

FLOW CONDITIONS FOR THE 20 INCH MACH 6 (AIR)

TEST	6834	RUN	32	DATE	11 Feb 2002
TIME	2.5 sec	PT2	INPUT	0.0000	AOA .14 deg

RESERVOIR STAGNATION CONDITIONS

PT1 N/M <sup>2</sup>	TT1 DEG K	RHOT1 KG/M <sup>3</sup>	ZT1	HT1 J/KG	ST1 J/KG-K
3.273E+06	5.205E+02	2.190E+01	1.000E+00	5.247E+05	0.000E+00
PSI	DEG R	SLUG/FT <sup>3</sup>		BTU/LBM	S/R
4.747E+02	9.370E+02	4.250E-02	1.000E+00	2.257E+02	0.000E+00

FREE - STREAM CONDITIONS ( GAM=1.402, Z1=1 )

P1 N/M <sup>2</sup>	T1 DEG K	RHO1 KG/M <sup>3</sup>	H1 J/KG	A1 M/S	U1 M/S
2.024E+03	6.305E+01	1.118E-01	6.340E+04	1.592E+02	9.587E+02
PSI	DEG R	SLUG/FT <sup>3</sup>	BTU/LBM	FPS	FPS
2.935E-01	1.135E+02	2.170E-04	2.728E+01	5.222E+02	3.145E+03
M1	NRE1 1/M	Q1 N/M <sup>2</sup>	VIS1 N-S/M <sup>2</sup>	V_BAR	
6.023E+00	2.547E+07	5.140E+04	4.210E-06	1.528E-03	
6.023E+00	1/FT	PSI	SLUG/FT <sup>2</sup>		
	7.762E+06	7.455E+00	8.794E-08	1.528E-03	

STATIC CONDITIONS BEHIND NORMAL SHOCK ( Z2=1 )

P2 N/M <sup>2</sup>	T2 DEG K	RHO2 KG/M <sup>3</sup>	H2 J/KG	A2 M/S	Kn
8.533E+04	5.041E+02	5.898E-01	5.077E+05	4.501E+02	4.726E-05
PSI	DEG R	SLUG/FT <sup>3</sup>	BTU/LBM	FPS	
1.238E+01	9.073E+02	1.144E-03	2.184E+02	1.477E+03	4.726E-05

U2 M/S	M2	NRE2 1/M	GAM2	RATIO
1.818E+02	4.040E-01	3.992E+06	1.400E+00	5.273E+00
FPS		1/FT		
5.965E+02	4.040E-01	1.217E+06	1.400E+00	5.273E+00

STAGNATION CONDITIONS BEHIND NORMAL SHOCK

( ZT2 = 1 , GAMT2 = GAM2 , HT2 = HT1 )

PT2 N/M <sup>2</sup>	TT2 DEG K	RHOT2 KG/M <sup>3</sup>	RADIUS M	TW DEG K	QT2-FR W/M <sup>2</sup>
9.548E+04	5.205E+02	6.391E-01	3.175E-03	3.000E+02	3.677E+05
PSI	DEG R	SLUG/FT <sup>3</sup>	INCH	DEG R	BTU/FT <sup>2</sup> -SEC
1.385E+01	9.370E+02	1.240E-03	1.250E-01	5.400E+02	3.240E+