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BOEING

Solid Rocket Booster Performance Evaluation Model

VOLUME III – SAMPLE CASE

(NASA-CR-150337) SOLID ROCKET BOOSTER PERFORMANCE EVALUATION MODEL. VOLUME 3: SAMPLE CASE (Boeing Aerospace Co., Huntsville, Ala.) 268 p HC A12/MF A01 CSCL 21H G3/20

N77-27183

Unclas 36837

AUG 1977
RECEIVED
NASA STI FACILITY
INPUT BRANCH

CONTRACT NAS8-29643

DCN 1-2-50-23786
SOLID ROCKET BOOSTER PERFORMANCE EVALUATION MODEL

Solid Rocket Booster Performance Evaluation Model

VOLUME III – SAMPLE CASE

PREPARED BY

BOEING AEROSPACE COMPANY
(A DIVISION OF THE BOEING COMPANY)
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SEPTEMBER 7, 1974

PREPARED FOR

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GEORGE C. MARSHALL SPACE FLIGHT CENTER
HUNTSVILLE, ALABAMA

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ACKNOWLEDGEMENTS

Contributions to the development, programming and documentation of the Solid Rocket Booster Performance Evaluation Model were made by the following personnel:

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Any questions concerning this document should be directed to the responsible Project Supervisor.

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1.0 INTRODUCTION

This document contains Volume III of a set of four Volumes which describe the SRB-II program. Volume I contains the engineering description, Volume II contains the User's Manual, Volume III contains the sample case prediction, and Volume IV contains the program listing.

The sample case presented in this Volume is a performance prediction for the sample solid rocket motor shown in Figure 1-1 on the following page. This motor contains a five segmented grain. The first segment has a 14 pointed star configuration with a web which wraps partially around the forward dome. The other segments are circular in cross-section and are tapered along the interior burning surface. Two of the segments are inhibited on the forward face. The nozzle is not assumed to be submerged.

This performance prediction is broken into two simulation parts. Part One determines the delivered end item specific impulse and the propellant properties which are required as inputs for the Internal Ballistics Module. Part Two presents the internal ballistics simulation for the entire burn duration of the motor.

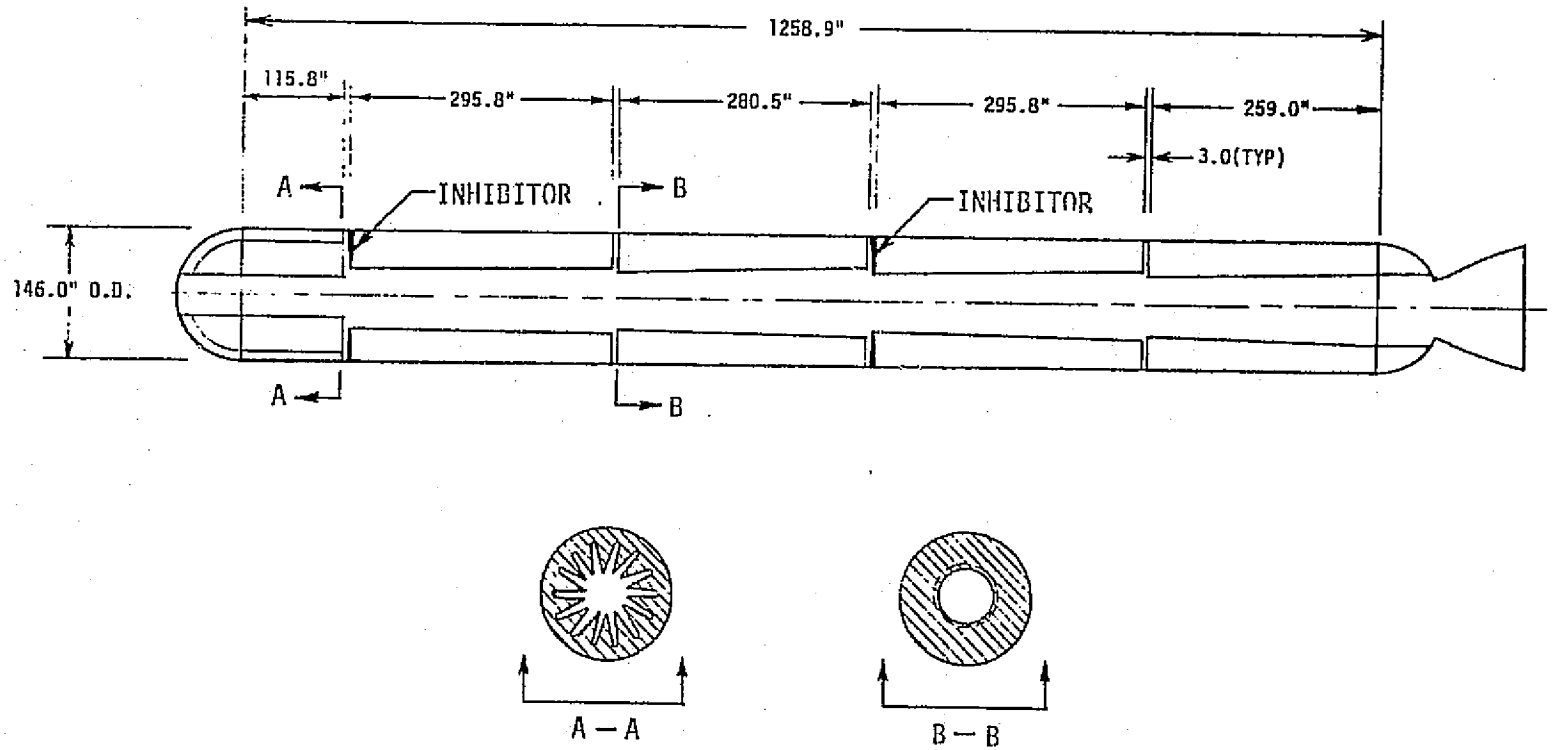


FIGURE 1-1 SAMPLE SRM CONFIGURATION

2.0 SAMPLE PREDICTION, PART ONE

This portion of the sample prediction contains the simulation required to obtain the delivered end item specific impulse and the propellant combustion products properties to be used by the Internal Ballistics Module in the second part of the sample prediction. The Internal Ballistics Module requires combustion gas properties input data for temperature, specific heat ratio, characteristic exhaust velocity at the nozzle throat, and either the molecular weight or the gas constant. The data for each input can be set as a constant. However, a more accurate performance simulation is obtained if these data are input as variables. Part One establishes these propellant combustion products as functions of pressure.

The propellant chosen for the sample motor is a PBAN type propellant with 16% Aluminum and has the following composition:

$$C_{0.929}H_{3.679}O_{2.442}N_{0.627}Al_{0.593}Cl_{0.600}\left(\frac{\text{gm-atom}}{100\ \text{gms}}\right)$$

This is a hypothetical propellant and is used only for sample prediction purposes. The assumed density is 0.064 LB_M/IN^3 and the assumed nominal burn rate equation as a function of pressure is

$$r = 0.066P^{0.233}$$

The Isp Scaling Module (SISCAL) was chosen to determine the gas properties. SISCAL was called by setting NSI=1 in the Control Data Package. Input used by this module are the expected average nozzle entrance total pressure, PCAVE, the expected average throat diameter, DTE, the expected average nozzle area ratio, ARETE, the nozzle half-angle in radians, and the expected characteristic exhaust velocity efficiency, ETACS.

Subroutine LEWIS was exercised (NLEWIS=1) and the combustion gas data was printed (IRKO1=1) for several pressure points. These data were used in the prediction in paragraph 3.0. The pressure points evaluated were PCAVE and 500, 700, and 900 PSIA. Required data for Subroutine LEWIS were the REACTANTS, species, and INSERT cards to describe the constituents of the propellant and combustion products.

The printout for Part One of the sample prediction begins on page 2-5 with a listing of the input data cards exactly as they were arranged in the data deck. This is followed by a title page and a page which

2.0 (Continued)

lists the major program constants and indicators. The propellant combustion products output begins on page 2-9 with the data generated by Subroutine LEWIS. Page 2-17 presents the data that was generated by the Specific Impulse Scaling Module.

Figure 2-1 presents a flowchart of the SRB-II program and shows the simulation steps taken in Part One of the sample prediction.

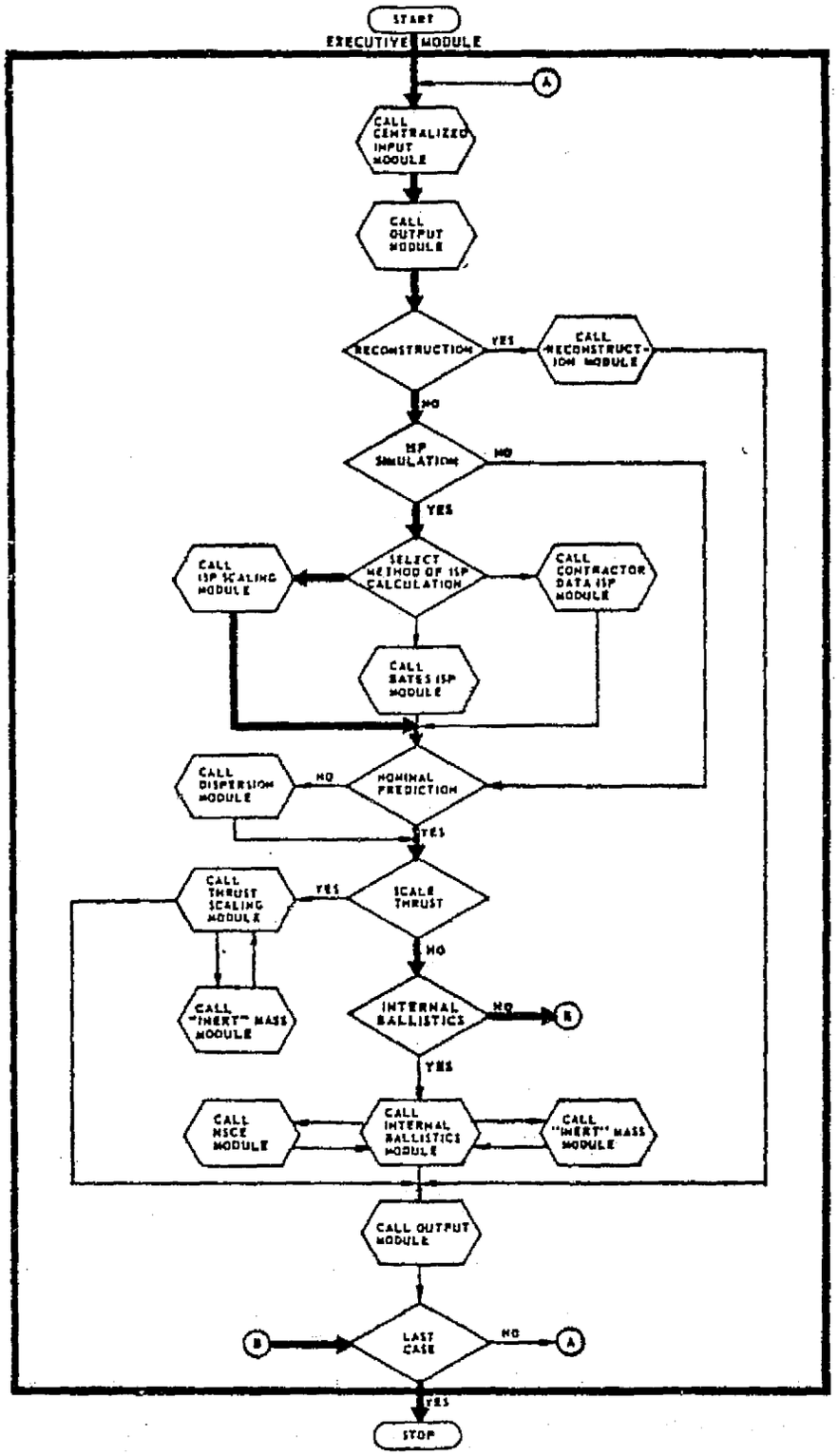


FIGURE 2-1 SAMPLE PREDICTION, PART ONE

SAMPLE PREDICTION PRINTOUT, PART ONE

CARD IMAGE OF INPUT DATA FOR CASE 1

```
CONTROL DATA CARDS
 &INPUT1
 TITLE='SAMP','LE S','RM P','ERFO','RMAN','CE P','REDI','CTIO','N   ',
 NF=-1,
 NSI=1,
 NLEWIS=1,
 IRKTO1=1,
 PCAVE=580.,
 DTE=53.55,
 ETACS=0.9928,
 AHALFE=.2967,
 ARETE=6.85,
 MITOT=9770.0,
 &END
IDNOZL DATA CARDS
 &ONEDNZ
 IDNPRT=0.
 &END
LEWIS DATA
REACTANTS
C  1.                                        11.158            S 298.15 F
H  1.                                        3.708             S 298.15 F
O  1.                                        39.078            S 298.15 F
N  1.                                        8.783             S 298.15 F
AL 1.                                        15.999            S 298.15 F
CL 1.                                        21.274  -72000.   S 298.15 F

INSERT        AL203(L)
END
IBM DATA CARDS
 &IBDATA
 HCO=1258.9,
 DELZ=30.,
 AINCIN(1)=0.0,115.8,118.8,414.6,417.6,698.1,701.1,996.9,999.9,1258.9,
 SA(1)=115.8,414.6,698.1,996.9,
 SB(1)=118.8,417.6,701.1,999.9,
 RF(1)=10*71.5,
 ANO(1)=2*14.,8*4.,
 TAUW(1)=2*8.70,36.4,33.5,36.4,33.5,36.4,33.5,36.4,32.5,
 ALS1(1)=2*39.8,
 AO1(1)=2*17.0,
 AO2(1)=2*17.0,
 AO3(1)=2*17.0,
 R2(1)=2*0.5,
 R5(1)=2*2.0,
 DTAU(1)=2*1.,8*2.,
 DTAUW(1)=2*.5,8*2.,
 AN2=17.0,
 DE=140.22,
 DT=53.0,
 PONBAR=578.7,
 ERBAR=0.0045,
 EREXP=1.0,
 STFLAG=1.,
 TST=1.,
 DELTST=0.25,
 DELTSS=2.0,
 DELTTO=1.0,
 ANTTW=5.,
```

```
TIMAX=135.,
PA=14.7,
PHI=29.4,
AKR(2)=0.066,0.233,
AKR(36)=0.066,0.233,
AKSLOT(1)=0.066,0.233,
AKU(1)=5000.,
SLTBRN(1)=2.0,0.0,2.0,0.0,
NAKEND=3,
NAKR=9,
TIMAKR(1)=0.0,7.1,54.,71.6,89.,106.3,113.3,124.6,130.,
TBLAKR(1)=2*.00105,.00132,.0015,.00132,-.00018,-.00195,-.0048,-.0048,
AINCPL=627.6,
NTAUTO=1,
NPH=5,
TIMEPH(1)=0.0,0.25,0.5,0.75,1.0,
PHST(1)=14.7,490.,725.,800.,815.,
DELF=0.064,
R=55.2,
NCSTR=6,
PRESS(1)=0.,400.,600.,800.,1000.,1800.,
TCOMB(1)=5950.,6125.,6197.,6248.,6282.,6282.,
AMWG(1)=28.,28.27,28.39,28.47,28.54,28.54,
GAMAG(1)=1.1612,1.1615,1.1616,1.1618,1.1619,1.1619,
DLRF=0.01,
DRVRF=0.01,
AK=0.50,
AKK=0.5,
DH1=36.,
DN1=80.,
BH=1.0,
BN=1.0,
AOHM=75.42,
AONM=55.62,
BTAOE=1.0,
RIG=18.,
HHR=35.75,
NCM=13,
TIMECM(1)=0.0,31.,32.,38.0,46.,54.,58.,76.,110.,116.,120.,124.,140.,
TBLCM(1)=2*.965,.964 ,.962 ,.960 ,.959,.960,.961,.960,.958,.954,.949,.947,
NCSCOE=0,
PRTFLG=1.,
NWRTAB=1,
KMOICG=1,
VCHINP=764380.,
VFHD=594380.,
KPLANE=10,
NGEOHD=12,
TAUHD(1)=0.,0.5,2.0,4.0,6.0,8.7,9.0,10.0,12.0,14.0,16.253,17.0,
ABHD(1)=55000.,55300.,55400.,54700.,52700.,48200.,44000.,34000.,21000.,
10500.,2*0.0,
&END
CASE END
```

ALL DATA CARDS FOR THIS CASE HAVE BEEN TRANSFERED TO DISK

```
*****************************************************************************
*                                                                           *
* SPACE SHUTTLE SOLID ROCKET BOOSTER PERFORMANCE EVALUATION MODEL           *
*                                                                           *
* SAMPLE SRM PERFORMANCE PREDICTION                                         *
*                                                                           *
*****************************************************************************
```

THESE ARE THE INITIAL VALUES FOR CASE 1

PROGRAM CONSTANTS

MOTOR CONSTANTS

```
MC( 1)= 0.17180000E-03
MC( 2)=  5184.0000
MC( 3)=  8.8199997
MC( 4)=  1000.0000
MC( 5)= 0.16999997E-01
MC( 6)=  5144.0000
MC( 7)=  5144.0000
MC( 8)= -1.0000000
MC( 9)=  2.9582996
MC(10)=  2.9582996
MC(11)= 0.0
MC(12)= 0.0
MC(13)= 0.0
MC(14)= 0.0
MC(15)=  68.199997
MC(16)= 0.0
MC(17)= 0.0
MC(18)= 0.0
MC(19)= 0.0
MC(20)= 0.0
MC(21)= 0.0
MC(22)= 0.0
MC(23)=  4886.0000
```

CURVE FIT CONSTANTS

```
AK( 1)=  246.62000
AK( 2)=  5.4059992
AK( 3)=-0.14399999
AK( 4)=  1.4938993
AK( 5)= 0.62402999
AK( 6)=-0.30534999E-02
AK( 7)=-0.42780000E-03
AK( 8)= 0.86193995E-05
AK( 9)=-0.46339999E-07
AK(10)= 0.85429996
AK(11)= 0.24400000E-01
AK(12)=-0.12500000E-02
CSCOEF(1)=  4735.2266
CSCOEF(2)= 0.95469534E-01
CSCOEF(3)=-0.35990190E-04
```

UNIVERSAL CONSTANTS

```
CK(1)=  32.173996
CK(2)=  14.695999
CK(3)=  778.00000
CK(4)=  3.1415892
```

ODD CONSTANTS

```
OK(1)=  1.0000000
OK(2)=  1.0000000
OK(3)=  1.0000000
OK(4)=  100.00000
OK(5)=  6.0000000
```

DISPERSION LIMITS

```
DISLIM( 1)= 0.0
DISLIM( 2)= 0.0
DISLIM( 3)= 0.0
DISLIM( 4)= 0.0
DISLIM( 5)= 0.0
DISLIM( 6)= 0.0
DISLIM( 7)= 0.0
DISLIM( 8)= 0.0
DISLIM( 9)= 0.0
DISLIM(10)= 0.0
DISLIM(11)= 0.0
```

GENERAL PROGRAM INDICATORS

```
CLAME =   0.0
DPB   =   0.0
DPE   =   0.0
LIST1 =        T
NCARD =        0
NCASES=        1
NDISP =        0
NF    =       -1
NLEWIS=        1
NMP   =        0
NPLOT =        0
NRECON=        0
NSI   =        1
NTAPE =        0
NTB   =        0
SIBT  =   0.0
```

INERT MASS SCHEDULE

AMPRR	AMIRR
0.0	0.0
0.0	0.0
0.0	0.0
0.89999974E-01	0.14999998
0.15999997	0.23499995
0.25500000	0.32499999
0.73999995	0.66999996
0.84999996	0.76999998
0.92799997	0.88999995
1.0000000	1.0000000

OPTIONAL PRINT INDICATORS

```
IRKT01=  1
```

```
INERT MASS ISP(SII)=  190.00000
TOTAL INERT MASS(MITOT)=  9770.0000
```

THEORETICAL ROCKET PERFORMANCE ASSUMING EQUILIBRIUM COMPOSITION DURING EXPANSION

PC = 580.0 PSIA

	CHEMICAL FORMULA	WT FRACTION (SEE NOTE)	ENERGY CAL/MOL	STATE	TEMP DEG K	DENSITY G/CC
FUEL	C 1.00000	0.11158	0.0	S	298.15	0.0
FUEL	H 1.00000	0.03708	0.0	S	298.15	0.0
FUEL	O 1.00000	0.39078	0.0	S	298.15	0.0
FUEL	N 1.00000	0.08783	0.0	S	298.15	0.0
FUEL	AL 1.00000	0.15999	0.0	S	298.15	0.0
FUEL	CL 1.00000	0.21274	-72000.000	S	298.15	0.0

O/F= 0.0 PERCENT FUEL=100.0000 EQUIVALENCE RATIO= 1.6725 REACTANT DENSITY= 0.0

	CHAMBER	THROAT	EXIT
PC/P	1.0000	1.7351	40.327
P, ATM	39.466	22.746	0.9787
T, DEG K	3440	3245	2315
RHO, G/CC	3.9687-3	2.4465-3	1.5168-4
H, CAL/G	-432.0	-560.4	-1143.8
S, CAL/(G)(K)	2.2967	2.2967	2.2967
M, MOL WT	28.381	28.641	29.440
(DLV/DLP)T	-1.02063	-1.01596	-1.00220
(DLV/DLT)P	1.3659	1.2952	0.0
CP, CAL/(G)(K)	0.9201	0.8376	0.0
GAMMA (S)	1.1381	1.1402	0.9978
SON VEL,M/SEC	1070.9	1036.4	807.7
MACH NUMBER	0.0	1.000	3.022
AE/AT		1.0000	6.8500
CSTAR, FT/SEC		5174	5174
CF		0.657	1.547
IVAC,LB-SEC/LB		198.4	276.2
ISP, LB-SEC/LB		105.7	248.9

MOLE FRACTIONS

AL	0.00013	0.00006	0.00000
ALCL	0.00451	0.00285	0.00005
ALCL2	0.00333	0.00236	0.00010
ALCL3	0.00012	0.00010	0.00001
ALH	0.00002	0.00001	0.0
ALO	0.00015	0.00006	0.00000
ALOCL	0.00182	0.00120	0.00003
ALOH	0.00045	0.00025	0.00000
ALO2	0.00004	0.00002	0.00000
ALO2H	0.00080	0.00046	0.00001
AL2O	0.00002	0.00001	0.0
AL2O3(S)	0.0	0.0	0.06106
AL2O3(L)	0.07234	0.07486	0.01913
CO	0.22734	0.22851	0.22912
COCL	0.00001	0.00001	0.00000
CO2	0.01720	0.01762	0.02243
CL	0.01384	0.01188	0.00227
CLO	0.00001	0.00001	0.00000

CL2	0.00002	0.00002	0.00000
H	0.03886	0.03185	0.00523
HCL	0.13071	0.13800	0.15991
HCO	0.00002	0.00001	0.00000
H2	0.24624	0.25084	0.26895
H2O	0.14732	0.14749	0.14632
N	0.00001	0.00000	0.00000
NH2	0.00001	0.00001	0.00000
NH3	0.00001	0.00001	0.00000
NO	0.00085	0.00054	0.00001
N2	0.08210	0.08280	0.08489
O	0.00098	0.00057	0.00001
OH	0.01047	0.00746	0.00046
O2	0.00023	0.00014	0.00000

ADDITIONAL PRODUCTS WHICH WERE CONSIDERED BUT WHOSE MOLE FRACTIONS WERE LESS THAN 0.50000E-05 FOR ALL ASSIGNED CONDITIONS

AL(S)	AL(L)	ALCL3(S)	ALCL3(L)	ALN(S)	ALN	AL2CL6	AL2O2	C(S)	C
CCL	CCL2	CCL3	CCL4	CH	CH2	CH2O	CH3	CH4	CN
CNN	CN2	COCL2	C2	C2CL2	C2H	C2H2	C2H4	C2H6	C2N
C2N2	C2O	C3	C3O2	C4	C5	CLCN	CLO2	CL2O	HALO
HCN	HNCO	HNO	HO2	H2O(S)	H2O(L)	H2O2	NCO	NH	NOCL
NO2	NO2CL	NO3	N2H4	N2O	N2O4	N3	O3		

NOTE. WEIGHT FRACTION OF FUEL IN TOTAL FUELS AND OF OXIDANT IN TOTAL OXIDANTS

THEORETICAL ROCKET PERFORMANCE ASSUMING EQUILIBRIUM COMPOSITION DURING EXPANSION

PC = 500.0 PSIA

	CHEMICAL FORMULA	WT FRACTION (SEE NOTE)	ENERGY CAL/MOL	STATE	TEMP DEG K	DENSITY G/CC
FUEL	C 1.00000	0.11158	0.0	S	298.15	0.0
FUEL	H 1.00000	0.03708	0.0	S	298.15	0.0
FUEL	O 1.00000	0.39078	0.0	S	298.15	0.0
FUEL	N 1.00000	0.08783	0.0	S	298.15	0.0
FUEL	AL 1.00000	0.15999	0.0	S	298.15	0.0
FUEL	CL 1.00000	0.21274	-72000.000	S	298.15	0.0

O/F= 0.0 PERCENT FUEL=100.0000 EQUIVALENCE RATIO= 1.6725 REACTANT DENSITY= 0.0

	CHAMBER	THROAT	EXIT
PC/P	1.0000	1.7345	40.238
P, ATM	34.023	19.615	0.8455
T, DEG K	3425	3234	2315
RHO, G/CC	3.4302-3	2.1144-3	1.3100-4
H, CAL/G	-432.0	-560.0	-1142.6
S, CAL/(G)(K)	2.3071	2.3071	2.3071
M, MOL WT	28.337	28.603	29.430
(DLV/DLP)T	-1.02139	-1.01662	-1.00236
(DLV/DLT)P	1.3809	1.3084	0.0
CP, CAL/(G)(K)	0.9414	0.8565	0.0
GAMMA (S)	1.1372	1.1393	0.9976
SON VEL,M/SEC	1069.1	1034.9	807.8
MACH NUMBER	0.0	1.000	3.019
AE/AT		1.0000	6.8500
CSTAR, FT/SEC		5169	5169
CF		0.657	1.548
IVAC,LB-SEC/LB		198.2	276.0
ISP, LB-SEC/LB		105.5	248.6

MOLE FRACTIONS

AL	0.00014	0.00006	0.00000
ALCL	0.00459	0.00292	0.00005
ALCL2	0.00322	0.00229	0.00010
ALCL3	0.00011	0.00009	0.00001
ALH	0.00002	0.00001	0.0
ALO	0.00016	0.00007	0.00000
ALOCL	0.00186	0.00123	0.00003
ALOH	0.00045	0.00026	0.00000
ALO2	0.00005	0.00002	0.00000
ALO2H	0.00081	0.00047	0.00001
AL2O	0.00002	0.00001	0.0
AL2O3(S)	0.0	0.0	0.06107
AL2O3(L)	0.07222	0.07475	0.01909
CO	0.22701	0.22821	0.22905
COCL	0.00001	0.00001	0.00000
CO2	0.01719	0.01762	0.02243
CL	0.01438	0.01238	0.00244
CLO	0.00001	0.00001	0.00000

CL2	0.00002	0.00002	0.00000
H	0.04042	0.03324	0.00562
HCL	0.13009	0.13739	0.15969
HCO	0.00002	0.00001	0.00000
H2	0.24561	0.25027	0.26878
H2O	0.14664	0.14694	0.14624
N	0.00001	0.00000	0.00000
NH2	0.00001	0.00001	0.00000
NH3	0.00001	0.00000	0.00000
NO	0.00086	0.00055	0.00002
N2	0.08198	0.08269	0.08487
O	0.00106	0.00062	0.00001
OH	0.01078	0.00772	0.00050
O2	0.00025	0.00015	0.00000

ADDITIONAL PRODUCTS WHICH WERE CONSIDERED BUT WHOSE MOLE FRACTIONS WERE LESS THAN 0.50000E-05 FOR ALL ASSIGNED CONDITIONS

AL(S)	AL(L)	ALCL3(S)	ALCL3(L)	ALN(S)	ALN	AL2CL6	AL2O2	C(S)	C
CCL	CCL2	CCL3	CCL4	CH	CH2	CH2O	CH3	CH4	CN
CNN	CN2	COCL2	C2	C2CL2	C2H	C2H2	C2H4	C2H6	C2N
C2N2	C2O	C3	C3O2	C4	C5	CLCN	CLO2	CL2O	HALO
HCN	HNCO	HNO	HO2	H2O(S)	H2O(L)	H2O2	NCO	NH	NOCL
NO2	NO2CL	NO3	N2H4	N2O	N2O4	N3	O3		

NOTE. WEIGHT FRACTION OF FUEL IN TOTAL FUELS AND OF OXIDANT IN TOTAL OXIDANTS

THEORETICAL ROCKET PERFORMANCE ASSUMING EQUILIBRIUM COMPOSITION DURING EXPANSION

PC = 700.0 PSIA

	CHEMICAL FORMULA	WT FRACTION (SEE NOTE)	ENERGY CAL/MOL	STATE	TEMP DEG K	DENSITY G/CC
FUEL	C 1.00000	0.11158	0.0	S	298.15	0.0
FUEL	H 1.00000	0.03708	0.0	S	298.15	0.0
FUEL	O 1.00000	0.39078	0.0	S	298.15	0.0
FUEL	N 1.00000	0.08783	0.0	S	298.15	0.0
FUEL	AL 1.00000	0.15999	0.0	S	298.15	0.0
FUEL	CL 1.00000	0.21274	-72000.000	S	298.15	0.0

O/F= 0.0 PERCENT FUEL=100.0000 EQUIVALENCE RATIO= 1.6725 REACTANT DENSITY= 0.0

	CHAMBER	THROAT	EXIT
PC/P	1.0000	1.7358	40.434
P, ATM	47.632	27.440	1.1780
T, DEG K	3457	3259	2315
RHO, G/CC	4.7744-3	2.9435-3	1.8264-4
H, CAL/G	-432.0	-560.9	-1145.3
S, CAL/(G)(K)	2.2835	2.2835	2.2835
M, MOL WT	28.436	28.689	29.451
(DLV/DLP)T	-1.01968	-1.01515	-1.00200
(DLV/DLT)P	1.3473	1.2790	0.0
CP, CAL/(G)(K)	0.8939	0.8146	0.0
GAMMA (S)	1.1393	1.1415	0.9980
SON VEL,M/SEC	1073.1	1038.4	807.6
MACH NUMBER	0.0	1.000	3.025
AE/AT		1.0000	6.8500
CSTAR, FT/SEC		5181	5181
CF		0.658	1.547
IVAC,LB-SEC/LB		198.6	276.4
ISP, LB-SEC/LB		105.9	249.1

MOLE FRACTIONS

AL	0.00012	0.00005	0.00000
ALCL	0.00440	0.00277	0.00004
ALCL2	0.00348	0.00246	0.00010
ALCL3	0.00014	0.00011	0.00001
ALH	0.00002	0.00001	0.0
ALO	0.00014	0.00006	0.00000
ALOCL	0.00177	0.00116	0.00003
ALOH	0.00044	0.00025	0.00000
ALO2	0.00004	0.00002	0.00000
ALO2H	0.00078	0.00045	0.00000
AL2O	0.00002	0.00001	0.0
AL2O3(S)	0.0	0.0	0.06111
AL2O3(L)	0.07251	0.07500	0.01911
CO	0.22774	0.22887	0.22921
COCL	0.00001	0.00001	0.00000
CO2	0.01723	0.01763	0.02244
CL	0.01318	0.01126	0.00207
CLO	0.00001	0.00001	0.00000

CL2	0.00002	0.00002	0.00000
H	0.03693	0.03013	0.00477
HCL	0.13147	0.13875	0.16017
HCO	0.00002	0.00001	0.00000
H2	0.24704	0.25156	0.26916
H2O	0.14817	0.14817	0.14641
N	0.00001	0.00000	0.00000
NH2	0.00001	0.00001	0.00000
NH3	0.00001	0.00001	0.00000
NO	0.00082	0.00052	0.00001
N2	0.08226	0.08293	0.08492
O	0.00089	0.00052	0.00001
OH	0.01008	0.00714	0.00042
O2	0.00021	0.00012	0.00000

ADDITIONAL PRODUCTS WHICH WERE CONSIDERED BUT WHOSE MOLE FRACTIONS WERE LESS THAN 0.50000E-05 FOR ALL ASSIGNED CONDITIONS

AL(S)	AL(L)	ALCL3(S)	ALCL3(L)	ALN(S)	ALN	AL2CL6	AL2O2	C(S)	C
CCL	CCL2	CCL3	CCL4	CH	CH2	CH2O	CH3	CH4	CN
CNN	CN2	COCL2	C2	C2CL2	C2H	C2H2	C2H4	C2H6	C2N
C2N2	C2O	C3	C3O2	C4	C5	CLCN	CLO2	CL2O	HALO
HCN	HNCO	HNO	HO2	H2O(S)	H2O(L)	H2O2	NCO	NH	NOCL
NO2	NO2CL	NO3	N2H4	N2O	N2O4	N3	O3		

NOTE. WEIGHT FRACTION OF FUEL IN TOTAL FUELS AND OF OXIDANT IN TOTAL OXIDANTS

THEORETICAL ROCKET PERFORMANCE ASSUMING EQUILIBRIUM COMPOSITION DURING EXPANSION

PC = 900.0 PSIA

	CHEMICAL FORMULA	WT FRACTION (SEE NOTE)	ENERGY CAL/MOL	STATE	TEMP DEG K	DENSITY G/CC
FUEL	C 1.00000	0.11158	0.0	S	298.15	0.0
FUEL	H 1.00000	0.03708	0.0	S	298.15	0.0
FUEL	O 1.00000	0.39078	0.0	S	298.15	0.0
FUEL	N 1.00000	0.08783	0.0	S	298.15	0.0
FUEL	AL 1.00000	0.15999	0.0	S	298.15	0.0
FUEL	CL 1.00000	0.21274	-72000.000	S	298.15	0.0

O/F= 0.0 PERCENT FUEL=100.0000 EQUIVALENCE RATIO= 1.6725 REACTANT DENSITY= 0.0

	CHAMBER	THROAT	EXIT
PC/P	1.0000	1.7369	40.570
P, ATM	61.241	35.260	1.5095
T, DEG K	3481	3278	2315
RHO, G/CC	6.1130-3	3.7695-3	2.3415-4
H, CAL/G	-432.0	-561.5	-1147.2
S, CAL/(G)(K)	2.2660	2.2660	2.2660
M, MOL WT	28.508	28.751	29.465
(DLV/DLP)T	-1.01844	-1.01410	-1.00177
(DLV/DLT)P	1.3234	1.2581	0.0
CP, CAL/(G)(K)	0.8605	0.7853	0.0
GAMMA (S)	1.1408	1.1431	0.9982
SON VEL,M/SEC	1076.1	1040.9	807.5
MACH NUMBER	0.0	1.000	3.029
AE/AT		1.0000	6.8500
CSTAR, FT/SEC		5189	5189
CF		0.658	1.547
IVAC,LB-SEC/LB		199.0	276.7
ISP, LB-SEC/LB		106.1	249.4

MOLE FRACTIONS

AL	0.00011	0.00005	0.00000
ALCL	0.00424	0.00265	0.00004
ALCL2	0.00368	0.00260	0.00010
ALCL3	0.00016	0.00013	0.00001
ALH	0.00002	0.00001	0.0
ALO	0.00013	0.00005	0.00000
ALOCL	0.00170	0.00111	0.00002
ALOH	0.00043	0.00024	0.00000
ALO2	0.00004	0.00001	0.0
ALO2H	0.00076	0.00043	0.00000
AL2O	0.00002	0.00001	0.0
AL2O3(S)	0.0	0.0	0.06125
AL2O3(L)	0.07272	0.07519	0.01900
CO	0.22827	0.22934	0.22931
COCL	0.00001	0.00001	0.00000
CO2	0.01726	0.01764	0.02245
CL	0.01231	0.01045	0.00183
CLO	0.00001	0.00001	0.00000

CL2	0.00003	0.00002	0.00000
H	0.03443	0.02791	0.00421
HCL	0.13245	0.13972	0.16048
HCN	0.00001	0.00000	0.00000
HCO	0.00003	0.00001	0.00000
H2	0.24808	0.25248	0.26940
H2O	0.14928	0.14905	0.14653
N	0.00001	0.00000	0.00000
NH2	0.00001	0.00001	0.00000
NH3	0.00001	0.00001	0.00000
NO	0.00079	0.00049	0.00001
N2	0.08246	0.08311	0.08496
O	0.00079	0.00045	0.00000
OH	0.00956	0.00671	0.00037
O2	0.00019	0.00011	0.00000

ADDITIONAL PRODUCTS WHICH WERE CONSIDERED BUT WHOSE MOLE FRACTIONS WERE LESS THAN 0.50000E-05 FOR ALL ASSIGNED CONDITIONS

AL(S)	AL(L)	ALCL3(S)	ALCL3(L)	ALN(S)	ALN	AL2CL6	AL2O2	C(S)	C
CCL	CCL2	CCL3	CCL4	CH	CH2	CH2O	CH3	CH4	CN
CNN	CN2	COCL2	C2	C2CL2	C2H	C2H2	C2H4	C2H6	C2N
C2N2	C2O	C3	C3O2	C4	C5	CLCN	CLO2	CL2O	HALO
HNCO	HNO	HO2	H2O(S)	H2O(L)	H2O2	NCO	NH	NOCL	NO2
NO2CL	NO3	N2H4	N2O	N2O4	N3	O3			

NOTE. WEIGHT FRACTION OF FUEL IN TOTAL FUELS AND OF OXIDANT IN TOTAL OXIDANTS

THESE ARE THE VALUES FROM THE SPECIFIC IMPULSE SCALING MODULE

PARAMETER	INTERNATIONAL	ENGLISH
END ITEM ANALYTICAL SPECIFIC IMPULSE, SIAE(M/S,S)	2708.3757	276.17749
DELIVERED END ITEM SPECIFIC IMPULSE, SIDE(M/S,S)	2558.2449	260.86841
END ITEM FLOWRATE, WD1 (KG/S,LBM/S)	3711.0605	8181.4883
END ITEM NOZZLE EFFICIENCY, ETANZ	0.97266811	
DIVERGENCE CORRECTION FOR NOZZLE, CLAME	0.97815329	
THEO. PROPELLANT CSTAR AT PCAVE, CSTAR2(M/S,FT/S)	1577.1086	5174.2422
PREDICTED END ITEM CSTAR, CSTAR(M/S,FT/S)	1565.7527	5136.9844
CSTAR CURVE FIT COEFFICIENT NO. 1	5088.7539	
CSTAR CURVE FIT COEFFICIENT NO. 2	0.10736638	
CSTAR CURVE FIT COEFFICIENT NO. 3	-0.41745312E-04	

ALL DATA CASES COMPLETED

3.0 SAMPLE PREDICTION, PART TWO

This portion of the sample prediction presents the internal ballistics simulation for the entire burn duration of the sample solid rocket motor. An internal ballistics simulation is performed when NF=1 is set in the Control Data Package.

The combustion gas properties data generated in Part One were compiled into arrays for use by the Internal Ballistics Module (IBM). Data for characteristic exhaust velocity, CSTR(I), ratio of specific heats, GAMAG(I), combustion temperature, TCØMB(I), and molecular weight, AMWG(I), were input as functions of the pressure array, PRESS(I). The characteristic exhaust velocity, temperature, and molecular weight are obtained from the LEWIS output for each pressure. These data are obtained for conditions entitled CHAMBER. The ratio of specific heats is also obtained from the CHAMBER data but is determined as the negative product of GAMA(S) and (DLV/DLP)T. The characteristic exhaust velocity data is obtained from the conditions entitled THROAT. The characteristics exhaust velocity data enable the module to obtain a partially independent calculation for nozzle flowrate which is used to test for convergence of the head-end pressure iteration scheme.

The printout for Part Two of the sample prediction begins on page 3-7 with a listing of the input data cards exactly as they were arranged in the data deck. This is followed by a title page and a page which lists the major program constants and indicators. The Internal Ballistics Module reference plane and end sections geometry data are presented on pages 3-11 through 3-17. The solid rocket motor performance prediction starts on page 3-18. This prediction begins with the start of motor ignition (TIME=0.0 SEC) and terminates with the end of motor tailoff (TIME=127.0 SEC). Three pages of output are presented for each prediction "time step". The output for the major motor performance parameters is given on the first page, and the increment dividing plane data and segment slot data are given on the second and third pages, respectively.

Figure 3-1 presents the simulation steps which were exercised in Part Two of the sample prediction. Figure 3-2 presents the Internal Ballistics Module options which were exercised.

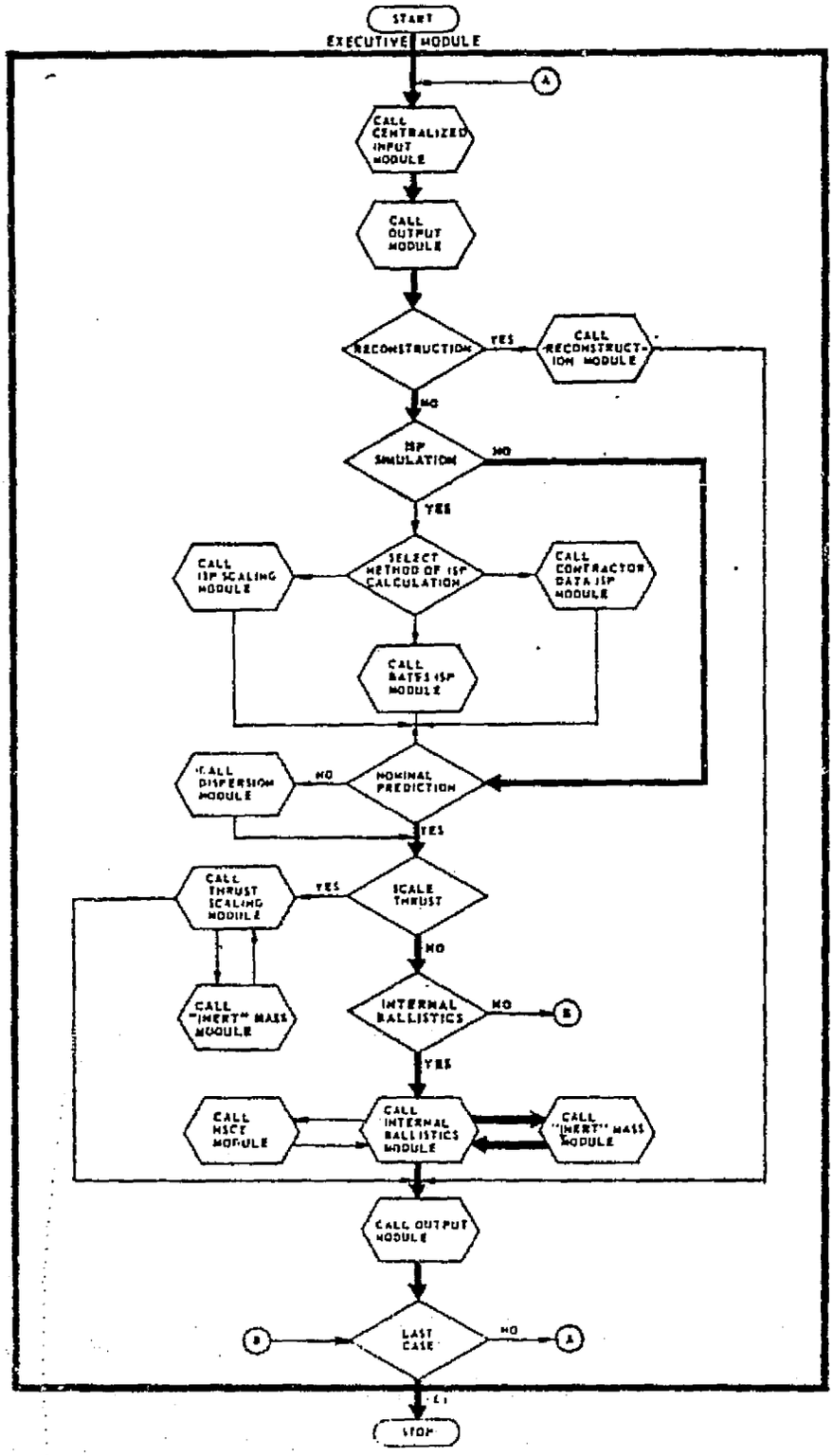


FIGURE 3-1 SAMPLE PREDICTION, PART TWO

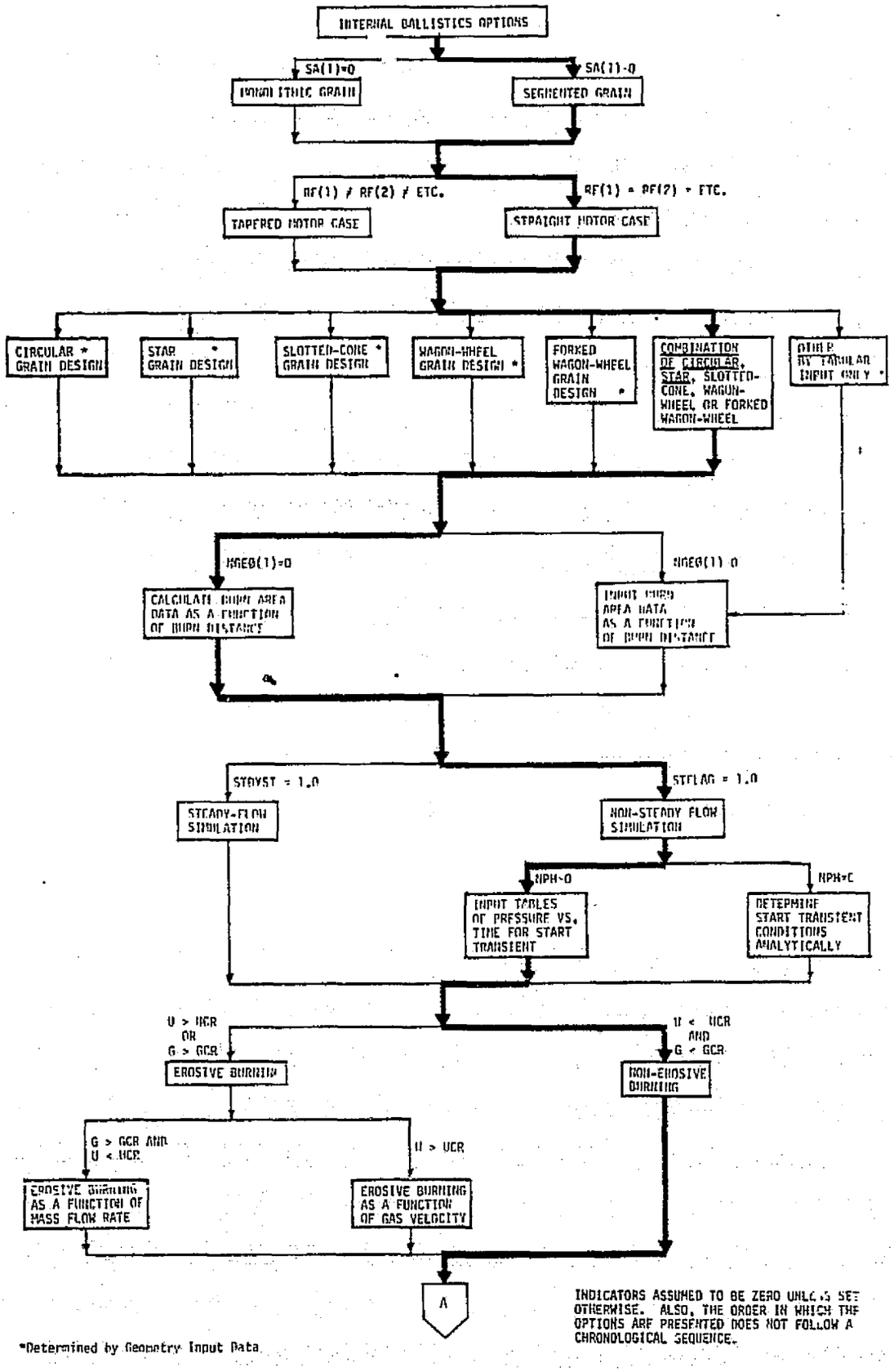


FIGURE 3-2 SAMPLE PREDICTION, PART TWO (INTERNAL BALLISTICS SIMULATION)

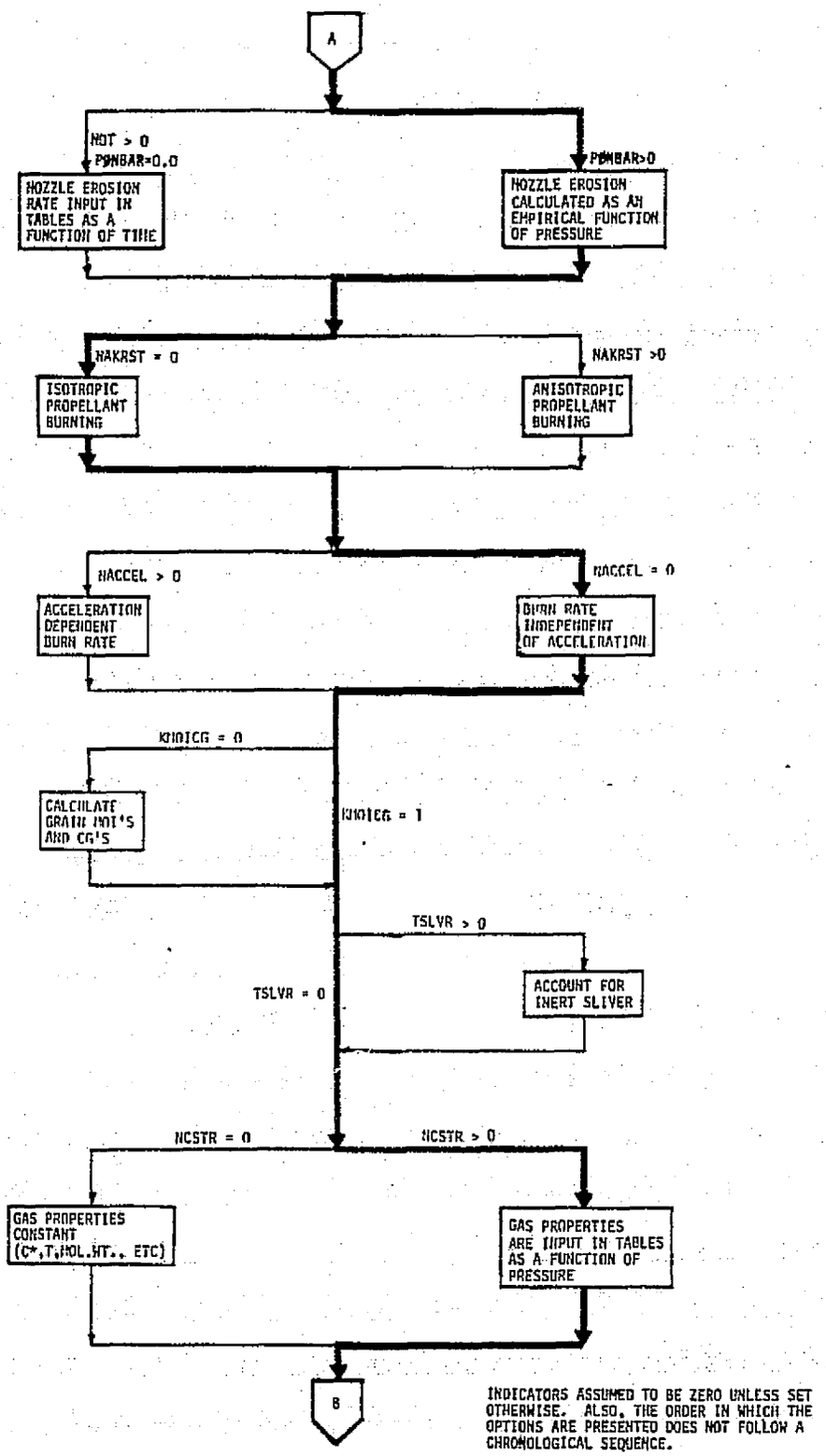
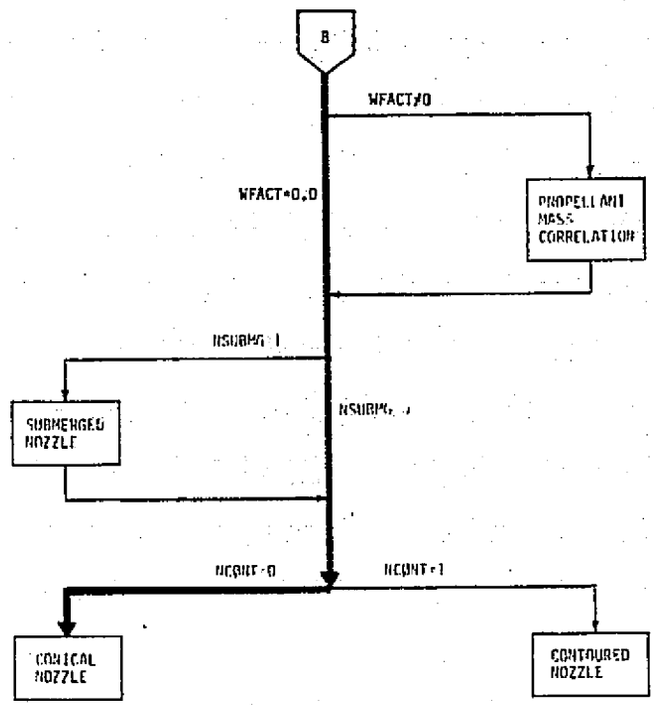


FIGURE 3-2 (CONTINUED)



INDICATORS ASSUMED TO BE ZERO UNLESS SET OTHERWISE. ALSO, THE ORDER IN WHICH THE OPTIONS ARE PRESENTED DOES NOT FOLLOW A CHRONOLOGICAL SEQUENCE.

FIGURE 3-2 (CONTINUED)

SAMPLE PREDICTION PRINTOUT, PART TWO

CARD IMAGE OF INPUT DATA FOR CASE 1

```
CONTROL DATA CARDS
 &INPUT1
 TITLE='SAMP','LE S','RM P','ERFO','RMAN','CE P','REDI','CTIO','N   ',
 NF=1,
 NSI=4,
 NLEWIS=0,
 HITOT=9770.0,
 &END
IDNOZL DATA CARDS
 &ONEDNZ
 IDNPRT=0,
 &END
LEWIS DATA
REACTANTS
C  1.                                        11.158            S 298.15 F
H  1.                                        3.708             S 298.15 F
O  1.                                        39.078            S 298.15 F
N  1.                                        8.783             S 298.15 F
AL 1.                                        15.999            S 298.15 F
CL 1.                                        21.274  -72000.   S 298.15 F

INSERT          AL203(L)
END
IBM DATA CARDS
 &IBDATA
 HCO=1258.9,
 DELZ=30.,
 AINCIN(1)=0.0,115.8,118.8,414.6,417.6,698.1,701.1,996.9,999.9,1258.9,
 SA(1)=115.8,414.6,698.1,996.9,
 SB(1)=118.8,417.6,701.1,999.9,
 RF(1)=10*71.5,
 ANO(1)=2*14.,8*4.,
 TAUW(1)=2*8.70,36.4,33.5,36.4,33.5,36.4,33.5,36.4,32.5,
 ALS1(1)=2*39.8,
 AO1(1)=2*17.0,
 AO2(1)=2*17.0,
 AO3(1)=2*17.0,
 R2(1)=2*0.5,
 R5(1)=2*2.0,
 DTAU(1)=2*1.,8*2.,
 DTAUW(1)=2*.5,8*2.,
 AN2=17.0,
 DE=140.22,
 DT=53.0,
 PONBAR=578.7,
 ERBAR=0.0045,
 EREXP=1.0,
 STFLAG=1.,
 TST=1.,
 DELTST=0.25,
 DELTSS=2.0,
 DELTTO=1.0,
 ANITW=5.,
 TIMAX=135.,
 PA=14.7,
 PHI=29.4,
 AKR(2)=0.066,0.233,
 AKR(36)=0.066,0.233,
 AKSLOT(1)=0.066,0.233,
```

```
AKU(1)=5000.,
SLTBRN(1)=2.0,0.0,2.0,0.0,
NAKEND=3,
NAKR=9,
TIMAKR(1)=0.0,7.1,54.,71.6,89.,106.3,113.3,124.6,130.,
TBLAKR(1)=2*.00105,.00132,.0015,.00132,-.00018,-.00195,-.0048,-.0048,
AINCPL=627.6,
NTAUTO=1,
NPH=5,
TIMEPH(1)=0.0,0.25,0.5,0.75,1.0,
PHST(1)=14.7,490.,725.,800.,815.,
DELF=0.064,
R=55.2,
NCSCOE=1,
NCSTR=6,
PRESS(1)=0.,400.,600.,800.,1000.,1800.,
CSTR(1)=5088.8,5125.0,5138.1,5147.9,5154.4,5146.8,
TCOMB(1)=5950.,6125.,6197.,6248.,6282.,6282.,
AMWG(1)=28.,28.27,28.39,28.47,28.54,28.54,
GAMAG(1)=1.1612,1.1615,1.1616,1.1618,1.1619,1.1619,
DLRF=0.01,
DRVRF=0.01,
AK=0.50,
AKK=0.5,
DH1=36.,
DN1=80.,
BH=1.0,
BN=1.0,
AOHM=75.42,
AONM=55.62,
BTADE=1.0,
RIG=18.,
HHR=35.75,
NCM=13,
TIMECM(1)=0.0,31.,32.,38.0,46.,54.,58.,76.,110.,116.,120.,124.,140.,
TBLCM(1)=2*.965,.964 ,.962 ,.960 ,.959,.960,.961,.960,.958,.954,.949,.947,
PRTFLG=1.,
NWRTAB=1,
KMOICG=1,
VCHINP=764380.,
VFHO=594380.,
KPLANE=10,
NGEOHD=12,
TAUHD(1)=0.,0.5,2.0,4.0,6.0,8.7,9.0,10.0,12.0,14.0,16.253,17.0,
ABHD(1)=55000.,55300.,55400.,54700.,52700.,48200.,44000.,34000.,21000.,
10500.,2*0.0,
&END
CASE END

ALL DATA CARDS FOR THIS CASE HAVE BEEN TRANSFERED TO DISK
```

```
*****************************************************************************
*                                                                           *
* SPACE SHUTTLE SOLID ROCKET BOOSTER PERFORMANCE EVALUATION MODEL           *
*                                                                           *
* SAMPLE SRM PERFORMANCE PREDICTION                                         *
*                                                                           *
*****************************************************************************
```

THESE ARE THE INITIAL VALUES FOR CASE 1

PROGRAM CONSTANTS

MOTOR CONSTANTS

```
MC( 1)= 0.17180000E-03
MC( 2)=  5184.0000
MC( 3)=  8.8199997
MC( 4)=  1000.0000
MC( 5)= 0.16999997E-01
MC( 6)=  5144.0000
MC( 7)=  5144.0000
MC( 8)= -1.0000000
MC( 9)=  2.9582996
MC(10)=  2.9582996
MC(11)= 0.0
MC(12)= 0.0
MC(13)= 0.0
MC(14)= 0.0
MC(15)=  68.199997
MC(16)= 0.0
MC(17)= 0.0
MC(18)= 0.0
MC(19)= 0.0
MC(20)= 0.0
MC(21)= 0.0
MC(22)= 0.0
MC(23)=  4886.0000
```

CURVE FIT CONSTANTS

```
AK( 1)=  246.62000
AK( 2)=  5.4059992
AK( 3)=-0.14399999
AK( 4)=  1.4938993
AK( 5)= 0.62402999
AK( 6)=-0.30534999E-02
AK( 7)=-0.42780000E-03
AK( 8)= 0.86193995E-05
AK( 9)=-0.46339999E-07
AK(10)= 0.85429996
AK(11)= 0.24400000E-01
AK(12)=-0.12500000E-02
CSCOEF(1)=  4735.2266
CSCOEF(2)= 0.95469534E-01
CSCOEF(3)=-0.35990190E-04
```

UNIVERSAL CONSTANTS

```
CK(1)=  32.173996
CK(2)=  14.695999
CK(3)=  778.00000
CK(4)=  3.1415892
```

ODD CONSTANTS

```
OK(1)=  1.0000000
OK(2)=  1.0000000
OK(3)=  1.0000000
OK(4)=  100.00000
OK(5)=  6.0000000
```

DISPERSION LIMITS

```
DISLIM( 1)= 0.0
DISLIM( 2)= 0.0
DISLIM( 3)= 0.0
DISLIM( 4)= 0.0
DISLIM( 5)= 0.0
DISLIM( 6)= 0.0
DISLIM( 7)= 0.0
DISLIM( 8)= 0.0
DISLIM( 9)= 0.0
DISLIM(10)= 0.0
DISLIM(11)= 0.0
```

GENERAL PROGRAM INDICATORS

```
CLAME =   0.0
DPB   =   0.0
DPE   =   0.0
LISTI =        T
NCARD =        0
NCASES=        1
NDISP =        0
NF    =        1
NLEWIS=        0
NMP   =        0
NPLOT =        0
NRECON=        0
NSI   =        4
NTAPE =        0
NTB   =        0
SIBT  =   0.0
```

INERT MASS SCHEDULE

AMPRR	AMIRR
0.0	0.0
0.0	0.0
0.0	0.0
0.89999974E-01	0.14999998
0.15999997	0.23499995
0.25500000	0.32499999
0.73999995	0.66999996
0.84999996	0.76999998
0.92799997	0.86999995
1.0000000	1.0000000

OPTIONAL PRINT INDICATORS

```
IRKTOI=  0
```

```
INERT MASS ISP(SII)=  190.00000
TOTAL INERT MASS(MITOT)=  9770.0000
```

LOCATION OF PLANE 1 0.0

A1	A2	A3	A4	A5	R1	R9	TH1
2.9670596E-01	2.9670596E-01	2.9670596E-01	0.0	0.0	2.3000000E 01	6.2799988E 01	2.2439939E-01
T2M	T4M	T5M	X45	Y45	LC	X03	Y03
5.0000000E-01	5.0000000E-01	5.0000000E-01	2.3907614E 00	2.2769058E 01	3.8169510E 01	4.7815239E-01	2.3353806E 01
R03	X05	Y05	R05	X07	Y07	R07	T6M
2.3358704E 01	4.7815239E-01	2.3353790E 01	2.3358673E 01	1.3550445E 01	5.9270737E 01	6.0799942E 01	1.2169588E 01
T7M	T12M	X76	Y76	LD	X09	Y09	R09
1.6252914E 01	0.0	0.0	6.2799988E 01	0.0	0.0	6.2799988E 01	6.2799973E 01
X011	Y011	R011	T10M	T9M	TAUM	TH2	TH3
0.0	6.2799988E 01	6.2799973E 01	0.0	8.7000113E 00	1.6252914E 01	2.2475570E-01	0.0
TH4	B71M	B72M	B91M	B92M			
-3.5631657E-04	4.3748981E-01	1.0613546E 00	1.5707960E 00	0.0			

LOCATION OF PLANE 2 1.158000E 02

A1	A2	A3	A4	A5	R1	R9	TH1
2.9670596E-01	2.9670596E-01	2.9670596E-01	0.0	0.0	2.3000000E 01	6.2799988E 01	2.2439939E-01
T2M	T4M	T5M	X45	Y45	LC	X03	Y03
5.0000000E-01	5.0000000E-01	5.0000000E-01	2.3907614E 00	2.2769058E 01	3.8169510E 01	4.7815239E-01	2.3353806E 01
R03	X05	Y05	R05	X07	Y07	R07	T6M
2.3358704E 01	4.7815239E-01	2.3353790E 01	2.3358673E 01	1.3550445E 01	5.9270737E 01	6.0799942E 01	1.2169588E 01
T7M	T12M	X76	Y76	LD	X09	Y09	R09
1.6252914E 01	0.0	0.0	6.2799988E 01	0.0	0.0	6.2799988E 01	6.2799973E 01
X011	Y011	R011	T10M	T9M	TAUM	TH2	TH3
0.0	6.2799988E 01	6.2799973E 01	0.0	8.7000113E 00	1.6252914E 01	2.2475570E-01	0.0
TH4	B71M	B72M	B91M	B92M			
-3.5631657E-04	4.3748981E-01	1.0613546E 00	1.5707960E 00	0.0			

LOCATION OF PLANE 3 1.188000E 02

A1	A2	A3	A4	A5	R1	R9	TH1
0.0	0.0	0.0	0.0	0.0	3.5100006E 01	3.5100006E 01	7.8539801E-01
T2M	T4M	T5M	X45	Y45	LC	X03	Y03
0.0	0.0	0.0	0.0	3.5100006E 01	0.0	0.0	3.5100006E 01
R03	X05	Y05	R05	X07	Y07	R07	T6M
3.5099991E 01	0.0	3.5100006E 01	3.5099991E 01	0.0	3.5100006E 01	3.5099991E 01	0.0
T7M	T12M	X76	Y76	LD	X09	Y09	R09
3.6399979E 01	0.0	0.0	3.5100006E 01	0.0	0.0	3.5100006E 01	3.5099991E 01
X011	Y011	R011	T10M	T9M	TAUM	TH2	TH3
0.0	3.5100006E 01	3.5099991E 01	0.0	3.6399979E 01	3.6399979E 01	0.0	0.0
TH4	B71M	B72M	B91M	B92M			
7.8539801E-01	1.5707960E 00	0.0	1.5707960E 00	0.0			

LOCATION OF PLANE 4 4.145999E 02

A1	A2	A3	A4	A5	R1	R9	TH1
0.0	0.0	0.0	0.0	0.0	3.8000000E 01	3.8000000E 01	7.8539801E-01
T2M	T4M	T5M	X45	Y45	LC	X03	Y03
0.0	0.0	0.0	0.0	3.8000000E 01	0.0	0.0	3.8000000E 01
R03	X05	Y05	R05	X07	Y07	R07	T6M
3.7999985E 01	0.0	3.8000000E 01	3.7999985E 01	0.0	3.8000000E 01	3.7999985E 01	0.0
T7M	T12M	X76	Y76	LD	X09	Y09	R09
3.3499985E 01	0.0	0.0	3.8000000E 01	0.0	0.0	3.8000000E 01	3.7999985E 01
X011	Y011	R011	T10M	T9M	TAUM	TH2	TH3
0.0	3.8000000E 01	3.7999985E 01	0.0	3.3499985E 01	3.3499985E 01	0.0	0.0
TH4	B71M	B72M	B91M	B92M			

7.8539801E-01 1.5707960E 00 0.0 1.5707960E 00 0.0

LOCATION OF PLANE 5 4.175999E 02

A1	A2	A3	A4	A5	R1	R9	TH1
0.0	0.0	0.0	0.0	0.0	3.5100006E 01	3.5100006E 01	7.8539801E-01
T2M	T4M	T5M	X45	Y45	LC	X03	Y03
0.0	0.0	0.0	0.0	3.5100006E 01	0.0	0.0	3.5100006E 01
R03	X05	Y05	R05	X07	Y07	R07	T6M
3.5099991E 01	0.0	3.5100006E 01	3.5099991E 01	0.0	3.5100006E 01	3.5099991E 01	0.0
T7M	T12M	X76	Y76	LD	X09	Y09	R09
3.6399979E 01	0.0	0.0	3.5100006E 01	0.0	0.0	3.5100006E 01	3.5099991E 01
X011	Y011	R011	T10M	T9M	TAUM	TH2	TH3
0.0	3.5100006E 01	3.5099991E 01	0.0	3.6399979E 01	3.6399979E 01	0.0	0.0
TH4	B71M	B72M	B91M	B92M			
7.8539801E-01	1.5707960E 00	0.0	1.5707960E 00	0.0			

LOCATION OF PLANE 6 6.980999E 02

A1	A2	A3	A4	A5	R1	R9	TH1
0.0	0.0	0.0	0.0	0.0	3.8000000E 01	3.8000000E 01	7.8539801E-01
T2M	T4M	T5M	X45	Y45	LC	X03	Y03
0.0	0.0	0.0	0.0	3.8000000E 01	0.0	0.0	3.8000000E 01
R03	X05	Y05	R05	X07	Y07	R07	T6M
3.7999985E 01	0.0	3.8000000E 01	3.7999985E 01	0.0	3.8000000E 01	3.7999985E 01	0.0
T7M	T12M	X76	Y76	LD	X09	Y09	R09
3.3499985E 01	0.0	0.0	3.8000000E 01	0.0	0.0	3.8000000E 01	3.7999985E 01
X011	Y011	R011	T10M	T9M	TAUM	TH2	TH3
0.0	3.8000000E 01	3.7999985E 01	0.0	3.3499985E 01	3.3499985E 01	0.0	0.0
TH4	B71M	B72M	B91M	B92M			
7.8539801E-01	1.5707960E 00	0.0	1.5707960E 00	0.0			

LOCATION OF PLANE 7 7.010999E 02

A1	A2	A3	A4	A5	R1	R9	TH1
0.0	0.0	0.0	0.0	0.0	3.5100006E 01	3.5100006E 01	7.8539801E-01
T2M	T4M	T5M	X45	Y45	LC	X03	Y03
0.0	0.0	0.0	0.0	3.5100006E 01	0.0	0.0	3.5100006E 01
R03	X05	Y05	R05	X07	Y07	R07	T6M
3.5099991E 01	0.0	3.5100006E 01	3.5099991E 01	0.0	3.5100006E 01	3.5099991E 01	0.0
T7M	T12M	X76	Y76	LD	X09	Y09	R09
3.6399979E 01	0.0	0.0	3.5100006E 01	0.0	0.0	3.5100006E 01	3.5099991E 01
X011	Y011	R011	T10M	T9M	TAUM	TH2	TH3
0.0	3.5100006E 01	3.5099991E 01	0.0	3.6399979E 01	3.6399979E 01	0.0	0.0
TH4	B71M	B72M	B91M	B92M			
7.8539801E-01	1.5707960E 00	0.0	1.5707960E 00	0.0			

LOCATION OF PLANE 8 9.968999E 02

A1	A2	A3	A4	A5	R1	R9	TH1
0.0	0.0	0.0	0.0	0.0	3.8000000E 01	3.8000000E 01	7.8539801E-01
T2M	T4M	T5M	X45	Y45	LC	X03	Y03
0.0	0.0	0.0	0.0	3.8000000E 01	0.0	0.0	3.8000000E 01
R03	X05	Y05	R05	X07	Y07	R07	T6M
3.7999985E 01	0.0	3.8000000E 01	3.7999985E 01	0.0	3.8000000E 01	3.7999985E 01	0.0
T7M	T12M	X76	Y76	LD	X09	Y09	R09
3.3499985E 01	0.0	0.0	3.8000000E 01	0.0	0.0	3.8000000E 01	3.7999985E 01
X011	Y011	R011	T10M	T9M	TAUM	TH2	TH3
0.0	3.8000000E 01	3.7999985E 01	0.0	3.3499985E 01	3.3499985E 01	0.0	0.0

TH4	B71M	B72M	B91M	B92M
7.8539801E-01	1.5707960E 00	0.0	1.5707960E 00	0.0

LOCATION OF PLANE 9 9.998999E 02

A1	A2	A3	A4	A5	R1	R9	TH1
0.0	0.0	0.0	0.0	0.0	3.5100006E 01	3.5100006E 01	7.8539801E-01
T2M	T4M	T5M	X45	Y45	LC	X03	Y03
0.0	0.0	0.0	0.0	3.5100006E 01	0.0	0.0	3.5100006E 01
R03	X05	Y05	R05	X07	Y07	R07	T6M
3.5099991E 01	0.0	3.5100006E 01	3.5099991E 01	0.0	3.5100006E 01	3.5099991E 01	0.0
T7M	T12M	X76	Y76	LD	X09	Y09	R09
3.6399979E 01	0.0	0.0	3.5100006E 01	0.0	0.0	3.5100006E 01	3.5099991E 01
X011	Y011	R011	T10M	T9M	TAUM	TH2	TH3
0.0	3.5100006E 01	3.5099991E 01	0.0	3.6399979E 01	3.6399979E 01	0.0	0.0
TH4	B71M	B72M	B91M	B92M			
7.8539801E-01	1.5707960E 00	0.0	1.5707960E 00	0.0			

LOCATION OF PLANE 10 1.258900E 03

A1	A2	A3	A4	A5	R1	R9	TH1
0.0	0.0	0.0	0.0	0.0	3.9000000E 01	3.9000000E 01	7.8539801E-01
T2M	T4M	T5M	X45	Y45	LC	X03	Y03
0.0	0.0	0.0	0.0	3.9000000E 01	0.0	0.0	3.9000000E 01
R03	X05	Y05	R05	X07	Y07	R07	T6M
3.9000000E 01	0.0	3.9000000E 01	3.9000000E 01	0.0	3.9000000E 01	3.9000000E 01	0.0
T7M	T12M	X76	Y76	LD	X09	Y09	R09
3.2500000E 01	0.0	0.0	3.9000000E 01	0.0	0.0	3.9000000E 01	3.9000000E 01
X011	Y011	R011	T10M	T9M	TAUM	TH2	TH3
0.0	3.9000000E 01	3.9000000E 01	0.0	3.2500000E 01	3.2500000E 01	0.0	0.0
TH4	B71M	B72M	B91M	B92M			
7.8539801E-01	1.5707960E 00	0.0	1.5707960E 00	0.0			

HEAD END

BH	BTAOE	RIG
1.0001000E 00	1.0000000E 00	1.8000000E 01

NOZZLE END

DE1	BE	AOEM					
8.0000000E 01	1.0000000E 00	5.5619995E 01					
RE1	ALFEM	ALFE	RE2	HE1	HE2	HEO	HER
4.0000000E 01	9.7075206E-01	9.7075206E-01	4.0374542E 01	2.5626242E-01	5.9009689E 01	5.9265945E 01	5.9265945E 01
VFEO	VCE	TAUEO	TAUE1	CAE	CBE	CCCE	CCVE
4.5065900E 05	7.3385219E 05	6.7117050E 01	4.5381969E-01	0.0	0.0	2.0449805E 04	0.0
CDCE	CDVE	CECE	CEVE				
1.6359510E 06	1.6000000E 02	3.2718368E 07	2.0449398E 04				

GEOMETRY TABLES

FORE-HEAD SECTION

```
TAUHD
 0.0          5.0000E-01 2.0000E 00 4.0000E 00 6.0000E 00 8.7000E 00 9.0000E 00 1.0000E 01
 1.2000E 01 1.4000E 01 1.6253E 01 1.7000E 01
ABHD
 5.5000E 04 5.5300E 04 5.5400E 04 5.4700E 04 5.2700E 04 4.8200E 04 4.4000E 04 3.4000E 04
 2.1000E 04 1.0500E 04 0.0          0.0
```

AFT-HEAD SECTION

```
TAUN
 0.0          2.0000E 00 4.0000E 00 6.0000E 00 8.0000E 00 1.0000E 01 1.2000E 01 1.4000E 01
 1.6000E 01 1.8000E 01 2.0000E 01 2.2000E 01 2.4000E 01 2.6000E 01 2.8000E 01 3.0000E 01
 3.2000E 01 3.2490E 01 3.2500E 01
ABN
 1.4771E 04 1.5049E 04 1.5407E 04 1.5710E 04 1.5912E 04 1.6031E 04 1.6058E 04 1.5982E 04
 1.5788E 04 1.5459E 04 1.4972E 04 1.4296E 04 1.3384E 04 1.2165E 04 1.0510E 04 8.1253E 03
 3.7656E 03 5.3782E 02 0.0
```

REFERENCE PLANE 1

```
TAUPL(1, 1)=
 0.0          1.0000E 00 2.0000E 00 3.0000E 00 4.0000E 00 5.0000E 00 6.0000E 00 7.0000E 00
 8.0000E 00 8.7000E 00 8.7100E 00 9.2100E 00 9.7100E 00 1.0210E 01 1.0710E 01 1.1210E 01
 1.1710E 01 1.2210E 01 1.2710E 01 1.3210E 01 1.3710E 01 1.4210E 01 1.4710E 01 1.5210E 01
 1.5710E 01 1.6210E 01 1.6243E 01 1.6253E 01

ALPPL(1, 1)=
 1.1705E 03 1.1489E 03 1.0992E 03 1.0496E 03 1.0000E 03 9.5039E 02 9.0078E 02 8.5116E 02
 8.0154E 02 7.6681E 02 7.5214E 02 6.3807E 02 5.6709E 02 5.0407E 02 4.4480E 02 3.8773E 02
 3.3207E 02 2.7743E 02 2.3044E 02 1.9071E 02 1.5494E 02 1.2170E 02 9.0215E 01 6.0002E 01
 3.0749E 01 2.2344E 00 3.7924E-01 0.0
```

REFERENCE PLANE 2

```
TAUPL(1, 2)=
 0.0          1.0000E 00 2.0000E 00 3.0000E 00 4.0000E 00 5.0000E 00 6.0000E 00 7.0000E 00
 8.0000E 00 8.7000E 00 8.7100E 00 9.2100E 00 9.7100E 00 1.0210E 01 1.0710E 01 1.1210E 01
 1.1710E 01 1.2210E 01 1.2710E 01 1.3210E 01 1.3710E 01 1.4210E 01 1.4710E 01 1.5210E 01
 1.5710E 01 1.6210E 01 1.6243E 01 1.6253E 01

ALPPL(1, 2)=
 1.1705E 03 1.1489E 03 1.0992E 03 1.0496E 03 1.0000E 03 9.5039E 02 9.0078E 02 8.5116E 02
 8.0154E 02 7.6681E 02 7.5214E 02 6.3807E 02 5.6709E 02 5.0407E 02 4.4480E 02 3.8773E 02
 3.3207E 02 2.7743E 02 2.3044E 02 1.9071E 02 1.5494E 02 1.2170E 02 9.0215E 01 6.0002E 01
 3.0749E 01 2.2344E 00 3.7924E-01 0.0
```

ORIGINAL PAGE IS
OF POOR QUALITY

REFERENCE PLANE 3

```
TAUPL(1, 3)=
 0.0          2.0000E 00 4.0000E 00 6.0000E 00 8.0000E 00 1.0000E 01 1.2000E 01 1.4000E 01
 1.6000E 01 1.8000E 01 2.0000E 01 2.2000E 01 2.4000E 01 2.6000E 01 2.8000E 01 3.0000E 01
 3.2000E 01 3.4000E 01 3.6000E 01 3.6390E 01 3.6400E 01

ALPPL(1, 3)=
 2.2054E 02 2.3311E 02 2.4567E 02 2.5824E 02 2.7081E 02 2.8337E 02 2.9594E 02 3.0850E 02
 3.2107E 02 3.3364E 02 3.4620E 02 3.5877E 02 3.7134E 02 3.8390E 02 3.9647E 02 4.0904E 02
 4.2160E 02 4.3417E 02 4.4673E 02 4.4918E 02 0.0
```

REFERENCE PLANE 4

```
TAUPL(1, 4)=
 0.0          2.0000E 00 4.0000E 00 6.0000E 00 8.0000E 00 1.0000E 01 1.2000E 01 1.4000E 01
 1.6000E 01 1.8000E 01 2.0000E 01 2.2000E 01 2.4000E 01 2.6000E 01 2.8000E 01 3.0000E 01
 3.2000E 01 3.3490E 01 3.3500E 01

ALPPL(1, 4)=
 2.3876E 02 2.5133E 02 2.6389E 02 2.7646E 02 2.8903E 02 3.0159E 02 3.1416E 02 3.2673E 02
 3.3929E 02 3.5186E 02 3.6442E 02 3.7699E 02 3.8956E 02 4.0212E 02 4.1469E 02 4.2726E 02
 4.3982E 02 4.4918E 02 0.0
```

REFERENCE PLANE 5

```
TAUPL(1, 5)=
 0.0          2.0000E 00 4.0000E 00 6.0000E 00 8.0000E 00 1.0000E 01 1.2000E 01 1.4000E 01
 1.6000E 01 1.8000E 01 2.0000E 01 2.2000E 01 2.4000E 01 2.6000E 01 2.8000E 01 3.0000E 01
 3.2000E 01 3.4000E 01 3.6000E 01 3.6390E 01 3.6400E 01

ALPPL(1, 5)=
 2.2054E 02 2.3311E 02 2.4567E 02 2.5824E 02 2.7081E 02 2.8337E 02 2.9594E 02 3.0850E 02
 3.2107E 02 3.3364E 02 3.4620E 02 3.5877E 02 3.7134E 02 3.8390E 02 3.9647E 02 4.0904E 02
 4.2160E 02 4.3417E 02 4.4673E 02 4.4918E 02 0.0
```

REFERENCE PLANE 6

```
TAUPL(1, 6)=
 0.0          2.0000E 00 4.0000E 00 6.0000E 00 8.0000E 00 1.0000E 01 1.2000E 01 1.4000E 01
 1.6000E 01 1.8000E 01 2.0000E 01 2.2000E 01 2.4000E 01 2.6000E 01 2.8000E 01 3.0000E 01
 3.2000E 01 3.3490E 01 3.3500E 01

ALPPL(1, 6)=
 2.3876E 02 2.5133E 02 2.6389E 02 2.7646E 02 2.8903E 02 3.0159E 02 3.1416E 02 3.2673E 02
 3.3929E 02 3.5186E 02 3.6442E 02 3.7699E 02 3.8956E 02 4.0212E 02 4.1469E 02 4.2726E 02
 4.3982E 02 4.4918E 02 0.0
```

REFERENCE PLANE 7

```
TAUPL(1, 7)=
 0.0          2.0000E 00 4.0000E 00 6.0000E 00 8.0000E 00 1.0000E 01 1.2000E 01 1.4000E 01
 1.6000E 01 1.8000E 01 2.0000E 01 2.2000E 01 2.4000E 01 2.6000E 01 2.8000E 01 3.0000E 01
 3.2000E 01 3.4000E 01 3.6000E 01 3.6390E 01 3.6400E 01

ALPPL(1, 7)=
 2.2054E 02 2.3311E 02 2.4567E 02 2.5824E 02 2.7081E 02 2.8337E 02 2.9594E 02 3.0850E 02
 3.2107E 02 3.3364E 02 3.4620E 02 3.5877E 02 3.7134E 02 3.8390E 02 3.9647E 02 4.0904E 02
 4.2160E 02 4.3417E 02 4.4673E 02 4.4918E 02 0.0


REFERENCE PLANE  8

TAUPL(1, 8)=
 0.0          2.0000E 00 4.0000E 00 6.0000E 00 8.0000E 00 1.0000E 01 1.2000E 01 1.4000E 01
 1.6000E 01 1.8000E 01 2.0000E 01 2.2000E 01 2.4000E 01 2.6000E 01 2.8000E 01 3.0000E 01
 3.2000E 01 3.3490E 01 3.3500E 01

ALPPL(1, 8)=
 2.3876E 02 2.5133E 02 2.6389E 02 2.7646E 02 2.8903E 02 3.0159E 02 3.1416E 02 3.2673E 02
 3.3929E 02 3.5186E 02 3.6442E 02 3.7699E 02 3.8956E 02 4.0212E 02 4.1469E 02 4.2726E 02
 4.3982E 02 4.4918E 02 0.0


REFERENCE PLANE  9

TAUPL(1, 9)=
 0.0          2.0000E 00 4.0000E 00 6.0000E 00 8.0000E 00 1.0000E 01 1.2000E 01 1.4000E 01
 1.6000E 01 1.8000E 01 2.0000E 01 2.2000E 01 2.4000E 01 2.6000E 01 2.8000E 01 3.0000E 01
 3.2000E 01 3.4000E 01 3.6000E 01 3.6390E 01 3.6400E 01

ALPPL(1, 9)=
 2.2054E 02 2.3311E 02 2.4567E 02 2.5824E 02 2.7081E 02 2.8337E 02 2.9594E 02 3.0850E 02
 3.2107E 02 3.3364E 02 3.4620E 02 3.5877E 02 3.7134E 02 3.8390E 02 3.9647E 02 4.0904E 02
 4.2160E 02 4.3417E 02 4.4673E 02 4.4918E 02 0.0


REFERENCE PLANE 10

TAUPL(1,10)=
 0.0          2.0000E 00 4.0000E 00 6.0000E 00 8.0000E 00 1.0000E 01 1.2000E 01 1.4000E 01
 1.6000E 01 1.8000E 01 2.0000E 01 2.2000E 01 2.4000E 01 2.6000E 01 2.8000E 01 3.0000E 01
 3.2000E 01 3.2490E 01 3.2500E 01

ALPPL(1,10)=
 2.4504E 02 2.5761E 02 2.7018E 02 2.8274E 02 2.9531E 02 3.0788E 02 3.2044E 02 3.3301E 02
 3.4557E 02 3.5814E 02 3.7071E 02 3.8327E 02 3.9584E 02 4.0841E 02 4.2097E 02 4.3354E 02
 4.4611E 02 4.4918E 02 0.0
```

IGNITION TIME, TIME (S) 0.0

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	0.0	0.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	0.0	0.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	0.0	0.0
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.0	0.0
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.0	0.0
THRUST COEFFICIENT	CF	0.0	0.0
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	0.0	0.0
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	0.0	0.0
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	0.0	0.0
INERT MASS REMAINING (KG,LBM)	MIR	4431.5938	9770.0000
TOTAL BURN AREA (M**2,IN**2)	ABTOT	345.53589	535581.81
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	256.86865	15675095.
PROPELLANT MASS REMAINING (KG,LBM)	WF	455046.19	1003205.3
TOTAL GAS MASS (KG,LBM)	WGTOT	1.8069124	3.9835615
RATIO OF SPECIFIC HEATS	GAMA	1.1612101	1.1612101
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.705085	28.009918
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1551.4697	5090.1250
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.0	0.0
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	10135290.	14.699997
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.0	0.0
BURN AREA (M**2,IN**2)	AHH	35.483795	55000.000
BURN RATE (M/S,IN/S)	RBZ(1)	0.0	0.0
DISTANCE BURNED (M,IN)	TAUZ(1)	0.0	0.0
PROPELLANT VOLUME (M**3,IN**3)	VFH	9.7401390	594380.00
GAS VOLUME (M**3,IN**3)	VPH	2.7857990	170000.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3309.1272	5956.4297
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	255.55794	396115.63
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	44.964584	69695.250
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	239.74356	14630056.
GAS VOLUME (M**3,IN**3)	VP	88.421814	5395833.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	10135290.	14.699997
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.0	0.0
BURN AREA (M**2,IN**2)	AAN	9.5296249	14770.949
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.0	0.0
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.0	0.0
PROPELLANT VOLUME (M**3,IN**3)	VFN	7.3849745	450659.00
GAS VOLUME (M**3,IN**3)	VPN	4.6407022	283193.19
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3309.1272	5956.4297
PORT AREA (M**2,IN**2)	AP	3.0828056	4778.3594
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4233408	2206.1836
EXPANSION RATIO	EPR	6.9995146	6.9995146
PRESSURE RATIO	PEPO	1.0000000	1.0000000
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.0	0.0
NUMBER OF PRESSURE ITERATIONS	ANLOPS	1.0000000	1.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	14.70	14.70	5956.43	0.0	0.0	1170.52	5317.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.000	14.70	14.70	5956.43	0.0	0.0	1170.52	5317.93	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60.000	14.70	14.70	5956.43	0.0	0.0	1170.52	5317.93	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90.000	14.70	14.70	5956.43	0.0	0.0	1170.52	5317.93	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115.800	14.70	14.70	5956.43	0.0	0.0	1170.52	5317.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118.800	14.70	14.70	5956.43	0.0	0.0	220.54	3870.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148.800	14.70	14.70	5956.43	0.0	0.0	222.39	3935.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178.800	14.70	14.70	5956.43	0.0	0.0	224.24	4001.29	0.0	0.0	0.0	0.0	0.0	0.0	0.0
208.800	14.70	14.70	5956.43	0.0	0.0	226.08	4067.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0
238.800	14.70	14.70	5956.43	0.0	0.0	227.93	4134.29	0.0	0.0	0.0	0.0	0.0	0.0	0.0
268.800	14.70	14.70	5956.43	0.0	0.0	229.78	4201.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
298.800	14.70	14.70	5956.43	0.0	0.0	231.63	4269.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
328.800	14.70	14.70	5956.43	0.0	0.0	233.48	4337.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0
358.800	14.70	14.70	5956.43	0.0	0.0	235.32	4406.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
388.800	14.70	14.70	5956.43	0.0	0.0	237.17	4476.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0
414.600	14.70	14.70	5956.43	0.0	0.0	238.76	4536.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0
417.600	14.70	14.70	5956.43	0.0	0.0	220.54	3870.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0
447.600	14.70	14.70	5956.43	0.0	0.0	222.49	3939.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0
477.600	14.70	14.70	5956.43	0.0	0.0	224.44	4008.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0
507.600	14.70	14.70	5956.43	0.0	0.0	226.39	4078.41	0.0	0.0	0.0	0.0	0.0	0.0	0.0
537.600	14.70	14.70	5956.43	0.0	0.0	228.33	4148.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
567.600	14.70	14.70	5956.43	0.0	0.0	230.28	4220.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0
597.600	14.70	14.70	5956.43	0.0	0.0	232.23	4291.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0
627.600	14.70	14.70	5956.43	0.0	0.0	234.18	4364.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0
657.600	14.70	14.70	5956.43	0.0	0.0	236.13	4437.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
687.600	14.70	14.70	5956.43	0.0	0.0	238.08	4510.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0
698.100	14.70	14.70	5956.43	0.0	0.0	238.76	4536.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0
701.100	14.70	14.70	5956.43	0.0	0.0	220.54	3870.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0
731.100	14.70	14.70	5956.43	0.0	0.0	222.39	3935.62	0.0	0.0	0.0	0.0	0.0	0.0	0.0
761.100	14.70	14.70	5956.43	0.0	0.0	224.24	4001.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0
791.100	14.70	14.70	5956.43	0.0	0.0	226.08	4067.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0
821.100	14.70	14.70	5956.43	0.0	0.0	227.93	4134.29	0.0	0.0	0.0	0.0	0.0	0.0	0.0
851.100	14.70	14.70	5956.43	0.0	0.0	229.78	4201.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
881.100	14.70	14.70	5956.43	0.0	0.0	231.63	4269.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
911.100	14.70	14.70	5956.43	0.0	0.0	233.48	4337.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0
941.100	14.70	14.70	5956.43	0.0	0.0	235.32	4406.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
971.100	14.70	14.70	5956.43	0.0	0.0	237.17	4476.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0
996.900	14.70	14.70	5956.43	0.0	0.0	238.76	4536.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999.900	14.70	14.70	5956.43	0.0	0.0	220.54	3870.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1029.900	14.70	14.70	5956.43	0.0	0.0	223.38	3970.74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1059.900	14.70	14.70	5956.43	0.0	0.0	226.22	4072.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1089.900	14.70	14.70	5956.43	0.0	0.0	229.05	4175.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1119.900	14.70	14.70	5956.43	0.0	0.0	231.89	4279.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1149.900	14.70	14.70	5956.43	0.0	0.0	234.73	4384.64	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1179.900	14.70	14.70	5956.43	0.0	0.0	237.57	4491.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1209.900	14.70	14.70	5956.43	0.0	0.0	240.41	4599.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1239.900	14.70	14.70	5956.43	0.0	0.0	243.25	4708.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1258.900	14.70	14.70	5956.43	0.0	0.0	245.04	4778.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AFT	14.70	14.70	5956.43	0.0	0.0	.....	4778.36	0.0	0.0	0.0	0.0	0.0	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U. FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.1580E 02	1.4700E 01	1.4700E 01	0.0	0.0	1.6061E 04	0.0	1.0743E 04	0.0	0.0	0.0
AFT	1.1880E 02	1.4700E 01	1.4700E 01	5.9564E 03	0.0	1.6061E 04	0.0	0.0	0.0	0.0	0.0

GAS BUILDUP IN SLOT, DW/DT = 0.0

FOREWARD	4.1460E 02	1.4700E 01	1.4700E 01	0.0	0.0	1.6061E 04	0.0	1.1524E 04	0.0	0.0	0.0
AFT	4.1760E 02	1.4700E 01	1.4700E 01	5.9564E 03	0.0	1.6061E 04	0.0	1.2190E 04	0.0	0.0	0.0

GAS BUILDUP IN SLOT, DW/DT = 0.0

FOREWARD	6.9810E 02	1.4700E 01	1.4700E 01	0.0	0.0	1.6061E 04	0.0	1.1524E 04	0.0	0.0	0.0
AFT	7.0110E 02	1.4700E 01	1.4700E 01	5.9564E 03	0.0	1.6061E 04	0.0	0.0	0.0	0.0	0.0

GAS BUILDUP IN SLOT, DW/DT = 0.0

FOREWARD	9.9690E 02	1.4700E 01	1.4700E 01	0.0	0.0	1.6061E 04	0.0	1.1524E 04	0.0	0.0	0.0
AFT	9.9990E 02	1.4700E 01	1.4700E 01	5.9564E 03	0.0	1.6061E 04	0.0	1.2190E 04	0.0	0.0	0.0

GAS BUILDUP IN SLOT, DW/DT = 0.0

IGNITION TIME, TIME (S) 0.25000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	6096004.0	1370886.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	7107754.0	1597887.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	0.0	0.0
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	762250.50	171360.75
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	888469.31	199735.88
THRUST COEFFICIENT	CF	1.6210384	1.6210384
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	2805.2454	6184.5078
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	350.65552	773.06348
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	0.0	0.0
INERT MASS REMAINING (KG,LBM)	MIR	4431.5938	9770.0000
TOTAL BURN AREA (M**2,IN**2)	ABTOT	345.53589	535581.81
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	256.86865	15675095.
PROPELLANT MASS REMAINING (KG,LBM)	WF	455046.19	1003205.3
TOTAL GAS MASS (KG,LBM)	WGTOT	311.95190	687.73633
RATIO OF SPECIFIC HEATS	GAMA	1.1615438	1.1615438
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.847545	28.323990
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1563.0332	5128.0625
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.31401831	0.31401831
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.33784269E 09	489.99976
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	43497264.	63.087463
BURN AREA (M**2,IN**2)	AHH	35.483795	55000.000
BURN RATE (M/S,IN/S)	RBZ(1)	0.65610334E-02	0.25830847
DISTANCE BURNED (M,IN)	TAUZ(1)	0.0	0.0
PROPELLANT VOLUME (M**3,IN**3)	VFH	9.7401390	594380.00
GAS VOLUME (M**3,IN**3)	VPH	2.7857990	170000.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3420.5249	6156.9453
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	255.55794	396115.63
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	44.964584	69695.250
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	239.74356	14630056.
GAS VOLUME (M**3,IN**3)	VP	88.421814	5395833.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.30805555E 09	446.79712
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	39773872.	57.687134
BURN AREA (M**2,IN**2)	AAN	9.5296249	14770.949
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.63603111E-02	0.25040603
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.0	0.0
PROPELLANT VOLUME (M**3,IN**3)	VFN	7.3849745	450659.00
GAS VOLUME (M**3,IN**3)	VPN	4.6407022	283193.19
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3399.2617	6118.6719
PORT AREA (M**2,IN**2)	AP	3.0828056	4778.3594
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4233427	2206.1865
EXPANSION RATIO	EPR	6.9995050	6.9995050
PRESSURE RATIO	PEPO	0.22169322E-01	0.22169322E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.60999103E-01	0.60999103E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	5.0000000	5.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	490.00	489.74	6156.95	106.93	0.030	1170.52	5317.92	829.10	909.24	80.15	0.2583	0.0	0.2581	0.0
30.000	489.69	489.01	6156.22	172.41	0.049	1170.52	5317.93	1334.46	580.48	75.12	0.2583	0.0	0.2583	0.0
60.000	489.12	487.84	6155.15	238.24	0.067	1170.52	5317.93	1839.82	580.35	74.99	0.2582	0.0	0.2582	0.0
90.000	488.30	486.21	6153.72	304.62	0.086	1170.52	5317.93	2345.13	580.09	74.78	0.2580	0.0	0.2580	0.0
115.800	487.37	484.42	6152.20	362.29	0.102	1170.52	5317.92	2779.57	498.54	64.09	0.2578	0.0	0.2578	0.0
118.800	486.89	480.56	6146.20	531.82	0.150	220.54	3870.47	2948.83	420.36	22.39	0.2576	0.0	0.2576	0.0
148.800	485.97	479.60	6146.11	533.88	0.151	222.39	3935.61	3004.12	109.44	54.15	0.2571	0.0	0.2571	0.0
178.800	485.05	478.65	6146.03	535.84	0.151	224.24	4001.29	3059.40	110.23	54.94	0.2570	0.0	0.2570	0.0
208.800	484.14	477.70	6145.95	537.70	0.152	226.08	4067.52	3114.74	111.09	55.74	0.2569	0.0	0.2569	0.0
238.800	483.22	476.76	6145.87	539.49	0.152	227.93	4134.29	3170.14	111.95	56.55	0.2568	0.0	0.2568	0.0
268.800	482.31	475.82	6145.80	541.19	0.153	229.78	4201.60	3225.59	112.80	57.36	0.2567	0.0	0.2567	0.0
298.800	481.40	474.88	6145.73	542.81	0.153	231.63	4269.45	3281.09	113.66	58.17	0.2565	0.0	0.2565	0.0
328.800	480.50	473.95	6145.66	544.35	0.154	233.48	4337.85	3336.62	114.52	58.98	0.2564	0.0	0.2564	0.0
358.800	479.60	473.03	6145.60	545.82	0.154	235.32	4406.79	3392.20	115.38	59.81	0.2563	0.0	0.2563	0.0
388.800	478.70	472.11	6145.54	547.21	0.155	237.17	4476.27	3447.80	116.24	60.63	0.2562	0.0	0.2562	0.0
414.600	477.93	471.33	6145.49	548.35	0.155	238.76	4536.46	3495.64	100.64	52.81	0.2561	0.0	0.2561	0.0
417.600	475.97	464.51	6136.55	725.45	0.205	220.54	3870.47	3894.27	203.00	21.72	0.2560	0.0	0.2560	0.0
447.600	475.29	463.89	6136.63	724.08	0.205	222.49	3939.18	3950.55	108.69	52.41	0.2551	0.0	0.2551	0.0
477.600	474.62	463.28	6136.72	722.64	0.204	224.44	4008.49	4006.73	109.44	53.26	0.2550	0.0	0.2550	0.0
507.600	473.96	462.67	6136.80	721.17	0.204	226.39	4078.41	4062.97	110.36	54.12	0.2550	0.0	0.2550	0.0
537.600	473.30	462.08	6136.89	719.67	0.203	228.33	4148.92	4119.27	111.28	54.98	0.2549	0.0	0.2549	0.0
567.600	472.65	461.49	6136.97	718.14	0.203	230.28	4220.05	4175.61	112.20	55.86	0.2548	0.0	0.2548	0.0
597.600	472.01	460.91	6137.06	716.58	0.203	232.23	4291.78	4231.99	113.12	56.73	0.2547	0.0	0.2547	0.0
627.600	471.37	460.34	6137.15	714.99	0.202	234.18	4364.11	4288.40	114.04	57.62	0.2547	0.0	0.2547	0.0
657.600	470.74	459.78	6137.24	713.38	0.202	236.13	4437.04	4344.85	114.96	58.51	0.2546	0.0	0.2546	0.0
687.600	470.12	459.22	6137.34	711.74	0.201	238.08	4510.59	4401.31	115.88	59.41	0.2545	0.0	0.2545	0.0
698.100	469.69	458.80	6137.35	711.51	0.201	238.76	4536.46	4421.08	40.77	21.00	0.2544	0.0	0.2544	0.0
701.100	468.51	452.00	6126.74	879.80	0.249	220.54	3870.47	4602.93	414.83	21.15	0.2544	0.0	0.2544	0.0
731.100	467.66	451.26	6126.91	877.39	0.248	222.39	3935.62	4659.90	107.98	51.00	0.2535	0.0	0.2535	0.0
761.100	466.82	450.54	6127.08	874.94	0.248	224.24	4001.30	4716.79	108.67	51.77	0.2534	0.0	0.2534	0.0
791.100	465.99	449.83	6127.25	872.50	0.247	226.08	4067.52	4773.78	109.53	52.54	0.2533	0.0	0.2533	0.0
821.100	465.17	449.13	6127.42	870.05	0.246	227.93	4134.29	4830.84	110.38	53.32	0.2532	0.0	0.2532	0.0
851.100	464.36	448.44	6127.59	867.59	0.245	229.78	4201.60	4887.98	111.24	54.10	0.2531	0.0	0.2531	0.0
881.100	463.57	447.76	6127.76	865.14	0.245	231.63	4269.45	4945.18	112.10	54.89	0.2530	0.0	0.2530	0.0
911.100	462.78	447.08	6127.93	862.68	0.244	233.48	4337.85	5002.46	112.96	55.68	0.2529	0.0	0.2529	0.0
941.100	462.00	446.42	6128.09	860.22	0.243	235.32	4406.79	5059.79	113.81	56.48	0.2529	0.0	0.2529	0.0
971.100	461.22	445.76	6128.26	857.76	0.243	237.17	4476.27	5117.16	114.67	57.29	0.2528	0.0	0.2528	0.0
996.900	460.57	445.20	6128.40	855.64	0.242	238.76	4536.46	5166.55	99.30	49.91	0.2527	0.0	0.2527	0.0
999.900	457.54	432.16	6108.72	1108.42	0.314	220.54	3870.47	5560.96	0.0	20.39	0.2526	0.0	0.2526	0.0
1029.900	456.34	431.72	6110.08	1093.12	0.310	223.38	3970.74	5619.18	107.28	49.06	0.2509	0.0	0.2509	0.0
1059.900	455.20	431.29	6111.36	1078.16	0.305	226.22	4072.30	5677.17	108.26	50.26	0.2508	0.0	0.2508	0.0
1089.900	454.09	430.86	6112.60	1063.63	0.301	229.05	4175.13	5735.30	109.60	51.47	0.2507	0.0	0.2507	0.0
1119.900	453.02	430.45	6113.78	1049.52	0.297	231.89	4279.24	5793.54	110.94	52.70	0.2507	0.0	0.2507	0.0
1149.900	451.98	430.03	6114.91	1035.79	0.293	234.73	4384.64	5851.87	112.28	53.94	0.2506	0.0	0.2506	0.0
1179.900	450.98	429.62	6116.00	1022.43	0.289	237.57	4491.32	5910.29	113.62	55.20	0.2506	0.0	0.2506	0.0
1209.900	450.00	429.22	6117.05	1009.43	0.286	240.41	4599.27	5968.79	114.96	56.47	0.2505	0.0	0.2505	0.0
1239.900	449.05	428.83	6118.05	996.76	0.282	243.25	4708.52	6027.33	116.30	57.75	0.2505	0.0	0.2505	0.0
1258.900	448.47	428.58	6118.67	988.90	0.280	245.04	4778.36	6064.43	74.35	37.25	0.2504	0.0	0.2504	0.0
AFT	446.80	425.97	6116.65	1014.33	0.287	.....	4778.36	6184.51	236.72	116.64	0.2504	0.0	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.1580E 02	4.8737E 02	4.8442E 02	6.1522E 03	1.2823E 02	1.6061E 04	1.9164E 02	1.0743E 04	2.7874F-01	0.0	2.9712F 03
AFT	1.1880E 02	4.8349E 02	4.8056E 02	6.1462E 03	1.2816E 02	1.6061E 04	0.0	0.0	0.0	0.0	2.9488F 03

GAS BUILDUP IN SLOT, DW/DT = 2.2386E 01

FOREWARD	4.1460E 02	4.7793E 02	4.7133E 02	6.1455E 03	1.6394E 02	1.6061E 04	2.0428E 02	1.1524E 04	2.7697F-01	0.0	3.6999F 03
AFT	4.1760E 02	4.7102E 02	4.6451E 02	6.1366E 03	1.6513E 02	1.6061E 04	2.1608E 02	1.2190E 04	2.7697F-01	0.0	3.6782F 03

GAS BUILDUP IN SLOT, DW/DT = 2.1717E 01

FOREWARD	6.9810E 02	4.6969E 02	4.5880E 02	6.1373E 03	2.1020E 02	1.6061E 04	2.0300E 02	1.1524E 04	2.7523E-01	0.0	4.6241F 03
AFT	7.0110E 02	4.6272E 02	4.5200E 02	6.1267E 03	2.1202E 02	1.6061E 04	0.0	0.0	0.0	0.0	4.6029F 03

GAS BUILDUP IN SLOT, DW/DT = 2.1148E 01

FOREWARD	9.9690E 02	4.6057E 02	4.4520E 02	6.1284E 03	2.5111E 02	1.6061E 04	2.0158E 02	1.1524E 04	2.7331E-01	0.0	5.3681F 03
AFT	9.9990E 02	4.4708E 02	4.3216E 02	6.1087E 03	2.5688E 02	1.6061E 04	2.1323E 02	1.2190E 04	2.7331E-01	0.0	5.3477F 03

GAS BUILDUP IN SLOT, DW/DT = 2.0388E 01

IGNITION TIME, TIME (S) 0.50000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	9807678.0	2204854.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	10817428.	2431855.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	131766.00	29622.188
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	2750460.0	618338.25
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	3129117.0	703453.63
THRUST COEFFICIENT	CF	1.6409292	1.6409292
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4206.5000	9273.7500
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	1227.1240	2705.3457
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	70.717880	155.90625
INERT MASS REMAINING (KG,LBM)	MIR	4413.9141	9731.0234
TOTAL BURN AREA (M**2,IN**2)	ABTOT	345.55347	535609.25
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	256.30103	15640463.
PROPELLANT MASS REMAINING (KG,LBM)	WF	454040.88	1000988.8
TOTAL GAS MASS (KG,LBM)	WGTOT	465.13770	1025.4536
RATIO OF SPECIFIC HEATS	GAMA	1.1617241	1.1617241
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.900161	28.439987
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1567.1624	5141.6094
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.30474895	0.30474895
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.49986970E 09	725.00000
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.14821130E 09	214.96234
BURN AREA (M**2,IN**2)	AHH	35.508789	55038.746
BURN RATE (M/S,IN/S)	RBZ(1)	0.79986192E-02	0.31490636
DISTANCE BURNED (M,IN)	TAUZ(1)	0.16402581E-02	0.64577103E-01
PROPELLANT VOLUME (M**3,IN**3)	VFH	9.6819153	590827.00
GAS VOLUME (M**3,IN**3)	VPH	2.8440228	173553.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3460.2969	6228.5352
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	255.64120	396244.69
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	44.868454	69546.250
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	239.24942	14599902.
GAS VOLUME (M**3,IN**3)	VP	88.807129	5419346.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.46312269E 09	671.70288
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.13617118E 09	197.49963
BURN AREA (M**2,IN**2)	AAN	9.5352449	14779.660
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.77833161E-02	0.30642980
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.15900780E-02	0.62601507E-01
PROPELLANT VOLUME (M**3,IN**3)	VFN	7.3698168	449734.00
GAS VOLUME (M**3,IN**3)	VPN	4.6558609	284118.19
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3439.0317	6190.2578
PORT AREA (M**2,IN**2)	AP	3.0927095	4793.7109
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4234362	2206.3311
EXPANSION RATIO	EPR	6.9990463	6.9990463
PRESSURE RATIO	PEPO	0.22161439E-01	0.22161439E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.67877054E-01	0.67877054E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	4.0000000	4.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FONE	725.00	724.72	6228.54	92.34	0.026	1169.12	5393.46	1066.52	1109.25	42.73	0.3149	0.065	0.3146	0.065
30.000	724.71	723.96	6227.97	150.36	0.042	1169.12	5393.43	1734.31	706.84	39.05	0.3149	0.065	0.3149	0.065
60.000	724.18	722.73	6227.14	208.57	0.059	1169.12	5393.40	2401.99	706.72	39.04	0.3148	0.065	0.3148	0.065
90.000	723.39	721.02	6226.04	267.12	0.075	1169.12	5393.36	3069.45	706.50	39.03	0.3147	0.065	0.3147	0.065
115.730	722.49	719.15	6224.86	317.70	0.089	1169.12	5393.34	3641.90	605.66	33.21	0.3145	0.064	0.3145	0.064
118.800	722.06	714.85	6220.18	467.32	0.131	220.94	3884.69	3838.36	461.08	12.18	0.3143	0.064	0.3143	0.064
148.800	721.20	713.83	6219.97	473.00	0.133	222.79	3949.96	3944.72	133.80	27.44	0.3139	0.064	0.3139	0.064
178.800	720.35	712.81	6219.76	478.52	0.135	224.64	4015.76	4051.62	134.80	27.89	0.3138	0.064	0.3138	0.064
208.800	719.48	711.78	6219.55	483.92	0.136	226.49	4082.11	4159.14	135.86	28.35	0.3137	0.064	0.3137	0.064
238.800	718.61	710.75	6219.35	489.19	0.138	228.34	4148.99	4267.27	136.93	28.80	0.3136	0.064	0.3136	0.064
268.800	717.72	709.72	6219.15	494.34	0.139	230.18	4216.41	4376.00	138.00	29.26	0.3135	0.064	0.3135	0.064
298.800	716.84	708.68	6218.95	499.36	0.140	232.03	4284.37	4485.35	139.06	29.72	0.3133	0.064	0.3133	0.064
328.800	715.96	707.64	6218.75	504.27	0.142	233.88	4352.87	4595.29	140.13	30.18	0.3132	0.064	0.3132	0.064
358.800	715.07	706.60	6218.56	509.08	0.143	235.73	4421.91	4705.84	141.19	30.64	0.3131	0.064	0.3131	0.064
388.800	714.17	705.56	6218.37	513.77	0.145	237.57	4491.49	4816.98	142.25	31.11	0.3130	0.064	0.3130	0.064
414.531	713.40	704.67	6218.20	517.73	0.146	239.16	4551.61	4913.00	122.85	26.83	0.3129	0.064	0.3129	0.064
417.669	711.41	696.95	6211.09	668.48	0.188	220.95	3884.76	5360.95	222.46	13.12	0.3128	0.064	0.3128	0.064
447.600	710.02	695.47	6210.94	671.24	0.189	222.89	3953.44	5466.78	132.81	26.98	0.3120	0.064	0.3120	0.064
477.600	708.64	694.00	6210.80	673.91	0.190	224.84	4022.88	5573.25	134.08	27.60	0.3119	0.064	0.3119	0.064
507.600	707.26	692.53	6210.66	676.53	0.190	226.79	4092.92	5680.45	135.18	27.98	0.3117	0.064	0.3117	0.064
537.600	705.88	691.08	6210.52	679.10	0.191	228.74	4163.56	5788.37	136.28	28.36	0.3116	0.064	0.3116	0.064
567.600	704.51	689.63	6210.38	681.63	0.192	230.68	4234.79	5897.01	137.38	28.73	0.3114	0.064	0.3114	0.064
597.600	703.15	688.18	6210.25	684.10	0.193	232.63	4306.64	6006.37	138.48	29.11	0.3113	0.064	0.3113	0.064
627.600	701.79	686.75	6210.11	686.53	0.193	234.58	4379.07	6116.45	139.57	29.49	0.3111	0.064	0.3111	0.064
657.600	700.43	685.32	6209.98	688.92	0.194	236.53	4452.11	6227.25	140.67	29.87	0.3110	0.064	0.3110	0.064
687.600	699.09	683.90	6209.86	691.27	0.195	238.48	4525.75	6338.77	141.76	30.24	0.3108	0.064	0.3108	0.064
698.031	698.62	683.41	6209.81	692.09	0.195	239.16	4551.49	6377.91	49.54	10.40	0.3107	0.064	0.3107	0.064
701.100	697.39	674.74	6200.30	847.20	0.239	220.94	3884.51	6588.72	454.99	11.64	0.3106	0.064	0.3106	0.064
731.100	696.41	673.75	6200.27	847.83	0.239	222.79	3949.78	6694.67	132.11	26.16	0.3097	0.063	0.3097	0.063
761.100	695.43	672.78	6200.22	848.41	0.239	224.63	4015.58	6801.10	132.99	26.56	0.3096	0.063	0.3096	0.063
791.100	694.47	671.82	6200.19	848.97	0.239	226.48	4081.92	6908.17	134.04	26.97	0.3095	0.063	0.3095	0.063
821.100	693.51	670.86	6200.15	849.52	0.239	228.33	4148.80	7015.88	135.10	27.38	0.3094	0.063	0.3094	0.063
851.100	692.56	669.92	6200.11	850.04	0.240	230.18	4216.22	7124.24	136.15	27.79	0.3093	0.063	0.3093	0.063
881.100	691.61	668.98	6200.08	850.54	0.240	232.03	4284.18	7233.23	137.20	28.21	0.3092	0.063	0.3092	0.063
911.100	690.68	668.05	6200.05	851.02	0.240	233.87	4352.68	7342.86	138.25	28.62	0.3091	0.063	0.3091	0.063
941.100	689.75	667.12	6200.02	851.49	0.240	235.72	4421.71	7453.12	139.30	29.04	0.3090	0.063	0.3090	0.063
971.100	688.83	666.21	6199.98	851.93	0.240	237.57	4491.29	7564.01	140.36	29.46	0.3089	0.063	0.3089	0.063
996.832	688.04	665.43	6199.96	852.32	0.240	239.15	4551.40	7659.82	121.22	25.41	0.3088	0.063	0.3088	0.063
999.968	684.81	648.96	6182.43	1080.06	0.305	220.94	3884.64	8102.46	0.0	12.33	0.3087	0.063	0.3087	0.063
1029.900	683.40	648.44	6183.50	1067.67	0.301	223.77	3984.89	8208.13	131.10	25.42	0.3069	0.063	0.3069	0.063
1059.900	682.05	647.93	6184.52	1055.59	0.298	226.61	4086.63	8314.51	132.67	26.29	0.3068	0.063	0.3068	0.063
1089.900	680.74	647.41	6185.50	1043.93	0.294	229.45	4189.64	8421.89	134.32	26.94	0.3068	0.063	0.3068	0.063
1119.900	679.47	646.90	6186.43	1032.65	0.291	232.29	4293.92	8530.26	135.97	27.59	0.3067	0.063	0.3067	0.063
1149.900	678.23	646.39	6187.32	1021.74	0.288	235.13	4399.48	8639.62	137.61	28.26	0.3067	0.063	0.3067	0.063
1179.900	677.03	645.89	6188.18	1011.20	0.285	237.96	4506.31	8749.95	139.26	28.92	0.3066	0.063	0.3066	0.063
1209.900	675.86	645.38	6188.99	1000.98	0.282	240.80	4614.41	8861.25	140.90	29.60	0.3065	0.063	0.3065	0.063
1239.900	674.71	644.88	6189.78	991.09	0.279	243.64	4723.79	8973.51	142.55	30.28	0.3065	0.063	0.3065	0.063
1258.900	674.01	644.57	6190.26	984.98	0.278	245.44	4793.71	9045.10	91.13	19.54	0.3064	0.063	0.3064	0.063
AFT	671.70	640.53	6187.80	1015.84	0.287	.....	4793.71	9273.75	289.85	61.19	0.3064	0.063	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.1573E 02	7.2249E 02	7.1915E 02	6.2249E 03	1.1280E 02	1.6061E 04	2.0865E 02	1.0667E 04	3.0562E-01	6.9685E-02	3.8505E 03
AFT	1.1880E 02	7.1817E 02	7.1485E 02	6.2202E 03	1.1304E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8384F 03

GAS BUILDUP IN SLOT, DW/DT = 1.2185E 01

FOREWARD	4.1453E 02	7.1340E 02	7.0467E 02	6.2182E 03	1.5342E 02	1.6061E 04	2.2405E 02	1.1509E 04	3.0418E-01	6.9242E-02	5.1370F 03
AFT	4.1767E 02	7.0558E 02	6.9695E 02	6.2111E 03	1.5454E 02	1.6061E 04	2.3703E 02	1.2176E 04	3.0418E-01	6.9242E-02	5.1239F 03

GAS BUILDUP IN SLOT, DW/DT = 1.3121E 01

FOREWARD	6.9803E 02	6.9862E 02	6.8341E 02	6.2098E 03	2.0298E 02	1.6061E 04	2.2246E 02	1.1509E 04	3.0201E-01	6.8809E-02	6.6004F 03
AFT	7.0110E 02	6.8976E 02	6.7474E 02	6.2003E 03	2.0491E 02	1.6061E 04	0.0	0.0	0.0	0.0	6.5887F 03

GAS BUILDUP IN SLOT, DW/DT = 1.1636E 01

FOREWARD	9.9683E 02	6.8804E 02	6.6543E 02	6.2000E 03	2.4851E 02	1.6061E 04	2.2108E 02	1.1509E 04	3.0014E-01	6.8328E-02	7.8809F 03
AFT	9.9997E 02	6.7102E 02	6.4896E 02	6.1824E 03	2.5370E 02	1.6061E 04	2.3389E 02	1.2176E 04	3.0014E-01	6.8328E-02	7.8686F 03

GAS BUILDUP IN SLOT, DW/DT = 1.2327E 01

IGNITION TIME, TIME (S) 0.75000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	11054132.	2485068.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	12063882.	2712069.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	158626.31	35660.625
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	5358184.0	1204568.0
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	5989276.0	1346443.0
THRUST COEFFICIENT	CF	1.6424866	1.6424866
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4686.2500	10331.418
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	2338.7168	5155.9883
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	85.133606	187.68750
INERT MASS REMAINING (KG,LBM)	MIR	4392.6328	9684.1016
TOTAL BURN AREA (M**2,IN**2)	ABTOT	345.58813	535663.06
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	255.61786	15598766.
PROPELLANT MASS REMAINING (KG,LBM)	WF	452830.44	998320.25
TOTAL GAS MASS (KG,LBM)	WGTOT	518.65894	1143.4475
RATIO OF SPECIFIC HEATS	GAMA	1.1617994	1.1617994
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.913768	28.469986
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1568.3064	5145.3633
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.30103624	0.30103624
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.55158042E 09	800.00000
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.27964237E 09	405.58716
BURN AREA (M**2,IN**2)	AHH	35.539261	55085.980
BURN RATE (M/S,IN/S)	RBZ(1)	0.81002973E-02	0.31890941
DISTANCE BURNED (M,IN)	TAUZ(1)	0.36399134E-02	0.14330369
PROPELLANT VOLUME (M**3,IN**3)	VFH	9.6108799	586492.13
GAS VOLUME (M**3,IN**3)	VPH	2.9150581	177887.88
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3470.9480	6247.7070
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	255.75589	396422.44
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	44.751114	69364.375
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	238.65570	14563671.
GAS VOLUME (M**3,IN**3)	VP	89.281219	5448277.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.51594624E 09	748.31689
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.25855472E 09	375.00195
BURN AREA (M**2,IN**2)	AAN	9.5421219	14790.320
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.70997322E-02	0.31099349
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.35359059E-02	0.13920891
PROPELLANT VOLUME (M**3,IN**3)	VFN	7.3512545	448601.31
GAS VOLUME (M**3,IN**3)	VPN	4.6744223	285250.88
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3449.7695	6209.5859
PORT AREA (M**2,IN**2)	AP	3.1048517	4812.5313
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4235764	2206.5488
EXPANSION RATIO	EPR	6.9983559	6.9983559
PRESSURE RATIO	PEPO	0.22160213E-01	0.22160213E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.67181170E-01	0.67181170E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	800.00	799.73	6247.71	85.64	0.024	1167.41	5485.44	1107.75	1124.31	16.57	0.3189	0.143	0.3150	0.143
30.000	799.75	799.04	6247.22	139.94	0.039	1167.42	5485.38	1808.23	714.79	14.30	0.3189	0.143	0.3189	0.143
60.000	799.28	797.90	6246.49	194.40	0.055	1167.42	5485.31	2508.61	714.69	14.31	0.3188	0.143	0.3188	0.143
90.000	798.59	796.32	6245.52	249.12	0.070	1167.42	5485.25	3208.77	714.50	14.33	0.3187	0.143	0.3187	0.143
115.654	797.78	794.58	6244.50	296.21	0.083	1167.42	5485.19	3807.57	610.74	11.95	0.3186	0.143	0.3186	0.143
118.800	797.39	790.31	6240.24	441.09	0.124	221.44	3902.07	4014.58	471.53	4.71	0.3184	0.143	0.3184	0.143
148.800	796.64	789.34	6240.00	448.04	0.126	223.29	3967.50	4141.26	135.85	9.17	0.3180	0.143	0.3180	0.143
178.800	795.87	788.37	6239.75	454.83	0.128	225.13	4033.45	4268.80	136.88	9.33	0.3179	0.143	0.3179	0.143
208.800	795.11	787.38	6239.51	461.48	0.130	226.98	4099.94	4397.27	137.96	9.49	0.3178	0.143	0.3178	0.143
238.800	794.32	786.39	6239.27	467.99	0.132	228.83	4166.97	4526.68	139.05	9.64	0.3177	0.143	0.3177	0.143
268.800	793.54	785.39	6239.03	474.37	0.133	230.68	4234.53	4657.01	140.14	9.80	0.3176	0.143	0.3176	0.143
298.800	792.74	784.39	6238.79	480.62	0.135	232.52	4302.63	4788.27	141.22	9.96	0.3175	0.142	0.3175	0.142
328.800	791.93	783.38	6238.55	486.74	0.137	234.37	4371.26	4920.46	142.31	10.12	0.3174	0.142	0.3174	0.142
358.800	791.13	782.37	6238.32	492.74	0.138	236.22	4440.42	5053.56	143.39	10.28	0.3174	0.142	0.3174	0.142
388.800	790.30	781.35	6238.09	498.62	0.140	238.07	4510.12	5187.59	144.47	10.44	0.3173	0.142	0.3173	0.142
414.454	789.60	780.48	6237.89	503.58	0.142	239.65	4570.15	5303.20	124.40	8.79	0.3172	0.142	0.3172	0.142
417.745	787.64	772.65	6231.29	647.38	0.182	221.44	3902.23	5768.85	227.69	5.81	0.3171	0.142	0.3171	0.142
447.600	786.36	771.21	6231.09	651.23	0.183	223.38	3970.90	5894.50	134.59	8.94	0.3163	0.142	0.3163	0.142
477.600	785.06	769.76	6230.90	654.99	0.184	225.33	4040.50	6021.36	136.24	9.37	0.3162	0.142	0.3162	0.142
507.600	783.77	768.33	6230.70	658.69	0.185	227.28	4110.68	6149.19	137.36	9.53	0.3161	0.142	0.3161	0.142
537.600	782.48	766.89	6230.52	662.31	0.186	229.23	4181.46	6277.97	138.48	9.69	0.3159	0.142	0.3159	0.142
567.600	781.19	765.47	6230.32	665.87	0.187	231.17	4252.84	6407.71	139.60	9.86	0.3158	0.142	0.3158	0.142
597.600	779.90	764.04	6230.14	669.37	0.188	233.12	4324.82	6538.40	140.72	10.03	0.3156	0.141	0.3156	0.141
627.600	778.62	762.62	6229.96	672.81	0.189	235.07	4397.38	6670.05	141.84	10.19	0.3155	0.141	0.3155	0.141
657.600	777.34	761.21	6229.77	676.19	0.190	237.02	4470.54	6802.64	142.96	10.36	0.3154	0.141	0.3154	0.141
687.600	776.07	759.80	6229.59	679.51	0.191	238.97	4544.30	6936.18	144.08	10.53	0.3152	0.141	0.3152	0.141
697.955	775.63	759.32	6229.53	680.67	0.191	239.64	4569.90	6982.75	49.99	3.42	0.3151	0.141	0.3151	0.141
701.100	774.40	750.20	6220.44	831.47	0.234	221.43	3901.69	7205.70	465.84	4.67	0.3151	0.141	0.3151	0.141
731.100	773.43	749.17	6220.34	833.10	0.234	223.27	3967.11	7330.83	134.31	9.17	0.3142	0.141	0.3142	0.141
761.100	772.46	748.15	6220.23	834.67	0.235	225.12	4033.05	7456.73	135.22	9.31	0.3141	0.141	0.3141	0.141
791.100	771.51	747.14	6220.13	836.22	0.235	226.97	4099.54	7583.55	136.29	9.46	0.3140	0.141	0.3140	0.141
821.100	770.56	746.13	6220.02	837.75	0.236	228.82	4166.56	7711.30	137.36	9.60	0.3139	0.141	0.3139	0.141
851.100	769.61	745.13	6219.93	839.25	0.236	230.66	4234.11	7839.98	138.43	9.75	0.3138	0.141	0.3138	0.141
881.100	768.68	744.14	6219.82	840.73	0.237	232.51	4302.20	7969.57	139.50	9.90	0.3137	0.141	0.3137	0.141
911.100	767.75	743.15	6219.73	842.18	0.237	234.36	4370.82	8100.09	140.56	10.05	0.3136	0.140	0.3136	0.140
941.100	766.82	742.17	6219.63	843.61	0.237	236.21	4439.98	8231.52	141.63	10.19	0.3135	0.140	0.3135	0.140
971.100	765.91	741.20	6219.54	845.03	0.238	238.05	4509.67	8363.88	142.70	10.34	0.3134	0.140	0.3134	0.140
996.756	764.45	739.68	6219.40	847.04	0.238	239.63	4569.70	8478.09	122.89	8.67	0.3133	0.140	0.3133	0.140
1000.043	761.19	722.28	6202.51	1068.09	0.301	221.43	3901.96	8938.12	0.0	5.59	0.3131	0.140	0.3131	0.140
1029.900	759.78	721.77	6203.49	1056.74	0.298	224.26	4002.20	9062.36	132.97	8.72	0.3114	0.139	0.3114	0.139
1059.900	758.44	721.26	6204.41	1045.67	0.295	227.10	4104.17	9188.08	134.92	9.20	0.3114	0.139	0.3114	0.139
1089.900	757.13	720.75	6205.30	1035.01	0.292	229.93	4207.41	9315.25	136.59	9.42	0.3113	0.139	0.3113	0.139
1119.900	755.85	720.24	6206.14	1024.73	0.289	232.77	4311.91	9443.86	138.27	9.65	0.3113	0.139	0.3113	0.139
1149.900	754.61	719.73	6206.95	1014.83	0.286	235.61	4417.67	9573.91	139.94	9.88	0.3112	0.139	0.3112	0.139
1179.900	753.41	719.22	6207.72	1005.27	0.283	238.45	4524.69	9705.40	141.61	10.12	0.3111	0.139	0.3111	0.139
1209.900	752.23	718.70	6208.45	996.05	0.281	241.28	4632.96	9838.32	143.28	10.35	0.3111	0.139	0.3111	0.139
1239.900	751.08	718.19	6209.16	987.15	0.278	244.12	4742.51	9972.68	144.96	10.59	0.3110	0.139	0.3110	0.139
1258.900	750.37	717.87	6209.59	981.66	0.277	245.92	4812.53	10058.52	92.67	6.83	0.3110	0.139	0.3110	0.139
AFT	748.32	713.80	6207.05	1013.62	0.286	.....	4812.53	10331.42	294.38	21.47	0.3110	0.139	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.1565E 02	7.9778E 02	7.9458E 02	6.2445E 03	1.0679E 02	1.6061E 04	2.1172E 02	1.0575E 04	3.1281E-01	7.6405E-02	4.0193E 03
AFT	1.1880E 02	7.9350E 02	7.9031E 02	6.2402E 03	1.0717E 02	1.6061E 04	0.0	0.0	0.0	0.0	4.0146E 03

GAS BUILDUP IN SLOT, DW/DT = 4.7053E 00

FOREWARD	4.1445E 02	7.8960E 02	7.8048E 02	6.2379E 03	1.4949E 02	1.6061E 04	2.2908E 02	1.1490E 04	3.1150E-01	7.6044E-02	5.5323E 03
AFT	4.1774E 02	7.8168E 02	7.7265E 02	6.2313E 03	1.5068E 02	1.6061E 04	2.4239E 02	1.2158E 04	3.1150E-01	7.6044E-02	5.5265E 03

GAS BUILDUP IN SLOT, DW/DT = 5.8089E 00

FOREWARD	6.9796E 02	7.7563E 02	7.5932E 02	6.2295E 03	1.9999E 02	1.6061E 04	2.2762E 02	1.1491E 04	3.0952E-01	7.5503E-02	7.2104E 03
AFT	7.0110E 02	7.6632E 02	7.5020E 02	6.2204E 03	2.0199E 02	1.6061E 04	0.0	0.0	0.0	0.0	7.2057E 03

GAS BUILDUP IN SLOT, DW/DT = 4.6707E 00

FOREWARD	9.9676E 02	7.6445E 02	7.3968E 02	6.2194E 03	2.4744E 02	1.6061E 04	2.2624E 02	1.1491E 04	3.0763E-01	7.5035E-02	8.7043E 03
AFT	1.0000E 03	7.4646E 02	7.2228E 02	6.2025E 03	2.5255E 02	1.6061E 04	2.3938E 02	1.2159E 04	3.0763E-01	7.5035E-02	8.6987E 03

GAS BUILDUP IN SLOT, DW/DT = 5.5856E 00

IGNITION TIME, TIME (S) 1.0000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	11329499.	2546973.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	12339249.	2773974.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	161003.31	36195.000
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	8156138.0	1833573.0
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	9039666.0	2032198.0
THRUST COEFFICIENT	CF	1.6422987	1.6422987
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4791.5781	10563.629
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	3523.4451	7767.8672
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	86.409332	190.50000
INERT MASS REMAINING (KG,LBM)	MIR	4371.0313	9636.4766
TOTAL BURN AREA (M**2,IN**2)	ABTOT	345.62231	535715.94
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	254.92439	15556448.
PROPELLANT MASS REMAINING (KG,LBM)	WF	451601.94	995611.88
TOTAL GAS MASS (KG,LBM)	WGTOT	533.19507	1175.4944
RATIO OF SPECIFIC HEATS	GAMA	1.1618061	1.1618061
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.916148	28.475235
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1568.5613	5146.1992
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.29865497	0.29865497
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.56192256E 09	815.00000
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.41883034E 09	607.46216
BURN AREA (M**2,IN**2)	AHH	38.570129	55133.816
BURN RATE (M/S,IN/S)	RBZ(1)	0.79865083E-02	0.31442958
DISTANCE BURNED (M,IN)	TAUZ(1)	0.56649856E-02	0.22303104
PROPELLANT VOLUME (M**3,IN**3)	VFH	9.5388775	582098.31
GAS VOLUME (M**3,IN**3)	VPH	2.9870596	182281.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3472.3760	6250.2773
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	255.87112	396601.06
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	44.632126	69179.938
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	238.05310	14526898.
GAS VOLUME (M**3,IN**3)	VP	89.741520	5477587.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.52772557E 09	765.40137
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.38901350E 09	564.21655
BURN AREA (M**2,IN**2)	AAN	9.5491009	14801.137
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.77958256E-02	0.30692238
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.55107139E-02	0.21695727
PROPELLANT VOLUME (M**3,IN**3)	VFN	7.3324032	447450.94
GAS VOLUME (M**3,IN**3)	VPN	4.6932735	286401.25
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3451.3865	6212.4961
PORT AREA (M**2,IN**2)	AP	3.1171980	4831.6680
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4237328	2206.7910
EXPANSION RATIO	EPR	6.9975882	6.9975882
PRESSURE RATIO	PEPO	0.22163045E-01	0.22163045E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES.	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	[illegible] IN/SEC	TAU[illegible] IN.
FORE	815.00	814.75	6250.28	82.34	0.023	1165.69	5578.44	1103.23	1109.48	6.25	0.3144	0.223	0.3132	0.223
30.000	814.78	814.10	6249.82	134.65	0.038	1165.69	5578.35	1802.23	703.71	4.70	0.3144	0.223	0.3144	0.223
60.000	814.35	813.04	6249.15	187.09	0.053	1165.69	5578.26	2501.13	703.62	4.71	0.3143	0.223	0.3143	0.223
90.000	813.71	811.57	6248.25	239.76	0.067	1165.69	5578.17	3199.86	703.45	4.72	0.3143	0.223	0.3143	0.223
115.576	812.98	809.96	6247.31	284.93	0.080	1165.69	5578.11	3795.64	599.49	3.70	0.3141	0.223	0.3141	0.223
118.800	812.61	805.77	6243.18	429.74	0.121	221.94	3919.72	4004.65	472.96	1.78	0.3140	0.223	0.3140	0.223
148.800	811.92	804.84	6242.93	437.09	0.123	223.79	3985.31	4136.69	134.27	2.23	0.3136	0.222	0.3136	0.222
178.800	811.21	803.90	6242.68	444.28	0.125	225.63	4051.42	4269.70	135.28	2.26	0.3135	0.222	0.3135	0.222
208.800	810.49	802.96	6242.43	451.33	0.127	227.48	4118.06	4403.75	136.36	2.30	0.3134	0.222	0.3134	0.222
238.800	809.76	802.00	6242.17	458.23	0.129	229.33	4185.23	4538.84	137.43	2.34	0.3133	0.222	0.3133	0.222
268.800	809.02	801.04	6241.93	465.00	0.131	231.17	4252.93	4674.95	138.50	2.38	0.3133	0.222	0.3133	0.222
298.800	808.28	800.08	6241.68	471.64	0.133	233.02	4321.17	4812.11	139.58	2.42	0.3132	0.222	0.3132	0.222
328.800	807.52	799.10	6241.43	478.14	0.134	234.87	4389.93	4950.29	140.65	2.46	0.3131	0.222	0.3131	0.222
358.800	806.76	798.12	6241.19	484.53	0.136	236.72	4459.21	5089.50	141.72	2.50	0.3130	0.222	0.3130	0.222
388.800	805.99	797.14	6240.94	490.79	0.138	238.56	4529.04	5229.75	142.79	2.54	0.3129	0.222	0.3129	0.222
414.376	805.33	796.30	6240.73	496.06	0.139	240.14	4588.98	5350.41	122.58	1.91	0.3128	0.222	0.3128	0.222
417.823	803.40	788.58	6234.35	637.28	0.179	221.95	3919.99	5820.53	228.40	2.82	0.3127	0.221	0.3127	0.221
447.600	802.18	787.19	6234.14	641.48	0.180	223.88	3988.64	5951.21	132.70	2.02	0.3120	0.221	0.3120	0.221
477.600	800.96	785.79	6233.93	645.60	0.182	225.83	4058.39	6083.56	134.68	2.32	0.3119	0.221	0.3119	0.221
507.600	799.73	784.40	6233.72	649.65	0.183	227.77	4128.73	6216.99	135.79	2.36	0.3118	0.221	0.3118	0.221
537.600	798.50	783.01	6233.51	653.63	0.184	229.72	4199.66	6351.49	136.90	2.40	0.3116	0.221	0.3116	0.221
567.600	797.27	781.62	6233.31	657.54	0.185	231.67	4271.18	6487.05	138.01	2.44	0.3115	0.220	0.3115	0.220
597.600	796.05	780.24	6233.11	661.39	0.186	233.62	4343.29	6623.68	139.12	2.48	0.3114	0.220	0.3114	0.220
627.600	794.83	778.86	6232.91	665.18	0.187	235.57	4415.99	6761.37	140.22	2.53	0.3113	0.220	0.3113	0.220
657.600	793.61	777.49	6232.71	668.91	0.188	237.51	4489.27	6900.13	141.33	2.57	0.3111	0.220	0.3111	0.220
687.600	792.39	776.12	6232.51	672.58	0.189	239.46	4563.16	7039.94	142.43	2.61	0.3110	0.220	0.3110	0.220
697.878	791.97	775.65	6232.44	673.85	0.189	240.13	4588.60	7088.35	49.05	0.63	0.3109	0.220	0.3109	0.220
701.100	790.76	766.57	6223.56	822.64	0.232	221.92	3919.15	7314.94	467.36	1.78	0.3108	0.220	0.3108	0.220
731.100	789.82	765.54	6223.43	824.62	0.232	223.77	3984.72	7445.43	132.81	2.31	0.3100	0.219	0.3100	0.219
761.100	788.88	764.53	6223.31	826.56	0.233	225.62	4050.82	7576.79	133.70	2.35	0.3099	0.219	0.3099	0.219
791.100	787.95	763.52	6223.18	828.47	0.233	227.46	4117.45	7709.16	134.76	2.38	0.3098	0.219	0.3098	0.219
821.100	787.02	762.51	6223.06	830.36	0.234	229.31	4184.61	7842.55	135.82	2.42	0.3097	0.219	0.3097	0.219
851.100	786.11	761.51	6222.93	832.21	0.234	231.16	4252.30	7976.97	136.88	2.45	0.3096	0.219	0.3096	0.219
881.100	785.20	760.52	6222.81	834.05	0.235	233.00	4320.52	8112.41	137.93	2.49	0.3095	0.219	0.3095	0.219
911.100	784.29	759.54	6222.69	835.86	0.235	234.85	4389.27	8248.87	138.99	2.53	0.3094	0.219	0.3094	0.219
941.100	783.39	758.56	6222.57	837.65	0.236	236.70	4458.55	8386.34	140.04	2.56	0.3093	0.219	0.3093	0.219
971.100	782.49	757.59	6222.45	839.42	0.236	238.55	4528.36	8524.84	141.10	2.60	0.3092	0.219	0.3092	0.219
996.679	781.09	756.10	6222.30	841.66	0.237	240.12	4588.30	8643.99	121.14	1.98	0.3091	0.219	0.3091	0.219
1000.120	777.86	738.71	6205.75	1059.83	0.299	221.93	3919.57	9108.56	0.0	2.72	0.3090	0.219	0.3090	0.219
1029.900	776.50	738.21	6206.68	1048.92	0.296	224.75	4019.80	9237.64	131.17	2.08	0.3073	0.217	0.3073	0.217
1059.900	775.18	737.72	6207.57	1038.26	0.293	227.59	4122.02	9368.69	133.44	2.38	0.3073	0.217	0.3073	0.217
1089.900	773.91	737.22	6208.41	1028.01	0.290	230.42	4225.48	9501.35	135.09	2.43	0.3072	0.217	0.3072	0.217
1119.900	772.66	736.72	6209.22	1018.15	0.287	233.26	4330.20	9635.60	136.74	2.49	0.3072	0.217	0.3072	0.217
1149.900	771.45	736.22	6209.98	1008.65	0.284	236.10	4436.16	9771.44	138.39	2.55	0.3071	0.217	0.3071	0.217
1179.900	770.27	735.72	6210.72	999.50	0.282	238.94	4543.38	9908.88	140.04	2.60	0.3071	0.217	0.3071	0.217
1209.900	769.12	735.21	6211.42	990.68	0.279	241.77	4651.84	10047.91	141.70	2.66	0.3070	0.217	0.3070	0.217
1239.900	768.00	734.71	6212.09	982.18	0.277	244.61	4761.54	10188.54	143.34	2.72	0.3070	0.217	0.3070	0.217
1258.900	767.31	734.39	6212.50	976.95	0.275	246.41	4831.67	10278.41	91.64	1.75	0.3069	0.217	0.3069	0.217
AFT	765.40	730.42	6209.95	1009.11	0.284	.....	4831.67	10563.63	290.74	5.52	0.3069	0.217	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.1558E 02	8.1298E 02	8.0996E 02	6.2473E 03	1.0446E 02	1.6061E 04	2.1079E 02	1.0482E 04	3.1421E-01	7.8202E-02	4.0064F 03
AFT	1.1880E 02	8.0877E 02	8.0577E 02	6.2432E 03	1.0488E 02	1.6061E 04	0.0	0.0	0.0	0.0	4.0047F 03

GAS BUILDUP IN SLOT, DW/DT = 1.7823E 00

FOREWARD	4.1438E 02	8.0533E 02	7.9630E 02	6.2407E 03	1.4783E 02	1.6061E 04	2.2977E 02	1.1472E 04	3.1296E-01	7.7876E-02	5.5802F 03
AFT	4.1782E 02	7.9752E 02	7.8858E 02	6.2344E 03	1.4905E 02	1.6061E 04	2.4317E 02	1.2141E 04	3.1296E-01	7.7876E-02	5.5774F 03

GAS BUILDUP IN SLOT, DW/DT = 2.8156E 00

FOREWARD	6.9788E 02	7.9197E 02	7.7565E 02	6.2324E 03	1.9872E 02	1.6061E 04	2.2838E 02	1.1472E 04	3.1105E-01	7.7379E-02	7.3167F 03
AFT	7.0110E 02	7.8270E 02	7.6657E 02	6.2236E 03	2.0074E 02	1.6061E 04	0.0	0.0	0.0	0.0	7.3149F 03

GAS BUILDUP IN SLOT, DW/DT = 1.7776E 00

FOREWARD	9.9668E 02	7.8109E 02	7.5610E 02	6.2223E 03	2.4677E 02	1.6061E 04	2.2703E 02	1.1472E 04	3.0921E-01	7.6908E-02	8.8710F 03
AFT	1.0001E 03	7.6312E 02	7.3871E 02	6.2057E 03	2.5183E 02	1.6061E 04	2.4026E 02	1.2141E 04	3.0921E-01	7.6908E-02	8.8683F 03

GAS BUILDUP IN SLOT, DW/DT = 2.7163E 00

START TRANSIENT BURN RATE COEFFICIENT TABLE

I	TAU	AKR
1	0.0	6.0999E-02
2	6.3663E-02	6.7877E-02
3	1.4144E-01	6.7181E-02
4	2.2032E-01	6.5951E-02

IGNITION TIME, TIME (S) 3.0000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	11492713.	2583665.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	12502464.	2810666.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	159218.94	35793.848
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	30978336.	6964211.0
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	33881376.	7616838.0
THRUST COEFFICIENT	CF	1.6416826	1.6416826
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4857.3008	10708.516
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	13172.324	29040.012
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	85.451660	188.38867
INERT MASS REMAINING (KG,LBM)	MIR	4200.1250	9259.6992
TOTAL BURN AREA (M**2,IN**2)	ABTOT	345.75000	535913.75
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	249.43796	15221645.
PROPELLANT MASS REMAINING (KG,LBM)	WF	441082.63	974184.50
TOTAL GAS MASS (KG,LBM)	WGTOT	571.78809	1260.5774
RATIO OF SPECIFIC HEATS	GAMA	1.1618128	1.1618128
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.918058	28.479446
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1568.7102	5146.6875
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.28700644	0.28700644
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.57024128E 09	827.06543
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.15509944E 10	2249.5276
BURN AREA (M**2,IN**2)	AHH	35.692474	55323.457
BURN RATE (M/S,IN/S)	RBZ(1)	0.80277659E-02	0.31605387
DISTANCE BURNED (M,IN)	TAUZ(1)	0.21638006E-01	0.85189021
PROPELLANT VOLUME (M**3,IN**3)	VFH	8.9697390	547367.31
GAS VOLUME (M**3,IN**3)	VPH	3.5561991	217012.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3473.5479	6252.3867
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	256.76123	397981.00
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	43.692047	67722.813
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	233.28511	14235937.
GAS VOLUME (M**3,IN**3)	VP	93.545349	5708490.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.53457357E 09	775.33374
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.14513129E 10	2104.9517
BURN AREA (M**2,IN**2)	AAN	9.6042109	14886.559
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.78372061E-02	0.30855149
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.21102369E-01	0.83080202
PROPELLANT VOLUME (M**3,IN**3)	VFN	7.1830864	438339.06
GAS VOLUME (M**3,IN**3)	VPN	4.8425903	295513.13
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3453.8604	6216.9492
PORT AREA (M**2,IN**2)	AP	3.2155447	4984.1055
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4246197	2208.1650
EXPANSION RATIO	EPR	6.9932337	6.9932337
PRESSURE RATIO	PEPO	0.22180829E-01	0.22180829E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	827.07	826.86	6252.39	72.56	0.020	1152.06	6307.21	1115.26	1119.12	3.85	0.3161	0.852	0.3702	0.852
30.000	826.89	826.36	6252.04	117.98	0.033	1152.07	6306.94	1811.86	699.10	2.50	0.3161	0.852	0.3161	0.852
60.000	826.55	825.55	6251.53	163.49	0.046	1152.07	6306.66	2508.41	699.05	2.50	0.3160	0.852	0.3160	0.852
90.000	826.06	824.42	6250.85	209.15	0.059	1152.08	6306.39	3204.83	698.93	2.51	0.3159	0.851	0.3159	0.851
114.947	825.52	823.21	6250.16	247.30	0.069	1152.08	6306.16	3784.15	581.05	1.74	0.3158	0.851	0.3158	0.851
118.800	825.34	819.14	6246.03	405.70	0.114	225.88	4060.32	3979.93	550.89	1.12	0.3154	0.851	0.3154	0.851
148.800	824.70	818.27	6245.79	413.25	0.116	227.73	4127.19	4116.63	137.33	0.63	0.3154	0.849	0.3154	0.849
178.800	824.05	817.40	6245.54	420.66	0.118	229.58	4194.54	4254.42	138.43	0.64	0.3153	0.849	0.3153	0.849
208.800	823.40	816.52	6245.29	427.92	0.120	231.42	4262.38	4393.29	139.51	0.64	0.3152	0.849	0.3152	0.849
238.800	822.73	815.62	6245.05	435.05	0.122	233.27	4330.71	4533.23	140.60	0.65	0.3151	0.849	0.3151	0.849
268.800	822.05	814.72	6244.80	442.03	0.124	235.11	4399.53	4674.25	141.68	0.66	0.3150	0.848	0.3150	0.848
298.800	821.36	813.82	6244.56	448.89	0.126	236.96	4468.84	4816.33	142.76	0.67	0.3150	0.848	0.3150	0.848
328.800	820.67	812.90	6244.32	455.61	0.128	238.80	4538.64	4959.49	143.84	0.67	0.3149	0.848	0.3149	0.848
358.800	819.97	811.98	6244.08	462.22	0.130	240.65	4608.93	5103.72	144.92	0.68	0.3148	0.848	0.3148	0.848
388.800	819.26	811.06	6243.84	468.71	0.132	242.50	4679.71	5249.03	145.99	0.69	0.3147	0.847	0.3147	0.847
413.750	818.66	810.28	6243.64	474.04	0.133	244.03	4738.96	5370.97	122.24	0.29	0.3146	0.847	0.3146	0.847
418.448	816.91	803.28	6237.96	605.82	0.170	225.92	4061.50	5837.36	267.09	2.12	0.3139	0.847	0.3139	0.847
447.600	815.81	802.00	6237.75	610.25	0.172	227.81	4129.98	5969.84	132.87	0.38	0.3139	0.845	0.3139	0.845
477.600	814.69	800.70	6237.53	614.70	0.173	229.75	4200.98	6107.06	137.87	0.65	0.3138	0.845	0.3138	0.845
507.600	813.56	799.39	6237.31	619.09	0.174	231.70	4272.54	6245.39	138.99	0.66	0.3137	0.844	0.3137	0.844
537.600	812.43	798.08	6237.10	623.40	0.175	233.64	4344.64	6384.83	140.11	0.66	0.3136	0.844	0.3136	0.844
567.600	811.30	796.78	6236.89	627.65	0.176	235.59	4417.29	6525.38	141.23	0.67	0.3135	0.844	0.3135	0.844
597.600	810.17	795.48	6236.68	631.83	0.178	237.53	4490.49	6667.03	142.34	0.68	0.3133	0.843	0.3133	0.843
627.600	809.04	794.18	6236.47	635.95	0.179	239.48	4564.23	6809.80	143.46	0.69	0.3132	0.843	0.3132	0.843
657.600	807.91	792.88	6236.26	640.02	0.180	241.42	4638.51	6953.67	144.57	0.70	0.3131	0.842	0.3131	0.842
687.600	806.78	791.59	6236.06	644.02	0.181	243.37	4713.35	7098.65	145.69	0.70	0.3130	0.842	0.3130	0.842
697.256	806.42	791.17	6235.99	645.31	0.181	244.00	4737.55	7145.82	47.12	-0.05	0.3129	0.842	0.3129	0.842
701.100	805.31	782.90	6228.07	784.29	0.221	225.83	4058.32	7371.18	548.57	1.09	0.3121	0.842	0.3121	0.842
731.100	803.72	781.18	6227.87	787.45	0.222	227.67	4125.13	7506.39	135.86	0.65	0.3121	0.839	0.3121	0.839
761.100	802.14	779.46	6227.67	790.59	0.222	229.52	4192.43	7642.67	136.93	0.64	0.3119	0.839	0.3119	0.839
791.100	800.56	777.75	6227.48	793.70	0.223	231.36	4260.21	7779.99	137.96	0.64	0.3117	0.839	0.3117	0.839
821.100	798.99	776.05	6227.28	796.79	0.224	233.21	4328.48	7918.35	138.99	0.63	0.3116	0.838	0.3116	0.838
851.100	797.42	774.36	6227.09	799.86	0.225	235.05	4397.26	8057.75	140.03	0.63	0.3114	0.838	0.3114	0.838
881.100	795.86	772.67	6226.89	802.90	0.226	236.90	4466.52	8198.18	141.06	0.62	0.3113	0.838	0.3113	0.838
911.100	794.31	770.99	6226.70	805.93	0.227	238.74	4536.27	8339.65	142.09	0.61	0.3111	0.838	0.3111	0.838
941.100	792.77	769.32	6226.50	808.93	0.228	240.59	4606.52	8482.16	143.12	0.61	0.3109	0.837	0.3109	0.837
971.100	791.23	767.65	6226.31	811.91	0.228	242.43	4677.25	8625.70	144.15	0.60	0.3108	0.837	0.3108	0.837
996.061	789.95	766.27	6226.15	814.40	0.229	243.97	4736.49	8746.18	120.71	0.23	0.3106	0.837	0.3106	0.837
1000.738	786.97	750.31	6211.19	1018.87	0.287	225.88	4060.04	9206.07	0.0	1.95	0.3090	0.837	0.3090	0.837
1029.900	785.73	749.81	6211.98	1009.27	0.284	228.63	4160.13	9336.79	131.05	0.32	0.3090	0.832	0.3090	0.832
1059.900	784.51	749.30	6212.74	999.77	0.282	231.46	4264.24	9472.68	136.46	0.57	0.3089	0.832	0.3089	0.832
1089.900	783.31	748.79	6213.46	990.64	0.279	234.30	4369.50	9610.21	138.12	0.58	0.3089	0.832	0.3089	0.832
1119.900	782.15	748.27	6214.15	981.88	0.277	237.13	4475.93	9749.40	139.78	0.59	0.3088	0.831	0.3088	0.831
1149.900	781.01	747.75	6214.81	973.47	0.274	239.97	4583.51	9890.23	141.44	0.60	0.3088	0.831	0.3088	0.831
1179.900	779.90	747.23	6215.43	965.38	0.272	242.80	4692.24	10032.72	143.10	0.61	0.3087	0.831	0.3087	0.831
1209.900	778.82	746.71	6216.03	957.60	0.270	245.63	4802.13	10176.85	144.75	0.62	0.3087	0.831	0.3087	0.831
1239.900	777.76	746.18	6216.60	950.11	0.268	248.47	4913.18	10322.63	146.41	0.62	0.3086	0.831	0.3086	0.831
1258.900	777.11	745.86	6216.95	945.52	0.266	250.26	4984.11	10415.81	93.58	0.40	0.3086	0.831	0.3086	0.831
AFT	775.33	742.10	6214.56	976.63	0.275	.....	4984.11	10708.52	293.97	1.26	0.3086	0.831	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.1495E 02	8.2552E 02	8.2321E 02	6.2502E 03	1.0215E 02	1.6061E 04	1.9690E 02	9.7544E 03	3.1540E-01	6.2841E-01	3.9810E 03
AFT	1.1880E 02	8.2144E 02	8.1914E 02	6.2460E 03	1.0257E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.9799E 03

GAS BUILDUP IN SLOT, DW/DT = 1.1164E 00

FOREWARD	4.1375E 02	8.1866E 02	8.1028E 02	6.2436E 03	1.4580E 02	1.6061E 04	2.2769E 02	1.1322E 04	3.1424E-01	6.2593E-01	5.5987E 03
AFT	4.1845E 02	8.1159E 02	8.0328E 02	6.2380E 03	1.4688E 02	1.6061E 04	2.4083E 02	1.1999E 04	3.1360E-01	6.2593E-01	5.5965E 03

GAS BUILDUP IN SLOT, DW/DT = 2.1215E 00

FOREWARD	6.9726E 02	8.0642E 02	7.9117E 02	6.2360E 03	1.9639E 02	1.6061E 04	2.2646E 02	1.1323E 04	3.1249E-01	6.2211E-01	7.3723E 03
AFT	7.0110E 02	7.9799E 02	7.8290E 02	6.2281E 03	1.9818E 02	1.6061E 04	0.0	0.0	0.0	0.0	7.3712E 03

GAS BUILDUP IN SLOT, DW/DT = 1.0855E 00

FOREWARD	9.9606E 02	7.8995E 02	7.6627E 02	6.2261E 03	2.4635E 02	1.6061E 04	2.2480E 02	1.1324E 04	3.1017E-01	6.1842E-01	8.9710E 03
AFT	1.0007E 03	7.7350E 02	7.5031E 02	6.2112E 03	2.5093E 02	1.6061E 04	2.3705E 02	1.2001E 04	3.0864E-01	6.1842E-01	8.9690E 03

GAS BUILDUP IN SLOT, DW/DT = 1.9502E 00

IGNITION TIME, TIME (S) 5.0000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	11467016.	2577888.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	12476766.	2804889.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	159738.88	35910.742
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	53938080.	12125766.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	58860608.	13232395.
THRUST COEFFICIENT	CF	1.6416626	1.6416626
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4843.5078	10678.109
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	22873.137	50426.637
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	85.730713	189.00391
INERT MASS REMAINING (KG,LBM)	MIR	4028.6672	8881.6914
TOTAL BURN AREA (M**2,IN**2)	ABTOT	344.78149	534412.75
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	243.93362	14885750.
PROPELLANT MASS REMAINING (KG,LBM)	WF	432131.63	952687.25
TOTAL GAS MASS (KG,LBM)	WGTOT	599.11621	1320.8257
RATIO OF SPECIFIC HEATS	GAMA	1.1618090	1.1618090
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.917014	28.477142
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1568.6755	5146.5742
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.27584094	0.27584094
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.56570317E 09	820.48340
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.26869394E 10	3897.0764
BURN AREA (M**2,IN**2)	AHH	35.719666	55365.598
BURN RATE (M/S,IN/S)	RBZ(1)	0.80129281E-02	0.31546968
DISTANCE BURNED (M,IN)	TAUZ(1)	0.37693527E-01	1.4839973
PROPELLANT VOLUME (M**3,IN**3)	VFH	8.3964596	512383.63
GAS VOLUME (M**3,IN**3)	VPH	4.1294785	251996.38
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3472.9512	6251.3125
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	286.65454	397815.56
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	42.747772	66259.188
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	228.50505	13944240.
GAS VOLUME (M**3,IN**3)	VP	97.338562	5939966.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.53299661E 09	773.04639
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.25188833E 10	3653.3318
BURN AREA (M**2,IN**2)	AAN	9.6596174	14972.438
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.78363903E-02	0.30851942
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.36776770E-01	1.4479046
PROPELLANT VOLUME (M**3,IN**3)	VFN	7.0320969	429125.06
GAS VOLUME (M**3,IN**3)	VPN	4.9935808	304727.13
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3454.5115	6218.1211
PORT AREA (M**2,IN**2)	AP	3.3159628	5139.7539
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4259148	2210.1729
EXPANSION RATIO	EPR	6.9868803	6.9868803
PRESSURE RATIO	PEPO	0.22207540E-01	0.22207540E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	820.48	820.32	6251.31	65.60	0.018	1124.84	7026.84	1114.56	1117.88	3.33	0.3155	1.484	0.3161	1.484
30.000	820.34	819.93	6251.04	105.66	0.030	1124.86	7026.44	1793.88	681.32	2.01	0.3155	1.484	0.3155	1.484
60.000	820.09	819.29	6250.63	145.78	0.041	1124.88	7026.05	2473.16	681.30	2.01	0.3154	1.484	0.3154	1.484
90.000	819.71	818.41	6250.10	186.01	0.052	1124.89	7025.64	3152.36	681.21	2.01	0.3154	1.483	0.3154	1.483
114.316	819.29	817.50	6249.57	218.75	0.061	1124.91	7025.33	3703.16	552.04	1.23	0.3153	1.483	0.3153	1.483
118.800	819.25	813.70	6245.57	384.97	0.108	229.85	4204.04	3884.28	462.82	0.97	0.3149	1.481	0.3149	1.481
148.800	818.66	812.90	6245.33	392.77	0.110	231.69	4272.21	4023.44	139.51	0.35	0.3149	1.480	0.3149	1.480
178.800	818.07	812.08	6245.09	400.42	0.112	233.54	4340.82	4163.70	140.61	0.35	0.3148	1.480	0.3148	1.480
208.800	817.47	811.26	6244.84	407.93	0.115	235.38	4409.89	4305.04	141.[illegible]	0.35	0.3147	1.479	0.3147	1.479
238.800	816.86	810.43	6244.60	415.30	0.117	237.23	4479.41	4447.45	142.78	0.36	0.3147	1.479	0.3147	1.479
268.800	816.23	809.58	6244.36	422.52	0.119	239.07	4549.37	4590.95	143.86	0.36	0.3146	1.479	0.3146	1.479
298.800	815.60	808.73	6244.12	429.62	0.121	240.92	4619.79	4735.52	144.94	0.36	0.3145	1.478	0.3145	1.478
328.800	814.96	807.88	6243.88	436.59	0.123	242.76	4690.65	4881.16	146.01	0.36	0.3144	1.478	0.3144	1.478
358.800	814.32	807.01	6243.64	443.44	0.125	244.61	4761.97	5027.88	147.09	0.37	0.3143	1.477	0.3143	1.477
388.800	813.66	806.14	6243.40	450.16	0.126	246.45	4833.74	5175.68	148.17	0.37	0.3143	1.477	0.3143	1.477
413.122	813.12	805.42	6243.20	455.56	0.128	247.95	4892.26	5296.58	120.91	0.01	0.3142	1.476	0.3142	1.476
419.075	811.51	799.09	6238.07	579.98	0.163	229.90	4206.08	5756.57	223.63	1.94	0.3135	1.475	0.3135	1.475
447.600	810.53	797.93	6237.85	584.64	0.164	231.75	4274.37	5888.59	132.12	0.09	0.3135	1.473	0.3135	1.473
477.600	809.49	796.70	6237.63	589.44	0.166	233.69	4346.68	6028.30	140.08	0.36	0.3134	1.472	0.3134	1.472
507.600	808.45	795.47	6237.40	594.16	0.167	235.64	4419.50	6169.13	141.20	0.37	0.3133	1.472	0.3133	1.472
537.600	807.41	794.25	6237.18	598.82	0.168	237.58	4492.82	6311.08	142.32	0.37	0.3132	1.471	0.3132	1.471
567.600	806.37	793.02	6236.96	603.40	0.170	239.53	4566.64	6454.14	143.43	0.37	0.3131	1.470	0.3131	1.470
597.600	805.32	791.79	6236.74	607.92	0.171	241.47	4640.96	6598.31	144.55	0.38	0.3130	1.470	0.3130	1.470
627.600	804.28	790.57	6236.53	612.37	0.172	243.41	4715.78	6743.59	145.67	0.38	0.3129	1.469	0.3129	1.469
657.600	803.23	789.35	6236.31	616.76	0.173	245.36	4791.11	6889.99	146.78	0.38	0.3128	1.469	0.3128	1.469
687.600	802.18	788.12	6236.10	621.09	0.175	247.30	4866.95	7037.50	147.90	0.38	0.3127	1.468	0.3127	1.468
696.631	801.87	787.75	6236.03	622.41	0.175	247.89	4889.88	7082.40	44.73	-0.17	0.3125	1.468	0.3125	1.468
701.100	800.85	780.25	6228.83	753.61	0.212	229.75	4200.48	7304.64	456.86	0.94	0.3118	1.466	0.3118	1.466
731.100	799.38	778.63	6228.63	757.12	0.213	231.59	4268.54	7442.36	138.10	0.37	0.3118	1.463	0.3118	1.463
761.100	797.92	777.02	6228.41	760.61	0.214	233.44	4337.05	7581.15	139.17	0.37	0.3117	1.463	0.3117	1.463
791.100	796.46	775.41	6228.20	764.07	0.215	235.28	4406.01	7720.97	140.20	0.38	0.3115	1.462	0.3115	1.462
821.100	795.01	773.81	6227.99	767.50	0.216	237.12	4475.43	7861.82	141.24	0.38	0.3114	1.462	0.3114	1.462
851.100	793.55	772.21	6227.79	770.90	0.217	238.97	4545.30	8003.70	142.27	0.38	0.3112	1.461	0.3112	1.461
881.100	792.11	770.62	6227.57	774.29	0.218	240.81	4615.61	8146.61	143.30	0.39	0.3111	1.460	0.3111	1.460
911.100	790.67	769.03	6227.37	777.64	0.219	242.65	4686.39	8290.55	144.33	0.39	0.3109	1.460	0.3109	1.460
941.100	789.23	767.45	6227.16	780.97	0.220	244.49	4757.61	8435.52	145.36	0.39	0.3108	1.459	0.3108	1.459
971.100	787.80	765.88	6226.95	784.28	0.221	246.34	4829.29	8581.51	146.39	0.40	0.3106	1.459	0.3106	1.459
995.441	786.64	764.60	6226.79	786.97	0.221	247.83	4887.77	8700.99	119.53	0.05	0.3105	1.458	0.3105	1.458
1001.355	783.90	750.10	6213.22	979.43	0.276	229.82	4202.98	9155.03	0.0	1.85	0.3090	1.455	0.3090	1.455
1029.900	782.78	749.60	6213.88	971.05	0.273	232.51	4302.95	9285.36	130.47	0.14	0.3090	1.450	0.3090	1.450
1059.900	781.64	749.07	6214.54	962.58	0.271	235.35	4409.06	9423.71	138.76	0.40	0.3089	1.450	0.3089	1.450
1089.900	780.52	748.54	6215.16	954.47	0.269	238.18	4516.23	9563.73	140.41	0.40	0.3089	1.449	0.3089	1.449
1119.900	779.44	748.01	6215.75	946.71	0.267	241.01	4624.46	9705.39	142.07	0.40	0.3088	1.449	0.3088	1.449
1149.900	778.38	747.47	6216.30	939.26	0.264	243.85	4733.76	9848.71	143.73	0.41	0.3088	1.449	0.3088	1.449
1179.900	777.34	746.94	6216.84	932.13	0.262	246.68	4844.11	9993.68	145.38	0.41	0.3087	1.449	0.3087	1.449
1209.900	776.33	746.40	6217.34	925.28	0.261	249.51	4955.51	10140.29	147.04	0.42	0.3087	1.448	0.3087	1.448
1239.900	775.33	745.86	6217.83	918.71	0.259	252.35	5067.98	10288.56	148.69	0.42	0.3086	1.448	0.3086	1.448
1258.900	774.72	745.52	6218.12	914.68	0.258	254.14	5139.75	10383.32	95.02	0.27	0.3086	1.448	0.3086	1.448
AFT	773.05	742.00	6215.89	944.77	0.266	.....	5139.75	10678.11	295.63	0.84	0.3085	1.448	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.1432E 02	8.1929E 02	8.1750E 02	6.2496E 03	1.0039E 02	1.6061E 04	1.8208E 02	9.0353E 03	3.1489E-01	6.3079E-01	3.8852E 03
AFT	1.1880E 02	8.1549E 02	8.1370E 02	6.2456E 03	1.0077E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8843F 03

GAS BUILDUP IN SLOT, DW/DT = 9.6572E-01

FOREWARD	4.1312E 02	8.1312E 02	8.0542E 02	6.2432E 03	1.4464E 02	1.6061E 04	2.2429E 02	1.1168E 04	3.1380E-01	6.2847E-01	5.5209E 03
AFT	4.1908E 02	8.0673E 02	7.9909E 02	6.2381E 03	1.4562E 02	1.6061E 04	2.3763E 02	1.1855E 04	3.1322E-01	6.2720E-01	5.5189F 03

GAS BUILDUP IN SLOT, DW/DT = 1.9365E 00

FOREWARD	6.9663E 02	8.0187E 02	7.8775E 02	6.2360E 03	1.9547E 02	1.6061E 04	2.2318E 02	1.1171E 04	3.1218E-01	6.2499E-01	7.3056F 03
AFT	7.0110E 02	7.9423E 02	7.8025E 02	6.2288E 03	1.9710E 02	1.6061E 04	0.0	0.0	0.0	0.0	7.3046F 03

GAS BUILDUP IN SLOT, DW/DT = 9.4209E-01

FOREWARD	9.9544E 02	7.8664E 02	7.6460E 02	6.2268E 03	2.4560E 02	1.6061E 04	2.2168E 02	1.1173E 04	3.1002E-01	6.2035E-01	8.9227F 03
AFT	1.0014E 03	7.7172E 02	7.5010E 02	6.2132E 03	2.4976E 02	1.6061E 04	2.3421E 02	1.1858E 04	3.0862E-01	6.1728E-01	8.9208F 03

GAS BUILDUP IN SLOT, DW/DT = 1.8456E 00

IGNITION TIME, TIME (S) 7.0000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	11390978.	2560794.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	12400728.	2787795.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	159014.25	35747.832
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	76796000.	17264432.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	83738080.	18825072.
THRUST COEFFICIENT	CF	1.6415663	1.6415663
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4816.5742	10618.730
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	32533.203	71723.438
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	85.341797	188.14648
INERT MASS REMAINING (KG,LBM)	MIR	3857.9836	8505.3984
TOTAL BURN AREA (M**2,IN**2)	ABTOT	343.49365	532416.50
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	238.45419	14551374.
PROPELLANT MASS REMAINING (KG,LBM)	WF	422424.75	931287.19
TOTAL GAS MASS (KG,LBM)	WGTOT	623.68823	1374.9973
RATIO OF SPECIFIC HEATS	GAMA	1.1618042	1.1618042
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.915561	28.473938
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1568.5957	5146.3125
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.26562828	0.26562828
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.55939072E 09	811.32788
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.38120328E 10	5528.8867
BURN AREA (M**2,IN**2)	AHH	35.715897	55359.770
BURN RATE (M/S,IN/S)	RBZ(1)	0.79920515E-02	0.31464785
DISTANCE BURNED (M,IN)	TAUZ(1)	0.53719364E-01	2.1149359
PROPELLANT VOLUME (M**3,IN**3)	VFH	7.8240509	477453.13
GAS VOLUME (M**3,IN**3)	VPH	4.7018862	286926.88
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3472.0981	6249.7773
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	256.25244	397192.25
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	41.808731	64803.676
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	223.74988	13654091.
GAS VOLUME (M**3,IN**3)	VP	101.10803	6169994.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.52929946E 09	767.68408
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.35811771E 10	5194.0586
BURN AREA (M**2,IN**2)	AAN	9.7166786	15060.883
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.78277327E-02	0.30817860
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.52449554E-01	2.0649433
PROPELLANT VOLUME (M**3,IN**3)	VFN	6.8802395	419858.19
GAS VOLUME (M**3,IN**3)	VPN	5.1454372	313994.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3454.7695	6218.5859
PORT AREA (M**2,IN**2)	AP	3.4179163	5297.7813
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4272079	2212.1777
EXPANSION RATIO	EPR	6.9805489	6.9805489
PRESSURE RATIO	PEPO	0.22234239E-01	0.22234239E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA1

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	811.33	811.19	6249.78	60.17	0.017	1093.54	7726.66	1111.68	1114.85	3.16	0.3147	2.115	0.3148	2.115
30.000	811.21	810.87	6249.55	95.88	0.027	1093.56	7726.19	1770.49	660.64	1.83	0.3146	2.115	0.3146	2.115
60.000	811.00	810.36	6249.23	131.65	0.037	1093.58	7725.70	2429.28	660.62	1.83	0.3146	2.115	0.3146	2.115
90.000	810.70	809.66	6248.80	167.49	0.047	1093.60	7725.22	3088.00	660.55	1.84	0.3146	2.114	0.3146	2.114
113.687	810.37	808.95	6248.39	195.88	0.055	1093.62	7724.84	3608.45	521.46	1.01	0.3145	2.113	0.3145	2.113
118.800	810.43	805.49	6244.60	365.26	0.103	233.80	4350.03	3775.10	455.05	0.92	0.3141	2.111	0.3141	2.111
148.800	809.90	804.74	6244.36	373.31	0.105	235.65	4419.50	3916.37	141.57	0.30	0.3141	2.110	0.3141	2.110
178.800	809.35	803.99	6244.13	381.20	0.107	237.49	4489.39	4058.73	142.67	0.31	0.3141	2.109	0.3141	2.109
208.800	808.80	803.22	6243.89	388.94	0.109	239.34	4559.68	4202.17	143.75	0.31	0.3140	2.109	0.3140	2.109
238.800	808.24	802.44	6243.65	396.54	0.111	241.18	4630.38	4346.68	144.83	0.31	0.3139	2.108	0.3139	2.108
268.800	807.67	801.65	6243.41	404.01	0.114	243.02	4701.48	4492.27	145.91	0.31	0.3139	2.108	0.3139	2.108
298.800	807.09	800.86	6243.18	411.34	0.116	244.87	4773.01	4638.94	146.98	0.31	0.3138	2.107	0.3138	2.107
328.800	806.50	800.05	6242.94	418.54	0.118	246.71	4844.94	4786.68	148.06	0.31	0.3137	2.107	0.3137	2.107
358.800	805.90	799.24	6242.70	425.63	0.120	248.56	4917.27	4935.50	149.14	0.32	0.3136	2.106	0.3136	2.106
388.800	805.29	798.42	6242.46	432.59	0.122	250.40	4990.03	5085.39	150.21	0.32	0.3136	2.105	0.3136	2.105
412.494	804.81	797.76	6242.27	438.03	0.123	251.86	5047.77	5204.84	119.40	-0.05	0.3135	2.105	0.3135	2.105
419.702	803.33	792.04	6237.61	555.72	0.156	233.88	4353.02	5657.85	219.76	1.86	0.3129	2.102	0.3129	2.102
447.600	802.45	790.97	6237.39	560.58	0.158	235.69	4421.06	5788.98	131.17	0.03	0.3129	2.100	0.3129	2.100
477.600	801.49	789.82	6237.16	565.71	0.159	237.63	4494.69	5930.82	142.16	0.32	0.3128	2.099	0.3128	2.099
507.600	800.53	788.67	6236.93	570.77	0.160	239.57	4568.76	6073.77	143.28	0.32	0.3127	2.098	0.3127	2.098
537.600	799.57	787.51	6236.71	575.75	0.162	241.52	4643.30	6217.84	144.39	0.32	0.3126	2.097	0.3126	2.097
567.600	798.60	786.36	6236.48	580.66	0.163	243.46	4718.29	6363.02	145.51	0.32	0.3125	2.097	0.3125	2.097
597.600	797.64	785.20	6236.25	585.50	0.165	245.40	4793.74	6509.32	146.63	0.33	0.3124	2.096	0.3124	2.096
627.600	796.67	784.05	6236.03	590.27	0.166	247.34	4869.64	6656.73	147.74	0.33	0.3123	2.095	0.3123	2.095
657.600	795.70	782.89	6235.81	594.98	0.167	249.29	4946.01	6805.25	148.85	0.33	0.3122	2.094	0.3122	2.094
687.600	794.73	781.74	6235.59	599.63	0.169	251.23	5022.84	6954.88	149.97	0.33	0.3121	2.093	0.3121	2.093
696.006	794.46	781.41	6235.52	600.94	0.169	251.77	5044.45	6997.29	42.22	-0.20	0.3119	2.093	0.3119	2.093
701.100	793.52	774.61	6228.96	725.05	0.204	233.67	4344.98	7216.07	449.59	0.90	0.3113	2.089	0.3113	2.089
731.100	792.16	773.09	6228.74	728.91	0.205	235.51	4414.29	7355.95	140.20	0.32	0.3113	2.087	0.3113	2.087
761.100	790.81	771.57	6228.52	732.74	0.206	237.35	4484.02	7496.89	141.27	0.33	0.3111	2.086	0.3111	2.086
791.100	789.46	770.05	6228.29	736.53	0.207	239.19	4554.16	7638.86	142.31	0.33	0.3110	2.085	0.3110	2.085
821.100	788.11	768.54	6228.07	740.30	0.208	241.03	4624.71	7781.86	143.34	0.33	0.3109	2.084	0.3109	2.084
851.100	786.76	767.03	6227.85	744.04	0.209	242.87	4695.68	7925.90	144.38	0.34	0.3107	2.083	0.3107	2.083
881.100	785.42	765.53	6227.63	747.76	0.210	244.72	4767.05	8070.97	145.41	0.34	0.3106	2.083	0.3106	2.083
911.100	784.08	764.03	6227.41	751.44	0.211	246.56	4838.84	8217.07	146.44	0.34	0.3104	2.082	0.3104	2.082
941.100	782.75	762.54	6227.19	755.10	0.212	248.40	4911.05	8364.19	147.47	0.34	0.3103	2.081	0.3103	2.081
971.100	781.42	761.04	6226.97	758.74	0.213	250.24	4983.66	8512.34	148.50	0.34	0.3101	2.080	0.3101	2.080
994.821	780.36	759.87	6226.80	761.62	0.214	251.70	5041.38	8630.48	118.14	-0.01	0.3100	2.079	0.3100	2.079
1001.973	777.84	746.68	6214.44	943.31	0.266	233.76	4348.39	9078.10	0.0	1.79	0.3086	2.072	0.3086	2.072
1029.900	776.82	746.18	6214.99	936.04	0.264	236.39	4448.17	9207.69	129.67	0.08	0.3086	2.068	0.3086	2.068
1059.900	775.75	745.63	6215.55	928.53	0.261	239.23	4556.29	9348.25	140.91	0.35	0.3086	2.067	0.3086	2.067
1089.900	774.71	745.09	6216.08	921.37	0.259	242.06	4665.36	9490.46	142.56	0.35	0.3085	2.067	0.3085	2.067
1119.900	773.69	744.54	6216.58	914.53	0.257	244.89	4775.39	9634.32	144.22	0.35	0.3085	2.067	0.3085	2.067
1149.900	772.70	743.99	6217.05	908.00	0.256	247.73	4886.39	9779.83	145.87	0.36	0.3084	2.066	0.3084	2.066
1179.900	771.73	743.44	6217.50	901.75	0.254	250.56	4998.36	9926.99	147.52	0.36	0.3084	2.066	0.3084	2.066
1209.900	770.77	742.89	6217.93	895.77	0.252	253.39	5111.28	10075.80	149.17	0.36	0.3083	2.066	0.3083	2.066
1239.900	769.84	742.34	6218.34	890.05	0.251	256.22	5225.16	10226.26	150.83	0.36	0.3083	2.065	0.3083	2.065
1258.900	769.26	741.99	6218.59	886.55	0.250	258.02	5297.78	10322.39	96.37	0.23	0.3082	2.065	0.3082	2.065
AFT	767.68	738.68	6216.49	915.78	0.258	.....	5297.78	10618.73	297.05	0.71	0.3082	2.065	....	.....

SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD 1.1369E 02	8.1037E 02	8.0895E 02	6.2484E 03	9.8592E 01	1.6061E 04	1.6758E 02	8.3358E 03	3.1412E-01	6.2977E-01	3.7760F 03
AFT 1.1880E 02	8.0691E 02	8.0549E 02	6.2446E 03	9.8931E 01	1.6061E 04	0.0	0.0	0.0	0.0	3.7751F 03

GAS BUILDUP IN SLOT, DW/DT = 9.1861E-01

FOREWARD 4.1249E 02	8.0481E 02	7.9776E 02	6.2423E 03	1.4351E 02	1.6061E 04	2.2068E 02	1.1013E 04	3.1310E-01	6.2759E-01	5.4255F 03
AFT 4.1970E 02	7.9904E 02	7.9204E 02	6.2376E 03	1.4439E 02	1.6061E 04	2.3421E 02	1.1708E 04	3.1257E-01	6.2644E-01	5.4236F 03

GAS BUILDUP IN SLOT, DW/DT = 1.8642E 00

FOREWARD 6.9601E 02	7.9446E 02	7.8141E 02	6.2355E 03	1.9467E 02	1.6061E 04	2.1968E 02	1.1016E 04	3.1159E-01	6.2436E-01	7.2170F 03
AFT 7.0110E 02	7.8754E 02	7.7461E 02	6.2290E 03	1.9615E 02	1.6061E 04	0.0	0.0	0.0	0.0	7.2161F 03

GAS BUILDUP IN SLOT, DW/DT = 9.0019E-01

FOREWARD 9.9482E 02	7.8036E 02	7.5987E 02	6.2268E 03	2.4512E 02	1.6061E 04	2.1832E 02	1.1019E 04	3.0957E-01	6.2003E-01	8.8488F 03
AFT 1.0020E 03	7.6682E 02	7.4668E 02	6.2144E 03	2.4890E 02	1.6061E 04	2.3109E 02	1.1712E 04	3.0830E-01	6.1725E-01	8.8470F 03

GAS BUILDUP IN SLOT, DW/DT = 1.7881E 00

IGNITION TIME, TIME (S) 9.0000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	11272926.	2534255.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	12282677.	2761256.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	112911.63	25383.555
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	99459872.	22359472.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.10842150E 09	24374128.
THRUST COEFFICIENT	CF	1.6354218	1.6354218
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4788.1992	10556.176
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	42137.961	92898.313
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	60.598862	133.59766
INERT MASS REMAINING (KG,LBM)	MIR	3736.7859	8238.2031
TOTAL BURN AREA (M**2,IN**2)	ABTOT	342.10059	530257.31
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	233.00748	14218995.
PROPELLANT MASS REMAINING (KG,LBM)	WF	412775.81	910014.94
TOTAL GAS MASS (KG,LBM)	WGTOT	648.34253	1429.3508
RATIO OF SPECIFIC HEATS	GAMA	1.1618004	1.1618004
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.914308	28.471176
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1568.5195	5146.0625
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.25559056	0.25559056
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.55393613E 09	803.41675
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.49253581E 10	7143.6289
BURN AREA (M**2,IN**2)	AHH	35.573807	55139.516
BURN RATE (M/S,IN/S)	RBZ(1)	0.79739690E-02	0.31393588
DISTANCE BURNED (M,IN)	TAUZ(1)	0.69703460E-01	2.7442312
PROPELLANT VOLUME (M**3,IN**3)	VFH	7.2543001	442684.75
GAS VOLUME (M**3,IN**3)	VPH	5.2716379	321695.25
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3471.3647	6248.4570
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	255.86285	396588.25
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	40.876419	63358.586
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	219.02562	13365769.
GAS VOLUME (M**3,IN**3)	VP	104.84850	6398251.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.52575718E 09	762.54639
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.46362337E 10	6724.2891
BURN AREA (M**2,IN**2)	AAN	9.7877369	15171.023
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.78193806E-02	0.30784971
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.68104982E-01	2.6813002
PROPELLANT VOLUME (M**3,IN**3)	VFN	6.7275467	410540.31
GAS VOLUME (M**3,IN**3)	VPN	5.2981300	323311.88
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3455.0801	6219.1445
PORT AREA (M**2,IN**2)	AP	3.5212975	5458.0234
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4284925	2214.1689
EXPANSION RATIO	EPR	6.9742708	6.9742708
PRESSURE RATIO	PEPO	0.22260763E-01	0.22260763E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	803.42	803.30	6248.46	55.51	0.016	1062.31	8405.00	1104.77	1107.89	3.12	0.3139	2.744	0.3139	2.744
30.000	803.32	803.04	6248.27	87.63	0.025	1062.34	8404.45	1743.33	640.32	1.76	0.3139	2.744	0.3139	2.744
60.000	803.15	802.62	6248.00	119.79	0.034	1062.36	8403.91	2381.88	640.31	1.77	0.3139	2.744	0.3139	2.744
90.000	802.90	802.05	6247.66	152.02	0.043	1062.39	8403.36	3020.38	640.27	1.77	0.3139	2.743	0.3139	2.743
113.058	802.65	801.50	6247.33	176.86	0.050	1062.41	8402.94	3511.55	492.06	0.88	0.3138	2.742	0.3138	2.742
118.800	802.77	798.38	6243.81	345.90	0.097	237.75	4498.16	3664.26	447.79	0.91	0.3135	2.739	0.3135	2.739
148.800	802.28	797.69	6243.58	354.16	0.099	239.59	4568.94	3807.59	143.66	0.32	0.3135	2.738	0.3135	2.739
178.800	801.79	796.98	6243.34	362.27	0.102	241.44	4640.09	3952.02	144.75	0.32	0.3134	2.738	0.3134	2.738
208.800	801.28	796.27	6243.11	370.22	0.104	243.28	4711.60	4097.52	145.83	0.32	0.3134	2.737	0.3134	2.737
238.800	800.77	795.54	6242.88	378.03	0.106	245.12	4783.48	4244.10	146.91	0.33	0.3133	2.736	0.3133	2.736
268.800	800.24	794.80	6242.64	385.71	0.108	246.97	4855.73	4391.75	147.98	0.33	0.3132	2.735	0.3132	2.735
298.800	799.70	794.06	6242.41	393.25	0.110	248.81	4928.36	4540.48	149.06	0.33	0.3132	2.735	0.3132	2.735
328.800	799.16	793.30	6242.18	400.66	0.113	250.65	5001.35	4690.29	150.14	0.33	0.3131	2.734	0.3131	2.734
358.800	798.60	792.54	6241.94	407.95	0.115	252.50	5074.71	4841.16	151.21	0.33	0.3130	2.733	0.3130	2.733
388.800	798.04	791.77	6241.71	415.11	0.117	254.34	5148.44	4993.11	152.29	0.34	0.3130	2.733	0.3130	2.733
411.868	797.60	791.17	6241.53	420.57	0.118	255.76	5205.39	5110.98	117.83	-0.05	0.3129	2.732	0.3129	2.732
420.327	796.26	786.00	6237.30	531.82	0.149	237.85	4502.17	5557.04	216.15	1.84	0.3123	2.728	0.3123	2.728
447.600	795.46	785.02	6237.09	536.85	0.151	239.62	4569.92	5687.16	130.16	0.04	0.3123	2.726	0.3123	2.726
477.600	794.58	783.94	6236.86	542.28	0.152	241.56	4644.85	5831.09	144.26	0.33	0.3123	2.725	0.3123	2.725
507.600	793.70	782.86	6236.62	547.64	0.154	243.50	4720.19	5976.13	145.38	0.34	0.3122	2.724	0.3122	2.724
537.600	792.81	781.77	6236.39	552.91	0.155	245.44	4795.94	6122.29	146.50	0.34	0.3121	2.723	0.3121	2.723
567.600	791.92	780.69	6236.16	558.12	0.157	247.38	4872.10	6269.55	147.61	0.34	0.3120	2.722	0.3120	2.722
597.600	791.02	779.60	6235.93	563.25	0.158	249.33	4948.68	6417.94	148.73	0.34	0.3119	2.721	0.3119	2.721
627.600	790.13	778.51	6235.70	568.31	0.160	251.27	5025.67	6567.43	149.84	0.34	0.3118	2.720	0.3118	2.720
657.600	789.22	777.42	6235.48	573.31	0.161	253.21	5103.07	6718.04	150.96	0.35	0.3117	2.719	0.3117	2.719
687.600	788.32	776.33	6235.25	578.24	0.163	255.15	5180.89	6869.75	152.07	0.35	0.3115	2.718	0.3115	2.718
695.383	788.08	776.04	6235.19	579.54	0.163	255.65	5201.15	6909.58	39.63	-0.21	0.3114	2.716	0.3114	2.716
701.100	787.22	769.88	6229.22	696.86	0.196	237.58	4491.66	7124.89	442.83	0.90	0.3108	2.712	0.3108	2.712
731.100	785.96	768.45	6228.99	701.04	0.197	239.42	4562.24	7266.89	142.34	0.34	0.3108	2.710	0.3108	2.710
761.100	784.72	767.02	6228.75	705.18	0.198	241.26	4633.18	7409.95	143.41	0.34	0.3107	2.708	0.3107	2.708
791.100	783.47	765.59	6228.52	709.29	0.199	243.10	4704.49	7554.04	144.44	0.35	0.3106	2.707	0.3106	2.707
821.100	782.22	764.16	6228.29	713.36	0.201	244.94	4776.18	7699.16	145.48	0.35	0.3104	2.706	0.3104	2.706
851.100	780.97	762.74	6228.06	717.41	0.202	246.78	4848.25	7845.32	146.51	0.35	0.3103	2.705	0.3103	2.705
881.100	779.72	761.32	6227.83	721.42	0.203	248.62	4920.68	7992.50	147.54	0.35	0.3102	2.704	0.3102	2.704
911.100	778.47	759.91	6227.60	725.41	0.204	250.46	4993.49	8140.71	148.57	0.36	0.3100	2.703	0.3100	2.703
941.100	777.23	758.49	6227.37	729.37	0.205	252.30	5066.67	8289.95	149.60	0.36	0.3099	2.701	0.3099	2.701
971.100	775.99	757.08	6227.14	733.31	0.206	254.14	5140.22	8440.22	150.63	0.36	0.3098	2.700	0.3098	2.700
994.201	775.04	755.99	6226.96	736.34	0.207	255.55	5197.13	8556.92	116.69	-0.01	0.3096	2.699	0.3096	2.699
1002.589	772.71	744.01	6215.72	907.80	0.256	237.69	4496.14	8998.10	0.0	1.78	0.3084	2.690	0.3084	2.690
1029.900	771.78	743.51	6216.18	901.53	0.254	240.27	4595.63	9126.83	128.81	0.08	0.3084	2.685	0.3084	2.685
1059.900	770.78	742.95	6216.65	894.94	0.252	243.10	4705.75	9269.55	143.09	0.36	0.3083	2.685	0.3083	2.685
1089.900	769.81	742.40	6217.10	888.66	0.250	245.94	4816.72	9413.92	144.74	0.37	0.3083	2.684	0.3083	2.684
1119.900	768.86	741.84	6217.52	882.69	0.248	248.77	4928.56	9559.94	146.39	0.37	0.3082	2.684	0.3082	2.684
1149.900	767.93	741.28	6217.92	877.00	0.247	251.60	5041.27	9707.61	148.04	0.37	0.3082	2.683	0.3082	2.683
1179.900	767.02	740.72	6218.30	871.58	0.245	254.43	5154.84	9856.92	149.69	0.38	0.3081	2.683	0.3081	2.683
1209.900	766.12	740.16	6218.65	866.42	0.244	257.27	5269.26	10007.88	151.34	0.38	0.3081	2.682	0.3081	2.682
1239.900	765.24	739.60	6218.99	861.49	0.242	260.10	5384.56	10160.48	152.99	0.38	0.3080	2.682	0.3080	2.682
1258.900	764.03	738.57	6219.14	859.28	0.242	261.89	5458.02	10257.99	97.74	0.24	0.3080	2.681	0.3080	2.681
AFT	762.55	735.44	6217.16	887.73	0.250	.....	5458.02	10556.18	298.90	0.71	0.3078	2.681	.....	.....

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	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.1306E 02	8.0265E 02	8.0150E 02	6.2473E 03	9.6581E 01	1.6061E 04	1.5361E 02	7.6576E 03	3.1344E-01	6.2823E-01	3.6652F 03
AFT	1.1880E 02	7.9952E 02	7.9838E 02	6.2438E 03	9.6879E 01	1.6061E 04	0.0	0.0	0.0	0.0	3.6643F 03

GAS BUILDUP IN SLOT, DW/DT = 9.0921E-01

FOREWARD	4.1187E 02	7.9760E 02	7.9117E 02	6.2415E 03	1.4210E 02	1.6061E 04	2.1710E 02	1.0855E 04	3.1249E-01	6.2620E-01	5.3281F 03
AFT	4.2033E 02	7.9240E 02	7.8600E 02	6.2373E 03	1.4289E 02	1.6061E 04	2.3081E 02	1.1558E 04	3.1202E-01	6.2514E-01	5.3262F 03

GAS BUILDUP IN SLOT, DW/DT = 1.8436E 00

FOREWARD	6.9538E 02	7.8808E 02	7.7604E 02	6.2352E 03	1.9355E 02	1.6061E 04	2.1621E 02	1.0859E 04	3.1109E-01	6.2318E-01	7.1258F 03
AFT	7.0110E 02	7.8182E 02	7.6988E 02	6.2292E 03	1.9489E 02	1.6061E 04	0.0	0.0	0.0	0.0	7.1249F 03

GAS BUILDUP IN SLOT, DW/DT = 8.9538E-01

FOREWARD	9.9420E 02	7.7504E 02	7.5599E 02	6.2270E 03	2.4426E 02	1.6061E 04	2.1497E 02	1.0863E 04	3.0920E-01	6.1914E-01	8.7719F 03
AFT	1.0026E 03	7.6275E 02	7.4401E 02	6.2157E 03	2.4770E 02	1.6061E 04	2.2799E 02	1.1564E 04	3.0804E-01	6.1660E-01	8.7701F 03

GAS BUILDUP IN SLOT, DW/DT = 1.7809E 00

IGNITION TIME, TIME (S) 11.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	11197952.	2517400.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	12207702.	2744401.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	111582.81	25084.824
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.12193072E 09	27411120.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.13291184E 09	29879776.
THRUST COEFFICIENT	CF	1.6352062	1.6352062
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4759.9258	10493.844
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	51686.082	113948.31
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	59.885696	132.02539
INERT MASS REMAINING (KG,LBM)	MIR	3617.0144	7974.1523
TOTAL BURN AREA (M**2,IN**2)	ABTOT	340.72656	528127.38
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	227.59247	13888551.
PROPELLANT MASS REMAINING (KG,LBM)	WF	403183.06	888866.56
TOTAL GAS MASS (KG,LBM)	WGTOT	671.85547	1481.1880
RATIO OF SPECIFIC HEATS	GAMA	1.1617937	1.1617937
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.912875	28.468018
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1568.4409	5145.8047
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.24638754	0.24638754
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.54819558E 09	795.09082
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.60274852E 10	8742.1328
BURN AREA (M**2,IN**2)	AHH	35.432022	54919.762
BURN RATE (M/S,IN/S)	RBZ(1)	0.79547614E-02	0.31317967
DISTANCE BURNED (M,IN)	TAUZ(1)	0.85651398E-01	3.3721027
PROPELLANT VOLUME (M**3,IN**3)	VFH	6.6881018	408133.19
GAS VOLUME (M**3,IN**3)	VPH	5.8378363	356246.81
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3470.3577	6246.6445
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	255.48532	396003.06
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	39.950577	61923.523
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	214.33047	13079254.
GAS VOLUME (M**3,IN**3)	VP	108.56125	6624817.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.52215040E 09	757.31519
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.56841380E 10	8244.1484
BURN AREA (M**2,IN**2)	AAN	9.8587341	15281.070
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.78104101E-02	0.30749649
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.83743751E-01	3.2969990
PROPELLANT VOLUME (M**3,IN**3)	VFN	6.5738735	401162.56
GAS VOLUME (M**3,IN**3)	VPN	5.4518032	332689.63
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3455.0344	6219.0625
PORT AREA (M**2,IN**2)	AP	3.6261292	5620.5117
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4297686	2216.1465
EXPANSION RATIO	EPR	6.9680471	6.9680471
PRESSURE RATIO	PEPO	0.22287272E-01	0.22287272E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	795.09	795.00	6246.64	51.68	0.015	1031.16	9062.21	1097.80	1100.81	3.02	0.3132	3.372	0.3139	3.372
30.000	795.01	794.78	6246.48	80.83	0.023	1031.19	9061.62	1716.20	620.05	1.65	0.3132	3.372	0.3132	3.372
60.000	794.87	794.43	6246.26	110.00	0.031	1031.22	9061.03	2334.60	620.05	1.65	0.3132	3.372	0.3132	3.372
90.000	794.66	793.96	6245.97	139.23	0.039	1031.25	9060.44	2952.96	620.01	1.65	0.3131	3.371	0.3131	3.371
112.432	794.46	793.52	6245.71	161.14	0.045	1031.27	9060.00	3415.79	463.55	0.72	0.3131	3.370	0.3131	3.370
118.800	794.63	790.73	6242.46	327.85	0.092	241.69	4648.45	3555.01	441.88	0.88	0.3128	3.366	0.3128	3.366
148.800	794.19	790.08	6242.24	336.31	0.094	243.53	4720.54	3700.40	145.70	0.31	0.3128	3.365	0.3128	3.365
178.800	793.73	789.42	6242.01	344.61	0.097	245.38	4792.95	3846.88	146.79	0.31	0.3127	3.364	0.3127	3.364
208.800	793.27	788.76	6241.79	352.77	0.099	247.22	4865.69	3994.44	147.87	0.31	0.3127	3.364	0.3127	3.364
238.800	792.79	788.08	6241.56	360.78	0.101	249.06	4938.75	4143.07	148.95	0.31	0.3126	3.363	0.3126	3.363
268.800	792.31	787.[illegible]	6241.33	368.65	0.104	250.90	5012.15	4292.77	150.02	0.32	0.3125	3.362	0.3125	3.362
298.800	791.82	786.69	6241.10	376.39	0.106	252.74	5085.88	4443.55	151.10	0.32	0.3125	3.361	0.3125	3.361
328.800	791.31	785.98	6240.87	384.00	0.108	254.59	5159.92	4595.40	152.17	0.32	0.3124	3.360	0.3124	3.360
358.800	790.80	785.26	6240.64	391.48	0.110	256.43	5234.30	4748.32	153.25	0.32	0.3123	3.359	0.3123	3.359
388.800	790.27	784.53	6240.41	398.84	0.112	258.27	5309.00	4902.32	154.32	0.32	0.3123	3.358	0.3123	3.358
411.243	789.88	783.98	6240.23	404.30	0.114	259.65	5365.11	5018.53	116.14	-0.07	0.3122	3.358	0.3122	3.358
420.951	788.65	779.31	6236.39	509.62	0.143	241.82	4653.57	5457.51	213.20	1.80	0.3117	3.352	0.3117	3.352
447.600	787.93	778.41	6236.18	51[illegible].79	0.145	243.54	4720.98	5586.52	129.03	0.01	0.3117	3.350	0.3117	3.350
477.600	787.12	777.40	6235.95	52[illegible].51	0.146	245.48	4797.20	5732.52	146.33	0.32	0.3116	3.349	0.3116	3.349
507.600	786.30	776.38	6235.71	526.15	0.148	247.42	4873.80	5879.64	147.44	0.32	0.3116	3.348	0.3116	3.348
537.600	785.48	775.36	6235.48	531.71	0.149	249.36	4950.77	6027.87	148.56	0.32	0.3115	3.347	0.3115	3.347
567.600	784.65	774.33	6235.24	537.19	0.151	251.30	5028.11	6177.21	149.67	0.33	0.3114	3.346	0.3114	3.346
597.600	783.82	773.31	6235.01	542.60	0.153	253.24	5105.81	6327.67	150.79	0.33	0.3113	3.344	0.3113	3.344
627.600	782.98	772.28	6234.78	547.94	0.154	255.18	5183.88	6479.23	151.90	0.33	0.3112	3.343	0.3112	3.343
657.600	782.14	771.25	6234.55	553.21	0.156	257.12	5262.32	6631.91	153.01	0.33	0.3111	3.342	0.3111	3.342
687.600	781.30	770.21	6234.32	558.41	0.157	259.06	5341.13	6785.70	154.12	0.33	0.3110	3.341	0.3110	3.341
694.760	781.10	769.96	6234.26	559.67	0.157	259.53	5360.00	6822.87	36.95	-0.23	0.3109	3.339	0.3109	3.339
701.100	780.31	764.37	6228.81	670.79	0.189	241.49	4640.57	7034.65	437.49	0.87	0.3103	3.334	0.3103	3.334
731.100	779.14	763.02	6228.57	675.27	0.190	243.32	4712.41	7178.75	144.43	0.33	0.3103	3.331	0.3103	3.331
761.100	777.99	761.67	6228.33	679.71	0.191	245.16	4784.57	7323.91	145.50	0.33	0.3102	3.330	0.3102	3.330
791.100	776.82	760.32	6228.09	684.11	0.192	247.00	4857.06	7470.11	146.53	0.33	0.3101	3.328	0.3101	3.328
821.100	775.66	758.97	6227.85	688.48	0.194	248.84	4929.88	7617.33	147.56	0.34	0.3099	3.327	0.3099	3.327
851.100	774.50	757.63	6227.61	692.82	0.195	250.68	5003.05	7765.59	148.60	0.34	0.3098	3.326	0.3098	3.326
881.100	773.34	756.29	6227.38	697.12	0.196	252.51	5076.54	7914.88	149.63	0.34	0.3097	3.324	0.3097	3.324
911.100	772.18	754.94	6227.14	701.40	0.197	254.35	5150.36	8065.19	150.66	0.34	0.3096	3.323	0.3096	3.323
941.100	771.02	753.60	6226.90	705.64	0.198	256.19	5224.52	8216.53	151.69	0.34	0.3094	3.321	0.3094	3.321
971.100	769.86	752.26	6226.66	709.86	0.200	258.03	5299.01	8368.90	152.72	0.35	0.3093	3.320	0.3093	3.320
993.583	768.99	751.26	6226.48	713.02	0.201	259.41	5355.07	8484.05	115.12	-0.04	0.3092	3.318	0.3092	3.318
1003.205	766.85	740.34	6216.21	875.19	0.246	241.63	4646.25	8918.61	0.0	1.74	0.3080	3.306	0.3080	3.306
1029.900	766.00	739.84	6216.59	869.83	0.245	244.15	4745.37	9046.38	127.82	0.05	0.3080	3.302	0.3080	3.302
1059.900	765.07	739.28	6216.99	864.07	0.243	246.98	4857.47	9191.24	145.22	0.35	0.3080	3.301	0.3080	3.301
1089.900	764.15	738.72	6217.36	858.61	0.242	249.81	4970.35	9337.75	146.87	0.35	0.3079	3.301	0.3079	3.301
1119.900	763.26	738.15	6217.71	853.44	0.240	252.64	5083.99	9485.91	148.51	0.35	0.3079	3.300	0.3079	3.300
1149.900	762.38	737.59	6218.05	848.53	0.239	255.47	5198.40	9635.71	150.16	0.36	0.3078	3.300	0.3078	3.300
1179.900	761.52	737.02	6218.36	843.88	0.238	258.30	5313.57	9787.16	151.81	0.36	0.3078	3.299	0.3078	3.299
1209.900	760.67	736.46	6218.66	839.46	0.236	261.14	5429.50	9940.25	153.45	0.36	0.3077	3.299	0.3077	3.299
1239.900	759.84	735.89	6218.94	835.27	0.235	263.97	5546.21	10094.98	155.10	0.36	0.3076	3.298	0.3076	3.298
1258.900	758.72	734.90	6219.06	833.43	0.235	265.76	5620.51	10193.82	99.08	0.23	0.3076	3.297	0.3076	3.297
AFT	757.32	731.96	6217.19	861.15	0.242	.....	5620.51	10493.84	300.73	0.70	0.3075	3.297	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.1243E 02	7.9446E 02	7.9352E 02	6.2457E 03	9.4629E 01	1.6061E 04	1.4011E 02	7.0006E 03	3.1271E-01	6.2688E-01	3.5559E 03
AFT	1.1880E 02	7.9166E 02	7.9073E 02	6.2425E 03	9.4891E 01	1.6061E 04	0.0	0.0	0.0	0.0	3.5550E 03

GAS BUILDUP IN SLOT, DW/DT = 8.8165E-01

FOREWARD	4.1124E 02	7.8988E 02	7.8398E 02	6.2402E 03	1.4080E 02	1.6061E 04	2.1345E 02	1.0695E 04	3.1183E-01	6.2499E-01	5.2320E 03
AFT	4.2095E 02	7.8517E 02	7.7931E 02	6.2364E 03	1.4151E 02	1.6061E 04	2.2733E 02	1.1407E 04	3.1139E-01	6.2403E-01	5.2302E 03

GAS BUILDUP IN SLOT, DW/DT = 1.7953E 00

FOREWARD	6.9476E 02	7.8110E 02	7.6996E 02	6.2343E 03	1.9260E 02	1.6061E 04	2.1266E 02	1.0701E 04	3.1052E-01	6.2218E-01	7.0355E 03
AFT	7.0110E 02	7.7542E 02	7.6437E 02	6.2288E 03	1.9382E 02	1.6061E 04	0.0	0.0	0.0	0.0	7.0347E 03

GAS BUILDUP IN SLOT, DW/DT = 8.7101E-01

FOREWARD	9.9358E 02	7.6899E 02	7.5126E 02	6.2265E 03	2.4367E 02	1.6061E 04	2.1154E 02	1.0706E 04	3.0875E-01	6.1840E-01	8.6956E 03
AFT	1.0032E 03	7.5781E 02	7.4034E 02	6.2162E 03	2.4681E 02	1.6061E 04	2.2477E 02	1.1414E 04	3.0769E-01	6.1608E-01	8.6938E 03

GAS BUILDUP IN SLOT, DW/DT = 1.7426E 00

IGNITION TIME, TIME (S) 13.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	11124307.	2500844.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	12134057.	2727845.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	110915.94	24934.902
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.14425296E 09	32429360.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.15725358E 09	35352016.
THRUST COEFFICIENT	CF	1.6350803	1.6350803
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4731.8984	10432.051
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	61177.898	134874.19
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	59.527786	131.23633
INERT MASS REMAINING (KG,LBM)	MIR	3497.9590	7711.6797
TOTAL BURN AREA (M**2,IN**2)	ABTOT	339.37134	526026.69
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	222.20982	13560081.
PROPELLANT MASS REMAINING (KG,LBM)	WF	393647.63	867844.50
TOTAL GAS MASS (KG,LBM)	WGTOT	694.87061	1531.9277
RATIO OF SPECIFIC HEATS	GAMA	1.1617861	1.1617861
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.911428	28.464828
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1568.3635	5145.5508
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.23768228	0.23768228
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.54271232E 09	787.13794
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.71183933E 10	10324.359
BURN AREA (M**2,IN**2)	AHH	35.290588	54700.535
BURN RATE (M/S,IN/S)	RBZ(1)	0.79362653E-02	0.31245154
DISTANCE BURNED (M,IN)	TAUZ(1)	0.10156089	3.9984617
PROPELLANT VOLUME (M**3,IN**3)	VFH	6.1255207	373802.38
GAS VOLUME (M**3,IN**3)	VPH	6.4004173	390577.63
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3469.2380	6244.6289
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	255.11987	395436.63
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	39.031326	60498.680
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	209.66501	12794550.
GAS VOLUME (M**3,IN**3)	VP	112.24620	6849687.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.51857997E 09	752.13696
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.67248660E 10	9753.5977
BURN AREA (M**2,IN**2)	AAN	9.9296513	15390.992
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.78012459E-02	0.30713576
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.99364519E-01	3.9119911
PROPELLANT VOLUME (M**3,IN**3)	VFN	6.4192686	391728.00
GAS VOLUME (M**3,IN**3)	VPN	5.6064081	342124.19
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3454.8044	6218.6484
PORT AREA (M**2,IN**2)	AP	3.7323732	5785.1914
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4310379	2218.1133
EXPANSION RATIO	EPR	6.9618692	6.9618692
PRESSURE RATIO	PEPO	0.22313666E-01	0.22313666E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WOOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	787.14	787.06	6244.63	48.46	0.014	1000.08	9698.36	1090.92	1093.87	2.94	0.3125	3.998	0.3132	3.999
30.000	787.07	786.87	6244.49	75.08	0.021	1000.11	9697.74	1689.33	599.97	1.56	0.3125	3.998	0.3125	3.998
60.000	786.95	786.58	6244.30	101.71	0.029	1000.15	9697.11	2287.73	599.97	1.56	0.3124	3.998	0.3124	3.998
90.000	786.78	786.19	6244.06	128.38	0.036	1000.18	9696.49	2886.11	599.94	1.56	0.3124	3.997	0.3124	3.997
111.806	786.61	785.82	6243.85	147.82	0.042	1000.20	9696.04	3321.57	436.05	0.59	0.3124	3.996	0.3124	3.996
118.800	786.81	783.33	6240.87	310.73	0.087	245.62	4800.88	3447.79	434.66	0.86	0.3121	3.992	0.3121	3.992
148.800	786.40	782.73	6240.65	319.37	0.090	247.46	4874.27	3595.22	147.74	0.31	0.3121	3.991	0.3121	3.991
178.800	785.99	782.12	6240.43	327.86	0.092	249.30	4947.94	3743.74	148.83	0.31	0.3121	3.990	0.3121	3.990
208.800	785.55	781.50	6240.21	336.19	0.094	251.15	5021.90	3893.33	149.91	0.31	0.3120	3.989	0.3120	3.989
238.800	785.12	780.86	6239.99	344.38	0.097	252.99	5096.15	4043.99	150.98	0.32	0.3119	3.988	0.3119	3.988
268.800	784.68	780.22	6239.77	352.43	0.099	254.83	5170.68	4195.72	152.05	0.32	0.3119	3.987	0.3119	3.987
298.800	784.21	779.56	6239.54	360.35	0.101	256.67	5245.50	4348.53	153.13	0.32	0.3118	3.986	0.3118	3.986
328.800	783.75	778.90	6239.32	368.13	0.103	258.51	5320.61	4502.41	154.20	0.32	0.3118	3.985	0.3118	3.985
358.800	783.28	778.22	6239.09	375.79	0.106	260.35	5396.00	4657.36	155.27	0.32	0.3117	3.984	0.3117	3.984
388.800	782.79	777.54	6238.86	383.33	0.108	262.20	5471.68	4813.37	156.34	0.32	0.3116	3.983	0.3116	3.983
410.619	782.43	777.03	6238.70	388.77	0.109	263.54	5526.91	4927.83	114.38	-0.08	0.3116	3.982	0.3116	3.982
421.573	781.30	772.80	6235.21	488.54	0.137	245.78	4807.16	5359.68	209.59	1.76	0.3111	3.976	0.3111	3.976
447.600	780.66	771.98	6235.00	493.82	0.139	247.46	4874.17	5487.48	127.81	0.00	0.3111	3.974	0.3111	3.974
477.600	779.90	771.02	6234.76	499.80	0.141	249.40	4951.71	5635.54	148.38	0.32	0.3110	3.972	0.3110	3.972
507.600	779.15	770.06	6234.53	505.70	0.142	251.34	5029.57	5784.71	149.50	0.32	0.3110	3.971	0.3110	3.971
537.600	778.39	769.10	6234.29	511.51	0.144	253.28	5107.75	5935.00	150.61	0.33	0.3109	3.970	0.3109	3.970
567.600	777.61	768.13	6234.05	517.25	0.145	255.22	5186.25	6086.39	151.73	0.33	0.3108	3.968	0.3108	3.968
597.600	776.84	767.16	6233.82	522.92	0.147	257.15	5265.08	6238.90	152.84	0.33	0.3107	3.967	0.3107	3.967
627.600	776.07	766.19	6233.59	528.51	0.149	259.09	5344.23	6392.52	153.95	0.33	0.3106	3.965	0.3106	3.965
657.600	775.29	765.21	6233.35	534.03	0.150	261.03	5423.70	6547.24	155.06	0.33	0.3105	3.964	0.3105	3.964
687.600	774.50	764.23	6233.12	539.48	0.152	262.97	5503.50	6703.07	156.17	0.34	0.3104	3.963	0.3104	3.963
694.139	774.33	764.02	6233.07	540.69	0.152	263.39	5520.93	6737.50	34.19	-0.24	0.3103	3.961	0.3103	3.961
701.100	773.60	758.93	6228.09	646.02	0.182	245.39	4791.66	6945.71	430.69	0.86	0.3098	3.954	0.3098	3.954
731.100	772.52	757.65	6227.84	650.77	0.183	247.22	4864.75	7091.89	146.51	0.33	0.3098	3.952	0.3098	3.952
761.100	771.44	756.38	6227.59	655.49	0.184	249.06	4938.13	7239.13	147.58	0.33	0.3097	3.950	0.3097	3.950
791.100	770.36	755.11	6227.35	660.17	0.186	250.90	5011.80	7387.40	148.61	0.33	0.3096	3.949	0.3096	3.949
821.100	769.28	753.83	6227.11	664.81	0.187	252.73	5085.76	7536.70	149.64	0.34	0.3094	3.947	0.3094	3.947
851.100	768.20	752.56	6226.86	669.42	0.188	254.57	5160.02	7687.04	150.67	0.34	0.3093	3.945	0.3093	3.945
881.100	767.12	751.29	6226.61	673.99	0.190	256.41	5234.57	7838.39	151.71	0.34	0.3092	3.943	0.3092	3.943
911.100	766.03	750.02	6226.37	678.53	0.191	258.24	5309.41	7990.79	152.74	0.34	0.3091	3.942	0.3091	3.942
941.100	764.95	748.75	6226.13	683.04	0.192	260.08	5384.54	8144.20	153.77	0.35	0.3090	3.940	0.3090	3.940
971.100	763.86	747.47	6225.88	687.52	0.193	261.92	5459.97	8298.65	154.79	0.35	0.3088	3.938	0.3088	3.938
992.965	763.08	746.55	6225.70	690.79	0.194	263.25	5515.13	8412.16	113.46	-0.05	0.3087	3.937	0.3087	3.937
1003.820	761.10	736.58	6216.30	844.32	0.238	245.56	4798.66	8840.02	0.0	1.72	0.3077	3.923	0.3077	3.923
1029.900	760.32	736.09	6216.61	839.77	0.236	248.02	4897.31	8966.70	126.73	0.04	0.3077	3.918	0.3077	3.918
1059.900	759.44	735.52	6216.95	834.79	0.235	250.85	5011.42	9113.68	147.33	0.35	0.3076	3.917	0.3076	3.917
1089.900	758.59	734.96	6217.26	830.09	0.234	253.68	5126.19	9262.30	148.98	0.35	0.3076	3.917	0.3076	3.917
1119.900	757.74	734.39	6217.55	825.65	0.232	256.51	5241.63	9412.57	150.62	0.35	0.3075	3.916	0.3075	3.916
1149.900	756.91	733.82	6217.83	821.47	0.231	259.34	5357.75	9564.48	152.27	0.36	0.3074	3.915	0.3074	3.915
1179.900	756.10	733.25	6218.09	817.52	0.230	262.17	5474.51	9718.03	153.91	0.36	0.3074	3.915	0.3074	3.915
1209.900	755.31	732.68	6218.33	813.80	0.229	265.00	5591.95	9873.21	155.55	0.36	0.3073	3.914	0.3073	3.914
1239.900	754.52	732.11	6218.55	810.28	0.228	267.83	5710.05	10030.05	157.20	0.36	0.3073	3.913	0.3073	3.913
1258.900	753.47	731.18	6218.65	808.79	0.228	269.63	5785.19	10130.21	100.40	0.23	0.3072	3.913	0.3072	3.913
AFT	752.14	728.39	6216.88	835.84	0.235	.....	5785.19	10432.05	302.54	0.70	0.3071	3.912	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.1181E 02	7.8661E 02	7.8582E 02	6.2438E 03	9.2657E 01	1.6061E 04	1.2709E 02	6.3645E 03	3.1200E-01	6.2542E-01	3.4487F 03
AFT	1.1880E 02	7.8412E 02	7.8333E 02	6.2409E 03	9.2884E 01	1.6061E 04	0.0	0.0	0.0	0.0	3.4478F 03

GAS BUILDUP IN SLOT, DW/DT = 8.6433E-01

FOREWARD	4.1062E 02	7.8243E 02	7.7703E 02	6.2387E 03	1.3948E 02	1.6061E 04	2.0979E 02	1.0534E 04	3.1118E-01	6.2366E-01	5.1376F 03
AFT	4.2157E 02	7.7817E 02	7.7280E 02	6.2352E 03	1.4012E 02	1.6061E 04	2.2383E 02	1.1253E 04	3.1079E-01	6.2279E-01	5.1359F 03

GAS BUILDUP IN SLOT, DW/DT = 1.7622E 00

FOREWARD	6.9414E 02	7.7433E 02	7.6402E 02	6.2331E 03	1.9163E 02	1.6061E 04	2.0908E 02	1.0540E 04	3.0996E-01	6.2104E-01	6.9466F 03
AFT	7.0110E 02	7.6917E 02	7.5893E 02	6.2281E 03	1.9274E 02	1.6061F 04	0.0	0.0	0.0	0.0	6.9457F 03

GAS BUILDUP IN SLOT, DW/DT = 8.5663E-01

FOREWARD	9.9297E 02	7.6308E 02	7.4655E 02	6.2257E 03	2.4308E 02	1.6061E 04	2.0807E 02	1.0545E 04	3.0829E-01	6.1749E-01	8.6202F 03
AFT	1.0038E 03	7.5289E 02	7.3658E 02	6.2163E 03	2.4595E 02	1.6061E 04	2.2151E 02	1.1262E 04	3.0733E-01	6.1538E-01	8.6185F 03

GAS BUILDUP IN SLOT, DW/DT = 1.7188E 00

IGNITION TIME, TIME (S) 15.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	11031940.	2480079.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	12041690.	2707080.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	101364.94	22787.754
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.16640923E 09	37410288.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.18142934E 09	40786944.
THRUST COEFFICIENT	CF	1.6337633	1.6337633
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4699.9805	10361.691
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	70609.750	155667.88
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	54.401840	119.93555
INERT MASS REMAINING (KG,LBM)	MIR	3389.1553	7471.8086
TOTAL BURN AREA (M**2,IN**2)	ABTOT	337.76343	523534.50
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	216.86082	13233665.
PROPELLANT MASS REMAINING (KG,LBM)	WF	384171.75	846953.88
TOTAL GAS MASS (KG,LBM)	WGTOT	716.75317	1580.1707
RATIO OF SPECIFIC HEATS	GAMA	1.1617775	1.1617775
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.909920	28.461502
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1568.2778	5145.2695
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.22940928	0.22940928
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.53697126E 09	778.81104
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.81980744E 10	11890.305
BURN AREA (M**2,IN**2)	AHH	34.888077	54076.633
BURN RATE (M/S,IN/S)	RBZ(1)	0.79167448E-02	0.31168294
DISTANCE BURNED (M,IN)	TAUZ(1)	0.11743343	4.6233644
PROPELLANT VOLUME (M**3,IN**3)	VFH	5.5685644	339814.81
GAS VOLUME (M**3,IN**3)	VPH	6.9573736	424565.19
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3468.0640	6242.5156
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	254.76556	394887.44
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	38.118546	59083.887
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	205.02843	12511608.
GAS VOLUME (M**3,IN**3)	VP	115.90390	7072893.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.51459405E 09	746.35571
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.77580411E 10	11252.090
BURN AREA (M**2,IN**2)	AAN	9.9913197	15486.578
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.77902898E-02	0.30670446
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.11496705	4.5262623
PROPELLANT VOLUME (M**3,IN**3)	VFN	6.2638130	382241.50
GAS VOLUME (M**3,IN**3)	VPN	5.7618637	351610.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3454.4551	6218.0195
PORT AREA (M**2,IN**2)	AP	3.8400240	5952.0508
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4322977	2220.0664
EXPANSION RATIO	EPR	6.9557438	6.9557438
PRESSURE RATIO	PEPO	0.22339940E-01	0.22339940E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES.	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	778.81	778.74	6242.52	45.42	0.013	969.08	10313.62	1075.90	1078.73	2.82	0.3117	4.623	0.3125	4.624
30.000	778.75	778.58	6242.40	69.86	0.020	969.11	10312.98	1654.39	579.94	1.45	0.3117	4.623	0.3117	4.623
60.000	778.65	778.34	6242.24	94.32	0.027	969.14	10312.34	2232.88	579.94	1.45	0.3117	4.623	0.3117	4.623
90.000	778.51	778.00	6242.03	118.81	0.033	969.18	10311.69	2811.35	579.93	1.45	0.3116	4.622	0.3116	4.622
111.182	778.37	777.71	6241.86	136.14	0.038	969.20	10311.23	3220.35	409.45	0.45	0.3116	4.621	0.3116	4.621
118.800	778.58	775.50	6239.15	294.00	0.083	249.54	4955.42	3334.04	427.41	0.84	0.3114	4.616	0.3114	4.616
148.800	778.21	774.95	6238.94	302.82	0.085	251.38	5030.11	3483.48	149.74	0.30	0.3114	4.615	0.3114	4.615
178.800	777.83	774.38	6238.73	311.49	0.088	253.23	5105.05	3634.00	150.83	0.30	0.3113	4.614	0.3113	4.614
208.800	777.44	773.80	6238.51	320.00	0.090	255.07	5180.23	3785.60	151.90	0.30	0.3113	4.613	0.3113	4.613
238.800	777.04	773.20	6238.30	328.37	0.092	256.91	5255.66	3938.27	152.98	0.31	0.3112	4.612	0.3112	4.612
268.800	776.63	772.60	6238.08	336.60	0.095	258.75	5331.34	4092.01	154.05	0.31	0.3112	4.611	0.3112	4.611
298.800	776.20	771.98	6237.86	344.69	0.097	260.59	5407.25	4246.82	155.12	0.31	0.3111	4.610	0.3111	4.610
328.800	775.77	771.36	6237.64	352.65	0.099	262.43	5483.41	4402.70	156.19	0.31	0.3111	4.608	0.3111	4.608
358.800	775.33	770.72	6237.41	360.49	0.101	264.27	5559.82	4559.65	157.26	0.31	0.3110	4.607	0.3110	4.607
388.800	774.88	770.08	6237.19	368.20	0.103	266.11	5636.47	4717.66	158.33	0.31	0.3109	4.606	0.3109	4.606
409.997	774.56	769.62	6237.03	373.61	0.105	267.41	5690.78	4830.27	112.51	-0.10	0.3109	4.605	0.3109	4.605
422.195	773.52	765.79	6233.86	468.15	0.132	249.73	4962.96	5254.88	205.97	1.71	0.3105	4.598	0.3105	4.598
447.600	772.93	765.03	6233.66	473.53	0.133	251.37	5029.51	5381.38	126.48	-0.02	0.3105	4.596	0.3105	4.596
477.600	772.24	764.13	6233.42	479.77	0.135	253.31	5108.36	5531.46	150.40	0.31	0.3104	4.595	0.3104	4.595
507.600	771.54	763.23	6233.18	485.92	0.137	255.24	5187.47	5682.66	151.52	0.31	0.3103	4.593	0.3103	4.593
537.600	770.83	762.32	6232.95	491.99	0.138	257.18	5266.87	5834.97	152.63	0.32	0.3102	4.591	0.3102	4.591
567.600	770.12	761.41	6232.71	497.98	0.140	259.12	5346.54	5988.39	153.74	0.32	0.3101	4.590	0.3101	4.590
597.600	769.40	760.50	6232.48	503.89	0.142	261.06	5426.49	6142.92	154.85	0.32	0.3101	4.588	0.3101	4.589
627.600	768.68	759.57	6232.24	509.72	0.143	262.99	5506.71	6298.56	155.96	0.32	0.3100	4.587	0.3100	4.587
657.600	767.95	758.65	6232.00	515.49	0.145	264.93	5587.22	6455.31	157.07	0.32	0.3099	4.585	0.3099	4.585
687.600	767.22	757.72	6231.77	521.19	0.147	266.87	5668.00	6613.16	158.18	0.32	0.3098	4.583	0.3098	4.583
693.519	767.08	757.54	6231.72	522.33	0.147	267.25	5683.97	6644.75	31.34	-0.26	0.3097	4.582	0.3097	4.582
701.100	766.41	752.91	6227.16	622.23	0.175	249.28	4944.91	6849.36	423.83	0.83	0.3092	4.574	0.3092	4.574
731.100	765.40	751.71	6226.91	627.26	0.176	251.11	5019.26	6997.59	148.55	0.32	0.3092	4.572	0.3092	4.572
761.100	764.40	750.50	6226.66	632.25	0.178	252.95	5093.86	7146.88	149.61	0.32	0.3091	4.570	0.3091	4.570
791.100	763.39	749.30	6226.41	637.19	0.179	254.78	5168.70	7297.20	150.65	0.32	0.3090	4.568	0.3090	4.568
821.100	762.38	748.09	6226.16	642.10	0.181	256.62	5243.80	7448.55	151.68	0.32	0.3089	4.566	0.3089	4.566
851.100	761.38	746.89	6225.91	646.97	0.182	258.46	5319.16	7600.94	152.71	0.33	0.3088	4.564	0.3088	4.564
881.100	760.37	745.68	6225.66	651.80	0.183	260.29	5394.76	7754.35	153.74	0.33	0.3087	4.562	0.3087	4.562
911.100	759.35	744.48	6225.41	656.60	0.185	262.13	5470.62	7908.79	154.77	0.33	0.3085	4.560	0.3085	4.560
941.100	758.34	743.27	6225.16	661.37	0.186	263.96	5546.73	8064.25	155.80	0.33	0.3084	4.558	0.3084	4.558
971.100	757.33	742.06	6224.91	666.10	0.187	265.80	5623.09	8220.74	156.83	0.33	0.3083	4.556	0.3083	4.556
992.349	756.61	741.21	6224.73	669.46	0.188	267.10	5677.33	8332.51	111.70	-0.07	0.3082	4.554	0.3082	4.554
1004.435	754.78	732.10	6216.13	814.97	0.229	249.48	4953.36	8753.51	0.0	1.68	0.3072	4.538	0.3072	4.538
1029.900	754.07	731.62	6216.38	811.17	0.228	251.88	5051.47	8879.01	125.52	0.02	0.3072	4.533	0.3072	4.533
1059.900	753.25	731.06	6216.65	806.92	0.227	254.71	5167.57	9028.08	149.40	0.34	0.3072	4.532	0.3072	4.532
1089.900	752.44	730.49	6216.91	802.93	0.226	257.54	5284.24	9178.79	151.05	0.34	0.3071	4.532	0.3071	4.532
1119.900	751.65	729.92	6217.14	799.20	0.225	260.37	5401.48	9331.13	152.69	0.34	0.3071	4.531	0.3071	4.531
1149.900	750.86	729.35	6217.37	795.70	0.224	263.20	5519.28	9485.11	154.33	0.34	0.3070	4.530	0.3070	4.530
1179.900	750.10	728.78	6217.57	792.42	0.223	266.03	5637.65	9640.73	155.97	0.35	0.3070	4.529	0.3070	4.529
1209.900	749.34	728.20	6217.77	789.35	0.222	268.86	5756.58	9798.00	157.61	0.35	0.3069	4.529	0.3069	4.529
1239.900	748.59	727.63	6217.95	786.47	0.221	271.70	5876.08	9956.89	159.25	0.35	0.3068	4.528	0.3068	4.528
1258.900	747.62	726.74	6218.02	785.32	0.221	273.49	5952.05	10058.37	101.70	0.22	0.3068	4.527	0.3068	4.527
AFT	746.36	724.11	6216.34	811.72	0.228	.....	5952.05	10361.69	303.99	0.66	0.3067	4.526	....	.....

	SLOT INTERFACE LOCATION IN.	PD PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.1118E 02	7.7837E 02	7.7771E 02	6.2419E 03	9.0516E 01	1.6061E 04	1.1453E 02	5.7494E 03	3.1125E-01	6.2400E-01	3.3349F 03
AFT	1.1880E 02	7.7616E 02	7.7550E 02	6.2391E 03	9.0712E 01	1.6061E 04	0.0	0.0	0.0	0.0	3.3340F 03

GAS BUILDUP IN SLOT, DW/DT = 8.3672E-01

FOREWARD	4.1000E 02	7.7456E 02	7.6962E 02	6.2370E 03	1.3803E 02	1.6061E 04	2.0606E 02	1.0370E 04	3.1049E-01	6.2237E-01	5.0363F 03
AFT	4.2219E 02	7.7070E 02	7.6579E 02	6.2339E 03	1.3860E 02	1.6061E 04	2.2027E 02	1.1098E 04	3.1013E-01	6.2157E-01	5.0346F 03

GAS BUILDUP IN SLOT, DW/DT = 1.7127E 00

FOREWARD	6.9352E 02	7.6708E 02	7.5754E 02	6.2317E 03	1.9057E 02	1.6061E 04	2.0544E 02	1.0377E 04	3.0935E-01	6.1992E-01	6.8502F 03
AFT	7.0110E 02	7.6239E 02	7.5291E 02	6.2272E 03	1.9158E 02	1.6061E 04	0.0	0.0	0.0	0.0	6.8494F 03

GAS BUILDUP IN SLOT, DW/DT = 8.3200E-01

FOREWARD	9.9235E 02	7.5661E 02	7.4121E 02	6.2247E 03	2.4246E 02	1.6061E 04	2.0453E 02	1.0383E 04	3.0778E-01	6.1659E-01	8.5370F 03
AFT	1.0044E 03	7.4732E 02	7.3210E 02	6.2161E 03	2.4509E 02	1.6061E 04	2.1816E 02	1.1107E 04	3.0689E-01	6.1465E-01	8.5354F 03

GAS BUILDUP IN SLOT, DW/DT = 1.6780E 00

IGNITION TIME: TIME (S) 17.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	10925876.	2456235.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	11935627.	2683236.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	77624.500	17450.684
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.18836701E 09	42346592.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.20540661E 09	46177248.
THRUST COEFFICIENT	CF	1.6304913	1.6304913
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4668.2578	10291.750
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	79978.000	176321.31
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	41.660507	91.845703
INERT MASS REMAINING (KG,LBM)	MIR	3305.8342	7288.1172
TOTAL BURN AREA (M**2,IN**2)	ABTOT	336.17261	521068.88
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	211.54831	12909476.
PROPELLANT MASS REMAINING (KG,LBM)	WF	374760.63	826205.81
TOTAL GAS MASS (KG,LBM)	WGTOT	738.06055	1627.1455
RATIO OF SPECIFIC HEATS	GAMA	1.1617699	1.1617699
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.908466	28.458298
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1568.1921	5144.9883
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.22202182	0.22202182
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.53143322E 09	770.77881
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.92664791E 10	13439.895
BURN AREA (M**2,IN**2)	AHH	34.485901	53453.270
BURN RATE (M/S,IN/S)	RBZ(1)	0.78977346E-02	0.31093460
DISTANCE BURNED (M,IN)	TAUZ(1)	0.13326693	5.2467299
PROPELLANT VOLUME (M**3,IN**3)	VFH	5.0193481	306299.56
GAS VOLUME (M**3,IN**3)	VPH	7.5065899	458080.44
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3466.9290	6240.4727
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	254.42314	394356.69
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	37.212372	57679.316
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	200.42133	12230465.
GAS VOLUME (M**3,IN**3)	VP	119.53401	7294416.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.51063910E 09	740.61963
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.87832699E 10	12739.063
BURN AREA (M**2,IN**2)	AAN	10.051380	15579.672
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.77791177E-02	0.30626464
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.13054758	5.1396704
PROPELLANT VOLUME (M**3,IN**3)	VFN	6.1076288	372710.56
GAS VOLUME (M**3,IN**3)	VPN	5.9180479	361141.63
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3454.0859	6217.3555
PORT AREA (M**2,IN**2)	AP	3.9490490	6121.0391
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4335489	2222.0059
EXPANSION RATIO	EPR	6.9496727	6.9496727
PRESSURE RATIO	PEPO	0.22366010E-01	0.22366010E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	770.78	770.71	6240.47	42.78	0.012	938.15	10908.07	1061.00	1063.73	2.73	0.3109	5.247	0.3117	5.247
30.000	770.72	770.58	6240.38	65.32	0.018	938.18	10907.41	1619.72	560.08	1.37	0.3109	5.247	0.3109	5.247
60.000	770.63	770.36	6240.24	87.89	0.025	938.22	10906.76	2178.44	560.09	1.37	0.3109	5.246	0.3109	5.246
90.000	770.52	770.08	6240.06	110.47	0.031	938.25	10906.10	2737.15	560.08	1.37	0.3109	5.245	0.3109	5.245
110.560	770.40	769.84	6239.91	125.99	0.035	938.28	10905.65	3120.63	383.82	0.33	0.3109	5.244	0.3109	5.244
118.800	770.61	767.89	6237.46	278.12	0.078	253.46	5112.04	3222.26	420.03	0.82	0.3107	5.239	0.3107	5.239
148.800	770.27	767.37	6237.26	287.11	0.081	255.30	5188.04	3373.69	151.73	0.30	0.3107	5.238	0.3107	5.238
178.800	769.93	766.84	6237.05	295.94	0.083	257.14	5264.24	3526.20	152.82	0.30	0.3106	5.237	0.3106	5.237
208.800	769.56	766.30	6236.85	304.62	0.086	258.98	5340.64	3679.79	153.89	0.30	0.3106	5.235	0.3106	5.235
238.800	769.19	765.74	6236.64	313.15	0.088	260.82	5417.25	3834.44	154.96	0.31	0.3105	5.234	0.3105	5.234
268.800	768.81	765.18	6236.43	321.54	0.090	262.66	5494.05	3990.16	156.03	0.31	0.3105	5.233	0.3105	5.233
298.800	768.43	764.60	6236.21	329.79	0.093	264.50	5571.07	4146.95	157.10	0.31	0.3104	5.232	0.3104	5.232
328.800	768.02	764.01	6236.00	337.91	0.095	266.34	5648.29	4304.81	158.17	0.31	0.3104	5.231	0.3104	5.231
358.800	767.62	763.41	6235.78	345.91	0.097	268.18	5725.70	4463.74	159.24	0.31	0.3103	5.229	0.3103	5.229
388.800	767.19	762.80	6235.56	353.79	0.099	270.02	5803.32	4623.73	160.31	0.31	0.3102	5.228	0.3102	5.228
409.375	766.90	762.38	6235.41	359.14	0.101	271.28	5856.68	4734.41	110.56	-0.12	0.3102	5.227	0.3102	5.227
422.815	765.95	758.91	6232.52	448.79	0.126	253.67	5120.91	5151.72	202.28	1.68	0.3098	5.219	0.3098	5.219
447.600	765.43	758.22	6232.32	454.23	0.128	255.27	5186.95	5276.80	125.06	-0.03	0.3098	5.217	0.3098	5.217
477.600	764.78	757.37	6232.09	460.71	0.130	257.21	5267.10	5428.90	152.41	0.31	0.3098	5.215	0.3098	5.215
507.600	764.13	756.52	6231.86	467.10	0.131	259.14	5347.48	5582.10	153.52	0.31	0.3097	5.214	0.3097	5.214
537.600	763.48	755.67	6231.62	473.40	0.133	261.08	5428.09	5736.42	154.63	0.32	0.3096	5.212	0.3096	5.212
567.600	762.82	754.81	6231.38	479.62	0.135	263.02	5508.93	5891.84	155.74	0.32	0.3095	5.210	0.3095	5.210
597.600	762.15	753.94	6231.14	485.76	0.137	264.95	5590.00	6048.37	156.85	0.32	0.3094	5.208	0.3094	5.208
627.600	761.47	753.07	6230.91	491.82	0.138	266.89	5671.30	6206.01	157.96	0.32	0.3093	5.207	0.3093	5.207
657.600	760.79	752.19	6230.67	497.81	0.140	268.83	5752.83	6364.75	159.07	0.32	0.3093	5.205	0.3093	5.205
687.600	760.11	751.31	6230.44	503.74	0.142	270.76	5834.59	6524.60	160.18	0.32	0.3092	5.203	0.3092	5.203
692.900	759.99	751.16	6230.39	504.80	0.142	271.10	5849.06	6553.28	28.41	-0.27	0.3091	5.201	0.3091	5.201
701.100	759.37	746.94	6226.22	599.63	0.169	253.16	5100.29	6754.23	416.81	0.82	0.3087	5.192	0.3087	5.192
731.100	758.44	745.81	6225.97	604.91	0.170	255.00	5175.89	6904.49	150.58	0.32	0.3087	5.190	0.3087	5.190
761.100	757.50	744.67	6225.71	610.15	0.172	256.83	5251.71	7055.81	151.64	0.32	0.3086	5.188	0.3086	5.188
791.100	756.56	743.53	6225.46	615.34	0.173	258.67	5327.73	7208.16	152.67	0.32	0.3085	5.186	0.3085	5.186
821.100	755.62	742.39	6225.21	620.50	0.175	260.50	5403.97	7361.54	153.71	0.32	0.3083	5.184	0.3083	5.184
851.100	754.68	741.25	6224.95	625.61	0.176	262.33	5480.42	7515.94	154.74	0.33	0.3082	5.181	0.3082	5.181
881.100	753.74	740.10	6224.70	630.69	0.177	264.17	5557.08	7671.38	155.77	0.33	0.3081	5.179	0.3081	5.179
911.100	752.80	738.96	6224.45	635.73	0.179	266.00	5633.95	7827.84	156.80	0.33	0.3080	5.177	0.3080	5.177
941.100	751.85	737.81	6224.19	640.73	0.180	267.84	5711.03	7985.32	157.82	0.33	0.3079	5.175	0.3079	5.175
971.100	750.90	736.66	6223.94	645.71	0.182	269.67	5788.32	8143.84	158.85	0.33	0.3078	5.173	0.3078	5.173
991.733	750.25	735.87	6223.76	649.13	0.183	270.93	5841.59	8253.76	109.84	-0.09	0.3077	5.171	0.3077	5.171
1005.049	748.56	727.55	6215.86	787.16	0.222	253.40	5110.30	8667.82	0.0	1.65	0.3068	5.152	0.3068	5.152
1029.900	747.90	727.08	6216.06	784.03	0.221	255.74	5207.78	8792.04	124.22	0.00	0.3068	5.148	0.3068	5.148
1059.900	747.13	726.51	6216.28	780.46	0.220	258.57	5325.88	8943.16	151.46	0.33	0.3067	5.147	0.3067	5.147
1089.900	746.36	725.95	6216.49	777.14	0.219	261.40	5444.44	9095.92	153.10	0.34	0.3067	5.146	0.3067	5.146
1119.900	745.62	725.38	6216.68	774.05	0.218	264.23	5563.47	9250.32	154.74	0.34	0.3066	5.145	0.3066	5.145
1149.900	744.87	724.81	6216.86	771.18	0.217	267.06	5682.97	9406.35	156.38	0.34	0.3066	5.144	0.3066	5.144
1179.900	744.15	724.24	6217.02	768.52	0.216	269.89	5802.93	9564.02	158.02	0.34	0.3065	5.143	0.3065	5.143
1209.900	743.44	723.67	6217.17	766.06	0.216	272.72	5923.35	9723.32	159.65	0.35	0.3065	5.142	0.3065	5.142
1239.900	742.73	723.10	6217.30	763.79	0.215	275.55	6044.24	9884.26	161.29	0.35	0.3064	5.142	0.3064	5.142
1258.900	741.81	722.24	6217.36	762.95	0.215	277.34	6121.04	9987.03	102.99	0.22	0.3063	5.141	0.3063	5.141
AFT	740.62	719.75	6215.76	788.75	0.222	.....	6121.04	10291.75	305.38	0.65	0.3063	5.140	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.1056E 02	7.7040E 02	7.6984E 02	6.2399E 03	8.8359E 01	1.6061E 04	1.0244E 02	5.1549E 03	3.1051E-01	6.2249E-01	3.2231F 03
AFT	1.1880E 02	7.6844E 02	7.6789E 02	6.2375E 03	8.8526E 01	1.6061E 04	0.0	0.0	0.0	0.0	3.2223F 03

GAS BUILDUP IN SLOT, DW/DT = 8.1896E-01

FOREWARD	4.0938E 02	7.6690E 02	7.6238E 02	6.2354E 03	1.3656E 02	1.6061E 04	2.0232E 02	1.0204E 04	3.0981E-01	6.2098E-01	4.9367F 03
AFT	4.2281E 02	7.6342E 02	7.5891E 02	6.2325E 03	1.3708E 02	1.6061E 04	2.1668E 02	1.0940E 04	3.0948E-01	6.2025E-01	4.9350F 03

GAS BUILDUP IN SLOT, DW/DT = 1.6781E 00

FOREWARD	6.9290E 02	7.5999E 02	7.5116E 02	6.2304E 03	1.8950E 02	1.6061E 04	2.0177F 02	1.0212E 04	3.0874E-01	6.1869E-01	6.7550F 03
AFT	7.0110E 02	7.5572E 02	7.4694E 02	6.2262E 03	1.9042E 02	1.6061E 04	0.0	0.0	0.0	0.0	6.7542F 03

GAS BUILDUP IN SLOT, DW/DT = 8.1630E-01

FOREWARD	9.9173E 02	7.5025E 02	7.3587E 02	6.2238E 03	2.4185E 02	1.6061E 04	2.0095E 02	1.0219E 04	3.0726E-01	6.1556E-01	8.4547F 03
AFT	1.0050E 03	7.4176E 02	7.2755E 02	6.2159E 03	2.4426E 02	1.6061E 04	2.1476E 02	1.0950E 04	3.0644E-01	6.1378E-01	8.4531F 03

GAS BUILDUP IN SLOT, DW/DT = 1.6504E 00

IGNITION TIME, TIME (S) 19.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	10846106.	2438302.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	11855857.	2665303.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	77099.563	17332.676
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.21013894E 09	47241120.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.22919805E 09	51525776.
THRUST COEFFICIENT	CF	1.6303654	1.6303654
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4637.7383	10224.465
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	89283.938	196837.50
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	41.378784	91.224609
INERT MASS REMAINING (KG,LBM)	MIR	3223.0767	7105.6680
TOTAL BURN AREA (M**2,IN**2)	ABTOT	334.60034	518631.75
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	206.27177	12587482.
PROPELLANT MASS REMAINING (KG,LBM)	WF	365413.13	805598.19
TOTAL GAS MASS (KG,LBM)	WGTOT	759.51147	1674.4363
RATIO OF SPECIFIC HEATS	GAMA	1.1617632	1.1617632
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.907199	28.455505
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1568.1089	5144.7148
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.21585435	0.21585435
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.52664090E 09	763.82813
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.10324550E 11	14974.500
BURN AREA (M**2,IN**2)	AHH	34.084702	52831.398
BURN RATE (M/S,IN/S)	RBZ(1)	0.78812093E-02	0.31028390
DISTANCE BURNED (M,IN)	TAUZ(1)	0.14906240	5.8685989
PROPELLANT VOLUME (M**3,IN**3)	VFH	4.4777956	273252.00
GAS VOLUME (M**3,IN**3)	VPH	8.0481424	491128.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3465.9502	6238.7109
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	254.09169	393842.94
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	36.312729	56284.859
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	195.84323	11951093.
GAS VOLUME (M**3,IN**3)	VP	123.13712	7514291.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.50682650E 09	735.08984
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.98007368E 10	14214.770
BURN AREA (M**2,IN**2)	AAN	10.111358	15672.637
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.77681653E-02	0.30583340
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.14610583	5.7521992
PROPELLANT VOLUME (M**3,IN**3)	VFN	5.9507370	363136.44
GAS VOLUME (M**3,IN**3)	VPN	6.0749397	370715.75
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3453.8125	6216.8633
PORT AREA (M**2,IN**2)	AP	4.0594397	6292.1445
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4347897	2223.9297
EXPANSION RATIO	EPR	6.9436607	6.9436607
PRESSURE RATIO	PEPO	0.22391833E-01	0.22391833E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	763.83	763.77	6238.71	40.44	0.011	907.29	11481.88	1046.46	1049.15	2.69	0.3103	5.869	0.3109	5.869
30.000	763.78	763.65	6238.62	61.29	0.017	907.33	11481.22	1585.67	540.53	1.32	0.3103	5.869	0.3103	5.869
60.000	763.71	763.47	6238.50	82.16	0.023	907.37	11480.55	2124.88	540.54	1.32	0.3103	5.868	0.3103	5.868
90.000	763.60	763.23	6238.35	103.05	0.029	907.40	11479.89	2664.09	540.53	1.32	0.3103	5.867	0.3103	5.867
109.939	763.50	763.03	6238.23	116.96	0.033	907.43	11479.45	3023.08	359.24	0.25	0.3102	5.866	0.3102	5.866
118.800	763.72	761.30	6236.02	262.83	0.074	257.36	5270.73	3113.12	412.61	0.82	0.3100	5.860	0.3100	5.860
148.800	763.41	760.82	6235.82	271.96	0.076	259.20	5348.04	3266.55	153.75	0.32	0.3100	5.859	0.3100	5.859
178.800	763.08	760.33	6235.63	280.93	0.079	261.04	5425.50	3421.06	154.84	0.32	0.3100	5.858	0.3100	5.858
208.800	762.75	759.82	6235.43	289.75	0.081	262.88	5503.12	3576.65	155.91	0.32	0.3100	5.857	0.3100	5.857
238.800	762.42	759.31	6235.22	298.42	0.084	264.72	5580.90	3733.30	156.98	0.33	0.3099	5.855	0.3099	5.855
268.800	762.06	758.78	6235.02	306.95	0.086	266.56	5658.84	3891.02	158.05	0.33	0.3099	5.854	0.3099	5.854
298.800	761.70	758.24	6234.81	315.34	0.089	268.40	5736.95	4049.81	159.12	0.33	0.3098	5.853	0.3098	5.853
328.800	761.33	757.68	6234.60	323.60	0.091	270.24	5815.21	4209.67	160.19	0.33	0.3098	5.851	0.3098	5.851
358.800	760.95	757.12	6234.39	331.73	0.093	272.08	5893.64	4370.59	161.25	0.33	0.3097	5.850	0.3097	5.850
388.800	760.56	756.55	6234.18	339.75	0.095	273.92	5972.23	4532.57	162.32	0.33	0.3097	5.849	0.3097	5.849
408.756	760.30	756.16	6234.03	345.04	0.097	275.14	6024.59	4641.24	108.56	-0.12	0.3096	5.847	0.3096	5.847
423.434	759.43	753.02	6231.41	430.00	0.121	257.60	5281.00	5051.29	198.57	1.67	0.3093	5.839	0.3093	5.839
447.600	758.95	752.38	6231.22	435.49	0.122	259.16	5346.48	5174.91	123.59	-0.03	0.3093	5.837	0.3093	5.837
477.600	758.36	751.59	6230.98	442.18	0.124	261.10	5427.93	5329.02	154.44	0.33	0.3092	5.835	0.3092	5.835
507.600	757.75	750.78	6230.75	448.77	0.126	263.03	5509.57	5484.24	155.56	0.33	0.3091	5.833	0.3091	5.833
537.600	757.14	749.98	6230.52	455.29	0.128	264.97	5591.39	5640.57	156.67	0.33	0.3090	5.831	0.3090	5.831
567.600	756.53	749.16	6230.28	461.71	0.130	266.90	5673.40	5798.01	157.78	0.34	0.3090	5.829	0.3090	5.829
597.600	755.90	748.34	6230.05	468.06	0.132	268.84	5755.59	5956.55	158.89	0.34	0.3089	5.827	0.3089	5.827
627.600	755.28	747.52	6229.81	474.33	0.133	270.78	5837.96	6116.21	159.99	0.34	0.3088	5.825	0.3088	5.825
657.600	754.64	746.69	6229.57	480.52	0.135	272.71	5920.52	6276.96	161.10	0.34	0.3087	5.823	0.3087	5.823
687.600	754.00	745.85	6229.34	486.64	0.137	274.65	6003.26	6438.82	162.21	0.34	0.3087	5.821	0.3087	5.821
692.283	753.90	745.72	6229.30	487.62	0.137	274.95	6016.20	6464.51	25.42	-0.28	0.3086	5.819	0.3086	5.819
701.100	753.33	741.89	6225.48	577.61	0.162	257.04	5257.77	6661.82	409.72	0.82	0.3082	5.810	0.3082	5.810
731.100	752.46	740.81	6225.23	583.12	0.164	258.88	5334.64	6814.13	152.64	0.33	0.3082	5.807	0.3082	5.807
761.100	751.59	739.74	6224.97	588.59	0.166	260.71	5411.67	6967.48	153.70	0.34	0.3081	5.805	0.3081	5.805
791.100	750.72	738.66	6224.72	594.01	0.167	262.54	5488.87	7121.87	154.73	0.34	0.3080	5.803	0.3080	5.803
821.100	749.84	737.58	6224.46	599.39	0.169	264.37	5566.24	7277.29	155.76	0.34	0.3079	5.800	0.3079	5.800
851.100	748.96	736.50	6224.21	604.72	0.170	266.21	5643.79	7433.73	156.79	0.34	0.3078	5.798	0.3078	5.798
881.100	748.08	735.41	6223.95	610.02	0.172	268.04	5721.50	7591.20	157.82	0.35	0.3077	5.795	0.3077	5.795
911.100	747.20	734.32	6223.69	615.28	0.173	269.87	5799.38	7749.70	158.85	0.35	0.3076	5.793	0.3076	5.793
941.100	746.30	733.23	6223.44	620.50	0.175	271.71	5877.43	7909.22	159.88	0.35	0.3075	5.791	0.3075	5.791
971.100	745.42	732.14	6223.18	625.68	0.176	273.54	5955.65	8069.77	160.90	0.35	0.3073	5.788	0.3073	5.788
991.118	744.83	731.41	6223.00	629.15	0.177	274.76	6007.94	8177.79	107.93	-0.09	0.3072	5.786	0.3072	5.786
1005.661	743.26	723.80	6215.76	760.06	0.214	257.31	5269.47	8584.92	0.0	1.65	0.3064	5.766	0.3064	5.766
1029.900	741.98	722.64	6215.87	758.27	0.213	259.60	5366.23	8707.77	122.85	-0.00	0.3064	5.761	0.3064	5.761
1059.900	741.24	722.07	6216.05	755.33	0.213	262.43	5486.33	8860.96	153.53	0.34	0.3063	5.760	0.3063	5.760
1089.900	740.52	721.51	6216.21	752.63	0.212	265.26	5606.79	9015.77	155.15	0.34	0.3063	5.759	0.3063	5.759
1119.900	739.81	720.94	6216.36	750.14	0.211	268.09	5727.61	9172.21	156.79	0.34	0.3062	5.758	0.3062	5.758
1149.900	739.12	720.37	6216.49	747.87	0.211	270.91	5848.79	9330.29	158.42	0.35	0.3061	5.757	0.3061	5.757
1179.900	738.43	719.80	6216.62	745.78	0.210	273.74	5970.34	9490.00	160.06	0.35	0.3061	5.756	0.3061	5.756
1209.900	737.75	719.23	6216.73	743.89	0.209	276.57	6092.25	9651.33	161.69	0.35	0.3060	5.755	0.3060	5.755
1239.900	737.08	718.67	6216.83	742.16	0.209	279.40	6214.52	9814.30	163.32	0.35	0.3060	5.754	0.3060	5.754
1258.900	736.22	717.85	6216.86	741.62	0.209	281.19	6292.14	9918.36	104.28	0.22	0.3059	5.753	0.3059	5.753
AFT	735.09	715.50	6215.35	766.84	0.216	.....	6292.14	10224.46	306.77	0.65	0.3058	5.752	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0994E 02	7.6350E 02	7.6303E 02	6.2382E 03	8.6114E 01	1.6061E 04	9.0851E 01	4.5811E 03	3.0987E-01	6.2102E-01	3.1139F 03
AFT	1.1880E 02	7.6178E 02	7.6130E 02	6.2360E 03	8.6256E 01	1.6061E 04	0.0	0.0	0.0	0.0	3.1131F 03

GAS BUILDUP IN SLOT, DW/DT = 8.1746E-01

FOREWARD	4.0876E 02	7.6030E 02	7.5616E 02	6.2340E 03	1.3497E 02	1.6061E 04	1.9861E 02	1.0038E 04	3.0921E-01	6.1961E-01	4.8398F 03
AFT	4.2343E 02	7.5714E 02	7.5302E 02	6.2314E 03	1.3543E 02	1.6061E 04	2.1312E 02	1.0780E 04	3.0891E-01	6.1895E-01	4.8382F 03

GAS BUILDUP IN SLOT, DW/DT = 1.6710E 00

FOREWARD	6.9228E 02	7.5390E 02	7.4572E 02	6.2293E 03	1.8826E 02	1.6061E 04	1.9813E 02	1.0044E 04	3.0822E-01	6.1747E-01	6.6626F 03
AFT	7.0110E 02	7.5002E 02	7.4189E 02	6.2255E 03	1.8909E 02	1.6061E 04	0.0	0.0	0.0	0.0	6.6618F 03

GAS BUILDUP IN SLOT, DW/DT = 8.1678E-01

FOREWARD	9.9112E 02	7.4483E 02	7.3141E 02	6.2230E 03	2.4103E 02	1.6061E 04	1.9740E 02	1.0053E 04	3.0683E-01	6.1452E-01	8.3752F 03
AFT	1.0057E 03	7.3707E 02	7.2380E 02	6.2158E 03	2.4324E 02	1.6061E 04	2.1139E 02	1.0791E 04	3.0608E-01	6.1289E-01	8.3735F 03

GAS BUILDUP IN SLOT, DW/DT = 1.6497E 00

IGNITION TIME, TIME (S) 21.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	10776376.	2422626.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	11786127.	2649627.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	76576.250	17215.039
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.23176136E 09	52102032.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.25283995E 09	56840688.
THRUST COEFFICIENT	CF	1.6302338	1.6302338
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4606.6211	10155.863
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	98528.313	217217.81
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	41.097946	90.605469
INERT MASS REMAINING (KG,LBM)	MIR	3140.8806	6924.4570
TOTAL BURN AREA (M**2,IN**2)	ABTOT	332.82373	515878.00
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	201.03099	12267669.
PROPELLANT MASS REMAINING (KG,LBM)	WF	356129.00	785130.19
TOTAL GAS MASS (KG,LBM)	WGTOT	782.33008	1724.7432
RATIO OF SPECIFIC HEATS	GAMA	1.1617575	1.1617575
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.906306	28.453537
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1568.0361	5144.4766
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.20975161	0.20975161
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.52323942E 09	758.89478
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.11374432E 11	16497.223
BURN AREA (M**2,IN**2)	AHH	33.473938	51884.723
BURN RATE (M/S,IN/S)	RBZ(1)	0.78694262E-02	0.30982006
DISTANCE BURNED (M,IN)	TAUZ(1)	0.16482478	6.4891663
PROPELLANT VOLUME (M**3,IN**3)	VFH	3.9453516	240760.25
GAS VOLUME (M**3,IN**3)	VPH	8.5805864	523619.75
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(I,3)	3465.2559	6237.4609
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	253.77138	393346.44
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	35.419312	54900.051
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	191.29239	11673383.
GAS VOLUME (M**3,IN**3)	VP	126.71457	7732601.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.50345318E 09	730.19727
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.10811015E 11	15680.055
BURN AREA (M**2,IN**2)	AAN	10.159266	15746.895
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.77586100E-02	0.30545712
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.16164213	6.3638659
PROPELLANT VOLUME (M**3,IN**3)	VFN	5.7932301	353524.75
GAS VOLUME (M**3,IN**3)	VPN	6.2324467	380327.44
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3453.7974	6216.8359
PORT AREA (M**2,IN**2)	AP	4.1711903	6465.3594
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4360247	2225.8428
EXPANSION RATIO	EPR	6.9376926	6.9376926
PRESSURE RATIO	PEPO	0.22417452E-01	0.22417452E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	758.89	758.85	6237.46	38.07	0.011	876.50	12035.36	1026.09	1028.81	2.72	0.3098	6.489	0.3103	6.489
30.000	758.86	758.74	6237.38	57.38	0.016	876.54	12034.70	1546.16	521.40	1.33	0.3098	6.489	0.3098	6.489
60.000	758.79	758.59	6237.28	76.70	0.022	876.58	12034.03	2066.25	521.42	1.33	0.3098	6.489	0.3098	6.489
90.000	758.70	758.38	6237.15	96.04	0.027	876.62	12033.37	2586.34	521.42	1.33	0.3098	6.488	0.3098	6.488
109.319	758.62	758.21	6237.04	108.52	0.031	876.64	12032.94	2921.91	335.77	0.20	0.3098	6.486	0.3098	6.486
118.800	758.82	756.70	6235.08	247.33	0.070	261.26	5431.52	3000.82	405.26	0.84	0.3096	6.480	0.3096	6.480
148.800	758.55	756.26	6234.89	256.57	0.072	263.10	5510.13	3156.32	155.85	0.36	0.3096	6.479	0.3096	6.479
178.800	758.25	755.80	6234.70	265.66	0.075	264.93	5588.85	3312.89	156.94	0.36	0.3096	6.478	0.3096	6.479
208.800	757.95	755.33	6234.51	274.59	0.077	266.77	5667.69	3470.54	158.01	0.36	0.3095	6.476	0.3095	6.476
238.800	757.63	754.85	6234.32	283.38	0.080	268.61	5746.65	3629.25	159.08	0.37	0.3095	6.475	0.3095	6.475
268.800	757.31	754.35	6234.12	292.02	0.082	270.45	5825.73	3789.03	160.15	0.37	0.3094	6.474	0.3094	6.474
298.800	756.98	753.85	6233.92	300.52	0.084	272.29	5904.93	3949.87	161.22	0.37	0.3094	6.472	0.3094	6.472
328.800	756.63	753.33	6233.71	308.90	0.087	274.13	5984.24	4111.78	162.28	0.37	0.3093	6.471	0.3093	6.471
358.800	756.28	752.80	6233.51	317.15	0.089	275.97	6063.67	4274.75	163.35	0.37	0.3093	6.469	0.3093	6.469
388.800	755.92	752.26	6233.30	325.28	0.091	277.81	6143.22	4438.79	164.42	0.38	0.3092	6.468	0.3092	6.468
408.137	755.69	751.91	6233.16	330.48	0.093	278.99	6194.56	4545.42	106.54	-0.10	0.3092	6.466	0.3092	6.466
424.051	754.89	749.07	6230.79	410.83	0.115	261.53	5443.27	4948.36	194.89	1.70	0.3089	6.457	0.3089	6.457
447.600	754.47	748.49	6230.61	416.32	0.117	263.05	5508.13	5070.46	122.10	-0.01	0.3089	6.455	0.3089	6.455
477.600	753.91	747.74	6230.38	423.20	0.119	264.98	5590.89	5226.65	156.56	0.37	0.3088	6.453	0.3088	6.453
507.600	753.35	746.99	6230.15	429.98	0.121	266.92	5673.78	5383.95	157.68	0.37	0.3088	6.451	0.3088	6.451
537.600	752.78	746.23	6229.92	436.68	0.123	268.85	5756.81	5542.36	158.79	0.37	0.3087	6.449	0.3087	6.449
567.600	752.21	745.46	6229.69	443.28	0.125	270.79	5839.98	5701.88	159.90	0.38	0.3086	6.447	0.3086	6.447
597.600	751.63	744.69	6229.46	449.81	0.126	272.72	5923.29	5862.50	161.00	0.38	0.3085	6.445	0.3085	6.445
627.600	751.05	743.91	6229.22	456.26	0.128	274.66	6006.74	6024.22	162.11	0.38	0.3085	6.443	0.3085	6.443
657.600	750.46	743.12	6228.99	462.63	0.130	276.59	6090.31	6187.05	163.22	0.38	0.3084	6.441	0.3084	6.441
687.600	749.86	742.33	6228.76	468.93	0.132	278.53	6174.04	6350.98	164.32	0.39	0.3083	6.439	0.3083	6.439
691.666	749.78	742.23	6228.72	469.80	0.132	278.79	6185.40	6373.63	22.36	-0.29	0.3082	6.436	0.3082	6.436
701.100	749.25	738.74	6225.25	555.01	0.156	260.92	5417.40	6567.36	402.68	0.84	0.3079	6.426	0.3079	6.426
731.100	748.45	737.72	6224.99	560.73	0.158	262.75	5495.53	6721.77	154.78	0.37	0.3079	6.424	0.3079	6.424
761.100	747.64	736.71	6224.74	566.40	0.159	264.58	5573.78	6877.22	155.84	0.38	0.3078	6.421	0.3078	6.421
791.100	746.82	735.69	6224.48	572.02	0.161	266.41	5652.16	7033.71	156.87	0.38	0.3077	6.419	0.3077	6.419
821.100	746.00	734.67	6224.23	577.60	0.162	268.24	5730.66	7191.22	157.90	0.38	0.3076	6.416	0.3076	6.416
851.100	745.18	733.64	6223.97	583.13	0.164	270.07	5809.30	7349.76	158.93	0.39	0.3075	6.413	0.3075	6.413
881.100	744.36	732.61	6223.71	588.62	0.166	271.91	5888.07	7509.33	159.96	0.39	0.3074	6.411	0.3074	6.411
911.100	743.53	731.58	6223.46	594.08	0.167	273.74	5966.96	7669.93	160.99	0.39	0.3073	6.408	0.3073	6.408
941.100	742.70	730.55	6223.20	599.49	0.169	275.57	6045.98	7831.55	162.02	0.39	0.3072	6.406	0.3072	6.406
971.100	741.87	729.51	6222.94	604.86	0.170	277.40	6125.13	7994.19	163.04	0.40	0.3071	6.403	0.3071	6.403
990.504	741.33	728.84	6222.77	608.35	0.171	278.58	6176.39	8100.26	106.00	-0.07	0.3070	6.400	0.3070	6.400
1006.273	739.89	721.89	6216.16	732.26	0.206	261.22	5430.90	8500.60	0.0	1.69	0.3062	6.379	0.3062	6.379
1029.900	738.73	720.82	6216.24	730.92	0.206	263.45	5526.86	8622.05	121.48	0.02	0.3062	6.374	0.3062	6.374
1059.900	738.04	720.26	6216.37	728.58	0.205	266.27	5648.94	8777.36	155.70	0.39	0.3061	6.373	0.3061	6.373
1089.900	737.36	719.70	6216.50	726.47	0.204	269.10	5771.28	8934.29	157.33	0.40	0.3061	6.372	0.3061	6.372
1119.900	736.69	719.14	6216.61	724.56	0.204	271.93	5893.88	9092.84	158.96	0.40	0.3060	6.371	0.3060	6.371
1149.900	736.03	718.57	6216.70	722.84	0.203	274.76	6016.75	9253.02	160.59	0.40	0.3060	6.370	0.3060	6.370
1179.900	734.69	717.31	6216.75	722.02	0.203	277.59	6139.88	9414.84	162.22	0.40	0.3059	6.368	0.3059	6.368
1209.900	733.37	716.05	6216.79	721.35	0.203	280.42	6263.27	9578.29	163.84	0.39	0.3058	6.367	0.3058	6.367
1239.900	732.08	714.81	6216.82	720.82	0.203	283.25	6386.91	9743.35	165.43	0.37	0.3057	6.366	0.3057	6.366
1258.900	731.27	714.04	6216.84	720.56	0.203	285.04	6465.36	9848.70	105.59	0.23	0.3055	6.365	0.3055	6.365
AFT	730.20	711.81	6215.40	745.19	0.210	.....	6465.36	10155.86	307.84	0.67	0.3055	6.364	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0932E 02	7.5862E 02	7.5821E 02	6.2370E 03	8.3526E 01	1.6061E 04	7.9756E 01	4.0276E 03	3.0941E-01	6.1973E-01	3.0017E 03
AFT	1.1880E 02	7.5711E 02	7.5670E 02	6.2351E 03	8.3643E 01	1.6061E 04	0.0	0.0	0.0	0.0	3.0008E 03

GAS BUILDUP IN SLOT, DW/DT = 8.3887E-01

FOREWARD	4.0814E 02	7.5569E 02	7.5191E 02	6.2332E 03	1.3293E 02	1.6061E 04	1.9499E 02	9.8660E 03	3.0881E-01	6.1843E-01	4.7404E 03
AFT	4.2405E 02	7.5283E 02	7.4907E 02	6.2308E 03	1.3334E 02	1.6061E 04	2.0965E 02	1.0617E 04	3.0854E-01	6.1783E-01	4.7387E 03

GAS BUILDUP IN SLOT, DW/DT = 1.7046E 00

FOREWARD	6.9167E 02	7.4978E 02	7.4223E 02	6.2287E 03	1.8646E 02	1.6061E 04	1.9458E 02	9.8752E 03	3.0788E-01	6.1643E-01	6.5682E 03
AFT	7.0110E 02	7.4626E 02	7.3874E 02	6.2252E 03	1.8721E 02	1.6061E 04	0.0	0.0	0.0	0.0	6.5674E 03

GAS BUILDUP IN SLOT, DW/DT = 8.4070E-01

FOREWARD	9.9050E 02	7.4133E 02	7.2884E 02	6.2228E 03	2.3955E 02	1.6061E 04	1.9394E 02	9.8842E 03	3.0658E-01	6.1365E-01	8.2942E 03
AFT	1.0063E 03	7.3426E 02	7.2189E 02	6.2162E 03	2.4155E 02	1.6061E 04	2.0810E 02	1.0630E 04	3.0589E-01	6.1215E-01	8.2925E 03

GAS BUILDUP IN SLOT, DW/DT = 1.6903E 00

IGNITION TIME, TIME (S) 23.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	10681891.	2401385.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	11691642.	2628386.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	76069.500	17101.113
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.25321957E 09	56926032.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.27631770E 09	62118704.
THRUST COEFFICIENT	CF	1.6301279	1.6301279
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4574.9297	10085.996
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	107709.81	237459.63
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	40.825958	90.005859
INERT MASS REMAINING (KG,LBM)	MIR	3059.2288	6744.4453
TOTAL BURN AREA (M**2,IN**2)	ABTOT	330.99951	513050.63
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	195.82500	11949980.
PROPELLANT MASS REMAINING (KG,LBM)	WF	346906.56	764798.13
TOTAL GAS MASS (KG,LBM)	WGTOT	803.44800	1771.2998
RATIO OF SPECIFIC HEATS	GAMA	1.1617517	1.1617517
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.905269	28.451248
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1567.9397	5144.1602
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.20434564	0.20434564
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.51929830E 09	753.17871
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.12416967E 11	18009.293
BURN AREA (M**2,IN**2)	AHH	32.807663	50851.988
BURN RATE (M/S,IN/S)	RBZ(1)	0.78556687E-02	0.30927843
DISTANCE BURNED (M,IN)	TAUZ(1)	0.18056363	7.1088057
PROPELLANT VOLUME (M**3,IN**3)	VFH	3.4237528	208930.31
GAS VOLUME (M**3,IN**3)	VPH	9.1021852	555449.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3464.4485	6236.0078
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	253.46153	392866.19
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	34.531540	53524.004
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	186.76599	11397165.
GAS VOLUME (M**3,IN**3)	VP	130.26863	7949483.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.49902413E 09	723.77368
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.11813491E 11	17134.023
BURN AREA (M**2,IN**2)	AAN	10.199034	15808.535
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.77448264E-02	0.30491447
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.17715937	6.9747801
PROPELLANT VOLUME (M**3,IN**3)	VFN	5.6352367	343883.44
GAS VOLUME (M**3,IN**3)	VPN	6.3904400	389968.75
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3453.5762	6216.4375
PORT AREA (M**2,IN**2)	AP	4.2843180	6640.7070
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4372492	2227.7412
EXPANSION RATIO	EPR	6.9317808	6.9317808
PRESSURE RATIO	PEPO	0.22442888E-01	0.22442888E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	753.18	753.13	6236.01	35.94	0.010	845.76	12568.95	1004.01	1006.57	2.56	0.3093	7.109	0.3098	7.109
30.000	753.14	753.05	6235.94	53.88	0.015	845.80	12568.29	1505.02	502.24	1.22	0.3093	7.109	0.3093	7.109
60.000	753.08	752.91	6235.85	71.83	0.020	845.84	12567.63	2006.06	502.25	1.22	0.3093	7.108	0.3093	7.108
90.000	753.01	752.73	6235.73	89.80	0.025	845.88	12566.97	2507.09	502.26	1.22	0.3093	7.107	0.3093	7.107
108.700	752.94	752.59	6235.65	101.03	0.028	845.90	12566.56	2820.09	313.07	0.07	0.3092	7.106	0.3092	7.106
118.800	753.13	751.26	6233.90	232.77	0.065	265.15	5594.50	2888.35	393.09	0.81	0.3091	7.099	0.3091	7.099
148.800	752.87	750.85	6233.72	242.14	0.068	266.99	5674.41	3045.92	157.90	0.34	0.3091	7.098	0.3091	7.098
178.800	752.60	750.43	6233.54	251.34	0.071	268.82	5754.40	3204.55	158.98	0.34	0.3091	7.097	0.3091	7.097
208.800	752.32	749.99	6233.36	260.39	0.073	270.66	5834.45	3364.26	160.05	0.35	0.3090	7.096	0.3090	7.096
238.800	752.04	749.54	6233.17	269.29	0.076	272.50	5914.59	3525.04	161.12	0.35	0.3090	7.094	0.3090	7.094
268.800	751.74	749.08	6232.98	278.05	0.078	274.34	5994.80	3686.88	162.19	0.35	0.3089	7.093	0.3089	7.093
298.800	751.43	748.60	6232.79	286.67	0.081	276.18	6075.09	3849.78	163.26	0.35	0.3089	7.091	0.3089	7.091
328.800	751.11	748.12	6232.59	295.16	0.083	278.02	6155.45	4013.76	164.33	0.35	0.3088	7.090	0.3088	7.090
358.800	750.78	747.62	6232.39	303.53	0.085	279.86	6235.88	4178.79	165.39	0.36	0.3088	7.088	0.3088	7.088
388.800	750.45	747.11	6232.19	311.77	0.088	281.69	6316.39	4344.88	166.46	0.36	0.3087	7.086	0.3087	7.086
407.520	750.24	746.79	6232.06	316.88	0.089	282.84	6366.68	4449.41	104.40	-0.13	0.3087	7.085	0.3087	7.085
424.668	749.51	744.22	6229.91	392.97	0.111	265.45	5607.79	4845.13	191.29	1.65	0.3084	7.075	0.3084	7.075
447.600	749.12	743.69	6229.73	398.47	0.112	266.93	5671.99	4965.66	120.49	-0.04	0.3084	7.073	0.3084	7.073
477.600	748.61	742.98	6229.51	405.53	0.114	268.86	5756.05	5123.93	158.63	0.35	0.3084	7.071	0.3084	7.071
507.600	748.09	742.28	6229.28	412.50	0.116	270.79	5840.20	5283.31	159.74	0.35	0.3083	7.069	0.3083	7.069
537.600	747.57	741.56	6229.05	419.37	0.118	272.73	5924.45	5443.80	160.85	0.36	0.3082	7.066	0.3082	7.066
567.600	747.03	740.83	6228.82	426.16	0.120	274.66	6008.78	5605.39	161.96	0.36	0.3082	7.064	0.3082	7.064
597.600	746.49	740.10	6228.59	432.87	0.122	276.60	6093.21	5768.09	163.06	0.36	0.3081	7.062	0.3081	7.062
627.600	745.95	739.37	6228.36	439.49	0.124	278.53	6177.72	5931.90	164.17	0.36	0.3080	7.060	0.3080	7.060
657.600	745.40	738.62	6228.13	446.04	0.125	280.46	6262.32	6096.80	165.28	0.36	0.3080	7.057	0.3080	7.057
687.600	744.84	737.87	6227.90	452.51	0.127	282.40	6347.02	6262.82	166.38	0.37	0.3079	7.055	0.3079	7.055
691.050	744.77	737.79	6227.88	453.28	0.127	282.62	6356.77	6282.32	19.21	-0.30	0.3078	7.053	0.3078	7.053
701.100	744.30	734.61	6224.70	534.10	0.150	264.79	5579.25	6472.45	395.81	0.81	0.3075	7.042	0.3075	7.042
731.100	743.54	733.65	6224.45	540.02	0.152	266.62	5658.64	6628.95	156.86	0.36	0.3075	7.040	0.3075	7.040
761.100	742.78	732.69	6224.19	545.89	0.154	268.45	5738.11	6786.51	157.92	0.36	0.3074	7.037	0.3074	7.037
791.100	742.03	731.73	6223.93	551.71	0.155	270.28	5817.67	6945.09	158.95	0.36	0.3073	7.034	0.3073	7.034
821.100	741.26	730.76	6223.68	557.49	0.157	272.11	5897.31	7104.71	159.98	0.36	0.3072	7.031	0.3072	7.031
851.100	740.49	729.79	6223.43	563.21	0.158	273.94	5977.04	7265.35	161.01	0.37	0.3071	7.028	0.3071	7.028
881.100	739.72	728.81	6223.17	568.90	0.160	275.77	6056.86	7427.02	162.04	0.37	0.3070	7.026	0.3070	7.026
911.100	738.95	727.83	6222.91	574.54	0.162	277.60	6136.77	7589.72	163.07	0.37	0.3069	7.023	0.3069	7.023
941.100	738.17	726.85	6222.65	580.14	0.163	279.43	6216.75	7753.45	164.10	0.37	0.3068	7.020	0.3068	7.020
971.100	737.39	725.86	6222.39	585.70	0.165	281.26	6296.83	7918.20	165.13	0.37	0.3067	7.017	0.3067	7.017
989.891	736.89	725.24	6222.23	589.19	0.166	282.41	6347.03	8022.24	103.95	-0.10	0.3066	7.014	0.3066	7.014
1006.885	735.57	718.88	6216.17	706.72	0.199	265.12	5594.67	8415.66	0.0	1.64	0.3059	6.991	0.3059	6.991
1029.900	734.51	717.90	6216.22	705.79	0.199	267.29	5689.73	8535.63	119.96	-0.01	0.3059	6.987	0.3059	6.987
1059.900	733.16	716.63	6216.28	704.73	0.198	270.12	5813.79	8693.07	157.82	0.37	0.3058	6.985	0.3058	6.985
1089.900	731.84	715.37	6216.33	703.85	0.198	272.95	5938.00	8852.13	159.42	0.35	0.3057	6.984	0.3057	6.984
1119.900	730.54	714.13	6216.37	703.14	0.198	275.78	6062.38	9012.80	161.01	0.34	0.3056	6.983	0.3056	6.983
1149.900	729.26	712.91	6216.40	702.60	0.198	278.60	6186.91	9175.08	162.60	0.33	0.3055	6.982	0.3055	6.982
1179.900	728.00	711.70	6216.42	702.22	0.198	281.43	6311.60	9338.95	164.20	0.32	0.3053	6.980	0.3053	6.980
1209.900	726.77	710.50	6216.43	701.98	0.198	284.26	6436.45	9504.42	165.79	0.32	0.3052	6.979	0.3052	6.979
1239.900	725.55	709.32	6216.44	701.88	0.198	287.09	6561.45	9671.47	167.38	0.32	0.3051	6.978	0.3051	6.978
1258.900	724.79	708.58	6216.44	701.88	0.198	288.88	6640.[illegible]	9778.09	106.82	0.21	0.3050	6.976	0.3050	6.976
AFT	723.77	706.46	6215.07	725.99	0.204	.....	6640.[illegible]	[illegible]	308.50	0.58	0.3049	6.975	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0870E 02	7.5294E 02	7.5259E 02	6.2357E 03	8.0985E 01	1.6061E 04	6.9070E 01	3.4940E 03	3.0887E-01	6.1882E-01	2.8892F 03
AFT	1.1880E 02	7.5161E 02	7.5126E 02	6.2339E 03	8.1083E 01	1.6061E 04	0.0	0.0	0.0	0.0	2.8884F 03

GAS BUILDUP IN SLOT, DW/DT = 8.0872E-01

FOREWARD	4.0752E 02	7.5024E 02	7.4679E 02	6.2321E 03	1.3102E 02	1.6061E 04	1.9128E 02	9.6939E 03	3.0832E-01	6.1762E-01	4.6407F 03
AFT	4.2467E 02	7.4766E 02	7.4422E 02	6.2299E 03	1.3138E 02	1.6061E 04	2.0609F 02	1.0453E 04	3.0807E-01	6.1707E-01	4.6390F 03

GAS BUILDUP IN SLOT, DW/DT = 1.6502E 00

FOREWARD	6.9105E 02	7.4477E 02	7.3779E 02	6.2279E 03	1.8486E 02	1.6061E 04	1.9094F 02	9.7038E 03	3.0745E-01	6.1576E-01	6.4733F 03
AFT	7.0110E 02	7.4157E 02	7.3461E 02	6.2247E 03	1.8554E 02	1.6061E 04	0.0	0.0	0.0	0.0	6.4724F 03

GAS BUILDUP IN SLOT, DW/DT = 8.1142E-01

FOREWARD	9.8989E 02	7.3689E 02	7.2524E 02	6.2222E 03	2.3837E 02	1.6061E 04	1.9037E 02	9.7136E 03	3.0622E-01	6.1315E-01	8.2126F 03
AFT	1.0069E 03	7.3043E 02	7.1888E 02	6.2162E 03	2.4020E 02	1.6061E 04	2.0469E 02	1.0466E 04	3.0559E-01	6.1178E-01	8.2110F 03

GAS BUILDUP IN SLOT, DW/DT = 1.6398E 00

IGNITION TIME, TIME (S) 25.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	10592704.	2381335.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	11602455.	2608336.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	75533.000	16980.508
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.27449395E 09	61708736.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.29961165E 09	67355424.
THRUST COEFFICIENT	CF	1.6300116	1.6300116
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4541.0234	10011.250
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	116825.75	257556.81
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	40.538040	89.371094
INERT MASS REMAINING (KG,LBM)	MIR	2978.1526	6565.7031
TOTAL BURN AREA (M**2,IN**2)	ABTOT	329.19312	510250.38
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	190.65556	11634522.
PROPELLANT MASS REMAINING (KG,LBM)	WF	337748.81	744608.81
TOTAL GAS MASS (KG,LBM)	WGTOT	821.80249	1811.7646
RATIO OF SPECIFIC HEATS	GAMA	1.1617441	1.1617441
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.903808	28.448029
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1567.8494	5143.8633
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.19897515	0.19897515
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.51372877E 09	745.10083
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.13449994E 11	19507.570
BURN AREA (M**2,IN**2)	AHH	32.142548	49821.063
BURN RATE (M/S,IN/S)	RBZ(1)	0.78360736E-02	0.30850697
DISTANCE BURNED (M,IN)	TAUZ(1)	0.19627494	7.7273617
PROPELLANT VOLUME (M**3,IN**3)	VFH	2.9135246	177794.31
GAS VOLUME (M**3,IN**3)	VPH	9.6124125	586585.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3463.3091	6233.9570
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	253.16219	392402.19
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	33.649658	52157.090
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	182.26512	11122505.
GAS VOLUME (M**3,IN**3)	VP	133.79866	8164899.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.49483392E 09	717.69629
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.12807348E 11	18575.492
BURN AREA (M**2,IN**2)	AAN	10.238729	15870.063
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.77317432E-02	0.30439937
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.19264901	7.5846090
PROPELLANT VOLUME (M**3,IN**3)	VFN	5.4769115	334221.81
GAS VOLUME (M**3,IN**3)	VPN	6.5487652	399630.38
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3453.0054	6215.4102
PORT AREA (M**2,IN**2)	AP	4.3987532	6818.0820
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4384651	2229.6260
EXPANSION RATIO	EPR	6.9259214	6.9259214
PRESSURE RATIO	PEPO	0.22468265E-01	0.22468265E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	745.10	745.06	6233.96	34.11	0.010	815.07	13082.61	981.43	983.70	2.27	0.3085	7.727	0.3093	7.728
30.000	745.07	744.99	6233.89	50.86	0.014	815.11	13081.95	1463.21	482.80	1.02	0.3085	7.727	0.3085	7.727
60.000	745.02	744.87	6233.82	67.62	0.019	815.15	13081.30	1945.01	482.82	1.02	0.3085	7.727	0.3085	7.727
90.000	744.95	744.71	6233.71	84.39	0.024	815.19	13080.65	2426.81	482.83	1.02	0.3085	7.726	0.3085	7.726
108.082	744.90	744.59	6233.64	94.53	0.027	815.21	13080.26	2717.93	291.02	-0.09	0.3085	7.724	0.3085	7.724
118.800	745.07	743.42	6232.08	219.55	0.062	269.03	5759.62	2775.95	390.74	0.74	0.3083	7.718	0.3083	7.718
148.800	744.83	743.04	6231.91	229.05	0.064	270.87	5840.83	2935.48	159.82	0.29	0.3083	7.717	0.3083	7.717
178.800	744.59	742.65	6231.73	238.39	0.067	272.71	5922.07	3096.09	160.90	0.29	0.3083	7.715	0.3083	7.715
208.800	744.32	742.24	6231.56	247.57	0.070	274.55	6003.35	3257.77	161.96	0.29	0.3083	7.714	0.3083	7.714
238.800	744.06	741.82	6231.38	256.60	0.072	276.38	6084.66	3420.51	163.03	0.29	0.3082	7.712	0.3082	7.712
268.800	743.78	741.38	6231.19	265.49	0.075	278.22	6166.00	3584.31	164.10	0.29	0.3082	7.710	0.3082	7.710
298.800	743.50	740.94	6231.00	274.24	0.077	280.06	6247.38	3749.18	165.16	0.29	0.3082	7.709	0.3082	7.709
328.800	743.21	740.48	6230.81	282.86	0.080	281.90	6328.78	3915.12	166.23	0.30	0.3081	7.707	0.3081	7.707
358.800	742.90	740.01	6230.62	291.35	0.082	283.74	6410.22	4082.11	167.29	0.30	0.3081	7.706	0.3081	7.706
388.800	742.59	739.53	6230.42	299.73	0.084	285.57	6491.70	4250.17	168.36	0.30	0.3080	7.704	0.3080	7.704
406.903	742.39	739.24	6230.30	304.75	0.086	286.68	6540.88	4352.45	102.10	-0.18	0.3080	7.702	0.3080	7.702
425.284	741.73	736.91	6228.34	377.05	0.106	269.36	5774.52	4740.65	187.60	1.53	0.3077	7.692	0.3077	7.692
447.600	741.38	736.42	6228.17	382.54	0.108	270.80	5837.99	4859.44	118.70	-0.09	0.3077	7.690	0.3077	7.690
477.600	740.90	735.76	6227.95	389.80	0.110	272.73	5923.36	5019.70	160.55	0.30	0.3077	7.688	0.3077	7.688
507.600	740.42	735.09	6227.72	396.96	0.112	274.67	6008.77	5181.06	161.67	0.30	0.3076	7.685	0.3076	7.685
537.600	739.93	734.41	6227.50	404.02	0.114	276.60	6094.22	5343.53	162.77	0.30	0.3075	7.683	0.3075	7.683
567.600	739.43	733.73	6227.27	411.00	0.116	278.53	6179.72	5507.11	163.88	0.30	0.3075	7.681	0.3075	7.681
597.600	738.93	733.03	6227.05	417.89	0.118	280.47	6265.27	5671.79	164.98	0.30	0.3074	7.678	0.3074	7.678
627.600	738.42	732.33	6226.82	424.69	0.119	282.40	6350.85	5837.57	166.09	0.30	0.3073	7.676	0.3073	7.676
657.600	737.91	731.63	6226.59	431.42	0.121	284.33	6436.47	6004.45	167.19	0.30	0.3073	7.673	0.3073	7.673
687.600	737.38	730.91	6226.36	438.08	0.123	286.27	6522.14	6172.44	168.30	0.30	0.3072	7.671	0.3072	7.671
690.435	737.33	730.85	6226.34	438.73	0.123	286.45	6530.24	6188.72	15.96	-0.32	0.3071	7.669	0.3071	7.669
701.100	736.89	727.95	6223.41	515.67	0.145	268.65	5743.28	6375.09	388.72	0.74	0.3068	7.657	0.3068	7.657
731.100	736.19	727.04	6223.16	521.80	0.147	270.48	5823.93	6533.59	158.81	0.30	0.3068	7.655	0.3068	7.655
761.100	735.47	726.13	6222.90	527.88	0.148	272.31	5904.62	6693.15	159.86	0.30	0.3068	7.652	0.3068	7.652
791.100	734.76	725.21	6222.65	533.91	0.150	274.14	5985.36	6853.74	160.89	0.30	0.3067	7.649	0.3067	7.649
821.100	734.05	724.29	6222.39	539.88	0.152	275.97	6066.13	7015.35	161.92	0.31	0.3066	7.646	0.3066	7.646
851.100	733.33	723.37	6222.14	545.81	0.154	277.80	6146.96	7177.99	162.95	0.31	0.3065	7.643	0.3065	7.643
881.100	732.60	722.44	6221.88	551.69	0.155	279.63	6227.83	7341.66	163.98	0.31	0.3064	7.640	0.3064	7.640
911.100	731.88	721.50	6221.62	557.53	0.157	281.45	6308.74	7506.35	165.01	0.31	0.3063	7.637	0.3063	7.637
941.100	731.14	720.57	6221.36	563.33	0.158	283.28	6389.70	7672.07	166.03	0.31	0.3062	7.634	0.3062	7.634
971.100	730.41	719.63	6221.10	569.09	0.160	285.11	6470.70	7838.81	167.06	0.31	0.3061	7.631	0.3061	7.631
989.279	729.96	719.05	6220.95	572.58	0.161	286.22	6519.80	7940.69	101.72	-0.15	0.3060	7.628	0.3060	7.628
1007.496	728.73	713.21	6215.34	684.49	0.193	269.03	5760.72	8326.84	0.0	1.52	0.3054	7.603	0.3054	7.603
1029.900	727.78	712.30	6215.38	683.94	0.192	271.14	5854.79	8445.16	118.26	-0.07	0.3054	7.598	0.3054	7.598
1059.900	726.51	711.09	6215.41	683.34	0.192	273.96	5980.80	8604.63	159.78	0.32	0.3053	7.597	0.3053	7.597
1089.900	725.27	709.90	6215.43	682.91	0.192	276.79	6106.86	8765.68	161.38	0.32	0.3052	7.595	0.3052	7.595
1119.900	724.06	708.72	6215.45	682.64	0.192	279.62	6232.98	8928.33	162.97	0.32	0.3051	7.594	0.3051	7.594
1149.900	722.86	707.55	6215.45	682.53	0.192	282.44	6359.16	9092.57	164.57	0.32	0.3049	7.592	0.3049	7.592
1179.900	721.68	706.40	6215.45	682.56	0.192	285.27	6485.39	9258.40	166.16	0.33	0.3048	7.591	0.3048	7.591
1209.900	720.52	705.25	6215.44	682.73	0.192	288.09	6611.69	9425.82	167.75	0.33	0.3047	7.589	0.3047	7.589
1239.900	719.38	704.12	6215.42	683.04	0.192	290.92	6738.04	9594.82	169.34	0.33	0.3046	7.588	0.3046	7.588
1258.900	718.66	703.41	6215.41	683.29	0.192	292.71	6818.08	9702.66	108.06	0.21	0.3045	7.586	0.3045	7.586
AFT	717.70	701.41	6214.10	706.89	0.199	.....	6818.08	10011.25	309.17	0.59	0.3044	7.585	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0808E 02	7.4490E 02	7.4459E 02	6.2336E 03	7.8652E 01	1.6061E 04	5.8768E 01	2.9803E 03	3.0811E-01	6.1775E-01	2.7767E 03
AFT	1.1880E 02	7.4373E 02	7.4342E 02	6.2321E 03	7.8735E 01	1.6061E 04	0.0	0.0	0.0	0.0	2.7760E 03

GAS BUILDUP IN SLOT, DW/DT = 7.4047E-01

FOREWARD	4.0690E 02	7.4239E 02	7.3924E 02	6.2303E 03	1.2946E 02	1.6061E 04	1.8740E 02	9.5197E 03	3.0759E-01	6.1664E-01	4.5398E 03
AFT	4.2528E 02	7.4005E 02	7.3691E 02	6.2283E 03	1.2978E 02	1.6061E 04	2.0234E 02	1.0286E 04	3.0736E-01	6.1614E-01	4.5383E 03

GAS BUILDUP IN SLOT, DW/DT = 1.5285E 00

FOREWARD	6.9044E 02	7.3733E 02	7.3085E 02	6.2263E 03	1.8378E 02	1.6061E 04	1.8711E 02	9.5303E 03	3.0677E-01	6.1490E-01	6.3758E 03
AFT	7.0110E 02	7.3440E 02	7.2795E 02	6.2234E 03	1.8440E 02	1.6061E 04	0.0	0.0	0.0	0.0	6.3751E 03

GAS BUILDUP IN SLOT, DW/DT = 7.4358E-01

FOREWARD	9.8928E 02	7.2996E 02	7.1905E 02	6.2209E 03	2.3790E 02	1.6061E 04	1.8661E 02	9.5408E 03	3.0561E-01	6.1244E-01	8.1273E 03
AFT	1.0075E 03	7.2403E 02	7.1321E 02	6.2153E 03	2.3959E 02	1.6061E 04	2.0107E 02	1.0300E 04	3.0503E-01	6.1118E-01	8.1258E 03

GAS BUILDUP IN SLOT, DW/DT = 1.5208E 00

IGNITION TIME, TIME (S) 27.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	10487900.	2357774.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	11497650.	2584775.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	60470.352	13594.277
DELIVEREL TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.29557453E 09	66447840.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.32271181E 09	72548528.
THRUST COEFFICIENT	CF	1.6278439	1.6278439
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4506.2656	9934.6211
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	125873.06	277502.63
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	32.453995	71.548828
INERT MASS REMAINING (KG,LBM)	MIR	2913.2446	6422.6055
TOTAL BURN AREA (M**2,IN**2)	ABTOT	327.39966	507470.75
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	185.52582	11321485.
PROPELLANT MASS REMAINING (KG,LBM)	WF	328661.38	724574.44
TOTAL GAS MASS (KG,LBM)	WGTOT	839.47998	1850.7368
RATIO OF SPECIFIC HEATS	GAMA	1.1617355	1.1617355
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.902354	28.444824
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1567.7576	5143.5625
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.19381493	0.19381493
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.50822733E 09	737.12158
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.14471946E 11	20989.789
BURN AREA (M**2,IN**2)	AHH	31.479095	48792.707
BURN RATE (M/S,IN/S)	RBZ(1)	0.78165308E-02	0.30773753
DISTANCE BURNED (M,IN)	TAUZ(1)	0.21194708	8.3443756
PROPELLANT VOLUME (M**3,IN**3)	VFH	2.4149809	147371.25
GAS VOLUME (M**3,IN**3)	VPH	10.110957	617008.75
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3462.1785	6231.9219
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	252.87331	391954.44
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	32.774307	50800.285
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	177.79253	10849571.
GAS VOLUME (M**3,IN**3)	VP	137.30252	8378718.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.49060582E 09	711.56396
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.13792788E 11	20004.750
BURN AREA (M**2,IN**2)	AAN	10.273159	15923.430
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.77182688E-02	0.30386895
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.20811248	8.1934071
PROPELLANT VOLUME (M**3,IN**3)	VFN	5.3182821	324541.63
GAS VOLUME (M**3,IN**3)	VPN	6.7073956	409310.56
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3452.4084	6214.3359
PORT AREA (M**2,IN**2)	AP	4.5144987	6997.4883
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4396706	2231.4951
EXPANSION RATIO	EPR	6.9201202	6.9201202
PRESSURE RATIO	PEPO	0.22493500E-01	0.22493500E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RHTO IN/SEC	TAUTO IN.
FORE	737.12	737.08	6231.92	32.45	0.009	784.46	13576.07	958.84	960.99	2.16	0.3077	8.344	0.3085	8.345
30.000	737.09	737.02	6231.87	48.11	0.014	784.50	13575.43	1421.41	463.51	0.94	0.3077	8.344	0.3077	8.344
60.000	737.05	736.91	6231.80	63.78	0.018	784.54	13574.79	1883.99	463.53	0.94	0.3077	8.344	0.3077	8.344
90.000	736.99	736.77	6231.71	79.46	0.022	784.58	13574.14	2346.59	463.54	0.94	0.3077	8.343	0.3077	8.343
107.466	736.94	736.67	6231.65	88.62	0.025	784.60	13573.77	2616.65	269.88	-0.18	0.3077	8.341	0.3077	8.341
118.800	737.11	735.66	6230.26	206.94	0.058	272.91	5926.72	2664.84	383.03	0.72	0.3076	8.334	0.3076	8.334
148.800	736.89	735.31	6230.10	216.56	0.061	274.74	6009.23	2826.27	161.72	0.28	0.3076	8.333	0.3076	8.333
178.800	736.67	734.94	6229.93	226.02	0.064	276.58	6091.74	2988.78	162.79	0.29	0.3076	8.332	0.3076	8.332
208.800	736.43	734.56	6229.76	235.32	0.066	278.42	6174.23	3152.35	163.86	0.29	0.3075	8.330	0.3075	8.330
238.800	736.19	734.17	6229.58	244.47	0.069	280.26	6256.71	3316.99	164.93	0.29	0.3075	8.328	0.3075	8.328
268.800	735.93	733.76	6229.41	253.48	0.071	282.09	6339.19	3482.69	165.99	0.29	0.3075	8.327	0.3075	8.327
298.800	735.67	733.35	6229.22	262.35	0.074	283.93	6421.65	3649.45	167.05	0.29	0.3074	8.325	0.3074	8.325
328.800	735.39	732.92	6229.04	271.08	0.076	285.77	6504.10	3817.28	168.12	0.29	0.3074	8.323	0.3074	8.323
358.800	735.11	732.48	6228.85	279.69	0.079	287.61	6586.54	3986.16	169.18	0.29	0.3073	8.322	0.3073	8.322
388.800	734.81	732.02	6228.66	288.18	0.081	289.44	6668.97	4156.11	170.24	0.29	0.3073	8.320	0.3073	8.320
406.288	734.64	731.75	6228.54	293.10	0.082	290.52	6717.02	4256.02	99.72	-0.19	0.3072	8.318	0.3072	8.318
425.899	734.04	729.64	6226.75	361.82	0.102	273.27	5943.31	4636.58	183.73	1.49	0.3070	8.307	0.3070	8.307
447.600	733.72	729.19	6226.59	367.29	0.103	274.67	6006.01	4753.50	116.82	-0.11	0.3070	8.305	0.3070	8.305
477.600	733.27	728.56	6226.38	374.72	0.105	276.60	6092.68	4915.67	162.46	0.29	0.3070	8.303	0.3070	8.303
507.600	732.82	727.93	6226.15	382.06	0.107	278.53	6179.34	5078.94	163.57	0.29	0.3069	8.301	0.3069	8.301
537.600	732.37	727.29	6225.93	389.30	0.109	280.46	6266.01	5243.32	164.68	0.30	0.3068	8.298	0.3068	8.298
567.600	731.90	726.64	6225.71	396.44	0.111	282.40	6352.66	5408.80	165.78	0.30	0.3068	8.296	0.3068	8.296
597.600	731.43	725.99	6225.48	403.50	0.113	284.33	6439.32	5575.39	166.89	0.30	0.3067	8.293	0.3067	8.293
627.600	730.95	725.32	6225.25	410.48	0.115	286.26	6525.97	5743.08	167.99	0.30	0.3067	8.290	0.3067	8.290
657.600	730.47	724.65	6225.03	417.38	0.117	288.19	6612.61	5911.87	169.09	0.30	0.3066	8.288	0.3066	8.288
687.600	729.97	723.97	6224.80	424.20	0.119	290.13	6699.26	6081.75	170.19	0.30	0.3065	8.285	0.3065	8.285
689.822	729.94	723.92	6224.78	424.73	0.119	290.27	6705.68	6094.73	12.65	-0.33	0.3065	8.283	0.3065	8.283
701.100	729.53	721.27	6222.09	498.01	0.140	272.51	5909.32	6277.26	381.25	0.73	0.3062	8.271	0.3062	8.271
731.100	728.88	720.41	6221.84	504.34	0.142	274.33	5991.24	6437.70	160.74	0.30	0.3062	8.268	0.3062	8.268
761.100	728.21	719.54	6221.58	510.61	0.144	276.16	6073.15	6599.18	161.79	0.30	0.3061	8.265	0.3061	8.265
791.100	727.54	718.67	6221.33	516.82	0.145	277.99	6155.06	6761.69	162.82	0.30	0.3060	8.262	0.3060	8.262
821.100	726.87	717.80	6221.07	522.99	0.147	279.82	6236.97	6925.23	163.85	0.30	0.3059	8.259	0.3059	8.259
851.100	726.20	716.92	6220.82	529.10	0.149	281.65	6318.89	7089.80	164.87	0.30	0.3058	8.256	0.3058	8.256
881.100	725.51	716.03	6220.56	535.17	0.151	283.47	6400.81	7255.39	165.90	0.31	0.3058	8.252	0.3058	8.252
911.100	724.83	715.14	6220.30	541.19	0.152	285.30	6482.73	7422.00	166.93	0.31	0.3057	8.249	0.3057	8.249
941.100	724.14	714.25	6220.04	547.17	0.154	287.13	6564.65	7589.64	167.95	0.31	0.3056	8.246	0.3056	8.246
971.100	723.44	713.35	6219.79	553.11	0.156	288.96	6646.57	7758.30	168.97	0.31	0.3055	8.243	0.3055	8.243
988.667	723.04	712.82	6219.63	556.59	0.157	290.03	6694.55	7857.89	99.42	-0.17	0.3054	8.240	0.3054	8.240
1008.106	721.90	707.46	6214.45	663.20	0.187	272.92	5928.90	8236.63	0.0	1.49	0.3048	8.214	0.3048	8.214
1029.900	721.03	706.61	6214.46	662.99	0.187	274.97	6021.89	8353.18	116.47	-0.08	0.3048	8.209	0.3048	8.209
1059.900	719.85	705.46	6214.47	662.82	0.187	277.80	6149.85	8514.59	161.73	0.31	0.3047	8.207	0.3047	8.207
1089.900	718.69	704.33	6214.47	662.82	0.187	280.62	6277.76	8677.60	163.33	0.31	0.3046	8.206	0.3046	8.206
1119.900	717.55	703.20	6214.46	662.96	0.187	283.45	6405.64	8842.20	164.92	0.32	0.3045	8.204	0.3045	8.204
1149.900	716.43	702.09	6214.45	663.26	0.187	286.27	6533.46	9008.38	166.51	0.32	0.3044	8.202	0.3044	8.202
1179.900	715.32	700.99	6214.43	663.69	0.187	289.10	6661.23	9176.15	168.10	0.32	0.3043	8.201	0.3043	8.201
1209.900	714.23	699.89	6214.40	664.25	0.187	291.92	6788.97	9345.50	169.68	0.32	0.3042	8.199	0.3042	8.199
1239.900	713.15	698.81	6214.36	664.94	0.187	294.75	6916.65	9516.45	171.27	0.33	0.3040	8.197	0.3040	8.197
1258.900	712.48	698.13	6214.34	665.44	0.187	296.54	6997.49	9625.52	109.28	0.21	0.3039	8.195	0.3039	8.195
AFT	711.56	696.23	6213.09	688.54	0.194	.....	6997.49	9934.62	309.67	0.57	0.3039	8.193	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0747E 02	7.3694E 02	7.3667E 02	6.2317E 03	7.6300E 01	1.6061E 04	4.8915E 01	2.4868E 03	3.0734E-01	6.1621E-01	2.6656E 03
AFT	1.1880E 02	7.3592E 02	7.3566E 02	6.2303E 03	7.6367E 01	1.6061E 04	0.0	0.0	0.0	0.0	2.6648E 03

GAS BUILDUP IN SLOT, DW/DT = 7.2058E-01

FOREWARD	4.0629E 02	7.3464E 02	7.3175E 02	6.2285E 03	1.2787E 02	1.6061E 04	1.8350E 02	9.3436E 03	3.0686E-01	6.1518E-01	4.4395E 03
AFT	4.2590E 02	7.3252E 02	7.2964E 02	6.2268E 03	1.2816E 02	1.6061E 04	1.9856E 02	1.0117E 04	3.0665E-01	6.1472E-01	4.4380E 03

GAS BUILDUP IN SLOT, DW/DT = 1.4905E 00

FOREWARD	6.8982E 02	7.2994E 02	7.2392E 02	6.2248E 03	1.8267E 02	1.6061E 04	1.8326E 02	9.3549E 03	3.0609E-01	6.1354E-01	6.2780E 03
AFT	7.0110E 02	7.2727E 02	7.2127E 02	6.2221E 03	1.8324E 02	1.6061E 04	0.0	0.0	0.0	0.0	6.2773E 03

GAS BUILDUP IN SLOT, DW/DT = 7.2524E-01

FOREWARD	9.8867E 02	7.2304E 02	7.1282E 02	6.2196E 03	2.3740E 02	1.6061E 04	1.8282E 02	9.3660E 03	3.0499E-01	6.1122E-01	8.0407E 03
AFT	1.0081E 03	7.1759E 02	7.0746E 02	6.2145E 03	2.3896E 02	1.6061E 04	1.9742E 02	1.0132E 04	3.0445E-01	6.1006E-01	8.0392E 03

GAS BUILDUP IN SLOT, DW/DT = 1.4863E 00

WEB BURNOUT INCREMENT LOCATION
0.0

WEB BURNOUT INCREMENT LOCATION
3.0000000E 01

WEB BURNOUT INCREMENT LOCATION
6.0000000E 01

WEB BURNOUT INCREMENT LOCATION
9.0000000E 01

IGNITION TIME, TIME (S) 29.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	10140165.	2279600.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	11149915.	2506601.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	57654.246	12961.191
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.31620250E 09	71085200.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.34535936E 09	77639888.
THRUST COEFFICIENT	CF	1.6275902	1.6275902
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4374.5234	9644.1797
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	134753.81	297081.38
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	30.942612	68.216797
INERT MASS REMAINING (KG,LBM)	MIR	2851.3594	6286.1719
TOTAL BURN AREA (M**2,IN**2)	ABTOT	319.52417	495263.81
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	180.48318	11013765.
PROPELLANT MASS REMAINING (KG,LBM)	WF	319728.31	704880.38
TOTAL GAS MASS (KG,LBM)	WGTOT	837.55883	1846.4795
RATIO OF SPECIFIC HEATS	GAMA	1.1617117	1.1617117
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.897952	28.435120
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1567.4290	5142.4844
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.18899411	0.18899411
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.49149056E 09	712.84692
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.15471661E 11	22439.754
BURN AREA (M**2,IN**2)	AHH	28.749664	44562.094
BURN RATE (M/S,IN/S)	RBZ(1)	0.77558942E-02	0.30535030
DISTANCE BURNED (M,IN)	TAUZ(1)	0.22758013	8.9598503
PROPELLANT VOLUME (M**3,IN**3)	VFH	1.9441996	118642.44
GAS VOLUME (M**3,IN**3)	VPH	10.581738	645737.56
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3458.7454	6225.7422
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	248.56117	385270.63
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	31.917023	49471.504
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	173.37949	10580270.
GAS VOLUME (M**3,IN**3)	VP	140.74883	8589024.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.47544755E 09	689.57861
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.14758838E 11	21405.891
BURN AREA (M**2,IN**2)	AAN	10.296534	15959.660
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.76638982E-02	0.30172837
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.22354901	8.8011446
PROPELLANT VOLUME (M**3,IN**3)	VFN	5.1594830	314851.13
GAS VOLUME (M**3,IN**3)	VPN	6.8661938	419001.06
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3449.4746	6209.0547
PORT AREA (M**2,IN**2)	AP	4.6315403	7178.9023
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4408665	2233.3477
EXPANSION RATIO	EPR	6.9143801	6.9143801
PRESSURE RATIO	PEPO	0.22519384E-01	0.22519384E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	ANRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

C-2

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	712.85	712.82	6225.74	29.45	0.008	695.14	14031.39	870.26	870.86	0.59	0.3054	8.960	0.3077	8.960
30.000	712.83	712.77	6225.70	43.25	0.012	695.33	14030.81	1277.92	407.60	-0.06	0.3054	8.960	0.3054	8.960
60.000	712.80	712.69	6225.64	57.06	0.016	695.52	14030.23	1685.68	407.70	-0.06	0.3053	8.959	0.3053	8.959
90.000	712.75	712.58	6225.57	70.88	0.020	695.71	14029.65	2093.54	407.81	-0.06	0.3053	8.958	0.3053	8.958
106.851	712.71	712.51	6225.53	78.67	0.022	695.82	14029.32	2323.41	229.11	-0.76	0.3053	8.957	0.3053	8.957
118.800	712.84	711.73	6224.42	184.28	0.052	276.77	6095.80	2362.76	375.33	0.30	0.3052	8.950	0.3052	8.950
148.800	712.66	711.42	6224.27	194.39	0.055	278.61	6179.61	2525.60	162.74	-0.10	0.3052	8.948	0.3052	8.948
178.800	712.47	711.10	6224.11	204.33	0.058	280.45	6263.38	2689.51	163.81	-0.10	0.3052	8.947	0.3052	8.947
208.800	712.26	710.77	6223.95	214.10	0.060	282.28	6347.09	2854.49	164.87	-0.10	0.3052	8.945	0.3052	8.945
238.800	712.05	710.42	6223.78	223.71	0.063	284.12	6430.73	3020.52	165.93	-0.11	0.3051	8.943	0.3051	8.943
268.800	711.83	710.05	6223.61	233.16	0.066	285.96	6514.34	3187.62	166.99	-0.11	0.3051	8.942	0.3051	8.942
298.800	711.60	709.68	6223.43	242.48	0.068	287.79	6597.88	3355.78	168.04	-0.11	0.3051	8.940	0.3051	8.940
328.800	711.36	709.29	6223.25	251.65	0.071	289.63	6681.38	3524.99	169.10	-0.12	0.3050	8.938	0.3050	8.938
358.800	711.11	708.89	6223.07	260.69	0.073	291.47	6764.81	3695.27	170.16	-0.12	0.3050	8.936	0.3050	8.936
388.800	710.84	708.48	6222.88	269.61	0.076	293.31	6848.20	3866.60	171.21	-0.12	0.3050	8.935	0.3050	8.935
405.674	710.70	708.24	6222.77	274.60	0.077	294.34	6895.07	3963.79	96.76	-0.43	0.3049	8.933	0.3049	8.933
426.512	710.15	706.40	6221.18	339.49	0.096	277.17	6114.13	4335.41	179.89	0.75	0.3047	8.921	0.3047	8.921
447.600	709.88	706.01	6221.03	345.17	0.097	278.52	6176.01	4450.04	114.26	-0.38	0.3047	8.919	0.3047	8.919
477.600	709.48	705.43	6220.81	353.10	0.099	280.46	6263.98	4613.63	163.50	-0.09	0.3047	8.917	0.3047	8.917
507.600	709.07	704.85	6220.59	360.93	0.102	282.39	6351.90	4778.32	164.61	-0.09	0.3046	8.914	0.3046	8.914
537.600	708.66	704.26	6220.36	368.65	0.104	284.32	6439.78	4944.12	165.70	-0.09	0.3046	8.912	0.3046	8.912
567.600	708.25	703.65	6220.14	376.28	0.106	286.25	6527.59	5111.02	166.80	-0.10	0.3045	8.909	0.3045	8.909
597.600	707.82	703.05	6219.91	383.81	0.108	288.18	6615.36	5279.02	167.90	-0.10	0.3044	8.906	0.3044	8.906
627.600	707.38	702.43	6219.68	391.25	0.110	290.11	6703.07	5448.11	168.99	-0.11	0.3044	8.904	0.3044	8.904
657.600	706.94	701.80	6219.45	398.60	0.112	292.05	6790.73	5618.30	170.09	-0.11	0.3043	8.901	0.3043	8.901
687.600	706.49	701.17	6219.21	405.88	0.114	293.98	6878.34	5789.60	171.18	-0.11	0.3042	8.898	0.3042	8.898
689.209	706.47	701.13	6219.20	406.29	0.114	294.08	6883.04	5799.17	9.21	-0.36	0.3042	8.896	0.3042	8.896
701.100	706.10	698.80	6216.77	475.68	0.134	276.35	6077.38	5977.30	373.86	0.32	0.3039	8.883	0.3039	8.883
731.100	705.50	697.99	6216.51	482.50	0.136	278.18	6160.55	6139.17	161.80	-0.07	0.3039	8.881	0.3039	8.881
761.100	704.90	697.18	6216.25	489.26	0.138	280.01	6243.68	6302.09	162.85	-0.08	0.3039	8.877	0.3039	8.877
791.100	704.28	696.37	6215.98	495.96	0.140	281.83	6326.77	6466.04	163.87	-0.08	0.3038	8.874	0.3038	8.874
821.100	703.67	695.55	6215.72	502.59	0.141	283.66	6409.81	6631.00	164.89	-0.08	0.3037	8.871	0.3037	8.871
851.100	703.05	694.72	6215.46	509.17	0.143	285.49	6492.82	6796.99	165.91	-0.08	0.3036	8.867	0.3036	8.867
881.100	702.42	693.89	6215.19	515.69	0.145	287.32	6575.79	6964.01	166.93	-0.09	0.3035	8.864	0.3035	8.864
911.100	701.79	693.05	6214.92	522.17	0.147	289.14	6658.71	7132.04	167.95	-0.09	0.3034	8.861	0.3034	8.861
941.100	701.15	692.21	6214.65	528.59	0.149	290.97	6741.60	7301.10	168.97	-0.09	0.3034	8.857	0.3034	8.857
971.100	700.51	691.36	6214.38	534.97	0.151	292.80	6824.44	7471.18	169.98	-0.10	0.3033	8.854	0.3033	8.854
988.057	700.14	690.88	6214.23	538.59	0.152	293.83	6871.25	7568.11	96.52	-0.41	0.3032	8.850	0.3032	8.850
1008.715	699.10	686.04	6209.45	640.42	0.180	276.81	6099.19	7938.11	0.0	0.77	0.3026	8.823	0.3026	8.823
1029.900	698.33	685.27	6209.44	640.72	0.180	278.80	6191.02	8052.44	113.99	-0.35	0.3026	8.819	0.3026	8.819
1059.900	697.24	684.19	6209.41	641.26	0.181	281.63	6320.93	8215.30	162.80	-0.06	0.3026	8.817	0.3026	8.817
1089.900	696.18	683.11	6209.38	641.94	0.181	284.45	6450.70	8379.75	164.39	-0.07	0.3024	8.815	0.3024	8.815
1119.900	695.13	682.05	6209.33	642.76	0.181	287.27	6580.31	8545.79	165.97	-0.07	0.3023	8.813	0.3023	8.813
1149.900	694.09	680.99	6209.29	643.71	0.181	290.10	6709.79	8713.40	167.55	-0.08	0.3022	8.811	0.3022	8.811
1179.900	693.07	679.95	6209.23	644.79	0.182	292.92	6839.10	8882.61	169.12	-0.08	0.3021	8.809	0.3021	8.809
1209.900	692.06	678.91	6209.17	645.99	0.182	295.74	6968.26	9053.39	170.70	-0.09	0.3020	8.807	0.3020	8.807
1239.900	691.07	677.88	6209.10	647.29	0.182	298.57	7097.27	9225.75	172.28	-0.09	0.3019	8.805	0.3019	8.805
1258.900	690.44	677.24	6209.05	648.17	0.182	300.35	7178.90	9335.73	109.92	-0.06	0.3018	8.803	0.3018	8.803
AFT	689.58	675.44	6207.84	671.24	0.189	.....	7178.90	9644.18	308.19	-0.27	0.3017	8.801	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0685E 02	7.1271E 02	7.1251E 02	6.2255E 03	6.9890E 01	1.6061E 04	3.9645E 01	2.0313E 03	3.0496E-01	6.1468E-01	2.3631F 03
AFT	1.1880E 02	7.1193E 02	7.1173E 02	6.2244E 03	6.9945E 01	1.6061E 04	0.0	0.0	0.0	0.0	2.3628F 03

GAS BUILDUP IN SLOT, DW/DT = 2.9718E-01

FOREWARD	4.0567E 02	7.1070E 02	7.0824E 02	6.2228E 03	1.2320E 02	1.6061E 04	1.7864E 02	9.1655E 03	3.0453E-01	6.1372E-01	4.1424F 03
AFT	4.2651E 02	7.0886E 02	7.0640E 02	6.2212E 03	1.2347E 02	1.6061F 04	1.9374F 02	9.9465E 03	3.0435E-01	6.1331E-01	4.1417F 03

GAS BUILDUP IN SLOT, DW/DT = 7.5300E-01

FOREWARD	6.8921E 02	7.0647E 02	7.0113E 02	6.2192E 03	1.7948E 02	1.6061E 04	1.7845E 02	9.1775E 03	3.0382F-01	6.1218E-01	5.9776F 03
AFT	7.0110E 02	7.0411E 02	6.9880E 02	6.2168E 03	1.8000E 02	1.6061E 04	0.0	0.0	0.0	0.0	5.9773F 03

GAS BUILDUP IN SLOT, DW/DT = 3.1537E-01

FOREWARD	9.8806F 02	7.0014E 02	6.9088E 02	6.2142E 03	2.3585E 02	1.6061E 04	1.7807E 02	9.1893E 03	3.0278E-01	6.0998E-01	7.7462F 03
AFT	1.0087E 03	6.9525E 02	6.8604E 02	6.2095E 03	2.3730E 02	1.6061E 04	1.9271E 02	9.9614E 03	3.0228E-01	6.0891E-01	7.7454F 03

GAS BUILDUP IN SLOT, DW/DT = 7.7467E-01

IGNITION TIME, TIME (S) 31.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	9687269.0	2177785.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	10697020.	2404786.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	55599.113	12499.180
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.33602995E 09	75542592.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.36720614E 09	82551280.
THRUST COEFFICIENT	CF	1.6275301	1.6275301
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4194.3906	9247.0508
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	143322.69	315972.56
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	29.839630	65.785156
INERT MASS REMAINING (KG,LBM)	MIR	2791.6802	6154.6016
TOTAL BURN AREA (M**2,IN**2)	ABTOT	309.08936	479089.50
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	175.62033	10717015.
PROPELLANT MASS REMAINING (KG,LBM)	WF	311113.69	685888.38
TOTAL GAS MASS (KG,LBM)	WGTOT	825.31934	1819.5181
RATIO OF SPECIFIC HEATS	GAMA	1.1616812	1.1616812
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.892360	28.422791
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1567.0039	5141.0898
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.18408751	0.18408751
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.47021978E 09	681.99634
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.16433369E 11	23834.594
BURN AREA (M**2,IN**2)	AHH	24.706070	38294.492
BURN RATE (M/S,IN/S)	RBZ(1)	0.76764449E-02	0.30222237
DISTANCE BURNED (M,IN)	TAUZ(1)	0.24309194	9.5705509
PROPELLANT VOLUME (M**3,IN**3)	VFH	1.5296021	93342.125
GAS VOLUME (M**3,IN**3)	VPH	10.996336	671037.88
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3454.3770	6217.8789
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	242.96611	376598.25
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	31.097504	48201.230
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	169.08925	10318464.
GAS VOLUME (M**3,IN**3)	VP	144.07959	8792280.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.45578522E 09	661.06079
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.15690072E 11	22756.527
BURN AREA (M**2,IN**2)	AAN	10.319739	15995.629
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.75907111E-02	0.29884696
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.23887682	9.4046011
PROPELLANT VOLUME (M**3,IN**3)	VFN	5.0014458	305207.13
GAS VOLUME (M**3,IN**3)	VPN	7.0242310	428645.06
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3445.6116	6202.1016
PORT AREA (M**2,IN**2)	AP	4.7492390	7361.3359
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4420261	2235.1455
EXPANSION RATIO	EPR	6.9088182	6.9088182
PRESSURE RATIO	PEPO	0.22544891E-01	0.22544891E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	682.00	681.97	6217.88	25.48	0.007	586.89	14422.86	741.13	740.71	-0.42	0.3022	9.571	0.3021	9.571
30.000	681.98	681.94	6217.85	37.22	0.011	587.01	14422.36	1082.37	340.59	-0.66	0.3022	9.570	0.3022	9.570
60.000	681.95	681.88	6217.81	48.96	0.014	587.13	14421.87	1423.68	340.65	-0.66	0.3022	9.570	0.3022	9.570
90.000	681.92	681.80	6217.76	60.71	0.017	587.25	14421.38	1765.05	340.72	-0.65	0.3022	9.569	0.3022	9.569
106.241	681.90	681.76	6217.73	67.09	0.019	587.31	14421.11	1950.60	184.48	-1.07	0.3022	9.567	0.3022	9.567
118.800	681.98	681.21	6216.93	157.02	0.044	280.61	6265.93	1982.21	361.75	0.06	0.3021	9.560	0.3021	9.560
148.800	681.84	680.96	6216.79	167.76	0.047	282.44	6351.04	2145.81	163.32	-0.28	0.3021	9.559	0.3021	9.559
178.800	681.68	680.69	6216.64	178.32	0.050	284.28	6436.05	2310.47	164.38	-0.29	0.3021	9.557	0.3021	9.557
208.800	681.51	680.40	6216.49	188.69	0.053	286.12	6520.97	2476.19	165.43	-0.29	0.3021	9.556	0.3021	9.556
238.800	681.33	680.10	6216.33	198.90	0.056	287.95	6605.79	2642.96	166.48	-0.30	0.3021	9.554	0.3021	9.554
268.800	681.15	679.78	6216.17	208.94	0.059	289.79	6690.51	2810.79	167.52	-0.30	0.3020	9.552	0.3020	9.552
298.800	680.95	679.45	6216.00	218.83	0.062	291.63	6775.13	2979.67	168.57	-0.31	0.3020	9.550	0.3020	9.550
328.800	680.74	679.11	6215.83	228.57	0.064	293.46	6859.66	3149.60	169.62	-0.31	0.3020	9.548	0.3020	9.548
358.800	680.53	678.76	6215.65	238.16	0.067	295.30	6944.09	3320.59	170.66	-0.32	0.3019	9.546	0.3019	9.546
388.800	680.30	678.39	6215.46	247.62	0.070	297.14	7028.41	3492.62	171.71	-0.33	0.3019	9.544	0.3019	9.544
405.065	680.18	678.18	6215.36	252.72	0.071	298.13	7074.10	3586.68	93.53	-0.53	0.3019	9.542	0.3019	9.542
427.121	679.70	676.64	6213.99	313.72	0.088	281.04	6286.07	3948.23	173.19	0.33	0.3017	9.531	0.3017	9.531
447.600	679.47	676.29	6213.84	319.67	0.090	282.35	6347.07	4060.10	111.38	-0.49	0.3017	9.529	0.3017	9.529
477.600	679.12	675.77	6213.62	328.23	0.092	284.28	6436.35	4224.46	164.09	-0.27	0.3016	9.526	0.3016	9.526
507.600	678.76	675.24	6213.40	336.68	0.095	286.22	6525.52	4389.91	165.18	-0.28	0.3016	9.524	0.3016	9.524
537.600	678.40	674.70	6213.17	345.01	0.097	288.15	6614.59	4556.46	166.27	-0.28	0.3015	9.521	0.3015	9.521
567.600	678.03	674.15	6212.94	353.23	0.099	290.08	6703.56	4724.11	167.36	-0.29	0.3015	9.518	0.3015	9.518
597.600	677.65	673.59	6212.71	361.35	0.102	292.01	6792.43	4892.84	168.44	-0.30	0.3014	9.515	0.3014	9.515
627.600	677.26	673.03	6212.48	369.36	0.104	293.94	6881.20	5062.67	169.53	-0.30	0.3014	9.513	0.3014	9.513
657.600	676.87	672.45	6212.24	377.28	0.106	295.87	6969.86	5233.59	170.61	-0.31	0.3013	9.510	0.3013	9.510
687.600	676.46	671.87	6212.01	385.11	0.108	297.80	7058.43	5405.60	171.70	-0.31	0.3012	9.507	0.3012	9.507
688.602	676.45	671.85	6212.00	385.40	0.108	297.87	7061.39	5411.70	5.75	-0.36	0.3012	9.504	0.3012	9.504
701.100	676.11	669.83	6209.82	450.81	0.127	280.17	6246.52	5584.86	360.36	0.09	0.3010	9.491	0.3010	9.491
731.100	675.58	669.09	6209.55	458.24	0.129	282.00	6330.95	5747.54	162.42	-0.25	0.3010	9.488	0.3010	9.488
761.100	675.03	668.34	6209.29	465.60	0.131	283.82	6415.29	5911.25	163.46	-0.26	0.3009	9.485	0.3009	9.485
791.100	674.48	667.58	6209.01	472.89	0.133	285.65	6499.55	6075.98	164.47	-0.26	0.3008	9.481	0.3008	9.481
821.100	673.92	666.82	6208.74	480.10	0.135	287.48	6583.73	6241.72	165.48	-0.27	0.3007	9.478	0.3007	9.478
851.100	673.36	666.05	6208.46	487.25	0.137	289.30	6667.82	6408.48	166.49	-0.27	0.3006	9.474	0.3006	9.474
881.100	672.79	665.27	6208.19	494.34	0.139	291.13	6751.82	6576.26	167.50	-0.28	0.3006	9.471	0.3006	9.471
911.100	672.22	664.49	6207.91	501.38	0.141	292.96	6835.75	6745.05	168.51	-0.28	0.3005	9.467	0.3005	9.467
941.100	671.63	663.70	6207.63	508.35	0.143	294.78	6919.59	6914.86	169.52	-0.29	0.3004	9.464	0.3004	9.464
971.100	671.04	662.90	6207.35	515.27	0.145	296.61	7003.34	7085.67	170.52	-0.30	0.3003	9.460	0.3003	9.460
987.451	670.72	662.46	6207.19	519.05	0.146	297.60	7048.96	7179.53	93.36	-0.50	0.3002	9.457	0.3002	9.457
1009.319	669.77	658.17	6202.80	616.30	0.174	280.67	6270.65	7539.66	0.0	0.36	0.2997	9.429	0.2997	9.429
1029.900	669.09	657.47	6202.76	617.18	0.174	282.60	6361.25	7651.31	111.19	-0.46	0.2997	9.424	0.2997	9.424
1059.900	668.10	656.45	6202.69	618.53	0.174	285.43	6493.11	7814.97	163.43	-0.24	0.2997	9.422	0.2997	9.422
1089.900	667.13	655.44	6202.62	620.01	0.175	288.25	6624.72	7980.22	165.00	-0.25	0.2995	9.420	0.2995	9.420
1119.900	666.17	654.43	6202.54	621.60	0.175	291.07	6756.07	8147.04	166.56	-0.26	0.2994	9.418	0.2994	9.418
1149.900	665.22	653.44	6202.45	623.31	0.176	293.89	6887.17	8315.42	168.12	-0.27	0.2993	9.416	0.2993	9.416
1179.900	664.29	652.45	6202.36	625.13	0.176	296.72	7018.01	8485.38	169.69	-0.28	0.2992	9.413	0.2992	9.413
1209.900	663.36	651.47	6202.27	627.05	0.177	299.54	7148.59	8656.91	171.25	-0.29	0.2991	9.411	0.2991	9.411
1239.900	662.45	650.50	6202.17	629.07	0.177	302.36	7278.93	8830.01	172.81	-0.30	0.2990	9.409	0.2990	9.409
1258.900	661.87	649.88	6202.10	630.39	0.178	304.15	7361.34	8940.45	110.25	-0.19	0.2989	9.407	0.2989	9.407
AFT	661.06	648.20	6200.92	653.58	0.184	.....	7361.34	9247.05	305.94	-0.67	0.2988	9.405	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U. FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0624E 02	6.8190E 02	6.8176E 02	6.2177E 03	6.1222E 01	1.6061E 04	3.1671E 01	1.6395E 03	3.0184E-01	6.0992E-01	1.9823F 03
AFT	1.1880E 02	6.8135E 02	6.8121E 02	6.2169E 03	6.1261E 01	1.6061E 04	0.0	0.0	0.0	0.0	1.9822F 03

GAS BUILDUP IN SLOT, DW/DT = 6.1201E-02

FOREWARD	4.0506E 02	6.8018E 02	6.7818E 02	6.2154E 03	1.1670E 02	1.6061E 04	1.7339E 02	8.9865E 03	3.0147E-01	6.0907E-01	3.7601F 03
AFT	4.2712E 02	6.7863E 02	6.7664E 02	6.2140E 03	1.1693E 02	1.6061E 04	1.8849E 02	9.7745E 03	3.0131E-01	6.0870E-01	3.7597F 03

GAS BUILDUP IN SLOT, DW/DT = 3.2705E-01

FOREWARD	6.8860E 02	6.7645E 02	6.7185E 02	6.2120E 03	1.7487E 02	1.6061E 04	1.7325E 02	8.9992E 03	3.0081E-01	6.0764E-01	5.5850E 03
AFT	7.0110E 02	6.7442E 02	6.6983E 02	6.2098E 03	1.7534E 02	1.6061E 04	0.0	0.0	0.0	0.0	5.5849F 03

GAS BUILDUP IN SLOT, DW/DT = 8.6279E-02

FOREWARD	9.8745E 02	6.7072E 02	6.6246E 02	6.2072E 03	2.3330E 02	1.6061E 04	1.7292E 02	9.0116E 03	2.9983E-01	6.0556E-01	7.3525F 03
AFT	1.0093E 03	6.6637E 02	6.5817E 02	6.2028E 03	2.3464E 02	1.6061E 04	1.8757E 02	9.7899E 03	2.9937E-01	6.0456E-01	7.3521F 03

GAS BUILDUP IN SLOT, DW/DT = 3.6378E-01

IGNITION TIME, TIME (S) 33.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	9306906.0	2092276.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	10316657.	2319277.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	53449.895	12016.016
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.35502413E 09	79812640.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.38821990E 09	87275328.
THRUST COEFFICIENT	CF	1.6251545	1.6251545
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	4052.3374	8933.8750
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	151569.44	334153.44
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	28.686172	63.242188
INERT MASS REMAINING (KG,LBM)	MIR	2734.3079	6028.1172
TOTAL BURN AREA (M**2,IN**2)	ABTOT	301.32275	467051.50
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	170.94540	10431733.
PROPELLANT MASS REMAINING (KG,LBM)	WF	302832.00	667630.38
TOTAL GAS MASS (KG,LBM)	WGTOT	817.19141	1801.5991
RATIO OF SPECIFIC HEATS	GAMA	1.1616554	1.1616554
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.887806	28.412750
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1566.6587	5139.9570
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.17959666	0.17959666
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.45291878E 09	656.90332
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.17356509E 11	25173.492
BURN AREA (M**2,IN**2)	AHH	21.201584	32862.527
BURN RATE (M/S,IN/S)	RBZ(1)	0.76097921E-02	0.29959816
DISTANCE BURNED (M,IN)	TAUZ(1)	0.25844485	10.174995
PROPELLANT VOLUME (M**3,IN**3)	VFH	1.1771946	71836.875
GAS VOLUME (M**3,IN**3)	VPH	11.348743	692543.13
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3450.8264	6211.4883
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	239.46362	371169.38
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	30.315186	46988.648
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	164.92363	10064262.
GAS VOLUME (M**3,IN**3)	VP	147.29529	8988514.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.43988224E 09	637.99536
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.16585736E 11	24055.582
BURN AREA (M**2,IN**2)	AAN	10.342594	16031.055
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.75298026E-02	0.29644907
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.25405824	10.002295
PROPELLANT VOLUME (M**3,IN**3)	VFN	4.8445702	295633.94
GAS VOLUME (M**3,IN**3)	VPN	7.1811075	438218.25
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3442.5039	6196.5078
PORT AREA (M**2,IN**2)	AP	4.8672705	7544.2852
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4431372	2236.8682
EXPANSION RATIO	EPR	6.9034977	6.9034977
PRESSURE RATIO	PEPO	0.22569135E-01	0.22569135E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	656.90	656.89	6211.49	21.99	0.006	508.48	14753.90	630.52	630.12	-0.40	0.2996	10.175	0.3022	10.175
30.000	656.89	656.86	6211.46	32.21	0.009	508.59	14753.47	923.60	292.52	-0.56	0.2996	10.175	0.2996	10.175
60.000	656.87	656.82	6211.43	42.43	0.012	508.69	14753.04	1216.75	292.58	-0.56	0.2996	10.174	0.2996	10.174
90.000	656.85	656.77	6211.39	52.67	0.015	508.80	14752.61	1509.95	292.64	-0.56	0.2996	10.173	0.2996	10.173
105.638	656.83	656.73	6211.37	58.03	0.017	508.86	14752.38	1663.51	152.56	-1.00	0.2996	10.172	0.2996	10.172
118.800	657.05	656.50	6210.78	135.02	0.038	284.40	6436.64	1688.43	355.20	0.13	0.2996	10.164	0.2996	10.164
148.800	656.93	656.28	6210.66	146.24	0.041	286.24	6523.04	1852.71	164.10	-0.18	0.2996	10.163	0.2996	10.163
178.800	656.80	656.05	6210.52	157.26	0.044	288.08	6609.29	2018.04	165.15	-0.18	0.2995	10.161	0.2995	10.161
208.800	656.66	655.81	6210.38	168.10	0.047	289.91	6695.41	2184.42	166.20	-0.18	0.2995	10.160	0.2995	10.160
238.800	656.51	655.54	6210.23	178.75	0.050	291.75	6781.38	2351.85	167.24	-0.19	0.2995	10.158	0.2995	10.158
268.800	656.34	655.27	6210.08	189.24	0.053	293.59	6867.21	2520.31	168.28	-0.19	0.2995	10.156	0.2995	10.156
298.800	656.17	654.98	6209.92	199.56	0.056	295.42	6952.90	2689.83	169.32	-0.20	0.2994	10.154	0.2994	10.154
328.800	655.99	654.67	6209.76	209.73	0.059	297.26	7038.45	2860.39	170.36	-0.20	0.2994	10.152	0.2994	10.152
358.800	655.80	654.35	6209.59	219.75	0.062	299.10	7123.86	3031.99	171.39	-0.21	0.2994	10.150	0.2994	10.150
388.800	655.61	654.02	6209.41	229.62	0.065	300.93	7209.13	3204.63	172.43	-0.21	0.2993	10.148	0.2993	10.148
404.462	655.50	653.84	6209.32	234.75	0.066	301.89	7253.58	3295.51	90.43	-0.46	0.2993	10.146	0.2993	10.146
427.723	655.08	652.51	6208.11	292.31	0.082	284.86	6458.66	3647.15	169.90	0.44	0.2991	10.134	0.2991	10.134
447.600	654.88	652.20	6207.96	298.41	0.084	286.14	6518.74	3756.21	108.64	-0.41	0.2991	10.132	0.2991	10.132
477.600	654.57	651.73	6207.75	307.46	0.087	288.07	6609.30	3921.26	164.89	-0.17	0.2991	10.130	0.2991	10.130
507.600	654.25	651.25	6207.53	316.39	0.089	290.00	6699.71	4087.41	165.97	-0.17	0.2990	10.127	0.2990	10.127
537.600	653.92	650.75	6207.30	325.19	0.092	291.93	6789.96	4254.63	167.05	-0.18	0.2990	10.124	0.2990	10.124
567.600	653.59	650.24	6207.07	333.88	0.094	293.86	6880.07	4422.94	168.13	-0.18	0.2989	10.121	0.2989	10.121
597.600	653.24	649.73	6206.84	342.45	0.096	295.79	6970.04	4592.33	169.21	-0.19	0.2989	10.118	0.2989	10.118
627.600	652.89	649.20	6206.61	350.91	0.099	297.73	7059.86	4762.80	170.29	-0.19	0.2988	10.115	0.2988	10.115
657.600	652.53	648.67	6206.38	359.27	0.101	299.66	7149.52	4934.36	171.36	-0.20	0.2988	10.112	0.2988	10.112
688.000	652.16	648.12	6206.14	367.54	0.103	301.59	7239.04	5106.99	172.44	-0.20	0.2987	10.109	0.2987	10.109
701.100	651.85	646.35	6204.17	429.59	0.121	283.95	6416.30	5277.86	354.13	0.16	0.2985	10.093	0.2985	10.093
731.100	651.37	645.66	6203.90	437.50	0.123	285.78	6501.97	5441.26	163.25	-0.15	0.2985	10.090	0.2985	10.090
761.100	650.87	644.96	6203.63	445.33	0.125	287.60	6587.52	5605.69	164.27	-0.16	0.2984	10.087	0.2984	10.087
791.100	650.36	644.25	6203.35	453.08	0.128	289.43	6672.93	5771.12	165.28	-0.16	0.2983	10.083	0.2983	10.083
821.100	649.85	643.54	6203.07	460.75	0.130	291.26	6758.22	5937.56	166.28	-0.16	0.2982	10.079	0.2982	10.079
851.100	649.33	642.81	6202.79	468.36	0.132	293.08	6843.39	6105.01	167.28	-0.17	0.2982	10.076	0.2982	10.076
881.100	648.81	642.08	6202.50	475.89	0.134	294.91	6928.42	6273.46	168.28	-0.17	0.2981	10.072	0.2981	10.072
911.100	648.28	641.35	6202.22	483.36	0.136	296.73	7013.33	6442.92	169.28	-0.18	0.2980	10.068	0.2980	10.068
941.100	647.74	640.60	6201.93	490.77	0.138	298.56	7098.12	6613.38	170.28	-0.18	0.2979	10.065	0.2979	10.065
971.100	647.20	639.85	6201.64	498.12	0.140	300.38	7182.77	6784.85	171.28	-0.19	0.2979	10.061	0.2979	10.061
986.852	646.91	639.45	6201.49	501.98	0.141	301.34	7227.18	6875.60	90.33	-0.43	0.2978	10.057	0.2978	10.057
1009.918	646.04	635.59	6197.43	594.99	0.168	284.49	6442.82	7226.02	0.0	0.47	0.2973	10.028	0.2973	10.028
1029.900	645.43	634.95	6197.37	596.30	0.168	286.37	6532.13	7334.93	108.52	-0.39	0.2973	10.024	0.2973	10.024
1059.900	644.52	633.99	6197.28	598.33	0.169	289.19	6665.91	7499.32	164.25	-0.15	0.2972	10.021	0.2972	10.021
1089.900	643.63	633.04	6197.18	600.46	0.169	292.01	6799.34	7665.29	165.81	-0.15	0.2971	10.019	0.2971	10.019
1119.900	642.75	632.09	6197.07	602.70	0.170	294.83	6932.41	7832.80	167.37	-0.16	0.2970	10.017	0.2970	10.017
1149.900	641.87	631.14	6196.96	605.03	0.170	297.65	7065.12	8001.88	168.92	-0.16	0.2969	10.014	0.2969	10.014
1179.900	641.00	630.21	6196.84	607.46	0.171	300.47	7197.47	8172.51	170.46	-0.17	0.2968	10.012	0.2968	10.012
1209.900	640.15	629.28	6196.71	609.98	0.172	303.30	7329.47	8344.70	172.01	-0.18	0.2967	10.009	0.2967	10.009
1239.900	639.30	628.35	6196.59	612.59	0.173	306.12	7461.11	8518.44	173.56	-0.18	0.2966	10.007	0.2966	10.007
1258.900	638.76	627.76	6196.51	614.28	0.173	307.90	7544.29	8629.27	110.71	-0.12	0.2965	10.004	0.2965	10.004
AFT	638.00	626.17	6195.36	637.46	0.180	.....	7544.29	8933.88	304.15	-0.45	0.2964	10.002	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RH IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0564E 02	6.5683E 02	6.5673E 02	6.2114E 03	5.4102E 01	1.6061E 04	2.5052E 01	1.3082E 03	2.9922E-01	6.0368E-01	1.6886E 03
AFT	1.1880E 02	6.5660E 02	6.5650E 02	6.2108E 03	5.4112E 01	1.6061E 04	0.0	0.0	0.0	0.0	1.6884E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3129E-01

FOREWARD	4.0446E 02	6.5550E 02	6.5384E 02	6.2093E 03	1.1144E 02	1.6061E 04	1.6848E 02	8.8070E 03	2.9892E-01	6.0294E-01	3.4640E 03
AFT	4.2772E 02	6.5417E 02	6.5251E 02	6.2081E 03	1.1163E 02	1.6061E 04	1.8360E 02	9.6019E 03	2.9877E-01	6.0262E-01	3.4635E 03

GAS BUILDUP IN SLOT, DW/DT = 4.4293E-01

FOREWARD	6.8800E 02	6.5216E 02	6.4812E 02	6.2061E 03	1.7121E 02	1.6061E 04	1.6839E 02	8.8203E 03	2.9830E-01	6.0163E-01	5.2780E 03
AFT	7.0110E 02	6.5038E 02	6.4635E 02	6.2042E 03	1.7162E 02	1.6061E 04	0.0	0.0	0.0	0.0	5.2779E 03

GAS BUILDUP IN SLOT, DW/DT = 1.5876E-01

FOREWARD	9.8685E 02	6.4691E 02	6.3945E 02	6.2015E 03	2.3141E 02	1.6061E 04	1.6811E 02	8.8334E 03	2.9737E-01	5.9966E-01	7.0437E 03
AFT	1.0099E 03	6.4301E 02	6.3559E 02	6.1974E 03	2.3265E 02	1.6061E 04	1.8278E 02	9.6178E 03	2.9695E-01	5.9875E-01	7.0432E 03

GAS BUILDUP IN SLOT, DW/DT = 4.7221E-01

LATERAL BURNOUT INCREMENT LOCATION ZCALC(26)= 0.6875999E 03

IGNITION TIME, TIME (S) 35.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	9007563.0	2024981.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	10017314.	2251982.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	51779.379	11640.469
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.37333862E 09	83929888.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.40855373E 09	91846576.
THRUST COEFFICIENT	CF	1.6239109	1.6239109
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3938.6096	8683.1484
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	159560.38	351770.44
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	27.789612	61.265625
INERT MASS REMAINING (KG,LBM)	MIR	2678.7285	5905.5859
TOTAL BURN AREA (M**2,IN**2)	ABTOT	295.09204	457393.63
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	166.41646	10155360.
PROPELLANT MASS REMAINING (KG,LBM)	WF	294808.94	649942.50
TOTAL GAS MASS (KG,LBM)	WGTOT	812.87158	1792.0752
RATIO OF SPECIFIC HEATS	GAMA	1.1616354	1.1616354
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.884172	28.404739
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1566.3823	5139.0508
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.17530638	0.17530638
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.43910707E 09	636.87109
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.18248536E 11	26467.266
BURN AREA (M**2,IN**2)	AHH	18.688828	28967.762
BURN RATE (M/S,IN/S)	RBZ(1)	0.75551756E-02	0.29744798
DISTANCE BURNED (M,IN)	TAUZ(1)	0.27366441	10.774191
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.87363720	53312.637
GAS VOLUME (M**3,IN**3)	VPH	11.652300	711067.31
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3447.9902	6206.3828
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	236.49431	366566.94
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	29.561142	45819.879
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	160.85406	9815922.0
GAS VOLUME (M**3,IN**3)	VP	150.42302	9179380.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.42712832E 09	619.49731
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.17452749E 11	25313.074
BURN AREA (M**2,IN**2)	AAN	10.347783	16039.098
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.74798614E-02	0.29448289
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.26911783	10.595192
PROPELLANT VOLUME (M**3,IN**3)	VFN	4.6887407	286124.69
GAS VOLUME (M**3,IN**3)	VPN	7.3369360	447727.50
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3440.0757	6192.1367
PORT AREA (M**2,IN**2)	AP	4.9857855	7727.9844
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4442110	2238.5322
EXPANSION RATIO	EPR	6.8983660	6.8983660
PRESSURE RATIO	PEPO	0.22592328E-01	0.22592328E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	636.87	636.86	6206.38	19.46	0.005	437.48	15037.30	551.75	551.45	-0.30	0.2974	10.774	0.2996	10.774
30.000	636.86	636.84	6206.36	28.29	0.008	437.57	15036.93	802.07	249.87	-0.45	0.2974	10.774	0.2974	10.774
60.000	636.85	636.81	6206.34	37.12	0.010	437.67	15036.56	1052.44	249.93	-0.45	0.2974	10.773	0.2974	10.773
90.000	636.83	636.77	6206.31	45.96	0.013	437.77	15036.19	1302.86	249.98	-0.45	0.2974	10.772	0.2974	10.772
105.039	636.82	636.74	6206.30	50.42	0.014	437.82	15036.00	1429.12	125.34	-0.92	0.2974	10.771	0.2974	10.771
118.800	636.97	636.57	6205.86	116.29	0.033	288.17	6608.16	1448.39	345.39	0.21	0.2974	10.763	0.2974	10.763
148.800	636.87	636.39	6205.75	127.89	0.036	290.00	6695.83	1613.55	165.08	-0.08	0.2974	10.762	0.2974	10.762
178.800	636.76	636.20	6205.63	139.28	0.039	291.84	6783.32	1779.76	166.12	-0.09	0.2974	10.761	0.2974	10.761
208.800	636.64	635.98	6205.50	150.48	0.042	293.68	6870.62	1947.01	167.16	-0.09	0.2974	10.759	0.2974	10.759
238.800	636.51	635.75	6205.36	161.50	0.046	295.51	6957.73	2115.30	168.20	-0.09	0.2974	10.757	0.2974	10.757
268.800	636.38	635.50	6205.21	172.33	0.049	297.35	7044.67	2284.63	169.23	-0.10	0.2973	10.755	0.2973	10.755
298.800	636.22	635.24	6205.07	183.00	0.052	299.18	7131.42	2454.99	170.26	-0.10	0.2973	10.753	0.2973	10.753
328.800	636.06	634.97	6204.91	193.51	0.054	301.02	7217.98	2626.39	171.30	-0.10	0.2973	10.751	0.2973	10.751
358.800	635.90	634.68	6204.75	203.86	0.057	302.86	7304.36	2798.82	172.33	-0.11	0.2972	10.749	0.2972	10.749
388.800	635.72	634.38	6204.57	214.07	0.060	304.69	7390.56	2972.28	173.36	-0.11	0.2972	10.747	0.2972	10.747
403.864	635.62	634.22	6204.49	219.17	0.062	305.61	7433.77	3060.11	87.43	-0.40	0.2972	10.745	0.2972	10.745
428.321	635.26	633.07	6203.42	273.59	0.077	288.66	6632.10	3402.45	165.03	0.55	0.2970	10.732	0.2970	10.732
447.600	635.08	632.80	6203.29	279.76	0.079	289.90	6691.21	3508.82	106.02	-0.35	0.2970	10.730	0.2970	10.730
477.600	634.80	632.36	6203.07	289.22	0.081	291.83	6783.04	3674.77	165.87	-0.08	0.2970	10.728	0.2970	10.728
507.600	634.51	631.92	6202.86	298.54	0.084	293.76	6874.66	3841.80	166.95	-0.08	0.2970	10.725	0.2970	10.725
537.600	634.22	631.46	6202.63	307.72	0.087	295.69	6966.09	4009.91	168.03	-0.08	0.2969	10.722	0.2969	10.722
567.600	633.91	630.99	6202.41	316.78	0.089	297.62	7057.32	4179.10	169.10	-0.09	0.2969	10.719	0.2969	10.719
597.600	633.60	630.51	6202.18	325.72	0.092	299.55	7148.37	4349.36	170.17	-0.09	0.2968	10.716	0.2968	10.716
627.600	633.28	630.02	6201.95	334.55	0.094	301.48	7239.21	4520.69	171.24	-0.09	0.2968	10.713	0.2968	10.713
657.600	632.94	629.52	6201.71	343.28	0.097	303.41	7329.85	4693.09	172.31	-0.10	0.2967	10.710	0.2967	10.710
687.403	632.61	629.01	6201.48	351.85	0.099	305.32	7419.71	4865.53	172.23	-0.21	0.2966	10.707	0.2966	10.707
701.100	632.34	627.45	6199.70	410.56	0.116	287.70	6586.92	5029.12	344.47	0.23	0.2964	10.690	0.2964	10.690
731.100	631.89	626.80	6199.43	418.87	0.118	289.53	6673.83	5193.44	164.26	-0.07	0.2964	10.687	0.2964	10.687
761.100	631.43	626.15	6199.15	427.09	0.120	291.35	6760.56	5358.78	165.28	-0.07	0.2963	10.683	0.2963	10.683
791.100	630.96	625.48	6198.87	435.22	0.123	293.18	6847.13	5525.13	166.27	-0.07	0.2963	10.680	0.2963	10.680
821.100	630.49	624.81	6198.59	443.27	0.125	295.00	6933.52	5692.46	167.27	-0.07	0.2962	10.676	0.2962	10.676
851.100	630.01	624.13	6198.30	451.24	0.127	296.83	7019.76	5860.80	168.27	-0.08	0.2961	10.672	0.2961	10.672
881.100	629.52	623.44	6198.02	459.15	0.129	298.65	7105.81	6030.14	169.26	-0.08	0.2961	10.668	0.2961	10.668
911.100	629.03	622.75	6197.73	466.98	0.132	300.48	7191.70	6200.48	170.26	-0.08	0.2960	10.664	0.2960	10.664
941.100	628.53	622.04	6197.44	474.74	0.134	302.30	7277.43	6371.81	171.25	-0.09	0.2959	10.661	0.2959	10.661
971.100	628.02	621.33	6197.15	482.45	0.136	304.13	7362.98	6544.13	172.24	-0.09	0.2959	10.657	0.2958	10.657
986.257	627.77	620.97	6197.00	486.34	0.137	305.05	7406.14	6631.90	87.39	-0.38	0.2957	10.653	0.2957	10.653
1010.512	626.96	617.48	6193.25	575.33	0.162	288.28	6615.91	6973.19	0.0	0.58	0.2953	10.623	0.2953	10.623
1029.900	626.42	616.89	6193.17	576.98	0.163	290.10	6703.86	7079.48	105.97	-0.33	0.2953	10.618	0.2953	10.618
1059.900	625.58	615.98	6193.05	579.59	0.163	292.92	6839.55	7244.80	165.27	-0.06	0.2952	10.616	0.2952	10.616
1089.900	624.75	615.07	6192.93	582.28	0.164	295.74	6974.79	7411.68	166.82	-0.06	0.2951	10.613	0.2951	10.613
1119.900	623.93	614.17	6192.80	585.07	0.165	298.56	7109.56	7580.11	168.36	-0.07	0.2950	10.611	0.2950	10.611
1149.900	623.12	613.28	6192.66	587.94	0.166	301.38	7243.87	7750.08	169.90	-0.07	0.2949	10.608	0.2949	10.608
1179.900	622.31	612.39	6192.52	590.90	0.167	304.20	7377.73	7921.59	171.44	-0.08	0.2948	10.606	0.2948	10.606
1209.900	621.51	611.50	6192.38	593.93	0.167	307.02	7511.11	8094.64	172.98	-0.08	0.2947	10.603	0.2947	10.603
1239.900	620.72	610.61	6192.23	597.04	0.168	309.84	7644.04	8269.24	174.52	-0.09	0.2946	10.600	0.2946	10.600
1258.900	620.23	610.06	6192.14	599.05	0.169	311.63	7727.98	8380.61	111.31	-0.06	0.2945	10.597	0.2945	10.597
AFT	619.50	608.55	6191.02	622.09	0.175	.....	7727.98	8683.15	302.29	-0.26	0.2945	10.595	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0504E 02	6.3682E 02	6.3674E 02	6.2063E 03	4.7845E 01	1.6061E 04	1.9480E 01	1.0246E 03	2.9708E-01	5.9845E-01	1.4486F 03
AFT	1.1880E 02	6.3665E 02	6.3657E 02	6.2059E 03	4.7847E 01	1.6061E 04	0.0	0.0	0.0	0.0	1.4484F 03

GAS BUILDUP IN SLOT, DW/DT = 2.0675E-01

FOREWARD	4.0386E 02	6.3562E 02	6.3422E 02	6.2045E 03	1.0688E 02	1.6061E 04	1.6387E 02	8.6268E 03	2.9680E-01	5.9783E-01	3.2240F 03
AFT	4.2832E 02	6.3447E 02	6.3307E 02	6.2034E 03	1.0703E 02	1.6061E 04	1.7902E 02	9.4285E 03	2.9667E-01	5.9755E-01	3.2234F 03

GAS BUILDUP IN SLOT, DW/DT = 5.5363E-01

FOREWARD	6.8740E 02	6.3261E 02	6.2901E 02	6.2015E 03	1.6802E 02	1.6061E 04	1.6382E 02	8.6409E 03	2.9623E-01	5.9661E-01	5.0293F 03
AFT	7.0110E 02	6.3104E 02	6.2745E 02	6.1997E 03	1.6838E 02	1.6061E 04	0.0	0.0	0.0	0.0	5.0291F 03

GAS BUILDUP IN SLOT, DW/DT = 2.2669E-01

FOREWARD	9.8626E 02	6.2777E 02	6.2097E 02	6.1970E 03	2.2980E 02	1.6061E 04	1.6359E 02	8.6544E 03	2.9534E-01	5.9474E-01	6.7955F 03
AFT	1.0105E 03	6.2424E 02	6.1748E 02	6.1932E 03	2.3094E 02	1.6061E 04	1.7829E 02	9.4447E 03	2.9496E-01	5.9390E-01	6.7949F 03

GAS BUILDUP IN SLOT, DW/DT = 5.7937E-01

IGNITION TIME, TIME (S) 37.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	8731666.0	1962957.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	9741417.0	2189958.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	50372.977	11324.297
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.39107789E 09	87917824.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.42831258E 09	96288528.
THRUST COEFFICIENT	CF	1.6226940	1.6226940
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3833.8477	8452.1875
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	167332.81	368905.75
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	27.034805	59.601563
INERT MASS REMAINING (KG,LBM)	MIR	2624.6589	5786.3828
TOTAL BURN AREA (M**2,IN**2)	ABTOT	289.17114	448216.44
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	162.01062	9886499.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	287003.94	632735.44
TOTAL GAS MASS (KG,LBM)	WGTOT	808.80859	1783.1179
RATIO OF SPECIFIC HEATS	GAMA	1.1616173	1.1616173
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.880829	28.397369
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1566.1277	5138.2148
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.17120326	0.17120326
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.42639795E 09	618.43799
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.19114037E 11	27722.574
BURN AREA (M**2,IN**2)	AHH	16.194122	25100.941
BURN RATE (M/S,IN/S)	RBZ(1)	0.75037442E-02	0.29542303
DISTANCE BURNED (M,IN)	TAUZ(1)	0.28877473	11.369086
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.61009032	37230.012
GAS VOLUME (M**3,IN**3)	VPH	11.915847	727149.94
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3445.3838	6201.6914
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	233.79250	362379.13
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	28.831741	44689.313
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	156.86665	9572595.0
GAS VOLUME (M**3,IN**3)	VP	153.47490	9365617.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.41537587E 09	602.45190
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.18295251E 11	26535.023
BURN AREA (M**2,IN**2)	AAN	10.352937	16047.086
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.74327849E-02	0.29262942
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.28407753	11.184157
PROPELLANT VOLUME (M**3,IN**3)	VFN	4.5338688	276673.81
GAS VOLUME (M**3,IN**3)	VPN	7.4918079	457178.38
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3437.8491	6188.1289
PORT AREA (M**2,IN**2)	AP	5.1049261	7912.6523
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4452534	2240.1484
EXPANSION RATIO	EPR	6.8933887	6.8933887
PRESSURE RATIO	PEPO	0.22614770E-01	0.22614770E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	618.44	618.43	6201.69	16.97	0.005	370.02	15277.49	475.01	474.59	-0.43	0.2954	11.369	0.2974	11.369
30.000	618.43	618.42	6201.67	24.49	0.007	370.12	15277.18	685.41	209.91	-0.49	0.2954	11.369	0.2954	11.369
60.000	618.42	618.39	6201.66	32.01	0.009	370.21	15276.86	895.86	209.96	-0.49	0.2954	11.368	0.2954	11.368
90.000	618.41	618.36	6201.64	39.54	0.011	370.31	15276.54	1106.37	210.02	-0.49	0.2954	11.367	0.2954	11.367
104.445	618.40	618.35	6201.63	43.19	0.012	370.36	15276.39	1208.43	101.14	-0.92	0.2954	11.366	0.2954	11.366
118.800	618.50	618.23	6201.31	98.49	0.028	291.91	6780.68	1223.04	336.20	0.20	0.2954	11.358	0.2954	11.358
148.800	618.42	618.08	6201.21	110.45	0.031	293.74	6869.62	1389.18	166.08	-0.07	0.2954	11.357	0.2954	11.357
178.800	618.33	617.91	6201.11	122.19	0.034	295.58	6958.33	1556.37	167.12	-0.07	0.2954	11.355	0.2954	11.355
208.800	618.23	617.73	6200.99	133.74	0.038	297.41	7046.82	1724.59	168.15	-0.07	0.2954	11.353	0.2954	11.353
238.800	618.12	617.53	6200.86	145.09	0.041	299.25	7135.07	1893.84	169.18	-0.07	0.2953	11.352	0.2953	11.352
268.800	618.00	617.31	6200.73	156.26	0.044	301.08	7223.10	2064.12	170.21	-0.08	0.2953	11.350	0.2953	11.350
298.800	617.87	617.08	6200.59	167.25	0.047	302.92	7310.91	2235.44	171.23	-0.08	0.2953	11.348	0.2953	11.348
328.800	617.73	616.83	6200.44	178.08	0.050	304.76	7398.48	2407.78	172.26	-0.08	0.2953	11.345	0.2953	11.345
358.800	617.58	616.57	6200.28	188.75	0.053	306.59	7485.82	2581.15	173.29	-0.09	0.2952	11.343	0.2952	11.343
388.800	617.42	616.30	6200.12	199.27	0.056	308.43	7572.95	2755.55	174.31	-0.09	0.2952	11.341	0.2952	11.341
403.270	617.34	616.16	6200.04	204.32	0.058	309.31	7614.89	2840.37	84.44	-0.38	0.2952	11.339	0.2952	11.339
428.914	617.02	615.16	6199.10	255.78	0.072	292.43	6806.60	3173.72	160.46	0.53	0.2951	11.326	0.2951	11.326
447.600	616.86	614.92	6198.97	262.01	0.074	293.63	6864.70	3277.46	103.40	-0.34	0.2951	11.324	0.2951	11.324
477.600	616.61	614.52	6198.76	271.83	0.077	295.56	6957.79	3444.40	166.89	-0.06	0.2950	11.322	0.2950	11.322
507.600	616.35	614.11	6198.55	281.52	0.079	297.49	7050.63	3612.42	167.96	-0.06	0.2950	11.319	0.2950	11.319
537.600	616.08	613.69	6198.33	291.07	0.082	299.42	7143.22	3781.51	169.02	-0.07	0.2949	11.316	0.2949	11.316
567.600	615.81	613.25	6198.11	300.48	0.085	301.35	7235.57	3951.67	170.09	-0.07	0.2949	11.313	0.2949	11.313
597.600	615.52	612.81	6197.89	309.78	0.087	303.28	7327.68	4122.89	171.15	-0.07	0.2948	11.310	0.2948	11.310
627.600	615.23	612.35	6197.66	318.95	0.090	305.21	7419.54	4295.18	172.22	-0.08	0.2948	11.306	0.2948	11.306
657.600	614.92	611.88	6197.43	328.02	0.092	307.13	7511.16	4468.54	173.28	-0.08	0.2947	11.303	0.2947	11.303
686.811	614.62	611.42	6197.19	336.76	0.095	309.01	7600.14	4638.69	169.74	-0.41	0.2947	11.300	0.2947	11.300
701.100	614.37	610.03	6195.58	392.47	0.111	291.43	6758.59	4797.80	335.42	0.22	0.2945	11.283	0.2945	11.283
731.100	613.96	609.42	6195.30	401.15	0.113	293.25	6846.72	4963.14	165.29	-0.05	0.2945	11.280	0.2945	11.280
761.100	613.53	608.81	6195.03	409.74	0.115	295.08	6934.64	5129.49	166.30	-0.05	0.2944	11.276	0.2944	11.276
791.100	613.10	608.19	6194.75	418.23	0.118	296.90	7022.34	5296.84	167.30	-0.05	0.2943	11.272	0.2943	11.272
821.100	612.66	607.55	6194.47	426.64	0.120	298.72	7109.84	5465.18	168.29	-0.06	0.2943	11.268	0.2943	11.268
851.100	612.22	606.91	6194.18	434.96	0.123	300.55	7197.13	5634.51	169.28	-0.06	0.2942	11.264	0.2942	11.264
881.100	611.77	606.26	6193.89	443.20	0.125	302.37	7284.20	5804.83	170.26	-0.06	0.2941	11.260	0.2941	11.260
911.100	611.31	605.60	6193.61	451.38	0.127	304.20	7371.07	5976.14	171.25	-0.06	0.2941	11.256	0.2941	11.256
941.100	610.84	604.93	6193.31	459.48	0.129	306.02	7457.72	6148.45	172.24	-0.07	0.2940	11.252	0.2940	11.252
971.100	610.37	604.26	6193.02	467.52	0.132	307.84	7544.16	6321.73	173.22	-0.07	0.2939	11.248	0.2939	11.248
985.666	610.14	603.93	6192.87	471.42	0.133	308.73	7586.06	6406.55	84.46	-0.36	0.2938	11.244	0.2938	11.244
1011.102	609.40	600.76	6189.39	556.61	0.157	292.05	6790.13	6739.02	0.0	0.56	0.2934	11.213	0.2934	11.213
1029.900	608.91	600.22	6189.30	558.57	0.157	293.81	6876.64	6842.74	103.41	-0.31	0.2934	11.209	0.2934	11.209
1059.900	608.14	599.36	6189.16	561.72	0.158	296.63	7014.23	7009.09	166.31	-0.04	0.2934	11.206	0.2934	11.206
1089.900	607.37	598.50	6189.02	564.95	0.159	299.45	7151.27	7176.98	167.85	-0.05	0.2933	11.204	0.2933	11.204
1119.900	606.60	597.65	6188.87	568.26	0.160	302.27	7287.73	7346.41	169.38	-0.05	0.2932	11.201	0.2932	11.201
1149.900	605.85	596.79	6188.72	571.64	0.161	305.09	7423.63	7517.37	170.91	-0.05	0.2931	11.198	0.2931	11.198
1179.900	605.09	595.94	6188.56	575.09	0.162	307.91	7558.97	7689.86	172.44	-0.06	0.2930	11.195	0.2930	11.195
1209.900	604.35	595.10	6188.40	578.61	0.163	310.73	7693.75	7863.89	173.97	-0.06	0.2929	11.192	0.2929	11.192
1239.900	603.61	594.25	6188.23	582.19	0.164	313.55	7827.95	8039.46	175.50	-0.07	0.2928	11.189	0.2928	11.189
1258.900	603.14	593.72	6188.13	584.50	0.165	315.33	7912.65	8151.43	111.93	-0.05	0.2927	11.187	0.2927	11.187
AFT	602.45	592.30	6187.04	607.41	0.171	.....	7912.65	8452.19	300.53	-0.23	0.2926	11.184	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0445E 02	6.1840E 02	6.1835E 02	6.2016E 03	4.1583E 01	1.6061E 04	1.4808E 01	7.8420E 02	2.9505E-01	5.9415E-01	1.2232E 03
AFT	1.1880E 02	6.1828E 02	6.1823E 02	6.2013E 03	4.1582E 01	1.6061E 04	0.0	0.0	0.0	0.0	1.2230E 03

GAS BUILDUP IN SLOT, DW/DT = 2.0254E-01

FOREWARD	4.0327E 02	6.1734E 02	6.1616E 02	6.2000E 03	1.0231E 02	1.6061E 04	1.5935E 02	8.4457E 03	2.9481E-01	5.9360E-01	2.9997E 03
AFT	4.2891E 02	6.1634E 02	6.1516E 02	6.1991E 03	1.0244E 02	1.6061E 04	1.7453E 02	9.2540E 03	2.9470E-01	5.9334E-01	2.9992E 03

GAS BUILDUP IN SLOT, DW/DT = 5.3352E-01

FOREWARD	6.8681E 02	6.1462E 02	6.1142E 02	6.1972E 03	1.6484E 02	1.6061E 04	1.5934E 02	8.4604E 03	2.9428E-01	5.9246E-01	4.7980E 03
AFT	7.0110E 02	6.1322E 02	6.1003E 02	6.1956E 03	1.6516E 02	1.6061E 04	0.0	0.0	0.0	0.0	4.7978E 03

GAS BUILDUP IN SLOT, DW/DT = 2.2099E-01

FOREWARD	9.8567E 02	6.1014E 02	6.0393E 02	6.1929E 03	2.2820E 02	1.6061E 04	1.5915E 02	8.4745E 03	2.9344E-01	5.9069E-01	6.5657E 03
AFT	1.0111E 03	6.0694E 02	6.0076E 02	6.1894E 03	2.2925E 02	1.6061E 04	1.7388E 02	9.2705E 03	2.9308E-01	5.8991E-01	6.5651E 03

GAS BUILDUP IN SLOT, DW/DT = 5.5924E-01

IGNITION TIME, TIME (S) 39.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	8469373.0	1903991.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	9479123.0	2130992.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	49044.156	11025.566
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.40827878E 09	91784752.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.44753306E 09	0.10060946E 09
THRUST COEFFICIENT	CF	1.6216192	1.6216192
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3733.9119	8231.8672
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	174900.56	385589.75
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	26.321640	58.029297
INERT MASS REMAINING (KG,LBM)	MIR	2572.0156	5670.3242
TOTAL BURN AREA (M**2,IN**2)	ABTOT	283.46240	439367.94
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	157.72104	9624733.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	279404.88	615982.44
TOTAL GAS MASS (KG,LBM)	WGTOT	804.33521	1773.2559
RATIO OF SPECIFIC HEATS	GAMA	1.1615992	1.1615992
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.877652	28.390366
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.8157	5137.1914
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.16727424	0.16727424
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.41433088E 09	600.93628
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.19954766E 11	28941.945
BURN AREA (M**2,IN**2)	AHH	13.716386	21260.441
BURN RATE (M/S,IN/S)	RBZ(1)	0.74538067E-02	0.29345703
DISTANCE BURNED (M,IN)	TAUZ(1)	0.30378222	11.959932
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.38564956	23533.793
GAS VOLUME (M**3,IN**3)	VPH	12.140288	740846.19
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3442.9055	6197.2305
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	231.26279	358458.06
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	28.125397	43594.469
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	152.95549	9333921.0
GAS VOLUME (M**3,IN**3)	VP	156.45680	9547584.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.40417562E 09	586.20752
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.19114799E 11	27723.680
BURN AREA (M**2,IN**2)	AAN	10.358058	16055.023
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.73868968E-02	0.29082274
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.29894310	11.769416
PROPELLANT VOLUME (M**3,IN**3)	VFN	4.3798962	267277.81
GAS VOLUME (M**3,IN**3)	VPN	7.6457806	466574.38
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3435.7288	6184.3125
PORT AREA (M**2,IN**2)	AP	5.2247095	8098.3164
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4462681	2241.7207
EXPANSION RATIO	EPR	6.8885536	6.8885536
PRESSURE RATIO	PEPO	0.22636626E-01	0.22636626E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	600.94	600.93	6197.23	14.51	0.004	304.76	15476.84	399.88	399.30	-0.58	0.2935	11.960	0.2954	11.960
30.000	600.93	600.92	6197.22	20.76	0.006	304.85	15476.57	572.18	171.74	-0.56	0.2935	11.960	0.2935	11.960
60.000	600.92	600.90	6197.21	27.02	0.008	304.95	15476.31	744.53	171.79	-0.56	0.2935	11.959	0.2935	11.959
90.000	600.91	600.88	6197.19	33.27	0.010	305.04	15476.05	916.93	171.84	-0.56	0.2935	11.958	0.2935	11.958
103.855	600.91	600.87	6197.18	36.19	0.010	305.09	15475.93	997.24	79.38	-0.93	0.2935	11.957	0.2935	11.957
118.800	600.97	600.79	6196.97	81.41	0.023	295.62	6954.23	1008.02	327.20	0.18	0.2934	11.949	0.2934	11.949
148.800	600.91	600.67	6196.89	93.71	0.026	297.45	7044.44	1175.16	167.07	-0.06	0.2934	11.948	0.2934	11.948
178.800	600.84	600.53	6196.79	105.79	0.030	299.29	7134.37	1343.33	168.10	-0.07	0.2934	11.946	0.2934	11.946
208.800	600.75	600.37	6196.69	117.67	0.033	301.12	7224.03	1512.52	169.13	-0.07	0.2934	11.944	0.2934	11.944
238.800	600.66	600.20	6196.57	129.35	0.036	302.96	7313.42	1682.74	170.15	-0.07	0.2934	11.942	0.2934	11.942
268.800	600.56	600.01	6196.45	140.83	0.040	304.80	7402.54	1853.99	171.17	-0.07	0.2934	11.940	0.2934	11.940
298.800	600.45	599.81	6196.32	152.14	0.043	306.63	7491.39	2026.26	172.19	-0.08	0.2934	11.938	0.2934	11.938
328.800	600.32	599.59	6196.18	163.28	0.046	308.47	7579.96	2199.55	173.22	-0.08	0.2933	11.936	0.2933	11.936
358.800	600.19	599.35	6196.03	174.26	0.049	310.30	7668.27	2373.87	174.23	-0.08	0.2933	11.934	0.2933	11.934
388.800	600.05	599.10	6195.88	185.08	0.052	312.14	7756.30	2549.21	175.25	-0.09	0.2933	11.932	0.2933	11.932
402.680	599.98	598.98	6195.80	190.06	0.054	312.99	7796.95	2631.01	81.43	-0.37	0.2932	11.929	0.2932	11.929
429.503	599.69	598.12	6194.97	238.72	0.067	296.18	6982.18	2955.52	155.98	0.49	0.2931	11.916	0.2931	11.916
447.600	599.56	597.90	6194.86	244.97	0.069	297.34	7039.24	3056.60	100.75	-0.33	0.2931	11.914	0.2931	11.914
477.600	599.33	597.54	6194.65	255.16	0.072	299.27	7133.57	3224.55	167.89	-0.06	0.2931	11.912	0.2931	11.912
507.600	599.09	597.16	6194.45	265.20	0.075	301.20	7227.62	3393.56	168.95	-0.06	0.2931	11.909	0.2931	11.909
537.600	598.85	596.77	6194.23	275.09	0.078	303.12	7321.37	3563.63	170.01	-0.06	0.2930	11.906	0.2930	11.906
567.600	598.60	596.37	6194.02	284.85	0.080	305.05	7414.84	3734.77	171.07	-0.07	0.2930	11.902	0.2930	11.902
597.600	598.34	595.95	6193.79	294.48	0.083	306.98	7508.01	3906.97	172.13	-0.07	0.2929	11.899	0.2929	11.899
627.600	598.07	595.53	6193.57	303.99	0.086	308.91	7600.89	4080.22	173.19	-0.07	0.2929	11.896	0.2929	11.896
657.600	597.79	595.09	6193.34	313.38	0.088	310.84	7693.48	4254.54	174.24	-0.08	0.2928	11.893	0.2928	11.893
686.222	597.51	594.66	6193.11	322.26	0.091	312.68	7781.55	4422.16	167.22	-0.40	0.2928	11.889	0.2928	11.889
701.100	597.29	593.43	6191.65	375.14	0.106	295.13	6931.32	4576.88	326.56	0.20	0.2926	11.871	0.2926	11.871
731.100	596.91	592.86	6191.38	384.18	0.108	296.95	7020.67	4743.23	166.31	-0.05	0.2926	11.869	0.2926	11.869
761.100	596.52	592.28	6191.10	393.11	0.111	298.78	7109.77	4910.60	167.32	-0.05	0.2925	11.865	0.2925	11.865
791.100	596.12	591.70	6190.82	401.95	0.113	300.60	7198.62	5078.95	168.30	-0.05	0.2925	11.861	0.2925	11.861
821.100	595.71	591.10	6190.54	410.70	0.116	302.42	7287.21	5248.29	169.29	-0.05	0.2924	11.857	0.2924	11.857
851.100	595.30	590.50	6190.25	419.36	0.118	304.24	7375.54	5418.62	170.27	-0.06	0.2923	11.853	0.2923	11.853
881.100	594.88	589.88	6189.96	427.94	0.121	306.07	7463.63	5589.93	171.26	-0.06	0.2923	11.849	0.2923	11.849
911.100	594.45	589.26	6189.67	436.44	0.123	307.89	7551.46	5762.23	172.24	-0.06	0.2922	11.844	0.2922	11.844
941.100	594.02	588.62	6189.38	444.86	0.125	309.71	7639.03	5935.50	173.22	-0.06	0.2921	11.840	0.2921	11.840
971.100	593.57	587.98	6189.08	453.22	0.128	311.54	7726.35	6109.77	174.20	-0.07	0.2920	11.836	0.2920	11.836
985.079	593.36	587.68	6188.94	457.12	0.129	312.39	7766.96	6191.62	81.50	-0.36	0.2920	11.832	0.2920	11.832
1011.688	592.69	584.81	6185.71	538.72	0.152	295.79	6965.48	6515.40	0.0	0.51	0.2916	11.800	0.2916	11.800
1029.900	592.25	584.31	6185.62	540.94	0.152	297.50	7050.48	6616.53	100.83	-0.31	0.2916	11.796	0.2916	11.796
1059.900	591.53	583.49	6185.46	544.61	0.154	300.32	7189.97	6783.91	167.34	-0.04	0.2915	11.793	0.2915	11.793
1089.900	590.81	582.68	6185.30	548.35	0.155	303.14	7328.79	6952.82	168.87	-0.04	0.2915	11.790	0.2915	11.790
1119.900	590.10	581.87	6185.13	552.16	0.156	305.95	7466.95	7123.25	170.39	-0.05	0.2914	11.787	0.2914	11.787
1149.900	589.39	581.05	6184.96	556.02	0.157	308.77	7604.43	7295.21	171.91	-0.05	0.2913	11.784	0.2913	11.784
1179.900	588.69	580.24	6184.79	559.95	0.158	311.59	7741.25	7468.70	173.43	-0.06	0.2912	11.781	0.2912	11.781
1209.900	587.99	579.44	6184.61	563.94	0.159	314.41	7877.39	7643.71	174.95	-0.06	0.2911	11.778	0.2911	11.778
1239.900	587.30	578.63	6184.43	567.98	0.160	317.22	8012.86	7820.23	176.47	-0.07	0.2910	11.775	0.2910	11.775
1258.900	586.86	578.12	6184.31	570.57	0.161	319.01	8098.32	7932.82	112.54	-0.04	0.2909	11.772	0.2909	11.772
AFT	586.21	576.77	6183.26	593.36	0.167	.....	8098.32	8231.87	298.83	-0.23	0.2908	11.769	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0386E 02	6.0091E 02	6.0087E 02	6.1972E 03	3.5253E 01	1.6061E 04	1.0967E 01	5.8465E 02	2.9309E-01	5.9011E-01	1.0082E 03
AFT	1.1880E 02	6.0083E 02	6.0079E 02	6.1970E 03	3.5251E 01	1.6061E 04	0.0	0.0	0.0	0.0	1.0080E 03

GAS BUILDUP IN SLOT, DW/DT = 1.8381E-01

FOREWARD	4.0268E 02	5.9998E 02	5.9898E 02	6.1958E 03	9.7699E 01	1.6061E 04	1.5489E 02	8.2636E 03	2.9287E-01	5.8962E-01	2.7859E 03
AFT	4.2950E 02	5.9911E 02	5.9812E 02	6.1950E 03	9.7810E 01	1.6061E 04	1.7011E 02	9.0784E 03	2.9277E-01	5.8939E-01	2.7854E 03

GAS BUILDUP IN SLOT, DW/DT = 4.8864E-01

FOREWARD	6.8622E 02	5.9751E 02	5.9466E 02	6.1931E 03	1.6161E 02	1.6061E 04	1.5492E 02	8.2790E 03	2.9238E-01	5.8856E-01	4.5771E 03
AFT	7.0110E 02	5.9627E 02	5.9343E 02	6.1916E 03	1.6190E 02	1.6061E 04	0.0	0.0	0.0	0.0	4.5769E 03

GAS BUILDUP IN SLOT, DW/DT = 2.0101E-01

FOREWARD	9.8508E 02	5.9336E 02	5.8768E 02	6.1889E 03	2.2659E 02	1.6061E 04	1.5477E 02	8.2936E 03	2.9158E-01	5.8687E-01	6.3464E 03
AFT	1.0117E 03	5.9047E 02	5.8481E 02	6.1857E 03	2.2756E 02	1.6061E 04	1.6953E 02	9.0951E 03	2.9124E-01	5.8615E-01	6.3459E 03

GAS BUILDUP IN SLOT, DW/DT = 5.1465E-01

IGNITION TIME, TIME (S) 41.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	8245872.0	1853746.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	9255622.0	2080747.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	47832.539	10753.184
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.42499405E 09	95542496.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.46626765E 09	0.10482120E 09
THRUST COEFFICIENT	CF	1.6206732	1.6206732
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3648.7075	8044.0234
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	182283.13	401865.63
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	25.671371	56.595703
INERT MASS REMAINING (KG,LBM)	MIR	2520.6729	5557.1328
TOTAL BURN AREA (M**2,IN**2)	ABTOT	278.66064	431925.19
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	153.53745	9369434.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	271993.63	599643.31
TOTAL GAS MASS (KG,LBM)	WGTOT	801.86450	1767.8091
RATIO OF SPECIFIC HEATS	GAMA	1.1615915	1.1615915
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.873659	28.381561
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.5396	5136.2852
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.16349399	0.16349399
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.40400307E 09	585.95703
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.20773097E 11	30128.836
BURN AREA (M**2,IN**2)	AHH	11.696140	18129.055
BURN RATE (M/S,IN/S)	RBZ(1)	0.74101798E-02	0.29173952
DISTANCE BURNED (M,IN)	TAUZ(1)	0.31868982	12.546846
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.19622958	11974.672
GAS VOLUME (M**3,IN**3)	VPH	12.329708	752405.31
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3439.9629	6191.9336
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	229.17328	355219.31
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	27.440170	42532.359
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	149.11432	9099518.0
GAS VOLUME (M**3,IN**3)	VP	159.37469	9725645.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.39460710E 09	572.32935
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.19913585E 11	28882.215
BURN AREA (M**2,IN**2)	AAN	10.351347	16044.621
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.73469765E-02	0.28925121
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.31371689	12.351061
PROPELLANT VOLUME (M**3,IN**3)	VFN	4.2268867	257940.56
GAS VOLUME (M**3,IN**3)	VPN	7.7987909	475911.63
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3433.1182	6179.6133
PORT AREA (M**2,IN**2)	AP	5.3451271	8284.9648
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4472551	2243.2510
EXPANSION RATIO	EPR	6.8838549	6.8838549
PRESSURE RATIO	PEPO	0.22657380E-01	0.22657380E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	585.96	585.95	6191.93	12.48	0.004	245.77	15638.39	339.05	338.49	-0.56	0.2917	12.547	0.2935	12.547
30.000	585.95	585.94	6191.93	17.57	0.006	245.85	15638.18	477.25	137.69	-0.52	0.2917	12.547	0.2917	12.547
60.000	585.94	585.93	6191.92	22.66	0.007	245.93	15637.97	615.51	137.73	-0.52	0.2917	12.546	0.2917	12.546
90.000	585.94	585.92	6191.91	27.75	0.008	246.02	15637.76	753.80	137.78	-0.52	0.2917	12.545	0.2917	12.545
103.269	585.93	585.91	6191.90	30.02	0.009	246.05	15637.67	815.64	60.95	-0.88	0.2917	12.543	0.2917	12.543
118.800	585.97	585.86	6191.77	66.48	0.019	299.31	7128.81	823.31	318.30	0.22	0.2917	12.536	0.2917	12.536
148.800	585.93	585.76	6191.69	79.06	0.022	301.14	7220.27	991.48	168.16	-0.02	0.2917	12.535	0.2917	12.535
178.800	585.87	585.64	6191.61	91.42	0.026	302.98	7311.42	1160.69	169.18	-0.02	0.2917	12.533	0.2917	12.533
208.800	585.80	585.51	6191.52	103.56	0.029	304.81	7402.25	1330.91	170.21	-0.02	0.2917	12.531	0.2917	12.531
238.800	585.72	585.36	6191.41	115.50	0.033	306.65	7492.76	1502.16	171.22	-0.02	0.2917	12.529	0.2917	12.529
268.800	585.63	585.19	6191.30	127.25	0.036	308.48	7582.96	1674.42	172.24	-0.02	0.2917	12.527	0.2917	12.527
298.800	585.53	585.01	6191.18	138.81	0.039	310.32	7672.86	1847.71	173.26	-0.03	0.2917	12.525	0.2917	12.525
328.800	585.43	584.82	6191.04	150.20	0.042	312.15	7762.43	2022.01	174.28	-0.03	0.2916	12.523	0.2916	12.523
358.800	585.31	584.60	6190.91	161.42	0.045	313.99	7851.68	2197.33	175.29	-0.03	0.2916	12.520	0.2916	12.520
388.800	585.18	584.38	6190.76	172.48	0.049	315.82	7940.63	2373.67	176.30	-0.03	0.2916	12.518	0.2916	12.518
402.094	585.12	584.27	6190.69	177.36	0.050	316.64	7979.95	2452.47	78.45	-0.35	0.2916	12.516	0.2916	12.516
430.089	584.86	583.52	6189.96	223.43	0.063	299.90	7158.85	2768.35	151.55	0.54	0.2915	12.503	0.2915	12.503
447.600	584.74	583.33	6189.85	229.65	0.065	301.02	7214.80	2866.79	98.14	-0.30	0.2915	12.501	0.2915	12.501
477.600	584.54	582.99	6189.65	240.14	0.068	302.95	7310.39	3035.79	168.98	-0.01	0.2914	12.498	0.2914	12.498
507.600	584.33	582.64	6189.45	250.48	0.071	304.88	7405.63	3205.85	170.04	-0.01	0.2914	12.495	0.2914	12.495
537.600	584.11	582.28	6189.24	260.66	0.073	306.81	7500.54	3376.96	171.10	-0.02	0.2914	12.492	0.2914	12.492
567.600	583.87	581.90	6189.03	270.70	0.076	308.73	7595.11	3549.13	172.15	-0.02	0.2913	12.488	0.2913	12.488
597.600	583.63	581.52	6188.81	280.61	0.079	310.66	7689.34	3722.36	173.21	-0.02	0.2913	12.485	0.2913	12.485
627.600	583.38	581.12	6188.59	290.40	0.082	312.59	7783.23	3896.64	174.26	-0.02	0.2912	12.482	0.2912	12.482
657.600	583.12	580.71	6188.37	300.06	0.085	314.51	7876.77	4071.97	175.31	-0.02	0.2912	12.478	0.2912	12.478
685.637	582.88	580.32	6188.15	309.01	0.087	316.32	7963.90	4237.10	164.78	-0.35	0.2911	12.475	0.2911	12.475
701.100	582.67	579.22	6186.82	359.26	0.101	298.81	7105.10	4387.51	317.80	0.23	0.2910	12.457	0.2910	12.457
731.100	582.32	578.68	6186.55	368.60	0.104	300.63	7195.67	4554.94	167.43	-0.00	0.2910	12.454	0.2910	12.454
761.100	581.96	578.14	6186.27	377.83	0.106	302.45	7285.95	4723.37	168.43	-0.00	0.2909	12.450	0.2909	12.450
791.100	581.59	577.59	6186.00	386.96	0.109	304.27	7375.92	4892.78	169.41	-0.01	0.2908	12.446	0.2908	12.446
821.100	581.21	577.02	6185.71	395.99	0.112	306.09	7465.59	5063.18	170.39	-0.01	0.2908	12.442	0.2908	12.442
851.100	580.82	576.45	6185.43	404.94	0.114	307.92	7554.98	5234.55	171.37	-0.01	0.2907	12.437	0.2907	12.437
881.100	580.43	575.87	6185.14	413.80	0.117	309.74	7644.06	5406.91	172.35	-0.01	0.2906	12.433	0.2906	12.433
911.100	580.03	575.28	6184.85	422.57	0.119	311.56	7732.85	5580.25	173.33	-0.01	0.2906	12.429	0.2906	12.429
941.100	579.62	574.67	6184.56	431.27	0.122	313.38	7821.34	5754.55	174.30	-0.02	0.2905	12.425	0.2905	12.425
971.100	579.21	574.06	6184.26	439.90	0.124	315.21	7909.53	5929.84	175.27	-0.02	0.2904	12.420	0.2904	12.420
984.496	579.02	573.79	6184.13	443.75	0.125	316.02	7948.82	6008.75	78.57	-0.33	0.2903	12.416	0.2903	12.416
1012.270	578.39	571.17	6181.13	521.93	0.147	299.51	7141.96	6324.04	0.0	0.57	0.2900	12.384	0.2900	12.384
1029.900	578.00	570.72	6181.03	524.35	0.148	301.16	7225.40	6422.59	98.28	-0.28	0.2900	12.379	0.2900	12.379
1059.900	577.32	569.94	6180.86	528.49	0.149	303.98	7366.77	6591.05	168.46	0.00	0.2900	12.376	0.2900	12.376
1089.900	576.66	569.16	6180.68	532.67	0.150	306.80	7507.37	6761.03	169.99	0.00	0.2899	12.373	0.2899	12.373
1119.900	575.99	568.38	6180.50	536.91	0.151	309.61	7647.20	6932.52	171.50	-0.00	0.2898	12.370	0.2898	12.370
1149.900	575.33	567.61	6180.31	541.21	0.153	312.43	7786.25	7105.54	173.01	-0.00	0.2897	12.367	0.2897	12.367
1179.900	574.67	566.84	6180.13	545.55	0.154	315.25	7924.53	7280.06	174.52	-0.01	0.2896	12.363	0.2896	12.363
1209.900	574.01	566.06	6179.93	549.95	0.155	318.06	8062.04	7456.10	176.03	-0.01	0.2895	12.360	0.2895	12.360
1239.900	573.36	565.29	6179.74	554.39	0.156	320.88	8198.77	7633.66	177.54	-0.01	0.2894	12.357	0.2894	12.357
1258.900	572.95	564.80	6179.61	557.23	0.157	322.66	8284.96	7746.88	113.22	-0.01	0.2893	12.354	0.2893	12.354
AFT	572.33	563.52	6178.60	579.82	0.163	.....	8284.96	8044.02	297.02	-0.13	0.2893	12.351	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0327E 02	5.8593E 02	5.8591E 02	6.1919E 03	2.9515E 01	1.6061E 04	7.8865E 00	4.2292E 02	2.9137E-01	5.8618E-01	8.2353E 02
AFT	1.1880E 02	5.8588E 02	5.8586E 02	6.1918E 03	2.9509E 01	1.6061E 04	0.0	0.0	0.0	0.0	8.2331E 02

GAS BUILDUP IN SLOT, DW/DT = 2.1947E-01

FOREWARD	4.0209E 02	5.8512E 02	5.8427E 02	6.1907E 03	9.3536E 01	1.6061E 04	1.5059E 02	8.0806E 03	2.9118E-01	5.8575E-01	2.6031E 03
AFT	4.3009E 02	5.8436E 02	5.8352E 02	6.1900E 03	9.3627E 01	1.6061E 04	1.6584E 02	8.9017E 03	2.9109E-01	5.8555E-01	2.6025E 03

GAS BUILDUP IN SLOT, DW/DT = 5.4237E-01

FOREWARD	6.8564E 02	5.8288E 02	5.8032E 02	6.1881E 03	1.5868E 02	1.6061E 04	1.5065E 02	8.0967E 03	2.9072E-01	5.8476E-01	4.3877E 03
AFT	7.0110E 02	5.8177E 02	5.7922E 02	6.1868E 03	1.5893E 02	1.6061E 04	0.0	0.0	0.0	0.0	4.3875E 03

GAS BUILDUP IN SLOT, DW/DT = 2.3436E-01

FOREWARD	9.8450E 02	5.7902E 02	5.7379E 02	6.1841E 03	2.2513E 02	1.6061E 04	1.5053E 02	8.1118E 03	2.8996E-01	5.8315E-01	6.1593E 03
AFT	1.0123E 03	5.7638E 02	5.7117E 02	6.1811E 03	2.2603E 02	1.6061E 04	1.6533E 02	8.9186E 03	2.8965E-01	5.8249E-01	6.1587E 03

GAS BUILDUP IN SLOT, DW/DT = 5.6592E-01

IGNITION TIME, TIME (S) 43.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	8057138.0	1811317.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	9066889.0	2038318.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	46812.398	10523.848
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.44129690E 09	99207536.
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.48459008E 09	0.10894024E 09
THRUST COEFFICIENT	CF	1.6197262	1.6197262
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3576.9424	7885.8086
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	189508.81	417795.44
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	25.123871	55.388672
INERT MASS REMAINING (KG,LBM)	MIR	2470.4250	5446.3555
TOTAL BURN AREA (M**2,IN**2)	ABTOT	274.61279	425651.00
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	149.44312	9119583.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	264740.44	583652.81
TOTAL GAS MASS (KG,LBM)	WGTOT	801.28271	1766.5261
RATIO OF SPECIFIC HEATS	GAMA	1.1615858	1.1615858
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.870205	28.373947
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.3049	5135.5156
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.15986437	0.15986437
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.39525299E 09	573.26611
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.21572354E 11	31288.059
BURN AREA (M**2,IN**2)	AHH	9.7198458	15065.793
BURN RATE (M/S,IN/S)	RBZ(1)	0.73725730E-02	0.29025888
DISTANCE BURNED (M,IN)	TAUZ(1)	0.33351022	13.130325
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.37533335E-01	2290.4258
GAS VOLUME (M**3,IN**3)	VPH	12.488405	762089.56
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3437.4302	6187.3750
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	227.78389	353065.75
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	26.772217	41497.027
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	145.33070	8868628.0
GAS VOLUME (M**3,IN**3)	VP	162.24034	9900518.0
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.38652902E 09	560.61328
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.20694716E 11	30015.156
BURN AREA (M**2,IN**2)	AAN	10.337106	16022.547
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.73127635E-02	0.28790420
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.32841080	12.929563
PROPELLANT VOLUME (M**3,IN**3)	VFN	4.0748577	248663.19
GAS VOLUME (M**3,IN**3)	VPN	7.9508190	485189.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3430.8938	6175.6094
PORT AREA (M**2,IN**2)	AP	5.4662561	8472.7148
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4482193	2244.7451
EXPANSION RATIO	EPR	6.8792725	6.8792725
PRESSURE RATIO	PEPO	0.22677530E-01	0.22677530E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	573.27	573.27	6187.38	10.46	0.003	197.04	15767.57	280.38	279.87	-0.51	0.2903	13.130	0.2917	13.131
30.000	573.26	573.26	6187.36	14.57	0.005	197.11	15767.41	390.67	109.83	-0.47	0.2903	13.130	0.2903	13.130
60.000	573.26	573.25	6187.36	18.69	0.006	197.18	15767.24	501.01	109.87	-0.47	0.2903	13.130	0.2903	13.130
90.000	573.26	573.24	6187.35	22.80	0.007	197.25	15767.07	611.38	109.90	-0.47	0.2903	13.128	0.2903	13.128
102.686	573.25	573.24	6187.35	24.57	0.007	197.28	15767.00	658.71	46.49	-0.84	0.2903	13.127	0.2903	13.127
118.800	573.28	573.20	6187.26	53.45	0.015	302.97	7304.51	663.90	309.72	0.26	0.2903	13.119	0.2903	13.119
148.800	573.24	573.13	6187.20	66.25	0.019	304.81	7397.22	833.22	169.35	0.03	0.2903	13.118	0.2903	13.118
178.800	573.19	573.03	6187.13	78.82	0.022	306.64	7489.58	1003.56	170.37	0.03	0.2902	13.116	0.2902	13.116
208.800	573.14	572.92	6187.04	91.18	0.026	308.48	7581.57	1174.92	171.39	0.03	0.2902	13.114	0.2902	13.114
238.800	573.07	572.79	6186.95	103.33	0.029	310.31	7673.21	1347.30	172.40	0.03	0.2902	13.112	0.2902	13.112
268.800	572.99	572.64	6186.85	115.28	0.032	312.15	7764.49	1520.69	173.42	0.02	0.2902	13.110	0.2902	13.110
298.800	572.90	572.48	6186.73	127.05	0.036	313.98	7855.41	1695.10	174.43	0.02	0.2902	13.108	0.2902	13.108
328.800	572.81	572.30	6186.61	138.64	0.039	315.82	7945.98	1870.51	175.44	0.02	0.2902	13.106	0.2902	13.106
358.800	572.70	572.11	6186.48	150.06	0.042	317.65	8036.19	2046.95	176.45	0.02	0.2901	13.104	0.2901	13.104
388.800	572.59	571.90	6186.34	161.32	0.046	319.49	8126.04	2224.39	177.46	0.02	0.2901	13.101	0.2901	13.101
401.512	572.54	571.81	6186.28	166.07	0.047	320.26	8164.01	2300.21	75.50	-0.32	0.2901	13.099	0.2901	13.099
430.671	572.30	571.15	6185.63	209.73	0.059	303.60	7336.69	2607.74	147.27	0.60	0.2900	13.086	0.2900	13.086
447.600	572.20	570.98	6185.52	215.88	0.061	304.69	7391.50	2703.58	95.57	-0.27	0.2900	13.084	0.2900	13.084
477.600	572.02	570.67	6185.34	226.62	0.064	306.61	7488.34	2873.73	170.18	0.03	0.2900	13.081	0.2900	13.081
507.600	571.82	570.34	6185.14	237.19	0.067	308.54	7584.78	3044.94	171.24	0.03	0.2900	13.078	0.2900	13.078
537.600	571.62	570.00	6184.94	247.62	0.070	310.47	7680.83	3217.19	172.29	0.03	0.2899	13.074	0.2899	13.074
567.600	571.40	569.66	6184.73	257.89	0.073	312.39	7776.50	3390.50	173.34	0.03	0.2899	13.071	0.2899	13.071
597.600	571.18	569.29	6184.52	268.03	0.076	314.32	7871.79	3564.86	174.39	0.03	0.2898	13.068	0.2898	13.068
627.600	570.95	568.92	6184.30	278.05	0.078	316.25	7966.68	3740.27	175.43	0.03	0.2898	13.064	0.2898	13.064
657.600	570.71	568.53	6184.08	287.93	0.081	318.17	8061.18	3916.72	176.48	0.03	0.2897	13.061	0.2897	13.061
685.055	570.48	568.17	6183.88	296.91	0.084	319.94	8147.34	4079.45	162.43	-0.30	0.2897	13.057	0.2897	13.057
701.100	570.30	567.18	6182.66	344.72	0.097	302.46	7260.04	4225.69	309.33	0.27	0.2895	13.039	0.2895	13.039
731.100	569.97	566.68	6182.39	354.31	0.100	304.28	7371.83	4394.29	168.65	0.04	0.2895	13.036	0.2895	13.036
761.100	569.63	566.17	6182.12	363.79	0.103	306.11	7463.27	4563.89	169.64	0.04	0.2895	13.032	0.2895	13.032
791.100	569.29	565.64	6181.85	373.16	0.105	307.93	7554.36	4734.46	170.62	0.04	0.2894	13.028	0.2894	13.028
821.100	568.93	565.11	6181.57	382.44	0.108	309.75	7645.12	4906.02	171.60	0.04	0.2894	13.023	0.2894	13.023
851.100	568.57	564.57	6181.29	391.62	0.110	311.57	7735.54	5078.55	172.57	0.04	0.2893	13.019	0.2893	13.019
881.100	568.20	564.01	6181.00	400.71	0.113	313.39	7825.63	5252.05	173.54	0.04	0.2892	13.014	0.2892	13.014
911.100	567.83	563.45	6180.71	409.72	0.116	315.21	7915.37	5426.54	174.52	0.03	0.2892	13.010	0.2892	13.010
941.100	567.45	562.88	6180.42	418.65	0.118	317.03	8004.77	5601.98	175.49	0.03	0.2891	13.006	0.2891	13.006
971.100	567.05	562.29	6180.12	427.50	0.121	318.85	8093.83	5778.40	176.46	0.03	0.2890	13.001	0.2890	13.001
983.916	566.88	562.04	6179.99	431.29	0.122	319.63	8131.77	5854.38	75.67	-0.31	0.2890	12.997	0.2890	12.997
1012.849	566.31	559.65	6177.21	506.19	0.143	303.21	7319.67	6161.44	0.0	0.62	0.2886	12.964	0.2886	12.964
1029.900	565.95	559.23	6177.10	508.77	0.143	304.81	7401.48	6257.45	95.76	-0.26	0.2886	12.959	0.2886	12.959
1059.900	565.32	558.49	6176.92	513.31	0.145	307.62	7544.72	6427.09	169.68	0.05	0.2886	12.956	0.2886	12.956
1089.900	564.69	557.75	6176.73	517.89	0.146	310.44	7687.09	6598.24	171.20	0.05	0.2885	12.953	0.2885	12.953
1119.900	564.07	557.01	6176.54	522.52	0.147	313.25	7828.58	6770.90	172.71	0.05	0.2884	12.949	0.2884	12.949
1149.900	563.44	556.26	6176.34	527.19	0.149	316.07	7969.20	6945.07	174.21	0.04	0.2883	12.946	0.2883	12.946
1179.900	562.82	555.52	6176.15	531.90	0.150	318.89	8108.94	7120.74	175.72	0.04	0.2882	12.943	0.2882	12.943
1209.900	562.20	554.78	6175.95	536.65	0.151	321.70	8247.80	7297.93	177.22	0.04	0.2881	12.939	0.2881	12.939
1239.900	561.59	554.04	6175.74	541.45	0.153	324.52	8385.78	7476.61	178.73	0.04	0.2881	12.936	0.2881	12.936
1258.900	561.20	553.57	6175.61	544.51	0.154	326.30	8472.71	7590.55	113.96	0.02	0.2880	12.932	0.2880	12.932
AFT	560.61	552.36	6174.63	566.84	0.160	.....	8472.71	7885.81	295.23	-0.04	0.2879	12.930	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0269E 02	5.7325E 02	5.7324E 02	6.1873E 03	2.4318E 01	1.6061E 04	5.4468E 00	2.9358E 02	2.89A9E-01	5.8274E-01	6.6415F 02
AFT	1.1880E 02	5.7322E 02	5.7320E 02	6.1873E 03	2.4310E 01	1.6061E 04	0.0	0.0	0.0	0.0	6.6390F 02

GAS BUILDUP IN SLOT, DW/DT = 2.5720E-01

FOREWARD	4.0151E 02	5.7254E 02	5.7181E 02	6.1863E 03	8.9792E 01	1.6061E 04	1.4642E 02	7.8966E 03	2.8972E-01	5.8236E-01	2.4466F 03
AFT	4.3067E 02	5.7188E 02	5.7115E 02	6.1856E 03	8.9864E 01	1.6061E 04	1.6172E 02	8.7239E 03	2.8964E-01	5.8218E-01	2.4460F 03

GAS BUILDUP IN SLOT, DW/DT = 6.0183E-01

FOREWARD	6.8506E 02	5.7048E 02	5.6817E 02	6.1839E 03	1.5603E 02	1.6061E 04	1.4651E 02	7.9132E 03	2.8929F-01	5.8144E-01	4.2260F 03
AFT	7.0110E 02	5.6949E 02	5.6718E 02	6.1827E 03	1.5626E 02	1.6061E 04	0.0	0.0	0.0	0.0	4.2257F 03

GAS BUILDUP IN SLOT, DW/DT = 2.6995E-01

FOREWARD	9.8392E 02	5.6688E 02	5.6204E 02	6.1800E 03	2.2383E 02	1.6061E 04	1.4643E 02	7.9288E 03	2.8856E-01	5.7991E-01	6.0008F 03
AFT	1.0128E 03	5.6447E 02	5.5965E 02	6.1772E 03	2.2466E 02	1.6061E 04	1.6127E 02	8.7409E 03	2.8828E-01	5.7929E-01	6.0002F 03

GAS BUILDUP IN SLOT, DW/DT = 6.2284E-01

IGNITION TIME, TIME (S) 45.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	TDEL	7891002.0	1773968.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8900752.0	2000969.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	44897.582	10093.379
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.45724518E 09	0.10279282E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.50255770E 09	0.11297952E 09
THRUST COEFFICIENT	CF	1.6185961	1.6185961
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3514.3289	7747.7695
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	196600.06	433429.00
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	24.096207	53.123047
INERT MASS REMAINING (KG,LBM)	MIR	2422.2327	5340.1094
TOTAL BURN AREA (M**2,IN**2)	ABTOT	271.03638	420107.38
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	145.51619	8879947.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	257783.81	568316.13
TOTAL GAS MASS (KG,LBM)	WGTOT	801.50464	1767.0156
RATIO OF SPECIFIC HEATS	GAMA	1.1615801	1.1615801
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.867181	28.367279
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.1001	5134.8438
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.15637630	0.15637630
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.38758784E 09	562.14893
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.22355194E 11	32423.473
BURN AREA (M**2,IN**2)	AHH	7.7535801	12018.074
BURN RATE (M/S,IN/S)	RBZ(1)	0.73390901E-02	0.28894067
DISTANCE BURNED (M,IN)	TAUZ(1)	0.34825534	13.710843
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3435.2058	6183.3711
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	226.84224	351606.19
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	26.117722	40482.574
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	141.59244	8640505.0
GAS VOLUME (M**3,IN**3)	VP	165.06517	10072899.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37946394E 09	550.36597
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.21460709E 11	31126.133
BURN AREA (M**2,IN**2)	AAN	10.322929	16000.574
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72824433E-02	0.28671044
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.34303635	13.505370
PROPELLANT VOLUME (M**3,IN**3)	VFN	3.9237452	239441.75
GAS VOLUME (M**3,IN**3)	VPN	8.1019316	494410.44
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3428.9602	6172.1289
PORT AREA (M**2,IN**2)	AP	5.5881681	8661.6797
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4491644	2246.2100
EXPANSION RATIO	EPR	6.8747864	6.8747864
PRESSURE RATIO	PEPO	0.22697281E-01	0.22697281E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	562.15	562.15	6183.37	8.43	0.002	154.89	15869.72	223.13	222.24	-0.89	0.2889	13.711	0.2903	13.711
30.000	562.15	562.15	6183.36	11.69	0.004	154.95	15869.59	309.52	85.94	-0.44	0.2889	13.711	0.2889	13.711
60.000	562.14	562.14	6183.36	14.96	0.005	155.01	15869.46	395.93	85.98	-0.44	0.2889	13.710	0.2889	13.710
90.000	562.14	562.13	6183.36	18.22	0.006	155.07	15869.34	482.38	86.01	-0.44	0.2889	13.709	0.2889	13.709
102.106	562.14	562.13	6183.36	19.56	0.006	155.09	15869.29	517.91	34.72	-0.81	0.2889	13.707	0.2889	13.707
118.800	562.15	562.11	6183.30	41.76	0.012	306.62	7481.44	521.17	301.41	0.28	0.2889	13.700	0.2889	13.700
148.800	562.13	562.05	6183.25	54.74	0.016	308.45	7575.41	691.72	170.61	0.06	0.2889	13.699	0.2889	13.699
178.800	562.09	561.97	6183.19	67.49	0.019	310.29	7668.96	863.28	171.62	0.06	0.2889	13.697	0.2889	13.697
208.800	562.04	561.87	6183.12	80.03	0.023	312.12	7762.13	1035.86	172.64	0.06	0.2889	13.695	0.2889	13.695
238.800	561.98	561.76	6183.03	92.35	0.026	313.96	7854.88	1209.45	173.65	0.06	0.2889	13.693	0.2889	13.693
268.800	561.91	561.63	6182.94	104.48	0.029	315.79	7947.23	1384.05	174.66	0.06	0.2889	13.691	0.2889	13.691
298.800	561.84	561.49	6182.83	116.42	0.033	317.63	8039.19	1559.66	175.67	0.06	0.2889	13.689	0.2889	13.689
328.800	561.75	561.33	6182.72	128.18	0.036	319.46	8130.74	1736.28	176.67	0.05	0.2889	13.686	0.2889	13.686
358.800	561.66	561.16	6182.59	139.76	0.039	321.30	8221.89	1913.91	177.68	0.05	0.2888	13.684	0.2888	13.684
388.800	561.56	560.97	6182.46	151.19	0.043	323.13	8312.63	2092.54	178.69	0.05	0.2888	13.682	0.2888	13.682
400.932	561.51	560.88	6182.41	155.79	0.044	323.87	8349.22	2165.39	72.55	-0.31	0.2888	13.679	0.2888	13.679
431.250	561.30	560.30	6181.83	197.18	0.056	307.28	7515.82	2464.79	143.12	0.63	0.2887	13.666	0.2887	13.666
447.600	561.22	560.15	6181.73	203.24	0.057	308.33	7569.45	2558.04	92.99	-0.26	0.2887	13.664	0.2887	13.664
477.600	561.04	559.86	6181.55	214.18	0.060	310.26	7667.52	2729.43	171.45	0.07	0.2887	13.661	0.2887	13.661
507.600	560.86	559.56	6181.36	224.97	0.063	312.18	7765.16	2901.86	172.50	0.06	0.2887	13.658	0.2887	13.658
537.600	560.68	559.25	6181.17	235.59	0.066	314.11	7862.36	3075.34	173.55	0.06	0.2886	13.654	0.2886	13.654
567.600	560.48	558.92	6180.97	246.07	0.069	316.03	7959.13	3249.87	174.59	0.06	0.2886	13.651	0.2886	13.651
597.600	560.27	558.58	6180.76	256.41	0.072	317.96	8055.45	3425.45	175.63	0.06	0.2886	13.647	0.2886	13.647
627.600	560.06	558.23	6180.55	266.62	0.075	319.89	8151.35	3602.06	176.68	0.06	0.2885	13.644	0.2885	13.644
657.600	559.84	557.86	6180.33	276.70	0.078	321.81	8246.80	3779.72	177.72	0.06	0.2885	13.640	0.2885	13.640
684.477	559.63	557.53	6180.13	285.66	0.081	323.54	8331.96	3940.10	160.10	-0.27	0.2884	13.637	0.2884	13.637
701.100	559.46	556.63	6179.02	331.20	0.093	306.10	7456.24	4082.27	301.13	0.29	0.2883	13.618	0.2883	13.618
731.100	559.15	556.16	6178.76	341.00	0.096	307.92	7549.23	4252.13	169.93	0.07	0.2883	13.615	0.2883	13.615
761.100	558.84	555.68	6178.49	350.70	0.099	309.74	7641.83	4422.97	170.92	0.07	0.2882	13.611	0.2882	13.611
791.100	558.52	555.18	6178.22	360.28	0.102	311.56	7734.05	4594.79	171.89	0.07	0.2882	13.606	0.2882	13.606
821.100	558.18	554.67	6177.95	369.76	0.104	313.38	7825.89	4767.58	172.86	0.07	0.2881	13.602	0.2881	13.602
851.100	557.85	554.16	6177.67	379.15	0.107	315.20	7917.34	4941.34	173.83	0.07	0.2880	13.597	0.2880	13.597
881.100	557.50	553.63	6177.38	388.44	0.110	317.02	8008.42	5116.07	174.80	0.07	0.2880	13.593	0.2880	13.593
911.100	557.14	553.09	6177.10	397.65	0.112	318.85	8099.11	5291.78	175.77	0.07	0.2879	13.588	0.2879	13.588
941.100	556.78	552.55	6176.80	406.78	0.115	320.67	8189.42	5468.45	176.74	0.07	0.2878	13.584	0.2878	13.584
971.100	556.41	551.99	6176.51	415.83	0.117	322.49	8279.34	5646.09	177.70	0.06	0.2878	13.579	0.2878	13.579
983.339	556.26	551.76	6176.39	419.53	0.118	323.23	8315.92	5719.14	72.77	-0.29	0.2877	13.575	0.2877	13.575
1013.425	555.72	549.56	6173.79	491.32	0.139	306.89	7498.73	6018.20	0.0	0.65	0.2874	13.541	0.2874	13.541
1029.900	555.40	549.18	6173.69	494.02	0.139	308.43	7578.83	6111.67	93.24	-0.24	0.2874	13.536	0.2874	13.536
1059.900	554.81	548.47	6173.50	498.92	0.141	311.25	7723.94	6282.56	170.97	0.08	0.2874	13.533	0.2874	13.533
1089.900	554.22	547.76	6173.30	503.85	0.142	314.06	7868.07	6454.96	172.48	0.08	0.2873	13.530	0.2873	13.530
1119.900	553.63	547.05	6173.10	508.82	0.144	316.88	8011.22	6628.87	173.98	0.08	0.2872	13.526	0.2872	13.526
1149.900	553.04	546.34	6172.89	513.83	0.145	319.69	8153.39	6804.27	175.48	0.07	0.2871	13.523	0.2871	13.523
1179.900	552.46	545.63	6172.69	518.87	0.146	322.51	8294.58	6981.18	176.98	0.07	0.2870	13.519	0.2870	13.519
1209.900	551.87	544.92	6172.48	523.95	0.148	325.32	8434.79	7159.58	178.48	0.07	0.2869	13.515	0.2869	13.515
1239.900	551.29	544.21	6172.27	529.07	0.149	328.14	8574.02	7339.48	179.98	0.07	0.2869	13.512	0.2869	13.512
1258.900	550.92	543.76	6172.13	532.33	0.150	329.92	8661.68	7454.19	114.75	0.04	0.2868	13.508	0.2868	13.508
AFT	550.37	542.61	6171.18	554.38	0.156	.....	8661.68	7747.77	293.60	0.02	0.2867	13.505	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0211E 02	5.6214E 02	5.6213E 02	6.1834E 03	1.9462E 01	1.6061E 04	3.5331E 00	1.9130E 02	2.8857E-01	5.7978E-01	5.2145E 02
AFT	1.1880E 02	5.6212E 02	5.6211E 02	6.1833E 03	1.9452E 01	1.6061E 04	0.0	0.0	0.0	0.0	5.2117E 02

GAS BUILDUP IN SLOT, DW/DT = 2.7865E-01

FOREWARD	4.0093E 02	5.6151E 02	5.6088E 02	6.1824E 03	8.6310E 01	1.6061E 04	1.4234E 02	7.7114E 03	2.8842E-01	5.7945E-01	2.3077E 03
AFT	4.3125E 02	5.6093E 02	5.6030E 02	6.1818E 03	8.6368E 01	1.6061E 04	1.5769E 02	8.5448E 03	2.8835E-01	5.7929E-01	2.3071E 03

GAS BUILDUP IN SLOT, DW/DT = 6.3405E-01

FOREWARD	6.8448E 02	5.5963E 02	5.5753E 02	6.1801E 03	1.5355E 02	1.6061E 04	1.4246E 02	7.7286E 03	2.8802E-01	5.7058E-01	4.0826E 03
AFT	7.0110E 02	5.5873E 02	5.5663E 02	6.1790E 03	1.5376E 02	1.6061E 04	0.0	0.0	0.0	0.0	4.0823E 03

GAS BUILDUP IN SLOT, DW/DT = 2.9017E-01

FOREWARD	9.8334E 02	5.5626E 02	5.5176E 02	6.1764E 03	2.2263E 02	1.6061E 04	1.4241E 02	7.7447E 03	2.8732E-01	5.7712E-01	5.8616E 03
AFT	1.0134E 03	5.5405E 02	5.4956E 02	6.1738E 03	2.2340E 02	1.6061E 04	1.5729E 02	8.5619E 03	2.8706E-01	5.7655E-01	5.8609E 03

GAS BUILDUP IN SLOT, DW/DT = 6.5370E-01

IGNITION TIME, TIME (S) 47.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7745193.0	1741189.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8754944.0	1968190.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	44026.008	9897.4414
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.47288115E 09	0.10630795E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.52021350E 09	0.11694867E 09
THRUST COEFFICIENT	CF	1.6178493	1.6178493
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3458.8188	7625.3906
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	203573.19	448802.13
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	23.628433	52.091797
INERT MASS REMAINING (KG,LBM)	MIR	2374.9758	5235.9258
TOTAL BURN AREA (M**2,IN**2)	ABTOT	267.85938	415183.19
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	141.66541	8644957.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	250962.13	553276.81
TOTAL GAS MASS (KG,LBM)	WGTOT	802.55811	1769.3381
RATIO OF SPECIFIC HEATS	GAMA	1.1615753	1.1615753
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.864489	28.361343
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.9192	5134.2500
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.15301967	0.15301967
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.38076800E 09	552.25757
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.23123550E 11	33537.879
BURN AREA (M**2,IN**2)	AHH	5.9060583	9154.4102
BURN RATE (M/S,IN/S)	RBZ(1)	0.73088855E-02	0.28775144
DISTANCE BURNED (M,IN)	TAUZ(1)	0.36293352	14.288724
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3433.2288	6179.8125
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	226.17352	350569.69
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	25.474319	39485.293
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	137.89191	8414684.0
GAS VOLUME (M**3,IN**3)	VP	167.85628	10243223.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37318118E 09	541.25366
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.22213353E 11	32217.750
BURN AREA (M**2,IN**2)	AAN	10.305715	15973.891
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72551593E-02	0.28563631
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.35760123	14.078791
PROPELLANT VOLUME (M**3,IN**3)	VFN	3.7734890	230272.56
GAS VOLUME (M**3,IN**3)	VPN	8.2521877	503579.63
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3427.2544	6169.0586
PORT AREA (M**2,IN**2)	AP	5.7109098	8851.9297
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4500923	2247.6484
EXPANSION RATIO	EPR	6.8703871	6.8703871
PRESSURE RATIO	PEPO	0.22716708E-01	0.22716708E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RRTO IN/SEC	TAUTO IN.
FORE	552.26	552.26	6179.81	6.48	0.002	116.75	15948.21	169.52	168.59	-0.94	0.2878	14.289	0.2889	14.289
30.000	552.26	552.26	6179.81	8.97	0.003	116.80	15948.11	234.46	64.52	-0.42	0.2878	14.289	0.2878	14.289
60.000	552.26	552.25	6179.80	11.45	0.004	116.86	15948.02	299.43	64.55	-0.42	0.2878	14.288	0.2878	14.288
90.000	552.25	552.25	6179.80	13.94	0.004	116.91	15947.92	364.43	64.58	-0.42	0.2878	14.287	0.2878	14.287
101.529	552.25	552.25	6179.80	14.92	0.005	116.93	15947.88	390.05	24.83	-0.79	0.2878	14.285	0.2878	14.285
118.800	552.26	552.23	6179.77	31.20	0.009	310.25	7659.68	391.82	293.29	0.29	0.2877	14.278	0.2877	14.278
148.800	552.24	552.19	6179.73	44.34	0.013	312.08	7754.89	563.65	171.91	0.08	0.2877	14.277	0.2877	14.277
178.800	552.21	552.13	6179.68	57.24	0.016	313.92	7849.64	736.49	172.92	0.08	0.2877	14.275	0.2877	14.275
208.800	552.17	552.05	6179.62	69.92	0.020	315.75	7943.96	910.34	173.93	0.08	0.2877	14.273	0.2877	14.273
238.800	552.12	551.95	6179.54	82.39	0.023	317.59	8037.83	1085.20	174.94	0.08	0.2877	14.271	0.2877	14.271
268.800	552.07	551.84	6179.46	94.66	0.027	319.42	8131.25	1261.07	175.95	0.08	0.2877	14.268	0.2877	14.268
298.800	552.00	551.71	6179.36	106.74	0.030	321.26	8224.23	1437.94	176.95	0.08	0.2877	14.266	0.2877	14.266
328.800	551.92	551.57	6179.25	118.64	0.033	323.09	8316.77	1615.82	177.96	0.08	0.2877	14.264	0.2877	14.264
358.800	551.84	551.41	6179.14	130.36	0.037	324.93	8408.86	1794.71	178.96	0.08	0.2877	14.262	0.2877	14.262
388.800	551.74	551.23	6179.01	141.93	0.040	326.76	8500.50	1974.59	179.96	0.08	0.2876	14.259	0.2876	14.259
400.355	551.70	551.16	6178.96	146.36	0.041	327.47	8538.69	2044.47	69.58	-0.30	0.2876	14.257	0.2876	14.257
431.826	551.52	550.65	6178.45	185.62	0.052	310.94	7696.31	2335.89	139.07	0.66	0.2876	14.243	0.2876	14.243
447.600	551.44	550.51	6178.36	191.56	0.054	311.96	7748.71	2426.55	90.41	-0.25	0.2876	14.241	0.2876	14.241
477.600	551.29	550.24	6178.18	202.69	0.057	313.88	7848.02	2599.22	172.76	0.09	0.2875	14.238	0.2875	14.238
507.600	551.12	549.96	6178.00	213.65	0.060	315.81	7946.84	2772.94	173.81	0.09	0.2875	14.235	0.2875	[illegible]
537.600	550.95	549.67	6177.81	224.45	0.063	317.73	8045.18	2947.70	174.85	0.09	0.2875	14.231	0.2875	14.231
567.600	550.76	549.36	6177.62	235.11	0.066	319.66	8143.04	3123.51	175.89	0.09	0.2874	14.228	0.2874	14.228
597.600	550.57	549.04	6177.42	245.62	0.069	321.58	8240.41	3300.36	176.93	0.09	0.2874	14.224	0.2874	14.224
627.600	550.37	548.71	6177.21	255.99	0.072	323.51	8337.30	3478.24	177.97	0.08	0.2874	14.221	0.2874	14.221
657.600	550.16	548.36	6177.00	266.24	0.075	325.44	8433.70	3657.17	179.01	0.08	0.2873	14.217	0.2873	14.217
683.901	549.97	548.05	6176.81	275.15	0.078	327.12	8517.83	3815.21	157.79	-0.25	0.2873	14.214	0.2873	14.214
701.100	549.81	547.25	6175.79	318.55	0.090	309.72	7633.77	3953.39	293.10	0.30	0.2871	14.194	0.2871	14.194
731.100	549.52	546.80	6175.53	328.55	0.093	311.54	7727.96	4124.54	171.26	0.09	0.2871	14.192	0.2871	14.192
761.100	549.23	546.34	6175.27	338.43	0.095	313.36	7821.72	4296.69	172.24	0.09	0.2871	14.187	0.2871	14.187
791.100	548.93	545.87	6175.00	348.20	0.098	315.18	7915.05	4469.81	173.21	0.09	0.2870	14.183	0.2870	14.183
821.100	548.62	545.39	6174.73	357.86	0.101	317.00	8007.97	4643.89	174.18	0.09	0.2870	14.178	0.2870	14.178
851.100	548.30	544.89	6174.46	367.43	0.104	318.82	8100.45	4818.95	175.15	0.09	0.2869	14.173	0.2869	14.173
881.100	547.97	544.39	6174.18	376.90	0.106	320.64	8192.52	4994.96	176.11	0.09	0.2869	14.169	0.2869	14.169
911.100	547.64	543.88	6173.89	386.28	0.109	322.46	8284.16	5171.95	177.08	0.09	0.2868	14.164	0.2868	14.164
941.100	547.29	543.36	6173.61	395.59	0.112	324.28	8375.36	5349.90	178.04	0.09	0.2867	14.159	0.2867	14.159
971.100	546.94	542.82	6173.31	404.81	0.114	326.10	8466.14	5528.81	179.00	0.09	0.2867	14.155	0.2867	14.155
982.764	546.80	542.61	6173.20	408.40	0.115	326.81	8501.33	5598.95	69.85	-0.29	0.2866	14.150	0.2866	14.150
1013.999	546.31	540.60	6170.78	477.22	0.135	310.55	7679.18	5890.13	0.0	0.67	0.2863	14.116	0.2863	14.116
1029.900	546.02	540.24	6170.67	480.01	0.135	312.04	7757.52	5981.06	90.70	-0.23	0.2863	14.111	0.2863	14.111
1059.900	545.46	539.56	6170.47	485.24	0.137	314.86	7904.49	6153.26	172.30	0.10	0.2863	14.108	0.2863	14.108
1089.900	544.90	538.88	6170.27	490.49	0.138	317.67	8050.38	6326.97	173.81	0.10	0.2862	14.104	0.2862	14.104
1119.900	544.35	538.21	6170.06	495.78	0.140	320.49	8195.18	6502.17	175.31	0.10	0.2861	14.101	0.2861	14.101
1149.900	543.79	537.53	6169.85	501.09	0.141	323.30	8338.90	6678.87	176.80	0.10	0.2860	14.097	0.2860	14.097
1179.900	543.24	536.85	6169.64	506.43	0.143	326.11	8481.53	6857.07	178.29	0.10	0.2859	14.093	0.2859	14.093
1209.900	542.69	536.16	6169.42	511.80	0.144	328.93	8623.07	7036.75	179.79	0.10	0.2859	14.089	0.2859	14.089
1239.900	542.13	535.48	6169.20	517.21	0.146	331.74	8763.54	7217.93	181.28	0.09	0.2858	14.086	0.2858	14.086
1258.900	541.78	535.05	6169.06	520.65	0.147	333.52	8851.93	7333.45	115.57	0.06	0.2857	14.082	0.2857	14.082
AFT	541.25	533.95	6168.14	542.40	0.153	.....	8851.93	7625.39	292.01	0.07	0.2856	14.079	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AG SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0153E 02	5.5225E 02	5.5225E 02	6.1798E 03	1.4892E 01	1.6061E 04	2.0728E 00	1.1270E 02	2.8738E-01	5.7715E-01	3.9212E 02
AFT	1.1880E 02	5.5224E 02	5.5223E 02	6.1798E 03	1.4881E 01	1.6061E 04	0.0	0.0	0.0	0.0	3.9182E 02

GAS BUILDUP IN SLOT, DW/DT = 2.9391E-01

FOREWARD	4.0036E 02	5.5170E 02	5.5116E 02	6.1790E 03	8.3049E 01	1.6061E 04	1.3834E 02	7.5249E 03	2.8725E-01	5.7685E-01	2.1828E 03
AFT	4.3183E 02	5.5119E 02	5.5065E 02	6.1784E 03	8.3095E 01	1.6061E 04	1.5373E 02	8.3643E 03	2.8719E-01	5.7670E-01	2.1822E 03

GAS BUILDUP IN SLOT, DW/DT = 6.5627E-01

FOREWARD	6.8390E 02	5.4997E 02	5.4805E 02	6.1768E 03	1.5123E 02	1.6061E 04	1.3848E 02	7.5428E 03	2.8687E-01	5.7604E-01	3.9537E 03
AFT	7.0110E 02	5.4916E 02	5.4725E 02	6.1758E 03	1.5141E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.9534E 03

GAS BUILDUP IN SLOT, DW/DT = 3.0434E-01

FOREWARD	9.8276E 02	5.4680E 02	5.4261E 02	6.1732E 03	2.2152E 02	1.6061E 04	1.3846E 02	7.5593E 03	2.8621E-01	5.7465E-01	5.7374E 03
AFT	1.0140E 03	5.4477E 02	5.4060E 02	6.1708E 03	2.2224E 02	1.6061E 04	1.5339E 02	8.3814E 03	2.8596E-01	5.7411E-01	5.7367E 03

GAS BUILDUP IN SLOT, DW/DT = 6.7455E-01

IGNITION TIME, TIME (S) 49.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7613593.0	1711604.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8623343.0	1938605.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	43644.695	9811.7188
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.48823987E 09	0.10976074E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.53759155E 09	0.12085546E 09
THRUST COEFFICIENT	CF	1.6173916	1.6173916
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3408.2185	7513.8359
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	210440.19	463941.31
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	23.423782	51.640625
INERT MASS REMAINING (KG,LBM)	MIR	2328.1282	5132.6445
TOTAL BURN AREA (M**2,IN**2)	ABTOT	264.94824	410670.88
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	137.84816	8412015.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	244199.81	538368.50
TOTAL GAS MASS (KG,LBM)	WGTOT	804.18872	1772.9331
RATIO OF SPECIFIC HEATS	GAMA	1.1615705	1.1615705
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.862031	28.355927
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.7524	5133.7031
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.14978683	0.14978683
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37454643E 09	543.23389
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.23878861E 11	34633.367
BURN AREA (M**2,IN**2)	AHH	4.1756668	6472.2969
BURN RATE (M/S,IN/S)	RBZ(1)	0.72809607E-02	0.28665215
DISTANCE BURNED (M,IN)	TAUZ(1)	0.37755126	14.864226
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3431.4233	6176.5625
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	225.66228	349777.25
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	24.840500	38502.875
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	134.22397	8190853.0
GAS VOLUME (M**3,IN**3)	VP	170.61845	10411782.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.36744422E 09	532.93311
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.22953976E 11	33291.934
BURN AREA (M**2,IN**2)	AAN	10.270009	15918.547
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72299317E-02	0.28464305
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.37211150	14.650063
PROPELLANT VOLUME (M**3,IN**3)	VFN	3.6241808	221161.19
GAS VOLUME (M**3,IN**3)	VPN	8.4014959	512691.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3425.7051	6166.2695
PORT AREA (M**2,IN**2)	AP	5.8345165	9043.5195
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4510050	2249.0625
EXPANSION RATIO	EPR	6.8660669	6.8660669
PRESSURE RATIO	PEPO	0.22735737E-01	0.22735737E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	543.23	543.23	6176.56	4.63	0.001	80.90	16005.08	119.59	118.74	-0.85	0.2867	14.864	0.2878	14.864
30.000	543.23	543.23	6176.56	6.37	0.003	80.95	16005.01	164.55	44.54	-0.42	0.2867	14.864	0.2867	14.864
60.000	543.23	543.23	6176.56	8.12	0.003	81.00	16004.95	209.54	44.57	-0.42	0.2867	14.863	0.2867	14.863
90.000	543.23	543.23	6176.56	9.86	0.003	81.05	16004.88	254.56	44.60	-0.42	0.2867	14.862	0.2867	14.862
100.954	543.23	543.23	6176.55	10.52	0.004	81.07	16004.86	271.62	16.29	-0.77	0.2867	14.861	0.2867	14.861
118.800	543.23	543.22	6176.54	21.53	0.006	313.87	7839.26	272.34	285.30	0.30	0.2867	14.853	0.2867	14.853
148.800	543.22	543.19	6176.51	34.80	0.010	315.70	7935.71	445.48	173.25	0.10	0.2867	14.852	0.2867	14.852
178.800	543.20	543.14	6176.47	47.83	0.014	317.53	8031.67	619.64	174.25	0.10	0.2866	14.850	0.2866	14.850
208.800	543.17	543.07	6176.41	60.64	0.017	319.37	8127.14	794.80	175.26	0.10	0.2866	14.848	0.2866	14.848
238.800	543.12	542.99	6176.35	73.23	0.021	321.20	8222.12	970.97	176.27	0.10	0.2866	14.846	0.2866	14.846
268.800	543.07	542.89	6176.27	85.62	0.024	323.04	8316.61	1148.14	177.27	0.10	0.2866	14.844	0.2866	14.844
298.800	543.01	542.77	6176.18	97.82	0.028	324.87	8410.62	1326.32	178.27	0.10	0.2866	14.842	0.2866	14.842
328.800	542.94	542.64	6176.08	109.84	0.031	326.71	8504.13	1505.49	179.27	0.10	0.2866	14.839	0.2866	14.839
358.800	542.87	542.50	6175.97	121.69	0.034	328.54	8597.15	1685.67	180.27	0.10	0.2866	14.837	0.2866	14.837
388.800	542.78	542.34	6175.86	133.37	0.038	330.38	8689.68	1866.85	181.27	0.09	0.2866	14.835	0.2866	14.835
399.781	542.75	542.27	6175.81	137.63	0.039	331.05	8723.43	1933.74	66.60	-0.29	0.2865	14.832	0.2865	14.832
432.401	542.58	541.82	6175.35	174.88	0.049	314.59	7878.20	2217.28	135.07	0.66	0.2865	14.818	0.2865	14.818
447.600	542.51	541.70	6175.27	180.69	0.051	315.57	7929.34	2305.33	87.80	-0.24	0.2865	14.816	0.2865	14.816
477.600	542.37	541.45	6175.10	191.97	0.054	317.50	8029.88	2479.33	174.10	0.10	0.2865	14.813	0.2865	14.813
507.600	542.21	541.19	6174.93	203.09	0.057	319.42	8129.88	2654.37	175.14	0.10	0.2864	14.810	0.2864	14.810
537.600	542.06	540.91	6174.74	214.05	0.060	321.35	8229.36	2830.45	176.18	0.10	0.2864	14.806	0.2864	14.806
567.600	541.88	540.62	6174.55	224.85	0.063	323.27	8328.30	3007.57	177.22	0.10	0.2864	14.803	0.2864	14.803
597.600	541.71	540.32	6174.36	235.51	0.066	325.20	8426.72	3185.73	178.26	0.10	0.2863	14.799	0.2863	14.799
627.600	541.52	540.01	6174.16	246.04	0.069	327.12	8524.60	3364.92	179.29	0.10	0.2863	14.796	0.2863	14.796
657.600	541.32	539.68	6173.95	256.44	0.072	329.05	8621.95	3545.15	180.33	0.10	0.2863	14.792	0.2863	14.792
683.327	541.15	539.39	6173.77	265.28	0.075	330.70	8705.01	3700.86	155.47	-0.24	0.2862	14.788	0.2862	14.789
701.100	541.00	538.66	6172.83	306.67	0.086	313.33	7812.67	3835.10	285.21	0.31	0.2861	14.768	0.2861	14.768
731.100	540.74	538.24	6172.58	316.84	0.089	315.15	7908.06	4007.60	172.61	0.11	0.2861	14.766	0.2861	14.766
761.100	540.46	537.80	6172.32	326.88	0.092	316.97	8002.98	4181.08	173.59	0.11	0.2860	14.761	0.2860	14.761
791.100	540.17	537.35	6172.06	336.81	0.095	318.79	8097.43	4355.53	174.56	0.11	0.2860	14.757	0.2860	14.757
821.100	539.88	536.89	6171.80	346.64	0.098	320.61	8191.41	4530.94	175.52	0.11	0.2859	14.752	0.2859	14.752
851.100	539.58	536.43	6171.52	356.37	0.101	322.43	8284.93	4707.32	176.49	0.11	0.2859	14.747	0.2859	14.747
881.100	539.27	535.95	6171.25	366.00	0.103	324.25	8377.97	4884.66	177.45	0.11	0.2858	14.742	0.2858	14.742
911.100	538.95	535.46	6170.97	375.54	0.106	326.07	8470.55	5062.96	178.41	0.11	0.2858	14.738	0.2858	14.738
941.100	538.63	534.95	6170.68	384.99	0.109	327.89	8562.65	5242.23	179.37	0.11	0.2857	14.733	0.2857	14.733
971.100	538.30	534.44	6170.39	394.37	0.111	329.70	8654.29	5422.45	180.33	0.10	0.2856	14.728	0.2856	14.728
982.191	538.17	534.25	6170.29	397.84	0.112	330.38	8688.06	5489.64	66.91	-0.28	0.2856	14.723	0.2856	14.723
1014.571	537.71	532.40	6168.03	463.83	0.131	314.20	7861.08	5773.04	0.0	0.68	0.2853	14.688	0.2853	14.688
1029.900	537.44	532.07	6167.93	466.68	0.132	315.64	7937.59	5861.42	88.15	-0.23	0.2853	14.684	0.2853	14.684
1059.900	536.92	531.42	6167.72	472.21	0.133	318.45	8086.42	6034.96	173.66	0.11	0.2853	14.681	0.2853	14.681
1089.900	536.39	530.77	6167.51	477.76	0.135	321.27	8234.05	6210.01	175.17	0.11	0.2852	14.677	0.2852	14.677
1119.900	535.87	530.12	6167.30	483.33	0.136	324.08	8380.50	6386.55	176.66	0.11	0.2851	14.673	0.2851	14.673
1149.900	535.34	529.47	6167.08	488.92	0.138	326.89	8525.77	6564.58	178.15	0.11	0.2850	14.669	0.2850	14.669
1179.900	534.82	528.81	6166.86	494.54	0.140	329.71	8669.84	6744.10	179.63	0.11	0.2849	14.665	0.2849	14.665
1209.900	534.30	528.16	6166.64	500.18	0.141	332.52	8812.71	6925.11	181.12	0.11	0.2849	14.661	0.2849	14.661
1239.900	533.77	527.50	6166.41	505.85	0.143	335.33	8954.40	7107.60	182.61	0.11	0.2848	14.657	0.2848	14.657
1258.900	533.44	527.08	6166.27	509.46	0.144	337.11	9043.52	7223.94	116.41	0.07	0.2847	14.653	0.2847	14.653
AFT	532.93	526.04	6165.39	530.87	0.150	.....	9043.52	7513.84	289.99	0.09	0.2846	14.650	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0095E 02	5.4323E 02	5.4323E 02	6.1766E 03	1.0522E 01	1.6061E 04	1.0210E 00	5.5726E 01	2.8628E-01	5.7477E-01	2.7264E 02
AFT	1.1880E 02	5.4322E 02	5.4322E 02	6.1765E 03	1.0511E 01	1.6061E 04	0.0	0.0	0.0	0.0	2.7234E 02

GAS BUILDUP IN SLOT, DW/DT = 3.0053E-01

FOREWARD	3.9978E 02	5.4275E 02	5.4227E 02	6.1758E 03	7.9950E 01	1.6061E 04	1.3438E 02	7.3372E 03	2.8616E-01	5.7450E-01	2.0681E 03
AFT	4.3240E 02	5.4229E 02	5.4182E 02	6.1753E 03	7.9985E 01	1.6061E 04	1.4983E 02	8.1824E 03	2.8611E-01	5.7437E-01	2.0675E 03

GAS BUILDUP IN SLOT, DW/DT = 6.6300E-01

FOREWARD	6.8333E 02	5.4115E 02	5.3939E 02	6.1738E 03	1.4901E 02	1.6061E 04	1.3455E 02	7.3556E 03	2.8581E-01	5.7375E-01	3.8354E 03
AFT	7.0110E 02	5.4041E 02	5.3866E 02	6.1728E 03	1.4918E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8351E 03

GAS BUILDUP IN SLOT, DW/DT = 3.0995E-01

FOREWARD	9.8219E 02	5.3817E 02	5.3425E 02	6.1703E 03	2.2049E 02	1.6061E 04	1.3456E 02	7.3725E 03	2.8517E-01	5.7241E-01	5.6242E 03
AFT	1.0146E 03	5.3630E 02	5.3240E 02	6.1680E 03	2.2115E 02	1.6061E 04	1.4953E 02	8.1995E 03	2.8494E-01	5.7192E-01	5.6235E 03

GAS BUILDUP IN SLOT, DW/DT = 6.8057E-01

IGNITION TIME, TIME (S) 51.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7489002.0	1683595.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8498753.0	1910596.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	43298.047	9733.7891
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.50334259E 09	0.11315594E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.55471386E 09	0.12470466E 09
THRUST COEFFICIENT	CF	1.6169338	1.6169338
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3360.3308	7408.2617
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	217208.75	478863.38
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	23.237747	51.230469
INERT MASS REMAINING (KG,LBM)	MIR	2281.6528	5030.1836
TOTAL BURN AREA (M**2,IN**2)	ABTOT	262.16553	406357.44
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	134.06110	8180914.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	237491.00	523578.06
TOTAL GAS MASS (KG,LBM)	WGTOT	805.95288	1776.8225
RATIO OF SPECIFIC HEATS	GAMA	1.1615667	1.1615667
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.859713	28.350815
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.5952	5133.1875
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.14667022	0.14667022
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.36866560E 09	534.70459
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.24622076E 11	35711.305
BURN AREA (M**2,IN**2)	AHH	2.4518871	3800.4336
BURN RATE (M/S,IN/S)	RBZ(1)	0.72542578E-02	0.28560078
DISTANCE BURNED (M,IN)	TAUZ(1)	0.39211321	15.437531
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3429.7175	6173.4922
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	225.26396	349159.88
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	24.215302	37533.816
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	130.58519	7968801.0
GAS VOLUME (M**3,IN**3)	VP	173.35468	10578756.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.36201344E 09	525.05640
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.23683432E 11	34349.922
BURN AREA (M**2,IN**2)	AAN	10.234426	15863.395
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72057582E-02	0.28369141
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.38657135	15.219348
PROPELLANT VOLUME (M**3,IN**3)	VFN	3.4759073	212113.00
GAS VOLUME (M**3,IN**3)	VPN	8.5497694	521739.19
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3424.2402	6163.6328
PORT AREA (M**2,IN**2)	AP	5.9590092	9236.4844
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4519043	2250.4570
EXPANSION RATIO	EPR	6.8618126	6.8618126
PRESSURE RATIO	PEPO	0.22754479E-01	0.22754479E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RH IN/SEC	TAU IN.	RHTO IN/SEC	TAUTO IN.
FORE	534.70	534.70	6173.49	2.76	0.001	46.69	16041.65	70.27	69.47	-0.81	0.2856	15.438	0.2867	15.438
30.000	534.70	534.70	6173.49	3.78	0.003	46.74	16041.61	96.32	25.62	-0.44	0.2856	15.437	0.2856	15.437
60.000	534.70	534.70	6173.49	4.80	0.003	46.79	16041.58	122.41	25.64	-0.44	0.2856	15.437	0.2856	15.437
90.000	534.70	534.70	6173.49	5.83	0.003	46.84	16041.54	148.51	25.67	-0.44	0.2856	15.436	0.2856	15.436
100.382	534.70	534.70	6173.49	6.21	0.003	46.86	16041.53	158.16	8.89	-0.76	0.2856	15.434	0.2856	15.434
118.800	534.70	534.70	6173.48	12.42	0.004	317.47	8020.23	158.21	277.40	0.30	0.2856	15.427	0.2856	15.427
148.800	534.69	534.67	6173.46	25.80	0.007	319.30	8117.92	332.69	174.59	0.11	0.2856	15.425	0.2856	15.425
178.800	534.68	534.64	6173.43	38.95	0.011	321.14	8215.07	508.18	175.59	0.10	0.2856	15.424	0.2856	15.424
208.800	534.65	534.58	6173.38	51.87	0.015	322.97	8311.70	684.67	176.60	0.10	0.2856	15.421	0.2856	15.421
238.800	534.62	534.51	6173.32	64.58	0.018	324.80	8407.78	862.16	177.60	0.10	0.2856	15.419	0.2856	15.419
268.800	534.57	534.43	6173.25	77.08	0.022	326.64	8503.34	1040.66	178.60	0.10	0.2856	15.417	0.2856	15.417
298.800	534.52	534.32	6173.17	89.39	0.025	328.47	8598.36	1220.15	179.60	0.10	0.2856	15.415	0.2856	15.415
328.800	534.46	534.21	6173.08	101.52	0.029	330.31	8692.85	1400.65	180.60	0.10	0.2856	15.413	0.2856	15.413
358.800	534.39	534.07	6172.98	113.48	0.032	332.14	8786.80	1582.14	181.59	0.10	0.2855	15.410	0.2855	15.410
388.800	534.31	533.93	6172.87	125.27	0.035	333.98	8880.22	1764.63	182.59	0.10	0.2855	15.408	0.2855	15.408
399.208	534.28	533.87	6172.83	129.34	0.036	334.61	8912.51	1828.50	63.58	-0.30	0.2855	15.405	0.2855	15.405
432.973	534.14	533.47	6172.41	164.68	0.046	318.23	8061.52	2104.23	131.12	0.65	0.2854	15.391	0.2854	15.391
447.600	534.07	533.36	6172.34	170.34	0.048	319.17	8111.35	2189.63	85.16	-0.24	0.2854	15.389	0.2854	15.389
477.600	533.94	533.13	6172.18	181.77	0.051	321.09	8213.12	2364.97	175.45	0.11	0.2854	15.386	0.2854	15.386
507.600	533.80	532.88	6172.01	193.04	0.054	323.02	8314.31	2541.35	176.49	0.11	0.2854	15.383	0.2854	15.383
537.600	533.65	532.63	6171.84	204.14	0.058	324.94	8414.92	2718.76	177.52	0.11	0.2854	15.379	0.2854	15.379
567.600	533.49	532.36	6171.66	215.08	0.061	326.87	8514.95	2897.21	178.56	0.11	0.2853	15.376	0.2853	15.376
597.600	533.32	532.07	6171.47	225.88	0.064	328.79	8614.40	3076.70	179.59	0.11	0.2853	15.372	0.2853	15.372
627.600	533.15	531.78	6171.27	236.55	0.067	330.72	8713.27	3257.22	180.63	0.11	0.2853	15.368	0.2853	15.368
657.600	532.97	531.47	6171.07	247.08	0.070	332.64	8811.56	3438.77	181.66	0.11	0.2852	15.364	0.2852	15.364
682.755	532.81	531.20	6170.89	255.84	0.072	334.26	8893.53	3592.12	153.11	-0.24	0.2852	15.361	0.2852	15.361
701.100	532.68	530.54	6170.03	295.32	0.083	316.93	7992.98	3722.45	277.40	0.31	0.2851	15.341	0.2851	15.341
731.100	532.43	530.13	6169.79	305.65	0.086	318.75	8089.57	3896.30	173.97	0.11	0.2851	15.338	0.2851	15.338
761.100	532.16	529.72	6169.54	315.85	0.089	320.56	8185.64	4071.14	174.95	0.11	0.2850	15.334	0.2850	15.334
791.100	531.89	529.29	6169.28	325.93	0.092	322.38	8281.20	4246.93	175.91	0.11	0.2850	15.329	0.2850	15.329
821.100	531.62	528.85	6169.02	335.91	0.095	324.20	8376.25	4423.69	176.87	0.11	0.2849	15.324	0.2849	15.324
851.100	531.33	528.41	6168.75	345.78	0.098	326.02	8470.79	4601.41	177.84	0.11	0.2849	15.319	0.2849	15.319
881.100	531.04	527.95	6168.48	355.56	0.100	327.84	8564.81	4780.09	178.80	0.11	0.2848	15.314	0.2848	15.314
911.100	530.74	527.48	6168.20	365.24	0.103	329.66	8658.32	4959.73	179.75	0.11	0.2848	15.309	0.2848	15.309
941.100	530.43	527.00	6167.92	374.84	0.106	331.48	8751.32	5140.33	180.71	0.11	0.2847	15.304	0.2847	15.304
971.100	530.12	526.51	6167.63	384.36	0.108	333.29	8843.82	5321.88	181.67	0.11	0.2846	15.299	0.2846	15.299
981.621	530.00	526.33	6167.53	387.71	0.109	333.93	8876.14	5386.09	63.93	-0.28	0.2846	15.294	0.2846	15.294
1015.141	529.58	524.62	6165.43	451.00	0.127	317.84	8044.46	5661.77	0.0	0.67	0.2843	15.259	0.2843	15.259
1029.900	529.33	524.32	6165.32	453.88	0.128	319.23	8119.07	5747.55	85.55	-0.23	0.2843	15.254	0.2843	15.254
1059.900	528.84	523.70	6165.11	459.70	0.130	322.04	8269.76	5922.46	175.03	0.12	0.2843	15.251	0.2843	15.251
1089.900	528.34	523.08	6164.90	465.53	0.131	324.85	8419.14	6098.86	176.53	0.12	0.2842	15.247	0.2842	15.247
1119.900	527.84	522.46	6164.68	471.37	0.133	327.66	8567.23	6276.75	178.01	0.12	0.2841	15.243	0.2841	15.243
1149.900	527.35	521.83	6164.46	477.23	0.135	330.47	8714.03	6456.13	179.50	0.12	0.2841	15.239	0.2841	15.239
1179.900	526.85	521.20	6164.24	483.10	0.136	333.29	8859.54	6636.99	180.98	0.12	0.2840	15.235	0.2840	15.235
1209.900	526.35	520.57	6164.01	489.00	0.138	336.10	9003.74	6819.34	182.46	0.12	0.2839	15.231	0.2839	15.231
1239.900	525.85	519.93	6163.78	494.92	0.140	338.91	9146.65	7003.16	183.94	0.12	0.2838	15.227	0.2838	15.227
1258.900	525.53	519.53	6163.63	498.68	0.141	340.69	9236.48	7120.34	117.26	0.07	0.2837	15.223	0.2837	15.223
AFT	525.06	518.54	6162.78	519.76	0.147	.....	9236.48	7408.26	288.02	0.10	0.2837	15.219	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	1.0038E 02	5.3470E 02	5.3470E 02	6.1735E 03	6.2133E 00	1.6061E 04	3.4780E-01	1.9053E 01	2.8523E-01	5.7256E-01	1.5851F 02
AFT	1.1880E 02	5.3470E 02	5.3470E 02	6.1735E 03	6.2017E 00	1.6061E 04	0.0	0.0	0.0	0.0	1.5821F 02

GAS BUILDUP IN SLOT, DW/DT = 2.9631E-01

FOREWARD	3.9921E 02	5.3428E 02	5.3387E 02	6.1728E 03	7.6898E 01	1.6061E 04	1.3044E 02	7.1481E 03	2.8513E-01	5.7233E-01	1.9589F 03
AFT	4.3297E 02	5.3388E 02	5.3347E 02	6.1724E 03	7.6925E 01	1.6061E 04	1.4594E 02	7.9991E 03	2.8507E-01	5.7222E-01	1.9583F 03

GAS BUILDUP IN SLOT, DW/DT = 6.5162E-01

FOREWARD	6.8276E 02	5.3281E 02	5.3120E 02	6.1709E 03	1.4682E 02	1.6061E 04	1.3063E 02	7.1671E 03	2.8479E-01	5.7162E-01	3.7228F 03
AFT	7.0110E 02	5.3214E 02	5.3054E 02	6.1700E 03	1.4698E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.7224F 03

GAS BUILDUP IN SLOT, DW/DT = 3.0554E-01

FOREWARD	9.8162E 02	5.3000E 02	5.2633E 02	6.1675E 03	2.1947E 02	1.6061E 04	1.3067E 02	7.1844E 03	2.8418E-01	5.7035E-01	5.5168F 03
AFT	1.0151E 03	5.2828E 02	5.2462E 02	6.1654E 03	2.2008E 02	1.6061E 04	1.4568E 02	8.0161E 03	2.8397E-01	5.6988E-01	5.5161F 03

GAS BUILDUP IN SLOT, DW/DT = 6.6888E-01

IGNITION TIME, TIME (S) 53.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7369519.0	1656734.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8379269.0	1883735.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	42977.809	9661.7969
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.51820109E 09	0.11649626E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.57159168E 09	0.12849898E 09
THRUST COEFFICIENT	CF	1.6164827	1.6164827
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3314.4082	7307.0195
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	223883.44	493578.63
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	23.065872	50.851563
INERT MASS REMAINING (KG,LBM)	MIR	2235.5210	4928.4805
TOTAL BURN AREA (M**2,IN**2)	ABTOT	259.48193	402197.94
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	130.30214	7951528.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	230831.94	508897.38
TOTAL GAS MASS (KG,LBM)	WGTOT	807.72437	1780.7275
RATIO OF SPECIFIC HEATS	GAMA	1.1615620	1.1615620
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.857498	28.345932
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.4441	5132.6914
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.14366281	0.14366281
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.36305434E 09	526.56616
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.25353794E 11	36772.574
BURN AREA (M**2,IN**2)	AHH	0.73443902	1138.3828
BURN RATE (M/S,IN/S)	RBZ(1)	0.72284602E-02	0.28458512
DISTANCE BURNED (M,IN)	TAUZ(1)	0.40662163	16.008728
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3428.0898	6170.5625
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	224.95055	348674.06
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	23.598099	36577.129
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	126.97348	7748401.0
GAS VOLUME (M**3,IN**3)	VP	176.06712	10744280.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.35680589E 09	517.50342
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.24402252E 11	35392.480
BURN AREA (M**2,IN**2)	AAN	10.198963	15808.426
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.71822964E-02	0.28276771
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.40098292	15.786731
PROPELLANT VOLUME (M**3,IN**3)	VFN	3.3286419	203126.31
GAS VOLUME (M**3,IN**3)	VPN	8.6970348	530725.88
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3422.8381	6161.1094
PORT AREA (M**2,IN**2)	AP	6.0843945	9430.8320
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4527903	2251.8301
EXPANSION RATIO	EPR	6.8576279	6.8576279
PRESSURE RATIO	PEPO	0.22773016E-01	0.22773016E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	526.57	526.57	6170.56	0.86	0.000	13.71	16058.90	21.50	20.73	-0.77	0.2846	16.009	0.2856	16.009
30.000	526.57	526.57	6170.56	1.17	0.0	13.76	16058.89	29.46	7.51	-0.45	0.2846	16.009	0.2846	16.009
60.000	526.57	526.57	6170.56	1.49	0.0	13.81	16058.88	37.45	7.53	-0.45	0.2846	16.008	0.2846	16.008
90.000	526.57	526.57	6170.56	1.81	0.0	13.86	16058.88	45.46	7.56	-0.45	0.2846	16.007	0.2846	16.007
99.811	526.57	526.57	6170.56	1.94	0.0	13.88	16058.88	48.68	2.48	-0.74	0.2846	16.005	0.2846	16.005
118.800	526.57	526.57	6170.56	3.77	0.003	321.06	8202.59	48.42	269.55	0.29	0.2846	15.998	0.2846	15.998
148.800	526.53	526.53	6170.55	17.26	0.005	322.89	8301.52	224.24	175.93	0.11	0.2846	15.997	0.2846	15.997
178.800	526.53	526.51	6170.52	30.52	0.009	324.72	8399.87	401.06	176.93	0.11	0.2846	15.995	0.2846	15.995
208.800	526.51	526.47	6170.48	43.54	0.013	326.56	8497.63	578.88	177.93	0.11	0.2846	15.993	0.2846	15.993
238.800	526.48	526.41	6170.43	56.36	0.016	328.39	8594.82	757.70	178.93	0.11	0.2846	15.991	0.2846	15.991
268.800	526.45	526.33	6170.37	68.96	0.020	330.23	8691.44	937.52	179.92	0.11	0.2846	15.988	0.2846	15.988
298.800	526.40	526.24	6170.30	81.38	0.023	332.06	8787.48	1118.34	180.92	0.11	0.2846	15.986	0.2846	15.986
328.800	526.35	526.13	6170.21	93.61	0.026	333.90	8882.93	1300.15	181.92	0.11	0.2845	15.984	0.2845	15.984
358.800	526.28	526.01	6170.12	105.67	0.030	335.73	8977.82	1482.96	182.91	0.10	0.2845	15.981	0.2845	15.981
388.800	526.21	525.88	6170.01	117.56	0.033	337.56	9072.13	1666.76	183.91	0.10	0.2845	15.979	0.2845	15.979
398.638	526.19	525.83	6169.98	121.44	0.034	338.17	9102.92	1727.58	60.52	-0.30	0.2845	15.976	0.2845	15.976
433.543	526.05	525.47	6169.61	154.95	0.044	321.85	8246.29	1995.53	127.19	0.64	0.2844	15.962	0.2844	15.962
447.600	526.00	525.38	6169.54	160.46	0.045	322.76	8294.77	2078.25	82.48	-0.25	0.2844	15.960	0.2844	15.960
477.600	525.88	525.16	6169.39	172.03	0.049	324.68	8397.76	2254.93	176.79	0.11	0.2844	15.957	0.2844	15.957
507.600	525.75	524.93	6169.23	183.43	0.052	326.60	8500.13	2432.65	177.83	0.11	0.2844	15.954	0.2844	15.954
537.600	525.61	524.69	6169.06	194.66	0.055	328.53	8601.87	2611.40	178.86	0.11	0.2844	15.950	0.2844	15.950
567.600	525.46	524.44	6168.88	205.74	0.058	330.45	8702.98	2791.18	179.89	0.11	0.2843	15.946	0.2843	15.946
597.600	525.31	524.17	6168.70	216.67	0.061	332.38	8803.47	2972.00	180.93	0.11	0.2843	15.942	0.2843	15.942
627.600	525.14	523.89	6168.51	227.46	0.064	334.30	8903.32	3153.84	181.95	0.11	0.2843	15.939	0.2843	15.939
657.600	524.97	523.60	6168.31	238.12	0.067	336.22	9002.54	3336.72	182.98	0.11	0.2842	15.935	0.2842	15.935
682.186	524.82	523.35	6168.15	246.79	0.070	337.80	9083.40	3487.68	150.72	-0.24	0.2842	15.931	0.2842	15.931
701.100	524.70	522.75	6167.36	284.46	0.080	320.51	8174.70	3614.11	269.63	0.30	0.2841	15.911	0.2841	15.911
731.100	524.47	522.36	6167.11	294.93	0.083	322.33	8272.48	3789.32	175.33	0.12	0.2841	15.908	0.2841	15.908
761.100	524.22	521.97	6166.87	305.27	0.086	324.15	8369.70	3965.51	176.30	0.12	0.2841	15.904	0.2841	15.904
791.100	523.97	521.56	6166.62	315.50	0.089	325.96	8466.37	4142.65	177.26	0.12	0.2840	15.899	0.2840	15.899
821.100	523.70	521.15	6166.36	325.62	0.092	327.78	8562.48	4320.76	178.22	0.12	0.2840	15.894	0.2840	15.894
851.100	523.44	520.72	6166.10	335.63	0.095	329.60	8658.04	4499.82	179.18	0.12	0.2839	15.889	0.2839	15.889
881.100	523.16	520.28	6165.83	345.55	0.097	331.42	8753.04	4679.84	180.14	0.11	0.2838	15.884	0.2838	15.884
911.100	522.87	519.83	6165.55	355.37	0.100	333.23	8847.49	4860.82	181.09	0.11	0.2838	15.879	0.2838	15.879
941.100	522.58	519.37	6165.28	365.10	0.103	335.05	8941.38	5042.75	182.05	0.11	0.2837	15.874	0.2837	15.874
971.100	522.28	518.90	6165.00	374.76	0.106	336.87	9034.72	5225.63	183.00	0.11	0.2837	15.869	0.2837	15.869
981.052	522.18	518.74	6164.90	377.97	0.107	337.47	9065.57	5286.83	60.92	-0.29	0.2836	15.863	0.2836	15.863
1015.709	521.79	517.17	6162.93	438.68	0.124	321.47	8229.33	5554.82	0.0	0.65	0.2834	15.828	0.2834	15.828
1029.900	521.56	516.89	6162.83	441.58	0.125	322.80	8301.98	5637.96	82.91	-0.24	0.2834	15.823	0.2834	15.823
1059.900	521.09	516.29	6162.62	447.67	0.126	325.61	8454.51	5814.23	176.39	0.12	0.2834	15.820	0.2834	15.820
1089.900	520.63	515.70	6162.40	453.76	0.128	328.42	8605.64	5991.99	177.89	0.12	0.2833	15.815	0.2833	15.815
1119.900	520.16	515.10	6162.18	459.86	0.130	331.23	8755.37	6171.24	179.37	0.12	0.2832	15.811	0.2832	15.811
1149.900	519.69	514.50	6161.95	465.97	0.132	334.04	8903.70	6351.96	180.85	0.12	0.2831	15.807	0.2831	15.807
1179.900	519.21	513.89	6161.73	472.09	0.133	336.85	9050.63	6534.17	182.33	0.12	0.2831	15.803	0.2831	15.803
1209.900	518.74	513.28	6161.50	478.23	0.135	339.66	9196.15	6717.85	183.80	0.12	0.2830	15.799	0.2830	15.799
1239.900	518.26	512.67	6161.26	484.38	0.137	342.47	9340.28	6903.00	185.28	0.12	0.2829	15.794	0.2829	15.794
1258.900	517.96	512.28	6161.11	488.29	0.138	344.26	9430.83	7021.03	118.10	0.07	0.2828	15.790	0.2828	15.790
AFT	517.50	511.34	6160.29	509.05	0.144	.....	9430.83	7307.02	286.09	0.09	0.2828	15.787	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9811E 01	5.2657E 02	5.2657E 02	6.1706E 03	1.9384E 00	1.6061E 04	3.1062E-02	1.7077E 00	2.8421E-01	5.7046E-01	4.8713E 01
AFT	1.1880E 02	5.2657E 02	5.2657E 02	6.1706E 03	1.9268E 00	1.6061E 04	0.0	0.0	0.0	0.0	4.8423E 01

GAS BUILDUP IN SLOT, DW/DT = 2.9021E-01

FOREWARD	3.9864E 02	5.2619E 02	5.2583E 02	6.1700E 03	7.3874E 01	1.6061E 04	1.2652E 02	6.9577E 03	2.8412E-01	5.7025E-01	1.8541E 03
AFT	4.3354E 02	5.2583E 02	5.2547E 02	6.1696E 03	7.3894E 01	1.6061E 04	1.4207E 02	7.8143E 03	2.8407E-01	5.7015E-01	1.8535E 03

GAS BUILDUP IN SLOT, DW/DT = 6.3516E-01

FOREWARD	6.8219E 02	5.2482E 02	5.2335E 02	6.1681E 03	1.4465E 02	1.6061E 04	1.2673E 02	6.9772E 03	2.8381E-01	5.6959E-01	3.6144E 03
AFT	7.0110E 02	5.2422E 02	5.2275E 02	6.1674E 03	1.4479E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.6141E 03

GAS BUILDUP IN SLOT, DW/DT = 2.9821E-01

FOREWARD	9.8105E 02	5.2218E 02	5.1874E 02	6.1649E 03	2.1846E 02	1.6061E 04	1.2679E 02	6.9950E 03	2.8322E-01	5.6837E-01	5.4136E 03
AFT	1.0157E 03	5.2059E 02	5.1717E 02	6.1629E 03	2.1903E 02	1.6061E 04	1.4185E 02	7.8313E 03	2.8302E-01	5.6793E-01	5.4130E 03

GAS BUILDUP IN SLOT, DW/DT = 6.5230E-01

IGNITION TIME, TIME (S) 55.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7336557.0	1649324.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8346308.0	1876325.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	42730.203	9606.1328
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.53290701E 09	0.11980230E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.58831718E 09	0.13225902E 09
THRUST COEFFICIENT	CF	1.6165915	1.6165915
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3300.5806	7276.5352
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	230498.44	508162.13
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	22.932983	50.558594
INERT MASS REMAINING (KG,LBM)	MIR	2189.6550	4827.3633
TOTAL BURN AREA (M**2,IN**2)	ABTOT	259.00342	401456.38
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	126.56470	7723455.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	224211.00	494300.69
TOTAL GAS MASS (KG,LBM)	WGTOT	817.07617	1801.3450
RATIO OF SPECIFIC HEATS	GAMA	1.1615610	1.1615610
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.856715	28.344208
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.3977	5132.5391
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.14073175	0.14073175
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.36108134E 09	523.70459
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.26077929E 11	37822.844
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72194003E-02	0.28422850
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3427.5171	6169.5313
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	225.87030	350099.69
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	22.985016	35626.867
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	123.38222	7529248.0
GAS VOLUME (M**3,IN**3)	VP	178.76587	10908968.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.35516493E 09	515.12329
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.25114223E 11	36425.105
BURN AREA (M**2,IN**2)	AAN	10.148122	15729.621
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.71753748E-02	0.28249520
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.41534746	16.352264
PROPELLANT VOLUME (M**3,IN**3)	VFN	3.1824770	194206.75
GAS VOLUME (M**3,IN**3)	VPN	8.8431997	539645.44
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3422.4758	6160.4570
PORT AREA (M**2,IN**2)	AP	6.2106695	9626.5586
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4536638	2253.1846
EXPANSION RATIO	EPR	6.8535061	6.8535061
PRESSURE RATIO	PEPO	0.22791095E-01	0.22791095E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	523.70	523.70	6169.53	0.01	0.000	0.0	16062.80	0.28	0.01	-0.27	0.2842	16.253	0.2846	16.253
30.000	523.70	523.70	6169.53	0.02	0.0	0.0	16062.80	0.44	0.0	-0.16	0.2842	16.253	0.2842	16.253
60.000	523.70	523.70	6169.53	0.02	0.0	0.0	16062.81	0.60	0.0	-0.16	0.2842	16.253	0.2842	16.253
90.000	523.70	523.70	6169.53	0.03	0.0	0.0	16062.82	0.77	0.0	-0.16	0.2842	16.253	0.2842	16.253
99.243	523.70	523.70	6169.53	0.06	0.0	0.0	16062.82	1.41	0.0	-0.64	0.2842	16.253	0.2842	16.253
118.800	523.70	523.70	6169.53	0.07	0.0	324.63	8386.34	0.89	261.72	0.48	0.2842	16.567	0.2842	16.567
148.800	523.71	523.70	6169.52	13.50	0.004	326.47	8466.50	178.28	177.66	0.27	0.2842	16.566	0.2842	16.566
178.800	523.70	523.68	6169.50	26.69	0.008	328.30	8586.04	356.66	178.66	0.27	0.2842	16.564	0.2842	16.564
208.800	523.68	523.65	6169.47	39.66	0.011	330.14	8684.95	536.05	179.66	0.27	0.2842	16.562	0.2842	16.562
238.800	523.66	523.59	6169.42	52.42	0.015	331.97	8783.25	716.43	180.66	0.27	0.2842	16.560	0.2842	16.560
268.800	523.63	523.53	6169.36	64.97	0.018	333.80	8880.91	897.81	181.65	0.28	0.2842	16.557	0.2842	16.557
298.800	523.59	523.44	6169.29	77.34	0.022	335.64	8977.96	1080.19	182.65	0.28	0.2842	16.555	0.2842	16.555
328.800	523.54	523.34	6169.21	89.52	0.025	337.47	9074.39	1263.55	183.65	0.28	0.2842	16.553	0.2842	16.553
358.800	523.48	523.23	6169.12	101.53	0.029	339.31	9170.20	1447.92	184.64	0.28	0.2842	16.550	0.2842	16.550
388.800	523.41	523.10	6169.02	113.38	0.032	341.14	9265.39	1633.27	185.63	0.28	0.2842	16.548	0.2842	16.548
398.069	523.39	523.06	6168.99	117.03	0.033	341.71	9294.67	1691.07	57.56	-0.25	0.2842	16.545	0.2842	16.545
434.111	523.27	522.73	6168.65	148.94	0.042	325.47	8432.49	1951.48	123.27	0.98	0.2841	16.531	0.2841	16.531
447.600	523.22	522.64	6168.59	154.22	0.044	326.33	8479.57	2031.59	79.93	-0.18	0.2841	16.529	0.2841	16.529
477.600	523.10	522.44	6168.44	165.78	0.047	328.25	8583.80	2209.85	178.53	0.27	0.2841	16.526	0.2841	16.526
507.600	522.98	522.22	6168.29	177.16	0.050	330.18	8687.34	2389.14	179.57	0.28	0.2841	16.522	0.2841	16.522
537.600	522.85	521.99	6168.13	188.38	0.053	332.10	8790.21	2569.46	180.60	0.28	0.2840	16.519	0.2840	16.519
567.600	522.71	521.75	6167.95	199.45	0.056	334.02	8892.40	2750.81	181.63	0.28	0.2840	16.515	0.2840	16.515
597.600	522.56	521.50	6167.78	210.37	0.059	335.95	8993.92	2933.19	182.66	0.28	0.2840	16.511	0.2840	16.511
627.600	522.41	521.23	6167.59	221.15	0.062	337.87	9094.76	3116.60	183.69	0.28	0.2839	16.507	0.2839	16.507
657.600	522.24	520.95	6167.40	231.80	0.065	339.80	9194.91	3301.03	184.71	0.28	0.2839	16.503	0.2839	16.503
681.618	522.10	520.71	6167.24	240.27	0.068	341.34	9274.62	3449.76	148.62	-0.11	0.2839	16.499	0.2839	16.499
701.100	521.99	520.15	6166.50	276.36	0.078	324.08	8357.83	3572.38	261.87	0.49	0.2838	16.479	0.2838	16.479
731.100	521.76	519.79	6166.27	286.84	0.081	325.90	8456.80	3749.18	177.07	0.27	0.2838	16.477	0.2838	16.477
761.100	521.53	519.41	6166.03	297.19	0.084	327.71	8555.17	3926.95	178.05	0.28	0.2837	16.472	0.2837	16.472
791.100	521.29	519.02	6165.79	307.42	0.087	329.53	8652.94	4105.68	179.01	0.28	0.2837	16.467	0.2837	16.467
821.100	521.04	518.62	6165.54	317.54	0.090	331.35	8750.12	4285.36	179.97	0.28	0.2836	16.462	0.2836	16.462
851.100	520.78	518.21	6165.28	327.56	0.092	333.17	8846.69	4466.00	180.92	0.28	0.2836	16.457	0.2836	16.457
881.100	520.52	517.78	6165.02	337.48	0.095	334.98	8942.67	4647.60	181.88	0.28	0.2835	16.451	0.2835	16.451
911.100	520.24	517.35	6164.75	347.32	0.098	336.80	9038.05	4830.14	182.83	0.28	0.2835	16.446	0.2835	16.446
941.100	519.96	516.91	6164.48	357.06	0.101	338.62	9132.83	5013.64	183.79	0.28	0.2834	16.441	0.2834	16.441
971.100	519.67	516.45	6164.20	366.72	0.103	340.43	9227.01	5198.10	184.74	0.28	0.2834	16.436	0.2834	16.436
980.486	519.58	516.31	6164.11	369.75	0.104	341.00	9256.35	5256.32	57.99	-0.24	0.2833	16.431	0.2833	16.431
1016.275	519.21	514.84	6162.27	427.94	0.121	325.08	8415.68	5516.86	0.0	0.99	0.2831	16.394	0.2831	16.394
1029.900	519.01	514.58	6162.18	430.78	0.122	326.36	8486.30	5597.43	80.41	-0.17	0.2831	16.390	0.2831	16.390
1059.900	518.56	514.01	6161.96	437.00	0.123	329.17	8640.68	5775.29	178.15	0.28	0.2831	16.386	0.2831	16.386
1089.900	518.12	513.43	6161.74	443.22	0.125	331.98	8793.55	5954.64	179.64	0.28	0.2830	16.382	0.2830	16.382
1119.900	517.66	512.85	6161.52	449.44	0.127	334.79	8944.91	6135.47	181.12	0.29	0.2829	16.378	0.2829	16.378
1149.900	517.21	512.27	6161.30	455.67	0.129	337.60	9094.77	6317.78	182.60	0.29	0.2828	16.373	0.2828	16.373
1179.900	516.76	511.69	6161.07	461.91	0.130	340.41	9243.12	6501.56	184.08	0.29	0.2828	16.369	0.2828	16.369
1209.900	516.30	511.10	6160.84	468.16	0.132	343.22	9389.96	6686.82	185.55	0.29	0.2827	16.365	0.2827	16.365
1239.900	515.85	510.51	6160.61	474.43	0.134	346.03	9535.29	6873.55	187.03	0.29	0.2826	16.360	0.2826	16.360
1258.900	515.56	510.14	6160.46	478.41	0.135	347.81	9626.56	6992.57	119.21	0.19	0.2825	16.356	0.2825	16.356
AFT	515.12	509.24	6159.68	498.65	0.141	.....	9626.56	7276.54	284.39	0.42	0.2825	16.352	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.2370E 02	5.2370E 02	6.1695E 03	5.4737E-02	1.6061E 04	-4.0712E-02	-2.2411E 00	2.8385E-01	5.6842E-01	1.3683E 00
AFT	1.1880E 02	5.2370E 02	5.2370E 02	6.1695E 03	3.5507E-02	1.6061E 04	0.0	0.0	0.0	0.0	8.8757E-01

GAS BUILDUP IN SLOT, DW/DT = 4.8070E-01

FOREWARD	3.9807E 02	5.2339E 02	5.2306E 02	6.1690E 03	7.2650E 01	1.6061E 04	1.2288E 02	6.7659E 03	2.8377E-01	5.6824E-01	1.8139E 03
AFT	4.3411E 02	5.2306E 02	5.2273E 02	6.1686E 03	7.2652E 01	1.6061E 04	1.3852E 02	7.6281E 03	2.8373E-01	5.6815E-01	1.8130E 03

GAS BUILDUP IN SLOT, DW/DT = 9.8400E-01

FOREWARD	6.8162E 02	5.2210E 02	5.2071E 02	6.1672E 03	1.4370E 02	1.6061E 04	1.2311E 02	6.7860E 03	2.8347E-01	5.6761E-01	3.5729E 03
AFT	7.0110E 02	5.2154E 02	5.2015E 02	6.1665E 03	1.4382E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.5724E 03

GAS BUILDUP IN SLOT, DW/DT = 4.8617E-01

FOREWARD	9.8049E 02	5.1958E 02	5.1631E 02	6.1641E 03	2.1810E 02	1.6061E 04	1.2320E 02	6.8042E 03	2.8291E-01	5.6644E-01	5.3795E 03
AFT	1.0163E 03	5.1810E 02	5.1484E 02	6.1623E 03	2.1862E 02	1.6061E 04	1.3833E 02	7.6449E 03	2.8272E-01	5.6604E-01	5.3785E 03

GAS BUILDUP IN SLOT, DW/DT = 9.9246E-01

IGNITION TIME, TIME (S) 57.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7376071.0	1658207.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8385822.0	1885208.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	42839.148	9630.6250
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.54761958E 09	0.12310984E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.60504934E 09	0.13602056E 09
THRUST COEFFICIENT	CF	1.6173267	1.6173267
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3314.2842	7306.7461
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	237113.25	522745.35
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	22.991455	50.687500
INERT MASS REMAINING (KG,LBM)	MIR	2143.6721	4725.9883
TOTAL BURN AREA (M**2,IN**2)	ABTOT	260.12012	403187.06
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	122.81779	7494805.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	217573.31	479667.13
TOTAL GAS MASS (KG,LBM)	WGTOT	720.48926	1588.4070
RATIO OF SPECIFIC HEATS	GAMA	1.1615620	1.1615620
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.857138	28.345139
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.4346	5132.6602
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.13791311	0.13791311
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.36215322E 09	525.25903
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.26801160E 11	38871.805
BURN AREA (M**2,IN**2)	AHR	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72245374E-02	0.28443074
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3427.8274	6170.0898
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	227.66316	352878.63
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	22.368652	34671.488
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	119.78053	7309460.0
GAS VOLUME (M**3,IN**3)	VP	181.62173	11083243.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.35647078E 09	517.01733
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.25825858E 11	37457.246
BURN AREA (M**2,IN**2)	AAN	10.088190	15636.727
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.71822777E-02	0.28276688
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.42969811	16.917252
PROPELLANT VOLUME (M**3,IN**3)	VFN	3.0372486	185344.38
GAS VOLUME (M**3,IN**3)	VPN	8.9884281	548507.81
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3422.9814	6161.3672
PORT AREA (M**2,IN**2)	AP	6.3381166	9824.1016
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4545336	2254.5322
EXPANSION RATIO	EPR	6.8494091	6.8494091
PRESSURE RATIO	PEPO	0.22808969E-01	0.22808969E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	525.26	525.26	6170.09	0.0	0.0	0.0	16062.80	0.0	0.01	0.15	0.2844	16.253	0.2842	16.253
30.000	525.26	525.26	6170.09	0.0	0.0	0.0	16062.80	0.0	0.0	0.09	0.2844	16.253	0.2844	16.253
60.000	525.26	525.26	6170.09	0.0	0.0	0.0	16062.81	0.0	0.0	0.09	0.2844	16.253	0.2844	16.253
90.000	525.26	525.26	6170.09	0.0	0.0	0.0	16062.82	0.0	0.0	0.09	0.2844	16.253	0.2844	16.253
99.243	525.26	525.26	6170.09	0.0	0.0	0.0	16062.82	0.0	0.0	0.03	0.2844	16.253	0.2844	16.253
118.800	525.26	525.26	6170.09	0.0	0.0	328.20	8571.89	0.0	254.47	0.65	0.2844	17.135	0.2844	17.135
148.800	525.26	525.26	6170.08	13.25	0.004	330.04	8673.29	179.32	179.74	0.41	0.2844	17.134	0.2844	17.134
178.800	525.25	525.24	6170.06	26.26	0.007	331.87	8774.02	359.64	180.74	0.42	0.2844	17.132	0.2844	17.132
208.800	525.24	525.21	6170.03	39.06	0.011	333.71	8874.08	540.96	181.74	0.42	0.2844	17.130	0.2844	17.130
238.800	525.22	525.15	6169.98	51.65	0.015	335.54	8973.47	723.28	182.74	0.42	0.2844	17.128	0.2844	17.128
268.800	525.18	525.09	6169.93	64.04	0.018	337.37	9072.20	906.59	183.73	0.42	0.2844	17.126	0.2844	17.126
298.800	525.14	525.00	6169.86	76.24	0.022	339.21	9170.26	1090.89	184.73	0.43	0.2844	17.124	0.2844	17.124
328.800	525.09	524.91	6169.78	88.27	0.025	341.04	9267.66	1276.19	185.73	0.43	0.2844	17.121	0.2844	17.121
358.800	525.04	524.80	6169.69	100.13	0.028	342.88	9364.38	1462.48	186.72	0.43	0.2844	17.119	0.2844	17.119
388.800	524.97	524.67	6169.59	111.83	0.032	344.71	9460.45	1649.76	187.71	0.43	0.2844	17.116	0.2844	17.116
397.502	524.95	524.63	6169.56	115.22	0.033	345.24	9488.19	1704.61	54.63	-0.22	0.2844	17.114	0.2844	17.114
434.678	524.84	524.33	6169.25	145.74	0.041	329.07	8620.55	1957.95	119.62	1.30	0.2843	17.099	0.2843	17.099
447.600	524.79	524.24	6169.19	150.74	0.043	329.90	8666.19	2035.55	77.47	-0.13	0.2843	17.097	0.2843	17.097
477.600	524.68	524.05	6169.05	162.17	0.046	331.82	8771.64	2215.74	180.61	0.42	0.2843	17.094	0.2843	17.094
507.600	524.57	523.84	6168.89	173.43	0.049	333.75	8876.37	2396.96	181.65	0.42	0.2843	17.090	0.2843	17.090
537.600	524.44	523.61	6168.74	184.53	0.052	335.67	8980.36	2579.22	182.68	0.42	0.2843	17.087	0.2843	17.087
567.600	524.30	523.38	6168.57	195.48	0.055	337.59	9083.63	2762.51	183.71	0.43	0.2842	17.083	0.2842	17.083
597.600	524.16	523.13	6168.40	206.29	0.058	339.52	9186.18	2946.82	184.74	0.43	0.2842	17.079	0.2842	17.079
627.600	524.01	522.87	6168.22	216.96	0.061	341.44	9288.00	3132.16	185.77	0.43	0.2842	17.075	0.2842	17.075
657.600	523.85	522.60	6168.04	227.51	0.064	343.36	9389.09	3318.53	186.80	0.43	0.2841	17.071	0.2841	17.071
681.051	523.72	522.38	6167.89	235.69	0.066	344.87	9467.61	3465.26	146.73	0.00	0.2841	17.067	0.2841	17.067
701.100	523.61	521.85	6167.19	270.42	0.076	327.65	8542.77	3584.30	254.67	0.66	0.2840	17.047	0.2840	17.047
731.100	523.39	521.49	6166.96	280.80	0.079	329.46	8642.94	3763.04	179.15	0.41	0.2840	17.044	0.2840	17.044
761.100	523.17	521.13	6166.73	291.05	0.082	331.28	8742.46	3942.76	180.13	0.42	0.2840	17.039	0.2840	17.039
791.100	522.93	520.75	6166.49	301.19	0.085	333.10	8841.33	4123.42	181.09	0.42	0.2839	17.034	0.2839	17.034
821.100	522.69	520.36	6166.25	311.22	0.088	334.91	8939.57	4305.05	182.05	0.42	0.2839	17.029	0.2839	17.029
851.100	522.44	519.96	6166.00	321.15	0.091	336.73	9037.16	4487.63	183.01	0.43	0.2838	17.024	0.2838	17.024
881.100	522.18	519.55	6165.75	330.99	0.093	338.55	9134.11	4671.16	183.97	0.43	0.2838	17.018	0.2838	17.018
911.100	521.92	519.13	6165.49	340.73	0.096	340.36	9230.41	4855.65	184.92	0.43	0.2837	17.013	0.2837	17.013
941.100	521.65	518.70	6165.22	350.39	0.099	342.18	9326.08	5041.09	185.88	0.43	0.2837	17.008	0.2837	17.008
971.100	521.37	518.26	6164.95	359.97	0.102	344.00	9421.11	5227.49	186.83	0.44	0.2836	17.003	0.2836	17.003
979.920	521.28	518.12	6164.87	362.80	0.102	344.53	9448.92	5282.80	55.11	-0.21	0.2835	16.997	0.2835	16.997
1016.840	520.94	516.74	6163.14	418.55	0.118	328.69	8603.94	5536.34	0.0	1.30	0.2833	16.961	0.2833	16.961
1029.900	520.75	516.50	6163.05	421.29	0.119	329.92	8672.45	5614.45	77.99	-0.12	0.2833	16.956	0.2833	16.956
1059.900	520.32	515.95	6162.84	427.53	0.121	332.72	8828.67	5794.26	180.24	0.42	0.2833	16.952	0.2833	16.952
1089.900	519.90	515.39	6162.63	433.77	0.122	335.53	8983.29	5975.56	181.73	0.43	0.2832	16.948	0.2832	16.948
1119.900	519.46	514.83	6162.41	440.02	0.124	338.34	9136.28	6158.34	183.22	0.43	0.2832	16.943	0.2832	16.943
1149.900	519.03	514.27	6162.20	446.27	0.126	341.15	9287.66	6342.60	184.70	0.44	0.2831	16.939	0.2831	16.939
1179.900	518.59	513.71	6161.97	452.53	0.128	343.96	9437.43	6528.34	186.18	0.44	0.2830	16.935	0.2830	16.935
1209.900	518.15	513.14	6161.75	458.80	0.129	346.77	9585.59	6715.54	187.66	0.44	0.2830	16.930	0.2830	16.930
1239.900	517.71	512.56	6161.52	465.09	0.131	349.58	9732.13	6904.23	189.13	0.45	0.2829	16.925	0.2829	16.925
1258.900	517.43	512.20	6161.37	469.09	0.132	351.36	9824.10	7024.48	120.54	0.29	0.2828	16.921	0.2828	16.921
AFT	517.02	511.34	6160.62	488.69	0.138	.....	9824.10	7306.75	282.98	0.70	0.2828	16.917	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.2526E 02	5.2526E 02	6.1701E 03	-1.6251E-03	1.6061E 04	-4.0740E-02	-2.2411E 00	2.8405E-01	5.6842E-01	-4.0740E-02
AFT	1.1880E 02	5.2526E 02	5.2526E 02	6.1701E 03	-2.7722E-02	1.6061E 04	0.0	0.0	0.0	0.0	-6.9500E-01

GAS BUILDUP IN SLOT, DW/DT = 6.5426E-01

FOREWARD	3.9750E 02	5.2495E 02	5.2463E 02	6.1696E 03	7.2840E 01	1.6061E 04	1.1945E 02	6.5724E 03	2.8397E-01	5.6754E-01	1.8241E 03
AFT	4.3468E 02	5.2465E 02	5.2433E 02	6.1692E 03	7.2827E 01	1.6061E 04	1.3520E 02	7.4400E 03	2.8393E-01	5.6745E-01	1.8228E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3009E 00

FOREWARD	6.8105E 02	5.2372E 02	5.2238E 02	6.1679E 03	1.4374E 02	1.6061E 04	1.1970E 02	6.5930E 03	2.8368E-01	5.6694E-01	3.5850E 03
AFT	7.0110E 02	5.2319E 02	5.2185E 02	6.1672E 03	1.4384E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.5843E 03

GAS BUILDUP IN SLOT, DW/DT = 6.5575E-01

FOREWARD	9.7992E 02	5.2128E 02	5.1812E 02	6.1649E 03	2.1829E 02	1.6061E 04	1.1981E 02	6.6117E 03	2.8314E-01	5.6582E-01	5.4026E 03
AFT	1.0168E 03	5.1989E 02	5.1674E 02	6.1631E 03	2.1875E 02	1.6061E 04	1.3504E 02	7.4566E 03	2.8297E-01	5.6545E-01	5.4013E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3021E 00

IGNITION TIME, TIME (S) 59.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7421447.0	1668408.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8431198.0	1895409.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	43055.391	9679.2383
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.56241715E 09	0.12643643E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.62186624E 09	0.13980115E 09
THRUST COEFFICIENT	CF	1.6177521	1.6177521
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3331.2725	7344.1992
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	243758.81	537396.31
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	23.107513	50.943359
INERT MASS REMAINING (KG,LBM)	MIR	2097.4570	4624.1016
TOTAL BURN AREA (M**2,IN**2)	ABTOT	261.21826	404889.50
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	119.05199	7265001.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	210902.13	464959.69
TOTAL GAS MASS (KG,LBM)	WGTOT	736.96411	1624.7283
RATIO OF SPECIFIC HEATS	GAMA	1.1615629	1.1615629
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.857692	28.346359
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.4822	5132.8164
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.13519400	0.13519400
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.36355661E 09	527.29468
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.27526869E 11	39924.355
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72311945E-02	0.28469282
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3428.2354	6170.8242
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	229.44489	355640.31
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	21.745224	33705.188
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	116.15923	7088474.0
GAS VOLUME (M**3,IN**3)	VP	184.49683	11258692.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.35809050E 09	519.36646
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.26540421E 11	38493.629
BURN AREA (M**2,IN**2)	AAN	10.028202	15543.746
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.71906000E-02	0.28309458
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.44406235	17.482773
PROPELLANT VOLUME (M**3,IN**3)	VFN	2.8927422	176526.06
GAS VOLUME (M**3,IN**3)	VPN	9.1329346	557326.13
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3423.5740	6162.4336
PORT AREA (M**2,IN**2)	AP	6.4669819	10023.844
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4554071	2255.8867
EXPANSION RATIO	EPR	6.8452969	6.8452969
PRESSURE RATIO	PEPO	0.22826921E-01	0.22826921E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	PADOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TA IN.	PHTO IN/SEC	TAUTO IN.
FORE	527.29	527.29	6170.82	0.0	0.0	0.0	16062.80	0.0	0.01	0.19	0.2847	16.253	0.2844	16.253
30.000	527.29	527.29	6170.82	0.0	0.0	0.0	16062.80	0.0	0.0	0.12	0.2847	16.253	0.2847	16.253
60.000	527.29	527.29	6170.82	0.0	0.0	0.0	16062.81	0.0	0.0	0.12	0.2847	16.253	0.2847	16.253
90.000	527.29	527.29	6170.82	0.0	0.0	0.0	16062.82	0.0	0.0	0.12	0.2847	16.253	0.2847	16.253
99.243	527.29	527.29	6170.82	0.0	0.0	0.0	16062.82	0.0	0.0	0.04	0.2847	16.253	0.2847	16.253
118.800	527.29	527.29	6170.82	0.0	0.0	331.78	8759.61	0.0	247.63	0.68	0.2847	17.704	0.2847	17.704
148.800	527.30	527.29	6170.82	13.06	0.004	333.61	8862.25	181.42	181.85	0.44	0.2847	17.703	0.2847	17.703
178.800	527.29	527.27	6170.80	25.90	0.007	335.45	8964.16	363.84	182.86	0.44	0.2847	17.701	0.2847	17.701
208.800	527.28	527.24	6170.76	38.53	0.011	337.28	9065.37	547.25	183.86	0.44	0.2847	17.699	0.2847	17.699
238.800	527.25	527.19	6170.72	50.95	0.015	339.11	9165.87	731.67	184.86	0.44	0.2847	17.697	0.2847	17.697
268.800	527.22	527.12	6170.66	63.19	0.018	340.95	9265.65	917.08	185.86	0.45	0.2847	17.695	0.2847	17.695
298.800	527.18	527.04	6170.60	75.24	0.021	342.78	9364.72	1103.48	186.86	0.45	0.2847	17.692	0.2847	17.692
328.800	527.13	526.95	6170.52	87.11	0.025	344.62	9463.09	1290.88	187.85	0.45	0.2847	17.690	0.2847	17.690
358.800	527.08	526.84	6170.43	98.83	0.028	346.45	9560.74	1479.27	188.85	0.46	0.2846	17.687	0.2846	17.687
388.800	527.01	526.72	6170.34	110.38	0.031	348.28	9657.68	1668.65	189.84	0.46	0.2846	17.685	0.2846	17.685
396.934	526.99	526.68	6170.31	113.51	0.032	348.78	9683.85	1720.52	51.64	-0.23	0.2846	17.682	0.2846	17.682
435.246	526.89	526.39	6170.02	142.71	0.040	332.68	8810.82	1967.03	116.16	1.35	0.2846	17.668	0.2846	17.668
447.600	526.84	526.32	6169.96	147.44	0.042	333.47	8854.98	2042.11	74.94	-0.14	0.2846	17.666	0.2846	17.666
477.600	526.74	526.13	6169.82	158.74	0.045	335.40	8961.66	2224.40	182.73	0.44	0.2846	17.663	0.2846	17.663
507.600	526.62	525.92	6169.68	169.88	0.048	337.32	9067.56	2407.73	183.77	0.44	0.2845	17.659	0.2845	17.659
537.600	526.50	525.71	6169.53	180.86	0.051	339.24	9172.69	2592.08	184.80	0.45	0.2845	17.655	0.2845	17.655
567.600	526.37	525.48	6169.37	191.69	0.054	341.16	9277.04	2777.47	185.84	0.45	0.2845	17.651	0.2845	17.651
597.600	526.23	525.24	6169.20	202.38	0.057	343.09	9380.62	2963.89	186.87	0.45	0.2845	17.647	0.2845	17.647
627.600	526.09	524.98	6169.02	212.95	0.060	345.01	9483.41	3151.33	187.90	0.45	0.2844	17.643	0.2844	17.643
657.600	525.93	524.72	6168.84	223.39	0.063	346.93	9585.44	3339.80	188.93	0.46	0.2844	17.639	0.2844	17.639
680.483	525.80	524.51	6168.70	231.30	0.065	348.40	9662.74	3484.60	144.80	0.00	0.2844	17.635	0.2844	17.635
701.100	525.71	524.01	6168.04	264.73	0.075	331.22	8729.89	3600.19	247.90	0.68	0.2843	17.615	0.2843	17.615
731.100	525.50	523.67	6167.82	275.00	0.078	333.03	8831.25	3781.03	181.28	0.44	0.2843	17.612	0.2843	17.612
761.100	525.28	523.31	6167.60	285.16	0.080	334.85	8931.91	3962.85	182.25	0.44	0.2842	17.607	0.2842	17.607
791.100	525.05	522.94	6167.37	295.21	0.083	336.66	9031.90	4145.62	183.22	0.44	0.2842	17.602	0.2842	17.602
821.100	524.82	522.57	6167.13	305.15	0.086	338.48	9131.20	4329.35	184.18	0.45	0.2841	17.597	0.2841	17.597
851.100	524.57	522.18	6166.89	314.99	0.089	340.29	9229.80	4514.04	185.14	0.45	0.2841	17.591	0.2841	17.591
881.100	524.32	521.78	6166.64	324.73	0.092	342.11	9327.73	4699.68	186.10	0.45	0.2840	17.586	0.2840	17.586
911.100	524.07	521.37	6166.39	334.39	0.094	343.93	9424.97	4886.27	187.06	0.45	0.2840	17.581	0.2840	17.581
941.100	523.80	520.95	6166.13	343.97	0.097	345.74	9521.52	5073.82	188.01	0.46	0.2839	17.575	0.2839	17.575
971.100	523.54	520.52	6165.87	353.47	0.100	347.56	9617.38	5262.33	188.97	0.46	0.2839	17.570	0.2839	17.570
979.354	523.46	520.40	6165.80	356.09	0.100	348.06	9643.64	5314.70	52.15	-0.22	0.2838	17.564	0.2838	17.564
1017.406	523.14	519.10	6164.18	409.52	0.116	332.31	8794.45	5561.47	0.0	1.35	0.2837	17.527	0.2837	17.527
1029.900	522.97	518.88	6164.09	412.15	0.116	333.47	8860.79	5637.11	75.50	-0.13	0.2837	17.523	0.2837	17.523
1059.900	522.55	518.34	6163.88	418.42	0.118	336.28	9018.86	5819.03	182.37	0.44	0.2836	17.519	0.2836	17.519
1089.900	522.14	517.81	6163.68	424.68	0.120	339.09	9175.21	6002.45	183.87	0.45	0.2836	17.514	0.2836	17.514
1119.900	521.72	517.26	6163.46	430.94	0.122	341.90	9329.84	6187.34	185.36	0.45	0.2835	17.510	0.2835	17.510
1149.900	521.30	516.72	6163.25	437.21	0.123	344.71	9482.75	6373.72	186.84	0.46	0.2834	17.505	0.2834	17.505
1179.900	520.88	516.17	6163.03	443.49	0.125	347.52	9633.95	6561.57	188.32	0.46	0.2834	17.501	0.2834	17.501
1209.900	520.46	515.62	6162.80	449.78	0.127	350.33	9783.41	6750.91	189.80	0.47	0.2833	17.496	0.2833	17.496
1239.900	520.04	515.06	6162.58	456.08	0.129	353.14	9931.16	6941.71	191.28	0.47	0.2832	17.491	0.2832	17.491
1258.900	519.76	514.71	6162.43	460.09	0.130	354.91	10023.84	7063.32	121.91	0.30	0.2831	17.486	0.2831	17.486
AFT	519.37	513.89	6161.73	479.09	0.135	.....	10023.84	7344.28	281.62	0.74	0.2831	17.483	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.2729E 02	5.2729E 02	6.1708E 03	-1.6204E-03	1.6061E 04	-4.0777E-02	-2.2411E 00	2.8430E-01	5.6842E-01	-4.0777E-02
AFT	1.1880E 02	5.2729E 02	5.2729E 02	6.1708E 03	-2.8452E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.1598E-01

GAS BUILDUP IN SLOT, DW/DT = 6.7521E-01

FOREWARD	3.9693E 02	5.2699E 02	5.2668E 02	6.1703E 03	7.3058E 01	1.6061E 04	1.1600E 02	6.3767E 03	2.8423E-01	5.6794E-01	1.8365E 03
AFT	4.3525E 02	5.2670E 02	5.2639E 02	6.1700E 03	7.3041E 01	1.6061E 04	1.3186E 02	7.2498E 03	2.8419E-01	5.6786E-01	1.8352E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3459E 00

FOREWARD	6.8048E 02	5.2580E 02	5.2451E 02	6.1687E 03	1.4380E 02	1.6061E 04	1.1627E 02	6.3978E 03	2.8395E-01	5.6737E-01	3.6009E 03
AFT	7.0110E 02	5.2530E 02	5.2401E 02	6.1680E 03	1.4390E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.6002E 03

GAS BUILDUP IN SLOT, DW/DT = 6.7964E-01

FOREWARD	9.7935E 02	5.2346E 02	5.2040E 02	6.1658E 03	2.1850E 02	1.6061E 04	1.1640E 02	6.4169E 03	2.8343E-01	5.6629E-01	5.4311E 03
AFT	1.0174E 03	5.2215E 02	5.1910E 02	6.1642E 03	2.1893E 02	1.6061E 04	1.3173E 02	7.2661E 03	2.8327E-01	5.6593E-01	5.4297E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3469E 00

IGNITION TIME, TIME (S) 61.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7465503.0	1678312.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8475253.0	1905313.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	43279.887	9729.7070
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.57730406E 09	0.12978317E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.63877274E 09	0.14360189E 09
THRUST COEFFICIENT	CF	1.6178513	1.6178513
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3348.3213	7381.7852
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	250438.38	552122.25
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	23.227997	51.208984
INERT MASS REMAINING (KG,LBM)	MIR	2051.0010	4521.6836
TOTAL BURN AREA (M**2,IN**2)	ABTOT	262.29517	406558.38
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	115.26666	7034007.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	204196.38	450176.06
TOTAL GAS MASS (KG,LBM)	WGTOT	753.65454	1661.5244
RATIO OF SPECIFIC HEATS	GAMA	1.1615639	1.1615639
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.858253	28.347595
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.5286	5132.9688
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.13255143	0.13255143
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.36497741E 09	529.35522
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.28255404E 11	40981.004
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72379187E-02	0.28495759
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3428.6477	6171.5664
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	231.21489	358383.81
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	21.114639	32727.762
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	112.51770	6866255.0
GAS VOLUME (M**3,IN**3)	VP	187.39140	11435330.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.35972275E 09	521.73389
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.27258229E 11	39534.727
BURN AREA (M**2,IN**2)	AAN	9.9654627	15446.500
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.71989298E-02	0.28342253
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.45844328	18.048950
PROPELLANT VOLUME (M**3,IN**3)	VFN	2.7489519	167751.44
GAS VOLUME (M**3,IN**3)	VPN	9.2767248	566100.75
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3424.1599	6163.4883
PORT AREA (M**2,IN**2)	AP	6.5972948	10225.828
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4562845	2257.2461
EXPANSION RATIO	EPR	6.8411741	6.8411741
PRESSURE RATIO	PEPO	0.22844952E-01	0.22844952E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RRTO IN/SEC	TAUTO IN.
FORE	529.36	529.35	6171.57	0.0	0.0	0.0	16062.80	0.0	0.01	0.20	0.2850	16.253	0.2847	16.253
30.000	529.35	529.35	6171.57	0.0	0.0	0.0	16062.80	0.0	0.0	0.12	0.2850	16.253	0.2850	16.253
60.000	529.35	529.35	6171.57	0.0	0.0	0.0	16062.81	0.0	0.0	0.12	0.2850	16.253	0.2850	16.253
90.000	529.35	529.35	6171.57	0.0	0.0	0.0	16062.82	0.0	0.0	0.12	0.2850	16.253	0.2850	16.253
99.243	529.35	529.35	6171.57	0.0	0.0	0.0	16062.82	0.0	0.0	0.04	0.2850	16.253	0.2850	16.253
118.800	529.35	529.35	6171.57	0.0	0.0	335.36	8949.54	0.0	240.76	0.68	0.2850	18.274	0.2850	18.274
148.800	529.36	529.35	6171.56	12.89	0.004	337.19	9053.41	183.54	183.98	0.44	0.2850	18.273	0.2850	18.273
178.800	529.35	529.34	6171.54	25.56	0.007	339.02	9156.52	368.07	184.98	0.45	0.2850	18.271	0.2850	18.271
208.800	529.33	529.30	6171.51	38.02	0.011	340.86	9258.88	553.61	185.99	0.45	0.2850	18.268	0.2850	18.268
238.800	529.31	529.25	6171.46	50.28	0.014	342.69	9360.48	740.15	186.99	0.45	0.2850	18.266	0.2850	18.266
268.800	529.28	529.19	6171.41	62.36	0.018	344.53	9461.32	927.68	187.99	0.46	0.2849	18.264	0.2849	18.264
298.800	529.24	529.11	6171.35	74.25	0.021	346.36	9561.41	1116.20	188.99	0.46	0.2849	18.262	0.2849	18.262
328.800	529.20	529.02	6171.27	85.98	0.024	348.19	9660.74	1305.73	189.98	0.46	0.2849	18.259	0.2849	18.259
358.800	529.14	528.91	6171.19	97.55	0.028	350.03	9759.31	1496.24	190.98	0.46	0.2849	18.257	0.2849	18.257
388.800	529.08	528.79	6171.09	108.97	0.031	351.86	9857.13	1687.75	191.97	0.47	0.2849	18.254	0.2849	18.254
396.365	529.06	528.76	6171.07	111.84	0.032	352.32	9881.68	1736.56	48.57	-0.24	0.2849	18.251	0.2849	18.251
435.814	528.97	528.49	6170.79	139.76	0.039	336.29	9003.36	1976.18	112.69	1.36	0.2848	18.237	0.2848	18.237
447.600	528.92	528.42	6170.74	144.22	0.041	337.05	9045.98	2048.66	72.34	-0.15	0.2848	18.235	0.2848	18.235
477.600	528.82	528.23	6170.61	155.40	0.044	338.97	9153.89	2233.07	184.86	0.45	0.2848	18.232	0.2848	18.232
507.600	528.71	528.04	6170.47	166.42	0.047	340.89	9260.98	2418.52	185.90	0.45	0.2848	18.228	0.2848	18.228
537.600	528.59	527.83	6170.32	177.28	0.050	342.82	9367.23	2605.00	186.93	0.45	0.2848	18.224	0.2848	18.224
567.600	528.47	527.61	6170.16	188.00	0.053	344.74	9472.67	2792.51	187.97	0.46	0.2848	18.220	0.2848	18.220
597.600	528.33	527.37	6170.00	198.59	0.056	346.66	9577.28	2981.05	189.00	0.46	0.2847	18.216	0.2847	18.216
627.600	528.19	527.13	6169.83	209.04	0.059	348.58	9681.05	3170.63	190.03	0.46	0.2847	18.212	0.2847	18.212
657.600	528.04	526.87	6169.66	219.38	0.062	350.51	9784.01	3361.22	191.06	0.47	0.2847	18.208	0.2847	18.208
679.915	527.92	526.67	6169.52	227.02	0.064	351.94	9860.07	3504.02	142.79	-0.01	0.2846	18.204	0.2846	18.204
701.100	527.83	526.20	6168.90	259.20	0.073	334.79	8919.21	3616.13	241.09	0.69	0.2846	18.183	0.2846	18.183
731.100	527.63	525.86	6168.69	269.38	0.076	336.60	9021.77	3799.09	183.41	0.44	0.2846	18.181	0.2846	18.181
761.100	527.42	525.52	6168.47	279.44	0.079	338.42	9123.60	3983.03	184.39	0.45	0.2845	18.175	0.2845	18.175
791.100	527.20	525.16	6168.25	289.39	0.082	340.23	9224.69	4167.93	185.35	0.45	0.2845	18.170	0.2845	18.170
821.100	526.97	524.80	6168.02	299.24	0.084	342.05	9325.05	4353.78	186.31	0.45	0.2844	18.165	0.2844	18.165
851.100	526.74	524.42	6167.78	308.99	0.007	343.86	9424.68	4540.60	187.28	0.46	0.2844	18.159	0.2844	18.159
881.100	526.50	524.03	6167.54	318.65	0.090	345.68	9523.57	4728.37	188.24	0.46	0.2843	18.154	0.2843	18.154
911.100	526.25	523.64	6167.29	328.23	0.093	347.50	9621.75	4917.10	189.19	0.46	0.2843	18.149	0.2843	18.149
941.100	525.99	523.23	6167.04	337.72	0.095	349.31	9719.18	5106.78	190.15	0.47	0.2842	18.143	0.2842	18.143
971.100	525.73	522.81	6166.79	347.14	0.098	351.13	9815.89	5297.42	191.11	0.47	0.2842	18.138	0.2842	18.138
978.787	525.66	522.70	6166.72	349.56	0.099	351.59	9840.55	5346.77	49.12	-0.23	0.2841	18.132	0.2841	18.132
1017.972	525.36	521.48	6165.20	400.77	0.113	335.92	8987.26	5586.71	0.0	1.36	0.2840	18.095	0.2840	18.095
1029.900	525.20	521.27	6165.12	403.29	0.114	337.04	9051.35	5659.79	72.94	-0.14	0.2840	18.090	0.2840	18.090
1059.900	524.81	520.76	6164.91	409.57	0.116	339.85	9211.28	5843.85	184.51	0.45	0.2839	18.086	0.2839	18.086
1089.900	524.41	520.23	6164.71	415.85	0.117	342.65	9369.38	6029.40	186.01	0.46	0.2839	18.082	0.2839	18.082
1119.900	524.00	519.71	6164.50	422.12	0.119	345.46	9525.64	6216.44	187.50	0.46	0.2838	18.077	0.2838	18.077
1149.900	523.60	519.18	6164.29	428.41	0.121	348.27	9680.09	6404.95	188.99	0.47	0.2837	18.072	0.2837	18.072
1179.900	523.19	518.65	6164.07	434.70	0.123	351.08	9832.70	6594.95	190.47	0.47	0.2837	18.067	0.2837	18.067
1209.900	522.78	518.11	6163.86	441.01	0.124	353.89	9983.48	6786.43	191.96	0.48	0.2836	18.062	0.2836	18.062
1239.900	522.38	517.57	6163.63	447.33	0.126	356.69	10132.44	6979.38	193.44	0.48	0.2835	18.058	0.2835	18.058
1258.900	522.12	517.22	6163.49	451.34	0.127	358.47	10225.83	7102.34	123.27	0.31	0.2835	18.053	0.2835	18.053
AFT	521.73	516.44	6162.82	469.76	0.133	.....	10225.83	7381.79	280.18	0.74	0.2834	18.049	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.2935E 02	5.2935E 02	6.1716E 03	-1.6157E-03	1.6061E 04	-4.0814E-02	-2.2411E 00	2.8456E-01	5.6842E-01	-4.0814E-02
AFT	1.1880E 02	5.2935E 02	5.2935E 02	6.1716E 03	-2.8474E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.1928E-01

GAS BUILDUP IN SLOT, DW/DT = 6.7847E-01

FOREWARD	3.9636E 02	5.2906E 02	5.2876E 02	6.1711E 03	7.3274E 01	1.6061E 04	1.1250E 02	6.1789E 03	2.8449E-01	5.6845E-01	1.8491E 03
AFT	4.3581E 02	5.2879E 02	5.2849E 02	6.1708E 03	7.3254E 01	1.6061E 04	1.2848E 02	7.0572E 03	2.8445E-01	5.6838E-01	1.8477E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3587E 00

FOREWARD	6.7992E 02	5.2792E 02	5.2667E 02	6.1695E 03	1.4386E 02	1.6061E 04	1.1279E 02	6.2005E 03	2.8422E-01	5.6790E-01	3.6168E 03
AFT	7.0110E 02	5.2745E 02	5.2620E 02	6.1689E 03	1.4394E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.6161E 03

GAS BUILDUP IN SLOT, DW/DT = 6.8618E-01

FOREWARD	9.7879E 02	5.2566E 02	5.2270E 02	6.1667E 03	2.1871E 02	1.6061E 04	1.1295E 02	6.2200E 03	2.8372E-01	5.6687E-01	5.4597E 03
AFT	1.0180E 03	5.2443E 02	5.2148E 02	6.1652E 03	2.1911E 02	1.6061E 04	1.2837E 02	7.0733E 03	2.8357E-01	5.6654E-01	5.4583E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3601E 00

IGNITION TIME, TIME (S) 63.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7507872.0	1687837.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8517622.0	1914838.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	43499.430	9779.0625
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.59227750E 09	0.13314931E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.65576576E 09	0.14742203E 09
THRUST COEFFICIENT	CF	1.6179485	1.6179485
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3364.7463	7417.9961
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	257151.44	566922.00
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	23.345825	51.468750
INERT MASS REMAINING (KG,LBM)	MIR	2004.3093	4418.7461
TOTAL BURN AREA (M**2,IN**2)	ABTOT	263.32690	408157.75
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	111.46205	6801835.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	197456.44	435317.06
TOTAL GAS MASS (KG,LBM)	WGTOT	770.38086	1698.3992
RATIO OF SPECIFIC HEATS	GAMA	1.1615648	1.1615648
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.858792	28.348785
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.5740	5133.1172
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.12998831	0.12998831
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.36633677E 09	531.32690
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.28986716E 11	42041.684
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72443336E-02	0.28521007
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3429.0427	6172.2773
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	232.97363	361109.88
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	20.476837	31739.168
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	108.85596	6642801.0
GAS VOLUME (M**3,IN**3)	VP	190.30527	11613145.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.36128026E 09	523.99292
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.27979235E 11	40580.453
BURN AREA (M**2,IN**2)	AAN	9.8764210	15308.484
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72068460E-02	0.28373426
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.47284085	18.615784
PROPELLANT VOLUME (M**3,IN**3)	VFN	2.6060886	159033.38
GAS VOLUME (M**3,IN**3)	VPN	9.4195881	574818.81
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3424.7219	6164.5000
PORT AREA (M**2,IN**2)	AP	6.7290611	10430.066
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4571667	2258.6133
EXPANSION RATIO	EPR	6.8370333	6.8370333
PRESSURE RATIO	PEPO	0.22863086E-01	0.22863086E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RRTO IN/SEC	TAUTO IN.
FORE	531.33	531.33	6172.28	0.0	0.0	0.0	16062.80	0.0	0.01	0.19	0.2852	16.253	0.2850	16.253
30.000	531.33	531.33	6172.28	0.0	0.0	0.0	16062.80	0.0	0.0	0.12	0.2852	16.253	0.2852	16.253
60.000	531.33	531.33	6172.28	0.0	0.0	0.0	16062.81	0.0	0.0	0.12	0.2852	16.253	0.2852	16.253
90.000	531.33	531.33	6172.28	0.0	0.0	0.0	16062.82	0.0	0.0	0.12	0.2852	16.253	0.2852	16.253
99.243	531.33	531.33	6172.28	0.0	0.0	0.0	16062.82	0.0	0.0	0.04	0.2852	16.253	0.2852	16.253
118.800	531.33	531.33	6172.28	0.0	0.0	338.94	9141.68	0.0	233.79	0.68	0.2852	18.844	0.2852	18.844
148.800	531.33	531.33	6172.27	12.72	0.004	340.77	9246.80	185.66	186.10	0.45	0.2852	18.842	0.2852	18.842
178.800	531.32	531.31	6172.25	25.22	0.007	342.60	9351.11	372.31	187.11	0.45	0.2852	18.840	0.2852	18.840
208.800	531.31	531.27	6172.22	37.52	0.011	344.44	9454.61	559.97	188.11	0.45	0.2852	18.838	0.2852	18.838
238.800	531.28	531.22	6172.18	49.63	0.014	346.27	9557.31	748.63	189.11	0.46	0.2852	18.836	0.2852	18.836
268.800	531.25	531.16	6172.13	61.55	0.017	348.11	9659.22	938.28	190.11	0.46	0.2852	18.834	0.2852	18.834
298.800	531.22	531.09	6172.06	73.30	0.021	349.94	9760.32	1128.94	191.11	0.46	0.2852	18.832	0.2852	18.832
328.800	531.17	530.99	6171.99	84.89	0.024	351.77	9860.62	1320.58	192.11	0.47	0.2852	18.829	0.2852	18.829
358.800	531.12	530.89	6171.91	96.31	0.027	353.61	9960.12	1513.22	193.11	0.47	0.2852	18.827	0.2852	18.827
388.800	531.06	530.77	6171.82	107.60	0.030	355.44	10058.81	1706.86	194.11	0.47	0.2852	18.824	0.2852	18.824
395.796	531.04	530.74	6171.79	110.23	0.031	355.87	10081.71	1752.53	45.41	-0.26	0.2851	18.821	0.2851	18.821
436.383	530.95	530.49	6171.53	136.91	0.039	339.91	9198.17	1985.16	109.16	1.36	0.2851	18.807	0.2851	18.807
447.600	530.91	530.42	6171.48	141.12	0.040	340.63	9239.20	2054.97	69.64	-0.17	0.2851	18.805	0.2851	18.805
477.600	530.81	530.24	6171.36	152.18	0.043	342.55	9348.35	2241.50	186.98	0.45	0.2851	18.802	0.2851	18.802
507.600	530.70	530.05	6171.22	163.08	0.046	344.47	9456.61	2429.07	188.03	0.45	0.2851	18.798	0.2851	18.798
537.600	530.59	529.85	6171.08	173.83	0.049	346.39	9564.00	2617.67	189.06	0.46	0.2851	18.794	0.2851	18.794
567.600	530.47	529.63	6170.93	184.44	0.052	348.32	9670.52	2807.31	190.10	0.46	0.2850	18.790	0.2850	18.790
597.600	530.34	529.41	6170.77	194.92	0.055	350.24	9776.16	2997.98	191.13	0.46	0.2850	18.786	0.2850	18.786
627.600	530.20	529.17	6170.61	205.27	0.058	352.16	9880.93	3189.68	192.16	0.47	0.2850	18.782	0.2850	18.782
657.600	530.05	528.92	6170.43	215.50	0.061	354.08	9984.81	3382.40	193.20	0.47	0.2849	18.778	0.2849	18.778
679.347	529.94	528.73	6170.30	222.87	0.063	355.48	10059.58	3523.12	140.69	-0.03	0.2849	18.773	0.2849	18.773
701.100	529.86	528.28	6169.72	253.86	0.072	338.36	9110.77	3631.69	234.18	0.69	0.2848	18.752	0.2848	18.752
731.100	529.66	527.96	6169.52	263.94	0.074	340.18	9214.52	3816.78	185.54	0.45	0.2848	18.750	0.2848	18.750
761.100	529.45	527.62	6169.30	273.92	0.077	341.99	9317.50	4002.84	186.52	0.45	0.2848	18.745	0.2848	18.745
791.100	529.25	527.28	6169.08	283.78	0.080	343.81	9419.71	4189.87	187.48	0.45	0.2847	18.739	0.2847	18.739
821.100	529.02	526.92	6168.86	293.54	0.083	345.62	9521.13	4377.85	188.45	0.46	0.2847	18.734	0.2847	18.734
851.100	528.80	526.56	6168.63	303.20	0.086	347.44	9621.78	4566.79	189.41	0.46	0.2847	18.728	0.2847	18.728
881.100	528.56	526.18	6168.40	312.78	0.088	349.25	9721.66	4756.70	190.37	0.46	0.2846	18.723	0.2846	18.723
911.100	528.32	525.80	6168.16	322.27	0.091	351.07	9820.76	4947.55	191.33	0.47	0.2846	18.717	0.2846	18.717
941.100	528.07	525.40	6167.91	331.68	0.094	352.88	9919.09	5139.37	192.29	0.47	0.2845	18.712	0.2845	18.712
971.100	527.82	524.99	6167.66	341.02	0.096	354.70	10016.63	5332.14	193.25	0.47	0.2845	18.706	0.2845	18.706
978.219	527.76	524.90	6167.61	343.25	0.097	355.13	10039.67	5378.39	46.00	-0.25	0.2844	18.700	0.2844	18.700
1018.540	527.48	523.74	6166.18	392.33	0.111	339.54	9182.38	5611.41	0.0	1.36	0.2843	18.662	0.2843	18.662
1029.900	527.34	523.56	6166.10	394.74	0.111	340.61	9244.15	5681.85	70.28	-0.16	0.2843	18.658	0.2843	18.658
1059.900	526.95	523.05	6165.90	401.03	0.113	343.41	9405.94	5868.04	186.65	0.46	0.2842	18.654	0.2842	18.654
1089.900	526.57	522.55	6165.70	407.32	0.115	346.22	9565.79	6055.73	188.15	0.46	0.2842	18.649	0.2842	18.649
1119.900	526.18	522.04	6165.50	413.62	0.117	349.03	9723.70	6244.90	189.64	0.47	0.2841	18.644	0.2841	18.644
1149.900	525.79	521.52	6165.29	419.91	0.118	351.83	9879.68	6435.55	191.13	0.47	0.2840	18.640	0.2840	18.640
1179.900	525.40	521.01	6165.07	426.22	0.120	354.64	10033.71	6627.70	192.62	0.48	0.2840	18.635	0.2840	18.635
1209.900	525.00	520.49	6164.86	432.54	0.122	357.45	10185.81	6821.32	194.10	0.48	0.2839	18.630	0.2839	18.630
1239.900	524.61	519.96	6164.64	438.87	0.124	360.26	10335.97	7016.42	195.59	0.48	0.2838	18.625	0.2838	18.625
1258.900	524.36	519.63	6164.50	442.89	0.125	362.03	10430.07	7140.75	124.64	0.31	0.2838	18.620	0.2838	18.620
AFT	523.99	518.88	6163.86	460.70	0.130	.....	10430.07	7418.00	277.99	0.73	0.2837	18.616	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.3133E 02	5.3133E 02	6.1723E 03	-1.6112E-03	1.6061E 04	-4.0850E-02	-2.2411E 00	2.8481E-01	5.6842E-01	-4.0850E-02
AFT	1.1880E 02	5.3133E 02	5.3133E 02	6.1723E 03	-2.8321E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.1804E-01

GAS BUILDUP IN SLOT, DW/DT = 6.7719E-01

FOREWARD	3.9580E 02	5.3104E 02	5.3074E 02	6.1718E 03	7.3496E 01	1.6061E 04	1.0895E 02	5.9789E 03	2.8474E-01	5.6897E-01	1.8615E 03
AFT	4.3638E 02	5.3079E 02	5.3049E 02	6.1715E 03	7.3474E 01	1.6061E 04	1.2504E 02	6.8624E 03	2.8470E-01	5.6890E-01	1.8601E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3611E 00

FOREWARD	6.7935E 02	5.2994E 02	5.2873E 02	6.1703E 03	1.4393E 02	1.6061E 04	1.0926E 02	6.0010E 03	2.8448E-01	5.6845E-01	3.6324E 03
AFT	7.0110E 02	5.2950E 02	5.2828E 02	6.1697E 03	1.4401E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.6317E 03

GAS BUILDUP IN SLOT, DW/DT = 6.8706E-01

FOREWARD	9.7822E 02	5.2776E 02	5.2490E 02	6.1676E 03	2.1894E 02	1.6061E 04	1.0944E 02	6.0209E 03	2.8400E-01	5.6745E-01	5.4878E 03
AFT	1.0185E 03	5.2660E 02	5.2374E 02	6.1662E 03	2.1931E 02	1.6061E 04	1.2495E 02	6.8782E 03	2.8386E-01	5.6714E-01	5.4865E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3627E 00

IGNITION TIME, TIME (S) 65.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7549405.0	1697174.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8559156.0	1924175.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	43709.070	9826.1914
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.60733466E 09	0.13653430E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.67284250E 09	0.15126104E 09
THRUST COEFFICIENT	CF	1.6180468	1.6180468
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3380.8489	7453.4961
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	263897.00	581793.44
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	23.458344	51.716797
INERT MASS REMAINING (KG,LBM)	MIR	1957.3926	4315.3125
TOTAL BURN AREA (M**2,IN**2)	ABTOT	264.34033	409728.63
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	107.63908	6568543.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	190684.00	420386.38
TOTAL GAS MASS (KG,LBM)	WGTOT	787.21240	1735.5068
RATIO OF SPECIFIC HEATS	GAMA	1.1615658	1.1615658
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.859318	28.349945
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.6179	5133.2617
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.12749916	0.12749916
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.36766566E 09	533.25415
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.29720719E 11	43106.262
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72506070E-02	0.28545707
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3429.4268	6172.9688
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	234.72121	363818.63
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	19.831833	30739.414
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	105.17471	6418158.0
GAS VOLUME (M**3,IN**3)	VP	193.23813	11792119.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.36279962E 09	526.19653
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.28703314E 11	41630.641
BURN AREA (M**2,IN**2)	AAN	9.7872829	15170.320
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72145537E-02	0.28403765
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.48725432	19.183243
PROPELLANT VOLUME (M**3,IN**3)	VFN	2.4643536	150384.19
GAS VOLUME (M**3,IN**3)	VPN	9.5613232	583468.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3425.2644	6165.4766
PORT AREA (M**2,IN**2)	AP	6.8622761	10636.551
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4580526	2259.9863
EXPANSION RATIO	EPR	6.8328791	6.8328791
PRESSURE RATIO	PEPO	0.22881344E-01	0.22881344E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	533.25	533.25	6172.97	0.0	0.0	0.0	16062.80	0.0	0.01	0.18	0.2855	16.253	0.2852	16.253
30.000	533.25	533.25	6172.97	0.0	0.0	0.0	16062.80	0.0	0.0	0.11	0.2855	16.253	0.2855	16.253
60.000	533.25	533.25	6172.97	0.0	0.0	0.0	16062.81	0.0	0.0	0.11	0.2855	16.253	0.2855	16.253
90.000	533.25	533.25	6172.97	0.0	0.0	0.0	16062.82	0.0	0.0	0.11	0.2855	16.253	0.2855	16.253
99.243	533.25	533.25	6172.97	0.0	0.0	0.0	16062.82	0.0	0.0	0.04	0.2855	16.253	0.2855	16.253
118.800	533.25	533.25	6172.97	0.0	0.0	342.52	9336.04	0.0	226.72	0.68	0.2855	19.414	0.2855	19.414
148.800	533.26	533.25	6172.96	12.55	0.004	344.35	9442.40	187.78	188.23	0.45	0.2855	19.413	0.2855	19.413
178.800	533.25	533.23	6172.94	24.90	0.007	346.19	9547.90	376.56	189.24	0.46	0.2855	19.411	0.2855	19.411
208.800	533.23	533.20	6172.91	37.04	0.010	348.02	9652.56	566.34	190.24	0.46	0.2855	19.409	0.2855	19.409
238.800	533.21	533.15	6172.87	48.99	0.014	349.86	9756.37	757.11	191.24	0.46	0.2855	19.407	0.2855	19.407
268.800	533.18	533.09	6172.82	60.77	0.017	351.69	9859.34	948.89	192.24	0.47	0.2854	19.404	0.2854	19.404
298.800	533.14	533.02	6172.76	72.37	0.021	353.52	9961.45	1141.67	193.24	0.47	0.2854	19.402	0.2854	19.402
328.800	533.10	532.93	6172.69	83.82	0.024	355.36	10062.72	1335.44	194.24	0.47	0.2854	19.399	0.2854	19.399
358.800	533.05	532.83	6172.61	95.11	0.027	357.19	10163.14	1530.21	195.24	0.47	0.2854	19.397	0.2854	19.397
388.800	532.99	532.71	6172.52	106.26	0.030	359.02	10262.71	1725.97	196.24	0.48	0.2854	19.394	0.2854	19.394
395.226	532.97	532.68	6172.50	108.65	0.031	359.42	10283.94	1768.41	42.17	-0.28	0.2854	19.391	0.2854	19.391
436.952	532.89	532.44	6172.25	134.15	0.038	343.53	9395.25	1993.95	105.59	1.37	0.2854	19.377	0.2854	19.377
447.600	532.85	532.39	6172.21	138.10	0.039	344.21	9434.64	2061.00	66.87	-0.18	0.2854	19.375	0.2854	19.375
477.600	532.76	532.21	6172.09	149.04	0.042	346.13	9545.03	2249.66	189.11	0.46	0.2853	19.372	0.2853	19.372
507.600	532.65	532.03	6171.95	159.83	0.045	348.05	9654.48	2439.35	190.15	0.46	0.2853	19.368	0.2853	19.368
537.600	532.54	531.83	6171.82	170.47	0.048	349.97	9763.00	2630.08	191.19	0.46	0.2853	19.364	0.2853	19.364
567.600	532.43	531.62	6171.67	180.97	0.051	351.90	9870.61	2821.84	192.23	0.47	0.2853	19.360	0.2853	19.360
597.600	532.30	531.40	6171.52	191.34	0.054	353.82	9977.28	3014.63	193.26	0.47	0.2853	19.356	0.2853	19.356
627.600	532.16	531.17	6171.36	201.59	0.057	355.74	10083.03	3208.46	194.30	0.47	0.2852	19.352	0.2852	19.352
657.600	532.02	530.92	6171.19	211.73	0.060	357.66	10187.85	3403.31	195.33	0.47	0.2852	19.347	0.2852	19.347
678.778	531.91	530.74	6171.07	218.84	0.062	359.02	10261.29	3541.86	138.51	-0.04	0.2852	19.343	0.2852	19.343
701.100	531.84	530.32	6170.52	248.67	0.070	341.94	9304.54	3646.85	227.17	0.69	0.2851	19.322	0.2851	19.322
731.100	531.65	530.01	6170.32	258.66	0.073	343.76	9409.50	3834.06	187.67	0.45	0.2851	19.320	0.2851	19.320
761.100	531.45	529.68	6170.11	268.55	0.076	345.57	9513.63	4022.25	188.65	0.46	0.2851	19.314	0.2851	19.314
791.100	531.25	529.35	6169.89	278.32	0.079	347.39	9616.95	4211.40	189.61	0.46	0.2850	19.309	0.2850	19.309
821.100	531.03	529.00	6169.68	287.99	0.081	349.20	9719.44	4401.52	190.58	0.46	0.2850	19.303	0.2850	19.303
851.100	530.81	528.65	6169.46	297.57	0.084	351.01	9821.12	4592.59	191.54	0.47	0.2849	19.298	0.2849	19.298
881.100	530.59	528.28	6169.23	307.07	0.087	352.83	9921.97	4784.62	192.51	0.47	0.2849	19.292	0.2849	19.292
911.100	530.36	527.91	6169.00	316.48	0.089	354.64	10022.01	4977.61	193.47	0.47	0.2848	19.286	0.2848	19.286
941.100	530.11	527.52	6168.76	325.81	0.092	356.46	10121.22	5171.56	194.43	0.47	0.2848	19.281	0.2848	19.281
971.100	529.86	527.13	6168.52	335.07	0.095	358.27	10219.61	5366.46	195.39	0.48	0.2847	19.275	0.2847	19.275
977.651	529.81	527.04	6168.46	337.11	0.095	358.67	10240.99	5409.52	42.79	-0.27	0.2847	19.269	0.2847	19.269
1019.107	529.55	525.96	6167.12	384.14	0.108	343.17	9379.81	5635.51	0.0	1.37	0.2845	19.231	0.2845	19.231
1029.900	529.42	525.78	6167.05	386.44	0.109	344.18	9439.18	5793.22	67.55	-0.17	0.2845	19.226	0.2845	19.226
1059.900	529.05	525.29	6166.85	392.74	0.111	346.98	9602.84	5891.55	188.79	0.46	0.2845	19.223	0.2845	19.223
1089.900	528.68	524.80	6166.66	399.05	0.113	349.79	9764.44	6081.37	190.30	0.47	0.2845	19.218	0.2845	19.218
1119.900	528.30	524.31	6166.45	405.35	0.114	352.60	9924.00	6272.68	191.79	0.47	0.2844	19.213	0.2844	19.213
1149.900	527.93	523.81	6166.25	411.66	0.116	355.40	10081.51	6465.48	193.28	0.48	0.2843	19.208	0.2843	19.208
1179.900	527.55	523.31	6166.04	417.98	0.118	358.21	10236.97	6659.76	194.77	0.48	0.2843	19.203	0.2843	19.203
1209.900	527.17	522.80	6165.83	424.31	0.120	361.02	10390.38	6855.53	196.25	0.49	0.2842	19.197	0.2842	19.197
1239.900	526.79	522.29	6165.61	430.65	0.122	363.82	10541.75	7052.77	197.74	0.49	0.2841	19.192	0.2841	19.192
1258.900	526.54	521.97	6165.48	434.68	0.123	365.60	10636.55	7178.46	126.00	0.31	0.2841	19.187	0.2841	19.187
AFT	526.20	521.26	6164.87	451.91	0.127	.....	10636.55	7453.50	275.77	0.73	0.2840	19.183	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.3325E 02	5.3325E 02	6.1730E 03	-1.6068E-03	1.6061E 04	-4.0884E-02	-2.2411E 00	2.8505E-01	5.6842E-01	-4.0884E-02
AFT	1.1880E 02	5.3325E 02	5.3325E 02	6.1730E 03	-2.8237E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.1847E-01

GAS BUILDUP IN SLOT, DW/DT = 6.7759E-01

FOREWARD	3.9523E 02	5.3297E 02	5.3268E 02	6.1725E 03	7.3717E 01	1.6061E 04	1.0536E 02	5.7766E 03	2.8498E-01	5.6947E-01	1.8738E 03
AFT	4.3695E 02	5.3273E 02	5.3244E 02	6.1723E 03	7.3693E 01	1.6061E 04	1.2155E 02	6.6653E 03	2.8495E-01	5.6941E-01	1.8724E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3676E 00

FOREWARD	6.7878E 02	5.3191E 02	5.3074E 02	6.1711E 03	1.4399E 02	1.6061E 04	1.0568E 02	5.7993E 03	2.8474E-01	5.6897E-01	3.6475E 03
AFT	7.0110E 02	5.3149E 02	5.3032E 02	6.1705E 03	1.4406E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.6469E 03

GAS BUILDUP IN SLOT, DW/DT = 6.9024E-01

FOREWARD	9.7765E 02	5.2981E 02	5.2704E 02	6.1685E 03	2.1916E 02	1.6061E 04	1.0588E 02	5.8196E 03	2.8427E-01	5.6800E-01	5.5154E 03
AFT	1.0191E 03	5.2872E 02	5.2596E 02	6.1671E 03	2.1951E 02	1.6061E 04	1.2149E 02	6.6808E 03	2.8413E-01	5.6771E-01	5.5140E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3694E 00

ORIGINAL PAGE IS OF POOR QUALITY

IGNITION TIME, TIME (S) 67.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7590271.0	1706361.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8600021.0	1933362.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	43915.410	9872.5781
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.62247424E 09	0.13993782E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.69000166E 09	0.15511856E 09
THRUST COEFFICIENT	CF	1.6181393	1.6181393
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3396.6677	7488.3711
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	270674.50	596735.25
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	23.569077	51.960938
INERT MASS REMAINING (KG,LBM)	MIR	1910.2544	4211.3906
TOTAL BURN AREA (M**2,IN**2)	ABTOT	265.33496	411270.06
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	103.79800	6334146.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	183879.50	405385.00
TOTAL GAS MASS (KG,LBM)	WGTOT	804.16040	1772.8706
RATIO OF SPECIFIC HEATS	GAMA	1.1615667	1.1615667
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.859830	28.351074
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.6609	5133.4023
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.12507999	0.12507999
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.36897280E 09	535.15015
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.30457356E 11	44174.664
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72567500E-02	0.28569889
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3429.8066	6173.6523
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	236.45714	366509.31
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	19.179626	29728.496
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	101.47424	6192341.0
GAS VOLUME (M**3,IN**3)	VP	196.18967	11972233.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.36428800E 09	528.35547
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.29430399E 11	42685.191
BURN AREA (M**2,IN**2)	AAN	9.6980515	15032.012
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72220713E-02	0.28433359
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.50168324	19.751312
PROPELLANT VOLUME (M**3,IN**3)	VFN	2.3237553	141804.31
GAS VOLUME (M**3,IN**3)	VPN	9.7019224	592047.88
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3425.7961	6166.4336
PORT AREA (M**2,IN**2)	AP	6.9969406	10845.281
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4589424	2261.3662
EXPANSION RATIO	EPR	6.8287096	6.8287096
PRESSURE RATIO	PEPO	0.22899657E-01	0.22899657E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RRTO IN/SEC	TAUTO IN.
FORE	535.15	535.15	6173.65	0.0	0.0	0.0	16062.80	0.0	0.01	0.18	0.2857	16.253	0.2855	16.253
30.000	535.15	535.15	6173.65	0.0	0.0	0.0	16062.80	0.0	0.0	0.11	0.2857	16.253	0.2857	16.253
60.000	535.15	535.15	6173.65	0.0	0.0	0.0	16062.81	0.0	0.0	0.11	0.2857	16.253	0.2857	16.253
90.000	535.15	535.15	6173.65	0.0	0.0	0.0	16062.82	0.0	0.0	0.11	0.2857	16.253	0.2857	16.253
99.243	535.15	535.15	6173.65	0.0	0.0	0.0	16062.82	0.0	0.0	0.03	0.2857	16.253	0.2857	16.253
118.800	535.15	535.15	6173.65	0.0	0.0	346.11	9532.61	0.0	219.55	0.68	0.2857	19.985	0.2857	19.985
148.800	535.15	535.15	6173.64	12.39	0.004	347.94	9640.21	189.90	190.36	0.46	0.2857	19.984	0.2857	19.984
178.800	535.14	535.13	6173.63	24.58	0.007	349.78	9746.92	380.80	191.36	0.46	0.2857	19.982	0.2857	19.982
208.800	535.13	535.10	6173.60	36.57	0.010	351.61	9852.73	572.70	192.37	0.47	0.2857	19.980	0.2857	19.980
238.800	535.10	535.05	6173.56	48.37	0.014	353.44	9957.65	765.60	193.37	0.47	0.2857	19.977	0.2857	19.977
268.800	535.08	534.99	6173.51	60.00	0.017	355.28	10061.68	959.50	194.37	0.47	0.2857	19.975	0.2857	19.975
298.800	535.04	534.92	6173.45	71.47	0.020	357.11	10164.81	1154.41	195.38	0.47	0.2857	19.973	0.2857	19.973
328.800	535.00	534.83	6173.38	82.77	0.023	358.94	10267.05	1350.30	196.38	0.48	0.2857	19.970	0.2857	19.970
358.800	534.95	534.73	6173.30	93.93	0.027	360.78	10368.39	1547.20	197.37	0.48	0.2857	19.968	0.2857	19.968
388.800	534.89	534.62	6173.21	104.95	0.030	362.61	10468.84	1745.09	198.37	0.48	0.2856	19.965	0.2856	19.965
394.656	534.88	534.59	6173.20	107.11	0.030	362.97	10488.36	1784.22	38.84	-0.29	0.2856	19.962	0.2856	19.962
437.522	534.79	534.37	6172.96	131.47	0.037	347.15	9594.59	2002.58	101.97	1.37	0.2856	19.948	0.2856	19.948
447.600	534.77	534.31	6172.93	135.16	0.038	347.79	9632.30	2066.78	64.01	-0.20	0.2856	19.945	0.2856	19.945
477.600	534.67	534.15	6172.80	145.99	0.041	349.72	9743.92	2257.56	191.24	0.46	0.2856	19.942	0.2856	19.942
507.600	534.57	533.97	6172.68	156.67	0.044	351.64	9854.56	2449.38	192.28	0.47	0.2856	19.939	0.2856	19.939
537.600	534.46	533.77	6172.54	167.20	0.047	353.56	9964.23	2642.23	193.32	0.47	0.2856	19.935	0.2856	19.935
567.600	534.35	533.57	6172.40	177.60	0.050	355.48	10072.91	2836.12	194.36	0.47	0.2855	19.930	0.2855	19.930
597.600	534.23	533.36	6172.25	187.86	0.053	357.40	10180.63	3031.04	195.40	0.48	0.2855	19.926	0.2855	19.926
627.600	534.09	533.13	6172.10	198.01	0.056	359.32	10287.36	3226.99	196.43	0.48	0.2855	19.922	0.2855	19.922
657.600	533.96	532.89	6171.93	208.05	0.059	361.25	10393.11	3423.98	197.47	0.48	0.2854	19.918	0.2854	19.918
678.208	533.86	532.72	6171.82	214.91	0.061	362.56	10465.20	3560.28	136.24	-0.05	0.2854	19.913	0.2854	19.913
701.100	533.79	532.33	6171.30	243.63	0.069	345.52	9500.52	3661.64	220.05	0.69	0.2853	19.892	0.2853	19.892
731.100	533.60	532.02	6171.10	253.53	0.072	347.34	9606.69	3850.97	189.80	0.46	0.2853	19.890	0.2853	19.890
761.100	533.41	531.71	6170.90	263.32	0.074	349.15	9711.99	4041.29	190.78	0.46	0.2853	19.884	0.2853	19.884
791.100	533.21	531.38	6170.70	273.01	0.077	350.97	9816.42	4232.56	191.75	0.47	0.2853	19.879	0.2853	19.879
821.100	533.01	531.04	6170.48	282.60	0.080	352.78	9919.98	4424.80	192.71	0.47	0.2852	19.873	0.2852	19.873
851.100	532.79	530.70	6170.27	292.10	0.082	354.59	10022.68	4618.00	193.68	0.47	0.2852	19.867	0.2852	19.867
881.100	532.57	530.34	6170.05	301.51	0.085	356.41	10124.52	4812.17	194.64	0.48	0.2851	19.862	0.2851	19.862
911.100	532.35	529.98	6169.82	310.84	0.088	358.22	10225.48	5007.29	195.61	0.48	0.2851	19.856	0.2851	19.856
941.100	532.11	529.60	6169.59	320.09	0.090	360.04	10325.59	5203.38	196.57	0.48	0.2851	19.850	0.2851	19.850
971.100	531.87	529.22	6169.35	329.28	0.093	361.85	10424.82	5400.42	197.53	0.48	0.2850	19.844	0.2850	19.844
977.082	531.82	529.14	6169.30	331.13	0.093	362.21	10444.51	5440.20	39.50	-0.28	0.2850	19.838	0.2850	19.838
1019.675	531.59	528.12	6168.04	376.20	0.106	346.80	9579.54	5659.06	0.0	1.38	0.2848	19.800	0.2848	19.800
1029.900	531.46	527.96	6167.98	378.37	0.107	347.75	9636.45	5723.97	64.72	-0.19	0.2848	19.795	0.2848	19.795
1059.900	531.11	527.49	6167.79	384.69	0.109	350.56	9801.97	5914.43	190.93	0.47	0.2848	19.792	0.2848	19.792
1089.900	530.75	527.01	6167.59	391.01	0.110	353.36	9966.33	6106.39	192.44	0.47	0.2847	19.787	0.2847	19.787
1119.900	530.39	526.53	6167.39	397.32	0.112	356.17	10126.54	6299.84	193.93	0.48	0.2847	19.781	0.2847	19.781
1149.900	530.02	526.05	6167.19	403.64	0.114	358.98	10285.59	6494.78	195.42	0.48	0.2846	19.776	0.2846	19.776
1179.900	529.66	525.56	6166.99	409.97	0.116	361.78	10442.47	6691.20	196.92	0.49	0.2846	19.771	0.2846	19.771
1209.900	529.29	525.07	6166.78	416.31	0.117	364.59	10597.20	6889.11	198.41	0.49	0.2845	19.766	0.2845	19.766
1239.900	528.92	524.58	6166.57	422.66	0.119	367.39	10749.77	7088.51	199.89	0.50	0.2844	19.761	0.2844	19.761
1258.900	528.69	524.26	6166.43	426.69	0.120	369.17	10845.28	7215.56	127.36	0.32	0.2844	19.755	0.2844	19.755
AFT	528.36	523.58	6165.86	443.36	0.125	.....	10845.28	7488.37	273.54	0.73	0.2843	19.751	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.3515E 02	5.3515E 02	6.1737E 03	-1.6026E-03	1.6061E 04	-4.0918E-02	-2.2411E 00	2.8528E-01	5.6842E-01	-4.0918E-02
AFT	1.1880E 02	5.3515E 02	5.3515E 02	6.1737E 03	-2.8175E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.1939E-01

GAS BUILDUP IN SLOT, DW/DT = 6.7847E-01

FOREWARD	3.9466E 02	5.3488E 02	5.3459E 02	6.1732E 03	7.3935E 01	1.6061E 04	1.0171E 02	5.5722E 03	2.8522E-01	5.6996E-01	1.8859E 03
AFT	4.3752E 02	5.3465E 02	5.3437E 02	6.1730E 03	7.3910E 01	1.6061E 04	1.1802E 02	6.4660E 03	2.8519E-01	5.6989E-01	1.8846E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3745E 00

FOREWARD	6.7821E 02	5.3386E 02	5.3272E 02	6.1718E 03	1.4405E 02	1.6061E 04	1.0205E 02	5.5954E 03	2.8498E-01	5.6947E-01	3.6623E 03
AFT	7.0110E 02	5.3346E 02	5.3233E 02	6.1713E 03	1.4412E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.6616E 03

GAS BUILDUP IN SLOT, DW/DT = 6.9360E-01

FOREWARD	9.7708E 02	5.3182E 02	5.2914E 02	6.1693E 03	2.1939E 02	1.6061E 04	1.0227E 02	5.6161E 03	2.8453E-01	5.6854E-01	5.5425E 03
AFT	1.0197E 03	5.3080E 02	5.2812E 02	6.1680E 03	2.1971E 02	1.6061E 04	1.1797E 02	6.4810E 03	2.8441E-01	5.6827E-01	5.5411E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3765E 00

IGNITION TIME, TIME (S) 69.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7629544.0	1715190.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8639295.0	1942191.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	44120.098	9918.5938
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.63769421E 09	0.14335938E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.70724096E 09	0.15899411E 09
THRUST COEFFICIENT	CF	1.6182384	1.6182384
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3411.9021	7521.9570
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	277483.06	611745.56
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	23.678925	52.203125
INERT MASS REMAINING (KG,LBM)	MIR	1862.8967	4106.9844
TOTAL BURN AREA (M**2,IN**2)	ABTOT	266.29077	412751.69
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	99.939072	6098659.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	177043.38	390313.88
TOTAL GAS MASS (KG,LBM)	WGTOT	821.13257	1810.2876
RATIO OF SPECIFIC HEATS	GAMA	1.1615677	1.1615677
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.860322	28.352158
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.7024	5133.5391
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.12273037	0.12273037
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37021645E 09	536.95386
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.31196541E 11	45246.766
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72625838E-02	0.28592861
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3430.1667	6174.3008
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	238.18156	369182.19
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	18.520218	28706.418
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	97.754623	5965356.0
GAS VOLUME (M**3,IN**3)	VP	199.15941	12153458.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.36570547E 09	530.41113
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.30160392E 11	43743.957
BURN AREA (M**2,IN**2)	AAN	9.5889091	14862.840
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72292164E-02	0.28461486
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.51612735	20.319977
PROPELLANT VOLUME (M**3,IN**3)	VFN	2.1844435	133303.00
GAS VOLUME (M**3,IN**3)	VPN	9.8412333	600549.19
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3426.2996	6167.3398
PORT AREA (M**2,IN**2)	AP	7.1330547	11056.258
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4598360	2262.7510
EXPANSION RATIO	EPR	6.8245306	6.8245306
PRESSURE RATIO	PEPO	0.22918053E-01	0.22918053E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	536.95	536.95	6174.30	0.0	0.0	0.0	16062.80	0.0	0.01	0.17	0.2859	16.253	0.2857	16.253
30.000	536.95	536.95	6174.30	0.0	0.0	0.0	16062.80	0.0	0.0	0.11	0.2859	16.253	0.2859	16.253
60.000	536.95	536.95	6174.30	0.0	0.0	0.0	16062.81	0.0	0.0	0.11	0.2859	16.253	0.2859	16.253
90.000	536.95	536.95	6174.30	0.0	0.0	0.0	16062.82	0.0	0.0	0.11	0.2859	16.253	0.2859	16.253
99.243	536.95	536.95	6174.30	0.0	0.0	0.0	16062.82	0.0	0.0	0.03	0.2859	16.253	0.2859	16.253
118.800	536.95	536.95	6174.30	0.0	0.0	349.70	9731.40	0.0	212.28	0.68	0.2859	20.556	0.2859	20.556
148.800	536.96	536.95	6174.29	12.23	0.004	351.53	9840.25	192.02	192.48	0.46	0.2859	20.555	0.2859	20.555
178.800	536.95	536.93	6174.28	24.27	0.007	353.37	9948.16	385.04	193.49	0.47	0.2859	20.553	0.2859	20.553
208.800	536.94	536.90	6174.25	36.11	0.010	355.20	10055.13	579.06	194.49	0.47	0.2859	20.551	0.2859	20.551
238.800	536.91	536.86	6174.21	47.77	0.014	357.03	10161.16	774.09	195.50	0.47	0.2859	20.549	0.2859	20.549
268.800	536.88	536.80	6174.16	59.26	0.017	358.87	10266.25	970.11	196.50	0.48	0.2859	20.547	0.2859	20.547
298.800	536.85	536.73	6174.10	70.59	0.020	360.70	10370.39	1167.14	197.50	0.48	0.2859	20.544	0.2859	20.544
328.800	536.81	536.64	6174.04	81.76	0.023	362.53	10473.60	1365.16	198.50	0.48	0.2859	20.542	0.2859	20.542
358.800	536.76	536.54	6173.96	92.79	0.026	364.37	10575.87	1564.18	199.50	0.48	0.2859	20.539	0.2859	20.539
388.800	536.70	536.43	6173.87	103.69	0.029	366.20	10677.20	1764.20	200.50	0.49	0.2859	20.536	0.2859	20.536
394.086	536.69	536.41	6173.86	105.61	0.030	366.52	10694.96	1799.94	35.43	-0.31	0.2859	20.534	0.2859	20.534
438.093	536.61	536.20	6173.64	128.87	0.036	350.77	9796.20	2011.01	98.30	1.38	0.2858	20.519	0.2858	20.519
447.600	536.59	536.15	6173.61	132.32	0.037	351.38	9832.18	2072.29	61.06	-0.22	0.2858	20.517	0.2858	20.517
477.600	536.50	535.99	6173.49	143.04	0.040	353.30	9945.04	2265.19	193.37	0.47	0.2858	20.514	0.2858	20.514
507.600	536.40	535.81	6173.36	153.61	0.043	355.23	10056.87	2459.13	194.41	0.47	0.2858	20.510	0.2858	20.510
537.600	536.29	535.63	6173.23	164.03	0.046	357.15	10167.68	2654.11	195.45	0.47	0.2858	20.506	0.2858	20.506
567.600	536.18	535.43	6173.09	174.33	0.049	359.07	10277.45	2850.12	196.49	0.48	0.2858	20.501	0.2858	20.501
597.600	536.06	535.22	6172.95	184.49	0.052	360.99	10386.20	3047.17	197.53	0.48	0.2857	20.497	0.2857	20.497
627.600	535.94	535.00	6172.80	194.55	0.055	362.91	10493.91	3245.25	198.56	0.48	0.2857	20.493	0.2857	20.493
657.600	535.80	534.77	6172.64	204.49	0.058	364.83	10600.61	3444.36	199.60	0.48	0.2857	20.489	0.2857	20.489
677.638	535.71	534.61	6172.53	211.09	0.060	366.11	10671.30	3578.32	133.89	-0.07	0.2857	20.484	0.2857	20.484
701.100	535.64	534.23	6172.04	238.75	0.067	349.11	9698.73	3676.01	212.84	0.69	0.2856	20.463	0.2856	20.463
731.100	535.46	533.94	6171.85	248.56	0.070	350.92	9806.11	3867.47	191.93	0.46	0.2856	20.460	0.2856	20.460
761.100	535.28	533.63	6171.66	258.27	0.073	352.74	9912.57	4059.91	192.91	0.47	0.2856	20.455	0.2856	20.455
791.100	535.08	533.32	6171.45	267.87	0.076	354.55	10018.12	4253.31	193.88	0.47	0.2855	20.449	0.2855	20.449
821.100	534.89	532.99	6171.25	277.38	0.078	356.36	10122.75	4447.68	194.84	0.47	0.2855	20.443	0.2855	20.443
851.100	534.68	532.65	6171.04	286.79	0.081	358.18	10226.48	4643.01	195.81	0.48	0.2854	20.438	0.2854	20.438
881.100	534.47	532.31	6170.82	296.13	0.084	359.99	10329.30	4839.30	196.78	0.48	0.2854	20.432	0.2854	20.432
911.100	534.25	531.95	6170.60	305.38	0.086	361.80	10431.20	5036.55	197.74	0.48	0.2854	20.426	0.2854	20.426
941.100	534.02	531.59	6170.38	314.56	0.089	363.62	10532.19	5234.77	198.70	0.48	0.2853	20.420	0.2853	20.420
971.100	533.79	531.21	6170.14	323.67	0.091	365.43	10632.27	5433.95	199.67	0.49	0.2853	20.414	0.2853	20.414
976.513	533.75	531.14	6170.10	325.33	0.092	365.76	10650.23	5470.38	36.13	-0.30	0.2852	20.408	0.2852	20.408
1020.244	533.52	530.19	6168.91	368.52	0.104	350.43	9781.59	5682.00	0.0	1.38	0.2851	20.370	0.2851	20.370
1029.900	533.41	530.04	6168.86	370.58	0.105	351.33	9835.95	5744.02	61.82	-0.21	0.2851	20.365	0.2851	20.365
1059.900	533.07	529.58	6168.67	376.91	0.106	354.14	10003.34	5936.62	193.07	0.47	0.2851	20.361	0.2851	20.361
1089.900	532.72	529.12	6168.48	383.23	0.108	356.94	10168.46	6130.71	194.58	0.48	0.2850	20.356	0.2850	20.356
1119.900	532.37	528.66	6168.28	389.56	0.110	359.75	10331.32	6326.30	196.07	0.48	0.2850	20.351	0.2850	20.351
1149.900	532.02	528.19	6168.09	395.88	0.112	362.55	10491.91	6523.38	197.57	0.49	0.2849	20.346	0.2849	20.346
1179.900	531.67	527.71	6167.89	402.22	0.113	365.36	10650.22	6721.94	199.06	0.49	0.2848	20.340	0.2848	20.340
1209.900	531.32	527.24	6167.68	408.56	0.115	368.16	10806.27	6922.00	200.55	0.49	0.2848	20.335	0.2848	20.335
1239.900	530.96	526.75	6167.47	414.92	0.117	370.97	10960.04	7123.54	202.04	0.50	0.2847	20.329	0.2847	20.329
1258.900	530.73	526.45	6167.34	418.96	0.118	372.74	11056.26	7251.95	128.73	0.32	0.2847	20.324	0.2847	20.324
AFT	530.41	525.80	6166.80	435.06	0.123	.....	11056.26	7521.96	270.73	0.72	0.2846	20.320	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RH IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.3695E 02	5.3695E 02	6.1743E 03	-1.5986E-03	1.6061E 04	-4.0950E-02	-2.2411E 00	2.8561E-01	5.6842E-01	-4.0950E-02
AFT	1.1880E 02	5.3695E 02	5.3695E 02	6.1743E 03	-2.8022E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.1782E-01

GAS BUILDUP IN SLOT, DW/DT = 6.7687E-01

FOREWARD	3.9409E 02	5.3669E 02	5.3641E 02	6.1739E 03	7.4160E 01	1.6061E 04	9.8021E 01	5.3656E 03	2.8544E-01	5.7043E-01	1.8980E 03
AFT	4.3809E 02	5.3648E 02	5.3620E 02	6.1736E 03	7.4133E 01	1.6061E 04	1.1443E 02	6.2644E 03	2.8541E-01	5.7037E-01	1.8966E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3759E 00

FOREWARD	6.7764E 02	5.3571E 02	5.3461E 02	6.1725E 03	1.4412E 02	1.6061E 04	9.8375E 01	5.3893E 03	2.8522E-01	5.6997E-01	3.6767E 03
AFT	7.0110E 02	5.3533E 02	5.3423E 02	6.1720E 03	1.4418E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.6760E 03

GAS BUILDUP IN SLOT, DW/DT = 6.9408E-01

FOREWARD	9.7651E 02	5.3375E 02	5.3114E 02	6.1701E 03	2.1962E 02	1.6061E 04	9.8611E 01	5.4104E 03	2.8479E-01	5.6907E-01	5.5690E 03
AFT	1.0202E 03	5.3278E 02	5.3019E 02	6.1689E 03	2.1992E 02	1.6061E 04	1.1439E 02	6.2790E 03	2.8467E-01	5.6881E-01	5.5676E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3783E 00

IGNITION TIME, TIME (S) 71.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7667607.0	1723747.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8677358.0	1950748.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	44313.941	9962.1719
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.65299123E 09	0.14679832E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.72455757E 09	0.16288706E 09
THRUST COEFFICIENT	CF	1.6183367	1.6183367
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3426.5837	7554.3242
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	284321.56	626821.81
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	23.782974	52.432495
INERT MASS REMAINING (KG,LBM)	MIR	1815.3306	4002.1194
TOTAL BURN AREA (M**2,IN**2)	ABTOT	267.21265	414180.56
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	96.063141	5862135.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	170177.06	375176.31
TOTAL GAS MASS (KG,LBM)	WGTOT	838.14624	1847.7966
RATIO OF SPECIFIC HEATS	GAMA	1.1615686	1.1615686
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.860792	28.353195
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.7417	5133.6680
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.12044585	0.12044585
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37140915E 09	538.68359
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.31938167E 11	46322.402
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72681829E-02	0.28614897
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3430.5139	6174.9258
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	239.89423	371836.81
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	17.853638	27673.203
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	94.016434	5737238.0
GAS VOLUME (M**3,IN**3)	VP	202.14719	12335784.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.36706918E 09	532.38892
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.30893167E 11	44806.754
BURN AREA (M**2,IN**2)	AAN	9.4646702	14670.270
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72360635E-02	0.28488445
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.53058577	20.889206
PROPELLANT VOLUME (M**3,IN**3)	VFN	2.0466814	124896.25
GAS VOLUME (M**3,IN**3)	VPN	9.9789953	608955.94
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3426.7834	6168.2109
PORT AREA (M**2,IN**2)	AP	7.2706175	11269.480
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4607334	2264.1416
EXPANSION RATIO	EPR	6.8203392	6.8203392
PRESSURE RATIO	PEPO	0.22936530E-01	0.22936530E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	538.68	538.68	6174.93	0.0	0.0	0.0	16062.80	0.0	0.01	0.16	0.2861	16.253	0.2859	16.253
30.000	538.68	538.68	6174.93	0.0	0.0	0.0	16062.80	0.0	0.0	0.10	0.2861	16.253	0.2861	16.253
60.000	538.68	538.68	6174.93	0.0	0.0	0.0	16062.81	0.0	0.0	0.10	0.2861	16.253	0.2861	16.253
90.000	538.68	538.68	6174.93	0.0	0.0	0.0	16062.82	0.0	0.0	0.10	0.2861	16.253	0.2861	16.253
99.243	538.68	538.68	6174.93	0.0	0.0	0.0	16062.82	0.0	0.0	0.03	0.2861	16.253	0.2861	16.253
118.800	538.68	538.68	6174.93	0.0	0.0	353.29	9932.40	0.0	204.91	0.68	0.2861	21.128	0.2861	21.128
148.800	538.69	538.68	6174.92	12.08	0.004	355.12	10042.50	194.14	194.60	0.47	0.2861	21.127	0.2861	21.127
178.800	538.67	538.66	6174.90	23.97	0.007	356.96	10151.62	389.28	195.61	0.47	0.2861	21.125	0.2861	21.125
208.800	538.66	538.63	6174.88	35.66	0.010	358.79	10259.75	585.42	196.62	0.47	0.2861	21.123	0.2861	21.123
238.800	538.65	538.59	6174.84	47.19	0.013	360.62	10366.88	782.57	197.62	0.48	0.2861	21.121	0.2861	21.121
268.800	538.62	538.53	6174.79	58.54	0.017	362.46	10473.04	980.71	198.63	0.48	0.2861	21.118	0.2861	21.118
298.800	538.58	538.46	6174.73	69.73	0.020	364.29	10578.20	1179.86	199.63	0.48	0.2861	21.116	0.2861	21.116
328.800	538.54	538.38	6174.66	80.78	0.023	366.13	10682.38	1380.01	200.63	0.48	0.2861	21.113	0.2861	21.113
358.800	538.49	538.28	6174.59	91.68	0.026	367.96	10785.57	1581.15	201.63	0.49	0.2861	21.111	0.2861	21.111
388.800	538.43	538.18	6174.51	102.45	0.029	369.79	10887.77	1783.29	202.63	0.49	0.2861	21.108	0.2861	21.108
393.515	538.43	538.16	6174.49	104.16	0.029	370.08	10903.74	1815.56	31.94	-0.33	0.2861	21.105	0.2861	21.105
438.663	538.35	537.96	6174.29	126.35	0.036	354.40	10000.08	2019.24	94.58	1.38	0.2861	21.090	0.2861	21.090
447.600	538.33	537.91	6174.26	129.57	0.037	354.97	10034.28	2077.51	58.03	-0.23	0.2861	21.088	0.2861	21.088
477.600	538.24	537.76	6174.14	140.18	0.040	356.90	10148.38	2272.52	195.49	0.47	0.2861	21.085	0.2861	21.085
507.600	538.15	537.59	6174.02	150.64	0.043	358.82	10261.41	2468.59	196.54	0.47	0.2860	21.081	0.2860	21.081
537.600	538.05	537.41	6173.90	160.96	0.045	360.74	10373.35	2665.68	197.58	0.48	0.2860	21.077	0.2860	21.077
567.600	537.94	537.21	6173.76	171.15	0.048	362.66	10484.21	2863.82	198.62	0.48	0.2860	21.073	0.2860	21.073
597.600	537.82	537.01	6173.62	181.22	0.051	364.58	10594.00	3062.99	199.66	0.48	0.2860	21.069	0.2860	21.069
627.600	537.70	536.79	6173.48	191.18	0.054	366.50	10702.70	3263.20	200.69	0.49	0.2859	21.064	0.2859	21.064
657.600	537.57	536.57	6173.32	201.03	0.057	368.42	10810.32	3464.44	201.73	0.49	0.2859	21.060	0.2859	21.060
677.067	537.48	536.42	6173.22	207.39	0.059	369.67	10879.59	3595.98	131.46	-0.09	0.2859	21.056	0.2859	21.056
701.100	537.42	536.06	6172.75	234.02	0.066	352.70	9899.16	3689.93	205.51	0.70	0.2858	21.034	0.2858	21.034
731.100	537.25	535.78	6172.57	243.75	0.069	354.51	10007.75	3883.52	194.05	0.47	0.2858	21.032	0.2858	21.032
761.100	537.07	535.48	6172.38	253.37	0.071	356.33	10115.38	4078.08	195.04	0.47	0.2858	21.026	0.2858	21.026
791.100	536.88	535.17	6172.18	262.89	0.074	358.14	10222.05	4273.61	196.01	0.47	0.2858	21.020	0.2858	21.020
821.100	536.69	534.86	6171.98	272.31	0.077	359.95	10327.75	4470.10	196.97	0.48	0.2857	21.014	0.2857	21.014
851.100	536.49	534.53	6171.78	281.65	0.079	361.76	10432.51	4667.56	197.94	0.48	0.2857	21.009	0.2857	21.009
881.100	536.28	534.19	6171.57	290.90	0.082	363.58	10536.30	4865.98	198.91	0.48	0.2856	21.003	0.2856	21.003
911.100	536.07	533.85	6171.36	300.08	0.085	365.39	10639.14	5065.36	199.87	0.49	0.2856	20.997	0.2856	20.997
941.100	535.85	533.49	6171.13	309.18	0.087	367.20	10741.02	5265.71	200.84	0.49	0.2855	20.991	0.2855	20.991
971.100	535.63	533.13	6170.91	318.22	0.090	369.02	10841.94	5467.02	201.80	0.49	0.2855	20.985	0.2855	20.985
975.944	535.59	533.07	6170.87	319.70	0.090	369.31	10858.14	5500.00	32.67	-0.32	0.2855	20.979	0.2855	20.979
1020.813	535.38	532.17	6169.75	361.08	0.102	354.06	9985.93	5704.29	0.0	1.38	0.2853	20.940	0.2853	20.940
1029.900	535.28	532.03	6169.70	363.02	0.102	354.91	10037.68	5763.33	58.82	-0.22	0.2853	20.935	0.2853	20.935
1059.900	534.95	531.59	6169.52	369.36	0.104	357.72	10206.95	5958.05	195.20	0.48	0.2853	20.931	0.2853	20.931
1089.900	534.61	531.14	6169.33	375.69	0.106	360.52	10373.84	6154.28	196.71	0.48	0.2853	20.926	0.2853	20.926
1119.900	534.28	530.69	6169.14	382.02	0.108	363.33	10538.35	6352.00	198.21	0.49	0.2852	20.921	0.2852	20.921
1149.900	533.94	530.23	6168.95	388.36	0.110	366.13	10700.47	6551.21	199.71	0.49	0.2852	20.915	0.2852	20.915
1179.900	533.60	529.77	6168.75	394.70	0.111	368.94	10860.22	6751.91	201.20	0.49	0.2851	20.910	0.2851	20.910
1209.900	533.26	529.31	6168.55	401.05	0.113	371.74	11017.58	6954.11	202.70	0.50	0.2850	20.904	0.2850	20.904
1239.900	532.91	528.84	6168.34	407.42	0.115	374.54	11172.56	7157.79	204.19	0.50	0.2850	20.899	0.2850	20.899
1258.900	532.69	528.54	6168.21	411.46	0.116	376.32	11269.48	7287.56	130.09	0.32	0.2849	20.893	0.2849	20.893
AFT	532.39	527.92	6167.70	426.98	0.120	.....	11269.48	7554.32	267.48	0.71	0.2849	20.889	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U· FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.3868E 02	5.3868E 02	6.1749E 03	-1.5947E-03	1.6061E 04	-4.0981E-02	-2.2411E 00	2.8572E-01	5.6842E-01	-4.0981F-02
AFT	1.1880E 02	5.3868E 02	5.3868E 02	6.1749E 03	-2.7897E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.1688F-01

GAS BUILDUP IN SLOT, DW/DT = 6.7590E-01

FOREWARD	3.9351E 02	5.3843E 02	5.3816E 02	6.1745E 03	7.4387E 01	1.6061E 04	9.4278E 01	5.1568E 03	2.8566E-01	5.7088E-01	1.9098F 03
AFT	4.3866E 02	5.3823E 02	5.3796E 02	6.1743E 03	7.4358E 01	1.6061E 04	1.1079E 02	6.0605E 03	2.8563E-01	5.7083E-01	1.9085F 03

GAS BUILDUP IN SLOT, DW/DT = 1.3782E 00

FOREWARD	6.7707E 02	5.3748E 02	5.3642E 02	6.1732E 03	1.4418E 02	1.6061E 04	9.4648F 01	5.1810E 03	2.8544E-01	5.7043E-01	3.6906F 03
AFT	7.0110E 02	5.3713E 02	5.3606E 02	6.1728E 03	1.4424E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.6899F 03

GAS BUILDUP IN SLOT, DW/DT = 6.9509E-01

FOREWARD	9.7594E 02	5.3559E 02	5.3307E 02	6.1709E 03	2.1987E 02	1.6061E 04	9.4901E 01	5.2024E 03	2.8503F-01	5.6957E-01	5.5949F 03
AFT	1.0208E 03	5.3468E 02	5.3217E 02	6.1698E 03	2.2015E 02	1.6061E 04	1.1077E 02	6.0747E 03	2.8491E-01	5.6933E-01	5.5935F 03

GAS BUILDUP IN SLOT, DW/DT = 1.3809E 00

IGNITION TIME, TIME (S) 73.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7704550.0	1732052.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8714301.0	1959053.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	44502.750	10004.617
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.66836352E 09	0.15025411E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.74194918E 09	0.16679685E 09
THRUST COEFFICIENT	CF	1.6184320	1.6184320
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3440.8435	7585.7617
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	291189.00	641961.88
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	23.884293	52.655884
INERT MASS REMAINING (KG,LBM)	MIR	1767.5620	3896.8076
TOTAL BURN AREA (M**2,IN**2)	ABTOT	268.11548	415579.94
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	92.170746	5624607.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	163281.69	359974.56
TOTAL GAS MASS (KG,LBM)	WGTOT	855.22485	1885.4485
RATIO OF SPECIFIC HEATS	GAMA	1.1615686	1.1615686
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.861249	28.354202
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.7798	5133.7930
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.11822385	0.11822385
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37256627E 09	540.36206
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.32682144E 11	47401.445
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72733909E-02	0.28635412
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3430.8481	6175.5273
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	241.59518	374473.31
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	17.179840	26628.820
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	90.260147	5508015.0
GAS VOLUME (M**3,IN**3)	VP	205.15256	12519183.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.36838246E 09	534.29395
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.31628616E 11	45873.434
BURN AREA (M**2,IN**2)	AAN	9.3403158	14477.520
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72424524E-02	0.28513598
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.54505771	21.458969
PROPELLANT VOLUME (M**3,IN**3)	VFN	1.9105892	116591.38
GAS VOLUME (M**3,IN**3)	VPN	10.115088	617260.81
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3427.2500	6169.0508
PORT AREA (M**2,IN**2)	AP	7.4096241	11484.941
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4616337	2265.5381
EXPANSION RATIO	EPR	6.8161354	6.8161354
PRESSURE RATIO	PEPO	0.22955131E-01	0.22955131E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	540.36	540.36	6175.53	0.0	0.0	0.0	16062.80	0.0	0.01	0.16	0.2864	16.253	0.2861	16.253
30.000	540.36	540.36	6175.53	0.0	0.0	0.0	16062.80	0.0	0.0	0.10	0.2864	16.253	0.2864	16.253
60.000	540.36	540.36	6175.53	0.0	0.0	0.0	16062.81	0.0	0.0	0.10	0.2864	16.253	0.2864	16.253
90.000	540.36	540.36	6175.53	0.0	0.0	0.0	16062.82	0.0	0.0	0.10	0.2864	16.253	0.2864	16.253
99.243	540.36	540.36	6175.53	0.0	0.0	0.0	16062.82	0.0	0.0	0.03	0.2864	16.253	0.2864	16.253
118.800	540.36	540.36	6175.53	0.0	0.0	356.89	10135.62	0.0	197.44	0.68	0.2864	21.700	0.2864	21.700
148.800	540.36	540.36	6175.52	11.93	0.004	358.72	10246.97	196.25	196.72	0.47	0.2864	21.699	0.2864	21.699
178.800	540.35	540.34	6175.50	23.67	0.007	360.55	10357.29	393.50	197.73	0.48	0.2864	21.697	0.2864	21.697
208.800	540.34	540.31	6175.48	35.23	0.010	362.39	10466.58	591.76	198.74	0.48	0.2864	21.695	0.2864	21.695
238.800	540.32	540.27	6175.44	46.61	0.013	364.22	10574.83	791.02	199.74	0.48	0.2863	21.693	0.2863	21.693
268.800	540.29	540.21	6175.39	57.84	0.016	366.05	10682.04	991.28	200.74	0.48	0.2863	21.691	0.2863	21.691
298.800	540.26	540.15	6175.34	68.90	0.020	367.89	10788.23	1192.54	201.75	0.49	0.2863	21.688	0.2863	21.688
328.800	540.22	540.06	6175.27	79.82	0.023	369.72	10893.38	1394.80	202.75	0.49	0.2863	21.686	0.2863	21.686
358.800	540.17	539.97	6175.20	90.60	0.026	371.55	10997.49	1598.06	203.75	0.49	0.2863	21.683	0.2863	21.683
388.800	540.12	539.86	6175.12	101.25	0.029	373.39	11100.57	1802.32	204.75	0.49	0.2863	21.680	0.2863	21.680
392.943	540.11	539.85	6175.11	102.74	0.029	373.64	11114.73	1831.02	28.36	-0.35	0.2863	21.677	0.2863	21.677
439.234	540.04	539.66	6174.92	123.91	0.035	358.03	10206.22	2027.23	90.81	1.38	0.2863	21.662	0.2863	21.662
447.600	540.02	539.62	6174.89	126.89	0.036	358.57	10238.59	2082.39	54.92	-0.25	0.2863	21.660	0.2863	21.660
477.600	539.94	539.47	6174.78	137.39	0.039	360.49	10353.94	2279.52	197.61	0.48	0.2863	21.657	0.2863	21.657
507.600	539.85	539.30	6174.66	147.74	0.042	362.41	10468.16	2477.70	198.65	0.48	0.2862	21.653	0.2862	21.653
537.600	539.75	539.13	6174.54	157.97	0.045	364.33	10581.25	2676.91	199.70	0.48	0.2862	21.649	0.2862	21.649
567.600	539.64	538.94	6174.41	168.06	0.047	366.25	10693.20	2877.16	200.74	0.49	0.2862	21.645	0.2862	21.645
597.600	539.53	538.74	6174.27	178.03	0.050	368.17	10804.02	3078.45	201.78	0.49	0.2862	21.641	0.2862	21.641
627.600	539.41	538.53	6174.13	187.90	0.053	370.09	10913.71	3280.78	202.82	0.49	0.2862	21.636	0.2862	21.636
657.600	539.29	538.31	6173.98	197.65	0.056	372.01	11022.27	3484.14	203.85	0.49	0.2861	21.632	0.2861	21.632
676.496	539.20	538.17	6173.88	203.77	0.057	373.22	11090.07	3613.17	128.93	-0.10	0.2861	21.627	0.2861	21.627
701.100	539.14	537.84	6173.44	229.42	0.065	356.29	10101.81	3703.34	198.08	0.70	0.2860	21.606	0.2860	21.606
731.100	538.98	537.56	6173.26	239.06	0.067	358.10	10211.61	3899.04	196.17	0.47	0.2860	21.603	0.2860	21.603
761.100	538.80	537.27	6173.07	248.60	0.070	359.92	10320.41	4095.72	197.16	0.48	0.2860	21.597	0.2860	21.597
791.100	538.62	536.97	6172.89	258.04	0.073	361.73	10428.20	4293.37	198.13	0.48	0.2860	21.592	0.2860	21.592
821.100	538.43	536.66	6172.69	267.38	0.075	363.54	10534.98	4491.98	199.10	0.48	0.2859	21.586	0.2859	21.586
851.100	538.24	536.34	6172.49	276.64	0.078	365.35	10640.76	4691.55	200.07	0.49	0.2859	21.580	0.2859	21.580
881.100	538.04	536.02	6172.29	285.82	0.081	367.17	10745.54	4892.09	201.03	0.49	0.2859	21.574	0.2859	21.574
911.100	537.83	535.68	6172.08	294.92	0.083	368.98	10849.31	5093.60	202.00	0.49	0.2858	21.568	0.2858	21.568
941.100	537.62	535.33	6171.86	303.95	0.086	370.79	10952.08	5296.07	202.96	0.49	0.2858	21.562	0.2858	21.562
971.100	537.40	534.98	6171.64	312.92	0.088	372.60	11053.84	5499.50	203.93	0.50	0.2857	21.556	0.2857	21.556
975.374	537.37	534.93	6171.61	314.21	0.089	372.86	11068.26	5528.96	29.13	-0.34	0.2857	21.550	0.2857	21.550
1021.383	537.18	534.08	6170.56	353.85	0.100	357.70	10192.59	5725.80	0.0	1.38	0.2856	21.511	0.2856	21.511
1029.900	537.09	533.96	6170.51	355.68	0.100	358.50	10241.63	5781.78	55.74	-0.24	0.2856	21.506	0.2856	21.506
1059.900	536.77	533.53	6170.33	362.02	0.102	361.30	10412.79	5978.63	197.33	0.48	0.2856	21.502	0.2856	21.502
1089.900	536.44	533.09	6170.14	368.36	0.104	364.11	10581.45	6176.98	198.84	0.49	0.2855	21.497	0.2855	21.497
1119.900	536.12	532.66	6169.96	374.70	0.106	366.91	10747.61	6376.82	200.34	0.49	0.2855	21.491	0.2855	21.491
1149.900	535.79	532.21	6169.77	381.04	0.107	369.71	10911.28	6578.17	201.84	0.49	0.2854	21.486	0.2854	21.486
1179.900	535.46	531.77	6169.57	387.38	0.109	372.52	11072.46	6781.00	203.34	0.50	0.2853	21.480	0.2853	21.480
1209.900	535.13	531.31	6169.38	393.74	0.111	375.32	11231.13	6985.33	204.83	0.50	0.2853	21.474	0.2853	21.474
1239.900	534.79	530.86	6169.18	400.11	0.113	378.12	11387.32	7191.15	206.33	0.51	0.2852	21.469	0.2852	21.469
1258.900	534.58	530.57	6169.05	404.16	0.114	379.90	11484.94	7322.27	131.44	0.32	0.2852	21.463	0.2852	21.463
AFT	534.29	529.98	6168.56	419.13	0.118	.....	11484.94	7585.76	264.20	0.70	0.2851	21.459	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.4036E 02	5.4036E 02	6.1755E 03	-1.5910E-03	1.6061E 04	-4.1010E-02	-2.2411E 00	2.8593E-01	5.6842E-01	-4.1010E-02
AFT	1.1880E 02	5.4036E 02	5.4036E 02	6.1755E 03	-2.7808E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.1677E-01

GAS BUILDUP IN SLOT, DW/DT = 6.7576E-01

FOREWARD	3.9294E 02	5.4011E 02	5.3985E 02	6.1751E 03	7.4612E 01	1.6061E 04	9.0487E 01	4.9459E 03	2.8587E-01	5.7131E-01	1.9215E 03
AFT	4.3923E 02	5.3993E 02	5.3966E 02	6.1749E 03	7.4581E 01	1.6061E 04	1.0710E 02	5.8544E 03	2.8584E-01	5.7126E-01	1.9201E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3819E 00

FOREWARD	6.7650E 02	5.3920E 02	5.3817E 02	6.1739E 03	1.4425E 02	1.6061E 04	9.0872E 01	4.9705E 03	2.8566E-01	5.7088E-01	3.7040E 03
AFT	7.0110E 02	5.3887E 02	5.3784E 02	6.1734E 03	1.4430E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.7033E 03

GAS BUILDUP IN SLOT, DW/DT = 6.9675E-01

FOREWARD	9.7537E 02	5.3737E 02	5.3493E 02	6.1716E 03	2.2011E 02	1.6061E 04	9.1142E 01	4.9923E 03	2.8526E-01	5.7005E-01	5.6201E 03
AFT	1.0214E 03	5.3652E 02	5.3408E 02	6.1706E 03	2.2037E 02	1.6061E 04	1.0709E 02	5.8680E 03	2.8515E-01	5.6983E-01	5.6187E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3846E 00

IGNITION TIME, TIME (S) 75.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7740394.0	1740110.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8750144.0	1967111.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	44686.688	10045.969
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.68380826E 09	0.15372627E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.75941350E 09	0.17072301E 09
THRUST COEFFICIENT	CF	1.6185284	1.6185284
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3454.6921	7616.2930
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	298084.50	657163.88
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	23.983017	52.873535
INERT MASS REMAINING (KG,LBM)	MIR	1719.5959	3791.0605
TOTAL BURN AREA (M**2,IN**2)	ABTOT	268.99658	416945.56
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	88.262268	5386097.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	156357.75	344709.94
TOTAL GAS MASS (KG,LBM)	WGTOT	872.34204	1923.1851
RATIO OF SPECIFIC HEATS	GAMA	1.1615696	1.1615696
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.861692	28.355179
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.8167	5133.9141
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.11606508	0.11606508
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37367834E 09	541.97485
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.33428386E 11	48483.781
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72782859E-02	0.28654677
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3431.1716	6176.1094
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	243.28421	377091.31
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	16.498886	25573.336
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	86.486069	5277706.0
GAS VOLUME (M**3,IN**3)	VP	208.17509	12703629.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.36964710E 09	536.12793
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.32366645E 11	46943.855
BURN AREA (M**2,IN**2)	AAN	9.2133121	14280.664
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72484724E-02	0.28537303
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.55954254	22.029236
PROPELLANT VOLUME (M**3,IN**3)	VFN	1.7761974	108390.31
GAS VOLUME (M**3,IN**3)	VPN	10.249479	625461.88
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3427.6973	6169.8555
PORT AREA (M**2,IN**2)	AP	7.5500727	11702.637
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4625387	2266.9404
EXPANSION RATIO	EPR	6.8119183	6.8119183
PRESSURE RATIO	PEPO	0.22973746E-01	0.22973746E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RH IN/SEC	TAU IN.	RHTO IN/SEC	TAUTO IN.
FORE	541.97	541.97	6176.11	0.0	0.0	0.0	16062.80	0.0	0.01	0.15	0.2865	16.253	0.2865	16.253
30.000	541.97	541.97	6176.11	0.0	0.0	0.0	16062.80	0.0	0.0	0.10	0.2865	16.253	0.2865	16.253
60.000	541.97	541.97	6176.11	0.0	0.0	0.0	16062.81	0.0	0.0	0.10	0.2865	16.253	0.2865	16.253
90.000	541.97	541.97	6176.11	0.0	0.0	0.0	16062.82	0.0	0.0	0.10	0.2865	16.253	0.2865	16.253
99.243	541.97	541.97	6176.11	0.0	0.0	0.0	16062.82	0.0	0.0	0.03	0.2865	16.253	0.2865	16.253
118.800	541.97	541.97	6176.11	0.0	0.0	360.49	10341.04	0.0	189.87	0.68	0.2865	22.273	0.2865	22.273
148.800	541.98	541.97	6176.10	11.79	0.004	362.32	10453.65	198.36	198.83	0.48	0.2865	22.272	0.2865	22.272
178.800	541.97	541.95	6176.09	23.39	0.007	364.15	10565.18	397.72	199.84	0.48	0.2865	22.270	0.2865	22.270
208.800	541.95	541.92	6176.06	34.81	0.010	365.99	10675.63	598.08	200.85	0.48	0.2865	22.268	0.2865	22.268
238.800	541.93	541.88	6176.02	46.06	0.013	367.82	10784.99	799.45	201.85	0.49	0.2865	22.266	0.2865	22.266
268.800	541.91	541.83	6175.98	57.15	0.016	369.65	10893.27	1001.82	202.86	0.49	0.2865	22.263	0.2865	22.263
298.800	541.87	541.76	6175.93	68.09	0.019	371.48	11000.47	1205.19	203.86	0.49	0.2865	22.261	0.2865	22.261
328.800	541.83	541.68	6175.86	78.89	0.022	373.32	11106.59	1409.57	204.87	0.49	0.2865	22.258	0.2865	22.258
358.800	541.79	541.59	6175.79	89.55	0.025	375.15	11211.63	1614.94	205.87	0.50	0.2865	22.256	0.2865	22.256
388.800	541.73	541.48	6175.71	100.08	0.028	376.98	11315.58	1821.31	206.87	0.50	0.2865	22.253	0.2865	22.253
392.371	541.73	541.47	6175.70	101.35	0.029	377.20	11327.89	1846.37	24.69	-0.37	0.2865	22.250	0.2865	22.250
439.806	541.66	541.30	6175.52	121.53	0.034	361.67	10414.63	2034.99	86.99	1.38	0.2865	22.235	0.2865	22.235
447.600	541.64	541.26	6175.50	124.28	0.035	362.17	10445.11	2086.98	51.71	-0.27	0.2865	22.233	0.2865	22.233
477.600	541.56	541.11	6175.39	134.68	0.038	364.09	10561.72	2286.22	199.72	0.48	0.2865	22.230	0.2865	22.230
507.600	541.47	540.95	6175.27	144.93	0.041	366.01	10677.13	2486.50	200.77	0.48	0.2864	22.226	0.2864	22.226
537.600	541.38	540.78	6175.16	155.06	0.044	367.93	10791.36	2687.83	201.81	0.49	0.2864	22.222	0.2864	22.222
567.600	541.28	540.60	6175.03	165.05	0.047	369.85	10904.41	2890.19	202.85	0.49	0.2864	22.217	0.2864	22.217
597.600	541.17	540.40	6174.89	174.94	0.049	371.77	11016.27	3093.59	203.89	0.49	0.2864	22.213	0.2864	22.213
627.600	541.05	540.20	6174.75	184.71	0.052	373.69	11126.95	3298.03	204.93	0.50	0.2864	22.209	0.2864	22.209
657.600	540.93	539.99	6174.61	194.37	0.055	375.61	11236.43	3503.50	205.97	0.50	0.2863	22.204	0.2863	22.204
675.925	540.85	539.85	6174.52	200.26	0.056	376.78	11302.74	3629.94	126.32	-0.12	0.2863	22.200	0.2863	22.200
701.100	540.80	539.54	6174.10	224.95	0.063	359.89	10306.66	3716.29	190.56	0.70	0.2862	22.178	0.2862	22.178
731.100	540.64	539.27	6173.93	234.51	0.066	361.70	10417.68	3914.10	198.29	0.48	0.2862	22.175	0.2862	22.175
761.100	540.47	538.99	6173.75	243.96	0.069	363.51	10527.65	4112.89	199.27	0.48	0.2862	22.169	0.2862	22.169
791.100	540.29	538.70	6173.56	253.32	0.071	365.32	10636.56	4312.65	200.24	0.48	0.2862	22.164	0.2862	22.164
821.100	540.11	538.40	6173.38	262.59	0.074	367.13	10744.42	4513.38	201.21	0.49	0.2861	22.158	0.2861	22.158
851.100	539.92	538.09	6173.18	271.77	0.077	368.95	10851.23	4715.07	202.18	0.49	0.2861	22.152	0.2861	22.152
881.100	539.73	537.77	6172.98	280.87	0.079	370.76	10956.99	4917.73	203.15	0.49	0.2861	22.146	0.2861	22.146
911.100	539.53	537.44	6172.77	289.90	0.082	372.57	11061.70	5121.35	204.12	0.49	0.2860	22.140	0.2860	22.140
941.100	539.32	537.10	6172.57	298.86	0.084	374.38	11165.36	5325.93	205.09	0.50	0.2860	22.134	0.2860	22.134
971.100	539.11	536.76	6172.35	307.76	0.087	376.19	11267.96	5531.48	206.05	0.50	0.2859	22.127	0.2859	22.127
974.803	539.08	536.71	6172.32	308.87	0.087	376.42	11280.56	5557.34	25.50	-0.36	0.2859	22.121	0.2859	22.121
1021.953	538.91	535.92	6171.34	346.84	0.098	361.34	10401.54	5746.64	0.0	1.39	0.2858	22.082	0.2858	22.082
1029.900	538.82	535.81	6171.29	348.55	0.098	362.09	10447.81	5799.47	52.58	-0.26	0.2858	22.077	0.2858	22.077
1059.900	538.51	535.39	6171.11	354.90	0.100	364.89	10620.85	5998.43	199.45	0.48	0.2858	22.073	0.2858	22.073
1089.900	538.20	534.97	6170.93	361.25	0.102	367.69	10791.28	6198.91	200.97	0.49	0.2857	22.068	0.2857	22.068
1119.900	537.89	534.54	6170.75	367.59	0.104	370.50	10959.11	6400.88	202.47	0.49	0.2857	22.062	0.2857	22.062
1149.900	537.57	534.11	6170.56	373.93	0.105	373.30	11124.32	6604.34	203.97	0.50	0.2856	22.056	0.2856	22.056
1179.900	537.25	533.68	6170.38	380.28	0.107	376.10	11286.93	6809.30	205.47	0.50	0.2856	22.051	0.2856	22.051
1209.900	536.93	533.24	6170.18	386.64	0.109	378.91	11446.92	7015.76	206.96	0.51	0.2855	22.045	0.2855	22.045
1239.900	536.60	532.79	6169.98	393.01	0.111	381.71	11604.31	7223.71	208.46	0.51	0.2855	22.039	0.2855	22.039
1258.900	536.40	532.51	6169.86	397.06	0.112	383.48	11702.64	7356.17	132.80	0.33	0.2854	22.033	0.2854	22.033
AFT	536.13	531.95	6169.39	411.50	0.116	.....	11702.64	7616.29	260.82	0.69	0.2854	22.029	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.4197E 02	5.4197E 02	6.1761E 03	-1.5875E-03	1.6061E 04	-4.1039E-02	-2.2411E 00	2.8613E-01	5.6842E-01	-4.1039E-02
AFT	1.1880E 02	5.4197E 02	5.4197E 02	6.1761E 03	-2.7698E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.1604E-01

GAS BUILDUP IN SLOT, DW/DT = 6.7500E-01

FOREWARD	3.9237E 02	5.4173E 02	5.4147E 02	6.1757E 03	7.4839E 01	1.6061E 04	8.6647E 01	4.7327E 03	2.8607E-01	5.7173E-01	1.9330E 03
AFT	4.3981E 02	5.4155E 02	5.4130E 02	6.1755E 03	7.4807E 01	1.6061E 04	1.0336E 02	5.6460E 03	2.8604E-01	5.7169E-01	1.9316E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3837E 00

FOREWARD	6.7592E 02	5.4085E 02	5.3985E 02	6.1745E 03	1.4431E 02	1.6061E 04	8.7047E 01	4.7578E 03	2.8587E-01	5.7132E-01	3.7170E 03
AFT	7.0110E 02	5.4053E 02	5.3954E 02	6.1741E 03	1.4436E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.7163E 03

GAS BUILDUP IN SLOT, DW/DT = 6.9750E-01

FOREWARD	9.7480E 02	5.3908E 02	5.3671E 02	6.1723E 03	2.2035E 02	1.6061E 04	8.7334E 01	4.7800E 03	2.8548E-01	5.7051E-01	5.6447E 03
AFT	1.0220E 03	5.3829E 02	5.359[illegible]E 02	6.1713E 03	2.2059E 02	1.6061E 04	1.0336E 02	5.6591E 03	2.8538E-01	5.7030E-01	5.6433E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3860E 00

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	773168.0	174478.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	872919.0	1974479.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	44861.770	10085.328
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.69932186E 09	0.15721386E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.77694669E 09	0.17464459E 09
THRUST COEFFICIENT	CF	1.6184835	1.6184835
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3467.6284	7644.8125
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	305006.81	672424.94
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	24.076981	53.080688
INERT MASS REMAINING (KG,LBM)	MIR	1671.4419	3684.8992
TOTAL BURN AREA (M**2,IN**2)	ABTOT	269.81763	418218.25
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	84.338486	5146653.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	149406.69	329385.50
TOTAL GAS MASS (KG,LBM)	WGTOT	889.38257	1960.7534
RATIO OF SPECIFIC HEATS	GAMA	1.1615705	1.1615705
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.862093	28.356064
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.8501	5134.0234
MAXIMUM CHAMBER MACH NUMBER	AMPK	0.11396503	0.11396503
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37469440E 09	543.44849
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.34176758E 11	49569.203
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RHZ(1)	0.72827451E-02	0.28672230
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3431.4668	6176.6406
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	244.96127	379690.75
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	15.810802	24506.793
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	82.694656	5046340.0
GAS VOLUME (M**3,IN**3)	VP	211.21442	12889100.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37081165E 09	537.81714
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.33107100E 11	48017.797
BURN AREA (M**2,IN**2)	AAN	9.0454245	14020.438
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72540194E-02	0.28559142
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.57403928	22.599976
PROPELLANT VOLUME (M**3,IN**3)	VFN	1.6438332	100312.94
GAS VOLUME (M**3,IN**3)	VPN	10.381844	633539.25
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3428.1116	6170.6016
PORT AREA (M**2,IN**2)	AP	7.6919575	11922.559
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4634476	2268.3486
EXPANSION RATIO	EPR	5.8076897	5.8076897
PRESSURE RATIO	PEPO	0.22992488E-01	0.22992488E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

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INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	543.45	543.45	6176.64	0.0	0.0	0.0	16062.80	0.0	0.01	0.14	0.2867	16.253	0.2865	16.253
30.000	543.45	543.45	6176.64	0.0	0.0	0.0	16062.80	0.0	0.0	0.09	0.2867	16.253	0.2867	16.253
60.000	543.45	543.45	6176.64	0.0	0.0	0.0	16062.81	0.0	0.0	0.09	0.2867	16.253	0.2867	16.253
90.000	543.45	543.45	6176.64	0.0	0.0	0.0	16062.82	0.0	0.0	0.09	0.2867	16.253	0.2867	16.253
99.243	543.45	543.45	6176.64	0.0	0.0	0.0	16062.82	0.0	0.0	0.03	0.2867	16.253	0.2867	16.253
118.800	543.45	543.45	6176.64	0.0	0.0	364.09	10548.66	0.0	182.21	0.67	0.2867	22.846	0.2867	22.846
148.800	543.45	543.45	6176.63	11.65	0.004	365.92	10662.53	200.46	200.94	0.48	0.2867	22.845	0.2867	22.845
178.800	543.44	543.43	6176.62	23.11	0.007	367.75	10775.27	401.92	201.95	0.48	0.2867	22.843	0.2867	22.843
208.800	543.42	543.40	6176.59	34.40	0.010	369.59	10886.88	604.39	202.95	0.48	0.2867	22.841	0.2867	22.841
238.800	543.41	543.36	6176.56	45.52	0.013	371.42	10997.35	807.86	203.96	0.49	0.2867	22.839	0.2867	22.839
268.800	543.38	543.31	6176.51	56.49	0.016	373.25	11106.70	1012.34	204.97	0.49	0.2867	22.836	0.2867	22.836
298.800	543.35	543.24	6176.46	67.31	0.019	375.09	11214.92	1217.82	205.97	0.49	0.2867	22.834	0.2867	22.834
328.800	543.31	543.16	6176.40	77.98	0.022	376.92	11322.01	1424.30	206.98	0.50	0.2867	22.831	0.2867	22.831
358.800	543.27	543.07	6176.33	88.53	0.025	378.75	11427.97	1631.78	207.98	0.50	0.2867	22.829	0.2867	22.829
388.800	543.22	542.97	6176.25	98.95	0.028	380.58	11532.80	1840.26	208.98	0.50	0.2867	22.826	0.2867	22.826
391.799	543.21	542.96	6176.24	100.01	0.028	380.77	11543.22	1861.59	20.95	-0.39	0.2867	22.823	0.2867	22.823
440.378	543.15	542.80	6176.07	119.24	0.034	365.30	10625.29	2042.54	83.12	1.38	0.2866	22.808	0.2866	22.808
447.600	543.14	542.76	6176.05	121.77	0.034	365.77	10653.84	2091.25	48.43	-0.28	0.2866	22.806	0.2866	22.806
477.600	543.05	542.62	6175.95	132.06	0.037	367.69	10771.70	2292.60	201.83	0.48	0.2866	22.803	0.2866	22.803
507.600	542.97	542.46	6175.84	142.22	0.040	369.61	10888.31	2494.99	202.88	0.48	0.2866	22.799	0.2866	22.799
537.600	542.88	542.30	6175.72	152.25	0.043	371.53	11003.68	2698.42	203.92	0.49	0.2866	22.794	0.2866	22.794
567.600	542.78	542.12	6175.60	162.15	0.046	373.45	11117.82	2902.89	204.96	0.49	0.2866	22.790	0.2866	22.790
597.600	542.67	541.93	6175.46	171.94	0.049	375.37	11230.73	3108.40	206.00	0.49	0.2866	22.786	0.2866	22.786
627.600	542.56	541.74	6175.33	181.62	0.051	377.29	11342.39	3314.95	207.04	0.50	0.2865	22.781	0.2865	22.781
657.600	542.44	541.53	6175.19	191.20	0.054	379.21	11452.81	3522.53	208.08	0.50	0.2865	22.777	0.2865	22.777
675.353	542.37	541.40	6175.10	196.85	0.056	380.34	11517.58	3646.29	123.62	-0.14	0.2865	22.772	0.2865	22.772
701.100	542.32	541.10	6174.71	220.63	0.062	363.48	10513.72	3728.77	182.93	0.69	0.2864	22.750	0.2864	22.750
731.100	542.16	540.84	6174.54	230.11	0.065	365.29	10625.96	3928.68	200.40	0.48	0.2864	22.748	0.2864	22.748
761.100	542.00	540.57	6174.36	239.49	0.068	367.11	10737.10	4129.58	201.38	0.48	0.2864	22.742	0.2864	22.742
791.100	541.83	540.28	6174.18	248.77	0.070	368.92	10847.13	4331.44	202.35	0.48	0.2864	22.736	0.2864	22.736
821.100	541.65	539.99	6174.00	257.96	0.073	370.73	10956.07	4534.28	203.33	0.49	0.2863	22.730	0.2863	22.730
851.100	541.47	539.69	6173.81	267.07	0.075	372.54	11063.92	4738.08	204.30	0.49	0.2863	22.724	0.2863	22.724
881.100	541.28	539.38	6173.62	276.10	0.078	374.35	11170.66	4942.84	205.27	0.49	0.2863	22.718	0.2863	22.718
911.100	541.09	539.06	6173.42	285.06	0.080	376.16	11276.30	5148.58	206.23	0.50	0.2862	22.712	0.2862	22.712
941.100	540.89	538.73	6173.21	293.95	0.083	377.97	11380.85	5355.28	207.20	0.50	0.2862	22.705	0.2862	22.705
971.100	540.68	538.40	6173.00	302.77	0.085	379.79	11484.30	5562.94	208.17	0.50	0.2861	22.699	0.2861	22.699
974.232	540.66	538.36	6172.98	303.72	0.086	379.98	11495.04	5585.10	21.79	-0.38	0.2861	22.693	0.2861	22.693
1022.523	540.49	537.61	6172.05	340.08	0.096	364.99	10612.77	5766.76	0.0	1.38	0.2860	22.653	0.2860	22.653
1029.900	540.42	537.51	6172.01	341.67	0.096	365.68	10656.20	5816.36	49.33	-0.28	0.2860	22.649	0.2860	22.649
1059.900	540.12	537.11	6171.84	348.03	0.098	368.48	10831.14	6017.43	201.57	0.49	0.2860	22.645	0.2860	22.645
1089.900	539.82	536.70	6171.66	354.38	0.100	371.28	11003.34	6220.02	203.08	0.49	0.2859	22.639	0.2859	22.639
1119.900	539.51	536.28	6171.48	360.72	0.102	374.08	11172.83	6424.11	204.59	0.50	0.2859	22.633	0.2859	22.633
1149.900	539.21	535.86	6171.30	367.06	0.104	376.89	11339.59	6629.70	206.09	0.50	0.2858	22.628	0.2858	22.628
1179.900	538.90	535.44	6171.11	373.42	0.105	379.69	11503.63	6836.77	207.59	0.50	0.2858	22.622	0.2858	22.622
1209.900	538.59	535.01	6170.92	379.78	0.107	382.49	11664.94	7045.35	209.09	0.51	0.2857	22.616	0.2857	22.616
1239.900	538.27	534.58	6170.73	386.15	0.109	385.30	11823.53	7255.42	210.59	0.51	0.2857	22.610	0.2857	22.610
1258.900	538.08	534.31	6170.60	390.20	0.110	387.07	11922.56	7389.23	134.14	0.33	0.2856	22.604	0.2856	22.604
AFT	537.82	533.78	6170.16	404.07	0.114	.....	11922.56	7644.81	256.26	0.68	0.2856	22.600	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.4345E 02	5.4345E 02	6.1766E 03	-1.5843E-03	1.6061E 04	-4.1065E-02	-2.2411E 00	2.8631E-01	5.6842E-01	-4.1065E-02
AFT	1.1880E 02	5.4345E 02	5.4345E 02	6.1766E 03	-2.7479E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.1228E-01

GAS BUILDUP IN SLOT, DW/DT = 6.7121E-01

FOREWARD	3.9180E 02	5.4321E 02	5.4296E 02	6.1762E 03	7.5075E 01	1.6061E 04	8.2758E 01	4.5174E 03	2.8625E-01	5.7213E-01	1.9443E 03
AFT	4.4038E 02	5.4305E 02	5.4280E 02	6.1761E 03	7.5042E 01	1.6061E 04	9.9567E 01	5.4353E 03	2.8623E-01	5.7209E-01	1.9430E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3789E 00

FOREWARD	6.7535E 02	5.4237E 02	5.4140E 02	6.1751E 03	1.4439E 02	1.6061E 04	8.3172E 01	4.5430E 03	2.8606E-01	5.7173E-01	3.7295E 03
AFT	7.0110E 02	5.4207E 02	5.4110E 02	6.1747E 03	1.4443E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.7288E 03

GAS BUILDUP IN SLOT, DW/DT = 6.9466E-01

FOREWARD	9.7423E 02	5.4066E 02	5.3836E 02	6.1730E 03	2.2063E 02	1.6061E 04	8.3475E 01	4.5655E 03	2.8568E-01	5.7096E-01	5.6686E 03
AFT	1.0225E 03	5.3991E 02	5.3761E 02	6.1721E 03	2.2085E 02	1.6061E 04	9.9573E 01	5.4478E 03	2.8559E-01	5.7076E-01	5.6672E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3812E 00

IGNITION TIME, TIME (S) 79.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7804083.0	1754428.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8813834.0	1981429.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	45026.629	10122.391
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.71489920E 09	0.16071576E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.79454336E 09	0.17862050E 09
THRUST COEFFICIENT	CF	1.6182919	1.6182919
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3480.1748	7672.4727
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	311954.56	687742.19
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	24.165466	53.275757
INERT MASS REMAINING (KG,LBM)	MIR	1623.1111	3578.3477
TOTAL BURN AREA (M**2,IN**2)	ABTOT	270.61938	419460.94
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	80.400269	4906328.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	142430.13	314004.75
TOTAL GAS MASS (KG,LBM)	WGTOT	906.45557	1998.3926
RATIO OF SPECIFIC HEATS	GAMA	1.1615715	1.1615715
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.862474	28.356903
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.8823	5134.1289
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.11192316	0.11192316
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37567283E 09	544.86768
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.34927124E 11	50657.516
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72870255E-02	0.28689092
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3431.7510	6177.1523
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	246.62622	382271.44
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	15.115579	23429.195
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	78.886444	4813949.0
GAS VOLUME (M**3,IN**3)	VP	214.27003	13075566.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37192934E 09	539.43799
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.33849844E 11	49095.051
BURN AREA (M**2,IN**2)	AAN	8.8774109	13760.016
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72593167E-02	0.28579992
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.58854735	23.171158
PROPELLANT VOLUME (M**3,IN**3)	VFN	1.5138054	92378.125
GAS VOLUME (M**3,IN**3)	VPN	10.511871	641474.06
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3428.5088	6171.3164
PORT AREA (M**2,IN**2)	AP	7.8352709	12144.695
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4643583	2269.7607
EXPANSION RATIO	EPR	6.8034544	6.8034544
PRESSURE RATIO	PEPO	0.23011263E-01	0.23011263E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RH IN/SEC	TAU IN.	RHTU IN/SEC	TAUTU IN.
FORE	544.87	544.87	6177.15	0.0	0.0	0.0	16062.80	0.0	0.01	0.13	0.2869	16.253	0.2867	16.253
30.000	544.87	544.87	6177.15	0.0	0.0	0.0	16062.80	0.0	0.0	0.08	0.2869	16.253	0.2869	16.253
60.000	544.87	544.87	6177.15	0.0	0.0	0.0	16062.81	0.0	0.0	0.08	0.2869	16.253	0.2869	16.253
90.000	544.87	544.87	6177.15	0.0	0.0	0.0	16062.82	0.0	0.0	0.08	0.2869	16.253	0.2869	16.253
99.243	544.87	544.87	6177.15	0.0	0.0	0.0	16062.82	0.0	0.0	0.03	0.2869	16.253	0.2869	16.253
118.800	544.87	544.87	6177.15	0.0	0.0	367.69	10758.48	0.0	174.44	0.67	0.2863	23.420	0.2869	23.420
146.800	544.87	544.87	6177.14	11.51	0.004	369.52	10873.61	202.56	203.04	0.48	0.2869	23.419	0.2869	23.419
178.800	544.86	544.85	6177.13	22.84	0.007	371.36	10987.55	406.12	204.05	0.49	0.2869	23.417	0.2869	23.417
208.800	544.84	544.82	6177.11	34.00	0.010	373.19	11100.32	610.69	205.06	0.49	0.2869	23.414	0.2869	23.414
238.800	544.83	544.78	6177.07	45.00	0.013	375.02	11211.92	816.26	206.07	0.49	0.2869	23.412	0.2869	23.412
268.800	544.80	544.72	6177.03	55.85	0.016	376.85	11322.33	1022.84	207.07	0.49	0.2869	23.410	0.2869	23.410
298.800	544.77	544.66	6176.98	66.54	0.019	378.69	11431.57	1230.42	208.08	0.50	0.2869	23.407	0.2869	23.407
328.800	544.73	544.58	6176.91	77.11	0.022	380.52	11539.63	1439.00	209.08	0.50	0.2869	23.405	0.2869	23.405
358.800	544.69	544.50	6176.85	87.54	0.025	382.35	11646.51	1648.58	210.08	0.50	0.2869	23.402	0.2869	23.402
388.800	544.63	544.40	6176.77	97.85	0.028	384.19	11752.22	185[illegible].16	211.09	0.50	0.2868	23.399	0.2868	23.399
391.227	544.63	544.39	6176.77	98.70	0.028	384.34	11760.72	1876.69	17.12	-0.40	0.2868	23.396	0.2868	23.396
440.950	544.58	544.24	6176.61	117.01	0.033	368.94	10838.19	2049.85	79.20	1.38	0.2868	23.381	0.2868	23.381
447.600	544.56	544.21	6176.59	119.32	0.034	369.37	10864.77	2095.22	45.06	-0.30	0.2868	23.379	0.2868	23.379
477.600	544.49	544.07	6176.48	129.52	0.037	371.29	10983.87	2298.66	203.93	0.49	0.2868	23.376	0.2868	23.376
507.600	544.40	543.91	6176.38	139.58	0.039	373.21	11101.68	2503.15	204.98	0.49	0.2868	23.372	0.2868	23.372
537.600	544.31	543.75	6176.27	149.51	0.042	375.13	11218.21	2708.68	206.02	0.49	0.2868	23.368	0.2868	23.368
567.600	544.22	543.58	6176.14	159.32	0.045	377.05	11333.44	2915.26	207.07	0.50	0.2868	23.363	0.2868	23.363
597.600	544.11	543.40	6176.02	169.02	0.048	378.97	11447.38	3122.87	208.11	0.50	0.2867	23.359	0.2867	23.359
627.600	544.00	543.21	6175.89	178.62	0.050	380.89	11560.04	3331.52	209.15	0.50	0.2867	23.354	0.2867	23.354
657.600	543.89	543.00	6175.75	188.12	0.053	382.81	11671.39	3541.21	210.19	0.50	0.2867	23.350	0.2867	23.350
674.781	543.82	542.88	6175.66	193.54	0.055	383.90	11734.59	3662.20	120.84	-0.15	0.2867	23.345	0.2867	23.345
701.100	543.77	542.60	6175.29	216.44	0.061	367.08	10722.98	3740.75	175.20	0.70	0.2866	23.323	0.2866	23.323
731.100	543.62	542.35	6175.13	225.84	0.064	368.89	10836.44	3942.77	202.50	0.48	0.2866	23.321	0.2866	23.321
761.100	543.46	542.08	6174.96	235.14	0.066	370.70	10948.75	4145.77	203.49	0.49	0.2866	23.315	0.2866	23.315
791.100	543.30	541.81	6174.79	244.34	0.069	372.52	11059.91	4349.73	204.46	0.49	0.2865	23.309	0.2865	23.309
821.100	543.13	541.52	6174.60	253.46	0.072	374.33	11169.93	4554.67	205.43	0.49	0.2865	23.303	0.2865	23.303
851.100	542.95	541.23	6174.42	262.50	0.074	376.14	11278.81	4760.58	206.41	0.49	0.2865	23.297	0.2865	23.297
881.100	542.77	540.93	6174.23	271.46	0.077	377.95	11386.54	4967.45	207.38	0.50	0.2864	23.290	0.2864	23.290
911.100	542.58	540.62	6174.04	280.34	0.079	379.76	11493.12	5175.29	208.34	0.50	0.2864	23.284	0.2864	23.284
941.100	542.39	540.30	6173.84	289.16	0.082	381.57	11598.55	5384.10	209.31	0.50	0.2864	23.278	0.2864	23.278
971.100	542.18	539.97	6173.63	297.92	0.084	383.38	11702.84	5593.87	210.28	0.51	0.2863	23.271	0.2863	23.271
973.660	542.17	539.94	6173.61	298.69	0.084	383.54	11711.70	5612.25	17.99	-0.40	0.2863	23.265	0.2863	23.265
1023.094	542.01	539.24	6172.74	333.52	0.094	368.63	10826.30	5786.17	0.0	1.38	0.2862	23.225	0.2862	23.225
1029.900	541.95	539.15	6172.70	334.99	0.094	369.27	10866.80	5832.45	45.99	-0.29	0.2862	23.221	0.2862	23.221
1059.900	541.66	538.76	6172.53	341.35	0.096	372.07	11043.63	6035.64	203.68	0.49	0.2862	23.217	0.2862	23.217
1089.900	541.37	538.36	6172.36	347.70	0.098	374.87	11217.62	6240.34	205.20	0.50	0.2861	23.211	0.2861	23.211
1119.900	541.07	537.95	6172.18	354.04	0.100	377.68	11388.77	6446.54	206.70	0.50	0.2861	23.205	0.2861	23.205
1149.900	540.78	537.55	6172.00	360.39	0.102	380.48	11557.08	6654.23	208.20	0.50	0.2860	23.199	0.2860	23.199
1179.900	540.48	537.14	6171.82	366.74	0.103	383.28	11722.55	6863.43	209.71	0.51	0.2860	23.193	0.2860	23.193
1209.900	540.18	536.72	6171.63	373.10	0.105	386.08	11885.18	7074.12	211.21	0.51	0.2859	23.187	0.2859	23.187
1239.900	539.88	536.30	6171.44	379.48	0.107	388.89	12044.96	7286.30	212.71	0.52	0.2859	23.182	0.2859	23.182
1258.900	539.68	536.03	6171.32	383.53	0.108	390.66	12144.70	7421.46	135.49	0.33	0.2858	23.176	0.2858	23.176
AFT	539.44	535.53	6170.91	396.85	0.112	.....	12144.70	7672.47	251.69	0.66	0.2858	23.171	....	.....

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	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RH IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.4487E 02	5.4487E 02	6.1772E 03	-1.5812E-03	1.6061E 04	-4.1090E-02	-2.2411E 00	2.8648E-01	5.6842E-01	-4.1090E-02
AFT	1.1880E 02	5.4487E 02	5.4487E 02	6.1772E 03	-2.7389E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.1175E-01

GAS BUILDUP IN SLOT, DW/DT = 6.7066E-01

FOREWARD	3.9123E 02	5.4463E 02	5.4439E 02	6.1768E 03	7.5312E 01	1.6061E 04	7.8821E 01	4.2999E 03	2.8642E-01	5.7250E-01	1.9555E 03
AFT	4.4095E 02	5.4448E 02	5.4424E 02	6.1766E 03	7.5278E 01	1.6061E 04	9.5726E 01	5.2224E 03	2.8641E-01	5.7246E-01	1.9541E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3801E 00

FOREWARD	6.7478E 02	5.4382E 02	5.4288E 02	6.1757E 03	1.4447E 02	1.6061E 04	7.9249E 01	4.3260E 03	2.8624E-01	5.7211E-01	3.7414E 03
AFT	7.0110E 02	5.4354E 02	5.4260E 02	6.1753E 03	1.4451E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.7408E 03

GAS BUILDUP IN SLOT, DW/DT = 6.9515E-01

FOREWARD	9.7366E 02	5.4217E 02	5.3994E 02	6.1736E 03	2.2090E 02	1.6061E 04	7.9568E 01	4.3489E 03	2.8588E-01	5.7136E-01	5.6918E 03
AFT	1.0231E 03	5.4146E 02	5.3924E 02	6.1727E 03	2.2110E 02	1.6061E 04	9.5738E 01	5.2343E 03	2.8579E-01	5.7118E-01	5.6904E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3828E 00

IGNITION TIME, TIME (S) 81.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	783427.8.0	1761216.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8844029.0	1988217.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	45188.504	10158.781
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.73053747E 09	0.16423139E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.81220122E 09	0.18259013E 09
THRUST COEFFICIENT	CF	1.6181011	1.6181011
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3492.4094	7699.4453
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	318927.13	703114.06
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	24.252350	53.467285
INERT MASS REMAINING (KG,LBM)	MIR	1574.6064	3471.4131
TOTAL BURN AREA (M**2,IN**2)	ABTOT	271.40137	420673.25
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	76.447906	4665140.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	135428.44	298568.69
TOTAL GAS MASS (KG,LBM)	WGTOT	923.59155	2036.1709
RATIO OF SPECIFIC HEATS	GAMA	1.1615725	1.1615725
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.862855	28.357742
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.9143	5134.2344
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.10993576	0.10993576
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37662464E 09	546.24805
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.35679420E 11	51748.629
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72911717E-02	0.28705406
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3432.0266	6177.6484
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	248.27884	384833.00
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	14.413249	22340.582
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	75.061783	4580553.0
GAS VOLUME (M**3,IN**3)	VP	217.34152	13262999.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37301453E 09	541.01221
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.34594787E 11	50175.500
BURN AREA (M**2,IN**2)	AAN	9.7092762	13499.406
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72644353E-02	0.28600150
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.60306585	23.742752
PROPELLANT VOLUME (M**3,IN**3)	VFN	1.3861227	84586.438
GAS VOLUME (M**3,IN**3)	VPN	10.639555	649265.75
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3428.8950	6172.0117
PORT AREA (M**2,IN**2)	AP	7.9800138	12369.047
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4652729	2271.1777
EXPANSION RATIO	EPR	6.7992096	6.7992096
PRESSURE RATIO	PEPO	0.23030125E-01	0.23030125E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS AUDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	546.25	546.25	6177.65	0.0	0.0	0.0	16062.80	0.0	0.01	0.13	0.2871	16.253	0.2869	16.253
30.000	546.25	546.25	6177.65	0.0	0.0	0.0	16062.80	0.0	0.0	0.08	0.2871	16.253	0.2871	16.253
60.000	546.25	546.25	6177.65	0.0	0.0	0.0	16062.81	0.0	0.0	0.08	0.2871	16.253	0.2871	16.253
90.000	546.25	546.25	6177.65	0.0	0.0	0.0	16062.82	0.0	0.0	0.08	0.2871	16.253	0.2871	16.253
99.243	546.25	546.25	6177.65	0.0	0.0	0.0	16062.82	0.0	0.0	0.03	0.2871	16.253	0.2871	16.253
118.800	546.25	546.25	6177.65	0.0	0.0	371.29	10970.48	0.0	166.58	0.67	0.2871	23.993	0.2871	23.993
148.800	546.25	546.25	6177.64	11.38	0.004	373.13	11086.88	204.65	205.14	0.49	0.2871	23.992	0.2871	23.992
178.800	546.24	546.23	6177.63	22.58	0.007	374.96	11202.04	410.31	206.15	0.49	0.2871	23.990	0.2871	23.990
208.800	546.22	546.20	6177.60	33.62	0.010	376.79	11315.97	616.98	207.16	0.49	0.2871	23.988	0.2871	23.988
238.800	546.21	546.16	6177.57	44.49	0.013	378.63	11428.68	824.65	208.17	0.50	0.2870	23.986	0.2870	23.986
268.800	546.18	546.10	6177.53	55.22	0.016	380.46	11540.16	1033.33	209.17	0.50	0.2870	23.984	0.2870	23.984
298.800	546.15	546.04	6177.48	65.80	0.019	382.29	11650.42	1243.01	210.18	0.50	0.2870	23.981	0.2870	23.981
328.800	546.11	545.97	6177.42	76.25	0.021	384.13	11759.45	1453.69	211.19	0.50	0.2870	23.978	0.2870	23.979
358.800	546.07	545.88	6177.35	86.57	0.025	385.96	11867.26	1665.38	212.19	0.51	0.2870	23.976	0.2870	23.976
388.800	546.02	545.78	6177.27	96.77	0.027	387.79	11973.83	1878.06	213.19	0.51	0.2870	23.973	0.2870	23.973
390.654	546.02	545.78	6177.27	97.42	0.028	387.91	11980.38	1891.69	13.21	-0.42	0.2870	23.970	0.2870	23.970
441.523	545.97	545.64	6177.13	114.85	0.032	372.58	11053.34	2056.98	75.24	1.38	0.2870	23.955	0.2870	23.955
447.600	545.95	545.61	6177.11	116.93	0.033	372.97	11077.88	2098.91	41.61	-0.32	0.2870	23.953	0.2870	23.953
477.600	545.88	545.47	6177.01	127.03	0.036	374.89	11198.24	2304.45	206.03	0.49	0.2870	23.950	0.2870	23.950
507.600	545.80	545.33	6176.90	137.00	0.039	376.81	11317.26	2511.04	207.09	0.49	0.2870	23.945	0.2870	23.945
537.600	545.71	545.17	6176.79	146.84	0.041	378.73	11434.93	2718.68	208.13	0.50	0.2869	23.941	0.2869	23.941
567.600	545.62	545.00	6176.68	156.57	0.044	380.65	11551.26	2927.35	209.17	0.50	0.2869	23.937	0.2869	23.937
597.600	545.52	544.82	6176.55	166.18	0.047	382.57	11666.24	3137.06	210.22	0.50	0.2869	23.932	0.2869	23.932
627.600	545.41	544.64	6176.42	175.69	0.050	384.49	11779.88	3347.82	211.26	0.51	0.2869	23.928	0.2869	23.928
657.600	545.30	544.44	6176.29	185.11	0.052	386.41	11892.18	3559.61	212.30	0.51	0.2869	23.923	0.2869	23.923
674.208	545.23	544.32	6176.21	190.30	0.054	387.47	11953.76	3677.75	117.98	-0.17	0.2868	23.918	0.2868	23.918
701.100	545.19	544.06	6175.86	212.35	0.060	370.68	10934.43	3752.34	167.37	0.70	0.2868	23.896	0.2868	23.896
731.100	545.04	543.81	6175.70	221.67	0.063	372.49	11049.12	3956.46	204.61	0.49	0.2868	23.894	0.2868	23.894
761.100	544.89	543.55	6175.53	230.90	0.065	374.30	11162.60	4161.55	205.59	0.49	0.2868	23.888	0.2868	23.888
791.100	544.73	543.29	6175.36	240.03	0.068	376.12	11274.89	4367.63	206.57	0.49	0.2867	23.882	0.2867	23.882
821.100	544.56	543.01	6175.19	249.07	0.070	377.93	11385.99	4574.66	207.54	0.50	0.2867	23.876	0.2867	23.876
851.100	544.39	542.73	6175.01	258.04	0.073	379.74	11495.90	4782.68	208.51	0.50	0.2867	23.869	0.2867	23.869
881.100	544.22	542.43	6174.82	266.93	0.075	381.55	11604.61	4991.66	209.49	0.50	0.2866	23.863	0.2866	23.863
911.100	544.03	542.13	6174.63	275.75	0.078	383.36	11712.13	5201.60	210.46	0.51	0.2866	23.857	0.2866	23.857
941.100	543.84	541.82	6174.44	284.50	0.080	385.17	11818.46	5412.52	211.42	0.51	0.2865	23.851	0.2865	23.851
971.100	543.65	541.50	6174.24	293.19	0.083	386.98	11923.59	5624.39	212.39	0.51	0.2865	23.844	0.2865	23.844
973.089	543.63	541.47	6174.22	293.79	0.083	387.10	11930.52	5638.92	14.11	-0.41	0.2865	23.838	0.2865	23.838
1023.666	543.50	540.82	6173.40	327.13	0.092	372.28	11042.10	5805.00	0.0	1.39	0.2864	23.798	0.2864	23.798
1029.900	543.44	540.74	6173.37	328.48	0.093	372.87	11079.61	5847.88	42.57	-0.31	0.2864	23.793	0.2864	23.793
1059.900	543.16	540.35	6173.20	334.84	0.094	375.67	11258.34	6053.17	205.79	0.50	0.2864	23.789	0.2864	23.789
1089.900	542.88	539.97	6173.03	341.19	0.096	378.47	11434.11	6259.98	207.31	0.50	0.2863	23.783	0.2863	23.783
1119.900	542.59	539.58	6172.86	347.54	0.098	381.27	11606.92	6468.29	208.82	0.50	0.2863	23.777	0.2863	23.777
1149.900	542.31	539.18	6172.68	353.89	0.100	384.07	11776.78	6678.09	210.32	0.51	0.2862	23.771	0.2862	23.771
1179.900	542.02	538.78	6172.50	360.24	0.102	386.87	11943.68	6889.40	211.83	0.51	0.2862	23.765	0.2862	23.765
1209.900	541.72	538.37	6172.32	366.60	0.103	389.68	12107.63	7102.21	213.33	0.52	0.2861	23.759	0.2861	23.759
1239.900	541.43	537.97	6172.13	372.98	0.105	392.48	12268.61	7316.51	214.83	0.52	0.2861	23.753	0.2861	23.753
1258.900	541.24	537.70	6172.01	377.03	0.106	394.25	12369.05	7453.01	136.83	0.33	0.2860	23.747	0.2860	23.747
AFT	541.01	537.23	6171.62	389.82	0.110	.....	12369.05	7699.45	247.09	0.65	0.2860	23.743	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.4625E 02	5.4625E 02	6.1776E 03	-1.5782E-03	1.6061E 04	-4.1114E-02	-2.2411E 00	2.8665E-01	5.6842E-01	-4.1114E-02
AFT	1.1880E 02	5.4625E 02	5.4625E 02	6.1776E 03	-2.7323E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.1179E-01

GAS BUILDUP IN SLOT, DW/DT = 6.7068E-01

FOREWARD	3.9065E 02	5.4602E 02	5.4578E 02	6.1773E 03	7.5547E 01	1.6061E 04	7.4839E 01	4.0802E 03	2.8659E-01	5.7285E-01	1.9665E 03
AFT	4.4152E 02	5.4588E 02	5.4564E 02	6.1771E 03	7.5512E 01	1.6061E 04	9.1837E 01	5.0072E 03	2.8658E-01	5.7281E-01	1.9651E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3833E 00

FOREWARD	6.7421E 02	5.4523E 02	5.4432E 02	6.1762E 03	1.4454E 02	1.6061E 04	7.5281E 01	4.1068E 03	2.8642E-01	5.7248E-01	3.7530E 03
AFT	7.0110E 02	5.4497E 02	5.4406E 02	6.1759E 03	1.4457E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.752[illegible]E 03

GAS BUILDUP IN SLOT, DW/DT = 6.9663E-01

FOREWARD	9.7309E 02	5.4363E 02	5.4147E 02	6.1742E 03	2.2117E 02	1.6061E 04	7.5614E 01	4.1301E 03	2.8607E-01	5.7176E-01	5.7145E 03
AFT	1.0237E 03	5.4297E 02	5.4082E 02	6.1734E 03	2.2135E 02	1.6061E 04	9.1853E 01	5.0185E 03	2.8598E-01	5.7158E-01	5.7131E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3861E 00

IGNITION TIME, TIME (S) 83.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7862448.0	1767549.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8872199.0	1994550.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	45342.543	10193.410
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMOTI	0.74623411E 09	0.16776014E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.82991744E 09	0.18657290E 09
THRUST COEFFICIENT	CF	1.6179132	1.6179132
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3503.8679	7724.7070
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	325923.38	718538.19
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	24.335007	53.649536
INERT MASS REMAINING (KG,LBM)	MIR	1525.9363	3364.1140
TOTAL BURN AREA (M**2,IN**2)	ABTOT	272.13232	421806.19
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	72.482056	4423129.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	128402.08	283080.00
TOTAL GAS MASS (KG,LBM)	WGTOT	940.64868	2073.7759
RATIO OF SPECIFIC HEATS	GAMA	1.1615725	1.1615725
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.863194	28.358490
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.9429	5134.3281
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.10800093	0.10800093
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37749248E 09	547.50684
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHOT	0.36433535E 11	52842.383
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72949342E-02	0.28720230
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3432.2783	6178.1016
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	249.91911	387375.44
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	13.703797	21240.930
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	71.221024	4346176.0
GAS VOLUME (M**3,IN**3)	VP	220.42868	13451389.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37401190E 09	542.45874
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.35341812E 11	51258.969
BURN AREA (M**2,IN**2)	AAN	8.5093803	13189.566
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72691441E-02	0.28618681
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.61759436	24.314743
PROPELLANT VOLUME (M**3,IN**3)	VFN	1.2610235	76952.438
GAS VOLUME (M**3,IN**3)	VPN	10.764653	656899.75
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3429.2488	6172.6484
PORT AREA (M**2,IN**2)	AP	8.1261854	12595.613
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4661894	2272.5996
EXPANSION RATIO	EPR	6.7949562	6.7949562
PRESSURE RATIO	PEPO	0.23049086E-01	0.23049086E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	547.51	547.51	6178.10	0.0	0.0	0.0	16062.80	0.0	0.01	0.12	0.2872	16.253	0.2871	16.253
30.000	547.51	547.51	6178.10	0.0	0.0	0.0	16062.80	0.0	0.0	0.08	0.2872	16.253	0.2872	16.253
60.000	547.51	547.51	6178.10	0.0	0.0	0.0	16062.81	0.0	0.0	0.08	0.2872	16.253	0.2872	16.253
90.000	547.51	547.51	6178.10	0.0	0.0	0.0	16062.82	0.0	0.0	0.08	0.2872	16.253	0.2872	16.253
99.243	547.51	547.51	6178.10	0.0	0.0	0.0	16062.82	0.0	0.0	0.02	0.2872	16.253	0.2872	16.253
118.800	547.51	547.51	6178.10	0.0	0.0	374.90	11104.68	0.0	158.62	0.67	0.2872	24.568	0.2872	24.564
148.800	547.51	547.51	6178.09	11.25	0.004	376.73	11302.34	206.75	207.24	0.49	0.2872	24.566	0.2872	24.564
178.800	547.50	547.49	6178.08	22.33	0.006	378.57	11418.71	414.50	208.25	0.49	0.2872	24.564	0.2872	24.564
208.800	547.49	547.46	6178.05	33.24	0.010	380.40	11533.81	623.26	209.26	0.50	0.2872	24.562	0.2872	24.562
238.800	547.47	547.42	6178.02	44.00	0.013	382.23	11647.64	833.03	210.27	0.50	0.2872	24.560	0.2872	24.560
268.800	547.45	547.37	6177.98	54.61	0.016	384.07	11760.19	1043.80	211.27	0.50	0.2872	24.558	0.2872	24.558
298.800	547.41	547.31	6177.93	65.08	0.018	385.90	11871.47	1255.58	212.28	0.50	0.2872	24.555	0.2872	24.555
328.800	547.38	547.23	6177.88	75.42	0.021	387.73	11981.47	1468.36	213.29	0.51	0.2872	24.552	0.2872	24.552
358.800	547.33	547.15	6177.81	85.63	0.024	389.57	12090.20	1682.14	214.29	0.51	0.2872	24.550	0.2872	24.550
388.800	547.28	547.05	6177.74	95.73	0.027	391.40	12197.65	1896.92	215.29	0.51	0.2872	24.547	0.2872	24.547
390.080	547.28	547.05	6177.73	96.18	0.027	391.48	12202.21	1906.58	9.21	-0.44	0.2871	24.544	0.2871	24.544
442.096	547.24	546.92	6177.60	112.75	0.032	376.23	11270.73	2063.91	71.23	1.38	0.2871	24.529	0.2871	24.529
447.600	547.22	546.89	6177.58	114.63	0.032	376.58	11293.20	2102.31	38.07	-0.34	0.2871	24.527	0.2871	24.527
477.600	547.15	546.76	6177.48	124.63	0.035	378.50	11414.81	2309.95	208.13	0.49	0.2871	24.524	0.2871	24.524
507.600	547.08	546.62	6177.38	134.51	0.038	380.42	11535.03	2518.64	209.18	0.50	0.2871	24.519	0.2871	24.519
537.600	546.99	546.47	6177.27	144.26	0.041	382.33	11653.86	2728.37	210.23	0.50	0.2871	24.515	0.2871	24.515
567.600	546.90	546.30	6177.16	153.90	0.043	384.25	11771.28	2939.14	211.27	0.50	0.2871	24.511	0.2871	24.511
597.600	546.80	546.13	6177.04	163.43	0.046	386.17	11887.30	3150.95	212.32	0.50	0.2871	24.506	0.2871	24.506
627.600	546.70	545.95	6176.91	172.86	0.049	388.09	12001.93	3363.80	213.36	0.51	0.2870	24.502	0.2870	24.502
657.600	546.59	545.75	6176.79	182.19	0.051	390.01	12115.15	3577.69	214.40	0.51	0.2870	24.497	0.2870	24.497
673.635	546.53	545.65	6176.71	187.17	0.053	391.04	12175.11	3692.90	115.02	-0.19	0.2870	24.492	0.2870	24.492
701.100	546.49	545.40	6176.38	208.40	0.059	374.29	11148.07	3763.47	159.44	0.69	0.2869	24.470	0.2869	24.470
731.100	546.35	545.16	6176.22	217.65	0.061	376.10	11263.98	3969.69	206.71	0.49	0.2869	24.467	0.2869	24.467
761.100	546.20	544.91	6176.06	226.80	0.064	377.91	11378.65	4176.88	207.69	0.49	0.2869	24.461	0.2869	24.461
791.100	546.04	544.64	6175.89	235.86	0.067	379.72	11492.07	4385.05	208.67	0.50	0.2869	24.455	0.2869	24.455
821.100	545.88	544.38	6175.72	244.83	0.069	381.53	11604.25	4594.19	209.64	0.50	0.2869	24.449	0.2869	24.449
851.100	545.71	544.10	6175.55	253.73	0.072	383.34	11715.20	4804.30	210.61	0.50	0.2868	24.443	0.2868	24.443
881.100	545.54	543.81	6175.37	262.55	0.074	385.15	11824.89	5015.38	211.59	0.50	0.2868	24.436	0.2868	24.436
911.100	545.37	543.52	6175.18	271.30	0.077	386.96	11933.36	5227.43	212.56	0.51	0.2867	24.430	0.2867	24.430
941.100	545.18	543.21	6174.99	279.99	0.079	388.77	12040.57	5440.45	213.53	0.51	0.2867	24.424	0.2867	24.424
971.100	544.99	542.90	6174.80	288.62	0.081	390.58	12146.54	5654.43	214.50	0.51	0.2867	24.417	0.2867	24.417
972.516	544.98	542.88	6174.79	289.05	0.082	390.67	12151.51	5665.01	10.15	-0.43	0.2866	24.411	0.2866	24.411
1024.238	544.85	542.27	6174.02	320.96	0.091	375.94	11260.19	5823.15	0.0	1.38	0.2866	24.370	0.2866	24.370
1029.900	544.80	542.20	6173.98	322.19	0.091	376.46	11294.62	5862.54	39.07	-0.33	0.2866	24.366	0.2866	24.366
1059.900	544.53	541.83	6173.82	328.55	0.093	379.27	11475.25	6069.94	207.90	0.50	0.2866	24.362	0.2866	24.362
1089.900	544.26	541.45	6173.65	334.91	0.094	382.07	11652.80	6278.85	209.42	0.50	0.2865	24.356	0.2865	24.356
1119.900	543.98	541.07	6173.48	341.25	0.096	384.87	11827.29	6489.26	210.92	0.51	0.2865	24.350	0.2865	24.350
1149.900	543.71	540.68	6173.31	347.60	0.098	387.67	11998.70	6701.18	212.43	0.51	0.2864	24.344	0.2864	24.344
1179.900	543.42	540.29	6173.13	353.95	0.100	390.47	12167.03	6914.60	213.94	0.51	0.2864	24.338	0.2864	24.338
1209.900	543.14	539.90	6172.95	360.32	0.102	393.27	12332.29	7129.52	215.44	0.52	0.2863	24.332	0.2863	24.332
1239.900	542.86	539.50	6172.77	366.69	0.103	396.07	12494.48	7345.93	216.94	0.52	0.2863	24.325	0.2863	24.325
1258.900	542.68	539.25	6172.65	370.74	0.105	397.85	12595.61	7483.77	138.17	0.33	0.2862	24.319	0.2862	24.319
AFT	542.46	538.80	6172.29	382.97	0.108	.....	12595.61	7724.71	241.58	0.64	0.2862	24.315	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.4751E 02	5.4751E 02	6.1781E 03	-1.5755E-03	1.6061E 04	-4.1136E-02	-2.2411E 00	2.8681E-01	5.6842E-01	-4.1136E-02
AFT	1.1880E 02	5.4751E 02	5.4751E 02	6.1781E 03	-2.7134E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.0848E-01

GAS BUILDUP IN SLOT, DW/DT = 6.6734E-01

FOREWARD	3.9008E 02	5.4728E 02	5.4705E 02	6.1777E 03	7.5792E 01	1.6061E 04	7.0809E 01	3.8584E 03	2.8675E-01	5.7319E-01	1.9774E 03
AFT	4.4210E 02	5.4715E 02	5.4692E 02	6.1776E 03	7.5755E 01	1.6061E 04	8.7898E 01	4.7899E 03	2.8673E-01	5.7315E-01	1.9760E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3780E 00

FOREWARD	6.7364E 02	5.4653E 02	5.4565E 02	6.1767E 03	1.4462E 02	1.6061E 04	7.1264E 01	3.8855E 03	2.8658E-01	5.7283E-01	3.7642E 03
AFT	7.0110E 02	5.4628E 02	5.4540E 02	6.1764E 03	1.4466E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.7635E 03

GAS BUILDUP IN SLOT, DW/DT = 6.9358E-01

FOREWARD	9.7252E 02	5.4498E 02	5.4288E 02	6.1748E 03	2.2146E 02	1.6061E 04	7.1612E 01	3.9091E 03	2.8624E-01	5.7213E-01	5.7366E 03
AFT	1.0242E 03	5.4436E 02	5.4227E 02	6.1740E 03	2.2163E 02	1.6061E 04	8.7916E 01	4.8004E 03	2.8616E-01	5.7197E-01	5.7352E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3807E 00

IGNITION TIME, TIME (S) 85.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7888564.0	1773420.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8898315.0	2000421.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	45486.570	10225.789
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.76198502E 09	0.17130112E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.84763794E 09	0.19056787E 09
THRUST COEFFICIENT	CF	1.6177235	1.6177235
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3514.5752	7748.3125
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	332941.81	734011.19
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	24.412308	53.819946
INERT MASS REMAINING (KG,LBM)	MIR	1477.1116	3256.4741
TOTAL BURN AREA (M**2,IN**2)	ABTOT	272.81860	422869.81
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	68.503632	4180350.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	121355.06	267542.19
TOTAL GAS MASS (KG,LBM)	WGTOT	957.61035	2111.1699
RATIO OF SPECIFIC HEATS	GAMA	1.1615734	1.1615734
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.863505	28.359177
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.9692	5134.4141
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.10611957	0.10611957
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37827866E 09	548.64697
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.37189308E 11	53938.535
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72983131E-02	0.28733527
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3432.5061	6178.5117
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	251.54698	389898.63
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	12.987264	20130.301
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	67.364685	4110847.0
GAS VOLUME (M**3,IN**3)	VP	223.53116	13640714.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37492173E 09	543.77808
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.36090745E 11	52345.203
BURN AREA (M**2,IN**2)	AAN	8.2842741	12840.652
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72734095E-02	0.28635478
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.63213265	24.887115
PROPELLANT VOLUME (M**3,IN**3)	VFN	1.1389341	69502.063
GAS VOLUME (M**3,IN**3)	VPN	10.886743	664350.13
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3429.5764	6173.2383
PORT AREA (M**2,IN**)	AP	8.2737780	12824.383
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4671106	2274.0264
EXPANSION RATIO	EPR	6.7906923	6.7906923
PRESSURE RATIO	PEPO	0.23068085E-01	0.23068085E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	548.65	548.65	6178.51	0.0	0.0	0.0	16062.80	0.0	0.01	0.11	0.2873	16.253	0.2872	16.253
30.000	548.65	548.65	6178.51	0.0	0.0	0.0	16062.80	0.0	0.0	0.07	0.2873	16.253	0.2873	16.253
60.000	548.65	548.65	6178.51	0.0	0.0	0.0	16062.81	0.0	0.0	0.07	0.2873	16.253	0.2873	16.253
90.000	548.65	548.65	6178.51	0.0	0.0	0.0	16062.82	0.0	0.0	0.07	0.2873	16.253	0.2873	16.253
99.243	548.65	548.65	6178.51	0.0	0.0	0.0	16062.82	0.0	0.0	0.02	0.2873	16.253	0.2873	16.253
118.800	548.65	548.65	6178.51	0.0	0.0	378.51	11401.06	0.0	150.57	0.66	0.2873	25.142	0.2873	25.142
148.800	548.65	548.65	6178.50	11.13	0.004	380.34	11519.98	208.83	209.32	0.49	0.2873	25.141	0.2873	25.141
178.800	548.64	548.63	6178.49	22.08	0.006	382.18	11637.57	418.67	210.33	0.49	0.2873	25.139	0.2873	25.139
208.800	548.63	548.60	6178.47	32.88	0.009	384.01	11753.84	629.52	211.34	0.50	0.2873	25.137	0.2873	25.137
238.800	548.61	548.56	6178.43	43.52	0.013	385.84	11868.79	841.38	212.35	0.50	0.2873	25.134	0.2873	25.134
268.800	548.58	548.51	6178.39	54.02	0.015	387.68	11982.41	1054.24	213.36	0.50	0.2873	25.132	0.2873	25.132
298.800	548.56	548.45	6178.34	64.38	0.018	389.51	12094.71	1268.10	214.37	0.50	0.2873	25.129	0.2873	25.129
328.800	548.52	548.38	6178.29	74.62	0.021	391.34	12205.68	1482.97	215.38	0.51	0.2873	25.127	0.2873	25.127
358.800	548.48	548.30	6178.23	84.73	0.024	393.17	12315.33	1698.84	216.38	0.51	0.2873	25.124	0.2873	25.124
388.800	548.43	548.20	6178.15	94.73	0.027	395.01	12423.66	1915.71	217.38	0.51	0.2873	25.121	0.2873	25.121
389.507	548.43	548.20	6178.15	94.99	0.027	395.05	12426.19	1921.31	5.14	-0.46	0.2873	25.118	0.2873	25.118
442.669	548.39	548.08	6178.02	110.72	0.031	379.87	11490.36	2070.58	67.17	1.37	0.2873	25.103	0.2873	25.103
447.600	548.38	548.06	6178.01	112.39	0.032	380.19	11510.70	2105.39	34.45	-0.36	0.2873	25.101	0.2873	25.101
477.600	548.30	547.93	6177.92	122.31	0.034	382.10	11633.57	2315.11	210.22	0.49	0.2873	25.098	0.2873	25.098
507.600	548.23	547.79	6177.82	132.10	0.037	384.02	11755.00	2525.89	211.27	0.50	0.2872	25.094	0.2872	25.094
537.600	548.15	547.64	6177.71	141.76	0.040	385.94	11874.97	2737.70	212.32	0.50	0.2872	25.089	0.2872	25.089
567.600	548.06	547.48	6177.60	151.32	0.043	387.86	11993.48	2950.56	213.36	0.50	0.2872	25.085	0.2872	25.085
597.600	547.97	547.31	6177.48	160.76	0.045	389.78	12110.55	3164.46	214.41	0.51	0.2872	25.080	0.2872	25.080
627.600	547.86	547.13	6177.36	170.11	0.048	391.70	12226.17	3379.41	215.45	0.51	0.2872	25.076	0.2872	25.076
657.600	547.76	546.95	6177.23	179.37	0.051	393.62	12340.33	3595.39	216.49	0.51	0.2872	25.071	0.2872	25.071
673.062	547.70	546.84	6177.16	184.13	0.052	394.61	12398.61	3707.58	111.99	-0.21	0.2871	25.066	0.2871	25.066
701.100	547.66	546.61	6176.85	204.57	0.058	377.89	11363.91	3774.09	151.41	0.69	0.2871	25.044	0.2871	25.044
731.100	547.53	546.38	6176.70	213.75	0.060	379.70	11481.05	3982.39	208.80	0.49	0.2871	25.041	0.2871	25.041
761.100	547.38	546.13	6176.54	222.83	0.063	381.51	11596.89	4191.68	209.78	0.49	0.2871	25.035	0.2871	25.035
791.100	547.23	545.88	6176.38	231.82	0.065	383.32	11711.45	4401.94	210.76	0.50	0.2870	25.029	0.2870	25.029
821.100	547.08	545.62	6176.21	240.73	0.068	385.13	11824.71	4613.17	211.73	0.50	0.2870	25.023	0.2870	25.023
851.100	546.91	545.34	6176.04	249.55	0.070	386.94	11936.69	4825.37	212.71	0.50	0.2870	25.016	0.2870	25.016
881.100	546.75	545.07	6175.86	258.31	0.073	388.75	12047.37	5038.54	213.68	0.51	0.2869	25.010	0.2869	25.010
911.100	546.57	544.78	6175.68	267.00	0.075	390.56	12156.77	5252.69	214.65	0.51	0.2869	25.004	0.2869	25.004
941.100	546.39	544.48	6175.50	275.62	0.078	392.37	12264.87	5467.80	215.62	0.51	0.2869	24.997	0.2869	24.997
971.100	546.20	544.18	6175.31	284.19	0.080	394.18	12371.69	5683.87	216.59	0.51	0.2868	24.990	0.2868	24.990
971.944	546.20	544.17	6175.30	284.46	0.080	394.23	12374.67	5690.43	6.11	-0.45	0.2868	24.984	0.2868	24.984
1024.810	546.08	543.59	6174.57	314.99	0.089	379.59	11480.55	5840.54	0.0	1.37	0.2867	24.943	0.2867	24.943
1029.900	546.04	543.53	6174.55	316.10	0.089	380.06	11511.83	5876.36	35.47	-0.35	0.2867	24.939	0.2867	24.939
1059.900	545.78	543.17	6174.39	322.46	0.091	382.87	11694.36	6085.85	209.99	0.50	0.2867	24.935	0.2867	24.935
1089.900	545.52	542.80	6174.22	328.82	0.093	385.67	11873.71	6296.86	211.51	0.50	0.2867	24.929	0.2867	24.929
1119.900	545.25	542.43	6174.05	335.17	0.095	388.47	12049.86	6509.37	213.02	0.51	0.2866	24.923	0.2866	24.923
1149.900	544.98	542.06	6173.89	341.51	0.096	391.27	12222.82	6723.38	214.53	0.51	0.2866	24.917	0.2866	24.917
1179.900	544.71	541.68	6173.71	347.87	0.098	394.07	12392.59	6938.90	216.04	0.52	0.2865	24.911	0.2865	24.911
1209.900	544.44	541.29	6173.54	354.23	0.100	396.87	12559.16	7155.92	217.54	0.52	0.2865	24.904	0.2865	24.904
1239.900	544.16	540.90	6173.35	360.61	0.102	399.67	12722.55	7374.44	219.05	0.52	0.2864	24.898	0.2864	24.898
1258.900	543.98	540.66	6173.24	364.65	0.103	401.44	12824.38	7513.61	139.50	0.33	0.2864	24.892	0.2864	24.892
AFT	543.78	540.23	6172.89	376.32	0.106	.....	12824.38	7748.31	235.33	0.62	0.2864	24.887	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.4865E 02	5.4865E 02	6.1785E 03	-1.5730E-03	1.6061E 04	-4.1156E-02	-2.2411E 00	2.8694E-01	5.6842E-01	-4.1156E-02
AFT	1.1880E 02	5.4865E 02	5.4865E 02	6.1785E 03	-2.6951E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.0513E-01

GAS BUILDUP IN SLOT, DW/DT = 6.6398E-01

FOREWARD	3.8951E 02	5.4843E 02	5.4820E 02	6.1782E 03	7.6043E 01	1.6061E 04	6.6731E 01	3.6344E 03	2.8689E-01	5.7350E-01	1.9880E 03
AFT	4.4267E 02	5.4830E 02	5.4808E 02	6.1780E 03	7.6006E 01	1.6061E 04	8.3909E 01	4.5702E 03	2.8688E-01	5.7347E-01	1.9867E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3712E 00

FOREWARD	6.7306E 02	5.4770E 02	5.4684E 02	6.1772E 03	1.4472E 02	1.6061E 04	6.7199E 01	3.6620E 03	2.8673E-01	5.7316E-01	3.7748E 03
AFT	7.0110E 02	5.4746E 02	5.4661E 02	6.1769E 03	1.4475E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.7741E 03

GAS BUILDUP IN SLOT, DW/DT = 6.8986E-01

FOREWARD	9.7194E 02	5.4620E 02	5.4417E 02	6.1753E 03	2.2178E 02	1.6061E 04	6.7561E 01	3.6859E 03	2.8640E-01	5.7248E-01	5.7580E 03
AFT	1.0248E 03	5.4562E 02	5.4359E 02	6.1746E 03	2.2193E 02	1.6061E 04	8.3928E 01	4.5800E 03	2.8633E-01	5.7233E-01	5.7566E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3742E 00

ORIGINAL PAGE IS
OF POOR QUALITY

IGNITION TIME, TIME (S) 87.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTOEL	7917602.0	1779948.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8927353.0	2006949.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	49373.879	11099.691
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.77779123E 09	0.17485446E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.86551347E 09	0.19457522E 09
THRUST COEFFICIENT	CF	1.6182127	1.6182127
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3524.9016	7771.0781
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	339981.31	749530.56
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	26.498596	58.419434
INERT MASS REMAINING (KG,LBM)	MIR	1424.1145	3139.6353
TOTAL BURN AREA (M**2,IN**2)	ABTOT	273.48535	423903.19
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	64.513153	3936836.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	114285.88	251957.25
TOTAL GAS MASS (KG,LBM)	WGTOT	974.60205	2148.6301
RATIO OF SPECIFIC HEATS	GAMA	1.1615734	1.1615734
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.863803	28.359833
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.9941	5134.4961
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.10428613	0.10428613
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37903488E 09	549.74365
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.37946622E 11	55036.926
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.73015578E-02	0.28746301
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3432.7253	6178.9063
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	253.16251	392402.69
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	12.263672	19008.730
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	63.493088	3874588.0
GAS VOLUME (M**3,IN**3)	VP	226.64832	13830935.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37579520E 09	545.04492
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.36841460E 11	53434.023
BURN AREA (M**2,IN**2)	AAN	8.0590410	12491.539
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72775036E-02	0.28651601
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.64667946	25.459824
PROPELLANT VOLUME (M**3,IN**3)	VFN	1.0200491	62247.293
GAS VOLUME (M**3,IN**3)	VPN	11.005627	671604.88
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3429.8889	6173.8008
PORT AREA (M**2,IN**2)	AP	8.4227877	13055.348
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4680319	2275.4551
EXPANSION RATIO	EPR	6.7864285	6.7864285
PRESSURE RATIO	PEPO	0.23087144E-01	0.23087144E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	549.74	549.74	6178.91	0.0	0.0	0.0	16062.80	0.0	0.01	0.10	0.2875	16.253	0.2875	16.253
30.000	549.74	549.74	6178.91	0.0	0.0	0.0	16062.80	0.0	0.0	0.07	0.2875	16.253	0.2875	16.253
60.000	549.74	549.74	6178.91	0.0	0.0	0.0	16062.81	0.0	0.0	0.07	0.2875	16.253	0.2875	16.253
90.000	549.74	549.74	6178.91	0.0	0.0	0.0	16062.82	0.0	0.0	0.07	0.2875	16.253	0.2875	16.253
99.243	549.74	549.74	6178.91	0.0	0.0	0.0	16062.82	0.0	0.0	0.02	0.2875	16.253	0.2875	16.253
118.800	549.74	549.74	6178.91	0.0	0.0	382.12	11619.61	0.0	142.42	0.66	0.2875	25.717	0.2875	25.717
148.800	549.75	549.74	6178.90	11.01	0.004	383.95	11739.80	210.91	211.41	0.49	0.2875	25.715	0.2875	25.715
178.800	549.73	549.72	6178.89	21.85	0.006	385.79	11858.61	422.84	212.42	0.50	0.2875	25.713	0.2875	25.713
208.800	549.72	549.70	6178.86	32.53	0.009	387.62	11976.05	635.77	213.43	0.50	0.2875	25.711	0.2875	25.711
238.800	549.71	549.66	6178.83	43.06	0.012	389.45	12092.12	849.71	214.44	0.50	0.2875	25.709	0.2875	25.709
268.800	549.68	549.61	6178.79	53.45	0.015	391.29	12206.81	1064.65	215.45	0.51	0.2875	25.707	0.2875	25.707
298.800	549.65	549.55	6178.74	63.70	0.018	393.12	12320.13	1280.60	216.46	0.51	0.2874	25.704	0.2874	25.704
328.800	549.62	549.48	6178.69	73.83	0.021	394.95	12432.07	1497.55	217.46	0.51	0.2874	25.701	0.2874	25.701
358.800	549.58	549.40	6178.63	83.84	0.024	396.78	12542.64	1715.50	218.47	0.51	0.2874	25.699	0.2874	25.699
388.933	549.53	549.31	6178.55	93.74	0.027	398.62	12651.84	1934.46	219.47	0.52	0.2874	25.696	0.2874	25.696
443.243	549.49	549.19	6178.43	108.75	0.031	383.52	11712.21	2077.03	63.06	1.37	0.2874	25.678	0.2874	25.678
447.600	549.48	549.18	6178.42	110.21	0.031	383.79	11730.37	2108.15	30.75	-0.38	0.2874	25.676	0.2874	25.676
477.600	549.42	549.05	6178.33	120.04	0.034	385.71	11854.51	2319.96	212.31	0.50	0.2874	25.672	0.2874	25.672
507.600	549.34	548.92	6178.24	129.74	0.037	387.63	11977.14	2532.82	213.36	0.50	0.2874	25.668	0.2874	25.668
537.600	549.26	548.77	6178.13	139.32	0.039	389.55	12098.26	2746.72	214.41	0.50	0.2874	25.664	0.2874	25.664
567.600	549.18	548.61	6178.03	148.80	0.042	391.47	12217.88	2961.66	215.45	0.51	0.2873	25.659	0.2873	25.659
597.600	549.08	548.45	6177.91	158.16	0.045	393.39	12335.99	3177.65	216.50	0.51	0.2873	25.655	0.2873	25.655
627.600	548.98	548.28	6177.79	167.43	0.047	395.31	12452.59	3394.68	217.54	0.51	0.2873	25.650	0.2873	25.650
657.600	548.88	548.09	6177.67	176.61	0.050	397.23	12567.69	3612.74	218.58	0.51	0.2873	25.645	0.2873	25.645
672.489	548.83	548.00	6177.60	181.16	0.051	398.18	12624.25	3721.83	108.87	-0.23	0.2873	25.640	0.2873	25.640
701.100	548.80	547.78	6177.30	200.84	0.057	381.50	11581.92	3784.23	143.29	0.69	0.2872	25.618	0.2872	25.618
731.100	548.66	547.55	6177.16	209.95	0.059	383.31	11700.29	3994.62	210.88	0.50	0.2872	25.615	0.2872	25.615
761.100	548.52	547.31	6177.00	218.96	0.062	385.12	11817.32	4205.99	211.87	0.50	0.2872	25.609	0.2872	25.609
791.100	548.38	547.06	6176.84	227.88	0.064	386.93	11933.00	4418.34	212.85	0.50	0.2872	25.603	0.2872	25.603
821.100	548.22	546.81	6176.68	236.72	0.067	388.74	12047.35	4631.66	213.82	0.50	0.2871	25.597	0.2871	25.597
851.100	548.06	546.55	6176.52	245.48	0.069	390.55	12160.36	4845.95	214.80	0.51	0.2871	25.590	0.2871	25.590
881.100	547.90	546.27	6176.34	254.17	0.072	392.36	12272.04	5061.20	215.77	0.51	0.2871	25.584	0.2871	25.584
911.100	547.74	545.99	6176.16	262.80	0.074	394.17	12382.37	5277.43	216.75	0.51	0.2870	25.577	0.2870	25.577
941.100	547.56	545.70	6175.98	271.36	0.077	395.98	12491.37	5494.63	217.72	0.51	0.2870	25.571	0.2870	25.571
971.371	547.38	545.41	6175.80	279.87	0.079	397.79	12599.02	5712.80	218.69	0.52	0.2870	25.564	0.2870	25.564
1025.383	547.27	544.86	6175.11	309.18	0.087	383.25	11703.16	5857.22	0.0	1.38	0.2869	25.517	0.2869	25.517
1029.900	547.23	544.81	6175.09	310.17	0.087	383.67	11731.22	5889.39	31.80	-0.37	0.2869	25.512	0.2869	25.512
1059.900	546.98	544.46	6174.93	316.53	0.089	386.47	11915.67	6100.96	212.09	0.50	0.2869	25.508	0.2869	25.508
1089.900	546.73	544.10	6174.77	322.88	0.091	389.27	12096.80	6314.07	213.61	0.51	0.2868	25.502	0.2868	25.502
1119.900	546.47	543.74	6174.61	329.23	0.093	392.07	12274.62	6528.67	215.12	0.51	0.2868	25.496	0.2868	25.496
1149.900	546.21	543.38	6174.44	335.58	0.095	394.87	12449.14	6744.78	216.63	0.52	0.2867	25.490	0.2867	25.490
1179.900	545.94	543.01	6174.27	341.93	0.096	397.67	12620.34	6962.39	218.14	0.52	0.2867	25.484	0.2867	25.484
1209.900	545.68	542.63	6174.09	348.29	0.098	400.47	12788.24	7181.51	219.64	0.52	0.2866	25.477	0.2866	25.477
1239.900	545.41	542.25	6173.92	354.66	0.100	403.27	12952.82	7402.13	221.15	0.53	0.2866	25.471	0.2866	25.471
1258.900	545.24	542.01	6173.80	358.71	0.101	405.04	13055.35	7542.63	140.83	0.34	0.2865	25.464	0.2865	25.464
AFT	545.04	541.62	6173.48	369.83	0.104	.....	13055.35	7771.08	229.06	0.60	0.2865	25.460	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.4974E 02	5.4974E 02	6.1789E 03	-1.5707E-03	1.6061E 04	-4.1175E-02	-2.2411E 00	2.8708E-01	5.6842E-01	-4.1175E-02
AFT	1.1880E 02	5.4974E 02	5.4974E 02	6.1789E 03	-2.6881E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.0468E-01

GAS BUILDUP IN SLOT, DW/DT = 6.6351E-01

FOREWARD	3.8893E 02	5.4953E 02	5.4931E 02	6.1786E 03	7.6294E 01	1.6061E 04	6.2608E 01	3.4083E 03	2.8703E-01	5.7378E-01	1.9985E 03
AFT	4.4324E 02	5.4942E 02	5.4919E 02	6.1784E 03	7.6255E 01	1.6061E 04	7.9874E 01	4.3484E 03	2.8701E-01	5.7375E-01	1.9972E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3722E 00

FOREWARD	6.7249E 02	5.4883E 02	5.4800E 02	6.1776E 03	1.4481E 02	1.6061E 04	6.3089E 01	3.4363E 03	2.8687E-01	5.7345E-01	3.7849E 03
AFT	7.0110E 02	5.4861E 02	5.4778E 02	6.1773E 03	1.4484E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.7842E 03

GAS BUILDUP IN SLOT, DW/DT = 6.9025E-01

FOREWARD	9.7137E 02	5.4738E 02	5.4540E 02	6.1758E 03	2.2208E 02	1.6061E 04	6.3464E 01	3.4606E 03	2.8655E-01	5.7279E-01	5.7767E 03
AFT	1.0254E 03	5.4683E 02	5.4486E 02	6.1751E 03	2.2222E 02	1.6061E 04	7.9892E 01	4.3574E 03	2.8648E-01	5.7265E-01	5.7773E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3754E 00

LATERAL BURNOUT INCREMENT LOCATION ZCALC(15)= 0.3887998E 03

LATERAL BURNOUT INCREMENT LOCATION ZCALC(37)= 0.9710999E 03

IGNITION TIME, TIME (S) 89.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7952787.0	1787858.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8962538.0	2014859.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	60936.250	13699.016
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.79366170E 09	0.17842227E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.88340326E 09	0.19859702E 09
THRUST COEFFICIENT	CF	1.6200886	1.6200886
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3534.6555	7792.5820
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	347040.88	765094.19
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	32.704041	72.100098
INERT MASS REMAINING (KG,LBM)	MIR	1358.7063	2995.4351
TOTAL BURN AREA (M**2,IN**2)	ABTOT	274.12646	424897.25
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	60.511261	3692626.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	107196.50	236327.88
TOTAL GAS MASS (KG,LBM)	WGTOT	991.53271	2185.9558
RATIO OF SPECIFIC HEATS	GAMA	1.1615744	1.1615744
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.864079	28.360443
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.0181	5134.5742
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.10250092	0.10250092
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37972941E 09	550.75122
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.38705381E 11	56137.418
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.73045343E-02	0.28758013
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3432.9272	6179.2695
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	254.76508	394886.69
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	11.533061	17876.281
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	59.606842	3637435.0
GAS VOLUME (M**3,IN**3)	VP	229.77974	14022026.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37660211E 09	546.21558
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.37593854E 11	54525.281
BURN AREA (M**2,IN**2)	AAN	7.8283958	12134.039
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72812848E-02	0.28666478
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.66123438	26.032852
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.90441704	55190.938
GAS VOLUME (M**3,IN**3)	VPN	11.121261	678661.25
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3430.1819	6174.3281
PORT AREA (M**2,IN**2)	AP	8.5732107	13288.504
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4689569	2276.8887
EXPANSION RATIO	EPR	6.7821560	6.7821560
PRESSURE RATIO	PEPO	0.23106221E-01	0.23106221E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	550.75	550.75	6179.27	0.0	0.0	0.0	16062.80	0.0	0.01	0.10	0.2876	16.253	0.2875	16.253
30.000	550.75	550.75	6179.27	0.0	0.0	0.0	16062.80	0.0	0.0	0.06	0.2876	16.253	0.2876	16.253
60.000	550.75	550.75	6179.27	0.0	0.0	0.0	16062.81	0.0	0.0	0.06	0.2876	16.253	0.2876	16.253
90.000	550.75	550.75	6179.27	0.0	0.0	0.0	16062.82	0.0	0.0	0.06	0.2876	16.253	0.2876	16.253
99.243	550.75	550.75	6179.27	0.0	0.0	0.0	16062.82	0.0	0.0	0.02	0.2876	16.253	0.2876	16.253
118.800	550.75	550.75	6179.27	0.0	0.0	385.73	11840.34	0.0	134.17	0.66	0.2876	26.291	0.2876	26.291
148.800	550.75	550.75	6179.26	10.89	0.004	387.57	11961.80	212.99	213.49	0.50	0.2876	26.290	0.2876	26.290
178.800	550.74	550.73	6179.25	21.61	0.006	389.40	12081.82	426.99	214.50	0.50	0.2876	26.288	0.2876	26.288
208.800	550.73	550.71	6179.23	32.18	0.009	391.23	12200.43	642.00	215.51	0.50	0.2876	26.286	0.2876	26.286
238.800	550.71	550.67	6179.20	42.61	0.012	393.06	12317.62	858.02	216.52	0.51	0.2876	26.284	0.2876	26.284
268.800	550.69	550.62	6179.16	52.89	0.015	394.90	12433.38	1075.04	217.53	0.51	0.2876	26.282	0.2876	26.282
298.800	550.66	550.56	6179.11	63.04	0.018	396.73	12547.72	1293.07	218.54	0.51	0.2876	26.279	0.2876	26.279
328.800	550.63	550.49	6179.05	73.07	0.021	398.56	12660.64	1512.11	219.55	0.51	0.2876	26.276	0.2876	26.276
358.800	550.58	550.41	6179.00	82.99	0.023	400.40	12772.13	1732.14	220.55	0.52	0.2875	26.274	0.2875	26.274
388.359	550.54	550.32	6178.93	92.67	0.026	402.20	12880.59	1950.30	218.29	0.13	0.2875	26.271	0.2875	26.271
443.817	550.50	550.22	6178.82	106.83	0.030	387.16	11936.30	2083.17	58.91	1.37	0.2875	26.252	0.2875	26.252
447.600	550.50	550.20	6178.80	108.09	0.031	387.41	11952.22	2110.52	26.96	-0.39	0.2875	26.250	0.2875	26.250
477.600	550.43	550.08	6178.72	117.83	0.033	389.32	12077.62	2324.41	214.39	0.50	0.2875	26.247	0.2875	26.247
507.600	550.36	549.95	6178.63	127.45	0.036	391.24	12201.46	2539.35	215.44	0.50	0.2875	26.243	0.2875	26.243
537.600	550.28	549.81	6178.52	136.95	0.039	393.16	12323.74	2755.33	216.49	0.51	0.2875	26.238	0.2875	26.238
567.600	550.20	549.66	6178.42	146.34	0.041	395.08	12444.46	2972.35	217.53	0.51	0.2875	26.234	0.2875	26.234
597.600	550.11	549.50	6178.31	155.63	0.044	397.00	12563.61	3190.42	218.58	0.51	0.2874	26.229	0.2874	26.229
627.600	550.01	549.33	6178.19	164.82	0.046	398.92	12681.20	3409.53	219.62	0.51	0.2874	26.225	0.2874	26.225
657.600	549.92	549.15	6178.07	173.93	0.049	400.84	12797.23	3629.68	220.67	0.52	0.2874	26.220	0.2874	26.220
671.915	549.86	549.06	6178.01	178.27	0.050	401.75	12852.05	3735.59	105.66	-0.24	0.2874	26.215	0.2874	26.215
701.100	549.83	548.85	6177.73	197.22	0.056	385.11	11802.11	3793.83	135.07	0.69	0.2873	26.192	0.2873	26.192
731.100	549.70	548.63	6177.58	206.25	0.058	386.92	11921.70	4006.30	212.97	0.50	0.2873	26.190	0.2873	26.190
761.100	549.57	548.40	6177.43	215.20	0.061	388.73	12039.91	4219.76	213.96	0.50	0.2873	26.184	0.2873	26.184
791.100	549.43	548.16	6177.28	224.05	0.063	390.54	12156.73	4434.18	214.93	0.50	0.2873	26.177	0.2873	26.177
821.100	549.28	547.91	6177.12	232.82	0.066	392.35	12272.16	4649.58	215.91	0.51	0.2873	26.171	0.2873	26.171
851.100	549.13	547.65	6176.95	241.52	0.068	394.16	12386.20	4865.95	216.88	0.51	0.2872	26.165	0.2872	26.165
881.100	548.97	547.38	6176.79	250.15	0.071	395.96	12498.86	5083.30	217.86	0.51	0.2872	26.158	0.2872	26.158
911.100	548.80	547.11	6176.61	258.72	0.073	397.77	12610.13	5301.61	218.83	0.51	0.2872	26.151	0.2872	26.151
941.100	548.63	546.83	6176.44	267.22	0.075	399.58	12720.00	5520.89	219.80	0.52	0.2871	26.145	0.2871	26.145
970.798	548.46	546.54	6176.25	275.59	0.078	401.37	12827.41	5739.18	218.55	0.26	0.2871	26.138	0.2871	26.138
1025.955	548.36	546.04	6175.61	303.53	0.086	386.90	11928.05	5872.93	0.0	1.37	0.2870	26.091	0.2870	26.091
1029.900	548.33	545.99	6175.59	304.39	0.086	387.27	11952.80	5901.36	28.05	-0.39	0.2870	26.086	0.2870	26.086
1059.900	548.08	545.65	6175.44	310.76	0.088	390.07	12139.16	6115.03	214.17	0.50	0.2870	26.082	0.2870	26.082
1089.900	547.84	545.30	6175.28	317.11	0.089	392.87	12322.09	6330.21	215.70	0.51	0.2870	26.076	0.2870	26.076
1119.900	547.59	544.95	6175.12	323.46	0.091	395.67	12501.58	6546.91	217.21	0.51	0.2869	26.069	0.2869	26.069
1149.900	547.33	544.60	6174.95	329.80	0.093	398.47	12677.65	6765.11	218.72	0.52	0.2869	26.063	0.2869	26.063
1179.900	547.08	544.24	6174.79	336.15	0.095	401.27	12850.29	6984.81	220.23	0.52	0.2868	26.057	0.2868	26.057
1209.900	546.82	543.87	6174.62	342.51	0.097	404.07	13019.50	7206.02	221.74	0.53	0.2868	26.050	0.2868	26.050
1239.900	546.56	543.50	6174.44	348.88	0.098	406.87	13185.28	7428.73	223.24	0.53	0.2867	26.044	0.2867	26.044
1258.900	546.40	543.27	6174.33	352.93	0.100	408.64	13288.50	7570.55	142.16	0.34	0.2867	26.038	0.2867	26.038
AFT	546.22	542.89	6174.03	363.51	0.103	.....	13288.50	7792.58	222.62	0.58	0.2867	26.033	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.5075E 02	5.5075E 02	6.1793E 03	-1.5686E-03	1.6061E 04	-4.1193E-02	-2.2411E 00	2.8720E-01	5.6842E-01	-4.1193E-02
AFT	1.1880E 02	5.5075E 02	5.5075E 02	6.1793E 03	-2.6744E-02	1.6061E 04	0.0	0.0	0.0	0.0	-7.0235E-01

GAS BUILDUP IN SLOT, DW/DT = 6.6116E-01

FOREWARD	3.8836E 02	5.5054E 02	5.5032E 02	6.1789E 03	7.6545E 01	1.6061E 04	5.8440E 01	3.1800E 03	2.8715E-01	5.7405E-01	2.0087E 03
AFT	4.4382E 02	5.5044E 02	5.5022E 02	6.1788E 03	7.6506E 01	1.6061E 04	7.5791E 01	4.1243E 03	2.8714E-01	5.7402E-01	2.0074E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3674E 00

FOREWARD	6.7191E 02	5.4986E 02	5.4906E 02	6.1780E 03	1.4491E 02	1.6061E 04	5.8933E 01	3.2085E 03	2.8700E-01	5.7373E-01	3.7945E 03
AFT	7.0110E 02	5.4966E 02	5.4885E 02	6.1777E 03	1.4493E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.7938E 03

GAS BUILDUP IN SLOT, DW/DT = 6.8766E-01

FOREWARD	9.7080E 02	5.4846E 02	5.4654E 02	6.1763E 03	2.2239E 02	1.6061E 04	5.9322E 01	3.2332E 03	2.8669E-01	5.7310E-01	5.7985E 03
AFT	1.0260E 03	5.4795E 02	5.4604E 02	6.1756E 03	2.2252E 02	1.6061E 04	7.5807E 01	4.1325E 03	2.8662E-01	5.7296E-01	5.7971E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3707E 00

IGNITION TIME, TIME (S) 91.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7972284.0	1792241.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8982035.0	2019242.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	61096.680	13735.082
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.80958669E 09	0.18200237E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.90134784E 09	0.20263112E 09
THRUST COEFFICIENT	CF	1.6199026	1.6199026
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3542.7405	7810.4063
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	354118.25	780697.13
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	32.790146	72.289917
INERT MASS REMAINING (KG,LBM)	MIR	1293.1260	2850.8552
TOTAL BURN AREA (M**2,IN**2)	ABTOT	274.67261	425743.69
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	56.498856	3447774.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	100088.44	220657.31
TOTAL GAS MASS (KG,LBM)	WGTOT	1008.0896	2222.4573
RATIO OF SPECIFIC HEATS	GAMA	1.1615744	1.1615744
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.864281	28.360886
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.0359	5134.6328
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.10076231	0.10076231
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.38024448E 09	551.49829
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.39465353E 11	57239.664
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.73055737E-02	0.28762114
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3433.0769	6179.5391
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	256.35498	397351.13
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	10.795419	16732.934
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	55.706223	3399404.0
GAS VOLUME (M**3,IN**3)	VP	232.92519	14213973.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37722675E 09	547.12134
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.38347682E 11	55618.617
BURN AREA (M**2,IN**2)	AAN	7.5221891	11659.418
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72830990E-02	0.28673625
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.67579663	26.606171
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.79263377	48369.504
GAS VOLUME (M**3,IN**3)	VPN	11.233043	685482.63
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3430.4163	6174.7500
PORT AREA (M**2,IN**2)	AP	8.7250423	13523.844
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4698839	2278.3262
EXPANSION RATIO	EPR	6.7778769	6.7778769
PRESSURE RATIO	PEPO	0.23125421E-01	0.23125421E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RA IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	551.50	551.50	6179.54	0.0	0.0	0.0	16062.80	0.0	0.01	0.07	0.2876	16.253	0.2876	16.253
30.000	551.50	551.50	6179.54	0.0	0.0	0.0	16062.80	0.0	0.0	0.04	0.2876	16.253	0.2876	16.253
60.000	551.50	551.50	6179.54	0.0	0.0	0.0	16062.81	0.0	0.0	0.04	0.2876	16.253	0.2876	16.253
90.000	551.50	551.50	6179.54	0.0	0.0	0.0	16062.82	0.0	0.0	0.04	0.2876	16.253	0.2876	16.253
99.243	551.50	551.50	6179.54	0.0	0.0	0.0	16062.82	0.0	0.0	0.01	0.2876	16.253	0.2876	16.253
118.800	551.50	551.50	6179.54	0.0	0.0	389.35	12063.23	0.0	125.84	0.65	0.2876	26.867	0.2876	26.867
148.800	551.50	551.50	6179.53	10.78	0.004	391.18	12185.96	215.02	215.52	0.49	0.2876	26.866	0.2876	26.866
178.800	551.49	551.48	6179.52	21.39	0.006	393.01	12307.21	431.06	216.53	0.49	0.2876	26.864	0.2876	26.864
208.800	551.48	551.45	6179.50	31.85	0.009	394.85	12426.99	648.10	217.54	0.50	0.2876	26.861	0.2876	26.861
238.800	551.46	551.41	6179.47	42.17	0.012	396.68	12545.33	866.15	218.55	0.50	0.2876	26.859	0.2876	26.859
268.800	551.44	551.37	6179.43	52.36	0.015	398.51	12662.13	1085.21	219.56	0.50	0.2876	26.857	0.2876	26.857
298.800	551.41	551.31	6179.38	62.41	0.018	400.34	12777.49	1305.27	220.57	0.50	0.2876	26.854	0.2876	26.854
328.800	551.38	551.24	6179.33	72.34	0.021	402.18	12891.38	1526.33	221.57	0.51	0.2876	26.851	0.2876	26.851
358.800	551.33	551.16	6179.27	82.16	0.023	404.01	13003.79	1748.40	222.58	0.51	0.2876	26.849	0.2876	26.849
387.784	551.29	551.08	6179.20	91.57	0.026	405.78	13111.00	1964.41	216.00	-0.01	0.2876	26.846	0.2876	26.846
444.391	551.26	550.98	6179.10	104.99	0.030	390.81	12162.60	2088.95	54.71	1.34	0.2876	26.827	0.2876	26.827
447.600	551.26	550.97	6179.09	106.05	0.030	391.02	12176.24	2112.45	23.08	-0.41	0.2876	26.825	0.2876	26.825
477.600	551.19	550.85	6179.01	115.71	0.033	392.94	12302.91	2328.37	216.41	0.49	0.2876	26.822	0.2876	26.822
507.600	551.12	550.72	6178.91	125.25	0.035	394.86	12427.96	2545.34	217.47	0.50	0.2875	26.818	0.2875	26.818
537.600	551.05	550.59	6178.82	134.67	0.038	396.77	12551.39	2763.35	218.52	0.50	0.2875	26.813	0.2875	26.813
567.600	550.96	550.44	6178.71	143.99	0.041	398.69	12673.21	2982.41	219.56	0.50	0.2875	26.809	0.2875	26.809
597.600	550.88	550.28	6178.61	153.20	0.043	400.61	12793.41	3202.51	220.61	0.51	0.2875	26.804	0.2875	26.804
627.600	550.78	550.12	6178.49	162.32	0.046	402.53	12911.99	3423.66	221.65	0.51	0.2875	26.799	0.2875	26.799
657.600	550.69	549.94	6178.37	171.36	0.048	404.45	13028.95	3645.84	222.70	0.51	0.2875	26.795	0.2875	26.795
671.341	550.64	549.86	6178.32	175.49	0.049	405.33	13081.98	3748.46	102.35	-0.27	0.2874	26.790	0.2874	26.790
701.100	550.61	549.66	6178.05	193.74	0.055	388.72	12024.46	3 02.51	126.76	0.67	0.2874	26.767	0.2874	26.767
731.100	550.49	549.44	6177.91	202.71	0.057	390.53	12145.29	4017.02	215.00	0.49	0.2874	26.765	0.2874	26.765
761.100	550.35	549.22	6177.76	211.58	0.060	392.34	12264.68	4232.50	215.98	0.49	0.2874	26.758	0.2874	26.758
791.100	550.21	548.99	6177.61	220.37	0.062	394.15	12382.63	4448.96	216.96	0.50	0.2873	26.752	0.2873	26.752
821.100	550.07	548.74	6177.46	229.08	0.065	395.96	12499.14	4666.40	217.94	0.50	0.2873	26.746	0.2873	26.746
851.100	549.92	548.49	6177.30	237.72	0.067	397.76	12614.22	4884.81	218.91	0.50	0.2873	26.739	0.2873	26.739
881.100	549.77	548.23	6177.13	246.29	0.069	399.57	12727.86	5104.19	219.89	0.50	0.2873	26.732	0.2873	26.732
911.100	549.61	547.97	6176.96	254.79	0.072	401.38	12840.06	5324.54	220.86	0.51	0.2872	26.726	0.2872	26.726
941.100	549.44	547.69	6176.79	263.24	0.074	403.19	12950.82	5545.86	221.84	0.51	0.2872	26.719	0.2872	26.719
970.224	549.28	547.42	6176.62	271.41	0.077	404.95	13056.98	5762.15	216.29	-0.00	0.2872	26.712	0.2872	26.712
1026.529	549.19	546.94	6176.01	298.12	0.084	390.56	12155.18	5887.60	0.0	1.35	0.2871	26.665	0.2871	26.665
1029.900	549.16	546.91	6176.00	298.86	0.084	390.88	12176.56	5912.20	24.20	-0.41	0.2871	26.660	0.2871	26.660
1059.900	548.93	546.57	6175.84	305.23	0.086	393.68	12364.83	6127.91	216.21	0.50	0.2871	26.656	0.2871	26.656
1089.900	548.69	546.24	6175.69	311.58	0.088	396.48	12549.55	6345.14	217.73	0.50	0.2870	26.650	0.2870	26.650
1119.900	548.45	545.89	6175.53	317.92	0.090	399.28	12730.73	6563.87	219.24	0.51	0.2870	26.643	0.2870	26.643
1149.900	548.20	545.55	6175.37	324.27	0.091	402.07	12908.36	6784.11	220.76	0.51	0.2869	26.637	0.2869	26.637
1179.900	547.95	545.20	6175.20	330.61	0.093	404.87	13082.43	7005.86	222.27	0.51	0.2869	26.631	0.2869	26.631
1209.900	547.70	544.84	6175.04	336.97	0.095	407.67	13252.95	7229.11	223.77	0.52	0.2869	26.624	0.2869	26.624
1239.900	547.45	544.48	6174.86	343.34	0.097	410.47	13419.93	7453.87	225.28	0.52	0.2868	26.617	0.2868	26.617
1258.900	547.29	544.25	6174.75	347.39	0.098	412.25	13523.84	7596.99	143.45	0.33	0.2868	26.611	0.2868	26.611
AFT	547.12	543.91	6174.47	357.36	0.101	.....	13523.84	7810.41	213.96	0.54	0.2867	26.606	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.5150E 02	5.5150E 02	6.1795E 03	-1.5670E-03	1.6061E 04	-4.1206E-02	-2.2411E 00	2.8729E-01	5.6842E-01	-4.1206E-02
AFT	1.1880E 02	5.5150E 02	5.5150E 02	6.1795E 03	-2.6355E-02	1.6061E 04	0.0	0.0	0.0	0.0	-6.9306E-01

GAS BUILDUP IN SLOT, DW/DT = 6.5185E-01

FOREWARD	3.8778E 02	5.5129E 02	5.5108E 02	6.1792E 03	7.6818E 01	1.6061E 04	5.4223E 01	2.9496E 03	2.8724E-01	5.7430E-01	2.0186E 03
AFT	4.4439E 02	5.5120E 02	5.5098E 02	6.1791E 03	7.6780E 01	1.6061E 04	7.1655E 01	3.8980E 03	2.8723E-01	5.7427E-01	2.0173E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3430E 00

FOREWARD	6.7134E 02	5.5064E 02	5.4986E 02	6.1783E 03	1.4503E 02	1.6061E 04	5.4728E 01	2.9786E 03	2.8709E-01	5.7399E-01	3.8032E 03
AFT	7.0110E 02	5.5044E 02	5.4966E 02	6.1780E 03	1.4505E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8025E 03

GAS BUILDUP IN SLOT, DW/DT = 6.7454E-01

FOREWARD	9.7022E 02	5.4928E 02	5.4742E 02	6.1766E 03	2.2276E 02	1.6061E 04	5.5131E 01	3.0036E 03	2.8679E-01	5.7338E-01	5.8173E 03
AFT	1.0265E 03	5.4880E 02	5.4694E 02	6.1760E 03	2.2288E 02	1.6061E 04	7.1668E 01	3.9054E 03	2.8674E-01	5.7325E-01	5.8159E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3463E 00

IGNITION TIME, TIME (S) 93.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7989912.0	1796204.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8999663.0	2023205.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	61228.527	13764.723
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.82554880E 09	0.18559082E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.91932954E 09	0.20667357E 09
THRUST COEFFICIENT	CF	1.6197090	1.6197090
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3550.1150	7826.6641
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	361211.06	796334.19
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	32.860916	72.445923
INERT MASS REMAINING (KG,LBM)	MIR	1227.4043	2705.9634
TOTAL BURN AREA (M**2,IN**2)	ABTOT	275.19897	426559.44
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	52.477783	3202393.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	92965.063	204952.94
TOTAL GAS MASS (KG,LBM)	WGTOT	1024.5266	2258.6948
RATIO OF SPECIFIC HEATS	GAMA	1.1615753	1.1615753
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.864461	28.361282
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.0513	5134.6836
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.99069178E-01	0.99069178E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.38068864E 09	552.14258
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.40226288E 11	58343.305
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.73062927E-02	0.28764945
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3433.2051	6179.7695
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	257.93168	399795.50
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	10.050924	15578.965
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	51.792496	3160574.0
GAS VOLUME (M**3,IN**3)	VP	236.08351	14406706.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37777331E 09	547.91406
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.39102681E 11	56713.652
BURN AREA (M**2,IN**2)	AAN	7.2159119	11184.688
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72845444E-02	0.28679323
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.69036281	27.179642
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.68528426	41818.629
GAS VOLUME (M**3,IN**3)	VPN	11.340392	692033.50
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3430.6270	6175.1289
PORT AREA (M**2,IN**2)	AP	8.8782454	13761.309
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4708138	2279.7666
EXPANSION RATIO	EPR	6.7735939	6.7735939
PRESSURE RATIO	PEPO	0.23144636E-01	0.23144636E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS AUDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	552.14	552.14	6179.77	0.0	0.0	0.0	16062.80	0.0	0.01	0.06	0.2876	16.253	0.2876	16.253
30.000	552.14	552.14	6179.77	0.0	0.0	0.0	16062.80	0.0	0.0	0.04	0.2876	16.253	0.2876	16.253
60.000	552.14	552.14	6179.77	0.0	0.0	0.0	16062.81	0.0	0.0	0.04	0.2876	16.253	0.2876	16.253
90.000	552.14	552.14	6179.77	0.0	0.0	0.0	16062.82	0.0	0.0	0.04	0.2876	16.253	0.2876	16.253
99.243	552.14	552.14	6179.77	0.0	0.0	0.0	16062.82	0.0	0.0	0.01	0.2876	16.253	0.2876	16.253
118.800	552.14	552.14	6179.77	0.0	0.0	392.96	12288.24	0.0	117.41	0.65	0.2876	27.442	0.2876	27.442
148.800	552.15	552.14	6179.76	10.67	0.004	394.79	12412.24	217.04	217.53	0.49	0.2876	27.441	0.2876	27.441
178.800	552.13	552.12	6179.75	21.18	0.006	396.63	12534.71	435.09	218.55	0.49	0.2876	27.439	0.2876	27.439
208.800	552.12	552.10	6179.73	31.53	0.009	398.46	12655.66	654.15	219.56	0.50	0.2876	27.437	0.2876	27.437
238.800	552.10	552.06	6179.70	41.75	0.012	400.29	12775.09	874.22	220.57	0.50	0.2876	27.434	0.2876	27.434
268.800	552.08	552.01	6179.66	51.84	0.015	402.12	12893.00	1095.29	221.57	0.50	0.2876	27.432	0.2876	27.432
298.800	552.05	551.96	6179.62	61.79	0.017	403.96	13009.38	1317.37	222.58	0.50	0.2876	27.429	0.2876	27.429
328.800	552.02	551.89	6179.56	71.63	0.020	405.79	13124.23	1540.45	223.59	0.51	0.2876	27.427	0.2876	27.427
358.800	551.98	551.81	6179.50	81.36	0.023	407.62	13237.56	1764.54	224.60	0.51	0.2876	27.424	0.2876	27.424
387.209	551.94	551.73	6179.44	90.50	0.026	409.36	13343.48	1978.19	213.62	-0.03	0.2876	27.421	0.2876	27.421
444.965	551.91	551.64	6179.34	103.20	0.029	394.46	12391.06	2094.29	50.47	1.33	0.2876	27.402	0.2876	27.402
447.600	551.90	551.63	6179.34	104.07	0.029	394.63	12402.38	2113.85	19.13	-0.43	0.2876	27.400	0.2876	27.400
477.600	551.84	551.51	6179.25	113.65	0.032	396.55	12530.31	2331.79	218.43	0.49	0.2876	27.397	0.2876	27.397
507.600	551.78	551.39	6179.17	123.10	0.035	398.47	12656.57	2550.78	219.49	0.50	0.2876	27.393	0.2876	27.393
537.600	551.70	551.26	6179.07	132.45	0.037	400.39	12781.16	2770.81	220.53	0.50	0.2876	27.388	0.2876	27.388
567.600	551.62	551.11	6178.97	141.69	0.040	402.30	12904.08	2991.89	221.58	0.50	0.2875	27.384	0.2875	27.384
597.600	551.54	550.96	6178.87	150.83	0.043	404.22	13025.32	3214.01	222.63	0.51	0.2875	27.379	0.2875	27.379
627.600	551.45	550.80	6178.75	159.88	0.045	406.14	13144.89	3437.17	223.67	0.51	0.2875	27.374	0.2875	27.374
657.600	551.35	550.63	6178.64	168.85	0.048	408.06	13262.79	3661.38	224.72	0.51	0.2875	27.369	0.2875	27.369
670.766	551.31	550.55	6178.58	172.78	0.049	408.90	13314.00	3760.62	98.95	-0.29	0.2875	27.364	0.2875	27.364
701.100	551.28	550.36	6178.33	190.34	0.054	392.33	12248.93	3810.43	118.35	0.67	0.2874	27.342	0.2874	27.342
731.100	551.16	550.15	6178.19	199.25	0.056	394.14	12370.99	4026.95	217.02	0.49	0.2874	27.339	0.2874	27.339
761.100	551.03	549.93	6178.05	208.06	0.059	395.95	12491.56	4244.46	218.00	0.49	0.2874	27.333	0.2874	27.333
791.100	550.90	549.71	6177.90	216.79	0.061	397.76	12610.64	4462.94	218.98	0.50	0.2874	27.327	0.2874	27.327
821.100	550.76	549.47	6177.75	225.44	0.064	399.57	12728.24	4682.39	219.96	0.50	0.2874	27.320	0.2874	27.320
851.100	550.61	549.23	6177.60	234.02	0.066	401.37	12844.36	4902.82	220.93	0.50	0.2873	27.314	0.2873	27.314
881.100	550.46	548.97	6177.43	242.53	0.068	403.18	12958.98	5124.22	221.91	0.51	0.2873	27.307	0.2873	27.307
911.100	550.31	548.71	6177.27	250.97	0.071	404.99	13072.12	5346.59	222.88	0.51	0.2873	27.300	0.2873	27.300
941.100	550.14	548.44	6177.10	259.36	0.073	406.80	13183.77	5569.94	223.86	0.51	0.2872	27.293	0.2872	27.293
969.650	549.99	548.18	6176.93	267.32	0.075	408.52	13288.64	5783.90	213.94	-0.02	0.2872	27.287	0.2872	27.287
1027.102	549.91	547.74	6176.37	292.85	0.083	394.22	12384.51	5900.93	0.0	1.34	0.2871	27.239	0.2871	27.239
1029.900	549.89	547.71	6176.35	293.47	0.083	394.48	12402.44	5921.63	20.28	-0.43	0.2871	27.234	0.2871	27.234
1059.900	549.66	547.38	6176.20	299.83	0.085	397.28	12592.63	6139.36	218.23	0.50	0.2871	27.230	0.2871	27.230
1089.900	549.43	547.06	6176.05	306.19	0.086	400.08	12779.15	6358.62	219.76	0.50	0.2871	27.224	0.2871	27.224
1119.900	549.19	546.72	6175.89	312.53	0.088	402.88	12962.00	6579.38	221.27	0.51	0.2870	27.217	0.2870	27.217
1149.900	548.96	546.39	6175.73	318.87	0.090	405.68	13141.19	6801.65	222.78	0.51	0.2870	27.211	0.2870	27.211
1179.900	548.72	546.05	6175.57	325.21	0.092	408.48	13316.70	7025.42	224.29	0.52	0.2869	27.204	0.2869	27.204
1209.900	548.47	545.70	6175.41	331.57	0.094	411.28	13488.53	7250.70	225.80	0.52	0.2869	27.198	0.2869	27.198
1239.900	548.23	545.35	6175.24	337.94	0.095	414.08	13656.70	7477.49	227.31	0.52	0.2869	27.191	0.2869	27.191
1258.900	548.07	545.12	6175.13	341.98	0.096	415.85	13761.31	7621.89	144.74	0.33	0.2868	27.184	0.2868	27.184
AFT	547.91	544.80	6174.87	351.36	0.099	.....	13761.31	7826.66	205.29	0.52	0.2868	27.180	....	.....

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	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.5214E 02	5.5214E 02	6.1798E 03	-1.5656E-03	1.6061E 04	-4.1217E-02	-2.2411E 00	2.8737E-01	5.6842E-01	-4.1217E-02
AFT	1.1880E 02	5.5214E 02	5.5214E 02	6.1798E 03	-2.6202E-02	1.6061E 04	0.0	0.0	0.0	0.0	-6.8980E-01

GAS BUILDUP IN SLOT, DW/DT = 6.4858E-01

FOREWARD	3.8721E 02	5.5194E 02	5.5173E 02	6.1794E 03	7.7092E 01	1.6061E 04	4.9963E 01	2.7171E 03	2.8732E-01	5.7448E-01	2.0281E 03
AFT	4.4497E 02	5.5185E 02	5.5164E 02	6.1793E 03	7.7052E 01	1.6061E 04	6.7474E 01	3.6695E 03	2.8731E-01	5.7446E-01	2.0268E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3343E 00

FOREWARD	6.7077E 02	5.5131E 02	5.5055E 02	6.1786E 03	1.4515E 02	1.6061E 04	5.9480E 01	2.7466E 03	2.8718E-01	5.7419E-01	3.8111E 03
AFT	7.0110E 02	5.5112E 02	5.5036E 02	6.1783E 03	1.4517E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8104E 03

GAS BUILDUP IN SLOT, DW/DT = 6.7002E-01

FOREWARD	9.6965E 02	5.4999E 02	5.4818E 02	6.1769E 03	2.2313E 02	1.6061E 04	5.0895E 01	2.7719E 03	2.8689E-01	5.7359E-01	5.8348E 03
AFT	1.0271E 03	5.4955E 02	5.4774E 02	6.1764E 03	2.2324E 02	1.6061E 04	6.7483E 01	3.6761E 03	2.8688E-01	5.7347E-01	5.8335E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3379E 00

IGNITION TIME, TIME (S) 95.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7997012.0	1797800.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	9006762.0	2024801.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	61352.438	13792.578
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.84153574E 09	0.18918482E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.93733606E 09	0.21072157E 09
THRUST COEFFICIENT	CF	1.6195316	1.6195316
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3556.7397	7841.2695
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	368317.88	812002.06
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	32.927414	72.592529
INERT MASS REMAINING (KG,LBM)	MIR	1161.5493	2560.7783
TOTAL BURN AREA (M**2,IN**2)	ABTOT	275.70483	427343.56
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	48.448578	2956515.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	85827.250	189216.81
TOTAL GAS MASS (KG,LBM)	WGTOT	1138.6118	2510.2095
RATIO OF SPECIFIC HEATS	GAMA	1.1615753	1.1615753
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.864461	28.361282
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.0549	5134.6953
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.97513199E-01	0.97513199E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.38068864E 09	552.14258
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.40987664E 11	59447.590
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.73062927E-02	0.28764945
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3433.2051	6179.7695
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	259.49536	402219.00
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	9.2996206	14414.441
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	47.866196	2920976.0
GAS VOLUME (M**3,IN**3)	VP	239.25414	14600190.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37787366E 09	548.05981
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.39858328E 11	57809.625
BURN AREA (M**2,IN**2)	AAN	6.9095697	10709.855
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72839558E-02	0.28677005
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.70493168	27.753220
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.58237666	35538.820
GAS VOLUME (M**3,IN**3)	VPN	11.443299	698313.31
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3430.7007	6175.2617
PORT AREA (M**2,IN**2)	AP	9.0328112	14000.887
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4717445	2281.2090
EXPANSION RATIO	EPR	6.7693110	6.7693110
PRESSURE RATIO	PEPO	0.23163892E-01	0.23163892E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	1.0000000	1.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RRTO IN/SEC	TAUTO IN.
FORE	552.14	552.14	6179.77	0.00	0.000	0.0	16062.80	0.01	0.01	0.00	0.2876	16.253	0.2876	16.253
30.000	552.14	552.14	6179.77	0.00	0.0	0.0	16062.80	0.01	0.0	0.0	0.2876	16.253	0.2876	16.253
60.000	552.14	552.14	6179.77	0.00	0.0	0.0	16062.81	0.01	0.0	0.0	0.2876	16.253	0.2876	16.253
90.000	552.14	552.14	6179.77	0.00	0.0	0.0	16062.82	0.01	0.0	0.0	0.2876	16.253	0.2876	16.253
99.243	552.14	552.14	6179.77	0.00	0.0	0.0	16062.82	0.01	0.0	0.0	0.2876	16.253	0.2876	16.253
118.800	552.14	552.14	6179.77	0.0	0.0	396.58	12515.35	0.0	117.44	0.62	0.2876	28.017	0.2876	28.017
148.800	552.15	552.14	6179.76	10.57	0.004	398.41	12640.62	219.02	219.49	0.47	0.2876	28.016	0.2876	28.016
178.800	552.13	552.12	6179.75	20.98	0.006	400.24	12764.32	439.06	220.50	0.47	0.2876	28.014	0.2876	28.014
208.800	552.12	552.10	6179.73	31.25	0.009	402.07	12886.44	660.10	221.51	0.47	0.2876	28.012	0.2876	28.012
238.800	552.10	552.06	6179.70	41.38	0.012	403.91	13006.99	882.15	222.52	0.47	0.2876	28.010	0.2876	28.010
268.800	552.08	552.02	6179.66	51.38	0.015	405.74	13125.96	1105.21	223.53	0.48	0.2876	28.007	0.2876	28.007
298.800	552.06	551.96	6179.62	61.25	0.017	407.57	13243.37	1329.27	224.54	0.48	0.2876	28.005	0.2876	28.005
328.800	552.02	551.90	6179.57	71.01	0.020	409.40	13359.19	1554.34	225.55	0.48	0.2876	28.002	0.2876	28.002
358.800	551.98	551.82	6179.51	80.66	0.023	411.24	13473.44	1780.41	226.55	0.48	0.2876	27.999	0.2876	27.999
386.635	551.94	551.74	6179.45	89.54	0.025	412.94	13578.04	1991.58	211.10	-0.07	0.2876	27.996	0.2876	27.996
445.540	551.92	551.66	6179.36	101.54	0.029	398.11	12621.68	2099.21	50.48	1.26	0.2875	27.978	0.2875	27.978
447.600	551.91	551.65	6179.35	102.23	0.029	398.25	12630.62	2114.76	15.10	-0.45	0.2875	27.976	0.2875	27.976
477.600	551.86	551.54	6179.27	111.74	0.032	400.16	12759.82	2334.68	220.39	0.47	0.2875	27.973	0.2875	27.973
507.600	551.79	551.42	6179.19	121.13	0.034	402.08	12887.30	2555.65	221.44	0.47	0.2875	27.968	0.2875	27.968
537.600	551.72	551.29	6179.09	130.41	0.037	404.00	13013.04	2777.67	222.49	0.47	0.2875	27.964	0.2875	27.964
567.600	551.64	551.15	6179.00	139.58	0.039	405.92	13137.05	3000.73	223.54	0.48	0.2875	27.959	0.2875	27.959
597.600	551.56	551.00	6178.89	148.66	0.042	407.84	13259.34	3224.84	224.59	0.48	0.2875	27.954	0.2875	27.954
627.600	551.47	550.84	6178.78	157.65	0.044	409.75	13379.90	3449.98	225.63	0.48	0.2875	27.949	0.2875	27.949
657.600	551.37	550.67	6178.67	166.55	0.047	411.67	13498.73	3676.17	226.67	0.48	0.2874	27.944	0.2874	27.944
670.192	551.34	550.60	6178.62	170.29	0.048	412.48	13548.09	3771.94	95.45	-0.32	0.2874	27.939	0.2874	27.939
701.100	551.32	550.43	6178.38	187.22	0.053	395.94	12475.51	3817.49	118.38	0.63	0.2874	27.917	0.2874	27.917
731.100	551.20	550.22	6178.24	196.06	0.055	397.75	12598.80	4036.00	218.98	0.47	0.2874	27.914	0.2874	27.914
761.100	551.07	550.01	6178.11	204.82	0.058	399.56	12720.55	4255.49	219.96	0.47	0.2874	27.908	0.2874	27.908
791.100	550.94	549.78	6177.96	213.50	0.060	401.37	12840.77	4475.96	220.94	0.47	0.2873	27.901	0.2873	27.901
821.100	550.81	549.55	6177.81	222.10	0.063	403.18	12959.46	4697.40	221.92	0.47	0.2873	27.895	0.2873	27.895
851.100	550.66	549.31	6177.66	230.62	0.065	404.98	13076.61	4919.82	222.90	0.48	0.2873	27.888	0.2873	27.888
881.100	550.52	549.07	6177.50	239.08	0.067	406.79	13192.21	5143.20	223.87	0.48	0.2873	27.882	0.2873	27.882
911.100	550.37	548.81	6177.34	247.48	0.070	408.60	13306.29	5367.56	224.84	0.48	0.2872	27.875	0.2872	27.875
941.100	550.21	548.55	6177.17	255.82	0.072	410.41	13418.82	5592.89	225.82	0.48	0.2872	27.868	0.2872	27.868
969.076	550.06	548.30	6177.01	263.58	0.074	412.09	13522.38	5804.42	211.46	-0.07	0.2872	27.861	0.2872	27.861
1027.675	549.99	547.89	6176.48	287.99	0.081	397.88	12616.04	5912.99	0.0	1.27	0.2871	27.813	0.2871	27.813
1029.900	549.97	547.86	6176.47	288.49	0.081	398.09	12630.43	5929.70	16.27	-0.45	0.2871	27.808	0.2871	27.808
1059.900	549.75	547.55	6176.32	294.86	0.083	400.89	12822.55	6149.42	220.20	0.47	0.2871	27.804	0.2871	27.804
1089.900	549.52	547.23	6176.17	301.21	0.085	403.69	13010.87	6370.66	221.72	0.48	0.2870	27.798	0.2870	27.798
1119.900	549.30	546.90	6176.02	307.56	0.087	406.49	13195.40	6593.41	223.24	0.48	0.2870	27.791	0.2870	27.791
1149.900	549.06	546.58	6175.86	313.91	0.089	409.29	13376.14	6817.68	224.75	0.48	0.2870	27.785	0.2870	27.785
1179.900	548.83	546.24	6175.70	320.25	0.090	412.08	13553.08	7043.44	226.26	0.49	0.2869	27.778	0.2869	27.778
1209.900	548.60	545.90	6175.54	326.61	0.092	414.88	13726.23	7270.71	227.77	0.49	0.2869	27.772	0.2869	27.772
1239.900	548.36	545.56	6175.37	332.98	0.094	417.68	13895.59	7499.49	229.28	0.49	0.2868	27.765	0.2868	27.765
1258.900	548.21	545.34	6175.26	337.03	0.095	419.45	14000.89	7645.16	145.98	0.31	0.2868	27.758	0.2868	27.758
AFT	548.06	545.04	6175.02	345.85	0.098	.....	14000.89	7841.27	196.56	0.44	0.2868	27.753	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.5214E 02	5.5214E 02	6.1798E 03	-1.3152E-03	1.6061E 04	-4.1217E-02	-2.2411E 00	2.8737E-01	5.6842E-01	-3.4624F-02
AFT	1.1880E 02	5.5214E 02	5.5214E 02	6.1798E 03	-2.4999E-02	1.6061E 04	0.0	0.0	0.0	0.0	-6.5815F-01

GAS BUILDUP IN SLOT, DW/DT = 6.2353E-01

FOREWARD	3.8663E 02	5.5194E 02	5.5174E 02	6.1794E 03	7.7435E 01	1.6061E 04	4.5650E 01	2.4825E 03	2.8732E-01	5.7464E-01	2.0372F 03
AFT	4.4554E 02	5.5186E 02	5.5166E 02	6.1794E 03	7.7398E 01	1.6061E 04	6.3234E 01	3.4389E 03	2.8731E-01	5.7462E-01	2.0360F 03

GAS BUILDUP IN SLOT, DW/DT = 1.2614E 00

FOREWARD	6.7019E 02	5.5134E 02	5.5060E 02	6.1786E 03	1.4541E 02	1.6061E 04	4.6179E 01	2.5125E 03	2.8718E-01	5.7435E-01	3.8181F 03
AFT	7.0110E 02	5.5116E 02	5.5043E 02	6.1784E 03	1.4542E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8175F 03

GAS BUILDUP IN SLOT, DW/DT = 6.3155E-01

FOREWARD	9.6908E 02	5.5006E 02	5.4830E 02	6.1770E 03	2.2371E 02	1.6061E 04	4.6606E 01	2.5382E 03	2.8690E-01	5.7378E-01	5.8510F 03
AFT	1.0277E 03	5.4965E 02	5.4789E 02	6.1765E 03	2.2381E 02	1.6061E 04	6.3237E 01	3.4445E 03	2.8685E-01	5.7367E-01	5.8498F 03

GAS BUILDUP IN SLOT, DW/DT = 1.2650E 00

IGNITION TIME, TIME (S) 97.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	8018381.0	1802604.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	9028132.0	2029605.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	61446.527	13813.730
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.85755110E 09	0.19278520E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.95537101E 09	0.21477597E 09
THRUST COEFFICIENT	CF	1.6193295	1.6193295
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3562.0376	7852.9492
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	375436.69	827696.25
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	32.977905	72.703857
INERT MASS REMAINING (KG,LBM)	MIR	1095.5935	2415.3706
TOTAL BURN AREA (M**2,IN**2)	ABTOT	276.11255	427975.69
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	44.413177	2710260.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	78678.500	173456.50
TOTAL GAS MASS (KG,LBM)	WGTOT	1056.8191	2329.8875
RATIO OF SPECIFIC HEATS	GAMA	1.1615753	1.1615753
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.864696	28.361801
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.0752	5134.7617
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.95808983E-01	0.95808983E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.38129306E 09	553.01904
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.41749647E 11	60552.750
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.73064603E-02	0.28765601
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3433.3809	6180.0859
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	261.04541	404621.56
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	8.5417013	13239.664
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	43.928665	2680693.0
GAS VOLUME (M**3,IN**3)	VP	242.43610	14794365.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37857792E 09	549.08105
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.40614781E 11	58906.766
BURN AREA (M**2,IN**2)	AAN	6.5252790	10114.203
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72860941E-02	0.28685415
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.71949941	28.326752
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.48450857	29566.543
GAS VOLUME (M**3,IN**3)	VPN	11.541168	704285.63
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3430.9568	6175.7227
PORT AREA (M**2,IN**2)	AP	9.1887007	14242.516
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4726753	2282.6523
EXPANSION RATIO	EPR	6.7650309	6.7650309
PRESSURE RATIO	PEPO	0.23183208E-01	0.23183208E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	553.02	553.02	6180.09	0.0	0.0	0.0	16062.80	0.0	0.01	0.08	0.2877	16.253	0.2876	16.253
30.000	553.02	553.02	6180.09	0.0	0.0	0.0	16062.80	0.0	0.0	0.05	0.2877	16.253	0.2877	16.253
60.000	553.02	553.02	6180.09	0.0	0.0	0.0	16062.81	0.0	0.0	0.05	0.2877	16.253	0.2877	16.253
90.000	553.02	553.02	6180.09	0.0	0.0	0.0	16062.82	0.0	0.0	0.05	0.2877	16.253	0.2877	16.253
99.243	553.02	553.02	6180.09	0.0	0.0	0.0	16062.82	0.0	0.0	0.02	0.2877	16.253	0.2877	16.253
118.800	553.02	553.02	6180.09	0.0	0.0	400.19	12744.50	0.0	100.26	0.66	0.2877	28.592	0.2877	28.592
148.800	553.02	553.02	6180.08	10.46	0.004	402.02	12871.04	221.02	221.53	0.51	0.2877	28.591	0.2877	28.591
178.800	553.01	553.00	6180.07	20.77	0.006	403.86	12995.96	443.04	222.54	0.52	0.2877	28.589	0.2877	28.589
208.800	553.00	552.97	6180.05	30.93	0.009	405.69	13119.26	666.08	223.55	0.52	0.2877	28.587	0.2877	28.587
238.800	552.98	552.94	6180.02	40.95	0.012	407.52	13240.93	890.12	224.56	0.52	0.2877	28.585	0.2877	28.585
268.800	552.96	552.90	6179.98	50.85	0.015	409.35	13360.98	1115.17	225.57	0.52	0.2876	28.582	0.2876	28.582
298.800	552.94	552.84	6179.94	60.62	0.017	411.18	13479.40	1341.22	226.58	0.53	0.2876	28.580	0.2876	28.580
328.800	552.90	552.78	6179.89	70.29	0.020	413.02	13596.20	1568.28	227.59	0.53	0.2876	28.577	0.2876	28.577
358.800	552.86	552.70	6179.83	79.84	0.023	414.85	13711.36	1796.34	228.59	0.53	0.2876	28.574	0.2876	28.574
386.060	552.83	552.62	6179.77	88.46	0.025	416.51	13814.61	2004.98	208.59	-0.05	0.2876	28.571	0.2876	28.571
446.114	552.80	552.55	6179.69	99.77	0.028	401.76	12854.39	2103.91	41.84	1.37	0.2876	28.553	0.2876	28.553
447.600	552.80	552.54	6179.68	100.27	0.028	401.86	12860.90	2115.36	10.99	-0.47	0.2876	28.551	0.2876	28.551
477.600	552.74	552.43	6179.61	109.69	0.031	403.78	12991.38	2337.28	222.43	0.52	0.2876	28.548	0.2876	28.548
507.600	552.67	552.32	6179.52	119.00	0.034	405.69	13120.06	2560.24	223.48	0.52	0.2876	28.543	0.2876	28.543
537.600	552.60	552.19	6179.43	128.20	0.036	407.61	13246.96	2784.25	224.53	0.52	0.2876	28.539	0.2876	28.539
567.600	552.53	552.05	6179.34	137.30	0.039	409.53	13372.07	3009.31	225.58	0.53	0.2876	28.534	0.2876	28.534
597.600	552.45	551.91	6179.23	146.30	0.041	411.45	13495.41	3235.41	226.63	0.53	0.2875	28.529	0.2875	28.529
627.600	552.36	551.75	6179.13	155.22	0.044	413.37	13616.95	3462.55	227.67	0.53	0.2875	28.524	0.2875	28.524
657.600	552.27	551.59	6179.02	164.05	0.046	415.28	13736.71	3690.73	228.72	0.53	0.2875	28.519	0.2875	28.519
669.617	552.24	551.52	6178.97	167.59	0.047	416.05	13784.18	3782.96	91.91	-0.32	0.2875	28.514	0.2875	28.514
701.100	552.22	551.36	6178.74	183.86	0.052	399.56	12704.13	3824.13	101.23	0.69	0.2875	28.491	0.2875	28.491
731.100	552.10	551.16	6178.61	192.64	0.054	401.36	12828.65	4044.63	221.02	0.51	0.2875	28.489	0.2875	28.489
761.100	551.98	550.95	6178.48	201.33	0.057	403.17	12951.59	4266.12	222.01	0.52	0.2874	28.483	0.2874	28.483
791.100	551.86	550.73	6178.34	209.94	0.059	404.98	13072.95	4488.58	222.98	0.52	0.2874	28.476	0.2874	28.476
821.100	551.72	550.51	6178.19	218.48	0.062	406.79	13192.72	4712.02	223.96	0.52	0.2874	28.469	0.2874	28.469
851.100	551.58	550.28	6178.04	226.94	0.064	408.59	13310.90	4936.43	224.94	0.52	0.2874	28.463	0.2874	28.463
881.100	551.44	550.03	6177.89	235.34	0.066	410.40	13427.50	5161.81	225.91	0.53	0.2873	28.456	0.2873	28.456
911.100	551.29	549.79	6177.73	243.68	0.069	412.21	13542.50	5388.17	226.89	0.53	0.2873	28.449	0.2873	28.449
941.100	551.14	549.53	6177.57	251.96	0.071	414.02	13655.92	5615.49	227.86	0.53	0.2873	28.442	0.2873	28.442
968.502	551.00	549.29	6177.41	259.50	0.073	415.67	13758.14	5824.51	208.98	-0.04	0.2872	28.435	0.2872	28.435
1028.249	550.93	548.90	6176.91	282.79	0.080	401.54	12849.68	5924.41	0.0	1.37	0.2872	28.387	0.2872	28.387
1029.900	550.92	548.89	6176.90	283.16	0.080	401.70	12860.48	5937.05	12.19	-0.46	0.2872	28.382	0.2872	28.382
1059.900	550.71	548.58	6176.76	289.53	0.082	404.50	13054.52	6158.77	222.24	0.52	0.2872	28.379	0.2872	28.379
1089.900	550.49	548.27	6176.61	295.88	0.083	407.29	13244.64	6382.01	223.77	0.52	0.2871	28.372	0.2871	28.372
1119.900	550.27	547.95	6176.46	302.22	0.085	410.09	13430.85	6606.76	225.28	0.53	0.2871	28.365	0.2871	28.365
1149.900	550.05	547.63	6176.31	308.55	0.087	412.89	13613.14	6833.02	226.79	0.53	0.2870	28.359	0.2870	28.359
1179.900	549.82	547.31	6176.15	314.89	0.089	415.69	13791.52	7060.79	228.31	0.54	0.2870	28.352	0.2870	28.352
1209.900	549.59	546.98	6175.99	321.24	0.091	418.49	13965.98	7290.06	229.82	0.54	0.2870	28.345	0.2870	28.345
1239.900	549.36	546.65	6175.83	327.60	0.092	421.28	14136.53	7520.84	231.33	0.54	0.2869	28.338	0.2869	28.338
1258.900	549.21	546.43	6175.72	331.64	0.094	423.06	14242.52	7667.77	147.28	0.35	0.2869	28.332	0.2869	28.332
AFT	549.08	546.16	6175.50	339.81	0.096	.....	14242.52	7852.95	185.68	0.50	0.2869	28.327	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.5302E 02	5.5302E 02	6.1801E 03	-1.5637E-03	1.6061E 04	-4.1232E-02	-2.2411E 00	2.8748E-01	5.6842E-01	-4.1232E-02
AFT	1.1880E 02	5.5302E 02	5.5302E 02	6.1801E 03	-2.6540E-02	1.6061E 04	0.0	0.0	0.0	0.0	-6.9979E-01

GAS BUILDUP IN SLOT, DW/DT = 6.5856E-01

FOREWARD	3.8606E 02	5.5283E 02	5.5262E 02	6.1798E 03	7.7658E 01	1.6061E 04	4.1316E 01	2.2460E 03	2.8743E-01	5.7464E-01	2.0463E 03
AFT	4.4611E 02	5.5275E 02	5.5255E 02	6.1797E 03	7.7616E 01	1.6061E 04	5.8977E 01	3.2062E 03	2.8742E-01	5.7462E-01	2.0449E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3675E 00

FOREWARD	6.6962E 02	5.5224E 02	5.5152E 02	6.1790E 03	1.4543E 02	1.6061E 04	4.1856E 01	2.2764E 03	2.8729E-01	5.7437E-01	3.8248E 03
AFT	7.0110E 02	5.5207E 02	5.5136E 02	6.1787E 03	1.4544E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8241E 03

GAS BUILDUP IN SLOT, DW/DT = 6.8725E-01

FOREWARD	9.6850E 02	5.5100E 02	5.4929E 02	6.1774E 03	2.2392E 02	1.6061E 04	4.2295E 01	2.3024E 03	2.8702E-01	5.7381E-01	5.8668E 03
AFT	1.0282E 03	5.5061E 02	5.4890E 02	6.1769E 03	2.2400E 02	1.6061E 04	5.8973E 01	3.2109E 03	2.8698E-01	5.7370E-01	5.8654E 03

GAS BUILDUP IN SLOT, DW/DT = 1.3712E 00

IGNITION TIME, TIME (S) 99.000000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	8028412.0	1804859.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	9038162.0	2031860.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	64666.641	14537.641
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.87359795E 09	0.19639266E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.97343718E 09	0.21883742E 09
THRUST COEFFICIENT	CF	1.6197062	1.6197062
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3566.6162	7863.0430
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	382565.31	843412.19
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	34.706116	76.513916
INERT MASS REMAINING (KG,LBM)	MIR	1026.1814	2262.3428
TOTAL BURN AREA (M**2,IN**2)	ABTOT	276.44312	428487.94
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	40.371353	2463613.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	71518.375	157671.06
TOTAL GAS MASS (KG,LBM)	WGTOT	1171.1255	2581.8901
RATIO OF SPECIFIC HEATS	GAMA	1.1615753	1.1615753
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.864696	28.361801
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.0774	5134.7695
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.94279230E-01	0.94279230E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.38129306E 09	553.01904
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.42512232E 11	61658.785
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.73064603E-02	0.28765601
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3433.3809	6180.0859
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	262.58203	407003.25
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	7.7768936	12054.211
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	39.978729	2439653.0
GAS VOLUME (M**3,IN**3)	VP	245.63011	14989276.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37867059E 09	549.21558
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.41372029E 11	60005.059
BURN AREA (M**2,IN**2)	AAN	6.0839891	9430.2031
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72854571E-02	0.28682905
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.73407137	28.900452
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.39262801	23959.645
GAS VOLUME (M**3,IN**3)	VPN	11.633049	709892.50
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3431.0261	6175.8477
PORT AREA (M**2,IN**2)	AP	9.3459682	14486.281
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4736090	2284.0986
EXPANSION RATIO	EPR	6.7607470	6.7607470
PRESSURE RATIO	PEPO	0.23202516E-01	0.23202516E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	1.0000000	1.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RRTO IN/SEC	TAUTO IN.
FORE	553.02	553.02	6180.09	0.00	0.000	0.0	16062.80	0.01	0.01	0.00	0.2877	16.253	0.2877	16.253
30.000	553.02	553.02	6180.09	0.00	0.0	0.0	16062.80	0.01	0.0	0.0	0.2876	16.253	0.2876	16.253
60.000	553.02	553.02	6180.09	0.00	0.0	0.0	16062.81	0.01	0.0	0.0	0.2876	16.253	0.2876	16.253
90.000	553.02	553.02	6180.09	0.00	0.0	0.0	16062.82	0.01	0.0	0.0	0.2876	16.253	0.2876	16.253
99.243	553.02	553.02	6180.09	0.00	0.0	0.0	16062.82	0.01	0.0	0.0	0.2876	16.253	0.2876	16.253
118.800	553.02	553.02	6180.09	0.0	0.0	403.81	12975.77	0.0	100.29	0.62	0.2876	29.168	0.2876	29.168
148.800	553.02	553.02	6180.08	10.37	0.004	405.64	13103.59	223.01	223.49	0.48	0.2876	29.167	0.2876	29.167
178.800	553.01	553.00	6180.07	20.58	0.006	407.47	13229.74	447.03	224.50	0.48	0.2876	29.165	0.2876	29.165
208.800	553.00	552.97	6180.05	30.66	0.009	409.30	13354.21	672.06	225.51	0.48	0.2876	29.162	0.2876	29.162
238.800	552.98	552.94	6180.02	40.60	0.012	411.13	13477.00	898.10	226.52	0.48	0.2876	29.160	0.2876	29.160
268.800	552.96	552.90	6179.98	50.41	0.014	412.97	13598.12	1125.14	227.53	0.49	0.2876	29.158	0.2876	29.158
298.800	552.93	552.84	6179.94	60.10	0.017	414.80	13717.56	1353.19	228.54	0.49	0.2876	29.155	0.2876	29.155
328.800	552.90	552.78	6179.89	69.69	0.020	416.63	13835.32	1582.25	229.54	0.49	0.2876	29.152	0.2876	29.152
358.800	552.86	552.71	6179.84	79.17	0.022	418.46	13951.41	1812.31	230.55	0.49	0.2876	29.149	0.2876	29.149
385.485	552.83	552.63	6179.78	87.54	0.025	420.09	14053.27	2018.33	205.92	-0.10	0.2876	29.146	0.2876	29.146
446.689	552.80	552.56	6179.70	98.20	0.028	405.41	13089.29	2108.65	41.86	1.26	0.2876	29.128	0.2876	29.128
447.600	552.81	552.56	6179.70	98.51	0.028	405.47	13093.31	2115.94	6.80	-0.49	0.2876	29.126	0.2876	29.126
477.600	552.75	552.45	6179.62	107.87	0.031	407.39	13225.05	2339.85	224.39	0.48	0.2876	29.123	0.2876	29.123
507.600	552.69	552.34	6179.54	117.11	0.033	409.31	13354.95	2564.81	225.44	0.48	0.2875	29.118	0.2875	29.118
537.600	552.62	552.21	6179.45	126.25	0.036	411.23	13483.01	2790.82	226.49	0.48	0.2875	29.114	0.2875	29.114
567.600	552.55	552.08	6179.36	135.28	0.038	413.14	13609.23	3017.87	227.54	0.49	0.2875	29.109	0.2875	29.109
597.600	552.47	551.94	6179.26	144.23	0.041	415.06	13733.60	3245.96	228.58	0.49	0.2875	29.104	0.2875	29.104
627.600	552.38	551.79	6179.16	153.08	0.043	416.98	13856.13	3475.10	229.63	0.49	0.2875	29.099	0.2875	29.099
657.600	552.30	551.63	6179.05	161.85	0.046	418.90	13976.82	3705.28	230.6[illegible]	0.49	0.2875	29.094	0.2875	29.094
669.043	552.26	551.57	6179.00	165.20	0.047	419.63	14022.38	3793.89	88.26	-0.35	0.2874	29.089	0.2874	29.089
701.100	552.25	551.41	6178.79	180.88	0.051	403.17	12934.87	3830.74	101.27	0.63	0.2874	29.066	0.2874	29.066
731.100	552.13	551.22	6178.66	189.60	0.053	404.97	13060.64	4053.24	222.98	0.48	0.2874	29.064	0.2874	29.064
761.100	552.01	551.02	6178.53	198.24	0.056	406.78	13184.77	4276.72	223.97	0.48	0.2874	29.057	0.2874	29.057
791.100	551.89	550.80	6178.39	206.80	0.058	408.59	13307.26	4501.18	224.94	0.48	0.2874	29.051	0.2874	29.051
821.100	551.76	550.58	6178.25	215.28	0.061	410.40	13428.11	4726.61	225.92	0.48	0.2873	29.044	0.2873	29.044
851.100	551.63	550.36	6178.10	223.70	0.063	412.20	13547.33	4953.02	226.90	0.49	0.2873	29.037	0.2873	29.037
881.100	551.49	550.12	6177.95	232.05	0.065	414.01	13664.91	5180.40	227.87	0.49	0.2873	29.031	0.2873	29.031
911.100	551.35	549.88	6177.79	240.34	0.068	415.82	13780.86	5408.76	228.85	0.49	0.2873	29.024	0.2873	29.024
941.100	551.20	549.63	6177.63	248.58	0.070	417.62	13895.16	5638.09	229.82	0.49	0.2872	29.017	0.2872	29.017
967.928	551.06	549.40	6177.49	255.92	0.072	419.24	13995.99	5844.52	206.35	-0.10	0.2872	29.010	0.2872	29.010
1028.823	551.00	549.04	6177.02	278.16	0.078	405.21	13085.54	5935.82	0.0	1.27	0.2871	28.961	0.2871	28.961
1029.900	550.99	549.03	6177.01	278.42	0.078	405.31	13092.66	5944.32	8.02	-0.48	0.2871	28.957	0.2871	28.957
1059.900	550.79	548.73	6176.87	284.78	0.080	408.10	13268.62	6168.04	224.21	0.48	0.2871	28.953	0.2871	28.953
1089.900	550.57	548.43	6176.72	291.13	0.082	410.90	13440.55	6393.28	225.73	0.49	0.2871	28.946	0.2871	28.946
1119.900	550.36	548.12	6176.57	297.48	0.084	413.70	13608.43	6620.04	227.25	0.49	0.2870	28.939	0.2870	28.939
1149.900	550.15	547.81	6176.42	303.81	0.086	416.50	13852.29	6848.30	228.76	0.49	0.2870	28.933	0.2870	28.933
1179.900	549.92	547.49	6176.27	310.15	0.087	419.29	14032.10	7078.07	230.27	0.50	0.2870	28.926	0.2870	28.926
1209.900	549.71	547.17	6176.11	316.50	0.089	422.09	14207.87	7309.34	231.78	0.50	0.2869	28.919	0.2869	28.919
1239.900	549.48	546.84	6175.95	322.87	0.091	424.89	14379.61	7542.13	233.29	0.50	0.2869	28.912	0.2869	28.912
1258.900	549.33	546.63	6175.85	326.91	0.092	426.66	14486.28	7690.33	148.53	0.32	0.2869	28.905	0.2869	28.905
AFT	549.22	546.39	6175.65	334.39	0.094	.....	14486.28	7863.04	173.11	0.40	0.2868	28.900	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.5302E 02	5.5302E 02	6.1801E 03	-1.3146E-03	1.6061E 04	-4.1232E-02	-2.2411E 00	2.8748E-01	5.6842E-01	-3.4662E-02
AFT	1.1880E 02	5.5302E 02	5.5302E 02	6.1801E 03	-2.4999E-02	1.6061E 04	0.0	0.0	0.0	0.0	-6.5915E-01

GAS BUILDUP IN SLOT, DW/DT = 6.2449E-01

FOREWARD	3.8549E 02	5.5283E 02	5.5263E 02	6.1798E 03	7.7997E 01	1.6061E 04	3.6926E 01	2.0073E 03	2.8743E-01	5.7486E-01	2.0553E 03
AFT	4.4669E 02	5.5276E 02	5.5256E 02	6.1797E 03	7.7958E 01	1.6061E 04	5.4657E 01	2.9713E 03	2.8742E-01	5.7484E-01	2.0540E 03

GAS BUILDUP IN SLOT, DW/DT = 1.2635E 00

FOREWARD	6.6904E 02	5.5226E 02	5.5157E 02	6.1790E 03	1.4566E 02	1.6061E 04	3.7477E 01	2.0382E 03	2.8730E-01	5.7459E-01	3.8314E 03
AFT	7.0110E 02	5.5211E 02	5.5141E 02	6.1788E 03	1.4567E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8307E 03

GAS BUILDUP IN SLOT, DW/DT = 6.3272E-01

FOREWARD	9.6793E 02	5.5106E 02	5.4940E 02	6.1775E 03	2.2447E 02	1.6061E 04	3.7927E 01	2.0646E 03	2.8704E-01	5.7405E-01	5.8824E 03
AFT	1.0288E 03	5.5070E 02	5.4904E 02	6.1770E 03	2.2455E 02	1.6061E 04	5.4644E 01	2.9750E 03	2.8699E-01	5.7395E-01	5.8812E 03

GAS BUILDUP IN SLOT, DW/DT = 1.2674E 00

IGNITION TIME, TIME (S) 101.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	8049358.0	1809568.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	9059109.0	2036569.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	78965.375	17752.125
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.88967552E 09	0.20000707E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.99153434E 09	0.22290584E 09
THRUST COEFFICIENT	CF	1.6220655	1.6220655
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3570.1367	7870.8047
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	389702.00	859146.00
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	42.380142	93.432251
INERT MASS REMAINING (KG,LBM)	MIR	941.42090	2075.4783
TOTAL BURN AREA (M**2,IN**2)	ABTOT	276.75342	428969.00
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	36.325378	2216712.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	64350.891	141869.44
TOTAL GAS MASS (KG,LBM)	WGTOT	1186.5139	2615.8159
RATIO OF SPECIFIC HEATS	GAMA	1.1615753	1.1615753
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.864696	28.361801
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.0798	5134.7773
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.92762411E-01	0.92762411E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.38129306E 09	553.01904
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.43274818E 11	62764.820
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.73051937E-02	0.28760612
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3433.3809	6180.0859
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	264.10522	409363.94
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	7.0054865	10858.527
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	36.018188	2197966.0
GAS VOLUME (M**3,IN**3)	VP	248.83463	15184827.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37875610E 09	549.33936
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.42129453E 11	61103.613
BURN AREA (M**2,IN**2)	AAN	5.6427355	8746.2578
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72847903E-02	0.28680283
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.74864221	29.474106
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.30718601	18745.648
GAS VOLUME (M**3,IN**3)	VPN	11.718491	715106.50
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3431.0935	6175.9688
PORT AREA (M**2,IN**2)	AP	9.5045567	14732.094
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4745426	2285.5459
EXPANSION RATIO	EPR	6.7564659	6.7564659
PRESSURE RATIO	PEPO	0.23221865E-01	0.23221865E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	1.0000000	1.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	553.02	553.02	6180.09	0.00	0.000	0.0	16062.80	0.01	0.01	0.00	0.2876	16.253	0.2877	16.253
30.000	553.02	553.02	6180.09	0.00	0.0	0.0	16062.80	0.01	0.0	0.0	0.2876	16.253	0.2876	16.253
60.000	553.02	553.02	6180.09	0.00	0.0	0.0	16062.81	0.01	0.0	0.0	0.2876	16.253	0.2876	16.253
90.000	553.02	553.02	6180.09	0.00	0.0	0.0	16062.82	0.01	0.0	0.0	0.2876	16.253	0.2876	16.253
99.243	553.02	553.02	6180.09	0.00	0.0	0.0	16062.82	0.01	0.0	0.0	0.2876	16.253	0.2876	16.253
118.800	553.02	553.02	6180.09	0.0	0.0	407.42	13209.09	0.0	91.58	0.62	0.2876	29.743	0.2876	29.743
148.800	553.02	553.02	6180.08	10.27	0.004	409.25	13338.18	224.97	225.45	0.48	0.2876	29.742	0.2876	29.742
178.800	553.01	553.00	6180.07	20.40	0.006	411.08	13465.55	450.94	226.46	0.48	0.2876	29.740	0.2876	29.740
208.800	553.00	552.97	6180.05	30.38	0.009	412.92	13591.20	677.92	227.47	0.49	0.2876	29.738	0.2876	29.738
238.800	552.98	552.94	6180.02	40.24	0.012	414.75	13715.12	905.91	228.48	0.49	0.2876	29.735	0.2876	29.735
268.800	552.96	552.90	6179.98	49.97	0.014	416.58	13837.30	1134.90	229.48	0.49	0.2875	29.733	0.2875	29.733
298.800	552.93	552.84	6179.95	59.58	0.017	418.41	13957.77	1364.91	230.49	0.49	0.2875	29.730	0.2875	29.730
328.800	552.90	552.78	6179.89	69.08	0.020	420.25	14076.50	1595.91	231.50	0.49	0.2875	29.727	0.2875	29.727
358.800	552.86	552.71	6179.84	78.48	0.022	422.08	14193.50	1827.92	232.51	0.50	0.2875	29.725	0.2875	29.725
384.910	552.83	552.64	6179.79	86.61	0.025	423.67	14293.93	2031.22	203.18	-0.12	0.2875	29.721	0.2875	29.721
447.264	552.81	552.57	6179.71	96.77	0.027	409.09	13327.76	2115.79	2.53	-0.51	0.2875	29.701	0.2875	29.701
477.600	552.76	552.47	6179.64	106.06	0.030	411.00	13460.78	2341.65	226.35	0.48	0.2875	29.698	0.2875	29.698
507.600	552.69	552.36	6179.56	115.24	0.033	412.92	13591.89	2568.57	227.40	0.49	0.2875	29.693	0.2875	29.693
537.600	552.63	552.24	6179.47	124.31	0.035	414.84	13721.11	2796.53	228.45	0.49	0.2875	29.689	0.2875	29.689
567.600	552.56	552.11	6179.38	133.28	0.038	416.76	13848.42	3025.53	229.49	0.49	0.2875	29.684	0.2875	29.684
597.600	552.48	551.97	6179.28	142.16	0.040	418.67	13973.84	3255.58	230.54	0.49	0.2874	29.679	0.2874	29.679
627.600	552.40	551.82	6179.18	150.95	0.043	420.59	14097.36	3486.67	231.59	0.49	0.2874	29.674	0.2874	29.674
657.600	552.31	551.67	6179.07	159.67	0.045	422.51	14218.98	3718.80	232.63	0.50	0.2874	29.669	0.2874	29.669
668.468	552.28	551.61	6179.03	162.83	0.046	423.20	14262.57	3803.70	84.53	-0.37	0.2874	29.664	0.2874	29.664
701.100	552.27	551.46	6178.83	177.91	0.050	406.78	13167.66	3836.13	92.57	0.63	0.2874	29.641	0.2874	29.641
731.100	552.16	551.27	6178.70	186.59	0.053	408.59	13294.66	4060.59	224.94	0.48	0.2874	29.639	0.2874	29.639
761.100	552.04	551.07	6178.57	195.17	0.055	410.39	13419.98	4286.03	225.92	0.48	0.2873	29.632	0.2873	29.632
791.100	551.92	550.87	6178.44	203.68	0.057	412.20	13543.61	4512.44	226.90	0.49	0.2873	29.626	0.2873	29.626
821.100	551.80	550.65	6178.30	212.11	0.060	414.01	13665.55	4739.83	227.88	0.49	0.2873	29.619	0.2873	29.619
851.100	551.67	550.43	6178.16	220.47	0.062	415.81	13785.81	4968.20	228.86	0.49	0.2873	29.612	0.2873	29.612
881.100	551.53	550.20	6178.01	228.78	0.065	417.62	13904.37	5197.54	229.83	0.49	0.2872	29.605	0.2872	29.605
911.100	551.39	549.97	6177.86	237.02	0.067	419.43	14021.25	5427.84	230.81	0.49	0.2872	29.598	0.2872	29.598
941.100	551.25	549.72	6177.70	245.21	0.069	421.23	14136.44	5659.13	231.78	0.50	0.2872	29.591	0.2872	29.591
967.354	551.11	549.50	6177.56	252.36	0.071	422.81	14235.86	5862.87	203.64	-0.11	0.2872	29.584	0.2872	29.584
1029.396	551.06	549.16	6177.11	273.71	0.077	408.91	13326.88	5949.67	3.78	-0.50	0.2871	29.531	0.2871	29.531
1059.900	550.86	548.87	6176.97	280.07	0.079	411.71	13524.77	6175.35	226.17	0.49	0.2871	29.527	0.2871	29.527
1089.900	550.65	548.58	6176.83	286.43	0.081	414.51	13718.51	6402.55	227.70	0.49	0.2871	29.520	0.2871	29.520
1119.900	550.45	548.28	6176.68	292.77	0.083	417.31	13908.08	6631.27	229.21	0.49	0.2870	29.514	0.2870	29.514
1149.900	550.24	547.97	6176.54	299.11	0.084	420.10	14093.48	6861.48	230.72	0.50	0.2870	29.507	0.2870	29.507
1179.900	550.02	547.66	6176.38	305.45	0.086	422.90	14274.73	7093.21	232.23	0.50	0.2869	29.500	0.2869	29.500
1209.900	549.81	547.35	6176.23	311.79	0.088	425.70	14451.81	7326.45	233.74	0.50	0.2869	29.493	0.2869	29.493
1239.900	549.59	547.03	6176.07	318.16	0.090	428.49	14624.73	7561.19	235.25	0.51	0.2869	29.486	0.2869	29.486
1258.900	549.45	546.83	6175.97	322.20	0.091	430.27	14732.09	7710.64	149.77	0.32	0.2868	29.479	0.2868	29.479
AFT	549.34	546.61	6175.79	329.01	0.093	.....	14732.09	7870.80	160.54	0.37	0.2868	29.474	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.5302E 02	5.5302E 02	6.1801E 03	-1.3146E-03	1.6061E 04	-4.1232E-02	-2.2411E 00	2.8748E-01	5.6842E-01	-3.4661E-02
AFT	1.1880E 02	5.5302E 02	5.5302E 02	6.1801E 03	-2.4999E-02	1.6061E 04	0.0	0.0	0.0	0.0	-6.5915E-01

GAS BUILDUP IN SLOT, DW/DT = 6.2449E-01

FOREWARD	3.8491E 02	5.5283E 02	5.5264E 02	6.1798E 03	7.8317E 01	1.6061E 04	3.2499E 01	1.7667E 03	2.8743E-01	5.7486E-01	2.0637E 03
AFT	4.4726E 02	5.5277E 02	5.5257E 02	6.1797E 03	7.8278E 01	1.6061E 04	5.0298E 01	2.7343E 03	2.8742E-01	5.7484E-01	2.0625E 03

GAS BUILDUP IN SLOT, DW/DT = 1.2633E 00

FOREWARD	6.6847E 02	5.5228E 02	5.5161E 02	6.1790E 03	1.4586E 02	1.6061E 04	3.3061E 01	1.7980E 03	2.8730E-01	5.7460E-01	3.8368E 03
AFT	7.0110E 02	5.5214E 02	5.5146E 02	6.1788E 03	1.4587E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8361E 03

GAS BUILDUP IN SLOT, DW/DT = 6.3248E-01

FOREWARD	9.6735E 02	5.5111E 02	5.4950E 02	6.1776E 03	2.2496E 02	1.6061E 04	3.3522E 01	1.8247E 03	2.8705E-01	5.7407E-01	5.8964E 03
AFT	1.0294E 03	5.5078E 02	5.4917E 02	6.1771E 03	2.2503E 02	1.6061E 04	5.0276E 01	2.7371E 03	2.8701E-01	5.7398E-01	5.8951E 03

GAS BUILDUP IN SLOT, DW/DT = 1.2671E 00

LATERAL BURNOUT INCREMENT LOCATION ZCALC(18)= 0.4475999E 03

LATERAL BURNOUT INCREMENT LOCATION ZCALC(40)= 0.1029900E 04

IGNITION TIME, TIME (S) 103.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	8056284.0	1811125.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	9066035.0	2038126.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	F'	79038.375	17768.547
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMOTI	0.90578125E 09	0.20362776E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.10096594E 10	0.22698053E 09
THRUST COEFFICIENT	CF	1.6218748	1.6218748
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3572.6033	7876.2422
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	396844.75	874893.00
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	42.419342	93.518677
INERT MASS REMAINING (KG,LBM)	MIR	856.58228	1888.4409
TOTAL BURN AREA (M**2,IN**2)	ABTOT	277.01001	429366.69
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	32.275665	1969583.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	57176.762	126053.19
TOTAL GAS MASS (KG,LBM)	WGTOT	1201.9387	2649.8218
RATIO OF SPECIFIC HEATS	GAMA	1.1615753	1.1615753
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.864696	28.361801
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.0823	5134.7852
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.91254115E-01	0.91254115E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.38129306E 09	553.01904
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.44037399E 11	63870.855
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.73039345E-02	0.28755653
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3433.3809	6180.0859
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	265.61450	411703.63
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	6.2274361	9652.5469
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	32.047226	1955643.0
GAS VOLUME (M**3,IN**3)	VP	252.04959	15381017.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37885005E 09	549.47583
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.42887057E 11	62202.426
BURN AREA (M**2,IN**2)	AAN	5.1679020	8010.2656
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72841384E-02	0.28677720
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.76321149	30.047699
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.22842592	13939.414
GAS VOLUME (M**3,IN**3)	VPN	11.797251	719912.75
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3431.1584	6176.0859
PORT AREA (M**2,IN**2)	AP	9.6644630	14979.949
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4754763	2286.9941
EXPANSION RATIO	EPR	6.7521877	6.7521877
PRESSURE RATIO	PEPO	0.23241229E-01	0.23241229E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	1.0000000	1.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	553.02	553.02	6180.09	0.00	0.000	0.0	16062.80	0.01	0.01	0.00	0.2876	16.253	0.2876	16.253
30.000	553.02	553.02	6180.09	0.00	0.0	0.0	16062.80	0.01	0.0	0.0	0.2875	16.253	0.2875	16.253
60.000	553.02	553.02	6180.09	0.00	0.0	0.0	16062.81	0.01	0.0	0.0	0.2875	16.253	0.2875	16.253
90.000	553.02	553.02	6180.09	0.00	0.0	0.0	16062.82	0.01	0.0	0.0	0.2875	16.253	0.2875	16.253
99.243	553.02	553.02	6180.09	0.00	0.0	0.0	16062.82	0.01	0.0	0.0	0.2875	16.253	0.2875	16.253
118.800	553.02	553.02	6180.09	0.0	0.0	411.03	13444.43	0.0	82.80	0.62	0.2875	30.318	0.2875	30.318
148.800	553.02	553.02	6180.08	10.18	0.003	412.86	13574.81	226.92	227.40	0.48	0.2875	30.317	0.2875	30.317
178.800	553.02	553.01	6180.07	20.22	0.006	414.70	13703.41	454.84	228.41	0.49	0.2875	30.315	0.2875	30.315
208.800	553.01	552.98	6180.05	30.12	0.009	416.53	13830.23	683.77	229.42	0.49	0.2875	30.313	0.2875	30.313
238.800	552.99	552.95	6180.02	39.89	0.012	418.36	13955.27	913.71	230.43	0.49	0.2875	30.310	0.2875	30.310
268.800	552.97	552.91	6179.99	49.53	0.014	420.19	14078.53	1144.66	231.44	0.49	0.2875	30.308	0.2875	30.308
298.800	552.94	552.85	6179.95	59.07	0.017	422.03	14200.01	1376.61	232.45	0.50	0.2875	30.305	0.2875	30.305
328.800	552.91	552.79	6179.90	68.49	0.019	423.86	14319.71	1609.57	233.46	0.50	0.2875	30.302	0.2875	30.302
358.800	552.88	552.72	6179.84	77.81	0.022	425.69	14437.63	1843.53	234.46	0.50	0.2875	30.300	0.2875	30.300
384.335	552.84	552.65	6179.79	85.70	0.024	427.25	14536.60	2044.02	200.36	-0.13	0.2875	30.297	0.2875	30.297
447.838	552.82	552.60	6179.73	95.11	0.027	412.71	13565.34	2116.69	33.06	1.26	0.2875	30.276	0.2875	30.274
477.600	552.77	552.50	6179.65	104.27	0.029	414.62	13698.55	2342.92	226.49	0.27	0.2875	30.273	0.2875	30.273
507.600	552.71	552.39	6179.57	113.38	0.032	416.53	13830.88	2571.79	229.36	0.49	0.2874	30.268	0.2874	30.268
537.600	552.65	552.27	6179.49	122.39	0.035	418.45	13961.25	2801.70	230.40	0.49	0.2874	30.264	0.2874	30.264
567.600	552.58	552.14	6179.40	131.30	0.037	420.37	14089.66	3032.65	231.45	0.50	0.2874	30.259	0.2874	30.259
597.600	552.51	552.01	6179.30	140.12	0.040	422.28	14216.13	3264.65	232.50	0.50	0.2874	30.254	0.2874	30.254
627.600	552.43	551.86	6179.21	148.85	0.042	424.20	14340.63	3497.70	233.54	0.50	0.2874	30.249	0.2874	30.249
657.600	552.34	551.71	6179.10	157.51	0.044	426.12	14463.18	3731.78	234.59	0.50	0.2874	30.244	0.2874	30.244
667.893	552.31	551.66	6179.06	160.49	0.045	426.78	14504.77	3812.90	80.73	-0.39	0.2873	30.239	0.2873	30.239
701.100	552.30	551.52	6178.87	175.00	0.049	410.39	13402.48	3840.87	83.80	0.63	0.2873	30.216	0.2873	30.216
731.100	552.20	551.34	6178.75	183.61	0.052	412.20	13530.73	4067.28	226.90	0.49	0.2873	30.213	0.2873	30.213
761.100	552.08	551.14	6178.62	192.15	0.054	414.00	13657.25	4294.68	227.88	0.49	0.2873	30.207	0.2873	30.207
791.100	551.97	550.94	6178.49	200.60	0.057	415.81	13782.02	4523.04	228.86	0.49	0.2873	30.200	0.2873	30.200
821.100	551.84	550.73	6178.35	208.98	0.059	417.62	13905.05	4752.38	229.84	0.49	0.2873	30.193	0.2873	30.193
851.100	551.72	550.52	6178.21	217.29	0.061	419.42	14026.34	4982.70	230.82	0.49	0.2872	30.187	0.2872	30.187
881.100	551.58	550.29	6178.07	225.55	0.064	421.23	14145.90	5213.99	231.79	0.50	0.2872	30.180	0.2872	30.180
911.100	551.45	550.06	6177.92	233.74	0.066	423.04	14263.71	5446.25	232.76	0.50	0.2872	30.173	0.2872	30.173
941.100	551.30	549.82	6177.77	241.88	0.068	424.84	14379.79	5679.48	233.74	0.50	0.2871	30.166	0.2871	30.166
966.780	551.18	549.61	6177.63	248.84	0.070	426.39	14477.76	5880.46	200.85	-0.13	0.2871	30.158	0.2871	30.158
1029.970	551.14	549.30	6177.21	269.07	0.076	412.53	13563.65	5954.13	0.0	1.27	0.2871	30.105	0.2871	30.105
1059.900	550.94	549.02	6177.07	275.42	0.078	415.32	13763.00	6181.30	227.60	0.43	0.2871	30.101	0.2871	30.101
1069.900	550.75	548.73	6176.93	281.77	0.079	418.12	13958.54	6410.46	229.66	0.50	0.2870	30.094	0.2870	30.094
1119.900	550.54	548.44	6176.79	288.11	0.081	420.91	14149.78	6641.13	231.17	0.50	0.2870	30.088	0.2870	30.088
1149.900	550.34	548.14	6176.64	294.45	0.083	423.71	14336.74	6873.31	232.68	0.50	0.2870	30.081	0.2870	30.081
1179.900	550.13	547.84	6176.50	300.79	0.085	426.51	14519.42	7107.00	234.20	0.51	0.2869	30.074	0.2869	30.074
1209.900	549.92	547.53	6176.34	307.14	0.087	429.30	14697.80	7342.19	235.71	0.51	0.2869	30.067	0.2869	30.067
1239.900	549.71	547.22	6176.19	313.50	0.088	432.10	14871.90	7578.89	237.22	0.51	0.2868	30.060	0.2868	30.060
1258.900	549.57	547.02	6176.09	317.53	0.090	433.87	14979.95	7729.57	151.01	0.33	0.2868	30.053	0.2868	30.053
AFT	549.48	546.83	6175.93	323.67	0.091	.....	14979.95	7876.24	147.02	0.34	0.2868	30.048	....	.....

SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD 9.9243E 01	5.5302E 02	5.5302E 02	6.1801E 03	-1.3147E-03	1.6061E 04	-4.1232E-02	-2.2411E 00	2.8748E-01	5.6842E-01	-3.4665F-02
AFT 1.1880E 02	5.5302E 02	5.5302E 02	6.1801E 03	-2.4999E-02	1.6061E 04	0.0	0.0	0.0	0.0	-6.5916F-01

GAS BUILDUP IN SLOT, DW/DT = 6.2449E-01

FOREWARD 3.8434E 02	5.5284E 02	5.5265E 02	6.1798E 03	7.8632E 01	1.6061E 04	2.8035E 01	1.5240E 03	2.8743E-01	5.7486E-01	2.0721F 03
AFT 4.4784E 02	5.5278E 02	5.5260E 02	6.1797E 03	7.8591E 01	1.6061E 04	4.5901E 01	2.4952E 03	2.8742E-01	5.7484F-01	2.0708F 03

GAS BUILDUP IN SLOT, DW/DT = 1.2646E 00

FOREWARD 6.6789E 02	5.5231E 02	5.5166E 02	6.179.E 03	1.4603E 02	1.6061E 04	2.8608E 01	1.5558E 03	2.8731E-01	5.7461E-01	3.8415F 03
AFT 7.0110E 02	5.5218E 02	5.5152E 02	6.1789E 03	1.4603E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8409F 03

GAS BUILDUP IN SLOT, DW/DT = 6.3330E-01

FOREWARD 9.6678E 02	5.5118E 02	5.4961E 02	6.1776E 03	2.2542E 02	1.6061E 04	2.9080E 01	1.5828E 03	2.8706E-01	5.7410E-01	5.9095F 03
AFT 1.0300E 03	5.5087E 02	5.4930E 02	6.1772E 03	2.2548E 02	1.6061E 04	4.5867E 01	2.4969E 03	2.8702E-01	5.7401E-01	5.9083F 03

GAS BUILDUP IN SLOT, DW/DT = 1.2688E 00

IGNITION TIME, TIME (S) 105.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	8063103.0	1812658.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	9072854.0	2039659.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	79052.750	17771.770
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.92190054E 09	0.20725155E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.10277983E 10	0.23105832E 09
THRUST COEFFICIENT	CF	1.6216745	1.6216745
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3571.2212	7873.1953
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	403988.56	890642.44
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	42.427048	93.535645
INERT MASS REMAINING (KG,LBM)	MIR	771.72803	1701.3696
TOTAL BURN AREA (M**2,IN**2)	ABTOT	276.91431	429218.25
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	28.225220	1722410.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	50001.355	110234.13
TOTAL GAS MASS (KG,LBM)	WGTOT	1217.3586	2683.8167
RATIO OF SPECIFIC HEATS	GAMA	1.1615753	1.1615753
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.864696	28.361801
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.0859	5134.7969
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.89686930E-01	0.89686930E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.38129306E 09	553.01904
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.44799984E 11	64976.891
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.73026679E-02	0.28750670
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3433.3809	6180.0859
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	267.11011	414021.75
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	5.4427805	8436.3281
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	28.066208	1712706.0
GAS VOLUME (M**3,IN**3)	VP	255.27457	15577817.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37894195E 09	549.60889
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.43644850E 11	63301.508
BURN AREA (M**2,IN**2)	AAN	4.3612309	6759.9219
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72834603E-02	0.28675044
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.77777958	30.621246
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.15900850	9703.3008
GAS VOLUME (M**3,IN**3)	VPN	11.866669	724148.88
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3431.2214	6176.1992
PORT AREA (M**2,IN**2)	AP	9.8256903	15229.852
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4764118	2288.4434
EXPANSION RATIO	EPR	6.7479115	6.7479115
PRESSURE RATIO	PEPO	0.23260631E-01	0.23260631E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	1.0000000	1.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	553.02	553.02	6180.09	0.00	0.000	0.0	16062.80	0.01	0.01	0.00	0.2875	16.253	0.2876	16.253
30.000	553.02	553.02	6180.09	0.00	0.0	0.0	16062.80	0.01	0.0	0.0	0.2875	16.253	0.2875	16.253
60.000	553.02	553.02	6180.09	0.00	0.0	0.0	16062.81	0.01	0.0	0.0	0.2875	16.253	0.2875	16.253
90.000	553.02	553.02	6180.09	0.00	0.0	0.0	16062.82	0.01	0.0	0.0	0.2875	16.253	0.2875	16.253
99.243	553.02	553.02	6180.09	0.00	0.0	0.0	16062.82	0.01	0.0	0.0	0.2875	16.253	0.2875	16.253
118.800	553.02	553.02	6180.09	0.0	0.0	414.65	13681.82	0.0	73.94	0.62	0.2875	30.893	0.2875	30.893
148.800	553.02	553.02	6180.08	10.09	0.003	416.48	13813.48	228.87	229.36	0.49	0.2875	30.892	0.2875	30.892
178.800	553.02	553.01	6180.07	20.04	0.006	418.31	13943.31	458.74	230.37	0.49	0.2875	30.890	0.2875	30.890
208.800	553.00	552.98	6180.05	29.85	0.008	420.14	14071.30	689.63	231.38	0.49	0.2875	30.888	0.2875	30.888
238.800	552.99	552.95	6180.02	39.54	0.011	421.97	14197.47	921.52	232.39	0.50	0.2875	30.885	0.2875	30.885
268.800	552.97	552.91	6179.99	49.11	0.014	423.81	14321.80	1154.41	233.39	0.50	0.2874	30.883	0.2874	30.883
298.800	552.95	552.86	6179.95	58.56	0.017	425.64	14444.30	1388.31	234.40	0.50	0.2874	30.880	0.2874	30.880
328.800	552.92	552.80	6179.90	67.91	0.019	427.47	14564.97	1623.22	235.41	0.50	0.2874	30.877	0.2874	30.877
358.800	552.88	552.73	6179.85	77.16	0.022	429.30	14683.81	1859.13	236.41	0.50	0.2874	30.875	0.2874	30.875
383.760	552.85	552.67	6179.80	84.80	0.024	430.83	14781.29	2056.75	197.47	-0.15	0.2874	30.871	0.2874	30.871
448.413	552.83	552.61	6179.74	93.61	0.026	416.36	13806.50	2120.48	28.61	1.26	0.2874	30.851	0.2874	30.851
477.600	552.78	552.52	6179.67	102.54	0.029	418.23	13938.36	2344.57	224.03	-0.05	0.2874	30.848	0.2874	30.848
507.600	552.73	552.41	6179.59	111.59	0.032	420.14	14071.90	2575.38	231.31	0.49	0.2874	30.843	0.2874	30.843
537.600	552.67	552.30	6179.51	120.53	0.034	422.06	14203.43	2807.25	232.36	0.50	0.2874	30.839	0.2874	30.839
567.600	552.60	552.17	6179.42	129.38	0.036	423.98	14332.95	3040.15	233.41	0.50	0.2874	30.834	0.2874	30.834
597.600	552.53	552.04	6179.33	138.14	0.039	425.90	14460.45	3274.10	234.45	0.50	0.2874	30.829	0.2874	30.829
627.600	552.45	551.90	6179.23	146.82	0.041	427.81	14585.94	3509.10	235.50	0.50	0.2873	30.824	0.2873	30.824
657.600	552.37	551.75	6179.13	155.41	0.044	429.73	14709.41	3745.13	236.54	0.51	0.2873	30.819	0.2873	30.819
667.319	552.34	551.70	6179.09	158.21	0.045	430.35	14748.98	3822.39	76.85	-0.40	0.2873	30.813	0.2873	30.813
701.100	552.33	551.58	6178.91	172.16	0.049	414.00	13639.35	3845.87	74.95	0.63	0.2873	30.790	0.2873	30.790
731.100	552.23	551.40	6178.79	180.73	0.051	415.81	13768.85	4074.24	228.85	0.49	0.2873	30.788	0.2873	30.788
761.100	552.12	551.21	6178.66	189.21	0.053	417.61	13896.55	4303.59	229.84	0.49	0.2873	30.781	0.2873	30.781
791.100	552.01	551.01	6178.54	197.61	0.056	419.42	14022.46	4533.91	230.82	0.49	0.2872	30.775	0.2872	30.775
821.100	551.88	550.81	6178.40	205.94	0.058	421.23	14146.59	4765.20	231.80	0.50	0.2872	30.768	0.2872	30.768
851.100	551.76	550.60	6178.27	214.21	0.060	423.03	14268.92	4997.47	232.77	0.50	0.2872	30.761	0.2872	30.761
881.100	551.63	550.38	6178.12	222.41	0.063	424.84	14389.46	5230.71	233.75	0.50	0.2872	30.754	0.2872	30.754
911.100	551.50	550.15	6177.98	230.55	0.065	426.64	14508.21	5464.93	234.72	0.50	0.2871	30.747	0.2871	30.747
941.100	551.36	549.92	6177.82	238.65	0.067	428.45	14625.18	5700.11	235.70	0.51	0.2871	30.740	0.2871	30.740
966.206	551.24	549.71	6177.70	245.41	0.069	429.96	14721.68	5898.24	197.99	-0.14	0.2871	30.733	0.2871	30.733
1030.544	551.21	549.43	6177.30	264.68	0.075	416.19	13805.90	5962.99	0.0	1.27	0.2870	30.679	0.2870	30.679
1059.900	551.02	549.16	6177.17	270.93	0.076	418.93	14003.27	6188.19	225.16	-0.04	0.2870	30.675	0.2870	30.675
1089.900	550.82	548.88	6177.04	277.28	0.078	421.72	14200.61	6419.31	231.62	0.50	0.2870	30.668	0.2870	30.668
1119.900	550.63	548.59	6176.89	283.62	0.080	424.52	14393.54	6651.93	233.13	0.50	0.2870	30.661	0.2870	30.661
1149.900	550.43	548.30	6176.75	289.95	0.082	427.31	14582.05	6886.07	234.64	0.51	0.2869	30.655	0.2869	30.655
1179.900	550.23	548.01	6176.60	296.29	0.084	430.11	14766.16	7121.71	236.16	0.51	0.2869	30.648	0.2869	30.648
1209.900	550.03	547.71	6176.45	302.63	0.085	432.91	14945.85	7358.86	237.67	0.51	0.2868	30.641	0.2868	30.641
1239.900	549.82	547.40	6176.30	308.99	0.087	435.70	15121.13	7597.52	239.18	0.52	0.2868	30.633	0.2868	30.633
1258.900	549.69	547.21	6176.20	313.03	0.088	437.47	15229.85	7749.45	152.26	0.33	0.2868	30.626	0.2868	30.626
AFT	549.61	547.05	6176.07	318.11	0.090	.....	15229.85	7873.20	124.06	0.31	0.2868	30.621	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.5302E 02	5.5302E 02	6.1801E 03	-1.3147E-03	1.6061E 04	-4.1232E-02	-2.2411E 00	2.8748E-01	5.6842E-01	-3.4666E-02
AFT	1.1880E 02	5.5302E 02	5.5302E 02	6.1801E 03	-2.4999E-02	1.6061E 04	0.0	0.0	0.0	0.0	-6.5916E-01

GAS BUILDUP IN SLOT, DW/DT = 6.2450E-01

FOREWARD	3.8376E 02	5.5285E 02	5.5267E 02	6.1798E 03	7.8942E 01	1.6061E 04	2.3534E 01	1.2793E 03	2.8743E-01	5.7486E-01	2.0803E 03
AFT	4.4841E 02	5.5280E 02	5.5261E 02	6.1797E 03	7.8901E 01	1.6061E 04	4.1465E 01	2.2541E 03	2.8743E-01	5.7485E-01	2.0790E 03

GAS BUILDUP IN SLOT, DW/DT = 1.2641E 00

FOREWARD	6.6732E 02	5.5234E 02	5.5170E 02	6.1791E 03	1.4620E 02	1.6061E 04	2.4118E 01	1.3116E 03	2.8732E-01	5.7462E-01	3.8465E 03
AFT	7.0110E 02	5.5222E 02	5.5158E 02	6.1789E 03	1.4621E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8459E 03

GAS BUILDUP IN SLOT, DW/DT = 6.3307E-01

FOREWARD	9.6621E 02	5.5124E 02	5.4971E 02	6.1777E 03	2.2589E 02	1.6061E 04	2.4599E 01	1.3389E 03	2.8707E-01	5.7412E-01	5.9228E 03
AFT	1.0305E 03	5.5095E 02	5.4943E 02	6.1773E 03	2.2594E 02	1.6061E 04	4.1420E 01	2.2547E 03	2.8704E-01	5.7405E-01	5.9216E 03

GAS BUILDUP IN SLOT, DW/DT = 1.2683E 00

IGNITION TIME, TIME (S) 107.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	8043451.0	1808240.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	9053202.0	2035241.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	79012.625	17762.750
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.93800704E 09	0.21087243E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.10459244E 10	0.23513320E 09
THRUST COEFFICIENT	CF	1.6215048	1.6215048
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WOOT	3567.9910	7866.0742
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	411127.75	906381.69
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	42.405502	93.488159
INERT MASS REMAINING (KG,LBM)	MIR	686.91699	1514.3933
TOTAL BURN AREA (M**2,IN**2)	ABTOT	276.79834	429038.63
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	24.176834	1475362.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	42829.578	94423.063
TOTAL GAS MASS (KG,LBM)	WGTOT	1229.2566	2710.0471
RATIO OF SPECIFIC HEATS	GAMA	1.1615744	1.1615744
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.864260	28.360840
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.0562	5134.6992
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.88371217E-01	0.88371217E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.38019072E 09	551.42017
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.45561455E 11	66081.313
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72943568E-02	0.28717953
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3433.0596	6179.5078
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	268.59204	416318.81
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	4.6515350	7209.8945
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	24.075485	1469177.0
GAS VOLUME (M**3,IN**3)	VP	258.50928	15775212.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37792128E 09	548.12866
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.44401709E 11	64399.2[illegible]
BURN AREA (M**2,IN**2)	AAN	3.5546246	5509.67[illegible]
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72769038E-02	0.28649248
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.[illegible]9234612	31.19473[illegible]
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.10134894	6184.6953
GAS VOLUME (M**3,IN**3)	VPN	11.924328	727667.44
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3430.9502	6175.7109
PORT AREA (M**2,IN**2)	AP	9.9882355	15481.797
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	3.4773464	2289.8926
EXPANSION RATIO	EPR	6.7436409	6.7436409
PRESSURE RATIO	PEPO	0.23280051E-01	0.23280051E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	551.42	551.42	6179.51	0.01	0.000	0.0	16062.80	0.16	0.01	-0.15	0.2872	16.253	0.2875	16.253
30.000	551.42	551.42	6179.51	0.01	0.0	0.0	16062.80	0.25	0.0	-0.10	0.2872	16.253	0.2872	16.253
60.000	551.42	551.42	6179.51	0.01	0.0	0.0	16062.81	0.35	0.0	-0.10	0.2872	16.253	0.2872	16.253
90.000	551.42	551.42	6179.51	0.02	0.0	0.0	16062.82	0.44	0.0	-0.10	0.2872	16.253	0.2872	16.253
99.243	551.42	551.42	6179.51	0.02	0.0	0.0	16062.82	0.47	0.0	-0.03	0.2872	16.253	0.2872	16.253
118.800	551.42	551.42	6179.51	0.0	0.0	418.26	13921.24	0.0	55.99	0.56	0.2872	31.468	0.2872	31.468
148.800	551.42	551.42	6179.50	10.03	0.003	420.09	14054.18	230.72	231.13	0.41	0.2872	31.467	0.2872	31.467
178.800	551.42	551.41	6179.49	19.91	0.006	421.92	14185.24	462.44	232.14	0.41	0.2872	31.465	0.2872	31.465
208.800	551.41	551.39	6179.47	29.67	0.008	423.75	14314.41	695.18	233.15	0.41	0.2872	31.463	0.2872	31.463
238.800	551.40	551.36	6179.45	39.29	0.011	425.59	14441.70	928.92	234.15	0.41	0.2872	31.460	0.2872	31.460
268.800	551.38	551.32	6179.41	48.80	0.014	427.42	14567.11	1163.66	235.16	0.42	0.2872	31.458	0.2872	31.458
298.800	551.35	551.27	6179.37	58.20	0.017	429.25	14690.63	1399.42	236.17	0.42	0.2872	31.455	0.2872	31.455
328.800	551.32	551.21	6179.32	67.50	0.019	431.08	14812.27	1636.17	237.17	0.42	0.2872	31.452	0.2872	31.452
358.800	551.29	551.14	6179.27	76.69	0.022	432.91	14932.02	1873.93	238.18	0.42	0.2872	31.449	0.2872	31.449
383.185	551.25	551.08	6179.23	84.13	0.024	434.40	15027.97	2068.51	194.34	-0.24	0.2871	31.446	0.2871	31.446
448.988	551.24	551.03	6179.17	92.38	0.026	420.01	14049.75	2123.41	19.59	1.05	0.2871	31.426	0.2871	31.426
477.600	551.19	550.94	6179.10	101.09	0.029	421.84	14180.20	2344.88	221.32	-0.15	0.2871	31.423	0.2871	31.423
507.600	551.14	550.83	6179.03	110.09	0.031	423.76	14314.96	2577.54	233.08	0.41	0.2871	31.418	0.2871	31.418
537.600	551.08	550.72	6178.95	119.00	0.034	425.67	14447.65	2811.26	234.13	0.41	0.2871	31.413	0.2871	31.413
567.600	551.02	550.60	6178.86	127.81	0.036	427.59	14578.27	3046.02	235.17	0.42	0.2871	31.408	0.2871	31.408
597.600	550.94	550.47	6178.77	136.53	0.039	429.51	14706.82	3281.82	236.22	0.42	0.2871	31.404	0.2871	31.404
627.600	550.87	550.33	6178.67	145.16	0.041	431.42	14833.29	3518.66	237.26	0.42	0.2871	31.398	0.2871	31.398
657.600	550.79	550.19	6178.57	153.73	0.043	433.34	14957.69	3756.55	238.31	0.42	0.2870	31.393	0.2870	31.393
666.744	550.76	550.14	6178.54	156.35	0.044	433.92	14995.20	3829.84	72.84	-0.45	0.2870	31.388	0.2870	31.388
701.100	550.76	550.02	6178.36	169.80	0.048	417.61	13878.26	3848.89	57.01	0.52	0.2870	31.365	0.2870	31.365
731.100	550.65	549.85	6178.25	178.33	0.050	419.42	14009.00	4079.11	230.63	0.41	0.2870	31.363	0.2870	31.363
761.100	550.55	549.66	6178.12	186.78	0.053	421.22	14137.90	4310.31	231.61	0.41	0.2870	31.356	0.2870	31.356
791.100	550.44	549.47	6178.00	195.15	0.055	423.03	14264.96	4542.48	232.59	0.41	0.2870	31.349	0.2870	31.349
821.100	550.32	549.27	6177.86	203.45	0.057	424.83	14390.17	4775.63	233.57	0.41	0.2869	31.342	0.2869	31.342
851.100	550.20	549.07	6177.73	211.69	0.060	426.64	14513.55	5009.75	234.54	0.42	0.2869	31.335	0.2869	31.335
881.100	550.07	548.85	6177.59	219.86	0.062	428.45	14635.07	5244.85	235.52	0.42	0.2869	31.328	0.2869	31.328
911.100	549.95	548.63	6177.45	227.98	0.064	430.25	14754.76	5480.92	236.49	0.42	0.2869	31.321	0.2869	31.321
941.100	549.81	548.40	6177.30	236.05	0.067	432.06	14872.61	5717.96	237.46	0.42	0.2868	31.314	0.2868	31.314
965.631	549.70	548.21	6177.17	242.64	0.068	433.53	14967.60	5913.08	194.90	-0.23	0.2868	31.307	0.2868	31.307
1031.118	549.66	547.94	6176.80	261.03	0.074	419.85	14050.27	5968.99	0.0	1.06	0.2868	31.253	0.2868	31.253
1059.900	549.49	547.68	6176.68	267.18	0.075	422.53	14245.59	6191.61	222.48	-0.14	0.2868	31.249	0.2868	31.249
1089.900	549.30	547.41	6176.54	273.54	0.077	425.33	14444.74	6424.58	233.39	0.42	0.2867	31.242	0.2867	31.242
1119.900	549.11	547.13	6176.40	279.89	0.079	428.12	14639.35	6659.06	234.90	0.42	0.2867	31.235	0.2867	31.235
1149.900	548.92	546.85	6176.26	286.24	0.081	430.92	14829.41	6895.05	236.42	0.42	0.2867	31.228	0.2867	31.228
1179.900	548.72	546.56	6176.11	292.58	0.083	433.72	15014.95	7132.55	237.93	0.42	0.2866	31.221	0.2866	31.221
1209.900	548.53	546.27	6175.96	298.94	0.084	436.51	15195.94	7371.56	239.44	0.43	0.2866	31.214	0.2866	31.214
1239.900	548.32	545.97	6175.81	305.31	0.086	439.31	15372.39	7612.07	240.94	0.43	0.2866	31.207	0.2866	31.207
1258.900	548.19	545.78	6175.71	309.35	0.087	441.08	15481.80	7765.17	153.37	0.27	0.2865	31.200	0.2865	31.201
AFT	548.13	545.65	6175.61	313.44	0.088	.....	15481.80	7866.07	101.02	0.11	0.2865	31.195	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.5142E 02	5.5142E 02	6.1795E 03	1.6423E-02	1.6061E 04	-4.1204E-02	-2.2411E 00	2.8728E-01	5.6842E-01	4.3182F-01
AFT	1.1880E 02	5.5142E 02	5.5142E 02	6.1795E 03	-4.8978E-03	1.6061E 04	0.0	0.0	0.0	0.0	-1.2878F-01

GAS BUILDUP IN SLOT, DW/DT = 5.6059E-01

FOREWARD	3.8319E 02	5.5125E 02	5.5108E 02	6.1792E 03	7.9440E 01	1.6061E 04	1.8983E 01	1.0326E 03	2.8724E-01	5.7487E-01	2.0875F 03
AFT	4.4899E 02	5.5121E 02	5.5103E 02	6.1792E 03	7.9406E 01	1.6061E 04	3.6965E 01	2.0108E 03	2.8723E-01	5.7485E-01	2.0864F 03

GAS BUILDUP IN SLOT, DW/DT = 1.0511E 00

FOREWARD	6.6674E 02	5.5076E 02	5.5014E 02	6.1785E 03	1.4672E 02	1.6061E 04	1.9578E 01	1.0654E 03	2.8713E-01	5.7463E-01	3.8494F 03
AFT	7.0110E 02	5.5065E 02	5.5002E 02	6.1784E 03	1.4673E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8489F 03

GAS BUILDUP IN SLOT, DW/DT = 5.2171E-01

FOREWARD	9.6563E 02	5.4970E 02	5.4821E 02	6.1772E 03	2.2689E 02	1.6061E 04	2.0068E 01	1.0930E 03	2.8689E-01	5.7415E-01	5.9331F 03
AFT	1.0311E 03	5.4943E 02	5.4794E 02	6.1768E 03	2.2695E 02	1.6061E 04	3.6907E 01	2.0103E 03	2.8686E-01	5.7408E-01	5.9321F 03

GAS BUILDUP IN SLOT, DW/DT = 1.0555E 00

IGNITION TIME, TIME (S) 109.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	8049794.0	1809666.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	9059545.0	2036667.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	100600.38	22615.867
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.95410022E 09	0.21449034E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.10640371E 10	0.23920510E 09
THRUST COEFFICIENT	CF	1.6252089	1.6252089
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3562.3176	7853.5664
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	418258.06	922101.31
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	53.991486	119.03088
INERT MASS REMAINING (KG,LBM)	MIR	578.93408	1276.3315
TOTAL BURN AREA (M**2,IN**2)	ABTOT	276.66211	428827.44
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	20.134079	1228658.0
PROPELLANT MASS REMAINING (KG,LBM)	WF	35667.781	78634.000
TOTAL GAS MASS (KG,LBM)	WGTOT	1241.6436	2737.3560
RATIO OF SPECIFIC HEATS	GAMA	1.1615744	1.1615744
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.863900	28.360046
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1565.0322	5134.6211
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.86986899E-01	0.86986899E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37927501E 09	550.09204
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.46320914E 11	67182.813
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72865710E-02	0.28687304
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3432.7949	6179.0313
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	270.05884	418592.38
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	3.8543339	5974.2305
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	20.078598	1225272.0
GAS VOLUME (M**3,IN**3)	VP	261.75049	15973010.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37708595E 09	546.91724
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.45156717E 11	65494.285
BURN AREA (M**2,IN**2)	AAN	2.7487469	4260.5664
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72696023E-02	0.28620493
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.80689985	31.767715
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.55476237E-01	3385.3691
GAS VOLUME (M**3,IN**3)	VPN	11.970201	730466.81
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3430.7397	6175.3320
PORT AREA (M**2,IN**2)	AP	10.151965	15735.578
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4782791	2291.3379
EXPANSION RATIO	EPR	6.7393875	6.7393875
PRESSURE RATIO	PEPO	0.23299396E-01	0.23299396E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	550.09	550.09	6179.03	0.01	0.000	0.0	16062.80	0.13	0.01	-0.13	0.2869	16.253	0.2872	16.253
30.000	550.09	550.09	6179.03	0.01	0.0	0.0	16062.80	0.21	0.0	-0.08	0.2869	16.253	0.2869	16.253
60.000	550.09	550.09	6179.03	0.01	0.0	0.0	16062.81	0.29	0.0	-0.08	0.2869	16.253	0.2869	16.253
90.000	550.09	550.09	6179.03	0.01	0.0	0.0	16062.82	0.37	0.0	-0.08	0.2869	16.253	0.2869	16.253
99.243	550.09	550.09	6179.03	0.02	0.0	0.0	16062.82	0.39	0.0	-0.02	0.2869	16.253	0.2869	16.253
118.800	550.09	550.09	6179.03	0.0	0.0	421.87	14162.51	0.0	46.87	0.57	0.2869	32.042	0.2869	32.042
148.800	550.09	550.09	6179.03	9.95	0.003	423.70	14296.73	232.44	232.87	0.42	0.2869	32.041	0.2869	32.041
178.800	550.09	550.08	6179.02	19.77	0.006	425.53	14429.02	465.89	233.88	0.43	0.2869	32.039	0.2869	32.039
208.800	550.08	550.06	6179.00	29.45	0.008	427.36	14559.37	700.35	234.88	0.43	0.2869	32.037	0.2869	32.037
238.800	550.07	550.03	6178.97	39.01	0.011	429.20	14687.78	935.81	235.89	0.43	0.2869	32.035	0.2869	32.035
268.800	550.05	549.99	6178.94	48.46	0.014	431.03	14814.26	1172.28	236.90	0.43	0.2869	32.032	0.2869	32.032
298.800	550.02	549.94	6178.90	57.79	0.016	432.86	14938.80	1409.75	237.90	0.43	0.2869	32.029	0.2869	32.029
328.800	550.00	549.88	6178.85	67.03	0.019	434.69	15061.40	1648.23	238.91	0.43	0.2869	32.027	0.2869	32.027
358.800	549.96	549.82	6178.80	76.16	0.021	436.52	15182.06	1887.70	239.91	0.44	0.2868	32.024	0.2868	32.024
382.611	549.93	549.76	6178.75	83.38	0.024	437.98	15276.46	2079.07	191.13	-0.24	0.2868	32.021	0.2868	32.021
449.562	549.92	549.71	6178.70	91.07	0.026	423.66	14294.89	2124.84	15.02	1.08	0.2868	32.000	0.2868	32.000
477.600	549.87	549.63	6178.64	99.56	0.028	425.45	14423.89	2343.50	218.51	-0.15	0.2868	31.997	0.2868	31.997
507.600	549.82	549.52	6178.56	108.51	0.031	427.36	14559.87	2577.89	234.82	0.43	0.2868	31.992	0.2868	31.992
537.600	549.76	549.41	6178.48	117.36	0.033	429.28	14693.72	2813.33	235.87	0.43	0.2868	31.987	0.2868	31.987
567.600	549.70	549.30	6178.40	126.12	0.036	431.20	14825.43	3049.81	236.91	0.43	0.2868	31.983	0.2868	31.983
597.600	549.63	549.17	6178.31	134.80	0.038	433.11	14955.02	3287.33	237.96	0.43	0.2868	31.978	0.2868	31.978
627.600	549.56	549.04	6178.21	143.39	0.040	435.03	15082.48	3525.90	239.00	0.43	0.2868	31.973	0.2868	31.973
657.600	549.48	548.89	6178.11	151.91	0.043	436.95	15207.80	3765.50	240.04	0.44	0.2867	31.967	0.2867	31.967
666.169	549.45	548.85	6178.09	154.36	0.044	437.49	15243.21	3834.72	68.76	-0.46	0.2867	31.962	0.2867	31.962
701.100	549.45	548.74	6177.92	167.30	0.047	421.22	14119.01	3849.19	47.91	0.54	0.2867	31.939	0.2867	31.939
731.100	549.35	548.57	6177.80	175.79	0.050	423.02	14251.00	4081.14	232.37	0.42	0.2867	31.937	0.2867	31.937
761.100	549.25	548.39	6177.68	184.20	0.052	424.83	14381.09	4314.06	233.35	0.43	0.2867	31.930	0.2867	31.930
791.100	549.14	548.20	6177.56	192.54	0.054	426.63	14509.29	4547.96	234.33	0.43	0.2867	31.923	0.2867	31.923
821.100	549.02	548.01	6177.43	200.80	0.057	428.44	14635.60	4782.84	235.31	0.43	0.2866	31.916	0.2866	31.916
851.100	548.91	547.80	6177.30	209.00	0.059	430.25	14760.01	5018.68	236.28	0.43	0.2866	31.909	0.2866	31.909
881.100	548.78	547.59	6177.16	217.14	0.061	432.05	14882.53	5255.50	237.25	0.43	0.2866	31.902	0.2866	31.902
911.100	548.66	547.38	6177.02	225.22	0.063	433.86	15003.15	5493.29	238.23	0.43	0.2866	31.895	0.2866	31.895
941.100	548.53	547.15	6176.87	233.25	0.066	435.66	15121.88	5732.05	239.20	0.44	0.2865	31.888	0.2865	31.888
965.057	548.42	546.97	6176.75	239.66	0.068	437.10	15215.33	5923.99	191.72	-0.23	0.2865	31.880	0.2865	31.880
1031.692	548.39	546.72	6176.41	257.18	0.073	423.51	14296.56	5970.78	0.0	1.08	0.2865	31.827	0.2865	31.827
1059.900	548.22	546.47	6176.28	263.20	0.074	426.14	14489.76	6190.62	219.70	-0.14	0.2865	31.823	0.2865	31.823
1089.900	548.04	546.21	6176.15	269.57	0.076	428.93	14690.71	6425.32	235.13	0.43	0.2864	31.816	0.2864	31.816
1119.900	547.85	545.94	6176.01	275.93	0.078	431.73	14887.00	6661.52	236.65	0.43	0.2864	31.809	0.2864	31.809
1149.900	547.67	545.66	6175.87	282.28	0.080	434.52	15078.62	6899.24	238.16	0.44	0.2864	31.802	0.2864	31.802
1179.900	547.48	545.38	6175.73	288.63	0.081	437.32	15265.58	7138.46	239.66	0.44	0.2863	31.795	0.2863	31.795
1209.900	547.29	545.09	6175.58	294.99	0.083	440.11	15447.87	7379.19	241.17	0.44	0.2863	31.787	0.2863	31.787
1239.900	547.09	544.80	6175.43	301.37	0.085	442.91	15625.49	7621.43	242.68	0.44	0.2863	31.780	0.2863	31.780
1258.900	546.96	544.61	6175.33	305.41	0.086	444.68	15735.58	7775.61	154.47	0.28	0.2862	31.773	0.2862	31.773
AFT	546.92	544.52	6175.25	308.52	0.087	.....	15735.58	7853.57	78.04	0.08	0.2862	31.768	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.5009E 02	5.5009E 02	6.1790E 03	1.3455E-02	1.6061E 04	-4.1181E-02	-2.2411E 00	2.8712E-01	5.6842E-01	3.5293E-01
AFT	1.1880E 02	5.5009E 02	5.5009E 02	6.1790E 03	-8.2605E-03	1.6061E 04	0.0	0.0	0.0	0.0	-2.1668E-01

GAS BUILDUP IN SLOT, DW/DT = 5.6962E-01

FOREWARD	3.8261E 02	5.4993E 02	5.4976E 02	6.1788E 03	7.9855E 01	1.6061E 04	1.4407E 01	7.8413E 02	2.8708E-01	5.7448E-01	2.0935E 03
AFT	4.4956E 02	5.4989E 02	5.4971E 02	6.1787E 03	7.9819E 01	1.6061E 04	3.2441E 01	1.7657E 03	2.8707E-01	5.7447E-01	2.0924E 03

GAS BUILDUP IN SLOT, DW/DT = 1.0796E 00

FOREWARD	6.6617E 02	5.4945E 02	5.4885E 02	6.1781E 03	1.4707E 02	1.6061E 04	1.5012E 01	8.1737E 02	2.8697E-01	5.7425E-01	3.8497E 03
AFT	7.0110E 02	5.4934E 02	5.4874E 02	6.1779E 03	1.4708E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8492E 03

GAS BUILDUP IN SLOT, DW/DT = 5.3673E-01

FOREWARD	9.6506E 02	5.4842E 02	5.4697E 02	6.1768E 03	2.2764E 02	1.6061E 04	1.5512E 01	8.4525E 02	2.8674E-01	5.7378E-01	5.9395E 03
AFT	1.0317E 03	5.4817E 02	5.4672E 02	6.1764E 03	2.2769E 02	1.6061E 04	3.2369E 01	1.7640E 03	2.8671E-01	5.7372E-01	5.9384E 03

GAS BUILDUP IN SLOT, DW/DT = 1.0840E 00

IGNITION TIME, TIME (S) 111.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	8001727.0	1798860.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	9011477.0	2025861.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	107936.94	24265.191
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.97015168E 09	0.21809885E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.10821082E 10	0.24326763E 09
THRUST COEFFICIENT	CF	1.6259384	1.6259384
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3543.1497	7811.3086
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	425363.56	937766.19
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	57.928970	127.71155
INERT MASS REMAINING (KG,LBM)	MIR	463.07617	1020.9084
TOTAL BURN AREA (M**2,IN**2)	ABTOT	275.52393	427063.00
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	16.104782	982775.19
PROPELLANT MASS REMAINING (KG,LBM)	WF	28529.852	62897.563
TOTAL GAS MASS (KG,LBM)	WGTOT	1268.0483	2795.5684
RATIO OF SPECIFIC HEATS	GAMA	1.1615725	1.1615725
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.862917	28.357880
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.9619	5134.3906
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.85666656E-01	0.85666656E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.37678950E 09	546.48706
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.47076966E 11	68279.375
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.72717406E-02	0.28628904
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3432.0742	6177.7344
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	271.51074	420842.69
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	3.0512838	4729.5000
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	16.076279	981035.94
GAS VOLUME (M**3,IN**3)	VP	264.99780	16171174.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.37468083E 09	543.42896
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.45908480E 11	66584.625
BURN AREA (M**2,IN**2)	AAN	0.96161330	1490.5037
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.72551295E-02	0.28563511
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82143891	32.340118
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.28501246E-01	1739.2537
GAS VOLUME (M**3,IN**3)	VPN	11.997176	732112.94
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3430.0540	6174.0977
PORT AREA (M**2,IN**2)	AP	10.316858	15991.164
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4792109	2292.7822
EXPANSION RATIO	EPR	6.7351418	6.7351418
PRESSURE RATIO	PEPO	0.23318846E-01	0.23318846E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	546.49	546.49	6177.73	0.01	0.000	0.0	16062.80	0.35	0.01	-0.34	0.2863	16.253	0.2869	16.253
30.000	546.49	546.49	6177.73	0.02	0.0	0.0	16062.80	0.56	0.0	-0.21	0.2863	16.253	0.2863	16.253
60.000	546.49	546.49	6177.73	0.03	0.0	0.0	16062.81	0.78	0.0	-0.21	0.2863	16.253	0.2863	16.253
90.000	546.49	546.49	6177.73	0.04	0.0	0.0	16062.82	0.99	0.0	-0.21	0.2863	16.253	0.2863	16.253
99.243	546.49	546.49	6177.73	0.04	0.0	0.0	16062.82	1.06	0.0	-0.07	0.2863	16.253	0.2863	16.253
118.800	546.49	546.49	6177.73	0.02	0.0	425.47	14405.59	0.54	37.71	0.48	0.2863	32.616	0.2863	32.614
148.800	546.49	546.49	6177.73	9.94	0.003	427.30	14541.09	234.61	234.37	0.30	0.2863	32.615	0.2863	32.615
178.800	546.48	546.48	6177.72	19.72	0.006	429.14	14674.61	469.69	235.38	0.30	0.2863	32.613	0.2863	32.613
208.800	546.48	546.46	6177.70	29.38	0.008	430.97	14806.13	705.78	236.39	0.30	0.2863	32.611	0.2863	32.611
238.800	546.46	546.43	6177.67	38.91	0.011	432.80	14935.67	942.87	237.39	0.30	0.2863	32.608	0.2863	32.608
268.800	546.44	546.39	6177.64	48.32	0.014	434.63	15063.21	1180.96	238.40	0.30	0.2863	32.606	0.2863	32.606
298.800	546.42	546.34	6177.60	57.63	0.016	436.46	15188.77	1420.06	239.40	0.30	0.2863	32.603	0.2863	32.603
328.800	546.39	546.28	6177.55	66.84	0.019	438.30	15312.34	1660.16	240.40	0.30	0.2863	32.600	0.2863	32.600
358.800	546.36	546.21	6177.50	75.95	0.021	440.13	15433.91	1901.26	241.40	0.30	0.2863	32.597	0.2863	32.597
382.036	546.33	546.16	6177.46	82.97	0.023	441.55	15526.71	2089.28	187.67	-0.36	0.2863	32.594	0.2863	32.594
450.136	546.32	546.12	6177.41	90.16	0.025	427.30	14541.89	2126.18	10.42	0.76	0.2862	32.574	0.2862	32.574
477.600	546.28	546.03	6177.35	98.45	0.028	429.05	14669.40	2341.88	215.42	-0.28	0.2862	32.570	0.2862	32.570
507.600	546.23	545.93	6177.27	107.39	0.030	430.97	14806.59	2577.90	236.32	0.30	0.2862	32.566	0.2862	32.565
537.600	546.17	545.83	6177.20	116.23	0.033	432.88	14941.59	2814.97	237.37	0.30	0.2862	32.561	0.2862	32.561
567.600	546.10	545.71	6177.11	124.97	0.035	434.80	15074.41	3053.07	238.41	0.30	0.2862	32.556	0.2862	32.556
597.600	546.03	545.59	6177.02	133.63	0.038	436.72	15205.04	3292.22	239.45	0.30	0.2862	32.551	0.2862	32.551
627.600	545.96	545.45	6176.93	142.21	0.040	438.63	15333.47	3532.41	240.49	0.30	0.2862	32.546	0.2862	32.546
657.600	545.89	545.31	6176.83	150.72	0.043	440.55	15459.72	3773.64	241.53	0.30	0.2862	32.541	0.2862	32.541
665.595	545.86	545.27	6176.80	153.00	0.043	441.06	15493.00	3838.69	64.55	-0.51	0.2861	32.536	0.2861	32.536
701.100	545.86	545.17	6176.64	165.51	0.047	424.82	14301.57	3848.73	38.75	0.37	0.2861	32.512	0.2861	32.512
731.100	545.76	545.00	6176.53	174.00	0.049	426.63	14434.81	4082.31	233.88	0.30	0.2861	32.510	0.2861	32.510
761.100	545.66	544.83	6176.41	182.40	0.051	428.43	14626.10	4316.86	234.86	0.30	0.2861	32.503	0.2861	32.503
791.100	545.56	544.64	6176.29	190.72	0.054	430.24	14755.45	4552.39	235.84	0.30	0.2861	32.496	0.2861	32.496
821.100	545.44	544.45	6176.16	198.98	0.056	432.04	14882.84	4788.89	236.81	0.30	0.2861	32.490	0.2861	32.490
851.100	545.33	544.25	6176.03	207.17	0.058	433.85	15008.29	5026.37	237.78	0.30	0.2860	32.482	0.2860	32.482
881.100	545.21	544.05	6175.89	215.31	0.061	435.65	15131.79	5264.82	238.75	0.30	0.2860	32.475	0.2860	32.475
911.100	545.09	543.83	6175.75	223.38	0.063	437.46	15253.35	5504.23	239.72	0.30	0.2860	32.468	0.2860	32.468
941.100	544.96	543.61	6175.61	231.42	0.065	439.26	15372.96	5744.62	240.69	0.30	0.2860	32.461	0.2860	32.461
964.484	544.85	543.44	6175.49	237.67	0.067	440.67	15464.84	5933.25	188.28	-0.35	0.2859	32.453	0.2859	32.453
1032.265	544.83	543.21	6175.17	254.41	0.072	427.16	14544.73	5971.17	0.0	0.76	0.2859	32.400	0.2859	32.400
1059.900	544.67	542.97	6175.05	260.34	0.073	429.73	14735.75	6188.07	216.63	-0.27	0.2859	32.396	0.2859	32.396
1089.900	544.49	542.71	6174.91	266.74	0.075	432.53	14938.50	6424.40	236.64	0.30	0.2859	32.389	0.2859	32.389
1119.900	544.31	542.44	6174.77	273.12	0.077	435.32	15136.47	6662.24	238.15	0.31	0.2858	32.382	0.2858	32.382
1149.900	544.13	542.17	6174.64	279.50	0.079	438.12	15329.64	6901.58	239.65	0.31	0.2858	32.375	0.2858	32.375
1179.900	543.94	541.90	6174.49	285.88	0.081	440.92	15518.02	7142.43	241.16	0.31	0.2858	32.367	0.2858	32.367
1209.900	543.76	541.62	6174.34	292.27	0.082	443.71	15701.61	7384.79	242.67	0.31	0.2857	32.360	0.2857	32.360
1239.900	543.57	541.33	6174.20	298.68	0.084	446.51	15880.40	7628.64	244.17	0.31	0.2857	32.353	0.2857	32.353
1258.900	543.44	541.15	6174.10	302.74	0.085	448.28	15991.16	7783.86	155.41	0.20	0.2857	32.345	0.2857	32.345
AFT	543.43	541.12	6174.07	303.82	0.086	.....	15991.16	7811.31	27.25	-0.20	0.2856	32.340	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.4649E 02	5.4649E 02	6.1777E 03	3.9034E-02	1.6061E 04	-4.1118E-02	-2.2411E 00	2.8648E-01	5.6842E-01	1.0173E 00
AFT	1.1880E 02	5.4649E 02	5.4649E 02	6.1777E 03	2.0726E-02	1.6061E 04	0.0	0.0	0.0	0.0	5.4018E-01

GAS BUILDUP IN SLOT, DW/DT = 4.7713E-01

FOREWARD	3.8204E 02	5.4633E 02	5.4616E 02	6.1775E 03	8.0586E 01	1.6061E 04	9.7938E 00	5.3387E 02	2.8664E-01	5.7416E-01	2.0991E 03
AFT	4.5014E 02	5.4629E 02	5.4612E 02	6.1774E 03	8.0562E 01	1.6061E 04	2.7860E 01	1.5187E 03	2.8664E-01	5.7415E-01	2.0983E 03

GAS BUILDUP IN SLOT, DW/DT = 7.5914E-01

FOREWARD	6.6560E 02	5.4586E 02	5.4527E 02	6.1768E 03	1.4799E 02	1.6061E 04	1.0408E 01	5.6758E 02	2.8653E-01	5.7394E-01	3.8491E 03
AFT	7.0110E 02	5.4576E 02	5.4517E 02	6.1766E 03	1.4800E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8487E 03

GAS BUILDUP IN SLOT, DW/DT = 3.6963E-01

FOREWARD	9.6448E 02	5.4485E 02	5.4344E 02	6.1755E 03	2.2927E 02	1.6061E 04	1.0916E 01	5.9574E 02	2.8631E-01	5.7348E-01	5.9442E 03
AFT	1.0323E 03	5.4463E 02	5.4321E 02	6.1752E 03	2.2933E 02	1.6061E 04	2.7773E 01	1.5159E 03	2.8628E-01	5.7342E-01	5.9434E 03

GAS BUILDUP IN SLOT, DW/DT = 7.6370E-01

WEB BURNOUT INCREMENT LOCATION
1.2398999E 03

WEB BURNOUT INCREMENT LOCATION
1.2588999E 03

IGNITION TIME, TIME (S) 113.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7629175.0	1715107.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8638925.0	1942108.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	99880.125	22453.953
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.98578278E 09	0.22161282E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.10997586E 10	0.24723560E 09
THRUST COEFFICIENT	CF	1.6240368	1.6240368
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3400.1016	7495.9414
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	432306.81	953073.44
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	53.604950	118.17871
INERT MASS REMAINING (KG,LBM)	MIR	355.86621	784.55103
TOTAL BURN AREA (M**2,IN**2)	ABTOT	265.31982	411246.94
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	12.376259	755246.00
PROPELLANT MASS REMAINING (KG,LBM)	WF	21924.703	48335.703
TOTAL GAS MASS (KG,LBM)	WGTOT	1230.3528	2712.4639
RATIO OF SPECIFIC HEATS	GAMA	1.1615610	1.1615610
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.856827	28.344452
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.5190	5132.9375
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.85500896E-01	0.85500896E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.36135680E 09	524.10400
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.47815094E 11	69349.938
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.71975775E-02	0.28336924
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3427.5974	6169.6758
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	263.06494	407751.56
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	2.2548962	3495.0972
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	12.354734	753932.50
GAS VOLUME (M**3,IN**3)	VP	267.96753	16352399.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.35938662E 09	521.24634
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.46642512E 11	67649.250
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.71814023E-02	0.28273243
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3425.5986	6166.0781
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4801359	2294.2168
EXPANSION RATIO	EPR	6.7309303	6.7309303
PRESSURE RATIO	PEPO	0.23338690E-01	0.23338690E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

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INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	524.10	524.10	6169.68	0.08	0.000	0.0	16062.80	2.13	0.01	-2.12	0.2834	16.253	0.2831	16.253
30.000	524.10	524.10	6169.68	0.14	0.0	0.0	16062.80	3.46	0.0	-1.34	0.2834	16.253	0.2834	16.253
60.000	524.10	524.10	6169.68	0.19	0.0	0.0	16062.81	4.80	0.0	-1.34	0.2834	16.253	0.2834	16.253
90.000	524.10	524.10	6169.68	0.25	0.0	0.0	16062.82	6.13	0.0	-1.34	0.2834	16.253	0.2834	16.253
99.243	524.10	524.10	6169.68	0.26	0.0	0.0	16062.82	6.54	0.0	-0.41	0.2834	16.253	0.2834	16.253
118.800	524.10	524.10	6169.68	0.30	0.0	429.07	14650.23	6.78	28.17	-0.28	0.2834	33.189	0.2834	33.189
148.800	524.11	524.10	6169.67	10.48	0.004	430.90	14787.02	241.47	233.94	-0.75	0.2834	33.187	0.2834	33.187
178.800	524.10	524.08	6169.66	20.53	0.006	432.73	14921.76	477.16	234.94	-0.76	0.2834	33.185	0.2834	33.185
208.800	524.08	524.06	6169.64	30.45	0.009	434.56	15054.46	713.86	235.93	-0.76	0.2834	33.183	0.2834	33.183
238.800	524.07	524.03	6169.61	40.24	0.012	436.40	15185.12	951.56	236.93	-0.77	0.2834	33.181	0.2834	33.181
268.800	524.05	523.99	6169.57	49.91	0.014	438.23	15313.73	1190.26	237.92	-0.78	0.2834	33.178	0.2834	33.178
298.800	524.02	523.94	6169.54	59.48	0.017	440.06	15440.30	1429.97	238.91	-0.79	0.2834	33.176	0.2834	33.176
328.800	524.00	523.88	6169.48	68.94	0.020	441.89	15564.83	1670.67	239.91	-0.80	0.2833	33.173	0.2833	33.173
358.800	523.96	523.81	6169.43	78.31	0.022	443.72	15687.32	1912.38	240.90	-0.81	0.2833	33.170	0.2833	33.170
381.463	523.93	523.76	6169.39	85.35	0.024	445.11	15778.49	2096.21	182.64	-1.19	0.2833	33.167	0.2833	33.167
450.709	523.92	523.72	6169.34	92.36	0.026	430.93	14790.50	2126.30	5.74	-1.89	0.2833	33.146	0.2833	33.146
477.600	523.88	523.64	6169.27	100.72	0.028	432.65	14916.47	2338.05	210.54	-1.22	0.2833	33.143	0.2833	33.143
507.600	523.83	523.54	6169.20	109.91	0.031	434.56	15054.87	2574.69	235.87	-0.77	0.2833	33.138	0.2833	33.138
537.600	523.77	523.43	6169.11	119.00	0.034	436.48	15191.03	2812.36	236.90	-0.77	0.2833	33.133	0.2833	33.133
567.600	523.71	523.31	6169.02	128.00	0.036	438.40	15324.94	3051.07	237.93	-0.78	0.2833	33.129	0.2833	33.129
597.600	523.64	523.19	6168.93	136.91	0.039	440.31	15456.60	3290.83	238.96	-0.79	0.2833	33.124	0.2833	33.124
627.600	523.57	523.06	6168.83	145.75	0.041	442.23	15586.02	3531.62	239.99	-0.80	0.2833	33.118	0.2833	33.118
657.600	523.49	522.91	6168.73	154.50	0.044	444.15	15713.19	3773.45	241.02	-0.81	0.2832	33.113	0.2832	33.113
665.022	523.47	522.88	6168.70	156.68	0.044	444.62	15744.30	3834.01	59.79	-0.78	0.2832	33.108	0.2832	33.108
701.100	523.47	522.78	6168.54	169.22	0.048	428.42	14605.71	3840.77	29.52	-1.01	0.2832	33.085	0.2832	33.085
731.100	523.37	522.61	6168.42	177.96	0.050	430.22	14740.19	4074.96	233.44	-0.75	0.2832	33.082	0.2832	33.082
761.100	523.27	522.43	6168.29	186.61	0.053	432.03	14872.68	4310.12	234.41	-0.75	0.2832	33.076	0.2832	33.076
791.100	523.16	522.25	6168.16	195.19	0.055	433.83	15003.16	4546.26	235.38	-0.76	0.2832	33.069	0.2832	33.069
821.100	523.05	522.05	6168.03	203.70	0.057	435.64	15131.64	4783.36	236.34	-0.77	0.2831	33.062	0.2831	33.062
851.100	522.94	521.86	6167.89	212.14	0.060	437.44	15258.13	5021.44	237.30	-0.78	0.2831	33.055	0.2831	33.055
881.100	522.82	521.65	6167.75	220.52	0.062	439.25	15382.62	5260.48	238.26	-0.79	0.2831	33.047	0.2831	33.047
911.100	522.70	521.43	6167.60	228.85	0.065	441.05	15505.11	5500.50	239.22	-0.80	0.2831	33.040	0.2831	33.040
941.100	522.57	521.21	6167.45	237.13	0.067	442.86	15625.59	5741.48	240.18	-0.81	0.2830	33.033	0.2830	33.033
963.911	522.47	521.04	6167.32	243.42	0.069	444.23	15715.87	5925.93	183.26	-1.19	0.2830	33.025	0.2830	33.025
1032.838	522.45	520.82	6166.99	260.36	0.073	430.82	14776.41	5957.36	0.0	-1.88	0.2830	32.972	0.2830	32.972
1059.900	522.30	520.58	6166.86	266.64	0.075	433.36	14950.64	6170.38	211.75	-1.27	0.2830	32.968	0.2830	32.968
1089.900	522.12	520.32	6166.71	273.56	0.077	436.15	15139.50	6407.41	236.18	-0.85	0.2829	32.960	0.2829	32.960
1119.900	521.94	520.05	6166.55	280.47	0.079	438.94	15323.84	6645.96	237.67	-0.89	0.2829	32.953	0.2829	32.953
1149.900	521.76	519.78	6166.40	287.38	0.081	441.74	15503.69	6886.05	239.16	-0.93	0.2829	32.946	0.2829	32.946
1179.900	521.58	519.50	6166.24	294.29	0.083	444.53	15679.03	7127.67	240.64	-0.97	0.2828	32.939	0.2828	32.939
1209.900	521.39	519.21	6166.08	301.20	0.085	447.32	15849.87	7370.81	242.13	-1.01	0.2828	32.931	0.2828	32.931
1239.900	521.28	519.07	6166.03	303.11	0.086	0.00	16016.20	7493.29	121.44	-1.05	0.2828	32.786	0.2828	32.786
1258.900	521.25	519.07	6166.08	301.20	0.085	0.0	16119.21	7493.97	0.00	-0.68	0.2827	32.500	0.2827	32.500
AFT	521.25	519.07	6166.08	301.28	0.085	.....	16119.21	7495.94	0.0	-1.98	0.2827	32.500	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	VR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.2410E 02	5.2410E 02	6.1697E 03	2.5995E-01	1.6061E 04	-4.0719E-02	-2.2411E 00	2.8390E-01	5.6842E-01	6.5028E 00
AFT	1.1880E 02	5.2410E 02	5.2410E 02	6.1697E 03	2.7107E-01	1.6061E 04	0.0	0.0	0.0	0.0	6.7810E 00

GAS BUILDUP IN SLOT, DW/DT =-2.7813E-01

FOREWARD	3.8146E 02	5.2393E 02	5.2376E 02	6.1694E 03	8.4052E 01	1.6061E 04	5.1247E 00	2.8209E 02	2.8386E-01	5.7328E-01	2.1013E 03
AFT	4.5071E 02	5.2390E 02	5.2372E 02	6.1693E 03	8.4133E 01	1.6061E 04	2.3073E 01	1.2701E 03	2.8385E-01	5.7327E-01	2.1032E 03

GAS BUILDUP IN SLOT, DW/DT =-1.8907E 00

FOREWARD	6.6502E 02	5.2347E 02	5.2288E 02	6.1687E 03	1.5383E 02	1.6061E 04	5.7435E 00	3.1628E 02	2.8375E-01	5.7307E-01	3.8348E 03
AFT	7.0110E 02	5.2337E 02	5.2278E 02	6.1685E 03	1.5390E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8408E 03

GAS BUILDUP IN SLOT, DW/DT =-1.0113E 00

FOREWARD	9.6391E 02	5.2247E 02	5.2104E 02	6.1673E 03	2.3844E 02	1.6061E 04	6.2548E 00	3.4471E 02	2.8351E-01	5.7262E-01	5.9322E 03
AFT	1.0328E 03	5.2224E 02	5.2082E 02	6.1670E 03	2.3861E 02	1.6061E 04	2.3299E 01	1.2842E 03	2.8349E-01	5.7256E-01	5.9341E 03

GAS BUILDUP IN SLOT, DW/DT =-1.8847E 00

IGNITION TIME, TIME (S) 114.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7566041.0	1700914.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8575792.0	1927915.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	91403.750	20548.387
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.99338035E 09	0.22332082E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11083658E 10	0.24917061E 09
THRUST COEFFICIENT	CF	1.6219501	1.6219501
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3379.5872	7450.7148
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	435696.63	960546.75
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	49.055740	108.14941
INERT MASS REMAINING (KG,LBM)	MIR	306.81055	676.40161
TOTAL BURN AREA (M**2,IN**2)	ABTOT	265.59546	411674.13
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	10.670206	651136.25
PROPELLANT MASS REMAINING (KG,LBM)	WF	18902.410	41672.688
TOTAL GAS MASS (KG,LBM)	WGTOT	1228.7300	2708.8865
RATIO OF SPECIFIC HEATS	GAMA	1.1615591	1.1615591
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.855906	28.342422
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.4536	5132.7227
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.85499287E-01	0.85499287E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.35903206E 09	520.73218
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.48175260E 11	69872.313
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.71849450E-02	0.28287190
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3426.9224	6168.4609
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	263.73096	408784.13
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	1.8643312	2889.7195
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	10.648683	649822.75
GAS VOLUME (M**3,IN**3)	VP	269.30151	16433799.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.35711206E 09	517.94751
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.47000736E 11	68168.813
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.71689636E-02	0.28224277
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3424.9238	6164.8633
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4805803	2294.9053
EXPANSION RATIO	EPR	6.7289114	6.7289114
PRESSURE RATIO	PEPO	0.23348019E-01	0.23348019E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	PA IN/SEC	TAU IN.	RATE IN/SEC	TAUT IN.
FORE	520.73	520.73	6168.46	0.03	0.000	0.0	16062.80	0.64	0.01	-0.64	0.2829	16.253	0.2828	16.253
30.000	520.73	520.73	6168.46	0.04	0.0	0.0	16062.80	1.05	0.0	-0.40	0.2829	16.253	0.2829	16.253
60.000	520.73	520.73	6168.46	0.06	0.0	0.0	16062.81	1.45	0.0	-0.40	0.2829	16.253	0.2829	16.253
90.000	520.73	520.73	6168.46	0.07	0.0	0.0	16062.82	1.85	0.0	-0.40	0.2829	16.253	0.2829	16.253
99.243	520.73	520.73	6168.46	0.08	0.0	0.0	16062.82	1.98	0.0	-0.12	0.2829	16.253	0.2829	16.253
118.800	520.73	520.73	6168.46	0.04	0.0	430.85	14772.07	1.02	23.63	0.92	0.2829	33.472	0.2829	33.472
148.800	520.73	520.73	6168.46	10.20	0.003	432.68	14909.48	235.42	234.50	0.10	0.2829	33.471	0.2829	33.471
178.800	520.73	520.72	6168.44	20.22	0.006	434.51	15044.84	470.81	235.49	0.10	0.2829	33.469	0.2829	33.469
208.800	520.72	520.70	6168.42	30.11	0.009	436.35	15178.12	707.20	236.49	0.10	0.2829	33.467	0.2829	33.467
238.800	520.71	520.67	6168.39	39.87	0.012	438.18	15309.33	944.58	237.48	0.10	0.2829	33.464	0.2829	33.464
268.800	520.68	520.63	6168.36	49.52	0.014	440.01	15438.47	1182.95	238.47	0.10	0.2829	33.462	0.2829	33.462
298.800	520.66	520.58	6168.32	59.05	0.017	441.84	15565.55	1422.32	239.46	0.10	0.2829	33.459	0.2829	33.459
328.800	520.63	520.52	6168.27	68.49	0.019	443.67	15690.55	1662.68	240.45	0.10	0.2829	33.456	0.2829	33.456
358.800	520.60	520.45	6168.22	77.83	0.022	445.51	15813.49	1904.03	241.44	0.09	0.2828	33.453	0.2828	33.453
381.179	520.57	520.40	6168.18	84.77	0.024	446.87	15903.84	2085.29	180.75	-0.51	0.2828	33.450	0.2828	33.453
450.993	520.56	520.36	6168.13	91.41	0.026	432.73	14914.32	2108.68	3.47	0.24	0.2828	33.429	0.2828	33.429
477.600	520.52	520.28	6168.07	99.66	0.028	434.43	15039.50	2317.94	208.81	-0.45	0.2828	33.426	0.2828	33.426
507.600	520.47	520.19	6167.99	108.83	0.031	436.34	15178.51	2554.26	236.42	0.10	0.2828	33.422	0.2828	33.422
537.600	520.41	520.08	6167.91	117.91	0.033	438.26	15315.23	2791.61	237.45	0.10	0.2828	33.417	0.2828	33.417
567.600	520.35	519.97	6167.82	126.89	0.036	440.18	15449.69	3030.00	238.48	0.10	0.2828	33.412	0.2828	33.412
597.600	520.29	519.84	6167.73	135.78	0.038	442.09	15581.86	3269.41	239.51	0.10	0.2828	33.407	0.2828	33.407
627.600	520.21	519.71	6167.63	144.60	0.041	444.01	15711.76	3509.85	240.54	0.10	0.2828	33.402	0.2828	33.402
657.600	520.14	519.57	6167.53	153.34	0.043	445.93	15839.39	3751.32	241.56	0.09	0.2827	33.396	0.2827	33.396
664.738	520.12	519.54	6167.50	155.43	0.044	446.38	15869.42	3809.51	57.63	-0.55	0.2827	33.391	0.2827	33.391
701.100	520.12	519.44	6167.34	167.66	0.047	430.20	14727.29	3812.87	25.32	0.10	0.2827	33.368	0.2827	33.368
731.100	520.02	519.28	6167.23	176.38	0.050	432.00	14862.38	4046.76	234.00	0.10	0.2827	33.365	0.2827	33.365
761.100	519.92	519.10	6167.10	185.02	0.052	433.81	14995.46	4281.63	234.97	0.10	0.2827	33.359	0.2827	33.359
791.100	519.82	518.92	6166.97	193.58	0.055	435.61	15126.51	4517.45	235.93	0.10	0.2827	33.352	0.2827	33.352
821.100	519.71	518.73	6166.84	202.07	0.057	437.42	15255.53	4754.24	236.89	0.10	0.2826	33.345	0.2826	33.345
851.100	519.59	518.53	6166.70	210.50	0.059	439.22	15382.53	4991.99	237.85	0.10	0.2826	33.338	0.2826	33.338
881.100	519.47	518.33	6166.56	218.87	0.062	441.02	15507.50	5230.70	238.81	0.10	0.2826	33.330	0.2826	33.330
911.100	519.35	518.12	6166.41	227.19	0.064	442.83	15630.45	5470.36	239.77	0.10	0.2826	33.323	0.2826	33.323
941.100	519.22	517.90	6166.26	235.45	0.066	444.63	15751.38	5710.99	240.73	0.10	0.2825	33.316	0.2825	33.316
963.627	519.13	517.73	6166.14	241.65	0.068	445.99	15840.84	5892.88	181.39	-0.50	0.2825	33.309	0.2825	33.309
1033.121	519.11	517.52	6165.81	258.40	0.073	432.63	14882.54	5917.95	0.0	0.25	0.2825	33.254	0.2825	33.254
1059.900	518.96	517.29	6165.68	264.88	0.075	435.14	15041.52	6128.51	210.04	-0.53	0.2825	33.250	0.2825	33.250
1089.900	518.80	517.03	6165.52	272.09	0.077	437.93	15215.69	6365.29	236.73	-0.05	0.2824	33.243	0.2824	33.243
1119.900	518.63	516.76	6165.37	279.30	0.079	440.72	15365.71	6603.61	238.22	-0.11	0.2824	33.236	0.2824	33.236
1149.900	518.45	516.49	6165.21	286.50	0.081	443.51	15551.57	6843.48	239.71	-0.17	0.2824	33.229	0.2824	33.229
1179.900	518.27	516.21	6165.04	293.71	0.083	446.31	15713.27	7084.89	241.19	-0.22	0.2823	33.222	0.2823	33.222
1209.900	518.09	515.92	6164.87	300.92	0.085	449.10	15870.82	7327.84	242.68	-0.28	0.2823	33.214	0.2823	33.214
1239.900	517.97	515.78	6164.82	303.08	0.086	0.00	16024.21	7449.88	121.71	-0.33	0.2823	32.786	0.2823	32.786
1258.900	517.94	515.78	6164.86	301.31	0.085	0.0	16119.21	7450.12	0.00	-0.24	0.2822	32.500	0.2822	32.500
AFT	517.95	515.78	6164.86	301.33	0.085	.....	16119.21	7450.71	0.0	-0.60	0.2822	32.500	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RH IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.2073E 02	5.2073E 02	6.1685E 03	7.7858E-02	1.6061E 04	-4.0658E-02	-2.2411E 00	2.8347E-01	5.6842E-01	1.9354E 00
AFT	1.1880E 02	5.2073E 02	5.2073E 02	6.1685E 03	4.1041E-02	1.6061E 04	0.0	0.0	0.0	0.0	1.0202E 00

GAS BUILDUP IN SLOT, DW/DT = 9.1519E-01

FOREWARD	3.8118E 02	5.2057E 02	5.2040E 02	6.1682E 03	8.4053E 01	1.6061E 04	2.8432E 00	1.5674E 02	2.8343E-01	2.8386E-01	2.0881E 03
AFT	4.5099E 02	5.2054E 02	5.2036E 02	6.1681E 03	8.4047E 01	1.6061E 04	2.0793E 01	1.1463E 03	2.8343E-01	2.8385E-01	2.0879E 03

GAS BUILDUP IN SLOT, DW/DT = 2.4286E-01

FOREWARD	6.6474E 02	5.2012E 02	5.1954E 02	6.1675E 03	1.5372E 02	1.6061E 04	3.4663E 00	1.9116E 02	2.8332E-01	2.8375E-01	3.8130E 03
AFT	7.0110E 02	5.2002E 02	5.1944E 02	6.1673E 03	1.5374E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.9129E 03

GAS BUILDUP IN SLOT, DW/DT = 1.0340E-01

FOREWARD	9.6363E 02	5.1913E 02	5.1773E 02	6.1661E 03	2.3851E 02	1.6061E 04	3.9812E 00	2.1974E 02	2.8309E-01	2.8351E-01	5.8969E 03
AFT	1.0331E 03	5.1891E 02	5.1752E 02	6.1658E 03	2.3858E 02	1.6061E 04	2.1342E 01	1.1780E 03	2.8307E-01	2.8349E-01	5.8966E 03

GAS BUILDUP IN SLOT, DW/DT = 2.5300E-01

WEB BURNOUT INCREMENT LOCATION
1.2098999E 03

IGNITION TIME, TIME (S) 115.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	7287618.0	1638322.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	8297369.0	1865323.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	71710.375	16121.145
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.10008072E 10	0.22499043E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11168023E 10	0.25106722E 09
THRUST COEFFICIENT	CF	1.6180477	1.6180477
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3280.6934	7232.6914
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	439026.75	967888.44
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	38.486465	84.848145
INERT MASS REMAINING (KG,LBM)	MIR	268.32397	591.55347
TOTAL BURN AREA (M**2,IN**2)	ABTOT	257.26489	398761.63
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	9.3317289	569457.31
PROPELLANT MASS REMAINING (KG,LBM)	WF	16531.281	36445.238
TOTAL GAS MASS (KG,LBM)	WGTOT	1196.4082	2637.6292
RATIO OF SPECIFIC HEATS	GAMA	1.1615515	1.1615515
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.851580	28.332886
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1564.1394	5131.6914
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.86229563E-01	0.86229563E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.34806477E 09	504.82544
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.48528785E 11	70385.063
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.71313977E-02	0.28076380
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3423.7410	6162.7344
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	255.67648	396299.38
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	1.5883675	2461.9758
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	9.3102045	568143.81
GAS VOLUME (M**3,IN**3)	VP	270.26855	16492808.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.34624819E 09	502.19092
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.47352414E 11	68678.875
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.71157403E-02	0.28014731
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1311.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3421.7402	6159.1328
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4810219	2295.5889
EXPANSION RATIO	EPR	6.7269077	6.7269077
PRESSURE RATIO	PEPO	0.23357596E-01	0.23357596E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

ORIGINAL PAGE IS OF POOR QUALITY

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PU PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DI LB/SEC	RR IN/SEC	TAU IN.	RHTO IN/SEC	TAUTO IN.
FORE	504.83	504.83	6162.73	0.13	0.000	0.0	16062.80	3.02	0.01	-3.01	0.2808	16.253	0.2829	16.253
30.000	504.83	504.83	6162.73	0.20	0.0	0.0	16062.80	4.92	0.0	-1.90	0.2808	16.253	0.2808	16.253
60.000	504.83	504.83	6162.73	0.28	0.0	0.0	16062.81	6.82	0.0	-1.90	0.2808	16.253	0.2808	16.253
90.000	504.83	504.83	6162.73	0.36	0.0	0.0	16062.82	8.72	0.0	-1.90	0.2808	16.253	0.2808	16.253
99.243	504.83	504.83	6162.73	0.39	0.0	0.0	16062.82	9.30	0.0	-0.59	0.2808	16.253	0.2808	16.253
118.800	504.82	504.82	6162.73	0.42	0.0	432.63	14894.19	9.36	20.29	-0.10	0.2808	33.755	0.2808	33.755
148.800	504.83	504.82	6162.73	10.83	0.004	434.47	15025.28	244.39	233.71	-1.32	0.2808	33.754	0.2808	33.754
178.800	504.82	504.81	6162.71	21.12	0.006	436.30	15154.38	480.46	234.70	-1.36	0.2808	33.752	0.2808	33.752
208.800	504.80	504.78	6162.70	31.28	0.009	438.14	15281.50	717.55	235.69	-1.40	0.2808	33.749	0.2808	33.749
238.800	504.79	504.75	6162.66	41.32	0.012	439.97	15406.64	955.66	236.68	-1.44	0.2808	33.747	0.2808	33.747
268.800	504.77	504.71	6162.63	51.25	0.015	441.80	15529.80	1194.80	237.66	-1.48	0.2808	33.745	0.2808	33.745
298.800	504.75	504.66	6162.59	61.09	0.017	443.63	15650.98	1434.96	238.64	-1.51	0.2807	33.742	0.2807	33.742
328.800	504.72	504.60	6162.54	70.82	0.020	445.46	15770.17	1676.13	239.63	-1.55	0.2807	33.739	0.2807	33.739
358.800	504.69	504.54	6162.48	80.47	0.023	447.29	15887.38	1918.32	240.61	-1.59	0.2807	33.736	0.2807	33.736
380.896	504.66	504.48	6162.43	87.54	0.025	448.63	15972.44	2097.91	177.84	-1.75	0.2807	33.733	0.2807	33.733
451.276	504.65	504.45	6162.38	94.07	0.027	434.55	15030.20	2121.37	2.22	-3.32	0.2807	33.712	0.2807	33.712
477.600	504.61	504.37	6162.32	102.49	0.029	436.24	15148.28	2329.01	205.91	-1.73	0.2807	33.709	0.2807	33.709
507.600	504.56	504.27	6162.23	111.96	0.032	438.16	15280.80	2566.04	235.63	-1.40	0.2807	33.704	0.2807	33.704
537.600	504.50	504.16	6162.15	121.34	0.034	440.08	15411.15	2804.15	236.66	-1.45	0.2807	33.700	0.2807	33.700
567.600	504.44	504.04	6162.05	130.63	0.037	441.99	15539.31	3043.31	237.68	-1.48	0.2807	33.695	0.2807	33.695
597.600	504.37	503.92	6161.96	139.84	0.040	443.91	15665.30	3283.53	238.70	-1.52	0.2807	33.690	0.2807	33.690
627.600	504.30	503.78	6161.85	148.98	0.042	445.83	15789.10	3524.82	239.72	-1.56	0.2806	33.684	0.2806	33.684
657.600	504.22	503.64	6161.74	158.05	0.045	447.74	15910.73	3767.15	240.74	-1.60	0.2806	33.679	0.2806	33.679
664.455	504.20	503.61	6161.72	160.13	0.045	447.74	15938.21	3823.21	55.12	-0.93	0.2806	33.609	0.2806	33.609
701.100	504.20	503.51	6161.56	172.08	0.049	431.97	14849.15	3827.17	22.16	-1.76	0.2806	33.651	0.2806	33.651
731.100	504.11	503.34	6161.43	181.11	0.051	433.81	14977.92	4061.70	233.21	-1.32	0.2806	33.648	0.2806	33.648
761.100	504.01	503.17	6161.30	190.07	0.054	435.61	15104.76	4297.24	234.18	-1.36	0.2806	33.641	0.2806	33.641
791.100	503.90	502.98	6161.16	198.96	0.056	437.41	15229.65	4533.78	235.14	-1.40	0.2805	33.634	0.2805	33.634
821.100	503.79	502.79	6161.02	207.78	0.059	439.22	15352.61	4771.30	236.09	-1.44	0.2805	33.627	0.2805	33.627
851.100	503.68	502.59	6160.88	216.54	0.061	441.02	15473.63	5009.82	237.04	-1.48	0.2805	33.620	0.2805	33.620
881.100	503.56	502.38	6160.72	225.25	0.064	442.82	15592.71	5249.32	237.99	-1.51	0.2805	33.613	0.2805	33.613
911.100	503.44	502.17	6160.57	233.90	0.066	444.63	15709.85	5489.80	238.94	-1.55	0.2804	33.606	0.2804	33.606
941.100	503.31	501.94	6160.40	242.52	0.068	446.43	15825.05	5731.27	239.89	-1.59	0.2804	33.598	0.2804	33.598
963.344	503.21	501.77	6160.28	248.90	0.070	447.75	15909.22	5911.49	178.48	-1.76	0.2804	33.591	0.2804	33.591
1033.404	503.20	501.56	6159.94	265.41	0.075	434.43	14988.62	5936.80	0.0	-3.32	0.2803	33.537	0.2803	33.537
1059.900	503.05	501.33	6159.80	272.26	0.077	436.91	15132.62	6145.69	207.11	-1.78	0.2803	33.533	0.2803	33.533
1089.900	502.88	501.07	6159.63	279.96	0.079	439.70	15292.07	6383.09	235.91	-1.49	0.2803	33.526	0.2803	33.526
1119.900	502.71	500.79	6159.45	287.67	0.081	442.50	15447.72	6622.03	237.38	-1.57	0.2803	33.518	0.2803	33.518
1149.900	502.54	500.52	6159.28	295.37	0.083	445.29	15599.56	6862.52	238.86	-1.64	0.2802	33.511	0.2802	33.511
1179.900	502.36	500.23	6159.09	303.07	0.086	448.08	15747.60	7104.55	240.33	-1.71	0.2802	33.504	0.2802	33.504
1209.900	502.25	500.09	6159.04	305.58	0.086	0.00	15891.82	7226.85	120.53	-1.77	0.2802	33.238	0.2802	33.238
1239.900	502.21	500.09	6159.10	302.98	0.085	0.00	16032.25	7228.67	0.00	-1.82	0.2801	32.786	0.2801	32.786
1258.900	502.19	500.09	6159.13	301.40	0.085	0.0	16119.21	7229.84	0.00	-1.18	0.2801	32.500	0.2801	32.500
AFT	502.19	500.09	6159.13	301.52	0.085	.....	16119.21	7232.69	0.0	-2.85	0.2801	32.500	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	5.0483E 02	5.0483E 02	6.1627E 03	3.8419E-01	1.6061E 04	-4.0365E-02	-2.2411E 00	2.8143E-01	5.6842E-01	9.2639E 00
AFT	1.1880E 02	5.0482E 02	5.0482E 02	6.1627E 03	3.8817E-01	1.6061E 04	0.0	0.0	0.0	0.0	9.3600E 00

GAS BUILDUP IN SLOT, DW/DT =-9.6021E-02

FOREWARD	3.8090E 02	5.0466E 02	5.0448E 02	6.1624E 03	8.7125E 01	1.6061E 04	1.5873E 00	8.8141E 01	2.8139E-01	2.8343E-01	2.0995E 03
AFT	4.5128E 02	5.0463E 02	5.0445E 02	6.1624E 03	8.7267E 01	1.6061E 04	1.8556E 01	1.0304E 03	2.8138E-01	2.8343E-01	2.1028E 03

GAS BUILDUP IN SLOT, DW/DT =-3.3194E 00

FOREWARD	6.6445E 02	5.0420E 02	5.0361E 02	6.1617E 03	1.5900E 02	1.6061E 04	2.2028E 00	1.2237E 02	2.8127E-01	2.8332E-01	3.8254E 03
AFT	7.0110E 02	5.0411E 02	5.0351E 02	6.1616E 03	1.5910E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.8272E 03

GAS BUILDUP IN SLOT, DW/DT =-1.7555E 00

FOREWARD	9.6334E 02	5.0321E 02	5.0177E 02	6.1603E 03	2.4667E 02	1.6061E 04	2.7225E 00	1.5136E 02	2.8104E-01	2.8309E-01	5.9142E 03
AFT	1.0334E 03	5.0300E 02	5.0156E 02	6.1599E 03	2.4689E 02	1.6061E 04	1.9279E 01	1.0720E 03	2.8101E-01	2.8307E-01	5.9175E 03

GAS BUILDUP IN SLOT, DW/DT =-3.3194E 00

WEB BURNOUT INCREMENT LOCATION
1.1798999E 03

IGNITION TIME, TIME (S) 116.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	6810978.0	1531169.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	7820729.0	1758170.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	51814.234	11648.305
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.10078564E 10	0.22657515E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11248614E 10	0.25287894E 09
THRUST COEFFICIENT	CF	1.6141634	1.6141634
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	3098.7073	6831.4805
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	442216.44	974920.50
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	27.808334	61.306885
INERT MASS REMAINING (KG,LBM)	MIR	240.51579	530.24658
TOTAL BURN AREA (M**2,IN**2)	ABTOT	243.73354	377787.75
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	8.3646154	510440.38
PROPELLANT MASS REMAINING (KG,LBM)	WF	14818.023	32668.156
TOTAL GAS MASS (KG,LBM)	WGTOT	1134.1223	2500.3118
RATIO OF SPECIFIC HEATS	GAMA	1.1615372	1.1615372
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.843932	28.316025
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1563.5833	5129.8672
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.86680889E-01	0.86680889E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.32870298E 09	476.74365
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.48867148E 11	70875.813
BURN AREA (M**2,IN**2)	AHR	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.70351474E-02	0.27697444
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3418.1248	6152.6250
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	242.30620	375575.38
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	1.4271374	2212.0681
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	8.3430910	509126.88
GAS VOLUME (M**3,IN**3)	VP	270.94067	16533828.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.32704870E 09	474.34424
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.47689048E 11	69167.125
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.70200153E-02	0.27637863
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3416.1326	6149.0391
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4814501	2296.2529
EXPANSION RATIO	EPR	6.7249622	6.7249622
PRESSURE RATIO	PEPO	0.23367308E-01	0.23367308E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PU PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RRTO IN/SEC	TAUTO IN.
FORE	476.74	476.74	6152.63	0.23	0.000	0.0	16062.80	5.33	0.01	-5.33	0.2770	16.253	0.2769	16.253
30.000	476.74	476.74	6152.63	0.38	0.0	0.0	16062.80	8.69	0.0	-3.36	0.2770	16.253	0.2770	16.253
60.000	476.74	476.74	6152.63	0.53	0.0	0.0	16062.81	12.05	0.0	-3.36	0.2770	16.253	0.2770	16.253
90.000	476.74	476.74	6152.63	0.68	0.0	0.0	16062.82	15.40	0.0	-3.36	0.2770	16.253	0.2770	16.253
99.243	476.74	476.74	6152.63	0.72	0.0	0.0	16062.82	16.44	0.0	-1.03	0.2770	16.253	0.2770	16.253
118.800	476.74	476.74	6152.63	0.82	0.0	434.39	15015.90	17.51	17.75	-1.11	0.2770	34.036	0.2770	34.036
148.800	476.75	476.74	6152.62	11.72	0.004	436.23	15133.76	251.74	231.49	-2.74	0.2770	34.034	0.2770	34.034
178.800	476.74	476.73	6152.60	22.50	0.007	438.07	15249.84	487.03	232.47	-2.81	0.2770	34.032	0.2770	34.032
208.800	476.72	476.70	6152.58	33.17	0.010	439.90	15364.13	723.36	233.45	-2.88	0.2770	34.030	0.2770	34.030
238.800	476.71	476.67	6152.55	43.74	0.013	441.73	15476.64	960.73	234.42	-2.95	0.2770	34.028	0.2770	34.028
268.800	476.69	476.63	6152.51	54.21	0.015	443.57	15587.37	1199.14	235.39	-3.02	0.2770	34.025	0.2770	34.025
298.800	476.67	476.57	6152.46	64.59	0.018	445.40	15696.31	1438.59	236.36	-3.09	0.2770	34.023	0.2770	34.023
328.800	476.63	476.51	6152.40	74.89	0.021	447.23	15803.48	1679.07	237.33	-3.15	0.2770	34.020	0.2770	34.020
358.800	476.60	476.44	6152.34	85.11	0.024	449.06	15908.86	1920.58	238.29	-3.22	0.2769	34.017	0.2769	34.017
380.614	476.57	476.38	6152.29	92.50	0.026	448.74	15984.36	2097.05	173.56	-2.91	0.2769	33.753	0.2769	33.753
451.558	476.56	476.35	6152.24	98.83	0.028	436.33	15137.34	2121.69	1.93	-6.87	0.2769	33.993	0.2769	33.993
477.600	476.53	476.27	6152.16	107.63	0.030	438.00	15242.26	2326.41	201.77	-2.95	0.2769	33.990	0.2769	33.990
507.600	476.47	476.17	6152.07	117.67	0.033	439.92	15361.29	2562.69	233.39	-2.89	0.2769	33.985	0.2769	33.985
537.600	476.41	476.05	6151.98	127.63	0.036	441.84	15478.37	2800.05	234.40	-2.96	0.2769	33.980	0.2769	33.980
567.600	476.35	475.93	6151.88	137.50	0.039	443.76	15593.48	3038.48	235.40	-3.04	0.2769	33.975	0.2769	33.975
597.600	476.28	475.80	6151.77	147.31	0.042	445.67	15706.64	3278.00	236.41	-3.11	0.2769	33.970	0.2769	33.970
627.600	476.21	475.66	6151.65	157.05	0.044	447.59	15817.85	3518.58	237.41	-3.17	0.2768	33.965	0.2768	33.965
657.600	476.16	475.59	6151.59	161.42	0.046	0.00	15927.09	3640.78	118.96	-3.24	0.2768	33.919	0.2768	33.919
664.455	476.15	475.57	6151.58	162.41	0.046	447.74	15951.78	3668.72	27.19	-0.75	0.2768	33.609	0.2768	33.609
701.100	476.15	475.49	6151.43	173.34	0.049	433.73	14970.61	3674.21	19.62	-3.56	0.2768	33.931	0.2768	33.931
731.100	476.06	475.32	6151.30	183.01	0.052	435.57	15046.18	3907.94	231.00	-2.73	0.2768	33.929	0.2768	33.929
761.100	475.96	475.15	6151.16	192.62	0.054	437.37	15200.01	4142.69	231.96	-2.80	0.2768	33.922	0.2768	33.922
791.100	475.86	474.96	6151.00	202.17	0.057	439.18	15312.11	4378.45	232.90	-2.87	0.2768	33.915	0.2768	33.915
821.100	475.76	474.77	6150.85	211.65	0.060	440.98	15422.46	4615.22	233.84	-2.94	0.2767	33.908	0.2767	33.908
851.100	475.65	474.57	6150.69	221.09	0.062	442.78	15531.07	4852.99	234.77	-3.00	0.2767	33.901	0.2767	33.901
881.100	475.53	474.36	6150.52	230.48	0.065	444.59	15637.95	5091.77	235.71	-3.07	0.2767	33.894	0.2767	33.894
911.100	475.41	474.14	6150.35	239.82	0.068	446.39	15743.09	5331.54	236.64	-3.14	0.2767	33.886	0.2767	33.886
941.100	475.28	473.92	6150.17	249.13	0.070	448.19	15846.48	5572.31	237.57	-3.20	0.2766	33.879	0.2766	33.879
963.063	475.18	473.74	6150.03	255.94	0.072	448.75	15921.08	5749.58	174.37	-2.91	0.2766	33.753	0.2766	33.753
1033.685	475.17	473.56	6149.71	271.30	0.077	436.22	15094.05	5776.03	0.0	-6.83	0.2765	33.817	0.2765	33.817
1059.900	475.03	473.33	6149.55	278.71	0.079	438.67	15223.40	5981.94	202.96	-2.96	0.2765	33.813	0.2765	33.813
1089.900	474.87	473.06	6149.36	287.15	0.081	441.46	15368.19	6218.48	233.65	-2.90	0.2765	33.806	0.2765	33.806
1119.900	474.70	472.79	6149.16	295.59	0.083	444.26	15509.52	6456.55	235.10	-2.98	0.2765	33.799	0.2765	33.799
1149.900	474.53	472.50	6148.96	304.03	0.086	447.05	15647.39	6696.16	236.55	-3.06	0.2764	33.792	0.2764	33.792
1179.900	474.42	472.36	6148.89	307.01	0.087	0.00	15761.80	6817.92	118.64	-3.13	0.2764	33.690	0.2764	33.690
1209.900	474.39	472.36	6148.95	304.63	0.086	0.00	15912.76	6821.10	0.00	-3.18	0.2764	33.238	0.2764	33.238
1239.900	474.36	472.36	6149.00	302.36	0.085	0.00	16040.25	6824.35	0.00	-3.25	0.2764	32.786	0.2764	32.786
1258.900	474.34	472.36	6149.04	300.97	0.085	0.0	16119.21	6826.44	0.00	-2.09	0.2764	32.500	0.2764	32.500
AFT	474.34	472.36	6149.03	301.19	0.085	.....	16119.21	6831.48	0.0	-5.04	0.2764	32.500	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	4.7674E 02	4.7674E 02	6.1526E 03	7.1936E-01	1.6061E 04	-3.9831E-02	-2.2411E 00	2.7771E-01	5.6842E-01	1.6398E 01
AFT	1.1880E 02	4.7674E 02	4.7674E 02	6.1526E 03	7.6799E-01	1.6061E 04	0.0	0.0	0.0	0.0	1.7507E 01

GAS BUILDUP IN SLOT, DW/DT =-1.1085E 00

FOREWARD	3.8061E 02	4.7657E 02	4.7638E 02	6.1523E 03	9.2119E 01	1.6061E 04	1.3544E 00	7.6220E 01	2.7766E-01	2.8139E-01	2.6984E 03
AFT	4.5156E 02	4.7654E 02	4.7635E 02	6.1522E 03	9.2426E 01	1.6061E 04	1.6406E 01	9.2324E 02	2.7765E-01	2.8138E-01	2.1053E 03

GAS BUILDUP IN SLOT, DW/DT =-6.8748E 00

FOREWARD	6.6445E 02	4.7615E 02	4.7557E 02	6.1516E 03	1.6139E 02	1.6061E 04	1.9327E 00	1.0880E 02	2.7755E-01	2.8132E-01	3.6706E 03
AFT	7.0110E 02	4.7607E 02	4.7549E 02	6.1514E 03	1.6157E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.6742E 03

GAS BUILDUP IN SLOT, DW/DT =-3.5565E 00

FOREWARD	9.6306E 02	4.7518E 02	4.7374E 02	6.1500E 03	2.5382E 02	1.6061E 04	2.4758E 00	1.3951E 02	2.7730E-01	2.8104E-01	5.7521E 03
AFT	1.0337E 03	4.7499E 02	4.7356E 02	6.1497E 03	.5421E 02	1.6061E 04	1.7151E 01	9.6653E 02	2.7727E-01	2.8101E-01	5.7589E 03

GAS BUILDUP IN SLOT, DW/DT =-6.8266E 00

IGNITION TIME, TIME (S) 117.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	6024906.0	1354453.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	7034657.0	1581454.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	51157.879	11500.750
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.10142743E 10	0.22801797E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11322890E 10	0.25454875E 09
THRUST COEFFICIENT	CF	1.6135006	1.6135006
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	2790.1333	6151.1914
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	445160.88	981411.81
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	27.456055	60.530273
INERT MASS REMAINING (KG,LBM)	MIR	213.05972	469.71631
TOTAL BURN AREA (M**2,IN**2)	ABTOT	220.56741	341880.19
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	7.4097538	452171.13
PROPELLANT MASS REMAINING (KG,LBM)	WF	13126.477	28938.930
TOTAL GAS MASS (KG,LBM)	WGTOT	1024.7295	2259.1423
RATIO OF SPECIFIC HEATS	GAMA	1.1615133	1.1615133
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.830872	28.287231
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1562.6331	5126.7500
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.86339235E-01	0.86339235E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.29561139E 09	428.74829
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.49179263E 11	71328.500
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.68616085E-02	0.27014220
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3408.5261	6135.3477
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	219.30080	339916.94
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	1.2664294	1962.9705
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	7.3882294	450457.63
GAS VOLUME (M**3,IN**3)	VP	271.75098	16583271.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.29421722E 09	426.72607
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.47999656E 11	69617.625
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.68473592E-02	0.26958114
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.064153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3406.5405	6131.7734
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4818535	2296.9789
EXPANSION RATIO	EPR	6.7231293	6.7231293
PRESSURE RATIO	PEPO	0.23377027E-01	0.23377027E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

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INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RRTO IN/SEC	TAUTO IN.
FORE	428.75	428.75	6135.35	0.44	0.000	0.0	16062.80	9.12	0.01	-9.12	0.2701	16.253	0.2701	16.253
30.000	428.75	428.75	6135.35	0.72	0.0	0.0	16062.80	14.87	0.0	-5.75	0.2701	16.253	0.2701	16.253
60.000	428.75	428.75	6135.35	1.00	0.0	0.0	16062.81	20.62	0.0	-5.75	0.2701	16.253	0.2701	16.253
90.000	428.75	428.75	6135.35	1.28	0.0	0.0	16062.82	26.37	0.0	-5.75	0.2701	16.253	0.2701	16.253
99.243	428.75	428.75	6135.35	1.37	0.0	0.0	16062.82	28.14	0.0	-1.77	0.2701	16.253	0.2701	16.253
118.800	428.75	428.75	6135.35	1.60	0.0	436.13	15136.46	30.88	15.26	-2.77	0.2701	34.313	0.2701	34.313
148.800	428.75	428.75	6135.34	13.48	0.004	437.97	15241.21	262.63	226.69	-5.07	0.2701	34.311	0.2701	34.311
178.800	428.75	428.73	6135.32	25.25	0.007	439.81	15344.38	495.42	227.64	-5.15	0.2701	34.309	0.2701	34.309
208.800	428.73	428.71	6135.29	36.92	0.011	441.64	15445.97	729.24	228.59	-5.23	0.2701	34.307	0.2701	34.307
238.800	428.72	428.67	6135.25	48.50	0.014	443.48	15545.97	964.08	229.54	-5.30	0.2701	34.305	0.2701	34.305
268.800	428.70	428.63	6135.20	60.00	0.017	445.31	15644.39	1199.95	230.48	-5.38	0.2701	34.302	0.2701	34.302
298.800	428.67	428.57	6135.14	71.41	0.020	447.14	15741.22	1436.83	231.43	-5.45	0.2701	34.300	0.2701	34.300
328.800	428.64	428.51	6135.07	82.74	0.023	448.97	15836.47	1674.73	232.37	-5.53	0.2701	34.297	0.2701	34.297
358.800	428.62	428.47	6135.04	88.26	0.025	0.00	15930.13	1796.75	116.42	-5.60	0.2701	34.047	0.2701	34.047
380.614	428.61	428.44	6135.01	92.23	0.026	448.74	15997.24	1885.47	84.61	-4.11	0.2701	33.753	0.2701	33.753
451.835	428.60	428.41	6134.96	98.23	0.028	438.09	15243.20	1913.42	1.65	-12.67	0.2701	34.270	0.2701	34.270
477.600	428.56	428.33	6134.89	107.89	0.031	439.74	15335.34	2113.76	195.48	-4.87	0.2701	34.267	0.2701	34.267
507.600	428.52	428.23	6134.79	119.02	0.034	441.66	15441.01	2347.52	228.53	-5.22	0.2701	34.262	0.2701	34.262
537.600	428.46	428.12	6134.68	130.09	0.037	443.58	15544.95	2582.34	229.52	-5.30	0.2701	34.257	0.2701	34.257
567.600	428.40	428.00	6134.56	141.08	0.040	445.50	15647.14	2818.22	230.50	-5.38	0.2701	34.252	0.2701	34.252
597.600	428.33	427.87	6134.43	152.01	0.043	447.41	15747.60	3055.16	231.48	-5.46	0.2700	34.247	0.2700	34.247
627.600	428.29	427.80	6134.37	157.09	0.044	0.00	15846.32	3176.67	115.98	-5.53	0.2700	34.229	0.2700	34.229
657.600	428.29	427.80	6134.38	156.41	0.044	0.00	15943.30	3182.27	0.00	-5.60	0.2700	33.919	0.2700	33.919
664.455	428.28	427.79	6134.36	157.57	0.045	447.74	15965.21	3210.08	26.52	-1.29	0.2700	33.609	0.2700	33.609
701.100	428.28	427.72	6134.24	167.14	0.047	435.47	15090.90	3218.24	17.12	-6.51	0.2700	34.208	0.2700	34.208
731.100	428.20	427.57	6134.09	178.00	0.050	437.31	15193.40	3449.48	226.22	-5.03	0.2700	34.206	0.2700	34.206
761.100	428.11	427.40	6133.94	188.80	0.053	439.11	15294.36	3681.74	227.15	-5.11	0.2700	34.199	0.2700	34.199
791.100	428.01	427.23	6133.77	199.54	0.056	440.92	15393.77	3914.99	228.07	-5.18	0.2699	34.192	0.2699	34.192
821.100	427.92	427.04	6133.60	210.23	0.059	442.72	15491.64	4149.23	228.98	-5.26	0.2699	34.185	0.2699	34.185
851.100	427.81	426.84	6133.42	220.87	0.062	444.52	15587.97	4384.45	229.89	-5.33	0.2699	34.177	0.2699	34.177
881.100	427.70	426.64	6133.23	231.47	0.065	446.33	15682.76	4620.65	230.80	-5.40	0.2699	34.170	0.2699	34.170
911.100	427.59	426.43	6133.03	242.02	0.068	448.13	15776.00	4857.83	231.71	-5.47	0.2698	34.163	0.2698	34.163
941.100	427.52	426.31	6132.94	246.71	0.070	0.00	15867.71	4979.45	116.08	-5.54	0.2698	34.047	0.2698	34.047
963.063	427.47	426.23	6132.87	250.13	0.071	448.75	15933.87	5068.62	85.09	-4.09	0.2698	33.753	0.2698	33.753
1033.962	427.46	426.08	6132.59	263.85	0.075	437.98	15198.19	5098.24	0.0	-12.50	0.2698	34.094	0.2698	34.094
1059.900	427.34	425.87	6132.41	272.35	0.077	440.41	15313.32	5299.75	196.67	-4.85	0.2698	34.090	0.2698	34.090
1089.900	427.19	425.62	6132.20	282.13	0.080	443.20	15443.58	5533.73	228.81	-5.18	0.2697	34.083	0.2697	34.083
1119.900	427.03	425.35	6131.98	291.90	0.083	445.99	15570.73	5769.23	230.22	-5.27	0.2697	34.075	0.2697	34.075
1149.900	426.88	425.08	6131.75	301.68	0.085	448.79	15694.76	6006.21	231.64	-5.36	0.2696	34.068	0.2696	34.068
1179.900	426.78	424.94	6131.66	305.53	0.086	0.00	15815.68	6127.82	116.17	-5.45	0.2696	33.690	0.2696	33.690
1209.900	426.76	424.94	6131.70	303.54	0.086	0.00	15933.49	6133.35	0.00	-5.53	0.2696	33.238	0.2696	33.238
1239.900	426.74	424.94	6131.75	301.65	0.085	0.00	16048.18	6138.96	0.00	-5.61	0.2696	32.786	0.2696	32.786
1258.900	426.72	424.94	6131.77	300.50	0.085	0.0	16119.21	6142.55	0.00	-3.60	0.2696	32.500	0.2696	32.500
AFT	426.73	424.94	6131.77	300.92	0.085	.....	16119.21	6151.19	0.0	-8.64	0.2696	32.500	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	4.2875E 02	4.2875E 02	6.1353E 03	1.3683E 00	1.6061E 04	-3.8858E-02	-2.2411E 00	2.7092E-01	5.6842E-01	2.8102E 01
AFT	1.1880E 02	4.2875E 02	4.2875E 02	6.1353E 03	1.5034E 00	1.6061E 04	0.0	0.0	0.0	0.0	3.0876E 01

GAS BUILDUP IN SLOT, DW/DT =-2.7741E 00

FOREWARD	3.8061E 02	4.2861E 02	4.2844E 02	6.1350E 03	9.1922E 01	1.6061E 04	1.0982E 00	6.3346E 01	2.7088E-01	2.8139E-01	1.8866E 03
AFT	4.5184E 02	4.2858E 02	4.2841E 02	6.1350E 03	9.2544E 01	1.6061E 04	1.4170E 01	8.1738E 02	2.7087E-01	2.7765E-01	1.8992E 03

GAS BUILDUP IN SLOT, DW/DT =-1.2675E 01

FOREWARD	6.6445E 02	4.2828E 02	4.2779E 02	6.1344E 03	1.5671E 02	1.6061E 04	1.6527E 00	9.5368E 01	2.7078E-01	2.8332E-01	3.21[illegible]7E 03
AFT	7.0110E 02	4.2822E 02	4.2772E 02	6.1342E 03	1.5705E 02	1.6061E 04	0.0	0.0	0.0	0.0	3.21[illegible]2E 03

GAS BUILDUP IN SLOT, DW/DT =-6.5063E 00

FOREWARD	9.6306E 02	4.2747E 02	4.2623E 02	6.1329E 03	2.4826E 02	1.6061E 04	2.1942E 00	1.2672E 02	2.7055E-01	2.8104E-01	5.0708E 03
AFT	1.0340E 03	4.2732E 02	4.2608E 02	6.1326E 03	2.4895E 02	1.6061E 04	1.4931E 01	8.6240E 02	2.7053E-01	2.7727E-01	5.0833E 03

GAS BUILDUP IN SLOT, DW/DT =-1.2497E 01

WEB BURNOUT INCREMENT LOCATION
1.1498999E 03

ORIGINAL PAGE IS
OF POOR QUALITY

IGNITION TIME, TIME (S) 118.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	5094418.0	1145271.0
TOTAL VACUUM THRUST (N,LBF)	FTVAC	6104169.0	1372272.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	49994.965	11239.316
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.10198339E 10	0.22926781E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11388585E 10	0.25602560E 09
THRUST COEFFICIENT	CF	1.6132889	1.6132889
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	2423.5190	5342.9453
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	447767.69	987158.88
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	26.831924	59.154297
INERT MASS REMAINING (KG,LBM)	MIR	186.22778	410.56201
TOTAL BURN AREA (M**2,IN**2)	ABTOT	194.92093	302128.06
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	6.4765978	395226.44
PROPELLANT MASS REMAINING (KG,LBM)	WF	11473.375	25294.469
TOTAL GAS MASS (KG,LBM)	WGTOT	893.34448	1969.4878
RATIO OF SPECIFIC HEATS	GAMA	1.1614780	1.1614780
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.814447	28.251022
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1561.2783	5122.3047
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.86511791E-01	0.86511791E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.25642030E 09	371.90625
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.49455272E 11	71728.813
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.66362694E-02	0.26127058
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3395.9480	6112.7070
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	193.81133	300408.19
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	1.1093969	1719.5698
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	6.4550734	393912.94
GAS VOLUME (M**3,IN**3)	VP	272.54272	16631595.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.25527146E 09	370.23999
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.48274371E 11	70016.063
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.66228546E-02	0.26074237
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3393.9731	6109.1523
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4822178	2297.4424
EXPANSION RATIO	EPR	6.7214804	6.7214804
PRESSURE RATIO	PEPO	0.23386616E-01	0.23386616E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RH IN/SEC	TAU IN.	RBT IN/SEC	TAUT IN.
FORE	371.91	371.91	6112.71	0.61	0.000	0.0	16062.80	10.83	0.01	-10.82	0.2613	16.253	0.2612	16.253
30.000	371.91	371.91	6112.71	0.99	0.0	0.0	16062.80	17.66	0.0	-6.82	0.2613	16.253	0.2613	16.253
60.000	371.91	371.91	6112.71	1.37	0.0	0.0	16062.81	24.48	0.0	-6.82	0.2613	16.253	0.2613	16.253
90.000	371.91	371.91	6112.71	1.75	0.0	0.0	16062.82	31.30	0.0	-6.82	0.2613	16.253	0.2613	16.253
99.243	371.91	371.91	6112.71	1.87	0.0	0.0	16062.82	33.41	0.0	-2.10	0.2613	16.253	0.2613	16.253
118.800	371.91	371.91	6112.71	2.18	0.0	437.83	15254.50	36.97	12.82	-3.60	0.2613	34.583	0.2613	34.583
148.800	371.91	371.91	6112.70	15.43	0.005	439.67	15346.43	263.25	220.09	-6.19	0.2613	34.582	0.2613	34.582
178.800	371.90	371.89	6112.67	28.58	0.008	441.51	15436.96	490.53	221.02	-6.26	0.2613	34.580	0.2613	34.580
208.800	371.89	371.86	6112.64	41.64	0.012	443.34	15526.11	718.81	221.93	-6.34	0.2613	34.577	0.2613	34.577
238.800	371.87	371.82	6112.59	54.62	0.016	445.17	15613.86	948.07	222.85	-6.41	0.2613	34.575	0.2613	34.575
268.800	371.85	371.77	6112.52	67.52	0.019	447.00	15700.22	1178.32	223.76	-6.48	0.2613	34.572	0.2613	34.572
298.800	371.82	371.71	6112.45	80.35	0.023	448.84	15785.19	1409.55	224.68	-6.55	0.2612	34.570	0.2612	34.570
328.800	371.80	371.67	6112.41	86.69	0.025	0.00	15868.77	1528.73	112.57	-6.62	0.2612	34.341	0.2612	34.341
358.800	371.80	371.67	6112.41	86.62	0.025	0.00	15950.96	1535.41	0.00	-6.68	0.2612	34.047	0.2612	34.047
360.614	371.79	371.65	6112.38	91.18	0.026	448.74	16009.84	1622.14	81.83	-4.90	0.2612	33.753	0.2612	33.753
452.106	371.79	371.63	6112.34	96.79	0.027	439.80	15346.61	1650.39	1.38	-15.43	0.2612	34.540	0.2612	34.540
477.600	371.75	371.55	6112.25	107.59	0.030	441.44	15426.49	1843.90	187.80	-5.70	0.2612	34.537	0.2612	34.537
507.600	371.71	371.46	6112.13	120.22	0.034	443.36	15519.07	2072.11	221.88	-6.33	0.2612	34.532	0.2612	34.532
537.600	371.65	371.35	6112.01	132.77	0.038	445.28	15610.14	2301.34	222.83	-6.41	0.2612	34.527	0.2612	34.527
567.600	371.59	371.23	6111.87	145.27	0.041	447.19	15699.68	2531.60	223.78	-6.48	0.2612	34.522	0.2612	34.522
597.600	371.53	371.10	6111.72	157.71	0.045	449.11	15787.70	2762.88	224.72	-6.55	0.2612	34.517	0.2612	34.517
627.600	371.49	371.03	6111.65	163.65	0.046	0.00	15874.20	2882.10	112.60	-6.62	0.2611	34.229	0.2611	34.229
657.600	371.49	371.03	6111.65	163.15	0.046	0.00	15959.17	2888.80	0.00	-6.69	0.2611	33.919	0.2611	33.919
664.455	371.48	371.01	6111.64	164.50	0.047	447.74	15978.37	2915.98	25.65	-1.54	0.2611	33.609	0.2611	33.609
701.100	371.48	370.96	6111.52	173.39	0.049	437.17	15208.70	2925.27	14.65	-7.91	0.2611	34.478	0.2611	34.478
731.100	371.40	370.80	6111.34	185.76	0.053	439.00	15298.40	3151.06	219.63	-6.16	0.2611	34.476	0.2611	34.476
761.100	371.31	370.64	6111.16	198.06	0.056	440.81	15386.75	3377.83	220.53	-6.24	0.2611	34.469	0.2611	34.469
791.100	371.22	370.46	6110.96	210.32	0.060	442.61	15473.74	3605.55	221.41	-6.31	0.2611	34.462	0.2611	34.462
821.100	371.12	370.27	6110.75	222.54	0.063	444.42	15559.39	3834.23	222.29	-6.38	0.2610	34.455	0.2610	34.455
851.100	371.02	370.07	6110.53	234.71	0.066	446.22	15643.69	4063.85	223.17	-6.45	0.2610	34.447	0.2610	34.447
881.100	370.90	369.86	6110.30	246.85	0.070	448.02	15726.64	4294.42	224.05	-6.52	0.2610	34.440	0.2610	34.440
911.100	370.85	369.75	6110.19	252.44	0.071	0.00	15808.24	4413.24	112.24	-6.58	0.2609	34.341	0.2609	34.341
941.100	370.84	369.75	6110.21	251.54	0.071	0.00	15868.49	4419.88	0.00	-6.64	0.2609	34.047	0.2609	34.047
963.063	370.79	369.67	6110.13	255.63	0.072	448.75	15946.39	4507.06	82.29	-4.90	0.2609	33.753	0.2609	33.753
1034.233	370.78	369.55	6109.86	268.28	0.076	439.70	15299.89	4537.00	0.0	-15.30	0.2609	34.364	0.2609	34.364
1059.900	370.67	369.34	6109.65	278.09	0.079	442.10	15401.37	4731.66	188.95	-5.71	0.2609	34.360	0.2609	34.360
1089.900	370.53	369.09	6109.39	289.52	0.082	444.90	15517.41	4960.09	222.13	-6.31	0.2608	34.352	0.2608	34.352
1119.900	370.38	368.82	6109.13	300.94	0.085	447.69	15630.66	5189.99	223.50	-6.40	0.2608	34.345	0.2608	34.345
1149.900	370.29	368.69	6109.02	305.76	0.087	0.00	15741.15	5308.55	112.09	-6.48	0.2608	34.141	0.2608	34.141
1179.900	370.28	368.69	6109.05	304.06	0.086	0.00	15848.86	5315.09	0.00	-6.54	0.2607	33.690	0.2607	33.690
1209.900	370.26	368.69	6109.09	302.44	0.086	0.00	15953.79	5321.71	0.00	-6.62	0.2607	33.238	0.2607	33.238
1239.900	370.24	368.69	6109.13	300.90	0.085	0.00	16055.95	5328.40	0.00	-6.69	0.2607	32.786	0.2607	32.786
1258.900	370.24	368.69	6109.15	299.96	0.085	0.0	16119.21	5332.68	0.00	-4.24	0.2607	32.530	0.2607	32.530
AFT	370.24	368.69	6109.14	300.53	0.085	.....	16119.21	5342.95	0.0	-10.27	[illegible]	32.530	.....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RH IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	3.7191E 02	3.7191E 02	6.1127E 03	1.8686E 00	1.6061E 04	-3.7591E-02	-2.2411E 00	2.6209E-01	5.6842E-01	3.3369E 01
AFT	1.1880E 02	3.7191E 02	3.7191E 02	6.1127E 03	2.0703E 00	1.6061E 04	0.0	0.0	0.0	0.0	3.6971E 01

GAS BUILDUP IN SLOT, DW/DT =-3.6023E 00

FOREWARD	3.8061E 02	3.7179E 02	3.7165E 02	6.1124E 03	9.0944E 01	1.6061E 04	8.5097E-01	5.0740E 01	2.6205E-01	2.8139E-01	1.6230E 03
AFT	4.5211E 02	3.7177E 02	3.7163E 02	6.1123E 03	9.1812E 01	1.6061E 04	1.1974E 01	7.1398E 02	2.6205E-01	2.7087E-01	1.6384E 03

GAS BUILDUP IN SLOT, DW/DT =-1.5425E 01

FOREWARD	6.6445E 02	3.7148E 02	3.7101E 02	6.1116E 03	1.6373E 02	1.6061E 04	1.3782E 00	8.2212E 01	2.6195E-01	2.8332E-01	2.9174E 03
AFT	7.0110E 02	3.7142E 02	3.7096E 02	6.1115E 03	1.6420E 02	1.6061E 04	0.0	0.0	0.0	0.0	2.9253E 03

GAS BUILDUP IN SLOT, DW/DT =-7.9053E 00

FOREWARD	9.6306E 02	3.7079E 02	3.6967E 02	6.1101E 03	2.5392E 02	1.6061E 04	1.9128E 00	1.1419E 02	2.6172E-01	2.8104E-01	4.5090E 03
AFT	1.0342E 03	3.7067E 02	3.6955E 02	6.1099E 03	2.5485E 02	1.6061E 04	1.2741E 01	7.6069E 02	2.6170E-01	2.7053E-01	4.5243E 03

GAS BUILDUP IN SLOT, DW/DT =-1.5296E 01

WEB BURNOUT INCREMENT LOCATION
1.1198999E 03

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PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	3931844.0	883914.00
TOTAL VACUUM THRUST (N,LBF)	FTVAC	4941591.0	1110914.0
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	48443.301	10890.488
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.10243469E 10	0.23028240E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11443812E 10	0.25726720E 09
THRUST COEFFICIENT	CF	1.6142197	1.6142197
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	1963.3621	4328.4727
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	449961.13	991994.56
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	25.999161	57.318359
INERT MASS REMAINING (KG,LBM)	MIR	160.22861	353.24365
TOTAL BURN AREA (M**2,IN**2)	ABTOT	160.46628	248723.25
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	5.5724020	340049.00
PROPELLANT MASS REMAINING (KG,LBM)	WF	9871.5820	21763.117
TOTAL GAS MASS (KG,LBM)	WGTOT	726.68433	1602.0649
RATIO OF SPECIFIC HEATS	GAMA	1.1614246	1.1614246
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.792652	28.202972
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1559.3267	5115.9023
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.86306870E-01	0.86306870E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.20734786E 09	300.73267
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.49687151E 11	72065.125
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.63142106E-02	0.24859101
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3378.6499	6081.5703
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	159.50882	247239.19
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	0.95726079	1483.7573
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	5.5508776	338735.50
GAS VOLUME (M**3,IN**3)	VP	273.31030	16678437.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.20649022E 09	299.48877
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.48505217E 11	70350.875
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.63019618E-02	0.24819880
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3376.6902	6078.0430
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4825335	2297.9316
EXPANSION RATIO	EPR	6.7200489	6.7200489
PRESSURE RATIO	PEPO	0.23396164E-01	0.23396164E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	300.73	300.73	6081.57	0.94	0.000	0.0	16062.80	13.61	0.01	-13.60	0.2486	16.253	0.2484	16.253
30.000	300.73	300.73	6081.57	1.53	0.0	0.0	16062.80	22.18	0.0	-8.57	0.2486	16.253	0.2486	16.253
60.000	300.73	300.73	6081.57	2.12	0.0	0.0	16062.81	30.75	0.0	-8.57	0.2486	16.253	0.2486	16.253
90.000	300.73	300.73	6081.57	2.71	0.003	0.0	16062.82	39.33	0.0	-8.57	0.2486	16.253	0.2486	16.253
99.243	300.73	300.73	6081.57	2.90	0.003	0.0	16062.82	41.97	0.0	-2.64	0.2486	16.253	0.2486	16.253
118.800	300.73	300.73	6081.57	3.38	0.003	439.47	15369.11	46.84	10.40	-4.90	0.2486	34.844	0.2486	34.844
148.800	300.71	300.71	6081.55	19.02	0.006	441.31	15448.58	265.01	210.20	-7.98	0.2486	34.843	0.2486	34.843
178.800	300.71	300.69	6081.52	34.57	0.010	443.15	15526.84	484.14	211.07	-8.05	0.2486	34.841	0.2486	34.841
208.800	300.69	300.66	6081.47	50.04	0.014	444.98	15603.91	704.21	211.94	-8.12	0.2486	34.839	0.2486	34.839
238.800	300.68	300.62	6081.40	65.43	0.019	446.81	15679.77	925.21	212.81	-8.19	0.2486	34.836	0.2486	34.836
268.800	300.65	300.56	6081.31	80.75	0.023	448.65	15754.43	1147.15	213.68	-8.26	0.2486	34.834	0.2486	34.834
298.800	300.63	300.53	6081.26	88.47	0.025	0.00	15827.88	1262.53	107.06	-8.32	0.2486	34.635	0.2486	34.635
328.800	300.63	300.53	6081.26	88.66	0.025	0.00	15900.13	1270.92	0.00	-8.38	0.2486	34.341	0.2486	34.341
358.800	300.63	300.53	6081.26	88.85	0.025	0.00	15971.18	1279.36	0.00	-8.45	0.2486	34.047	0.2486	34.047
380.614	300.62	300.50	6081.22	94.39	0.027	448.74	16022.08	1363.40	77.86	-6.18	0.2486	33.753	0.2486	33.753
452.368	300.62	300.48	6081.18	100.08	0.028	441.46	15446.77	1393.66	1.11	-19.84	0.2485	34.801	0.2485	34.801
477.600	300.59	300.41	6081.07	112.87	0.032	443.08	15514.98	1578.23	177.51	-7.07	0.2485	34.798	0.2485	34.798
507.600	300.54	300.31	6080.92	127.98	0.036	445.00	15594.86	1798.24	211.89	-8.12	0.2485	34.793	0.2485	34.793
537.600	300.49	300.20	6080.76	143.03	0.041	446.92	15673.43	2019.22	212.79	-8.19	0.2485	34.788	0.2485	34.788
567.600	300.43	300.08	6080.59	158.04	0.045	448.83	15750.69	2241.16	213.69	-8.26	0.2485	34.783	0.2485	34.783
597.600	300.40	300.01	6080.49	165.41	0.047	0.00	15826.63	2356.55	107.07	-8.32	0.2485	34.539	0.2485	34.539
627.600	300.40	300.01	6080.49	165.22	0.047	0.00	15901.26	2364.93	0.00	-8.38	0.2485	34.229	0.2485	34.229
657.600	300.40	300.01	6080.50	165.05	0.047	0.00	15974.58	2373.37	0.00	-8.44	0.2485	33.919	0.2485	33.919
664.455	300.39	300.00	6080.47	166.72	0.047	447.74	15991.14	2399.71	24.40	-1.94	0.2485	33.609	0.2485	33.609
701.100	300.39	299.96	6080.36	174.82	0.050	438.81	15323.07	2410.93	12.17	-10.11	0.2484	34.739	0.2484	34.739
731.100	300.31	299.81	6080.15	189.73	0.054	440.64	15400.33	2628.62	209.75	-7.94	0.2484	34.737	0.2484	34.737
761.100	300.23	299.65	6079.92	204.61	0.058	442.45	15476.44	2847.24	210.61	-8.01	0.2484	34.730	0.2484	34.730
791.100	300.14	299.47	6079.67	219.44	0.062	444.25	15551.38	3066.75	211.44	-8.07	0.2484	34.723	0.2484	34.723
821.100	300.05	299.28	6079.41	234.23	0.066	446.06	15625.16	3287.17	212.28	-8.14	0.2483	34.716	0.2483	34.716
851.100	299.95	299.08	6079.13	249.00	0.071	447.86	15697.78	3508.48	213.11	-8.21	0.2483	34.708	0.2483	34.708
881.100	299.89	298.98	6078.98	256.09	0.073	0.00	15769.24	3623.51	106.76	-8.26	0.2483	34.635	0.2483	34.635
911.100	299.89	298.98	6079.00	255.53	0.072	0.00	15839.54	3631.82	0.00	-8.32	0.2483	34.341	0.2483	34.341
941.100	299.89	298.98	6079.01	255.01	0.072	0.00	15908.67	3640.19	0.00	-8.37	0.2483	34.047	0.2483	34.047
963.063	299.84	298.90	6078.90	260.18	0.074	448.75	15958.55	3724.66	78.30	-6.17	0.2483	33.753	0.2483	33.753
1034.494	299.84	298.81	6078.65	272.02	0.077	441.36	15398.38	3756.49	0.0	-19.65	0.2482	34.624	0.2482	34.624
1059.900	299.73	298.61	6078.39	284.01	0.081	443.74	15488.86	3942.17	178.61	-7.07	0.2482	34.620	0.2482	34.620
1089.900	299.60	298.36	6078.07	298.14	0.085	446.54	15589.08	4162.37	212.13	-8.07	0.2482	34.613	0.2482	34.613
1119.900	299.53	298.24	6077.91	304.51	0.086	0.00	15688.86	4276.90	106.39	-8.15	0.2481	34.593	0.2481	34.593
1149.900	299.52	298.24	6077.95	303.22	0.086	0.00	15786.18	4285.11	0.00	-8.21	0.2481	34.141	0.2481	34.141
1179.900	299.51	298.24	6077.98	301.99	0.086	0.00	15881.07	4293.39	0.00	-8.28	0.2481	33.690	0.2481	33.690
1209.900	299.50	298.24	6078.00	300.83	0.085	0.00	15973.50	4301.75	0.00	-8.36	0.2481	33.238	0.2481	33.238
1239.900	299.49	298.24	6078.03	299.73	0.085	0.00	16063.49	4310.19	0.00	-8.44	0.2481	32.786	0.2481	32.786
1258.900	299.48	298.24	6078.04	299.07	0.085	0.0	16119.21	4315.57	0.00	-5.38	0.2481	32.500	0.2481	32.500
AFT	299.49	298.24	6078.02	299.96	0.085	.....	16119.21	4328.47	0.0	-12.91	0.2481	32.500	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RH IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	3.0073E 02	3.0073E 02	6.0816E 03	2.8941E 00	1.6061E 04	-3.5776E-02	-2.2411E 00	2.4944E-01	5.6842E-01	4.1934E 01
AFT	1.1880E 02	3.0073E 02	3.0073E 02	6.0816E 03	3.2325E 00	1.6061E 04	0.0	0.0	0.0	0.0	4.6837E 01

GAS BUILDUP IN SLOT, DW/DT =-4.9025E 00

FOREWARD	3.8061E 02	3.0062E 02	3.0050E 02	6.0812E 03	9.4207E 01	1.6061E 04	6.1451E-01	3.8501E 01	2.4939E-01	2.8139E-01	1.3640E 03
AFT	4.5237E 02	3.0060E 02	3.0048E 02	6.0812E 03	9.5582E 01	1.6061E 04	9.7970E 00	6.1382E 02	2.4939E-01	2.6205E-01	1.3839E 03

GAS BUILDUP IN SLOT, DW/DT =-1.9843E 01

FOREWARD	6.6445E 02	3.0039E 02	3.0000E 02	6.0805E 03	1.6607E 02	1.6061E 04	1.1079E 00	6.9439E 01	2.4929E-01	2.8332E-01	2.4008E 03
AFT	7.0110E 02	3.0035E 02	2.9996E 02	6.0804E 03	1.6679E 02	1.6061E 04	0.0	0.0	0.0	0.0	2.4109E 03

GAS BUILDUP IN SLOT, DW/DT =-1.0108E 01

FOREWARD	9.6306E 02	2.9984E 02	2.9890E 02	6.0789E 03	2.5864E 02	1.6061E 04	1.6265E 00	1.0203E 02	2.4908E-01	2.8104E-01	3.7263E 03
AFT	1.0345E 03	2.9975E 02	2.9861E 02	6.0787E 03	2.6007E 02	1.6061E 04	1.0556E 01	6.6221E 02	2.4906E-01	2.6170E-01	3.7459E 03

GAS BUILDUP IN SLOT, DW/DT =-1.9650E 01

IGNITION TIME, TIME (S) 120.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	3021771.0	679321.38
TOTAL VACUUM THRUST (N,LBF)	FTVAC	3909196.0	878822.50
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	46174.809	10380.512
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.10278236E 10	0.23106402E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11488067E 10	0.25826206E 09
THRUST COEFFICIENT	CF	1.5963678	1.5963678
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	1572.1733	3466.0491
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	451728.88	995891.81
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	24.781677	54.634277
INERT MASS REMAINING (KG,LBM)	MIR	135.44693	298.60938
TOTAL BURN AREA (M**2,IN**2)	ABTOT	134.58403	208605.69
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	4.7105513	287455.63
PROPELLANT MASS REMAINING (KG,LBM)	WF	8344.8008	18397.145
TOTAL GAS MASS (KG,LBM)	WGTOT	584.26367	1288.0811
RATIO OF SPECIFIC HEATS	GAMA	1.1613798	1.1613798
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.774200	28.162292
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1557.6719	5110.4727
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.85917175E-01	0.85917175E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.16579443E 09	240.46451
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.49873695E 11	72335.688
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.59920810E-02	0.23590887
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3364.0015	6055.2031
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	133.77158	207346.38
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	0.81226820	1259.0183
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	4.6890268	286142.13
GAS VOLUME (M**3,IN**3)	VP	274.04224	16723099.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.16514862E 09	239.52785
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.48691028E 11	70620.375
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.59807934E-02	0.23546445
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3362.0527	6051.6953
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4827890	2298.3281
EXPANSION RATIO	EPR	6.7188902	6.7188902
PRESSURE RATIO	PEPO	0.27758658E-01	0.27758658E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RRTO IN/SEC	TAUTO IN.
FORE	240.46	240.46	6055.20	0.99	0.000	0.0	16062.80	11.56	0.01	-11.55	0.2359	16.253	0.2358	16.253
30.000	240.46	240.46	6055.20	1.62	0.0	0.0	16062.80	18.84	0.0	-7.28	0.2359	16.253	0.2359	16.253
60.000	240.46	240.46	6055.20	2.25	0.0	0.0	16062.81	26.12	0.0	-7.28	0.2359	16.253	0.2359	16.253
90.000	240.46	240.46	6055.20	2.87	0.003	0.0	16062.82	33.40	0.0	-7.28	0.2359	16.253	0.2359	16.253
99.243	240.46	240.46	6055.20	3.07	0.003	0.0	16062.82	35.64	0.0	-2.24	0.2359	16.253	0.2359	16.253
118.800	240.46	240.46	6055.20	3.55	0.003	441.03	15478.55	39.80	8.26	-4.20	0.2359	35.092	0.2359	35.092
148.800	240.45	240.44	6055.18	21.95	0.006	442.87	15546.13	246.83	200.18	-6.84	0.2359	35.091	0.2359	35.091
178.800	240.44	240.42	6055.14	40.27	0.012	444.71	15612.68	454.74	201.01	-6.90	0.2359	35.089	0.2359	35.089
208.800	240.43	240.39	6055.07	58.51	0.017	446.54	15678.21	663.52	201.84	-6.95	0.2359	35.087	0.2359	35.087
238.800	240.41	240.34	6054.97	76.70	0.022	448.38	15742.71	873.18	202.66	-7.00	0.2359	35.085	0.2359	35.085
268.800	240.39	240.31	6054.91	85.90	0.024	0.00	15806.19	981.77	101.54	-7.05	0.2359	34.929	0.2359	34.929
298.800	240.39	240.31	6054.91	86.18	0.024	0.00	15868.65	988.86	0.00	-7.09	0.2359	34.635	0.2359	34.635
328.800	240.40	240.31	6054.91	86.47	0.025	0.00	15930.08	995.99	0.00	-7.14	0.2359	34.341	0.2359	34.341
358.800	240.40	240.31	6054.91	86.77	0.025	0.00	15990.49	1003.18	0.00	-7.18	0.2359	34.047	0.2359	34.047
380.614	240.38	240.29	6054.86	93.37	0.027	448.74	16033.77	1082.32	73.89	-5.25	0.2359	33.753	0.2359	33.753
452.617	240.38	240.27	6054.82	98.57	0.028	443.04	15542.20	1107.52	0.87	-16.94	0.2359	35.050	0.2359	35.050
477.600	240.35	240.21	6054.70	113.61	0.032	444.64	15599.48	1280.87	167.38	-5.97	0.2359	35.047	0.2359	35.047
507.600	240.31	240.12	6054.52	131.60	0.037	446.56	15667.23	1489.60	201.79	-6.94	0.2359	35.042	0.2359	35.042
537.600	240.26	240.01	6054.32	149.54	0.043	448.48	15733.88	1699.23	202.64	-6.99	0.2358	35.037	0.2358	35.037
567.600	240.23	239.95	6054.21	158.47	0.045	0.00	15799.40	1807.80	101.53	-7.04	0.2358	34.849	0.2358	34.849
597.600	240.23	239.95	6054.21	158.45	0.045	0.00	15863.81	1814.88	0.00	-7.08	0.2358	34.539	0.2358	34.539
627.600	240.23	239.95	6054.21	158.44	0.045	0.00	15927.11	1822.01	0.00	-7.13	0.2358	34.229	0.2358	34.229
657.600	240.23	239.95	6054.21	158.44	0.045	0.00	15989.29	1829.18	0.00	-7.17	0.2358	33.919	0.2358	33.919
664.455	240.22	239.93	6054.19	160.46	0.046	447.74	16003.34	1853.98	23.16	-1.65	0.2358	33.609	0.2358	33.609
701.100	240.22	239.91	6054.10	167.26	0.047	440.37	15432.28	1863.44	9.97	-8.59	0.2358	34.987	0.2358	34.987
731.100	240.16	239.77	6053.85	185.11	0.053	442.21	15497.68	2070.01	199.77	-6.80	0.2358	34.985	0.2358	34.985
761.100	240.09	239.62	6053.58	202.94	0.058	444.01	15562.09	2277.44	200.58	-6.85	0.2358	34.978	0.2358	34.978
791.100	240.01	239.46	6053.29	220.74	0.063	445.81	15625.52	2485.71	201.37	-6.90	0.2357	34.971	0.2357	34.971
821.100	239.92	239.28	6052.96	238.52	0.068	447.62	15687.97	2694.81	202.16	-6.95	0.2357	34.964	0.2357	34.964
851.100	239.87	239.19	6052.80	247.23	0.070	0.00	15749.44	2803.07	101.27	-6.99	0.2356	34.929	0.2356	34.929
881.100	239.87	239.19	6052.80	246.90	0.070	0.00	15809.92	2810.10	0.00	-7.02	0.2356	34.635	0.2356	34.635
911.100	239.87	239.19	6052.81	246.59	0.070	0.00	15869.43	2817.16	0.00	-7.06	0.2356	34.341	0.2356	34.341
941.100	239.86	239.19	6052.82	246.30	0.070	0.00	15927.94	2824.27	0.00	-7.11	0.2356	34.047	0.2356	34.047
963.063	239.83	239.11	6052.69	252.64	0.072	448.75	15970.16	2903.81	74.31	-5.23	0.2356	33.753	0.2356	33.753
1034.743	239.82	239.05	6052.48	262.89	0.075	442.95	15492.18	2930.53	0.0	-16.75	0.2356	34.873	0.2356	34.873
1059.900	239.73	238.87	6052.18	277.37	0.079	445.30	15568.49	3104.94	168.46	-5.95	0.2356	34.869	0.2356	34.869
1089.900	239.62	238.65	6051.79	294.61	0.084	448.09	15657.52	3313.86	202.03	-6.88	0.2355	34.861	0.2355	34.861
1119.900	239.55	238.53	6051.60	302.70	0.086	0.00	15744.42	3422.12	101.32	-6.94	0.2355	34.593	0.2355	34.593
1149.900	239.54	238.53	6051.62	301.69	0.086	0.00	15829.19	3429.13	0.00	-7.01	0.2355	34.141	0.2355	34.141
1179.900	239.54	238.53	6051.64	300.75	0.085	0.00	15911.82	3436.20	0.00	-7.07	0.2355	33.690	0.2355	33.690
1209.900	239.53	238.53	6051.66	299.85	0.085	0.00	15992.32	3443.32	0.00	-7.12	0.2355	33.238	0.2355	33.238
1239.900	239.52	238.53	6051.68	299.01	0.085	0.00	16070.68	3450.50	0.00	-7.18	0.2355	32.786	0.2355	32.786
1258.900	239.52	238.53	6051.70	298.51	0.085	0.0	16119.21	3455.08	0.00	-4.58	0.2355	32.500	0.2355	32.500
AFT	239.53	238.53	6051.67	299.46	0.085	.....	16119.21	3466.05	0.0	-10.97	0.2355	32.500	....	.....

SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RH IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD 9.9243E 01	2.4046E 02	2.4046E 02	6.0552E 03	3.0647E 00	1.6061E 04	-3.3960E-02	-2.2411E 00	2.3677E-01	5.6842E-01	3.5609E 01
AFT 1.1880E 02	2.4046E 02	2.4046E 02	6.0552E 03	3.4258E 00	1.6061E 04	0.0	0.0	0.0	0.0	3.9805E 01

GAS BUILDUP IN SLOT, DW/DT =-4.1958E 00

FOREWARD 3.8061E 02	2.4038E 02	2.4029E 02	6.0549E 03	9.3247E 01	1.6061E 04	4.0624E-01	2.6813E 01	2.3673E-01	2.8139E-01	1.0827E 03
AFT 4.5262E 02	2.4037E 02	2.4027E 02	6.0548E 03	9.4711E 01	1.6061E 04	7.8538E 00	5.1838E 02	2.3673E-01	2.4939E-01	1.0997E 03

GAS BUILDUP IN SLOT, DW/DT =-1.6945E 01

FOREWARD 6.6445E 02	2.4022E 02	2.3993E 02	6.0542E 03	1.5996E 02	1.6061E 04	8.6695E-01	5.7241E 01	2.3665E-01	2.8312E-01	1.8549E 03
AFT 7.0110E 02	2.4020E 02	2.3991E 02	6.0541E 03	1.6072E 02	1.6061E 04	0.0	0.0	0.0	0.0	1.8634E 03

GAS BUILDUP IN SLOT, DW/DT =-8.5898E 00

FOREWARD 9.6306E 02	2.3983E 02	2.3911E 02	6.0527E 03	2.5134E 02	1.6061E 04	1.3684E 00	9.0423E 01	2.3646E-01	2.8104E-01	2.9052E 03
AFT 1.0347E 03	2.3976E 02	2.3905E 02	6.0525E 03	2.5285E 02	1.6061E 04	8.6013E 00	5.6840E 02	2.3645E-01	2.4906E-01	2.9219E 03

GAS BUILDUP IN SLOT, DW/DT =-1.6749E 01

IGNITION TIME, TIME (S) 121.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	2251419.0	506139.38
TOTAL VACUUM THRUST (N,LBF)	FTVAC	2971181.0	667948.25
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	50688.105	11395.141
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.10304602E 10	0.23165674E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11522468E 10	0.25903544E 09
THRUST COEFFICIENT	CF	1.5693235	1.5693235
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	1216.7131	2682.3936
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	453123.31	998966.00
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	27.203934	59.974442
INERT MASS REMAINING (KG,LBM)	MIR	108.24298	238.63493
TOTAL BURN AREA (M**2,IN**2)	ABTOT	108.61409	168352.19
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	3.7644548	229721.25
PROPELLANT MASS REMAINING (KG,LBM)	WF	6668.7813	14702.148
TOTAL GAS MASS (KG,LBM)	WGTOT	453.95457	1000.7991
RATIO OF SPECIFIC HEATS	GAMA	1.1613388	1.1613388
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.757479	28.125427
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1556.1729	5105.5547
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.85617542E-01	0.85617542E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	0.12812312E 09	185.82690
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.50020639E 11	72548.813
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.56413822E-02	0.22210181
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3350.7202	6031.2969
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	107.93945	167306.50
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	0.67445248	1045.4036
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	3.7429304	228407.75
GAS VOLUME (M**3,IN**3)	VP	274.86499	16773300.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	0.12766659E 09	185.16475
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.48837415E 11	70832.688
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.56312010E-02	0.22170085
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3348.7822	6027.8086
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4829931	2298.6445
EXPANSION RATIO	EPR	6.7179651	6.7179651
PRESSURE RATIO	PEPO	0.36741119E-01	0.36741119E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

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INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RB IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	185.83	185.83	6031.30	1.17	0.000	0.0	16062.80	10.50	0.01	-10.50	0.2221	16.253	0.2220	16.253
30.000	185.83	185.83	6031.30	1.90	0.0	0.0	16062.80	17.12	0.0	-6.62	0.2221	16.253	0.2221	16.253
60.000	185.83	185.83	6031.29	2.64	0.003	0.0	16062.81	23.74	0.0	-6.62	0.2221	16.253	0.2221	16.253
90.000	185.83	185.83	6031.29	3.37	0.003	0.0	16062.82	30.36	0.0	-6.62	0.2221	16.253	0.2221	16.253
99.243	185.83	185.83	6031.29	3.60	0.003	0.0	16062.82	32.40	0.0	-2.04	0.2221	16.253	0.2221	16.253
118.800	185.83	185.83	6031.29	4.15	0.003	442.51	15582.76	36.25	6.32	-3.89	0.2221	35.328	0.2221	35.328
148.800	185.81	185.81	6031.27	26.43	0.007	444.36	15639.01	231.64	189.10	-6.29	0.2221	35.327	0.2221	35.327
178.800	185.81	185.79	6031.20	48.64	0.014	446.19	15694.41	427.86	189.88	-6.33	0.2221	35.325	0.2221	35.325
208.800	185.80	185.75	6031.10	70.81	0.020	448.02	15748.96	624.88	190.66	-6.37	0.2221	35.323	0.2221	35.323
238.800	185.78	185.72	6031.04	80.76	0.023	0.0	16060.57	726.68	95.52	-6.28	0.2221	35.224	0.2221	35.224
268.800	185.78	185.72	6031.03	82.51	0.024	0.00	15855.48	733.00	0.00	-6.31	0.2221	34.929	0.2221	34.929
298.800	185.78	185.72	6031.02	82.97	0.024	0.00	15907.47	739.47	0.00	-6.48	0.2221	34.635	0.2221	34.635
328.800	185.78	185.72	6031.02	83.43	0.024	0.00	15958.60	745.99	0.00	-6.51	0.2221	34.341	0.2221	34.341
358.800	185.79	185.72	6031.02	83.90	0.024	0.00	16008.88	752.53	0.00	-6.55	0.2221	34.047	0.2221	34.047
380.614	185.78	185.70	6030.96	91.99	0.026	448.74	16044.90	826.88	69.56	-4.78	0.2221	33.753	0.2221	33.753
452.854	185.77	185.69	6030.93	96.92	0.028	444.54	15632.89	848.74	0.65	-15.53	0.2221	35.286	0.2221	35.286
477.600	185.75	185.63	6030.77	115.10	0.033	446.12	15679.95	1010.75	156.62	-5.39	0.2221	35.282	0.2221	35.282
507.600	185.71	185.54	6030.56	137.10	0.039	448.04	15736.15	1207.72	190.61	-6.36	0.2220	35.278	0.2220	35.278
537.600	185.68	185.49	6030.43	148.19	0.042	0.00	15791.43	1309.62	95.51	-6.40	0.2220	35.159	0.2220	35.159
567.600	185.68	185.49	6030.43	148.41	0.042	0.00	15845.79	1316.05	0.00	-6.43	0.2220	34.849	0.2220	34.849
597.600	185.68	185.49	6030.43	148.63	0.042	0.00	15899.22	1322.51	0.00	-6.46	0.2220	34.539	0.2220	34.539
627.600	185.68	185.49	6030.43	148.87	0.042	0.00	15951.72	1329.01	0.00	-6.50	0.2220	34.229	0.2220	34.229
657.600	185.69	185.49	6030.42	149.12	0.042	0.00	16003.30	1335.55	0.00	-6.54	0.2220	33.919	0.2220	33.919
664.455	185.68	185.48	6030.39	151.62	0.043	447.74	16014.96	1358.85	21.80	-1.50	0.2220	33.609	0.2220	33.609
701.100	185.68	185.46	6030.32	157.28	0.045	441.85	15536.28	1367.35	7.96	-7.85	0.2220	35.223	0.2220	35.223
731.100	185.62	185.35	6030.04	179.19	0.051	443.69	15590.38	1562.33	188.73	-6.25	0.2220	35.221	0.2220	35.221
761.100	185.56	185.21	6029.71	201.10	0.057	445.49	15643.66	1758.10	189.49	-6.29	0.2220	35.214	0.2220	35.214
791.100	185.49	185.06	6029.34	223.00	0.063	447.29	15696.13	1954.65	190.23	-6.33	0.2219	35.207	0.2219	35.207
821.100	185.41	184.89	6028.94	244.92	0.070	449.10	15747.79	2151.97	190.96	-6.36	0.2219	35.200	0.2219	35.200
851.100	185.36	184.79	6028.72	255.83	0.073	0.00	15798.63	2254.03	95.66	-6.40	0.2218	34.929	0.2218	34.929
881.100	185.36	184.79	6028.73	255.75	0.073	0.00	15848.66	2260.47	0.00	-6.43	0.2218	34.635	0.2218	34.635
911.100	185.36	184.79	6028.73	255.69	0.073	0.00	15897.89	2266.93	0.00	-6.47	0.2218	34.341	0.2218	34.341
941.100	185.36	184.79	6028.73	255.64	0.073	0.00	15946.29	2273.43	0.00	-6.50	0.2218	34.047	0.2218	34.047
963.063	185.33	184.72	6028.57	263.56	0.075	448.75	15981.22	2348.17	69.96	-4.78	0.2218	33.753	0.2218	33.753
1034.979	185.32	184.67	6028.37	273.08	0.078	444.45	15581.31	2371.54	0.0	-15.41	0.2218	35.108	0.2218	35.108
1059.900	185.24	184.50	6027.97	290.89	0.083	446.78	15646.23	2534.56	157.62	-5.39	0.2218	35.104	0.2218	35.104
1089.900	185.18	184.39	6027.73	301.24	0.086	0.00	15722.71	2636.01	95.12	-6.33	0.2217	35.045	0.2217	35.045
1119.900	185.17	184.39	6027.75	300.54	0.085	0.00	15797.34	2642.38	0.00	-6.36	0.2217	34.593	0.2217	34.593
1149.900	185.17	184.39	6027.76	299.88	0.085	0.00	15870.15	2648.78	0.00	-6.40	0.2217	34.141	0.2217	34.141
1179.900	185.17	184.39	6027.78	299.28	0.085	0.00	15941.11	2655.23	0.00	-6.45	0.2217	33.690	0.2217	33.690
1209.900	185.16	184.39	6027.79	298.71	0.085	0.00	16010.25	2661.72	0.00	-6.49	0.2217	33.238	0.2217	33.238
1239.900	185.16	184.39	6027.80	298.19	0.085	0.00	16077.54	2668.26	0.00	-6.54	0.2217	32.786	0.2217	32.786
1258.900	185.16	184.39	6027.81	297.89	0.085	0.0	16119.21	2672.42	0.00	-4.16	0.2217	32.500	0.2217	32.500
AFT	185.16	184.39	6027.79	299.00	0.085	.....	16119.21	2682.39	0.0	-9.97	0.2217	32.500	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RH IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	1.8583E 02	1.8583E 02	6.0313E 03	3.5951E 00	1.6061E 04	-3.1980E-02	-2.2411E 00	2.2297E-01	5.6842E-01	1.2367E 01
AFT	1.1880E 02	1.8583E 02	1.8583E 02	6.0313E 03	4.0270E 00	1.6061E 04	0.0	0.0	0.0	0.0	3.6255E 01

GAS BUILDUP IN SLOT, DW/DT =-3.8877E 00

FOREWARD	3.8061E 02	1.8578E 02	1.8570E 02	6.0310E 03	9.1926E 01	1.6061E 04	2.2377E-01	1.5684E 01	2.2293E-01	2.8139E-01	8.2710E 02
AFT	4.5285E 02	1.8577E 02	1.8569E 02	6.0309E 03	9.3657E 01	1.6061E 04	6.1023E 00	4.2770E 02	2.2293E-01	2.3673E-01	8.4264E 02

GAS BUILDUP IN SLOT, DW/DT =-1.5532E 01

FOREWARD	6.6445E 02	1.8568E 02	1.8548E 02	6.0304E 03	1.5127E 02	1.6061E 04	6.5080E-01	4.5626E 01	2.2287E-01	2.8332E-01	1.3595E 03
AFT	7.0110E 02	1.8566E 02	1.8546E 02	6.0303E 03	1.5215E 02	1.6061E 04	0.0	0.0	0.0	0.0	1.3673E 03

GAS BUILDUP IN SLOT, DW/DT =-7.8450E 00

FOREWARD	9.6306E 02	1.8533E 02	1.8472E 02	6.0286E 03	2.6239E 02	1.6061E 04	1.1310E 00	7.9365E 01	2.2266E-01	2.8104E-01	2.3493E 03
AFT	1.0350E 03	1.8528E 02	1.8467E 02	6.0284E 03	2.6417E 02	1.6061E 04	6.8293E 00	4.7927E 02	2.2265E-01	2.3645E-01	2.3647E 03

GAS BUILDUP IN SLOT, DW/DT =-1.5412E 01

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IGNITION TIME, TIME (S) 122.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	1550343.0	348531.06
TOTAL VACUUM THRUST (N,LBF)	FTVAC	2107110.0	473697.31
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	39901.637	8970.2461
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.10323612E 10	0.23208406E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11547860E 10	0.25960626E 09
THRUST COEFFICIENT	CF	1.5257282	1.5257282
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	888.36743	1958.5154
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	454175.88	1001286.4
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	21.414917	47.211838
INERT MASS REMAINING (KG,LBM)	MIR	86.828049	191.42310
TOTAL BURN AREA (M**2,IN**2)	ABTOT	82.554459	127959.69
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	3.0196905	184272.94
PROPELLANT MASS REMAINING (KG,LBM)	WF	5349.4219	11793.457
TOTAL GAS MASS (KG,LBM)	WGTOT	332.57007	733.19189
RATIO OF SPECIFIC HEATS	GAMA	1.1613007	1.1613007
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.742058	28.091431
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1554.7905	5101.0195
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.84968507E-01	0.84968507E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	93408272.	135.47726
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.50131386E 11	72709.438
BURN AREA (M**2,IN**2)	AHH	0.23195436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.52356022E-02	0.20628357
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3338.4827	6009.2695
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	62.009781	127115.44
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	0.54451454	843.99927
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	2.9981661	182959.44
GAS VOLUME (M**3,IN**3)	VP	275.49341	16811648.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	93116080.	135.05347
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.48947773E 11	70992.750
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.52306652E-02	0.20593172
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3336.5579	6005.8047
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4831505	2298.8887
EXPANSION RATIO	EPR	6.7172518	6.7172518
PRESSURE RATIO	PEPO	0.52157644E-01	0.52157644E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

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INCREMENT DIVIDING PLANE DATA:

MASS AUDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RRTO IN/SEC	TAUTO IN.
FORE	135.48	135.48	6009.27	1.47	0.000	0.0	16062.80	9.70	0.00	-9.70	0.2063	16.253	0.2061	16.253
30.000	135.48	135.48	6009.27	2.40	0.0	0.0	16062.80	15.82	0.0	-6.11	0.2063	16.253	0.2063	16.253
60.000	135.48	135.48	6009.27	3.33	0.003	0.0	16062.81	21.93	0.0	-6.11	0.2063	16.253	0.2063	16.253
90.000	135.48	135.48	6009.27	4.26	0.003	0.0	16062.82	28.05	0.0	-6.11	0.2063	16.253	0.2063	16.253
99.243	135.48	135.48	6009.27	4.55	0.003	0.0	16062.82	29.93	0.0	-1.88	0.2063	16.253	0.2063	16.253
118.800	135.48	135.48	6009.27	5.23	0.003	443.91	15681.20	33.57	4.60	-3.67	0.2063	35.550	0.2063	35.550
148.800	135.47	135.46	6009.22	33.47	0.010	445.75	15726.75	215.64	176.18	-5.88	0.2063	35.549	0.2063	35.549
178.800	135.46	135.44	6009.12	61.68	0.018	447.59	15771.61	398.45	176.91	-5.91	0.2063	35.547	0.2063	35.547
208.800	135.45	135.42	6009.04	76.12	0.022	0.00	15815.78	493.03	88.63	-5.94	0.2063	35.518	0.2063	35.518
238.800	135.45	135.42	6009.04	75.88	0.022	0.0	16060.57	499.06	0.00	-6.03	0.2063	35.224	0.2063	35.224
268.800	135.45	135.42	6009.03	77.56	0.022	0.00	15902.04	505.11	0.00	-6.05	0.2063	34.929	0.2063	34.929
298.800	135.46	135.42	6009.03	78.28	0.022	0.00	15944.14	511.12	0.00	-6.01	0.2063	34.635	0.2063	34.635
328.800	135.46	135.42	6009.02	79.00	0.023	0.00	15985.54	517.16	0.00	-6.04	0.2063	34.341	0.2063	34.341
358.800	135.46	135.42	6009.02	79.72	0.023	0.00	16026.25	523.23	0.00	-6.07	0.2063	34.047	0.2063	34.047
380.614	135.45	135.40	6008.95	90.09	0.026	448.74	16055.41	592.26	64.61	-4.43	0.2063	33.753	0.2063	33.753
453.077	135.45	135.39	6008.91	94.99	0.027	445.94	15718.37	611.35	0.46	-14.48	0.2063	35.508	0.2063	35.508
477.600	135.42	135.34	6008.72	117.99	0.034	447.52	15755.95	760.90	144.61	-4.94	0.2063	35.504	0.2063	35.504
507.600	135.40	135.29	6008.58	132.31	0.038	0.00	15801.25	855.44	88.61	-5.93	0.2062	35.469	0.2062	35.469
537.600	135.41	135.29	6008.57	132.85	0.038	0.00	15845.80	861.38	0.00	-5.95	0.2062	35.159	0.2062	35.159
567.600	135.41	135.29	6008.57	133.41	0.038	0.00	15889.60	867.36	0.00	-5.97	0.2062	34.849	0.2062	34.849
597.600	135.41	135.29	6008.56	133.97	0.038	0.00	15932.66	873.35	0.00	-6.00	0.2062	34.539	0.2062	34.539
627.600	135.41	135.29	6008.56	134.53	0.038	0.00	15974.97	879.38	0.00	-6.03	0.2062	34.229	0.2062	34.229
657.600	135.41	135.29	6008.55	135.11	0.039	0.00	16016.54	885.43	0.00	-6.05	0.2062	33.919	0.2062	33.919
664.455	135.41	135.28	6008.52	138.34	0.039	447.74	16025.93	907.07	20.25	-1.39	0.2062	33.609	0.2062	33.609
701.100	135.40	135.27	6008.46	143.02	0.041	443.25	15634.53	914.82	6.14	-7.29	0.2062	35.445	0.2062	35.445
731.100	135.36	135.17	6008.12	171.07	0.049	445.08	15677.94	1096.52	175.86	-5.85	0.2062	35.443	0.2062	35.443
761.100	135.31	135.05	6007.71	199.15	0.057	446.89	15720.71	1278.96	176.56	-5.87	0.2062	35.436	0.2062	35.436
791.100	135.24	134.91	6007.24	227.28	0.065	448.69	15762.82	1462.09	177.24	-5.90	0.2061	35.429	0.2061	35.429
821.100	135.20	134.83	6006.98	241.50	0.069	0.00	15804.29	1556.80	88.79	-5.92	0.2061	35.224	0.2061	35.224
851.100	135.20	134.83	6006.97	241.79	0.069	0.00	15845.10	1562.73	0.00	-5.93	0.2061	34.929	0.2061	34.929
881.100	135.21	134.83	6006.97	242.10	0.069	0.00	15885.26	1568.69	0.00	-5.95	0.2061	34.635	0.2061	34.635
911.100	135.21	134.83	6006.96	242.42	0.069	0.00	15924.77	1574.66	0.00	-5.98	0.2061	34.341	0.2061	34.341
941.100	135.21	134.83	6006.96	242.75	0.069	0.00	15963.63	1580.66	0.00	-6.00	0.2061	34.047	0.2061	34.047
963.063	135.18	134.77	6006.75	253.07	0.072	448.75	15991.66	1650.06	64.99	-4.41	0.2061	33.753	0.2061	33.753
1035.202	135.18	134.74	6006.58	261.60	0.074	445.86	15665.30	1670.52	0.0	-14.31	0.2060	35.330	0.2060	35.330
1059.900	135.10	134.59	6006.09	284.48	0.081	448.18	15719.66	1821.02	145.57	-4.93	0.2060	35.326	0.2060	35.324
1089.900	135.05	134.49	6005.78	298.23	0.085	0.00	15764.27	1915.54	88.64	-5.88	0.2060	35.045	0.2060	35.045
1119.900	135.05	134.49	6005.79	297.96	0.085	0.00	15847.33	1921.46	0.00	-5.91	0.2059	34.593	0.2059	34.593
1149.900	135.05	134.49	6005.79	297.73	0.085	0.00	15908.83	1927.40	0.00	-5.95	0.2059	34.141	0.2059	34.141
1179.900	135.05	134.49	6005.80	297.53	0.085	0.00	15968.78	1933.39	0.00	-5.98	0.2059	33.690	0.2059	33.690
1209.900	135.05	134.49	6005.80	297.37	0.085	0.00	16027.18	1939.40	0.00	-6.02	0.2059	33.238	0.2059	33.238
1239.900	135.05	134.49	6005.80	297.24	0.085	0.00	16084.02	1945.45	0.00	-6.05	0.2059	32.786	0.2059	32.786
1258.900	135.05	134.49	6005.80	297.18	0.085	0.0	16119.21	1949.30	0.00	-3.85	0.2059	32.500	0.2059	32.500
AFT	135.05	134.49	6005.77	298.58	0.085	.....	16119.21	1958.52	0.0	-9.22	0.2059	32.500	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	1.3548E 02	1.3548E 02	6.0093E 03	4.5442E 00	1.6061E 04	-2.9710E-02	-2.2411E 00	2.0714E-01	5.6842E-01	2.9900E 01
AFT	1.1880E 02	1.3548E 02	1.3548E 02	6.0093E 03	5.1026E 00	1.6061E 04	0.0	0.0	0.0	0.0	3.3574E 01

GAS BUILDUP IN SLOT, DW/DT =-3.6737E 00

FOREWARD	3.8061E 02	1.3545E 02	1.3540E 02	6.0089E 03	9.0072E 01	1.6061E 04	6.8549E-02	5.1715E 00	2.0711E-01	2.8139E-01	5.9233E 02
AFT	4.5308E 02	1.3544E 02	1.3539E 02	6.0089E 03	9.2278E 01	1.6061E 04	4.5361E 00	3.4222E 02	2.0711E-01	2.2293E-01	6.0681E 02

GAS BUILDUP IN SLOT, DW/DT =-1.4478E 01

FOREWARD	6.6445E 02	1.3541E 02	1.3528E 02	6.0085E 03	1.3811E 02	1.6061E 04	4.5927E-01	3.4655E 01	2.0707E-01	2.8332E-01	9.0753E 02
AFT	7.0110E 02	1.3540E 02	1.3527E 02	6.0085E 03	1.3923E 02	1.6061E 04	0.0	0.0	0.0	0.0	9.1482E 02

GAS BUILDUP IN SLOT, DW/DT =-7.2902E 00

FOREWARD	9.6306E 02	1.3518E 02	1.3477E 02	6.0068E 03	2.5213E 02	1.6061E 04	9.1256E-01	6.8919E 01	2.0689E-01	2.8104E-01	1.6510E 03
AFT	1.0352E 03	1.3515E 02	1.3474E 02	6.0066E 03	2.5436E 02	1.6061E 04	5.2336E 00	3.9528E 02	2.0688E-01	2.2265E-01	1.6653E 03

GAS BUILDUP IN SLOT, DW/DT =-1.4313E 01

IGNITION TIME, TIME (S) 123.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	1079335.0	242644.19
TOTAL VACUUM THRUST (N,LBF)	FTVAC	1514312.0	340431.06
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	36959.574	8308.8438
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.10336760E 10	0.23237965E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11565965E 10	0.26001331E 09
THRUST COEFFICIENT	CF	1.4849663	1.4849663
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	656.47046	1447.2698
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	454948.25	1002989.3
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	19.835938	43.730774
INERT MASS REMAINING (KG,LBM)	MIR	66.992096	147.69232
TOTAL BURN AREA (M**2,IN**2)	ABTOT	65.920822	102177.50
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	2.3298397	142175.63
PROPELLANT MASS REMAINING (KG,LBM)	WF	4127.3398	9099.2305
TOTAL GAS MASS (KG,LBM)	WGTOT	246.32278	543.04883
RATIO OF SPECIFIC HEATS	GAMA	1.1612740	1.1612740
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.731198	28.067490
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1553.8154	5097.4203
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.84967196E-01	0.84967196E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	68951984.	100.00642
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.50212528E 11	72827.125
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.48805587E-02	0.19214809
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3329.8608	5993.7500
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	65.496994	101520.56
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	0.42365509	656.66675
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	2.3083153	140862.13
GAS VOLUME (M**3,IN**3)	VP	276.07813	16847328.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	68751104.	99.715057
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.49028702E 11	71110.125
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.48724860E-02	0.19183028
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3327.9402	5990.2930
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4832659	2299.0674
EXPANSION RATIO	EPR	6.7167292	6.7167292
PRESSURE RATIO	PEPO	0.73718071E-01	0.73718071E-01
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	2.0000000	2.0000000

ORIGINAL PAGE IS OF POOR QUALITY

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	100.01	100.01	5993.75	1.41	0.000	0.0	16062.80	6.85	0.00	-6.84	0.1921	16.253	0.2063	16.253
30.000	100.01	100.01	5993.75	2.29	0.0	0.0	16062.80	11.16	0.0	-4.31	0.1921	16.253	0.1921	16.253
60.000	100.01	100.01	5993.75	3.18	0.003	0.0	16062.81	15.48	0.0	-4.31	0.1921	16.253	0.1921	16.253
90.000	100.01	100.01	5993.75	4.07	0.003	0.0	16062.82	19.79	0.0	-4.31	0.1921	16.253	0.1921	16.253
99.243	100.01	100.01	5993.75	4.34	0.003	0.0	16062.82	21.12	0.0	-1.33	0.1921	16.253	0.1921	16.253
118.800	100.01	100.01	5993.75	4.95	0.003	445.21	15772.90	23.67	3.42	-2.58	0.1921	35.757	0.1921	35.757
148.800	100.00	99.99	5993.68	40.19	0.012	447.05	15808.49	192.44	164.59	-4.18	0.1921	35.756	0.1921	35.756
178.800	99.99	99.97	5993.52	75.43	0.022	448.88	15843.54	361.89	165.26	-4.19	0.1921	35.754	0.1921	35.754
208.800	99.98	99.94	5993.41	93.38	0.027	0.00	15878.04	448.90	82.80	-4.21	0.1921	35.518	0.1921	35.518
238.800	99.98	99.94	5993.41	93.20	0.027	0.0	16060.57	453.17	0.00	-4.27	0.1921	35.224	0.1921	35.224
268.800	99.98	99.94	5993.39	94.76	0.027	0.00	15945.42	457.45	0.00	-4.28	0.1921	34.929	0.1921	34.929
298.800	99.98	99.94	5993.39	95.44	0.027	0.00	15978.30	461.71	0.00	-4.26	0.1921	34.635	0.1921	34.635
328.800	99.98	99.94	5993.39	96.13	0.027	0.00	16010.63	465.99	0.00	-4.27	0.1921	34.341	0.1921	34.341
358.800	99.98	99.94	5993.38	96.82	0.028	0.00	16042.43	470.28	0.00	-4.29	0.1921	34.047	0.1921	34.047
380.614	99.97	99.92	5993.28	109.72	0.031	448.74	16065.21	533.59	60.18	-3.13	0.1921	33.753	0.1921	33.753
453.284	99.97	99.91	5993.23	114.40	0.033	447.25	15797.86	547.01	0.32	-10.24	0.1921	35.714	0.1921	35.714
477.600	99.95	99.85	5992.95	142.95	0.041	448.81	15826.76	684.44	133.94	-3.48	0.1921	35.711	0.1921	35.711
507.600	99.93	99.81	5992.73	160.83	0.046	0.00	15861.89	771.42	82.77	-4.21	0.1921	35.469	0.1921	35.469
537.600	99.93	99.81	5992.73	161.36	0.046	0.00	15896.44	775.65	0.00	-4.23	0.1921	35.159	0.1921	35.159
567.600	99.93	99.81	5992.72	161.90	0.046	0.00	15930.42	779.89	0.00	-4.24	0.1921	34.849	0.1921	34.849
597.600	99.93	99.81	5992.71	162.44	0.046	0.00	15963.81	784.15	0.00	-4.26	0.1921	34.539	0.1921	34.539
627.600	99.93	99.81	5992.71	162.99	0.046	0.00	15996.63	788.42	0.00	-4.28	0.1921	34.229	0.1921	34.229
657.600	99.93	99.81	5992.70	163.55	0.047	0.00	16028.86	792.71	0.00	-4.29	0.1921	33.919	0.1921	33.919
664.455	99.92	99.79	5992.65	167.59	0.048	447.74	16036.15	812.56	18.86	-0.98	0.1921	33.609	0.1921	33.609
701.100	99.93	99.79	5992.59	172.05	0.049	444.54	15726.06	818.01	4.99	-5.15	0.1920	35.651	0.1920	35.651
731.100	99.88	99.67	5992.07	207.25	0.059	446.38	15759.53	986.44	164.26	-4.17	0.1920	35.649	0.1920	35.649
761.100	99.81	99.54	5991.44	242.57	0.069	448.18	15792.50	1155.53	164.91	-4.19	0.1920	35.642	0.1920	35.642
791.100	99.78	99.46	5991.09	260.45	0.074	0.00	15824.96	1242.34	82.61	-4.20	0.1919	35.518	0.1919	35.518
821.100	99.78	99.46	5991.08	260.81	0.074	0.00	15856.93	1246.54	0.00	-4.21	0.1919	35.224	0.1919	35.224
851.100	99.78	99.46	5991.07	261.17	0.074	0.00	15888.39	1250.76	0.00	-4.22	0.1919	34.929	0.1919	34.929
881.100	99.78	99.46	5991.07	261.54	0.075	0.00	15919.36	1254.99	0.00	-4.23	0.1919	34.635	0.1919	34.635
911.100	99.78	99.46	5991.06	261.93	0.075	0.00	15949.82	1259.24	0.00	-4.25	0.1919	34.341	0.1919	34.341
941.100	99.78	99.46	5991.05	262.32	0.075	0.00	15979.78	1263.51	0.00	-4.26	0.1919	34.047	0.1919	34.047
963.063	99.75	99.40	5990.78	275.32	0.078	448.75	16001.40	1327.16	60.52	-3.13	0.1919	33.753	0.1919	33.753
1035.409	99.75	99.37	5990.61	283.01	0.081	447.18	15743.40	1341.97	0.0	-10.17	0.1919	35.536	0.1919	35.536
1059.900	99.71	99.30	5990.29	297.30	0.085	0.00	15788.08	1412.69	67.24	-3.48	0.1919	35.497	0.1919	35.497
1089.900	99.71	99.30	5990.29	297.17	0.085	0.00	15841.64	1416.87	0.00	-4.18	0.1918	35.045	0.1918	35.045
1119.900	99.71	99.30	5990.29	297.07	0.085	0.00	15893.90	1421.06	0.00	-4.19	0.1918	34.593	0.1918	34.593
1149.900	99.71	99.30	5990.29	297.00	0.085	0.00	15944.88	1425.27	0.00	-4.21	0.1918	34.141	0.1918	34.141
1179.900	99.71	99.30	5990.29	296.95	0.085	0.00	15994.56	1429.51	0.00	-4.24	0.1918	33.690	0.1918	33.690
1209.900	99.71	99.30	5990.29	296.94	0.085	0.00	16042.95	1433.76	0.00	-4.26	0.1918	33.238	0.1918	33.238
1239.900	99.71	99.30	5990.29	296.95	0.085	0.00	16090.05	1438.04	0.00	-4.28	0.1918	32.786	0.1918	32.786
1258.900	99.71	99.30	5990.29	296.98	0.085	0.0	16119.21	1440.76	0.00	-2.72	0.1918	32.500	0.1918	32.500
AFT	99.72	99.30	5990.26	298.32	0.085	.....	16119.21	1447.27	0.0	-6.51	0.1918	32.500	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	HB IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	1.0001E 02	1.0001E 02	5.9937E 03	4.3357E 00	1.6061E 04	-2.7681E-02	-2.2411E 00	1.9300E-01	5.6842E-01	2.1095E 01
AFT	1.1880E 02	1.0001E 02	1.0001E 02	5.9937E 03	4.8657E 00	1.6061E 04	0.0	0.0	0.0	0.0	2.3674E 01

GAS BUILDUP IN SLOT, DW/DT =-2.5787E 00

FOREWARD	3.8061E 02	9.9975E 01	9.9918E 01	5.9933E 03	1.0974E 02	1.6061E 04	-5.7075E-02	-4.6217E 00	1.9296E-01	2.8139E-01	5.3353E 02
AFT	4.5328E 02	9.9969E 01	9.9913E 01	5.9932E 03	1.1186E 02	1.6061E 04	3.2444E 00	2.6273E 02	1.9295E-01	2.0711E-01	5.4377E 02

GAS BUILDUP IN SLOT, DW/DT =-1.0242E 01

FOREWARD	6.6445E 02	9.9925E 01	9.9793E 01	5.9926E 03	1.6739E 02	1.6061E 04	3.0165E-01	2.4434E 01	1.9290E-01	2.8332E-01	8.1286E 02
AFT	7.0110E 02	9.9917E 01	9.9786E 01	5.9926E 03	1.6847E 02	1.6061E 04	0.0	0.0	0.0	0.0	8.1801E 02

GAS BUILDUP IN SLOT, DW/DT =-5.1521E 00

FOREWARD	9.6306E 02	9.9752E 01	9.9397E 01	5.9908E 03	2.7446E 02	1.6061E 04	7.3003E-01	5.9187E 01	1.9272E-01	2.8104E-01	1.3279E 03
AFT	1.0354E 03	9.9729E 01	9.9374E 01	5.9906E 03	2.7662E 02	1.6061E 04	3.9120E 00	3.1718E 02	1.9271E-01	2.0688E-01	1.3381E 03

GAS BUILDUP IN SLOT, DW/DT =-1.0169E 01

IGNITION TIME, TIME (S) 124.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	601702.81	135268.19
TOTAL VACUUM THRUST (N,LBF)	FTVAC	896557.56	201554.19
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	34201.691	7688.8477
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.10345165E 10	0.23256859E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11578020E 10	0.26028430E 09
THRUST COEFFICIENT	CF	1.4175148	1.4175148
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	407.56177	898.52026
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	455480.25	1004162.2
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	18.355804	40.467636
INERT MASS REMAINING (KG,LBM)	MIR	48.636292	107.22469
TOTAL BURN AREA (M**2,IN**2)	ABTOT	40.633942	62982.738
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	1.6914644	103219.56
PROPELLANT MASS REMAINING (KG,LBM)	WF	2996.4521	6606.0469
TOTAL GAS MASS (KG,LBM)	WGTOT	153.27423	337.91187
RATIO OF SPECIFIC HEATS	GAMA	1.1612453	1.1612453
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.719550	28.041809
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1552.7700	5094.3906
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.84977448E-01	0.84977448E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	42717168.	61.956024
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.50268336E 11	72908.063
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.43642409E-02	0.17182058
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3320.6138	5977.1055
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	40.322571	62500.121
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	0.31113422	482.25903
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	1.6699400	101906.06
GAS VOLUME (M**3,IN**3)	VP	276.67334	16883664.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	42638944.	61.842575
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.49084375E 11	71190.875
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.43581240E-02	0.17157978
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3318.7107	5973.6797
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4833508	2299.1992
EXPANSION RATIO	EPR	6.7163448	6.7163448
PRESSURE RATIO	PEPO	0.13090742	0.13090742
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	61.96	61.96	5977.11	2.44	0.001	0.0	16062.80	7.36	0.00	-7.36	0.1718	16.253	0.1711	16.253
30.000	61.96	61.96	5977.10	3.97	0.003	0.0	16062.80	12.00	0.0	-4.64	0.1718	16.253	0.1718	16.253
60.000	61.96	61.96	5977.10	5.51	0.003	0.0	16062.81	16.63	0.0	-4.64	0.1718	16.253	0.1718	16.253
90.000	61.96	61.96	5977.10	7.04	0.003	0.0	16062.82	21.27	0.0	-4.64	0.1718	16.253	0.1718	16.253
99.243	61.96	61.96	5977.10	7.52	0.003	0.0	16062.82	22.70	0.0	-1.43	0.1718	16.253	0.1718	16.253
118.800	61.96	61.96	5977.10	8.57	0.003	446.41	15858.56	25.56	1.92	-2.88	0.1718	35.949	0.1718	35.949
148.800	61.96	61.95	5976.96	59.49	0.017	448.25	15884.84	177.67	147.57	-4.54	0.1718	35.948	0.1718	35.948
178.800	61.95	61.93	5976.82	85.65	0.024	0.00	15910.71	256.17	73.94	-4.55	0.1718	35.812	0.1718	35.812
208.800	61.95	61.93	5976.81	87.04	0.025	0.00	15936.19	260.73	0.00	-4.56	0.1718	35.518	0.1718	35.518
238.800	61.95	61.93	5976.80	87.89	0.025	0.0	16060.57	265.33	0.00	-4.60	0.1718	35.224	0.1718	35.224
268.800	61.96	61.93	5976.79	89.84	0.026	0.00	15965.93	269.94	0.00	-4.61	0.1718	34.929	0.1718	34.929
298.800	61.96	61.93	5976.78	91.23	0.026	0.00	16010.21	274.54	0.00	-4.60	0.1718	34.635	0.1718	34.635
328.800	61.96	61.93	5976.77	92.62	0.026	0.00	16034.07	279.15	0.00	-4.61	0.1718	34.341	0.1718	34.341
358.800	61.96	61.93	5976.76	94.01	0.027	0.00	16057.54	283.76	0.00	-4.62	0.1718	34.047	0.1718	34.047
380.614	61.95	61.91	5976.61	112.87	0.032	448.74	16074.36	340.95	53.82	-3.36	0.1718	33.753	0.1718	33.753
453.477	61.95	61.91	5976.55	118.70	0.034	448.47	15871.97	354.01	0.16	-11.13	0.1718	35.906	0.1718	35.906
477.600	61.94	61.88	5976.34	139.76	0.040	0.00	15892.89	417.18	59.47	-3.70	0.1718	35.780	0.1718	35.780
507.600	61.94	61.88	5976.32	141.05	0.040	0.00	15918.54	421.73	0.00	-4.55	0.1718	35.469	0.1718	35.469
537.600	61.94	61.88	5976.31	142.35	0.041	0.00	15943.75	426.29	0.00	-4.56	0.1718	35.159	0.1718	35.159
567.600	61.94	61.88	5976.30	143.66	0.041	0.00	15968.54	430.87	0.00	-4.57	0.1718	34.849	0.1718	34.849
597.600	61.94	61.88	5976.28	144.96	0.041	0.00	15992.91	435.45	0.00	-4.58	0.1718	34.539	0.1718	34.539
627.600	61.94	61.88	5976.27	146.27	0.042	0.00	16016.86	440.04	0.00	-4.59	0.1718	34.229	0.1718	34.229
657.600	61.94	61.88	5976.25	147.59	0.042	0.00	16040.38	444.65	0.00	-4.61	0.1718	33.919	0.1718	33.919
664.455	61.94	61.87	5976.18	153.51	0.044	447.74	16045.70	462.57	16.87	-1.05	0.1718	33.609	0.1718	33.609
701.100	61.94	61.87	5976.13	157.72	0.045	445.75	15811.55	468.31	3.24	-5.57	0.1718	35.843	0.1718	35.843
731.100	61.90	61.77	5975.40	208.82	0.060	447.58	15835.73	620.13	147.30	-4.51	0.1718	35.841	0.1718	35.841
761.100	61.87	61.71	5974.94	235.05	0.067	0.00	15859.54	698.45	73.80	-4.52	0.1717	35.812	0.1717	35.812
791.100	61.88	61.71	5974.92	236.22	0.067	0.00	15883.00	702.97	0.00	-4.52	0.1717	35.518	0.1717	35.518
821.100	61.88	61.71	5974.90	237.40	0.068	0.00	15906.10	707.50	0.00	-4.53	0.1717	35.224	0.1717	35.224
851.100	61.88	61.71	5974.88	238.58	0.068	0.00	15928.83	712.04	0.00	-4.54	0.1717	34.929	0.1717	34.929
881.100	61.88	61.71	5974.85	239.77	0.068	0.00	15951.20	716.59	0.00	-4.55	0.1717	34.635	0.1717	34.635
911.100	61.88	61.71	5974.83	240.96	0.069	0.00	15973.21	721.15	0.00	-4.56	0.1717	34.341	0.1717	34.341
941.100	61.88	61.71	5974.81	242.16	0.069	0.00	15994.86	725.72	0.00	-4.57	0.1717	34.047	0.1717	34.047
963.063	61.86	61.66	5974.43	261.29	0.075	448.75	16010.48	783.21	54.14	-3.35	0.1717	33.753	0.1717	33.753
1035.409	61.86	61.65	5974.27	269.36	0.077	447.18	15815.91	797.44	0.0	-10.97	0.1716	35.536	0.1716	35.536
1059.900	61.83	61.58	5973.80	290.53	0.083	0.00	15851.98	861.26	60.15	-3.64	0.1716	35.497	0.1716	35.497
1089.900	61.83	61.58	5973.78	291.26	0.083	0.00	15895.21	865.78	0.00	-4.52	0.1716	35.045	0.1716	35.045
1119.900	61.83	61.58	5973.77	292.01	0.083	0.00	15937.40	870.31	0.00	-4.53	0.1716	34.593	0.1716	34.593
1149.900	61.83	61.58	5973.75	292.78	0.083	0.00	15978.54	874.86	0.00	-4.55	0.1716	34.141	0.1716	34.141
1179.900	61.83	61.58	5973.73	293.57	0.084	0.00	16018.64	879.43	0.00	-4.57	0.1716	33.690	0.1716	33.690
1209.900	61.84	61.58	5973.71	294.38	0.084	0.00	16057.68	884.01	0.00	-4.58	0.1716	33.238	0.1716	33.238
1239.900	61.84	61.58	5973.69	295.22	0.084	0.00	16095.69	888.61	0.00	-4.60	0.1716	32.786	0.1716	32.786
1258.900	61.84	61.58	5973.68	295.75	0.084	0.0	16119.21	891.53	0.00	-2.92	0.1716	32.500	0.1716	32.500
AFT	61.84	61.58	5973.63	298.07	0.085	.....	16119.21	898.52	0.0	-6.99	0.1716	32.500	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RH IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	6.1956E 01	6.1956E 01	5.9771E 03	7.5088E 00	1.6061E 04	-2.4759E-02	-2.2411E 00	1.7262E-01	5.6842E-01	2.2676E 01
AFT	1.1880E 02	6.1956E 01	6.1956E 01	5.9771E 03	8.4624E 00	1.6061E 04	0.0	0.0	0.0	0.0	2.5554E 01

GAS BUILDUP IN SLOT, DW/DT =-2.8797E 00

FOREWARD	3.8061E 02	6.1949E 01	6.1912E 01	5.9766E 03	1.1292E 02	1.6061E 04	-1.5210E-01	-1.3770E 01	1.7259E-01	2.8139E-01	3.4079E 02
AFT	4.5348E 02	6.1945E 01	6.1908E 01	5.9766E 03	1.1662E 02	1.6061E 04	2.0834E 00	1.8861E 02	1.7259E-01	1.9295E-01	3.5192E 02

GAS BUILDUP IN SLOT, DW/DT =-1.1130E 01

FOREWARD	6.6445E 02	6.1939E 01	6.1870E 01	5.9762E 03	1.5342E 02	1.6061E 04	1.6442E-01	1.4887E 01	1.7257E-01	2.8332E-01	4.6274E 02
AFT	7.0110E 02	6.1935E 01	6.1866E 01	5.9761E 03	1.5528E 02	1.6061E 04	0.0	0.0	0.0	0.0	4.6831E 02

GAS BUILDUP IN SLOT, DW/DT =-5.5744E 00

FOREWARD	9.6306E 02	6.1861E 01	6.1662E 01	5.9744E 03	2.6066E 02	1.6061E 04	5.5287E-01	5.0098E 01	1.7243E-01	2.8104E-01	7.8377E 02
AFT	1.0354E 03	6.1847E 01	6.1648E 01	5.9743E 03	2.6436E 02	1.6061E 04	2.7000E 00	2.4467E 02	1.7242E-01	2.0688E-01	7.9474E 02

GAS BUILDUP IN SLOT, DW/DT =-1.0971E 01

IGNITION TIME, TIME (S) 125.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	362258.38	81438.938
TOTAL VACUUM THRUST (N,LBF)	FTVAC	576128.31	129518.81
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	30443.086	6843.8789
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.10349983E 10	0.23267693E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11585382E 10	0.26044982E 09
THRUST COEFFICIENT	CF	1.3514452	1.3514452
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	274.62085	605.43555
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	455821.31	1004914.1
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	16.338577	36.020416
INERT MASS REMAINING (KG,LBM)	MIR	32.297699	71.204269
TOTAL BURN AREA (M**2,IN**2)	ABTOT	31.899078	49443.688
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	1.1232443	68544.625
PROPELLANT MASS REMAINING (KG,LBM)	WF	1989.8423	4386.8516
TOTAL GAS MASS (KG,LBM)	WGTOT	103.62445	228.45282
RATIO OF SPECIFIC HEATS	GAMA	1.1612301	1.1612301
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.713369	28.028183
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1552.2139	5092.5664
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.84912956E-01	0.84912956E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	28801072.	41.772430
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.50304057E 11	72959.875
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.39806589E-02	0.15671891
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3315.7070	5968.2734
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	31.688477	49117.246
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	0.21037519	326.08228
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	1.1017199	67231.125
GAS VOLUME (M**3,IN**3)	VP	277.25220	16918976.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	28738320.	41.681412
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.49120055E 11	71242.625
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.39747618E-02	0.15648675
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3313.8040	5964.8477
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4834042	2299.2813
EXPANSION RATIO	EPR	6.7161045	6.7161045
PRESSURE RATIO	PEPO	0.22165400	0.22165400
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

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INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	41.77	41.77	5968.27	1.92	0.001	0.0	16062.80	3.91	0.00	-3.91	0.1567	16.253	0.1569	16.253
30.000	41.77	41.77	5968.27	3.13	0.003	0.0	16062.80	6.37	0.0	-2.46	0.1567	16.253	0.1567	16.253
60.000	41.77	41.77	5968.27	4.33	0.003	0.0	16062.81	8.83	0.0	-2.46	0.1567	16.253	0.1567	16.253
90.000	41.77	41.77	5968.27	5.54	0.003	0.0	16062.82	11.30	0.0	-2.46	0.1567	16.253	0.1567	16.253
99.243	41.77	41.77	5968.27	5.91	0.003	0.0	16062.82	12.05	0.0	-0.76	0.1567	16.253	0.1567	16.253
118.800	41.77	41.77	5968.27	6.70	0.003	447.49	15935.36	13.54	1.01	-1.51	0.1567	36.121	0.1567	36.121
148.800	41.77	41.77	5968.21	41.14	0.012	0.00	15953.29	83.29	67.33	-2.42	0.1567	36.106	0.1567	36.106
178.800	41.77	41.77	5968.20	42.29	0.012	0.00	15970.94	85.71	0.00	-2.43	0.1567	35.812	0.1567	35.812
208.800	41.77	41.77	5968.20	43.45	0.012	0.00	15988.32	88.14	0.00	-2.43	0.1567	35.518	0.1567	35.518
238.800	41.77	41.77	5968.20	44.45	0.013	0.0	16060.57	90.59	0.00	-2.45	0.1567	35.224	0.1567	35.224
268.800	41.77	41.77	5968.19	45.76	0.013	0.00	16022.26	93.04	0.00	-2.45	0.1567	34.929	0.1567	34.929
298.800	41.77	41.77	5968.19	46.92	0.013	0.00	16038.81	95.48	0.00	-2.44	0.1567	34.635	0.1567	34.635
328.800	41.77	41.77	5968.18	48.07	0.014	0.00	16055.09	97.93	0.00	-2.45	0.1567	34.341	0.1567	34.341
358.800	41.77	41.77	5968.18	49.23	0.014	0.00	16071.09	100.39	0.00	-2.45	0.1567	34.047	0.1567	34.047
380.614	41.77	41.76	5968.06	74.14	0.021	448.74	16062.55	151.26	49.09	-1.79	0.1567	33.753	0.1567	33.753
453.477	41.77	41.76	5968.03	78.23	0.022	448.47	15938.21	158.17	0.06	-5.89	0.1567	35.906	0.1567	35.906
477.600	41.76	41.74	5967.83	105.96	0.030	0.00	15952.19	214.36	54.25	-1.95	0.1567	35.780	0.1567	35.780
507.600	41.76	41.74	5967.82	107.05	0.031	0.00	15969.32	216.79	0.00	-2.42	0.1567	35.469	0.1567	35.469
537.600	41.76	41.74	5967.81	108.13	0.031	0.00	15986.16	219.22	0.00	-2.43	0.1567	35.159	0.1567	35.159
567.600	41.76	41.74	5967.80	109.22	0.031	0.00	16002.72	221.65	0.00	-2.43	0.1567	34.849	0.1567	34.849
597.600	41.76	41.74	5967.80	110.31	0.031	0.00	16019.00	224.09	0.00	-2.44	0.1567	34.539	0.1567	34.539
627.600	41.77	41.74	5967.79	111.40	0.032	0.00	16035.00	226.53	0.00	-2.44	0.1567	34.229	0.1567	34.229
657.600	41.77	41.74	5967.78	112.50	0.032	0.00	16050.71	228.98	0.00	-2.45	0.1567	33.919	0.1567	33.919
664.455	41.76	41.73	5967.71	120.32	0.034	447.74	16054.26	244.93	15.39	-0.56	0.1567	33.609	0.1567	33.609
701.100	41.76	41.73	5967.68	123.08	0.035	446.83	15888.20	247.95	2.23	-2.95	0.1567	36.015	0.1567	36.015
731.100	41.74	41.67	5966.84	191.22	0.055	448.66	15904.05	385.05	134.70	-2.41	0.1567	36.013	0.1567	36.013
761.100	41.72	41.62	5966.27	225.96	0.064	0.00	15919.66	454.95	67.49	-2.41	0.1566	35.812	0.1566	35.812
791.100	41.72	41.62	5966.26	226.94	0.065	0.00	15935.04	457.36	0.00	-2.41	0.1566	35.518	0.1566	35.518
821.100	41.72	41.62	5966.24	227.93	0.065	0.00	15950.18	459.78	0.00	-2.42	0.1566	35.224	0.1566	35.224
851.100	41.72	41.62	5966.22	228.91	0.065	0.00	15965.09	462.21	0.00	-2.42	0.1566	34.929	0.1566	34.929
881.100	41.72	41.62	5966.20	229.90	0.066	0.00	15979.75	464.63	0.00	-2.43	0.1566	34.635	0.1566	34.635
911.100	41.72	41.62	5966.19	230.90	0.066	0.00	15994.19	467.07	0.00	-2.43	0.1566	34.341	0.1566	34.341
941.100	41.72	41.62	5966.17	231.90	0.066	0.00	16008.39	469.50	0.00	-2.44	0.1566	34.047	0.1566	34.047
963.063	41.70	41.57	5965.68	257.26	0.073	448.75	16018.64	520.68	49.38	-1.79	0.1566	33.753	0.1566	33.753
1035.409	41.70	41.56	5965.55	263.55	0.075	447.18	15880.94	528.74	0.0	-5.83	0.1565	35.536	0.1565	35.536
1059.900	41.67	41.51	5964.94	291.73	0.083	0.00	15909.29	585.56	54.86	-1.96	0.1565	35.497	0.1565	35.497
1089.900	41.68	41.51	5964.93	292.30	0.083	0.00	15943.26	587.97	0.00	-2.41	0.1565	35.045	0.1565	35.045
1119.900	41.68	41.51	5964.91	292.90	0.084	0.00	15976.41	590.39	0.00	-2.42	0.1565	34.593	0.1565	34.593
1149.900	41.68	41.51	5964.90	293.51	0.084	0.00	16008.73	592.82	0.00	-2.43	0.1565	34.141	0.1565	34.141
1179.900	41.68	41.51	5964.89	294.14	0.084	0.00	16040.23	595.26	0.00	-2.44	0.1565	33.690	0.1565	33.690
1209.900	41.68	41.51	5964.87	294.78	0.084	0.00	16070.89	597.70	0.00	-2.44	0.1565	33.238	0.1565	33.238
1239.900	41.68	41.51	5964.86	295.44	0.084	0.00	16100.74	600.15	0.00	-2.45	0.1565	32.786	0.1565	32.786
1258.900	41.68	41.51	5964.85	295.86	0.084	0.0	16119.21	601.71	0.00	-1.56	0.1565	32.500	0.1565	32.500
AFT	41.68	41.51	5964.80	297.69	0.085	.....	16119.21	605.44	0.0	-3.73	0.1565	32.500	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDDT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	4.1772E 01	4.1772E 01	5.9683E 03	5.9036E 00	1.6061E 04	-2.2586E-02	-2.2411E 00	1.5747E-01	5.6842E-01	1.2032E 01
AFT	1.1880E 02	4.1772E 01	4.1772E 01	5.9683E 03	6.6437E 00	1.6061E 04	0.0	0.0	0.0	0.0	1.3541E 01

GAS BUILDUP IN SLOT, DW/DT =-1.5084E 00

FOREWARD	3.8061E 02	4.1769E 01	4.1759E 01	5.9681E 03	7.4131E 01	1.6061E 04	-2.2141E-01	-2.1971E 01	1.5746E-01	2.8139E-01	1.5104E 02
AFT	4.5348E 02	4.1768E 01	4.1757E 01	5.9680E 03	7.7024E 01	1.6061E 04	1.2332E 00	1.2237E 02	1.5746E-01	1.9295E-01	1.5693E 02

GAS BUILDUP IN SLOT, DW/DT =-5.8896E 00

FOREWARD	6.6445E 02	4.1762E 01	4.1734E 01	5.9677E 03	1.2031E 02	1.6061E 04	6.3764E-02	6.3282E 00	1.5744E-01	2.8332E-01	2.4560E 02
AFT	7.0110E 02	4.1761E 01	4.1733E 01	5.9677E 03	1.2176E 02	1.6061E 04	0.0	0.0	0.0	0.0	2.4795E 02

GAS BUILDUP IN SLOT, DW/DT =-2.9522E 00

FOREWARD	9.6306E 02	4.1702E 01	4.1572E 01	5.9657E 03	2.5680E 02	1.6061E 04	4.2230E-01	4.1948E 01	1.5730E-01	2.8104E-01	5.2110E 02
AFT	1.0354E 03	4.1695E 01	4.1564E 01	5.9656E 03	2.5971E 02	1.6061E 04	1.8084E 00	1.7965E 02	1.5729E-01	2.0688E-01	5.2693E 02

GAS BUILDUP IN SLOT, DW/DT =-5.8287E 00

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IGNITION TIME, TIME (S) 126.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	204803.63	46041.691
TOTAL VACUUM THRUST (N,LBF)	FTVAC	358383.44	80567.813
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	26949.129	6058.4063
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.10352819E 10	0.23274067E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11590057E 10	0.26055488E 09
THRUST COEFFICIENT	CF	1.2627172	1.2627172
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	182.90292	403.23193
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	456050.06	1005418.4
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	14.463406	31.886353
INERT MASS REMAINING (KG,LBM)	MIR	17.834305	39.317917
TOTAL BURN AREA (M**2,IN**2)	ABTOT	23.142242	35870.555
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	0.62023848	37849.293
PROPELLANT MASS REMAINING (KG,LBM)	WF	1098.7605	2422.3528
TOTAL GAS MASS (KG,LBM)	WGTOT	69.132584	152.41127
RATIO OF SPECIFIC HEATS	GAMA	1.1612196	1.1612196
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.709092	28.018753
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1551.8293	5091.3047
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.84918141E-01	0.84918141E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	19171248.	27.805557
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.50328019E 11	72994.625
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.36205151E-02	0.14253998
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3312.3130	5962.1641
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	23.023758	35686.902
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	0.11825490	183.29553
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	0.59871441	36535.813
GAS VOLUME (M**3,IN**3)	VP	277.78125	16951264.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	19132496.	27.749359
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.49143972E 11	71277.313
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.36152857E-02	0.14233410
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3310.4121	5958.7422
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4834394	2299.3359
EXPANSION RATIO	EPR	6.7159452	6.7159452
PRESSURE RATIO	PEPO	0.47804421	0.47804421
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTL IN/SEC	TAUTL IN.
FORE	27.81	27.81	5962.16	1.99	0.001	0.0	16062.80	2.71	0.00	-2.70	0.1425	16.253	0.1425	16.253
30.000	27.81	27.81	5962.16	3.25	0.003	0.0	16062.80	4.41	0.0	-1.71	0.1425	16.253	0.1425	16.253
60.000	27.81	27.81	5962.16	4.51	0.003	0.0	16062.81	6.12	0.0	-1.71	0.1425	16.253	0.1425	16.253
90.000	27.81	27.81	5962.16	5.76	0.003	0.0	16062.82	7.82	0.0	-1.71	0.1425	16.253	0.1425	16.253
99.243	27.81	27.81	5962.16	6.15	0.003	0.0	16062.82	8.35	0.0	-0.53	0.1425	16.253	0.1425	16.253
118.800	27.81	27.81	5962.16	6.93	0.003	448.48	16005.56	9.37	0.30	-1.05	0.1425	36.277	0.1425	36.277
148.800	27.81	27.80	5962.05	53.51	0.015	0.00	16015.86	72.43	61.37	-1.69	0.1425	36.106	0.1425	36.106
178.800	27.81	27.80	5962.05	54.72	0.016	0.00	16026.00	74.12	0.00	-1.69	0.1425	35.812	0.1425	35.812
208.800	27.81	27.80	5962.04	55.93	0.016	0.00	16035.98	75.81	0.00	-1.69	0.1425	35.518	0.1425	35.518
238.800	27.81	27.80	5962.04	57.10	0.016	0.0	16060.57	77.51	0.00	-1.70	0.1425	35.224	0.1425	35.224
268.800	27.81	27.80	5962.03	58.37	0.017	0.00	16065.46	79.21	0.00	-1.70	0.1425	34.929	0.1425	34.929
298.800	27.81	27.80	5962.02	59.59	0.017	0.00	16064.96	80.91	0.00	-1.70	0.1425	34.635	0.1425	34.635
328.800	27.81	27.80	5962.02	60.80	0.017	0.00	16074.30	82.61	0.00	-1.70	0.1425	34.341	0.1425	34.341
358.800	27.81	27.80	5962.01	62.02	0.018	0.00	16083.48	84.31	0.00	-1.70	0.1425	34.047	0.1425	34.047
380.614	27.80	27.79	5961.80	95.77	0.027	448.74	16090.05	130.20	44.65	-1.24	0.1425	33.753	0.1425	33.753
453.477	27.80	27.79	5961.77	99.57	0.029	448.47	15998.78	134.58	-0.01	-4.09	0.1425	35.906	0.1425	35.906
477.600	27.80	27.77	5961.43	137.09	0.039	0.00	16006.40	185.28	49.34	-1.36	0.1425	35.780	0.1425	35.780
507.600	27.80	27.77	5961.41	138.26	0.040	0.00	16015.75	186.97	0.00	-1.69	0.1425	35.469	0.1425	35.469
537.600	27.80	27.77	5961.40	139.43	0.040	0.00	16024.94	188.66	0.00	-1.69	0.1425	35.159	0.1425	35.159
567.600	27.80	27.77	5961.39	140.61	0.040	0.00	16033.97	190.36	0.00	-1.69	0.1425	34.849	0.1425	34.849
597.600	27.80	27.77	5961.38	141.78	0.041	0.00	16042.85	192.05	0.00	-1.70	0.1425	34.539	0.1425	34.539
627.600	27.80	27.77	5961.36	142.96	0.041	0.00	16051.58	193.75	0.00	-1.70	0.1425	34.229	0.1425	34.229
657.600	27.80	27.77	5961.35	144.14	0.041	0.00	16060.14	195.46	0.00	-1.70	0.1425	33.919	0.1425	33.919
664.455	27.79	27.76	5961.23	154.77	0.044	447.74	16062.08	209.84	14.00	-0.39	0.1425	33.609	0.1425	33.609
701.100	27.79	27.76	5961.20	157.29	0.045	447.81	15958.29	211.88	1.42	-2.05	0.1425	36.172	0.1425	36.172
731.100	27.78	27.72	5960.53	204.16	0.058	0.00	15966.52	274.81	61.26	-1.68	0.1425	36.106	0.1425	36.106
761.100	27.78	27.72	5960.52	205.30	0.059	0.00	15974.63	276.49	0.00	-1.68	0.1424	35.812	0.1424	35.812
791.100	27.78	27.72	5960.50	206.44	0.059	0.00	15982.62	278.17	0.00	-1.68	0.1424	35.518	0.1424	35.518
821.100	27.78	27.72	5960.48	207.59	0.059	0.00	15990.49	279.85	0.00	-1.68	0.1424	35.224	0.1424	35.224
851.100	27.78	27.72	5960.46	208.73	0.060	0.00	15998.23	281.53	0.00	-1.68	0.1424	34.929	0.1424	34.929
881.100	27.78	27.72	5960.44	209.88	0.060	0.00	16005.86	283.21	0.00	-1.68	0.1424	34.635	0.1424	34.635
911.100	27.78	27.72	5960.42	211.03	0.060	0.00	16013.37	284.90	0.00	-1.69	0.1424	34.341	0.1424	34.341
941.100	27.78	27.72	5960.40	212.18	0.061	0.00	16020.76	286.59	0.00	-1.69	0.1424	34.047	0.1424	34.047
963.063	27.77	27.69	5959.79	246.58	0.070	448.75	16026.09	332.75	44.93	-1.24	0.1424	33.753	0.1424	33.753
1035.409	27.77	27.68	5959.68	252.00	0.072	447.18	15940.39	338.20	0.0	-4.03	0.1424	35.536	0.1424	35.536
1059.900	27.74	27.63	5958.87	290.29	0.083	0.00	15961.68	389.47	49.90	-1.36	0.1424	35.497	0.1424	35.497
1089.900	27.74	27.63	5958.85	291.08	0.083	0.00	15987.19	391.14	0.00	-1.68	0.1423	35.045	0.1423	35.045
1119.900	27.74	27.63	5958.83	291.87	0.083	0.00	16012.07	392.82	0.00	-1.68	0.1423	34.593	0.1423	34.593
1149.900	27.75	27.63	5958.81	292.68	0.084	0.00	16036.33	394.50	0.00	-1.68	0.1423	34.141	0.1423	34.141
1179.900	27.75	27.63	5958.79	293.50	0.084	0.00	16059.96	396.19	0.00	-1.69	0.1423	33.690	0.1423	33.690
1209.900	27.75	27.63	5958.77	294.33	0.084	0.00	16082.98	397.88	0.00	-1.69	0.1423	33.238	0.1423	33.238
1239.900	27.75	27.63	5958.75	295.17	0.084	0.00	16105.36	399.58	0.00	-1.70	0.1423	32.786	0.1423	32.786
1258.900	27.75	27.63	5958.74	295.71	0.084	0.0	16119.21	400.66	0.00	-1.08	0.1423	32.500	0.1423	32.500
AFT	27.75	27.63	5958.70	297.61	0.085	.....	16119.21	403.23	0.0	-2.58	0.1423	32.500	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	2.7806E 01	2.7806E 01	5.9622E 03	6.1342E 00	1.6061E 04	-2.0543E-02	-2.2411E 00	1.4323E-01	5.6842E-01	8.3277E 00
AFT	1.1880E 02	2.7805E 01	2.7805E 01	5.9622E 03	6.9055E 00	1.6061E 04	0.0	0.0	0.0	0.0	9.3748E 00

GAS BUILDUP IN SLOT, DW/DT =-1.0471E 00

FOREWARD	3.8061E 02	2.7803E 01	2.7791E 01	5.9618E 03	9.5750E 01	1.6061E 04	-2.7009E-01	-2.9458E 01	1.4321E-01	2.8139E-01	1.2993E 02
AFT	4.5348E 02	2.7802E 01	2.7790E 01	5.9618E 03	9.8765E 01	1.6061E 04	5.6649E-01	6.1807E 01	1.4321E-01	1.9295E-01	1.3402E 02

GAS BUILDUP IN SLOT, DW/DT =-4.0873E 00

FOREWARD	6.6445E 02	2.7794E 01	2.7763E 01	5.9612E 03	1.5477E 02	1.6061E 04	-1.3720E-02	-1.4973E 00	1.4318E-01	2.8332E-01	2.0963E 02
AFT	7.0110E 02	2.7793E 01	2.7762E 01	5.9612E 03	1.5629E 02	1.6061E 04	0.0	0.0	0.0	0.0	2.1184E 02

GAS BUILDUP IN SLOT, DW/DT =-2.0513E 00

FOREWARD	9.6306E 02	2.7767E 01	2.7687E 01	5.9598E 03	2.4629E 02	1.6061E 04	3.1590E-01	3.4497E 01	1.4309E-01	2.8104E-01	3.3306E 02
AFT	1.0354E 03	2.7762E 01	2.7683E 01	5.9597E 03	2.4930E 02	1.6061E 04	1.1007E 00	1.2020E 02	1.4308E-01	2.0688E-01	3.3710E 02

GAS BUILDUP IN SLOT, DW/DT =-4.0332E 00

ORIGINAL PAGE IS
OF POOR QUALITY

IGNITION TIME, TIME (S) 127.00000

PARAMETER DESCRIPTION (UNITS)	PROGRAM NOMENCLATURE	INTERNATIONAL	ENGLISH
MOTOR PARAMETERS:			
TOTAL DELIVERED THRUST (N,LBF)	FTDEL	92423.625	20777.672
TOTAL VACUUM THRUST (N,LBF)	FTVAC	242776.94	54578.438
THRUST CONTRIBUTION OF INERTS (N,LBF)	FI	19966.793	4488.7148
DELIVERED TOTAL IMPULSE (N*S,LBF*S)	SRMDTI	0.10354304E 10	0.23277406E 09
VACUUM TOTAL IMPULSE (N*S,LBF*S)	SRMVTI	0.11593060E 10	0.26062243E 09
THRUST COEFFICIENT	CF	1.3588829	1.3588829
GRAIN DISCHARGE MASS FLOWRATE (KG/S,LBM/S)	WDOT	115.16566	253.89685
FLOWRATE INTEGRAL (KG,LBM)	SWDOTN	456199.13	1005747.0
INERT MASS FLOWRATE (KG/S,LBM/S)	MIF	10.716043	23.624832
INERT MASS REMAINING (KG,LBM)	MIR	7.1182585	15.693075
TOTAL BURN AREA (M**2,IN**2)	ABTOT	15.571316	24135.590
TOTAL PROPELLANT VOLUME (M**3,IN**3)	VF	0.24755752	15106.895
PROPELLANT MASS REMAINING (KG,LBM)	WF	438.55127	966.84033
TOTAL GAS MASS (KG,LBM)	WGTOT	43.598663	96.118607
RATIO OF SPECIFIC HEATS	GAMA	1.1612120	1.1612120
MOLECULAR WEIGHT OF GAS (KG/MOLE,LBM/MOLE)	AMW	12.705935	28.011795
CHARACTERISTIC EXHAUST VELOCITY (M/S,FT/S)	CSTAR	1551.5461	5090.3750
MAXIMUM CHAMBER MACH NUMBER	AMPN	0.84922254E-01	0.84922254E-01
HEAD END PARAMETERS:			
TOTAL PRESSURE (N/M**2,LBF/IN**2)	PH	12063751.	17.496994
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPHDT	0.50343617E 11	73017.250
BURN AREA (M**2,IN**2)	AHH	0.23185436E-03	0.35937500
BURN RATE (M/S,IN/S)	RBZ(1)	0.32501116E-02	0.12795717
DISTANCE BURNED (M,IN)	TAUZ(1)	0.41282398	16.252914
PROPELLANT VOLUME (M**3,IN**3)	VFH	0.0	0.0
GAS VOLUME (M**3,IN**3)	VPH	12.525938	764380.00
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(1,3)	3309.8066	5957.6523
CYLINDRICAL SECTION PARAMETERS:			
RADIAL BURN AREA (M**2,IN**2)	ABCYL	15.534510	24078.664
SEGMENT FACE BURN AREA (M**2,IN**2)	ABSLOT	0.36496181E-01	56.569199
PROPELLANT VOLUME (M**3,IN**3)	VFCYL	0.22603345	13793.414
GAS VOLUME (M**3,IN**3)	VP	278.19775	16976688.
AFT END PARAMETERS:			
TOTAL PRESSURE(NOZ ENT) (N/M**2,LBF/IN**2)	PON	12043384.	17.467453
PRESSURE INTEGRAL (N*S/M**2,LBF*S/IN**2)	SPONDT	0.49159528E 11	71299.875
BURN AREA (M**2,IN**2)	AAN	0.0	0.0
BURN RATE (M/S,IN/SEC)	RBZ(NI+1)	0.32456620E-02	0.12778199
DISTANCE BURNED (M,IN)	TAUZ(NI+1)	0.82549989	32.500000
PROPELLANT VOLUME (M**3,IN**3)	VFN	0.21524068E-01	1313.4800
GAS VOLUME (M**3,IN**3)	VPN	12.004153	732538.69
GAS STATIC TEMPERATURE (DEG K,DEG R)	PRNT(NI,3)	3307.9121	5954.2422
PORT AREA (M**2,IN**2)	AP	10.399472	16119.215
NOZZLE PARAMETERS:			
THROAT AREA (M**2,IN**2)	AT	1.4834623	2299.3721
EXPANSION RATIO	EPR	6.7158394	6.7158394
PRESSURE RATIO	PEPO	0.57212842	0.57212842
MISCELLANEOUS PARAMETERS:			
ANISOTROPIC BURN RATE COEFFICIENT	AKRST	0.65951407E-01	0.65951407E-01
NUMBER OF PRESSURE ITERATIONS	ANLOPS	3.0000000	3.0000000

INCREMENT DIVIDING PLANE DATA:

MASS ADDITION REGIONS	PO PSIA	P PSIA	T DEG. R	U FT/SEC	M	LP INCHES	AP SQ. IN.	WDOT LB/SEC	DWDOT LB/SEC	DW/DT LB/SEC	RR IN/SEC	TAU IN.	RBTO IN/SEC	TAUTO IN.
FORE	17.50	17.50	5957.65	2.34	0.001	0.0	16062.80	2.00	0.00	-2.00	0.1280	16.253	0.1278	16.253
30.000	17.50	17.50	5957.65	3.81	0.003	0.0	16062.80	3.26	0.0	-1.26	0.1280	16.253	0.1280	16.253
60.000	17.50	17.50	5957.65	5.29	0.003	0.0	16062.81	4.52	0.0	-1.26	0.1280	16.253	0.1280	16.253
90.000	17.50	17.50	5957.65	6.76	0.003	0.0	16062.82	5.78	0.0	-1.26	0.1280	16.253	0.1280	16.253
99.243	17.50	17.50	5957.65	7.21	0.003	0.0	16062.82	6.17	0.0	-0.39	0.1280	16.253	0.1280	16.253
118.800	17.50	17.50	5957.65	8.12	0.003	0.0	16037.52	6.93	-0.22	-0.78	0.1280	36.400	0.1280	36.400
148.800	17.50	17.50	5957.65	9.58	0.003	0.0	16044.35	8.18	0.0	-1.25	0.1280	36.106	0.1280	36.106
178.800	17.50	17.50	5957.64	11.04	0.004	0.0	16051.07	9.43	0.0	-1.25	0.1280	35.812	0.1280	35.812
208.800	17.50	17.50	5957.64	12.51	0.004	0.0	16057.68	10.69	0.0	-1.25	0.1280	35.518	0.1280	35.518
238.800	17.50	17.50	5957.64	13.98	0.004	0.0	16060.57	11.95	0.0	-1.26	0.1280	35.224	0.1280	35.224
268.800	17.50	17.50	5957.64	15.44	0.005	0.0	16070.58	13.20	0.0	-1.26	0.1280	34.929	0.1280	34.929
298.800	17.50	17.50	5957.64	16.90	0.005	0.0	16076.87	14.46	0.0	-1.26	0.1280	34.635	0.1280	34.635
328.800	17.50	17.50	5957.64	18.37	0.006	0.0	16083.05	15.72	0.0	-1.26	0.1280	34.341	0.1280	34.341
358.800	17.50	17.50	5957.64	19.83	0.006	0.0	16089.12	16.98	0.0	-1.26	0.1280	34.047	0.1280	34.047
380.614	17.50	17.50	5957.63	20.89	0.006	0.0	16093.46	17.90	0.0	-0.92	0.1280	33.753	0.1280	33.753
453.477	17.50	17.50	5957.63	24.23	0.007	448.47	16053.98	20.70	-0.07	-3.02	0.1280	35.906	0.1280	35.906
477.600	17.50	17.49	5957.42	77.26	0.022	0.00	16055.81	66.00	44.30	-1.00	0.1280	35.780	0.1280	35.780
507.600	17.50	17.49	5957.41	78.71	0.022	0.00	16058.07	67.25	0.00	-1.25	0.1279	35.469	0.1279	35.469
537.600	17.50	17.49	5957.40	80.16	0.023	0.00	16060.28	68.50	0.00	-1.25	0.1279	35.159	0.1279	35.159
567.600	17.50	17.49	5957.39	81.62	0.023	0.00	16062.46	69.75	0.00	-1.25	0.1279	34.849	0.1279	34.849
597.600	17.50	17.49	5957.38	83.07	0.024	0.00	16064.59	71.00	0.00	-1.25	0.1279	34.539	0.1279	34.539
627.600	17.50	17.49	5957.37	84.52	0.024	0.00	16066.69	72.26	0.00	-1.25	0.1279	34.229	0.1279	34.229
657.600	17.50	17.49	5957.36	85.98	0.025	0.00	16068.75	73.51	0.00	-1.25	0.1279	33.919	0.1279	33.919
664.455	17.50	17.49	5957.25	101.03	0.029	447.74	16069.21	86.36	12.57	-0.29	0.1279	33.609	0.1279	33.609
701.100	17.50	17.49	5957.23	103.02	0.030	448.71	16022.16	87.81	0.77	-1.51	0.1279	36.314	0.1279	36.314
731.100	17.49	17.47	5956.53	169.33	0.048	0.00	16023.45	144.16	55.11	-1.24	0.1279	36.106	0.1279	36.106
761.100	17.49	17.47	5956.51	170.77	0.049	0.00	16024.72	145.40	0.00	-1.24	0.1279	35.812	0.1279	35.812
791.100	17.49	17.47	5956.49	172.22	0.049	0.00	16025.98	146.65	0.00	-1.24	0.1279	35.518	0.1279	35.518
821.100	17.49	17.47	5956.47	173.67	0.050	0.00	16027.22	147.89	0.00	-1.25	0.1279	35.224	0.1279	35.224
851.100	17.49	17.47	5956.45	175.12	0.050	0.00	16028.45	149.14	0.00	-1.25	0.1279	34.929	0.1279	34.929
881.100	17.49	17.47	5956.43	176.57	0.050	0.00	16029.66	150.39	0.00	-1.25	0.1279	34.635	0.1279	34.635
911.100	17.49	17.47	5956.41	178.02	0.051	0.00	16030.85	151.63	0.00	-1.25	0.1279	34.341	0.1279	34.341
941.100	17.49	17.47	5956.39	179.47	0.051	0.00	16032.03	152.88	0.00	-1.25	0.1279	34.047	0.1279	34.047
963.063	17.48	17.44	5955.61	228.23	0.065	448.75	16032.88	194.14	40.34	-0.91	0.1279	33.753	0.1279	33.753
1035.409	17.48	17.44	5955.52	233.23	0.067	447.18	15994.58	197.89	0.0	-2.98	0.1279	35.536	0.1279	35.536
1059.900	17.46	17.39	5954.42	287.58	0.082	0.00	16009.43	243.71	44.81	-1.01	0.1279	35.497	0.1279	35.497
1089.900	17.46	17.39	5954.39	288.73	0.082	0.00	16027.23	244.95	0.00	-1.24	0.1278	35.045	0.1278	35.045
1119.900	17.46	17.39	5954.37	289.88	0.083	0.00	16044.58	246.20	0.00	-1.24	0.1278	34.593	0.1278	34.593
1149.900	17.46	17.39	5954.34	291.04	0.083	0.00	16061.49	247.45	0.00	-1.25	0.1278	34.141	0.1278	34.141
1179.900	17.46	17.39	5954.31	292.21	0.083	0.00	16077.96	248.70	0.00	-1.25	0.1278	33.690	0.1278	33.690
1209.900	17.47	17.39	5954.29	293.38	0.084	0.00	16093.98	249.95	0.00	-1.25	0.1278	33.238	0.1278	33.238
1239.900	17.47	17.39	5954.26	294.57	0.084	0.00	16109.57	251.20	0.00	-1.25	0.1278	32.786	0.1278	32.786
1258.900	17.47	17.39	5954.24	295.32	0.084	0.0	16119.21	251.99	0.00	-0.79	0.1278	32.500	0.1278	32.500
AFT	17.47	17.39	5954.19	297.55	0.085	.....	16119.21	253.90	0.0	-1.90	0.1278	32.500	....	.....

	SLOT INTERFACE LOCATION IN.	PO PSIA	P PSIA	T DEG. R	U FT/SEC	AP SQ. IN.	DWDOT LB/SEC	AB SQ. IN.	RR IN/SEC	DELTA TAU IN.	WSLOT LB/SEC
FOREWARD	9.9243E 01	1.7497E 01	1.7497E 01	5.9576E 03	7.1917E 00	1.6061E 04	-1.8441E-02	-2.2411E 00	1.2857E-01	5.6842E-01	6.1469E 00
AFT	1.1880E 02	1.7497E 01	1.7497E 01	5.9576E 03	8.1046E 00	1.6061E 04	0.0	0.0	0.0	0.0	6.9271E 00

GAS BUILDUP IN SLOT, DW/DT =-7.8020E-01

FOREWARD	3.8061E 02	1.7497E 01	1.7497E 01	5.9576E 03	2.0621E 01	1.6061E 04	-2.7057E-01	-3.2881E 01	1.2857E-01	2.8139E-01	1.7625E 01
AFT	4.5348E 02	1.7497E 01	1.7497E 01	5.9576E 03	2.4154E 01	1.6061E 04	5.4384E-02	6.6091E 00	1.2857E-01	1.9295E-01	2.0644E 01

GAS BUILDUP IN SLOT, DW/DT =-3.0194E 00

FOREWARD	6.6445E 02	1.7497E 01	1.7488E 01	5.9573E 03	1.0101E 02	1.6061E 04	-7.1002E-02	-8.6295E 00	1.2856E-01	2.8332E-01	8.6293E 01
AFT	7.0110E 02	1.7496E 01	1.7488E 01	5.9572E 03	1.0278E 02	1.6061E 04	0.0	0.0	0.0	0.0	8.7806E 01

GAS BUILDUP IN SLOT, DW/DT =-1.5126E 00

FOREWARD	9.6306E 02	1.7481E 01	1.7438E 01	5.9556E 03	2.2810E 02	1.6061E 04	2.2781E-01	2.7706E 01	1.2847E-01	2.8104E-01	1.9437E 02
AFT	1.0354E 03	1.7478E 01	1.7435E 01	5.9555E 03	2.3163E 02	1.6061E 04	5.4270E-01	6.6006E 01	1.2847E-01	2.0688E-01	1.9735E 02

GAS BUILDUP IN SLOT, DW/DT =-2.9846E 00

ALL DATA CASES COMPLETED