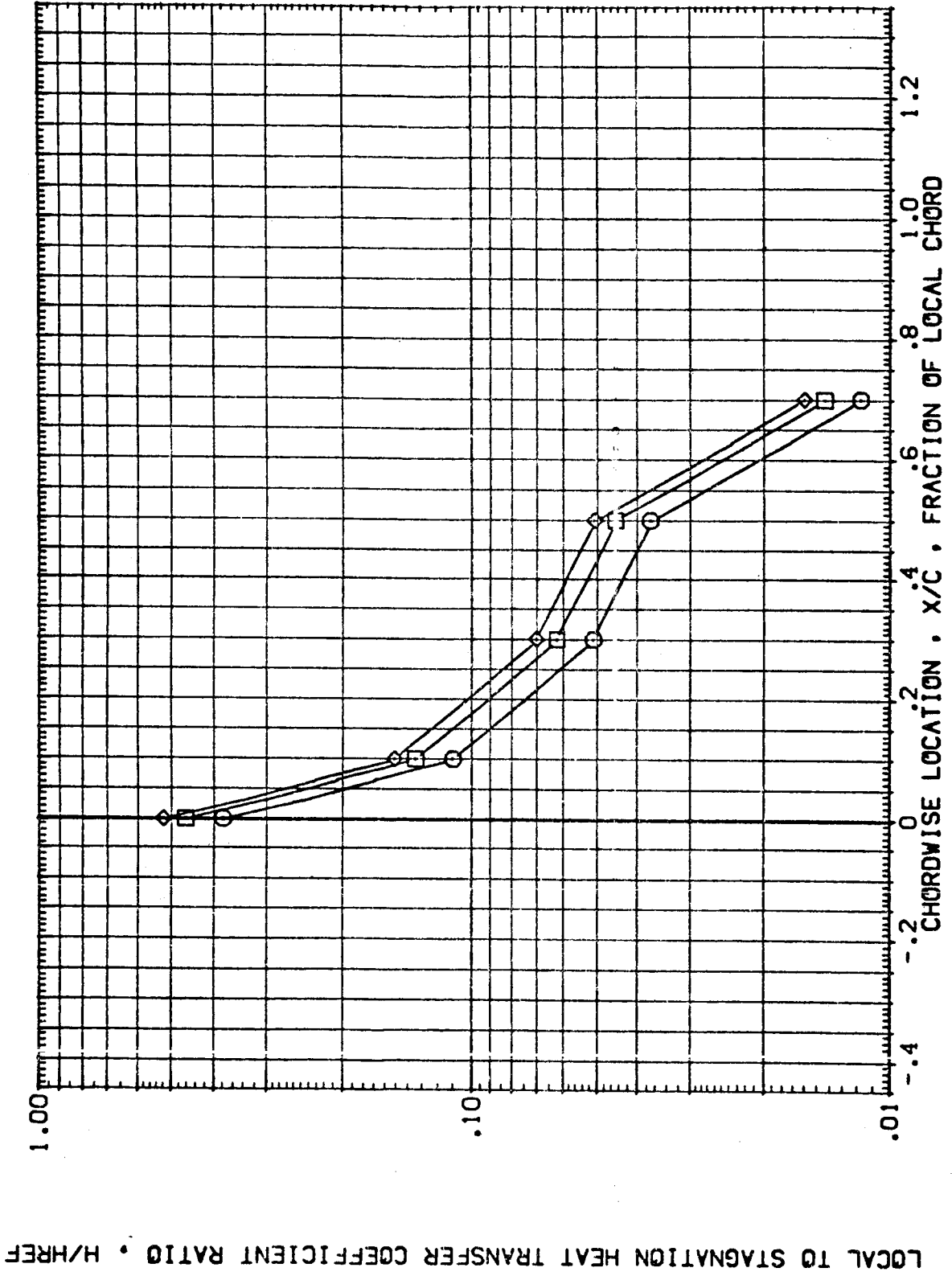


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .765

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RNU/L HAV/HT

(RE1V04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 1.000

(AE1V04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .900

(BE1V04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .850

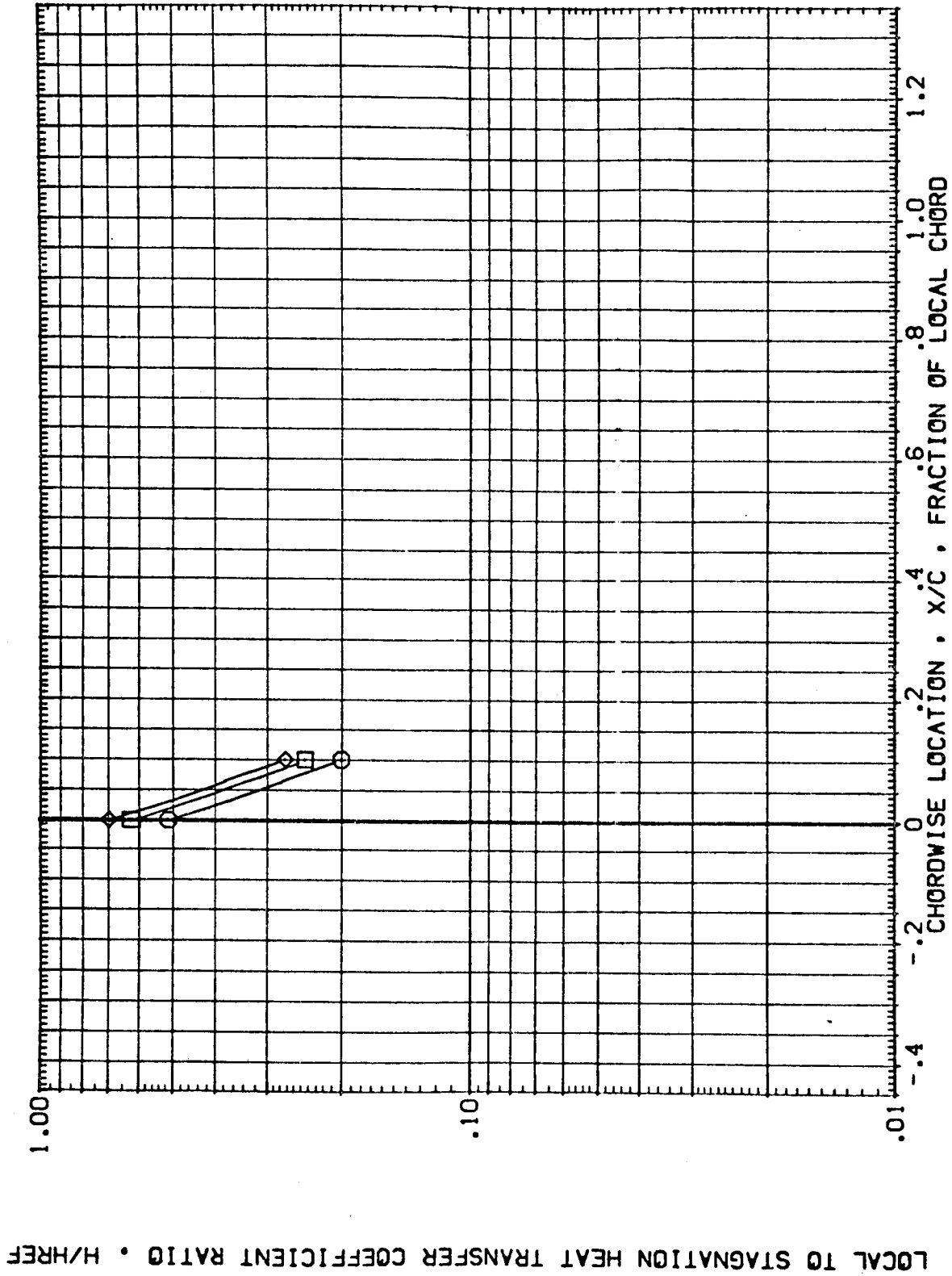


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .905

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(RE V04)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	1.000
(AE V04)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	.900
(BE V04)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	.850

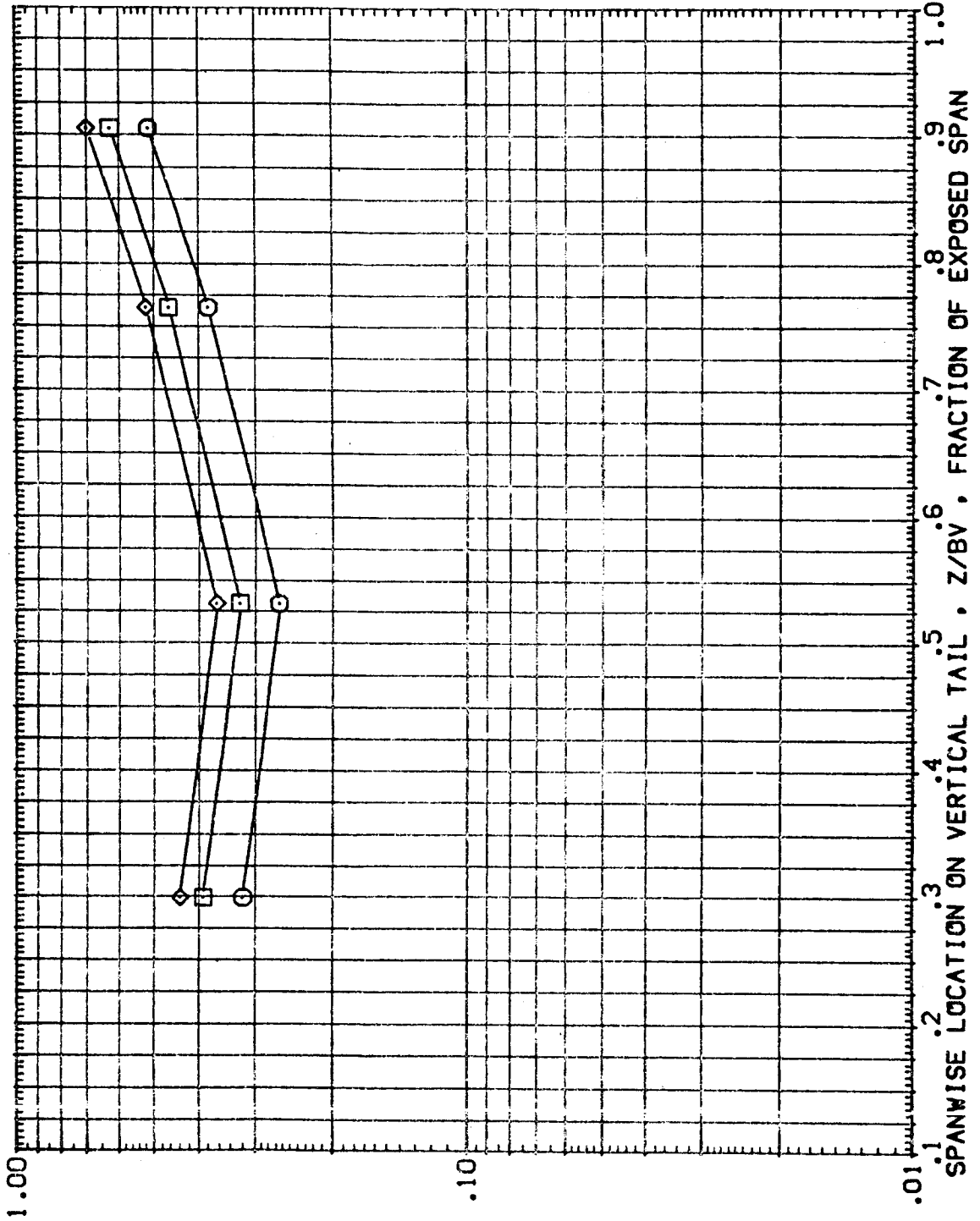


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REIV04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 1.000

(AEIV04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .900

(BEIV04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .850

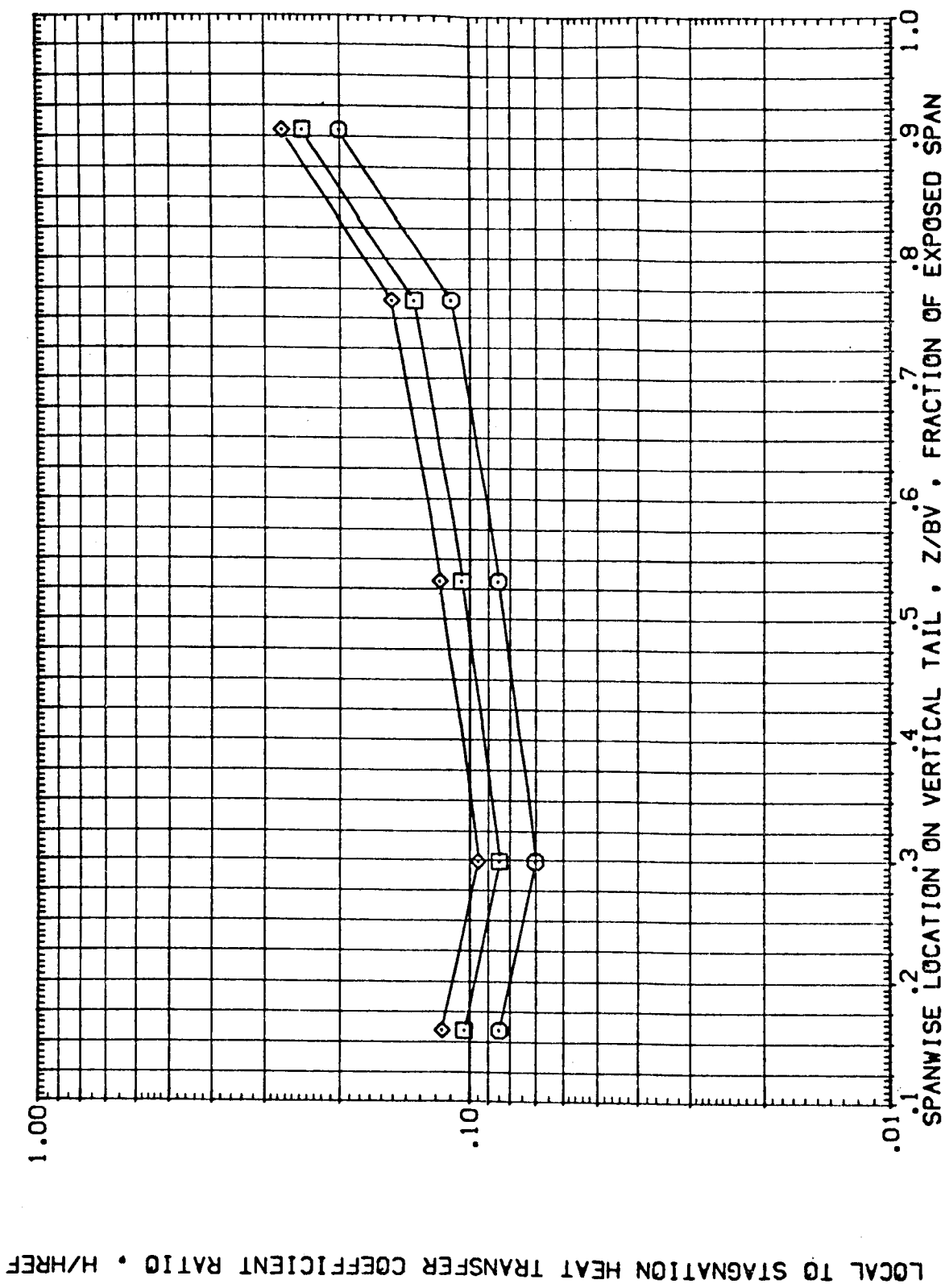


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(RE|V04) ARC 3.5-178 IH3 0+T+S (TRIPS) VERTICAL .000 .000 5.000 1.000

(AE|V04) ARC 3.5-178 IH3 0+T+S (TRIPS) VERTICAL .000 .000 5.000 .900

(BE|V04) ARC 3.5-178 IH3 0+T+S (TRIPS) VERTICAL .000 .000 5.000 .850

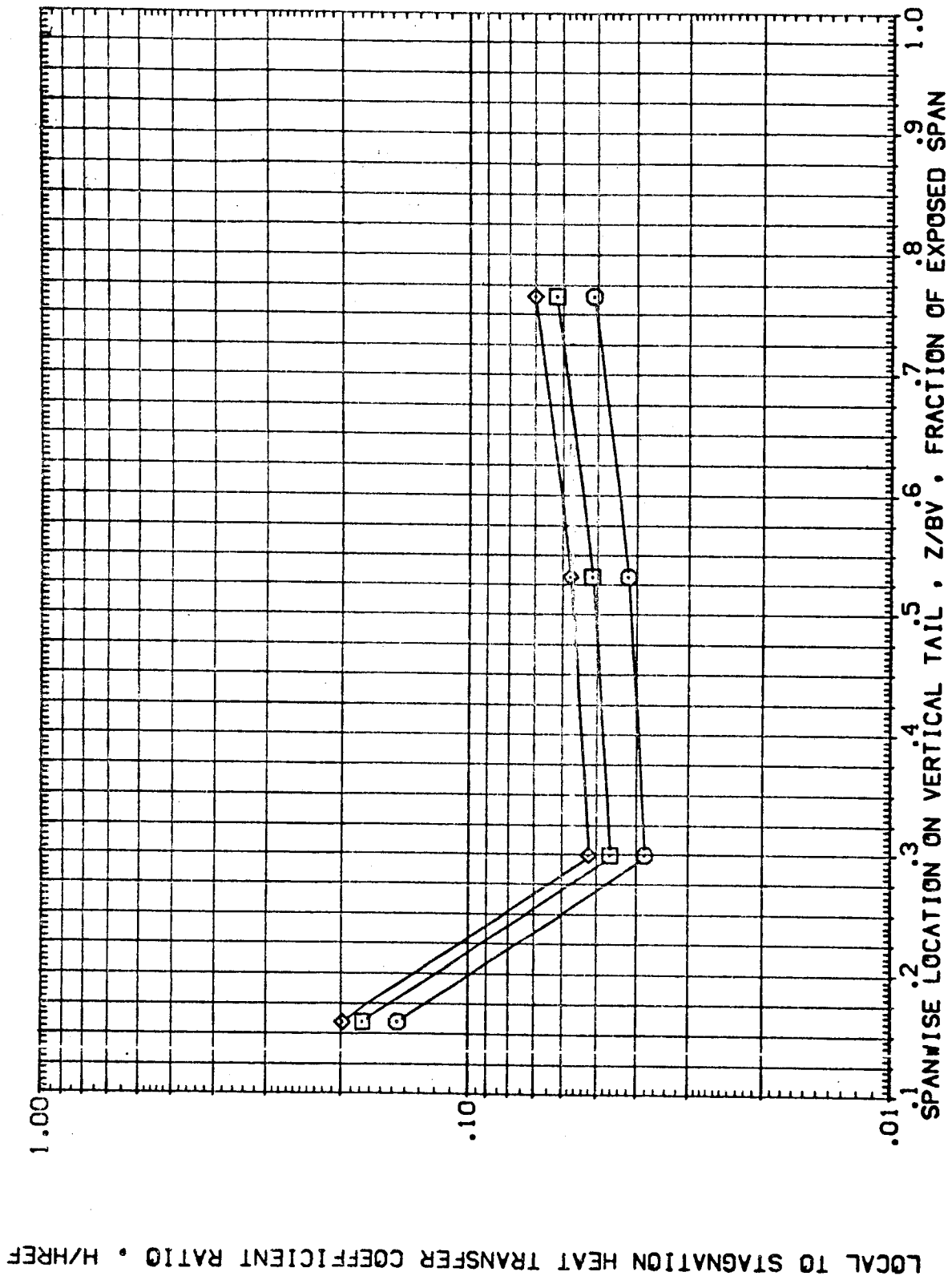


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .300

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(REIV04)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	1.000
(AEIV04)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	.900
(BEIV04)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	.850

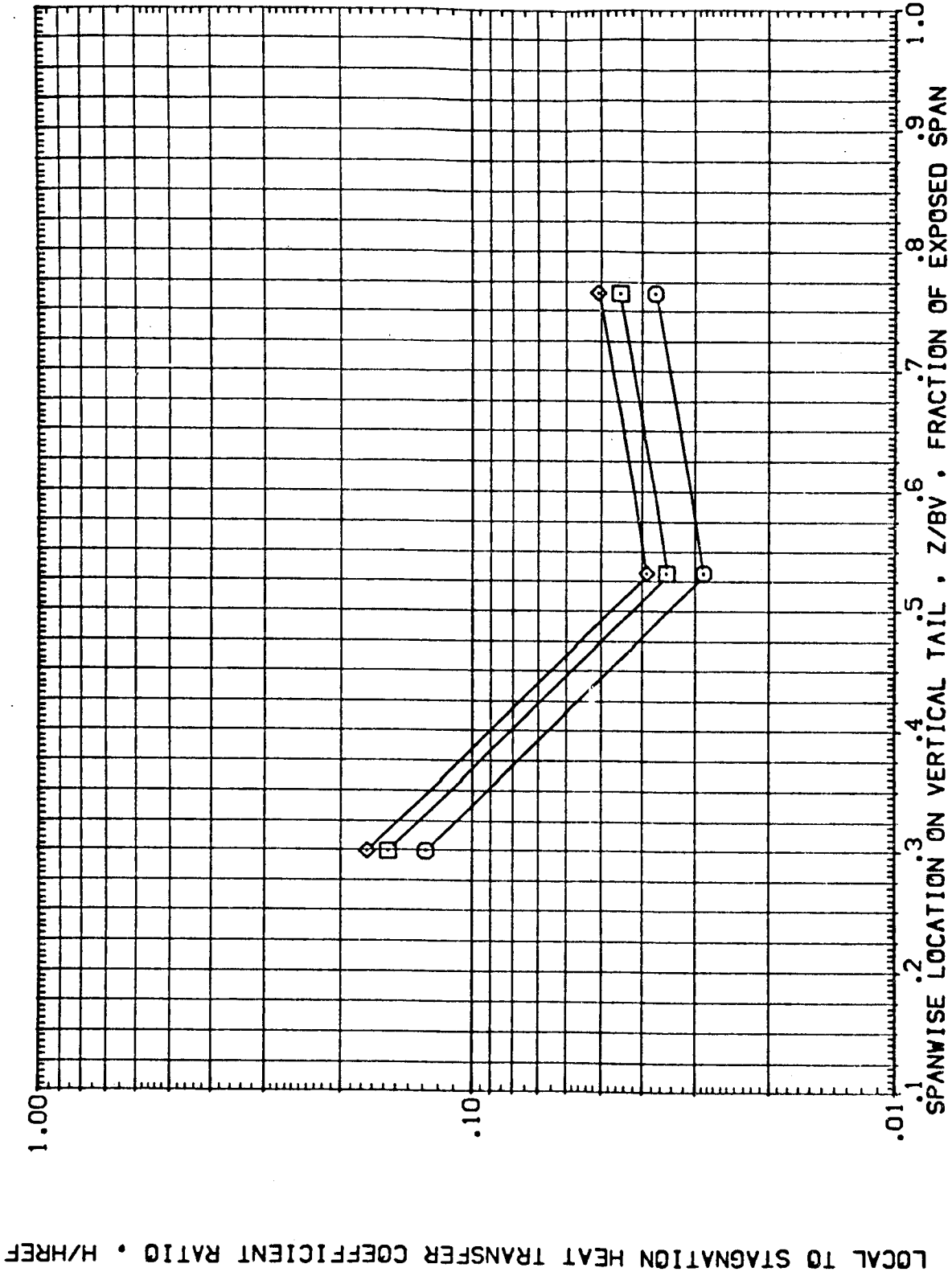


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RVAL MAV/HT

(REIV04) ARC 3.5-178 IH3 0+1+S (TRIPS) VERTICAL .000 .000 5.000 1.000

(AEIV04) ARC 3.5-178 IH3 0+1+S (TRIPS) VERTICAL .000 .000 5.000 .900

(BEIV04) ARC 3.5-178 IH3 0+1+S (TRIPS) VERTICAL .000 .000 5.000 .850

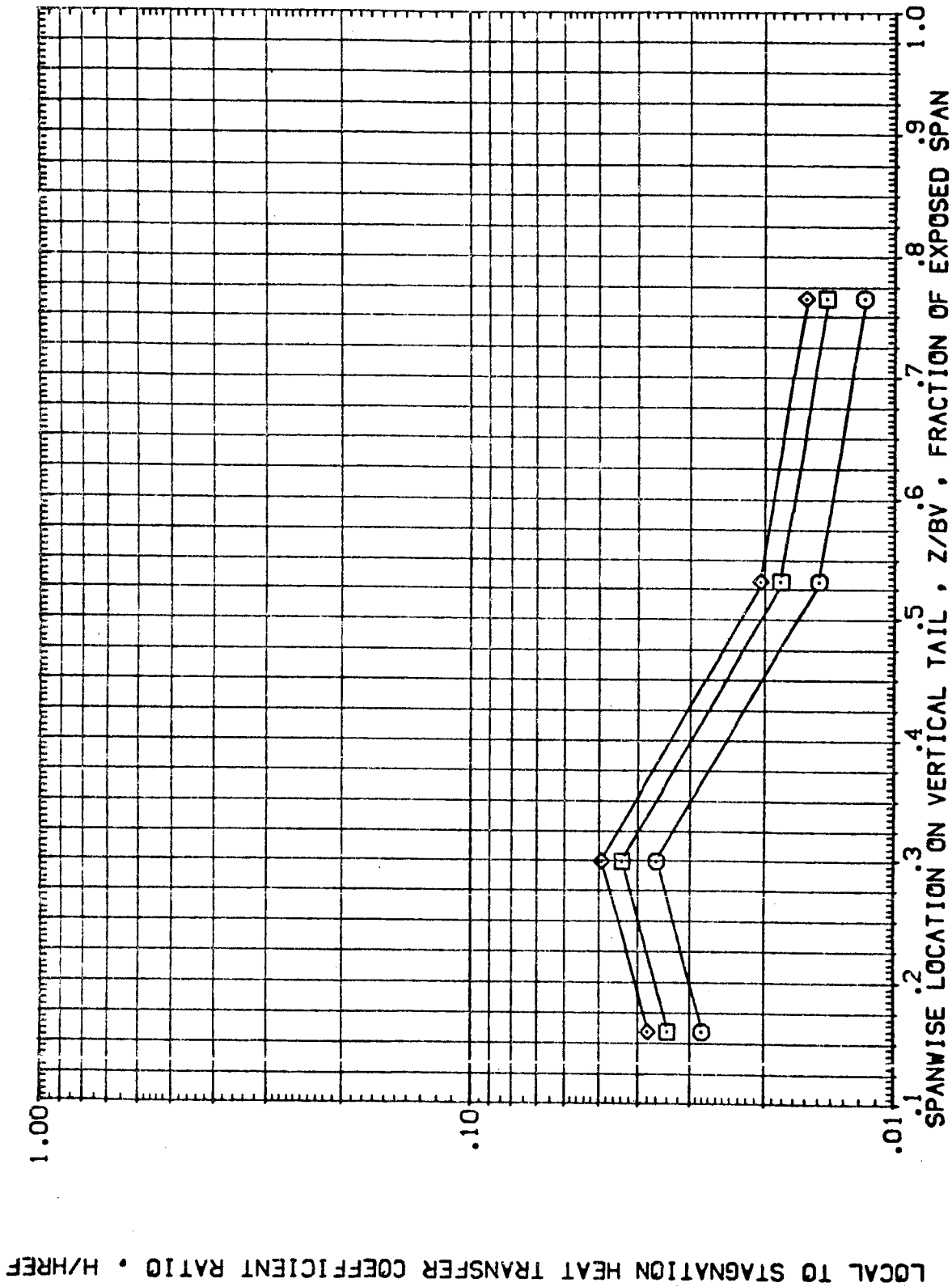


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA R/V/L HAV/HT

(RE1V04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 1.000

(AE1V04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .900

(BE1V04) ARC 3.5-178 IH3 0+T+S (TRIPS) .000 .000 5.000 .850

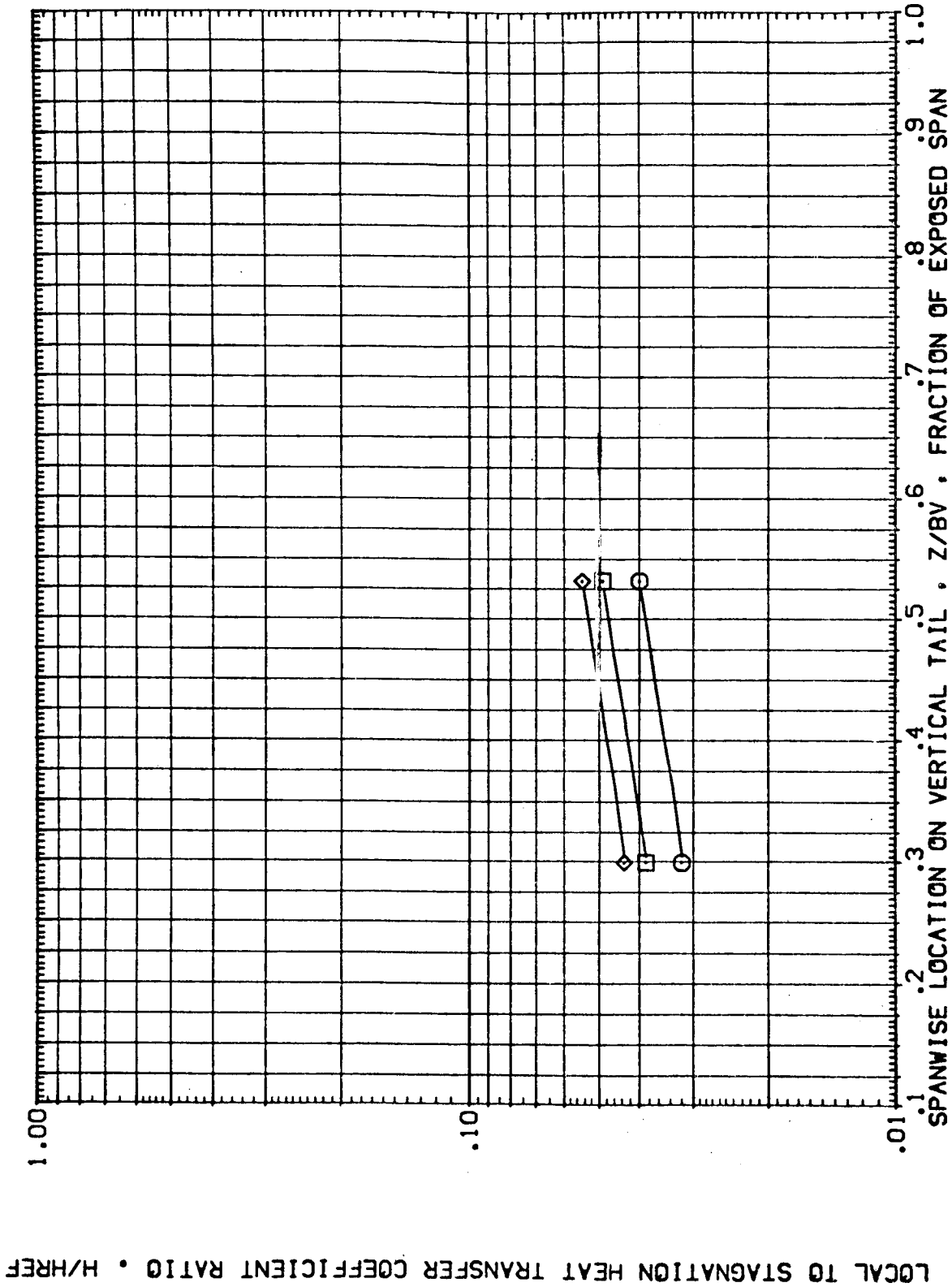


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (AE|VOS) □ ARC 3.5-178 IH3 0+T+S
 (BE|VOS) ◇ ARC 3.5-178 IH3 0+T+S

ALPHA BETA R/V/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

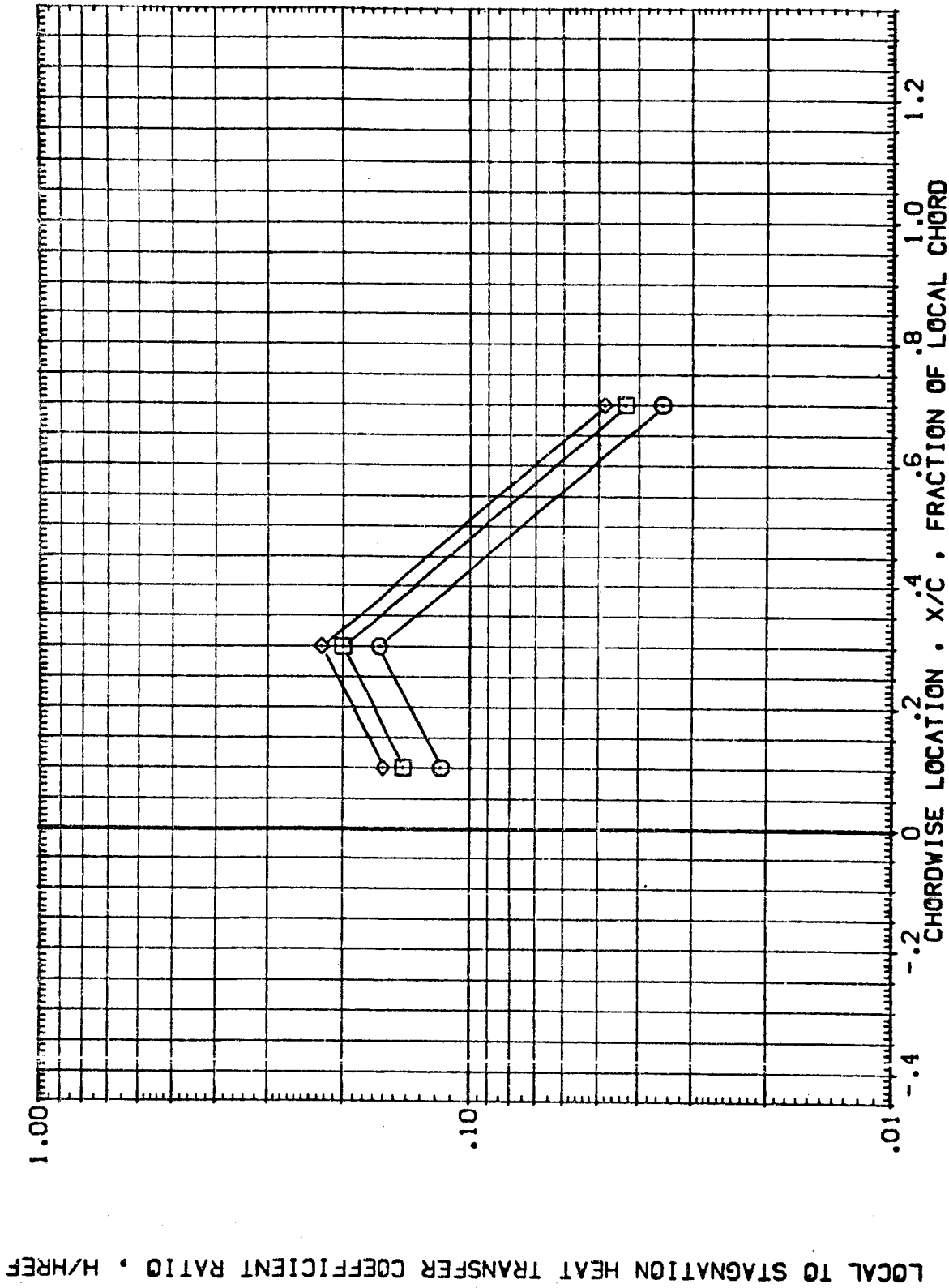


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .159

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (AE IVOS) ARC 3.5-178 IH3 0+T+S
 (BE IVOS) ARC 3.5-178 IH3 0+T+S

ALPHA BETA R/V/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, H/HREF

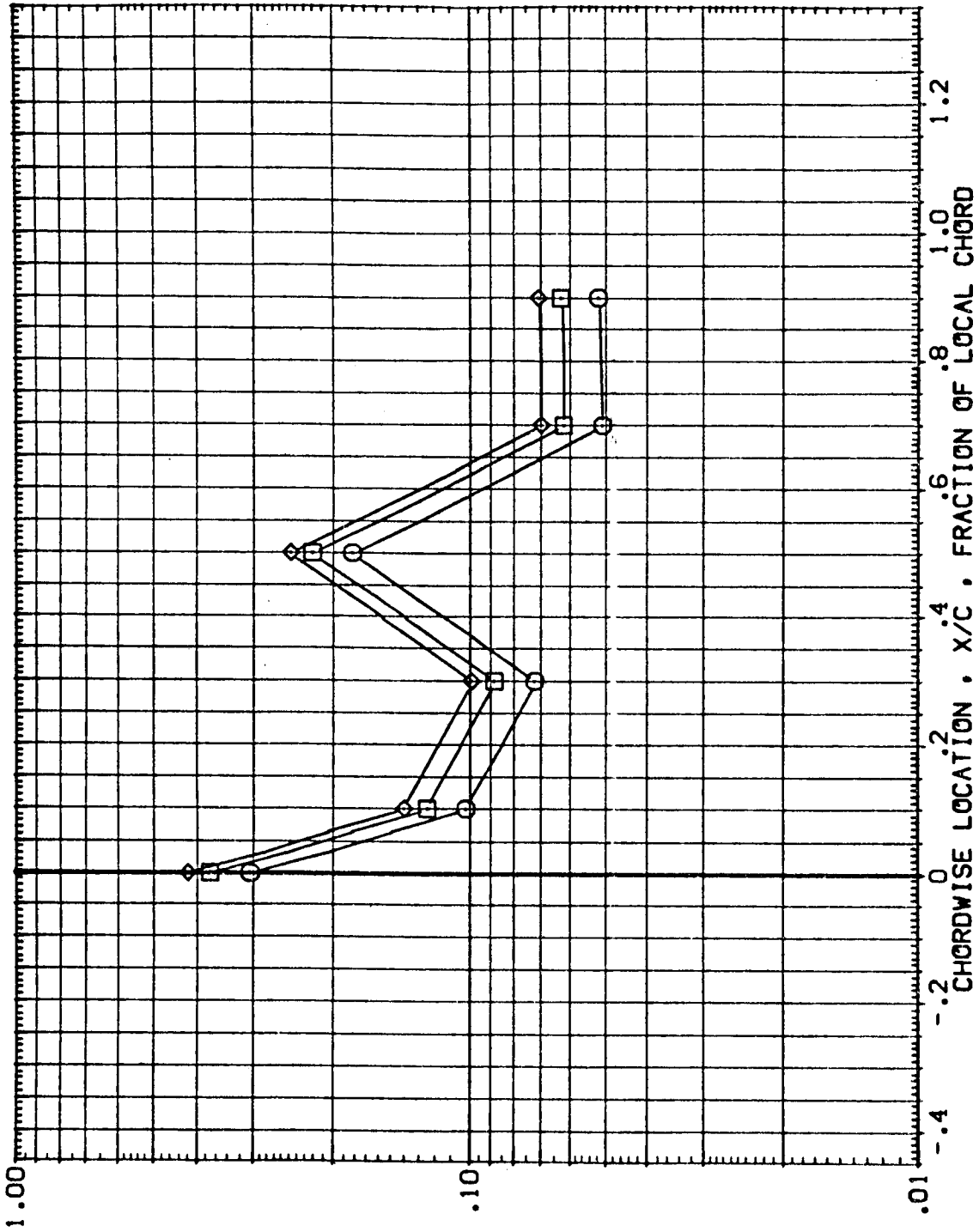


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RVAL HAV/HI

(RE|VOS) ARC 3.5-178 IH3 0+I+S .000 -5.000 5.000 1.000

(AE|VOS) ARC 3.5-178 IH3 0+I+S .000 -5.000 5.000 .900

(BE|VOS) ARC 3.5-178 IH3 0+I+S .000 -5.000 5.000 .850

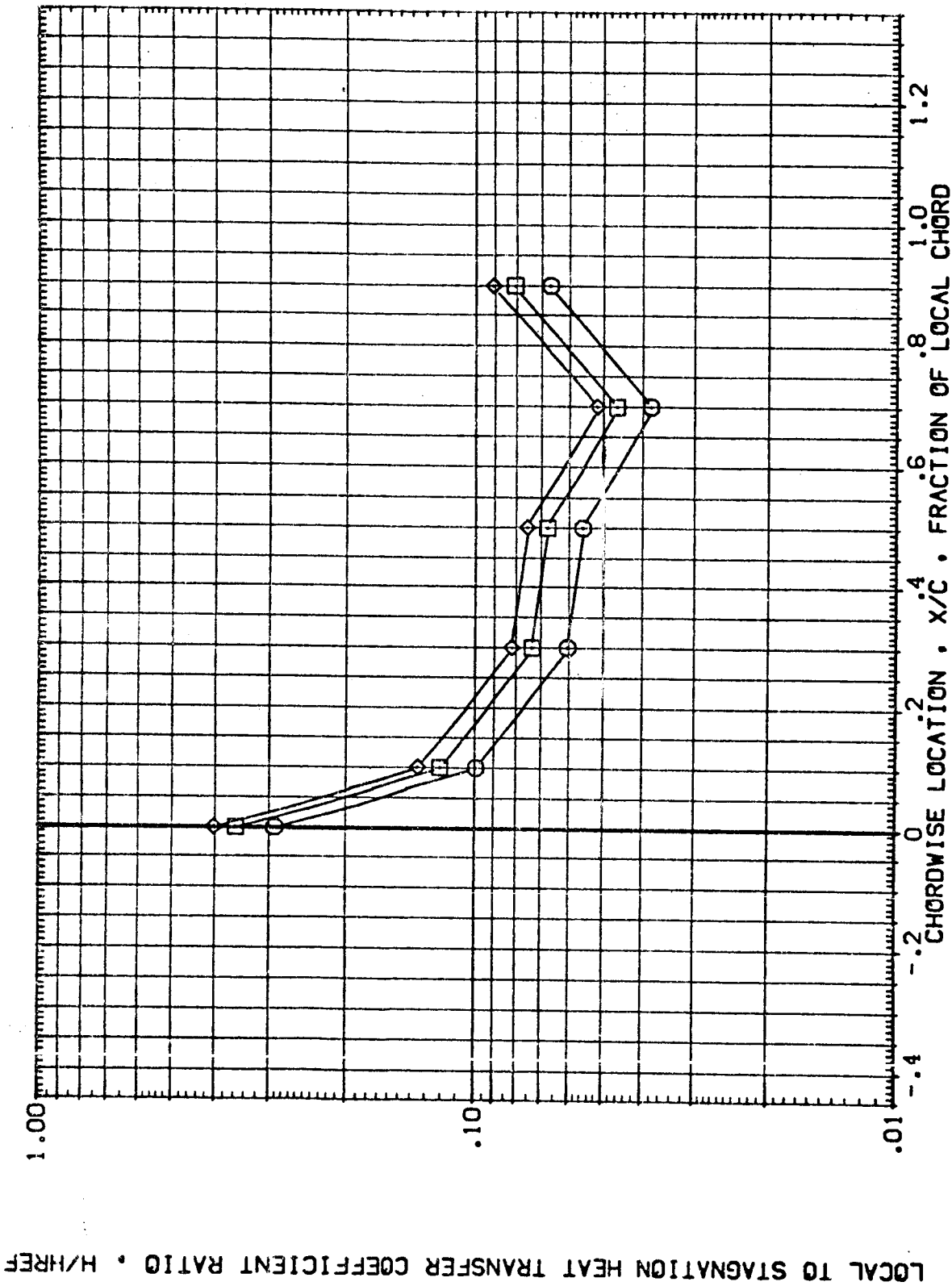


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .532

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|V05) ARC 3.5-178 IH3 0+T+S
 (AE|V05) ARC 3.5-178 IH3 0+T+S
 (BE|V05) ARC 3.5-178 IH3 0+T+S

VERTICAL VERTICAL VERTICAL
 ALPHA BETA RVL HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

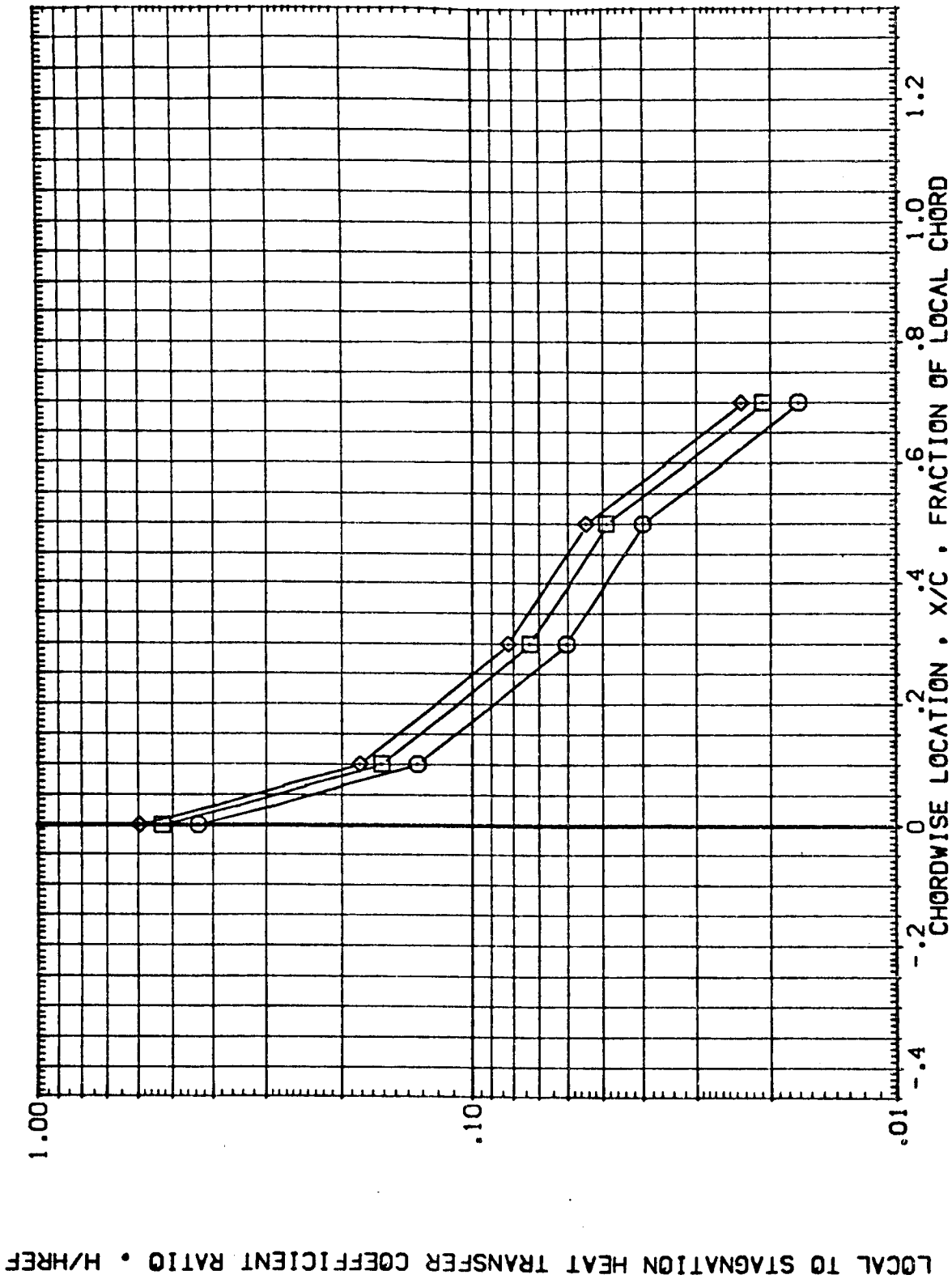
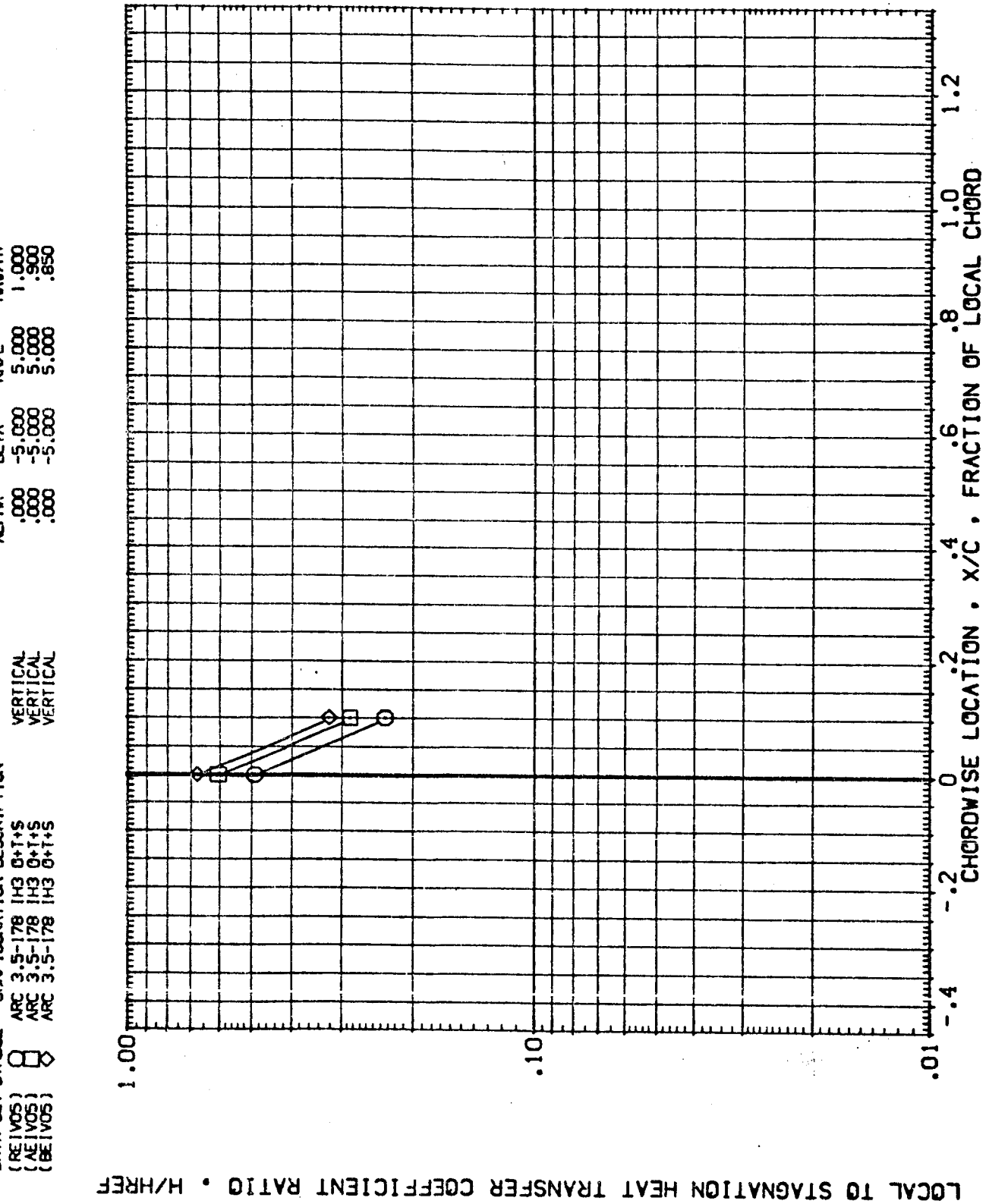


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .765

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIVOS) ARC 3.5-178 IH3 0+1+S
 (AEIVOS) ARC 3.5-178 IH3 0+1+S
 (BEIVOS) ARC 3.5-178 IH3 0+1+S

ALPHA BETA RVL HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850



LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .905

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIVOS) ARC 3.5-178 IH3 0+T+S
 (AEIVOS) ARC 3.5-178 IH3 0+T+S
 (BEIVOS) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RVL HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

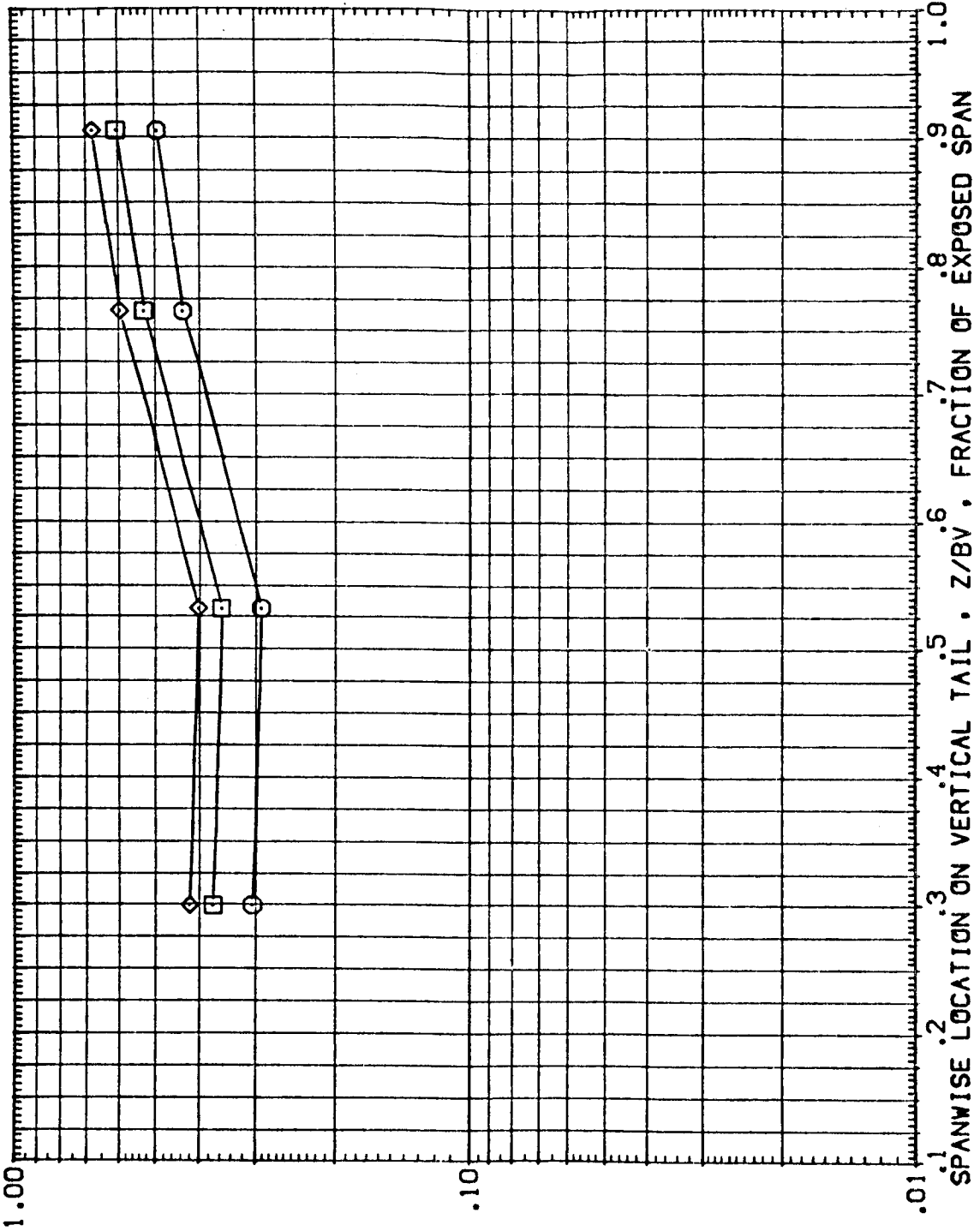


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

{REIVOS} ARC 3.5-178 IH3 0+1+S .000 -5.000 5.000 1.000

{AEIVOS} ARC 3.5-178 IH3 0+1+S .000 -5.000 5.000 .900

{BEIVOS} ARC 3.5-178 IH3 0+1+S .000 -5.000 5.000 .850

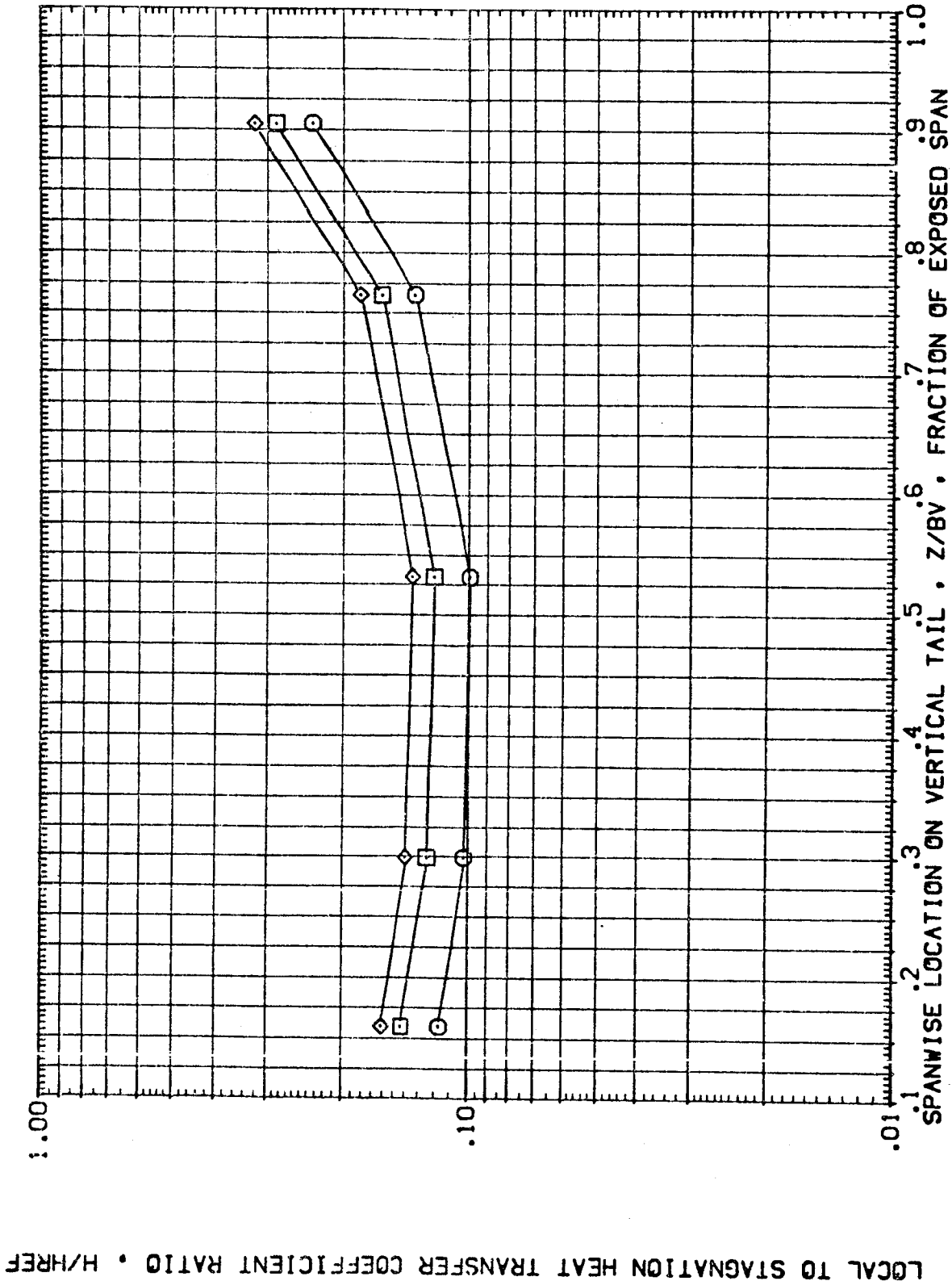


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|V05) ARC 3.5-178 IH3 0+T+S
 (AE|V05) ARC 3.5-178 IH3 0+T+S
 (BE|V05) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RNL HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

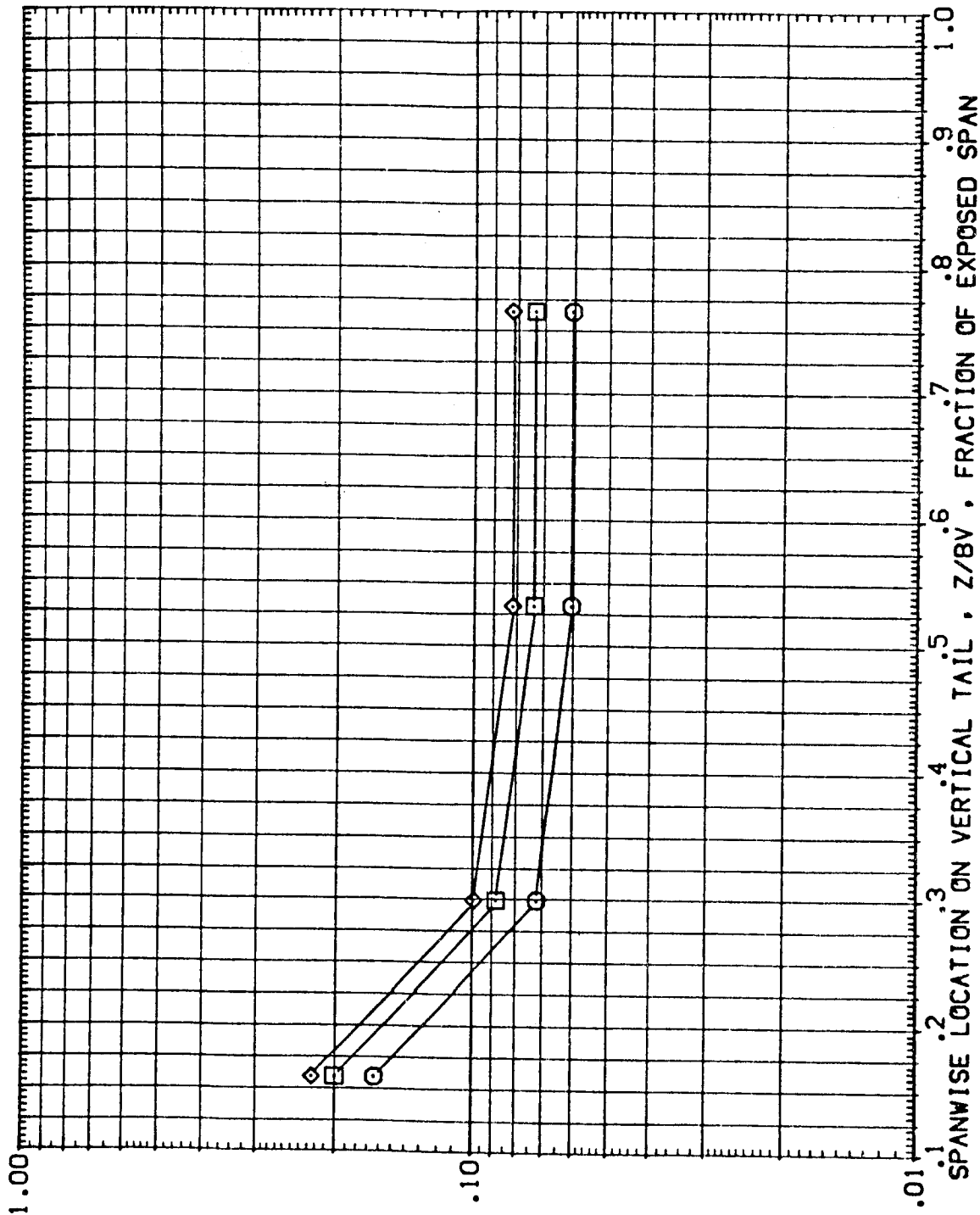


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .300



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIVOS) ARC 3.5-178 IH3 0+T+S
 (AEIVOS) ARC 3.5-178 IH3 0+T+S
 (BEIVOS) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

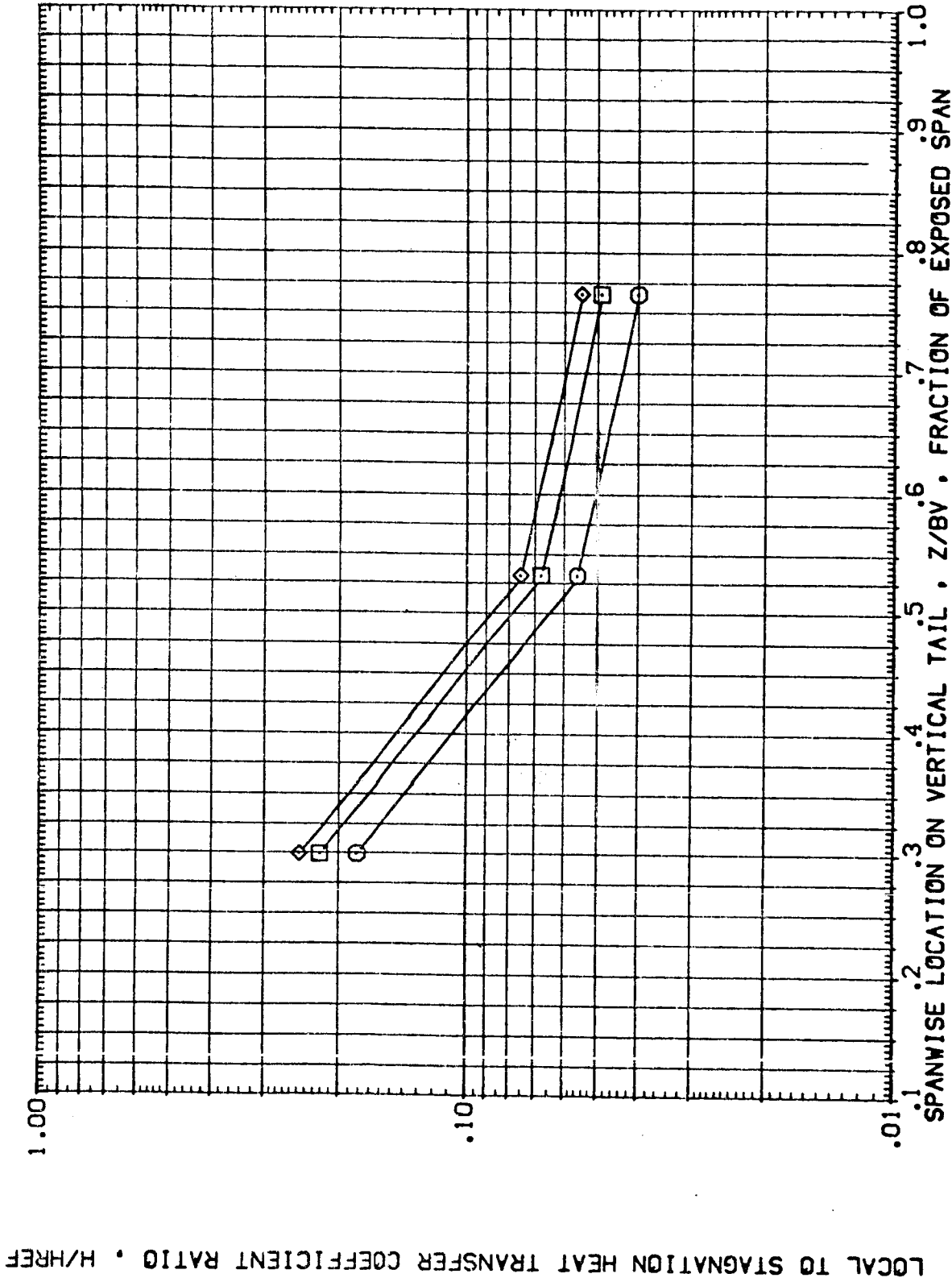


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BE1V05) ARC 3.5-178 IH3 0+T+S
 (AE1V05) ARC 3.5-178 IH3 0+T+S
 (BE1V05) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .900
 .000 -5.000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

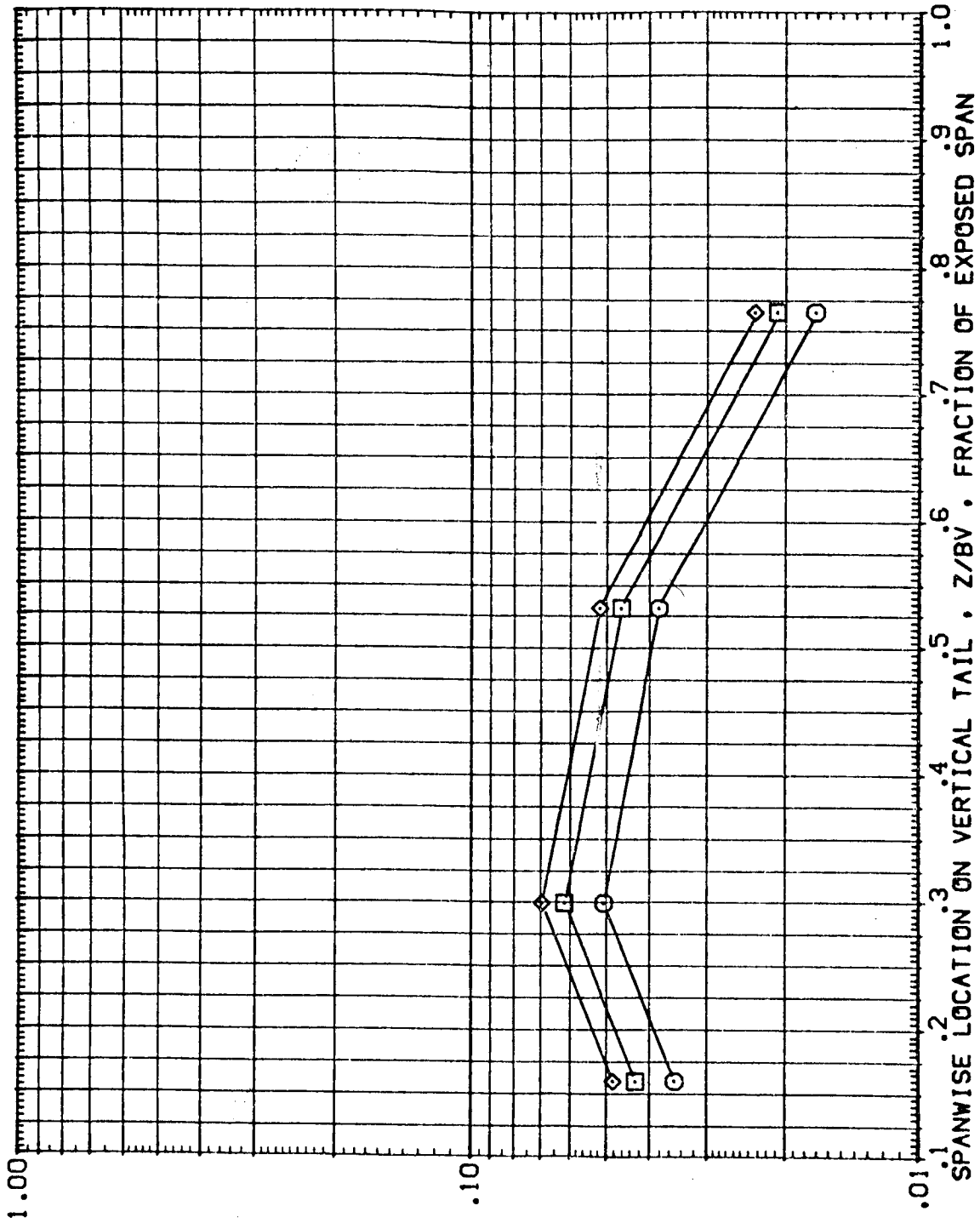


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIVOS) ○ ARC 3.5-178 IH3 0+T+S
 (AEIVOS) □ ARC 3.5-178 IH3 0+T+S
 (BEIVOS) ◇ ARC 3.5-178 IH3 0+T+S

ALPHA BETA RNLV HAV/HT
 .000 -5.000 5.000 1.000
 .000 -5.000 5.000 .500
 .000 -5.000 5.000 .650

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO, h/h_{REF}

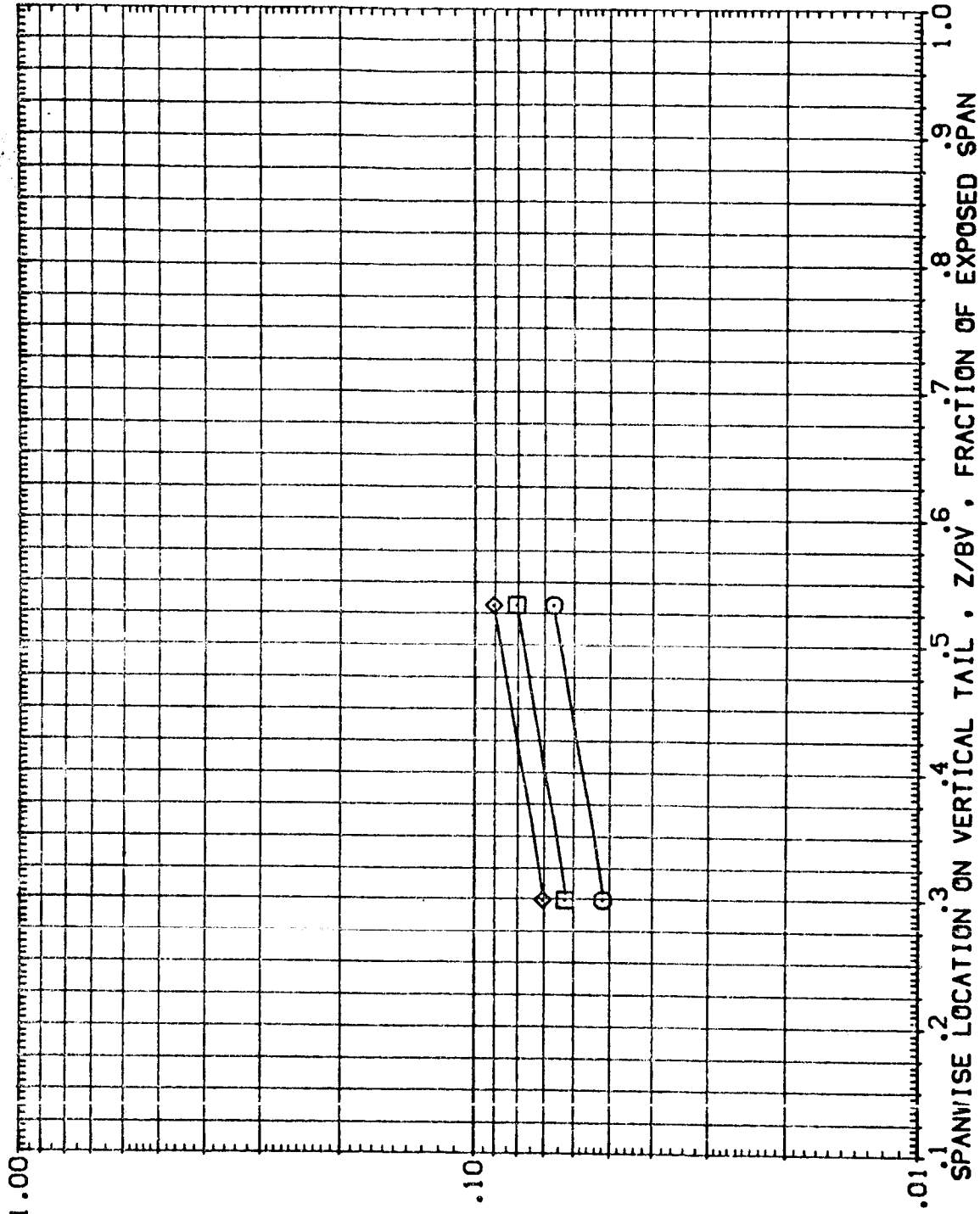


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV19) ARC 3.5-178 IH3 0+1+S
 (AEIV19) ARC 3.5-178 IH3 0+1+S
 (BEIV19) ARC 3.5-178 IH3 0+1+S

ALPHA BETA RNU/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

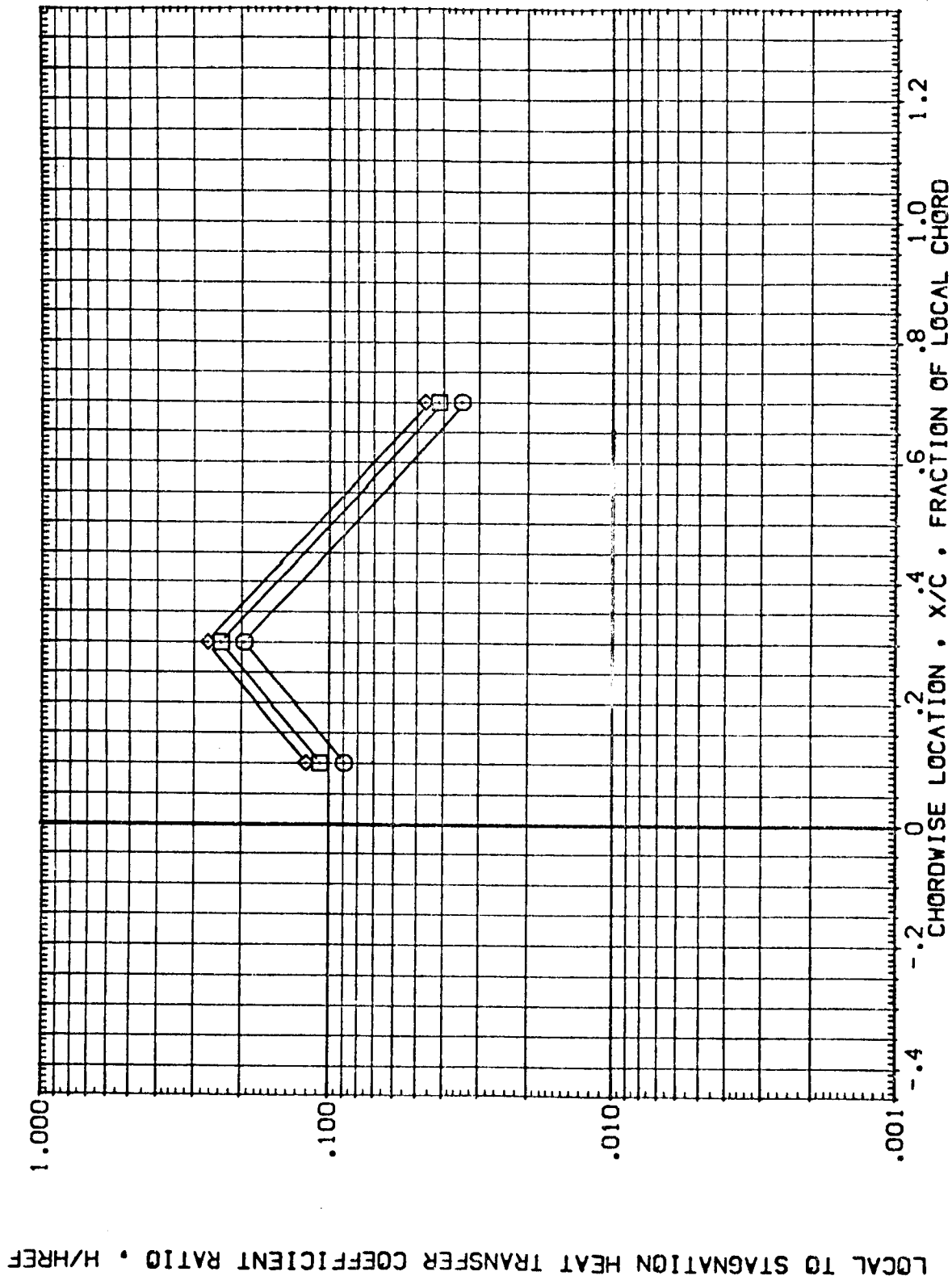


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .159

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV19) ARC 3.5-178 IH3 0+1+S
 (AEIV19) ARC 3.5-178 IH3 0+1+S
 (BEIV19) ARC 3.5-178 IH3 0+1+S

VERTICAL VERTICAL VERTICAL
 ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

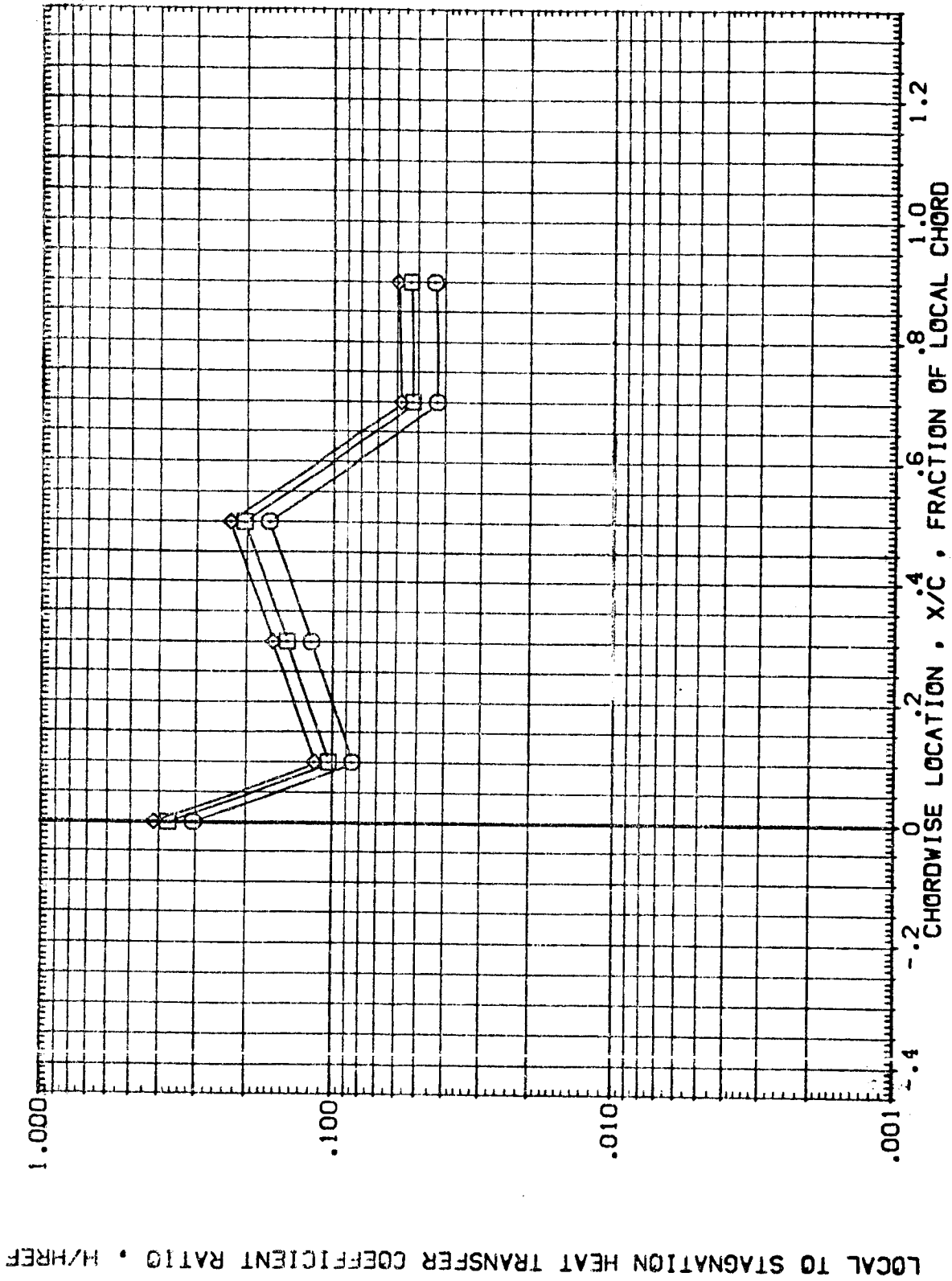


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|V|9) ARC 3.5-178 IH3 0+1+S
 (AE|V|9) ARC 3.5-178 IH3 0+1+S
 (BE|V|9) ARC 3.5-178 IH3 0+1+S

VERTICAL
 VERTICAL
 VERTICAL

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

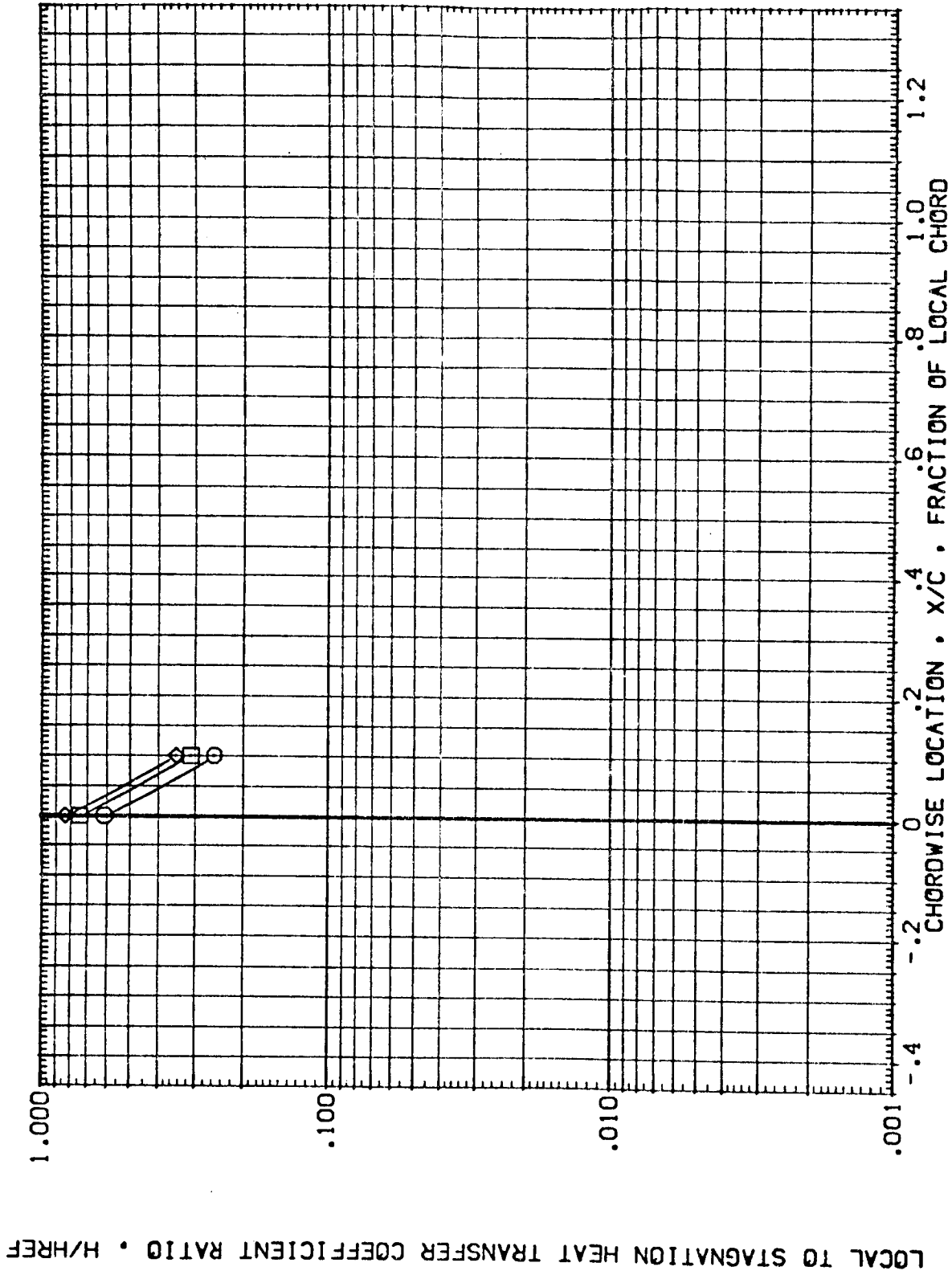


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .905

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIVIS) ARC 3.5-178 IH3 0+1+S
 (AEIVIS) ARC 3.5-178 IH3 0+1+S
 (BEIVIS) ARC 3.5-178 IH3 0+1+S

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .650

VERTICAL
 VERTICAL
 VERTICAL

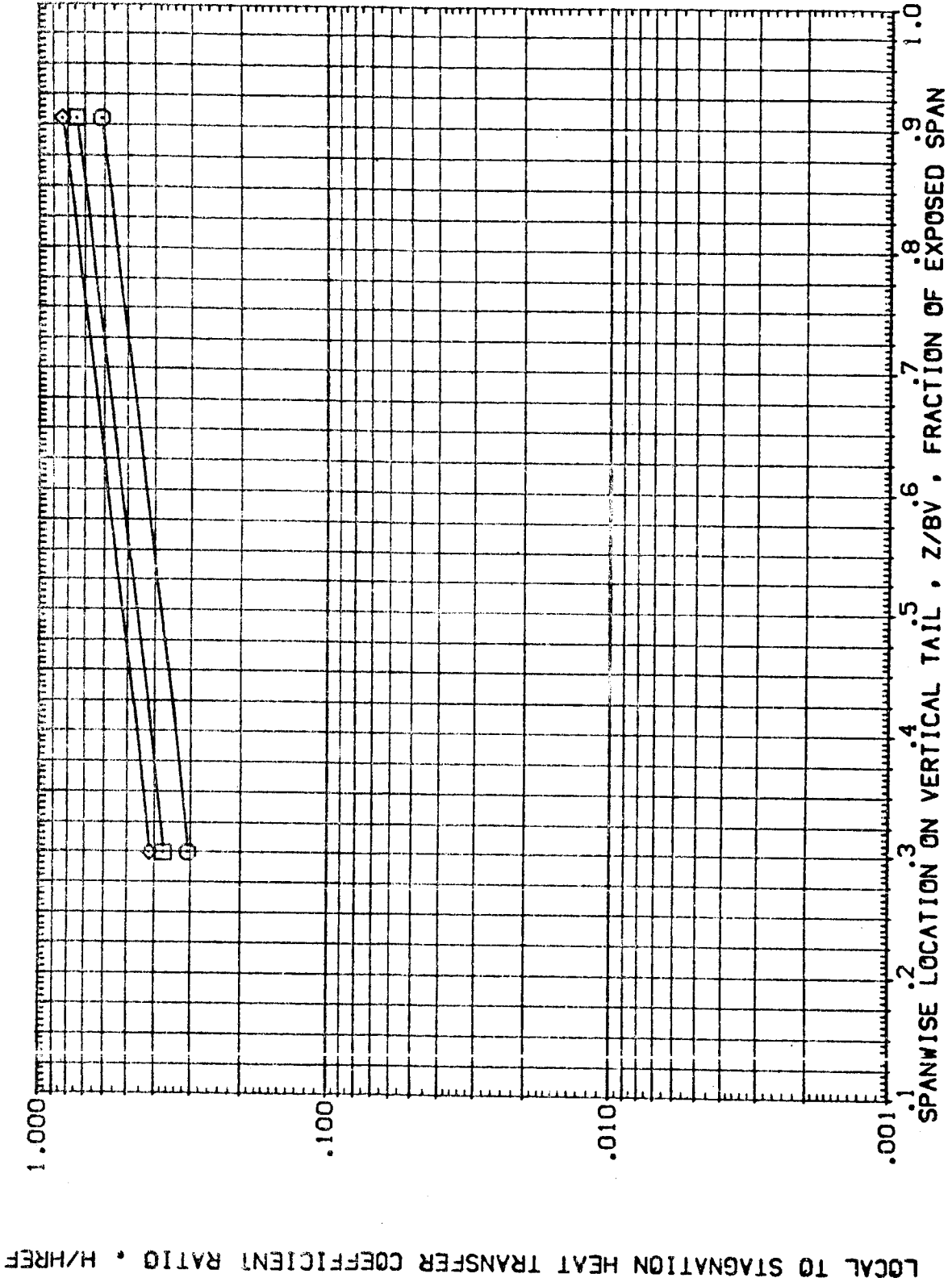


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI19) ARC 3.5-178 IH3 0+T+S
 (AEI19) ARC 3.5-178 IH3 0+T+S
 (BEI19) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RVN HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

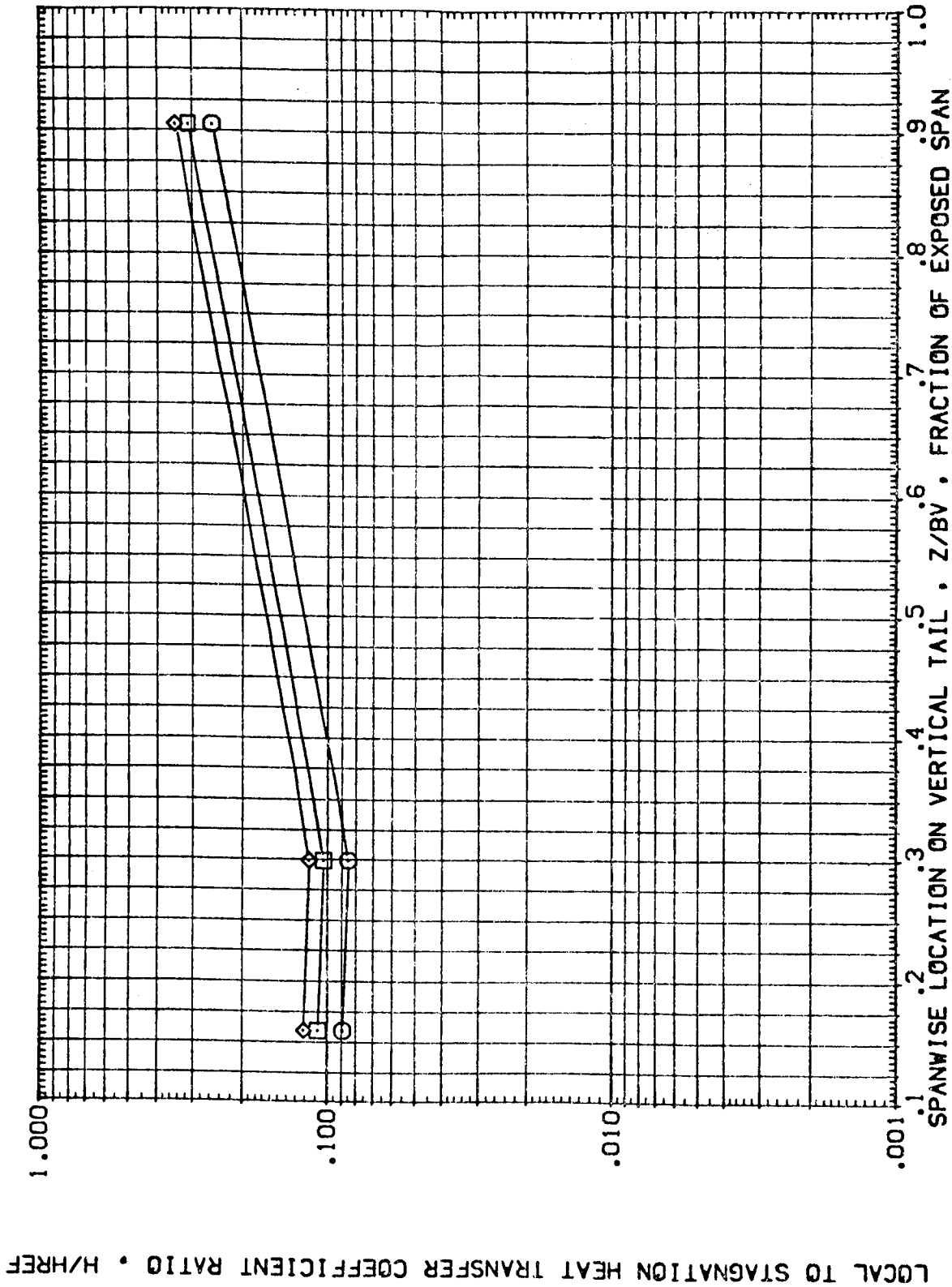


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .100

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|V|9) ARC 3.5-178 IH3 0+T+S
 (AE|V|9) ARC 3.5-178 IH3 0+T+S
 (BE|V|9) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

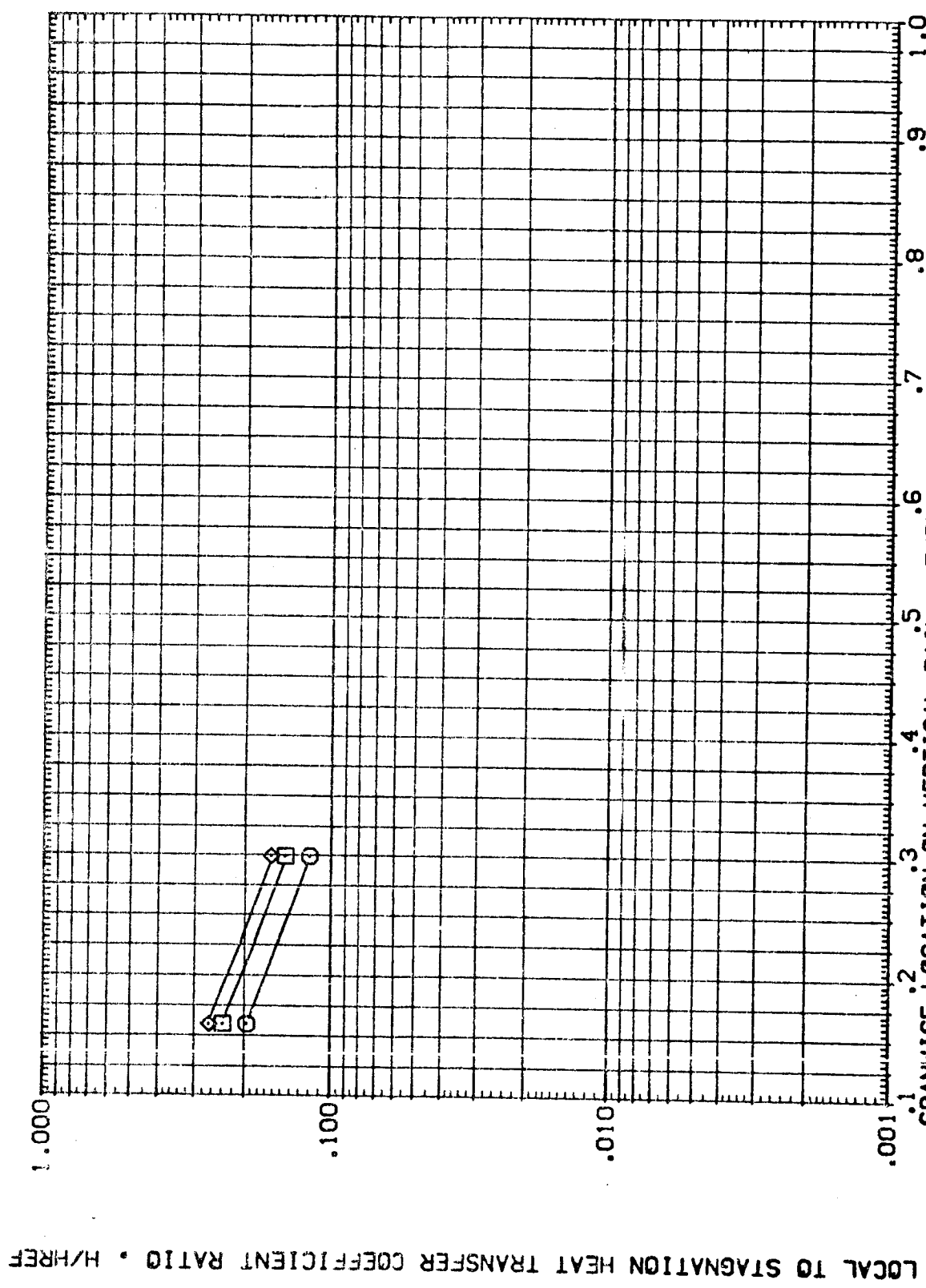


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .300

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BEI19) ARC 3.5-178 IH3 0+T+S
 (AEI19) ARC 3.5-178 IH3 0+T+S
 (BEI19) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RNU/ HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .500
 -5.000 .000 5.000 .650

VERTICAL
 VERTICAL
 VERTICAL

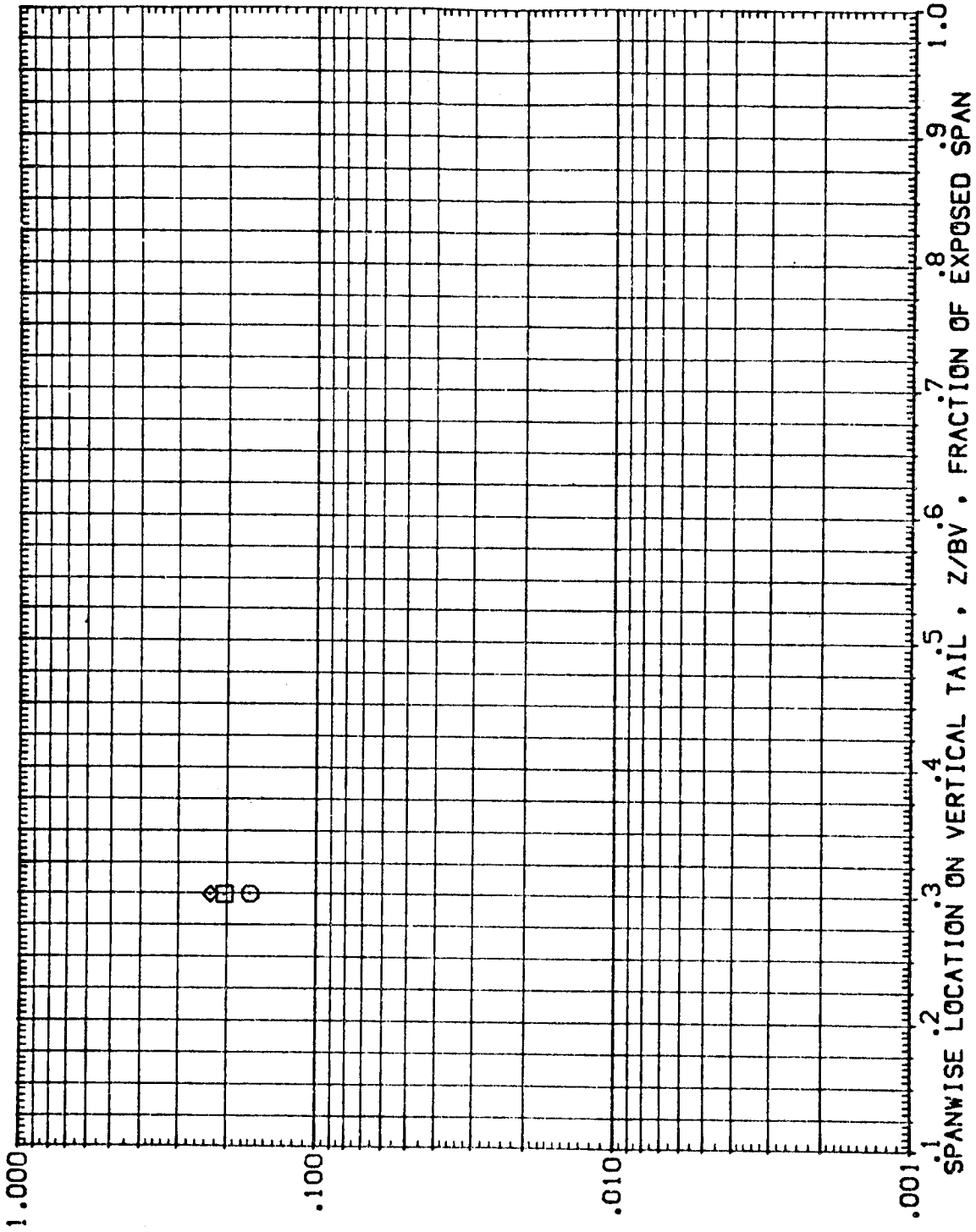


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .500



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REI1V9) ARC 3.5-178 IH3 0+T+S
 (AEI1V9) ARC 3.5-178 IH3 0+T+S
 (BEI1V9) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RNU/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

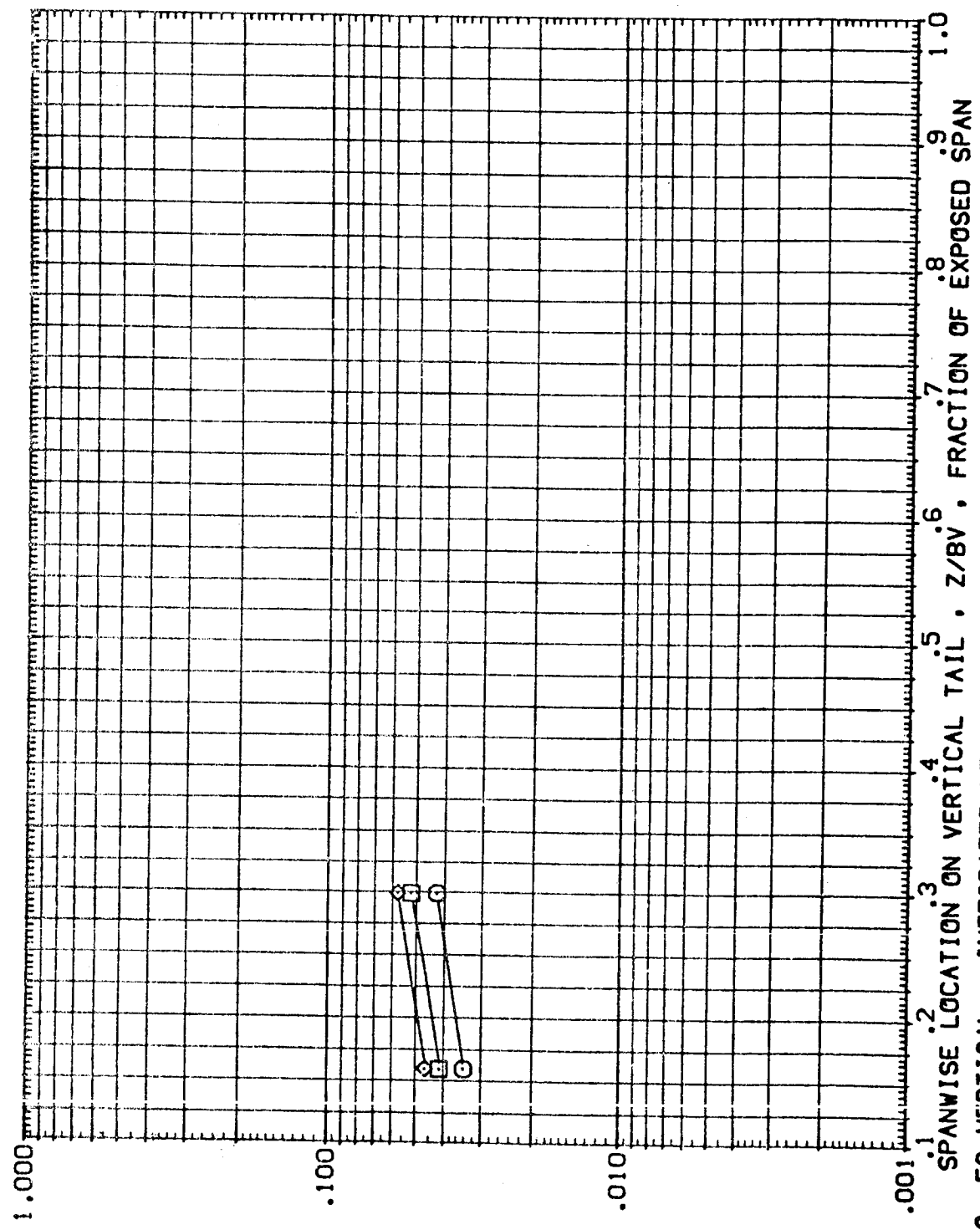


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV19) ARC 3.5-178 IH3 0+T+S
 (AEIV19) □ ARC 3.5-178 IH3 0+T+S
 (BEIV19) ◇ ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAV/HT
 -5.000 .000 5.000 1.000
 -5.000 .000 5.000 .900
 -5.000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

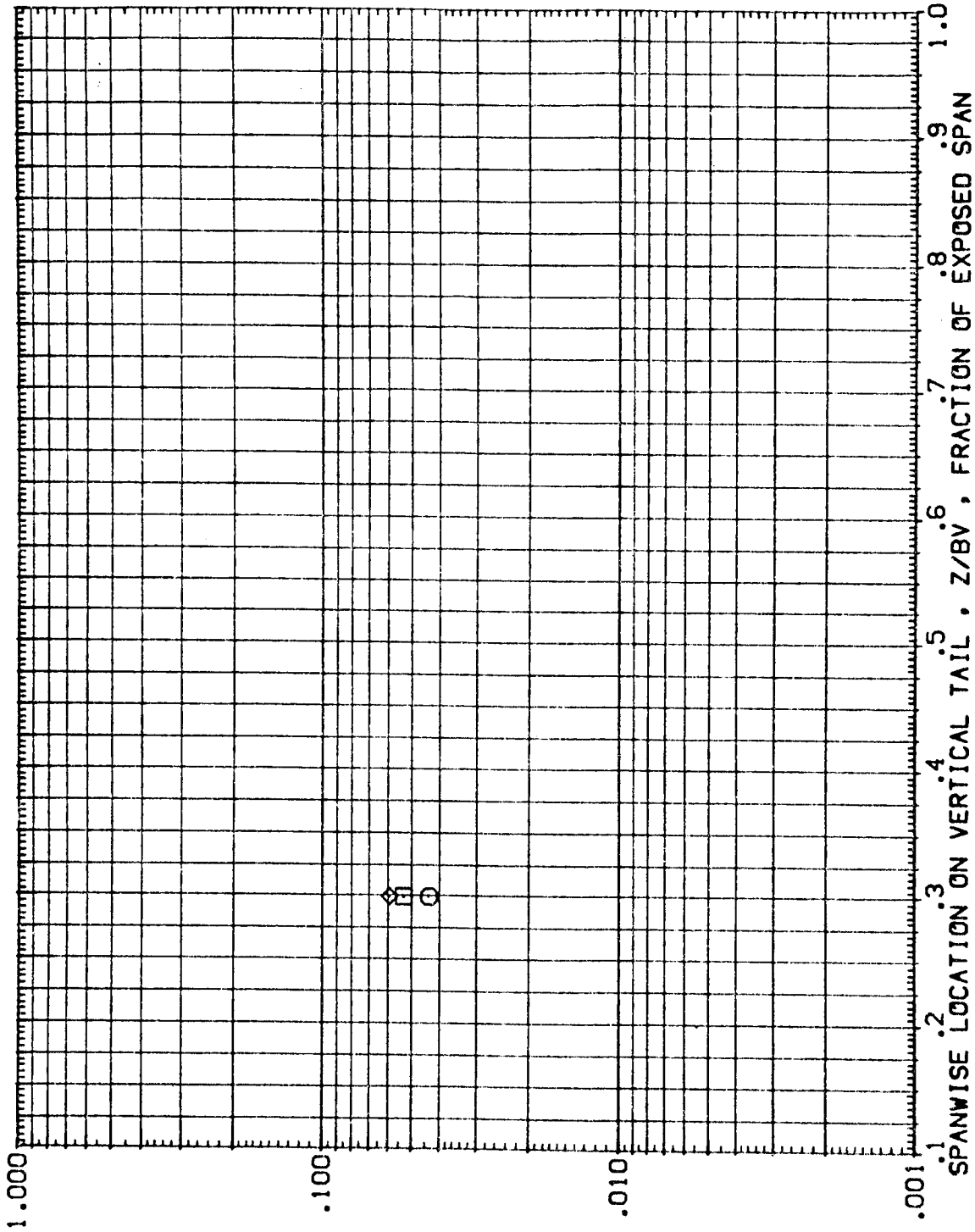


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(REIV20) ARC 3.5-178 IH3 0+T+S

(AEIV20) ARC 3.5-178 IH3 0+T+S

(BEIV20) ARC 3.5-178 IH3 0+T+S

VERTICAL ALPHA BETA RN/L HAW/HT

VERTICAL -3.000 .000 5.000 1.000

VERTICAL -3.000 .000 5.000 .900

VERTICAL -3.000 .000 5.000 .650

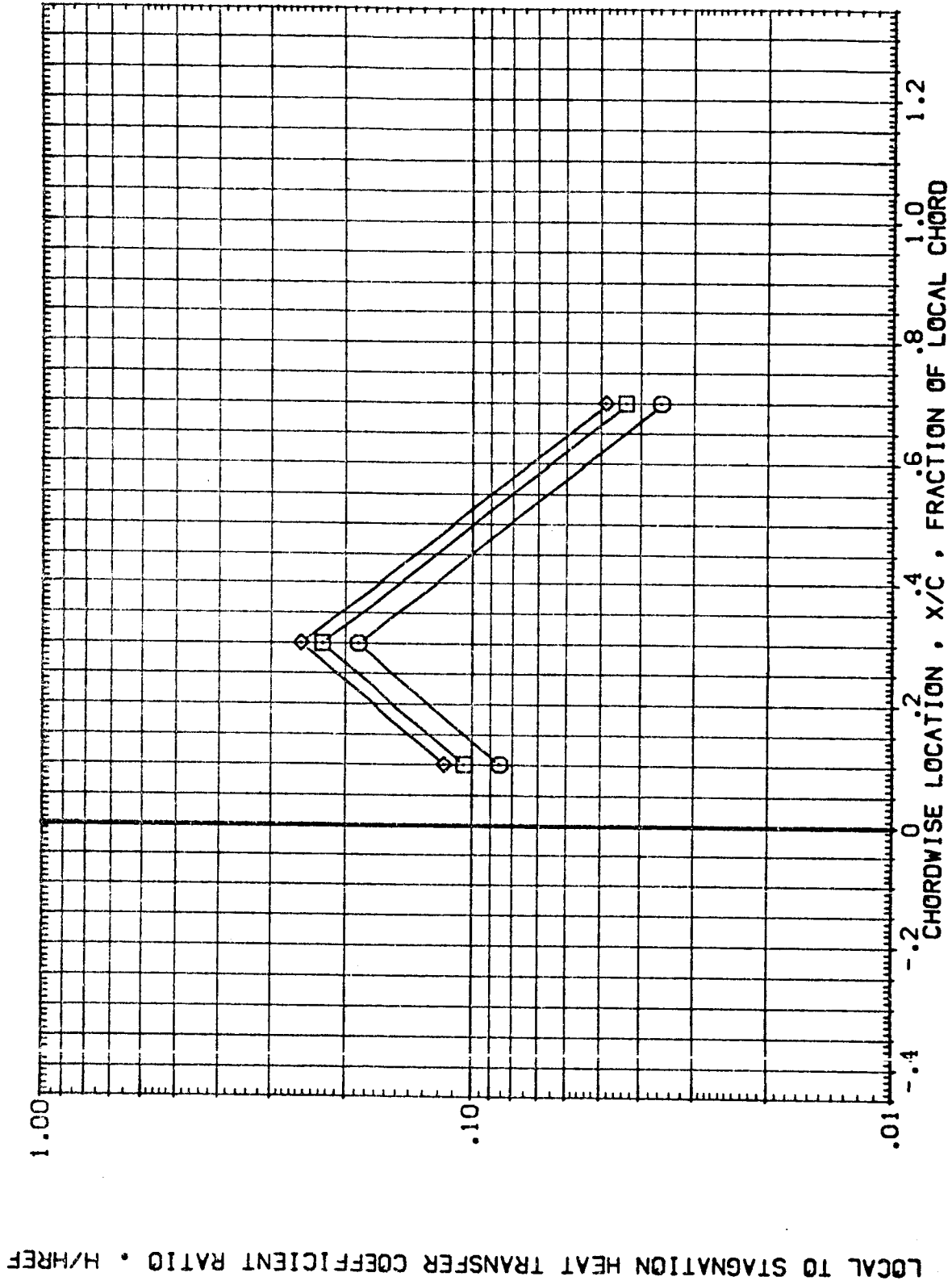


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .159

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE|V20) ARC 3.5-178 IH3 0+T+S
 (AE|V20) ARC 3.5-178 IH3 0+T+S
 (BE|V20) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HAW/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

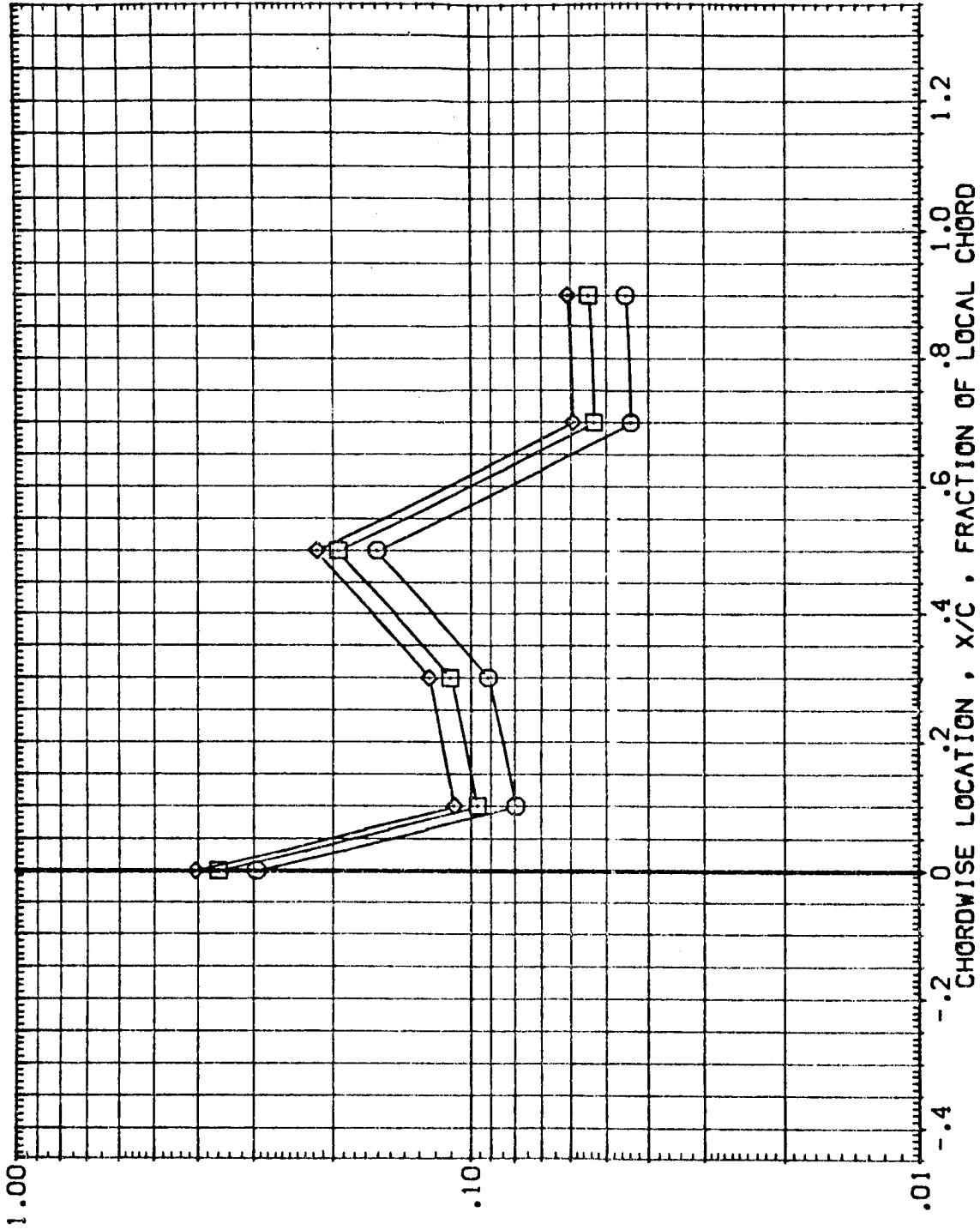


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RE1V20) ARC 3.5-178 IH3 0+1+S

(AE1V20) ARC 3.5-178 IH3 0+1+S

(BE1V20) ARC 3.5-178 IH3 0+1+S

VERTICAL

VERTICAL

VERTICAL

ALPHA BETA RV/L HAV/HT

-3.000 .000 5.000 1.000

-3.000 .000 5.000 .900

-3.000 .000 5.000 .850

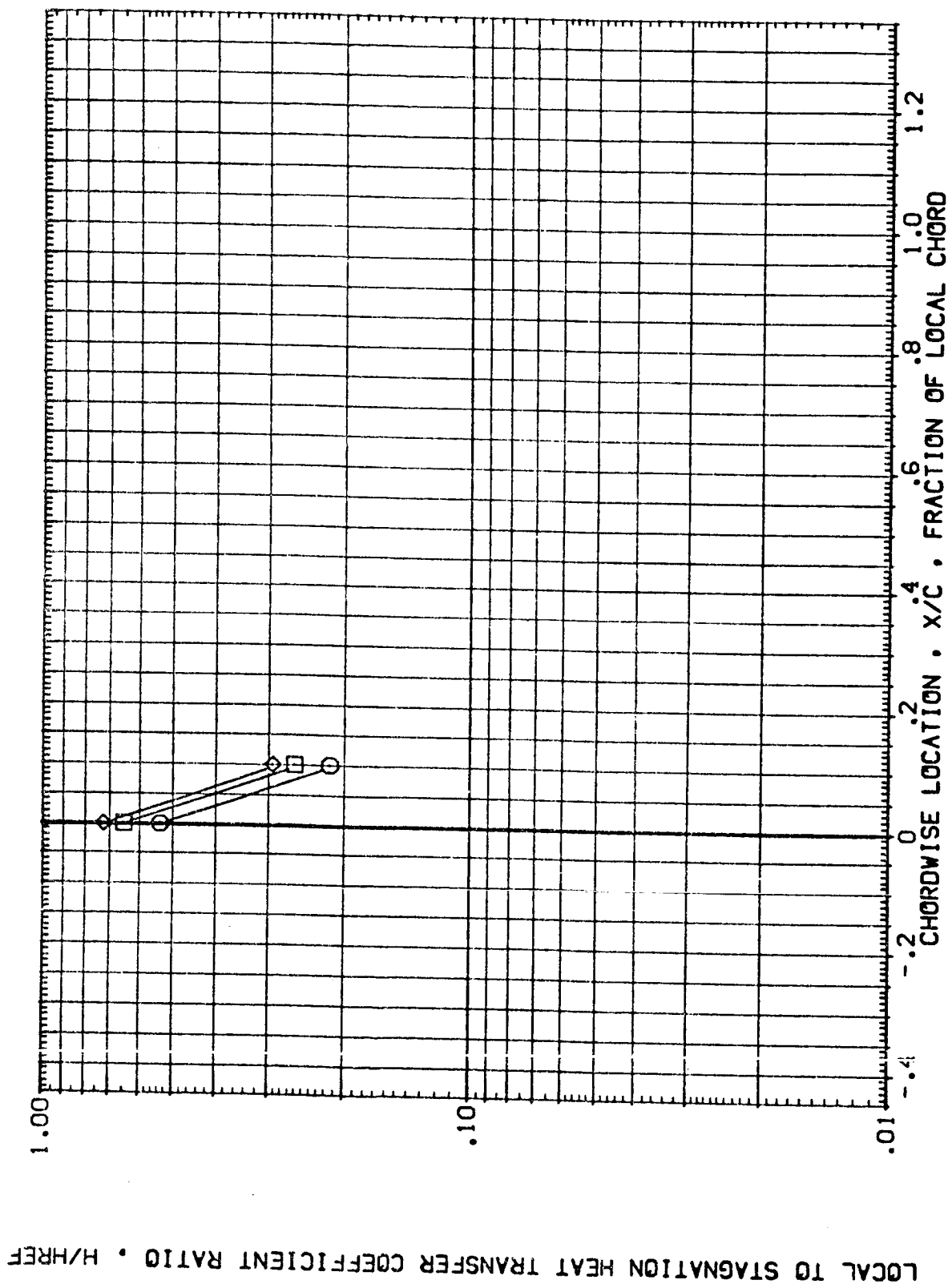


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 Z/BV = .905

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REIV20) ARC 3.5-178 IH3 0+T+S
 (AEIV20) ARC 3.5-178 IH3 0+T+S
 (BEIV20) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RVAL HAV/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

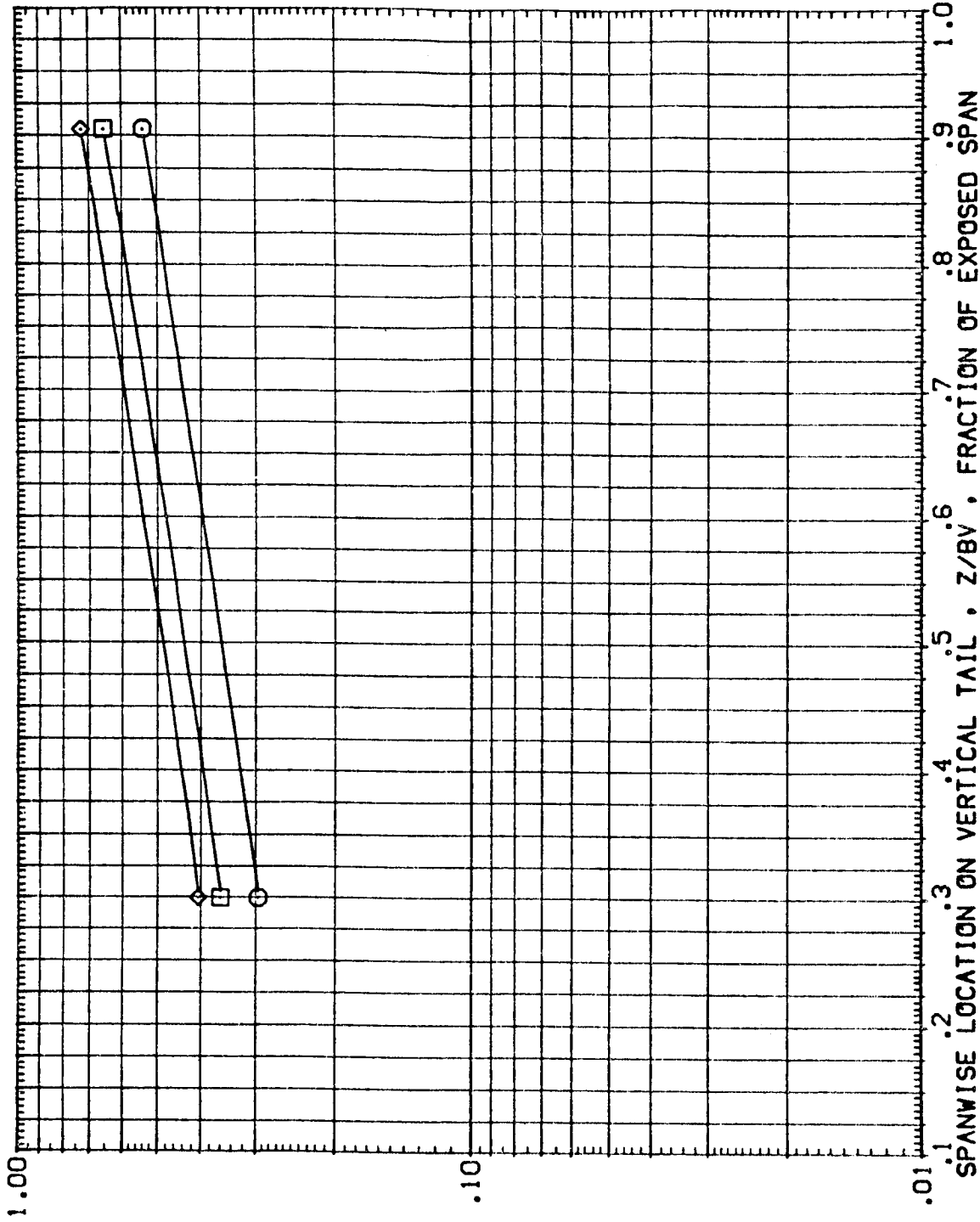


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA BETA RV/L HAV/HT

(REIV20) ARC 3.5-178 IH3 0+T+S -3.000 .000 5.000 1.000

(AEIV20) ARC 3.5-178 IH3 0+T+S -3.000 .000 5.000 .900

(BEIV20) ARC 3.5-178 IH3 0+T+S -3.000 .000 5.000 .850

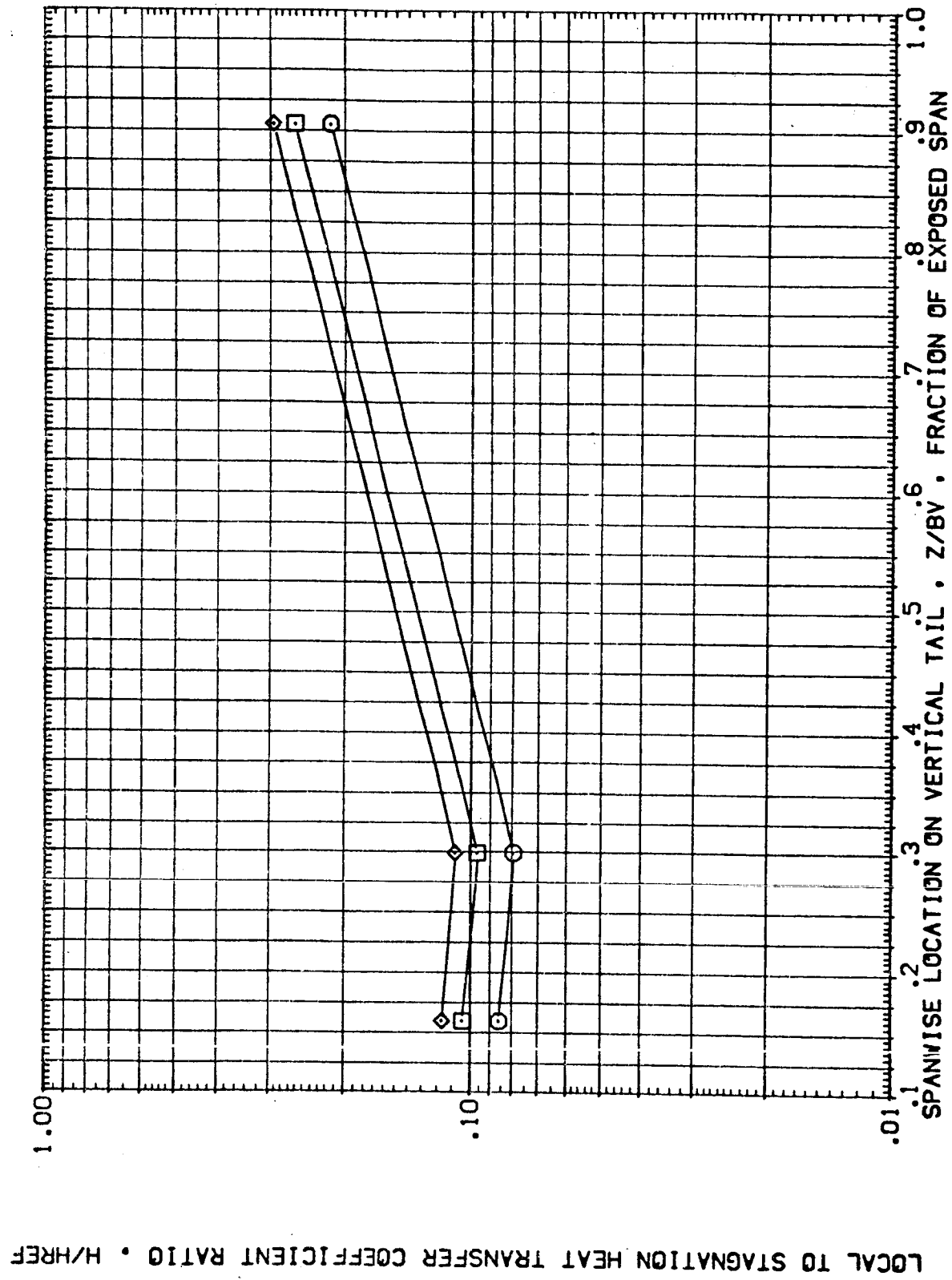


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .100

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(REIV20)	ARC 3.5-178 IH3 0+1+S	-3.000	.000	5.000	1.000
(AEIV20)	ARC 3.5-178 IH3 0+1+S	-3.000	.000	5.000	.900
(BEIV20)	ARC 3.5-178 IH3 0+1+S	-3.000	.000	5.000	.850

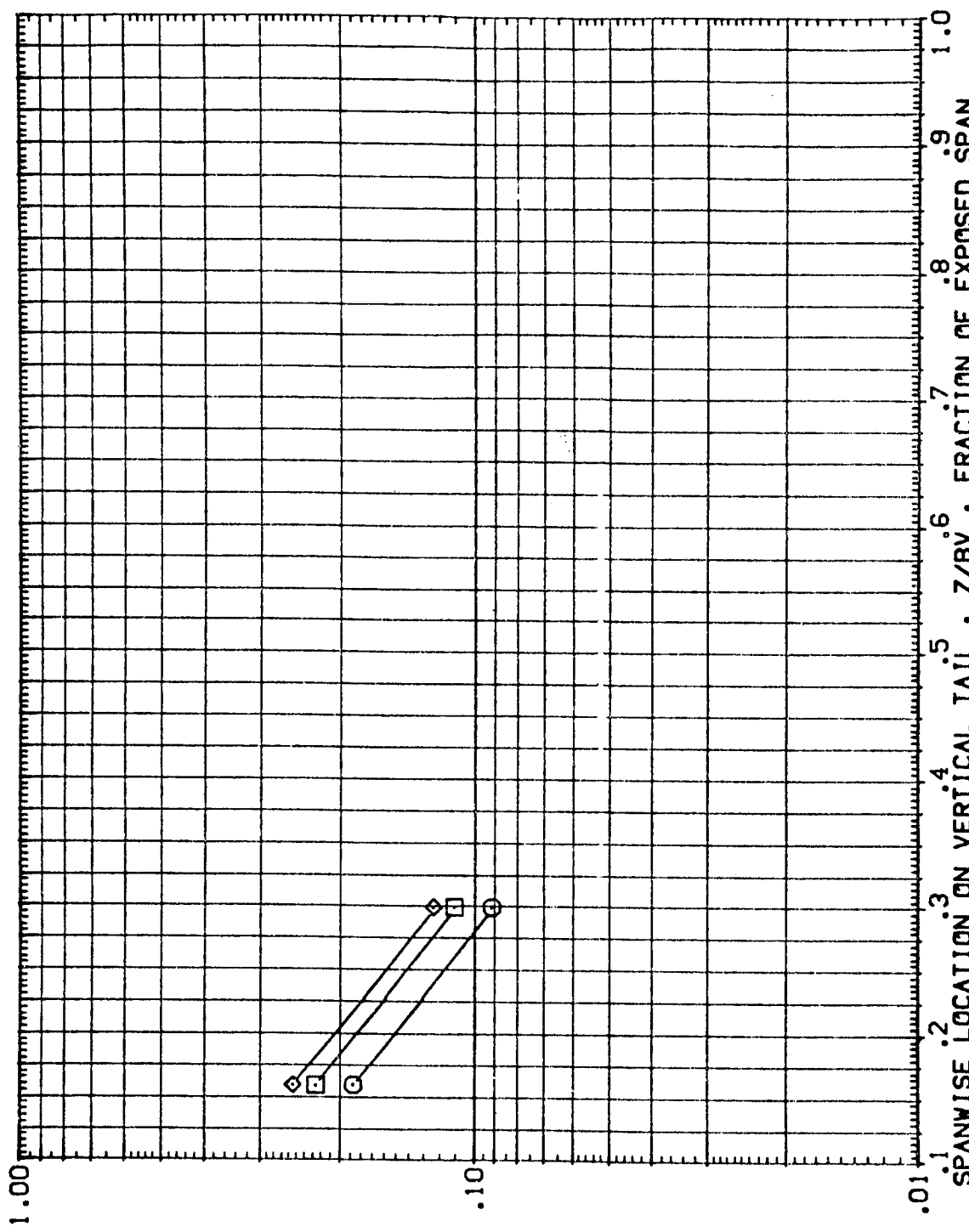




FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BEIV20) (AEIV20) (BEIV20)   ARC 3.5-178 IH3 0+T+S
 ARC 3.5-178 IH3 0+T+S
 ARC 3.5-178 IH3 0+T+S

ALPHA BETA RVAL HAV/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF

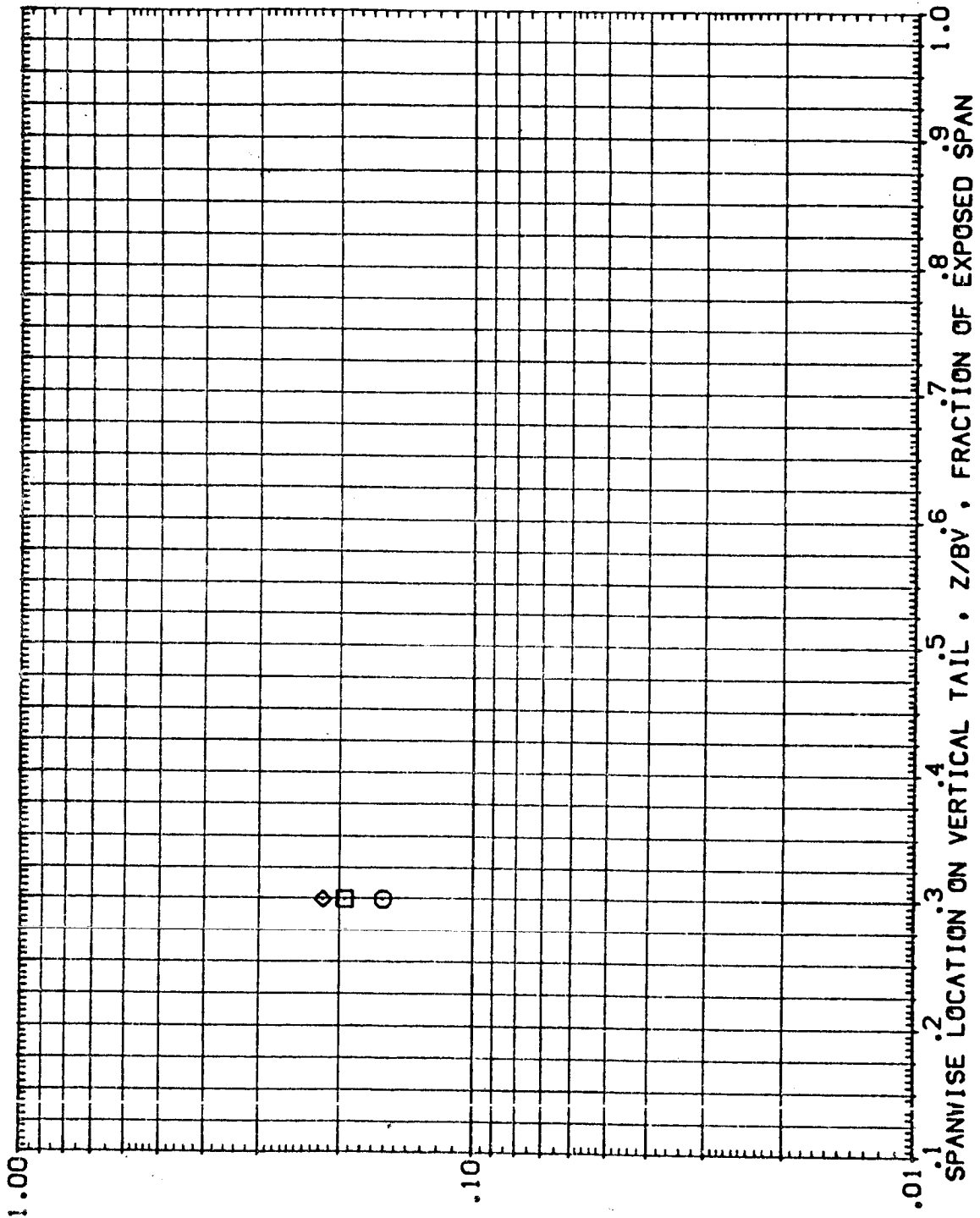


FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .500

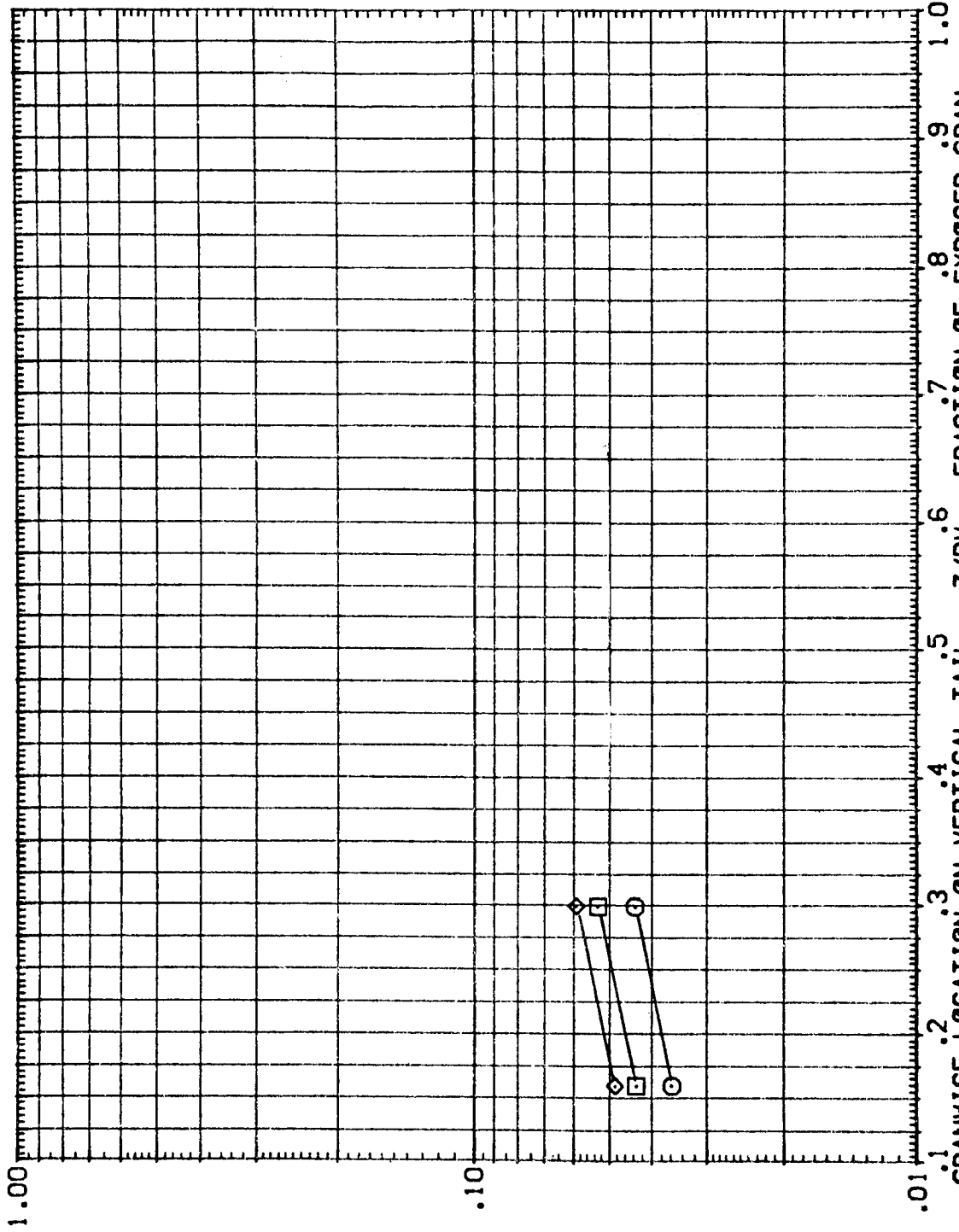
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(REIV20) ARC 3.5-178 IHG 0+T+S
 (AEIV20) ARC 3.5-178 IHG 0+T+S
 (BEIV20) ARC 3.5-178 IHG 0+T+S

VERTICAL
 VERTICAL
 VERTICAL

ALPHA BETA RVL HAV/HT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



SPANWISE LOCATION ON VERTICAL TAIL • Z/BV • FRACTION OF EXPOSED SPAN

FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

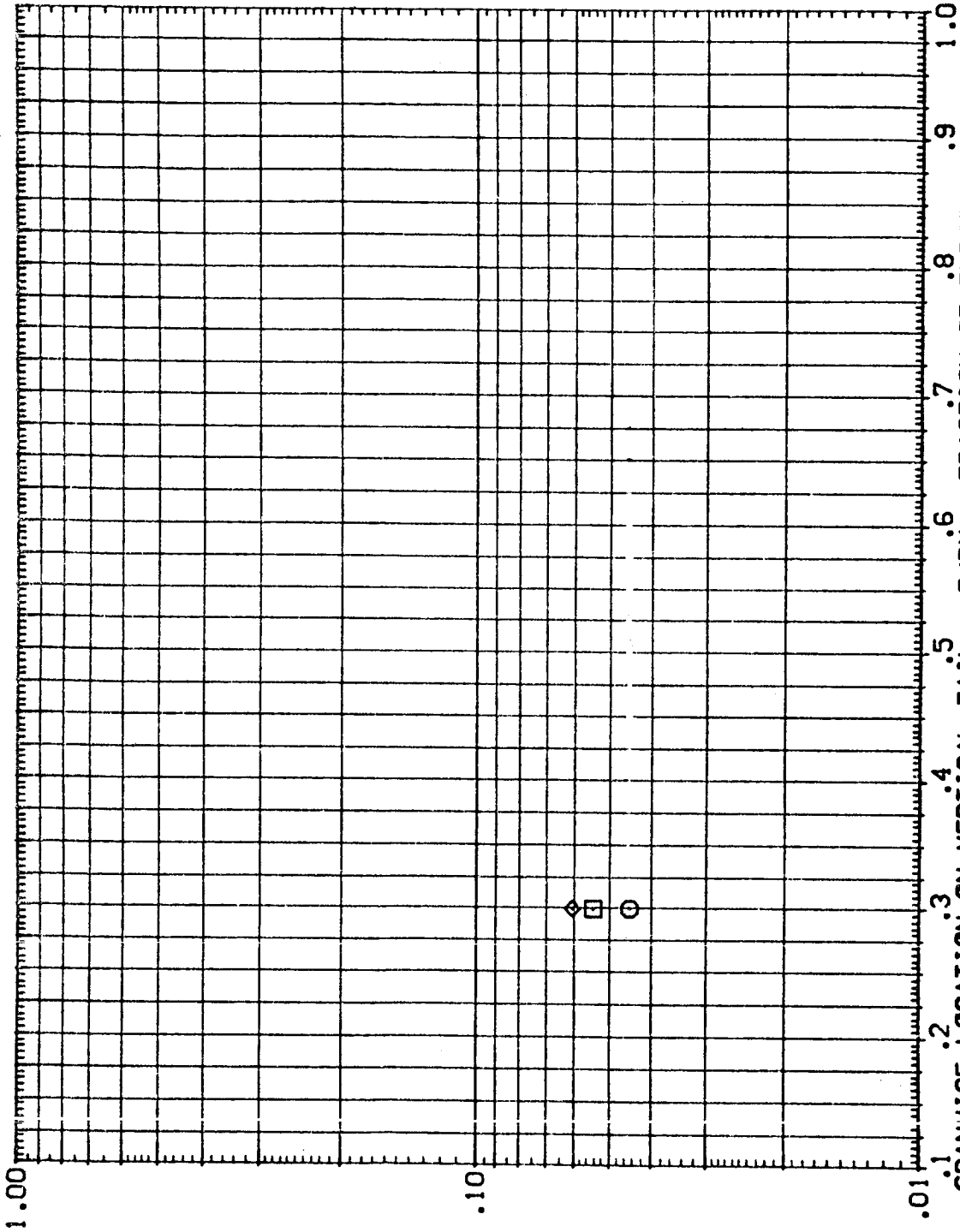
MACH = 5.300 X/C = .700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BE1V20) ARC 3.5-178 IH3 0+T+S
 (AE1V20) ARC 3.5-178 IH3 0+T+S
 (BE1V20) ARC 3.5-178 IH3 0+T+S

ALPHA BETA RV/L HW/HIT
 -3.000 .000 5.000 1.000
 -3.000 .000 5.000 .900
 -3.000 .000 5.000 .850

VERTICAL
 VERTICAL
 VERTICAL

LOCAL TO STAGNATION HEAT TRANSFER COEFFICIENT RATIO • H/HREF



SPANWISE LOCATION ON VERTICAL TAIL, Z/BV, FRACTION OF EXPOSED SPAN

FIG. 53 VERTICAL - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/C = .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(EE1V06)	ARC 3.5-178 IH3 0+T+S
(EE1V07)	ARC 3.5-178 IH3 0+T+S
(EE1V08)	ARC 3.5-178 IH3 0+T+S (TRIPS)
(EE1V09)	ARC 3.5-178 IH3 0+T+S (TRIPS)

ALPHA	BETA	RM/L	HAV/HT
.000	.000	1.500	.900
.000	.000	5.000	.900
.000	.000	1.500	.900
.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

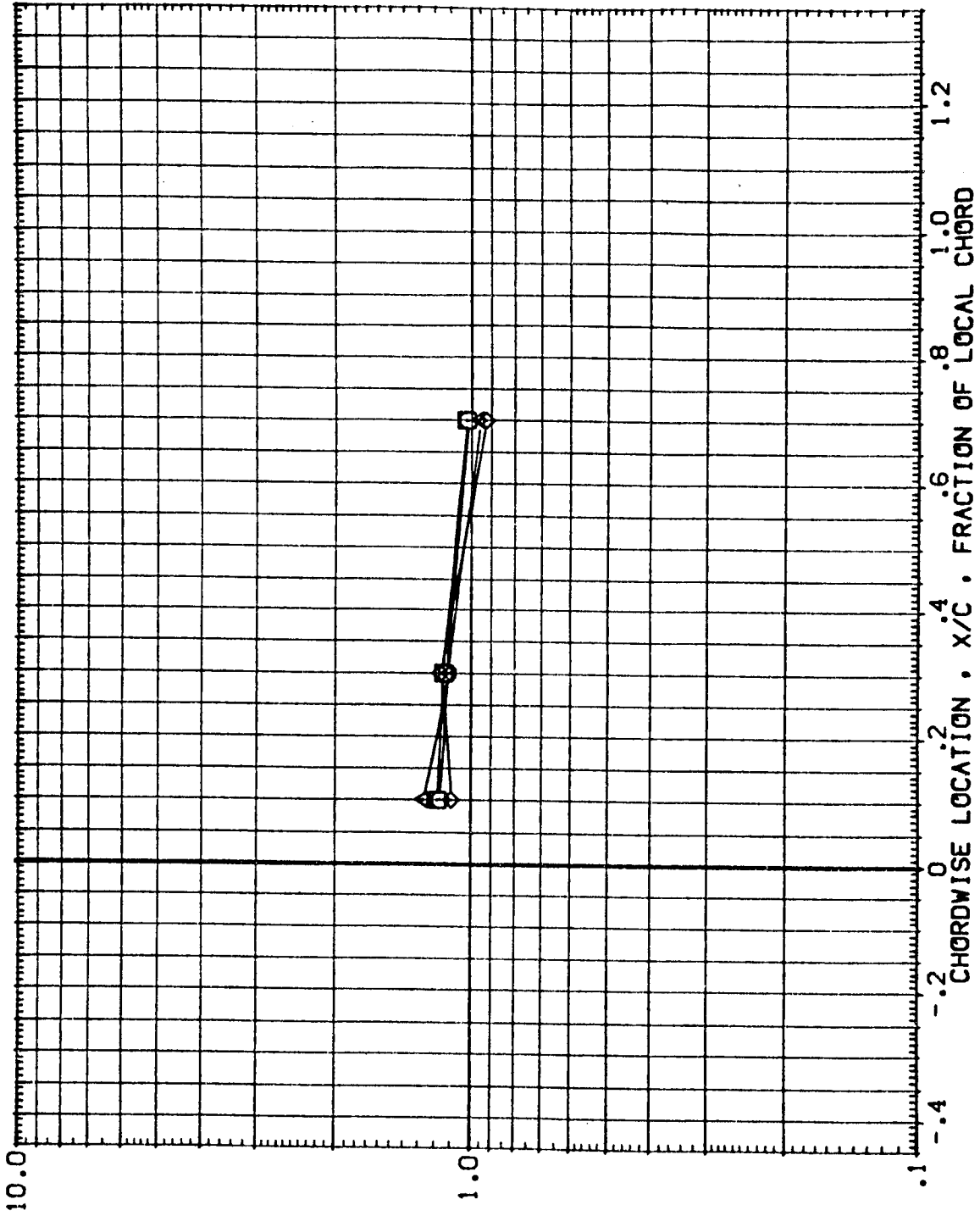


FIG. 54 VERTICAL - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 Z/BV = .159

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(EE1V06)	ARC 3.5-178 IH3 0+T+S	.000	.000	1.500	.900
(EE1V07)	ARC 3.5-178 IH3 0+T+S	.000	.000	5.000	.900
(EE1V08)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(EE1V09)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

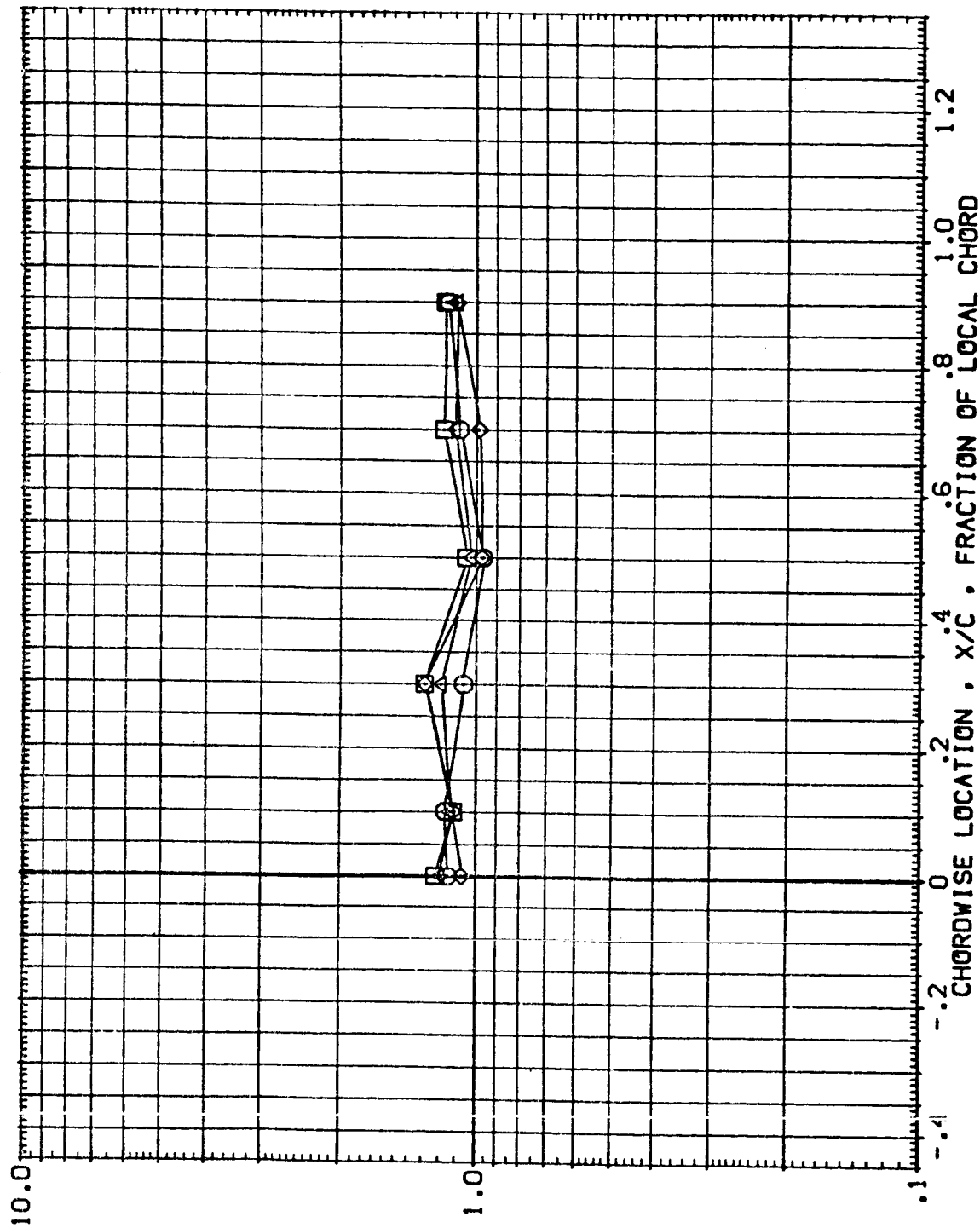


FIG. 54 VERTICAL - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 Z/BV = .299

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(EEIV06)	ARC 3.5-178 IH3 0-T+S	.000	.000	1.500	.900
(EEIV07)	ARC 3.5-178 IH3 0-T+S	.000	.000	5.000	.900
(EEIV08)	ARC 3.5-178 IH3 0-T+S (TRIPS)	.000	.000	1.500	.900
(EEIV09)	ARC 3.5-178 IH3 0-T+S (TRIPS)	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

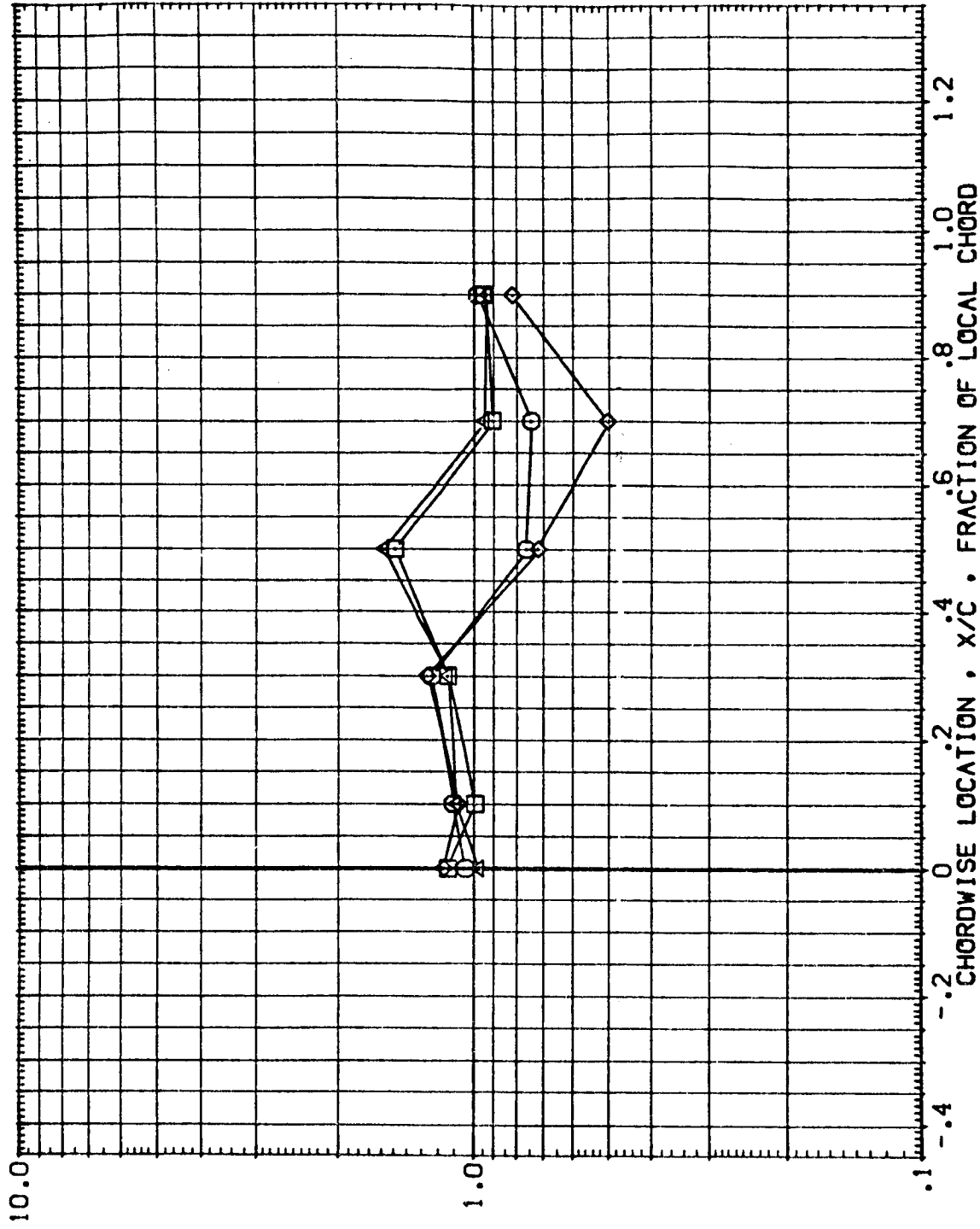


FIG. 54 VERTICAL - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 Z/BV = .532

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(EEIV06)	ARC 3.5-178 IH3 0+1+S	.000	.000	1.500	.900
(EEIV07)	ARC 3.5-178 IH3 0+1+S	.000	.000	5.000	.900
(EEIV08)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	1.500	.900
(EEIV09)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	.900

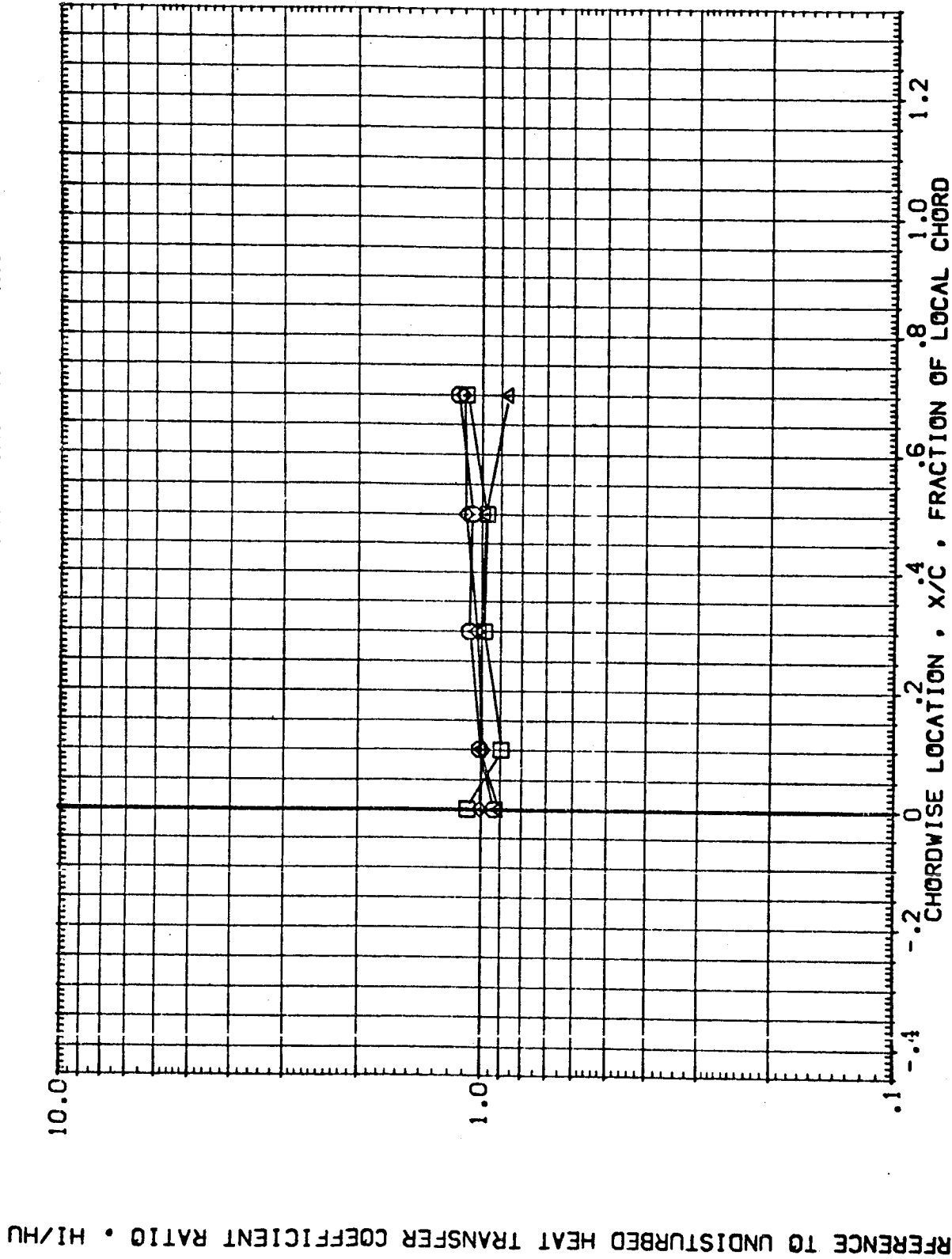


FIG. 54 VERTICAL - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 Z/BV = .765

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(EE1V06)	ARC 3.5-178 IH3 0+1+S	.000	.000	1.500	.900
(EE1V07)	ARC 3.5-178 IH3 0+1+S	.000	.000	5.000	.900
(EE1V08)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	1.500	.900
(EE1V09)	ARC 3.5-178 IH3 0+1+S (TRIPS)	.000	.000	5.000	.900

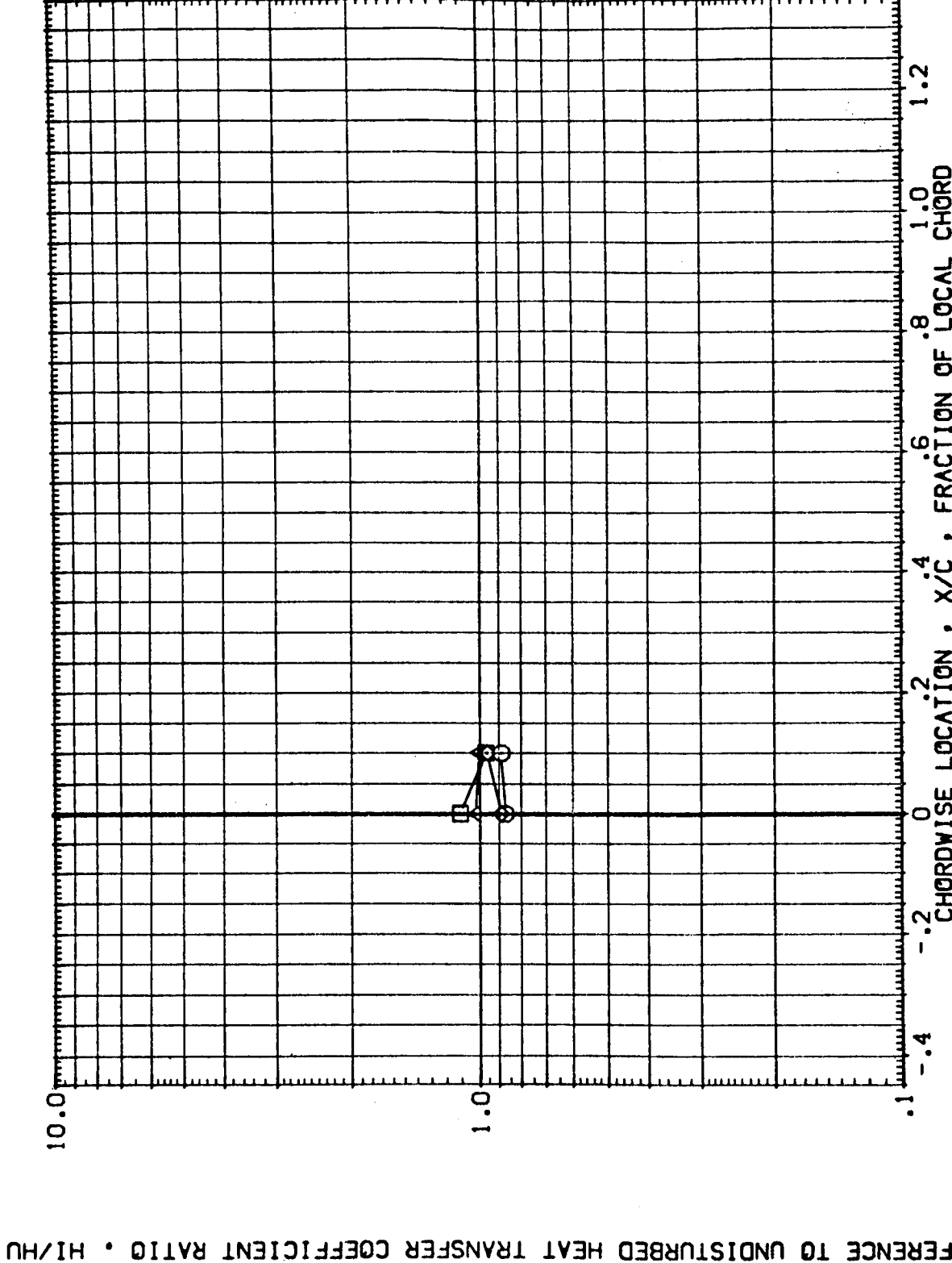


FIG. 54 VERTICAL - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 Z/BV = .905

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAV/HT
(EE1V06)	ARC 3.5-178 IH3 0+T+S	.000	.000	1.500	.900
(EE1V07)	ARC 3.5-178 IH3 0+T+S	.000	.000	5.000	.900
(EE1V08)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(EE1V09)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	5.000	.900

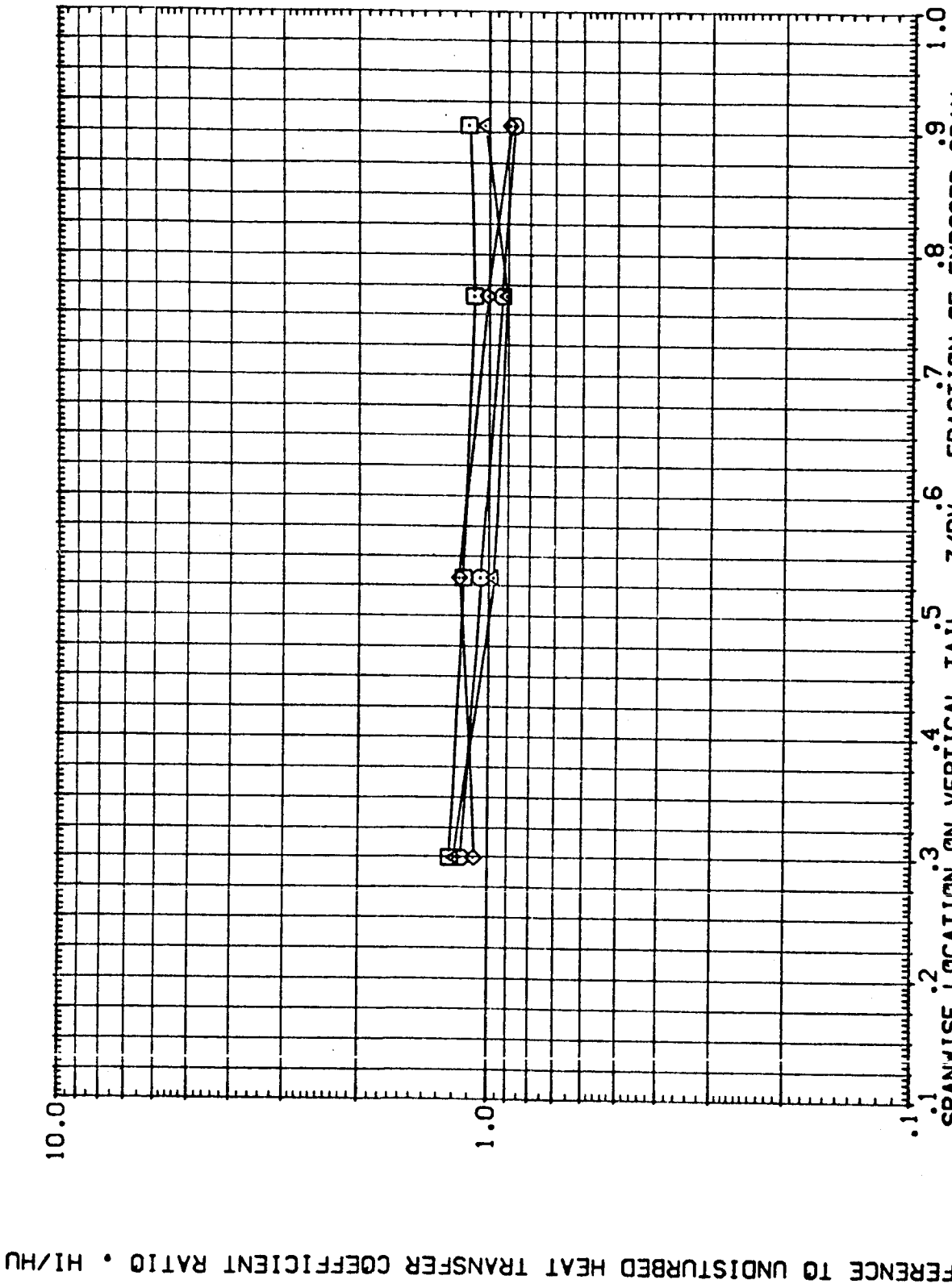


FIG. 54 VERTICAL - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(EEIV06)	ARC 3.5-178 IH3 0+T+S	.000	.000	1.500	.900
(EEIV07)	ARC 3.5-178 IH3 0+T+S	.000	.000	5.000	.900
(EEIV08)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(EEIV09)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	5.000	.900

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU

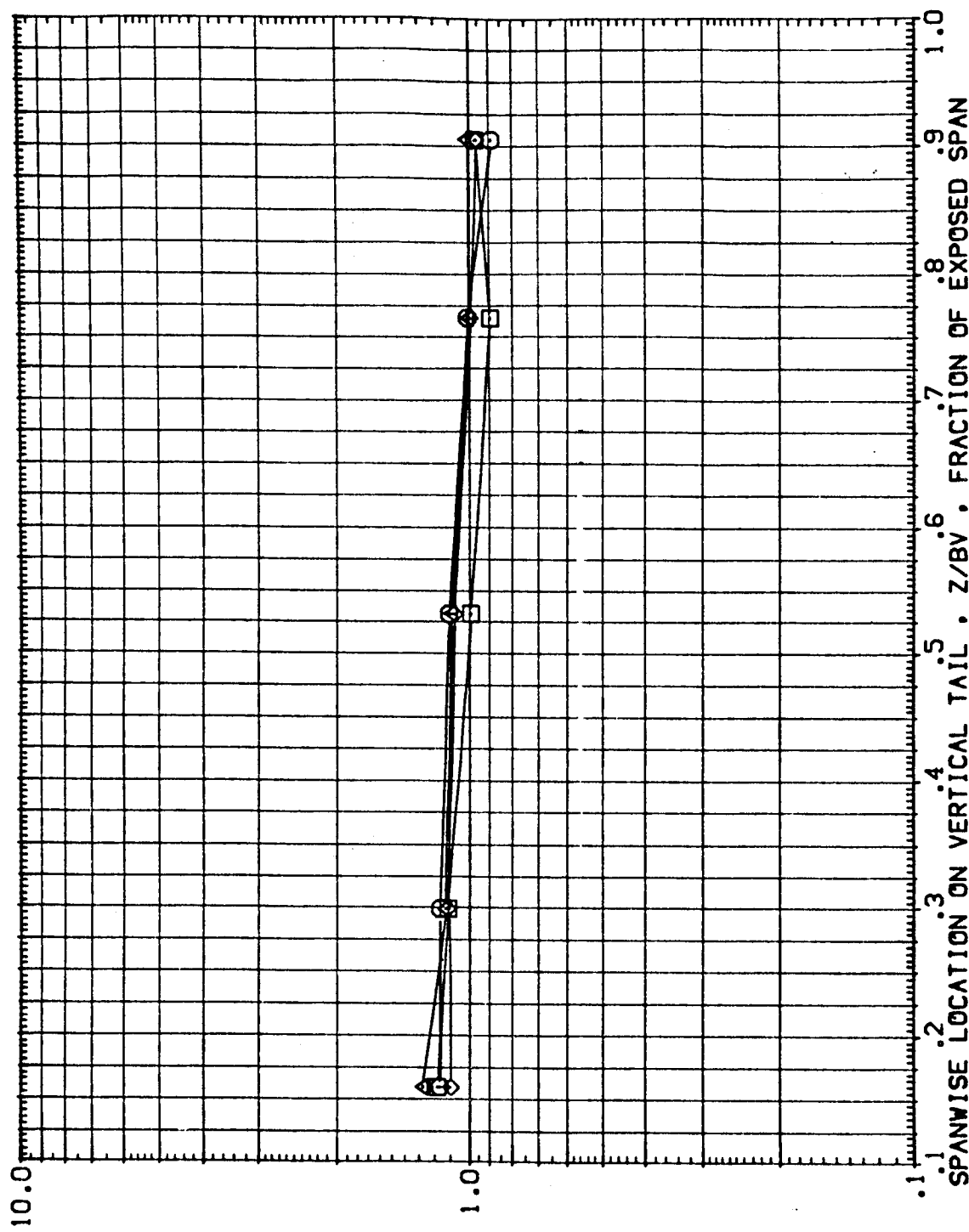


FIG. 54 VERTICAL - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .100

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RV/L	HAV/HT
(EEIV06)	ARC 3.5-178 IH3 0+T+S	.000	.000	1.500	.900
(EEIV07)	ARC 3.5-178 IH3 0+T+S	.000	.000	5.000	.900
(EEIV08)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(EEIV09)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	5.000	.900

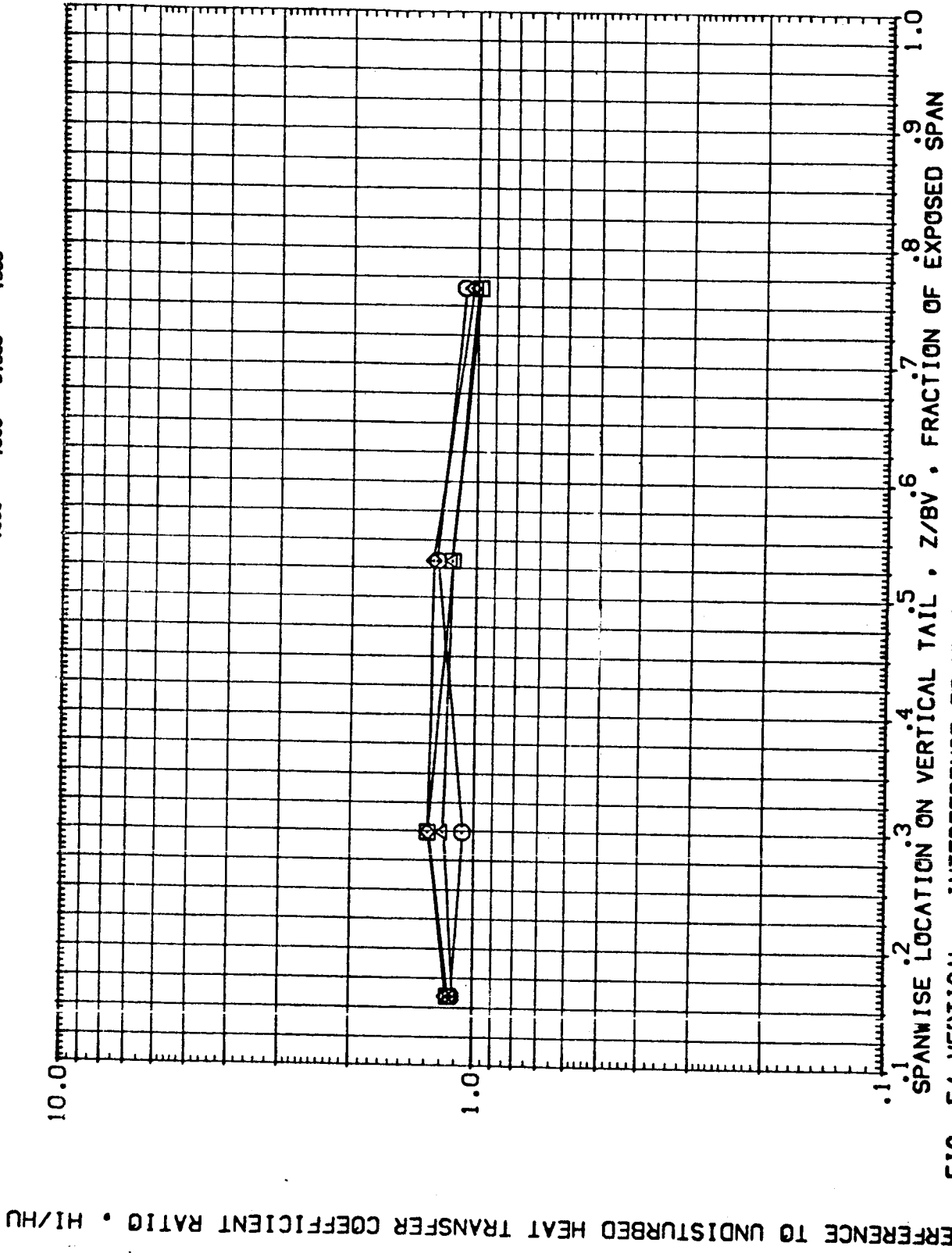


FIG. 54 VERTICAL - INTERFERENCE TO UNDISTURBED RATIO

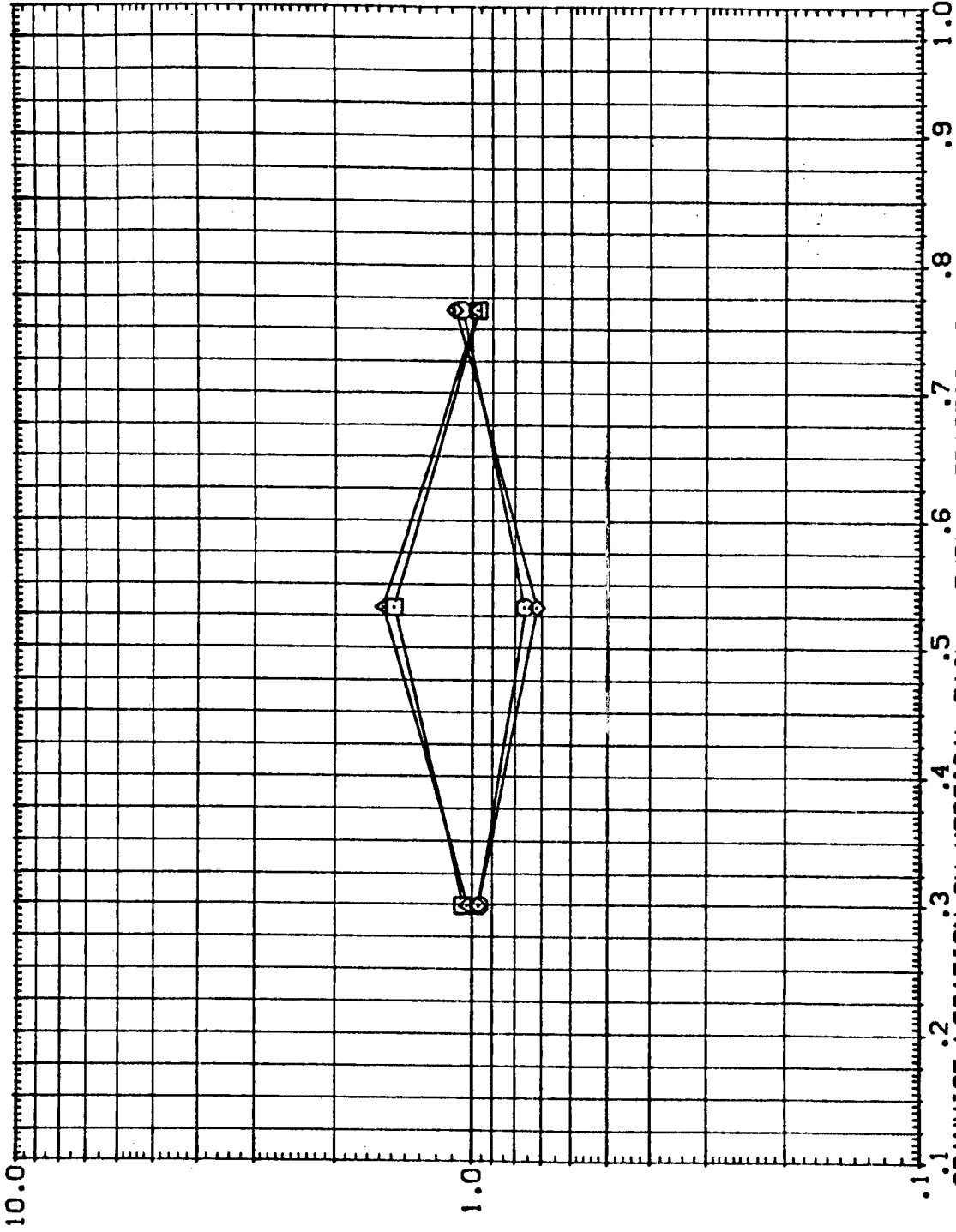
MACH = 5.300 X/C = .300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (EE|V06) ARC 3.5-178 IH3 0+T+S
 (EE|V07) ARC 3.5-178 IH3 0+T+S
 (EE|V08) ARC 3.5-178 IH3 0+T+S (TRIPS)
 (EE|V09) ARC 3.5-178 IH3 0+T+S (TRIPS)

ALPHA BETA R/V/L HAV/HT
 .000 .000 1.500 .900
 .000 .000 5.000 .900
 .000 .000 1.500 .900
 .000 .000 5.000 .900

VERTICAL
 VERTICAL
 VERTICAL

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO • HI/HU



SPANWISE LOCATION ON VERTICAL TAIL • Z/BV • FRACTION OF EXPOSED SPAN

FIG. 54 VERTICAL - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .500

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(EEIV06)	ARC 3.5-178 IH3 0+T+S	.000	.000	1.500	.900
(EEIV07)	ARC 3.5-178 IH3 0+T+S	.000	.000	5.000	.900
(EEIV08)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(EEIV09)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	5.000	.900

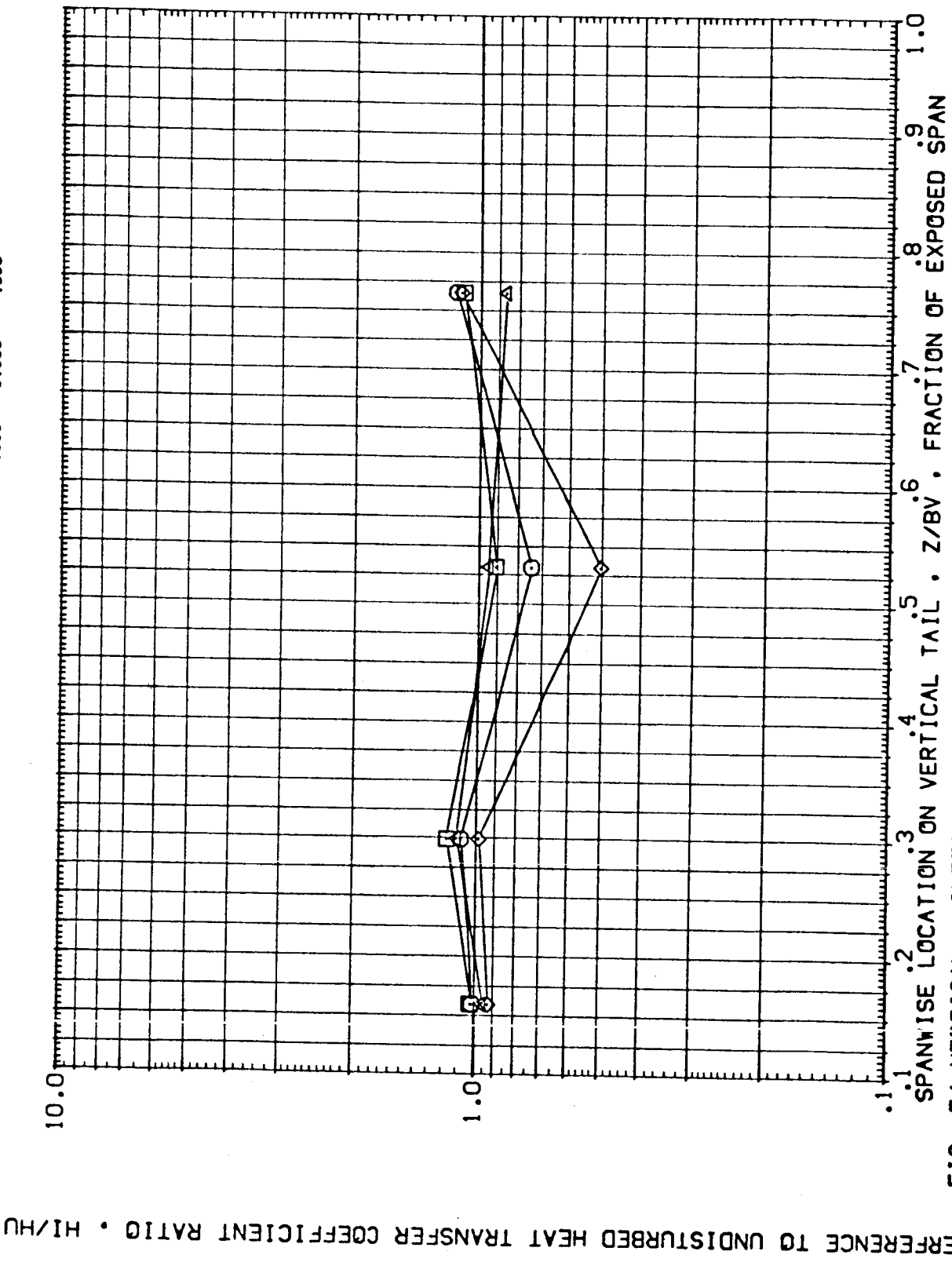


FIG. 54 VERTICAL - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .700

INTERFERENCE TO UNDISTURBED HEAT TRANSFER COEFFICIENT RATIO, HI/HU

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RM/L	HAV/HT
(EE1V06)	ARC 3.5-178 IH3 0+T+S	.000	.000	1.500	.900
(EE1V07)	ARC 3.5-178 IH3 0+T+S	.000	.000	5.000	.900
(EE1V08)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	1.500	.900
(EE1V09)	ARC 3.5-178 IH3 0+T+S (TRIPS)	.000	.000	5.000	.900

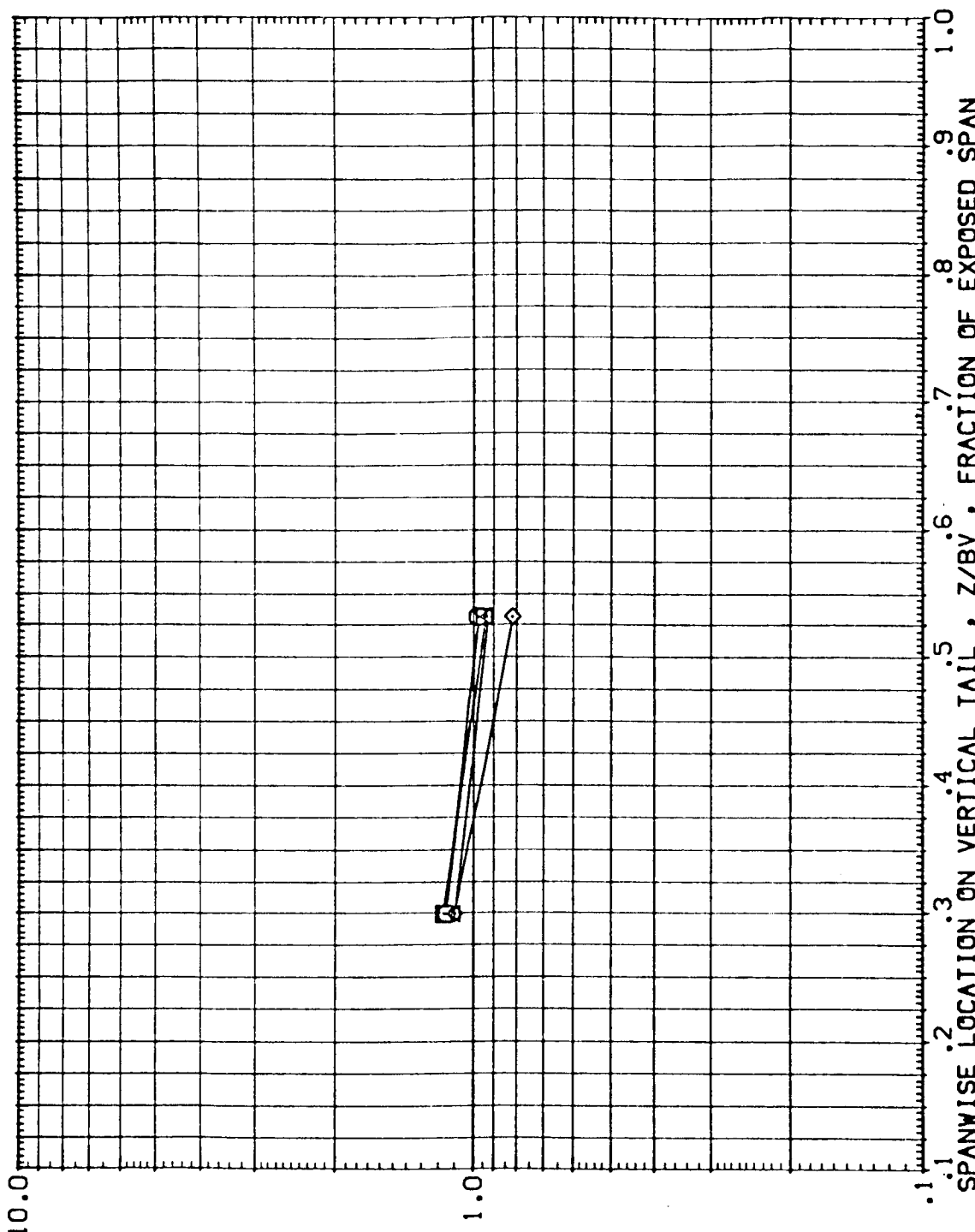


FIG. 54 VERTICAL - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/C = .900