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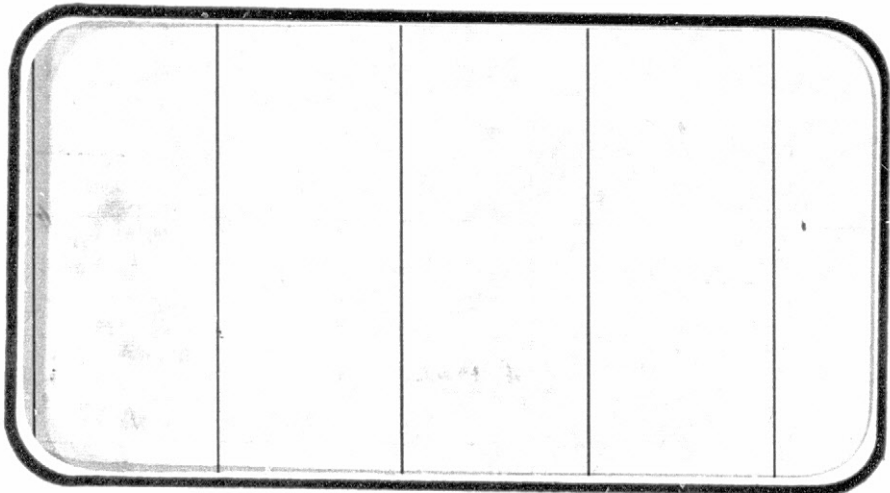
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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA CR-
141827



(NASA-CR-141827) RESULTS OF AN
INVESTIGATION OF THE 0.003-SCALE SPACE
SHUTTLE EXTERNAL TANK MSFC MODEL 460 IN THE
NASA/MSFC 14 X 14-INCH TRISONIC WIND TUNNEL
TO DETERMINE STATIC PRESSURE DISTRIBUTIONS

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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER
HOUSTON, TEXAS

DATA MANAGEMENT services
SPACE DIVISION  CHRYSLER CORPORATION

November, 1975

DMS-DR-2165
NASA CR-141,827

VOLUME 5 OF 5

RESULTS OF AN INVESTIGATION OF THE 0.003-SCALE
SPACE SHUTTLE EXTERNAL TANK MSFC MODEL 460
IN THE NASA/MSFC 14 X 14-INCH TRISONIC WIND TUNNEL
TO DETERMINE STATIC PRESSURE DISTRIBUTIONS DURING
REENTRY (TA2F)

by

P. E. Ramsey, MSFC
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Prepared under NASA Contract Number NAS9-13247

by

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New Orleans, La. 70189

for

Engineering Analysis Division
Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number: MSFC TWT 596
NASA Series Number: TA2F
Model Number: 460
Test Dates: July 20-23, 1974
Occupancy Hours: 104

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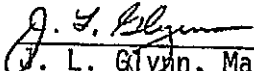
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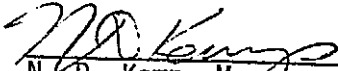
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RESULTS OF AN INVESTIGATION OF AN 0.003-SCALE
SPACE SHUTTLE EXTERNAL TANK MSFC MODEL 460 IN THE
NASA/MSFC 14 x 14-INCH TRISONIC WIND TUNNEL TO
DETERMINE STATIC PRESSURE DISTRIBUTIONS DURING REENTRY
(TA2F)

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P. E. Ramsey, MSFC, and G. W. Winkler, NSI

ABSTRACT

Objective of the test was to obtain static pressure distributions for the ET at reentry conditions. Basic configuration of the model was the MCR 0200 ET modified to include a rectangular crossbar at the aft ET/orbiter attach point. Mach numbers were 1.96, 3.48, and 4.96. Reynolds number per foot at these Mach numbers were 6.95 million, 6.42 million, and 4.95 million, respectively. Angle of attack range was -8 to 100 degrees and roll angle was 0 to 315 degrees. Occupancy hours were 104.

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SCHEDULE OF COEFFICIENTS PLOTTED:

- A) CP vs. X/LB
- B) CP vs. THETA
- C) DCNM/D(X/LB) vs. X/LB
- D) DCYM/D(X/LB) vs. X/LB
- E) CNM vs. ALPHA
CLMM
CYM
CYNM

NOMENCLATURE

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>	<u>Units</u>
a		speed of sound	m/sec, ft/sec
A_b		base area; cross-sectional area of the cylindrical ET	in. ²
b_{ref}	BREF	reference span; diameter of the cylindrical section of the model	in.
ET		external tank	
FA		axial force (AF), positive in the negative direction of x_m	lb
F_N		normal force (NF), positive in the negative direction of z_m	lb
F_y		side force (SF), positive in the positive direction of y_m	lb
l_B	LBODY	length of the ET	in.
l_{ref}	LREF	reference length; diameter of the cylindrical section of the model	in.
M	MACH	Mach number; V/a	
MRP	MRP	moment reference point located in the x_m , y_m , z_m axes by XMRP, YMRP, and ZMRP (See Data Reduction section)	
M_x		rolling moment (RM); a moment about the x_m axis (a positive rolling moment tends to rotate the positive y_m axis toward the positive z_m axis)	in.-lb
M_y		pitching moment (PM); a moment about the y_m axis (a positive pitching moment tends to rotate the positive z_m axis toward the positive x_m axis)	in.-lb
c g		center of gravity	

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>	<u>Units</u>
M_z		yawing moment (YM); a moment about the z_m axis (a positive yawing moment tends to rotate the positive x_m axis toward the positive y_m axis)	in.-lb
p_∞	P	pressure, freestream	psi
p_0	P0	stagnation pressure	psi
q_∞	Q(P5I)	free stream dynamic pressure	psi
S_{ref}	SREF	reference area; cross-sectional area of the cylindrical section of the model	in. ²
RN/L	RN/L	unit Reynolds number	per m, per ft
SRB		solid rocket booster	
V		velocity	m/sec, ft/sec
x_m, y_m, z_m		missile axis system (see Data Reduction section)	
X		distance from nose of ET model in the negative x_m direction	in.
x_T, y_T, z_T		model stations; (see figure 2a)	in.
x_{CP}/ℓ_B	XCP/L	longitudinal position of the center of pressure, expressed as a fraction of the ET length, measured from the ET nose	
		$\frac{x_{CP}}{\ell_B} = \frac{x_{MRP}}{\ell_B} - \frac{C_{m_m} \ell_{ref}}{C_{N_m} \ell_B}$	
\bar{c}		aerodynamic chord	m, ft
COEFFICIENTS			
C_{A_m}	CA	axial force coefficient; $F_A/q S_{ref}$	

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>	<u>Units</u>
$C_{A_{b_m}}$	CAB	base axial force coefficient; $(p_\infty - p_b) A_B / q S_{ref}$	
C_{A_f}	CAF	forebody axial force coefficient; $C_{A_m} - C_{A_{b_m}}$	
C_{ℓ_m}	CBL	rolling moment coefficient; $M_x / q S_{ref} b_{ref}$	
C_{m_m}	CLMM	pitching moment coefficient; $M_y / q S_{ref} \ell_{ref}$	
C_{N_m}	CNM	normal force coefficient; $F_N / q S_{ref}$	
C_{n_m}	CYNM	yawing moment coefficient; $M_z / q S_{ref} b_{ref}$	
C_p	CP	pressure coefficient; $(p - p_\infty) / q$	
C_{Y_m}	CYM	side force coefficient; $F_y / q S_{ref}$	
C_{N_m}'	DCN/DX	local normal force coefficient; $\partial C_N / \partial (X/D)$	
C_{Y_m}'	DCY/DX	local side force coefficient; $\partial C_Y / \partial (X/D)$	
SYMBOLS			
α	ALPHA	angle of attack	deg.
β	BETA	angle of sideslip	deg.
ϕ	PHI	angle of roll	deg.
ψ	PSI	angle of yaw	deg.

NOMENCLATURE (Concluded)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>	<u>Units</u>
θ	THETA	circumferential location	deg.
ρ		mass density	kg/m ³ , slugs/ft ³
ref		reference conditions	
∞		free stream conditions	
b		base	
c		cavity	
t		total conditions	
B		model body	
T		external tank	
m		missile axis system	
l		local	
s		static conditions	
	MOUNT	1.0 indicates tail mounted (T ₁) 2.0 indicates side mounted (T ₂)	

INTRODUCTION

After the solid rocket boosters and the external tank separate from the orbiter, the ET will reenter the earth's atmosphere at high supersonic or even hypersonic Mach numbers. This test is the second of two tests conducted in the NASA-MSFC 14-inch Trisonic Wind Tunnel to obtain force and pressure data on the 324-inch diameter ET at typical reentry angles of attack.

Model (MSFC No. 460) configuration is a 0.003-scale representation of the ET with fuel lines and forward and aft SRB and orbiter attach hardware. Also included is the ET/orbiter rectangular crossbar attach structure.

Pressure taps (192 total) were used to obtain data for evaluating the load distribution on the ET. Further evaluation of the ET aerodynamic characteristics can be made by comparing data from this test with data from TWT 583 (reference 4).

Pressure data were taken at three Mach numbers: 1.96, 3.48, and 4.96. Angle of attack range was -8 to 100 degrees, which was obtained by using two ET model mountings. Range -8 to 30 degrees used a tail-mounted model (T_1) for each of eight roll positions, 0 to 315 degrees. This model had attach structure and protuberances. For the range of 51 to 100 degrees, a side-mounted model (T_2) at 0° roll position was used.

MODEL DESCRIPTION

The model is a 0.003-scale of the MCR 0200 space shuttle ET configuration modified to include a crossbar at the aft orbiter/ET attach points. General arrangement of the model is shown in figure 2a. The model is designated MSFC #450, and it consists of two ET models (one tail-mounted and one side-mounted); protuberances simulating fuel lines, attachment hardware, etc.; and model adapters which allowed the tanks to be supported in the tunnel on RI stings #1 and #3. The models were built by NASA to conform to the configuration specified by Rockwell International drawing VL78-000041B (Reference Drawing 6) and Martin-Marietta memo SA-A-74-9 (Reference Report 2).

Both ET models were made of stainless steel and contained 192 pressure orifices each. From these orifices, stainless steel and annealed 0.032-inch OD tubing was routed out the base (or the side) of the model. Four feet of 0.050-inch OD tubing was brazed onto each of the 0.032-inch tubes as close to the exit cavity as possible.

When placed in the tunnel test section, the tubing bundle from the model was secured along the sting and routed down the sector through the tunnel floor. At this point, Tygon tubing was used to connect the steel tubing to quick disconnects, which were connected to the scanivalves. Installation photographs for the tail mounted (T_1) and side mounted (T_2) models are in figures 3a and 3b, respectively.

Model stations are sometimes used to describe locations of various components of the model. When used, these stations will be given in

MODEL DESCRIPTION (Concluded)

inches model scale and the zero reference points will be same as in Rockwell International drawing VL72-000088"D" (Reference Drawing 2). Zero reference points are shown in figure 2a.

CONFIGURATIONS INVESTIGATED

Two ET configurations investigated are defined as follows:

T₁--MCR 0200 tail-mounted, modified to include crossbar configuration with protuberances.

T₂--MCR 0200 side-mounted, "clean" configuration (without protuberances).

Each of the configurations consists of the following model components:

T₁--T₁₂ AT₅ AT₆ AT₇ AT₈ AT₉ PT₁ PT₂ PT₃ FL₁ FL₂ FR₆

T₂--T₁₂

Brief descriptions of each component are below. Refer to table III for dimensional data.

T ₁₂	Baseline 324-inch diameter external oxygen-hydrogen tank
AT ₅	Forward orbiter/ET attach structure
AT ₆	Left rear orbiter/ET attach structure
AT ₇	Right rear orbiter/ET attach structure
AT ₈	Forward SRB/ET attach structure
AT ₉	Aft SRB/ET attach structure
PT ₁	LOX vent line fairing
PT ₂	LOX feed line
PT ₃	LH ₂ feed line
FL ₁	LOX feed line
FL ₂	LH ₂ feed line
FR ₆	Aft ET/orbiter crossbar

TEST FACILITY DESCRIPTION

The Marshall Space Flight Center 14" x 14" Trisonic Wind Tunnel is an intermittent blowdown tunnel which operates by high pressure air flowing from storage to either vacuum or atmospheric conditions. A Mach number range from .2 to 5.85 is covered by utilizing two interchangeable test sections. The transonic section permits testing at Mach 0.20 through 2.50, and the supersonic section permits testing at Mach 2.74 through 5.85. Mach numbers between .2 and .9 are obtained by using a controllable diffuser. The range from .95 to 1.3 is achieved through the use of plenum suction and perforated walls. Mach numbers of 1.44, 1.93 and 2.50 are produced by interchangeable sets of fixed contour nozzle blocks. Above Mach 2.50 a set of fixed contour nozzle blocks is tilted and translated automatically to produce any desired Mach number in .25 increments.

Air is supplied to a 6000 cubic foot storage tank at approximately -40°F dew point and 500 psi. The compressor is a three-stage reciprocating unit driven by a 1500 hp motor.

The tunnel flow is established and controlled with a servo actuated gate valve. The controlled air flows through the valve diffuser into the stilling chamber and heat exchanger where the air temperature can be controlled from ambient to approximately 180°F. The air then passes through the test section which contains the nozzle blocks and test region.

Downstream of the test section is a hydraulically controlled pitch sector that provides a total angle of attack range of 20° ($\pm 10^\circ$). Sting offsets are available for obtaining various maximum angles of attack up to 95°.

TEST FACILITY DESCRIPTION (Concluded)

The diffuser section has movable floor and ceiling panels which are the primary means of controlling the subsonic Mach numbers and permit more efficient running supersonically. The sector assembly and supersonic diffuser telescope into the subsonic diffuser to allow easy access to the model and test section.

Tunnel flow is exhausted through an acoustically damped tower to atmosphere or into the vacuum field of 42,000 cubic feet. The vacuum tanks are evacuated by vacuum pumps driven by a motor of 500 hp.

Data are recorded by a solid-state digital data acquisition system. The digital data are transferred to punched cards during the run to be reduced later by a computer to proper coefficient form.

TEST PROCEDURE

First part of the test was conducted using a side-mounted, "clean" configuration (T_2 without protuberances). Since it was a "clean" configuration, the roll angle was considered to always be 0 degrees. Angle of attack range was from 51 to 100 degrees in increments of 3 degrees. Data were obtained at Mach numbers of 1.96, 3.48, and 4.96.

Second part of the test consisted of using a tail-mounted model with attach hardware, fuel lines, and electrical tunnel. Angle of attack range was from -8 to 30 degrees in increments of 4 degrees. Data were obtained at eight roll positions, 0 to 315 degrees in 45-degree increments. All orifices and tubing were checked for leakage at the beginning of the test and after each roll position change. A leak check after rolling the model insured that correct measurements were being received from the orifices. Response time for the scanivalve function was within the one-second intervals allowed each scanivalve.

List of average test conditions is in table I. Dataset run number collation summary is in table II.

DATA REDUCTION

Location of each pressure orifice and the numbering system are presented in tables IV and V. Also special identification of blocked or inoperative pressure orifices is made for both tail-mounted and side-mounted models in these tables. Locations of these orifices are shown in figure 2b.

Sting deflections were measured outside the tunnel by using check weights. Sting deflections versus load curve for the pressure test (TWT 596) was found to be the same, within allowable accuracy, as that of the force test (TWT 583). The same ET configuration and only slightly different support hardware were used in both force and pressure tests. Increments of α due to sting bending in the force test were added to the nominal α 's for the pressure test. This gave reasonably accurate values of angle of attack, accuracy comparable to force test, when the pressure model was tested at the same Mach number and tunnel total pressure as the force model.

Pressure data were reduced to coefficient form and are tabulated along with wind tunnel parameters, configuration, and run number in the appendix. Plots are presented for both longitudinal and circumferential pressure distributions (C_p vs X/λ_B and C_p vs θ). These plots are shown for each Mach number, angle of attack, and roll position at which tests were conducted. In addition, the pressure coefficients were integrated to obtain the following missile axis force and moment coefficients:

DATA REDUCTION (Concluded)

C_{N_m}	$= F_N/q S_{ref}$	normal force coefficient
C_{Y_m}	$= F_Y/q S_{ref}$	side force coefficient
C_{m_m}	$= M_Y/q S_{ref} l_{ref}$	pitching moment coefficient
C_{n_m}	$= M_Z/q S_{ref} b_{ref}$	yawing moment coefficient
C'_{N_m}	$= \partial C_N / \partial (X/D)$	local normal force coefficient
C'_{Y_m}	$= \partial C_Y / \partial (X/D)$	local side force coefficient

Force and moment coefficients obtained from the integration of pressures are for comparison with the results from the force test.

Model reference dimensions used in the data reduction are presented in table VI. The axis system diagram is presented in figure 1. The missile axis system (x_m , y_m , z_m) is a non-rolling body axis system that is frequently used in wind tunnel tests and studies of missile flight dynamics. It is a system of axes that rotates with a missile or wind tunnel model through angles of sideslip and angles of attack but never through angles of roll; i.e., it never rotates about the missile or model longitudinal axis. The orientation of the missile axis coefficients is defined in figure 1. The missile axis system is identical with the body axis system at zero roll angle.

Moment reference point (MRP) for the 0.003-scale model is taken to be at the dry weight center of gravity of the ET. For the full-scale ET, the center of gravity is located at $X_T = 1395.4$ inches. Thus, the MRP for the 0.003-scale ET model is 3.259 inches from the model nose, on the centerline (figure 2a).

REFERENCES

1. NASA TMX-53185, "The George C. Marshall Space Flight Center's 14 x 14 Inch Trisonic Wind Tunnel Technical Handbook," Simon, Erwin; December 1964.
2. SA-A-74-9, "Space Shuttle External Tank Entry Force and Moment Wind Tunnel Test Requirements," Michna, D. J., Michoud Operations, Martin Marietta Corporation, February 1974.
3. NSI-M-9230-74-270, "A Pre-test Report for MSFC TWT 596, An Investigation to Determine the Static Pressure Distributions During Reentry of a 0.003-scale Modified MCR 200 Space Shuttle External Tank Model in the NASA-MSFC 14 x 14-Inch Trisonic Wind Tunnel," Robertson, M, K. and Winkler, G. W., April 1974.
4. DMS-DR-2145, NASA CR-134,420, "Static Stability Characteristics of the Space Shuttle External Tank (MSFC Model 458) During Reentry in the MSFC 14-inch TWT (TAIF)," by Ramsey, Paul E., Robertson, Michael K., and Winkler, Gary W. October 1974.

REFERENCE DRAWINGS

1. VL72-000106, 8-6-73; SRB to ET Aft Attach, Approved Link Concept, Shuttle Study; Rockwell International.
2. VL72-000088 "D", 8-3-73; Shuttle Configuration Control, MCR 0200 Baseline Rev. III, Dated 7-2-73; Rockwell International.
3. VL78-000031 "A", 6-29-73; Thermal Protection-External Tank MCR 0200 Baseline Dated 4-11-73; Rockwell International.
4. VL77-000051 "A", 9-10-73; SRB Single PT.-Fwd Thrust Fitting (MCR 0190 Rev. 3 Baseline 8-13-73); Rockwell International.
5. SS-A01176 (Wind Tunnel Model Group); Details - .015 Scale EOHT Attachments (140 A/B) (67-OTS) 11-20-73; Rockwell International.
6. VL78-000041 "B", 5-30-73; External Tank Configuration Control MCR 0200 Revision 1 Dated 5-16-73; Rockwell International.

Table I.

TEST: MSFC TWT 596			DATE: Aug 1974	
TEST CONDITIONS				
MACH NUMBER	REYNOLDS NUMBER (per foot)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)	STAGNATION PRESSURE (pounds/sq. inch)
1.96	6.95×10^6	10.2	104	28.0
3.48	6.42×10^6	6.9	143	60.0
4.96	4.95×10^6	3.1	143	90.0

BALANCE UTILIZED: None - Pressure Test; 50 PSIA Transducers

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

COMMENTS: Transducer capacity of 50 psia, accuracy of $\pm .25$ psi, and coefficient tolerance of $\pm .025$ @ $q = 10$ psi.

TABLE II.

TEST: MSFC TWT 596			DATA SET/RUN NUMBER COLLATION SUMMARY						DATE: July 1974								
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)									
		α	β	DEF-SET	MT.	ϕ		1.96	3.48	4.96							
RIA001	T, (TAIL MOUNTED	-8	0	0	TAIL	0	3	86	140	139							
002	E.T. WITH	-4					3	87	137	138							
003	PROTUBERANCES)	0					5	88	136	135							
004		4					3	89	133	134							
005		8		Y			5	90	132	131							
006		12		20			3	85	141	142							
007		16					3	84	144	143							
008		20					3	83	145	146							
009		24					3	82	148	147							
010		28		Y		Y	3	81	149	150							
011		-8		0		90	3	80	170	169							
012		-4					3	79	167	168							
013		0					3	78	166	165							
014		4					3	77	163	164							
015		8		Y			3	76	162	161							
016		12		20			3	75	159	160							
017		16					3	74	158	157							
RIA018		20	Y	Y	Y	Y	3	73	155	156							

TEST RUN NUMBERS

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

CP

COEFFICIENTS

IDVAR (1) IDVAR (2) NDV

 α OR β
SCHEDULES

TABLE II. (Continued)

TEST: MSFC TWT 596		DATA SET/RUN NUMBER COLLATION SUMMARY						DATE: July 1974												
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)												
		α	β	OFF-SET	MT.	ϕ		1.96	3.48	4.96										
R1A 019	T, (TAIL-MOUNTED	24	0	20	TAIL	90	3	72	154	153										
020	ET WITH	28		↓		↓	3	71	151	152										
021	PROTUBERANCES)	-8		0		135	2		179	180										
022		-4					2		178	177										
023		0					2		175	176										
024		4					2		173	172										
025		8		Y			2		174	171										
026		12		20			2		190	189										
027		16					2		187	188										
028		20					2		186	185										
029		24					2		183	184										
030		28		Y		Y	2		182	181										
031		-8		0		180	3	61	210	209										
032		-4					3	62	207	208										
033		0					3	63	206	205										
034		4					3	64	203	204										
035		8		Y			3	65	202	201										
R1A 036		12	Y	20	Y	Y	3	66	199	200										

TEST RUN NUMBERS

22

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

CP COEFFICIENTS IDVAR (1) IDVAR (2) NDV

α OR β
SCHEDULES

TABLE II. (Continued)

TEST: MSFC TWT 596			DATA SET/RUN NUMBER COLLATION SUMMARY						DATE: JULY 1974					
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)						
		α	β	OFF-SET	NT	θ		1.96	3.48	4.96				
R1A 037	T, (TAIL-MOUNTED)	16	0	20	TAIL	130	3	67	198	197				
038	E.T. WITH	20					3	68	195	196				
039	PROTUBERANCES	24					3	69	194	193				
040		28		V		V	3	70	191	192				
041		-8		0		225	2		255	126				
042		-4					2		254	127				
043		0					2		253	128				
044		4					2		252	129				
045		8		V			2		251	130				
046		12		20			2		260	121				
047		16					2		259	122				
048		20					2		258	123				
049		24					2		257	124				
050		28		V		V	2		256	125				
051		-8		0		270	3	96	101	102				
052		-4					3	97	104	103				
053		0					3	98	105	106				
R1A 054	V	4	V	V	V	V	3	99	108	107				

TEST RUN NUMBERS

23

1	7	13	19	25	31	37	43	49	55	61	67	75	76	
CP														
COEFFICIENTS											IDVAR (1)	IDVAR (2)	NDV	
α OR β														
SCHEDULES														

TABLE II. (Continued)

TEST: MSFC TWT 596			DATA SET/RUN NUMBER COLLATION SUMMARY						DATE: July 1974										
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)										
		α	β	OFF SET	MT.	ϕ	STING COMB		1.96	3.48	4.96								
R1A 061	T ₂ (SIDE-MOUNTED	51	0	60	SIDE	0	C	3	60	V ₁	2								
062	ET WITHOUT	54						3	59	4	3								
063	PROTUBERANCES)	57						3	58	5	6								
064		60						3	57	8	7								
065		63						3	56	9	10								
066		66						3	55	12	11								
067		69		Y			Y	3	54	13	14								
068		70		80			D	3	53	16/1	15								
069		72						3	52	17	18								
070		75						3	51	20	19								
071		78		Y			Y	3	50	21	22								
072		80		90			E	3	49	24	23								
073		82						3	48	25	26								
074		85						3	47	28	27								
075		88						3	46	29	30								
076		90						3	45	32	31								
Y 077		92						3	44	33	34								
R1A 078	Y	95	Y	Y	Y	Y	Y	3	43	36	35								

TEST RUN NUMBERS

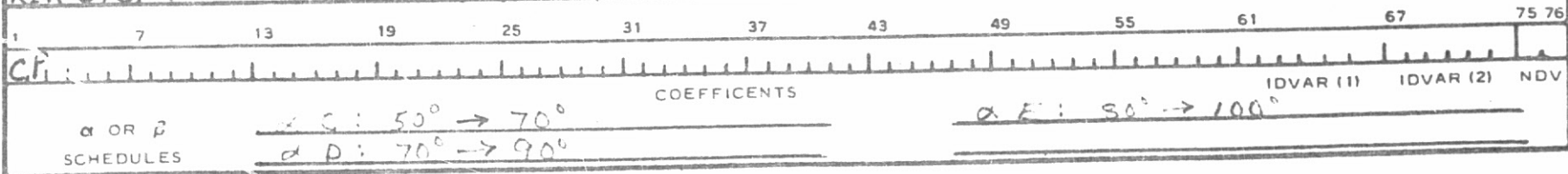


TABLE II. (Continued)

TEST: MSFC TWT 596		DATA SET/RUN NUMBER COLLATION SUMMARY							DATE: JUL 1964										
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)											
		α	β	OFF SET	MT.	ϕ		1.96	3.48	4.96									
RIA 081	T ₁ (TAIL-MOUNTED	-8	0	0	TAIL	45	2		219	220									
082	ET WITH	-4					2		218	217									
083	PROTUBERANCES)	0					2		215	216									
084		4					2		214	213									
085		8		↓			2		211	212									
086		12		20			2		230	229									
087		16					2		227	228									
088		20					2		226	225									
089		24					2		223	224									
090		28		↓		↓	2		222	221									
091		-8		0		315	2		250	249									
092		-4					2		247	248									
093		0					2		246	245									
094		4					2		243	244									
095		8		↓			2		242	241									
096		12		20			2		239	240									
↓ 097		16					2		238	237									
RIA 098	↓	20	↓	↓	↓	↓	2		235	236									
		1	7	13	19	25	31	37	43	49	55	61	67	73	79	85	91	97	103
CP		COEFFICIENTS														IDVAR (1)	IDVAR (2)	NDV	
α OR β																			
SCHEDULES																			

TEST RUN NUMBERS

27

TABLE III. MODEL DIMENSIONAL DATA

MODEL COMPONENT: EXTERNAL TANK - T₁₂

GENERAL DESCRIPTION: EXTERNAL OXYGEN - HYDROGEN TANK WITH OGIVE NOSE AND SEMI-ELLIPTICAL TAIL. BEGINNING AT MODEL TANK STATION 0.927 AND ENDING AT STATION 6.522

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000041B

DIMENSIONS:	THEORETICAL	
	FULL-SCALE	MODEL SCALE
Length	<u>1865 in.</u>	<u>5.595 in.</u>
Max. Width	<u>324 in.</u>	<u>0.972 in.</u>
Fineness Ratio	<u>5.756 in.</u>	<u>5.756 in.</u>
Max. Cross-Sectional	<u>572.555 ft²</u>	<u>0.742 in.²</u>
Base	<u>572.555 ft²</u>	<u>0.742 in.²</u>
WL OF TANK CENTERLINE	<u>400 in.</u>	<u>1.200 in.</u>

TABLE III. (Continued)

MODEL COMPONENT: ATTACH STRUCTURE - AT₅

GENERAL DESCRIPTION: FORWARD ORBITER/ET ATTACH STRUCTURE

(2 MEMBERS)

MODEL SCALE: 0.003

REFERENCE DRAWING: VL72-000088D

ALL DIMENSIONS IN INCHES MODEL SCALE

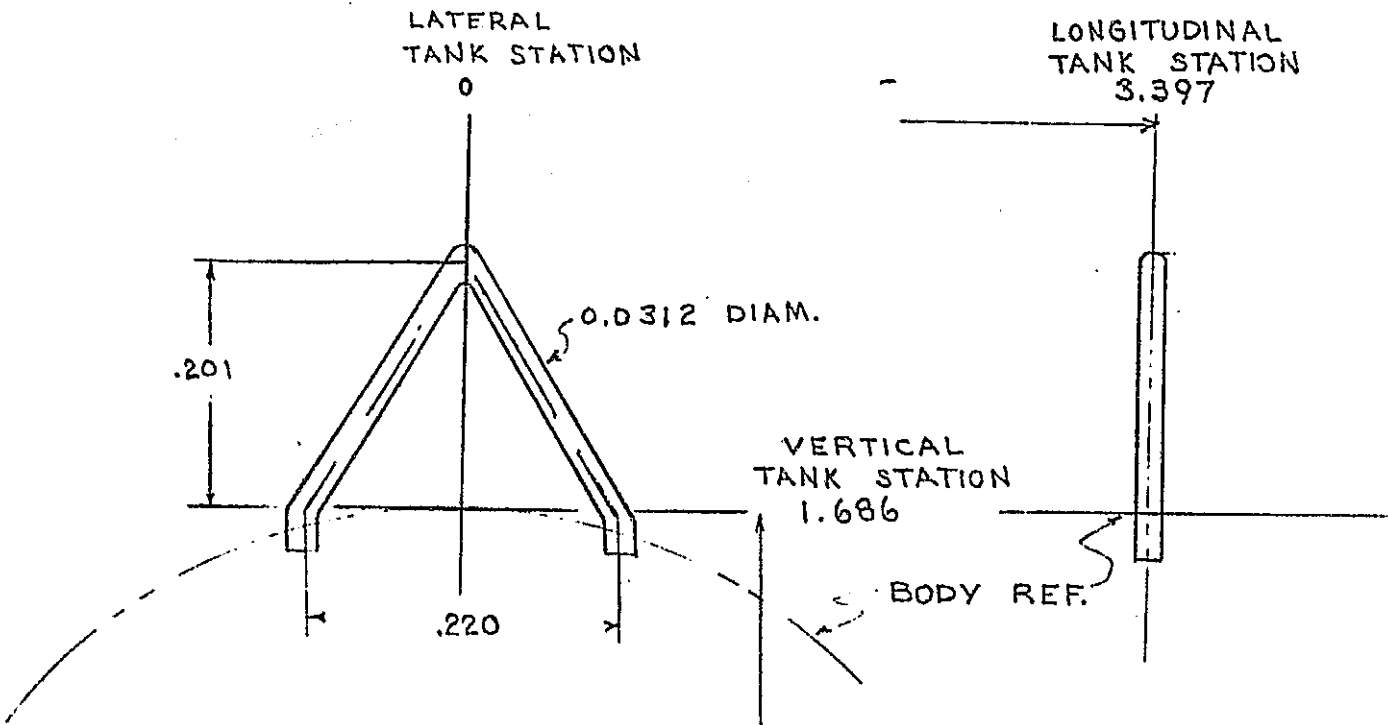


TABLE III. (Continued)

MODEL COMPONENT: ATTACH STRUCTURE - AT₆

GENERAL DESCRIPTION: LEFT REAR ORBITER/ET ATTACH STRUCTURE (2 MEMBERS)

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000050

ALL DIMENSIONS IN INCHES MODEL SCALE

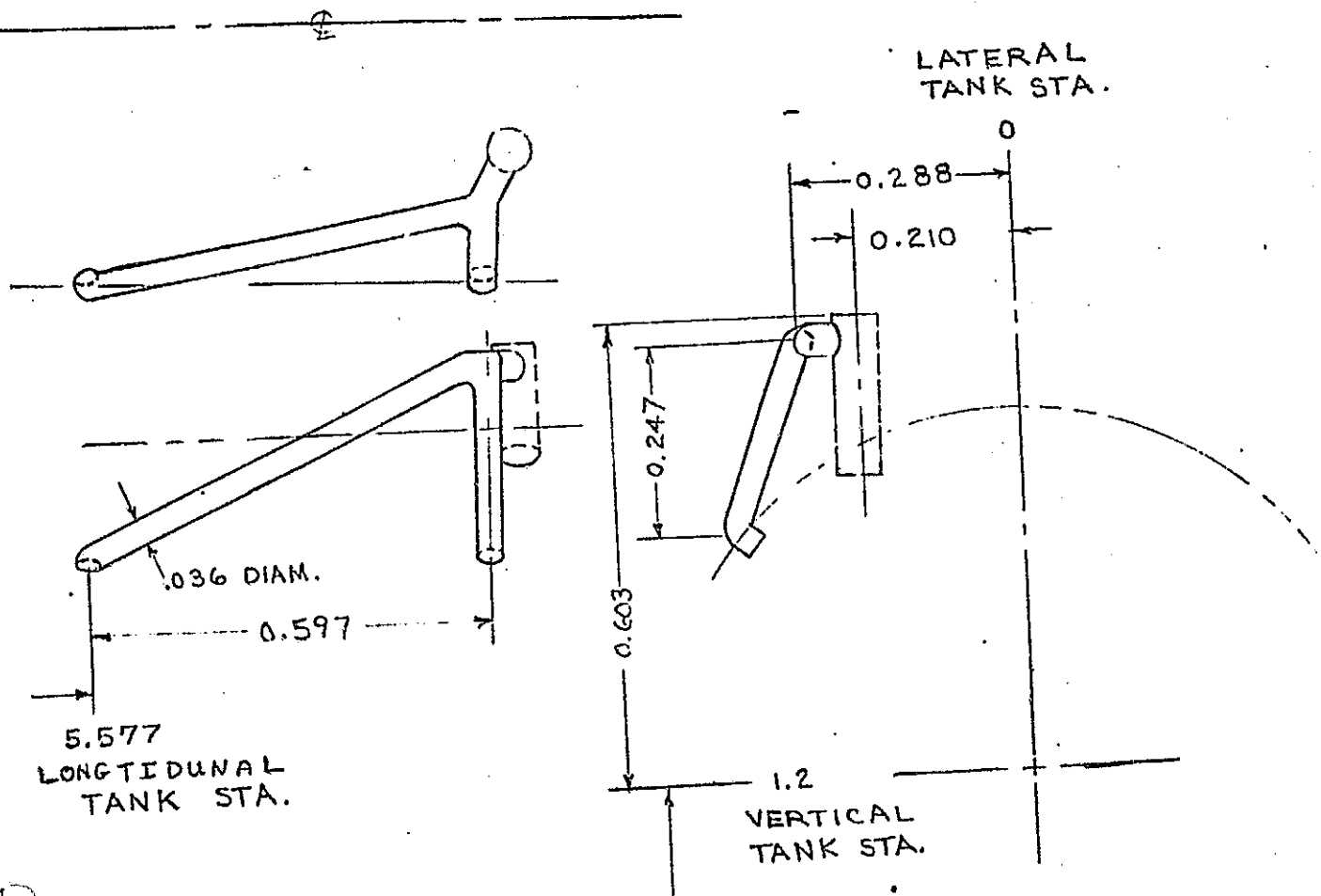


TABLE III. (Continued)

MODEL COMPONENT: ATTACH STRUCTURE - AT7

GENERAL DESCRIPTION: RIGHT REAR ORBITER/ET ATTACH STRUCTURE (3 MEMBERS)

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000050

ALL DIMENSIONS IN INCHES MODEL SCALE

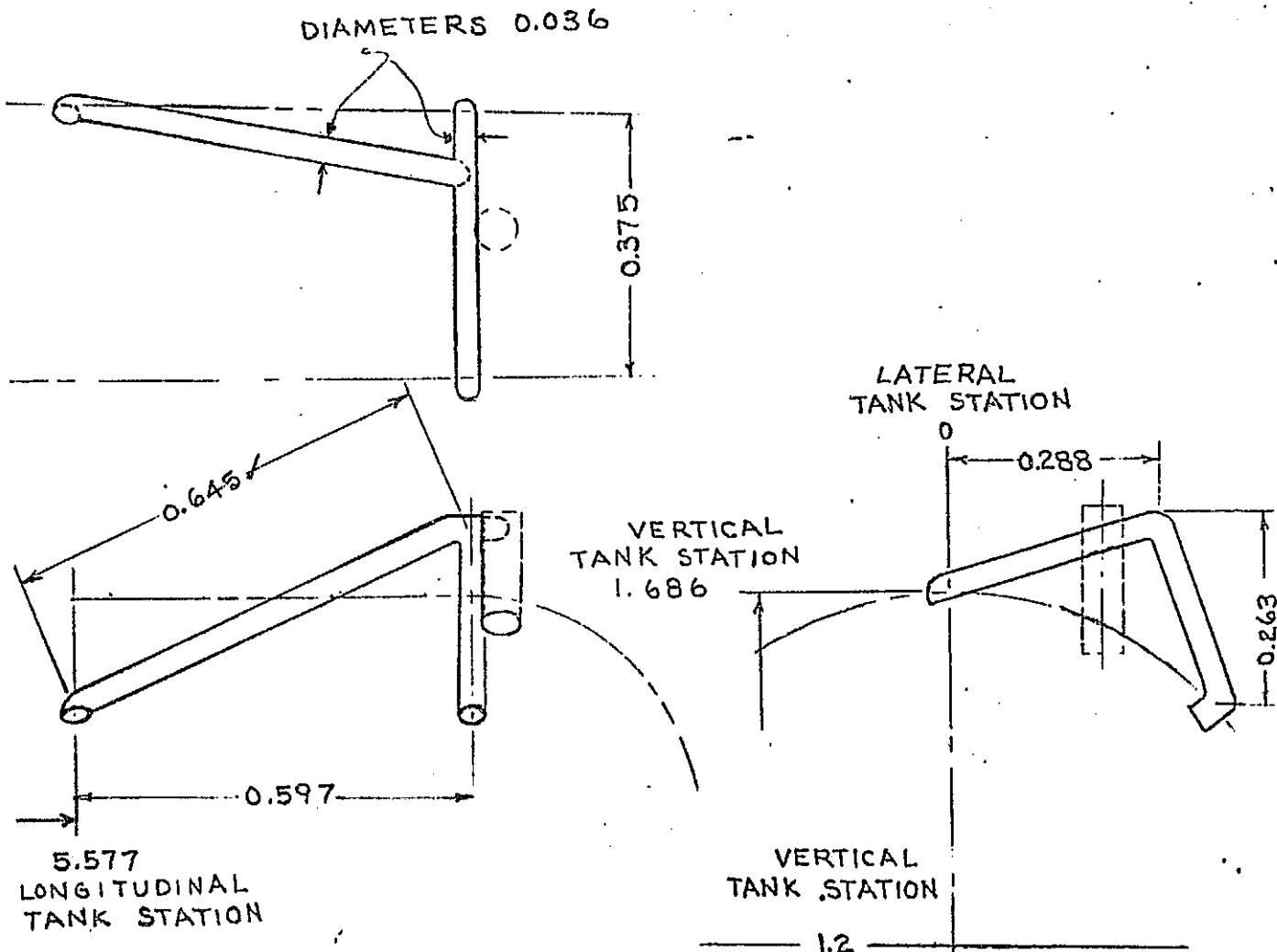


TABLE III. (Continued)

MODEL COMPONENT: ATTACH STRUCTURE - AT_g

GENERAL DESCRIPTION: FORWARD SRB/ET ATTACH STRUCTURE (ET PORTION TESTED ONLY)

MODEL SCALE: 0.003

REFERENCE DRAWING: VL77-000051A

ALL DIMENSIONS IN INCHES MODEL SCALE

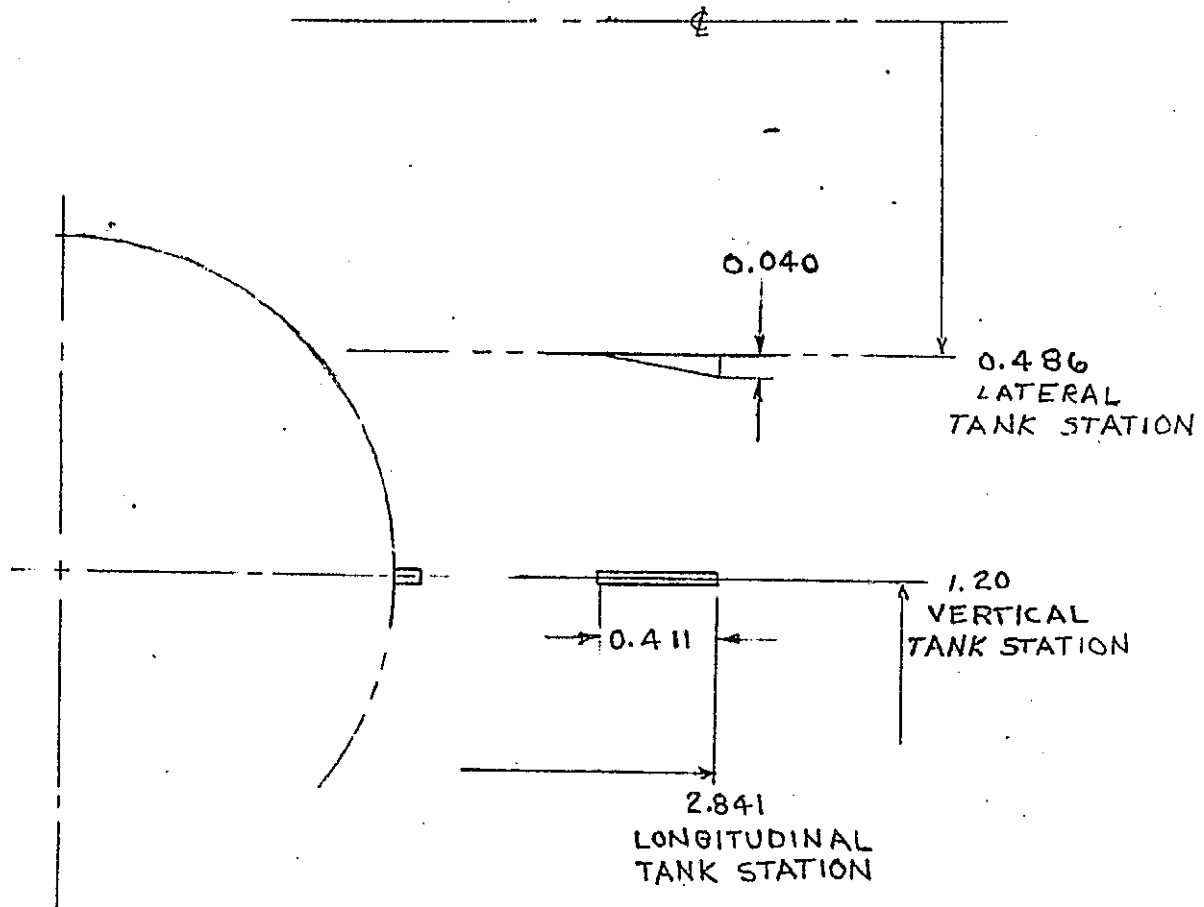


TABLE III. (Continued)

MODEL COMPONENT: ATTACH STRUCTURE - AT₉

GENERAL DESCRIPTION: AFT SRB/ET ATTACH STRUCTURE (3 MEMBERS) (ET PORTION TESTED ONLY)

MODEL SCALE: 0.003

REFERENCE DRAWING: VL72-000106

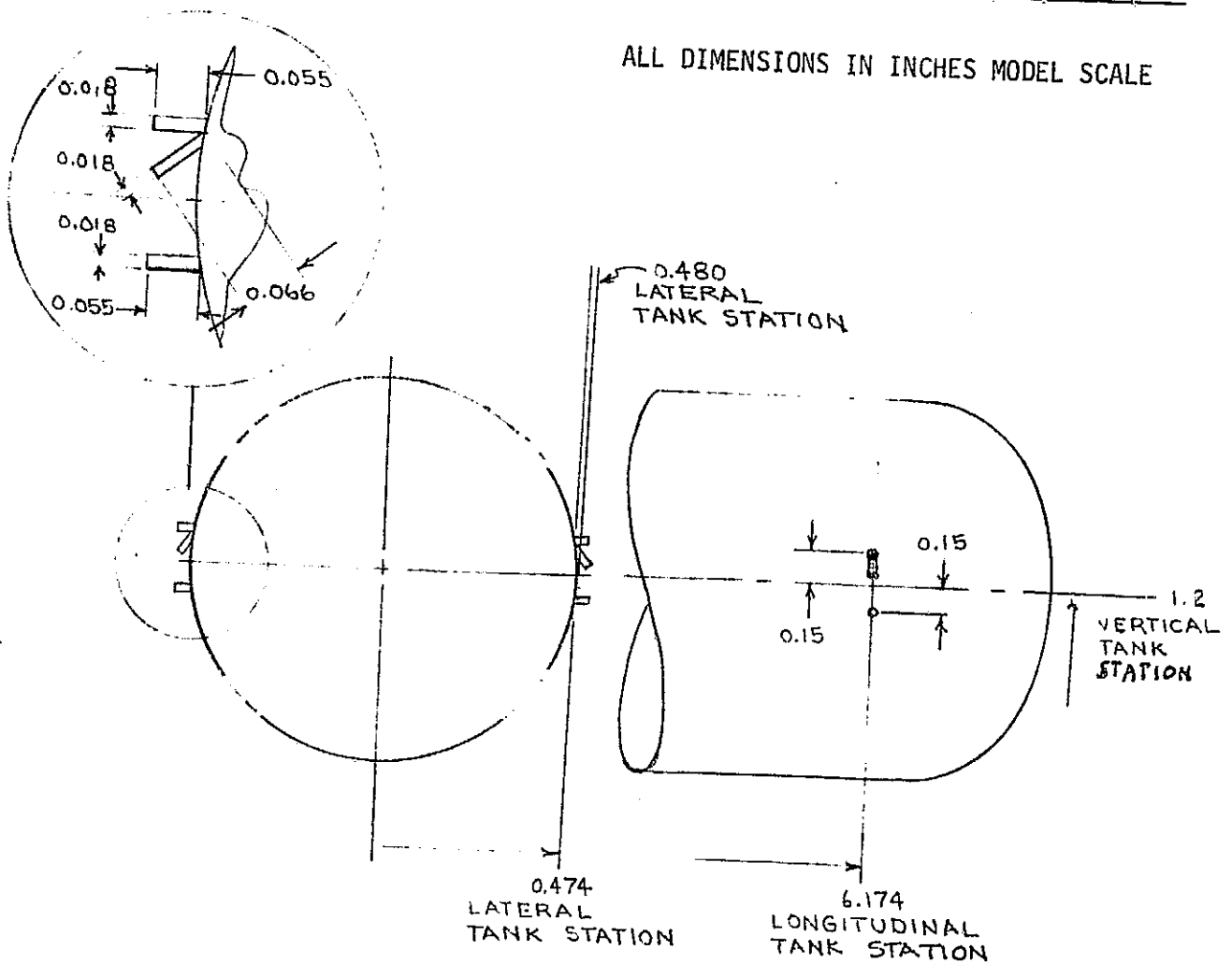


TABLE III. (Continued)

MODEL COMPONENT: LOX VENT LINE FAIRING - PT_T

GENERAL DESCRIPTION: VENT LINE ALONG UPPER RIGHT SIDE OF ET OGIVE NOSE

BEGINNING AT MODEL STATIONS X_T = 0.927, Y_T = 0, AND Z_T = 1.2; TERMINATING AT
X_T = 2.841, Y_T = 0.162, Z_T = 1.658

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000031A

<u>DIMENSIONS:</u>	<u>THEORETICAL</u>	
	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length	<u>638 in.</u>	<u>1.914 in.</u>
Max. Width	<u>17.7 in.</u>	<u>0.053 in.</u>
Max. Depth	<u>9.3 in.</u>	<u>0.028 in.</u>
Radial Position	<u>19 1/2°</u>	<u>19 1/2°</u>

TABLE III. (Continued)

MODEL COMPONENT: LOX FEED LINE - PT₂

GENERAL DESCRIPTION: LONGITUDINAL FUEL LINE ALONG UPPER RIGHT SIDE OF ET
BEGINNING AT MODEL STATIONS $X_T = 2.841$, $-Y_T = 0.194$, AND $Z_T = 1.645$; TERMINATING
AT $X_T = 6.116$, $-Y_T = 0.194$, AND $Z_T = 1.645$

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000031A

<u>DIMENSIONS:</u>	<u>THEORETICAL</u>	
	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length	<u>1092 in.</u>	<u>3.275 in.</u>
Max. Width	<u>30.7 in.</u>	<u>0.092 in.</u>
Max. Height	<u>28 in.</u>	<u>0.084 in.</u>
Radial Position	<u>23 1/2°</u>	<u>23 1/2°</u>

TABLE III. (Continued)

MODEL COMPONENT: LH₂ FEED LINE - PT₃

GENERAL DESCRIPTION: LONGITUDINAL FUEL LINE ALONG UPPER LEFT SIDE OF ET

BEGINNING AT MODEL STATIONS X_T = 2.841, Y_T = 0.275, AND Z_T = 1.601

TERMINATING AT STATIONS X_T = 6.116, Y_T = 0.275, AND Z_T = 1.601

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000031A

<u>DIMENSIONS:</u>	<u>THEORETICAL</u>	
	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length	<u>1092 in.</u>	<u>3.275 in.</u>
Max. Width	<u>25.7 in.</u>	<u>0.077 in.</u>
Max. Depth	<u>14.7 in.</u>	<u>0.044 in.</u>
Radial Position	<u>-33°</u>	<u>-33°</u>

TABLE III. (Continued)

MODEL COMPONENT: LOX FEED LINE - FL₇

GENERAL DESCRIPTION: 18-INCH DIAMETER VERTICAL FUEL LINE AT AFT END OF ET ON
RIGHT

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000050

ALL DIMENSIONS IN INCHES MODEL SCALE

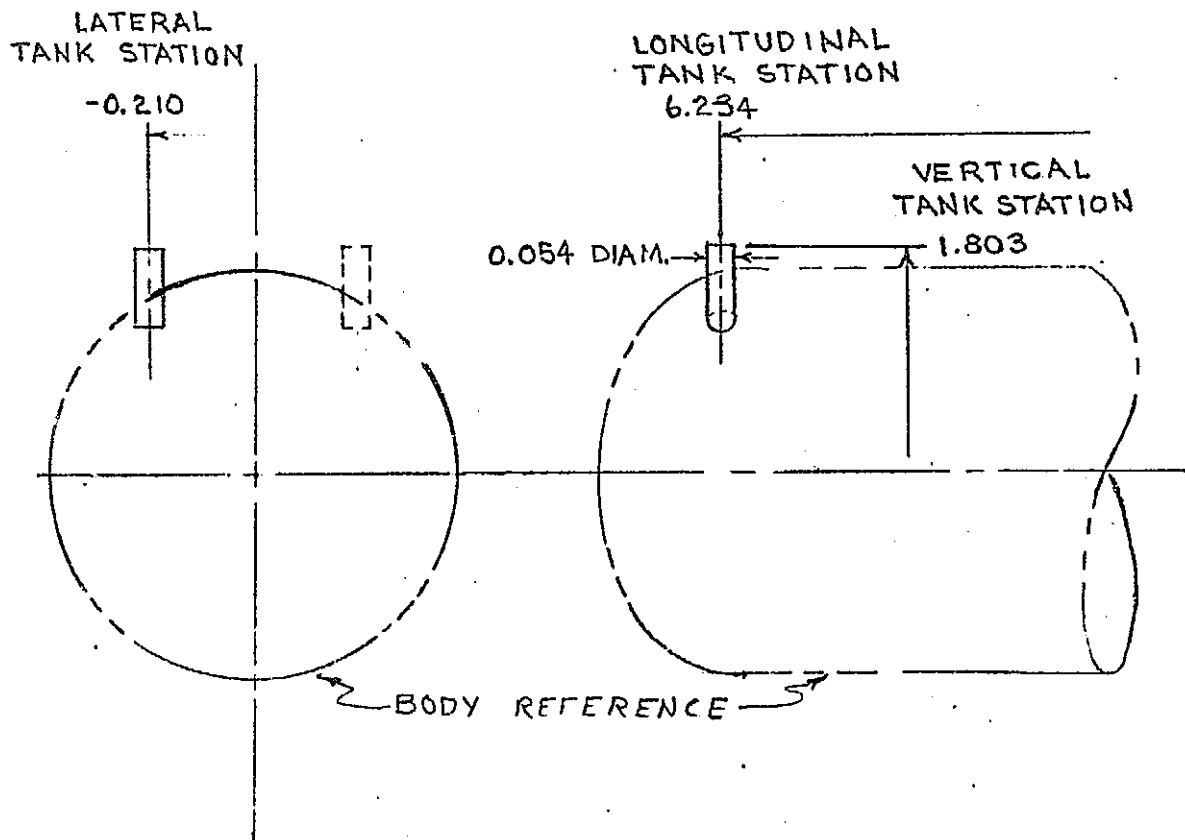


TABLE III. (Continued)

MODEL COMPONENT: LH₂ FEED LINE - FL₂

GENERAL DESCRIPTION: 18-INCH DIAMETER VERTICAL FUEL LINE AT AFT END OF ET
ON LEFT

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000050

ALL DIMENSIONS IN INCHES MODEL SCALE

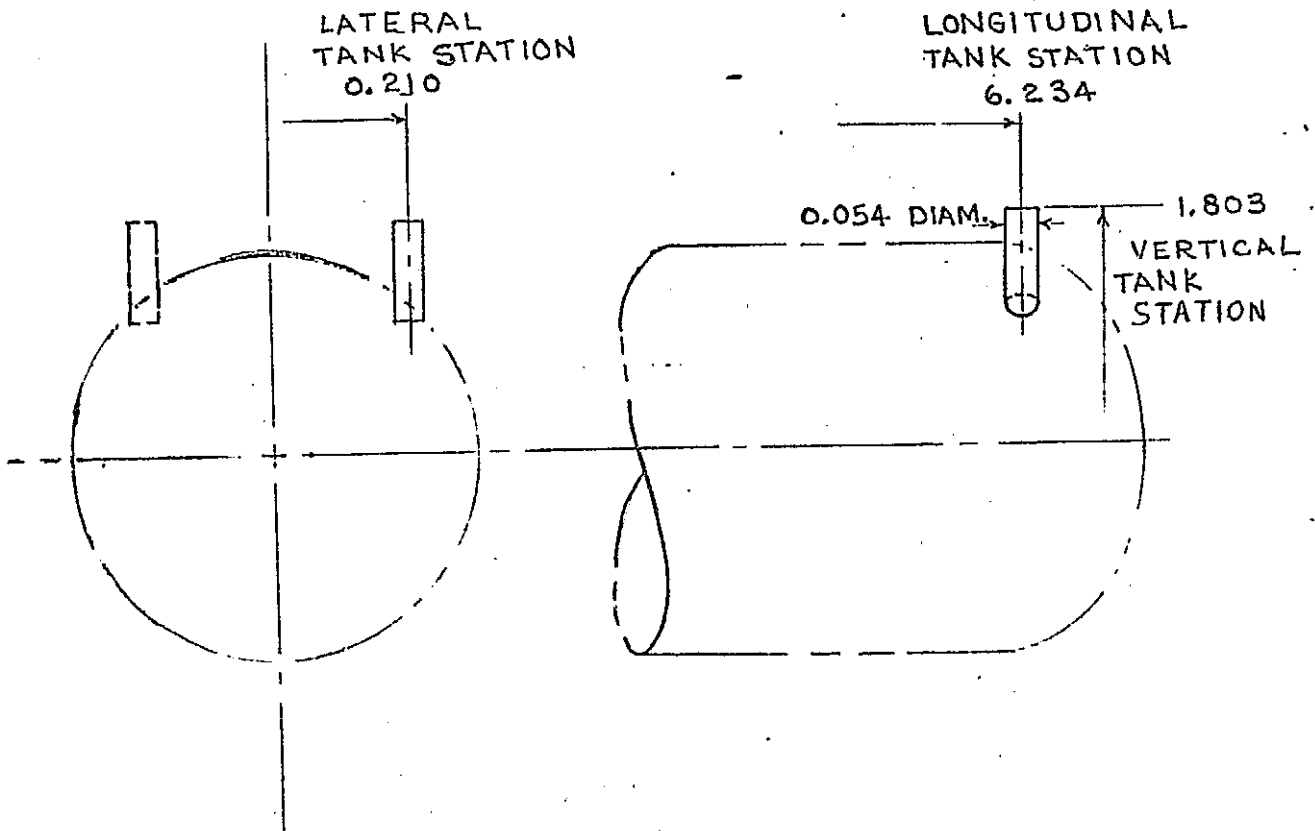


TABLE III. (Concluded)

MODEL COMPONENT: ATTACH STRUCTURE - FR₆

GENERAL DESCRIPTION: AFT ET/ORBITER CROSS MEMBER (CROSS SECTION 11 IN. x 15 IN.)

LOCATED AT ET-STATION 2050.5

MODEL SCALE: 0.003

REFERENCE DRAWING: FIGURE 3, MARTIN MARIETTA MEMO SA-A-74-9

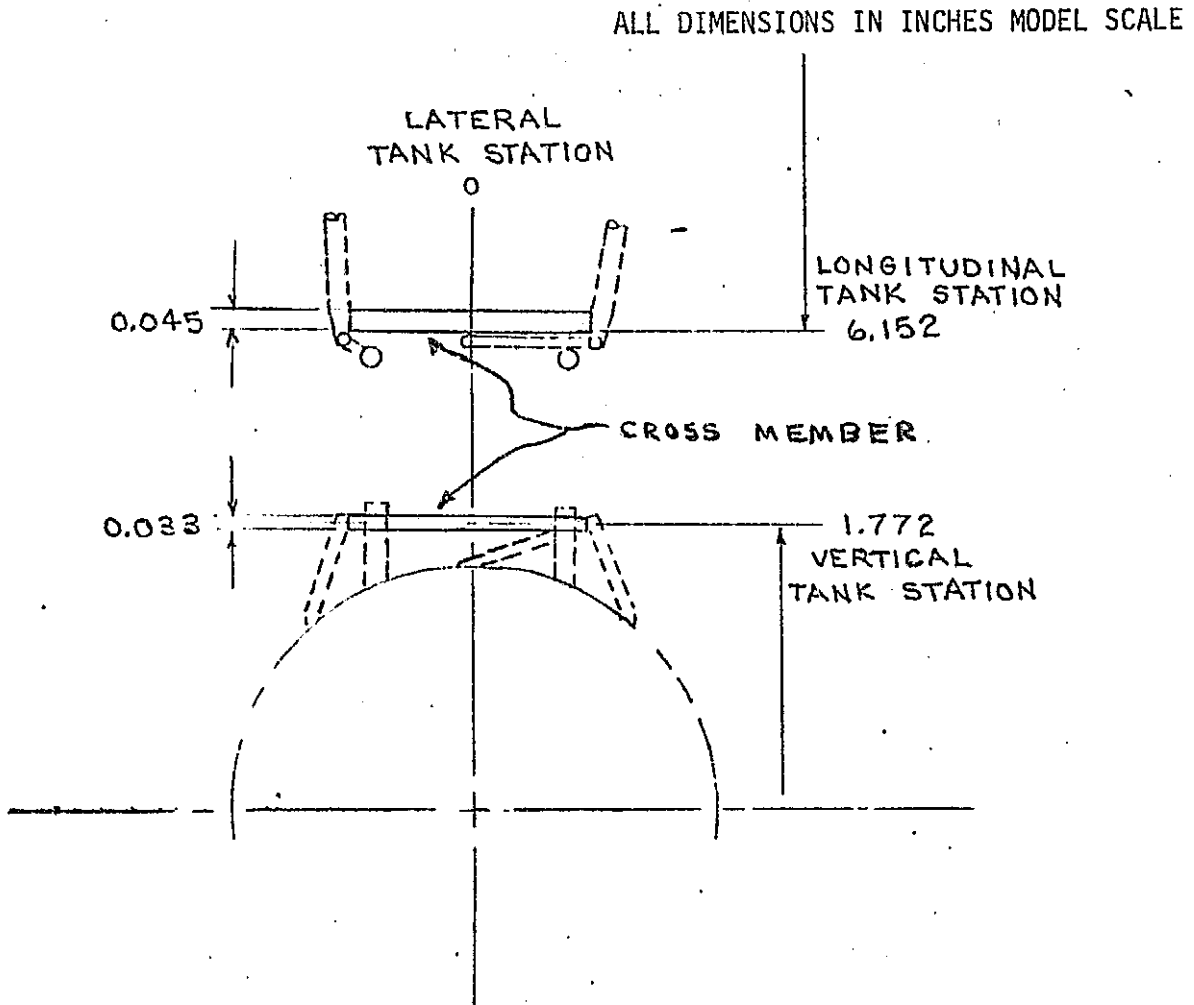


TABLE IV. TABULATED DATA PRINT-OUT FORMAT AND CORRELATION BETWEEN TUBE NUMBER, ORIFICE NUMBER, AND ORIFICE LOCATION ON MODEL

SIDE-MOUNTED ET (T₂ CONFIGURATION)

*inoperable orifice

X/R/B LONG. STA. X (In.) LONG STA. NO. RADIAL ROW NO. RADIAL LOCATION θ (deg.)		0.055	0.108	0.162	0.216	0.322	0.518	0.610	0.735	0.860	0.892	0.923	0.954
		0.305	0.605	0.905	1.205	1.800	2.900	3.410	4.110	4.810	4.985	5.160	5.335
		1	2	3	4	5	6	7	8	9	10	11	12
0	A	1	2	3	4	5	*6	*7	8	9	10	11	12
14	B	X	13	14	15	16	*17	*18	19	20	21	22	23
24	C	X	X	X	X	X	X	X	X	24	25	26	27
45	D	28	29	30	31	32	33	34	35	36	37	38	39
67½	E	X	40	41	42	43	44	45	46	47	48	49	50
90	F	51	52	53	54	55	56	57	58	59	60	61	62
112½	G	X	63	64	65	66	67	68	69	70	71	72	73
135	H	74	75	76	77	78	79	80	81	82	83	84	85
157½	I	X	86	87	88	89	90	91	92	93	94	95	96
180	J	97	98	99	100	101	102	103	104	105	106	107	108
202½	K	X	109	110	111	112	113	114	115	116	117	118	119
225	L	120	121	122	123	124	125	126	127	128	129	130	131
247½	M	X	132	133	134	135	136	137	138	139	140	141	142
270	N	143	144	145	146	147	148	149	150	151	152	153	154
292½	O	X	155	156	157	158	159	160	161	162	163	164	165
315	P	166	167	168	169	170	171	172	173	174	175	176	177
326	Q	X	X	X	X	X	X	X	X	178	179	180	181
346	R	X	182	183	184	185	*186	*187	188	189	190	191	192

TABLE IV. TABULATED DATA PRINT-OUT FORMAT AND CORRELATION BETWEEN TUBE NUMBER, ORIFICE NUMBER, AND ORIFICE LOCATION ON MODEL (CONCLUDED)

SIDE-MOUNTED ET (T₂ CONFIGURATION)

* inoperable orifice

		0.055	0.108	0.162	0.216	0.322	0.518	0.610	0.735	0.860	0.892	0.923	0.954
		0.305	0.605	0.905	1.205	1.800	2.900	3.410	4.110	4.810	4.985	5.160	5.335
		1	2	3	4	5	6	7	8	9	10	11	12
0	A	1	2	3	4	5	* 6	* 7	8	9	10	11	12
14	B	X	13	14	15	16	* 17	* 18	19	20	21	22	23
24	C	X	X	X	X	X	X	X	X	24	25	26	27
45	D	28	29	30	31	32	33	34	35	36	37	38	39
67½	E	X	40	41	42	43	44	45	46	47	48	49	50
90	F	51	52	53	54	55	56	57	58	59	60	61	62
112½	G	X	63	64	65	66	67	68	69	70	71	72	73
135	H	74	75	76	77	78	79	80	81	82	83	84	85
157½	I	X	86	87	88	89	90	91	92	93	94	95	96
180	J	97	98	99	100	101	102	103	104	105	106	107	108
202½	K	X	109	110	111	112	113	114	115	116	117	118	119
225	L	120	121	122	123	124	125	126	127	128	129	130	131
247½	M	X	132	133	134	135	136	137	138	139	140	141	142
270	N	143	144	145	146	147	148	149	150	151	152	153	154
292½	O	X	155	156	157	158	159	160	161	162	163	164	165
315	P	166	167	168	169	170	171	172	173	174	175	176	177
326	Q	X	X	X	X	X	X	X	X	178	179	180	181
346	R	X	182	183	184	185	* 186	* 187	188	189	190	191	192

TABLE V. TABULATED DATA PRINT-OUT FORMAT AND CORRELATION BETWEEN TUBE NUMBER, ORIFICE NUMBER, AND ORIFICE LOCATION ON MODEL

TAIL-MOUNTED ET (T₁ CONFIGURATION)

* inoperable orifice

X/P/B LONG. STA. X (In.) LONG. STA. NO. RADIAL ROW NO. RADIAL LOCATION θ (deg.)		0.055	0.108	0.162	0.216	0.322	0.518	0.610	0.735	0.860	0.892	0.923	0.954
		0.305	0.605	0.905	1.205	1.800	2.900	3.410	4.110	4.810	4.985	5.160	5.335
		1	2	3	4	5	6	7	8	9	10	11	12
0	A	1	2	3	4	5	6	7	8	9	10	11	12
14	B	X	13	14	15	16	17	18	19	20	21	22	23
24	C	X	X	X	X	X	X	X	X	24	25	26	27
45	D	28	29	30	31	32	33	34	35	36	37	38	39
67½	E	X	40	41	42	43	44	45	46	47	48	49	50
90	F	51	52	53	54	*55	56	57	58	59	60	61	62
112½	G	X	63	64	65	66	67	68	69	70	71	72	73
135	H	74	75	76	77	78	79	80	81	*82	83	84	85
157½	I	X	86	87	88	89	90	91	92	93	94	95	96
180	J	97	98	99	100	101	102	103	104	105	106	107	108
202½	K	X	109	110	111	112	113	114	115	116	117	118	119
225	L	120	121	122	123	124	125	126	127	128	129	130	131
247½	M	X	132	133	134	135	136	137	138	139	140	141	142
270	N	143	144	145	146	*147	148	149	150	151	152	153	154
292½	O	X	155	156	157	158	159	160	161	162	163	164	165
315	P	166	167	168	169	170	171	172	173	174	175	176	177
326	Q	X	X	X	X	X	X	X	X	178	179	180	181
346	R	X	182	183	184	185	186	187	188	189	190	191	192

TABLE V. TABULATED DATA PRINT-OUT FORMAT AND CORRELATION BETWEEN TUBE NUMBER, ORIFICE NUMBER, AND ORIFICE LOCATION ON MODEL (CONCLUDED)

TAIL-MOUNTED ET (T₁ CONFIGURATION)

* inoperable orifice

LONG. STA. X (In.)	X/L	LONG. STA. No.	CIRCUM. ROW	CIRCUM. STA θ (deg.)	0.055	0.108	0.162	0.216	0.322	0.518	0.610	0.735	0.860	0.892	0.923	0.954
					0.305	0.605	0.905	1.205	1.800	2.900	3.410	4.110	4.810	4.985	5.160	5.335
					1	2	3	4	5	6	7	8	9	10	11	12
0	A				1	2	3	4	5	6	7	8	9	10	11	12
14	B				X	13	14	15	16	17	18	19	20	21	22	23
24	C				X	X	X	X	X	X	X	X	24	25	26	27
45	D				28	29	30	31	32	33	34	35	36	37	38	39
67½	E				X	40	41	42	43	44	45	46	47	48	49	50
90	F				51	52	53	54	* 55	56	57	58	59	60	61	62
112½	G				X	63	64	65	66	67	68	69	70	71	72	73
135	H				74	75	76	77	78	79	80	81	* 82	83	84	85
157½	I				X	86	87	88	89	90	91	92	93	94	95	96
180	J				97	98	99	100	101	102	103	104	105	106	107	108
202½	K				X	109	110	111	112	113	114	115	116	117	118	119
225	L				120	121	122	123	124	125	126	127	128	129	130	131
247½	M				X	132	133	134	135	136	137	138	139	140	141	142
270	N				143	144	145	146	* 147	148	149	150	151	152	153	154
292½	O				X	155	156	157	158	159	160	161	162	163	164	165
315	P				166	167	168	169	170	171	172	173	174	175	176	177
326	Q				X	X	X	X	X	X	X	X	178	179	180	181
346	R				X	182	183	184	185	186	187	188	189	190	191	192

Table VI.
0.003-SCALE 324-INCH ET REFERENCE DIMENSIONS

DIMENSION	FULL SCALE	MODEL SCALE
Reference Area, S_{ref} (cross-sectional area of ET)	572.555 FT ²	0.742 IN. ²
Reference Length, l_{ref} (ET diameter)	324 IN.	0.972 IN.
Reference Span, b_{ref} (ET diameter)	324 IN.	0.972 IN.
Moment Reference Point, MRP (dry weight c.g.)		
XMRP (from nose)	1086.4 IN.	3.259 IN.
YMRP	0	0
ZMRP (model centerline)	400 IN.	1.2 IN.
Base Area, A_b (cross-sectional area of ET)	572.555 FT ²	0.742 IN. ²

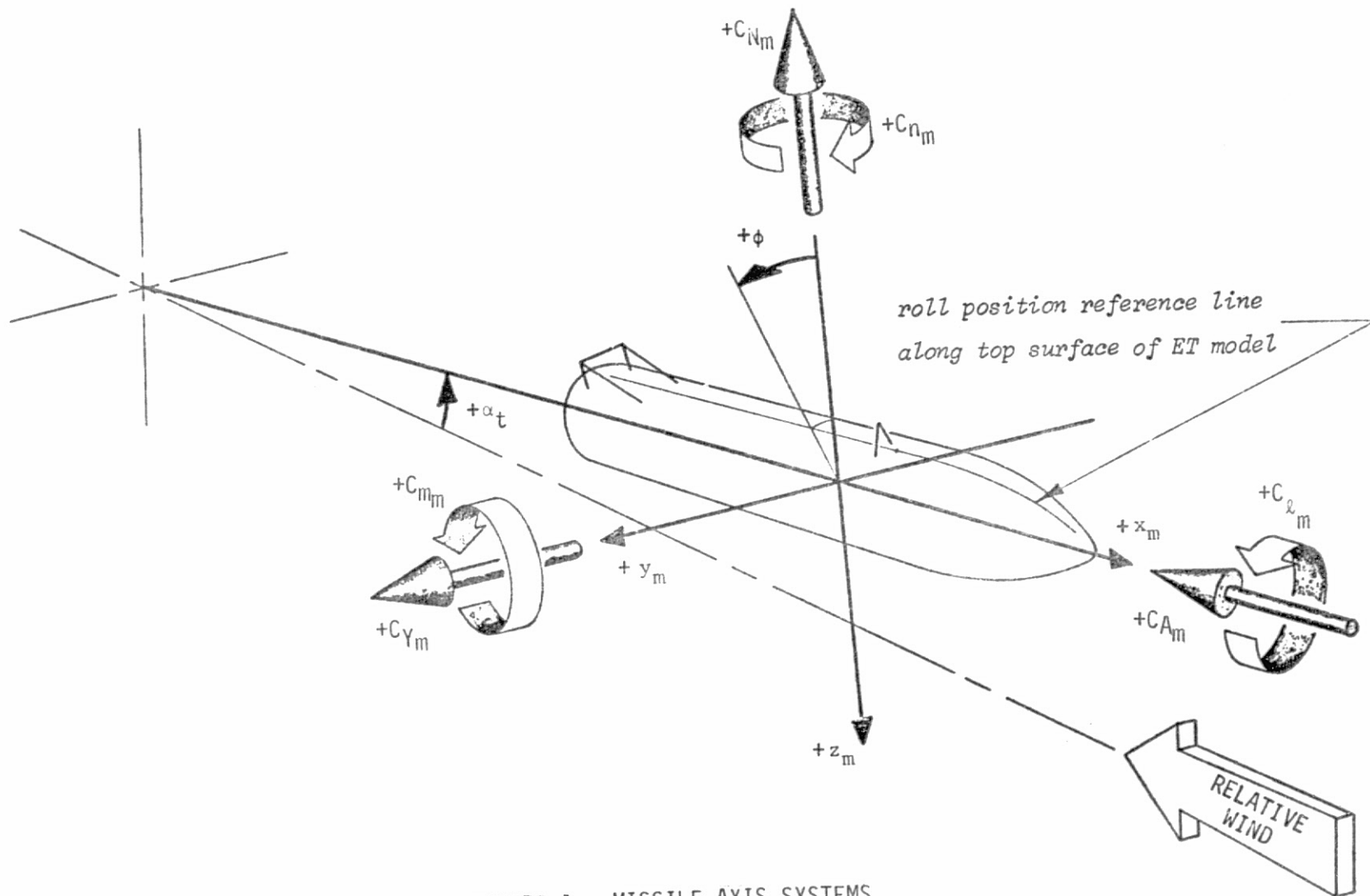
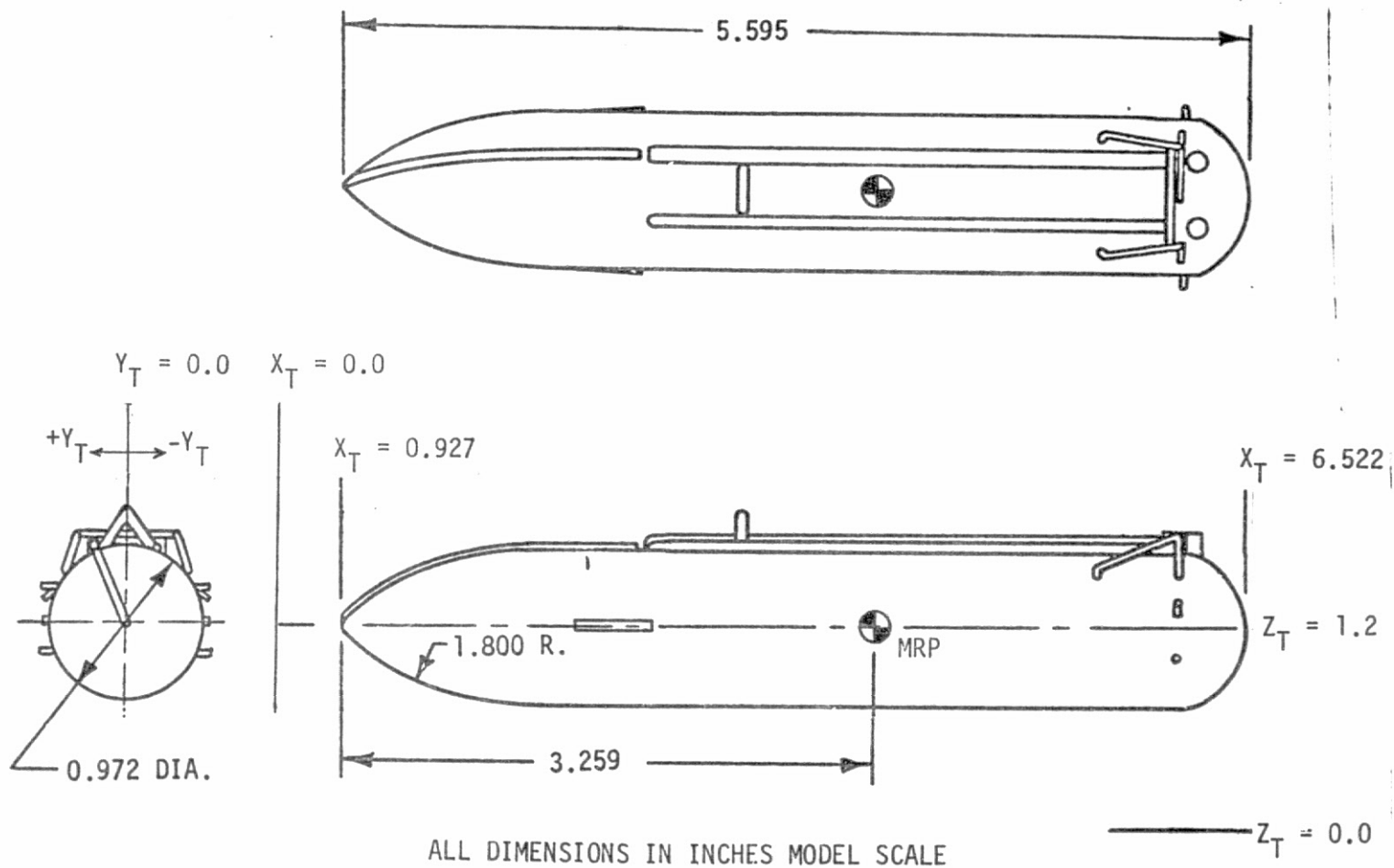
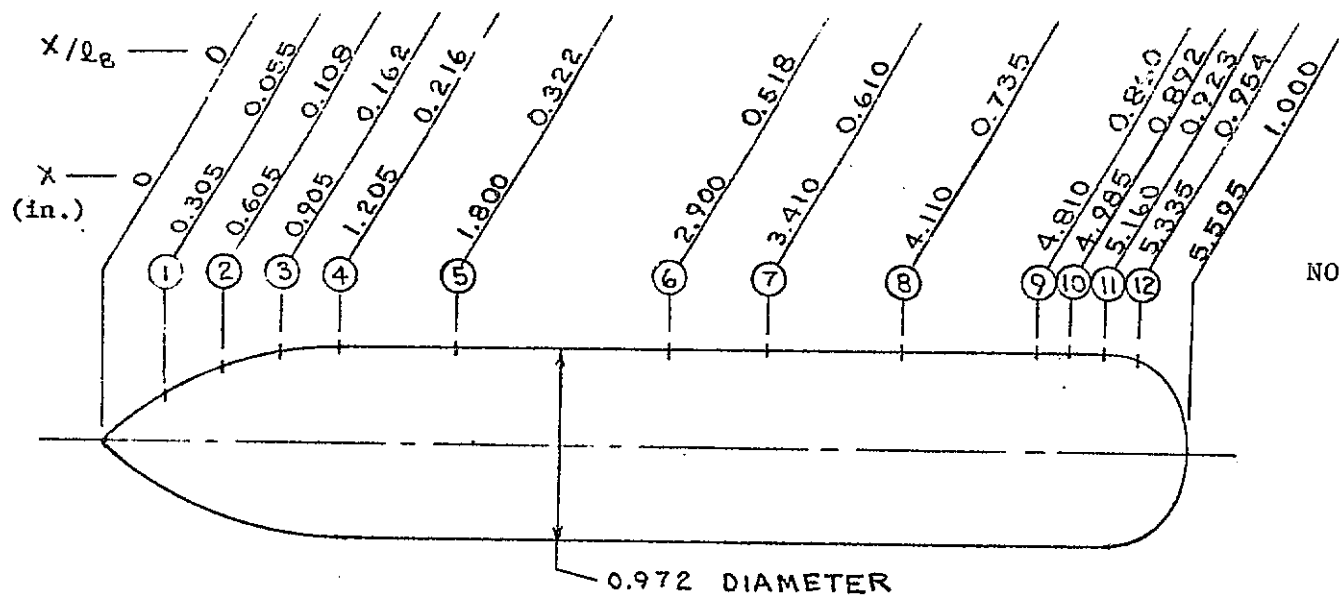


FIGURE 1. MISSILE AXIS SYSTEMS



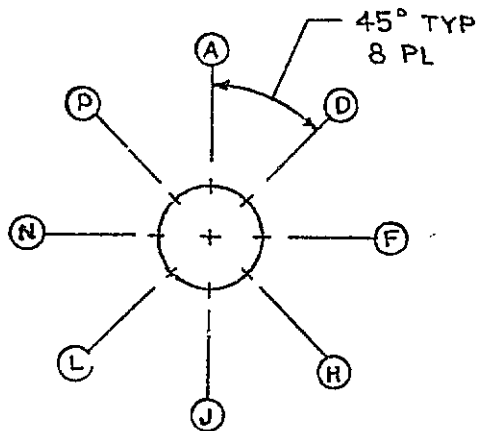
a. GENERAL ARRANGEMENT OF MSFC MODEL NO. 460, CONFIGURATION T₁ EXTERNAL TANK WITH PROTUBERANCES
 Figure 2. MODEL SKETCHES



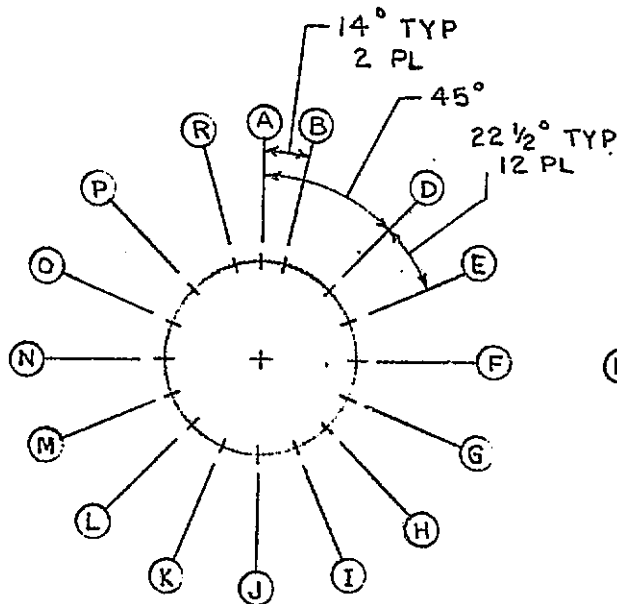
NOTE: ○ Denotes longitudinal and radial location of orifices. (192 total, though some may be missing due to sting cavities or protuberances.)

ALL SECTIONS
LOOKING AFT

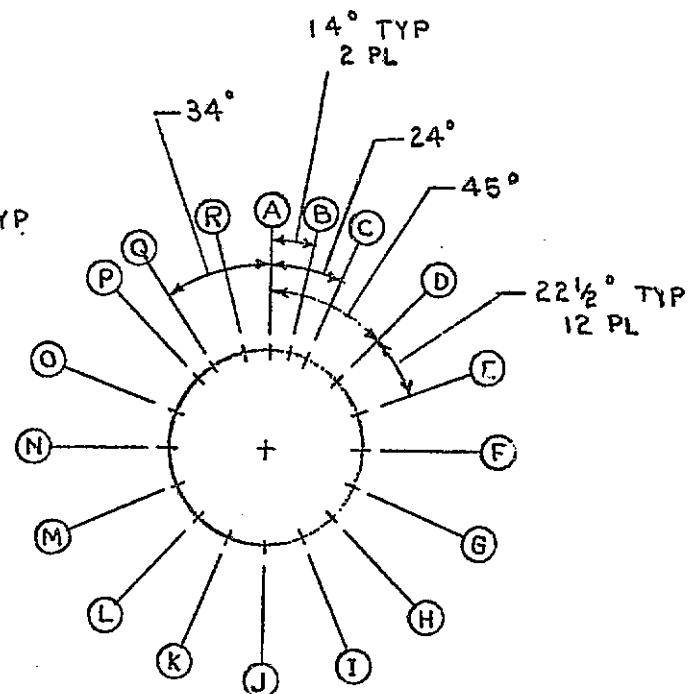
48



STATION 1



STATIONS 2 THRU 8

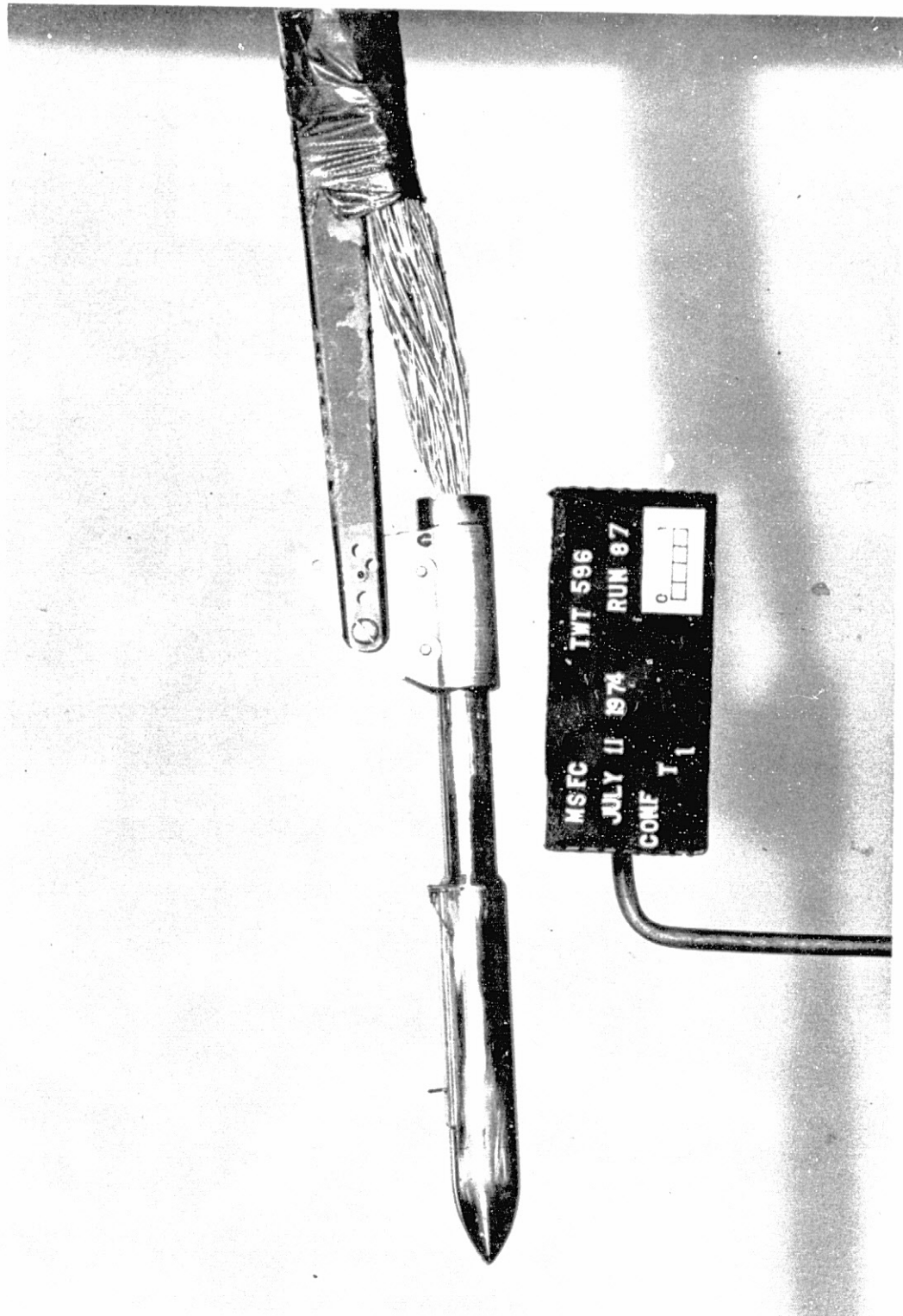


STATIONS 9 THRU 12

b. EXTERNAL TANK MODEL PRESSURE ORIFICE LOCATIONS

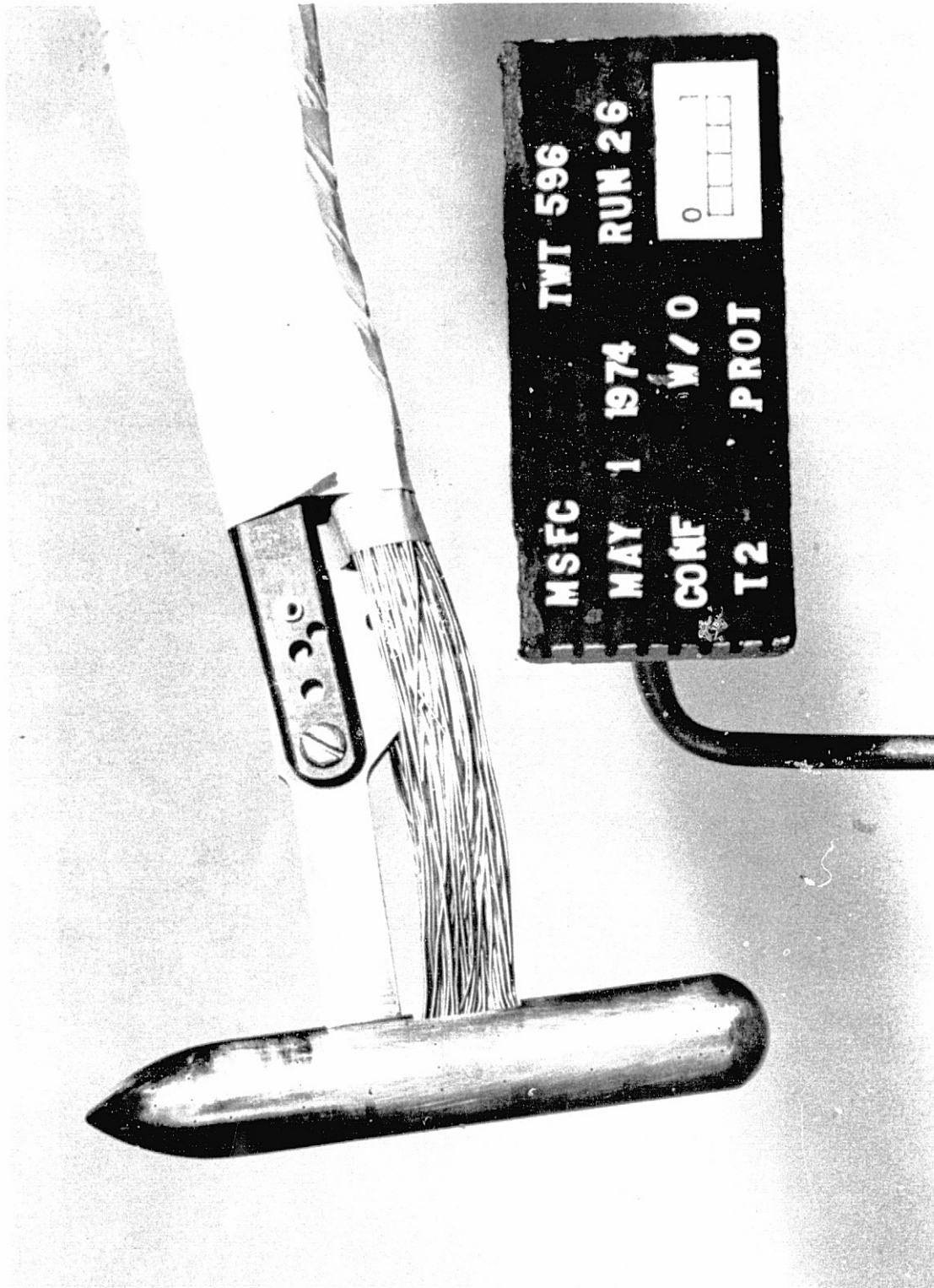
Figure 2. CONCLUDED

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



EXTERNAL TANK MODEL NO. 460, CONFIGURATION T₁ TAIL-MOUNTED WITH PROTUBERANCES

Figure 3. MODEL PHOTOGRAPHS



b. EXTERNAL TANK MODEL NO. 460, CONFIGURATION T₂ SIDE-MOUNTED WITHOUT PROTUBERANCES
Figure 2. CONCLUDED

APPENDIX
TABULATED SOURCE DATA

VOLUME 5

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

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIAD01) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1085.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = .000

MACH (1) = 1.950 ALPHA (1) = -8.380 BETA = .00000 Q(PSI) = 10.263 PO = 28.005 P = 3.9330

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7131	.4585	.1684	-.0105	.0104	.0086	.0097	.0097	.0108	.1316	.6336	-.2287
14.000		.4495	.1683	-.0102	.0051	-.1014	-.0357	-.0034	.0138	.1295	.4850	-.2237
24.000									.0726	.1164	.3587	-.2492
45.000	.7236	.3701	.1226	-.0353	-.0030	-.0523	-.0669	-.0440	-.0989	.0338	.1028	-.2681
67.500		.3211	.0854	-.0724	-.0544	-.0540	-.1100	-.0750	-.0829	-.0472	.0492	-.2426
90.000	.5622	.2469	.0394	-.1008	9.9990	-.0665	-.1151	-.0944	-.0672	-.0702	.0214	-.1981
112.500		.1978	-.0047	-.1267	-.1218	-.0957	-.1029	-.0651	-.0462	-.0459	.0312	-.1617
135.000	.4557	.1578	-.0302	-.1520	-.1294	-.0947	-.0558	-.0464	9.9990	-.0408	-.0336	-.1592
157.500		.1187	-.0446	-.1538	-.1174	-.0556	-.0239	-.0231	-.0261	-.0337	-.0359	-.1582
180.000	.4029	.1044	-.0564	-.1615	-.1135	-.0261	-.0107	-.0066	-.0169	-.0160	-.0276	-.1444
202.500		.1123	-.0548	-.1657	-.1250	-.0382	-.0288	-.0322	-.0306	-.0227	-.0351	-.1492
225.000	.4312	.1438	-.0370	-.1575	-.1202	-.0697	-.0437	-.0490	-.0358	-.0268	-.0357	-.1598
247.500		.1890	-.0095	-.1368	-.1134	-.0931	-.0810	-.0599	-.0464	-.0385	.0191	-.1666
270.000	.5433	.2505	.0338	-.1086	9.9990	-.0834	-.1022	-.0871	-.0641	-.0792	.0481	-.2177
292.500		.3049	.0783	-.0795	-.0457	-.0472	-.1004	-.0691	-.1056	-.0596	.1172	-.2265
315.000	.7210	.3743	.1257	-.0588	-.0230	-.0456	-.0505	-.0471	-.1066	-.0155	.2178	-.2383
326.000									.0466	.0526	.1520	-.2573
346.000		.4661	.1776	-.0083	.0078	-.0953	.0025	-.0170	.0827	.1370	.3281	-.2582
360.000	.7131	.4585	.1684	-.0105	.0104	.0086	.0097	.0097	.0108	.1316	.6336	-.2287

MACH (2) = 3.480 ALPHA (1) = -8.360 BETA = .00000 Q(PSI) = 6.8640 PO = 60.027 P = .81000

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7373	.4298	.1973	.0473	.0405	-.0040	.0117	.0191	.0202	.0930	.2471	-.0661
14.000		.4205	.1927	.0489	.0393	-.0136	.0027	.0179	.0179	.0985	.2376	-.0525
24.000									.0324	.1175	.2061	-.0869
45.000	.6959	.3594	.1548	.0274	.0353	.0082	-.0159	-.0029	-.0080	.0015	.0928	-.0869
67.500		.3079	.1220	.0065	.0026	-.0041	-.0266	-.0019	-.0283	-.0261	.0290	-.0836
90.000	.5195	.2403	.0820	-.0148	9.9990	-.0357	-.0379	-.0407	-.0481	-.0475	-.0289	-.0813
112.500		.1852	.0454	-.0345	-.0401	-.0497	-.0497	-.0497	-.0503	-.0441	-.0328	-.0661
135.000	.3774	.1474	.0166	-.0469	-.0469	-.0447	-.0441	-.0402	9.9990	-.0435	-.0424	-.0689
157.500		.1238	.0060	-.0531	-.0458	-.0418	-.0373	-.0221	.0026	-.0227	-.0249	-.0683
180.000	.3239	.1069	.0009	-.0559	-.0446	-.0311	-.0232	.0009	-.0086	-.0091	-.0136	-.0661
202.500		.1193	.0049	-.0548	-.0435	-.0413	-.0362	-.0210	-.0244	-.0221	-.0283	-.0661

REPRODUCIBILITY OF THE
 ORIGINAL PAGE IS POOR

MSFC 595 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A001)

MACH (2) = 3.480 ALPHA (1) = -8.360

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.3617	.1400	.0138	-.0509	-.0486	-.0441	-.0435	-.0374	-.0424	-.0407	-.0424	-.0678	
247.500		.1796	.0381	-.0390	-.0424	-.0514	-.0531	-.0508	-.0503	-.0435	-.0300	-.0762	
270.000	.5060	.2302	.0680	-.0216	9.9990	-.0419	-.0419	-.0464	-.0554	-.0537	-.0306	-.0824	
292.500		.2878	.1097	.0015	.0111	-.0069	-.0255	-.0283	-.0345	-.0328	.0235	-.0880	
315.000	.7344	.3595	.1531	.0243	.0170	.0254	-.0082	-.0004	-.0251	.0035	.1097	-.0773	
326.000									.0381	.0404	.1065	-.0762	
346.000		.4524	.2117	.0601	.0528	-.0362	.0223	.0184	.0387	.1120	.1862	-.0807	
360.000	.7373	.4298	.1973	.0473	.0405	-.0040	.0117	.0191	.0202	.0930	.2471	-.0661	

MACH (3) = 4.960 ALPHA (1) = -8.310 BETA = .0000 Q(P51) = 3.0710 PD = 90.035 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.7228	.3916	.1901	.1006	.1132	.0918	.0754	.0868	.0855	.1094	.1421	.0099	
14.000		.3865	.1799	.0905	.0981	.0703	.0628	.0678	.0703	.0968	.1648	.0086	
24.000									.0527	.0766	.1510	-.0013	
45.000	.6648	.3425	.1624	.0792	.0830	.0515	.0540	.0578	.0490	.0691	.0729	-.0064	
67.500		.2972	.1359	.0603	.0590	.0427	.0515	.0490	.0414	.0515	.0288	-.0039	
90.000	.5088	.2342	.1057	.0502	9.9990	.0326	.0414	.0427	.0313	.0414	-.0039	-.0051	
112.500		.1913	.0754	.0363	.0351	.0212	.0288	.0351	.0237	.0338	.0049	.0086	
135.000	.3702	.1535	.0628	.0363	.0263	.0149	.0250	.0326	9.9990	.0237	.0011	.0124	
157.500		.1309	.0527	.0250	.0275	.0175	.0238	.0301	.1082	.0275	.0023	.0149	
180.000	.3098	.1157	.0439	.0200	.0225	.0174	.0200	.0250	.0225	.0200	.0061	.0149	
202.500		.1258	.0464	.0200	.0225	.0074	.0175	.0212	.0137	.0225	-.0001	.0187	
225.000	.3501	.1447	.0502	.0162	.0175	.0099	.0137	.0200	.0099	.0162	-.0039	.0162	
247.500		.1813	.0641	.0212	.0162	.0011	.0074	.0162	.0073	.0124	.0074	-.0076	
270.000	.4709	.2266	.0880	.0263	9.9990	.0036	.0099	.0175	.0049	.0112	.0074	-.0076	
292.500		.2719	.1169	.0339	.0452	.0149	.0200	.0225	.0086	.0200	.0326	-.0127	
315.000	.6850	.3425	.1447	.0464	.0464	.0301	.0288	.0313	.0086	.0326	.0541	-.0127	
326.000									.0427	.0477	.0729	-.0139	
346.000		.4155	.2039	.0729	.0829	.0162	.0376	.0426	.0452	.0792	.1245	-.0190	
360.000	.7228	.3916	.1901	.1006	.1132	.0918	.0754	.0868	.0855	.1094	.1421	.0099	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA002) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 10.247 PO = 28.014 P = 3.8130

PARAMETRIC DATA

SECTION (1) ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6128	.3564	.0907	-.0665	-.0314	-.0352	-.0246	-.0257	-.0118	.1473	.5094	-.2149
14.000		.3504	.0950	-.0613	-.0164	-.1380	-.0330	-.0277	.0035	.1592	.3293	-.2318
24.000									.0270	.1425	.2644	-.2338
45.000	.6573	.3025	.0696	-.0647	-.0201	-.0390	-.0488	-.0292	-.0577	.0636	.1662	-.2419
67.500		.2825	.0693	-.0780	-.0512	-.0126	-.0855	-.0262	-.0587	-.0368	.1399	-.2130
90.000	.5720	.2490	.0511	-.0987	9.9990	-.0345	-.0522	-.0371	-.0280	-.0350	.0447	-.1969
112.500		.2343	.0281	-.1123	-.0949	-.0613	-.0477	-.0383	-.0296	-.0285	.0285	-.1662
135.000	.5011	.2205	.0138	-.1283	-.0974	-.0653	-.0359	-.0340	9.9990	-.0318	-.0295	-.1458
157.500		.2032	-.0012	-.1288	-.0933	-.0533	-.0311	-.0114	-.0107	-.0194	-.0277	-.1364
180.000	.4683	.1881	-.0107	-.1322	-.0937	-.0401	-.0224	-.0073	-.0148	-.0133	-.0257	-.1355
202.500		.1986	-.0080	-.1363	-.1053	-.0427	-.0344	-.0205	-.0186	-.0103	-.0163	-.1405
225.000	.4894	.2126	.0100	-.1269	-.0937	-.0427	-.0220	-.0348	-.0284	-.0129	-.0208	-.1482
247.500		.2231	.0281	-.1101	-.0848	-.0530	-.0270	-.0319	-.0232	-.0156	.0277	-.1666
270.000	.5660	.2563	.0428	-.0938	9.9990	-.0451	-.0341	-.0341	-.0281	-.0304	.0440	-.1979
292.500		.2837	.0609	-.0902	-.0434	-.0125	-.0619	-.0321	-.0555	-.0333	.1602	-.2251
315.000	.6483	.3196	.0810	-.0877	-.0409	-.0356	-.0564	-.0292	-.0824	-.0258	.2748	-.2302
326.000									.0511	-.0208	.1946	-.2402
346.000		.3715	.1066	-.0556	-.0405	-.1363	-.0194	-.0322	.0588	.1213	.2774	-.2327
360.000	.6128	.3564	.0907	-.0665	-.0314	-.0352	-.0246	-.0257	-.0118	.1473	.5094	-.2149

MACH (2) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 6.8610 PO = 60.006 P = .80900

SECTION (1) ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6212	.3344	.1347	.0140	.0140	-.0153	-.0085	-.0017	.0021	.0659	.1981	-.0650
14.000		.3261	.1283	.0133	.0144	-.0198	-.0136	-.0052	-.0018	.0748	.2145	-.0559
24.000									.0099	.0917	.1576	-.0847
45.000	.6170	.3008	.1165	.0065	.0189	.0105	-.0153	-.0108	-.0182	.0144	.0843	-.0807
67.500		.2805	.1024	-.0029	-.0012	.0009	-.0170	-.0165	-.0170	-.0125	.0370	-.0796
90.000	.5324	.2495	.0849	-.0114	9.9990	-.0221	-.0125	-.0204	-.0238	-.0182	.0004	-.0717
112.500		.2166	.0657	-.0215	-.0249	-.0283	-.0210	-.0198	-.0244	-.0210	-.0002	-.0610
135.000	.4580	.1983	.0511	-.0305	-.0300	-.0266	-.0209	-.0175	9.9990	-.0175	-.0176	-.0604
157.500		.1824	.0398	-.0351	-.0334	-.0244	-.0193	-.0142	.0144	-.0080	-.0097	-.0604
180.000	.4225	.1673	.0354	-.0373	-.0333	-.0238	-.0187	-.0119	-.0068	-.0018	-.0041	-.0638
202.500		.1803	.0399	-.0356	-.0311	-.0238	-.0192	-.0130	-.0097	-.0040	-.0097	-.0621

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A002)

MACH (2) = 3.480 ALPHA (1) = -4.330

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.4428	.1903	.0454	-.0322	-.0311	-.0272	-.0215	-.0182	-.0198	-.0148	-.0153	-.0610	
247.500		.2131	.0591	-.0243	-.0271	-.0288	-.0226	-.0198	-.0243	-.0209	-.0013	-.0683	
270.000	.5291	.2444	.0781	-.0142	9.9990	-.0244	-.0159	-.0210	-.0249	-.0210	-.0052	-.0756	
292.500		.2699	.0951	-.0057	.0060	-.0057	-.0108	-.0175	-.0209	-.0226	.0212	-.0818	
315.000	.6404	.3030	.1159	.0037	.0032	.0144	-.0159	-.0097	-.0311	-.0086	.0759	-.0751	
326.000									.0381	.0082	.0843	-.0734	
346.000		.3600	.1492	.0257	.0223	-.0446	-.0007	-.0035	.0150	.0815	.1493	-.0801	
360.000	.6212	.3344	.1347	.0140	.0140	-.0153	-.0085	-.0017	.0021	.0659	.1981	-.0650	

MACH (3) = 4.960 ALPHA (1) = -4.280 BETA = .00000 Q(P51) = 3.0710 PO = 90.038 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.5830	.2597	.1447	.0880	.0968	.0830	.0679	.0742	.0729	.0842	.0842	.0061	
14.000		.2997	.1359	.0817	.0830	.0628	.0578	.0653	.0578	.0779	.1157	-.0001	
24.000									.0338	.0527	.0931	-.0076	
45.000	.5842	.2833	.1233	.0679	.0666	.0502	.0464	.0653	.0389	.0565	.0464	-.0114	
67.500		.2682	.1183	.0553	.0565	.0364	.0490	.0704	.0452	.0452	.0187	-.0102	
90.000	.5088	.2417	.1044	.0515	9.9990	.0351	.0414	.0477	.0326	.0401	.0023	-.0051	
112.500		.2165	.0893	.0414	.0389	.0250	.0338	.0527	.0275	.0364	.0137	.0187	
135.000	.4420	.1963	.0754	.0351	.0313	.0212	.0263	.0527	9.9990	.0288	.0074	.0200	
157.500		.1812	.0666	.0300	.0263	.0187	.0225	.0540	.0955	.0263	.0036	.0200	
180.000	.4105	.1749	.0691	.0300	.0275	.0137	.0237	.0578	.0250	.0212	.0011	.0200	
202.500		.1824	.0666	.0225	.0237	.0124	.0162	.0590	.0152	.0212	.0011	.0200	
225.000	.4345	.1913	.0703	.0212	.0200	.0099	.0200	.0212	.0124	.0162	.0036	.0237	
247.500		.2114	.0766	.0237	.0187	.0086	.0099	.0149	.0061	.0124	.0174	-.0076	
270.000	.5061	.2379	.0880	.0263	9.9990	.0061	.0111	.0149	.0049	.0124	.0162	-.0114	
292.500		.2556	.1019	.0263	.0338	.0137	.0124	.0162	.0061	.0124	.0225	-.0101	
315.000	.6069	.2819	.1119	.0300	.0338	.0149	.0162	.0162	-.0001	.0149	.0414	-.0164	
326.000									.0313	.0263	.0515	-.0190	
346.000		.3323	.1459	.0452	.0515	.0074	.0187	.0187	.0212	.0464	.0342	-.0165	
360.000	.5830	.2997	.1447	.0880	.0968	.0830	.0679	.0742	.0729	.0842	.0842	.0061	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 5

MSFC 586 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA003) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 10.220 PO = 28.007 P = 3.7860

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5158	.2629	.0232	-.1090	-.0663	-.0501	-.0338	-.0296	-.0081	.1532	.4042	-.1882
14.000		.2609	.0307	-.1039	-.0479	-.1513	-.0335	-.0222	.0088	.1674	.2755	-.2245
24.000									.0194	.1601	.2439	-.2285
45.000	.5843	.2289	.0205	-.1064	-.0754	-.0259	-.0626	-.0115	-.0701	.0376	.2502	-.2332
67.500		.2496	.0368	-.0930	-.0657	-.0021	-.0604	-.0127	-.0331	-.0354	.1406	-.1884
90.000	.5793	.2375	.0383	-.0952	9.9990	-.0369	-.0153	-.0297	-.0199	-.0225	.0217	-.1854
112.500		.2461	.0455	-.0963	-.0630	-.0403	-.0380	-.0225	-.0187	-.0259	.0198	-.1878
135.000	.5797	.2597	.0538	-.0982	-.0676	-.0521	-.0407	-.0229	9.9990	-.0244	-.0331	-.1534
157.500		.2553	.0554	-.0933	-.0668	-.0566	-.0434	-.0127	-.0138	-.0210	-.0271	-.1422
180.000	.5638	.2293	.0599	-.1003	-.0734	-.0305	-.0313	-.0101	-.0120	-.0165	-.0293	-.1443
202.500		.2490	.0576	-.0989	-.0705	-.0433	-.0384	-.0233	-.0199	-.0161	-.0214	-.1460
225.000	.5547	.2539	.0459	-.0928	-.0675	-.0361	-.0176	-.0221	-.0301	-.0214	-.0202	-.1533
247.500		.2558	.0413	-.0955	-.0660	-.0319	-.0127	-.0130	-.0221	-.0191	.0323	-.1980
270.000	.5699	.2633	.0421	-.1008	9.9990	-.0361	-.0043	-.0229	-.0198	-.0149	.0391	-.2007
292.500		.2550	.0368	-.1075	-.0569	-.0073	-.0353	-.0228	-.0342	-.0308	.1496	-.2001
315.000	.5786	.2644	.0440	-.1114	-.0587	-.0230	-.0636	-.0257	-.0424	.0068	.2184	-.2109
326.000									.0065	.0058	.2171	-.2104
346.000		.2836	.0417	-.0975	-.0733	-.1543	-.0256	-.0331	.0554	.1235	.2508	-.2024
360.000	.5158	.2629	.0232	-.1090	-.0663	-.0501	-.0338	-.0296	-.0081	.1532	.4042	-.1882

MACH (2) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 6.8610 PO = 60.006 P = .80900

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4986	.2481	.0777	-.0153	.0067	-.0147	-.0215	-.0153	-.0040	.0512	.1587	-.0649
14.000		.2451	.0782	-.0142	.0089	-.0170	-.0243	-.0153	-.0080	.0500	.1683	-.0728
24.000									.0026	.0499	.1362	-.0907
45.000	.5341	.2389	.0737	-.0159	-.0012	-.0063	-.0164	-.0153	-.0181	.0015	.1013	-.0768
67.500		.2479	.0805	-.0142	-.0097	-.0119	-.0125	-.0119	-.0074	-.0113	.0370	-.0723
90.000	.5353	.2489	.0838	-.0131	9.9990	-.0136	-.0074	-.0097	-.0114	-.0059	.0049	-.0700
112.500		.2485	.0810	-.0136	-.0147	-.0153	-.0108	-.0091	-.0113	-.0074	.0133	-.0666
135.000	.5389	.2523	.0826	-.0136	-.0153	-.0170	-.0108	-.0091	9.9990	-.0080	-.0108	-.0632
157.500		.2517	.0904	-.0142	-.0170	-.0170	-.0131	-.0097	.0195	-.0074	-.0131	-.0604
180.000	.5305	.2371	.0793	-.0136	-.0159	-.0176	-.0120	-.0103	-.0086	-.0080	-.0136	-.0598
202.500		.2508	.0822	-.0136	-.0147	-.0175	-.0119	-.0097	-.0097	-.0053	-.0114	-.0616

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A003)

MACH (2) = 3.480 ALPHA (1) = -.280

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.5212	.2444	.0810	-.0131	-.0153	-.0153	-.0120	-.0103	-.0103	-.0052	-.0091	-.0632	
247.500		.2506	.0810	-.0131	-.0148	-.0170	-.0114	-.0080	-.0091	-.0074	.0111	-.0740	
270.000	.5341	.2512	.0815	-.0131	9.9990	-.0159	-.0086	-.0058	-.0120	-.0063	.0071	-.0768	
292.500		.2409	.0787	-.0153	-.0035	-.0108	-.0029	-.0120	-.0080	-.0114	.0297	-.0788	
315.000	.5437	.2444	.0781	-.0159	-.0041	-.0018	-.0165	-.0170		-.0136	-.0170	.0794	-.0779
326.000									.0218	.0122	.0595	-.0830	
346.000		.2720	.0939	-.0052	.0094	-.0520	-.0187	-.0182	.0077	.0578	.1142	-.0790	
360.000	.4986	.2481	.0777	-.0153	.0067	-.0147	-.0215	-.0153	-.0040	.0512	.1587	-.0649	

MACH (3) = 4.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 3.0700 PG = 90.019 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4496	.2242	.1095	.0717	.0843	.0742	.0553	.0629	.0629	.0768	.0553	.0023	
14.000		.2217	.0994	.0642	.0654	.0465	.0452	.0465	.0478	.0667	.1309	-.0026	
24.000									.0175	.0391	.0855	-.0051	
45.000	.4975	.2266	.0943	.0540	.0578	.0389	.0389	.0431	.0351	.0490	.0414	-.0076	
67.500		.2316	.0981	.0439	.0477	.0338	.0414	.0364	.0376	.0401	.0124	-.0051	
90.000	.5126	.2367	.0991	.0452	9.9990	.0338	.0376	.0376	.0326	.0389	.0074	-.0001	
112.500		.2430	.0968	.0401	.0414	.0275	.0326	.0338	.0288	.0364	.0286	.0211	
135.000	.5176	.2442	.0956	.0351	.0313	.0225	.0225	.0275	9.9990	.0288	.0023	-.0013	
157.500		.2468	.1006	.0351	.0301	.0175	.0238	.0250	.1271	.0313	.0036	.0023	
180.000	.5113	.2379	.0991	.0338	.0326	.0187	.0200	.0239	.0289	.0288	.0011	.0023	
202.500		.2468	.0991	.0288	.0301	.0301	.0162	.0187	.0200	.0238	.0023	.0023	
225.000	.5050	.2392	.0918	.0263	.0263	.0149	.0149	.0162	.0137	.0175	.0011	.0011	
247.500		.2405	.1031	.0250	.0225	.0074	.0112	.0137	.0074	.0149	.0149	-.0013	
270.000	.4962	.2354	.0858	.0212	9.9990	.0074	.0099	.0137	.0074	.0149	.0162	-.0076	
292.500		.2291	.0842	.0175	.0301	.0112	.0124	.0124	.0074	.0112	.0250	-.0064	
315.000	.5076	.2178	.0767	.0175	.0238	.0074	.0074	.0049	.0011	.0149	.0351	-.0114	
326.000									.0200	.0197	.0389	-.0177	
346.000		.2468	.0931	.0200	.0275	.0011	.0036	.0074	.0099	.0391	.0353	-.0127	
360.000	.4496	.2242	.1095	.0717	.0843	.0742	.0553	.0629	.0629	.0768	.0553	.0023	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A004) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XHRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YHRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZHRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 3.790 BETA = .00000 Q(P51) = 10.242 PO = 28.011 P = 3.0080

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4337	.1801	-.0065	-.1286	-.0796	-.0593	-.0329	-.0197	.0040	.1412	.3990	-.1763
14.000		.1743	-.0122	-.1346	-.0881	-.1603	-.0345	-.0205	.0020	.1467	.3015	-.2183
24.000									.0006	.1331	.2542	-.2168
45.000	.5129	.1717	-.0013	-.1343	-.0731	-.0168	-.0644	-.0190	-.0300	.0602	.1709	-.2144
67.500		.2110	.0100	-.1120	-.0882	-.0251	-.0557	-.0338	-.0311	-.0299	.1115	-.1970
90.000	.5763	.2450	.0311	-.0991	9.9990	-.0443	-.0232	-.0390	-.0300	-.0307	.0092	-.1785
112.500		.2791	.0561	-.0822	-.0561	-.0523	-.0504	-.0255	-.0395	-.0410	-.0091	-.2114
135.000	.6644	.3136	.0851	-.0666	-.0443	-.0496	-.0534	-.0341	9.9990	-.0311	-.0405	-.1745
157.500		.3230	.0996	-.0516	-.0353	-.0414	-.0391	-.0191	-.0126	-.0187	-.0232	-.1650
180.000	.6874	.3076	.1086	-.0455	-.0349	-.0160	-.0266	-.0126	-.0092	-.0100	-.0228	-.1720
202.500		.3256	.0953	-.0503	-.0398	-.0250	-.0356	-.0235	-.0156	-.0092	-.0208	-.1725
225.000	.6353	.3197	.0874	-.0639	-.0409	-.0360	-.0239	-.0288	-.0330	-.0247	-.0296	-.1713
247.500		.2912	.0640	-.0860	-.0482	-.0402	-.0289	-.0157	-.0353	-.0406	.0013	-.2038
270.000	.5752	.2617	.0428	-.1035	9.9990	-.0360	-.0182	-.0299	-.0341	-.0295	.0198	-.2002
292.500		.2258	.0160	-.1224	-.0797	-.0314	-.0303	-.0367	-.0341	-.0344	.1325	-.1828
315.000	.5296	.2031	-.0073	-.1257	-.0695	-.0129	-.0665	-.0314	-.0348	.0602	.1864	-.1924
326.000									-.0206	.0692	.1839	-.1959
346.000		.1918	-.0039	-.1302	-.1031	-.1551	-.0295	-.0321	.0455	.1194	.2510	-.1838
360.000	.4337	.1601	-.0065	-.1286	-.0796	-.0593	-.0329	-.0197	.0040	.1412	.3990	-.1763

MACH (2) = 3.480 ALPHA (1) = 3.770 BETA = .00000 Q(P51) = 6.8630 PO = 60.018 P = .81000

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3879	.1745	.0308	-.0345	-.0187	-.0266	-.0272	-.0193	-.0103	.0370	.1592	-.0644
14.000		.1727	.0324	-.0351	-.0188	-.0306	-.0312	-.0210	-.0114	.0426	.1452	-.0717
24.000									-.0030	.0471	.1084	-.0808
45.000	.4507	.1852	.0421	-.0339	-.0204	-.0176	-.0210	-.0193	-.0255	.0282	.0894	-.0773
67.500		.2134	.0601	-.0277	-.0249	-.0170	-.0221	-.0193	-.0159	-.0074	.0354	-.0740
90.000	.5268	.2427	.0798	-.0165	9.9990	-.0198	-.0153	-.0170	-.0176	-.0063	-.0068	-.0672
112.500		.2765	.1012	-.0052	-.0080	-.0176	-.0148	-.0165	-.0159	-.0097	.0020	-.0114
135.000	.6187	.3098	.1210	.0049	-.0007	-.0086	-.0074	-.0159	9.9990	-.0086	-.0091	-.0108
157.500		.3257	.1329	.0128	.0043	-.0029	-.0006	-.0153	.0246	-.0012	-.0053	-.0115
180.000	.6491	.3177	.1300	.0155	.0071	.0037	.0015	-.0001	-.0018	.0015	-.0029	-.0108
202.500		.3295	.1311	.0127	.0043	-.0007	-.0007	-.0018	-.0058	-.0007	-.0052	-.0108

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A004)

MACH (2) = 3.480 ALPHA (1) = 3.770

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.6040	.3047	.1210	.0060	-.0012	-.0041	-.0074	-.0086	-.0114	-.0058	-.0107	-.0502	
247.500	.2805	.1046	-.0029	-.0046	-.0159	-.0142	-.0131	-.0153	-.0091	-.0002	-.0672		
270.000	.5392	.2510	.0842	-.0137	9.9990	-.0210	-.0182	-.0126	-.0176	-.0069	-.0029	-.0678	
292.500	.2172	.0651	-.0255	-.0171	-.0148	-.0159	-.0120	-.0165	-.0081	.0014	-.0769		
315.000	.4601	.1883	.0461	-.0350	-.0186	-.0153	-.0164	-.0124	-.0231	-.0057	.0804	-.0768	
326.000									-.0053	-.0018	.0804	-.0734	
346.000		.1969	.0516	-.0317	-.0182	-.0520	-.0295	-.0114	.0031	.0465	.1026	-.0762	
360.000	.3879	.1745	.0308	-.0345	-.0187	-.0266	-.0272	-.0193	-.0103	.0370	.1592	-.0644	

MACH (3) = 4.960 ALPHA (1) = 3.730 BETA = .0000 QIP511 = 3.0710 PO = 90.042 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.3463	.1636	.0931	.0691	.0716	.0679	.0540	.0716	.0628	.0716	.0490	.0112	
14.000		.1624	.0792	.0603	.0527	.0427	.0452	.0641	.0464	.0628	.0616	.0061	
24.000									.0124	.0162	.0401	.0049	
45.000	.4219	.1774	.0779	.0515	.0489	.0426	.0376	.0653	.0363	.0489	.0200	.0036	
67.500		.2038	.0842	.0426	.0413	.0376	.0401	.0476	.0376	.0426	.0049	.0049	
90.000	.5101	.2316	.0918	.0426	9.9990	.0300	.0351	.0426	.0288	.0376	.0011	.0074	
112.500		.2658	.1132	.0452	.0401	.0288	.0313	.0426	.0300	.0376	.0124	.0212	
135.000	.6033	.2971	.1245	.0489	.0363	.0275	.0300	.0414	9.9990	.0326	.0086	.0212	
157.500		.3133	.1333	.0476	.0363	.0275	.0288	.0376	.1257	.0351	.0112	.0225	
180.000	.6310	.3079	.1396	.0514	.0376	.0262	.0275	.0426	.0325	.0288	.0112	.0212	
202.500		.3122	.1409	.0452	.0338	.0200	.0225	.0326	.0237	.0275	.0099	.0200	
225.000	.5819	.2971	.1308	.0426	.0313	.0212	.0200	.0300	.0187	.0225	-.0001	.0212	
247.500		.2706	.1132	.0338	.0225	.0124	.0124	.0237	.0099	.0137	.0124	.0086	
270.000	.4950	.2366	.0930	.0225	9.9990	.0061	.0061	.0212	.0049	.0124	.0061	.0023	
292.500		.2027	.0754	.0137	.0137	.0061	.0074	.0187	.0061	.0137	.0112	.0036	
315.000	.4231	.1723	.0552	.0124	.0149	.0074	.0074	.0187	.0036	.0135	.0149	-.0026	
326.000									.0124	.0137	.0149	-.0064	
346.000		.1774	.0628	.0111	.0137	-.0039	.0036	.0174	.0074	.0212	.0376	-.0064	
360.000	.3463	.1636	.0931	.0691	.0716	.0679	.0540	.0716	.0628	.0716	.0490	.0112	

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A005) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SO. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 7.860 BETA = .00000 Q(PS1) = 10.214 PO = 28.000 P = 3.7810

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.3275	.0995	-.0675	-.1670	-.1051	-.0470	-.0383	-.0280	-.0071	.1010	.4319	-.1828	
14.000		.1036	-.0636	-.1683	-.1076	-.1456	-.0439	-.0318	-.0101	.0823	.3052	-.2039	
24.000									-.0157	.1173	.2446	-.2094	
45.000	.4149	.1088	-.0438	-.1613	-.1223	-.0275	-.0695	-.0461	-.0472	.0599	.1643	-.2033	
67.500		.1556	-.0143	-.1406	-.1255	-.0777	-.0674	-.0742	-.0587	-.0173	.0822	-.2049	
90.000	.5435	.2163	.0239	-.1164	9.9990	-.1084	-.0811	-.0811	-.0879	-.0811	-.0301	-.1978	
112.500		.2908	.0744	-.0826	-.0538	-.0963	-.0933	-.0732	-.0747	-.0747	-.0663	-.1892	
135.000	.7223	.3721	.1262	-.0540	-.0229	-.0529	-.0597	-.0513	9.9990	-.0510	-.0535	-.1881	
157.500		.4227	.1594	-.0146	.0069	-.0271	-.0195	-.0157	-.0100	-.0150	-.0247	-.1970	
180.000	.7882	.4201	.1682	-.0070	.0114	.0005	.0061	.0095	.0031	.0073	-.0070	-.2030	
202.500		.4209	.1635	-.0180	-.0028	.0005	-.0210	-.0142	-.0104	-.0070	-.0108	-.2030	
225.000	.7105	.3795	.1379	-.0377	-.0100	-.0229	-.0366	-.0373	-.0400	-.0335	-.0441	-.1944	
247.500		.3111	.0871	-.0755	-.0414	-.0717	-.0721	-.0584	-.0630	-.0717	-.0538	-.2032	
270.000	.5744	.2501	.0383	-.1101	9.9990	-.0900	-.0828	-.0722	-.0799	-.0805	-.0433	-.2092	
292.500		.1827	-.0164	-.1393	-.1143	-.0663	-.0614	-.0640	-.0610	-.0432	.0923	-.1909	
315.000	.4489	.1344	-.0429	-.1526	-.1091	-.0391	-.0698	-.0460	-.0391	.0394	.1556	-.1946	
326.000									-.0387	.0542	.1784	-.1951	
346.000		.1198	-.0517	-.1544	-.1028	-.1305	-.0279	-.0279	.0315	.1179	.2545	-.1906	
360.000	.3275	.0995	-.0675	-.1670	-.1051	-.0470	-.0383	-.0280	-.0071	.1010	.4319	-.1828	

MACH (2) = 3.480 ALPHA (1) = 7.800 BETA = .00000 Q(PS1) = 6.8640 PO = 60.031 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.2931	.1127	.0021	-.0457	-.0322	-.0310	-.0299	-.0181	-.0186	.0129	.1825	-.0717	
14.000		.1119	-.0002	-.0481	-.0362	-.0385	-.0357	-.0250	-.0233	.0076	.1113	-.0802	
24.000									-.0170	.0166	.0747	-.0807	
45.000	.3671	.1361	.0138	-.0458	-.0357	-.0340	-.0328	-.0345	-.0345	-.0210	.0183	-.0847	
67.500		.1785	.0415	-.0368	-.0407	-.0356	-.0368	-.0368	-.0334	-.0294	-.0266	-.0745	
90.000	.5113	.2341	.0735	-.0188	9.9990	-.0390	-.0390	-.0413	-.0374	-.0295	-.0272	-.0678	
112.500		.3000	.1169	.0059	-.0013	-.0176	-.0227	-.0250	-.0328	-.0289	-.0125	-.0593	
135.000	.6944	.3677	.1592	.0279	.0161	.0026	.0020	-.0013	9.9990	-.0058	-.0092	-.0576	
157.500		.4155	.1896	.0482	.0352	.0211	.0200	.0178	.0442	.0155	.0138	-.0593	
180.000	.7899	.4084	.1999	.0550	.0421	.0297	.0285	.0274	.0218	.0229	.0206	-.0616	
202.500		.4122	.1890	.0476	.0335	.0257	.0211	.0206	.0133	.0183	.0149	-.0616	

REPRODUCIBILITY OF THIS
 ORIGINAL PAGE IS POOR.

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A005)

MACH (2) = 3.480 ALPHA (1) = 7.800

SECTION (1)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6871	.3637	.1643	.0335	.0206	.0093	.0059	.0031	-.0058	-.0035	-.0041	-.0610
247.500		.3085	.1265	.0110	.0037	-.0120	-.0182	-.0199	-.0266	-.0266	-.0142	-.0638
270.000	.5299	.2471	.0865	-.0126	9.9990	-.0351	-.0368	-.0379	-.0368	-.0293	-.0216	-.0695
292.500		.1885	.0504	-.0334	-.0345	-.0334	-.0362	-.0362	-.0340	-.0295	-.0238	-.0790
315.000	.3827	.1445	.0211	-.0475	-.0379	-.0288	-.0312	-.0357	-.0357	-.0261	.0178	-.0847
326.000									-.0238	-.0188	.0578	-.0830
346.000		.1306	.0139	-.0514	-.0368	-.0508	-.0317	-.0356	-.0148	.0353	.1028	-.0869
360.000	.2931	.1127	.0021	-.0457	-.0322	-.0310	-.0299	-.0181	-.0186	.0129	.1825	-.0717

MACH (3) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(P51) = 3.0700 P0 = 90.020 P = .17800

SECTION (1)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2808	.1259	.0767	.0578	.0603	.0591	.0477	.0591	.0490	.0578	.0250	.0061
14.000		.1234	.0629	.0503	.0440	.0352	.0402	.0427	.0326	.0478	.0515	.0036
24.000									.0035	.0049	.0074	.0011
45.000	.3501	.1422	.0666	.0439	.0414	.0326	.0338	.0464	.0263	.0389	-.0026	-.0001
67.500		.1787	.0767	.0338	.0364	.0263	.0351	.0490	.0275	.0351	-.0051	-.0026
90.000	.4962	.2329	.0905	.0376	9.9990	.0250	.0263	.0477	.0187	.0275	-.0076	.0036
112.500		.2984	.1283	.0477	.0427	.0238	.0301	.0364	.0200	.0263	.0086	.0112
135.000	.6927	.3627	.1624	.0590	.0452	.0338	.0326	.0375	9.9990	.0313	.0149	.0112
157.500		.4093	.1901	.0691	.0527	.0389	.0401	.0414	.1422	.0401	.0250	.0112
180.000	.7696	.4020	.2014	.0754	.0565	.0439	.0427	.0452	.0414	.0389	.0313	.0137
202.500		.4143	.1976	.0704	.0553	.0351	.0376	.0376	.0313	.0364	.0275	.0149
225.000	.6701	.3627	.1737	.0565	.0439	.0275	.0288	.0275	.0200	.0212	.0162	.0149
247.500		.3060	.1309	.0389	.0250	.0149	.0112	.0175	.0023	.0099	.0099	.0036
270.000	.5063	.2405	.0956	.0225	9.9990	.0023	.0023	.0099	-.0001	.0061	.0074	-.0013
292.500		.1901	.0716	.0112	.0175	.0011	.0049	.0112	.0011	.0086	.0036	.0023
315.000	.3564	.1472	.0477	.0049	.0099	-.0026	.0023	.0099	-.0026	.0074	.0049	-.0026
326.000									.0023	.0049	.0061	-.0051
346.000		.1334	.0414	.0023	.0074	.0011	.0011	.0112	-.0013	.0124	.0187	-.0089
360.000	.2808	.1259	.0767	.0578	.0603	.0591	.0477	.0591	.0490	.0578	.0250	.0061

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 595 (TA-2F) MCRO200 EXTERNAL TANK, T1

(R1A005) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 12.570 BETA = .00000 Q(P51) = 10.202 PO = 28.001 P = 3.7680

SECTION (1) TANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.2408	.0687	-.1025	-.1880	-.1097	-.0478	-.0505	-.0353	-.0337	.0839	.4053	-.2088		
14.000		.0668	-.0949	-.1873	-.1193	-.1546	-.0604	-.0452	-.0402	.0152	.2896	-.2306		
24.000														
45.000	.3354	.0775	-.0862	-.1857	-.1359	-.0763	-.1055	-.0714	-.0736	-.0015	.1230	-.2349		
67.500		.1256	-.0428	-.1667	-.1596	-.1266	-.1353	-.1000	-.1073	-.0458	.0126	-.2128		
90.000	.5097	.2115	.0145	-.1294	9.9990	-.1597	-.1722	-.1836	-.1711	-.1502	-.0433	-.2158		
112.500		.3118	.1002	-.0581	-.0628	-.1095	-.1190	-.1239	-.1421	-.1391	-.1276	-.1890		
135.000	.7831	.4198	.1827	-.0082	-.0074	-.0411	-.0358	-.0514	9.9990	-.0661	-.0609	-.1848		
157.500		.4835	.2349	.0474	.0478	.0053	.0144	.0167	-.0044	-.0117	.0000	-.2031		
180.000	.9026	.4872	.2465	.0694	.0633	.0520	.0459	.0398	.0209	.0216	.0118	-.2115		
202.500		.4868	.2250	.0497	.0357	.0296	.0129	.0125	.0125	.0095	-.0055	-.2075		
225.000	.7782	.4276	.1766	.0133	.0020	-.0100	-.0225	-.0426	-.0483	-.0441	-.0559	-.1965		
247.500		.3207	.1047	-.0538	-.0477	-.0902	-.0932	-.1005	-.1197	-.1183	-.1125	-.2016		
270.000	.5355	.2273	.0330	-.1114	9.9990	-.1501	-.1524	-.1683	-.1467	-.1410	-.0434	-.2280		
292.500		.1421	-.0370	-.1537	-.1423	-.1135	-.1052	-.0987	-.0805	-.0248	.0387	-.2206		
315.000	.3534	.0906	-.0710	-.1767	-.1328	-.0692	-.0979	-.0771	-.0695	.0008	.1597	-.2005		
326.000														
346.000		.0819	-.0909	-.1804	-.1186	-.1163	-.0408	-.0351	-.0143	.1108	.2445	-.2254		
360.000	.2408	.0687	-.1025	-.1880	-.1097	-.0478	-.0505	-.0353	-.0337	.0839	.4053	-.2088		

MACH (2) = 3.480 ALPHA (1) = 12.520 BETA = .00000 Q(P51) = 6.8640 PO = 60.032 P = .81000

SECTION (1) TANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.2152	.0688	-.0162	-.0449	-.0348	-.0258	-.0258	-.0184	-.0201	-.0038	.1245	-.0754		
14.000		.0700	-.0201	-.0466	-.0421	-.0410	-.0404	-.0365	-.0393	-.0229	.0783	-.0844		
24.000														
45.000	.2924	.0958	-.0061	-.0500	-.0421	-.0450	-.0506	-.0500	-.0450	-.0337	-.0179	-.0889		
67.500		.1488	.0248	-.0410	-.0466	-.0517	-.0512	-.0483	-.0450	-.0416	-.0393	-.0742		
90.000	.4893	.2254	.0699	-.0179	9.9990	-.0500	-.0495	-.0579	-.0517	-.0461	-.0415	-.0742		
112.500		.3205	.1307	.0175	.0057	-.0128	-.0185	-.0258	-.0337	-.0297	-.0145	-.0641		
135.000	.7623	.4260	.1989	.0558	.0400	.0197	.0147	.0113	9.9990	.0090	.0107	-.0552		
157.500		.4947	.2496	.0896	.0699	.0519	.0496	.0457	.0569	.0417	.0435	-.0697		
180.000	.8874	.5068	.2695	.1032	.0846	.0694	.0666	.0621	.0576	.0587	.0552	-.0720		
202.500		.5048	.2575	.0919	.0727	.0592	.0559	.0490	.0479	.0496	.0474	-.0720		

MSFC 586 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A006)

MACH (2) = 3.480 ALPHA (1) = 12.520

SECTION (1)/ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.7599	.4327	.2136	.0654	.0480	.0704	.0288	.0209	.0169	.0180	.0181	-.0688	
247.500		.3420	.1476	.0271	.0169	-.0033	-.0089	-.0157	-.0224	-.0235	-.0134	-.0658	
270.000	.5167	.2479	.0868	-.0078	9.9990	-.0427	-.0478	-.0528	-.0523	-.0495	-.0393	-.0737	
292.500		.1679	.0372	-.0371	-.0405	-.0433	-.0540	-.0562	-.0495	-.0450	-.0387	-.0742	
315.000	.3178	.1134	.0046	-.0539	-.0438	-.0466	-.0528	-.0562	-.0500	-.0415	-.0106	-.0838	
326.000									-.0477	-.0337	-.0089	-.0833	
345.000		.0823	-.0117	-.0602	-.0455	-.0405	-.0309	-.0292	-.0241	.0118	.0801	-.0838	
350.000	.2152	.0688	-.0162	-.0449	-.0348	-.0258	-.0258	-.0184	-.0201	-.0038	.1245	-.0754	

MACH (3) = 4.860 ALPHA (1) = 12.450 BETA = .00000 Q(PSI) = 3.0700 PO = 90.021 P = .17800

SECTION (1)/ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.1976	.0981	.0704	.0603	.0679	.0692	.0528	.0603	.0528	.0553	.0452	.0011	
14.000		.0893	.0527	.0527	.0464	.0401	.0427	.0364	.0364	.0401	.1019	-.0039	
24.000									.0074	.0061	.0212	-.0064	
45.000	.2745	.1069	.0515	.0439	.0427	.0427	.0364	.0313	.0288	.0326	-.0013	-.0114	
67.500		.1498	.0679	.0389	.0369	.0314	.0377	.0263	.0301	.0301	-.0039	-.0064	
90.000	.4748	.2178	.0880	.0439	9.9990	.0313	.0326	.0238	.0212	.0238	-.0076	-.0026	
112.500		.3110	.1359	.0565	.0464	.0364	.0364	.0301	.0275	.0275	.0187	.0023	
135.000	.7469	.4156	.2014	.0842	.0641	.0490	.0515	.0452	9.9990	.0427	.0364	-.0026	
157.500		.4961	.2505	.1094	.0830	.0653	.0691	.0628	.1399	.0603	.0616	-.0026	
180.000	.8817	.5025	.2694	.1220	.0955	.0805	.0779	.0742	.0767	.0729	.0729	-.0039	
202.500		.4924	.2556	.1107	.0868	.0729	.0691	.0641	.0528	.0641	.0641	-.0039	
225.000	.7507	.4231	.2153	.0880	.0653	.0527	.0477	.0427	.0401	.0389	.0414	-.0026	
247.500		.3337	.1598	.0603	.0452	.0313	.0250	.0225	.0200	.0175	.0175	.0049	
270.000	.4924	.2405	.1006	.0326	9.9990	.0086	.0099	.0074	-.0039	-.0091	.0011	.0036	
292.500		.1687	.0616	.0149	.0187	.0112	.0061	.0061	.0023	.0023	.0036	.0011	
315.000	.3009	.1132	.0351	.0086	.0112	-.0001	.0061	.0036	-.0013	.0011	.0023	-.0013	
326.000									.0049	.0036	-.0026	-.0051	
346.000		.0893	.0250	.0074	.0099	.0023	.0086	.0061	.0023	.0036	.0175	-.0051	
350.000	.1976	.0981	.0704	.0603	.0679	.0692	.0528	.0603	.0528	.0553	.0452	.0011	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 13

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A007) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 16.660 BETA = .00000 Q(PSI) = 10.289 PO = 28.012 P = 3.8380

SECTION (1) TANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.1948	-.0012	-.1217	-.2035	-.1112	-.0951	-.0558	-.0147	-.0483	.0413	.3694	-.2149	-.2149	-.2299
14.000		.0059	-.1241	-.1983	-.1294	-.1686	-.0917	-.0739	-.0996	-.0623	-.2111	-.2530	-.2530	-.2530
24.000									-.0922	.0145	.1838	-.2604	-.2604	-.2604
45.000	.2692	.0198	-.1192	-.2082	-.1758	-.1343	-.1765	-.1652	-.1988	-.0819	-.0076	-.2141	-.2141	-.2141
67.500		.0782	-.0839	-.1900	-.1998	-.2088	-.2040	-.1667	-.1475	-.1095	-.0444	-.2180	-.2180	-.2180
90.000	.4786	.1893	-.0049	-.1432	9.9990	-.2121	-.2193	-.2155	-.1632	-.1360	-.0650	-.1983	-.1983	-.1983
112.500		.3318	.1140	-.0592	-.0694	-.0973	-.1135	-.1285	-.1496	-.1444	-.1396	-.2050	-.2050	-.2050
135.000	.8579	.4911	.2330	.0296	.0262	-.0189	-.0098	-.0241	9.9990	-.0351	-.0356	-.2052	-.2052	-.2052
157.500		.5939	.3140	.1140	.1068	.0518	.0580	.0402	.0439	.0496	-.2052	-.2052	-.2052	-.2052
180.000	1.0221	.6163	.3373	.1398	.1304	.1154	.1079	.1030	.0766	.0812	.0745	-.2280	-.2280	-.2280
202.500		.6039	.3105	.1102	.0850	.0839	.0631	.0631	.0639	.0586	.0435	-.2237	-.2237	-.2237
225.000	.8483	.5085	.2395	.0473	.0364	.0176	.0151	-.0125	-.0234	-.0185	-.0361	-.2111	-.2111	-.2111
247.500		.3519	.1253	-.0388	-.0449	-.0765	-.0871	-.1100	-.1304	-.1285	-.1272	-.2348	-.2348	-.2348
270.000	.5167	.2218	.0206	-.1184	9.9990	-.2031	-.2020	-.1992	-.1508	-.1432	-.0571	-.2413	-.2413	-.2413
292.500		.1072	-.0645	-.1767	-.1880	-.1718	-.1699	-.1473	-.1319	-.1014	-.0075	-.2325	-.2325	-.2325
315.000	.2904	.0398	-.1075	-.1951	-.1750	-.1388	-.1750	-.1531	-.1916	-.0815	.0398	-.2295	-.2295	-.2295
326.000									-.1003	-.0494	-.0015	-.2372	-.2372	-.2372
346.000		.0093	-.1185	-.2036	-.1288	-.1008	-.0474	-.0433	-.0440	.0981	.2052	-.2149	-.2149	-.2149
360.000	.1948	-.0012	-.1217	-.2035	-.1112	-.0951	-.0558	-.0147	-.0483	.0413	.3694	-.2149	-.2149	-.2149

MACH (2) = 3.480 ALPHA (1) = 16.560 BETA = .00000 Q(PSI) = 6.8650 PO = 60.040 P = .81000

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.1859	.0341	-.0334	-.0469	-.0424	-.0300	-.0357	-.0300	-.0379	-.0143	.0054	-.0756	-.0756
14.000		.0330	-.0379	-.0486	-.0486	-.0559	-.0537	-.0486	-.0475	-.0306	.0358	-.0795	-.0795
24.000									-.0480	-.0374	-.0098	-.0903	-.0903
45.000	.2217	.0578	-.0266	-.0559	-.0492	-.0548	-.0582	-.0458	-.0509	-.0419	-.0335	-.0909	-.0909
67.500		.1186	.0048	-.0486	-.0576	-.0593	-.0593	-.0458	-.0520	-.0497	-.0469	-.0774	-.0774
90.000	.4626	.2155	.0640	-.0182	9.9990	-.0486	-.0514	-.0441	-.0576	-.0565	-.0520	-.0774	-.0774
112.500		.3440	.1485	.0318	.0138	-.0075	-.0159	-.0165	-.0238	-.0238	-.0086	-.0683	-.0683
135.000	.8345	.4902	.2422	.0877	.0657	.0437	.0426	.0364	9.9990	.0330	.0364	-.0728	-.0728
157.500		.5935	.3248	.1406	.1164	.0904	.0916	.0916	.1045	.0854	.0870	-.0746	-.0746
180.000	1.0169	.6122	.3513	.1626	.1350	.1209	.1152	.1152	.1085	.1090	.1072	-.0734	-.0734
202.500		.6043	.3288	.1440	.1158	.1051	.0993	.0950	.0938	.0950	.0910	-.0757	-.0757

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A0071)

MACH (2) = 3.480 ALPHA (1) = 15.560

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8372	.4995	.2662	.1034	.0797	.0811	.0561	.0504	.0454	.0471	.0431	-.0785
247.500		.3705	.1716	.0454	.0273	.0059	-.0007	-.0041	-.0109	-.0131	-.0069	-.0779
270.000	.4961	.2414	.0859	-.0064	9.9990	-.0435	-.0469	-.0509	-.0588	-.0599	-.0514	-.0762
292.500		.1423	.0234	-.0430	-.0486	-.0582	-.0717	-.0655	-.0610	-.0582	-.0537	-.0751
315.000	.2517	.0769	-.0165	-.0633	-.0576	-.0706	-.0700	-.0672	-.0627	-.0588	-.0459	-.0836
326.000									-.0577	-.0509	-.0419	-.0824
346.000		.0414	-.0345	-.0621	-.0543	-.0520	-.0481	-.0368	-.0385	-.0221	.0071	-.0762
360.000	.1559	.0341	-.0334	-.0469	-.0424	-.0300	-.0357	-.0300	-.0379	-.0143	.0054	-.0756

MACH (3) = 4.960 ALPHA (1) = 16.470 BETA = .00000 Q(P51) = 3.0700 PO = 90.020 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1397	.0805	.0628	.0590	.0641	.0679	.0527	.0527	.0519	.0540	.0238	-.0039
14.000		.0717	.0477	.0528	.0465	.0414	.0414	.0351	.0351	.0389	.0628	-.0076
24.000									.0023	.0011	-.0001	-.0089
45.000	.2140	.0855	.0515	.0452	.0439	.0351	.0326	.0313	.0288	.0313	-.0054	-.0127
67.500		.1296	.0553	.0364	.0351	.0338	.0351	.0250	.0288	.0263	-.0114	-.0114
90.000	.4559	.2127	.0842	.0452	9.9990	.0326	.0338	.0239	.0212	.0212	-.0127	-.0127
112.500		.3375	.1548	.0691	.0540	.0427	.0414	.0354	.0338	.0326	.0263	-.0051
135.000	.8187	.4723	.2379	.1069	.0830	.0641	.0666	.0616	9.9990	.0628	.0628	-.0076
157.500		.5768	.3186	.1498	.1183	.1006	.1044	.1031	.1750	.1057	.1107	-.0051
180.000	.9951	.6055	.3488	.1712	.1384	.1246	.1246	.1233	.1258	.1246	.1283	-.0064
202.500		.6046	.3453	.1598	.1271	.1132	.1082	.1082	.1120	.1132	.1107	-.0089
225.000	.8288	.6013	.2692	.1208	.0931	.0792	.0729	.0591	.0591	.0579	.0656	-.0101
247.500		.7665	.1800	.0716	.0515	.0351	.0313	.0288	.0263	.0225	.0238	-.0001
270.000	.4723	.2444	.1057	.0364	9.9990	.0150	.0125	.0099	.0049	.0024	.0036	-.0001
292.500		.1472	.0502	.0124	.0137	.0074	.0023	.0023	-.0013	-.0013	.0023	-.0026
315.000	.2291	.0205	.0250	.0074	.0086	-.0026	.0023	.0023	-.0039	-.0026	-.0001	-.0076
326.000									.0011	.0023	-.0039	-.0101
346.000		.0553	.0085	.0023	.0049	-.0001	-.0001	.0011	-.0026	.0011	.0000	-.0114
360.000	.1397	.0805	.0628	.0590	.0641	.0679	.0527	.0527	.0515	.0540	.0238	-.0039

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

(R1A008) (16 NOV 74)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

PARAMETRIC DATA

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. YT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. YT
 SCALE = .0030

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 20.740 BETA = .00000 Q(PSI) = 10.261 PO = 28.010 P = 3.8290

DEPENDENT VARIABLE CP

SECTION (1) TANK

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1204	-.0374	-.1547	-.2140	-.1132	-.1657	-.0884	-.0487	-.1783	-.0861	.2469	-.2365
14.000		-.0381	-.1542	-.2149	-.1535	-.1795	-.1569	-.1395	-.1309	-.1124	.2314	-.2668
24.000												
45.000	.1688	-.0264	-.1604	-.2363	-.2212	-.2374	-.2178	-.1110	-.1933	-.0955	-.0474	-.2826
67.500		.0221	-.1197	-.2187	-.2443	-.2176	-.2228	-.1950	-.1822	-.1359	-.0791	-.2402
90.000	.4235	.1600	-.0272	-.1560	9.9990	-.2114	-.2227	-.2268	-.1914	-.1707	-.1018	-.2374
112.500		.3480	.1209	-.0480	-.0563	-.0997	-.1080	-.1144	-.1400	-.1351	-.1326	-.2128
135.000	.9136	.5545	.2678	.0669	.0699	.0130	.0078	.0066	9.9990	-.0015	.0017	-.2272
157.500		.6956	.3940	.1689	.1715	.1094	.1128	.1177	.0955	.0985	.1135	-.2324
180.000	1.1334	.7251	.4430	.1994	.2043	.1979	.1790	.1681	.1492	.1518	.1365	-.2472
202.500		.6992	.4061	.1615	.1510	.1461	.1231	.1201	.1246	.1231	.1060	-.2507
225.000	.9048	.5670	.3012	.0876	.0838	.0466	.0428	.0255	.0172	.0206	.0010	-.2446
247.500		.3785	.1470	-.0228	-.0307	-.0703	-.0718	-.0949	-.1145	-.1202	-.1187	-.2399
270.000	.4785	.1963	.0040	-.1294	9.9990	-.2010	-.2048	-.2135	-.1924	-.1916	-.1355	-.2656
292.500		.0515	-.1013	-.2032	-.2183	-.2029	-.1964	-.1787	-.1749	-.1568	-.0783	-.2513
315.000	.1961	-.0212	-.1471	-.2262	-.2191	-.2432	-.2357	-.1746	-.2225	-.1218	-.0154	-.2416
326.000									-.1686	-.1185	-.0380	-.2447
346.000		-.0387	-.1528	-.2162	-.1275	-.1645	-.0765	-.0889	-.1165	.0107	.0828	-.2544
350.000	.1204	-.0374	-.1547	-.2140	-.1132	-.1657	-.0884	-.0427	-.1083	-.0861	.2469	-.2365

MACH (2) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(PSI) = 6.8640 PO = 60.035 P = .81000

DEPENDENT VARIABLE CP

SECTION (1) TANK

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1051	.0083	-.0362	-.0480	-.0418	-.0384	-.0418	-.0412	-.0446	-.0266	-.0002	-.0751
14.000		.0049	-.0418	-.0492	-.0508	-.0559	-.0587	-.0570	-.0525	-.0390	.0211	-.0824
24.000												
45.000	.1592	.0228	-.0374	-.0565	-.0503	-.0644	-.0599	-.0599	-.0548	-.0497	-.0452	-.0881
67.500		.0888	-.0064	-.0526	-.0616	-.0610	-.0616	-.0627	-.0548	-.0548	-.0548	-.0774
90.000	.4336	.2033	.0584	-.0198	9.9990	-.0492	-.0531	-.0587	-.0604	-.0604	-.0588	-.0802
112.500		.3648	.1688	.0465	.0262	.0014	-.0035	-.0075	-.0109	-.0109	.0037	-.0751
135.000	.9018	.5544	.2951	.1249	.1018	.0770	.0748	.0585	9.9990	-.0714	.0719	-.0796
157.500		.6978	.4071	.1995	.1733	.1445	.1457	.1479	.1597	.1451	.1462	-.0723
180.000	1.1452	.7282	.4499	.2319	.2026	.1879	.1834	.1823	.1783	.1795	.1744	-.0689
202.500		.713E	.4184	.2048	.1738	.1643	.1552	.1519	.1564	.1569	.1513	-.0706

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA008)

MACH (2) = 3.480 ALPHA (1) = 20.610

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.9520	.9230	.9540
THETA													
225.000	.9108	.5688	.3248	.1451	.1181	.0955	.0933	.0848	.0631	.0871	.0809	-.0785	
247.500		.3953	.1986	.0640	.0426	.0172	.0133	.0097	.0054	.0042	.0087	-.0774	
270.000	.4719	.2324	.0865	-.0047	9.9990	-.0402	-.0481	-.0514	-.0559	-.0565	-.0492	-.0774	
292.500		.1147	.0099	-.0509	-.0543	-.0599	-.0785	-.0728	-.0655	-.0638	-.0599	-.0785	
315.000	.1947	.0454	-.0323	-.0706	-.0616	-.0795	-.0745	-.0745	-.0627	-.0605	-.0537	-.0889	
326.000													
346.000		.0026	-.0492	-.0706	-.0571	-.0723	-.0610	-.0559	-.0559	-.0317	.0133	-.0779	
360.000	.1051	.0083	-.0362	-.0480	-.0418	-.0384	-.0418	-.0412	-.0446	-.0266	-.0023	-.0751	

MACH (3) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(P51) = 3.0700 PO = 90.020 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.1006	.0716	.0628	.0590	.0628	.0653	.0490	.0527	.0502	.0553	.0036	-.0051	
14.000		.0641	.0502	.0527	.0464	.0401	.0376	.0351	.0351	.0401	.0553	-.0076	
24.000													
45.000	.1624	.0729	.0477	.0427	.0427	.0389	.0326	.0301	.0288	.0226	-.0076	-.0114	
67.500		.1120	.0540	.0326	.0338	.0288	.0339	.0225	.0288	.0225	-.0089	-.0101	
90.000	.4332	.2127	.0956	.0464	9.9990	.0289	.0326	.0263	.0250	.0238	-.0064	-.0089	
112.500		.3652	.1813	.0792	.0653	.0439	.0477	.0452	.0452	.0452	.0427	-.0051	
135.000	.8943	.5441	.2946	.1372	.1132	.0931	.0994	.0959	9.9990	.1031	.1044	-.0076	
157.500		.6833	.3983	.2004	.1714	.1537	.1588	.1651	.2559	.1739	.1800	-.0026	
180.000	1.1312	.7217	.4483	.2342	.2014	.1863	.1938	.2001	.2115	.2090	.2090	-.0039	
202.500		.7041	.4231	.2140	.1800	.1661	.1687	.1737	.1825	.1825	.1838	-.0026	
225.000	.8805	.5718	.3337	.1598	.1321	.1132	.1107	.1132	.1132	.1157	.1132	-.0051	
247.500		.3954	.2077	.0880	.0704	.0515	.0452	.0477	.0439	.0427	.0439	-.0039	
270.000	.4420	.2405	.1107	.0364	9.9990	.0162	.0099	.0137	.0074	.0049	.0099	-.0026	
292.500		.1309	.0527	.0099	.0225	.0049	.0036	.0023	.0011	-.0013	.0049	-.0051	
315.000	.1850	.0691	.0175	.0023	.0112	-.0001	.0011	.0011	-.0039	.0036	-.0026	-.0051	
326.000													
346.000		.0338	.0124	.0023	.0074	.0049	.0011	.0011	-.0001	.0023	.0124	-.0127	
360.000	.1006	.0716	.0628	.0590	.0628	.0653	.0490	.0527	.0502	.0553	.0036	-.0051	

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TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A009) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 24.850 BETA = .00000 Q(PSI) = 10.257 PO = 28.007 P = 3.8250

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0756	-.0795	-.1737	-.2299	-.1097	-.2363	-.1233	-.1150	-.1349	-.0694	.1571	-.2346
14.000		-.0813	-.1688	-.2323	-.1836	-.2217	-.1836	-.1972	-.1541	-.1375	.1556	-.2702
24.000									-.1516	-.0382	.1356	-.2751
45.000	.0809	-.0920	-.2016	-.2627	-.2631	-.2461	-.2273	-.1949	-.2031	-.1297	-.0865	-.2827
67.500		-.0275	-.1628	-.2446	-.2702	-.2227	-.2242	-.2129	-.1922	-.1523	-.1072	-.2435
90.000	.3703	.1329	-.0479	-.1618	9.9990	-.2093	-.2243	-.2357	-.1949	-.1799	-.1323	-.2446
112.500		.3555	.1266	-.0336	-.0416	-.0944	-.1083	-.1076	-.1298	-.1245	-.1170	-.2218
135.000	.9620	.6127	.3246	.1153	.1164	.0572	.0477	.0477	9.9990	.0383	.0458	-.2294
157.500		.7918	.4838	.2422	.2445	.1830	.1800	.1846	.1646	.1657	.1749	-.2450
180.000	1.2457	.8433	.5465	.2877	.3016	.2813	.2590	.2495	.2296	.2304	.2190	-.2435
202.500		.8029	.4913	.2405	.2363	.2190	.1978	.1877	.1941	.1948	.1787	-.2487
225.000	.9669	.6316	.3559	.1394	.1484	.0915	.0941	.0670	.0605	.0719	.0495	-.2600
247.500		.3956	.1636	-.0046	-.0110	-.0680	-.0744	-.0831	-.0944	-.1001	-.0992	-.2459
270.000	.4325	.1749	-.0042	-.1314	9.9990	-.1926	-.1994	-.2175	-.2164	-.2024	-.1510	-.2664
292.500		.0051	-.1339	-.2286	-.2379	-.2066	-.2047	-.2074	-.2014	-.1678	-.1118	-.2740
315.000	.0986	-.0620	-.1804	-.2529	-.2525	-.2601	-.2133	-.1970	-.2197	-.1386	-.0623	-.2676
326.000									-.1789	-.1204	-.0593	-.2585
346.000		-.0755	-.1782	-.2231	-.1174	-.2340	-.1238	-.1491	-.1393	-.0012	.0635	-.2525
360.000	.0756	-.0795	-.1737	-.2299	-.1097	-.2363	-.1233	-.1150	-.1349	-.0694	.1571	-.2346

MACH (2) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(PSI) = 6.8620 PO = 60.015 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0574	-.0113	-.0469	-.0559	-.0491	-.0553	-.0548	-.0581	-.0565	-.0418	.0043	-.0802
14.000		-.0148	-.0537	-.0565	-.0593	-.0666	-.0639	-.0655	-.0661	-.0475	.0308	-.0852
24.000									-.0689	-.0514	-.0187	-.0903
45.000	.1052	-.0058	-.0526	-.0621	-.0599	-.0695	-.0667	-.0661	-.0650	-.0537	-.0503	-.0886
67.500		.0623	-.0204	-.0504	-.0649	-.0717	-.0678	-.0678	-.0627	-.0565	-.0615	-.0807
90.000	.4011	.1909	.0533	-.0227	9.9990	-.0548	-.0548	-.0587	-.0621	-.0570	-.0576	-.0841
112.500		.3931	.1858	.0601	.0387	.0105	.0099	.0082	.0032	.0094	.0201	-.0802
135.000	.9665	.6175	.3487	.1627	.1384	.1120	.1136	.1114	9.9990	.1204	.1182	-.0756
157.500		.8013	.4936	.2613	.2360	.2044	.2134	.2174	.2168	.2190	.2157	-.0649
180.000	1.2686	.8368	.5539	.3087	.2788	.2703	.2670	.2703	.2596	.2591	.2563	-.0587
202.500		.8261	.5127	.2732	.2405	.2320	.2247	.2258	.2303	.2348	.2226	-.0627

CONTINUED ON NEXT PAGE IS POOR

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA009)

MACH (2) = 3.480 ALPHA (1) = 24.650

SECTION (1)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8687	.6373	.3859	.1880	.1621	.1384	.1390	.1322	.1300	.1413	.1283	-.0723
247.500		.4186	.2174	.0804	.0573	.0330	.0308	.0291	.0257	.0251	.0285	-.0802
270.000	.4389	.2229	.0837	-.0058	9.9990	-.0458	-.0497	-.0452	-.0554	-.0503	-.0435	-.0875
292.500		.0894	-.0041	-.0570	-.0508	-.0711	-.0835	-.0762	-.0734	-.0661	-.0723	-.0824
315.000	.1424	.0161	-.0475	-.0796	-.0723	-.0835	-.0835	-.0779	-.0751	-.0689	-.0638	-.0795
326.000									-.0717	-.0678	-.0604	-.0925
346.000		-.0215	-.0610	-.0779	-.0610	-.0796	-.0694	-.0779	-.0706	-.0460	-.0007	-.0920
360.000	.0674	-.0113	-.0469	-.0559	-.0491	-.0553	-.0548	-.0581	-.0565	-.0418	.0043	-.0802

MACH (3) = 4.960 ALPHA (1) = 24.610 BETA = .00000 Q(PSI) = 3.0700 P0 = 99.019 P = .17800

SECTION (1)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0729	.0667	.0654	.0579	.0629	.0591	.0478	.0516	.0465	.0503	-.0051	-.0064
14.000		.0578	.0440	.0503	.0415	.0427	.0364	.0440	.0301	.0377	.0376	-.0076
24.000									-.0001	-.0013	-.0001	-.0089
45.000	.1233	.0590	.0427	.0401	.0389	.0376	.0301	.0452	.0250	.0275	-.0076	-.0127
67.500		.0981	.0489	.0326	.0338	.0326	.0338	.0275	.0263	.0250	-.0127	-.0101
90.000	.4105	.2064	.0880	.0452	9.9990	.0301	.0326	.0275	.0225	.0225	-.0026	-.0101
112.500		.3904	.2014	.0943	.0767	.0565	.0616	.0616	.0578	.0578	.0641	-.0001
135.000	.9750	.6222	.3501	.1775	.1485	.1384	.1422	.1460	9.9990	.1561	.1588	-.0001
157.500		.8074	.4975	.2694	.2367	.2316	.2405	.2556	.3413	.2631	.2669	.0049
180.000	1.3013	.8681	.5617	.3148	.2770	.2808	.2946	.3135	.3099	.3098	.3110	.0074
202.500		.8351	.5202	.2909	.2493	.2531	.2556	.2682	.2644	.2770	.2720	.0049
225.000	.9850	.6499	.3954	.2064	.1750	.1649	.1649	.1712	.1712	.1750	.1724	.0011
247.500		.4269	.2405	.1107	.0905	.0742	.0704	.0754	.0691	.0691	.0679	.0049
270.000	.4383	.2367	.1132	.0401	9.9990	.0175	.0137	.0200	.0099	.0086	.0162	-.0039
292.500		.1132	.0477	.0085	.0200	.0086	.0023	.0061	.0011	.0011	.0049	.0023
315.000	.1498	.0515	.0099	.0023	.0049	-.0001	-.0001	.0023	-.0064	-.0039	.0023	-.0026
326.000									-.0001	-.0001	-.0001	-.0064
346.000		.0212	.0112	.0036	.0061	-.0039	-.0001	.0023	-.0026	-.0001	.0386	-.0101
360.000	.0729	.0667	.0654	.0579	.0629	.0591	.0478	.0516	.0465	.0503	-.0051	-.0064

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TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A010) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = .000

MACH (1) = 1.950 ALPHA (1) = 28.950 BETA = .00800 Q(PSI) = 10.253 PO = 28.808 P = 3.8210

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0142	-.1038	-.1955	-.2382	-.1186	-.2785	-.1895	-.1525	-.1540	-.0937	.0896	-.2435
14.000		-.1033	-.1958	-.2560	-.2548	-.2839	-.2375	-.2220	-.1810	-.1685	.0681	-.2773
24.000									-.1820	-.0962	.0628	-.2747
45.000	-.0185	-.1494	-.2328	-.2912	-.2923	-.2622	-.2279	-.2079	-.2165	-.1445	-.0970	-.2856
67.500		-.0796	-.1916	-.2658	-.2854	-.2221	-.2270	-.2187	-.2145	-.1799	-.1273	-.2398
90.000	.3266	.1080	-.0622	-.1681	9.9990	-.2273	-.2337	-.2379	-.2141	-.1972	-.1631	-.2492
112.500		.3667	.1431	-.0136	-.0234	-.0811	-.0932	-.0872	-.1109	-.1038	-.0963	-.2261
135.000	1.0058	.6665	.3848	.1624	.1676	.1050	.0971	.0949	9.9990	.0903	.0955	-.2479
157.500		.8919	.5868	.3167	.3404	.2598	.2628	.2673	.2474	.2466	.2522	-.2272
180.000	1.3483	.9680	.6675	.3893	.4154	.3761	.3569	.3523	.3316	.3320	.3140	-.2192
202.500		.9077	.5950	.3340	.3253	.3057	.2778	.2733	.2816	.2801	.2629	-.2247
225.000	1.0211	.6956	.4269	.1990	.2017	.1477	.1477	.1213	.1157	.1273	.1036	-.2526
247.500		.4079	.1897	.0172	.0089	-.0488	-.0541	-.0624	-.0734	-.0768	-.0774	-.2593
270.000	.3687	.1550	-.0137	-.1387	9.9990	-.1998	-.2161	-.2206	-.2157	-.2119	-.1709	-.2716
292.500		-.0357	-.1615	-.2454	-.2447	-.2080	-.2148	-.2159	-.2095	-.1846	-.1272	-.2849
315.000	.0432	-.1197	-.2238	-.2801	-.2759	-.2585	-.2291	-.2144	-.2269	-.1589	-.0687	-.2902
325.000									-.2019	-.1439	-.0681	-.2791
346.000		-.1173	-.1938	-.2347	-.1137	-.2707	-.1640	-.1897	-.1548	-.0208	.0406	-.2643
360.000	.0142	-.1029	-.1955	-.2382	-.1186	-.2785	-.1895	-.1525	-.1540	-.0937	.0896	-.2435

MACH (2) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(PSI) = 6.8600 PO = 59.997 P = .80900

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0342	-.0286	-.0529	-.0620	-.0558	-.0620	-.0631	-.0614	-.0608	-.0529	-.0125	-.0802
14.000		-.0315	-.0597	-.0637	-.0677	-.0699	-.0665	-.0631	-.0626	-.0518	.0381	-.0847
24.000									-.0678	-.0531	-.0198	-.0909
45.000	.0601	-.0282	-.0603	-.0694	-.0665	-.0660	-.0688	-.0620	-.0603	-.0564	-.0531	-.0880
67.500		.0394	-.0299	-.0637	-.0688	-.0677	-.0700	-.0615	-.0592	-.0604	-.0627	-.0830
90.000	.3690	.1810	.0536	-.0186	9.9990	-.0497	-.0497	-.0609	-.0536	-.0530	-.0452	-.0880
112.500		.4030	.2085	.0816	.0568	.0354	.0342	.0354	.0320	.0354	.0477	-.0706
135.000	1.0302	.6835	.4113	.2117	.1886	.1651	.1728	.1700	9.9990	.1785	.1785	-.0621
157.500		.9146	.6978	.3447	.3171	.2946	.3042	.3132	.3194	.3087	.3059	-.0475
180.000	1.3949	.9614	.6734	.4045	.3747	.3792	.3781	.3826	.3674	.3708	.3571	-.0401
202.500		.9456	.6176	.3571	.3233	.3307	.3199	.3228	.3290	.3278	.3149	-.0441

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA010)

MACH (2) = 3.480 ALPHA (1) = 28.700

SECTION (1)ANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
225.000	1.0397	.7089	.4547	.2450	.2145	.2027	.2027	.1954	.1937	.2021	.1892	-.0576	
247.500		.4423	.2478	.1069	.0804	.0618	.0601	.0612	.0567	.0545	.0578	-.0694	
270.000	.4169	.2162	.0911	.0026	9.9990	-.0373	-.0390	-.0362	-.0413	-.0413	-.0289	-.0818	
292.500		.0669	-.0108	-.0599	-.0503	-.0593	-.0813	-.0773	-.0751	-.0740	-.0734	-.0773	
315.000	.0996	-.0086	-.0604	-.0824	-.0756	-.0756	-.0802	-.0796	-.0773	-.0751	-.0711	-.0790	
326.000										-.0751	-.0734	-.0694	
346.000		-.0356	-.0655	-.0779	-.0649	-.0880	-.0773	-.0773	-.0751	-.0672	-.0345	-.0824	
360.000	.0342	-.0286	-.0529	-.0620	-.0558	-.0620	-.0631	-.0614	-.0608	-.0529	-.0125	-.0802	

MACH (3) = 4.960 ALPHA (1) = 28.540 BETA = .00000 Q(PS1) = 3.0710 PO = 90.040 P = .17800

SECTION (1)ANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.0527	.0691	.0691	.0578	.0628	.0565	.0477	.0691	.0439	.0565	-.0139	-.0051	
14.000		.0578	.0477	.0502	.0401	.0301	.0376	.0376	.0275	.0452	.0301	-.0076	
24.000									-.0051	-.0051	-.0127	-.0139	
45.000	.0855	.0553	.0452	.0389	.0401	.0263	.0288	.0301	.0225	.0364	-.0152	-.0139	
67.500		.0855	.0428	.0288	.0275	.0174	.0313	.0212	.0187	.0288	-.0190	-.0089	
90.000	.3827	.2001	.0867	.0439	9.9990	.0237	.0326	.0300	.0209	.0313	-.0039	-.0089	
112.500		.4054	.2139	.1018	.0804	.0590	.0729	.0703	.0691	.0817	.0855	-.0001	
135.000	1.0278	.6787	.4016	.2139	.1837	.1787	.1976	.1976	9.9990	.2152	.2115	.0023	
157.500		.9256	.5893	.3374	.3021	.3084	.3323	.3449	.3739	.3512	.3474	.0011	
180.000	1.4130	.9949	.6699	.3978	.3588	.3877	.4054	.4104	.4066	.4205	.4066	.0023	
202.500		.9508	.6195	.3553	.3147	.3348	.3525	.3600	.3563	.3701	.3575	.0051	
225.000	1.0326	.7165	.4583	.2492	.2152	.2114	.2215	.2290	.2253	.2391	.2241	.0074	
247.500		.4419	.2542	.1232	.0981	.0842	.0890	.0930	.0855	.0943	.0892	-.0089	
270.000	.4105	.2316	.1132	.0401	9.9990	.0086	.0149	.0200	.0099	.0174	.0212	-.0202	
292.500		.0955	.0338	.0023	.0086	-.0102	-.0026	-.0026	-.0139	-.0051	-.0039	-.0240	
315.000	.1119	.0376	.0074	-.0051	.0011	-.0177	-.0051	-.0051	-.0164	-.0054	-.0102	-.0202	
326.000									-.0114	-.0102	-.0076	-.0240	
346.000		.0149	.0049	-.0051	.0011	-.0190	-.0064	-.0026	-.0152	-.0039	-.0101	-.0202	
360.000	.0527	.0691	.0691	.0578	.0628	.0565	.0477	.0691	.0439	.0565	-.0139	-.0051	

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIAD11) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = -8.380 BETA = .00000 Q(PSI) = 10.235 PO = 28.008 P = 3.8010

SECTION (1)ANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.4934	.2431	.0436	-.1017	-.1755	-.1683	-.0687	-.0449	-.0169	.1549	.3485	-.1978	
14.000		.2851	.0675	-.0806	-.1746	-.1007	-.0924	-.0495	-.0359	.1058	.2186	-.2174	
24.000									-.0111	.0924	.1790	-.2347	
45.000	.7144	.3660	.1160	-.0559	.0190	.0205	-.0119	-.0263	-.0608	.0118	.2766	-.2580	
67.500		.4246	.1609	-.0354	.0107	.0069	.0043	-.0191	.0198	-.0316	.1713	-.2208	
90.000	.7912	.4311	.1642	-.0179	9.9990	.0107	.0251	-.0179	-.0175	-.0047	.0175	-.2528	
112.500		.4130	.1530	-.0161	-.0044	-.0028	-.0214	-.0256	-.0293	-.0256	.0428	-.2126	
135.000	.7183	.3729	.1298	-.0391	-.0327	-.0508	-.0542	-.0535	9.9990	-.0610	-.0583	-.1853	
157.500		.2957	.0826	-.0740	-.0630	-.0781	-.0838	-.0804	-.0927	-.0800	-.0774	-.1691	
180.000	.5465	.2248	.0292	-.1062	-.1032	-.0945	-.1047	-.0809	-.0847	-.0809	-.0828	-.1617	
202.500		.1895	-.0107	-.1324	-.1237	-.0973	-.1014	-.0618	-.0599	-.0542	-.0577	-.1662	
225.000	.4351	.1521	-.0307	-.1509	-.1290	-.0708	-.0398	-.0428	-.0428	-.0398	-.0417	-.1667	
247.500		.1229	-.0432	-.1641	-.1157	-.0462	-.0171	-.0205	-.0258	-.0300	.0194	-.1978	
270.000	.4178	.1161	-.0541	-.1633	9.9990	-.0186	-.0269	-.0145	-.0111	-.0039	.0149	-.2072	
292.500		.1187	-.0537	-.1646	-.0982	-.0186	-.0348	-.0216	-.0133	-.0514	.1473	-.2057	
315.000	.4703	.1466	-.0337	-.1609	-.1175	-.1122	-.0760	-.0862	-.0760	.0379	.1776	-.2168	
325.000									-.0563	.0693	.1502	-.2332	
346.000		.2370	.0500	-.0969	-.0666	-.0587	-.0553	-.0322	.0251	.1467	.2627	-.2090	
360.000	.4934	.2471	.0436	-.1017	-.0755	-.1683	-.0687	-.0449	-.0169	.1549	.3485	-.1978	

MACH (2) = 3.480 ALPHA (1) = -8.360 BETA = .00000 Q(PSI) = 6.8640 PO = 60.032 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.4995	.2237	.0743	-.0102	.0134	-.0164	-.0147	-.0130	-.0074	.0433	.0983	-.0723	
14.000		.2822	.1035	.0015	.0111	-.0086	-.0198	-.0125	.0111	.0364	.1366	-.0824	
24.000									.0149	.0318	.0731	-.0847	
45.000	.7012	.3648	.1575	.0318	.0335	.0279	.0279	.0195	.0099	.0092	.1835	-.0875	
67.500		.4169	.1914	.0516	.0375	.0364	.0308	.0319	.0325	.0297	.0826	-.0913	
90.000	.7821	.4302	.2003	.0572	9.9990	.0358	.0341	.0285	.0262	.0279	.0392	-.0802	
112.500		.4122	.1890	.0516	.0364	.0279	.0234	.0290	.0178	.0166	.0465	-.0595	
135.000	.6920	.3705	.1603	.0324	.0179	.0042	.0048	.0026	9.9990	-.0054	-.0335	-.0790	
157.500		.3023	.1220	.0110	-.0024	-.0154	-.0165	-.0193	-.0392	-.0272	-.0283	-.0666	
180.000	.5048	.2268	.0797	-.0126	-.0233	-.0328	-.0368	-.0358	-.0402	-.0424	-.0458	-.0649	
202.500		.1857	.0437	-.0323	-.0390	-.0390	-.0351	-.0340	-.0385	-.0402	-.0430	-.0661	

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A011)

MACH (2) = 3.480 ALPHA (1) = -8.360

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.3667	.1434	.0211	-.0435	-.0441	-.0328	-.0334	-.0345	-.0385	-.0385	-.0402	-.0706	
247.500		.1215	.0060	-.0503	-.0430	-.0311	-.0328	-.0407	-.0249	-.0244	.0031	-.0723	
270.000	.3237	.1135	.0020	-.0514	9.9990	-.0210	-.0148	-.0114	-.0131	-.0137	-.0035	-.0740	
292.500		.1203	.0042	-.0525	-.0306	-.0182	-.0312	-.0176	-.0182	-.0159	.0094	-.0723	
315.000	.3947	.1485	.0189	-.0475	-.0385	-.0486	-.0650	-.0543	-.0509	-.0210	.0043	-.0723	
326.000									-.0345	-.0153	.0360	-.0723	
346.000		.2144	.0741	-.0120	.0048	-.0238	-.0148	-.0221	-.0109	.0504	.1299	-.0813	
360.000	.4995	.2237	.0743	-.0102	.0134	-.0164	-.0147	-.0130	-.0074	.0433	.0983	-.0723	

MACH (3) = 4.960 ALPHA (1) = -8.310 BETA = .00000 Q(PS1) = 3.0710 P0 = 90.052 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4885	.1876	.1094	.0716	.0716	.0742	.0590	.0641	.0603	.0628	.0892	-.0039	
14.000		.1876	.1170	.0591	.0540	.0553	.0515	.0515	.0477	.0515	.1258	-.0013	
24.000									.0174	.0225	.0591	-.0127	
45.000	.6636	.3424	.1547	.0754	.0628	.0615	.0565	.0540	.0590	.0563	.0615	-.0127	
67.500		.3890	.1824	.0779	.0615	.0640	.0503	.0565	.0555	.0590	.0552	-.0152	
90.000	.7341	.4003	.1862	.0804	9.9990	.0552	.0590	.0565	.0477	.0489	.0489	-.0089	
112.500		.3865	.1774	.0729	.0540	.0502	.0477	.0590	.0426	.0425	.0515	.0023	
135.000	.6535	.3500	.1547	.0615	.0426	.0376	.0376	.0590	9.9990	.1288	.0225	.0036	
157.500		.2920	.1245	.0464	.0338	.0326	.0288	.0527	.0842	.0225	.0074	.0036	
180.000	.4822	.2227	.0880	.0325	.0187	.0212	.0174	.0200	.0212	.0061	.0011	.0036	
202.500		.1837	.0640	.0225	.0149	.0061	.0137	.0137	.0162	.0099	.0023	.0023	
225.000	.3563	.1459	.0464	.0162	.0099	.0275	.0137	.0137	.0099	.0049	.0035	.0011	
247.500		.1263	.0389	.0174	.0099	.0111	.0124	.0137	.0074	.0051	.0049	.0011	
270.000	.3147	.1245	.0313	.0086	9.9990	.0086	.0086	.0124	.0086	.0023	.0086	.0011	
292.500		.1232	.0300	.0049	.0124	.0124	.0111	.0111	.0051	.0011	.0039	.0011	
315.000	.3752	.1484	.0414	.0099	.0085	.0011	.0035	.0074	.0023	.0023	-.0026	-.0039	
326.000									.0049	.0049	-.0039	-.0102	
346.000		.2136	.0714	.0211	.0211	.0136	.0136	.0136	.0135	.0211	.0363	-.0114	
360.000	.4885	.1876	.1094	.0716	.0716	.0742	.0590	.0641	.0603	.0628	.0892	-.0039	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA012) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = -4.330 BETA = .00000 Q(P51) = 10.216 PO = 28.002 P = 3.7920

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4995	.2551	.0432	-.0982	-.0581	-.0762	-.0486	-.0308	-.0089	.1662	.3379	-.1861	
14.000		.2865	.0561	-.0906	-.0611	-.1477	-.0516	-.0297	-.0127	.1446	.2912	-.2125	
24.000									.0023	.1192	.2360	-.2434	
45.000	.6317	.3089	.0731	-.0880	-.0202	-.0002	-.0479	-.0225	-.0604	.0663	.1997	-.2423	
67.500		.3408	.0947	-.0744	-.0282	.0035	-.0252	-.0373	-.0089	-.0418	.1578	-.1987	
90.000	.6632	.3376	.0864	-.0641	9.9990	-.0206	.0092	-.0418	-.0285	-.0187	.0031	-.2099	
112.500		.3304	.0840	-.0631	-.0405	-.0262	-.0322	-.0322	-.0390	-.0337	.0247	-.1895	
135.000	.6399	.3139	.0796	-.0672	-.0513	-.0430	-.0453	-.0324	9.9990	-.0415	-.0352	-.1635	
157.500		.2697	.0625	-.0803	-.0640	-.0595	-.0504	-.0259	-.0387	-.0399	-.0386	-.1501	
180.000	.5486	.2323	.0459	-.0996	-.0777	-.0493	-.0489	-.0187	-.0368	-.0357	-.0457	-.1415	
202.500		.2188	.0228	-.1180	-.1055	-.0504	-.0579	-.0307	-.0322	-.0311	-.0409	-.1372	
225.000	.4678	.2135	.0129	-.1251	-.0944	-.0456	-.0293	-.0225	-.0225	-.0214	-.0355	-.1450	
247.500		.2039	-.0020	-.1288	-.0905	-.0394	-.0130	-.0156	-.0126	-.0145	.0266	-.1766	
270.000	.4791	.1987	-.0063	-.1348	9.9990	-.0359	-.0226	-.0154	-.0056	-.0131	.0406	-.1857	
292.500		.1938	-.0082	-.1356	-.0825	-.0082	-.0586	-.0188	-.0299	-.0298	.1400	-.2097	
315.000	.5082	.1940	.0141	-.1313	-.0987	-.0620	-.0476	-.0309	-.0605	-.0142	.2376	-.1991	
326.000									-.0105	.0334	.2056	-.2021	
346.000		.2508	.0508	-.0998	-.0646	-.1081	-.0335	-.0384	.0202	.1713	.2283	-.2117	
360.000	.4995	.2551	.0432	-.0982	-.0581	-.0762	-.0486	-.0308	-.0089	.1662	.3379	-.1861	

MACH (2) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(P51) = 6.8640 PO = 60.028 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.5136	.2455	.0787	-.0114	.0173	-.0136	-.0187	-.0165	-.0041	.0573	.1541	-.0689	
14.000		.2675	.0900	-.0046	.0189	-.0227	-.0221	-.0170	.0020	.0409	.1930	-.0717	
24.000									.0234	.0409	.1034	-.0847	
45.000	.6268	.3047	.1148	.0071	.0173	.0167	.0077	-.0052	.0032	-.0052	.1189	-.0797	
67.500		.3307	.1329	.0167	.0116	.0111	.0122	.0082	.0150	.0049	.0482	-.0785	
90.000	.8573	.3344	.1372	.0195	9.9990	.0093	.0076	.0059	.0042	.0054	.0161	-.0785	
112.500		.3256	.1300	.0167	.0082	.0032	.0026	.0020	.0009	-.0012	.0279	-.0521	
135.000	.6163	.3107	.1203	.0087	.0031	-.0041	-.0035	-.0052	9.9990	-.0075	-.0064	-.0571	
157.500		.2760	.0996	-.0018	-.0080	-.0125	-.0125	-.0136	.0082	-.0159	-.0159	-.0565	
180.000	.5201	.2337	.0787	-.0125	-.0165	-.0176	-.0187	-.0170	-.0153	-.0170	-.0206	-.0571	
202.500		.2162	.0601	-.0232	-.0255	-.0210	-.0193	-.0176	-.0170	-.0176	-.0227	-.0593	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A012)

MACH (2) = 3.480 ALPHA (1) = -4.330

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.4420	.1914	.0516	-.0300	-.0289	-.0204	-.0159	-.0142	-.0159	-.0176	-.0210	-.0610	
247.500		.1790	.0364	-.0351	-.0306	-.0204	-.0153	-.0142	-.0148	-.0142	.0065	-.0633	
270.000	.4217	.1734	.0347	-.0362	9.9990	-.0193	-.0120	-.0114	-.0097	-.0080	.0037	-.0706	
292.500		.1756	.0381	-.0362	-.0136	-.0103	-.0210	-.0153	-.0091	-.0193	.0240	-.0723	
315.000	.4753	.1948	.0454	-.0339	-.0255	-.0187	-.0294	-.0232	-.0373	-.0136	.0964	-.0701	
326.000									-.0114	-.0003	.0826	-.0728	
346.000		.2561	.0820	-.0120	.0110	-.0396	-.0126	-.0165	-.0007	.0640	.1069	-.0751	
360.000	.5136	.2455	.0787	-.0114	.0173	-.0136	-.0187	-.0165	-.0041	.0573	.1541	-.0689	

MACH (3) = 4.960 ALPHA (1) = -4.290 BETA = .00000 Q(PSI) = 3.0710 PO = 90.046 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4910	.1838	.1082	.0767	.0830	.0792	.0666	.0653	.0666	.0704	.0628	-.0026	
14.000		.2518	.1044	.0716	.0641	.0603	.0515	.0565	.0540	.0616	.1182	-.0051	
24.000									.0237	.0351	.0590	-.0114	
45.000	.5905	.2908	.1270	.0691	.0656	.0590	.0527	.0615	.0489	.0515	.0439	-.0089	
67.500		.3122	.1371	.0640	.0590	.0552	.0552	.0628	.0489	.0502	.0338	-.0064	
90.000	.6258	.3172	.1346	.0615	9.9990	.0452	.0515	.0628	.0389	.0389	.0250	-.0026	
112.500		.3109	.1295	.0552	.0477	.0414	.0401	.0653	.0376	.0376	.0300	.0061	
135.000	.5920	.2933	.1207	.0515	.0414	.0376	.0351	.0376	9.9990	.0300	.0174	.0111	
157.500		.2656	.1069	.0414	.0363	.0313	.0288	.0263	.0943	.0237	.0086	.0086	
180.000	.5050	.2329	.0968	.0389	.0338	.0237	.0263	.0237	.0300	.0174	.0112	.0112	
202.500		.2151	.0766	.0289	.0250	.0199	.0187	.0174	.0212	.0174	.0111	.0111	
225.000	.4318	.1938	.0716	.0237	.0237	.0263	.0212	.0200	.0225	.0174	.0111	.0074	
247.500		.1789	.0590	.0187	.0162	.0212	.0162	.0162	.0137	.0111	.0137	.0111	
270.000	.4129	.1761	.0540	.0086	9.9990	.0137	.0099	.0162	.0111	.0086	.0212	.0049	
292.500		.1799	.0540	.0149	.0263	.0187	.0174	.0162	.0124	.0111	.0225	.0023	
315.000	.4570	.1925	.0615	.0237	.0187	.0099	.0111	.0099	.0049	.0111	.0326	.0011	
326.000									.0137	.0212	.0300	-.0001	
346.000		.2429	.0943	.0250	.0351	.0174	.0162	.0149	.0212	.0300	.0328	-.0064	
360.000	.4910	.1838	.1082	.0767	.0830	.0792	.0666	.0653	.0666	.0704	.0528	-.0026	

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TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 25

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A013) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.970 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 10.207 PO = 28.008 P = 3.7710

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5073	.2742	.0470	-.1029	-.0596	-.0596	-.0377	-.0223	-.0049	.1732	.4095	-.1932
14.000		.2732	.0508	-.0993	-.0386	-.1581	-.0276	-.0154	.0114	.1776	.2763	-.2318
24.000									.0190	.1641	.2437	-.2333
45.000	.5693	.2436	-.0266	-.1150	-.0665	-.0282	-.0601	-.0173	-.0699	.0307	.2520	-.2298
67.500		.2581	.0311	-.1129	-.0679	-.0009	-.0596	-.0316	-.0308	-.0354	.1387	-.1905
90.000	.5701	.2520	.0224	-.1047	9.9990	-.0322	-.0083	-.0401	-.0155	-.0193	.0266	-.1866
112.500		.2469	.0281	-.1039	-.0687	-.0358	-.0278	-.0305	-.0286	-.0275	.0285	-.1951
135.000	.5782	.2502	.0361	-.1017	-.0724	-.0474	-.0371	-.0269	9.9990	-.0329	-.0317	-.1590
157.500		.2387	.0296	-.0978	-.0728	-.0674	-.0329	-.0185	-.0242	-.0295	-.0317	-.1428
180.000	.5608	.2180	.0273	-.0984	-.0757	-.0359	-.0332	-.0082	-.0196	-.0245	-.0377	-.1419
202.500		.2314	.0417	-.0996	-.0674	-.0363	-.0477	-.0177	-.0143	-.0166	-.0344	-.1439
225.000	.5557	.2466	.0490	-.0963	-.0617	-.0382	-.0310	-.0234	-.0230	-.0147	-.0321	-.1505
247.500		.2540	.0489	-.0927	-.0594	-.0336	-.0275	-.0188	-.0162	-.0173	.0251	-.1845
270.000	.5708	.2529	.0603	-.0990	9.9990	-.0293	-.0165	-.0199	-.0108	-.0153	.0410	-.1961
292.500		.2493	.0489	-.0960	-.0555	-.0036	-.0370	-.0195	-.0320	-.0267	.1547	-.2083
315.000	.5786	.2558	.0376	-.0923	-.0631	-.0256	-.0699	-.0195	-.0525	.0054	.2183	-.2169
326.000									.0137	.0050	.2145	-.2132
346.000		.2760	.0607	-.0962	-.0753	-.1580	-.0325	-.0184	.0618	.1229	.2577	-.2078
369.000	.5073	.2742	.0470	-.1029	-.0596	-.0596	-.0377	-.0223	-.0049	.1732	.4095	-.1932

MACH (2) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 6.8640 PO = 60.035 P = .81000

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5091	.2567	.0814	-.0120	.0099	-.0103	-.0188	-.0137	-.0019	.0510	.1597	-.0650
14.000		.2537	.0802	-.0115	.0104	-.0120	-.0222	-.0149	-.0064	.0476	.1768	-.0711
24.000									.0037	.0522	.1428	-.0807
45.000	.5443	.2475	.0797	-.0120	.0025	.0008	-.0137	-.0132	-.0126	.0019	.1024	-.0756
67.500		.2499	.0809	-.0126	-.0092	-.0058	-.0114	-.0103	-.0035	-.0114	.0409	-.0717
90.000	.5412	.2488	.0826	-.0103	9.9990	-.0081	-.0052	-.0069	-.0081	-.0081	.0075	-.0723
112.500		.2482	.0803	-.0120	-.0131	-.0103	-.0075	-.0058	-.0058	-.0075	.0161	-.0644
135.000	.5398	.2501	.0798	-.0131	-.0153	-.0097	-.0086	-.0058	9.9990	-.0069	-.0080	-.0593
157.500		.2471	.0820	-.0126	-.0143	-.0126	-.0086	-.0058	.0189	-.0064	-.0109	-.0565
180.000	.5302	.2369	.0792	-.0126	-.0143	-.0097	-.0092	-.0064	-.0041	-.0069	-.0103	-.0548
202.500		.2484	.0776	-.0148	-.0165	-.0120	-.0108	-.0080	-.0074	-.0069	-.0103	-.0587

THIS DOCUMENT CONTAINS
 INFORMATION OF A CONFIDENTIAL NATURE

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T1

(R1A013)

MACH (2) = 3.480 ALPHA (1) = -.280

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.5192	.2422	.0804	-.0131	-.0148	-.0120	-.0091	-.0069	-.0059	-.0063	-.0069	-.0616
247.500		.2460	.0797	-.0131	-.0137	-.0114	-.0086	-.0052	-.0052	-.0075	.0127	-.0672
270.000	.6324	.2476	.0797	-.0131	9.9990	-.0120	-.0052	-.0035	-.0081	-.0064	.0094	-.0706
292.500		.2386	.0786	-.0143	-.0002	-.0047	-.0002	-.0097	-.0041	-.0114	.0290	-.0706
315.000	.5541	.2454	.0781	-.0148	-.0047	.0042	-.0148	-.0148	-.0114	-.0165	.0714	-.0717
326.000									.0206	.0144	.0516	-.0762
346.000		.2799	.0990	-.0018	.0127	-.0469	-.0165	-.0153	.0099	.0618	.1135	-.0751
360.000	.5091	.2567	.0814	-.0120	.0099	-.0103	-.0188	-.0137	-.0019	.0510	.1597	-.0650

MACH (3) = 4.960 ALPHA (1) = -.280 BETA = .0000 Q(P51) = 3.0710 P0 = 90.046 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4381	.2166	.0855	.0490	.0540	.0490	.0339	.0351	.0414	.0440	.0338	-.0253
14.000		.2102	.0729	.0414	.0376	.0288	.0263	.0212	.0288	.0376	.0853	-.0291
24.000									.0011	.0161	.0615	-.0328
45.000	.4840	.2051	.0741	.0313	.0326	.0225	.0187	.0162	.0162	.0200	.0275	-.0354
67.500		.2139	.0729	.0225	.0225	.0187	.0200	.0137	.0200	.0149	.0074	-.0303
90.000	.4835	.2102	.0666	.0200	9.9990	.0124	.0149	.0111	.0096	.0061	-.0026	-.0278
112.500		.2089	.0628	.0174	.0124	.0074	.0099	.0086	.0086	.0036	-.0064	-.0202
135.000	.4860	.2140	.0666	.0149	.0086	.0086	.0061	.0074	9.9990	.0011	-.0115	-.0165
157.500		.2102	.0656	.0124	.0086	.0086	.0049	.0023	.0031	-.0013	-.0152	-.0165
180.000	.4860	.2013	.0666	.0099	.0011	-.0001	-.0001	-.0026	.0086	-.0102	-.0139	-.0165
202.500		.2177	.0640	.0061	-.0001	-.0013	-.0051	-.0051	-.0026	-.0051	-.0139	-.0165
225.000	.4872	.2177	.0640	.0049	-.0026	-.0001	-.0039	-.0051	-.0039	-.0102	-.0139	-.0177
247.500		.2227	.0691	.0049	-.0026	-.0051	-.0051	-.0051	-.0076	-.0139	-.0064	-.0278
270.000	.4953	.2215	.0716	.0036	9.9990	-.0039	-.0064	-.0039	-.0089	-.0114	-.0027	-.0190
292.500		.2203	.0716	.0011	.0086	.0011	-.0051	-.0051	-.0039	-.0101	.0036	-.0215
315.000	.5162	.2153	.0653	.0011	.0036	-.0089	-.0064	-.0089	-.0152	-.0139	.0187	-.0265
326.000									.0011	.0011	.0212	-.0303
346.000		.2442	.0817	.0074	.0099	-.0139	-.0127	-.0114	-.0026	.0061	.0338	-.0253
360.000	.4381	.2166	.0855	.0490	.0540	.0490	.0339	.0351	.0414	.0440	.0338	-.0253

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TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA014) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.950 ALPHA (1) = 3.790 BETA = .00000 Q(P51) = 10.244 PO = 28.005 P = 3.8120

SECTION (1) TANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.5334	.2763	.0440	-.1059	-.0678	-.0742	-.0560	-.0220	.0141	.1052	.2239	-.1997		
14.000		.2485	.0270	-.1222	-.0769	-.0973	-.0527	-.0319	-.0077	.1714	.3081	-.2208		
24.000									.0024	.1749	.2892	-.2298		
45.000	.5303	.1914	-.0141	-.1253	-.0863	-.0780	-.0534	-.0296	-.0198	.0810	.1731	-.2380		
67.500		.1697	-.0133	-.1380	-.0968	-.0126	-.0681	-.0235	-.0307	.0288	.1417	-.2004		
90.000	.4902	.1563	-.0227	-.1366	9.9990	-.0227	-.0193	-.0340	-.0036	-.0159	.0357	-.1919		
112.500		.1636	-.0107	-.1386	-.0963	-.0420	-.0242	-.0306	-.0220	-.0208	.0338	-.1993		
135.000	.5118	.1844	.0070	-.1368	-.0987	-.0564	-.0375	-.0262	9.9990	-.0311	-.0291	-.1616		
157.500		.2044	.0093	-.1144	-.0933	-.0820	-.0507	-.0239	-.0337	-.0386	-.0413	-.1497		
180.000	.5643	.2279	.0270	-.0991	-.0798	-.0537	-.0530	-.0254	-.0303	-.0379	-.0583	-.1458		
202.500		.2647	.0500	-.0893	-.0757	-.0515	-.0610	-.0421	-.0349	-.0330	-.0506	-.1563		
225.000	.6383	.3041	.0813	-.0658	-.0416	-.0333	-.0382	-.0382	-.0371	-.0258	-.0454	-.1693		
247.500		.3236	.0953	-.0559	-.0310	-.0201	-.0254	-.0144	-.0212	-.0239	.0187	-.1970		
270.000	.6960	.3350	.1040	-.0446	9.9990	-.0095	-.0080	-.0175	-.0122	-.0058	.0104	-.2238		
292.500		.3275	.0957	-.0477	-.0254	-.0107	-.0089	-.0220	-.0137	-.0311	.1694	-.2094		
315.000	.6510	.3199	.0896	-.0684	-.0103	.0032	-.0586	-.0311	-.0428	.0017	.2233	-.2153		
326.000									-.0111	.0428	.1719	-.2008		
346.000		.3079	.0699	-.0843	-.0632	-.1738	-.0567	-.0503	.0700	.0859	.1550	-.2214		
350.000	.5334	.2763	.0440	-.1059	-.0678	-.0742	-.0560	-.0220	.0141	.1052	.2239	-.1997		

MACH (2) = 3.480 ALPHA (1) = 3.770 BETA = .00000 Q(P51) = 6.8640 PO = 60.035 P = .81000

SECTION (1) TANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.5091	.2626	.0788	-.0125	-.0142	-.0311	-.0221	-.0204	-.0170	.0348	.1333	-.0706		
14.000		.2354	.0702	-.0176	-.0142	-.0424	-.0255	-.0215	-.0165	.0499	.1499	-.0734		
24.000									-.0086	.0469	.1193	-.0790		
45.000	.4624	.1931	.0494	-.0277	-.0170	-.0221	-.0351	-.0210	-.0215	.0003	.0567	-.0796		
67.500		.1813	.0398	-.0334	-.0277	-.0187	-.0238	-.0215	-.0029	-.0204	.0285	-.0734		
90.000	.4282	.1761	.0386	-.0340	8.9990	-.0182	-.0114	-.0199	-.0120	-.0097	.0048	-.0734		
112.500		.1800	.0397	-.0345	-.0317	-.0182	-.0137	-.0188	-.0143	-.0137	.0059	-.0655		
135.000	.4575	.1954	.0499	-.0306	-.0289	-.0221	-.0148	-.0176	9.9990	-.0176	-.0200	-.0656		
157.500		.2144	.0628	-.0233	-.0250	-.0244	-.0182	-.0176	-.0126	-.0188	-.0227	-.0621		
180.000	.5268	.2330	.0792	-.0143	-.0188	-.0204	-.0189	-.0171	-.0176	-.0182	-.0210	-.0610		
202.500		.2764	.0955	-.0058	-.0109	-.0148	-.0131	-.0178	-.0171	-.0159	-.0165	-.0605		

MSFC 598 (TA-2F) MCRO200 EXTERNAL TANK, T1

(R1A014)

MACH (2) = 3.480 ALPHA (1) = 3.770

SECTION I TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.6018	.2997	.1148	-.0001	-.0012	-.0041	-.0046	-.0170	-.0097	-.0074	-.0075	-.0621	
247.500		.3209	.1293	.0133	.0054	.0003	.0026	.0003	-.0007	-.0019	.0183	-.0700	
270.000	.6459	.3305	.1333	.0166	9.9990	.0059	.0082	.0065	-.0007	.0003	.0160	-.0774	
292.500		.3175	.1282	.0133	.0178	.0172	.0133	.0054	.0037	-.0024	.0454	-.0785	
315.000	.6257	.3012	.1161	.0075	.0137	.0159	.0041	-.0071	-.0116	-.0071	.1153	-.0785	
326.000									.0156	.0009	.0955	-.0847	
346.000		.2981	.1160	.0089	.0027	-.0328	-.0170	-.0159	-.0035	.0466	.1012	-.0779	
360.000	.5091	.2626	.0788	-.0125	-.0142	-.0311	-.0221	-.0204	-.0170	.0348	.1333	-.0706	

MACH (3) = 4.960 ALPHA (1) = 3.730 BETA = .00000 Q(P51) = 3.0700 PO = 90.008 P = .17800

SECTION I TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4408	.2495	.1234	.0831	.0844	.0818	.0680	.0692	.0705	.0730	.0439	-.0039	
14.000		.2130	.0944	.0692	.0604	.0591	.0541	.0491	.0516	.0604	.0754	-.0076	
24.000									.0200	.0263	.0603	-.0089	
46.000	.4345	.1826	.0805	.0578	.0541	.0541	.0452	.0427	.0415	.0478	.0225	-.0114	
67.500		.1700	.0717	.0452	.0427	.0452	.0478	.0377	.0415	.0415	.0187	-.0089	
90.000	.4042	.1675	.0717	.0427	9.9990	.0364	.0465	.0364	.0351	.0339	.0061	-.0076	
112.500		.1712	.0691	.0376	.0376	.0288	.0389	.0351	.0313	.0326	.0124	.0023	
135.000	.4357	.1852	.0679	.0314	.0276	.0289	.0289	.0188	9.9990	.0238	.0099	.0049	
157.500		.2039	.0805	.0338	.0288	.0225	.0288	.0225	.0477	.0212	.0112	.0061	
180.000	.5120	.2279	.0918	.0354	.0275	.0250	.0238	.0200	.0225	.0162	.0086	.0074	
202.500		.2682	.1094	.0376	.0289	.0212	.0225	.0187	.0187	.0162	.0074	.0061	
225.000	.5945	.2972	.1271	.0427	.0326	.0275	.0263	.0212	.0225	.0200	.0137	.0036	
247.500		.3186	.1346	.0452	.0313	.0238	.0250	.0212	.0162	.0162	.0301	.0023	
270.000	.6335	.3261	.1435	.0480	9.9990	.0288	.0288	.0263	.0200	.0200	.0301	.0036	
292.500		.3198	.1435	.0502	.0427	.0313	.0313	.0250	.0263	.0263	.0351	-.0013	
315.000	.5993	.2959	.1220	.0376	.0338	.0301	.0263	.0212	.0149	.0238	.0376	-.0039	
326.000									.0212	.0275	.0389	-.0101	
346.000		.2808	.1195	.0351	.0288	.0187	.0137	.0124	.0124	.0187	.0114	-.0139	
360.000	.4408	.2495	.1234	.0831	.0844	.0818	.0680	.0692	.0705	.0730	.0439	-.0039	

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA015) (16 NOV 74)

REFERENCE DATA

PARAMETRIC DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = 7.640 BETA = .00000 Q(PSI) = 10.269 PO = 28.008 P = 3.8380

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5406	.2807	.0406	-.1090	-.0762	-.1082	-.1048	-.0792	-.0946	.0594	.1103	-.2084
14.000		.2232	-.0004	-.1266	-.1025	-.0761	-.0874	-.0547	-.0309	.1358	.2588	-.2341
24.000									-.0193	.1433	.2828	-.2362
45.000	.4406	.1271	-.0385	-.1594	-.1233	-.1719	-.1052	-.0494	-.0803	.0383	.1976	-.2472
67.500		.1081	-.0498	-.1614	-.1128	-.0287	-.0374	-.0208	-.0174	-.0513	.1461	-.2149
90.000	.3762	.1023	-.0633	-.1645	9.9990	-.0057	-.0290	-.0271	-.0027	-.0053	.0074	-.2144
112.500		.1167	-.0592	-.1624	-.1135	-.0415	-.0272	-.0328	-.0317	-.0321	.0244	-.2148
135.000	.4146	.1403	-.0388	-.1616	-.1228	-.0776	-.0433	-.0403	9.9990	-.0429	-.0425	-.1795
157.500		.1632	-.0083	-.1418	-.1264	-.1287	-.0899	-.0545	-.0519	-.0594	-.0641	-.1756
180.000	.5457	.2093	.0213	-.1081	-.1036	-.1055	-.1137	-.0545	-.0821	-.0791	-.0946	-.1703
202.500		.2957	.0609	-.0835	-.0703	-.0797	-.0977	-.0974	-.0929	-.0880	-.0951	-.1705
225.000	.7009	.3700	.1197	-.0434	-.0215	-.0287	-.0389	-.0517	-.0581	-.0483	-.0622	-.1873
247.500		.4166	.1603	-.0162	.0134	.0048	.0006	.0014	-.0083	-.0147	.0221	-.2224
270.000	.8037	.44.9	.1800	-.0061	9.9990	.0244	.0168	.0172	.0082	.0172	.0217	-.2446
292.500		.4190	.1708	-.0173	.0142	.0198	.0134	.0021	.0195	-.0195	.1829	-.2359
315.000	.73.3	.3832	.1456	-.0399	.0213	.0036	-.0204	-.0286	-.0226	-.0185	.2556	-.2521
326.000												
346.000		.3022	.0677	-.0898	-.0687	-.1554	-.1301	-.1199	-.0027	.0443	.1110	-.2065
360.000	.5406	.2807	.0406	-.1090	-.0762	-.1082	-.1048	-.0792	-.0946	.0594	.1103	-.2084

MACH (2) = 3.480 ALPHA (1) = 7.600 BETA = .00000 Q(PSI) = 6.8640 PO = 60.032 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4930	.2702	.0893	-.0092	-.0114	-.0300	-.0300	-.0317	-.0289	.0009	.0330	-.0475
14.000		.2212	.0645	-.0227	-.0272	-.0199	-.0300	-.0340	-.0261	.0273	.0955	-.0824
24.000									-.0165	.0431	.0832	-.0903
45.000	.3885	.1474	.0228	-.0413	-.0340	-.0548	-.0554	-.0413	-.0272	.0014	.0544	.0869
67.500		.1221	.0077	-.0486	-.0407	-.0232	-.0345	-.0255	-.0227	-.0187	.0313	-.0779
90.000	.3301	.1164	.0054	-.0486	9.9990	-.0204	-.0137	-.0120	-.0137	-.0131	.0054	-.0745
112.500		.1220	.0071	-.0486	-.0413	-.0312	-.0323	-.0413	-.0266	-.0278	.0043	-.0740
135.000	.3795	.1468	.0195	-.0447	-.0441	-.0374	-.0334	-.0374	9.9990	-.0407	-.0385	-.0723
157.500		.1835	.0483	-.0328	-.0379	-.0424	-.0351	-.0351	-.0322	-.0413	-.0441	-.0700
180.000	.5147	.2274	.0764	-.0143	-.0227	-.0328	-.0385	-.0402	-.0441	-.0447	-.0469	-.0683
202.500		.3042	.1176	.0043	-.0024	-.0153	-.0176	-.0238	-.0283	-.0272	-.0283	-.0689

MSFC 595 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A015)

MACH (2) = 3.400 ALPHA (1) = 7.800

SECTION (1) TANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6767	.3620	.1597	.0330	.0211	.0087	.0065	.0009	-.0030	-.0013	-.0035	-.0723
247.500		.4082	.1868	.0510	.0397	.0273	.0251	.0223	.0183	.0144	.0426	-.0723
270.000	.7733	.4276	.2038	.0595	9.9990	.0370	.0359	.0319	.0274	.0280	.0426	-.0757
292.500		.4073	.1931	.0528	.0449	.0415	.0347	.0313	.0347	.0313	.0915	-.0751
315.000	.7100	.3693	.1637	.0358	.0347	.0302	.0234	.0195	.0082	.0104	.1564	-.0751
325.000									.0313	.0110	.1169	-.0796
345.000		.2922	.1175	.0121	.0009	-.0250	-.0379	-.0452	-.0300	.0037	.0504	-.0796
360.000	.4930	.2702	.0893	-.0092	-.0114	-.0300	-.0300	-.0317	-.0289	.0009	.0330	-.0475

MACH (3) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(P51) = 3.0700 P0 = 90.024 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4030	.2543	.1132	.0641	.0666	.0616	.0502	.0527	.0477	.0515	.0061	-.0076
14.000		.2077	.0855	.0527	.0452	.0439	.0414	.0364	.0351	.0414	.0527	-.0114
24.000									.0112	.0112	.0200	-.0127
32.000	.3602	.1409	.0553	.0364	.0389	.0351	.0263	.0250	.0225	.0253	-.0013	-.0177
67.500		.1220	.0464	.0263	.0313	.0301	.0338	.0212	.0238	.0238	.0011	-.0139
90.000	.3071	.1157	.0464	.0275	9.9990	.0288	.0326	.0250	.0225	.0250	-.0026	-.0152
112.500		.1195	.0414	.0212	.0263	.0263	.0263	.0225	.0175	.0187	.0036	-.0064
135.000	.3526	.1409	.0490	.0212	.0200	.0212	.0212	.0200	9.9990	.0124	-.0001	-.0089
157.500		.1762	.0590	.0212	.0200	.0137	.0162	.0137	.0401	.0112	-.0001	-.0064
181.000	.4975	.2203	.0868	.0288	.0212	.0137	.0149	.0112	.0112	.0011	-.0026	-.0076
202.500		.2696	.1170	.0389	.0275	.0225	.0197	.0124	.0112	.0124	.0051	-.0054
225.000	.6674	.3525	.1586	.0553	.0439	.0351	.0313	.0238	.0212	.0212	.0212	-.0114
247.500		.4005	.1901	.0704	.0540	.0389	.0401	.0301	.0313	.0313	.0527	-.0026
270.000	.7558	.4219	.2052	.0779	9.9990	.0452	.0490	.0427	.0364	.0364	.0527	-.0051
292.500		.4030	.1951	.0716	.0590	.0477	.0452	.0389	.0351	.0427	.0553	-.0039
315.000	.6739	.3602	.1649	.0565	.0490	.0401	.0376	.0301	.0275	.0414	.0653	-.0101
326.000									.0414	.0490	.0742	-.0101
346.000		.2568	.1183	.0364	.0325	.0112	.0112	.0086	.0074	.0112	.0300	-.0127
360.000	.4030	.2543	.1132	.0641	.0666	.0616	.0502	.0527	.0477	.0515	.0061	-.0076

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 595 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA016) (16 NOV 74)

REFERENCE DATA

SREF = 872.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.950 ALPHA (1) = 12.550 BETA = .00000 Q(P51) = 10.220 PO = 28.000 P = 3.7870

SECTION (1) ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5023	.2671	.0554	-.1001	-.0998	-.1728	-.1444	-.1751	-.1441	-.0244	.0285	-.2023
14.000		.1953	-.0085	-.1394	-.1310	-.0955	-.1227	-.0891	-.0928	-.0251	.1262	-.2557
24.000									-.0327	.0728	.2521	-.2457
45.000	.3709	.0867	-.0751	-.1791	-.1523	-.2370	-.1133	-.0675	-.0690	.0251	.1519	-.2394
67.500		.0732	-.0941	-.1847	-.1282	-.0426	-.0619	-.0551	-.0040	-.1017	.1239	-.2352
90.000	.2907	.0618	-.1013	-.1812	9.9990	.0020	-.0419	-.0252	-.0343	-.0222	-.0244	-.2407
112.500		.0678	-.0929	-.1826	-.1330	-.0562	-.0596	-.0645	-.0774	-.0876	-.0308	-.2325
135.000	.3434	.0886	-.0792	-.1799	-.1443	-.1114	-.0944	-.0991	9.9990	-.1194	-.1120	-.2127
157.500		.1296	-.0430	-.1661	-.1487	-.1865	-.1638	-.1070	-.0983	-.0937	-.0902	-.2033
180.000	.5137	.1959	.0133	-.1240	-.1271	-.1528	-.1714	-.1801	-.1687	-.1445	-.1311	-.2053
202.500		.2989	.0944	-.0729	-.0835	-.0941	-.1093	-.1252	-.1426	-.1316	-.1360	-.2049
225.000	.7492	.4114	.1851	-.0070	-.0021	-.0236	-.0161	-.0475	-.0649	-.0509	-.0584	-.2180
247.500		.4891	.2425	.0489	.0561	.0368	.0387	.0349	.0035	.0035	.0701	-.2534
270.000	.9073	.5236	.2554	.0709	9.9990	.0739	.0648	.0588	.0323	.0425	.0584	-.2639
292.500		.4951	.2294	.0565	.0618	.0603	.0440	.0489	.0607	.0084	.1844	-.2344
315.000	.8039	.4365	.1818	.0186	.0379	.0251	.0137	.0058	-.0051	-.0062	.2722	-.2386
326.000									-.0009	.0239	.2117	-.2265
346.000		.2674	.0549	-.0924	-.1015	-.1684	-.1900	-.1858	-.0879	-.0274	.0606	-.2282
360.000	.5023	.2871	.0554	-.1001	-.0998	-.1728	-.1444	-.1751	-.1441	-.0244	.0285	-.2023

MACH (2) = 3.480 ALPHA (1) = 12.520 BETA = .00000 Q(P51) = 6.8650 PO = 60.040 P = .81000

SECTION (1) ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4815	.2754	.0973	-.0052	-.0080	-.0362	-.0424	-.0531	-.0289	-.0204	-.0278	-.0779
14.000		.2037	.0555	-.0255	-.0317	-.0289	-.0368	-.0435	-.0295	-.0159	.0527	-.0779
24.000									-.0143	-.0075	.0307	-.0813
45.000	.3226	.1045	-.0024	-.0509	-.0475	-.0644	-.0588	-.0514	-.0441	-.0255	.0206	-.0836
67.500		.0775	-.0171	-.0582	-.0509	-.0345	-.0424	-.0531	-.0475	-.0317	-.0131	-.0869
90.000	.2499	.0685	-.0104	-.0588	9.9990	-.0171	-.0159	-.0283	-.0283	-.0261	-.0182	-.0836
112.500		.0764	-.0182	-.0593	-.0514	-.0531	-.0627	-.0582	-.0571	-.0576	-.0379	-.0824
135.000	.3074	.1041	-.0024	-.0554	-.0548	-.0542	-.0531	-.0593	9.9990	-.0565	-.0571	-.0802
157.500		.1530	.0245	-.0430	-.0520	-.0610	-.0537	-.0576	-.0454	-.0582	-.0582	-.0799
180.000	.4927	.2162	.0688	-.0178	-.0301	-.0476	-.0510	-.0583	-.0516	-.0539	-.0638	-.0785
202.500		.3243	.1304	.0161	.0009	-.0137	-.0199	-.0278	-.0312	-.0306	-.0300	-.0796

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T1

(R1A016)

MACH (2) = 3.480 ALPHA (1) = 12.520

SECTION (1)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.7412	.4150	.1941	.0555	.0392	.0234	.0206	.0121	.0087	.0104	.0082	-.0847
247.500	.4890	.2450	.0977	.0731	.0556	.0545	.0488	.0443	.0443	.0443	.0758	-.0813
270.000	.8911	.5254	.2719	.1034	9.9990	.0707	.0707	.0651	.0606	.0606	.0758	-.0734
292.500	.4984	.2572	.0933	.0769	.0719	.0573	.0506	.0657	.0645	.1321	-.0751	
315.000	.7663	.4375	.2093	.0640	.0538	.0572	.0521	.0420	.0403	.0409	.2105	-.0836
326.000									.0673	.0403	.1671	-.0841
346.000		.2600	.1034	.0065	-.0069	-.0362	-.0486	-.0582	-.0312	-.0216	.0121	-.0847
360.000	.4815	.2754	.0973	-.0052	-.0080	-.0362	-.0424	-.0531	-.0289	-.0204	-.0278	-.0779

MACH (3) = 4.960 ALPHA (1) = 12.450 BETA = .00000 Q(PSI) = 3.0700 P0 = 90.019 P = .17800

SECTION (1)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3841	.2545	.1221	.0717	.0730	.0705	.0528	.0515	.0528	.0541	.0124	-.0051
14.000		.2003	.0881	.0578	.0465	.0427	.0440	.0352	.0364	.0415	.0968	-.0101
24.000									.0086	.0049	.0124	-.0139
45.000	.3022	.1145	.0565	.0439	.0401	.0364	.0313	.0301	.0288	.0313	-.0026	-.0114
67.500		.0880	.0464	.0313	.0313	.0288	.0364	.0238	.0298	.0263	-.0039	-.0139
90.000	.2329	.0817	.0364	.0275	9.9990	.0275	.0313	.0225	.0212	.0250	-.0051	-.0114
112.500		.0817	.0364	.0238	.0253	.0200	.0263	.0200	.0200	.0187	.0036	-.0051
135.000	.2896	.1057	.0427	.0225	.0187	.0137	.0212	.0162	9.9990	.0124	-.0026	-.0114
157.500		.1510	.0553	.0250	.0200	.0124	.0175	.0124	.0439	.0137	-.0039	-.0101
180.000	.4887	.2165	.0893	.0326	.0263	.0149	.0162	.0086	.0124	.0049	-.0013	-.0089
202.500		.3135	.1409	.0502	.0364	.0212	.0250	.0149	.0175	.0162	.0099	-.0114
225.000	.7381	.4093	.1976	.0779	.0565	.0389	.0452	.0338	.0338	.0338	.0376	-.0127
247.500		.4849	.2468	.1044	.0792	.0641	.0653	.0578	.0578	.0603	.0893	-.0039
270.000	.8880	.5227	.2720	.1195	9.9990	.0767	.0792	.0742	.0716	.0729	.0956	-.0051
292.500		.5013	.2644	.1120	.0880	.0754	.0754	.0691	.0729	.0817	.1044	-.0101
315.000	.7746	.4395	.2228	.0868	.0704	.0653	.0716	.0553	.0628	.0842	.0981	-.0127
326.000									.0591	.0842	.1120	-.0190
346.000		.2417	.1157	.0401	.0288	.0086	.0124	.0137	.0574	.0061	.0187	-.0127
360.000	.3841	.2545	.1221	.0717	.0730	.0705	.0528	.0515	.0528	.0541	.0124	-.0051

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA017) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = 16.660 BETA = .00000 Q (PSI) = 10.235 PO = 28.004 P = 3.8020

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4082	.3160	.0617	-.1003	-.1142	-.2049	-.2057	-.2435	-.1241	-.0980	-.0636	-.2215
14.000		.1723	-.0255	-.1516	-.1500	-.1368	-.1784	-.1686	-.1561	-.0895	-.0043	-.2174
24.000									-.1286	-.0980	.0504	-.2272
45.000	.3043	.0368	-.1142	-.2056	-.1913	-.2449	-.1127	-.0881	-.0749	-.0681	.0776	-.2618
67.500		.0043	-.1232	-.2029	-.1602	-.1258	-.1330	-.1047	-.0964	-.0745	.0009	-.2749
90.000	.2416	-.0035	-.1248	-.1977	9.9990	.0043	-.0530	-.0511	-.0825	-.0217	-.0806	-.2359
112.500		.0058	-.1243	-.2014	-.1640	-.1258	-.1375	-.1481	-.1542	-.1621	-.1207	-.2669
135.000	.2641	.0274	-.1143	-.2046	-.1839	-.1831	-.1865	-.2012	9.9990	-.1853	-.1600	-.2378
157.500		.0833	-.0815	-.1912	-.1962	-.2185	-.1727	-.1428	-.1334	-.1405	-.1354	-.2325
180.000	.4695	.1733	-.0042	-.1423	-.1559	-.1910	-.2069	-.1918	-.1740	-.1623	-.1572	-.2399
202.500		.3165	.1060	-.0663	-.0825	-.1037	-.1199	-.1343	-.1524	-.1430	-.1429	-.2431
225.000	.8045	.4783	.2182	.0307	.0357	.0013	.0013	-.0281	-.0474	-.0296	-.0375	-.2510
247.500		.5901	.3027	.1075	.1132	.0894	.0811	.0773	.0482	.0470	.1305	-.2756
270.000	1.0214	.6463	.3442	.1322	9.9990	.1458	.1246	.1095	.0921	.1069	.1218	-.2388
292.500		.6001	.3136	.1041	.1207	.1211	.0965	.1011	.1302	.0663	.2718	-.2809
315.000	.8801	.5998	.2410	.0466	.0523	.0633	.0515	.0625	.0481	.0455	.3508	-.2644
326.000									.0451	.0538	.2942	-.2632
345.000		.2303	.0206	-.1128	-.1426	-.2019	-.2122	-.2208	-.1177	-.1037	-.0904	-.2540
360.000	.4082	.3160	.0617	-.1003	-.1142	-.2049	-.2057	-.2435	-.1241	-.0980	-.0636	-.2215

MACH (2) = 3.480 ALPHA (1) = 16.560 BETA = .00000 Q (PSI) = 6.8650 PO = 60.036 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3643	.2844	.0956	-.0007	-.0046	-.0368	-.0520	-.0554	-.0418	-.0452	-.0188	-.0864
14.000		.1874	.0476	-.0272	-.0323	-.0430	-.0486	-.0593	-.0413	-.0385	.0392	-.0881
24.000									-.0398	-.0323	-.0261	-.0869
45.000	.2612	.0873	-.0182	-.0554	-.0543	-.0627	-.0576	-.0548	-.0481	-.0424	-.0138	-.0869
67.500		.0388	-.0362	-.0621	-.0582	-.0531	-.0633	-.0593	-.0452	-.0413	-.0272	-.0889
90.000	.1828	.0352	-.0351	-.0618	9.9990	.0103	-.0345	-.0413	-.0469	-.0481	-.0396	-.0881
112.500		.0380	-.0374	-.0644	-.0616	-.0683	-.0621	-.0644	-.0610	-.0610	-.0588	-.0836
135.000	.2382	.0657	-.0249	-.0627	-.0649	-.0644	-.0632	-.0632	9.9990	-.0632	-.0555	-.0836
157.500		.1220	.0071	-.0497	-.0616	-.0689	-.0650	-.0650	-.0520	-.0555	-.0589	-.0836
180.000	.4688	.2082	.0657	-.0176	-.0334	-.0509	-.0565	-.0627	-.0627	-.0550	-.0672	-.0830
202.500		.3479	.1485	.0279	.0104	-.0086	-.0131	-.0221	-.0233	-.0227	-.0221	-.0830

REPRODUCIBILITY OF THE
 ORIGINAL PAGE IS POOR

MSFC 886 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA017)

MACH (2) = 3.480 ALPHA (1) = 16.560

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8066	.4817	.2427	.0900	.0719	.0483	.0471	.0359	.0359	.0392	.0364	-.0858
247.500		.5998	.3203	.1406	.1226	.1000	.0978	.0944	.0921	.0910	.1214	-.0785
270.000	1.0193	.6392	.3592	.1643	0.9990	.1231	.1237	.1197	.1199	.1181	.1276	-.0653
292.500		.6015	.3372	.1496	.1259	.1209	.1175	.1119	.1192	.1209	.2026	-.0672
315.000	.8742	.5136	.2662	.1045	.0893	.1062	.0944	.0837	.0888	.0910	.3019	-.0796
326.000									.1102	.0826	.2403	-.0785
346.000		.2274	.0826	-.0007	-.0103	-.0488	-.0616	-.0599	-.0430	-.0469	.0223	-.0920
360.000	.3643	.2844	.0956	-.0007	-.0046	-.0368	-.0520	-.0554	-.0418	-.0452	-.0188	-.0864

MACH (3) = 4.860 ALPHA (1) = 16.470 BETA = .00000 Q(P51) = 3.0700 P0 = 90.021 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3148	.2621	.1146	.0768	.0717	.0730	.0528	.0553	.0528	.0515	.0149	-.0064
14.000		.1838	.0805	.0590	.0502	.0452	.0414	.0338	.0338	.0364	.0603	-.0089
24.000									.0074	.0036	-.0001	-.0152
45.000	.2480	.0931	.0527	.0452	.0414	.0389	.0288	.0301	.0313	.0275	-.0089	-.0139
67.500		.0704	.0364	.0313	.0338	.0313	.0338	.0225	.0288	.0250	-.0076	-.0152
90.000	.1737	.0653	.0338	.0313	0.9990	.0326	.0351	.0263	.0263	.0238	-.0076	-.0127
112.500		.0641	.0313	.0275	.0288	.0187	.0263	.0212	.0200	.0187	.0023	-.0031
135.000	.2279	.0805	.0301	.0212	.0187	.0149	.0162	.0137	0.9990	.0086	-.0051	-.0076
157.500		.1296	.0490	.0250	.0212	.0112	.0162	.0112	.0502	.0086	-.0051	-.0101
180.000	.4698	.2102	.0855	.0351	.0263	.0175	.0149	.0099	.0137	.0036	-.0026	-.0089
202.500		.3413	.1548	.0628	.0439	.0338	.0275	.0212	.0250	.0212	.0175	-.0114
225.000	.8087	.4735	.2480	.1094	.0855	.0641	.0666	.0578	.0628	.0603	.0666	-.0114
247.500		.5831	.3161	.1523	.1233	.1044	.1082	.1031	.1044	.1044	.1523	-.0039
270.000	1.0203	.6361	.3551	.1750	0.9990	.1271	.1258	.1258	.1271	.1296	.1661	.0023
292.500		.6046	.3337	.1598	.1296	.1170	.1195	.1157	.1195	.1220	.2039	-.0013
315.000	.8729	.5189	.2757	.1246	.1019	.1132	.119	.0894	.1019	.1359	.1950	-.0013
326.000									.1094	.1271	.1951	-.0051
346.000		.2165	.1008	.0389	.0313	.0112	.0137	.0137	.0086	.0349	.0313	-.0139
360.000	.3148	.2621	.1146	.0768	.0717	.0730	.0528	.0553	.0528	.0515	.0149	-.0064

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA01B) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 30.000

MACH (1) = 1.960 ALPHA (1) = 20.740 BETA = .00000 Q(P51) = 10.237 P0 = 28.006 P = 3.8040

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2522	.3324	.0345	-.0964	-.1662	-.2334	-.2493	-.2172	-.1745	-.1534	-.1222	-.2545
14.000		.1449	-.0496	-.1630	-.1785	-.2064	-.2253	-.2189	-.1671	-.1199	-.0326	-.2357
24.000									-.1883	-.1375	-.0232	-.2562
45.000	.2275	-.0239	-.1490	-.2303	-.2163	-.2443	-.1502	-.1214	-.1500	-.1702	-.0251	-.2571
67.500		-.0307	-.1466	-.2233	-.2127	-.2169	-.1806	-.1006	-.1142	-.1297	-.0535	-.2758
90.000	.1611	-.0409	-.1463	-.2053	9.9990	-.0369	-.0957	-.1135	-.1312	-.1339	-.1302	-.2502
112.500		-.0380	-.1552	-.2179	-.2036	-.2164	-.2176	-.2145	-.1756	-.1673	-.1230	-.2522
135.000	.1749	-.0311	-.1583	-.2360	-.2292	-.2349	-.2394	-.2171	9.9990	-.1652	-.1594	-.2387
157.500		.0266	-.1197	-.2151	-.2385	-.2196	-.1978	-.1610	-.1682	-.1769	-.1695	-.2264
180.000	.4231	.1452	-.0258	-.1543	-.1717	-.2083	-.2193	-.1792	-.1977	-.2011	-.2003	-.2310
202.500		.3307	.1135	-.0568	-.0678	-.0969	-.1199	-.1225	-.1445	-.1384	-.1374	-.2340
225.000	.8602	.5424	.2599	.0708	.0802	.0375	.0262	.0092	-.0141	.0017	-.0023	-.2434
247.500		.6891	.3818	.1688	.1787	.1575	.1420	.1378	.1125	.1060	.2009	-.2688
270.000	1.1257	.7607	.4464	.2036	9.9990	.2297	.1994	.1888	.1665	.1824	.1950	-.2127
292.500		.7039	.4069	.1704	.1942	.1949	.1704	.1764	.2067	.1337	.3779	-.2774
315.000	.9499	.5822	.3051	.0908	.1078	.1237	.1150	.1184	.1127	.1079	.4503	-.2684
325.000									.1101	.1261	.3861	-.2849
346.000		.1660	-.0288	-.1365	-.1678	-.2400	-.2551	-.2177	-.1693	-.1591	-.1638	-.2743
360.000	.2522	.3324	.0345	-.0964	-.1662	-.2334	-.2493	-.2172	-.1745	-.1534	-.1222	-.2545

MACH (2) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(P51) = 6.8620 P0 = 60.017 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2782	.2976	.0805	-.0142	-.0243	-.0407	-.0576	-.0536	-.0497	-.0519	.0037	-.0869
14.000		.1661	.0359	-.0260	-.0322	-.0469	-.0604	-.0610	-.0525	-.0537	.0054	-.0914
24.000									-.0503	-.0503	-.0396	-.0886
45.000	.2027	.0404	-.0300	-.0587	-.0593	-.0644	-.0644	-.0593	-.0570	-.0459	-.0396	-.0903
67.500		.0082	-.0452	-.0549	-.0632	-.0632	-.0627	-.0621	-.0554	-.0531	-.0503	-.0903
90.000	.1283	.0077	-.0452	-.0544	9.9990	-.0384	-.0486	-.0593	-.0593	-.0587	-.0509	-.0898
112.500		.0060	-.0469	-.0644	-.0672	-.0717	-.0644	-.0666	-.0649	-.0644	-.0638	-.0847
135.000	.1723	.0291	-.0418	-.0694	-.0706	-.0706	-.0666	-.0678	9.9990	-.0594	-.0729	-.0854
157.500		.0928	-.0074	-.0570	-.0683	-.0740	-.0683	-.0706	-.0525	-.0706	-.0745	-.0835
180.000	.4411	.1988	.0640	-.0176	-.0339	-.054	-.0565	-.0604	-.0616	-.0638	-.0666	-.0958
202.500		.3695	.1689	.0437	.0218	.005	-.0012	-.0080	-.0091	-.0074	-.0063	-.0875

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A01B)

MACH (2) = 3.480 ALPHA (1) = 20.610

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.8729	.5446	.2938	.1282	.1045	.0820	.0820	.0690	.0719	.0775	.0735	-.0795	
247.500		.6931	.4011	.1976	.1773	.1576	.1554	.1508	.1508	.1520	.1869	-.0706	
270.000	1.1491	.7607	.4575	.2337	9.9990	.1909	.1931	.1897	.1858	.1897	.2010	-.0542	
292.500		.7123	.4242	.2100	.1830	.1830	.1807	.1756	.1892	.1914	.3013	-.0554	
315.000	.9676	.5956	.3329	.1508	.1358	.1627	.1514	.1430	.1508	.1508	.3993	-.0589	
326.000									.1678	.1384	.3470	-.0723	
346.000		.1914	.0550	-.0136	-.0238	-.0599	-.0672	-.0542	-.0514	-.0542	.0330	-.0909	
360.000	.2782	.2976	.0805	-.0142	-.0243	-.0407	-.0576	-.0536	-.0497	-.0519	.0037	-.0869	

MACH (3) = 4.960 ALPHA (1) = 20.490 BETA = .00000 O1P511 = 3.0700 PO = 90.023 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.2606	.2279	.1107	.0691	.0679	.0729	.0515	.0553	.0502	.0515	.0452	-.0064	
14.000		.1849	.0805	.0641	.0490	.0515	-.0039	.0389	.0364	.0376	.0565	-.0089	
24.000									.0036	-.0013	.0036	-.0114	
45.000	.2064	.0779	.0502	.0452	.0414	.0464	.0351	.0326	.0301	.0313	-.0139	-.0190	
67.500		.0553	.0401	.0338	.0364	.0313	.0376	.0275	.0313	.0263	-.0139	-.0164	
90.000	.1258	.0527	.0376	.0301	9.9990	.0288	.0338	.0250	.0250	.0238	-.0114	-.0127	
112.500		.0477	.0239	.0225	.0238	.0175	.0250	.0200	.0175	.0162	.0023	-.0026	
135.000	.1712	.0603	.0263	.0212	.0137	.0187	.0187	.0149	9.9990	.0112	-.0013	-.0054	
157.500		.1094	.0439	.0225	.0187	.0137	.0175	.0112	.0540	.0086	-.0039	-.0054	
180.000	.4471	.2079	.0855	.0351	.0225	.0162	.0175	.0112	.0162	.0049	.0011	-.0121	
202.500		.3614	.1737	.0729	.0527	.0427	.0401	.0338	.0354	.0376	.0313	-.0114	
225.000	.8893	.5328	.2883	.1372	.1094	.0961	.0956	.0931	.0924	.1031	.1082	-.0064	
247.500		.6290	.3992	.2039	.1750	.1573	.1674	.1674	.1737	.1775	.2279	.0061	
270.000	1.1602	.7595	.4534	.2342	9.9990	.1876	.1964	.2039	.2052	.2115	.2469	.0176	
292.500		.7117	.4250	.2153	.1787	.1787	.1963	.1876	.2001	.2014	.3224	.0124	
315.000	.9674	.5932	.3287	.1599	.1346	.1687	.1561	.1636	.1586	.1775	.3527	-.0013	
326.000									.1724	.1650	.3324	-.0013	
346.000		.1976	.0905	.0326	.0301	.0137	.0112	.0187	.0039	.0061	.0379	-.0127	
360.000	.2606	.2279	.1107	.0691	.0679	.0729	.0515	.0553	.0502	.0515	.0452	-.0064	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 996 (TA-2F) MICRO200 EXTERNAL TANK, T1

IRIA0191 (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1085.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = 24.850 BETA = .00000 Q(PSI) = 10.252 PO = 28.008 P = 3.8200

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.1293	.2442	.0149	-.1645	-.1898	-.2769	-.2550	-.2003	-.1992	-.1894	-.1455	-.2844	-.2596
14.000	.1197	-.0589	-.1704	-.2063	-.2266	-.2500	-.2504	-.1908	-.1908	-.1165	-.1472	-.2562	-.2562
24.000													
45.000	.1266	-.0680	-.1845	-.2619	-.2513	-.2340	-.1596	-.1540	-.2117	-.1860	-.0616	-.2567	-.2765
67.500		-.0721	-.1788	-.2463	-.2550	-.2705	-.2056	-.1464	-.1645	-.2011	-.1196	-.2447	-.2447
90.000	.1017	-.0774	-.1633	-.2139	9.9990	-.1054	-.1588	-.1690	-.1645	-.1599	-.1677	-.2459	-.2459
112.500		-.0869	-.1745	-.2417	-.2693	-.2553	-.2493	-.2198	-.1798	-.1805	-.1458	-.2358	-.2358
135.000	.0795	-.0895	-.2005	-.2616	-.2658	-.2356	-.2190	-.2009	9.9990	-.1805	-.1781	-.2264	-.2264
157.500		-.0223	-.1586	-.2419	-.2668	-.2284	-.2042	-.1816	-.1706	-.1786	-.1740	-.2330	-.2330
180.000	.3693	.1183	-.0442	-.1601	-.1794	-.2171	-.2254	-.1967	-.1941	-.1911	-.1911	-.2407	-.2407
202.500		.3412	.1237	-.0409	-.0541	-.0824	-.1123	-.1145	-.1315	-.1206	-.1192	-.2481	-.2481
225.000	.9089	.5971	.3147	.1141	.1243	.0820	.0647	.0424	.0285	.0440	.0421	-.2433	-.2433
247.500		.7880	.4786	.2328	.2599	.2351	.2106	.2019	.1849	.1793	.2913	-.1857	-.1857
270.000	1.2423	.8730	.5585	.2876	9.9990	.3110	.2823	.2673	.2514	.2722	.2793	-.2575	-.2575
292.500		.8059	.5016	.2519	.2828	.2673	.2511	.2477	.2937	.2032	.4921	-.2560	-.2560
315.000	1.0313	.6558	.3697	.1512	.1727	.1972	.1851	.1825	.1832	.1776	.5539	-.2931	-.2931
325.000									.1880	.2093	.4875	-.2930	-.2930
346.000		.0866	-.0880	-.1759	-.1902	-.2641	-.2890	-.2136	-.1894	-.1894	-.1802	-.2930	-.2930
360.000	.1293	.2442	.0149	-.1645	-.1898	-.2769	-.2550	-.2003	-.1992	-.1894	-.1455	-.2944	-.2944

MACH (2) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(PSI) = 6.8640 PO = 60.029 P = .81000

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.1807	.1845	.1028	-.0357	-.0379	-.0497	-.0593	-.0520	-.0554	-.0554	.0257	-.0886	-.0886
14.000		.1422	.0324	-.0295	-.0441	-.0565	-.0639	-.0594	-.0610	-.0594	.0161	-.0926	-.0926
24.000													
45.000	.1469	.0138	-.0340	-.0627	-.0616	-.0667	-.0667	-.0582	-.0610	-.0543	-.0604	-.0931	-.0931
67.500		-.0149	-.0554	-.0695	-.0684	-.0717	-.0678	-.0695	-.0639	-.0605	-.0576	-.0926	-.0926
90.000	.0842	-.0097	-.0526	-.0667	9.9990	-.0605	-.0593	-.0661	-.0610	-.0610	-.0621	-.0903	-.0903
112.500		-.0165	-.0559	-.0712	-.0717	-.0740	-.0667	-.0567	-.0661	-.0650	-.0527	-.0847	-.0847
135.000	.1131	-.0002	-.0559	-.0740	-.0751	-.0728	-.0678	-.0578	9.9990	-.0683	-.0705	-.0864	-.0864
157.500		.0681	-.0191	-.0615	-.0705	-.0722	-.0655	-.0706	-.0497	-.0700	-.0745	-.0847	-.0847
180.000	.4129	.1875	.0612	-.0165	-.0356	-.0514	-.0548	-.0576	-.0570	-.0593	-.0610	-.0854	-.0854
202.500		.3881	.1864	.0561	.0359	.0189	.0133	.0088	.0099	.0133	.0149	-.0952	-.0952

REPRODUCTION OF THE
 ORIGINAL DATA IS PROHIBITED

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T1

(R1A019)

MACH (2) = 3.480 ALPHA (1) = 24.660

SECTION (1) TANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.9339	.6085	.3476	.1678	.1475	.1294	.1272	.1153	.1187	.1289	.1215	-.0723
247.500		.8002	.4952	.2664	.2388	.2269	.2309	.2337	.2292	.2303	.2715	-.0616
270.000	1.2708	.8870	.5640	.3132	9.9990	.2788	.2827	.2822	.2765	.2839	.2988	-.0362
292.500		.8250	.5229	.2839	.2569	.2675	.2602	.2613	.2133	.2856	.4324	-.0424
315.000	1.0499	.6775	.4015	.2026	.1885	.2335	.2099	.2217	.2262	.2285	.5324	-.0632
326.000									.2426	.2247	.4595	-.0678
346.000		.1632	.0251	-.0272	-.0317	-.0616	-.0689	-.0525	-.0582	-.0593	.0392	-.0880
360.000	.1807	.1845	.1028	-.0357	-.0379	-.0497	-.0593	-.0520	-.0554	-.0594	.0257	-.0886

MACH (3) = 4.960 ALPHA (1) = 24.510 BETA = .00000 Q(PSI) = 3.0700 PO = 90.022 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2153	.1612	.1044	.0603	.0603	.0629	.0440	.0490	.0402	.0452	.0616	-.0076
14.000		.1409	.0830	.0565	.0439	.0376	.0364	.0326	.0275	.0351	.0364	-.0127
24.000										-.0001	-.0064	-.0001
45.000	.1409	.0641	.0439	.0389	.0351	.0326	.0263	.0239	.0200	.0250	-.0190	-.0177
67.500		.0439	.0301	.0250	.0263	.0275	.0289	.0187	.0225	.0200	-.0152	-.0127
90.000	.0905	.0414	.0313	.0263	9.9990	.0200	.0263	.0200	.0187	.0162	-.0215	-.0152
112.500		.0338	.0212	.0187	.0200	.0137	.0212	.0162	.0162	.0162	-.0001	-.0051
135.000	.1283	.0464	.0200	.0175	.0137	.0162	.0149	.0137	9.9990	.0124	-.0054	-.0101
157.500		.0956	.0351	.0175	.0162	.0074	.0124	.0074	.0503	.0074	-.0051	-.0089
180.000	.4357	.2014	.0880	.0351	.0238	.0149	.0162	.0112	.0149	.0035	-.0001	-.0127
202.500		.3879	.1954	.0858	.0628	.0452	.0515	.0452	.0527	.0540	.0540	-.0101
225.000	.9498	.6020	.3375	.1712	.1447	.1296	.1422	.1435	.1460	.1549	.1561	-.0076
247.500		.7850	.4735	.2558	.2315	.2241	.2417	.2480	.2531	.2591	.3211	.0086
270.000	1.2673	.8616	.5391	.3050	9.9990	.2707	.2909	.2994	.2984	.3085	.3375	.0238
292.500		.7986	.5113	.2795	.2367	.2543	.2694	.2720	.2921	.3009	.4710	.0162
315.000	1.0191	.6575	.3979	.2852	.1787	.2329	.2241	.2455	.2291	.2379	.5567	.0036
326.000									.2519	.2619	.5391	.0074
346.000		.1737	.0704	.0250	.0225	.0175	.0049	.0212	.0074	.0074	.1157	-.0101
360.000	.2153	.1612	.1044	.0603	.0603	.0629	.0440	.0490	.0402	.0452	.0616	-.0076

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIAD20) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 ØREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 POUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = 28.930 BETA = .00000 Q(PSI) = 10.265 PO = 28.006 P = 3.8340

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0149	.0820	.0308	-.2178	-.2242	-.2887	-.2955	-.2582	-.2205	-.1756	-.1343	-.3001
14.000		.1131	-.0526	-.1760	-.2274	-.2553	-.2746	-.2568	-.2085	-.1526	-.1904	-.3012
24.000									-.1839	-.1534	-.1395	-.2768
45.000	.0654	-.1187	-.2254	-.2872	-.2615	-.2137	-.1783	-.2122	-.2389	-.1900	-.0984	-.2688
67.500		-.1102	-.2061	-.2762	-.2785	-.2710	-.2072	-.1944	-.2336	-.2445	-.1444	-.2724
90.000	.0578	-.0942	-.1779	-.2253	9.9990	-.1831	-.2065	-.1824	-.1748	-.1858	-.1946	-.2606
112.500		-.1127	-.2100	-.2759	-.2899	-.2703	-.2477	-.2168	-.1836	-.1908	-.1692	-.2554
135.000	-.0084	-.1444	-.2308	-.2877	-.2885	-.2357	-.2217	-.2067	9.9990	-.1667	-.1855	-.2488
157.500		-.0732	-.1889	-.2621	-.2855	-.2270	-.2074	-.1965	-.1803	-.1908	-.1790	-.2605
180.000	.3285	.0986	-.0577	-.1629	-.1859	-.2209	-.2217	-.2092	-.2036	-.1983	-.1965	-.2440
202.500		.3515	.1412	-.0204	-.0339	-.0649	-.0962	-.0977	-.1109	-.0973	-.0950	-.2619
225.000	.9623	.6567	.3765	.1673	.1820	.1409	.1190	.0903	.0832	.1009	.0957	-.2316
247.500		.8935	.5824	.3207	.3507	.3207	.2981	.2902	.2721	.2868	.4136	-.1993
270.000	1.3590	.9996	.6787	.3988	9.9990	.4127	.3882	.3732	.3570	.3807	.3919	-.1553
292.500		.9239	.6101	.3554	.3720	.3652	.3468	.3438	.3900	.2858	.6299	-.2505
315.000	1.1135	.7422	.4524	.2220	.2631	.2971	.2675	.2657	.2736	.2595	.6719	-.2338
326.000									.2891	.3142	.6000	-.2815
346.000		.0285	-.1464	-.2157	-.2123	-.2785	-.2875	-.2371	-.1980	-.1761	-.1511	-.3007
360.000	.0149	.0820	.0308	-.2178	-.2242	-.2887	-.2955	-.2582	-.2205	-.1756	-.1343	-.3001

MACH (2) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(PSI) = 6.8630 PO = 60.023 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1435	.1153	.0421	-.0438	-.0424	-.0537	-.0578	-.0559	-.0578	-.0821	.0364	-.0880
14.000		.1300	.0375	-.0283	-.0537	-.0570	-.0599	-.0632	-.0661	-.0649	.0200	-.0920
24.000									-.0745	-.0824	-.0554	-.0909
45.000	.0938	-.0108	-.0480	-.0644	-.0644	-.0661	-.0678	-.0678	-.0621	-.0694	-.0824	-.0931
67.500		-.0300	-.0582	-.0717	-.0694	-.0734	-.0894	-.0717	-.0621	-.0678	-.0740	-.0886
90.000	.0556	-.0221	-.0531	-.0666	9.9990	-.0561	-.0666	-.0678	-.0632	-.0610	-.0728	-.0890
112.500		-.0345	-.0632	-.0734	-.0728	-.0723	-.0678	-.0672	-.0655	-.0638	-.0549	-.0830
135.000	.0662	-.0255	-.0638	-.0756	-.0762	-.0717	-.0627	-.0561	9.9990	-.0672	-.0699	-.0852
157.500		.0454	-.0306	-.0649	-.0740	-.0717	-.0527	-.0578	-.0441	-.0694	-.0717	-.0818
180.000	.3868	.1796	.0835	-.0148	-.0334	-.0458	-.0480	-.0508	-.0508	-.0520	-.0509	-.0841
202.500		.4101	.2106	.0793	.0545	.0404	.0387	.0336	.0359	.0404	.0442	-.0774

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA020)

MACH (2) = 3.480 ALPHA (1) = 28.700

SECTION (1)	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.9924	.6764	.4071	.2150	.1958	.1812	.1851	.1716	.1761	.1896	.1807	-.0610	
247.500		.9097	.5913	.3440	.3265	.3192	.3248	.3276	.3203	.3231	.3667	-.0520	
270.000	1.3931	1.0167	.6809	.4082	9.9990	.3879	.3975	.3953	.3851	.3958	.4054	-.0131	
292.500		.9383	.6255	.3662	.3397	.3667	.3622	.3656	.3887	.3927	.5922	-.0255	
315.000	1.1316	.7575	.4741	.2606	.2527	.3220	.3012	.3153	.3130	.3175	.6911	-.0537	
325.000									.3357	.3237	.6195	-.0571	
345.000		.1368	.0105	-.0362	-.0368	-.0537	-.0621	-.0492	-.0559	-.0593	.0607	-.0847	
360.000	.1435	.1153	.0421	-.0435	-.0424	-.0537	-.0576	-.0559	-.0576	-.0621	.0364	-.0880	

MACH (3) = 4.960 ALPHA (1) = 28.540 BETA = .00000 Q(P51) = 3.0700 PO = 90.022 P = .17800

SECTION (1)	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.1737	.1473	.0931	.0641	.0666	.0666	.0515	.0528	.0477	.0503	.0994	-.0064	
14.000		.1372	.0754	.0565	.0401	.0439	.0427	.0351	.0288	.0389	.0477	-.0089	
24.000									.0036	-.0001	.0086	-.0101	
45.000	.1057	.0590	.0477	.0414	.0389	.0389	.0326	.0288	.0250	.0301	-.0152	-.0177	
67.500		.0427	.0364	.0301	.0301	.0275	.0364	.0225	.0250	.0253	-.0114	-.0139	
90.000	.0841	.0414	.0351	.0275	9.9990	.0200	.0288	.0225	.0200	.0200	-.0152	-.0101	
112.500		.0301	.0187	.0200	.0175	.0187	.0250	.0175	.0149	.0175	.0036	-.0001	
135.000	.0918	.0401	.0275	.0200	.0175	.0149	.0200	.0175	9.9990	.0137	.0023	-.0051	
157.500		.0830	.0376	.0212	.0200	.0149	.0225	.0124	.0729	.0149	-.0026	-.0076	
180.000	.4181	.2014	.0943	.0414	.0275	.0175	.0225	.0175	.0225	.0124	.0099	-.0101	
202.500		.4143	.2190	.1044	.0817	.0779	.0779	.0716	.0757	.0830	.0859	.0164	
225.000	1.0178	.6751	.4042	.2228	.1951	.1954	.2077	.2027	.2090	.2203	.2190	.0023	
247.500		.9145	.5894	.3413	.3148	.3312	.3501	.3551	.3526	.3551	.4219	.0175	
270.000	1.4172	1.0241	.6751	.4017	9.9990	.3967	.4156	.4231	.4181	.4244	.4458	.0490	
292.500		.9460	.6247	.3627	.3211	.3677	.3853	.3891	.4055	.4105	.6272	.0389	
315.000	1.1299	.7583	.4773	.2669	.2430	.3299	.3337	.3576	.3337	.3400	.7444	.0212	
325.000									.3753	.3639	.6814	.0162	
345.000		.1661	.0704	.0288	.0301	.0288	.0200	.0351	.0187	.0152	.1310	-.0089	
360.000	.1737	.1473	.0931	.0641	.0666	.0666	.0515	.0528	.0477	.0503	.0994	-.0064	

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TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A021) (16 NOV 74)

REFERENCE DATA											PARAMETRIC DATA						
SREF	=	572.5550	SQ. FT	XMRP	=	1086.4000	IN. XT	BETA	=	.000	OFFSET	=	.000				
LREF	=	324.0000	INCHES	YMRP	=	.0000	IN. YT	MOUNT	=	1.000	PHI	=	135.000				
BREF	=	324.0000	INCHES	ZMRP	=	400.0000	IN. ZT										
SCALE	=	.0030															
MACH (1)	=	3.480	ALPHA (1)	=	-8.360	BETA	=	.00000	Q(PSI)	=	6.8650	PO	=	60.036	P	=	.81000
SECTION (1) TANK											DEPENDENT VARIABLE CP						
X/LB		.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540				
THETA																	
.000		.3574	.1418	.0150	-.0351	-.0176	-.0289	-.0322	-.0339	-.0198	.0246	.0826	-.0667				
14.000			.1689	.0302	-.0317	-.0216	-.0334	-.0424	-.0390	-.0176	-.0081	.0702	-.0779				
24.000										-.0137	-.0086	.0318	-.0813				
45.000		.5198	.2352	.0735	-.0143	-.0148	-.0092	-.0069	-.0092	-.0148	.0059	.0296	-.0836				
67.500			.3051	.1197	.0093	-.0069	-.0047	-.0069	-.0109	-.0097	.0054	.0042	-.0913				
90.000		.6967	.3688	.1603	.0330	9.9990	.0087	.0093	.0042	.0020	.0031	.0245	-.0919				
112.500			.4150	.1885	.0510	.0397	.0228	.0217	.0189	.0166	.0161	.0504	-.0751				
135.000		.7840	.4358	.2020	.0572	.0403	.0302	.0302	.0262	9.9990	.0240	.0257	-.0672				
157.500			.4110	.1885	.0510	.0358	.0257	.0228	.0200	.0285	.0161	.0172	-.0661				
180.000		.6837	.3504	.1610	.0342	.0218	.0094	.0077	.0026	-.0001	-.0029	-.0041	-.0655				
202.500			.3085	.1175	.0194	-.0007	-.0103	-.0165	-.0210	-.0261	-.0266	-.0283	-.0616				
225.000		.5046	.2388	.0810	-.0120	-.0210	-.0317	-.0362	-.0407	-.0418	-.0390	-.0435	-.0610				
247.500			.1862	.0448	-.0317	-.0340	-.0396	-.0368	-.0368	-.0379	-.0368	-.0357	-.0633				
270.000		.3761	.1451	.0189	-.0441	9.9990	-.0362	-.0345	-.0374	-.0379	-.0369	-.0244	-.0712				
292.500			.1192	.0065	-.0531	-.0278	-.0182	-.0283	-.0289	-.0295	-.0328	-.0002	-.0762				
315.000		.3276	.1103	-.0024	-.0554	-.0390	-.0272	-.0299	-.0221	-.0283	-.0165	.0797	-.0813				
326.000										.0014	-.0097	.0135	-.0913				
346.000			.1406	.0200	-.0419	-.0283	-.0430	-.0323	-.0317	-.0194	.0369	.1034	-.0723				
360.000		.3524	.1418	.0150	-.0351	-.0176	-.0289	-.0322	-.0339	-.0199	.0246	.0826	-.0667				
MACH (2)	=	4.960	ALPHA (1)	=	-8.310	BETA	=	.00000	Q(PSI)	=	3.0700	PO	=	90.027	P	=	.17800
SECTION (1) TANK											DEPENDENT VARIABLE CP						
X/LB		.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540				
THETA																	
.000		.3375	.1471	.0665	.0476	.0539	.0539	.0388	.0388	.0375	.0413	.0112	-.0026				
14.000			.1687	.0603	.0439	.0364	.0376	.0289	.0263	.0275	.0313	.0641	-.0051				
24.000										.0074	.0086	.0187	-.0114				
45.000		.4912	.2329	.0893	.0452	.0376	.0376	.0351	.0288	.0250	.0288	.0162	-.0089				
67.500			.2934	.1220	.0477	.0376	.0376	.0354	.0263	.0288	.0263	.0149	-.0139				
90.000		.6575	.3476	.1523	.0616	9.9990	.0389	.0401	.0326	.0298	.0288	.0212	-.0039				
112.500			.3866	.1800	.0716	.0553	.0414	.0452	.0401	.0354	.0364	.0464	-.0001				
135.000		.7621	.4017	.1926	.0754	.0565	.0464	.0477	.0414	9.9990	.0351	.0351	.0011				
157.500			.3866	.1926	.0704	.0527	.0414	.0414	.0351	.0617	.0313	.0301	.0023				
180.000		.6499	.3337	.1523	.0553	.0376	.0338	.0289	.0238	.0263	.0187	.0187	.0049				
202.500			.2921	.1220	.0414	.0288	.0263	.0187	.0124	.0137	.0137	.0074	.0061				

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA021)

MACH (2) = 4.960 ALPHA (1) = -8.310

SECTION (1) TANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4824	.2329	.0893	.0250	.0175	.0137	.0124	.0061	.0074	.0036	.0086	.0074
247.500		.1838	.0603	.0149	.0086	.0086	.0049	.0074	.0036	.0049	.0074	.0112
270.000	.3602	.1485	.0439	.0112	9.9990	.0074	.0099	.0086	.0061	.0023	.0086	.0086
292.500		.1233	.0275	.0011	.0124	.0162	.0074	.0061	.0036	.0061	.0086	.0086
315.000	.3173	.1157	.0275	.0036	.0112	.0049	.0074	.0074	.0023	.0074	.0187	-.0001
326.000									.0006	.0175	.0200	.0001
346.000		.1422	.0326	.0061	.0086	.0036	.0049	.0061	-.0001	.0049	.0275	.0011
360.000	.3375	.1471	.0665	.0476	.0539	.0539	.0388	.0388	.0375	.0413	.0112	-.0026

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA022) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(P51) = 6.8650 PO = 60.039 P = .81000

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4324	.1903	.0449	-.0249	-.0052	-.0187	-.0238	-.0204	-.0120	.0556	.1243	-.0712
14.000		.2065	.0527	-.0221	-.0024	-.0317	-.0295	-.0227	-.0131	.0426	.1468	-.0807
24.000									-.0058	.0262	.1107	-.0824
45.000	.5367	.2443	.0792	-.0131	-.0030	-.0035	-.0058	-.0154	-.0148	-.0114	.1068	-.0824
67.500		.2811	.1035	-.0018	-.0069	-.0035	-.0058	-.0058	-.0018	-.0063	.0397	-.0774
90.000	.6184	.3081	.1204	.0082	9.9990	-.0035	.0015	-.0007	-.0024	.0003	.0189	-.0757
112.500		.3260	.1282	.0155	.0082	.0020	.0020	.0014	-.0002	.0020	.0240	-.0633
135.000	.6584	.3378	.1372	.0172	.0093	.0037	.0037	.0026	9.9990	.0020	.0037	-.0599
157.500		.3226	.1289	.0144	.0059	.0020	.0009	-.0002	.0121	-.0019	-.0013	-.0565
180.000	.6088	.2894	.1149	.0075	-.0003	-.0048	-.0043	-.0076	-.0082	-.0116	-.0086	-.0531
202.500		.2781	.1000	-.0035	-.0092	-.0114	-.0131	-.0148	-.0165	-.0148	-.0159	-.0548
225.000	.5187	.2426	.0797	-.0137	-.0182	-.0199	-.0193	-.0193	-.0204	-.0188	-.0199	-.0582
247.500		.2144	.0600	-.0238	-.0250	-.0233	-.0193	-.0176	-.0188	-.0171	-.0126	-.0610
270.000	.4533	.1930	.0465	-.0312	9.9990	-.0221	-.0165	-.0165	-.0182	-.0159	-.0064	-.0689
292.500		.1740	.0347	-.0373	-.0159	-.0097	-.0142	-.0153	-.0188	-.0165	.0240	-.0689
315.000	.4386	.1710	.0296	-.0396	-.0255	-.0176	-.0250	-.0188	-.0272	-.0131	.0955	-.0678
326.000									.0127	-.0058	.0792	-.0689
346.000		.2043	.0516	-.0295	-.0131	-.0407	-.0210	-.0210	-.0114	.0527	.1147	-.0757
360.000	.4324	.1903	.0449	-.0249	-.0052	-.0187	-.0238	-.0204	-.0120	.0556	.1243	-.0712

MACH (2) = 4.960 ALPHA (1) = -4.290 BETA = .00000 Q(P51) = 3.0700 PO = 90.023 P = .17800

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4005	.1800	.0968	.0716	.0767	.0716	.0603	.0616	.0603	.0641	.0288	.0011
14.000		.1938	.0855	.0666	.0565	.0565	.0477	.0452	.0452	.0540	.1586	-.0039
24.000									.0182	.0200	.0301	-.0101
45.000	.5038	.2304	.0981	.0590	.0565	.0527	.0452	.0414	.0427	.0464	.0464	-.0101
67.500		.2594	.1057	.0515	.0464	.0490	.0477	.0376	.0401	.0401	.0225	-.0051
90.000	.5768	.2858	.1220	.0565	9.9990	.0389	.0464	.0376	.0351	.0364	.0124	-.0039
112.500		.3022	.1258	.0527	.0439	.0351	.0389	.0351	.0313	.0326	.0275	.0099
135.000	.6159	.3110	.1359	.0540	.0427	.0326	.0376	.0338	9.9990	.0275	.0187	.0124
157.500		.3022	.1283	.0502	.0401	.0338	.0338	.0288	.0288	.0275	.0061	.0099
180.000	.5718	.2757	.1208	.0452	.0351	.0275	.0275	.0238	.0301	.0187	.0137	.0137
202.500		.2606	.1057	.0364	.0288	.0250	.0212	.0187	.0187	.0187	.0137	.0137

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A022)

MACH (2) = 4.960 ALPHA (1) = -4.290

SECTION (INK)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9340
THETA												
225.000	.4924	.2304	.0905	.0301	.0238	.0187	.0200	.0149	.0162	.0137	.0149	.0124
247.500		.2084	.0767	.0263	.0187	.0162	.0137	.0137	.0137	.0137	.0149	.0149
270.000	.4357	.1850	.0616	.0175	9.9990	.0124	.0124	.0112	.0099	.0124	.0162	.0175
292.500		.1699	.0565	.0124	.0275	.0225	.0137	.0124	.0137	.0149	.0124	.0149
315.000	.4194	.1649	.0477	.0124	.0175	.0099	.0124	.0099	.0036	.0124	.0301	.0049
326.000									.0149	.0187	.0338	-.0013
346.000		.1913	.0666	.0175	.0238	.0074	.0112	.0086	.0099	.0200	.0389	-.0013
360.000	.4003	.1800	.0968	.0716	.0767	.0716	.0603	.0616	.0603	.0541	.0288	.0011

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TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA023) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(P51) = 6.8650 PO = 60.037 P = .81000

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.5068	.2534	.0798	-.0131	.0094	-.0120	-.0187	-.0159	-.0035	.0511	.1558	-.0650	
14.000		.2523	.0787	-.0125	.0077	-.0187	-.0232	-.0176	-.0080	.0511	.1941	-.0728	
24.000									.0026	.0488	.1412	-.0796	
45.000	.5446	.2533	.0809	-.0137	.0009	-.0035	-.0137	-.0159	-.0131	-.0013	.1006	-.0768	
67.500		.2533	.0842	-.0137	-.0109	-.0092	-.0109	-.0126	-.0052	-.0126	.0375	-.0706	
90.000	.5423	.2520	.0830	-.0115	9.9990	-.0098	-.0058	-.0092	-.0104	-.0081	.0071	-.0706	
112.500		.2499	.0831	-.0131	-.0148	-.0131	-.0081	-.0086	-.0086	-.0081	.0166	-.0655	
135.000	.5418	.2510	.0797	-.0159	-.0182	-.0143	-.0092	-.0092	9.9990	-.0081	-.0092	-.0621	
157.500		.2461	.0821	-.0142	-.0170	-.0159	-.0097	-.0086	.0065	-.0069	-.0114	-.0582	
180.000	.5316	.2358	.0786	-.0143	-.0171	-.0137	-.0097	-.0081	-.0069	-.0081	-.0114	-.0565	
202.500		.2505	.0775	-.0165	-.0188	-.0159	-.0103	-.0103	-.0092	-.0086	-.0114	-.0588	
225.000	.5254	.2448	.0792	-.0154	-.0188	-.0159	-.0103	-.0097	-.0081	-.0081	-.0086	-.0616	
247.500		.2465	.0809	-.0148	-.0154	-.0148	-.0086	-.0069	-.0075	-.0075	.0110	-.0700	
270.000	.5282	.2454	.0775	-.0143	9.9990	-.0154	-.0064	-.0058	-.0092	-.0075	.0037	-.0751	
292.500		.2371	.0759	-.0170	-.0012	-.0052	-.0018	-.0125	-.0046	-.0131	.0268	-.0734	
315.000	.5502	.2431	.0786	-.0171	-.0064	.0014	-.0154	-.0159	-.0114	-.0165	.0595	-.0768	
326.000									.0195	.0115	.0482	-.0796	
346.000		.2764	.0972	-.0041	.0087	-.0497	-.0165	-.0171	.0093	.0617	.1107	-.0768	
360.000	.5068	.2524	.0798	-.0131	.0094	-.0120	-.0187	-.0159	-.0035	.0511	.1558	-.0650	

MACH (2) = 4.960 ALPHA (1) = -.280 BETA = .00000 Q(P51) = 3.0700 PO = 90.022 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4546	.2241	.1069	.0716	.0792	.0805	.0590	.0868	.0616	.0691	.0540	-.0039	
14.000		.2266	.0981	.0653	.0628	.0540	.0502	.0565	.0502	.0590	.1321	-.0101	
24.000									.0200	.0301	.0767	-.0114	
45.000	.5013	.2267	.0918	.0540	.0540	.0477	.0414	.0465	.0364	.0427	.0427	-.0114	
67.500		.2253	.0943	.0439	.0464	.0414	.0464	.0427	.0376	.0351	.0225	-.0064	
90.000	.5000	.2241	.0869	.0401	9.9990	.0376	.0389	.0401	.0288	.0326	.0074	-.0039	
112.500		.2279	.0968	.0376	.0364	.0338	.0364	.0414	.0275	.0301	.0175	.0086	
135.000	.4975	.2291	.0918	.0364	.0351	.0275	.0313	.0376	9.9990	.0250	.0112	.0137	
157.500		.2279	.0868	.0326	.0301	.0275	.0275	.0326	.0918	.0238	.0086	.0137	
180.000	.4975	.2203	.0880	.0313	.0250	.0200	.0238	.0288	.0263	.0137	.0112	.0162	
202.500		.2304	.0893	.0288	.0288	.0187	.0212	.0275	.0200	.0187	.0099	.0162	

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A023)

MACH (2) = 4.960 ALPHA (1) = -.280

SECTION (TANK)	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.4912	.2291	.0842	.0238	.0200	.0200	.0187	.0238	.0149	.0124	.0086	.0112	.0112
247.500		.2354	.0842	.0212	.0175	.0162	.0137	.0212	.0099	.0086	.0162	.0023	
270.000	.4975	.2342	.0855	.0225	9.9990	.0112	.0162	.0225	.0099	.0074	.0149	-.0013	
292.500		.2329	.0830	.0187	.0301	.0225	.0212	.0212	.0086	.0086	.0187	-.0001	
315.000	.5252	.2266	.0792	.0200	.0263	.0162	.0162	.0212	.0030	.0086	.0338	-.0064	
326.000									.0175	.0225	.0376	-.0089	
346.000		.2531	.0968	.0250	.0313	.0112	.0112	.0162	.0124	.0225	.0452	-.0089	
360.000	.4546	.2241	.1069	.0716	.0792	.0805	.0590	.0868	.0616	.0691	.0540	-.0039	

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TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA024) (15 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 3.720 BETA = .00000 Q(P51) = 6.8640 PO = 60.035 P = .81000

SECTION (TANK)	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.5939	.3228	.1215	.0054	.0026	-.0266	-.0125	-.0120	-.0058	.0640	.1497	-.0655	
14.000		.2989	.1090	.0009	.0020	-.0328	-.0199	-.0126	-.0109	.0527	.1817	-.0644	
24.000									-.0018	.0583	.1547	-.0813	
45.000	.5434	.2482	.0842	-.0126	-.0019	-.0131	-.0323	-.0278	-.0210	-.0035	.0578	-.0830	
67.500		.2223	.0690	-.0210	-.0176	-.0131	-.0255	-.0261	-.0159	-.0176	.0358	-.0751	
90.000	.4634	.1975	.0533	-.0283	9.9990	-.0261	-.0143	-.0227	-.0193	-.0143	.0054	-.0683	
112.500		.1840	.0409	-.0340	-.0334	-.0233	-.0188	-.0143	-.0148	-.0131	.0111	-.0644	
135.000	.4315	.1795	.0380	-.0362	-.0328	-.0233	-.0148	-.0114	9.9990	-.0081	-.0035	-.0650	
157.500		.1800	.0409	-.0351	-.0328	-.0221	-.0159	-.0143	.0042	-.0092	-.0075	-.0655	
180.000	.4513	.1834	.0448	-.0323	-.0317	-.0250	-.0188	-.0171	-.0154	-.0154	-.0136	-.0689	
202.500		.2144	.0600	-.0255	-.0278	-.0266	-.0199	-.0204	-.0188	-.0176	-.0171	-.0678	
225.000	.5192	.2405	.0764	-.0193	-.0210	-.0227	-.0210	-.0215	-.0204	-.0204	-.0199	-.0683	
247.500		.2707	.0944	-.0058	-.0114	-.0131	-.0114	-.0137	-.0176	-.0171	.0020	-.0706	
270.000	.6049	.2989	.1147	.0054	9.9990	-.0052	-.0013	-.0058	-.0114	-.0183	.0065	-.0740	
292.500		.3136	.1265	.0121	.0211	.0082	.0121	-.0041	-.0002	-.0075	.0352	-.0824	
315.000	.6632	.3248	.1316	.0149	.0195	.0245	.0020	-.0058	-.0058	-.0126	.0866	-.0762	
326.000									.0341	.0189	.0668	-.0813	
346.000		.3549	.1475	.0274	.0246	-.0356	-.0029	-.0114	.0060	.0776	.1316	-.0774	
360.000	.5939	.3228	.1215	.0054	.0026	-.0266	-.0125	-.0120	-.0058	.0640	.1497	-.0655	

MACH (2) = 4.960 ALPHA (1) = 3.730 BETA = .00000 Q(P51) = 3.0700 PO = 90.017 P = .17800

SECTION (TANK)	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.5731	.3123	.1372	.0830	.0817	.0716	.0616	.0603	.0653	.0742	.0767	-.0001	
14.000		.2820	.1195	.0729	.0828	.0515	.0515	.0439	.0515	.0641	.0868	-.0054	
24.000									.0301	.0401	.0842	-.0101	
45.000	.5189	.2392	.1057	.0603	.0565	.0376	.0427	.0364	.0389	.0439	.0364	-.0139	
67.500		.2090	.0868	.0439	.0427	.0275	.0439	.0301	.0376	.0376	.0187	-.0089	
90.000	.4345	.1838	.0716	.0414	9.9990	.0313	.0376	.0288	.0288	.0326	.0061	-.0101	
112.500		.1762	.0679	.0384	.0275	.0238	.0338	.0288	.0288	.0301	.0200	-.0039	
135.000	.4030	.1687	.0641	.0326	.0250	.0200	.0288	.0263	9.9990	.0239	.0112	-.0064	
157.500		.1715	.0617	.0264	.0251	.0214	.0277	.0214	.0895	.0239	.0074	-.0039	
180.000	.4257	.1787	.0666	.0288	.0187	.0182	.0238	.0187	.0263	.0137	.0049	-.0076	
202.500		.2052	.0754	.0288	.0225	.0112	.0187	.0137	.0187	.0182	.0061	-.0064	

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TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A024)

MACH (2) = 4.960 ALPHA (1) = 3.730

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1090	.1620	.2160	.3220	.5180	.6100	.7350	.8500	.8920	.9230	.9540
THETA													
225.000	.5013	.2316	.0905	.0313	.0225	.0137	.0212	.0137	.0162	.0112	.0074	-.0089	
247.500		.2657	.1057	.0338	.0212	.0137	.0187	.0137	.0112	.0086	.0187	-.0064	
270.000	.5907	.2972	.1246	.0414	9.9990	.0175	.0225	.0175	.0175	.0149	.0175	-.0064	
292.500		.3085	.1296	.0427	.0351	.0263	.0263	.0200	.0162	.0162	.0364	-.0089	
315.000	.6487	.3186	.1409	.0477	.0452	.0250	.0313	.0212	.0124	.0212	.0565	-.0089	
326.000									.0364	.0401	.0590	-.0114	
346.000		.3413	.1485	.0515	.0376	.0124	.0175	.0112	.0200	.0364	.1145	-.0139	
360.000	.5731	.3123	.1372	.0630	.0817	.0716	.0616	.0603	.0653	.0742	.0767	-.0001	

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TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA025) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 7.710 BETA = .00000 Q(P51) = 6.6650 PO = 60.036 P = .81000

SECTION (1) TANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.7001	.3943	.1649	.0330	.0212	-.0142	.0020	-.0007	.0003	.0635	.1845	-.0689		
14.000		.3504	.1452	.0206	.0127	-.0148	-.0046	-.0052	-.0035	.0646	.1631	-.0757		
24.000										.0087	.0702	.1851	-.0858	
45.000	.5356	.2405	.0849	-.0108	-.0024	-.0480	-.0469	-.0492	-.0379	-.0165	-.0126	-.0864		
67.500		.1913	.0504	-.0289	-.0250	-.0328	-.0458	-.0481	-.0452	-.0238	-.0052	-.0779		
90.000	.3812	.1479	.0228	-.0407	9.9990	-.0424	-.0441	-.0424	-.0317	-.0261	.0020	-.0712		
112.500		.1237	.0071	-.0469	-.0435	-.0379	-.0233	-.0227	-.0216	-.0199	-.0002	-.0650		
135.000	.3322	.1169	.0054	-.0497	-.0419	-.0312	-.0154	-.0081	9.9990	-.0092	-.0069	-.0712		
157.500		.1203	.0059	-.0497	-.0430	-.0362	-.0334	-.0407	-.0058	-.0244	-.0221	-.0706		
180.000	.3699	.1339	.0173	-.0446	-.0452	-.0396	-.0339	-.0368	-.0311	-.0317	-.0306	-.0740		
202.500		.1812	.0386	-.0345	-.0407	-.0468	-.0385	-.0430	-.0441	-.0424	-.0424	-.0751		
225.000	.4984	.2313	.0741	-.0159	-.0250	-.0374	-.0357	-.0458	-.0509	-.0503	-.0509	-.0751		
247.500		.2950	.1124	.0059	-.0041	-.0148	-.0171	-.0255	-.0323	-.0317	-.0081	-.0728		
270.000	.6770	.3569	.1530	.0307	9.9990	.0093	.0093	-.0024	-.0075	-.0052	.0155	-.0802		
292.500		.3953	.1845	.0482	.0426	.0290	.0290	.0121	.0155	.0082	.0578	-.0941		
315.000	.7818	.4172	.1981	.0572	.0476	.0521	.0262	.0166	.0206	.0104	.1293	-.0841		
325.000									.0695	.0527	.0961	-.0779		
346.000		.4370	.2026	.0685	.0493	-.0171	.0183	.0042	.0285	.1017	.1812	-.0824		
360.000	.7001	.3943	.1649	.0330	.0212	-.0142	.0020	-.0007	.0003	.0635	.1845	-.0689		

MACH (2) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(P51) = 3.0700 PO = 90.016 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.6678	.3906	.1801	.0894	.0793	.0842	.0629	.0604	.0654	.0818	.1346	.0023		
14.000		.3453	.1537	.0742	.0692	.0440	.0541	.0452	.0528	.0654	.1183	-.0064		
24.000									.0376	.0490	.1233	-.0089		
45.000	.5214	.2406	.1057	.0553	.0515	.0314	.0314	.0276	.0364	.0364	.0112	-.0114		
67.500		.1863	.0729	.0389	.0351	.0288	.0351	.0225	.0288	.0263	-.0026	-.0089		
90.000	.3602	.1472	.0553	.0326	9.9990	.0238	.0301	.0225	.0225	.0238	-.0051	-.0089		
112.500		.1233	.0452	.0275	.0250	.0162	.0275	.0225	.0212	.0238	.0086	-.0013		
135.000	.3098	.1170	.0376	.0238	.0162	.0149	.0212	.0200	9.9990	.0162	.0061	-.0064		
157.500		.1183	.0376	.0212	.0162	.0149	.0200	.0137	.0905	.0149	-.0013	-.0089		
180.000	.3539	.1346	.0490	.0212	.0149	.0086	.0187	.0124	.0212	.0074	-.0013	-.0089		
202.500		.1775	.0578	.0225	.0137	.0099	.0112	.0086	.0137	.0099	-.0001	-.0076		

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TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A025)

MACH (2) = 4.980 ALPHA (1) = 7.750

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.8100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.4849	.2266	.0880	.0263	.0187	.0086	.0149	.0061	.0086	.0049	-.0001	-.0101	
247.500		.2883	.1208	.0389	.0212	.0112	.0175	.0086	.0086	.0036	.0187	-.0026	
270.000	.6751	.3501	.1548	.0553	9.9990	.0250	.0263	.0225	.0175	.0175	.0313	-.0064	
292.500		.3942	.1850	.0691	.0553	.0414	.0427	.0326	.0289	.0275	.0565	-.0076	
315.000	.7772	.4168	.2039	.0805	.0691	.0527	.0515	.0364	.0289	.0427	.0956	-.0127	
326.000									.0603	.0590	.0968	-.0114	
346.000		.4257	.2115	.0880	.0616	.0351	.0301	.0275	.0477	.0666	.1499	-.0190	
360.000	.6676	.3906	.1801	.0894	.0793	.0642	.0629	.0604	.0654	.0818	.1346	.0023	

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TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 51

MSFC 996 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA026) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 12.520 BETA = .00000 Q(PSI) = 6.8630 PO = 60.026 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8071	.4671	.2140	.0618	.0449	.0082	.0240	.0212	.0280	.1328	.2093	-.0543
14.000		.3927	.1751	.0375	.0251	.0274	.0156	.0127	.0060	.0934	.2123	-.0435
24.000									.0223	.1024	.2354	-.0875
45.000	.5291	.2405	.0815	-.0120	-.0058	-.0520	-.0610	-.0593	-.0136	-.0103	-.0295	-.0948
67.500		.1621	.0353	-.0362	-.0384	-.0525	-.0593	-.0632	-.0514	-.0345	-.1323	-.0931
90.000	.3092	.1051	.0003	-.0514	9.9990	-.0514	-.0565	-.0514	-.0492	-.0300	-.0227	-.0836
112.500		.0759	-.0182	-.0587	-.0520	-.0548	-.0398	-.0508	-.0486	-.0480	-.0312	-.0712
135.000	.2493	.0702	-.0210	-.0593	-.0509	-.0334	-.0182	-.0233	9.9990	-.0250	-.0238	-.0790
157.500		.0714	-.0210	-.0610	-.0537	-.0587	-.0621	-.0548	-.0294	-.0570	-.0587	-.0773
180.000	.2978	.0905	-.0091	-.0576	-.0587	-.0565	-.0565	-.0593	-.0570	-.0599	-.0616	-.0779
202.500		.1468	.0189	-.0452	-.0543	-.0616	-.0599	-.0610	-.0582	-.0565	-.0576	-.0774
225.000	.4727	.2185	.0669	-.0204	-.0322	-.0503	-.0531	-.0610	-.0549	-.0638	-.0633	-.0882
247.500		.3121	.1249	.0144	-.0018	-.0170	-.0204	-.0284	-.0356	-.0345	-.0035	-.0768
270.000	.7387	.4084	.1892	.0539	9.9990	.0240	.0212	.0094	.0043	.0071	.0342	-.0830
292.500		.4750	.2444	.0872	.0764	.0567	.0539	.0404	.0449	.0359	.0939	-.0824
315.000	.8967	.5164	.2736	.1017	.0842	.0982	.0566	.0493	.0516	.0420	.2093	-.0779
326.000									.1176	.0904	.1614	-.0672
346.000		.5119	.2612	.1068	.0826	.0048	.0414	.0262	.0690	.1423	.2685	-.0734
350.000	.8071	.4671	.2140	.0618	.0449	.0082	.0240	.0212	.0280	.1328	.2093	-.0543

MACH (2) = 4.960 ALPHA (1) = 12.450 BETA = .00000 Q(PSI) = 3.0700 PO = 90.031 P = .17800

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.343	.4584	.2127	.1006	.0880	.0767	.0704	.0691	.0805	.1157	.1585	.0137
14.000		.3828	.1750	.0830	.0653	.0679	.0603	.0565	.0628	.0868	.1586	.0074
24.000									.0502	.0767	.1813	-.0139
45.000	.5176	.2316	.1069	.0540	.0527	.0301	.0326	.0313	.0401	.0351	.0111	-.0139
67.500		.1598	.0716	.0338	.0338	.0263	.0338	.0238	.0288	.0225	-.0076	-.0152
90.000	.2997	.1120	.0464	.0288	9.9990	.0187	.0288	.0212	.0175	.0200	-.0127	-.0164
112.500		.0892	.0376	.0250	.0237	.0187	.0237	.0212	.0187	.0187	.0036	-.0013
135.000	.2391	.0830	.0364	.0212	.0175	.0049	.0212	.0225	9.9990	.0162	.0036	-.0064
157.500		.0842	.0351	.0174	.0187	.0086	.0162	.0061	.1081	.0111	-.0039	-.0101
180.000	.2920	.1066	.0351	.0175	.0149	.0099	.0124	.0099	.0187	.0023	-.0051	-.0076
202.500		.1485	.0490	.0175	.0124	.0061	.0074	.0061	.0086	.0061	-.0039	-.0076

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A026)

MACH (2) = 4.960 ALPHA (1) = 12.450

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1090	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4710	.2153	.0855	.0263	.0162	.0086	.0099	.0049	.0061	-.0013	-.0064	-.0114
247.500		.3071	.1346	.0464	.0288	.0174	.0162	.0149	.0099	.0086	.0263	-.0026
270.000	.7369	.3992	.1901	.0742	9.9990	.0364	.0376	.0351	.0288	.0288	.0502	-.0076
292.500		.4735	.2430	.1006	.0830	.0590	.0641	.0540	.0540	.0490	.0943	-.0064
315.000	.8916	.5074	.2631	.1132	.0905	.0867	.0729	.0628	.0640	.0615	.1371	-.0026
326.000									.1031	.1094	.1364	-.0051
346.000		.4887	.2657	.1195	.0956	.0376	.0502	.0452	.0805	.0994	.2480	-.0177
360.000	.7643	.4584	.2127	.1006	.0880	.0767	.0704	.0691	.0805	.1157	.1585	.0137

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TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A027) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 16.540 BETA = .00000 Q(PSI) = 6.8650 PO = 60.037 P = .81000

SECTION (1) TANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.8888	.5516	.2799	.1080	.0776	.0308	.0505	.0607	.0934	.2106	.2645	-.0340	
14.000		.4420	.2121	.0640	.0488	.0578	.0482	.0386	.0499	.1721	.2826	-.0261	
24.000									.0634	.1755	.3064	-.0847	
45.000	.5215	.2330	.0848	-.0025	-.0035	-.0559	-.0633	-.0582	-.0030	-.0199	-.0306	-.0909	
67.500		.1344	.0206	-.0424	-.0469	-.0537	-.0644	-.0650	-.0520	-.0413	-.0486	-.0937	
90.000	.2427	.0373	-.0205	-.0584	9.9990	-.0588	-.0639	-.0605	-.0588	-.0453	-.0300	-.0852	
112.500		.0380	-.0340	-.0644	-.0610	-.0565	-.0616	-.0605	-.0621	-.0599	-.0447	-.0678	
135.000	.1812	.0347	-.0334	-.0638	-.0548	-.0384	-.0306	-.0362	9.9990	-.0475	-.0469	-.0774	
157.500		.0359	-.0362	-.0655	-.0621	-.0700	-.0678	-.0632	-.0153	-.0638	-.0666	-.0768	
180.000	.2324	.0488	-.0238	-.0650	-.0678	-.0644	-.0678	-.0655	-.0592	-.0633	-.0650	-.0774	
202.500		.1193	.0065	-.0520	-.0627	-.0689	-.0666	-.0638	-.0610	-.0610	-.0650	-.0785	
225.000	.4479	.2074	.0621	-.0205	-.0369	-.0453	-.0582	-.0633	-.0644	-.0673	-.0655	-.0785	
247.500		.3335	.1435	.0280	.0065	-.0086	-.0131	-.0221	-.0244	-.0260	.0110	-.0700	
270.000	.8054	.4695	.2364	.0859	9.9990	.0504	.0459	.0347	.0324	.0341	.0724	-.0779	
292.500		.5705	.3153	.1366	.1237	.1012	.0921	.0848	.0910	.0769	.1486	-.0694	
315.000	1.0133	.6308	.3815	.1614	.1614	.1378	.1090	.1017	.1017	.0921	.3265	-.0638	
326.000									.1903	.1406	.2561	-.0531	
346.000		.5823	.3231	.1490	.1226	.0657	.0628	.0500	.1541	.1992	.3389	-.0543	
360.000	.8888	.5516	.2799	.1080	.0776	.0308	.0505	.0607	.0934	.2106	.2645	-.0340	

MACH (2) = 4.960 ALPHA (1) = 16.450 BETA = .00000 Q(PSI) = 3.0700 PO = 90.027 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.8452	.5443	.2746	.1347	.1170	.1019	.0931	.0969	.1334	.1876	.2518	.0389	
14.000		.4321	.2065	.1019	.0780	.0931	.0805	.0742	.0944	.1448	.2391	.0212	
24.000									.0868	.1308	.2909	-.0101	
45.000	.5137	.2354	.1107	.0628	.0590	.0502	.0364	.0389	.0502	.0464	.0250	-.0139	
67.500		.1397	.0679	.0389	.0376	.0376	.0401	.0288	.0351	.0288	-.0101	-.0152	
90.000	.2379	.0880	.0452	.0351	9.9990	.0364	.0326	.0275	.0263	.0275	-.0152	-.0152	
112.500		.0641	.0326	.0288	.0263	.0238	.0263	.0238	.0238	.0238	.0049	.0311	
135.000	.1774	.0616	.0326	.0250	.0212	.0288	.0250	.0263	9.9990	.0187	.0011	-.0051	
157.500		.0603	.0288	.0212	.0212	.0238	.0187	.0162	.1208	.0162	-.0064	-.0101	
180.000	.2328	.0716	.0301	.0187	.0112	.0212	.0112	.0099	.0212	.0036	-.0051	-.0089	
202.500		.1246	.0452	.0187	.0124	.0124	.0074	.0061	.0112	.0049	-.0089	-.0089	

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TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A027)

MACH (2) = 4.960 ALPHA (1) = 16.450

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.4521	.2089	.0829	.0313	.0200	.0200	.0111	.0099	.0099	.0049	-.0039	-.0177	
247.500		.3287	.1548	.0578	.0364	.0288	.0238	.0225	.0212	.0162	.0401	.0049	
270.000	.8046	.4646	.2391	.1044	9.9990	.0653	.0640	.0590	.0578	.0565	.0880	.0023	
292.500		.5680	.3110	.1447	.1220	.1082	.1006	.0991	.1006	.0968	.1599	-.0013	
315.000	1.0153	.6235	.3513	.1649	.1422	.1296	.1233	.1132	.1246	.1094	.2366	.0049	
326.000									.1737	.1824	.2203	.0061	
346.000		.5643	.3249	.1573	.1334	.1069	.0716	.0729	.1447	.1661	.3525	-.0013	
360.000	.8452	.5443	.2746	.1347	.1170	.1019	.0931	.0969	.1334	.1876	.2518	.0389	

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TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T1

(R1A028) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(PS1) = 6.8640 PO = 60.029 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.9300	.6407	.3431	.1531	.1221	.0466	.0956	.1108	.1632	.2833	.3327	.0054
14.000		.4890	.2472	.0911	.0691	.0815	.0776	.0810	.0888	.2360	.3648	-.0176
24.000									.1175	.2944	.4291	-.0841
45.000	.4989	.2252	.0860	-.0069	-.0063	-.0593	-.0649	-.0582	-.0041	-.0238	.0279	-.0796
67.500		.1045	.0054	-.0486	-.0554	-.0706	-.0695	-.0689	-.0571	-.0537	-.0768	-.0959
90.000	.1806	.0307	-.0368	-.0655	9.9990	-.0695	-.0683	-.0667	-.0627	-.0537	-.0599	-.0931
112.500		.0043	-.0508	-.0700	-.0700	-.0649	-.0717	-.0583	-.0683	-.0610	-.0452	-.0683
135.000	.1259	.0049	-.0497	-.0700	-.0548	-.0497	-.0413	-.0582	9.9990	-.0521	-.0605	-.0785
157.500		.0026	-.0514	-.0706	-.0734	-.0717	-.0723	-.0678	-.0592	-.0689	-.0700	-.0807
180.000	.1710	.0223	-.0446	-.0734	-.0751	-.0717	-.0711	-.0672	-.0666	-.0689	-.0689	-.0819
202.500		.0860	-.0131	-.0610	-.0728	-.0756	-.0705	-.0683	-.0666	-.0666	-.0678	-.0835
225.000	.4189	.1942	.0550	-.0232	-.0413	-.0582	-.0587	-.0649	-.0666	-.0689	-.0638	-.0841
247.500		.3536	.1575	.0409	.0165	-.0007	-.0030	-.0103	-.0143	-.0125	.0341	-.0717
270.000	.8635	.5322	.2871	.1214	9.9990	.0814	.0781	.0690	.0685	.0702	.1231	-.0734
292.500		.6764	.3964	.1936	.1817	.1490	.1490	.1434	.1479	.1344	.2212	-.0599
315.000	1.1452	.7525	.4572	.2302	.2414	.1998	.1761	.1693	.1603	.1575	.4741	-.0497
328.000									.2820	.2020	.3774	-.0407
346.000		.6651	.3817	.1992	.1767	.1045	.1006	.0861	.2375	.2719	.4180	-.0379
360.000	.9300	.6407	.3431	.1531	.1221	.0466	.0956	.1108	.1532	.2833	.3327	.0054

MACH (2) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(PS1) = 3.0700 PO = 90.014 P = .17800

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8389	.5986	.3364	.1650	.1448	.1045	.1158	.1247	.2154	.2558	.3576	.0616
14.000		.4951	.2582	.1221	.1019	.1044	.0994	.1007	.1410	.2758	.3085	.0288
24.000									.1460	.2379	.4005	-.0076
45.000	.4761	.2330	.1120	.0616	.0591	.0440	.0364	.0377	.0515	.0528	.0553	.0036
67.500		.1233	.0616	.0377	.0377	.0326	.0377	.0288	.0326	.0253	-.0051	-.0127
90.000	.1762	.0679	.0414	.0339	9.9990	.0263	.0339	.0288	.0263	.0238	-.0127	-.0139
112.500		.0477	.0250	.0250	.0250	.0200	.0250	.0238	.0225	.0187	.0124	.0112
135.000	.1233	.0464	.0225	.0225	.0212	.0175	.0238	.0225	9.9990	.0124	.0061	-.0013
157.500		.0452	.0276	.0213	.0213	.0137	.0187	.0175	.0490	.0112	-.0013	-.0039
180.000	.1863	.0553	.0238	.0162	.0124	.0112	.0112	.0112	.0137	-.0001	-.0026	-.0039
202.500		.1094	.0376	.0175	.0149	.0124	.0085	.0086	.0086	.0061	-.0064	-.0051

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A028)

MACH (2) = 4.960 ALPHA (1) = 20.490

SECTION (1) TANK	DEPENDENT VARIABLE CP											
X/LB	.0350	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4370	.2064	.0830	.0338	.0225	.0187	.0137	.0124	.0124	.0049	.0023	-.0089
247.500		.3539	.1724	.0729	.0490	.0364	.0376	.0364	.0351	.0326	.0742	.0149
270.000	.8628	.6252	.2858	.1372	9.9990	.0893	.0994	.0981	.1019	.0981	.1510	.0086
292.500		.6587	.3841	.1989	.1737	.1573	.1611	.1649	.1699	.1636	.2606	.0137
315.000	1.1110	.7306	.4408	.2291	.2064	.1951	.2039	.1976	.2014	.1838	.3992	.0112
325.000									.2921	.2846	.3501	.0187
346.000		.6310	.3765	.2027	.1775	.1498	.1183	.1157	.2279	.2241	.4294	.0011
360.000	.8389	.6986	.3364	.1650	.1448	.1045	.1158	.1247	.2154	.2558	.3576	.0616

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA029) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(PSI) = 6.8650 PO = 60.038 P = .01000

SECTION (1) TANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.9722	.7314	.4169	.2016	.1728	.0714	.1503	.1785	.2788	.3532	.4077	.0707
14.000		.5454	.2935	.1244	.1012	.1407	.1136	.1390	.1599	.3087	.4206	-.0092
24.000									.2003	.3919	.6099	-.0802
45.000	.4775	.2229	.0899	-.0019	.0020	-.0531	-.0588	-.0469	.0121	-.0041	.0259	-.0678
67.500		.0831	-.0019	-.0481	-.0526	-.0689	-.0655	-.0633	-.0610	-.0616	-.0813	-.0931
90.000	.1293	.0054	-.0452	-.0650	9.9990	-.0683	-.0655	-.0638	-.0616	-.0549	-.0854	-.0892
112.500		-.0182	-.0559	-.0678	-.0695	-.0655	-.0712	-.0651	-.0678	-.0621	-.0526	-.0633
135.000	.0854	-.0103	-.0520	-.0678	-.0497	-.0655	-.0571	-.0621	9.9990	-.0650	-.0661	-.0802
157.500		-.0148	-.0554	-.0700	-.0706	-.0723	-.0700	-.0638	-.0486	-.0632	-.0678	-.0819
180.000	.1214	-.0030	-.0543	-.0734	-.0740	-.0683	-.0683	-.0616	-.0610	-.0638	-.0638	-.0836
202.500		.0634	-.0233	-.0621	-.0728	-.0695	-.0678	-.0633	-.0633	-.0627	-.0644	-.0807
225.000	.3998	.1845	.0527	-.0199	-.0396	-.0548	-.0554	-.0576	-.0605	-.0605	-.0559	-.0807
247.500		.3722	.1795	.0583	.0335	.0166	.0155	.0116	.0082	.0099	.0657	-.0678
270.000	.9204	.5970	.3423	.1648	9.9990	.1226	.1231	.1186	.1192	.1203	.1862	-.0667
292.500		.7795	.4882	.2623	.2533	.2206	.2217	.2217	.2212	.2121	.3175	-.0452
315.000	1.2714	.8783	.5668	.3094	.3303	.2835	.2610	.2599	.2334	.2424	.6420	-.0300
326.000									.3924	.2786	.5175	-.0233
346.000		.7344	.4460	.2589	.2381	.1440	.1451	.1412	.3254	.3344	.4865	-.0171
360.000	.9722	.7314	.4169	.2016	.1728	.0714	.1503	.1785	.2788	.3532	.4077	.0707

MACH (2) = 4.960 ALPHA (1) = 24.510 BETA = .00000 Q(PSI) = 3.0700 PO = 90.016 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.9032	.7310	.4171	.2116	.1953	.1347	.1574	.1801	.3037	.3402	.4572	.0868
14.000		.5507	.2961	.1473	.1209	.1436	.1347	.1410	.2116	.3793	.4005	.0515
24.000									.2329	.3891	.5214	.0049
45.000	.4786	.2343	.1221	.0692	.0654	.0478	.0440	.0440	.0692	.0755	.0716	.0162
67.500		.1132	.0603	.0452	.0389	.0389	.0414	.0338	.0351	.0338	-.0051	-.0114
90.000	.1409	.0603	.0427	.0351	9.9990	.0288	.0364	.0326	.0275	.0275	-.0127	-.0101
112.500		.0427	.0301	.0288	.0301	.0225	.0301	.0288	.0288	.0250	.0149	.0162
135.000	.0893	.0439	.0301	.0263	.0238	.0200	.0238	.0238	9.9990	.0162	.0049	.0011
157.500		.0389	.0301	.0225	.0225	.0162	.0200	.0212	.0515	.0137	-.0039	-.0026
180.000	.1447	.0414	.0212	.0187	.0112	.0137	.0137	.0137	.0137	.0011	-.0026	-.0039
202.500		.0918	.0288	.0187	.0112	.0137	.0074	.0086	.0061	.0061	-.0064	-.0039

REPRODUCIBILITY OF THE
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MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A029)

MACH (2) = 4.860 ALPHA (1) = 24.310

SECTION (TANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8620	.9230	.9540
THETA												
225.000	.4206	.2014	.0855	.0364	.0225	.0175	.0187	.0112	.0137	.0088	.0086	-.0039
247.500		.3828	.1951	.0830	.0616	.0553	.0553	.0865	.0540	.0540	.1006	.0212
270.000	.9435	.5995	.3425	.1787	9.9990	.1296	.1422	.1435	.1498	.1472	.2178	.0137
292.500		.7860	.4887	.2694	.2379	.2266	.2417	.2455	.2519	.2417	.3614	.0238
315.000	1.2836	.8918	.5660	.3110	.2883	.2800	.3009	.2909	.2946	.2694	.5920	.0263
326.000									.4231	.3841	.4924	.0376
346.000		.7003	.4307	.2543	.2216	.2001	.1674	.1573	.3072	.3009	.5454	.0112
360.000	.9032	.7310	.4171	.2116	.1953	.1347	.1574	.1801	.3937	.3402	.4572	.0868

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA030) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(P51) = 6.8650 PO = 60.036 P = .91000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.9902	.8199	.4919	.2608	.2281	.1091	.2112	.2517	.3741	.4214	.4860	.1045
14.000		.5944	.3369	.1632	.1390	.1993	.1593	.1959	.2641	.4248	.5089	.0009
24.000									.2865	.4981	.6815	-.0774
45.000	.4580	.2157	.0928	.0020	.0077	-.0531	-.0554	-.0520	.0533	.0268	.0081	-.0509
67.500		.0617	-.0148	-.0537	-.0559	-.0723	-.0689	-.0650	-.0638	-.0644	-.0864	-.0926
90.000	.0809	-.0204	-.0571	-.0695	9.9990	-.0717	-.0706	-.0706	-.0695	-.0667	-.0914	-.0920
112.500		-.0374	-.0644	-.0728	-.0717	-.0745	-.0751	-.0723	-.0734	-.0678	-.0593	-.0638
135.000	.0526	-.0255	-.0588	-.0700	-.0633	-.0689	-.0678	-.0734	9.9990	-.0723	-.0711	-.0830
157.500		-.0340	-.0633	-.0745	-.0751	-.0728	-.0717	-.0706	-.0531	-.0678	-.0723	-.0875
180.000	.0739	-.0312	-.0667	-.0779	-.0785	-.0762	-.0751	-.0706	-.0689	-.0661	-.0689	-.0681
202.500		.0375	-.0362	-.0672	-.0751	-.0762	-.0751	-.0706	-.0678	-.0683	-.0667	-.0699
225.000	.3631	.1727	.0499	-.0188	-.0374	-.0492	-.0509	-.0554	-.0559	-.0537	-.0475	-.0875
247.500		.3915	.1959	.0753	.0516	.0392	.0359	.0319	.0313	.0364	.1040	-.0615
270.000	.9760	.6643	.3977	.2089	9.9990	.1694	.1740	.1683	.1751	.1751	.2664	-.0587
292.500		.8871	.5880	.3417	.3400	.3096	.3147	.3074	.2995	.2978	.4274	-.0289
315.000	1.3959	1.0117	.6877	.4020	.4375	.3908	.3660	.3598	.3153	.3896	.8142	-.0132
326.000									.5102	.3611	.6843	-.0030
346.000		.7942	.5079	.3215	.3107	.1964	.1738	.1913	.4048	.4020	.5598	.0082
360.000	.9902	.8199	.4919	.2608	.2281	.1091	.2112	.2517	.3741	.4214	.4860	.1045

MACH (2) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(P51) = 3.0700 PO = 90.021 P = .17800

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8830	.8001	.4825	.2569	.2305	.1801	.1889	.2405	.3691	.4107	.5643	.1145
14.000		.5995	.3400	.1762	.1611	.1787	.1724	.1888	.2959	.4559	.4861	.0716
24.000									.3261	.5101	.6499	.0137
45.000	.4395	.2279	.1233	.0716	.0691	.0540	.0439	.0464	.0994	.1044	.0893	.0275
67.500		.0968	.0590	.0439	.0389	.0351	.0414	.0326	.0364	.0338	-.0051	-.0064
90.000	.1006	.0490	.0326	.0301	9.9990	.0275	.0338	.0263	.0225	.0250	-.0164	-.0089
112.500		.0364	.0263	.0263	.0275	.0263	.0288	.0275	.0212	.0250	.0124	.0212
135.000	.0616	.0377	.0288	.0238	.0238	.0175	.0238	.0225	9.9990	.0175	.0011	-.0013
157.500		.0288	.0212	.0175	.0162	.0137	.0187	.0149	.0590	.0137	-.0039	-.0051
180.000	.1120	.0301	.0200	.0162	.0099	.0099	.0124	.0112	.0149	.0038	-.0026	-.0051
202.500		.0767	.0301	.0162	.0112	.0086	.0099	.0074	.0086	.0074	-.0051	-.0064

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA030)

MACH (2) = 4.980 ALPHA (1) = 7.750

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.3992	.1901	.0792	.0326	.0212	.0225	.0200	.0175	.0137	.0137	.0086	-.0089	
247.500		.3992	.2077	.0994	.0742	.0653	.0754	.0704	.0751	.0792	.1334	.0275	
270.000	.9939	.6597	.3967	.2153	9.9990	.1839	.1976	.1951	.2027	.2052	.2883	.0162	
292.500		.8855	.5768	.3350	.3098	.3199	.3274	.3362	.3375	.3211	.4698	.0376	
315.000	1.4021	.9989	.6688	.3929	.3778	.4055	.4068	.3979	.3841	.3488	.7948	.0351	
326.000													
346.000		.7545	.4937	.3110	.2846	.2568	.1951	.1999	.3966	.4761	.6613	.0515	
360.000	.8830	.8001	.4825	.2569	.2305	.1801	.1899	.2405	.3691	.4107	.5643	.1145	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T1

(RIAD31) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = -8.360 BETA = .00000 Q(P(SI)) = 10.247 PO = 28.005 P = 3.8150

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3622	.1262	-.0438	-.1593	-.0955	-.0465	-.0295	-.0148	-.0035	.1137	.4034	-.1761
14.000		.1265	-.0494	-.1583	-.0965	-.1519	-.0336	-.0230	-.0091	.1016	.3060	-.1941
24.000									-.0119	.1313	.2565	-.2099
45.000	.4459	.1409	-.0363	-.1547	-.1136	-.0200	-.0645	-.0381	-.0397	.0715	.1757	-.2093
67.500		.1981	-.0027	-.1324	-.1124	-.0619	-.0623	-.0653	-.0547	-.0144	.0942	-.1986
90.000	.5502	.2572	.0410	-.1065	9.9990	-.0892	-.0661	-.0673	-.0831	-.0752	-.0232	-.1970
112.500		.3189	.0842	-.0750	-.0535	-.0765	-.0791	-.0596	-.0641	-.0637	-.0418	-.1946
135.000	.7232	.3939	.1319	-.0488	-.0231	-.0348	-.0390	-.0477	9.9990	-.0345	-.0353	-.1881
157.500		.4219	.1528	-.0234	.0014	-.0219	-.0095	-.0249	-.0110	-.0193	-.0164	-.1956
180.000	.7795	.4141	.1563	-.0106	-.0027	.0104	.0085	-.0072	-.0087	-.0031	-.0035	-.2002
202.500		.4100	.1481	-.0156	-.0156	-.0008	-.0231	-.0276	-.0208	-.0103	-.0148	-.1994
225.000	.7029	.3745	.1300	-.0291	-.0273	-.0276	-.0386	-.0510	-.0446	-.0299	-.0436	-.1902
247.500		.3070	.0832	-.0725	-.0540	-.0639	-.0672	-.0657	-.0676	-.0593	-.0433	-.1973
270.000	.5604	.2542	.0395	-.1003	9.9990	-.0757	-.0754	-.0580	-.0765	-.0686	-.0236	-.2017
292.500		.1945	-.0050	-.1261	-.1099	-.0616	-.0571	-.0563	-.0574	-.0348	.0916	-.1889
315.000	.4541	.1620	-.0266	-.1464	-.1064	-.0368	-.0652	-.0413	-.0402	.0361	.1572	-.1862
326.000									-.0360	.0485	.1783	-.1914
346.000		.1615	-.0323	-.1521	-.1011	-.1332	-.0266	-.0198	.0349	.1154	.2408	-.1887
360.000	.3622	.1262	-.0438	-.1593	-.0955	-.0465	-.0295	-.0148	-.0035	.1137	.4034	-.1761

MACH (2) = 3.480 ALPHA (1) = -8.360 BETA = .00000 Q(P(SI)) = 6.8650 PO = 60.039 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3034	.1165	.0003	-.0469	-.0339	-.0317	-.0306	-.0187	-.0148	.0139	.1936	-.0700
14.000		.1181	.0037	-.0458	-.0340	-.0379	-.0340	-.0238	-.0188	.0071	.1378	-.0796
24.000									-.0131	.0195	.0792	-.0819
45.000	.3772	.1428	.0161	-.0452	-.0340	-.0295	-.0312	-.0323	-.0272	-.0204	.0211	-.0819
67.500		.1857	.0459	-.0323	-.0368	-.0300	-.0312	-.0328	-.0266	-.0261	-.0188	-.0745
90.000	.5198	.2402	.0768	-.0143	9.9990	-.0318	-.0340	-.0385	-.0312	-.0250	-.0199	-.0661
112.500		.3062	.1175	.0099	.0003	-.0114	-.0188	-.0221	-.0266	-.0266	-.0064	-.0565
135.000	.7040	.3720	.1585	.0312	.0188	.0098	.0070	.0019	9.9990	-.0025	-.0002	-.0548
157.500		.4110	.1879	.0504	.0358	.0262	.0240	.0223	.0488	.0178	.0189	-.0576
180.000	.7705	.4099	.1981	.0578	.0431	.0335	.0318	.0302	.0279	.0257	.0251	-.0576
202.500		.4127	.1857	.0488	-.0341	.0290	.0240	.0211	.0189	.0189	.0189	-.0582

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A031)

MACH (2) = 3.480 ALPHA (1) = -8.360

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6809	.3648	.1620	.0341	.0211	.0121	.0099	.0042	-.0002	-.0013	-.0013	-.0559
247.500		.3079	.1243	.0127	.0054	-.0081	-.0148	-.0182	-.0210	-.0244	-.0114	-.0565
270.000	.5271	.2469	.0842	-.0098	9.9990	-.0301	-.0334	-.0346	-.0301	-.0256	-.0188	-.0633
292.500		.1919	.0482	-.0300	-.0250	-.0221	-.0306	-.0323	-.0278	-.0266	-.0216	-.0740
315.000	.3862	.1468	.0223	-.0435	-.0328	-.0233	-.0244	-.0295	-.0278	-.0221	.0228	-.0768
326.000									-.0188	-.0109	.0629	-.0779
346.000		.1357	.0156	-.0463	-.0333	-.0446	-.0271	-.0192	-.0085	.0416	.1079	-.0796
360.000	.3034	.1165	.0003	-.0469	-.0339	-.0317	-.0306	-.0187	-.0148	.0139	.1936	-.0700

MACH (3) = 4.960 ALPHA (1) = -8.290 BETA = .00000 Q(PSI) = 3.0700 P0 = 90.022 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2833	.1322	.0755	.0603	.0578	.0641	.0528	.0603	.0528	.0566	.0326	.0074
14.000		.1334	.0578	.0540	.0427	.0364	.0427	.0427	.0351	.0427	.0578	.0061
24.000									.0112	.0124	.0137	.0049
45.000	.3627	.1548	.0729	.0490	.0464	.0384	.0401	.0401	.0351	.0376	.0061	.0049
67.500		.1888	.0742	.0389	.0351	.0338	.0401	.0338	.0326	.0326	-.0001	.0023
90.000	.4975	.2367	.0994	.0464	9.9990	.0263	.0364	.0326	.0275	.0301	.0036	.0074
112.500		.2972	.1296	.0515	.0439	.0288	.0364	.0351	.0263	.0275	.0149	.0137
135.000	.6676	.3526	.1611	.0628	.0502	.0301	.0401	.0389	9.9990	.0301	.0200	.0149
157.500		.3904	.1863	.0729	.0565	.0414	.0464	.0439	.0541	.0364	.0288	.0137
180.000	.7293	.3904	.1913	.0754	.0565	.0439	.0464	.0439	.0401	.0354	.0351	.0149
202.500		.3929	.1863	.0704	.0515	.0351	.0414	.0389	.0338	.0326	.0313	.0124
225.000	.6524	.3539	.1611	.0590	.0439	.0313	.0313	.0301	.0238	.0225	.0200	.0124
247.500		.3022	.1321	.0452	.0326	.0225	.0212	.0212	.0124	.0124	.0112	.0061
270.000	.5113	.2455	.1006	.0301	9.9990	.0049	.0112	.0137	.0085	.0074	.0124	.0074
292.500		.1939	.0716	.0162	.0238	.0112	.0112	.0137	.0099	.0061	.0112	.0112
315.000	.3652	.1535	.0515	.0124	.0175	.0023	.0112	.0149	.0061	.0074	.0099	.0099
326.000									.0112	.0124	.0085	.0023
346.000		.1409	.0477	.0112	.0149	-.0001	.0099	.0124	.0074	.0124	.0250	.0049
360.000	.2833	.1322	.0755	.0603	.0578	.0641	.0528	.0603	.0528	.0566	.0326	.0074

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA032) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.680 ALPHA (1) = -4.330 BETA = .00000 Q(P91) = 10.281 PO = 28.005 P = 3.8300

SECTION (1)ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.4252	.2127	-.0045	-.1303	-.0893	-.0705	-.0350	-.0087	.0000	.1701	.3617	-.1756		
14.000		.2118	.0003	-.1291	-.0858	-.1738	-.0331	-.0162	.0058	.1749	.2839	-.2181		
24.000									.0031	.1354	.2668	-.2189		
45.000	.5132	.2132	.0112	-.1245	-.0662	-.0113	-.0587	-.0169	-.0124	.0740	.1801	-.2228		
67.500		.2380	.0360	-.1148	-.0758	-.0146	-.0495	-.0386	-.0213	-.0101	.1267	-.1934		
90.000	.5714	.2648	.0534	-.0943	9.9990	-.0415	-.0076	-.0366	-.0340	-.0208	.0258	-.1856		
112.500		.2922	.0669	-.0863	-.0554	-.0505	-.0415	-.0234	-.0392	-.0362	.0050	-.2074		
135.000	.6465	.3337	.0831	-.0709	-.0434	-.0343	-.0298	-.0260	9.9990	-.0268	-.0277	-.1720		
157.500		.3333	.0869	-.0554	-.0385	-.0340	-.0215	-.0245	-.0147	-.0200	-.0199	-.1651		
180.000	.6697	.3100	.0910	-.0607	-.0464	-.0177	-.0162	-.0219	-.0193	-.0113	-.0225	-.1707		
202.500		.3175	.0918	-.0571	-.0509	-.0249	-.0351	-.0324	-.0215	-.0049	-.0190	-.1689		
225.000	.6338	.3158	.0816	-.0633	-.0471	-.0316	-.0219	-.0350	-.0328	-.0132	-.0281	-.1652		
247.500		.2842	.0662	-.0787	-.0539	-.0283	-.0279	-.0117	-.0369	-.0290	.0028	-.1927		
270.000	.5714	.2606	.0541	-.0989	9.9990	-.0263	-.0222	-.0237	-.0320	-.0263	.0149	-.1962		
292.500		.2365	.0296	-.1093	-.0780	-.0208	-.0317	-.0275	-.0302	-.0291	.1200	-.1818		
315.000	.5073	.2232	.0187	-.1248	-.0800	-.0154	-.0631	-.0267	-.0342	.0552	.1850	-.1960		
326.000									-.0123	.0512	.1890	-.1942		
346.000		.2494	.0153	-.1183	-.0934	-.1485	-.0250	-.0194	.0349	.1327	.2593	-.1898		
360.000	.4252	.2127	-.0045	-.1303	-.0893	-.0705	-.0350	-.0087	.0000	.1701	.3617	-.1756		

MACH (2) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(P51) = 6.8650 PO = 60.036 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.3953	.1785	.0364	-.0334	-.0170	-.0244	-.0255	.0105	-.0074	.0381	.1507	-.0672		
14.000		.1783	.0369	-.0328	-.0165	-.0283	-.0289	-.0199	-.0103	.0397	.1614	-.0751		
24.000									-.0013	.0482	.1130	-.0830		
45.000	.4601	.1896	.0493	-.0295	-.0159	-.0171	-.0159	-.0182	-.0233	.0059	.0916	-.0802		
67.500		.2196	.0657	-.0232	-.0221	-.0136	-.0176	-.0153	-.0136	-.0086	.0093	-.0762		
90.000	.5356	.2476	.0814	-.0143	9.9990	-.0165	-.0131	-.0148	-.0165	-.0075	-.0035	-.0689		
112.500		.2792	.1028	-.0024	-.0069	-.0143	-.0109	-.0114	-.0154	-.0114	.0065	-.0610		
135.000	.6240	.3113	.1192	.0054	-.0019	-.0069	-.0041	-.0075	9.9990	-.0086	-.0047	-.0588		
157.500		.3237	.1333	.0138	.0054	-.0013	.0026	.0003	.0037	-.0024	-.0002	-.0559		
180.000	.6499	.3153	.1350	.0161	.0082	.0014	.0048	.0026	-.0007	-.0002	.0009	-.0571		
202.500		.3243	.1293	.0116	.0042	.0014	.0020	-.0007	-.0041	-.0024	-.0019	-.0559		

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A032)

MACH (2) = 3.480 ALPHA (1) = -4.330

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6043	.3013	.1210	.0071	.0009	-.0058	-.0029	-.0063	-.0086	-.0074	-.0064	-.0571
247.500		.2758	.1023	-.0030	-.0064	-.0148	-.0109	-.0109	-.0143	-.0120	.0003	-.0650
270.000	.5356	.2482	.0842	-.0131	9.9990	-.0204	-.0131	-.0126	-.0154	-.0097	-.0007	-.0667
292.500		.2172	.0645	-.0238	-.0081	-.0075	-.0114	-.0126	-.0154	-.0126	.0065	-.0734
315.000	.4691	.1907	.0482	-.0323	-.0165	-.0092	-.0126	-.0182	-.0199	-.0081	.0809	-.0745
326.000									-.0024	-.0007	.0809	-.0695
346.000		.1982	.0516	-.0289	-.0176	-.0480	-.0266	-.0204	.0037	.0454	.1006	-.0751
360.000	.3953	.1785	.0364	-.0334	-.0170	-.0244	-.0255	.0105	-.0074	.0381	.1507	-.0672

MACH (3) = 4.960 ALPHA (1) = -4.290 BETA = .00000 Q(PSI) = 3.0700 PO = 90.016 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3791	.1801	.0906	.0642	.0642	.0642	.0553	.1612	.0553	.0684	.0590	.0137
14.000		.1788	.0755	.0553	.0452	.0452	.0440	.0465	.0402	.0528	.0817	.0099
24.000									.0175	.0263	.0515	.0023
45.000	.4498	.1951	.0868	.0502	.0477	.0414	.0427	.0376	.0364	.0401	.0389	.0024
67.500		.2140	.0880	.0389	.0364	.0389	.0439	.0313	.0338	.0338	.0149	.0112
90.000	.5176	.2417	.1031	.0439	9.9990	.0351	.0401	.0326	.0313	.0338	.0099	.0099
112.500		.2682	.1107	.0439	.0389	.0301	.0376	.0326	.0275	.0301	.0263	.0225
135.000	.5934	.2934	.1233	.0452	.0326	.0250	.0338	.0288	9.9990	.0225	.0238	.0238
157.500		.3047	.1321	.0464	.0351	.0301	.0326	.0288	.0565	.0250	.0187	.0212
180.000	.6224	.3009	.1372	.0490	.0351	.0301	.0313	.0275	.0288	.0212	.0200	.0238
202.500		.3072	.1359	.0439	.0351	.0212	.0301	.0238	.0225	.0225	.0200	.0238
225.000	.5831	.2846	.1233	.0376	.0275	.0238	.0250	.0200	.0175	.0149	.0200	.0225
247.500		.2682	.1120	.0326	.0238	.0175	.0200	.0175	.0124	.0124	.0212	.0187
270.000	.5252	.2417	.0931	.0238	9.9990	.0124	.0162	.0149	.0086	.0112	.0187	.0124
292.500		.2140	.0842	.0175	.0250	.0200	.0162	.0124	.0162	.0137	.0149	.0124
315.000	.4660	.1888	.0691	.0149	.0200	.0074	.0175	.0112	.0049	.0137	.0377	.0024
326.000									.0112	.0187	.0351	.0049
346.000		.1964	.0692	.0137	.0150	.0011	.0074	.0061	.0074	.0162	.0452	.0024
360.000	.3791	.1801	.0906	.0642	.0642	.0642	.0553	.1612	.0553	.0684	.0590	.0137

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

(R1A033) (16 NOV 74)

MSFC 598 (TA-2F) MICRO200 EXTERNAL TANK, T1

PARAMETRIC DATA

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1085.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = -.280 BETA = .00000 Q(P51) = 10.241 PO = 28.003 P = 3.8090

SECTION (1) ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
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THETA												
.000	.5131	.2655	.0682	-.1003	-.0614	-.0531	-.0372	-.0024	-.0047	.1877	.3908	-.1873
14.000		.2627	.0673	-.0981	-.0449	-.1584	-.0344		.0273	.1724	.2543	-.2276
24.000									-.0664	.0432	.2714	-.2385
45.000	.5810	.2434	.0470	-.0966	-.0710	-.0185	-.0566	-.0106	-.0292	-.0330	.1533	-.1914
67.500		.2612	.0500	-.0923	-.0685	.0054	-.0496	-.0168	-.0223	-.0148	.0345	-.1876
90.000	.5748	.2594	.0459	-.0993	9.9990	-.0537	-.0053	-.0344	-.0277	-.0250	.0353	-.1900
112.500		.2688	.0447	-.1032	-.0609	-.0413	-.0186	-.0262	-.0277	-.0281	-.0250	-.1550
135.000	.5896	.2726	.0387	-.1033	-.0655	-.0440	-.0311	-.0258	9.9990	-.0281	-.0240	-.1383
157.500		.2485	.0285	-.1046	-.0722	-.0454	-.0246	-.0193	-.0144	-.0273	-.0240	-.1422
180.000	.5778	.2254	.0289	-.1041	-.0795	-.0289	-.0175	-.0172	-.0164	-.0206	-.0281	-.1423
202.500		.2342	.0330	-.1075	-.0773	-.0293	-.0346	-.0228	-.0228	-.0206	-.0251	-.1495
225.000	.5657	.2456	.0345	-.1004	-.0750	-.0266	-.0172	-.0149	-.0293	-.0206	-.0243	-.1798
247.500		.2473	.0345	-.0914	-.0639	-.0314	-.0171	-.0050	-.0257	-.0223	.0334	-.1882
270.000	.5833	.2507	.0440	-.0940	9.9990	-.0295	-.0118	-.0156	-.0178	-.0201	.0344	-.2022
292.500		.2424	.0474	-.0963	-.0556	.0055	-.0446	-.0140	-.0280	-.0310	.1446	-.2022
315.000	.5871	.2571	.0591	-.0980	-.0610	-.0213	-.0689	-.0224	-.0443	.0039	.2148	-.2174
325.000									.0281	.0077	.2130	-.2073
348.000		.3056	.0822	-.0856	-.0686	-.1400	-.0368	-.0244	.0417	.1381	.2802	-.2027
360.000	.5131	.2655	.0682	-.1023	-.0614	-.0531	-.0372	-.0024	-.0047	.1877	.3908	-.1873

MACH (2) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(P51) = 6.8650 PO = 60.038 P = .81000

SECTION (1) ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
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THETA												
.000	.5091	.2529	.0804	-.0114	.0082	-.0058	-.0170	.0201	-.0029	.0505	.1586	-.0610
14.000		.2516	.0820	-.0097	.0093	-.0137	-.0199	-.0125	-.0058	.0516	.1738	-.0712
24.000									.0054	.0521	.1405	-.0774
45.000	.5457	.2465	.0814	-.0114	-.0020	.0003	-.0114	-.0126	-.0126	-.0002	.1614	-.0740
67.500		.2561	.0899	-.0092	-.0069	-.0058	-.0064	-.0088	-.0035	-.0103	.0397	-.0706
90.000	.5443	.2557	.0905	-.0086	9.9990	-.0080	-.0029	-.0058	-.0080	-.0052	.0065	-.0712
112.500		.2550	.0882	-.0092	-.0114	-.0086	-.0047	-.0041	-.0075	-.0064	.0195	-.0610
135.000	.5474	.2565	.0865	-.0114	-.0148	-.0126	-.0058	-.0047	9.9990	-.0064	-.0058	-.0576
157.500		.2488	.0871	-.0109	-.0143	-.0109	-.0059	-.0047	.0031	-.0058	-.0075	-.0532
180.000	.5361	.2376	.0843	-.0120	-.0142	-.0120	-.0059	-.0052	-.0058	-.0058	-.0086	-.0531
202.500		.2489	.0843	-.0131	-.0142	-.0131	-.0089	-.0052	-.0058	-.0024	-.0081	-.0554

REPRODUCIBILITY OF THIS
 ORIGINAL PAGE IS POOR

MSFC 595 (TA-2F) MICRO200 EXTERNAL TANK, TI

(RIA033)

MACH (2) = 3.480 ALPHA (1) = -.280

SECTION (1) TANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
225.000	.5285	.2443	.0826	-.0131	-.0165	-.0109	-.0075	-.0058	-.0069	-.0058	-.0052	-.0593	
247.500		.2469	.0808	-.0132	-.0154	-.0120	-.0070	-.0042	-.0070	-.0054	.0133	-.0655	
270.000	.5333	.2486	.0853	-.0120	9.9990	-.0132	-.0030	-.0019	-.0087	-.0064	.0076	-.0717	
292.500		.2405	.0815	-.0125	.0065	-.0001	.0026	-.0069	-.0046	-.0103	.0312	-.0712	
315.000	.5536	.2454	.0842	-.0126	-.0019	.0037	-.0103	-.0120	-.0103	-.0143	.0730	-.0723	
326.000									.0245	.0149	.0538	-.0779	
346.000		.2758	.0989	-.0024	.0110	-.0447	-.0148	-.0131	.0099	.0747	.1119	-.0757	
360.000	.5091	.2529	.0804	-.0114	.0082	-.0058	-.0170	.0201	-.0029	.0505	.1586	-.0610	

MACH (3) = 4.960 ALPHA (1) = -.280 BETA = .00000 Q(P51) = 3.0700 PO = 90.020 P = .17800

SECTION (1) TANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.4698	.2432	.1095	.0755	.0780	.0755	.0604	.0730	.0591	.0679	.0553	-.0013	
14.000		.2393	.1019	.0704	.0666	.0591	.0477	.0503	.0503	.0616	.1006	-.0076	
24.000									.0288	.0364	.0805	-.0114	
45.000	.5151	.2379	.1006	.0628	.0603	.0515	.0464	.0464	.0376	.0464	.0439	-.0076	
67.500		.2442	.1019	.0515	.0502	.0427	.0477	.0414	.0376	.0364	.0339	-.0039	
90.000	.5113	.2392	.0981	.0502	9.9990	.0376	.0427	.0401	.0313	.0313	.0086	-.0026	
112.500		.2367	.0943	.0439	.0414	.0326	.0376	.0376	.0288	.0301	.0238	.0112	
135.000	.5050	.2367	.0943	.0427	.0351	.0288	.0313	.0339	9.9990	.0238	.0137	.0124	
157.500		.2329	.0918	.0389	.0351	.0250	.0313	.0313	.0616	.0200	.0124	.0124	
180.000	.4924	.2229	.0855	.0364	.0288	.0263	.0250	.0263	.0238	.0162	.0162	.0162	
202.500		.2304	.0830	.0338	.0238	.0225	.0288	.0225	.0162	.0175	.0137	.0175	
225.000	.4887	.2316	.0855	.0313	.0238	.0212	.0200	.0212	.0162	.0124	.0124	.0124	
247.500		.2329	.0830	.0301	.0212	.0200	.0187	.0212	.0099	.0124	.0225	.0086	
270.000	.4950	.2367	.0893	.0288	9.9990	.0162	.0200	.0212	.0112	.0086	.0175	.0049	
292.500		.2405	.0905	.0275	.0414	.0238	.0212	.0212	.0099	.0112	.0250	.0011	
315.000	.5290	.2367	.0842	.0263	.0288	.0137	.0187	.0175	.0049	.0061	.0389	-.0026	
326.000									.0238	.0288	.0414	-.0026	
346.000		.2644	.1057	.0338	.0351	.0099	.0137	.0149	.0149	.0225	.0365	-.0039	
360.000	.4698	.2432	.1095	.0755	.0780	.0755	.0604	.0730	.0591	.0679	.0553	-.0013	

HSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A034) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = 3.770 BETA = .00000 Q(PSI) = 10.214 PO = 28.002 P = 3.7810

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6002	.3632	.1282	-.0470	-.0210	-.0252	-.0225	-.0116	.0011	.1733	.5368	-.2115
14.000		.3564	.1205	-.0442	-.0052	-.1351	-.0270	-.0138	.0139	.1851	.3232	-.2334
24.000									.0266	.1688	.2494	-.2361
45.000	.6380	.3187	.0884	-.0614	-.0132	-.0358	-.0418	-.0230	-.0614	.0455	.1838	-.2449
67.500		.2979	.0707	-.0837	-.0502	-.0091	-.0792	-.0324	-.0569	-.0396	.1348	-.2130
90.000	.5635	.2604	.0443	-.1022	9.9990	-.0336	-.0397	-.0449	-.0283	-.0366	.0349	-.2021
112.500		.2306	.0183	-.1173	-.0906	-.0642	-.0378	-.0423	-.0329	-.0295	.0292	-.1652
135.000	.5033	.2054	-.0046	-.1212	-.0906	-.0631	-.0325	-.0389	9.9990	-.0303	-.0258	-.1471
157.500		.1693	-.0076	-.1311	-.0929	-.0446	-.0208	-.0148	-.0095	-.0205	-.0197	-.1376
180.000	.4680	.1524	-.0165	-.1294	-.0934	-.0264	-.0089	-.0059	-.0108	-.0142	-.0254	-.1336
202.500		.1618	-.0190	-.1383	-.1071	-.0269	-.0292	-.0224	-.0201	-.0144	-.0227	-.1386
225.000	.4825	.1780	-.0056	-.1290	-.1001	-.0428	-.0223	-.0432	-.0307	-.0234	-.0310	-.1471
247.500		.1979	.0076	-.1192	-.0938	-.0596	-.0261	-.0368	-.0250	-.0242	.0171	-.1595
270.000	.5673	.2359	.0258	-.1063	9.9990	-.0508	-.0497	-.0383	-.0261	-.0289	.0220	-.1931
292.500		.2720	.0490	-.0881	-.0455	-.0151	-.0698	-.0349	-.0619	-.0417	.1372	-.2103
315.000	.6542	.3101	.0760	-.0714	-.0402	-.0402	-.0668	-.0383	-.0931	-.0220	.2602	-.2249
326.000									.0456	-.0050	.1826	-.2396
346.600		.3835	.1268	-.0447	-.0402	-.1374	-.0307	-.0185	.0425	.1435	.3039	-.2271
360.000	.6002	.3622	.1282	-.0470	-.0210	-.0252	-.0225	-.0116	.0011	.1733	.5368	-.2115

MACH (2) = 3.480 ALPHA (1) = 3.770 BETA = .00000 Q(PSI) = 6.8640 PO = 60.029 P = .81000

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6235	.3374	.1351	.0144	.0364	-.0012	-.0058	-.0018	.0032	.0663	.1902	-.0655
14.000		.3338	.1344	.0172	.0392	-.0081	-.0103	-.0035	-.0007	.0690	.1868	-.0621
24.000									.0099	.0882	.1575	-.0836
45.000	.6235	.3036	.1170	.0071	.0201	.0111	-.0125	-.0125	-.0204	.0105	.0849	-.0835
67.500		.2854	.1062	-.0003	.0009	.0014	-.0131	-.0165	-.0154	-.0148	.0375	-.0813
90.000	.5418	.2517	.0866	-.0097	9.9990	-.0198	-.0108	-.0215	-.0238	-.0198	-.0013	-.0762
112.500		.2223	.0652	-.0199	-.0244	-.0261	-.0193	-.0199	-.0238	-.0221	.0020	-.0627
135.000	.4637	.2010	.0533	-.0283	-.0294	-.0249	-.0182	-.0182	9.9990	-.0193	-.0154	-.0616
157.500		.1806	.0392	-.0334	-.0334	-.0227	-.0171	-.0154	-.0002	-.0103	-.0069	-.0610
180.000	.4203	.1655	.0342	-.0362	-.0334	-.0238	-.0159	-.0131	-.0058	-.0012	-.0018	-.0655
202.500		.1810	.0382	-.0356	-.0316	-.0220	-.0158	-.0141	-.0085	-.0051	-.0052	-.0633

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA034)

MACH (2) = 3.480 ALPHA (1) = 3.770

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8605	.8920	.9230	.9540
THETA													
225.000	.4415	.1879	.0471	-.0312	-.0300	-.0250	-.0176	-.0204	-.0171	-.0143	-.0137	-.0638	
247.500		.2082	.0561	-.0261	-.0299	-.0266	-.0199	-.0204	-.0244	-.0227	-.0019	-.0669	
270.000	.5203	.2403	.0741	-.0171	9.9990	-.0227	-.0154	-.0227	-.0250	-.0227	-.0064	-.0734	
292.500		.2652	.0944	-.0064	.0059	-.0035	-.0081	-.0193	-.0193	-.0255	.0195	-.0796	
315.000	.6392	.3012	.1169	.0048	.0031	.0138	-.0126	-.0109	-.0334	-.0126	.0776	-.0723	
326.000									.0386	.0032	.0814	-.0757	
346.000		.3600	.1514	.0263	.0285	-.0418	.0003	-.0041	.0139	.0843	.1372	-.0790	
360.000	.6235	.3374	.1351	.0144	.0364	-.0012	-.0058	-.0018	.0032	.0663	.1902	-.0555	

MACH (3) = 4.860 ALPHA (1) = 3.730 BETA = .00000 Q(P51) = 3.0700 PO = 90.021 P = .17600

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.6235	.3186	.1422	.0792	.0817	.0779	.0603	.0590	.0616	.0716	.0855	-.0013	
14.000		.3148	.1384	.0729	.0716	.0590	.0515	.0464	.0527	.0628	.1107	-.0039	
24.000									.0351	.0490	.0956	-.0101	
45.000	.6186	.2922	.1259	.0641	.0603	.0515	.0440	.0377	.0351	.0440	.0515	-.0127	
67.500		.2694	.1107	.0490	.0452	.0439	.0452	.0338	.0326	.0351	.0250	-.0101	
90.000	.5214	.2405	.0994	.0452	9.9990	.0338	.0401	.0313	.0275	.0289	.0036	-.0139	
112.500		.2115	.0767	.0351	.0301	.0275	.0301	.0250	.0225	.0212	.0175	-.0013	
135.000	.4420	.1876	.0679	.0313	.0225	.0288	.0263	.0238	9.9990	.0187	.0124	-.0038	
157.500		.1724	.0691	.0263	.0225	.0225	.0263	.0212	.0641	.0187	.0099	-.0039	
180.000	.4005	.1624	.0578	.0225	.0162	.0175	.0225	.0175	.0212	.0112	.0112	-.0051	
202.500		.1724	.0590	.0225	.0187	.0225	.0187	.0162	.0162	.0162	.0086	-.0039	
225.000	.4194	.1825	.0628	.0212	.0149	.0212	.0175	.0137	.0149	.0099	.0049	-.0089	
247.500		.2027	.0729	.0225	.0137	.0149	.0137	.0112	.0074	.0086	.0162	-.0026	
270.000	.5039	.2316	.0880	.0250	9.9990	.0112	.0137	.0124	.0061	.0051	.0137	-.0038	
292.500		.2581	.0981	.0313	.0313	.0200	.0175	.0112	.0049	.0023	.0200	-.0026	
315.000	.6298	.2934	.1183	.0351	.0313	.0288	.0225	.0162	.0035	.0124	.0477	-.0013	
326.000									.0288	.0301	.0540	-.0064	
346.000		.3450	.1510	.0490	.0490	.0162	.0212	.0149	.0238	.0401	.0317	-.0114	
360.000	.6235	.3186	.1422	.0792	.0817	.0779	.0603	.0590	.0616	.0716	.0655	-.0013	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

(RIA035) (16 NOV 74)

MSFC 536 (TA-2F) MCR0200 EXTERNAL TANK, T1

PARAMETRIC DATA

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. YT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = 7.820 BETA = .00000 Q(PSI) = 10.238 PO = 28.004 P = 3.8060

SECTION (1) INK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.7277	.4572	.1842	-.0102	.0210	-.0050	.0047	.0372	.0228	.1341	.6585	-.2288		
14.000		.4468	.1844	-.0122	.0206	-.1062	-.0080	.0036	.0228	.1655	.3999	-.2121		
24.000									.0708	.1551	.3287	-.2509		
45.000	.7339	.3739	.1371	-.0395	.0217	-.0380	-.0573	-.0259	-.0978	.0209	.1135	-.2670		
67.500		.3164	.0946	-.0749	-.0383	-.0542	-.1074	-.0617	-.0904	-.0689	.0554	-.2426		
90.000	.5730	.2468	.0372	-.1104	9.9990	-.0696	-.1138	-.1036	-.0779	-.0866	.0172	-.2039		
112.500		.1857	-.0134	-.1328	-.1207	-.1018	-.1029	-.0712	-.0512	-.0527	.0281	-.1706		
135.000	.4442	.1346	-.0367	-.1523	-.1232	-.0964	-.0549	-.0481	9.9990	-.0386	-.0315	-.1562		
157.500		.0984	-.0511	-.1591	-.1157	-.0462	-.0179	-.0258	-.0228	-.0303	-.0330	-.1515		
180.000	.3751	.0946	-.0666	-.1566	-.1128	-.0205	-.0050	-.0069	-.0137	-.0126	-.0243	-.1411		
202.500		.1029	-.0614	-.1657	-.1230	-.0311	-.0273	-.0296	-.0311	-.0273	-.0357	-.1466		
225.000	.4008	.1283	-.0349	-.1574	-.1252	-.0587	-.0349	-.0428	-.0391	-.0323	-.0392	-.1578		
247.500		.1591	-.0092	-.1406	-.1258	-.1058	-.0734	-.0537	-.0416	-.0394	.0077	-.1630		
270.000	.5476	.2210	.0228	-.1081	9.9990	-.0858	-.1111	-.0888	-.0624	-.0746	.0406	-.2057		
292.500		.2850	.0712	-.0821	-.0462	-.0557	-.1040	-.0776	-.1025	-.0674	.1006	-.2199		
315.000	.7311	.3679	.1237	-.0485	-.0202	-.0462	-.0572	-.0443	-.1188	-.0334	.2020	-.2307		
326.000									.0515	.0477	.1465	-.2536		
346.000		.4964	.1914	.0009	.0130	-.0916	.0062	.0016	.0564	.1291	.3765	-.2473		
360.000	.7277	.4572	.1842	-.0102	.0210	-.0050	.0047	.0372	.0228	.1341	.6585	-.2288		

MACH (2) = 3.480 ALPHA (1) = 7.800 BETA = .00000 Q(PSI) = 6.8650 PO = 60.038 P = .81000

SECTION (1) INK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.7452	.4341	.2026	.0521	.0437	.0009	.0178	.0206	.0240	.0938	.2572	-.0655		
14.000		.4257	.1954	.0544	.0431	-.0064	.0087	.0183	.0200	.1051	.2161	-.0492		
24.000									.0335	.1282	.2033	-.0847		
45.000	.7097	.3643	.1597	.0330	.0397	.0166	-.0075	-.0035	-.0047	.0054	.0955	-.0864		
67.500		.3141	.1288	.0127	.0099	.0009	-.0188	-.0199	-.0244	-.0227	.0313	-.0847		
90.000	.5302	.2454	.0865	-.0103	9.9990	-.0306	-.0312	-.0430	-.0452	-.0447	-.0255	-.0824		
112.500		.1903	.0477	-.0311	-.0379	-.0458	-.0446	-.0514	-.0469	-.0435	-.0266	-.0672		
135.000	.3806	.1507	.0240	-.0441	-.0447	-.0430	-.0390	-.0413	9.9990	-.0441	-.0368	-.0695		
157.500		.1237	.0065	-.0520	-.0447	-.0368	-.0317	-.0244	-.0069	-.0216	-.0197	-.0683		
180.000	.3231	.1124	.0009	-.0537	-.0430	-.0306	-.0188	-.0002	-.0069	-.0081	-.0081	-.0672		
202.500		.1203	.0048	-.0526	-.0430	-.0351	-.0295	-.0204	-.0204	-.0193	-.0216	-.0678		

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA035)

MACH (2) = 3.480 ALPHA (1) = 7.800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.3622	.1395	.0138	-.0486	-.0464	-.0402	-.0374	-.0374	-.0396	-.0396	-.0374	-.0700	
247.500		.1783	.0380	-.0374	-.0419	-.0464	-.0464	-.0514	-.0458	-.0413	-.0278	-.0734	
270.000	.5046	.2319	.0696	-.0193	9.9990	-.0402	-.0362	-.0481	-.0537	-.0537	-.0272	-.0768	
292.500		.2871	.1096	.0020	.0076	-.0030	-.0199	-.0300	-.0328	-.0306	.0263	-.0841	
315.000	.7350	.3620	.1547	.0262	.0223	.0307	-.0013	-.0013	-.0221	.0054	.1079	-.0740	
326.000									.0392	.0420	.1079	-.0734	
346.000		.4927	.2150	.0634	.0561	-.0306	.0273	.0172	.0392	.1141	.1896	-.0796	
360.000	.7452	.4341	.2026	.0521	.0437	.0009	.0178	.0206	.0240	.0938	.2572	-.0655	

MACH (3) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(Psi) = 3.0700 P0 = 90.023 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.7469	.4133	.1965	.0944	.1095	.0831	.0705	.0692	.0742	.0919	.1624	.0011	
14.000		.4131	.1913	.0905	.0981	.0716	.0603	.0553	.0653	.0880	.1447	-.0039	
24.000									.0540	.0754	.1510	-.0127	
45.000	.7003	.3627	.1636	.0742	.0779	.0540	.0464	.0439	.0427	.0540	.0716	-.0164	
67.500		.3060	.1346	.0540	.0540	.0414	.0477	.0338	.0338	.0364	.0237	-.0152	
90.000	.6164	.2405	.0968	.0414	9.9990	.0301	.0351	.0263	.0212	.0250	-.1064	-.0152	
112.500		.1838	.0691	.0275	.0275	.0162	.0263	.0212	.0162	.0175	.1061	-.0039	
135.000	.3539	.1460	.0515	.0238	.0200	.0175	.0212	.0187	9.9990	.0137	-.0001	-.0101	
157.500		.1220	.0401	.0187	.0200	.0162	.0200	.0162	.0666	.0124	-.0013	-.0076	
180.000	.3009	.1120	.0389	.0162	.0175	.0074	.0187	.0162	.0187	.0124	.0061	-.0101	
202.500		.1195	.0300	.0111	.0149	.0111	.0124	.0099	.0086	.0086	-.0001	-.0089	
225.000	.3513	.1397	.0414	.0112	.0112	.0112	.0099	.0061	.0074	.0011	-.0013	-.0114	
247.500		.1724	.0502	.0124	.0074	.0036	.0036	.0036	-.0039	-.0001	.0099	-.0076	
270.000	.4899	.2228	.0754	.0175	9.9990	.0023	.0061	.0036	-.0051	-.0039	.0023	-.0127	
292.500		.2833	.1157	.0313	.0376	.0212	.0187	.0112	.0036	.0086	.0338	-.0139	
315.000	.7217	.3476	.1535	.0464	.0427	.0313	.0301	.0212	.0074	.0238	.0641	-.0089	
326.000									.0414	.0477	.0779	-.0139	
346.000		.4345	.2115	.0767	.0855	.0238	.0401	.0326	.0439	.0754	.1372	-.0114	
360.000	.7469	.4133	.1965	.0944	.1095	.0831	.0705	.0692	.0742	.0919	.1624	.0011	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA036) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 180.000

PARAMETRIC DATA

MACH (1) = 1.970 ALPHA (1) = 12.570 BETA = .00000 Q(P51) = 10.214 P0 = 28.008 P = 3.7790

SECTION (1) TANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.8483	.5431	.2656	.0717	.0807	.0588	.0527	.0876	.0433	.1970	.6373	-.2287	
14.000		.5343	.2540	.0666	.0735	-.0373	.0357	.0410	.0376	.1768	.5523	-.2127	
24.000									.0876	.1860	.4581	-.2620	
45.000	.8011	.4215	.1746	.0145	.0031	-.0574	-.0339	-.0445	-.1123	.0455	.0724	-.2883	
67.500		.3300	.1130	-.0521	-.0536	-.0855	-.1120	-.0899	-.1180	-.0680	-.0464	-.2453	
90.000	.5312	.2213	.0330	-.1120	9.9990	-.1362	-.1635	-.1703	-.1559	-.1393	-.0627	-.2156	
112.500		.1432	-.0362	-.1528	-.1558	-.1752	-.1801	-.1074	-.0790	-.0710	-.0131	-.2071	
135.000	.3484	.0917	-.0702	-.1795	-.1519	-.1235	-.0910	-.0989	9.9990	-.0974	-.0866	-.1922	
157.500		.0640	-.0932	-.1822	-.1349	-.0588	-.0603	-.0664	-.0857	-.0914	-.0930	-.1779	
180.000	.2814	.0527	-.1018	-.1799	-.1101	-.0105	-.0123	-.0978	-.0293	-.0233	-.0286	-.1728	
202.500		.0577	-.0976	-.1886	-.1310	-.0457	-.0529	-.0601	-.0684	-.0692	-.0809	-.1786	
225.000	.3266	.0826	-.0835	-.1792	-.1588	-.0933	-.0823	-.0925	-.1172	-.1100	-.1081	-.2001	
247.500		.1277	-.0479	-.1680	-.1547	-.1653	-.1570	-.0922	-.0839	-.0752	-.0230	-.2158	
270.000	.5151	.2075	.0103	-.1270	9.9990	-.1433	-.1815	-.1743	-.1395	-.1077	-.0089	-.2119	
292.500		.3005	.0936	-.0711	-.0480	-.0851	-.1180	-.1067	-.1393	-.1124	.0069	-.2268	
315.000	.7847	.4104	.1868	-.0074	-.0014	-.0396	-.0158	-.0358	-.1415	-.0798	.1954	-.2395	
326.000									.0652	.0572	.1319	-.2438	
346.000		.5712	.2803	.0750	.0705	-.0063	.0508	.0501	.0879	.2159	.3934	-.2482	
360.000	.8483	.5431	.2656	.0717	.0807	.0588	.0527	.0876	.0433	.1970	.6373	-.2287	

MACH (2) = 3.480 ALPHA (1) = 12.540 BETA = .00000 Q(P51) = 6.8620 P0 = 60.015 P = .81000

SECTION (1) TANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.8481	.5319	.2737	.0967	.0804	.0381	.0539	.0561	.0640	.1328	.3735	-.0644	
14.000		.5257	.2682	.0998	.0798	.0189	.0392	.0528	.0556	.1475	.2946	-.0308	
24.000									.0708	.1638	.2861	-.0658	
45.000	.7788	.4231	.2055	.0835	.0648	.0201	.0080	.0054	.0218	.0139	.1153	-.0880	
67.500		.3391	.1497	.0288	.0139	.0084	-.0183	-.0120	-.0204	-.0187	.0359	-.0790	
90.000	.5078	.2388	.0843	-.0108	9.9990	-.0396	-.0480	-.0514	-.0554	-.0554	-.0390	-.0841	
112.500		.1587	.0302	-.0396	-.0508	-.0639	-.0649	-.0582	-.0554	-.0520	-.0379	-.0672	
135.000	.3081	.1052	-.0018	-.0599	-.0599	-.0610	-.0604	-.0587	9.9990	-.0621	-.0587	-.0745	
157.500		.0748	-.0198	-.0621	-.0570	-.0542	-.0563	-.0627	-.0599	-.0706	-.0706	-.0717	
180.000	.2444	.0607	-.0221	-.0627	-.0542	-.0238	-.0088	-.0170	-.0266	-.0294	-.0294	-.0678	
202.500		.0719	-.0210	-.0632	-.0548	-.0531	-.0508	-.0554	-.0616	-.0610	-.0655	-.0711	

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA036)

MACH (2) = 3.480 ALPHA (1) = 12.540

SECTION (1)ANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
225.000	.2878	.0934	-.0108	-.0599	-.0616	-.0610	-.0604	-.0627	-.0700	-.0706	-.0678	-.0756	
247.500		.1435	.0167	-.0475	-.0582	-.0700	-.0672	-.0604	-.0570	-.0537	-.0317	-.0711	
270.000	.4789	.2162	.0618	-.0238	9.9990	-.0531	-.0582	-.0627	-.0627	-.0604	-.0396	-.0762	
292.500		.3059	.1221	.0105	.0122	-.0035	-.0227	-.0244	-.0339	-.0238	.0313	-.0785	
315.000	.8210	.4129	.1920	.0499	.0370	.0454	.0195	.0099	-.0136	.0094	.1322	-.0762	
326.000									.0646	.0928	.1227	-.0762	
346.000		.5437	.2850	.1080	.0956	-.0136	.0595	.0528	.0900	.1570	.2681	-.0779	
360.000	.8481	.5319	.2737	.0957	.0904	.0381	.0539	-.0561	.0640	.1328	.3735	-.0644	

MACH (3) = 4.960 ALPHA (1) = 12.450 BETA = .00000 Q(P51) = 3.0700 P0 = 90.023 P = .17800

SECTION (1)ANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.8943	.5139	.2669	.1296	.1485	.1094	.0956	.0968	.1145	.1498	.2745	.0061	
14.000		.5128	.2632	.1246	.1410	.1096	.0956	.0818	.1044	.1473	.2382	.0149	
24.000									.0931	.1422	.2581	-.0114	
45.000	.7784	.4244	.2102	.0956	.1019	.0663	.0565	.0540	.0754	.0792	.1132	-.0164	
67.500		.3312	.1498	.0641	.0616	.0502	.0515	.0401	.0401	.0490	.0364	-.0139	
90.000	.5076	.2353	.1006	.0452	9.9990	.0288	.0363	.0288	.0250	.0237	-.0039	.0164	
112.500		.1624	.0603	.0301	.0301	.0200	.0275	.0238	.0200	.0212	.0049	-.0013	
135.000	.3009	.1157	.0427	.0238	.0212	.0187	.0212	.0200	9.9990	.0162	-.0026	-.0076	
157.500		.0880	.0338	.0187	.0212	.0124	.0187	.0149	.0452	.0112	-.0051	-.0089	
180.000	.2304	.0767	.0263	.0137	.0124	.0099	.0175	.0149	.0212	.0099	.0051	-.0101	
202.500		.0830	.0200	.0099	.0137	.0112	.0099	.0074	.0074	.0074	-.0051	-.0089	
225.000	.2808	.1019	.0263	.0085	.0099	.0061	.0112	.0061	.0049	.0011	-.0039	-.0114	
247.500		.1447	.0401	.0099	.0049	-.0013	.0036	.0011	-.0026	-.0051	.0086	-.0064	
270.000	.4698	.2153	.0729	.0175	9.9990	.0036	.0049	.0036	-.0051	-.0026	.0011	-.0089	
292.500		.3035	.1271	.0389	.0464	.0250	.0212	.0162	.0124	.0225	.0313	-.0127	
315.000	.8263	.4168	.1926	.0704	.0666	.0540	.0452	.0364	.0187	.0464	.0968	-.0139	
326.000									.0691	.0742	.0968	-.0139	
346.000		.5277	.2732	.1157	.1233	.0389	.0704	.0603	.0658	.1359	.2203	-.0164	
360.000	.8943	.5139	.2669	.1296	.1485	.1094	.0956	.0968	.1145	.1498	.2745	.0061	

MSFC 586 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A037) (16 NOV 74)

REFERENCE DATA

PARAMETRIC DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = 16.660 BETA = .00000 Q(PSI) = 10.253 PO = 28.019 P = 3.8170

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.9742	.6765	.3584	.1432	.1489	.1346	.1127	.1263	.1036	.3116	.7060	-.2551
14.000		.6537	.3449	.1318	.1375	.0802	.0949	.0907	.0964	.2906	.6700	-.2220
24.000									.1284	.2968	.5845	-.2660
45.000	.8737	.4913	.2333	.0451	.0459	-.0702	.0096	-.0378	-.0793	.0508	.0723	-.2941
67.500		.3639	.1329	-.0370	-.0456	-.0818	-.0931	-.1003	-.1214	-.0615	-.0669	-.2692
90.000	.4996	.2117	.0206	-.1176	9.9990	-.1867	-.2029	-.1931	-.1701	-.1425	-.1163	-.2431
112.500		.1028	-.0661	-.1766	-.1951	-.2230	-.1898	-.1457	-.1215	-.1246	-.0608	-.2046
135.000	.2852	.0368	-.1117	-.2019	-.1925	-.1762	-.1725	-.1654	9.9990	-.1423	-.1148	-.2031
157.500		-.0023	-.1170	-.2000	-.1744	-.1287	-.1464	-.1654	-.1604	-.1578	-.1412	-.2030
180.000	.2357	-.0122	-.1223	-.1966	-.1110	-.0118	-.0140	-.0325	-.0518	-.0570	-.0752	-.1898
202.500		.0005	-.1298	-.2018	-.1592	-.0993	-.1117	-.1204	-.1302	-.1317	-.1429	-.2217
225.000	.2574	.0235	-.1166	-.2052	-.1905	-.1595	-.1607	-.2053	-.1773	-.1603	-.1401	-.2288
247.500		.0813	-.0850	-.1869	-.1997	-.2150	-.1944	-.1280	-.1110	-.1137	-.0295	-.2359
270.000	.4703	.1874	-.0050	-.1474	9.9990	-.1979	-.2187	-.1741	-.1488	-.1194	-.0337	-.2201
292.500		.3178	.1047	-.0553	-.0472	-.0865	-.1057	-.1091	-.1430	-.1114	-.0303	-.2389
315.000	.8535	.4761	.2323	.0315	.0357	-.0201	.0224	-.0065	-.1073	-.0850	.2032	-.2398
326.000									.1096	.1047	.1572	-.2439
346.000		.6914	.3647	.1432	.1436	.0794	.1081	.1051	.1828	.2877	.4737	-.2737
360.000	.8742	.6765	.3584	.1432	.1489	.1346	.1127	.1263	.1036	.3116	.7060	-.2551

MACH (2) = 3.480 ALPHA (1) = 16.560 BETA = .00000 Q(PSI) = 6.8630 PO = 60.018 P = .81000

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8490	.6435	.3622	.1548	.1373	.1058	.1069	.1120	.1131	.2112	.5172	-.0621
14.000		.6429	.3526	.1548	.1356	.0866	.0877	.1012	.1007	.2241	.4253	-.0001
24.000									.1187	.2286	.4282	-.0813
45.000	.8549	.4902	.2563	.0996	.1063	.0302	.0302	.0223	.0578	.0832	.1361	-.0975
67.500		.3633	.1689	.0426	.0268	.0127	-.0086	-.0063	-.0058	.0122	.0364	-.0649
90.000	.4851	.2286	.0860	-.0091	9.9990	-.0413	-.0486	-.0480	-.0542	-.0525	-.0250	-.0858
112.500		.1294	.0184	-.0441	-.0570	-.0717	-.0661	-.0587	-.0504	-.0576	-.0475	-.0672
135.000	.2403	.0674	-.0193	-.0521	-.0678	-.0711	-.0683	-.0616	9.9990	-.0610	-.0597	-.0711
157.500		.0370	-.0356	-.0678	-.0649	-.0751	-.0683	-.0672	-.0495	-.0610	-.0621	-.0706
180.000	.1778	.0280	-.0398	-.0683	-.0593	-.0255	-.0352	-.0446	-.0548	-.0559	-.0554	-.0678
202.500		.0330	-.0407	-.0694	-.0649	-.0728	-.0711	-.0656	-.0655	-.0638	-.0655	-.0711

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA037)

MACH (2) = 3.480 ALPHA (1) = 16.550

SECTION (1)ANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
225.000	.2224	.0550	-.0289	-.0694	-.0706	-.0711	-.0728	-.0666	-.0639	-.0616	-.0593	-.0728	
247.500	.1131	-.0018	-.0565	-.0689	-.0756	-.0711	-.0566	-.0644	-.0610	-.0394	-.0756		
270.000	.4603	.2048	.0583	-.0244	9.9990	-.0543	-.0582	-.0621	-.0627	-.0396	-.0864		
292.500	.3245	.1396	.0240	.0223	.0032	-.0198	-.0103	-.0210	-.0105	.0399	-.0841		
315.000	.9090	.4755	.2399	.0832	.0691	.0702	.0477	.0342	.0161	.0178	.1655	-.0678	
326.000									.1204	.1558	.1463	-.0717	
346.000		.6435	.3718	.1666	.1531	.0189	.1080	.1046	.1463	.2252	.3983	-.0768	
360.000	.9490	.6435	.3622	.1548	.1373	.1058	.1069	.1120	.1131	.2112	.5172	-.0621	

MACH (3) = 4.960 ALPHA (1) = 16.470 BETA = .00000 Q(PSI) = 3.0700 PO = 90.023 P = .17800

SECTION (1)ANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	1.0090	.6260	.3501	.1649	.1913	.1296	.1183	.1220	.1548	.2178	.4357	.0149	
14.000		.6260	.3387	.1611	.1876	.1296	.1082	.1107	.1523	.2190	.3803	.0364	
24.000									.1611	.2266	.4060	-.0064	
45.000	.8502	.4798	.2543	.1157	.1183	.0666	.0590	.0590	.1107	.1132	.1422	-.0177	
67.500		.3513	.1687	.0716	.0628	.0502	.0477	.0401	.0427	.0578	.0628	-.0089	
90.000	.4798	.2140	.0994	.0439	9.9990	.0288	.0288	.0225	.0175	.0225	.0074	-.0164	
112.500		.1346	.0565	.0250	.0200	.0137	.0175	.0149	.0112	.0137	-.0081	.0011	
135.000	.2329	.0805	.0288	.0162	.0124	.0061	.0099	.0099	9.9990	.0049	-.0064	-.0114	
157.500		.0578	.0212	.0124	.0124	.0074	.0099	.0061	.0464	.0061	-.0114	-.0139	
180.000	.1687	.0477	.0175	.0099	.0061	.0036	.0061	.0061	.0399	-.0013	-.0064	-.0152	
202.500		.0490	.0099	.0074	.0049	.0175	.0023	.0011	.0011	.0011	-.0089	-.0127	
225.000	.2228	.0691	.0175	.0061	.0049	-.0001	.0036	-.0001	-.0013	-.0039	-.0089	-.0152	
247.500		.1195	.0364	.0074	.0011	-.0064	-.0013	-.0026	-.0089	-.0089	.0099	-.0076	
270.000	.4697	.2052	.0716	.0175	9.9990	-.0039	.0011	-.0025	-.0099	-.0064	.0074	-.0114	
292.500		.3211	.1409	.0477	.0464	.0288	.0187	.0187	.0124	.0414	.0477	-.0114	
315.000	.9069	.4773	.2405	.0981	.0842	.0830	.0653	.0540	.0389	.0666	.1435	-.0164	
326.000									.1157	.1346	.1548	-.0089	
346.000		.6361	.3627	.1699	.1787	.0628	.1195	.1107	.1561	.2291	.3326	-.0101	
360.000	1.0090	.6260	.3501	.1649	.1913	.1296	.1183	.1220	.1548	.2178	.4357	.0149	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 75

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA03B) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = 20.740 BETA = .00000 Q(PSI) = 10.225 P0 = 28.010 P = 3.7900

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.0882	.7682	.4552	.2008	.2227	.2107	.1846	.1876	.1766	.4246	.8161	-.2530
14.000		.7674	.4431	.1855	.2173	.1344	.1588	.1488	.1688	.4193	.7879	-.1954
24.000									.1935	.4010	.7118	-.2572
45.000	.9285	.5523	.2881	.0849	.1110	.0441	.0027	-.0108	-.0032	.0731	.1049	-.2911
67.500		.3742	.1503	-.0274	-.0308	-.0906	-.0788	-.0770	-.0940	-.0630	-.0436	-.2661
90.000	.4537	.1776	.0028	-.1331	9.9990	-.1925	-.1982	-.1936	-.1932	-.1766	-.1574	-.2752
112.500		.0402	-.1049	-.2061	-.2353	-.2266	-.1748	-.1498	-.1608	-.1506	-.0880	-.2243
135.000	.1972	-.0297	-.1539	-.2330	-.2333	-.2318	-.2439	-.2409	9.9990	-.1489	-.1404	-.2318
157.500		-.0531	-.1495	-.2236	-.2262	-.2270	-.2436	-.2383	-.1306	-.1287	-.1245	-.2020
180.000	.1822	-.0487	-.1505	-.2090	-.1001	-.0502	-.0797	-.1149	-.1308	-.1380	-.1496	-.1905
202.500		-.0436	-.1579	-.2203	-.2082	-.2017	-.2025	-.2085	-.1635	-.1446	-.1422	-.2023
225.000	.1672	-.0323	-.1594	-.2339	-.2305	-.2317	-.2499	-.2313	-.1549	-.1382	-.1428	-.2328
247.500		.0251	-.1258	-.2177	-.2404	-.2276	-.1882	-.1477	-.1436	-.1485	-.0698	-.2152
270.000	.4181	.1548	-.0286	-.1568	9.9990	-.2022	-.2155	-.1716	-.1882	-.1708	-.1306	-.2481
292.500		.3318	.1102	-.0565	-.0380	-.1008	-.0872	-.0826	-.1276	-.0815	-.0296	-.2647
315.000	.9073	.5347	.2674	.0678	.0833	.0152	.0326	.0481	-.0682	-.0656	.2309	-.2416
326.000									.1483	.1643	.1981	-.2427
346.000		.7843	.4577	.2076	.2163	.1611	.1773	.1758	.2676	.3663	.5886	-.2714
360.000	1.0882	.7822	.4552	.2008	.2227	.2107	.1846	.1876	.1766	.4246	.8161	-.2530

MACH (2) = 3.480 ALPHA (1) = 20.810 BETA = .00000 Q(PSI) = 6.8640 P0 = 60.032 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.0516	.7652	.4609	.2264	.2061	.1948	.1740	.1830	.1835	.2641	.6638	-.0525
14.000		.7528	.4507	.2241	.2106	.1931	.1565	.1649	.1745	.2574	.5947	-.0583
24.000									.1847	.3508	.6167	-.0695
45.000	.9181	.5634	.3166	.1413	.1559	.0595	.0669	.0488	.1204	.1294	.1790	-.0773
67.500		.3919	.1959	.0634	.0504	.0234	.0121	.0127	.0189	.0392	.0668	-.0486
90.000	.4567	.2208	.0826	-.0069	9.9990	-.0340	-.0458	-.0486	-.0492	-.0441	-.0142	-.0875
112.500		.1028	.0071	-.0486	-.0593	-.0734	-.0650	-.0655	-.0621	-.0588	-.0520	-.0616
135.000	.1762	.0347	-.0340	-.0667	-.0723	-.0745	-.0678	-.0667	9.9990	-.0616	-.0599	-.0745
157.500		.0054	-.0508	-.0717	-.0728	-.0768	-.0723	-.0672	-.0503	-.0678	-.0678	-.0751
180.000	.1238	.0031	-.0469	-.0695	-.0565	-.0543	-.0526	-.0576	-.0661	-.0667	-.0655	-.0745
202.500		.0020	-.0542	-.0734	-.0717	-.0796	-.0756	-.0711	-.0694	-.0693	-.0683	-.0774

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A038)

MACH (2) = 3.480 ALPHA (1) = 20.610

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.1678	.0217	-.0452	-.0740	-.0745	-.0785	-.0740	-.0717	-.0667	-.0650	-.0632	-.0790	
247.500		.0820	-.0154	-.0610	-.0740	-.0790	-.0734	-.0728	-.0678	-.0638	-.0407	-.0734	
270.000	.4330	.1927	.0528	-.0238	9.9990	-.0519	-.0604	-.0632	-.0593	-.0598	-.0227	-.0864	
292.500		.3434	.1592	.0397	.0359	.0206	-.0068	.0076	-.0058	.0133	.0617	-.0751	
315.000	.8806	.5418	.2933	.1220	.1017	.1079	.0837	.0752	.0538	.0516	.2151	-.0582	
326.000									.1840	.2168	.1862	-.0599	
346.000		.7480	.4695	.2387	.2236	.0744	.1768	.1768	.2472	.3068	.5291	-.0723	
360.000	1.0516	.7652	.4609	.2264	.2061	.1948	.1740	.1830	.1835	.2641	.6638	-.0525	

MACH (3) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(PSI) = 3.0700 PO = 90.019 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	1.0657	.7386	.4461	.2280	.2696	.1940	.1877	.1839	.2419	.3339	.6537	.0364	
14.000		.7373	.4360	.2242	.2696	.2142	.1726	.1713	.2230	.3327	.5907	.0880	
24.000									.2442	.3337	.6285	.0886	
45.000	.8830	.5542	.3211	.1561	.1598	.0855	.0895	.0842	.1775	.1926	.2001	-.0089	
67.500		.3841	.2001	.0905	.0817	.0653	.0590	.0553	.0616	.0893	.1069	.0036	
90.000	.4395	.2253	.1094	.0515	9.9990	.0313	.0351	.0275	.0263	.0326	.0238	-.0139	
112.500		.1183	.0565	.0326	.0263	.0124	.0225	.0175	.0162	.0175	.0074	.0074	
135.000	.1712	.0541	.0313	.0225	.0162	.0124	.0149	.0137	9.9990	.0112	-.0064	-.0114	
157.500		.0389	.0225	.0162	.0137	.0049	.0124	.0061	.0527	.0074	-.0039	-.0114	
180.000	.1170	.0351	.0225	.0162	.0124	.0036	.0112	.0061	.0124	.0023	-.0089	-.0139	
202.500		.0326	.0137	.0124	.0112	.0011	.0061	.0023	.0061	.0061	-.0051	-.0137	
225.000	.1750	.0464	.0099	.0074	.0036	.0011	.0061	-.0013	.0011	-.0013	-.0064	-.0152	
247.500		.0981	.0301	.0112	.0023	-.0039	.0011	-.0013	-.0039	-.0039	.0187	-.0013	
270.000	.4383	.1989	.0767	.0238	9.9990	.0036	.0049	.0036	.0011	.0036	.0137	-.0101	
292.500		.3413	.1674	.0579	.0641	.0401	.0326	.0427	.0338	.0792	.0666	-.0051	
315.000	.8951	.5403	.2909	.1372	.1208	.1372	.0905	.0959	.0830	.1031	.2115	-.0026	
326.000									.1762	.2291	.2153	-.0013	
346.000		.7255	.4446	.2329	.2518	.1183	.1913	.1762	.2908	.3350	.5176	.0086	
360.000	1.0657	.7386	.4461	.2280	.2696	.1940	.1877	.1839	.2419	.3339	.6537	.0364	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A039) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = 24.870 BETA = .00000 Q(PSI) = 10.225 PO = 28.006 P = 3.7900

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	1.2112	.8993	.5738	.2862	.3343	.3089	.2809	.2976	.2646	.5526	.9530	-.2482	
14.000		.8720	.5523	.2696	.3199	.1961	.2313	.2325	.2506	.5795	.9054	-.1464	
24.000													
45.000	.9859	.6113	.3441	.1366	.1884	-.0179	.0096	.0228	.0855	.0931	.1457	-.2661	
67.500		.3961	.1676	-.0081	-.0138	-.0841	-.0807	-.0504	-.0678	-.0504	-.0085	-.2637	
90.000	.4105	.1496	-.0104	-.1382	9.9990	-.1984	-.1980	-.2060	-.2060	-.1912	-.1594	-.2854	
112.500		-.0164	-.1398	-.2298	-.2544	-.2340	-.1912	-.1897	-.1704	-.1769	-.0933	-.2255	
135.000	.0950	-.0871	-.1918	-.2641	-.2667	-.2387	-.2278	-.1775	9.9990	-.1801	-.1706	-.2458	
157.500		-.0822	-.1809	-.2471	-.2861	-.2286	-.2524	-.1938	-.1586	-.1669	-.1694	-.2164	
180.000	.0931	-.0830	-.1701	-.2132	-.0932	-.1375	-.1625	-.1791	-.1610	-.1606	-.1575	-.2044	
202.500		-.0899	-.1797	-.2395	-.2720	-.2383	-.2436	-.2035	-.1668	-.1664	-.1732	-.2186	
225.000	.0856	-.0875	-.1994	-.2618	-.2675	-.2383	-.2421	-.2100	-.1760	-.1658	-.1813	-.2453	
247.500		-.0266	-.1626	-.2442	-.2673	-.2363	-.1940	-.1724	-.1770	-.1652	-.0771	-.2221	
270.000	.3630	.1238	-.0520	-.1648	9.9990	-.2026	-.2124	-.2030	-.1973	-.1750	-.1510	-.2662	
292.500		.3381	.1173	-.0387	-.0252	-.1034	-.0833	-.0837	-.1041	-.0470	-.0059	-.2561	
315.000	.9617	.5893	.3224	.1144	.1358	.0720	.0330	.1016	-.0066	-.0316	.2815	-.2305	
326.000									.2068	.2127	.2613	-.2304	
346.000		.8890	.5718	.2867	.3261	.2553	.2662	.2632	.3692	.4775	.7206	-.2612	
360.000	1.2112	.8993	.5738	.2862	.3343	.3089	.2809	.2976	.2646	.5526	.9530	-.2482	

MACH (2) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(PSI) = 6.8640 PO = 60.031 P = .81000

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	1.2077	.8904	.5685	.3064	.2895	.2951	.2613	.2658	.2681	.3977	.8528	-.0441	
14.000		.8736	.5525	.3017	.2944	.2719	.2341	.2499	.2606	.4550	.7384	.1006	
24.000									.2785	.4679	.7462	-.0609	
45.000	.9897	.6353	.3795	.1879	.2014	.0865	.0865	.0792	.1716	.2116	.2183	-.0572	
67.500		.4161	.2200	.0826	.0679	.0431	.0307	.0397	.0459	.0927	.1041	-.0396	
90.000	.4303	.2127	.0854	-.0035	9.9990	-.0374	-.0407	-.0430	-.0413	-.0317	-.0012	-.0864	
112.500		.0775	-.0058	-.0537	-.0521	-.0672	-.0672	-.0655	-.0616	-.0576	-.0492	-.0610	
135.000	.1220	.0037	-.0497	-.0728	-.0762	-.0734	-.0700	-.0695	9.9990	-.0633	-.0593	-.0824	
157.500		-.0193	-.0605	-.0751	-.0779	-.0785	-.0786	-.0695	-.0497	-.0695	-.0694	-.0829	
180.000	.0826	-.0170	-.0554	-.0728	-.0576	-.0786	-.0621	-.0689	-.0638	-.0644	-.0700	-.0830	
202.500		-.0233	-.0644	-.0768	-.0768	-.0807	-.0762	-.0762	-.0768	-.0751	-.0762	-.0824	

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T1

(R1A039)

MACH (2) = 3.480 ALPHA (1) = 24.860

SECTION (1)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.8100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.1167	-.0097	-.0627	-.0802	-.0819	-.0790	-.0790	-.0790	-.0762	-.0751	-.0728	-.0858
247.500		.0566	-.0266	-.0667	-.0778	-.0830	-.0796	-.0807	-.0785	-.0700	-.0503	-.0700
270.000	.4026	.1812	.0504	-.0238	9.9990	-.0531	-.0605	-.0554	-.0582	-.0554	-.0109	-.0841
292.500		.3615	.1767	.0544	.0516	.0364	.0133	.0341	.0166	.0516	.1071	-.0672
315.000	1.0460	.6108	.3543	.1661	.1463	.1616	.1125	.1317	.0956	.1204	.2837	-.0526
326.000									.2470	.2798	.2455	-.0537
346.000		.8561	.5744	.3192	.3119	.1665	.2640	.2629	.3586	.4296	.7061	-.0655
360.000	1.2077	.8904	.5695	.3064	.2895	.2951	.2613	.2659	.2681	.3977	.8528	-.0441

MACH (3) = 4.960 ALPHA (1) = 24.510 BETA = .00000 Q(P51) = 3.0700 P0 = 90.023 P = .17800

SECTION (1)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.8100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.2219	.8717	.5504	.2984	.3526	.2795	.2556	.2669	.3425	.5139	.9258	.0527
14.000		.8603	.5454	.2984	.3551	.3098	.2367	.2505	.2820	.4685	.8452	.1472
24.000									.3072	.4874	.8591	.0200
46.000	1.0002	.6348	.3853	.1976	.2652	.1107	.1006	.1120	.2455	.2455	.2606	-.0039
67.500		.4156	.2329	.1107	.1006	.0842	.0767	.0792	.0868	.1309	.1510	.0137
90.000	.4420	.2228	.1170	.0553	9.9990	.0313	.0376	.0338	.0326	.0414	.0414	-.0101
112.500		.1044	.0464	.0275	.0250	.0112	.0225	.0187	.0175	.0162	.0124	.0162
135.000	.1359	.0490	.0250	.0200	.0124	.0112	.0137	.0124	9.9990	.0099	-.0051	-.0076
157.500		.0326	.0200	.0175	.0149	.0086	.0124	.0099	.0666	.0086	-.0101	-.0114
180.000	.0855	.0275	.0212	.0137	.0099	.0086	.0086	.0074	.0137	.0011	-.0114	-.0127
202.500		.0225	.0086	.0099	.0061	-.0001	.0061	.0023	.0061	.0036	-.0064	-.0114
225.000	.1309	.0301	.0061	.0049	.0036	.0011	.0049	-.0001	.0036	-.0013	-.0039	-.0139
247.500		.0805	.0200	.0086	.0011	-.0013	-.0013	-.0013	-.0039	-.0026	.0212	.0036
270.000	.4269	.1926	.0767	.0263	9.9990	.0036	.0061	.0061	.0049	.0112	.0275	-.0114
292.500		.3665	.1863	.0817	.0767	.0628	.0477	.0666	.0616	.1268	.0943	-.0026
315.000	1.0783	.6209	.3513	.1762	.1636	.1954	.1183	.1447	.1208	.1472	.3022	-.0051
326.000									.2379	.3350	.2883	.0049
346.000		.8591	.5668	.3135	.3362	.1800	.2568	.2644	.4257	.5025	.7391	.0225
360.000	1.2219	.8717	.5504	.2984	.3526	.2795	.2556	.2669	.3425	.5139	.9258	.0527

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A040) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = 28.930 BETA = .00000 Q(P51) = 10.265 PO = 28.006 P = 3.8340

SECTION (1) TANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	1.3271	1.0213	.6877	.4038	.4256	.4256	.3824	.3591	.3625	.6768	1.1122	-.2391		
14.000		.9869	.6586	.3771	.4110	.3191	.3097	.3402	.3455	.7219	1.0261	-.1450		
24.000									.3728	.6658	.9691	-.2484		
45.000	1.0469	.6800	.4186	.1961	.2281	.0394	.0187	.0511	.1678	.0970	.1862	-.2479		
67.500		.4123	.1945	.0180	.0022	-.0595	-.0613	-.0271	-.0452	-.0166	.0281	-.2692		
90.000	.3492	.1407	-.0132	-.1409	9.9990	-.2178	-.1989	-.2095	-.2178	-.2031	-.1453	-.2947		
112.500		-.0520	-.1640	-.2495	-.2668	-.2167	-.1994	-.1986	-.1979	-.1930	-.1019	-.2474		
135.000	.0217	-.1346	-.2353	-.2914	-.2858	-.2458	-.2176	-.1882	9.9990	-.1987	-.1767	-.2604		
157.500		-.1181	-.2116	-.2847	-.3021	-.2534	-.2489	-.2022	-.1848	-.1909	-.1944	-.2404		
180.000	.0526	-.0995	-.1776	-.2232	-.1120	-.1972	-.1968	-.2126	-.1689	-.1712	-.1736	-.2252		
202.500		-.1112	-.2065	-.2754	-.2954	-.2630	-.2569	-.2140	-.2027	-.2016	-.2047	-.2356		
225.000	.0051	-.1370	-.2326	-.2905	-.2901	-.2412	-.2356	-.2058	-.2070	-.2040	-.1974	-.2551		
247.500		-.0725	-.1909	-.2648	-.2814	-.2365	-.2188	-.1860	-.1882	-.1980	-.0936	-.2191		
270.000	.3232	.1012	-.0626	-.1696	9.9990	-.2306	-.2280	-.2216	-.2205	-.2088	-.1521	-.2770		
292.500		.3488	.1350	-.0212	-.0020	-.0906	-.0484	-.0593	-.0797	.0164	.0160	-.2340		
315.000	1.0164	.6446	.3828	.1618	.2096	.1693	.1064	.1573	.0741	.0406	.3597	-.2226		
326.000									.2588	.2725	.3421	-.2156		
346.000		.9986	.6739	.3943	.4248	.3766	.3604	.3529	.4872	.5945	.8738	-.2498		
360.000	1.3271	1.0213	.6877	.4038	.4256	.4256	.3824	.3591	.3625	.6768	1.1122	-.2391		

MACH (2) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(P51) = 6.8630 PO = 60.020 P = .81000

SECTION (1) TANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	1.3486	1.0223	.6897	.3994	.3848	.4383	.3690	.3617	.3763	.5758	1.0798	-.0221		
14.000		.9968	.6892	.3889	.3805	.3726	.3105	.3517	.3619	.5964	.9366	.1322		
24.000									.3853	.5725	.9355	-.0548		
45.000	1.0533	.7044	.4485	.2405	.2653	.1165	.0984	.1091	.2399	.3030	.2732	-.0621		
67.500		.4378	.2467	.1052	.0950	.0753	.0595	.0798	.0793	.1255	.1345	-.0294		
90.000	.3989	.2014	.0831	-.0013	9.9990	-.0340	-.0345	-.0340	-.0334	-.0182	.0189	-.0841		
112.500		.0545	-.0148	-.0565	-.0627	-.0694	-.0578	-.0616	-.0587	-.0587	-.0486	-.0559		
135.000	.0736	-.0221	-.0610	-.0756	-.0773	-.0734	-.0706	-.0694	9.9990	-.0644	-.0604	-.0818		
157.500		-.0373	-.0678	-.0785	-.0795	-.0790	-.0734	-.0711	-.0430	-.0711	-.0717	-.0835		
180.000	.0488	-.0328	-.0644	-.0768	-.0689	-.0655	-.0734	-.0700	-.0734	-.0768	-.0785	-.0824		
202.500		-.0396	-.0694	-.0802	-.0802	-.0824	-.0818	-.0807	-.0802	-.0802	-.0824	-.0835		

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A040)

MACH (2) = 3.480 ALPHA (1) = 28.700

SECTION (1)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.0691	-.0339	-.0734	-.0841	-.0841	-.0785	-.0835	-.0830	-.0807	-.0837	-.0796	-.0852
247.500		.0347	-.0384	-.0717	-.0813	-.0847	-.0875	-.0854	-.0869	-.0841	-.0441	-.0576
270.000	.3718	.1781	.0475	-.0217	9.9990	-.0515	-.0594	-.0487	-.0509	-.0425	-.0018	-.0830
292.500		.3791	.1955	.0719	.0714	.0505	.0471	.0466	.0415	.1227	.1497	-.0514
315.000	1.1153	.6751	.4129	.2117	.1976	.2162	.1390	.1807	.1593	.2371	.3487	-.0492
326.000										.3109	.3605	-.0311
346.000		.9671	.6916	.4150	.4093	.3226	.3592	.3558	.5271	.5818	.8842	-.0492
360.000	1.3486	1.0223	.6897	.3994	.3848	.4383	.3690	.3617	.3763	.5758	1.0798	-.0221

MACH (3) = 4.960 ALPHA (1) = 28.560 BETA = .00000 Q(PSI) = 3.0700 PO = 90.023 P = .17800

SECTION (1)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.3680	.9957	.6591	.3856	.4423	.3730	.3553	.3856	.4448	.7600	1.1929	.0742
14.000		.9712	.6449	.3816	.4433	.4055	.3135	.3602	.3929	.7016	1.0947	.2228
24.000									.4069	.7369	1.1425	.0212
45.000	1.0531	.6890	.4458	.2480	.2644	.1372	.1170	.1422	.3148	.2556	.3476	.0149
67.500		.4306	.2618	.1308	.1220	.1044	.0892	.0981	.1119	.1384	.1926	.0187
90.000	.4156	.2139	.1144	.0552	9.9990	.0363	.0339	.0351	.0363	.0452	.0590	-.0114
112.500		.0868	.0452	.0263	.0250	.0112	.0212	.0175	.0162	.0162	.0162	.0263
135.000	.1019	.0376	.0175	.0149	.0074	.0061	.0099	.0099	9.9990	.0086	-.0064	-.0076
157.500		.0225	.0212	.0137	.0112	.0036	.0112	.0061	.0716	.0061	-.0076	-.0101
180.000	.0628	.0162	.0124	.0099	.0061	.0049	.0061	.0023	.0099	-.0039	-.0089	-.0114
202.500		.0200	.0086	.0074	.0074	-.0001	.0036	-.0013	.0036	.0011	-.0114	-.0114
225.000	.0894	.0200	.0061	.0061	.0036	-.0013	.0036	-.0013	.0011	-.0026	-.0114	-.0177
247.500		.0691	.0212	.0049	.0011	-.0026	-.0039	-.0039	-.0051	-.0039	.0376	.0099
270.000	.4055	.1876	.0729	.0250	9.9990	-.0001	.0061	.0099	.0049	.0187	.0427	-.0076
292.500		.3853	.2014	.0956	.0918	.0842	.0666	.0767	.0880	.1800	.1145	.0011
315.000	1.1488	.6890	.4093	.2203	.2127	.2405	.1523	.1964	.1573	.1800	.4244	.0074
326.000									.3035	.4534	.4168	.0124
346.000		.9699	.6726	.3992	.4168	.2493	.3652	.3778	.5580	.6751	.9737	.0187
360.000	1.3680	.9957	.6591	.3856	.4423	.3730	.3553	.3856	.4448	.7600	1.1929	.0742

MSFC 595 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA041) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = -8.360 BETA = .00000 Q(PSI) = 6.8630 PO = 60.026 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3457	.1587	.0229	-.0384	-.0289	-.0373	-.0430	-.0430	-.0182	-.0035	.0240	-.0734
14.000		.1362	.0099	-.0430	-.0384	-.0384	-.0384	-.0362	-.0244	.0043	.1282	-.0824
24.000									-.0092	.0296	.0652	-.0635
45.000	.3299	.1120	.0003	-.0475	-.0396	-.0260	-.0277	-.0204	-.0272	-.0108	.0797	-.0802
67.500		.1214	.0037	-.0492	-.0407	-.0306	-.0261	-.0266	-.0239	-.0272	.0026	-.0768
90.000	.3752	.1446	.0189	-.0441	9.9990	-.0379	-.0322	-.0362	-.0368	-.0339	-.0261	-.0734
112.500		.1851	.0426	-.0328	-.0374	-.0424	-.0362	-.0362	-.0374	-.0345	-.0340	-.0655
135.000	.5243	.2450	.0781	-.0153	-.0272	-.0373	-.0373	-.0418	9.9990	-.0396	-.0419	-.0627
157.500		.3059	.1182	.0082	-.0063	-.0193	-.0176	-.0244	-.0125	-.0272	-.0283	-.0632
180.000	.6894	.3515	.1554	.0302	.0144	.0054	.0049	-.0018	-.0046	-.0029	-.0047	-.0655
202.500		.4088	.1868	.0476	.0307	.0240	.0228	.0161	.0166	.0211	.0166	-.0667
225.000	.7641	.4304	.2004	.0573	.0421	.0297	.0313	.0246	.0240	.0274	.0245	-.0678
247.500		.4146	.1903	.0516	.0398	.0229	.0251	.0212	.0195	.0218	.0414	-.0774
270.000	.7046	.3729	.1655	.0353	9.9990	.0065	.0099	.0065	.0043	.0071	.0234	-.0796
292.500		.3115	.1244	.0111	.0020	-.0063	-.0024	-.0091	-.0103	.0133	.0116	-.0796
315.000	.5288	.2454	.0820	-.0126	-.0171	-.0024	-.0064	-.0165	-.0109	.0071	.0268	-.0779
326.000									-.0024	.0048	.0561	-.0745
346.000		.1756	.0432	-.0328	-.0373	-.0559	-.0497	-.0497	-.0131	-.0024	.0211	-.0774
360.000	.3457	.1587	.0229	-.0384	-.0289	-.0373	-.0430	-.0430	-.0182	-.0035	.0240	-.0734

MACH (2) = 4.960 ALPHA (1) = -8.310 BETA = .00000 Q(PSI) = 3.0700 PO = 90.025 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3236	.1611	.0868	.0578	.0603	.0578	.0464	.0527	.0498	.0553	.0086	.0023
14.000		.1397	.0641	.0490	.0414	.0389	.0364	.0376	.0338	.0490	.1006	-.0013
24.000									.0061	.0124	.0301	-.0026
45.000	.3186	.1220	.0578	.0401	.0376	.0338	.0326	.0351	.0250	.0401	.0074	-.0001
67.500		.1321	.0628	.0301	.0376	.0275	.0376	.0313	.0288	.0351	-.0013	.0086
90.000	.3652	.1485	.0616	.0288	9.9990	.0212	.0313	.0275	.0225	.0275	-.0051	.0049
112.500		.1853	.0754	.0301	.0301	.0162	.0263	.0275	.0212	.0288	.0049	.0074
135.000	.5038	.2392	.0968	.0351	.0263	.0187	.0200	.0225	9.9990	.0225	.0112	-.0074
157.500		.2946	.1246	.0414	.0338	.0212	.0212	.0212	.1409	.0225	.0049	.0074
180.000	.6625	.3323	.1522	.0527	.0376	.0288	.0263	.0263	.0288	.0237	.0124	.0036
202.500		.3765	.1787	.0616	.0452	.0288	.0326	.0313	.0225	.0326	.0238	.0049

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A041)

MACH (2) = 4.860 ALPHA (1) = -8.310

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2100	.3220	.5180	.8100	.7350	.6600	.8920	.9230	.8540
THETA													
225.000	.7230	.3942	.1888	.0653	.0502	.0338	.0376	.0338	.0288	.0326	.0288	.0049	
247.500		.3828	.1787	.0616	.0464	.0338	.0313	.0301	.0225	.0301	.0364	-.0013	
270.000	.6625	.3476	.1611	.0490	8.9990	.0200	.0225	.0238	.0162	.0212	.0250	-.0039	
292.500		.2972	.1296	.0338	.0326	.0175	.0162	.0149	.0099	.0187	.0263	-.0076	
315.000	.4950	.2405	.0956	.0200	.0175	.0099	.0099	.0124	.0061	.0175	.0212	-.0114	
326.000									.0137	.0175	.0250	-.0076	
348.000		.1687	.0666	.0099	.0112	-.0026	-.0013	.0036	-.0013	.0074	.0099	-.0127	
360.000	.3236	.1611	.0868	.0578	.0603	.0578	.0464	.0527	.0490	.0553	.0086	.0023	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A042) (16 NOV 74 1

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 6.8640 PO = 60.028 P = .81000

SECTION (1)ANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.4234	.2016	.0460	-.0272	-.0193	-.0373	-.0283	-.0227	-.0159	.0488	.1243	-.0689	
14.000		.1875	.0392	-.0306	-.0193	-.0441	-.0277	-.0215	-.0120	.0381	.1616	-.0756	
24.000									-.0013	.0313	.1344	-.0813	
45.000	.4276	.1706	.0330	-.0351	-.0266	-.0193	-.0221	-.0187	-.0167	-.0063	.0955	-.0745	
67.500		.1795	.0380	-.0340	-.0300	-.0199	-.0148	-.0182	-.0092	-.0137	.0262	-.0780	
90.000	.4555	.1941	.0482	-.0306	9.9990	-.0216	-.0131	-.0159	-.0165	-.0126	-.0064	-.0673	
112.500		.2174	.0607	-.0244	-.0272	-.0244	-.0170	-.0182	-.0176	-.0148	-.0109	-.0605	
135.000	.5395	.2517	.0793	-.0148	-.0227	-.0227	-.0187	-.0193	9.9990	-.0170	-.0182	-.0587	
157.500		.2799	.0990	-.0041	-.0136	-.0153	-.0131	-.0170	-.0012	-.0148	-.0137	-.0554	
180.000	.6150	.3017	.1181	.0071	-.0024	-.0052	-.0035	-.0047	-.0086	-.0069	-.0103	-.0548	
202.500		.3249	.1299	.0138	.0026	.0014	.0020	-.0019	-.0019	.0020	-.0013	-.0559	
225.000	.6449	.3338	.1355	.0172	.0054	.0031	.0054	.0009	.0014	.0037	.0031	-.0582	
247.500		.3256	.1294	.0150	.0060	.0003	.0032	.0009	.0009	.0037	.0172	-.0557	
270.000	.6181	.3099	.1210	.0088	9.9990	-.0024	.0015	-.0001	-.0018	.0043	.0167	-.0589	
292.500		.2775	.1028	-.0024	-.0030	-.0030	-.0002	-.0041	-.0047	-.0058	.0330	-.0695	
315.000	.5406	.2433	.0810	-.0142	-.0114	-.0012	-.0024	-.0153	-.0210	-.0103	.0983	-.0689	
326.000									.0009	.0031	.0916	-.0672	
346.000		.2309	.0731	-.0153	-.0193	-.0424	-.0294	-.0289	-.0159	.0488	.1034	-.0740	
360.000	.4234	.2016	.0460	-.0272	-.0193	-.0373	-.0283	-.0227	-.0159	.0488	.1243	-.0689	

MACH (2) = 4.960 ALPHA (1) = -4.290 BETA = .00000 Q(PSI) = 3.0700 PO = 90.025 P = .17800

SECTION (1)ANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.3702	.2001	.1044	.0679	.0729	.0729	.0527	.1636	.0616	.0742	.0578	.0049	
14.000		.1838	.0888	.0578	.0528	.0440	.0465	.0780	.0427	.0616	.0931	-.0051	
24.000									.0175	.0238	.0553	-.0076	
45.000	.4143	.1737	.0842	.0515	.0515	.0389	.0401	.0817	.0326	.0502	.0288	.0011	
67.500		.1787	.0767	.0351	.0376	.0351	.0389	.0452	.0326	.0401	.0036	.0086	
90.000	.4446	.1926	.0779	.0376	9.9990	.0250	.0364	.0427	.0263	.0376	.0011	.0137	
112.500		.2140	.0858	.0326	.0338	.0275	.0313	.0101	.0263	.0338	.0124	.0389	
135.000	.5150	.2379	.0956	.0351	.0288	.0200	.0250	.0351	9.9990	.0250	.0112	.0364	
157.500		.2657	.1069	.0351	.0313	.0200	.0212	.0301	.1460	.0250	.0074	.0376	
180.000	.5817	.2807	.1182	.0376	.0288	.0187	.0212	.0300	.0253	.0200	.0074	.0389	
202.500		.2959	.1271	.0389	.0326	.0200	.0200	.0288	.0162	.0225	.0074	.0389	

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A042)

MACH (2) = 4.950 ALPHA (1) = -4.290

SECTION (1) TANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
223.000	.6046	.3072	.1372	.0414	.0326	.0200	.0250	.0326	.0175	.0225	.0124	.0414
247.500		.3022	.1321	.0376	.0313	.0162	.0200	.0338	.0124	.0162	.0225	.0074
270.000	.5831	.2870	.1195	.0326	9.9990	.0149	.0149	.0338	.0099	.0187	.0187	-.0001
292.500		.2644	.1107	.0250	.0301	.0212	.0149	.0351	.0112	.0175	.0187	-.0013
315.000	.5139	.2316	.0880	.0175	.0200	.0099	.0124	.0338	-.0026	.0175	.0300	-.0076
326.000									.0086	.0174	.0338	-.0127
346.000		.2216	.0842	.0162	.0162	.0036	.0124	.0351	.0011	.0225	.0502	-.0089
360.000	.3702	.2001	.1044	.0679	.0729	.0729	.0527	.1636	.0616	.0742	.0578	.0049

TA-2F - PRESSURE SOURCE DATA TABULATION

DATE 09 OCT 75

(RIAD03) (16 NOV 74)

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

REFERENCE DATA

SREF = 572.5550 SO. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = -.280 BETA = .00000 O(P51) = 6.8640 P0 = 60.034 P = .81000

SECTION (1) ANK

DEPENDENT VARIABLE CP

Table with columns X/LB, THETA, and values for various angles from 0.000 to 202.500. Includes values for X/LB, THETA, and dependent variable CP.

MACH (2) = 4.960 ALPHA (1) = -.280 BETA = .00000 O(P51) = 3.0700 P0 = 90.024 P = .17800

SECTION (1) ANK

DEPENDENT VARIABLE CP

Table with columns X/LB, THETA, and values for various angles from 0.000 to 202.500. Includes values for X/LB, THETA, and dependent variable CP.

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA043)

MACH (2) = 4.860 ALPHA (1) = -.280

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.4962	.2266	.0905	.0250	.0200	.0162	.0162	.0666	.0137	.0175	.0049	.0275	
247.500		.2279	.0893	.0238	.0200	.0124	.0149	.0288	.0099	.0175	.0162	.0011	
270.000	.4987	.2279	.0880	.0200	9.9990	.0112	.0112	.0212	.0074	.0162	.0162	-.0001	
292.500		.2228	.0842	.0200	.0263	.0175	.0124	.0200	.0049	.0124	.0212	-.0064	
315.000	.5301	.2266	.0842	.0162	.0212	.0074	.0112	.0212	-.0026	.0112	.0326	-.0064	
326.000									.0187	.0200	.0351	-.0127	
346.000		.2594	.1044	.0225	.0301	.0049	.0061	.0250	.0099	.0313	.0527	-.0139	
360.000	.4772	.2379	.1183	.0742	.0792	.0729	.0578	.0679	.0516	.0742	.0540	-.0001	

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TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA044) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1088.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 3.770 BETA = .00000 Q(PSI) = 6.8630 PO = 60.025 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.5770	.2964	.1132	.0032	.0303	.0066	-.0091	-.0091	-.0046	.0777	.1458	-.0644	
14.000		.3143	.1187	.0088	.0342	-.0193	-.0131	-.0091	-.0029	.0652	.1649	-.0728	
24.000									.0118	.0696	.1490	-.0836	
45.000	.6525	.3237	.1333	.0144	.0240	.0234	.0014	-.0052	-.0035	.0020	.1035	-.0694	
67.500		.3284	.1345	.0150	.0082	.0065	.0049	-.0029	.0032	-.0012	.0403	-.0796	
90.000	.6212	.3079	.1209	.0087	9.9990	-.0013	.0003	-.0064	-.0103	-.0058	.0059	-.0723	
112.500		.2839	.1063	-.0007	-.0091	-.0120	-.0114	-.0131	-.0153	-.0136	.0122	-.0683	
135.000	.5420	.2568	.0866	-.0120	-.0182	-.0170	-.0198	9.9990	-.0182	-.0182	-.0589		
157.500		.2207	.0657	-.0221	-.0283	-.0249	-.0199	-.0193	.0009	-.0176	-.0171	-.0678	
180.000	.4552	.1987	.0516	-.0295	-.0306	-.0221	-.0178	-.0159	-.0148	-.0148	-.0193	-.0683	
202.500		.1802	.0387	-.0362	-.0368	-.0221	-.0165	-.0159	-.0159	-.0125	-.0143	-.0657	
225.000	.4212	.1779	.0370	-.0368	-.0362	-.0204	-.0153	-.0125	-.0103	-.0058	-.0064	-.0661	
247.500		.1783	.0369	-.0368	-.0374	-.0227	-.0159	-.0137	-.0128	-.0103	.0043	-.0678	
270.000	.4423	.1896	.0459	-.0323	9.9990	-.0255	-.0159	-.0189	-.0165	-.0120	-.0007	-.0694	
292.500		.2071	.0561	-.0289	-.0188	-.0154	-.0233	-.0238	-.0193	-.0250	.0223	-.0689	
315.000	.5539	.2410	.0742	-.0198	-.0215	-.0103	-.0266	-.0249	-.0368	-.0074	.0810	-.0655	
326.000									-.0058	.0065	.0893	-.0802	
346.000		.3160	.1193	.0049	.0218	-.0334	-.0029	-.0063	-.0108	.0708	.1361	-.0796	
360.000	.5770	.2964	.1132	.0032	.0303	.0066	-.0091	-.0091	-.0046	.0777	.1458	-.0644	

MACH (2) = 4.960 ALPHA (1) = 3.730 BETA = .00000 Q(PSI) = 3.0700 PO = 90.031 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.5655	.2808	.1359	.0742	.0805	.0666	.0553	.0628	.0578	.0716	.0905	-.0013	
14.000		.3005	.1319	.0677	.0627	.0501	.0463	.0476	.0426	.0627	.1019	-.0089	
24.000									.0275	.0414	.0880	-.0114	
45.000	.6272	.3186	.1465	.0653	.0641	.0502	.0477	.0553	.0376	.0502	.0502	-.0101	
67.500		.3198	.1460	.0540	.0502	.0401	.0452	.0540	.0364	.0389	.0301	-.0101	
90.000	.6020	.2997	.1296	.0502	9.9990	.0301	.0376	.0578	.0263	.0326	.0099	-.0101	
112.500		.2707	.1132	.0427	.0364	.0225	.0288	.0590	.0187	.0250	.0124	.0414	
135.000	.5101	.2404	.1031	.0363	.0326	.0174	.0225	.0300	9.9990	.0225	.0011	.0061	
157.500		.2064	.0834	.0263	.0250	.0174	.0187	.0288	.1711	.0200	.0011	.0112	
180.000	.4231	.1761	.0729	.0237	.0200	.0111	.0162	.0326	.0250	.0149	-.0013	.0124	
202.500		.1636	.0616	.0175	.0137	.0074	.0124	.0326	.0112	.0137	-.0013	.0011	

REPRODUCIBILITY OF THIS
 ORIGINAL PAGE IS POOR

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A044)

MACH (2) = 4.980 ALPHA (1) = 3.730

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8500	.8920	.9230	.9540
THETA												
225.000	.3879	.1611	.0590	.0137	.0137	.0137	.0124	.0351	.0112	.0137	.0011	-.0076
247.500		.1624	.0540	.0099	.0074	.0074	.0049	.0338	-.0001	.0099	.0124	-.0039
270.000	.4168	.1762	.0578	.0011	9.9990	-.0013	.0023	.0351	-.0001	.0074	.0086	-.0114
292.500		.1913	.0641	.0074	.0162	.0023	.0036	.0364	-.0013	.0061	.0187	-.0114
315.000	.5239	.2266	.0842	.0162	.0200	.0074	.0074	.0401	.0011	.0137	.0149	-.0139
326.000									.0099	.0137	.0112	-.0139
346.000		.2883	.1183	.0301	.0401	.0074	.0137	.0401	.0124	.0313	.0679	-.0164
360.000	.6655	.2808	.1359	.0742	.0805	.0666	.0553	.0628	.0578	.0716	.0905	-.0013

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TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A045) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 7.800 BETA = .00000 Q(PSI) = 6.8640 PO = 60.030 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.6373	.3543	.1531	.0285	.0539	.0319	.0099	.0065	.0094	.0725	.2534	-.0756	
14.000		.3881	.1711	.0398	.0533	-.0001	.0071	.0099	.0150	.0850	.1958	-.0464	
24.000									.0460	.1175	.1536	-.0796	
45.000	.7750	.4158	.1942	.0539	.0578	.0595	.0325	.0189	.0308	.0178	.1440	-.0683	
67.500		.4169	.1942	.0516	.0392	.0268	.0291	.0167	.0257	.0161	.0629	-.0830	
90.000	.7046	.3695	.1644	.0359	9.9990	.0111	.0105	.0020	-.0046	.0009	.0178	-.0757	
112.500		.3119	.1276	.0133	-.0024	-.0092	-.0148	-.0199	-.0255	-.0255	.0063	-.0734	
135.000	.5305	.2510	.0859	-.0114	-.0244	-.0334	-.0351	-.0424	9.9990	-.0469	-.0458	-.0745	
157.500		.1909	.0505	-.0300	-.0379	-.0419	-.0379	-.0418	-.0176	-.0418	-.0452	-.0740	
180.000	.3772	.1451	.0234	-.0435	-.0476	-.0385	-.0345	-.0362	-.0362	-.0340	-.0323	-.0751	
202.500		.1259	.0099	-.0497	-.0464	-.0385	-.0334	-.0430	-.0435	-.0334	-.0317	-.0700	
225.000	.3265	.1176	.0043	-.0525	-.0458	-.0283	-.0153	-.0091	-.0103	-.0058	-.0075	-.0712	
247.500		.1181	.0026	-.0537	-.0481	-.0345	-.0182	-.0204	-.0188	-.0176	-.0052	-.0644	
270.000	.3693	.1399	.0133	-.0492	9.9990	-.0413	-.0395	-.0357	-.0266	-.0221	-.0030	-.0651	
292.500		.1744	.0335	-.0396	-.0334	-.0334	-.0509	-.0464	-.0492	-.0233	-.0024	-.0734	
315.000	.5556	.2403	.0735	-.0204	-.0210	-.0272	-.0503	-.0571	-.0497	-.0148	.0014	-.0774	
326.000									-.0188	-.0047	-.0255	-.0768	
346.000		.3310	.1485	.0279	.0465	-.0097	.0161	-.0030	.0228	.0510	.1817	-.0813	
360.000	.6373	.3543	.1531	.0285	.0539	.0319	.0099	.0065	.0094	.0725	.2534	-.0756	

MACH (2) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(PSI) = 3.0710 PO = 90.037 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.6499	.3425	.1636	.0905	.0994	.0880	.0704	.0742	.0729	.0958	.1523	-.0001	
14.000		.3853	.1813	.0893	.0792	.0691	.0641	.0679	.0578	.0880	.1750	.0049	
24.000									.0490	.0855	.1447	-.0039	
45.000	.7734	.4192	.2026	.0918	.0642	.0703	.0678	.0716	.0527	.0640	.0968	-.0051	
67.500		.4155	.2051	.0829	.0716	.0590	.0628	.0766	.0527	.0552	.0565	-.0102	
90.000	.6925	.3689	.1799	.0779	9.9990	.0452	.0527	.0792	.0414	.0464	.0225	-.0127	
112.500		.3059	.1371	.0540	.0439	.0300	.0363	.0779	.0263	.0313	.0175	.0301	
135.000	.5025	.2403	.1018	.0401	.0338	.0187	.0237	.0791	9.9999	.0199	-.0001	.0326	
157.500		.1837	.0766	.0300	.0288	.0174	.0174	.0829	.1900	.0225	-.0039	.0326	
180.000	.3450	.1372	.0590	.0225	.0187	.0175	.0137	.0855	.0250	.0124	-.0076	.0313	
202.500		.1182	.0452	.0174	.0187	.0124	.0137	.0855	.0099	.0137	-.0114	.0326	

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A045)

MACH (2) = 4.960 ALPHA (1) = 7.750

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.2996	.1081	.0376	.0111	.0137	.0124	.0124	.0855	.0099	.0174	.0049	.0330
247.500		.1132	.0401	.0112	.0124	.0023	.0099	.0263	.0023	.0124	.0112	-.0064
270.000	.3526	.1309	.0401	.0074	9.9990	.0162	.0023	.0225	-.0001	.0074	.0074	-.0127
292.500		.1624	.0565	.0074	.0162	.0137	.0036	.0250	-.0001	.0049	.0011	-.0076
315.000	.5328	.2329	.0830	.0162	.0200	-.0001	-.0001	.0250	-.0076	.0023	.0074	-.0127
326.000									.0049	.0099	.0011	-.0177
346.000		.3236	.1498	.0477	.0590	.0200	.0288	.0288	.0288	.0578	.1195	-.0190
360.000	.6499	.3425	.1636	.0905	.0994	.0880	.0704	.0742	.0729	.0956	.1523	-.0001

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA046) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 12.520 BETA = .00000 Q(PSI) = 6.8630 PO = 60.025 P = .81000

SECTION (1) ANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.7035	.4180	.1976	.0545	.0810	.0347	.0370	.0257	.0302	.1306	.3446	-.0723	
14.000		.4744	.2286	.0759	.0821	.0229	.0325	.0404	.0468	.1379	.2443	-.0283	
24.000									.0961	.1637	.2061	-.0756	
45.000	.8956	.5178	.2681	.1012	.1018	.0877	.0691	.0545	.0635	.0539	.2065	-.0565	
67.500		.5082	.2596	.0939	.0753	.0578	.0556	.0471	.0590	.0454	.1018	-.0745	
90.000	.7759	.4332	.2117	.0657	9.9990	.0268	.0313	.0173	.0144	.0184	.0415	-.0751	
112.500		.3323	.1463	.0257	.0032	-.0091	-.0131	-.0182	-.0244	-.0238	.0054	-.0734	
135.000	.5079	.2433	.0838	-.0114	-.0272	-.0430	-.0463	-.0508	9.9990	-.0576	-.0588	-.0779	
157.500		.1603	.0324	-.0374	-.0526	-.0621	-.0588	-.0582	-.0435	-.0543	-.0576	-.0762	
180.000	.3023	.1017	.0003	-.0543	-.0599	-.0582	-.0531	-.0571	-.0548	-.0537	-.0554	-.0762	
202.500		.0781	-.0171	-.0610	-.0565	-.0616	-.0633	-.0627	-.0565	-.0531	-.0570	-.0756	
225.000	.2461	.0691	-.0204	-.0621	-.0559	-.0317	-.0035	-.0232	-.0227	-.0238	-.0260	-.0779	
247.500		.0719	-.0227	-.0655	-.0582	-.0475	-.0430	-.0486	-.0430	-.0379	-.0238	-.0757	
270.000	.2972	.0972	-.0092	-.0605	9.9990	-.0565	-.0554	-.0447	-.0430	-.0272	-.0272	-.0819	
292.500		.1435	.0178	-.0486	-.0413	-.0531	-.0504	-.0632	-.0463	-.0306	-.0368	-.0852	
315.000	.5412	.2326	.0719	-.0198	-.0131	-.0745	-.0694	-.0717	-.0537	-.0514	-.0261	-.0903	
326.000									-.0430	-.0238	-.0649	-.0903	
346.000		.3553	.1936	.0555	.0769	.0228	.0431	.0240	.0707	.1012	.3154	-.0914	
360.000	.7035	.4180	.1976	.0545	.0810	.0347	.0370	.0257	.0302	.1306	.3446	-.0723	

MACH (2) = 4.960 ALPHA (1) = 12.450 BETA = .00000 Q(PSI) = 3.0710 PO = 90.038 P = .17800

SECTION (1) ANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.7192	.4208	.2140	.1089	.1057	.0943	.0855	.0792	.0968	.1246	.2737	.0149	
14.000		.4761	.2354	.1157	.0943	.0742	.0779	.0716	.0855	.1334	.2883	.0225	
24.000									.0868	.1346	.2190	-.0051	
45.000	.8943	.5151	.2644	.1220	.1019	.0931	.0943	.0754	.0905	.0830	.1649	.0036	
67.500		.4962	.2468	.1107	.0880	.0853	.0817	.0691	.0742	.0754	.1120	-.0013	
90.000	.7681	.4218	.2064	.0905	9.9990	.0565	.0628	.0540	.0515	.0615	.0578	-.0051	
112.500		.3273	.1535	.0640	.0464	.0338	.0426	.0351	.0351	.0414	.0313	-.0039	
135.000	.4924	.2328	.0955	.0401	.0212	.0187	.0250	.0200	9.9990	.0212	.0036	-.0089	
157.500		.1623	.0666	.0288	.0187	.0074	.0225	.0149	.0540	.0200	-.0039	-.0114	
180.000	.2795	.1107	.0439	.0212	.0111	.0061	.0174	.0111	.0149	.0099	-.0026	-.0101	
202.500		.0867	.0250	.0124	.0061	.0036	.0049	.0036	.0074	.0099	-.0039	-.0089	

MSFC 996 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A046)

MACH (2) = 4.860 ALPHA (1) = 12.450

SECTION (1) TANK		DEPENDENT VARIABLE CP											
X/LB	.0580	.1080	.1620	.2160	.3220	.5180	.8100	.7350	.8500	.8920	.9230	.8540	
THETA													
225.000	.2265	.0779	.0187	.0099	.0036	.0086	.0149	.0086	.0137	.0149	.0074	-.0101	
247.500		.0817	.0212	.0074	.0011	.0036	.0074	.0049	.0049	.0086	.0023	-.0051	
270.000	.2683	.1031	.0263	.0111	9.9990	-.0013	.0036	.0036	.0011	.0061	-.0064	-.0114	
292.500		.1447	.0401	.0061	.0111	.0049	.0036	-.0001	-.0001	.0011	-.0114	-.0165	
315.000	.5340	.2379	.0867	.0237	.0263	-.0051	.0036	-.0001	-.0028	.0036	-.0076	-.0139	
326.000									.0061	.0149	-.0114	-.0164	
346.000		.3613	.1862	.0729	.0779	.0363	.0552	.0376	.0640	.1044	.2228	-.0164	
360.000	.7192	.4206	.2140	.1069	.1057	.0943	.0855	.0792	.0958	.1246	.2757	.0149	

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TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A047) (16 NOV 74)

REFERENCE DATA

SREF = 572.5580 SQ. FT XHRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 16.560 BETA = .00000 Q(PSI) = 6.8530 PO = 60.022 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7878	.4924	.2506	.0945	.1131	.0573	.0810	.0567	.0798	.2010	.4676	-.0666
14.000		.5657	.2968	.1232	.1255	.0691	.0691	.0832	.0939	.2033	.3701	-.0001
24.000									.1441	.2591	.2867	-.0683
45.000	1.0279	.6280	.3513	.1609	.1474	.1445	.1203	.1057	.1141	.1085	.2974	-.0452
67.500		.6074	.3402	.1492	.1255	.1058	.0967	.0934	.1091	.0900	.1558	-.0655
90.000	.8492	.4975	.2641	.1024	9.9990	.0556	.0590	.0443	.0426	.0488	.0764	-.0717
112.500		.3611	.1683	.0426	.0156	-.0012	-.0052	-.0108	-.0148	-.0136	.0218	-.0751
135.000	.4834	.2343	.0843	-.0103	-.0317	-.0435	-.0520	-.0542	9.9990	-.0593	-.0576	-.0824
157.500		.1316	.0178	-.0447	-.0599	-.0723	-.0672	-.0638	-.0475	-.0610	-.0655	-.0818
180.000	.2314	.0640	-.0204	-.0633	-.0717	-.0667	-.0661	-.0667	-.0638	-.0621	-.0644	-.0790
202.500		.0387	-.0373	-.0689	-.0689	-.0786	-.0706	-.0689	-.0644	-.0621	-.0644	-.0790
225.000	.1762	.0330	-.0373	-.0683	-.0621	-.0187	-.0294	-.0396	-.0446	-.0463	-.0492	-.0796
247.500		.0336	-.0390	-.0689	-.0683	-.0621	-.0672	-.0531	-.0548	-.0525	-.0384	-.0734
270.000	.2354	.0561	-.0322	-.0700	9.9990	-.0711	-.0570	-.0565	-.0542	-.0475	-.0497	-.0858
292.500		.1158	.0014	-.0548	-.0492	-.0537	-.0723	-.0717	-.0588	-.0531	-.0559	-.0914
315.000	.5014	.2264	.0731	-.0159	-.0012	-.0852	-.0813	-.0768	-.0683	-.0570	-.0328	-.0937
326.000									-.0554	.0082	-.0571	-.0965
345.000		.3994	.2512	.0911	.1108	.0764	.0753	.0674	.1401	.1587	.4155	-.0903
360.000	.7878	.4924	.2506	.0945	.1131	.0573	.0810	.0567	.0798	.2010	.4676	-.0666

MACH (2) = 4.960 ALPHA (1) = 16.450 BETA = .00000 Q(PSI) = 3.0700 PO = 90.027 P = .17800

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7845	.4849	.2518	.1183	.1120	.1044	.0981	.1258	.1283	.1984	.4054	.0149
14.000		.5567	.2984	.1359	.1220	.1435	.0968	.1233	.1233	.2090	.3716	.0565
24.000									.1497	.2216	.3299	.0011
45.000	1.0241	.6235	.3476	.1624	.1465	.1422	.1364	.1485	.1510	.1233	.2833	.0137
67.500		.6020	.3425	.1535	.1309	.1183	.1120	.1372	.1271	.1170	.1850	-.0001
90.000	.8490	.4923	.2694	.1157	9.9990	.0829	.0792	.0893	.0754	.0766	.1031	-.0051
112.500		.3551	.1838	.0691	.0905	.0452	.0439	.0653	.0414	.0364	.0452	.0263
135.000	.4723	.2291	.1044	.0351	.0288	.0275	.0187	.0439	9.9990	.0162	.0023	.0162
157.500		.1334	.0565	.0099	.0175	.0162	.0112	.0351	.0515	.0074	-.0051	.0162
180.000	.2203	.0792	.0401	.0112	.0149	.0112	.0099	.0338	.0149	.0061	-.0089	.0137
202.500		.0527	.0187	.0049	.0074	.0124	.0061	.0288	.0074	.0061	-.0064	.0124

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA047)

MACH (2) * 4.950 ALPHA (1) * 16.450

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.1750	.0477	.0225	.0023	.0061	.0112	.0049	.0351	.0124	.0074	-.0039	.0137
247.500		.0464	.0162	.0023	.0049	.0099	.0061	.0275	.0023	.0023	.0099	.0036
270.000	.2304	.0653	.0175	-.0001	9.9990	.0036	.0011	.0263	.0036	-.0026	-.0026	-.0051
292.500		.1195	.0389	.0023	.0182	.0099	-.0001	.0250	.0023	-.0013	-.0039	-.0064
315.000	.4898	.2178	.0918	.0187	.0275	.0049	-.0026	.0225	-.0026	-.0001	.0023	-.0051
326.000									.0061	.0112	.0049	-.0101
346.000		.4181	.2505	.1031	.0968	.0452	.0830	.1006	.1296	.1913	.3602	-.0013
360.000	.7845	.4849	.2518	.1183	.1120	.1044	.0981	.1258	.1283	.1954	.4054	.0149

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A04B) (16 NOV 74)

REFERENCE DATA

SREF = 372.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 26.000
 MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(P51) = 6.6640 PO = 60.029 P = .81000

SECTION (1) TANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.8785	.5708	.3166	.1407	.1418	.0776	.1277	.0556	.1384	.2929	.5956	-.0570	
14.000		.6615	.3741	.1785	.1796	.1255	.1165	.1401	.1621	.2912	.4488	.0251	
24.000									.2190	.3586	.3998	-.0554	
45.000	1.1559	.7478	.4473	.2292	.2072	.2151	.1864	.1745	.1683	.1734	.4370	-.0362	
67.500		.7151	.4248	.2095	.1818	.1621	.1480	.1508	.1700	.1475	.2331	-.0508	
90.000	.9125	.5654	.3231	.1440	9.9990	.0910	.0955	.0803	.0831	.0883	.1248	-.0655	
112.500		.3840	.1930	.0606	.0307	.0155	.0116	.0042	.0031	.0042	.0477	-.0694	
135.000	.4533	.2251	.0837	-.0081	-.0312	-.0469	-.0486	-.0520	9.9990	-.0564	-.0520	-.0647	
157.500		.1023	.0031	-.0520	-.0683	-.0757	-.0700	-.0667	-.0481	-.0621	-.0655	-.0841	
180.000	.1671	.0318	-.0368	-.0700	-.0785	-.0745	-.0695	-.0689	-.0638	-.0633	-.0655	-.0892	
202.500		.0065	-.0520	-.0745	-.0717	-.0779	-.0751	-.0700	-.0661	-.0632	-.0651	-.0858	
225.000	.1231	.0071	-.0492	-.0723	-.0621	-.0587	-.0486	-.0587	-.0593	-.0610	-.0638	-.0852	
247.500		.0037	-.0508	-.0740	-.0751	-.0661	-.0706	-.0644	-.0745	-.0711	-.0542	-.0678	
270.000	.1795	.0262	-.0452	-.0762	9.9990	-.0790	-.0717	-.0723	-.0723	-.0655	-.0605	-.0892	
292.500		.0933	-.0092	-.0589	-.0526	-.0599	-.0774	-.0757	-.0723	-.0565	-.0593	-.0903	
315.000	.4693	.2162	.0736	-.0091	-.0227	-.0880	-.0841	-.0752	-.0756	-.0503	-.0492	-.0948	
326.000									-.0616	.0566	-.0582	-.0959	
346.000		.4730	.3169	.1434	.1356	.1474	.1220	.1333	.1996	.2065	.5299	-.0836	
360.000	.8785	.5708	.3166	.1407	.1418	.0776	.1277	.0556	.1384	.2929	.5956	-.0570	

MACH (2) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(P51) = 3.0700 PO = 90.025 P = .17800

SECTION (1) TANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.8855	.5556	.3010	.1511	.1435	.1284	.1347	.1334	.1876	.3351	.6222	.0250	
14.000		.6348	.3627	.1787	.1687	.1989	.1359	.1372	.1938	.3526	.5403	.0956	
24.000									.2518	.3438	.4723	.0051	
45.000	1.1274	.7243	.4383	.2241	.2140	.2014	.2077	.1901	.2493	.1825	.4446	.0288	
67.500		.6991	.4205	.2090	.1850	.1699	.1636	.1649	.1964	.1750	.2720	.0074	
90.000	.8805	.5617	.3274	.1535	9.9990	.1145	.1107	.1019	.1170	.1145	.1573	-.0039	
112.500		.3841	.2027	.0855	.1006	.0603	.0527	.0452	.0553	.0480	.0729	-.0001	
135.000	.4332	.2290	.1132	.0414	.0363	.0275	.0263	.0174	9.9990	.0187	.0074	-.0152	
157.500		.1157	.0527	.0200	.0200	.0200	.0200	.0149	.0036	.0578	-.0099	-.0190	
180.000	.1573	.0598	.0275	.0099	.0112	.0124	.0086	-.0013	.0124	-.0001	-.0089	-.0190	
202.500		.0351	.0112	.0049	.0086	.0124	.0049	-.0051	.0074	.0036	-.0089	-.0215	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A04B)

MACH (2) = 4.960 ALPHA (1) = 20.490

SECTION (TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.1183	.0351	.0162	.0036	.0074	.0137	.0061	-.0013	.0099	.0911	-.0064	-.0215	
247.500		.0263	.0086	.0011	.0023	.0124	.0023	-.0102	.0023	-.0039	.0086	.0023	
270.000	.1838	.0477	.0149	.0011	9.9990	.0036	.0011	-.0039	.0023	-.0064	-.0039	-.0051	
292.500		.1031	.0313	.0011	.0175	.0061	-.0001	-.0089	-.0001	-.0076	-.0114	-.0051	
315.000	.4458	.2115	.0905	.0250	.0301	-.0001	-.0013	-.0114	-.0064	-.0001	.0074	-.0101	
326.000													
346.000		.4887	.2997	.1409	.1321	.0729	.1283	.1208	.2039	.2820	.5668	.0074	
360.000	.8855	.5556	.3010	.1511	.1435	.1284	.1347	.1334	.1876	.3351	.6222	.0250	

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T1

(R1A049) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(P51) = 6.8640 PO = 60.030 P = .81000

SECTION (1) ANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1060	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.9733	.6508	.3870	.1942	.1875	.1120	.1903	.1841	.2168	.3842	.7547	-.0424	
14.000		.7592	.4578	.2409	.2471	.1902	.1767	.2195	.2437	.3496	.6001	.0511	
24.000									.3198	.4693	.5339	-.0374	
45.000	1.2821	.8708	.5519	.3085	.2854	.3074	.2736	.2657	.2268	.2403	.6223	-.0300	
67.500		.8257	.5187	.2826	.2544	.2358	.2178	.2268	.2460	.2217	.3299	-.0328	
90.000	.9739	.6319	.3812	.1890	9.9990	.1344	.1406	.1271	.1338	.1383	.1864	-.0593	
112.500		.4067	.2157	.0798	.0499	.0319	.0297	.0235	.0240	.0257	.0803	-.0633	
135.000	.4217	.2144	.0837	-.0069	-.0312	-.0464	-.0458	-.0486	9.9990	-.0514	-.0441	-.0830	
157.500		.0781	-.0058	-.0554	-.0672	-.0751	-.0678	-.0678	-.0441	-.0582	-.0616	-.0847	
180.000	.1090	.0009	-.0537	-.0768	-.0824	-.0796	-.0728	-.0695	-.0627	-.0621	-.0627	-.0909	
202.500		-.0171	-.0610	-.0774	-.0819	-.0807	-.0768	-.0717	-.0655	-.0644	-.0695	-.0903	
225.000	.0809	-.0114	-.0554	-.0751	-.0599	-.0728	-.0570	-.0644	-.0734	-.0728	-.0751	-.0892	
247.500		-.0182	-.0610	-.0785	-.0819	-.0734	-.0762	-.0807	-.0824	-.0779	-.0605	-.0655	
270.000	.1322	.0015	-.0582	-.0830	9.9990	-.0807	-.0790	-.0824	-.0779	-.0694	-.0734	-.0903	
292.500		.0663	-.0255	-.0649	-.0559	-.0723	-.0830	-.0830	-.0790	-.0644	-.0847	-.0954	
315.000	.4403	.2038	.0770	-.0114	-.0328	-.0903	-.0841	-.0847	-.0790	-.0322	-.0559	-.0948	
326.000									-.0588	.0499	-.0683	-.0982	
346.000		.5620	.3953	.2043	.1879	.2392	.1947	.2150	.3508	.3575	.7348	-.0723	
360.000	.9733	.6508	.3870	.1942	.1875	.1120	.1903	.1841	.2168	.3842	.7547	-.0424	

MACH (2) = 4.960 ALPHA (1) = 24.510 BETA = .00000 Q(P51) = 3.0700 PO = 90.029 P = .17800

SECTION (1) ANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	1.0014	.6474	.3828	.1989	.1938	.1661	.1951	.1913	.2631	.4987	.8591	.0401	
14.000		.7570	.4559	.2392	.2417	.2909	.1951	.2127	.2934	.5277	.7406	.1422	
24.000									.3992	.5063	.6323	.0200	
45.000	1.2962	.8792	.5592	.3060	.3135	.2972	.3161	.2921	.3614	.2820	.6197	.0565	
67.500		.8288	.5202	.2808	.2505	.2493	.2417	.2531	.2896	.2594	.3765	.0275	
90.000	.9888	.6386	.3929	.1976	9.9990	.1535	.1548	.1535	.1712	.1687	.2291	.0023	
112.500		.4118	.2354	.1044	.1107	.0742	.0679	.0653	.0729	.0718	.1059	.0149	
135.000	.4294	.2240	.1119	.0414	.0376	.0326	.0263	.0187	9.9990	.0212	.0112	-.0152	
157.500		.0981	.0452	.0182	.0162	.0175	.0112	.0036	.0590	.0112	-.0064	-.0164	
180.000	.1208	.0414	.0225	.0074	.0099	.0174	.0074	.0011	.0149	.0023	-.0076	-.0202	
202.500		.0238	.0099	.0036	.0085	.0124	.0023	-.0026	.0074	.0049	-.0152	-.0202	

REPRODUCTION OF THIS
 ORIGINAL PAGE IS POOR

MSFC 588 (TA-2F) MCRQ-200 EXTERNAL TANK, T1

(R1A04B)

MACH (2) = 4.980 ALPHA (1) = 24.810

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7390	.8800	.9920	.9230	.9540
THETA												
225.000	.0905	.0225	.0112	.0011	.0061	.0124	.0023	-.0076	.0049	-.0001	-.0101	-.0227
247.500		.0149	.0049	-.0013	.0011	.0061	-.0039	-.0102	-.0051	-.0051	.0099	.0112
270.000	.1409	.0326	.0086	-.0026	9.9990	.0023	-.0064	-.0101	-.0051	-.0127	-.0089	-.0028
292.500		.0918	.0250	-.0026	.0200	.0061	-.0051	-.0102	-.0025	-.0102	-.0064	-.0064
315.000	.4320	.2052	.0868	.0263	.0225	-.0039	-.0064	-.0127	-.0051	.0149	.0074	-.0089
325.000									.0187	.1170	-.0001	-.0076
346.000		.9943	.3789	.2013	.1812	.1321	.1950	.2064	.3298	.3663	.8654	.0023
360.000	1.0014	.6474	.3828	.1989	.1938	.1661	.1951	.1913	.2631	.4987	.8591	.0401

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 99

MSFC 595 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A050) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 28.720 BETA = .00000 Q(PSI) = 6.8630 PO = 60.025 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	1.0741	.7365	.4648	.2540	.2472	.1830	.2664	.2794	.3064	.5623	.9338	-.0362		
14.000		.8595	.5451	.3124	.3102	.2713	.2600	.3107	.3468	.6023	.7579	.0714		
24.000									.4479	.5725	.6683	-.0159		
45.000	1.3994	1.0009	.6627	.4011	.3746	.4208	.3797	3741	.2940	.3447	.7485	-.0103		
67.500		.9372	.6232	.3622	.3369	.3335	.3025	.3171	.3346	.3115	.4428	-.0148		
90.000	1.0335	.7004	.4485	.2410	9.9990	.1858	.1976	.1824	.1959	.1971	.2600	-.0509		
112.500		.4248	.2422	.1012	.0736	.0578	.0550	.0499	.0545	.0556	.1221	-.0559		
135.000	.3936	.2048	.0826	-.0030	-.0261	-.0424	-.0402	-.0424	9.9990	-.0441	-.0345	-.0852		
157.500		.0561	-.0159	-.0587	-.0700	-.0745	-.0661	-.0621	-.0413	-.0565	-.0604	-.0852		
180.000	.0623	-.0216	-.0605	-.0779	-.0807	-.0802	-.0655	-.0633	-.0610	-.0516	-.0655	-.0914		
202.500		-.0351	-.0672	-.0795	-.0807	-.0807	-.0717	-.0723	-.0700	-.0683	-.0711	-.0903		
225.000	.0494	-.0255	-.0627	-.0768	-.0711	-.0773	-.0762	-.0824	-.0807	-.0779	-.0768	-.0914		
247.500		-.0322	-.0672	-.0824	-.0841	-.0869	-.0852	-.0869	-.0824	-.0779	-.0621	-.0610		
270.000	.0855	-.0244	-.0683	-.0835	9.9990	-.0869	-.0858	-.0852	-.0847	-.0852	-.0886	-.0875		
292.500		.0443	-.0351	-.0678	-.0418	-.0655	-.0869	-.0869	-.0869	-.0852	-.0931	-.0920		
315.000	.4389	.2055	.0804	-.0012	-.0396	-.0897	-.0847	-.0859	-.0768	-.0300	-.0396	-.0971		
326.000									-.0496	.0713	-.0570	-.0976		
346.000		.6550	.4798	.2719	.2522	.3378	.2950	.3062	.4843	.4786	.8950	-.0610		
360.000	1.0741	.7365	.4648	.2540	.2472	.1830	.2664	.2794	.3064	.5623	.9338	-.0362		

MACH (2) = 4.960 ALPHA (1) = 28.540 BETA = .00000 Q(PSI) = 3.0700 PO = 90.032 P = .17600

SECTION (1)ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	1.0947	.7297	.4562	.2520	.2444	.2104	.2608	.2633	.3679	.5860	1.1224	.0515		
14.000		.8467	.5304	.2960	.3061	.3842	.2658	.2910	.3817	.6249	.8326	.1926		
24.000									.5340	.6398	.7732	.0389		
45.000	1.4084	.9825	.6499	.3879	.3929	.4105	.4231	.4017	.4471	.3740	.7480	.0817		
67.500		.9095	.6159	.3576	.3236	.3450	.3287	.3463	.3740	.3337	.4685	.0414		
90.000	1.0200	.6854	.4564	.2439	9.9990	.2099	.2099	.2061	.2262	.2237	.2921	.0099		
112.500		.4192	.2542	.1182	.1258	.0968	.0855	.0905	.0955	.0918	.1435	.0212		
135.000	.3928	.2127	.1157	.0477	.0439	.0401	.0351	.0275	9.9990	.0275	.0200	-.0101		
157.500		.0855	.0464	.0230	.0225	.0212	.0149	.0274	.0666	.0124	-.0102	-.0177		
180.000	.0867	.0313	.0253	.0111	.0124	.0200	.0111	.0244	.0162	.0049	-.0152	-.0190		
202.500		.0212	.0099	.0049	.0099	.0099	.0049	-.0026	.0061	.0023	-.0127	-.0227		

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T1

(R1A050)

MACH (2) = 4.950 ALPHA (1) = 28.540

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.0828	.0200	.0099	.0023	.0074	.0137	.0023	-.0051	.0086	-.0001	-.0089	-.0227
247.500		.0099	.0036	-.0039	-.0001	-.0026	-.0051	-.0089	-.0013	-.0064	.0162	.0200
270.000	.1145	.0225	.0036	-.0001	9.9990	.0086	-.0039	-.0089	-.0013	-.0064	-.0026	-.0026
292.500		.0679	.0175	-.0026	.0162	.0036	-.0039	-.0114	-.0051	-.0101	-.0089	-.0013
315.000	.4030	.2027	.0905	.0263	.0149	.0011	-.0064	-.0114	.0124	.0288	.0162	-.0076
326.000									.0275	.1232	.0061	-.0089
346.000		.6749	.4532	.2542	.2416	.2051	.2744	.3021	.5112	.4999	1.1451	.0149
360.000	1.0947	.7297	.4562	.2520	.2444	.2104	.2608	.2633	.3679	.5960	1.1224	.0515

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA051) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.950 ALPHA (1) = -8.380 BETA = .00000 Q(PSI) = 10.272 PO = 28.006 P = 3.8420

SECTION (1)ANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.5424	.2807	.0470	-.1007	-.0833	-.0992	-.1093	-.0404	-.0796	.0647	.1278	-.2016	
14.000		.2319	.0119	-.1206	-.1074	-.0772	-.0957	-.0403	-.0279	.1340	.2696	-.2291	
24.000									-.0158	.1395	.3038	-.2331	
45.000	.4769	.1505	-.0377	-.1537	-.1288	-.1548	-.0938	-.0403	-.0610	.0598	.1755	-.2440	
67.500		.1302	-.0430	-.1617	-.1157	-.0332	-.0437	-.0189	-.0219	-.0460	.1366	-.2069	
90.000	.4151	.1148	-.0554	-.1609	9.9990	-.0121	-.0279	-.0208	-.0046	-.0091	.0172	-.2045	
112.500		.1234	-.0497	-.1593	-.1107	-.0418	-.0260	-.0301	-.0286	-.0230	.0330	-.2054	
135.000	.4486	.1562	-.0316	-.1537	-.1186	-.0806	-.0471	-.0437	9.9990	-.0343	-.0316	-.1704	
157.500		.1943	-.0039	-.1349	-.1131	-.1097	-.0878	-.0426	-.0539	-.0517	-.0507	-.1669	
180.000	.5482	.2369	.0357	-.1082	-.0942	-.0988	-.0935	-.0792	-.0784	-.0743	-.0861	-.1617	
202.500		.3048	.0768	-.0848	-.0671	-.0705	-.0875	-.0762	-.0750	-.0694	-.0762	-.1640	
225.000	.6998	.3743	.1193	-.0520	-.0215	-.0207	-.0241	-.0505	-.0550	-.0366	-.0514	-.1819	
247.500		.4202	.1449	-.0211	.0063	.0000	.0044	-.0064	-.0140	-.0143	.0296	-.2208	
270.000	.8001	.4401	.1573	-.0113	9.9990	.0210	.0176	.0089	-.0057	.0059	.0326	-.2347	
292.500		.4147	.1485	-.0135	-.0011	.0112	.0074	-.0041	.0153	-.0225	.1853	-.2388	
315.000	.7271	.3929	.1331	-.0297	.0116	-.0004	-.0286	-.0384	-.0203	-.0098	.2583	-.2531	
326.000									-.0128	.0567	.1732	-.2314	
346.000		.3079	.0707	-.0806	-.0719	-.1533	-.1284	-.1141	.0165	.0507	.1186	-.2037	
360.000	.5424	.2807	.0470	-.1007	-.0833	-.0992	-.1093	-.0404	-.0796	.0647	.1278	-.2016	

MACH (2) = 3.480 ALPHA (1) = -8.360 BETA = .00000 Q(PSI) = 6.8540 PO = 60.031 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.4916	.2677	.0844	-.0136	-.0136	-.0503	-.0378	-.0378	-.0271	.0010	.0341	-.0655	
14.000		.2210	.0597	-.0277	-.0299	-.0497	-.0389	-.0389	-.0243	.0337	.1068	-.0875	
24.000									-.0210	.0414	.0905	-.0890	
45.000	.3874	.1446	.0173	-.0475	-.0390	-.0627	-.0610	-.0475	-.0322	-.0041	.0494	-.0854	
67.500		.1220	.0054	-.0531	-.0430	-.0300	-.0390	-.0289	-.0204	-.0193	.0263	-.0790	
90.000	.3307	.1142	-.0004	-.0555	9.9990	-.0336	-.0190	-.0173	-.0150	-.0162	.0049	-.0779	
112.500		.1232	.0060	-.0525	-.0317	-.0430	-.0362	-.0418	-.0289	-.0300	.0003	-.0786	
135.000	.3819	.1475	.0167	-.0486	-.0469	-.0345	-.0379	-.0413	9.9990	-.0435	-.0430	-.0774	
157.500		.1830	.0409	-.0362	-.0413	-.0452	-.0418	-.0401	-.0024	-.0435	-.0486	-.0751	
180.000	.5161	.2292	.0731	-.0176	-.0272	-.0396	-.0430	-.0446	-.0430	-.0475	-.0514	-.0746	
202.500		.2996	.1145	.0041	-.0065	-.0205	-.0233	-.0301	-.0267	-.0273	-.0311	-.0740	

MSFC 598 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA051)

MACH (2) = 3.480 ALPHA (1) = -8.360

SECTION (1) TANK		DEPENDENT VARIABLE CP										
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6784	.3639	.1554	.0280	.0184	.0009	.0020	-.0035	-.0029	-.0029	-.0074	-.0728
247.500		.4077	.1823	.0454	.0358	.0189	.0206	.0183	.0189	.0161	.0375	-.0785
270.000	.7699	.4268	.1958	.0539	9.9990	.0296	.0307	.0279	.0279	.0262	.0392	-.0836
292.500		.4048	.1840	.0471	.0397	.0324	.0285	.0268	.0347	.0313	.0793	-.0824
315.000	.6956	.3660	.1575	.0296	.0307	.0206	.0195	.0262	.0093	.0093	.1497	-.0875
326.000									.0291	.0082	.1131	-.0926
346.000		.2860	.1113	.0037	-.0092	-.0255	-.0390	-.0469	-.0266	.0031	.0466	-.0880
360.000	.4916	.2677	.0844	-.0136	-.0136	-.0503	-.0378	-.0378	-.0271	.0010	.0341	-.0655

MACH (3) = 4.960 ALPHA (1) = -8.310 BETA = .00000 Q(P51) = 3.0700 PO = 90.024 P = .17800

SECTION (1) TANK		DEPENDENT VARIABLE CP										
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4041	.2469	.1171	.0705	.0717	.0730	.0578	.0528	.0629	.0629	.0174	-.0051
14.000		.2039	.0855	.0578	.0489	.0590	.0452	.0464	.0477	.0502	.0641	-.0089
24.000									.0086	.0124	.0351	-.0127
45.000	.3652	.1485	.0704	.0452	.0452	.0540	.0351	.0490	.0376	.0376	.0124	-.0139
67.500		.1296	.0578	.0364	.0351	.0439	.0401	.0527	.0354	.0326	.0137	-.0114
90.000	.3135	.1208	.0527	.0288	9.9990	.0338	.0351	.0527	.0301	.0250	.0023	-.0101
112.500		.1271	.0515	.0250	.0704	.0313	.0288	.0565	.0275	.0250	.0061	.0313
135.000	.3602	.1434	.0565	.0237	.0250	.0237	.0225	.0578	9.9990	.0174	.0011	.0313
157.500		.1787	.0691	.0263	.0250	.0200	.0212	.0590	.1825	.0187	-.0013	.0023
180.000	.4887	.2190	.0880	.0288	.0225	.0250	.0162	.0175	.0313	.0074	-.0001	-.0013
202.500		.2745	.1183	.0376	.0288	.0225	.0187	.0212	.0212	.0137	.0036	-.0051
225.000	.6247	.3299	.1498	.0502	.0389	.0364	.0275	.0250	.0288	.0225	.0137	-.0076
247.500		.3702	.1737	.0603	.0477	.0427	.0338	.0263	.0364	.0313	.0439	.0049
270.000	.7003	.3841	.1813	.0653	9.9990	.0401	.0376	.0225	.0376	.0326	.0439	.0011
292.500		.3715	.1750	.0590	.0502	.0427	.0389	.0275	.0351	.0376	.0502	-.0051
315.000	.6321	.3350	.1548	.0490	.0414	.0401	.0351	.0313	.0351	.0389	.0464	-.0084
326.000									.0338	.0464	.0578	-.0101
346.000		.2556	.1170	.0313	.0275	.0149	.0124	.0288	.0112	.0124	.0175	-.0114
360.000	.4041	.2469	.1171	.0705	.0717	.0730	.0578	.0528	.0629	.0629	.0174	-.0051

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TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 103

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA052) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.960 ALPHA (1) = -4.350 BETA = .00000 Q(PSI) = 10.266 PO = 28.004 P = 3.8360
 SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5294	.2725	.0556	-.0989	-.0717	-.0789	-.0604	.0047	.0149	.1092	.2539	-.1942
14.000		.2501	.0413	-.1112	-.0822	-.0969	-.0566	-.0226	.0006	.1634	.3194	-.2163
24.000									.0104	.1664	.3003	-.2258
45.000	.5138	.2148	.0100	-.1242	-.0781	-.0676	-.0480	-.0189	-.0151	.0798	.1916	-.2263
67.500		.2104	.0021	-.1303	-.0900	-.0143	-.0712	-.0162	-.0230	-.0358	.1414	-.1912
90.000	.4847	.2038	-.0046	-.1297	9.9990	-.0272	-.0193	-.0272	-.0012	-.0106	.0413	-.1872
112.500		.2057	.0017	-.1283	-.0879	-.0423	-.0223	-.0276	-.0174	-.0095	.0458	-.2006
135.000	.5139	.2216	.0176	-.1241	-.0902	-.0593	-.0321	-.0280	9.9990	-.0185	-.0159	-.1591
157.500		.2273	.0296	-.1099	-.0843	-.0719	-.0474	-.0263	-.0260	-.0252	-.0294	-.1476
180.000	.5647	.2391	.0432	-.0961	-.0743	-.0494	-.0366	-.0230	-.0321	-.0283	-.0377	-.1446
202.500		.2789	.0617	-.0917	-.0777	-.0476	-.0510	-.0359	-.0283	-.0238	-.0380	-.1535
225.000	.6425	.3185	.0748	-.0694	-.0415	-.0204	-.0177	-.0287	-.0324	-.0174	-.0305	-.1658
247.500		.3325	.0790	-.0574	-.0344	-.0178	-.0065	-.0159	-.0235	-.0186	.0232	-.1991
270.000	.6875	.3320	.0869	-.0633	9.9990	-.0162	.0021	-.0283	-.0219	-.0106	.0213	-.2201
292.500		.3191	.0873	-.0649	-.0336	-.0121	-.0121	-.0321	-.0204	-.0287	.1693	-.2100
315.000	.6592	.3130	.0794	-.0671	-.0189	.0115	-.0592	-.0347	-.0430	.0168	.2149	-.2173
326.000												
346.000		.3018	.0768	-.0750	-.0693	-.1734	-.0611		-.0113	.0492	.1783	-.1991
360.000	.5294	.2725	.0556	-.0989	-.0717	-.0789	-.0604	.0047	.0149	.1092	.2539	-.1942

MACH (2) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 6.8620 PO = 60.010 P = .80900
 SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5026	.2598	.0782	-.0153	-.0142	-.0356	-.0232	-.0243	-.0153	.0266	.1339	-.0706
14.000		.2340	.0676	-.0215	-.0169	-.0389	-.0282	-.0254	-.0164	.0366	.1407	-.0700
24.000												
45.000	.4809	.1928	.0501	-.0305	-.0175	-.0085	-.0358	-.0288	-.0114	.0397	.1283	-.0796
67.500		.1825	.0421	-.0362	-.0277	-.0189	-.0204	-.0288	-.0220	.0010	.0691	-.0807
90.000	.4293	.1773	.0370	-.0373	9.9990	-.0170	-.0120	-.0178	-.0114	-.0091	.0313	-.0728
112.500		.1824	.0404	-.0362	-.0182	-.0178	-.0153	-.0170	-.0142	-.0091	.0080	-.0728
135.000	.4826	.1898	.0521	-.0323	-.0283	-.0213	-.0159	-.0159	9.9990	-.0159	-.0204	-.0672
157.500		.2179	.0848	-.0255	-.0268	-.0210	-.0198	-.0159	.0325	-.0176	-.0221	-.0638
180.000	.5330	.2376	.0821	-.0153	-.0182	-.0187	-.0193	-.0148	-.0131	-.0170	-.0204	-.0627
202.500		.2737	.0984	-.0069	-.0114	-.0120	-.0142	-.0159	-.0131	-.0142	-.0159	-.0616

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A052)

MACH (2) = 3.480 ALPHA (1) = -4.330

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6046	.3036	.1165	.0037	-.0007	-.0018	-.0046	-.0136	-.0063	-.0058	-.0074	-.0627
247.500		.3194	.1255	.0099	.0054	.0009	.0015	-.0153	-.0012	-.0007	.0184	-.0661
270.000	.6424	.3261	.1311	.0133	9.9990	.0088	.0077	.0032	.0037	.0026	.0156	-.0734
292.500		.3115	.1260	.0094	.0122	.0156	.0116	.0026	.0071	-.0012	.0454	-.0751
315.000	.6159	.2974	.1131	.0026	.0111	.0122	.0065	-.0103	-.0097	-.0080	.1136	-.0773
326.000									.0111	-.0029	.0950	-.0813
346.000		.2923	.1074	.0009	-.0012	-.0182	-.0227	-.0272	-.0046	.0421	.0979	-.0756
360.000	.5026	.2598	.0782	-.0153	-.0142	-.0356	-.0232	-.0243	-.0153	.0286	.1339	-.0706

MACH (3) = 4.960 ALPHA (1) = -4.290 BETA = .00000 Q(PSI) = 3.0700 PO = 90.022 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4534	.2418	.1120	.0629	.0666	.0666	.0528	.1523	.0603	.0616	.0628	-.0039
14.000		.2178	.0943	.0527	.0502	.0464	.0439	.0628	.0464	.0540	.0716	-.0076
24.000									.0124	.0225	.0628	-.0114
45.000	.4383	.1901	.0830	.0427	.0452	.0427	.0338	.0401	.0376	.0389	.0326	-.0089
67.500		.1813	.0742	.0464	.0351	.0414	.0389	.0452	.0389	.0351	.0263	-.0076
90.000	.4105	.1724	.0666	.0288	9.9990	.0364	.0338	.0464	.0288	.0275	.0086	-.0013
112.500		.1775	.0653	.0250	.0691	.0338	.0288	.0490	.0288	.0275	.0112	.0351
135.000	.4383	.1913	.0679	.0250	.0238	.0275	.0225	.0313	9.9990	.0212	.0112	.0338
157.500		.2077	.0830	.0238	.0238	.0238	.0225	.0200	.1661	.0200	.0099	.0263
180.000	.4987	.2229	.0880	.0238	.0187	.0225	.0162	.0225	.0313	.0124	.0074	.0200
202.500		.2556	.1057	.0288	.0250	.0212	.0187	.0263	.0212	.0175	.0061	.0137
225.000	.5592	.2745	.1145	.0301	.0238	.0225	.0200	.0263	.0200	.0124	.0099	-.0112
247.500		.2909	.1233	.0326	.0275	.0275	.0212	.0301	.0200	.0162	.0250	.0124
270.000	.5907	.2972	.1309	.0351	9.9990	.0238	.0225	.0313	.0200	.0175	.0275	-.0023
292.500		.2883	.1208	.0301	.0288	.0301	.0225	.0301	.0175	.0212	.0275	-.0013
315.000	.5680	.2720	.1094	.0263	.0250	.0263	.0212	.0313	.0124	.0175	.0351	-.0013
326.000									.0137	.0162	.0401	-.0089
346.000		.2669	.1157	.0250	.0225	.0263	.0086	.0338	.0162	.0200	.0353	-.0076
360.000	.4534	.2418	.1120	.0629	.0666	.0666	.0528	.1523	.0603	.0616	.0628	-.0039

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA053) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 FHI = 270.000

MACH (1) = 1.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 10.264 PO = 28.008 P = 3.8330

SECTION (1)ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.5192	.2590	.0451	-.0975	-.0611	-.0581	-.0460	.0243	-.0125	.1814	.3810	-.1878		
14.000		.2620	.0503	-.0957	-.0490	-.1646	-.0445	-.0151	.0067	.1769	.2536	-.2310		
24.000								.0209	.1686	.2516	-.2424			
45.000	.5913	.2453	.0451	-.0991	-.0696	-.0179	-.0677	-.0084	-.0586	.0251	.2662	-.2416		
67.500		.2614	.0643	-.0909	-.0589	.0044	-.0589	-.0204	-.0219	-.0287	.1487	-.1910		
90.000	.5946	.2519	.0635	-.0965	9.9990	-.0347	-.0106	-.0355	-.0132	-.0151	.0236	-.1891		
112.500		.2622	.0643	-.0913	-.0604	-.0438	-.0253	-.0261	-.0208	-.0174	.0375	-.1936		
135.000	.5892	.2687	.0587	-.0936	-.0721	-.0476	-.0291	-.0208	9.9990	-.0227	-.0170	-.1575		
157.500		.2565	.0503	-.0914	-.0704	-.0557	-.0320	-.0150	-.0222	-.0177	-.0162	-.1459		
180.000	.5716	.2379	.0388	-.1017	-.0723	-.0354	-.0223	-.0113	-.0185	-.0128	-.0242	-.1454		
202.500		.2564	.0327	-.1081	-.0708	-.0422	-.0358	-.0245	-.0241	-.0181	-.0234	-.1439		
225.000	.5784	.2586	.0300	-.0970	-.0646	-.0291	-.0178	-.0201	-.0250	-.0144	-.0249	-.1538		
247.500		.2454	.0229	-.1020	-.0670	-.0305	-.0075	-.0196	-.0211	-.0222	.0281	-.1981		
270.000	.5905	.2403	.0345	-.1018	9.9990	-.0358	-.0049	-.0317	-.0147	-.0185	.0481	-.1978		
292.500		.2305	.0394	-.1055	-.0660	-.0012	-.0366	-.0219	-.0355	-.0242	.1563	-.2032		
315.000	.5873	.2435	.0428	-.1042	-.0687	-.0189	-.0649	-.0193	-.0495	.0169	.2168	-.2250		
326.000									.0149	.0179	.2157	-.2106		
346.000		.2765	.0553	-.0645	-.0705	-.1399	-.0396	-.0129	.0364	.1348	.2836	-.2024		
360.000	.5192	.2590	.0451	-.0975	-.0611	-.0581	-.0460	.0243	-.0125	.1814	.3810	-.1878		

MACH (2) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 6.8620 PO = 60.010 P = .80900

SECTION (1)ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.4969	.2481	.0777	-.0186	.0038	-.0344	-.0260	-.0181	-.0085	.0501	.1638	-.0678		
14.000		.2461	.0793	-.0176	.0043	-.0260	-.0260	-.0193	-.0085	.0454	.1542	-.0689		
24.000								-.0024	.0330	.1503	-.0835			
45.000	.5364	.2410	.0748	-.0193	-.0046	.0082	-.0193	-.0193	-.0142	-.0035	.1007	-.0773		
67.500		.2489	.0821	-.0176	-.0142	-.0035	-.0120	-.0131	-.0035	-.0120	.0392	-.0717		
90.000	.5381	.2484	.0838	-.0165	9.9990	-.0091	-.0080	-.0120	-.0086	-.0080	.0088	-.0717		
112.500		.2492	.0834	-.0164	-.0023	-.0107	-.0119	-.0119	-.0068	-.0085	.0111	-.0644		
135.000	.5415	.2534	.0849	-.0170	-.0159	-.0120	-.0120	-.0114	9.9990	-.0063	-.0120	-.0616		
157.500		.2472	.0843	-.0114	-.0165	-.0120	-.0136	-.0114	.0359	-.0069	-.0153	-.0604		
180.000	.5324	.2389	.0805	-.0175	-.0198	-.0119	-.0142	-.0113	-.0051	-.0085	-.0153	-.0582		
202.500		.2438	.0804	-.0187	-.0198	-.0120	-.0142	-.0103	-.0058	-.0074	-.0159	-.0593		

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA053)

MACH (2) = 3.480 ALPHA (1) = -.280

SECTION (1) TANK		DEPENDENT VARIABLE CP										
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.5240	.2438	.0804	-.0187	-.0198	-.0159	-.0142	-.0103	-.0063	-.0074	-.0136	-.0632
247.500		.2410	.0770	-.0193	-.0182	-.0120	-.0136	-.0108	-.0058	-.0074	.0077	-.0666
270.000	.5262	.2399	.0725	-.0193	9.9990	-.0114	-.0103	-.0086	-.0074	-.0063	.0049	-.0694
292.500		.2337	.0736	-.0215	-.0120	-.0097	-.0058	-.0091	-.0052	-.0125	.0235	-.0694
315.000	.5426	.2365	.0742	-.0227	-.0108	.0003	-.0170	-.0086	-.0120	-.0170	.0640	-.0689
326.000												
346.000		.2692	.0945	-.0120	.0026	-.0345	-.0227	-.0080	.0139	.0060	.0488	-.0711
360.000	.4969	.2481	.0777	-.0186	.0038	-.0344	-.0260	-.0181	-.0085	.0501	.1638	-.0678

MACH (3) = 4.950 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 3.0710 PO = 90.049 P = .17800

SECTION (1) TANK		DEPENDENT VARIABLE CP										
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4558	.2289	.1068	.0589	.0728	.0728	.0476	.1546	.0627	.0665	.0628	-.0026
14.000		.2289	.0955	.0577	.0073	.0564	.0539	.0413	.0476	.0564	.1157	-.0102
24.000												
45.000	.5137	.2379	.1031	.0452	.0477	.0540	.0338	.0414	.0099	.0225	.0817	-.0152
67.500		.2429	.0993	.0351	.0351	.0489	.0363	.0439	.0376	.0439	.0502	-.0102
90.000	.5202	.2442	.1018	.0351	9.9990	.0389	.0326	.0464	.0326	.0300	.0212	-.0039
112.500		.2428	.0955	.0288	.0665	.0351	.0250	.0275	.0288	.0275	.0099	-.0064
135.000	.5200	.2442	.0943	.0275	.0288	.0288	.0212	.0200	9.9990	.0212	.0036	-.0026
157.500		.2379	.4458	.0162	.0326	-.0618	.0200	.0200	.1397	.0200	-.0001	-.0013
180.000	.5049	.2291	.0943	.0238	.0200	.0263	.0162	.0250	.0326	.0175	.0023	.0036
202.500		.2290	.0867	.0187	.0162	.0187	.0124	.0250	.0162	.0162	.0023	-.0001
225.000	.4861	.2265	.0842	.0162	.0137	.0200	.0124	.0250	.0187	.0124	-.0001	-.0026
247.500		.2253	.0890	.0149	.0124	.0174	.0086	.0288	.0212	.0124	.0036	.0111
270.000	.4822	.2253	.0817	.0162	9.9990	.0212	.0086	.0300	.0137	.0111	.0074	.0036
292.500		.2152	.0779	.0074	.0137	.0212	.0074	.0111	.0111	.0111	.0124	.0023
315.000	.5036	.2152	.0741	.0074	.0137	.0162	.0049	.0049	.0061	.0074	.0263	.0036
326.000												
346.000		.2429	.0993	.0149	.0225	.0111	.0049	.0049	.0086	.0124	.0288	-.0001
360.000	.4558	.2289	.1068	.0589	.0728	.0728	.0476	.1546	.0627	.0665	.0628	-.0026

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A054) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1066.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.880 ALPHA (1) = 3.770 BETA = .00000 Q(P51) = 10.251 PO = 28.005 P = 3.8190

SECTION (1) ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.5157	.2503	.0349	-.0987	-.0588	-.0878	-.0599	-.8109	-.0038	.1614	.3559	-.1791	
14.000		.2775	.0519	-.0869	-.0586	-.1469	-.0639	-.0231	-.0020	.1345	.2480	-.2057	
24.000										.0077	.1192	.2134	-.2465
45.000	.6587	.2995	.0754	-.0851	-.0054	.0149	-.0493	-.0224	-.0546	.0451	.2278	-.2502	
67.500		.3351	.1057	-.0505	-.0264	-.0039	-.0358	-.0332	.0021	-.0369	.1612	-.2056	
90.000	.7037	.3390	.1085	-.0427	9.9990	-.0193	-.0016	-.0261	-.0140	-.0057	.0010	-.2255	
112.500		.3354	.1048	-.0459	-.0323	-.0323	-.0308	-.0183	-.0240	-.0213	.0300	-.1946	
135.000	.6553	.3277	.0884	-.0705	-.0471	-.0566	-.0453	-.0355	9.9990	-.0449	-.0311	-.1743	
157.500		.2880	.0663	-.0849	-.0607	-.0600	-.0471	-.0316	-.0354	-.0403	-.0352	-.1631	
180.000	.5691	.2407	.0406	-.1051	-.0726	-.0511	-.0398	-.0296	-.0337	-.0356	-.0392	-.1500	
202.500		.2206	.0190	-.1251	-.1040	-.0607	-.0516	-.0385	-.0366	-.0332	-.0348	-.1475	
225.000	.5025	.1957	-.0118	-.1227	-.0925	-.0484	-.0257	-.0318	-.0295	-.0231	-.0272	-.1524	
247.500		.1637	-.0181	-.1383	-.0969	-.0362	-.0068	-.0226	-.0162	-.0159	.0270	-.1908	
270.000	.4875	.1628	-.0191	-.1323	9.9990	-.0305	-.0093	-.0191	-.0013	-.0104	.0353	-.1921	
292.500		.1541	-.0167	-.1401	-.0891	-.0035	-.0503	-.0167	-.0280	-.0284	.1376	-.2069	
315.000	.5232	.1767	.0066	-.1407	-.0996	-.0596	-.0517	-.0219	-.0562	-.0204	.2327	-.2020	
326.000									-.0163	.0307	.2072	-.2131	
346.000		.2501	.0372	-.0953	-.0583	-.1058	-.0428	-.0273	.0258	.1606	.2351	-.1999	
360.000	.5157	.2503	.0349	-.0987	-.0588	-.0878	-.0599	-.0189	-.0038	.1614	.3559	-.1791	

MACH (2) = 3.480 ALPHA (1) = 3.790 BETA = .00000 Q(P51) = 6.8630 PO = 60.022 P = .81000

SECTION (1) ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4964	.2355	.0743	-.0192	.0027	-.0350	-.0271	-.0226	-.0068	.0528	.1773	-.0717	
14.000		.2575	.0844	-.0142	.0015	-.0085	-.0266	-.0238	-.0018	.0376	.1542	-.0723	
24.000										.0139	.0313	.0966	-.0853
45.000	.6142	.2980	.1142	.0015	.0099	.0122	.0071	-.0080	.0049	-.0046	.1169	-.0802	
67.500		.3258	.1332	.0109	.0064	.0087	.0070	.0036	.0115	.0042	.0471	-.0796	
90.000	.6541	.3322	.1355	.0138	9.9990	.0093	.0037	.0009	.0025	.0037	.0150	-.0807	
112.500		.3271	.1333	.0121	.0144	.0048	-.0002	.0014	.0009	-.0019	.0235	-.0678	
135.000	.6212	.3134	.1245	.0049	.0004	-.0323	-.0063	.0027	9.9990	-.0068	-.0091	-.0627	
157.500		.2764	.1045	-.0030	-.0103	-.0114	-.0159	-.0159	.0155	-.0154	-.0194	-.0610	
180.000	.5271	.2376	.0804	-.0159	-.0210	-.0187	-.0232	-.0232	-.0176	-.0210	-.0250	-.0621	
202.500		.2140	.0607	-.0283	-.0306	-.0221	-.0249	-.0215	-.0176	-.0193	-.0289	-.0655	

REPRODUCIBILITY OF THE
 ORIGINAL PAGE IS POOR

MSFC 56B (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA084)

MACH (2) = 3.480 ALPHA (1) = 3.790

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.4429	.1902	.0488	-.0357	-.0362	-.0221	-.0216	-.0199	-.0171	-.0204	-.0266	-.0683	
247.500		.1762	.0381	-.0401	-.0351	-.0204	-.0210	-.0187	-.0148	-.0142	-.0001	-.0668	
270.000	.4180	.1683	.0330	-.0430	9.9990	-.0176	-.0176	-.0176	-.0086	-.0063	.0026	-.0734	
292.500		.1683	.0330	-.0435	-.0277	-.0159	-.0227	-.0187	-.0080	-.0210	.0200	-.0751	
315.000	.4628	.1877	.0433	-.0401	-.0322	-.0130	-.0316	-.0169	-.0367	-.0141	.0995	-.0728	
326.000									-.0104	-.0097	.0837	-.0717	
346.000		.2426	.0769	-.0210	-.0024	-.0419	-.0199	-.0171	.0009	.0600	.1052	-.0779	
360.000	.4964	.2355	.0743	-.0192	.0027	-.0350	-.0271	-.0226	-.0068	.0528	.1773	-.0717	

MACH (3) = 4.960 ALPHA (1) = 3.750 BETA = .0000 QIP511 = 3.0700 PO = 90.031 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4797	.2165	.1006	.0578	.0653	.0678	.0477	.1510	.0578	.0615	.0464	-.0051	
14.000		.2417	.0994	.0515	.0452	.0565	.0364	.0553	.0452	.0502	.0943	-.0114	
24.000									.0099	.0112	.0401	-.0139	
45.000	.5907	.2909	.1283	.0540	.0540	.0578	.0414	.0628	.0464	.0464	.0414	-.0127	
67.500		.3173	.1422	.0490	.0464	.0502	.0427	.0326	.0452	.0414	.0338	-.0114	
90.000	.6348	.3260	.1484	.0515	9.9990	.0439	.0388	.0313	.0388	.0401	.0250	-.0051	
112.500		.3198	.1472	.0477	.0792	.0401	.0326	.0338	.0351	.0313	.0263	.0111	
135.000	.5993	.3022	.1321	.0364	.0399	.0338	.0250	.0238	9.9990	.0250	.0074	.0124	
157.500		.2657	.1094	.0301	.0263	.0263	.0187	.0137	.1233	.0187	-.0013	.0112	
180.000	.4848	.2279	.0955	.0237	.0212	.0212	.0124	.0099	.0288	.0399	-.0001	.0137	
202.500		.1989	.0754	.0149	.0137	.0175	.0074	.0061	.0200	.0149	.0011	.0137	
225.000	.4080	.1775	.0653	.0099	.0099	.0200	.0086	.0061	.0200	.0162	.0036	.0162	
247.500		.1598	.0489	.0049	.0036	.0149	.0049	.0036	.0149	.0099	.0049	.0149	
270.000	.3828	.1523	.0490	.0049	9.9990	.0149	.0049	.0061	.0124	.0086	.0061	.0049	
292.500		.1523	.0452	-.0026	.0074	.0124	.0023	.0061	.0112	.0061	.0074	.0049	
315.000	.4192	.1712	.0553	.0011	.0074	.0099	.0023	.0099	.0036	.0112	.0149	.0011	
326.000									-.0026	.0023	.0099	-.0064	
346.000		.2266	.0792	.0086	.0162	.0086	.0023	.0112	.0149	.0225	.0477	-.0076	
360.000	.4797	.2165	.1006	.0578	.0653	.0678	.0477	.1510	.0578	.0615	.0464	-.0051	

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA055) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.960 ALPHA (1) = 7.860 BETA = .00000 Q(P51) = 10.255 PO = 28.002 P = 3.8240

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4918	.2285	.0349	-.1050	-.0801	-.1782	-.0797	-.0280	-.0167	.1666	.3266	-.1959
14.000		.2719	.0534	-.0927	-.0460	-.1029	-.1086	-.0573	-.0257	.0756	.1688	-.2173
24.000									.0096	.0689	.1444	-.2285
45.000	.7168	.3599	.1141	-.0464	.0228	.0213	-.0136	-.0200	-.0521	.0232	.2666	-.2585
67.500		.4268	.1673	-.0151	.0138	.0006	-.0050	-.0023	.0360	-.0201	.1621	-.2216
90.000	.8081	.4366	.1849	-.0064	9.9990	.0044	.0168	.0029	.0040	.0157	.0115	-.2572
112.500		.4249	.1762	-.0144	.0059	-.0068	-.0193	-.0113	-.0121	-.0132	.0470	-.2212
135.000	.7311	.3864	.1439	-.0434	-.0148	-.0514	-.0480	-.0397	9.9990	-.0600	-.0585	-.1932
157.500		.3042	.0869	-.0763	-.0533	-.0819	-.0831	-.0763	-.0846	-.0921	-.0858	-.1749
180.000	.5507	.2274	.0270	-.1129	-.0948	-.0971	-.1058	-.1027	-.0884	-.0929	-.0944	-.1703
202.500		.1786	-.0250	-.1381	-.1257	-.1147	-.1034	-.0740	-.0646	-.0619	-.0650	-.1729
225.000	.4159	.1266	-.0385	-.1543	-.1230	-.0793	-.0427	-.0502	-.0442	-.0416	-.0438	-.1750
247.500		.0971	-.0574	-.1649	-.1192	-.0453	-.0151	-.0287	-.0314	-.0314	.0157	-.2069
270.000	.3755	.1016	-.0690	-.1610	9.9990	-.0197	-.0223	-.0189	-.0091	-.0016	.0006	-.2166
292.500		.1092	-.0631	-.1642	-.1016	-.0212	-.0374	-.0201	-.0039	-.0571	.1304	-.2115
315.000	.4311	.1297	-.0409	-.1644	-.1270	-.1149	-.0817	-.0854	-.0809	.0315	.1572	-.2257
326.000									-.0745	.0670	.1466	-.2314
346.000		.2065	.0440	-.1030	-.0759	-.0676	-.0574	-.0314	.0006	.1706	.2389	-.2120
360.000	.4918	.2225	.0349	-.1050	-.0801	-.1782	-.0797	-.0280	-.0167	.1666	.3266	-.1959

MACH (2) = 3.480 ALPHA (1) = 7.800 BETA = .00000 Q(P51) = 6.8660 PO = 60.046 P = .81000

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4803	.2323	.0701	-.0182	.0036	-.0256	-.0216	-.0272	-.0075	.0425	.1000	-.0745
14.000		.2753	.0983	-.0069	.0026	.0104	-.0233	-.0278	.0076	.0364	.1018	-.0824
24.000									.0037	.0257	.0707	-.0864
45.000	.6869	.3541	.1507	.0251	.0273	.0313	.0234	.0144	.0082	.0059	.1778	-.0892
67.500		.4088	.1874	.0465	.0352	.0347	.0273	.0240	.0330	.0307	.0820	-.0802
90.000	.7767	.4263	.2003	.0538	9.9990	.0369	.0330	.0234	.0257	.0273	.0386	-.0802
112.500		.4122	.1913	.0488	.0442	.0307	.0234	.0178	.0189	.0178	.0476	-.0774
135.000	.6995	.3744	.1682	.0313	.0206	.0104	.0059	.0003	9.9990	-.0030	-.0041	-.0745
157.500		.3029	.1254	.0082	-.0013	-.0103	-.0171	-.0233	.0037	-.0266	-.0289	-.0734
180.000	.5113	.2302	.0803	-.0165	-.0244	-.0300	-.0390	-.0441	-.0424	-.0452	-.0514	-.0712
202.500		.1845	.0459	-.0362	-.0396	-.0402	-.0402	-.0407	-.0402	-.0419	-.0464	-.0717

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA055)

MACH (2) = 3.480 ALPHA (1) = 7.800

SECTION (1) TANK		DEPENDENT VARIABLE CP										
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.3660	.1434	.0195	-.0458	-.0492	-.0374	-.0379	-.0407	-.0424	-.0441	-.0441	-.0762
247.500	.1186	.0054	-.0559	-.0469	-.0334	-.0379	-.3390	-.0396	-.0362	-.0092	-.0768	
270.000	.3222	.1096	.0003	-.0582	9.9990	-.0255	-.0154	-.0143	-.0120	-.0120	.0032	-.0734
292.500	.1125	-.0004	-.0606	-.0386	-.0218	-.0308	-.0251	-.0184	-.0150	.0082	-.0745	
315.000	.3846	.1406	.0127	-.0559	-.0424	-.0396	-.0571	-.0610	-.0565	-.0306	.0127	-.0734
326.000									-.0430	-.0193	.0409	-.0723
346.000		.2043	.0679	-.0216	-.0030	-.0492	-.0199	-.0283	-.0131	.0482	.1350	-.0807
360.000	.4803	.2323	.0701	-.0182	.0036	-.0256	-.0216	-.0272	-.0075	.0425	.1000	-.0745

MACH (3) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(P51) = 3.0700 P0 = 90.019 P = .17800

SECTION (1) TANK		DEPENDENT VARIABLE CP										
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4609	.2180	.1008	.0554	.0642	.0705	.0503	.0491	.0566	.0604	.0905	-.0064
14.000		.2595	.1108	.0515	.0452	.0578	.0427	.0314	.0440	.0452	.0767	-.0064
24.000									.0074	.0074	.0603	-.0139
45.000	.6600	.3388	.1511	.0603	.0553	.0603	.0477	.0402	.0528	.0566	.0641	-.0164
67.500		.3914	.1862	.0691	.0602	.0640	.0539	.0451	.0552	.0590	.0616	-.0101
90.000	.7457	.4131	.2039	.0742	9.9990	.0590	.0566	.0477	.0515	.0515	.0490	-.0114
112.500		.3979	.1901	.0679	.0905	.0540	.0477	.0477	.0439	.0414	.0515	.0023
135.000	.6739	.3589	.1649	.0540	.0439	.0439	.0338	.0477	9.9990	.0288	.0167	.0011
157.500		.2959	.1321	.0389	.0326	.0326	.0238	.0175	.1006	.0200	.0023	-.0013
180.000	.4836	.2253	.0956	.0238	.0187	.0175	.0124	.0112	.0238	.0099	.0023	-.0013
202.500		.1724	.0616	.0099	.0112	.0124	.0061	.0175	.0137	.0099	.0011	-.0001
225.000	.3375	.1334	.0389	-.0026	-.0013	.0149	.0074	.0137	.0112	.0061	.0023	-.0051
247.500		.1107	.0338	-.0001	.0023	.0099	.0049	.0175	.0086	.0049	-.0013	.0099
270.000	.2921	.1031	.0225	-.0013	9.9990	.0086	.0061	.0162	.0049	.0036	.0036	.0049
292.500		.1057	.0301	-.0076	.0061	.0074	.0061	.0200	.0049	.0049	.0061	-.0026
315.000	.3463	.1334	.0326	-.0051	-.0001	.0023	-.0026	.0200	-.0026	.0011	-.0001	-.0064
326.000									-.0089	-.0064	-.0039	-.0039
346.000		.1964	.0742	.0086	.0175	.0061	.0099	.0149	.0137	.0225	.0338	-.0101
360.000	.4609	.2180	.1008	.0554	.0642	.0705	.0503	.0491	.0566	.0604	.0905	-.0064

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T1

(R1A056) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.970 ALPHA (1) = 12.570 BETA = .00000 Q(PSI) = 10.213 PO = 28.006 P = 3.7770

SECTION (1)ANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.4629	.2307	.0323	-.1114	-.0772	-.1822	-.0945	-.0565	-.0079	.0744	.1773	-.2172	
14.000		.2855	.0701	-.0838	-.0615	-.0482	-.1217	-.0751	-.0331	-.0089	.1179	-.2129	
24.000									-.0305	-.0203	.0543	-.2317	
45.000	.7622	.4035	.1728	-.0035	.0360	.0323	.0425	.0190	-.0283	.0235	.2470	-.2487	
67.500		.4938	.2407	.0531	.0595	.0421	.0175	.0402	.0614	.0058	.1764	-.2627	
90.000	.9185	.5237	.2590	.0782	9.9990	.0618	.0603	.0455	.0304	.0410	.0447	-.2438	
112.500		.5028	.2316	.0599	.0436	.0277	.0107	.0188	.0160	.0069	.0614	-.2547	
135.000	.7901	.4346	.1781	.0080	-.0044	-.0419	-.0381	-.0386	9.9990	-.0620	-.0537	-.2258	
157.500		.3115	.1039	-.0567	-.0620	-.0987	-.0930	-.0999	-.1154	-.1234	-.1243	-.2123	
180.000	.5076	.2088	.0217	-.1150	-.1203	-.1465	-.1586	-.1806	-.1764	-.1756	-.1741	-.2138	
202.500		.1406	-.0438	-.1566	-.1540	-.1907	-.1839	-.1286	-.1032	-.0975	-.1045	-.2126	
225.000	.3350	.0850	-.0738	-.1762	-.1535	-.1201	-.0890	-.1087	-.1129	-.1079	-.1184	-.2135	
247.500		.0629	-.0968	-.1650	-.1339	-.0532	-.0456	-.0536	-.0847	-.0886	-.0604	-.2350	
270.000	.2896	.0622	-.1034	-.1815	9.9990	.0057	-.0423	-.0196	-.0427	-.0404	-.0150	-.2379	
292.500		.0645	-.0999	-.1893	-.1127	-.0385	-.0445	-.0370	-.0517	-.0445	.0801	-.2575	
315.000	.3640	.0929	-.0810	-.1830	-.1516	-.2134	-.1925	-.1425	-.0943	-.0059	.0997	-.1771	
326.000									-.0815	.0156	.1491	-.1758	
346.000		.1947	.0485	-.1112	-.0737	-.0430	-.0589	-.0695	.0008	.1413	.2193	-.2411	
360.000	.4629	.2307	.0323	-.1114	-.0772	-.1822	-.0945	-.0565	-.0079	.0744	.1773	-.2172	

MACH (2) = 3.480 ALPHA (1) = 12.520 BETA = .00000 Q(PSI) = 6.8520 PO = 60.012 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.4798	.2330	.0716	-.0152	-.0028	-.0186	-.0197	-.0242	-.0045	.0377	.0837	-.0740	
14.000		.2808	.1075	.0004	.0015	.0275	-.0249	-.0305	.0010	.0252	.0911	-.0886	
24.000									-.0030	.0133	.0804	-.0897	
45.000	.7545	.4104	.1899	.0523	.0489	.0495	.0466	.0410	.0325	.0280	.2134	-.0875	
67.500		.4966	.2545	.0880	.0733	.1692	1.6451	.0558	.0699	.0677	.1243	-.0779	
90.000	.8960	.5251	.2732	.1024	9.9990	.0725	.0697	.0573	.0595	.0612	.0714	-.0745	
112.500		.5023	.2572	.0916	.0797	.0588	.0527	.0442	.0476	.0448	.0809	-.0824	
135.000	.7686	.4366	.2100	.0601	.0443	.0274	.0223	.0156	9.9990	.0105	.0122	-.0869	
157.500		.3290	.1463	.0229	.0094	-.0063	-.0165	-.0215	-.0074	-.0255	-.0266	-.0824	
180.000	.4936	.2252	.0821	-.0142	-.0238	-.0390	-.0492	-.0565	-.0559	-.0604	-.0632	-.0807	
202.500		.1559	.0388	-.0418	-.0497	-.0582	-.0616	-.0627	-.0599	-.0610	-.0650	-.0807	

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A056)

MACH (2) = 3.480 ALPHA (1) = 12.520

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.2985	.1034	.0009	-.0582	-.0576	-.0576	-.0582	-.0621	-.0588	-.0593	-.0616	-.0830	
247.500		.0747	-.0182	-.0655	-.0559	-.0571	-.0689	-.0650	-.0633	-.0621	-.0464	-.0768	
270.000	.2455	.0663	-.0204	-.0661	9.9990	-.0334	-.0052	-.0260	-.0266	-.0283	-.0159	-.0813	
292.500		.0708	-.0232	-.0683	-.0446	-.0311	-.0396	-.0520	-.0503	-.0322	-.0159	-.0830	
315.000	.3158	.1007	-.0063	-.0649	-.0469	-.0785	-.0773	-.0694	-.0469	-.0384	-.0046	-.0762	
326.000													
346.000		.1937	.0742	-.0131	-.0041	-.0418	-.0159	-.0176	-.0125	.0443	.1182	-.0802	
360.000	.4798	.2330	.0716	-.0152	-.0028	-.0186	-.0197	-.0242	-.0045	.0377	.0837	-.0740	

MACH (3) = 4.960 ALPHA (1) = 12.450 BETA = .00000 Q(PSI) = 3.0700 PO = 90.025 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4622	.2266	.1132	.0704	.0779	.0880	.0603	.0550	.0679	.0666	.0691	-.0064	
14.000		.2871	.1309	.0691	.0603	.0729	.0527	.0414	.0527	.0553	.1283	-.0127	
24.000									.0175	.0162	.0905	-.0101	
46.000	.7432	.4068	.1964	-.0868	.0767	.0792	.0704	.0464	.0742	.0893	.1031	-.0152	
67.500		.4912	.2543	.1057	.0893	.0893	.0779	.0653	.0842	.0680	.1094	-.0164	
90.000	.8956	.5238	.2794	.1182	9.9990	.0892	.0855	.0729	.0829	.0792	.0981	-.0127	
112.500		.5000	.2631	.1107	.1258	.0779	.0729	.0653	.0729	.0679	.0956	-.0114	
135.000	.7621	.4332	.2203	.0842	.0754	.0565	.0527	.0452	9.9990	.0452	.0389	-.0177	
157.500		.3274	.1586	.0565	.0477	.0351	.0288	.0225	.0842	.0238	.0099	-.0152	
180.000	.4735	.2291	.0994	.0313	.0288	.0263	.0162	.0061	.0212	.0049	-.0064	-.0177	
202.500		.1523	.0553	.0149	.0162	.0175	.0049	.0023	.0124	.0096	-.0089	-.0177	
225.000	.2833	.1082	.0399	.0074	.0124	.0124	.0074	-.0001	.0099	.0023	-.0076	-.0202	
247.500		.0779	.0200	.0036	.0036	.0099	.0011	-.0051	.0023	-.0013	-.0013	-.0013	
270.000	.2291	.0729	.0225	.0036	9.9990	.0099	.0124	-.0013	.0061	-.0013	-.0001	-.0051	
292.500		.0742	.0162	-.0051	.0137	.0086	.0011	-.0076	.0036	-.0039	.0036	-.0013	
315.000	.2984	.1031	.0200	-.0039	.0074	.0023	-.0051	-.0101	-.0026	-.0026	-.0051	-.0051	
326.000									-.0026	-.0076	-.0089	-.0101	
346.000		.1926	.0817	.0175	.0212	.0112	.0175	.0162	.0225	.0263	.0302	-.0102	
360.000	.4622	.2266	.1132	.0704	.0779	.0880	.0603	.0590	.0679	.0666	.0691	-.0064	

MSFC 59B (TA-2F) MCR0200 EXTERNAL TANK, F1

(RIA057) (16 NOV 74)

REFERENCE DATA

PARAMETRIC DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = 20.000
 MOUNT = 1.300 PHI = 270.000

MACH (1) = 1.960 ALPHA (1) = 16.640 BETA = .00000 Q(PSI) = 10.220 PO = 27.998 P = 3.7890

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4618	.2189	.0289	-.1146	-.1025	-.1652	-.1089	-.0643	-.0541	-.0334	.0592	-.2281
14.000		.2927	.0735	-.0886	-.0844	-.0546	-.1301	-.1230	-.0678	-.0394	.0319	-.2343
24.000									-.0751	-.0572	.0114	-.2573
45.000	.8234	.4672	.2095	.0319	.0523	.0778	.0753	.0677	.0036	.0548	.3000	-.2562
67.500		.5988	.3129	.1120	.1176	.1003	.0602	.0931	.1248	.0598	.2298	-.2799
90.000	1.0307	.6424	.3471	.1365	9.9990	.1255	.1195	.0931	.0833	.0965	.1047	-.2194
112.500		.6035	.3137	.1081	.0964	.0791	.0587	.0609	.0628	.0538	.1260	-.2603
135.000	.8548	.5044	.2362	.0349	.0277	-.0171	-.0129	-.0213	9.9990	-.0417	-.0371	-.2589
157.500		.3375	.1229	-.0432	-.0557	-.1018	-.0999	-.1105	-.1237	-.1343	-.1320	-.2345
180.000	.4739	.1920	.0062	-.1244	-.1372	-.1840	-.1931	-.2037	-.1833	-.1814	-.1841	-.2361
202.500		.0953	-.0736	-.1811	-.1992	-.2305	-.1860	-.1570	-.1445	-.1430	-.1523	-.2351
225.000	.2528	.0338	-.1144	-.2043	-.1911	-.1937	-.1737	-.1926	-.2020	-.1937	-.1845	-.2527
247.500		.0017	-.1259	-.2011	-.1720	-.1437	-.1527	-.1909	-.1958	-.1932	-.1586	-.2421
270.000	.2151	.0038	-.1237	-.1943	9.9990	.0144	-.0588	-.0527	-.0804	-.0842	-.0928	-.2381
292.500		.0038	-.1299	-.2076	-.1287	-.0726	-.0950	-.1098	-.1143	-.1193	.0941	-.2212
315.000	.3071	.0448	-.1128	-.2009	-.2165	-.2788	-.1903	-.1143	-.0885	-.0136	.1299	-.1932
326.000									-.0766	.0030	.1409	-.2047
348.000		.1844	.0459	-.1039	-.0640	-.0572	-.0390	-.0944	-.0079	.0186	.1725	-.2482
360.000	.4616	.2189	.0289	-.1146	-.1025	-.1652	-.1089	-.0643	-.0541	-.0334	.0592	-.2281

MACH (2) = 3.480 ALPHA (1) = 16.540 BETA = .00000 Q(PSI) = 6.8630 PO = 60.020 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4812	.2393	.0793	-.0069	-.0041	-.0046	-.0114	-.0176	.0144	.0308	.0511	-.0785
14.000		.3047	.1227	.0105	.0082	.0161	-.0131	-.0339	.0071	.0189	.0916	-.0909
24.000									.0026	.0048	.0714	-.0914
45.000	.8212	.4727	.2365	.0849	.0725	.0922	.0934	.0826	.0781	.0652	.2579	-.0824
67.500		.5911	.3256	.1373	.1148	.1198	.1001	.0996	.1193	.1210	.1858	-.0734
90.000	1.0262	.6336	.3598	.1609	9.9990	.1231	.1220	.1085	.1113	.1135	.1204	-.0655
112.500		.6001	.3346	.1452	.1244	.1058	.0956	.0900	.0934	.0911	.1322	-.0785
135.000	.8408	.5014	.2630	.0956	.0742	.0545	.0494	.0426	9.9990	.0375	.0386	-.0854
157.500		.3526	.1661	.0387	.0189	.0015	-.0074	-.0125	.0037	-.0165	-.0182	-.0835
180.000	.4682	.2185	.0798	-.0131	-.0283	-.0452	-.0525	-.0582	-.0570	-.0610	-.0666	-.0824
202.500		.1272	.0150	-.0492	-.0612	-.0700	-.0728	-.0711	-.0689	-.0594	-.0740	-.0824

REPRODUCIBILITY OF THIS
ORIGINAL PAGE IS POOR

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A057)

MACH (2) = 3.480 ALPHA (1) = 16.540

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.2303	.0891	-.0216	-.0679	-.0740	-.0683	-.0717	-.0734	-.0689	-.0699	-.0717	-.0630	
247.500		.0347	-.0368	-.0723	-.0706	-.0779	-.0734	-.0734	-.0700	-.0700	-.0621	-.0773	
270.000	.1755	.0302	-.0390	-.0717	9.9990	-.0210	-.0283	-.0475	-.0554	-.0582	-.0469	-.0219	
292.500		.0336	-.0401	-.0762	-.0548	-.0424	-.0773	-.0740	-.0565	-.0475	-.0328	-.0830	
315.000	.2506	.0657	-.0255	-.0717	-.0566	-.0802	-.0813	-.0728	-.0565	-.0480	-.0108	-.0796	
326.000									-.0492	-.0384	-.0049	-.0835	
346.000		.2082	.0893	-.0047	-.0069	-.0261	-.0041	-.0126	.0121	.0431	.0601	-.0790	
360.000	.4812	.2393	.0793	-.0069	-.0041	-.0043	-.0114	-.0176	.0144	.0308	.0511	-.0785	

MACH (3) = 4.860 ALPHA (1) = 16.450 BETA = .00000 Q(PSI) = 3.0700 PQ = 90.017 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4836	.2369	.1159	.0718	.0768	.0831	.0604	.0579	.0667	.0654	.0590	-.0039	
14.000		.3011	.1373	.0730	.0629	.0694	.0503	.0427	.0541	.0593	.0868	-.0139	
24.000									.0225	.0175	.1674	-.0114	
45.000	.8152	.4660	.2392	.1082	.0943	.1107	.1057	.0956	.1094	.1233	.1813	-.0114	
67.500		.5857	.3186	.1435	.1220	.1233	.1132	.1082	.1258	.1246	.1951	-.0101	
90.000	1.0291	.6348	.3589	.1661	9.9990	.1271	.1271	.1183	.1309	.1309	.1586	-.0026	
112.500		.5983	.3324	.1523	.1548	.1132	.1082	.1031	.1157	.1082	.1573	-.0101	
135.000	.8339	.4937	.2669	.1107	.0931	.0767	.0704	.0653	9.9990	.0666	.0679	-.0164	
157.500		.3526	.1825	.0679	.0578	.0414	.0376	.0313	.0968	.0338	.0200	-.0177	
180.000	.4509	.2203	.1019	.0326	.0250	.0200	.0137	.0074	.0212	.0036	-.0064	-.0202	
202.500		.1334	.0490	.0124	.0124	.0137	.0036	-.0001	.0099	.0036	-.0127	-.0177	
225.000	.2216	.0792	.0225	.0036	.0051	.0099	.0036	-.0051	.0036	-.0039	-.0114	-.0202	
247.500		.0527	.0149	.0011	.0049	.0086	-.0026	-.0051	.0011	-.0026	-.0013	.0036	
270.000	.1649	.0477	.0112	.0011	9.9990	.0049	-.0026	-.0064	.0036	-.0026	-.0001	-.0064	
292.500		.0477	.0099	-.0001	.0086	.0061	-.0026	-.0076	.0023	-.0013	.0023	-.0064	
315.000	.2266	.0729	.0149	-.0039	.0061	.0011	-.0039	-.0089	-.0013	-.0051	.0023	-.0039	
326.000									-.0051	-.0064	-.0076	-.0064	
346.000		.2052	.1031	.0275	.0288	.0225	.0288	.0149	.0263	.0364	.0340	-.0089	
360.000	.4836	.2369	.1159	.0718	.0768	.0831	.0604	.0579	.0667	.0654	.0590	-.0039	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 115

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA05B) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.960 ALPHA (1) = 20.740 BETA = .00000 Q(PSI) = 10.253 PO = 28.001 P = 3.8220

SECTION (1) ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4788	.2126	.0232	-.1073	-.1024	-.1405	-.0780	-.0787	-.1062	-.0475	.0077	-.2227	
14.000		.2969	.0723	-.0850	-.0733	-.1092	-.1583	-.1530	-.0941	-.0594	.0001	-.2486	
24.000									-.1016	-.0724	-.0149	-.2767	
45.000	.8855	.5327	.2550	.0703	.0805	.1457	.1284	.1359	.0575	.1216	.3875	-.2680	
67.500		.7006	.4017	.1693	.1825	.1709	.1185	.1483	.2051	.1234	.3257	-.2781	
90.000	1.1423	.7600	.4576	.2053	9.9990	.2057	.2001	.1612	.1571	.1737	.1753	-.1939	
112.500		.7037	.4155	.1724	.1698	.1397	.1246	.1223	.1231	.1140	.2101	-.2594	
135.000	.9074	.5651	.2998	.0771	.0760	.0161	.0217	.0127	9.9990	-.0087	-.0017	-.2456	
157.500		.3589	.1421	-.0273	-.0393	-.0971	-.0979	-.1050	-.1145	-.1288	-.1284	-.2344	
180.000	.4382	.1683	-.0049	-.1338	-.1504	-.2062	-.2099	-.2058	-.2182	-.2193	-.2268	-.2310	
202.500		.0440	-.1080	-.2069	-.2359	-.2352	-.2004	-.1835	-.1910	-.1869	-.1945	-.2324	
225.000	.1757	-.0312	-.1535	-.2366	-.2355	-.2332	-.2054	-.2114	-.1907	-.1768	-.1806	-.2404	
247.500		-.0344	-.1547	-.2264	-.2279	-.2592	-.2494	-.2305	-.1936	-.1849	-.1432	-.2500	
270.000	.1590	-.0340	-.1490	-.2051	9.9990	-.0366	-.1135	-.1263	-.1320	-.1339	-.1303	-.2694	
292.500		-.0381	-.1549	-.2152	-.1481	-.1538	-.1911	-.1429	-.1251	-.1037	.0258	-.2586	
315.000	.2798	.0191	-.1338	-.2291	-.2525	-.2968	-.2167	-.1240	-.1297	-.0701	.0848	-.2276	
326.000									-.0951	-.0789	.0837	-.2354	
346.000		.1855	.0590	-.0975	-.0843	-.0553	-.0681	-.1095	-.0930	-.0693	.0368	-.2722	
360.000	.4788	.2126	.0232	-.1073	-.1024	-.1405	-.0780	-.0787	-.1062	-.0475	.0077	-.2227	

MACH (2) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(PSI) = 6.8660 PO = 60.046 P = .81000

SECTION (1) ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4939	.2460	.0902	.0022	.0016	.0056	-.0028	-.0163	.0180	.0304	.0578	-.0807	
14.000		.3169	.1325	.0196	.0145	-.0034	-.0356	-.0418	.0050	.0117	.0697	-.0926	
24.000									.0026	.0020	.0258	-.0880	
45.000	.8870	.5350	.2874	.1228	.1075	.1493	.1566	.1442	.1346	.1211	.3553	-.0740	
67.500		.6957	.4104	.1972	.1746	.1831	.1599	.1662	.1910	.1921	.2826	-.0605	
90.000	1.1592	.7538	.4555	.2305	9.9990	.1916	.1910	.1780	.1808	.1870	.1897	-.0508	
112.500		.7042	.4193	.2058	.1793	.1596	.1596	.1489	.1546	.1517	.1992	-.0700	
135.000	.9063	.5663	.3181	.1358	.1082	.0896	.0846	.0784	9.9990	-.0756	.0787	-.0796	
157.500		.3747	.1908	.0569	.0327	.0125	.0074	.0029	.0199	-.0009	-.0006	-.0863	
180.000	.4415	.2089	.0806	-.0121	-.0307	-.0459	-.0526	-.0543	-.0543	-.0594	-.0621	-.0841	
202.500		.1009	.0030	-.0549	-.0678	-.0718	-.0740	-.0735	-.0723	-.0746	-.0785	-.0841	

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIAD58)

MACH (2) = 3.490 ALPHA (1) = 20.610

SECTION (1)	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.1684	.0322	-.0392	-.0757	-.0819	-.0740	-.0757	-.0769	-.0746	-.0769	-.0773	-.0841	
247.500		.0025	-.0515	-.0774	-.0802	-.0808	-.0751	-.0768	-.0740	-.0763	-.0672	-.0745	
270.000	.1232	.0041	-.0510	-.0763	9.9990	-.0481	-.0645	-.0740	-.0678	-.0650	-.0554	-.0824	
292.500		.0064	-.0503	-.0791	-.0588	-.0610	-.0824	-.0751	-.0650	-.0532	-.0339	-.0852	
315.000	.1975	.0375	-.0356	-.0762	-.0779	-.0807	-.0841	-.0756	-.0661	-.0503	.0020	-.0796	
326.000									-.0491	-.0413	.0104	-.0836	
346.000		.2252	.1069	.0065	.0009	-.0001	.0167	.0071	-.0007	.0319	.0618	-.0768	
350.000	.4939	.2460	.0902	.0022	.0016	.0056	-.0028	-.0163	.0180	.0304	.0578	-.0807	

MACH (3) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(P51) = 3.0700 PO = 90.016 P = .17800

SECTION (1)	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4913	.2443	.1309	.0805	.0792	.0944	.0692	.0666	.0742	.0780	.0704	-.0026	
14.000		.3110	.1472	.0779	.0616	.0679	.0490	.0452	.0540	.0603	.1334	-.0089	
24.000									.0263	.0238	.2241	-.0101	
45.000	.8868	.5343	.2923	.1385	.1158	.1562	.1650	.1574	.1625	.1698	.3551	-.0051	
67.500		.6953	.4093	.2001	.1687	.1775	.1750	.1787	.2027	.2027	.3236	-.0013	
90.000	1.1690	.7713	.4638	.2368	9.9990	.1965	.1978	.1978	.2129	.2167	.2417	.0099	
112.500		.7117	.4244	.2115	.2001	.1712	.1651	.1687	.1838	.1800	.2494	-.0013	
135.000	.9145	.5718	.3337	.1510	.1246	.1107	.1069	.1107	9.9990	.1107	.1132	-.0001	
157.500		.3791	.2027	.0842	.0603	.0565	.0490	.0540	.1183	.0490	.0389	.0023	
180.000	.4357	.2179	.1107	.0376	.0275	.0225	.0200	.0212	.0250	.0112	-.0013	.0023	
202.500		.1157	.0502	.0149	.0099	.0124	.0061	.0023	.0099	.0049	-.0101	.0023	
225.000	.1661	.0565	.0200	.0049	.0023	.0137	.0049	-.0026	.0061	-.0001	-.0101	.0023	
247.500		.0301	.0149	.0023	-.0013	.0049	-.0013	-.0051	-.0001	-.0039	-.0064	-.0001	
270.000	.1220	.0313	.0149	.0023	9.9990	.0086	-.0026	-.0026	.0023	.0011	-.0064	-.0039	
292.500		.0275	.0049	-.0064	.0074	.0036	-.0051	-.0076	-.0001	-.0013	-.0051	-.0001	
315.000	.1700	.0502	.0112	-.0039	-.0013	.0011	-.0051	-.0039	-.0039	-.0013	-.0101	-.0076	
326.000									-.0076	-.0051	-.0152	-.0089	
346.000		.2291	.1132	.0351	.0250	.0427	.0376	-.0026	.0313	.0414	.0779	-.0114	
350.000	.4913	.2443	.1309	.0805	.0792	.0944	.0692	.0666	.0742	.0780	.0704	-.0026	

MSFC 596 (TA-2F) MCRD200 EXTERNAL TANK, T1

(RIA059) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.960 ALPHA (1) = 24.850 BETA = .00000 Q(PSI) = 10.248 PO = 20.006 P = 3.8160

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4949	.2166	.0327	-.0911	-.1145	-.1006	-.0885	-.1402	-.1161	-.0413	-.0284	-.2418
14.000		.2922	.0685	-.0767	-.0729	-.1193	-.1473	-.1733	-.0950	-.0601	.0658	-.2724
24.000									-.1100	-.0714	-.0303	-.2955
45.000	.9421	.5829	.3087	.1142	.1206	.2207	.1985	.2015	.1252	.1951	.4957	-.2720
67.500		.7933	.4957	.2343	.2638	.2543	.1909	.2188	.2959	.1917	.4322	-.2649
90.000	1.2563	.8692	.5631	.2900	9.9990	.2805	.2783	.2371	.2398	.2602	.2556	-.1669
112.500		.8046	.4986	.2511	.2602	.2070	.1953	.1855	.1953	.1858	.3133	-.2399
135.000	.9690	.6264	.3529	.1305	.1380	.0572	.0689	-.0561	9.9990	.0394	.0455	-.2604
157.500		.3647	.1560	-.0122	-.0235	-.0838	-.0895	-.0922	-.0955	-.1114	-.1125	-.2472
180.000	.3860	.1393	-.0231	-.1426	-.1652	-.2142	-.2183	-.2281	-.2300	-.2375	-.2402	-.2334
202.500		-.0122	-.1444	-.2324	-.2584	-.2494	-.2226	-.2143	-.2116	-.2120	-.2169	-.2263
225.000	.0606	-.0839	-.1957	-.2686	-.2701	-.2550	-.2244	-.2180	-.2149	-.2093	-.2099	-.2367
247.500		-.0767	-.1877	-.2515	-.2899	-.2598	-.2447	-.2379	-.2175	-.2137	-.1859	-.2452
270.000	.0968	-.0766	-.1708	-.2190	9.9990	-.1421	-.1776	-.1817	-.1614	-.1719	-.1351	-.2645
292.500		-.0820	-.1727	-.2342	-.1779	-.2153	-.2614	-.1583	-.1458	-.1357	-.0148	-.2702
315.000	.1901	-.0269	-.1900	-.2881	-.2738	-.2651	-.2670	-.1503	-.1594	-.1288	.1316	-.2708
326.000									-.0789	-.1477	.1055	-.2747
346.000		.2014	.0791	-.0903	-.0601	-.0333	-.0805	-.1031	-.1295	-.0714	.0130	-.2465
360.000	.4949	.2166	.0327	-.0911	-.1145	-.1006	-.0885	-.1402	-.1161	-.0413	-.0284	-.2418

MACH (2) = 3.480 ALPHA (1) = 24.680 BETA = .00000 Q(PSI) = 6.8610 PO = 60.001 P = .80900

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5079	.2547	.1053	.0128	.0066	.0156	-.0012	-.0232	.0122	.0359	.0698	-.0796
14.000		.3258	.1431	.0292	.0241	.0049	-.0384	-.0260	-.0040	.0089	.0736	-.0903
24.000									-.0018	.0009	.0094	-.0841
45.000	.9462	.5961	.3391	.1632	.1469	.2230	.2360	.2258	.1959	.2021	.4887	-.0632
67.500		.7989	.4994	.2637	.2412	.2581	.2265	.2468	.2812	.2863	.4047	-.0469
90.000	1.2821	.8791	.5640	.3115	9.9990	.2777	.2811	.2653	.2715	.2805	.2767	-.0322
112.500		.8141	.5096	.2778	.2468	.2350	.2214	.2226	.2350	.2310	.2829	-.0649
135.000	.9675	.6367	.3791	.1813	.1520	.1339	.1322	.1244	9.9990	.1244	.1277	-.0728
157.500		.3974	.2136	.0765	.0506	.0320	.0258	.0241	.0376	.0224	.0212	-.0875
180.000	.4120	.1995	.0799	-.0097	-.0271	-.0441	-.0486	-.0519	-.0491	-.0525	-.0565	-.0897
202.500		.0748	-.0086	-.0587	-.0694	-.0683	-.0734	-.0773	-.0762	-.0762	-.0847	-.0909

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A059)

MACH (2) = 3.480 ALPHA (1) = 24.680

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.1097	.0009	-.0508	-.0795	-.0830	-.0751	-.0751	-.0802	-.0773	-.0790	-.0835	-.0909	
247.500		-.0221	-.0627	-.0807	-.0835	-.0807	-.0801	-.0813	-.0779	-.0779	-.0706	-.0745	
270.000	.0798	-.0142	-.0553	-.0762	9.9990	-.0666	-.0756	-.0790	-.0711	-.0717	-.0649	-.0813	
292.500		-.0164	-.0604	-.0830	-.0615	-.0649	-.0841	-.0801	-.0694	-.0598	-.0401	-.0858	
315.000	.1543	.0240	-.0548	-.0864	-.0795	-.0847	-.0835	-.0796	-.0706	-.0537	-.0074	-.0852	
326.000									-.0582	-.0480	-.0142	-.0658	
346.000		.2433	.1277	.0161	.0049	.0223	.0313	-.0018	-.0001	.0443	.0585	-.0852	
360.000	.5079	.2547	.1053	.0128	.0066	.0156	-.0012	-.0232	.0122	.0359	.0698	-.0796	

MACH (3) = 4.950 ALPHA (1) = 24.530 BETA = .00000 Q(P51) = 3.0700 PO = 90.020 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.5038	.2558	.1398	.0818	.0793	.0957	.0654	.0654	.0780	.0793	.1107	-.0001	
14.000		.3250	.1637	.0855	.0692	.0654	.0528	.0490	.0603	.0629	.1787	-.0089	
24.000									.0313	.0250	.2468	-.0089	
45.000	.9435	.5932	.3387	.1712	.1447	.2253	.2455	.2455	.2329	.2367	.5491	.0086	
67.500		.8024	.4962	.2619	.2304	.2581	.2594	.2745	.3072	.3072	.4622	.0149	
90.000	1.2937	.8855	.5643	.3110	9.9990	.2883	.2959	.2997	.3135	.3186	.3400	.0313	
112.500		.8175	.5164	.2795	.2519	.2518	.2493	.2581	.2720	.2694	.3539	.0036	
135.000	.9599	.6323	.3891	.1951	.1624	.1548	.1573	.1624	9.9990	.1649	.1661	-.0013	
157.500		.4017	.2329	.1019	.0779	.0729	.0628	.0691	.1447	.0729	.0628	-.0089	
180.000	.4080	.2140	.1132	.0401	.0301	.0187	.0187	.0212	.0288	.0162	.0023	-.0114	
202.500		.1006	.0452	.0149	.0099	.0124	.0061	.0061	.0137	.0099	-.0089	-.0114	
225.000	.1220	.0389	.0162	.0023	-.0001	.0099	.0049	.0011	.0099	-.0001	-.0089	-.0190	
247.500		.0187	.0112	.0023	-.0001	.0086	-.0013	-.0001	-.0026	-.0013	-.0051	-.0075	-.0001
270.000	.0817	.0212	.0061	-.0001	9.9990	.0074	-.0064	-.0026	-.0013	-.0039	-.0114	-.0051	
292.500		.0187	.0036	-.0076	.0049	.0074	-.0039	-.0051	-.0013	-.0039	-.0114	-.0039	
315.000	.1183	.0376	.0061	-.0064	-.0026	-.0013	-.0051	-.0051	-.0026	-.0051	-.0114	-.0039	
326.000									-.0076	-.0089	-.0152	-.0076	
346.000		.2493	.1309	.0464	.0275	.0464	.0439	.0137	.0452	.0452	.1057	-.0064	
360.000	.5038	.2558	.1398	.0818	.0793	.0957	.0654	.0654	.0780	.0793	.1107	-.0001	

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TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 119

MSFC 596 (TA-2F) HCRO200 EXTERNAL TANK, T1

(R1A060) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.960 ALPHA (1) = 28.930 BETA = .00000 Q(PSI) = 10.256 PO = 28.001 P = 3.8260

SECTION (1)ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.5337	.2299	.0519	-.0748	-.1136	-.0940	-.1174	-.1438	-.0861	-.0374	-.0303	-.2451		
14.000		.2949	.0791	-.0672	-.0623	-.1419	-.1438	-.1766	-.0993	-.0702	.1074	-.2922		
24.000									-.1054	-.0805	-.0676	-.3022		
45.000	.9891	.6389	.3654	.1638	.1721	.3149	.2881	.2926	.2071	.2874	.5959	-.2615		
67.500		.8970	.5933	.3198	.3548	.3454	.2757	.3141	.3925	.2719	.5609	-.2453		
90.000	1.3663	.9936	.6778	.3945	9.9990	.3847	.3813	.3405	.3386	.3658	.3544	-.1334		
112.500		.9127	.6080	.3460	.3475	.2985	.2785	.2721	.2826	.2679	.4476	-.1862		
135.000	1.0223	.6933	.4221	.1876	.1857	.1126	.1201	.1107	8.9990	.0896	.1096	-.2390		
157.500		.3871	.1838	.0123	-.0019	-.0589	-.0687	-.0653	-.0721	-.0857	-.0842	-.2622		
180.000	.3384	.1268	-.0281	-.1457	-.1681	-.2110	-.2174	-.2223	-.2237	-.2340	-.2404	-.2825		
202.500		-.0508	-.1893	-.2482	-.2734	-.2553	-.2330	-.2330	-.2443	-.2470	-.2457	-.2419		
225.000	-.0095	-.1488	-.2447	-.2956	-.2930	-.2847	-.2395	-.2436	-.2462	-.2428	-.2384	-.2403		
247.500		-.1248	-.2220	-.2898	-.3071	-.2830	-.2638	-.2551	-.2355	-.2344	-.2149	-.2444		
270.000	.0508	-.0954	-.1839	-.2280	9.9990	-.2178	-.2193	-.2137	-.1937	-.2118	-.1816	-.2665		
292.500		-.0962	-.1958	-.2557	-.2380	-.2165	-.25	-.1626	-.1671	-.1630	-.0446	-.2145		
315.000	.0040	-.1557	-.2744	-.3139	-.2751	-.2661	-.2664	-.1606	-.1971	-.1349	.1202	-.2928		
326.000									-.0702	-.1725	.0443	-.2880		
346.000		.2138	.1172	-.0812	-.0363	-.0114	-.0650	-.1408	-.1144	-.0352	.0062	-.2441		
360.000	.5337	.2299	.0519	-.0748	-.1136	-.0940	-.1174	-.1438	-.0861	-.0374	-.0303	-.2451		

MACH (2) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(PSI) = 6.8600 PO = 59.997 P = .80900

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.5336	.2653	.1163	.0186	.0028	.0147	.0011	-.0236	.0214	.0344	.0781	-.0785	
14.000		.3307	.1520	.0364	.0347	-.0178	-.0362	-.0260	-.0048	.0082	.0726	-.0897	
24.000									-.0018	-.0012	-.0260	-.0784	
45.000	.9979	.6568	.3946	.2057	.1938	.3156	.3342	.3229	.2784	.2970	.6370	-.0503	
67.500		.9039	.5967	.3397	.3188	.3543	.3177	.3464	.3898	.3943	.5488	-.0311	
90.000	1.3977	1.0092	.6810	.4030	9.9990	.3861	.3906	.3714	.3771	.3857	.3786	-.0091	
112.500		.9229	.6145	.3557	.3258	.3201	.3094	.3117	.3275	.3196	.3791	-.0570	
135.000	1.0244	.7019	.4425	.2299	.2017	.1865	.1854	.1808	9.9990	.1808	.1837	-.0621	
157.500		.4149	.2367	.0953	.0720	.0545	.0506	.0506	.0630	.0500	.0489	-.0813	
180.000	.3810	.1886	.0787	-.0080	-.0244	-.0390	-.0430	-.0187	-.0413	-.0446	-.0480	-.0892	
202.500		.0533	-.0182	-.0844	-.0711	-.0728	-.0740	-.0678	-.0734	-.0740	-.0802	-.0897	

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA060)

MACH (2) = 3.480 ALPHA (1) = 28.700

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0580	.1080	.1620	.2160	.3220	.5180	.8100	.7350	.0800	.8920	.9230	.9540
THETA													
225.000	.0613	-.0244	-.0644	-.0858	-.0830	-.0751	-.0773	-.0593	-.0756	-.0768	-.0790	-.0926	
247.500		-.0407	-.0717	-.0869	-.0863	-.0818	-.0835	-.0807	-.0773	-.0779	-.0678	-.0734	
270.000	.0444	-.0305	-.0644	-.0830	9.9990	-.0762	-.0835	-.0784	-.0762	-.0745	-.0694	-.0818	
292.500		-.0345	-.0706	-.0886	-.0627	-.0666	-.0852	-.0835	-.0756	-.0649	-.0604	-.0841	
315.000	.0415	-.0328	-.0790	-.0931	-.0847	-.0869	-.0847	-.0852	-.0700	-.0559	-.0672	-.0880	
326.000									-.0672	-.0553	-.0830	-.0897	
346.000		.2575	.1408	.0184	.0043	.0602	.0433	-.0238	.0292	.0557	.0900	-.0835	
360.000	.5336	.2653	.1163	.0186	.0028	.0147	.0011	-.0236	.0214	.0344	.0781	-.0785	

MACH (3) = 4.950 ALPHA (1) = 28.540 BETA = .00000 Q(PSI) = 3.0700 PO = 90.020 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.8100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.5252	.2621	.1360	.0755	.0717	.0919	.0604	.0604	.0742	.0780	.1283	-.0026	
14.000		.3327	.1675	.0831	.0730	.0642	.0528	.0478	.0616	.0629	.2140	-.0101	
24.000									.0275	.0200	.2090	-.0051	
45.000	.9976	.6600	.3967	.2115	.1888	.3224	.3513	.3413	.3312	.3161	.7028	.0149	
67.500		.9120	.5932	.3362	.3085	.3662	.3627	.3803	.4156	.4156	.6033	.0238	
90.000	1.4184	1.0216	.6776	.3979	9.9990	.4030	.4131	.4080	.4143	.4219	.4282	.0439	
112.500		.9347	.6197	.3551	.3350	.3476	.3483	.3488	.3602	.3551	.4483	-.0064	
135.000	1.0203	.7028	.4521	.2379	.2090	.2153	.2178	.2190	9.9990	.2216	.2216	-.0064	
157.500		.4219	.2543	.1157	.0968	.0943	.0893	.1120	.1510	.0943	.0905	-.0026	
180.000	.3778	.2052	.1069	.0376	.0275	.0313	.0225	.0389	.0301	.0200	.0085	-.0901	
202.500		.0817	.0351	.0061	.0074	.0124	.0023	.0036	.0099	.0049	-.0089	-.0013	
225.000	.0880	.0250	.0111	-.0013	-.0013	.0099	.0049	-.0013	.0049	.0011	-.0101	-.0013	
247.500		.0086	.0061	-.0039	-.0051	.0049	-.0026	-.0051	-.0001	-.0013	-.0076	.0023	
270.000	.0527	.0112	.0036	-.0064	9.9990	.0011	-.0039	-.0009	-.0026	-.0064	-.0127	-.0013	
292.500		.0074	-.0026	-.0152	-.0026	.0036	-.0051	-.0114	-.0026	-.0051	-.0089	-.0039	
315.000	.0729	.0149	-.0026	-.0114	-.0051	-.0013	-.0064	-.0076	-.0026	-.0064	-.0152	-.0051	
326.000									-.0127	-.0154	-.0127	-.0101	
346.000		.2644	.1422	.0477	.0376	.0729	.0452	-.0076	.0452	.0515	.1472	-.0076	
360.000	.5252	.2621	.1360	.0755	.0717	.0919	.0604	.0604	.0742	.0780	.1283	-.0026	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 595 (TA-2F) MICRO200 EXTERNAL TANK, T2

(R1A051) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 60.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 51.110 BETA = .00000 Q(PSI) = 10.246 PO = 28.013 P = 3.8120

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.1541	-.2126	-.2304	-.1843	-.1488	9.9990	9.9990	-.1794	-.1809	-.1798	-.1794	-.1786
14.000		-.2137	-.2194	-.1990	-.1488	9.9990	9.9990	-.1802	-.1813	-.1802	-.1802	-.1786
24.000									-.1817	-.1802	-.1792	-.1770
45.000	-.2160	-.2208	-.2102	-.1932	-.1449	-.1057	-.1562	-.1845	-.1815	-.1804	-.1793	-.1774
67.500		-.2098	-.1956	-.1800	-.1267	-.1010	-.1501	-.1864	-.1796	-.1788	-.1771	-.1763
90.000	.1003	.0055	-.0930	-.1383	-.1281	-.1111	-.1658	-.1726	-.1768	-.1771	-.1839	-.1748
112.500		.3981	.2475	.1693	.0874	.1202	.1055	.0946	.0987	.1093	.0953	-.1749
135.000	1.0330	.9013	.6784	.5766	.4924	.5305	.5087	.4917	.4826	.4747	.4380	-.1473
157.500		1.3451	1.1038	.9561	.8802	.8768	.8783	.8522	.8473	.8333	.7940	-.0621
180.000	1.6573	1.5320	1.2760	1.1151	1.0468	1.0377	1.0192	.9928	.9743	.9732	.9243	-.0046
202.500		1.3666	1.1182	.9644	.8987	.8843	.8677	.8462	.8337	.8254	.7851	-.0635
225.000	1.0985	.9182	.7022	.5830	.5290	.5245	.4882	.4829	.4829	.4799	.4500	-.1503
247.500		.4140	.2482	.1584	.1251	.1025	.0844	.0897	.0836	.0772	.0658	-.1669
270.000	.1285	.0191	-.0813	-.1229	-.1157	-.1040	-.1554	-.1796	-.1784	-.1773	-.1836	-.1734
292.500		-.2030	-.1777	-.1781	-.1191	-.1006	-.1411	-.1856	-.1807	-.1792	-.1777	-.1754
315.000	-.2111	-.2136	-.1955	-.1820	-.1427	-.1114	-.1506	-.1846	-.1831	-.1808	-.1793	-.1766
326.000									9.9990	-.1770	-.1790	-.1748
346.000		-.2120	-.2094	-.1886	-.1516	9.9990	9.9990	-.1792	-.1818	-.1795	-.1797	-.1778
360.000	-.1541	-.2125	-.2304	-.1843	-.1488	9.9990	9.9990	-.1794	-.1809	-.1798	-.1794	-.1786

MACH (2) = 3.480 ALPHA (1) = 51.000 BETA = .00000 Q(PSI) = 6.8630 PO = 60.021 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0322	-.0424	-.0401	-.0435	-.0446	9.9990	9.9990	-.0497	-.0497	-.0514	-.0587	-.0576
14.000		-.0458	-.0503	-.0480	-.0469	9.9990	9.9990	-.0514	-.0559	-.0548	-.0587	-.0582
24.000									-.0604	-.0599	-.0582	-.0559
45.000	-.0616	-.0503	-.0519	-.0441	-.0412	.0342	-.0074	-.0587	-.0559	-.0559	-.0592	-.0570
67.500		-.0239	-.0554	-.0452	-.0407	-.0159	-.0396	-.0666	-.0616	-.0610	-.0632	-.0570
90.000	.2219	.1356	.0488	.0099	-.0046	.0049	.0077	.0082	.0054	.0065	.0026	-.0610
112.500		.4688	.3188	.2252	.1886	.2213	.2190	.2117	.2190	.2275	.2382	-.0373
135.000	1.1100	.9580	.7061	.5837	.5460	.5837	.5736	.5623	.5550	.5488	.5358	.0398
157.500		1.4191	1.1491	.9479	.9242	.9321	.9270	.9078	.9039	.8960	.8746	.1058
180.000	1.7901	1.6164	1.3334	1.1113	1.1017	1.0978	1.0736	1.0505	1.0443	1.0392	1.0164	.1546
202.500		1.4428	1.1609	.9574	.9434	.9287	.9146	.8994	.8904	.8870	.8673	.1052

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T2

(RIA0611)

MACH (2) = 3.480 ALPHA (1) = 51.000

SECTION (1)	TANK											
	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.1674	.9738	.7433	.5911	.5736	.5775	.5572	.5516	.5556	.5556	.5398	.0359
247.500		.4851	.3323	.2365	.2213	.2185	.2128	.2151	.2157	.2112	.1982	.0003
270.000	.2517	.1520	.0753	.0268	.0133	.0065	.0043	.0139	.0139	.0150	.0144	-.0576
292.500		-.0159	-.0441	-.0458	-.0300	-.0171	-.0379	-.0621	-.0571	-.0576	-.0542	-.0576
315.000	-.0486	-.0379	-.0402	-.0452	-.0351	-.0233	-.0447	-.0621	-.0593	-.0599	-.0570	-.0592
326.000									9.9990	.0044	-.0593	-.0576
346.000		-.0384	-.0384	-.0458	-.0413	9.9990	9.9990	-.0576	-.0599	-.0587	-.0593	-.0570
360.000	-.0322	-.0424	-.0401	-.0435	-.0446	9.9990	9.9990	-.0497	-.0497	-.0514	-.0587	-.0576

MACH (3) = 4.960 ALPHA (1) = 51.000 BETA = .00000 Q(PSI) = 3.0710 PO = 90.052 P = .17800

SECTION (1)	TANK											
	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0026	.0476	.0602	.0602	.0640	9.9990	9.9990	.0778	.0640	.0527	.0023	.0036
14.000		.0299	.0400	.0462	.0488	9.9990	9.9990	.0412	.0400	.0374	.0023	.0011
24.000									.0023	.0036	.0011	.0023
45.000	-.0076	.0199	.0337	.0450	.0400	.1972	.1192	.0312	.0324	.0324	-.0026	-.0013
67.500		.0363	.0287	.0300	.0388	.0488	.0488	.0363	.0249	.0262	-.0051	.0011
90.000	.2518	.1636	.0943	.0615	.0515	.0628	.0603	.0640	.0628	.0628	.0515	-.0064
112.500		.4871	.3423	.2479	.2139	.2516	.2529	.2453	.2529	.2579	.3224	.0263
135.000	1.1425	.9772	.7203	.5918	.5704	.6031	.5993	.5893	.5792	.5729	.5630	.0918
157.500		1.4609	1.1800	.9558	.9445	.9583	.9559	.9394	.9281	.9205	.9057	.1535
180.000	1.8632	1.6865	1.3781	1.1224	1.1224	1.1299	1.1022	1.0846	1.0770	1.0732	1.0468	.1976
202.500		1.4751	1.1891	.9586	.9548	.9548	.9397	.9284	.9132	.9069	.8880	.1561
225.000	1.2232	.9850	.7570	.5920	.5857	.5957	.5794	.5794	.5756	.5743	.5580	.0918
247.500		.4975	.3614	.2556	.2543	.2531	.2430	.2543	.2505	.2442	.2190	.1220
270.000	.2795	.1787	.1195	.0704	.0679	.0616	.0590	.0666	.0679	.0666	.0679	.0074
292.500		.0301	.0212	.0124	.0225	.0288	.0187	.0112	.0086	.0086	.0086	.0023
315.000	.0086	-.0001	.0137	.0137	.0162	.0200	.0162	.0061	.0049	.0074	.0036	-.0013
326.000									9.9990	.1397	.0011	.0011
346.000		-.0001	.0086	.0099	.0112	9.9990	9.9990	.0036	.0036	.0011	-.0326	-.0001
360.000	-.0026	.0476	.0602	.0602	.0640	9.9990	9.9990	.0778	.0640	.0527	.0023	.0036

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 123

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(R1A062) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1085.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 60.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 54.110 BETA = .00000 Q(PSI) = 10.243 PO = 28.018 P = 3.8070

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB .0550 .1080 .1620 .2160 .3220 .5180 .6100 .7350 .8600 .8920 .9230 .9540

THETA

.000	-.1824	-.2235	-.2235	-.1975	-.1623	9.9990	9.9990	.3305	-.1793	-.1782	-.1805	-.1816
14.000		-.2188	-.2188	-.2037	-.1670	9.9990	9.9990	-.1795	-.1810	-.1795	-.1823	-.1815
24.000									-.1812	-.1815	-.1836	-.1821
45.000	-.2162	-.2189	-.2102	-.1985	-.1551	-.1150	-.1604	-.1845	-.1808	-.1795	-.1823	-.1804
67.500		-.2185	-.2049	-.1893	-.1330	-.1095	-.1561	-.1878	-.1799	-.1788	-.1804	-.1795
90.000	.0711	-.0070	-.0959	-.1345	-.1500	-.1269	-.1624	-.1659	-.1685	-.1689	-.1802	-.1755
112.500		.3938	.2582	.1875	.1082	.1381	.1286	.1177	.1263	.1309	.1111	-.1812
135.000	1.0168	.9138	.7201	.6249	.5441	.5773	.5577	.5410	.5312	.5184	.4675	-.1366
157.500		1.3735	1.1631	1.0272	.9535	.9452	.9425	.9187	.9165	.9002	.8446	-.0438
180.000	1.6622	1.5798	1.3568	1.2069	1.1367	1.1190	1.0982	1.0771	1.0623	1.0544	.9877	.0198
202.500		1.4022	1.1839	1.0427	.9751	.9559	.9411	.9207	.917	.8970	.8387	-.0450
225.000	1.0866	.9332	.7423	.6319	.5767	.5703	.5355	.5313	.5332	.5264	.4837	-.1386
247.500		.4073	.2619	.1784	.1456	.1214	.1063	.1108	.1063	.0972	.0809	-.1710
270.000	.1005	.0047	-.0819	-.1204	-.1468	-.1128	-.1683	-.1743	-.1705	-.1709	-.1811	-.1766
292.500		-.2136	-.1978	-.1925	-.1324	-.1075	-.1483	-.1895	-.1815	-.1793	-.1814	-.1799
315.000	-.2197	-.2202	-.2081	-.1983	-.1530	-.1175	-.1583	-.1891	-.1839	-.1809	-.1808	-.1793
326.000									9.9990	-.1785	-.1811	-.1804
346.000		-.2204	-.2178	-.2011	-.1645	9.9990	9.9990	-.1822	-.1838	-.1807	-.1802	-.1813
360.000	-.1824	-.2275	-.2235	-.1975	-.1623	9.9990	9.9990	.3305	-.1793	-.1782	-.1805	-.1816

MACH (2) = 3.480 ALPHA (1) = 54.130 BETA = .00000 Q(PSI) = 6.8670 PO = 60.060 P = .81000

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB .0550 .1080 .1620 .2160 .3220 .5180 .6100 .7350 .8600 .8920 .9230 .9540

THETA

.000	-.0441	-.0430	-.0430	-.0441	-.0447	9.9990	9.9990	-.0520	-.0508	-.0543	-.0639	-.0610
14.000		-.0486	-.0554	-.0475	-.0448	9.9990	9.9990	-.0570	-.0587	-.0582	-.0639	-.0633
24.000									-.0633	-.0639	-.0644	-.0622
45.000	-.0672	-.0543	-.0565	-.0482	-.0435	.0245	-.0035	-.0638	-.0599	-.0605	-.0639	-.0622
67.500		-.0295	-.0588	-.0486	-.0430	-.0261	-.0458	-.0717	-.0672	-.0667	-.0723	-.0627
90.000	.2017	.1265	.0465	.0138	-.0024	.0093	.0127	.0076	.0087	.0104	.0070	-.0712
112.500		.4666	.3280	.2447	.2086	.2419	.2402	.2289	.2424	.2492	.2582	-.0334
135.000	1.1002	.9774	.7408	.6350	.5989	.6299	.6215	.6091	.6051	.5989	.5848	.0554
157.500		1.4634	1.2213	1.0393	1.0051	1.0112	1.0056	.9847	.9796	.9734	.9482	.1314
180.000	1.8013	1.6808	1.4201	1.2173	1.1970	1.1903	1.1861	1.1402	1.1334	1.1289	1.1002	.1872
202.500		1.4927	1.2331	1.0444	1.0247	1.0095	.9920	.9729	.9650	.9611	.9419	.1309

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(R1A062)

MACH (2) = 3.480 ALPHA (1) = 54.130

SECTION (1)ANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1000	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
225.000	1.1835	.8982	.7949	.6395	.6248	.6271	.6017	.5955	.6023	.6001	.5922	.0504	
247.500		.4857	.3393	.2531	.2396	.2369	.2267	.2289	.2340	.2238	.2216	.0019	
270.000	.2340	.1444	.0723	.0290	.0177	.0109	.0081	.0126	.0177	.0194	.0194	-.0661	
292.500		-.0188	-.0486	-.0497	-.0334	-.0233	-.0435	-.0693	-.0633	-.0627	-.0605	-.0628	
315.000	-.0571	-.0435	-.0430	-.0481	-.0391	-.0289	-.0492	-.0667	-.0644	-.0633	-.0594	-.0627	
326.000									9.9990	-.0042	-.0622	-.0633	
346.000		-.0436	-.0441	-.0498	-.0470	9.9990	9.9990	-.0639	-.0661	-.0644	-.0622	-.0627	
360.000	-.0441	-.0430	-.0430	-.0441	-.0447	9.9990	9.9990	-.0520	-.0599	-.0543	-.0639	-.0610	

MACH (3) = 4.860 ALPHA (1) = 54.130 BETA = .00000 Q(P51) = 3.0700 P0 = J.013 P = .17800

SECTION (1)ANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.0061	.0592	.0592	.0567	.0617	9.9990	9.9990	.0491	.0604	.0503	.0023	.0023	
14.000		.0427	.0414	.0439	.0502	9.9990	9.9990	.0439	.0351	.0364	-.0001	-.0001	
24.000									.0023	.0036	.0011	.0049	
45.000	.0011	.0326	.0326	.0465	.0465	.1965	.1385	.0322	.0326	.0339	.0011	.0011	
67.500		.0452	.0263	.0301	.0402	.0490	.0465	.0213	.0238	.0226	-.0051	-.0001	
90.000	.2480	.1699	.0931	.0679	.0641	.0716	.0704	.0666	.0691	.0691	.0578	-.0051	
112.500		.4987	.3526	.2689	.2379	.2732	.2732	.2631	.2732	.2808	.3463	.0288	
135.000	1.1504	1.0115	.7583	.6436	.6209	.6537	.6436	.6335	.6260	.6197	.6096	.0968	
157.500		1.5268	1.2547	1.0506	1.0430	1.0392	1.0342	1.0140	1.0065	1.0014	.9863	.1825	
180.000	1.8864	1.7447	1.4651	1.2307	1.2332	1.2232	1.1942	1.1753	1.1702	1.1652	1.1403	.2368	
202.500		1.5381	1.2685	1.0569	1.0480	1.0367	1.0178	1.0039	.9901	.9853	.9674	.1838	
225.000	1.2219	1.0216	.8036	.6474	.6386	.6449	.6272	.6247	.6209	.6235	.6093	.1057	
247.500		.5139	.3728	.2795	.2795	.2757	.2644	.2732	.2732	.2657	.2480	.1296	
270.000	.2682	.1901	.1208	.0767	.0805	.0691	.0653	.0729	.0754	.0754	.0779	.0086	
292.500		.0414	.0212	.0112	.0238	.0275	.0137	.0051	.0074	.0086	.0162	.0049	
315.000	.0049	.0137	.0124	.0099	.0187	.0175	.0124	.0023	.0011	.0023	.0150	.0024	
326.000									9.9990	.1448	.0137	.0023	
346.000		.0124	.0099	.0086	.0212	9.9990	9.9990	.0011	.0011	.0011	.0399	.0036	
360.000	.0081	.0592	.0592	.0567	.0617	9.9990	9.9990	.0491	.0604	.0503	.0023	.0023	

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T2

(R1A063) (16 NOV 74)

REFERENCE DATA

SREF = 572.9550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 60.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 57.110 BETA = .00000 Q(PSI) = 10.220 PO = 28.014 P = 3.7920

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.1732	-.2054	-.2137	-.1994	-.1792	9.9990	9.9990	-.1859	-.1833	-.1840	-.1850	-.1872
14.000		-.2091	-.2136	-.2020	-.1784	9.9990	9.9990	-.1862	-.1847	-.1844	-.1860	-.1875
24.000									-.1831	-.1837	-.1873	-.1877
45.000	-.1958	-.2035	-.2001	-.1944	-.1611	-.1232	-.1660	-.1838	-.1804	-.1808	-.1876	-.1857
67.500		-.2214	-.1998	-.1915	-.1400	-.1203	-.1646	-.1869	-.1797	-.1805	-.1857	-.1857
90.000	.0482	-.0192	-.0976	-.1316	-.1604	-.1438	-.1551	-.1574	-.1612	-.1619	-.1777	-.1815
112.500		.3842	.2677	.2018	.1284	.1572	.1507	.1367	.1469	.1526	.1216	-.1944
135.000	.9840	.9179	.7525	.6673	.5886	.6216	.6022	.5829	.5750	.5583	.4939	-.1213
157.500		1.3959	1.2188	1.0969	1.0227	1.0125	1.0084	.9894	.9788	.9573	.8846	-.0157
180.000	1.6504	1.6102	1.4209	1.2824	1.2097	1.1927	1.1685	1.1541	1.1397	1.1257	1.0393	.0554
202.500		1.4310	1.2420	1.1132	1.0459	1.0210	1.0055	.9896	.9767	.9556	.8779	-.0175
225.000	1.0657	.9415	.7735	.6743	.6240	.6138	.6024	.5794	.5779	.5669	.5038	-.1209
247.500		.3986	.2751	.1982	.1652	.1436	.1311	.1353	.1308	.1199	.0879	-.1789
270.000	.0754	.0070	-.0802	-.1185	-.1511	-.1284	-.1682	-.1647	-.1606	-.1613	-.1777	-.1807
292.500		-.2190	-.1978	-.1986	-.1430	-.1188	-.1574	-.1914	-.1846	-.1831	-.1843	-.1835
315.000	-.1978	-.2040	-.2014	-.2003	-.1605	-.1256	-.1658	-.1881	-.1843	-.1825	-.1857	-.1834
326.000									9.9990	-.1804	-.1861	-.1861
346.000		-.2048	-.2120	-.2014	-.1787	9.9990	9.9990	-.1866	-.1859	-.1848	-.1845	-.1868
360.000	-.1732	-.2054	-.2137	-.1994	-.1792	9.9990	9.9990	-.1859	-.1833	-.1840	-.1850	-.1872

MACH (2) = 3.480 ALPHA (1) = 57.130 BETA = .00000 Q(PSI) = 6.6570 PO = 60.053 P = .81000

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0520	-.0413	-.0446	-.0430	-.0418	9.9990	9.9990	-.0514	-.0508	-.0525	-.0550	-.0516
14.000		-.0503	-.0537	-.0464	-.0447	9.9990	9.9990	-.0497	-.0576	-.0559	-.0650	-.0510
24.000									-.0621	-.0633	-.0644	-.0627
45.000	-.0695	-.0560	-.0548	-.0436	-.0447	.0312	-.0019	-.0560	-.0594	-.0588	-.0650	-.0628
67.500		-.0329	-.0554	-.0481	-.0430	-.0272	-.0486	-.0655	-.0672	-.0650	-.0740	-.0621
90.000	.1862	.1196	.0459	.0177	.0019	.0171	.0194	.0149	.0171	.0183	.0127	-.0734
112.500		.4643	.3370	.2655	.2283	.2649	.2599	.2520	.2644	.2728	.2809	-.0283
135.000	1.0867	.9920	.7758	.6862	.6479	.6840	.6699	.6575	.6547	.6485	.6308	.0741
157.500		1.4995	1.2826	1.1249	1.0923	1.0850	1.0805	1.0619	1.0591	1.0534	1.0229	.1603
180.000	1.7977	1.7236	1.4972	1.3193	1.2922	1.2764	1.2528	1.2308	1.2224	1.2184	1.1852	.2220
202.500		1.5271	1.3007	1.1356	1.1091	1.0861	1.0681	1.0506	1.0422	1.0393	1.0155	.1621

REPRODUCIBILITY OF THIS
 ORIGINAL PAGE IS POOR

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T2

(RIA063)

MACH (2) = 3.480 ALPHA (1) = 57.130

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.1643	1.0130	.8210	.6943	.6746	.6724	.6487	.6431	.6493	.6510	.6364	.0690
247.500		.4829	.3528	.2768	.2627	.2588	.2492	.2526	.2554	.2509	.2375	.0116
270.000	.2155	.1377	.0763	.0357	.0222	.0194	.0160	.0205	.0262	.0295	.0273	-.0683
292.500		-.0221	-.0492	-.0509	-.0357	-.0261	-.0481	-.0650	-.0638	-.0633	-.0599	-.0644
315.000	-.0616	-.0430	-.0458	-.0497	-.0430	-.0340	-.0531	-.0616	-.0665	-.0633	-.0616	-.0639
326.000									9.9990	-.0003	-.0627	-.0632
346.000		-.0441	-.0458	-.0492	-.0458	9.9990	9.9990	-.0587	-.0644	-.0627	-.0605	-.0616
350.000	-.0520	-.0413	-.0446	-.0430	-.0418	9.9990	9.9990	-.0514	-.0508	-.0525	-.0650	-.0616

MACH (3) = 4.960 ALPHA (1) = 57.130 BETA = .0000 Q(PSI) = 3.0710 PO = 90.060 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0001	.0627	.0589	.0589	.0627	9.9990	9.9990	.0589	.0589	.0501	-.0026	-.0001
14.000		.0500	.0450	.0475	.0488	9.9990	9.9990	.0488	.0387	.0387	-.0001	.0036
24.000									.0023	.0074	-.0026	-.0001
45.000	.0023	.0413	.0363	.0463	.0413	.2364	.1457	.0526	.0312	.0325	-.0026	-.0013
67.500		.0451	.0275	.0313	.0363	.0539	.0489	.0565	.0225	.0237	-.0102	-.0013
90.000	.2278	.1598	.0943	.0703	.0578	.0766	.0741	.0590	.0703	.0741	.0603	-.0076
112.500		.4912	.3626	.2833	.2531	.2896	.2946	.2795	.2896	.2934	.3689	.0401
135.000	1.1246	1.0153	.7809	.6877	.6600	.7003	.6915	.6789	.6650	.6613	.5510	.1321
157.500		1.5427	1.2996	1.1233	1.0943	1.1183	1.1069	1.0906	1.0704	1.0704	1.0477	.2165
180.000	1.8626	1.7669	1.5251	1.3324	1.3261	1.3110	1.2744	1.2593	1.2455	1.2442	1.2228	.2794
202.500		1.5566	1.3223	1.1485	1.1283	1.1044	1.0817	1.1208	1.0581	1.0603	1.0389	.2202
225.000	1.1901	1.0301	.8412	.7026	.6888	.6900	.6635	.6749	.6661	.6711	.6560	.1308
247.500		.5112	.3869	.3021	.3147	.2983	.2845	.3021	.2933	.2870	.2568	.1447
270.000	.2429	.1824	.1107	.0817	.0804	.0766	.0703	.0842	.0804	.0792	.0804	.0137
292.500		.0401	.0200	.0111	.0237	.0275	.0099	.0149	.0061	.0086	.0049	.0049
315.000	.0023	.0036	.0074	.0137	.0174	.0162	.0093	.0137	.0023	.0061	.0086	.0036
326.000									9.9990	.1484	.0036	.0036
346.000		.0023	.0074	.0061	.0086	9.9990	9.9990	.0187	.0011	.0023	.0123	.0011
360.000	-.0001	.0627	.0589	.0589	.0627	9.9990	9.9990	.0589	.0589	.0501	-.0026	-.0001

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T2

(R1A064) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0930

PARAMETRIC DATA

BETA = .000 OFFSET = 60.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 60.130 BETA = .00000 Q(PSI) = 10.182 PC = 28.022 P = 3.7410

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB .0550 .1080 .1620 .2160 .3220 .5180 .6100 .7350 .8600 .8920 .9230 .9540

THETA

.000	-.1799	-.1986	-.2087	-.1919	-.1847	9.9990	9.9990	-.0756	-.1836	-.1836	-.1867	-.1867
14.000		-.2028	-.2093	-.1944	-.1864	9.9990	9.9990	-.1754	-.1845	-.1849	-.1869	-.1877
24.000									-.1822	-.1842	-.1883	-.1879
45.000	-.1899	-.2021	-.2025	-.1945	-.1668	-.1310	-.1713	-.1740	-.1827	-.1850	-.1895	-.1887
67.500		-.2199	-.2024	-.1910	-.1492	-.1272	-.1713	-.1735	-.1781	-.1804	-.1869	-.1869
90.000	.0227	-.0330	-.1002	-.1298	-.1598	-.1450	-.1454	-.1499	-.1564	-.1571	-.1747	-.1826
112.500		.3736	.2742	.2128	.1460	.1767	.1714	.1578	.1638	.1669	.1336	-.2080
135.000	.9593	.9220	.7772	.7099	.6343	.6650	.6479	.6301	.6213	.5959	.5212	-.1003
157.500		1.4147	1.2704	1.1606	1.0899	1.0804	1.0781	1.0648	1.0474	1.0170	.9271	-.0197
180.000	1.6228	1.6282	1.4822	1.3549	1.2815	1.2708	1.2492	1.2370	1.2093	1.1853	1.0809	.0923
202.500		1.4427	1.2838	1.1724	1.1058	1.0819	1.0671	1.0568	1.0348	1.0093	.9134	.0159
225.070	1.0399	.9478	.8067	.7166	.6583	.6577	.6280	.6311	.6159	.6003	.5229	-.0988
247.500		.3867	.2835	.2167	.1799	.1620	.1575	.1594	.1495	.1332	.0937	-.1879
270.000	.0528	-.0194	-.0777	-.1127	-.1458	-.1412	-.1561	-.1538	-.1500	-.1530	-.1759	-.1804
292.500		-.2175	-.1940	-.1981	-.1507	-.1237	-.1628	-.1913	-.1841	-.1829	-.1852	-.1829
315.000	-.1913	-.2016	-.1982	-.1993	-.1651	-.1340	-.1716	-.1891	-.1853	-.1938	-.1868	-.1930
326.000												
346.000		-.2017	-.2093	-.1944	-.1838	9.9990	9.9990	-.1876	-.1861	-.1846	-.1883	-.1854
360.000	-.1799	-.1989	-.2087	-.1919	-.1847	9.9990	9.9990	-.0756	-.1836	-.1836	-.1867	-.1867

MACH (2) = 3.480 ALPHA (1) = 60.130 BETA = .00000 Q(PSI) = 6.8630 PC = 60.023 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB .0550 .1080 .1620 .2160 .3220 .5180 .6100 .7350 .8600 .8620 .9230 .9540

THETA

.000	-.0525	-.0407	-.0441	-.0447	-.0447	9.9990	9.9990	-.0509	-.0526	-.0548	-.0627	-.0627
14.000		-.0531	-.0514	-.0469	-.0446	9.9990	9.9990	-.0542	-.0573	-.0576	-.0616	-.0616
24.000									-.0610	-.0604	-.0627	-.0627
45.000	-.0694	-.0559	-.0503	-.0435	-.0441	.0352	-.0109	-.0531	-.0588	-.0576	-.0638	-.0627
67.500		-.0358	-.0582	-.0492	-.0453	-.0295	-.0515	-.0667	-.0661	-.0661	-.0728	-.0621
90.000	.1700	.1129	.0464	.0233	.0104	.0250	.0273	.0245	.0250	.0262	.0195	-.0762
112.500		.4600	.3478	.2846	.2485	.2874	.2812	.2750	.2885	.2936	.3013	-.0176
135.000	1.0662	1.0024	.8174	.7363	.6951	.7323	.7182	.7075	.7058	.6725	.6751	.0917
157.500		1.5262	1.3441	1.2055	1.1671	1.1643	1.1542	1.1384	1.1333	1.1260	1.0905	.1835
180.000	1.7922	1.7599	1.5728	1.4139	1.3768	1.3627	1.3368	1.3193	1.3086	1.3035	1.2624	.2551
202.500		1.5538	1.3605	1.2179	1.1846	1.1609	1.1423	1.1265	1.1164	1.1095	1.0926	.1892

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T2

(RIA064)

MACH (2) = 3.480 ALPHA (1) = 60.130

SECTION (1)	ANK												DEPENDENT VARIABLE CP													
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540														
THETA																										
225.000	1.1435	1.0251	.8594	.7455	.7247	.7230	.6965	.6937	.6982	.6987	.6779	.0888														
247.500		.4786	.3648	.2972	.2826	.2809	.2685	.2764	.2775	.2707	.2591	.0184														
270.000	.1948	.1317	.0748	.0409	.0313	.0285	.0229	.0285	.0359	.0347	.0347	-.0643														
292.500		-.0277	-.0508	-.0531	-.0384	-.0277	-.0520	-.0616	-.0632	-.0655	-.0599	-.0621														
315.000	-.0616	-.0430	-.0475	-.0503	-.0413	-.0362	-.0548	-.0592	-.0638	-.0627	-.0504	-.0621														
326.000													9.9990	-.0046	-.0576	-.0610										
346.000		-.0435	-.0475	-.0492	-.0460	9.9990	9.9990	-.0610	-.0632	-.0621	-.0593	-.0616														
360.000	-.0525	-.0407	-.0441	-.0447	-.0447	9.9990	9.9990	-.0509	-.0526	-.0548	-.0627	-.0627														

MACH (3) = 4.960 ALPHA (1) = 60.130 BETA = .00000 Q(PSI) = 3.0710 PO = 90.038 P = .17800

SECTION (1)	ANK												DEPENDENT VARIABLE CP													
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540														
THETA																										
.000	.0023	.0603	.0578	.0578	.0565	9.9990	9.9990	.0452	.0540	.0477	-.0013	-.0039														
14.000		.0464	.0439	.0477	.0427	9.9990	9.9990	.0351	.0326	.0364	-.0001	.0049														
24.000									.0074	.0112	-.0091	.0011														
45.000	.0036	.0401	.0364	.0477	.0376	.2266	.1359	.0389	.0288	.0301	-.0001	.0023														
67.500		.0426	.0275	.0309	.0300	.0502	.0452	.0200	.0187	.0212	-.0076	.0023														
90.000	.2177	.1573	.0943	.0742	.0628	.0805	.0805	.0742	.0742	.0779	.0653	-.0076														
112.500		.4935	.3689	.3059	.2656	.3134	.3122	.2996	.3071	.3248	.3778	.0074														
135.000	1.1195	1.0402	.8235	.7454	.7114	.7417	.7341	.7215	.7102	.7051	.6940	.1409														
157.500		1.5931	1.3815	1.2253	1.1888	1.1838	1.1749	1.1523	1.1460	1.1463	1.1220	.2379														
180.000	1.8815	1.8266	1.6213	1.4424	1.3958	1.3945	1.3554	1.3366	1.3340	1.3378	1.3009	.3024														
202.500		1.6019	1.3916	1.2345	1.1938	1.1737	1.1573	1.1397	1.1296	1.1296	1.1069	.2429														
225.000	1.1812	1.0506	.8742	.7557	.7343	.7381	.7129	.7091	.7117	.7129	.6928	.1409														
247.500		.5101	.3954	.3211	.3173	.3148	.3047	.3123	.3098	.3050	.2732	.1460														
270.000	.2316	.1774	.1232	.0890	.0817	.0829	.0754	.0804	.0829	.0955	.0830	.0149														
292.500		.0363	.0187	.0124	.0187	.0212	.0086	.0061	.0073	.0073	.0111	.0074														
315.000	.0011	.0074	.0111	.0124	.0099	.0149	.0086	.0023	.0023	.0049	.0023	.0049														
326.000													9.9990	.1472	.0074	.0086										
346.000		.0049	.0099	.0112	.0086	9.9990	9.9990	.0049	.0011	.0011	.0011	.0036														
360.000	.0023	.0503	.0578	.0578	.0565	9.9990	9.9990	.0452	.0540	.0477	-.0013	-.0039														

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 595 (TA-2F) MICRO200 EXTERNAL TANK, T2

(RIA065) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 60.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.950 ALPHA (1) = 63.130 BETA = .00000 Q(P51) = 10.259 PO = 28.020 P = 3.8240

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	-.1925	-.2004	-.2098	-.2064	-.2015	9.9990	9.9990	-.1925	-.1952	-.1955	-.1966	-.1943	
14.000		-.2062	-.2073	-.2043	-.2032	9.9990	9.9990	-.1882	-.1953	-.1946	-.1958	-.1939	
24.000									-.1932	-.1931	-.1983	-.1960	
45.000	-.1924	-.2010	-.1991	-.1999	-.1848	-.1414	-.1780	-.1818	-.1897	-.1919	-.1997	-.1955	
67.500		-.2102	-.1981	-.1996	-.1728	-.1397	-.1774	-.1808	-.1830	-.1876	-.1956	-.1951	
90.000	-.0042	-.0405	-.0986	-.1292	-.1575	-.1394	-.1394	-.1420	-.1548	-.1564	-.1793	-.1910	
112.500		.3693	.2908	.2313	.1634	.1992	.1913	.1796	.1785	.1766	.1352	-.2158	
135.000	.9366	.9278	.8190	.7541	.6819	.7133	.6936	.6763	.6528	.6207	.5331	-.0840	
157.500		1.4292	1.3326	1.2311	1.1631	1.1473	1.1435	1.1299	1.0956	1.0593	.9538	.0488	
180.000	1.6188	1.6564	1.5497	1.4396	1.3679	1.3395	1.3178	1.3080	1.2638	1.2329	1.1175	1.280	
202.500		1.4636	1.3509	1.2494	1.1846	1.1491	1.1288	1.1193	1.0835	1.0500	.9425	.0458	
225.000	1.0053	.9464	.8438	.7639	.7168	.7006	.6735	.6727	.6471	.6252	.5377	-.0797	
247.500		.3751	.2903	.2318	.2001	.1794	.1756	.1760	.1605	.1409	.0945	-.2087	
270.000	.0255	-.0370	-.0822	-.1130	-.1462	-.1541	-.1556	-.1534	-.1534	-.1575	-.1788	-.1879	
292.500		-.2098	-.2042	-.2319	-.1581	-.1327	-.1664	-.1932	-.1868	-.1883	-.1953	-.1926	
315.000	-.1943	-.2015	-.2053	-.2364	-.1706	-.1438	-.1785	-.1947	-.1906	-.1917	-.1957	-.1934	
326.000									9.9990	-.1893	-.1966	-.1936	
346.000		-.2037	-.2086	-.2048	-.1950	9.9990	9.9990	-.1939	-.1939	-.1935	-.1962	-.1940	
360.000	-.1926	-.2004	-.2098	-.2064	-.2015	9.9990	9.9990	-.1925	-.1952	-.1955	-.1966	-.1943	

MACH (2) = 3.480 ALPHA (1) = 63.130 BETA = .00000 Q(P51) = 6.8620 PO = 60.012 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	-.0457	-.0418	-.0463	-.0451	-.0451	9.9990	9.9990	-.0508	-.0497	-.0508	-.0615	-.0593	
14.000		-.0482	-.0497	-.0486	-.0475	9.9990	9.9990	-.0537	-.0570	-.0565	-.0621	-.0604	
24.000									-.0593	-.0599	-.0615	-.0610	
45.000	-.0520	-.0457	-.0491	-.0474	-.0469	.0365	-.0125	-.0519	-.0576	-.0559	-.0621	-.0604	
67.500		-.0424	-.0593	-.0559	-.0480	-.0317	-.0531	-.0514	-.0672	-.0655	-.0734	-.0616	
90.000	.1526	.1035	.0454	.0251	.0133	.0319	.0370	.0325	.0297	.0319	.0251	-.0740	
112.500		.4524	.3555	.3088	.2653	.3053	.3025	.2963	.3081	.3171	.3156	-.0108	
135.000	1.0414	1.0089	.8430	.7788	.7359	.7743	.7624	.7545	.7517	.7444	.7106	.1024	
157.500		1.5448	1.3982	1.2776	1.2370	1.2359	1.2280	1.2162	1.2072	1.1976	1.1479	.2181	
180.000	1.7731	1.7838	1.6399	1.5035	1.4601	1.4438	1.4190	1.4083	1.3897	1.3841	1.3289	.2923	
202.500		1.5707	1.4213	1.2951	1.2517	1.2325	1.2150	1.2026	1.1883	1.1818	1.1350	.2186	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

(RIA066) (16 NOV 74)

MSFC 596 (TA-2F) MCR020U EXTERNAL TANK, T2

PARAMETRIC DATA

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = 60.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 66.130 BETA = .00000 Q(PS1) = 10.182 PO = 28.019 P = 3.7410

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.1933	-.2097	-.2059	-.2116	-.2018	9.9990	9.9990	.6225	-.2040	-.2025	-.2020	-.1975
14.000		-.2101	-.2075	-.2116	-.2025	9.9990	9.9990	-.1797	-.2052	-.2048	-.2012	-.1974
24.000									-.2017	-.2012	-.2020	-.1990
45.000	-.1935	-.2060	-.2064	-.2083	-.1855	-.1506	-.1848	-.1897	-.2003	-.2026	-.2037	-.2002
67.500		-.2131	-.2085	-.2051	-.1758	-.1514	-.1642	-.1891	-.1937	-.1990	-.2019	-.2008
90.000	-.0227	-.0547	-.0996	-.1285	-.1498	-.1346	-.1308	-.1384	-.1464	-.1517	-.1757	-.1958
112.500		.3509	.2889	.2372	.1817	.2170	.2102	.1969	.1980	.1938	.1489	-.2085
135.000	.8943	.9135	.8192	.7781	.7139	.7443	.7261	.7143	.6873	.6512	.5586	-.0558
157.500		1.4330	1.3584	1.2782	1.2097	1.1987	1.1911	1.1770	1.1394	1.0952	.9854	.0915
180.000	1.5658	1.6474	1.5817	1.4893	1.4171	1.4061	1.3856	1.3658	1.3130	1.2724	1.1515	-.1783
202.500		1.4555	1.3715	1.2853	1.2249	1.1964	1.1873	1.1740	1.1288	1.0877	.9732	.0857
225.000	.9710	.9446	.8610	.7883	.7518	.7343	.7073	.7085	.6784	.6510	.5541	-.0522
247.500		.3599	.2957	.2445	.2141	.1966	.1940	.1940	.1723	.1492	.1022	-.2005
270.000	.0022	-.0475	-.0820	-.1105	-.1390	-.1470	-.1451	-.1447	-.1466	-.1527	-.1758	-.1921
292.500		-.2117	-.2083	-.2102	-.1737	-.1475	-.1787	-.1965	-.1957	-.1976	-.1971	-.1941
315.000	-.1960	-.2047	-.2074	-.2119	-.1796	-.1553	-.1884	-.1967	-.1979	-.1986	-.1991	-.1949
326.000									9.9990	-.1953	-.2019	-.1962
346.000		-.2108	-.2077	-.2127	-.1994	9.9990	9.9990	-.1986	-.2024	-.2020	-.2023	-.1958
360.000	-.1933	-.2097	-.2059	-.2116	-.2018	9.9990	9.9990	.6225	-.2040	-.2025	-.2020	-.1975

MACH (2) = 3.480 ALPHA (1) = 66.130 BETA = .00000 Q(PS1) = 6.8610 PO = 60.007 P = .80900

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0551	-.0471	-.0493	-.0518	-.0476	9.9990	9.9990	-.0521	-.0527	-.0538	-.0541	-.0618
14.000		-.0511	-.0533	-.0545	-.0499	9.9990	9.9990	-.0539	-.0590	-.0578	-.0630	-.0624
24.000									-.0641	-.0635	-.0630	-.0607
45.000	-.0551	-.0517	-.0550	-.0534	-.0488	.0317	-.0252	-.0517	-.0601	-.0590	-.0641	-.0613
67.500		-.0488	-.0635	-.0613	-.0488	-.0398	-.0567	-.0629	-.0686	-.0663	-.0759	-.0635
90.000	.1331	.0925	.0401	.0226	.0170	.0339	.0373	.0373	.0333	.0350	.0232	-.0754
112.500		.4401	.3606	.3110	.2806	.3229	.3195	.3144	.3251	.3330	.3191	-.0077
135.000	1.0062	.9966	.8647	.8146	.7723	.8123	.7999	.7931	.7881	.7774	.7238	.1213
157.500		1.5507	1.4425	1.3365	1.2959	1.2959	1.2875	1.2785	1.2666	1.2542	1.1776	.2498
180.000	1.7440	1.7951	1.6909	1.5725	1.5309	1.5083	1.4852	1.4801	1.4610	1.4508	1.3670	.3309
202.500		1.5755	1.4622	1.3540	1.3145	1.2892	1.2728	1.2655	1.2486	1.2373	1.1629	.2475

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T2

(RIA066)

MACH (2) = 3.480 ALPHA (1) = 66.130

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.0795	1.0180	.9155	.8264	.8044	.8038	.7740	.7802	.7785	.7768	.7221	.1246
247.500		.4536	.3770	.3257	.3167	.3150	.3048	.3150	.3105	.3015	.2718	.0249
270.000	.1528	.1097	.0719	.0437	.0408	.0392	.0324	.0425	.0454	.0448	.0390	-.0675
292.500		-.0421	-.0585	-.0635	-.0455	-.0410	-.0596	-.0528	-.0652	-.0641	-.0662	-.0613
315.000	-.0590	-.0551	-.0556	-.0579	-.0489	-.0489	-.0573	-.0477	-.0630	-.0607	-.0579	-.0607
326.000									9.9990	-.0167	-.0596	-.0624
346.000		-.0562	-.0568	-.0579	-.0534	9.9990	9.9990	-.0607	-.0641	-.0619	-.0585	-.0624
360.000	-.0551	-.0471	-.0493	-.0516	-.0476	9.9990	9.9990	-.0521	-.0527	-.0538	-.0641	-.0618

MACH (3) = 4.960 ALPHA (1) = 66.130 BETA = .00000 Q(P51) = 3.0700 P0 = 90.015 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0017	.0535	.0497	.0434	.0485	9.9990	9.9990	.0459	.0485	.0371	-.0020	-.0020
14.000		.0395	.0345	.0332	.0383	9.9990	9.9990	.0408	.0268	.0244	-.0057	-.0070
24.000									-.0045	-.0045	-.0057	-.0057
45.000	-.0007	.0345	.0282	.0332	.0307	.2311	.1089	.0458	.0232	.0219	-.0095	-.0095
67.500		.0307	.0194	.0121	.0270	.0434	.0370	.0219	.0156	.0144	-.0146	-.0070
90.000	.1756	.1327	.0849	.0660	.0609	.0849	.0849	.0861	.0773	.0786	.0660	-.0133
112.500		.4641	.3734	.3242	.2940	.3482	.3507	.3406	.3431	.3494	.3948	.0156
135.000	1.0487	1.0285	.8710	.8206	.7904	.8370	.8244	.8106	.7942	.7803	.7463	.1642
157.500		1.6232	1.4884	1.3674	1.3397	1.3372	1.3183	1.3032	1.2830	1.2742	1.2125	.2940
180.000	1.8323	1.8729	1.7681	1.6370	1.5955	1.5539	1.5161	1.5035	1.4846	1.4758	1.4040	.3759
202.500		1.6484	1.5325	1.4153	1.3662	1.3170	1.2943	1.2830	1.2603	1.2553	1.1948	.3003
225.000	1.1230	1.0663	.9554	.8584	.8395	.8194	.7929	.7954	.7917	.7891	.7453	.1756
247.500		.4968	.4162	.3545	.3520	.3482	.3318	.3507	.3406	.3305	.2902	.1466
270.000	.1882	.1592	.1189	.0887	.0924	.0874	.0811	.0962	.0937	.0912	.0849	.0030
292.500		.0219	.0093	-.0032	.0080	.0118	.0017	.0080	.0005	-.0020	.0068	.0005
315.000	-.0070	.0055	.0030	-.0020	.0030	.0055	.0005	.0055	-.0045	-.0020	-.0020	-.0057
326.000									9.9990	.1151	.0005	-.0057
346.000		.0017	.0005	-.0045	-.0020	9.9990	9.9990	.0105	-.0045	-.0057	-.0020	-.0045
360.000	.0017	.0535	.0497	.0434	.0485	9.9990	9.9990	.0459	.0485	.0371	-.0020	-.0020

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, 12

(R1A067) (16 NOV 74)

PARAMETRIC DATA

REFERENCE DATA
 SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = 60.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 69.130 BETA = .00000 Q(P51) = 10.184 PO = 28.019 P = 3.7440

SECTION (1) ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA .000	-.2012	-.2153	-.2149	-.2206	-.2092	9.9990	9.9990	-.1913	-.2149	-.2107	-.2073	-.2062
14.000		-.2148	-.2152	-.2198	-.2099	9.9990	9.9990	-.1807	-.2156	-.2107	-.2100	-.2084
24.000									-.2126	-.2107	-.2100	-.2096
45.000	-.2024	-.2115	-.2146	-.2161	-.1948	-.1606	-.1922	-.1918	-.2127	-.2119	-.2122	-.2096
67.500		-.2198	-.2190	-.2156	-.1883	-.1671	-.1955	-.1921	-.2084	-.2126	-.2114	-.2088
90.000	-.0444	-.0632	-.1008	-.1286	-.1461	-.1297	-.1248	-.1343	-.1438	-.1495	-.1737	-.2064
112.500		.3368	.2120	.2464	.1952	.2297	.2244	.2100	.2096	.2013	.1559	-.1917
135.000	.8568	.9058	.8122	.8085	.7492	.7803	.7621	.7522	.7157	.6765	.5772	-.0197
157.500		1.4287	1.3681	1.3215	1.2573	1.2462	1.2432	1.2284	1.1835	1.1406	1.0239	.1519
180.000	1.5218	1.6483	1.6166	1.5450	1.4767	1.4615	1.4399	1.4171	1.3538	1.3132	1.1895	.2396
202.500		1.4468	1.3994	1.3308	1.2759	1.2425	1.2372	1.2232	1.1622	1.1159	.9966	.1393
225.000	.9297	.9297	.8750	.8146	.7846	.7649	.7440	.7398	.7075	.6756	.5735	-.0166
247.500		.3459	.2998	.2554	.2299	.2106	.2102	.2106	.1862	.1604	.1114	-.1853
270.000	-.0212	-.0584	-.0861	-.1104	-.1328	-.1431	-.1400	-.1389	-.1438	-.1514	-.1750	-.2046
292.500		-.2162	-.2179	-.2181	-.1817	-.1661	-.1923	-.2045	-.2075	-.2075	-.2088	-.2062
315.000	-.2016	-.2118	-.2175	-.2202	-.1898	-.1727	-.2004	-.2057	-.2111	-.2103	-.2100	-.2065
325.000									9.9990	-.2035	-.2107	-.2069
346.000		-.2157	-.2160	-.2210	-.2084	9.9990	9.9990	-.2031	-.2134	-.2092	-.2094	-.2087
360.000	-.2012	-.2153	-.2163	-.2206	-.2092	9.9990	9.9990	-.1913	-.2149	-.2107	-.2073	-.2062

MACH (2) = 3.480 ALPHA (1) = 69.130 BETA = .00000 Q(P51) = 6.8610 PO = 60.009 P = .80900

SECTION (1) ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA .000	-.0579	-.0475	-.0487	-.0509	-.0464	9.9990	9.9990	-.0509	-.0509	-.0526	-.0630	-.0613
14.000		-.0517	-.0534	-.0545	-.0494	9.9990	9.9990	-.0551	-.0573	-.0573	-.0630	-.0618
24.000									-.0624	-.0624	-.0623	-.0618
45.000	-.0585	-.0528	-.0545	-.0539	-.0517	.0294	-.0252	-.0539	-.0596	-.0579	-.0639	-.0630
67.500		-.0528	-.0652	-.0641	-.0545	-.0477	-.0585	-.0652	-.0686	-.0680	-.0725	-.0737
90.000	.1176	.0846	.0423	.0254	.0232	.0401	.0463	.0440	.0384	.0384	.0220	-.0737
112.500		.4290	.3659	.3253	.2992	.3405	.3394	.3321	.3411	.3445	.3208	.0001
135.000	.9670	.9887	.8878	.8518	.8084	.8518	.8422	.8326	.8247	.8067	.7373	.1432
157.500		1.5530	1.4831	1.3929	1.3500	1.3517	1.3467	1.3371	1.3196	1.2999	1.2085	.2926
180.000	1.7042	1.7970	1.7356	1.6375	1.5935	1.5733	1.5535	1.5456	1.5242	1.5045	1.4023	.3829
202.500		1.5748	1.4999	1.4103	1.3697	1.3427	1.3320	1.3229	1.3015	1.2813	1.1928	.2909

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(RIA067)

MACH (2) = 3.480 ALPHA (1) = 69.130

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8500	.8920	.9230	.9540
THETA												
225.000	1.0409	1.0107	.9363	.8613	.8422	.8399	.8157	.8174	.8123	.8023	.7334	.1508
247.500		.4406	.3860	.3392	.3313	.3319	.3240	.3324	.3240	.3099	.2701	.0328
270.000	.1325	.1004	.0728	.0485	.0457	.0440	.0406	.0208	.0491	.0468	.0373	-.0658
292.500		-.0468	-.0568	-.0858	-.0511	-.0477	-.0613	-.0494	-.0647	-.0647	-.0550	-.0629
315.000	-.0596	-.0556	-.0562	-.0596	-.0534	-.0517	-.0573	-.0601	-.0630	-.0613	-.0579	-.0609
326.000									9.9990	-.0163	-.0579	-.0630
346.000		-.0568	-.0585	-.0590	-.0551	9.9990	9.9990	-.0590	-.0630	-.0624	-.0596	-.0613
360.000	-.0579	-.0475	-.0487	-.0509	-.0464	9.9990	9.9990	-.0509	-.0509	-.0626	-.0630	-.0613

MACH (3) = 4.960 ALPHA (1) = 69.130 BETA = .00000 Q(P51) = 3.0710 PO = 90.039 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8500	.8920	.9230	.9540
THETA												
.000	.0055	.0635	.0648	.0560	.0623	9.9990	9.9990	.0560	.0623	.0509	.0030	.0030
14.000		.0483	.0470	.0407	.0508	9.9990	9.9990	.0470	.0382	.0344	.0030	.0017
24.000									-.0007	.0030	.0005	-.0007
45.000	.0055	.0420	.0369	.0432	.0432	.2195	.1049	.0521	.0332	.0306	.0005	-.0032
67.500		.0357	.0281	.0268	.0357	.0457	.0445	.0558	.0243	.0268	-.0070	.0005
90.000	.1668	.1314	.0911	.0735	.0760	.0936	.0961	.0898	.0873	.0873	.0710	-.0095
112.500		.4639	.3884	.3443	.3254	.3657	.3682	.3556	.3607	.3632	.4024	.0534
135.000	1.0273	1.0345	.9048	.8708	.8393	.8645	.8582	.8405	.8267	.8065	.7513	.1894
157.500		1.6378	1.5509	1.4401	1.3897	1.3733	1.3607	1.3393	1.3242	1.3078	1.2276	.7369
180.000	1.8134	1.9075	1.8280	1.6983	1.6240	1.6000	1.5572	1.5471	1.5359	1.5207	1.4355	.4301
202.500		1.6610	1.5652	1.4455	1.3863	1.3573	1.3284	1.3221	1.3082	1.2931	1.2150	.3431
225.000	1.0953	1.0547	.9578	.8708	.8531	.8494	.8191	.8242	.8204	.8103	.7513	.2058
247.500		.4816	.4161	.3619	.3808	.3657	.3506	.3670	.3594	.3393	.2953	.1630
270.000	.1781	.1491	.1227	.0899	.1012	.0962	.0899	.1050	.1000	.0962	.0899	.0156
292.500		.0231	.0143	.0017	.0206	.0181	.0063	.0105	.0080	.0055	.0131	.0030
315.000	.0042	.0105	.0118	.0042	.0130	.0143	.0080	.0067	.0042	.0042	.0080	.0030
326.000									9.9990	.1075	.0105	.0005
346.000		.0093	.0093	.0030	.0143	9.9990	9.9990	.0118	.0055	.0030	.0380	.0017
360.000	.0055	.0635	.0648	.0560	.0623	9.9990	9.9990	.0560	.0623	.0509	.0030	.0030

MSFC 588 (TA-2F) MICRO200 EXTERNAL TANK, T2

(RIA068) 1 18 NOV 74 1

REFERENCE DATA

SREF = 672.5950 SQ. FT XMRP = 1088.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 80.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.950 ALPHA (1) = 69.960 BETA = .00000 Q(PSI) = 10.256 PO = 29.018 P = 3.8210

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2000	-.2116	-.2120	-.2188	-.2048	9.9990	9.9990	-.1723	-.2139	-.2123	-.2098	-.2083
14.000		-.2127	-.2139	-.2192	-.2071	9.9990	9.9990	-.2109	-.2143	-.2139	-.2105	-.2090
24.000									-.2136	-.2132	-.2105	-.2097
45.000	-.2003	-.2093	-.2127	-.2165	-.1923	-.1572	-.1954	-.2112	-.2116	-.2109	-.2098	-.2075
67.500		-.2145	-.2149	-.2171	-.1847	-.1602	-.1987	-.2134	-.2111	-.2122	-.2117	-.2099
90.000	-.0476	-.0631	-.1072	-.1299	-.1472	-.1276	-.1261	-.1344	-.1465	-.1537	-.1768	-.2077
112.500		.3480	.2978	.2559	.2005	.2408	.2322	.2163	.2122	.2020	.1556	-.1951
135.000	.8685	.9197	.8636	.8195	.7618	.7920	.7709	.7588	.7226	.6770	.5780	-.0174
157.500		1.4293	1.4170	1.3378	1.2857	1.2646	1.2638	1.2480	1.1940	1.1468	1.0300	.1582
180.000	1.5154	1.6294	1.6336	1.5630	1.5144	1.4691	1.4597	1.4393	1.3842	1.3382	1.2106	.2537
202.500		1.4427	1.4329	1.3570	1.3148	1.2680	1.2491	1.2291	1.1797	1.1344	1.0102	.1483
225.000	.9236	.9275	.8925	.8337	.7948	.7805	.7503	.7466	.7051	.6735	.5760	-.0125
247.500		.3447	.3013	.2605	.2270	.2115	.2126	.2107	.1809	.1523	.1047	-.1823
270.000	-.0276	-.0570	-.0860	-.1105	-.1358	-.1452	-.1407	-.1428	-.1475	-.1577	-.1841	-.2037
292.500		-.2138	-.2145	-.2161	-.1791	-.1550	-.1840	-.2089	-.2096	-.2127	-.2120	-.2063
315.000	-.2015	-.2100	-.2145	-.2183	-.1878	-.1625	-.1949	-.2074	-.2127	-.2134	-.2121	-.2057
326.000									9.9990	-.2060	-.2117	-.2072
346.000		-.2132	-.2140	-.2196	-.2049	9.9990	9.9990	-.2053	-.2155	-.2140	-.2118	-.2058
360.000	-.2000	-.2115	-.2120	-.2188	-.2048	9.9990	9.9990	-.1723	-.2139	-.2123	-.2098	-.2083

MACH (2) = 3.480 ALPHA (1) = 69.980 BETA = .00000 Q(PSI) = 6.8635 PO = 60.030 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0425	-.0419	-.0419	-.0452	-.0424	9.9990	9.9990	-.0458	-.0497	-.0526	-.0576	-.0582
14.000		-.0435	-.0446	-.0480	-.0458	9.9990	9.9990	-.0508	-.0537	-.0548	-.0576	-.0571
24.000									-.0582	-.0582	-.0582	-.0582
45.000	-.0430	-.0441	-.0447	-.0469	-.0469	.0516	-.0024	-.0509	-.0554	-.0548	-.0582	-.0582
67.500		-.0482	-.0543	-.0531	-.0475	-.0289	-.0537	-.0497	-.0644	-.0638	-.0683	-.0593
90.000	.1184	.0898	.0471	.0290	.0228	.0448	.0488	.0510	.0437	.0414	.0268	-.0700
112.500		.4315	.3724	.3329	.3013	.3478	.3453	.3425	.3493	.3498	.3329	.0105
135.000	.9877	.8918	.8895	.8828	.8190	.8840	.8918	.8480	.8359	.8138	.7428	.1958
157.500		1.8548	1.4958	1.4083	1.3825	1.3848	1.3827	1.3858	1.3390	1.3125	1.2198	.3074
180.000	1.6640	1.7878	1.7458	1.8940	1.8083	1.8908	1.8728	1.8881	1.8424	1.8193	1.4148	.4015
202.500		1.8734	1.8088	1.4224	1.3913	1.3978	1.3483	1.3390	1.3189	1.2917	1.1978	.3082

REPRODUCIBILITY OF THIS ORIGINAL PAGE IS POOR

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T2

(RIA06B)

MACH (2) = 3.480 ALPHA (1) = 69.890

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	1.0302	1.0071	.9457	.8680	.8477	.8488	.8257	.8302	.8218	.8088	.7367	.1643	
247.500		.4428	.3932	.3453	.3414	.3397	.3295	.3464	.3340	.3171	.2698	.0584	
270.000	.1327	.1024	.0787	.0522	.0511	.0477	.0437	.0567	.0556	.0505	.0358	-.0599	
292.500		-.0435	-.0469	-.0520	-.0407	-.0182	-.0543	-.0531	-.0576	-.0563	-.0520	-.0593	
315.000	-.0452	-.0463	-.0446	-.0492	-.0458	-.0351	-.0525	-.0492	-.0576	-.0576	-.0559	-.0582	
326.000									9.9990	-.0019	-.0559	-.0588	
346.000		-.0475	-.0469	-.0497	-.0458	9.9990	9.9990	-.0468	-.0599	-.0588	-.0559	-.0582	
360.000	-.0435	-.0419	-.0419	-.0452	-.0424	9.9990	9.9990	-.0458	-.0497	-.0525	-.0576	-.0582	

MACH (3) = 4.960 ALPHA (1) = 69.980 BETA = .00000 (1PSI) = 3.0700 PO = 90.031 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.0105	.0496	.0483	.0446	.0521	9.9990	9.9990	.0395	.0446	.0320	.0030	.0004	
14.000		.0370	.0383	.0357	.0395	9.9990	9.9990	.0357	.0269	.0257	.0017	-.0020	
24.000									.0017	.0030	.0005	.0005	
45.000	.0093	.0332	.0282	.0357	.0370	.2146	.0937	.0231	.0244	.0206	-.0007	-.0007	
67.500		.0269	.0194	.0194	.0294	.0446	.0320	.0231	.0143	.0131	-.0095	-.0032	
90.000	.1630	.1290	.0899	.0761	.0761	.0937	.0987	.0962	.0899	.0874	.0697	-.0093	
112.500		.4602	.3909	.3544	.3342	.3783	.3758	.3644	.3670	.3695	.3997	.0571	
135.000	1.0147	1.0323	.9202	.8887	.8547	.8887	.8786	.8622	.8446	.8232	.7627	.1907	
157.500		1.6479	1.5548	1.4640	1.4174	1.4136	1.3935	1.3733	1.3544	1.3292	1.2452	.3494	
180.000	1.8159	1.9152	1.8474	1.7340	1.6761	1.6446	1.5992	1.5879	1.5614	1.5375	1.4531	.4490	
202.500		1.6761	1.5980	1.4934	1.4390	1.3977	1.3674	1.3501	1.3321	1.3145	1.2288	.3532	
225.000	1.0978	1.0647	.9992	.9048	.8871	.8595	.8393	.8390	.8330	.8229	.7549	.2070	
247.500		.4854	.4287	.3795	.3846	.3745	.3559	.3720	.3632	.3443	.2927	.1768	
270.000	.1781	.1504	.1252	.0987	.1038	.0987	.0899	.1053	.1025	.0962	.0887	.0143	
292.500		.0206	.0143	.0080	.0206	.0219	.0055	.0093	.0068	.0042	.0143	-.0057	
315.000	.0055	.0130	.0130	.0090	.0143	.0143	.0055	.0030	.0017	.0004	.0105	.0005	
326.000									9.9990	.1050	.0030	.0005	
346.000		.0131	.0105	.0105	.0118	9.9990	9.9990	.0005	.0005	-.0020	.0140	.0004	
360.000	.0105	.0496	.0483	.0446	.0521	9.9990	9.9990	.0395	.0446	.0320	.0030	.0004	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(R1A069) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LRL = 324.0000 INCHES YMRP = .0000 IN. YT
 BRP = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = 80.000
 MOUNT = 2.000 PHI = .000

PARAMETRIC DATA

MACH (1) = 1.960 ALPHA (1) = 71.880 BETA = .00000 Q(P51) = 10.259 PO = 28.018 P = 3.8240

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2059	-.2167	-.2178	-.2235	-.2084	9.9990	9.9990	-.1793	-.2174	-.2136	-.2119	-.2134
14.000		-.2167	-.2170	-.2231	-.2103	9.9990	9.9990	-.2069	-.2167	-.2136	-.2129	-.2129
24.000									-.2168	-.2148	-.2119	-.2112
45.000	-.2046	-.2136	-.2167	-.2201	-.1953	-.1635	-.1993	-.2118	-.2148	-.2136	-.2120	-.2116
67.500		-.2170	-.2197	-.2204	-.1880	-.1676	-.2038	-.2140	-.2140	-.2148	-.2132	-.2121
90.000	-.0605	-.0713	-.1105	-.1294	-.1444	-.1263	-.1226	-.1316	-.1456	-.1531	-.1776	-.2123
112.500		.3369	.2966	.2611	.2102	.2491	.2408	.2242	.2212	.2095	.1589	-.1787
135.000	.8392	.9100	.8708	.8353	.7825	.8157	.7938	.7799	.7444	.6980	.5918	.0123
157.500		1.4122	1.4277	1.3591	1.3094	1.2928	1.2909	1.2728	1.278	1.1696	1.0551	.2109
180.000	1.4780	1.6192	1.6460	1.5864	1.5453	1.5012	1.4941	1.4718	1.4074	1.3614	1.2371	.3056
202.500		1.4274	1.4421	1.3799	1.3425	1.2909	1.2788	1.2558	1.2023	1.1560	1.0368	.1956
225.000	.8931	.9156	.8986	.8481	.8138	.8002	.7709	.7633	.7215	.6876	.5871	.0183
247.500		.3323	.3007	-.1105	-.1346	-.1414	-.1384	-.1399	-.1459	-.1565	-.1812	-.2106
270.000	-.0431	-.0653	-.0883	-.1105	-.1346	-.1414	-.1384	-.1399	-.1459	-.1565	-.1812	-.2106
292.500		-.2179	-.2194	-.2198	-.1859	-.1610	-.1927	-.2130	-.2134	-.2149	-.2138	-.2112
315.000	-.2066	-.2157	-.2195	-.2221	-.1950	-.1694	-.2022	-.2127	-.2165	-.2150	-.2135	-.2124
325.000									9.9990	-.2075	-.2147	-.2125
345.000		-.2179	-.2131	-.2240	-.2085	9.9990	9.9990	-.2040	-.2179	-.2142	-.2145	-.2138
360.000	-.2059	-.2167	-.2178	-.2235	-.2084	9.9990	9.9990	-.1793	-.2174	-.2135	-.2119	-.2134

MACH (2) = 3.480 ALPHA (1) = 71.880 BETA = .00000 Q(P51) = 6.8640 PO = 60.027 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0458	-.0430	-.0435	-.0458	-.0435	9.9990	9.9990	-.0362	-.0497	-.0537	-.0582	-.0582
14.000		-.0452	-.0452	-.0475	-.0458	9.9990	9.9990	-.0463	-.0542	-.0537	-.0576	-.0593
24.000									-.0588	-.0576	-.0582	-.0593
45.000	-.0452	-.0447	-.0452	-.0464	-.0447	.0296	-.0159	-.0441	-.0548	-.0548	-.0582	-.0576
67.500		-.0525	-.0554	-.0531	-.0446	-.0334	-.0559	-.0582	-.0649	-.0649	-.0672	-.0576
90.000	.1069	.0721	.0499	.0319	.0280	.0499	.0545	.0578	.0471	.0437	.0257	-.0695
112.500		.4222	.3776	.3404	.3156	.3619	.3579	.3568	.3590	.3568	.3231	.0200
135.000	.9378	.9800	.9101	.8847	.8436	.8898	.8752	.8729	.8582	.8301	.7502	.1800
157.500		1.5447	1.5114	1.4370	1.3976	1.3959	1.3931	1.3997	1.3683	1.3362	1.2376	.3493
180.000	1.6613	1.7920	1.7672	1.6861	1.6421	1.6241	1.6061	1.6004	1.5740	1.5475	1.4382	.4494
202.500		1.5633	1.5238	1.4494	1.4117	1.3869	1.3756	1.3706	1.3429	1.3142	1.2151	.3446

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T2

(R1A069)

MACH (2) = 3.480 ALPHA (1) = 71.880

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	1.0020	.9959	.9463	.8832	.8652	.8657	.8443	.8488	.8364	.8190	.7406	.1862	
247.500		.4291	.3902	.3468	.3417	.3400	.3367	.3508	.3333	.3130	.2696	.0414	
270.000	.1209	.0934	.0736	.0522	.0494	.0483	.0454	.0578	.0539	.0477	.0341	-.0627	
292.500		-.0480	-.0497	-.0542	-.0424	-.0210	-.0570	-.0407	-.0610	-.0616	-.0537	-.0593	
315.000	-.0452	-.0469	-.0458	-.0497	-.0446	-.0362	-.0520	-.0514	-.0576	-.0576	-.0554	-.0582	
326.000									9.9990	-.0126	-.0548	-.0593	
346.000		-.0469	-.0458	-.0497	-.0446	9.9990	9.9990	-.0514	-.0570	-.0570	-.0559	-.0588	
360.000	-.0458	-.0430	-.0435	-.0458	-.0435	9.9990	9.9990	-.0362	-.0497	-.0537	-.0582	-.0582	

MACH (3) = 4.960 ALPHA (1) = 71.880 BETA = .0000 Q(PSI) = 3.0710 PO = 90.037 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.0124	.0666	.0703	.0615	.0666	9.9990	9.9990	.0678	.0640	.0540	.0036	.0023	
14.000		.0502	.0527	.0477	.0527	9.9990	9.9990	.0615	.0363	.0351	.0036	.0023	
24.000									.0036	.0036	.0036	.0036	
45.000	.0124	.0426	.0438	.0464	.0426	.2213	.1156	.0652	.0313	.0287	.0011	.0011	
67.500		.0351	.0313	.0326	.0401	.0477	.0439	.0527	.0237	.0225	-.0039	.0011	
90.000	.1547	.1270	.1063	.0792	.0804	.0993	.1006	.1132	.0943	.0919	.0704	-.0051	
112.500		.4507	.3953	.3575	.3386	.3802	.3789	.3852	.3752	.3752	.3891	.0917	
135.000	.9762	1.0099	.9205	.8928	.8613	.8878	.8840	.8827	.8550	.8336	.7608	.2316	
157.500		1.6036	1.5545	1.4701	1.4184	1.4071	1.3983	1.3970	1.3706	1.3454	1.2543	.4054	
180.000	1.7410	1.8529	1.8299	1.7254	1.6624	1.6473	1.6044	1.6095	1.5843	1.5629	1.4613	.5076	
202.500		1.6099	1.5658	1.4726	1.4159	1.3958	1.3706	1.3769	1.3466	1.3227	1.2295	.4042	
225.000	1.0339	1.0176	.9624	.8843	.8742	.8691	.8465	.8591	.8402	.8301	.7532	.2430	
247.500		.4597	.4181	.3677	.3879	.3728	.3614	.3891	.3652	.3450	.2934	.1737	
270.000	.1636	.1409	.1233	.0968	.1082	.1031	.0956	.1208	.1082	.1019	.0830	.0137	
292.500		.0200	.0212	.0124	.0263	.0237	.0085	.0842	.0111	.0061	.0149	.0023	
315.000	.0162	.015	.0212	.0124	.0187	.0149	.0074	.0905	.0049	.0049	.0061	.0023	
326.000									9.9990	.1145	.0074	.0023	
346.000		.0162	.0187	.0112	.0149	9.9990	9.9990	.0250	.0036	.0036	.0349	-.0001	
360.000	.0124	.0666	.0703	.0615	.0666	9.9990	9.9990	.0578	.0640	.0540	.0036	.0023	

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(RIA070) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 80.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 74.860 BETA = .00000 Q(PSI) = 10.246 PO = 28.022 P = 3.8090

SECTION (1) ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	-.2121	-.2215	-.2234	-.2268	-.2106	9.9990	9.9990	-.2004	-.2166	-.2155	-.2166	-.2181		
14.000		-.2211	-.2226	-.2264	-.2113	9.9990	9.9990	-.2008	-.2170	-.2158	-.2166	-.2162		
24.000									-.2166	-.2155	-.2165	-.2161		
45.000	-.2094	-.2171	-.2224	-.2216	-.1982	-.1722	-.2027	-.2069	-.2156	-.2148	-.2161	-.2165		
67.500		-.2220	-.2277	-.2220	-.1926	-.1772	-.2111	-.2104	-.2183	-.2187	-.2170	-.2155		
90.000	-.0824	-.0843	-.1119	-.1312	-.1398	-.1221	-.1198	-.1255	-.1417	-.1519	-.1758	-.2151		
112.500		.3119	.2933	.2627	.2200	.2593	.2519	.2355	.2306	.2166	.1631	-.1449		
135.000	.7878	.8810	.8625	.8519	.8036	.8351	.8191	.8074	.7685	.7205	.6181	.0787		
157.500		1.3908	1.4210	1.3938	1.3447	1.3303	1.3265	1.3125	1.2623	1.2161	1.0981	.3037		
180.000	1.4176	1.6060	1.6465	1.6253	1.5807	1.5492	1.5339	1.5146	1.4466	1.4035	1.2790	.3985		
202.500		1.4056	1.4397	1.4071	1.3678	1.3201	1.3228	1.3046	1.2282	1.1854	1.0723	.2812		
225.000	.8399	.8880	.8932	.8612	.8381	.8193	.7985	.7906	.7434	.7087	.6124	.0829		
247.500		.3102	.2989	.2694	.2472	.2347	.2325	.2283	.1982	.1657	.1118	-.1404		
270.000	-.0680	-.0775	-.0907	-.1107	-.1311	-.1352	-.1360	-.1367	-.1428	-.1534	-.1800	-.2136		
292.500		-.2204	-.2230	-.2200	-.1894	-.1652	-.2011	-.2113	-.2125	-.2140	-.2157	-.2142		
315.000	-.2117	-.2182	-.2239	-.2224	-.1967	-.1751	-.2076	-.2122	-.2144	-.2156	-.2157	-.2161		
326.000									9.9990	-.2070	-.2174	-.2163		
346.000		-.2206	-.2233	-.2255	-.2081	9.9990	9.9990	-.2078	-.2149	-.2146	-.2154	-.2162		
360.000	-.2121	-.2215	-.2234	-.2268	-.2106	9.9990	9.9990	-.2004	-.2166	-.2155	-.2166	-.2181		

MACH (2) = 3.480 ALPHA (1) = 74.860 BETA = .00000 Q(PSI) = 6.8630 PO = 60.021 P = .81000

SECTION (1) ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	-.0452	-.0418	-.0412	-.0457	-.0446	9.9990	9.9990	-.0480	-.0497	-.0531	-.0582	-.0582		
14.000		-.0446	-.0441	-.0475	-.0446	9.9990	9.9990	-.0492	-.0542	-.0542	-.0582	-.0587		
24.000									-.0565	-.0570	-.0587	-.0593		
45.000	-.0458	-.0458	-.0452	-.0469	-.0435	.0297	-.0227	-.0486	-.0559	-.0559	-.0599	-.0599		
67.500		-.0559	-.0548	-.0537	-.0441	-.0334	-.0565	-.0475	-.0655	-.0644	-.0644	-.0593		
90.000	.0883	.0742	.0466	.0330	.0330	.0539	.0590	.0590	.0471	.0437	.0218	-.0678		
112.500		.4051	.3780	.3487	.3261	.3757	.3724	.3662	.3667	.3500	.3239	.0342		
135.000	.8878	.9591	.9174	.9073	.8701	.9197	.9067	.8988	.8731	.8487	.7624	.2185		
157.500		1.5224	1.5298	1.4740	1.4386	1.4397	1.4369	1.4290	1.4035	1.3716	1.2675	.4186		
180.000	1.6023	1.7731	1.7872	1.7308	1.6935	1.6733	1.6598	1.6513	1.6226	1.5916	1.4788	.5285		
202.500		1.5413	1.5430	1.4889	1.4551	1.4303	1.4224	1.4123	1.3224	1.3508	1.2466	.4107		

MSFC 598 (TA-2F) MICRO200 EXTERNAL TANK, T2

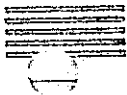
(RIA070)

MACH (2) = 3.480 ALPHA (1) = 74.860

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.8512	.9749	.9588	.9087	.8949	.8977	.8752	.8740	.8577	.8383	.7534	.2238	
247.500		.4135	.3921	.3577	.3560	.3538	.3498	.3600	.3391	.3154	.2703	.0578	
270.000	.1041	.0837	.0719	.0538	.0521	.0504	.0493	.0578	.0533	.0437	.0297	-.0559	
292.500		-.0514	-.0497	-.0531	-.0413	-.0312	-.0537	-.0554	-.0605	-.0599	-.0525	-.0576	
315.000	-.0468	-.0475	-.0469	-.0508	-.0458	-.0430	-.0514	-.0554	-.0593	-.0599	-.0548	-.0582	
326.000									9.9990	-.0204	-.0537	-.0582	
346.000		-.0497	-.0469	-.0497	-.0463	9.9990	9.9990	-.0548	-.0576	-.0582	-.0542	-.0576	
360.000	-.0462	-.0418	-.0412	-.0457	-.0446	9.9990	9.9990	-.0480	-.0497	-.0531	-.0582	-.0582	

MACH (3) = 4.960 ALPHA (1) = 74.860 BETA = .00000 O(PSI) = 3.0700 PO = 90.022 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.6920	.9230	.9540
THETA													
.000	.0124	.0566	.0604	.0503	.0553	9.9990	9.9990	.0591	.0503	.0415	.0036	.0036	
14.000		.0427	.0465	.0402	.0440	9.9990	9.9990	.0541	.0314	.0276	.0061	.0023	
24.000									.0049	.0061	.0036	.0036	
46.000	.0137	.0376	.0401	.0414	.0414	.2253	.1107	.0603	.0313	.0275	.0036	.0011	
67.500		.0275	.0301	.0263	.0301	.0427	.0376	.0616	.0187	.0187	-.0039	.0023	
90.000	.1384	.1195	.0956	.0817	.0868	.1006	.1082	.1183	.0956	.0905	.0679	-.0013	
112.500		.4320	.3979	.3677	.3501	.3967	.3954	.3979	.3841	.3791	.3853	.0981	
135.000	.9233	.9901	.9296	.9208	.8969	.9271	.9208	.9195	.8830	.8553	.7772	.2745	
157.500		1.5805	1.5692	1.5087	1.4772	1.4609	1.4558	1.4520	1.4180	1.3891	1.2887	.4798	
180.000	1.6767	1.8400	1.8500	1.7896	1.7354	1.7077	1.6775	1.6788	1.6372	1.6145	1.5079	.5907	
202.500		1.5956	1.6032	1.5364	1.4860	1.4596	1.4344	1.4344	1.3878	1.3588	1.2647	.4761	
225.000	.9850	1.0102	.9928	.9334	.9271	.9158	.8906	.8943	.8666	.8490	.7658	.2858	
247.500		.4534	.4307	.3904	.4055	.3929	.3828	.4017	.3715	.3476	.2934	.1838	
270.000	.1510	.1372	.1283	.1031	.1170	.1094	.1006	.1233	.1084	.1006	.0893	.0162	
292.500		.0175	.0187	.0112	.0225	.0175	.0061	.0250	.0099	.0074	.0212	.0023	
315.000	.0149	.0149	.0200	.0124	.0175	.0149	.0086	.0263	.0061	.0049	.0124	.0023	
326.000									9.9990	.1094	.0124	.0023	
346.000		.0162	.0187	.0137	.0200	9.9990	9.9990	.0313	.0074	.0074	.0136	.0011	
360.000	.0124	.0566	.0604	.0503	.0553	9.9990	9.9990	.0591	.0503	.0415	.0036	.0036	



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TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T2

(R1A071) (18 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1088.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 80.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.880 ALPHA (1) = 77.860 BETA = .00000 Q(P51) = 10.253 PO = 28.013 P = 3.8180

SECTION (1)ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	-.2137	-.2231	-.2265	-.2287	-.2092	9.9990	9.9990	-.2104	-.2175	-.2197	-.2224	-.2202		
14.000		-.2231	-.2257	-.2283	-.2100	9.9990	9.9990	-.2077	-.2193	-.2205	-.2215	-.2204		
24.000									-.2175	-.2193	-.2207	-.2200		
45.000	-.2106	-.2153	-.2202	-.2180	-.1934	-.1696	-.2010	-.2040	-.2127	-.2149	-.2213	-.2198		
67.500		-.2221	-.2285	-.2194	-.1916	-.1795	-.2123	-.2081	-.2179	-.2198	-.2188	-.2169		
90.000	-.1025	-.0852	-.1137	-.1322	-.1379	-.1171	-.1167	-.1232	-.1405	-.1503	-.1761	-.2215		
112.500		.2890	.2860	.2652	.2320	.2694	.2637	.2441	.2380	.2229	.1730	-.0937		
135.000	.7362	.8542	.8599	.8640	.8229	.8584	.8437	.8312	.7859	.7391	.6417	.1626		
157.500		1.3593	1.4208	1.4144	1.3759	1.3631	1.3585	1.3457	1.2982	1.2525	1.1401	.4081		
180.000	1.3537	1.5739	1.6517	1.6517	1.6154	1.5875	1.5663	1.5557	1.4972	1.4560	1.3334	.5071		
202.500		1.3672	1.4404	1.4332	1.4015	1.3559	1.3551	1.3347	1.2672	1.2257	1.1178	.3824		
225.000	.7831	.8611	.8906	.8747	.8596	.8441	.8260	.8139	.7648	.7315	.6374	.1599		
247.500		.2880	.2933	.2706	.2559	.2431	.2424	.2363	.2012	.1692	.1194	-.0933		
270.000	-.0882	-.0891	-.0959	-.1129	-.1280	-.1325	-.1329	-.1355	-.1423	-.1555	-.1781	-.2189		
292.500		-.2200	-.2241	-.2200	-.1886	-.1678	-.2052	-.2090	-.2120	-.2162	-.2173	-.2158		
315.000	-.2137	-.2194	-.2258	-.2232	-.1945	-.1779	-.2100	-.2104	-.2141	-.2187	-.2209	-.2187		
326.000									9.9990	-.2134	-.2211	-.2181		
346.000		-.2231	-.2253	-.2272	-.2069	9.9990	9.9990	-.2114	-.2159	-.2212	-.2226	-.2196		
360.000	-.2137	-.2221	-.2265	-.2287	-.2092	9.9990	9.9990	-.2104	-.2175	-.2197	-.2224	-.2202		

MACH (2) = 3.480 ALPHA (1) = 77.880 BETA = .00000 Q(P51) = 6.8620 PO = 60.013 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	-.0458	-.0423	-.0412	-.0451	-.0423	9.9990	9.9990	-.0423	-.0479	-.0496	-.0565	-.0565	
14.000		-.0452	-.0452	-.0480	-.0435	9.9990	9.9990	-.0452	-.0520	-.0525	-.0570	-.0576	
24.000									-.0548	-.0554	-.0565	-.0570	
45.000	-.0463	-.0458	-.0469	-.0475	-.0435	.0280	-.0232	-.0446	-.0542	-.0554	-.0570	-.0582	
67.500		-.0570	-.0554	-.0537	-.0435	-.0394	-.0548	-.0430	-.0638	-.0638	-.0621	-.0576	
90.000	.0725	.0669	.0454	.0353	.0387	.0578	.0635	.0646	.0477	.0404	.0189	-.0570	
112.500		.3859	.3769	.3555	.3374	.3870	.3848	.3786	.3729	.3639	.3278	.0652	
135.000	.8329	.9349	.9191	.9248	.8949	.9479	.9343	.9293	.9028	.8673	.7793	.2816	
157.500		1.4934	1.5379	1.5047	1.4765	1.4810	1.4770	1.4720	1.4438	1.4100	1.3035	.5195	
180.000	1.5335	1.7426	1.7973	1.7646	1.7331	1.7161	1.7020	1.6970	1.6654	1.6344	1.5239	.6333	
202.500		1.5098	1.5493	1.5183	1.4924	1.4681	1.4602	1.4518	1.4197	1.3870	1.2821	.5020	

REPRODUCIBILITY OF THE
 ORIGINAL DATA IS POOR

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(RIA071)

MACH (2) = 3.480 ALPHA (1) = 77.880

SECTION (1) ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.8949	.9484	.9603	.9253	.9214	.9242	.9022	.9028	.6780	.6549	.7686	.2827	
247.500		.3955	.3921	.3656	.3695	.3639	.3628	.3735	.3442	.3183	.2687	.0849	
270.000	.0855	.0748	.0702	.0556	.0567	.0545	.0539	.0635	.0533	.0421	.0268	-.0452	
292.500		-.0542	-.0508	-.0542	-.0413	-.0334	-.0531	-.0458	-.0576	-.0587	-.0492	-.0548	
315.000	-.0446	-.0469	-.0467	-.0503	-.0446	-.0441	-.0497	-.0413		-.0565	-.0525	-.0565	
326.000									9.9990	-.0193	-.0554	-.0555	
346.000		-.0480	-.0480	-.0514	-.0480	9.9990	9.9990	-.0401	-.0576	-.0582	-.0548	-.0565	
360.000	-.0458	-.0423	-.0412	-.0451	-.0423	9.9990	9.9990	-.0423	-.0479	-.0496	-.0565	-.0565	

MACH (3) = 4.960 ALPHA (1) = 77.880 BETA = .00000 Q(PSI) = 3.0710 PO = 90.044 P = .17800

SECTION (1) ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.0175	.0602	.0615	.0552	.0589	9.9990	9.9990	-.0539	.0527	.0426	.0011	-.0001	
14.000		.0464	.0501	.0438	.0476	9.9990	9.9990	.0464	.0338	.0313	-.0001	-.0001	
24.000									.0049	.0049	-.0001	-.0001	
45.000	.0137	.0388	.0401	.0426	.0401	.2189	.0980	.0338	.0275	.0250	-.0013	-.0039	
67.500		.0288	.0275	.0263	.0351	.0401	.0376	-.0263	.0162	.0149	-.0089	-.0026	
90.000	-.1208	.1119	.0943	.0817	.0855	.1031	.1081	.1081	.0880	.0817	.0603	.0011	
112.500		.4180	.3966	.3752	.3626	.4041	.4054	.3953	.3840	.3739	.3954	.1145	
135.000	-.8754	.9684	.9319	.9419	.9167	.9419	.9394	.9256	.8916	.8613	.7847	.3211	
157.500		1.5561	1.5801	1.5410	1.4995	1.4831	1.4718	1.4630	1.4327	1.4025	1.3088	.5592	
180.000	1.6150	1.6110	1.6576	1.6060	1.7480	1.7291	1.6901	1.6888	1.6536	1.6309	1.5356	.6563	
202.500		1.5566	1.5906	1.5415	1.4898	1.4672	1.4432	1.4407	1.4017	1.3765	1.2870	.6490	
225.000	.9246	.9696	.9759	.9256	.9281	.9193	.8941	.8941	.8701	.8500	.7732	.3286	
247.500		.4282	.4168	.3853	.4080	.3929	.3853	.3979	.3715	.3425	.2983	.2064	
270.000	.1321	.1220	.1208	.0981	.1107	.1044	.1019	.1157	.1006	.0918	.0930	.0238	
292.500		.0149	.0200	.0124	.0250	.0175	.0099	.0263	.0074	.0049	.0225	.0023	
315.000	.0162	.0175	.0200	.0137	.0187	.0149	.0099	.0137	.0023	.0023	.0124	-.0001	
326.000									9.9990	.0994	.0749	.0011	
346.000		.0137	.0162	.0099	.0149	9.9990	9.9990	.0086	-.0001	-.0026	.0336	-.0026	
360.000	.0175	.0602	.0615	.0552	.0589	9.9990	9.9990	.0539	.0527	.0426	.0011	-.0001	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 143

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(RIA072) (16 NOV 74)

REFERENCE DATA

PARAMETRIC DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 RREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = 90.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 79.930 BETA = .00000 Q(PSI) = 10.218 PO = 28.022 P = 3.7790

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2108	-.2162	-.2208	-.2211	-.1988	9.9990	9.9990	-.1920	-.2208	-.2295	-.2293	-.2274
14.000		-.2180	-.2210	-.2222	-.2013	9.9990	9.9990	-.2157	-.2229	-.2301	-.2304	-.2285
24.000									-.2240	-.2289	-.2300	-.2285
45.000	-.2081	-.2149	-.2213	-.2164	-.1910	-.1770	-.2035	-.2153	-.2210	-.2251	-.2276	-.2245
67.500		-.2171	-.2236	-.2137	-.1830	-.1804	-.2126	-.2164	-.2209	-.2254	-.2261	-.2220
90.000	-.1155	-.1010	-.1192	-.1324	-.1362	-.1165	-.1139	-.1245	-.1404	-.1499	-.1726	-.2332
112.500		.2711	.2741	.2658	.2336	.2722	.2696	.2442	.2412	.2298	.1831	-.0592
135.000	.6944	.8266	.8501	.8645	.8335	.8683	.8490	.8403	.8009	.7569	.6637	.2175
157.500		1.3245	1.4112	1.4105	1.3923	1.3847	1.3756	1.3540	1.3166	1.2742	1.1625	.4775
180.000	1.3084	1.5361	1.6305	1.6411	1.6301	1.6104	1.5907	1.5680	1.5153	1.4694	1.3530	.5816
202.500		1.3404	1.4248	1.4263	1.4116	1.3785	1.3627	1.3548	1.2965	1.2458	1.1329	.4490
225.000	.7467	.8390	.8837	.8738	.8851	.8564	.8314	.8250	.7852	.7511	.6582	.2157
247.500		.2770	.2861	.2721	.2627	.2490	.2528	.2449	.2074	.1779	.1309	-.0558
270.000	-.1000	-.0949	-.0998	-.1112	-.1248	-.1290	-.1256	-.1324	-.1426	-.1521	-.1752	-.2270
292.500		-.2159	-.2215	-.2150	-.1798	-.1628	-.2078	-.2112	-.2188	-.2237	-.2232	-.2179
315.000	-.2104	-.2165	-.2233	-.2191	-.1881	-.1783	-.2123	-.2146	-.2233	-.2278	-.2268	-.2226
326.000									9.9990	-.2207	-.2284	-.2250
348.000		-.2183	-.2228	-.2224	-.1978	9.9990	9.9990	-.2156	-.2258	-.2319	-.2296	-.2252
360.000	-.2108	-.2162	-.2208	-.2211	-.1988	9.9990	9.9990	-.1920	-.2208	-.2295	-.2293	-.2274

MACH (2) = 3.480 ALPHA (1) = 79.930 BETA = .00000 Q(PSI) = 6.6610 PO = 60.009 P = .80900

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0492	-.0429	-.0418	-.0457	-.0441	9.9990	9.9990	-.0474	-.0480	-.0514	-.0587	-.0593
14.000		-.0463	-.0457	-.0480	-.0452	9.9990	9.9990	-.0486	-.0548	-.0548	-.0582	-.0582
24.000									-.0565	-.0565	-.0587	-.0593
45.000	-.0492	-.0480	-.0463	-.0486	-.0469	.0268	-.0283	-.0537	-.0554	-.0565	-.0587	-.0599
67.500		-.0599	-.0570	-.0554	-.0475	-.0435	-.0576	-.0632	-.0655	-.0638	-.0621	-.0587
90.000	.0596	.0590	.0421	.0354	.0376	.0596	.0624	.0595	.0455	.0376	.0162	-.0469
112.500		.3712	.3712	.3583	.3431	.3904	.3881	.3763	.3718	.3808	.3261	.0877
135.000	.7923	.9129	.9157	.9326	.9084	.9580	.9496	.9349	.9107	.8757	.7900	.3318
157.500		1.4687	1.5375	1.5200	1.4941	1.4963	1.5053	1.4890	1.4625	1.4298	1.3284	.5891
180.000	1.4856	1.7195	1.7990	1.7855	1.7533	1.7398	1.7342	1.7246	1.6896	1.6586	1.5538	.7094
202.500		1.4862	1.5510	1.5397	1.5093	1.4918	1.4901	1.4755	1.4366	1.4044	1.3058	.5691

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T2

(R1A072)

MACH (2) = 3.480 ALPHA (1) = 79.930

SECTION (1) ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.0564	.9281	.9608	.9366	.9326	.9428	.9253	.9152	.8859	.8622	.7797	.3275	
247.500		.3831	.3881	.3679	.3729	.3735	.3718	.3729	.3442	.3137	.2698	.1029	
270.000	.0731	.0686	.0669	.0545	.0585	.0573	.0573	.0596	.0506	.0404	.0251	-.0345	
292.500		-.0570	-.0525	-.0548	-.0446	-.0418	-.0559	-.0497	-.0593	-.0576	-.0514	-.0565	
315.000	-.0492	-.0497	-.0503	-.0525	-.0463	-.0480	-.0525	-.0537	-.0582	-.0587	-.0548	-.0576	
326.000									9.9990	-.0244	-.0554	-.0565	
346.000		-.0497	-.0497	-.0520	-.0486	9.9990	9.9990	-.0554	-.0582	-.0587	-.0542	-.0581	
360.000	-.0492	-.0429	-.0418	-.0457	-.0441	9.9990	9.9990	-.0474	-.0480	-.0514	-.0587	-.0593	

MACH (3) = 4.960 ALPHA (1) = 79.930 BETA = .00000 Q(P51) = 3.0700 PO = 90.029 P = .17800

SECTION (1) ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.0111	.0578	.0603	.0515	.0540	9.9990	9.9990	.0502	.0502	.0401	.0011	-.0001	
14.000		.0427	.0464	.0401	.0439	9.9990	9.9990	.0464	.0288	.0275	-.0013	-.0051	
24.000									.0049	.0036	.0000	.0000	
45.000	.0111	.0376	.0364	.0401	.0389	.2178	.0893	.0326	.0263	.0212	.0011	-.0001	
67.500		.0250	.0301	.0275	.0301	.0389	.0364	.0238	.0149	.0149	-.0076	-.0026	
90.000	.1121	.1069	.0893	.0792	.0880	.1057	.1120	.1082	.0893	.0830	.0590	.0086	
112.500		.4055	.3954	.3765	.3677	.4181	.4168	.4042	.3891	.3791	.3903	.1207	
135.000	.8339	.9495	.9432	.9570	.9281	.9822	.9696	.9482	.9130	.8764	.7996	.3752	
157.500		1.5402	1.6044	1.5717	1.6490	1.5452	1.5301	1.4986	1.4672	1.4369	1.3462	.6428	
180.000	1.5810	1.8123	1.8803	1.8589	1.8337	1.7909	1.7732	1.7254	1.7014	1.6737	1.5772	.7709	
202.500		1.5658	1.6238	1.6062	1.5810	1.5306	1.5192	1.4840	1.4462	1.4159	1.3189	.6235	
225.000	.9037	.9759	1.0112	.9797	.9822	.9646	.9382	.9268	.8916	.8727	.7923	.3803	
247.500		.4320	.4383	.4118	.4269	.4131	.4005	.4105	.3791	.3476	.2908	.2215	
270.000	.1232	.1246	.1296	.1082	.1183	.1132	.1069	.1183	.1019	.0918	.0792	.0325	
292.500		.0137	.0175	.0086	.0225	.0162	.0061	.0137	.0074	.0011	.0175	.0036	
315.000	.0137	.0149	.0162	.0112	.0175	.0137	.0086	.0112	.0036	.0036	.0099	.0049	
326.000									9.9990	.0943	.0035	.0011	
346.000		.0111	.0149	.0074	.0137	9.9990	9.9990	.0074	.0011	-.0001	.0099	.0023	
360.000	.0111	.0578	.0603	.0515	.0540	9.9990	9.9990	.0502	.0502	.0401	.0011	-.0001	

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T2

(RIAD73) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 81.830 BETA = .00000 Q(PSI) = 10.194 PO = 28.015 P = 3.7560

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2122	-.2160	-.2210	-.2198	-.1932	9.9990	9.9990	-.2126	-.2259	-.2312	-.2288	-.2266
14.000		-.2164	-.2214	-.2198	-.1948	9.9990	9.9990	-.2130	-.2244	-.2297	-.2286	-.2263
24.000									-.2266	-.2290	-.2292	-.2262
45.000	-.2089	-.2150	-.2203	-.2190	-.1868	-.1713	-.2017	-.2138	-.2222	-.2260	-.2253	-.2215
67.500		-.2178	-.2235	-.2140	-.1772	-.1802	-.2121	-.2151	-.2212	-.2257	-.2230	-.2158
90.000	-.1288	-.1082	-.1204	-.1348	-.1382	-.1135	-.1105	-.1223	-.1371	-.1454	-.1650	-.2224
112.500		.2548	.2696	.2628	.2362	.2780	.2746	.2487	.2499	.2385	.1914	-.0247
135.000	.6604	.8017	.8336	.8629	.8431	.8742	.8591	.8492	.8104	.7679	.6784	.2731
157.500		1.2954	1.3877	1.4132	1.4064	1.3931	1.3893	1.3760	1.3334	1.2947	1.1897	.5519
180.000	1.2635	1.5070	1.6218	1.6529	1.6335	1.6294	1.6077	1.5849	1.5443	1.5048	1.3820	.6703
202.500		1.3102	1.4090	1.4352	1.4234	1.3927	1.3835	1.3680	1.3133	1.2711	1.1628	.5377
225.000	.7097	.8154	.8727	.8735	.8746	.8610	.8427	.8374	.7914	.7580	.6753	.2745
247.500		.2620	.2833	.2696	.2643	.2533	.2559	.2518	.2153	.1853	.1373	-.0232
270.000	-.1116	-.1018	-.1003	-.1121	-.1220	-.1258	-.1220	-.1273	-.1372	-.1474	-.1718	-.2112
292.500		-.2145	-.2194	-.2145	-.1761	-.1602	-.2118	-.2095	-.2194	-.2243	-.2235	-.2163
315.000	-.2114	-.2142	-.2222	-.2165	-.1827	-.1795	-.2119	-.2119	-.2226	-.2271	-.2245	-.2219
326.000									9.9990	-.2200	-.2256	-.2230
346.000		-.2191	-.2236	-.2214	-.1941	9.9990	9.9990	-.2138	-.2297	-.2327	-.2265	-.2239
360.000	-.2122	-.2160	-.2210	-.2198	-.1932	9.9990	9.9990	-.2126	-.2259	-.2312	-.2288	-.2266

MACH (2) = 3.480 ALPHA (1) = 81.830 BETA = .00000 Q(PSI) = 6.8600 PO = 59.998 P = .80900

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0486	-.0423	-.0423	-.0473	-.0445	9.9990	9.9990	-.0440	-.0473	-.0524	-.0565	-.0581
14.000		-.0446	-.0469	-.0497	-.0457	9.9990	9.9990	-.0412	-.0525	-.0548	-.0554	-.0570
24.000									-.0559	-.0559	-.0559	-.0576
45.000	-.0480	-.0474	-.0474	-.0497	-.0480	.0246	-.0294	-.0407	-.0542	-.0553	-.0565	-.0582
67.500		-.0593	-.0559	-.0553	-.0486	-.0435	-.0570	-.0610	-.0621	-.0615	-.0610	-.0593
90.000	.0517	.0540	.0404	.0325	.0387	.0602	.0630	.0598	.0444	.0348	.0156	-.0356
112.500		.3590	.3691	.3579	.3478	.3968	.3946	.3799	.3748	.3635	.3275	.1171
135.000	.7957	.8919	.9055	.9353	.9184	.9714	.9518	.9483	.9212	.8852	.7996	.6859
157.500		1.4349	1.5256	1.5251	1.5076	1.5172	1.5222	1.5048	1.4794	1.4478	1.3504	.6658
180.000	1.4275	1.6818	1.7883	1.7928	1.7708	1.7573	1.7539	1.7398	1.7111	1.6829	1.5848	.7974
202.500		1.4540	1.5425	1.5482	1.5273	1.5081	1.5031	1.4890	1.4569	1.4270	1.3323	.6457

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(R1A073)

MACH (2) = 3.480 ALPHA (1) = 81.830

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.8113	.9039	.9548	.9405	.9482	.9818	.9315	.8242	.6888	.8740	.7934	.3814	
247.500		.3712	.3848	.3888	.3780	.3783	.3729	.3763	.3478	.3180	.2888	.1895	
270.000	.0823	.0641	.0858	.0834	.0890	.0879	.0873	.0813	.0511	.0393	.0257	-.0198	
292.500		-.0570	-.0525	-.0559	-.0469	-.0441	-.0559	-.0554	-.0565	-.0570	-.0474	-.0548	
315.000	-.0497	-.0491	-.0491	-.0525	-.0491	-.0474	-.0519	-.0531	-.0565	-.0570	-.0525	-.0565	
326.000									9.9990	-.0255	-.0537	-.0570	
346.000		-.0491	-.0503	-.0536	-.0508	9.9990	9.9990	-.0536	-.0570	-.0593	-.0548	-.0565	
360.000	-.0488	-.0423	-.0423	-.0473	-.0445	9.9990	9.9990	-.0440	-.0473	-.0524	-.0565	-.0581	

MACH (3) = 4.860 ALPHA (1) = 81.830 BETA = .00000 Q(PSI) = 3.0710 PO = 90.038 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.0112	.0653	.0678	.0578	.0603	9.9990	9.9990	.0590	.0615	.0515	.0049	-.0001	
14.000		.0488	.0488	.0463	.0488	9.9990	9.9990	.0439	.0375	.0362	.0061	-.0023	
24.000									.0049	.0061	-.0025	-.0013	
46.000	.0149	.0401	.0413	.0428	.0351	.2189	.0879	.0413	.0313	.0288	.0011	-.0013	
67.500		.0313	.0300	.0300	.0328	.0428	.0389	.0452	.0212	.0200	-.0013	-.0001	
90.000	.1044	.1044	.0905	.0805	.0855	.1069	.1082	.1082	.0905	.0805	.0615	.0212	
112.500		.3967	.3967	.3816	.3715	.4194	.4168	.4055	.3916	.3803	.3891	.1611	
135.000	.8081	.9397	.9447	.9574	.9473	.9625	.9574	.9548	.9195	.8843	.8087	.4231	
157.500		1.5213	1.6019	1.5868	1.5541	1.5364	1.5339	1.5024	1.4747	1.4457	1.3538	.7026	
180.000	1.5356	1.7829	1.8745	1.8707	1.8216	1.7838	1.7737	1.7309	1.7007	1.6767	1.5873	.8465	
202.500		1.5314	1.6107	1.6007	1.5591	1.5213	1.5075	1.4735	1.4457	1.4168	1.3353	.6953	
225.000	.8613	.9473	.9913	.9536	.9674	.9599	.9284	.9221	.8991	.8767	.7983	.4293	
247.500		.4143	.4231	.4055	.4168	.4055	.3942	.4080	.3791	.3463	.2909	.2329	
270.000	.1120	.1170	.1183	.1006	.1157	.1082	.1031	.1170	.1031	.0880	.0779	.0439	
292.500		.0137	.0187	.0099	.0225	.0175	.0061	.0200	.0099	.0074	.0089	.0036	
315.000	.0099	.0149	.0149	.0099	.0137	.0099	.0074	.0250	.0036	.0023	.0061	.0011	
326.000									9.9990	.0980	.0061	.0023	
346.000		.0149	.0124	.0099	.0162	9.9990	9.9990	.0313	.0661	.0011	.0361	.0036	
360.000	.0112	.0653	.0678	.0578	.0603	9.9990	9.9990	.0590	.0615	.0515	.0049	-.0001	

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T2

(RIAD74) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
 MDUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 84.830 BETA = .00000 Q(P51) = 10.210 PO = 28.020 P = 3.7710

SECTION (1) ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2130	-.2174	-.2243	-.2201	-.1924	9.9990	9.9990	-.2038	-.2307	-.2307	-.2274	-.2274
14.000		-.2199	-.2267	-.2229	-.1968	9.9990	9.9990	-.2100	-.2324	-.2335	-.2265	-.2253
24.000									-.2308	-.2303	-.2265	-.2234
45.000	-.2102	-.2170	-.2227	-.2170	-.1882	-.1783	-.1992	-.2087	-.2272	-.2280	-.2251	-.2175
67.500		-.2198	-.2243	-.2175	-.1792	-.1784	-.2118	-.2107	-.2273	-.2277	-.2207	-.2139
90.000	-.1440	-.1191	-.1267	-.1362	-.1358	-.1089	-.1096	-.1195	-.1339	-.1427	-.1636	-.1950
112.500		.2288	.2553	.2591	.2387	.2807	.2773	.2500	.2553	.2462	.2125	.0334
135.000	.5967	.7638	.8139	.8633	.8485	.8906	.8747	.8599	.8306	.7931	.7122	.3554
157.500		1.2427	1.3677	1.4131	1.4127	1.4154	1.4021	1.3590	1.3219	1.2237	1.6649	
180.000	1.1836	1.4486	1.5916	1.6511	1.6416	1.6556	1.6219	1.6219	1.5787	1.5468	1.4505	.8001
202.500		1.2558	1.3831	1.4324	1.4264	1.4104	1.4055	1.3866	1.3418	1.3077	1.2185	.6542
225.000	.6460	.7739	.8531	.8709	.8811	.8716	.8580	.8466	.8053	.7758	.7034	.3504
247.500		.2386	.2696	.2666	.2685	.2549	.2602	.2549	.2189	.1890	.1485	.0270
270.000	-.1315	-.1150	-.1089	-.1165	-.1237	-.1271	-.1237	-.1275	-.1377	-.1487	-.1667	-.1841
292.500		-.2166	-.2219	-.2169	-.1806	-.1651	-.2139	-.2064	-.2268	-.2268	-.2227	-.2151
315.000	-.2115	-.2169	-.2237	-.2180	-.1881	-.1847	-.2112	-.2078	-.2294	-.2290	-.2266	-.2217
326.000									9.9990	-.2217	-.2256	-.2215
346.000		-.2188	-.2252	-.2207	-.1945	9.9990	9.9990	-.2066	-.2320	-.2309	-.2272	-.2257
360.000	-.2130	-.2174	-.2243	-.2201	-.1924	9.9990	9.9990	-.2038	-.2307	-.2307	-.2274	-.2274

MACH (2) = 3.480 ALPHA (1) = 84.830 BETA = .00000 Q(P51) = 6.8630 PO = 60.018 P = .81000

SECTION (1) ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0497	-.0462	-.0446	-.0491	-.0491	9.9990	9.9990	-.0469	-.0463	-.0508	-.0531	-.0559
14.000		-.0469	-.0486	-.0508	-.0497	9.9990	9.9990	-.0474	-.0497	-.0525	-.0531	-.0565
24.000									-.0537	-.0537	-.0531	-.0559
45.000	-.0497	-.0480	-.0486	-.0503	-.0519	.0258	-.0316	-.0463	-.0508	-.0536	-.0526	-.0548
67.500		-.0599	-.0570	-.0576	-.0582	-.0458	-.0587	-.0604	-.0587	-.0587	-.0554	-.0570
90.000	.0381	.0466	.0387	.0342	.0421	.0629	.0657	.0612	.0466	.0353	.0172	-.0159
112.500		.3391	.3600	.3611	.3571	.4051	.4000	.3842	.3803	.3684	.3346	.1627
135.000	.6984	.8543	.8915	.9405	.9310	.9862	.9749	.9620	.9355	.9011	.8227	.4665
157.500		1.3847	1.5069	1.5329	1.5251	1.5386	1.5431	1.5273	1.5070	1.4777	1.3887	.7810
180.000	1.3458	1.6235	1.7666	1.7988	1.7841	1.7802	1.7757	1.7633	1.7413	1.7182	1.6326	.9333
202.500		1.3999	1.5210	1.5531	1.5379	1.5283	1.5232	1.5097	1.4827	1.4562	1.3729	.7714

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(R1A074)

MACH (2) = 3.480 ALPHA (1) = 84.830

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.7489	.8623	.9407	.9446	.9587	.9660	.9435	.9362	.9125	.8894	.8145	.4623
247.500		.3532	.3769	.3729	.3876	.3836	.3786	.3803	.3521	.3183	.2771	.1672
270.000	.0454	.0567	.0623	.0550	.0629	.0612	.0584	.0629	.0522	.0392	.0240	-.0035
292.500		-.0576	-.0525	-.0570	-.0520	-.0441	-.0559	-.0486	-.0508	-.0531	-.0475	-.0531
315.000	-.0514	-.0503	-.0508	-.0542	-.0537	-.0492	-.0525	-.0469	-.0525	-.0559	-.0531	-.0543
326.000									9.9990	-.0272	-.0542	-.0537
346.000		-.0508	-.0514	-.0542	-.0548	9.9990	9.9990	-.0435	-.0537	-.0565	-.0554	-.0548
360.000	-.0497	-.0452	-.0446	-.0491	-.0491	9.9990	9.9990	-.0469	-.0463	-.0508	-.0531	-.0559

MACH (3) = 4.960 ALPHA (1) = 84.830 BETA = .00000 O(PSI) = 3.0700 PO = 90.027 = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0124	.0541	.0541	.0440	.0440	9.9990	9.9990	.0478	.0503	.0364	.0061	-.0013
14.000		.0414	.0401	.0364	.0389	9.9990	9.9990	.0414	.0351	.0288	.0074	-.0026
24.000									.0023	.0049	.0061	-.0013
45.000	.0137	.0376	.0338	.0364	.0313	.2165	.0817	.0288	.0301	.0212	.0049	-.0013
67.500		.0225	.0225	.0200	.0187	.0351	.0301	.0212	.0187	.0137	.0011	-.0064
90.000	.0930	.0981	.0905	.0817	.0956	.1082	.1120	.1107	.0931	.0792	.0628	.0338
112.500		.3802	.3903	.3852	.3827	.4268	.4218	.4066	.3966	.3802	.4017	.1989
135.000	.7457	.8981	.9221	.9649	.9498	.9913	.9762	.9636	.9334	.8931	.8213	.4975
157.500		1.4621	1.5742	1.5830	1.5667	1.5553	1.5478	1.5264	1.5012	1.4697	1.3878	.8210
180.000	1.4436	1.7120	1.8418	1.8594	1.8304	1.7964	1.7888	1.7536	1.7309	1.7057	1.6314	.9813
202.500		1.4659	1.5767	1.5969	1.5667	1.5389	1.5251	1.4923	1.4672	1.4445	1.3680	.8112
225.000	.7908	.8994	.9699	.9599	.9636	.9687	.9384	.9296	.9057	.8805	.8124	.4975
247.500		.3942	.4168	.4005	.4282	.4131	.4005	.4105	.3816	.3450	.2921	.2594
270.000	.0956	.1120	.1170	.1019	.1183	.1132	.1044	.1397	.1044	.0893	.0742	.0553
292.500		.0162	.0187	.0086	.0200	.0175	.0061	.0187	.0137	.0049	.0137	.0049
315.000	.0124	.0187	.0162	.0086	.0137	.0137	.0061	.0225	.0099	.0023	.0049	.0049
326.000									9.9990	.0842	.0049	.0023
346.000		.0162	.0124	.0074	.0086	9.9990	9.9990	.0263	.0099	-.0001	.0223	.0023
360.000	.0124	.0541	.0541	.0440	.0440	9.9990	9.9990	.0478	.0503	.0364	.0061	-.0013

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 595 (TA-2F) MICRO200 EXTERNAL TANK, T2

(RIA075) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 87.830 BETA = .00000 Q(P51) = 10.209 PO = 28.012 P = 3.7720

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	-.2184	-.2228	-.2300	-.2254	-.1963	9.9990	9.9990	-.2058	-.2345	-.2311	-.2268	-.2279	
14.000		-.2242	-.2302	-.2257	-.1996	9.9990	9.9990	-.2060	-.2344	-.2314	-.2254	-.2270	
24.000									-.2336	-.2296	-.2254	-.2251	
45.000	-.2152	-.2223	-.2291	-.2219	-.1936	-.1769	-.1947	-.2045	-.2322	-.2310	-.2231	-.2208	
67.500		-.2225	-.2278	-.2189	-.1866	-.1771	-.2025	-.2021	-.2316	-.2282	-.2216	-.2132	
90.000	-.1614	-.1333	-.1348	-.1390	-.1333	-.1106	-.1121	-.1216	-.1341	-.1398	-.1574	-.1658	
112.500		.2015	.2408	.2546	.2432	.2853	.2792	.2508	.2614	.2553	.2289	.0861	
135.000	.5352	.7196	.7876	.8538	.8504	.9004	.8815	.8671	.8470	.8121	.7439	.4356	
157.500		1.1844	1.3332	1.4018	1.4105	1.4253	1.4314	1.4230	1.3836	1.3514	1.2720	.7734	
180.000	1.0275	1.3838	1.5569	1.6415	1.6328	1.6461	1.6393	1.6510	1.5979	1.5736	1.4888	.9149	
202.500		1.1969	1.3459	1.4213	1.4270	1.4186	1.4160	1.4058	1.3652	1.3387	1.2670	.7740	
225.000	.5755	.7272	.8265	.8614	.8856	.8765	.8663	.8549	.8216	.7977	.7396	.4301	
247.500		.2122	.2531	.2614	.2712	.2591	.2618	.2542	.2224	.1936	.1637	.0701	
270.000	-.1504	-.1276	-.1174	-.1178	-.1208	-.1242	-.1231	-.1299	-.1367	-.1466	-.1591	-.1572	
292.500		-.2212	-.2269	-.2189	-.1860	-.1742	-.2057	-.2023	-.2284	-.2261	-.2201	-.2125	
315.000	-.2184	-.2216	-.2285	-.2213	-.1925	-.1898	-.2050	-.2053	-.2307	-.2285	-.2231	-.2220	
326.000									9.9990	-.2201	-.2258	-.2239	
346.000		-.2229	-.2293	-.2237	-.1971	9.9990	9.9990	-.2062	-.2324	-.2286	-.2283	-.2272	
360.000	-.2184	-.2229	-.2300	-.2254	-.1953	9.9990	9.9990	-.2058	-.2345	-.2311	-.2268	-.2279	

MACH (2) = 3.480 ALPHA (1) = 87.830 BETA = .00000 Q(P51) = 6.8630 PO = 60.020 P = .81000

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	-.0525	-.0463	-.0446	-.0482	-.0463	9.9990	9.9990	-.0424	-.0458	-.0492	-.0520	-.0531	
14.000		-.0497	-.0480	-.0520	-.0492	9.9990	9.9990	-.0452	-.0497	-.0508	-.0525	-.0537	
24.000									-.0531	-.0531	-.0525	-.0542	
45.000	-.0525	-.0504	-.0509	-.0526	-.0509	.0238	-.0290	-.0464	-.0515	-.0526	-.0531	-.0537	
67.500		-.0610	-.0604	-.0604	-.0570	-.0475	-.0576	-.0548	-.0570	-.0570	-.0542	-.0593	
90.000	.0229	.0370	.0347	.0336	.0483	.0646	.0669	.0635	.0437	.0353	.0184	.0043	
112.500		.3158	.3486	.3598	.3643	.4088	.4043	.3879	.3795	.3716	.3459	.2089	
135.000	.6335	.8092	.8712	.9400	.9439	.9947	.9845	.9749	.9467	.9163	.8470	.5460	
157.500		1.3244	1.4755	1.5307	1.5391	1.5510	1.5572	1.5465	1.5295	1.5070	1.4304	.9000	
180.000	1.2690	1.5555	1.7325	1.7962	1.7990	1.7934	1.7922	1.7849	1.7686	1.7528	1.6801	1.0657	
202.500		1.3379	1.4890	1.5504	1.5561	1.5380	1.5358	1.5273	1.5019	1.4817	1.4112	.8915	

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(R1A075)

MACH (2) = 3.480 ALPHA (1) = 87.830

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6869	.8177	.9214	.9434	.9704	.9744	.9518	.9467	.9214	.9022	.8391	.5370
247.500		.3307	.3650	.3718	.3950	.3859	.3808	.3631	.3493	.3188	.2873	.2027
270.000	.0325	.0477	.0590	.0573	.0686	.0635	.0595	.0663	.0499	.0387	.0285	.0139
292.500		-.0593	-.0554	-.0593	-.0514	-.0458	-.0548	-.0407	-.0497	-.0497	-.0441	-.0565
315.000	-.0520	-.0525	-.0531	-.0554	-.0503	-.0508	-.0503	-.0373	-.0514	-.0525	-.0497	-.0542
325.000									9.9990	-.0260	-.0480	-.0531
346.000		-.0525	-.0531	-.0554	-.0520	9.9990	9.9990	-.0475	-.0531	-.0537	-.0492	-.0525
360.000	-.0525	-.0463	-.0446	-.0492	-.0463	9.9990	9.9990	-.0424	-.0458	-.0492	-.0520	-.0531

MACH (3) = 4.950 ALPHA (1) = 87.830 BETA = .00000 Q(PSI) = 3.0710 PO = 90.044 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0124	.0589	.0665	.0501	.0615	9.9990	9.9990	.0602	.0564	.0451	.0074	.0049
14.000		.0451	.0501	.0388	.0451	9.9990	9.9990	.0526	.0350	.0300	.0061	.0036
24.000									.0049	.0049	.0085	.0061
45.000	.0112	.0388	.0426	.0388	.0400	.2200	.0879	.0577	.0312	.0262	.0036	.0023
67.500		.0275	.0326	.0225	.0300	.0389	.0313	.0578	.0187	.0174	.0011	-.0013
90.000	.0817	.0918	.0930	.0817	.0981	.1107	.1132	.1107	.0867	.0766	.0541	.0490
112.500		.3575	.3852	.3852	.3928	.4306	.4255	.4117	.3903	.3789	.4118	.2442
135.000	.6902	.8573	.9140	.9694	.9656	1.0046	.9870	.9757	.9341	.9001	.8439	.5718
157.500		1.4080	1.5553	1.5868	1.5830	1.5654	1.5604	1.5377	1.5100	1.4873	1.4235	.9284
180.000	1.3605	1.6549	1.8211	1.8514	1.8513	1.8060	1.8009	1.7682	1.7493	1.7304	1.6654	1.1060
202.500		1.4071	1.5532	1.5973	1.5860	1.5432	1.5331	1.5066	1.4902	1.4600	1.4021	.9296
225.000	.7394	.8555	.9548	.9649	.9888	.9750	.9460	.9410	.9120	.8906	.8351	.5743
247.500		.3715	.4118	.4005	.4385	.4168	.4042	.4181	.3791	.3476	.3009	.2883
270.000	.0905	.1019	.1195	.1008	.1271	.1145	.1069	.1233	.0994	.0855	.0642	.0704
292.500		.0112	.0263	.0086	.0225	.0175	.0074	.0263	.0124	.0099	.0225	.0086
315.000	.0187	.0137	.0200	.0074	.0162	.0112	.0074	.0338	.0061	.0036	.0137	.0049
325.000									9.9990	.0817	.0149	.0049
346.000		.0137	.0175	.0074	.0175	9.9990	9.9990	.0401	.0085	.0011	.0137	.0036
360.000	.0124	.0589	.0665	.0501	.0615	9.9990	9.9990	.0602	.0564	.0451	.0074	.0049

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(RIA076) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 89.830 BETA = .00000 Q(PSI) = 10.248 PO = 28.019 P = 3.9120

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2218	-.2275	-.2328	-.2279	-.1969	9.9990	9.9990	-.2113	-.2354	-.2305	-.2259	-.2263
14.000		-.2277	-.2338	-.2277	-.1998	9.9990	9.9990	-.2104	-.2345	-.2307	-.2250	-.2258
24.000									-.2327	-.2273	-.2258	-.2254
45.000	-.2190	-.2275	-.2318	-.2237	-.1981	-.1830	-.1932	-.2060	-.2335	-.2297	-.2221	-.2213
67.500		-.2290	-.2324	-.2226	-.1943	-.1823	-.2004	-.2019	-.2343	-.2290	-.2203	-.2139
90.000	-.1759	-.1476	-.1433	-.1441	-.1358	-.1128	-.1132	-.1249	-.1362	-.1418	-.1532	-.1506
112.500		.1835	.2310	.2513	.2449	.2875	.2823	.2532	.2664	.2613	.2414	.1219
135.000	.4882	.6900	.7723	.8482	.8501	.9044	.8848	.8724	.8539	.8233	.7646	.4879
157.500		1.1432	1.3138	1.3981	1.4143	1.4286	1.4373	1.4313	1.3988	1.3727	1.3056	.8426
180.000	1.0420	1.3314	1.5227	1.6268	1.6445	1.6600	1.6449	1.6578	1.6136	1.5914	1.5196	.9903
202.500		1.1510	1.3205	1.4179	1.4312	1.4213	1.4240	1.4119	1.3809	1.3560	1.2893	.8390
225.000	.5312	.6970	.8097	.8596	.8849	.8812	.8688	.8559	.8302	.8098	.7638	.4780
247.500		.1953	.2438	.2578	.2726	.2584	.2832	.2545	.2239	.1953	.1764	.0992
270.000	-.1618	-.1389	-.1208	-.1231	-.1215	-.1246	-.1238	-.1306	-.1385	-.1468	-.1539	-.1444
292.500		-.2273	-.2284	-.2224	-.1937	-.1783	-.2039	-.2013	-.2318	-.2269	-.2198	-.2114
315.000	-.2208	-.2274	-.2318	-.2244	-.1984	-.1946	-.2037	-.2067	-.2338	-.2297	-.2244	-.2183
325.000									9.9990	-.2213	-.2260	-.2207
348.000		-.2276	-.2329	-.2265	-.1993	9.9990	9.9990	-.2106	-.2340	-.2299	-.2303	-.2254
360.000	-.2218	-.2275	-.2328	-.2279	-.1969	9.9990	9.9990	-.2113	-.2354	-.2305	-.2259	-.2263

MACH (2) = 3.480 ALPHA (1) = 89.830 BETA = .00000 Q(PSI) = 6.8640 PO = 60.028 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0537	-.0446	-.0441	-.0480	-.0457	9.9990	9.9990	-.0356	-.0446	-.0480	-.0531	-.0531
14.000		-.0491	-.0480	-.0508	-.0480	9.9990	9.9990	-.0356	-.0487	-.0503	-.0520	-.0531
24.000									-.0520	-.0508	-.0509	-.0531
45.000	-.0520	-.0503	-.0520	-.0514	-.0503	.0248	-.0311	-.0351	-.0503	-.0525	-.0531	-.0542
67.500		-.0593	-.0593	-.0599	-.0582	-.0480	-.0570	-.0480	-.0559	-.0548	-.0548	-.0644
90.000	.0149	.0308	.0330	.0347	.0505	.0657	.0657	.0891	.0437	.0359	.0217	.0138
112.500		.3045	.3429	.3609	.3693	.4105	.4031	.3941	.3800	.3733	.3508	.2251
135.000	.6035	.7812	.8578	.9378	.9446	.9931	.9857	.9835	.9497	.9221	.8633	.5990
157.500		1.2849	1.4517	1.5261	1.5430	1.5503	1.5683	1.5582	1.5385	1.5165	1.4551	.9762
180.000	1.2010	1.5098	1.7082	1.7934	1.8007	1.8086	1.8063	1.7922	1.7793	1.7669	1.7077	1.1513
202.500		1.2979	1.4658	1.5486	1.5571	1.5537	1.5480	1.5323	1.5080	1.4911	1.4349	.9687

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(R1A076)

MACH (2) = 3.480 ALPHA (1) = 89.830

SECTION (1)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8511	.7891	.9057	.5412	.9733	.9848	.9584	.9502	.9232	.8069	.8551	.5891
247.500		.3169	.3592	.3716	.3970	.3902	.3817	.3874	.3474	.3199	.2910	.2257
270.000	.0240	.0426	.0555	.0550	.0596	.0523	.0589	.0713	.0482	.0369	.0325	.0246
292.500		-.0605	-.0554	-.0610	-.0554	-.0447	-.0543	-.0379	-.0503	-.0509	-.0447	-.0571
315.000	-.0526	-.0526	-.0531	-.0548	-.0514	-.0486	-.0497	-.0402	-.0514	-.0526	-.0497	-.0531
326.000									9.9990	-.0277	-.0480	-.0531
346.000		-.0531	-.0548	-.0554	-.0520	9.9990	9.9990	-.0396	-.0526	-.0548	-.0486	-.0526
360.000	-.0537	-.0446	-.0441	-.0480	-.0457	9.9990	9.9990	-.0356	-.0446	-.0480	-.0531	-.0531

MACH (3) = 4.960 ALPHA (1) = 89.830 BETA = .00000 Q(P51) = 3.0700 PO = 90.022 P = .17800

SECTION (1)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0112	.0553	.0616	.0477	.0578	9.9990	9.9990	.0566	.0528	.0414	.0061	.0036
14.000		.0401	.0477	.0351	.0401	9.9990	9.9990	.0527	.0313	.0275	.0049	.0011
24.000									.0061	.0049	.0036	-.0001
45.000	.0112	.0351	.0401	.0364	.0364	.2203	.0817	.0578	.0288	.0275	.0036	.0023
67.500		.0250	.0301	.0212	.0301	.0389	.0313	.0578	.0187	.0162	-.0001	-.0064
90.000	.0716	.0855	.0918	.0830	.1019	.1170	.1157	.0943	.0855	.0779	.0641	.0603
112.500		.3438	.3765	.3879	.4017	.4345	.4332	.4118	.3879	.3791	.4105	.2669
135.000	.6537	.8288	.8994	.9699	.9762	1.0140	.9339	.9762	.9347	.9019	.8528	.6209
157.500		1.3680	1.5381	1.5885	1.5961	1.5784	1.5684	1.5432	1.5218	1.5054	1.4512	1.0153
180.000	1.3000	1.6027	1.8065	1.8745	1.8758	1.8292	1.8166	1.7876	1.7825	1.7725	1.7221	1.2080
202.500		1.3718	1.5432	1.6175	1.6225	1.5671	1.5570	1.5444	1.5180	1.4978	1.4474	1.0115
225.000	.7028	.8376	.9586	.9900	1.0203	1.0002	.9724	.9699	.9296	.9057	.8578	.6222
247.500		.3627	.4156	.4105	.4509	.4307	.4181	.4257	.3791	.3476	.3099	.3085
270.000	.0830	.0981	.1220	.1057	.1296	.1195	.1132	.1246	.0981	.0855	.0817	.0767
292.500		.0124	.0225	.0086	.0250	.0149	.0061	.0288	.0112	.0099	.0162	.0049
315.000	.0200	.0149	.0175	.0074	.0175	.0112	.0074	.0187	.0074	.0023	.0162	.0074
326.000									9.9990	.0792	.0137	.0023
346.000		.0124	.0187	.0074	.0137	9.9990	9.9990	.0149	.0049	-.0001	.0162	.0023
360.000	.0112	.0553	.0616	.0477	.0578	9.9990	9.9990	.0566	.0528	.0414	.0061	.0036

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(RIA077) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 91.830 BETA = .00000 Q(PSI) = 10.249 PO = 28.011 P = 3.8160

SECTION (1) ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2272	-.2302	-.2362	-.2287	-.1974	9.9990	9.9990	-.2140	-.2343	-.2283	-.2306	-.2272
14.000		-.2302	-.2363	-.2291	-.2004	9.9990	9.9990	-.2133	-.2340	-.2287	-.2296	-.2 99
24.000									-.2348	-.2300	-.2269	-.2. 51
45.000	-.2251	-.2302	-.2352	-.2261	-.2023	-.1816	-.1910	-.2080	-.2333	-.2295	-.2217	-.2: 31
67.500		-.2317	-.2340	-.2241	-.2009	-.1887	-.1959	-.2000	-.2336	-.2279	-.2200	-.2155
90.700	-.1865	-.1549	-.1477	-.1451	-.1353	-.1092	-.1122	-.1232	-.1345	-.1383	-.1478	-.1342
112.500		.1643	.2183	.2462	.2439	.2877	.2809	.2537	.2685	.2670	.2537	.1560
135.000	.4483	.6559	.7507	.8375	.8477	.9044	.8844	.8761	.8625	.8345	.7854	.5408
157.500		1.0990	1.2816	1.3790	1.4122	1.4247	1.4364	1.4315	1.4138	1.3941	1.3370	.9171
180.000	.9849	1.2805	1.4878	1.6101	1.6381	1.6441	1.6528	1.6551	1.6184	1.6064	1.5512	1.0710
202.500		1.1065	1.2868	1.4034	1.4291	1.4193	1.4280	1.4144	1.3925	1.3714	1.3166	.9074
225.000	.4918	.6624	.7866	.8489	.8856	.8922	.8727	.8599	.8418	.8255	.7873	.5301
247.500		.1780	.2316	.2531	.2732	.2618	.2633	.2554	.2271	.2014	.1873	.1300
270.000	-.1753	-.1484	-.1281	-.1247	-.1243	-.1228	-.1254	-.1311	-.1398	-.1454	-.1508	-.1320
292.500		-.2299	-.2310	-.2231	-.1989	-.1865	-.1993	-.1993	-.2310	-.2265	-.2182	-.2099
315.000	-.2253	-.2295	-.2340	-.2253	-.2000	-.1981	-.2015	-.2064	-.2321	-.2295	-.2229	-.2165
326.000									9.9990	-.2217	-.2275	-.2200
346.000		-.2319	-.2364	-.2300	-.2028	9.9990	9.9990	-.2122	-.2360	-.2315	-.2331	-.2248
360.000	-.2272	-.2302	-.2362	-.2287	-.1974	9.9990	9.9990	-.2140	-.2343	-.2283	-.2306	-.2272

MACH (2) = 3.480 ALPHA (1) = 91.850 BETA = .00000 Q(PSI) = 6.8630 PO = 60.023 P = .91000

SECTION (1) ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0520	-.0441	-.0435	-.0480	-.0474	9.9990	9.9990	-.0378	-.0429	-.0457	-.0508	-.0503
14.000		-.0474	-.0469	-.0514	-.0497	9.9990	9.9990	-.0384	-.0486	-.0491	-.0514	-.0525
24.000									-.0514	-.0525	-.0508	-.0520
45.000	-.0520	-.0480	-.0480	-.0503	-.0497	.0274	-.0300	-.0362	-.0480	-.0486	-.0509	-.0514
67.500		-.0576	-.0570	-.0610	-.0593	-.0458	-.0554	-.0362	-.0537	-.0537	-.0531	-.0532
90.000	.0077	.0262	.0335	.0341	.0488	.0673	.0668	.0657	.0431	.0364	.0251	.0285
112.500		.2899	.3350	.3569	.3699	.4110	.4071	.3891	.3784	.3744	.3594	.2664
135.000	.5626	.7480	.8347	.9294	.9412	.9987	.9857	.9773	.9508	.9271	.8791	.6469
157.500		1.2353	1.4192	1.5118	1.5371	1.5563	1.5625	1.5524	1.5484	1.5360	1.4800	1.0516
180.000	1.1345	1.4517	1.6680	1.7757	1.7971	1.7982	1.7965	1.7926	1.7820	1.7884	1.7407	1.2353
202.500		1.2449	1.4325	1.5334	1.5514	1.5413	1.5407	1.5345	1.5193	1.5075	1.4602	1.0414

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T2

(R1A077)

MACH (2) = 3.480 ALPHA (1) = 91.850

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.6085	.7547	.8849	.9333	.9728	.9773	.9553	.9502	.9288	.9153	.8718	.6350	
247.500		.3017	.3508	.3699	.3981	.3885	.3846	.3646	.3474	.3226	.2985	.2501	
270.000	.0161	.0375	.0556	.0550	.0597	.0635	.0612	.0680	.0488	.0392	.0342	.0364	
292.500		-.0576	-.0543	-.0616	-.0548	-.0452	-.0537	-.0374	-.0481	-.0492	-.0441	-.0576	
315.000	-.0508	-.0514	-.0520	-.0554	-.0537	-.0492	-.0486	-.0328	-.0503	-.0497	-.0492	-.0520	
325.000									9.9990	-.0272	-.0492	-.0514	
346.000		-.0520	-.0509	-.0554	-.0531	9.9990	9.9990	-.0407	-.0503	-.0509	-.0497	-.0508	
360.000	-.0520	-.0441	-.0435	-.0480	-.0474	9.9990	9.9990	-.0378	-.0429	-.0457	-.0508	-.0503	

MACH (3) = 4.380 ALPHA (1) = 91.850 BETA = .00000 Q(P51) = 3.0710 PO = 90.036 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.0137	.0665	.0715	.0614	.0614	9.9990	9.9990	.0816	.0639	.0526	.0099	.0049	
14.000		.0526	.0526	.0488	.0514	9.9990	9.9990	.0728	.0426	.0413	.0061	.0049	
24.000									.0099	.0112	.0074	.0049	
45.000	.0162	.0426	.0439	.0464	.0363	.2215	.0792	.0754	.0351	.0326	.0074	.0036	
67.500		.0326	.0351	.0288	.0275	.0427	.0364	.0779	.0250	.0238	.0036	-.0026	
90.000	.0679	.0855	.0893	.0893	.1031	.1120	.1132	.1295	.0880	.0792	.0691	.0716	
112.500		.3312	.3652	.3904	.4005	.4282	.4269	.4219	.3879	.3828	.4055	.3060	
135.000	.6096	.7908	.8701	.9621	.9508	1.0037	.9885	.9873	.9369	.9104	.8666	.6764	
157.500		1.3038	1.4890	1.5658	1.5646	1.5709	1.5646	1.5570	1.5230	1.5066	1.4613	1.0909	
180.000	1.2184	1.5371	1.7447	1.8342	1.8418	1.8128	1.8040	1.7825	1.7636	1.7586	1.7196	1.2836	
202.500		1.3051	1.4802	1.5696	1.5885	1.5482	1.5344	1.5243	1.4890	1.4789	1.4436	1.0821	
225.000	.6487	.7910	.9095	.9536	1.0014	.9775	.9447	.9523	.9132	.8969	.8565	.6713	
247.500		.3425	.3929	.4042	.4370	.4181	.4042	.4269	.3715	.3450	.3085	.3287	
270.000	.0716	.0956	.1170	.1094	.1296	.1183	.1082	.1384	.0994	.0893	.0830	.0868	
292.500		.0162	.0250	.0137	.0200	.0200	.0086	.0490	.0162	.0137	.0149	.0086	
315.000	.0162	.0187	.0200	.0149	.0187	.0086	.0112	.0590	.0124	.0112	.0137	.0049	
325.000									9.9990	.0792	.0099	.0049	
346.000		.0149	.0200	.0124	.0124	9.9990	9.9990	.0615	.0099	.0086	.0137	.0049	
360.000	.0137	.0665	.0715	.0614	.0614	9.9990	9.9990	.0816	.0639	.0526	.0099	.0049	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(R1A078) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 94.850 BETA = .00000 Q(PSI) = 10.251 PO = 28.014 P = 3.8170

SECTION (1) TANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	-.2294	-.2326	-.2382	-.2276	-.2118	9.9990	9.9990	-.2174	-.2352	-.2303	-.2320	-.2271	
14.000		-.2332	-.2397	-.2287	-.2125	9.9990	9.9990	-.2170	-.2348	-.2298	-.2292	-.2263	
24.000									-.2350	-.2278	-.2278	-.2274	
45.000	-.2267	-.2333	-.2359	-.2246	-.2091	-.1933	-.1929	-.2106	-.2333	-.2280	-.2202	-.2225	
67.500		-.2325	-.2332	-.2204	-.2094	-.1962	-.1970	-.1996	-.2317	-.2249	-.2168	-.2176	
90.000	-.2037	-.1686	-.1566	-.1486	-.1350	-.1112	-.1116	-.1195	-.1343	-.1354	-.1364	-.1082	
112.500		.1324	.1961	.2341	.2371	.2861	.2778	.2544	.2661	.2718	.2714	.2047	
135.000	.3885	.5986	.7071	.8162	.8393	.8997	.8741	.8752	.8665	.8431	.8114	.6124	
157.500		1.0252	1.2239	1.3456	1.4007	1.4193	1.4204	1.4132	1.4306	1.4109	1.3678	1.0183	
180.000	.9004	1.2043	1.4336	1.5805	1.6266	1.6353	1.6504	1.6319	1.6443	1.6307	1.5936	1.1842	
202.500		1.0349	1.2344	1.3744	1.4189	1.4113	1.4241	1.4124	1.4060	1.3913	1.3539	1.0048	
225.000	.4282	.6051	.7496	.8300	.8790	.8775	.8643	.8605	.8466	.8368	.8139	.6033	
247.500		.1480	.2080	.2415	.2679	.2593	.2585	.2540	.2249	.2016	.2062	.1754	
270.000	-.1908	-.1606	-.1368	-.1285	-.1229	-.1247	-.1247	-.1293	-.1395	-.1432	-.1402	-.1093	
292.500		-.2326	-.2315	-.2213	-.2100	-.1938	-.1976	-.2006	-.2300	-.2247	-.2173	-.2101	
315.000	-.2286	-.2324	-.2355	-.2241	-.2087	-.2064	-.2015	-.2102	-.2332	-.2290	-.2217	-.2127	
326.000									9.9990	-.2225	-.2259	-.2164	
346.000		-.2338	-.2403	-.2289	-.2127	9.9990	9.9990	-.2184	-.2369	-.2335	-.2343	-.2234	
360.000	-.2294	-.2329	-.2382	-.2276	-.2118	9.9990	9.9990	-.2174	-.2352	-.2303	-.2320	-.2271	

MACH (2) = 3.480 ALPHA (1) = 94.850 BETA = .00000 Q(PSI) = 6.8620 PO = 60.017 P = .81000

SECTION (1) TANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	-.0514	-.0458	-.0452	-.0480	-.0475	9.9990	9.9990	-.0384	-.0446	-.0475	-.0492	-.0508	
14.000		-.0486	-.0486	-.0503	-.0497	9.9990	9.9990	-.0407	-.0486	-.0503	-.0492	-.0508	
24.000									-.0497	-.0480	-.0497	-.0508	
45.000	-.0508	-.0491	-.0497	-.0491	-.0497	.0280	-.0300	-.0401	-.0480	-.0486	-.0497	-.0525	
67.500		-.0554	-.0589	-.0582	-.0587	-.0407	-.0537	-.0390	-.0531	-.0531	-.0525	-.0593	
90.000	-.0029	.0184	.0263	.0333	.0333	.0880	.0880	.0646	.0409	.0336	.0291	.0426	
112.500		.2670	.3171	.3543	.3701	.4090	.4056	.3859	.3752	.3736	.3690	.3075	
135.000	.5043	.6953	.7996	.9180	.9383	.9941	.9817	.9738	.9501	.9310	.9000	.7162	
157.500		1.1597	1.3615	1.4883	1.5266	1.5475	1.5554	1.5463	1.5514	1.5418	1.5127	1.1559	
180.000	1.0341	1.3633	1.6062	1.7483	1.7810	1.7928	1.7894	1.7877	1.7956	1.7951	1.7719	1.3526	
202.500		1.1677	1.3740	1.5087	1.5414	1.5352	1.5341	1.5290	1.5211	1.5149	1.4912	1.1446	

NSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T2

(R1A078)

MACH (2) = 3.480 ALPHA (1) = 94.850

SECTION (1) ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
225.000	.9465	.7027	.8442	.9189	.9882	.9738	.9518	.9430	.9281	.9174	.8943	.7004		
247.500		.2794	.3335	.3845	.3977	.3876	.3831	.3803	.3442	.3199	.3104	.2878		
270.000	.0037	.0302	.0494	.0556	.0702	.0629	.0607	.0657	.0466	.0370	.0421	.0528		
292.500		-.0548	-.0537	-.0593	-.0537	-.0424	-.0508	-.0362	-.0469	-.0480	-.0401	-.0537		
315.000	-.0520	-.0514	-.0525	-.0537	-.0514	-.0480	-.0463	-.0317	-.0492	-.0514	-.0458	-.0508		
326.000									9.9990	-.0277	-.0452	-.0508		
346.000		-.0520	-.0514	-.0531	-.0520	9.9990	9.9990	-.0300	-.0503	-.0514	-.0463	-.0503		
360.000	-.0514	-.0458	-.0452	-.0480	-.0475	9.9990	9.9990	-.0384	-.0446	-.0475	-.0492	-.0508		

MACH (3) = 4.960 ALPHA (1) = 94.850 BETA = .00000 Q(PSI) = 3.0700 PO = 90.023 P = .17800

SECTION (1) ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.0137	.0578	.0603	.0540	.0553	9.9990	9.9990	.0679	.0553	-.0452	.0086	.0086	
14.000		.0464	.0477	.0414	.0439	9.9990	9.9990	.0628	.0364	.0364	.0099	.0049	
24.000									.0124	.0112	.0074	.0061	
45.000	.0149	.0401	.0389	.0427	.0351	.2253	.0792	.0653	.0326	.0313	.0074	.0036	
67.500		.0275	.0301	.0250	.0238	.0439	.0389	.0427	.0200	.0212	.0011	-.0013	
90.000	.0565	.0767	.0842	.0868	.1019	.1132	.1157	.1195	.0855	.0767	.0716	.0805	
112.500		.3072	.3513	.3853	.4005	.4257	.4289	.4131	.3853	.3816	.4181	.3387	
135.000	.5491	.7381	.8376	.9473	.9435	1.0002	.9888	.9787	.9372	.9145	.8931	.7406	
157.500		1.2232	1.4285	1.5344	1.5482	1.5709	1.5684	1.5520	1.5281	1.5192	1.5016	1.1942	
180.000	1.1022	1.4373	1.6717	1.8040	1.8216	1.8241	1.8090	1.7851	1.7699	1.7687	1.7523	1.3907	
202.500		1.2181	1.4247	1.5469	1.5810	1.5568	1.5394	1.5180	1.4915	1.4865	1.4688	1.1740	
225.000	.5889	.7381	.8767	.9460	1.0014	.9901	.9498	.9435	.9132	.9019	.8792	.7293	
247.500		.3211	.3791	.4055	.4634	.4231	.4093	.4181	.3715	.3463	.3186	.3551	
270.000	.0590	.0880	.1107	.1107	.1334	.1233	.1132	.1296	.0994	.0905	.0918	.1006	
292.500		.0162	.0200	.0124	.0225	.0225	.0137	.0338	.0162	.0124	.0162	.0149	
315.000	.0175	.0187	.0200	.0137	.0149	.0175	.0149	.0351	.0112	.0124	.0112	.0099	
326.000									9.9990	.0767	.0086	.0099	
346.000		.0137	.0182	.0112	.0099	9.9990	9.9990	.0389	.0099	.0074	.0137	.0099	
360.000	.0137	.0578	.0603	.0540	.0553	9.9990	9.9990	.0679	.0553	.0452	.0086	.0086	

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T2

(RIA079) (16 NOV 74)

REFERENCE DATA

PARAMETRIC DATA

SREF = 572.8980 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = 90.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.870 ALPHA (1) = 97.850 BETA = .00000 Q(P51) = 10.210 PO = 29.004 P = 3.7750

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2270	-.2288	-.2334	-.2193	-.2224	9.9990	9.9990	-.2148	-.2288	-.2250	-.2243	-.2205
14.000		-.2304	-.2342	-.2205	-.2221	9.9990	9.9890	-.2152	-.2293	-.2255	-.2207	-.2184
24.000									-.2293	-.2230	-.2200	-.2184
45.000	-.2245	-.2297	-.2289	-.2168	-.2180	-.1835	-.1888	-.2077	-.2282	-.2217	-.2122	-.2145
67.500		-.2291	-.2257	-.2132	-.2170	-.1958	-.1920	-.1973	-.2268	-.2193	-.2080	-.2171
90.000	-.2192	-.1803	-.1656	-.1542	-.1353	-.1167	-.1152	-.1236	-.1357	-.1334	-.1227	-.0825
112.500		.1073	.1787	.2244	.2365	.2805	.2737	.2513	.2650	.2786	.2886	.2495
135.000	.3287	.5339	.6596	.7896	.8165	.8870	.8608	.8520	.8570	.8441	.8305	.6820
157.500		.9473	1.1522	1.3063	1.3662	1.4071	1.3995	1.3980	1.4306	1.4086	1.3821	1.1093
180.000	.8163	1.1244	1.3708	1.5398	1.5928	1.6217	1.6277	1.6194	1.6724	1.6626	1.6284	1.2937
202.500		.9578	1.1764	1.3355	1.3806	1.3886	1.4037	1.4022	1.4102	1.4124	1.3940	1.1101
225.000	.3653	.5430	.7043	.7989	.8584	.8663	.8459	.8531	.8406	.8356	.8261	.6722
247.500		.1198	.1842	.2290	.2672	.2543	.2532	.2490	.2233	.2013	.2212	.2144
270.000	-.2071	-.1714	-.1456	-.1304	-.1213	-.1262	-.1262	-.1308	-.1387	-.1399	-.1305	-.0974
292.500		-.2280	-.2220	-.2110	-.2201	-.1905	-.1939	-.1988	-.2193	-.2144	-.2112	-.2101
315.000	-.2262	-.2292	-.2276	-.2155	-.2193	-.2072	-.1985	-.2091	-.2250	-.2208	-.2133	-.2173
326.000									9.9990	-.2145	-.2167	-.2091
346.000		-.2311	-.2342	-.2205	-.2236	9.9990	9.9990	-.2160	-.2308	-.2266	-.2247	-.2175
360.000	-.2270	-.2229	-.2334	-.2193	-.2224	9.9990	9.9990	-.2148	-.2288	-.2250	-.2243	-.2205

MACH (2) = 3.480 ALPHA (1) = 97.830 BETA = .00000 Q(P51) = 6.8630 PO = 60.021 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0537	-.0469	-.0452	-.0486	-.0463	9.9990	9.9990	-.0384	-.0424	-.0452	-.0492	-.0497
14.000		-.0497	-.0480	-.0520	-.0514	9.9990	9.9990	-.0396	-.0475	-.0480	-.0480	-.0492
24.000									-.0492	-.0480	-.0486	-.0497
45.000	-.0531	-.0503	-.0497	-.0508	-.0537	.0274	-.0311	-.0390	-.0475	-.0480	-.0475	-.0480
67.500		-.0560	-.0560	-.0605	-.0627	-.0413	-.0543	-.0379	-.0520	-.0532	-.0531	-.0537
90.000	-.0136	.0105	.0235	.0347	.0539	.0657	.0657	.0612	.0398	.0370	.0364	.0584
112.500		.2420	.3006	.3474	.3677	.4037	.3992	.3789	.3727	.3761	.3769	.3408
135.000	.4479	.6424	.7819	.8994	.9276	.9834	.9715	.9531	.9462	.9332	.9169	.7697
157.500		1.0799	1.3013	1.4573	1.5097	1.5311	1.5413	1.5334	1.5480	1.5463	1.5341	1.2506
180.000	.9388	1.2708	1.5362	1.7109	1.7593	1.7757	1.7745	1.7740	1.7926	1.7993	1.7917	1.4614
202.500		1.0855	1.3131	1.4765	1.5210	1.5187	1.5170	1.5165	1.5159	1.5187	1.5115	1.2365

REPRODUCIBILITY OF THE
 ORIGINAL PAGE IS POOR

MSFC 596 (TA-2F) HCRO200 EXTERNAL TANK, T2

(R1A079)

MACH (2) = 3.480 ALPHA (1) = 97.830

SECTION (1) ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4890	.6491	.8041	.8994	.9574	.9631	.9400	.9332	.9236	.9191	.9090	.7602
247.500		.2540	.3171	.3583	.3949	.3831	.3769	.3729	.3419	.3205	.3166	.3177
270.000	-.0046	.0201	.0454	.0539	.0702	.0618	.0584	.0623	.0443	.0387	.0443	.0646
292.500		-.0542	-.0525	-.0599	-.0537	-.0424	-.0497	-.0294	-.0446	-.0469	-.0430	-.0497
315.000	-.0514	-.0525	-.0508	-.0548	-.0554	-.0486	-.0469	-.0266	-.0492	-.0497	-.0452	-.0486
326.000									9.9990	-.0272	-.0475	-.0492
346.000		-.0531	-.0525	-.0548	-.0531	9.9990	9.9990	-.0244	-.0480	-.0497	-.0452	-.0480
360.000	-.0537	-.0469	-.0452	-.0486	-.0463	9.9990	9.9990	-.0384	-.0424	-.0452	-.0492	-.0497

MACH (3) = 4.960 ALPHA (1) = 97.830 BETA = .00000 Q(PSI) = 3.0710 PO = 90.049 P = .17800

SECTION (1) ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0112	.0602	.0639	.0589	.0501	9.9990	9.9990	.0577	.0614	.0514	.0112	.0112
14.000		.0463	.0475	.0475	.0400	9.9990	9.9990	.0538	.0412	.0400	.0086	.0074
24.000									.0112	.0111	.0086	.0086
45.000	.0111	.0414	.0363	.0477	.0313	.2353	.1434	.0401	.0363	.0351	.0086	.0061
67.500		.0313	.0313	.0326	.0212	.0489	.0489	.0376	.0263	.0263	.0036	.0036
90.000	.0439	.0678	.0741	.0655	.0968	.1132	.1157	.1018	.0817	.0779	.0754	.0930
112.500		.2783	.3299	.3803	.3929	.4282	.4269	.3942	.3791	.3816	.4282	.3476
135.000	.0547	.6749	.7883	.9281	.9419	.9911	.9797	.9545	.9243	.9104	.9041	.7895
157.500		1.1372	1.3563	1.5112	1.5478	1.5541	1.5515	1.5276	1.5314	1.5276	1.5205	1.2773
180.000	.9898	1.3485	1.6099	1.7813	1.8178	1.8103	1.7888	1.7712	1.7725	1.7788	1.7833	1.4986
202.500		1.1359	1.3762	1.5389	1.5704	1.5427	1.5301	1.5062	1.4949	1.4949	1.5003	1.2547
225.000	.5189	.6863	.8399	.9394	.9986	.9822	.9495	.9293	.9155	.9054	.8956	.7782
247.500		.2958	.3588	.4016	.4394	.4230	.4079	.4003	.3701	.3437	.3199	.4357
270.000	.0464	.0754	.0993	.1069	.1220	.1169	.1119	.1122	.0930	.0880	.0855	.1132
292.500		.0149	.0175	.0137	.0149	.0238	.0124	.0238	.0175	.0175	.0112	.0137
315.000	.0124	.0124	.0149	.0124	.0049	.0149	.0149	.0086	.0099	.0099	.0074	.0074
326.000									9.9990	.0943	.0074	.0061
346.000		.0137	.0124	.0137	.0099	9.9990	9.9990	.0149	.0112	.0099	.0361	.0111
360.000	.0112	.0602	.0639	.0589	.0501	9.9990	9.9990	.0577	.0614	.0514	.0112	.0112

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

(RIA080) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
 MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 99.730 BETA = .00000 Q(P51) = 10.236 PO = 28.030 P = 3.7970

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2276	-.2318	-.2341	-.2180	-.2259	9.9990	9.9990	-.2158	-.2318	-.2265	-.2223	-.2174
14.000		-.2270	-.2281	-.2123	-.2206	9.9990	9.9990	-.2100	-.2255	-.2198	-.2210	-.2168
24.000									-.2264	-.2213	-.2198	-.2168
45.000	-.2247	-.2259	-.2229	-.2116	-.2188	-.1817	-.1859	-.2036	-.2248	-.2172	-.2107	-.2123
67.500		-.2282	-.2226	-.2120	-.2218	-.1961	-.1905	-.1954	-.2260	-.2169	-.2075	-.2218
90.000	-.2281	-.1887	-.1701	-.1576	-.1364	-.1164	-.1186	-.1243	-.1353	-.1315	-.1187	-.0679
112.500		.0867	.1589	.2129	.2307	.2715	.2662	.2454	.2617	.2791	.2990	.2782
135.000	.2912	.4954	.6259	.7720	.8080	.8754	.8538	.8561	.8496	.8440	.8432	.7234
157.500		.8978	1.1099	1.2816	1.3464	1.3944	1.3910	1.3918	1.4164	1.4107	1.3960	1.1623
180.000	.7612	1.0704	1.3248	1.5114	1.5738	1.6124	1.6156	1.6132	1.6654	1.6612	1.6390	1.3525
202.500		.9117	1.1378	1.3105	1.3666	1.3791	1.3919	1.3950	1.4150	1.4120	1.4045	1.1662
225.000	.3309	.5069	.6730	.7782	.8483	.8570	.8392	.8445	.8388	.8346	.8365	.7166
247.500		.0988	.1664	.2193	.2621	.2488	.2462	.2469	.2193	.2039	.2318	.2408
270.000	-.2160	-.1822	-.1550	-.1357	-.1263	-.1316	-.1316	-.1323	-.1437	-.1399	-.1245	-.0746
292.500		-.2270	-.2190	-.2084	-.2304	-.1929	-.1929	-.1890	-.2130	-.2122	-.2169	-.2217
315.000	-.2261	-.2290	-.2256	-.2135	-.2271	-.2067	-.1980	-.2082	-.2211	-.2222	-.2179	-.2100
326.000									9.9990	-.2164	-.2184	-.2113
346.000		-.2301	-.2317	-.2161	-.2256	9.9990	9.9990	-.2143	-.2264	-.2245	-.2209	-.2122
360.000	-.2276	-.2319	-.2341	-.2180	-.2259	9.9990	9.9990	-.2158	-.2318	-.2285	-.2223	-.2174

MACH (2) = 3.480 ALPHA (1) = 99.750 BETA = .00000 Q(P51) = 6.8630 PO = 60.023 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0559	-.0475	-.0475	-.0492	-.0520	9.9990	9.9990	-.0458	-.0441	-.0469	-.0503	-.0497
14.000		-.0508	-.0520	-.0508	-.0531	9.9990	9.9990	-.0469	-.0475	-.0475	-.0497	-.0497
24.000									-.0497	-.0492	-.0497	-.0497
45.000	-.0554	-.0531	-.0542	-.0520	-.0582	.0268	-.0120	-.0497	-.0497	-.0486	-.0497	-.0492
67.500		-.0571	-.0593	-.0616	-.0655	-.0413	-.0509	-.0559	-.0531	-.0526	-.0542	-.0508
90.000	-.0227	.0014	.0144	.0313	.0442	.0628	.0623	.0488	.0352	.0330	.0358	.0651
112.500		.2223	.2848	.3400	.3592	.3970	.3913	.3654	.3648	.3722	.3823	.3524
135.000	.4079	.6046	.7286	.8797	.9140	.9698	.9580	.9473	.9360	.9264	.9202	.8086
157.500		1.0223	1.2511	1.4264	1.4879	1.5127	1.5228	1.5155	1.5352	1.5375	1.5380	1.3018
180.000	.8706	1.2060	1.4766	1.6756	1.7393	1.7579	1.7562	1.7562	1.7804	1.7922	1.7967	1.5228
202.500		1.0252	1.2618	1.4483	1.4996	1.5047	1.5013	1.4996	1.5063	1.5125	1.5194	1.2906

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T2

(RIA080)

MACH (2) = 3.480 ALPHA (1) = 99.750

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.4468	.6077	.7688	.8826	.9463	.9531	.9300	.9204	.9170	.9147	.9147	.7919	
247.500		.2348	.3002	.3515	.3891	.3791	.3724	.3611	.3357	.3171	.3169	.3384	
270.000	-.0178	.0122	.0353	.0505	.0646	.0601	.0581	.0505	.0398	.0364	.0449	.0702	
292.500		-.0565	-.0559	-.0616	-.0599	-.0441	-.0492	-.0475	-.0469	-.0480	-.0475	-.0458	
315.000	-.0565	-.0559	-.0555	-.0565	-.0610	-.0497	-.0469	-.0497	-.0497	-.0503	-.0497	-.0503	
326.000													
346.000		-.0554	-.0576	-.0559	-.0587	9.9990	9.9990	-.0497	-.0497	-.0503	-.0508	-.0497	
360.000	-.0559	-.0475	-.0475	-.0492	-.0520	9.9990	9.9990	-.0458	-.0441	-.0469	-.0503	-.0497	

MACH (3) = 4.960 ALPHA (1) = 99.750 BETA = .0000 Q(PSI) = 3.0710 PO = 90.042 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.0086	.0515	.0502	.0490	.0427	9.9990	9.9990	.0477	.0502	.0414	.0061	.0061	
14.000		.0389	.0376	.0401	.0351	9.9990	9.9990	.0414	.0326	.0326	.0086	.0086	
24.000									.0074	.0111	.0036	.0049	
45.000	.0137	.0326	.0313	.0376	.0225	.2215	.1295	.0300	.0263	.0263	.0049	.0074	
67.500		.0275	.0225	.0238	.0162	.0414	.0414	.0200	.0187	.0200	-.0001	.0036	
90.000	.0364	.0615	.0703	.0842	.0905	.1069	.1107	.0943	.0765	.0741	.0741	.0969	
112.500		.2685	.3147	.3739	.3865	.4117	.4167	.3802	.3689	.3739	.4268	.3600	
135.000	.4489	.6371	.7543	.9079	.9306	.9722	.9608	.9344	.9104	.8953	.9015	.8199	
157.500		1.0754	1.3022	1.4772	1.5289	1.5289	1.5264	1.5049	1.5112	1.5125	1.5192	1.3126	
180.000	.9167	1.2744	1.5478	1.7417	1.7858	1.7846	1.7619	1.7442	1.7505	1.7594	1.7757	1.5515	
202.500		1.0780	1.3248	1.5100	1.5490	1.5213	1.5075	1.4923	1.4785	1.4835	1.4986	1.3097	
225.000	.4773	.6510	.8021	.9230	.9810	.9633	.9331	.9155	.8991	.8979	.8986	.8072	
247.500		.2807	.3437	.3978	.4369	.4142	.4029	.3915	.3613	.3437	.3160	.4281	
270.000	.0389	.0691	.0955	.1069	.1232	.1144	.1094	.1069	.0918	.0855	.0905	.1182	
292.500		.0149	.0124	.0099	.0137	.0200	.0111	.0174	.0099	.0099	.0074	.0137	
315.000	.0086	.0149	.0111	.0124	.0086	.0162	.0149	.0137	.0111	.0099	.0049	.0099	
326.000													
346.000		.0137	.0112	.0124	.0074	9.9990	9.9990	.0124	9.9990	.0918	.0061	.0061	
360.000	.0086	.0515	.0502	.0490	.0427	9.9990	9.9990	.0477	.0502	.0414	.0061	.0061	

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A081) (16 NOV 74)

REFERENCE DATA

PARAMETRIC DATA

SREF = 572.5550 SQ. FT XMRP = 1085.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = -8.380 BETA = .00000 Q(P51) = 6.8640 PO = 60.032 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6461	.3605	.1554	.0285	.0584	.0280	.0099	.0105	.0105	.0686	.2637	-.0768
14.000		.3965	.1762	.0415	.0501	.0032	.0077	.0150	.0156	.0926	.2178	-.0458
24.000									.0455	.1395	.1609	-.0813
45.000	.7784	.4178	.1930	.0538	.0505	.0623	.0307	.0223	.0318	.0217	.1434	-.0589
67.500		.4150	.1947	.0516	.0414	.0302	.0285	.0200	.0251	.0149	.0634	-.0830
90.000	.8987	.3679	.1844	.0353	9.9990	.0127	.0111	.0043	-.0024	-.0001	.0178	-.0768
112.500		.3064	.1238	.0116	-.0012	-.0091	-.0153	-.0176	-.0285	-.0283	-.0001	-.0589
135.000	.8215	.2465	.0848	-.0114	-.0204	-.0312	-.0328	-.0385	9.9990	-.0486	-.0452	-.0706
157.500		.1879	.0471	-.0306	-.0333	-.0424	-.0368	-.0390	-.0227	-.0447	-.0441	-.0700
180.000	.3710	.1412	.0228	-.0424	-.0430	-.0368	-.0328	-.0317	-.0362	-.0340	-.0306	-.0712
202.500		.1226	.0065	-.0497	-.0430	-.0328	-.0328	-.0396	-.0390	-.0295	-.0272	-.0678
225.000	.3248	.1159	.0043	-.0508	-.0407	-.0265	-.0131	-.0069	-.0114	-.0091	-.0075	-.0678
247.500		.1169	.0037	-.0520	-.0441	-.0317	-.0188	-.0193	-.0216	-.0204	-.0040	-.0627
270.000	.3739	.1428	.0155	-.0475	9.9990	-.0407	-.0407	-.0340	-.0289	-.0255	.0014	-.0533
292.500		.1778	.0397	-.0357	-.0238	-.0295	-.0509	-.0424	-.0481	-.0221	-.0013	-.0712
315.000	.5666	.2460	.0769	-.0176	-.0159	-.0244	-.0486	-.0531	-.0492	-.0159	.0026	-.0757
326.000									-.0159	-.0035	-.0216	-.0762
346.000		.3400	.1536	.0307	.0527	-.0035	.0178	.0037	.0268	.0538	.1879	-.0785
360.000	.8461	.3605	.1554	.0285	.0584	.0280	.0099	.0105	.0105	.0686	.2637	-.0768

MACH (2) = 4.960 ALPHA (1) = -8.330 BETA = .00000 Q(P51) = 3.0700 PO = 90.024 P = .17800

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6197	.3312	.1523	.0817	.0855	.0830	.0653	.0716	.0641	.0754	.1447	-.0026
14.000		.3693	.1673	.0855	.0729	.0653	.0578	.0552	.0565	.0766	.1800	.0011
24.000									.0515	.0855	.1397	-.0114
45.000	.7258	.3954	.1928	.0880	.0767	.0742	.0628	.0578	.0540	.0553	.0988	-.0089
67.500		.3929	.1901	.0817	.0653	.0616	.0603	.0527	.0515	.0464	.0516	-.0114
90.000	.6613	.3526	.1887	.0704	9.9990	.0439	.0515	.0439	.0364	.0364	.0326	-.0114
112.500		.2959	.1321	.0540	.0401	.0326	.0364	.0338	.0275	.0239	.0250	-.0001
135.000	.5025	.2357	.0981	.0401	.0301	.0275	.0263	.0263	9.9990	.0149	.0061	-.0013
157.500		.1991	.0716	.0313	.0250	.0212	.0225	.0200	.0716	.0124	.0011	-.0013
180.000	.3814	.1447	.0590	.0263	.0187	.0162	.0200	.0200	.0200	.0074	.0036	-.0026
202.500		.1233	.0427	.0187	.0149	.0149	.0149	.0149	.0137	.0074	.0049	-.0001

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A0B1)

MACH (2) = 4.950 ALPHA (1) = -8.330

SECTION (TANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.8100	.7380	.8600	.8920	.9230	.9540
THETA												
225.000	.3035	.1145	.0328	.0137	.0099	.0182	.0137	.0137	.0112	.0086	.0099	-.0039
247.500		.1170	.0351	.0149	.0086	.0137	.0099	.0112	.0049	.0049	.0061	.0036
270.000	.3463	.1359	.0452	.0137	8.9990	.0099	.0086	.0112	.0049	.0036	.0049	.0011
292.500		.1636	.0590	.0137	.0187	.0124	.0099	.0086	.0036	.0011	.0036	-.0001
315.000	.5050	.2253	.0890	.0239	.0225	.0061	.0086	.0086	-.0001	-.0001	.0137	-.0064
326.000									.0124	.0239	.0074	-.0051
346.000		.3099	.1372	.0502	.0565	.0328	.0351	.0263	.0288	.0502	.1157	-.0114
360.000	.6197	.3312	.1523	.0817	.0855	.0630	.0553	.0716	.0641	.0754	.1447	-.0026

DATE 09 OCT 78

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T1

(RIA082) (16 NOV 74)

REFERENCE DATA

SREF * 572.5550 SQ. FT XHRP * 1086.4000 IN. XT
 LREF * 324.0000 INCHES YHRP * .0000 IN. YT
 BREF * 324.0000 INCHES ZHRP * 400.0000 IN. ZT
 SCALE * .0030

PARAMETRIC DATA

BETA * .000 OFFSET * .000
 MOUNT * 1.000 PHI * 45.000

MACH (1) * 3.480 ALPHA (1) * -4.330 BETA * .00000 Q(PSI) * 6.8640 PD * 60.034 P * .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5829	.3025	.1148	.0043	.0330	.0060	-.0080	-.0052	-.0058	.0770	.1564	-.0644
14.000		.3194	.1232	.0111	.0381	-.0159	-.0108	-.0041	-.0012	.0635	.1810	-.0712
24.000									.0133	.0538	.1738	-.0852
45.000	.6564	.3261	.1322	.0156	.0302	.0263	.0032	-.0001	-.0029	.0009	.1062	-.0700
67.500		.3273	.1339	.0161	.0133	.0077	.0060	.0003	.0037	-.0035	.0409	-.0802
90.000	.6178	.3051	.1197	.0082	9.9990	-.0013	.0014	-.0035	-.0097	-.0092	.0059	-.0740
112.500		.2798	.1034	-.0002	-.0069	-.0103	-.0103	-.0097	-.0159	-.0159	.0121	-.0633
135.000	.5327	.2522	.0854	-.0120	-.0154	-.0188	-.0176	-.0176	9.9990	-.0204	-.0171	-.0639
157.500		.2161	.0623	-.0227	-.0250	-.0216	-.0193	-.0148	.0003	-.0182	-.0171	-.0633
180.000	.4477	.1879	.0499	-.0295	-.0295	-.0199	-.0171	-.0120	-.0137	-.0148	-.0193	-.0650
202.500		.1800	.0397	-.0334	-.0306	-.0188	-.0159	-.0114	-.0131	-.0126	-.0137	-.0616
225.000	.4189	.1756	.0364	-.0362	-.0328	-.0198	-.0148	-.0097	-.0103	-.0086	-.0064	-.0610
247.500		.1778	.0364	-.0351	-.0334	-.0199	-.0159	-.0109	-.0131	-.0126	.0076	-.0638
270.000	.4508	.1913	.0459	-.0312	9.9990	-.0244	-.0171	-.0182	-.0188	-.0148	.0036	-.0667
292.500		.2117	.0612	-.0249	-.0103	-.0103	-.0221	-.0215	-.0187	-.0260	.0262	-.0655
315.000	.5620	.2476	.0781	-.0165	-.0165	-.0064	-.0250	-.0193	-.0351	-.0086	.0775	-.0650
326.000									-.0035	.0087	.0803	-.0757
346.000		.3160	.1260	.0082	.0280	-.0311	-.0012	-.0024	-.0024	.0793	.1440	-.0751
360.000	.5829	.3025	.1148	.0043	.0330	.0060	-.0080	-.0052	-.0058	.0770	.1564	-.0644

MACH (2) * 4.960 ALPHA (1) * -4.290 BETA * .00000 Q(PSI) * 3.0710 PD * 90.041 P * .17800

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5464	.2732	.1283	.0792	.0842	.0767	.0666	.0704	.0653	.0742	.0855	-.0001
14.000		.2909	.1271	.0716	.0679	.0603	.0540	.0515	.0515	.0653	.0968	-.0089
24.000									.0326	.0502	.0968	-.0102
45.000	.6006	.3047	.1334	.0679	.0641	.0628	.0527	.0502	.0427	.0477	.0590	-.0089
67.500		.3060	.1359	.0590	.0540	.0515	.0527	.0477	.0427	.0427	.0363	-.0127
90.000	.5817	.2886	.1309	.0553	9.9990	.0427	.0477	.0414	.0338	.0351	.0174	-.0127
112.500		.2631	.1089	.0452	.0389	.0338	.0376	.0351	.0250	.0313	.0212	.0036
135.000	.5099	.2391	.0993	.0414	.0338	.0275	.0326	.0326	9.9990	.0237	.0137	.0011
157.500		.2102	.0817	.0351	.0288	.0250	.0288	.0275	.0918	.0225	.0099	.0023
180.000	.4306	.1850	.0716	.0288	.0237	.0250	.0250	.0250	.0263	.0137	.0086	.0011
202.500		.1761	.0603	.0225	.0200	.0225	.0212	.0212	.0174	.0162	.0086	.0011

MSFC 595 (TA-2F) MCRO200 EXTERNAL TANK, T1

(R1A082)

MACH (2) = 4.960 ALPHA (1) = -4.290

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.4041	.1711	.0540	.0187	.0162	.0200	.0187	.0174	.0137	.0099	.0086	.0086	-.0026
247.500		.1724	.0540	.0174	.0124	.0167	.0162	.0162	.0074	.0086	.0162	.0049	
270.000	.4192	.1850	.0653	.0174	9.9990	.0111	.0149	.0162	.0061	.0074	.0099	-.0026	
292.500		.2051	.0716	.0174	.0275	.0137	.0162	.0162	.0074	.0074	.0212	-.0026	
315.000	.5175	.2265	.0842	.0225	.0263	.0137	.0174	.0162	.0011	.0137	.0263	-.0013	
326.000										.0187	.0212	.0300	-.0089
346.000		.2807	.1018	.0313	.0414	.0162	.0200	.0162	.0167	.0338	.0703	-.0114	
360.000	.5464	.2732	.1283	.0792	.0842	.0767	.0666	.0704	.0653	.0742	.0855	-.0001	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A083) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 6.8650 PO = 60.039 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.5113	.2557	.0810	-.0109	.0088	-.0103	-.0170	-.0109	-.0001	.0477	.1597	-.0633		
14.000		.2523	.0810	-.0108	.0099	-.0069	-.0204	-.0108	-.0035	.0494	.1496	-.0700		
24.000									.0059	.0544	.1361	-.0790		
45.000	.5395	.2420	.0792	-.0131	.0014	-.0002	-.0114	-.0109	-.0131	.0059	.1000	-.0757		
67.500		.2488	.0831	-.0114	-.0081	-.0047	-.0086	-.0069	-.0019	-.0092	.0409	-.0683		
90.000	.5356	.2471	.0809	-.0120	9.9990	-.0086	-.0030	-.0058	-.0097	-.0075	.0076	-.0695		
112.500		.2488	.0786	-.0114	-.0131	-.0075	-.0052	-.0030	-.0059	-.0069	.0172	-.0605		
135.000	.5372	.2522	.0831	-.0126	-.0148	-.0092	-.0064	-.0035	9.9990	-.0058	-.0069	-.0554		
157.500		.2476	.0831	-.0114	-.0143	-.0109	-.0069	-.0058	.0206	-.0058	-.0092	-.0520		
180.000	.5294	.2375	.0786	-.0126	-.0165	-.0097	-.0064	-.0041	-.0058	-.0058	-.0086	-.0520		
202.500		.2476	.0814	-.0120	-.0148	-.0114	-.0064	-.0041	-.0058	-.0058	-.0070	-.0069	-.0571	
225.000	.5271	.2492	.0808	-.0126	-.0154	-.0109	-.0075	-.0047	-.0075	-.0070	-.0069	-.0571		
247.500		.2499	.0826	-.0114	-.0131	-.0103	-.0058	-.0024	-.0058	-.0058	.0121	-.0650		
270.000	.5367	.2499	.0842	-.0103	9.9990	-.0103	-.0030	-.0007	-.0081	-.0058	.0082	-.0678		
292.500		.2443	.0814	-.0126	-.0030	-.0058	.0014	-.0075	-.0047	-.0114	.0302	-.0683		
315.000	.5581	.2476	.0814	-.0131	-.0030	.0054	-.0114	-.0120	-.0114	-.0171	.0747	-.0734		
326.000									.0234	.0133	.0595	-.0745		
346.000		.2786	.0993	-.0019	.0110	-.0464	-.0154	-.0137	.0121	.0561	.1090	-.0745		
360.000	.5113	.2557	.0810	-.0109	.0088	-.0103	-.0170	-.0108	-.0001	.0477	.1597	-.0633		

MACH (2) = 4.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 3.0700 PO = 90.020 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4483	.2255	.1020	.0642	.0679	-.0667	.0515	.0553	.0541	.0604	.0578	-.0051	
14.000		.2242	.0931	.0566	.0540	.0528	.0440	.0440	.0452	.0578	.0970	-.0063	
24.000									.0238	.0377	.0830	-.0089	
45.000	.4891	.2241	.0893	.0502	.0477	.0401	.0414	.0389	.0288	.0364	.0477	-.0139	
67.500		.2329	.0956	.0427	.0414	.0401	.0427	.0351	.0338	.0338	.0187	-.0089	
90.000	.5013	.2304	.0880	.0401	9.9990	.0376	.0389	.0338	.0250	.0275	.0086	-.0089	
112.500		.2354	.0905	.0389	.0326	.0288	.0351	.0313	.0263	.0238	.0175	.0036	
135.000	.5101	.2367	.0905	.0351	.0263	.0275	.0288	.0288	.0301	9.9990	.0212	.0125	.0049
157.500		.2354	.0893	.0338	.0275	.0275	.0288	.0263	.100E	.0212	.0112	.0061	
180.000	.5063	.2327	.0892	.0325	.0237	.0262	.0250	.0237	.0250	.0237	.0136	.0112	.0061
202.500		.2379	.0918	.0301	.0212	.0212	.0212	.0200	.0187	.0137	.0112	.0049	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

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MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA083)

MACH (2) = 4.950 ALPHA (1) = -.280

SECTION (TANK)	DEPENDENT VARIABLE CP												
	x/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.5038	.2379	.0918	.0288	.0212	.0200	.0225	.0200	.0162	.0137	.0124	.0023	
247.500		.2341	.0905	.0275	.0187	.0174	.0200	.0187	.0099	.0111	.0149	.0011	
270.000	.4979	.2316	.0888	.0250	.0199	.0187	.0200	.0200	.0099	.0112	.0100	.0037	
292.500		.2266	.0880	.0238	.0250	.0212	.0212	.0200	.0099	.0099	.0263	-.0026	
315.000	.5151	.2203	.0817	.0225	.0250	.0175	.0200	.0187	.0049	.0124	.0389	-.0026	
325.000									.0238	.0238	.0401	-.0039	
346.000		.2493	.0991	.0238	.0313	.0099	.0124	.0124	.0162	.0250	.0540	-.0101	
380.000	.4483	.2255	.1020	.0642	.0679	.0667	.0515	.0553	.0541	.0604	.0578	-.0051	

MSFC 596 (TA-2F) MCRJ200 EXTERNAL TANK, T1

(R1A084) (16 NOV 74)

REFERENCE DATA

SREF = 572.8990 SQ. FT XMRP = 1088.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 3.770 BETA = .00000 Q(PSI) = 6.8850 PO = 60.039 P = .81009

SECTION (1) ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4302	.2072	.0471	-.0280	-.0170	-.0382	-.0272	-.0210	-.0170	.0477	.1282	-.0700	
14.000		.1814	.0426	-.0284	-.0189	-.0446	-.0266	-.0182	-.0114	.0387	.1316	-.0745	
24.000										.0003	.0335	.1372	-.0813
45.000	.4268	.1718	.0352	-.0328	-.0216	-.0165	-.0221	-.0148	-.0182	-.0058	.0989	-.0740	
67.500		.1789	.0403	-.0328	-.0261	-.0159	-.0131	-.0128	-.0058	-.0131	.0268	-.0712	
90.000	.4516	.1913	.0448	-.0300	9.9990	-.0171	-.0126	-.0131	-.0159	-.0143	-.0052	-.0717	
112.500		.2144	.0583	-.0233	-.0250	-.0193	-.0159	-.0131	-.0171	-.0154	-.0103	-.0565	
135.000	.5327	.2460	.0786	-.0148	-.0193	-.0193	-.0165	-.0154	9.9990	-.0182	-.0176	-.0554	
157.500		.2741	.0961	-.0035	-.0103	-.0131	-.0126	-.0126	.0149	-.0159	-.0148	-.0520	
180.000	.6065	.2905	.1135	.0071	-.0019	-.0024	-.0041	-.0058	-.0088	-.0092	-.0103	-.0503	
202.500		.3209	.1276	.0144	.0048	.0042	.0020	-.0002	-.0035	-.0019	-.0019	-.0520	
225.000	.6443	.3333	.1372	.0189	.0110	.0059	.0059	.0042	.0014	.0026	.0037	-.0568	
247.500		.3269	.1326	.0171	.0121	.0031	.0053	.0059	.0019	.0036	.0200	-.0627	
270.000	.6212	.3113	.1209	.0110	9.9990	.0020	.0026	.0037	-.0013	.0009	.0200	-.0678	
292.500		.2803	.1040	-.0002	.0009	.0042	.0009	-.0007	-.0030	-.0089	.0414	-.0678	
315.000	.5502	.2454	.0814	-.0120	-.0092	.0026	-.0035	-.0120	-.0204	-.0120	.1051	-.0655	
326.000									.0026	.0054	.0944	-.0655	
346.000		.2347	.0752	-.0148	-.0159	-.0396	-.0283	-.0255	-.0137	.0465	.1073	-.0745	
360.000	.4302	.2072	.0471	-.0260	-.0170	-.0362	-.0272	-.0210	-.0170	.0477	.1282	-.0700	

MACH (2) = 4.960 ALPHA (1) = 3.730 BETA = .00000 Q(PSI) = 3.0710 PO = 90.033 P = .17800

SECTION (1) ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.3665	.1913	.0968	.0716	.0729	.0779	.0603	.0742	.0641	.0704	.0477	-.0013	
14.000		.1736	.0741	.0615	.0515	.0540	.0489	.0552	.0477	.0578	.0742	-.0039	
24.000									.0225	.0313	.0565	-.0114	
45.000	.3979	.1636	.0729	.0527	.0515	.0477	.0439	.0615	.0389	.0464	.0313	-.0039	
67.500		.1724	.0666	.0401	.0439	.0414	.0489	.0628	.0401	.0389	.0112	.0061	
90.000	.4293	.1850	.0716	.0414	9.9990	.0414	.0414	.0653	.0351	.0338	.1085	.0086	
112.500		.2064	.0804	.0401	.0351	.0338	.0363	.0439	.0275	.0338	.0187	.0238	
135.000	.5137	.2391	.0918	.0389	.0300	.0263	.0313	.0363	9.9990	.0225	.0200	.0250	
157.500		.2719	.1132	.0452	.0376	.0288	.0338	.0351	.1118	.0250	.0137	.0225	
180.000	.5881	.2934	.1288	.0490	.0351	.0288	.0313	.0351	.0328	.0200	.0149	.0200	
202.500		.3211	.1384	.0477	.0351	.0313	.0288	.0338	.0238	.0225	.0175	.0200	

REPRODUCIBILITY OF THIS
ORIGINAL DATA IS POOR

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A084)

MACH (2) = 4.960 ALPHA (1) = 3.730

SECTION (1) TANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1080	.1620	.2160	.3220	.5160	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
225.000	.6359	.3362	.1498	.0540	.0414	.0326	.0338	.0376	.0263	.0238	.0212	.0175	
247.500		.3287	.1472	.0515	.0389	.0288	.0301	.0351	.0212	.0212	.0275	.0099	
270.000	.5146	.3098	.1296	.0427	9.9990	.0250	.0238	.0313	.0149	.0175	.0275	.0099	
292.500		.2783	.1195	.0376	.0338	.0238	.0263	.0313	.0162	.0175	.0237	.0011	
315.000	.5151	.2417	.0956	.0288	.0250	.0250	.0225	.0263	.0099	.0187	.0288	-.0013	
325.000									.0187	.0212	.0369	-.0001	
346.000		.2178	.0868	.0238	.0212	.0137	.0112	.0175	.0061	.0187	.0427	-.0026	
360.000	.3665	.1913	.0868	.0716	.0729	.0779	.0603	.0742	.0641	.0704	.0477	-.0013	

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A085) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 7.800 BETA = .00000 Q(P51) = 6.8640 PO = 60.035 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3498	.1632	.0240	-.0379	-.0311	-.0339	-.0424	-.0418	-.0176	-.0058	.0257	-.0745
14.000		.1398	.0109	-.0425	-.0340	-.0307	-.0369	-.0324	-.0217	.0025	.0933	-.0836
24.000									-.0080	.0302	.0695	-.0847
45.000	.3322	.1140	.0031	-.0470	-.0346	-.0211	-.0256	-.0154	-.0227	-.0109	.0893	-.0796
67.500		.1226	.0082	-.0464	-.0362	-.0255	-.0233	-.0210	-.0182	-.0250	.0105	-.0790
90.000	.3727	.1434	.0172	-.0430	9.9990	-.0317	-.0306	-.0334	-.0357	-.0351	-.0216	-.0734
112.500		.1840	.0414	-.0317	-.0345	-.0390	-.0334	-.0328	-.0357	-.0351	-.0311	-.0621
135.000	.5209	.2414	.0775	-.0137	-.0221	-.0340	-.0351	-.0374	9.9990	-.0379	-.0396	-.0582
157.500		.3086	.1158	.0087	-.0041	-.0137	-.0171	-.0227	.0104	-.0283	-.0276	-.0588
180.000	.6854	.3502	.1564	.0335	.0200	.0116	.0065	.0026	-.0002	-.0035	-.0035	-.0605
202.500		.4073	.1880	.0505	.0359	.0280	.0246	.0189	.0167	.0173	.0178	-.0621
225.000	.7626	.4299	.2016	.0607	.0466	.0381	.0342	.0297	.0263	.0268	.0268	-.0627
247.500		.4158	.1948	.0556	.0454	.0297	.0291	.0263	.0223	.0206	.0443	-.0728
270.000	.7113	.3784	.1676	.0380	9.9990	.0149	.0127	.0110	.0076	.0093	.0318	-.0723
292.500		.3175	.1288	.0155	.0071	.0076	.0009	-.0035	-.0052	.0155	.0166	-.0734
315.000	.5381	.2517	.0872	-.0091	-.0097	.0032	-.0035	-.0114	-.0063	.0099	.0341	-.0717
326.000									.0003	.0099	.0629	-.0683
346.000		.1802	.0477	-.0283	-.0306	-.0503	-.0475	-.0458	-.0120	-.0029	.0285	-.0700
360.000	.3498	.1632	.0240	-.0379	-.0311	-.0339	-.0424	-.0418	-.0176	-.0058	.0257	-.0745

MACH (2) = 4.880 ALPHA (1) = 7.750 BETA = .00000 Q(P51) = 3.0700 PO = 90.029 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3173	.1574	.0729	.0515	.0515	.0566	.0427	.0427	.0414	.0440	.0149	-.0013
14.000		.1334	.0527	.0439	.0338	.0364	.0338	.0364	.0301	.0351	.0641	-.0039
24.000									.0124	.0137	.0200	-.0114
45.000	.3098	.1144	.0477	.0363	.0326	.0313	.0313	.0389	.0250	.0253	.0137	-.0076
67.500		.1207	.0426	.0263	.0250	.0313	.0338	.0414	.0250	.0237	.0023	-.0051
90.000	.3589	.1421	.0527	.0313	9.9990	.0263	.0326	.0452	.0212	.0237	-.0013	-.0013
112.500		.1799	.0653	.0300	.0263	.0237	.0250	.0263	.0225	.0212	.0124	.0086
135.000	.5038	.2353	.0918	.0363	.0250	.0187	.0237	.0200	9.9990	.0137	.0099	.0086
157.500		.2984	.1271	.0477	.0338	.0288	.0275	.0225	.1195	.0187	.0099	.0023
180.000	.6865	.3539	.1649	.0628	.0452	.0389	.0364	.0326	.0364	.0238	.0225	.0023
202.500		.4093	.1964	.0767	.0565	.0477	.0452	.0389	.0376	.0364	.0364	-.0001

MSFC 556 (TA-2F) HCRO200 EXTERNAL TANK, T1

(R1A065)

MACH (2) = 4.960 ALPHA (1) = 7.750

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.7608	.4293	.2064	.0829	.0603	.0502	.0477	.0426	.0401	.0363	.0427	-.0013
247.500		.4194	.2052	.0817	.0628	.0540	.0477	.0427	.0364	.0364	.0477	.0011
270.000	.7016	.3778	.1787	.0666	9.9990	.0338	.0351	.0313	.0238	.0225	.0364	.0011
292.500		.3186	.1372	.0464	.0338	.0313	.0250	.0212	.0137	.0200	.0263	-.0064
315.000	.5126	.2543	.1044	.0301	.0238	.0250	.0187	.0200	.0162	.0225	.0275	-.0064
326.000									.0175	.0250	.0263	-.0076
346.000		.1624	.0641	.0162	.0162	.0036	.0036	.0061	.0036	.0049	.0099	-.0064
360.000	.3173	.1574	.0729	.0515	.0515	.0566	.0427	.0427	.0414	.0440	.0149	-.0013

MSFC 595 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA086) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 12.520 BETA = .00000 Q(PSI) = 6.8610 PD = 60.006 P = .80900

SECTION (TANK)	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.2641	.1276	.0096	-.0406	-.0366	-.0361	-.0519	-.0457	-.0321	-.0084	.0099	-.0604		
14.000		.0953	-.0073	-.0462	-.0446	-.0344	-.0440	-.0502	-.0361	-.0169	.0623	-.0796		
24.000									-.0401	-.0356	.0026	-.0818		
45.000	.2557	.0727	-.0164	-.0502	-.0451	-.0186	-.0175	-.0192	-.0254	-.0237	.0499	-.0830		
67.500		.0782	-.0119	-.0525	-.0452	-.0384	-.0469	-.0536	-.0519	-.0514	-.0345	-.0830		
90.000	.3036	.1035	-.0024	-.0497	9.9990	-.0418	-.0469	-.0486	-.0480	-.0469	-.0435	-.0779		
112.500		.1554	.0291	-.0373	-.0446	-.0486	-.0469	-.0458	-.0492	-.0508	-.0503	-.0700		
135.000	.4998	.2343	.0748	-.0148	-.0272	-.0379	-.0458	-.0497	9.9990	-.0559	-.0582	-.0694		
157.500		.3228	.1334	.0195	.0026	-.0080	-.0165	-.0215	.0404	-.0277	-.0277	-.0706		
180.000	.7551	.4071	.1969	.0595	.0403	.0335	.0228	.0183	.0161	.0121	.0099	-.0740		
202.500		.4969	.2517	.0860	.0691	.0635	.0528	.0466	.0477	.0471	.0460	-.0711		
225.000	.8853	.5305	.2769	.1073	.0865	.0786	.0713	.0634	.0628	.0651	.0618	-.0717		
247.500		.5122	.2641	.0996	.0860	.0680	.0618	.0595	.0567	.0545	.0742	-.0717		
270.000	.7923	.4485	.2202	.0725	9.9990	.0421	.0336	.0308	.1268	.0246	.0375	-.0699		
292.500		.3532	.1587	.0325	.0178	.0173	.0015	-.0001	-.0024	.0043	.0370	-.0683		
315.000	.5381	.2636	.0950	-.0041	-.0125	.0127	-.0001	-.0029	-.0029	.0111	.0635	-.0717		
326.000									-.0001	.0189	.0736	-.0669		
346.000		.1187	.0133	-.0407	-.0497	-.0593	-.0638	-.0531	-.0311	-.0041	.0274	-.0728		
360.000	.2641	.1275	.0096	-.0406	-.0366	-.0361	-.0519	-.0457	-.0321	-.0084	.0099	-.0604		

MACH (2) = 4.960 ALPHA (1) = 12.450 BETA = .00000 Q(PSI) = 3.0710 PD = 90.049 P = .17800

SECTION (TANK)	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.2404	.1283	.0817	.0686	.0691	.0767	.0590	.1750	.0578	.0590	.0036	-.0051	
14.000		.1069	.0927	.0553	.0439	.0464	.0477	.1157	.0389	.0414	.0590	-.0114	
24.000									.0023	.0023	.0049	-.0139	
45.000	.2328	.0918	.0552	.0464	.0464	.0401	.0426	.1132	.0338	.0338	.0011	-.0152	
67.500		.0905	.0401	.0300	.0313	.0363	.0401	.1031	.0288	.0275	-.0089	-.0139	
90.000	.2882	.1107	.0477	.0338	9.9990	.0300	.0376	.1044	.0250	.0250	-.0127	-.0102	
112.500		.1535	.0578	.0313	.0300	.0225	.0313	.1018	.0237	.0225	.0036	.0754	
135.000	.4809	.2278	.0867	.0376	.0300	.0250	.0263	.0981	9.9990	.0149	.0923	.0729	
157.500		.3197	.1384	.0540	.0426	.0300	.0338	.1018	.0502	.0225	.0111	.0716	
180.000	.7442	.4066	.1963	.0792	.0578	.0452	.0477	.1157	.0414	.0313	.0313	.0678	
202.500		.4923	.2467	.1031	.0804	.0628	.0666	.1308	.0565	.0565	.0603	.0678	

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A086)

MACH (2) = 4.880 ALPHA (1) = 12.450

SECTION (TANK)	DEPENDENT VARIABLE CP												
	X/LB	.0950	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.8827	.5278	.2708	.1187	.0905	.0792	.0779	.1434	.0691	.0691	.0754	.0678	
247.500		.5080	.2592	.1106	.0892	.0678	.0703	.1383	.0628	.0590	.0817	-.0013	
270.000	.7744	.4432	.2215	.0892	9.8290	.0502	.0515	.1207	.0401	.0401	.0527	-.0064	
292.500		.3500	.1638	.0565	.0439	.0275	.0288	.1008	.0200	.0237	.0328	-.0089	
315.000	.5187	.2829	.1068	.0313	.0250	.0250	.0262	.0980	.0187	.0237	.0300	-.0089	
328.000									.0187	.0225	.0326	-.0114	
346.000		.1189	.0401	.0088	.0061	-.0013	.0036	.0779	-.0039	-.0026	.0049	-.0102	
360.000	.2404	.1283	.0817	.0658	.0691	.0767	.0590	.1750	.0578	.0590	.0036	-.0051	

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

IR1A087) (16 NOV 74)

PARAMETRIC DATA

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 16.560 BETA = .00000 Q(PS1) = 6.6640 PO = 60.030 P = .81000

SECTION (1) TANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1530	.0895	-.0119	-.0486	-.0491	-.0531	-.0559	.0049	-.0395	-.0266	-.0137	-.0745
14.000		.0527	-.0295	-.0537	-.0543	-.0568	-.0609	-.0261	-.0488	-.0295	.0409	-.0852
24.000									-.0554	-.0351	-.0216	-.0931
45.000	.1834	.0330	-.0322	-.0492	-.0193	-.0187	-.0356	-.0097	-.0384	-.0548	-.0131	-.0903
67.500		.0359	-.0351	-.0621	-.0576	-.0610	-.0621	-.0283	-.0633	-.0655	-.0638	-.0881
90.000	.2285	.0617	-.0255	-.0599	9.9990	-.0638	-.0593	-.0317	-.0638	-.0633	-.0667	-.0681
112.500		.1210	.0060	-.0497	-.0582	-.0666	-.0621	-.0339	-.0638	-.0638	-.0661	-.0469
135.000	.4679	.2161	.0634	-.0221	-.0362	-.0554	-.0555	-.0300	9.9990	-.0667	-.0683	-.0458
157.500		.3408	.1469	.0280	.0088	-.0159	-.0153	.0105	-.0176	-.0283	-.0255	-.0492
180.000	.8184	.4634	.2392	.0871	.3657	.0442	.0414	.0668	.0302	.0296	.0302	-.0486
202.500		.5868	.3169	.1327	.1079	.0950	.0882	.1119	.0826	.0837	.0842	-.0402
225.000	1.0117	.6398	.3564	.1609	.1365	.1192	.1169	.1378	.1068	.1130	.1685	-.0368
247.500		.8072	.3359	.1470	.1307	.0985	.1013	.1284	.0940	.0917	.1226	-.0813
270.000	.8680	.5127	.2681	.1046	9.9990	.0564	.0561	.0832	.0477	.0460	.0640	-.0790
292.500		.3797	.1768	.0465	.0257	.0094	.0009	.0285	-.0074	-.0024	.0302	-.0486
315.000	.5378	.2600	.0938	-.0035	-.0148	.0104	-.0007	.0302	-.0047	.0093	.0533	-.0869
326.000									.0003	.0223	.0651	-.0886
346.000		.0651	-.0250	-.0599	-.0644	-.0841	-.0723	-.0312	-.0413	-.0216	.0240	-.0864
360.000	.1530	.0895	-.0119	-.0486	-.0491	-.0531	-.0559	.0049	-.0395	-.0266	-.0137	-.0745

MACH (2) = 4.860 ALPHA (1) = 16.470 BETA = .00000 Q(PS1) = 3.0700 PO = 90.029 P = .17800

SECTION (1) TANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1447	.1095	.0729	.0629	.0603	.0629	.0503	.1473	.0528	.0515	-.0051	-.0089
14.000		.0830	.0439	.0502	.0376	.0389	.0376	.1195	.0313	.0364	.0275	-.0127
24.000									-.0013	.0023	-.0026	-.0164
45.000	.1724	.0716	.0477	.0426	.0414	.0338	.0351	.1182	.0288	.0288	-.0039	-.0177
67.500		.0679	.0351	.0275	.0313	.0288	.0364	.1082	.0250	.0225	-.0127	-.0152
90.000	.2241	.0868	.0401	.0301	9.9990	.0225	.0313	.1094	.0212	.0187	-.0177	-.0177
112.500		.1321	.0502	.0301	.0301	.0137	.0250	.1069	.0175	.0162	-.0013	.0804
135.000	.4635	.2215	.0867	.0376	.0288	.0174	.0225	.1044	9.9990	.0099	.0011	.0805
157.500		.3400	.1510	.0503	.0439	.0275	.0313	.1107	.0515	.0212	.0152	.0779
180.000	.8213	.4622	.2417	.1057	.0830	.0578	.0653	.1435	.0683	.0540	.0683	.0779
202.500		.5857	.3188	.1447	.1170	.0843	.1019	.1787	.0981	.0981	.1057	.0779

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A087)

MACH (2) = 4.960 ALPHA (1) = 16.470

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.9989	.6371	.3500	.1648	.1321	.1195	.1207	.1988	.1157	.1169	.1258	.0779
247.500		.6069	.3298	.1510	.1295	.1056	.1069	.1875	.1044	.1031	.1308	-.0076
270.000	.8641	.5061	.2618	.1107	9.9990	.0678	.0703	.1510	.0528	.0615	.0855	-.0101
292.500		.3740	.1775	.0666	.0527	.0351	.0326	.1145	.0212	.0225	.0414	-.0114
315.000	.5150	.2594	.1031	.0313	.0250	.0212	.0250	.0981	.0162	.0238	.0414	-.0152
326.000									.0187	.0313	.0376	-.0139
346.000		.0805	.0187	.0036	.0011	-.0064	-.0026	.0830	-.0101	-.0076	.0036	-.0190
360.000	.1447	.1095	.0729	.0629	.0603	.0629	.0503	.1473	.0528	.0515	-.0051	-.0089

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 175

MSFC 596 (TA-2F) MCRD200 EXTERNAL TANK, T1

(R1A088) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(PSI) = 6.8640 PO = 60.031 P = .81000

SECTION (1) TANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.0640	.0195	-.0458	-.0554	-.0554	-.0537	-.0593	.0015	-.0407	-.0232	-.0114	-.0785	
14.000		.0223	-.0446	-.0576	-.0649	-.0621	-.0644	-.0249	-.0508	-.0294	.0285	-.0886	
24.000									-.0569	-.0317	-.0080	-.0920	
45.000	.1254	.0076	-.0447	-.0605	-.0520	-.0492	-.0554	-.0216	-.0565	-.0627	-.0441	-.0909	
67.500		.0037	-.0514	-.0672	-.0689	-.0672	-.0644	-.0289	-.0649	-.0683	-.0650	-.0886	
90.000	.1666	.0268	-.0435	-.0678	9.9990	-.0644	-.0638	-.0306	-.0683	-.0683	-.0723	-.0886	
112.500		.0894	-.0131	-.0582	-.0683	-.0723	-.0672	-.0339	-.0706	-.0594	-.0711	-.0390	
135.000	.4398	.2043	.0565	-.0238	-.0323	-.0571	-.0576	-.0244	9.9990	-.0661	-.0661	-.0402	
157.500		.3820	.1614	.0403	.0172	-.0041	-.0047	.0273	-.0052	-.0137	-.0114	-.0430	
180.000	.8787	.5260	.2876	.1226	.0955	.0769	.0758	.1062	.0657	.0673	.0668	-.0374	
202.500		.6933	.3958	.1890	.1597	.1507	.1423	.1733	.1412	.1457	.1445	-.0227	
225.000	1.1378	.7632	.4527	.2296	.2020	.1874	.1851	.2110	.1783	.1857	.1823	-.0131	
247.500		.7170	.4195	.2088	.1885	.1581	.1603	.1936	.1575	.1569	.2050	-.0745	
270.000	.9469	.5851	.3248	.1524	9.9990	.0921	.0933	.1259	.0854	.0859	.1119	-.0740	
292.500		.4096	.2004	.0640	.0381	.0195	.0127	.0471	.0043	.0127	.0330	-.0686	
315.000	.5274	.2640	.0983	-.0082	-.0143	.0161	.0071	.0397	.0059	.0121	.0296	-.0875	
326.000									.0094	.0262	.0414	-.0898	
346.000		.0200	-.0481	-.0706	-.0734	-.0785	-.0779	-.0261	-.0390	-.0171	.0335	-.0875	
368.000	.0640	.0195	-.0458	-.0554	-.0554	-.0537	-.0593	.0015	-.0407	-.0232	-.0114	-.0785	

MACH (2) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(PSI) = 3.0710 PO = 90.040 P = .17800

SECTION (1) TANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.0931	.0930	.0766	.0729	.0691	.0766	.0590	.0691	.0565	.0640	-.0089	-.0039	
14.000		.0766	.0552	.0628	.0452	.0477	.0464	.0729	.0389	.0477	.0426	-.0064	
24.000									.0036	.0074	.0023	-.0102	
45.000	.1182	.0653	.0477	.0515	.0439	.0401	.0376	.0363	.0300	.0363	-.0089	-.0127	
67.500		.0615	.0452	.0481	.0363	.0351	.0426	.0313	.0313	.0326	-.0114	-.0076	
90.000	.1661	.0691	.0376	.0351	9.9990	.0326	.0363	.0300	.0212	.0275	-.0190	-.0089	
112.500		.1132	.0489	.0338	.0326	.0212	.0313	.0275	.0212	.0237	.0011	-.0013	
135.000	.4307	.2114	.0892	.0452	.0313	.0212	.0263	.0237	9.9990	.0187	.0036	-.0076	
157.500		.3613	.1698	.0766	.0552	.0439	.0439	.0414	.0703	.0361	.0300	-.0064	
180.000	.8931	.5276	.2870	.1396	.1081	.0988	.0955	.0958	.1018	.0993	.1006	-.0051	
202.500		.6915	.4005	.2027	.1649	.1548	.1598	.1611	.1649	.1737	.1787	.0036	

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T1

(RIA08B)

MACH (2) = 4.960 ALPHA (1) = 20.490

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.1460	.7643	.4570	.2391	.2026	.1850	.1976	.1988	.2013	.2127	.2127	.0061
247.500		.7162	.4218	.2177	.1850	.1661	.1698	.1749	.1761	.1824	.2241	.0049
270.000	.8384	.5867	.3361	.1636	9.9990	.1069	.1119	.1157	.1107	.1182	.1421	-.0026
292.500		.4143	.2153	.0943	.0691	.0565	.0477	.0490	.0401	.0477	.0678	-.0064
315.000	.5126	.2682	.1309	.0439	.0288	.0326	.0351	.0301	.0275	.0389	.0427	-.0076
326.000									.0338	.0414	.0464	-.0089
346.000		.0578	.0237	.0086	.0036	-.0013	-.0001	.0049	-.0051	.0023	-.0013	-.0101
360.000	.0931	.0930	.0766	.0729	.0691	.0766	.0590	.0691	.0665	.0640	-.0088	-.0039

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A089) (16 NOV 74)

REFERENCE DATA

PARAMETRIC DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(PSI) = 6.6650 PO = 80.044 P = .81000

SECTION (1) TANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.8100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.0527	-.0317	-.0488	-.0554	-.0531	-.0542	-.0599	-.0564	-.0413	-.0269	-.0143	-.0807		
14.000	.0020	-.0488	-.0571	-.0633	-.0633	-.0644	-.0621	-.0621	-.0488	-.0272	.0538	-.0852		
24.000									-.0588	-.0334	-.0807	-.0881		
45.000	.0820	-.0114	-.0303	-.0610	-.0486	-.0621	-.0644	-.0667	-.0610	-.0655	-.0345	-.0852		
67.500		-.0182	-.0599	-.0678	-.0678	-.0706	-.0667	-.0678	-.0650	-.0706	-.0678	-.0847		
90.000	.1096	-.0030	-.0599	-.0700	9.9990	-.0706	-.0878	-.0700	-.0700	-.0700	-.0769	-.0870		
112.500		.0806	-.0255	-.0610	-.0689	-.0689	-.0667	-.0728	-.0728	-.0717	-.0740	-.0782		
135.000	.4093	.1913	.0527	-.0221	-.0390	-.0576	-.0571	-.0618	9.9990	-.0638	-.0644	-.0769		
157.500		.3812	.1828	.0578	.0335	.0110	.0116	.0082	.0172	.0087	.0099	-.0774		
180.000	.9435	.5846	.3412	.1643	.1361	.1209	.1175	.1175	.1130	.1164	.1130	-.0861		
202.500		.7942	.4865	.2556	.2234	.2229	.2121	.2127	.2172	.2240	.2229	-.0481		
225.000	1.2629	.8871	.5603	.3102	.2848	.2724	.2713	.2662	.2685	.2769	.2654	-.0324		
247.500		.8280	.5164	.2820	.2634	.2290	.2347	.2392	.2375	.2364	.3085	-.0638		
270.000	1.0100	.6584	.3898	.1936	9.9990	.1395	.1417	.1428	.1383	.1400	.1671	-.0712		
292.500		.4384	.2298	.0871	.0634	.0420	.0324	.0330	.0285	.0358	.0595	-.0858		
315.000	.5170	.2629	.1028	.0037	-.0120	.0161	.0155	.0085	.0178	.0262	.0369	-.0869		
326.000										.0223	.0409	.0493	-.0914	
346.000		-.0114	-.0621	-.0779	-.0762	-.0802	-.0798	-.0655	-.0430	-.0221	.0057	-.0915		
360.000	.0527	-.0317	-.0488	-.0554	-.0531	-.0542	-.0599	-.0564	-.0413	-.0266	-.0143	-.0807		

MACH (2) = 4.860 ALPHA (1) = 24.610 BETA = .00000 Q(PSI) = 3.0700 PO = 90.024 P = .17800

SECTION (1) TANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.8100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.0666	.0718	.0628	.0578	.0578	.0552	.0464	.0578	.0489	.0527	-.0089	-.0051		
14.000		.0716	.0427	.0490	.0376	.0313	.0338	.0389	.0326	.0389	.0364	-.0089		
24.000									-.0001	.0011	-.0026	-.0114		
45.000	.0666	.0729	.0414	.0414	.0401	.0326	.0326	.0338	.0263	.0313	-.0039	-.0101		
67.500		.0742	.0328	.0263	.0301	.0275	.0338	.0289	.0275	.0263	-.0127	-.0127		
90.000	.1283	.0716	.0182	.0250	9.9990	.0212	.0263	.0263	.0175	.0212	-.0190	-.0127		
112.500		.0817	.0351	.0250	.0225	.0124	.0225	.0238	.0162	.0162	-.0013	.0011		
135.000	.4208	.2115	.0842	.0388	.0288	.0137	.0225	.0250	9.9990	.0162	.0023	-.0039		
157.500		.3918	.1928	.0889	.0693	.0477	.0515	.0565	.0893	.0590	.0515	-.0026		
180.000	.9523	.5545	.3375	.1737	.1409	.1283	.1372	.1480	.1472	.1510	.1499	.0038		
202.500		.7872	.4723	.2988	.2153	.2178	.2329	.2430	.2488	.2558	.2518	.0124		

MSFC 556 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A089)

MACH (2) = 4.980 ALPHA (1) = 24.510

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.2584	.8780	.5529	.3072	.2682	.2682	.2909	.2997	.2972	.3085	.2997	.0200
247.500		.8301	.5128	.2783	.2442	.2354	.2480	.2644	.2606	.2669	.3110	.0049
270.000	.9780	.8800	.3888	.1984	9.9990	.1422	.1573	.1849	.1824	.1687	.1976	-.0039
292.500		.4395	.2342	.1031	.0742	.0828	.0628	.0704	.0828	.0888	.1044	-.0127
315.000	.4838	.2708	.1186	.0402	.0278	.0377	.0377	.0388	.0388	.0503	.0685	-.0101
328.000									.0351	.0477	.0590	-.0177
346.000		.0452	.0137	.0023	.0011	-.0064	-.0039	.0074	-.0064	-.0001	-.0001	-.0190
360.000	.0888	.0716	.0628	.0578	.0578	.0552	.0464	.0578	.0489	.0527	-.0089	-.0051

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA09D) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(PSI) = 6.8650 PO = 60.03R P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	-.0143	-.0424	-.0497	-.0531	-.0520	-.0497	-.0559	-.0520	-.0447	-.0402	-.0402	-.0802	
14.000	-.0143	-.0576	-.0565	-.0627	-.0621	-.0610	-.0616	-.0616	-.0514	-.0357	.0212	-.0886	
24.000									-.0661	-.0469	-.0317	-.0854	
45.000	.0494	-.0244	-.0520	-.0599	-.0525	-.0604	-.0632	-.0649	-.0638	-.0576	-.0323	-.0852	
67.500		-.0334	-.0605	-.0689	-.0678	-.0661	-.0661	-.0667	-.0638	-.0650	-.0627	-.0836	
90.000	.0617	-.0278	-.0610	-.0706	9.9990	-.0689	-.0650	-.0667	-.0667	-.0661	-.0712	-.0847	
112.500		.0403	-.0334	-.0627	-.0700	-.0695	-.0667	-.0667	-.0695	-.0683	-.0678	-.0706	-.0762
135.000	.3772	.1795	.0499	-.0221	-.0390	-.0514	-.0520	-.0543	9.9990	-.0548	-.0570	-.0790	
157.500		.3958	.2009	.0741	.0499	.0307	.0341	.0318	.0431	.0341	.0364	-.0717	
180.000	.9959	.6437	.3975	.2093	.1828	.1767	.1716	.1761	.1710	.1750	.1699	-.0537	
202.500		.9001	.5829	.3316	.3017	.3113	.3045	.3034	.3079	.3158	.3119	-.0312	
225.000	1.3824	1.0150	.6809	.4048	.3795	.3789	.3846	.3739	.3744	.3840	.3727	-.0086	
247.500		.9395	.6206	.3631	.3474	.3265	.3316	.3361	.3316	.3293	.4127	-.0481	
270.000	1.0724	.7294	.4589	.2476	9.9990	.1924	.2026	.2054	.1986	.2026	.2303	-.0599	
292.500		.4612	.2561	.1102	.0781	.0702	.0806	.0634	.0595	.0685	.0910	-.0819	
315.000	.5074	.2572	.1023	.0076	-.0069	.0330	.0279	.0189	.0335	.0426	.0606	-.0841	
326.000									.0388	.0517	.0685	-.0875	
346.000		-.0261	-.0672	-.0807	-.0779	-.0779	-.0774	-.0678	-.0548	-.0447	-.0374	-.0920	
360.000	-.0143	-.0424	-.0497	-.0531	-.0520	-.0497	-.0559	-.0520	-.0447	-.0402	-.0402	-.0802	

MACH (2) = 4.960 ALPHA (1) = 28.540 BETA = .00000 Q(PSI) = 3.0700 PO = 90.028 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.0338	.0603	.0578	.0565	.0578	.0640	.0452	.0653	.0439	.0515	-.0127	-.0064	
14.000		.0515	.0351	.0477	.0363	.0401	.0326	.0300	.0288	.0376	.0275	-.0114	
24.000									-.0013	-.0076	-.0114	-.0127	
45.000	.0540	.0464	.0364	.0401	.0389	.0389	.0275	.0250	.0238	.0301	-.0127	-.0139	
67.500		.0389	.0275	.0263	.0288	.0301	.0301	.0187	.0238	.0250	-.0139	-.0139	
90.000	.0817	.0414	.0238	.0263	9.9990	.0225	.0275	.0175	.0149	.0200	-.0202	-.0127	
112.500		.0767	.0288	.0238	.0238	.0162	.0212	.0137	.0149	.0162	-.0013	-.0076	
135.000	.3879	.1913	.0729	.0389	.0300	.0250	.0225	.0187	9.9990	.0200	.0011	-.0139	
157.500		.3992	.2102	.1019	.0805	.0691	.0691	.0691	.1157	.0754	.0704	-.0101	
180.000	1.0140	.6474	.3904	.2165	.1838	.1876	.1913	.1951	.1984	.2039	.2039	.0023	
202.500		.8994	.5731	.3312	.2934	.3236	.3274	.3261	.3400	.3463	.3438	.0225	

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA090)

MACH (2) = 4.960 ALPHA (1) = 28.540

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.3970	1.0162	.6711	.4003	.3651	.3966	.4079	.4016	.4041	.4180	.4068	.0351
247.500		.9384	.6197	.3639	.3362	.3450	.3564	.3602	.3589	.3614	.4408	.0124
270.000	1.0506	.7180	.4483	.2518	9.9990	.2115	.2203	.2253	.2241	.2329	.2694	.0086
292.500		.4597	.2606	.1283	.0956	.0893	.0880	.0905	.0905	.0981	.1409	-.0051
315.000	.4912	.2606	.1195	.0452	.0313	.0553	.0452	.0439	.0527	.0716	.0981	-.0101
326.000									.0464	.0716	.0868	-.0076
346.000		.0288	.0112	.0023	.0036	-.0026	-.0039	.0011	-.0089	-.0039	.0074	-.0139
366.000	.0338	.0603	.0578	.0565	.0578	.0640	.0452	.0653	.0439	.0515	-.0127	-.0064

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T1

(R1A091) 16 NOV 74

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1096.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = -8.360 BETA = .00000 Q(PSI) = 6.8650 PO = 60.038 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.6978	.3920	.1640	.0300	.0182	-.0155	.0008	.0002	.0008	.0649	.1783	-.0667		
14.000		.3464	.1413	.0150	.0071	-.0091	-.0041	-.0041	-.0046	.0607	.1971	-.0751		
24.000									.0076	.0629	.1845	-.0859		
45.000	.9262	.2362	.0808	-.0132	-.0075	-.0481	-.0486	-.0515	-.035	-.0115	-.0103	-.0864		
67.500		.1885	.0488	-.0312	-.0306	-.0357	-.0464	-.0492	-.0464	-.0193	-.0058	-.0774		
90.000	.3784	.1457	.0217	-.0435	9.9990	-.0419	-.0435	-.0413	-.0317	-.0244	.0003	-.0706		
112.500		.1232	.0054	-.0497	-.0469	-.0396	-.0232	-.0210	-.0215	-.0182	.0003	-.0667		
135.000	.3316	.1169	.0042	-.0514	-.0458	-.0306	-.0159	-.0081	9.9990	-.0086	-.0080	-.0734		
157.500		.1225	.0054	-.0509	-.0458	-.0362	-.0351	-.0362	-.0024	-.0261	-.0261	-.0706		
180.000	.3733	.1378	.0178	-.0464	-.0492	-.0396	-.0368	-.0390	-.0312	-.0300	-.0300	-.0757		
202.500		.1812	.0426	-.0345	-.0424	-.0441	-.0407	-.0452	-.0441	-.0407	-.0435	-.0757		
225.000	.5079	.2375	.0752	-.0154	-.0278	-.0351	-.0362	-.0458	-.0509	-.0492	-.0509	-.0757		
247.500		.3012	.1152	.0071	-.0075	-.0131	-.0166	-.0238	-.0312	-.0295	-.0081	-.0745		
270.000	.6852	.3622	.1555	.0308	9.9990	.0094	.0116	-.0001	-.0058	-.0018	.0139	-.0796		
292.500		.4000	.1835	.0477	.0404	.0308	.0302	.0144	.0184	.0122	.0589	-.0854		
315.000	.7818	.4223	.1999	.0561	.0471	.0533	.0285	.0183	.0234	.0144	.1276	-.0854		
325.000									.0679	.0521	.0927	-.0785		
346.000		.4347	.2003	.0651	.0454	-.0165	.0166	.0042	.0273	.1012	.1795	-.0852		
360.000	.6978	.3920	.1640	.0300	.0182	-.0155	.0008	.0002	.0008	.0649	.1783	-.0667		

MACH (2) = 4.960 ALPHA (1) = -8.310 BETA = .00000 Q(PSI) = 3.0700 PO = 90.022 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.6411	.3753	.1661	.0842	.0754	.0716	.0641	.0653	.0679	.0868	.1246	.0011	
14.000		.3237	.1410	.0729	.0616	.0477	.0540	.0465	.0528	.0692	.1372	-.0039	
24.000									.0338	.0464	.1157	-.0039	
45.000	.5126	.2354	.1006	.0540	.0477	.0364	.0351	.0301	.0351	.0439	.0175	-.0089	
67.500		.1876	.0742	.0364	.0301	.0288	.0389	.0225	.0275	.0313	-.0013	-.0064	
90.000	.3740	.1472	.0578	.0326	9.9990	.0225	.0328	.0225	.0200	.0275	-.0013	-.0051	
112.500		.1321	.0477	.0263	.0187	.0238	.0288	.0238	.0238	.0275	.0099	-.0051	
135.000	.3299	.1271	.0490	.0250	.0175	.0187	.0283	.0238	9.9990	.0238	.0074	-.0064	
157.500		.1321	.0414	.0187	.0137	.0182	.0212	.0149	.1031	.0200	.0011	-.0064	
180.000	.3728	.1460	.0464	.0175	-.0036	.0137	-.0175	.0112	.0200	.0112	.0011	-.0076	
202.500		.1850	.0616	.0238	.0074	.0086	.0112	.0061	.0086	.0112	-.0001	-.0076	

REPRODUCIBILITY OF THIS
 ORIGINAL PAGE IS POOR

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 182

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A091)

MACH (2) = 4.960 ALPHA (1) = -9.310

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4950	.2379	.0905	.0275	.0124	.0137	.0149	.0086	.0112	.0124	-.0001	-.0089
247.500		.2909	.1208	.0376	.0175	.0162	.0187	.0099	.0099	.0112	.0124	-.0051
270.000	.6587	.3463	.1548	.0527	9.9990	.0250	.0301	.0238	.0200	.0238	.0250	-.0114
292.500		.3816	.1800	.0628	.0502	.0389	.0414	.0338	.0301	.0313	.0515	-.0076
315.000	.7419	.3967	.1850	.0666	.0527	.0477	.0490	.0313	.0238	.0389	.0868	-.0139
326.000									.0540	.0515	.0842	-.0114
346.000		.4068	.1964	.0754	.0515	.0301	.0313	.0250	.0414	.0641	.1321	-.0139
360.000	.6411	.3753	.1661	.0842	.0754	.0716	.0641	.0653	.0679	.0868	.1246	.0011

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA092) (18 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0900 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.460 ALPHA (1) = -4.330 BETA = .00000 Q(PS1) = 6.8640 PO = 60.029 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5916	.3198	.1158	.0042	-.0041	-.0266	-.0137	-.0120	-.0081	.0657	.1503	-.0661
14.000		.2961	.1073	-.0013	-.0019	-.0272	-.0199	-.0103	-.0088	.0566	.1803	-.0628
24.000									-.0018	.0503	.1599	-.0813
45.000	.5350	.2452	.0802	-.0132	-.0064	-.0137	-.0329	-.0272	-.0216	-.0025	.0528	-.0830
67.500		.2195	.0673	-.0227	-.0210	-.0120	-.0266	-.0255	-.0143	-.0165	.0336	-.0756
90.000	.4980	.1952	.0493	-.0289	9.9990	-.0255	-.0148	-.0210	-.0182	-.0120	.0054	-.0649
112.500		.1812	.0414	-.0345	-.0397	-.0244	-.0176	-.0126	-.0126	-.0109	.0105	-.0655
135.000	.4310	.1789	.0386	-.0362	-.0357	-.0210	-.0159	-.0103	9.9990	-.0047	-.0048	-.0650
157.500		.1795	.0397	-.0362	-.0362	-.0232	-.0170	-.0182	.0223	-.0108	-.0103	-.0655
180.000	.4541	.1868	.0482	-.0312	-.0340	-.0244	-.0182	-.0159	-.0131	-.0131	-.0153	-.0694
202.500		.2145	.0590	-.0255	-.0317	-.0249	-.0215	-.0204	-.0193	-.0159	-.0193	-.0693
225.000	.5206	.2467	.0787	-.0148	-.0232	-.0227	-.0193	-.0215	-.0210	-.0187	-.0198	-.0678
247.500		.2765	.0996	-.0029	-.0125	-.0125	-.0103	-.0114	-.0153	-.0153	-.0001	-.0711
270.000	.8127	.3030	.1158	.0065	9.9990	-.0018	-.0001	-.0035	-.0097	-.0063	.0047	-.0757
292.500		.3177	.1255	.0122	.0133	.0094	.0122	-.0024	.0015	-.0046	.0330	-.0824
315.000	.8668	.3281	.1328	.0158	.0195	.0280	.0032	-.0041	-.0012	-.0080	.0843	-.0768
326.000									.0353	.0201	.0629	-.0841
346.000		.3515	.1430	.0283	.0189	-.0368	-.0048	-.0108	.0054	.0764	.1328	-.0785
360.000	.8918	.3199	.1158	.0042	-.0041	-.0266	-.0137	-.0120	-.0081	.0657	.1503	-.0661

MACH (2) = 4.880 ALPHA (1) = -4.290 BETA = .00000 Q(PS1) = 3.0700 PO = 90.032 P = .17800

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5580	.2972	.1334	.0767	.0754	.0718	.0618	.0603	.0653	.0767	.0691	.0849
14.000		.2720	.1170	.0666	.0578	.0502	.0502	.0439	.0527	.0653	.0742	-.0051
24.000									.0253	.0376	.0742	-.0076
45.000	.5176	.2366	.0968	.0540	.0464	.0363	.0401	.0338	.0326	.0439	.0313	-.0101
67.500		.2139	.0880	.0401	.0351	.0338	.0426	.0300	.0353	.0389	.0200	-.0114
90.000	.4433	.1925	.0779	.0376	9.9990	.0275	.0363	.0288	.0275	.0326	.0086	-.0076
112.500		.1812	.0666	.0326	.0237	.0237	.0328	.0253	.0275	.0300	.0175	-.0039
135.000	.4194	.1787	.0666	.0288	.0174	.0212	.0300	.0250	9.9990	.0275	.0099	-.0051
157.500		.1799	.0640	.0263	.0187	.0237	.0263	.0212	.1207	.0263	.0036	-.0064
180.000	.4383	.1875	.0691	.0263	.0137	.0137	.0225	.0187	.0275	.0162	.0049	-.0076
202.500		.2051	.0754	.0237	.0124	.0124	.0174	.0061	.0187	.0174	.0049	-.0029

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A092)

MACH (2) = 4.960 ALPHA (1) = -4.290

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.5013	.2342	.0830	.0263	.0112	.0124	.0175	.0112	.0124	.0112	.0061	-.0089
247.500		.2594	.0968	.0275	.0099	.0149	.0149	.0112	.0099	.0112	.0112	-.0039
270.000	.5806	.2871	.1170	.0351	9.9990	.0137	.0225	.0162	.0149	.0149	.0124	-.0064
292.500		.3009	.1296	.0354	.0275	.0200	.0263	.0212	.0175	.0200	.0238	-.0076
315.000	.6260	.3035	.1246	.0376	.0288	.0263	.0288	.0162	.0086	.0238	.0464	-.0089
326.000									.0263	.0326	.0490	-.0139
346.000		.3261	.1384	.0427	.0313	.0112	.0137	.0112	.0187	.0389	.1019	-.0177
360.000	.5580	.2972	.1334	.0757	.0754	.0716	.0616	.0603	.0653	.0767	.0691	.0049

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A093) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 6.8630 PO = 60.022 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.5122	.2600	.0893	-.0035	.0172	.0071	-.0109	-.0002	.0166	.0544	.1790	-.0548	
14.000		.2583	.0904	-.0019	.0195	.0059	-.0137	-.0019	.0121	.0662	.1621	-.0593	
24.000													
45.000	.5443	.2514	.0881	-.0042	.0098	.0138	-.0058	-.0019	-.0002	.0115	.1142	-.0666	
67.500		.2583	.0950	-.0013	.0014	.0093	-.0007	.0037	.0099	-.0007	.0539	-.0604	
90.000	.5437	.2574	.0934	-.0007	9.9990	.0065	.0049	.0049	.0049	.0032	.0201	-.0593	
112.500		.2563	.0911	-.0029	-.0052	.0060	.0003	.0049	.0054	.0015	.0235	-.0514	
135.000	.5477	.2619	.0945	-.0024	-.0041	.0049	.0009	.0071	9.9990	.0037	-.0001	-.0469	
157.500		.2563	.0911	-.0024	-.0058	.0037	-.0007	.0049	.0184	.0020	-.0012	-.0424	
180.000	.5432	.2495	.0917	-.0018	-.0052	.0043	-.0001	.0049	.0071	.0020	-.0007	-.0424	
202.500		.2579	.0928	-.0024	-.0058	.0060	-.0018	.0049	.0060	.0032	-.0007	-.0424	
225.000	.5420	.2613	.0939	-.0012	-.0041	.0049	-.0007	.0049	.0065	.0032	.0009	-.0463	
247.500		.2613	.0945	-.0007	-.0024	.0065	.0015	.0077	.0077	.0049	.0218	-.0508	
270.000	.5482	.2591	.0928	-.0007	9.9990	.0054	.0043	.0094	.0049	.0043	.0184	-.0542	
292.500		.2517	.0917	-.0024	.0082	.0099	.0094	.0049	.0094	.0003	.0421	-.0559	
315.000	.5612	.2534	.0917	-.0035	.0077	.0206	-.0024	-.0001	.0032	-.0046	.0838	-.0599	
325.000													
346.000		.2831	.1062	.0076	.0200	-.0295	-.0075	-.0024	.0302	.0634	.1148	-.0593	
360.000	.5122	.2600	.0893	-.0035	.0172	.0071	-.0109	-.0002	.0166	.0544	.1790	-.0548	

MACH (2) = 4.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 3.0710 PO = 90.044 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.4847	.2518	.1309	.0943	.1006	.1107	.0792	.0855	.0956	.0905	.1031	.0212	
14.000		.2555	.1232	.0892	.0855	.0955	.0703	.0741	.0804	.0855	.1497	.0162	
24.000													
45.000	.5351	.2619	.1246	.0830	.0792	.0868	.0653	.0716	.0704	.0704	.0842	.0124	
67.500		.2706	.1283	.0741	.0703	.0817	.0691	.0666	.0729	.0628	.0552	.0149	
90.000	.5482	.2731	.1295	.0729	9.9990	.0766	.0640	.0653	.0653	.0565	.0452	.0187	
112.500		.2744	.1258	.0691	.0615	.0703	.0578	.0640	.0640	.0527	.0414	.0300	
135.000	.5527	.2719	.1232	.0640	.0527	.0678	.0515	.0590	9.9990	.0489	.0326	.0288	
157.500		.2706	.1258	.0640	.0565	.0653	.0515	.0552	.1081	.0477	.0326	.0326	
180.000	.5477	.2617	.1194	.0602	.0527	.0602	.0502	.0502	.0565	.0388	.0326	.0338	
202.500		.2618	.1169	.0578	.0477	.0615	.0439	.0489	.0515	.0426	.0326	.0338	

MSFC 586 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A093)

MACH (2) = 4.950 ALPHA (1) = -.280

SECTION (TANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
225.000	.5356	.2618	.1195	.0552	.0464	.0603	.0426	.0477	.0515	.0376	.0313	.0313	.0313
247.500		.2580	.1119	.0603	.0426	.0603	.0351	.0464	.0464	.0376	.0414	.0439	.0439
270.000	.5225	.2555	.1119	.0502	9.9990	.0590	.0401	.0477	.0452	.0376	.0401	.0376	.0376
292.500		.2505	.1094	.0464	.0477	.0628	.0401	.0464	.0452	.0363	.0478	.0352	.0352
315.000	.5490	.2492	.1119	.0477	.0477	.0452	.0401	.0452	.0376	.0351	.0628	.0326	.0326
326.000									.0503	.0515	.0640	.0313	.0313
346.000		.2756	.1258	.0527	.0552	.0527	.0351	.0426	.0515	.0552	.0943	.0339	.0339
360.000	.4647	.2518	.1309	.0943	.1006	.1107	.0792	.0855	.0956	.0905	.1031	.0212	.0212

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(RIA094) (16 NOV 74)

REFERENCE DATA

SREF * 572.5550 SQ. FT XMRP * 1086.4000 IN. XT
 LREF * 324.0000 INCHES YMRP * .0000 IN. YT
 BREF * 324.0000 INCHES ZMRP * 400.0000 IN. ZT
 SCALE * .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 3.770 BETA = .00000 Q(PSI) = 6.8640 P0 = 60.027 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4364	.1976	.0561	-.0176	.0020	-.0001	-.0148	-.0086	.0026	.0680	.1378	-.0593
14.000		.2123	.0612	-.0176	.0049	-.0148	-.0193	-.0108	.0009	.0567	.1383	-.0667
24.000									.0009	.0392	.1265	-.0723
45.000	.5369	.2488	.0865	-.0047	.0048	.0127	.0020	-.0041	.0003	.0009	.1231	-.0723
67.500		.2856	.1108	.0060	-.0001	.0116	.0009	.0032	.0111	.0032	.0488	-.0678
90.000	.6218	.3147	.1293	.0178	9.9990	.0121	.0104	.0099	.0104	.0121	.0324	-.0633
112.500		.3335	.1413	.0251	.0167	.0173	.0105	.0122	.0133	.0116	.0313	-.0514
135.000	.6668	.3493	.1508	.0280	.0184	.0184	.0133	.0133	9.9990	.0116	.0127	-.0469
157.500		.3355	.1423	.0251	.0144	.0178	.0104	.0110	.0279	.0087	.0082	-.0447
189.000	.6218	.3070	.1306	.0195	.0105	.0122	.0054	.0054	.0071	.0026	-.0002	-.0430
202.500		.2901	.1153	.0088	.0020	.0049	-.0024	-.0018	-.0001	-.0041	-.0069	-.0447
225.000	.5372	.2619	.0956	-.0018	-.0097	-.0029	-.0097	-.0074	-.0046	-.0080	-.0092	-.0464
247.500		.2303	.0781	-.0120	-.0120	-.0080	-.0103	-.0052	-.0029	-.0046	-.0030	-.0452
270.000	.4719	.2066	.0607	-.0198	9.9990	-.0053	-.0069	-.0046	-.0035	-.0046	.0031	-.0514
292.500		.1864	.0516	-.0255	-.0108	.0003	-.0041	-.0018	.0043	-.0035	.0358	-.0514
315.000	.4465	.1812	.0448	-.0288	-.0159	.0003	-.0148	-.0054	-.0081	.0003	.0933	-.0497
326.000									.0251	.0093	.0792	-.0531
346.000		.2123	.0652	-.0198	-.0035	-.0238	-.0114	-.0080	.0049	.0618	.1265	-.0599
360.000	.4364	.1976	.0561	-.0176	.0020	-.0001	-.0148	-.0086	.0026	.0680	.1378	-.0593

MACH (2) = 4.860 ALPHA (1) = 3.730 BETA = .00000 Q(PSI) = 3.0710 P0 = 90.045 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4243	.2039	.1183	.0956	.0981	.1120	.0779	.0905	.0918	.0888	.0578	.0200
14.000		.2165	.1107	.0892	.0779	.0892	.0666	.0766	.0779	.0779	.0892	.0149
24.000									.0401	.0426	.0540	.0124
45.000	.9281	.2556	.1245	.0804	.0729	.0829	.0640	.0729	.0729	.0653	.0779	.0111
67.500		.2920	.1384	.0779	.0888	.0829	.0891	.0691	.0729	.0691	.0569	.0162
90.000	.8259	.5835	-.3971	.8823	8.8880	.1158	.2203	.0755	.0882	.0717	.0488	.0187
112.500		.3488	.1888	.0042	.0891	.0768	.0815	.0891	.0891	.0803	.0477	.0338
135.000	.8782	.3983	.1749	.0699	.0688	.0703	.0590	.0888	8.9990	.0540	.0401	.0351
157.500		.3482	.1836	.0792	.0818	.0888	.0585	.0990	.1132	.0489	.0391	.0363
180.000	.8308	.3185	.1873	.0741	.0803	.0640	.0489	.0585	.0815	.0428	.0338	.0389
202.500		.3048	.1348	.0840	.0489	.0565	.0414	.0477	.0477	.0376	.0326	.0428

MSFC 586 (TA-2F) MCRD200 EXTERNAL TANK, T1

(R1A094)

MACH (2) = 4.860 ALPHA (1) = 3.730

SECTION (TANK)	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8351	.2843	.1220	.0552	.0439	.0540	.0378	.0452	.0477	.0383	.0338	.0401
247.500		.2328	.1031	.0502	.0378	.0477	.0351	.0428	.0438	.0328	.0328	.0484
270.000	.4554	.2089	.0905	.0414	8.9990	.0477	.0313	.0428	.0414	.0313	.0313	.0478
292.500		.1938	.0817	.0376	.0363	.0515	.0351	.0428	.0401	.0351	.0338	.0464
315.000	.4358	.1850	.0779	.0363	.0351	.0439	.0326	.0401	.0363	.0326	.0502	.0351
326.000									.0414	.0452	.0527	.0328
348.000		.2089	.0880	.0376	.0401	.0439	.0300	.0401	.0401	.0414	.0663	.0328
360.000	.4243	.2039	.1183	.0956	.0991	.1120	.0779	.0905	.0918	.0868	.0578	.0200

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

PAGE 189

MSFC 596 (TA-2F) MCRO200 EXTERNAL TANK, T1

(RIA095) (16 NOV 74)

REFERENCE DATA

GREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
 MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 7.800 BETA = .00000 Q(P51) = 8.8840 PO = 80.027 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3543	.1432	.0222	-.0239	-.0110	-.0070	-.0233	-.0200	-.0055	.0267	.0979	-.0576
14.000		.1713	.0396	-.0233	-.0143	-.0183	-.0329	-.0262	-.0031	.0013	.0673	-.0695
24.000									-.0029	.0026	.0516	-.0728
45.000	.5164	.2389	.0805	-.0068	-.0068	.0077	-.0012	.0004	-.0001	.0139	.0449	-.0734
67.500		.3081	.1272	.0156	.0026	.0105	-.0007	-.0007	.0032	.0133	.0173	-.0734
90.000	.6970	.3707	.1678	.0404	9.9990	.0229	.0139	.0133	.0133	.0094	.0347	-.0740
112.500		.4186	.1999	.0607	.0483	.0381	.0291	.0308	.0302	.0251	.0539	-.0627
135.000	.7923	.4409	.2116	.0662	.0493	.0454	.0364	.0358	9.9990	.0307	.0324	-.0565
157.500		.4206	.2031	.0623	.0426	.0420	.0313	.0330	.0499	.0262	.0246	-.0548
180.000	.6999	.3645	.1728	.0449	.0285	.0274	.0139	.0144	.0133	.0065	.0043	-.0525
202.500		.3171	.1362	.0218	.0088	.0049	-.0074	-.0091	-.0103	-.0159	-.0210	-.0508
225.000	.5246	.2546	.0945	-.0018	-.0131	-.0165	-.0283	-.0294	-.0300	-.0334	-.0356	-.0503
247.500		.1952	.0572	-.0227	-.0278	-.0238	-.0312	-.0266	-.0250	-.0289	-.0294	-.0480
270.000	.3679	.1570	.0347	-.0339	9.9990	-.0193	-.0272	-.0255	-.0232	-.0289	-.0193	-.0559
292.500		.1288	.0178	-.0424	-.0233	-.0052	-.0227	-.0193	-.0193	-.0266	.0009	-.0616
315.000	.3369	.1198	.0099	-.0469	-.0322	-.0091	-.0210	-.0086	-.0131	-.0080	.0883	-.0632
326.000									.0127	-.0012	.0764	-.0638
346.000		.1475	.0251	-.0339	-.0227	-.0232	-.0249	-.0199	-.0024	.0466	.1063	-.0582
360.000	.3543	.1422	.0222	-.0239	-.0110	-.0070	-.0233	-.0200	-.0065	.0267	.0979	-.0576

MACH (2) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(P51) = 3.0700 PO = 90.021 P = .17800

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3513	.1625	.1070	.0894	.0906	.1108	.0730	.0818	.0906	.0818	.0439	.0200
14.000		.1838	.1031	.0842	.0729	.0817	.0653	.0666	.0754	.0716	.0805	.0124
24.000									.0288	.0275	.0540	.0112
45.000	.5113	.2468	.1208	.0817	.0691	.0842	.0653	.0666	.0704	.0666	.0477	.0074
67.500		.3148	.1485	.0792	.0653	.0754	.0679	.0603	.0691	.0628	.0502	.0099
90.000	.7041	.3803	.1838	.0905	9.9990	.0767	.0679	.0641	.0691	.0578	.0565	.0124
112.500		.4282	.2165	.1019	.0830	.0855	.0691	.0716	.0716	.0566	.0666	.0238
135.000	.7986	.4509	.2291	.1057	.0817	.0868	.0691	.0729	9.9990	.0653	.0540	.0225
157.500		.4282	.2178	.0981	.0754	.0792	.0628	.0653	.1460	.0616	.0515	.0263
180.000	.6965	.3778	.1976	.0893	.0653	.0679	.0553	.0565	.0691	.0477	.0351	.0263
202.500		.3236	.1598	.0691	.0540	.0603	.0401	.0439	.0515	.0389	.0263	.0313

REPRODUCIBILITY OF THE
 ORIGINAL PAGE IS POOR

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA0951)

MACH (2) = 4.960 ALPHA (1) = 7.750

SECTION (1) TANK	DEPENDENT VARIABLE CP												
X/LB	.0529	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
225.000	.5164	.2568	.1233	.0527	.0401	.0464	.0313	.0338	.0452	.0301	.0238	.0288	
247.500		.2014	.0918	.0414	.0275	.0401	.0250	.0326	.0401	.0263	.0238	.0414	
270.000	.3753	.1636	.0666	.0301	9.9990	.0414	.0238	.0326	.0376	.0250	.0212	.0414	
292.500		.1409	.0603	.0288	.0338	.0427	.0275	.0326	.0389	.0275	.0250	.0389	
315.000	.3261	.1271	.0477	.0250	.0250	.0376	.0250	.0313	.0313	.0288	.0338	.0288	
326.000									.0313	.0326	.0427	.0263	
346.000		.1523	.0565	.0288	.0238	.0338	.0212	.0275	.0326	.0275	.0490	.0250	
360.000	.3513	.1625	.1070	.0894	.0906	.1108	.0730	.0818	.0906	.0818	.0439	.0200	

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIAD96) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 12.500 BETA = .00000 Q(P51) = 6.8650 PO = 60.038 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.2899	.1035	.0015	-.0339	-.0244	-.0221	-.0368	-.0424	-.0255	-.0131	.0217	-.0757	
14.000		.1362	.0037	-.0322	-.0317	-.0322	-.0508	-.0492	-.0277	-.0114	.0611	-.0790	
24.000									-.0266	-.0131	.0172	-.0796	
45.000	.4927	.2257	.0741	-.0097	-.0176	.0093	.0031	-.0024	-.0013	.0093	.0296	-.0830	
67.500		.3254	.1383	.0234	.0048	.0104	-.0058	-.0041	-.0030	.0071	-.0007	-.0830	
90.000	.7637	.4263	.2026	.0634	9.9990	.0364	.0257	.0228	.0200	.0189	.0442	-.0774	
112.500		.5040	.2589	.0983	.0814	.0640	.0555	.0555	.0538	.0516	.0854	-.0734	
135.000	.9097	.5418	.2798	.1090	.0859	.0747	.0679	.0673	9.9990	.0634	.0645	-.0633	
157.500		.5068	.2640	.1012	.0775	.0707	.0589	.0600	.0609	.0555	.0538	-.0605	
180.000	.7632	.4217	.2138	.0713	.0527	.0426	.0313	.0296	.0279	.0223	.0183	-.0638	
202.500		.3417	.1513	.0324	.0144	.0076	-.0069	-.0086	-.0131	-.0171	-.0204	-.0627	
225.000	.5034	.2465	.0921	-.0030	-.0176	-.0278	-.0413	-.0435	-.0469	-.0520	-.0543	-.0616	
247.500		.1676	.0409	-.0306	-.0402	-.0452	-.0497	-.0452	-.0458	-.0481	-.0469	-.0578	
270.000	.3158	.1135	.0071	-.0469	9.9990	-.0402	-.0486	-.0475	-.0458	-.0469	-.0402	-.0616	
292.500		.0831	-.0086	-.0548	-.0351	-.0407	-.0537	-.0571	-.0565	-.0514	-.0362	-.0678	
315.000	.2522	.0747	-.0143	-.0565	-.0430	-.0182	-.0216	-.0176	-.0289	-.0182	.0538	-.0672	
326.000									.0116	-.0159	.0364	-.0757	
346.000		.0978	.0803	-.0458	-.0379	-.0345	-.0334	-.0328	-.0261	-.0154	.0471	-.0717	
360.000	.2899	.1035	.0015	-.0339	-.0244	-.0221	-.0368	-.0424	-.0255	-.0131	.0217	-.0757	

MACH (2) = 4.960 ALPHA (1) = 12.430 BETA = .00000 Q(P51) = 3.0700 PO = 90.022 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP												
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA													
.000	.2921	.1283	.0868	.0754	.0729	.0991	.0603	.0691	.0691	.0628	.0301	.0124	
14.000		.1536	.0805	.0704	.0540	.0717	.0515	.0528	.0553	.0528	.1334	.0099	
24.000									.0238	.0225	.0389	.0049	
45.000	.4937	.2392	.1157	.0729	.0641	.0805	.0603	.0603	.0628	.0578	.0452	.0023	
67.500		.3337	.1611	.0779	.0603	.0716	.0590	.0540	.0603	.0515	.0439	.0023	
90.000	.7621	.4320	.2190	.1031	9.9990	.2153	.0704	.0666	.0691	.0641	.0691	.0036	
112.500		.5076	.2707	.1283	.0994	.1006	.0842	.0855	.0880	.0805	.1044	.0149	
135.000	.9069	.5441	.2984	.1409	.1069	.1094	.0931	.0956	9.9990	.0880	.0905	.0162	
157.500		.5191	.2884	.1322	.1044	.0981	.0855	.0893	.1700	.0818	.0792	.0137	
180.000	.7633	.4383	.2354	.1057	.0817	.0830	.0628	.0653	.0729	.0553	.0515	.0149	
202.500		.3513	.1762	.0779	.0565	.0590	.0401	.0427	.0452	.0338	.0275	.0187	

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A095)

MACH (2) = 4.960 ALPHA (1) = 12.430

SECTION (TANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4950	.2593	.1207	.0527	.0376	.0439	.0288	.0275	.0300	.0187	.0175	.0175
247.500		.1800	.0779	.0364	.0250	.0364	.0175	.0225	.0250	.0149	.0175	.0351
270.000	.3110	.1296	.0578	.0288	9.9990	.0338	.0212	.0250	.0250	.0175	.0175	.0313
292.500		.0994	.0401	.0250	.0301	.0338	.0200	.0225	.0238	.0162	.0149	.0250
315.000	.2455	.0931	.0401	.0250	.0263	.0288	.0238	.0288	.0200	.0149	.0212	.0263
326.000									.0275	.0238	.0238	.0250
346.000		.1183	.0502	.0263	.0225	.0326	.0200	.0250	.0225	.0149	.0288	.0200
360.000	.2921	.1283	.0868	.0754	.0729	.0991	.0603	.0691	.0691	.0628	.0301	.0124

DATE 09 OCT 75

TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) HCRO200 EXTERNAL TANK, T1

(RIA097) 16 NOV 74 1

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 16.580 BETA = .00000 Q(PSI) = 8.8660 PO = 60.050 P = .81000

SECTION (1)ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.2313	.0866	-.0098	-.0369	-.0312	-.0239	-.0487	-.0397	-.0340	-.0284	-.0013	-.0757		
14.000		.1032	.0009	-.0369	-.0408	-.0442	-.0528	-.0470	-.0414	-.0335	.0781	-.0838		
24.000									-.0514	-.0413	-.0142	-.0852		
45.000	.4629	.2165	.0696	-.0126	-.0250	.0155	.0025	-.0030	.0002	.0059	.0228	-.0864		
67.500		.3487	.1582	.0359	.0144	.0111	-.0052	-.0052	-.0041	.0037	-.0007	-.0852		
90.000	.8351	.4910	.2516	.0955	9.9990	.0599	.0510	.0431	.0442	.0437	.0665	-.0774		
112.500		.6020	.3310	.1479	.1265	.1057	.0955	.0978	.0966	.0955	.1451	-.0728		
135.000	1.0449	.6561	.3877	.1665	.1395	.1289	.1164	.1188	9.9990	.1175	.1181	-.0565		
157.500		.8080	.3388	.1538	.1271	.1107	.1023	.1051	.1231	.1008	.0999	-.0887		
180.000	.6387	.4871	.2657	.1057	.0820	.0702	.0572	.0581	.0521	.0488	.0459	-.0661		
202.500		.3699	.1727	.0465	.0245	.0144	-.0013	-.0007	-.0047	-.0088	-.0120	-.0850		
225.000	.4785	.2392	.0892	-.0035	-.0216	-.0334	-.0458	-.0481	-.0514	-.0554	-.0593	-.0661		
247.500		.1379	.0268	-.0390	-.0520	-.0554	-.0616	-.0599	-.0542	-.0548	-.0559	-.0616		
270.000	.2465	.0749	-.0148	-.0587	9.9990	-.0542	-.0627	-.0610	-.0554	-.0576	-.0554	-.0672		
292.500		.0429	-.0296	-.0628	-.0476	-.0577	-.0684	-.0588	-.0605	-.0616	-.0554	-.0694		
315.000	.1800	.0369	-.0340	-.0650	-.0537	-.0204	-.0295	-.0306	-.0526	-.0497	-.0143	-.0723		
326.000									-.0103	-.0328	-.0221	-.0729		
346.000		.0597	-.0150	-.0555	-.0527	-.0431	-.0549	-.0662	-.0572	-.0497	-.0154	-.0745		
360.000	.2313	.0665	-.0098	-.0369	-.0312	-.0239	-.0487	-.0397	-.0340	-.0284	-.0013	-.0757		

MACH (2) = 4.960 ALPHA (1) = 16.470 BETA = .00000 Q(PSI) = 3.0710 PO = 90.047 P = .17800

SECTION (1)ANK	DEPENDENT VARIABLE CP													
	X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA														
.000	.2316	.1132	.0868	.0729	.0729	.0994	.0565	.0679	.0716	.0679	.0124	.0049		
14.000		.1258	.0767	.0666	.0540	.0704	.0477	.0527	.0553	.0540	.0754	.0074		
24.000									.0162	.0174	.0200	-.0001		
45.000	.4621	.2253	.1089	.0678	.0578	.0842	.0590	.0603	.0615	.0628	.0401	.0011		
67.500		.3525	.1724	.0855	.0678	.0766	.0615	.0578	.0640	.0565	.0464	-.0014		
90.000	.8374	.4948	.2618	.1258	9.9990	.1044	.0867	.0880	.0842	.0955	.0036			
112.500		.6069	.3388	.1673	.1371	.1321	.1157	.1207	.1258	.1182	.1610	.0137		
135.000	1.0515	.6599	.3789	.1862	.1547	.1497	.1358	.1421	9.9990	.1409	.1421	.0162		
157.500		.6145	.3525	.1736	.1409	.1409	.1207	.1295	.2265	.1258	.1232	.0137		
180.000	.6399	.4973	.2769	.1396	.1031	.1044	.0817	.0880	.0943	.0792	.0766	.0099		
202.500		.3739	.1963	.0867	.0678	.0666	.0452	.0527	.0527	.0452	.0313	.0086		

REPRODUCIBILITY OF THIS
 ORIGINAL PAGE IS POOR

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A097)

MACH (2) = 4.960 ALPHA (1) = 16.470

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5160	.8100	.7350	.8500	.8920	.9230	.9540
THETA												
225.000	.4734	.2484	.1144	.0489	.0376	.0489	.0237	.0288	.0300	.0200	.0081	.0099
247.500		.1497	.0640	.0288	.0162	.0313	.0137	.0200	.0212	.0111	.0089	.0275
270.000	.2379	.0930	.0361	.0187	9.9990	.0300	.0111	.0200	.0187	.0149	.0099	.0275
292.500		.0666	.0301	.0175	.0288	.0288	.0137	.0200	.0175	.0112	.0124	.0237
315.000	.1686	.0578	.0237	.0162	.0200	.0338	.0149	.0225	.0137	.0111	.0137	.0263
326.000									.0162	.0137	.0111	.0199
346.000		.0804	.0300	.0162	.0162	.0313	.0099	.0162	.0149	.0099	.0074	.0212
360.000	.2318	.1132	.0868	.0729	.0729	.0994	.0565	.0679	.0716	.0679	.0124	.0049

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA099) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(P51) = 6.8630 PO = 60.021 P = .81000

SECTION (1) ANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.1830	.0432	-.0227	-.0475	-.0430	-.0469	-.0582	-.0508	-.0407	-.0272	-.0165	-.0773	
14.000		.0748	-.0136	-.0469	-.0503	-.0554	-.0632	-.0542		-.0379	-.0227	.0499	-.0830
24.000									-.0435	-.0272	-.0108	-.0852	
45.000	.4378	.2050	.0646	-.0142	-.0277	.0189	.0043	.0003	.0032	.0150	.0386	-.0852	
67.500		.3677	.1750	.0493	.0257	.0178	.0031	.0037	.0031	.0059	.0342	-.0852	
90.000	.8971	.5550	.3025	.1322	9.9990	.0894	.0860	.0815	.0798	.0804	.1040	-.0683	
112.500		.7072	.4158	.2066	.1824	.1559	.1503	.1554	.1554	.1537	.2089	-.0666	
135.000	1.1689	.7833	.4682	.2360	.2078	.1892	.1818	.1841	9.9990	.1847	.1869	-.0446	
157.500		.7113	.4251	.2138	.1840	.1688	.1586	.1637	.1806	.1603	.1593	-.0548	
180.000	.9040	.5516	.3188	.1446	.1187	.1063	.0939	.0934	.0934	.0877	.0837	-.0644	
202.500		.3913	.1941	.0634	.0397	.0273	.0133	.0149	.0116	.0082	.0037	-.0672	
225.000	.4502	.2309	.0917	-.0012	-.0187	-.0345	-.0458	-.0452	-.0480	-.0520	-.0559	-.0650	
247.500		.1103	.0122	-.0458	-.0576	-.0638	-.0706	-.0649	-.0604	-.0621	-.0627	-.0593	
270.000	.1830	.0421	-.0294	-.0672	9.9990	-.0661	-.0711	-.0661	-.0616	-.0632	-.0587	-.0672	
292.500		.0105	-.0469	-.0717	-.0542	-.0678	-.0717	-.0661	-.0649	-.0666	-.0565	-.0666	
315.000	.1198	.0099	-.0452	-.0706	-.0587	-.0311	-.0599	-.0548	-.0655	-.0678	-.0407	-.0700	
326.000									-.0339	-.0407	-.0379	-.0756	
346.000		.0404	-.0215	-.0604	-.0576	-.0503	-.0740	-.0689	-.0542	-.0373	-.0143	-.0728	
360.000	.1830	.0422	-.0227	-.0475	-.0430	-.0469	-.0582	-.0508	-.0407	-.0272	-.0165	-.0773	

MACH (2) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(P51) = 3.0700 PO = 90.024 P = .17800

SECTION (1) ANK		DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540	
THETA													
.000	.1862	.1046	.0894	.0794	.0857	.1008	.0655	.0768	.0794	.0730	.0149	.0086	
14.000		.1108	.0730	.0705	.0617	.0743	.0528	.0604	.0604	.0591	.0855	.0086	
24.000									.0137	.0149	.0225	.0049	
45.000	.4356	.2140	.1069	.0729	.0653	.0880	.0666	.0704	.0729	.0716	.0578	.0011	
67.500		.3702	.1913	.0956	.0805	.0868	.0716	.0729	.0792	.0704	.0754	.0023	
90.000	.8941	.5491	.3085	.1535	9.9990	.1183	.1132	.1195	.1246	.1183	.1460	.0099	
112.500		.6953	.4143	.2.78	.1901	.1762	.1699	.1838	.1926	.1863	.2454	.0212	
135.000	1.1589	.7656	.4646	.2416	.2114	.2051	.2001	.2127	9.9990	.2152	.2215	.0288	
157.500		.7104	.4307	.2266	.1926	.1787	.1762	.1901	.2896	.1913	.1988	.0237	
180.000	.8868	.5580	.3375	.1674	.1384	.1321	.1170	.1283	.1384	.1246	.1195	.0187	
202.500		.3954	.2140	.0968	.0792	.0742	.0553	.0666	.0653	.0578	.0515	.0200	

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1

(R1A098)

MACH (2) = 4.960 ALPHA (1) = 20.490

SECTION (1)ANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4331	.2405	.1233	.0927	.0439	.0452	.0288	.0364	.0389	.0250	.0137	.0149
247.500		.1270	.0578	.0288	.0200	.0338	.0149	.0250	.0225	.0149	.0124	.0275
270.000	.1837	.0715	.0401	.0212	9.9990	.0262	.0161	.0275	.0237	.0111	.0137	.0225
292.500		.0477	.0301	.0162	.0364	.0275	.0149	.0250	.0250	.0149	.0137	.0225
315.000	.1157	.0427	.0187	.0149	.0238	.0275	.0137	.0225	.0162	.0112	.0162	.0187
325.000									.0137	.0149	.0149	.0175
346.000		.0616	.0275	.0162	.0149	.0250	.0099	.0187	.0162	.0099	.0112	.0212
360.000	.1862	.1046	.0894	.0794	.0857	.1008	.0555	.0768	.0794	.0730	.0149	.0086

MSFC 596 (TA-2F) HCRO200 EXTERNAL TANK, T1

(RIA099) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
 LREF = 324.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(PSI) = 6.8620 PO = 60.017 P = .81000

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1475	.0207	-.0271	-.0463	-.0429	-.0412	-.0553	-.0452	-.0350	-.0164	-.0024	-.0734
14.000		.0427	-.0283	-.0486	-.0536	-.0531	-.0593	-.0508	-.0401	-.0322	.0561	-.0813
24.000									-.0468	-.0390	-.0396	-.0824
45.000	.4056	.1920	.0578	-.0136	-.0300	.0229	.0127	.0082	.0158	.0313	.0409	-.0830
67.500		.3953	.1961	.0655	.0419	.0317	.0193	.0199	.0250	.0323	.0437	-.0807
90.000	.9608	.6198	.3566	.1740	9.9990	.1272	.1294	.1266	.1283	.1300	.1621	-.0627
112.500		.8132	.5065	.2760	.2506	.2269	.2213	.2326	.2331	.2337	.3132	-.0582
135.000	1.2962	.9073	.5758	.3149	.2867	.2749	.2687	.2749	9.9990	.2788	.2782	-.0255
157.500		.8205	.5189	.2861	.2546	.2416	.2343	.2438	.2581	.2416	.2399	-.0396
180.000	.9676	.6209	.3814	.1909	.1638	.1520	.1407	.1446	.1480	.1407	.1345	-.0537
202.500		.4175	.2190	.0832	.0573	.0398	.0336	.0370	.0353	.0319	.0274	-.0665
225.000	.4242	.2219	.0900	.0009	-.0193	-.0311	-.0424	-.0396	-.0413	-.0458	-.0514	-.0661
247.500		.0838	-.0012	-.0508	-.0621	-.0649	-.0734	-.0694	-.0649	-.0661	-.0700	-.0627
270.000	.1238	.0111	-.0446	-.0711	9.9990	-.0666	-.0734	-.0694	-.0655	-.0672	-.0666	-.0627
292.500		-.0142	-.0565	-.0745	-.0531	-.0700	-.0740	-.0700	-.0666	-.0678	-.0632	-.0694
315.000	.0787	-.0091	-.0537	-.0723	-.0649	-.0559	-.0683	-.0689	-.0666	-.0689	-.0441	-.0683
32F.000									-.0469	-.0373	-.0390	-.0717
346.000		.0212	-.0334	-.0661	-.0644	-.0644	-.0734	-.0717	-.0458	-.0289	-.0058	-.0706
360.000	.1475	.0207	-.0271	-.0463	-.0429	-.0412	-.0553	-.0452	-.0350	-.0164	-.0024	-.0734

MACH (2) = 4.960 ALPHA (1) = 24.510 BETA = .00000 Q(PSI) = 3.0700 PO = 90.021 P = .17800

SECTION (1) TANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1624	.0918	.0779	.0691	.0704	.0931	.0578	.0679	.0704	.0666	.0124	.0086
14.000		.1007	.0641	.0641	.0540	.0704	.0490	.0528	.0578	.0591	.0792	.0074
24.000									.0124	.0893	.0275	.0061
45.000	.4194	.2140	.1094	.0704	.0603	.0868	.0691	.0704	.0817	.0817	.0792	.0049
67.500		.3978	.2127	.1056	.0829	.0905	.0804	.0792	.0905	.0829	.1031	.0074
90.000	.9687	.6298	.3627	.1913	9.9990	.1811	.1573	.1624	.1750	.1737	.2090	.0162
112.500		.8288	.5113	.2858	.2531	.2594	.2505	.2657	.2795	.2770	.3602	.0225
135.000	1.3252	.9233	.5819	.3211	.2846	.3009	.2972	.3135	9.9990	.3211	.3198	.0376
157.500		.8444	.5343	.2999	.2608	.2696	.2658	.2835	.3856	.2860	.2820	.0313
180.000	.9888	.6361	.3979	.2115	.1762	.1800	.1712	.1813	.1964	.1800	.1775	.0225
202.500		.4320	.2493	.1183	.0956	.0843	.0792	.0880	.0931	.0855	.0754	.0149

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A099)

MACH (2) = 4.960 ALPHA (1) = 24.510

SECTION (1) TANK	DEPENDENT VARIABLE CP											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.8100	.7350	.8800	.8920	.9230	.9540
THETA												
225.000	.4289	.2417	.1220	.0540	.0414	.0477	.0326	.0351	.0401	.0283	.0212	.0124
247.500		.1170	.0565	.0288	.0225	.0376	.0200	.0238	.0238	.0162	.0099	.0238
270.000	.1384	.0590	.0313	.0137	9.9990	.0238	.0124	.0212	.0238	.0137	.0074	.0238
292.500		.0389	.0212	.0137	.0263	.0250	.0175	.0200	.0212	.0124	.0099	.0250
315.000	.0842	.0376	.0162	.0137	.0162	.0275	.0124	.0175	.0162	.0124	.0137	.0338
328.000									.0112	.0149	.0124	.0275
346.000		.0578	.0250	.0137	.0137	.0250	.0124	.0149	.0187	.0099	.0112	.0225
350.000	.1824	.0918	.0779	.0891	.0704	.0931	.0578	.0679	.0704	.0666	.0124	.0086

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1

(RIA100) (16 NOV 74)

REFERENCE DATA

BREF = 872.5550 SQ. FT XMRP = 1088.4000 IN. XT
 LREF = 304.0000 INCHES YMRP = .0000 IN. YT
 BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
 SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
 MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(P51) = 6.8640 PO = 60.035 P = .81000

SECTION (1) ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1209	.0049	-.0362	-.0508	-.0497	-.0418	-.0870	-.0514	-.0418	-.0300	-.0435	-.0785
14.000		.0189	-.0388	-.0526	-.0593	-.0531	-.0583	-.0565	-.0482	-.0447	.0388	-.0830
24.000									-.0627	-.0568	-.0570	-.0847
45.000	.3727	.1806	.0561	-.0137	-.0283	.0330	.0262	.0223	.0347	.0561	.0868	-.0830
67.500		.4015	.2127	.0809	.0555	.0527	.0431	.0426	.0478	.0600	.0640	-.0798
90.000	1.0166	.6829	.4141	.2179	9.9990	.1745	.1802	.1807	.1835	.1864	.2223	-.0599
112.500		.9202	.6046	.3521	.3273	.3132	.3087	.3211	.3205	.3205	.4229	-.0481
135.000	1.4111	1.0348	.8922	.4037	.3767	.3750	.3739	.3772	8.9990	.3784	.3800	-.0075
157.500		.9254	.6212	.3626	.3333	.3282	.3248	.3344	.3462	.3293	.3285	-.0255
180.000	1.0252	.6837	.4409	.2375	.2099	.2054	.1998	.1998	.2043	.1969	.1919	-.0441
202.500		.4364	.2454	.1040	.0764	.0590	.0589	.0623	.0651	.0572	.0561	-.0638
225.000	.3983	.2121	.0904	.0026	-.0159	-.0266	-.0357	-.0362	-.0351	-.0396	-.0402	-.0740
247.500		.0628	-.0092	-.0554	-.0661	-.0661	-.0734	-.0706	-.0650	-.0661	-.0695	-.0672
270.000	.0758	-.0143	-.0548	-.0768	9.9990	-.0683	-.0751	-.0700	-.0655	-.0667	-.0661	-.0717
292.500		-.0351	-.0650	-.0802	-.0588	-.0689	-.0745	-.0706	-.0672	-.0683	-.0610	-.0745
315.000	.0442	-.0266	-.0621	-.0773	-.0728	-.0627	-.0745	-.0723	-.0711	-.0678	-.0447	-.0762
326.000									-.0632	-.0582	-.0419	-.0774
346.000		.0042	-.0452	-.0734	-.0717	-.0700	-.0768	-.0757	-.0571	-.0351	-.0289	-.0785
360.000	.1209	.0049	-.0362	-.0508	-.0497	-.0418	-.0570	-.0514	-.0418	-.0300	-.0435	-.0785

MACH (2) = 4.680 ALPHA (1) = 28.540 BETA = .00000 Q(P51) = 3.0700 PO = 90.009 P = .17800

SECTION (1) ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1422	.0882	.0832	.0718	.0731	.0895	.0617	.0668	.0680	.0643	.0149	.0086
14.000		.0907	.0629	.0642	.0503	.0718	.0516	.0503	.0541	.0579	.0880	.0099
24.000									.0137	.0175	.0313	.0086
45.000	.3979	.2103	.1107	.0729	.0641	.0931	.0792	.0767	.0906	.0981	.0931	.0036
67.500		.4208	.2342	.1183	.0956	.1044	.0956	.0918	.1044	.1019	.1208	.0074
90.000	1.0430	.6980	.4233	.2317	9.9990	.2027	.2090	.2116	.2242	.2267	.2669	.0212
112.500		.9347	.6071	.3551	.3224	.3476	.3413	.3551	.3639	.3627	.4685	.0289
135.000	1.4386	1.0417	.6852	.4055	.3665	.4093	.4055	.4181	9.9990	.4231	.4282	.0565
157.500		.9397	.6197	.3677	.3274	.3602	.3602	.3702	.4534	.3715	.3702	.0452
180.000	1.0165	.6928	.4834	.2543	.2216	.2392	.2291	.2367	.2493	.2405	.2318	.0250
202.500		.4458	.2882	.1346	.1107	.1183	.0894	.1094	.1145	.1107	.1018	.0182

1000'S PRESSURE SOURCE
 1000'S PRESSURE SOURCE
 1000'S PRESSURE SOURCE

MSFC 596 (TA-2F) MICRO200 EXTERNAL TANK, T1

(R1A100)

MACH (2) = 4.960 ALPHA (1) = 28.540

SECTION 1 TANK	DEPENDENT VARIABLE CP												
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.0230	.9540	
THETA													
225.000	.3992	.2342	.1246	.0578	.0477	.0578	.0364	.0401	.0427	.0364	.0263	.0099	
247.500		.1031	.0565	.0301	.0263	.0326	.0212	.0238	.0212	.0187	.0124	.0250	
270.000	.1069	.0490	.0326	.0162	9.9990	.0250	.0137	.0225	.0225	.0124	.0149	.0225	
292.500		.0326	.0250	.0175	.0288	.0313	.0200	.0212	.0212	.0124	.0137	.0275	
315.000	.0666	.0351	.0175	.0162	.0200	.0301	.0162	.0200	.0162	.0137	.0112	.0212	
326.000									.0137	.0124	.0099	.0200	
346.000		.0515	.0263	.0149	.0149	.0225	.0162	.0137	.0175	.0061	.0049	.0250	
360.000	.1422	.0882	.0832	.0718	.0731	.0895	.0617	.0668	.0680	.0643	.0149	.0086	