National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
Houston, Texas 77058

DMS-DR-2520
NASA-CR 167,693

RESULTS OF AEROHEATING DFI AND ET DESIGN-DATA TEST ON A 0.0175-SCALE MODEL 60-OTS CONDUCTED IN THE VON KARMAN GAS DYNAMICS FACILITY (VKF) 40-INCH SUPERSONIC AND THE 50-INCH HYPERSONIC WIND TUNNELS A&C (IH-97A/B/C)

SPACE SHUTTLE AEROTHERMODYNAMIC DATA REPORT

Data Management Services

MICHOUD ENGINEERING OFFICE CHRYSLER CORPORATION

March 1985

DMS-DR-2520
NASA-CR 167,693

RESULTS OF AEROHEATING DFI AND ET DESIGN-DATA TEST ON A 0.0175-SCALE MODEL 60-OTS CONDUCTED IN THE VON KARMAN GAS DYNAMICS FACILITY (VKF) 40-INCH SUPERSONIC AND THE 50-INCH HYPERSONIC WIND TUNNELS A&C (IH-97A/B/C)

by

J. Marroquin
C. R. Leef

Prepared under NASA Contract Number NAS9-17179

by

Data Management Services
Chrysler Military-Public Electronic Systems
Michoud Engineering Office
New Orleans, Louisiana 70189

for

Systems Engineering Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

Wind Tunnel Test Specifics:

Facility Test Number:	V-A-1X V-C-2E
NASA Series Number:	IH97A/B IH97C
Model Number:	60-OTS
Test Dates:	October 18, 1982 through October 19, 1982 October 21, 1982 through October 22, 1982
Occupancy Hours:	32

Facility Coordinator:

Larry L. Trimmer
Arvin Calspan/AEDC Division
VKF - SH
Arnold Air Force Station, TN 37389
Phone: (615) 455-2611, X-7640

Project Engineers

W. K. Crain
K. W. Nutt
Von Karman Gas Dynamics Facility
Arvin Calspan/AEDC Division
Arnold Air Force Stn, TN 37389
Phone: (615) 455-2611, X-5575

J. Marroquin
C. R. Leef
D. J. Wong
Rockwell International
Space Transportation & Sys. Group
Mail Code AC07
12214 Lakewood Blvd.
Downey, CA 90241
Phone: (213) 922-4620
922-4849
922-3902

E. C. Knox
Rockwell International
Space Transportation &
Systems Group
3322 S.Memorial Parkway
Suite 67
Huntsville, AL 35801
Phone: (205) 882-2000, X-213

L. D. Foster
NASA/MSFC Project Manager
ED 33 X-3163
John Warmbrod
Remtech Corporation
Huntsville, AL

Data Management Services:

Approved: J. L. Glynn
J. L. Glynn, Manager
Data Operations

Concurrence: J. L. Glynn
FOR N. D. Kemp, Manager
Data Management Services

RESULTS OF AEROHEATING DFI AND ET DESIGN-DATA TEST ON A 0.0175-SCALE MODEL 60-OTS CONDUCTED IN THE VON KARMAN GAS DYNAMICS FACILITY (VKF) 40-INCH SUPERSONIC AND THE 50-INCH HYPERSONIC WIND TUNNELS A & C

(IH-97A/B/C)

by

John Marroquin
Rockwell International

ABSTRACT

The 0.0175-scale thin-skin thermocouple Model 60-OTS was tested in the USAF Arnold Engineering Development Center von Karman Gas Facility 40-inch continuous flow supersonic tunnel A from October 18, 1982 through October 19, 1982. Test IH-97/C was performed in the VKF Tunnel C during the time period of October 21 through 22, 1982.

Testing was conducted at Mach numbers 2.25 to 4.0, and Reynolds numbers from 0.4 x 10^6/ft to 6.6 x 10^6/ft. Angle of attack range was from -5.0 to +5.0 degrees, and angle of sideslip range was from -6 to +6 degrees.

The primary objective of this test was to provide a valid base for the ET and SRB heating prediction methodology for ascent flight by taking heating data at Development Flight Instrumentation (DFI) locations for flight conditions simulating STS-1 through -4. A second objective was to obtain additional aeroheating data to support potential reduction of TPS on the ET. The third phase of the test was funded and conducted by NASA/MSFC for the purpose of establishing confidence in the data

base from the lower temperature tunnel "A" by running comparable data in tunnel "C." The latter tunnel is regarded by AEDC to be their heat transfer facility.

TABLE OF CONTENTS

INDEX OF MODEL FIGURES

INDEX OF MODEL FIGURES (Concluded)

INDEX OF DATA FIGURES

INTRODUCTION

Test IH97A/B/C was conducted at the Arnold Engineering Development Center (AEDC), Air Force Systems Command (AFSC), for NASA/Johnson Space Center, Houston, in the von Karman Gas Dynamic Facility 40-inch continuous-flow supersonic Tunnel A during the period of October 18 to 19, 1982, and in the 50-inch continuous-flow with an axisymmetric contoured nozzle and a special 25-inch diameter nozzle exit. The test was performed in the VKF Aerothermal Tunnel C during the October 21 to 22, 1982 time period. The 0.0175-scale thin-skin thermocouple Model 60-OTS was used for this test.

The test was divided into three phases. The objective of the first phase (IH97A) was to obtain heating data in locations where developmental flight instrumentation (DFI) had been placed on the full scale external tank, solid rocket boosters, and associated hardware and support structure. Data were obtained over the Mach range 2.25 to 4.0 at freestream unit Reynolds numbers of 3.7×10^6 to 5.7×10^6 per foot. Nominal ascent pitch and yaw attitudes from STS-1 through -4 were duplicated during the course of the test. The objective of the second phase (IH97B) was to obtain data for assessment of ET and SRB thermal protection system design, including a proposed external TVC pod located on the SRB aft skirt. The model attitude was varied over the range of +5.3 to -6 degrees angle of attack and +6 to -6 degrees angle of sideslip.

Due to the low driving potential (TR-TW < 100°F) experienced in conducting heat transfer tests in Tunnel A, NASA has been concerned about the validity of the interference heating measurements (Hi/Hu) obtained on the External Tank in previous Tunnel A tests. With the advent of the M = 4 Aerothermal Tunnel addition to Tunnel C, came the capability to provide conditions similar to those run in Tunnel A, but at a much higher driving potential (TR-TW >800°F). In addition, conditions could be provided in the Aerothermal Tunnel to duplicate Space Shuttle flight Reynolds number.

Test objectives for phase three were to obtain interference heating data on the integrated vehicle at conditions comparable to previous tests run in Tunnel A, at similar and higher values of driving potential. Secondly, to obtain external tank interference heating data at conditions comparable to flight STS-4, the only one up to that time which staged beyond Mach 4. The configuration tested was the 0.0175 scale 60-OTS integrated Space Shuttle vehicle. Test conditions covered the range M = 4, Re/ft = 4 x 10^6, TT = 270 - 980°F for the first objective. Model attitude was varied from -5 to +5 degrees angle of attack and -3 to +3 degrees angle of sideslip. For the second objective, the model was run at flight attitudes experienced on STS-4 and conditions of M = 4, Re/ft = 0.4 x 10^6 and 6.6 x 10^6. These data provide a base then, for assessment of the validity of the interference heating factors (Hi/Hu)

obtained in Tunnel A, as well as a base for comparisons between Aerothermal Tunnel C, Tunnel A, and flight.

This report provides a description of the test consisting of remarks on the conduct of the test, descriptions of the model and the test facility, and details of the test procedure, test program, data reduction, and test anomalies.

NOMENCLATURE

SYMBOL	DESCRIPTION
a_1, a_2, a_3	Denote Constant Terms Used to Calculate R
ALPHA	Model Angle of Attack, Deg.
ALPHA-SECTOR,	Tunnel Sector Angle, Deg
b	Model Wall Thickness, Ft
BETA	Model Angle of Sideslip, Deg
c	Model Wall Specific Heat, $\frac{Btu}{lbm-^oR}$
C.R.	Center of Rotation, Axis about which Model is pitched in the Tunnel
C_1	Schmidt-Boelter Calibration Constant, $mv/Btu/ft^2sec$
DELTBF	Body Flap Deflection Angle, Deg
DELTAE	Elevon Deflection Angle, Deg
DELTSB	Speed Brake Deflection Angle, Deg
DTW/DT	Derivative of the Model Wall Temperature with Respect to Time, $^oR/sec$
E	Schmidt-Boelter Gage Output, mv
GAGE NO	Schmidt-Boelter Gage Identification Number
H(TR)	Heat-Transfer Coefficient Based on TR, $\frac{QDOT,}{TR-TW}$ $\frac{Btu}{ft^2-sec-^oR}$
H(TT)	Heat-Transfer Coefficient Based on TT, $\frac{QDOT,}{TT-TW}$ $\frac{Btu}{ft^2-sec-^oR}$
H(0.95TT)	Heat-Transfer Coefficient Based on 0.95 TT $\frac{QDOT,}{(0.95TT)-TW}$ $\frac{Btu}{ft^2-sec-^oR}$
H(RTT)	Heat-Transfer Coefficient Based on RTT, $\frac{QDOT,}{RTT-TW}$ $\frac{Btu}{ft^2-sec-^oR}$
Hi/Hu	Ratio of the local heat-transfer coefficient on the external tank (ET) in the interference flow field, i.e. with orbiter, SRB's divided by the local heat transfer coefficient for the tank alone, corresponding definition for heating on the SRB.

NOMENCLATURE (Continued)

SYMBOL	DESCRIPTION
HREF, H(REF)	Reference Heat-Transfer Coefficient Based on Fay-Riddell Theory, Btu/ft^2-sec-^{o}R
L_S, L_T	Axial Reference Length, In.
M_e	Mach Number at Boundary Layer Edge
MACH NO., M	Freestream Mach Number
MODEL	Model Configuration
MU	Freestream Viscosity, lb-sec/ft^2
N_x, N_y, N_z	Direction Cosines of the Outward Unit Normal Vector at each Measurement Location on the External Tank and SRB's
OTS	Orbiter, External Tank and Both Solid Rocket Boosters
P	Freestream Pressure, PSIA
PT	Tunnel Stilling Chamber Pressure, PSIA
Q	Freestream Dynamic Pressure, PSIA
QDOT	Heat-Transfer Rate, Btu/ft^2-sec
RUN	Data Set Identification Number
r	Recovery Factor
R	Radius or Analytical Temperature Ratio, TR/TT
RN	Reference Nose Radius for HREF and STFR Calculations
RE	Freestream Reynolds Number per Foot, ft^{-1}
RHO	Freestream Density, lbm/ft^3
ROLL-SECTOR, ϕ	Tunnel Sector Angle of Roll, Deg
SRB	Solid Rocket Booster
STFR	Theoretical Stagnation Point Stanton Number for a 0.0175-ft Radius Sphere
TURFAC	Ratio of Test Value to Theory for ET or SRB alone; Hu test/Hu theory

NOMENCLATURE (Continued)

SYMBOL	DESCRIPTION
S.F.	Schmidt-Boelter Gage Scale Factor; the Reciprocal of C_1, Btu/ft^2-sec/mv
T	Temperature, ^{o}R Freestream Static Temperature, ^{o}R
TC-NO	Thin-skin Thermocouple Identification Number
T_e	Temperature at the Edge of the Boundary Layer, ^{o}R
THETA, θ	Model Circumferential Measurement Coordinate, Deg
TI	Model Initial Wall Temperature Prior to Injection in the Tunnel, ^{o}R
TR	Boundary Layer Recovery Temperature, ^{o}R
TT	Freestream Total Temperature, ^{o}R
TW	Model Wall Temperature, ^{o}R
V	Freestream Velocity, ft/sec
X	Model Axial Coordinate, In.
X/L	Nondimensionalized Axial Location
YAW	Model Angle of Yaw, Deg.
δ	The Included Angle Between the Freestream Velocity Vector and Local Unit Normal to the Model Surface, Deg.
γ	Ratio of Specific Heats
ρ	Model Wall Density, lbm/ft^3
CONFIGURATION - OTS + Tr + TVC	
*OTS	0.0175 Scale Orbiter, External Tank Right and Left Solid Rocket Boosters (SRB)
Tr	Transition Strips (SRB's and Orbiter)
TVC	Thrust Vector Control Pods on Left SRB

NOMENCLATURE (Concluded)

SYMBOL	DESCRIPTION
*OTS	B C M W E V R F T S 62 12 16 116 52 8 18 10 38 26
	B - Fuselage 62
	C - Canopy 12
	M - OMS Pod 16
	W - Wing 116
	E - Elevon 52
	V - Vertical Tail 8
	R - Rudder 18
	F - Body Flap 10
	T - External Tank (Spike Hose) 38
	S - Solid Rocket Booster 26

CONFIGURATION INVESTIGATED

The 60-OTS model is a 0.0175-scale thin skin thermocouple model of the Rockwell International vehicle 5 launch configuration, as shown in Figure 3. The 60-OTS configuration consists of the assembly of a payload carrying orbiter, an expendable external oxygen/hydrogen tank (ET) (which provides fuel for the orbiter main engines), and two recoverable solid rocket boosters (SRB's). The model configuration component buildup: OTS = B_{62}, C_{12}, M_{16}, W_{116}, E_{52}, V_8, R_{18}, F_{10}, T_{38}, and S_{26}. The model was constructed of 17-4 PH stainless steel with a nominal skin thickness of 0.030 inch at all instrumented areas except the inter-tank area. A new instrumented 17-4 PH stainless steel corrugated inter-tank was constructed with approximately 166 stringers at various spacing, with an average skin thickness of 0.04 inch at each thermocouple location (see Figure 6d). In addition, the external tank was configured with the 30/10 degrees spike nose tip as shown in Figure 6d. For phase B of the test, instrumentation thrust vector control (TVC), figure 6f was added to the aft skirt of the left SRB.

All control surfaces on the orbiter were set at zero degrees, except for elevon deflections (δ_e), which were run at 0 and +10 degrees.

Boundary layer trips were applied to both SRB's and to the orbiter nose to insure a turbulent boundary layer over each model element. The spiked nose of the ET effectively tripped

its boundary layer so no artificial trip was necessary. The SRB trips consisted of 0.025-inch diameter balls spaced on 0.075-inch center around 1/8-inch form-fitted steel rings, while trips for the orbiter were attached to a steel strip. Axial locations of the trips on the SRB's were at X/L = 0.033 and X/L = 0.0398 for the orbiter (see Figures 6b and 6c).

TEST INSTRUMENTATION

Model 60-OTS was instrumented with 230 Chromel Constantan thin-skin thermocouples (30 gage wire) and 46 0.050-inch diameter thermopile Schmidt-Boelter heat transfer gages. Schmidt-Boelter gage instrumentation was placed in locations not instrumented on previous Space Shuttle tests, such as struts, cable trays and other support structure and protuberances, and particularly at flight test instrument locations.

The external tank was instrumented with 169 thin-skin thermocouples and 28 Schmidt-Boelter gages. Instrumentation was composed of gages and thermocouples carrying the 600, 700, 2000 and 5000 series designation numbers. Instrumentation location is depicted in Figure 4a for the external tank and in Figures 4b through 4f for the support hardware, i.e., bipod strut, cable tray, thrust struts, etc.

The SRB's were instrumented as follows: the right SRB (Figure 5a) contained 30 thin-skin thermocouples and 6 Schmidt-Boelter gages. The left-hand SRB (Figure 5b) contained 32 thin-skin thermocouples and 12 Schmidt-Boelter gages, which included 5 Schmidt-Boelter gages installed on the TVC pods (Figure 5c). Right SRB instrumentation was composed of the 3000 series designation numbers while the 4000 series designation pertained to the left SRB. Instrumentation location on associated SRB hardware (support struts, kick rings, etc.) is illustrated in Figure 5d through 5i.

Instrumentation for Phase A consisted of 174 thin-skin thermocouples and 41 Schmidt-Boelter gages from the ET and SRB's, while

TEST INSTRUMENTATION (Continued)

Phase B instrumentation consisted of 164 thin-skin thermocouples and 46 Schmidt-Boelter gages. Instrumentation for Phase C for Tunnel C runs consisted of 188 thin-skin thermocouples and 34 Schmidt-Boelter gages from the ET and SRB's. Instrumentation locations for Phases A, B and C are given in Table IV.

The Schmidt-Boelter gages were developed by Medtherm Corporation of Huntsville, Alabama. The gage is a direct reading heat flux gage with a Chromel-Constantan thermocouple vapor deposited on the gage surface. The addition of the thermocouple to the gage allows measurement of surface temperature and heat flux simultaneously. The principle of operation of the gage is based on axial heat conduction from the gage surface to a heat sink embedded within the gage. The difference in temperature between two points along the path of heat flow from the surface to the sink is proportional to the heat transferred and, therefore, the heat flux absorbed. At two such points, the Medtherm gages have thermocouple junctions which form a differential thermo-electric circuit providing a self-generating EMF between the two output leads directly proportional to the heat transfer rate. The gages were built in place and are, therefore, an integral part of the 60-OTS model. Schmidt-Boelter gage calibrations were performed by the Medtherm Corporation. The resulting calibration constants are presented in Table V.

TEST INSTRUMENTATION (Continued)

The following instrumentation problems were encountered during Test IH97A/B/C:

T/C's Omitted (Missing in Model 60-OTS) or Open

T/C No.	X_S	X_T	O DEG.
5253*		11.38	18
3225	6.02		30
5255		15.41	180
5256		17.03	180
5164		20.62	358
2077		25.103	36.32
724		25.103	27.7
708		25.103	29.8
725		28.33	37.7
5514		31.85	38
5532		32.73	38
5541		32.98	38
5174		33.53	358
5175		33.53	332
4022	6.79		60
5125		24.15	58.5
5045		26.06	172.5
2005		21.09	31.43

Problem Schmidt-Boelters

S/B No.	Location	Remarks
3068	Kick Ring	Open
3243	R/H Stag. Pt.	Open T/C
5057	ET/ORB Fwd. Strut	Open T/C
5059	ET/ORB Thrust Strut	Open T/C
5062	Crossbeam	Open T/C
5260**	LH_2 Center of Ramp	Open Gage
4189	TVC POD LSRB	T/C Questionable
5241	LO_2 Cable Tray Fairing	Hi Resistance
5540	ET Surface Fwd. of Blue Streak Ramp	N.G.

* Thermocouple #5253 was incorrectly installed on the model. Instead of at $\Theta = 180^{\circ}$, it was located at $\Theta = 18^{\circ}$.

** Schmidt-Boelter gage #5260 was incorrectly installed flush with the ET surface ahead of, instead of on, the "Blue Streak" ramp face.

TEST INSTRUMENTATION (Concluded)

The model data were acquired using a 256 channel analog-to-digital multiplying system. Model temperature data, as well as tunnel flow measurements, model attitude, and time were processed by the Random Access Data Acquisition System (RADS) PDP-11 Mini-computer and recorded on disc memory for transmission to the facility computer (DEC-10) for data reduction.

Three constant sets were given to this test. Constant set 100 was for IH97A, constant set 200 was for IH97B, and constant set 300 was for IH97C.

Thermocouple and Schmidt-Belter gage locations for this model are illustrated in Figures 4a through 5i. The dimension locations and skin thickness are listed in Table IV.

TEST FACILITY DESCRIPTION

The Arnold Engineering Development Center's von Karman Facility Tunnel A is a closed-circuit, continuous-flow, variable density wind tunnel equipped with model injection system which allows removal of the model from the test section while the tunnel remains in operation.

Tunnel A has a 40 x 40-inch test section with an automatically driven flexible-plate-type nozzle which provides Mach numbers from 1.5 to 6.0 (Reference Figure 2a, 2b, and 2c). The tunnel operates at maximum stagnation pressures ranging from 29 psia at Mach = 1.5 to 200 psia at Mach = 6.0. Minimum operating pressure range from about one-tenth to one-twentieth of the maximum at each Mach number. The stagnation temperature can be varied from an average minimum of about 540 to a maximum of 750°F, depending upon Mach number and pressure level. A complete description of the tunnel and air-flow calibration may be found in Reference 8.

The Mach 4 Aerothermal Tunnel C is a closed-circuit high temperature, supersonic free-jet wind tunnel with an axisymmetric contoured nozzle and a 25-inch diameter nozzle exit, Figure 2d and e. This tunnel utilizes parts of the Tunnel C circuit (the electric air heater, the Tunnel C test section, and injection system) and operates continuously over a range of pressures from nominally 15 psia at a minimum stagnation temperature of 710°R to 180 psia at a maximum temperature of 1570°R.

TEST FACILITY DESCRIPTION. (Concluded)

Using the normal Tunnel C Mach 10 circuit (Series Heater Circuit), the Aerothermal Mach 4 nozzle operates at a maximum pressure and temperature of 100 psia and 1900°R, respectively. The air temperatures and pressures are normally achieved by mixing high temperature air (up to 2250°R) from the primary flow discharged from the electric heater with the bypass air flow (at 1440°R) from the natural gas-fired heater. The primary and the bypass air flows discharge into a mixing chamber just upstream of the Aerothermal Tunnel stilling chamber. The entire Aerothermal nozzle insert (the mixing chamber, throat and nozzle sections) is water-cooled by integral, external water jackets. Since the test unit utilizes the Tunnel C model injection system, it allows for the removal of the model from the test section while the free-jet tunnel remains in operation.

TEST PROCEDURES

In the VKF continuous flow wind Tunnel A & C, the model is mounted on a sting support mechanism in an installation tank directly underneath the tunnel test section. The tank is separated from the tunnel by a pair of fairing doors and a safety door. When closed, the fairing doors, except for a slot for the pitch sector, cover the opening to the tank, and the safety door seals the tunnel from the tank area, allowing access to the model with the tunnel operating. After the model is prepared for the next data run, the personnel leave and the access door to the installation tank is closed, the tank is vented to the tunnel flow, the safety and fairing doors are opened, the model is injected into the airstream, and the fairing doors closed. After the data are obtained, the fairing doors are opened and the model is retracted into the tank. The sequence can now be repeated with the tank being vented to atmosphere, if necessary, to allow access to the model in preparation for the next run.

With the model retracted, a typical run sequence for this test began by cooling the model uniformly with the new cooling stand system to approximately 35°F with cooled high pressure air. This was accomplished by positioning the model in the Tunnel A cooling manifold and bathing the model in chilled high pressure cool air supplied from a vortex tube. The cooling manifold, which is normally located to the side of the model, was modified

such that it was supported off the tank floor. This modification allowed the model attitude to be set while model was being cooled. Once the cooling cycle was complete, the desired model attitude was established in the tank prior to injection. When the desired tunnel freestream conditions were established, the model was injected into the tunnel. As the injector system began to move, termed lift-off, the initial temperature, TW, for each thermocouple on the selected constant set was recorded. Prior to the model reaching the airstream, the data acquisition sequence was started. The model continued to move upward until reaching centerline, where it then translated forward to clear an area of tunnel induced shock impingements. Data acquisition continued until the model reached the full forward position, about seven seconds later, or approximately 13 seconds after lift off. The model was then retracted directly from the tunnel. During data acquisition, thermocouple outputs were scanned approximately 15 times per second. After each injection, the cooling cycle was repeated to return the model to an isothermal state. Tunnel A model cooling apparatus is shown in Figure 6g.

In the VKF continuous flow wind tunnel "C", the initial step prior to recording the test data was to cool the model uniformly to approximately 35^{o}F. This was accomplished by positioning the model in the Tunnel C cooling manifold and bathing the model in chilled high pressure air. The model was then

injected out of the cooling environment into the tunnel flow. Instrumentation outputs were scanned approximately 17 times per second starting upon injection and continued to approximately 1.5 seconds after the model reached tunnel centerline. The model was then retracted into the tank area below the tunnel and the cooling cycle began to cool the model to an isothermal state. A photograph of the model in the cooling rig is shown in Figure 6i.

TEST PROGRAM

The test was accomplished in four running shifts and four model installation shifts. A combined total of 106 valid runs was completed in approximately 32 occupancy hours and 24 hours of total test running time. These tests were conducted in October 18 through October 22, 1982. A summary of configurations tested and test conditions for each run is given in the enclosed run schedule, see Tables I, II and III.

Approximately 95 percent of the test objectives were successfully completed at AEDC VKF on October 22, 1982. The new heat-flux gages (modified Schmidt-Boelter type), specially fabricated for Rockwell by Medtherm Corporation, yielded good heating rate coefficient data. In the past, these types of gages only provided heat-flux in BTU's, and were considerably larger. The newer gages allowed data to be obtained from the 0.0175-scale 60-OTS model in locations that previously could not be instrumented to measure heat transfer-rate coefficients. The new modified cooling system in Tunnel A proved to be very effective during this test. The integrated vehicle was cooled to = +35 degrees prior to injecting model into the airstream.

A schedule of completed runs given in Tables II and III is the data set/run number collation summary for this test.

DATA REDUCTION

Measured stilling chamber pressure and temperature and the calibrated test section Mach number are used to compute the freestream parameters.

The reduction of this skin temperature data to coefficient form normally involves only the calorimeter heat balance for the thin skin as follows:

$$QDOT = \rho bc\ (DTW/DT) \tag{1}$$

$$H(TR) = \frac{QDOT}{TR-TW} = \frac{\rho bc\,(DTW/DT)}{TR-TW} \tag{2}$$

Thermal radiation and heat conduction effects on the thin-skin element are neglected in the above relationship and the skin temperature response is assumed to be due to convective heating only. It can be shown that for constant TR, the following relationship is true:

$$\frac{d}{dt} \ln \left[\frac{TR-TI}{TR-TW}\right] = \frac{DTW/DT}{TR-TW} \tag{3}$$

Substituting Eq. (3) in Eq. (2) and rearranging terms yields:

$$\frac{H(TR)}{\rho bc} = \frac{d}{dt} \ln \left[\frac{TR-TI}{TR-TW}\right] \tag{4}$$

By assuming that the value of $H(TR)/\rho bc$ is a constant, it can be seen that the derivative (or slope) must also be constant. Hence, the term

$$\ln \left[\frac{TR-TI}{TR-TW}\right]$$

is linear with time. This linearity assumes the validity of Eq. (2) which applies for convective heating only. The evaluation of conduction effects will be discussed later.

The assumption that H(TR) and c are constant is reasonable for this test although small variations do occur in these parameters. The variations of H(TR) caused by changing wall temperature and by transition movement with wall temperature are trivial for the small wall temperature changes that occur during data reduction. The value of the model material specific heat, c, was computed by the relation

$$c = 0.0797 + (5.556 \times 10^{-5})TW, \text{ (17-4 PH stainless steel)} \quad (5)$$

The maximum variation of c over the curve fit was less than 1.5 percent. Thus, the assumption of constant c used to derive Equation 4 was reasonable. The value of density used for the 17-4 PH stainless steel skin was $\rho = 490$ lbm/ft^3, and the skin thickness, b, for each thermocouple is listed in Table 4 for Phase A, B and C.

The right side of Equation 4 was evaluated using a linear least squares curve fit of 15 consecutive data points to determine the slope. The curve fit was started at approximately the time the model arrived on tunnel centerline. Data acquisition and curve fitting were continued for about 5 seconds after centerline, i.e., until the model reached the full forward position in the tunnel. H(TR) was then calculated for each thermocouple from the resulting slopes and the appropriate values of ρbc:

$$H(TR) = (\rho bc) \frac{d}{dt} \ln \left[\frac{TR-TI}{TR-TW}\right] \quad (6)$$

Reduction of the final data; i.e., the values listed in the AEDC facility tabulated data, was delayed in time until all

thermocouples influenced by the tunnel induced shock had been translated forward out of this region of tunnel flow. For the External Tank, data from those thermocouples between $0 \leq X/L \leq 0.2$ was reduced when the model reached centerline and those thermocouples between $0.2 \leq X/L \leq 1.00$ were delayed approximately 2.5 seconds after model arrival on tunnel centerline. For the SRBs, data reduction of thermocouples located between $0 \leq X/L \leq 0.113$ was started at centerline and delayed approximately 2.5 seconds for thermocouples located between $0.113 \leq X/L \leq 1.00$.

To investigate conduction effects, a second value of H(TR) was calculated one second later than the value under consideration for final tabulated data. A comparison of these two values was used to identify those thermocouples that were significantly influenced by conduction or system noise. In addition, timewise variation of H(TR) was monitored to insure that the final data were reduced during a time period where H(TR) was constant. Those measurements significantly affected were then deleted from the final data. In general, conduction and/or noise effects were found to be negligible.

Schmidt-Boelter Measurement

Measurements obtained from the Schmidt-Boelter gages; i.e., gage output, E, and surface thermocouple output, were used to calculate the incident heat flux (QDOT), wall temperature (TW) and heat transfer coefficient in the following manner. The gage output and surface thermocouple were sampled five con-

secutive times and then averaged. This procedure began when the model was at approximately tunnel certerline and continued until translation to the full forward position in the tunnel was achieved (about 5 seconds, i.e., the same fashion as the thin skin thermocouple data). The average values of the gage output E were then related to the incident heat flux (QDOT) through the gage scale factor.

$$QDOT = (S.F.)\ (E) \tag{7}$$

The scale factor is equal to the reciprocal of the gage calibration constants (C_1) listed in Table V.

$$S.F. = 1/C_1 \tag{8}$$

Using the same averaging procedure an average value of gage surface thermocouple output was obtained. The average values were then related to the wall temperature (TW) through the use of a fifth degree polynomial curve fit of the NBS (National Bureau of Standards) tables for a chromel-constantan thermocouple. The heat transfer coefficient for each average value was calculated from the following equation:

$$H(TR) = \frac{QDOT}{(TR-TW)} \tag{9}$$

Final data reduction, i.e., those data listed in the final AEDC facility data package, was delayed in time for the Schmidt-Boelter gages in the same fashion as used for the thin skin thermocouple data. Again this was done to insure that those gages which might be influenced by the tunnel induced shock were out of this region of tunnel flow. Timewise variation

of H(TR) versus time for the various Schmidt-Boelter gages was monitored to insure that the final data were reduced during a time period where H(TR) was constant. For cases where either the gage output or surface thermocouple was faulty, that particular measurement was deleted and likewise the calculation of heat transfer coefficient. The remaining valid measurement was then tabulated.

Data Reduction for Malfunctioning Gages

Frequently there were occurrences where Schmidt-Boelter data could not be reduced by standard methods because of failure of one of the two elements of each gage. An effort was therefore undertaken to devise a procedure which could recover the desired data, regardless of which of the two elements had failed.

Rationale behind the technique was to correlate parameters based on measurements from the surviving component against those from healthy gages located close to the oiling gage. This comparison was tracked for all runs, from beginning of the Phase A test to the end of Phase C.

The logic of the scheme is explained as follows. From the basic convective heat transfer equation

$$\dot{q} = h\ (RT_T - T_W) \qquad (1)$$

$\dot{q}$ and T_W are the two measurements made by the Schmidt-Boelter gage, T_T is the tunnel total temperature, R is the analytical temperature ratio described in the next section, and h is normally the only unknown.

DATA REDUCTION (Continued)

T_W Measurement Missing

For the case where the temperature component (T_W) malfunctions, consider from Eq (1) that the parameter $h/\dot{q}$ is a function of, but does not contain T_W. To compare gages, the parameter $h/\dot{q}$ can be evaluated for each run for gages with two working elements. If this quantity is divided by the value for a reference run, the result is a dimensionless ratio (Ratio One) as follows:

$$\frac{\left(\frac{h}{\dot{q}}\right)_{\text{Run X}}}{\left(\frac{h}{\dot{q}}\right)_{\substack{\text{Ref}\\ \text{Run}}}}$$

or using quantities available from test data

$$\frac{\left(\frac{h/href}{\dot{q}}\right)_{\text{Run X}}}{\left(\frac{h/href}{\dot{q}}\right)_{\substack{\text{Ref}\\ \text{Run}}}}$$

It can be shown that this ratio (or variations of it) has practically the same value for gages or thermocouples located close to each other. Therefore, the ratio for a nearby working gage is presumed to represent that for a malfunctioning gage. If there is a single good reference run in which both $\dot{q}$ and T_W are working, the terms in the denominator of the ratio are known, and h/href can be recovered for any other run in which $\dot{q}$ is available.

In an attempt to improve the correlation ratio for conditions where tunnel density and temperature varied widely, a compensation factor, $(P/T_\infty) \times (T_T - 460)$, was introduced.

An example of the variation of this ratio with run number for a close grouping of gages is shown in Figures 7a and 7b.

DATA REDUCTION (Continued)

$\dot{q}$ Measurement Missing

For the case where the heat flux component malfunctions, it can be seen from Eq. (1) that a parameter which excludes $\dot{q}$ but is proportional to $\dot{q}$ is h $(RT_T - T_W)$. As in the previous case, this parameter can be evaluated for Schmidt-Boelter gages at any run where both gage elements are working. It can also be evaluated for thermocouples. The corresponding dimensionless ration (Ratio Two) is:

$$\frac{\left[h/href\,(RT_T - T_W)\right]}{\left[h/Href\,(RT_T - T_W)\right]} \quad \begin{matrix} \text{Run X} \\ \text{Ref Run} \end{matrix}$$

Again, the process is viable if all quantities are known at a single run. h/href can be recovered from any other run, then, where T_W is available.

The compensation factor applied to ratio two is

$$(P/P_T)_\infty \div (T_T - 460).$$

An example of the variation of this ratio with run number is shown in Figures 7a and 7b.

Because the missing data recovered by the procedures of this section are not available in published form elsewhere, the entire set of heating data from the Schmidt-Boelter gages is included in Table VI.

DATA REDUCTION (Continued)

Recovery Temperature and R Factor

The tunnel stagnation temperature for each Mach number tested is listed in Table I. With the relatively low stagnation temperatures of tunnel A, the difference between the model wall temperature and recovery temperature was generally small, even in regions of peak heating. This small temperature difference caused the calculation of the heat-transfer coefficient to be very sensitive to deviations from the actual recovery temperature. Since the actual value of the recovery temperature (TR) at each measurement location is not known, three assumed values of TR are used to calculate the local heat transfer coefficients. They are TR = TT, 0.95 TT, and RTT where R is defined by the analytic temperature ratio $\frac{TR}{TT}$. The analytic method for determining R was developed by Dr. Serge-Albert Waiter of Rockwell International (Reference 7). In this method the following relationships were assumed:

$$R = \frac{TR}{TT} \tag{10}$$

and

$$TR = T_0 \left(1 + \frac{\gamma-1}{2} r M_e^2\right) \qquad (11)$$

$r = 0.898$ for turbulent flow

with r being the recovery factor and the subscript e identifying local properties at the boundary-layer edge. From these relationships, the temperature ratio can be defined as:

$$R = \frac{1 + 0.2 r M_e^2}{1 + 0.2 M^2} \qquad (12)$$

which is a function of the recovery factor and the local Mach number. The local Mach number can be written

$$M_e = M_e (M, \delta) \qquad (13)$$

where δ is the local surface angle of attack.

The local Mach number can be approximated by using tangent cone flow theory, and was used in Equation (12) to give R as a function of M and δ . Calculations of R were made for several values of M and δ, and the results were curve fit by Rockwell International. The following equation resulted

$$R(M, \delta) = a_1 + a_2 (\sin \delta)^{a_3} \qquad (14)$$

where a_1 a_2 and a_3 are constants for a particular Mach number. Turbulent values of a_1 a_2 and a_3 for this test were provided by Rockwell International and are as follows:

M	a_1	a_2	a_3
2.25	0.950	$1.0-a_1$	2.322
2.50	0.944	↓	2.275
2.75	0.938	↓	2.222
3.00	0.934	↓	2.165
3.25	0.930	↓	2.115
3.50	0.927	↓	2.070
3.75	0.925	↓	2.015
4.00	0.922	↓	1.965

The angle δ is the included angle between the freestream velocity vector and the local normal to the model surface.

δ was computed using the following equation

$$\delta = \sin^{-1}\left\{\left[N_x\cos\alpha_s - N_y\sin\alpha_s\sin\phi + N_z\sin\alpha_s\cos\phi\right](-1)\right\}$$

where N_x, N_y and N_z are the direction cosines for the local unit normal. Values of N_x, N_y and N_z for each thin skin thermocouple and Schmidt-Boelter gage is tabulated in the AEDC test report, Reference 2.

For values of $\delta \leq 0$ $R \equiv a_1$

For R values > 1.0 $R \equiv 1.00$

Values of heat transfer coefficient H(TT), H(0.95TT) and H(RTT) were normalized using the Fay-Riddell stagnation point heat transfer coefficient H(REF). The calculation of H(REF) was based on a hemispherical nose radius of 0.0175 ft. model scale (1.0 ft. full scale). Definition of the calculation of H(REF) is given below.

Reference Heat Transfer Coefficient, H (Ref)

In presenting heat-transfer coefficient results, it is convenient to use reference coefficients to normalize the data.* Equilibrium stagnation point values derived from the work of Fay and Riddell were used to normalize the data obtained in this test. These reference coefficients are given by:

$$H(REF) = \frac{8.17173(PT2)^{1/2}(MUTT)^{0.4}\left(1-\frac{P}{PT2}\right)^{0.25}\left[0.2235+(1.35\times10^{-5})(TT+560)\right]}{(RN)^{1/2}(TT)^{0.15}}$$

and

$$STFR = \frac{H(REF)}{(RHO)(V)\left[0.2235 + (1.35 \times 10^{-5})(TT + 560)\right]}$$

where

PT2 Stagnation pressure downstream of a normal shock wave, psia

MUTT	Air viscosity based on TT, lb_f-sec/ft^2
P	Freestream pressure, psia
TT	Tunnel stilling chamber temperature, ^oR
RN	Reference nose radius, (0.0175 ft)
RHO	Freestream density, lbm/ft^3
V	Freestream velocity, ft/sec

* It should be noted, however, that the normalized data are not dimensionless.

Uncertainty of Measurement

In general, instrumentation calibrations and data uncertainty estimates were made using methods recognized by the National Bureau of Standards (NBS). Measurement uncertainty is a combination of bias and precision errors defined as:

$$U = \pm (B + t_{95}S)$$

where B is the bias limit, S is the sample standard deviation and t_{95} is the 95th percentile point for the two-tailed Student's "t" distribution (95-percent confidence interval), which for sample sizes greater than 30 is taken equal to 2.

Estimates of the measured data uncertainties for this test are given in Table 2a, References 2 and 4. The data uncertainties for the measurements are determined from in-place calibrations through the data recording system and data reduction program.

Propagation of the bias and precision errors of measured data through the calculated data was made in accordance with Reference 7 and the results are given in Table 2b in References 2 and 4.

DATA ANALYSIS

Representative data from the top centerline of the external tank (θ = 0 deg) are presented in Figures 7c, d, and e. The data from the current test (IH-97) are compared with data from the previous entries in Tunnel A, i.e. IH-72 and IH-85, as well as turbulent theory of Reference 9. The data pertain to the integrated vehicle while the theory was calculated for the interference-free tank alone. Agreement of data from Test IH-97 with previous data and theory (upstream of the interference regions) is considered good for validation of the basic results.

Tabulated data for phase A and phase B of Test IH-97 has been published in References 2 and 3. Tabulated data for phase C has been published in References 4 and 5.

TEST ANOMALIES

During the IH-97A DFI-configuration test at the low Reynolds number and prior to going into the three-stage high Reynolds number runs, a tunnel pressure relief valve kept opening. It was then determined that the high Reynolds-number runs could not be obtained during that running shift. The test was continued at lower Reynolds-number, as shown in the enclosed run portion of the test, the test data appeared questionable. After minor corrections were made to the data reduction method, however, the output compared more favorably with previous test data.

Prior to the design-configuration test IH-97B, a vacuum-tank-to tunnel valve problem was encountered. A limit switch was found

out of adjustment but was corrected, and the test started soon after.

Twelve scheduled yaw runs at angles of ±9 degrees could not be achieved because tunnel hardware interference precluded moving the sector center-of-rotation adequately forward. Nine additional runs were added to the run schedule in order to fill the test time. During phase B, the SRB trip was lost during runs 84 and 85.

REFERENCES

1. STS82-0663, "Pretest Information for 0.0175-Scale Thin-Skin Thermocouple Model 60-OTS Aero Heating DFI and ET Design Data Test in the AEDC VKF A Hypersonic Wind Tunnel Test IH-97A/B" (August 1982)

2. AEDC-TSR-82-V37, "NASA/Rockwell International IH-97 Space Shuttle Heating Test" Crain, W. K. and Nutt, K. W. (December 1982)

3. V--A-1X, "NASA/RI IH-97 Heating Test" Crain, W. K. and Nutt, K. W. (December 1982)

4. AEDC-TSR-83-V2, "NASA/AEDC External Tank Interference Heating Test" Crain, W. K. and Nutt, K. W. (December 1982)

5. V41C-2E, "NASA/AEDC External Tank Interference Heating Test" Crain, W. K. and Nutt, K. W. (December 1982)

6. AD78-SH-0082, "Pretest Information for Testing the 0.0175-Scale Thin Skin Thermocouple Model 60-OTS in the AEDC VKF A Hypersonic Wind Tunnel, Test IH-85" (March 13, 1978)

7. Waiter, Serge-Albert, "Determination of Temperature Efficiency R=Taw/To in Low Temperature Wind Tunnels (An Engineering Attempt)" NA-77-299, 47th Semiannual Meeting of the Supersonic Tunnel Association (April 1977)

8. Test Facilities Handbook (Tenth Edition) "von Karman Gas Dynamics Facility, Vol. 4" Arnold Engineering Development Center (May 1974)

9. DeJarnette, Fred R. and Jones, Michael H., "Calculation of Inviscid Surface Streamlines and Heat Transfer on Shuttle Type Configurations, Part 2 - Description of Computer Program" NASA CR-111922 (August 1971)

10. Fay, J. A. and Riddell, F. R. "Theory of Stagnation Point Heat Transfer in Dissociated Air" Journal of the Aero-nautical Sciences, Vol. 25, No. 2 (February 1958)

TABLE I

TEST CONDITIONS

A summary of the nominal test conditions for Phase A and Phase B is given below:

M	PT, psia	TT, ^{o}R	P,psia	T, ^{o}R	Re/ft x 10^{-6}
2.24	23	637	2.0	318	4.2
2.50	26	649	1.5	289	4.0
2.75	31	650	1.2	258	4.1
3.00	34	675	0.9	240	3.8
3.00	36	723	1.0	256	3.7
3.00	52	683	1.4	243	5.7
3.24	45	725	0.9	234	4.0
3.50	55	729	0.7	211	4.2
3.77	61	738	0.6	192	4.0
4.00	72	738	0.5	174	4.1

A summary of the nominal test conditions for Phase C is given below:

M	PT, psia	TT, ^{o}R	P,psia	T, ^{o}R	Re/ft x 10^{-6}
4.00	175	1440	1.1	350	3.6
↓	140	1240	0.9	300	3.6
	120	1050	0.8	250	4.0
	102	980	0.7	230	3.8
	60	740	0.4	180	3.5
	119	740	0.8	180	6.6
	20	1430	0.1	350	0.4

TABLE II

IH-97A

Aeroheating DFI Verification Test

TEST :

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE :

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δ_E	CONTROL DEFLECTION δ_{AF}	CONTROL DEFLECTION $R_{N/ft}$	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.25	2.50	2.75	3.01	3.25	3.50	3.75	4.00	TEST RUN NUMBERS P_T	T_T
	OTS + Tr (STS-1)	2.4	-.6	10°	0	4.0		4								23	190
		3.2	-.6						8							26	190
		3.8	-.6							12						31	190
	OTS + Tr (STS-2)	2.6	.8	10°	0	4.0		5								23	190
		2.8	.8						9							26	190
		3.6	1.3							13						31	190
	OTS + Tr (STS-3)	1.8	-.7	10°	0	4.0		6								23	190
		1.6	-.7						10							26	190
		.9	-.8							14						31	190
	OTS + Tr (STS-4)	.6	-.2	10°	0	4.0		7								23	190
		1.5	+.2						11							26	190
		.2	.1							15						31	190
	OTS + Tr	0	0	10°	0	3.7					1/2					34	220

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

COEFFICIENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

NOTE: Tr = Boundary Layer Trips on the SRB's
Run #2, Repeat of Run #1 (Verification)
Run No. 3, Trash (omitted)

TABLE II (Continued)

IH-97A

TEST:

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE:

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δ_E	CONTROL DEFLECTION δ_{BF}	CONTROL DEFLECTION δ_{RUD}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.25	2.53	2.75	3.01	3.25	3.50	3.75	4.02	P_T	T_T
	OTS + Tr (STS-1)	4.5	-.7	0°	0	3.7					17					37	270
		4.4	-.6			3.9						26				45	270
		4.5	-.4			4.0							30			55	270
		5.0	.1			4.0								37		62	280
	OTS + Tr (STS-2)	4.6	1.3	0°	0	3.7					18					37	270
		5.2	1.7			3.9						27				45	270
		5.3	1.5			4.0							31			55	270
		3.9	.7			4.0								36		62	280
	OTS + Tr (STS-3)	1.6	-.7	0°	0	3.7					19					37	270
		1.5	-.7			3.9						28				45	270
		1.4	+.2			4.0							32			55	270
		1.5	-.5			4.0								35		62	280

TEST RUN NUMBERS

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

COEFFICIENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

NOTE: Run #32, β was set at +0.2, will pick up re-run during Phase B.
Tr = Boundary layer trips on the SRB's and orbiter.

TABLE II (Continued)

IH-97A

TEST :

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE :

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δe	CONTROL DEFLECTION δBF	CONTROL DEFLECTION δelevon	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.25	2.50	2.75	3.01	3.25	3.50	3.75	4.02	TEST RUN NUMBERS pT	TEST RUN NUMBERS TT
	OTS + Tr (STS-4)	.2	-.1	0°	0	3.7					20					37	270
		.3	0			3.9						29				45	270
		.4	-.3			4.0							33			55	270
		.3	0			4.0								34		62	280
		.7	-.6			4.0									39	73	280
	OTS + Tr	0	0	0°	0	3.77					16					34	220
	OTS + Tr	0	+3	0°	0	3.7					21					37	270
		0	-3			3.7					22					37	270
	OTS + Tr	5	0	0°	0	3.7					23					37	270
		5	+3			3.7					24					37	270
		5	-3			3.7					25					37	270
	OTS (Tr Off)	0	0	0°	0	4.0									39	73	280

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

COEFFICIENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

Tr = Boundary layer trips on the SRB's and orbiter.

TABLE II (Continued)

IH-97B

TEST : DATA SET/RUN NUMBER COLLATION SUMMARY DATE :

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δ_e	CONTROL DEFLECTION δ_{SBC}	CONTROL DEFLECTION P_{BASE}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.25	2.50	2.75	3.01	3.25	3.50	3.75	3.92	P_T	T_T	TEST RUN NUMBERS
	OTS + TVC + Tr	5	0	0°	0	3.7					40					37	280	
			-3								42					37	280	
			+3								41					37	280	
			+6								43					37	280	
			-6								44					37	280	
	OTS + TVC + Tr	0	0	0°	0	3.7					45					37	280	
			-3								47					37	280	
			+3								46					37	280	
			+6								48					37	280	
			-6								49					37	280	
	OTS + TVC + Tr	-5	0	0°	0	3.7					50					37	280	
			-3								52					37	280	
			+3								51					37	280	
			+6								53					37	280	
			-6								54					37	280	
		0	-3	0°	0	3.7					55					37	280	

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

COEFFICIENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

NOTE: TVC Pod on Left SRB Only
Tr = Boundary Layer Trips on the SRB's and Orbiter

TABLE II (Continued)

IH-97B

TEST:

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE:

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δe	CONTROL DEFLECTION δBF	CONTROL DEFLECTION Ro10	NO. OF RUNS	2.25	2.50	2.75	3.01	3.25	3.50	3.75	4.02			Pt	Tt
	OTS + TVC − Tr	0	0	0°	0	3.7					56							37	280
	OTS + TVC + Tr	0	0	+10°	0	4.0									84			73	280
	OTS + TVC + Tr	0	0	+10°	0	5.6					85							52	220
	OTS + TVC + Tr	0	0	0	0°	3.9						57						45	280
		0	-3									58						45	280
		5	0									59						45	280
		0	0	0	0	4.0							60					55	280
		1.4	-.2										61*					55	280
		0	-3										62					55	280
		5	0										63					55	280
		0	0	0	0	4.0								64				62	280
		0	-3											65				62	280
		5	0											66				62	280
		1.5	-.5											67**				62	280

TEST RUN NUMBERS

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

COEFFICIENTS

IDVAR (1) IDVAR (2) NDV

α OR β

Note: Tr = Boundary Layer Trips on the SRB's and ET

NOTE: TRIPS OFF SRB ONLY on Run 56
*Repeat of Run 32 IH-97A
**Repeat of Run 35 IH-97A
TVC pod on left SRB only.

TABLE II (Continued)

IH-97B

TEST :

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE :

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δ_E	CONTROL DEFLECTION δ_{SRB}	CONTROL DEFLECTION R_{TVC}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.25	2.50	2.75	3.01	3.25	3.50	3.75	4.02			R_T	T_T
	OTS + TVC + Tr	6	0	0	0	4.0									69			73	280
			3												70			73	280
			-3												71			73	280
			6												72			73	280
			-6												73			73	280
	OTS + TVC + Tr	0	0	0	0	4.0									68			73	280
			+3												74			73	280
			-3												77			73	280
			6												75			73	280
			-6												76			73	280
	OTS + TVC + Tr	-6	0	0	0	4.0									78			73	280
			3												79			73	280
			-3												80			73	280
			6												81			73	280
			-6												82			73	280

TEST RUN NUMBERS

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

COEFFICIENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

Note: TVC pod on left SRB only.
Tr = Boundary Layer Trips on the SRB's and Orbiter

TABLE II (Concluded)

IH-97B

TEST :

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE :

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δ_E	CONTROL DEFLECTION δ_{RF}	CONTROL DEFLECTION $P_{a/10}$	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.25	2.50	2.75	3.01	3.25	3.50	3.75	4.02			TEST RUN NUMBERS R_F	T_F
	OTS + TVC $-T_F$	0	0	0	0	4.0									83			73	280
	OTS + TVC $+T_F$	0	0	10°	0	4.0									84			73	280
		0	0	10°	0	5.6					85							52	220

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

COEFFICIENTS

α OR β SCHEDULES

IDVAR (1) IDVAR (2) NDV

TABLE III

IH-97C

TEST:

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE:

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δ_E	CONTROL DEFLECTION δ_{SE}	CONTROL DEFLECTION β_{SRB}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.25	2.50	2.75	3.01	3.25	3.50	3.75	4.02			P_T	T_{T_R}
	OTS + TVC + Tr	0	0	0	0	4.0									86			174	980
			3												87			174	980
			-3												88			174	980
		5	0												89			174	980
			3												90			174	980
			-3												91			174	980
		-5	0												92			174	980
			3												93			174	980
			-3												94			174	980
		0	0												95			174	980
	OTS + TVC *	.7	-.6			0.5									96			20	980
	OTS + TVC + TR	0	0	0	0	4.0									97			140	780
															98			120	590
															99			108	490
	OTS + TVC + Tr	0	0	0	0	4.0									100			60	280
		5													101			60	280
		-5													102			60	280

TEST RUN NUMBERS

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

α OR β SCHEDULES

COFFICIENTS

IDVAR (1) IDVAR (2) NDV

* Trips Off SRB Only

Tr = Trips on SRB's

TVC Pod on Left SRB Only

TABLE III (Concluded)

IH-97C

TEST :

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE :

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δ_e	CONTROL DEFLECTION δ_{ef}	CONTROL DEFLECTION Period	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.25	2.50	2.75	3.01	2.25	3.50	3.75	4.02			P_T	T_T
	OTS + TVC + Tr	-5	3	0	0	4.0									103			60	280
	↓		-3												104			60	280
	↓	0	0												105			60	280
															106			120	280
	OTS + TVC + Tr	.7	-.6	0	0	6.8									107			120	280
	↓	.7	-.6																

TEST RUN NUMBERS

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

IDVAR (1) IDVAR (2) NDV

COEFFICIENTS

α OR β SCHEDULES

Table IV

SRB CALORIMETER DFI LOCATIONS

Phase No.	Sensor No.	Type	X FS IN.	X MS IN.	X/L	Φ DEG	Skin thick- ness	Flight instr. ident.	Remarks
A B C	3001	T/C	544	9.52	.199	90	8440/B07R		R/H SRB MOTOR CASE
A B C	3002	T/C	544	9.52	.199	135	8441		R/H SRB MOTOR CASE
A B C	3003	T/C	544	9.52	.199	180	8442		R/H SRB MOTOR CASE
A B C	3004	T/C	1061	18.58	.498	90	8437		R/H SRB MOTOR CASE
A B C	3005	T/C	1061	18.58	.498	180	8438		R/H SRB MOTOR CASE
A	3006	T/C	1397	24.45	.692	90	8439		R/H SRB MOTOR CASE
A	3007	T/C	1884.9	32.98	.974	4	8407		R/H SRB AFT. SKIRT
A	3008	T/C	1910	33.42	.988	90	8434		R/H SRB AFT. SKIRT
A	3009	T/C	1910	33.42	.988	135	8436		R/H SRB AFT. SKIRT
A	3010	T/C	1910	33.42	.988	182	8443		R/H SRB AFT. SKIRT
A	3011	T/C	1910	33.42	.988	270	8435		R/H SRB AFT. SKIRT
A	3012	T/C	1920	33.60	.994	53	8409		R/H SRB AFT. SKIRT
								B07R-	
A B C	4013	T/C	200	3.5	0	0	7426		L/H SRB STAGN. POINT
A B C	4014	T/C	214	3.74	.0081	0	7427		L/H SRB NOSE CONE SKIRT
A B C	4015	T/C	286	5.01	.0497	54	7446		L/H SRB NOSE CONE SKIRT
A B C	4016	T/C	287	5.02	.0503	74	7412		L/H SRB NOSE CONE SKIRT
A B C	4017	T/C	300	5.25	.0578	180	7429		L/H SRB NOSE CONE SKIRT
A B C	4018	T/C	300	5.25	.0578	352	7428		L/H SRB NOSE CONE SKIRT
A B C	4019	T/C	313.5	5.49	.0656	72	7413		L/H SRB NOSE CONE SKIRT
A B C	4020	T/C	388	6.79	.1086	0	7430		L/H SRB NOSE CONE SKIRT
A B C	4021	T/C	388	6.79	.1086	45	7431		L/H SRB NOSE CONE SKIRT
- - -	4022	T/C	388	6.79	.1086	60	7432		L/H SRB NOSE CONE SKIRT
A B C	4023	T/C	419	7.33	.1265	46	7444		L/H SRB MOTOR CASE
A B C	4024	T/C	876	15.33	.3906	260	7418		L/H SRB MOTOR CASE
A B	4025	T/C	1237	21.65	.599	0	7419		L/H SRB MOTOR CASE
A B C	4026	T/C	1237	21.65	.599	99	7420		L/H SRB MOTOR CASE
A B C	4027	T/C	1237	21.65	.599	279	7421		L/H SRB MOTOR CASE
A	4028	T/C	1851	32.40	.954	18	7445		L/H SRB AFT SKIRT

NOTE: X_B NOSE IS X = 200

L = 1725.2

. Table IV (Cont'd)

SRB PROTUBERANCE INSTRUMENTATION LOCATIONS

Phase No.	Sensor No.	Type	X FS IN.	X BS IN.	X/L	ϕ DEG	Skin thick-ness	Flight instr. ident.	Remarks
								B07R-	
A B	4063	S-B	1838	32.165	.946	260		7416	SRB PROTUBERANCE
A B	4064	S-B	1838	32.165	.946	180		7417	L/H SRB KICK RING
A B	4065	S-B	1838	32.165	.946	0		7415	L/H SRB KICK RING
A B C	3066	S-B	1838	32.165	.946	48		8448	R/H SRB KICK RING
A B C	3067	S-B	1839	32.180	.947	35		8406	R/H SRB KICK RING
A B C	3068	S-B	1838	32.165	.946	42		8447	R/H SRB KICK RING
A B	4069	S-B	1504	26.32	.753	0		7414	L/H SRB ATTACH RING
A B	4070	S-B	1504	26.32	.753	90		7424	L/H SRB ATTACH RING
A B	4071	S-B	1504	26.32	.753	180		7425	L/H SRB ATTACH RING
								B07T-	
A B C	3203	S-B	1506	23.355	.757	90		8517	R/H SRB STRUT END FACE FIG
A B C	3207	S-B	450	7.875	.145	270		8527	R/H SRB CABLE TRAY FIG.
								B07R-	
A B	4186	S-B	1859.1	32.53	.962	16		7472	L/H SRB SEP. MOTOR FAIRING
B	4187	S-B	1856.3	32.485	.960	314°43'			TVC POD MEASUREMENTS
B	4188	S-B	1845.3	32.293	.954	292°59'			L/H SRB
B	4189	S-B	1856.3	32.485	.960	282°45'			L/H SRB
B	4190	S-B	1856.3	32.485	.960	271°14'			L/H SRB
B	4191	S-B	1845.3	32.293	.954	247°1'			L/H SRB

NOTE: S-B= SCHMIDT - BOELTER

SRB ACREAGE MEASUREMENTS

Phase No.	Sensor No.	Type	X_B FS	X_B MS	X/L	ϕ DEG	Skin thickness	Flight Instr. Idesc.	Remarks
								B07T-	
A B C	3224	T/C	280	4.90	.0462	45		8485	
~~A B C~~	~~3225~~	~~T/C~~	~~304~~	~~6.02~~	~~.0833~~	~~30~~		~~8487~~	OPEN (ELIMINATED) 4-8-72
A B C	3226	T/C	388	6.79	.1086	90		8436	
A	3227	T/C	460	8.05	.1902	180		8489	
A	3228	T/C	462	8.08	.1918	144		8487	
A	3229	T/C	480	8.58	.1680	105		8529	
A	3230	T/C	480	8.40	.1623	325		8538	
A	3231	T/C	485	8.49	.1651	330		8516	
A	3232	T/C	611.5	10.70	.2385	135		8495	
A	3233	T/C	931.5	16.30	.424	180		8490	
A	3234	T/C	1251.5	21.90	.609	180		8491	
A	3235	T/C	1481.5	25.93	.742	0		8492	
A	3236	T/C	1481.5	25.93	.742	90		8499	
A	3237	T/C	1637.5	28.66	.833	0		8502	
A	3238	T/C	1877.5	32.86	.972	45		8475	
A	3239	T/C	1910	33.42	.991	95		8474	
A	3240	T/C	1910	33.42	.991	315		8477	
								B07T-	
A B C	4208	T/C	280	4.90	.0462	6		7513	
A B C	4209	T/C	280	4.90	.0462	90		7483	
A B C	4210	T/C	280	4.90	.0462	270		7484	
A	4211	T/C	388	6.79	.1086	10		7515	
A	4212	T/C	462	8.08	.1518	0		7421	
A	4213	T/C	462	8.08	.1518	140		7482	
A	4214	T/C	480	8.40	.1623	110		7529	
A	4215	T/C	485	8.49	.1651	330		7516	
A	4216	T/C	611.5	10.70	.2385	225		7489	
A	4217	T/C	931.5	16.30	.424	180		7490	
A	4218	T/C	1251.5	21.90	.609	180		7491	
A	4219	T/C	1481.5	25.93	.742	180		7492	
A	4220	T/C	1637.5	28.66	.833	180		7494	
A	4221	T/C	1877.5	32.86	.972	90		7470	
A	4222	T/C	1877.5	32.86	.972	135		7471	
A	4223	T/C	1877.5	32.86	.972	166		7473	

Table IV (Cont'd)

ET CALORIMETER DFI LOCATIONS

Phase No.	Sensor No.	Type	X_T FS IN.	X_T MS IN.	X/L	θ DEG.	Skin Thickness	Flight instr. ident.	Remarks
								T07R-	
A B C	5029	S-B	350	6.125	.012	180		9001A	NOSE CAP
A B C	5030	T/C	467.4	8.180	.076	174		9005A	LO_2 TANK
A B C	5031	T/C	467.4	8.180	.076	264		9004A	LO_2 TANK
A B C	5032	S-B	672.5	11.77	.1871	180		9008A	LO_2 TANK
A B C	5033	T/C	672.5	11.77	.1871	270		9007A	LO_2 TANK
A B C	5034	T/C	825.5	14.45	.270	270		9010A	LO_2 TANK
A B C	5246	T/C	467.4	7.93	.076	25		9003A	LO_2 TANK
B C	5247	T/C	672.5	11.77	.1871	8.25		9006A	LO_2 TANK
A B C	5248	T/C	825.5	14.45	.270	0		9009A	LO_2 TANK
								T07R-	
A B C	5035	S-B	941.4	16.47	.3328	180		9017A	INTERTANK
A B C	5036	S-B	941.4	16.47	.3328	251.4		9016A	INTERTANK
A B C	5037	S-B	941.4	16.47	.3328	270		9015A	INTERTANK
A B C	5038	S-B	941.4	16.47	.3328	288.6		9014A	INTERTANK
A B C	5039	S-B	1098.5	19.22	.4179	2.5		9018A	INTERTANK
A B C	5040	S-B	1064.4	18.98	.4103	2.5		9019A	INTERTANK
A B C	5041	S-B	1110.4	19.43	.4244	2.5		9013A	INTERTANK
A B C	5042	S-B	976	17.08	.3515	25		9011A	INTERTANK
A B C	5043	S-B	1034.2	18.10	.3831	270		9021A	INTERTANK
A B C	5044	S-B	1082	18.94	.4090	180		9022A	INTERTANK

NOTE: Y_T NOSE IS Y_T= 327.2
L= 1845.5

Table IV (Cont'd)

ET CALORIMETER DFI LOCATIONS

Phase No.	Sensor No.	Type	X_T FS IN.	X_T MS IN.	X/L	θ DEG	Skin thickness	Flight instr. ident.	Remarks
								T07R-	
A B	5045	T/C	1489	26.06	.6295	172.5		9026A	LH_2 TANK
A B C	5046	T/C	1489	26.06	.6295	264.4		9025A	LH_2 TANK
A B C	5047	T/C	2002.5	35.04	.9078	168.8		9029	LH_2 TANK
A B C	5048	T/C	2017	35.30	.9156	5.6		9027A	LH_2 TANK
A B C	5049	T/C	2039	35.68	.9275	356.3		9030A	LH_2 TANK
A B C	5050	T/C	2057	36.00	.9373	5.6		9028A	LH_2 TANK
A B C	5051	T/C	2057	36.00	.9373	276		9031A	LH_2 TANK
A B C	5052	T/C	2057	36.00	.9373	340.6		9032A	LH_2 TANK
A B C	5249	T/C	1130.25	19.78	.435	0		9023	LH_2 TANK
A B C	5250	T/C	1147.4	20.08	.444	358		9020A	LH_2 TANK
A B C	5251	T/C	1489	26.06	.630	352.5		9024A	LH_2 TANK
A B C	5252	T/C	1871	32.74	.837	310		9033A	LH_2 TANK

Table IV (Cont'd)

ET THERMOCOUPLES AT SOFI PLUG LOCATIONS

Phase No.	Sensor No.	Type	X FS IN.	Y MS IN.	X/L	θ DEG	Skin thickness	Flight instr. ident.	Remarks
A	983	T/C	375	6.56	.0257	0			Same Loc. as T/C2187
A	600	T/C	395	6.91	.0366	0			
A	601	T/C	420	7.35	.0501	0			
A	5152	T/C	450	7.88	.0664	0			
A	5153	T/C	480	8.40	.0826	0			
A	5154	T/C	375	6.56	.0257	25			
A	5155	T/C	404	6.91	.0414				℄ of Ramp
A B C	5156	T/C	421	7.37	.0507	25			
A B C	5157	T/C	439	7.68	.0604	25			
A C	5158	T/C	476	8.33	.0805	25			
A C	5159	T/C	496	8.68	.0913	25			
A C	5160	T/C	1120.7	19.61	.430	17			
A	5161	T/C	1120.7	19.61	.430	343.12			
A C	5162	T/C	1152	20.16	.4468	20			
A	5163	T/C	1178	20.62	.4609	20			
- - -	5164	T/C	1178	20.62	.4609	358			(MISSING) Replaced w/1189
A	5165	T/C	1178	20.62	.4609	331			
A	5166	T/C	1205	21.09	.4755	20			
A	5167	T/C	1205	21.09	.4755	332			
A	5168	T/C	1231	21.54	.4898	20			
A	5169	T/C	1231	21.54	.4898	331			
A	5170	T/C	1852	32.41	.8261	332			

Table IV (Cont'd)

ET THERMOCOUPLES AT SOFI PLUG LOCATIONS

Phase No.	Sensor No.	Type	X_T FS IN	X_T MS IN	X/L	θ ψ DEG	Skin thickness	Flight instr. ident.	Remarks
A	5171	T/C	1871	32.74	.8364	18			
A	5172	T/C	1878	32.86	.8402	331			
A C	5173	T/C	1916	33.53	.8607	20			
- - -	5174	T/C	1916	33.53	.8607	358			(MISSING) W/627
- - -	5175	T/C	1916	33.53	.8607	332			(MISSING) W/630
A	5176	T/C	1949	34.11	.8786	20			
A	5177	T/C	1949	34.11	.8786	358			
A	5178	T/C	1949	34.11	.8786	331			
A	5179	T/C	1974	34.54	.8922	18			
A	5180	T/C	1981	34.67	.8960	332			
A	5185	T/C	2039	35.68	.9274	48			
BC	699	T/C	419.5	7.34	.050	29.8			
BC	715	T/C	419.5	7.34	.050	37.7			
~~5181~~	~~C-B~~	~~419.5~~	~~7.500~~	~~.054~~					~~Sensor at ramp~~

INSTRUMENTATION LOCATIONS IN SLA REGIONS

Phase No.	Sensor No.	Type	X_T FS IN	X_T MS IN	X/L	θ Ψ DEG	Skin Thickness	Flight instr. ident.	Remarks
A B C	5241	S-B	353.0	6.178		31.5		50109	To Cable Tray 1
A B C	5072	T/C	862.95	15.10	.29	280			Inter-Tank
A B C	5073	T/C	881.15	15.42	.30	280			
A B C	5074	T/C	899.61	15.74	.31	280			
A B C	5075	T/C	918.06	16.07	.32	280			
A B C	5076	T/C	936.52	16.39	.33	280			
A B C	5077	T/C	954.97	16.71	.34	280			
A B C	5078	T/C	973.43	17.04	.35	280			
A B C	5079	T/C	991.88	17.36	.36	280			
A B C	5080	T/C	1010.34	17.68	.37	280			
A B C	5081	T/C	1038.03	18.16	.385	280			
A B C	5082	T/C	1056.5	18.49	.395	337.5			Inter-Tank
A B C	5083	T/C	1194.9	20.91	.470	337.5			
A B C	5084	T/C	1250.0	21.88	.500	337.5			
A B C	5085	T/C	1056.5	18.49	.395	330			Inter-Tank
A B C	5086	T/C	1123	19.65	.431	330			
A B C	5087	T/C	1056.5	18.49	.395	343.12			
A B C	5088	T/C	1047.3	18.33	.390	40			Inter-Tank
B C	5096	T/C	1342.2	23.49	.55	17			
B C	5097	T/C	1342.2	23.49	.55	11.8			
A B C	635	T/C	1342.2	23.49	.55	0			
B C	5098	T/C	1342.2	23.49	.55	348			
B C	5100	T/C	1342.2	23.49	.55	337.5			
A B C	5141	S-B	470.5	7.58	.0856				CENTER OF RING

Table IV (Cont'd)

INSTRUMENTATION LOCATIONS IN SLA REGIONS

Phase No.	Sensor No.	Type	X_T FS IN	X_T MS IN	X/L	θ DEG	Skin thickness	Flight instr. ident.	Remarks
BC	5101	T/C	1480.94	25.92	.625	17			
BC	5102	T/C	1480.94	25.92	.625	11.8			
ABC	5103	T/C	1480.94	25.92	.625	0			
BC	5104	T/C	1480.94	25.92	.625	348			
BC	5105	T/C	1480.94	25.92	.625	337.5			
BC	5106	T/C	1554.69	27.21	.665	337.5			
BC	5107	T/C	1554.69	27.21	.665	330			
BC	5108	T/C	1554.69	27.21	.665	315			
ABC	5109	T/C	1951.54	34.15	.880	270			
ABC	5110	T/C	1951.54	34.15	.880	255			
ABC	5111	T/C	2058	36.02	.938	315			
ABC	5112	T/C	2058	36.02	.938	0			
ABC	5113	T/C	2058	36.02	.938	23			
ABC	5114	T/C	1951.54	34.15	.880	240			
ABC	5115	T/C	1951.54	34.15	.880	285			
ABC	5118	T/C	2036.46	35.64	.926	240			
ABC	5119	T/C	2036.46	35.64	.926	285			
ABC	5120	T/C	2058.0	36.02	.938	15			
ABC	5121	T/C	2058.0	36.02	.938	240			
ABC	5122	T/C	2058.0	36.02	.938	345			
ABC	5123	T/C	1803.64	31.56	.800	58.5			
ABC	5124	T/C	1877.46	32.86	.840	58.5			
---	5125	T/C	1951.54	34.15	.880	58.5			
ABC	5126	T/C	2036.46	35.64	.926	58.5			

INSTRUMENTATION LOCATIONS IN SLA REGION

Phase No.	Sensor No.	Type	X_T FS IN	Y_T MS IN	X/L	ϕ DEG	Skin thickness	Flight instr. ident.	Remarks
A B C	5127	T/C	1803.64	31.56	.800	68			
A B C	5128	T/C	1877.46	32.86	.840	68			
A B C	5129	T/C	1951.54	34.15	.880	68			
A B C	5130	T/C	2036.46	35.64	.926	68			
A B C	5131	T/C	1803.64	31.56	.800	75			
A B C	5132	T/C	1877.46	32.86	.840	75			
A B C	5133	T/C	1951.54	34.15	.880	75			
A B C	5134	T/C	2036.46	35.64	.926	75			
A B C	5259	S-B	1200	21.00	.473	37.5			LH_2 TK Cable Tray Top ℄
A B C	5260	S-B	1197	20.95	.471	35			LH_2 TK. Center of Ramp

Table IV (Cont'd)

ET PROTUBERANCES INSTRUMENTATION LOCATIONS

Phase No.	Sensor No.	Type	X_T FS IN	X_T MS IN	X/L	θ DEG	Skin thick-ness	Flight inser. ident.	Remarks
									Body Points
A B C	5053	S-B	1008	17.64	.369			95-012	LO_2 Feedline
A B C	5054	S-B	996	17.43	.362			038	LO_2 Feedline
A B C	5055	S-B	1324.6	23.180	.548			040	Cable Tray Fig.
A B C	5056	S-B	1906.2	33.358	.856			043	Cable Tray Fig.
A B C	5057	S-B	1129.9	19.77	.435			039	ET/ORB FWD Strut Fig
A B C	5058	S-B		16.795		270		041	Bolt Catcher Fig
A B C	5059	S-B	2002					042	ET/ORB Thrust Strut Fig
A B C	5060	S-B						045	Sway Strut Fig.
A B C	5061	S-B						046	Vertical Strut Fig.
A B C	5062	S-B						047	Crossbeam Fig.

Table IV (Cont'd)

ET INSTRUMENTATION UNDER FEEDLINE-BLUE STREAK

Phase No.	Sensor No.	Type	X_T FS IN	X_T MS IN	X/L	θ w DEG	Skin thick-ness	Flight instr. ident.	Remarks
BC	2072	T/C	1102.34	19.29	.420	36.32			
BC	5502	T/C	1106.0	19.36		32			
BC	2073	T/C	1111.57	19.45		36.32			
ABC	5504	T/C	1120.3	19.60		32			
BC	2074	T/C	1120.79	19.61		36.32			
BC	5506	T/C	1160.0	20.30		32			
ABC	5508	T/C	1174.3	20.55		32			
BC	5510	T/C	1224.4	21.427		32			
ABC	5512	T/C	1238.7	21.677		32			
BC	5513	T/C	1353.6	23.688		32			
ABC	5515	T/C	1367.9	23.938		32			
BC	5516	T/C	1418.2	24.819		32			
BC	2085	T/C	1434.46	25.103	.60	33.75			
BC	5518	T/C	1482.8	25.949		32			
BC	5519	T/C	1497.1	26.199		32			
BC	5501	T/C	1547.4	27.080		38			
BC	5520	T/C	1547.4	27.080		32			
BC	5503	T/C	1561.7	27.330		38			
BC	5521	T/C	1561.7	27.330		32			
BC	5505	T/C	1612.0	28.210		38			
BC	5522	T/C	1612.0	28.210		32			
AC	709	T/C	1619.09	28.334		29.8			
---	725	T/C	1619.09	28.334		37.7			(MISSING) W/626
BC	5507	T/C	1626.3	28.460		38			
BC	5523	T/C	1626.3	28.460		32			

Table IV (Cont'd)

ET INSTRUMENTATION UNDER FEEDLINE-BLUE STREAK

Phase No.	Sensor No.	Type	X_T FS IN	X_T MS IN	X/L	ϕ w DEC	Skin thickness	Flight instr. ident.	Remarks
BC	5524	T/C	1690.0	29.575	.739	38			
BC	5525	T/C	1690.0	29.575	.739	32			
BC	5509	T/C	1741.2	30.471	.766	38			
BC	5526	T/C	1741.2	30.471	.766	32			
BC	5511	T/C	1755.5	30.721	.774	38			
BC	5527	T/C	1755.5	30.721	.774	32			
BC	710	T/C	1803.64	31.564	.800	29.8			
BC	726	T/C	1803.64	31.564	.800	37.7			
BC	5528	T/C	1805.8	31.602	.801	32			
---	5514	T/C	1820.1	31.852	.809	38			(MISSING) w/632
BC	5529	T/C	18201.	31.852	.809	32			
---	5532	T/C	1870.4	32.732	.836	38			(MISSING) w/633
BC	5530	T/C	1870.4	32.732	.836	32			
---	5541	T/C	1884.7	32.982	.844	38			(MISSING) w/634
BC	5531	T/C	1884.7	32.982	.844	32			
BC	711	T/C	1932.83	33.825	.870	29.8			
BC	727	T/C	1932.83	33.825	.870	37.7			
BC	5533	T/C	1935	33.863	.871	32			
ABC	5534	T/C	1949.3	34.113	.879	38			
ABC	5535	T/C	1949.3	34.113	.879	32			
ABC	5536	T/C	1174.3	20.550	.459	27			
ABC	5537	T/C	1185.6	20.748	.465	27			
BC	2055	T/C	1877.5	32.856	.840	45			
BC	2056	T/C	1896	33.180	.850	45			

Table IV (Cont'd)

ET INSTRUMENTATION UNDER FEEDLINE - BLUE STREAK

Phase No.	Sensor No.	Type	X_T FS IN	X_T MS IN	X/L	ϕ DEG	Skin Thickness	Flight instr. ident.	Remarks
A B C	5538	T/C	1884.7	32.982		27			
A B C	5539	T/C	1896	33.180		27			
C	5540	S-B	1896	33.180		32			ET Surface

Table IV (Cont'd)

INSTRUMENTATION VERIFICATION LOCATIONS

Phase No.	Sensor No.	X_T FS Type	X_T FS IN	X_T MS IN	X/L	θ ♥ DEG	Skin thick-ness	Flight instr. ident.	Remarks
				EXTERNAL TANK					
A B C	5242	S-B	401.02	7.02	.04	180			Replaces existing R/C 737 at FWD Location on LO_2 Tank
A B C	5032	S-B	672.49	11.77	.1871	180			Existing S-B DFI
A B C	5253	T/C	650.16	11.38	.175	18			Mid Location on
A B C	5254	T/C	696.3	12.18	.200	180			LO_2 Tank
A B C	5035	S-B	941.38	16.47	.3328	180			S-B & T/C on new
	5255	T/C	880.85	15.41	.300	180			Intertank, FWD end
- - -	5256	T/C	973.12	17.03	.350	180			Of intertank on bot- tom ℄
A B C	5037	S-B	941.38	16.47	.3328	270			S-B & T/C locations
A B C	5257	T/C	899.31	15.74	.318	270			on new intertank
A B C	5258	T/C	954.67	16.71	.340	270			FWD of bolt catcher
A B C	628	T/C	1157.68	20.26	.450	0			Existing T/C 628 &
A B C	631	T/C	1194.58	20.91	.470	0			631 on FWD part of LH_2 tank top ℄
				SRB					
A B C	3243	S-B	200	3.5	0.0	0			R/H SRB Stagn. Point
A B C	4013	T/C	200	3.5	0.0	0			L/H SRB Stagn. point
A B C	3261	T/C	225.96	3.95	.015	90			R/H SRB

TABLE IV (Concluded)

SECOND PRIORITY ET MEASUREMENTS

	Sensor No.	Type	X_T FS IN	X_T MS IN	X/L	θ DEG	Skin thickness	Flight instr. ident.	Remarks
ABC	626	T/C		19.94		0			Duplicate 225
A	627	T/C		20.09		0			" " 5174
ABC	629	T/C		20.42		0			" " 5164
A	630	T/C		20.58		0			" " 5175
ABC	632	T/C		21.22		0			" " 5514
ABC	633	T/C		21.55		0			" " 5512
ABC	634	T/C		21.88		0			" " 5541
	2077	T/C	1434.46	25.103	.60	36.32			(MISSING)
	724	T/C	1434.46	25.103	.60	37.7			(MISSING)
	708	T/C	1434.46	25.103	.60	29.8			(MISSING)
C	648				.926	0			
BC	696				.926	17			
C	712				.926	29.8			
C	893				.900	315			
C	2002				.703	23			
C	2003				.835	23			
C	2004				.900	23			
C	2001				.569	23			
BC	2008				.581	31			
C	2009				.616	31			
C	2010				.650	31			
C	2035				.935	326			
C	2040				.936	345			
C	2044				.935	45			
C	2089				.937	352			
C	2114				.830	305			
C	2125				.900	302			
BC	2140				.926	289.9	.030		
AC	2145				.930	289.9	.0295		
BC	2146				.930	270	.030		
C	2151				.935	258	.0295		
C	2158				.926	315			
C	2160				.926	345			
C	2161				.890	45			
C	2007				.546	31			

TABLE V

SCHMIDT-BOELTER GAGE CALIBRATION CONSTANTS

GAGE SENSITIVITY TO INCIDENT RADIANT FLUX

(ABSORPTIVITY = 0.97) USED FOR DATA REDUCTION

GAGE No.	C_1 SENSITIVITY mv/Btu/ft^{2}sec	GAGE No.	C_1 SENSITIVITY mv/Btu/ft^{2}sec
5062	.512	5044	.580
5061	.462	5054	.484
5035	.570	3203	.528
5032	.612	4071	.450
5036	.500	5058	.486
3207	.534	5242	.510
4188	.618	4191	.525
5042	.550	3068	.452
3243	.412	4187	.515
4186	.522	5060	.520
5540	.512	3066	.500
5053	.534	4190	.634
4069	.450	5241	.565
5037	.478	4064	.500
5059	.444	5057	.518
5056	.512	5029	.525
5055	.488	5181	.550
3067	.442	5041	.492
5039	.504	5040	.512
5260	.446	5259	.564
4070	.556	4063	.504
5038	.420	5043	.560
4189	.545	4065	.532

GAGE SENSITIVITY TO ABSORBED HEAT FLUX

(DATA CORRECTED TO ABSORPTIVITY = 1.00)

GAGE No.	C_1 SENSITIVITY mv/Btu/ft^{2}sec	GAGE No.	C_1 SENSITIVITY mv/Btu/ft^{2}sec
5062	.528	5044	.598
5061	.476	5054	.497
5035	.588	3203	.544
5032	.631	4071	.464
5036	.515	5058	.501
3207	.551	5242	.526
4188	.637	4191	.541
5042	.567	3068	.466
3243	.425	4187	.531
4186	.538	5060	.536
5540	.528	3066	.515
5053	.551	4190	.654
4069	.464	5241	.582
5037	.493	4064	.515
5059	.458	5057	.534
5056	.528	5029	.541
5055	.503	5181	.567
3067	.456	5041	.505
5039	.520	5040	.528
5260	.460	5259	.581
4070	.573	4063	.520
5038	.433	5043	.577
4189	.562	4065	.548

TABLE VI

SCHMIDT-BOELTER GAUGE HEATING DATA

GAGE= 3066 X/L=0.8460 PHI= 48.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	0.4142	0.8700	0.4761	0.0384	0.0927	0.052894	34.04	675.67	3783000.
2	3.01	0.0	0.0	0.3883	0.8700	0.4463	0.0360	0.0827	0.052848	33.84	677.67	3767200.
4	2.24	2.40	-0.60	0.8178	0.8700	0.9400	0.1270	0.1563	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	0.6827	0.8700	0.7847	0.1065	0.1960	0.057850	22.88	644.67	4098100.
6	2.24	1.80	-0.70	1.0744	0.8700	1.2348	0.1647	0.1533	0.057984	22.93	648.67	4073800.
7	2.24	0.60	-0.20	1.0878	0.8700	1.2503	0.1674	0.1447	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	0.4761	0.8700	0.5472	0.0667	0.1380	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	0.2542	0.8700	0.2922	0.0347	0.1365	0.056609	26.21	648.67	4060500.
10	2.50	1.60	-0.70	0.7100	0.8700	0.8161	0.0940	0.1324	0.056303	26.01	648.67	4031000.
11	2.50	1.50	0.20	0.3338	0.8700	0.3837	0.0441	0.1321	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	0.1500	0.8700	0.1724	0.0186	0.1420	0.055904	31.19	650.67	4211400.
13	2.76	3.60	1.30	0.2240	0.8700	0.2575	0.0278	0.1420	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	0.5521	0.8700	0.6346	0.0604	0.1094	0.056639	31.07	652.67	4159500.
15	2.76	0.20	0.10	0.2459	0.8700	0.2826	0.0269	0.1094	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	1.1629	0.8700	1.3367	0.1071	0.0921	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	0.6304	0.8700	0.7246	0.0701	0.1112	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	0.2005	0.8700	0.2305	0.0224	0.1117	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	0.8691	0.8700	0.9990	0.0870	0.1001	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	1.1072	0.8700	1.2726	0.1033	0.0933	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	1.0943	0.8700	1.2578	0.1021	0.0933	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	0.7824	0.8700	0.8993	0.0730	0.0933	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	0.2678	0.8700	0.3078	0.0304	0.1135	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	0.2881	0.8700	0.3311	0.0327	0.1135	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	0.7833	0.8700	0.9003	0.0889	0.1135	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	0.6857	0.8700	0.7882	0.0696	0.1015	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	0.2814	0.8700	0.3234	0.0296	0.1052	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	0.8947	0.8700	1.0284	0.0807	0.0902	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	1.1107	0.8700	1.2767	0.0933	0.0840	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	0.7572	0.8700	0.8703	0.0708	0.0935	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	0.6848	0.8700	0.7871	0.0667	0.0974	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	1.4354	0.8700	1.6499	0.1117	0.0813	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	1.2474	0.8700	1.4338	0.0943	0.0756	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	1.7636	0.8700	2.0271	0.1171	0.0664	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	0.8821	0.8700	1.0139	0.0636	0.0721	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	0.9185	0.8700	1.0557	0.0744	0.0810	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	1.1719	0.8700	1.3470	0.1009	0.0861	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	1.2741	0.8700	1.4645	0.0753	0.0591	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	1.3553	0.8700	1.5578	0.0801	0.0591	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	0.3061	0.8700	0.3518	0.0348	0.1137	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	0.4195	0.8700	0.4822	0.0477	0.1137	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	0.8373	0.8700	0.9624	0.0952	0.1137	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	0.1708	0.8700	0.1963	0.0194	0.1136	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	0.8222	0.8700	0.9451	0.0934	0.1136	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	1.1403	0.8700	1.3107	0.1065	0.0934	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	1.1681	0.8700	1.3426	0.1091	0.0934	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	0.7955	0.8700	0.9144	0.0743	0.0934	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	0.4711	0.8700	0.5415	0.0440	0.0934	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	1.0396	0.8700	1.1949	0.0971	0.0934	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	1.2013	0.8700	1.3808	0.1122	0.0934	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	1.0364	0.8700	1.1913	0.0968	0.0934	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	0.7002	0.8700	0.8048	0.0654	0.0934	0.055734	37.00	721.67	3739500.
53	3.01	-5.00	6.00	0.6991	0.8700	0.8036	0.0653	0.0934	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	0.9186	0.8700	1.0559	0.0858	0.0934	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	0.8373	0.8700	0.9624	0.0782	0.0934	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.1413	0.8700	1.3118	0.1066	0.0934	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	1.2083	0.8700	1.3888	0.1015	0.0840	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	1.3607	0.8700	1.5640	0.1143	0.0840	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	1.0326	0.8700	1.1869	0.1077	0.1043	0.055847	45.07	733.67	3899700
60	3.51	0.0	0.0	1.5345	0.8700	1.7638	0.1157	0.0754	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	0.8656	0.8700	0.9949	0.0702	0.0811	0.055442	55.16	741.67	4080200.
62	3.51	0.0	-3.00	0.8302	0.8700	0.9543	0.0626	0.0754	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	0.8860	0.8700	1.0184	0.0847	0.0956	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.4744	0.8700	1.6947	0.0979	0.0664	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	0.8449	0.8700	0.9711	0.0561	0.0664	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.0801	0.8700	1.2415	0.0930	0.0861	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	0.9487	0.8700	1.0905	0.0684	0.0721	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.7157	0.8700	1.9721	0.1014	0.0591	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.0982	0.8700	1.2623	0.0861	0.0784	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.1967	0.8700	1.3755	0.0937	0.0783	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	0.9055	0.8700	1.0408	0.0709	0.0713	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	0.4092	0.8700	0.4703	0.0320	0.0742	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	0.9118	0.8700	1.0480	0.0713	0.0782	0.050925	72.73	739.67	4108000.

TABLE VI (Continued)

74	4.04	0.0	3.00	0.4788	0.8700	0.5603	0.0263	0.0591	0.050994	72.80	740.67	4106000.
75	4.04	0.0	6.00	0.8274	0.8700	0.9510	0.0489	0.0591	0.050866	72.85	739.67	4111700.
76	4.04	0.0	-6.00	1.6108	0.8700	1.8515	0.0952	0.0591	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	1.2893	0.8700	1.4820	0.0762	0.0591	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	1.8274	0.8700	2.1005	0.1080	0.0591	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	1.6103	0.8700	2.1957	0.1129	0.0591	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	0.9514	0.8700	0.7487	0.0385	0.0591	0.050866	72.85	739.67	4111700.
81	4.04	-5.00	6.00	2.1810	0.8700	2.5069	0.1289	0.0591	0.051001	72.85	739.67	4117400.
82	4.04	-5.00	-6.00	1.2741	0.8700	1.4645	0.0753	0.0591	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.5127	0.8700	1.7387	0.0894	0.0591	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	1.4264	0.8700	1.6395	0.0843	0.0591	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	0.6689	0.8700	0.7689	0.0713	0.1066	0.069521	92.01	683.67	5684000.
86	4.00	0.0	0.0	1.4863	0.8700	1.7084	0.1030	0.0693	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	1.8990	0.8700	2.1828	0.1316	0.0693	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	0.7576	0.8700	0.8708	0.0525	0.0693	0.089307	174.68	1440.70	3637100.
89	4.00	5.00	0.0	1.0731	0.8700	1.2334	0.0984	0.0917	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	1.5741	0.8700	1.8093	0.1445	0.0918	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	0.4924	0.8700	0.5660	0.0452	0.0918	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	1.7168	0.8700	1.9733	0.1188	0.0692	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	2.2298	0.8700	2.5630	0.1543	0.0692	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	1.2197	0.8700	1.4020	0.0844	0.0692	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	1.5217	0.8700	1.7491	0.1053	0.0692	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	0.8283	0.8700	0.9521	0.0275	0.0332	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	1.4768	0.8700	1.6975	0.0985	0.0667	0.078417	140.45	1245.70	3651800.
98	4.00	0.0	0.0	1.4119	0.8700	1.6229	0.0929	0.0656	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	1.4604	0.8700	1.6786	0.0923	0.0632	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	1.3327	0.8700	1.5318	0.0749	0.0562	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	1.1779	0.8700	1.3539	0.0874	0.0742	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	1.8289	0.8700	2.1022	0.1026	0.0561	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	1.9964	0.8700	2.2947	0.1122	0.0562	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	0.7843	0.8700	0.9015	0.0440	0.0561	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	1.4171	0.8700	1.6288	0.0785	0.0561	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	0.8856	0.8700	1.0179	0.0627	0.0708	0.066420	119.54	737.67	6920200
107	4.00	0.70	-0.60	0.8460	0.8700	0.9724	0.0599	0.0708	0.066764	120.72	738.67	6974400

GAGE= 3067 X/L=0.9470 PHI= 35.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	1.2824	0.8700	1.4395	0.1161	0.0927	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	1.0820	0.8700	1.2437	0.1003	0.0927	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	1.2000	0.8700	1.3793	0.1730	0.1600	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	0.8200	0.8700	1.0575	0.1331	0.1600	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	0.8400	0.8700	0.9655	0.1213	0.1600	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	1.6200	0.8700	1.8621	0.2347	0.1600	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	0.1291	0.8700	0.1484	0.0161	0.1247	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	0.1323	0.8700	0.1521	0.0165	0.1247	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	0.7698	0.8700	0.8848	0.0960	0.1247	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	0.4531	0.8700	0.5208	0.0565	0.1247	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	0.5300	0.8700	0.6092	0.0577	0.1270	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	0.8400	0.8700	0.9655	0.0915	0.1270	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	1.5242	0.8700	1.7520	0.1666	0.1093	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	1.2004	0.8700	1.3798	0.1312	0.1093	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	0.9468	0.8700	1.0883	0.0872	0.0921	0.052886	34.04	674.67	3782900.
17	3.02	4.60	-0.70	0.7588	0.8700	0.8722	0.0708	0.0933	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	0.4180	0.8700	0.4805	0.0390	0.0933	0.055824	37.48	721.67	3767500.
19	3.02	1.60	-0.70	1.1147	0.8700	1.2813	0.1040	0.0933	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	1.1372	0.8700	1.3071	0.1061	0.0933	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	0.8467	0.8700	0.9732	0.0790	0.0933	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	1.0137	0.8700	1.1652	0.1035	0.1021	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	0.3012	0.8700	0.3462	0.0281	0.0933	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	0.1994	0.8700	0.2292	0.0186	0.0933	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	1.0429	0.8700	1.1987	0.0973	0.0933	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	0.9273	0.8700	1.0659	0.0778	0.0839	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	0.3897	0.8700	0.4479	0.0327	0.0839	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	1.0536	0.8700	1.2110	0.0884	0.0839	0.056035	45.17	726.67	3992700.
29	3.24	0.30	0.0	1.3480	0.8700	1.5494	0.1131	0.0839	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	0.9643	0.8700	1.1084	0.0729	0.0756	0.055407	54.89	727.67	4209800.
31	3.50	5.30	1.50	0.8180	0.8700	1.0552	0.0694	0.0756	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	1.5688	0.8700	1.8032	0.1186	0.0756	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	1.3069	0.8700	1.5022	0.0988	0.0756	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	1.7349	0.8700	1.9941	0.1152	0.0664	0.053050	61.92	738.67	4058400.
35	3.77	1.50	-0.50	1.1596	0.8700	1.3329	0.0770	0.0664	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	1.3690	0.8700	1.5736	0.0909	0.0664	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	1.3675	0.8700	1.5718	0.0908	0.0664	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	1.2504	0.8700	1.4372	0.0739	0.0591	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	1.4433	0.8700	1.6590	0.0853	0.0591	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	0.3105	0.8700	0.3569	0.0290	0.0934	0.055879	37.09	722.67	3741700.

TABLE VI (Continued)

41	3.01	5.00	3.00	0.3876	0.8700	0.4466	0.0362	0.0834	0.056883	37.07	724.67	3725100.
42	3.01	5.00	-3.00	1.0663	0.8700	1.2245	0.0995	0.0834	0.056846	37.01	724.67	3718800.
43	3.01	5.00	6.00	0.4615	0.8700	0.5305	0.0431	0.0834	0.056782	36.89	724.67	3706300.
44	3.01	5.00	-6.00	0.8575	0.8700	1.1006	0.0946	0.0888	0.056744	36.88	724.67	3705200.
45	3.01	0.0	0.0	1.1991	0.8700	1.3783	0.1120	0.0834	0.056838	37.00	724.67	3717700.
46	3.01	0.0	3.00	0.8415	0.8700	0.8672	0.0786	0.0834	0.056788	36.83	724.67	3711100.
47	3.01	0.0	-3.00	1.0254	0.8700	1.1786	0.1049	0.1023	0.056784	36.96	729.67	3721000.
48	3.01	0.0	6.00	0.7784	0.8700	0.8950	0.0728	0.0834	0.056805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	0.8372	0.8700	0.9623	0.0831	0.1112	0.056968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	0.9548	0.8700	1.0976	0.1017	0.1065	0.056787	36.98	722.67	3730600.
51	3.01	-5.00	3.00	0.6630	0.8700	0.7621	0.0665	0.0888	0.056717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	0.9259	0.8700	1.0636	0.1077	0.1164	0.056794	37.00	721.67	3739900.
53	3.01	-5.00	6.00	0.6231	0.8700	0.7162	0.0582	0.0834	0.056717	36.91	720.67	3736500.
54	3.01	-5.00	-6.00	0.7034	0.8700	0.8085	0.0901	0.1281	0.056783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	0.8932	0.8700	1.1416	0.1016	0.1023	0.056874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.2634	0.8700	1.4522	0.1180	0.0834	0.056871	37.02	726.67	3712900.
57	3.25	0.0	0.0	1.3456	0.8700	1.5467	0.1129	0.0839	0.056670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	0.8575	0.8700	0.9856	0.0794	0.0926	0.056860	45.07	734.67	3892000.
59	3.25	5.00	0.0	1.0060	0.8700	1.1563	0.0844	0.0839	0.056847	45.07	733.67	3899700.
60	3.51	0.0	0.0	1.5981	0.8700	1.8369	0.1205	0.0754	0.056389	55.08	740.67	4084900.
61	3.51	1.40	-0.20	1.0119	0.8700	1.1631	0.0763	0.0754	0.056442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	0.7804	0.8700	0.8970	0.0654	0.0838	0.056339	55.03	738.67	4097500.
63	3.51	5.00	0.0	1.1034	0.8700	1.2683	0.0832	0.0754	0.056354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.4819	0.8700	1.7033	0.0984	0.0664	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	0.6685	0.8700	0.7684	0.0498	0.0745	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.3901	0.8700	1.5978	0.0923	0.0664	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	1.0964	0.8700	1.2602	0.0728	0.0664	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.6988	0.8700	1.9526	0.1004	0.0591	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.6176	0.8700	1.8593	0.0956	0.0591	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.2538	0.8700	1.4411	0.0741	0.0591	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	1.3604	0.8700	1.5637	0.0804	0.0591	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	0.8900	0.8700	1.0230	0.0526	0.0591	0.050957	72.36	738.67	4120600.
73	4.04	5.00	-6.00	1.1088	0.8700	1.2745	0.0703	0.0634	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.3926	0.8700	1.6007	0.0823	0.0591	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	1.1929	0.8700	1.3711	0.0705	0.0591	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	0.9222	0.8700	1.0600	0.0699	0.0758	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	0.9356	0.8700	1.0754	0.0625	0.0668	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	1.8492	0.8700	2.2405	0.1382	0.0709	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	1.8368	0.8700	2.2262	0.1226	0.0633	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	1.0961	0.8700	1.2599	0.0890	0.0812	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	2.3486	0.8700	2.6995	0.1388	0.0591	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	0.9775	0.8700	1.1236	0.0912	0.0933	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.6193	0.8700	1.8613	0.0957	0.0591	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	1.7716	0.8700	2.0363	0.1047	0.0591	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	1.2570	0.8700	1.4448	0.1340	0.1066	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	1.0505	0.8700	1.2075	0.0728	0.0693	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	1.3218	0.8700	1.5193	0.0916	0.0693	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	0.6475	0.8700	0.7443	0.0507	0.0783	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	0.9364	0.8700	1.0763	0.0648	0.0692	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	1.0750	0.8700	1.2356	0.0745	0.0693	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	0.7302	0.8700	0.8393	0.0506	0.0693	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	0.8929	0.8700	1.0263	0.0742	0.0831	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	1.2938	0.8700	1.4871	0.0960	0.0742	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	0.5632	0.8700	0.6474	0.0535	0.0950	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	1.0636	0.8700	1.2225	0.0736	0.0692	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	1.9849	0.8700	2.2815	0.0659	0.0332	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	1.1409	0.8700	1.3114	0.0761	0.0667	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	1.1550	0.8700	1.3276	0.0760	0.0658	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	1.1978	0.8700	1.3768	0.0767	0.0632	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	1.1886	0.8700	1.3662	0.0668	0.0562	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	1.2282	0.8700	1.4117	0.0689	0.0561	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	1.1382	0.8700	1.3083	0.0766	0.0673	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	1.4435	0.8700	1.6592	0.0869	0.0602	0.047189	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	0.5896	0.8700	0.6777	0.0454	0.0770	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	1.2424	0.8700	1.4280	0.0697	0.0551	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	0.8983	0.8700	1.0325	0.0636	0.0708	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	0.8814	0.8700	1.0131	0.0624	0.0708	0.066764	120.72	738.67	6974400.

GAGE= 3068 X/L=0.9460 PHI= 42.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	0.1553	0.8700	0.1785	0.0144	0.0927	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	0.1424	0.8700	0.1637	0.0132	0.0927	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	0.5923	0.8700	0.6808	0.0857	0.1447	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	0.4492	0.8700	0.5163	0.0650	0.1447	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	0.7961	0.8700	0.9151	0.1152	0.1447	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	0.8487	0.8700	0.9755	0.1228	0.1447	0.058088	23.00	649.67	4077600.

TABLE VI (Continued)

8	2.50	3.20	-0.60	0.2735	0.8700	0.3144	0.0341	0.1247	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	0.02 7	0.8700	0.0249	0.0027	0.1247	0.056609	26.21	649.67	4060500.
10	2.50	1.60	-0.70	0.5269	0.8700	0.6056	0.0657	0.1247	0.056303	26.01	648.67	4031000.
11	2.50	1.50	0.20	0.1828	0.8700	0.2101	0.0228	0.1247	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	0.0600	0.8700	0.0690	0.0069	0.1270	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	0.0900	0.8700	0.1034	0.0104	0.1270	0.056675	31.03	650.67	4172900.
14	2.76	0.90	-0.80	0.2678	0.8700	0.3078	0.0293	0.1094	0.056639	31.07	652.67	4159500.
15	2.76	0.20	0.10	0.0850	0.8700	0.0977	0.0093	0.1094	0.056712	31.17	651.67	4181900.
16	3.01	0.0	0.0	0.9207	0.8700	1.0583	0.0848	0.0921	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	0.5852	0.8700	0.6726	0.0546	0.0933	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	0.1361	0.8700	0.1564	0.0127	0.0933	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	0.9121	0.8700	1.0484	0.0851	0.0933	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	1.0257	0.8700	1.1790	0.0957	0.0933	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	0.7471	0.8700	0.8587	0.0697	0.0933	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	0.6796	0.8700	0.7811	0.0683	0.1005	0.056483	36.89	721.67	3708300.
23	3.02	5.00	0.0	0.1447	0.8700	0.1663	0.0135	0.0933	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	0.2079	0.8700	0.2390	0.0194	0.0933	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	0.7449	0.8700	0.8562	0.0695	0.0933	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	0.8357	0.8700	0.9606	0.0702	0.0840	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	0.2417	0.8700	0.2778	0.0203	0.0840	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	0.9464	0.8700	1.0878	0.0795	0.0840	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	1.1060	0.8700	1.2713	0.0929	0.0840	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	0.9749	0.8700	1.1206	0.0737	0.0756	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	0.9392	0.8700	1.0795	0.0710	0.0756	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	1.1005	0.8700	1.2649	0.0832	0.0756	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	1.1905	0.8700	1.3684	0.0900	0.0756	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	1.4443	0.8700	1.6601	0.0959	0.0664	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	0.9759	0.8700	1.1217	0.0648	0.0664	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	1.1310	0.8700	1.3000	0.0751	0.0664	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	1.4910	0.8700	1.7138	0.0990	0.0664	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	1.2030	0.8700	1.3828	0.0711	0.0591	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	1.3096	0.8700	1.5053	0.0774	0.0591	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	0.1100	0.8700	0.1264	0.0202	0.1100	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	0.3400	0.8700	0.3908	0.0320	0.1100	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	0.7300	0.8700	0.8391	0.0686	0.1100	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	0.0040	0.8700	0.0046	0.0004	0.1100	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	0.8590	0.8700	0.9874	0.0803	0.1100	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	1.1600	0.8700	1.3333	0.1085	0.1100	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	0.6800	0.8700	0.7816	0.0635	0.1100	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	0.6700	0.8700	0.7701	0.0678	0.1170	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	0.3100	0.8700	0.3563	0.0293	0.1100	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	0.8200	0.8700	0.9425	0.0879	0.1240	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	0.9200	0.8700	1.0575	0.1008	0.1280	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	0.7000	0.8700	0.8046	0.0723	0.1190	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	0.5300	0.8700	0.6092	0.0619	0.1380	0.055784	37.00	721.67	3739500.
53	3.01	-5.00	6.00	0.5100	0.8700	0.5862	0.0478	0.1100	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	0.6400	0.8700	0.7356	0.0805	0.1490	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	0.7000	0.8700	0.8046	0.0703	0.1170	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.2100	0.8700	1.3908	0.1130	0.1100	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	1.1500	0.8700	1.3218	0.0965	0.1010	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	0.8400	0.8700	0.9655	0.0763	0.1070	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	1.1900	0.8700	1.3678	0.0982	0.1010	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	1.2100	0.8700	1.3908	0.0916	0.0920	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	0.9700	0.8700	1.1149	0.0729	0.0920	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	0.6700	0.8700	0.7701	0.0552	0.0980	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	1.0800	0.8700	1.2414	0.0816	0.0900	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.4400	0.8700	1.6552	0.0956	0.0820	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	0.6900	0.8700	0.7931	0.0505	0.0880	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.3700	0.8700	1.5747	0.0913	0.0820	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	1.0600	0.8700	1.2184	0.0703	0.0820	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.7300	0.8700	1.9885	0.1025	0.0730	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.4800	0.8700	1.7011	0.0873	0.0730	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.5200	0.8700	1.7471	0.0899	0.0730	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	1.1100	0.8700	1.2759	0.0655	0.0730	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	0.3500	0.8700	0.4023	0.0210	0.0730	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	1.0100	0.8700	1.1609	0.0600	0.0730	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	0.4500	0.8700	0.5172	0.0268	0.0730	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	0.8500	0.8700	0.9770	0.0503	0.0730	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	1.0900	0.8700	1.2529	0.0780	0.0870	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	1.0000	0.8700	1.1494	0.0653	0.0790	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	1.3000	0.8700	1.4943	0.0963	0.0910	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	1.4000	0.8700	1.6092	0.0943	0.0820	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	0.3000	0.8700	0.3448	0.0246	0.1020	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	1.9000	0.8700	2.1839	0.1124	0.0730	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	0.6500	0.8700	0.7471	0.0595	0.1150	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.4300	0.8700	1.6437	0.0843	0.0730	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	1.5300	0.8700	1.7586	0.0906	0.0730	0.050975	72.81	741.67	4092500.

TABLE VI (Continued)

85	3.01	0.0	0.0	0.4400	0.8700	0.5057	0.0468	0.1260	0.066821	52.01	683.67	5684000.
86	4.00	0.0	0.0	1.2520	0.8700	1.4391	0.0868	0.0870	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	1.6170	0.8700	1.8586	0.1121	0.0870	0.089267	174.48	1438.70	3642800.
88	4.00	0.0	-3.00	0.7200	0.8700	0.8276	0.0547	0.0960	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	1.2000	0.8700	1.3793	0.0830	0.0870	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	1.7000	0.8700	1.9540	0.1180	0.0870	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	0.6800	0.8700	0.7816	0.0472	0.0870	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	1.1200	0.8700	1.2874	0.0975	0.1100	0.089259	174.42	1438.70	3637700.
93	4.00	-5.00	3.00	1.5800	0.8700	1.8161	0.1245	0.0990	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	0.7900	0.8700	0.9080	0.0764	0.1240	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	1.2500	0.8700	1.4368	0.0867	0.0870	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	0.7600	0.8700	0.8736	0.0252	0.0420	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	1.2300	0.8700	1.4138	0.0821	0.0840	0.078417	140.45	1245.70	3651800.
98	4.00	0.0	0.0	1.1610	0.8700	1.3345	0.0764	0.0820	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	1.2030	0.8700	1.3828	0.0761	0.0790	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	1.2440	0.8700	1.4299	0.0699	0.0700	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	1.4800	0.8700	1.7011	0.0829	0.0690	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	1.3900	0.8700	1.5977	0.0980	0.0860	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	1.5400	0.8700	1.7701	0.0982	0.0780	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	0.5800	0.8700	0.6667	0.0451	0.0970	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	1.2310	0.8700	1.4149	0.0691	0.0700	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	0.8600	0.8700	0.9885	0.0609	0.0880	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	0.8100	0.8700	0.9310	0.0571	0.0880	0.066764	120.72	738.67	6974400.

GAGE= 3203 X/L=0.7570 PHI= 50.000 NRUN= 94

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	7.9250	0.8700	9.1092	1.5747	0.1987	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	7.3533	0.8700	8.4521	1.4611	0.1987	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	4.9265	0.8700	5.6626	1.1390	0.2312	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	4.4436	0.8700	5.1076	1.0318	0.2322	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	5.3574	0.8700	6.1579	1.2547	0.2342	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	5.5880	0.8700	6.4230	1.3467	0.2410	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	6.0600	0.8700	6.9655	1.2732	0.2101	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	5.2116	0.8700	5.9903	1.1184	0.2146	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	5.1475	0.8700	5.9167	1.1273	0.2190	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	5.6738	0.8700	6.5216	1.2539	0.2210	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	6.5692	0.8700	7.5508	1.2718	0.1936	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	6.1858	0.8700	7.1101	1.2254	0.1981	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	7.0555	0.8700	8.1098	1.4873	0.2108	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	6.9320	0.8700	7.9678	1.4994	0.2163	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	7.7100	0.8700	8.8621	1.5250	0.2400	0.052886	34.04	674.67	3732800.
17	3.02	4.50	-0.70	6.2800	0.8700	7.2184	1.0790	0.2090	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	5.8200	0.8700	6.6897	1.0180	0.2120	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	5.3100	0.8700	6.1034	1.0070	0.2320	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	6.7300	0.8700	7.7356	1.3400	0.2450	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	6.2100	0.8700	7.1379	1.2740	0.2540	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	6.8100	0.8700	7.8276	1.3290	0.2400	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	5.3100	0.8700	6.1034	0.9019	0.2060	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	3.4200	0.8700	3.9310	0.5983	0.2120	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	7.0200	0.8700	8.0690	1.1560	0.1990	0.055536	36.96	721.67	3715700.
26	3.24	4.40	-0.60	6.4900	0.8700	7.4598	1.0700	0.2030	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	4.6500	0.8700	5.3448	0.7619	0.2020	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	5.8700	0.8700	6.7471	1.0750	0.2290	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	6.0560	0.8700	6.9609	1.1610	0.2410	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	8.0100	0.8700	9.2069	1.2600	0.1970	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	5.4700	0.8700	6.2874	0.8518	0.1950	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	5.6900	0.8700	6.5402	1.0170	0.2270	0.055430	54.98	728.67	4192000.
33	3.50	0.40	-0.30	6.3000	0.8700	7.2414	1.1590	0.2350	0.055543	55.23	728.67	4219800.
34	3.75	0.30	0.0	4.4400	0.8700	5.1034	0.7727	0.2260	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	6.8700	0.8700	7.8966	1.1370	0.2140	0.052582	61.87	739.67	4012800.
36	3.77	3.80	0.70	7.5500	0.8700	8.6782	1.1510	0.1950	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	7.8600	0.8700	9.0345	1.1340	0.1830	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	7.2200	0.8700	8.2989	1.1720	0.2140	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	6.8200	0.8700	7.8391	1.1450	0.2210	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	5.2519	0.8700	6.0367	0.8944	0.1703	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	3.3757	0.8700	3.8801	0.5921	0.1754	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	7.4964	0.8700	8.6166	1.2369	0.1650	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	2.6249	0.8700	3.0171	0.4730	0.1802	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	2.5643	0.8700	2.9475	0.4090	0.1595	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	7.8754	0.8700	9.0522	1.5806	0.2007	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	7.2613	0.8700	8.3463	1.4922	0.2055	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	8.5161	0.8700	9.7886	1.6649	0.1955	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	8.3837	0.8700	9.6364	1.7589	0.2098	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	6.1901	0.8700	7.1151	1.1755	0.1899	0.055868	37.23	721.67	3762900.
50	3.01	-5.00	0.0	7.3734	0.8700	8.4752	1.6745	0.2271	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	6.7515	0.8700	7.7603	1.5596	0.2310	0.055717	36.88	722.67	3719900.

TABLE VI (Continued)

52	3.01	-5.00	-3.00	6.4266	0.8700	7.3869	1.4312	0.2227	0.056784	37.00	721.67	3739500.
53	3.01	-5.00	6.00	6.0687	0.8700	6.9755	1.4219	0.2343	0.056717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	2.9247	0.8700	3.3617	0.6367	0.2177	0.056783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	8.6266	0.8700	9.9156	1.6866	0.1955	0.056874	37.08	722.67	3741000.
56	3.01	0.0	0.0	7.9063	0.8700	9.0877	1.5868	0.2007	0.056871	37.02	725.67	3712900.
57	3.25	0.0	0.0	6.8904	0.8700	7.9200	1.3333	0.1935	0.056670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	7.5545	0.8700	8.6833	1.4210	0.1881	0.056860	45.07	734.67	3892000.
59	3.25	5.00	0.0	4.6652	0.8700	5.3608	0.7946	0.1621	0.056847	45.07	733.67	3899700.
60	3.51	0.0	0.0	4.4971	0.8700	5.1691	0.8387	0.1865	0.056389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	7.1748	0.8700	8.2469	1.2721	0.1773	0.056442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	4.1541	0.8700	4.7748	0.7519	0.1810	0.056339	55.03	738.67	4097500.
63	3.51	5.00	0.0	6.9618	0.8700	8.0021	1.0742	0.1543	0.056354	55.11	736.67	4120500.
64	3.76	0.0	0.0	7.8010	0.8700	8.9667	1.3722	0.1759	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	3.8245	0.8700	4.3960	0.6517	0.1704	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	9.0861	0.8700	10.4438	1.3084	0.1440	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	7.5223	0.8700	8.6463	1.2457	0.1656	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	7.7896	0.8700	8.9536	1.3071	0.1678	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	8.7601	0.8700	10.0691	1.1905	0.1359	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	5.4965	0.8700	6.3178	0.7761	0.1412	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	2.3528	0.8700	2.7044	0.3068	0.1304	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	2.9214	0.8700	3.3579	0.4274	0.1463	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	1.8258	0.8700	2.0986	0.2275	0.1246	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	2.0474	0.8700	2.3533	0.3540	0.1729	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	8.8901	0.8700	10.2185	1.5780	0.1775	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	3.2837	0.8700	3.7744	0.5139	0.1565	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	4.6765	0.8700	5.3753	0.7590	0.1623	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	3.3481	0.8700	3.8484	0.6569	0.1962	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	3.3461	0.8700	3.8461	0.6709	0.2005	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	2.7915	0.8700	3.2086	0.5343	0.1914	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	3.0122	0.8700	3.4623	0.6157	0.2044	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	4.1113	0.8700	4.7256	0.7647	0.1860	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	5.5888	0.8700	6.4239	0.9378	0.1678	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	7.9452	0.8700	9.1324	1.3332	0.1678	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	6.9991	0.8700	8.0449	1.6077	0.2297	0.065521	52.01	683.67	5684000.
98	4.00	0.0	0.0	5.7000	0.8700	6.5517	1.0580	0.2550	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	6.2800	0.8700	7.2184	1.1200	0.2430	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	8.4300	0.8700	9.6897	1.3380	0.2090	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	10.1200	0.8700	11.6322	1.3000	0.1650	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	7.7400	0.8700	8.8966	1.4320	0.2460	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	6.4700	0.8700	7.4368	1.2240	0.2520	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	8.2700	0.8700	9.5057	1.4940	0.2400	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	7.7900	0.8700	8.9540	1.2350	0.2090	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	5.8300	0.8700	6.7011	1.1350	0.2560	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	5.9400	0.8700	6.8276	1.1550	0.2560	0.066764	120.72	738.67	6974400.

GAGE= 3207 X/L=0.1490 PHI=270.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	4.0120	0.8700	4.6115	0.5027	0.1253	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	3.7614	0.8700	4.3234	0.4713	0.1253	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	2.9080	0.8700	3.3425	0.5627	0.1935	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	2.9008	0.8700	3.3343	0.5613	0.1935	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	2.9194	0.8700	3.3556	0.5649	0.1935	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	2.6693	0.8700	3.0682	0.5165	0.1935	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	3.0364	0.8700	3.4901	0.5883	0.1674	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	3.3883	0.8700	3.8946	0.5672	0.1674	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	3.1057	0.8700	3.5698	0.5198	0.1674	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	3.2593	0.8700	3.7463	0.5456	0.1674	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	3.2785	0.8700	3.7684	0.4826	0.1472	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	3.5591	0.8700	4.0908	0.5239	0.1472	0.055575	31.03	650.67	4172800.
14	2.76	0.90	-0.80	3.4973	0.8700	4.0199	0.5148	0.1472	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	3.3465	0.8700	3.8466	0.4926	0.1472	0.055712	31.17	651.67	4161900.
16	3.01	0.0	0.0	4.2169	0.8700	4.8470	0.5250	0.1248	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	3.8394	0.8700	4.4131	0.4830	0.1258	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	4.3219	0.8700	4.9677	0.5437	0.1258	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	3.8005	0.8700	4.3684	0.4781	0.1258	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	3.7949	0.8700	4.3620	0.4774	0.1258	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	4.4515	0.8700	5.1167	0.5600	0.1258	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	3.2489	0.8700	3.7344	0.4477	0.1378	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	4.0048	0.8700	4.6032	0.5038	0.1258	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	4.6542	0.8700	5.3497	0.5855	0.1258	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	3.8029	0.8700	4.3711	0.4784	0.1258	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	4.1841	0.8700	4.8093	0.4749	0.1135	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	4.5586	0.8700	5.2398	0.5174	0.1135	0.056019	45.15	725.67	3980400.
28	3.24	1.50	-0.70	4.1040	0.8700	4.7172	0.4658	0.1135	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	4.0546	0.8700	4.6605	0.4602	0.1135	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	4.5117	0.8700	5.1859	0.4620	0.1024	0.055407	54.99	727.67	4209800.

TABLE VI (Continued)

31	3.60	5.30	1.50	4.8866	0.8700	5.6282	0.5014	0.1024	0.055427	54.95	730.67	4180800.
32	3.60	1.40	0.20	4.5303	0.8700	5.2072	0.4639	0.1024	0.055430	54.98	729.67	4192000.
33	3.60	0.40	-0.30	4.5498	0.8700	5.2297	0.4659	0.1024	0.055543	55.23	728.67	4219800.
34	3.75	0.30	0.0	4.7831	0.8700	5.5093	0.4333	0.0904	0.053060	61.92	738.67	4058400.
35	3.77	1.60	-0.50	4.8186	0.8700	5.5386	0.4356	0.0904	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	5.2478	0.8700	6.0320	0.4744	0.0904	0.052599	61.81	739.67	4009300.
37	3.77	5.00	0.10	5.3285	0.8700	6.1247	0.4817	0.0904	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	5.3734	0.8700	6.1769	0.4331	0.0806	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	5.2853	0.8700	6.0866	0.4268	0.0806	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	4.2413	0.8700	4.8751	0.5344	0.1260	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	4.6556	0.8700	5.3513	0.5866	0.1260	0.055883	37.07	724.67	3729100
42	3.01	5.00	-3.00	3.8611	0.8700	4.4380	0.4865	0.1260	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	5.1278	0.8700	5.8940	0.6461	0.1260	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	3.4064	0.8700	3.9154	0.4568	0.1341	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	3.9532	0.8700	4.5439	0.4981	0.1260	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	4.5802	0.8700	5.2646	0.5771	0.1260	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	3.2355	0.8700	3.7190	0.4468	0.1380	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	5.1127	0.8700	5.8767	0.6442	0.1260	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	2.7668	0.8700	3.1802	0.4153	0.1501	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	3.5832	0.8700	4.1186	0.5106	0.1425	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	4.3794	0.8700	5.0338	0.5518	0.1260	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	3.0269	0.8700	3.4792	0.4719	0.1559	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	5.0190	0.8700	5.7690	0.6324	0.1260	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	2.4301	0.8700	2.7932	0.4170	0.1716	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	3.3123	0.8700	3.8072	0.4571	0.1380	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	4.6135	0.8700	5.3029	0.5813	0.1260	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	4.1110	0.8700	4.7253	0.4666	0.1135	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	3.3834	0.8700	3.8890	0.4236	0.1252	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	4.3921	0.8700	5.0484	0.4985	0.1135	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	4.2517	0.8700	4.8870	0.4341	0.1021	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	4.5553	0.8700	5.2360	0.4651	0.1021	0.055442	55.15	741.67	4082200.
62	3.51	0.0	-3.00	3.6136	0.8700	4.1536	0.4105	0.1136	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	4.5710	0.8700	5.2540	0.4667	0.1021	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	4.7024	0.8700	5.4051	0.4251	0.0904	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	4.1333	0.8700	4.7509	0.4187	0.1013	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	5.2389	0.8700	6.0217	0.4736	0.0904	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	4.7577	0.8700	5.4686	0.4301	0.0904	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	5.2295	0.8700	6.0109	0.4215	0.0806	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	5.8871	0.8700	6.7668	0.4745	0.0806	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	6.4864	0.8700	7.4556	0.5228	0.0806	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	5.3722	0.8700	6.1749	0.4330	0.0806	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	6.9727	0.8700	8.0146	0.5620	0.0806	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	4.6621	0.8700	5.3587	0.4070	0.0873	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	6.0980	0.8700	7.0092	0.4915	0.0806	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	6.6588	0.8700	7.6538	0.5367	0.0806	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	3.7739	0.8700	4.3378	0.3906	0.1035	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	4.8399	0.8700	5.5631	0.4414	0.0912	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	4.8161	0.8700	5.5357	0.4609	0.0957	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	5.7593	0.8700	6.6199	0.4930	0.0856	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	6.9543	0.8700	7.9934	0.7615	0.1095	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	6.8759	0.8700	7.9033	0.5542	0.0806	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	7.8697	0.8700	9.0456	0.9908	0.1259	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	6.9764	0.8700	8.0189	0.5623	0.0806	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	6.7618	0.8700	7.7722	0.5450	0.0806	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	5.0615	0.8700	5.8178	0.7238	0.1430	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	3.1095	0.8700	3.5741	0.2867	0.0922	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	5.0618	0.8700	5.8182	0.4667	0.0922	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	3.4770	0.8700	3.9966	0.3623	0.1042	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	4.8599	0.8700	5.5861	0.4476	0.0921	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	6.6985	0.8700	7.6994	0.6176	0.0922	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	5.0087	0.8700	5.7571	0.4618	0.0922	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	4.2011	0.8700	4.8289	0.4596	0.1094	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	5.4438	0.8700	6.2572	0.5324	0.0978	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	3.0608	0.8700	3.5182	0.3826	0.1250	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	4.9479	0.8700	5.6872	0.4557	0.0921	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	2.7641	0.8700	3.1771	0.1277	0.0462	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	4.9350	0.8700	5.6724	0.4402	0.0892	0.076417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	5.0825	0.8700	5.8420	0.4498	0.0885	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	5.0469	0.8700	5.8010	0.4305	0.0853	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	5.5338	0.8700	6.3607	0.4261	0.0770	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	6.0065	0.8700	6.9040	0.4613	0.0768	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	4.8024	0.8700	5.5200	0.4375	0.0911	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	5.4627	0.8700	6.2790	0.4463	0.0817	0.047198	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	3.8033	0.8700	4.3716	0.3963	0.1042	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	5.3992	0.8700	6.2060	0.4152	0.0769	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	4.0920	0.8700	4.7034	0.3916	0.0957	0.066420	118.54	737.67	6820200.
107	4.00	0.70	-0.60	4.0063	0.8700	4.6049	0.3834	0.0957	0.066764	120.72	738.67	6974400.

TABLE VI (Continued)

GAGE= 3243 X/L=0.0 PHI= 0.0 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	1.2380	1.0000	1.2380	1.1777	0.9510	0.052894	34.04	675.67	3783800.
2	3.01	0.0	0.0	1.2130	1.0000	1.2130	1.1538	0.9510	0.052848	33.84	677.67	3757200.
4	2.24	2.40	-0.60	1.1240	1.0000	1.1240	1.0687	0.9510	0.058067	23.14	637.67	4208300.
5	2.24	2.60	0.80	1.1040	1.0000	1.1040	1.0501	0.9510	0.057850	22.88	644.67	4088100.
6	2.24	1.80	-0.70	1.0980	1.0000	1.0980	1.0442	0.9510	0.057884	22.93	648.67	4073800.
7	2.24	0.60	-0.20	1.0760	1.0000	1.0760	1.0229	0.9510	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	1.1040	1.0000	1.1040	1.0500	0.9510	0.056426	26.13	649.67	4048600
9	2.50	2.80	0.80	1.1730	1.0000	1.1730	1.1152	0.9510	0.056508	26.21	649.67	4060500.
10	2.50	1.60	-0.70	1.1430	1.0000	1.1430	1.0872	0.9510	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	1.1230	1.0000	1.1230	1.0684	0.9510	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	1.1510	1.0000	1.1510	1.0947	0.9510	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	1.1890	1.0000	1.1890	1.1310	0.9510	0.055675	31.03	650.67	4172800.
14	2.76	0.90	-0.80	1.1340	1.0000	1.1340	1.0781	0.9510	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	1.1240	1.0000	1.1240	1.0689	0.9510	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	1.3320	1.0000	1.3320	1.2667	0.9510	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	1.1930	1.0000	1.1930	1.1343	0.9510	0.055320	36.67	721.67	3886600.
18	3.02	4.60	1.30	1.2610	1.0000	1.2610	1.1986	0.9510	0.055924	37.46	721.67	3767500.
19	3.02	1.60	-0.70	1.1910	1.0000	1.1910	1.1328	0.9510	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	1.2010	1.0000	1.2010	1.1424	0.9510	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	1.2690	1.0000	1.2690	1.2069	0.9510	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	1.1990	1.0000	1.1990	1.1400	0.9510	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	1.2080	1.0000	1.2080	1.1484	0.9510	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	1.2340	1.0000	1.2340	1.1740	0.9510	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	1.1790	1.0000	1.1790	1.1208	0.9510	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	1.2030	1.0000	1.2030	1.1437	0.9510	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	1.2530	1.0000	1.2530	1.1917	0.9510	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	1.2150	1.0000	1.2150	1.1553	0.9510	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	1.2050	1.0000	1.2050	1.1464	0.9510	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	1.2610	1.0000	1.2610	1.1993	0.9510	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	1.3340	1.0000	1.3340	1.2683	0.9510	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	1.3130	1.0000	1.3130	1.2486	0.9510	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	1.3250	1.0000	1.3250	1.2605	0.9510	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	1.3410	1.0000	1.3410	1.2750	0.9510	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	1.3830	1.0000	1.3830	1.3157	0.9510	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	1.4010	1.0000	1.4010	1.3319	0.9510	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	1.3740	1.0000	1.3740	1.3066	0.9510	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	1.3740	1.0000	1.3740	1.3062	0.9510	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	1.4580	1.0000	1.4580	1.3869	0.9510	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	1.3490	1.0000	1.3490	1.2832	0.9510	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	1.3790	1.0000	1.3790	1.3113	0.9510	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	1.3380	1.0000	1.3380	1.2725	0.9510	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	1.4350	1.0000	1.4350	1.3645	0.9510	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	1.2500	1.0000	1.2500	1.1892	0.9510	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	1.2690	1.0000	1.2690	1.2067	0.9510	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	1.3310	1.0000	1.3310	1.2662	0.9510	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	1.2600	1.0000	1.2600	1.1978	0.9510	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.3250	1.0000	1.3250	1.2605	0.9510	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	1.2270	1.0000	1.2270	1.1673	0.9510	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	1.2360	1.0000	1.2360	1.1754	0.9510	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	1.2880	1.0000	1.2880	1.2251	0.9510	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	1.1900	1.0000	1.1900	1.1316	0.9510	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	1.3150	1.0000	1.3150	1.2505	0.9510	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	1.2080	1.0000	1.2080	1.1484	0.9510	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	1.2510	1.0000	1.2510	1.1899	0.9510	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.2370	1.0000	1.2370	1.1762	0.9510	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	1.3230	1.0000	1.3230	1.2582	0.9510	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	1.2770	1.0000	1.2770	1.2146	0.9510	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	1.3080	1.0000	1.3080	1.2441	0.9510	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	1.3330	1.0000	1.3330	1.2675	0.9510	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	1.3320	1.0000	1.3320	1.2668	0.9510	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	1.2920	1.0000	1.2920	1.2289	0.9510	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	1.3600	1.0000	1.3600	1.2930	0.9510	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.3730	1.0000	1.3730	1.3057	0.9510	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	1.3200	1.0000	1.3200	1.2552	0.9510	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.4190	1.0000	1.4190	1.3492	0.9510	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	1.3720	1.0000	1.3720	1.3049	0.9510	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.4110	1.0000	1.4110	1.3415	0.9510	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.4180	1.0000	1.4180	1.3490	0.9510	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.4890	1.0000	1.4890	1.4161	0.9510	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	1.3510	1.0000	1.3510	1.2846	0.9510	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.5910	1.0000	1.5910	1.5127	0.9510	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	1.3040	1.0000	1.3040	1.2403	0.9510	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.5250	1.0000	1.5250	1.4498	0.9510	0.050994	72.90	740.67	4106000.

TABLE VI (Continued)

75	4.04	0.0	6.00	1.6420	1.0000	1.6420	1.5620	0.9510	0.050966	72.86	739.67	4111700.
76	4.04	0.0	-6.00	1.3420	1.0000	1.3420	1.2761	0.9510	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	1.4070	1.0000	1.4070	1.3378	0.9510	0.050963	72.84	739.67	4111200.
78	4.04	-6.00	0.0	1.4680	1.0000	1.4680	1.3965	0.9510	0.050947	72.80	739.67	4108600.
79	4.04	-6.00	3.00	1.5170	1.0000	1.5170	1.4430	0.9510	0.050973	72.87	739.67	4112800.
80	4.04	-6.00	-3.00	1.3930	1.0000	1.3930	1.3250	0.9510	0.050966	72.86	739.67	4111700.
81	4.04	-6.00	6.00	1.6330	1.0000	1.6330	1.5527	0.9510	0.051001	72.95	739.67	4117400.
82	4.04	-6.00	-6.00	1.4700	1.0000	1.4700	1.3982	0.9510	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.4660	1.0000	1.4660	1.3947	0.9510	0.050972	72.89	740.67	4102400.
84	4.04	0.0	0.0	1.4640	1.0000	1.4640	1.3926	0.9510	0.050975	72.91	741.67	4092600.
85	3.01	0.0	0.0	1.3570	1.0000	1.3570	1.2906	0.9510	0.066521	92.01	683.67	5684000.
86	4.00	0.0	0.0	1.2300	1.0000	1.2300	1.1697	0.9510	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	0.9470	1.0000	0.9470	0.9009	0.9510	0.089267	174.48	1438.70	3642800.
88	4.00	0.0	-3.00	0.9340	1.0000	0.9340	0.8882	0.9510	0.089307	174.98	1440.70	3637100.
89	4.00	5.00	0.0	1.0350	1.0000	1.0350	0.9843	0.9510	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	0.9960	1.0000	0.9960	0.9472	0.9510	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	0.9890	1.0000	0.9890	0.9407	0.9510	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	1.1540	1.0000	1.1540	1.0975	0.9510	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	1.1010	1.0000	1.1010	1.0471	0.9510	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	1.2140	1.0000	1.2140	1.1545	0.9510	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	1.0780	1.0000	1.0780	1.0252	0.9510	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	1.4760	1.0000	1.4760	1.4040	0.9510	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	1.0640	1.0000	1.0640	1.0120	0.9510	0.078417	140.45	1245.70	3651800.
98	4.00	0.0	0.0	1.1080	1.0000	1.1080	1.0540	0.9510	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	1.1460	1.0000	1.1460	1.0900	0.9510	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	1.5170	1.0000	1.5170	1.4430	0.9510	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	1.4570	1.0000	1.4570	1.3850	0.9510	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	1.4580	1.0000	1.4580	1.3870	0.9510	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	1.4870	1.0000	1.4870	1.4140	0.9510	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	1.3570	1.0000	1.3570	1.2900	0.9510	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	1.4110	1.0000	1.4110	1.3420	0.9510	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	1.2880	1.0000	1.2880	1.2250	0.9510	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	1.2600	1.0000	1.2600	1.1980	0.9510	0.066764	120.72	738.67	6974400.

GAGE= 4063 X/L=0.9460 PHI=280.000 NRUN= 84

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	4.0388	0.8700	4.6423	0.3744	0.0927	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	3.8867	0.8700	4.4675	0.3603	0.0927	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	2.5197	0.8700	2.8962	0.3646	0.1447	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	3.0117	0.8700	3.4617	0.4358	0.1447	0.057850	22.88	644.67	4089100.
6	2.24	1.80	-0.70	2.5522	0.8700	2.9336	0.3693	0.1447	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	3.2433	0.8700	3.7279	0.4693	0.1447	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	2.5204	0.8700	2.8970	0.3143	0.1247	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	2.6022	0.8700	2.9910	0.3245	0.1247	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	2.9126	0.8700	3.3478	0.3632	0.1247	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	2.9832	0.8700	3.4290	0.3720	0.1247	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	2.5402	0.8700	2.9198	0.2779	0.1094	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	2.1461	0.8700	2.4668	0.2483	0.1157	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	3.3611	0.8700	3.8633	0.3677	0.1094	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	3.4717	0.8700	3.9905	0.3798	0.1094	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	4.3301	0.8700	4.9771	0.3988	0.0921	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	2.1790	0.8700	2.5046	0.2033	0.0933	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	2.3730	0.8700	2.7276	0.2354	0.0992	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	3.8403	0.8700	4.4141	0.3583	0.0933	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	4.2980	0.8700	4.9402	0.4010	0.0933	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	3.9886	0.8700	4.5846	0.4188	0.1050	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	3.6131	0.8700	4.1530	0.3371	0.0933	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	2.1222	0.8700	2.4393	0.1980	0.0933	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	2.1990	0.8700	2.5276	0.2309	0.1050	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	2.2154	0.8700	2.5464	0.2067	0.0933	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	2.1833	0.8700	2.5095	0.1834	0.0840	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	2.0869	0.8700	2.3987	0.1897	0.0909	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	3.7071	0.8700	4.2610	0.3114	0.0840	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	3.2750	0.8700	3.7644	0.2751	0.0840	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	2.0000	0.8700	2.2989	0.1512	0.0756	0.055407	54.95	727.67	4209800.
31	3.50	5.30	1.50	2.0771	0.8700	2.3875	0.1697	0.0817	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	2.8320	0.8700	3.2552	0.2141	0.0756	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	3.6614	0.8700	4.2085	0.2768	0.0756	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	3.3419	0.8700	3.8413	0.2219	0.0664	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	3.5407	0.8700	4.0698	0.2351	0.0664	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	2.6536	0.8700	3.0501	0.1762	0.0664	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	2.0392	0.8700	2.3439	0.1354	0.0664	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	3.8037	0.8700	4.3721	0.2248	0.0591	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	3.5533	0.8700	4.0843	0.2100	0.0591	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	1.3062	0.8700	1.5014	0.1220	0.0934	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	1.0961	0.8700	1.2599	0.1152	0.1051	0.055893	37.07	724.67	3725100.

TABLE VI (Continued)

42	3.01	5.00	-3.00	1.0257	0.8700	1.1790	0.0858	0.0934	0.056846	37.01	724.67	3718800.
43	3.01	5.00	6.00	2.0590	0.8700	2.3667	0.2442	0.1186	0.056752	36.88	724.67	3706300.
44	3.01	5.00	-6.00	1.3687	0.8700	1.5617	0.1269	0.0934	0.056744	36.88	724.67	3705200.
45	3.01	0.0	0.0	2.2730	0.8700	2.6126	0.2123	0.0834	0.056838	37.00	724.67	3717700.
46	3.01	0.0	3.00	1.8868	0.8700	2.1687	0.1883	0.1051	0.056788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	1.4378	0.8700	1.6528	0.1343	0.0934	0.056784	36.86	723.67	3721000.
48	3.01	0.0	6.00	2.3457	0.8700	2.6962	0.2782	0.1186	0.056805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	2.0225	0.8700	2.3247	0.1889	0.0934	0.056868	37.23	721.67	3702800.
50	3.01	-5.00	0.0	1.2816	0.8700	1.4731	0.1197	0.0934	0.056787	36.88	722.67	3730600.
51	3.01	-5.00	3.00	0.5176	0.8700	0.5948	0.0544	0.1051	0.056717	36.88	722.67	3718900.
52	3.01	-5.00	-3.00	2.0332	0.8700	2.3370	0.1898	0.0934	0.056784	37.00	721.67	3738500.
53	3.01	-5.00	6.00	0.4435	0.8700	0.5098	0.0526	0.1186	0.056717	36.81	720.67	3738500.
54	3.01	-5.00	-6.00	2.2302	0.8700	2.5634	0.2083	0.0934	0.056783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	1.3180	0.8700	1.5148	0.1231	0.0934	0.056874	37.08	722.67	3741000.
56	3.01	0.0	0.0	2.2281	0.8700	2.5610	0.2081	0.0934	0.056871	37.02	725.67	3712900.
57	3.25	0.0	0.0	2.3750	0.8700	2.7299	0.1995	0.0840	0.056670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	1.7274	0.8700	1.9855	0.1451	0.0840	0.056860	45.07	734.67	3892000.
59	3.25	5.00	0.0	1.4298	0.8700	1.6434	0.1201	0.0840	0.056847	45.07	733.67	3889700.
60	3.51	0.0	0.0	2.1936	0.8700	2.5214	0.1654	0.0754	0.056389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	2.1804	0.8700	2.5062	0.1644	0.0754	0.056442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	1.6552	0.8700	1.9025	0.1248	0.0754	0.056339	55.03	738.67	4097500.
63	3.51	5.00	0.0	1.2202	0.8700	1.4025	0.0920	0.0754	0.056354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.7289	0.8700	1.9872	0.1148	0.0664	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	1.5934	0.8700	1.8315	0.1058	0.0664	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.1265	0.8700	1.2948	0.0748	0.0664	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	1.8855	0.8700	2.1672	0.1252	0.0664	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.8206	0.8700	2.0926	0.1076	0.0591	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.1641	0.8700	1.3380	0.0688	0.0591	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.2845	0.8700	1.4879	0.0901	0.0696	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	1.1794	0.8700	1.3556	0.0697	0.0591	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.5168	0.8700	1.7434	0.1265	0.0834	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	1.9408	0.8700	2.2308	0.1147	0.0591	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.5934	0.8700	1.8315	0.1109	0.0696	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	2.7122	0.8700	3.1175	0.2262	0.0834	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	2.2690	0.8700	2.6080	0.1341	0.0591	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	1.8088	0.8700	2.0791	0.1069	0.0591	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	1.9831	0.8700	2.2794	0.1172	0.0591	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	3.1839	0.8700	3.6597	0.2216	0.0696	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	4.0541	0.8700	4.6599	0.2396	0.0591	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	2.9065	0.8700	3.3408	0.2424	0.0834	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	4.8393	0.8700	5.5624	0.2860	0.0591	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	2.0389	0.8700	2.3436	0.1205	0.0591	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	1.9272	0.8700	2.2152	0.1139	0.0591	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	1.7129	0.8700	1.9689	0.1826	0.1066	0.065521	52.01	683.67	5684000.

GAGE= 4064 X/L=0.8460 PHI=180.000 NRUN= 84

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	1.4542	0.8700	1.6715	0.1348	0.0927	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	1.2427	0.8700	1.4284	0.1152	0.0927	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	1.0041	0.8700	1.1541	0.1453	0.1447	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	0.8666	0.8700	0.9961	0.1254	0.1447	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	0.9862	0.8700	1.1336	0.1427	0.1447	0.057884	22.93	648.67	4073900.
7	2.24	0.60	-0.20	1.0318	0.8700	1.1860	0.1493	0.1447	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	1.4571	0.8700	1.6748	0.1817	0.1247	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	0.8629	0.8700	0.9918	0.1076	0.1247	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	1.7410	0.8700	2.0011	0.2171	0.1247	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	1.4066	0.8700	1.6168	0.1754	0.1247	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	1.5858	0.8700	1.7883	0.1702	0.1084	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	0.8126	0.8700	0.9340	0.0889	0.1094	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	2.4744	0.8700	2.8441	0.2707	0.1094	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	1.4497	0.8700	1.6663	0.1586	0.1094	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	1.4256	0.8700	1.6386	0.1313	0.0921	0.052886	34.04	674.67	3782900.
17	3.02	4.50	-0.70	2.8274	0.8700	3.2499	0.2638	0.0933	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	2.1844	0.8700	2.5108	0.2038	0.0933	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	2.9861	0.8700	3.4323	0.2786	0.0933	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	1.6345	0.8700	1.8787	0.1525	0.0933	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	1.3344	0.8700	1.5338	0.1245	0.0933	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	1.0859	0.8700	1.2482	0.1138	0.1048	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	2.3430	0.8700	2.6931	0.2186	0.0933	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	3.5541	0.8700	4.0852	0.3316	0.0933	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	2.6470	0.8700	3.0425	0.2692	0.1017	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	2.7500	0.8700	3.1609	0.2310	0.0840	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	2.5024	0.8700	2.8763	0.2102	0.0840	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	4.6548	0.8700	5.3503	0.3910	0.0840	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	3.7774	0.8700	4.3418	0.3173	0.0840	0.055889	44.91	726.67	3962100.
30	3.59	4.50	-0.40	2.4299	0.8700	2.7930	0.1837	0.0756	0.055410	55.00	727.67	4210000.

TABLE VI (Continued)

31	3.50	5.30	1.50	2.7130	0.8700	3.1184	0.2051	0.0766	0.056427	54.86	730.67	4180800.
32	3.50	1.40	0.20	7.6270	0.8700	8.7667	0.5766	0.0766	0.056430	54.88	729.67	4192000.
33	3.50	0.40	-0.30	4.3730	0.8700	5.0264	0.3306	0.0756	0.056043	55.23	728.67	4218900.
34	3.75	0.30	0.0	7.6627	0.8700	8.8077	0.5088	0.0664	0.053060	61.82	739.67	4058400.
35	3.77	1.50	-0.50	1.4217	0.8700	1.6341	0.0944	0.0664	0.052582	61.87	738.67	4012800.
36	3.77	3.90	0.70	2.4081	0.8700	2.7679	0.1598	0.0664	0.052559	61.81	739.67	4005300.
37	3.77	5.00	0.10	2.3479	0.8700	2.6987	0.1559	0.0664	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	2.1743	0.8700	2.4992	0.1285	0.0591	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	3.7327	0.8700	4.2905	0.2206	0.0591	0.051364	72.81	738.67	4159800.
40	3.01	5.00	0.0	1.8480	0.8700	2.1241	0.1726	0.0934	0.056878	37.09	722.67	3741700.
41	3.01	5.00	3.00	2.7805	0.8700	3.1960	0.2597	0.0934	0.056893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	1.3566	0.8700	1.5593	0.1381	0.1018	0.056846	37.01	724.67	3718800.
43	3.01	5.00	6.00	2.4529	0.8700	2.8194	0.2291	0.0934	0.056752	36.88	724.67	3706300.
44	3.01	5.00	-6.00	1.1308	0.8700	1.2998	0.1288	0.1136	0.056744	36.88	724.67	3705200.
45	3.01	0.0	0.0	1.6006	0.8700	1.8398	0.1495	0.0934	0.056838	37.00	724.67	3717700.
46	3.01	0.0	3.00	1.0203	0.8700	1.1728	0.0953	0.0934	0.056788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	0.7238	0.8700	0.8320	0.0760	0.1050	0.056784	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.0632	0.8700	1.2221	0.0993	0.0934	0.056805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	0.6588	0.8700	0.7572	0.0778	0.1181	0.056968	37.23	721.67	3762800.
50	3.01	-5.00	0.0	1.3972	0.8700	1.6060	0.1305	0.0934	0.056797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	2.6253	0.8700	3.0176	0.2452	0.0934	0.056717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	1.1402	0.8700	1.3106	0.1236	0.1084	0.056794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	2.4700	0.8700	2.8391	0.2307	0.0934	0.056717	36.91	720.67	3736500.
54	3.01	-5.00	-6.00	0.4380	0.8700	0.5034	0.0537	0.1226	0.056783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	0.6895	0.8700	0.7925	0.0724	0.1050	0.056874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.2559	0.8700	1.4436	0.1173	0.0934	0.056871	37.02	725.67	3712900.
57	3.25	0.0	0.0	4.8893	0.8700	5.6199	0.4107	0.0840	0.056670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	0.7524	0.8700	0.8648	0.0717	0.0953	0.056860	45.07	734.67	3892000.
59	3.25	5.00	0.0	2.3679	0.8700	2.7217	0.1989	0.0840	0.056847	45.07	733.67	3899700.
60	3.51	0.0	0.0	7.1074	0.8700	8.1694	0.5359	0.0754	0.056389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	1.2971	0.8700	1.4909	0.0978	0.0754	0.056442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	0.8682	0.8700	0.9979	0.0761	0.0865	0.056339	55.03	738.67	4097500.
63	3.51	5.00	0.0	1.5265	0.8700	1.7546	0.1151	0.0754	0.056354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.9187	0.8700	2.2054	0.1274	0.0664	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	1.0467	0.8700	1.2031	0.0807	0.0771	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.3298	0.8700	1.5285	0.0883	0.0664	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	0.9187	0.8700	1.0560	0.0610	0.0664	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.3500	0.8700	1.5517	0.0796	0.0730	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.5685	0.8700	1.8029	0.0927	0.0591	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.9695	0.8700	2.2638	0.1164	0.0591	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	1.3635	0.8700	1.5672	0.0904	0.0663	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.6802	0.8700	1.9313	0.0993	0.0591	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	1.6310	0.8700	1.8747	0.1282	0.0786	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.0237	0.8700	1.1767	0.0605	0.0591	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	1.4010	0.8700	1.6103	0.0828	0.0591	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	0.7021	0.8700	0.8070	0.0582	0.0829	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	1.0720	0.8700	1.2322	0.0744	0.0694	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	6.1021	0.8700	7.0139	0.3826	0.0627	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	5.0102	0.8700	5.7588	0.2961	0.0591	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	6.2356	0.8700	7.1674	0.4552	0.0730	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	2.9239	0.8700	3.3608	0.1728	0.0591	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	4.1131	0.8700	4.7277	0.3599	0.0875	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	3.7902	0.8700	4.3566	0.2240	0.0591	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	2.0440	0.8700	2.3494	0.1208	0.0591	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	0.8377	0.8700	0.9629	0.0893	0.1066	0.065521	52.01	683.67	5684000.

GAGE= 4065 X/L=0.9460 PHI= 0.0 NRUN= 84

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	4.0755	0.8700	4.6845	0.3778	0.0927	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	3.6872	0.8700	4.2382	0.3418	0.0927	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	4.3117	0.8700	4.9560	0.6239	0.1447	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	2.9468	0.8700	3.3871	0.4264	0.1447	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	4.3338	0.8700	4.9814	0.6271	0.1447	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	3.9496	0.8700	4.5398	0.5715	0.1447	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	3.6167	0.8700	4.1571	0.4510	0.1247	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	3.3480	0.8700	3.8483	0.4175	0.1247	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	4.6191	0.8700	5.3093	0.5760	0.1247	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	3.9399	0.8700	4.5286	0.4913	0.1247	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	3.7733	0.8700	4.3371	0.4128	0.1094	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	3.2669	0.8700	3.7551	0.3574	0.1094	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	3.9954	0.8700	4.5924	0.4371	0.1094	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	2.8894	0.8700	3.3211	0.3161	0.1094	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	4.2921	0.8700	4.9334	0.3953	0.0921	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	3.2840	0.8700	3.7747	0.3064	0.0933	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	3.3580	0.8700	3.8598	0.3133	0.0933	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	4.1415	0.8700	4.7603	0.3864	0.0933	0.055518	36.90	723.67	3694700.

TABLE VI (Continued)

20	3.02	0.20	-0.10	4.2283	0.8700	4.8601	0.3945	0.0833	0.055535	36.84	722.67	3706100.
21	3.02	0.0	3.00	2.3151	0.8700	2.6610	0.2160	0.0833	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	4.8156	0.8700	5.5362	0.4883	0.1014	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	3.2047	0.8700	3.6836	0.2980	0.0833	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	2.6999	0.8700	3.1033	0.2519	0.0833	0.055588	37.04	721.67	3723800.
25	3.02	5.00	-3.00	2.3044	0.8700	2.6487	0.2150	0.0833	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	2.8500	0.8700	3.2759	0.2384	0.0840	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	3.5428	0.8700	4.0723	0.3876	0.0840	0.056019	45.15	726.67	3980400.
28	3.24	1.50	-0.70	3.7036	0.8700	4.2579	0.3111	0.0840	0.056035	45.17	726.67	3982700.
29	3.24	0.30	0.0	3.6202	0.8700	4.1611	0.3041	0.0840	0.055888	44.91	726.67	3962100.
30	3.50	4.50	-0.40	3.6706	0.8700	4.2181	0.2776	0.0756	0.055407	54.98	727.67	4209800.
31	3.50	5.30	1.50	4.4101	0.8700	5.0691	0.3334	0.0756	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	2.9854	0.8700	3.4315	0.2257	0.0756	0.055430	54.98	728.67	4182000.
33	3.50	0.40	-0.30	3.0928	0.8700	4.4746	0.2943	0.0756	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	4.1943	0.8700	4.8210	0.2785	0.0664	0.053080	61.92	739.67	4058400.
35	3.77	1.50	-0.50	3.5934	0.8700	4.1303	0.2386	0.0664	0.052982	61.87	738.67	4012800.
36	3.77	3.90	0.70	5.2440	0.8700	6.0276	0.3482	0.0664	0.052959	61.81	739.67	4009300.
37	3.77	5.00	0.10	5.4322	0.8700	6.2439	0.3607	0.0664	0.052974	61.88	738.67	4021600.
38	4.02	0.70	-0.60	4.4095	0.8700	5.0684	0.2606	0.0591	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	4.9052	0.8700	5.6382	0.2899	0.0591	0.051364	72.61	738.67	4159800.
40	3.01	5.00	0.0	2.5000	0.8700	2.8736	0.2335	0.0934	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	2.3522	0.8700	2.7037	0.2197	0.0934	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	2.3169	0.8700	2.6631	0.2164	0.0934	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	2.0064	0.8700	2.3062	0.1874	0.0934	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	2.8951	0.8700	3.3277	0.2704	0.0934	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	2.9657	0.8700	3.4089	0.2770	0.0934	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	1.7216	0.8700	1.9788	0.1608	0.0934	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	4.9675	0.8700	5.7098	0.5047	0.1016	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.4668	0.8700	1.6860	0.1370	0.0934	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	3.9844	0.8700	4.5798	0.4355	0.1083	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	3.2167	0.8700	3.6974	0.3474	0.1080	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	1.9274	0.8700	2.2154	0.1939	0.1006	0.055717	36.88	722.67	3718900.
52	3.01	-5.00	-3.00	3.5367	0.8700	4.0652	0.4145	0.1172	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	0.9079	0.8700	1.0436	0.0848	0.0934	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	4.0572	0.8700	4.6634	0.5181	0.1277	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	5.1742	0.8700	5.9474	0.5257	0.1016	0.055874	37.08	722.67	3741000
56	3.01	0.0	0.0	3.0236	0.8700	3.4754	0.2824	0.0934	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	3.3238	0.8700	3.8205	0.2792	0.0840	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	4.1382	0.8700	4.7566	0.3603	0.0919	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	2.8655	0.8700	3.2937	0.2407	0.0840	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	3.9363	0.8700	4.5245	0.2968	0.0754	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	3.9562	0.8700	4.5474	0.2983	0.0754	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	3.7653	0.8700	4.3279	0.3129	0.0831	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	3.9841	0.8700	4.5794	0.3004	0.0754	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	4.8247	0.8700	5.6606	0.3270	0.0664	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	4.0773	0.8700	4.6866	0.3005	0.0737	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	5.4247	0.8700	6.2353	0.3602	0.0664	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	3.0060	0.8700	3.4552	0.1996	0.0664	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	4.3418	0.8700	4.9906	0.2566	0.0591	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	7.1709	0.8700	8.2424	0.4238	0.0591	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	2.6074	0.8700	2.9970	0.1541	0.0591	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	3.1692	0.8700	3.6428	0.1873	0.0591	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.6751	0.8700	1.9254	0.0990	0.0591	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	2.6734	0.8700	3.0729	0.1580	0.0591	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.9763	0.8700	2.2716	0.1168	0.0591	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	1.3926	0.8700	1.6007	0.0823	0.0591	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	6.0867	0.8700	6.9962	0.4492	0.0738	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	5.4879	0.8700	6.3079	0.3622	0.0660	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	3.5352	0.8700	4.0634	0.2563	0.0725	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	6.2750	0.8700	7.2126	0.4085	0.0651	0.050973	72.87	738.67	4112800.
80	4.04	-5.00	-3.00	2.7070	0.8700	3.1115	0.2217	0.0818	0.050966	72.85	738.67	4111700.
81	4.04	-5.00	6.00	5.6802	0.8700	6.5290	0.3357	0.0591	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	2.5867	0.8700	2.9732	0.2403	0.0928	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	3.7090	0.8700	4.2632	0.2192	0.0591	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	3.8951	0.8700	4.4771	0.2302	0.0591	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	2.8039	0.8700	3.2229	0.2989	0.1066	0.055521	52.01	683.67	5684000.

GAGE= 4069 X/L=0.7530 PHI= 0.0 NRUN= 84

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	6.0114	0.8700	6.9097	0.5777	0.0961	0.052884	34.04	675.67	3783960.
2	3.01	0.0	0.0	5.5838	0.8700	6.4182	0.5366	0.0961	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	4.9038	0.8700	5.6366	0.7341	0.1497	0.058067	23.14	637.67	4209300.
5	2.24	2.80	0.80	4.7508	0.8700	5.4607	0.7112	0.1497	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	5.0581	0.8700	5.8139	0.7572	0.1497	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	5.0207	0.8700	5.7709	0.7516	0.1497	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	4.0805	0.8700	4.6902	0.5272	0.1292	0.056426	26.13	648.67	4048600.

TABLE VI (Continued)

9	2.50	2.80	0.80	4.1186	0.8700	4.7340	0.5588	0.1357	0.066508	26.21	649.67	4060500.
10	2.50	1.60	-0.70	4.7802	0.8700	5.4945	0.6176	0.1282	0.066303	26.01	649.67	4031000.
11	2.50	1.50	0.20	5.4861	0.8700	6.3174	0.7101	0.1282	0.066307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	5.2674	0.8700	6.0545	0.6968	0.1139	0.066804	31.15	660.67	4211400.
13	2.75	3.60	1.30	3.6082	0.8700	4.1474	0.4384	0.1215	0.066575	31.03	660.67	4172800.
14	2.75	0.90	-0.80	6.3363	0.8700	7.2831	0.7178	0.1133	0.066539	31.07	662.67	4159500.
15	2.75	0.20	0.10	5.8146	0.8700	6.6834	0.6588	0.1133	0.066712	31.17	661.67	4181800.
16	3.01	0.0	0.0	5.8836	0.8700	6.7628	0.6613	0.0864	0.052886	34.04	674.67	3782800.
17	3.02	4.50	-0.70	4.1138	0.8700	4.7285	0.3078	0.0867	0.055320	36.67	721.67	3986600.
18	3.02	4.60	1.30	5.6069	0.8700	6.4447	0.5876	0.1048	0.056024	37.48	721.67	3767500.
19	3.02	1.60	-0.70	5.3371	0.8700	6.1346	0.5161	0.0867	0.055518	36.80	723.67	3804700.
20	3.02	0.20	-0.10	6.6143	0.8700	7.6026	0.6386	0.0867	0.055535	36.84	722.67	3796100.
21	3.02	0.0	3.00	8.9245	0.8700	11.4075	1.0778	0.1086	0.055546	36.87	721.67	3716800.
22	3.02	0.0	-3.00	6.5812	0.8700	7.5646	0.6364	0.0867	0.055483	36.88	721.67	3708300.
23	3.02	5.00	0.0	4.5998	0.8700	5.2871	0.4448	0.0867	0.055976	37.01	721.67	3720800.
24	3.02	5.00	3.00	6.9238	0.8700	7.9584	0.7720	0.1119	0.055508	37.04	721.67	3723800.
25	3.02	5.00	-3.00	3.9524	0.8700	4.5430	0.3822	0.0867	0.055538	36.86	721.67	3719700.
26	3.24	4.40	-0.60	3.6885	0.8700	4.2387	0.3209	0.0870	0.055876	45.03	726.67	3974400.
27	3.24	5.20	1.70	6.0921	0.8700	7.0024	0.5885	0.0966	0.056019	45.19	725.67	3990400.
28	3.24	1.50	-0.70	5.6724	0.8700	6.5200	0.4835	0.0870	0.056038	45.17	725.67	3992700.
29	3.24	0.30	0.0	5.0103	0.8700	5.7590	0.4359	0.0870	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	3.8737	0.8700	4.4525	0.3037	0.0784	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	5.9047	0.8700	6.7870	0.5143	0.0871	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	4.9630	0.8700	5.7046	0.3881	0.0784	0.055430	54.98	729.67	4182000.
33	3.50	0.40	-0.30	5.7015	0.8700	6.5534	0.4470	0.0784	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	7.6938	0.8700	8.8434	0.5301	0.0689	0.053060	61.92	739.67	4098400.
35	3.77	1.60	-0.50	4.2235	0.8700	4.8546	0.2910	0.0689	0.052582	61.87	738.67	4012800.
36	3.77	3.90	0.70	4.8633	0.8700	5.5900	0.3594	0.0739	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	5.1600	0.8700	5.9310	0.3752	0.0870	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	5.1403	0.8700	5.9084	0.3151	0.0613	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	7.9804	0.8700	9.1729	0.4892	0.0613	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	4.9800	0.8700	5.7241	0.4816	0.1140	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	4.9700	0.8700	5.7126	0.5541	0.1300	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	3.7550	0.8700	4.3161	0.3635	0.1140	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	5.2300	0.8700	6.0115	0.6599	0.1480	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	3.4800	0.8700	4.0000	0.3365	0.1140	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	6.7110	0.8700	7.7138	0.6496	0.1140	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	7.7300	0.8700	8.8851	0.8412	0.1260	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	5.1910	0.8700	5.9667	0.5025	0.1140	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	6.7100	0.8700	7.7126	0.8221	0.1430	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	7.5900	0.8700	8.7241	0.7343	0.1140	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	9.0100	0.8700	10.3563	0.8719	0.1140	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	6.4800	0.8700	7.4483	0.6882	0.1230	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	5.9200	0.8700	6.8046	0.5728	0.1140	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	5.3400	0.8700	6.1379	0.6352	0.1390	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	6.2700	0.8700	7.2069	0.6069	0.1140	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	5.1800	0.8700	5.9655	0.5022	0.1140	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	6.2870	0.8700	7.2264	0.6086	0.1140	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	5.5500	0.8700	6.3793	0.4830	0.1040	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	5.3900	0.8700	6.1954	0.4689	0.1040	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	5.1000	0.8700	5.8621	0.4437	0.1040	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	6.3700	0.8700	7.3218	0.4976	0.0950	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	7.4100	0.8700	8.5172	0.5791	0.0950	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	6.4000	0.8700	7.3563	0.5000	0.0950	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	5.0400	0.8700	5.7931	0.3939	0.0950	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	6.9700	0.8700	8.0115	0.4804	0.0850	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	6.0200	0.8700	6.9195	0.4151	0.0850	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	4.5600	0.8700	5.7011	0.3414	0.0850	0.052947	61.94	748.67	3965800.
67	3.76	1.60	-0.50	5.2300	0.8700	6.0115	0.3602	0.0850	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	8.4700	0.8700	9.7356	0.5191	0.0760	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	7.1400	0.8700	8.2069	0.4375	0.0760	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	4.9300	0.8700	5.6667	0.3690	0.0920	0.050948	72.87	737.67	4128500.
71	4.04	5.00	-3.00	4.7200	0.8700	5.4253	0.2896	0.0760	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	10.4000	0.8700	11.9540	0.9347	0.1120	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	5.4100	0.8700	6.2184	0.3316	0.0760	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	2.6400	0.8700	3.0345	0.1902	0.0880	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	6.1300	0.8700	7.0460	0.5277	0.1070	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	8.7000	0.8700	10.0000	0.5333	0.0760	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	8.4500	0.8700	9.7126	0.5179	0.0760	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	8.2200	0.8700	9.4483	0.5039	0.0760	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	9.8400	0.8700	11.3103	0.6827	0.0850	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	11.0100	0.8700	12.6552	0.6750	0.0760	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	7.5600	0.8700	8.6897	0.6235	0.1020	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	10.9500	0.8700	12.5862	0.6712	0.0760	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	8.7800	0.8700	10.0920	0.5385	0.0760	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	9.2100	0.8700	10.5862	0.5646	0.0760	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	7.9000	0.8700	9.0805	0.8723	0.1300	0.066521	52.01	683.67	5684000.

TABLE VI (Continued)

GAGE= 4070 X/L=0.7630 PHI= 90.000 NRUN= 84

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TI	RE/FT
1	3.01	0.0	0.0	2.4173	0.8700	2.7786	0.2323	0.0861	0.052894	34.04	675.67	3783800.
2	3.01	0.0	0.0	2.0822	0.8700	2.3933	0.2001	0.0861	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	1.0056	0.8700	1.1559	0.1616	0.1607	0.058067	23.14	637.67	4208300.
5	2.24	2.60	0.80	1.0861	0.8700	1.2484	0.1753	0.1614	0.057850	22.88	644.67	4089100.
6	2.24	1.80	-0.70	1.3676	0.8700	1.5720	0.2168	0.1606	0.057884	22.93	648.67	4073800.
7	2.24	0.60	-0.20	1.5130	0.8700	1.7391	0.2268	0.1487	0.058088	23.00	648.67	4077600.
8	2.50	3.20	-0.60	1.5674	0.8700	1.7801	0.2224	0.1428	0.056426	26.13	649.67	4046600.
9	2.50	2.80	0.80	1.0406	0.8700	2.2306	0.2742	0.1413	0.056500	26.21	648.67	4060600.
10	2.50	1.60	-0.70	1.4488	0.8700	1.6654	0.1886	0.1370	0.056303	26.01	648.67	4031000.
11	2.50	1.80	0.20	1.3672	0.8700	1.5715	0.1868	0.1367	0.056307	26.03	648.67	4042600.
12	2.76	3.20	-0.60	2.1017	0.8700	2.5077	0.2821	0.1283	0.055804	31.15	650.67	4211400.
13	2.76	3.60	1.30	2.2078	0.8700	2.5378	0.2835	0.1284	0.055875	31.03	650.67	4172800.
14	2.76	0.80	-0.80	1.8728	0.8700	2.1928	0.2122	0.1133	0.056038	31.07	652.67	4188600.
15	2.76	0.20	0.10	2.3219	0.8700	2.6682	0.2830	0.1133	0.056712	31.17	651.67	4181800.
16	3.01	0.0	0.0	2.0671	0.8700	2.3507	0.2448	0.0994	0.052886	34.04	674.67	3782800.
17	3.02	4.80	-0.70	2.1111	0.8700	2.4266	0.2432	0.1152	0.056320	36.07	721.67	3886600.
18	3.02	4.60	1.30	1.4852	0.8700	1.7186	0.1730	0.1157	0.056024	37.48	721.67	3767000.
19	3.02	1.80	-0.70	4.1745	0.8700	4.7983	0.4328	0.1037	0.055518	36.00	723.67	3884700.
20	3.03	0.20	-0.10	2.8284	0.8700	3.2522	0.2736	0.0867	0.055539	36.04	722.67	3706100.
21	3.02	0.0	3.00	2.6194	0.8700	3.0108	0.2533	0.0867	0.055946	36.87	721.67	3716800.
22	3.02	0.0	-3.00	3.0010	0.8700	3.4484	0.2902	0.0867	0.055483	36.86	721.67	3708300.
23	3.02	5.00	0.0	1.2849	0.8700	1.4768	0.1511	0.1176	0.055876	37.01	721.67	3720800.
24	3.02	5.00	3.00	1.5888	0.8700	1.8263	0.1867	0.1175	0.055908	37.04	721.67	3723800.
25	3.02	5.00	-3.00	1.5030	0.8700	1.7276	0.1766	0.1175	0.055838	36.96	721.67	3719700.
26	3.24	4.40	-0.60	1.4177	0.8700	1.6295	0.1490	0.1091	0.055876	45.06	726.67	3974400.
27	3.24	5.20	1.70	3.3882	0.8700	3.8060	0.3704	0.1090	0.056010	45.19	725.67	3990400.
28	3.24	1.50	-0.70	3.6235	0.8700	4.1649	0.3368	0.0935	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	3.0862	0.8700	3.5474	0.2686	0.0870	0.055889	44.81	726.67	3962100.
30	3.90	4.50	-0.40	1.7099	0.8700	1.9808	0.1693	0.0969	0.055407	54.89	727.67	4209800.
31	3.90	5.30	1.90	3.6105	0.8700	4.1500	0.3643	0.1009	0.055427	54.95	730.67	4180900.
32	3.90	1.40	0.20	4.2088	0.8700	4.8377	0.3948	0.0843	0.055430	54.98	729.67	4192000.
33	3.90	0.40	-0.30	5.3814	0.8700	6.1898	0.4218	0.0784	0.055543	55.23	728.67	4219800.
34	3.75	0.30	0.0	9.2409	0.8700	10.6217	0.6367	0.0689	0.053090	61.92	739.67	4058400.
35	3.77	1.50	-0.90	4.9813	0.8700	5.7256	0.3726	0.0748	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	4.3180	0.8700	4.9644	0.3628	0.0840	0.052558	61.81	738.67	4009300.
37	3.77	5.00	0.10	1.7488	0.8700	2.0102	0.1560	0.0892	0.052674	61.88	738.67	4021600.
38	4.02	0.70	-0.60	6.7308	0.8700	7.7366	0.4126	0.0613	0.051351	72.74	742.67	4122800.
39	4.02	0.0	0.0	6.2780	0.8700	8.5161	0.5075	0.0613	0.051364	72.81	738.67	4159800.
40	3.01	5.00	0.0	1.2804	0.8700	1.4717	0.1507	0.1177	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	2.1521	0.8700	2.4737	0.2533	0.1177	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	1.5047	0.8700	1.7295	0.1771	0.1177	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	3.5612	0.8700	4.0933	0.4188	0.1176	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	1.4898	0.8700	1.7124	0.1752	0.1176	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	3.3109	0.8700	3.8056	0.3205	0.0968	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	3.1498	0.8700	3.6205	0.3049	0.0968	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	3.5527	0.8700	4.0836	0.3439	0.0968	0.055784	36.86	723.67	3721000.
48	3.01	0.0	6.00	3.3161	0.8700	3.8116	0.3210	0.0968	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	3.8802	0.8700	4.4600	0.3756	0.0968	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	3.7448	0.8700	4.3044	0.3625	0.0968	0.055787	36.98	722.67	3730600.
51	3.01	-5.00	3.00	2.8326	0.8700	3.2559	0.2742	0.0968	0.055717	36.88	722.67	3719800.
52	3.01	-5.00	-3.00	3.1488	0.8700	3.6193	0.3048	0.0968	0.055784	37.00	721.67	3739500.
53	3.01	-5.00	6.00	3.7820	0.8700	4.3471	0.3661	0.0968	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	3.0155	0.8700	3.4661	0.2919	0.0968	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	3.7727	0.8700	4.3364	0.3652	0.0968	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	3.6415	0.8700	4.1856	0.3525	0.0968	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	3.6747	0.8700	4.2238	0.3197	0.0870	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	3.4621	0.8700	3.9794	0.3012	0.0870	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	2.1296	0.8700	2.4478	0.2300	0.1080	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	6.5928	0.8700	7.5779	0.5149	0.0781	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	4.2071	0.8700	4.8357	0.3534	0.0840	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	5.6031	0.8700	6.4403	0.4376	0.0781	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	1.3515	0.8700	1.5534	0.1338	0.0980	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	6.5559	0.8700	7.5355	0.4517	0.0689	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	4.9419	0.8700	5.6803	0.3405	0.0689	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.9339	0.8700	2.2229	0.1728	0.0892	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.80	5.1781	0.8700	5.9530	0.3874	0.0748	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	7.2072	0.8700	8.2841	0.4418	0.0613	0.050998	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.4249	0.8700	1.6379	0.1157	0.0812	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	3.6281	0.8700	4.1702	0.2946	0.0812	0.050946	72.87	737.67	4129500.
71	4.04	5.00	-3.00	3.7623	0.8700	4.3245	0.3055	0.0812	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	7.2922	0.8700	8.3818	0.5914	0.0811	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	3.7768	0.8700	4.3411	0.3063	0.0811	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	4.2300	0.8700	4.8621	0.2593	0.0613	0.050994	72.90	740.67	4106000.

TABLE VI (Continued)

75	4.04	0.0	6.00	1.6427	0.8700	1.8882	0.1007	0.0613	0.060866	72.86	739.67	4111700
76	4.04	0.0	-6.00	3.0440	0.8700	3.4986	0.1866	0.0613	0.060957	72.82	738.67	4110200.
77	4.04	0.0	-3.00	3.7661	0.8700	4.3277	0.2308	0.0613	0.060963	72.84	738.67	4111200.
78	4.04	-5.00	0.0	8.6933	0.8700	11.1417	0.5942	0.0613	0.060947	72.80	738.67	4108600.
79	4.04	-5.00	3.00	8.1633	0.8700	10.5210	0.5611	0.0613	0.060973	72.87	738.67	4112800.
80	4.04	-5.00	-3.00	12.1484	0.8700	13.9637	0.7447	0.0613	0.060966	72.86	738.67	4111700.
81	4.04	-5.00	6.00	7.8086	0.8700	9.0903	0.4848	0.0613	0.061001	72.96	738.67	4117400.
82	4.04	-5.00	-6.00	8.2724	0.8700	9.5085	0.5071	0.0613	0.060957	72.82	738.67	4110200.
83	4.04	0.0	0.0	8.2153	0.8700	9.4429	0.5036	0.0613	0.060972	72.83	740.67	4102400.
84	4.04	0.0	0.0	6.6900	0.8700	7.6897	0.4101	0.0613	0.060879	72.81	741.67	4092500.
85	3.01	0.0	0.0	3.0281	0.8700	3.4806	0.3343	0.1104	0.065521	52.01	683.67	5684000.

GAGE= 4071 X/L=0.7530 PHI=180.000 NRUN= 84

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	3.9303	0.8700	4.5176	0.3777	0.0961	0.052884	34.04	675.67	3783900.
2	3.01	0.0	0.0	3.7253	0.8700	4.2820	0.3580	0.0961	0.052848	33.91	677.67	3757200.
4	2.24	2.40	-0.60	2.5351	0.8700	2.9139	0.3795	0.1497	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	2.4823	0.8700	2.8532	0.3716	0.1497	0.057860	22.88	644.67	4099100.
6	2.24	1.80	-0.70	2.7415	0.8700	3.1511	0.4104	0.1497	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	2.7816	0.8700	3.1972	0.4164	0.1497	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	2.8088	0.8700	3.2285	0.3629	0.1292	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	2.8785	0.8700	3.3086	0.3719	0.1292	0.056509	26.21	649.67	4060800.
10	2.50	1.60	-0.70	2.8320	0.8700	3.2552	0.3659	0.1292	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	2.8676	0.8700	3.2961	0.3705	0.1292	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	3.1968	0.8700	3.6745	0.3622	0.1133	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	3.0494	0.8700	3.5051	0.3455	0.1133	0.055675	31.03	650.67	4172900.
14	2.76	0.90	-0.80	3.5702	0.8700	4.1037	0.4045	0.1133	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	3.4440	0.8700	3.9586	0.3902	0.1133	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	4.0618	0.8700	4.6687	0.3875	0.0954	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	3.7198	0.8700	4.2756	0.3597	0.0967	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	3.5264	0.8700	4.0533	0.3410	0.0967	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	4.3992	0.8700	5.0566	0.4254	0.0967	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	3.8180	0.8700	4.3885	0.3692	0.0967	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	3.3495	0.8700	3.8500	0.3239	0.0967	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	1.6577	0.8700	1.9054	0.1603	0.0967	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	3.8128	0.8700	4.3825	0.3687	0.0967	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	3.5843	0.8700	4.1199	0.3466	0.0967	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	4.0176	0.8700	4.6179	0.3885	0.0967	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	3.5678	0.8700	4.1009	0.3704	0.0870	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	4.2322	0.8700	4.8646	0.3682	0.0870	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	6.2057	0.8700	7.1330	0.5399	0.0870	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	3.8287	0.8700	4.4008	0.3331	0.0870	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	3.7449	0.8700	4.3045	0.2936	0.0784	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	4.5982	0.8700	5.2853	0.3605	0.0784	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	5.0765	0.8700	5.8351	0.3980	0.0784	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	5.6735	0.8700	6.5213	0.4448	0.0784	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	9.0421	0.8700	10.3932	0.6230	0.0689	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	3.6705	0.8700	4.2190	0.2529	0.0689	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	3.6923	0.8700	4.2440	0.2544	0.0689	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	4.2700	0.8700	4.9080	0.2942	0.0689	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	3.8728	0.8700	4.4515	0.2374	0.0613	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	6.6020	0.8700	7.5885	0.4047	0.0613	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	4.1033	0.8700	4.7164	0.3972	0.0968	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	3.7335	0.8700	4.2914	0.3614	0.0968	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	4.3864	0.8700	5.0418	0.4246	0.0968	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	4.6643	0.8700	5.3613	0.4516	0.0968	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	3.5558	0.8700	4.0871	0.3442	0.0968	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	4.8523	0.8700	5.5774	0.4697	0.0968	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	3.8388	0.8700	4.4124	0.3716	0.0968	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	1.6973	0.8700	1.9509	0.1643	0.0968	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	3.1116	0.8700	3.5766	0.3012	0.0968	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	3.2478	0.8700	3.7332	0.3144	0.0968	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	1.1750	0.8700	1.3506	0.1383	0.1177	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	2.1742	0.8700	2.4991	0.2559	0.1177	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	0.4282	0.8700	0.4922	0.0504	0.1177	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	3.1896	0.8700	3.6662	0.3751	0.1176	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	0.4507	0.8700	0.5180	0.0530	0.1176	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	1.6663	0.8700	1.9153	0.1613	0.0968	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	4.6415	0.8700	5.3351	0.4493	0.0968	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	4.3195	0.8700	4.9649	0.3758	0.0870	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	2.5655	0.8700	2.9489	0.2232	0.0870	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	4.6586	0.8700	5.3547	0.4053	0.0870	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	8.1805	0.8700	9.4029	0.6389	0.0781	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	5.4059	0.8700	6.2137	0.4222	0.0781	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	3.7426	0.8700	4.3018	0.2923	0.0781	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	4.8131	0.8700	5.5323	0.3759	0.0781	0.055354	55.11	736.67	4120500.

TABLE VI (Continued)

64	3.76	0.0	0.0	5.3861	0.8700	6.1809	0.3711	0.0689	0.052913	61.87	744.67	4000200.
65	3.76	0.0	-3.00	4.4780	0.8700	5.1483	0.3086	0.0688	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	4.5530	0.8700	5.2333	0.3137	0.0689	0.052947	61.94	748.67	3966800.
67	3.76	1.50	-0.50	3.9842	0.8700	4.5810	0.2752	0.0689	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	5.5449	0.8700	6.3734	0.3399	0.0613	0.050889	72.84	742.67	4086300.
69	4.04	5.00	0.0	5.4829	0.8700	6.3022	0.3361	0.0613	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	5.6623	0.8700	6.5084	0.3471	0.0613	0.050948	72.87	737.67	4128500.
71	4.04	5.00	-3.00	5.5253	0.8700	6.3509	0.3387	0.0613	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	7.0049	0.8700	8.0516	0.4294	0.0613	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	5.8515	0.8700	6.7259	0.3587	0.0613	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	4.5759	0.8700	5.2587	0.2805	0.0613	0.050884	72.80	740.67	4106000.
75	4.04	0.0	6.00	2.7406	0.8700	3.1501	0.1680	0.0613	0.050966	72.89	739.67	4111700.
76	4.04	0.0	-6.00	2.6085	0.8700	2.9983	0.1599	0.0613	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	5.0310	0.8700	5.7828	0.3084	0.0613	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	5.6675	0.8700	6.5144	0.4602	0.0812	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	7.3362	0.8700	8.4324	0.5957	0.0812	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	7.8054	0.8700	8.9717	0.6338	0.0812	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	4.6757	0.8700	5.3744	0.3792	0.0811	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	7.7300	0.8700	8.8851	0.6270	0.1000	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	6.8956	0.8700	7.9260	0.4227	0.0613	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	5.8173	0.8700	6.6866	0.3566	0.0613	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	4.3551	0.8700	5.0059	0.4808	0.1104	0.065521	52.01	683.67	5684000.

GAGE= 4186 X/L=0.9620 PHI= 16.000 NRUN= 84

RUN	MACH	ALPHA	BETA	MIHU*TH	TUR FAC	MIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	5.1397	1.0000	5.1397	0.9858	0.1918	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	4.8170	1.0000	4.8170	0.9239	0.1918	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	5.4652	1.0000	5.4652	1.2313	0.2253	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	3.9465	1.0000	3.9465	0.9069	0.2298	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	5.2498	1.0000	5.2498	1.1917	0.2270	0.057984	22.93	648.67	4073800.
7	2.24	0.60	-0.20	5.1171	1.0000	5.1171	1.1928	0.2331	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	4.5126	1.0000	4.5126	0.9305	0.2062	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	4.2258	1.0000	4.2258	0.9022	0.2135	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	5.9835	1.0000	5.9835	1.2691	0.2121	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	5.4956	1.0000	5.4956	1.1876	0.2161	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	4.8846	1.0000	4.8846	0.9354	0.1915	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	3.9282	1.0000	3.9282	0.7880	0.2006	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	5.7528	1.0000	5.7528	1.1661	0.2027	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	5.5301	1.0000	5.5301	1.1580	0.2094	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	4.5160	1.0000	4.5160	0.8621	0.1909	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	3.6840	1.0000	3.6840	0.6318	0.1715	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	3.7538	1.0000	3.7538	0.6753	0.1799	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	4.1066	1.0000	4.1066	0.7548	0.1838	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	4.0099	1.0000	4.0099	0.7707	0.1922	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	2.9470	1.0000	2.9470	0.6059	0.2056	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	5.5546	1.0000	5.5546	1.0015	0.1803	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	3.6174	1.0000	3.6174	0.6240	0.1725	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	3.5154	1.0000	3.5154	0.6521	0.1855	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	3.2189	1.0000	3.2189	0.5118	0.1590	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	3.4339	1.0000	3.4339	0.5666	0.1650	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	3.5864	1.0000	3.5864	0.6165	0.1719	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	3.7163	1.0000	3.7163	0.6589	0.1773	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	3.2814	1.0000	3.2814	0.6087	0.1855	0.056889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	4.0429	1.0000	4.0429	0.6412	0.1586	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	3.9658	1.0000	3.9658	0.6500	0.1639	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	2.4179	1.0000	2.4179	0.4241	0.1754	0.055430	54.98	729.67	4182000.
33	3.50	0.40	-0.30	4.0778	1.0000	4.0778	0.7234	0.1774	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	3.2298	1.0000	3.2298	0.5439	0.1684	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	3.4944	1.0000	3.4944	0.5626	0.1610	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	4.2912	1.0000	4.2912	0.6690	0.1559	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	5.0587	1.0000	5.0587	0.7492	0.1481	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	4.1504	1.0000	4.1504	0.6483	0.1562	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	3.8036	1.0000	3.8036	0.6158	0.1619	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	2.8095	1.0000	2.8095	0.4852	0.1727	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	3.2761	1.0000	3.2761	0.6087	0.1858	0.056893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	2.8318	1.0000	2.8318	0.4511	0.1593	0.056846	37.01	724.67	3718800.
43	3.01	5.00	6.00	2.6927	1.0000	2.6927	0.5337	0.1982	0.056752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	2.5953	1.0000	2.5953	0.3784	0.1458	0.056744	36.88	724.67	3705200.
45	3.01	0.0	0.0	3.0996	1.0000	3.0996	0.6004	0.1937	0.056838	37.00	724.67	3717700.
46	3.01	0.0	3.00	2.4828	1.0000	2.4828	0.5112	0.2059	0.056788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	5.1329	1.0000	5.1329	0.9270	0.1806	0.056794	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.4527	1.0000	1.4527	0.3151	0.2169	0.056805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	5.1661	1.0000	5.1661	0.8617	0.1668	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	2.9732	1.0000	2.9732	0.6312	0.2123	0.056797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	1.5747	1.0000	1.5747	0.3510	0.2229	0.056717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	4.5075	1.0000	4.5075	0.9024	0.2002	0.056794	37.00	721.67	3739500.

TABLE VI (Continued)

53	3.01	-5.00	6.00	0.8473	1.0000	0.8473	0.1864	0.2318	0.056717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	5.7176	1.0000	5.7176	1.0682	0.1870	0.056783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	5.4280	1.0000	5.4280	0.9803	0.1806	0.056874	37.08	722.67	3741000.
56	3.01	0.0	0.0	3.2442	1.0000	3.2442	0.6284	0.1937	0.056871	37.02	725.67	3712800
57	3.25	0.0	0.0	2.9197	1.0000	2.9197	0.5464	0.1868	0.056670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	4.7217	1.0000	4.7217	0.8176	0.1732	0.056860	45.07	734.67	3892000
59	3.25	5.00	0.0	3.5700	1.0000	3.5700	0.6884	0.1691	0.056847	45.07	733.67	3899700.
60	3.51	0.0	0.0	3.2952	1.0000	3.2952	0.5928	0.1799	0.056988	55.08	740.67	4084500.
61	3.51	1.40	-0.20	3.9520	1.0000	3.9520	0.6146	0.1730	0.056442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	4.0277	1.0000	4.0277	0.6686	0.1660	0.056339	55.03	738.67	4097500.
63	3.51	5.00	0.0	4.0774	1.0000	4.0774	0.6430	0.1577	0.056364	55.11	736.67	4120500.
64	3.76	0.0	0.0	4.0689	1.0000	4.0689	0.6805	0.1687	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	4.1764	1.0000	4.1764	0.6911	0.1559	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	4.7062	1.0000	4.7062	0.6951	0.1477	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	2.9378	1.0000	2.9378	0.4730	0.1610	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	3.5553	1.0000	3.5553	0.5756	0.1619	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	5.5572	1.0000	5.5572	0.7769	0.1398	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	2.8463	1.0000	2.8463	0.4369	0.1535	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	3.5827	1.0000	3.5827	0.4507	0.1258	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.4022	1.0000	1.4022	0.2336	0.1666	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	2.7504	1.0000	2.7504	0.3075	0.1118	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	2.2561	1.0000	2.2561	0.3946	0.1749	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	0.9620	1.0000	0.9620	0.1797	0.1868	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	6.4854	1.0000	6.4854	0.8671	0.1337	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	4.9791	1.0000	4.9791	0.7369	0.1480	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	3.1865	1.0000	3.1865	0.5793	0.1818	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	3.7911	1.0000	3.7911	0.7332	0.1934	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	2.6931	1.0000	2.6931	0.4546	0.1688	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	3.3374	1.0000	3.3374	0.6795	0.2036	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	3.7003	1.0000	3.7003	0.5728	0.1548	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	3.1767	1.0000	3.1767	0.5143	0.1619	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	3.5102	1.0000	3.5102	0.5683	0.1619	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	4.4657	1.0000	4.4657	0.9905	0.2218	0.065521	52.01	683.67	5684000.

GAGE= 4187 X/L=0.9600 PHI=314.480 NRUN= 46

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
40	3.01	5.00	0.0	0.3000	1.0000	0.3000	0.0553	0.2230	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	0.1900	1.0000	0.1900	0.0480	0.2460	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	0.3182	1.0000	0.3182	0.0526	0.1653	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	0.2500	1.0000	0.2500	0.0537	0.2660	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	0.1283	1.0000	0.1283	0.0190	0.1481	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	0.3630	1.0000	0.3630	0.0704	0.2390	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	0.3200	1.0000	0.3200	0.0675	0.2610	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	0.4500	1.0000	0.4500	0.0792	0.2150	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	0.2600	1.0000	0.2600	0.0571	0.2790	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	0.5800	1.0000	0.5800	0.0929	0.1920	0.055868	37.23	721.67	3762900.
50	3.01	-5.00	0.0	0.3000	1.0000	0.3000	0.0613	0.2530	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	0.1600	1.0000	0.1600	0.0352	0.2730	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	0.4000	1.0000	0.4000	0.0759	0.2300	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	0.1100	1.0000	0.1100	0.0242	0.2890	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	0.4700	1.0000	0.4700	0.0797	0.2060	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	0.4400	1.0000	0.4400	0.0783	0.2150	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	0.3420	1.0000	0.3420	0.0663	0.2390	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	0.2120	1.0000	0.2120	0.0396	0.1868	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	0.4800	1.0000	0.4800	0.0807	0.2100	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	0.0605	1.0000	0.0605	0.0106	0.1751	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	0.2606	1.0000	0.2606	0.0469	0.1800	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	0.3800	1.0000	0.3800	0.0663	0.2250	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	0.4800	1.0000	0.4800	0.0782	0.2050	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	0.1762	1.0000	0.1762	0.0296	0.1680	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	0.0901	1.0000	0.0901	0.0153	0.1698	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	0.4600	1.0000	0.4600	0.0698	0.1950	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	0.2920	1.0000	0.2920	0.0461	0.1578	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	0.3500	1.0000	0.3500	0.0564	0.2120	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	0.3400	1.0000	0.3400	0.0543	0.2140	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	0.4707	1.0000	0.4707	0.0706	0.1500	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	0.2661	1.0000	0.2661	0.0445	0.1672	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	0.2952	1.0000	0.2952	0.0390	0.1321	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	0.2200	1.0000	0.2200	0.0407	0.2440	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	0.3004	1.0000	0.3004	0.0343	0.1142	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	0.2700	1.0000	0.2700	0.0485	0.2380	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	0.2300	1.0000	0.2300	0.0451	0.2580	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	0.8500	1.0000	0.8500	0.1068	0.1620	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	0.5100	1.0000	0.5100	0.0729	0.1880	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	0.1895	1.0000	0.1895	0.0327	0.1726	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	0.1105	1.0000	0.1105	0.0208	0.1883	0.050973	72.87	739.67	4112800

TABLE VI (Continued)

80	4.04	-5.00	-3.00	0.4800	1.0000	0.4800	0.0753	0.2040	0.050966	72.85	738.67	4111700.
81	4.04	-5.00	6.00	0.5200	1.0000	0.5200	0.1058	0.2690	0.051001	72.95	738.67	4117400.
82	4.04	-5.00	-6.00	0.6400	1.0000	0.6400	0.0881	0.1780	0.050957	72.82	738.67	4110200.
83	4.04	0.0	0.0	0.3200	1.0000	0.3200	0.0523	0.2140	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	0.3400	1.0000	0.3400	0.0543	0.2140	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	0.3600	1.0000	0.3600	0.0790	0.2710	0.065521	52.01	683.67	5684000.

GAGE= 4188 X/L=0.9540 PHI=282.590 NRUN= 46

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
40	3.01	5.00	0.0	1.7055	1.0000	1.7055	0.3116	0.1827	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	1.0894	1.0000	1.0894	0.2168	0.1980	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	1.0242	1.0000	1.0242	0.1695	0.1655	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	1.2335	1.0000	1.2335	0.2636	0.2137	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	1.6601	1.0000	1.6601	0.2462	0.1483	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	1.6041	1.0000	1.6041	0.3112	0.1940	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	1.4091	1.0000	1.4091	0.2952	0.2095	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	1.1626	1.0000	1.1626	0.2059	0.1771	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.1386	1.0000	1.1386	0.2539	0.2230	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	2.6046	1.0000	2.6046	0.4157	0.1596	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	1.1559	1.0000	1.1559	0.2358	0.2040	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	0.7176	1.0000	0.7176	0.1568	0.2185	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	1.0783	1.0000	1.0783	0.2024	0.1877	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	0.4120	1.0000	0.4120	0.0950	0.2306	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	1.0364	1.0000	1.0364	0.1765	0.1703	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	1.1067	1.0000	1.1067	0.1960	0.1771	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.7283	1.0000	1.7283	0.3353	0.1940	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	1.3102	1.0000	1.3102	0.2450	0.1870	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	1.6362	1.0000	1.6362	0.2775	0.1696	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	1.2270	1.0000	1.2270	0.2151	0.1753	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	1.2747	1.0000	1.2747	0.2297	0.1802	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	1.8561	1.0000	1.8561	0.3263	0.1758	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	2.0296	1.0000	2.0296	0.3294	0.1623	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	1.0226	1.0000	1.0226	0.1720	0.1682	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.6233	1.0000	1.6233	0.2758	0.1699	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	1.8548	1.0000	1.8548	0.2823	0.1522	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.0209	1.0000	1.0209	0.1613	0.1580	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	1.8368	1.0000	1.8368	0.3005	0.1636	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.7403	1.0000	1.7403	0.2821	0.1621	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	0.9274	1.0000	0.9274	0.1393	0.1502	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.2270	1.0000	1.2270	0.2054	0.1674	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	1.0295	1.0000	1.0295	0.1361	0.1322	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.2859	1.0000	1.2859	0.2357	0.1833	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	1.7996	1.0000	1.7996	0.2057	0.1143	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.4454	1.0000	1.4454	0.2583	0.1787	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	0.8548	1.0000	0.8548	0.1654	0.1935	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	2.8906	1.0000	2.8906	0.3645	0.1261	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	2.0229	1.0000	2.0229	0.2921	0.1444	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	1.2119	1.0000	1.2119	0.2093	0.1727	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	2.2382	1.0000	2.2382	0.4219	0.1885	0.050973	72.87	738.67	4112800.
80	4.04	-5.00	-3.00	1.7376	1.0000	1.7376	0.2702	0.1555	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	2.4807	1.0000	2.4807	0.5016	0.2022	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	2.9264	1.0000	2.9264	0.4015	0.1372	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.6675	1.0000	1.6675	0.2703	0.1621	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	1.7347	1.0000	1.7347	0.2812	0.1621	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	1.6979	1.0000	1.6979	0.3771	0.2221	0.065521	52.01	683.67	5684000.

GAGE= 4189 X/L=0.9600 PHI=282.450 NRUN= 46

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
40	3.01	5.00	0.0	2.8122	1.0000	2.8122	0.5422	0.1928	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	1.8272	1.0000	1.8272	0.3828	0.2095	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	3.1117	1.0000	3.1117	0.5433	0.1746	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	1.5543	1.0000	1.5543	0.3480	0.2239	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	2.4509	1.0000	2.4509	0.3821	0.1559	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	3.8875	1.0000	3.8875	0.7534	0.1938	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	2.2619	1.0000	2.2619	0.4759	0.2104	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	2.9602	1.0000	2.9602	0.5201	0.1757	0.055784	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.8638	1.0000	1.8638	0.4188	0.2247	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	6.7369	1.0000	6.7369	1.0577	0.1570	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	2.1681	1.0000	2.1681	0.4204	0.1939	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	0.7653	1.0000	0.7653	0.1611	0.2105	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	4.5190	1.0000	4.5190	0.7949	0.1759	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	0.6870	1.0000	0.6870	0.1545	0.2249	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	5.0942	1.0000	5.0942	0.8003	0.1571	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	2.9385	1.0000	2.9385	0.5163	0.1757	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	3.4469	1.0000	3.4469	0.6680	0.1938	0.055871	37.02	725.67	3712900.

TABLE VI (Continued)

57	3.25	0.0	0.0	2.9561	1.0000	2.9561	0.5822	0.1868	0.056670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	3.1243	1.0000	3.1243	0.6262	0.1681	0.056860	45.07	734.67	3892000.
59	3.25	5.00	0.0	1.8122	1.0000	1.8122	0.3367	0.1858	0.056847	45.07	733.67	3899700.
60	3.51	0.0	0.0	2.3906	1.0000	2.3906	0.4309	0.1800	0.056389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	2.9787	1.0000	2.9787	0.5320	0.1786	0.056442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	4.3824	1.0000	4.3824	0.7063	0.1608	0.056339	55.03	738.67	4097500.
63	3.51	5.00	0.0	1.5338	1.0000	1.5338	0.2744	0.1788	0.056354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.9706	1.0000	1.9706	0.3346	0.1698	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	4.3862	1.0000	4.3862	0.6610	0.1507	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.3694	1.0000	1.3694	0.2300	0.1687	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	2.8708	1.0000	2.8708	0.4777	0.1664	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.7980	1.0000	1.7980	0.2911	0.1619	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.3091	1.0000	1.3091	0.2105	0.1608	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.5753	1.0000	1.5753	0.2815	0.1787	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	1.6657	1.0000	1.6657	0.2362	0.1418	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.4322	1.0000	1.4322	0.2787	0.1946	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	2.6697	1.0000	2.6697	0.3265	0.1223	0.050928	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.5431	1.0000	1.5431	0.2773	0.1797	0.050984	72.90	740.67	4106000.
75	4.04	0.0	6.00	1.4936	1.0000	1.4936	0.2920	0.1955	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	6.6167	1.0000	6.6167	0.8165	0.1234	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	5.2484	1.0000	5.2484	0.7500	0.1429	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	1.9900	1.0000	1.9900	0.3233	0.2140	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	4.7091	1.0000	4.7091	0.8467	0.1798	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	6.9196	1.0000	6.9196	0.9902	0.1431	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	7.4049	1.0000	7.4049	1.4484	0.1956	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	7.1100	1.0000	7.1100	0.8788	0.1236	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.8098	1.0000	1.8098	0.2930	0.1619	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	1.7091	1.0000	1.7091	0.2767	0.1619	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	4.6377	1.0000	4.6377	1.0291	0.2219	0.065521	52.01	683.67	5684000.

GAGE= 4190 X/L=0.9600 PHI=271.400 NRUN= 46

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
40	3.01	5.00	0.0	0.5188	1.0000	0.5188	0.1061	0.2045	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	0.4783	1.0000	0.4783	0.1046	0.2187	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	0.5844	1.0000	0.5844	0.1101	0.1884	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	0.8236	1.0000	0.8236	0.1900	0.2307	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	0.8960	1.0000	0.8960	0.1534	0.1712	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	1.1481	1.0000	1.1481	0.2225	0.1938	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	1.5528	1.0000	1.5528	0.3247	0.2091	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	1.3094	1.0000	1.3094	0.2319	0.1771	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.1424	1.0000	1.1424	0.2543	0.2226	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	1.5156	1.0000	1.5156	0.2422	0.1598	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	0.9714	1.0000	0.9714	0.1765	0.1817	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	0.3598	1.0000	0.3598	0.0712	0.1979	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	1.2482	1.0000	1.2482	0.2057	0.1648	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	0.1383	1.0000	0.1383	0.0294	0.2126	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	0.8646	1.0000	0.8646	0.1277	0.1477	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	1.1158	1.0000	1.1158	0.1976	0.1771	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.0439	1.0000	1.0439	0.2023	0.1938	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	1.0134	1.0000	1.0134	0.1893	0.1868	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	1.5926	1.0000	1.5926	0.2701	0.1696	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	0.5422	1.0000	0.5422	0.1073	0.1979	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	0.7900	1.0000	0.7900	0.1422	0.1800	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	1.1872	1.0000	1.1872	0.2163	0.1822	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	1.2568	1.0000	1.2568	0.2041	0.1624	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	0.4472	1.0000	0.4472	0.0856	0.1914	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.0465	1.0000	1.0465	0.1777	0.1698	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	1.0933	1.0000	1.0933	0.1664	0.1522	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	0.4307	1.0000	0.4307	0.0780	0.1811	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	1.2352	1.0000	1.2352	0.2106	0.1705	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.1124	1.0000	1.1124	0.1801	0.1619	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	0.4218	1.0000	0.4218	0.0731	0.1733	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	0.5498	1.0000	0.5498	0.1038	0.1888	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	0.7639	1.0000	0.7639	0.1194	0.1563	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	0.5042	1.0000	0.5042	0.1020	0.2023	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	1.1678	1.0000	1.1678	0.1615	0.1383	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	0.9450	1.0000	0.9450	0.1685	0.1783	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	1.0969	1.0000	1.0969	0.2117	0.1930	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	0.2714	1.0000	0.2714	0.0343	0.1264	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	0.7846	1.0000	0.7846	0.1133	0.1444	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	0.6839	1.0000	0.6839	0.1021	0.1493	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	0.9254	1.0000	0.9254	0.1539	0.1663	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	1.0251	1.0000	1.0251	0.1348	0.1315	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	0.9731	1.0000	0.9731	0.1772	0.1821	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	2.6098	1.0000	2.6098	0.2970	0.1138	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.1563	1.0000	1.1563	0.1872	0.1619	0.050972	72.83	740.67	4102400.

TABLE VI (Continued)

84	4.04	0.0	0.0	1.2452	1.0000	1.2452	0.2016	0.1619	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	0.4881	1.0000	0.4881	0.1083	0.2219	0.065521	52.01	683.67	5684000.

GAGE= 4181 X/L=0.8540 PHI=247.100 NRUN= 46

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
40	3.01	5.00	0.0	1.8465	1.0000	1.8465	0.3778	0.2046	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	0.8813	1.0000	0.8813	0.1952	0.2190	0.056893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	3.0371	1.0000	3.0371	0.5728	0.1886	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	0.8662	1.0000	0.8662	0.2000	0.2309	0.056752	36.88	724.67	3706300.
44	3.01	5.00	-6.00	5.6628	1.0000	5.6628	0.9706	0.1714	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	1.7258	1.0000	1.7258	0.3348	0.1940	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	1.4892	1.0000	1.4892	0.3117	0.2093	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	2.3305	1.0000	2.3305	0.4132	0.1773	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.2626	1.0000	1.2626	0.2813	0.2228	0.056805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	2.8881	1.0000	2.8881	0.4621	0.1600	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	1.2705	1.0000	1.2705	0.2311	0.1819	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	1.3160	1.0000	1.3160	0.2607	0.1981	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	1.1448	1.0000	1.1448	0.1889	0.1650	0.055794	37.00	721.67	3738500.
53	3.01	-5.00	6.00	1.9187	1.0000	1.9187	0.4083	0.2128	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	2.0534	1.0000	2.0534	0.3037	0.1479	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	2.3373	1.0000	2.3373	0.4144	0.1773	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.7572	1.0000	1.7572	0.3409	0.1940	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	2.8283	1.0000	2.8283	0.5289	0.1870	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	2.2203	1.0000	2.2203	0.3770	0.1698	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	2.1842	1.0000	2.1842	0.4327	0.1981	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	3.3108	1.0000	3.3108	0.5966	0.1802	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	1.5740	1.0000	1.5740	0.2871	0.1824	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	2.2868	1.0000	2.2868	0.3716	0.1625	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	2.1247	1.0000	2.1247	0.4071	0.1916	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.6127	1.0000	1.6127	0.2740	0.1699	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	1.9672	1.0000	1.9672	0.2998	0.1524	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	2.6282	1.0000	2.6282	0.4765	0.1813	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	1.5120	1.0000	1.5120	0.2581	0.1707	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.3769	1.0000	1.3769	0.2232	0.1621	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	2.2785	1.0000	2.2785	0.3951	0.1734	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	0.9116	1.0000	0.9116	0.1723	0.1890	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	3.7705	1.0000	3.7705	0.5897	0.1564	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	0.9185	1.0000	0.9185	0.1860	0.2025	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	6.8273	1.0000	6.8273	0.9449	0.1384	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.5389	1.0000	1.5389	0.2747	0.1785	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	1.4353	1.0000	1.4353	0.2773	0.1932	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	3.3431	1.0000	3.3431	0.4229	0.1265	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	2.2012	1.0000	2.2012	0.3183	0.1446	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	3.0114	1.0000	3.0114	0.4499	0.1494	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	4.0967	1.0000	4.0967	0.6821	0.1665	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	3.5080	1.0000	3.5080	0.4620	0.1317	0.050966	72.86	739.67	4111700.
81	4.04	-5.00	6.00	2.9100	1.0000	2.9100	0.5305	0.1823	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	3.5759	1.0000	3.5759	0.4073	0.1139	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.6749	1.0000	1.6749	0.2715	0.1621	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	1.4244	1.0000	1.4244	0.2309	0.1621	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	1.6348	1.0000	1.6348	0.3631	0.2221	0.065521	52.01	683.67	5684000.

GAGE= 5029 X/L=0.0120 PHI=180.000 NRUN=105

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	2.6622	1.0000	2.6622	1.3617	0.5115	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	2.7458	1.0000	2.7458	1.4045	0.5115	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	1.9412	1.0000	1.9412	1.0898	0.5614	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	2.0320	1.0000	2.0320	1.1375	0.5598	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	1.7517	1.0000	1.7517	0.9850	0.5623	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	1.3263	1.0000	1.3263	0.7471	0.5633	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	2.1852	1.0000	2.1852	1.1975	0.5480	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	2.1542	1.0000	2.1542	1.1822	0.5488	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	1.7932	1.0000	1.7932	0.9866	0.5502	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	1.7759	1.0000	1.7759	0.9773	0.5503	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	2.1243	1.0000	2.1243	1.1484	0.5406	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	2.1270	1.0000	2.1270	1.1507	0.5410	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	2.0915	1.0000	2.0915	1.1342	0.5423	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	1.9895	1.0000	1.9895	1.0775	0.5416	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	2.8359	1.0000	2.8359	1.4463	0.5100	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	3.0041	1.0000	3.0041	1.5444	0.5141	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	3.1461	1.0000	3.1461	1.6171	0.5140	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	3.8373	1.0000	3.8373	1.9789	0.5157	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	3.3002	1.0000	3.3002	1.6963	0.5140	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	3.4265	1.0000	3.4265	1.7595	0.5135	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	3.3365	1.0000	3.3365	1.7133	0.5135	0.055483	36.89	721.67	3708300.

TABLE VI (Continued)

23	3.02	5.00	0.0	3.8061	1.0000	3.8061	2.0042	0.5131	0.056876	37.01	721.67	3720800.
24	3.02	5.00	3.00	3.6867	1.0000	3.6867	1.8924	0.5133	0.056598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	3.5535	1.0000	3.5535	1.8240	0.5133	0.056538	36.96	721.67	3716700.
26	3.24	4.40	-0.60	3.8618	1.0000	3.8618	1.9765	0.5118	0.056876	45.05	726.67	3974400.
27	3.24	5.20	1.70	3.6949	1.0000	3.6949	1.8866	0.5106	0.056019	45.16	725.67	3980400.
28	3.24	1.60	-0.70	3.1388	1.0000	3.1388	1.6061	0.5117	0.056035	45.17	725.67	3982700.
29	3.24	0.30	0.0	2.5085	1.0000	2.5085	1.2786	0.5097	0.056889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	4.3038	1.0000	4.3038	2.1885	0.5085	0.056407	84.99	727.67	4209800.
31	3.50	5.30	1.50	3.9374	1.0000	3.9374	1.9986	0.5076	0.056427	84.95	730.67	4180900.
32	3.50	1.40	0.20	2.1087	1.0000	2.1087	1.0693	0.5071	0.056430	84.98	729.67	4182000.
33	3.50	0.40	-0.30	1.3231	1.0000	1.3231	0.6683	0.5051	0.056543	85.23	728.67	4219800.
34	3.75	0.30	0.0	0.5332	1.0000	0.5332	0.2582	0.4861	0.053050	61.92	739.67	4068400.
35	3.77	1.50	-0.50	0.7670	1.0000	0.7670	0.3748	0.4888	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	4.6999	1.0000	4.6999	2.3081	0.4911	0.052569	61.81	739.67	4009300.
37	3.77	5.00	0.10	4.4452	1.0000	4.4452	2.1808	0.4906	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	0.3729	1.0000	0.3729	0.1773	0.4754	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	0.6516	1.0000	0.6516	0.3084	0.4733	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	3.4950	1.0000	3.4950	1.7968	0.5141	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	3.8793	1.0000	3.8793	1.9951	0.5143	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	3.9362	1.0000	3.9362	2.0244	0.5143	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	3.8024	1.0000	3.8024	1.9575	0.5148	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	4.0950	1.0000	4.0950	2.1081	0.5148	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	3.5927	1.0000	3.5927	1.8488	0.5146	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	3.8316	1.0000	3.8316	1.9710	0.5144	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	3.6231	1.0000	3.6231	1.8637	0.5144	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	2.9154	1.0000	2.9154	1.4988	0.5141	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	3.6178	1.0000	3.6178	1.8599	0.5141	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	1.5508	1.0000	1.5508	0.7686	0.4956	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	1.4805	1.0000	1.4805	0.7333	0.4953	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	1.6426	1.0000	1.6426	0.8136	0.4953	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	1.5030	1.0000	1.5030	0.7431	0.4944	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	1.7668	1.0000	1.7668	0.8735	0.4944	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	3.4757	1.0000	3.4757	1.7879	0.5144	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	3.5577	1.0000	3.5577	1.8308	0.5146	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	2.2599	1.0000	2.2599	1.1503	0.5090	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	2.0692	1.0000	2.0692	1.0530	0.5089	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	3.9748	1.0000	3.9748	2.0311	0.5110	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	0.9327	1.0000	0.9327	0.4684	0.5022	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	1.8929	1.0000	1.8929	0.9563	0.5052	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	1.4086	1.0000	1.4086	0.7071	0.5020	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	4.3653	1.0000	4.3653	2.2093	0.5061	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	0.3118	1.0000	0.3118	0.1513	0.4852	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	0.7384	1.0000	0.7384	0.3581	0.4850	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	4.6033	1.0000	4.6033	2.2584	0.4906	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	0.7189	1.0000	0.7189	0.3514	0.4888	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	0.5878	1.0000	0.5878	0.2782	0.4733	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	5.4466	1.0000	5.4466	2.6149	0.4801	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	4.5899	1.0000	4.5899	2.2036	0.4801	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	5.1339	1.0000	5.1339	2.4648	0.4801	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	3.1372	1.0000	3.1372	1.5065	0.4802	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	6.0498	1.0000	6.0498	2.9051	0.4802	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	0.4782	1.0000	0.4782	0.2263	0.4732	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	3.0656	1.0000	3.0656	1.4485	0.4725	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	2.0489	1.0000	2.0489	0.9681	0.4725	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	0.6600	1.0000	0.6600	0.3123	0.4732	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	0.4734	1.0000	0.4734	0.2128	0.4495	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	0.3042	1.0000	0.3042	0.1366	0.4491	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	0.1795	1.0000	0.1795	0.0806	0.4491	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	0.4669	1.0000	0.4669	0.2092	0.4481	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	1.3031	1.0000	1.3031	0.5839	0.4481	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	0.5795	1.0000	0.5795	0.2743	0.4733	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	0.4158	1.0000	0.4158	0.1968	0.4733	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	2.9728	1.0000	2.9728	1.7348	0.5836	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	0.7077	1.0000	0.7077	0.3694	0.5220	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	2.0240	1.0000	2.0240	1.0560	0.5220	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	2.0880	1.0000	2.0880	1.0890	0.5220	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	1.9600	1.0000	1.9600	1.0330	0.5210	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	2.0040	1.0000	2.0040	1.0570	0.5270	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	2.2120	1.0000	2.2120	1.1660	0.5270	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	0.6250	1.0000	0.6250	0.3102	0.5270	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	0.6350	1.0000	0.6350	0.3148	0.4970	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	0.7410	1.0000	0.7410	0.3672	0.4960	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	1.0178	1.0000	1.0178	0.5308	0.5215	0.089292	174.48	1441.70	3631300.
97	4.00	0.0	0.0	1.8120	1.0000	1.8120	0.9226	0.5090	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	1.6960	1.0000	1.6960	0.8615	0.5080	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	1.2940	1.0000	1.2940	0.6357	0.4910	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	0.5320	1.0000	0.5320	0.2394	0.4500	0.047013	60.24	728.67	3544500.

TABLE VI (Continued)

101	4.00	5.00	0.0	4.8940	1.0000	4.8940	2.2270	0.4550	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	0.3980	1.0000	0.3980	0.1697	0.4260	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	0.4240	1.0000	0.4240	0.1809	0.4260	0.047199	60.45	737.67	3481300.
104	4.00	-5.00	-3.00	0.2530	1.0000	0.2530	0.1080	0.4260	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	0.5670	1.0000	0.5670	0.2646	0.4490	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	4.0290	1.0000	4.0290	0.2254	0.5580	0.066420	118.54	737.67	6920200.
107	4.00	0.70	-0.60	3.9610	1.0000	3.9610	0.2216	0.5580	0.066764	120.72	738.67	6974400.

GAGE= 6032 X/L=0.1871 PHI=180.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HATT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	0.8703	1.0000	0.8733	0.1488	0.1709	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	0.8979	1.0000	0.8979	0.1531	0.1705	0.052848	33.94	677.67	3787200.
4	2.24	2.40	-0.60	0.9446	1.0000	0.9446	0.2421	0.2563	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	0.8990	1.0000	0.8990	0.2315	0.2575	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	0.8943	1.0000	0.8943	0.2259	0.2526	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	0.8640	1.0000	0.8640	0.2122	0.2496	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	0.9372	1.0000	0.9372	0.2207	0.2355	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	0.9540	1.0000	0.9540	0.2221	0.2328	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	0.9151	1.0000	0.9151	0.2060	0.2251	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	0.8998	1.0000	0.8998	0.2020	0.2245	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	0.9491	1.0000	0.9491	0.2088	0.2200	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	0.9675	1.0000	0.9675	0.2115	0.2186	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	0.8892	1.0000	0.8892	0.1782	0.2004	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	0.8628	1.0000	0.8628	0.1691	0.1960	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	0.9392	1.0000	0.9392	0.1592	0.1695	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	0.9782	1.0000	0.9782	0.1973	0.2017	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	0.9931	1.0000	0.9931	0.2010	0.2024	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	0.9494	1.0000	0.9494	0.1725	0.1817	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	0.9224	1.0000	0.9224	0.1593	0.1727	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	0.9271	1.0000	0.9271	0.1589	0.1714	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	0.9096	1.0000	0.9096	0.1559	0.1714	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	0.9932	1.0000	0.9932	0.2039	0.2053	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	0.9596	1.0000	0.9596	0.1969	0.2052	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	1.0093	1.0000	1.0093	0.2071	0.2052	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	0.9673	1.0000	0.9673	0.1834	0.1896	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	0.9954	1.0000	0.9954	0.1945	0.1954	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	0.9378	1.0000	0.9378	0.1584	0.1689	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	0.8634	1.0000	0.8634	0.1390	0.1610	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	0.9728	1.0000	0.9728	0.1750	0.1799	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	0.9919	1.0000	0.9919	0.1844	0.1859	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	0.9428	1.0000	0.9428	0.1483	0.1573	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	0.9037	1.0000	0.9037	0.1360	0.1505	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	0.8987	1.0000	0.8987	0.1224	0.1362	0.053050	61.82	739.67	4058400.
35	3.77	1.50	-0.50	0.9252	1.0000	0.9252	0.1335	0.1443	0.052582	61.87	739.67	4012800.
36	3.77	3.80	0.70	0.9498	1.0000	0.9498	0.1534	0.1615	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	0.9528	1.0000	0.9528	0.1616	0.1696	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	0.8924	1.0000	0.8924	0.1145	0.1283	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	1.0639	1.0000	1.0639	0.1316	0.1237	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	0.9898	1.0000	0.9898	0.2036	0.2057	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	0.9946	1.0000	0.9946	0.2044	0.2055	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	1.0258	1.0000	1.0258	0.2108	0.2055	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	1.0224	1.0000	1.0224	0.2097	0.2051	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	1.0049	1.0000	1.0049	0.2061	0.2051	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	0.9161	1.0000	0.9161	0.1573	0.1717	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	0.9726	1.0000	0.9726	0.1669	0.1716	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	0.9435	1.0000	0.9435	0.1619	0.1716	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	0.9061	1.0000	0.9061	0.1553	0.1714	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	0.9142	1.0000	0.9142	0.1567	0.1714	0.055868	37.23	721.67	3762900.
50	3.01	-5.00	0.0	0.8581	1.0000	0.8581	0.1252	0.1459	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	0.8060	1.0000	0.8060	0.1176	0.1459	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	0.7916	1.0000	0.7916	0.1155	0.1459	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	0.7826	1.0000	0.7826	0.1141	0.1458	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	0.7771	1.0000	0.7771	0.1133	0.1458	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	0.9417	1.0000	0.9417	0.1616	0.1716	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	0.9336	1.0000	0.9336	0.1603	0.1717	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	0.9522	1.0000	0.9522	0.1514	0.1590	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	0.9251	1.0000	0.9251	0.1470	0.1589	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	0.9866	1.0000	0.9866	0.1914	0.1940	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	0.9037	1.0000	0.9037	0.1332	0.1474	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	0.9592	1.0000	0.9592	0.1504	0.1568	0.[illegible]5442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	0.9260	1.0000	0.9260	0.1364	0.1473	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	0.9929	1.0000	0.9929	0.1818	0.1831	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	0.8615	1.0000	0.8615	0.1157	0.1343	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	0.9493	1.0000	0.9493	0.1274	0.1342	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	0.9511	1.0000	0.9511	0.1613	0.1696	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	0.9335	1.0000	0.9335	0.1347	0.1443	0.052832	61.90	740.67	4027900.

TABLE VI (Continued)

68	4.04	0.0	0.0	0.9483	1.0000	0.9483	0.1173	0.1237	0.050988	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.0068	1.0000	1.0068	0.1601	0.1690	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	0.9812	1.0000	0.9812	0.1674	0.1588	0.050848	72.87	737.67	4128500.
71	4.04	5.00	-3.00	1.0227	1.0000	1.0227	0.1624	0.1588	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.0170	1.0000	1.0170	0.1611	0.1584	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	1.0455	1.0000	1.0455	0.1656	0.1584	0.050926	72.73	739.67	4105000.
74	4.04	0.0	3.00	0.9693	1.0000	0.9693	0.1188	0.1236	0.050894	72.90	740.67	4106000.
75	4.04	0.0	6.00	0.9733	1.0000	0.9733	0.1201	0.1234	0.050866	72.85	739.67	4111700.
76	4.04	0.0	-6.00	0.9514	1.0000	0.9514	0.1174	0.1234	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	0.9587	1.0000	0.9587	0.1185	0.1236	0.050863	72.84	739.67	4111200.
78	4.04	-5.00	0.0	0.8435	1.0000	0.8435	0.0814	0.0965	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	1.1244	1.0000	1.1244	0.1085	0.0965	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	0.7596	1.0000	0.7596	0.0733	0.0965	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	0.7573	1.0000	0.7573	0.0730	0.0964	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	0.7645	1.0000	0.7645	0.0737	0.0964	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	0.9289	1.0000	0.9289	0.1149	0.1237	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	0.9046	1.0000	0.9046	0.1119	0.1237	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	0.9355	1.0000	0.9355	0.1827	0.1953	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	0.9050	1.0000	0.9050	0.1286	0.1421	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	0.9338	1.0000	0.9338	0.1326	0.1420	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	0.9373	1.0000	0.9373	0.1330	0.1419	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	0.9693	1.0000	0.9693	0.1769	0.1825	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	0.9671	1.0000	0.9671	0.1765	0.1825	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	0.9759	1.0000	0.9759	0.1780	0.1824	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	0.8350	1.0000	0.8350	0.0926	0.1109	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	0.8141	1.0000	0.8141	0.0902	0.1108	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	0.8177	1.0000	0.8177	0.0906	0.1108	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	0.9099	1.0000	0.9099	0.1292	0.1420	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	0.5560	1.0000	0.5560	0.0402	0.0723	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	0.9125	1.0000	0.9125	0.1252	0.1372	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	0.8896	1.0000	0.8896	0.1209	0.1359	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	0.9099	1.0000	0.9099	0.1191	0.1309	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	0.8641	1.0000	0.8641	0.1017	0.1177	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	0.9575	1.0000	0.9575	0.1442	0.1506	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	0.7854	1.0000	0.7854	0.0721	0.0918	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	0.7541	1.0000	0.7541	0.0693	0.0919	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	0.7661	1.0000	0.7661	0.0704	0.0919	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	0.8757	1.0000	0.8757	0.1029	0.1175	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	0.8893	1.0000	0.8893	0.1357	0.1526	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	0.8879	1.0000	0.8879	0.1355	0.1526	0.066764	120.72	738.67	6974400.

GAGE= 5035 X/L=0.3328 PHI=180.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	0.6784	0.7967	0.8516	0.0730	0.1076	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	0.6115	0.8700	0.7029	0.0658	0.1076	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	0.5165	0.8700	0.5936	0.0925	0.1791	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	0.5136	0.8700	0.5904	0.0924	0.1799	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	0.5506	0.8700	0.6329	0.0974	0.1769	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	0.5527	0.8700	0.6353	0.0923	0.1670	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	0.5596	0.8700	0.6432	0.0892	0.1594	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	0.5415	0.8700	0.6225	0.0854	0.1577	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	0.5359	0.8700	0.6160	0.0820	0.1530	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	0.5426	0.8700	0.6237	0.0828	0.1526	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	0.5298	0.8700	0.6089	0.0765	0.1444	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	0.5470	0.8700	0.6288	0.0785	0.1435	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	0.5735	0.8700	0.6591	0.0726	0.1266	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	0.6058	0.8700	0.6964	0.0767	0.1266	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	0.6451	0.7967	0.8098	0.0689	0.1068	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	0.6535	0.8021	0.8147	0.0841	0.1287	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	0.6664	0.8070	0.8258	0.0861	0.1292	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	0.6480	0.8023	0.8076	0.0751	0.1159	0.055518	36.90	723.67	3684700.
20	3.02	0.20	-0.10	0.6707	0.7980	0.8404	0.0726	0.1081	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	0.6392	0.8107	0.7885	0.0691	0.1081	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	0.6910	0.8106	0.8525	0.0747	0.1081	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	0.6908	0.7974	0.8663	0.0907	0.1313	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	0.6771	0.8106	0.8353	0.0889	0.1313	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	0.6725	0.8106	0.8296	0.0883	0.1313	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	0.6604	0.8140	0.8113	0.0776	0.1175	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	0.6388	0.8189	0.7800	0.0778	0.1218	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	0.6702	0.8145	0.8228	0.0701	0.1046	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	0.7567	0.8120	0.9319	0.0737	0.0974	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	0.6651	0.8291	0.8022	0.0721	0.1084	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	0.6525	0.8296	0.7865	0.0736	0.1128	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	0.7066	0.8292	0.8521	0.0667	0.0944	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	0.6856	0.8292	0.8269	0.0602	0.0878	0.055543	55.2..	728.67	4219900.
34	3.75	0.30	0.0	0.7891	0.8461	0.9327	0.0610	0.0773	0.053050	61.92	739.67	4058400.

TABLE VI (Continued)

35	3.77	1.50	-0.50	0.7768	0.8450	0.9193	0.0651	0.0838	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	0.7226	0.8442	0.8560	0.0680	0.0941	0.052659	61.81	738.67	4008300.
37	3.77	5.00	0.10	0.7287	0.8468	0.8605	0.0728	0.0999	0.052674	61.88	738.67	4021600.
38	4.02	0.70	-0.60	0.8328	0.8580	0.9707	0.0573	0.0688	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	0.8968	0.8629	1.0393	0.0617	0.0688	0.051364	72.81	738.67	4158900.
40	3.01	5.00	0.0	0.7283	0.7967	0.9164	0.0969	0.1315	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	0.6837	0.8104	0.8436	0.0899	0.1315	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	0.6867	0.8104	0.8473	0.0903	0.1315	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	0.7032	0.7503	0.8372	0.0924	0.1314	0.055752	36.88	724.67	3706300.
44	3.01	5.00	-6.00	0.6865	0.7501	0.9191	0.0902	0.1314	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	0.6916	0.7967	0.8681	0.0748	0.1083	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	0.6814	0.8103	0.8410	0.0738	0.1083	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	0.7036	0.8103	0.8683	0.0762	0.1083	0.055784	36.96	723.67	3721000.
48	3.01	0.0	6.00	0.6667	0.7509	0.8878	0.0722	0.1083	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	0.6741	0.7509	0.8977	0.0730	0.1083	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	0.5762	0.7968	0.7231	0.0624	0.1083	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	0.4746	0.8103	0.5857	0.0514	0.1083	0.055717	36.88	722.67	3719800.
52	3.01	-5.00	-3.00	0.4848	0.8103	0.5983	0.0525	0.1083	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	0.5660	0.7494	0.7553	0.0613	0.1083	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	0.5716	0.7491	0.7630	0.0619	0.1083	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	0.6824	0.8104	0.8420	0.0739	0.1083	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	0.6741	0.8700	0.7748	0.0730	0.1083	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	0.7197	0.8700	0.8273	0.0701	0.0974	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	0.7290	0.8178	0.8914	0.0710	0.0974	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	0.6959	0.8127	0.8563	0.0840	0.1207	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	0.7509	0.8300	0.9046	0.0657	0.0875	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	0.7194	0.8299	0.8669	0.0677	0.0941	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	0.7451	0.8260	0.9021	0.0652	0.0875	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	0.7094	0.8300	0.8547	0.0786	0.1108	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	0.8072	0.8700	0.9279	0.0624	0.0773	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	0.7827	0.8336	0.9389	0.0605	0.0773	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	0.7648	0.8467	0.9032	0.0764	0.0999	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	0.7900	0.8444	0.9355	0.0662	0.0838	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	0.9520	0.8631	1.1030	0.0655	0.0688	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	0.8121	0.8631	0.9409	0.0739	0.0910	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	0.7813	0.8421	0.9278	0.0711	0.0910	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	0.7604	0.8421	0.9030	0.0692	0.0910	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	0.7426	0.8294	0.8953	0.0675	0.0909	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	0.7712	0.8294	0.9298	0.0701	0.0909	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	0.8401	0.8421	0.9976	0.0578	0.0688	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	0.7994	0.8295	0.9637	0.0550	0.0688	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	0.7994	0.8294	0.9639	0.0550	0.0688	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	0.8387	0.8420	0.9960	0.0577	0.0688	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	1.1294	0.8631	1.3085	0.0777	0.0688	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	1.3784	0.8421	1.6380	0.0949	0.0688	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	1.8416	0.8420	2.1871	0.1267	0.0688	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	1.4666	0.8294	1.7682	0.1009	0.0688	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	1.5581	0.8294	1.8786	0.1072	0.0688	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	0.8997	0.8631	1.0424	0.0619	0.0688	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	0.8939	0.8631	1.0357	0.0615	0.0688	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	0.5422	0.7967	0.6806	0.0668	0.1232	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	0.7607	0.8627	0.8817	0.0607	0.0798	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	0.7043	0.8415	0.8369	0.0562	0.0798	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	0.7177	0.8415	0.8529	0.0572	0.0797	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	0.7930	0.8627	0.9192	0.0835	0.1053	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	0.7163	0.8414	0.8513	0.0755	0.1054	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	0.7372	0.8414	0.8761	0.0777	0.1054	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	0.6023	0.8627	0.6981	0.0480	0.0797	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	0.4668	0.8412	0.5549	0.0372	0.0797	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	0.4730	0.8411	0.5624	0.0377	0.0797	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	0.7729	0.8627	0.8959	0.0616	0.0797	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	0.4885	0.8582	0.5692	0.0191	0.0391	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	0.7948	0.8627	0.9213	0.0612	0.0770	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	0.7714	0.8627	0.8941	0.0587	0.0761	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	0.8295	0.8627	0.9615	0.0608	0.0733	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	0.8659	0.8627	1.0037	0.0568	0.0656	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	0.8287	0.8627	0.9606	0.0716	0.0864	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	0.7985	0.8627	0.9256	0.0523	0.0655	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	0.5534	0.8412	0.6578	0.0363	0.0656	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	0.5695	0.8412	0.6770	0.0373	0.0655	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	0.9069	0.8627	1.0512	0.0594	0.0655	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	0.6175	0.8581	0.7197	0.0507	0.0821	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	0.6175	0.8581	0.7197	0.0507	0.0821	0.066764	120.72	738.67	6974400.

GAGE= 5036 X/L=0.3328 PHI=251.400 NRUN=106

RUN	MACH	ALPHA	BETA	MIHU*TH	TUR FAC	MIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT

TABLE VI (Continued)

1	3.01	0.0	0.0	3.7951	0.7967	4.6883	0.4019	0.1076	0.052884	34.04	675.67	3783800.
2	3.01	0.0	0.0	3.4693	0.8700	3.9877	0.3733	0.1076	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	3.7546	0.8700	4.3156	0.6578	0.1752	0.058067	23.14	637.67	4208300.
5	2.24	2.60	0.80	4.1192	0.8700	4.7278	0.6869	0.1670	0.057850	22.88	644.67	4098100.
6	2.24	1.80	-0.70	3.8072	0.8700	4.3761	0.6358	0.1670	0.057804	22.83	648.67	4073900.
7	2.24	0.60	-0.20	3.2166	0.8700	3.6974	0.5372	0.1670	0.058088	23.00	648.67	4077600.
8	2.50	3.20	-0.60	3.8186	0.8700	4.5052	0.5883	0.1529	0.056426	26.13	648.67	4048600.
9	2.50	2.80	0.80	4.3946	0.8700	5.0813	0.6337	0.1442	0.056609	26.21	648.67	4060500.
10	2.50	1.60	-0.70	3.9023	0.8700	3.7958	0.5003	0.1515	0.056303	26.01	648.67	4031000.
11	2.50	1.50	0.20	3.4278	0.8700	3.9401	0.4943	0.1442	0.056307	26.03	648.67	4042600.
12	2.75	3.60	-0.60	4.3633	0.8700	5.0153	0.5821	0.1357	0.055804	31.15	650.67	4211400.
13	2.76	3.60	1.30	5.5703	0.8700	6.4026	0.7052	0.1266	0.056075	31.03	650.67	4172800.
14	2.76	0.80	-0.80	3.3688	0.8700	3.8723	0.4484	0.1331	0.056038	31.07	652.67	4158600.
15	2.76	0.20	0.10	3.9934	0.8700	3.8004	0.4296	0.1266	0.056712	31.17	651.67	4181800.
16	3.01	0.0	0.0	4.2725	0.7967	5.3627	0.4563	0.1068	0.052886	34.04	674.67	3782800.
17	3.02	4.50	-0.70	4.2292	0.8700	4.8612	0.4982	0.1178	0.055320	36.67	721.67	3966600.
18	3.02	4.60	1.30	4.4949	0.8343	5.3876	0.4859	0.1081	0.055024	37.48	721.67	3767900.
19	3.02	1.60	-0.70	3.7876	0.8700	4.3535	0.4333	0.1144	0.055516	36.80	723.67	3694700.
20	3.02	0.20	-0.10	3.8501	0.8700	4.4254	0.4162	0.1081	0.055535	36.84	722.67	3706100.
21	3.02	0.0	3.00	3.6179	0.8738	4.1405	0.3911	0.1081	0.055546	36.87	721.67	3716800.
22	3.02	0.0	-3.00	3.4942	0.8700	4.0163	0.4221	0.1208	0.055483	36.88	721.67	3708300.
23	3.02	5.00	0.0	4.1148	0.7975	5.1596	0.4768	0.1159	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	4.0759	0.8740	4.6634	0.4406	0.1081	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	4.1785	0.8700	4.8029	0.5361	0.1283	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	4.2681	0.8700	4.9059	0.4537	0.1063	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	4.3029	0.8543	5.0367	0.4191	0.0974	0.056019	45.15	726.67	3990400.
28	3.24	1.50	-0.70	4.2602	0.8700	4.8967	0.4405	0.1034	0.056035	45.17	726.67	3992700.
29	3.24	0.30	0.0	4.3388	0.8121	5.3427	0.4226	0.0974	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	4.7758	0.8700	5.4894	0.4580	0.0959	0.055407	54.98	727.67	4209800.
31	3.50	5.30	1.50	4.7198	0.8613	5.4799	0.4144	0.0878	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	5.2415	0.8335	6.2885	0.4602	0.0878	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	5.2073	0.8700	5.9854	0.4572	0.0878	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	5.4256	0.8461	6.4125	0.4194	0.0773	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	5.2073	0.8700	5.9854	0.4270	0.0820	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	5.1048	0.8586	5.9455	0.3946	0.0773	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	5.0322	0.8489	5.9279	0.4217	0.0838	0.052674	61.88	738.67	4021600.
38	4.02	0.70	-0.60	5.4121	0.8700	6.2208	0.3940	0.0728	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	5.5683	0.8700	6.4004	0.3831	0.0688	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	4.5745	0.8700	5.2580	0.5311	0.1161	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	4.1376	0.8733	4.7379	0.4481	0.1083	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	4.2900	0.8700	4.9311	0.5517	0.1286	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	3.9058	0.9133	4.2766	0.4230	0.1083	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	3.8736	0.8700	4.4524	0.5609	0.1448	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	3.9603	0.7967	4.9709	0.4289	0.1083	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	3.6768	0.8737	4.2083	0.3982	0.1083	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	3.5207	0.8700	4.0467	0.4260	0.1210	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	3.1311	0.9132	3.4287	0.3391	0.1083	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	3.0983	0.8700	3.5613	0.4192	0.1353	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	2.9474	0.8700	3.3878	0.3192	0.1083	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	2.8661	0.8737	3.2804	0.3104	0.1083	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	2.9069	0.8700	3.3412	0.3340	0.1149	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	2.6851	0.9134	2.9397	0.2908	0.1083	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	2.7526	0.8700	3.1639	0.3493	0.1269	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	3.5190	0.8700	4.0448	0.4258	0.1210	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	4.0628	0.8700	4.6699	0.4400	0.1083	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	4.6643	0.8700	5.3612	0.4543	0.0974	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	4.1764	0.8700	4.8004	0.4594	0.1100	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	4.4242	0.8128	5.4432	0.4641	0.1049	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	5.1006	0.8700	5.8627	0.4463	0.0875	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	5.2366	0.8700	6.0190	0.4582	0.0875	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	4.8689	0.8700	5.5964	0.4864	0.0999	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	4.7848	0.8300	5.7648	0.4536	0.0948	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	5.2937	0.8700	6.0847	0.4092	0.0773	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	5.5174	0.8700	6.3418	0.4916	0.0891	0.052842	61.98	746.67	3984700.
66	3.76	5.00	0.0	5.0737	0.8467	5.9923	0.4267	0.0841	0.052947	61.84	748.67	3965800.
67	3.76	1.50	-0.50	5.2122	0.8700	5.9910	0.4274	0.0820	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	5.5901	0.8700	6.4254	0.3846	0.0688	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	5.4894	0.8700	6.3096	0.4139	0.0754	0.050813	72.73	738.67	4113400.
70	4.04	5.00	3.00	4.4855	0.9075	4.9427	0.3086	0.0688	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	5.9182	0.8700	6.8025	0.5208	0.0880	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	3.7151	0.9221	4.0290	0.2556	0.0688	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	5.9275	0.8700	6.8132	0.6212	0.1048	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	4.4840	0.9076	4.9405	0.3085	0.0688	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	3.7587	0.9220	4.0767	0.2586	0.0688	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	5.1674	0.8700	5.8395	0.4909	0.0950	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	6.0224	0.8700	6.9223	0.4836	0.0803	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	5.2645	0.8700	6.0512	0.3622	0.0688	0.050947	72.80	739.67	4108600.

TABLE VI (Continued)

78	4.04	-5.00	3.00	6.8387	0.9076	7.5349	0.4706	0.0688	0.050974	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	5.2224	0.8700	6.0027	0.3875	0.0742	0.050966	72.86	739.67	4111700.
81	4.04	-5.00	6.00	7.6876	0.8221	8.3370	0.5289	0.0688	0.051001	72.96	739.67	4117400.
82	4.04	-5.00	-6.00	4.4803	0.8700	5.1497	0.3862	0.0862	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	5.2807	0.8700	6.0813	0.3640	0.0688	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	5.5305	0.8631	6.4077	0.3805	0.0688	0.050976	72.81	741.67	4092600.
85	3.01	0.0	0.0	3.0721	0.7967	4.6091	0.4624	0.1232	0.066521	62.01	683.67	5664000.
86	4.00	0.0	0.0	3.9348	0.8700	4.5228	0.3140	0.0798	0.088276	174.52	1438.70	3643600.
87	4.00	0.0	3.00	3.7707	0.9078	4.1536	0.3008	0.0798	0.088267	174.48	1438.70	3642800.
88	4.00	0.0	-3.00	4.5161	0.8700	5.1910	0.4200	0.0930	0.088307	174.68	1440.70	3687100.
89	4.00	5.00	0.0	4.5447	0.8627	5.2680	0.3963	0.0872	0.088162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	4.2846	0.8081	4.7261	0.3427	0.0798	0.088322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	4.3670	0.8700	5.0186	0.4460	0.1018	0.088307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	4.0226	0.8700	4.6237	0.3206	0.0787	0.088298	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	3.4656	0.8086	3.8031	0.2754	0.0787	0.088244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	4.0808	0.8700	4.7021	0.3914	0.0858	0.088260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	4.3400	0.8627	5.0307	0.3459	0.0787	0.088282	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	8.0308	0.8700	10.1389	0.3643	0.0413	0.030223	80.16	1428.70	423840.
97	4.00	0.0	0.0	4.9870	0.8627	5.3179	0.3932	0.0770	0.070417	140.45	1249.70	3051900.
98	4.00	0.0	0.0	4.6452	0.8700	5.3383	0.3938	0.0761	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	4.9468	0.8700	5.6860	0.3626	0.0733	0.064621	102.46	882.67	3816300.
100	4.00	0.0	0.0	5.3089	0.8627	6.1545	0.3483	0.0696	0.047013	60.24	728.67	3544800.
101	4.00	5.00	0.0	5.1341	0.8700	5.9012	0.3676	0.0716	0.047081	60.21	736.67	3464200.
102	4.00	-5.00	0.0	4.6977	0.8628	5.4447	0.3077	0.0699	0.047126	60.26	737.67	3480900.
103	4.00	-5.00	3.00	4.2780	0.8088	4.7084	0.2807	0.0656	0.047188	60.49	737.67	3481300.
104	4.00	-5.00	-3.00	4.4547	0.8700	5.1203	0.3145	0.0706	0.047128	60.33	739.67	3498600.
105	4.00	0.0	0.0	5.2031	0.8627	6.0311	0.3408	0.0699	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	5.0173	0.8700	5.7670	0.4360	0.0869	0.066420	118.54	737.67	6820200.
107	4.00	0.70	-0.60	4.9703	0.8700	5.7233	0.4327	0.0868	0.066764	120.72	730.67	6974400.

GAGE= 8037 X/L=0.3328 PHI=270.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	7.9149	0.7967	9.4326	0.8086	0.1076	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	6.7388	0.7967	8.4585	0.7251	0.1076	0.052848	33.94	677.67	3797200.
4	2.24	2.40	-0.60	5.0731	0.8700	5.8311	0.8472	0.1670	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	4.7275	0.8700	5.4340	0.7895	0.1670	0.057860	22.88	644.67	4099100.
6	2.24	1.80	-0.70	4.8419	0.8700	5.5654	0.8086	0.1670	0.057964	22.93	648.67	4073900.
7	2.24	0.60	-0.20	4.6192	0.8700	5.3094	0.7714	0.1670	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	6.4667	0.8700	7.4330	0.9325	0.1442	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	6.4459	0.8700	7.4091	0.9295	0.1442	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	6.3634	0.8700	7.3142	0.9176	0.1442	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	6.0673	0.8700	6.9739	0.8749	0.1442	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	7.5824	0.8700	8.7269	0.9612	0.1266	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	7.5932	0.8700	8.7278	0.9613	0.1266	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	7.2504	0.8700	8.3338	0.9179	0.1266	0.055639	31.07	652.67	4159800.
15	2.76	0.20	0.10	6.2046	0.8700	7.1317	0.7855	0.1266	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	9.2781	0.7967	11.6456	0.9909	0.1068	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	8.5902	0.8700	9.8738	0.9286	0.1081	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	8.5338	0.8258	10.3339	0.9225	0.1081	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	7.6957	0.8700	8.8456	0.8319	0.1081	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	7.4302	0.8700	8.5404	0.8032	0.1081	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	7.4135	0.8591	8.6294	0.8014	0.1081	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	7.0206	0.8700	8.0696	0.8530	0.1215	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	8.2766	0.7975	10.3782	0.8947	0.1081	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	7.9204	0.8593	9.2173	0.8562	0.1081	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	7.8140	0.8700	8.9816	0.9494	0.1215	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	8.3337	0.8700	9.5789	0.8117	0.0974	0.055976	45.05	726.67	3874400.
27	3.24	5.20	1.70	8.3111	0.8480	9.8008	0.8095	0.0974	0.056018	45.15	725.67	3890400.
28	3.24	1.50	-0.70	8.8429	0.8700	10.1643	0.8613	0.0974	0.056035	45.17	725.67	3892700.
29	3.24	0.30	0.0	7.8224	0.8121	9.6323	0.7619	0.0974	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	8.2778	0.8700	9.5148	0.7268	0.0878	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	8.9009	0.8592	10.3595	0.7815	0.0878	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	10.3907	0.8334	12.4678	0.9123	0.0878	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	9.5285	0.8700	10.9523	0.8366	0.0878	0.055543	55.23	728.67	4219900.
34	3.76	0.30	0.0	11.1022	0.8461	13.1216	0.8582	0.0773	0.053050	61.92	739.67	4056400.
35	3.77	1.50	-0.50	11.2341	0.8700	12.9128	0.8684	0.0773	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	10.0168	0.8598	11.6502	0.7743	0.0773	0.052569	61.81	739.67	4009300.
37	3.77	5.00	0.10	9.7180	0.8491	11.4450	0.7612	0.0773	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	12.6017	0.8700	14.4848	0.8670	0.0688	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	11.8416	0.8700	13.6110	0.8147	0.0688	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	9.0573	0.8700	10.4106	0.9809	0.1083	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	8.4026	0.8583	9.7898	0.9100	0.1083	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	8.2662	0.8700	9.5014	1.0060	0.1217	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	7.6824	0.8913	8.6193	0.8320	0.1083	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	7.6689	0.8700	8.8148	1.0514	0.1371	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	7.7701	0.7967	9.7528	0.8415	0.1083	0.055838	37.00	724.67	3717700.

TABLE VI (Continued)

46	3.01	0.0	3.00	7.8488	0.8589	9.1380	0.8501	0.1083	0.066788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	7.2628	0.8700	8.3482	0.8639	0.1217	0.066794	36.96	723.67	3721000.
48	3.01	0.0	6.00	7.8316	0.8913	8.2256	0.7940	0.1083	0.066805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	6.6076	0.8700	7.5849	0.8058	0.1371	0.066868	37.23	721.67	3702800
50	3.01	-6.00	0.0	7.8780	0.8700	9.0564	0.8539	0.1083	0.066787	36.98	722.67	3720600
51	3.01	-6.00	3.00	7.3333	0.8689	8.5381	0.7642	0.1083	0.066717	36.86	722.67	3719800
52	3.01	-6.00	-3.00	7.2021	0.8700	8.2783	0.8705	0.1217	0.066784	37.00	721.67	3720600
53	3.01	-6.00	6.00	7.0637	0.8913	7.9252	0.7660	0.1083	0.066717	36.81	720.67	3738600
54	3.01	-6.00	-6.00	6.5376	0.8700	7.5144	0.8063	0.1371	0.066783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	7.3098	0.8700	8.4020	0.8806	0.1217	0.066874	37.08	722.67	3741000
56	3.01	0.0	0.0	8.0090	0.7967	10.0414	0.8664	0.1083	0.066871	37.02	725.67	3712800
57	3.25	0.0	0.0	8.0203	0.8127	10.8831	0.8691	0.0874	0.066870	44.83	731.67	3884300.
58	3.25	0.0	-3.00	8.7163	0.8700	10.0188	0.8648	0.1107	0.066860	45.07	734.67	3882900.
59	3.25	6.00	0.0	8.8408	0.8128	10.8770	0.8611	0.0874	0.066847	45.07	733.67	3880700.
60	3.51	0.0	0.0	8.8451	0.8700	10.8714	0.8382	0.0879	0.066888	50.08	740.67	4004900.
61	3.51	1.40	-0.20	10.3784	0.8700	11.8304	0.8082	0.0879	0.066842	50.16	741.67	4003200.
62	3.51	0.0	-3.00	8.7087	0.8700	10.0101	0.8761	0.1006	0.066838	50.03	738.67	4007600.
63	3.51	6.00	0.0	8.9817	0.8300	10.3384	0.7908	0.0879	0.066864	50.11	736.67	4120600.
64	3.76	0.0	0.0	10.6374	0.8467	12.9916	0.8218	0.0773	0.062813	61.87	744.67	4000200.
65	3.76	0.0	-3.00	10.1203	0.8700	11.6329	0.8088	0.0808	0.062842	61.88	746.67	3884700.
66	3.76	6.00	0.0	9.8887	0.8467	11.6782	0.7644	0.0773	0.062847	61.84	748.67	3869800.
67	3.76	1.50	-0.90	11.3312	0.8700	13.0243	0.8798	0.0773	0.062832	61.80	740.67	4027600.
68	4.04	0.0	0.0	12.0843	0.8700	13.8800	0.8314	0.0688	0.060888	72.84	742.67	4086300.
69	4.04	6.00	0.0	11.4942	0.8700	13.2117	0.7908	0.0688	0.060913	72.73	738.67	4113400
70	4.04	6.00	3.00	10.6337	0.9197	11.6127	0.7316	0.0688	0.060848	72.87	737.67	4120500.
71	4.04	6.00	-3.00	9.8716	0.8700	11.4616	0.8077	0.0810	0.060822	72.76	738.67	4114900.
72	4.04	6.00	6.00	7.3765	0.9191	8.0257	0.5079	0.0688	0.060857	72.86	738.67	4120600.
73	4.04	6.00	-6.00	8.4804	0.8700	9.7476	0.8205	0.0968	0.060829	72.73	739.67	4109000.
74	4.04	0.0	3.00	10.0491	0.9158	10.9686	0.6911	0.0688	0.060884	72.80	740.67	4106000.
75	4.04	0.0	6.00	10.2151	0.9191	11.1143	0.7028	0.0688	0.060866	72.89	739.67	4111700.
76	4.04	0.0	-6.00	9.2097	0.8700	10.9859	0.8915	0.0968	0.060857	72.82	739.67	4110200.
77	4.04	0.0	-3.00	11.0863	0.8700	12.7544	0.8988	0.0810	0.060863	72.84	739.67	4111200.
78	4.04	-6.00	0.0	10.1541	0.8700	11.6713	0.6986	0.0688	0.060947	72.80	739.67	4108600.
79	4.04	-6.00	3.00	10.8532	0.9198	11.8511	0.7467	0.0688	0.060973	72.87	739.67	4112800.
80	4.04	-6.00	-3.00	10.3000	0.8700	11.8391	0.8343	0.0810	0.060966	72.85	739.67	4111700.
81	4.04	-6.00	6.00	11.3866	0.9191	12.3889	0.7834	0.0688	0.061001	72.86	739.67	4117400.
82	4.04	-6.00	-6.00	10.4886	0.8700	12.0359	1.0153	0.0968	0.060957	72.82	739.67	4110200.
83	4.04	0.0	0.0	10.2951	0.8700	11.8334	0.7083	0.0688	0.060972	72.83	740.67	4102400.
84	4.04	0.0	0.0	12.3576	0.8631	14.3176	0.8502	0.0688	0.060975	72.81	741.67	4092500.
85	3.01	0.0	0.0	7.2419	0.7967	9.0898	0.8922	0.1232	0.065621	52.01	683.67	5664000.
86	4.00	0.0	0.0	4.6905	0.8700	5.3914	0.3743	0.0798	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	8.8684	0.9162	9.6796	0.7077	0.0798	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	6.9179	0.8700	7.9516	0.6489	0.0938	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	7.7842	0.8628	9.0220	0.6204	0.0797	0.089162	174.11	1437.70	3638000.
90	4.00	5.00	3.00	8.0589	0.9166	8.7931	0.6431	0.0798	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	6.2836	0.8700	7.2225	0.5894	0.0938	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	6.3011	0.8700	7.2427	0.5022	0.0797	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	8.2120	0.9171	8.9544	0.6545	0.0797	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	3.7033	0.8700	4.2567	0.3470	0.0937	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	8.2497	0.8627	9.5626	0.6575	0.0797	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	6.2634	0.8700	7.1993	0.2449	0.0391	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	8.8143	0.8627	10.2171	0.6787	0.0770	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	9.0381	0.8700	10.3886	0.6878	0.0761	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	9.7763	0.8700	11.2371	0.7166	0.0733	0.064821	102.46	982.67	3816300.
100	4.00	0.0	0.0	11.2668	0.8627	13.0599	0.7391	0.0656	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	10.1740	0.8700	11.6943	0.6664	0.0655	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	9.7878	0.8628	11.3442	0.6411	0.0655	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	9.6265	0.9172	10.4056	0.6315	0.0656	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	8.0480	0.8700	9.2506	0.6197	0.0770	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	10.8183	0.8627	12.5401	0.7086	0.0655	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	10.0134	0.8700	11.5097	0.8221	0.0821	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	9.7637	0.8700	11.2226	0.8016	0.0821	0.066764	120.72	738.67	6974400.

GAGE= 5038 X/L=0.3328 PHI=288.600 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	3.9517	0.8700	4.5422	0.4252	0.1076	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	3.6543	0.7967	4.5868	0.3932	0.1076	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	2.7731	0.8700	3.1874	0.4631	0.1670	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	2.7982	0.8700	3.2163	0.4673	0.1670	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	2.9689	0.8700	3.4125	0.4958	0.1670	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	2.9581	0.8700	3.4001	0.4940	0.1670	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	2.6345	0.8700	3.0282	0.3799	0.1442	0.056426	26.13	648.67	4048600.
9	2.50	2.80	0.80	2.6429	0.8700	3.0378	0.3811	0.1442	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	2.8883	0.8700	3.3199	0.4165	0.1442	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	2.7718	0.8700	3.1860	0.3997	0.1442	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	2.8096	0.8700	3.2295	0.3557	0.1266	0.055904	31.15	650.67	4211400.

TABLE VI (Continued)

13	2.76	3.60	1.30	2.8404	0.8700	3.2649	0.3596	0.1266	0.055575	31.03	660.67	4172900.
14	2.76	0.90	-0.80	3.5016	0.8700	4.0248	0.4433	0.1266	0.056639	31.07	662.67	4159600.
15	2.76	0.20	0.10	3.5466	0.8700	4.0766	0.4490	0.1266	0.056712	31.17	661.67	4161900.
16	3.01	0.0	0.0	4.6038	0.8700	5.2919	0.4817	0.1068	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	3.1221	0.8700	3.5886	0.3376	0.1081	0.056320	36.67	721.67	3686600.
18	3.02	4.60	1.30	3.1089	0.8343	3.8342	0.3468	0.1081	0.056824	37.48	721.67	3767500.
19	3.02	1.60	-0.70	3.8594	0.8700	4.4361	0.4172	0.1081	0.056520	36.80	723.67	3696000.
20	3.02	0.20	-0.10	4.0019	0.8700	4.5996	0.4326	0.1081	0.056535	36.84	722.67	3706100.
21	3.02	0.0	3.00	3.9852	0.8736	4.5608	0.4308	0.1081	0.056646	36.87	721.67	3716800.
22	3.02	0.0	-3.00	3.6540	0.8700	4.2000	0.4414	0.1208	0.056483	36.88	721.67	3708900.
23	3.02	5.00	0.0	2.9556	0.7876	3.7061	0.3185	0.1081	0.056576	37.01	721.67	3720800.
24	3.02	5.00	3.00	3.0600	0.8740	3.5246	0.3330	0.1081	0.056648	37.04	721.67	3723800.
25	3.02	5.00	-3.00	2.8134	0.8700	3.2338	0.3227	0.1147	0.056538	36.86	721.67	3719700.
26	3.24	4.40	-0.60	3.0117	0.8700	4.4962	0.3810	0.0974	0.058976	46.05	726.67	3974400
27	3.24	5.20	1.70	3.6318	0.8943	4.1342	0.5440	0.0974	0.060018	46.19	725.67	3989400.
28	3.24	1.50	-0.70	4.6437	0.8700	5.3376	0.4623	0.0974	0.060035	46.17	726.67	3982700
29	3.24	0.30	0.0	4.8840	0.8121	6.0140	0.4707	0.0974	0.059888	44.81	726.67	3962100
30	3.50	4.50	-0.40	4.0908	0.8700	5.3007	0.4081	0.0870	0.060407	54.00	727.67	4300800.
31	3.50	0.30	1.00	4.9013	0.8613	5.2842	0.5806	0.0870	0.060427	54.05	730.67	4180800.
32	3.50	1.40	0.20	5.3200	0.8335	6.3020	0.4671	0.0870	0.060430	54.00	730.67	4192000.
33	3.50	0.40	-0.30	5.4862	0.8700	6.3048	0.4816	0.0870	0.060643	55.23	728.67	4219000.
34	3.75	0.30	0.0	6.0314	0.8700	6.8177	0.4985	0.0773	0.063000	61.62	730.67	4098400.
35	3.77	1.50	-0.90	5.8418	0.8700	6.8206	0.4883	0.0773	0.062882	61.87	730.67	4012800
36	3.77	3.80	0.70	5.8627	0.8686	6.4788	0.4360	0.0773	0.062690	61.81	730.67	4009300.
37	3.77	5.60	0.10	5.2026	0.8489	6.1883	0.4068	0.0773	0.062974	61.88	730.67	4021600.
38	4.02	0.70	-0.60	6.8110	0.8700	7.8288	0.4686	0.0688	0.061301	72.74	742.67	4122800.
39	4.02	0.0	0.0	6.7349	0.8700	7.7402	0.4633	0.0688	0.061364	72.81	738.67	4150800
40	3.01	5.00	0.0	3.1154	0.8700	3.5808	0.3374	0.1083	0.056878	37.00	722.67	3741700.
41	3.01	5.00	3.00	3.1136	0.8753	3.5693	0.3372	0.1083	0.056863	37.07	724.67	3726100.
42	3.01	5.00	-3.00	2.8877	0.8700	3.3102	0.3310	0.1148	0.056846	37.01	724.67	3718800.
43	3.01	5.00	6.00	3.3010	0.8133	3.6194	0.3676	0.1083	0.056752	36.88	724.67	3706300.
44	3.01	5.00	-6.00	2.7376	0.8700	3.1467	0.3474	0.1268	0.056744	36.88	724.67	3709200
45	3.01	0.0	0.0	4.1848	0.7867	5.2693	0.4843	0.1083	0.056838	37.00	724.67	3717700.
46	3.01	0.0	3.00	3.9621	0.8737	4.9349	0.4281	0.1083	0.056708	36.83	724.67	3711100.
47	3.01	0.0	-3.00	3.8413	0.8700	4.4183	0.4648	0.1210	0.056784	36.86	723.67	3721000.
48	3.01	0.0	6.00	3.9067	0.8132	4.3781	0.4231	0.1083	0.056805	36.87	723.67	3722500.
49	3.01	0.0	-6.00	3.3854	0.8700	3.9028	0.4894	0.1393	0.056968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	4.5095	0.8700	5.1838	0.5226	0.1161	0.056787	36.98	722.67	3730600.
51	3.01	-5.00	3.00	4.9226	0.8737	5.1764	0.4898	0.1083	0.056717	36.68	722.67	3719800.
52	3.01	-5.00	-3.00	4.2092	0.8700	4.8381	0.5413	0.1206	0.056784	37.00	721.67	3730900.
53	3.01	-5.00	6.00	4.9224	0.8134	5.3891	0.5331	0.1083	0.056717	36.81	720.67	3738500.
54	3.01	-5.00	-6.00	3.9006	0.8700	4.4834	0.5648	0.1448	0.056783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	3.8711	0.8700	4.4495	0.4684	0.1210	0.056874	37.08	722.67	3741000.
56	3.01	0.0	0.0	4.1782	0.7967	5.2444	0.4525	0.1083	0.056871	37.02	725.67	3712900.
57	3.25	0.0	0.0	5.1776	0.8109	6.3850	0.5043	0.0974	0.056670	44.83	731.67	3884000.
58	3.25	0.0	-3.00	4.5273	0.8700	5.2038	0.4980	0.1100	0.056860	45.07	734.67	3892000.
59	3.25	5.00	0.0	3.8408	0.8128	4.7255	0.3741	0.0974	0.056847	45.07	733.67	3899700.
60	3.51	0.0	0.0	5.2903	0.8700	6.0808	0.4629	0.0875	0.056389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	5.3337	0.8700	6.1307	0.4667	0.0875	0.056442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	5.4114	0.8700	6.2200	0.5406	0.0999	0.056339	55.03	738.67	4097500.
63	3.51	5.00	0.0	4.6274	0.8700	5.3189	0.4049	0.0875	0.056364	55.11	736.67	4120500.
64	3.76	0.0	0.0	6.0233	0.8467	7.1138	0.4656	0.0773	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	5.4411	0.8700	6.2541	0.4848	0.0891	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	5.2316	0.8700	6.0133	0.4044	0.0773	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	5.8745	0.8700	6.7523	0.4541	0.0773	0.052832	61.80	740.67	4027900.
68	4.04	0.0	0.0	6.7573	0.8700	7.7670	0.4649	0.0688	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	5.6323	0.8700	6.4739	0.3875	0.0688	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	5.3852	0.9075	5.9341	0.3705	0.0688	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	5.6024	0.8700	6.4396	0.4157	0.0742	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	5.3140	0.9221	5.7629	0.3656	0.0688	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	5.1520	0.8700	5.9218	0.4441	0.0862	0.050928	72.73	739.67	4105000.
74	4.04	0.0	3.00	5.9520	0.9076	6.8580	0.4095	0.0688	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	4.9128	0.9220	5.3284	0.3380	0.0688	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	5.2053	0.8700	5.9831	0.4845	0.0950	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	6.2852	0.8700	7.2243	0.5047	0.0803	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	6.4363	0.8700	7.3981	0.4853	0.0754	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	6.8270	0.9076	7.5221	0.4697	0.0688	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	6.1750	0.8700	7.0977	0.5434	0.0880	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	7.2035	0.9221	7.8120	0.4956	0.0688	0.051001	72.95	738.67	4117400.
82	4.04	-5.00	-6.00	6.0010	0.8700	6.8976	0.6289	0.1048	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	6.8474	0.8700	7.8706	0.4711	0.0818	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	6.8724	0.8631	8.0783	0.4797	0.0688	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	3.8701	0.7967	4.8577	0.4768	0.1232	0.056521	52.01	683.67	5684000.
86	4.00	0.0	0.0	5.0414	0.8700	5.7947	0.4023	0.0798	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	5.0514	0.9078	5.5644	0.4031	0.0798	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	5.0290	0.8700	5.7805	0.4677	0.0930	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	4.8281	0.8627	5.5965	0.3848	0.0797	0.089162	174.11	1437.70	3639000.

TABLE VI (Continued)

90	4.00	5.00	3.00	4.5727	0.8081	5.0354	0.3648	0.0788	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	4.7663	0.8700	5.4785	0.4098	0.0860	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	5.4880	0.8700	6.3080	0.4781	0.0873	0.089268	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	5.5107	0.8086	6.0650	0.4392	0.0797	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	4.8833	0.8700	5.7278	0.5068	0.1017	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	5.6901	0.8627	6.5957	0.4535	0.0797	0.089292	174.48	1441.70	3631900.
96	4.00	0.70	-0.60	8.9874	0.8700	10.3419	0.3618	0.0391	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	5.9808	0.8627	6.8164	0.4528	0.0770	0.078417	140.45	1245.70	3661900.
98	4.00	0.0	0.0	5.8645	0.8700	6.8958	0.4539	0.0761	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	6.2565	0.8700	7.1914	0.4586	0.0733	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	6.7622	0.8627	7.8384	0.4436	0.0666	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	5.6260	0.8700	6.4666	0.3685	0.0685	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	6.1813	0.8628	7.1642	0.4432	0.0717	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	6.0610	0.9088	6.6692	0.3876	0.0656	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	5.5909	0.8700	6.4263	0.4674	0.0836	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	6.5191	0.8627	7.5566	0.4270	0.0655	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	6.5359	0.8700	7.5126	0.5366	0.0821	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	6.4775	0.8700	7.4454	0.5318	0.0821	0.066764	120.72	738.67	6974400.

GAGE= 5039 X/L=0.4173 PHI= 2.500 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	2.7767	0.8700	3.1916	0.2885	0.1039	0.082894	34.04	675.67	3783900.
2	3.01	0.0	0.0	2.6179	0.8201	3.1922	0.2720	0.1039	0.082848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	2.6301	0.8700	3.0231	0.4245	0.1614	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	2.7980	0.8700	3.2161	0.4516	0.1614	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	2.7429	0.8700	3.1527	0.4427	0.1614	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	2.4560	0.8700	2.8230	0.3964	0.1614	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	2.9527	0.8700	3.3939	0.4116	0.1394	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	3.4950	0.8700	4.0172	0.4872	0.1394	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	3.2504	0.8700	3.7360	0.4531	0.1394	0.056303	26.01	649.67	4031000.
11	2.50	1.80	0.20	2.9763	0.8700	3.4211	0.4149	0.1394	0.056307	26.03	648.67	4042600.
12	2.75	3.60	-0.60	3.3917	0.8700	3.8985	0.4148	0.1223	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	3.4407	0.8700	3.9548	0.4208	0.1223	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	3.2796	0.8700	3.7697	0.4011	0.1223	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	3.0213	0.8700	3.4727	0.3695	0.1223	0.055712	31.17	651.67	4181800.
16	3.01	0.0	0.0	3.1620	0.8700	3.6345	0.3260	0.1031	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	3.7644	0.8243	4.5667	0.3930	0.1044	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	3.2854	0.8700	3.7764	0.3430	0.1044	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	3.0651	0.8244	3.7180	0.3200	0.1044	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	2.9167	0.8211	3.5521	0.3045	0.1044	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	2.7510	0.8700	3.1620	0.2872	0.1044	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	3.1657	0.8271	3.8242	0.3305	0.1044	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	3.7347	0.8700	4.2927	0.3899	0.1044	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	3.4253	0.8700	3.9371	0.3576	0.1044	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	4.5862	0.8278	5.5402	0.4788	0.1044	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	3.2181	0.8342	3.8577	0.3025	0.0940	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	2.2904	0.8700	2.6327	0.2153	0.0940	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	2.7191	0.8345	3.2584	0.2556	0.0940	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	2.8500	0.8700	3.2758	0.2679	0.0940	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	3.0142	0.8467	3.5599	0.2553	0.0847	0.055407	54.98	727.67	4209800.
31	3.50	5.30	1.50	2.2621	0.8700	2.6001	0.1916	0.0847	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	2.4959	0.8700	2.8688	0.2114	0.0847	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	3.0213	0.8469	3.5674	0.2559	0.0847	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	2.9316	0.8700	3.3697	0.2187	0.0746	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	2.9357	0.8598	3.4143	0.2190	0.0746	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	3.4705	0.8700	3.9891	0.2589	0.0746	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	2.9719	0.8700	3.4159	0.2217	0.0746	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	3.3117	0.8704	3.8049	0.2199	0.0664	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	3.1943	0.8751	3.6502	0.2121	0.0664	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	3.9665	0.8201	4.8367	0.4149	0.1046	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	3.3690	0.8700	3.8724	0.3524	0.1046	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	4.6826	0.8277	5.6574	0.4898	0.1046	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	4.4351	0.8700	5.1208	0.4660	0.1046	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	2.9503	0.7707	3.8281	0.3086	0.1046	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	2.8384	0.8700	3.2626	0.2969	0.1046	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	2.8614	0.8700	3.2899	0.2993	0.1046	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	3.3231	0.8276	4.0154	0.3476	0.1046	0.055784	36.96	723.67	3721000.
48	3.01	0.0	6.00	3.2065	0.8700	3.6856	0.3354	0.1046	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	3.5067	0.7714	4.5469	0.3668	0.1046	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	2.5898	0.8202	3.1575	0.3289	0.1270	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	2.5474	0.8700	2.9280	0.3253	0.1277	0.055717	36.88	722.67	3719800.
52	3.01	-5.00	-3.00	2.5352	0.8275	3.0637	0.3202	0.1263	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	2.8410	0.8700	3.2655	0.3645	0.1283	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	3.1203	0.7698	4.0534	0.3916	0.1255	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	3.2572	0.8278	3.9347	0.3407	0.1046	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	2.7304	0.8201	3.3294	0.2856	0.1046	0.055871	37.02	725.67	3712900.

C-2

TABLE VI (Continued)

57	3.25	0.0	0.0	3.1734	0.8334	3.8078	0.2983	0.0940	0.066670	44.83	731.67	3884300.
58	3.25	0.0	-3.00	3.1372	0.8341	3.7612	0.2948	0.0940	0.065860	45.07	734.67	3882000.
59	3.25	5.00	0.0	4.3723	0.8700	5.0257	0.4110	0.0940	0.066847	45.07	733.67	3899700.
60	3.51	0.0	0.0	3.0248	0.8478	3.5679	0.2956	0.0845	0.066389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	2.7089	0.8476	3.1969	0.2288	0.0845	0.066442	55.16	741.67	4082200.
62	3.51	0.0	-1.00	3.2473	0.8412	3.8604	0.2744	0.0845	0.066339	55.03	738.67	4097500.
63	3.51	5.00	0.0	3.9266	0.8700	4.5134	0.3318	0.0845	0.066354	55.11	736.67	4120500.
64	3.76	0.0	0.0	3.2131	0.8617	3.7288	0.2397	0.0746	0.052813	61.97	744.67	4000200.
65	3.76	0.0	-3.00	3.4973	0.8478	4.1252	0.2609	0.0746	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	2.8525	0.8700	3.2788	0.2128	0.0746	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	3.0067	0.8694	3.4986	0.2243	0.0746	0.052832	61.80	740.67	4027900.
68	4.04	0.0	0.0	3.2696	0.8751	3.7362	0.2171	0.0664	0.050888	72.84	742.67	4086300.
69	4.04	5.00	0.0	3.0894	0.8751	3.5418	0.2058	0.0664	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	3.4428	0.8700	3.9572	0.2286	0.0664	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	4.6265	0.8549	5.4118	0.3072	0.0664	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	5.0587	0.8700	5.8146	0.3359	0.0664	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	3.3660	0.8303	4.0539	0.2235	0.0664	0.050925	72.73	738.67	4105000.
74	4.04	0.0	3.00	3.7380	0.8700	4.2965	0.2482	0.0664	0.050994	72.80	740.67	4106000.
75	4.04	0.0	6.00	5.2967	0.8700	6.0881	0.3517	0.0664	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	4.5828	0.8303	5.5196	0.3043	0.0664	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	3.6114	0.8548	4.2249	0.2398	0.0664	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	3.3724	0.8751	3.8538	0.2961	0.0878	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	3.6350	0.8700	4.1782	0.3217	0.0885	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	3.6958	0.8548	4.3235	0.3219	0.0871	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	4.1515	0.8700	4.7719	0.3699	0.0891	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	3.9363	0.8303	4.7408	0.3397	0.0863	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	3.3735	0.8751	3.8550	0.2240	0.0664	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	3.3855	0.8700	3.8914	0.2248	0.0664	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	2.4643	0.8700	2.8325	0.2935	0.1191	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	2.6109	0.8750	2.9839	0.2013	0.0771	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	3.3178	0.8700	3.8135	0.2558	0.0771	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	2.6083	0.8547	3.0517	0.2011	0.0771	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	2.0597	0.8700	2.3674	0.1586	0.0771	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	2.8459	0.8700	3.2711	0.2197	0.0772	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	2.6926	0.8546	3.1507	0.2076	0.0771	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	2.6094	0.8750	2.9822	0.2659	0.1019	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	1.9825	0.8700	2.2787	0.2034	0.1026	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	2.3238	0.8543	2.7201	0.2347	0.1010	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	2.5940	0.8700	2.9816	0.2000	0.0771	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	8.0395	0.8707	9.2338	0.3023	0.0376	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	3.1035	0.8700	3.5672	0.2309	0.0744	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	3.1753	0.8750	3.6289	0.2337	0.0736	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	3.4682	0.8750	3.9636	0.2452	0.0707	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	3.7772	0.8700	4.3417	0.2391	0.0633	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	2.5705	0.8749	2.9381	0.1622	0.0631	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	3.0672	0.8700	3.5255	0.2555	0.0833	0.047126	60.26	737.67	3490500.
103	4.00	-5.00	3.00	3.4393	0.8700	3.9532	0.2888	0.0840	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	3.5042	0.8544	4.1014	0.2898	0.0827	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	3.5934	0.8700	4.1303	0.2271	0.0632	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	2.7831	0.8706	3.1968	0.2207	0.0793	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	2.5032	0.8706	2.8752	0.1985	0.0793	0.066764	120.72	738.67	6974400.

GAGE= 5040 X/L=0.4103 PHI= 2.500 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	2.0643	0.8700	2.3728	0.2151	0.1042	0.052894	34.01	675.67	3783900.
2	3.01	0.0	0.0	1.9194	0.8180	2.3464	0.2000	0.1042	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	2.3038	0.8700	2.6482	0.3730	0.1619	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	2.5238	0.8700	2.9008	0.4086	0.1619	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	2.4219	0.8700	2.7838	0.3921	0.1619	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	2.1384	0.8700	2.4579	0.3462	0.1619	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	2.5104	0.8700	2.8855	0.3507	0.1397	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	2.9284	0.8700	3.3660	0.4091	0.1397	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	2.7681	0.8700	3.1817	0.3867	0.1397	0.056303	26.01	648.67	4031000.
11	2.50	1.50	0.20	2.5948	0.8700	2.9826	0.3625	0.1397	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	2.8157	0.8700	3.2364	0.3452	0.1226	0.055904	31.18	650.67	4211400.
13	2.76	3.60	1.30	2.7814	0.8700	3.1970	0.3410	0.1226	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	2.5506	0.8700	2.9317	0.3127	0.1226	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	2.3703	0.8700	2.7245	0.2906	0.1226	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	2.3124	0.8700	2.6579	0.2391	0.1034	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	2.9007	0.8225	3.5266	0.3037	0.1047	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	2.4422	0.8700	2.8071	0.2557	0.1047	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	2.3629	0.8226	2.8725	0.2474	0.1047	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	2.2015	0.8191	2.6877	0.2305	0.1047	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	2.2521	0.8700	2.5887	0.2358	0.1047	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	2.3801	0.8267	2.8791	0.2492	0.1047	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	3.0630	0.8700	3.5207	0.3207	0.1047	0.055576	37.01	721.67	3720800.

TABLE VI (Continued)

24	3.02	6.00	3.00	2.9843	0.8700	3.4417	0.3138	0.1047	0.056698	37.04	721.67	3723800.
25	3.02	6.00	-3.00	3.9178	0.8267	4.7392	0.4102	0.1047	0.056538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	2.3001	0.8339	2.7596	0.2169	0.0943	0.056980	45.05	726.67	3974000.
27	3.24	5.20	1.70	1.9258	0.8700	2.2135	0.1816	0.0943	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	2.0933	0.8329	2.5133	0.1974	0.0943	0.056036	45.17	725.67	3992700.
29	3.24	0.30	0.0	2.0710	0.8700	2.3805	0.1953	0.0943	0.056889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	2.1647	0.8452	2.5612	0.1840	0.0850	0.059407	54.99	727.67	4209800.
31	3.50	5.30	1.50	1.5965	0.8700	1.8350	0.1357	0.0850	0.059427	54.95	730.67	4180900.
32	3.50	1.40	0.20	1.7388	0.8700	1.9996	0.1478	0.0850	0.059430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	2.1471	0.8453	2.5400	0.1825	0.0850	0.059943	55.23	728.67	4219900.
34	3.75	0.30	0.0	1.9626	0.8700	2.2568	0.1468	0.0748	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	2.0709	0.8586	2.4119	0.1549	0.0748	0.052582	61.87	738.67	4012800.
36	3.77	3.90	0.70	2.3971	0.8700	2.7552	0.1793	0.0748	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	2.0869	0.8700	2.3987	0.1561	0.0748	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	2.3679	0.8694	2.7236	0.1577	0.0666	0.051381	72.74	742.67	4122800.
39	4.02	0.0	0.0	2.1141	0.8740	2.4189	0.1408	0.0666	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	3.2622	0.8180	3.9880	0.3422	0.1049	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	3.0334	0.8700	3.4866	0.3182	0.1049	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	3.8437	0.8266	4.6500	0.4032	0.1049	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	3.7054	0.8700	4.2591	0.3887	0.1049	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	2.3356	0.7698	3.0340	0.2450	0.1049	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	2.1230	0.8700	2.4402	0.2227	0.1049	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	2.3537	0.8700	2.7054	0.2469	0.1049	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	2.4505	0.8265	3.0012	0.2602	0.1049	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	3.0496	0.8700	3.5053	0.3199	0.1049	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	2.7178	0.7705	3.5274	0.2851	0.1049	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	2.6530	0.8181	3.2429	0.2783	0.1049	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	2.5558	0.8700	2.9377	0.2681	0.1049	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	2.4576	0.8264	2.9738	0.2578	0.1049	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	2.8751	0.8700	3.3047	0.3016	0.1049	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	2.9075	0.7690	3.7809	0.3050	0.1049	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	2.3947	0.8266	2.8970	0.2512	0.1049	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.9876	0.8180	2.4298	0.2085	0.1049	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	2.2503	0.8316	2.7059	0.2122	0.0943	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	2.2460	0.8331	2.6.60	0.2118	0.0943	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	3.2895	0.8700	3.7810	0.3102	0.0943	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	2.0685	0.8462	2.4444	0.1752	0.0847	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	1.8902	0.8460	2.2343	0.1601	0.0847	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	2.2349	0.8402	2.6600	0.1893	0.0847	0.055039	55.03	738.67	4097500.
63	3.51	5.00	0.0	2.8087	0.8700	3.2284	0.2379	0.0847	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	2.1725	0.8611	2.5229	0.1625	0.0748	0.052910	61.97	744.67	4000000.
65	3.76	0.0	-3.00	2.3396	0.8469	2.7625	0.1750	0.0748	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	2.0789	0.8700	2.3895	0.1555	0.0748	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	2.1043	0.8581	2.4523	0.1574	0.0748	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	2.1622	0.8741	2.4736	0.1440	0.0666	0.050999	72.84	742.67	4086300.
69	4.04	6.00	0.0	2.1922	0.8740	2.5082	0.1460	0.0666	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	2.9219	0.8700	3.3585	0.1946	0.0666	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	3.3889	0.8540	3.9683	0.2257	0.0666	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	3.1682	0.8700	3.6416	0.2110	0.0666	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	2.5631	0.8307	3.0854	0.1707	0.0666	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	2.8769	0.8700	3.3068	0.1916	0.0666	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	3.7568	0.8700	4.3181	0.2502	0.0666	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	3.1637	0.8308	3.8080	0.2107	0.0666	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	2.5075	0.8540	2.8362	0.1670	0.0666	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	3.3168	0.8740	3.7950	0.2209	0.0666	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	3.5616	0.8700	4.0937	0.2372	0.0666	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	3.5781	0.8540	4.1898	0.2383	0.0666	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	4.3303	0.8700	4.9774	0.2884	0.0666	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	3.8619	0.8307	4.6488	0.2572	0.0666	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	2.2673	0.8741	2.5938	0.1510	0.0666	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	2.3318	0.8700	2.6803	0.1553	0.0666	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	1.8266	0.8700	2.0996	0.2181	0.1194	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	1.9018	0.8738	2.1762	0.1472	0.0774	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	2.2442	0.8700	2.5795	0.1737	0.0774	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	2.0091	0.8538	2.3531	0.1553	0.0773	0.089307	174.56	1440.70	3637100.
89	4.00	5.00	0.0	1.7063	0.8700	1.9613	0.1319	0.0773	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	2.2842	0.8700	2.6256	0.1768	0.0774	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	1.9574	0.8537	2.2928	0.1515	0.0774	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	2.4080	0.8739	2.7555	0.2461	0.1022	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	1.7085	0.8700	1.9637	0.1758	0.1029	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	1.5514	0.8534	1.8179	0.1570	0.1012	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	1.9728	0.8700	2.2676	0.1525	0.0773	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	4.4960	0.8696	5.1702	0.1695	0.0377	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	1.9517	0.8700	2.2434	0.1456	0.0746	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	2.0447	0.8739	2.3398	0.1509	0.0738	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	2.2539	0.8739	2.5791	0.1598	0.0709	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	2.5543	0.8700	2.9360	0.1622	0.0635	0.047013	60.24	728.67	3544500.

TABLE VI (Continued)

101	4.00	5.00	0.0	1.9289	0.8738	2.2076	0.1221	0.0693	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	2.5239	0.8700	2.8011	0.2110	0.0836	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	2.4164	0.8700	2.7774	0.2037	0.0843	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	2.4524	0.8635	2.8733	0.2033	0.0829	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	2.4155	0.8700	2.7764	0.1539	0.0693	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	2.1899	0.8695	2.5186	0.1741	0.0795	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	1.9824	0.8695	2.2799	0.1576	0.0795	0.066764	120.72	738.67	6974400.

GAGE= 5041 X/L=0.4244 PHI= 2.500 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	3.3166	0.8700	3.8122	0.3436	0.1036	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	3.1390	0.8218	3.8192	0.3252	0.1036	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	2.8348	0.8700	3.2584	0.4564	0.1610	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	2.7845	0.8700	3.2005	0.4483	0.1610	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	2.8720	0.8700	3.3012	0.4624	0.1610	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	2.9801	0.8700	2.9657	0.4154	0.1610	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	3.0978	0.8700	3.5607	0.4306	0.1390	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	3.4115	0.8700	3.9213	0.4742	0.1390	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	3.3259	0.8700	3.8229	0.4623	0.1390	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	3.0568	0.8700	3.5136	0.4249	0.1390	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	3.4730	0.8700	3.9919	0.4237	0.1220	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	3.6697	0.8700	4.2180	0.4477	0.1220	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	3.7066	0.8700	4.2604	0.4522	0.1220	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	3.3328	0.8700	3.8308	0.4066	0.1220	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	3.7911	0.8700	4.3575	0.3901	0.1029	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	4.0355	0.8259	4.8862	0.4205	0.1042	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	3.7006	0.8700	4.2535	0.3856	0.1042	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	3.5297	0.8260	4.2733	0.3678	0.1042	0.055918	36.90	723.67	3694700.
20	3.02	0.20	-0.10	3.3570	0.8229	4.0795	0.3498	0.1042	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	2.7486	0.8700	3.1583	0.2864	0.1042	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	3.6276	0.8288	4.3770	0.3780	0.1042	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	3.7965	0.8700	4.3638	0.3956	0.1042	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	3.6017	0.8700	4.1399	0.3753	0.1042	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	4.7073	0.8288	5.6796	0.4905	0.1042	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	3.7715	0.8356	4.5139	0.3538	0.0938	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	2.6546	0.8700	3.0512	0.2490	0.0938	0.056019	45.15	725.67	3990400.
28	3.24	1.90	-0.70	2.7633	0.8360	3.3054	0.2592	0.0938	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	3.0235	0.8700	3.4752	0.2836	0.0938	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	3.6035	0.8480	4.2495	0.3045	0.0845	0.055407	54.98	727.67	4209800.
31	3.50	5.30	1.50	2.8805	0.8700	3.3109	0.2434	0.0845	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	2.8656	0.8700	3.2823	0.2413	0.0845	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	3.1763	0.8482	3.7448	0.2684	0.0845	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	3.3306	0.8700	3.8283	0.2478	0.0744	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	3.2379	0.8609	3.7611	0.2409	0.0744	0.052582	61.87	738.67	4012800.
36	3.77	3.90	0.70	4.2110	0.8700	4.8403	0.3133	0.0744	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	3.3548	0.8700	3.8561	0.2496	0.0744	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	3.7930	0.8713	4.3533	0.2511	0.0662	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	3.7326	0.8760	4.2610	0.2471	0.0662	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	4.1179	0.8219	5.0103	0.4295	0.1043	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	3.6616	0.8700	4.2087	0.3819	0.1043	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	4.9271	0.8286	5.9463	0.5139	0.1043	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	4.6961	0.8700	5.3978	0.4898	0.1043	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	3.2694	0.7714	4.2383	0.3410	0.1043	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	3.3231	0.8700	3.8197	0.3466	0.1043	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	2.8763	0.8700	3.3061	0.3000	0.1043	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	3.7411	0.8285	4.5155	0.3902	0.1043	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	3.1045	0.8700	3.5684	0.3238	0.1043	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	3.6759	0.7721	4.7610	0.3834	0.1043	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	2.4451	0.8219	2.9750	0.3098	0.1267	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	2.5400	0.8700	2.9196	0.3236	0.1274	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	2.6206	0.8285	3.1631	0.3302	0.1260	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	2.6937	0.8700	3.0963	0.3448	0.1280	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	3.3810	0.7706	4.3875	0.4233	0.1252	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	3.7641	0.8287	4.5422	0.3926	0.1043	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	3.1534	0.8218	3.8367	0.3289	0.1043	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	3.2804	0.8350	3.9286	0.3077	0.0938	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	3.4467	0.8350	4.1278	0.3233	0.0938	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	4.6525	0.8700	5.3476	0.4364	0.0938	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	3.2871	0.8492	3.8708	0.2771	0.0843	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	3.1779	0.8489	3.7436	0.2679	0.0843	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	3.6821	0.8421	4.3725	0.3104	0.0843	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	4.3227	0.8700	4.9686	0.3644	0.0843	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	3.6062	0.8628	4.1796	0.2683	0.0744	0.052913	61.87	744.67	4000200.
65	3.76	0.0	-3.00	4.0820	0.8486	4.8103	0.3037	0.0744	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	3.1962	0.8700	3.6738	0.2378	0.0744	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	3.3790	0.8604	3.9273	0.2514	0.0744	0.052832	61.90	740.67	4027800.

68	4.04	0.0	0.0	3.8157	0.8760	4.3558	0.2526	0.0662	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	3.9988	0.8760	3.8799	0.2250	0.0662	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	3.4109	0.8700	3.9205	0.2258	0.0662	0.050948	72.87	737.67	4128600.
71	4.04	5.00	-3.00	5.7024	0.8557	6.6640	0.3775	0.0662	0.050822	72.76	738.67	4114900.
72	4.04	5.00	6.00	5.1027	0.8700	5.8662	0.3378	0.0662	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	3.4139	0.8289	4.1136	0.2260	0.0662	0.050925	72.73	739.67	4109000.
74	4.04	0.0	3.00	3.6284	0.8700	4.1706	0.2402	0.0662	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	5.1148	0.8700	5.8781	0.3386	0.0662	0.050966	72.85	738.67	4111700.
76	4.04	0.0	-6.00	5.2205	0.8300	6.2898	0.3496	0.0662	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	4.2840	0.8566	5.0070	0.2836	0.0662	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	3.3630	0.8760	3.8391	0.2946	0.0876	0.050947	72.80	738.67	4108600.
79	4.04	-5.00	3.00	3.9309	0.8700	4.5183	0.3471	0.0883	0.050973	72.87	738.67	4112800.
80	4.04	-5.00	-3.00	4.0253	0.8556	4.7047	0.3498	0.0868	0.050966	72.85	738.67	4111700.
81	4.04	-5.00	6.00	4.3048	0.8700	4.9481	0.3827	0.0889	0.051001	72.95	738.67	4117400.
82	4.04	-5.00	-6.00	4.2962	0.8299	5.1767	0.3699	0.0861	0.050957	72.82	738.67	4110200.
83	4.04	0.0	0.0	3.8520	0.8760	4.3972	0.2850	0.0662	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	3.9894	0.8700	4.5855	0.2641	0.0662	0.050975	72.81	741.67	4082600.
85	3.01	0.0	0.0	2.8806	0.8700	3.3225	0.3434	0.1188	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	3.5325	0.8759	4.0330	0.2720	0.0770	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	3.4247	0.8700	3.9364	0.2637	0.0770	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	3.2429	0.8554	3.7910	0.2497	0.0770	0.089307	174.66	1440.70	3637100.
89	4.00	5.00	0.0	2.1612	0.8700	2.4842	0.1662	0.0769	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	2.9558	0.8700	3.3975	0.2276	0.0770	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	3.2312	0.8554	3.7774	0.2488	0.0770	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	2.6863	0.8759	3.0669	0.2732	0.1017	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	2.3076	0.8700	2.6524	0.2363	0.1024	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	3.0437	0.8551	3.5595	0.3065	0.1007	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	3.4434	0.8700	3.9580	0.2648	0.0769	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	10.4853	0.8716	12.0300	0.3932	0.0375	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	4.1051	0.8700	4.7185	0.3046	0.0742	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	4.1676	0.8759	4.7580	0.3059	0.0734	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	4.4462	0.8759	5.0761	0.3139	0.0706	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	4.7944	0.8700	5.4648	0.3000	0.0631	0.047013	60.24	729.67	3544500.
101	4.00	5.00	0.0	3.3413	0.8759	3.8147	0.2105	0.0630	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	3.7148	0.8700	4.2699	0.3087	0.0831	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	3.9081	0.8700	4.4921	0.3275	0.0838	0.047189	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	4.5818	0.8552	5.3576	0.3780	0.0825	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	4.5651	0.8700	5.2472	0.2876	0.0630	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	3.5537	0.8715	4.0777	0.2811	0.0791	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	3.1618	0.8715	3.6280	0.2501	0.0791	0.066764	120.72	738.67	6974400.

GAGE= 5042 X/L=0.3515 PHI= 25.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	0.6382	0.8700	0.7336	0.0681	0.1067	0.052884	34.04	675.67	3783900.
2	3.01	0.0	0.0	0.6064	0.8019	0.7562	0.0647	0.1067	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	1.0622	0.8700	1.2209	0.1759	0.1656	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	1.3225	0.8700	1.5201	0.2190	0.1656	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	0.9360	0.8700	1.0759	0.1550	0.1656	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	1.1695	0.8700	1.3396	0.1930	0.1656	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	0.9860	0.8700	1.1334	0.1411	0.1431	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	1.3452	0.8700	1.5462	0.1925	0.1431	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	0.8854	0.8700	1.0177	0.1267	0.1431	0.056303	26.01	649.67	4031900.
11	2.50	1.50	0.20	1.0601	0.8700	1.2185	0.1517	0.1431	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	0.8893	0.8700	1.0222	0.1117	0.1256	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	1.5223	0.8700	1.7498	0.1912	0.1256	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	0.7253	0.8700	0.8337	0.0911	0.1256	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	0.7970	0.8700	0.9161	0.1001	0.1256	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	0.6789	0.8700	0.7804	0.0719	0.1059	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	0.7481	0.8155	0.9174	0.0802	0.1072	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	1.4683	0.8700	1.6877	0.1574	0.1072	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	0.6082	0.8157	0.7456	0.0652	0.1072	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	0.6819	0.8045	0.8476	0.0731	0.1072	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	1.3708	0.8700	1.5757	0.1560	0.1138	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	0.8162	0.8526	0.9573	0.0875	0.1072	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	1.0457	0.8700	1.2020	0.1121	0.1072	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	1.0112	0.8700	1.1623	0.1084	0.1072	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	0.4356	0.8526	0.5109	0.0467	0.1072	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	0.8033	0.8258	0.9728	0.0776	0.0966	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	1.3965	0.8700	1.6051	0.1349	0.0966	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	0.9493	0.8272	1.1476	0.0917	0.0966	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	1.3137	0.8700	1.5100	0.1269	0.0966	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	0.7394	0.8378	0.8825	0.0644	0.0871	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	1.4420	0.8700	1.6575	0.1256	0.0871	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	1.4661	0.8700	1.6852	0.1277	0.0871	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	1.2652	0.8700	1.4543	0.1102	0.0871	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	1.2794	0.8700	1.4705	0.0980	0.0766	0.053050	61.92	739.67	4058400.

TABLE VI (Continued)

35	3.77	1.50	-0.50	1.3489	0.8540	1.5806	0.1034	0.0766	0.052582	61.87	739.67	4012800.
36	3.77	5.00	0.70	1.6274	0.8700	1.7566	0.1170	0.0766	0.052559	61.81	739.67	4008300.
37	3.77	5.00	0.10	0.8734	0.8700	1.0038	0.0669	0.0766	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	1.2713	0.8673	1.4668	0.0867	0.0682	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	1.1804	0.8656	1.3636	0.0805	0.0682	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	1.0466	0.8018	1.3051	0.1124	0.1074	0.056878	37.09	722.67	3741700.
41	3.01	5.00	3.00	1.0047	0.8700	1.1548	0.1078	0.1074	0.056883	37.07	724.67	3726100.
42	3.01	5.00	-3.00	0.4507	0.8520	0.5289	0.0484	0.1074	0.056846	37.01	724.67	3718800.
43	3.01	5.00	6.00	0.8274	0.8700	1.0669	0.0986	0.1074	0.056752	36.88	724.67	3706300.
44	3.01	5.00	-6.00	0.5531	0.8635	0.6405	0.0594	0.1074	0.056744	36.88	724.67	3705200.
45	3.01	0.0	0.0	0.7123	0.8700	0.8187	0.0765	0.1074	0.056838	37.00	724.67	3717700.
46	3.01	0.0	3.00	1.4482	0.8700	1.6646	0.1651	0.1140	0.056788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	0.8524	0.8525	0.9764	0.0884	0.1074	0.056784	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.7068	0.8700	1.9619	0.2026	0.1187	0.056805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	0.5773	0.8636	0.6685	0.0620	0.1074	0.056968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	0.8727	0.8021	1.2126	0.1245	0.1280	0.056797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	1.3436	0.8700	1.5442	0.1811	0.1348	0.056717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	0.8210	0.8526	0.9630	0.1000	0.1218	0.056784	37.00	721.67	3739500.
53	3.01	-5.00	6.00	1.3172	0.8700	1.5140	0.1873	0.1422	0.056717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	1.2094	0.8633	1.4010	0.1409	0.1165	0.056783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	0.8380	0.8517	0.9839	0.0900	0.1074	0.056874	37.08	722.67	3741000.
56	3.01	0.0	0.0	0.7719	0.8019	0.9626	0.0829	0.1074	0.056871	37.02	725.67	3712900.
57	3.25	0.0	0.0	1.3727	0.8173	1.6795	0.1326	0.0966	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	0.8282	0.8569	0.9669	0.0800	0.0966	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	0.9555	0.8700	1.0983	0.0923	0.0966	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	1.1889	0.8340	1.4256	0.1032	0.0868	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	0.8456	0.8361	1.0114	0.0734	0.0868	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	0.7316	0.8620	0.8487	0.0635	0.0868	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	0.9159	0.8700	1.0928	0.0795	0.0868	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.1175	0.8500	1.3147	0.0856	0.0766	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	0.7180	0.8671	0.8281	0.0550	0.0766	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	0.8133	0.8700	0.9348	0.0623	0.0766	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	1.3930	0.8535	1.6320	0.1067	0.0766	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.2214	0.8658	1.4107	0.0833	0.0682	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	0.8871	0.8658	1.0246	0.0605	0.0682	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.3988	0.8700	1.6078	0.0954	0.0682	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	0.7243	0.8700	0.8325	0.0494	0.0682	0.050922	72.76	738.67	4114980.
72	4.04	5.00	6.00	0.9018	0.8700	1.0365	0.0615	0.0682	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	0.5161	0.8770	0.5885	0.0352	0.0682	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.0367	0.8700	1.1916	0.0763	0.0736	0.050984	72.80	740.67	4106000.
75	4.04	0.0	6.00	1.2797	0.8700	1.4709	0.1002	0.0783	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	0.7390	0.8770	0.8426	0.0504	0.0682	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	1.0689	0.8720	1.2258	0.0729	0.0682	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	0.9977	0.8658	1.1524	0.0875	0.0877	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	0.8460	0.8700	0.9724	0.0802	0.0948	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	1.1388	0.8720	1.3060	0.0927	0.0814	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	0.9463	0.8700	1.0877	0.0970	0.1025	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	1.5046	0.8770	1.7156	0.1145	0.0761	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.1408	0.8658	1.3176	0.0778	0.0682	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	1.1848	0.8700	1.3618	0.0808	0.0682	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	0.7300	0.8700	0.8390	0.0892	0.1222	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	0.6131	0.8694	0.7085	0.0485	0.0791	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	0.8665	0.8700	0.9960	0.0740	0.0854	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	0.4083	0.8716	0.4685	0.0323	0.0791	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	0.9406	0.8700	1.0811	0.0744	0.0791	0.089162	174.11	1437.70	3639000
90	4.00	5.00	3.00	0.9255	0.8700	1.0638	0.0733	0.0792	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	0.7332	0.8716	0.8413	0.0580	0.0791	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	0.4685	0.8654	0.5414	0.0476	0.1016	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	0.6199	0.8700	0.7125	0.0680	0.1087	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	0.6890	0.8717	0.7904	0.0649	0.0942	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	0.6296	0.8700	0.7237	0.0488	0.0791	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	0.7855	0.8670	0.9060	0.0304	0.0387	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	0.6186	0.8700	0.7110	0.0472	0.0763	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	0.6344	0.8654	0.7331	0.0479	0.0755	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	0.6905	0.8654	0.7979	0.0502	0.0727	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	1.0998	0.8700	1.2642	0.0716	0.0651	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	0.7519	0.8654	0.8689	0.0488	0.0649	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	0.7455	0.8700	0.8569	0.0621	0.0833	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	0.6878	0.8700	0.7905	0.0619	0.0900	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	0.7506	0.8717	0.8611	0.0581	0.0774	0.047128	60.33	736.67	3498600.
105	4.00	0.0	0.0	0.9122	0.8700	1.0485	0.0592	0.0649	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	1.0368	0.8670	1.1959	0.0845	0.0815	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	0.9963	0.8670	1.1492	0.0812	0.0815	0.066764	120.72	738.67	6974400.

GAGE= 5043 X/L=0.3831 PHI=270.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT

TABLE VI (Continued)

1	3.01	0.0	0.0	0.4881	0.8105	0.6023	0.0514	0.1053	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	0.4748	0.8105	0.5859	0.0500	0.1059	0.052848	33.84	677.67	3767200.
4	2.24	2.40	-0.60	0.0826	0.8700	0.0949	0.0135	0.1636	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	0.0924	0.8700	0.1062	0.0151	0.1635	0.057850	22.88	641.67	4099100.
6	2.24	1.80	-0.70	0.1333	0.8700	0.1533	0.0218	0.1635	0.057884	22.93	648.67	4073900.
7	2.24	0.60	-0.20	0.1713	0.8700	0.1968	0.0280	0.1636	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	0.2472	0.8700	0.2841	0.0349	0.1412	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	0.2305	0.8700	0.2654	0.0326	0.1412	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	0.2780	0.8700	0.3207	0.0394	0.1412	0.056303	26.01	648.67	4031000.
11	2.50	1.50	0.20	0.3283	0.8700	0.3785	0.0465	0.1412	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	0.2970	0.8700	0.3414	0.0368	0.1238	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	0.3366	0.8700	0.3869	0.0417	0.1239	0.055575	31.03	650.67	4172900.
14	2.76	0.80	-0.80	0.4188	0.8700	0.4815	0.0519	0.1238	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	0.4286	0.8700	0.4926	0.0531	0.1239	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	0.6153	0.8105	0.7592	0.0643	0.1045	0.052886	34.04	674.67	3792900.
17	3.02	4.90	-0.70	0.4272	0.8700	0.4911	0.0462	0.1058	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	0.4414	0.8356	0.5283	0.0467	0.1058	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	0.5898	0.8700	0.6779	0.0624	0.1058	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	0.5936	0.8700	0.6823	0.0628	0.1058	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	0.5284	0.8645	0.6112	0.0559	0.1058	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	0.3970	0.8700	0.4563	0.0472	0.1189	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	0.4206	0.8112	0.5185	0.0445	0.1058	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	0.3355	0.8647	0.3880	0.0355	0.1058	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	0.3970	0.8700	0.4563	0.0472	0.1189	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	0.6327	0.8700	0.7273	0.0603	0.0953	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	1.1836	0.8559	1.3829	0.1128	0.0953	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	0.9234	0.8700	1.0614	0.0880	0.0953	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	0.8961	0.8243	1.0871	0.0854	0.0953	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	1.6612	0.8700	1.9095	0.1427	0.0859	0.055407	54.89	727.67	4209800.
31	3.50	5.30	1.60	1.2258	0.8667	1.4144	0.1053	0.0859	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	1.0268	0.8435	1.2173	0.0882	0.0859	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	1.1735	0.8700	1.3488	0.1008	0.0859	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	1.3280	0.8550	1.5533	0.1004	0.0756	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	1.1270	0.8700	1.2954	0.0852	0.0756	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	1.3241	0.8677	1.5260	0.1001	0.0756	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	1.7659	0.8577	2.0688	0.1335	0.0756	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	1.3418	0.8700	1.5422	0.0903	0.0673	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	1.8336	0.8700	2.1076	0.1234	0.0673	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	1.0104	0.8700	1.1614	0.1071	0.1060	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	0.8670	0.8637	1.0038	0.0919	0.1060	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	1.0563	0.8700	1.2141	0.1258	0.1191	0.055846	37.01	724.67	3716800.
43	3.01	5.00	6.00	0.8594	0.8928	0.9626	0.0911	0.1060	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	0.8703	0.8700	1.0003	0.1168	0.1342	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	0.9198	0.8105	1.1349	0.0975	0.1060	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	0.6283	0.8642	0.7270	0.0666	0.1060	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	0.8018	0.8700	0.9217	0.0955	0.1191	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	0.5868	0.8928	0.6572	0.0622	0.1060	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	0.5939	0.8700	0.6826	0.0797	0.1342	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	0.4528	0.8700	0.5205	0.0480	0.1060	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	0.4377	0.8642	0.5065	0.0464	0.1060	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	0.3249	0.8700	0.3738	0.0387	0.1191	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	0.3651	0.8928	0.4089	0.0387	0.1060	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	0.3908	0.8700	0.4488	0.0524	0.1342	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	1.0848	0.8700	1.2469	0.0982	0.1191	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.1340	0.8105	1.3991	0.1202	0.1060	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	1.2204	0.8249	1.4794	0.1163	0.0953	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	1.2161	0.8700	1.3978	0.1317	0.1083	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	1.1112	0.8250	1.3469	0.1059	0.0953	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	1.2173	0.8700	1.3982	0.1042	0.0856	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	1.2512	0.8700	1.4381	0.1071	0.0856	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	1.0630	0.8700	1.2218	0.1046	0.0984	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	1.2313	0.8406	1.4648	0.1054	0.0856	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.3545	0.8556	1.5831	0.1024	0.0756	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	1.2230	0.8700	1.4057	0.1075	0.0879	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.4444	0.8556	1.6882	0.1092	0.0756	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	1.0503	0.8700	1.2072	0.0794	0.0756	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.6908	0.8700	1.9436	0.1138	0.0673	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.6746	0.8700	1.9248	0.1127	0.0673	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.6196	0.9194	1.7616	0.1090	0.0673	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	1.8902	0.8700	2.1726	0.1497	0.0792	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.4354	0.9240	1.5534	0.0966	0.0673	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	1.4836	0.8700	1.7053	0.1405	0.0947	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.0386	0.9195	1.1296	0.0699	0.0673	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	0.9851	0.9240	1.0662	0.0663	0.0673	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	0.8786	0.8700	1.0098	0.0832	0.0947	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.90	1.4444	0.8700	1.6603	0.1144	0.0792	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	0.5988	0.8700	0.6883	0.0403	0.0673	0.050947	72.80	739.67	4108600.

TABLE VI (Continued)

79	4.04	-5.00	3.00	0.8617	0.9195	0.6108	0.0378	0.0673	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	0.3699	0.8700	0.4252	0.0283	0.0792	0.050966	72.86	739.67	4111700.
81	4.04	-5.00	6.00	1.7741	0.8240	1.9201	0.1194	0.0673	0.051091	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	1.3221	0.8700	1.5186	0.1252	0.0947	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.7741	0.8700	2.0392	0.1194	0.0673	0.050972	72.83	740.67	4110200.
84	4.04	0.0	0.0	1.7489	0.8702	2.0097	0.1177	0.0673	0.050975	72.81	741.67	4092600.
85	3.01	0.0	0.0	0.8692	0.8105	1.0600	0.1037	0.1207	0.066521	92.01	683.67	5684000.
86	4.00	0.0	0.0	1.3367	0.8700	1.5365	0.1044	0.0781	0.088278	174.52	1438.70	3643600.
87	4.00	0.0	3.00	1.3227	0.8198	1.4380	0.1033	0.0781	0.088267	174.48	1438.70	3642800.
88	4.00	0.0	-3.00	0.9108	0.8700	1.0468	0.0837	0.0919	0.088307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	1.6236	0.8700	1.8662	0.1268	0.0781	0.088162	174.11	1437.70	3638000.
90	4.00	5.00	3.00	1.0844	0.8201	1.1786	0.0848	0.0782	0.088322	174.70	1438.70	3647600.
91	4.00	5.00	-3.00	1.2816	0.8700	1.4846	0.1167	0.0919	0.088307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	1.0618	0.8700	1.2436	0.0849	0.0781	0.088258	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	0.8965	0.8206	1.0380	0.0747	0.0781	0.088244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	0.8368	0.8700	1.0768	0.0860	0.0918	0.088260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	1.2396	0.8700	1.4202	0.0865	0.0781	0.088282	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	1.9058	0.8700	2.1905	0.0728	0.0382	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	1.2109	0.8700	1.3918	0.0913	0.0754	0.078417	140.46	1245.70	3651900.
98	4.00	0.0	0.0	1.1611	0.8700	1.3346	0.0865	0.0749	0.070603	120.00	1091.70	4033000.
99	4.00	0.0	0.0	1.2092	0.8700	1.3899	0.0867	0.0717	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	1.1433	0.8700	1.3141	0.0734	0.0642	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	1.5484	0.8700	1.7798	0.0991	0.0640	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	1.0609	0.8700	1.2195	0.0679	0.0640	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	0.9750	0.9208	1.0589	0.0625	0.0641	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	1.0292	0.8700	1.1830	0.0775	0.0753	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	1.1987	0.8700	1.3790	0.0769	0.0641	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	1.0062	0.8700	1.1566	0.0809	0.0804	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	0.9776	0.8700	1.1237	0.0786	0.0804	0.066764	120.72	738.67	6974400.

GAGE= 5044 X/L=0.4090 PHI=180.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIMU*TH	TUR FAC	HIMU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	0.6065	0.8177	0.7417	0.0632	0.1042	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	0.5528	0.8700	0.6354	0.0576	0.1042	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	1.1837	0.8700	1.3605	0.2056	0.1737	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	1.0868	0.8700	1.2607	0.1914	0.1745	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	1.0297	0.8700	1.1836	0.1766	0.1715	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	1.3008	0.8700	1.4952	0.2106	0.1619	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	0.9256	0.8700	1.0639	0.1430	0.1545	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	0.8124	0.8700	1.0487	0.1395	0.1529	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	1.0276	0.8700	1.1812	0.1524	0.1483	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	1.0324	0.8700	1.1867	0.1528	0.1480	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	0.5707	0.8700	0.6560	0.0798	0.1400	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	0.5399	0.8700	0.6206	0.0751	0.1391	0.055875	31.03	650.67	4172900.
14	2.76	0.90	-0.80	0.7767	0.8700	0.8927	0.0953	0.1227	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	0.8191	0.8700	0.9415	0.1005	0.1227	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	0.6377	0.8177	0.7798	0.0660	0.1035	0.052886	34.04	674.67	3792900.
17	3.02	4.60	-0.70	0.6022	0.8207	0.7338	0.0751	0.1247	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	0.6054	0.8236	0.7351	0.0758	0.1252	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	0.6046	0.8208	0.7366	0.0679	0.1123	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	0.6174	0.8185	0.7543	0.0647	0.1048	0.055535	36.94	722.67	3706100.
21	3.02	0.9	3.00	0.8292	0.8223	1.0084	0.0869	0.1048	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	0.8721	0.8222	1.0607	0.0914	0.1048	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	0.6709	0.8182	0.8199	0.0864	0.1273	0.055976	37.01	721.67	3720800.
24	3.02	5.00	3.00	0.6300	0.8222	0.7662	0.0802	0.1273	0.055998	37.04	721.67	3723800.
25	3.02	5.00	-3.00	0.6347	0.8222	0.7720	0.0808	0.1273	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	0.6714	0.8311	0.8078	0.0764	0.1138	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	0.6864	0.8329	0.7041	0.0692	0.1180	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	0.6278	0.8313	0.7552	0.0636	0.1013	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	0.6981	0.8307	0.8404	0.0659	0.0944	0.055889	44.31	726.67	3962100.
30	3.50	4.50	-0.40	0.6514	0.8444	0.7715	0.0684	0.1050	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	0.5819	0.8428	0.6904	0.0636	0.1093	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	0.6685	0.8449	0.7912	0.0611	0.0914	0.055430	54.98	728.67	4192000.
33	3.50	0.40	-0.30	0.6718	0.8446	0.7954	0.0571	0.0850	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	0.7527	0.8595	0.8757	0.0563	0.0748	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	0.7389	0.8578	0.8614	0.0600	0.0812	0.052582	61.87	738.67	4012800.
36	3.77	3.90	0.70	0.6981	0.8568	0.8148	0.0636	0.0911	0.052558	61.81	739.67	4009300.
37	3.77	5.00	0.10	0.7335	0.8601	0.8528	0.0710	0.0968	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	0.8498	0.8687	0.9783	0.0566	0.0666	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	0.9324	0.8738	1.0671	0.0621	0.0666	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	0.7161	0.8177	0.8757	0.0913	0.1275	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	0.6290	0.8220	0.7652	0.0802	0.1275	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	0.6573	0.8220	0.7996	0.0838	0.1275	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	0.8413	0.7601	1.1069	0.1071	0.1273	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	0.8853	0.7599	1.1650	0.1127	0.1273	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	0.5987	0.8177	0.7321	0.0628	0.1049	0.055838	37.00	724.67	3717700.

TABLE VI (Continued)

46	3.01	0.0	3.00	0.8446	0.8218	1.0276	0.0886	0.1049	0.056788	36.89	724.67	3711100.
47	3.01	0.0	-3.00	0.8665	0.8218	1.0543	0.0909	0.1049	0.056794	36.96	723.67	3721000.
48	3.01	0.0	6.00	0.9066	0.7607	1.2707	0.1014	0.1049	0.056805	36.97	723.67	3722800.
49	3.01	0.0	-6.00	0.8671	0.7607	1.2582	0.1004	0.1048	0.056808	37.23	721.67	3702800.
50	3.01	-6.00	0.0	0.8832	0.8177	1.0824	0.0937	0.1049	0.056787	36.98	722.67	3730000.
51	3.01	-6.00	3.00	0.6187	0.8218	0.7527	0.0648	0.1049	0.056717	36.88	722.67	3719800.
52	3.01	-6.00	-3.00	0.8987	0.8218	0.7286	0.0628	0.1048	0.056794	37.00	721.67	3739800.
53	3.01	-6.00	6.00	0.6672	0.7593	0.7470	0.0666	0.1049	0.056717	36.81	720.67	3738600.
54	3.01	-6.00	-6.00	0.8386	0.7590	0.7096	0.0665	0.1048	0.056783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	0.8694	0.8221	1.0575	0.0912	0.1049	0.056874	37.08	722.67	3741000.
56	3.01	0.0	0.0	0.8901	0.8700	0.8783	0.0618	0.1048	0.056871	37.02	725.67	3712800.
57	3.25	0.0	0.0	0.8339	0.8700	0.7281	0.0598	0.0844	0.056670	44.83	731.67	3884300.
58	3.25	0.0	-3.00	0.7214	0.8280	0.8702	0.0681	0.0844	0.056860	45.07	734.67	3892000.
59	3.25	5.00	0.0	0.6863	0.8312	0.8257	0.0803	0.1170	0.056847	45.07	733.67	3889700.
60	3.51	0.0	0.0	0.7193	0.8460	0.8503	0.0610	0.0848	0.056388	55.08	740.67	4084900.
61	3.51	1.40	-0.20	0.6883	0.8484	0.8106	0.0629	0.0812	0.056442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	0.6875	0.8366	0.8218	0.0583	0.0848	0.056338	55.03	738.67	4087500.
63	3.51	5.00	0.0	0.6999	0.8460	0.8273	0.0751	0.1073	0.056354	55.11	736.67	4120500.
64	3.76	0.0	0.0	0.7861	0.8700	0.9036	0.0586	0.0748	0.052813	61.97	744.67	4000200.
65	3.76	0.0	-3.00	0.7660	0.8437	0.9080	0.0573	0.0748	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	0.7541	0.8601	0.8768	0.0730	0.0968	0.052947	61.94	748.67	3965800.
67	3.76	1.80	-0.50	0.7586	0.8573	0.8849	0.0616	0.0812	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	0.9174	0.8739	1.0498	0.0611	0.0666	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	0.7857	0.8738	0.8992	0.0693	0.0882	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	0.6924	0.8514	0.8132	0.0610	0.0881	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	0.6844	0.8514	0.8039	0.0603	0.0881	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	0.6807	0.8240	0.8261	0.0589	0.0880	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	0.7057	0.8239	0.8565	0.0621	0.0880	0.050925	72.73	738.67	4105000.
74	4.04	0.0	3.00	0.6667	0.8513	0.7831	0.0444	0.0666	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	1.1141	0.8241	1.3519	0.0742	0.0666	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	1.1351	0.8240	1.3776	0.0756	0.0666	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	0.6892	0.8513	0.8096	0.0459	0.0666	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	1.1727	0.8700	1.3479	0.0781	0.0666	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	1.8393	0.8513	2.1606	0.1225	0.0666	0.050973	72.87	739.67	4112800.
80	4 04	-5.00	-3.00	2.2372	0.8513	2.6280	0.1490	0.0666	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	1.8844	0.8240	2.2869	0.1285	0.0666	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	2.3333	0.8238	2.8324	0.1554	0.0666	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	0.8498	0.8739	0.9725	0.0566	0.0666	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	0.8514	0.8739	0.9742	0.0567	0.0666	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	0.5339	0.8177	0.6529	0.0638	0.1195	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	0.7739	0.8737	0.8858	0.0899	0.0774	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	0.6744	0.8512	0.7923	0.0522	0.0774	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	0.6809	0.8511	0.8000	0.0527	0.0774	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	0.7947	0.8737	0.9096	0.0813	0.1023	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	0.6901	0.8511	0.8109	0.0706	0.1023	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	0.6911	0.8511	0.8120	0.0707	0.1023	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	0.4948	0.8737	0.5664	0.0383	0.0774	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	0.5356	0.8508	0.6295	0.0414	0.0773	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	0.6533	0.8507	0.7680	0.0505	0.0773	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	0.7801	0.8737	0.8928	0.0603	0.0773	0.089282	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	0.3210	0.8690	0.3693	0.0121	0.0377	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	0.8056	0.8737	0.9221	0.0601	0.0746	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	0.7832	0.8737	0.8964	0.0578	0.0738	0.070603	120.00	1091.70	405 300.
99	4.00	0.0	0.0	0.8423	0.8737	0.9640	0.0598	0.0710	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	0.8724	0.8737	0.9986	0.0554	0.0535	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	0.8605	0.8736	0.9735	0.0711	0.0836	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	1.0457	0.8737	1.1969	0.0663	0.0634	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	0.8360	0.8508	0.9826	0.0530	0.0634	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	0.8533	0.8508	1.0030	0.0541	0.0634	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	0.8117	0.8737	1.0435	0.0878	0.0634	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	0.6284	0.8689	0.7244	0.0501	0.0796	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	0.6281	0.8689	0.7229	0.0500	0.0796	0.066764	120.72	738.67	6974400.

GAGE= 5053 X/L=0.3690 PHI= 19.300 NRUN=106

RUN	MACH	ALPHA	BETA	MIHU*TH	TUR FAC	MIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	0.8511	0.8700	0.9783	0.1036	0.1059	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	0.8256	0.8700	0.9490	0.1005	0.1059	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	0.7822	0.8700	0.8991	0.1479	0.1645	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	0.8991	0.8700	1.0334	0.1700	0.1645	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	0.8573	0.8700	0.9854	0.1621	0.1645	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	0.6706	0.8700	0.7708	0.1268	0.1645	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	0.8096	0.8700	0.9306	0.1317	0.1420	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	0.7763	0.8700	0.8923	0.1267	0.1420	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	0.8620	0.8700	0.9908	0.1407	0.1420	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	0.6660	0.8700	0.7655	0.1087	0.1420	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	0.8435	0.8700	0.9695	0.1208	0.1246	0.055904	31.15	650.67	4211400.

TABLE VI (Continued)

13	2.76	3.60	1.30	1.1954	0.8700	1.3740	0.1712	0.1246	0.066575	91.03	660.67	4172800.
14	2.76	0.80	-0.80	0.9147	0.8700	1.0514	0.1310	0.1246	0.066639	91.07	662.67	4169600.
15	2.76	0.20	0.10	0.8183	0.8700	0.9406	0.1172	0.1246	0.066712	91.17	661.67	4181900.
16	3.01	0.0	0.0	0.8832	0.8700	1.0152	0.1067	0.1051	0.062886	94.04	674.67	3792800.
17	3.02	4.60	-0.70	0.8815	0.8700	1.0132	0.1078	0.1064	0.066320	96.67	721.67	3686600.
18	3.02	4.60	1.30	0.8412	0.8700	1.0818	0.1151	0.1064	0.066024	97.48	721.67	3767500.
19	3.02	1.60	-0.70	0.8060	0.8700	1.0414	0.1106	0.1064	0.066018	96.90	723.67	3684700.
20	3.02	0.20	-0.10	0.8610	0.8700	0.9887	0.1053	0.1064	0.066035	96.94	722.67	3706100.
21	3.02	0.0	3.00	0.8493	0.8700	1.0811	0.1161	0.1064	0.066046	96.87	721.67	3710800.
22	3.02	0.0	-3.00	1.3353	0.8700	1.5348	0.1633	0.1064	0.066483	96.88	721.67	3708300.
23	3.02	5.00	0.0	0.8166	0.8700	1.0536	0.1121	0.1064	0.066676	97.01	721.67	3720800.
24	3.02	5.00	3.00	1.1832	0.8700	1.3600	0.1447	0.1064	0.066698	97.04	721.67	3723800.
25	3.02	5.00	-3.00	0.8812	0.8700	1.0244	0.1090	0.1064	0.066538	96.96	721.67	3716700.
26	3.24	4.40	-0.60	0.9988	0.8700	1.1480	0.1101	0.0959	0.066076	45.09	726.67	3974400.
27	3.24	5.20	1.70	0.6885	0.8700	0.7929	0.0760	0.0959	0.066018	45.10	725.67	3980400.
28	3.24	1.50	-0.70	1.0759	0.8700	1.2367	0.1186	0.0959	0.066039	45.17	725.67	3982700.
29	3.24	0.30	0.0	1.0161	0.8700	1.1678	0.1120	0.0959	0.066089	44.81	726.67	3962100.
30	3.50	4.50	-0.40	0.9677	0.8700	1.1123	0.0961	0.0864	0.056407	54.89	727.67	4209800.
31	3.50	5.30	1.50	0.5638	0.8700	0.6480	0.0560	0.0864	0.056427	54.85	730.67	4180900.
32	3.50	1.40	0.20	0.8982	0.8700	1.0324	0.0892	0.0864	0.056430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	0.7685	0.8700	0.9178	0.0793	0.0864	0.056543	55.23	728.67	4219900.
34	3.75	0.30	0.0	0.8918	0.8700	1.0251	0.0780	0.0761	0.053050	61.82	739.67	4098400.
35	3.77	1.90	-0.50	0.8026	0.8700	0.9225	0.0702	0.0761	0.052882	61.87	739.67	4012800.
36	3.77	3.90	0.70	0.7443	0.8700	0.8555	0.0651	0.0761	0.052859	61.81	739.67	4009300.
37	3.77	5.00	0.10	0.9329	0.8700	1.0723	0.0816	0.0761	0.052874	61.88	738.67	4021600.
38	4.02	0.70	-0.60	0.7839	0.8700	0.9010	0.0610	0.0677	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	0.9446	0.8700	1.0857	0.0735	0.0677	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	0.9533	0.8700	1.0957	0.1168	0.1066	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	1.2413	0.8700	1.4268	0.1521	0.1066	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	0.9492	0.8700	1.0910	0.1163	0.1066	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	1.3123	0.8700	1.5084	0.1608	0.1066	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	1.0120	0.8700	1.1632	0.1240	0.1066	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	0.8762	0.8700	1.0094	0.1076	0.1066	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	0.9567	0.8700	1.0997	0.1235	0.1123	0.059788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	1.3907	0.8700	1.5985	0.1704	0.1066	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.1347	0.8700	1.3043	0.1509	0.1157	0.055805	36.97	723.67	3722800.
49	3.01	0.0	-6.00	1.4747	0.8700	1.6951	0.1807	0.1066	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	0.8870	0.8700	1.0195	0.1305	0.1280	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	0.9157	0.8700	1.0525	0.1403	0.1333	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	1.0603	0.8700	1.2187	0.1455	0.1230	0.055794	37.00	721.67	3738500.
53	3.01	-5.00	6.00	0.4638	0.8700	0.5331	0.0741	0.1380	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	1.7488	0.8700	2.0101	0.2384	0.1186	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	1.5507	0.8700	1.7824	0.1653	0.1066	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.0766	0.8700	1.2368	0.1147	0.1066	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	1.2179	0.8700	1.3999	0.1168	0.0959	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	1.6392	0.8700	1.8841	0.1572	0.0959	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	0.7904	0.8700	0.9085	0.0758	0.0959	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	1.0626	0.8700	1.2214	0.0916	0.0862	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	1.1984	0.8700	1.3775	0.1033	0.0862	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	1.7622	0.8700	2.0255	0.1519	0.0862	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	0.9118	0.8700	1.0480	0.0786	0.0862	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.0368	0.8700	1.1917	0.0789	0.0761	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	1.9343	0.8700	2.2233	0.1472	0.0761	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.1327	0.8700	1.3020	0.0862	0.0761	0.052947	61.94	748.67	3966800.
67	3.76	1.50	-0.50	0.9369	0.8700	1.0769	0.0713	0.0761	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.1270	0.8700	1.2954	0.0763	0.0677	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.1960	0.8700	1.3736	0.0809	0.0677	0.050813	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.1270	0.8700	1.2954	0.0763	0.0677	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	1.3368	0.8700	1.5366	0.0905	0.0677	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.6942	0.8700	1.9474	0.1147	0.0677	0.050857	72.86	738.67	4120600.
73	4.04	5.00	-6.00	1.2216	0.8700	1.4041	0.0827	0.0677	0.050825	72.73	739.67	4105000.
74	4.04	0.0	3.00	0.6302	0.8700	0.7244	0.0455	0.0722	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	0.3338	0.8700	0.3837	0.0252	0.0755	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	2.4269	0.8700	2.7895	0.1643	0.0677	0.050957	72.82	738.67	4110200.
77	4.04	0.0	-3.00	2.0857	0.8700	2.3974	0.1412	0.0677	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	0.8898	0.8700	1.0228	0.0783	0.0880	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	0.8654	0.8700	0.9947	0.0810	0.0836	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	1.4867	0.8700	1.7088	0.1234	0.0830	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	0.8270	0.8700	0.9506	0.0822	0.0994	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	2.0612	0.8700	2.3692	0.1616	0.0784	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.1167	0.8700	1.2836	0.0756	0.0677	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	1.0875	0.8700	1.2615	0.0743	0.0677	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	1.0231	0.8700	1.1760	0.1241	0.1213	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	0.8232	0.8700	0.9462	0.0647	0.0786	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	0.2672	0.8700	0.3071	0.0210	0.0786	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	1.7901	0.8700	2.0576	0.1407	0.0786	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	1.0522	0.8700	1.2094	0.0826	0.0785	0.089162	174.11	1437.70	3639000.

TABLE VI (Continued)

80	4.00	5.00	3.00	0.3781	0.8700	0.4357	0.0298	0.0786	0.089322	174.70	1438.70	3647600.
81	4.00	5.00	-3.00	1.2880	0.8700	1.4831	0.1021	0.0786	0.088307	174.61	1439.70	3641600.
82	4.00	-5.00	0.0	1.7758	0.8700	2.0411	0.1394	0.0785	0.089259	174.42	1439.70	3637700.
83	4.00	-5.00	3.00	0.8824	0.8700	1.1407	0.0779	0.0786	0.089244	174.30	1441.70	3627400.
84	4.00	-5.00	-3.00	2.4830	0.8700	2.8665	0.1957	0.0785	0.089206	174.33	1442.70	3624100.
85	4.00	0.0	0.0	0.8127	0.8700	0.8341	0.0638	0.0785	0.089292	174.48	1441.70	3631300.
86	4.00	0.70	-0.60	1.2214	0.8700	1.4038	0.0468	0.0384	0.090223	20.16	1428.70	423840.
87	4.00	0.0	0.0	0.9406	0.8700	1.0811	0.0713	0.0788	0.078417	140.45	1248.70	3051800.
88	4.00	0.0	0.0	0.8760	0.8700	1.1218	0.0732	0.0790	0.070603	120.00	1091.70	4033000.
89	4.00	0.0	0.0	0.8803	0.8700	1.1383	0.0714	0.0731	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	0.7276	0.8700	0.8363	0.0470	0.0646	0.047013	60.24	728.67	3944600.
101	4.00	0.00	0.0	0.8038	0.8700	1.1423	0.0640	0.0644	0.047081	60.21	736.67	3984200.
102	4.00	-5.00	0.0	0.8720	0.8700	1.1172	0.0626	0.0644	0.047126	60.26	737.67	3980600.
103	4.00	-5.00	3.00	0.7518	0.8700	0.8643	0.0485	0.0645	0.047188	60.45	737.67	3981300.
104	4.00	-5.00	-3.00	1.6882	0.8700	1.9531	0.1086	0.0645	0.047128	60.39	736.67	3988600.
105	4.00	0.0	0.0	0.8286	0.8700	1.0674	0.0998	0.0644	0.047081	60.24	734.67	3980600.
106	4.00	0.70	-0.60	0.8906	0.8700	1.0926	0.0768	0.0809	0.066420	118.94	737.67	6020200.
107	4.00	0.70	-0.60	0.8147	0.8700	1.0514	0.0740	0.0805	0.066764	120.72	738.67	6074400.

GAGE= 5084 X/L=0.3620 PHI= 23.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	1.7428	0.8700	2.0032	0.1863	0.1068	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	1.6885	0.8700	1.9408	0.1805	0.1068	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	1.3030	0.8700	1.4977	0.2163	0.1660	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	2.8884	0.8700	3.2885	0.4745	0.1660	0.057890	22.88	644.67	4099100.
6	2.24	1.80	-0.70	1.2349	0.8700	1.4194	0.2050	0.1660	0.057884	22.93	648.67	4073900.
7	2.24	0.60	-0.20	1.8313	0.8700	2.1049	0.3040	0.1660	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	1.5007	0.8700	1.7249	0.2152	0.1434	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	2.9226	0.8700	3.3593	0.4191	0.1434	0.056508	26.21	648.67	4060900.
10	2.50	1.60	-0.70	0.9275	0.8700	1.0661	0.1330	0.1434	0.056303	26.01	649.67	4031000.
11	2.50	1.60	0.20	1.6534	0.8700	1.9005	0.2371	0.1434	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	1.3996	0.8700	1.6086	0.1762	0.1259	0.058804	31.15	650.67	4211400.
13	2.76	3.60	1.30	5.1199	0.8700	5.8849	0.6446	0.1259	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	0.9335	0.8700	1.0718	0.1174	0.1259	0.056639	31.07	652.67	4159500.
15	2.76	0.20	0.10	1.2844	0.8700	1.4763	0.1617	0.1259	0.056712	31.17	651.67	4181900.
16	3.01	0.0	0.0	1.6714	0.8700	1.9211	0.1775	0.1062	0.052886	34.04	674.67	3782900.
17	3.02	4.80	-0.70	1.4772	0.8700	1.6979	0.1588	0.1075	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	6.4670	0.8700	7.4333	0.6952	0.1075	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	0.9637	0.8700	1.1077	0.1036	0.1075	0.055818	36.90	723.67	3694700.
20	3.02	0.20	-0.10	1.8856	0.8700	2.1674	0.2027	0.1075	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	5.2512	0.8700	6.0359	0.5645	0.1075	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	3.0642	0.8700	3.5221	0.3294	0.1075	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	1.9274	0.8700	2.2154	0.2072	0.1075	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	1.8772	0.8700	2.1577	0.2018	0.1075	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	1.1023	0.8700	1.2670	0.1185	0.1075	0.055536	36.96	721.67	3715700.
26	3.24	4.40	-0.60	1.3957	0.8700	1.6043	0.1351	0.0968	0.055976	48.05	726.67	3974400.
27	3.24	5.20	1.70	5.3936	0.8700	6.1995	0.5221	0.0968	0.056019	48.15	725.67	3990400.
28	3.24	1.50	-0.70	0.9711	0.8700	1.1162	0.0940	0.0968	0.056035	48.17	726.67	3992700.
29	3.24	0.30	0.0	2.1322	0.8700	2.4508	0.2064	0.0968	0.055869	44.91	726.67	3962100.
30	3.50	4.50	-0.40	1.3860	0.8700	1.5931	0.1210	0.0873	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	6.8580	0.8700	7.8828	0.5987	0.0873	0.055427	54.95	730.67	4180800.
32	3.50	1.40	0.20	3.4536	0.8700	3.9697	0.3015	0.0873	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	3.6987	0.8700	4.2514	0.3229	0.0873	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	4.0130	0.8700	4.6126	0.3082	0.0768	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	3.7721	0.8700	4.3357	0.2897	0.0768	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	4.8060	0.8700	5.5241	0.3691	0.0768	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	2.0664	0.8700	2.3752	0.1587	0.0768	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	3.7047	0.8700	4.2583	0.2534	0.0684	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	4.0453	0.8700	4.6498	0.2767	0.0684	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	1.7723	0.8700	2.0371	0.1907	0.1076	0.055878	37.09	722.67	3741700.
41	3.01	5.00	3.00	2.0901	0.8700	2.4024	0.2249	0.1076	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	1.0660	0.8700	1.2253	0.1147	0.1076	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	1.3383	0.8700	1.5383	0.1440	0.1076	0.055752	36.88	724.67	3706300.
44	3.01	5.00	-6.00	1.1849	0.8700	1.3620	0.1275	0.1076	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	1.5883	0.8700	1.8256	0.1709	0.1076	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	5.2625	0.8700	6.0489	0.5994	0.1139	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	2.6022	0.8700	2.9910	0.2800	0.1076	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	3.9839	0.8700	4.5792	0.4709	0.1182	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	1.9861	0.8700	2.2829	0.2137	0.1076	0.055868	37.23	721.67	3762900.
50	3.01	-5.00	0.0	3.4425	0.8700	3.9569	0.4427	0.1286	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	3.5993	0.8700	4.1371	0.4859	0.1350	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	4.2075	0.8700	4.8362	0.5171	0.1229	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	4.2891	0.8700	4.9300	0.6082	0.1418	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	3.3421	0.8700	3.8415	0.3937	0.1178	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	2.6868	0.8700	3.0883	0.2891	0.1076	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.7974	0.8700	2.0660	0.1934	0.1076	0.055871	37.02	725.67	3712900.

TABLE VI (Continued)

57	3.25	0.0	0.0	4.1736	0.8700	4.7972	0.4040	0.0868	0.056670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	3.7149	0.8700	4.2700	0.3596	0.0868	0.056860	45.07	734.67	3892000.
59	3.25	5.00	0.0	2.1033	0.8700	2.4176	0.2036	0.0868	0.056847	45.07	733.67	3899700.
60	3.51	0.0	0.0	3.8609	0.8700	4.4528	0.3446	0.0870	0.056388	55.08	740.67	4084500.
61	3.51	1.40	-0.20	2.4954	0.8700	2.8683	0.2171	0.0870	0.056442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	3.3943	0.8700	3.8016	0.2953	0.0870	0.056339	55.03	738.67	4097500.
63	3.51	5.00	0.0	1.8806	0.8700	2.1615	0.1636	0.0870	0.056364	55.11	736.67	4120500.
64	3.76	0.0	0.0	4.1628	0.8700	4.7848	0.3197	0.0768	0.052813	61.87	744.67	4000200.
65	3.76	0.0	-3.00	2.7830	0.8700	3.2103	0.2146	0.0768	0.052842	61.88	746.67	3884700.
66	3.76	5.00	0.0	1.5091	0.8700	1.7346	0.1159	0.0768	0.052847	61.84	748.67	3868800.
67	3.76	1.50	-0.50	3.6023	0.8700	4.1880	0.2806	0.0768	0.052852	61.90	740.67	4027800.
68	4.04	0.0	0.0	4.1433	0.8700	4.7624	0.2834	0.0684	0.050888	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.8158	0.8700	2.0871	0.1242	0.0684	0.050819	72.73	738.67	4113400.
70	4.04	3.00	3.00	5.8231	0.8700	6.6932	0.3883	0.0684	0.050848	72.87	737.67	4128500.
71	4.04	3.00	-3.00	0.8167	0.8700	1.0937	0.0627	0.0684	0.050822	72.76	738.67	4114900.
72	4.04	5.00	0.00	1.3089	0.8700	1.5040	0.0889	0.0684	0.050887	73.00	739.67	4120600.
73	4.04	5.00	-3.00	1.7471	0.8700	2.0083	0.1195	0.0684	0.050828	72.73	738.67	4109000.
74	4.04	0.0	3.00	7.1128	0.8700	8.1757	0.5228	0.0735	0.050884	72.80	740.67	4106000.
75	4.04	0.0	6.00	6.7773	0.8700	7.7900	0.5266	0.0777	0.050866	72.85	738.67	4111700.
76	4.04	0.0	-6.00	3.4342	0.8700	3.9474	0.2348	0.0684	0.050887	72.82	738.67	4110200.
77	4.04	0.0	-3.00	4.3012	0.8700	4.9430	0.2842	0.0684	0.050883	72.84	738.67	4111200.
78	4.04	-5.00	0.0	3.7701	0.8700	4.3334	0.3328	0.0883	0.050847	72.80	738.67	4108600.
79	4.04	-5.00	3.00	3.8956	0.8700	4.4317	0.3698	0.0848	0.050873	72.87	738.67	4112800.
80	4.04	-5.00	-3.00	4.4114	0.8700	5.0706	0.3638	0.0824	0.050866	72.89	739.67	4111700.
81	4.04	-5.00	6.00	4.3382	0.8700	4.9864	0.4426	0.1020	0.051001	72.95	738.67	4117400.
82	4.04	-5.00	-6.00	3.7671	0.8700	4.3300	0.2812	0.0773	0.050887	72.82	738.67	4110200.
83	4.04	0.0	0.0	4.2456	0.8700	4.8800	0.2904	0.0684	0.050872	72.83	740.67	4102400.
84	4.04	0.0	0.0	4.2164	0.8700	4.8464	0.2884	0.0684	0.050875	72.81	741.67	4092500.
85	3.61	0.0	0.0	1.6457	0.8700	1.8916	0.2016	0.1225	0.068521	92.01	683.67	9684000.
86	4.00	0.0	0.0	3.9786	0.8700	4.8731	0.3155	0.0793	0.089275	174.92	1438.70	3643600.
87	4.00	0.0	3.00	5.8764	0.8700	6.7546	0.4660	0.0793	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	5.3241	0.8700	6.1187	0.4222	0.0793	0.089307	174.98	1440.70	3637100.
89	4.00	5.00	0.0	5.1501	0.8700	5.9197	0.4084	0.0793	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	5.8184	0.8700	6.6878	0.4614	0.0793	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	1.1589	0.8700	1.3321	0.0919	0.0793	0.089307	174.61	1438.70	3641600.
92	4.00	-5.00	0.0	6.4048	0.8700	7.3618	0.5079	0.0793	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	6.3826	0.8700	7.3363	0.5055	0.0792	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	6.0518	0.8700	6.9561	0.4793	0.0792	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	4.6128	0.8700	5.3022	0.3656	0.0793	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	3.2010	0.8700	3.6793	0.1242	0.0388	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	4.6918	0.8700	5.3925	0.3589	0.0765	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	4.5258	0.8700	5.2021	0.3426	0.0757	0.070603	120.00	1061.70	4033000.
99	4.00	0.0	0.0	4.6236	0.8700	5.3145	0.3366	0.0728	0.064521	102.46	882.67	3816800.
100	4.00	0.0	0.0	3.7518	0.8700	4.3121	0.2446	0.0652	0.047013	60.24	728.67	3544800.
101	4.00	5.00	0.0	1.8218	0.8700	2.0940	0.1186	0.0651	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	5.7803	0.8700	6.6440	0.3763	0.0651	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	6.1879	0.8700	7.1240	0.4041	0.0652	0.047198	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	7.0538	0.8700	8.1078	0.4592	0.0651	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	4.4547	0.8700	5.1203	0.2900	0.0651	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	2.5128	0.8700	2.8883	0.2053	0.0817	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	2.5728	0.8700	2.9572	0.2102	0.0817	0.066764	120.72	738.67	6974400.

GAGE= 5065 X/L=0.5450 PHI= 37.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIMU*TH	TUR FAC	HIMU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	1.5721	0.8700	1.8070	0.1569	0.0998	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	1.5411	0.8700	1.7714	0.1538	0.0998	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	1.3393	0.8700	1.5394	0.2080	0.1553	0.058067	23.14	637.67	4208300.
5	2.24	2.60	0.80	1.5351	0.8700	1.7645	0.2384	0.1553	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	1.1945	0.8700	1.3730	0.1855	0.1553	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	1.4044	0.8700	1.6143	0.2181	0.1553	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	1.2965	0.8700	1.4891	0.1736	0.1340	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	1.2522	0.8700	1.4393	0.1678	0.1340	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	1.1828	0.8700	1.3595	0.1585	0.1340	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	1.4552	0.8700	1.6726	0.1950	0.1340	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	1.6684	0.8700	1.9177	0.1962	0.1176	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	1.4294	0.8700	1.6430	0.1681	0.1176	0.055675	31.03	650.67	4172900.
14	2.76	0.80	-0.80	1.3605	0.8700	1.5638	0.1600	0.1176	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	1.2832	0.8700	1.4748	0.1509	0.1176	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	1.7679	0.8700	2.0321	0.1752	0.0991	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	1.6018	0.8700	2.0710	0.1809	0.1004	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	1.5339	0.8700	1.7631	0.1540	0.1004	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	1.5568	0.8700	1.7894	0.1563	0.1004	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	1.6036	0.8700	1.8432	0.1610	0.1004	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	1.7355	0.8700	1.9948	0.1883	0.1085	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	1.7729	0.8700	2.0378	0.1780	0.1004	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	1.6285	0.8700	1.8718	0.1635	0.1004	0.055576	37.01	721.67	3720800.

TABLE VI (Continued)

24	3.02	6.00	3.00	1.1325	0.8700	1.3017	0.1137	0.1004	0.056698	37.06	721.67	3723800.
25	3.02	6.00	-3.00	1.2689	0.8700	1.4586	0.1274	0.1004	0.056538	36.96	721.67	3716700.
26	3.24	4.40	-0.60	1.7677	0.8700	2.0318	0.1598	0.0904	0.056876	46.06	726.67	3974400.
27	3.24	6.20	1.70	1.2466	0.8700	1.4317	0.1126	0.0904	0.056016	46.16	726.67	3900400.
28	3.24	1.60	-0.70	1.5364	0.8700	1.7648	0.1388	0.0904	0.056036	46.17	726.67	3902700.
29	3.24	0.30	0.0	1.6615	0.8700	1.9088	0.1502	0.0904	0.056088	44.81	726.67	3862100.
30	3.60	4.60	-0.40	1.8086	0.8700	2.1478	0.1521	0.0814	0.056407	54.88	737.67	4209800.
31	3.60	6.30	1.60	1.0504	0.8700	1.2074	0.0955	0.0814	0.056427	54.86	736.67	4198800.
32	3.60	1.40	0.20	1.8251	0.8700	2.2128	0.1667	0.0814	0.056430	54.88	738.67	4210000.
33	3.60	0.40	-0.30	1.8704	0.8700	2.158	0.1528	0.0814	0.056043	56.23	738.67	4218000.
34	3.75	0.90	0.0	2.0808	0.8700	2.4032	0.1487	0.0716	0.053080	61.82	738.67	4088400.
35	3.77	1.60	-0.80	1.8180	0.8700	2.2007	0.1374	0.0716	0.052982	61.87	739.67	4012800.
36	3.77	3.80	0.70	1.8142	0.8700	2.0993	0.1288	0.0716	0.052988	61.81	739.67	4008300.
37	3.77	5.00	0.10	1.8920	0.8700	2.1287	0.1326	0.0716	0.052974	61.88	738.67	4021600.
38	4.02	0.70	-0.60	1.9827	0.8700	2.2700	0.1263	0.0637	0.051381	72.74	742.67	4122800.
39	4.02	0.0	0.0	2.2466	0.8700	2.5022	0.1431	0.0637	0.051306	72.81	738.67	4150000.
40	3.01	9.00	0.0	1.7881	0.8700	2.0993	0.1787	0.1005	0.059878	37.09	723.67	3741700.
41	3.01	9.00	3.00	1.2198	0.8700	1.3976	0.1222	0.1005	0.059883	37.07	724.67	3728100.
42	3.01	9.00	-3.00	1.2809	0.8700	1.4637	0.1306	0.1005	0.059846	37.01	724.67	3718800.
43	3.01	9.00	6.00	0.8488	0.8700	0.8796	0.0853	0.1005	0.059782	36.88	724.67	3706300.
44	3.01	9.00	-6.00	1.4697	0.8700	1.6883	0.1477	0.1005	0.059744	36.88	724.67	3709200.
45	3.01	0.0	0.0	1.6408	0.8700	1.8860	0.1649	0.1005	0.059838	37.00	724.67	3717700.
46	3.01	0.0	3.00	1.7406	0.8700	2.0007	0.1892	0.1007	0.059788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	1.8119	0.8700	2.0826	0.1821	0.1005	0.059784	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.3905	0.8700	1.9883	0.1613	0.1160	0.059806	36.87	723.67	3722600.
49	3.01	0.0	-6.00	1.9982	0.8700	1.7910	0.1566	0.1005	0.059868	37.23	721.67	3762800.
50	3.01	-5.00	0.0	1.6763	0.8700	1.9268	0.1903	0.1171	0.059787	36.98	722.67	3730600.
51	3.01	-5.00	3.00	1.7403	0.8700	2.0003	0.2198	0.1263	0.059717	36.88	722.67	3715900.
52	3.01	-5.00	-3.00	1.4648	0.8700	1.6837	0.1604	0.1095	0.059794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	1.5666	0.8700	1.8007	0.2140	0.1366	0.059717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	1.4627	0.8700	1.6813	0.1470	0.1005	0.059783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	1.8020	0.8700	2.0713	0.1811	0.1005	0.059874	37.08	722.67	3741000
56	3.01	0.0	0.0	1.6468	0.8700	1.8917	0.1654	0.1005	0.059871	37.02	725.67	3712900.
57	3.25	0.0	0.0	1.8178	0.8700	2.0891	0.1643	0.0904	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	1.8507	0.8700	2.1272	0.1673	0.0904	0.055860	45.07	734.67	3892[illegible]
59	3.25	5.00	0.0	1.8308	0.8700	2.1044	0.1655	0.0904	0.055847	45.07	733.67	3899.0[illegible]
60	3.51	0.0	0.0	1.9212	0.8700	2.2083	0.1560	0.0812	0.055389	55.08	740.67	[illegible]
61	3.51	1.40	-0.20	1.8202	0.8700	2.0922	0.1478	0.0812	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	2.0764	0.8700	2.3867	0.1686	0.0812	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	1.8251	0.8700	2.0978	0.1482	0.0812	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	2.2346	0.8700	2.5688	0.1600	0.0716	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	2.0684	0.8700	2.3775	0.1481	0.0716	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.9777	0.8700	2.2732	0.1416	0.0716	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	2.0265	0.8700	2.3293	0.1451	0.0716	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	2.3469	0.8700	2.6976	0.1495	0.0637	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.5118	0.8700	1.7377	0.0963	0.0637	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	3.2500	0.8700	3.7356	0.2070	0.0637	0.050848	72.87	737.67	4129500.
71	4.04	5.00	-3.00	1.9623	0.8700	2.2565	0.1250	0.0637	0.050922	72.93	738.67	4114900.
72	4.04	5.00	6.00	2.7000	0.8700	3.1034	0.1720	0.0637	0.050857	72.86	738.67	4120600.
73	4.04	5.00	-6.00	2.0392	0.8700	2.3439	0.1299	0.0637	0.050925	72.73	738.67	4105000.
74	4.04	0.0	3.00	1.5212	0.8700	1.7485	0.1074	0.0706	0.050894	72.90	740.67	4106000.
75	4.04	0.0	6.00	3.2000	0.8700	3.6782	0.2500	0.0780	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	1.8210	0.8700	2.0931	0.1160	0.0637	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	2.0628	0.8700	2.3710	0.1314	0.0637	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	2.1884	0.8700	2.5154	0.1731	0.0791	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	2.0926	0.8700	2.4053	0.1854	0.0866	0.050973	72.87	738.67	4112800.
80	4.04	-5.00	-3.00	2.0965	0.8700	2.4098	0.1498	0.0718	0.050866	72.85	739.67	4111700.
81	4.04	-5.00	6.00	2.2123	0.8700	2.5429	0.2189	0.0984	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	2.4411	0.8700	2.8069	0.1555	0.0637	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	2.4553	0.8700	2.8222	0.1564	0.0637	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	2.4066	0.8700	2.7662	0.1533	0.0637	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	1.6763	0.8700	1.9268	0.1921	0.1146	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	1.2113	0.8700	1.3923	0.0900	0.0743	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	1.0109	0.8700	1.1620	0.0832	0.0823	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	1.0808	0.8700	1.2423	0.0803	0.0743	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	1.1226	0.8700	1.2903	0.0833	0.0742	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	3.3300	0.8700	3.8276	0.2472	0.0743	0.089322	174.70	1438.70	3647900.
91	4.00	5.00	-3.00	1.0444	0.8700	1.2005	0.0776	0.0743	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	1.3890	0.8700	1.5621	0.1253	0.0822	0.089258	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	1.1309	0.8700	1.2999	0.1166	0.1031	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	1.0998	0.8700	1.2641	0.0915	0.0832	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	1.2844	0.8700	1.4763	0.0953	0.0742	0.089282	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	2.1167	0.8700	2.4330	0.0762	0.0360	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	1.4358	0.8700	1.6503	0.1028	0.0716	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	1.4470	0.8700	1.6632	0.1023	0.0707	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	1.5618	0.8700	1.7952	0.1062	0.0680	0.061521	102.46	982.67	3816300.
100	4.00	0.0	0.0	1.5371	0.8700	1.7668	0.0933	0.0607	0.047013	60.24	728.67	3544500.

TABLE VI (Continued)

101	4.00	5.00	0.0	1.2854	0.8700	1.486[illegible]	[illegible]36	0.0606	0.047081	60.21	736.67	3484200.
102	4.00	-5.00	0.0	1.1831	0.8700	1.3714	0.[illegible]86	0.0761	0.047126	60.26	737.67	3480600.
103	4.00	-5.00	3.00	1.1986	0.8700	1.3777	0.1008	0.0841	0.047188	60.45	737.67	3481300.
104	4.00	-5.00	-3.00	1.2816	0.8700	1.4946	0.0877	0.0679	0.047128	60.33	736.67	3498600.
105	4.00	0.0	0.0	1.0363	0.8700	1.1787	0.0881	0.0606	0.047081	60.21	734.67	3900800.
106	4.00	0.70	-0.60	1.3084	0.8700	1.5038	0.0887	0.0762	0.066420	119.64	737.67	6920200.
107	4.00	0.70	-0.60	1.2690	0.8700	1.4586	0.0867	0.0762	0.066764	120.72	738.67	6974400.

GAGE= 0096 X/L=0.8600 PHI= 37.000 NRUN= 81

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	1.1280	0.8700	1.2877	0.1050	0.0930	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	1.1258	0.8700	1.2840	0.1047	0.0930	0.052848	33.84	677.67	3757200.
4	2.24	2.40	-0.60	1.6037	0.8700	1.8433	0.2327	0.1451	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	1.0779	0.8700	1.2390	0.1564	0.1451	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	1.4893	0.8700	1.7118	0.2161	0.1451	0.057884	22.93	648.67	4073900.
7	2.24	0.60	-0.20	1.2578	0.8700	1.4457	0.1825	0.1451	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	1.3144	0.8700	1.5108	0.1643	0.1290	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	1.1216	0.8700	1.2892	0.1402	0.1250	0.056909	26.21	649.67	4060500.
10	2.50	1.60	-0.70	1.1664	0.8700	1.3407	0.1458	0.1250	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	1.2064	0.8700	1.3867	0.1508	0.1250	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	1.1882	0.8700	1.3657	0.1307	0.1100	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.20	1.2427	0.8700	1.4284	0.1367	0.1100	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	0.9127	0.8700	1.0491	0.1004	0.1100	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	1.2700	0.8700	1.4598	0.1397	0.1100	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	1.2337	0.8700	1.4180	0.1135	0.0920	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	1.0245	0.8700	1.1776	0.0963	0.0940	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	1.0628	0.8700	1.2216	0.0999	0.0940	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	0.8400	0.8700	0.8655	0.0790	0.0940	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	0.9564	0.8700	1.0993	0.0899	0.0940	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	1.1317	0.8700	1.3008	0.1143	0.1910	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	1.0000	0.8700	1.1494	0.0940	0.0940	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	1.0096	0.8700	1.1605	0.0949	0.0940	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	1.1777	0.8700	1.3537	0.1107	0.0940	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	1.0447	0.8700	1.2008	0.0982	0.0940	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	0.9893	0.8700	1.1371	0.0831	0.0840	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	1.0548	0.8700	1.2124	0.0886	0.0840	0.056019	45.15	725.67	3980400.
28	3.24	1.50	-0.70	1.1690	0.8700	1.3437	0.0982	0.0840	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	0.8464	0.8700	0.9729	0.0711	0.0840	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	0.9276	0.8700	1.0662	0.0705	0.0760	0.055407	54.99	727.67	4209860.
31	3.50	5.30	1.50	0.8566	0.8700	0.9846	0.0651	0.0760	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	1.2184	0.8700	1.4005	0.0926	0.0760	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	2.0500	0.8700	2.3563	0.1558	0.0760	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	2.2761	0.8700	2.6162	0.1525	0.0670	0.053050	61.92	739.67	4058400.
36	3.77	3.90	0.70	1.3418	0.8700	1.5423	0.0899	0.0670	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	0.7463	0.8700	0.8578	0.0500	0.0670	0.052574	61.83	738.67	4021600.
38	4.02	0.70	-0.60	1.7690	0.8700	2.0333	0.1049	0.0593	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	0.6610	0.8700	0.7598	0.0392	0.0583	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	1.0702	0.8700	1.2301	0.1006	0.0940	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	1.2883	0.8700	1.4808	0.1211	0.0940	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	1.4354	0.8700	1.6499	0.1345	0.0937	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	2.5742	0.8700	2.9588	0.2412	0.0937	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	0.7150	0.8700	0.8218	0.0670	0.0937	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	1.3255	0.8700	1.5236	0.1242	0.0937	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	0.8535	0.8700	0.9810	0.0862	0.1010	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	0.9670	0.8700	1.1115	0.0909	0.0940	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.5407	0.8700	1.7709	0.1667	0.1082	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	2.7872	0.8700	3.2037	0.2620	0.0940	0.055868	37.23	721.67	3762900.
50	3.01	-5.00	0.0	0.8573	0.8700	0.9854	0.0937	0.1093	0.055797	36.98	722.67	3730600.
52	3.01	-5.00	-3.00	1.5980	0.8700	1.8368	0.1630	0.1020	0.055794	37.00	721.67	3739500.
54	3.01	-5.00	-6.00	2.5149	0.8700	2.8907	0.2364	0.0940	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	0.7500	0.8700	0.8621	0.0705	0.0940	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.0213	0.8700	1.1739	0.0957	0.0937	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	0.7155	0.8700	0.8224	0.0601	0.0840	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	1.3095	0.8700	1.5052	0.1100	0.0840	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	0.6655	0.8700	0.7649	0.0559	0.0840	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	1.6632	0.8700	1.9117	0.1264	0.0760	0.055389	55.08	740.67	4084500.
62	3.51	0.0	-3.00	1.2776	0.8700	1.4685	0.0971	0.0760	0.055339	55.03	738.67	4097500.
64	3.76	0.0	0.0	1.7597	0.8700	2.0226	0.1179	0.0670	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	1.0746	0.8700	1.2352	0.0720	0.0670	0.052942	61.98	746.67	3984700.
67	3.76	1.50	-0.50	1.4224	0.8700	1.6349	0.0953	0.0670	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.8203	0.8700	2.0923	0.1074	0.0590	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.0254	0.8700	1.1786	0.0605	0.0590	0.050913	72.73	738.67	4113400.
71	4.04	5.00	-3.00	1.6458	0.8700	1.8917	0.0971	0.0590	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.5559	0.8700	1.7884	0.0918	0.0590	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	2.0356	0.8700	2.3398	0.1201	0.0890	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.8621	0.8700	2.1403	0.1228	0.0660	0.050994	72.90	740.67	4106000.

TABLE VI (Continued)

75	4.04	0.0	6.00	0.9353	0.8700	1.0751	0.0679	0.0726	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	2.6288	0.8700	3.0216	0.1851	0.0690	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	1.2119	0.8700	1.3930	0.0715	0.0680	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	1.6730	0.8700	1.9230	0.1238	0.0740	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	2.5306	0.8700	2.9086	0.2075	0.0820	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	1.2821	0.8700	1.4737	0.0859	0.0670	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	1.8269	0.8700	2.0999	0.1699	0.0930	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	1.3034	0.8700	1.4982	0.0769	0.0680	0.050957	72.82	739.67	4110200.
84	4.04	0.0	0.0	1.7034	0.8700	1.9579	0.1005	0.0690	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	1.1497	0.8700	1.3215	0.1229	0.1069	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	0.4935	0.8700	0.5672	0.0343	0.0695	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	0.8571	0.8700	0.9852	0.0660	0.0770	0.089267	174.48	1438.70	3642800.
88	4.00	0.0	-3.00	0.5295	0.8700	0.6086	0.0368	0.0695	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	0.3948	0.8700	0.4538	0.0274	0.0694	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	0.8432	0.8700	0.9692	0.0586	0.0695	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	0.3770	0.8700	0.4333	0.0262	0.0695	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	0.4902	0.8700	0.5634	0.0423	0.0863	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	1.0135	0.8700	1.1649	0.0978	0.0965	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	0.6059	0.8700	0.6964	0.0472	0.0778	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	0.5403	0.8700	0.6210	0.0375	0.0694	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	0.4424	0.8700	0.5085	0.0146	0.0330	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	0.4963	0.8700	0.5705	0.0332	0.0669	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	0.4167	0.8700	0.4790	0.0275	0.0660	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	0.4353	0.8700	0.5003	0.0276	0.0634	0.064521	102.46	982.67	3816300.
103	4.00	-5.00	3.00	1.2095	0.8700	1.3902	0.0347	0.0783	0.047199	60.45	737.67	3491300.

GAGE= 5057 X/L=0.4350 PHI= 7.500 NRUN= 95

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	9.9020	0.8700	11.3816	0.0	0.1030	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	8.8660	0.8700	10.1908	0.9150	0.1032	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	6.3790	0.8700	7.3322	1.0240	0.1600	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	5.7450	0.8700	6.6034	0.9221	0.1600	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	5.6580	0.8700	6.5034	0.9082	0.1600	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	5.4560	0.8700	6.2713	0.8757	0.1600	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	6.5630	0.8700	7.5437	0.0	0.1380	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	6.5760	0.8700	7.5586	0.9108	0.1380	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	6.7040	0.8700	7.7057	0.9285	0.1380	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	6.5040	0.8700	7.4759	0.9008	0.1380	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	8.5610	0.8700	9.8402	1.0380	0.1220	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	8.4060	0.8700	9.6621	1.0210	0.1220	0.055575	31.03	650.67	4172900.
14	2.76	0.80	-0.80	7.9600	0.8700	9.1494	0.0	0.1220	0.055638	31.07	652.67	4159500.
15	2.76	0.20	0.10	7.9200	0.8700	9.1034	0.9623	0.1220	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	10.9000	0.8700	12.5287	1.1180	0.1030	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	8.5600	0.8700	9.8391	0.8886	0.1040	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	8.7130	0.8700	10.0149	0.9044	0.1040	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	8.8080	0.8700	10.1241	0.9143	0.1040	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	8.3960	0.8700	9.6506	0.8715	0.1040	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	8.8660	0.8700	10.1908	0.9203	0.1040	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	8.9810	0.8700	10.3230	0.9322	0.1040	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	8.3540	0.8700	9.6023	0.8672	0.1040	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	8.9110	0.8700	10.2425	0.9250	0.1040	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	9.3900	0.8700	10.7931	0.9747	0.1040	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	9.3980	0.8700	10.8023	0.8787	0.0940	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	10.0400	0.8700	11.5402	0.9384	0.0940	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	9.8350	0.8700	11.3046	0.9196	0.0940	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	8.4530	0.8700	9.7161	0.7803	0.0940	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	10.2500	0.8700	11.7816	0.8627	0.0840	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	11.5800	0.8700	13.3103	0.9753	0.0840	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	11.2200	0.8700	12.8966	0.9450	0.0840	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	11.0100	0.8700	12.6552	0.9271	0.0840	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	11.1900	0.8700	12.8621	0.8291	0.0740	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	10.5000	0.8700	12.0690	0.0	0.0740	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	13.0800	0.8700	15.0345	0.9693	0.0740	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	11.9700	0.8700	13.7586	0.8872	0.0740	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	11.8310	0.8700	13.5989	0.0	0.0660	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	13.6150	0.8700	15.6494	0.0	0.0660	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	9.4040	0.8700	10.8092	0.8771	0.1040	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	9.1580	0.8700	10.5264	0.8516	0.1040	0.055893	37.17	724.67	3725100.
42	3.01	5.00	-3.00	9.5990	0.8700	11.0333	0.8973	0.1040	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	6.6020	0.8700	7.5885	0.6860	0.1040	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	8.6420	0.8700	9.9333	0.8979	0.1040	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	8.4740	0.8700	9.7402	0.8804	0.1040	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	9.1220	0.8700	10.4851	0.0	0.1040	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	9.0300	0.8700	10.3793	0.9383	0.1040	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	7.9530	0.8700	9.1414	0.8263	0.1040	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	8.8240	0.8700	10.1425	0.9168	0.1040	0.055968	37.23	721.67	3762900.

TABLE VI (Continued)

50	3.01	-5.00	0.0	6.9730	0.8700	8.0149	0.8786	0.1260	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	6.0800	0.8700	6.9885	0.7813	0.1280	0.055717	36.88	722.67	3719800.
52	3.01	-5.00	-3.00	6.8300	0.8700	7.8606	0.8443	0.1240	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	7.3200	0.8700	8.4138	0.8970	0.1310	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	7.0200	0.8700	8.0690	0.8619	0.1210	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	8.0920	0.8700	10.4606	0.9446	0.1040	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	8.4940	0.8700	8.7632	0.8825	0.1040	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	8.7500	0.8700	10.0575	0.8181	0.0940	0.055870	44.83	731.67	3894300.
58	3.25	0.0	-3.00	9.9080	0.8700	11.3885	0.9264	0.0940	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	10.2800	0.8700	11.8276	0.9618	0.0940	0.055847	45.07	733.67	3898700.
60	3.51	0.0	0.0	9.0760	0.8700	10.4322	0.7624	0.0840	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	10.6600	0.8700	12.2929	0.8950	0.0840	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	10.9400	0.8700	12.5747	0.9192	0.0840	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	11.3100	0.8700	13.0000	0.9497	0.0840	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	10.5700	0.8700	12.1494	0.7832	0.0740	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	13.1300	0.8700	15.0920	0.9733	0.0740	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	11.1700	0.8700	12.8391	0.8280	0.0740	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	10.6500	0.8700	12.2414	0.7892	0.0740	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	12.3100	0.8700	14.1494	0.8128	0.0660	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	14.1200	0.8700	16.2299	0.9316	0.0660	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	11.1900	0.8700	12.8621	0.7387	0.0660	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	16.4700	0.8700	18.9310	1.0870	0.0660	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	13.1300	0.8700	15.0920	0.8665	0.0660	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	14.6300	0.8700	16.8161	0.9653	0.0660	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	10.6500	0.8700	12.2414	0.7030	0.0660	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	11.0500	0.8700	12.7011	0.7748	0.0700	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	12.8800	0.8700	14.8046	0.8500	0.0660	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	13.2400	0.8700	15.2184	0.8737	0.0660	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	9.9800	0.8700	11.4713	0.8683	0.0870	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	9.1500	0.8700	10.5172	0.8181	0.0890	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	10.5400	0.8700	12.1149	0.8915	0.0850	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	9.3300	0.8700	10.7241	0.8572	0.0920	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	11.6100	0.8700	13.3448	0.9541	0.0820	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	11.2700	0.8700	12.9540	0.7439	0.0660	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	11.1800	0.8700	12.8506	0.7377	0.0660	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	7.7960	0.8700	8.9609	0.0	0.1180	0.066521	52.01	683.67	5684000.
97	4.00	0.0	0.0	10.6500	0.8700	12.2414	0.7873	0.0740	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	10.6400	0.8700	12.2299	0.7775	0.0730	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	11.6800	0.8700	13.4253	0.8212	0.0700	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	15.0200	0.8700	17.2644	0.9451	0.0630	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	14.2500	0.8700	16.3793	0.8936	0.0630	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	14.2800	0.8700	16.4138	0.8955	0.0630	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	12.3600	0.8700	14.2069	0.7761	0.0630	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	13.0800	0.8700	15.0345	0.8213	0.0630	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	11.0500	0.8700	12.7011	0.7441	0.0630	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	10.2500	0.8700	11.7816	0.8079	0.0790	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	9.8480	0.8700	11.3195	0.7761	0.0790	0.066764	120.72	738.67	6974400.

GAGE= 5058 X/L=0.3420 PHI=270.000 NRUN= 94

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	0.9700	1.0000	0.9700	1.7737	1.8194	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	0.8300	1.0000	0.8300	1.5076	1.8194	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	0.8500	1.0000	0.8500	1.5552	1.8194	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	0.7900	1.0000	0.7900	1.4464	1.8194	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	0.8300	1.0000	0.8300	1.5196	1.8194	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	0.7600	1.0000	0.7600	1.3961	1.8194	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	0.8400	1.0000	0.8400	1.5264	1.8194	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	0.8500	1.0000	0.8500	1.5486	1.8194	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	0.8600	1.0000	0.8600	1.5590	1.8194	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	0.8300	1.0000	0.8300	1.5063	1.8194	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	0.8500	1.0000	0.8500	1.5547	1.8194	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	0.8700	1.0000	0.8700	1.5875	1.8194	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	0.9100	1.0000	0.9100	1.6502	1.8194	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	0.8800	1.0000	0.8800	1.5961	1.8194	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	1.2300	1.0000	1.2300	2.2461	1.8194	0.052886	34.04	674.67	3782900.
17	3.02	4.50	-0.70	0.8700	1.0000	0.8700	1.5816	1.8194	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	0.9500	1.0000	0.9500	1.7333	1.8194	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	0.9300	1.0000	0.9300	1.6859	1.8194	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	0.9600	1.0000	0.9600	1.7489	1.8194	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	0.9900	1.0000	0.9900	1.7927	1.8194	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	1.0200	1.0000	1.0200	1.8549	1.8194	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	0.7300	1.0000	0.7300	1.3870	1.8194	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	0.9600	1.0000	0.9600	1.7391	1.8194	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	0.7400	1.0000	0.7400	1.3445	1.8194	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	0.7000	1.0000	0.7000	1.2648	1.8194	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	0.8300	1.0000	0.8300	1.5116	1.8194	0.056019	45.15	725.67	3990400.

TABLE VI (Continued)

28	3.24	1.60	-0.70	0.9600	1.0000	0.9600	1.7594	1.8194	0.056035	48.17	725.67	3992700.
29	3.24	0.30	0.0	1.0100	1.0000	1.0100	1.8435	1.8194	0.055889	44.91	726.67	3962100.
30	3.50	4.60	-0.40	0.8500	1.0000	0.8500	1.5428	1.8194	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	0.9500	1.0000	0.9500	1.7292	1.8194	0.055427	54.96	730.67	4180900.
32	3.50	1.40	0.20	1.0700	1.0000	1.0700	1.9469	1.8194	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	1.1100	1.0000	1.1100	2.0276	1.8194	0.055643	55.23	728.67	4219900.
34	3.75	0.30	0.0	1.0800	1.0000	1.0800	1.9656	1.8194	0.053050	61.92	739.67	4058400.
35	3.77	1.60	-0.60	1.0900	1.0000	1.0900	1.9786	1.8194	0.052582	61.87	739.67	4012800.
36	3.77	3.80	0.70	1.0200	1.0000	1.0200	1.8576	1.8194	0.052859	61.81	739.67	4009300.
37	3.77	5.00	0.10	0.8600	1.0000	0.8600	1.5642	1.8194	0.052874	61.88	738.67	4021600.
38	4.02	0.70	-0.60	1.1100	1.0000	1.1100	2.0120	1.8194	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	1.1100	1.0000	1.1100	2.0172	1.8194	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	1.0200	1.0000	1.0200	1.8488	1.8194	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	1.0300	1.0000	1.0300	1.8765	1.8194	0.055893	37.07	724.67	3726100.
42	3.01	5.00	-3.00	0.7700	1.0000	0.7700	1.4043	1.8194	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	1.0800	1.0000	1.0800	1.9750	1.8194	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	0.7800	1.0000	0.7800	1.4188	1.8194	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	0.9600	1.0000	0.9600	1.7523	1.8194	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	1.0200	1.0000	1.0200	1.8613	1.8194	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	0.9600	1.0000	0.9600	1.7462	1.8194	0.055794	36.96	723.67	3721900.
48	3.01	0.0	6.00	1.0800	1.0000	1.0800	1.9607	1.8194	0.055809	36.97	723.67	3722500.
49	3.01	0.0	-6.00	0.7300	1.0000	0.7300	1.3113	1.8194	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	0.8700	1.0000	0.8700	1.5758	1.8194	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	0.8600	1.0000	0.8600	1.5687	1.8194	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	0.7100	1.0000	0.7100	1.2988	1.8194	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	1.0500	1.0000	1.0500	1.9097	1.8194	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	0.7600	1.0000	0.7600	1.3894	1.8194	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	0.9800	1.0000	0.9800	1.7755	1.8194	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	0.9200	1.0000	0.9200	1.6754	1.8194	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	1.1500	1.0000	1.1500	2.0891	1.8194	0.055670	44.83	731.67	3884300.
58	3.25	0.0	-3.00	1.0600	1.0000	1.0600	1.9228	1.8194	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	0.7900	1.0000	0.7900	1.4450	1.8194	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	1.1000	1.0000	1.1000	1.9990	1.8194	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	1.0700	1.0000	1.0700	1.9467	1.8194	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	1.0800	1.0000	1.0800	1.9586	1.8194	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	0.9100	1.0000	0.9100	1.6491	1.8194	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.1900	1.0000	1.1900	2.1735	1.8194	0.052913	61.87	744.67	4000200.
65	3.76	0.0	-3.00	1.2300	1.0000	1.2300	2.2441	1.8194	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.0200	1.0000	1.0200	1.8661	1.8194	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	1.1400	1.0000	1.1400	2.0787	1.8194	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	1.1800	1.0000	1.1800	2.1399	1.8194	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.0000	1.0000	1.0000	1.8227	1.8194	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.1000	1.0000	1.1000	1.9952	1.8194	0.050848	72.87	737.67	4129500.
71	4.04	5.00	-3.00	0.9500	1.0000	0.9500	1.7201	1.8194	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.1400	1.0000	1.1400	2.0754	1.8194	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	0.9100	1.0000	0.9100	1.6502	1.8194	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.2900	1.0000	1.2900	2.3448	1.8194	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	1.4100	1.0000	1.4100	2.5689	1.8194	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	0.9300	1.0000	0.9300	1.6911	1.8194	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	1.3100	1.0000	1.3100	2.3616	1.8194	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	1.2300	1.0000	1.2300	2.2450	1.8194	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	1.0600	1.0000	1.0600	1.8370	1.8194	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	1.2600	1.0000	1.2600	2.2855	1.8194	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	1.2700	1.0000	1.2700	2.3092	1.8194	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	1.2800	1.0000	1.2800	2.3362	1.8194	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.3000	1.0000	1.3000	2.3717	1.8194	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	1.2700	1.0000	1.2700	2.3035	1.8194	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	0.8600	1.0000	0.8600	1.5576	1.8194	0.055521	52.01	683.67	5684000.
98	4.00	0.0	0.0	0.9500	1.0000	0.9500	1.7200	1.8194	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	1.0600	1.0000	1.0600	1.9300	1.8194	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	1.5400	1.0000	1.5400	2.8100	1.8194	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	1.0500	1.0000	1.0500	1.9100	1.8194	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	1.3700	1.0000	1.3700	2.4900	1.8194	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	1.3600	1.0000	1.3600	2.4700	1.8194	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	1.0600	1.0000	1.0600	1.9200	1.8194	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	1.3000	1.0000	1.3000	2.3700	1.8194	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	1.0800	1.0000	1.0900	1.9800	1.8194	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	1.0300	1.0000	1.0300	1.8800	1.8194	0.066764	120.72	738.67	6974400.

GAGE= 5059 X/L=0.9080 PHI=331.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	6.9837	0.8700	8.0272	0.6439	0.0922	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	6.3633	0.8700	7.3141	0.5867	0.0922	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	5.0056	0.8700	5.7536	0.7198	0.1438	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	7.0470	0.8700	8.1000	1.0130	0.1440	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	8.6320	0.8700	9.9218	1.2410	0.1440	0.057984	22.93	648.67	4073900.

TABLE VI (Continued)

7	2.24	0.60	-0.20	7.1450	0.8700	8.2126	1.0270	0.1440	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	6.8400	0.8700	7.8621	0.8482	0.1240	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	7.0190	0.8700	8.0678	0.8704	0.1240	0.056609	26.21	649.67	4060500.
10	2.50	1.60	-0.70	7.2910	0.8700	8.3805	0.9041	0.1240	0.056303	26.01	648.67	4031000.
11	2.50	1.50	0.20	5.8640	0.8700	6.7402	0.7272	0.1240	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	6.1880	0.8700	7.1126	0.6727	0.1090	0.055804	31.15	650.67	4211400.
13	2.76	3.60	1.30	7.7670	0.8700	8.9276	0.8443	0.1090	0.055575	31.03	650.67	4172900.
14	2.76	0.80	-0.80	6.2880	0.8700	7.2287	0.6836	0.1090	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	6.5030	0.8700	7.4747	0.7069	0.1090	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	7.4440	0.8700	8.5563	0.6811	0.0910	0.052886	34.04	674.67	3792900.
17	3.02	4.90	-0.70	7.1080	0.8700	8.1701	0.6596	0.0930	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	8.5260	0.8700	9.8000	0.7912	0.0930	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	7.1770	0.8700	8.2494	0.6661	0.0930	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	7.7960	0.8700	8.9609	0.7234	0.0930	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	9.1870	0.8700	10.5598	0.9105	0.0930	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	10.2600	0.8700	11.7931	0.9522	0.0980	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	5.7620	0.8700	6.6230	0.5347	0.0930	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	7.2640	0.8700	8.3494	0.6741	0.0930	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	10.9100	0.8700	12.5402	1.0120	0.0930	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	4.9750	0.8700	5.7184	0.4154	0.0840	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	6.5440	0.8700	7.5218	0.5465	0.0840	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	7.4580	0.8700	8.5724	0.6228	0.0840	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	7.2780	0.8700	8.3655	0.6077	0.0840	0.055888	44.91	726.67	3962100.
30	3.50	4.50	-0.40	5.1120	0.8700	5.8759	0.3844	0.0750	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	7.6350	0.8700	8.7759	0.5742	0.0750	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	7.9240	0.8700	9.1080	0.5959	0.0750	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	6.5860	0.8700	7.5701	0.4953	0.0750	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	7.8530	0.8700	9.0264	0.5183	0.0660	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	6.3350	0.8700	7.2816	0.4181	0.0660	0.052582	61.87	739.67	4012800.
36	3.77	3.80	0.70	7.0940	0.8700	8.1540	0.4682	0.0660	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	5.6480	0.8700	6.4920	0.3728	0.0660	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	7.1060	0.8700	8.1678	0.4171	0.0590	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	6.2660	0.8700	7.2023	0.3678	0.0590	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	5.0650	0.8700	5.8218	0.4705	0.0930	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	6.2040	0.8700	7.1310	0.5764	0.0930	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	9.9110	0.8700	11.3920	0.9207	0.0930	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	6.6340	0.8700	7.6253	0.6163	0.0930	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	6.1460	0.8700	7.0644	0.5710	0.0930	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	7.4170	0.8700	8.5253	0.6891	0.0930	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	9.2700	0.8700	10.6552	0.8612	0.0930	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	10.6700	0.8700	12.2644	0.9911	0.0980	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	10.9700	0.8700	12.6092	1.1430	0.0930	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	6.8420	0.8700	7.8644	0.6356	0.1040	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	7.3670	0.8700	8.4678	0.8119	0.1100	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	6.9490	0.8700	7.9874	0.8130	0.1040	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	10.2300	0.8700	11.7586	1.0660	0.1170	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	9.1930	0.8700	10.5667	1.1440	0.0990	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	7.7270	0.8700	8.8816	0.7666	0.1240	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	10.0200	0.8700	11.5172	0.9312	0.0990	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	6.5910	0.8700	7.5759	0.6123	0.0930	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	6.9570	0.8700	7.9966	0.5809	0.0840	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	4.3130	0.8700	4.9575	0.3601	0.0900	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	4.4270	0.8700	5.0885	0.3696	0.0840	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	6.3050	0.8700	7.2471	0.4723	0.0750	0.055388	55.08	740.67	4084500.
61	3.51	1.40	-0.20	6.0150	0.8700	6.9138	0.4505	0.0750	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	3.7770	0.8700	4.3414	0.2829	0.0810	0.055339	55.03	738.67	4097900.
63	3.51	5.00	0.0	4.1300	0.8700	4.7471	0.3093	0.0750	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	7.0210	0.8700	8.0701	0.4634	0.0660	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	3.9950	0.8700	4.5920	0.2637	0.0720	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	4.8500	0.8700	5.5747	0.3201	0.0660	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	5.3140	0.8700	6.1080	0.3507	0.0660	0.052832	61.80	740.67	4027900.
68	4.04	0.0	0.0	5.1810	0.8700	5.9552	0.3041	0.0590	0.050999	72.94	742.67	4086300.
69	4.04	5.00	0.0	3.6760	0.8700	4.2253	0.2158	0.0590	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	4.4360	0.8700	5.0989	0.2604	0.0590	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	9.3330	0.8700	10.7276	0.5478	0.0590	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	6.9060	0.8700	7.9379	0.4054	0.0590	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	8.2250	0.8700	9.4540	0.4828	0.0590	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	7.5710	0.8700	8.7023	0.4838	0.0590	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	10.5800	0.8700	12.1609	0.7281	0.0500	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	5.6640	0.8700	6.5103	0.3325	0.0690	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	6.0010	0.8700	6.8977	0.3523	0.0640	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	8.0460	0.8700	9.2483	0.6026	0.0750	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	9.4170	0.8700	10.8241	0.7722	0.0690	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	13.8100	0.8700	15.8736	0.9500	0.0820	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	9.7810	0.8700	11.2425	0.8783	0.0640	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	19.3900	0.8700	22.2874	1.2390	0.0900	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	6.4010	0.8700	7.3575	0.3757	0.0590	0.050972	72.83	740.67	4102400.

TABLE VI (Continued)

84	4.04	0.0	0.0	5.3740	0.8700	6.1770	0.3154	0.0690	0.060979	72.81	741.67	4092500.
85	3.01	0.0	0.0	7.4140	0.8700	8.5218	0.7859	0.1060	0.066521	92.01	689.67	5684000.
86	4.00	0.0	0.0	2.2010	0.8700	2.5299	0.1917	0.0680	0.089279	174.52	1438.70	3643600.
87	4.00	0.0	3.00	5.2850	0.8700	6.0747	0.3963	0.0690	0.089267	174.48	1438.70	3642800.
88	4.00	0.0	-3.00	3.0690	0.8700	3.5276	0.2119	0.0750	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	2.1210	0.8700	2.4379	0.1469	0.0690	0.089162	174.11	1437.70	3638000.
90	4.00	5.00	3.00	5.1310	0.8700	5.8977	0.3539	0.0690	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	6.1680	0.8700	7.0897	0.4250	0.0690	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	3.8450	0.8700	4.4195	0.3376	0.0880	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	4.7590	0.8700	5.4701	0.4569	0.0810	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	4.2730	0.8700	4.9115	0.3449	0.0960	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	2.0060	0.8700	2.3057	0.1380	0.0690	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	4.8660	0.8700	5.5931	0.1606	0.0330	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	2.3220	0.8700	2.6690	0.1539	0.0660	0.078417	140.45	1245.70	3551900.
98	4.00	0.0	0.0	2.7860	0.8700	3.2023	0.1822	0.0650	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	3.2350	0.8700	3.7184	0.2032	0.0630	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	4.0130	0.8700	4.6126	0.2244	0.0560	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	2.2410	0.8700	2.5759	0.1250	0.0860	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	5.8040	0.8700	6.6713	0.4127	0.0710	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	7.0400	0.8700	8.0920	0.5478	0.0650	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	3.4820	0.8700	4.0023	0.2277	0.0780	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	4.3990	0.8700	5.0563	0.2455	0.0560	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	2.1420	0.8700	2.4621	0.1508	0.0700	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	1.9880	0.8700	2.2851	0.1399	0.0700	0.066764	120.72	738.67	6974400.

GAGE= 5060 X/L=0 9380 PHI= 10.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	3.1036	0.8700	3.5674	0.2846	0.0917	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	2.8462	0.8700	3.2715	0.2610	0.0917	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	2.2989	0.8700	2.6424	0.3292	0.1432	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	2.6927	0.8700	3.0951	0.3856	0.1432	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	2.5293	0.8700	2.9072	0.3622	0.1432	0.057984	22.93	646.67	4073900.
7	2.24	0.60	-0.20	2.4344	0.8700	2.7982	0.3486	0.1432	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	2.4489	0.8700	2.8148	0.3022	0.1234	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	3.1224	0.8700	3.5890	0.3853	0.1234	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	2.4182	0.8700	2.7795	0.2984	0.1234	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	2.4352	0.8700	2.7991	0.3005	0.1234	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	2.5490	0.8700	2.9299	0.2758	0.1082	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	3.5333	0.8700	4.0613	0.3823	0.1082	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	2.5582	0.8700	2.9405	0.2768	0.1082	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	2.8457	0.8700	3.2709	0.3079	0.1082	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	3.0790	0.8700	3.5391	0.2805	0.0911	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	2.5764	0.8700	2.9614	0.2378	0.0923	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	3.3835	0.8700	3.8891	0.3123	0.0923	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	2.4810	0.8700	2.8517	0.2290	0.0923	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	2.9957	0.8700	3.4433	0.2765	0.0923	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	2.4540	0.8700	2.8207	0.2265	0.0923	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	3.4875	0.8700	4.0086	0.3219	0.0923	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	2.7356	0.8700	3.1444	0.2525	0.0923	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	4.6046	0.8700	5.2926	0.4250	0.0923	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	2.1430	0.8700	2.4632	0.1978	0.0923	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	2.4609	0.8700	2.8286	0.2045	0.0831	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	3.1324	0.8700	3.6005	0.2603	0.0831	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	2.4753	0.8700	2.8452	0.2057	0.0831	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	1.6270	0.8700	1.8701	0.1352	0.0831	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	2.0254	0.8700	2.3280	0.1515	0.0748	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	2.8396	0.8700	3.2639	0.2124	0.0748	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	2.1203	0.8700	2.4371	0.1586	0.0748	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	2.0535	0.8700	2.3603	0.1536	0.0748	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	2.4353	0.8700	2.7992	0.1600	0.0657	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	2.2374	0.8700	2.5717	0.1470	0.0657	0.052582	61.87	739.67	4012800.
36	3.77	3.80	0.70	2.7458	0.8700	3.1561	0.1804	0.0657	0.052659	61.81	739.67	4009300.
37	3.77	5.00	0.10	2.0746	0.8700	2.3846	0.1363	0.0657	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	3.1558	0.8700	3.6274	0.1843	0.0584	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	3.4332	0.8700	3.9462	0.2005	0.0584	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	2.8214	0.8700	3.2430	0.2607	0.0924	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	4.7132	0.8700	5.4175	0.4355	0.0924	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	2.1732	0.8700	2.4979	0.2008	0.0924	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	1.9177	0.8700	2.2043	0.1772	0.0924	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	5.6916	0.8700	6.5421	0.5259	0.0924	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	2.8106	0.8700	3.2306	0.2597	0.0924	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	2.5108	0.8700	2.8860	0.2320	0.0924	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	3.2965	0.8700	3.7891	0.3046	0.0924	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	2.3364	0.8700	2.6855	0.2292	0.0981	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	7.1310	0.8700	8.1966	0.6589	0.0924	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	1.7411	0.8700	2.0013	0.1950	0.1120	0.055797	36.98	722.67	3730600.

TABLE VI (Continued)

51	3.01	-5.00	3.00	2.1567	0.8700	2.4780	0.2478	0.1149	0.055717	36.88	722.67	3719800.
52	3.01	-5.00	-3.00	3.4711	0.8700	3.9898	0.3787	0.1091	0.055794	37.00	721.67	3738600.
53	3.01	-5.00	6.00	3.3620	0.8700	3.8628	0.3952	0.1179	0.055717	36.91	720.67	3738600.
54	3.01	-5.00	-6.00	6.7736	0.8700	7.7856	0.7207	0.1064	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	3.2187	0.8700	3.7008	0.2875	0.0924	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	2.5952	0.8700	2.9830	0.2398	0.0924	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	1.5812	0.8700	1.8175	0.1314	0.0831	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	3.6486	0.8700	4.1938	0.3032	0.0831	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	2.5343	0.8700	2.9130	0.2106	0.0831	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	2.2373	0.8700	2.5716	0.1668	0.0746	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	1.8767	0.8700	2.1571	0.1400	0.0746	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	4.3981	0.8700	5.0553	0.3281	0.0746	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	2.1622	0.8700	2.4853	0.1613	0.0746	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.4353	0.8700	1.6498	0.0943	0.0657	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	4.3501	0.8700	5.0001	0.2858	0.0657	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	2.0563	0.8700	2.3636	0.1351	0.0657	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	2.5008	0.8700	2.8745	0.1643	0.0657	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	3.1969	0.8700	3.6746	0.1867	0.0584	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	3.3493	0.8700	3.8498	0.1956	0.0584	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	3.3596	0.8700	3.8616	0.1962	0.0584	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	2.3185	0.8700	2.6649	0.1354	0.0584	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	2.4812	0.8700	2.8520	0.1449	0.0584	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	2.8236	0.8700	3.2455	0.1649	0.0584	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.5171	0.8700	1.7438	0.0886	0.0584	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	1.3841	0.8700	1.5909	0.0872	0.0630	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	4.3168	0.8700	4.9618	0.2521	0.0584	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	4.7620	0.8700	5.4736	0.2781	0.0584	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	1.8909	0.8700	2.1734	0.1456	0.0770	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	3.7213	0.8700	4.2774	0.2977	0.0800	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	5.2527	0.8700	6.0376	0.3887	0.0740	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	4.2696	0.8700	4.9076	0.3548	0.0831	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	6.4025	0.8700	7.3592	0.4565	0.0713	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	2.9589	0.8700	3.4010	0.1728	0.0584	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	3.1558	0.8700	3.6274	0.1843	0.0584	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	2.0891	0.8700	2.4013	0.2204	0.1055	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	4.1487	0.8700	4.7686	0.2846	0.0686	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	2.1283	0.8700	2.4463	0.1460	0.0686	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	6.8280	0.8700	7.8483	0.4684	0.0686	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	4.3343	0.8700	4.9820	0.2969	0.0685	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	3.1516	0.8700	3.6225	0.2162	0.0686	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	2.7143	0.8700	3.1199	0.1862	0.0686	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	4.3104	0.8700	4.9545	0.3888	0.0902	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	2.2551	0.8700	2.5921	0.2113	0.0937	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	4.4919	0.8700	5.1631	0.3899	0.0868	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	5.1401	0.8700	5.9082	0.3921	0.0685	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	7.3465	0.8700	8.4443	0.2417	0.0329	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	6.4530	0.8700	7.4172	0.4259	0.0660	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	6.3395	0.8700	7.2868	0.4127	0.0651	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	6.7920	0.8700	7.8069	0.4245	0.0625	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	5.9496	0.8700	6.8386	0.3308	0.0556	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	4.7243	0.8700	5.4302	0.2622	0.0555	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	2.0479	0.8700	2.3539	0.1495	0.0730	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	2.1370	0.8700	2.4563	0.1622	0.0759	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	5.4040	0.8700	6.2115	0.3799	0.0703	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	6.4595	0.8700	7.4247	0.3585	0.0555	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	4.3310	0.8700	4.9782	0.3036	0.0701	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	4.2867	0.8700	4.9272	0.3005	0.0701	0.066764	120.72	738.67	6974400.

GAGE= 5061 X/L=0.9380 PHI=315.000 NRUN=106

RUN	MACH	ALPHA	BETA	MIHU*TH	TUR FAC	MIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	3.8811	0.8700	4.4610	0.3559	0.0917	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	3.6281	0.8700	4.1702	0.3327	0.0917	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	8.1314	0.8700	9.3464	1.1636	0.1431	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	5.0077	0.8700	5.7560	0.7166	0.1431	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	7.2739	0.8700	8.3608	1.0409	0.1431	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	5.1467	0.8700	5.9157	0.7365	0.1431	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	7.7026	0.8700	8.8536	0.9505	0.1234	0.056426	26.13	648.67	4048600.
9	2.50	2.80	0.80	5.3055	0.8700	6.0983	0.6547	0.1234	0.056509	26.21	648.67	4060500.
10	2.50	1.60	-0.70	8.9068	0.8700	10.2377	1.0991	0.1234	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	3.9700	0.8700	4.5632	0.4899	0.1234	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	7.4547	0.8700	8.5686	0.8066	0.1082	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	4.0379	0.8700	4.6413	0.4369	0.1082	0.055575	31.03	650.67	4172900.
14	2.76	0.80	-0.80	8.7292	0.8700	10.0336	0.9445	0.1082	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	2.8956	0.8700	3.3283	0.3133	0.1082	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	4.3117	0.8700	4.9560	0.3928	0.0911	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	4.9416	0.8700	5.6799	0.4561	0.0923	0.055320	36.67	721.67	3686600.

TABLE VI (Continued)

18	3.02	4.60	1.30	3.6804	0.8700	4.2303	0.3397	0.0923	0.056824	37.48	721.67	3767500.
19	3.02	1.60	-0.70	4.3684	0.8700	5.0211	0.4032	0.0923	0.056518	36.90	723.67	3684700.
20	3.02	0.20	-0.10	3.7248	0.8700	4.2814	0.3438	0.0923	0.056635	36.94	722.67	3706100.
21	3.02	0.0	3.00	4.6067	0.8700	5.2951	0.4252	0.0923	0.056646	36.97	721.67	3716800.
22	3.02	0.0	-3.00	2.0910	0.8700	2.4034	0.1818	0.1010	0.056483	36.88	721.67	3708300.
23	3.02	5.00	0.0	5.2633	0.8700	6.0498	0.4858	0.0923	0.056576	37.01	721.67	3720800.
24	3.02	5.00	3.00	4.0412	0.8700	4.6451	0.3730	0.0923	0.056698	37.04	721.67	3723800.
25	3.02	5.00	-3.00	7.3424	0.8700	8.4395	0.6777	0.0923	0.056538	36.96	721.67	3719700.
26	3.24	4.40	-0.60	3.7747	0.8700	4.3387	0.3133	0.0830	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	2.6048	0.8700	2.9940	0.2162	0.0830	0.056018	45.15	726.67	3980400.
28	3.24	1.50	-0.70	4.5470	0.8700	5.2264	0.3774	0.0830	0.056035	45.17	726.67	3982700.
29	3.24	0.30	0.0	1.9747	0.8700	2.2698	0.1639	0.0830	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	3.0789	0.8700	3.5390	0.2303	0.0748	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	2.9599	0.8700	3.4022	0.2214	0.0748	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	2.1992	0.8700	2.5278	0.1645	0.0748	0.055430	54.98	729.67	4182000.
33	3.50	0.40	-0.30	2.0120	0.8700	2.3126	0.1505	0.0748	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	10.7839	0.8700	12.3953	0.7085	0.0657	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	2.5266	0.8700	2.9041	0.1660	0.0657	0.052562	61.87	739.67	4012800.
36	3.77	3.90	0.70	2.2953	0.8700	2.6383	0.1508	0.0657	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	2.2618	0.8700	2.5998	0.1486	0.0657	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	4.2158	0.8700	4.8457	0.2462	0.0584	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	3.1181	0.8700	3.5840	0.1821	0.0584	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	5.8171	0.8700	6.6863	0.5375	0.0924	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	3.5758	0.8700	4.1101	0.3304	0.0924	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	7.7576	0.8700	8.9168	0.7168	0.0924	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	4.4729	0.8700	5.1413	0.4133	0.0924	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	9.7446	0.8700	11.2007	0.9004	0.0924	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	4.1569	0.8700	4.7780	0.3841	0.0924	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	4.5065	0.8700	5.1799	0.4164	0.0924	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	2.0714	0.8700	2.3809	0.2090	0.1009	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	4.2543	0.8700	4.8900	0.3931	0.0924	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	10.3071	0.8700	11.8472	1.1245	0.1091	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	3.0490	0.8700	3.5046	0.3235	0.1061	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	6.1095	0.8700	7.0224	0.6024	0.0986	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	6.2930	0.8700	7.2356	0.7277	0.1156	0.055794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	4.6677	0.8700	5.3652	0.4313	0.0924	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	6.4392	0.8700	7.4014	0.8152	0.1266	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	1.9049	0.8700	2.1895	0.1922	0.1009	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	4.1039	0.8700	4.7171	0.3792	0.0924	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	2.3916	0.8700	2.7490	0.1985	0.0830	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	3.2738	0.8700	3.7630	0.2989	0.0913	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	5.1060	0.8700	5.8690	0.4238	0.0830	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	2.7130	0.8700	3.1184	0.2024	0.0750	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	2.2292	0.8700	2.5623	0.1663	0.0746	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	3.7867	0.8700	4.3525	0.3124	0.0825	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	3.5496	0.8700	4.0800	0.2648	0.0746	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	3.6058	0.8700	4.1446	0.2369	0.0657	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	6.3533	0.8700	7.3026	0.4057	0.0733	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	2.6971	0.8700	3.1001	0.1772	0.0657	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	2.6195	0.8700	3.0109	0.1721	0.0657	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	3.8870	0.8700	4.4678	0.2270	0.0584	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	6.5462	0.8700	7.5244	0.3823	0.0584	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	7.6678	0.8700	8.8136	0.4478	0.0584	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	7.7414	0.8700	8.8982	0.4521	0.0584	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	3.7414	0.8700	4.3005	0.2185	0.0584	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	11.4360	0.8700	13.1448	0.7056	0.0617	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	5.5120	0.8700	6.3356	0.3218	0.0584	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	4.5771	0.8700	5.2610	0.2673	0.0584	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	4.7892	0.8700	5.5048	0.3544	0.0740	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	7.0502	0.8700	8.1037	0.4632	0.0657	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	3.5896	0.8700	4.1260	0.2545	0.0709	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	9.3707	0.8700	10.7709	0.5941	0.0634	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	6.7683	0.8700	7.7797	0.5462	0.0807	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	13.6866	0.8700	15.7317	0.7993	0.0584	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	7.9870	0.8700	9.1805	0.7356	0.0921	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	3.6764	0.8700	4.2257	0.2147	0.0584	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	4.0137	0.8700	4.6134	0.2344	0.0584	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	3.2597	0.8700	3.7468	0.3439	0.1055	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	4.8740	0.8700	5.6023	0.3343	0.0686	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	3.6647	0.8700	4.2123	0.2514	0.0686	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	6.8766	0.8700	7.9041	0.5295	0.0770	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	6.7679	0.8700	7.7792	0.4636	0.0685	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	4.5146	0.8700	5.1892	0.3097	0.0686	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	8.3105	0.8700	9.5523	0.5701	0.0686	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	5.6286	0.8700	6.4697	0.4683	0.0832	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	3.8280	0.8700	4.4000	0.2848	0.0744	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	8.3651	0.8700	9.6151	0.7905	0.0945	0.089260	174.33	1442.70	3624100.

TABLE VI (Continued)

95	4.00	0.0	0.0	5.5737	0.8700	6.4066	0.3818	0.0685	0.089282	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	8.6800	0.8700	8.9885	0.2859	0.0328	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	5.0712	0.8700	5.8280	0.3347	0.0660	0.078417	140.45	1245.70	3661900.
98	4.00	0.0	0.0	4.3763	0.8700	5.0302	0.2849	0.0651	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	4.3782	0.8700	5.0336	0.2737	0.0625	0.064521	102.46	882.67	3816300.
100	4.00	0.0	0.0	6.0188	0.8700	6.9193	0.3347	0.0556	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	7.2973	0.8700	8.3877	0.4060	0.0555	0.047081	60.21	736.67	3484200.
102	4.00	-5.00	0.0	5.6508	0.8700	6.4952	0.3803	0.0673	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	6.0083	0.8700	6.9061	0.3623	0.0603	0.047188	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	8.0353	0.8700	9.2360	0.6147	0.0765	0.047128	60.33	736.67	3498600.
105	4.00	0.0	0.0	5.0000	0.8700	5.7471	0.2776	0.0555	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	5.0314	0.8700	5.7832	0.3527	0.0701	0.066420	119.94	737.67	6920200.
107	4.00	0.70	-0.60	4.5748	0.8700	5.2585	0.3207	0.0701	0.066764	120.72	738.67	6974400.

GAGE= 5062 X/L=0.9260 PHI= 0.0 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	6.9887	0.8700	7.5732	0.6055	0.0919	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	6.2535	0.8700	7.1879	0.5747	0.0919	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	2.7057	0.8700	3.1100	0.3880	0.1434	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	4.7957	0.8700	5.5123	0.6877	0.1434	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	2.9630	0.8700	3.4057	0.4249	0.1434	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	3.1067	0.8700	3.5709	0.4455	0.1434	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	3.0404	0.8700	3.4947	0.3761	0.1237	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	5.2506	0.8700	6.0352	0.6495	0.1237	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	3.5150	0.8700	4.0402	0.4348	0.1237	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	4.4107	0.8700	5.0698	0.5456	0.1237	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	3.0194	0.8700	3.4706	0.3273	0.1084	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	6.2657	0.8700	7.2020	0.6792	0.1084	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	3.6836	0.8700	4.2340	0.3993	0.1084	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	4.7878	0.8700	5.5032	0.5190	0.1084	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	6.9430	0.8700	7.9805	0.6332	0.0912	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	3.3762	0.8700	3.8807	0.3123	0.0925	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	6.2411	0.8700	7.1737	0.5773	0.0925	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	4.6595	0.8700	5.3557	0.4310	0.0925	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	6.8368	0.8700	7.8584	0.6324	0.0925	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	8.0130	0.8700	9.2103	0.7412	0.0925	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	5.5243	0.8700	6.3498	0.5110	0.0925	0.055483	36.89	721.67	3708300.
23	3.02	5.60	0.0	3.7589	0.8700	4.3206	0.3477	0.0925	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	10.2811	0.8700	11.8174	0.9510	0.0925	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	5.2973	0.8700	6.0889	0.4900	0.0925	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	5.3462	0.8700	6.1451	0.4448	0.0832	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	7.0745	0.8700	8.1316	0.5886	0.0832	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	8.9207	0.8700	10.2537	0.7422	0.0832	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	9.4250	0.8700	10.8333	0.7823	0.0830	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	5.9200	0.8700	6.8046	0.4434	0.0750	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	8.6000	0.8700	9.8851	0.6441	0.0750	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	6.0060	0.8700	6.9034	0.4498	0.0750	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	9.0780	0.8700	10.4345	0.6800	0.0750	0.055543	55.23	728.67	4219900.
34	3.75	0.30	0.0	7.6320	0.8700	8.7724	0.5022	0.0660	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	10.2300	0.8700	11.7586	0.6732	0.0660	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	8.5500	0.8700	9.8276	0.5626	0.0660	0.052559	61.81	738.67	4009300.
37	3.77	5.00	0.10	7.0620	0.8700	8.1172	0.4623	0.0660	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	9.3390	0.8700	10.7345	0.5463	0.0580	0.051391	72.74	742.67	4122800.
39	4.02	6.0	0.0	10.2600	0.8700	11.7931	0.6002	0.0580	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	3.7700	0.8700	4.3333	0.3491	0.0930	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	8.0160	0.8700	9.2138	0.7423	0.0930	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	6.6430	0.8700	7.6356	0.6151	0.0930	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	12.1800	0.8700	14.0000	1.1280	0.0930	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	5.5430	0.8700	6.3713	0.5133	0.0930	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	6.6020	0.8700	7.5885	0.6113	0.0930	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	7.4800	0.8700	8.5977	0.6926	0.0930	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	6.0670	0.8700	6.9736	0.5618	0.0930	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	13.6100	0.8700	15.6437	1.2600	0.0930	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	5.2250	0.8700	6.0057	0.4838	0.0930	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	6.5770	0.8700	7.5598	0.7412	0.1130	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	9.2850	0.8700	10.6724	1.0460	0.1130	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	5.9720	0.8700	6.8644	0.6731	0.1130	0.055784	37.00	721.67	3739600.
53	3.01	-5.00	6.00	12.6700	0.8700	14.5632	1.4260	0.1130	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	5.3380	0.8700	6.1356	0.6011	0.1130	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	6.1210	0.8700	7.0356	0.5668	0.0930	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	6.5420	0.8700	7.5195	0.6058	0.0930	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	9.7440	0.8700	11.2000	0.8107	0.0830	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	5.0590	0.8700	5.8149	0.4209	0.0830	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	4.9610	0.8700	5.7023	0.4127	0.0830	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	8.0340	0.8700	9.2345	0.6002	0.0750	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	8.1560	0.8700	9.3747	0.6092	0.0750	0.055442	55.16	741.67	4082200.

TABLE VI (Continued)

62	3.51	0.0	-3.00	4.7420	0.8700	5.4805	0.3542	0.0780	0.055339	55.03	738.67	4087500.
63	3.51	5.00	0.0	5.6090	0.8700	6.4471	0.4190	0.0760	0.055364	55.11	736.67	4120500.
64	3.76	0.0	0.0	8.3700	0.8700	10.7701	0.6166	0.0660	0.052813	61.87	744.67	4000200.
65	3.76	0.0	-3.00	4.0840	0.8700	4.7057	0.2694	0.0660	0.052842	61.98	746.67	3984700.
66	3.76	5.00	0.0	6.3030	0.8700	7.2448	0.4147	0.0660	0.052847	61.84	748.67	3965800.
67	3.76	1.80	-0.60	8.7070	0.8700	11.1575	0.6387	0.0660	0.052832	61.90	740.67	4027800.
68	4.04	0.0	0.0	8.4700	0.8700	10.8851	0.5540	0.0580	0.050998	72.84	742.67	4086300.
69	4.04	5.00	0.0	6.8110	0.8700	7.8287	0.3985	0.0580	0.050813	72.79	738.67	4113400.
70	4.04	5.00	3.00	10.7300	0.8700	12.3333	0.6277	0.0580	0.050848	72.87	737.67	4128500.
71	4.04	5.00	-3.00	10.5800	0.8700	12.1724	0.6193	0.0580	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	17.9500	0.8700	20.1724	1.0270	0.0580	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	10.9200	0.8700	12.9917	0.6388	0.0580	0.050939	73	738.67	4105000.
74	4.04	0.0	3.00	16.1900	0.8700	18.5632	0.9449	0.0580	0.050984	72.80	740.67	4100000.
75	4.04	0.0	6.00	18.1100	0.8700	20.8161	1.0990	0.0580	0.050966	72.85	738.67	4111700.
76	4.04	0.0	-6.00	9.2990	0.8700	10.6839	0.5438	0.0580	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	4.6060	0.8700	5.2943	0.2695	0.0580	0.050963	72.84	738.67	4111200.
78	4.04	-5.00	0.0	8.7080	0.8700	10.0103	0.6767	0.0780	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	11.0300	0.8700	12.6782	0.8557	0.0780	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	8.1230	0.8700	10.4862	0.7079	0.0780	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	12.8800	0.8700	14.8046	0.9980	0.0770	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	13.3000	0.8700	15.2874	1.0310	0.0770	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	8.7970	0.8700	10.1115	0.5145	0.0580	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	9.0780	0.8700	10.4356	0.5311	0.0580	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	6.6640	0.8700	7.6598	0.7044	0.1060	0.069521	52.01	683.67	5684000.
86	4.00	0.0	0.0	3.0340	0.8700	3.4874	0.2084	0.0690	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	6.0770	0.8700	6.9851	0.4175	0.0690	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	3.6330	0.8700	4.1759	0.2496	0.0690	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	5.4400	0.8700	6.2529	0.3732	0.0690	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	5.8470	0.8700	6.7207	0.4017	0.0690	0.089322	174.70	1438.70	364[illegible]00.
91	4.00	5.00	-3.00	5.8290	0.8700	6.7000	0.4004	0.0690	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	4.7040	0.8700	5.4069	0.4281	0.0910	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	4.8400	0.8700	5.5632	0.4389	0.0910	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	4.9460	0.8700	5.6851	0.4496	0.0810	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	3.9730	0.8700	4.5667	0.2726	0.0690	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	8.4460	0.8700	9.7080	0.2779	0.0330	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	6.3300	0.8700	7.2759	0.4184	0.0660	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	6.3070	0.8700	7.2494	0.4112	0.0650	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	6.4280	0.8700	7.3885	0.4024	0.0630	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	8.6170	0.8700	9.9046	0.4800	0.0560	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	5.1710	0.8700	5.9437	0.2875	0.0560	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	6.0390	0.8700	6.9414	0.4445	0.0740	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	8.4240	0.8700	9.6828	0.6200	0.0740	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	4.6610	0.8700	5.3575	0.3430	0.0740	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	7.9960	0.8700	9.1908	0.4446	0.0560	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	4.5310	0.8700	5.2080	0.3181	0.0700	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	4.2820	0.8700	4.9218	0.3006	0.0700	0.066764	120.72	738.67	6974400.

GAGE= 5181 X/L=0.0560 PHI=,35.000 NRUN=105

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	1.0931	1.0000	1.0931	0.4320	0.3952	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	1.0838	1.0000	1.0838	0.4283	0.3952	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	0.9921	1.0000	0.9921	0.4401	0.4436	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	1.1053	1.0000	1.1053	0.4934	0.4464	0.057880	22.88	644.67	4099100.
6	2.24	1.80	-0.70	0.9445	1.0000	0.9445	0.4206	0.4453	0.057884	22.83	648.67	4073900.
7	2.24	0.60	-0.20	0.9565	1.0000	0.9565	0.4306	0.4502	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	1.0345	1.0000	1.0345	0.4349	0.4204	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	1.1183	1.0000	1.1183	0.4766	0.4262	0.056508	26.21	649.67	4060500.
10	2.50	1.60	-0.70	0.9343	1.0000	0.9343	0.3985	0.4265	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	0.9676	1.0000	0.9676	0.4155	0.4294	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	1.0908	1.0000	1.0908	0.4386	0.4021	0.055804	31.15	650.67	4211400.
13	2.76	3.60	1.30	1.1827	1.0000	1.1827	0.4843	0.4095	0.055575	31.03	650.67	4172800.
14	2.76	0.80	-0.80	1.1173	1.0000	1.1173	0.4629	0.4143	0.055639	31.07	652.67	4169800.
15	2.76	0.20	0.10	1.0267	1.0000	1.0267	0.4309	0.4197	0.055712	31.17	651.67	4181800.
16	3.01	0.0	0.0	1.1909	1.0000	1.1909	0.4691	0.3939	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	1.1373	1.0000	1.1373	0.4215	0.3706	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	1.2332	1.0000	1.2332	0.4653	0.3773	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	1.0065	1.0000	1.0065	0.3899	0.3874	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	1.1184	1.0000	1.1184	0.4436	0.3963	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	1.0966	1.0000	1.0966	0.4460	0.4067	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	1.4973	1.0000	1.4973	0.5784	0.3863	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	1.1697	1.0000	1.1697	0.4336	0.3707	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	1.2471	1.0000	1.2471	0.4784	0.3836	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	1.1251	1.0000	1.1251	0.4039	0.3590	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	1.0347	1.0000	1.0347	0.3782	0.3655	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	1.2242	1.0000	1.2242	0.4538	0.3707	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	1.0218	1.0000	1.0218	0.3898	0.3815	0.056035	45.17	725.67	3992700.

TABLE VI (Continued)

29	3.24	0.30	0.0	1.0130	1.0000	1.0130	0.3951	0.3900	0.056889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	1.0621	1.0000	1.0621	0.3813	0.3590	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	1.2298	1.0000	1.2298	0.4458	0.3625	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	0.9112	1.0000	0.9112	0.3457	0.3794	0.055430	54.98	728.67	4192000.
33	3.50	0.40	-0.30	1.1495	1.0000	1.1495	0.4387	0.3825	0.055543	55.23	728.67	4219800.
34	3.75	0.30	0.0	1.0571	1.0000	1.0571	0.3886	0.3676	0.053050	61.92	738.67	4068400.
35	3.77	1.50	-0.50	1.0790	1.0000	1.0790	0.3879	0.3695	0.052882	61.87	738.67	4012800.
36	3.77	3.80	0.70	1.1749	1.0000	1.1749	0.4126	0.3511	0.052898	61.81	738.67	4009300.
37	3.77	5.00	0.10	1.1963	1.0000	1.1963	0.4088	0.3418	0.052874	61.88	738.67	4021600.
38	4.02	0.70	-0.60	1.2923	1.0000	1.2923	0.4864	0.3524	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	1.0634	1.0000	1.0634	0.3809	0.3582	0.051364	72.81	738.67	4159800.
40	3.01	5.00	0.0	1.1444	1.0000	1.1444	0.4249	0.3713	0.056079	37.09	722.67	3741700.
41	3.01	5.00	3.00	1.2709	1.0000	1.2709	0.4884	0.3843	0.056093	37.07	724.67	3729100.
42	3.01	5.00	-3.00	1.1774	1.0000	1.1774	0.4234	0.3686	0.056046	37.01	724.67	3718800.
43	3.01	5.00	6.00	1.2989	1.0000	1.2989	0.5128	0.3948	0.056792	36.89	724.67	3706300.
44	3.01	5.00	-6.00	1.6427	1.0000	1.6427	0.6682	0.3466	0.056744	36.88	724.67	3709200.
45	3.01	0.0	0.0	1.1136	1.0000	1.1136	0.4436	0.3903	0.056836	37.00	724.67	3717700.
46	3.01	0.0	[illegible]	1.1492	1.0000	1.1492	0.4603	0.4075	0.056708	36.93	724.67	3711100.
47	3.01	0.0	.00	1.5682	1.0000	1.5682	0.6069	0.3870	0.056784	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.3577	1.0000	1.3577	0.5628	0.4146	0.056809	36.97	723.67	3722500.
49	3.01	0.0	-6.00	2.0521	1.0000	2.0521	0.7648	0.3727	0.056968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	1.4559	1.0000	1.4559	0.6053	0.4159	0.056797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	1.0368	1.0000	1.0368	0.4368	0.4213	0.056717	36.88	722.67	3719800.
52	3.01	-5.00	-3.00	1.9679	1.0000	1.9679	0.8031	0.4081	0.056794	37.00	721.67	3739500.
53	3.01	-5.00	6.00	0.9201	1.0000	0.9201	0.3905	0.4244	0.056717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	1.8701	1.0000	1.8701	0.7837	0.3978	0.056783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	1.5416	1.0000	1.5416	0.5866	0.3870	0.056874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.0924	1.0000	1.0924	0.4351	0.3983	0.056871	37.02	725.67	3712900.
57	3.25	0.0	0.0	1.1185	1.0000	1.1185	0.4380	0.3916	0.055670	44.83	731.67	3884300.
58	3.25	0.0	-3.00	1.5944	1.0000	1.5944	0.6057	0.3799	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	1.1259	1.0000	1.1259	0.4104	0.3645	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	1.0713	1.0000	1.0713	0.4116	0.3842	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	0.9694	1.0000	0.9694	0.3649	0.3764	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	1.5951	1.0000	1.5951	0.5937	0.3722	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	1.1588	1.0000	1.1588	0.4130	0.3964	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.1122	1.0000	1.1122	0.4105	0.3691	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	1.6863	1.0000	1.6863	0.5663	0.3570	0.052942	61.98	746.67	3994790.
66	3.76	5.00	0.0	1.1907	1.0000	1.1907	0.4065	0.3414	0.052947	61.94	748.67	3968800.
68	4.04	0.0	0.0	1.1106	1.0000	1.1106	0.3878	0.3582	0.050989	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.1662	1.0000	1.1662	0.3853	0.3304	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.3226	1.0000	1.3226	0.4539	0.3432	0.050948	72.87	737.67	4120500.
71	4.04	5.00	-3.00	1.0874	1.0000	1.0874	0.3435	0.3159	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.3194	1.0000	1.3194	0.4676	0.3544	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	1.4970	1.0000	1.4970	0.4491	0.3000	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	1.1362	1.0000	1.1362	0.4187	0.3685	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	1.5125	1.0000	1.5125	0.5699	0.3768	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	2.2952	1.0000	2.2952	0.7620	0.3320	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	1.6590	1.0000	1.6590	0.5740	0.3460	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	1.4770	1.0000	1.4770	0.5589	0.3784	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	1.1526	1.0000	1.1526	0.4442	0.3854	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	1.9618	1.0000	1.9618	0.7243	0.3692	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	1.1604	1.0000	1.1604	0.4529	0.3803	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	2.2877	1.0000	2.2877	0.8183	0.3577	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.0712	1.0000	1.0712	0.3837	0.3582	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	1.0818	1.0000	1.0818	0.3875	0.3582	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	0.9638	1.0000	0.9638	0.4368	0.4532	0.066521	52.01	683.67	5684000.
86	4.00	0.0	0.0	0.7314	1.0000	0.7314	0.2952	0.4036	0.089278	174.52	1438.70	3643600.
87	4.00	0.0	3.00	1.0617	1.0000	1.0617	0.4405	0.4149	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	1.4192	1.0000	1.4192	0.5535	0.3900	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	1.0830	1.0000	1.0830	0.4033	0.3724	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	1.2278	1.0000	1.2278	0.4753	0.3871	0.089322	174.70	1436.70	3647500.
91	4.00	5.00	-3.00	1.2621	1.0000	1.2621	0.4498	0.3564	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	1.4786	1.0000	1.4786	0.6280	0.4284	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	1.1015	1.0000	1.1015	0.4765	0.4326	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	1.6311	1.0000	1.6311	0.6769	0.4150	0.089260	174.33	1440.70	3624100.
95	4.00	0.0	0.0	1.2616	1.0000	1.2616	0.5088	0.4033	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	1.3910	1.0000	1.3910	0.2718	0.1954	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	1.2554	1.0000	1.2554	0.4815	0.3815	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	1.2057	1.0000	1.2057	0.4689	0.3889	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	1.2229	1.0000	1.2229	0.4586	0.3750	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	1.1351	1.0000	1.1351	0.3857	0.3398	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	1.0310	1.0000	1.0310	0.3223	0.3126	0.047081	60.21	736.67	3484200.
102	4.00	-5.00	0.0	1.5228	1.0000	1.5228	0.5450	0.3579	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	1.0655	1.0000	1.0655	0.3888	0.3649	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	1.9994	1.0000	1.9994	0.6988	0.3495	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	1.1416	1.0000	1.1416	0.3871	0.3391	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	1.2846	1.0000	1.2846	0.5362	0.4174	0.066420	119.54	737.67	6920200.

TABLE VI (Continued)

107 4.00 0.70 -0.60 1.2698 1.0000 1.2698 0.6300 0.4174 0.066764 120.72 738.67 6974400.

GAGE= 5241 X/L=0.0140 PHI= 31.500 NRUN=105

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	2.8101	1.0000	2.8101	1.4090	0.5014	0.092884	34.04	676.67	3783800.
2	3.01	0.0	0.0	3.2210	1.0000	3.2210	1.6150	0.5014	0.092848	33.84	677.67	3767200.
4	2.24	2.40	-0.60	4.3281	1.0000	4.3281	2.9838	0.6898	0.088067	23.14	637.67	4209300.
5	2.24	2.60	0.80	3.8882	1.0000	3.8882	2.1448	0.5516	0.087860	22.88	644.67	4068100.
6	2.24	1.80	-0.70	3.1864	1.0000	3.1864	1.7626	0.5514	0.087884	22.83	648.67	4073800.
7	2.24	0.60	-0.20	3.2210	1.0000	3.2210	1.7783	0.5524	0.088088	23.00	648.67	4077600.
8	2.50	3.20	-0.60	3.7471	1.0000	3.7471	1.9842	0.5322	0.086426	26.13	648.67	4048000.
9	2.50	2.80	0.80	4.6430	1.0000	4.6430	2.4886	0.5362	0.086808	26.21	648.67	4060900.
10	2.50	1.60	-0.70	3.6787	1.0000	3.6787	1.8731	0.5308	0.086303	26.01	648.67	4031000.
11	2.50	1.90	0.20	3.2946	1.0000	3.2946	1.7503	0.5378	0.086307	26.03	648.67	4042600.
12	2.76	3.80	-0.60	3.3428	1.0000	3.3428	1.7400	0.5209	0.086804	31.16	650.67	4211400.
13	2.76	3.60	1.30	4.0280	1.0000	4.0280	2.1139	0.5247	0.086579	31.03	650.67	4172600.
14	2.76	0.80	-0.80	3.0288	1.0000	3.0288	1.6001	0.5283	0.086838	31.07	652.67	4158900.
15	2.76	0.20	0.10	2.9243	1.0000	2.9243	1.3389	0.5304	0.086712	31.17	651.67	4181600.
16	3.01	0.0	0.0	3.6080	1.0000	3.6080	1.8040	0.5000	0.092886	34.04	674.67	3782900.
17	3.02	4.50	-0.70	4.0200	1.0000	4.0200	1.8660	0.4650	0.086320	36.67	721.67	3686600.
18	3.02	4.60	1.30	3.4680	1.0000	3.4680	1.6890	0.4830	0.086824	37.48	721.67	3767900.
19	3.02	1.60	-0.70	3.3440	1.0000	3.3440	1.6760	0.4890	0.086918	36.90	723.67	3694700.
20	3.02	0.20	-0.10	3.1330	1.0000	3.1330	1.5770	0.5030	0.086838	36.94	722.67	3706100.
21	3.02	0.0	3.00	3.5390	1.0000	3.5390	1.7680	0.5060	0.086846	36.97	721.67	3716800.
22	3.02	0.0	-3.00	3.2990	1.0000	3.2990	1.6680	0.4990	0.086483	36.89	721.67	3708300.
23	3.02	5.00	0.0	3.8580	1.0000	3.8580	1.8850	0.4890	0.086576	37.01	721.67	3720800.
24	3.02	5.00	3.00	3.1480	1.0000	3.1480	1.5120	0.4950	0.086598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	3.9150	1.0000	3.9150	1.9360	0.4800	0.086538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	3.9780	1.0000	3.9780	1.9360	0.4840	0.086976	45.05	726.67	3974400.
27	3.24	5.20	1.70	3.0790	1.0000	3.0790	1.4680	0.4860	0.086019	45.19	725.67	3990400.
28	3.24	1.50	-0.70	3.0280	1.0000	3.0280	1.5040	0.4940	0.086038	45.17	725.67	3992700.
29	3.24	0.30	0.0	2.6700	1.0000	2.6700	1.3310	0.4980	0.085889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	4.4950	1.0000	4.4950	2.1560	0.4770	0.085407	54.99	727.67	4209800.
31	3.50	5.30	1.50	3.3340	1.0000	3.3340	1.5680	0.4780	0.085427	54.98	730.67	4180900.
32	3.50	1.40	0.20	2.9160	1.0000	2.9160	1.4290	0.4910	0.085430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	2.5810	1.0000	2.5810	1.2740	0.4930	0.085543	55.23	728.67	4219900.
34	3.75	0.30	0.0	2.3620	1.0000	2.3620	1.1220	0.4750	0.053060	61.92	739.67	4058400.
35	3.77	1.50	-0.50	2.9490	1.0000	2.9490	1.3930	0.4700	0.052682	61.87	739.67	4012800.
36	3.77	3.90	0.70	3.3000	1.0000	3.3000	1.5190	0.4640	0.052658	61.81	739.67	4009300.
37	3.77	5.00	0.10	4.0580	1.0000	4.0580	1.8540	0.4570	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	2.4920	1.0000	2.4920	1.1540	0.4610	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	2.3840	1.0000	2.3840	1.1060	0.4640	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	3.3450	1.0000	3.3450	1.6370	0.4890	0.092879	37.09	722.67	3741700.
41	3.01	5.00	3.00	2.8780	1.0000	2.8780	1.3850	0.4960	0.092893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	3.7540	1.0000	3.7540	1.8620	0.4810	0.092846	37.01	724.67	3718800.
43	3.01	5.00	6.00	3.2340	1.0000	3.2340	1.5230	0.5010	0.092752	36.88	724.67	3706300.
44	3.01	5.00	-6.00	3.7070	1.0000	3.7070	1.8560	0.4710	0.092744	36.88	724.67	3705200.
45	3.01	0.0	0.0	2.6960	1.0000	2.6960	1.3600	0.5040	0.092838	37.00	724.67	3717700.
46	3.01	0.0	3.00	3.2950	1.0000	3.2950	1.6490	0.5070	0.092788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	2.9950	1.0000	2.9950	1.5170	0.5000	0.092794	36.96	723.67	3721000.
48	3.01	0.0	6.00	3.2900	1.0000	3.2900	1.6260	0.5070	0.092805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	2.9240	1.0000	2.9240	1.4820	0.4940	0.092968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	2.6070	1.0000	2.6070	1.3180	0.5060	0.092797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	2.5430	1.0000	2.5430	1.2890	0.5020	0.092717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	2.4590	1.0000	2.4590	1.2340	0.5070	0.092794	37.00	721.67	3738500.
53	3.01	-5.00	6.00	2.7550	1.0000	2.7550	1.3930	0.4960	0.092717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	2.4140	1.0000	2.4140	1.1980	0.5060	0.092783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	2.8920	1.0000	2.8920	1.4650	0.5000	0.092874	37.08	722.67	3741000.
56	3.01	0.0	0.0	2.6930	1.0000	2.6930	1.3590	0.5040	0.092871	37.02	725.67	3712900.
57	3.25	0.0	0.0	2.8210	1.0000	2.8210	1.4080	0.4990	0.092670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	2.7360	1.0000	2.7360	1.3730	0.4940	0.092860	45.07	734.67	3892000.
59	3.25	5.00	0.0	3.8370	1.0000	3.8370	1.8810	0.4820	0.092847	45.07	733.67	3899700.
60	3.51	0.0	0.0	2.0430	1.0000	2.0430	1.0060	0.4920	0.092389	55.08	740.67	4084600.
61	3.51	1.40	-0.20	2.7550	1.0000	2.7550	1.3470	0.4880	0.092442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	2.4110	1.0000	2.4110	1.1950	0.4870	0.092339	55.03	738.67	4097500.
63	3.51	5.00	0.0	4.0110	1.0000	4.0110	1.9030	0.4740	0.092354	55.11	736.67	4120500.
64	3.76	0.0	0.0	1.9070	1.0000	1.9070	0.9071	0.4760	0.092913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	2.3080	1.0000	2.3080	1.1060	0.4700	0.092942	61.98	746.67	3984700.
66	3.76	5.00	0.0	4.7510	1.0000	4.7510	2.1710	0.4570	0.092947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	2.5940	1.0000	2.5940	1.2200	0.4700	0.092832	61.90	740.67	4027900.
68	4.04	0.0	0.0	2.6630	1.0000	2.6630	1.2350	0.4640	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	6.7070	1.0000	6.7070	2.9820	0.4450	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	2.8310	1.0000	2.8310	1.2810	0.4520	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	5.8860	1.0000	5.8860	2.5610	0.4350	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	3.2380	1.0000	3.2380	1.4880	0.4590	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	6.3120	1.0000	6.3120	2.6750	0.4240	0.050925	72.73	739.67	4105000.

TABLE VI (Continued)

74	4.04	0.0	3.00	3.0020	1.0000	3.0020	1.4050	0.4680	0.050884	72.90	740.67	4106000.
75	4.04	0.0	6.00	3.4820	1.0000	3.4820	1.6370	0.4700	0.050866	72.85	739.67	4111700.
76	4.04	0.0	-6.00	2.9500	1.0000	2.9500	1.3280	0.4600	0.050857	72.82	739.67	4110200.
77	4.04	0.0	-3.00	2.6340	1.0000	2.6340	1.2070	0.4680	0.050863	72.84	739.67	4111200.
78	4.04	-5.00	0.0	3.0370	1.0000	3.0370	1.4300	0.4710	0.050847	72.80	739.67	4108600.
79	4.04	-5.00	3.00	2.9140	1.0000	2.9140	1.3680	0.4700	0.050873	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	2.6700	1.0000	2.6700	1.2640	0.4700	0.050866	72.85	739.67	4111700.
81	4.04	-5.00	6.00	3.1730	1.0000	3.1730	1.4820	0.4670	0.051001	72.85	739.67	4117400.
82	4.04	-5.00	-6.00	2.6350	1.0000	2.6350	1.2280	0.4660	0.050857	72.82	739.67	4110200.
83	4.04	0.0	0.0	2.8180	1.0000	2.8180	1.3640	0.4640	0.050872	72.83	740.67	4102400.
84	4.04	0.0	0.0	2.6440	1.0000	2.6440	1.2260	0.4640	0.050875	72.81	741.67	4092500.
85	3.01	0.0	0.0	1.6830	1.0000	1.6830	0.8462	0.5720	0.066921	92.01	683.67	5684000.
86	4.00	0.0	0.0	0.6087	1.0000	0.6087	0.3120	0.5126	0.088276	174.52	1438.70	3643000.
87	4.00	0.0	3.00	2.9120	1.0000	2.9120	1.2870	0.5160	0.088267	174.48	1438.70	3642800.
88	4.00	0.0	-3.00	2.7820	1.0000	2.7820	1.4090	0.5060	0.088307	174.60	1440.70	3637100.
89	4.00	5.00	0.0	2.9700	1.0000	2.9700	1.2690	0.4920	0.088162	174.11	1437.70	3638000.
90	4.00	5.00	3.00	2.9010	1.0000	2.9010	1.2980	0.5010	0.088322	174.70	1438.70	3647900.
91	4.00	5.00	-3.00	2.8720	1.0000	2.8720	1.4330	0.4920	0.088307	174.61	1438.70	3641000.
92	4.00	-5.00	0.0	2.9790	1.0000	2.9790	1.3340	0.5180	0.088268	174.42	1438.70	3637700.
93	4.00	-5.00	3.00	2.9780	1.0000	2.9780	1.3300	0.5160	0.088244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	2.9510	1.0000	2.9510	1.3180	0.5170	0.088260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	0.6102	1.0000	0.6102	0.3125	0.5121	0.088282	174.48	1441.70	3631300.
97	4.00	0.0	0.0	3.5540	1.0000	3.5540	1.7760	0.5000	0.076417	140.45	1245.70	3651800.
98	4.00	0.0	0.0	3.3230	1.0000	3.3230	1.6960	0.4980	0.070603	120.00	1091.70	4033000.
99	4.00	0.0	0.0	3.3990	1.0000	3.3990	1.6380	0.4820	0.064921	102.46	982.67	3816300.
100	4.00	0.0	0.0	3.1620	1.0000	3.1620	1.3940	0.4410	0.047013	60.24	728.67	3944500.
101	4.00	5.00	0.0	5.4310	1.0000	5.4310	2.2900	0.4220	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	3.6670	1.0000	3.6670	1.6360	0.4460	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	3.7420	1.0000	3.7420	1.6680	0.4460	0.047109	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	3.3460	1.0000	3.3460	1.4900	0.4450	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	3.0950	1.0000	3.0950	1.3620	0.4400	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	3.3350	1.0000	3.3350	1.8100	0.5430	0.066420	118.54	737.67	6920200.
107	4.00	0.70	-0.60	3.2700	1.0000	3.2700	1.7750	0.5430	0.066764	120.72	738.67	6974400.

GAGE= 5242 X/L=0.0400 PHI=180.000 NRUN=106

RUN	MACH	ALPHA	BETA	MIHU*TH	TUR FAC	MIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	1.4518	1.0000	1.4518	0.6314	0.4349	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	1.4371	1.0000	1.4371	0.6280	0.4349	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	1.5361	1.0000	1.5361	0.7533	0.4904	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	1.4569	1.0000	1.4569	0.7146	0.4905	0.057880	22.88	644.67	4099100.
6	2.24	1.80	-0.70	1.4943	1.0000	1.4943	0.7322	0.4900	0.057984	22.93	648.67	4073800.
7	2.24	0.60	-0.20	1.4601	1.0000	1.4601	0.7134	0.4886	0.058088	23.00	648.67	4077600.
8	2.50	3.20	-0.60	1.5431	1.0000	1.5431	0.7387	0.4787	0.056426	26.13	649.67	4046600.
9	2.50	2.80	0.80	1.5877	1.0000	1.5877	0.7594	0.4783	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	1.5530	1.0000	1.5530	0.7397	0.4763	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	1.4837	1.0000	1.4837	0.7064	0.4761	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	1.5916	1.0000	1.5916	0.7603	0.4714	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	1.6333	1.0000	1.6333	0.7696	0.4712	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	1.4573	1.0000	1.4573	0.6781	0.4653	0.055638	31.07	652.67	4159500.
15	2.76	0.20	0.10	1.3952	1.0000	1.3952	0.6460	0.4630	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	1.5326	1.0000	1.5326	0.6644	0.4335	0.052886	34.04	674.67	3792900.
17	3.02	4.60	-0.70	1.5710	1.0000	1.5710	0.7046	0.4485	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	1.5488	1.0000	1.5488	0.6948	0.4486	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	1.4578	1.0000	1.4578	0.6455	0.4428	0.055818	36.90	723.67	3694700.
20	3.02	0.20	-0.10	1.4354	1.0000	1.4354	0.6287	0.4380	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	1.4881	1.0000	1.4881	0.6503	0.4370	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	1.5332	1.0000	1.5332	0.6700	0.4379	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	1.5378	1.0000	1.5378	0.6903	0.4489	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	1.4558	1.0000	1.4558	0.6535	0.4489	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	1.5166	1.0000	1.5166	0.6808	0.4489	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	1.4667	1.0000	1.4667	0.6524	0.4448	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	1.4617	1.0000	1.4617	0.6515	0.4457	0.056018	45.15	725.67	3990400.
28	3.24	1.50	-0.70	1.4887	1.0000	1.4887	0.6516	0.4377	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	1.4009	1.0000	1.4009	0.6070	0.4333	0.055888	44.91	726.67	3962100.
30	3.50	4.50	-0.40	1.4630	1.0000	1.4630	0.6449	0.4408	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	1.4614	1.0000	1.4614	0.6458	0.4419	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	1.4721	1.0000	1.4721	0.6364	0.4323	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	1.4366	1.0000	1.4366	0.6153	0.4283	0.055543	55.23	728.67	4219800.
34	3.75	0.30	0.0	1.4132	1.0000	1.4132	0.5804	0.4107	0.053050	61.92	739.67	4056400.
35	3.77	1.50	-0.50	1.4492	1.0000	1.4492	0.6023	0.4156	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	1.5310	1.0000	1.5310	0.6476	0.4230	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	1.4971	1.0000	1.4971	0.6364	0.4251	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	1.3998	1.0000	1.3998	0.5619	0.4014	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	1.5038	1.0000	1.5038	0.5988	0.3982	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	1.5560	1.0000	1.5560	0.6999	0.4498	0.055878	37.09	722.67	3741700.
41	3.01	5.00	3.00	1.5459	1.0000	1.5459	0.6952	0.4497	0.055893	37.07	724.67	3725100.

TABLE VI (Continued)

42	3.01	5.00	-3.00	1.7038	1.0000	1.7038	0.7662	0.4497	0.056846	37.01	724.67	3718800.
43	3.01	5.00	6.00	1.6924	1.0000	1.6924	0.7609	0.4496	0.056752	36.99	724.67	3706300.
44	3.01	5.00	-6.00	1.6968	1.0000	1.6968	0.7628	0.4496	0.056744	36.98	724.67	3705200.
45	3.01	0.0	0.0	1.4739	1.0000	1.4739	0.6457	0.4381	0.056838	37.00	724.67	3717700.
46	3.01	0.0	3.00	1.5569	1.0000	1.5569	0.6816	0.4378	0.056788	36.99	724.67	3711100.
47	3.01	0.0	-3.00	1.5640	1.0000	1.5640	0.6847	0.4378	0.056784	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.5178	1.0000	1.5178	0.6636	0.4372	0.056806	36.97	723.67	3722500.
49	3.01	0.0	-6.00	1.5803	1.0000	1.5803	0.6853	0.4372	0.056868	37.23	721.67	3702800.
50	3.01	-5.00	0.0	1.3748	1.0000	1.3748	0.5692	0.4111	0.056787	36.98	722.67	3730600.
51	3.01	-5.00	3.00	1.3638	1.0000	1.3638	0.5603	0.4108	0.056717	36.88	722.67	3718000.
52	3.01	-5.00	-3.00	1.3703	1.0000	1.3703	0.5628	0.4108	0.056784	37.00	721.67	3730500.
53	3.01	-5.00	6.00	1.3467	1.0000	1.3467	0.5520	0.4088	0.056717	36.81	720.67	3730600.
54	3.01	-5.00	-6.00	1.4078	1.0000	1.4078	0.5876	0.4088	0.056783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	1.5464	1.0000	1.5464	0.6770	0.4378	0.056874	37.06	728.67	3741000.
56	3.01	0.0	0.0	1.4748	1.0000	1.4748	0.6461	0.4381	0.056871	37.02	729.67	3712000.
57	3.29	0.0	0.0	1.4824	1.0000	1.4824	0.6494	0.4320	0.056670	44.83	731.67	3884300.
58	3.29	0.0	-3.00	1.5960	1.0000	1.5960	0.6718	0.4318	0.056800	45.07	734.67	3882000.
59	3.29	5.00	0.0	1.6096	1.0000	1.6096	0.7193	0.4499	0.056847	45.07	733.67	3886700.
60	3.91	0.0	0.0	1.4311	1.0000	1.4311	0.6062	0.4290	0.056388	99.08	740.67	4084600.
61	3.91	1.40	-0.20	1.5260	1.0000	1.5260	0.6987	0.4308	0.056442	99.16	741.67	4082200.
62	3.91	0.0	-3.00	1.5471	1.0000	1.5471	0.6572	0.4248	0.056338	99.03	738.67	4087900.
63	3.91	5.00	0.0	1.6005	1.0000	1.6005	0.7042	0.4400	0.056394	99.11	736.67	4120900.
64	3.76	0.0	0.0	1.4081	1.0000	1.4081	0.5769	0.4084	0.092813	61.87	744.67	4000200.
65	3.76	0.0	-3.00	1.5463	1.0000	1.5463	0.6338	0.4091	0.092842	61.98	746.67	3984700.
66	3.76	5.00	0.0	1.5825	1.0000	1.5825	0.6727	0.4251	0.092847	61.84	748.67	3969800.
67	3.76	1.90	-0.50	1.4820	1.0000	1.4820	0.6188	0.4196	0.092332	61.90	740.67	4027800.
68	4.04	0.0	0.0	1.5618	1.0000	1.5618	0.6219	0.3982	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	1.6733	1.0000	1.6733	0.6841	0.4148	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	1.5742	1.0000	1.5742	0.6828	0.4147	0.050948	72.87	737.67	4128500.
71	4.04	5.00	-3.00	1.6822	1.0000	1.6822	0.6876	0.4147	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.6510	1.0000	1.6510	0.6840	0.4143	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	1.7000	1.0000	1.7000	0.7043	0.4143	0.050929	72.73	738.67	4109000.
74	4.04	0.0	3.00	1.5237	1.0000	1.5237	0.6063	0.3979	0.050984	72.80	740.67	4106000.
75	4.04	0.0	6.00	1.5686	1.0000	1.5686	0.6228	0.3971	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	1.6046	1.0000	1.6046	0.6372	0.3971	0.050957	72.82	738.67	4110200.
77	4.04	0.0	-3.00	1.5391	1.0000	1.5391	0.6124	0.3979	0.050969	72.84	738.67	4111200.
78	4.04	-5.00	0.0	1.4647	1.0000	1.4647	0.5393	0.3682	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	1.4501	1.0000	1.4501	0.5336	0.3679	0.050373	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	1.5102	1.0000	1.5102	0.5556	0.3679	0.050966	72.85	738.67	4111700.
81	4.04	-5.00	6.00	1.3645	1.0000	1.3645	0.5005	0.3668	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	1.4185	1.0000	1.4185	0.5203	0.3668	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	1.5595	1.0000	1.5595	0.6194	0.3982	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	1.5083	1.0000	1.5083	0.6006	0.3982	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	1.5945	1.0000	1.5945	0.7942	0.4981	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	0.7176	1.0000	0.7176	0.3199	0.4458	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	1.3704	1.0000	1.3704	0.6105	0.4455	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	1.4095	1.0000	1.4095	0.6278	0.4454	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	1.3840	1.0000	1.3840	0.6405	0.4628	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	1.3857	1.0000	1.3857	0.6417	0.4631	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	1.4490	1.0000	1.4490	0.6706	0.4628	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	1.3509	1.0000	1.3509	0.5575	0.4127	0.089269	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	1.3608	1.0000	1.3608	0.5602	0.4121	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	1.3796	1.0000	1.3796	0.5684	0.4120	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	1.3940	1.0000	1.3940	0.6208	0.4454	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	1.1386	1.0000	1.1386	0.2531	0.2223	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	1.4113	1.0000	1.4113	0.6115	0.4333	0.078417	140.45	1246.70	3651900.
98	4.00	0.0	0.0	1.4043	1.0000	1.4043	0.6051	0.4309	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	1.4418	1.0000	1.4418	0.5995	0.4158	0.064521	103.46	982.67	3816300.
100	4.00	0.0	0.0	1.4225	1.0000	1.4225	0.5377	0.3780	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	1.5307	1.0000	1.5307	0.6008	0.3925	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	1.3837	1.0000	1.3837	0.4826	0.3487	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	1.3780	1.0000	1.3780	0.4805	0.3487	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	1.4223	1.0000	1.4223	0.4958	0.3486	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	1.4203	1.0000	1.4203	0.5386	0.3771	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	1.4750	1.0000	1.4750	0.7002	0.4747	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	1.4784	1.0000	1.4784	0.7018	0.4747	0.066764	120.72	738.67	6974400.

GAGE= 5259 X/L=0.4730 PHI= 37.500 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	2.9800	0.8700	3.4253	0.3033	0.1019	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	2.7900	0.8700	3.2068	0.2845	0.1019	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	2.1600	0.8700	2.4828	0.3433	0.1585	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	1.9200	0.8700	2.2069	0.3050	0.1585	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	2.2700	0.8700	2.6092	0.3593	0.1585	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	2.2700	0.8700	2.6092	0.3600	0.1585	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	2.4300	0.8700	2.7931	0.3318	0.1368	0.056426	26.13	649.67	4048600.

TABLE VI (Continued)

9	2.50	2.80	0.80	2.4300	0.8700	2.7931	0.3322	0.1368	0.056509	26.21	649.67	4060600.
10	2.50	1.60	-0.70	2.4600	0.8700	2.8276	0.3366	0.1368	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	2.3900	0.8700	2.7471	0.3268	0.1368	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	2.5800	0.8700	2.9655	0.3098	0.1200	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	2.6500	0.8700	3.0460	0.3184	0.1200	0.055675	31.03	650.67	4172800.
14	2.76	0.80	-0.80	3.4900	0.8700	4.0115	0.4185	0.1200	0.055638	31.07	652.67	4159600.
15	2.76	0.20	0.10	2.8600	0.8700	3.2874	0.3428	0.1200	0.055712	31.17	651.67	4181800.
16	3.01	0.0	0.0	3.3000	0.8700	3.7931	0.3336	0.1012	0.052886	34.04	674.67	3782800.
17	3.02	4.60	-0.70	2.4900	0.8700	2.8621	0.2551	0.1024	0.056320	36.67	721.67	3686600.
18	3.02	4.60	1.30	2.3900	0.8700	2.7471	0.2447	0.1024	0.056024	37.48	721.67	3767600.
19	3.02	1.60	-0.70	2.7800	0.8700	3.1954	0.2843	0.1024	0.056518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	2.8300	0.8700	3.2528	0.2900	0.1024	0.056535	36.84	722.67	3706100.
21	3.02	0.0	3.00	2.7400	0.8700	3.1491	0.3032	0.1106	0.056546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	2.9300	0.8700	3.3678	0.3000	0.1024	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	2.4400	0.8700	2.8046	0.2503	0.1024	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	2.0900	0.8700	2.4023	0.2142	0.1024	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	2.6400	0.8700	3.0348	0.2699	0.1024	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	2.8800	0.8700	3.3103	0.2662	0.0923	0.056876	45.05	726.67	3974400.
27	3.24	5.20	1.70	2.6600	0.8700	3.0575	0.2452	0.0923	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	3.0200	0.8700	3.4713	0.2789	0.0923	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	2.9500	0.8700	3.3908	0.2719	0.0923	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	3.0500	0.8700	3.5057	0.2533	0.0831	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	2.2700	0.8700	2.6092	0.1884	0.0831	0.055427	54.95	730.67	4180900
32	3.50	1.40	0.20	2.7700	0.8700	3.1839	0.2300	0.0831	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	3.1300	0.8700	3.5977	0.2598	0.0831	0.055543	55.23	728.67	4219900.
34	3.76	0.30	0.0	2.9700	0.8700	3.4138	0.2173	0.0731	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	0.9986	0.8700	1.1478	0.0730	0.0731	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	2.5300	0.8700	2.9080	0.1846	0.0731	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	3.2500	0.8700	3.7356	0.2116	0.0731	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	1.4547	0.8700	1.6721	0.0947	0.0651	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	1.6574	0.8700	1.9051	0.1079	0.0651	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	2.7600	0.8700	3.1724	0.2827	0.1026	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	2.4100	0.8700	2.7701	0.2477	0.1026	0.055893	37.07	724.67	3725100.
42	3.01	5.00	-3.00	3.0800	0.8700	3.5402	0.3158	0.1026	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	3.0100	0.8700	3.4598	0.3087	0.1026	0.055752	36.89	724.67	3706300.
44	3.01	5.00	-6.00	2.8800	0.8700	3.3103	0.2956	0.1026	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	3.1000	0.8700	3.5632	0.3180	0.1026	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	3.2300	0.8700	3.7126	0.3584	0.1108	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	3.0600	0.8700	3.5172	0.3135	0.1026	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	2.8600	0.8700	3.2874	0.3383	0.1182	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	2.9300	0.8700	3.3678	0.3297	0.1126	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	3.6200	0.8700	4.1609	0.4325	0.1196	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	2.8500	0.8700	3.2759	0.3668	0.1289	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	3.2800	0.8700	3.7701	0.3665	0.1119	0.055794	37.00	721.67	3738500.
53	3.01	-5.00	6.00	2.9900	0.8700	3.4368	0.4165	0.1393	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	3.0800	0.8700	3.5402	0.3163	0.1026	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	2.9500	0.8700	3.3908	0.3025	0.1026	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	3.0700	0.8700	3.5287	0.3147	0.1026	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	3.4000	0.8700	3.9080	0.3135	0.0923	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	3.2900	0.8700	3.7816	0.3035	0.0923	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	2.6500	0.8700	3.0460	0.2448	0.0923	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	3.3300	0.8700	3.8276	0.2759	0.0829	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	3.1800	0.8700	3.6552	0.2640	0.0829	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	3.3800	0.8700	3.8851	0.2789	0.0829	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	2.9700	0.8700	3.4138	0.2460	0.0829	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	3.4200	0.8700	3.9310	0.2497	0.0731	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	3.4600	0.8700	3.9770	0.2530	0.0731	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	3.2000	0.8700	3.6782	0.2340	0.0731	0.052947	61.94	748.67	3965800.
67	3.76	1.50	-0.50	3.2500	0.8700	3.7356	0.2376	0.0731	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	3.4800	0.8700	4.0000	0.2268	0.0651	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	3.3200	0.8700	3.8161	0.2160	0.0651	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	2.6900	0.8700	3.0920	0.1750	0.0650	0.050848	72.87	737.67	4129500.
71	4.04	5.00	-3.00	3.0400	0.8700	3.4943	0.1977	0.0651	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	2.3800	0.8700	2.7356	0.1549	0.0651	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	3.4100	0.8700	3.9195	0.2220	0.0651	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	3.7100	0.8700	4.2644	0.2674	0.0721	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	3.0700	0.8700	3.5287	0.2437	0.0795	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	3.4600	0.8700	3.9770	0.2250	0.0651	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	3.5000	0.8700	4.0230	0.2279	0.0651	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	3.8400	0.8700	4.4138	0.3108	0.0809	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	2.8600	0.8700	3.2874	0.2584	0.0905	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	2.4000	0.8700	2.7586	0.1751	0.0731	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	3.2600	0.8700	3.7471	0.3302	0.1013	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	3.1300	0.8700	3.5977	0.2040	0.0651	0.050957	72.82	738.67	4110200.
83	4.04	0.0	0.0	3.4300	0.8700	3.9425	0.2236	0.0651	0.050972	72.83	740.67	4102400.
84	4.04	0.0	0.0	3.4800	0.8700	4.0000	0.2265	0.0651	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	5.8400	0.8700	6.7126	0.5799	0.0651	0.065521	52.01	683.67	5684000.

TABLE VI (Continued)

86	4.00	0.0	0.0	2.2800	0.8700	2.6207	0.1732	0.0758	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	2.2600	0.8700	2.5977	0.1693	0.0639	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	2.2700	0.8700	2.6092	0.1721	0.0757	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	1.9500	0.8700	2.2414	0.1475	0.0757	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	2.2100	0.8700	2.5402	0.1675	0.0758	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	2.0700	0.8700	2.3793	0.1571	0.0758	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	2.1900	0.8700	2.5172	0.2065	0.0841	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	2.0700	0.8700	2.3793	0.2178	0.1051	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	2.2600	0.8700	2.5977	0.1917	0.0850	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	2.2000	0.8700	2.5287	0.1666	0.0757	0.089292	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	2.8400	0.8700	3.2644	0.1046	0.0368	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	2.2200	0.8700	2.5517	0.1621	0.0730	0.078417	140.45	1245.70	3661900.
98	4.00	0.0	0.0	2.2700	0.8700	2.6092	0.1642	0.0722	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	2.2800	0.8700	2.6207	0.1580	0.0694	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	2.5900	0.8700	2.9770	0.1603	0.0620	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	2.2200	0.8700	2.5517	0.1375	0.0619	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	2.4800	0.8700	2.8506	0.1904	0.0768	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	2.0400	0.8700	2.3448	0.1753	0.0859	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	2.5900	0.8700	2.9770	0.1799	0.0695	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	2.4000	0.8700	2.7586	0.1485	0.0619	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	2.7900	0.8700	3.2069	0.2174	0.0778	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	2.7500	0.8700	3.1609	0.2141	0.0778	0.066764	120.72	738.67	6974400.

GAGE= 5260 X/L=0.4710 PHI= 35.000 NRUN=106

RUN	MACH	ALPHA	BETA	HIHU*TH	TUR FAC	HIHU*TS	HRTT/HR	HU/HR	HR	PT	TT	RE/FT
1	3.01	0.0	0.0	1.9462	0.8700	2.2370	0.2282	0.1020	0.052894	34.04	675.67	3783900.
2	3.01	0.0	0.0	1.8253	0.8700	2.0980	0.2140	0.1020	0.052848	33.94	677.67	3757200.
4	2.24	2.40	-0.60	2.0628	0.8700	2.3710	0.2418	0.1020	0.058067	23.14	637.67	4209300.
5	2.24	2.60	0.80	1.3137	0.8700	1.5100	0.2401	0.1590	0.057850	22.88	644.67	4099100.
6	2.24	1.80	-0.70	1.4312	0.8700	1.6451	0.2615	0.1590	0.057984	22.93	648.67	4073900.
7	2.24	0.60	-0.20	1.3459	0.8700	1.5470	0.2460	0.1590	0.058088	23.00	649.67	4077600.
8	2.50	3.20	-0.60	1.3485	0.8700	1.5500	0.2464	0.1590	0.056426	26.13	649.67	4048600.
9	2.50	2.80	0.80	1.5730	0.8700	1.8080	0.2477	0.1370	0.056509	26.21	649.67	4060500.
10	2.50	1.60	-0.70	1.5338	0.8700	1.7630	0.2415	0.1370	0.056303	26.01	649.67	4031000.
11	2.50	1.50	0.20	1.4825	0.8700	1.7040	0.2334	0.1370	0.056307	26.03	648.67	4042600.
12	2.75	3.80	-0.60	1.5182	0.8700	1.7451	0.2390	0.1370	0.055904	31.15	650.67	4211400.
13	2.76	3.60	1.30	1.8401	0.8700	2.1151	0.2538	0.1200	0.055575	31.03	650.67	4172900.
14	2.76	0.90	-0.80	2.0915	0.8700	2.4040	0.2885	0.1200	0.055639	31.07	652.67	4159500.
15	2.76	0.20	0.10	1.8949	0.8700	2.1780	0.2614	0.1200	0.055712	31.17	651.67	4181900.
16	3.01	0.0	0.0	2.0271	0.8700	2.3300	0.2353	0.1010	0.052886	34.04	674.67	3792900.
17	3.02	4.50	-0.70	1.7339	0.8700	1.9930	0.2053	0.1030	0.055320	36.67	721.67	3686600.
18	3.02	4.60	1.30	1.6835	0.8700	1.9351	0.1993	0.1030	0.055924	37.48	721.67	3767500.
19	3.02	1.60	-0.70	1.9175	0.8700	2.2040	0.2270	0.1030	0.055518	36.90	723.67	3694700.
20	3.02	0.20	-0.10	1.9027	0.8700	2.1870	0.2253	0.1030	0.055535	36.94	722.67	3706100.
21	3.02	0.0	3.00	1.7504	0.8700	2.0120	0.2213	0.1100	0.055546	36.97	721.67	3716800.
22	3.02	0.0	-3.00	1.9671	0.8700	2.2610	0.2329	0.1030	0.055483	36.89	721.67	3708300.
23	3.02	5.00	0.0	1.7165	0.8700	1.9730	0.2032	0.1030	0.055576	37.01	721.67	3720800.
24	3.02	5.00	3.00	1.6617	0.8700	1.9100	0.1967	0.1030	0.055598	37.04	721.67	3723800.
25	3.02	5.00	-3.00	1.8627	0.8700	2.1410	0.2205	0.1030	0.055538	36.96	721.67	3715700.
26	3.24	4.40	-0.60	1.9697	0.8700	2.2640	0.2083	0.0920	0.055976	45.05	726.67	3974400.
27	3.24	5.20	1.70	1.9236	0.8700	2.2110	0.2034	0.0920	0.056019	45.15	725.67	3990400.
28	3.24	1.50	-0.70	2.0027	0.8700	2.3020	0.2118	0.0920	0.056035	45.17	725.67	3992700.
29	3.24	0.30	0.0	1.8609	0.8700	2.1390	0.1968	0.0920	0.055889	44.91	726.67	3962100.
30	3.50	4.50	-0.40	2.1341	0.8700	2.4530	0.2036	0.0830	0.055407	54.99	727.67	4209800.
31	3.50	5.30	1.50	1.6991	0.8700	1.9530	0.1621	0.0830	0.055427	54.95	730.67	4180900.
32	3.50	1.40	0.20	2.0323	0.8700	2.3360	0.1939	0.0830	0.055430	54.98	729.67	4192000.
33	3.50	0.40	-0.30	2.0810	0.8700	2.3920	0.1985	0.0830	0.055543	55.23	728.67	4219900.
34	3.75	0.50	0.0	2.0602	0.8700	2.3680	0.1729	0.0730	0.053050	61.92	739.67	4058400.
35	3.77	1.50	-0.50	2.9354	0.8700	3.3740	0.2470	0.0731	0.052582	61.87	739.67	4012800.
36	3.77	3.90	0.70	1.8688	0.8700	2.1480	0.1568	0.0731	0.052559	61.81	739.67	4009300.
37	3.77	5.00	0.10	2.2098	0.8700	2.5400	0.1854	0.0731	0.052574	61.88	738.67	4021600.
38	4.02	0.70	-0.60	2.2455	0.8700	2.5810	0.1680	0.0651	0.051391	72.74	742.67	4122800.
39	4.02	0.0	0.0	2.3708	0.8700	2.7251	0.1774	0.0651	0.051364	72.81	738.67	4159900.
40	3.01	5.00	0.0	1.7818	0.8700	2.0480	0.2109	0.1030	0.055879	37.09	722.67	3741700.
41	3.01	5.00	3.00	1.7139	0.8700	1.9700	0.2029	0.1030	0.055893	37.07	724.67	3725100
42	3.01	5.00	-3.00	1.9236	0.8700	2.2110	0.2277	0.1030	0.055846	37.01	724.67	3718800.
43	3.01	5.00	6.00	1.8801	0.8700	2.1610	0.2226	0.1030	0.055752	36.89	724.67	3706300
44	3.01	5.00	-6.00	1.9323	0.8700	2.2210	0.2288	0.1030	0.055744	36.88	724.67	3705200.
45	3.01	0.0	0.0	1.8862	0.8700	2.1680	0.2233	0.1030	0.055838	37.00	724.67	3717700.
46	3.01	0.0	3.00	1.8122	0.8700	2.0830	0.2291	0.1100	0.055788	36.93	724.67	3711100.
47	3.01	0.0	-3.00	1.9584	0.8700	2.2510	0.2319	0.1030	0.055794	36.96	723.67	3721000.
48	3.01	0.0	6.00	1.7191	0.8700	1.9760	0.2312	0.1170	0.055805	36.97	723.67	3722500.
49	3.01	0.0	-6.00	2.0837	0.8700	2.3951	0.2467	0.1030	0.055968	37.23	721.67	3762900.
50	3.01	-5.00	0.0	1.9801	0.8700	2.2760	0.2731	0.1200	0.055797	36.98	722.67	3730600.
51	3.01	-5.00	3.00	1.5556	0.8700	1.7880	0.2307	0.1290	0.055717	36.88	722.67	3719900.
52	3.01	-5.00	-3.00	2.0236	0.8700	2.3260	0.2628	0.1130	0.055794	37.00	721.67	3739500.

TABLE VI (Concluded)

53	3.01	-5.00	-6.00	1.6382	0.8700	1.8830	0.2618	0.1390	0.055717	36.91	720.67	3738500.
54	3.01	-5.00	-6.00	1.8427	0.8700	2.1180	0.2182	0.1030	0.055783	37.00	720.67	3747400.
55	3.01	0.0	-3.00	1.9105	0.8700	2.1960	0.2262	0.1030	0.055874	37.08	722.67	3741000.
56	3.01	0.0	0.0	1.8435	0.8700	2.1190	0.2183	0.1030	0.055871	37.02	725.67	3712900.
57	3.25	0.0	0.0	2.0384	0.8700	2.3430	0.2156	0.0920	0.055670	44.83	731.67	3894300.
58	3.25	0.0	-3.00	2.2716	0.8700	2.6110	0.2402	0.0920	0.055860	45.07	734.67	3892000.
59	3.25	5.00	0.0	1.8609	0.8700	2.1390	0.1968	0.0920	0.055847	45.07	733.67	3899700.
60	3.51	0.0	0.0	2.0367	0.8700	2.3410	0.1943	0.0830	0.055389	55.08	740.67	4084500.
61	3.51	1.40	-0.20	1.9671	0.8700	2.2610	0.1877	0.0830	0.055442	55.16	741.67	4082200.
62	3.51	0.0	-3.00	2.3473	0.8700	2.6980	0.2239	0.0830	0.055339	55.03	738.67	4097500.
63	3.51	5.00	0.0	2.0663	0.8700	2.3751	0.1971	0.0830	0.055354	55.11	736.67	4120500.
64	3.76	0.0	0.0	2.1472	0.8700	2.4680	0.1802	0.0730	0.052913	61.97	744.67	4000200.
65	3.76	0.0	-3.00	2.5639	0.8700	2.9470	0.2151	0.0730	0.052942	61.98	746.67	3984700.
66	3.76	5.00	0.0	2.2724	0.8700	2.6120	0.1907	0.0730	0.052947	61.94	746.67	3965800.
67	3.76	1.50	-0.50	2.1098	0.8700	2.4251	0.1770	0.0730	0.052832	61.90	740.67	4027900.
68	4.04	0.0	0.0	2.4029	0.8700	2.7620	0.1795	0.0650	0.050999	72.84	742.67	4086300.
69	4.04	5.00	0.0	2.4491	0.8700	2.8151	0.1830	0.0650	0.050913	72.73	738.67	4113400.
70	4.04	5.00	3.00	2.0663	0.8700	2.3751	0.1544	0.0650	0.050948	72.87	737.67	4129500.
71	4.04	5.00	-3.00	2.2368	0.8700	2.5710	0.1671	0.0650	0.050922	72.76	738.67	4114900.
72	4.04	5.00	6.00	1.8287	0.8700	2.1020	0.1366	0.0650	0.050957	72.86	738.67	4120600.
73	4.04	5.00	-6.00	2.5039	0.8700	2.8780	0.1871	0.0650	0.050925	72.73	739.67	4105000.
74	4.04	0.0	3.00	2.3360	0.8700	2.6851	0.1933	0.0720	0.050994	72.90	740.67	4106000.
75	4.04	0.0	6.00	2.0080	0.8700	2.3080	0.1823	0.0790	0.050966	72.85	739.67	4111700.
76	4.04	0.0	-6.00	2.5204	0.8700	2.8970	0.1883	0.0650	0.050957	72.82	739.67	4110200.
77	4.04	0.0	-3.00	2.5682	0.8700	2.9520	0.1919	0.0650	0.050963	72.84	739.67	4111200.
78	4.04	-5.00	0.0	2.6196	0.8700	3.0110	0.2469	0.0820	0.050947	72.80	739.67	4108600.
79	4.04	-5.00	3.00	1.8166	0.8700	2.0880	0.1900	0.0910	0.050973	72.87	739.67	4112800.
80	4.04	-5.00	-3.00	2.5274	0.8700	2.9051	0.2150	0.0740	0.050966	72.85	739.67	4111700.
81	4.04	-5.00	6.00	1.9454	0.8700	2.2361	0.2258	0.1010	0.051001	72.95	739.67	4117400.
82	4.04	-5.00	-6.00	2.5300	0.8700	2.9080	0.1890	0.0650	0.050957	72.82	739.67	4110200.
83	4.04	0.0	0.0	2.3586	0.8700	2.7110	0.1762	0.0650	0.050972	72.89	740.67	4102400.
84	4.04	0.0	0.0	2.3342	0.8700	2.6830	0.1744	0.0650	0.050975	72.81	741.67	4092500.
85	3.01	0.0	0.0	1.7757	0.8700	2.0410	0.2388	0.1170	0.065521	52.01	683.67	5684000.
86	4.00	0.0	0.0	2.1219	0.8700	2.4390	0.1854	0.0760	0.089275	174.52	1438.70	3643600.
87	4.00	0.0	3.00	2.0680	0.8700	2.3770	0.1997	0.0840	0.089267	174.48	1438.70	3642900.
88	4.00	0.0	-3.00	2.1741	0.8700	2.4990	0.1899	0.0760	0.089307	174.58	1440.70	3637100.
89	4.00	5.00	0.0	1.6626	0.8700	1.9110	0.1452	0.0760	0.089162	174.11	1437.70	3639000.
90	4.00	5.00	3.00	2.0254	0.8700	2.3280	0.1769	0.0760	0.089322	174.70	1438.70	3647500.
91	4.00	5.00	-3.00	1.9601	0.8700	2.2530	0.1712	0.0760	0.089307	174.61	1439.70	3641600.
92	4.00	-5.00	0.0	2.1733	0.8700	2.4980	0.2346	0.0940	0.089259	174.42	1439.70	3637700.
93	4.00	-5.00	3.00	1.9566	0.8700	2.2490	0.2361	0.1050	0.089244	174.30	1441.70	3627400.
94	4.00	-5.00	-3.00	2.0254	0.8700	2.3280	0.1979	0.0850	0.089260	174.33	1442.70	3624100.
95	4.00	0.0	0.0	2.1593	0.8700	2.4820	0.1886	0.0760	0.089282	174.48	1441.70	3631300.
96	4.00	0.70	-0.60	2.6613	0.8700	3.0590	0.1132	0.0370	0.030223	20.16	1428.70	423840.
97	4.00	0.0	0.0	2.1158	0.8700	2.4320	0.1775	0.0730	0.078417	140.45	1245.70	3651900.
98	4.00	0.0	0.0	2.2185	0.8700	2.5500	0.1836	0.0720	0.070603	120.00	1051.70	4033000.
99	4.00	0.0	0.0	2.2559	0.8700	2.5930	0.1789	0.0690	0.064521	102.46	982.67	3816300.
100	4.00	0.0	0.0	2.5830	0.8700	2.9690	0.1841	0.0620	0.047013	60.24	728.67	3544500.
101	4.00	5.00	0.0	2.4978	0.8700	2.8710	0.1780	0.0620	0.047091	60.21	736.67	3484200.
102	4.00	-5.00	0.0	2.4699	0.8700	2.8390	0.2186	0.0770	0.047126	60.26	737.67	3480500.
103	4.00	-5.00	3.00	1.8957	0.8700	2.1790	0.1874	0.0860	0.047199	60.45	737.67	3491300.
104	4.00	-5.00	-3.00	2.5482	0.8700	2.9290	0.2050	0.0700	0.047128	60.33	735.67	3498600.
105	4.00	0.0	0.0	2.5392	0.8700	2.9186	0.2522	0.0620	0.047081	60.24	734.67	3500500.
106	4.00	0.70	-0.60	2.4282	0.8700	2.7910	0.2177	0.0780	0.066420	119.54	737.67	6920200.
107	4.00	0.70	-0.60	2.5334	0.8700	2.9120	0.2271	0.0780	0.066764	120.72	738.67	6974400.

Notes:

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

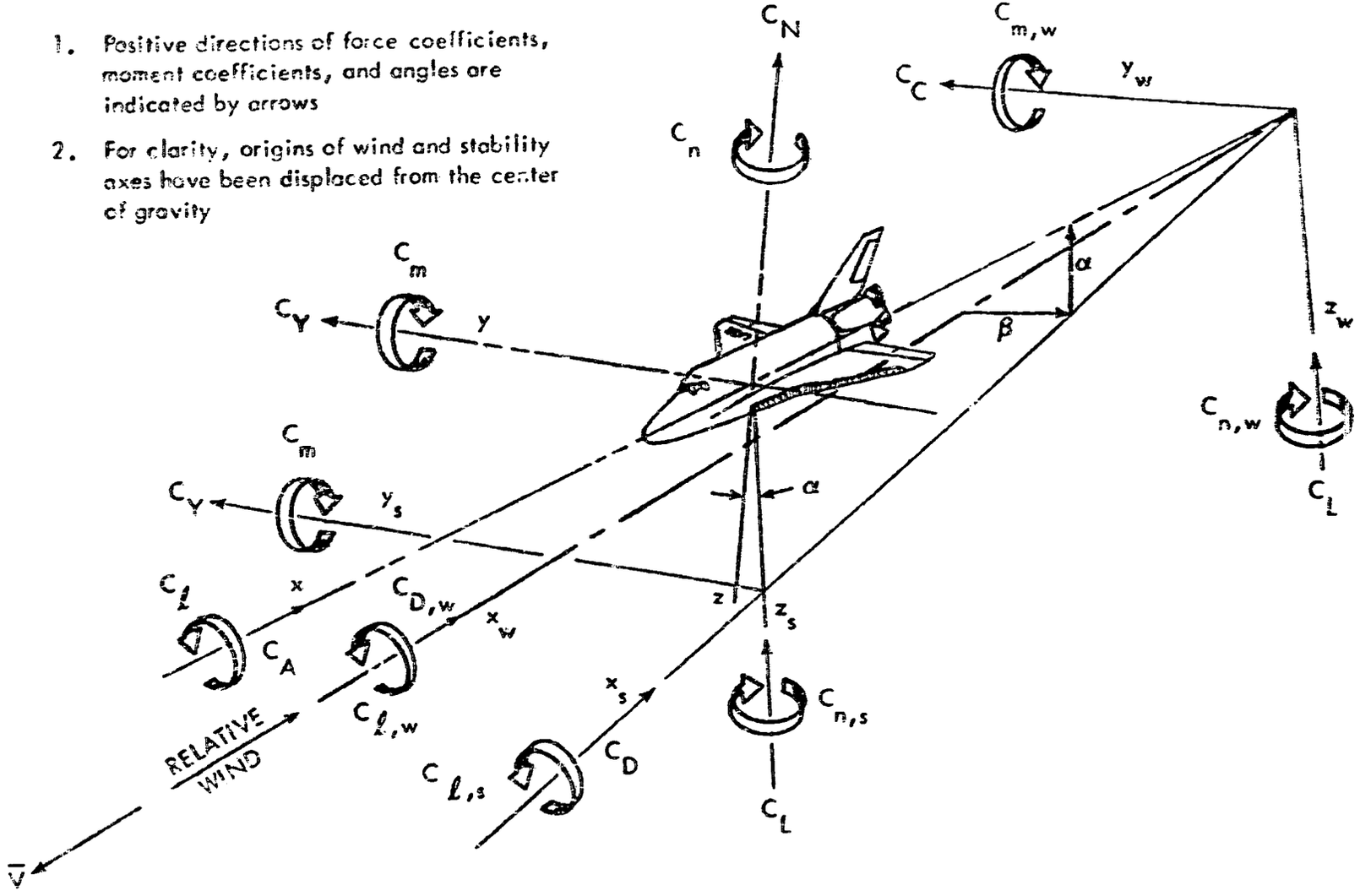


Figure 1. Axis systems.

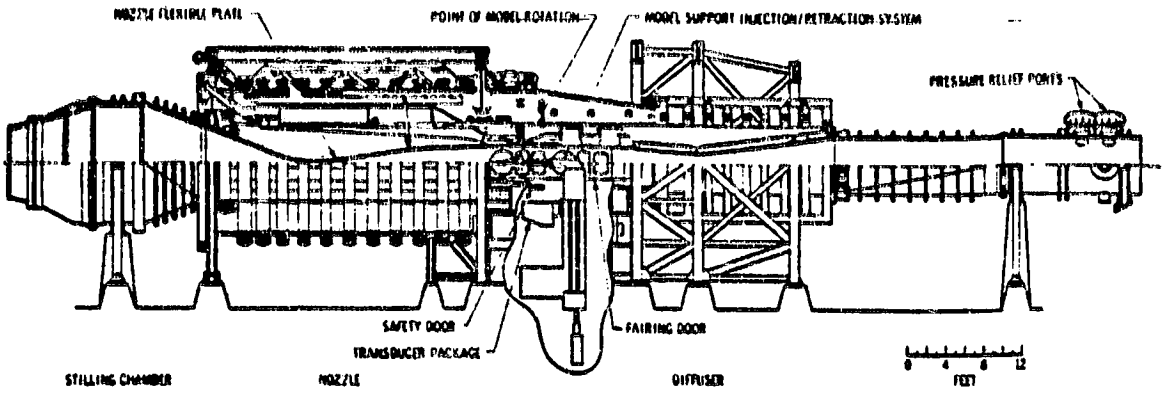
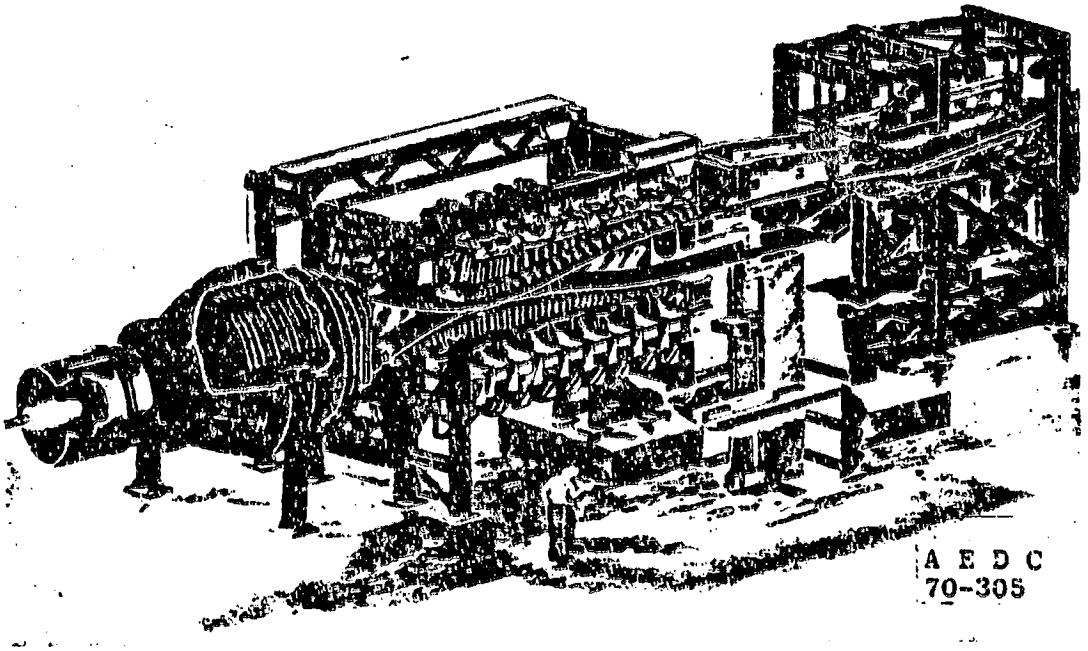


Figure 2.a **Tunnel assembly**



Tunnel test section

Figure 2.b **Tunnel A**

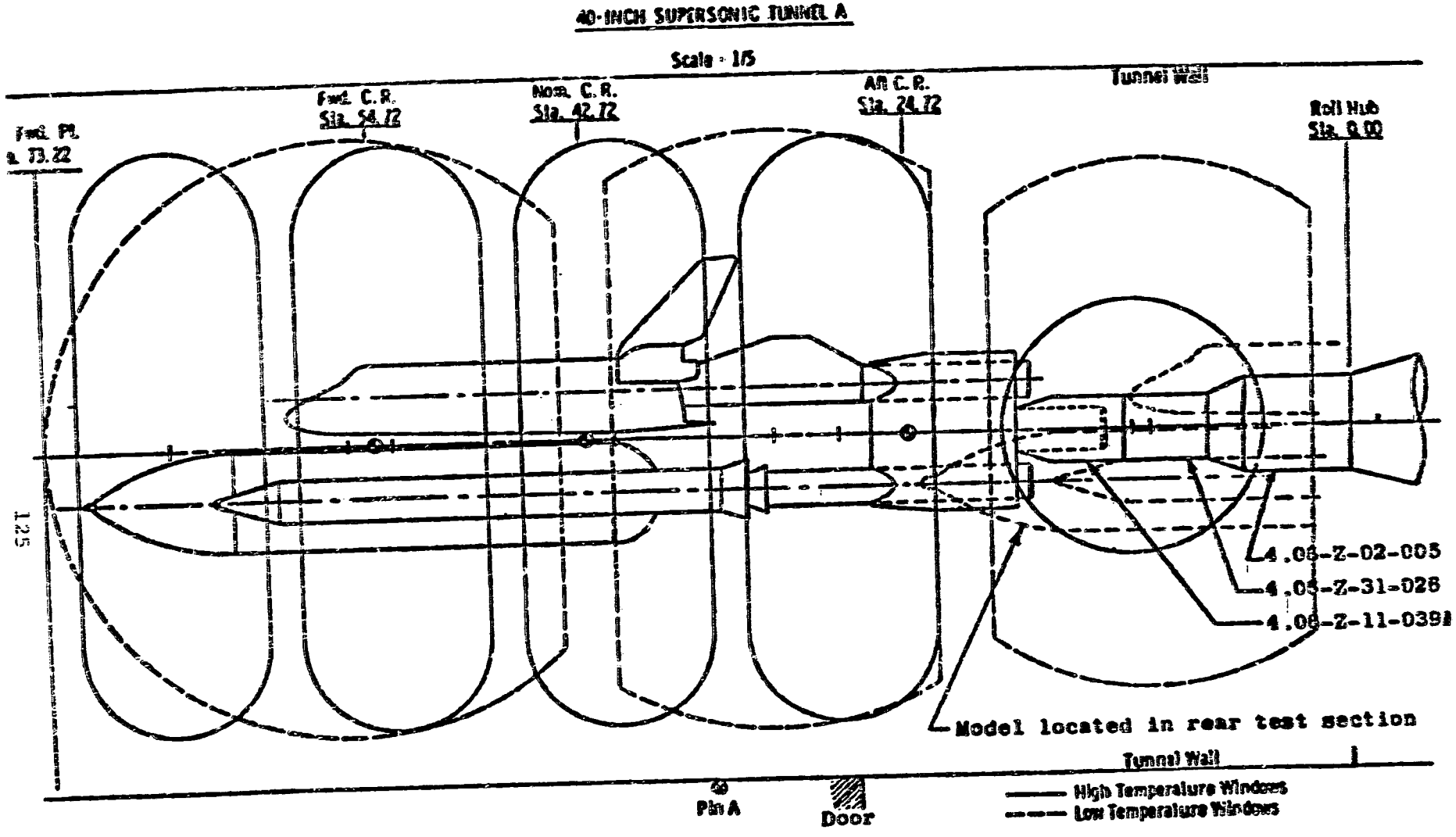


Figure 2.c Installation Sketch

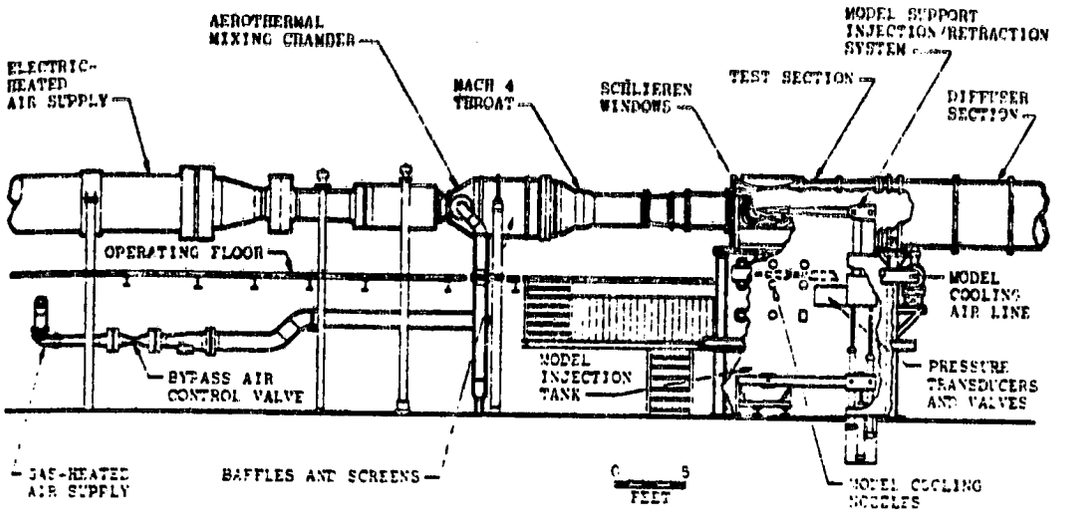


Figure 2.d Tunnel Assembly

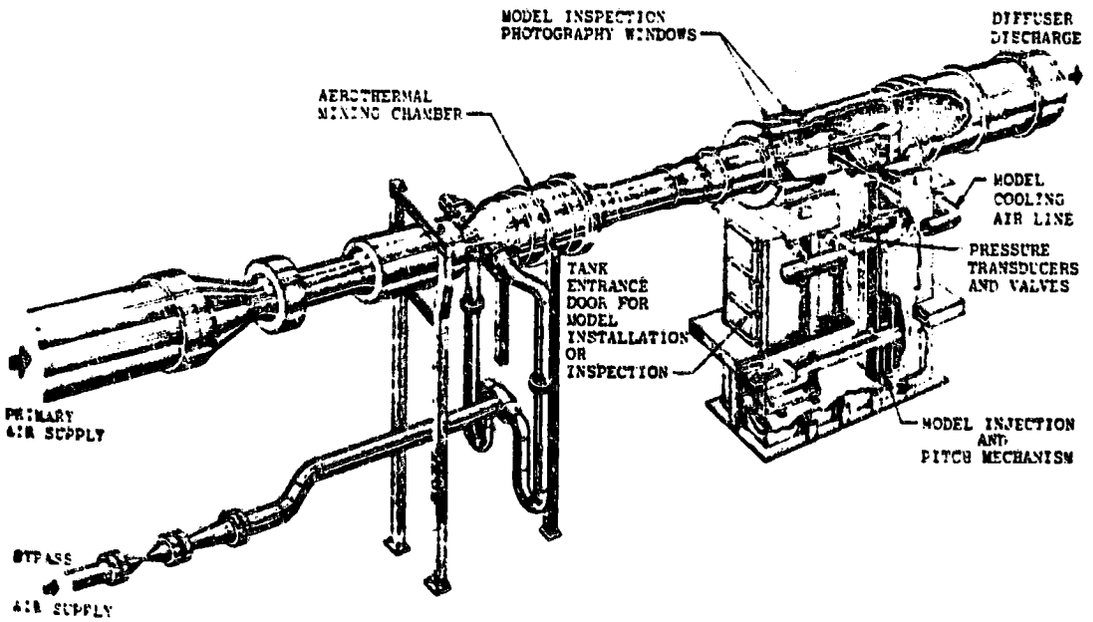
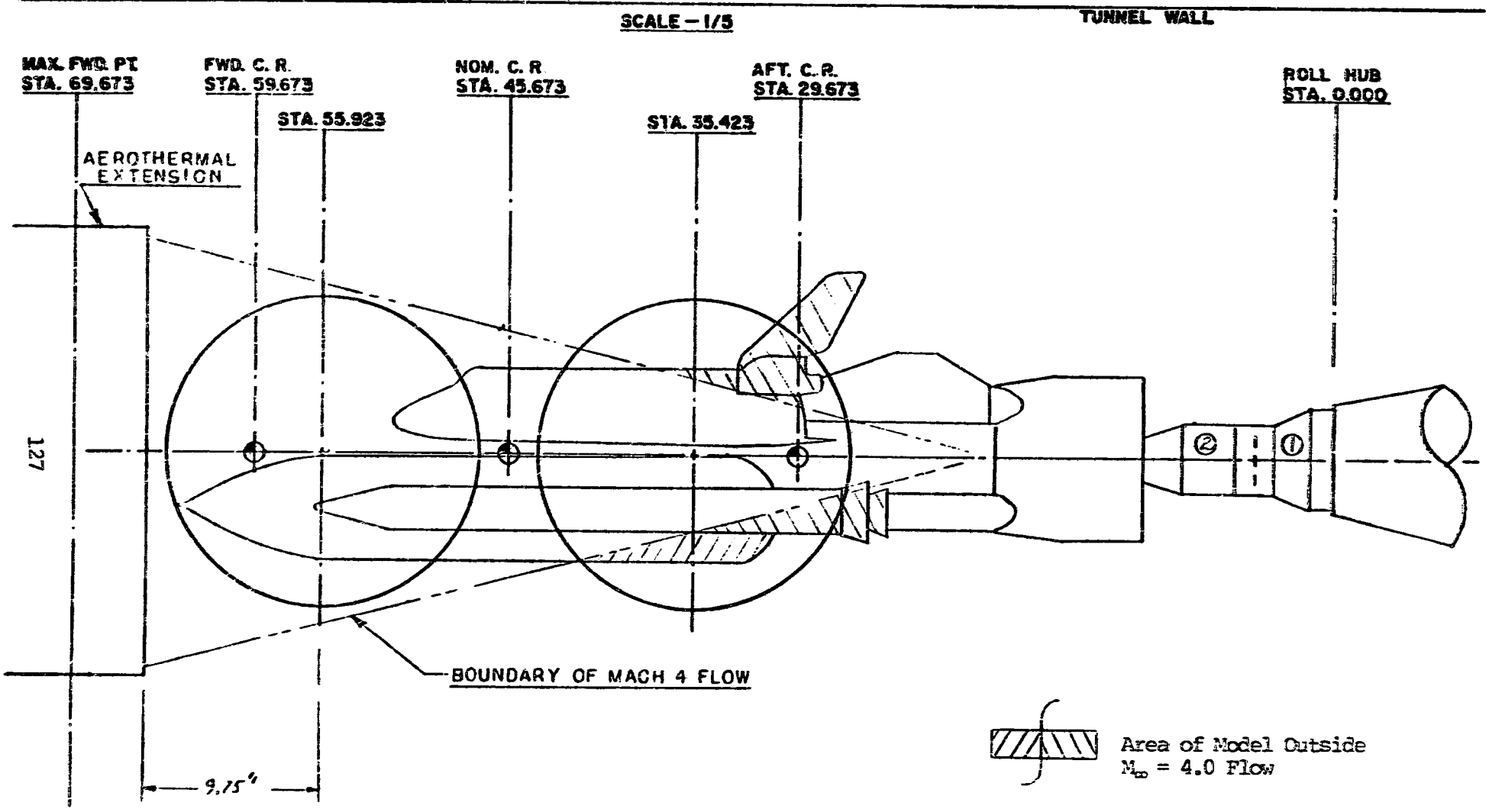


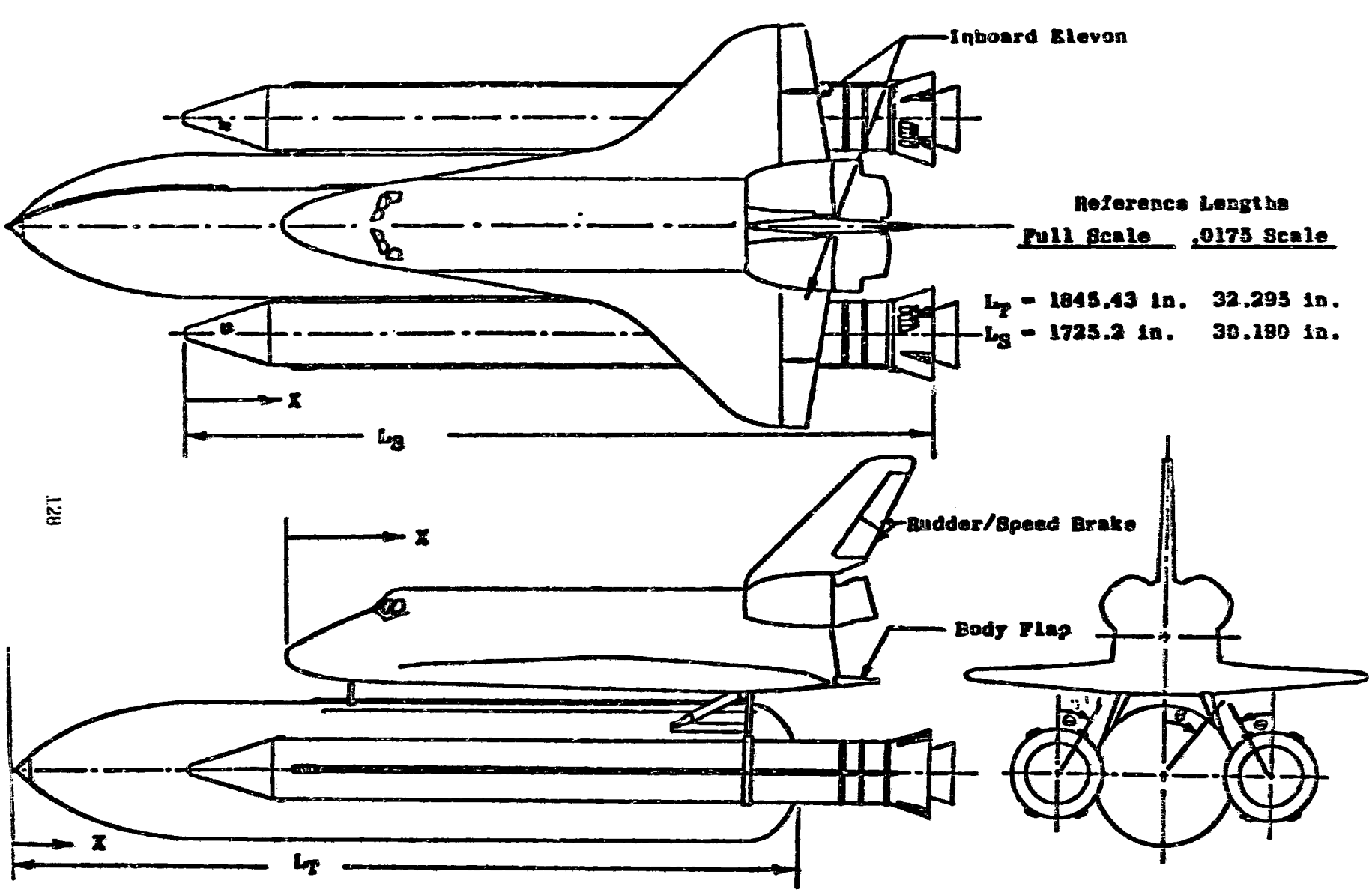
Figure 2.e Perspective of Tunnel Test Section Area

Tunnel C Mach 4.0 Configuration



f. Sketch of Installation

Figure 2 Concluded



Integrated Vehicle - Configuration

Figure 3. The 60-OTS Integrated Space Shuttle Vehicle

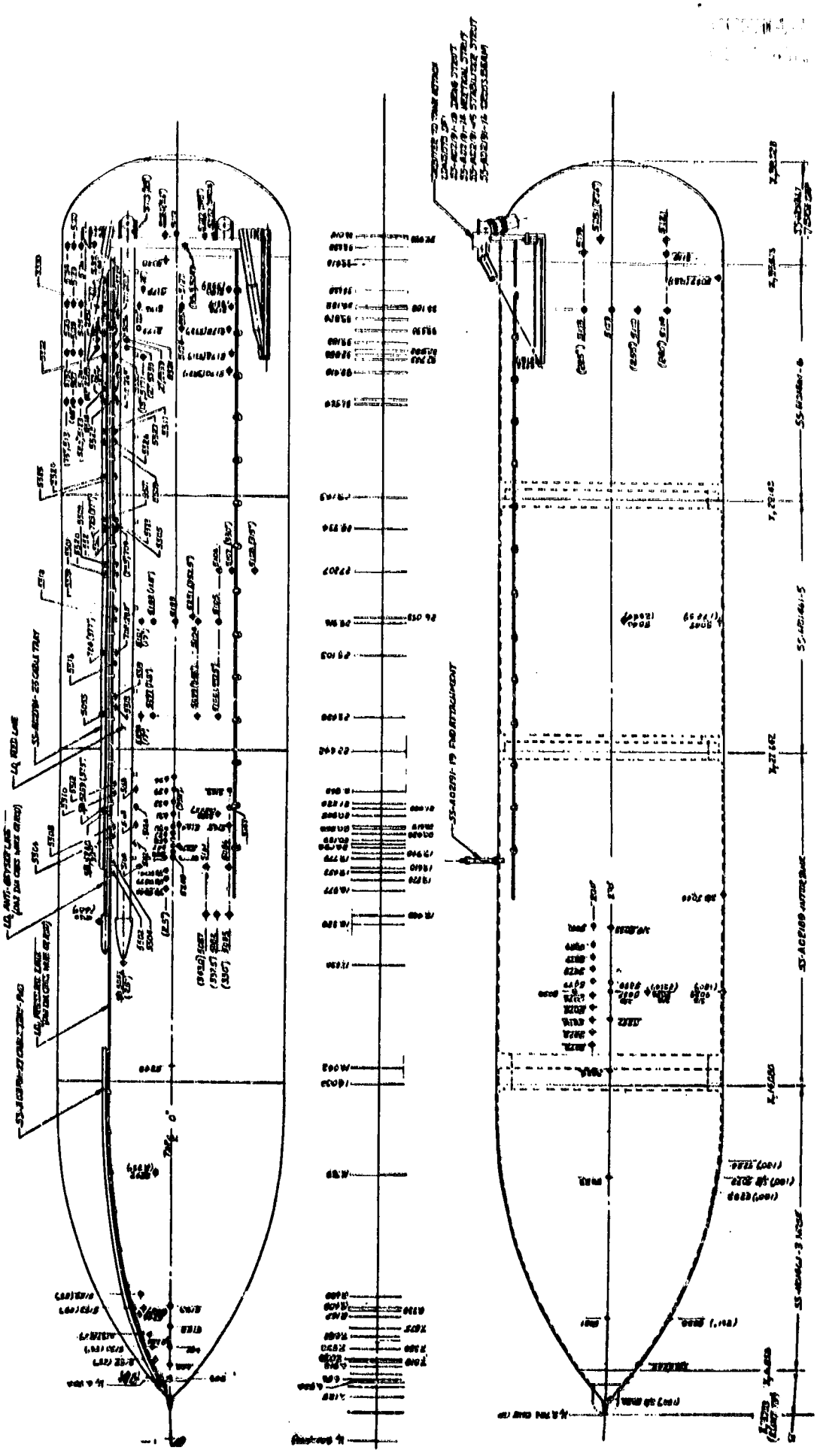


Figure 4.a External Tank Instrumentation Composite

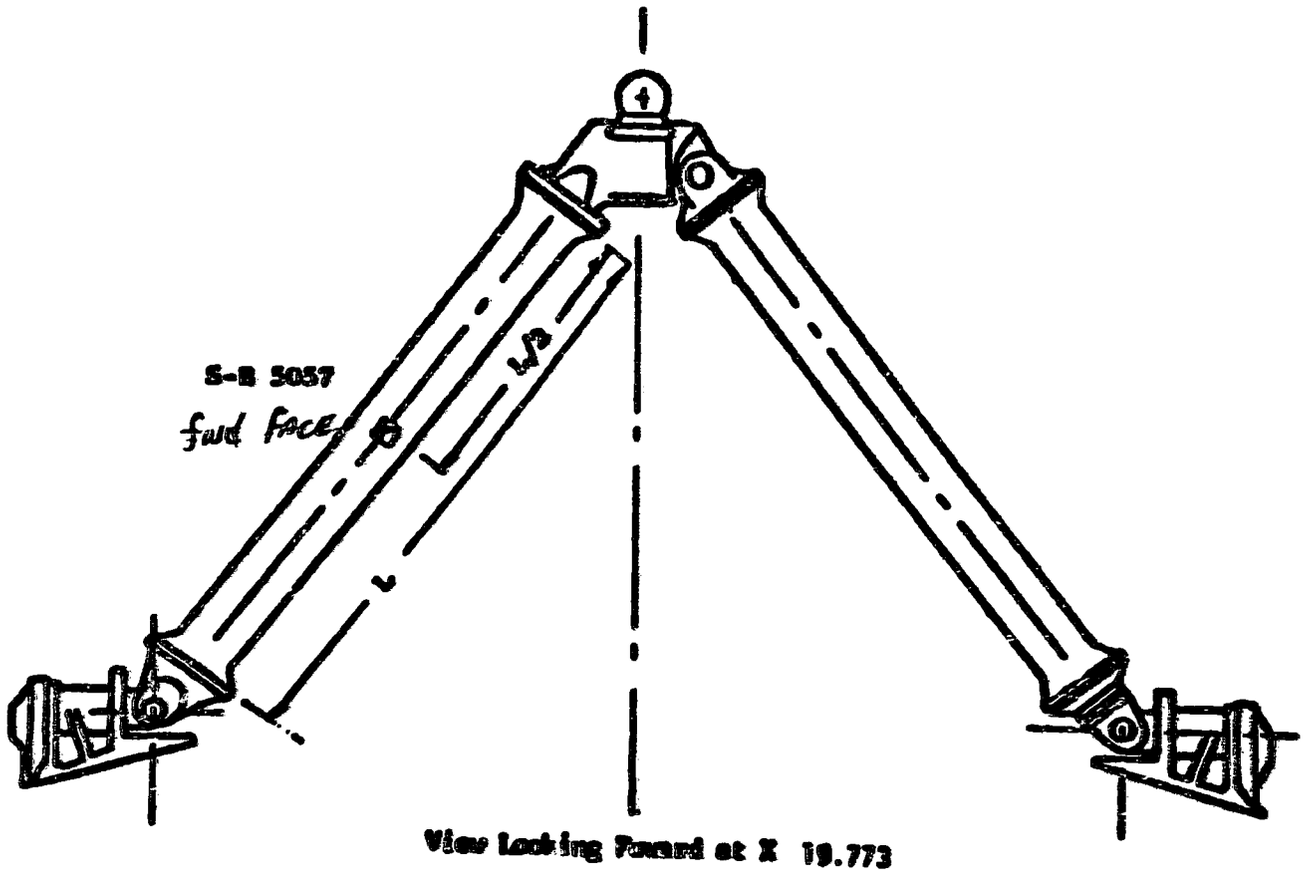


Figure 4.b Forward Orbiter/ET Attach Structure Instrumentation Location

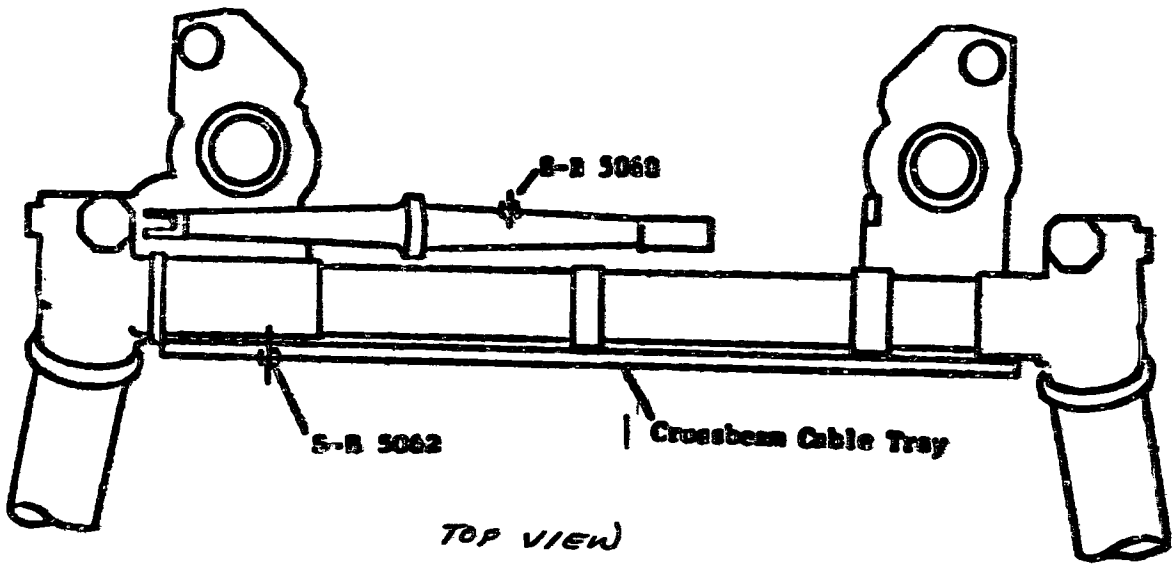


Figure 4.c Aft Orbiter/ET Attach Structure Instrumentation Location

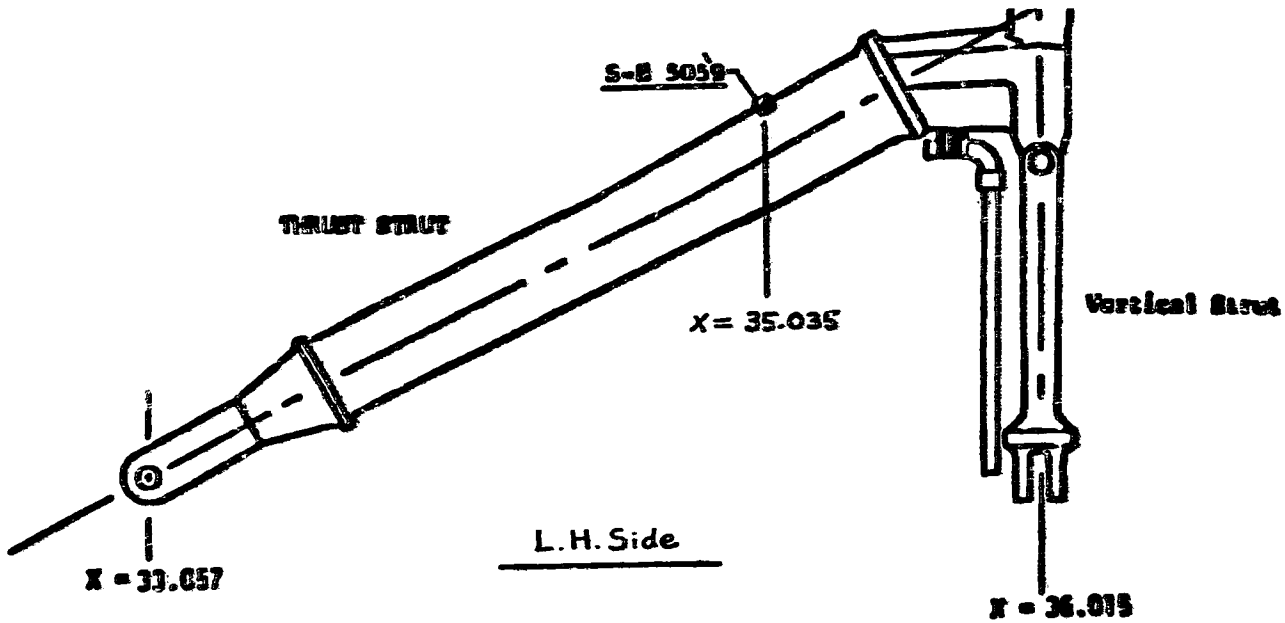


Figure 4.e Aft Orbiter/ET Attach Structure Instrumentation Location
Thrust Strut Detail

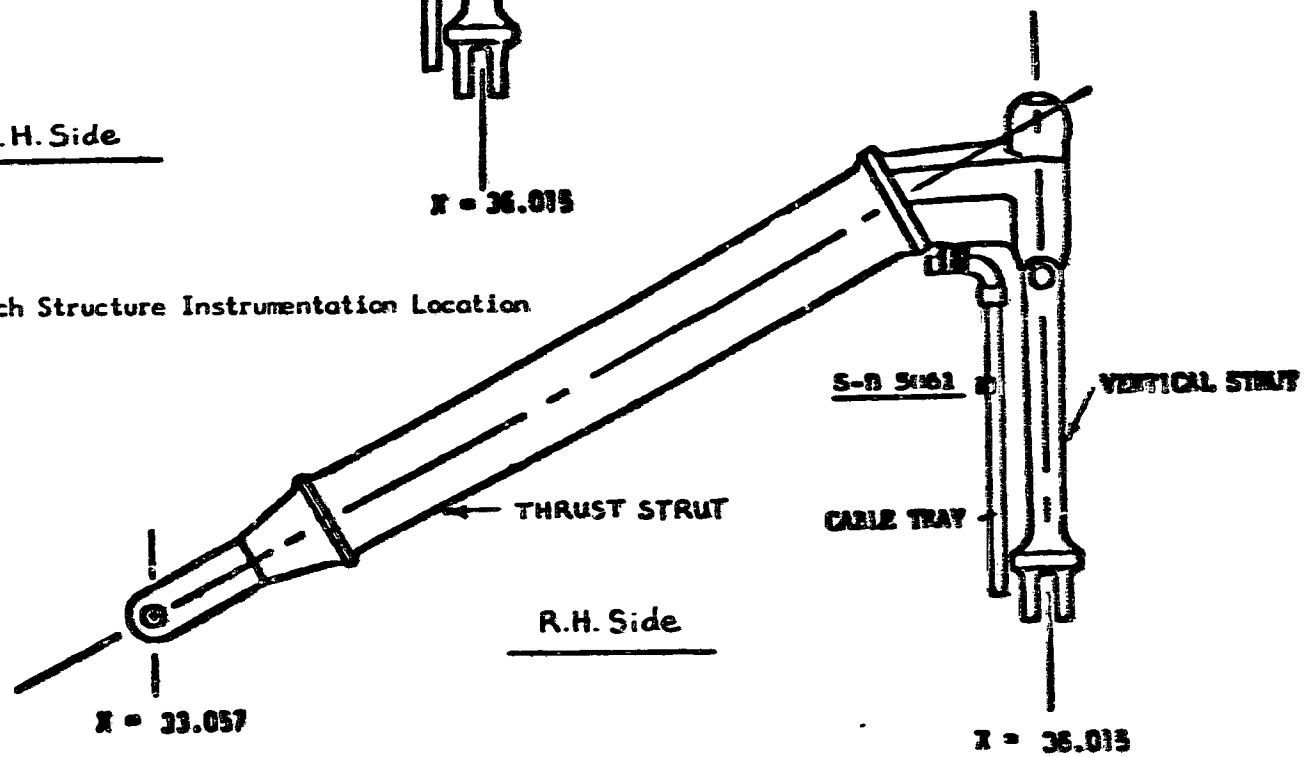


Figure 4.d Aft Orbiter/ET Attach Structure Instrumentation Location
Vertical Strut Cable Tray Detail

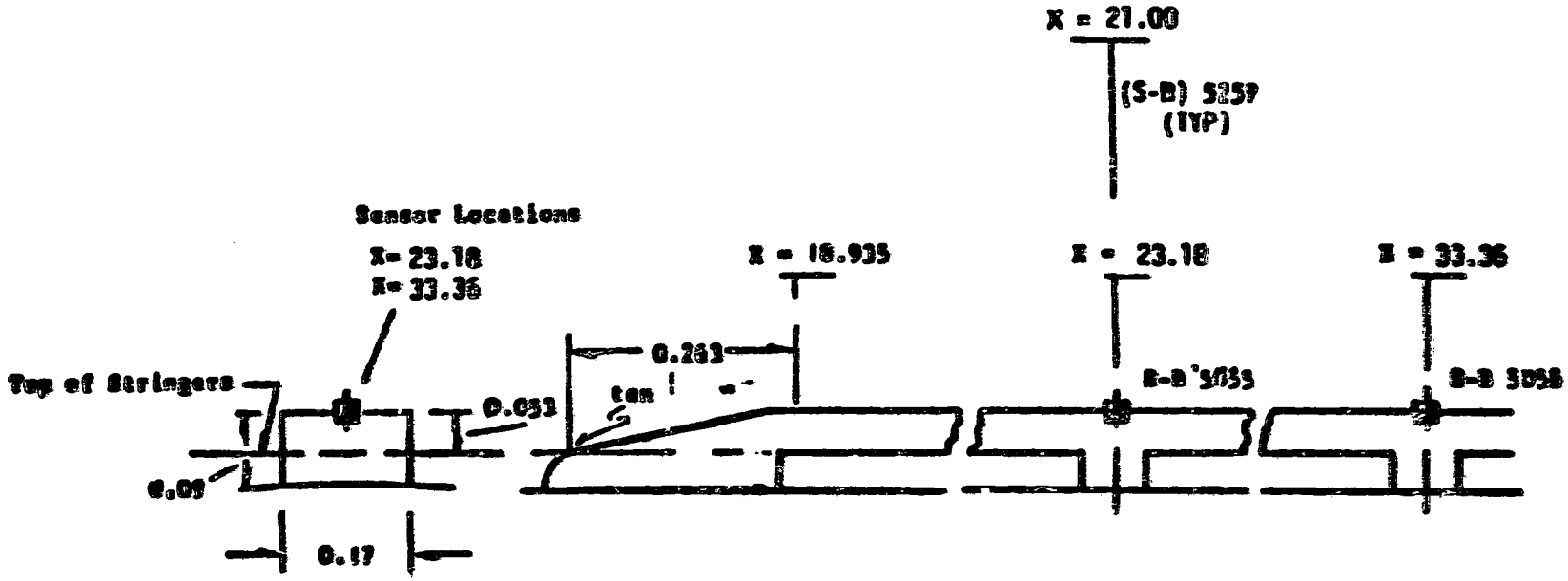


Figure 4f. External Tank Protuberance Instrumentation
LH_2 Cable Tray Detail

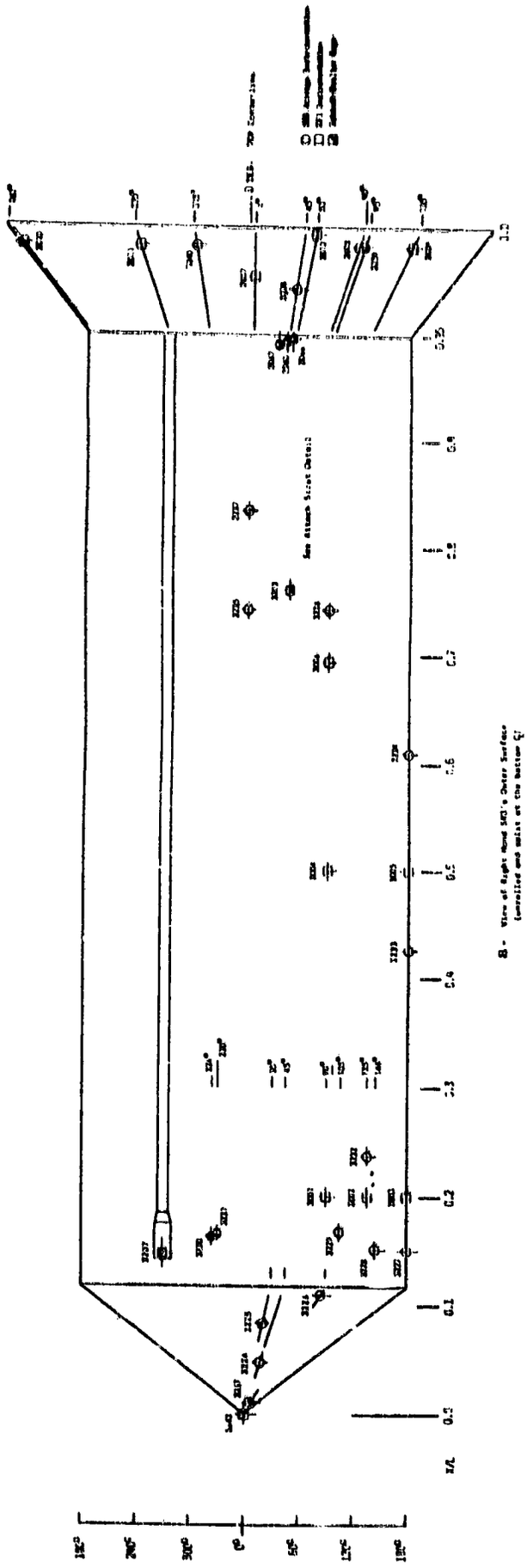


Figure 5.a SRB Instrumentation R/H

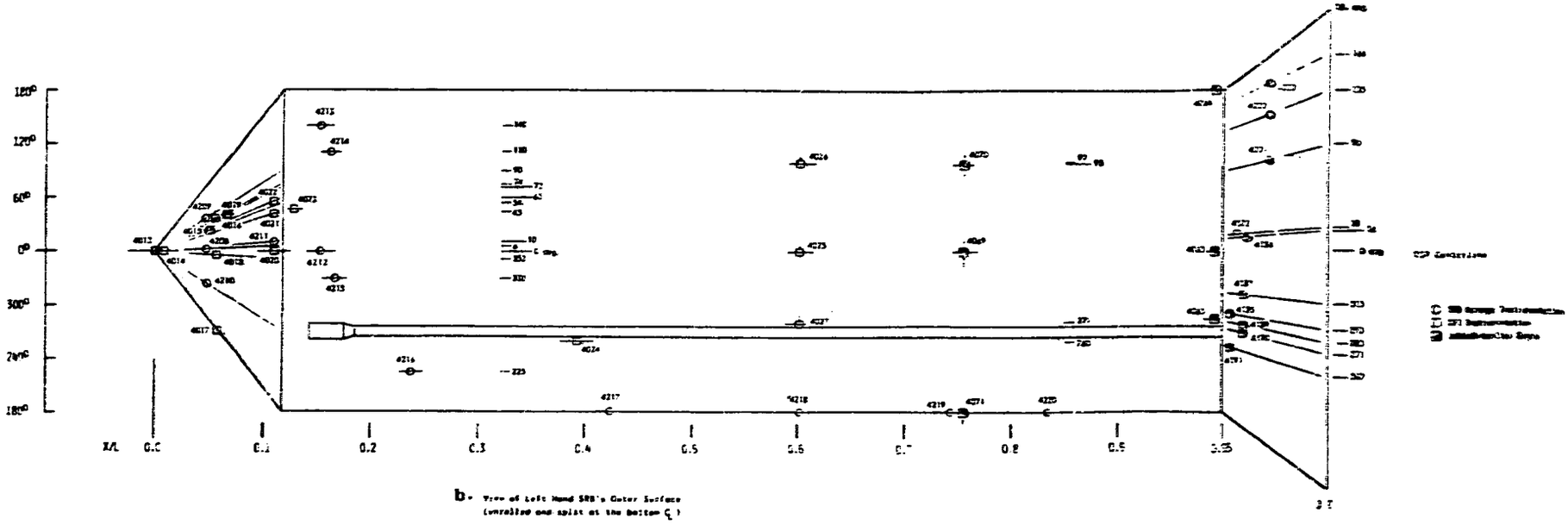


Figure 5.b SRB Instrumentation L/H

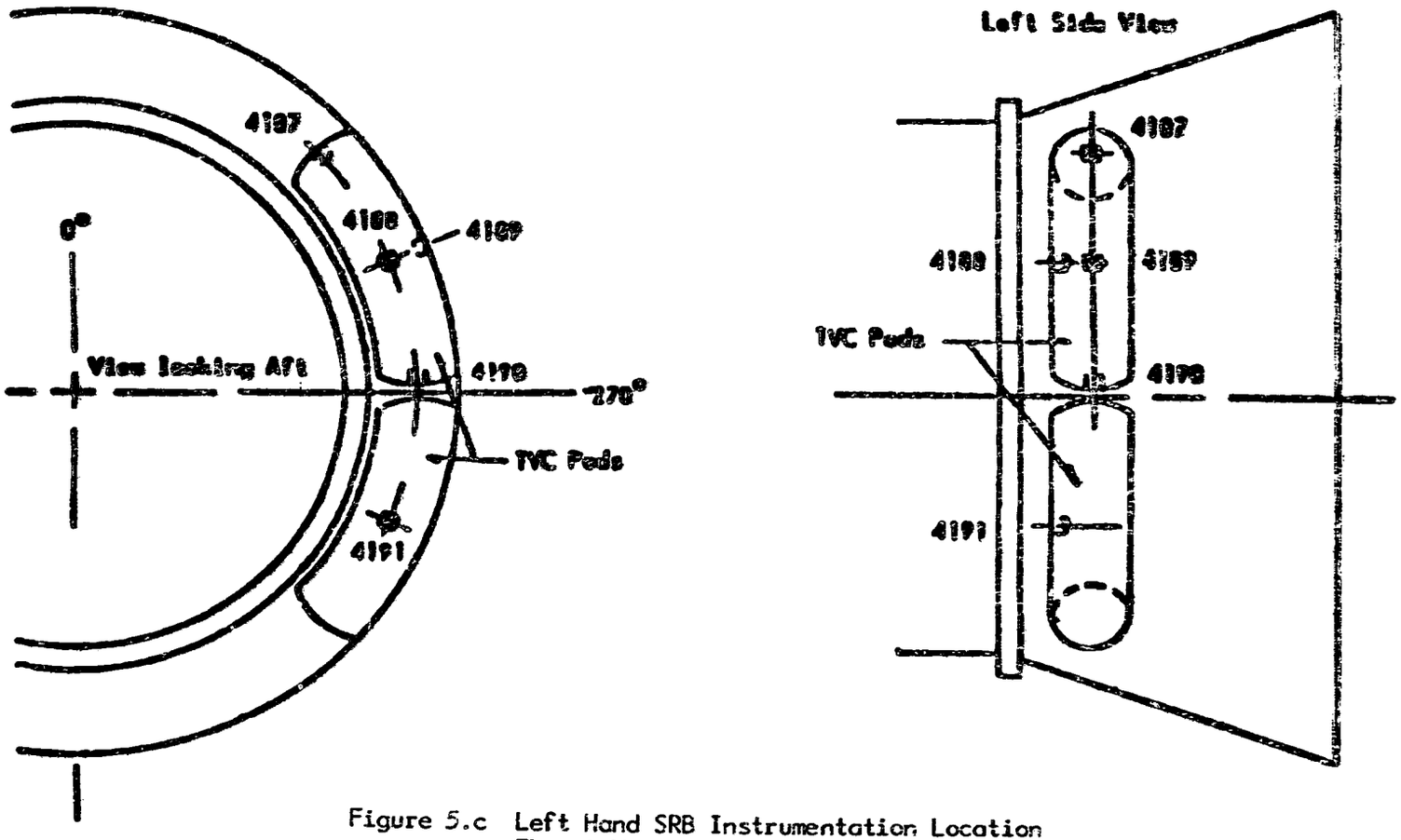


Figure 5.c Left Hand SRB Instrumentation Location
Thrust Vector Control (TVC) Pod Detail

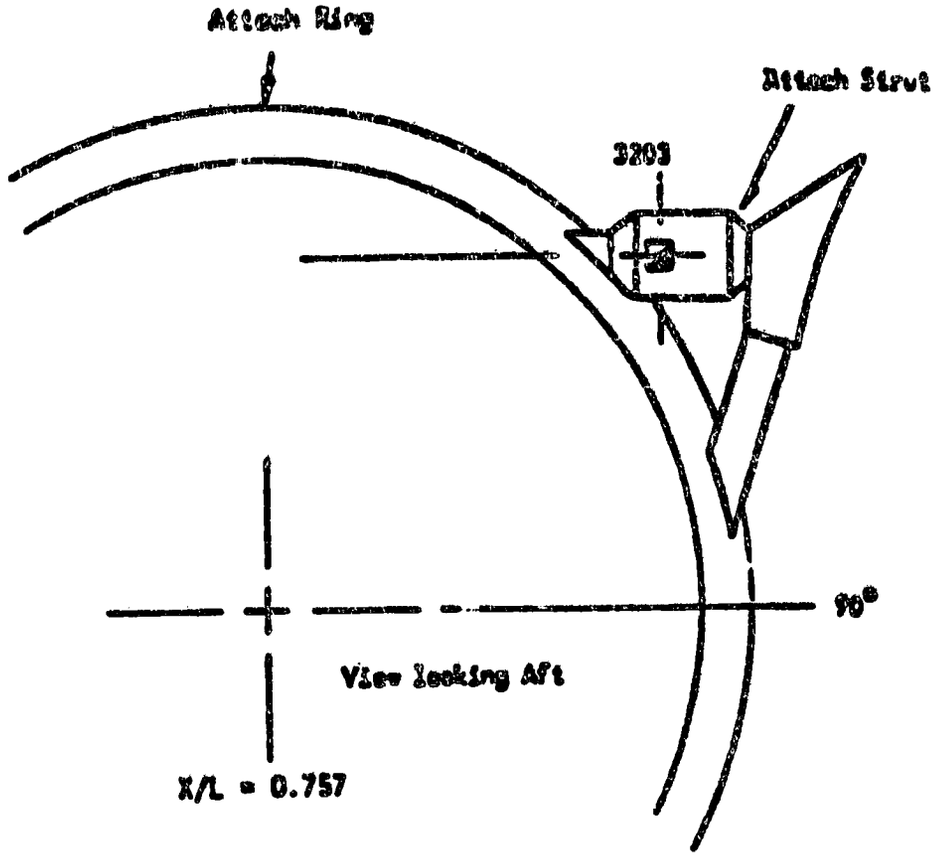


Figure 5.d. Right-Hand SRB Instrumentation Location
SRB/ET Aft Attach Strut Detail

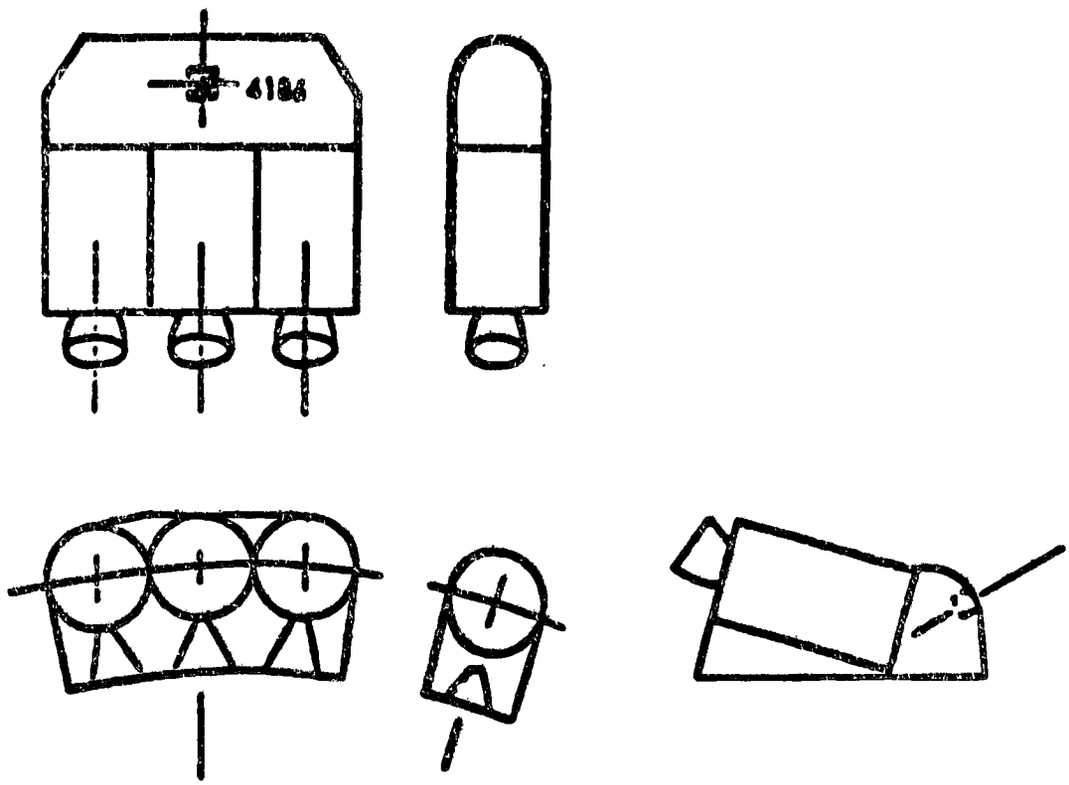
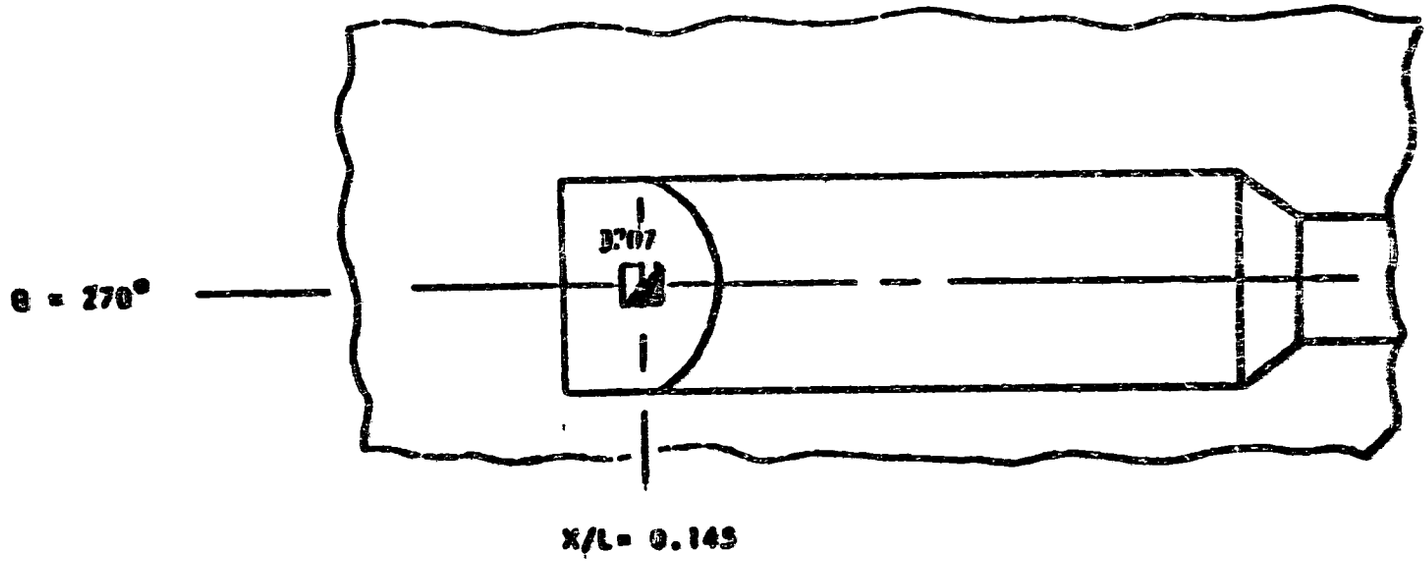


Figure 5.e Left-Hand SRB Instrumentation Location
Aft Separation Motor Detail



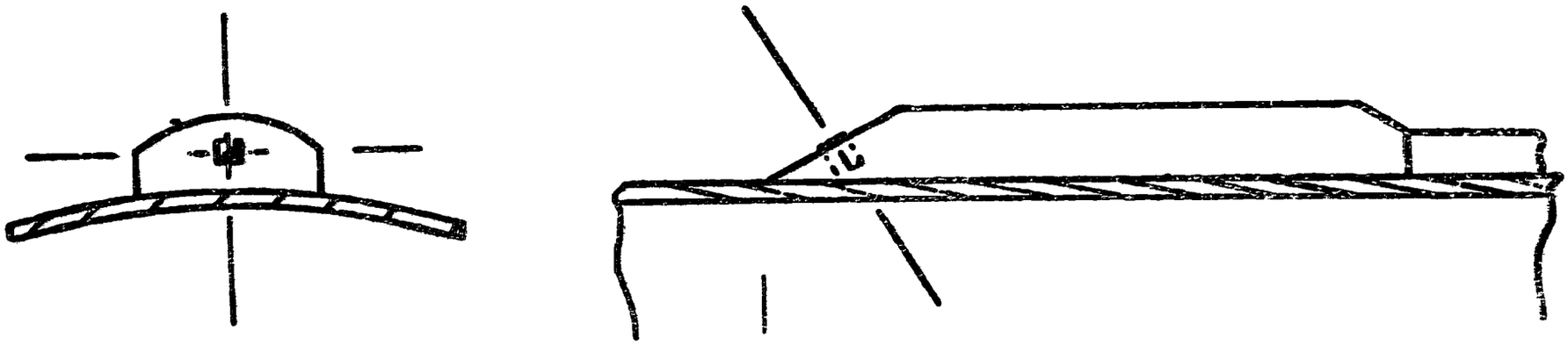


Figure 5.f Right-Hand SRB Instrumentation Location
Cable Tray Fairing Detail

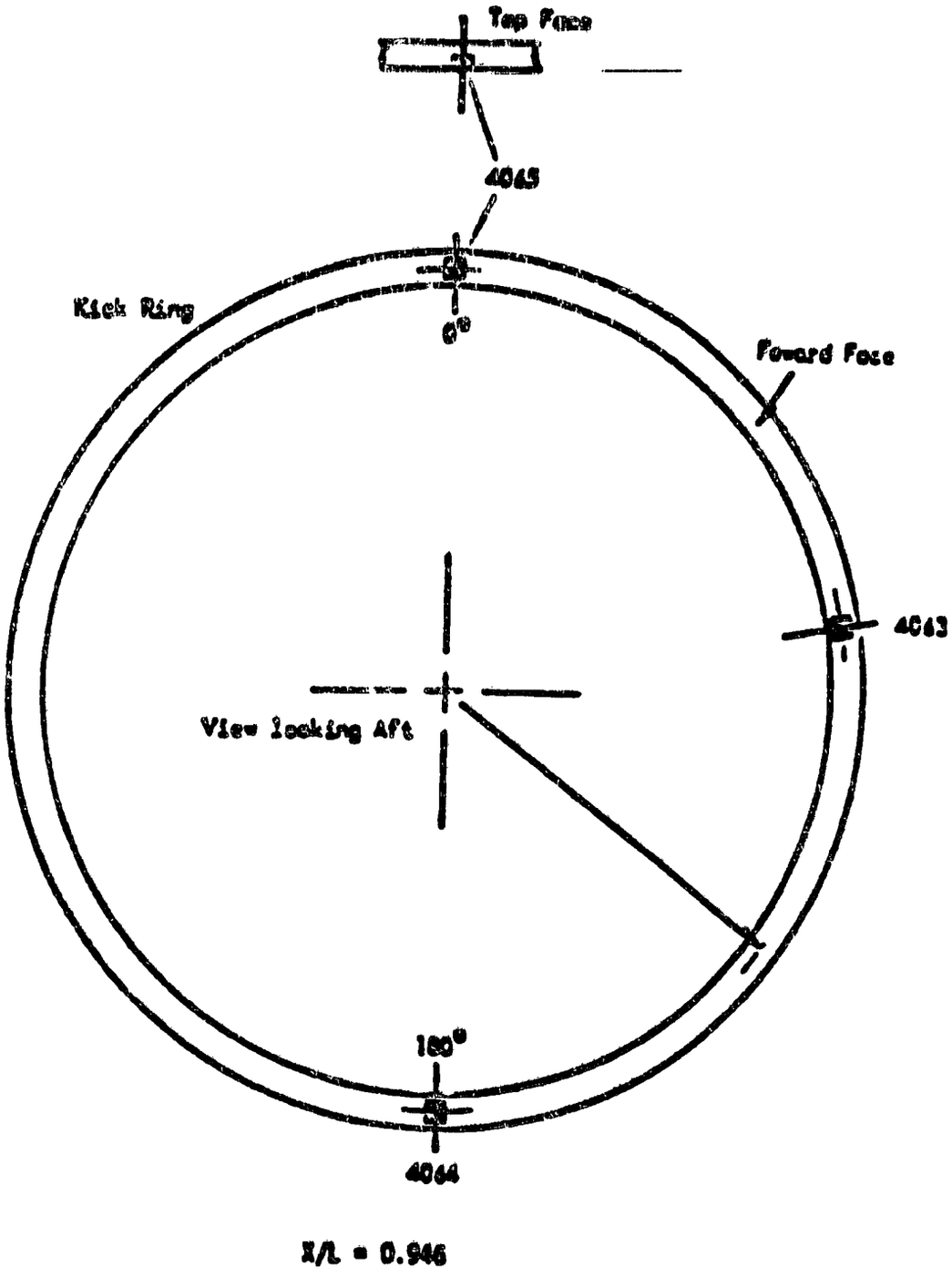


Figure 5.g Left-Hand SRB Instrumentation Location
Kick Ring Detail

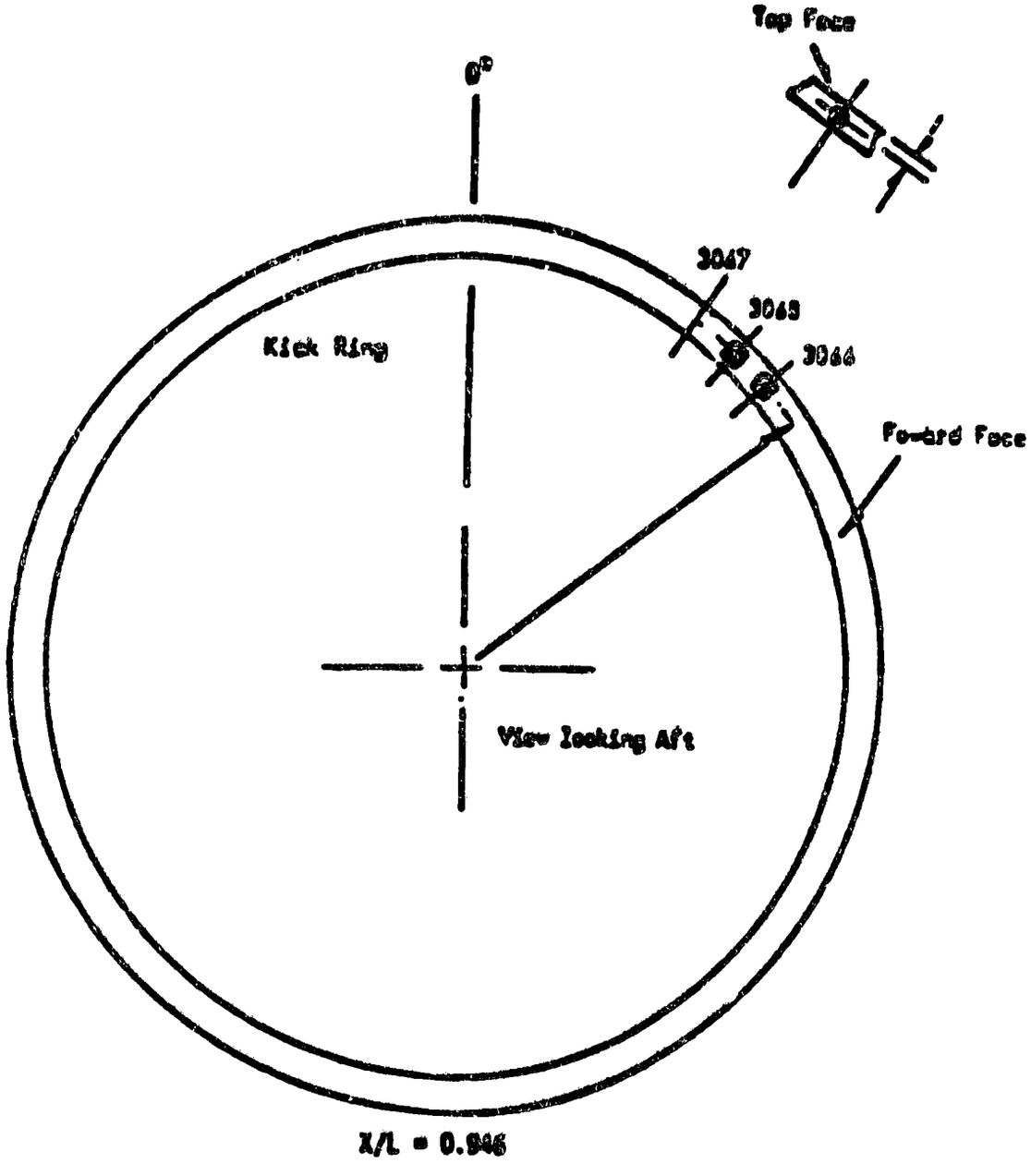


Figure 5.h Right-Hand SRB Instrumentation Location
Kick Ring Detail

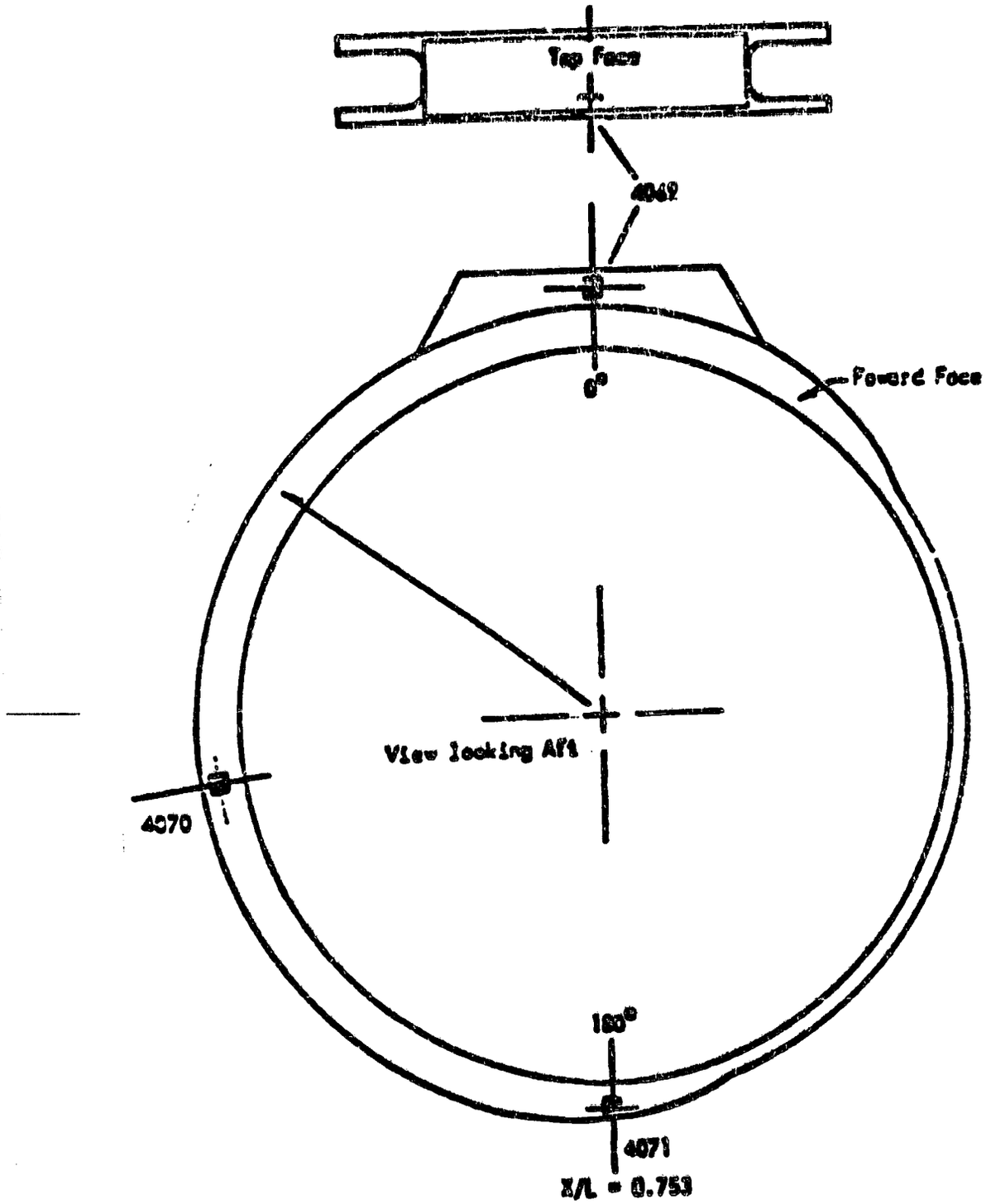


Figure 5.i Left-Hand SRB Instrumentation Location
Attach Ring Detail

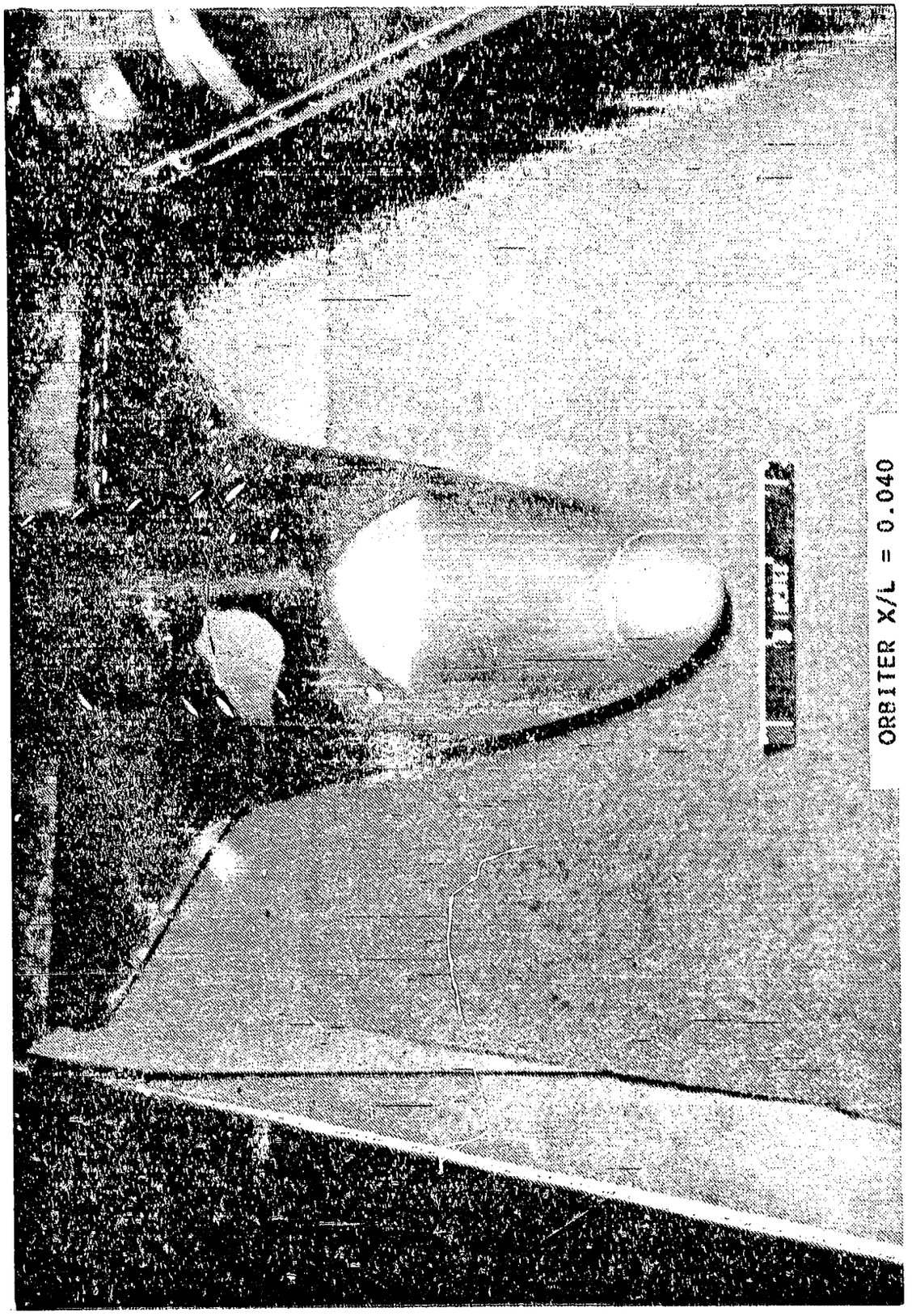


FIGURE 64 TRANSITION STRIP LOCATION

FIGURE 6c TRANSITION STRIP LOCATION

INSTALLATION PHOTOGRAPH

FIGURE 6a MODEL INSTALLATION IN TUNNEL A

FIGURE 64 EXTERNAL TANK FEATURES (INTERTANK AND SPIKE NOSE)

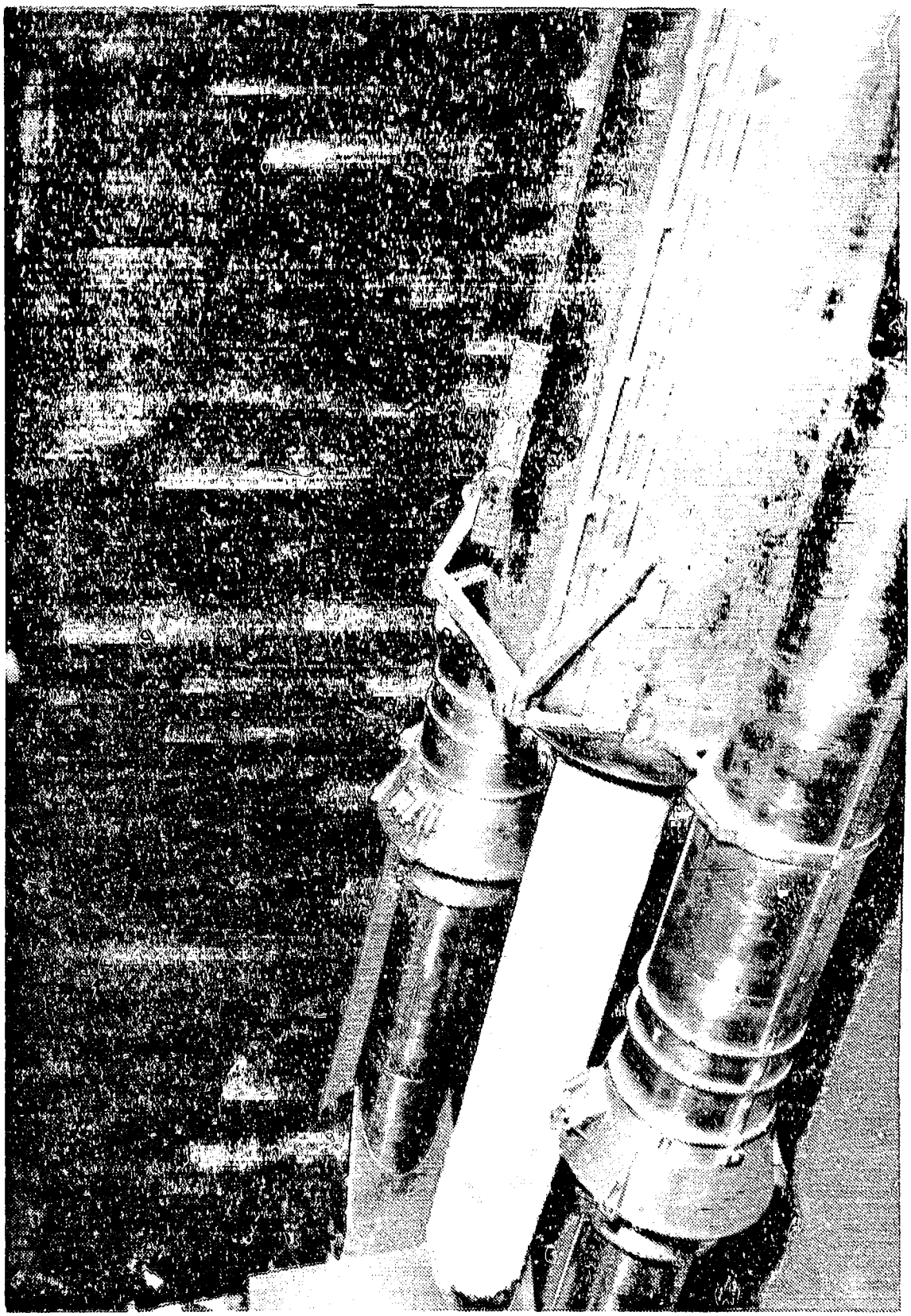


FIGURE 6a AFT FEATURES - EXTERNAL TANK AND SRB's

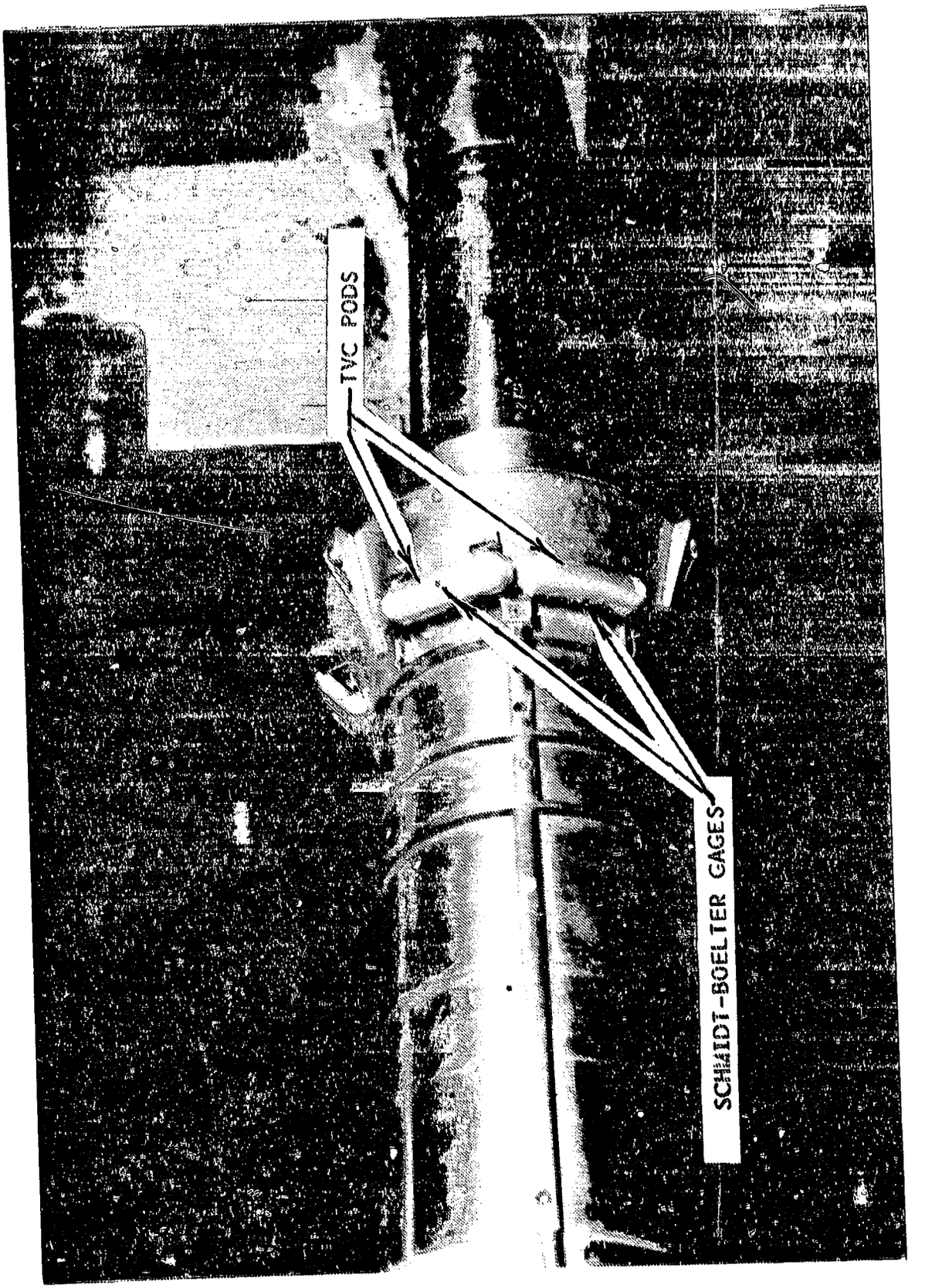


FIGURE 64 TVC PODS (LEFT SRB ONLY)

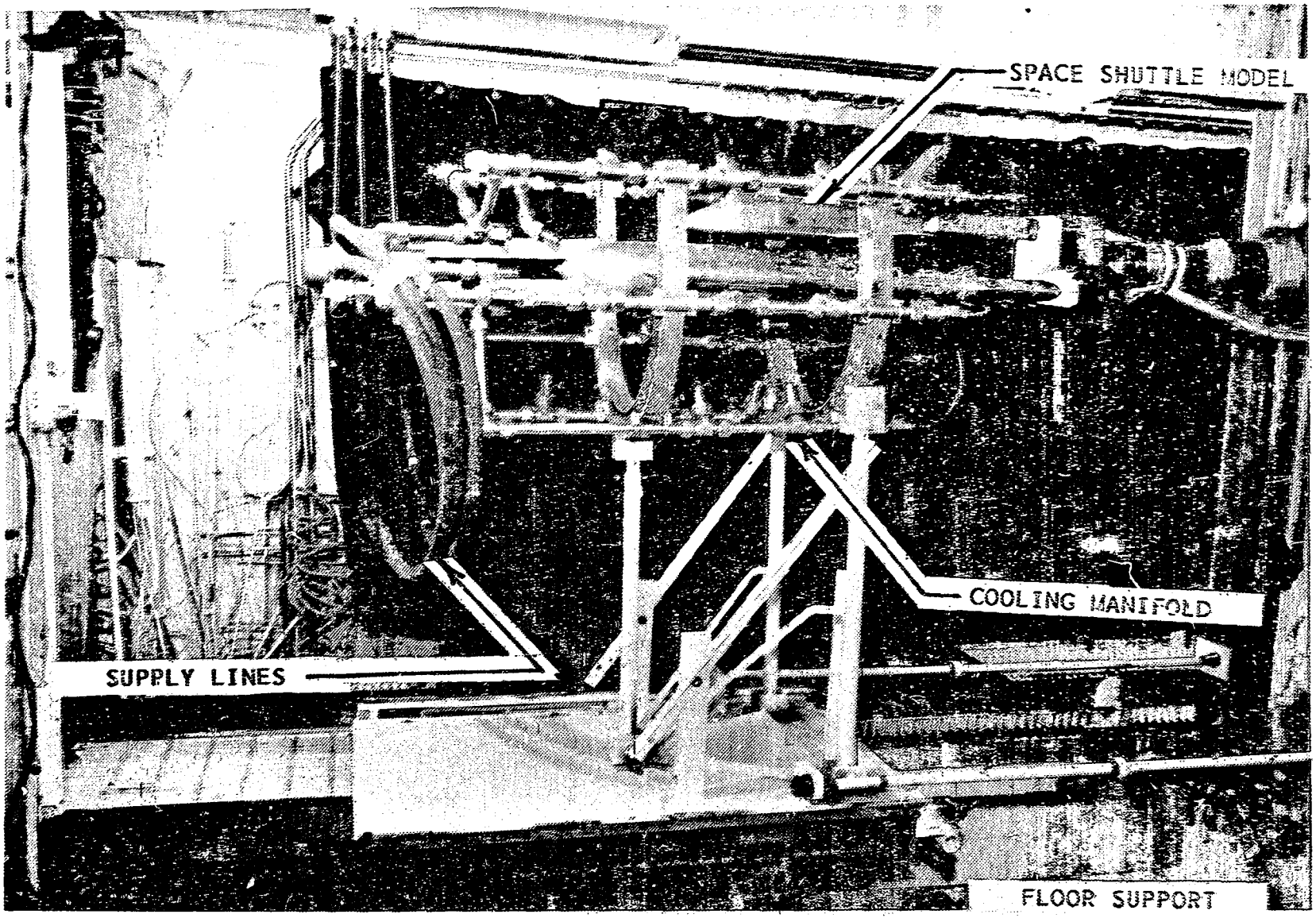


FIGURE 69 TUNNEL A MODEL COOLING APPARATUS

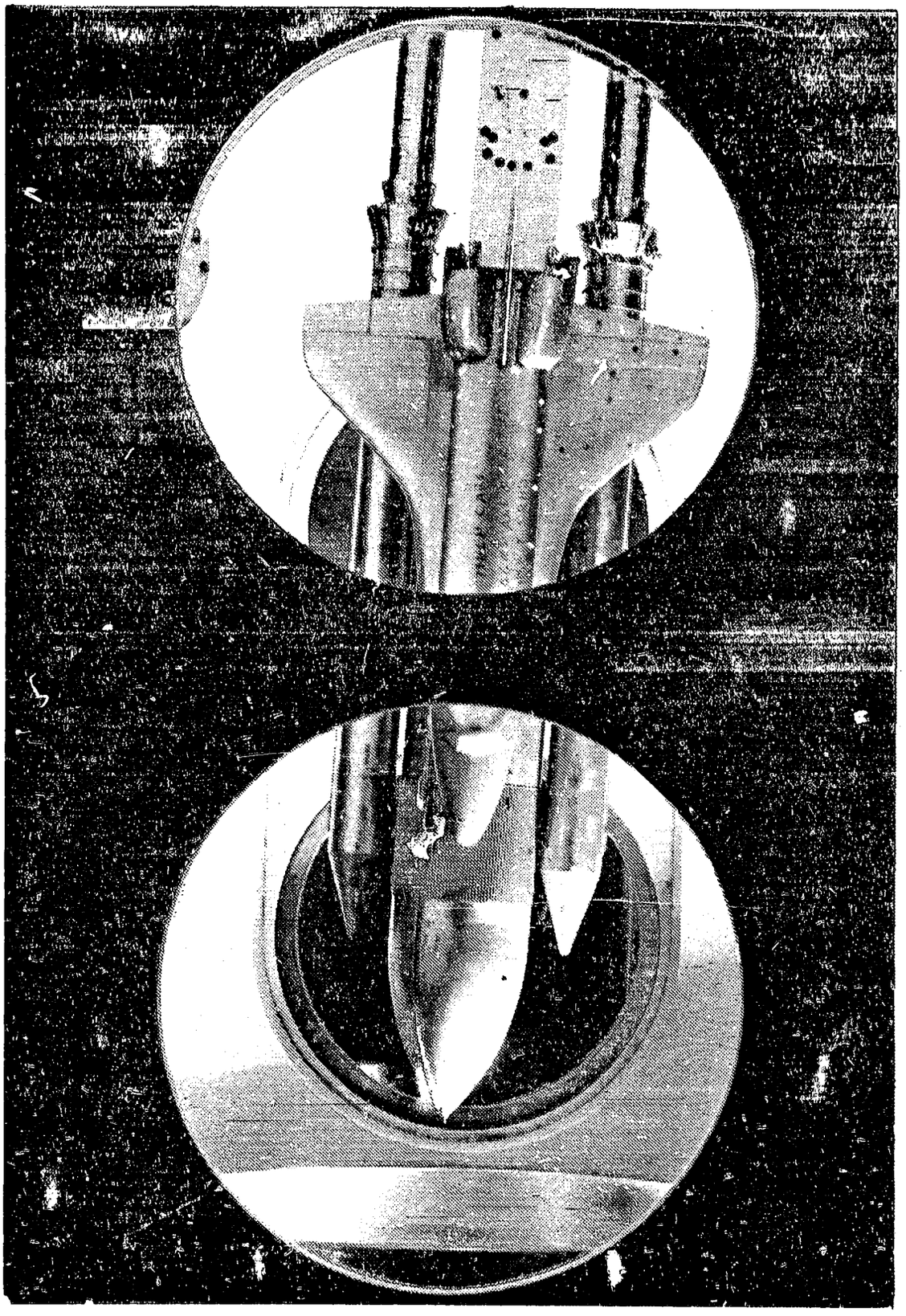


FIGURE 6R. MODEL INSTALLATION IN AEROTHERM TUNNEL C

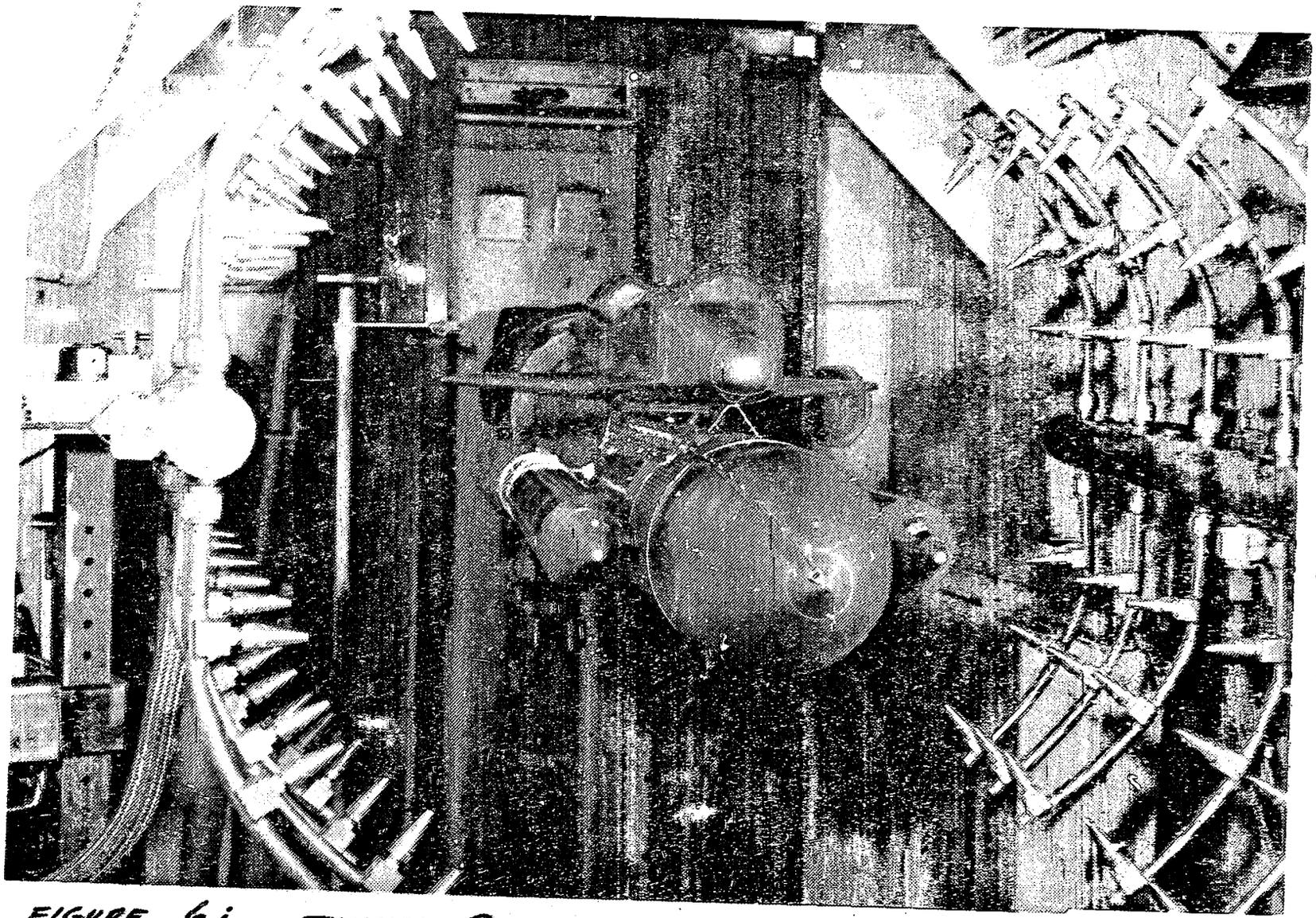


FIGURE 6i TUNNEL C MODEL COOLING APPARATUS

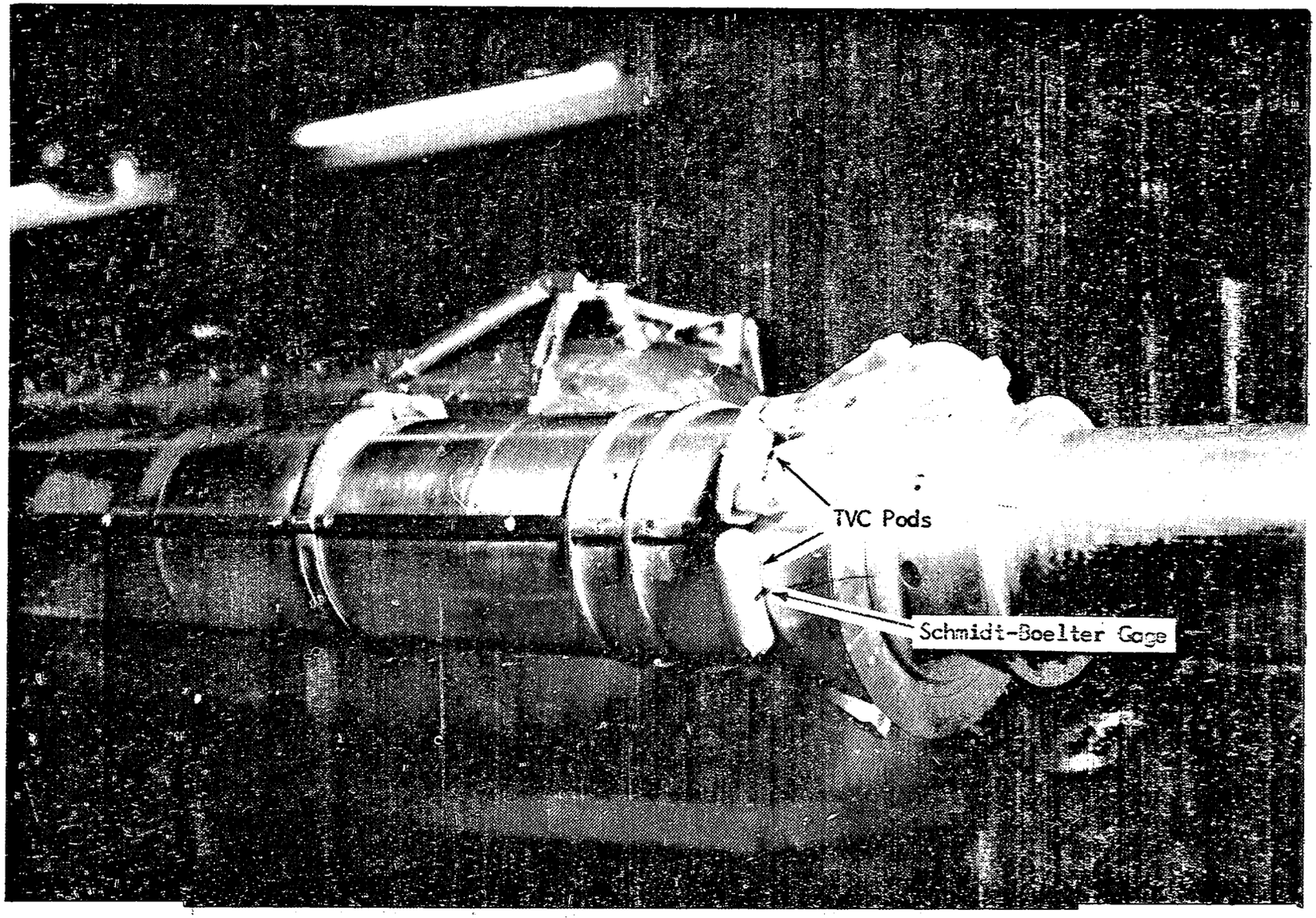


Figure 6j. Left-hand SRB Thrust Vector Control (TVC) Pod Detail and Instrumentation Location.

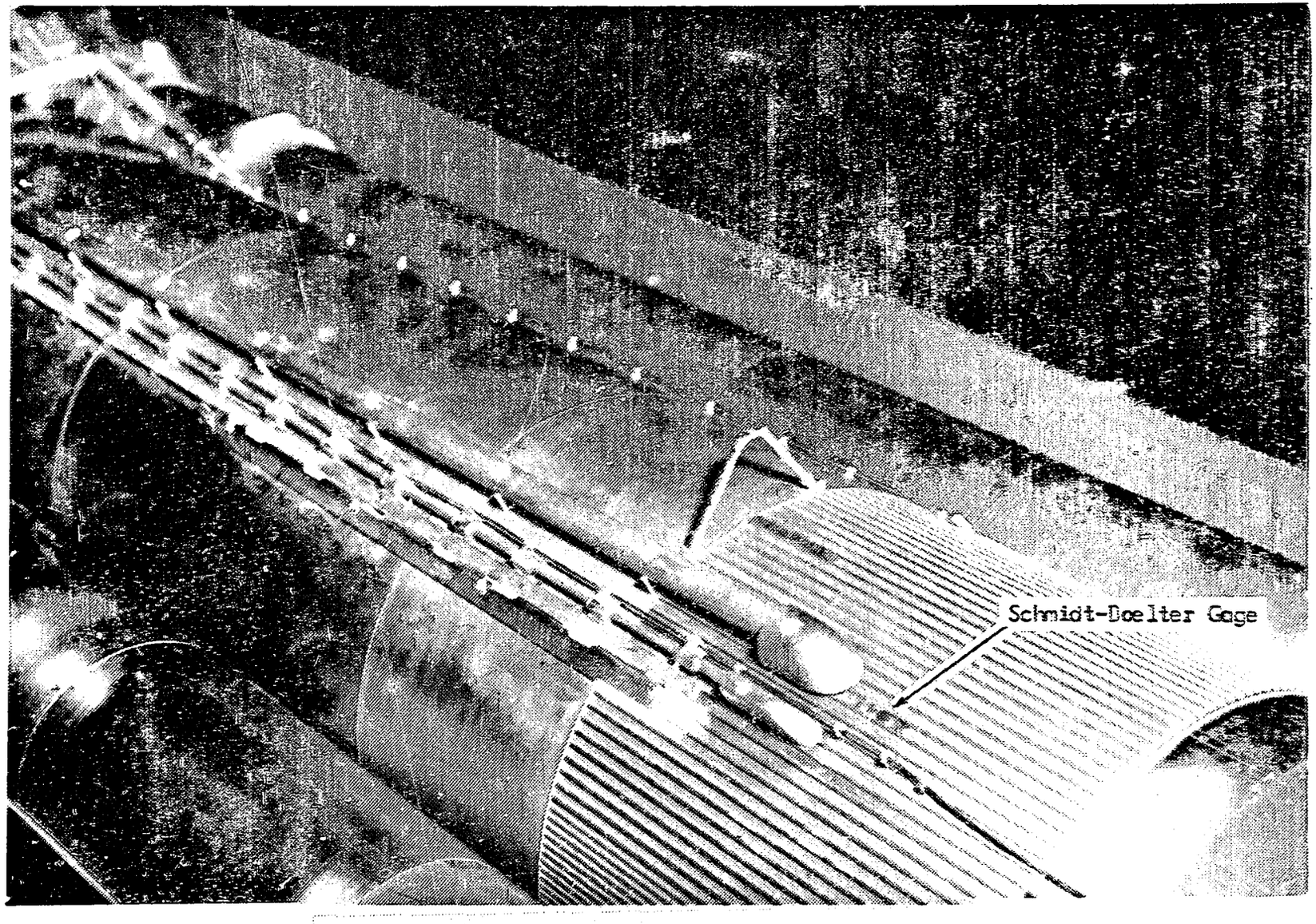


Figure 6k. ET Protuberance and Inter-Tank Detail

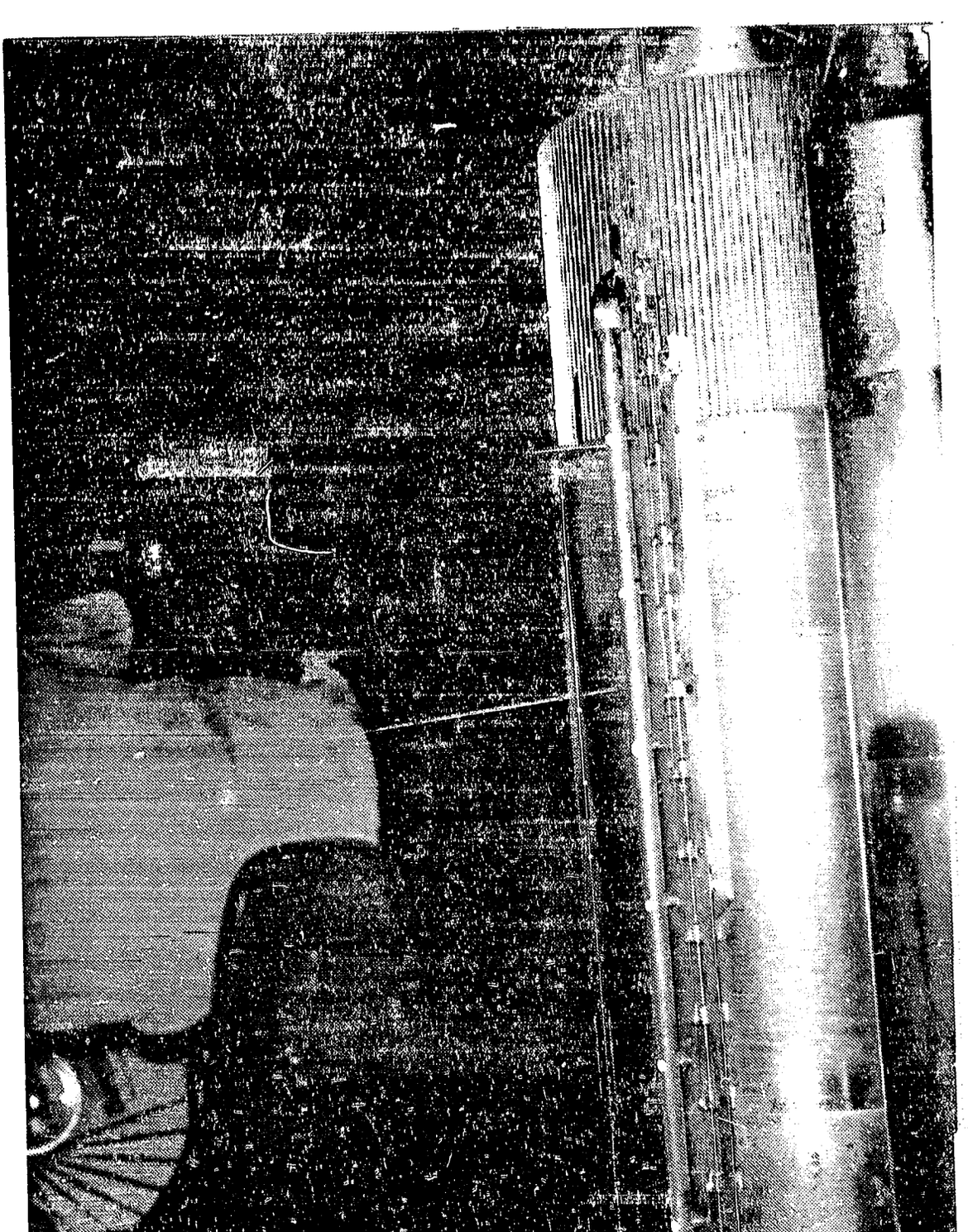


Figure 61. ET Protuberance, Inter-Tank and Instrumentation

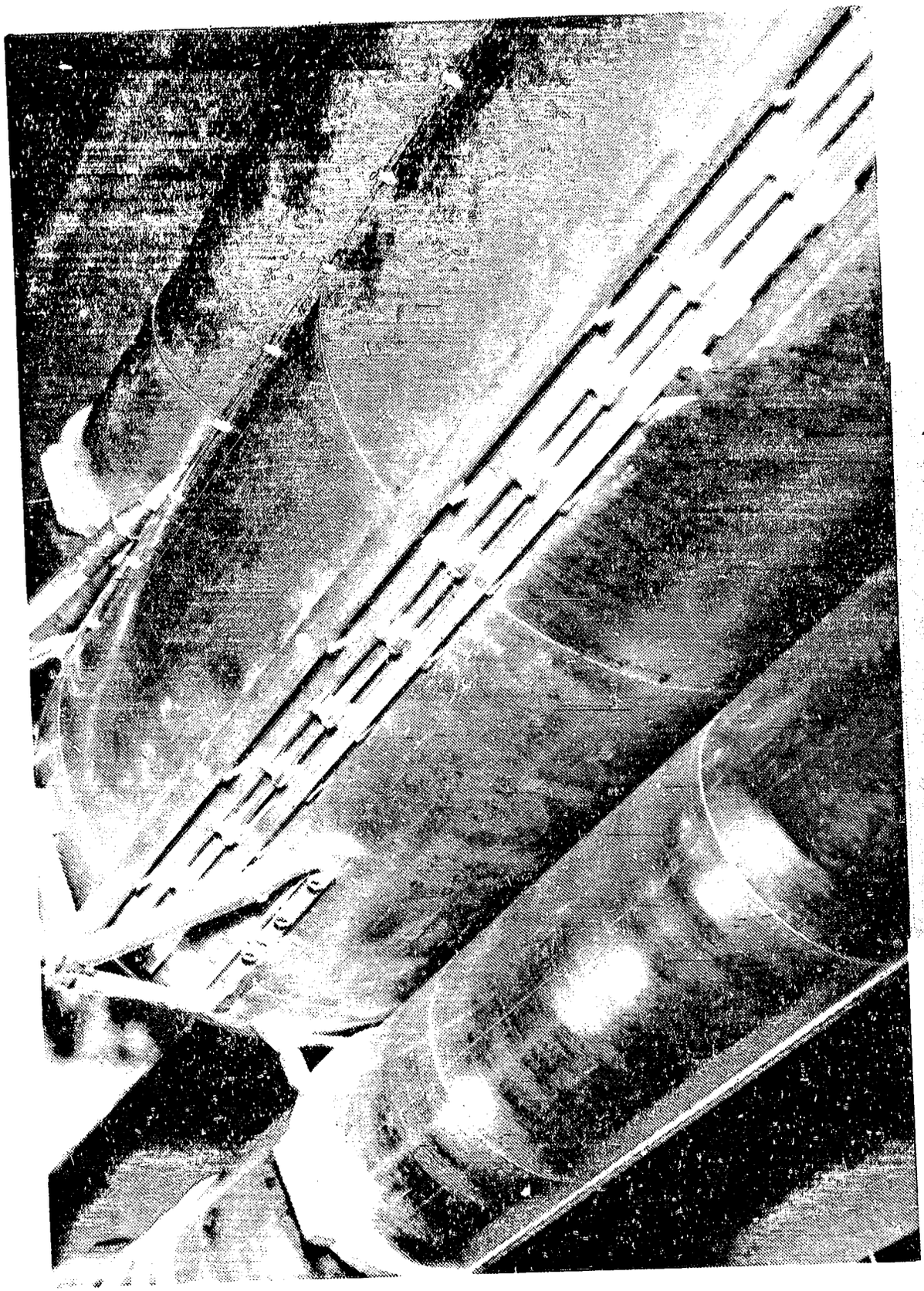


Figure 6m. ET Feedline - Blue Streak Area

Figure 6n. ET Aft Orb./ET Attach Structure Instrumentation Location

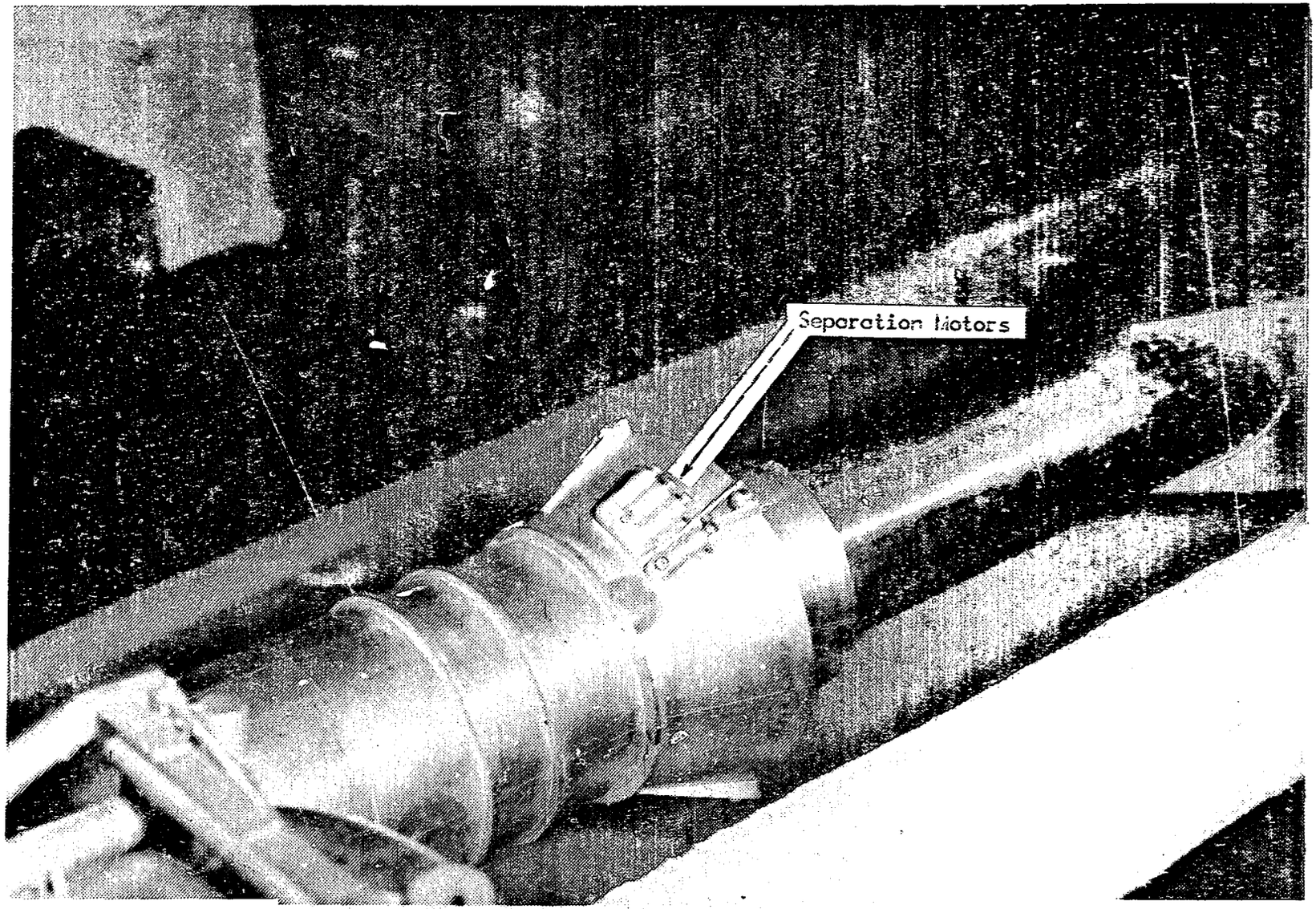


Figure 60. R/H SRB Aft Separation Motor Detail

Figure 6p. ET Nose and Nose Spike (Schmidt-Boelter Gage)

DATA FIGURES

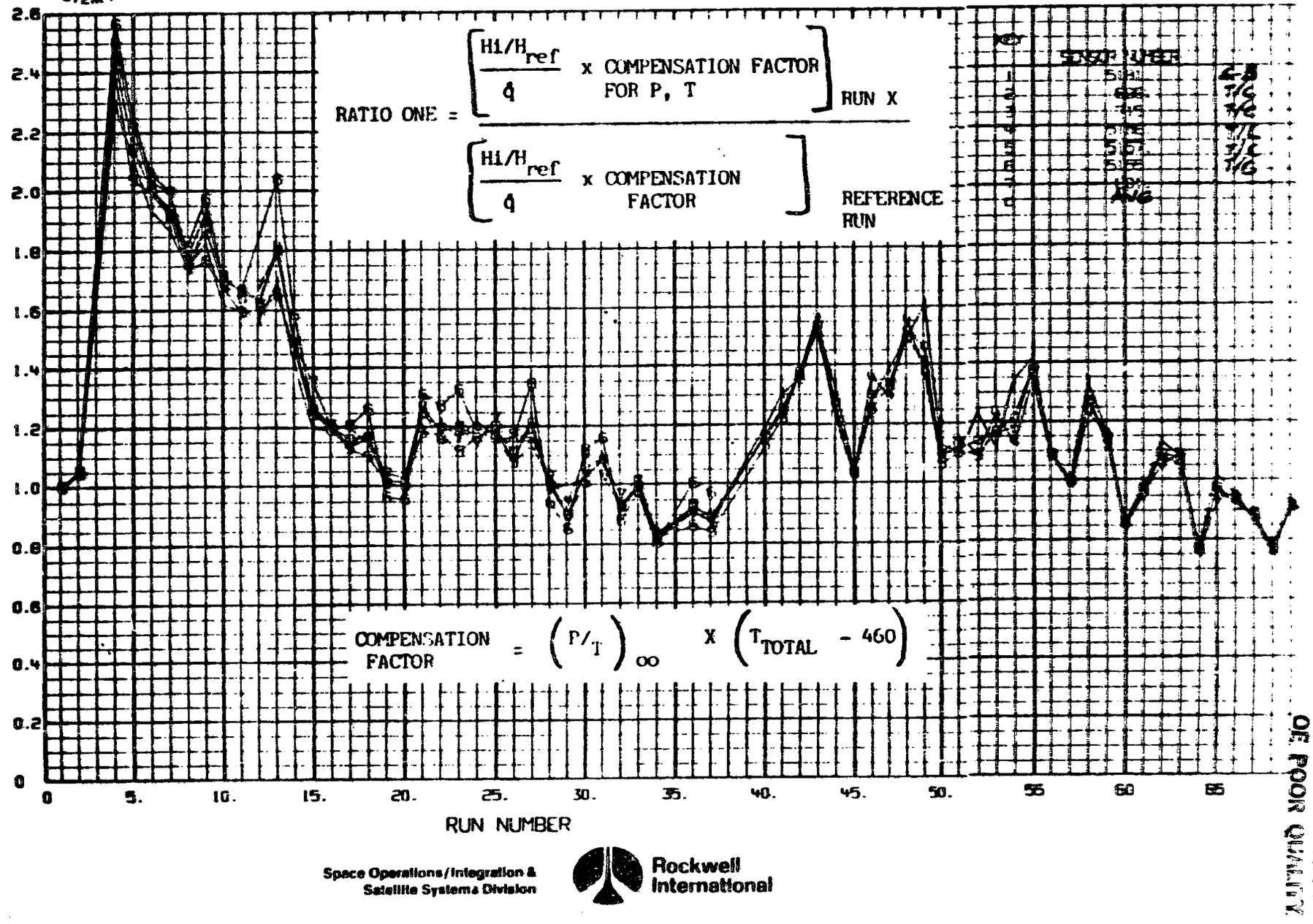
(Sample Heating Data)

Tabulations of plotted data figures are published in Table VI of this report.

RECOVERY OF 1H97 HEATING DATA FROM MALFUNCTIONING S-B GAGES

CORRELATION WITH ADJACENT T/C'S, BASED ON $\dot{q}$

Figure 7a.



160

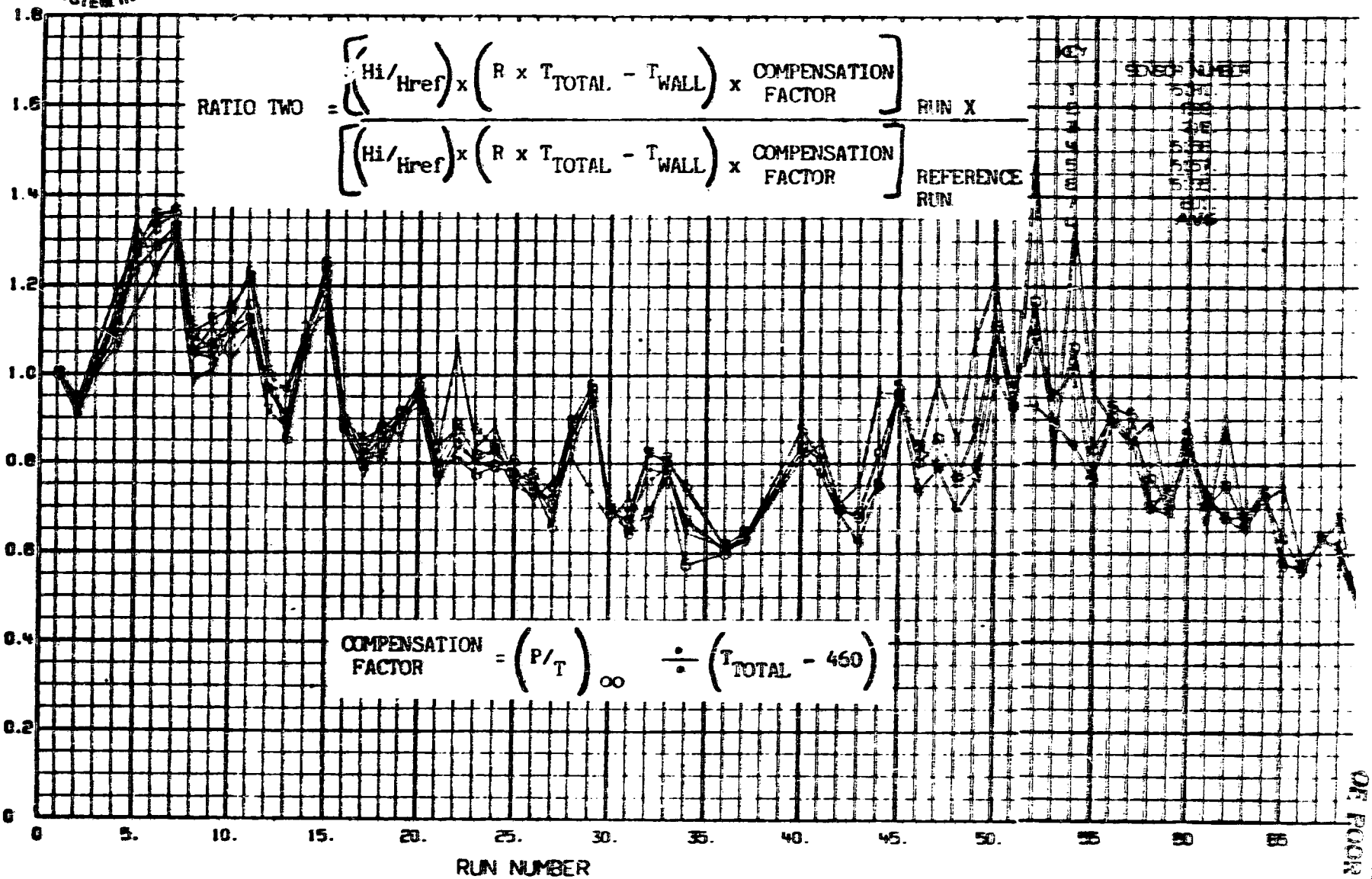
Space Operations/Integration & Satellite Systems Division

Rockwell International

RECOVERY OF IH97 HEATING DATA FROM MALFUNCTIONING S-B GAGES

CORRELATION WITH ADJACENT T/C'S, BASED ON T_W

Figure 7b.



Space Operations/Integration & Satellite Systems Division

Rockwell International

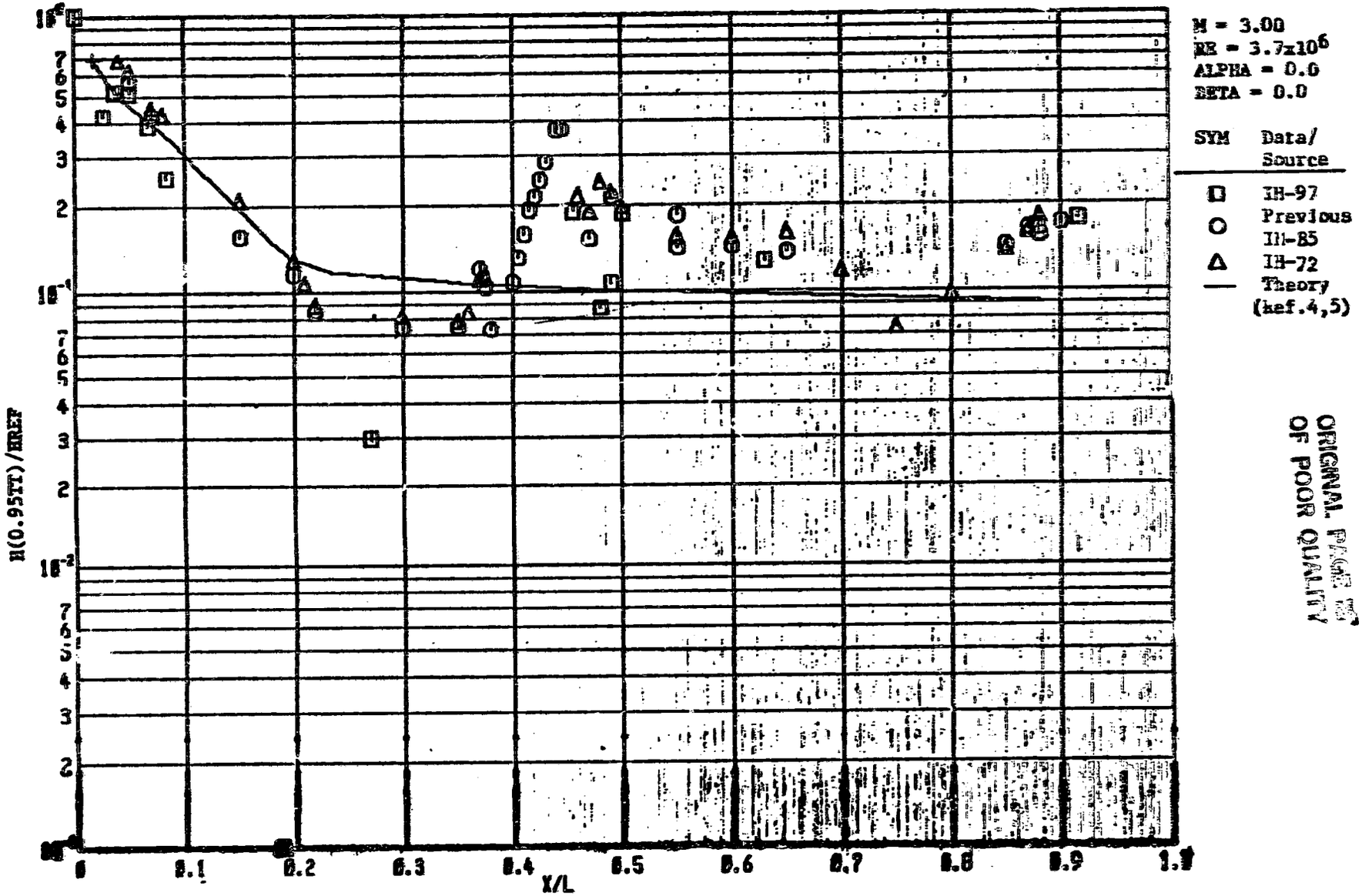


Figure 7c. Comparison of External Tank Heating Data from IH-97, IH-85, IH-72 and Theory at M = 3.00

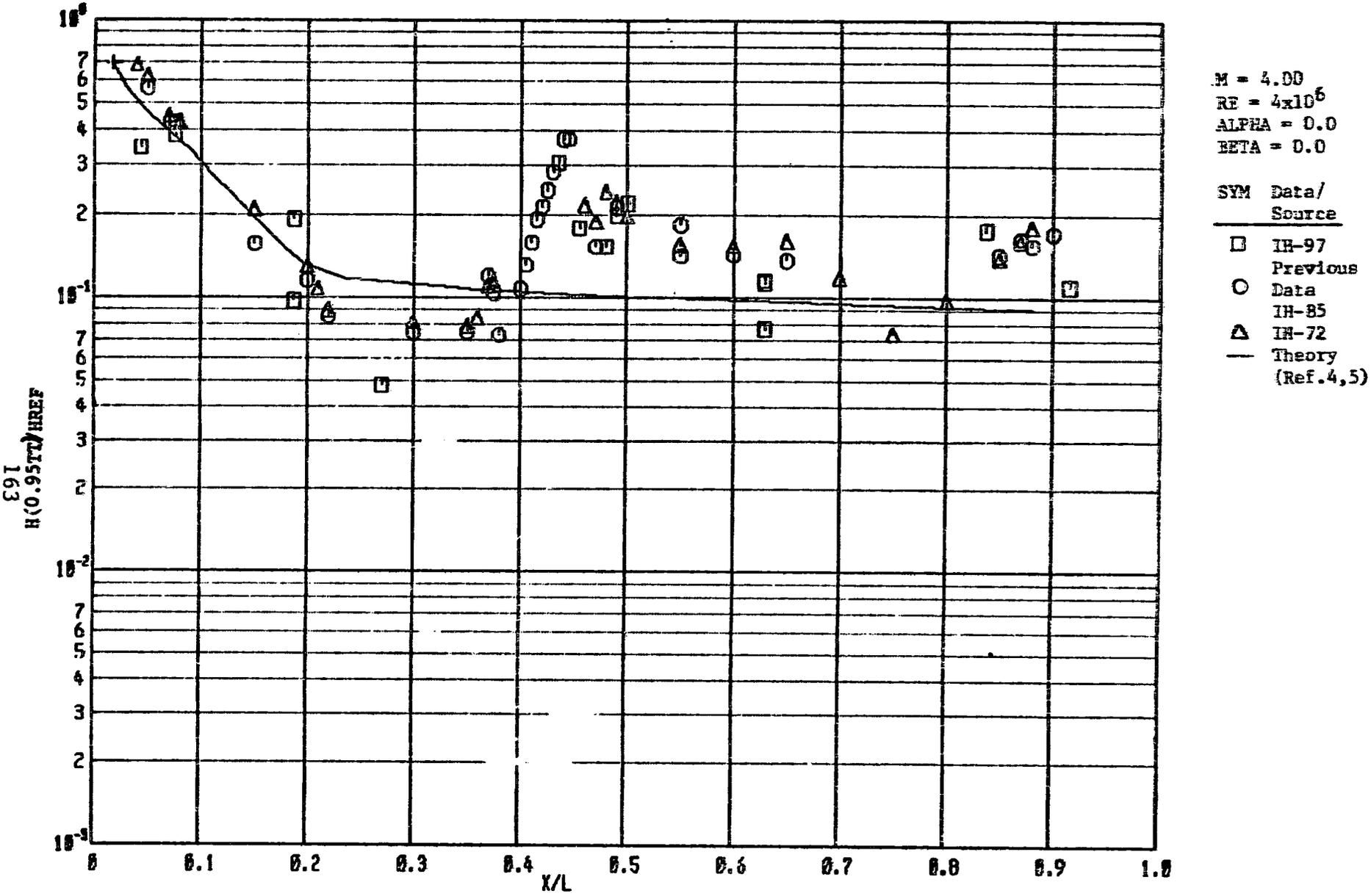


Figure 7d. Comparison of External Tank Heating Data from IH-97, IH-85, IH-72 and Theory at M = 4.00

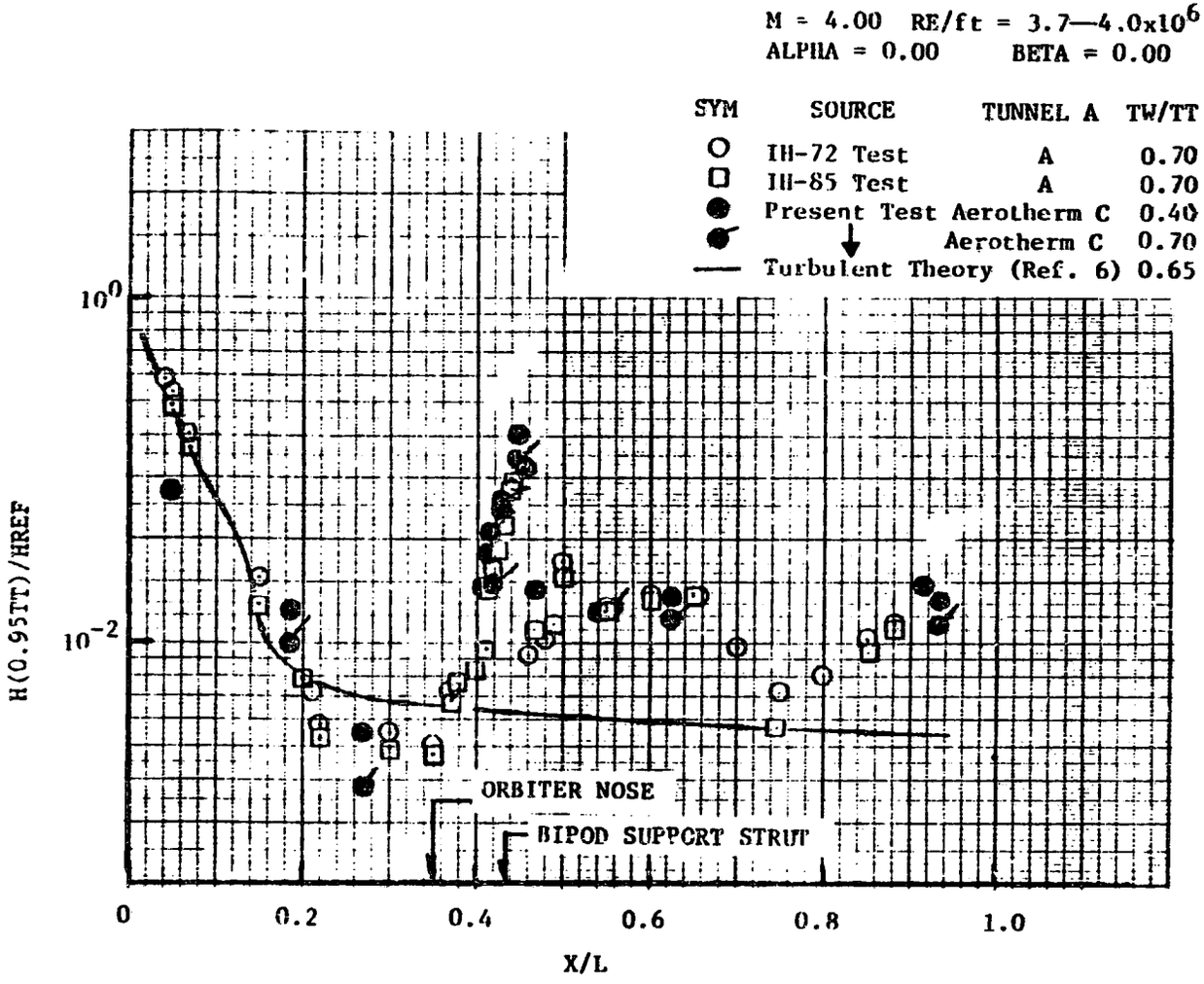


Figure 7e. Comparison of External Tank Heating Data from Present Test, IH-85, IH-72 and Theory at M = 4.00