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A NUMERICAL INTEGRATION OF A 97 KT
EXPLOSION IN SEA LEVEL AIR



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**LOS ALAMOS SCIENTIFIC LABORATORY
OF THE UNIVERSITY OF CALIFORNIA LOS ALAMOS NEW MEXICO**

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**A NUMERICAL INTEGRATION OF A 97 KT
EXPLOSION IN SEA LEVEL AIR**

by

D. D. Eilers

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ABSTRACT

An extensive numerical integration was made for a 97 KT explosion in sea level air using detailed data for the equation of state and opacity for air. The results are offered in the form of graphs and tables and illustrate in detail the shock wave and fireball phenomena from zero time through approximately twice breakaway time. Comparisons are made with previous calculations done by Brode.



I. PURPOSE AND METHOD

Fairly recent improvements in air equation of state and opacity data and in calculation techniques have led to the desire for a new detailed theoretical description of the nuclear fireball and blast phenomena for a sea level air explosion. A 97 KT yield has been selected.

The calculations were performed by an IBM 7094 Computer code which numerically integrates the Lagrangian formulation of the hydrodynamic equations together with the equations of radiation diffusion in one space dimension and spherical geometry.

A complete description of the equations and the methods for doing a calculation of this type is contained in LAMS-2792.¹ However, some changes have been made since that report was written.

Additional effort has been expended to minimize the shock radius errors due to the integration with finite zone sizes. This effort resulted in the development of a code to do explosion environment zoning, for which the theory is quite simple. If the mass ratio (M_i/M_{i+1} , where M is the mass and i is the zone number) is assumed to be constant, and if the specific volume or mass, the radii, the number of zones for each material shell, and the radius or mass of the first zone (shell)

are given, then the masses and radii of all zones can be calculated. By varying some of the zoning parameters, one can attempt to minimize the quantity $1 - x_{i-1}/x_i$ over the largest portion of X, where X is the radius. A zoned environment of this type was used in pure hydrodynamic, constant gamma problems; and when the results were compared with the corresponding von Neumann point source solutions, it was concluded that the error in the shock radius vs time data resulted in an equivalent energy error of no more than 2.8%.

A more detailed investigation of the effects of viscosity pressure resulted in the conclusion that a closer approximation of the real phenomena would be accomplished if we used a linear form of the viscosity pressure equation

$$q_{i-\frac{1}{2}}^n = a \rho_{i-\frac{1}{2}}^n \left(\frac{x_i^{2(n)} \dot{x}_i^{(n-\frac{1}{2})} - x_{i-1}^{2(n)} \dot{x}_{i-1}^{(n-\frac{1}{2})}}{x_i^{2(n)}} \right) \sqrt{(PV)_{i-\frac{1}{2}}^{(n-1)}}$$

where $q_{i-\frac{1}{2}}^n$ is the viscosity pressure at time n for mass point $i-\frac{1}{2}$ bounded by interfaces i and i-1, $\rho_{i-\frac{1}{2}}^n$ is the density, x_i^n is the position of interface i, $\dot{x}_i^{n-\frac{1}{2}}$ is the velocity of interface i, $P_{i-\frac{1}{2}}^{n-1}$ is the total pressure, and $V_{i-\frac{1}{2}}^{n-1}$ is the specific volume. Pure hydrodynamic, constant gamma problems were run to adjust the factor a so that the peak shock pressures obtained agreed to within 1% of the corresponding pressures from the von Neumann point source solutions to the same problems. A comparison of the peak shock pressure vs radius for a 1 KT, gamma = 1.2,

problem is made in Figure 1. The best value for a is 0.8.

II. PROBLEM DESCRIPTION

The problem was designed with a seven zone iron core to simulate the environment found in connection with a tower shot. The core was 100 cm in radius and had a mass of 5000 lbs. A 142 zone shell of sea level air with an outside radius of 279 m surrounded the core. An ambient temperature of 2.354×10^{-5} kv and a density of 1.293×10^{-3} gm/cc were used for the air.

Tabular equation of state and opacity tables were used. The National Bureau of Standards air equation of state data were taken from the report SWC-TN-56-48² and are plotted in Figures 2 through 9. Figures 2 through 5 are graphs of the ionization plus excitation energy E (jerks/gm) vs density ρ (gm/cc) at the temperatures θ (kv) specified at the bottom of Figure 2. Figures 6 through 9 are graphs of the quantity b (jerks/gm-kv) vs density ρ (gm/cc) at the temperatures θ (kv) specified at the bottom of Figure 6 where the equation $b(\theta, \rho) = P/\rho\theta$ defines b . The air opacity data were obtained from two sources. Opacities for temperatures greater than 1 v were calculated by methods used in J-15,³ while the data for less than 1 v were obtained from the Lockheed Aircraft Corporation report LMSD-288052.⁴ However, in an attempt to achieve a better fit to the shock breakaway phenomenon, the opacities for less than a volt had to be increased over the Lockheed values. Figures 10 through 13 are graphs of the Rosseland

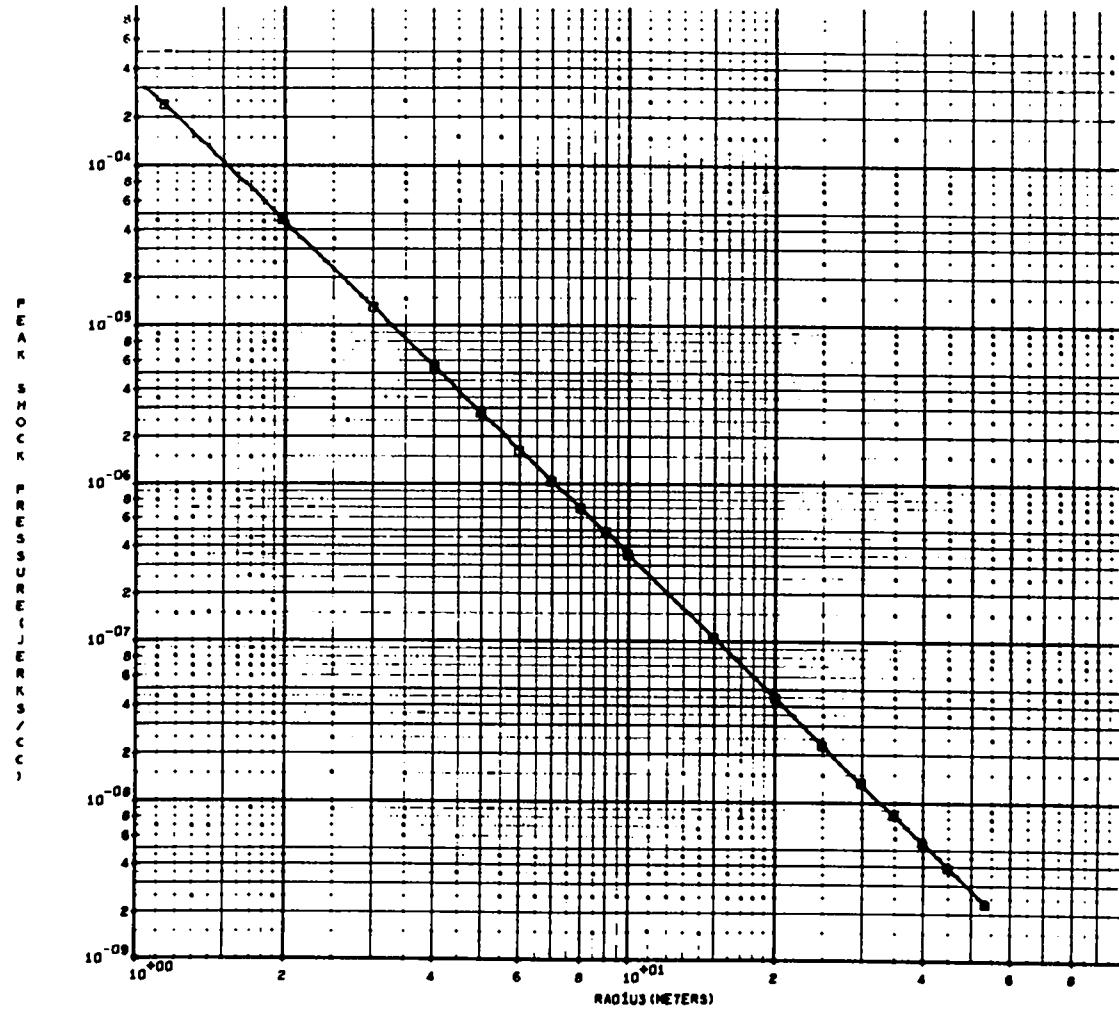


Fig. 1. Comparison of peak shock pressure vs radius. Rectangles are from the von Neumann solution.

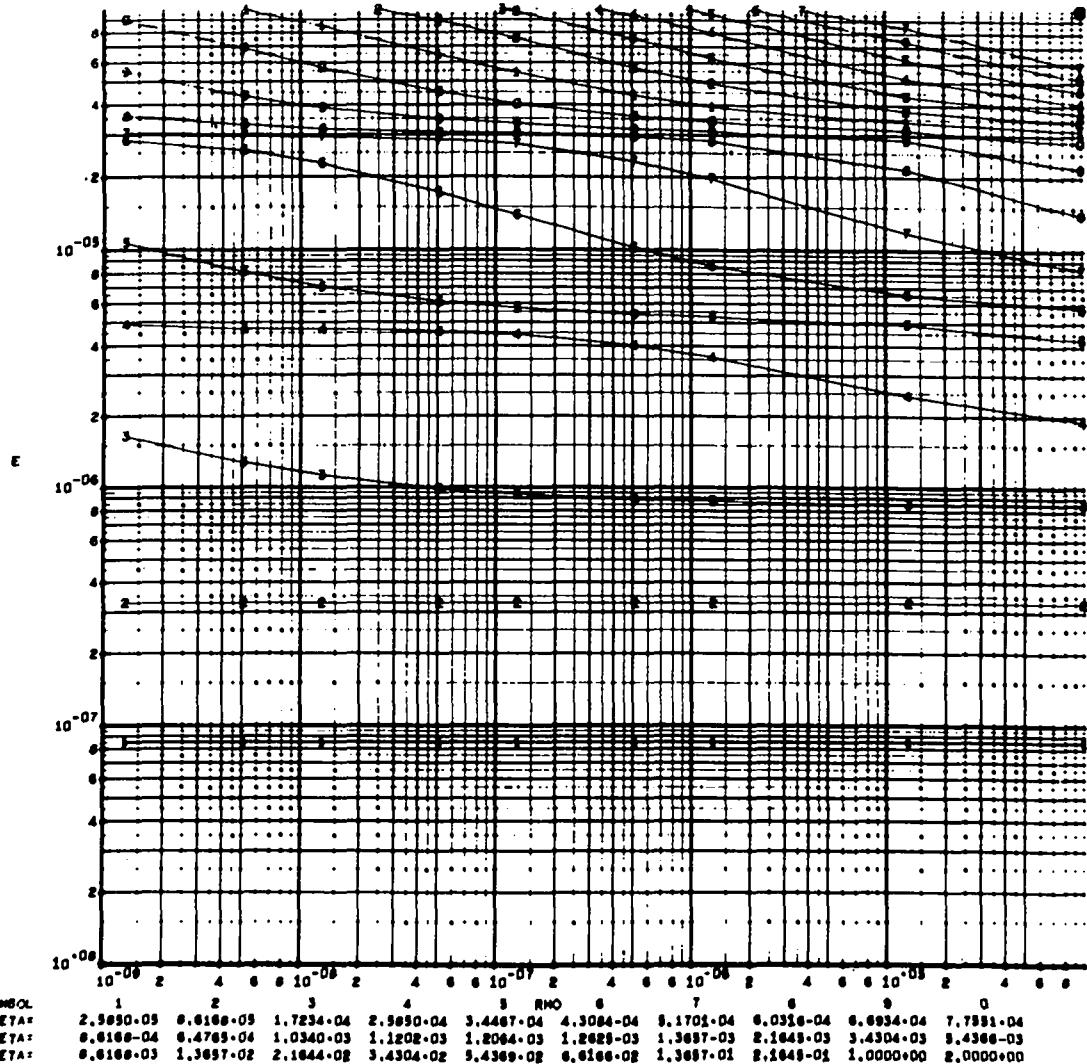


Fig. 2. Air equation of state, ionization plus excitation energy (jerks/gm) vs density (gm/cc) at the temperatures (kv) specified above.

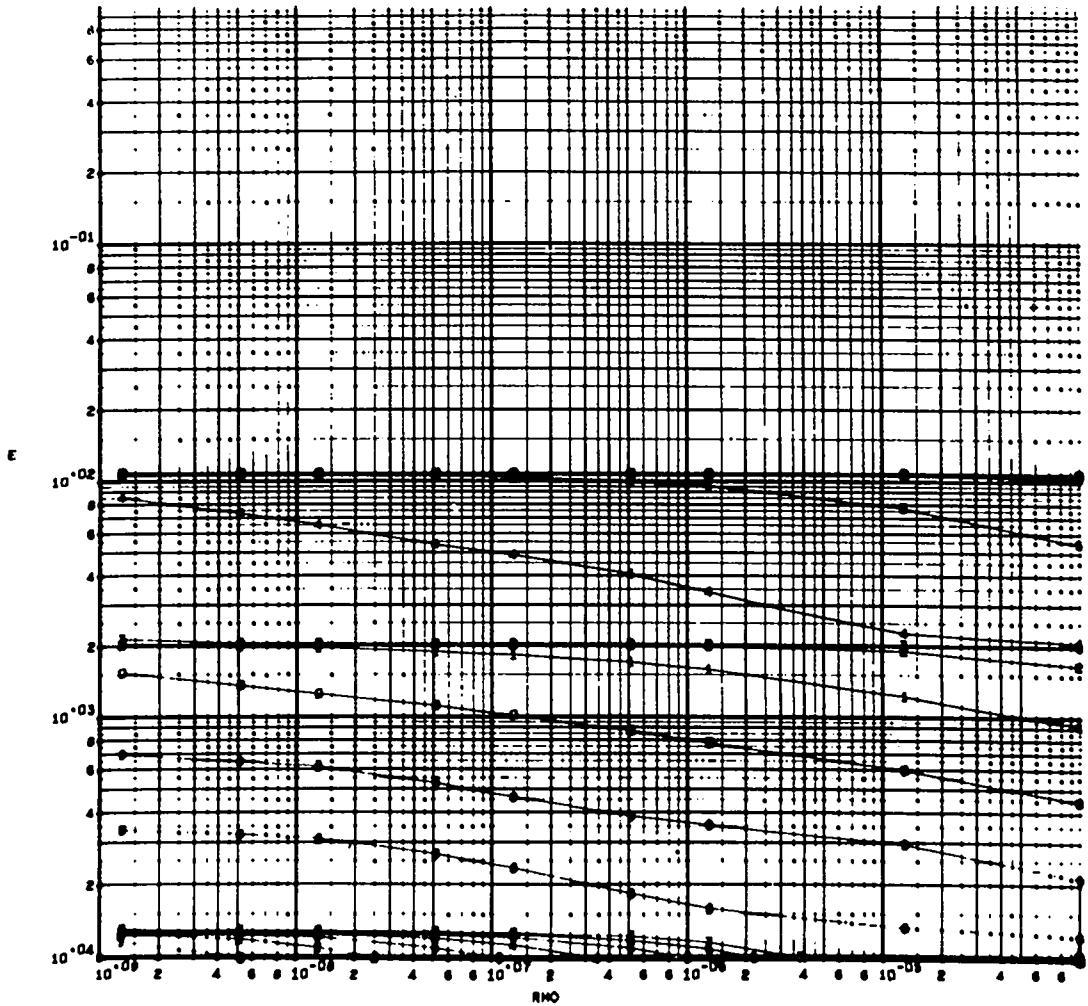


Fig. 3. Air equation of state, ionization plus excitation energy (jerks/gm) vs density (gm/cc) at the temperatures (kv) specified at the bottom of Figure 2.

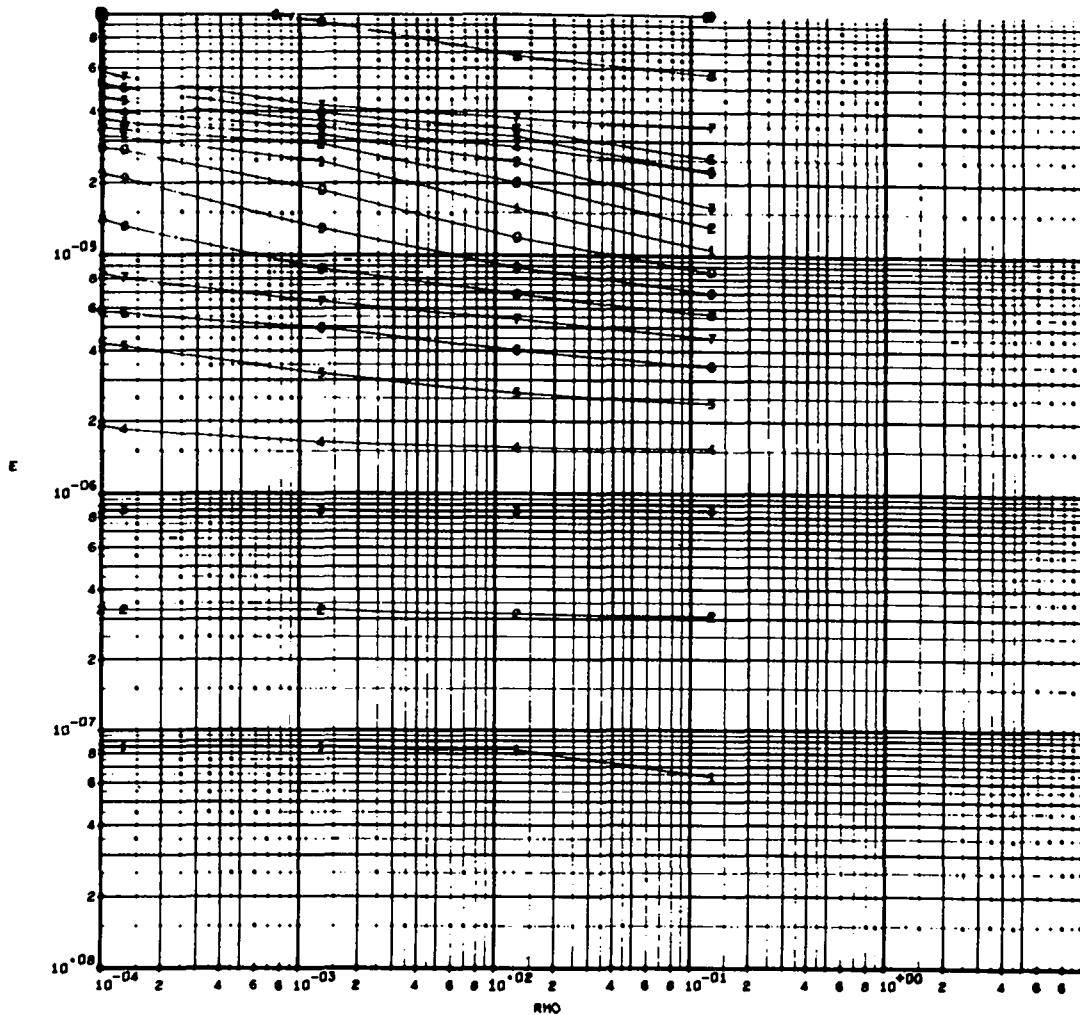


Fig. 4. Air equation of state, ionization plus excitation energy (jerks/gm) vs density (gm/cc) at the temperatures (kv) specified at the bottom of Figure 2.

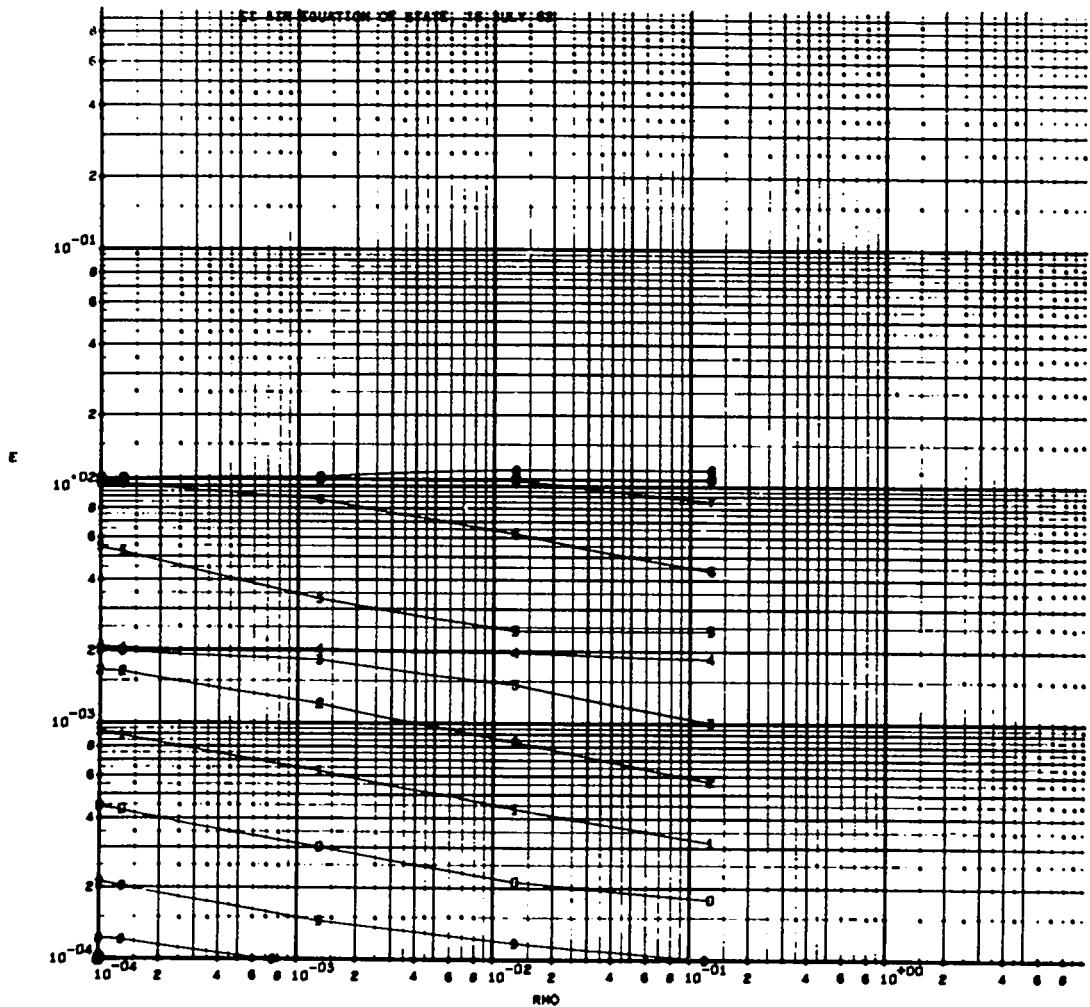


Fig. 5. Air equation of state, ionization plus excitation energy (jerks/gm) vs density (gm/cc) at the temperatures (kv) specified at the bottom of Figure 2.

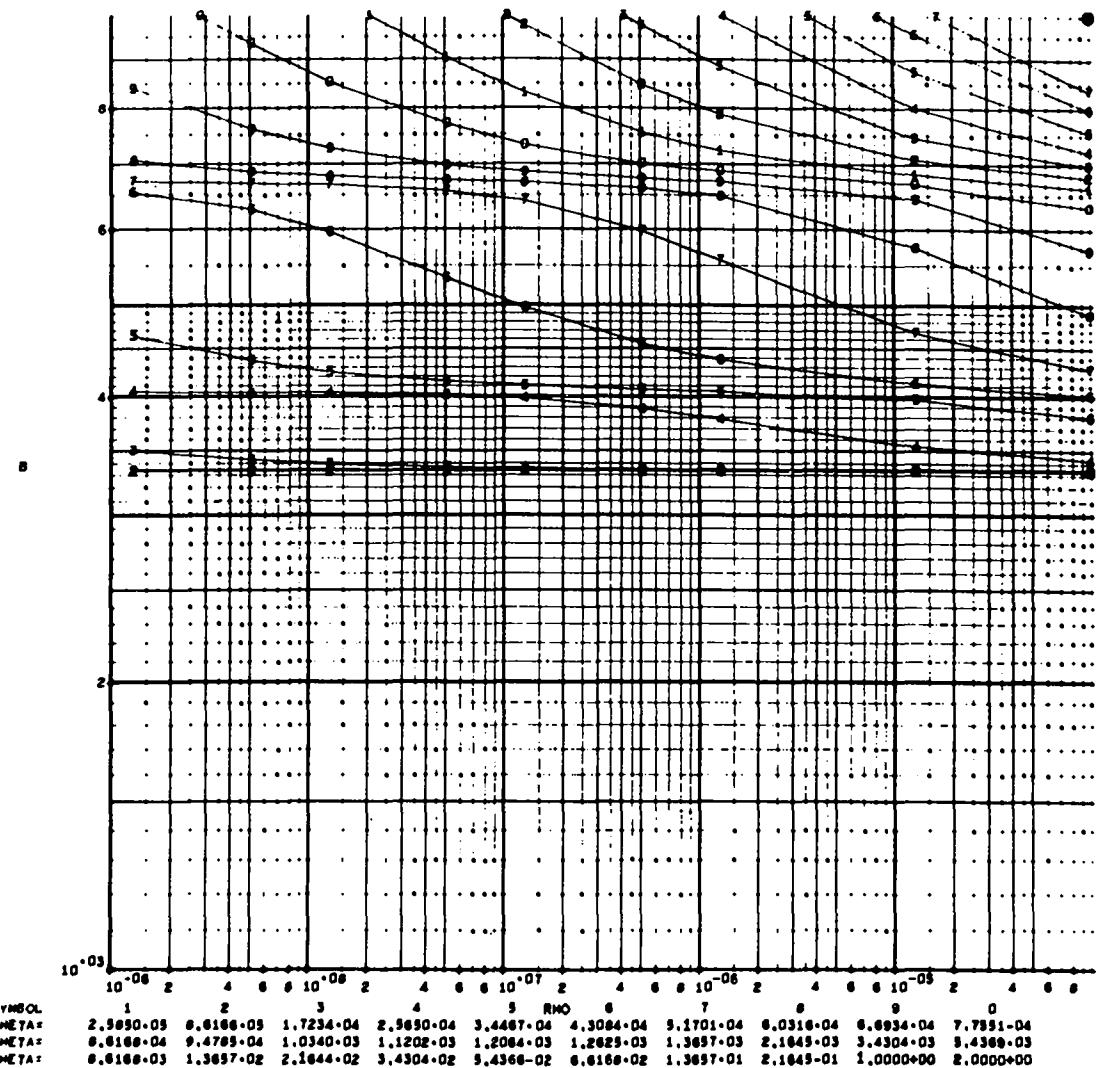


Fig. 6. Air equation of state, b (jerks/gm-kv) vs density (gm/cc) at the temperatures (kv) specified above.

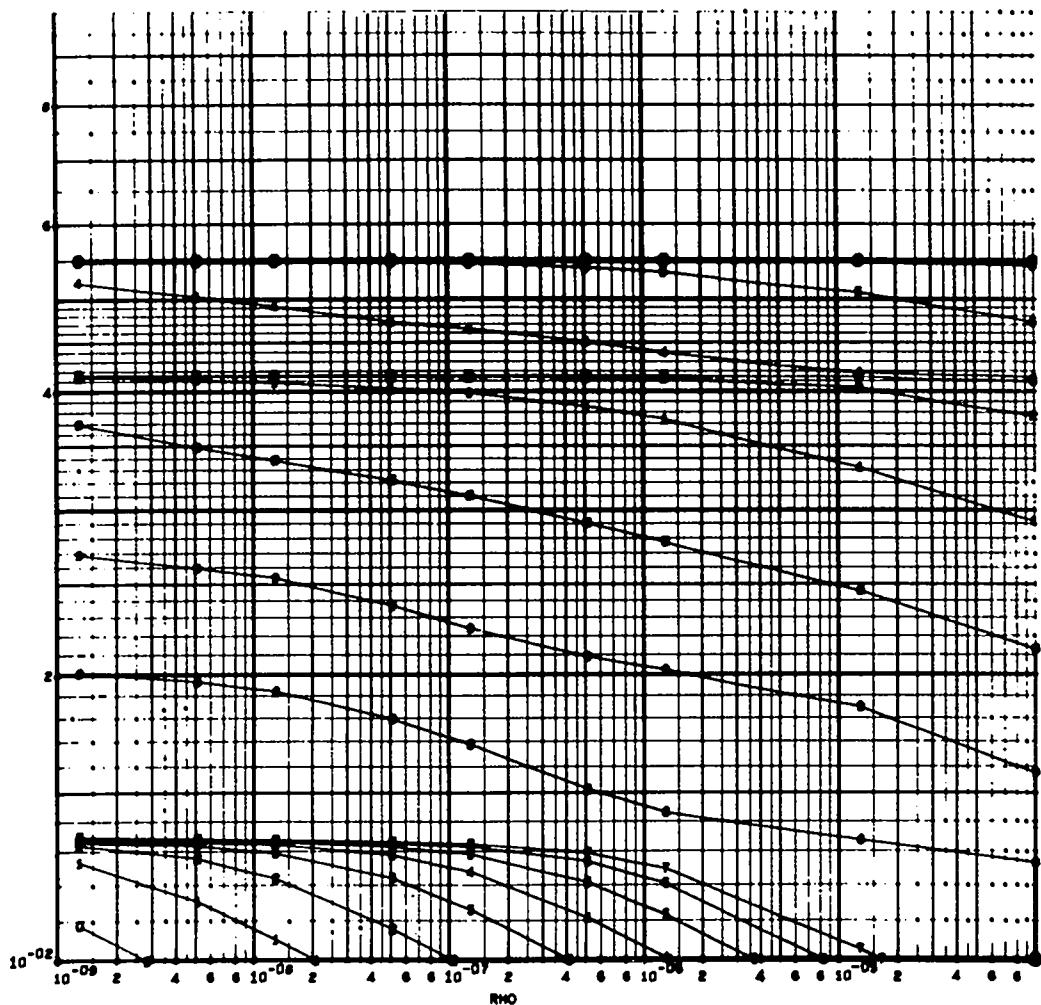


Fig. 7. Air equation of state, b (jerks/gm-kv) vs density (gm/cc) at the temperatures (kv) specified at the bottom of Figure 6.

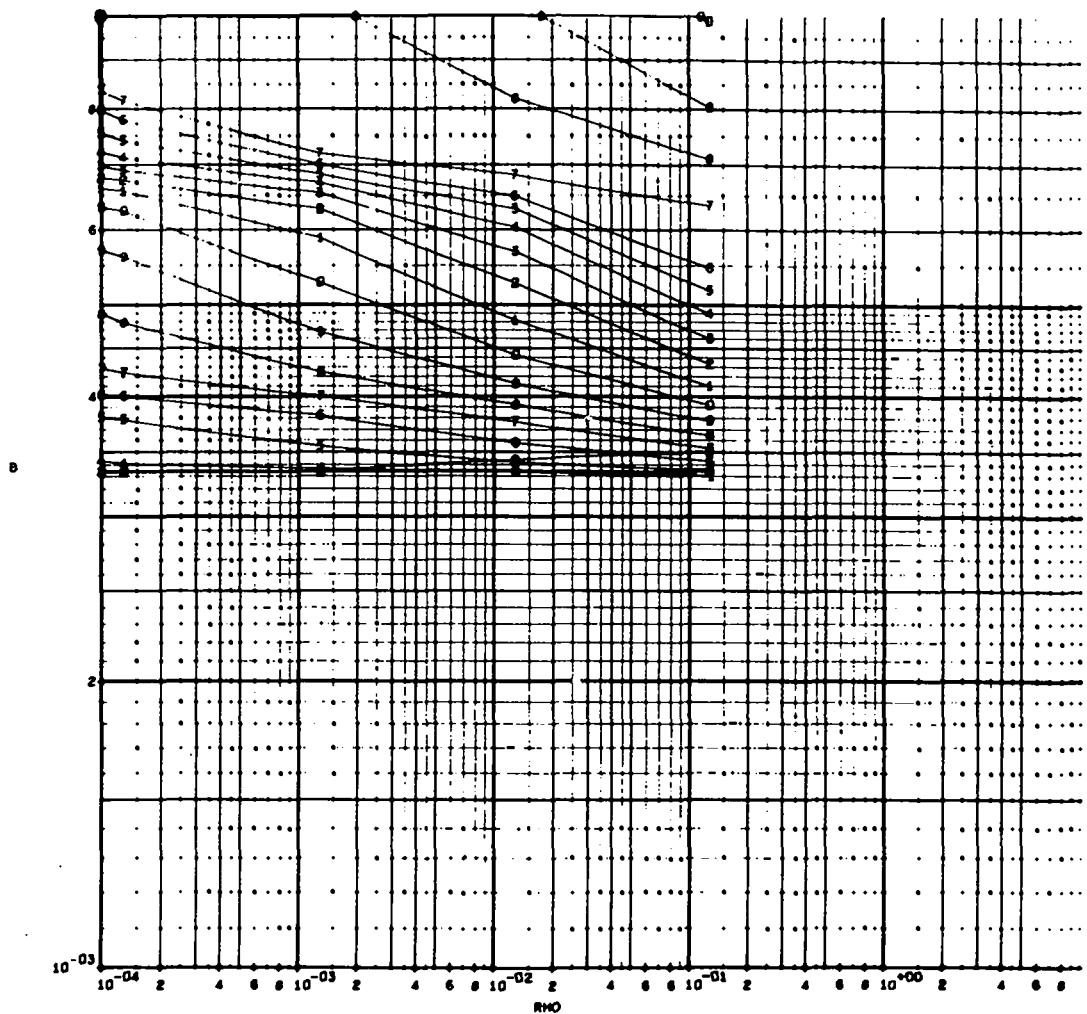


Fig. 8. Air equation of state, b (jerks/gm-kv) vs density (gm/cc) at the temperatures (kv) specified at the bottom of Figure 6.

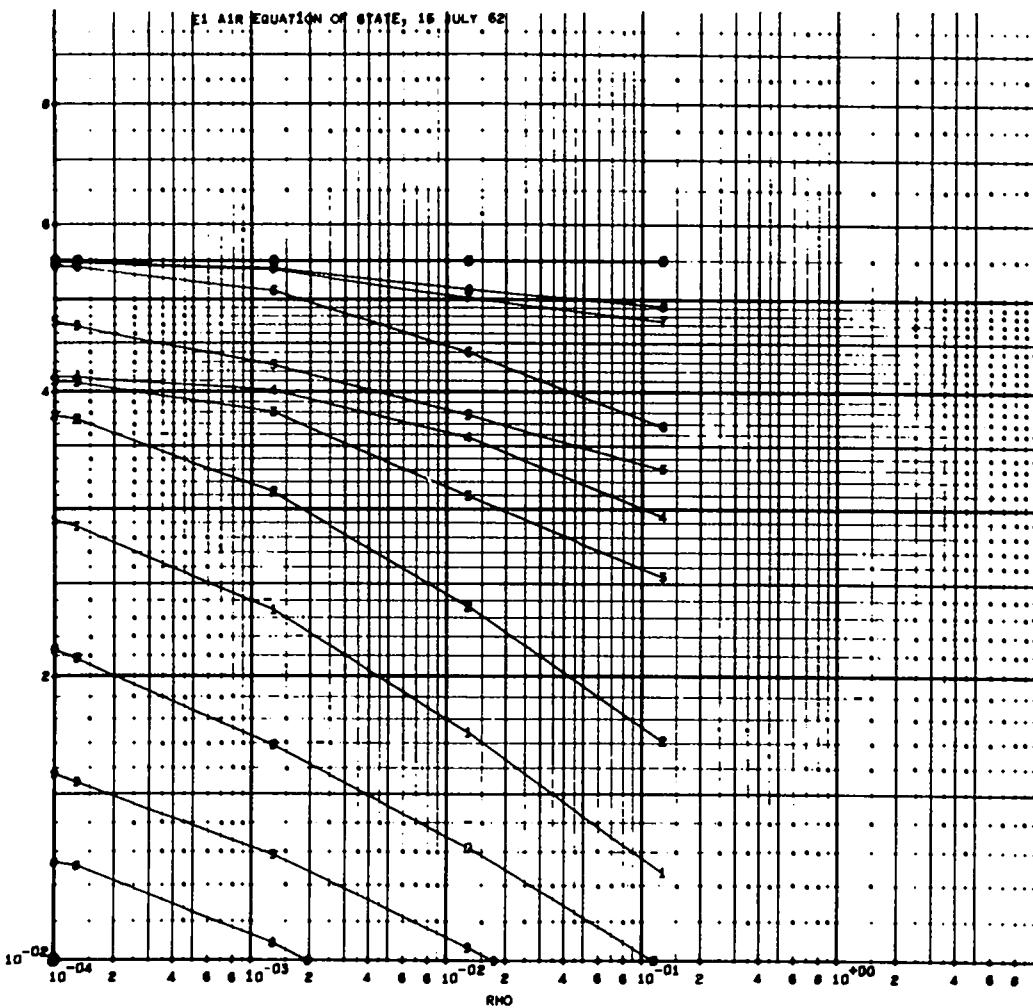


Fig. 9. Air equation of state, b (jerks/gm-kv) vs density (gm/cc) at the temperatures (kv) specified at the bottom of Figure 6.

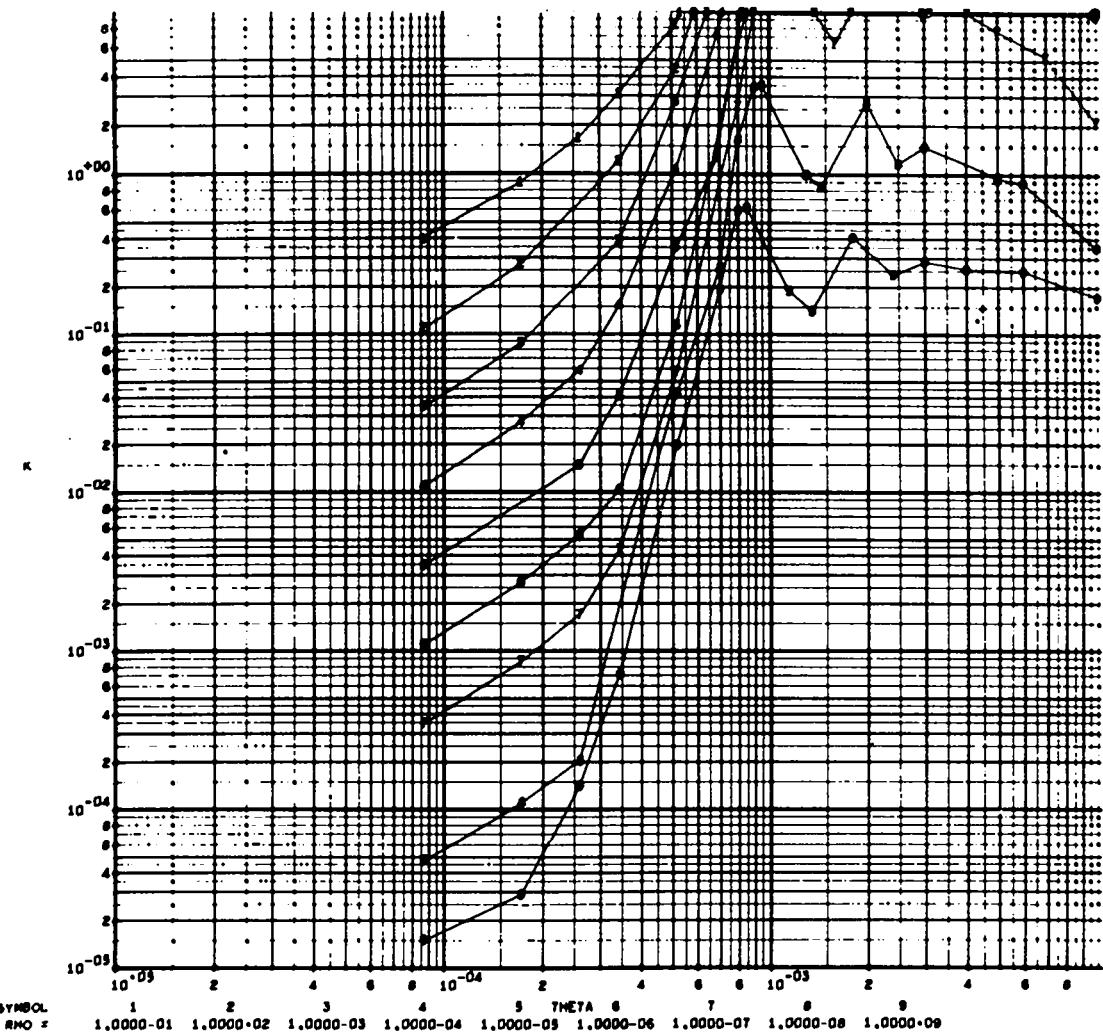


Fig. 10. Rosseland mean air opacity (cm^2/gm) vs temperature (kv) at the densities (gm/cc) specified above.

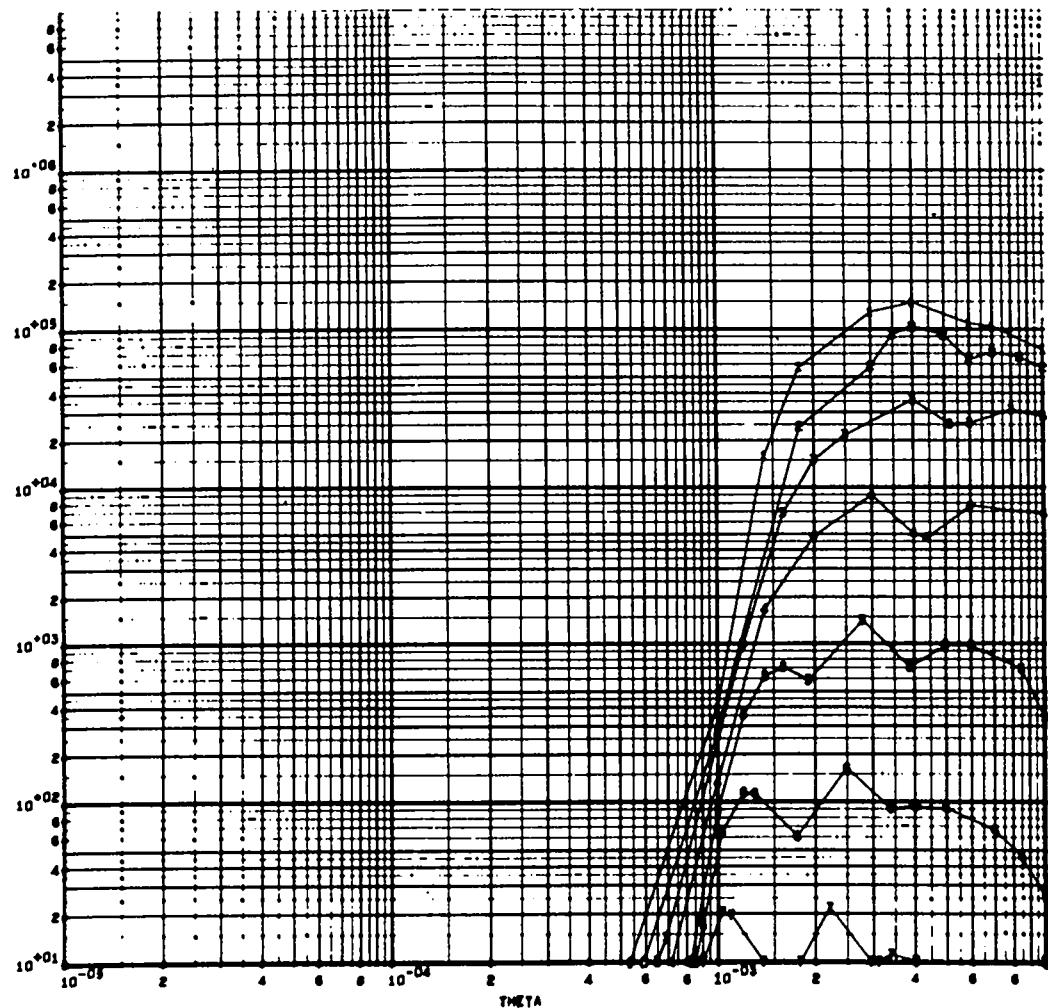


Fig. 11. Rosseland mean air opacity (cm^2/gm) vs temperature (kv) at the densities specified at the bottom of Figure 10.

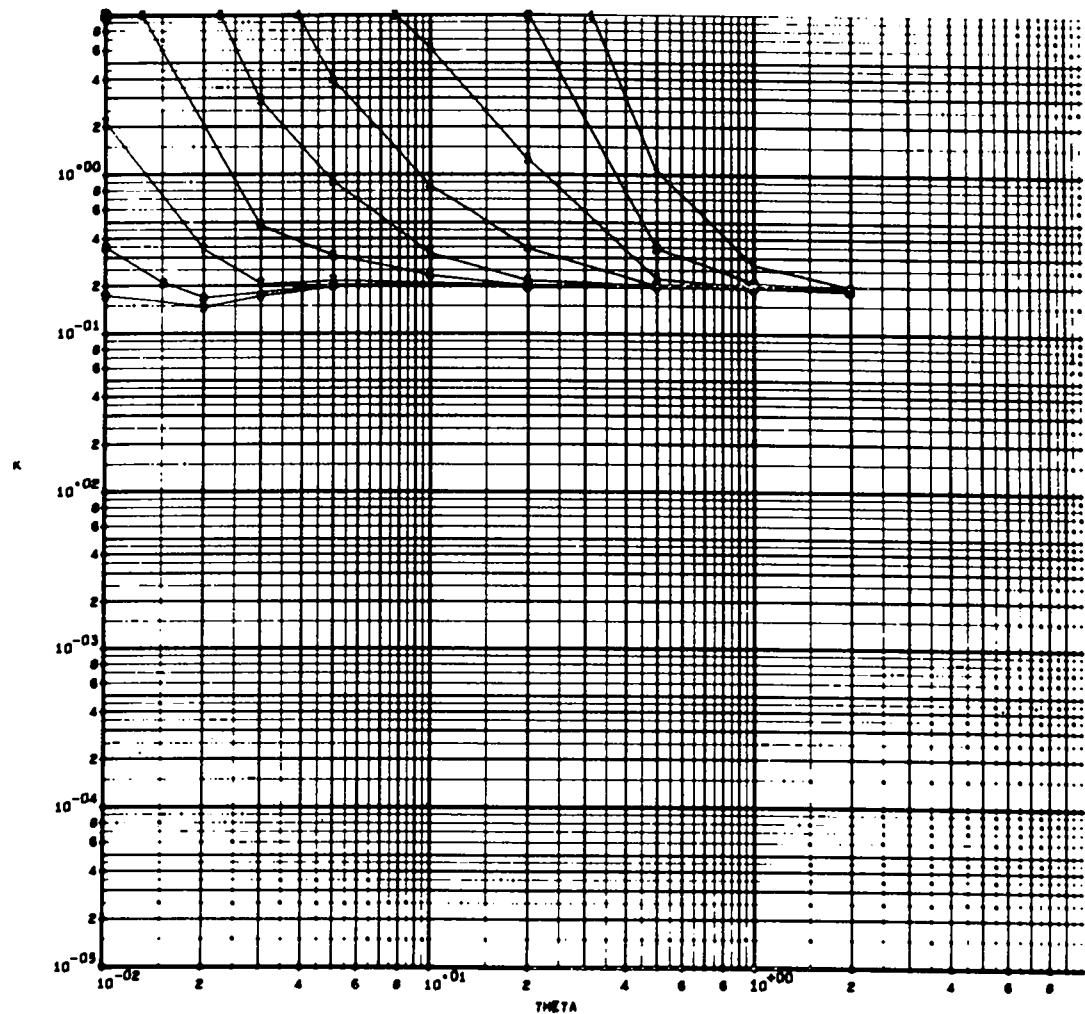


Fig. 12. Rosseland mean air opacity (cm^2/gm) vs temperature (kv) at the densities specified at the bottom of Figure 10.

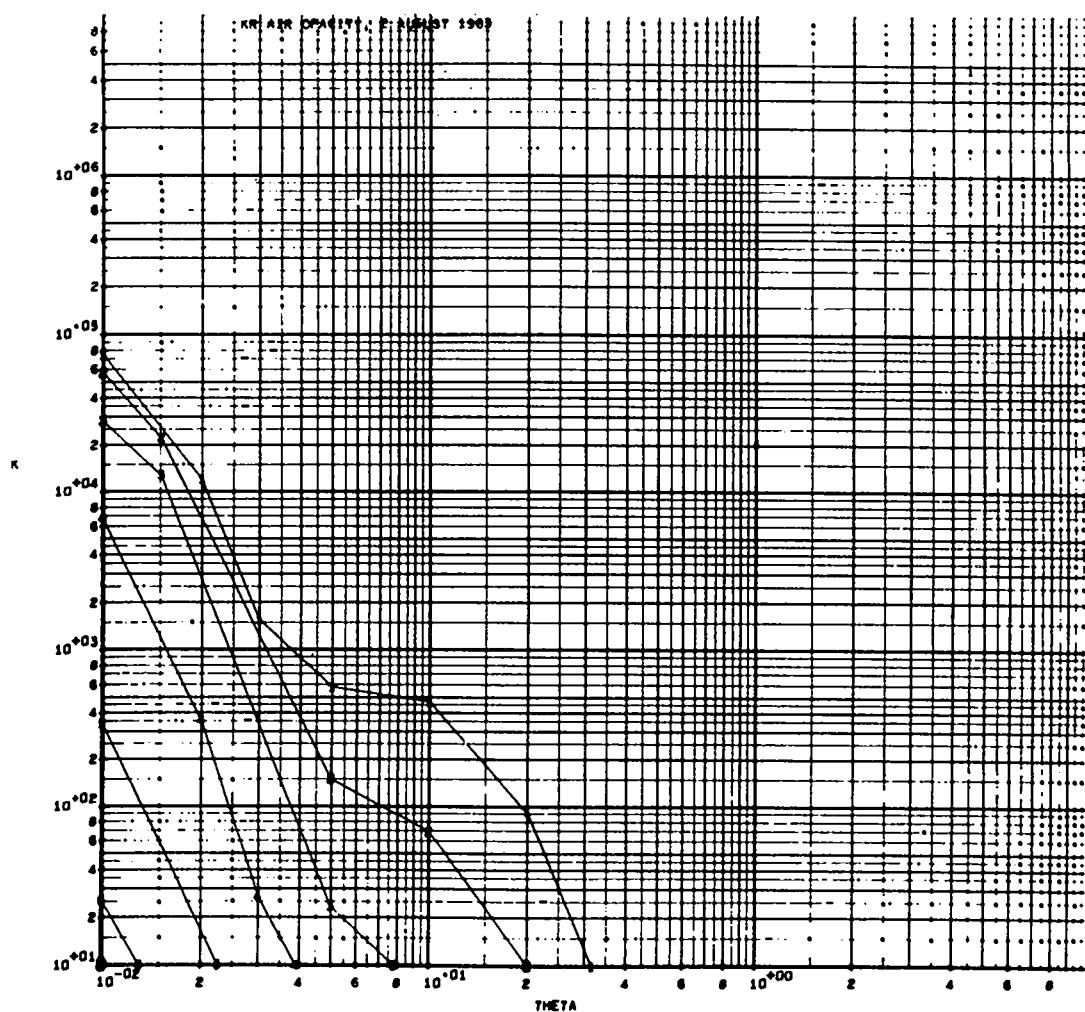


Fig. 13. Rosseland mean air opacity (cm^2/gm) vs temperature (kv) at the densities specified at the bottom of Figure 10.

mean opacity of air κ (cm^2/gm) vs temperature θ (kv) at the densities ρ (gm/cc) specified at the bottom of Figure 10.

Calculations were started at detonation time ($t = 0$) and continued through 70 ms. The energy was dumped into the first zone of the core at a constant rate of 19.4 KT/shake for 5 shakes. Table 1 gives the energy conservation and distribution data for various problem times. It shows that the total energy in the system at any time during the entire integration was always within 0.3% of the input energy.

III. RESULTS

Figure 14 is a graph of the shock front radius in cm vs time in shakes (10^{-8} sec). Figure 15 is a graph of the peak shock pressure in jerks/cc vs shock front radius in cm. The shock front radius, pressure, and time data are contained in Table 2. These data were obtained on the assumption that shock front is always determined in time and space when the static pressure in a zone hits a maximum.

Graphs of the static pressure (jerks/cc), dynamic pressure (jerks/cc), density (gm/cc), particle velocity (cm/shake), temperature (kv), and gamma 2 (defined in LAMS-2792) vs radius X (cm) are contained in Figures 16 through 21, respectively. The dynamic pressure at a mass point $i-\frac{1}{2}$ is defined at time n by the equation

$$Q_{i-\frac{1}{2}}^n = \frac{1}{2} \rho_{i-\frac{1}{2}}^n \left(\frac{x_i^{2(n)} + x_{i-1}^{2(n)}}{2} \right)$$

TABLE 1
ENERGY CONSERVATION AND DISTRIBUTION DATA

t(ms)	Energy in System (KT)			Total
	Kinetic (KE)	Internal (IE)	KE/IE	
1	14.96	81.98	0.182	96.94
5	13.32	83.53	0.159	96.85
10	12.76	84.06	0.152	96.82
20	12.13	84.65	0.143	96.78
30	12.01	84.75	0.142	96.76
40	12.01	84.75	0.142	96.76
50	12.01	84.75	0.142	96.76
60	12.04	84.70	0.142	96.74
70	12.05	84.70	0.142	96.75

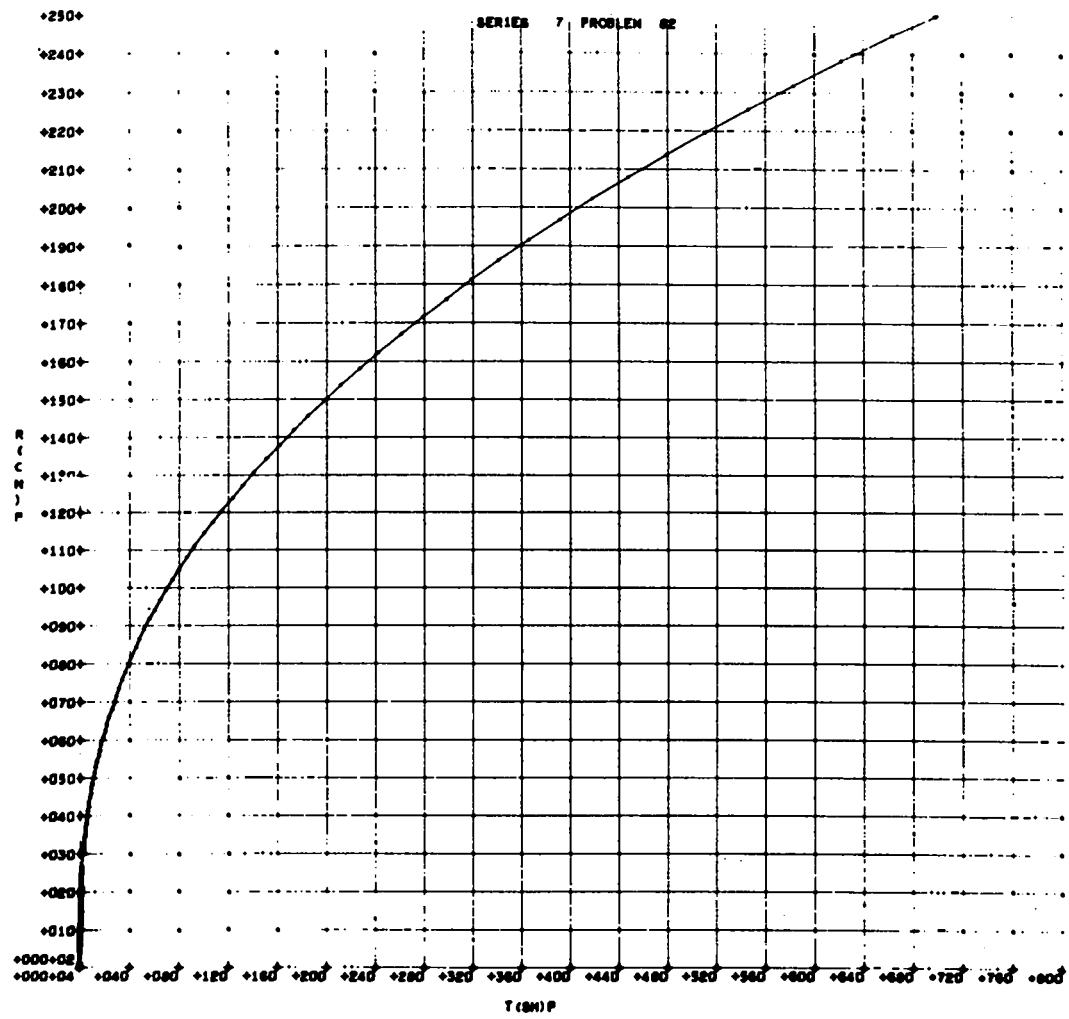


Fig. 14. Shock radius (cm) vs time (shakes).

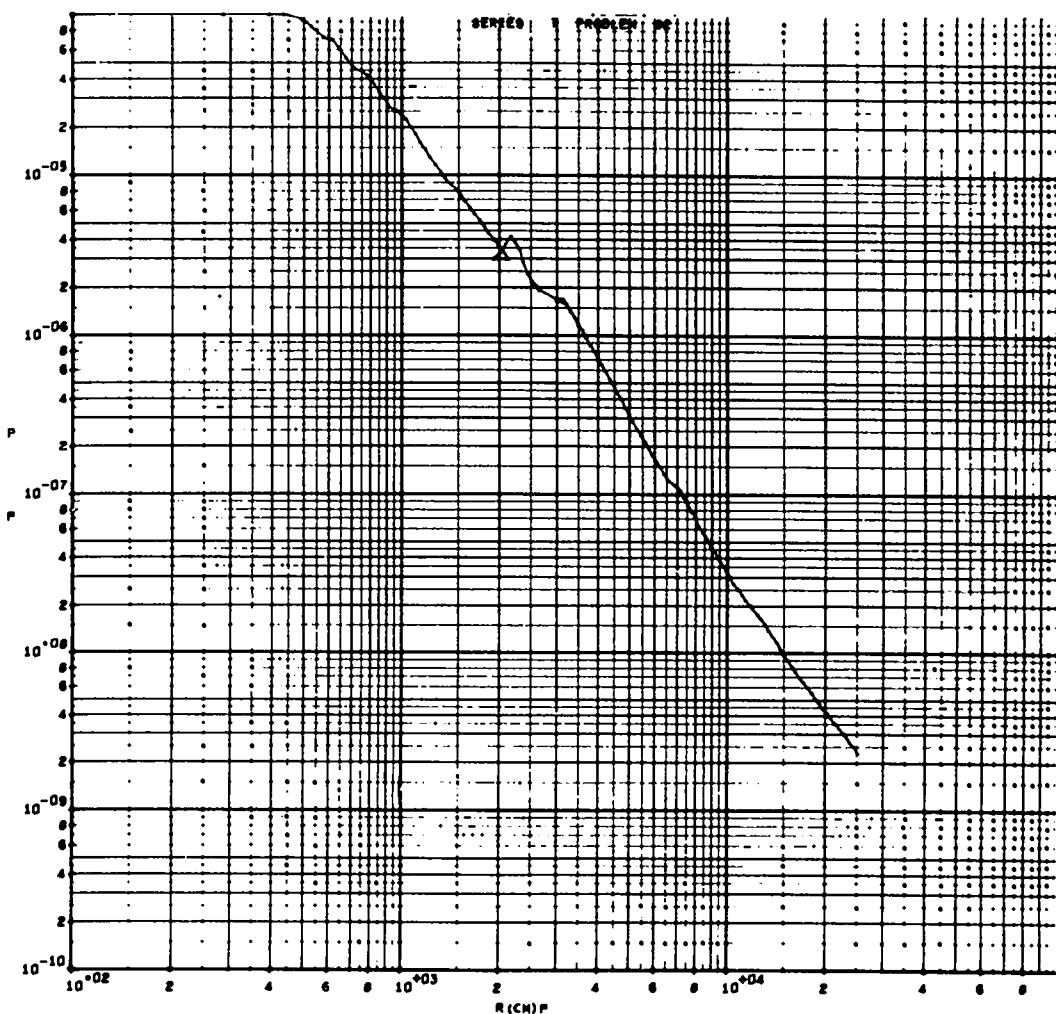


Fig. 15. Peak shock pressure (jerks/cc) vs shock radius (cm).

TABLE 2

J15 SERIES 7 PROBLEM 82 PAGE 1
 SHOCK FRONT DATA

TIME (SHAKES)	RADIUS (CM)	P (JERKS/CC)
5.00328+00	3.33566+01	1.07695-01
9.54480+00	7.35726+01	4.23998-02
1.33006+01	8.41576+01	3.24687-02
1.65144+01	9.04744+01	2.87188-02
1.68879+01	9.45509+01	2.60452-02
1.70652+01	9.73291+01	2.36385-02
1.62466+01	9.92489+01	2.11562-02
3.49070+02	2.85375+02	1.54641-04
6.75803+02	3.95097+02	1.24776-04
8.05825+02	4.38051+02	1.02500-04
1.00547+03	4.93985+02	9.35303-05
1.13088+03	5.29621+02	8.48757-05
1.30326+03	5.73438+02	7.27598-05
1.45719+03	6.11196+02	7.01973-05
1.58386+03	6.42250+02	6.29090-05
1.73485+03	6.76616+02	5.40219-05
1.90850+03	7.13086+02	4.72260-05
2.10227+03	7.51243+02	4.50661-05
2.25242+03	7.81437+02	4.24888-05
2.42774+03	8.14913+02	3.83642-05
2.61564+03	8.49040+02	3.37463-05
2.81445+03	8.83352+02	3.00675-05
3.03758+03	9.19533+02	2.68812-05
3.32931+03	9.62655+02	2.54815-05
3.53502+03	9.95501+02	2.44285-05
3.74725+03	1.02846+03	2.26666-05
3.99723+03	1.06523+03	2.03852-05
4.26244+03	1.10489+03	1.81931-05
4.55925+03	1.14268+03	1.62176-05
4.89815+03	1.18555+03	1.44950-05
5.20804+03	1.22483+03	1.29310-05
5.57209+03	1.26816+03	1.15773-05
5.97474+03	1.31391+03	1.04128-05
6.42772+03	1.36293+03	9.50882-06
6.93103+03	1.41528+03	8.86281-06
7.39744+03	1.46457+03	8.24520-06
7.85713+03	1.51321+03	7.55786-06
8.37387+03	1.56545+03	6.90568-06
8.99126+03	1.62361+03	6.30073-06
9.50800+03	1.67475+03	5.74071-06
1.01208+04	1.73154+03	5.23924-06
1.07986+04	1.79183+03	4.77619-06
1.15032+04	1.85351+03	4.36828-06
1.22683+04	1.91845+03	4.00032-06
1.30736+04	1.98553+03	3.66518-06
1.38856+04	2.05325+03	3.34752-06
1.47312+04	2.12350+03	3.00053-06
3.37564+03	1.91429+03	3.02098-06
4.02911+03	1.97190+03	3.15820-06
4.79581+03	2.03220+03	3.38332-06

TABLE 2 (Cont.)

J15 SERIES 7 PROBLEM 82 PAGE 2
 SHOCK FRONT DATA

TIME (SHAKES)	RADIUS (CM)	P (JERKS/CC)
5.69960+03	2.09603+03	3.72107-06
7.12565+03	2.17779+03	4.19486-06
7.93766+03	2.23654+03	3.79213-06
9.08521+03	2.30322+03	3.44722-06
1.03355+04	2.36980+03	2.90454-06
1.17046+04	2.43728+03	2.44779-06
1.33554+04	2.51101+03	2.17808-06
1.50130+04	2.58199+03	2.05874-06
1.67578+04	2.65440+03	1.94916-06
2.69390+04	3.00187+03	1.69731-06
2.82409+04	3.05229+03	1.66210-06
2.84691+04	3.06620+03	1.68805-06
2.82812+04	3.06637+03	1.68059-06
3.01611+04	3.13651+03	1.62988-06
3.00000+04	3.14034+03	1.67304-06
3.22012+04	3.22286+03	1.57781-06
3.46439+04	3.31141+03	1.42220-06
3.75564+04	3.41013+03	1.29281-06
4.01342+04	3.49687+03	1.16843-06
4.34359+04	3.59876+03	1.08301-06
4.66840+04	3.69627+03	9.76235-07
5.04832+04	3.80294+03	8.71607-07
5.43486+04	3.90762+03	7.98317-07
5.84289+04	4.01351+03	7.13051-07
6.31138+04	4.12732+03	6.49579-07
6.78383+04	4.23835+03	5.93076-07
7.40802+04	4.37163+03	5.36138-07
7.97710+04	4.49079+03	4.88137-07
8.59592+04	4.61383+03	4.37504-07
9.25770+04	4.73922+03	3.97615-07
9.99321+04	4.87094+03	3.52480-07
1.08268+05	5.01113+03	3.17797-07
1.16750+05	5.14832+03	2.86364-07
1.26228+05	5.29293+03	2.57946-07
1.36321+05	5.43974+03	2.33201-07
1.48482+05	5.60430+03	2.11717-07
1.59971+05	5.75556+03	1.92608-07
1.72348+05	5.91105+03	1.75573-07
1.85583+05	6.07010+03	1.61191-07
2.00644+05	6.24104+03	1.46848-07
2.17180+05	6.41957+03	1.32973-07
2.34603+05	6.60025+03	1.22786-07
2.54173+05	6.79395+03	1.16262-07
2.73314+05	6.98079+03	1.12896-07
2.92455+05	7.16546+03	1.06226-07
3.13100+05	7.35806+03	9.53218-08
3.38468+05	7.57639+03	8.66171-08
3.62792+05	7.78340+03	7.85065-08
3.88160+05	7.98883+03	7.09340-08
4.18468+05	8.21827+03	6.34063-08

TABLE 2 (Cont.)

J15 SERIES 7 PROBLEM 82
SHOCK FRONT DATA PAGE 3

TIME (SHAKES)	RADIUS (CM)	F (JERKS/CC)
4.49019+05	8.44128+03	5.75256-08
4.83436+05	8.67902+03	5.23185-08
5.19327+05	8.91698+03	4.74386-08
5.62577+05	9.18496+03	4.34027-08
6.03006+05	9.42999+03	3.98570-08
6.46442+05	9.68229+03	3.63840-08
6.93314+05	9.94305+03	3.34127-08
7.46013+05	1.02211+04	3.02055-08
8.03436+05	1.05100+04	2.76339-08
8.63436+05	1.08008+04	2.54871-08
9.28590+05	1.11033+04	2.35641-08
1.00429+06	1.14359+04	2.19531-08
1.07577+06	1.17453+04	2.04087-08
1.15000+06	1.20573+04	1.89303-08
1.23264+06	1.23900+04	1.77517-08
1.31718+06	1.27228+04	1.66721-08
1.40859+06	1.30703+04	1.53710-08
1.50859+06	1.34346+04	1.39327-08
1.61890+06	1.38169+04	1.27149-08
1.73092+06	1.41932+04	1.16021-08
1.85000+06	1.45774+04	1.05909-08
1.97921+06	1.49760+04	9.70391-09
2.11374+06	1.53772+04	8.93595-09
2.27577+06	1.58269+04	8.20990-09
2.43092+06	1.62515+04	7.57013-09
2.61374+06	1.67211+04	6.94451-09
2.79467+06	1.71765+04	6.45977-09
2.98780+06	1.76458+04	6.02285-09
3.19467+06	1.81307+04	5.59125-09
3.41374+06	1.86268+04	5.18932-09
3.66374+06	1.91620+04	4.81095-09
3.91718+06	1.96916+04	4.45959-09
4.18780+06	2.02367+04	4.13867-09
4.47749+06	2.07989+04	3.84594-09
4.78780+06	2.13790+04	3.57914-09
5.11374+06	2.19696+04	3.33223-09
5.46374+06	2.25806+04	3.09714-09
5.83092+06	2.32020+04	2.87928-09
6.22405+06	2.38434+04	2.67948-09
6.64123+06	2.45015+04	2.49552-09
7.00000+06	2.50918+04	2.28915-09

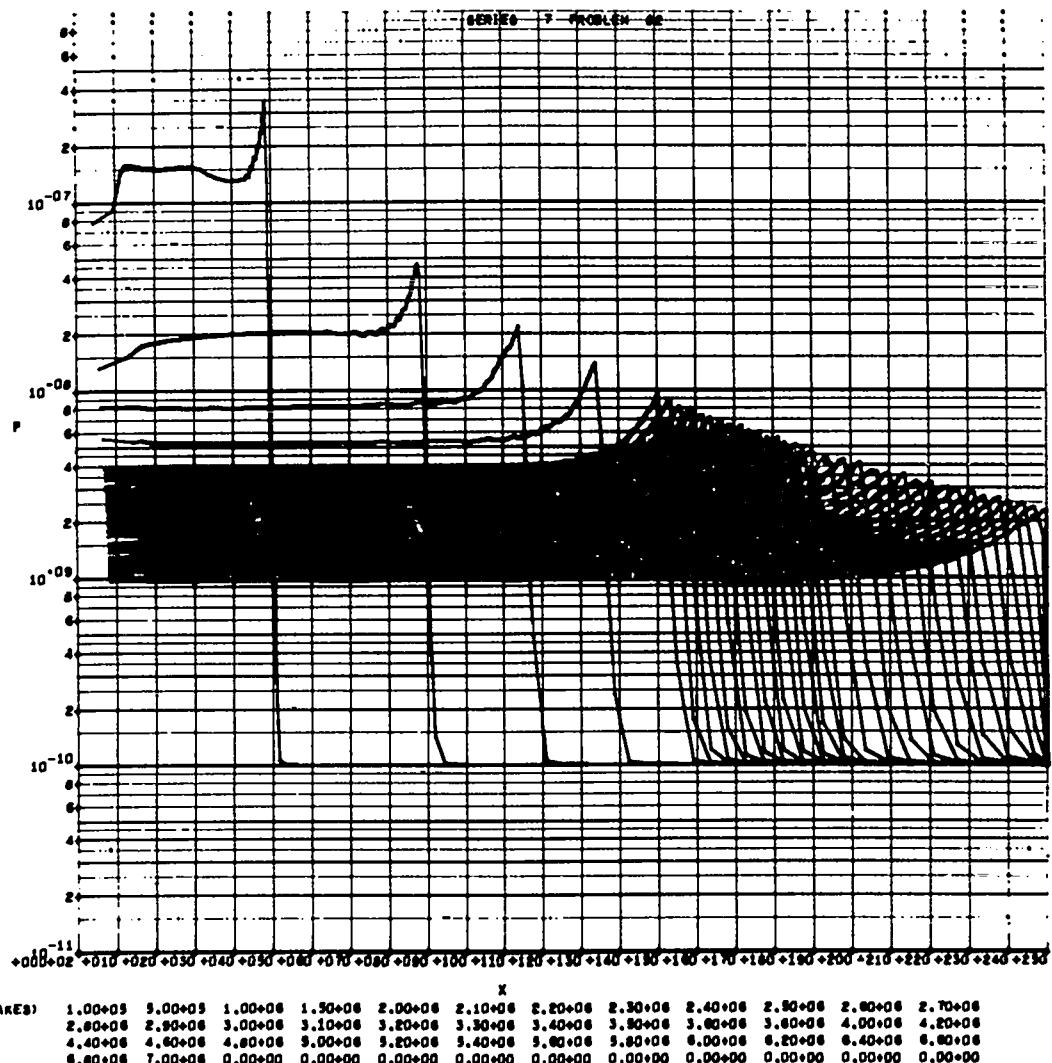


Fig. 16. Static pressure (jerks/cc) vs radius (cm) at times specified above.

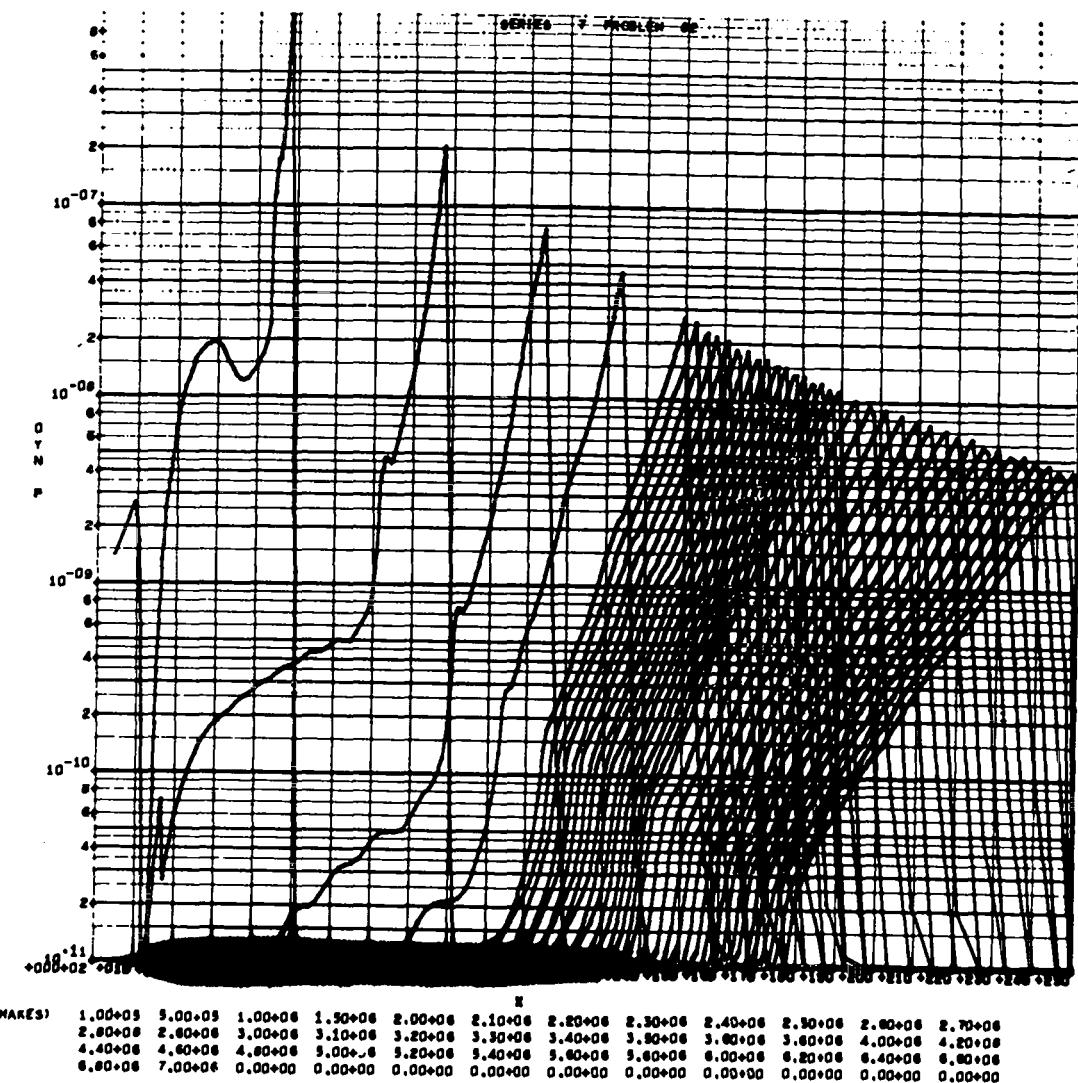


Fig. 17. Dynamic pressure (jerks/cc) vs radius (cm) at times specified above.

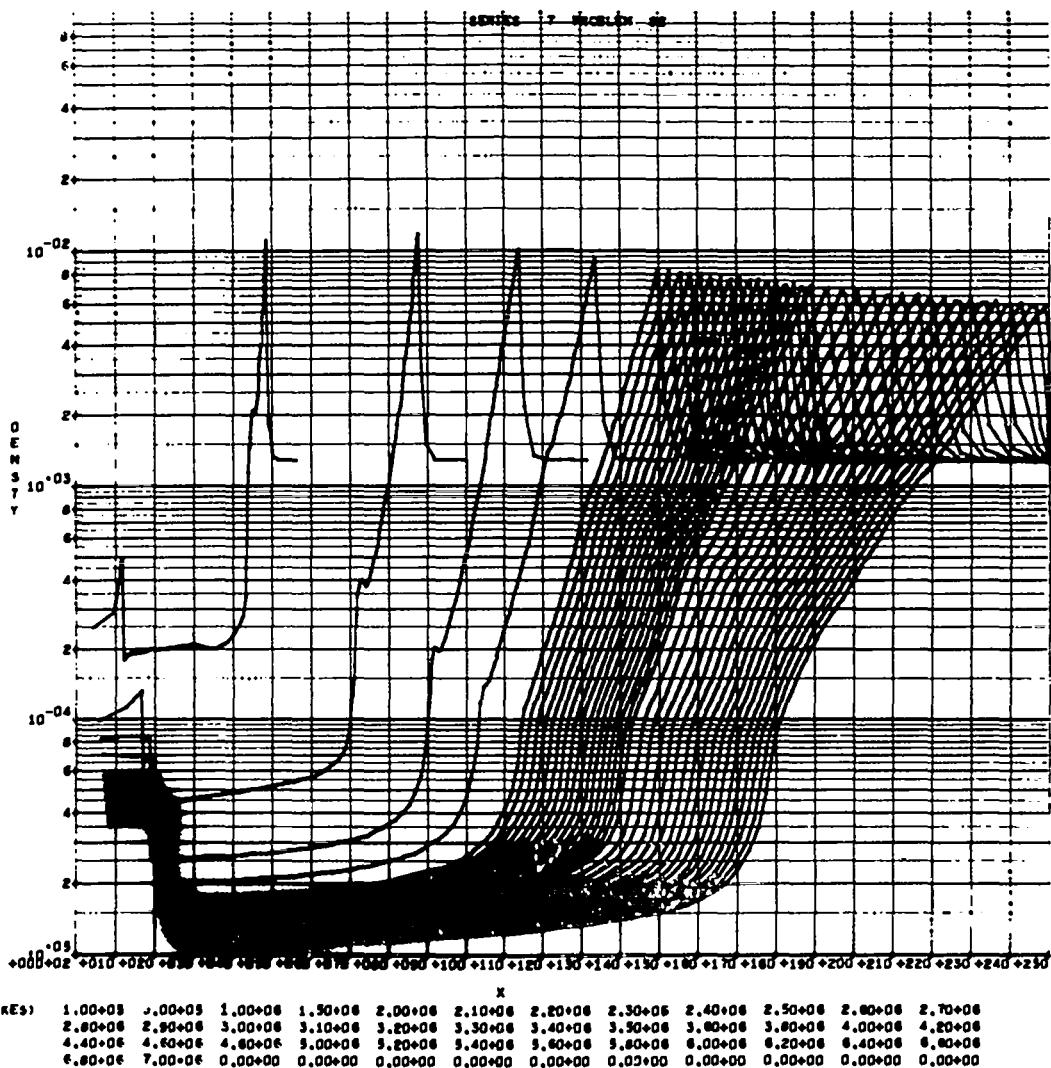


Fig. 18. Density (gm/cc) vs radius (cm) at times specified above.

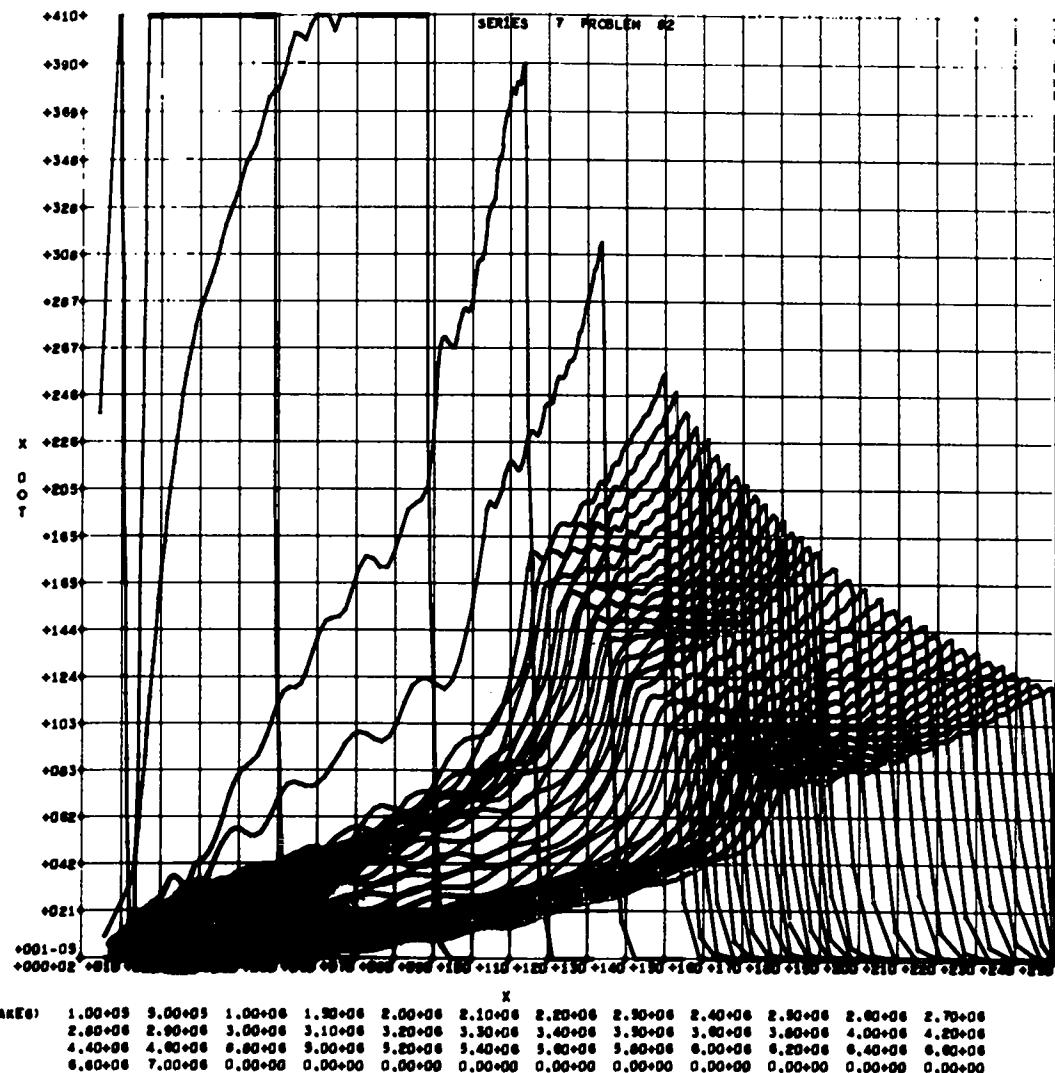


Fig. 19. Particle velocity (cm/shake) vs radius (cm) at times specified above.

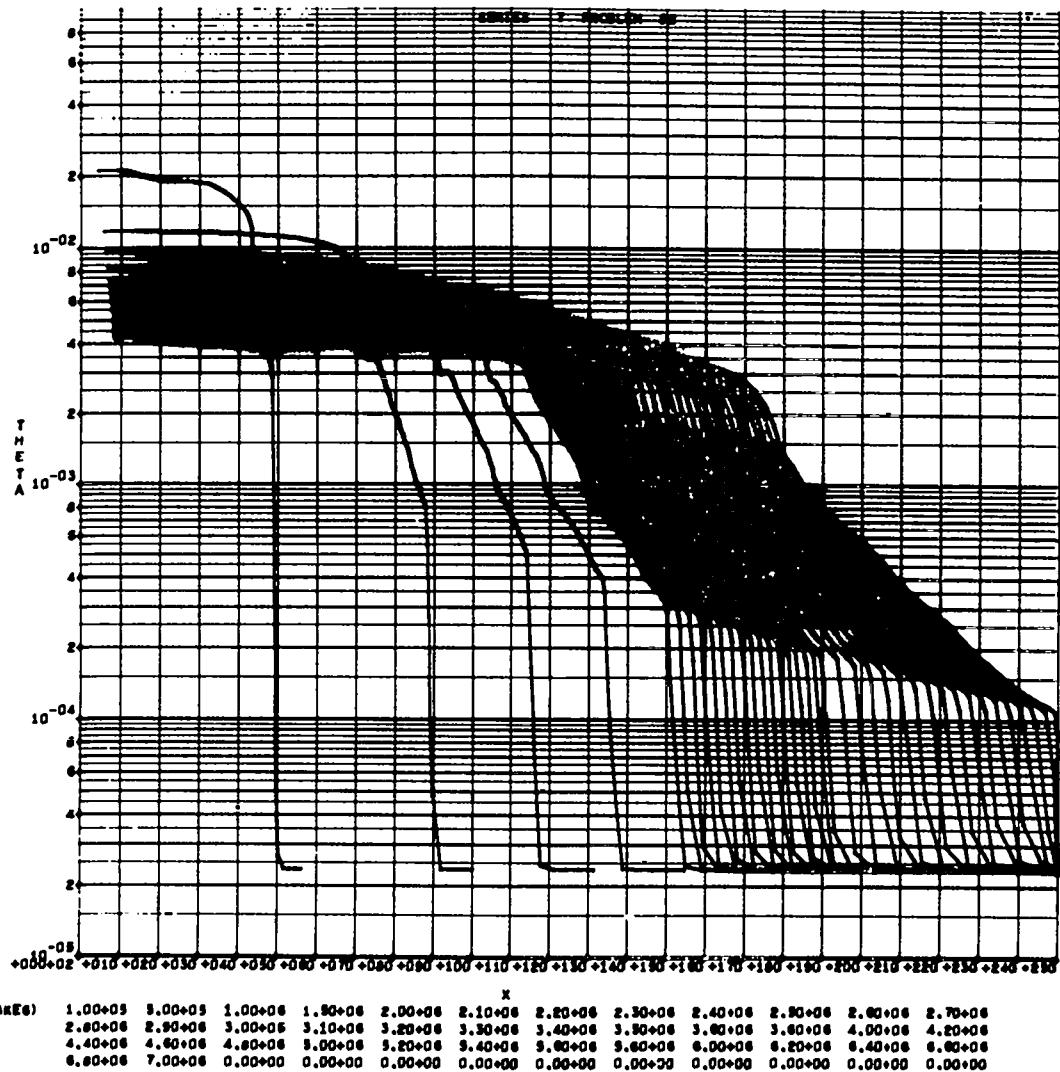


Fig. 20. Temperature (kv) vs radius (cm) at times specified above.

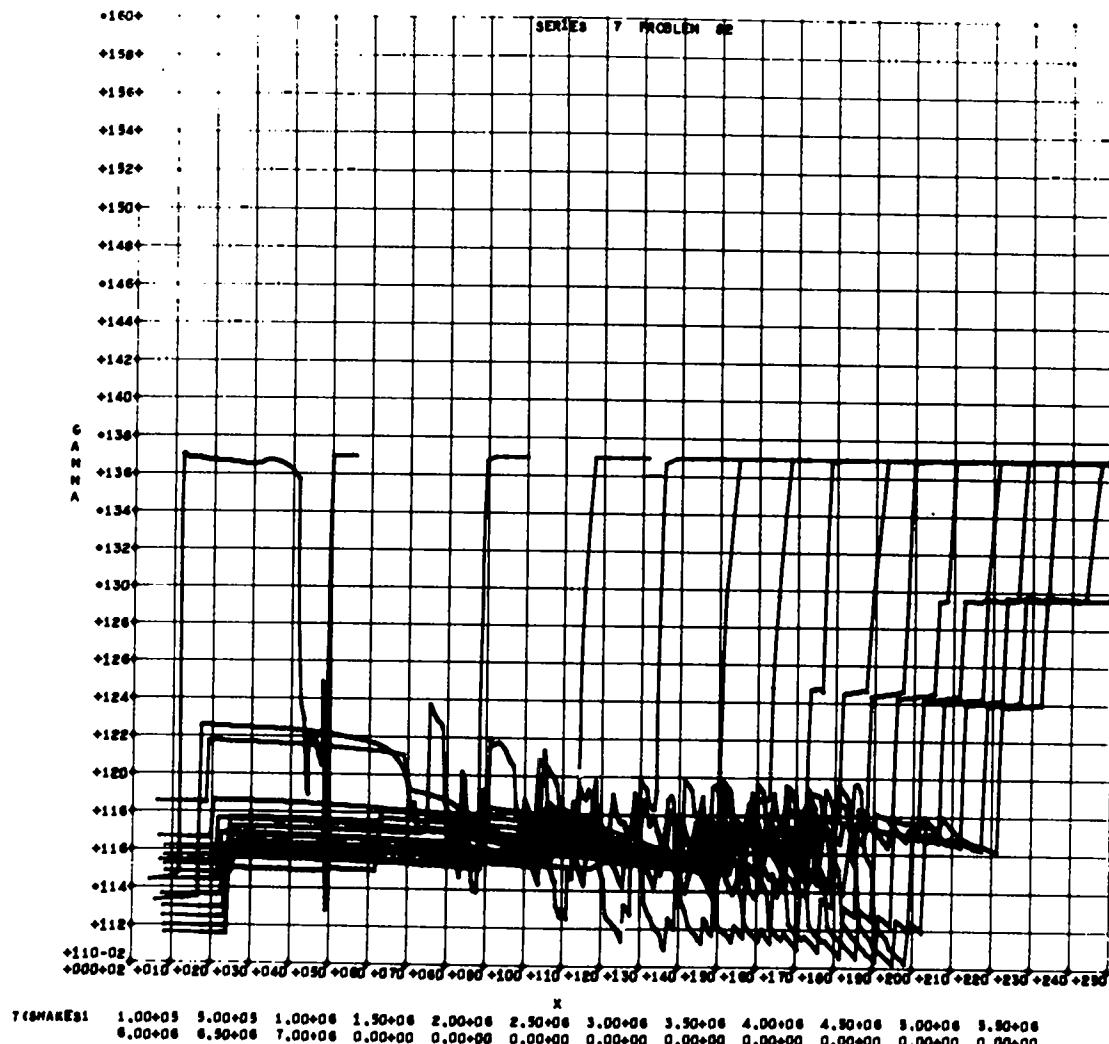


Fig. 21. Gamma 2 vs radius (cm) at times specified above.

where $Q_{i-\frac{1}{2}}^n$ is the dynamic pressure, $\rho_{i-\frac{1}{2}}^n$ is the density, and x_i^n and x_{i-1}^n are the bounding interface velocities. The time in shakes for each profile is given at the bottom of each graph. Note that at any given time the static pressure, dynamic pressure, density, and particle velocity do not always reach a maximum at the same mass point; nevertheless, the maxima are located at only slightly different points in space.

A comparison was made with Brode's 3.8 MT problem, described in RM-2248,⁵ scaled to a 97 KT in both time and radius by using the cube root of the relative yields. Figure 22 compares the peak shock pressure vs radius, and Figure 23 compares the peak dynamic pressure vs radius. The agreement is always within 20% and at late times averages more like 5%. The greater pressure in Brode's calculations appears to be consistent with the discussion in LAMS-2792 which shows that the apparent energy input as calculated from the radius time data is 5% larger than 3.8 MT.

The data which were plotted in Figures 16 through 21 are contained in Tables 3 through 40 to facilitate any data extraction that may be desired. Each table contains the radius, velocity, density, pressure, dynamic pressure, temperature and gamma 2 for each mass point encompassed by the explosion for the times designated at the top of each page.

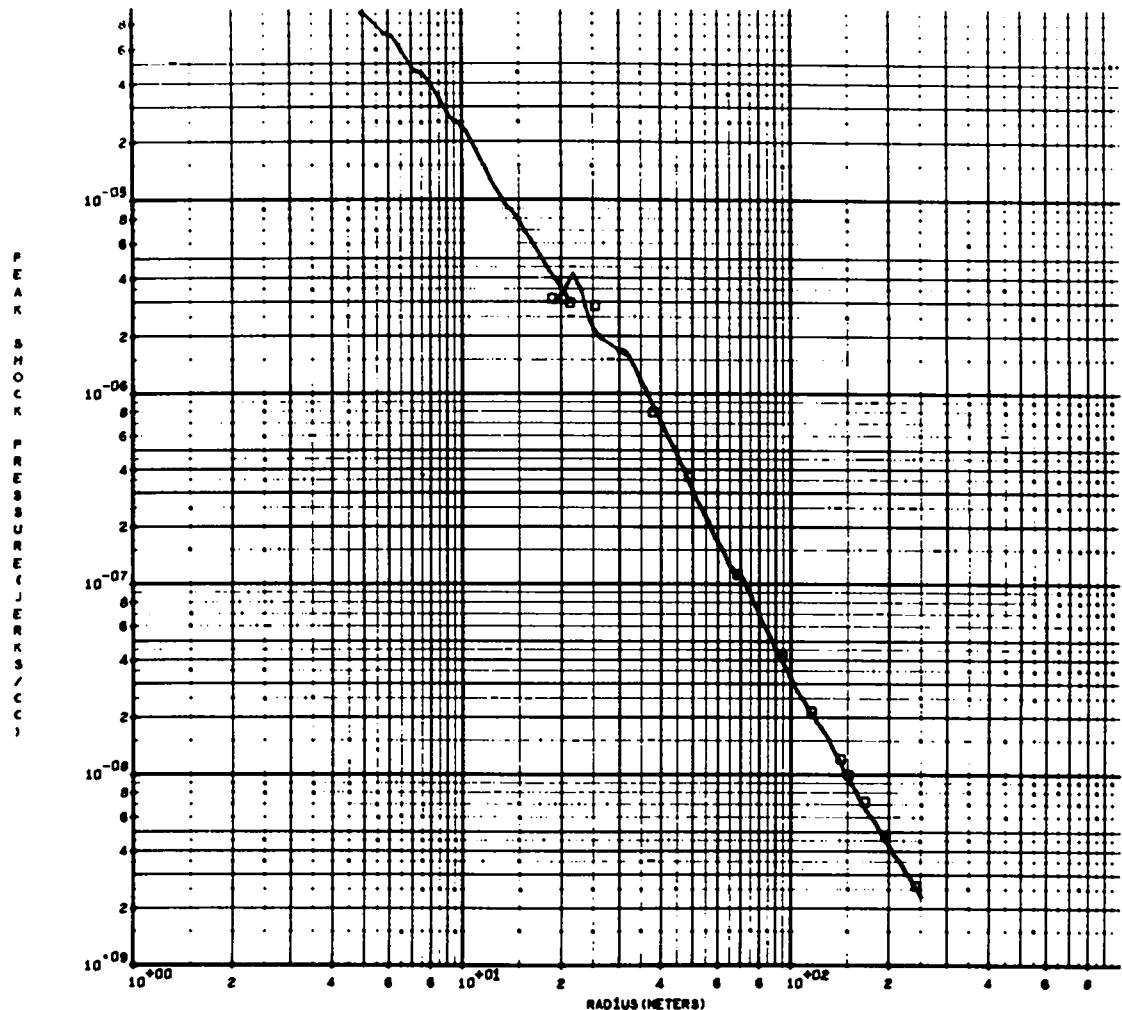


Fig. 22. Comparison of Brode's 3.8 MT peak shock pressure vs radius data scaled to 97 KT with the data given in Table 2.

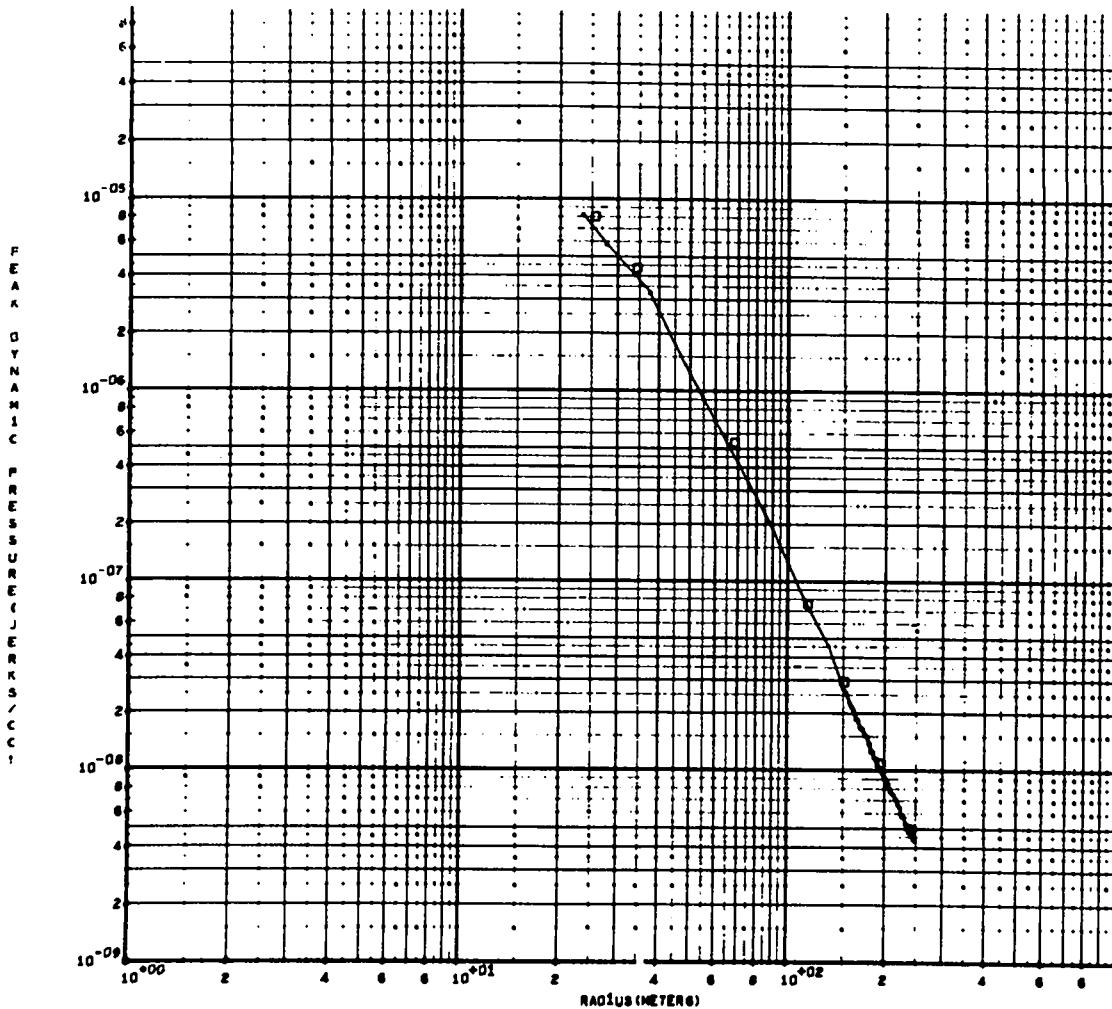


Fig. 23. Comparison of Brode's 3.8 MT peak dynamic pressure vs radius data scaled to 97 KT with the data given in Tables 3 through 40.

TABLE 3

J15 SERIES 7 PROBLEM 82
T= 1.00000+05 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
4.30716+02	2.38852-03	2.51248-04	7.98565-08	1.43338-09	2.13073-02	1.14407+00
9.38499+02	4.29264-03	2.90733-04	9.20397-08	2.71274-09	2.13204-02	1.14501+00
1.05308+03	2.97496-03	3.50990-04	1.16187-07	1.67506-09	2.13013-02	1.14625+00
1.11205+03	1.63498-03	4.07280-04	1.32059-07	5.96650-10	2.12565-02	1.14723+00
1.14701+03	8.75856-04	4.49449-04	1.42234-07	1.86709-10	2.12024-02	1.14783+00
1.16959+03	5.08111-04	4.76705-04	1.48457-07	6.47075-11	2.11510-02	1.14813+00
1.18496+03	3.39167-04	4.93748-04	1.52376-07	2.91086-11	2.11073-02	1.14826+00
1.20921+03	1.68723-04	1.81040-04	1.55447-07	3.81237-12	2.10565-02	1.137127+00
1.24513+03	-1.23889-05	1.85021-04	1.57684-07	3.96492-13	2.09894-02	1.37039+00
1.28123+03	-9.02127-05	1.88273-04	1.59201-07	7.83374-13	2.09152-02	1.36969+00
1.31773+03	-1.30017-05	1.90587-04	1.60108-07	8.00922-13	2.08338-02	1.36922+00
1.35491+03	2.07491-04	1.91317-04	1.59842-07	5.72853-12	2.07472-02	1.36909+00
1.39293+03	5.19116-04	1.92305-04	1.59731-07	2.90923-11	2.06561-02	1.36891+00
1.43187+03	8.90957-04	1.92608-04	1.59033-07	7.99213-11	2.05614-02	1.36888+00
1.47180+03	1.33781-03	1.93146-04	1.58484-07	1.79214-10	2.04630-02	1.36880+00
1.51274+03	1.85302-03	1.93469-04	1.57746-07	3.38611-10	2.03629-02	1.36877+00
1.55475+03	2.41874-03	1.93831-04	1.57020-07	5.76142-10	2.02612-02	1.36872+00
1.59786+03	3.04387-03	1.94174-04	1.56281-07	9.09325-10	2.01598-02	1.36869+00
1.64208+03	3.70160-03	1.94602-04	1.55619-07	1.34445-09	2.00596-02	1.36863+00
1.68743+03	4.37237-03	1.95177-04	1.55093-07	1.87634-09	1.99622-02	1.36854+00
1.73390+03	5.01682-03	1.95989-04	1.54779-07	2.47602-09	1.98685-02	1.36839+00
1.78144+03	5.61872-03	1.97151-04	1.54756-07	3.12022-09	1.97782-02	1.36817+00
1.83002+03	6.18976-03	1.98543-04	1.54919-07	3.81133-09	1.96902-02	1.36790+00
1.87968+03	6.78471-03	1.99782-04	1.54980-07	4.60794-09	1.96046-02	1.36766+00
1.93056+03	7.44982-03	2.00409-04	1.54627-07	5.57380-09	1.95236-02	1.36755+00
1.98284+03	8.16344-03	2.00475-04	1.53947-07	6.69305-09	1.94513-02	1.36756+00
2.03661+03	8.85037-03	2.00589-04	1.53415-07	7.86666-09	1.93903-02	1.36755+00
2.09186+03	9.46983-03	2.01085-04	1.53263-07	9.02504-09	1.93394-02	1.36746+00
2.14857+03	1.00484-02	2.01644-04	1.53245-07	1.01882-08	1.92974-02	1.36735+00
2.20678+03	1.05986-02	2.02072-04	1.53223-07	1.13565-08	1.92647-02	1.36727+00
2.26653+03	1.10927-02	2.02720-04	1.53447-07	1.24774-08	1.92406-02	1.36714+00
2.32781+03	1.15513-02	2.03438-04	1.53781-07	1.35781-08	1.92226-02	1.36699+00
2.39074+03	1.20144-02	2.03674-04	1.53833-07	1.47053-08	1.92112-02	1.36695+00
2.45544+03	1.24283-02	2.03899-04	1.53961-07	1.57507-08	1.92080-02	1.36690+00
2.52181+03	1.27193-02	2.04951-04	1.54726-07	1.65799-08	1.92089-02	1.36668+00
2.58972+03	1.29537-02	2.06318-04	1.55681-07	1.73116-08	1.92061-02	1.36640+00
2.65931+03	1.32009-02	2.06896-04	1.56036-07	1.80288-08	1.92004-02	1.36628+00
2.73067+03	1.33777-02	2.07959-04	1.56715-07	1.86087-08	1.91923-02	1.36606+00
2.80377+03	1.34979-02	2.09096-04	1.57328-07	1.90484-08	1.91729-02	1.36583+00
2.87874+03	1.36089-02	2.09643-04	1.57406-07	1.94135-08	1.91432-02	1.36573+00
2.95573+03	1.36197-02	2.10194-04	1.57350-07	1.94952-08	1.91004-02	1.36563+00
3.034685+03	1.35041-02	2.10559-04	1.56909-07	1.91996-08	1.90338-02	1.36557+00
3.11653+03	1.32447-02	2.09002-04	1.54775-07	1.83349-08	1.89356-02	1.36591+00
3.20131+03	1.27902-02	2.06985-04	1.51888-07	1.69381-08	1.87936-02	1.36636+00
3.28954+03	1.22441-02	2.04169-04	1.47883-07	1.53116-08	1.85921-02	1.36700+00
3.38130+03	1.17159-02	2.02151-04	1.43907-07	1.38807-08	1.83323-02	1.36750+00
3.47611+03	1.12851-02	2.01820-04	1.40511-07	1.28542-08	1.80102-02	1.36765+00
3.57326+03	1.10078-02	2.03255-04	1.37744-07	1.23155-08	1.76326-02	1.36743+00
3.67196+03	1.06923-02	2.06549-04	1.35574-07	1.22527-08	1.72000-02	1.36679+00
3.77149+03	1.09260-02	2.11561-04	1.33906-07	1.26281-08	1.67238-02	1.36578+00

TABLE 3 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 1.00000+05 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
3.87117+03	1.10523-02	2.18347-04	1.32702-07	1.33366-08	1.62107-02	1.36441+00
3.97035+03	1.12179-02	2.27336-04	1.32154-07	1.43050-08	1.56706-02	1.36260+00
4.06825+03	1.13907-02	2.39198-04	1.32249-07	1.55186-08	1.50872-02	1.36027+00
4.16391+03	1.15381-02	2.55182-04	1.32690-07	1.69864-08	1.44060-02	1.35725+00
4.25549+03	1.17463-02	2.81308-04	1.34853-07	1.94101-08	1.35858-02	1.23706+00
4.33820+03	1.19738-02	3.41456-04	1.33930-07	2.44785-08	1.21261-02	1.22912+00
4.38848+03	1.21973-02	1.15351-03	1.40591-07	8.58183-08	6.37751-03	1.20089+00
4.41074+03	1.24504-02	1.45491-03	1.41971-07	1.12772-07	5.66414-03	1.19219+00
4.43167+03	1.25788-02	1.49906-03	1.38779-07	1.18596-07	5.49776-03	1.18961+00
4.45301+03	1.25930-02	1.61700-03	1.39243-07	1.28214-07	5.28454-03	1.22025+00
4.47360+03	1.26362-02	1.86323-03	1.47982-07	1.48755-07	5.07078-03	1.21025+00
4.49320+03	1.27548-02	2.06698-03	1.55698-07	1.68139-07	4.93782-03	1.21715+00
4.51302+03	1.29346-02	2.11059-03	1.56222-07	1.76569-07	4.89025-03	1.21656+00
4.53446+03	1.30909-02	2.04982-03	1.54117-07	1.75642-07	4.92982-03	1.21690+00
4.55776+03	1.31346-02	2.05831-03	1.62774-07	1.77547-07	5.08829-03	1.21973+00
4.58213+03	1.32392-02	2.16401-03	1.74808-07	1.89662-07	5.17079-03	1.22178+00
4.60695+03	1.35306-02	2.28925-03	1.75405-07	2.09594-07	5.02137-03	1.21991+00
4.63193+03	1.37619-02	2.46384-03	1.73746-07	2.33316-07	4.79114-03	1.21672+00
4.65586+03	1.37949-02	2.88002-03	1.89224-07	2.74035-07	4.62917-03	1.21582+00
4.67810+03	1.39181-02	3.29730-03	2.02126-07	3.19398-07	4.46842-03	1.21470+00
4.69966+03	1.42556-02	3.54625-03	2.00025-07	3.60409-07	4.25690-03	1.21162+00
4.72008+03	1.44766-02	3.93949-03	2.05686-07	4.12802-07	4.07893-03	1.20955+00
4.74089+03	1.44921-02	4.61491-03	2.27464-07	4.84613-07	3.97037-03	1.20975+00
4.75962+03	1.46641-02	5.22137-03	2.39538-07	5.61470-07	3.81897-03	1.20859+00
4.77789+03	1.50074-02	5.62493-03	2.36985-07	6.33509-07	3.62867-03	1.20570+00
4.79569+03	1.51522-02	6.38872-03	2.50955-07	7.33394-07	3.49462-03	1.20492+00
4.81210+03	1.51717-02	7.69226-03	2.80226-07	8.85309-07	3.36673-03	1.24940+00
4.82726+03	1.53841-02	8.70753-03	2.90041-07	1.03053-06	3.20198-03	1.24467+00
4.84186+03	1.56406-02	9.66435-03	2.91579-07	1.18213-06	3.02361-03	1.23956+00
4.85576+03	1.57412-02	1.11697-02	3.10433-07	1.38384-06	2.89513-03	1.23507+00
4.87188+03	1.38853-02	8.48494-03	3.52441-07	8.32781-07	2.43395-03	1.22513+00
4.92380+03	6.93862-03	2.00455-03	1.30018-07	7.40883-08	6.68864-04	1.12856+00
5.03349+03	9.39037-04	1.32716-03	2.47003-09	1.15001-09	2.66819-05	1.36976+00
5.17164+03	8.21723-06	1.29314-03	1.06048-10	8.70224-14	2.35412-05	1.36972+00
5.31556+03	1.38889-08	1.29299-03	1.01773-10	2.48632-19	2.35400-05	1.36972+00
5.46347+03	2.20079-11	1.29299-03	1.01766-10	6.25976-25	2.35400-05	1.36972+00
5.61547+03	4.92221-15	1.29299-03	1.01766-10	3.13268-32	2.35400-05	1.36972+00

TABLE 4

J15 SERIES 7 PROBLEM 82
 T= 5.00000+05 SHAKE3

PAGE 1

RAO1US(CM)	VEL(CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
5.87520+02	1.05711-04	9.88946-05	1.33724-08	1.10513-12	1.19208-02	1.13336+00
1.28151+03	3.44138-04	1.12893-04	1.51601-08	7.67921-12	1.18938-02	1.13450+00
1.44599+03	5.78093-04	1.20584-04	1.61461-08	2.07671-11	1.18845-02	1.13511+00
1.54049+03	7.57605-04	1.24981-04	1.67064-08	3.62502-11	1.18783-02	1.13544+00
1.60139+03	8.91193-04	1.27922-04	1.70803-08	5.09953-11	1.18740-02	1.13565+00
1.64269+03	9.83143-04	1.29952-04	1.73378-08	6.28908-11	1.18710-02	1.13580+00
1.67151+03	1.04565-03	1.31339-04	1.75134-08	7.18454-11	1.18689-02	1.13590+00
1.72253+03	1.14994-03	4.10020-05	1.76576-08	2.72356-11	1.18634-02	1.22617+00
1.80013+03	1.30390-03	4.13639-05	1.77872-08	3.52805-11	1.18552-02	1.22605+00
1.87678+03	1.44742-03	4.17112-05	1.79124-08	4.37895-11	1.18478-02	1.22595+00
1.95289+03	1.57901-03	4.20320-05	1.80281-08	5.24835-11	1.18412-02	1.22585+00
2.02872+03	1.71238-03	4.23736-05	1.81533-08	6.22280-11	1.18350-02	1.22575+00
2.10450+03	1.83376-03	4.27311-05	1.82861-08	7.19021-11	1.18295-02	1.22565+00
2.18045+03	1.94901-03	4.30376-05	1.83983-08	8.18295-11	1.18242-02	1.22557+00
2.25674+03	2.06713-03	4.34056-05	1.85363-08	9.28012-11	1.18193-02	1.22547+00
2.33357+03	2.17185-03	4.36825-05	1.86374-08	1.03079-10	1.18145-02	1.22539+00
2.41110+03	2.28211-03	4.40020-05	1.87558-08	1.14661-10	1.18099-02	1.22531+00
2.48946+03	2.38518-03	4.42925-05	1.88628-08	1.26033-10	1.16054-02	1.22523+00
2.56881+03	2.47271-03	4.45594-05	1.89596-08	1.36269-10	1.18007-02	1.22516+00
2.64927+03	2.55435-03	4.48312-05	1.90576-08	1.46286-10	1.17959-02	1.22508+00
2.73096+03	2.62652-03	4.50813-05	1.91457-08	1.55527-10	1.17906-02	1.22501+00
2.81399+03	2.69788-03	4.53284-05	1.92311-08	1.64993-10	1.17848-02	1.22494+00
2.89848+03	2.76820-03	4.55662-05	1.93112-08	1.74612-10	1.17785-02	1.22486+00
2.98453+03	2.82761-03	4.57828-05	1.93810-08	1.83040-10	1.17716-02	1.22479+00
3.07225+03	2.87804-03	4.60004-05	1.94488-08	1.90528-10	1.17637-02	1.22471+00
3.16169+03	2.92191-03	4.62453-05	1.95248-08	1.97420-10	1.17549-02	1.22462+00
3.25295+03	2.95895-03	4.64640-05	1.95868-08	2.03413-10	1.17448-02	1.22452+00
3.34610+03	3.00628-03	4.67026-05	1.96531-08	2.11063-10	1.17334-02	1.22442+00
3.44122+03	3.06566-03	4.69363-05	1.97144-08	2.20582-10	1.17208-02	1.22432+00
3.53588+03	3.13288-03	4.71867-05	1.97792-08	2.31599-10	1.17073-02	1.22420+00
3.63756+03	3.20393-03	4.75205-05	1.98745-08	2.43930-10	1.16927-02	1.22407+00
3.73872+03	3.25743-03	4.78685-05	1.99719-08	2.53972-10	1.16770-02	1.22392+00
3.84199+03	3.29652-03	4.81885-05	2.00522-08	2.61843-10	1.16593-02	1.22378+00
3.94750+03	3.34729-03	4.84829-05	2.01161-08	2.71633-10	1.16394-02	1.22362+00
4.05538+03	3.41446-03	4.87673-05	2.01705-08	2.84308-10	1.16177-02	1.22346+00
4.16568+03	3.47592-03	4.90858-05	2.02332-08	2.96543-10	1.15943-02	1.22328+00
4.27838+03	3.51438-03	4.94662-05	2.03129-08	3.05480-10	1.15685-02	1.22308+00
4.39346+03	3.54700-03	4.98840-05	2.03968-08	3.13810-10	1.15392-02	1.22286+00
4.51101+03	3.60590-03	5.02622-05	2.04541-08	3.26806-10	1.15063-02	1.22262+00
4.63126+03	3.68940-03	5.05769-05	2.04780-08	3.44267-10	1.14705-02	1.22238+00
4.75430+03	3.75668-03	5.09367-05	2.05114-08	3.59439-10	1.14323-02	1.22211+00
4.87998+03	3.78126-03	5.14523-05	2.05915-08	3.67831-10	1.13899-02	1.22180+00
5.00812+03	3.79610-03	5.20510-05	2.06819-08	3.75041-10	1.13406-02	1.22144+00
5.13886+03	3.85770-03	5.25385-05	2.07060-08	3.90996-10	1.12836-02	1.22106+00
5.27261+03	3.96044-03	5.28951-05	2.06632-08	4.14909-10	1.12212-02	1.22066+00
5.40948+03	4.02652-03	5.33642-05	2.06478-08	4.33029-10	1.11543-02	1.22022+00
5.54903+03	4.02006-03	5.41312-05	2.07140-08	4.37416-10	1.10788-02	1.21969+00
5.69084+03	4.00156-03	5.50276-05	2.07748-08	4.40565-10	1.09870-02	1.21905+00
5.83516+03	4.06225-03	5.57378-05	2.07053-08	4.59979-10	1.08755-02	1.21832+00
5.98243+03	4.16826-03	5.63598-05	2.05530-08	4.89676-10	1.07484-02	1.21751+00

TABLE 4 (Cont.)

J15 SERIES 7 PROBLEM 82
 $T = 5.00000 \times 10^5$ SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
6.13232e+03	4.19228e-03	5.74152e-05	2.04999e-08	5.04561e-10	1.06067e-02	1.21655e+00
6.28342e+03	4.10242e-03	5.92211e-05	2.06002e-08	4.98465e-10	1.04369e-02	1.21532e+00
6.43444e+03	4.03621e-03	6.15479e-05	2.06673e-08	5.01339e-10	1.02097e-02	1.21368e+00
6.58468e+03	4.11919e-03	6.42504e-05	2.05045e-08	5.45320e-10	9.88599e-03	1.21139e+00
6.73294e+03	4.28144e-03	6.80650e-05	2.02346e-08	6.24048e-10	9.45096e-03	1.20822e+00
6.87561e+03	4.36746e-03	7.50357e-05	2.01233e-08	7.15644e-10	8.85676e-03	1.20356e+00
7.00400e+03	4.35636e-03	9.20266e-05	2.02384e-08	8.73250e-10	7.92953e-03	1.19495e+00
7.10111e+03	4.41534e-03	1.51241e-04	2.04343e-08	1.47470e-09	6.00124e-03	1.17873e+00
7.16073e+03	4.53821e-03	2.83921e-04	2.05734e-08	2.92401e-09	4.31618e-03	1.18557e+00
7.20122e+03	4.62343e-03	3.49093e-04	2.05008e-08	3.73141e-09	3.82912e-03	1.17696e+00
7.23881e+03	4.70957e-03	3.78062e-04	2.03344e-08	4.19310e-09	3.63817e-03	1.17337e+00
7.27672e+03	4.79670e-03	3.96411e-04	2.01157e-08	4.56072e-09	3.51507e-03	1.17095e+00
7.31640e+03	4.88016e-03	3.98608e-04	1.98324e-08	4.74696e-09	3.47234e-03	1.17000e+00
7.35933e+03	4.92789e-03	3.90360e-04	1.96667e-08	4.73978e-09	3.49896e-03	1.17043e+00
7.40648e+03	4.89698e-03	3.79814e-04	1.97826e-08	4.55800e-09	3.56655e-03	1.17176e+00
7.45744e+03	4.83509e-03	3.83059e-04	2.01012e-08	4.47776e-09	3.58490e-03	1.17225e+00
7.51018e+03	4.79456e-03	4.06014e-04	2.04428e-08	4.66671e-09	3.50223e-03	1.17084e+00
7.56280e+03	4.81596e-03	4.41536e-04	2.05831e-08	5.12062e-09	3.34464e-03	1.23774e+00
7.61445e+03	4.90663e-03	4.83309e-04	2.03826e-08	5.81865e-09	3.14251e-03	1.23507e+00
7.66525e+03	5.01041e-03	5.23966e-04	2.00853e-08	6.37742e-09	2.95912e-03	1.23247e+00
7.71525e+03	5.04961e-03	5.72372e-04	2.00253e-08	7.29733e-09	2.79440e-03	1.23034e+00
7.76381e+03	5.00815e-03	6.38006e-04	2.04865e-08	8.00149e-09	2.64864e-03	1.22903e+00
7.81063e+03	4.95225e-03	7.07781e-04	2.09790e-08	8.67923e-09	2.52278e-03	1.22810e+00
7.85598e+03	4.94071e-03	7.82983e-04	2.12969e-08	9.55659e-09	2.38982e-03	1.22688e+00
7.90031e+03	5.00050e-03	8.54348e-04	2.11736e-08	1.06826e-08	2.24963e-03	1.22505e+00
7.94418e+03	5.09341e-03	9.21435e-04	2.00946e-08	1.19531e-08	2.13210e-03	1.18661e+00
7.98731e+03	5.10884e-03	1.01884e-03	2.11586e-08	1.32964e-08	2.04275e-03	1.18237e+00
8.02908e+03	5.05101e-03	1.13305e-03	2.18162e-08	1.44541e-08	1.96774e-03	1.17877e+00
8.06346e+03	5.02135e-03	1.25909e-03	2.23031e-08	1.58733e-08	1.89086e-03	1.17498e+00
8.10899e+03	5.07764e-03	1.36679e-03	2.22798e-08	1.76216e-08	1.81213e-03	1.16965e+00
8.14027e+03	5.16859e-03	1.47505e-03	2.19710e-08	1.97035e-08	1.72831e-03	1.16491e+00
8.18696e+03	5.17638e-03	1.62785e-03	2.23899e-08	2.18097e-08	1.65719e-03	1.16107e+00
8.22427e+03	5.13198e-03	1.83444e-03	2.34160e-08	2.41573e-08	1.59447e-03	1.15791e+00
8.26017e+03	5.15097e-03	2.03712e-03	2.40201e-08	2.70262e-08	1.52679e-03	1.15425e+00
8.29554e+03	5.24919e-03	2.19161e-03	2.38316e-08	3.01981e-08	1.45808e-03	1.15016e+00
8.33071e+03	5.32337e-03	2.38575e-03	2.40584e-08	3.38041e-08	1.39623e-03	1.14661e+00
8.36484e+03	5.31408e-03	2.69831e-03	2.53715e-08	3.81000e-08	1.34038e-03	1.17639e+00
8.39727e+03	5.30965e-03	3.06290e-03	2.63252e-08	4.31756e-08	1.27432e-03	1.20240e+00
8.42637e+03	5.38183e-03	3.41169e-03	2.70585e-08	4.94135e-08	1.19814e-03	1.20081e+00
8.45870e+03	5.46932e-03	3.74071e-03	2.71222e-08	5.59506e-08	1.12736e-03	1.19718e+00
8.48815e+03	5.49617e-03	4.20204e-03	2.84139e-08	6.34675e-08	1.08040e-03	1.18332e+00
8.51631e+03	5.49873e-03	4.75433e-03	3.01557e-08	7.18763e-08	1.04092e-03	1.17927e+00
8.54360e+03	5.54598e-03	5.20934e-03	3.14556e-08	8.01184e-08	1.01391e-03	1.16357e+00
8.57093e+03	5.62317e-03	5.52202e-03	3.19862e-08	8.73071e-08	9.91810e-04	1.16144e+00
8.59862e+03	5.67420e-03	5.89625e-03	3.32947e-08	9.49200e-08	9.79949e-04	1.15972e+00
8.62604e+03	5.69338e-03	6.55445e-03	3.55167e-08	1.06230e-07	9.61346e-04	1.15698e+00
8.65246e+03	5.73054e-03	7.39753e-03	3.74566e-08	1.21468e-07	9.30969e-04	1.14480e+00
8.67818e+03	5.80521e-03	8.05951e-03	3.83810e-08	1.35812e-07	9.03834e-04	1.14224e+00
8.70341e+03	5.86457e-03	8.94473e-03	4.00367e-08	1.53820e-07	8.78866e-04	1.13962e+00
8.72769e+03	5.88721e-03	1.01491e-02	4.29960e-08	1.75879e-07	8.58856e-04	1.14273e+00

TABLE 4 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 5.00000+05 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SEC)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
8.75098+03	5.91722-03	1.13324-02	4.56750-08	1.98396-07	8.40450-04	1.14152+00
8.77413+03	5.89142-03	1.19583-02	4.67669-08	2.07545-07	8.14991-04	1.13892+00
8.82518+03	4.17802-03	3.78046-03	4.05482-08	3.82281-08	5.47996-04	1.16669+00
8.96931+03	1.32351-03	1.50333-03	5.11962-09	2.38236-09	5.08880-05	1.36846+00
9.19964+03	6.68476-05	1.29792-03	1.43400-10	5.72298-12	2.35839-05	1.36992+00
9.45476+03	4.48442-07	1.29301-03	1.02000-10	2.57301-16	2.35401-05	1.36972+00
9.71748+03	2.37228-09	1.29299-03	1.01767-10	7.20631-21	2.35400-05	1.36972+00
9.98750+03	1.15140-11	1.29299-03	1.01766-10	1.71416-25	2.35400-05	1.36972+00

TABLE 5

J15 SERIES 7 PROBLEM 82
 $T = 1.00000+06$ SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
6.23536+02	-8.57711-05	8.27094-05	8.34450-09	6.08466-13	9.65221-03	1.18563+00
1.37225+03	-1.82421-04	8.36561-05	8.33379-09	1.39688-12	9.62532-03	1.18543+00
1.56807+03	-1.88689-04	8.41431-05	8.33695-09	1.49878-12	9.61698-03	1.18539+00
1.68420+03	-1.32738-04	8.38308-05	8.28190-09	8.49000-13	9.61164-03	1.18528+00
1.76074+03	-6.95208-05	8.31293-05	8.20966-09	2.06753-13	9.60831-03	1.18514+00
1.81349+03	-4.40941-05	8.29019-05	8.18457-09	8.82007-14	9.60601-03	1.18507+00
1.85063+03	-2.16869-05	8.27992-05	8.17246-09	2.27205-14	9.60441-03	1.18504+00
1.91710+03	-1.43990-06	2.53285-05	8.17197-09	1.66852-15	9.59880-03	1.21790+00
2.01798+03	1.45722-05	2.54096-05	8.18441-09	2.96958-15	9.58893-03	1.21782+00
2.11680+03	3.11294-05	2.55180-05	8.20492-09	1.41807-14	9.57894-03	1.21772+00
2.21414+03	5.81286-05	2.56421-05	8.22994-09	4.62320-14	9.56884-03	1.21761+00
2.31055+03	9.19957-05	2.57366-05	8.24572-09	1.13456-13	9.55860-03	1.21752+00
2.40660+03	1.36470-04	2.57782-05	8.24529-09	2.48542-13	9.54821-03	1.21744+00
2.50277+03	1.95585-04	2.57902-05	8.23590-09	5.07704-13	9.53776-03	1.21737+00
2.59946+03	2.62455-04	2.57716-05	8.21738-09	9.02005-13	9.52738-03	1.21732+00
2.69696+03	3.25167-04	2.57422-05	8.19575-09	1.37195-12	9.51708-03	1.21727+00
2.79549+03	3.77601-04	2.57207-05	8.17651-09	1.84055-12	9.50677-03	1.21722+00
2.89517+03	4.12561-04	2.57186-05	8.16292-09	2.19053-12	9.49633-03	1.21716+00
2.99612+03	4.28999-04	2.57357-05	8.15464-09	2.36847-12	9.48552-03	1.21709+00
3.09837+03	4.40140-04	2.58003-05	8.15979-09	2.49961-12	9.47416-03	1.21700+00
3.20190+03	4.58553-04	2.59079-05	8.17687-09	2.72567-12	9.46220-03	1.21689+00
3.30674+03	4.91049-04	2.60370-05	8.19947-09	3.14466-12	9.44962-03	1.21676+00
3.41503+03	5.36110-04	2.61492-05	8.21624-09	3.76564-12	9.43652-03	1.21665+00
3.52104+03	5.90141-04	2.62128-05	8.21792-09	4.57597-12	9.42291-03	1.21654+00
3.63108+03	6.54100-04	2.62411-05	8.20864-09	5.62910-12	9.40889-03	1.21645+00
3.74338+03	7.10659-04	2.62472-05	8.19244-09	6.78989-12	9.39458-03	1.21636+00
3.85812+03	7.70002-04	2.62406-05	8.17206-09	7.78497-12	9.37909-03	1.21628+00
3.97538+03	8.06127-04	2.62650-05	8.16003-09	8.53697-12	9.36461-03	1.21618+00
4.09506+03	8.31626-04	2.63528-05	8.16544-09	9.11429-12	9.34853-03	1.21605+00
4.21699+03	8.50098-04	2.65034-05	8.18766-09	9.57738-12	9.33141-03	1.21589+00
4.34108+03	8.67552-04	2.66866-05	8.21746-09	1.00440-11	9.31299-03	1.21572+00
4.46742+03	8.92677-04	2.68563-05	8.24116-09	1.07038-11	9.29308-03	1.21554+00
4.59628+03	9.32032-04	2.69750-05	8.24800-09	1.17240-11	9.27169-03	1.21537+00
4.72801+03	9.88476-04	2.70437-05	8.23858-09	1.32264-11	9.24896-03	1.21521+00
4.86288+03	1.05046-03	2.71014-05	8.22460-09	1.52004-11	9.22518-03	1.21504+00
5.00093+03	1.12738-03	2.71950-05	8.21955-09	1.72959-11	9.20048-03	1.21486+00
5.14199+03	1.17545-03	2.73563-05	8.23195-09	1.89027-11	9.17461-03	1.21465+00
5.28586+03	1.19309-03	2.75825-05	8.25977-09	1.96315-11	9.14679-03	1.21440+00
5.43240+03	1.19327-03	2.78440-05	8.29306-09	1.98234-11	9.11600-03	1.21413+00
5.58168+03	1.20829-03	2.80958-05	8.31824-09	2.05131-11	9.08160-03	1.21383+00
5.73399+03	1.26270-03	2.83044-05	8.32628-09	2.25854-11	9.04302-03	1.21353+00
5.88967+03	1.34854-03	2.84723-05	8.31906-09	2.59212-11	9.00344-03	1.21323+00
6.04891+03	1.43097-03	2.86524-05	8.31178-09	2.93531-11	8.96087-03	1.21291+00
6.21157+03	1.48075-03	2.89101-05	8.32103-09	3.16974-11	8.91539-03	1.21254+00
6.37728+03	1.49657-03	2.92768-05	8.35254-09	3.27858-11	8.86540-03	1.21212+00
6.54570+03	1.50215-03	2.97014-05	8.38915-09	3.35103-11	8.80897-03	1.21163+00
6.71693+03	1.53446-03	3.00994-05	8.40636-09	3.54473-11	8.74488-03	1.21110+00
6.89133+03	1.61511-03	3.04494-05	8.39931-09	3.97577-11	8.67368-03	1.21055+00
7.06914+03	1.71119-03	3.08168-05	8.38178-09	4.51474-11	8.59709-03	1.19209+00
7.24973+03	1.76513-03	3.14311-05	8.39218-09	4.89662-11	8.51171-03	1.19138+00

TABLE 5 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 1.00000+06 SHAKES

PAGE 2

RADIUS(CM)	VEL(CM/SH)	RHO(GM/CC)	P(JERKS/CC)	OYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
7.43199+03	1.75577-03	3.22595-05	8.42925-09	4.97301-11	8.41383-03	1.19058+00
7.61490+03	1.71845-03	3.33401-05	8.48804-09	4.92329-11	8.29785-03	1.18965+00
7.79770+03	1.71657-03	3.45854-05	8.52973-09	5.09589-11	8.15703-03	1.18847+00
7.98012+03	1.77752-03	3.59368-05	8.52531-09	5.68101-11	7.98588-03	1.18697+00
8.16166+03	1.87948-03	3.75736-05	8.49789-09	6.64228-11	7.77924-03	1.18511+00
8.34087+03	1.96724-03	3.97959-05	8.48030-09	7.70251-11	7.52909-03	1.18284+00
8.51482+03	1.99729-03	4.31954-05	8.52119-09	8.61572-11	7.21776-03	1.18001+00
8.67941+03	2.00897-03	4.84224-05	8.57861-09	9.77198-11	6.80324-03	1.17612+00
8.82903+03	2.06194-03	5.74594-05	8.63289-09	1.22192-10	6.20798-03	1.17024+00
8.95471+03	2.20661-03	7.67971-05	8.65822-09	1.87389-10	5.28551-03	1.19258+00
9.04822+03	2.42978-03	1.19088-04	8.64667-09	3.52375-10	4.14578-03	1.17689+00
9.11278+03	2.60512-03	1.82861-04	8.60795-09	6.20807-10	3.22162-03	1.21980+00
9.16469+03	2.68224-03	2.04858-04	8.56864-09	7.36956-10	2.99071-03	1.21636+00
9.21750+03	2.71384-03	2.03702-04	8.56185-09	7.50138-10	2.99976-03	1.21648+00
9.27498+03	2.71743-03	1.99068-04	8.60230-09	7.35017-10	3.05332-03	1.21735+00
9.33714+03	2.70482-03	1.99788-04	8.66176-09	7.30832-10	3.08064-03	1.21758+00
9.40182+03	2.69025-03	2.10766-04	8.73036-09	7.62710-10	2.97534-03	1.21645+00
9.46640+03	2.67115-03	2.29777-04	8.78820-09	8.19744-10	2.82987-03	1.21437+00
9.52954+03	2.67252-03	2.52993-04	8.82329-09	9.03499-10	2.66848-03	1.21195+00
9.59127+03	2.70874-03	2.76066-04	8.79792-09	1.01288-09	2.51765-03	1.20954+00
9.65204+03	2.76530-03	3.00078-04	8.75109-09	1.14748-09	2.37619-03	1.20720+00
9.71192+03	2.81742-03	3.26738-04	8.71890-09	1.29687-09	2.24182-03	1.20498+00
9.77085+03	2.84193-03	3.56393-04	8.77904-09	1.43921-09	2.13757-03	1.18433+00
9.82862+03	2.84157-03	3.91239-04	8.87522-09	1.57954-09	2.05504-03	1.18037+00
9.88505+03	2.83319-03	4.29929-04	8.97779-09	1.72551-09	1.97479-03	1.17641+00
9.94028+03	2.83715-03	4.70926-04	9.09707-09	1.89536-09	1.90179-03	1.17271+00
9.99440+03	2.87086-03	5.16282-04	9.14788-09	2.12772-09	1.82272-03	1.16856+00
1.00478+04	2.94385-03	5.58996-04	9.13478-09	2.42284-09	1.75071-03	1.16465+00
1.01006+04	3.01397-03	6.07686-04	9.13980-09	2.76027-09	1.67962-03	1.16068+00
1.01527+04	3.04401-03	6.64138-04	9.24231-09	3.07697-09	1.61581-03	1.15707+00
1.02036+04	3.05257-03	7.34722-04	9.43802-09	3.42314-09	1.55256-03	1.15344+00
1.02531+04	3.06021-03	8.11445-04	9.66457-09	3.79957-09	1.49470-03	1.15006+00
1.03014+04	3.09333-03	8.93096-04	9.88587-09	4.27320-09	1.44008-03	1.14680+00
1.03489+04	3.16454-03	9.68710-04	9.92003-09	4.85146-09	1.38269-03	1.14324+00
1.03959+04	3.23312-03	1.05564-03	9.95050-09	5.51762-09	1.31646-03	1.17565+00
1.04420+04	3.27413-03	1.16878-03	1.00977-08	6.26483-09	1.24105-03	1.19632+00
1.04866+04	3.29478-03	1.30900-03	1.03605-08	7.10495-09	1.16434-03	1.21386+00
1.05290+04	3.29891-03	1.49157-03	1.07756-08	8.11622-09	1.09067-03	1.20930+00
1.05695+04	3.32168-03	1.67311-03	1.10790-08	9.23059-09	1.02764-03	1.18583+00
1.06088+04	3.37701-03	1.83211-03	1.11593-08	1.04479-08	9.75691-04	1.18168+00
1.06476+04	3.44187-03	1.99419-03	1.13151-08	1.18130-08	9.36471-04	1.15195+00
1.06860+04	3.48774-03	2.17570-03	1.15993-08	1.32332-08	9.07452-04	1.14919+00
1.07241+04	3.49803-03	2.35644-03	1.19891-08	1.44170-08	8.86974-04	1.14711+00
1.07619+04	3.50420-03	2.55397-03	1.25626-08	1.56808-08	8.73426-04	1.14557+00
1.08001+04	3.54841-03	2.70112-03	1.29466-08	1.70067-08	8.62992-04	1.14441+00
1.08389+04	3.61248-03	2.86371-03	1.31075-08	1.86871-08	8.44897-04	1.13244+00
1.08778+04	3.66114-03	3.12645-03	1.33579-08	2.09539-08	8.18603-04	1.12981+00
1.09160+04	3.67688-03	3.46000-03	1.39632-08	2.33887-08	7.98213-04	1.12793+00
1.09530+04	3.68650-03	3.86678-03	1.47153-08	2.62756-08	7.77702-04	1.12606+00
1.09891+04	3.72326-03	4.21999-03	1.50771-08	2.92515-08	7.54046-04	1.13041+00

TABLE 5 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 1.00000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.10251+04	3.77100-03	4.51717-03	1.52304-08	3.21193-08	7.32201-04	1.12030+00
1.10613+04	3.79018-03	4.87328-03	1.55243-08	3.50035-08	7.11335-04	1.12644+00
1.10972+04	3.77552-03	5.31902-03	1.61676-08	3.79104-08	6.94779-04	1.12539+00
1.11328+04	3.76937-03	5.80553-03	1.66481-08	4.12430-08	6.71615-04	1.14955+00
1.11684+04	3.79343-03	6.16348-03	1.67233-08	4.43479-08	6.48655-04	1.14794+00
1.12045+04	3.81683-03	6.56820-03	1.68908-08	4.78435-08	6.26898-04	1.14661+00
1.12406+04	3.81186-03	7.17206-03	1.76216-08	5.21062-08	6.09155-04	1.14650+00
1.12760+04	3.81134-03	7.96622-03	1.85655-08	5.78601-08	5.87344-04	1.18678+00
1.13109+04	3.84585-03	8.58378-03	1.89152-08	6.34826-08	5.63675-04	1.18611+00
1.13458+04	3.88380-03	9.23944-03	1.93607-08	6.96840-08	5.43129-04	1.18578+00
1.13804+04	3.89619-03	1.02082-02	2.04496-08	7.74817-08	5.25610-04	1.18651+00
1.14206+04	3.54095-03	8.12417-03	2.18427-08	5.14468-08	4.74298-04	1.19675+00
1.15345+04	1.91983-03	2.19658-03	1.04867-08	5.80561-09	1.65796-04	1.29875+00
1.17797+04	3.34491-04	1.34846-03	4.89715-10	1.44615-10	2.45901-05	1.36996+00
1.20997+04	7.15188-06	1.29378-03	1.05637-10	6.49542-14	2.35455-05	1.36972+00
1.24358+04	6.72029-08	1.29299-03	1.01801-10	5.74063-18	2.35400-05	1.36972+00
1.27813+04	5.77459-10	1.29299-03	1.01756-10	4.25350-22	2.35400-05	1.36972+00
1.31364+04	3.91730-12	1.29299-03	1.01766-10	1.98412-26	2.35400-05	1.36972+00

TABLE 6

J15 SERIES 7 PROBLEM 82
T = 1.50000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SW)	RHO(GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP(KV)	GAMMA 2
6.56652+02	7.04832-05	7.08278-05	5.61419-09	3.51064-13	8.36815-03	1.16734+00
1.45039+03	1.91933-04	6.83756-05	5.40917-09	1.34023-12	8.35387-03	1.16677+00
1.66394+03	2.27401-04	6.90434-05	5.45726-09	1.79345-12	8.35046-03	1.16683+00
1.78948+03	2.26024-04	6.88270-05	5.43800-09	1.76494-12	8.34803-03	1.16677+00
1.87198+03	2.46876-04	6.82880-05	5.39468-09	2.08255-12	8.34643-03	1.16666+00
1.92878+03	2.57699-04	6.80699-05	5.37668-09	2.26080-12	8.34531-03	1.16661+00
1.96877+03	2.66336-04	6.79623-05	5.36756-09	2.41114-12	8.34452-03	1.16658+00
2.04181+03	2.88953-04	2.01938-05	5.35955-09	8.46328-13	8.34153-03	1.18640+00
2.15335+03	3.24789-04	2.01864-05	5.35192-09	1.06789-12	8.33628-03	1.18634+00
2.26261+03	3.53723-04	2.02003-05	5.34967-09	1.26499-12	8.33112-03	1.18629+00
2.37025+03	3.63646-04	2.02328-05	5.35198-09	1.33779-12	8.32593-03	1.18625+00
2.47683+03	3.50451-04	2.02650-05	5.35386-09	1.24588-12	8.32043-03	1.18621+00
2.58282+03	3.28580-04	2.03056-05	5.35724-09	1.09714-12	8.31442-03	1.18616+00
2.68865+03	3.14564-04	2.03339-05	5.35697-09	1.00619-12	8.30787-03	1.18610+00
2.79470+03	3.08617-04	2.03622-05	5.35618-09	9.69725-13	8.30087-03	1.18604+00
2.90127+03	3.06288-04	2.03806-05	5.35245-09	9.55978-13	8.29341-03	1.18597+00
3.00864+03	3.12321-04	2.04011-05	5.34867-09	9.95434-13	8.28547-03	1.18589+00
3.11707+03	3.34049-04	2.04105-05	5.34177-09	1.14116-12	8.27716-03	1.18581+00
3.22680+03	3.71228-04	2.04109-05	5.33239-09	1.41134-12	8.26861-03	1.18572+00
3.33805+03	4.17992-04	2.04124-05	5.32317-09	1.78948-12	8.25993-03	1.18563+00
3.45093+03	4.65274-04	2.04293-05	5.31758-09	2.21642-12	8.25117-03	1.18554+00
3.56554+03	5.05873-04	2.04559-05	5.31423-09	2.62077-12	8.24228-03	1.18546+00
3.68200+03	5.40368-04	2.04893-05	5.31220-09	2.99415-12	8.23314-03	1.18538+00
3.80039+03	5.64420-04	2.05312-05	5.31189-09	3.27091-12	8.22370-03	1.18529+00
3.92083+03	5.71625-04	2.05841-05	5.31365-09	3.36299-12	8.21375-03	1.18521+00
4.04333+03	5.67721-04	2.06603-05	5.32013-09	3.32960-12	8.20304-03	1.18512+00
4.16798+03	5.56233-04	2.07390-05	5.32613-09	3.20895-12	8.19143-03	1.18503+00
4.29492+03	5.43326-04	2.08097-05	5.32889-09	3.07179-12	8.17871-03	1.18492+00
4.42432+03	5.40209-04	2.08789-05	5.32994-09	3.04654-12	8.16485-03	1.18480+00
4.55629+03	5.54423-04	2.09533-05	5.33092-09	3.22201-12	8.14990-03	1.18466+00
4.69095+03	5.89494-04	2.10294-05	5.33117-09	3.65925-12	8.13401-03	1.18452+00
4.82844+03	6.39078-04	2.10933-05	5.32760-09	4.31516-12	8.11737-03	1.18437+00
4.96896+03	6.92351-04	2.11521-05	5.32199-09	5.07694-12	8.10006-03	1.18421+00
5.11260+03	7.39059-04	2.12234-05	5.31843-09	5.80063-12	8.08203-03	1.18404+00
5.25940+03	7.69731-04	2.13029-05	5.31563-09	6.31194-12	8.06308-03	1.18387+00
5.40941+03	7.78030-04	2.13999-05	5.31536-09	6.47704-12	8.04284-03	1.18368+00
5.56257+03	7.70008-04	2.15311-05	5.32081-09	6.38341-12	8.02083-03	1.18349+00
5.71875+03	7.61329-04	2.17047-05	5.33332-09	6.29033-12	7.99665-03	1.18329+00
5.87788+03	7.59931-04	2.18935-05	5.34618-09	6.32171-12	7.97007-03	1.18307+00
6.04003+03	7.72027-04	2.20894-05	5.35716-09	6.58422-12	7.94084-03	1.18282+00
6.20537+03	8.01074-04	2.22709-05	5.36130-09	7.14949-12	7.90893-03	1.18254+00
6.37421+03	8.44356-04	2.24187-05	5.35431-09	7.99862-12	7.87430-03	1.18222+00
6.54688+03	8.96248-04	2.25493-05	5.34017-09	9.06454-12	7.83712-03	1.18186+00
6.72350+03	9.44878-04	2.26999-05	5.32718-09	1.01386-11	7.79741-03	1.18148+00
6.90389+03	9.80338-04	2.29111-05	5.32369-09	1.10116-11	7.75491-03	1.18108+00
7.08764+03	9.93884-04	2.32037-05	5.33299-09	1.14604-11	7.70897-03	1.18067+00
7.27434+03	9.85072-04	2.35595-05	5.34900-09	1.14316-11	7.65825-03	1.18023+00
7.46375+03	9.65285-04	2.39621-05	5.36586-09	1.11651-11	7.60127-03	1.17973+00
7.65578+03	9.54083-04	2.43929-05	5.37717-09	1.11021-11	7.53640-03	1.17914+00
7.85048+03	9.76166-04	2.48364-05	5.37791-09	1.18394-11	7.46250-03	1.17845+00

TABLE 6 (Cont.)

J15	SERIES	7 PROBLEM	82		PAGE 2
SHAKES					
RADIUS (CM)	VEL (CM/SH)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)
8.04801+03	1.04061-03	2.52788-05	5.36453-09	1.37092-11	7.37927-03
8.24845+03	1.12741-03	2.57542-05	5.34364-09	1.63931-11	7.28684-03
8.45145+03	1.19940-03	2.63403-05	5.32855-09	1.89559-11	7.18460-03
8.65611+03	1.23386-03	2.71166-05	5.32896-09	2.06419-11	7.07012-03
8.86114+03	1.23223-03	2.81379-05	5.34595-09	2.13632-11	6.93944-03
9.06504+03	1.20646-03	2.94696-05	5.37759-09	2.14514-11	6.78672-03
9.26620+03	1.18805-03	3.11603-05	5.41086-09	2.19907-11	6.60256-03
9.46319+03	1.22232-03	3.32461-05	5.42075-09	2.48570-11	6.37383-03
9.65423+03	1.31601-03	3.59874-05	5.40265-09	3.12236-11	6.08337-03
9.83599+03	1.43393-03	4.00986-05	5.38175-09	4.12965-11	5.70848-03
1.00035+04	1.55737-03	4.65904-05	5.37263-09	5.65942-11	5.24208-03
1.01508+04	1.69001-03	5.76469-05	5.37077-09	8.24639-11	4.65723-03
1.02723+04	1.84319-03	7.70391-05	5.38365-09	1.31137-10	3.96333-03
1.03635+04	1.96981-03	1.17786-04	5.42004-09	2.28619-10	3.10550-03
1.04352+E4	2.00574-03	1.38262-04	5.46482-09	2.78117-10	2.82087-03
1.05051+04	1.98966-03	1.41850-04	5.50120-09	2.80783-10	2.78769-03
1.05775+04	1.98418-03	1.48048-04	5.51976-09	2.91433-10	2.71860-03
1.06507+04	2.00403-03	1.58962-04	5.51769-09	3.19227-10	2.59620-03
1.07232+04	2.03942-03	1.73061-04	5.49910-09	3.59932-10	2.45115-03
1.07945+04	2.08136-03	1.88487-04	5.47916-09	4.08315-10	2.31202-03
1.08647+04	2.12298-03	2.04796-04	5.46140-09	4.61551-10	2.18374-03
1.09339+04	2.15466-03	2.23618-04	5.46172-09	5.19097-10	2.08867-03
1.10018+04	2.17227-03	2.43504-04	5.48025-09	5.74521-10	2.00833-03
1.10687+04	2.17166-03	2.65885-04	5.51206-09	5.26974-10	1.93054-03
1.11343+04	2.15468-03	2.91151-04	5.56225-09	6.75873-10	1.85602-03
1.11986+04	2.14145-03	3.18137-04	5.62554-09	7.29459-10	1.78795-03
1.12617+04	2.14784-03	3.48344-04	5.66098-09	8.03506-10	1.71565-03
1.13240+04	2.18044-03	3.77371-04	5.66447-09	8.97181-10	1.64954-03
1.13857+04	2.23060-03	4.08566-04	5.65044-09	1.01656-09	1.58341-03
1.14470+04	2.27486-03	4.41494-04	5.64458-09	1.14244-09	1.52210-03
1.15077+04	2.30078-03	4.80630-04	5.66550-09	1.27214-09	1.46090-03
1.15676+04	2.30745-03	5.22225-04	5.69941-09	1.39024-09	1.40477-03
1.16267+04	2.30037-03	5.70495-04	5.77103-09	1.50946-09	1.34960-03
1.16846+04	2.29332-03	6.30644-04	5.86129-09	1.65838-09	1.28351-03
1.17408+04	2.30502-03	6.98222-04	5.95045-09	1.85493-09	1.21186-03
1.17955+04	2.33924-03	7.69771-04	5.97549-09	2.10629-09	1.13375-03
1.18491+04	2.38020-03	8.42262-04	5.94386-09	2.38601-09	1.05720-03
1.19017+04	2.41191-03	9.26057-04	5.94500-09	2.69365-09	9.89227-04
1.19531+04	2.42960-03	1.01757-03	6.00104-09	3.00334-09	9.35850-04
1.20035+04	2.43336-03	1.11874-03	6.12529-09	3.31218-09	8.97551-04
1.20530+04	2.43025-03	1.22418-03	6.27673-09	3.61507-09	8.65780-04
1.21021+04	2.43824-03	1.31849-03	6.36808-09	3.91929-09	8.41711-04
1.21517+04	2.47232-03	1.39037-03	6.40116-09	4.24965-09	8.23580-04
1.22027+04	2.51930-03	1.44639-03	6.40749-09	4.59037-09	8.09157-04
1.22556+04	2.54384-03	1.49682-03	6.44279-09	4.84306-09	7.98669-04
1.23097+04	2.54247-03	1.60162-03	6.60481-09	5.17655-09	7.83718-04
1.23635+04	2.54083-03	1.75466-03	6.77822-09	5.66388-09	7.60842-04
1.24169+04	2.55534-03	1.80263-03	6.83898-09	6.14671-09	7.39205-04
1.24706+04	2.59110-03	2.00926-03	6.83874-09	6.74541-09	7.16451-04
1.25246+04	2.61590-03	2.15630-03	6.89683-09	7.37773-09	6.95322-04

TABLE 6 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 1.50000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.25783+04	2.61753-03	2.35107-03	7.10588-09	8.05412-09	6.74763-04	1.13290+00
1.26312+04	2.62622-03	2.38087-03	7.36113-09	8.90030-09	6.53107-04	1.13143+00
1.26837+04	2.66069-03	2.76262-03	7.46147-09	9.77957-09	6.32666-04	1.12973+00
1.27365+04	2.71044-03	2.96320-03	7.54702-09	1.08854-08	6.10968-04	1.12790+00
1.27889+04	2.73742-03	3.24829-03	7.84711-09	1.21705-08	5.90278-04	1.16890+00
1.28401+04	2.75127-03	3.60247-03	8.23637-09	1.36347-08	5.67994-04	1.16837+00
1.28901+04	2.79956-03	3.94591-03	8.54943-09	1.53542-08	5.46650-04	1.16772+00
1.29397+04	2.84339-03	4.25507-03	8.68937-09	1.72023-08	5.23533-04	1.16661+00
1.29888+04	2.87765-03	4.66918-03	9.02592-09	1.93325-08	5.02681-04	1.19881+00
1.30366+04	2.89379-03	5.21675-03	9.62220-09	2.18428-08	4.85631-04	1.19736+00
1.30831+04	2.92657-03	5.73223-03	1.00593-08	2.45494-08	4.67849-04	1.19578+00
1.31293+04	2.97551-03	6.14252-03	1.02987-08	2.71937-08	4.51906-04	1.19432+00
1.31753+04	3.00873-03	6.71239-03	1.08136-08	3.03820-08	4.38635-04	1.19312+00
1.32204+04	3.02693-03	7.44923-03	1.15630-08	3.41717-08	4.26853-04	1.18571+00
1.32647+04	3.06412-03	8.06523-03	1.21044-08	3.78639-08	4.16291-04	1.18483+00
1.33091+04	3.10538-03	8.65874-03	1.25570-08	4.17510-08	4.05629-04	1.18391+00
1.33533+04	3.13302-03	9.44597-03	1.33792-08	4.63603-08	3.98701-04	1.18361+00
1.34111+04	2.70116-03	6.21434-03	1.38704-08	2.32775-08	3.42262-04	1.19341+00
1.35714+04	1.29584-03	1.90008-03	4.99947-09	2.47710-09	8.26303-05	1.36741+00
1.38813+04	1.69386-04	1.32421-03	2.37974-10	3.65970-11	2.38892-05	1.36996+00
1.42621+04	3.21039-06	1.29344-03	1.03480-10	1.30223-14	2.35431-05	1.36972+00
1.46582+04	3.80164-08	1.29299-03	1.01786-10	1.82909-18	2.35400-05	1.36972+00
1.50654+04	4.10190-10	1.29299-03	1.01766-10	2.14450-22	2.35400-05	1.36972+00
1.54840+04	2.94637-12	1.29299-03	1.01766-10	1.12246-26	2.35400-05	1.36972+00

TABLE 7

J15 SERIES 7 FROBLEM 82
 T= 2.00000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.04065+02	1.26058-05	5.74580-05	3.87851-09	9.13038-15	7.54342-03	1.15430+00
1.55081+03	9.15563-05	5.74748-05	3.87137-09	3.67384-13	7.53326-03	1.15417+00
1.77524+03	1.37087-04	5.67274-05	3.82387-09	5.45319-13	7.53091-03	1.15401+00
1.90909+03	1.02200-04	5.69500-05	3.83920-09	3.03055-13	7.52921-03	1.15402+00
1.99632+03	7.63655-05	5.71553-05	3.85252-09	1.71351-13	7.52793-03	1.15404+00
2.05586+03	5.74108-05	5.73123-05	3.86028-09	9.61025-14	7.52700-03	1.15406+00
2.09761+03	4.48500-05	5.74114-05	3.86478-09	5.84507-14	7.52630-03	1.15406+00
2.17351+03	2.22908-05	1.71658-05	3.86804-09	6.92051-15	7.52374-03	1.17657+00
2.28930+03	-7.98765-06	1.72008-05	3.86973-09	1.93320-15	7.51875-03	1.17653+00
2.40278+03	-2.76307-05	1.72369-05	3.87073-09	6.99675-15	7.51341-03	1.17648+00
2.51470+03	-3.54798-05	1.72737-05	3.87133-09	1.08791-14	7.50774-03	1.17643+00
2.62569+03	-2.55682-05	1.73006-05	3.87068-09	6.66492-15	7.50181-03	1.17638+00
2.73635+03	4.47276-06	1.73006-05	3.86540-09	3.37373-15	7.49576-03	1.17631+00
2.84716+03	4.19662-05	1.72990-05	3.85977-09	1.81165-14	7.48969-03	1.17624+00
2.95842+03	7.84943-05	1.73042-05	3.85551-09	5.61966-14	7.48357-03	1.17618+00
3.07041+03	1.14938-04	1.73038-05	3.85006-09	1.17155-13	7.47740-03	1.17611+00
3.18339+03	1.46614-04	1.73095-05	3.84581-09	1.87617-13	7.47116-03	1.17604+00
3.29754+03	1.70742-04	1.73207-05	3.84257-09	2.53451-13	7.46479-03	1.17597+00
3.41303+03	1.86537-04	1.73414-05	3.84115-09	3.01937-13	7.45821-03	1.17591+00
3.52998+03	1.91866-04	1.73744-05	3.84200-09	3.19799-13	7.45134-03	1.17584+00
3.64847+03	1.87238-04	1.74222-05	3.84551-09	3.05593-13	7.44407-03	1.17578+00
3.76860+03	1.74577-04	1.74816-05	3.85182-09	2.66937-13	7.43626-03	1.17572+00
3.89047+03	1.59231-04	1.75467-05	3.85828-09	2.22959-13	7.42781-03	1.17565+00
4.01415+03	1.45553-04	1.76212-05	3.86487-09	1.86999-13	7.41866-03	1.17557+00
4.13989+03	1.35735-04	1.76976-05	3.87107-09	1.63145-13	7.40875-03	1.17549+00
4.26772+03	1.34229-04	1.77683-05	3.87604-09	1.60108-13	7.39803-03	1.17539+00
4.39787+03	1.44702-04	1.78317-05	3.87879-09	1.87311-13	7.38655-03	1.17529+00
4.53054+03	1.65921-04	1.78860-05	3.87898-09	2.47675-13	7.37434-03	1.17517+00
4.66592+03	1.96518-04	1.79315-05	3.87672-09	3.49075-13	7.36144-03	1.17504+00
4.80422+03	2.34181-04	1.79673-05	3.87192-09	4.96234-13	7.34791-03	1.17490+00
4.94561+03	2.76114-04	1.79988-05	3.86565-09	6.90465-13	7.33377-03	1.17476+00
5.09024+03	3.17742-04	1.80302-05	3.85984-09	9.13632-13	7.31904-03	1.17460+00
5.23821+03	3.54540-04	1.80687-05	3.85287-09	1.13828-12	7.30367-03	1.17444+00
5.38953+03	3.83256-04	1.81241-05	3.84955-09	1.33228-12	7.28757-03	1.17428+00
5.54416+03	4.01010-04	1.82068-05	3.85077-09	1.46427-12	7.27058-03	1.17412+00
5.70200+03	4.08686-04	1.83150-05	3.85590-09	1.52955-12	7.25245-03	1.17395+00
5.86298+03	4.10355-04	1.84496-05	3.86477-09	1.55337-12	7.23291-03	1.17378+00
6.02708+03	4.08266-04	1.85936-05	3.87379-09	1.54965-12	7.21174-03	1.17359+00
6.19439+03	4.06534-04	1.87405-05	3.88134-09	1.54862-12	7.18863-03	1.17338+00
6.36505+03	4.12543-04	1.88076-05	3.88676-09	1.60754-12	7.16341-03	1.17314+00
6.53922+03	4.29421-04	1.90321-05	3.88934-09	1.75603-12	7.13597-03	1.17288+00
6.71704+03	4.62032-04	1.91760-05	3.88941-09	2.05108-12	7.10624-03	1.17259+00
6.89871+03	5.10809-04	1.93143-05	3.88612-09	2.52716-12	7.07433-03	1.17227+00
7.08438+03	5.68167-04	1.94530-05	3.88066-09	3.14845-12	7.04034-03	1.17192+00
7.27411+03	6.23572-04	1.96088-05	3.87612-09	3.81881-12	7.00427-03	1.17156+00
7.46779+03	6.61844-04	1.98007-05	3.87565-09	4.33830-12	6.96588-03	1.17118+00
7.66519+03	6.74651-04	2.00372-05	3.87986-09	4.56000-12	6.92443-03	1.17077+00
7.86599+03	6.66665-04	2.03282-05	3.88932-09	4.51802-12	6.87898-03	1.17034+00
8.06987+03	6.51163-04	2.06670-05	3.90137-09	4.38209-12	6.82841-03	1.16986+00
8.27661+03	6.43558-04	2.1034-05	3.91384-09	4.35898-12	6.77173-03	1.16931+00

TABLE 7 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 2.00000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
8.48607+03	6.52091-04	2.14609-05	3.92278-09	4.57504-12	6.70794-03	1.16869+00
8.69826+03	6.83172-04	2.18914-05	3.92502-09	5.11329-12	6.63602-03	1.16796+00
8.91323+03	7.35480-04	2.23388-05	3.91884-09	6.05304-12	6.55495-03	1.16713+00
9.13094+03	8.04571-04	2.28309-05	3.90736-09	7.40563-12	6.46380-03	1.16617+00
9.35099+03	8.76392-04	2.34184-05	3.89650-09	9.00724-12	6.36136-03	1.16509+00
9.57250+03	9.34100-04	2.41603-05	3.89130-09	1.05470-11	6.24545-03	1.16387+00
9.79417+03	9.66080-04	2.51262-05	3.89522-09	1.17262-11	6.11232-03	1.16247+00
1.00143+04	9.74707-04	2.63951-05	3.90788-09	1.25384-11	5.95570-03	1.16082+00
1.02309+04	9.77955-04	2.80187-05	3.92417-09	1.33986-11	5.77144-03	1.15885+00
1.04422+04	9.98347-04	3.00860-05	3.93867-09	1.49977-11	5.55381-03	1.15646+00
1.06458+04	1.04898-03	3.28279-05	3.94664-09	1.80796-11	5.29431-03	1.15597+00
1.08390+04	1.13291-03	3.66186-05	3.94781-09	2.35464-11	4.98331-03	1.15184+00
1.10185+04	1.25138-03	4.18827-05	3.93877-09	3.28900-11	4.61665-03	1.15767+00
1.11812+04	1.39059-03	4.93836-05	3.92834-09	4.78726-11	4.20092-03	1.15082+00
1.13217+04	1.55789-03	6.31246-05	3.91991-09	7.68945-11	3.64772-03	1.15188+00
1.14313+04	1.71177-03	9.32015-05	3.92211-09	1.36702-10	2.89397-03	1.14931+00
1.15181+04	1.77624-03	1.11683-04	3.92287-09	1.76183-10	2.57761-03	1.15972+00
1.15995+04	1.78109-03	1.21131-04	3.93499-09	1.92131-10	2.44745-03	1.16808+00
1.16797+04	1.77590-03	1.31965-04	3.95638-09	2.08097-10	2.31903-03	1.15930+00
1.17584+04	1.76476-03	1.44086-04	3.97023-09	2.24374-10	2.19333-03	1.15085+00
1.18354+04	1.75673-03	1.58346-04	3.99666-09	2.44336-10	2.09628-03	1.15039+00
1.19105+04	1.76544-03	1.74096-04	4.02006-09	2.71316-10	2.00954-03	1.17610+00
1.19841+04	1.79011-03	1.89706-04	4.03348-09	3.03980-10	1.93177-03	1.17212+00
1.20566+04	1.82365-03	2.05733-04	4.02642-09	3.42135-10	1.85599-03	1.16812+00
1.21284+04	1.85858-03	2.22981-04	4.01780-09	3.85155-10	1.78293-03	1.16414+00
1.21997+04	1.88748-03	2.40546-04	4.00260-09	4.28500-10	1.71476-03	1.16032+00
1.22703+04	1.90388-03	2.61508-04	4.00156-09	4.73955-10	1.64560-03	1.15634+00
1.23401+04	1.90914-03	2.83382-04	4.00849-09	5.16439-10	1.58304-03	1.15266+00
1.24091+04	1.90962-03	3.08505-04	4.03050-09	5.62503-10	1.52201-03	1.14899+00
1.24772+04	1.90575-03	3.35588-04	4.06189-09	6.09409-10	1.46529-03	1.14551+00
1.25442+04	1.90324-03	3.66896-04	4.10319-09	6.64508-10	1.40844-03	1.14195+00
1.26102+04	1.90878-03	3.99827-04	4.13670-09	7.20380-10	1.35292-03	1.15665+00
1.26753+04	1.92558-03	4.34933-04	4.14327-09	8.06372-10	1.29049-03	1.16651+00
1.27396+04	1.95351-03	4.74294-04	4.13011-09	9.05056-10	1.21848-03	1.16323+00
1.28029+04	1.98010-03	5.18167-04	4.10822-09	1.01584-09	1.14223-03	1.17874+00
1.28650+04	1.99528-03	5.69194-04	4.10069-09	1.13303-09	1.06603-03	1.19147+00
1.29257+04	2.00150-03	6.27073-04	4.12237-09	1.25603-09	9.98564-04	1.18790+00
1.29847+04	2.00339-03	6.95176-04	4.18827-09	1.39508-09	9.40879-04	1.15923+00
1.30424+04	2.00279-03	7.62859-04	4.24915-09	1.52997-09	8.98064-04	1.15548+00
1.30992+04	2.00482-03	8.29705-04	4.28707-09	1.66741-09	8.59773-04	1.13308+00
1.31558+04	2.01805-03	8.87235-04	4.29665-09	1.80670-09	8.32725-04	1.13041+00
1.32131+04	2.04767-03	9.40294-04	4.28120-09	1.97148-09	8.08003-04	1.12800+00
1.32716+04	2.07889-03	9.86948-04	4.27901-09	2.13277-09	7.89236-04	1.12609+00
1.33317+04	2.09160-03	1.03052-03	4.30266-09	2.25418-09	7.75453-04	1.12230+00
1.33935+04	2.08507-03	1.07659-03	4.37089-09	2.34029-09	7.66076-04	1.12124+00
1.34566+04	2.08132-03	1.14687-03	4.46187-09	2.48406-09	7.51987-04	1.11964+00
1.35200+04	2.09839-03	1.23682-03	4.51550-09	2.72312-09	7.31003-04	1.11724+00
1.35836+04	2.12688-03	1.31227-03	4.50831-09	2.96824-09	7.11037-04	1.11186+00
1.36480+04	2.15856-03	1.39772-03	4.50659-09	3.25648-09	6.90218-04	1.10942+00
1.37122+04	2.17230-03	1.52880-03	4.62103-09	3.60713-09	6.66639-04	1.12600+00

TABLE 7 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 2.00000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
1.37755+04	2.16976-03	1.66410-03	4.74923-09	3.91717-09	6.45932-04	1.12427+00
1.38382+04	2.18533-03	1.80235-03	4.85637-09	4.30391-09	6.25409-04	1.12250+00
1.39011+04	2.22097-03	1.91054-03	4.87291-09	4.71249-09	6.05879-04	1.12057+00
1.39641+04	2.24730-03	2.07943-03	4.95942-09	5.25097-09	5.78668-04	1.16043+00
1.40264+04	2.25449-03	2.27063-03	5.11176-09	5.77052-09	5.55736-04	1.15930+00
1.40876+04	2.26442-03	2.48243-03	5.28493-09	6.36450-09	5.34199-04	1.15837+00
1.41484+04	2.28933-03	2.67648-03	5.37514-09	7.01416-09	5.11935-04	1.19899+00
1.42087+04	2.31372-03	2.92259-03	5.49367-09	7.82281-09	4.86834-04	1.19680+00
1.42680+04	2.32456-03	3.20528-03	5.68790-09	8.66001-09	4.66023-04	1.19496+00
1.43262+04	2.33498-03	3.51123-03	5.91870-09	9.57197-09	4.48196-04	1.19336+00
1.43840+04	2.35336-03	3.78212-03	6.04569-09	1.04735-08	4.30244-04	1.18206+00
1.44420+04	2.37286-03	4.02769-03	6.15375-09	1.13390-08	4.16062-04	1.18043+00
1.45004+04	2.38089-03	4.34327-03	6.36913-09	1.23102-08	4.03615-04	1.17912+00
1.45585+04	2.38680-03	4.70892-03	6.63112-09	1.34130-08	3.91605-04	1.17793+00
1.46167+04	2.40950-03	5.02430-03	6.82147-09	1.45855-08	3.80920-04	1.17684+00
1.46755+04	2.43558-03	5.35224-03	7.01544-09	1.58751-08	3.70822-04	1.17583+00
1.47344+04	2.45144-03	5.80653-03	7.42085-09	1.74475-08	3.63883-04	1.17542+00
1.47926+04	2.47587-03	6.37051-03	7.81818-09	1.95265-08	3.52690-04	1.17450+00
1.48501+04	2.51258-03	6.89072-03	8.09357-09	2.17520-08	3.40324-04	1.19499+00
1.49070+04	2.53854-03	7.56689-03	8.52971-09	2.43815-08	3.28382-04	1.19540+00
1.49623+04	2.55880-03	8.43573-03	9.16904-09	2.76170-08	3.18121-04	1.19635+00
1.50243+04	2.36644-03	7.10377-03	9.61416-09	2.00404-08	2.89840-04	1.19031+00
1.51761+04	1.32460-03	2.24376-03	5.11003-09	2.75345-09	1.02498-04	1.29716+00
1.54949+04	2.51452-04	1.35776-03	3.50315-10	8.09377-11	2.44483-05	1.36999+00
1.59144+04	7.52497-06	1.29435-03	1.05882-10	7.10955-14	2.35494-05	1.36991+00
1.63563+04	1.16135-07	1.29300-03	1.01827-10	1.69650-17	2.35401-05	1.36972+00
1.68107+04	1.62045-09	1.29299-03	1.01767-10	3.31638-21	2.35400-05	1.36972+00
1.72777+04	1.90373-11	1.29299-03	1.01766-10	4.68602-25	2.35400-05	1.36972+00

TABLE 8

J15 SERIES 7 PROBLEM 82
 T= 2.10000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	OYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.08417+02	3.51768-05	5.64063-05	3.70563-09	6.97978-14	7.41303-03	1.15238+00
1.55886+03	5.32522-05	5.71391-05	3.75103-09	8.93730-14	7.40331-03	1.15238+00
1.78186+03	7.89551-05	5.68615-05	3.72458-09	2.29326-13	7.39996-03	1.15229+00
1.91516+03	1.26871-04	5.63456-05	3.68998-09	4.54211-13	7.39808-03	1.15217+00
2.00296+03	1.39588-04	5.62132-05	3.68048-09	5.49281-13	7.39681-03	1.15213+00
2.06317+03	1.46142-04	5.62169-05	3.68002-09	6.00360-13	7.39592-03	1.15212+00
2.10544+03	1.42117-04	5.62695-05	3.68294-09	5.60491-13	7.39528-03	1.15212+00
2.18214+03	1.29764-04	1.68635-05	3.68764-09	1.42721-13	7.39296-03	1.17500+00
2.29899+03	1.16547-04	1.69140-05	3.69351-09	1.14997-13	7.38854-03	1.17497+00
2.41332+03	1.09853-04	1.69766-05	3.70236-09	1.02503-13	7.38389-03	1.17449+00
2.52592+03	1.02662-04	1.70271-05	3.70851-09	8.98884-14	7.37898-03	1.17490+00
2.63743+03	9.70054-05	1.70812-05	3.71508-09	8.03826-14	7.37375-03	1.17487+00
2.74836+03	9.34631-05	1.71295-05	3.72016-09	7.48581-14	7.36821-03	1.17482+00
2.85917+03	8.93244-05	1.71703-05	3.72342-09	6.85313-14	7.36230-03	1.17477+00
2.97025+03	8.67378-05	1.72051-05	3.72508-09	6.47247-14	7.35600-03	1.17471+00
3.08193+03	9.02305-05	1.72303-05	3.72445-09	7.02899-14	7.34930-03	1.17465+00
3.19457+03	1.06503-04	1.72349-05	3.71936-09	9.90105-14	7.34225-03	1.17457+00
3.30851+03	1.30402-04	1.72251-05	3.71113-09	1.47649-13	7.33495-03	1.17448+00
3.42397+03	1.54341-04	1.72204-05	3.70374-09	2.06377-13	7.32739-03	1.17440+00
3.54116+03	1.81005-04	1.72058-05	3.69415-09	2.83668-13	7.31958-03	1.17430+00
3.66026+03	2.08613-04	1.71938-05	3.68490-09	3.75605-13	7.31155-03	1.17421+00
3.78142+03	2.32605-04	1.71868-05	3.67649-09	4.65967-13	7.30329-03	1.17411+00
3.90474+03	2.52845-04	1.71890-05	3.66966-09	5.50200-13	7.29474-03	1.17402+00
4.03030+03	2.67387-04	1.72050-05	3.66534-09	6.15274-13	7.28588-03	1.17392+00
4.15812+03	2.74323-04	1.72375-05	3.66394-09	6.48617-13	7.27661-03	1.17383+00
4.28823+03	2.73790-04	1.72876-05	3.66557-09	6.47990-13	7.26682-03	1.17374+00
4.42066+03	2.66831-04	1.73519-05	3.66943-09	6.17907-13	7.25640-03	1.17364+00
4.55547+03	2.56529-04	1.74264-05	3.67460-09	5.73666-13	7.24522-03	1.17354+00
4.69274+03	2.46808-04	1.75023-05	3.67924-09	5.33217-13	7.23317-03	1.17343+00
4.83261+03	2.40444-04	1.75800-05	3.68334-09	5.08222-13	7.22018-03	1.17331+00
4.97524+03	2.40293-04	1.76520-05	3.68540-09	5.09684-13	7.20620-03	1.17318+00
5.12080+03	2.48003-04	1.77195-05	3.68564-09	5.45202-13	7.19121-03	1.17304+00
5.26946+03	2.64257-04	1.77815-05	3.68386-09	6.21869-13	7.17521-03	1.17288+00
5.42141+03	2.89485-04	1.78367-05	3.67984-09	7.49263-13	7.15823-03	1.17270+00
5.57682+03	3.22807-04	1.78898-05	3.67454-09	9.35241-13	7.14030-03	1.17252+00
5.73583+03	3.62865-04	1.79420-05	3.66825-09	1.10529-12	7.12148-03	1.17232+00
5.89853+03	4.92427-04	1.80019-05	3.66264-09	1.46069-12	7.10181-03	1.17211+00
6.06496+03	4.34104-04	1.80787-05	3.65929-09	1.70506-12	7.08116-03	1.17190+00
6.23504+03	4.52327-04	1.81805-05	3.65953-09	1.86007-12	7.05934-03	1.17169+00
6.49869+03	4.54443-04	1.83090-05	3.66326-09	1.89064-12	7.03599-03	1.17147+00
6.58578+03	4.44346-04	1.84671-05	3.67056-09	1.82361-12	7.01068-03	1.17123+00
6.76625+03	4.30331-04	1.86420-05	3.67850-09	1.72652-12	6.98294-03	1.17097+00
6.95009+03	4.23486-04	1.88336-05	3.68666-09	1.68881-12	6.95244-03	1.17068+00
7.13737+03	4.30995-04	1.90301-05	3.69258-09	1.76806-12	6.91892-03	1.17036+00
7.32825+03	4.54503-04	1.92229-05	3.69447-09	1.98785-12	6.88222-03	1.17000+00
7.52292+03	4.92566-04	1.94102-05	3.69191-09	2.35949-12	6.84221-03	1.16959+00
7.72161+03	5.43186-04	1.95926-05	3.68489-09	2.89026-12	6.79879-03	1.16914+00
7.92442+03	6.01888-04	1.97904-05	3.67693-09	3.59387-12	6.75194-03	1.16865+00
8.13128+03	6.58791-04	2.00179-05	3.67019-09	4.35099-12	6.70152-03	1.16813+00
8.34191+03	7.53725-04	2.03019-05	3.66856-09	5.03040-12	6.64709-03	1.16757+00

TABLE 8 (Cont.)

J15 SER1ES 7 PROBLEM 82
 T= 2.10000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA_2
8.55584+03	7.29981-04	2.06574-05	3.67332-09	5.50452-12	6.58781-03	1.16698+00
8.77252+03	7.35756-04	2.10925-05	3.68377-09	5.70912-12	6.52231-03	1.16633+00
8.99141+03	7.28087-04	2.16031-05	3.69661-09	5.72637-12	6.44870-03	1.16560+00
9.21208+03	7.23638-04	2.21820-05	3.70753-09	5.80785-12	6.36472-03	1.16475+00
9.43419+03	7.39428-04	2.28306-05	3.71340-09	6.24379-12	6.26810-03	1.16375+00
9.65736+03	7.81582-04	2.35674-05	3.71323-09	7.20721-12	6.15643-03	1.16257+00
9.88100+03	8.44640-04	2.44289-05	3.70712-09	8.72943-12	6.02644-03	1.16118+00
1.01424+04	9.19597-04	2.54767-05	3.69706-09	1.07921-11	5.87463-03	1.15952+00
1.03256+04	9.95276-04	2.67883-05	3.68777-09	1.32855-11	5.70011-03	1.15759+00
1.05435+04	1.05913-03	2.85091-05	3.68525-09	1.60009-11	5.49820-03	1.15533+00
1.07549+04	1.10762-03	3.08985-05	3.69196-09	1.89601-11	5.26185-03	1.14850+00
1.09565+04	1.14590-03	3.42265-05	3.70761-09	2.24762-11	4.98323-03	1.18134+00
1.11450+04	1.19043-03	3.88434-05	3.72802-09	2.75371-11	4.65818-03	1.17688+00
1.13174+04	1.25933-03	4.52171-05	3.74539-09	3.58945-11	4.28856-03	1.17155+00
1.14700+04	1.37054-03	5.53783-05	3.75982-09	5.21441-11	3.83054-03	1.16451+00
1.15931+04	1.53273-03	7.94914-05	3.76124-09	9.37147-11	3.10421-03	1.19623+00
1.16877+04	1.65656-03	1.05117-04	3.75245-09	1.44282-10	2.60108-03	1.18842+00
1.17709+04	1.70651-03	1.16071-04	3.74306-09	1.69031-10	2.43183-03	1.18596+00
1.18524+04	1.74264-03	1.25783-04	3.73595-09	1.91006-10	2.29966-03	1.18416+00
1.19328+04	1.76850-03	1.36767-04	3.73434-09	2.13882-10	2.17290-03	1.18957+00
1.20116+04	1.78429-03	1.49824-04	3.73587-09	2.38501-10	2.07885-03	1.17938+00
1.20887+04	1.79006-03	1.64501-04	3.75143-09	2.63557-10	1.99244-03	1.17507+00
1.21643+04	1.78593-03	1.79278-04	3.76413-09	2.85909-10	1.91528-03	1.17109+00
1.22386+04	1.78089-03	1.95423-04	3.78191-09	3.09001-10	1.84182-03	1.16720+00
1.23117+04	1.77441-03	2.13335-04	3.80795-09	3.35847-10	1.77148-03	1.16337+00
1.23838+04	1.76923-03	2.31461-04	3.81998-09	3.62257-10	1.70522-03	1.15966+00
1.24549+04	1.77825-03	2.52115-04	3.82909-09	3.98626-10	1.63717-03	1.15574+00
1.25252+04	1.80645-03	2.72820-04	3.82932-09	4.45189-10	1.57462-03	1.15203+00
1.25950+04	1.84432-03	2.95412-04	3.82633-09	5.02478-10	1.51297-03	1.14829+00
1.26643+04	1.88029-03	3.18628-04	3.81759-09	5.63297-10	1.45502-03	1.14469+00
1.27331+04	1.90364-03	3.45638-04	3.82139-09	6.26282-10	1.39734-03	1.14102+00
1.28012+04	1.91023-03	3.75413-04	3.83148-09	6.84936-10	1.33940-03	1.15454+00
1.28683+04	1.90471-03	4.10666-04	3.86142-09	7.44939-10	1.27738-03	1.16414+00
1.29340+04	1.89554-03	4.52064-04	3.89548-09	8.12152-10	1.20864-03	1.16126+00
1.29980+04	1.89469-03	5.00216-04	3.93265-09	8.97850-10	1.13454-03	1.17728+00
1.30603+04	1.90719-03	5.52678-04	3.95287-09	1.00517-09	1.05966-03	1.19060+00
1.31210+04	1.92849-03	6.07008-04	3.95952-09	1.12880-09	9.92348-04	1.18778+00
1.31808+04	1.95706-03	6.61696-04	3.94810-09	1.26727-09	9.34222-04	1.15985+00
1.32399+04	1.98198-03	7.15673-04	3.93488-09	1.40569-09	8.89282-04	1.15626+00
1.32989+04	1.99059-03	7.71227-04	3.93455-09	1.52798-09	8.52269-04	1.13365+00
1.33578+04	1.98956-03	8.31616-04	3.98065-09	1.64592-09	8.25952-04	1.13089+00
1.34165+04	1.98770-03	8.98728-04	4.05960-09	1.77542-09	8.03397-04	1.12832+00
1.34754+04	1.99146-03	9.56632-04	4.12495-09	1.89697-09	7.86079-04	1.12631+00
1.35357+04	2.00721-03	9.95186-04	4.12995-09	2.00481-09	7.72039-04	1.12199+00
1.35983+04	2.03460-03	1.02363-03	4.11717-09	2.11884-09	7.60991-04	1.12077+00
1.36632+04	2.06191-03	1.07400-03	4.12854-09	2.28310-09	7.45538-04	1.11903+00
1.37289+04	2.07031-03	1.15612-03	4.17182-09	2.47768-09	7.24758-04	1.11665+00
1.37943+04	2.05954-03	1.25045-03	4.26172-09	2.65206-09	7.06937-04	1.11455+00
1.38592+04	2.06443-03	1.35608-03	4.35052-09	2.88982-09	6.87758-04	1.12735+00
1.39240+04	2.08917-03	1.45620-03	4.36780-09	3.17799-09	6.62764-04	1.12488+00

TABLE 8 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 2.10000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
1.39892+04	2.11623-03	1.54727-03	4.36628-09	3.46484-09	6.40494-04	1.12261+00
1.40545+04	2.13114-03	1.67480-03	4.46418-09	3.80328-09	6.20390-04	1.12085+00
1.41194+04	2.13413-03	1.81702-03	4.59647-09	4.13781-09	6.02125-04	1.16096+00
1.41836+04	2.14767-03	1.98531-03	4.69386-09	4.57871-09	5.74400-04	1.15930+00
1.42472+04	2.17439-03	2.13662-03	4.75580-09	5.05125-09	5.50378-04	1.15779+00
1.43107+04	2.19521-03	2.30863-03	4.85065-09	5.56259-09	5.28198-04	1.15655+00
1.43734+04	2.20241-03	2.53488-03	5.02663-09	6.14787-09	5.06281-04	1.19841+00
1.44349+04	2.21386-03	2.78282-03	5.17428-09	6.81966-09	4.82138-04	1.19631+00
1.44956+04	2.23802-03	3.01783-03	5.28360-09	7.55810-09	4.60425-04	1.19436+00
1.45559+04	2.26169-03	3.25857-03	5.40183-09	8.33427-09	4.41497-04	1.19263+00
1.46159+04	2.27390-03	3.55308-03	5.60587-09	9.18588-09	4.25392-04	1.18102+00
1.46751+04	2.28537-03	3.86437-03	5.85306-09	1.00918-08	4.12930-04	1.17974+00
1.47343+04	2.30585-03	4.12672-03	5.98697-09	1.09711-08	3.99856-04	1.17828+00
1.47940+04	2.32640-03	4.39983-03	6.10970-09	1.19064-08	3.86842-04	1.17682+00
1.48541+04	2.33260-03	4.73618-03	6.35290-09	1.28849-08	3.76911-04	1.17587+00
1.49142+04	2.34184-03	5.09902-03	6.61796-09	1.39823-08	3.67628-04	1.17504+00
1.49749+04	2.36025-03	5.38353-03	6.77419-09	1.50977-08	3.58952-04	1.17418+00
1.50360+04	2.39081-03	5.82573-03	7.02163-09	1.66500-08	3.47135-04	1.17305+00
1.50961+04	2.40426-03	6.45446-03	7.47191-09	1.86550-08	3.35623-04	1.19338+00
1.51550+04	2.43106-03	7.06152-03	7.83946-09	2.08684-08	3.23606-04	1.19370+00
1.52133+04	2.46788-03	7.62743-03	8.10865-09	2.32283-08	3.11433-04	1.19383+00
1.52708+04	2.48338-03	8.43080-03	8.64177-09	2.59972-08	3.01545-04	1.19470+00
1.53483+04	2.06371-03	9.22112-03	8.83642-09	1.15751-08	2.49758-04	1.24611+00
1.55510+04	9.26021-04	1.77092-03	2.65107-09	1.21742-09	5.11444-05	1.36937+00
1.59184+04	1.05620-04	1.31673-03	1.76158-10	1.40742-11	2.37590-05	1.36995+00
1.63563+04	2.29313-06	1.29340-03	1.03005-10	6.59553-15	2.35428-05	1.36972+00
1.68107+04	3.57206-08	1.29299-03	1.01784-10	1.60457-18	2.35400-05	1.36972+00
1.72777+04	5.01218-10	1.29299-03	1.01766-10	3.18995-22	2.35400-05	1.36972+00
1.77577+04	4.53886-12	1.29299-03	1.01766-10	2.66373-26	2.35400-05	1.36972+00

TABLE 9

J15 SERIES 7 PROBLEM 82
T= 2.20000+06 SHAKES

PAGE 1

RAD1US (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.11099+02	5.87437-05	5.57715-05	3.56252-09	1.92457-13	7.28083-03	1.15051+00
1.56712+03	6.76429-05	5.54021-05	3.55331-09	1.95570-13	7.27004-03	1.15030+00
1.79332+03	3.04005-05	5.59233-05	3.56065-09	3.04752-14	7.26605-03	1.15034+00
1.92653+03	6.85852-05	5.61086-05	3.57026-09	1.50097-13	7.26351-03	1.15034+00
2.01372+03	1.16378-04	5.59580-05	3.55959-09	3.92948-13	7.26187-03	1.15029+00
2.07365+03	1.52237-04	5.57996-05	3.54887-09	6.51686-13	7.26077-03	1.15024+00
2.11587+03	1.73532-04	5.56872-05	3.54128-09	8.38350-13	7.26001-03	1.15021+00
2.19271+03	2.03402-04	1.66683-05	3.53496-09	3.48996-13	7.25741-03	1.17340+00
2.31001+03	2.47501-04	1.66600-05	3.52966-09	5.14185-13	7.25295-03	1.17334+00
2.42522+03	2.84869-04	1.66483-05	3.52381-09	6.77550-13	7.24866-03	1.17329+00
2.53390+03	3.06822-04	1.66392-05	3.51856-09	7.83532-13	7.24443-03	1.17324+00
2.65213+03	3.14986-04	1.66471-05	3.51657-09	8.25858-13	7.24011-03	1.17319+00
2.76479+03	3.14861-04	1.66569-05	3.51485-09	8.25695-13	7.23563-03	1.17314+00
2.87740+03	3.04187-04	1.66613-05	3.51580-09	7.23739-13	7.23092-03	1.17310+00
2.99024+03	2.83581-04	1.67169-05	3.51917-09	6.73368-13	7.22585-03	1.17305+00
3.10358+03	2.60252-04	1.67524-05	3.52182-09	5.68412-13	7.22035-03	1.17301+00
3.21768+03	2.38625-04	1.67908-05	3.52446-09	4.78932-13	7.21439-03	1.17295+00
3.33277+03	2.20166-04	1.68314-05	3.52668-09	4.08503-13	7.20794-03	1.17289+00
3.44905+03	2.05701-04	1.68715-05	3.52856-09	3.57273-13	7.20100-03	1.17283+00
3.56674+03	1.97858-04	1.69119-05	3.53030-09	3.31052-13	7.19353-03	1.17276+00
3.68603+03	2.00104-04	1.69493-05	3.53102-09	3.39462-13	7.18558-03	1.17268+00
3.80711+03	2.12063-04	1.69821-05	3.53046-09	3.85411-13	7.17718-03	1.17260+00
3.93018+03	2.33412-04	1.70116-05	3.52890-09	4.64553-13	7.16839-03	1.17251+00
4.05540+03	2.58333-04	1.70373-05	3.52628-09	5.70007-13	7.15921-03	1.17242+00
4.18298+03	2.86258-04	1.70563-05	3.52203-09	7.00650-13	7.14965-03	1.17231+00
4.31308+03	3.15308-04	1.70707-05	3.51660-09	8.50355-13	7.13972-03	1.17220+00
4.44587+03	3.42293-04	1.70827-05	3.51038-09	1.00209-12	7.12941-03	1.17209+00
4.58148+03	3.64815-04	1.70990-05	3.50460-09	1.13870-12	7.11867-03	1.17197+00
4.72001+03	3.80197-04	1.71215-05	3.49962-09	1.23771-12	7.10745-03	1.17185+00
4.86148+03	3.85062-04	1.71607-05	3.49731-09	1.27224-12	7.09562-03	1.17173+00
5.00590+03	3.79257-04	1.72156-05	3.49732-09	1.23835-12	7.08303-03	1.17161+00
5.15327+03	3.64657-04	1.72868-05	3.49960-09	1.15011-12	7.06950-03	1.17148+00
5.30360+03	3.44658-04	1.73731-05	3.50398-09	1.03286-12	7.05464-03	1.17134+00
5.45692+03	3.25649-04	1.74698-05	3.50856-09	9.26922-13	7.03887-03	1.17119+00
5.61331+03	3.13611-04	1.75697-05	3.51272-09	8.64122-13	7.02150-03	1.17103+00
5.77291+03	3.12020-04	1.76677-05	3.51516-09	8.60074-13	7.00266-03	1.17084+00
5.93589+03	3.22206-04	1.77590-05	3.51498-09	9.22425-13	6.98233-03	1.17064+00
6.10245+03	3.43610-04	1.78429-05	3.51203-09	1.05492-12	6.96053-03	1.17042+00
6.27282+03	3.74958-04	1.79189-05	3.50629-09	1.26256-12	6.93726-03	1.17017+00
6.44715+03	4.12762-04	1.79943-05	3.49912-09	1.53638-12	6.91257-03	1.16991+00
6.62559+03	4.53217-04	1.80712-05	3.49089-09	1.85983-12	6.88644-03	1.16963+00
6.80818+03	4.91477-04	1.81622-05	3.48383-09	2.19634-12	6.85863-03	1.16934+00
6.99490+03	5.21808-04	1.82766-05	3.47940-09	2.48970-12	6.82959-03	1.16904+00
7.18559+03	5.40394-04	1.84254-05	3.47916-09	2.69065-12	6.79843-03	1.16872+00
7.38004+03	5.45171-04	1.86098-05	3.48279-09	2.76553-12	6.76488-03	1.16839+00
7.57804+03	5.38954-04	1.88323-05	3.48997-09	2.73537-12	6.72831-03	1.16804+00
7.77944+03	5.28200-04	1.90797-05	3.49760-09	2.66187-12	6.68804-03	1.16764+00
7.98420+03	5.23075-04	1.93455-05	3.50375-09	2.64654-12	6.64335-03	1.16720+00
8.19238+03	5.35122-04	1.96192-05	3.50595-09	2.81035-12	6.59367-03	1.16670+00
8.40407+03	5.68820-04	1.99038-05	3.50429-09	3.22467-12	6.53868-03	1.16613+00

TABLE 9 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 2.20000+06 SHAKES

PAGE 2

RAD1US (CM)	VEL (CM/S)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
8.61935+03	6.18757-04	2.02015-05	3.49865-09	3.87498-12	6.47806-03	1.16549+00
8.83819+03	6.76199-04	2.05269-05	3.49073-09	4.70191-12	6.41129-03	1.16478+00
9.06039+03	7.32865-04	2.09034-05	3.48323-09	5.62117-12	6.33769-03	1.16400+00
9.28547+03	7.79748-04	2.13621-05	3.47928-09	6.49837-12	6.25624-03	1.16314+00
9.51264+03	8.09507-04	2.19412-05	3.48199-09	7.19013-12	6.16527-03	1.16218+00
9.74082+03	8.20446-04	2.26773-05	3.49245-09	7.63242-12	6.06215-03	1.16111+00
9.96876+03	8.18541-04	2.35968-05	3.50796-09	7.90516-12	5.94290-03	1.15986+00
1.01953+04	8.17473-04	2.47027-05	3.52318-09	8.25396-12	5.80530-03	1.15839+00
1.04194+04	8.36174-04	2.60192-05	3.53269-09	9.09981-12	5.64502-03	1.15665+00
1.06400+04	8.88368-04	2.76066-05	3.53332-09	1.09107-11	5.45716-03	1.15454+00
1.08552+04	9.71969-04	2.96724-05	3.52619-09	1.40507-11	5.23600-03	1.15435+00
1.10627+04	1.07230-03	3.23944-05	3.51539-09	1.86680-11	4.97686-03	1.15085+00
1.12596+04	1.17255-03	3.61132-05	3.51055-09	2.48674-11	4.67917-03	1.17670+00
1.14429+04	1.26976-03	4.12314-05	3.51269-09	3.32879-11	4.34432-03	1.17186+00
1.16087+04	1.37037-03	4.90586-05	3.52310-09	4.61292-11	3.94349-03	1.16577+00
1.17482+04	1.50646-03	6.57594-05	3.54003-09	7.48531-11	3.34169-03	1.19837+00
1.18547+04	1.61883-03	9.60649-05	3.56144-09	1.25912-10	2.66068-03	1.18745+00
1.19413+04	1.64999-03	1.11165-04	3.57608-09	1.51321-10	2.42470-03	1.18416+00
1.20235+04	1.65320-03	1.21554-04	3.58983-09	1.66108-10	2.28850-03	1.18247+00
1.21043+04	1.65843-03	1.32438-04	3.60029-09	1.82131-10	2.16296-03	1.18336+00
1.21834+04	1.67374-03	1.45112-04	3.59446-09	2.03267-10	2.06930-03	1.17882+00
1.22610+04	1.69708-03	1.58592-04	3.58879-09	2.28392-10	1.98181-03	1.17442+00
1.23374+04	1.72438-03	1.71765-04	3.57276-09	2.55388-10	1.90303-03	1.17032+00
1.24131+04	1.75392-03	1.86038-04	3.56206-09	2.86170-10	1.82841-03	1.16633+00
1.24879+04	1.77861-03	2.01807-04	3.55984-09	3.19210-10	1.75720-03	1.16241+00
1.25621+04	1.79413-03	2.18530-04	3.56280-09	3.51719-10	1.69108-03	1.15867+00
1.26352+04	1.79964-03	2.38718-04	3.58518-09	3.86569-10	1.62469-03	1.15483+00
1.27072+04	1.79468-03	2.59515-04	3.60568-09	4.17936-10	1.56372-03	1.15121+00
1.27782+04	1.78814-03	2.82960-04	3.63400-09	4.52374-10	1.50416-03	1.14760+00
1.28482+04	1.78661-03	3.07461-04	3.65826-09	4.90739-10	1.44809-03	1.14412+00
1.29175+04	1.79259-03	3.33354-04	3.65999-09	5.35600-10	1.39066-03	1.14047+00
1.29862+04	1.81078-03	3.61172-04	3.65556-09	5.92162-10	1.33126-03	1.15327+00
1.30542+04	1.84008-03	3.92076-04	3.64842-09	6.63811-10	1.26704-03	1.16227+00
1.31213+04	1.87325-03	4.28755-04	3.64879-09	7.52327-10	1.19663-03	1.17757+00
1.31872+04	1.90001-03	4.70711-04	3.64919-09	8.49662-10	1.12185-03	1.17483+00
1.32514+04	1.90924-03	5.20580-04	3.67051-09	9.48806-10	1.04726-03	1.18687+00
1.33138+04	1.90319-03	5.75418-04	3.70674-09	1.04213-09	9.82389-04	1.18760+00
1.33747+04	1.89224-03	6.33616-04	3.74827-09	1.13436-09	9.28331-04	1.16041+00
1.34344+04	1.89084-03	6.93211-04	3.78731-09	1.23922-09	8.84962-04	1.15667+00
1.34935+04	1.90576-03	7.49561-04	3.80587-09	1.36122-09	8.49404-04	1.13389+00
1.35526+04	1.93360-03	7.99615-04	3.80046-09	1.49492-09	8.21787-04	1.13119+00
1.36125+04	1.96139-03	8.49910-04	3.80101-09	1.63408-09	7.97567-04	1.12874+00
1.36734+04	1.97469-03	8.92920-04	3.80260-09	1.74092-09	7.78880-04	1.12681+00
1.37359+04	1.97452-03	9.33864-04	3.83213-09	1.82045-09	7.65835-04	1.12142+00
1.38000+04	1.97057-03	9.81486-04	3.91698-09	1.90564-09	7.56801-04	1.12038+00
1.38652+04	1.97368-03	1.04542-03	3.99806-09	2.03616-09	7.42835-04	1.11878+00
1.39310+04	1.99325-03	1.11524-03	3.99928-09	2.21558-09	7.21436-04	1.11633+00
1.39975+04	2.02086-03	1.18307-03	3.99320-09	2.41584-09	7.01897-04	1.11407+00
1.40644+04	2.03789-03	1.27397-03	4.04150-09	2.64541-09	6.81874-04	1.13016+00
1.41310+04	2.03443-03	1.38090-03	4.10799-09	2.85775-09	6.58678-04	1.12368+00

TABLE 9 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 2.20000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.41970+04	2.03556-03	1.49879-03	4.20919-09	3.10519-09	6.38200-04	1.12189+00
1.42630+04	2.05396-03	1.60276-03	4.24483-09	3.38090-09	6.17440-04	1.11987+00
1.43293+04	2.07342-03	1.71155-03	4.27636-09	3.67912-09	5.95921-04	1.15946+00
1.43955+04	2.08563-03	1.86425-03	4.35646-09	4.05461-09	5.68738-04	1.15778+00
1.44608+04	2.09003-03	2.03965-03	4.50175-09	4.45482-09	5.46430-04	1.15667+00
1.45253+04	2.10441-03	2.20492-03	4.59420-09	4.88246-09	5.24433-04	1.15543+00
1.45895+04	2.12923-03	2.38738-03	4.66871-09	5.41191-09	5.00117-04	1.19778+00
1.46531+04	2.14946-03	2.60047-03	4.76265-09	6.00738-09	4.75683-04	1.19563+00
1.47158+04	2.15864-03	2.85401-03	4.93579-09	6.64942-09	4.55372-04	1.19382+00
1.47774+04	2.16813-03	3.11054-03	5.10391-09	7.31112-09	4.37419-04	1.19219+00
1.48386+04	2.19149-03	3.35447-03	5.22941-09	8.05552-09	4.20986-04	1.18007+00
1.49001+04	2.21640-03	3.58126-03	5.33839-09	8.79653-09	4.07258-04	1.17849+00
1.49616+04	2.22979-03	3.88267-03	5.56198-09	9.65232-09	3.95486-04	1.17728+00
1.50225+04	2.24198-03	4.22563-03	5.81968-09	1.06201-08	3.84076-04	1.17617+00
1.50836+04	2.26565-03	4.48381-03	5.94725-09	1.15086-08	3.73231-04	1.17499+00
1.51456+04	2.28601-03	4.75971-03	6.09203-09	1.24368-08	3.63175-04	1.17393+00
1.52081+04	2.29060-03	5.11309-03	6.36660-09	1.34138-08	3.55671-04	1.17334+00
1.52703+04	2.30225-03	5.56255-03	6.64163-09	1.47421-08	3.44246-04	1.19182+00
1.53324+04	2.33003-03	5.96369-03	6.78513-09	1.61893-08	3.30108-04	1.19146+00
1.53943+04	2.35005-03	6.49267-03	7.07762-09	1.79288-08	3.18027-04	1.19164+00
1.54549+04	2.36231-03	7.21367-03	7.57712-09	2.01282-08	3.07886-04	1.19246+00
1.55143+04	2.39127-03	7.83540-03	7.90442-09	2.24039-08	2.96993-04	1.19287+00
1.55746+04	2.37604-03	8.13373-03	8.20389-09	2.29650-08	2.84881-04	1.19235+00
1.56828+04	1.68311-03	3.44385-03	7.14189-09	5.62064-09	1.79127-04	1.24230+00
1.59475+04	5.46186-04	1.49910-03	1.03831-09	3.96444-10	2.96050-05	1.36993+00
1.63575+04	3.35973-05	1.29995-03	1.21508-10	1.41549-12	2.35924-05	1.36992+00
1.68107+04	6.14099-07	1.29308-03	1.02094-10	4.72875-16	2.35406-05	1.36972+00
1.72777+04	9.57828-09	1.29299-03	1.01771-10	1.15354-19	2.35400-05	1.36972+00
1.77577+04	1.33864-10	1.29299-03	1.01766-10	2.31697-23	2.35400-05	1.36972+00

TABLE 10

J15 SERIES 7 PROBLEM 82
T= 2.30000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/S)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
7.15724+02	96495-05	5.46975-05	3.39807-09	1.94617-13	7.15112-03	1.14858+00
1.57890+03	1.99062-04	5.36481-05	3.32673-09	1.23357-12	7.14101-03	1.14826+00
1.80893+03	2.51679-04	5.40956-05	3.35527-09	1.73321-12	7.13885-03	1.14831+00
1.94426+03	2.05099-04	5.42223-05	3.36374-09	1.15878-12	7.13716-03	1.14831+00
2.03265+03	1.77238-04	5.43398-05	3.36755-09	8.56228-13	7.13587-03	1.14831+00
2.09310+03	1.62062-04	5.44142-05	3.36972-09	7.15289-13	7.13491-03	1.14831+00
2.13555+03	1.54388-04	5.44573-05	3.37092-09	6.49183-13	7.13420-03	1.14831+00
2.21251+03	1.44317-04	1.63525-05	3.37172-09	1.70756-13	7.13170-03	1.17184+00
2.32989+03	1.33156-04	1.63710-05	3.37153-09	1.45240-13	7.12699-03	1.17179+00
2.44513+03	1.32961-04	1.63746-05	3.36830-09	1.44836-13	7.12204-03	1.17174+00
2.55906+03	1.42370-04	1.63639-05	3.36218-09	1.66136-13	7.11694-03	1.17167+00
2.67232+03	1.55447-04	1.63509-05	3.35553-09	1.97960-13	7.11170-03	1.17161+00
2.78539+03	1.73322-04	1.63385-05	3.34891-09	2.46358-13	7.10634-03	1.17154+00
2.89862+03	1.98534-04	1.63312-05	3.34318-09	3.23551-13	7.10087-03	1.17148+00
3.01233+03	2.30590-04	1.63300-05	3.33858-09	4.36686-13	7.09535-03	1.17141+00
3.12675+03	2.66986-04	1.63393-05	3.33597-09	5.85220-13	7.08981-03	1.17135+00
3.24208+03	3.00570-04	1.63549-05	3.33454-09	7.40565-13	7.08423-03	1.17129+00
3.35853+03	3.25956-04	1.63754-05	3.33398-09	8.70838-13	7.07857-03	1.17124+00
3.47625+03	3.43244-04	1.64041-05	3.33481-09	9.66703-13	7.07273-03	1.17118+00
3.59539+03	3.51574-04	1.64446-05	3.33770-09	1.01634-12	7.06664-03	1.17112+00
3.71605+03	3.49911-04	1.64950-05	3.34213-09	1.00990-12	7.06019-03	1.17107+00
3.83836+03	3.39709-04	1.65534-05	3.34769-09	9.55551-13	7.05327-03	1.17101+00
3.96243+03	3.24741-04	1.66158-05	3.35347-09	8.76659-13	7.04575-03	1.17095+00
4.08842+03	3.09061-04	1.66779-05	3.35865-09	7.97013-13	7.03758-03	1.17088+00
4.21650+03	2.94658-04	1.67380-05	3.36282-09	7.27005-13	7.02867-03	1.17080+00
4.34683+03	2.84585-04	1.67939-05	3.36553-09	6.80146-13	7.01899-03	1.17071+00
4.47961+03	2.81520-04	1.68411-05	3.36594-09	6.67359-13	7.00853-03	1.17060+00
4.61503+03	2.87137-04	1.68817-05	3.36446-09	6.96170-13	6.99728-03	1.17049+00
4.75331+03	3.01343-04	1.69119-05	3.36042-09	7.68526-13	6.98529-03	1.17036+00
4.89461+03	3.22543-04	1.69401-05	3.35541-09	8.82470-13	6.97259-03	1.17022+00
5.03905+03	3.51327-04	1.69674-05	3.34967-09	1.04944-12	6.95921-03	1.17008+00
5.18685+03	3.85618-04	1.69975-05	3.34393-09	1.26649-12	6.94521-03	1.16992+00
5.33801+03	4.20910-04	1.70331-05	3.33867-09	1.51142-12	6.93059-03	1.16977+00
5.49262+03	4.52939-04	1.70751-05	3.33404-09	1.75333-12	6.91532-03	1.16960+00
5.65075+03	4.77342-04	1.71270-05	3.33056-09	1.95206-12	6.89931-03	1.16944+00
5.81243+03	4.90637-04	1.71922-05	3.32871-09	2.06940-12	6.88240-03	1.16926+00
5.97764+03	4.91739-04	1.72757-05	3.32918-09	2.08874-12	6.86437-03	1.16908+00
6.14636+03	4.82783-04	1.73759-05	3.33142-09	2.02536-12	6.84495-03	1.16889+00
6.31857+03	4.66870-04	1.74934-05	3.33525-09	1.90727-12	6.82386-03	1.16869+00
6.49428+03	4.49671-04	1.76224-05	3.33930-09	1.78220-12	6.80082-03	1.16846+00
6.67355+03	4.38307-04	1.77557-05	3.34211-09	1.70566-12	6.77560-03	1.16821+00
6.85652+03	4.39154-04	1.78893-05	3.34279-09	1.72520-12	6.74804-03	1.16793+00
7.04337+03	4.55161-04	1.80190-05	3.34059-09	1.86774-12	6.71812-03	1.16762+00
7.23427+03	4.84785-04	1.81452-05	3.33554-09	2.13514-12	6.68581-03	1.16728+00
7.42939+03	5.23001-04	1.82726-05	3.32848-09	2.50279-12	6.65115-03	1.16691+00
7.62880+03	5.63362-04	1.84122-05	3.32116-09	2.92553-12	6.61405-03	1.16652+00
7.83251+03	6.00089-04	1.85705-05	3.31447-09	3.34624-12	6.57435-03	1.16610+00
8.04538+03	6.27737-04	1.87629-05	3.31036-09	3.69794-12	6.53174-03	1.16565+00
8.25213+03	6.42432-04	1.90005-05	3.31061-09	3.92106-12	6.48572-03	1.16517+00
8.46740+03	6.42525-04	1.92955-05	3.31558-09	3.98308-12	6.43553-03	1.16466+00

TABLE 10 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 2.30000+06 SHAKES

PAGE 2

RAD1US (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
8.68573+03	6.31581-04	1.96506-05	3.32451-09	3.91979-12	6.38008-03	1.16410+00
8.90675+03	6.17925-04	2.00589-05	3.33459-09	3.82996-12	6.31802-03	1.16347+00
9.13021+03	6.13186-04	2.05060-05	3.34166-09	3.85512-12	6.24784-03	1.16275+00
9.35599+03	6.29656-04	2.09897-05	3.34346-09	4.16320-12	6.16799-03	1.16191+00
9.58395+03	6.72288-04	2.15191-05	3.33937-09	4.87125-12	6.07704-03	1.16093+00
9.81379+03	7.33571-04	2.21206-05	3.33081-09	5.96431-12	5.97332-03	1.15980+00
1.00449+04	7.98456-04	2.28379-05	3.32192-09	7.29114-12	5.85628-03	1.15851+00
1.02762+04	8.51597-04	2.37336-05	3.31754-09	8.61167-12	5.72457-03	1.15705+00
1.05062+04	8.86585-04	2.48866-05	3.32105-09	9.78302-12	5.57489-03	1.15540+00
1.07331+04	9.11099-04	2.63763-05	3.33041-09	1.09492-11	5.40252-03	1.14610+00
1.09544+04	9.35068-04	2.83443-05	3.34378-09	1.23937-11	5.20331-03	1.148352+00
1.11677+04	9.69905-04	3.09069-05	3.35693-09	1.45449-11	4.96970-03	1.14040+00
1.13708+04	1.03056-03	3.42326-05	3.36490-09	1.82036-11	4.69972-03	1.17666+00
1.15614+04	1.11984-03	3.86113-05	3.36779-09	2.42602-11	4.39393-03	1.17226+00
1.17366+04	1.23720-03	4.49098-05	3.36716-09	3.44703-11	4.03267-03	1.16680+00
1.18899+04	1.39605-03	5.63948-05	3.35816-09	5.51960-11	3.53341-03	1.15874+00
1.20101+04	1.55471-03	8.41737-05	3.35755-09	1.01914-10	2.78100-03	1.14737+00
1.21034+04	1.63760-03	1.03833-04	3.34603-09	1.39241-10	2.42287-03	1.14171+00
1.21888+04	1.66310-03	1.14404-04	3.34440-09	1.58220-10	2.26875-03	1.17953+00
1.22722+04	1.67924-03	1.24786-04	3.35547-09	1.75942-10	2.14794-03	1.17597+00
1.23537+04	1.68599-03	1.37612-04	3.36985-09	1.95584-10	2.05315-03	1.17787+00
1.24330+04	1.68471-03	1.51394-04	3.39198-09	2.14847-10	1.96834-03	1.17360+00
1.25105+04	1.68161-03	1.65411-04	3.41278-09	2.33876-10	1.89252-03	1.16966+00
1.25866+04	1.68262-03	1.80357-04	3.43076-09	2.55316-10	1.82023-03	1.16579+00
1.26616+04	1.68932-03	1.96270-04	3.44245-09	2.80058-10	1.75031-03	1.16194+00
1.27358+04	1.70493-03	2.12353-04	3.44144-09	3.08649-10	1.68418-03	1.15819+00
1.28093+04	1.72658-03	2.30257-04	3.43301-09	3.43218-10	1.61660-03	1.15424+00
1.28822+04	1.74940-03	2.48332-04	3.41958-09	3.80020-10	1.55421-03	1.15050+00
1.29547+04	1.77462-03	2.68240-04	3.40882-09	4.22400-10	1.49333-03	1.14675+00
1.30269+04	1.79621-03	2.89334-04	3.40216-09	4.66764-10	1.43640-03	1.14318+00
1.30984+04	1.81213-03	3.14377-04	3.41302-C9	5.16185-10	1.37999-03	1.13957+00
1.31690+04	1.81302-03	3.43188-04	3.43620-09	5.64041-10	1.32084-03	1.15163+00
1.32382+04	1.80459-03	3.76672-04	3.47386-09	6.13324-10	1.25833-03	1.16066+00
1.33059+04	1.79959-03	4.15314-04	3.50689-09	6.72502-10	1.18920-03	1.17629+00
1.33718+04	1.80028-03	4.57792-04	3.52363-09	7.41058-10	1.11537-03	1.19056+00
1.34363+04	1.81227-03	5.02980-04	3.51725-09	8.25996-10	1.04015-03	1.18789+00
1.34995+04	1.83620-03	5.50043-04	3.50609-09	9.27329-10	9.73979-04	1.18745+00
1.35618+04	1.86485-03	5.99425-04	3.50619-09	1.04236-09	9.20519-04	1.16114+00
1.36233+04	1.88701-03	6.52313-04	3.52035-09	1.16140-09	8.76544-04	1.15747+00
1.36842+04	1.89617-03	7.07145-04	3.55303-09	1.27125-09	8.43284-04	1.13437+00
1.37449+C4	1.89123-03	7.62267-04	3.59188-09	1.36323-09	8.16715-04	1.13157+00
1.38055+04	1.88196-03	8.20615-04	3.64771-09	1.45322-09	7.93963-04	1.12902+00
1.38666+04	1.88475-03	8.69363-04	3.68525-09	1.54413-09	7.76150-04	1.12702+00
1.39292+04	1.90836-03	9.04682-04	3.69190-09	1.64748-09	7.62765-04	1.12113+00
1.39941+04	1.93917-03	9.33815-04	3.69244-09	1.75584-09	7.51843-04	1.11991+00
1.40613+04	1.95040-03	9.80416-04	3.70559-09	1.86478-09	7.36611-04	1.11819+00
1.41291+04	1.94771-03	1.05646-03	3.75319-09	2.00387-09	7.16503-04	1.11587+00
1.41966+04	1.94841-03	1.14427-03	3.83960-09	2.17201-09	6.98475-04	1.11378+00
1.42638+04	1.95837-03	1.23653-03	3.89824-09	2.37122-09	6.78446-04	1.12905+00
1.43311+04	1.97904-03	1.31805-03	3.89282-09	2.58124-09	6.55128-04	1.12265+00

TABLE 10 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 2.30000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.43986+04	1.99674-03	1.41971-03	3.95490-09	2.83019-09	6.34364-04	1.12070+00
1.44661+04	1.99974-03	1.52460-03	4.00855-09	3.04843-09	6.14143-04	1.11878+00
1.45333+04	2.00010-03	1.65835-03	4.11615-09	3.31704-09	5.92651-04	1.15866+00
1.45999+04	2.01415-03	1.79559-03	4.16745-09	3.64229-09	5.65441-04	1.15688+00
1.46665+04	2.03404-03	1.92168-03	4.19582-09	3.97535-09	5.41429-04	1.15525+00
1.47331+04	2.04841-03	2.07423-03	4.27482-09	4.35176-09	5.19551-04	1.15396+00
1.47990+04	2.05443-03	2.27642-03	4.40400-09	4.80403-09	4.95385-04	1.19730+00
1.48636+04	2.06331-03	2.49793-03	4.53476-09	5.31722-09	4.71949-04	1.19524+00
1.49275+04	2.08513-03	2.69975-03	4.61198-09	5.86919-09	4.50349-04	1.19328+00
1.49912+04	2.10855-03	2.90949-03	4.70427-09	6.46792-09	4.31610-04	1.19156+00
1.50545+04	2.11980-03	3.16104-03	4.86795-09	7.10216-09	4.16556-04	1.17910+00
1.51174+04	2.12890-03	3.42829-03	5.06438-09	7.76899-09	4.04084-04	1.17778+00
1.51802+04	2.15244-03	3.66851-03	5.19367-09	8.49855-09	3.91471-04	1.17636+00
1.52435+04	2.17871-03	3.90987-03	5.30001-09	9.27990-09	3.78822-04	1.17492+00
1.53069+04	2.19220-03	4.23485-03	5.55236-09	1.01758-08	3.69494-04	1.17407+00
1.53701+04	2.20388-03	4.58012-03	5.81707-09	1.11232-08	3.60735-04	1.17332+00
1.54336+04	2.22899-03	4.84126-03	5.96119-09	1.20272-08	3.52219-04	1.17246+00
1.54980+04	2.24954-03	5.18706-03	6.09917-09	1.31245-08	3.39267-04	1.19016+00
1.55618+04	2.25299-03	5.69793-03	6.41950-09	1.44612-08	3.27049-04	1.19037+00
1.56246+04	2.26546-03	6.21155-03	6.70716-09	1.59403-08	3.15167-04	1.19057+00
1.56873+04	2.29512-03	6.63218-03	6.84265-09	1.74686-08	3.02694-04	1.19041+00
1.57499+04	2.31490-03	7.23701-03	7.17944-09	1.93907-08	2.92320-04	1.19092+00
1.58112+04	2.32818-03	8.03029-03	7.71289-09	2.17642-08	2.84002-04	1.19202+00
1.58786+04	2.17182-03	7.00013-03	8.08514-09	1.66057-08	2.62245-04	1.18716+00
1.60365+04	1.24369-03	2.29751-03	4.51071-09	2.44387-09	9.68055-05	1.29700+00
1.63691+04	2.49107-04	1.36514-03	3.48622-10	7.92789-11	2.45386-05	1.37000+00
1.68110+04	8.40742-06	1.29468-03	1.06398-10	8.84283-14	2.35518-05	1.36991+00
1.72777+04	1.46471-07	1.29300-03	1.01843-10	2.68996-17	2.35401-05	1.36972+00
1.77577+04	2.28334-09	1.29299-03	1.01767-10	6.56341-21	2.35400-05	1.36972+00
1.82510+04	3.05161-11	1.29299-03	1.01766-10	1.20408-24	2.35400-05	1.36972+00

TABLE 11

J15 SERIES 7 PROBLEM 82
 T= 2.40000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.26397+02	6.43201-05	5.23226-05	3.16221-09	3.72008-13	7.02250-03	1.14642+00
1.59739+03	1.75505-04	5.34551-05	3.22385-09	8.24525-13	7.01483-03	1.14653+00
1.82501+03	2.09659-04	5.28581-05	3.18670-09	1.18142-12	7.01227-03	1.14638+00
1.96149+03	2.41009-04	5.25938-05	3.16999-09	1.52789-12	7.01075-03	1.14632+00
2.05128+03	2.41072-04	5.24096-05	3.15835-09	1.52332-12	7.00969-03	1.14627+00
2.11202+03	2.34804-04	5.23379-05	3.15357-09	1.44290-12	7.00893-03	1.14624+00
2.15613+03	2.31350-04	5.23423-05	3.15344-09	1.40079-12	7.00836-03	1.14624+00
2.23462+03	2.28594-04	5.17238-05	3.15505-09	4.10846-13	7.00640-03	1.17015+00
2.35412+03	2.25191-04	5.15774-05	3.16199-09	4.00020-13	7.00277-03	1.17013+00
2.47100+03	2.20140-04	5.15840-05	3.17196-09	3.83996-13	6.99996-03	1.17011+00
2.58600+03	2.15943-04	5.15917-05	3.18255-09	3.71128-13	6.99490-03	1.17009+00
2.69978+03	2.13400-04	5.15982-05	3.19140-09	3.63929-13	6.99059-03	1.17006+00
2.81290+03	2.08383-04	5.16039-05	3.19858-09	3.48342-13	6.98597-03	1.17003+00
2.92585+03	2.02897-04	5.16093-05	3.20424-09	3.31230-13	6.98100-03	1.17000+00
3.03901+03	2.00491-04	5.16137-05	3.20887-09	3.24334-13	6.97566-03	1.16995+00
3.15274+03	2.02685-04	5.16171-05	3.21083-09	3.32226-13	6.96993-03	1.16990+00
3.26739+03	2.11646-04	5.16190-05	3.20963-09	3.62947-13	6.96385-03	1.16983+00
3.38529+03	2.26025-04	5.16204-05	3.20653-09	4.14331-13	6.95744-03	1.16976+00
3.50067+03	2.44094-04	5.16205-05	3.20230-09	4.83602-13	6.95072-03	1.16969+00
3.61978+03	2.65422-04	5.16204-05	3.19677-09	5.71829-13	6.94371-03	1.16960+00
3.74080+03	2.87955-04	5.16205-05	3.19071-09	6.72776-13	6.93641-03	1.16952+00
3.86390+03	3.10711-04	5.16199-05	3.18433-09	7.83026-13	6.92882-03	1.16943+00
3.98925+03	3.33022-04	5.16198-05	3.17811-09	8.99201-13	6.92094-03	1.16934+00
4.11697+03	3.52616-04	5.16198-05	3.17180-09	1.00767-12	6.91276-03	1.16924+00
4.24717+03	3.70277-04	5.16210-05	3.16749-09	1.11194-12	6.90423-03	1.16914+00
4.37987+03	3.88591-04	5.16238-05	3.16573-09	1.22675-12	6.89534-03	1.16905+00
4.51510+03	4.03929-04	5.16280-05	3.16629-09	1.32846-12	6.88606-03	1.16896+00
4.65289+03	4.12477-04	5.16337-05	3.16902-09	1.38983-12	6.87630-03	1.16887+00
4.79326+03	4.14554-04	5.16405-05	3.17358-09	1.40967-12	6.86594-03	1.16877+00
4.93626+03	4.11218-04	5.16484-05	3.17902-09	1.39380-12	6.85485-03	1.16867+00
5.08197+03	4.04513-04	5.16568-05	3.18491-09	1.35567-12	6.84269-03	1.16856+00
5.23051+03	3.97381-04	5.16654-05	3.19023-09	1.31503-12	6.82995-03	1.16844+00
5.38201+03	3.93118-04	5.16738-05	3.19424-09	1.29336-12	6.81592-03	1.16831+00
5.53665+03	3.95170-04	5.16813-05	3.19581-09	1.31288-12	6.80073-03	1.16816+00
5.69466+03	4.05540-04	5.16806-05	3.19485-09	1.38856-12	6.78438-03	1.16799+00
5.85624+03	4.23689-04	5.16940-05	3.19167-09	1.52152-12	6.76688-03	1.16780+00
6.02159+03	4.48197-04	5.16936-05	3.18631-09	1.70842-12	6.74823-03	1.16760+00
6.19086+03	4.76888-04	5.17047-05	3.18018-09	1.94043-12	6.72845-03	1.16739+00
6.36415+03	5.07663-04	5.17110-05	3.17459-09	2.20696-12	6.70754-03	1.16716+00
6.54149+03	5.37413-04	5.17187-05	3.17045-09	2.48363-12	6.68547-03	1.16693+00
6.72282+03	5.61791-04	5.17282-05	3.16841-09	2.72023-12	6.66211-03	1.16668+00
6.90812+03	5.76729-04	5.17397-05	3.16835-09	2.89357-12	6.63727-03	1.16643+00
7.09728+03	5.78845-04	5.17537-05	3.17084-09	2.93812-12	6.61064-03	1.16616+00
7.29020+03	5.68935-04	5.17702-05	3.17544-09	2.86546-12	6.58176-03	1.16587+00
7.48678+03	5.51227-04	5.17891-05	3.18153-09	2.71904-12	6.55013-03	1.16556+00
7.68696+03	5.32671-04	5.18097-05	3.18747-09	2.56815-12	6.51522-03	1.16521+00
7.89078+03	5.22737-04	5.18312-05	3.19104-09	2.50197-12	6.47653-03	1.16481+00
8.09836+03	5.29124-04	5.18530-05	3.19120-09	2.59455-12	6.43372-03	1.16437+00
8.30985+03	5.54435-04	5.18748-05	3.18724-09	2.88439-12	6.38659-03	1.16387+00
8.52540+03	5.94792-04	5.18974-05	3.18017-09	3.36143-12	6.33499-03	1.16331+00

TABLE 11 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 2.40000+06 SHAKES

PAGE 2

RAD1US (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
8.74502+03	6.41213-04	1.92229-05	3.17189-09	3.95703-12	6.27871-03	1.16270+00
8.96850+03	6.82100-04	1.95152-05	3.16511-09	4.54284-12	6.21729-03	1.16203+00
9.19540+03	7.08050-04	1.98779-05	3.16258-09	4.98343-12	6.14984-03	1.16131+00
9.42506+03	7.16140-04	2.03319-05	3.16539-09	5.21367-12	6.07487-03	1.16052+00
9.65665+03	7.12524-04	2.08906-05	3.17252-09	5.30308-12	5.99027-03	1.15962+00
9.88937+03	7.08647-04	2.15548-05	3.18115-09	5.41220-12	5.89431-03	1.15860+00
1.01226+04	7.13468-04	2.23228-05	3.18795-09	5.68221-12	5.78537-03	1.15743+00
1.03555+04	7.35171-04	2.32111-05	3.19070-09	6.27560-12	5.66077-03	1.15606+00
1.05876+04	7.79804-04	2.42466-05	3.18782-09	7.38249-12	5.51758-03	1.15445+00
1.08175+04	8.43275-04	2.55350-05	3.18129-09	9.09485-12	5.35239-03	1.15111+00
1.10436+04	9.19017-04	2.71695-05	3.17286-09	1.14960-11	5.16272-03	1.15259+00
1.12637+04	9.99818-04	2.92877-05	3.16501-09	1.46621-11	4.94340-03	1.17961+00
1.14754+04	1.07495-03	3.20817-05	3.16308-09	1.85550-11	4.69516-03	1.17613+00
1.16759+04	1.14329-03	3.58290-05	3.16910-09	2.34363-11	4.41664-03	1.17212+00
1.18619+04	1.21155-03	4.11717-05	3.18289-09	3.02423-11	4.09271-03	1.16728+00
1.20282+04	1.30211-03	4.99702-05	3.20079-09	4.24391-11	3.67631-03	1.16072+00
1.21620+04	1.43153-03	7.26058-05	3.22092-09	7.45926-11	2.96468-03	1.18917+00
1.22632+04	1.52713-03	9.80859-05	3.22973-09	1.14398-10	2.45521-03	1.18094+00
1.23502+04	1.56332-03	1.10827-04	3.23597-09	1.35441-10	2.26516-03	1.17826+00
1.24341+04	1.59108-03	1.20881-04	3.23656-09	1.53018-10	2.14222-03	1.17612+00
1.25162+04	1.61671-03	1.32722-04	3.22692-09	1.73461-10	2.04290-03	1.17726+00
1.25966+04	1.64507-03	1.45023-04	3.21973-09	1.96253-10	1.95606-03	1.17285+00
1.26756+04	1.66934-03	1.57441-04	3.21380-09	2.19374-10	1.87876-03	1.16878+00
1.27539+04	1.68742-03	1.70423-04	3.20262-09	2.42639-10	1.80520-03	1.16480+00
1.28313+04	1.70262-03	1.84706-04	3.19850-09	2.67727-10	1.73510-03	1.16090+00
1.29079+04	1.71263-03	2.00535-04	3.21121-09	2.94096-10	1.67050-03	1.15722+00
1.29834+04	1.71534-03	2.18892-04	3.23031-09	3.22032-10	1.60534-03	1.15341+00
1.30576+04	1.71031-03	2.38774-04	3.26206-09	3.49226-10	1.54589-03	1.14987+00
1.31307+04	1.70668-03	2.60347-04	3.28933-09	3.79166-10	1.48741-03	1.14629+00
1.32029+04	1.71312-03	2.82474-04	3.30611-09	4.14508-10	1.43186-03	1.14281+00
1.32743+04	1.72803-03	3.06273-04	3.30811-09	4.57291-10	1.37520-03	1.13916+00
1.33451+04	1.74946-03	3.31878-04	3.29938-09	5.07903-10	1.31405-03	1.15057+00
1.34153+04	1.77249-03	3.59556-04	3.28228-09	5.64827-10	1.24846-03	1.15888+00
1.34846+04	1.79117-03	3.92938-04	3.27478-09	6.30346-10	1.17681-03	1.17412+00
1.35525+04	1.80462-03	4.32750-04	3.28415-09	7.04658-10	1.10260-03	1.18893+00
1.36186+04	1.80777-03	4.78491-04	3.30633-09	7.81859-10	1.03013-03	1.19068+00
1.36829+04	1.80411-03	5.29082-04	3.34256-09	8.61038-10	9.66917-04	1.18734+00
1.37456+04	1.79851-03	5.82261-04	3.38570-09	9.41703-10	9.16428-04	1.16154+00
1.38072+04	1.79500-03	6.35923-04	3.41555-09	1.02447-09	8.73216-04	1.15782+00
1.38683+04	1.80478-03	6.83508-04	3.41466-09	1.11320-09	8.39697-04	1.13466+00
1.39238+04	1.82916-03	7.28524-04	3.40467-09	1.21883-09	8.11810-04	1.13194+00
1.39919+04	1.85648-03	7.74841-04	3.40889-09	1.33532-09	7.87848-04	1.12948+00
1.40549+04	1.87200-03	8.20593-04	3.44389-09	1.43783-09	7.70507-04	1.12209+00
1.41190+04	1.87129-03	8.63081-04	3.49350-09	1.51114-09	7.58267-04	1.12071+00
1.41849+04	1.86632-03	9.02561-04	3.54625-09	1.57188-09	7.48462-04	1.11959+00
1.42523+04	1.86951-03	9.52624-04	3.58071-09	1.66476-09	7.33744-04	1.11792+00
1.43205+04	1.89169-03	1.02109-03	3.60611-09	1.82714-09	7.13394-04	1.11557+00
1.43890+04	1.91342-03	1.08837-03	3.61978-09	1.99237-09	6.94341-04	1.11334+00
1.44578+04	1.9144-03	1.17309-03	3.65954-09	2.15020-09	6.72719-04	1.12718+00
1.45263+04	1.91529-03	1.26934-03	3.72478-09	2.32820-09	6.51832-04	1.12534+00

TABLE 11 (Cont.)

J15 SERIES 7 PROBLEM 62
 T= 2.40000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SEC)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
1.45944+04	1.92166-03	1.37321-03	3.80666-09	2.53548-09	6.32064-04	1.11998+00
1.46626+04	1.93993-03	1.46454-03	3.82776-09	2.75596-09	6.11474-04	1.11792+00
1.47311+04	1.96189-03	1.57353-03	3.86483-09	3.02828-09	5.87461-04	1.15738+00
1.47994+04	1.96836-03	1.70713-03	3.92632-09	3.30708-09	5.61093-04	1.15569+00
1.48670+04	1.97022-03	1.85357-03	4.02133-09	3.59757-09	5.38490-04	1.15440+00
1.49342+04	1.97760-03	2.00766-03	4.11276-09	3.92590-09	5.16889-04	1.19909+00
1.50010+04	1.99509-03	2.16697-03	4.14565-09	4.31284-09	4.90507-04	1.19679+00
1.50674+04	2.01321-03	2.35018-03	4.20951-09	4.76270-09	4.66294-04	1.19464+00
1.51331+04	2.02130-03	2.56379-03	4.33089-09	5.23737-09	4.45806-04	1.19280+00
1.51980+04	2.02754-03	2.79727-03	4.48626-09	5.74974-09	4.28555-04	1.18014+00
1.52625+04	2.04744-03	3.00538-03	4.58027-09	6.29960-09	4.12820-04	1.17827+00
1.53273+04	2.07379-03	3.20363-03	4.66665-09	6.88896-09	3.99222-04	1.17667+00
1.53925+04	2.08672-03	3.45136-03	4.82560-09	7.51427-09	3.87271-04	1.17538+00
1.54572+04	2.09468-03	3.76024-03	5.05741-09	8.24942-09	3.76262-04	1.17430+00
1.55219+04	2.11658-03	4.00579-03	5.19313-09	8.97328-09	3.65896-04	1.17318+00
1.55875+04	2.14563-03	4.24558-03	5.31073-09	9.77314-09	3.55994-04	1.17211+00
1.56536+04	2.16047-03	4.56792-03	5.55884-09	1.06607-08	3.48638-04	1.17153+00
1.57190+04	2.17005-03	5.02523-03	5.86846-09	1.18323-08	3.37064-04	1.18941+00
1.57837+04	2.19476-03	5.39477-03	6.00705-09	1.29940-08	3.23426-04	1.18907+00
1.58488+04	2.21677-03	5.77684-03	6.14248-09	1.41940-08	3.10611-04	1.18883+00
1.59134+04	2.22088-03	6.35262-03	6.49541-09	1.56665-08	3.00131-04	1.18937+00
1.59769+04	2.23268-03	6.92688-03	6.80938-09	1.72654-08	2.89811-04	1.18985+00
1.60404+04	2.26389-03	7.38046-03	6.96563-09	1.89143-08	2.79348-04	1.18995+00
1.61038+04	2.27565-03	8.04601-03	7.31372-09	2.08336-08	2.69993-04	1.19064+00
1.61925+04	1.83842-03	4.75191-03	7.34101-09	8.47154-09	2.10970-04	1.24485+00
1.64187+04	7.83094-04	1.70141-03	1.95196-09	8.53296-10	4.20657-05	1.36952+00
1.66143+04	8.11865-05	1.31254-03	1.55838-10	8.27365-12	2.37078-05	1.36994+00
1.72777+04	1.84351-06	1.29334-03	1.02763-10	4.24888-15	2.35424-05	1.36972+00
1.77577+04	3.17510-08	1.29299-03	1.01782-10	1.26412-18	2.35400-05	1.36972+00
1.82510+04	4.91282-10	1.29299-03	1.01766-10	3.06752-22	2.35400-05	1.36972+00
1.87580+04	4.22563-12	1.29299-03	1.01766-10	2.30876-26	2.35400-05	1.36972+00

TABLE 12

J15	SERIES	7 PROBLEM 82				PAGE 1
T= 2.50000+06	SHAKES					
RAD1US (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.32490+02	8.39077-05	5.10578-05	3.00831-09	3.59472-13	6.90480-03	1.14463+00
1.61416+03	1.14934-04	5.07132-05	2.99654-09	4.05864-13	6.89597-03	1.14445+00
1.84655+03	7.42713-05	5.15350-05	3.02750-09	1.45987-13	6.89251-03	1.14456+00
1.98272+03	1.02987-04	5.19846-05	3.05189-09	2.82759-13	6.89027-03	1.14461+00
2.07148+03	1.33274-04	5.21397-05	3.05979-09	4.68007-13	6.88876-03	1.14462+00
2.13226+03	1.57911-04	5.21329-05	3.05868-09	6.53059-13	6.88771-03	1.14461+00
2.17503+03	1.76496-04	5.20981-05	3.05614-09	8.13007-13	6.88702-03	1.14459+00
2.25266+03	2.05161-04	1.56577-05	3.05334-09	3.32953-13	6.88455-03	1.16872+00
2.37115+03	2.43927-04	1.56579-05	3.05023-09	4.68314-13	6.88037-03	1.16867+00
2.48768+03	2.76602-04	1.56442-05	3.04466-09	6.00181-13	6.87625-03	1.16862+00
2.60303+03	3.01700-04	1.56272-05	3.03851-09	7.12043-13	6.87215-03	1.16856+00
2.71777+03	3.20253-04	1.56108-05	3.03243-09	8.01073-13	6.86801-03	1.16851+00
2.83236+03	3.35062-04	1.55977-05	3.02690-09	8.75883-13	6.86378-03	1.16845+00
2.94716+03	3.44284-04	1.55888-05	3.02206-09	9.23941-13	6.85944-03	1.16840+00
3.06246+03	3.46047-04	1.55859-05	3.01819-09	9.33205-13	6.85493-03	1.16834+00
3.17850+03	3.42138-04	1.55920-05	3.01578-09	9.12656-13	6.85019-03	1.16829+00
3.29549+03	3.32400-04	1.56048-05	3.01440-09	8.62444-13	6.84517-03	1.16824+00
3.41361+03	3.17096-04	1.56250-05	3.01409-09	7.86116-13	6.83980-03	1.16818+00
3.53303+03	3.00471-04	1.56598-05	3.01611-09	7.07416-13	6.83402-03	1.16813+00
3.65382+03	2.88139-04	1.57098-05	3.02053-09	6.52286-13	6.82779-03	1.16807+00
3.77610+03	2.83001-04	1.57715-05	3.02673-09	6.31575-13	6.82113-03	1.16802+00
3.89998+03	2.82019-04	1.58388-05	3.03357-09	6.29869-13	6.81403-03	1.16796+00
4.02562+03	2.83702-04	1.59019-05	3.03925-09	6.39975-13	6.80645-03	1.16790+00
4.15323+03	2.89298-04	1.59592-05	3.04346-09	6.67955-13	6.79836-03	1.16782+00
4.28302+03	2.99770-04	1.60092-05	3.04595-09	7.19664-13	6.78975-03	1.16774+00
4.41521+03	3.15277-04	1.60495-05	3.04628-09	7.98285-13	6.78063-03	1.16765+00
4.55002+03	3.34697-04	1.60795-05	3.04437-09	9.01525-13	6.77100-03	1.16755+00
4.68763+03	3.57341-04	1.61050-05	3.04125-09	1.02942-12	6.76084-03	1.16744+00
4.82824+03	3.81368-04	1.61256-05	3.03687-09	1.17382-12	6.75018-03	1.16732+00
4.97197+03	4.05821-04	1.61460-05	3.03203-09	1.33082-12	6.73900-03	1.16719+00
5.11895+03	4.28797-04	1.61708-05	3.02754-09	1.48752-12	6.72727-03	1.16706+00
5.26926+03	4.46178-04	1.61994-05	3.02327-09	1.61284-12	6.71495-03	1.16692+00
5.42298+03	4.58235-04	1.62361-05	3.01987-09	1.70484-12	6.70194-03	1.16678+00
5.58013+03	4.67281-04	1.62899-05	3.01883-09	1.77858-12	6.68816-03	1.16664+00
5.74067+03	4.72948-04	1.63631-05	3.02047-09	1.83007-12	6.67352-03	1.16649+00
5.90454+03	4.74007-04	1.64548-05	3.02446-09	1.84855-12	6.65788-03	1.16634+00
6.07172+03	4.69722-04	1.65640-05	3.03046-09	1.82743-12	6.64106-03	1.16618+00
6.24220+03	4.61757-04	1.66865-05	3.03755-09	1.77911-12	6.62284-03	1.16601+00
6.41603+03	4.54157-04	1.68161-05	3.04440-09	1.73432-12	6.60300-03	1.16592+00
6.59334+03	4.50629-04	1.69461-05	3.04974-09	1.72059-12	6.58136-03	1.16581+00
6.77431+03	4.55754-04	1.70705-05	3.05242-09	1.77312-12	6.55776-03	1.16537+00
6.95918+03	4.72194-04	1.71857-05	3.05178-09	1.91696-12	6.53217-03	1.16510+00
7.14817+03	4.98249-04	1.72934-05	3.04814-09	2.14853-12	6.50455-03	1.16481+00
7.34150+03	5.30947-04	1.73982-05	3.04220-09	2.45503-12	6.47490-03	1.16448+00
7.53926+03	5.66315-04	1.75120-05	3.03591-09	2.81091-12	6.44318-03	1.16414+00
7.74142+03	5.99070-04	1.76483-05	3.03130-09	3.16884-12	6.40926-03	1.16377+00
7.94781+03	6.23295-04	1.78172-05	3.02968-09	3.46172-12	6.37289-03	1.16338+00
8.15817+03	6.33917-04	1.80259-05	3.03160-09	3.62187-12	6.33358-03	1.16297+00
8.37221+03	6.31151-04	1.82755-05	3.03643-09	3.64020-12	6.29059-03	1.16253+00
8.58967+03	6.21081-04	1.85633-05	3.04274-09	3.58065-12	6.24304-03	1.16204+00

TABLE 12 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 2.50000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SW)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA Z
8.81040+03	6.12210-04	1.88810-05	3.04816-09	3.53839-12	6.18998-03	1.16149+00
9.03432+03	6.12588-04	1.92258-05	3.05088-09	3.60711-12	6.15045-03	1.16086+00
9.26135+03	6.27161-04	1.95948-05	3.05021-09	3.85485-12	6.06345-03	1.16014+00
9.49139+03	6.57661-04	2.00023-05	3.04601-09	4.32940-12	5.98790-03	1.15932+00
9.72420+03	7.01743-04	2.04576-05	3.03888-09	5.04337-12	5.90330-03	1.15838+00
9.95940+03	7.51578-04	2.09827-05	3.03081-09	5.93282-12	5.80927-03	1.15733+00
1.01963+04	7.98238-04	2.16113-05	3.02410-09	6.89024-12	5.70452-03	1.15616+00
1.04340+04	8.34177-04	2.23031-05	3.02065-09	7.70995-12	5.58733-03	1.15484+00
1.06712+04	8.54475-04	2.33601-05	3.02340-09	8.52835-12	5.45518-03	1.15336+00
1.09059+04	8.62680-04	2.46444-05	3.03227-09	9.17044-12	5.30433-03	1.14841+00
1.11362+04	8.70510-04	2.62661-05	3.04372-09	9.95248-12	5.13115-03	1.14817+00
1.13602+04	8.92785-04	2.83171-05	3.05359-09	1.12892-11	4.92970-03	1.17916+00
1.15761+04	9.42846-04	3.08717-05	3.05754-09	1.37390-11	4.70007-03	1.17595+00
1.17820+04	1.02342-03	3.41108-05	3.05515-09	1.79014-11	4.44085-03	1.17220+00
1.19757+04	1.12937-03	3.84822-05	3.04900-09	2.46080-11	4.14253-03	1.16770+00
1.21531+04	1.25751-03	4.51859-05	3.04200-09	3.58358-11	3.77475-03	1.16190+00
1.23027+04	1.42295-03	6.12362-05	3.03866-09	6.22779-11	3.16607-03	1.19104+00
1.24165+04	1.55512-03	8.90441-05	3.03596-09	1.07731-10	2.50843-03	1.17966+00
1.25085+04	1.60191-03	1.04234-04	3.03547-09	1.33745-10	2.25784-03	1.17584+00
1.25952+04	1.61240-03	1.14526-04	3.03856-09	1.48873-10	2.13040-03	1.17631+00
1.26794+04	1.60822-03	1.26590-04	3.04930-09	1.63704-10	2.03047-03	1.17163+00
1.27612+04	1.60335-03	1.39356-04	3.06837-09	1.79122-10	1.94488-03	1.17216+00
1.28415+04	1.59612-03	1.52215-04	3.08517-09	1.93896-10	1.86965-03	1.16820+00
1.29197+04	1.59592-03	1.66066-04	3.10417-09	2.11484-10	1.79844-03	1.16436+00
1.29971+04	1.61062-03	1.80510-04	3.11154-09	2.34136-10	1.72942-03	1.16052+00
1.30737+04	1.62994-03	1.95271-04	3.10993-09	2.59400-10	1.66407-03	1.15678+00
1.31496+04	1.65572-03	2.11770-04	3.10473-09	2.90300-10	1.59786-03	1.15288+00
1.32249+04	1.68185-03	2.28697-04	3.09749-09	3.23462-10	1.53662-03	1.14918+00
1.32997+04	1.70172-03	2.46655-04	3.08348-09	3.57149-10	1.47656-03	1.14544+00
1.33741+04	1.71447-03	2.66391-04	3.08279-09	3.91520-10	1.42075-03	1.14191+00
1.34479+04	1.72300-03	2.89674-04	3.09541-09	4.29983-10	1.36503-03	1.15231+00
1.35205+04	1.72555-03	3.16771-04	3.11864-09	4.71595-10	1.30486-03	1.14912+00
1.35917+04	1.72226-03	3.47909-04	3.15285-09	5.15979-10	1.24147-03	1.15762+00
1.36611+04	1.71949-03	3.84267-04	3.18458-09	5.60071-10	1.17153-03	1.17324+00
1.37287+04	1.72246-03	4.24777-04	3.20715-09	6.30131-10	1.09788-03	1.16858+00
1.37946+04	1.73536-03	4.67509-04	3.21148-09	7.03961-10	1.02514-03	1.19059+00
1.38592+04	1.75472-03	5.09925-04	3.19444-09	7.85072-10	9.60020-04	1.18723+00
1.39232+04	1.77478-03	5.53490-04	3.18441-09	8.71731-10	9.08914-04	1.16224+00
1.39865+04	1.78770-03	6.01460-04	3.19470-09	9.61096-10	8.65413-04	1.15860+00
1.40493+04	1.79042-03	6.50491-04	3.22086-09	1.04260-09	8.34305-04	1.13508+00
1.41117+04	1.78785-03	7.04419-04	3.27219-09	1.12580-09	8.08165-04	1.13222+00
1.41741+04	1.78597-03	7.55529-04	3.30996-09	1.20496-09	7.85250-04	1.12970+00
1.42372+04	1.78854-03	7.97099-04	3.32930-09	1.27491-09	7.67730-04	1.12185+00
1.43020+04	1.80224-03	8.28983-04	3.33210-09	1.34634-09	7.54316-04	1.12036+00
1.43692+04	1.82573-03	8.59592-04	3.34710-09	1.43270-09	7.43545-04	1.11914+00
1.44382+04	1.84049-03	9.07798-04	3.38188-09	1.53754-09	7.29024-04	1.11747+00
1.45075+04	1.84070-03	9.82954-04	3.44872-09	1.66522-09	7.09946-04	1.11524+00
1.45768+04	1.83980-03	1.05424-03	3.48614-09	1.78424-09	6.91395-04	1.11306+00
1.46460+04	1.84998-03	1.13803-03	3.52904-09	1.94746-09	6.69414-04	1.12613+00
1.47151+04	1.87310-03	1.22260-03	3.56313-09	2.14523-09	6.48060-04	1.12405+00

TABLE 12 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 2.50000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.47847+04	1.88757-03	1.29679-03	3.56472-09	2.31018-09	6.28130-04	1.11877+00
1.48546+04	1.89047-03	1.40221-03	3.64143-09	2.50566-09	6.08607-04	1.11699+00
1.49240+04	1.89354-03	1.52205-03	3.71403-09	2.72867-09	5.84205-04	1.15657+00
1.49928+04	1.90397-03	1.65319-03	3.78063-09	2.99656-09	5.58292-04	1.15494+00
1.50613+04	1.92525-03	1.77320-03	3.81655-09	3.28638-09	5.34780-04	1.15337+00
1.51301+04	1.93985-03	1.90421-03	3.85188-09	3.58280-09	5.11166-04	1.19852+00
1.51982+04	1.94312-03	2.08318-03	3.95078-09	3.93276-09	4.86688-04	1.19640+00
1.52653+04	1.94542-03	2.28054-03	4.05875-09	4.31555-09	4.63570-04	1.19436+00
1.53316+04	1.95887-03	2.46422-03	4.12725-09	4.72801-09	4.42264-04	1.19242+00
1.53981+04	1.98093-03	2.63264-03	4.16958-09	5.16548-09	4.23879-04	1.17914+00
1.54648+04	1.99358-03	2.84316-03	4.28448-09	5.64988-09	4.08792-04	1.17738+00
1.55310+04	1.99750-03	3.08167-03	4.45377-09	6.14796-09	3.96483-04	1.17605+00
1.55971+04	2.01371-03	3.31303-03	4.59354-09	6.71755-09	3.84396-04	1.17472+00
1.56637+04	2.04152-03	3.51739-03	4.66749-09	7.33021-09	3.71832-04	1.17324+00
1.57310+04	2.05965-03	3.76384-03	4.81888-09	7.98340-09	3.61927-04	1.17220+00
1.57982+04	2.06611-03	4.08286-03	5.06793-09	8.71448-09	3.53591-04	1.17150+00
1.58654+04	2.08508-03	4.35741-03	5.25190-09	9.47267-09	3.45660-04	1.17077+00
1.59332+04	2.11750-03	4.66041-03	5.35487-09	1.04487-08	3.31855-04	1.16766+00
1.60006+04	2.13461-03	5.09095-03	5.59971-09	1.15986-08	3.19675-04	1.16770+00
1.60667+04	2.14128-03	5.62287-03	5.94512-09	1.28907-08	3.08918-04	1.16818+00
1.61321+04	2.16272-03	6.03809-03	6.10876-09	1.41219-08	2.97068-04	1.16815+00
1.61979+04	2.18735-03	6.44332-03	6.24034-09	1.54143-08	2.85731-04	1.16810+00
1.62634+04	2.19320-03	7.05961-03	6.60282-09	1.69788-08	2.76973-04	1.16886+00
1.63279+04	2.20526-03	7.72173-03	6.95885-09	1.87768-08	2.67759-04	1.16963+00
1.63950+04	2.15102-03	7.53127-03	7.16967-09	1.74408-08	2.54138-04	1.24834+00
1.65288+04	1.40216-03	2.84011-03	5.34677-09	3.44922-09	1.29390-04	1.29728+00
1.66350+04	3.78509-04	1.42637-03	5.68280-10	1.86232-10	2.61614-05	1.37003+00
1.72785+04	1.79412-05	1.29690-03	1.11533-10	4.02020-13	2.35693-05	1.36991+00
1.77577+04	3.43807-07	1.29305-03	1.01943-10	1.47781-16	2.35404-05	1.36972+00
1.82510+04	5.87826-09	1.29299-03	1.01769-10	4.33591-20	2.35400-05	1.36972+00
1.87580+04	8.80871-11	1.29299-03	1.01766-10	1.00328-23	2.35400-05	1.36972+00

TABLE 13

J15 SERIES 7 PROBLEM 82
T= 2.60000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.37055+02	6.14328-06	5.00847-05	2.87679-09	1.89019-15	6.79155-03	1.14292+00
1.62326+03	1.05199-04	5.02491-05	2.87913-09	4.94946-13	6.78103-03	1.14281+00
1.85730+03	2.02696-04	4.99394-05	2.86026-09	1.02642-12	6.77884-03	1.14272+00
1.99666+03	2.07042-04	4.98191-05	2.85254-09	1.06778-12	6.77739-03	1.14268+00
2.08793+03	2.05022-04	4.98764-05	2.85509-09	1.04833-12	6.77637-03	1.14267+00
2.15035+03	1.98580-04	4.99570-05	2.85913-09	9.85544-13	6.77561-03	1.14268+00
2.19414+03	1.89940-04	5.00262-05	2.86284-09	9.02797-13	6.77508-03	1.14269+00
2.27334+03	1.69552-04	1.50567-05	2.86661-09	2.18451-13	6.77313-03	1.16717+00
2.39401+03	1.38017-04	1.50863-05	2.86950-09	1.45413-13	6.76939-03	1.16713+00
2.51230+03	1.11908-04	1.51216-05	2.87184-09	9.55981-14	6.76530-03	1.16710+00
2.62897+03	9.43750-05	1.51612-05	2.87479-09	6.78428-14	6.76089-03	1.16706+00
2.74463+03	8.74422-05	1.52013-05	2.87794-09	5.81166-14	6.75619-03	1.16702+00
2.85977+03	9.41088-05	1.52459-05	2.88235-09	6.78912-14	6.75124-03	1.16698+00
2.97480+03	1.15259-04	1.52898-05	2.88647-09	1.03081-13	6.74610-03	1.16694+00
3.09008+03	1.47716-04	1.53308-05	2.88997-09	1.69842-13	6.74084-03	1.16689+00
3.20594+03	1.84903-04	1.53645-05	2.89209-09	2.65372-13	6.73550-03	1.16684+00
3.32270+03	2.22856-04	1.53917-05	2.89298-09	3.85026-13	6.73006-03	1.16679+00
3.44064+03	2.60442-04	1.54110-05	2.89240-09	5.25291-13	6.72451-03	1.16673+00
3.56001+03	2.95990-04	1.54284-05	2.89138-09	6.78095-13	6.71885-03	1.16667+00
3.68101+03	3.27936-04	1.54429-05	2.88972-09	8.32083-13	6.71303-03	1.16661+00
3.80386+03	3.54173-04	1.54533-05	2.88721-09	9.70216-13	6.70703-03	1.16654+00
3.92871+03	3.73911-04	1.54651-05	2.88478-09	1.08162-12	6.70079-03	1.16647+00
4.05573+03	3.87312-04	1.54795-05	2.88258-09	1.16124-12	6.69425-03	1.16640+00
4.18502+03	3.94369-04	1.55000-05	2.88119-09	1.20537-12	6.68736-03	1.16632+00
4.31670+03	3.94983-04	1.55253-05	2.88031-09	1.21108-12	6.68004-03	1.16624+00
4.45085+03	3.90064-04	1.55600-05	2.88072-09	1.18383-12	6.67223-03	1.16616+00
4.58075+03	3.78729-04	1.56030-05	2.88211-09	1.11949-12	6.66384-03	1.16608+00
4.72685+03	3.61203-04	1.56526-05	2.88413-09	1.02181-12	6.65476-03	1.16599+00
4.86885+03	3.43733-04	1.57140-05	2.88758-09	9.28795-13	6.64488-03	1.16590+00
5.01356+03	3.32029-04	1.57919-05	2.89322-09	8.70598-13	6.63417-03	1.16580+00
5.16103+03	3.27023-04	1.58770-05	2.89939-09	8.48982-13	6.62259-03	1.16569+00
5.31135+03	3.29030-04	1.59622-05	2.90484-09	8.64114-13	6.61010-03	1.16558+00
5.46471+03	3.38304-04	1.60423-05	2.90867-09	9.18328-13	6.59669-03	1.16545+00
5.62130+03	3.54526-04	1.61134-05	2.91017-09	1.01345-12	6.58233-03	1.16530+00
5.78134+03	3.77950-04	1.61759-05	2.90944-09	1.15678-12	6.56702-03	1.16514+00
5.94506+03	4.05760-04	1.62288-05	2.90634-09	1.35763-12	6.55076-03	1.16496+00
6.11264+03	4.35905-04	1.62799-05	2.90216-09	1.54872-12	6.53355-03	1.16477+00
6.28419+03	4.66155-04	1.63351-05	2.89788-09	1.77653-12	6.51535-03	1.16457+00
6.45981+03	4.91075-04	1.63953-05	2.89359-09	1.97779-12	6.49610-03	1.16436+00
6.63951+03	5.07383-04	1.64690-05	2.89056-09	2.12016-12	6.47565-03	1.16414+00
6.82325+03	5.15926-04	1.65649-05	2.89002-09	2.20468-12	6.45377-03	1.16391+00
7.01091+03	5.18221-04	1.66883-05	2.89257-09	2.24085-12	6.43023-03	1.16367+00
7.20234+03	5.15681-04	1.68378-05	2.89768-09	2.23886-12	6.40473-03	1.16341+00
7.39745+03	5.12055-04	1.70077-05	2.90404-09	2.22973-12	6.37691-03	1.16313+00
7.59623+03	5.11981-04	1.71891-05	2.90989-09	2.25287-12	6.34645-03	1.16283+00
7.79878+03	5.19160-04	1.73744-05	2.91367-09	2.34173-12	6.31302-03	1.16248+00
8.00525+03	5.36178-04	1.75607-05	2.91469-09	2.52533-12	6.27634-03	1.16210+00
8.21579+03	5.62742-04	1.77406-05	2.91280-09	2.81239-12	6.23619-03	1.16167+00
8.43054+03	5.96407-04	1.79417-05	2.90830-09	3.19396-12	6.19228-03	1.16119+00
8.64954+03	6.34281-04	1.81487-05	2.90219-09	3.65420-12	6.14433-03	1.16066+00

TABLE 13 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 2.60000+06 SHAKES

PAGE 1

RAD1US (CM)	VEL (CM/SH)	RHO(GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
8.87272+03	6.72367-04	1.83863-05	2.89651-09	4.15916-12	6.09197-03	1.16008+00
9.09975+03	7.04866-04	1.86726-05	2.89326-09	4.64044-12	6.03468-03	1.15945+00
9.33019+03	7.26195-04	1.90213-05	2.89324-09	5.01604-12	5.97157-03	1.15877+00
9.56344+03	7.33212-04	1.94432-05	2.89693-09	5.22634-12	5.90208-03	1.15802+00
9.79886+03	7.27084-04	1.99502-05	2.90410-09	5.27369-12	5.82488-03	1.15719+00
1.00358+04	7.16597-04	2.05447-05	2.91249-09	5.27519-12	5.73812-03	1.15626+00
1.02737+04	7.14868-04	2.12220-05	2.91853-09	5.42272-12	5.63970-03	1.15518+00
1.05120+04	7.31497-04	2.19943-05	2.92047-09	5.88650-12	5.52746-03	1.15392+00
1.07501+04	7.69925-04	2.28960-05	2.91728-09	6.79323-12	5.39893-03	1.15150+00
1.09870+04	8.25479-04	2.39858-05	2.90983-09	8.18351-12	5.25332-03	1.15171+00
1.12213+04	8.89504-04	2.53325-05	2.90169-09	1.00357-11	5.08744-03	1.15094+00
1.14511+04	9.55226-04	2.70567-05	2.89534-09	1.23584-11	4.89724-03	1.17832+00
1.16742+04	1.01807-03	2.92517-05	2.89925-09	1.51726-11	4.68476-03	1.17533+00
1.18885+04	1.07694-03	3.20999-05	2.89475-09	1.86276-11	4.44761-03	1.17189+00
1.20912+04	1.13233-03	3.59554-05	2.90335-09	2.30636-11	4.17827-03	1.16787+00
1.22783+04	1.19388-03	4.16734-05	2.91852-09	2.97247-11	3.85349-03	1.16284+00
1.24414+04	1.30476-03	5.30584-05	2.93367-09	4.53174-11	3.36587-03	1.19376+00
1.25671+04	1.43028-03	8.10071-05	2.94714-09	8.29564-11	2.61371-03	1.18043+00
1.26633+04	1.49955-03	1.00297-04	2.95167-09	1.12787-10	2.27267-03	1.17507+00
1.27508+04	1.53414-03	1.11278-04	2.94571-09	1.30963-10	2.12683-03	1.17651+00
1.28355+04	1.56004-03	1.22702-04	2.94037-09	1.49318-10	2.02369-03	1.17174+00
1.29181+04	1.58507-03	1.34322-04	2.93562-09	1.66875-10	1.93474-03	1.17154+00
1.29995+04	1.60765-03	1.45616-04	2.92378-09	1.88181-10	1.85752-03	1.16744+00
1.30798+04	1.62498-03	1.57976-04	2.92199-09	2.08579-10	1.78555-03	1.16351+00
1.31593+04	1.63468-03	1.71213-04	2.91917-09	2.28756-10	1.71665-03	1.15963+00
1.32380+04	1.63604-03	1.85679-04	2.92661-09	2.48497-10	1.65247-03	1.15594+00
1.33155+04	1.63359-03	2.02477-04	2.94205-09	2.70166-10	1.58833-03	1.15216+00
1.33920+04	1.62785-03	2.20050-04	2.95766-09	2.91557-10	1.52880-03	1.14856+00
1.34674+04	1.62363-03	2.40111-04	2.98618-09	3.16489-10	1.47147-03	1.14503+00
1.35418+04	1.62646-03	2.60507-04	3.00170-09	3.44570-10	1.41660-03	1.14157+00
1.36154+04	1.63910-03	2.83236-04	3.01163-09	3.80488-10	1.36015-03	1.15161+00
1.36881+04	1.66170-03	3.07755-04	3.01164-09	4.24925-10	1.29904-03	1.14823+00
1.37601+04	1.68527-03	3.33762-04	2.99740-09	4.73980-10	1.23287-03	1.15607+00
1.38311+04	1.70217-03	3.64895-04	2.98762-09	5.28629-10	1.16024-03	1.17126+00
1.39006+04	1.71116-03	4.02081-04	2.99479-09	5.88659-10	1.08580-03	1.16861+00
1.39683+04	1.71323-03	4.44987-04	3.02009-09	6.53055-10	1.01536-03	1.19041+00
1.40340+04	1.71125-03	4.91780-04	3.05585-09	7.20062-10	9.53730-04	1.18713+00
1.40983+04	1.70978-03	5.40304-04	3.09273-09	7.89753-10	9.05437-04	1.16258+00
1.41614+04	1.71584-03	5.89257-04	3.11882-09	8.67422-10	8.62859-04	1.15891+00
1.42241+04	1.72575-03	6.34016-04	3.12488-09	9.44122-10	8.31485-04	1.13531+00
1.42871+04	1.73945-03	6.77585-04	3.12532-09	1.02510-09	8.03852-04	1.13256+00
1.43506+04	1.75427-03	7.19781-04	3.12634-09	1.10756-09	7.80042-04	1.13011+00
1.44152+04	1.76207-03	7.59835-04	3.14798-09	1.17961-09	7.63181-04	1.12143+00
1.44811+04	1.76313-03	8.00217-04	3.19721-09	1.24379-09	7.51064-04	1.12005+00
1.45486+04	1.76263-03	8.38145-04	3.24798-09	1.30200-09	7.41083-04	1.11890+00
1.46178+04	1.76689-03	8.79905-04	3.25854-09	1.37350-09	7.25944-04	1.11718+00
1.46881+04	1.78057-03	9.41379-04	3.27805-09	1.49233-09	7.05988-04	1.11487+00
1.47588+04	1.80354-03	1.00528-03	3.29367-09	1.63505-09	6.86491-04	1.12668+00
1.48296+04	1.81900-03	1.08575-03	3.33677-09	1.79624-09	6.64670-04	1.12455+00
1.48999+04	1.81626-03	1.17562-03	3.40133-09	1.93908-09	6.44474-04	1.12274+00

TABLE 13 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 2.60000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.49702+04	1.81931-03	1.26016-03	3.44624-09	2.08555-09	6.25553-04	1.12100+00
1.50405+04	1.83586-03	1.35719-03	3.50689-09	2.28717-09	6.06408-04	1.11629+00
1.51109+04	1.85393-03	1.45305-03	3.51419-09	2.49718-09	5.79807-04	1.15547+00
1.51814+04	1.86729-03	1.56895-03	3.55502-09	2.73530-09	5.53954-04	1.15373+00
1.52515+04	1.86967-03	1.70091-03	3.63407-09	2.97291-09	5.31494-04	1.15240+00
1.53208+04	1.87395-03	1.85408-03	3.72660-09	3.25550-09	5.08308-04	1.19824+00
1.53894+04	1.88895-03	2.01157-03	3.78523-09	3.58887-09	4.83268-04	1.19605+00
1.54577+04	1.90808-03	2.16489-03	3.80916-09	3.94103-09	4.58799-04	1.19386+00
1.55258+04	1.91836-03	2.34519-03	3.88671-09	4.31525-09	4.38102-04	1.19197+00
1.55933+04	1.91806-03	2.55064-03	4.01454-09	4.69186-09	4.21634-04	1.17864+00
1.56603+04	1.92553-03	2.75064-03	4.11766-09	5.09934-09	4.06438-04	1.17685+00
1.57279+04	1.94843-03	2.91827-03	4.17084-09	5.53974-09	3.92648-04	1.17517+00
1.57962+04	1.96758-03	3.10842-03	4.25461-09	6.01694-09	3.80108-04	1.17370+00
1.58647+04	1.97324-03	3.36959-03	4.43365-09	6.56007-09	3.69168-04	1.17257+00
1.59329+04	1.98363-03	3.65472-03	4.62153-09	7.15110-09	3.59746-04	1.17166+00
1.60016+04	2.01187-03	3.83822-03	4.70599-09	7.76849-09	3.49798-04	1.17054+00
1.60716+04	2.03656-03	4.06493-03	4.82721-09	8.42987-09	3.40999-04	1.18663+00
1.61414+04	2.04267-03	4.47095-03	5.09248-09	9.32756-09	3.29193-04	1.18671+00
1.62098+04	2.05720-03	4.89005-03	5.33342-09	1.03480-08	3.17098-04	1.18677+00
1.62780+04	2.08967-03	5.22969-03	5.44636-09	1.14192-08	3.04512-04	1.18648+00
1.63461+04	2.11112-03	5.67751-03	5.67169-09	1.26518-08	2.93605-04	1.18668+00
1.64131+04	2.11601-03	6.26366-03	6.03170-09	1.40228-08	2.84222-04	1.18742+00
1.64794+04	2.13494-03	6.73291-03	6.23713-09	1.53452-08	2.74440-04	1.18772+00
1.65461+04	2.16139-03	7.16838-03	6.36507-09	1.67442-08	2.64093-04	1.18782+00
1.66126+04	2.16887-03	7.84304-03	6.74785-09	1.84469-08	2.56473-04	1.24861+00
1.66949+04	1.87621-03	5.58387-03	6.93243-09	1.00643-08	2.16543-04	1.24591+00
1.68991+04	9.14816-04	1.88714-03	2.54801-09	1.21390-09	5.52742-05	1.36915+00
1.72844+04	1.25427-04	1.32658-03	1.91312-10	1.98058-11	2.38747-05	1.36996+00
1.77578+04	3.34365-06	1.29370-03	1.03523-10	1.39486-14	2.35450-05	1.36972+00
1.82510+04	6.16230-08	1.29300-03	1.01797-10	4.75178-18	2.35400-05	1.36972+00
1.87580+04	1.02242-09	1.29299-03	1.01766-10	1.31794-21	2.35400-05	1.36972+00
1.92791+04	1.29044-11	1.29299-03	1.01766-10	2.15313-25	2.35400-05	1.36972+00

TABLE 14

J15 SERIES 7 PROBLEM 82
T= 2.70000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.42599+02	9.19400-05	4.90034-05	2.74630-09	4.14224-13	6.68299-03	1.14125+00
1.63543+03	1.19875-04	4.90515-05	2.76589-09	4.52909-13	6.67554-03	1.14116+00
1.87026+03	4.67850-05	4.93847-05	2.76353-09	5.60861-14	6.67235-03	1.14118+00
2.00915+03	4.84615-05	4.93769-05	2.75863-09	6.08408-14	6.67018-03	1.14115+00
2.10028+03	7.27089-05	4.92656-05	2.75159-09	1.34703-13	6.66874-03	1.14110+00
2.16282+03	9.57479-05	4.92536-05	2.75030-09	2.28018-13	6.66773-03	1.14109+00
2.20680+03	1.13224-04	4.92440-05	2.74931-09	3.17190-13	6.66707-03	1.14108+00
2.28641+03	1.48364-04	4.48280-05	2.74867-09	1.68689-13	6.66475-03	1.16578+00
2.40778+03	1.97071-04	1.48384-05	2.74783-09	2.91565-13	6.66093-03	1.16574+00
2.52689+03	2.36337-04	1.48515-05	2.74757-09	4.17117-13	6.65725-03	1.16570+00
2.64454+03	2.65282-04	1.48597-05	2.74649-09	5.23798-13	6.65366-03	1.16566+00
2.76134+03	2.82032-04	1.48669-05	2.74523-09	5.91503-13	6.65004-03	1.16562+00
2.87779+03	2.87931-04	1.48746-05	2.74400-09	6.16584-13	6.64632-03	1.16558+00
2.99429+03	2.86315-04	1.48871-05	2.74347-09	6.10224-13	6.64243-03	1.16554+00
3.11116+03	2.78903-04	1.49032-05	2.74340-09	5.79859-13	6.63831-03	1.16549+00
3.22866+03	2.66715-04	1.49278-05	2.74461-09	5.31294-13	6.63391-03	1.16545+00
3.34700+03	2.50207-04	1.49599-05	2.74692-09	4.68992-13	6.62918-03	1.16541+00
3.46639+03	2.30839-04	1.49968-05	2.75013-09	4.00253-13	6.62406-03	1.16536+00
3.58703+03	2.11436-04	1.50358-05	2.75338-09	3.36817-13	6.61851-03	1.16531+00
3.70910+03	1.92378-04	1.50776-05	2.75651-09	2.79646-13	6.61250-03	1.16525+00
3.83277+03	1.75774-04	1.51224-05	2.75928-09	2.34027-13	6.60599-03	1.16519+00
3.95823+03	1.63331-04	1.51686-05	2.76172-09	2.02520-13	6.59895-03	1.16513+00
4.08563+03	1.59709-04	1.52128-05	2.76398-09	1.94031-13	6.59138-03	1.16505+00
4.21516+03	1.70328-04	1.52607-05	2.76652-09	2.22013-13	6.58333-03	1.16498+00
4.34694+03	1.93709-04	1.53093-05	2.76885-09	2.88770-13	6.57485-03	1.16489+00
4.48113+03	2.25147-04	1.53527-05	2.77001-09	3.91403-13	6.56601-03	1.16480+00
4.61791+03	2.60849-04	1.53913-05	2.77007-09	5.26254-13	6.55681-03	1.16471+00
4.75747+03	2.99098-04	1.54259-05	2.76917-09	6.93017-13	6.54724-03	1.16461+00
4.89995+03	3.36268-04	1.54579-05	2.76755-09	8.76403-13	6.53732-03	1.16450+00
5.04550+03	3.68638-04	1.54894-05	2.76553-09	1.05419-12	6.52698-03	1.16438+00
5.19424+03	3.95157-04	1.55226-05	2.76344-09	1.21296-12	6.51616-03	1.16427+00
5.34628+03	4.13681-04	1.55612-05	2.76182-09	1.33188-12	6.50476-03	1.16414+00
5.50168+03	4.23395-04	1.56077-05	2.76099-09	1.39900-12	6.49267-03	1.16401+00
5.66046+03	4.25132-04	1.56688-05	2.76197-09	1.41598-12	6.47975-03	1.16388+00
5.82265+03	4.18188-04	1.57385-05	2.76359-09	1.37646-12	6.46584-03	1.16374+00
5.98829+03	4.05175-04	1.58182-05	2.76596-09	1.29880-12	6.45073-03	1.16358+00
6.15742+03	3.93415-04	1.59106-05	2.76934-09	1.23146-12	6.43428-03	1.16342+00
6.33007+03	3.89692-04	1.60155-05	2.77362-09	1.21607-12	6.41638-03	1.16324+00
6.50630+03	3.96046-04	1.61245-05	2.77734-09	1.26482-12	6.39699-03	1.16305+00
6.68624+03	4.11852-04	1.62325-05	2.77963-09	1.37757-12	6.37605-03	1.16283+00
6.87005+03	4.35863-04	1.63376-05	2.78014-09	1.55340-12	6.35351-03	1.16259+00
7.05794+03	4.64925-04	1.64370-05	2.77837-09	1.77842-12	6.32933-03	1.16233+00
7.25008+03	4.07537-04	1.65360-05	2.77511-09	2.04912-12	6.30340-03	1.16205+00
7.44658+03	5.31707-04	1.66408-05	2.77126-09	2.35468-12	6.27567-03	1.16174+00
7.64750+03	5.62580-04	1.67537-05	2.76708-09	2.65286-12	6.24600-03	1.16142+00
7.85285+03	5.86290-04	1.68029-05	2.76358-09	2.90205-12	6.21416-03	1.16107+00
8.06251+03	6.01724-04	1.70411-05	2.76241-09	3.08531-12	6.17985-03	1.16070+00
8.27624+03	6.09164-04	1.72361-05	2.76429-09	3.19802-12	6.14264-03	1.16030+00
8.49375+03	6.09259-04	1.74729-05	2.76934-09	3.24296-12	6.10197-03	1.15988+00
8.71473+03	6.03803-04	1.77507-05	2.77659-09	3.23588-12	6.05711-03	1.15941+00

TABLE 14 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 2.70000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
8.93093+03	5.98122-04	1.80639-05	2.78423-09	3.23121-12	6.00712-03	1.15089+00
9.16622+03	6.00840-04	1.84028-05	2.78984-09	3.32198-12	5.95111-03	1.15829+00
9.39660+03	6.17706-04	1.87586-05	2.79162-09	3.58019-12	5.88876-03	1.15762+00
9.63011+03	6.48653-04	1.91336-05	2.78911-09	4.02858-12	5.81940-03	1.15685+00
9.86668+03	6.91151-04	1.95433-05	2.78356-09	4.67336-12	5.74238-03	1.15598+00
1.01060+04	7.39746-04	2.00116-05	2.77701-09	5.48156-12	5.65696-03	1.15501+00
1.03475+04	7.85720-04	2.05725-05	2.77218-09	6.35490-12	5.56212-03	1.15394+00
1.05902+04	8.23041-04	2.12579-05	2.77040-09	7.20277-12	5.45629-03	1.15273+00
1.08328+04	8.47763-04	2.21313-05	2.77233-09	7.95372-12	5.33735-03	1.18392+00
1.10739+04	8.58867-04	2.32197-05	2.77856-09	8.56412-12	5.20379-03	1.18218+00
1.13117+04	8.61431-04	2.45788-05	2.78821-09	9.11951-12	5.05186-03	1.18016+00
1.15445+04	8.68516-04	2.62798-05	2.79909-09	9.91232-12	4.87757-03	1.17780+00
1.17707+04	8.99339-04	2.83507-05	2.80576-09	1.14732-11	4.68069-03	1.17505+00
1.19889+04	9.65852-04	3.08739-05	2.80400-09	1.44289-11	4.45887-03	1.17183+00
1.21976+04	1.06391-03	3.40803-05	2.79534-09	1.93401-11	4.20778-03	1.16804+00
1.23936+04	1.17406-03	3.86430-05	2.78735-09	2.66909-11	3.90996-03	1.16339+00
1.25699+04	1.30294-03	4.69330-05	2.78545-09	3.99667-11	3.49526-03	1.15660+00
1.27104+04	1.44635-03	7.00152-05	2.78150-09	7.34022-11	2.75722-03	1.18119+00
1.28156+04	1.53370-03	9.30522-05	2.78402-09	1.09456-10	2.29538-03	1.17341+00
1.29065+04	1.55677-03	1.05877-04	2.78991-09	1.28298-10	2.12031-03	1.17685+00
1.29931+04	1.55853-03	1.17684-04	2.79949-09	1.42929-10	2.01460-03	1.17188+00
1.30768+04	1.55167-03	1.29623-04	2.81340-09	1.56046-10	1.92572-03	1.17096+00
1.31587+04	1.54533-03	1.41476-04	2.82410-09	1.68926-10	1.85025-03	1.16695+00
1.32392+04	1.54103-03	1.54328-04	2.84125-09	1.83248-10	1.77997-03	1.16312+00
1.33185+04	1.54355-03	1.67785-04	2.84956-09	1.99879-10	1.71198-03	1.15931+00
1.33969+04	1.55799-03	1.81815-04	2.85369-09	2.20672-10	1.64762-03	1.15560+00
1.34745+04	1.57800-03	1.96999-04	2.84721-09	2.45280-10	1.58240-03	1.15173+00
1.35516+04	1.60146-03	2.12854-04	2.84223-09	2.72969-10	1.52183-03	1.14804+00
1.36282+04	1.62372-03	2.29490-04	2.82918-09	3.02531-10	1.46266-03	1.14434+00
1.37044+04	1.63619-03	2.47884-04	2.82892-09	3.31811-10	1.40743-03	1.14081+00
1.37798+04	1.63882-03	2.69545-04	2.83611-09	3.61961-10	1.35007-03	1.15011+00
1.38542+04	1.63415-03	2.94327-04	2.85350-09	3.92991-10	1.29047-03	1.15783+00
1.39272+04	1.62906-03	3.23084-04	2.88075-09	4.28708-10	1.22636-03	1.15486+00
1.39984+04	1.62700-03	3.56599-04	2.90282-09	4.71982-10	1.15508-03	1.17037+00
1.40677+04	1.63391-03	3.94452-04	2.92262-09	5.26539-10	1.08115-03	1.18625+00
1.41353+04	1.64835-03	4.34410-04	2.93025-09	5.90171-10	1.01028-03	1.19031+00
1.42014+04	1.66173-03	4.75300-04	2.93101-09	6.56242-10	9.47643-04	1.16698+00
1.42667+04	1.67355-03	5.16595-04	2.92886-09	7.23438-10	8.98725-04	1.16323+00
1.43314+04	1.68442-03	5.59746-04	2.93553-09	7.94084-10	8.57097-04	1.13882+00
1.43956+04	1.68876-03	6.06476-04	2.96487-09	8.64803-10	8.26602-04	1.13571+00
1.44595+04	1.68866-03	6.55421-04	3.00503-09	9.34485-10	8.00289-04	1.13285+00
1.45233+04	1.69194-03	7.03915-04	3.04652-09	1.00754-09	7.77837-04	1.13032+00
1.45878+04	1.70105-03	7.42127-04	3.06297-09	1.07371-09	7.60998-04	1.12123+00
1.46541+04	1.71420-03	7.72431-04	3.06761-09	1.13490-09	7.47705-04	1.11974+00
1.47228+04	1.72748-03	8.04688-04	3.07584-09	1.19442-09	7.36556-04	1.11848+00
1.47935+04	1.74189-03	8.40636-04	3.08681-09	1.27535-09	7.21522-04	1.11676+00
1.48650+04	1.74724-03	9.07212-04	3.13876-09	1.38479-09	7.02718-04	1.11455+00
1.49362+04	1.74289-03	9.79252-04	3.19102-09	1.48732-09	6.83686-04	1.12581+00
1.50073+04	1.74714-03	1.05197-03	3.21379-09	1.60559-09	6.61530-04	1.12352+00
1.50786+04	1.76326-03	1.12656-03	3.23434-09	1.75134-09	6.40477-04	1.12135+00

TABLE 14 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 2.70000+D6 SNAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.51502+04	1.78672-03	1.20736-03	3.27674-09	1.92727-09	6.21799-04	1.11959+00
1.52223+04	1.79850-03	1.28718-03	3.29910-09	2.08176-09	6.02825-04	1.15970+00
1.52941+04	1.79891-03	1.40452-03	3.37555-09	2.27257-09	5.76781-04	1.15468+00
1.53649+04	1.80541-03	1.52972-03	3.45112-09	2.49308-09	5.51903-04	1.15315+00
1.54355+04	1.82045-03	1.64046-03	3.48191-09	2.71839-09	5.28485-04	1.15156+00
1.55061+04	1.83897-03	1.76520-03	3.50772-09	2.98484-09	5.03234-04	1.19773+00
1.55765+04	1.84799-03	1.91226-03	3.55812-09	3.26524-09	4.78505-04	1.19556+00
1.56459+04	1.84906-03	2.10226-03	3.67645-09	3.59386-09	4.56324-04	1.19359+00
1.57142+04	1.85542-03	2.28458-03	3.76605-09	3.93249-09	4.35931-04	1.19174+00
1.57824+04	1.87429-03	2.44101-03	3.80733-09	4.28780-09	4.18337-04	1.17792+00
1.58513+04	1.89325-03	2.60260-03	3.85282-09	4.66444-09	4.02570-04	1.17596+00
1.59204+04	1.89701-03	2.79988-03	3.96872-09	5.03791-09	3.89936-04	1.17452+00
1.59894+04	1.89839-03	3.02402-03	4.11639-09	5.44913-09	3.78394-04	1.17327+00
1.60587+04	1.91673-03	3.22597-03	4.20811-09	5.92622-09	3.66382-04	1.17189+00
1.61291+04	1.94354-03	3.39440-03	4.25747-09	6.41118-09	3.55547-04	1.17059+00
1.62003+04	1.95540-03	3.64432-03	4.42311-09	6.96719-09	3.46813-04	1.16973+00
1.62714+04	1.96022-03	3.94717-03	4.65716-09	7.58353-09	3.38945-04	1.18597+00
1.63422+04	1.98387-03	4.24965-03	4.78874-09	8.36342-09	3.25838-04	1.18556+00
1.64133+04	2.01305-03	4.54503-03	4.88221-09	9.20936-09	3.12620-04	1.18509+00
1.64839+04	2.02401-03	4.98139-03	5.13636-09	1.02035-08	3.01746-04	1.18535+00
1.65532+04	2.03474-03	5.47949-03	5.43443-09	1.13433-08	2.91601-04	1.18584+00
1.66219+04	2.06586-03	5.87185-03	5.58099-09	1.25310-08	2.80720-04	1.18588+00
1.66908+04	2.09050-03	6.30817-03	5.76817-09	1.37840-08	2.71171-04	1.18615+00
1.67591+04	2.09731-03	6.94725-03	6.13091-09	1.52794-08	2.62605-04	1.18706+00
1.68265+04	2.11400-03	7.48038-03	6.35666-09	1.67157-08	2.53269-04	1.24829+00
1.68958+04	2.08830-03	7.63388-03	6.52752-09	1.66519-08	2.40164-04	1.24820+00
1.70190+04	1.45656-03	3.27420-03	5.52257-09	4.04639-09	1.44612-04	1.29713+00
1.73118+04	4.59374-04	1.48035-03	7.63581-10	2.77886-10	2.79944-05	1.37002+00
1.77590+04	2.75106-05	1.29941-03	1.17196-10	9.44287-13	2.35891-05	1.36992+00
1.82510+04	5.69076-07	1.29310-03	1.02062-10	4.04149-16	2.35407-05	1.36972+00
1.87580+04	1.02757-08	1.29299-03	1.01771-10	1.32231-19	2.35400-05	1.36972+00
1.92791+04	1.64272-10	1.29299-03	1.01766-10	3.48919-23	2.35400-05	1.36972+00

TABLE 15

J15 SERIES 7 PROBLEM 82
T= 2.80000*06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.47083+02	1.10965-05	4.80965-05	2.63608-09	5.92222-15	6.58636-03	1.13976+00
1.64587+03	1.11622-04	4.80524-05	2.62778-09	4.91506-13	6.57676-03	1.13962+00
1.88343+03	2.05696-04	4.80165-05	2.62462-09	1.01633-12	6.57477-03	1.13959+00
2.02419+03	1.99423-04	4.80727-05	2.62682-09	9.58776-13	6.57344-03	1.13958+00
2.11616+03	1.80117-04	4.81083-05	2.63329-09	7.83358-13	6.57245-03	1.13959+00
2.17903+03	1.66428-04	4.83004-05	2.63852-09	6.69599-13	6.57169-03	1.13960+00
2.22312+03	1.57128-04	4.83827-05	2.64265-09	5.97648-13	6.57116-03	1.13961+00
2.30279+03	1.38101-04	4.45952-05	2.64652-09	1.40626-13	6.56925-03	1.16453+00
2.42415+03	1.09211-04	1.46233-05	2.64901-09	8.86117-14	6.56558-03	1.16450+00
2.54323+03	8.37008-05	1.46500-05	2.65067-09	5.23119-14	6.56160-03	1.16446+00
2.66081+03	6.33296-05	1.46764-05	2.65168-09	2.99891-14	6.55729-03	1.16442+00
2.77749+03	4.94030-05	1.47029-05	2.65223-09	1.81415-14	6.55268-03	1.16438+00
2.89378+03	4.31050-05	1.47294-05	2.65236-09	1.36927-14	6.54777-03	1.16433+00
3.01012+03	4.83566-05	1.47462-05	2.65171-09	1.75377-14	6.54260-03	1.16428+00
3.12694+03	6.46824-05	1.47537-05	2.64938-09	3.15983-14	6.53724-03	1.16421+00
3.24456+03	8.78445-05	1.47606-05	2.64681-09	5.82334-14	6.53171-03	1.16415+00
3.36323+03	1.18102-04	1.47722-05	2.64495-09	1.05177-13	6.52605-03	1.16408+00
3.48316+03	1.54792-04	1.47858-05	2.64335-09	1.79982-13	6.52029-03	1.16402+00
3.60454+03	1.93244-04	1.48003-05	2.64183-09	2.78972-13	6.51445-03	1.16396+00
3.72754+03	2.30370-04	1.48184-05	2.64085-09	3.95687-13	6.50850-03	1.16389+00
3.85234+03	2.63083-04	1.48365-05	2.63977-09	5.14980-13	6.50244-03	1.16382+00
3.97908+03	2.87134-04	1.48554-05	2.63870-09	6.13069-13	6.49619-03	1.16376+00
4.10795+03	3.02540-04	1.48744-05	2.63746-09	6.80979-13	6.48968-03	1.16368+00
4.23907+03	3.10286-04	1.48986-05	2.63685-09	7.17228-13	6.48283-03	1.16361+00
4.37255+03	3.10378-04	1.49300-05	2.63712-09	7.19162-13	6.47556-03	1.16353+00
4.50846+03	3.04905-04	1.49700-05	2.63847-09	6.95954-13	6.46778-03	1.16346+00
4.64690+03	2.95008-04	1.50161-05	2.64041-09	6.53723-13	6.45940-03	1.16337+00
4.78796+03	2.82656-04	1.50684-05	2.64288-09	6.02218-13	6.45035-03	1.16328+00
4.93174+03	2.71133-04	1.51251-05	2.64553-09	5.56174-13	6.44055-03	1.16319+00
5.07836+03	2.61018-04	1.51814-05	2.64750-09	5.17322-13	6.42995-03	1.16308+00
5.22799+03	2.55957-04	1.52346-05	2.64836-09	4.99042-13	6.41848-03	1.16296+00
5.38079+03	2.61940-04	1.52907-05	2.64905-09	5.24081-13	6.40615-03	1.16283+00
5.53684+03	2.80570-04	1.53511-05	2.64983-09	6.05361-13	6.39301-03	1.16269+00
5.69628+03	3.08735-04	1.54111-05	2.64996-09	7.36426-13	6.37910-03	1.16255+00
5.85923+03	3.43337-04	1.54725-05	2.64974-09	9.14650-13	6.36444-03	1.16239+00
6.02582+03	3.80656-04	1.55316-05	2.64855-09	1.12795-12	6.34902-03	1.16222+00
6.19618+03	4.17403-04	1.55929-05	2.64710-09	1.36089-12	6.33280-03	1.16205+00
6.37044+03	4.50315-04	1.56552-05	2.64514-09	1.58902-12	6.31572-03	1.16186+00
6.54869+03	4.76419-04	1.57223-05	2.64319-09	1.78528-12	6.29765-03	1.16166+00
6.73099+03	4.95417-04	1.58008-05	2.64215-09	1.93953-12	6.27843-03	1.16145+00
6.91732+03	5.05073-04	1.58945-05	2.64247-09	2.02737-12	6.25789-03	1.16124+00
7.10767+03	5.03435-04	1.60014-05	2.64357-09	2.02785-12	6.23576-03	1.16100+00
7.30199+03	4.94757-04	1.61286-05	2.64631-09	1.97423-12	6.21170-03	1.16075+00
7.50021+03	4.85122-04	1.62797-05	2.65091-09	1.91583-12	6.18540-03	1.16048+00
7.70221+03	4.79311-04	1.64517-05	2.65660-09	1.88982-12	6.15656-03	1.16018+00
7.90798+03	4.81663-04	1.66378-05	2.66202-09	1.93009-12	6.12487-03	1.15986+00
8.11759+03	4.94108-04	1.68257-05	2.66504-09	2.05459-12	6.09006-03	1.15949+00
8.33123+03	5.17786-04	1.70123-05	2.66496-09	2.28240-12	6.05183-03	1.15907+00
8.54905+03	5.51166-04	1.72039-05	2.66249-09	2.61609-12	6.00997-03	1.15861+00
8.77113+03	5.88821-04	1.74061-05	2.65815-09	3.02062-12	5.96421-03	1.15810+00

TABLE 15 (Cont.)

115 SERIES 7 PROBLEM 82
T= 2.80000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
8.99746+03	6.25452-04	1.78272-05	2.65304-09	3.45050-12	5.91455-03	1.15754+00
9.22786+03	6.57232-04	1.78838-05	2.64902-09	3.86431-12	5.86061-03	1.15694+00
9.46196+03	6.81254-04	1.81940-05	2.64789-09	4.22266-12	5.80187-03	1.15629+00
9.69924+03	6.96204-04	1.85706-05	2.65032-09	4.50084-12	5.73755-03	1.15558+00
9.93908+03	7.01973-04	1.90209-05	2.65585-09	4.68644-12	5.66663-03	1.15480+00
1.01808+04	7.00036-04	1.95567-05	2.66409-09	4.79195-12	5.58768-03	1.15394+00
1.04237+04	6.96295-04	2.01852-05	2.67339-09	4.89318-12	5.49877-03	1.15296+00
1.06671+04	7.01860-04	2.09125-05	2.68005-09	5.15129-12	5.39747-03	1.14447+00
1.09104+04	7.28251-04	2.17429-05	2.68091-09	5.76906-12	5.26284-03	1.18297+00
1.11530+04	7.79739-04	2.26902-05	2.67574-09	6.90931-12	5.15287-03	1.18123+00
1.13939+04	8.46764-04	2.38286-05	2.66832-09	8.55737-12	5.00562-03	1.17922+00
1.16317+04	9.13805-04	2.52452-05	2.66263-09	1.05532-11	4.84038-03	1.17692+00
1.18645+04	9.75006-04	2.70235-05	2.66126-09	1.28564-11	4.65700-03	1.17432+00
1.20904+04	1.03197-03	2.92635-05	2.66239-09	1.55935-11	4.45338-03	1.17137+00
1.23070+04	1.08123-03	3.21872-05	2.66875-09	1.88219-11	4.22516-03	1.16796+00
1.25111+04	1.12971-03	3.63148-05	2.68101-09	2.31862-11	3.95514-03	1.16361+00
1.26969+04	1.19726-03	4.31431-05	2.69407-09	3.09568-11	3.59343-03	1.15799+00
1.28496+04	1.31603-03	6.12483-05	2.70754-09	5.32255-11	2.94044-03	1.18382+00
1.29637+04	1.42166-03	8.74516-05	2.71750-09	8.64079-11	2.35301-03	1.17352+00
1.30568+04	1.46455-03	1.02728-04	2.71921-09	1.10183-10	2.12430-03	1.17733+00
1.31439+04	1.49311-03	1.14513-04	2.71420-09	1.27656-10	2.00956-03	1.17202+00
1.32282+04	1.51844-03	1.25628-04	2.71125-09	1.44837-10	1.91850-03	1.16758+00
1.33111+04	1.54066-03	1.36446-04	2.70356-09	1.61944-10	1.84074-03	1.16635+00
1.33930+04	1.55740-03	1.47769-04	2.69613-09	1.79210-10	1.76901-03	1.16239+00
1.34740+04	1.56950-03	1.60093-04	2.69304-09	1.97182-10	1.70084-03	1.15853+00
1.35542+04	1.57210-03	1.73786-04	2.70275-09	2.14757-10	1.63751-03	1.15486+00
1.36333+04	1.56827-03	1.89321-04	2.71495-09	2.32813-10	1.57410-03	1.15110+00
1.37113+04	1.56175-03	2.05835-04	2.73058-09	2.51025-10	1.51527-03	1.14752+00
1.37883+04	1.55603-03	2.24014-04	2.74908-09	2.71194-10	1.45820-03	1.14397+00
1.38644+04	1.55810-03	2.42955-04	2.76171-09	2.94908-10	1.40372-03	1.14050+00
1.39396+04	1.56727-03	2.64288-04	2.76883-09	3.24594-10	1.34588-03	1.14952+00
1.40139+04	1.58207-03	2.87305-04	2.77009-09	3.59564-10	1.28501-03	1.15695+00
1.40873+04	1.59705-03	3.12573-04	2.76671-09	3.98629-10	1.21960-03	1.15365+00
1.41595+04	1.60850-03	3.43300-04	2.76936-09	4.44108-10	1.14685-03	1.16894+00
1.42301+04	1.61495-03	3.77798-04	2.76937-09	4.92662-10	1.07180-03	1.18503+00
1.42989+04	1.61601-03	4.17024-04	2.78497-09	5.44524-10	1.00222-03	1.19017+00
1.43660+04	1.61160-03	4.58995-04	2.81061-09	5.96066-10	9.42703-04	1.16751+00
1.44317+04	1.60985-03	5.03536-04	2.83962-09	6.52491-10	8.95014-04	1.16361+00
1.44964+04	1.61806-03	5.47679-04	2.86242-09	7.16955-10	8.54924-04	1.13904+00
1.45607+04	1.63182-03	5.90941-04	2.87534-09	7.86805-10	8.23683-04	1.13595+00
1.46252+04	1.64493-03	6.30806-04	2.87203-09	8.53429-10	7.96031-04	1.13320+00
1.46903+04	1.65694-03	6.71001-04	2.88052-09	9.21113-10	7.73030-04	1.12265+00
1.47565+04	1.66909-03	7.06798-04	2.89323-09	9.84533-10	7.56407-04	1.12080+00
1.48243+04	1.67756-03	7.41464-04	2.92419-09	1.04332-09	7.43908-04	1.11939+00
1.48937+04	1.67736-03	7.78857-04	2.97728-09	1.09568-09	7.33891-04	1.11822+00
1.49645+04	1.68042-03	8.24245-04	3.01472-09	1.16377-09	7.19537-04	1.11657+00
1.50362+04	1.69235-03	8.78243-04	3.02107-09	1.25768-09	6.99724-04	1.11427+00
1.51085+04	1.70657-03	9.37869-04	3.02970-09	1.36574-09	6.79028-04	1.12441+00
1.51810+04	1.72322-03	1.00930-03	3.05975-09	1.49860-09	6.57523-04	1.12221+00
1.52535+04	1.73238-03	1.08368-03	3.09010-09	1.62614-09	6.37091-04	1.12013+00

TABLE 15 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 2.80000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SEC)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA Z
1.53261+04	1.72728-03	1.16605-03	3.14553-09	1.73947-09	6.10953-04	1.11649+00
1.53987+04	1.73112-03	1.25206-03	3.18473-09	1.87613-09	5.98836-04	1.15793+00
1.54712+04	1.75243-03	1.35397-03	3.23202-09	2.07914-09	5.73443-04	1.15383+00
1.55436+04	1.77199-03	1.45079-03	3.24295-09	2.27774-09	5.47573-04	1.15195+00
1.56160+04	1.78270-03	1.56766-03	3.30052-09	2.49103-09	5.24897-04	1.15052+00
1.56875+04	1.78355-03	1.71618-03	3.38908-09	2.72964-09	5.00517-04	1.19744+00
1.57580+04	1.78786-03	1.87251-03	3.46823-09	2.99273-09	4.76526-04	1.19535+00
1.58280+04	1.80442-03	2.01562-03	3.49290-09	3.28145-09	4.52532-04	1.19319+00
1.58981+04	1.82322-03	2.16348-03	3.52539-09	3.59593-09	4.31347-04	1.19124+00
1.59681+04	1.83151-03	2.33772-03	3.61471-09	3.92087-09	4.15292-04	1.17724+00
1.60376+04	1.83103-03	2.54047-03	3.74345-09	4.25865-09	4.00992-04	1.17559+00
1.61070+04	1.84199-03	2.71794-03	3.82958-09	4.61107-09	3.87886-04	1.17404+00
1.61773+04	1.86512-03	2.86985-03	3.86558-09	4.99183-09	3.74961-04	1.17244+00
1.62467+04	1.88007-03	3.04747-03	3.93113-09	5.38590-09	3.62920-04	1.17100+00
1.63204+04	1.88023-03	3.29568-03	4.11015-09	5.82559-09	3.53855-04	1.17013+00
1.63922+04	1.88951-03	3.53120-03	4.25922-09	6.30386-09	3.44922-04	1.16925+00
1.64649+04	1.91768-03	3.71133-03	4.32108-09	6.82467-09	3.34734-04	1.18460+00
1.65385+04	1.93835-03	3.99258-03	4.44107-09	7.50052-09	3.21962-04	1.18417+00
1.66112+04	1.94376-03	4.40199-03	4.69787-09	8.31583-09	3.10757-04	1.18437+00
1.66828+04	1.96036-03	4.78439-03	4.89269-09	9.19382-09	2.99384-04	1.18442+00
1.67543+04	1.99185-03	5.09633-03	4.98089-09	1.01104-08	2.87634-04	1.18416+00
1.68259+04	2.00995-03	5.53554-03	5.19999-09	1.11815-08	2.77726-04	1.18449+00
1.68964+04	2.02156-03	6.09915-03	5.54001-09	1.24630-08	2.69485-04	1.18575+00
1.69661+04	2.04918-03	6.54927-03	5.71335-09	1.37517-08	2.59768-04	1.18564+00
1.70360+04	2.07260-03	7.04500-03	5.89571-09	1.51315-08	2.49465-04	1.24787+00
1.71051+04	2.07678-03	7.76781-03	6.27580-09	1.67513-08	2.40980-04	1.24831+00
1.71863+04	1.85128-03	5.99071-03	6.45627-09	1.04168-08	2.11575-04	1.24625+00
1.73028+04	9.61975-04	2.00853-03	2.79829-09	1.37317-09	6.27924-05	1.36896+00
1.77668+04	1.53137-04	1.33785-03	2.19319-10	2.95670-11	2.40205-05	1.36998+00
1.82512+04	4.63297-06	1.29403-03	1.04221-10	2.67303-14	2.35474-05	1.36972+00
1.87580+04	9.04254-06	1.29300-03	1.01812-10	1.02174-17	2.35401-05	1.36972+00
1.92791+04	1.58804-09	1.29299-03	1.01767-10	3.16879-21	2.35400-05	1.36972+00
1.98147+04	2.27187-11	1.29299-03	1.01766-10	6.67367-25	2.35400-05	1.36972+00

TABLE 16

J15 SERIES 7 PROBLEM 82
T= 2.90000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.52361+02	6.73060-05	4.71115-05	2.52357-09	2.13419-13	6.48767-03	1.13823+00
1.65617+03	8.01928-05	4.74498-05	2.55613-09	2.22829-13	6.47948-03	1.13819+00
1.89299+03	1.78679-05	4.77700-05	2.55489-09	9.11836-15	6.47618-03	1.13820+00
2.03313+03	1.95017-05	4.77856-05	2.55072-09	1.12611-14	6.47395-03	1.13818+00
2.12511+03	4.27199-05	4.76480-05	2.54258-09	4.79361-14	6.47244-03	1.13813+00
2.18829+03	6.60091-05	4.76026-05	2.53958-09	1.05906-13	6.47141-03	1.13811+00
2.23274+03	8.33291-05	4.75805-05	2.53797-09	1.66607-15	6.47070-03	1.13809+00
2.31314+03	1.16740-04	4.43507-05	2.53671-09	1.02528-13	6.46835-03	1.16321+00
2.43568+03	1.67449-04	4.43580-05	2.53535-09	2.05781-13	6.46444-03	1.16316+00
2.55598+03	2.10271-04	4.43721-05	2.53525-09	3.20006-13	6.46071-03	1.16312+00
2.67479+03	2.41307-04	4.43841-05	2.53483-09	4.20041-13	6.45705-03	1.16308+00
2.79274+03	2.61242-04	4.43939-05	2.53407-09	4.91498-13	6.45339-03	1.16304+00
2.91032+03	2.70729-04	4.44065-05	2.53369-09	5.28014-13	6.44964-03	1.16300+00
3.02793+03	2.71542-04	4.44219-05	2.53367-09	5.31726-13	6.44573-03	1.16296+00
3.14589+03	2.65421-04	4.44412-05	2.53415-09	5.08805-13	6.44160-03	1.16292+00
3.26449+03	2.53208-04	4.44667-05	2.53345-09	4.64229-13	6.43719-03	1.16287+00
3.38394+03	2.36980-04	4.44979-05	2.53747-09	4.07584-13	6.43242-03	1.16283+00
3.50448+03	2.20938-04	4.45300-05	2.53945-09	3.55079-13	6.42728-03	1.16278+00
3.62634+03	2.05494-04	4.45620-05	2.54121-09	3.07878-13	6.42173-03	1.16273+00
3.74970+03	1.91124-04	4.45946-05	2.54258-09	2.66895-13	6.41574-03	1.16267+00
3.87478+03	1.79431-04	4.46276-05	2.54351-09	2.35647-13	6.40928-03	1.16260+00
4.00175+03	1.73232-04	4.46560-05	2.54358-09	2.19920-13	6.40236-03	1.16253+00
4.13084+03	1.73631-04	4.46816-05	2.54288-09	2.21329-13	6.39498-03	1.16245+00
4.26222+03	1.80174-04	4.47024-05	2.54110-09	2.38813-13	6.38715-03	1.16236+00
4.39609+03	1.93036-04	4.47215-05	2.53874-09	2.74755-13	6.37889-03	1.16227+00
4.55328+03	2.13118-04	4.47438-05	2.53662-09	3.35899-13	6.37023-03	1.16217+00
4.67181+03	2.39768-04	4.47676-05	2.53450-09	4.26056-13	6.36119-03	1.16207+00
4.81390+03	2.71286-04	4.47967-05	2.53297-09	5.46612-13	6.35179-03	1.16196+00
4.95893+03	3.04966-04	4.48295-05	2.53178-09	6.91682-13	6.34205-03	1.16186+00
5.10701+03	3.36432-04	4.48638-05	2.53056-09	8.42800-13	6.33193-03	1.16174+00
5.25826+03	3.61905-04	4.48994-05	2.52924-09	9.76588-13	6.32138-03	1.16163+00
5.41280+03	3.80119-04	4.49370-05	2.52787-09	1.07954-12	6.31031-03	1.16151+00
5.57071+03	3.91392-04	4.49819-05	2.52722-09	1.14764-12	6.29861-03	1.16138+00
5.73206+03	3.94923-04	4.50357-05	2.52743-09	1.17252-12	6.28617-03	1.16125+00
5.89689+03	3.92183-04	4.50992-05	2.52854-09	1.16123-12	6.27283-03	1.16111+00
6.06521+03	3.84750-04	4.51774-05	2.53120-09	1.12356-12	6.25847-03	1.16096+00
6.23705+03	3.72484-04	4.52610-05	2.53384-09	1.05910-12	6.24291-03	1.16080+00
6.41250+03	3.56882-04	4.53524-05	2.53665-09	9.88966-13	6.22597-03	1.16063+00
6.59162+03	3.51018-04	4.54523-05	2.53967-09	9.51989-13	6.20751-03	1.16043+00
6.77448+03	3.54586-04	4.55605-05	2.54273-09	9.78428-13	6.18745-03	1.16023+00
6.96118+03	3.71058-04	4.56708-05	2.54487-09	1.07982-12	6.16577-03	1.16000+00
7.15187+03	3.99141-04	4.57792-05	2.54541-09	1.25925-12	6.14245-03	1.15975+00
7.34671+03	4.39402-04	4.58874-05	2.54462-09	1.50894-12	6.11748-03	1.15948+00
7.54585+03	4.73477-04	4.59939-05	2.54221-09	1.79551-12	6.09078-03	1.15918+00
7.74941+03	5.09817-04	4.61071-05	2.53930-09	2.09576-12	6.06218-03	1.15886+00
7.95741+03	5.41510-04	4.62349-05	2.53689-09	2.38188-12	6.03151-03	1.15852+00
8.16980+03	5.63331-04	4.63795-05	2.53503-09	2.59946-12	5.99847-03	1.15815+00
8.38647+03	5.73573-04	4.65504-05	2.53474-09	2.72248-12	5.96270-03	1.15776+00
8.60722+03	5.74959-04	4.67548-05	2.53666-09	2.76939-12	5.92385-03	1.15734+00
8.83175+03	5.72265-04	4.70012-05	2.54143-09	2.78386-12	5.88143-03	1.15688+00

TABLE 16 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 2.90000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/S)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
9.05973+03	5.67914-04	1.72879-05	2.54814-09	2.78795-12	5.83486-03	1.15639+00
9.29092+03	5.64050-04	1.76094-05	2.55516-09	2.80124-12	5.78336-03	1.15584+00
9.52515+03	5.67989-04	1.79603-05	2.56079-09	2.89733-12	5.72604-03	1.15522+00
9.76239+03	5.87446-04	1.83299-05	2.56272-09	3.16463-12	5.66212-03	1.15451+00
1.00027+04	6.23941-04	1.87153-05	2.55978-09	3.64758-12	5.59092-03	1.15370+00
1.02460+04	6.72174-04	1.91338-05	2.55336-09	4.32898-12	5.51178-03	1.15279+00
1.04920+04	7.20954-04	1.96237-05	2.54666-09	5.10505-12	5.42383-03	1.18445+00
1.07396+04	7.61643-04	2.02476-05	2.54403-09	5.87608-12	5.32712-03	1.18318+00
1.09877+04	7.92184-04	2.10120-05	2.54525-09	6.59476-12	5.21994-03	1.18177+00
1.12349+04	8.12914-04	2.19478-05	2.54984-09	7.25262-12	5.10018-03	1.18017+00
1.14800+04	8.24771-04	2.31062-05	2.55797-09	7.85912-12	4.96512-03	1.17836+00
1.17211+04	8.31719-04	2.45294-05	2.56916-09	8.48431-12	4.81410-03	1.17629+00
1.19570+04	8.47393-04	2.62544-05	2.57966-09	9.42833-12	4.64484-03	1.17392+00
1.21062+04	8.84873-04	2.83467-05	2.58662-09	1.11066-11	4.45504-03	1.17119+00
1.24071+04	9.50619-04	3.09496-05	2.58901-09	1.40099-11	4.24041-03	1.16798+00
1.26174+04	1.04450-03	3.44265-05	2.58540-09	1.88279-11	3.90676-03	1.16405+00
1.28124+04	1.15969-03	3.98436-05	2.58064-09	2.68693-11	3.66166-03	1.15880+00
1.29797+04	1.31345-03	5.27856-05	2.57964-09	4.57533-11	3.11437-03	1.18586+00
1.31068+04	1.44543-03	7.89486-05	2.57845-09	8.25369-11	2.42799-03	1.17312+00
1.32056+04	1.49502-03	9.70191-05	2.58417-09	1.08427-10	2.12960-03	1.17817+00
1.32949+04	1.50062-03	1.09950-04	2.59148-09	1.23796-10	2.00233-03	1.17222+00
1.33805+04	1.49200-03	1.21329-04	2.60203-09	1.35045-10	1.91093-03	1.16769+00
1.34640+04	1.48639-03	1.32599-04	2.61275-09	1.46480-10	1.83384-03	1.16589+00
1.35461+04	1.48331-03	1.44488-04	2.62477-09	1.58953-10	1.76381-03	1.16203+00
1.36269+04	1.48411-03	1.57173-04	2.63481-09	1.73095-10	1.69680-03	1.15825+00
1.37069+04	1.49510-03	1.70156-04	2.63533-09	1.90181-10	1.63276-03	1.15452+00
1.37860+04	1.51106-03	1.84933-04	2.64018-09	2.11134-10	1.56918-03	1.15073+00
1.38644+04	1.52700-03	1.99847-04	2.63601-09	2.33002-10	1.50924-03	1.14706+00
1.39422+04	1.53996-03	2.16036-04	2.63290-09	2.56164-10	1.45132-03	1.14342+00
1.40195+04	1.54998-03	2.33557-04	2.63453-09	2.80554-10	1.39646-03	1.13991+00
1.40961+04	1.55630-03	2.54171-04	2.64100-09	3.07810-10	1.33811-03	1.14837+00
1.41715+04	1.55630-03	2.77187-04	2.65152-09	3.35683-10	1.27750-03	1.15567+00
1.42456+04	1.55029-03	3.03847-04	2.67231-09	3.65134-10	1.21396-03	1.15262+00
1.43179+04	1.54648-03	3.35663-04	2.69225-09	4.01384-10	1.14179-03	1.16808+00
1.43884+04	1.55096-03	3.71028-04	2.70630-09	4.46251-10	1.06750-03	1.18450+00
1.44570+04	1.56177-03	4.08044-04	2.71012-09	4.97645-10	9.97687-04	1.19010+00
1.45244+04	1.57545-03	4.45835-04	2.71367-09	5.53300-10	9.30319-04	1.16797+00
1.45909+04	1.58715-03	4.84695-04	2.71173-09	6.10469-10	8.89388-04	1.16419+00
1.46569+04	1.59574-03	5.24056-04	2.71773-09	6.67226-10	8.50150-04	1.13946+00
1.47226+04	1.60190-03	5.65637-04	2.73008-09	7.25740-10	8.18806-04	1.13635+00
1.47883+04	1.60425-03	6.07678-04	2.74818-09	7.81970-10	7.91973-04	1.13355+00
1.48540+04	1.60424-03	6.52673-04	2.78997-09	8.39859-10	7.70586-04	1.12243+00
1.49203+04	1.60746-03	6.92300-04	2.82478-09	8.94431-10	7.54586-04	1.12064+00
1.49882+04	1.61929-03	7.21464-04	2.83227-09	9.45905-10	7.41353-04	1.11915+00
1.50586+04	1.63457-03	7.46672-04	2.83202-09	9.97499-10	7.29737-04	1.11783+00
1.51310+04	1.64897-03	7.86251-04	2.85071-09	1.06898-09	7.15010-04	1.11614+00
1.52043+04	1.66293-03	8.42744-04	2.87779-09	1.16525-09	6.95983-04	1.11391+00
1.52776+04	1.66981-03	9.08948-04	2.91839-09	1.26720-09	6.75845-04	1.12342+00
1.53506+04	1.66725-03	9.83358-04	2.96714-09	1.36673-09	6.55168-04	1.12141+00
1.54234+04	1.67296-03	1.05441-03	2.99239-09	1.47559-09	6.34685-04	1.11929+00

TABLE 16 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 2.90000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P (JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.54968+04	1.69320-03	1.12174-03	3.00496-09	1.60804-09	6.15590-04	1.11727+00
1.55706+04	1.71099-03	1.20527-03	3.03659-09	1.76424-09	5.93948-04	1.15562+00
1.56445+04	1.71320-03	1.29223-03	3.05834-09	1.89641-09	5.69389-04	1.15482+00
1.57181+04	1.71140-03	1.40804-03	3.13153-09	2.06201-09	5.45239-04	1.15128+00
1.57908+04	1.72005-03	1.52961-03	3.20560-09	2.26277-09	5.22851-04	1.14995+00
1.58632+04	1.73875-03	1.64878-03	3.22648-09	2.49249-09	4.96430-04	1.19703+00
1.59353+04	1.75929-03	1.77877-03	3.25724-09	2.75278-09	4.71692-04	1.19485+00
1.60070+04	1.76819-03	1.93445-03	3.32326-09	3.02403-09	4.49036-04	1.19282+00
1.60777+04	1.76684-03	2.11268-03	3.42758-09	3.29759-09	4.29737-04	1.17882+00
1.61479+04	1.77168-03	2.27829-03	3.50468-09	3.57566-09	4.13433-04	1.17683+00
1.62184+04	1.79305-03	2.42408-03	3.53845-09	3.89699-09	3.97721-04	1.17485+00
1.62898+04	1.81365-03	2.57208-03	3.58430-09	4.23025-09	3.84256-04	1.17317+00
1.63618+04	1.81792-03	2.76353-03	3.69489-09	4.56649-09	3.72633-04	1.17185+00
1.64335+04	1.81772-03	2.99684-03	3.85370-09	4.95093-09	3.61941-04	1.17074+00
1.65057+04	1.83486-03	3.16427-03	3.91461-09	5.32695-09	3.51362-04	1.16950+00
1.65795+04	1.85919-03	3.32144-03	3.95533-09	5.74057-09	3.40862-04	1.18375+00
1.66544+04	1.86742-03	3.55223-03	4.09762-09	6.19379-09	3.31911-04	1.18363+00
1.67289+04	1.87089-03	3.89501-03	4.31064-09	6.81674-09	3.20445-04	1.18363+00
1.68027+04	1.89363-03	4.18259-03	4.41715-09	7.49970-09	3.07688-04	1.18323+00
1.68769+04	1.92267-03	4.46549-03	4.50338-09	8.25400-09	2.95547-04	1.18286+00
1.69508+04	1.93411-03	4.88611-03	4.73570-09	9.13895-09	2.85454-04	1.18319+00
1.70235+04	1.94674-03	5.34705-03	4.98873-09	1.01329-08	2.75945-04	1.18368+00
1.70960+04	1.97645-03	5.68699-03	5.09529-09	1.11086-08	2.66066-04	1.18369+00
1.71687+04	1.99830-03	6.16994-03	5.31073-09	1.23190-08	2.56442-04	1.24721+00
1.72400+04	2.00790-03	6.84466-03	5.68625-09	1.37977-08	2.47649-04	1.24768+00
1.73102+04	2.03024-03	7.38982-03	5.89415-09	1.52310-08	2.37855-04	1.24797+00
1.73819+04	2.01623-03	7.58287-03	6.04095-09	1.54165-08	2.27402-04	1.24795+00
1.75042+04	1.44169-03	3.44298-03	5.30404-09	4.08671-09	1.44247-04	1.29700+00
1.77970+04	4.80349-04	1.50581-03	8.23722-10	3.05134-10	2.88141-05	1.37002+00
1.82527+04	3.19772-05	1.30090-03	1.19993-10	1.27378-12	2.36010-05	1.36992+00
1.87580+04	7.06580-07	1.29314-03	1.02136-10	6.21855-16	2.35410-05	1.36972+00
1.92791+04	1.34714-08	1.29299-03	1.01773-10	2.26883-19	2.35400-05	1.36972+00
1.98147+04	2.26992-10	1.29299-03	1.01766-10	6.64932-23	2.35400-05	1.36972+00
2.03652+04	2.19100-13	1.29299-03	1.01766-10	6.20700-29	2.35400-05	1.36972+00

TABLE 17

J15 SERIES 7 PROBLEM 82
T= 3.00000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
7.54237+02	-6.27155-06	4.67348-05	2.45325-09	1.83819-15	6.39574-03	1.13691+00
1.66197+03	7.69741-05	4.65695-05	2.43427-09	3.24551-13	6.38486-03	1.13672+00
1.90253+03	1.72198-04	4.64014-05	2.42429-09	6.88711-13	6.38255-03	1.13666+00
2.04528+03	1.70806-04	4.64307-05	2.42491-09	6.78473-13	6.38104-03	1.13664+00
2.13855+03	1.59014-04	4.65426-05	2.43002-09	5.88936-13	6.37994-03	1.13665+00
2.20229+03	1.51251-04	4.66461-05	2.43486-09	5.33777-13	6.37913-03	1.13666+00
2.24700+03	1.45661-04	4.67183-05	2.43831-09	4.95764-13	6.37854-03	1.13667+00
2.32765+03	1.32116-04	4.61176-05	2.44108-09	1.24066-13	6.37656-03	1.16198+00
2.45048+03	1.10939-04	4.61407-05	2.44261-09	8.77470-14	6.37281-03	1.16195+00
2.57102+03	9.27275-05	4.61620-05	2.44321-09	6.13451-14	6.36880-03	1.16191+00
2.69006+03	7.97035-05	4.61829-05	2.44321-09	4.52241-14	6.36452-03	1.16186+00
2.80824+03	7.48999-05	4.62010-05	2.44274-09	3.98340-14	6.36000-03	1.16182+00
2.92609+03	7.94769-05	4.62111-05	2.44136-09	4.50216-14	6.35526-03	1.16176+00
3.04407+03	9.11694-05	4.62181-05	2.43936-09	5.94655-14	6.35036-03	1.16170+00
3.16254+03	1.08100-04	4.62231-05	2.43695-09	8.37654-14	6.34529-03	1.16164+00
3.28180+03	1.31306-04	4.62325-05	2.43515-09	1.24001-13	6.34008-03	1.16158+00
3.40210+03	1.59763-04	4.62429-05	2.43342-09	1.83352-13	6.33476-03	1.16152+00
3.52364+03	1.91382-04	4.62572-05	2.43225-09	2.63089-13	6.32933-03	1.16146+00
3.64661+03	2.25479-04	4.62746-05	2.43152-09	3.65025-13	6.32980-03	1.16140+00
3.77120+03	2.58514-04	4.62934-05	2.43094-09	4.79362-13	6.31817-03	1.16134+00
3.89758+03	2.87406-04	4.63136-05	2.43048-09	5.92426-13	6.31240-03	1.16128+00
4.02592+03	3.10637-04	4.63322-05	2.42964-09	6.92212-13	6.30645-03	1.16121+00
4.15639+03	3.26947-04	4.63527-05	2.42894-09	7.67398-13	6.30027-03	1.16114+00
4.28914+03	3.36454-04	4.63755-05	2.42841-09	8.13739-13	6.29378-03	1.16107+00
4.42428+03	3.39793-04	4.64025-05	2.42829-09	8.31454-13	6.28692-03	1.16100+00
4.56193+03	3.37098-04	4.64357-05	2.42884-09	8.20259-13	6.27961-03	1.16092+00
4.70217+03	3.29392-04	4.64753-05	2.43006-09	7.85448-13	6.27177-03	1.16084+00
4.84510+03	3.17871-04	4.65219-05	2.43197-09	7.33982-13	6.26333-03	1.16075+00
4.99081+03	3.03598-04	4.65720-05	2.43397-09	6.71986-13	6.25420-03	1.16066+00
5.13939+03	2.88938-04	4.66283-05	2.43639-09	6.10987-13	6.24429-03	1.16056+00
5.29097+03	2.76206-04	4.66853-05	2.43836-09	5.60406-13	6.23356-03	1.16045+00
5.44568+03	2.67409-04	4.67424-05	2.43971-09	5.27168-13	6.22193-03	1.16033+00
5.60368+03	2.65483-04	4.67988-05	2.44032-09	5.21530-13	6.20938-03	1.16020+00
5.76511+03	2.73722-04	4.68540-05	2.44008-09	5.56825-13	6.19590-03	1.16005+00
5.93014+03	2.92985-04	4.69095-05	2.43927-09	6.41031-13	6.18153-03	1.15989+00
6.09888+03	3.22389-04	4.69674-05	2.43822-09	7.80026-13	6.16631-03	1.15973+00
6.27145+03	3.56606-04	4.70254-05	2.43639-09	9.57552-13	6.15028-03	1.15955+00
6.44797+03	3.89918-04	4.70833-05	2.43432-09	1.14860-12	6.13338-03	1.15936+00
6.62857+03	4.19365-04	4.71452-05	2.43196-09	1.33308-12	6.11554-03	1.15916+00
6.81333+03	4.41956-04	4.72119-05	2.42937-09	1.48631-12	6.09662-03	1.15894+00
7.00229+03	4.57889-04	4.72913-05	2.42817-09	1.60333-12	6.07646-03	1.15872+00
7.19541+03	4.66669-04	4.73875-05	2.42822-09	1.67559-12	6.05489-03	1.15849+00
7.39266+03	4.65921-04	4.75000-05	2.42942-09	1.68246-12	6.03163-03	1.15823+00
7.59396+03	4.57325-04	4.76292-05	2.43155-09	1.63463-12	6.00635-03	1.15796+00
7.79926+03	4.47099-04	4.77824-05	2.43536-09	1.57760-12	5.97868-03	1.15767+00
8.00843+03	4.40135-04	4.79566-05	2.44017-09	1.54559-12	5.94846-03	1.15735+00
8.22140+03	4.40819-04	4.61506-05	2.44550-09	1.56928-12	5.91538-03	1.15700+00
8.43818+03	4.51858-04	4.63552-05	2.44976-09	1.67020-12	5.87917-03	1.15661+00
8.65888+03	4.74847-04	4.65596-05	2.45114-09	1.86877-12	5.83956-03	1.15618+00
8.86371+03	5.10628-04	4.67634-05	2.44946-09	2.18908-12	5.79639-03	1.15570+00

TABLE 17 (Cont.)

J15	SERIES	7	PROBLEM	82		PAGE 2
T= 3.00000+06	SHAKES					
9.11282+03	5.54150-04	1.69730-05	2.44546-09	2.61041-12	5.74956-03	1.15156+00
9.34622+03	5.95731-04	1.72012-05	2.44063-09	3.05538-12	5.69884-03	1.15458+00
9.58372+03	6.27128-04	1.74663-05	2.43688-09	3.43601-12	5.64379-03	1.15395+00
9.82486+03	6.46655-04	1.77933-05	2.43687-09	3.72069-12	5.58372-03	1.15327+00
1.00690+04	6.56696-04	1.81941-05	2.44032-09	3.92318-12	5.51776-03	1.15254+00
1.03154+04	6.59618-04	1.86698-05	2.44648-09	4.06158-12	5.44482-03	1.15172+00
1.05633+04	6.56272-04	1.92515-05	2.45496-09	4.14586-12	5.36346-03	1.16341+00
1.08119+04	6.51580-04	1.99301-05	2.46421-09	4.23074-12	5.27282-03	1.16224+00
1.10603+04	6.55552-04	2.07073-05	2.47168-09	4.44978-12	5.17080-03	1.16090+00
1.13082+04	6.76985-04	2.15870-05	2.47430-09	4.94952-12	5.05514-03	1.17935+00
1.15548+04	7.19655-04	2.26099-05	2.47267-09	5.86291-12	4.92377-03	1.17755+00
1.17991+04	7.80777-04	2.38082-05	2.46885-09	7.27104-12	4.77799-03	1.17550+00
1.20400+04	8.50122-04	2.52521-05	2.46366-09	9.14031-12	4.61682-03	1.17319+00
1.22759+04	9.15537-04	2.70575-05	2.46272-09	1.13531-11	4.43899-03	1.17060+00
1.25044+04	9.72102-04	2.93789-05	2.46648-09	1.38935-11	4.24013-03	1.16762+00
1.27226+04	1.02031-03	3.25514-05	2.47595-09	1.69516-11	4.00823-03	1.16406+00
1.29264+04	1.07742-03	3.72809-05	2.48960-09	2.16615-11	3.72045-03	1.15949+00
1.31060+04	1.18630-03	4.68286-05	2.50082-09	3.30787-11	3.27377-03	1.16812+00
1.32451+04	1.31281-03	7.16529-05	2.51162-09	6.18452-11	2.53929-03	1.17431+00
1.33493+04	1.38729-03	9.26565-05	2.51925-09	8.91843-11	2.15132-03	1.17945+00
1.34401+04	1.42228-03	1.06937-04	2.51822-09	1.08170-10	2.00012-03	1.17247+00
1.35262+04	1.44514-03	1.17993-04	2.51893-09	1.23215-10	1.90498-03	1.16780+00
1.36104+04	1.46258-03	1.28673-04	2.52071-09	1.37628-10	1.82649-03	1.16377+00
1.36934+04	1.47804-03	1.39554-04	2.51745-09	1.52438-10	1.75530-03	1.16146+00
1.37754+04	1.48885-03	1.51428-04	2.51975-09	1.67834-10	1.66924-03	1.15764+00
1.38566+04	1.49318-03	1.64183-04	2.52475-09	1.83031-10	1.62492-03	1.15395+00
1.39368+04	1.49294-03	1.78339-04	2.52617-09	1.98748-10	1.56175-03	1.15016+00
1.40160+04	1.48926-03	1.93833-04	2.54168-09	2.14950-10	1.50332-03	1.14659+00
1.40943+04	1.48340-03	2.10713-04	2.55603-09	2.31835-10	1.44679-03	1.14305+00
1.41717+04	1.48179-03	2.28748-04	2.56958-09	2.51133-10	1.39262-03	1.13959+00
1.42481+04	1.49169-03	2.49137-04	2.57743-09	2.77191-10	1.33397-03	1.14778+00
1.43236+04	1.50548-03	2.70991-04	2.57900-09	3.07101-10	1.27257-03	1.15487+00
1.43981+04	1.51840-03	2.94984-04	2.57699-09	3.40058-10	1.20787-03	1.15155+00
1.44713+04	1.53005-03	3.23999-04	2.57674-09	3.79251-10	1.13424-03	1.16677+00
1.45428+04	1.53883-03	3.57182-04	2.58074-09	4.22909-10	1.05928-03	1.18344+00
1.46125+04	1.54343-03	3.93237-04	2.58861-09	4.68382-10	9.90506-04	1.18998+00
1.46809+04	1.54505-03	4.30690-04	2.60246-09	5.14068-10	9.33148-04	1.16852+00
1.47480+04	1.54405-03	4.71238-04	2.62175-09	5.61735-10	8.85464-04	1.16463+00
1.48142+04	1.54098-03	5.12772-04	2.64949-09	6.08819-10	8.47890-04	1.13968+00
1.48798+04	1.54496-03	5.55180-04	2.67080-09	6.62583-10	8.16761-04	1.13653+00
1.49455+04	1.55731-03	5.93242-04	2.67174-09	7.19381-10	7.89344-04	1.13378+00
1.50120+04	1.57249-03	6.28596-04	2.67080-09	7.77191-10	7.67077-04	1.12211+00
1.50797+04	1.58260-03	6.61092-04	2.67680-09	8.27892-10	7.50317-04	1.12024+00
1.51491+04	1.59091-03	6.91295-04	2.69422-09	8.74844-10	7.37417-04	1.11878+00
1.52206+04	1.59989-03	7.21992-04	2.72128-09	9.24031-10	7.26474-04	1.11752+00
1.52937+04	1.60159-03	7.65303-04	2.76034-09	9.81537-10	7.12405-04	1.11588+00
1.53673+04	1.60129-03	8.21528-04	2.79241-09	1.05325-09	6.93668-04	1.11368+00
1.54412+04	1.61365-03	8.80218-04	2.80872-09	1.14604-09	6.72357-04	1.12242+00
1.55155+04	1.63578-03	9.40287-04	2.81405-09	1.25806-09	6.50958-04	1.12005+00
1.55899+04	1.65282-03	1.01141-03	2.84980-09	1.38150-09	6.31173-04	1.11804+00

TABLE 17 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 3.00000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA Z
1.56645+04	1.65772-03	1.08334-03	2.88395-09	1.48852-09	6.12726-04	1.11620+00
1.57390+04	1.65253-03	1.17365-03	2.93818-09	1.60254-09	5.90770-04	1.15407+00
1.58130+04	1.65864-03	1.26720-03	2.98531-09	1.74314-09	5.67069-04	1.15364+00
1.58870+04	1.67799-03	1.36339-03	3.01546-09	1.91947-09	5.42646-04	1.15056+00
1.59613+04	1.69355-03	1.44910-03	3.00775-09	2.07813-09	5.18607-04	1.14873+00
1.60355+04	1.70148-03	1.50233-03	3.06905-09	2.29046-09	4.92578-04	1.19663+00
1.61086+04	1.70175-03	1.73076-03	3.15104-09	2.50609-09	4.69268-04	1.19459+00
1.61805+04	1.70640-03	1.89054-03	3.23277-09	2.75248-09	4.47114-04	1.19261+00
1.62520+04	1.72639-03	2.02879-03	3.26515-09	3.02351-09	4.26738-04	1.17818+00
1.63239+04	1.74916-03	2.16486-03	3.29596-09	3.31183-09	4.09807-04	1.17602+00
1.63961+04	1.75648-03	2.32437-03	3.36535-09	3.58563-09	3.95011-04	1.17419+00
1.64683+04	1.75338-03	2.51270-03	3.48585-09	3.86246-09	3.82807-04	1.17281+00
1.65404+04	1.76225-03	2.69752-03	3.58930-09	4.18875-09	3.71058-04	1.17147+00
1.66135+04	1.78750-03	2.83766-03	3.61009-09	4.53370-09	3.58592-04	1.16990+00
1.66879+04	1.80513-03	3.00641-03	3.68244-09	4.89817-09	3.48411-04	1.16871+00
1.67629+04	1.80518-03	3.23791-03	3.83592-09	5.27564-09	3.39260-04	1.18319+00
1.68380+04	1.81087-03	3.46839-03	3.98026-09	5.68699-09	3.30291-04	1.18310+00
1.69139+04	1.83576-03	3.67924-03	4.02427-09	6.20006-09	3.16933-04	1.18238+00
1.69904+04	1.85696-03	3.94559-03	4.11815-09	6.80286-09	3.04392-04	1.18185+00
1.70663+04	1.86282-03	4.32675-03	4.33628-09	7.50713-09	2.93668-04	1.18215+00
1.71411+04	1.87922-03	4.69559-03	4.51529-09	8.29171-09	2.83339-04	1.18229+00
1.72162+04	1.90938-03	4.99445-03	4.59798-09	9.10474-09	2.72558-04	1.18211+00
1.72913+04	1.92552-03	5.42300-03	4.81441-09	1.00532-08	2.63664-04	1.18258+00
1.73651+04	1.93488-03	5.98258-03	5.10926-09	1.11989-08	2.54435-04	1.24700+00
1.74382+04	1.96231-03	6.42567-03	5.25305-09	1.23727-08	2.43670-04	1.24724+00
1.75113+04	1.98908-03	6.93222-03	5.44028-09	1.37136-08	2.34076-04	1.24753+00
1.75834+04	1.99709-03	7.65163-03	5.83880-09	1.52588-08	2.27713-04	1.24801+00
1.76675+04	1.78926-03	5.98842-03	6.01397-09	9.71587-09	2.01540-04	1.24608+00
1.78681+04	9.39417-04	2.02715-03	2.67635-09	1.31146-09	6.18124-05	1.36906+00
1.82608+04	1.53822-04	1.34037-03	2.20670-10	2.97919-11	2.40466-05	1.36998+00
1.87583+04	4.91355-06	1.29415-03	1.04383-10	3.00090-14	2.35482-05	1.36991+00
1.92791+04	1.00987-07	1.29300-03	1.01818-10	1.27161-17	2.35401-05	1.36972+00
1.98147+04	1.86367-09	1.29299-03	1.01767-10	4.35642-21	2.35400-05	1.36972+00
2.03652+04	2.83399-11	1.29299-03	1.01766-10	1.03847-24	2.35400-05	1.36972+00

TABLE 18

J15 SERIES 7 PROBLEM 82
T= 3.10000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.59042+02	8.23133-05	4.58832-05	2.35023-09	3.10881-13	6.30002-03	1.13543+00
1.67183+03	1.09581-04	4.58702-05	2.36149-09	3.44899-13	6.29215-03	1.13532+00
1.91235+03	4.93466-05	4.60576-05	2.35357-09	5.66975-14	6.28897-03	1.13532+00
2.05493+03	5.71308-05	4.59167-05	2.34436-09	7.87989-14	6.28685-03	1.13526+00
2.14857+03	8.09360-05	4.58315-05	2.33927-09	1.52801-13	6.28545-03	1.13522+00
2.21281+03	1.00969-04	4.58113-05	2.33770-09	2.35456-13	6.28447-03	1.13521+00
2.25797+03	1.16973-04	4.57934-05	2.33641-09	3.14350-13	6.28380-03	1.13519+00
2.33953+03	1.45839-04	1.38344-05	2.33544-09	1.50489-13	6.28161-03	1.16069+00
2.46375+03	1.86064-04	1.38436-05	2.33464-09	2.41913-13	6.27794-03	1.16065+00
2.58569+03	2.19595-04	1.38517-05	2.33371-09	3.35614-13	6.27438-03	1.16061+00
2.70614+03	2.46220-04	1.38603-05	2.33291-09	4.21013-13	6.27087-03	1.16057+00
2.82572+03	2.64939-04	1.38685-05	2.33202-09	4.87119-13	6.26735-03	1.16053+00
2.94492+03	2.76074-04	1.38782-05	2.33134-09	5.28973-13	6.26376-03	1.16049+00
3.06418+03	2.80209-04	1.38874-05	2.33049-09	5.45201-13	6.26004-03	1.16044+00
3.18381+03	2.78706-04	1.39033-05	2.33058-09	5.40008-13	6.25614-03	1.16040+00
3.30411+03	2.73451-04	1.39234-05	2.33119-09	5.20637-13	6.25202-03	1.16036+00
3.42529+03	2.64870-04	1.39493-05	2.33255-09	4.89509-13	6.24764-03	1.16032+00
3.54757+03	2.52134-04	1.39795-05	2.33438-09	4.44736-13	6.24295-03	1.16027+00
3.67115+03	2.36404-04	1.40128-05	2.33658-09	3.92046-13	6.23789-03	1.16022+00
3.79623+03	2.19776-04	1.40457-05	2.33853-09	3.39703-13	6.23242-03	1.16017+00
3.92299+03	2.04057-04	1.40814-05	2.34034-09	2.93552-13	6.22652-03	1.16011+00
4.05161+03	1.90718-04	1.41190-05	2.34203-09	2.57029-13	6.22014-03	1.16005+00
4.18226+03	1.81262-04	1.41556-05	2.34344-09	2.32635-13	6.21327-03	1.15998+00
4.31511+03	1.77978-04	1.41903-05	2.34424-09	2.24748-13	6.20591-03	1.15990+00
4.45035+03	1.82550-04	1.42243-05	2.34460-09	2.37142-13	6.19807-03	1.15982+00
4.58813+03	1.95597-04	1.42577-05	2.34458-09	2.73274-13	6.18976-03	1.15973+00
4.72659+03	2.17719-04	1.42908-05	2.34421-09	3.39993-13	6.18103-03	1.15963+00
4.87190+03	2.46857-04	1.43238-05	2.34357-09	4.38200-13	6.17190-03	1.15953+00
5.01817+03	2.79300-04	1.43573-05	2.34274-09	5.62010-13	6.16239-03	1.15942+00
5.16755+03	3.11429-04	1.43886-05	2.34130-09	6.99466-13	6.15249-03	1.15931+00
5.32019+03	3.40171-04	1.44197-05	2.33954-09	8.35582-13	6.14215-03	1.15920+00
5.47621+03	3.63567-04	1.44523-05	2.33768-09	9.55884-13	6.13132-03	1.15907+00
5.63572+03	3.81200-04	1.44883-05	2.33596-09	1.05310-12	6.11991-03	1.15894+00
5.79881+03	3.92909-04	1.45311-05	2.33480-09	1.12176-12	6.10783-03	1.15881+00
5.96553+03	3.97942-04	1.45830-05	2.33449-09	1.15467-12	6.09498-03	1.15867+00
6.13591+03	3.96734-04	1.46440-05	2.33493-09	1.15250-12	6.08122-03	1.15852+00
6.30998+03	3.89762-04	1.47177-05	2.33645-09	1.11809-12	6.06640-03	1.15836+00
6.48775+03	3.78369-04	1.48005-05	2.33865-09	1.05976-12	6.05036-03	1.15819+00
6.66927+03	3.65051-04	1.48940-05	2.34136-09	9.92746-13	6.03291-03	1.15801+00
6.85458+03	3.53062-04	1.49942-05	2.34394-09	9.34742-13	6.01388-03	1.15781+00
7.04375+03	3.47789-04	1.51054-05	2.34686-09	9.13551-13	5.99311-03	1.15759+00
7.23682+03	3.53211-04	1.52238-05	2.34952-09	9.49878-13	5.97054-03	1.15735+00
7.43391+03	3.70002-04	1.53434-05	2.35099-09	1.05125-12	5.94616-03	1.15708+00
7.63520+03	3.96933-04	1.54592-05	2.35053-09	1.21973-12	5.91995-03	1.15679+00
7.84089+03	4.29602-04	1.55686-05	2.34774-09	1.43091-12	5.89189-03	1.15648+00
8.05118+03	4.64402-04	1.56791-05	2.34367-09	1.69323-12	5.86190-03	1.15613+00
8.26611+03	4.96635-04	1.58051-05	2.34023-09	1.95080-12	5.82990-03	1.15576+00
8.48560+03	5.19233-04	1.59502-05	2.33769-09	2.15064-12	5.79567-03	1.15538+00
8.70949+03	5.29187-04	1.61259-05	2.33730-09	2.25797-12	5.75883-03	1.15496+00
8.93748+03	5.28922-04	1.63381-05	2.33933-09	2.28540-12	5.71889-03	1.15452+00

TABLE 18 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 3.10000+06 SHAKES

PAGE 2

RAD1US(CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
9.16925+03	5.24533-04	1.65932-05	2.34407-09	2.28273-12	5.67530-03	1.15404+00
9.40444+03	5.20362-04	1.68898-05	2.35067-09	2.28671-12	5.62751-03	1.15352+00
9.64274+03	5.16897-04	1.72260-05	2.35804-09	2.30126-12	5.57479-03	1.15295+00
9.88390+03	5.17332-04	1.75998-05	2.36497-09	2.35518-12	5.51621-03	1.15230+00
1.01277+04	5.29260-04	1.80056-05	2.36962-09	2.52271-12	5.45076-03	1.15157+00
1.03741+04	5.54317-04	1.84465-05	2.37002-09	2.83644-12	5.37753-03	1.18335+00
1.06229+04	5.89537-04	1.89303-05	2.36694-09	3.29347-12	5.29679-03	1.18228+00
1.08736+04	6.31515-04	1.94758-05	2.36249-09	3.88825-12	5.20773-03	1.18108+00
1.11257+04	6.74376-04	2.01250-05	2.35943-09	4.58067-12	5.10932-03	1.17975+00
1.13781+04	7.10007-04	2.09216-05	2.35989-09	5.27566-12	5.00016-03	1.17827+00
1.16293+04	7.33467-04	2.19056-05	2.36503-09	5.89317-12	4.87938-03	1.17661+00
1.18779+04	7.47896-04	2.31051-05	2.37397-09	6.46227-12	4.74613-03	1.17477+00
1.21225+04	7.61115-04	2.45582-05	2.38456-09	7.11392-12	4.59302-03	1.17268+00
1.23616+04	7.87719-04	2.63024-05	2.39309-C9	8.16511-12	4.43241-03	1.17029+00
1.25940+04	8.38292-04	2.84249-05	2.39700-09	1.00017-11	4.24526-03	1.16750+00
1.28175+04	9.12920-04	3.11816-05	2.39785-09	1.30227-11	4.02725-03	1.16414+00
1.30290+04	1.01037-03	3.50071-05	2.39593-09	1.79203-11	3.76625-03	1.15996+00
1.32210+04	1.13475-03	4.20924-05	2.39654-09	2.72037-11	3.38740-03	1.18929+00
1.33743+04	1.27824-03	6.30440-05	2.40035-09	5.16735-11	2.67125-03	1.17552+00
1.34876+04	1.37389-03	8.60085-05	2.40406-09	8.11944-11	2.18596-03	1.16684+00
1.35819+04	1.40133-03	1.02487-04	2.41124-09	1.00629-10	1.99761-03	1.17288+00
1.36695+04	1.40779-03	1.13937-04	2.41837-09	1.12905-10	1.89780-03	1.16794+00
1.37547+04	1.40652-03	1.24635-04	2.42678-09	1.23283-10	1.81929-03	1.16386+00
1.38383+04	1.40352-03	1.36008-04	2.44134-09	1.33958-10	1.74943-03	1.16105+00
1.39206+04	1.40519-03	1.47936-04	2.45115-09	1.46074-10	1.68515-03	1.15728+00
1.40020+04	1.41450-03	1.60520-04	2.45761-09	1.60589-10	1.62001-03	1.15359+00
1.40824+04	1.43206-03	1.74370-04	2.46144-09	1.78808-10	1.55710-03	1.14982+00
1.41620+04	1.45005-03	1.88590-04	2.45999-09	1.98275-10	1.49787-03	1.14617+00
1.42410+04	1.46588-03	2.04196-04	2.46235-09	2.19396-10	1.44087-03	1.14258+00
1.43194+04	1.47886-03	2.20766-04	2.46264-09	2.41414-10	1.38611-03	1.13905+00
1.43970+04	1.48585-03	2.40008-04	2.46363-09	2.64940-10	1.32671-03	1.14670+00
1.44736+04	1.48956-03	2.61675-04	2.47141-09	2.90300-10	1.26540-03	1.15366+00
1.45490+04	1.48884-03	2.86008-04	2.47956-09	3.16991-10	1.20092-03	1.16071+00
1.46227+04	1.48622-03	3.15786-04	2.49521-09	3.48760-10	1.12863-03	1.16582+00
1.46943+04	1.48440-03	3.49891-04	2.51427-09	3.85482-10	1.05465-03	1.18285+00
1.47640+04	1.48455-C3	3.86505-04	2.53361-09	4.25905-10	9.87076-04	1.18993+00
1.48322+04	1.49312-03	4.21754-04	2.53704-09	4.70143-10	9.29870-04	1.16886+00
1.48997+04	1.50823-03	4.58146-04	2.53475-09	5.21098-10	8.81380-04	1.16509+00
1.49667+04	1.52146-03	4.93783-04	2.53389-09	5.71522-10	8.43614-04	1.14004+00
1.50336+04	1.52998-03	5.32580-04	2.54241-09	6.23347-10	8.12064-04	1.13693+00
1.51006+04	1.53495-03	5.71371-04	2.55619-09	6.73096-10	7.85281-04	1.13414+00
1.51679+04	1.54009-03	6.08986-G4	2.57460-09	7.22223-10	7.64237-04	1.12185+00
1.52362+04	1.54184-03	6.44343-04	2.59854-09	7.65888-10	7.48069-04	1.12003+00
1.53058+04	1.54111-03	6.76840-04	2.62881-09	8.03758-10	7.35544-04	1.11860+00
1.53774+04	1.54686-03	7.04891-04	2.64458-09	8.43332-10	7.24085-04	1.11729+00
1.54512+04	1.56175-03	7.38034-04	2.64366-09	9.00094-10	7.08839-04	1.11554+00
1.55264+04	1.58076-03	7.85769-04	2.64964-09	9.81768-10	6.89594-04	1.11329+00
1.56018+04	1.59126-03	8.46917-04	2.68319-09	1.07224-09	6.68870-04	1.12126+00
1.56770+04	1.59231-03	9.12395-04	2.71624-09	1.15667-09	6.48349-04	1.11916+00
1.57521+04	1.58981-03	9.83932-04	2.75965-09	1.24344-09	6.28961-04	1.11724+00

TABLE 18 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 3.10000+06 SHAKES

PAGE 3

RAD1US(CM)	VEL(CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
1.58271+04	1.59880-03	1.05626-03	2.79833-09	1.35005-09	6.10496-04	1.11542+00
1.59023+04	1.62166-03	1.13337-03	2.81408-09	1.49033-09	5.06529-04	1.15208+00
1.59778+04	1.63951-03	1.21430-03	2.83437-09	1.63203-09	5.62605-04	1.15118+00
1.60534+04	1.64399-03	1.30200-03	2.85705-09	1.75946-09	5.39070-04	1.14955+00
1.61286+04	1.64426-03	1.42303-03	2.94305-09	1.92366-09	5.17069-04	1.14830+00
1.62026+04	1.64681-03	1.55224-03	2.99914-09	2.10484-09	4.90883-04	1.19646+00
1.62761+04	1.65968-03	1.67192-03	3.02074-09	2.30280-09	4.66018-04	1.19426+00
1.63497+04	1.66180-03	1.79469-03	3.03511-09	2.53820-09	4.42633-04	1.19214+00
1.64232+04	1.69387-03	1.93705-03	3.08955-09	2.77888-09	4.23527-04	1.17747+00
1.64963+04	1.69380-03	2.10407-03	3.18737-09	3.01941-09	4.07962-04	1.17558+00
1.65687+04	1.69777-03	2.28223-03	3.29297-09	3.28922-09	3.93818-04	1.17392+00
1.66414+04	1.71751-03	2.42159-03	3.33474-09	3.57189-09	3.80351-04	1.17223+00
1.67155+04	1.73958-03	2.54513-03	3.34784-09	3.85106-09	3.67442-04	1.17057+00
1.67905+04	1.74608-03	2.73307-03	3.45239-09	4.16627-09	3.56462-04	1.16933+00
1.68655+04	1.74573-03	2.94751-03	3.59656-09	4.49138-09	3.47278-04	1.16841+00
1.69408+04	1.76075-03	3.13377-03	3.68736-09	4.85802-09	3.37069-04	1.18248+00
1.70178+04	1.78679-03	3.27627-03	3.71497-09	5.23020-09	3.26631-04	1.18185+00
1.70958+04	1.79864-03	3.52467-03	3.82207-09	5.70136-09	3.14458-04	1.18145+00
1.71732+04	1.80048-03	3.85527-03	4.00553-09	6.24891-09	3.03113-04	1.18145+00
1.72500+04	1.81895-03	4.14107-03	4.11409-09	6.85106-09	2.91466-04	1.18119+00
1.73274+04	1.84567-03	4.40372-03	4.18173-09	7.50092-09	2.80085-04	1.18085+00
1.74046+04	1.85677-03	4.80664-03	4.39265-09	8.28567-09	2.70753-04	1.18124+00
1.74808+04	1.86915-03	5.24719-03	4.62879-09	9.16654-09	2.62300-04	1.18182+00
1.75566+04	1.89850-03	5.61930-03	4.72327-09	1.01276-08	2.50407-04	1.24656+00
1.76324+04	1.91895-03	6.07731-03	4.89879-09	1.11895-08	2.40327-04	1.24685+00
1.77070+04	1.92628-03	6.72895-03	5.24130-09	1.24841-08	2.32344-04	1.24732+00
1.77805+04	1.94986-03	7.25397-03	5.46011-09	1.37910-08	2.24577-04	1.24765+00
1.78558+04	1.93761-03	7.43849-03	5.62085-09	1.39671-08	2.15179-04	1.24764+00
1.79848+04	1.37334-03	3.35017-03	4.87222-09	3.63451-09	1.34084-04	1.29698+00
1.802898+04	4.49285-04	1.49605-03	7.45081-10	2.65604-10	2.81989-05	1.37004+00
1.87597+04	2.95962-05	1.30062-03	1.18602-10	1.08898-12	2.35983-05	1.36992+00
1.92791+04	6.81459-07	1.29313-03	1.02124-10	5.77423-16	2.35410-05	1.36972+00
1.98147+04	1.36031-08	1.29299-03	1.01773-10	2.30996-19	2.35400-05	1.36972+00
2.03652+04	2.19345-10	1.29299-03	1.01766-10	7.39306-23	2.35400-05	1.36972+00
2.09309+04	2.25812-13	1.29299-03	1.01766-10	6.59308-29	2.35400-05	1.36972+00

TABLE 19

J15 SERIES 7 PROBLEM 02
 $T = 3.20000 \times 10^6$ SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/S)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
7.64169+02	2.81462-05	4.49476-05	2.25436-09	3.56080-14	6.21301-03	1.13406+00
1.68339+03	1.33701-04	4.49352-05	2.24879-09	5.36261-13	6.20409-03	1.13393+00
1.92637+03	2.21076-04	4.48286-05	2.24247-09	1.09772-12	6.20216-03	1.13388+00
2.07068+03	2.27326-04	4.47401-05	2.23742-09	1.15633-12	6.20090-03	1.13385+00
2.16521+03	2.17077-04	4.47457-05	2.23719-09	1.05522-12	6.19999-03	1.13384+00
2.22990+03	2.05539-04	4.48170-05	2.24032-09	9.47233-13	6.19932-03	1.13384+00
2.27529+03	1.96795-04	4.48676-05	2.24272-09	8.69136-13	6.19882-03	1.13385+00
2.35711+03	1.79306-04	1.35747-05	2.24484-09	2.19901-13	6.19714-03	1.15952+00
2.48166+03	1.52386-04	1.35977-05	2.24694-09	1.59058-13	6.19393-03	1.15949+00
2.60386+03	1.27395-04	1.36220-05	2.24872-09	1.11491-13	6.19044-03	1.15946+00
2.72448+03	1.05899-04	1.36475-05	2.25016-09	7.71638-14	6.18667-03	1.15942+00
2.84415+03	8.94245-05	1.36746-05	2.25137-09	5.49922-14	6.18261-03	1.15939+00
2.96336+03	7.89678-05	1.37028-05	2.25242-09	4.28163-14	6.17827-03	1.15934+00
3.08256+03	7.50481-05	1.37276-05	2.25333-09	3.86588-14	6.17367-03	1.15930+00
3.20214+03	6.08190-05	1.37498-05	2.25383-09	4.51551-14	6.16882-03	1.15925+00
3.32241+03	9.70473-05	1.37728-05	2.25433-09	6.55730-14	6.16377-03	1.15919+00
3.44365+03	1.20361-04	1.37952-05	2.25463-09	1.01111-13	6.15857-03	1.15914+00
3.56610+03	1.48439-04	1.38160-05	2.25458-09	1.53758-13	6.15321-03	1.15908+00
3.69000+03	1.79143-04	1.38327-05	2.25380-09	2.23675-13	6.14772-03	1.15902+00
3.81559+03	2.10108-04	1.38479-05	2.25271-09	3.07264-13	6.14208-03	1.15895+00
3.94305+03	2.39222-04	1.38619-05	2.25134-09	3.97974-13	6.13629-03	1.15889+00
4.07257+03	2.64909-04	1.38746-05	2.24965-09	4.87801-13	6.13031-03	1.15882+00
4.20432+03	2.85932-04	1.38861-05	2.24765-09	5.68233-13	6.12411-03	1.15874+00
4.33847+03	3.02008-04	1.38997-05	2.24579-09	6.34214-13	6.11764-03	1.15867+00
4.47513+03	3.14067-04	1.39185-05	2.24453-09	6.86638-13	6.11086-03	1.15859+00
4.61440+03	3.22158-04	1.39420-05	2.24373-09	7.23546-13	6.10371-03	1.15851+00
4.75639+03	3.24961-04	1.39711-05	2.24354-09	7.37671-13	6.09614-03	1.15843+00
4.90118+03	3.22384-04	1.40060-05	2.24388-09	7.27876-13	6.08808-03	1.15834+00
5.04886+03	3.15248-04	1.40482-05	2.24497-09	6.98213-13	6.07945-03	1.15825+00
5.19949+03	3.04719-04	1.40964-05	2.24653-09	6.54695-13	6.07016-03	1.15815+00
5.35316+03	2.92017-04	1.41513-05	2.24859-09	6.03695-13	6.06013-03	1.15805+00
5.50996+03	2.79781-04	1.42124-05	2.25104-09	5.56463-13	6.04926-03	1.15794+00
5.66997+03	2.71000-04	1.42779-05	2.25355-09	5.24375-13	6.03750-03	1.15781+00
5.83328+03	2.68261-04	1.43496-05	2.25634-09	5.16331-13	6.02480-03	1.15768+00
5.99999+03	2.74126-04	1.44252-05	2.25903-09	5.42191-13	6.01111-03	1.15754+00
6.17021+03	2.88361-04	1.45014-05	2.26111-09	6.03493-13	5.99643-03	1.15739+00
6.34412+03	3.09726-04	1.45742-05	2.26201-09	7.00168-13	5.98076-03	1.15722+00
6.52191+03	3.36056-04	1.46396-05	2.26115-09	8.28079-13	5.96410-03	1.15703+00
6.70380+03	3.65205-04	1.47003-05	2.25891-09	9.82026-13	5.94645-03	1.15683+00
6.88996+03	3.94325-04	1.47595-05	2.25574-09	1.14892-12	5.92777-03	1.15661+00
7.08051+03	4.19868-04	1.48248-05	2.25272-09	1.30773-12	5.90801-03	1.15639+00
7.27547+03	4.38623-04	1.49011-05	2.25042-09	1.43379-12	5.88704-03	1.15615+00
7.47481+03	4.48401-04	1.49953-05	2.24967-09	1.50756-12	5.86470-03	1.15590+00
7.67843+03	4.48368-04	1.51094-05	2.25056-09	1.51880-12	5.84075-03	1.15563+00
7.88624+03	4.39428-04	1.52429-05	2.25278-09	1.47199-12	5.81488-03	1.15535+00
8.09812+03	4.27038-04	1.53997-05	2.25653-09	1.40445-12	5.78676-03	1.15505+00
8.31396+03	4.16675-04	1.55778-05	2.26128-09	1.35244-12	5.75610-03	1.15472+00
8.53366+03	4.11539-04	1.57792-05	2.26696-09	1.33622-12	5.72259-03	1.15436+00
8.75714+03	4.11369-04	1.59946-05	2.27201-09	1.35335-12	5.68591-03	1.15396+00
8.98447+03	4.17930-04	1.62179-05	2.27521-09	1.31663-12	5.64562-03	1.15351+00

TABLE 19 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 3.20000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
9.21578+03	4.36169-04	1.64455-05	2.27378-09	1.56559-12	5.60139-03	1.15302+00
9.45120+03	4.65130-04	1.66709-05	2.27369-09	1.80649-12	5.55300-03	1.15246+00
9.69077+03	4.97308-04	1.69293-05	2.27012-09	2.09551-12	5.50021-03	1.15185+00
9.93434+03	5.26854-04	1.72148-05	2.26680-09	2.39087-12	5.44253-03	1.15118+00
1.01814+04	5.51673-04	1.75641-05	2.26507-09	2.67379-12	5.37939-03	1.15007+00
1.04313+04	5.68040-04	1.79902-05	2.26716-09	2.90272-12	5.31098-03	1.15217+00
1.06832+04	5.73774-04	1.84987-05	2.27234-09	3.04505-12	5.23620-03	1.15119+00
1.09363+04	5.73638-04	1.91076-05	2.28062-09	3.14378-12	5.15352-03	1.15011+00
1.11898+04	5.75486-04	1.98160-05	2.28932-09	3.28142-12	5.06113-03	1.15089+00
1.14430+04	5.86464-04	2.06273-05	2.29577-09	3.54805-12	4.95689-03	1.17748+00
1.16953+04	6.13675-04	2.15369-05	2.29789-09	4.05904-12	4.84086-03	1.17588+00
1.19461+04	6.58333-04	2.25792-05	2.29665-09	4.90067-12	4.71220-03	1.17406+00
1.21945+04	7.14906-04	2.38159-05	2.29466-09	6.09705-12	4.57003-03	1.17201+00
1.24391+04	7.77061-04	2.53139-05	2.29341-09	7.65532-12	4.41335-03	1.16971+00
1.26781+04	8.39134-04	2.71989-05	2.29501-09	9.58848-12	4.23848-03	1.16709+00
1.29091+04	9.00656-04	2.96698-05	2.29922-09	1.20483-11	4.03746-03	1.16400+00
1.31288+04	9.63475-04	3.30668-05	2.30606-09	1.53642-11	3.80041-03	1.16024+00
1.33305+04	1.03562-03	3.90116-05	2.31602-09	2.09523-11	3.46370-03	1.15468+00
1.34965+04	1.14903-03	5.56164-05	2.32851-09	3.68619-11	2.82052-03	1.17778+00
1.36195+04	1.26070-03	8.01789-05	2.33822-09	6.37766-11	2.24793-03	1.16701+00
1.37172+04	1.31569-03	9.89150-05	2.34204-09	8.56258-11	2.00282-03	1.17350+00
1.38059+04	1.34206-03	1.10773-04	2.34280-09	9.97637-11	1.89286-03	1.16810+00
1.38919+04	1.36291-03	1.20963-04	2.34215-09	1.12352-10	1.81238-03	1.16396+00
1.39766+04	1.38023-03	1.31414-04	2.34296-09	1.25176-10	1.74131-03	1.16050+00
1.40603+04	1.39367-03	1.42563-04	2.34460-09	1.38455-10	1.67474-03	1.15669+00
1.41430+04	1.40592-03	1.54490-04	2.34740-09	1.52687-10	1.61171-03	1.15298+00
1.42249+04	1.41331-03	1.67774-04	2.35082-09	1.67559-10	1.54934-03	1.14922+00
1.43058+04	1.41755-03	1.82166-04	2.36052-09	1.83027-10	1.49120-03	1.14564+00
1.43858+04	1.41945-03	1.97705-04	2.36969-09	1.99173-10	1.43505-03	1.14210+00
1.44650+04	1.41981-03	2.14849-04	2.38364-09	2.16554-10	1.38114-03	1.13863+00
1.45429+04	1.42119-03	2.34919-04	2.40027-09	2.37243-10	1.32247-03	1.14609+00
1.46195+04	1.42605-03	2.56600-04	2.41256-09	2.60914-10	1.26119-03	1.15298+00
1.46948+04	1.43799-03	2.80770-04	2.42157-09	2.90296-10	1.19607-03	1.16801+00
1.47688+04	1.45429-03	3.07790-04	2.41612-09	3.25495-10	1.12287-03	1.16487+00
1.48411+04	1.46784-03	3.38783-04	2.41481-09	3.64966-10	1.04766-03	1.10195+00
1.49118+04	1.47500-03	3.72150-04	2.41768-09	4.04831-10	9.79757-04	1.18982+00
1.49813+04	1.47815-03	4.06349-04	2.42470-09	4.43920-10	9.24113-04	1.16948+00
1.50497+04	1.48076-03	4.43527-04	2.43848-09	4.86911-10	8.76677-04	1.16564+00
1.51174+04	1.48547-03	4.80731-04	2.45494-09	5.30395-10	8.40633-04	1.14031+00
1.51846+04	1.48621-03	5.20179-04	2.47282-09	5.74491-10	8.03469-04	1.13716+00
1.52517+04	1.48537-03	5.59511-04	2.49475-09	6.17233-10	7.83157-04	1.13436+00
1.53192+04	1.49121-03	5.95412-04	2.50867-09	6.62027-10	7.62248-04	1.12167+00
1.53879+04	1.50549-03	6.25152-04	2.50895-09	7.08471-10	7.45308-04	1.11978+00
1.54586+04	1.52222-03	6.50480-04	2.50941-09	7.53657-10	7.31850-04	1.11826+00
1.55317+04	1.53389-03	6.76773-04	2.52006-09	7.96166-10	7.20180-04	1.11692+00
1.56066+04	1.53595-03	7.15975-04	2.54974-09	8.44540-10	7.05941-04	1.11526+00
1.56822+04	1.53395-03	7.69060-04	2.58225-09	9.04805-10	6.87404-04	1.12271+00
1.57578+04	1.53180-03	8.27033-04	2.60892-09	9.70285-10	6.66641-04	1.12055+00
1.58334+04	1.54191-03	8.88987-04	2.63449-09	1.05683-09	6.46013-04	1.11840+00
1.59094+04	1.56538-03	9.47256-04	2.63962-09	1.16065-09	6.25797-04	1.11615+00

TABLE 19 (Cont.)

J15 SERIES 7 PROBLEM 82
 $T = 3.20000 \times 10^6$ SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.59861e+04	1.58158e-03	1.01045e-03	2.65553e-09	1.26377e-09	6.06902e-04	1.11411e+00
1.60629e+04	1.58512e-03	1.09025e-03	2.68426e-09	1.36969e-09	5.82351e-04	1.14998e+00
1.61393e+04	1.58330e-03	1.18188e-03	2.74308e-09	1.48140e-09	5.59915e-04	1.14968e+00
1.62150e+04	1.59029e-03	1.28282e-03	2.80643e-09	1.62219e-09	5.37646e-04	1.14968e+00
1.62904e+04	1.60479e-03	1.37784e-03	2.82660e-09	1.77425e-09	5.13402e-04	1.19835e+00
1.63660e+04	1.62390e-03	1.47926e-03	2.82789e-09	1.95057e-09	4.86198e-04	1.19598e+00
1.64414e+04	1.63897e-03	1.60493e-03	2.87454e-09	2.15560e-09	4.62419e-04	1.19388e+00
1.65159e+04	1.63686e-03	1.74813e-03	2.94172e-09	2.34191e-09	4.40674e-04	1.19192e+00
1.65895e+04	1.63425e-03	1.90174e-03	3.02335e-09	2.53956e-09	4.22340e-04	1.17720e+00
1.66629e+04	1.64773e-03	2.04242e-03	3.07429e-09	2.77277e-09	4.05835e-04	1.17511e+00
1.67370e+04	1.67256e-03	2.16259e-03	3.08722e-09	3.02506e-09	3.90236e-04	1.17308e+00
1.68120e+04	1.68838e-03	2.30286e-03	3.14021e-09	3.28231e-09	3.77212e-04	1.17146e+00
1.68871e+04	1.68886e-03	2.49451e-03	3.26887e-09	3.55750e-09	3.66289e-04	1.17026e+00
1.69621e+04	1.69245e-03	2.67750e-03	3.36908e-09	3.83474e-09	3.55253e-04	1.16902e+00
1.70381e+04	1.71351e-03	2.81885e-03	3.40952e-09	4.13852e-09	3.44648e-04	1.16772e+00
1.71158e+04	1.73650e-03	2.96151e-03	3.44461e-09	4.46523e-09	3.33495e-04	1.16126e+00
1.71945e+04	1.74284e-03	3.17396e-03	3.57533e-09	4.82047e-09	3.24690e-04	1.16116e+00
1.72729e+04	1.74722e-03	3.45338e-03	3.72943e-09	5.27128e-09	3.13248e-04	1.16101e+00
1.73513e+04	1.76834e-03	3.68087e-03	3.78911e-09	5.75555e-09	3.00503e-04	1.16044e+00
1.74305e+04	1.78927e-03	3.91886e-03	3.85144e-09	6.27315e-09	2.88604e-04	1.17999e+00
1.75095e+04	1.79460e-03	4.28025e-03	4.04238e-09	6.89243e-09	2.78712e-04	1.16022e+00
1.75875e+04	1.80744e-03	4.64287e-03	4.21486e-09	7.58417e-09	2.69073e-04	1.16046e+00
1.76660e+04	1.83749e-03	4.91391e-03	4.28082e-09	8.29627e-09	2.59296e-04	1.16032e+00
1.77445e+04	1.85515e-03	5.36542e-03	4.45785e-09	9.23273e-09	2.47581e-04	1.24624e+00
1.78214e+04	1.86174e-03	5.92979e-03	4.75038e-09	1.02766e-08	2.38844e-04	1.24668e+00
1.78973e+04	1.88561e-03	6.37304e-03	4.99630e-09	1.13308e-08	2.29146e-04	1.24694e+00
1.79737e+04	1.91227e-03	6.79226e-03	5.02835e-09	1.24192e-08	2.20926e-04	1.24719e+00
1.80495e+04	1.92139e-03	7.50222e-03	5.41396e-09	1.38481e-08	2.15449e-04	1.24770e+00
1.81397e+04	1.69516e-03	5.66772e-03	5.58880e-09	8.28946e-09	1.88454e-04	1.24551e+00
1.83553e+04	8.61235e-04	1.94916e-03	2.28268e-09	1.08178e-09	5.42135e-05	1.36933e+00
1.87668e+04	1.31255e-04	1.33405e-03	1.98315e-10	2.16028e-11	2.39514e-05	1.36997e+00
1.92793e+04	4.15413e-06	1.29400e-03	1.03981e-10	2.14114e-14	2.35472e-05	1.36972e+00
1.98147e+04	8.89958e-08	1.29300e-03	1.01812e-10	9.86098e-18	2.35401e-05	1.36972e+00
2.03652e+04	1.70923e-09	1.29299e-03	1.01767e-10	3.66173e-21	2.35400e-05	1.36972e+00
2.09309e+04	2.65898e-11	1.29299e-03	1.01766e-10	9.14169e-25	2.35400e-05	1.36972e+00

TABLE 20

J15	SERIES	7 PROBLEM 82				PAGE 1
T= 3.30000+06	SHAKES					
7.70857+02	9.75073-05	4.38102-05	2.15193-09	4.16534-13	6.12710-03	1.13265+00
1.69783+03	1.36401-04	4.38028-05	2.16190-09	4.82725-13	6.12042-03	1.13256+00
1.94166+03	6.62458-05	4.41913-05	2.16755-09	9.99103-14	6.11756-03	1.13260+00
2.08545+03	5.45536-05	4.43531-05	2.17190-09	6.60001-14	6.11557-03	1.13261+00
2.17944+03	6.04416-05	4.44369-05	2.17518-09	8.19782-14	6.11418-03	1.13260+00
2.24380+03	7.37145-05	4.44678-05	2.17614-09	1.21979-13	6.11320-03	1.13260+00
2.28904+03	8.71300-05	4.44800-05	2.17635-09	1.69688-13	6.11251-03	1.13259+00
2.37063+03	1.15768-04	1.34720-05	2.17693-09	9.36749-14	6.11031-03	1.15839+00
2.49491+03	1.57462-04	1.34883-05	2.17721-09	1.69712-13	6.10660-03	1.15835+00
2.61704+03	1.92563-04	1.34906-05	2.17543-09	2.51815-13	6.10299-03	1.15831+00
2.73787+03	2.18822-04	1.34871-05	2.17282-09	3.23630-13	6.09943-03	1.15826+00
2.85801+03	2.37652-04	1.34822-05	2.16997-09	3.81207-13	6.09584-03	1.15821+00
2.97797+03	2.51607-04	1.34760-05	2.16689-09	4.26761-13	6.09219-03	1.15816+00
3.09815+03	2.61225-04	1.34727-05	2.16419-09	4.59791-13	6.08844-03	1.15811+00
3.21887+03	2.66584-04	1.34716-05	2.16175-09	4.78705-13	6.08456-03	1.15806+00
3.34041+03	2.67884-04	1.34762-05	2.16006-09	4.83537-13	6.08050-03	1.15801+00
3.46299+03	2.65945-04	1.34849-05	2.15887-09	4.76897-13	6.07624-03	1.15796+00
3.58682+03	2.60796-04	1.34989-05	2.15835-09	4.59129-13	6.07175-03	1.15791+00
3.71208+03	2.52279-04	1.35179-05	2.15839-09	4.30366-13	6.06698-03	1.15786+00
3.83893+03	2.40472-04	1.35426-05	2.15910-09	3.91848-13	6.06188-03	1.15781+00
3.96751+03	2.26681-04	1.35724-05	2.16034-09	3.49665-13	6.05642-03	1.15775+00
4.09798+03	2.12363-04	1.36061-05	2.16203-09	3.07175-13	6.05055-03	1.15769+00
4.23047+03	1.98233-04	1.36439-05	2.16384-09	2.68387-13	6.04423-03	1.15763+00
4.36511+03	1.87472-04	1.36868-05	2.16619-09	2.40627-13	6.03743-03	1.15756+00
4.50203+03	1.82653-04	1.37353-05	2.16908-09	2.29123-13	6.03014-03	1.15749+00
4.64134+03	1.84355-04	1.37865-05	2.17204-09	2.34322-13	6.02234-03	1.15741+00
4.78317+03	1.91641-04	1.38376-05	2.17466-09	2.54260-13	6.01405-03	1.15733+00
4.92769+03	2.04006-04	1.38874-05	2.17675-09	2.89387-13	6.00524-03	1.15724+00
5.07508+03	2.21616-04	1.39328-05	2.17784-09	3.42846-13	5.99590-03	1.15714+00
5.22551+03	2.42397-04	1.39726-05	2.17778-09	4.11294-13	5.98605-03	1.15703+00
5.37921+03	2.64855-04	1.40059-05	2.17644-09	4.92204-13	5.97567-03	1.15691+00
5.53636+03	2.89067-04	1.40351-05	2.17414-09	5.87481-13	5.96476-03	1.15679+00
5.89711+03	3.13546-04	1.40645-05	2.17154-09	6.92358-13	5.95330-03	1.15665+00
5.86160+03	3.35650-04	1.40964-05	2.16893-09	7.94779-13	5.94127-03	1.15651+00
6.02989+03	3.52941-04	1.41342-05	2.16677-09	8.80694-13	5.92861-03	1.15636+00
6.20204+03	3.63306-04	1.41815-05	2.16553-09	9.35995-13	5.91523-03	1.15621+00
6.37807+03	3.66202-04	1.42404-05	2.16538-09	9.54852-13	5.90101-03	1.15605+00
6.55795+03	3.61745-04	1.43128-05	2.16651-09	9.36609-13	5.88581-03	1.15589+00
6.74168+03	3.52017-04	1.43994-05	2.16888-09	8.92382-13	5.86945-03	1.15571+00
6.92923+03	3.40923-04	1.45006-05	2.17241-09	8.42912-13	5.85178-03	1.15553+00
7.12057+03	3.32320-04	1.46172-05	2.17708-09	8.07210-13	5.83265-03	1.15533+00
7.31571+03	3.28335-04	1.47449-05	2.18217-09	7.94783-13	5.81194-03	1.15511+00
7.51468+03	3.28421-04	1.48797-05	2.18699-09	8.02475-13	5.78948-03	1.15488+00
7.71759+03	3.32372-04	1.50164-05	2.19068-09	8.29507-13	5.76511-03	1.15461+00
7.92462+03	3.42085-04	1.51518-05	2.19266-09	8.86894-13	5.73866-03	1.15432+00
8.13597+03	3.59019-04	1.52836-05	2.19255-09	9.85781-13	5.71001-03	1.15400+00
8.35186+03	3.83086-04	1.54132-05	2.19048-09	1.13246-12	5.67907-03	1.15364+00
8.57240+03	4.10318-04	1.55497-05	2.18760-09	1.31037-12	5.64579-03	1.15326+00
8.79760+03	4.34443-04	1.57012-05	2.18481-09	1.40264-12	5.61000-03	1.15284+00
9.02736+03	4.51821-04	1.58766-05	2.18299-09	1.62089-12	5.57141-03	1.15240+00

TABLE 20 (Cont.)

J15 SERIES 7 PROBLEM 82
 $T = 3.30000 \times 10^6$ SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
9.26145E+03	4.62134E-04	1.60848E-05	2.18292E-09	1.71770E-12	5.52963E-03	1.15192E+00
9.49949E+03	4.65635E-04	1.63420E-05	2.18610E-09	1.77160E-12	5.48417E-03	1.15141E+00
9.74098E+03	4.62691E-04	1.66499E-05	2.19194E-09	1.78229E-12	5.43419E-03	1.18357E+00
9.98545E+03	4.56259E-04	1.70096E-05	2.19828E-09	1.77058E-12	5.37927E-03	1.18267E+00
1.02325E+04	4.52634E-04	1.74085E-05	2.20423E-09	1.78331E-12	5.31873E-03	1.18209E+00
1.04621E+04	4.59214E-04	1.78371E-05	2.20765E-09	1.88110E-12	5.25184E-03	1.18121E+00
1.07341E+04	4.77928E-04	1.82994E-05	2.20807E-09	2.09129E-12	5.17786E-03	1.18022E+00
1.09882E+04	5.07730E-04	1.88088E-05	2.20591E-09	2.42727E-12	5.09593E-03	1.17911E+00
1.12440E+04	5.44480E-04	1.94003E-05	2.20363E-09	2.87925E-12	5.00518E-03	1.17786E+00
1.15007E+04	5.82038E-04	2.00992E-05	2.20249E-09	3.40790E-12	4.90523E-03	1.17648E+00
1.17573E+04	6.17562E-04	2.09307E-05	2.20352E-09	3.99438E-12	4.79605E-03	1.17495E+00
1.20127E+04	6.49588E-04	2.19316E-05	2.20745E-09	4.62962E-12	4.67647E-03	1.17327E+00
1.22654E+04	6.77930E-04	2.31364E-05	2.21367E-09	5.31870E-12	4.54501E-03	1.17139E+00
1.25142E+04	7.04482E-04	2.45876E-05	2.22116E-09	6.10347E-12	4.39993E-03	1.16928E+00
1.27574E+04	7.37395E-04	2.63767E-05	2.22893E-09	7.17635E-12	4.23647E-03	1.16685E+00
1.29932E+04	7.91448E-04	2.86267E-05	2.23232E-09	8.98255E-12	4.04739E-03	1.16395E+00
1.32190E+04	8.72381E-04	3.15802E-05	2.23271E-09	1.20514E-11	3.82444E-03	1.16040E+00
1.34293E+04	9.72867E-04	3.65086E-05	2.23174E-09	1.73300E-11	3.51554E-03	1.15529E+00
1.36087E+04	1.11194E-03	4.88859E-05	2.23354E-09	3.03992E-11	2.97482E-03	1.17968E+00
1.37445E+04	1.24057E-03	7.27646E-05	2.23721E-09	5.60617E-11	2.32566E-03	1.16707E+00
1.38481E+04	1.30047E-03	9.35979E-05	2.23966E-09	7.91604E-11	2.01188E-03	1.17448E+00
1.39394E+04	1.32134E-03	1.06576E-04	2.24355E-09	9.30385E-11	1.86654E-03	1.16833E+00
1.40268E+04	1.32557E-03	1.16923E-04	2.24973E-09	1.02725E-10	1.80486E-03	1.16407E+00
1.41126E+04	1.32631E-03	1.27334E-04	2.25625E-09	1.11996E-10	1.73408E-03	1.16024E+00
1.41971E+04	1.32953E-03	1.38589E-04	2.26696E-09	1.22488E-10	1.66862E-03	1.15625E+00
1.42805E+04	1.33272E-03	1.50686E-04	2.27861E-09	1.33820E-10	1.60649E-03	1.15280E+00
1.43627E+04	1.33801E-03	1.64152E-04	2.29080E-09	1.46940E-10	1.54504E-03	1.14890E+00
1.44439E+04	1.34841E-03	1.78048E-04	2.29731E-09	1.61867E-10	1.48683E-03	1.14530E+00
1.45243E+04	1.36488E-03	1.92819E-04	2.30041E-09	1.79612E-10	1.43043E-03	1.14173E+00
1.46041E+04	1.38487E-03	2.08369E-04	2.29762E-09	1.99820E-10	1.37546E-03	1.13816E+00
1.46832E+04	1.40228E-03	2.26406E-04	2.29560E-09	2.22607E-10	1.31534E-03	1.14504E+00
1.47613E+04	1.41225E-03	2.46783E-04	2.30071E-09	2.46099E-10	1.25338E-03	1.15166E+00
1.48381E+04	1.41769E-03	2.70175E-04	2.30825E-09	2.71507E-10	1.18741E-03	1.16684E+00
1.49132E+04	1.42202E-03	2.98032E-04	2.31977E-09	3.01330E-10	1.11545E-03	1.16383E+00
1.49862E+04	1.42551E-03	3.29590E-04	2.33298E-09	3.34878E-10	1.04176E-03	1.18119E+00
1.50574E+04	1.42984E-03	3.63653E-04	2.34971E-09	3.71736E-10	9.75354E-04	1.18976E+00
1.51269E+04	1.43172E-03	3.96458E-04	2.36732E-09	4.08386E-10	9.20994E-04	1.16981E+00
1.51954E+04	1.43425E-03	4.34875E-04	2.38271E-09	4.47286E-10	8.74332E-04	1.16598E+00
1.52632E+04	1.44197E-03	4.70047E-04	2.39049E-09	4.88685E-10	8.38045E-04	1.14053E+00
1.53310E+04	1.45529E-03	5.04480E-04	2.38471E-09	5.34224E-10	8.05963E-04	1.13747E+00
1.53991E+04	1.46981E-03	5.38571E-04	2.38534E-09	5.81761E-10	7.78940E-04	1.13474E+00
1.54679E+04	1.48093E-03	5.71975E-04	2.39420E-09	6.27221E-10	7.58571E-04	1.12133E+00
1.55379E+04	1.48418E-03	6.04421E-04	2.41279E-09	6.65706E-10	7.42364E-04	1.11950E+00
1.56092E+04	1.48175E-03	6.35333E-04	2.44158E-09	6.97468E-10	7.29799E-04	1.11806E+00
1.56824E+04	1.48072E-03	6.64472E-04	2.46529E-09	7.28441E-10	7.18348E-04	1.11674E+00
1.57574E+04	1.48416E-03	7.01140E-04	2.48615E-09	7.72214E-10	7.03791E-04	1.11505E+00
1.58333E+04	1.49711E-03	7.48087E-04	2.49786E-09	8.38396E-10	6.84442E-04	1.12187E+00
1.59100E+04	1.51788E-03	7.96625E-04	2.49582E-09	9.17746E-10	6.63072E-04	1.11946E+00
1.59871E+04	1.53020E-03	8.53555E-04	2.51189E-09	9.99311E-10	6.42585E-04	1.11724E+00
1.60645E+04	1.52954E-03	9.16057E-04	2.53872E-09	1.07156E-09	6.23228E-04	1.11521E+00

TABLE 20 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 3.30000+06 SHAKES

PAGE 5

RADIUS (CM)	VEL (CM/SW)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.61418+04	1.52679-03	9.87187-04	2.50251-09	1.15061-09	6.04917-04	1.11341+00
1.62186+04	1.53202-03	1.07303-03	2.63301-09	1.25927-09	5.80639-04	1.1414+00
1.62953+04	1.54846-03	1.14686-03	2.64485-09	1.37498-09	5.56835-04	1.14803+00
1.63725+04	1.56652-03	1.22311-03	2.65311-09	1.50078-09	5.33306-04	1.14701+00
1.64501+04	1.58098-03	1.31613-03	2.67040-09	1.64487-09	5.08471-04	1.19785+00
1.65268+04	1.58414-03	1.44484-03	2.74926-09	1.81292-09	4.84234-04	1.19577+00
1.66022+04	1.57974-03	1.57366-03	2.80745-09	1.96360-09	4.60776-04	1.19370+00
1.66769+04	1.58930-03	1.70939-03	2.86389-09	2.15894-09	4.38829-04	1.19173+00
1.67515+04	1.61215-03	1.82554-03	2.87882-09	2.37246-09	4.19412-04	1.17656+00
1.68268+04	1.62935-03	1.94148-03	2.89329-09	2.57713-09	4.02440-04	1.17433+00
1.69025+04	1.63141-03	2.09371-03	2.97086-09	2.78619-09	3.88279-04	1.17259+00
1.69778+04	1.62962-03	2.26649-03	3.08152-09	3.00954-09	3.76268-04	1.17122+00
1.70534+04	1.64362-03	2.41148-03	3.13899-09	3.25749-09	3.64159-04	1.16974+00
1.71301+04	1.67066-03	2.54431-03	3.16998-09	3.55099-09	3.52247-04	1.16823+00
1.72083+04	1.68705-03	2.69093-03	3.22402-09	3.82937-09	3.41667-04	1.18096+00
1.72871+04	1.68753-03	2.89653-03	3.35449-09	4.12429-09	3.32190-04	1.18079+00
1.73661+04	1.69568-03	3.09269-03	3.46465-09	4.44644-09	3.23011-04	1.18060+00
1.74461+04	1.72030-03	3.27811-03	3.50319-09	4.85104-09	3.10207-04	1.17989+00
1.75268+04	1.73808-03	3.51417-03	3.58481-09	5.30805-09	2.98032-04	1.17945+00
1.76070+04	1.74082-03	3.83960-03	3.75884-09	5.81787-09	2.87585-04	1.17955+00
1.76866+04	1.75433-03	4.13275-03	3.87671-09	6.36004-09	2.76950-04	1.17945+00
1.77669+04	1.78168-03	4.36711-03	3.91863-09	6.93185-09	2.66221-04	1.17910+00
1.78477+04	1.79445-03	4.72088-03	4.07642-09	7.60075-09	2.57125-04	1.24567+00
1.79271+04	1.80126-03	5.23730-03	4.32527-09	8.49649-09	2.46082-04	1.24607+00
1.80055+04	1.82686-03	5.60870-03	4.43035-09	9.36017-09	2.35485-04	1.24629+00
1.80843+04	1.85090-03	6.01900-03	4.55834-09	1.03101-08	2.29928-04	1.24654+00
1.81622+04	1.85728-03	6.62880-03	4.87743-09	1.14329-08	2.19607-04	1.24702+00
1.82391+04	1.87549-03	7.15027-03	5.09692-09	1.25765-08	2.12785-04	1.24737+00
1.83187+04	1.85036-03	7.19032-03	5.24887-09	1.23158-08	2.03046-04	1.24724+00
1.84623+04	1.25952-03	3.05042-03	4.25677-09	2.87761-09	1.15509-04	1.29697+00
1.87912+04	3.77654-04	1.45859-03	5.78302-10	1.85309-10	2.67249-05	1.37006+00
1.92804+04	2.24096-05	1.29894-03	1.14326-10	6.22854-13	2.35845-05	1.36992+00
1.98147+04	5.28772-07	1.29310-03	1.02044-10	3.47118-16	2.35408-05	1.36972+00
2.03652+04	1.09738-08	1.29299-03	1.01771-10	1.50149-19	2.35400-05	1.36972+00
2.09309+04	1.99558-10	1.29299-03	1.01766-10	5.14913-23	2.35400-05	1.36972+00

TABLE 21

J15 SERIES 7 PROBLEM 82
 $T = 3.40000 \times 10^6$ SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.75934E+02	-3.09959E-06	4.29240E-05	2.06735E-09	4.12391E-16	6.04686E-03	1.13137E+00
1.70636E+03	5.62742E-05	4.37138E-05	2.09937E-09	1.54522E-13	6.03745E-03	1.13140E+00
1.95051E+03	1.44915E-04	4.33669E-05	2.08176E-09	4.70206E-13	6.03516E-03	1.13150E+00
2.09610E+03	1.81913E-04	4.32671E-05	2.07632E-09	7.18442E-13	6.03380E-03	1.13126E+00
2.19158E+03	1.94530E-04	4.32274E-05	2.07397E-09	8.17973E-13	6.03288E-03	1.13124E+00
2.25702E+03	1.95604E-04	4.32114E-05	2.07287E-09	8.26667E-13	6.03223E-03	1.13123E+00
2.30301E+03	1.93752E-04	4.31993E-05	2.07204E-09	8.10876E-13	6.03175E-03	1.13122E+00
2.38595E+03	1.84901E-04	4.30726E-05	2.07116E-09	2.23854E-13	6.03020E-03	1.15720E+00
2.51223E+03	1.70599E-04	4.30888E-05	2.07192E-09	1.90753E-13	6.02730E-03	1.15717E+00
2.63611E+03	1.57735E-04	4.31139E-05	2.07389E-09	1.63397E-13	6.02422E-03	1.15714E+00
2.75834E+03	1.44377E-04	4.31459E-05	2.07695E-09	1.37341E-13	6.02095E-03	1.15711E+00
2.87953E+03	1.30457E-04	4.31781E-05	2.07975E-09	1.12447E-13	6.01745E-03	1.15708E+00
3.00017E+03	1.19495E-04	4.32159E-05	2.08301E-09	9.44675E-14	6.01371E-03	1.15705E+00
3.12069E+03	1.13801E-04	4.32550E-05	2.08651E-09	8.58471E-14	6.00972E-03	1.15702E+00
3.24143E+03	1.11594E-04	4.32954E-05	2.09004E-09	8.27879E-14	6.00548E-03	1.15698E+00
3.36272E+03	1.13169E-04	4.33375E-05	2.09367E-09	8.54404E-14	6.00099E-03	1.15694E+00
3.48481E+03	1.20613E-04	4.33828E-05	2.09761E-09	9.75254E-14	5.99624E-03	1.15690E+00
3.60796E+03	1.33364E-04	4.34257E-05	2.10104E-09	1.19774E-13	5.99125E-03	1.15686E+00
3.73244E+03	1.49192E-04	4.34619E-05	2.10333E-09	1.50285E-13	5.98603E-03	1.15681E+00
3.85850E+03	1.65085E-04	4.34897E-05	2.10423E-09	1.84206E-13	5.98055E-03	1.15675E+00
3.98641E+03	1.80810E-04	4.35109E-05	2.10401E-09	2.21298E-13	5.97481E-03	1.15669E+00
4.11642E+03	1.97697E-04	4.35246E-05	2.10251E-09	2.64815E-13	5.96870E-03	1.15662E+00
4.24874E+03	2.15751E-04	4.35340E-05	2.10024E-09	3.12548E-13	5.96248E-03	1.15654E+00
4.30356E+03	2.32004E-04	4.35415E-05	2.09750E-09	3.64982E-13	5.95587E-03	1.15646E+00
4.52104E+03	2.49333E-04	4.35477E-05	2.09442E-09	4.21587E-13	5.94898E-03	1.15637E+00
4.66133E+03	2.64892E-04	4.35566E-05	2.09153E-09	4.75968E-13	5.94177E-03	1.15628E+00
4.80453E+03	2.77056E-04	4.35700E-05	2.08911E-09	5.20985E-13	5.93423E-03	1.15619E+00
4.95072E+03	2.84919E-04	4.35892E-05	2.08728E-09	5.51635E-13	5.92630E-03	1.15610E+00
5.09998E+03	2.87787E-04	4.36171E-05	2.08646E-09	5.63896E-13	5.91794E-03	1.15600E+00
5.25235E+03	2.84575E-04	4.36533E-05	2.08651E-09	5.52911E-13	5.90908E-03	1.15591E+00
5.40787E+03	2.76447E-04	4.36985E-05	2.08749E-09	5.23607E-13	5.89961E-03	1.15580E+00
5.56659E+03	2.66664E-04	4.37561E-05	2.08981E-09	4.89258E-13	5.88947E-03	1.15570E+00
5.72851E+03	2.57536E-04	4.38262E-05	2.09342E-09	4.58635E-13	5.87858E-03	1.15559E+00
5.89366E+03	2.50222E-04	4.39050E-05	2.09774E-09	4.35367E-13	5.86687E-03	1.15547E+00
6.06210E+03	2.45772E-04	4.39903E-05	2.10238E-09	4.22549E-13	5.85427E-03	1.15535E+00
6.23391E+03	2.44039E-04	4.40794E-05	2.10692E-09	4.19249E-13	5.84071E-03	1.15521E+00
6.40925E+03	2.44586E-04	4.41665E-05	2.11047E-09	4.23743E-13	5.82610E-03	1.15506E+00
6.58829E+03	2.47804E-04	4.42518E-05	2.11301E-09	4.37617E-13	5.81037E-03	1.15489E+00
6.77120E+03	2.55566E-04	4.43342E-05	2.11435E-09	4.68322E-13	5.79342E-03	1.15470E+00
6.95818E+03	2.69257E-04	4.44125E-05	2.11427E-09	5.22941E-13	5.77522E-03	1.15450E+00
7.14944E+03	2.88242E-04	4.44874E-05	2.11287E-09	6.02664E-13	5.75575E-03	1.15428E+00
7.34515E+03	3.10479E-04	4.45613E-05	2.11048E-09	7.02802E-13	5.73498E-03	1.15404E+00
7.54541E+03	3.32306E-04	4.46403E-05	2.10786E-09	8.09120E-13	5.71287E-03	1.15378E+00
7.75028E+03	3.49939E-04	4.47298E-05	2.10569E-09	9.02278E-13	5.68931E-03	1.15351E+00
7.95971E+03	3.62353E-04	4.48375E-05	2.10482E-09	9.74272E-13	5.66410E-03	1.15322E+00
8.17357E+03	3.70928E-04	4.49681E-05	2.10569E-09	1.02980E-12	5.63706E-03	1.15291E+00
8.39167E+03	3.75422E-04	4.51281E-05	2.10891E-09	1.06609E-12	5.60793E-03	1.15259E+00
8.61379E+03	3.74763E-04	4.53143E-05	2.11373E-09	1.07545E-12	5.57635E-03	1.15225E+00
8.83976E+03	3.70560E-04	4.55245E-05	2.11944E-09	1.06592E-12	5.54186E-03	1.15187E+00
9.06953E+03	3.67218E-04	4.57481E-05	2.12425E-09	1.06182E-12	5.50395E-03	1.15145E+00

TABLE 21 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 3.40000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
9.30315+03	3.69181-04	1.59840-05	2.12759-09	1.08933-12	5.46216-03	1.15098+00
9.54063+03	3.78652-04	1.62337-05	2.12879-09	1.16414-12	5.41602-03	1.18314+00
9.78198+03	3.96502-04	1.65011-05	2.12814-09	1.29813-12	5.36593-03	1.18248+00
1.00272+04	4.19678-04	1.67875-05	2.12609-09	1.47960-12	5.31161-03	1.18175+00
1.02760+04	4.43949-04	1.71060-05	2.12367-09	1.68700-12	5.25263-03	1.18096+00
1.05282+04	4.67164-04	1.74796-05	2.12291-09	1.90844-12	5.18848-03	1.18010+00
1.07831+04	4.87116-04	1.79226-05	2.12438-09	2.12708-12	5.11844-03	1.17915+00
1.10400+04	5.01840-04	1.84443-05	2.12769-09	2.32285-12	5.04152-03	1.17812+00
1.12981+04	5.11429-04	1.90609-05	2.13268-09	2.49292-12	4.95632-03	1.17696+00
1.15567+04	5.19042-04	1.97724-05	2.13821-09	2.66354-12	4.86281-03	1.17568+00
1.18149+04	5.30930-04	2.03883-05	2.14286-09	2.90247-12	4.75952-03	1.17424+00
1.20722+04	5.56835-04	2.15241-05	2.14553-09	3.34034-12	4.64504-03	1.17262+00
1.23279+04	6.02905-04	2.25921-05	2.14470-09	4.11507-12	4.51835-03	1.17078+00
1.25809+04	6.63303-04	2.38425-05	2.14210-09	5.25730-12	4.37903-03	1.16872+00
1.28299+04	7.26403-04	2.53996-05	2.14159-09	6.71338-12	4.22339-03	1.16637+00
1.30726+04	7.88800-04	2.74089-05	2.14586-09	8.54051-12	4.04597-03	1.16364+00
1.33060+04	8.53434-04	3.00814-05	2.14749-09	1.09715-11	3.83908-03	1.16036+00
1.35249+04	9.25909-04	3.43843-05	2.15330-09	1.47654-11	3.55910-03	1.15577+00
1.37167+04	1.03443-03	4.38151-05	2.16169-09	2.35473-11	3.10697-03	1.18146+00
1.38648+04	1.15259-03	6.61910-05	2.17150-09	4.40457-11	2.42378-03	1.16807+00
1.39745+04	1.21913-03	8.90316-05	2.18077-09	6.61766-11	2.03505-03	1.17591+00
1.40676+04	1.24273-03	1.03867-04	2.18711-09	8.02058-11	1.88560-03	1.16801+00
1.41556+04	1.25671-03	1.14296-04	2.19142-09	9.02584-11	1.80028-03	1.16417+00
1.42418+04	1.27435-03	1.24308-04	2.19260-09	1.00941-10	1.72856-03	1.16032+00
1.43271+04	1.29286-03	1.34631-04	2.19008-09	1.12523-10	1.66227-03	1.15580+00
1.44116+04	1.31252-03	1.45656-04	2.18797-09	1.25470-10	1.59919-03	1.15206+00
1.44953+04	1.32749-03	1.57928-04	2.18776-09	1.39154-10	1.53732-03	1.14830+00
1.45782+04	1.33456-03	1.71123-04	2.19140-09	1.52390-10	1.47930-03	1.14470+00
1.46602+04	1.33989-03	1.85598-04	2.19851-09	1.66603-10	1.42362-03	1.14117+00
1.47414+04	1.34716-03	2.01607-04	2.20841-09	1.82945-10	1.36949-03	1.13766+00
1.48214+04	1.35356-03	2.20145-04	2.21899-09	2.01660-10	1.31003-03	1.14425+00
1.49001+04	1.35851-03	2.40845-04	2.23293-09	2.22246-10	1.24832-03	1.15084+00
1.49772+04	1.36226-03	2.64299-04	2.24463-09	2.45236-10	1.18207-03	1.16584+00
1.50525+04	1.36537-03	2.91997-04	2.25868-09	2.72176-10	1.10992-03	1.18322+00
1.51258+04	1.37302-03	3.22066-04	2.26604-09	3.03541-10	1.03667-03	1.18055+00
1.51975+04	1.38656-03	3.53314-04	2.26754-09	3.39646-10	9.69796-04	1.18969+00
1.52680+04	1.40326-03	3.84435-04	2.26587-09	3.78516-10	9.15167-04	1.17044+00
1.53379+04	1.41732-03	4.17376-04	2.26836-09	4.19218-10	8.68408-04	1.16671+00
1.54071+04	1.42693-03	4.52151-04	2.28252-09	4.60322-10	8.33468-04	1.14093+00
1.54760+04	1.43120-03	4.89289-04	2.30011-09	5.01111-10	8.02576-04	1.13777+00
1.55446+04	1.43048-03	5.27020-04	2.32656-09	5.39217-10	7.76852-04	1.13498+00
1.56134+04	1.42942-03	5.62137-04	2.34717-09	5.74291-10	7.57135-04	1.12120+00
1.56833+04	1.43198-03	5.92648-04	2.35891-09	6.07637-10	7.40684-04	1.11935+00
1.57550+04	1.44123-03	6.19600-04	2.37114-09	6.43510-10	7.27493-04	1.11785+00
1.58289+04	1.45829-03	6.43650-04	2.37363-09	6.84432-10	7.15201-04	1.11645+00
1.59052+04	1.47575-03	6.74421-04	2.37356-09	7.34413-10	7.00016-04	1.11469+00
1.59826+04	1.48195-03	7.20790-04	2.38972-09	7.91493-10	6.80785-04	1.12078+00
1.60602+04	1.47921-03	7.76739-04	2.42275-09	8.49782-10	6.60853-04	1.11874+00
1.61376+04	1.47679-03	8.37063-04	2.45539-09	9.12782-10	6.40984-04	1.11669+00
1.62149+04	1.48245-03	9.01067-04	2.49038-09	9.90137-10	6.21906-04	1.11475+00

TABLE 21 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 3.40000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.62925+04	1.49923-03	9.60310-04	2.49762-09	1.07930-09	6.02204-04	1.14855+00
1.63707+04	1.51569-03	1.02580-03	2.49363-09	1.17831-09	5.76014-04	1.14684+00
1.64493+04	1.52691-03	1.09957-03	2.51427-09	1.28181-09	5.52660-04	1.14582+00
1.65278+04	1.52981-03	1.18953-03	2.56273-09	1.39195-09	5.30829-04	1.14549+00
1.66053+04	1.52558-03	1.30136-03	2.63332-09	1.51438-09	5.07311-04	1.19773+00
1.66821+04	1.52998-03	1.40605-03	2.65972-09	1.64571-09	4.81639-04	1.19551+00
1.67585+04	1.55192-03	1.51966-03	2.69049-09	1.83019-09	4.57539-04	1.19337+00
1.68350+04	1.57401-03	1.62712-03	2.69878-09	2.01563-09	4.34024-04	1.19129+00
1.69115+04	1.58063-03	1.75377-03	2.74454-09	2.19079-09	4.16737-04	1.17595+00
1.69874+04	1.57869-03	1.91250-03	2.84268-09	2.38322-09	4.01562-04	1.17412+00
1.70628+04	1.58286-03	2.05905-03	2.91270-09	2.57945-09	3.87230-04	1.17235+00
1.71390+04	1.60247-03	2.17145-03	2.92743-09	2.78824-09	3.73539-04	1.17056+00
1.72168+04	1.62433-03	2.29086-03	2.95241-09	3.02224-09	3.61103-04	1.16896+00
1.72955+04	1.63265-03	2.44628-03	3.02538-09	3.26033-09	3.50071-04	1.16764+00
1.73744+04	1.63486-03	2.64398-03	3.15668-09	3.53336-09	3.40560-04	1.18059+00
1.74536+04	1.64994-03	2.80606-03	3.22882-09	3.81970-09	3.30176-04	1.18012+00
1.75345+04	1.67404-03	2.93595-03	3.25398-09	4.11407-09	3.19836-04	1.17947+00
1.76166+04	1.68577-03	3.15283-03	3.34360-09	4.47989-09	3.08066-04	1.17905+00
1.76981+04	1.68855-03	3.44448-03	3.50024-09	4.91046-09	2.96983-04	1.17902+00
1.77791+04	1.70666-03	3.69398-03	3.58915-09	5.38014-09	2.85567-04	1.17872+00
1.78610+04	1.73285-03	3.90763-03	3.62653-09	5.56709-09	2.74261-04	1.17824+00
1.79432+04	1.74148-03	4.22936-03	3.77240-09	6.41332-09	2.64804-04	1.17839+00
1.80246+04	1.74694-03	4.62101-03	3.96833-09	7.05135-09	2.55700-04	1.24552+00
1.81055+04	1.77127-03	4.95100-03	4.03146-09	7.76735-09	2.42620-04	1.24568+00
1.81867+04	1.79264-03	5.32581-03	4.15264-09	8.55745-09	2.32503-04	1.24593+00
1.82667+04	1.79820-03	5.88649-03	4.43332-09	9.51707-09	2.24698-04	1.24639+00
1.83456+04	1.81704-03	6.34653-03	4.61875-09	1.04779-08	2.17176-04	1.24672+00
1.84252+04	1.84561-03	6.71667-03	4.71305-09	1.14398-08	2.09497-04	1.24693+00
1.85047+04	1.85321-03	7.34853-03	5.01026-09	1.26188-08	2.03979-04	1.24739+00
1.86049+04	1.56980-03	5.07680-03	5.17397-09	6.45436-09	1.71583-04	1.29573+00
1.88468+04	7.37356-04	1.80788-03	1.72511-09	7.67305-10	4.36004-05	1.36968+00
1.92857+04	9.52851-05	1.32257-03	1.66177-10	1.13205-11	2.38081-05	1.36996+00
1.98149+04	2.87291-06	1.29371-03	1.03298-10	1.02230-14	2.35451-05	1.36972+00
2.03652+04	6.37914-06	1.29300-03	1.01799-10	5.06050-18	2.35400-05	1.36972+00
2.09309+04	1.26275-09	1.29299-03	1.01767-10	2.00011-21	2.35400-05	1.36972+00
2.15124+04	1.91546-11	1.29299-03	1.01766-10	4.74397-25	2.35400-05	1.36972+00

TABLE 22

J15	SERIES	7	PROBLEM	82		PAGE 1
SHAKES					T= 3.50000+06	
RADIUS(CM)	VEL(CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
7.77130+02	6.16276-05	4.27464-05	2.01971-09	1.62349-13	5.97179-03	1.13031+00
1.71455+03	9.23866-05	4.18403-05	1.97686-09	1.98493-13	5.96426-03	1.13001+00
1.96428+03	5.31285-05	4.23485-05	1.99701-09	6.12575-14	5.96163-03	1.13008+00
2.11056+03	4.64104-05	4.27182-05	2.01223-09	4.60471-14	5.95983-03	1.13013+00
2.20570+03	4.96488-05	4.29460-05	2.02214-09	5.29849-14	5.95857-03	1.13017+00
2.27065+03	5.18221-05	4.30674-05	2.02730-09	5.78367-14	5.95767-03	1.13018+00
2.31621+03	5.25549-05	4.31461-05	2.03061-09	5.95855-14	5.95702-03	1.13019+00
2.39818+03	5.35113-05	1.31000-05	2.03303-09	1.87599-14	5.95494-03	1.15625+00
2.52300+03	5.80539-05	1.31215-05	2.03407-09	2.22027-14	5.95121-03	1.15621+00
2.64570+03	6.86371-05	1.31314-05	2.03338-09	3.12398-14	5.94739-03	1.15617+00
2.76711+03	8.27152-05	1.31346-05	2.03166-09	4.52749-14	5.94352-03	1.15612+00
2.88785+03	9.80049-05	1.31364-05	2.02971-09	6.35143-14	5.93957-03	1.15607+00
3.00843+03	1.15418-04	1.31337-05	2.02706-09	8.80534-14	5.93554-03	1.15602+00
3.12929+03	1.34204-04	1.31292-05	2.02412-09	1.18818-13	5.93144-03	1.15596+00
3.25076+03	1.51953-04	1.31237-05	2.02099-09	1.51965-13	5.92726-03	1.15591+00
3.37315+03	1.68220-04	1.31197-05	2.01802-09	1.86047-13	5.92299-03	1.15585+00
3.49671+03	1.82697-04	1.31171-05	2.01520-09	2.19193-13	5.91861-03	1.15579+00
3.62165+03	1.93662-04	1.31173-05	2.01270-09	2.46112-13	5.91410-03	1.15573+00
3.74816+03	2.01392-04	1.31264-05	2.01139-09	2.66267-13	5.90942-03	1.15568+00
3.87635+03	2.05699-04	1.31406-05	2.01071-09	2.78010-13	5.90454-03	1.15562+00
4.00638+03	2.05915-04	1.31618-05	2.01089-09	2.79043-13	5.89943-03	1.15556+00
4.13834+03	2.03050-04	1.31926-05	2.01227-09	2.71987-13	5.89404-03	1.15551+00
4.27233+03	1.97615-04	1.32314-05	2.01461-09	2.58429-13	5.88832-03	1.15545+00
4.40844+03	1.90510-04	1.32782-05	2.01786-09	2.41052-13	5.88223-03	1.15539+00
4.54676+03	1.84297-04	1.33332-05	2.02202-09	2.26476-13	5.87572-03	1.15534+00
4.68739+03	1.81309-04	1.33955-05	2.02692-09	2.20177-13	5.86875-03	1.15527+00
4.83043+03	1.80777-04	1.34581-05	2.03157-09	2.19907-13	5.86131-03	1.15521+00
4.97604+03	1.79674-04	1.35206-05	2.03588-09	2.18248-13	5.85336-03	1.15513+00
5.12438+03	1.77177-04	1.35806-05	2.03946-09	2.13172-13	5.84482-03	1.15505+00
5.27563+03	1.74797-04	1.36374-05	2.04220-09	2.08345-13	5.83563-03	1.15495+00
5.42999+03	1.74757-04	1.36884-05	2.04367-09	2.09028-13	5.82574-03	1.15485+00
5.58767+03	1.78419-04	1.37347-05	2.04406-09	2.18663-13	5.81514-03	1.15473+00
5.74883+03	1.86087-04	1.37788-05	2.04366-09	2.38735-13	5.80379-03	1.15460+00
5.91366+03	1.98464-04	1.38189-05	2.04227-09	2.72532-13	5.79170-03	1.15446+00
6.08234+03	2.14653-04	1.38564-05	2.04005-09	3.19753-13	5.77888-03	1.15431+00
6.25500+03	2.32448-04	1.38957-05	2.03761-09	3.75974-13	5.76530-03	1.15415+00
6.43175+03	2.49271-04	1.39372-05	2.03501-09	4.33420-13	5.75094-03	1.15398+00
6.61267+03	2.63347-04	1.39874-05	2.03307-09	4.85302-13	5.73574-03	1.15380+00
6.79774+03	2.74767-04	1.40514-05	2.03242-09	5.30603-13	5.71961-03	1.15362+00
6.98693+03	2.83907-04	1.41322-05	2.03337-09	5.69663-13	5.70245-03	1.15343+00
7.18015+03	2.90361-04	1.42305-05	2.03591-09	5.99924-13	5.68414-03	1.15323+00
7.37735+03	2.92524-04	1.43437-05	2.03956-09	6.12862-13	5.66452-03	1.15302+00
7.57849+03	2.88965-04	1.44703-05	2.04391-09	6.04201-13	5.64334-03	1.15279+00
7.78359+03	2.83374-04	1.46063-05	2.04825-09	5.86504-13	5.62034-03	1.15255+00
7.99273+03	2.79813-04	1.47479-05	2.05189-09	5.77351-13	5.59528-03	1.15227+00
8.20603+03	2.81761-04	1.48915-05	2.05422-09	5.91170-13	5.56798-03	1.15197+00
8.42366+03	2.90696-04	1.50359-05	2.05494-09	6.35580-13	5.53826-03	1.15163+00
8.64577+03	3.05952-04	1.51834-05	2.05425-09	7.11267-13	5.50597-03	1.15126+00
8.87247+03	3.25308-04	1.53352-05	2.05215-09	8.12227-13	5.47092-03	1.15085+00
9.10377+03	3.45668-04	1.55059-05	2.05013-09	9.27166-13	5.43282-03	1.18312+00

TABLE 22 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 3.50000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
9.33945+03	3.65874-04	1.57126-05	2.04959-09	1.05247-12	5.39201-03	1.18258+00
9.57919+03	3.83413-04	1.59511-05	2.05041-09	1.17290-12	5.34820-03	1.18200+00
9.82271+03	3.95933-04	1.62265-05	2.05278-09	1.27206-12	5.30099-03	1.18138+00
1.00697+04	4.03546-04	1.65420-05	2.05646-09	1.34699-12	5.24985-03	1.18071+00
1.03198+04	4.06153-04	1.68965-05	2.06051-09	1.39362-12	5.19405-03	1.17997+00
1.05726+04	4.07373-04	1.72967-05	2.06473-09	1.43523-12	5.13267-03	1.17916+00
1.08280+04	4.12838-04	1.77430-05	2.06805-09	1.51218-12	5.06473-03	1.17825+00
1.10855+04	4.26536-04	1.82358-05	2.06927-09	1.65966-12	4.98916-03	1.17721+00
1.13449+04	4.53067-04	1.87795-05	2.06817-09	1.93019-12	4.90586-03	1.17605+00
1.16058+04	4.92036-04	1.93910-05	2.06585-09	2.35190-12	4.81490-03	1.17477+00
1.18675+04	5.34396-04	2.01021-05	2.06426-09	2.87459-12	4.71590-03	1.17336+00
1.21291+04	5.72594-04	2.09529-05	2.06519-09	3.43813-12	4.60795-03	1.17182+00
1.23893+04	6.06596-04	2.19670-05	2.06789-09	4.04439-12	4.48977-03	1.17010+00
1.26469+04	6.38467-04	2.31743-05	2.07155-09	4.72619-12	4.36006-03	1.16820+00
1.29003+04	6.69487-04	2.46662-05	2.07690-09	5.53082-12	4.21435-03	1.16601+00
1.31477+04	7.04877-04	2.65534-05	2.08346-09	6.60181-12	4.04802-03	1.16347+00
1.33864+04	7.54073-04	2.90003-05	2.08931-09	8.25759-12	3.85446-03	1.16042+00
1.36120+04	8.28825-04	3.27200-05	2.09347-09	1.12724-11	3.59868-03	1.15623+00
1.38148+04	9.51158-04	3.99398-05	2.09404-09	1.81847-11	3.21233-03	1.16204+00
1.39759+04	1.09537-03	5.94629-05	2.09381-09	3.58075-11	2.53249-03	1.16924+00
1.40943+04	1.19589-03	8.27438-05	2.09320-09	5.92140-11	2.06741-03	1.17793+00
1.41914+04	1.23960-03	9.94856-05	2.09383-09	7.64401-11	1.88306-03	1.16904+00
1.42814+04	1.25321-03	1.10057-04	2.09653-09	8.64249-11	1.79229-03	1.16433+00
1.43692+04	1.25880-03	1.20025-04	2.10249-09	9.50949-11	1.72050-03	1.16042+00
1.44558+04	1.26550-03	1.30447-04	2.10924-09	1.04456-10	1.65552-03	1.15531+00
1.45413+04	1.27110-03	1.41592-04	2.11541-09	1.14385-10	1.59340-03	1.15163+00
1.46257+04	1.27621-03	1.53958-04	2.12276-09	1.25379-10	1.53240-03	1.14792+00
1.47091+04	1.28089-03	1.67237-04	2.13259-09	1.37191-10	1.47506-03	1.14436+00
1.47916+04	1.28509-03	1.81502-04	2.14118-09	1.49872-10	1.41966-03	1.14044+00
1.48731+04	1.29160-03	1.97103-04	2.14895-09	1.64467-10	1.36526-03	1.14698+00
1.49536+04	1.30073-03	2.14977-04	2.15592-09	1.81864-10	1.30542-03	1.14358+00
1.50330+04	1.31497-03	2.33765-04	2.15289-09	2.02114-10	1.24225-03	1.14984+00
1.51112+04	1.33208-03	2.55552-04	2.15194-09	2.26740-10	1.17433-03	1.16465+00
1.51879+04	1.34779-03	2.81077-04	2.15205-09	2.55300-10	1.10079-03	1.18216+00
1.52626+04	1.35811-03	3.10196-04	2.16142-09	2.86076-10	1.02853-03	1.19283+00
1.53356+04	1.36294-03	3.41509-04	2.17465-09	3.17195-10	9.63499-04	1.18961+00
1.54070+04	1.36465-03	3.74250-04	2.19266-09	3.48479-10	9.10893-04	1.17092+00
1.54772+04	1.36401-03	4.08460-04	2.21192-09	3.79976-10	8.65741-04	1.16711+00
1.55467+04	1.36553-03	4.43498-04	2.23068-09	4.13489-10	8.31226-04	1.14113+00
1.56157+04	1.37217-03	4.78422-04	2.24019-09	4.50403-10	8.00080-04	1.13801+00
1.56848+04	1.38355-03	5.12033-04	2.25017-09	4.90082-10	7.74051-04	1.12313+00
1.57547+04	1.40074-03	5.43365-04	2.25629-09	5.33087-10	7.53992-04	1.12091+00
1.58258+04	1.42100-03	5.70936-04	2.25880-09	5.76460-10	7.37312-04	1.11904+00
1.58989+04	1.43441-03	5.96675-04	2.26896-09	6.13846-10	7.24101-04	1.11753+00
1.59740+04	1.43407-03	6.24207-04	2.28878-09	6.41864-10	7.12323-04	1.11616+00
1.60507+04	1.42873-03	6.61599-04	2.31897-09	6.75250-10	6.98074-04	1.11449+00
1.61281+04	1.42881-03	7.09500-04	2.34300-09	7.24222-10	6.79178-04	1.12032+00
1.62056+04	1.43681-03	7.61618-04	2.36723-09	7.86163-10	6.59038-04	1.11818+00
1.62836+04	1.45470-03	8.11617-04	2.36824-09	8.58801-10	6.38362-04	1.11583+00
1.63625+04	1.47304-03	8.62431-04	2.36605-09	9.35684-10	6.18465-04	1.11354+00

TABLE 22 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 3.50000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.64418+04	1.48086-03	9.25275-04	2.38468-09	1.01454-09	5.97709-04	1.14666+00
1.65210+04	1.48142-03	1.00156-03	2.42331-09	1.09902-09	5.73740-04	1.14567+00
1.65995+04	1.47650-03	1.08610-03	2.47745-09	1.18388-09	5.51769-04	1.14519+00
1.66777+04	1.47898-03	1.16862-03	2.50762-09	1.27812-09	5.29061-04	1.14451+00
1.67561+04	1.49616-03	1.25421-03	2.51426-09	1.40384-09	5.03137-04	1.19618+00
1.68344+04	1.51834-03	1.35056-03	2.53222-09	1.55684-09	4.77813-04	1.19512+00
1.69127+04	1.52784-03	1.45508-03	2.55325-09	1.69829-09	4.53920-04	1.19298+00
1.69903+04	1.52509-03	1.58863-03	2.62374-09	1.84751-09	4.33128-04	1.19110+00
1.70667+04	1.52728-03	1.73360-03	2.70776-09	2.02188-09	4.16032-04	1.17578+00
1.71430+04	1.54183-03	1.85042-03	2.73262-09	2.19957-09	3.99317-04	1.17361+00
1.72202+04	1.56640-03	1.95941-03	2.74500-09	2.40398-09	3.84044-04	1.17159+00
1.72985+04	1.58196-03	2.08419-03	2.78788-09	2.60795-09	3.71098-04	1.16994+00
1.73773+04	1.58232-03	2.23558-03	2.86813-09	2.79866-09	3.59742-04	1.16859+00
1.74562+04	1.58459-03	2.40527-03	2.96523-09	3.01975-09	3.49111-04	1.16739+00
1.75360+04	1.60360-03	2.53235-03	2.99682-09	3.25628-09	3.37766-04	1.17967+00
1.76176+04	1.62738-03	2.66447-03	3.03430-09	3.52838-09	3.27050-04	1.17902+00
1.77002+04	1.63602-03	2.84987-03	3.13953-09	3.81392-09	3.18097-04	1.17884+00
1.77827+04	1.63954-03	3.09489-03	3.27027-09	4.15969-09	3.07030-04	1.17866+00
1.78652+04	1.65967-03	3.29939-03	3.32470-09	4.54449-09	2.94666-04	1.17810+00
1.79487+04	1.68418-03	3.49794-03	3.36332-09	4.96101-09	2.82866-04	1.17755+00
1.80323+04	1.69161-03	3.80330-03	3.51194-09	5.44168-09	2.73026-04	1.17766+00
1.81150+04	1.69911-03	4.13726-03	3.67499-09	5.97222-09	2.63783-04	1.17791+00
1.81979+04	1.72344-03	4.38355-03	3.71427-09	6.51067-09	2.52290-04	1.24516+00
1.82813+04	1.74032-03	4.73870-03	3.81685-09	7.17610-09	2.40054-04	1.24538+00
1.83634+04	1.74272-03	5.22129-03	4.05112-09	7.92869-09	2.31374-04	1.24579+00
1.84444+04	1.76101-03	5.63864-03	4.20097-09	8.74400-09	2.22252-04	1.24609+00
1.85260+04	1.78888-03	5.97070-03	4.27919-09	9.55373-09	2.13912-04	1.24629+00
1.86075+04	1.79848-03	6.53234-03	4.55193-09	1.05645-08	2.08082-04	1.24674+00
1.86878+04	1.80973-03	7.12875-03	4.83014-09	1.16743-08	2.02358-04	1.24718+00
1.87724+04	1.74990-03	6.81841-03	4.96174-09	1.04573-08	1.90269-04	1.24670+00
1.89397+04	1.10723-03	2.63600-03	3.49702-09	2.04489-09	9.27436-05	1.29679+00
1.93036+04	2.62081-04	1.40864-03	3.96503-10	1.01695-10	2.52738-05	1.37005+00
1.98156+04	1.40748-05	1.29682-03	1.09511-10	2.45092-13	2.35679-05	1.36991+00
2.03652+04	3.38419-07	1.29306-03	1.01944-10	1.41993-16	2.35405-05	1.36972+00
2.09309+04	7.25169-09	1.29299-03	1.01770-10	6.55114-20	2.35400-05	1.36972+00
2.15124+04	1.34929-10	1.29299-03	1.01766-10	2.35400-23	2.35400-05	1.36972+00

TABLE 23

J15 SERIES 7 PROBLEM 82
T= 3.60000+06 SHAKES

PAGE 1

RADIUS(CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.83134+02	2.25463-05	4.17587-05	1.93649-09	2.12274-14	5.89759-03	1.12908+00
1.72208+03	3.64718-05	4.26807-05	1.97617-09	2.99727-14	5.88945-03	1.12916+00
1.96634+03	3.76086-05	4.27472-05	1.97606-09	3.22660-14	5.88670-03	1.12914+00
2.11190+03	6.09630-05	4.24876-05	1.96336-09	8.28796-14	5.88496-03	1.12906+00
2.20781+03	8.25608-05	4.23169-05	1.95501-09	1.45577-13	5.88381-03	1.12901+00
2.27374+03	9.47172-05	4.22041-05	1.94948-09	1.89678-13	5.88302-03	1.12897+00
2.32018+03	1.01444-04	4.21212-05	1.94542-09	2.16872-13	5.88246-03	1.12895+00
2.40397+03	1.10597-04	1.27530-05	1.94221-09	7.82719-14	5.88072-03	1.15390+00
2.53158+03	1.22669-04	1.27518-05	1.94040-09	9.61354-14	5.87770-03	1.15386+00
2.65688+03	1.31695-04	1.27638-05	1.94048-09	1.10765-13	5.87466-03	1.15383+00
2.78057+03	1.35679-04	1.27822-05	1.94145-09	1.17654-13	5.87158-03	1.15380+00
2.90325+03	1.35990-04	1.28080-05	1.94342-09	1.18431-13	5.86840-03	1.15377+00
3.02536+03	1.34684-04	1.28457-05	1.94701-09	1.16517-13	5.86509-03	1.15375+00
3.14724+03	1.31526-04	1.28941-05	1.95204-09	1.11553-13	5.86161-03	1.15373+00
3.26923+03	1.27422-04	1.29422-05	1.95687-09	1.05096-13	5.85793-03	1.15493+00
3.39168+03	1.21752-04	1.29868-05	1.96105-09	9.63373-14	5.85402-03	1.15490+00
3.51492+03	1.13845-04	1.30274-05	1.96461-09	8.45449-14	5.84985-03	1.15487+00
3.63924+03	1.05136-04	1.30666-05	1.96780-09	7.23409-14	5.84537-03	1.15483+00
3.76487+03	9.66943-05	1.31050-05	1.97058-09	6.13736-14	5.84057-03	1.15478+00
3.89204+03	8.90650-05	1.31425-05	1.97296-09	5.22096-14	5.83541-03	1.15473+00
4.02095+03	8.26409-05	1.31792-05	1.97494-09	4.30582-14	5.82988-03	1.15468+00
4.15180+03	7.77319-05	1.32150-05	1.97658-09	3.99515-14	5.82394-03	1.15462+00
4.28476+03	7.64056-05	1.32484-05	1.97774-09	3.86743-14	5.81760-03	1.15455+00
4.42006+03	8.07605-05	1.32747-05	1.97765-09	4.33790-14	5.81084-03	1.15447+00
4.55790+03	8.89969-05	1.32982-05	1.97695-09	5.28037-14	5.80370-03	1.15439+00
4.69845+03	1.00102-04	1.33191-05	1.97565-09	6.70141-14	5.79615-03	1.15430+00
4.84189+03	1.14506-04	1.33389-05	1.97398-09	8.78629-14	5.78021-03	1.15421+00
4.98836+03	1.31585-04	1.33564-05	1.97175-09	1.16196-13	5.77987-03	1.15411+00
5.13801+03	1.49870-04	1.33764-05	1.96964-09	1.50775-13	5.77114-03	1.15400+00
5.29094+03	1.67130-04	1.34002-05	1.96783-09	1.87598-13	5.76200-03	1.15389+00
5.44723+03	1.82664-04	1.34296-05	1.96652-09	2.24413-13	5.75241-03	1.15378+00
5.60694+03	1.96909-04	1.34691-05	1.96530-09	2.61440-13	5.74234-03	1.15367+00
5.77007+03	2.09875-04	1.35223-05	1.96762-09	2.98064-13	5.73173-03	1.15355+00
5.93661+03	2.20325-04	1.35863-05	1.97002-09	3.29890-13	5.72051-03	1.15343+00
6.10659+03	2.26020-04	1.36581-05	1.97307-09	3.48877-13	5.70860-03	1.15331+00
6.28008+03	2.25666-04	1.37365-05	1.97645-09	3.49786-13	5.69587-03	1.15318+00
6.45715+03	2.19853-04	1.38189-05	1.97978-09	3.34090-13	5.68217-03	1.15303+00
6.63791+03	2.11458-04	1.39059-05	1.98299-09	3.11023-13	5.66733-03	1.15287+00
6.82248+03	2.04251-04	1.39943-05	1.98559-09	2.91973-13	5.65125-03	1.15270+00
7.01102+03	2.01463-04	1.40822-05	1.98726-09	2.85781-13	5.63381-03	1.15251+00
7.20370+03	2.04836-04	1.41688-05	1.98783-09	2.97318-13	5.61496-03	1.15230+00
7.40068+03	2.14001-04	1.42537-05	1.98725-09	3.26637-13	5.59465-03	1.15206+00
7.60214+03	2.27683-04	1.43383-05	1.98564-09	3.72074-13	5.57282-03	1.15181+00
7.80820+03	2.45004-04	1.44281-05	1.98366-09	4.33698-13	5.54940-03	1.15153+00
8.01869+03	2.65396-04	1.45295-05	1.98209-09	5.12544-13	5.52432-03	1.15124+00
8.23414+03	2.86066-04	1.46503-05	1.98180-09	6.00157-13	5.49747-03	1.15093+00
8.45385+03	3.03736-04	1.47908-05	1.98263-09	6.82719-13	5.46865-03	1.15060+00
8.67788+03	3.15626-04	1.49507-05	1.98431-09	7.44819-13	5.43759-03	1.15025+00
8.90605+03	3.20107-04	1.51403-05	1.98706-09	7.75704-13	5.40389-03	1.18253+00
9.13823+03	3.19338-04	1.53476-05	1.98992-09	7.82562-13	5.36762-03	1.18207+00

TABLE 23 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 3.60000+06 SHAKES

PAGE 2

RA01US (CM)	VEL (CM/SH)	RHO (GM/CC)	P(JERK8/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
9.37432+03	3.17674-04	1.55773-05	1.99314-09	7.98011-13	5.32837-03	1.18156+00
9.61422+03	3.17257-04	1.58279-05	1.99811-09	7.96557-13	5.26572-03	1.18100+00
9.85790+03	3.20060-04	1.60931-05	1.99762-09	8.24331-13	5.23917-03	1.18038+00
1.01054+04	3.31562-04	1.63767-05	1.99772-09	9.00806-13	5.18829-03	1.17969+00
1.03565+04	3.54292-04	1.66871-05	1.99693-09	1.04893-12	5.13278-03	1.17894+00
1.06112+04	3.85071-04	1.70302-05	1.99347-09	1.26502-12	5.07229-03	1.17811+00
1.08690+04	4.17230-04	1.74251-05	1.99477-09	1.51874-12	5.00637-03	1.17720+00
1.11294+04	4.43443-04	1.78054-05	1.99555-09	1.75956-12	4.93470-03	1.17621+00
1.13917+04	4.62196-04	1.84212-05	1.99798-09	1.96819-12	4.85696-03	1.17514+00
1.16553+04	4.76946-04	1.90410-05	2.00148-09	2.16617-12	4.77223-03	1.17395+00
1.19194+04	4.89409-04	1.97554-05	2.00543-09	2.36623-12	4.67957-03	1.17265+00
1.21831+04	5.01985-04	2.05674-05	2.00990-09	2.59441-12	4.57775-03	1.17119+00
1.24457+04	5.21950-04	2.15582-05	2.01423-09	2.93838-12	4.46546-03	1.16957+00
1.27061+04	5.57238-04	2.26834-05	2.01686-09	3.52741-12	4.34148-03	1.16773+00
1.29633+04	6.11336-04	2.40261-05	2.01708-09	4.50181-12	4.20153-03	1.16562+00
1.32157+04	6.81711-04	2.56667-05	2.01482-09	5.98316-12	4.04270-03	1.16316+00
1.34612+04	7.58806-04	2.77709-05	2.01233-09	8.01564-12	3.86051-03	1.16026+00
1.36955+04	8.36760-04	3.09506-05	2.01330-09	1.08594-11	3.62671-03	1.15643+00
1.39097+04	9.28330-04	3.67794-05	2.01756-09	1.58981-11	3.29008-03	1.18359+00
1.40838+04	1.04495-03	5.34376-05	2.02615-09	2.92062-11	2.64905-03	1.17074+00
1.42118+04	1.14483-03	7.65837-05	2.03135-09	5.02346-11	2.11768-03	1.18058+00
1.43129+04	1.18774-03	9.61514-05	2.03647-09	6.78248-11	1.88781-03	1.16964+00
1.44040+04	1.19840-03	1.07499-04	2.04256-09	7.71932-11	1.78866-03	1.16448+00
1.44923+04	1.20344-03	1.17391-04	2.04833-09	8.50071-11	1.71577-03	1.16051+00
1.45793+04	1.20804-03	1.27554-04	2.05364-09	9.30745-11	1.65058-03	1.15683+00
1.46653+04	1.21710-03	1.38314-04	2.05732-09	1.02447-10	1.58858-03	1.15127+00
1.47504+04	1.22932-03	1.50072-04	2.05947-09	1.13400-10	1.52748-03	1.14755+00
1.48347+04	1.24676-03	1.62309-04	2.05825-09	1.26159-10	1.46942-03	1.14392+00
1.49185+04	1.26737-03	1.75390-04	2.05582-09	1.40866-10	1.41348-03	1.14033+00
1.50015+04	1.28253-03	1.90089-04	2.05648-09	1.56342-10	1.35790-03	1.14596+00
1.50836+04	1.29329-03	2.07103-04	2.06102-09	1.73202-10	1.29851-03	1.14255+00
1.51643+04	1.29747-03	2.26449-04	2.07080-09	1.90606-10	1.23599-03	1.14879+00
1.52434+04	1.29788-03	2.49129-04	2.08361-09	2.09830-10	1.16836-03	1.16374+00
1.53204+04	1.29735-03	2.75701-04	2.09845-09	2.32017-10	1.09572-03	1.18159+00
1.53953+04	1.29595-03	3.04710-04	2.11206-09	2.55878-10	1.02422-03	1.19274+00
1.54683+04	1.29878-03	3.34737-04	2.12180-09	2.82322-10	9.59767-04	1.18957+00
1.55401+04	1.30841-03	3.65157-04	2.12756-09	3.12572-10	9.06811-04	1.17137+00
1.56111+04	1.32235-03	3.96318-04	2.13409-09	3.46512-10	8.61529-04	1.14482+00
1.56816+04	1.33944-03	4.28269-04	2.13941-09	3.84198-10	8.26945-04	1.14150+00
1.57520+04	1.35799-03	4.60508-04	2.14134-09	4.24637-10	7.95703-04	1.13841+00
1.58227+04	1.37146-03	4.92023-04	2.14873-09	4.62729-10	7.70469-04	1.12280+00
1.58939+04	1.37532-03	5.24593-04	2.16622-09	4.96139-10	7.50919-04	1.12062+00
1.59659+04	1.37286-03	5.56204-04	2.19188-09	5.24153-10	7.35158-04	1.11884+00
1.60393+04	1.37276-03	5.85279-04	2.21866-09	5.51475-10	7.22413-04	1.11737+00
1.61146+04	1.38047-03	6.12942-04	2.23916-09	5.84054-10	7.10430-04	1.11598+00
1.61915+04	1.39531-03	6.46604-04	2.25544-09	6.29459-10	6.95675-04	1.11426+00
1.62698+04	1.41429-03	6.86307-04	2.25413-09	6.86418-10	6.75903-04	1.11937+00
1.63490+04	1.43016-03	7.29850-04	2.25159-09	7.46409-10	6.55282-04	1.11699+00
1.64286+04	1.43624-03	7.83450-04	2.27202-09	8.08047-10	6.35573-04	1.11487+00
1.65082+04	1.43515-03	8.44104-04	2.30711-09	8.69280-10	6.16785-04	1.11294+00

TABLE 23 (Cont.)

J15 SERIES 7 PROBLEM 82
 $T = 3.60000 \times 10^6$ SHAKES

PAGE 3

RA01US (CM)	VEL (CM/SH)	RHO(GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
1.65875+04	1.43094-03	9.14376-04	2.34898-09	9.36142-10	5.96158-04	1.14604+00
1.66663+04	1.43335-03	9.06632-04	2.38007-09	1.01353-09	5.72260-04	1.14494+00
1.67454+04	1.45025-03	1.05035-03	2.37961-09	1.10463-09	5.48569-04	1.14350+00
1.68252+04	1.47075-03	1.12277-03	2.38968-09	1.21439-09	5.25325-04	1.14242+00
1.69051+04	1.48149-03	1.21052-03	2.40630-09	1.32844-09	4.99498-04	1.19487+00
1.69845+04	1.47733-03	1.31406-03	2.45021-09	1.43400-09	4.75514-04	1.19487+00
1.70628+04	1.47423-03	1.43905-03	2.52006-09	1.56378-09	4.53051-04	1.19289+00
1.71403+04	1.48470-03	1.55704-03	2.56238-09	1.71615-09	4.31644-04	1.19095+00
1.72180+04	1.50519-03	1.65313-03	2.55779-09	1.87280-09	4.12691-04	1.17504+00
1.72966+04	1.52674-03	1.76655-03	2.58547-09	2.05890-09	3.96311-04	1.17290+00
1.73754+04	1.53369-03	1.89664-03	2.64126-09	2.23065-09	3.82145-04	1.17111+00
1.74543+04	1.53323-03	2.04487-03	2.72575-09	2.40352-09	3.70003-04	1.16966+00
1.75333+04	1.54317-03	2.18858-03	2.79633-09	2.60601-09	3.58457-04	1.16827+00
1.76135+04	1.56531-03	2.29730-03	2.80708-09	2.81460-09	3.46471-04	1.16670+00
1.76954+04	1.58186-03	2.42652-03	2.84752-09	3.03594-09	3.35194-04	1.17879+00
1.77782+04	1.58398-03	2.59827-03	2.94466-09	3.25953-09	3.25630-04	1.17850+00
1.78614+04	1.59105-03	2.78477-03	3.05306-09	3.52483-09	3.16670-04	1.17834+00
1.79453+04	1.61576-03	2.95510-03	3.09410-09	3.85782-09	3.04435-04	1.17767+00
1.80302+04	1.63794-03	3.14308-03	3.13784-09	4.21624-09	2.92191-04	1.17707+00
1.81151+04	1.64210-03	3.41977-03	3.27439-09	4.61068-09	2.81807-04	1.17707+00
1.81992+04	1.65072-03	3.70689-03	3.40641-09	5.05062-09	2.71801-04	1.17712+00
1.82836+04	1.67779-03	3.91737-03	3.44422-09	5.51423-09	2.61325-04	1.17674+00
1.83690+04	1.69416-03	4.21909-03	3.54088-09	6.05474-09	2.49947-04	1.24490+00
1.84530+04	1.69475-03	4.66720-03	3.74540-09	6.70254-09	2.39175-04	1.24527+00
1.85358+04	1.71098-03	5.01939-03	3.85604-09	7.34761-09	2.29067-04	1.24551+00
1.86193+04	1.73597-03	5.32366-03	3.90973-09	8.02192-09	2.19120-04	1.24568+00
1.87027+04	1.74305-03	5.81765-03	4.14264-09	8.84583-09	2.12573-04	1.24611+00
1.87849+04	1.75387-03	6.34659-03	4.39056-09	9.76165-09	2.06558-04	1.24654+00
1.88672+04	1.78193-03	6.72127-03	4.48720-09	1.06719-08	1.99396-04	1.24677+00
1.89503+04	1.78887-03	7.21299-03	4.67477-09	1.15413-08	1.92892-04	1.24710+00
1.90667+04	1.41496-03	4.25899-03	4.63103-09	4.54644-09	1.45994-04	1.29643+00
1.93464+04	5.82181-04	1.64874-03	1.14420-09	4.60171-10	3.41034-05	1.36996+00
1.98188+04	5.05817-05	1.31084-03	1.37986-10	4.25581-12	2.36863-05	1.36994+00
2.03653+04	1.66306-06	1.29341-03	1.02651-10	3.42060-15	2.35430-05	1.36972+00
2.09309+04	3.80095-08	1.29299-03	1.01785-10	1.79486-18	2.35400-05	1.36972+00
2.15124+04	7.69635-10	1.29299-03	1.01766-10	7.45744-22	2.35400-05	1.36972+00
2.21100+04	1.02579-11	1.29299-03	1.01766-10	1.36056-25	2.35400-05	1.36972+00

TABLE 24

J15 SERIES 7 PROBLEM 82
T= 3.80000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.86238+02	4.35425-05	4.12724-05	1.85013-09	7.82504-14	5.76661-03	1.12718+00
1.73074+03	3.61051-05	4.15768-05	1.87719-09	8.11274-14	5.75898-03	1.12714+00
1.97816+03	-2.90764-05	4.18730-05	1.87845-09	2.19231-14	5.75592-03	1.12716+00
2.12439+03	-4.55237-05	4.19975-05	1.87787-09	4.36238-14	5.75380-03	1.12715+00
2.22004+03	-4.56817-05	4.20474-05	1.87730-09	4.39642-14	5.75232-03	1.12714+00
2.28560+03	-3.90131-05	4.20347-05	1.87622-09	3.24299-14	5.75128-03	1.12713+00
2.33172+03	-2.93902-05	4.20123-05	1.87487-09	1.86788-14	5.75053-03	1.12711+00
2.41473+03	-7.25835-06	4.27670-05	1.87345-09	2.20066-15	5.74832-03	1.15218+00
2.54116+03	2.41356-05	4.27691-05	1.87176-09	5.02550-15	5.74459-03	1.15213+00
2.66547+03	5.08401-05	4.27733-05	1.87040-09	1.74897-14	5.74093-03	1.15208+00
2.78844+03	7.55452-05	4.27728-05	1.86840-09	3.74146-14	5.73730-03	1.15203+00
2.91072+03	9.63556-05	4.27700-05	1.86609-09	5.97427-14	5.73370-03	1.15199+00
3.03277+03	1.11035-04	4.27726-05	1.86452-09	7.89781-14	5.73005-03	1.15194+00
3.15498+03	1.21198-04	4.27760-05	1.86300-09	9.39349-14	5.72632-03	1.15189+00
3.27768+03	1.27119-04	4.27847-05	1.86216-09	1.03319-13	5.72249-03	1.15185+00
3.40116+03	1.28775-04	4.27957-05	1.86155-09	1.06096-13	5.71850-03	1.15180+00
3.52563+03	1.25842-04	4.28134-05	1.86177-09	1.01503-13	5.71433-03	1.15175+00
3.65131+03	1.18254-04	4.28352-05	1.86255-09	8.98996-14	5.70991-03	1.15171+00
3.77839+03	1.08152-04	4.28598-05	1.86361-09	7.53813-14	5.70522-03	1.15166+00
3.90707+03	9.70887-05	4.28858-05	1.86482-09	6.09556-14	5.70021-03	1.15161+00
4.03754+03	8.50431-05	4.29141-05	1.86600-09	4.69443-14	5.69486-03	1.15155+00
4.16994+03	7.29795-05	4.29450-05	1.86717-09	3.46984-14	5.68912-03	1.15274+00
4.30445+03	6.18760-05	4.29782-05	1.86830-09	2.50198-14	5.68298-03	1.15267+00
4.44120+03	5.25699-05	4.30134-05	1.86934-09	1.80918-14	5.67640-03	1.15260+00
4.58035+03	4.57347-05	4.30503-05	1.87025-09	1.36969-14	5.66936-03	1.15253+00
4.72203+03	4.21282-05	4.30884-05	1.87098-09	1.16197-14	5.66184-03	1.15244+00
4.86641+03	4.45402-05	4.31227-05	1.87125-09	1.30877-14	5.65384-03	1.15235+00
5.01370+03	5.30769-05	4.31526-05	1.87068-09	1.87074-14	5.64536-03	1.15226+00
5.16407+03	6.61376-05	4.31815-05	1.86971-09	2.92319-14	5.63641-03	1.15215+00
5.31764+03	8.44064-05	4.32152-05	1.86908-09	4.77972-14	5.62700-03	1.15204+00
5.47450+03	1.06505-04	4.32510-05	1.86849-09	7.60536-14	5.61712-03	1.15193+00
5.63478+03	1.28545-04	4.32874-05	1.86768-09	1.10496-13	5.60678-03	1.15181+00
5.79860+03	1.47854-04	4.33259-05	1.86685-09	1.46187-13	5.59590-03	1.15168+00
5.96608+03	1.63667-04	4.33674-05	1.86606-09	1.79354-13	5.58443-03	1.15155+00
6.13729+03	1.75168-04	4.34146-05	1.86562-09	2.05948-13	5.57229-03	1.15141+00
6.31230+03	1.82358-04	4.34685-05	1.86561-09	2.23990-13	5.55938-03	1.15126+00
6.49117+03	1.85630-04	4.35299-05	1.86604-09	2.33114-13	5.54560-03	1.15110+00
6.67396+03	1.85812-04	4.35993-05	1.86691-09	2.34767-13	5.53083-03	1.15094+00
6.86071+03	1.83553-04	4.36753-05	1.86794-09	2.30393-13	5.51495-03	1.15076+00
7.05147+03	1.80064-04	4.37600-05	1.86933-09	2.23091-13	5.49782-03	1.15057+00
7.24631+03	1.77323-04	4.38514-05	1.87070-09	2.17775-13	5.47930-03	1.15036+00
7.44531+03	1.76365-04	4.39467-05	1.87161-09	2.16904-13	5.45927-03	1.15013+00
7.64857+03	1.78408-04	4.40478-05	1.87223-09	2.23595-13	5.43760-03	1.14988+00
7.85611+03	1.85488-04	4.41629-05	1.87300-09	2.43827-13	5.41415-03	1.18230+00
8.06796+03	2.00633-04	4.42835-05	1.87338-09	2.88205-13	5.38923-03	1.18197+00
8.28420+03	2.21732-04	4.44117-05	1.87363-09	3.55155-13	5.36283-03	1.18162+00
8.50491+03	2.43219-04	4.45432-05	1.87313-09	4.30947-13	5.33485-03	1.18125+00
8.73014+03	2.62166-04	4.46864-05	1.87277-09	5.05236-13	5.30513-03	1.18085+00
8.95989+03	2.75199-04	4.48430-05	1.87259-09	5.62216-13	5.27345-03	1.18043+00
9.19407+03	2.81997-04	4.50222-05	1.87340-09	5.97337-13	5.23948-03	1.17997+00

TABLE 24 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 3.80000+06 SHAKES

PAGE 2

RADIUS(CM)	VEL(CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
9.43248+03	2.83127-04	1.52275-05	1.87527-09	6.10336-13	5.20290-03	1.17949+00
9.67499+03	2.79812-04	1.54536-05	1.87721-09	6.05005-13	5.16324-03	1.17895+00
9.92145+03	2.77010-04	1.57071-05	1.87950-09	6.02642-13	5.12004-03	1.17837+00
1.01717+04	2.77889-04	1.59902-05	1.88195-09	6.17420-13	5.07285-03	1.17774+00
1.04254+04	2.84922-04	1.63070-05	1.88442-09	6.62159-13	5.02111-03	1.17703+00
1.06824+04	2.99872-04	1.66583-05	1.88641-09	7.49722-13	4.96437-03	1.17626+00
1.09425+04	3.23529-04	1.70329-05	1.88853-09	8.93155-13	4.90274-03	1.17540+00
1.12056+04	3.56025-04	1.74411-05	1.88858-09	1.10827-12	4.83590-03	1.17446+00
1.14715+04	3.92668-04	1.78936-05	1.88852-09	1.38252-12	4.76362-03	1.17342+00
1.17396+04	4.26514-04	1.84091-05	1.88820-09	1.67664-12	4.68545-03	1.17230+00
1.20094+04	4.52998-04	1.90133-05	1.88821-09	1.95199-12	4.60076-03	1.17108+00
1.22799+04	4.73097-04	1.97314-05	1.88463-09	2.20896-12	4.50859-03	1.16974+00
1.25499+04	4.93718-04	2.05793-05	1.88875-09	2.50955-12	4.40786-03	1.16827+00
1.28186+04	5.20627-04	2.15727-05	1.89289-09	2.92621-12	4.29672-03	1.16662+00
1.30846+04	5.54788-04	2.27609-05	1.89685-09	3.50680-12	4.17236-03	1.16474+00
1.33465+04	5.97358-04	2.42095-05	1.90055-09	4.32626-12	4.03207-03	1.16258+00
1.36024+04	6.53573-04	2.60074-05	1.90240-09	5.57153-12	3.87136-03	1.16004+00
1.38491+04	7.26190-04	2.85230-05	1.90161-09	7.54343-12	3.66882-03	1.15674+00
1.40799+04	8.17323-04	3.27533-05	1.90072-09	1.09830-11	3.38570-03	1.18430+00
1.42783+04	9.45931-04	4.33457-05	1.89822-09	1.95220-11	2.88218-03	1.17394+00
1.44298+04	1.07200-03	6.39023-05	1.89995-09	3.67936-11	2.26680-03	1.16141+00
1.45430+04	1.13549-03	8.72208-05	1.90389-09	5.62385-11	1.91376-03	1.17182+00
1.46386+04	1.15446-03	1.00906-04	1.90835-09	6.72438-11	1.78091-03	1.16498+00
1.47295+04	1.15857-03	1.10847-04	1.91460-09	7.43937-11	1.70343-03	1.16073+00
1.48186+04	1.15629-03	1.20669-04	1.92167-09	8.06680-11	1.63795-03	1.15700+00
1.49065+04	1.15681-03	1.31057-04	1.92946-09	8.76906-11	1.57764-03	1.15045+00
1.49933+04	1.16255-03	1.42471-04	1.93669-09	9.62764-11	1.51767-03	1.14678+00
1.50791+04	1.17096-03	1.54679-04	1.94436-09	1.06045-10	1.46075-03	1.14322+00
1.51640+04	1.18261-03	1.67571-04	1.94726-09	1.17184-10	1.40534-03	1.13966+00
1.52481+04	1.19678-03	1.81732-04	1.94677-09	1.30151-10	1.34871-03	1.14470+00
1.53312+04	1.21058-03	1.97696-04	1.94725-09	1.44864-10	1.28923-03	1.15057+00
1.54133+04	1.22453-03	2.15412-04	1.94700-09	1.61509-10	1.22566-03	1.14713+00
1.54939+04	1.23823-03	2.36189-04	1.94727-09	1.81068-10	1.15577-03	1.16186+00
1.55727+04	1.24807-03	2.60160-04	1.94815-09	2.02624-10	1.08149-03	1.17996+00
1.56496+04	1.25111-03	2.86960-04	1.95682-09	2.24585-10	1.01069-03	1.19251+00
1.57246+04	1.24855-03	3.15365-04	1.97171-09	2.45806-10	9.48677-04	1.18944+00
1.57982+04	1.24629-03	3.45509-04	1.98906-09	2.68328-10	8.98069-04	1.17242+00
1.58707+04	1.24711-03	3.75721-04	2.00568-09	2.92176-10	8.55871-04	1.14547+00
1.59425+04	1.25419-03	4.07444-04	2.01624-09	3.20461-10	8.21043-04	1.14205+00
1.60140+04	1.26717-03	4.38804-04	2.02444-09	3.52310-10	7.90603-04	1.13896+00
1.60858+04	1.28323-03	4.67758-04	2.02757-09	3.85143-10	7.66097-04	1.12240+00
1.61586+04	1.30028-03	4.95223-04	2.02672-09	4.18663-10	7.45849-04	1.12016+00
1.62328+04	1.31655-03	5.20140-04	2.02806-09	4.50793-10	7.29271-04	1.11829+00
1.63089+04	1.32665-03	5.44770-04	2.04023-09	4.79397-10	7.15973-04	1.11676+00
1.63869+04	1.32830-03	5.73609-04	2.06951-09	5.06032-10	7.04132-04	1.11537+00
1.64661+04	1.32770-03	6.09415-04	2.10070-09	5.37137-10	6.89904-04	1.11369+00
1.65459+04	1.32941-03	6.53881-04	2.12864-09	5.77814-10	6.71403-04	1.11802+00
1.66259+04	1.33843-03	7.00415-04	2.14549-09	6.27375-10	6.51740-04	1.11587+00
1.67065+04	1.35987-03	7.46519-04	2.14844-09	6.90318-10	6.31691-04	1.11358+00
1.67878+04	1.38373-03	7.96223-04	2.15344-09	7.62309-10	6.12046-04	1.11134+00

TABLE 24 (Cont.)

J15 SER1ES 7 PROBLEM 82
T= 3.80000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	OYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.68692+04	1.39490-03	8.57726-04	2.17185-09	8.34460-10	5.89007-04	1.14296+00
1.69505+04	1.39442-03	9.24272-04	2.20104-09	9.98586-10	5.66108-04	1.14185+00
1.70315+04	1.38865-03	1.00001-03	2.24422-09	9.64193-10	5.44329-04	1.14113+00
1.71119+04	1.39091-03	1.08295-03	2.28622-09	1.04758-09	5.22105-04	1.14054+00
1.71922+04	1.40722-03	1.16191-03	2.28814-09	1.15051-09	4.95382-04	1.19340+00
1.72728+04	1.42628-03	1.24295-03	2.28867-09	1.26429-09	4.70190-04	1.19253+00
1.73537+04	1.44080-03	1.33664-03	2.30548-09	1.38739-09	4.46819-04	1.19223+00
1.74341+04	1.44251-03	1.45158-03	2.35862-09	1.51027-09	4.26961-04	1.17653+00
1.75139+04	1.43847-03	1.56936-03	2.40541-09	1.62365-09	4.09438-04	1.17427+00
1.75935+04	1.44733-03	1.69267-03	2.45831-09	1.77293-09	3.93714-04	1.17228+00
1.76737+04	1.46705-03	1.78994-03	2.46573-09	1.92631-09	3.78609-04	1.17025+00
1.77553+04	1.48576-03	1.89049-03	2.48233-09	2.08667-09	3.65310-04	1.16849+00
1.78378+04	1.49204-03	2.02722-03	2.55289-09	2.25649-09	3.54117-04	1.16713+00
1.79204+04	1.49327-03	2.17914-03	2.63609-09	2.42960-09	3.43465-04	1.17846+00
1.80036+04	1.50855-03	2.31322-03	2.68963-09	2.63231-09	3.32340-04	1.17781+00
1.80886+04	1.53350-03	2.41942-03	2.70359-09	2.84498-09	3.21417-04	1.17702+00
1.81754+04	1.54707-03	2.55932-03	2.75869-09	3.06276-09	3.11817-04	1.17656+00
1.82626+04	1.54701-03	2.77508-03	2.87078-09	3.32072-09	3.01138-04	1.17636+00
1.83494+04	1.55930-03	2.98803-03	2.95468-09	3.63282-09	2.89638-04	1.17600+00
1.84369+04	1.58716-03	3.16078-03	2.98173-09	3.98147-09	2.77984-04	1.17540+00
1.85251+04	1.60190-03	3.39419-03	3.06848-09	4.35488-09	2.67817-04	1.17525+00
1.86126+04	1.60365-03	3.71426-03	3.23359-09	4.77597-09	2.59030-04	1.17560+00
1.86994+04	1.62145-03	3.99324-03	3.30540-09	5.24982-09	2.46498-04	1.24452+00
1.87865+04	1.64639-03	4.27176-03	3.35342-09	5.78966-09	2.33979-04	1.24466+00
1.88731+04	1.65161-03	4.66781-03	3.52184-09	6.36652-09	2.25044-04	1.24501+00
1.89583+04	1.65663-03	5.10608-03	3.71142-09	7.00678-09	2.16886-04	1.24539+00
1.90437+04	1.68019-03	5.38449-03	3.76070-09	7.60095-09	2.08484-04	1.24556+00
1.91303+04	1.69725-03	5.75706-03	3.88695-09	8.29210-09	2.01643-04	1.24585+00
1.92161+04	1.70135-03	6.32630-03	4.16021-09	9.15604-09	1.96458-04	1.24634+00
1.93012+04	1.72090-03	6.80164-03	4.32455-09	1.00726-08	1.89974-04	1.24669+00
1.93880+04	1.71376-03	7.01349-03	4.43684-09	1.03013-08	1.82297-04	1.24675+00
1.95304+04	1.22941-03	3.36585-03	3.91391-09	2.89933-09	1.15729-04	1.29682+00
1.98594+04	4.14394-04	1.50846-03	6.66769-10	2.24720-10	2.79978-05	1.37008+00
2.03673+04	3.03602-05	1.30210-03	1.19269-10	1.13829-12	2.36092-05	1.36992+00
2.09310+04	8.23174-07	1.29320-03	1.02203-10	8.37050-16	2.35414-05	1.36972+00
2.15124+04	1.92555-08	1.29299-03	1.01776-10	4.60243-19	2.35400-05	1.36972+00
2.21100+04	3.95477-10	1.29299-03	1.01766-10	1.99636-22	2.35400-05	1.36972+00
2.27242+04	2.54945-12	1.29299-03	1.01766-10	8.40406-27	2.35400-05	1.36972+00

TABLE 25

J15 SERIES 7 PROBLEM 82
 $T = 4.00000+06$ SHAKES

PAGE 1

RAD1US (CM)	VEL (CM/SH)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
7.85323+02	3.30231-05	4.14136-05	1.79493-09	4.51627-14	5.63962-03	1.12546+00
1.73234+03	4.89150-05	4.06311-05	1.75837-09	5.45707-14	5.63052-03	1.12516+00
1.98440+03	2.91114-05	4.10733-05	1.77469-09	1.75509-14	5.62759-03	1.12522+00
2.13241+03	2.32895-05	4.12628-05	1.78276-09	1.13952-14	5.62564-03	1.12523+00
2.22896+03	1.83796-05	4.13688-05	1.78627-09	7.05146-15	5.62426-03	1.12523+00
2.29500+03	1.58581-05	4.14249-05	1.78781-09	5.22075-15	5.62327-03	1.12523+00
2.34138+03	1.48157-05	4.14547-05	1.78855-09	4.55137-15	5.62255-03	1.12523+00
2.42459+03	1.30200-05	4.26357-05	1.78901-09	1.08549-15	5.62045-03	1.15041+00
2.55117+03	1.11144-05	4.26527-05	1.78912-09	7.02461-16	5.61670-03	1.15037+00
2.67556+03	1.31943-05	4.26663-05	1.78892-09	1.14120-15	5.61284-03	1.15033+00
2.79859+03	2.20357-05	4.26734-05	1.78782-09	5.33405-15	5.60887-03	1.15028+00
2.92092+03	3.71417-05	4.26722-05	1.78558-09	9.22428-15	5.60484-03	1.15022+00
3.04308+03	5.28748-05	4.26697-05	1.78313-09	1.80208-14	5.60074-03	1.15017+00
3.16548+03	6.61139-05	4.26690-05	1.78086-09	2.79351-14	5.59655-03	1.15011+00
3.28845+03	7.72371-05	4.26690-05	1.77865-09	3.79399-14	5.59225-03	1.15005+00
3.41230+03	8.78780-05	4.26690-05	1.77635-09	4.91287-14	5.58780-03	1.14999+00
3.53730+03	9.79688-05	4.26691-05	1.77400-09	6.09170-14	5.58322-03	1.14993+00
3.66367+03	1.05175-04	4.26737-05	1.77215-09	7.01496-14	5.57847-03	1.14987+00
3.79160+03	1.10444-04	4.26834-05	1.77088-09	7.73920-14	5.57351-03	1.14981+00
3.92125+03	1.14368-04	4.26954-05	1.76979-09	8.30427-14	5.56834-03	1.14975+00
4.05278+03	1.16316-04	4.27127-05	1.76927-09	8.59992-14	5.56291-03	1.14969+00
4.18632+03	1.16866-04	4.27351-05	1.76926-09	8.69659-14	5.55720-03	1.14962+00
4.32202+03	1.16161-04	4.27608-05	1.76952-09	8.60971-14	5.55117-03	1.14956+00
4.45999+03	1.14747-04	4.27920-05	1.77030-09	8.42178-14	5.54478-03	1.14949+00
4.60036+03	1.14618-04	4.28268-05	1.77133-09	8.42556-14	5.53800-03	1.14942+00
4.74325+03	1.15144-04	4.28665-05	1.77278-09	8.52924-14	5.53082-03	1.14934+00
4.88876+03	1.15831-04	4.29080-05	1.77420-09	8.65938-14	5.52318-03	1.14927+00
5.03705+03	1.16660-04	4.29495-05	1.77531-09	8.81194-14	5.51504-03	1.15044+00
5.18826+03	1.17944-04	4.29915-05	1.77616-09	9.03682-14	5.50636-03	1.15034+00
5.34255+03	1.20755-04	4.30322-05	1.77652-09	9.50360-14	5.49710-03	1.15024+00
5.50008+03	1.25334-04	4.30720-05	1.77642-09	1.02724-13	5.48723-03	1.15012+00
5.66101+03	1.31331-04	4.31108-05	1.77584-09	1.13133-13	5.47670-03	1.15000+00
5.82547+03	1.38771-04	4.31499-05	1.77489-09	1.26736-13	5.46548-03	1.14987+00
5.99363+03	1.47765-04	4.31883-05	1.77345-09	1.44128-13	5.45353-03	1.14972+00
6.16562+03	1.57497-04	4.32273-05	1.77166-09	1.64219-13	5.44080-03	1.14957+00
6.34153+03	1.64906-04	4.32720-05	1.76994-09	1.80497-13	5.42727-03	1.18211+00
6.52142+03	1.68788-04	4.33260-05	1.76887-09	1.89839-13	5.41305-03	1.18192+00
6.70536+03	1.72017-04	4.33839-05	1.76782-09	1.98033-13	5.39806-03	1.18172+00
6.89337+03	1.72680-04	4.34533-05	1.76770-09	2.00585-13	5.38226-03	1.18151+00
7.08549+03	1.69920-04	4.35300-05	1.76786-09	1.95345-13	5.36551-03	1.18129+00
7.28173+03	1.65564-04	4.36190-05	1.76887-09	1.86708-13	5.34771-03	1.18106+00
7.48208+03	1.62299-04	4.37217-05	1.77077-09	1.80725-13	5.32872-03	1.18081+00
7.68654+03	1.61040-04	4.38335-05	1.77293-09	1.79381-13	5.30846-03	1.18055+00
7.89515+03	1.61375-04	4.39538-05	1.77516-09	1.81697-13	5.28678-03	1.18027+00
8.10800+03	1.63323-04	4.40768-05	1.77669-09	1.87750-13	5.26358-03	1.17996+00
8.32519+03	1.67189-04	4.42063-05	1.77790-09	1.98616-13	5.23867-03	1.17963+00
8.54682+03	1.74113-04	4.43404-05	1.77829-09	2.17481-13	5.21193-03	1.17927+00
8.77300+03	1.84728-04	4.44796-05	1.77796-09	2.47372-13	5.18319-03	1.17888+00
9.00384+03	1.99961-04	4.46259-05	1.77677-09	2.92906-13	5.15256-03	1.17846+00
9.23939+03	2.18494-04	4.47788-05	1.77523-09	3.53493-13	5.11930-03	1.17800+00

TABLE 25 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 4.00000+06 SHAKES

PAGE 2

RADIUS(CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
9.47966+03	2.36653-04	1.49451-05	1.77329-09	4.19002-13	5.08387-03	1.17751+00
9.72456+03	2.52238-04	1.51350-05	1.77207-09	4.81885-13	5.04581-03	1.17698+00
9.97384+03	2.64920-04	1.53578-05	1.77227-09	5.39143-13	5.00479-03	1.17642+00
1.02271+04	2.74558-04	1.56195-05	1.77418-09	5.88859-13	4.96058-03	1.17581+00
1.04841+04	2.80963-04	1.59184-05	1.77728-09	6.28333-13	4.91299-03	1.17515+00
1.07445+04	2.85886-04	1.62478-05	1.78031-09	6.64038-13	4.86146-03	1.17444+00
1.10080+04	2.93875-04	1.66098-05	1.78290-09	7.17454-13	4.80551-03	1.17366+00
1.12746+04	3.06852-04	1.70036-05	1.78443-09	8.01032-13	4.74466-03	1.17280+00
1.15440+04	3.24634-04	1.74369-05	1.78501-09	9.19684-13	4.67841-03	1.17185+00
1.18158+04	3.48521-04	1.79146-05	1.78435-09	1.08975-12	4.60619-03	1.17080+00
1.20898+04	3.82115-04	1.84482-05	1.78275-09	1.35040-12	4.52752-03	1.16965+00
1.23655+04	4.24369-04	1.90515-05	1.78064-09	1.72033-12	4.44216-03	1.16838+00
1.26421+04	4.68813-04	1.97486-05	1.77905-09	2.17495-12	4.34970-03	1.16700+00
1.29187+04	5.09316-04	2.05850-05	1.77927-09	2.67348-12	4.24816-03	1.16546+00
1.31937+04	5.41728-04	2.16082-05	1.78218-09	3.17272-12	4.13591-03	1.16375+00
1.34655+04	5.67455-04	2.28751-05	1.78777-09	3.68458-12	4.01047-03	1.16182+00
1.37320+04	5.97615-04	2.44443-05	1.79334-09	4.36911-12	3.86736-03	1.15957+00
1.39904+04	6.41213-04	2.65899-05	1.79761-09	5.47484-12	3.68802-03	1.15668+00
1.42350+04	7.05718-04	2.99433-05	1.80104-09	7.47935-12	3.44601-03	1.15261+00
1.44542+04	8.10612-04	3.68125-05	1.80154-09	1.21742-11	3.06796-03	1.17664+00
1.46290+04	9.40307-04	5.35558-05	1.80317-09	2.37858-11	2.45142-03	1.16383+00
1.47573+04	1.03954-03	7.70322-05	1.80296-09	4.16703-11	1.98081-03	1.17579+00
1.48595+04	1.08769-03	9.47334-05	1.80324-09	5.60462-11	1.78358-03	1.16589+00
1.49530+04	1.10879-03	1.05199-04	1.80362-09	6.46708-11	1.69368-03	1.16101+00
1.50442+04	1.12295-03	1.14358-04	1.80268-09	7.21055-11	1.62586-03	1.15719+00
1.51343+04	1.13432-03	1.24025-04	1.80547-09	7.97921-11	1.56505-03	1.15362+00
1.52233+04	1.13943-03	1.34536-04	1.80970-09	8.73336-11	1.50694-03	1.14594+00
1.53114+04	1.13830-03	1.46186-04	1.81875-09	9.47086-11	1.45066-03	1.14240+00
1.53983+04	1.13519-03	1.59020-04	1.82925-09	1.02461-10	1.39597-03	1.13888+00
1.54840+04	1.13267-03	1.73448-04	1.83926-09	1.11261-10	1.33944-03	1.14341+00
1.55683+04	1.13602-03	1.89278-04	1.84549-09	1.22136-10	1.27988-03	1.14914+00
1.56513+04	1.14284-03	2.06815-04	1.85007-09	1.35059-10	1.21686-03	1.14574+00
1.57327+04	1.15280-03	2.26988-04	1.84958-09	1.50833-10	1.14573-03	1.16041+00
1.58122+04	1.16646-03	2.50000-04	1.84940-09	1.70084-10	1.07106-03	1.17881+00
1.58900+04	1.18184-03	2.74720-04	1.85067-09	1.91868-10	1.00055-03	1.19235+00
1.59663+04	1.19758-03	2.99549-04	1.85123-09	2.14814-10	9.39882-04	1.17746+00
1.60417+04	1.21005-03	3.25800-04	1.85271-09	2.38524-10	8.88890-04	1.17360+00
1.61165+04	1.21699-03	3.52487-04	1.85969-09	2.61028-10	8.48322-04	1.14625+00
1.61907+04	1.21756-03	3.82872-04	1.87280-09	2.83797-10	8.13714-04	1.14278+00
1.62643+04	1.21392-03	4.14061-04	1.89273-09	3.05082-10	7.84572-04	1.13966+00
1.63378+04	1.21183-03	4.44307-04	1.91107-09	3.26241-10	7.61669-04	1.12200+00
1.64118+04	1.21595-03	4.73436-04	1.92510-09	3.49998-10	7.42175-04	1.11982+00
1.64869+04	1.22572-03	4.99285-04	1.93524-09	3.75068-10	7.25950-04	1.11798+00
1.65639+04	1.24255-03	5.21473-04	1.93870-09	4.02592-10	7.12062-04	1.11639+00
1.66433+04	1.26476-03	5.43090-04	1.93854-09	4.34404-10	6.98760-04	1.11466+00
1.67248+04	1.28200-03	5.71094-04	1.94235-09	4.69313-10	6.83186-04	1.11813+00
1.68076+04	1.28814-03	6.09093-04	1.95764-09	5.05333-10	6.64986-04	1.11612+00
1.68907+04	1.28753-03	6.55462-04	1.98544-09	5.43290-10	6.46279-04	1.11413+00
1.69735+04	1.28726-03	7.07621-04	2.01895-09	5.86279-10	6.27641-04	1.11219+00
1.70560+04	1.29308-03	7.64698-04	2.05181-09	6.39324-10	6.08651-04	1.11021+00

TABLE 25 (Cont.)

J15 SERIES 7 PROBLEM 82
 T = 4.00000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
1.71383+04	1.30971-03	8.22134-04	2.06346-09	7.05175-10	5.84634-04	1.14102+00
1.72211+04	1.33314-03	8.73275-04	2.05659-09	7.76081-10	5.60834-04	1.13926+00
1.73046+04	1.35233-03	9.34667-04	2.07040-09	8.54680-10	5.38501-04	1.13800+00
1.73880+04	1.36158-03	1.00955-03	2.09986-09	9.35525-10	5.15854-04	1.19201+00
1.74708+04	1.35990-03	1.10077-03	2.14320-09	1.01785-09	4.90503-04	1.19152+00
1.75525+04	1.35881-03	1.19621-03	2.18530-09	1.10432-09	4.66937-04	1.19119+00
1.76338+04	1.36983-03	1.28744-03	2.20565-09	1.20795-09	4.44018-04	1.19070+00
1.77153+04	1.38814-03	1.37633-03	2.21488-09	1.32611-09	4.23429-04	1.17574+00
1.77975+04	1.40382-03	1.46471-03	2.21604-09	1.44328-09	4.04948-04	1.17324+00
1.78800+04	1.40990-03	1.58185-03	2.26893-09	1.57222-09	3.89609-04	1.17128+00
1.79623+04	1.40726-03	1.70277-03	2.32513-09	1.68608-09	3.75828-04	1.16954+00
1.80449+04	1.41479-03	1.81655-03	2.36806-09	1.81814-09	3.63073-04	1.16791+00
1.81288+04	1.43594-03	1.91121-03	2.37965-09	1.97049-09	3.50718-04	1.16626+00
1.82146+04	1.45447-03	2.01188-03	2.39563-09	2.12811-09	3.38537-04	1.17686+00
1.83015+04	1.46044-03	2.14931-03	2.46427-09	2.29213-09	3.28143-04	1.17634+00
1.83888+04	1.46208-03	2.30739-03	2.55541-09	2.46622-09	3.18820-04	1.17606+00
1.84770+04	1.47937-03	2.43773-03	2.60183-09	2.66776-09	3.09001-04	1.17555+00
1.85669+04	1.50490-03	2.56935-03	2.61878-09	2.90961-09	2.97068-04	1.17476+00
1.86575+04	1.51479-03	2.76628-03	2.69658-09	3.17374-09	2.85911-04	1.17440+00
1.87476+04	1.51520-03	3.01238-03	2.81697-09	3.45795-09	2.75812-04	1.17440+00
1.88375+04	1.53475-03	3.20699-03	2.96907-09	3.77747-09	2.65263-04	1.17405+00
1.89285+04	1.56006-03	3.40108-03	2.89824-09	4.13887-09	2.53610-04	1.24376+00
1.90192+04	1.56525-03	3.73435-03	3.04049-09	4.57462-09	2.42537-04	1.24406+00
1.91079+04	1.56955-03	4.10579-03	3.19225-09	5.05740-09	2.31757-04	1.24439+00
1.91963+04	1.59283-03	4.36146-03	3.23545-09	5.53330-09	2.21244-04	1.24454+00
1.92854+04	1.61210-03	4.66948-03	3.31963-09	6.06767-09	2.12174-04	1.24477+00
1.93740+04	1.61410-03	5.11268-03	3.52556-09	6.66034-09	2.05885-04	1.24520+00
1.94617+04	1.62631-03	5.49759-03	3.66938-09	7.27068-09	1.99333-04	1.24553+00
1.95506+04	1.65085-03	5.78003-03	3.71641-09	7.87654-09	1.92097-04	1.24571+00
1.96400+04	1.66043-03	6.27978-03	3.91445-09	8.65675-09	1.86313-04	1.24613+00
1.97282+04	1.66878-03	6.87850-03	4.17081-09	9.57805-09	1.81255-04	1.24661+00
1.98210+04	1.61015-03	6.56792-03	4.29452-09	8.52955-09	1.70984-04	1.29472+00
2.00025+04	1.01274-03	2.58150-03	2.96980-09	1.68438-09	8.25698-05	1.36911+00
2.03905+04	2.55137-04	1.40582-03	3.55413-10	8.26494-11	2.50999-05	1.37006+00
2.09319+04	1.33670-05	1.29700-03	1.09157-10	2.19990-13	2.35690-05	1.36991+00
2.15124+04	3.56333-07	1.29307-03	1.01954-10	1.56727-16	2.35406-05	1.36972+00
2.21100+04	8.46044-09	1.29299-03	1.01770-10	8.88355-20	2.35400-05	1.36972+00
2.27242+04	1.73381-10	1.29299-03	1.01766-10	3.88687-23	2.35400-05	1.36972+00

TABLE 26

J15 SERIES 7 PROBLEM 82
T= 4.20000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
7.90251+02	4.19805-06	4.06351-05	1.70046-09	7.16136-16	5.50872-03	1.12348+00
1.74191+03	6.68714-05	4.02962-05	1.68138-09	1.58991-13	5.49764-03	1.12326+00
1.99452+03	1.29358-04	4.02992-05	1.68028-09	3.37496-13	5.49498-03	1.12322+00
2.14406+03	1.30541-04	4.03359-05	1.68099-09	3.43841-13	5.49324-03	1.12321+00
2.24182+03	1.24803-04	4.03663-05	1.68167-09	3.14541-13	5.49200-03	1.12320+00
2.30873+03	1.21190-04	4.04179-05	1.68338-09	2.96820-13	5.49110-03	1.12319+00
2.35569+03	1.19765-04	4.04673-05	1.68511-09	2.90237-13	5.49045-03	1.12320+00
2.43973+03	1.14384-04	1.23644-05	1.68656-09	8.10210-14	5.48858-03	1.14849+00
2.56748+03	1.04215-04	1.23807-05	1.68715-09	6.74203-14	5.48522-03	1.14845+00
2.69296+03	9.37128-05	1.23955-05	1.68735-09	5.45839-14	5.48169-03	1.14841+00
2.81699+03	8.47849-05	1.24102-05	1.68726-09	4.47012-14	5.47797-03	1.14837+00
2.94018+03	7.86014-05	1.24241-05	1.68702-09	3.84107-14	5.47404-03	1.14833+00
3.06305+03	7.62178-05	1.24367-05	1.68658-09	3.61236-14	5.46992-03	1.14828+00
3.18605+03	7.71195-05	1.24480-05	1.68587-09	3.70233-14	5.46560-03	1.14823+00
3.30954+03	7.99612-05	1.24582-05	1.68492-09	3.98479-14	5.46107-03	1.14817+00
3.44338+03	8.57451-05	1.24693-05	1.68397-09	4.59371-14	5.45633-03	1.14812+00
3.55921+03	9.41010-05	1.24787-05	1.68271-09	5.53691-14	5.45138-03	1.14805+00
3.66859+03	1.03711-04	1.24897-05	1.68154-09	6.73400-14	5.44620-03	1.14799+00
3.81418+03	1.16104-04	1.25029-05	1.68052-09	8.45910-14	5.44078-03	1.14793+00
3.94417+03	1.32065-04	1.25182-05	1.67965-09	1.09651-13	5.43510-03	1.18017+00
4.07606+03	1.48785-04	1.25350-05	1.67876-09	1.39136-13	5.42933-03	1.18009+00
4.21001+03	1.62604-04	1.25537-05	1.67802-09	1.66179-13	5.42341-03	1.18001+00
4.34618+03	1.70478-04	1.25756-05	1.67759-09	1.82766-13	5.41729-03	1.17994+00
4.48466+03	1.70992-04	1.26045-05	1.67792-09	1.84280-13	5.41092-03	1.17986+00
4.62556+03	1.67014-04	1.26382-05	1.67866-09	1.76303-13	5.40424-03	1.17978+00
4.76903+03	1.62424-04	1.26725-05	1.67929-09	1.67188-13	5.39720-03	1.17970+00
4.91520+03	1.57275-04	1.27091-05	1.67998-09	1.57242-13	5.38978-03	1.17962+00
5.06417+03	1.49647-04	1.27520-05	1.68123-09	1.42918-13	5.38194-03	1.17953+00
5.21605+03	1.40997-04	1.27985-05	1.68265-09	1.27326-13	5.37361-03	1.17944+00
5.37094+03	1.32719-04	1.28457-05	1.68395-09	1.13246-13	5.36477-03	1.17934+00
5.52900+03	1.24529-04	1.28947-05	1.68508-09	1.00086-13	5.35536-03	1.17924+00
5.69034+03	1.16954-04	1.29460-05	1.68605-09	8.86218-14	5.34555-03	1.18073+00
5.85508+03	1.10901-04	1.29996-05	1.68686-09	7.99821-14	5.33469-03	1.18059+00
6.02336+03	1.07429-04	1.30527-05	1.68728-09	7.53267-14	5.32334-03	1.18044+00
6.19531+03	1.06814-04	1.31080-05	1.68755-09	7.47777-14	5.31128-03	1.18028+00
6.37107+03	1.08942-04	1.31628-05	1.68732-09	7.81308-14	5.29848-03	1.18011+00
6.55078+03	1.14224-04	1.32202-05	1.68695-09	8.63250-14	5.28490-03	1.17992+00
6.73453+03	1.23793-04	1.32811-05	1.68655-09	1.02007-13	5.27052-03	1.17973+00
6.92245+03	1.37262-04	1.33439-05	1.68585-09	1.26074-13	5.25534-03	1.17952+00
7.11464+03	1.52026-04	1.34102-05	1.68507-09	1.55327-13	5.23933-03	1.17930+00
7.31119+03	1.66328-04	1.34806-05	1.68423-09	1.86799-13	5.22244-03	1.17907+00
7.51220+03	1.78679-04	1.35561-05	1.68340-09	2.16593-13	5.20458-03	1.17883+00
7.71770+03	1.86987-04	1.36424-05	1.68316-09	2.38556-13	5.18565-03	1.17857+00
7.92770+03	1.90987-04	1.37380-05	1.68323-09	2.50561-13	5.16551-03	1.17830+00
8.14219+03	1.90363-04	1.38472-05	1.68398-09	2.50917-13	5.14397-03	1.17801+00
8.36115+03	1.86251-04	1.39676-05	1.68497-09	2.42305-13	5.12082-03	1.17770+00
8.58459+03	1.81181-04	1.41003-05	1.68618-09	2.31481-13	5.09587-03	1.17736+00
8.81250+03	1.77157-04	1.42446-05	1.68735-09	2.23543-13	5.06888-03	1.17699+00
9.04492+03	1.76154-04	1.43957-05	1.68780-09	2.23351-13	5.03967-03	1.17659+00
9.28192+03	1.79932-04	1.45576-05	1.68782-09	2.35739-13	5.00802-03	1.17615+00

TABLE 26 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 4.20000+06 SHAKES

PAGE 2

RADIUS(CM)	VEL(CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
9.52348+03	1.90193-04	1.47335-05	1.68761-09	2.66827-13	4.97385-03	1.17568+00
9.76958+03	2.05766-04	1.49243-05	1.68724-09	3.16512-13	4.93721-03	1.17517+00
1.00202+04	2.25492-04	1.51290-05	1.68644-09	3.89545-13	4.89796-03	1.17461+00
1.02753+04	2.47984-04	1.53506-05	1.68535-09	4.73014-13	4.85597-03	1.17402+00
1.05347+04	2.70722-04	1.55903-05	1.68389-09	5.72294-13	4.81107-03	1.17337+00
1.07985+04	2.90968-04	1.58599-05	1.68300-09	6.72014-13	4.76306-03	1.17268+00
1.10661+04	3.05726-04	1.61696-05	1.68327-09	7.55942-13	4.71161-03	1.17195+00
1.13372+04	3.12925-04	1.65264-05	1.68464-09	8.09166-13	4.65626-03	1.17115+00
1.16112+04	3.14609-04	1.69361-05	1.68749-09	8.38157-13	4.59633-03	1.17029+00
1.18877+04	3.17807-04	1.74057-05	1.69103-09	8.79073-13	4.53113-03	1.16935+00
1.21662+04	3.29862-04	1.79320-05	1.69425-09	9.75111-13	4.46001-03	1.16832+00
1.24462+04	3.53507-04	1.85108-05	1.69586-09	1.15869-12	4.38246-03	1.16717+00
1.27274+04	3.88230-04	1.91582-05	1.69593-09	1.44753-12	4.29726-03	1.16589+00
1.30091+04	4.31868-04	1.98994-05	1.69488-09	1.06138-12	4.20322-03	1.16445+00
1.32904+04	4.81465-04	2.07580-05	1.69262-09	2.41282-12	4.09913-03	1.16284+00
1.35703+04	5.32068-04	2.17887-05	1.69073-09	3.09089-12	3.98362-03	1.16102+00
1.38470+04	5.82264-04	2.30716-05	1.69025-09	3.91840-12	3.85348-03	1.15895+00
1.41174+04	6.32632-04	2.48387-05	1.69136-09	4.97831-12	3.69938-03	1.15635+00
1.43763+04	6.81915-04	2.75292-05	1.69567-09	6.40874-12	3.48420-03	1.15206+00
1.46140+04	7.42966-04	3.25175-05	1.70415-09	8.99684-12	3.18241-03	1.17792+00
1.48113+04	8.35201-04	4.51202-05	1.71247-09	1.58064-11	2.63559-03	1.16644+00
1.49588+04	9.38731-04	6.58237-05	1.71869-09	2.90786-11	2.09473-03	1.18167+00
1.50707+04	1.00357-03	8.81953-05	1.72202-09	4.44254-11	1.80408-03	1.16760+00
1.51670+04	1.02964-03	1.00641-04	1.72246-09	5.33522-11	1.68951-03	1.16142+00
1.52595+04	1.04670-03	1.09932-04	1.72179-09	6.02229-11	1.61789-03	1.15737+00
1.53506+04	1.06282-03	1.19222-04	1.72228-09	6.73395-11	1.55620-03	1.15375+00
1.54408+04	1.07855-03	1.28776-04	1.71831-09	7.49048-11	1.49857-03	1.15030+00
1.55305+04	1.09218-03	1.39267-04	1.71757-09	8.30652-11	1.44207-03	1.14171+00
1.56194+04	1.10432-03	1.50795-04	1.71652-09	9.19505-11	1.38629-03	1.13808+00
1.57074+04	1.11462-03	1.63911-04	1.71724-09	1.01822-10	1.32841-03	1.14188+00
1.57941+04	1.11877-03	1.78845-04	1.72172-09	1.11925-10	1.26830-03	1.14733+00
1.58793+04	1.11726-03	1.96041-04	1.73051-09	1.22357-10	1.20558-03	1.16192+00
1.59623+04	1.11278-03	2.16704-04	1.74239-09	1.34172-10	1.13452-03	1.15876+00
1.60430+04	1.10866-03	2.40212-04	1.75555-09	1.47626-10	1.06087-03	1.17767+00
1.61215+04	1.10922-03	2.64852-04	1.76653-09	1.62933-10	9.92434-04	1.19222+00
1.61983+04	1.11495-03	2.89193-04	1.77253-09	1.79752-10	9.33749-04	1.17818+00
1.62742+04	1.12538-03	3.14336-04	1.77590-09	1.99056-10	8.03877-04	1.17437+00
1.63496+04	1.13852-03	3.39371-04	1.77777-09	2.19958-10	8.43694-04	1.14672+00
1.64248+04	1.15342-03	3.65707-04	1.77429-09	2.43274-10	8.08356-04	1.14335+00
1.65001+04	1.16951-03	3.91019-04	1.77142-09	2.67423-10	7.78486-04	1.14039+00
1.65760+04	1.18338-03	4.16801-04	1.77470-09	2.91698-10	7.55915-04	1.12147+00
1.66527+04	1.18967-03	4.43863-04	1.78720-09	3.14104-10	7.36685-04	1.11931+00
1.67303+04	1.18970-03	4.70134-04	1.80545-09	3.32710-10	7.20918-04	1.11751+00
1.68093+04	1.18734-03	4.95899-04	1.82821-09	3.49552-10	7.07707-04	1.11597+00
1.68899+04	1.18726-03	5.21742-04	1.84727-09	3.67720-10	6.94832-04	1.11447+00
1.69721+04	1.19402-03	5.51384-04	1.86113-09	3.93057-10	6.79509-04	1.11715+00
1.70556+04	1.21048-03	5.84491-04	1.86424-09	4.28249-10	6.61216-04	1.11503+00
1.71403+04	1.23394-03	6.19662-04	1.85923-09	4.71805-10	6.41675-04	1.11269+00
1.72260+04	1.25408-03	6.60711-04	1.86400-09	5.19570-10	6.22425-04	1.11045+00
1.73119+04	1.26231-03	7.11692-04	1.86429-09	5.67016-10	6.02941-04	1.13965+00

J15 SERIES 7 PROBLEM 82
 $T = 4.20000 \times 10^6$ SHAKES

TABLE 26 (Cont.)

PAGE 3

RADIUS (CM)	VEL (CM/S)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
1.73973+04	1.26276-03	7.71074-04	1.91232-09	6.14760-10	5.78818-04	1.13826+00
1.74822+04	1.26250-03	8.32755-04	1.94405-09	6.63665-10	5.56811-04	1.13718+00
1.75668+04	1.27091-03	8.98529-04	1.97434-09	7.25690-10	5.35010-04	1.13620+00
1.76513+04	1.28954-03	9.65516-04	1.98288-09	8.02837-10	5.10260-04	1.19038+00
1.77360+04	1.30843-03	1.03543-03	1.98865-09	8.86352-10	4.84622-04	1.18941+00
1.78207+04	1.32353-03	1.11430-03	2.00494-09	9.75995-10	4.60697-04	1.18872+00
1.79051+04	1.33028-03	1.20807-03	2.04504-09	1.06892-09	4.39304-04	1.18851+00
1.79885+04	1.33035-03	1.31511-03	2.10006-09	1.16376-09	4.20668-04	1.17509+00
1.80716+04	1.33781-03	1.41455-03	2.12783-09	1.26587-09	4.02942-04	1.17275+00
1.81550+04	1.35728-03	1.50710-03	2.14285-09	1.38830-09	3.86693-04	1.17057+00
1.82397+04	1.37534-03	1.58793-03	2.14041-09	1.50186-09	3.71721-04	1.16851+00
1.83256+04	1.38417-03	1.69497-03	2.18158-09	1.62373-09	3.59210-04	1.16690+00
1.84119+04	1.38335-03	1.81786-03	2.24266-09	1.73941-09	3.48040-04	1.16553+00
1.84986+04	1.38733-03	1.94233-03	2.29837-09	1.86925-09	3.36598-04	1.17618+00
1.85868+04	1.40737-03	2.03639-03	2.31091-09	2.01689-09	3.25049-04	1.17527+00
1.86773+04	1.42724-03	2.13260-03	2.32628-09	2.17212-09	3.14446-04	1.17448+00
1.87692+04	1.43239-03	2.27642-03	2.39751-09	2.33531-09	3.05326-04	1.17415+00
1.88612+04	1.43456-03	2.46598-03	2.49430-09	2.53746-09	2.95032-04	1.17392+00
1.89533+04	1.44504-03	2.62201-03	2.53050-09	2.77591-09	2.83317-04	1.17330+00
1.90468+04	1.48034-03	2.77067-03	2.55148-09	3.03594-09	2.72003-04	1.17267+00
1.91405+04	1.48496-03	3.00737-03	2.65930-09	3.31502-09	2.62531-04	1.17271+00
1.92331+04	1.48704-03	3.28694-03	2.77749-09	3.63427-09	2.51501-04	1.24353+00
1.93253+04	1.50900-03	3.50808-03	2.81222-09	3.99449-09	2.38781-04	1.24363+00
1.94180+04	1.52960-03	3.76146-03	2.86213-09	4.40034-09	2.26852-04	1.24379+00
1.95098+04	1.53248-03	4.13426-03	3.02695-09	4.85462-09	2.18426-04	1.24417+00
1.96001+04	1.54089-03	4.48637-03	3.15822-09	5.32633-09	2.10094-04	1.24449+00
1.96911+04	1.56584-03	4.73187-03	3.20649-09	5.80139-09	2.01957-04	1.24466+00
1.97830+04	1.58043-03	5.07031-03	3.31706-09	6.33223-09	1.95433-04	1.24496+00
1.98743+04	1.58328-03	5.55747-03	3.53880-09	6.96565-09	1.90273-04	1.24530+00
1.99652+04	1.60138-03	5.92003-03	3.63661-09	7.59147-09	1.83593-04	1.24543+00
2.00572+04	1.62248-03	6.27677-03	3.72069-09	8.26174-09	1.77234-04	1.24571+00
2.01490+04	1.62935-03	6.87497-03	3.97915-09	9.12574-09	1.73091-04	1.24597+00
2.02544+04	1.45875-03	5.57916-03	4.13433-09	6.01867-09	1.52120-04	1.24648+00
2.04909+04	7.68949-04	2.00720-03	4.99286-10	8.62463-10	5.03586-05	1.29559+00
2.09423+04	1.30613-04	1.34336-03	5.04562-10	2.12223-11	2.40372-05	1.36967+00
2.15128+04	5.15774-06	1.29454-03	5.10183-10	3.26934-14	2.35509-05	1.36999+00
2.21100+04	1.37311-07	1.29302-03	5.01768-10	2.32690-17	2.35402-05	1.36991+00
2.27242+04	3.26570-09	1.29299-03	5.01766-10	1.32325-20	2.35400-05	1.36972+00
2.33555+04	6.48734-11	1.29299-03	5.01766-10	5.44164-24	2.35400-05	1.36972+00
						1.36972+00

TABLE 27

J15 SERIES 7 PROBLEM 82
T= 4.40000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
8.00681+02	3.36721-05	3.90759-05	1.57423-09	4.43047-14	5.36896-03	1.12121+00
1.76152+03	9.42900-05	3.97039-05	1.59494-09	1.90910-13	5.35943-03	1.12122+00
2.01291+03	1.31249-04	3.95556-05	1.58783-09	3.42680-13	5.35667-03	1.12115+00
2.16278+03	1.45774-04	3.94538-05	1.58302-09	4.19596-13	5.35492-03	1.12110+00
2.26110+03	1.47152-04	3.94157-05	1.58098-09	4.26942-13	5.35371-03	1.12108+00
2.32849+03	1.39783-04	3.94241-05	1.58128-09	3.85511-13	5.35284-03	1.12107+00
2.37583+03	1.32185-04	3.94359-05	1.58148-09	3.44754-13	5.35219-03	1.12106+00
2.46048+03	1.17445-04	1.20712-05	1.58190-09	8.40320-14	5.35040-03	1.17831+00
2.58910+03	9.63459-05	1.20904-05	1.58266-09	5.66856-14	5.34721-03	1.17827+00
2.71542+03	7.87104-05	1.21131-05	1.58369-09	3.79019-14	5.34391-03	1.17824+00
2.84018+03	6.44914-05	1.21385-05	1.58496-09	2.54840-14	5.34047-03	1.17821+00
2.96401+03	5.32694-05	1.21664-05	1.58644-09	1.74091-14	5.33690-03	1.17818+00
3.08739+03	4.50746-05	1.21978-05	1.58818-09	1.24567-14	5.33318-03	1.17815+00
3.21072+03	4.09216-05	1.22318-05	1.59019-09	1.02463-14	5.32930-03	1.17812+00
3.33435+03	4.06264-05	1.22678-05	1.59260-09	1.01261-14	5.32527-03	1.17810+00
3.45859+03	4.22903-05	1.23057-05	1.59514-09	1.10113-14	5.32108-03	1.17807+00
3.58371+03	4.41694-05	1.23411-05	1.59729-09	1.20423-14	5.31672-03	1.17803+00
3.70999+03	4.64883-05	1.23769-05	1.59936-09	1.33885-14	5.31216-03	1.17799+00
3.83766+03	4.90600-05	1.24103-05	1.60103-09	1.49419-14	5.30738-03	1.17795+00
3.96696+03	5.12038-05	1.24398-05	1.60209-09	1.63149-14	5.30237-03	1.17789+00
4.09812+03	5.44643-05	1.24659-05	1.60260-09	1.85185-14	5.29709-03	1.17783+00
4.25136+03	5.92379-05	1.24898-05	1.60266-09	2.19562-14	5.29156-03	1.17776+00
4.36686+03	6.47257-05	1.25138-05	1.60266-09	2.62648-14	5.28574-03	1.17769+00
4.50477+03	7.14843-05	1.25377-05	1.60245-09	3.21281-14	5.27964-03	1.17761+00
4.64527+03	7.92491-05	1.25603-05	1.60192-09	3.95368-14	5.27323-03	1.17753+00
4.78852+03	8.73023-05	1.25826-05	1.60120-09	4.80595-14	5.26652-03	1.17744+00
4.93465+03	9.53949-05	1.26047-05	1.60027-09	5.74497-14	5.25948-03	1.17734+00
5.08383+03	1.03216-04	1.26278-05	1.59927-09	6.73611-14	5.25209-03	1.17724+00
5.23617+03	1.10033-04	1.26529-05	1.59833-09	7.66504-14	5.24433-03	1.17714+00
5.39177+03	1.15295-04	1.26830-05	1.59777-09	8.43321-14	5.23617-03	1.17703+00
5.55072+03	1.19332-04	1.27171-05	1.59743-09	9.05655-14	5.22757-03	1.17692+00
5.71312+03	1.21169-04	1.27555-05	1.59734-09	9.36369-14	5.21848-03	1.17681+00
5.87903+03	1.21202-04	1.28020-05	1.59793-09	9.40307-14	5.20885-03	1.17669+00
6.04849+03	1.21419-04	1.28567-05	1.59913-09	9.47715-14	5.19863-03	1.17657+00
6.22156+03	1.22005-04	1.29184-05	1.60079-09	9.61464-14	5.18776-03	1.17629+00
6.39831+03	1.21822-04	1.29847-05	1.60251-09	9.63525-14	5.17619-03	1.17814+00
6.57883+03	1.20723-04	1.30540-05	1.60411-09	9.51284-14	5.16384-03	1.17798+00
6.76326+03	1.20354-04	1.31236-05	1.60523-09	9.50490-14	5.15063-03	1.17780+00
6.95174+03	1.21879-04	1.31947-05	1.60600-09	9.80106-14	5.13649-03	1.17761+00
7.14440+03	1.25607-04	1.32674-05	1.60638-09	1.04702-13	5.12138-03	1.17741+00
7.34138+03	1.32265-04	1.33412-05	1.60627-09	1.16812-13	5.10523-03	1.17718+00
7.54282+03	1.40546-04	1.34169-05	1.60575-09	1.32626-13	5.08800-03	1.17695+00
7.74881+03	1.49677-04	1.34970-05	1.60502-09	1.51359-13	5.06962-03	1.17669+00
7.95947+03	1.60301-04	1.35813-05	1.60402-09	1.74707-13	5.05000-03	1.17642+00
8.17486+03	1.71272-04	1.36721-05	1.60296-09	2.00726-13	5.02908-03	1.17612+00
8.39504+03	1.82100-04	1.37700-05	1.60181-09	2.28515-13	5.00674-03	1.17581+00
8.62005+03	1.92858-04	1.38795-05	1.60100-09	2.58314-13	4.98292-03	1.17547+00
8.84983+03	2.02239-04	1.40042-05	1.60087-09	2.86507-13	4.95762-03	1.17512+00
9.08429+03	2.08642-04	1.41470-05	1.60160-09	3.07959-13	4.93068-03	1.17475+00
9.32332+03	2.10544-04	1.43089-05	1.60311-09	3.17149-13	4.90190-03	1.17435+00

TABLE 27 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 4.40000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
9.56678+03	2.08504-04	1.44907-05	1.60527-09	3.15003-13	4.87099-03	1.17392+00
9.81459+03	2.05198-04	1.46906-05	1.60762-09	3.09306-13	4.83765-03	1.17346+00
1.00667+04	2.02997-04	1.49054-05	1.60959-09	3.07112-13	4.80159-03	1.17296+00
1.03231+04	2.08096-04	1.51324-05	1.61066-09	3.21478-13	4.76253-03	1.17240+00
1.05838+04	2.16734-04	1.53709-05	1.61059-09	3.61392-13	4.72031-03	1.17180+00
1.08489+04	2.33880-04	1.56211-05	1.60920-09	4.28035-13	4.67476-03	1.17113+00
1.11184+04	2.56204-04	1.58916-05	1.60714-09	5.22750-13	4.62574-03	1.17041+00
1.13921+04	2.82285-04	1.61925-05	1.60509-09	6.46708-13	4.57307-03	1.16963+00
1.16696+04	3.10457-04	1.65315-05	1.60346-09	7.98373-13	4.51660-03	1.16880+00
1.19506+04	3.36880-04	1.69200-05	1.60283-09	9.61356-13	4.45610-03	1.16790+00
1.22345+04	3.57600-04	1.73680-05	1.60347-09	1.11113-12	4.39117-03	1.16693+00
1.25206+04	3.72142-04	1.78914-05	1.60565-09	1.23921-12	4.32085-03	1.16588+00
1.28080+04	3.81362-04	1.65058-05	1.60932-09	1.34581-12	4.24404-03	1.16473+00
1.30957+04	3.87614-04	1.92266-05	1.61399-09	1.44443-12	4.15938-03	1.16345+00
1.33829+04	4.01753-04	2.00587-05	1.61779-09	1.62004-12	4.06511-03	1.16200+00
1.36688+04	4.35960-04	2.10059-05	1.61872-09	2.00178-12	3.95975-03	1.16035+00
1.39523+04	4.89132-04	2.21189-05	1.61718-09	2.65601-12	3.84096-03	1.15845+00
1.42312+04	5.53942-04	2.36066-05	1.61501-09	3.63606-12	3.69540-03	1.15607+00
1.45013+04	6.29513-04	2.57564-05	1.61219-09	5.12498-12	3.50829-03	1.15293+00
1.47545+04	7.13967-04	2.94906-05	1.60956-09	7.54441-12	3.24772-03	1.17821+00
1.49736+04	8.14510-04	3.84333-05	1.61132-09	1.28112-11	2.79151-03	1.15841+00
1.51443+04	9.19708-04	5.49561-05	1.61328-09	2.33066-11	2.24024-03	1.15670+00
1.52710+04	9.87258-04	7.89745-05	1.61838-09	3.85021-11	1.84573-03	1.17059+00
1.53733+04	1.00617-03	9.46741-05	1.62416-09	4.79233-11	1.68612-03	1.16216+00
1.54682+04	1.00490-03	1.04783-04	1.62956-09	5.29062-11	1.60892-03	1.15763+00
1.55610+04	1.00411-03	1.14276-04	1.63779-09	5.76085-11	1.54703-03	1.15391+00
1.56523+04	1.00617-03	1.24182-04	1.64488-09	6.28594-11	1.49039-03	1.15041+00
1.57427+04	1.01083-03	1.34515-04	1.64862-09	6.87226-11	1.43605-03	1.14122+00
1.58322+04	1.02030-03	1.45897-04	1.64925-09	7.59443-11	1.38005-03	1.13757+00
1.59207+04	1.03340-03	1.58656-04	1.64968-09	8.47189-11	1.32173-03	1.14097+00
1.60080+04	1.04757-03	1.72776-04	1.64901-09	9.48076-11	1.26060-03	1.14619+00
1.60940+04	1.06278-03	1.88851-04	1.64758-09	1.06658-10	1.19516-03	1.16055+00
1.61782+04	1.07787-03	2.07485-04	1.64648-09	1.20534-10	1.12351-03	1.15719+00
1.62606+04	1.08995-03	2.28375-04	1.64513-09	1.35655-10	1.04869-03	1.17628+00
1.63411+04	1.09606-03	2.50603-04	1.64776-09	1.50530-10	9.80650-04	1.19205+00
1.64201+04	1.09668-03	2.73535-04	1.65461-09	1.64551-10	9.23927-04	1.17936+00
1.64981+04	1.09417-03	2.97897-04	1.66577-09	1.78322-10	8.76073-04	1.17555+00
1.65752+04	1.09047-03	3.23619-04	1.67948-09	1.92412-10	8.37757-04	1.14732+00
1.66517+04	1.08898-03	3.51167-04	1.69246-09	2.08219-10	8.03965-04	1.14388+00
1.67277+04	1.09296-03	3.77709-04	1.70464-09	2.25600-10	7.75599-04	1.14088+00
1.68041+04	1.10270-03	4.03622-04	1.71091-09	2.45400-10	7.53273-04	1.12123+00
1.68813+04	1.11033-03	4.27581-04	1.71298-09	2.67399-10	7.33708-04	1.11904+00
1.69601+04	1.13823-03	4.48702-04	1.71108-09	2.90686-10	7.17005-04	1.11714+00
1.70412+04	1.15633-03	4.67439-04	1.70582-09	3.12520-10	7.02409-04	1.11547+00
1.71247+04	1.16796-03	4.88767-04	1.70887-09	3.33373-10	6.88619-04	1.11715+00
1.72100+04	1.17209-03	5.17206-04	1.72429-09	3.55267-10	6.73469-04	1.11547+00
1.72961+04	1.17215-03	5.53230-04	1.74736-09	3.80053-10	6.56526-04	1.11363+00
1.73826+04	1.17294-03	5.93953-04	1.76971-09	4.08577-10	6.38412-04	1.11165+00
1.74691+04	1.17845-03	6.37752-04	1.78789-09	4.42848-10	6.19635-04	1.10955+00
1.75558+04	1.19198-03	6.85126-04	1.79570-09	4.86744-10	5.98102-04	1.13791+00

TABLE 27 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 4.40000+06 SHAKES

PAGE 5.

RADIUS(CM)	VEL(CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
1.76428+04	1.21138-03	7.30366-04	1.79324-09	5.35926-10	5.73937-04	1.13600+00
1.77305+04	1.22851-03	7.80691-04	1.80071-09	5.89139-10	5.51324-04	1.13444+00
1.78183+04	1.23857-03	8.40409-04	1.82184-09	6.44626-10	5.29307-04	1.13324+00
1.79056+04	1.24046-03	9.13745-04	1.85288-09	7.03008-10	5.04731-04	1.10852+00
1.79919+04	1.24007-03	9.92368-04	1.88933-09	7.63023-10	4.80927-04	1.16601+00
1.80777+04	1.25148-03	1.07129-03	1.91285-09	8.38983-10	4.57551-04	1.18741+00
1.81635+04	1.27327-03	1.14519-03	1.91952-09	9.28386-10	4.35374-04	1.18672+00
1.82500+04	1.29332-03	1.22342-03	1.92725-09	1.02324-09	4.15920-04	1.17409+00
1.83367+04	1.30559-03	1.31488-03	1.95183-09	1.12065-09	3.98467-04	1.17168+00
1.84230+04	1.30915-03	1.42684-03	2.00973-09	1.22271-09	3.83648-04	1.16979+00
1.85090+04	1.31206-03	1.53278-03	2.05411-09	1.31934-09	3.69891-04	1.16802+00
1.85955+04	1.32660-03	1.63268-03	2.08741-09	1.43616-09	3.57163-04	1.16636+00
1.86837+04	1.34777-03	1.70746-03	2.08144-09	1.55086-09	3.44525-04	1.17568+00
1.87738+04	1.36075-03	1.80836-03	2.11166-09	1.67423-09	3.32573-04	1.17480+00
1.88648+04	1.36103-03	1.93398-03	2.17446-09	1.79126-09	3.22358-04	1.17427+00
1.89563+04	1.36349-03	2.06623-03	2.24104-09	1.92071-09	3.12821-04	1.17386+00
1.90494+04	1.38298-03	2.16361-03	2.25589-09	2.06931-09	3.02531-04	1.17312+00
1.91447+04	1.40401-03	2.27684-03	2.26871-09	2.24415-09	2.91058-04	1.17231+00
1.92406+04	1.40735-03	2.46263-03	2.35009-09	2.43882-09	2.80493-04	1.17204+00
1.93357+04	1.40948-03	2.68098-03	2.45472-09	2.66310-09	2.70603-04	1.17200+00
1.94310+04	1.43232-03	2.83526-03	2.47993-09	2.90874-09	2.59941-04	1.17149+00
1.95273+04	1.45512-03	3.03664-03	2.51638-09	3.21489-09	2.46679-04	1.24298+00
1.96229+04	1.45706-03	3.32379-03	2.62987-09	3.52828-09	2.35747-04	1.24326+00
1.97166+04	1.46100-03	3.64352-03	2.75137-09	3.88867-09	2.25139-04	1.24357+00
1.98103+04	1.48344-03	3.86161-03	2.77995-09	4.24934-09	2.14757-04	1.24370+00
1.99048+04	1.50226-03	4.13247-03	2.85086-09	4.66306-09	2.05935-04	1.24392+00
1.99988+04	1.50493-03	4.51536-03	3.01933-09	5.11324-09	1.99701-04	1.24433+00
2.00920+04	1.51661-03	4.85937-03	3.14579-09	5.58898-09	1.93379-04	1.24466+00
2.01863+04	1.54148-03	5.11006-03	3.18699-09	6.07153-09	1.86372-04	1.24484+00
2.02812+04	1.55231-03	5.53956-03	3.34772-09	6.67422-09	1.80669-04	1.24524+00
2.03751+04	1.55932-03	6.04405-03	3.54958-09	7.34816-09	1.75632-04	1.24570+00
2.04693+04	1.58078-03	6.38464-03	3.61898-09	7.97778-09	1.69372-04	1.29485+00
2.05645+04	1.58645-03	6.82612-03	3.74875-09	8.59023-09	1.63612-04	1.29471+00
2.06963+04	1.25266-03	4.12355-03	3.69427-09	3.45434-09	1.22689-04	1.29650+00
2.10037+04	5.15795-04	1.64399-03	9.41392-10	3.57446-10	3.23636-05	1.37007+00
2.15171+04	5.41982-05	1.31198-03	1.35225-10	3.61547-12	2.36926-05	1.36994+00
2.21101+04	1.77804-06	1.29352-03	1.02722-10	3.88160-15	2.35437-05	1.36972+00
2.27242+04	4.74757-08	1.29299-03	1.01790-10	2.78264-18	2.35400-05	1.36972+00
2.33555+04	1.11662-09	1.29299-03	1.01767-10	1.55946-21	2.35400-05	1.36972+00
2.40043+04	1.85558-11	1.29299-03	1.01766-10	4.45202-25	2.35400-05	1.36972+00

TABLE 28

J15 SERIES 7 PROBLEM 82
 T= 4.60000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P (JERKS/CC)	OYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
8.05888+02	1.66014-06	3.83147-05	1.49365-09	1.05598-16	5.25131-03	1.11942+00
1.77274+03	-1.21598-05	3.89772-05	1.52082-09	7.55169-15	5.24096-03	1.11942+00
2.02461+03	-3.17519-05	3.92236-05	1.52528-09	2.01039-14	5.23743-03	1.11942+00
2.17372+03	-3.55523-05	3.93143-05	1.52573-09	2.48478-14	5.23506-03	1.11941+00
2.27135+03	-3.28790-05	3.93421-05	1.52541-09	2.13747-14	5.23342-03	1.11939+00
2.33829+03	-2.73718-05	3.93320-05	1.52451-09	1.49286-14	5.23225-03	1.11937+00
2.36537+03	-2.19162-05	3.93196-05	1.52368-09	9.54789-15	5.23142-03	1.11936+00
2.46942+03	-1.21159-05	1.20831-05	1.52300-09	1.22582-15	5.22921-03	1.17629+00
2.59715+03	3.56964-06	1.20941-05	1.52253-09	4.83188-16	5.22555-03	1.17624+00
2.72279+03	2.08877-05	1.21078-05	1.52241-09	3.14531-15	5.22197-03	1.17620+00
2.84709+03	3.74693-05	1.21203-05	1.52218-09	8.84534-15	5.21843-03	1.17615+00
2.97064+03	5.10276-05	1.21341-05	1.52209-09	1.60232-14	5.21490-03	1.17611+00
3.09393+03	6.31489-05	1.21489-05	1.52211-09	2.44438-14	5.21135-03	1.17606+00
3.21737+03	7.31790-05	1.21648-05	1.52225-09	3.26700-14	5.20776-03	1.17602+00
3.34127+03	7.95235-05	1.21829-05	1.52239-09	3.85556-14	5.20408-03	1.17597+00
3.46596+03	8.23793-05	1.22013-05	1.52291-09	4.14027-14	5.20029-03	1.17593+00
3.59168+03	8.19264-05	1.22217-05	1.52338-09	4.10212-14	5.19635-03	1.17588+00
3.71867+03	7.84514-05	1.22438-05	1.52397-09	3.77163-14	5.19223-03	1.17584+00
3.84715+03	7.31935-05	1.22667-05	1.52460-09	3.29047-14	5.18788-03	1.17579+00
3.97732+03	6.71911-05	1.22896-05	1.52520-09	2.78064-14	5.18329-03	1.17573+00
4.10937+03	6.04284-05	1.23137-05	1.52575-09	2.25584-14	5.17842-03	1.17568+00
4.24347+03	5.33878-05	1.23389-05	1.52623-09	1.76612-14	5.17327-03	1.17562+00
4.37979+03	4.65918-05	1.23652-05	1.52661-09	1.34873-14	5.16779-03	1.17555+00
4.51848+03	4.05817-05	1.23926-05	1.52687-09	1.02510-14	5.16197-03	1.17548+00
4.65969+03	3.59112-05	1.24209-05	1.52699-09	8.03230-15	5.15578-03	1.17540+00
4.80357+03	3.31275-05	1.24503-05	1.52696-09	6.83620-15	5.14923-03	1.17532+00
4.95028+03	3.32534-05	1.24782-05	1.52677-09	6.90513-15	5.14228-03	1.17523+00
5.09997+03	3.59942-05	1.25062-05	1.52637-09	8.11609-15	5.13495-03	1.17514+00
5.25278+03	4.12650-05	1.25354-05	1.52592-09	1.07507-14	5.12721-03	1.17504+00
5.40863+03	5.03167-05	1.25686-05	1.52569-09	1.61021-14	5.11906-03	1.17493+00
5.56821+03	6.28228-05	1.26049-05	1.52561-09	2.51811-14	5.11051-03	1.17482+00
5.73104+03	7.66817-05	1.26439-05	1.52563-09	3.74727-14	5.10155-03	1.17471+00
5.89742+03	8.98390-05	1.26851-05	1.52564-09	5.14413-14	5.09214-03	1.17459+00
6.06749+03	1.01848-04	1.27261-05	1.52536-09	6.62131-14	5.08225-03	1.17446+00
6.14138+03	1.12745-04	1.27682-05	1.52493-09	8.13216-14	5.07183-03	1.17432+00
6.41922+03	1.22078-04	1.28140-05	1.52460-09	9.55954-14	5.06084-03	1.17418+00
6.60108+03	1.29598-04	1.28646-05	1.52447-09	1.08108-13	5.04921-03	1.17403+00
6.78704+03	1.35132-04	1.29207-05	1.52456-09	1.18001-13	5.03668-03	1.17592+00
6.97716+03	1.37210-04	1.29835-05	1.52488-09	1.22218-13	5.02377-03	1.17574+00
7.17150+03	1.35675-04	1.30557-05	1.52571-09	1.20177-13	5.00976-03	1.17555+00
7.37006+03	1.31678-04	1.31366-05	1.52693-09	1.13932-13	4.99474-03	1.17534+00
7.57289+03	1.25602-04	1.32251-05	1.52836-09	1.04400-13	4.97865-03	1.17513+00
7.78005+03	1.19374-04	1.33204-05	1.52979-09	9.49579-14	4.96135-03	1.17489+00
7.99159+03	1.16546-04	1.34238-05	1.53134-09	9.11682-14	4.94276-03	1.17464+00
8.20759+03	1.18934-04	1.35331-05	1.53270-09	9.57567-14	4.92281-03	1.17436+00
8.42814+03	1.26281-04	1.36454-05	1.53352-09	1.08961-13	4.90145-03	1.17407+00
8.65339+03	1.37833-04	1.37591-05	1.53358-09	1.31006-13	4.87862-03	1.17375+00
8.88349+03	1.53012-04	1.38745-05	1.53287-09	1.62917-13	4.85428-03	1.17340+00
9.11854+03	1.70346-04	1.39965-05	1.53187-09	2.03624-13	4.82637-03	1.17303+00
9.35860+03	1.87821-04	1.41271-05	1.53069-09	2.49703-13	4.80081-03	1.17263+00

TABLE 28 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 4.60000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
9.60368+03	2.04210-04	1.42703-05	1.52966-09	2.97979-13	4.77150-03	1.17221+00
9.85371+03	2.18067-04	1.44299-05	1.52902-09	3.43360-13	4.74031-03	1.17176+00
1.01086+04	2.28025-04	1.46088-05	1.52891-09	3.79906-13	4.70707-03	1.17128+00
1.03682+04	2.33106-04	1.48115-05	1.52954-09	4.02427-13	4.67155-03	1.17077+00
1.06322+04	2.34205-04	1.50451-05	1.53132-09	4.12627-13	4.63342-03	1.17022+00
1.09003+04	2.33110-04	1.53096-05	1.53389-09	4.15969-13	4.59236-03	1.16963+00
1.11723+04	2.32111-04	1.56C51-05	1.53687-09	4.20368-13	4.54792-03	1.16899+00
1.14480+04	2.34879-04	1.59.93-05	1.53959-09	4.39457-13	4.49969-03	1.16829+00
1.17273+04	2.46065-04	1.62748-05	1.54092-09	4.93278-13	4.44722-03	1.16752+00
1.20101+04	2.70066-04	1.66372-05	1.54019-09	6.08745-13	4.39024-03	1.16E66+00
1.22964+04	3.05158-04	1.70231-05	1.53755-09	7.95847-13	4.32839-03	1.16572+00
1.25860+04	3.44502-04	1.74534-05	1.53426-09	1.03913-12	4.26126-03	1.16469+00
1.28784+04	3.83808-04	1.79469-05	1.53114-09	1.32526-12	4.18832-03	1.16355+00
1.31728+04	4.21878-04	1.85231-05	1.52879-09	1.65159-12	4.10897-03	1.16232+00
1.34682+04	4.54807-04	1.92137-05	1.52841-09	1.98914-12	4.02258-03	1.16096+00
1.37631+04	4.78621-04	2.00574-05	1.53083-09	2.29826-12	3.92782-03	1.15947+00
1.40558+04	4.96502-04	2.11066-05	1.53533-09	2.60229-12	3.82050-03	1.15777+00
1.43438+04	5.14257-04	2.25024-05	1.54117-09	2.97648-12	3.68970-03	1.15566+00
1.46230+04	5.43376-04	2.44560-05	1.54678-09	3.61519-12	3.52268-03	1.15290+00
1.48869+04	5.97641-04	2.75867-05	1.54848-09	4.94307-12	3.29336-03	1.17846+00
1.51224+04	6.90063-04	3.40447-05	1.54898-09	8.16290-12	2.92386-03	1.17047+00
1.53132+04	8.03199-04	4.74792-05	1.54775-09	1.53075-11	2.39224-03	1.15891+00
1.54555+04	8.99713-04	6.95091-05	1.54750-09	2.81924-11	1.92376-03	1.17509+00
1.55657+04	9.56058-04	8.87372-05	1.54642-09	4.05651-11	1.69836-03	1.16343+00
1.56638+04	9.80257-04	9.97542-05	1.54400-09	4.79313-11	1.60161-03	1.15798+00
1.57589+04	9.95737-04	1.08619-04	1.54206-09	5.38498-11	1.53587-03	1.15411+00
1.58527+04	1.00756-03	1.17801-04	1.54369-09	5.97958-11	1.47834-03	1.15058+00
1.59456+04	1.01411-03	1.27525-04	1.54655-09	6.55746-11	1.42562-03	1.14724+00
1.6 375+04	1.01392-03	1.38729-04	1.55187-09	7.13100-11	1.37078-03	1.13680+00
1.61279+04	1.01243-03	1.51689-04	1.56150-09	7.77415-11	1.31296-03	1.13976+00
1.62166+04	1.00828-03	1.66137-04	1.56996-09	8.44512-11	1.25202-03	1.14491+00
1.63034+04	1.00262-03	1.82699-04	1.57668-09	9.18290-11	1.18579-03	1.15931+00
1.63880+04	1.00244-03	2.01772-04	1.58339-09	1.01379-10	1.11415-03	1.17830+00
1.64704+04	1.00748-03	2.22503-04	1.58852-09	1.12923-10	1.04132-03	1.17549+00
1.65511+04	1.01661-03	2.43661-04	1.58994-09	1.25917-10	9.74376-04	1.19196+00
1.66305+04	1.02960-03	2.64795-04	1.58917-09	1.40358-10	9.17948-04	1.18006+00
1.67094+04	1.04541-03	2.85888-04	1.58618-09	1.56232-10	8.69972-04	1.17649+00
1.67881+04	1.06243-03	3.08218-04	1.58395-09	1.73961-10	8.31394-04	1.14795+00
1.68667+04	1.07803-03	3.31739-04	1.58342-09	1.92774-10	7.97480-04	1.14465+00
1.69454+04	1.08799-03	3.54788-04	1.58725-09	2.09985-10	7.70333-04	1.12322+00
1.70245+04	1.09063-03	3.801057-04	1.59641-09	2.26036-10	7.48106-04	1.12075+00
1.71041+04	1.08894-03	4.05089-04	1.61036-09	2.40176-10	7.29355-04	1.11863+00
1.71847+04	1.08703-03	4.28812-04	1.62457-09	2.53351-10	7.13414-04	1.11681+00
1.72669+04	1.08931-03	4.51504-04	1.63810-09	2.67880-10	6.99404-04	1.11518+00
1.73509+04	1.09701-03	4.74086-04	1.64686-09	2.85271-10	6.85493-04	1.11634+00
1.74368+04	1.11170-03	4.99059-04	1.65150-09	3.08413-10	6.69944-04	1.11453+00
1.75244+04	1.13134-03	5.27324-04	1.65102-09	3.37492-10	6.52370-04	1.11243+00
1.76132+04	1.14731-03	5.59623-04	1.65079-09	3.68334-10	6.33766-04	1.11020+00
1.77028+04	1.15512-03	5.99058-04	1.66031-09	3.99660-10	6.14705-04	1.10798+00
1.77922+04	1.15767-03	6.48854-04	1.68108-09	4.34796-10	5.92531-04	1.13566+00

TABLE 28 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 4.60000+06 SNAKES

PAGE 3

RADIUS(CM)	VEL(CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
1.78812+04	1.15847-03	7.00039-04	1.70369-09	4.69745-10	5.70347-04	1.13429+00
1.79698+04	1.16226-03	7.54857-04	1.73016-09	5.09857-10	5.48521-04	1.13304+00
1.80584+04	1.17608-03	8.09045-04	1.73865-09	5.59566-10	5.25730-04	1.13155+00
1.81473+04	1.19571-03	8.66584-04	1.73644-09	6.19525-10	4.99479-04	1.18676+00
1.82366+04	1.21240-03	9.28512-04	1.74261-09	6.82439-10	4.74906-04	1.18582+00
1.83258+04	1.22288-03	1.00215-03	1.76617-09	7.49335-10	4.52295-04	1.18523+00
1.84145+04	1.22497-03	1.08473-03	1.80178-09	8.13848-10	4.31856-04	1.18497+00
1.85026+04	1.22654-L.	1.17664-03	1.84142-09	8.85066-10	4.13649-04	1.17411+00
1.85903+04	1.23980-03	1.26446-03	1.86472-09	9.71876-10	3.96225-04	1.17154+00
1.86788+04	1.26140-03	1.34553-03	1.87533-09	1.07053-09	3.80223-04	1.16894+00
1.87680+04	1.28135-03	1.42248-03	1.88057-09	1.16781-09	3.65675-04	1.16694+00
1.88583+04	1.28960-03	1.52743-03	1.92970-09	1.27010-09	3.53625-04	1.16541+00
1.89486+04	1.29064-03	1.64179-03	1.98718-09	1.36741-09	3.42316-04	1.17493+00
1.90394+04	1.30057-03	1.75231-03	2.03543-09	1.48206-09	3.30955-04	1.17421+00
1.91318+04	1.32205-03	1.83086-03	2.03758-09	1.60017-09	3.19352-04	1.17321+00
1.92266+04	1.33989-03	1.92029-03	2.05437-09	1.72377-09	3.08971-04	1.17243+00
1.93229+04	1.34055-03	2.05447-03	2.12138-09	1.84603-09	2.99929-04	1.17210+00
1.94191+04	1.34039-03	2.21920-03	2.20118-09	1.99357-09	2.89865-04	1.17181+00
1.95160+04	1.35964-03	2.34621-03	2.21942-09	2.16890-09	2.78254-04	1.17107+00
1.96146+04	1.38221-03	2.47094-03	2.22958-09	2.36043-09	2.67078-04	1.17035+00
1.97138+04	1.38579-03	2.67969-03	2.31678-09	2.57306-09	2.57152-04	1.24250+00
1.98115+04	1.38750-03	2.94326-03	2.42132-09	2.83316-09	2.44906-04	1.24276+00
1.99084+04	1.40884-03	3.14945-03	2.45900-09	3.12596-09	2.32612-04	1.24289+00
2.00058+04	1.43044-03	3.36581-03	2.49300-09	3.44356-09	2.20868-04	1.24303+00
2.01027+04	1.43360-03	3.67367-03	2.61287-09	3.77511-09	2.12233-04	1.24336+00
2.01984+04	1.43816-03	3.99723-03	2.73538-09	4.13383-09	2.04287-04	1.24370+00
2.02945+04	1.46053-03	4.21790-03	2.77334-09	4.49921-09	1.96361-04	1.24386+00
2.03919+04	1.47837-03	4.49203-03	2.85231-09	4.90883-09	1.89726-04	1.24411+00
2.04890+04	1.48211-03	4.90909-03	3.03166-09	5.39177-09	1.84580-04	1.24456+00
2.05855+04	1.49811-03	5.25509-03	3.13482-09	5.89765-09	1.78329-04	1.24487+00
2.06831+04	1.52125-03	5.55796-03	3.19667-09	6.43132-09	1.71981-04	1.29536+00
2.07807+04	1.52902-03	6.07287-03	3.39248-09	7.09690-09	1.66857-04	1.29509+00
2.08773+04	1.53877-03	6.57593-03	3.56451-09	7.78560-09	1.61668-04	1.29488+00
2.09773+04	1.50575-03	6.54295-03	3.65082-09	7.42351-09	1.52788-04	1.29507+00
2.11567+04	1.00088-03	2.82732-03	2.83229-09	1.71719-09	8.54499-05	1.36946+00
2.15472+04	2.87523-04	1.44178-03	4.10267-10	1.05341-10	2.57522-05	1.37009+00
2.21116+04	1.83486-05	1.29916-03	1.12106-10	4.12380-13	2.35851-05	1.36992+00
2.27242+04	5.54999-07	1.29314-03	1.02062-10	3.78076-16	2.35410-05	1.36972+00
2.33555+04	1.48217-08	1.29299-03	1.01773-10	2.71282-19	2.35400-05	1.36972+00
2.40043+04	3.41507-10	1.29299-03	1.01766-10	1.50249-22	2.35400-05	1.36972+00
2.46711+04	6.22259-13	1.29299-03	1.01766-10	5.00655-28	2.35400-05	1.36972+00

TABLE 29

J15 SERIES 7 PROBLEM 82
T= 4.80000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA: 2
8.01376+02	1.42382-07	3.89651-05	1.47292-09	7.89929-19	5.14355-03	1.11806+00
1.76627+03	3.69654-06	3.86562-05	1.45604-09	4.89091-16	5.13188-03	1.11783+00
2.02189+03	4.26730-06	3.88175-05	1.46151-09	5.10087-16	5.12843-03	1.11781+00
2.17288+03	-1.69813-06	3.88921-05	1.46364-09	2.44034-16	5.12615-03	1.11780+00
2.27158+03	-6.62225-06	3.89407-05	1.46434-09	9.18331-16	5.12456-03	1.11779+00
2.33914+03	-9.33127-06	3.89684-05	1.46452-09	1.71195-15	5.12341-03	1.11778+00
2.38660+03	-1.06049-05	3.89839-05	1.46452-09	2.19504-15	5.12259-03	1.11777+00
2.47100+03	-1.28104-05	1.20250-05	1.46448-09	1.00663-15	5.12045-03	1.17439+00
2.59910+03	-1.53948-05	1.20409-05	1.46439-09	1.43035-15	5.11681-03	1.17434+00
2.72505+03	-1.60264-05	1.20567-05	1.46428-09	1.54845-15	5.11315-03	1.17430+00
2.84961+03	-1.48794-05	1.20721-05	1.46415-09	1.34258-15	5.10944-03	1.17425+00
2.97341+03	-1.08571-05	1.20847-05	1.46380-09	7.66803-16	5.10567-03	1.17420+00
3.09698+03	-4.32898-06	1.20938-05	1.46300-09	1.88294-16	5.10183-03	1.17414+00
3.22074+03	2.91388-06	1.21029-05	1.46218-09	1.35197-16	5.09792-03	1.17408+00
3.34505+03	1.00912-05	1.21110-05	1.46119-09	6.88950-16	5.09392-03	1.17402+00
3.47022+03	1.71486-05	1.21208-05	1.46036-09	1.86081-15	5.08942-03	1.17396+00
3.59652+03	2.46816-05	1.21302-05	1.45942-09	3.78851-15	5.08561-03	1.17390+00
3.72419+03	3.24515-05	1.21404-05	1.45850-09	6.48151-15	5.08126-03	1.17384+00
3.85343+03	3.97078-05	1.21524-05	1.45773-09	9.65147-15	5.07678-03	1.17377+00
3.98444+03	4.63306-05	1.21660-05	1.45705-09	1.31197-14	5.07214-03	1.17371+00
4.11174+03	5.31585-05	1.21803-05	1.45638-09	1.72897-14	5.06733-03	1.17364+00
4.25251+03	5.97024-05	1.21967-05	1.45584-09	2.17888-14	5.06233-03	1.17357+00
4.38988+03	6.49413-05	1.22142-05	1.45533-09	2.57889-14	5.05712-03	1.17350+00
4.52967+03	6.91935-05	1.22353-05	1.45510-09	2.93125-14	5.05169-03	1.17343+00
4.67200+03	7.28839-05	1.22617-05	1.45534-09	3.25863-14	5.04599-03	1.17336+00
4.81697+03	7.61031-05	1.22916-05	1.45584-09	3.56077-14	5.04002-03	1.17329+00
4.96469+03	7.77805-05	1.23263-05	1.45671-09	3.72862-14	5.03373-03	1.17321+00
5.11525+03	7.74891-05	1.23663-05	1.45798-09	3.71287-14	5.02709-03	1.17314+00
5.26876+03	7.59980-05	1.24105-05	1.45952-09	3.58457-14	5.02004-03	1.17306+00
5.42532+03	7.39992-05	1.24558-05	1.46093-09	3.41096-14	5.01255-03	1.17298+00
5.58509+03	7.11458-05	1.25018-05	1.46217-09	3.16613-14	5.00457-03	1.17289+00
5.74819+03	6.73236-05	1.25480-05	1.46318-09	2.84614-14	4.99604-03	1.17279+00
5.91478+03	6.35199-05	1.25957-05	1.46401-09	2.54312-14	4.98694-03	1.17268+00
6.08497+03	6.02276-05	1.26446-05	1.46463-09	2.29470-14	4.97722-03	1.17256+00
6.25891+03	5.87254-05	1.26941-05	1.46499-09	2.18889-14	4.96684-03	1.17243+00
6.43677+03	6.08850-05	1.27466-05	1.46466-09	2.36452-14	4.95578-03	1.17229+00
6.61871+03	6.60243-05	1.27867-05	1.46392-09	2.79256-14	4.94404-03	1.17213+00
6.80488+03	7.34103-05	1.28327-05	1.46280-09	3.47044-14	4.93160-03	1.17136+00
6.99542+03	8.27616-05	1.28818-05	1.46164-09	4.42726-14	4.91845-03	1.17178+00
7.19044+03	9.28024-05	1.29327-05	1.46023-09	5.58599-14	4.90456-03	1.17381+00
7.39001+03	1.03886-04	1.29917-05	1.45921-09	7.03360-14	4.88990-03	1.17360+00
7.59415+03	1.16217-04	1.30605-05	1.45878-09	8.84646-14	4.87444-03	1.17338+00
7.80288+03	1.28126-04	1.31387-05	1.45884-09	1.08046-13	4.85813-03	1.17315+00
8.01622+03	1.37223-04	1.32248-05	1.45918-09	1.24595-13	4.84090-03	1.17290+00
8.23420+03	1.42486-04	1.33200-05	1.45985-09	1.35232-13	4.82263-03	1.17265+00
8.45682+03	1.44380-04	1.34270-05	1.46104-09	1.39948-13	4.80317-03	1.17237+00
8.68408+03	1.42796-04	1.35451-05	1.46254-09	1.38118-13	4.78237-03	1.17208+00
8.91595+03	1.38781-04	1.36756-05	1.46437-09	1.31731-13	4.76004-03	1.17177+00
9.15244+03	1.34658-04	1.38173-05	1.46627-09	1.25298-13	4.73600-03	1.17144+00
9.33359+03	1.32140-04	1.39670-05	1.46779-09	1.21942-13	4.71006-03	1.17107+00

TABLE 29 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 4.80000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (K.V)	GAMMA 2
9.63948+03	1.33723-04	1.41227-05	1.46861-09	1.26304-13	4.68206-03	1.17067+00
9.89020+03	1.43287-04	1.42853-05	1.46872-09	1.47033-13	4.65187-03	1.17023+00
1.01459+04	1.62529-04	1.44528-05	1.46787-09	1.91913-13	4.61947-03	1.16976+00
1.04066+04	1.89191-04	1.46260-05	1.46612-09	2.63350-13	4.58487-03	1.16924+00
1.06724+04	2.19151-04	1.48101-05	1.46368-09	3.57353-13	4.54804-03	1.16869+00
1.09433+04	2.47619-04	1.50146-05	1.46192-09	4.61631-13	4.50890-03	1.16810+00
1.12190+04	2.71830-04	1.52458-05	1.46062-09	5.64181-13	4.46727-03	1.16748+00
1.14993+04	2.90907-04	1.55104-05	1.46031-09	6.56810-13	4.42294-03	1.16681+00
1.17837+04	3.02905-04	1.58132-05	1.46105-09	7.25558-13	4.37561-03	1.16611+00
1.20718+04	3.06557-04	1.61669-05	1.46333-09	7.59657-13	4.32461-03	1.16535+00
1.23630+04	3.04728-04	1.65772-05	1.46690-09	7.69694-13	4.26924-03	1.16452+00
1.26567+04	3.04226-04	1.70434-05	1.47085-09	7.88726-13	4.20867-03	1.16361+00
1.29523+04	3.11951-04	1.75630-05	1.47408-09	8.54938-13	4.14213-03	1.16260+00
1.32496+04	3.33004-04	1.81348-05	1.47556-09	1.00739-12	4.06883-03	1.16146+00
1.35482+04	3.69720-04	1.87615-05	1.47459-09	1.28693-12	3.98812-03	1.16019+00
1.38475+04	4.17145-04	1.94729-05	1.47214-09	1.70040-12	3.89909-03	1.15876+00
1.41464+04	4.67601-04	2.0-454-05	1.46973-09	2.23077-12	3.79726-03	1.15711+00
1.44426+04	5.18999-04	2.14875-05	1.46727-09	2.90126-12	3.67457-03	1.15509+00
1.47325+04	5.71141-04	2.30871-05	1.46577-09	3.77337-12	3.52132-03	1.15252+00
1.50097+04	6.23112-04	2.56615-05	1.46639-09	4.99041-12	3.31824-03	1.17799+00
1.52627+04	6.84349-04	3.05442-05	1.47076-09	7.17147-12	3.01479-03	1.17145+00
1.54736+04	7.59253-04	4.14400-05	1.47719-09	1.19768-11	2.52497-03	1.16073+00
1.56339+04	8.39721-04	5.99217-05	1.48472-09	2.11764-11	2.03251-03	1.18076+00
1.57546+04	8.95821-04	8.24869-05	1.49012-09	3.31072-11	1.72718-03	1.16553+00
1.58558+04	9.15655-04	9.62458-05	1.49497-09	4.03484-11	1.60237-03	1.15849+00
1.59515+04	9.24427-04	1.05752-04	1.49673-09	4.51869-11	1.53157-03	1.15429+00
1.60456+04	9.34439-04	1.14764-04	1.49723-09	5.01065-11	1.47304-03	1.15070+00
1.61387+04	9.46183-04	1.24128-04	1.49638-09	5.55658-11	1.41916-03	1.14731+00
1.62310+04	9.58469-04	1.34483-04	1.49337-09	6.17751-11	1.36433-03	1.14230+00
1.63225+04	9.72631-04	1.45954-04	1.48892-09	6.90413-11	1.30512-03	1.13871+00
1.64127+04	9.87092-04	1.59074-04	1.48647-09	7.75005-11	1.24233-03	1.14350+00
1.65014+04	9.98040-04	1.74238-04	1.48230-09	8.67792-11	1.17338-03	1.15764+00
1.65981+04	1.00619-03	1.92038-04	1.48270-09	9.72138-11	1.10002-03	1.17684+00
1.66727+04	1.01016-03	2.11407-04	1.48619-09	1.07063-10	1.02848-03	1.19480+00
1.67555+04	1.00949-03	2.31621-04	1.49191-09	1.18020-10	9.63812-04	1.19183+00
1.68368+04	1.00854-03	2.53178-04	1.50353-09	1.28761-10	9.09980-04	1.18107+00
1.69171+04	1.00727-03	2.74744-04	1.51372-09	1.39376-10	8.64553-04	1.17742+00
1.69967+04	1.00634-03	2.98053-04	1.52188-09	1.50921-10	8.27251-04	1.14840+00
1.70758+04	1.00969-03	3.21406-04	1.52834-09	1.63834-10	7.94675-04	1.14513+00
1.71551+04	1.01836-03	3.43815-04	1.53263-09	1.78283-10	7.68001-04	1.12301+00
1.72349+04	1.03098-03	3.66872-04	1.53402-09	1.94986-10	7.45331-04	1.12050+00
1.73157+04	1.04628-03	3.87820-04	1.53238-09	2.12288-10	7.25837-04	1.11831+00
1.73983+04	1.06311-03	4.07344-04	1.53116-09	2.30208-10	7.09105-04	1.11640+00
1.74828+04	1.07680-03	4.26788-04	1.53350-09	2.47434-10	6.94421-04	1.11470+00
1.75695+04	1.08336-03	4.48794-04	1.54298-09	2.63370-10	6.80425-04	1.11498+00
1.76577+04	1.08366-03	4.74844-04	1.55658-09	2.78809-10	6.65498-04	1.11330+00
1.77470+04	1.08232-03	5.06152-04	1.57312-09	2.96456-10	6.48985-04	1.11143+00
1.78369+04	1.08422-03	5.41460-04	1.58789-09	3.10255-10	6.31160-04	1.10940+00
1.79271+04	1.09358-03	5.80582-04	1.59785-09	3.47179-10	6.11847-04	1.10714+00
1.80176+04	1.11257-03	6.22556-04	1.59940-09	3.85345-10	5.88441-04	1.13401+00

TABLE 29 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 4.80000+06 SHAKES

PAGE 3

RADIUS(CM)	VEL(CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
1.81086+04	1.13237-03	6.62543-04	1.59771-09	4.24800-10	5.65537-04	1.13212+00
1.82033+04	1.14435-03	7.08138-04	1.60402-09	4.63672-10	5.43351-04	1.13048+00
1.82921+04	1.14890-03	7.63882-04	1.62239-09	5.04151-10	5.20981-04	1.12913+00
1.83832+04	1.14941-03	8.30108-04	1.65021-09	5.48349-10	4.96016-04	1.18541+00
1.84734+04	1.15178-03	8.99775-04	1.67930-09	5.96819-10	4.72561-04	1.18484+00
1.85633+04	1.16269-03	9.67867-04	1.69550-09	6.54241-10	4.49835-04	1.18415+00
1.86536+04	1.18118-03	1.02986-03	1.69512-09	7.18473-10	4.28497-04	1.17676+00
1.87447+04	1.20022-03	1.10107-03	1.70189-09	7.93103-10	4.09376-04	1.17409+00
1.88360+04	1.21186-03	1.18308-03	1.72435-09	8.68744-10	3.92313-04	1.17156+00
1.89271+04	1.21185-03	1.27928-03	1.76836-09	9.39372-10	3.77589-04	1.16921+00
1.90179+04	1.21579-03	1.37729-03	1.81168-09	1.01794-09	3.64110-04	1.16651+00
1.91092+04	1.23243-03	1.46177-03	1.83203-09	1.11020-09	3.51234-04	1.16477+00
1.92022+04	1.25556-03	1.53653-03	1.83668-09	1.21126-09	3.38438-04	1.17365+00
1.92970+04	1.27139-03	1.62556-03	1.866274-09	1.31380-09	3.26924-04	1.17277+00
1.93926+04	1.27272-03	1.74792-03	1.92989-09	1.41565-09	3.17092-04	1.17234+00
1.94882+04	1.27672-03	1.87344-03	1.99571-09	1.52690-09	3.07778-04	1.17197+00
1.95853+04	1.29661-03	1.96356-03	2.00974-09	1.65077-09	2.97532-04	1.17121+00
1.96848+04	1.31908-03	2.05981-03	2.01519-09	1.79208-09	2.86305-04	1.17034+00
1.97854+04	1.32347-03	2.21821-03	2.07797-09	1.94270-09	2.75864-04	1.16997+00
1.98852+04	1.32257-03	2.41080-03	2.16614-09	2.10849-09	2.66077-04	1.16986+00
1.99851+04	1.33862-03	2.56604-03	2.19392-09	2.29928-09	2.54285-04	1.24220+00
2.00860+04	1.36054-03	2.73125-03	2.20664-09	2.52797-09	2.40547-04	1.24225+00
2.01867+04	1.36612-03	2.97075-03	2.28717-09	2.77214-09	2.29441-04	1.24249+00
2.02857+04	1.36767-03	3.26593-03	2.40196-09	3.05453-09	2.19326-04	1.24262+00
2.03839+04	1.38644-03	3.49344-03	2.45418-09	3.35795-09	2.09616-04	1.24302+00
2.04830+04	1.40855-03	3.70178-03	2.48606-09	3.67232-09	2.00516-04	1.24317+00
2.05825+04	1.41365-03	4.01179-03	2.60589-09	4.00863-09	1.94039-04	1.24352+00
2.06813+04	1.41994-03	4.35840-03	2.73133-09	4.37378-09	1.88114-04	1.24387+00
2.07809+04	1.44316-03	4.56863-03	2.77190-09	4.75801-09	1.81347-04	1.24406+00
2.08817+04	1.45906-03	4.89482-03	2.86960-09	5.21020-09	1.75305-04	1.24437+00
2.09817+04	1.46395-03	5.36283-03	3.05252-09	5.74668-09	1.70145-04	1.29553+00
2.10812+04	1.48163-03	5.72427-03	3.14283-09	6.28367-09	1.63662-04	1.29535+00
2.11815+04	1.50179-03	6.09979-03	3.23426-09	6.87876-09	1.58034-04	1.29521+00
2.12813+04	1.50830-03	6.68918-03	3.45370-09	7.60889-09	1.53699-04	1.29498+00
2.13954+04	1.35113-03	5.45675-03	3.57569-09	5.04886-09	1.35789-04	1.29583+00
2.16465+04	7.16394-04	2.01004-03	1.62956-09	7.44233-10	4.74984-05	1.36984+00
2.21234+04	1.25070-04	1.34583-03	1.94440-10	1.93586-11	2.40506-05	1.36999+00
2.27247+04	5.40696-06	1.29478-03	1.04715-10	3.57394-14	2.35526-05	1.36991+00
2.33555+04	1.59535-07	1.29302-03	1.01850-10	3.12609-17	2.35402-05	1.36972+00
2.40043+04	4.19327-09	1.29299-03	1.01768-10	2.17564-20	2.35400-05	1.36972+00
2.46711+04	9.23060-11	1.29299-03	1.01766-10	1.10168-23	2.35400-05	1.36972+00

TABLE 30

J15 SERIES 7 PROBLEM 82
T= 5.00000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SW)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
8.03616+02	5.86679-06	3.86416-05	1.41605-09	1.33002-15	5.03765-03	1.11651+00
1.76985+03	3.73465-05	3.87278-05	1.41430-09	3.97111-14	5.02598-03	1.11637+00
2.02497+03	7.01957-05	3.85458-05	1.40640-09	9.59753-14	5.02276-03	1.11628+00
2.17680+03	8.16283-05	3.84804-05	1.40319-09	1.28539-13	5.02072-03	1.11624+00
2.27628+03	8.75736-05	3.84579-05	1.40180-09	1.47528-13	5.01932-03	1.11622+00
2.34445+03	9.00029-05	3.84425-05	1.40084-09	1.55711-13	5.01833-03	1.11620+00
2.39236+03	9.05072-05	3.84235-05	1.39986-09	1.57375-13	5.01762-03	1.11618+00
2.47739+03	8.69752-05	1.18854-05	1.39915-09	4.50217-14	5.01582-03	1.17244+00
2.60633+03	8.07960-05	1.18979-05	1.39912-09	3.88821-14	5.01278-03	1.17240+00
2.73307+03	7.38432-05	1.19142-05	1.39962-09	3.25844-14	5.00971-03	1.17236+00
2.85834+03	6.57445-05	1.19323-05	1.40026-09	2.58818-14	5.00655-03	1.17235+00
2.90277+03	5.80517-05	1.19518-05	1.40C96-09	2.02217-14	5.00329-03	1.17229+00
3.10685+03	5.09383-05	1.19723-05	1.40167-09	1.56011-14	4.99991-03	1.17226+00
3.23099+03	4.45638-05	1.19938-05	1.40240-09	1.19629-14	4.99639-03	1.17222+00
3.35555+03	3.90438-05	1.20163-05	1.40314-09	9.19751-15	4.99271-03	1.17218+00
3.48084+03	3.45110-05	1.20398-05	1.40388-09	7.19374-15	4.98888-03	1.17214+00
3.60713+03	3.09947-05	1.20640-05	1.40463-09	5.80868-15	4.98486-03	1.17209+00
3.73466+03	2.82957-05	1.20887-05	1.40534-09	4.84782-15	4.98065-03	1.17205+00
3.86366+03	2.61445-05	1.21132-05	1.40596-09	4.14561-15	4.97623-03	1.17199+00
3.99435+03	2.43677-05	1.21374-05	1.40643-09	3.60746-15	4.97159-03	1.17194+00
4.12693+03	2.29178-05	1.21613-05	1.40673-09	3.19624-15	4.96671-03	1.17188+00
4.26158+03	2.22469-05	1.21848-05	1.40689-09	3.01582-15	4.96156-03	1.17181+00
4.39849+03	2.42958-05	1.22059-05	1.40666-09	3.62868-15	4.95615-03	1.17174+00
4.53787+03	2.97937-05	1.22224-05	1.40578-09	5.49640-15	4.95048-03	1.17166+00
4.67991+03	3.66309-05	1.22389-05	1.40480-09	8.28241-15	4.94456-03	1.17157+00
4.82475+03	4.39636-05	1.22561-05	1.40375-09	1.19386-14	4.93836-03	1.17148+00
4.97254+03	5.16585-05	1.22743-05	1.40268-09	1.64651-14	4.93189-03	1.17139+00
5.12340+03	5.94139-05	1.22945-05	1.40167-09	2.17973-14	4.92512-03	1.17129+00
5.27746+03	6.70748-05	1.23158-05	1.40063-09	2.77880-14	4.91804-03	1.17119+00
5.43484+03	7.36632-05	1.23405-05	1.39979-09	3.35525-14	4.91063-03	1.17109+00
5.59564+03	7.88904-05	1.23669-05	1.39917-09	3.85222-14	4.90265-03	1.17098+00
5.75995+03	8.29184-05	1.24007-05	1.39872-09	4.26494-14	4.89468-03	1.17087+00
5.92789+03	8.53548-05	1.24373-05	1.39856-09	4.53085-14	4.88608-03	1.17076+00
6.09951+03	8.62517-05	1.24787-05	1.39866-09	4.64171-14	4.87700-03	1.17064+00
6.27492+03	8.54603-05	1.25251-05	1.39903-09	4.57446-14	4.86740-03	1.17052+00
6.45417+03	8.26107-05	1.25777-05	1.39975-09	4.29400-14	4.85720-03	1.17039+00
6.63735+03	7.86968-05	1.26362-05	1.40074-09	3.91563-14	4.84636-03	1.17026+00
6.82450+03	7.46484-05	1.27015-05	1.40206-09	3.54137-14	4.83479-03	1.17012+00
7.01572+03	7.21766-05	1.27713-05	1.40344-09	3.32673-14	4.82244-03	1.16997+00
7.21108+03	7.13996-05	1.28457-05	1.40484-09	3.27436-14	4.80925-03	1.16981+00
7.41069+03	7.14300-05	1.29238-05	1.40612-09	3.29709-14	4.79517-03	1.17202+00
7.61467+03	7.34377-05	1.30039-05	1.40695-09	3.50842-14	4.78011-03	1.17181+00
7.82319+03	7.90815-05	1.30814-05	1.40695-09	4.10068-14	4.76402-03	1.17158+00
8.03645+03	8.86225-05	1.31572-05	1.40620-09	5.18733-14	4.74688-03	1.17133+00
8.25462+03	1.02139-04	1.32329-05	1.40485-09	6.94414-14	4.72867-03	1.17107+00
8.47789+03	1.18918-04	1.33083-05	1.40286-09	9.46208-14	4.70938-03	1.17078+00
8.70636+03	1.37138-04	1.33885-05	1.40073-09	1.26485-13	4.68900-03	1.17048+00
8.94012+03	1.54008-04	1.34766-05	1.39874-09	1.60201-13	4.66750-03	1.17015+00
9.17915+03	1.67856-04	1.35762-05	1.39715-09	1.91532-13	4.64478-03	1.16982+00
9.42337+03	1.79370-04	1.36950-05	1.39662-09	2.20490-13	4.62075-03	1.16946+00

TABLE 30 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 5.00000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
9.67264+03	1.87861-04	1.38330-05	1.39705-09	2.44171-13	4.59529-03	.1.16909+00
9.92681+03	1.92249-04	1.39902-05	1.39028-09	2.58545-13	4.56823-03	1.16870+00
1.01857+04	1.91669-04	1.41689-05	1.40033-09	2.60281-13	4.53934-03	1.16829+00
1.04492+04	1.86722-04	1.43691-05	1.40297-09	2.50568-13	4.50830-03	1.16784+00
1.07171+04	1.81070-04	1.45902-05	1.40588-09	2.39219-13	4.47479-03	1.16736+00
1.09894+04	1.79324-04	1.48264-05	1.40829-09	2.38390-13	4.43850-03	1.16682+00
1.12661+04	1.84959-04	1.50706-05	1.40937-09	2.57972-13	4.39918-03	1.16624+00
1.15473+04	2.00577-04	1.53254-05	1.40912-09	3.09139-13	4.35660-03	1.16560+00
1.18331+04	2.26625-04	1.55941-05	1.40765-09	4.02309-13	4.31056-03	1.16489+00
1.21234+04	2.60219-04	1.58849-05	1.40548-09	5.40425-13	4.26097-03	1.16413+00
1.24179+04	2.95677-04	1.62091-05	1.40330-09	7.10973-13	4.20767-03	1.16330+00
1.27164+04	3.28513-04	1.65810-05	1.40180-09	8.96712-13	4.15030-03	1.16240+00
1.30180+04	3.57663-04	1.70099-05	1.40115-09	1.08956-12	4.08844-03	1.16144+00
1.33222+04	3.81000-04	1.75092-05	1.40168-09	1.27165-12	4.02163-03	1.16039+00
1.36280+04	3.95123-04	1.81034-05	1.40417-09	1.41335-12	3.94908-03	1.15925+00
1.39342+04	4.01994-04	1.88154-05	1.40851-09	1.52034-12	3.86919-03	1.15799+00
1.42393+04	4.10468-04	1.96965-05	1.41345-09	1.65980-12	3.77588-03	1.15650+00
1.45411+04	4.31056-04	2.08045-05	1.41717-09	1.93502-12	3.66336-03	1.15467+00
1.48369+04	4.69312-04	2.22634-05	1.41871-09	2.45806-12	3.52337-03	1.15234+00
1.51219+04	5.26137-04	2.44533-05	1.41820-09	3.39797-12	3.34034-03	1.17786+00
1.53868+04	6.03165-04	2.83002-05	1.41647-09	5.17523-12	3.07701-03	1.17213+00
1.56150+04	7.01933-04	3.67770-05	1.41447-09	9.11548-12	2.63997-03	1.16235+00
1.57955+04	8.15521-04	5.09000-05	1.41245-09	1.70140-11	2.15631-03	1.18693+00
1.59314+04	9.01517-04	7.40199-05	1.41128-09	3.01066-11	1.77195-03	1.16869+00
1.63039+04	9.36927-04	9.02215-05	1.40967-09	3.96027-11	1.60320-03	1.15940+00
1.61386+04	9.48265-04	1.00321-04	1.40956-09	4.51051-11	1.52204-03	1.15460+00
1.62353+04	9.50845-04	1.09237-04	1.41163-09	4.93811-11	1.46220-03	1.15089+00
1.63306+04	9.48836-04	1.18639-04	1.41590-09	5.34049-11	1.40844-03	1.14743+00
1.64247+04	9.44745-04	1.29223-04	1.42122-09	5.76691-11	1.35574-03	1.14958+00
1.65173+04	9.40314-04	1.41122-04	1.42746-09	6.23898-11	1.29804-03	1.13778+00
1.66081+04	9.39720-04	1.54778-04	1.43384-09	6.83405-11	1.23520-03	1.14252+00
1.66968+04	9.41491-04	1.70665-04	1.43850-09	7.56390-11	1.16573-03	1.15675+00
1.67832+04	9.45626-04	1.88431-04	1.44129-09	8.42497-11	1.09216-03	1.17614+00
1.68675+04	9.53073-04	2.07126-04	1.44346-09	9.40727-11	1.02126-03	1.19465+00
1.69504+04	9.61522-04	2.25501-04	1.44149-09	1.04243-10	9.57607-04	1.19174+00
1.70323+04	9.72521-04	2.44552-04	1.44032-09	1.15654-10	9.03734-04	1.18187+00
1.71139+04	9.84243-04	2.62859-04	1.43652-09	1.27324-10	8.58681-04	1.15258+00
1.71954+04	9.95241-04	2.83675-04	1.43467-09	1.40496-10	8.20959-04	1.14908+00
1.72769+04	1.00413-03	3.04437-04	1.43566-09	1.53479-10	7.80904-04	1.14593+00
1.73586+04	1.00858-03	3.25565-04	1.43969-09	1.65588-10	7.63323-04	1.12259+00
1.74407+04	1.01068-03	3.49235-04	1.45045-09	1.78369-10	7.41404-04	1.12014+00
1.75233+04	1.01162-03	3.72207-04	1.46283-09	1.90455-10	7.22738-04	1.11803+00
1.76069+04	1.01200-03	3.93809-04	1.47353-09	2.01659-10	7.06552-04	1.11616+00
1.76921+04	1.01582-03	4.14582-04	1.48254-09	2.13903-10	6.91943-04	1.11446+00
1.77792+04	1.02542-03	4.35107-04	1.48696-09	2.28762-10	6.77515-04	1.11420+00
1.78685+04	1.04054-03	4.56935-04	1.48649-09	2.47385-10	6.61934-04	1.11234+00
1.79397+04	1.05929-03	4.81447-04	1.48274-09	2.70135-10	6.44808-04	1.11024+00
1.80523+04	1.07467-03	5.11595-04	1.48545-09	2.95435-10	6.26764-04	1.10006+00
1.81454+04	1.08132-03	5.49625-04	1.49628-09	3.21325-10	6.07421-04	1.10578+00
1.82383+04	1.08189-03	5.93841-04	1.51298-09	3.47539-10	5.84442-04	1.13226+00

TABLE 30 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 5.00000+06 SHAKES

PAGE 3

RADIUS(CM)	VEL(CM/S)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
1.83308+04	1.08066-03	6.39525-04	1.53247-09	3.73430-10	5.62664-04	1.13077+00
1.84232+04	1.08345-03	6.88066-04	1.54952-09	4.03850-10	5.40882-04	1.12933+00
1.85156+04	1.09633-03	7.39776-04	1.55930-09	4.44615-10	5.17971-04	1.12776+00
1.86081+04	1.11518-03	7.91925-04	1.55945-09	4.92463-10	4.91858-04	1.18392+00
1.87011+04	1.13150-03	8.46638-04	1.56125-09	5.41988-10	4.67555-04	1.18290+00
1.87943+04	1.14095-03	9.09703-04	1.57619-09	5.92117-10	4.45447-04	1.18222+00
1.88873+04	1.14293-03	9.82526-04	1.60487-09	6.41729-10	4.25795-04	1.17678+00
1.89796+04	1.1434-03	1.06791-03	1.64332-09	6.98107-10	4.07831-04	1.17413+00
1.90716+04	1.15338-03	1.14550-03	1.66114-09	7.61966-10	3.90577-04	1.17160+00
1.91643+04	1.17284-03	1.21365-03	1.66168-09	8.34785-10	3.74459-04	1.16923+00
1.92563+04	1.19258-03	1.28779-03	1.67380-09	9.15820-10	3.60455-04	1.16706+00
1.93534+04	1.20090-03	1.37119-03	1.69925-09	9.88735-10	3.47954-04	1.16387+00
1.94487+04	1.19939-03	1.48043-03	1.75969-09	1.06482-09	3.36724-04	1.17298+00
1.95442+04	1.20624-03	1.57903-03	1.80099-09	1.14880-09	3.25522-04	1.17224+00
1.96433+04	1.22866-03	1.65719-03	1.81204-09	1.25104-09	3.14297-04	1.17132+00
1.97409+04	1.25213-03	1.73318-03	1.81996-09	1.35873-09	3.03827-04	1.17047+00
1.98421+04	1.25963-03	1.85348-03	1.87713-09	1.47048-09	2.94758-04	1.17010+00
1.99431+04	1.26009-03	2.00876-03	1.95675-09	1.59479-09	2.85205-04	1.16987+00
2.00442+04	1.27536-03	2.13733-03	1.98912-09	1.73842-09	2.74224-04	1.16925+00
2.01470+04	1.29966-03	2.24586-03	1.99230-09	1.89690-09	2.63053-04	1.16846+00
2.02506+04	1.30858-03	2.42488-03	2.04499-09	2.07617-09	2.50888-04	1.24181+00
2.03529+04	1.30590-03	2.66147-03	2.13793-09	2.26940-09	2.39198-04	1.24207+00
2.04541+04	1.31696-03	2.86605-03	2.18747-09	2.48563-09	2.27441-04	1.24224+00
2.05558+04	1.33920-03	3.04446-03	2.20132-09	2.73020-09	2.15648-04	1.24234+00
2.06580+04	1.34953-03	3.27674-03	2.26658-09	2.98383-09	2.06452-04	1.24257+00
2.07592+04	1.35206-03	3.58921-03	2.39277-09	3.28065-09	1.99067-04	1.24296+00
2.08600+04	1.36926-03	3.82157-03	2.45289-09	3.58287-09	1.91727-04	1.24318+00
2.09624+04	1.39133-03	4.02572-03	2.48849-09	3.89661-09	1.84734-04	1.24335+00
2.10654+04	1.39735-03	4.35378-03	2.61075-09	4.25056-09	1.79276-04	1.24372+00
2.11677+04	1.40588-03	4.71682-03	2.74026-09	4.66165-09	1.73721-04	1.24411+00
2.12705+04	1.42821-03	4.99619-03	2.78546-09	5.09596-09	1.66517-04	1.29583+00
2.13739+04	1.44114-03	5.38616-03	2.90499-09	5.59324-09	1.60904-04	1.29560+00
2.14762+04	1.44674-03	5.88799-03	3.08970-09	6.16206-09	1.56355-04	1.29535+00
2.15782+04	1.46625-03	6.27758-03	3.18062-09	6.74873-09	1.50726-04	1.29523+00
2.16816+04	1.46877-03	6.62078-03	3.28391-09	7.14194-09	1.45602-04	1.29516+00
2.18324+04	1.11867-03	3.73139-03	3.11646-09	2.54818-09	1.04760-04	1.29660+00
2.21759+04	4.30450-04	1.58487-03	7.11635-10	2.43913-10	2.95612-05	1.37013+00
2.27283+04	4.16211-05	1.30859-03	1.26764-10	2.11081-12	2.36608-05	1.36994+00
2.33556+04	1.44812-06	1.29345-03	1.02547-10	2.56249-15	2.35432-05	1.36972+00
2.40043+04	4.22639-08	1.29299-03	1.01788-10	2.19663-18	2.35400-05	1.36972+00
2.46711+04	1.07861-09	1.29299-03	1.01766-10	1.45353-21	2.35400-05	1.36972+00
2.53565+04	1.85131-11	1.29299-03	1.01766-10	4.43156-25	2.35400-05	1.36972+00

TABLE 31

J15 SERIES 7 PROBLEM 82
T= 5.20000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
8.10998+02	4.26532-05	3.76058-05	1.33024-09	6.84159-14	4.92588-03	1.16510+00
1.78443+03	6.35784-05	3.61233-05	1.34869-09	6.60502-14	4.91933-03	1.16512+00
2.03870+03	3.24822-05	3.82914-05	1.35232-09	2.18808-14	4.91676-03	1.16512+00
2.18931+03	1.91732-05	3.63772-05	1.35331-09	7.35192-15	4.91496-03	1.16511+00
2.28788+03	1.38598-05	3.84203-05	1.35353-09	3.72633-15	4.91367-03	1.16510+00
2.35540+03	1.24866-05	3.84400-05	1.35344-09	2.99669-15	4.91274-03	1.16508+00
2.40287+03	1.34313-05	3.84389-05	1.35310-09	3.48436-15	4.91207-03	1.16507+00
2.48713+03	1.94738-05	1.19009-05	1.35259-09	2.41120-15	4.91048-03	1.17062+00
2.61506+03	3.04577-05	1.19013-05	1.35139-09	5.72646-15	4.90779-03	1.17058+00
2.74108+03	4.11406-05	1.19019-05	1.35022-09	1.02092-14	4.90505-03	1.17053+00
2.86589+03	5.03350-05	1.19066-05	1.34945-09	1.51986-14	4.90226-03	1.17048+00
2.99005+03	5.90702-05	1.19128-05	1.34880-09	2.08956-14	4.89940-03	1.17044+00
3.11405+03	6.73266-05	1.19195-05	1.34818-09	2.71063-14	4.89645-03	1.17040+00
3.23828+03	7.45619-05	1.19261-05	1.34750-09	3.32171-14	4.89342-03	1.17035+00
3.36308+03	7.99018-05	1.19341-05	1.34692-09	3.81197-14	4.89028-03	1.17030+00
3.48876+03	8.33101-05	1.19442-05	1.34651-09	4.14613-14	4.88701-03	1.17026+00
3.61556+03	8.53557-05	1.19552-05	1.34612-09	4.35528-14	4.88359-03	1.17021+00
3.74371+03	8.56432-J5	1.19691-05	1.34597-09	4.38959-14	4.88001-03	1.17016+00
3.87342+03	8.46117-05	1.19852-05	1.34597-09	4.29045-14	4.87625-03	1.17011+00
4.00486+03	8.27525-05	1.20032-05	1.34607-09	4.11074-14	4.87228-03	1.17006+00
4.13822+03	7.89179-05	1.20245-05	1.34642-09	3.74863-14	4.86810-03	1.17001+00
4.27363+03	7.34673-05	1.20498-05	1.34716-09	3.25669-14	4.86365-03	1.16996+00
4.41124+03	6.77618-05	1.20764-05	1.34786-09	2.77758-14	4.85892-03	1.16990+00
4.55122+03	6.20807-05	1.21048-05	1.34858-09	2.33732-14	4.85390-03	1.16984+00
4.69369+03	5.66745-05	1.21348-05	1.34929-09	1.95299-14	4.84855-03	1.16978+00
4.83881+03	5.17091-05	1.21663-05	1.34999-09	1.62990-14	4.84287-03	1.16971+00
4.98672+03	4.73106-05	1.21994-05	1.35065-09	1.36785-14	4.83681-03	1.16964+00
5.13754+03	4.35579-05	1.22341-05	1.35127-09	1.16237-14	4.83037-03	1.16956+00
5.29141+03	4.05119-05	1.22706-05	1.35186-09	1.00803-14	4.82351-03	1.16948+00
5.44845+03	3.84654-05	1.23084-05	1.35240-09	9.10880-15	4.81622-03	1.16939+00
5.60881+03	3.82720-05	1.23467-05	1.35279-09	9.04398-15	4.80846-03	1.16929+00
5.77264+03	4.14469-05	1.23836-05	1.35279-09	1.06804-14	4.80023-03	1.16918+00
5.94012+03	4.86543-05	1.24169-05	1.35220-09	1.48232-14	4.79152-03	1.16906+00
6.11142+03	5.84086-05	1.24488-05	1.35122-09	2.14038-14	4.78235-03	1.16893+00
6.28670+03	6.97169-05	1.24806-05	1.34999-09	3.05628-14	4.77270-03	1.16879+00
6.46610+03	8.24196-05	1.25118-05	1.34846-09	4.27688-14	4.76257-03	1.16864+00
6.64978+03	9.57289-05	1.25444-05	1.34683-09	5.77606-14	4.75194-03	1.16849+00
6.83785+03	1.08625-04	1.25795-05	1.34520-09	7.44554-14	4.74080-03	1.16832+00
7.03039+03	1.19600-04	1.26200-05	1.34385-09	9.04046-14	4.72912-03	1.16815+00
7.22746+03	1.27807-04	1.26678-05	1.34291-09	1.03535-13	4.71685-03	1.16798+00
7.42911+03	1.33156-04	1.27226-05	1.34236-09	1.12814-13	4.70392-03	1.16780+00
7.63536+03	1.35048-04	1.27870-05	1.34239-09	1.16605-13	4.69027-03	1.16762+00
7.84624+03	1.33752-04	1.28602-05	1.34285-09	1.15042-13	4.67580-03	1.16744+00
8.06175+03	1.29698-04	1.29439-05	1.34381-09	1.08919-13	4.66041-03	1.16981+00
8.26188+03	1.22943-04	1.30390-05	1.34533-09	9.86449-14	4.64398-03	1.16957+00
8.50665+03	1.15134-04	1.31434-05	1.34699-09	8.72106-14	4.62637-03	1.16932+00
8.73607+03	1.08323-04	1.32581-05	1.34876-09	7.78427-14	4.60747-03	1.16906+00
8.97018+03	1.04410-04	1.33794-05	1.35046-09	7.29337-14	4.58716-03	1.16877+00
9.20907+03	1.04950-04	1.35080-05	1.35198-09	7.44066-14	4.56532-03	1.16845+00
9.45286+03	1.11828-04	1.36356-05	1.35246-09	8.54573-14	4.54188-03	1.16811+00

TABLE 31 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 5.20000+06 SHAKES

PAGE 2

RADIUS(CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
9.70180+03	1.25324-04	1.37609-05	1.35179-09	1.08518-13	4.51682-03	1.16774+00
9.95606+03	1.43501-04	1.38894-05	1.35042-09	1.43712-13	4.49010-03	1.16734+00
1.02158+04	1.64905-04	1.40218-05	1.34839-09	1.91554-13	4.46170-03	1.16690+00
1.04810+04	1.87231-04	1.41651-05	1.34629-09	2.49139-13	4.43158-03	1.16644+00
1.07517+04	2.07209-04	1.43240-05	1.34445-09	3.08081-13	4.39967-03	1.16596+00
1.10277+04	2.23125-04	1.45058-05	1.34335-09	3.61432-13	4.36578-03	1.16544+00
1.13087+04	2.35308-04	1.47164-05	1.34328-09	4.07626-13	4.32968-03	1.16489+00
1.15945+04	2.43718-04	1.49606-05	1.34439-09	4.44392-13	4.29112-03	1.16431+00
1.18846+04	2.46600-04	1.52408-05	1.34657-09	4.63409-13	4.24979-03	1.16369+00
1.21785+04	2.44221-04	1.55632-05	1.34985-09	4.64161-13	4.20515-03	1.16302+00
1.24759+04	2.41512-04	1.59261-05	1.35353-09	4.64472-13	4.15659-03	1.16228+00
1.27765+04	2.45339-04	1.63204-05	1.35631-09	4.91331-13	4.10349-03	1.16147+00
1.30801+04	2.61099-04	1.67405-05	1.35725-09	5.71696-13	4.04535-03	1.16056+00
1.33866+04	2.90670-04	1.71918-05	1.35633-09	7.29118-13	3.98182-03	1.15955+00
1.36958+04	3.31852-04	1.76907-05	1.35415-09	9.78753-13	3.91237-03	1.15844+00
1.40071+04	3.80211-04	1.82662-05	1.35130-09	1.32619-12	3.83519-03	1.15718+00
1.43192+04	4.31992-04	1.89757-05	1.34817-09	1.77719-12	3.74557-03	1.15571+00
1.46300+04	4.84357-04	1.98893-05	1.34537-09	2.33976-12	3.63939-03	1.15394+00
1.49367+04	5.31796-04	2.11340-05	1.34398-09	2.99328-12	3.50997-03	1.15176+00
1.52336+04	5.68421-04	2.30608-05	1.34615-09	3.72817-12	3.34467-03	1.17703+00
1.55118+04	6.05655-04	2.63477-05	1.35095-09	4.83881-12	3.11328-03	1.17205+00
1.57562+04	6.62816-04	3.31430-05	1.35579-09	7.30070-12	2.73467-03	1.16362+00
1.59545+04	7.39036-04	4.49459-05	1.36126-09	1.23121-11	2.27681-03	1.15344+00
1.61045+04	8.12614-04	6.61068-05	1.36549-09	2.18726-11	1.84469-03	1.17290+00
1.62966+04	8.58761-04	8.55514-05	1.36664-09	3.15533-11	1.61892-03	1.16076+00
1.63207+04	8.79858-04	9.73111-05	1.36851-09	3.76697-11	1.52062-03	1.15496+00
1.64180+04	8.93549-04	1.06356-04	1.36906-09	4.24608-11	1.45719-03	1.15104+00
1.65139+04	9.04626-04	1.15262-04	1.36676-09	4.71638-11	1.40145-03	1.14752+00
1.66087+04	9.17021-04	1.25278-04	1.36517-09	5.26779-11	1.34643-03	1.14821+00
1.67024+04	9.31604-04	1.36251-04	1.36521-09	5.91291-11	1.29001-03	1.14492+00
1.67946+04	9.43913-04	1.48915-04	1.36398-09	6.63415-11	1.22584-03	1.14122+00
1.68848+04	9.50798-04	1.63924-04	1.36300-09	7.40952-11	1.15434-03	1.15527+00
1.69728+04	9.52866-04	1.80747-04	1.36278-09	8.20551-11	1.07998-03	1.17490+00
1.70587+04	9.52459-04	1.98678-04	1.36618-09	9.01183-11	1.01012-03	1.19445+00
1.71431+04	9.49392-04	2.16614-04	1.37007-09	9.76225-11	9.49045-04	1.19164+00
1.72263+04	9.46320-04	2.35728-04	1.37746-09	1.05550-10	8.97717-04	1.18275+00
1.73089+04	9.45155-04	2.54738-04	1.38424-09	1.13781-10	8.54906-04	1.15303+00
1.73909+04	9.46874-04	2.76225-04	1.39147-09	1.23829-10	8.18197-04	1.14949+00
1.74726+04	9.52311-04	2.96789-04	1.39664-09	1.34580-10	7.87036-04	1.14636+00
1.75546+04	9.61264-04	3.17407-04	1.39943-09	1.46652-10	7.61414-04	1.12242+00
1.76372+04	9.73507-04	3.37941-04	1.39796-09	1.60143-10	7.38941-04	1.11992+00
1.77211+04	9.87464-04	3.56824-04	1.39431-09	1.73977-10	7.19405-04	1.11772+00
1.78067+04	1.00160-03	3.74585-04	1.39096-09	1.87902-10	7.02404-04	1.11577+00
1.78945+04	1.01165-03	3.92189-04	1.38957-09	2.00693-10	6.87196-04	1.11459+00
1.79844+04	1.01678-03	4.12761-04	1.39736-09	2.13365-10	6.72944-04	1.11295+00
1.80760+04	1.01805-03	4.37133-04	1.41048-09	2.26529-10	6.58159-04	1.11128+00
1.81686+04	1.01715-03	4.65487-04	1.42470-09	2.40797-10	6.42058-04	1.10944+00
1.82618+04	1.01821-03	4.98055-04	1.43834-09	2.58182-10	6.24510-04	1.10740+00
1.83553+04	1.02475-03	5.35072-04	1.44689-09	2.80950-10	6.04829-04	1.10505+00
1.84491+04	1.03916-03	5.71999-04	1.44748-09	3.08864-10	5.81184-04	1.13089+00

TABLE 31 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 5.20000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.85435+04	1.05842-03	6.09020-04	1.44609-09	3.41154-10	5.58541-04	1.12894+00
1.86387+04	1.07340-03	6.50616-04	1.44912-09	3.74326-10	5.36256-04	1.12716+00
1.87338+04	1.07939-03	7.03144-04	1.46349-09	4.09613-10	5.12554-04	1.18340+00
1.88285+04	1.07805-03	7.58530-04	1.48247-09	4.40777-10	4.88602-04	1.18261+00
1.89227+04	1.07702-03	8.21323-04	1.50777-09	4.76355-10	4.65655-04	1.18201+00
1.90164+04	1.08536-03	8.85051-04	1.52762-09	5.21322-10	4.43859-04	1.18141+00
1.91105+04	1.10362-03	9.42768-04	1.52874-09	5.74190-10	4.23186-04	1.17678+00
1.92054+04	1.12230-03	1.00511-03	1.52974-09	6.33024-10	4.04058-04	1.17414+00
1.93008+04	1.13370-03	1.07642-03	1.54419-09	6.91754-10	3.86989-04	1.17163+00
1.93963+04	1.13634-03	1.15990-03	1.57666-09	7.48876-10	3.72152-04	1.16929+00
1.94915+04	1.13422-03	1.25378-03	1.62328-09	8.06470-10	3.59213-04	1.16711+00
1.95869+04	1.14386-03	1.33191-03	1.64225-09	8.71428-10	3.46456-04	1.16346+00
1.96841+04	1.16694-03	1.39871-03	1.64599-09	9.52445-10	3.33657-04	1.17192+00
1.97836+04	1.18655-03	1.46940-03	1.65482-09	1.03442-09	3.21022-04	1.17089+00
1.98844+04	1.19167-03	1.56921-03	1.70023-09	1.11422-09	3.11749-04	1.17031+00
1.99856+04	1.19125-03	1.68761-03	1.76440-09	1.19743-09	3.02649-04	1.16998+00
2.00875+04	1.20562-03	1.78514-03	1.79512-09	1.29750-09	2.92870-04	1.16937+00
2.01916+04	1.23188-03	1.87116-03	1.79927-09	1.41993-09	2.81912-04	1.16850+00
2.02973+04	1.24774-03	1.99904-03	1.83900-09	1.55610-09	2.71428-04	1.16797+00
2.04024+04	1.24853-03	2.17752-03	1.92109-09	1.69718-09	2.61791-04	1.16785+00
2.05065+04	1.25644-03	2.36066-03	1.97815-09	1.86341-09	2.49278-04	1.24162+00
2.06107+04	1.27853-03	2.50987-03	1.98787-09	2.05158-09	2.35844-04	1.24166+00
2.07155+04	1.29331-03	2.69031-03	2.02247-09	2.24997-09	2.24073-04	1.24180+00
2.08196+04	1.29346-03	2.94123-03	2.10981-U9	2.46041-09	2.13977-04	1.24210+00
2.09225+04	1.30053-03	3.18316-03	2.18660-09	2.69210-09	2.05017-04	1.24237+00
2.10260+04	1.32200-03	3.35359-03	2.19902-09	2.93075-09	1.95814-04	1.24249+00
2.11310+04	1.33593-03	3.58117-03	2.26267-09	3.19569-09	1.88700-04	1.24274+00
2.12357+04	1.33982-03	3.89786-03	2.39070-09	3.49858-09	1.83317-04	1.24313+00
2.13401+04	1.35606-03	4.15633-03	2.46412-09	3.82196-09	1.77241-04	1.24340+00
2.14460+04	1.37671-03	4.38601-03	2.49853-09	4.15654-09	1.70293-04	1.29630+00
2.15520+04	1.38273-03	4.78791-03	2.63649-09	4.57708-09	1.64430-04	1.29600+00
2.16567+04	1.39183-03	5.18985-03	2.76869-09	5.02712-09	1.59090-04	1.29575+00
2.17619+04	1.41366-03	5.49087-03	2.82253-09	5.48699-09	1.53071-04	1.29562+00
2.18678+04	1.42553-03	5.92531-03	2.95142-09	6.02054-09	1.48144-04	1.29545+00
2.19726+04	1.43321-03	6.47326-03	3.14960-09	6.64851-09	1.44523-04	1.29525+00
2.20842+04	1.36492-03	6.05542-03	3.24808-09	5.65817-09	1.34558-04	1.29559+00
2.23026+04	8.32048-04	2.41045-03	2.07523-09	1.08595-09	6.27796-05	1.36977+00
2.27496+04	1.98387-04	1.39264-03	2.77483-10	4.91681-11	2.47052-05	1.37005+00
2.33566+04	1.11495-05	1.29699-03	1.07958-10	1.51436-13	2.35686-05	1.36991+00
2.40043+04	3.59717-07	1.29309-03	1.01958-10	1.58205-16	2.35407-05	1.36972+00
2.46711+04	1.03343-08	1.29299-03	1.01771-10	1.31489-19	2.35400-05	1.36972+00
2.53565+04	2.53183-10	1.29299-03	1.01766-10	8.28830-23	2.35400-05	1.36972+00

TABLE 32

J15 SERIES 7 PROBLEM 82
 T= 5.40000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
8.10306+02	-6.55123-06	3.76892-05	1.29443-09	1.61757-15	4.83229-03	1.16303+00
1.78571+03	6.89229-06	3.74647-05	1.28001-09	8.37885-15	4.82288-03	1.16274+00
2.04392+03	2.74708-05	3.75810-05	1.28286-09	1.41866-14	4.82041-03	1.16272+00
2.19649+03	2.48670-05	3.76882-05	1.28632-09	1.18441-14	4.81880-03	1.16272+00
2.29613+03	1.86368-05	3.77739-05	1.28893-09	6.73485-15	4.81766-03	1.16273+00
2.36426+03	1.38071-05	3.78507-05	1.29085-09	3.66830-15	4.81683-03	1.16273+00
2.41207+03	1.11333-05	3.79079-05	1.29230-09	2.36434-15	4.81622-03	1.16274+00
2.49677+03	8.98284-06	1.17486-05	1.29361-09	4.83389-16	4.81483-03	1.16877+00
2.62520+03	6.76124-06	1.17720-05	1.29499-09	2.74474-16	4.81244-03	1.16875+00
2.75149+03	4.74170-06	1.17940-05	1.29623-09	1.39233-16	4.80993-03	1.16873+00
2.87639+03	2.57455-06	1.18148-05	1.29726-09	4.63747-17	4.80730-03	1.16871+00
3.00053+03	5.24433-07	1.18351-05	1.29811-09	6.90830-18	4.80453-03	1.16868+00
3.12439+03	-1.06737-06	1.18553-05	1.29887-09	9.23556-18	4.80161-03	1.16865+00
3.24839+03	-2.04022-06	1.18757-05	1.29955-09	2.53461-17	4.79853-03	1.16862+00
3.37289+03	-2.41874-06	1.18961-05	1.30018-09	3.48144-17	4.79529-03	1.16858+00
3.49819+03	-2.14445-06	1.19166-05	1.30073-09	2.80375-17	4.79186-03	1.16854+00
3.62457+03	-2.98608-07	1.19358-05	1.30111-09	1.42977-17	4.78825-03	1.16850+00
3.75230+03	3.97383-06	1.19524-05	1.30112-09	1.39689-16	4.78445-03	1.16845+00
3.88163+03	1.11690-05	1.19663-05	1.30077-09	8.64401-16	4.78047-03	1.16839+00
4.01280+03	2.10911-05	1.19769-05	1.30000-09	2.84376-15	4.77632-03	1.16833+00
4.14602+03	3.24164-05	1.19865-05	1.29904-09	6.50258-15	4.77199-03	1.16826+00
4.28147+03	4.41931-05	1.19963-05	1.29804-09	1.19257-14	4.76750-03	1.16819+00
4.41932+03	5.61940-05	1.20065-05	1.29698-09	1.91780-14	4.76282-03	1.16812+00
4.55972+03	6.82565-05	1.20172-05	1.29589-09	2.82097-14	4.75796-03	1.16804+00
4.70284+03	8.01561-05	1.20287-05	1.29479-09	3.88519-14	4.75290-03	1.16797+00
4.84680+03	9.14425-05	1.20416-05	1.29374-09	5.05185-14	4.74764-03	1.16788+00
4.99774+03	1.01071-04	1.20579-05	1.29294-09	6.16961-14	4.74216-03	1.16780+00
5.14975+03	1.08560-04	1.20780-05	1.29241-09	7.12353-14	4.73643-03	1.16772+00
5.30494+03	1.13653-04	1.21016-05	1.29210-09	7.81783-14	4.73043-03	1.16764+00
5.46342+03	1.15915-04	1.21299-05	1.29213-09	8.14908-14	4.72412-03	1.16755+00
5.62526+03	1.15588-04	1.21624-05	1.29240-09	8.12519-14	4.71746-03	1.16747+00
5.79056+03	1.12444-04	1.21997-05	1.29298-09	7.71603-14	4.71040-03	1.16738+00
5.95939+03	1.06337-04	1.22434-05	1.29409-09	6.93050-14	4.70289-03	1.16729+00
6.13184+03	9.90171-05	1.22908-05	1.29523-09	6.03322-14	4.69487-03	1.16720+00
6.30801+03	9.18360-05	1.23412-05	1.29643-09	5.21204-14	4.68631-03	1.16710+00
6.48602+03	8.49082-05	1.23947-05	1.29759-09	4.47495-14	4.67715-03	1.16699+00
6.67197+03	7.85074-05	1.24513-05	1.29871-09	3.84285-14	4.66736-03	1.16687+00
6.85998+03	7.28556-05	1.25109-05	1.29976-09	3.32463-14	4.65687-03	1.16671+00
7.05214+03	6.81198-05	1.25737-05	1.30073-09	2.92013-14	4.64565-03	1.16660+00
7.24658+03	6.48999-05	1.26396-05	1.30161-09	2.66267-14	4.63364-03	1.16645+00
7.44944+03	6.55445-05	1.27053-05	1.30209-09	2.73107-14	4.62079-03	1.16628+00
7.65491+03	7.24187-05	1.27671-05	1.30177-09	3.36464-14	4.60710-03	1.16610+00
7.86521+03	8.44991-05	1.28258-05	1.30072-09	4.60985-14	4.59259-03	1.16589+00
8.08050+03	9.89458-05	1.28860-05	1.29939-09	6.34408-14	4.57726-03	1.16567+00
8.30091+03	1.14573-04	1.29498-05	1.29791-09	8.54242-14	4.56109-03	1.16514+00
8.52653+03	1.30275-04	1.30187-05	1.29639-09	1.10846-13	4.54406-03	1.16788+00
8.75743+03	1.44691-04	1.30939-05	1.29498-09	1.37370-13	4.52613-03	1.16761+00
8.99362+03	1.56062-04	1.31794-05	1.29400-09	1.60629-13	4.50724-03	1.16733+00
9.23509+03	1.63443-04	1.32782-05	1.29364-09	1.77408-13	4.48727-03	1.16703+00
9.48178+03	1.66961-04	1.33907-05	1.29385-09	1.86643-13	4.46612-03	1.16672+00

TABLE 32 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 5.40000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SW)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
9.73360+03	1.66547-04	1.35185-05	1.29466-09	1.87496-13	4.44364-03	1.16638+00
9.99047+03	1.62908-04	1.36632-05	1.29611-09	1.81349-13	4.41964-03	1.16603+00
1.02523+04	1.56214-04	1.38247-05	1.29801-09	1.68798-13	4.39392-03	1.16565+00
1.05189+04	1.48750-04	1.40043-05	1.30027-09	1.55012-13	4.36616-03	1.16525+00
1.07903+04	1.44879-04	1.41995-05	1.30248-09	1.49025-13	4.33612-03	1.16480+00
1.10665+04	1.48712-04	1.44034-05	1.30388-09	1.59406-13	4.30355-03	1.16432+00
1.13476+04	1.62280-04	1.46110-05	1.30391-09	1.93005-13	4.26833-03	1.16378+00
1.16338+04	1.84729-04	1.48228-05	1.30255-09	2.54215-13	4.23033-03	1.16319+00
1.19252+04	2.13941-04	1.50449-05	1.30018-09	3.46223-13	4.18948-03	1.16255+00
1.22218+04	2.46837-04	1.52850-05	1.29730-09	4.67841-13	4.14565-03	1.16185+00
1.25233+04	2.80394-04	1.55496-05	1.29422-09	6.13406-13	4.09869-03	1.16110+00
1.28296+04	3.13092-04	1.58494-05	1.29153-09	7.78883-13	4.04841-03	1.16030+00
1.31401+04	3.42680-04	1.61972-05	1.28989-09	9.52468-13	3.99466-03	1.15944+00
1.34541+04	3.64638-04	1.66091-05	1.28995-09	1.10478-12	3.93700-03	1.15852+00
1.37706+04	3.76151-04	1.71042-05	1.29223-09	1.21012-12	3.87466-03	1.15753+00
1.40884+04	3.80777-04	1.77152-05	1.29632-09	1.28429-12	3.80382-03	1.15641+00
1.44059+04	3.88931-04	1.84534-05	1.30014-09	1.39610-12	3.72115-03	1.15507+00
1.47215+04	4.08475-04	1.93547-05	1.30234-09	1.61631-12	3.62266-03	1.15345+00
1.50330+04	4.41887-04	2.05159-05	1.30310-09	2.00731-12	3.50223-03	1.15143+00
1.53361+04	4.89421-04	2.21961-05	1.30219-09	2.66648-12	3.34687-03	1.17655+00
1.56236+04	5.50487-04	2.49245-05	1.30096-09	3.79089-12	3.13956-03	1.17196+00
1.58822+04	6.29854-04	3.02992-05	1.29912-09	6.04128-12	2.80674-03	1.16445+00
1.60982+04	7.21401-04	3.99272-05	1.29829-09	1.04320-11	2.37758-03	1.15464+00
1.62656+04	8.11477-04	5.73384-05	1.29810-09	1.89338-11	1.93258-03	1.17791+00
1.63923+04	8.72309-04	7.86012-05	1.29836-09	2.99160-11	1.64303-03	1.16289+00
1.64985+04	8.93739-04	9.22948-05	1.29937-09	3.68621-11	1.51784-03	1.15557+00
1.65983+04	8.98833-04	1.01838-04	1.30207-09	4.11376-11	1.44684-03	1.15127+00
1.66960+04	8.97117-04	1.11009-04	1.30490-09	4.46712-11	1.39225-03	1.14762+00
1.67921+04	8.93390-04	1.21203-04	1.30870-09	4.83689-11	1.33732-03	1.14682+00
1.68865+04	8.91076-04	1.32386-04	1.31432-09	5.25585-11	1.29221-03	1.14392+00
1.69791+04	8.88797-04	1.45245-04	1.31776-09	5.73669-11	1.21833-03	1.14026+00
1.70695+04	8.90017-04	1.60478-04	1.32099-09	6.35604-11	1.14621-03	1.15434+00
1.71574+04	8.95114-04	1.77322-04	1.32465-09	7.10382-11	1.07232-03	1.17421+00
1.72432+04	9.01603-04	1.94274-04	1.32478-09	7.89632-11	1.00319-03	1.19432+00
1.73279+04	9.10930-04	2.10814-04	1.32337-09	8.74688-11	9.43136-04	1.18723+00
1.74119+04	9.24889-04	2.28066-04	1.32308-09	9.75544-11	8.92053-04	1.18358+00
1.74956+04	9.39690-04	2.45089-04	1.32143-09	1.08213-10	8.49725-04	1.15358+00
1.75793+04	9.51305-04	2.64127-04	1.32021-09	1.19519-10	8.12908-04	1.15016+00
1.76632+04	9.59925-04	2.82284-04	1.31892-09	1.30058-10	7.81909-04	1.14714+00
1.77475+04	9.63304-04	3.01963-04	1.32153-09	1.40104-10	7.57155-04	1.12203+00
1.78323+04	9.62535-04	3.22838-04	1.32742-09	1.49551-10	7.35405-04	1.11960+00
1.79178+04	9.60836-04	3.43687-04	1.33673-09	1.58647-10	7.16681-04	1.11747+00
1.80043+04	9.60831-04	3.63913-04	1.34634-09	1.67982-10	7.00303-04	1.11558+00
1.80924+04	9.63441-04	3.83985-04	1.35623-09	1.78212-10	6.85543-04	1.11413+00
1.81823+04	9.69608-04	4.03709-04	1.36095-09	1.89775-10	6.70941-04	1.11242+00
1.82742+04	9.80862-04	4.24433-04	1.36147-09	2.04182-10	6.55487-04	1.11056+00
1.83681+04	9.95372-04	4.46614-04	1.35633-09	2.21257-10	6.38613-04	1.10846+00
1.84637+04	1.00945-03	4.72982-04	1.35257-09	2.40993-10	6.20380-04	1.10619+00
1.85600+04	1.01853-03	5.08171-04	1.35812-09	2.63590-10	5.99681-04	1.13104+00
1.86563+04	1.02101-03	5.45746-04	1.36996-09	2.84459-10	5.77404-04	1.12924+00

TABLE 32 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 5.49000+06 SHAKES

PAGE 3

RADIUS(CM)	VEL(CM/SW)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
1.87524+04	1.02014-03	5.08454-04	1.38858-09	3.06200-10	5.55815-04	1.12770+00
1.88482+04	1.01948-03	6.34924-04	1.40566-09	3.29950-10	5.33849-04	1.12617+00
1.89437+04	1.02562-03	6.85155-04	1.41699-09	3.60367-10	5.09736-04	1.18256+00
1.90393+04	1.04171-03	7.31040-04	1.41781-09	3.96683-10	4.85275-04	1.18145+00
1.91356+04	1.06113-03	7.79923-04	1.41800-09	4.39130-10	4.61646-04	1.18042+00
1.92324+04	1.07314-03	8.34607-04	1.42653-09	4.80586-10	4.39976-04	1.17964+00
1.93294+04	1.07541-03	8.96332-04	1.44530-09	5.19464-10	4.20432-04	1.17682+00
1.94259+04	1.07364-03	9.74239-04	1.47653-09	5.61503-10	4.02596-04	1.17419+00
1.95217+04	1.07637-03	1.05313-03	1.50685-09	6.10074-10	3.86070-04	1.17169+00
1.96178+04	1.09239-03	1.11965-03	1.51313-09	6.68126-10	3.70188-04	1.16932+00
1.97154+04	1.11403-03	1.17893-03	1.50891-09	7.31624-10	3.55597-04	1.16714+00
1.98147+04	1.12848-03	1.25163-03	1.52590-09	7.96967-10	3.42982-04	1.17390+00
1.99148+04	1.13014-03	1.33682-03	1.56256-09	8.55706-10	3.31636-04	1.17112+00
2.00153+04	1.12862-03	1.43615-03	1.61257-09	9.14668-10	3.20951-04	1.17050+00
2.01167+04	1.14206-03	1.51663-03	1.63375-09	9.89171-10	3.10100-04	1.16967+00
2.02206+04	1.16662-03	1.58258-03	1.63543-09	1.07709-09	2.99494-04	1.16875+00
2.03269+04	1.18267-03	1.66955-03	1.65881-09	1.16763-09	2.89762-04	1.16810+00
2.04334+04	1.18386-03	1.80252-03	1.72236-09	1.26314-09	2.80356-04	1.16781+00
2.05405+04	1.18902-03	1.94422-03	1.78021-09	1.37439-09	2.70293-04	1.16745+00
2.06476+04	1.21224-03	2.05788-03	1.79672-09	1.51231-09	2.59363-04	1.16675+00
2.07558+04	1.23483-03	2.20509-03	1.81812-09	1.68122-09	2.45321-04	1.24116+00
2.08632+04	1.23997-03	2.40456-03	1.88592-09	1.84853-09	2.33598-04	1.24137+00
2.09690+04	1.24284-03	2.62685-03	1.96393-09	2.02881-09	2.22850-04	1.24164+00
2.10742+04	1.26042-03	2.80940-03	1.99324-09	2.23185-09	2.11633-04	1.24178+00
2.11805+04	1.27953-03	2.97323-03	2.00903-09	2.43392-09	2.01706-04	1.24190+00
2.12871+04	1.28343-03	3.22524-03	2.09545-09	2.65631-09	1.94059-04	1.24222+00
2.13930+04	1.28810-03	3.48057-03	2.18404-09	2.88758-09	1.87490-04	1.24254+00
2.14999+04	1.30820-03	3.66204-03	2.21209-09	3.13389-09	1.80554-04	1.24271+00
2.16985+04	1.32453-03	3.89084-03	2.26999-09	3.41304-09	1.74461-04	1.24295+00
2.17167+04	1.32905-03	4.26574-03	2.41042-09	3.76746-09	1.68888-04	1.29641+00
2.18239+04	1.34297-03	4.57439-03	2.48536-09	4.12548-09	1.62157-04	1.29617+00
2.19322+04	1.36294-03	4.84176-03	2.53070-09	4.49718-09	1.55794-04	1.29601+00
2.20406+04	1.37002-03	5.26234-03	2.67138-09	4.93856-09	1.51142-04	1.29578+00
2.21479+04	1.37979-03	5.71780-03	2.81813-09	5.44312-09	1.46538-04	1.29557+00
2.22558+04	1.40136-03	6.02679-03	2.87062-09	5.91812-09	1.41416-04	1.29550+00
2.23644+04	1.40824-03	6.50902-03	3.02115-09	6.45425-09	1.37652-04	1.29535+00
2.25041+04	1.15911-03	4.39776-03	3.04979-09	3.08596-09	1.11394-04	1.29640+00
2.28198+04	5.21299-04	1.72835-03	9.58707-10	3.68369-10	3.41061-05	1.37012+00
2.33630+04	6.66880-05	1.32071-03	1.44611-10	5.43671-12	2.37685-05	1.36996+00
2.40046+04	2.66118-06	1.29392-03	1.03211-10	8.61998-15	2.35464-05	1.36972+00
2.46711+04	8.36671-08	1.29300-03	1.01810-10	8.57362-18	2.35401-05	1.36972+00
2.53565+04	2.31990-09	1.29299-03	1.01767-10	6.66070-21	2.35400-05	1.36972+00
2.60609+04	5.08004-11	1.29299-03	1.01766-10	3.33680-24	2.35400-05	1.36972+00

TABLE 33

J15 SERIES 7 PROBLEM 82
T= 5.60000+06 SHAKES

PAGE 1

RAD1US(CM)	VEL(CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
8.11433+02	-1.29709-05	3.75307-05	1.25192-09	6.31431-15	4.74300-03	1.16097+00
1.70574+03	-2.72550-05	3.79666-05	1.25943-09	1.41342-14	4.73265-03	1.16088+00
2.04080+03	-2.52712-05	3.80686-05	1.25936-09	1.23629-14	4.72940-03	1.16084+00
2.19219+03	-1.24254-05	3.80208-05	1.25689-09	4.66838-15	4.72731-03	1.16078+00
2.29160+03	2.48690-06	3.79022-05	1.25241-09	6.62400-16	4.72593-03	1.16071+00
2.35989+03	1.18828-05	3.78447-05	1.25012-09	2.97952-15	4.72498-03	1.16067+00
2.40794+03	1.87959-05	3.78031-05	1.24847-09	6.83451-15	4.72431-03	1.16064+00
2.49333+03	2.89455-05	1.16855-05	1.24674-09	5.20402-15	4.72287-03	1.16706+00
2.62292+03	4.27595-05	1.16829-05	1.24546-09	1.09306-14	4.72055-03	1.16701+00
2.75050+03	5.56945-05	1.16799-05	1.24415-09	1.83533-14	4.71821-03	1.16697+00
2.87679+03	6.68961-05	1.16804-05	1.24318-09	2.62707-14	4.71586-03	1.16693+00
3.00239+03	7.50336-05	1.16823-05	1.24232-09	3.29504-14	4.71347-03	1.16689+00
3.12777+03	8.00082-05	1.16858-05	1.24161-09	3.74180-14	4.71102-03	1.16685+00
3.25333+03	8.22167-05	1.16929-05	1.24122-09	3.95214-14	4.70848-03	1.16681+00
3.37940+03	8.24948-05	1.17037-05	1.24116-09	3.98245-14	4.70584-03	1.16677+00
3.50626+03	8.09867-05	1.17176-05	1.24135-09	3.84356-14	4.70307-03	1.16674+00
3.63416+03	7.68966-05	1.17357-05	1.24190-09	3.47454-14	4.70016-03	1.16670+00
3.76330+03	7.06777-05	1.17580-05	1.24297-09	2.94337-14	4.69707-03	1.16667+00
3.89390+03	6.37974-05	1.17817-05	1.24399-09	2.40496-14	4.69378-03	1.16664+00
4.02616+03	5.67937-05	1.18071-05	1.24505-09	1.91135-14	4.69029-03	1.16660+00
4.16029+03	5.00062-05	1.18338-05	1.24612-09	1.48607-14	4.68656-03	1.16656+00
4.29637+03	4.36869-05	1.18619-05	1.24718-09	1.15733-14	4.68259-03	1.16652+00
4.43466+03	3.80275-05	1.18913-05	1.24822-09	8.63966-15	4.67836-03	1.16648+00
4.57530+03	3.30990-05	1.19219-05	1.24926-09	6.56146-15	4.67386-03	1.16643+00
4.71844+03	2.88830-05	1.19535-05	1.25025-09	5.00835-15	4.66906-03	1.16638+00
4.86421+03	2.53405-05	1.19861-05	1.25120-09	3.86385-15	4.66395-03	1.16632+00
5.01278+03	2.24502-05	1.20196-05	1.25208-09	3.03890-15	4.65851-03	1.16626+00
5.16427+03	2.02393-05	1.20541-05	1.25288-09	2.47404-15	4.65272-03	1.16619+00
5.31683+03	1.88308-05	1.20896-05	1.25358-09	2.14468-15	4.64655-03	1.16611+00
5.47661+03	1.96061-05	1.21247-05	1.25412-09	2.33994-15	4.63998-03	1.16603+00
5.63778+03	2.45905-05	1.21559-05	1.25409-09	3.75979-15	4.63302-03	1.16594+00
5.80254+03	3.39694-05	1.21835-05	1.25352-09	7.22391-15	4.62567-03	1.16583+00
5.97107+03	4.64311-05	1.22084-05	1.25253-09	1.34429-14	4.61795-03	1.16572+00
6.14354+03	5.99218-05	1.22340-05	1.25141-09	2.22368-14	4.60986-03	1.16560+00
6.32005+03	7.30950-05	1.22620-05	1.25035-09	3.30156-14	4.60138-03	1.16547+00
6.50073+03	8.58053-05	1.22926-05	1.24935-09	4.54899-14	4.59249-03	1.16534+00
6.68567+03	9.78009-05	1.23263-05	1.24844-09	5.91565-14	4.58317-03	1.16521+00
6.87498+03	1.08563-04	1.23639-05	1.24768-09	7.30137-14	4.57340-03	1.16506+00
7.06873+03	1.16988-04	1.24071-05	1.24722-09	8.49756-14	4.56313-03	1.16492+00
7.26698+03	1.22301-04	1.24574-05	1.24717-09	9.31872-14	4.55230-03	1.16477+00
7.46977+03	1.24409-04	1.25148-05	1.24748-09	9.68500-14	4.54086-03	1.16462+00
7.67715+03	1.23497-04	1.25800-05	1.24819-09	9.59406-14	4.52872-03	1.16447+00
7.88916+03	1.19961-04	1.26525-05	1.24918-09	9.10757-14	4.51580-03	1.16430+00
8.10584+03	1.14020-04	1.27335-05	1.25060-09	8.28518-14	4.50200-03	1.16413+00
8.32729+03	1.07089-04	1.28215-05	1.25209-09	7.35922-14	4.48720-03	1.16394+00
8.55340+03	1.00634-04	1.29157-05	1.25355-09	6.54609-14	4.47132-03	1.16660+00
8.78440+03	9.50056-05	1.30182-05	1.25492-09	5.87939-14	4.45425-03	1.16635+00
9.02030+03	9.18574-05	1.31262-05	1.25612-09	5.53802-14	4.43586-03	1.16608+00
9.26124+03	9.44112-05	1.32346-05	1.25663-09	5.90488-14	4.41608-03	1.16579+00
9.50744+03	1.04900-04	1.33402-05	1.25612-09	7.37571-14	4.39489-03	1.16547+00

TABLE 33 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 5.60000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
9.75912+03	1.22307-04	1.34446-05	1.25472-09	1.01242-13	4.37226-03	1.16512+00
1.00165+04	1.44240-04	1.35517-05	1.25275-09	1.41927-13	4.34819-03	1.16475+00
1.02796+04	1.68704-04	1.36641-05	1.25042-09	1.95533-13	4.32264-03	1.16435+00
1.05485+04	1.93600-04	1.37857-05	1.24801-09	2.59392-13	4.29558-03	1.16393+00
1.08232+04	2.17065-04	1.39210-05	1.24584-09	3.28828-13	4.26693-03	1.16348+00
1.11037+04	2.35753-04	1.40736-05	1.24410-09	3.97778-13	4.23659-03	1.16300+00
1.13896+04	2.53582-04	1.42489-05	1.24312-09	4.58445-13	4.20443-03	1.16250+00
1.16808+04	2.63140-04	1.44526-05	1.24317-09	5.00429-13	4.17025-03	1.16197+00
1.19769+04	2.64941-04	1.46904-05	1.24443-09	5.15596-13	4.13372-03	1.16141+00
1.22774+04	2.60824-04	1.49667-05	1.24689-09	5.09157-13	4.09441-03	1.16081+00
1.25820+04	2.56726-04	1.52787-05	1.24989-09	5.03505-13	4.05180-03	1.16015+00
1.28903+04	2.59873-04	1.56160-05	1.25223-09	5.27446-13	4.00545-03	1.15943+00
1.32023+04	2.74434-04	1.59705-05	1.25297-09	6.02252-13	3.95502-03	1.15863+00
1.35180+04	2.99679-04	1.63504-05	1.25238-09	7.36006-13	3.90017-03	1.15775+00
1.38372+04	3.32243-04	1.67739-05	1.25078-09	9.28413-13	3.83943-03	1.15676+00
1.41590+04	3.69279-04	1.72696-05	1.24840-09	1.18074-12	3.77025-03	1.15562+00
1.44825+04	4.08233-04	1.78763-05	1.24602-09	1.49301-12	3.69051-03	1.15430+00
1.48056+04	4.47004-04	1.86489-05	1.24424-09	1.86658-12	3.59692-03	1.15273+00
1.51258+04	4.82778-04	1.96765-05	1.24366-09	2.29574-12	3.48435-03	1.15083+00
1.54384+04	5.14055-04	2.12113-05	1.24506-09	2.80466-12	3.34333-03	1.17566+00
1.57361+04	5.44790-04	2.36414-05	1.24813-09	3.51138-12	3.15428-03	1.17155+00
1.60072+04	5.88832-04	2.81520-05	1.25228-09	4.89152-12	2.86352-03	1.16506+00
1.62379+04	6.51165-04	3.63659-05	1.25639-09	7.73130-12	2.46568-03	1.15596+00
1.64211+04	7.29819-04	5.04224-05	1.25977-09	1.34779-11	2.03466-03	1.16311+00
1.66597+04	7.98755-04	7.22912-05	1.26214-09	2.30831-11	1.68797-03	1.16580+00
1.66705+04	8.33325-04	8.86454-05	1.26319-09	3.07835-11	1.52488-03	1.15642+00
1.67717+04	8.49862-04	9.89622-05	1.26310-09	3.57406-11	1.44533-03	1.15152+00
1.68701+04	8.62969-04	1.08061-04	1.26235-09	4.02397-11	1.38551-03	1.14770+00
1.69669+04	8.75755-04	1.17696-04	1.26036-09	4.51355-11	1.32911-03	1.14559+00
1.70624+04	8.87789-04	1.28144-04	1.25854-09	5.05019-11	1.27267-03	1.15018+00
1.71563+04	8.97503-04	1.40220-04	1.25680-09	5.64756-11	1.20467-03	1.13900+00
1.72481+04	9.05176-04	1.54544-04	1.25488-09	6.33135-11	1.13510-03	1.15294+00
1.73375+04	9.09782-04	1.70459-04	1.25614-09	7.05447-11	1.06096-03	1.17304+00
1.74250+04	9.10616-04	1.86507-04	1.25625-09	7.73278-11	9.92967-04	1.19417+00
1.75112+04	9.09313-04	2.02851-04	1.26037-09	8.38637-11	9.35267-04	1.18821+00
1.75966+04	9.06082-04	2.19866-04	1.26628-09	9.02539-11	8.86400-04	1.18454+00
1.76814+04	9.03195-04	2.37313-04	1.27124-09	9.67954-11	8.45489-04	1.15405+00
1.77659+04	9.03381-04	2.56805-04	1.27885-09	1.04789-10	8.10201-04	1.15061+00
1.78502+04	9.06087-04	2.75299-04	1.28410-09	1.13009-10	7.80244-04	1.14758+00
1.79348+04	9.11292-04	2.94929-04	1.28725-09	1.22464-10	7.55426-04	1.12188+00
1.80199+04	9.21886-04	3.14550-04	1.28964-09	1.33672-10	7.33565-04	1.11944+00
1.81061+04	9.36884-04	3.32827-04	1.28926-09	1.46080-10	7.14274-04	1.11725+00
1.81940+04	9.52081-04	3.49855-04	1.28697-09	1.58573-10	6.97158-04	1.11528+00
1.82841+04	9.64638-04	3.66183-04	1.28355-09	1.70377-10	6.81666-04	1.11306+00
1.83765+04	9.71682-04	3.84142-04	1.28392-09	1.81347-10	6.66830-04	1.11128+00
1.84708+04	9.73229-04	4.05447-04	1.28994-09	1.92015-10	6.51752-04	1.10950+00
1.85665+04	9.71836-04	4.31660-04	1.30239-09	2.03844-10	6.35816-04	1.10766+00
1.86627+04	9.69854-04	4.62779-04	1.31581-09	2.17649-10	6.18175-04	1.10560+00
1.87588+04	9.71073-04	4.99229-04	1.32747-09	2.35383-10	5.97416-04	1.13033+00
1.88551+04	9.78042-04	5.32532-04	1.33022-09	2.54708-10	5.75155-04	1.12836+00

TABLE 33 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 5.60000+06 SHAKES

PAGE 3

PAD1US (CM)	VEL (CM/SH)	RHO(GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
1.89522+04	9.91963-04	5.66776-04	1.32739-09	2.78873-10	5.52554-04	1.12632+00
1.90501+04	1.00753-03	6.04671-04	1.32451-09	3.06918-10	5.29564-04	1.12431+00
1.91484+04	1.01767-03	6.50546-04	1.33102-09	3.36876-10	5.04996-04	1.18096+00
1.92465+04	1.02018-03	6.99859-04	1.34670-09	3.64198-10	4.81935-04	1.18014+00
1.93442+04	1.01770-03	7.55946-04	1.36860-09	3.91472-10	4.59878-04	1.17953+00
1.94416+04	1.01732-03	8.15364-04	1.39014-09	4.21926-10	4.38920-04	1.17900+00
1.95389+04	1.02787-03	8.75594-04	1.40317-09	4.62579-10	4.18992-04	1.17684+00
1.96367+04	1.04888-03	9.31968-04	1.40144-09	5.12716-10	3.99892-04	1.17421+00
1.97356+04	1.06661-03	9.89569-04	1.40045-09	5.62915-10	3.82440-04	1.17172+00
1.98333+04	1.07350-03	1.05983-03	1.41949-09	6.10676-10	3.67303-04	1.16939+00
1.99350+04	1.07266-03	1.14110-03	1.45364-09	6.56479-10	3.54103-04	1.16720+00
2.00347+04	1.07271-03	1.22629-03	1.49117-09	7.05546-10	3.42095-04	1.17341+00
2.01354+04	1.08651-03	1.29233-03	1.50205-09	7.62895-10	3.29905-04	1.17242+00
2.02384+04	1.11009-03	1.35218-03	1.50258-09	8.33227-10	3.17949-04	1.16938+00
2.03439+04	1.12477-03	1.42506-03	1.51915-09	9.01439-10	3.07224-04	1.16853+00
2.04506+04	1.12533-03	1.52413-03	1.56556-09	9.65063-10	2.79708-04	1.16807+00
2.05576+04	1.12680-03	1.63363-03	1.61703-09	1.03711-09	2.88789-04	1.16769+00
2.06658+04	1.14507-03	1.72386-03	1.63403-09	1.13032-09	2.78341-04	1.16696+00
2.07761+04	1.17023-03	1.81352-03	1.64050-09	1.24185-09	2.67400-04	1.16613+00
2.08875+04	1.18013-03	1.95036-03	1.68294-09	1.35814-09	2.56489-04	1.24076+00
2.09976+04	1.18146-03	2.14178-03	1.75504-09	1.49480-09	2.43831-04	1.24096+00
2.11062+04	1.19621-03	2.31564-03	1.80013-09	1.65692-09	2.31525-04	1.24111+00
2.12150+04	1.22018-03	2.46379-03	1.81383-09	1.83425-09	2.19459-04	1.24119+00
2.13241+04	1.23253-03	2.65615-03	1.85987-09	2.01751-09	2.08916-04	1.24139+00
2.14321+04	1.23409-03	2.90459-03	1.95212-09	2.21180-09	2.00643-04	1.24174+00
2.15395+04	1.24623-03	3.10491-03	1.99890-09	2.41128-09	1.92286-04	1.24196+00
2.16483+04	1.26662-03	3.26401-02	2.01652-09	2.61840-09	1.84619-04	1.24210+00
2.17586+04	1.27429-03	3.49752-03	2.08952-09	2.83968-09	1.78613-04	1.24239+00
2.18685+04	1.27795-03	3.78987-03	2.19693-09	3.09478-09	1.73353-04	1.24277+00
2.19788+04	1.29658-03	4.02094-03	2.23251-09	3.38021-09	1.65875-04	1.29662+00
2.20899+04	1.31407-03	4.30364-03	2.29681-09	3.71575-09	1.59227-04	1.29639+00
2.22005+04	1.31853-03	4.69778-03	2.43379-09	4.08361-09	1.54401-04	1.29611+00
2.23102+04	1.33109-03	5.04387-03	2.52843-09	4.46874-09	1.49193-04	1.29592+00
2.24210+04	1.35139-03	5.33090-03	2.57335-09	4.86794-09	1.43471-04	1.29581+00
2.25321+04	1.35917-03	5.79919-03	2.73081-09	5.35654-09	1.39800-04	1.29562+00
2.26421+04	1.36929-03	6.27267-03	2.87885-09	5.88085-09	1.36065-04	1.29547+00
2.27568+04	1.33604-03	6.17714-03	2.95328-09	5.51905-09	1.29130-04	1.29562+00
2.29608+04	8.77779-04	2.71940-03	2.22406-09	1.28121-09	7.13768-05	1.36991+00
2.33920+04	2.47947-04	1.43518-03	3.47894-10	7.74016-11	2.54203-05	1.37010+00
2.40061+04	1.68582-05	1.29947-03	1.11294-10	3.45136-13	2.35870-05	1.36992+00
2.46712+04	5.88762-07	1.29318-03	1.02002-10	4.22147-16	2.35413-05	1.36972+00
2.53565+04	1.81625-08	1.29299-03	1.01775-10	4.04705-19	2.35400-05	1.36972+00
2.60609+04	4.80319-10	1.29299-03	1.01766-10	2.94371-22	2.35400-05	1.36972+00
2.67849+04	3.18503-12	1.29299-03	1.01766-10	1.31166-26	2.35400-05	1.36972+00

TABLE 34

J15 SERIES 7 PROBLEM 82
T= 5.00000+06 SHAKES

PAGE 1

RADIUS(CM)	VEL(CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
8.10894+02	4.11278-05	3.76198-05	1.21413-09	6.36338-14	4.65009-03	1.15908+00
1.78844+03	7.09103-05	3.69940-05	1.19128-09	9.54063-14	4.65126-03	1.15872+00
2.34859+03	5.21627-05	3.72457-05	1.19914-09	5.16967-14	4.64900-03	1.15875+00
2.20174+03	3.91351-05	3.73958-05	1.20359-09	2.92252-14	4.64743-03	1.15876+00
2.30165+03	2.97930-05	3.74984-05	1.20615-09	1.69035-14	4.64630-03	1.15877+00
2.36996+03	2.35315-05	3.75635-05	1.20764-09	1.05202-14	4.64547-03	1.15878+00
2.41791+03	1.92197-05	3.76056-05	1.20855-09	7.00545-15	4.64486-03	1.15878+00
2.50294+03	1.12835-05	1.16414-05	1.20924-09	9.61451-16	4.64358-03	1.16558+00
2.63193+03	-1.51691-07	1.16563-05	1.20971-09	1.62734-16	4.64138-03	1.16555+00
2.75883+03	-9.66753-06	1.16712-05	1.21006-09	6.50011-16	4.63903-03	1.16553+00
2.88437+03	-1.70650-05	1.16866-05	1.21036-09	1.76012-15	4.63654-03	1.16550+00
3.00918+03	-2.24473-05	1.17025-05	1.21066-09	2.97718-15	4.63391-03	1.16547+00
3.13372+03	-2.61170-05	1.17185-05	1.21093-09	4.00893-15	4.63113-03	1.16544+00
3.25843+03	-2.83888-05	1.17347-05	1.21116-09	4.73261-15	4.62821-03	1.16540+00
3.38363+03	-2.94433-05	1.17509-05	1.21133-09	5.09380-15	4.62513-03	1.16536+00
3.50969+03	-2.92645-05	1.17672-05	1.21141-09	5.03979-15	4.62189-03	1.16532+00
3.63684+03	-2.73265-05	1.17834-05	1.21140-09	4.41329-15	4.61849-03	1.16528+00
3.76537+03	-2.09973-05	1.17952-05	1.21101-09	2.73624-15	4.61493-03	1.16522+00
3.89555+03	-9.53459-06	1.18008-05	1.20998-09	7.98079-16	4.61124-03	1.16516+00
4.02764+03	3.90650-06	1.18046-05	1.20872-09	3.61521-16	4.60742-03	1.16510+00
4.16181+03	1.68104-05	1.18106-05	1.20759-09	1.89012-15	4.60348-03	1.16503+00
4.29824+03	2.90454-05	1.18178-05	1.20653-09	5.20572-15	4.59940-03	1.16496+00
4.43708+03	4.06493-05	1.18256-05	1.20547-09	9.94843-15	4.59518-03	1.16490+00
4.57847+03	5.08407-05	1.18362-05	1.20461-09	1.54278-14	4.59079-03	1.16483+00
4.72256+03	5.99506-05	1.18486-05	1.20384-09	2.14076-14	4.58623-03	1.16476+00
4.86948+03	6.81418-05	1.18624-05	1.20312-09	2.76252-14	4.58147-03	1.16468+00
5.01936+03	7.47037-05	1.18790-05	1.20257-09	3.31920-14	4.57650-03	1.16461+00
5.17232+03	7.91503-05	1.18990-05	1.20225-09	3.72887-14	4.57129-03	1.16454+00
5.32845+03	8.14129-05	1.19228-05	1.20218-09	3.95146-14	4.56582-03	1.16446+00
5.48787+03	8.13598-05	1.19511-05	1.20239-09	3.95572-14	4.56005-03	1.16439+00
5.65065+03	7.89577-05	1.19842-05	1.20291-09	3.73749-14	4.55394-03	1.16431+00
5.81688+03	7.44782-05	1.20221-05	1.20380-09	3.33879-14	4.54745-03	1.16423+00
5.98666+03	6.89314-05	1.20637-05	1.20481-09	2.87085-14	4.54053-03	1.16415+00
6.16010+03	6.33165-05	1.21085-05	1.20589-09	2.43186-14	4.53314-03	1.16406+00
6.33729+03	5.79243-05	1.21563-05	1.20696-09	2.04345-14	4.52525-03	1.16396+00
6.51837+03	5.30304-05	1.22069-05	1.20803-09	1.71965-14	4.51681-03	1.16386+00
6.70342+03	4.88039-05	1.22603-05	1.20905-09	1.46238-14	4.50779-03	1.16375+00
6.89258+03	4.53647-05	1.23164-05	1.21001-09	1.26874-14	4.49813-03	1.16363+00
7.08596+03	4.31027-05	1.23752-05	1.21089-09	1.14991-14	4.48779-03	1.16350+00
7.28370+03	4.41046-05	1.24337-05	1.21144-09	1.21123-14	4.47672-03	1.16336+00
7.48599+03	5.04270-05	1.24887-05	1.21131-09	1.60089-14	4.46490-03	1.16319+00
7.69305+03	6.21233-05	1.25406-05	1.21053-09	2.45175-14	4.45236-03	1.16301+00
7.90509+03	7.80854-05	1.25902-05	1.20919-09	3.88744-14	4.43909-03	1.16282+00
8.12227+03	9.66511-05	1.26405-05	1.20755-09	5.96386-14	4.42510-03	1.16261+00
8.34473+03	1.16489-04	1.26930-05	1.20577-09	8.67673-14	4.41037-03	1.16238+00
8.57257+03	1.36370-04	1.27498-05	1.20399-09	1.19161-13	4.39490-03	1.16215+00
8.80589+03	1.55427-04	1.28127-05	1.20237-09	1.55314-13	4.37863-03	1.16191+00
9.04473+03	1.72548-04	1.28825-05	1.20094-09	1.92169-13	4.36152-03	1.16166+00
9.28909+03	1.86879-04	1.29648-05	1.20006-09	2.26662-13	4.34350-03	1.16442+00
9.53893+03	1.97546-04	1.30587-05	1.19960-09	2.54919-13	4.32451-03	1.16413+00

TABLE 34 (Cont.)

J15 SERIES 7 PROBLEM 82
 $T = 5.00000 \times 10^6$ SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/S)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
9.79420+03	2.03278-04	1.31667-05	1.19974-09	2.72053-13	4.30442-03	1.16382+00
1.00548+04	2.03596-04	1.32911-05	1.20059-09	2.75478-13	4.28306-03	1.16350+00
1.03206+04	1.98931-04	1.34338-05	1.20215-09	2.65890-13	4.26022-03	1.16316+00
1.05915+04	1.91290-04	1.35941-05	1.20420-09	2.48839-13	4.23566-03	1.16279+00
1.08673+04	1.84422-04	1.37686-05	1.20629-09	2.34193-13	4.20913-03	1.16239+00
1.11482+04	1.83057-04	1.39511-05	1.20776-09	2.33760-13	4.18040-03	1.16196+00
1.14343+04	1.90527-04	1.41371-05	1.20815-09	2.56862-13	4.14936-03	1.16148+00
1.17257+04	2.06742-04	1.43269-05	1.20743-09	3.06904-13	4.11595-03	1.16095+00
1.20225+04	2.29122-04	1.45257-05	1.20593-09	3.82382-13	4.08012-03	1.16038+00
1.23248+04	2.54921-04	1.47400-05	1.20408-09	4.80271-13	4.04177-03	1.15977+00
1.26242+04	2.82393-04	1.49740-05	1.20206-09	5.98532-13	4.00080-03	1.15911+00
1.29452+04	3.09614-04	1.52355-05	1.20025-09	7.31570-13	3.95704-03	1.15840+00
1.32627+04	3.33971-04	1.55340-05	1.19908-09	8.67269-13	3.91027-03	1.15765+00
1.35844+04	3.52621-04	1.58816-05	1.19885-09	9.87820-13	3.85970-03	1.15683+00
1.39095+04	3.64492-04	1.63044-05	1.19993-09	1.08321-12	3.80315-03	1.15592+00
1.42367+04	3.71308-04	1.68239-05	1.20244-09	1.15980-12	3.73899-03	1.15488+00
1.45646+04	3.77633-04	1.74569-05	1.20549-09	1.24486-12	3.66486-03	1.15367+00
1.48915+04	3.89953-04	1.82329-05	1.20811-09	1.38693-12	3.57743-03	1.15222+00
1.52154+04	4.13376-04	1.92095-05	1.20945-09	1.64341-12	3.47173-03	1.15044+00
1.55326+04	4.49001-04	2.05970-05	1.20924-09	2.08059-12	3.33939-03	1.17509+00
1.58371+04	4.97251-04	2.26940-05	1.20791-09	2.81429-12	3.16423-03	1.17120+00
1.61190+04	5.62655-04	2.63697-05	1.20592-09	4.19290-12	2.90526-03	1.16533+00
1.63646+04	6.42506-04	3.32056-05	1.20380-09	6.88323-12	2.53548-03	1.15672+00
1.65657+04	7.33808-04	4.40853-05	1.20275-09	1.19228-11	2.13103-03	1.18804+00
1.67202+04	8.14170-04	6.43900-05	1.20250-09	2.13724-11	1.74437-03	1.16955+00
1.68394+04	8.55891-04	8.29147-05	1.20247-09	3.03742-11	1.53476-03	1.15777+00
1.69444+04	8.68633-04	9.45550-05	1.20355-09	3.56722-11	1.43986-03	1.15192+00
1.70449+04	8.69846-04	1.04089-04	1.20573-09	3.93787-11	1.37649-03	1.14781+00
1.71431+04	8.66710-04	1.13931-04	1.20893-09	4.27920-11	1.32029-03	1.14425+00
1.72393+04	8.61573-04	1.24769-04	1.21274-09	4.63089-11	1.26328-03	1.14850+00
1.73335+04	8.57038-04	1.37361-04	1.21748-09	5.04471-11	1.19964-03	1.15564+00
1.74251+04	8.54892-04	1.51808-04	1.22028-09	5.54736-11	1.12722-03	1.15208+00
1.75143+04	8.55088-04	1.67567-04	1.22447-09	6.12607-11	1.05412-03	1.17242+00
1.76016+04	8.58462-04	1.83189-04	1.22584-09	6.75017-11	9.87566-04	1.19407+00
1.76877+04	8.65805-04	1.98715-04	1.22739-09	7.44622-11	9.30670-04	1.18875+00
1.77734+04	8.75474-04	2.14209-04	1.22704-09	8.20932-11	8.82084-04	1.18524+00
1.78530+04	8.87587-04	2.30141-04	1.22518-09	9.06597-11	8.41312-04	1.15452+00
1.79447+04	9.00421-04	2.47155-04	1.22311-09	1.00196-10	8.05835-04	1.15121+00
1.80308+04	9.11566-04	2.63247-04	1.22048-09	1.09377-10	7.75767-04	1.14831+00
1.81176+04	9.20256-04	2.81536-04	1.22039-09	1.19214-10	7.51479-04	1.12151+00
1.82051+04	9.23945-04	2.99876-04	1.22154-09	1.27998-10	7.29837-04	1.11909+00
1.82934+04	9.24329-04	3.18800-04	1.22803-09	1.36189-10	7.11074-04	1.11695+00
1.83829+04	9.25109-04	3.37778-04	1.23697-09	1.43916-10	6.94627-04	1.11505+00
1.84739+04	9.21222-04	3.56769-04	1.24597-09	1.51386-10	6.79759-04	1.11252+00
1.85664+04	9.23210-04	3.76739-04	1.25473-09	1.60552-10	6.65172-04	1.11083+00
1.86607+04	9.31235-04	3.97807-04	1.26044-09	1.72495-10	6.49960-04	1.10903+00
1.87566+04	9.43843-04	4.20356-04	1.26087-09	1.87246-10	6.33367-04	1.10700+00
1.88539+04	9.57215-04	4.45766-04	1.25642-09	2.04227-10	6.14736-04	1.10466+00
1.89522+04	9.68220-04	4.76236-04	1.25375-09	2.23230-10	5.92780-04	1.12866+00
1.90510+04	9.74047-04	5.08250-04	1.25822-09	2.41106-10	5.71137-04	1.12674+00

TABLE 34 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 5.80000+06 SHAKES

PAGE 3

RA01US (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.91501+04	9.74076-04	5.46900-04	1.27189-09	2.59456-10	5.49604-04	1.12506+00
1.92488+04	9.70507-04	5.91861-04	1.28932-09	2.78734-10	5.27449-04	1.12346+00
1.93469+04	9.68191-04	6.38885-04	1.30394-09	2.99443-10	5.03855-04	1.18046+00
1.94450+04	9.73979-04	6.84086-04	1.31132-09	3.24484-10	4.80259-04	1.17948+00
1.95437+04	9.89987-04	7.28495-04	1.31024-09	3.57031-10	4.57140-04	1.17842+00
1.96436+04	1.00944-03	7.73261-04	1.30650-09	3.93993-10	4.35348-04	1.17741+00
1.97442+04	1.02054-03	8.27999-04	1.31451-09	4.31187-10	4.15707-04	1.17688+00
1.98447+04	1.02065-03	8.93399-04	1.33538-09	4.65344-10	3.97826-04	1.17428+00
1.99448+04	1.01836-03	9.66357-04	1.36416-09	5.01088-10	3.81555-04	1.17179+00
2.00445+04	1.02298-03	1.03940-03	1.38900-09	5.43869-10	3.66518-04	1.16944+00
2.01449+04	1.03900-03	1.10074-03	1.39324-09	5.94210-10	3.52064-04	1.16723+00
2.02474+04	1.05970-03	1.15482-03	1.38913-09	6.48460-10	3.38573-04	1.17185+00
2.03518+04	1.07175-03	1.22203-03	1.40677-09	7.01840-10	3.26930-04	1.17098+00
2.04574+04	1.07157-03	1.30473-03	1.44251-09	7.49084-10	3.16514-04	1.16877+00
2.05635+04	1.07160-03	1.39673-03	1.48500-09	8.01961-10	3.06481-04	1.16819+00
2.06708+04	1.08673-03	1.47194-03	1.50279-09	8.69283-10	2.96274-04	1.16742+00
2.07809+04	1.11052-03	1.53547-03	1.50306-09	9.46912-10	2.85945-04	1.16652+00
2.08933+04	1.12433-03	1.62546-03	1.52539-09	1.02739-09	2.75898-04	1.16586+00
2.10062+04	1.12520-03	1.75722-03	1.58120-09	1.11238-09	2.66172-04	1.16554+00
2.11183+04	1.13284-03	1.89922-03	1.62749-09	1.21873-09	2.54714-04	1.24057+00
2.12305+04	1.15459-03	2.02744-03	1.64020-09	1.35152-09	2.40738-04	1.24059+00
2.13433+04	1.17307-03	2.16823-03	1.65981-09	1.49189-09	2.28039-04	1.24067+00
2.14554+04	1.17840-03	2.36916-03	1.72861-09	1.64493-09	2.17543-04	1.24093+00
2.15656+04	1.18549-03	2.58868-03	1.80198-09	1.81912-09	2.07688-04	1.24122+00
2.16756+04	1.20619-03	2.74793-03	1.82230-09	1.99922-09	1.97984-04	1.24135+00
2.17868+04	1.22404-03	2.92468-03	1.85618-09	2.19100-09	1.89599-04	1.24154+00
2.18981+04	1.22738-03	3.16515-03	1.94129-09	2.38408-09	1.83313-04	1.24188+00
2.20091+04	1.23539-03	3.39768-03	2.01564-09	2.59288-09	1.77358-04	1.24219+00
2.21216+04	1.25554-03	3.56116-03	2.02934-09	2.80707-09	1.70359-04	1.29709+00
2.22353+04	1.26502-03	3.83522-03	2.10067-09	3.07256-09	1.63577-04	1.29678+00
2.23481+04	1.26873-03	4.18516-03	2.21543-09	3.36840-09	1.57906-04	1.29648+00
2.24605+04	1.28572-03	4.46504-03	2.27861-09	3.69093-09	1.52025-04	1.29628+00
2.25740+04	1.30439-03	4.73736-03	2.33104-09	4.03023-09	1.46408-04	1.29612+00
2.26872+04	1.30924-03	5.17692-03	2.47744-09	4.43689-09	1.42225-04	1.29590+00
2.27997+04	1.32114-03	5.55669-03	2.58342-09	4.84976-09	1.37983-04	1.29576+00
2.29132+04	1.34215-03	5.86573-03	2.63859-09	5.28339-09	1.33331-04	1.29568+00
2.30272+04	1.34804-03	6.37134-03	2.80394-09	5.79595-09	1.30298-04	1.29553+00
2.31658+04	1.15141-03	4.70828-03	2.86976-09	3.21075-09	1.10302-04	1.29630+00
2.34716+04	5.57311-04	1.82371-03	1.06609-09	4.28269-10	3.69369-05	1.37013+00
2.40147+04	8.27866-05	1.33035-03	1.57317-10	8.36936-12	2.38603-05	1.36997+00
2.46715+04	3.66911-06	1.29435-03	1.03769-10	1.63278-14	2.35495-05	1.36991+00
2.53565+04	1.22970-07	1.29302-03	1.01831-10	1.84545-17	2.35402-05	1.36972+00
2.60609+04	3.64442-09	1.29299-03	1.01768-10	1.63598-20	2.35400-05	1.36972+00
2.67849+04	8.84531-11	1.29299-03	1.01766-10	1.01163-23	2.35400-05	1.36972+00

TABLE 35

J15 SERIES 7 PROBLEM 82
T= 6.00000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
8.16897+02	-1.84155-05	3.67812-05	1.16114-09	1.24736-14	4.58077-03	1.15705+00
1.79657+03	-2.76373-05	3.75402-05	1.17458-09	1.59235-14	4.57030-03	1.15707+00
2.05150+03	-7.90385-06	3.76886-05	1.17784-09	3.27059-15	4.56713-03	1.15704+00
2.20290+03	1.55807-05	3.76432-05	1.17561-09	7.72296-15	4.56515-03	1.15698+00
2.30235+03	3.61663-05	3.75343-05	1.17171-09	2.56432-14	4.56386-03	1.15692+00
2.37068+03	4.73817-05	3.74801-05	1.16967-09	4.23114-14	4.56299-03	1.15688+00
2.41876+03	5.30295-05	3.74519-05	1.16854-09	5.27404-14	4.56236-03	1.15686+00
2.50416+03	6.05119-05	1.15817-05	1.16761-09	2.13738-14	4.56114-03	1.16401+00
2.63381+03	7.23493-05	1.15798-05	1.16660-09	3.05460-14	4.55917-03	1.16397+00
2.76146+03	8.28559-05	1.15812-05	1.16591-09	3.98495-14	4.55719-03	1.16394+00
2.88781+03	8.98767-05	1.15866-05	1.16557-09	4.68473-14	4.55516-03	1.16390+00
3.01347+03	9.40732-05	1.15890-05	1.16492-09	5.12891-14	4.55308-03	1.16387+00
3.13894+03	9.52668-05	1.15930-05	1.16439-09	5.26077-14	4.55091-03	1.16383+00
3.26462+03	9.43218-05	1.15986-05	1.16398-09	5.15988-14	4.54863-03	1.16380+00
3.39085+03	9.07128-05	1.16091-05	1.16397-09	4.78076-14	4.54624-03	1.16376+00
3.51707+03	8.45171-05	1.16244-05	1.16439-09	4.15874-14	4.54370-03	1.16373+00
3.64595+03	7.77135-05	1.16426-05	1.16505-09	3.52218-14	4.54099-03	1.16370+00
3.77530+03	7.10929-05	1.16622-05	1.16574-09	2.95346-14	4.53811-03	1.16367+00
3.90616+03	6.44273-05	1.16828-05	1.16648-09	2.43136-14	4.53504-03	1.16364+00
4.03872+03	5.75576-05	1.17044-05	1.16723-09	1.94590-14	4.53176-03	1.16360+00
4.17318+03	5.05148-05	1.17268-05	1.16793-09	1.50359-14	4.52826-03	1.16356+00
4.30971+03	4.34534-05	1.17499-05	1.16858-09	1.11655-14	4.52452-03	1.16352+00
4.44849+03	3.65714-05	1.17736-05	1.16915-09	7.94031-15	4.52053-03	1.16347+00
4.58969+03	3.00919-05	1.17981-05	1.16965-09	5.39874-15	4.51626-03	1.16342+00
4.73344+03	2.42285-05	1.18235-05	1.17007-09	3.51769-15	4.51170-03	1.16336+00
4.87992+03	1.92092-05	1.18498-05	1.17043-09	2.21718-15	4.50684-03	1.16330+00
5.02925+03	1.51661-05	1.18773-05	1.17073-09	1.38431-15	4.50165-03	1.16323+00
5.18158+03	1.22479-05	1.19058-05	1.17096-09	9.01004-16	4.49612-03	1.16316+00
5.33704+03	1.06335-05	1.19354-05	1.17111-09	6.78446-16	4.49022-03	1.16308+00
5.49579+03	1.21660-05	1.19644-05	1.17109-09	9.08116-16	4.48395-03	1.16300+00
5.65803+03	1.91446-05	1.19873-05	1.17039-09	2.34851-15	4.47732-03	1.16290+00
5.82395+03	3.07497-05	1.20066-05	1.16921-09	5.93580-15	4.47034-03	1.16279+00
5.99374+03	4.44812-05	1.20253-05	1.16782-09	1.22045-14	4.46304-03	1.16267+00
6.16754+03	5.94844-05	1.20446-05	1.16633-09	2.16799-14	4.45539-03	1.16255+00
6.34548+03	7.54299-05	1.20640-05	1.16470-09	3.47159-14	4.44740-03	1.16242+00
6.52770+03	9.12058-05	1.20855-05	1.16311-09	5.06226-14	4.43906-03	1.16229+00
6.71431+03	1.06169-04	1.21099-05	1.16161-09	6.85723-14	4.43035-03	1.16215+00
6.90542+03	1.20042-04	1.21372-05	1.16021-09	8.77120-14	4.42125-03	1.16201+00
7.10111+03	1.32205-04	1.21689-05	1.15902-09	1.06534-13	4.41173-03	1.16187+00
7.30148+03	1.42203-04	1.22058-05	1.15808-09	1.23550-13	4.40175-03	1.16172+00
7.50659+03	1.49618-04	1.22487-05	1.15746-09	1.37153-13	4.39128-03	1.16157+00
7.71649+03	1.53963-04	1.22992-05	1.15725-09	1.45785-13	4.38025-03	1.16141+00
7.93121+03	1.55240-04	1.23578-05	1.15746-09	1.48907-13	4.36860-03	1.16125+00
8.15078+03	1.53514-04	1.24247-05	1.15808-09	1.46421-13	4.35623-03	1.16109+00
8.37522+03	1.48510-04	1.25016-05	1.15919-09	1.37932-13	4.34307-03	1.16092+00
8.60453+03	1.41097-04	1.25882-05	1.16074-09	1.25410-13	4.32899-03	1.16074+00
8.83874+03	1.33339-04	1.26820-05	1.16235-09	1.12825-13	4.31388-03	1.16055+00
9.07792+03	1.27056-04	1.27817-05	1.16389-09	1.03212-13	4.29763-03	1.16035+00
9.32221+03	1.24745-04	1.28835-05	1.16500-09	1.00243-13	4.28015-03	1.16012+00
9.57176+03	1.28705-04	1.29863-05	1.16540-09	1.07647-13	4.26138-03	1.16299+00

TABLE 35 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 6.00000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
9.82678+03	1.39324-04	1.30882-05	1.16500-09	1.27344-13	4.24131-03	1.16268+00
1.00875+04	1.55359-04	1.31910-05	1.16398-09	1.59736-13	4.21995-03	1.16235+00
1.03539+04	1.74549-04	1.32979-05	1.16260-09	2.03254-13	4.19726-03	1.16199+00
1.06263+04	1.95034-04	1.34131-05	1.16116-09	2.55830-13	4.17321-03	1.16161+00
1.09046+04	2.15512-04	1.35395-05	1.15984-09	3.15111-13	4.14774-03	1.16121+00
1.11887+04	2.34668-04	1.36792-05	1.15874-09	3.77213-13	4.12078-03	1.16078+00
1.14785+04	2.50868-04	1.38357-05	1.15805-09	4.35726-13	4.09222-03	1.16033+00
1.17740+04	2.62523-04	1.40140-05	1.15800-09	4.83052-13	4.06191-03	1.15985+00
1.20747+04	2.69026-04	1.42181-05	1.15876-09	5.14544-13	4.02964-03	1.15935+00
1.23805+04	2.70760-04	1.44509-05	1.16029-09	5.29705-13	3.99513-03	1.15881+00
1.26910+04	2.69672-04	1.47143-05	1.16245-09	5.35040-13	3.95798-03	1.15823+00
1.30060+04	2.69906-04	1.50054-05	1.16466-09	5.46576-13	3.91777-03	1.15759+00
1.33251+04	2.76323-04	1.53191-05	1.16624-09	5.85060-13	3.87405-03	1.15690+00
1.36483+04	2.91839-04	1.56637-05	1.16670-09	6.67848-13	3.82501-03	1.15610+00
1.39752+04	3.16400-04	1.60476-05	1.16594-09	8.04919-13	3.76968-03	1.15520+00
1.43052+04	3.48502-04	1.64885-05	1.16416-09	1.00388-12	3.70677-03	1.15415+00
1.46374+04	3.85550-04	1.70157-05	1.16190-09	1.26786-12	3.63452-03	1.15294+00
1.49704+04	4.24322-04	1.76689-05	1.15948-09	1.59398-12	3.55027-03	1.15151+00
1.53019+04	4.61781-04	1.85185-05	1.15764-09	1.97746-12	3.44990-03	1.14980+00
1.56277+04	4.96413-04	1.97838-05	1.15700-09	2.44035-12	3.32609-03	1.17407+00
1.59416+04	5.31675-04	2.16652-05	1.15727-09	3.06590-12	3.16501-03	1.17049+00
1.62347+04	5.71094-04	2.48373-05	1.15875-09	4.03569-12	2.93426-03	1.16528+00
1.64932+04	6.16326-04	3.08110-05	1.16329-09	5.86112-12	2.59529-03	1.15746+00
1.67087+04	6.73369-04	3.99562-05	1.16679-09	9.07979-12	2.21750-03	1.14871+00
1.68767+04	7.39809-04	5.78023-05	1.17066-09	1.58513-11	1.81796-03	1.17373+00
1.70043+04	7.87479-04	7.81263-05	1.17169-09	2.42314-11	1.55885-03	1.15959+00
1.71121+04	8.08554-04	9.16776-05	1.17286-09	2.99700-11	1.44145-03	1.15243+00
1.72132+04	8.22422-04	1.01838-04	1.17480-09	3.44427-11	1.37170-03	1.14791+00
1.73117+04	8.34946-04	1.11484-04	1.17472-09	3.88620-11	3.31372-03	1.14331+00
1.74082+04	8.45136-04	1.21957-04	1.17381-09	4.35552-11	1.25453-03	1.14702+00
1.75028+04	8.54401-04	1.33902-04	1.17195-09	4.88761-11	1.18916-03	1.15452+00
1.75953+04	8.62246-04	1.47396-04	1.16906-09	5.47925-11	1.11635-03	1.17432+00
1.76856+04	8.68478-04	1.61783-04	1.16753-09	6.10137-11	1.04386-03	1.17138+00
1.77744+04	8.73655-04	1.76323-04	1.16653-09	6.72917-11	9.78119-04	1.19395+00
1.78622+04	8.76675-04	1.90965-04	1.16724-09	7.33843-11	9.22556-04	1.18983+00
1.79496+04	8.77315-04	2.05759-04	1.16897-09	7.91845-11	8.75609-04	1.18635+00
1.80368+04	8.75880-04	2.22064-04	1.17378-09	8.51799-11	8.36597-04	1.15507+00
1.81236+04	8.73570-04	2.39342-04	1.17953-09	9.13243-11	8.02775-04	1.15176+00
1.82106+04	8.72478-04	2.56355-04	1.18645-09	9.75710-11	7.74305-04	1.12406+00
1.82977+04	8.73641-04	2.75609-04	1.19219-09	1.05179-10	7.50089-04	1.12139+00
1.83852+04	8.78096-04	2.94368-04	1.19730-09	1.13488-10	7.28746-04	1.11900+00
1.84736+04	8.86842-04	3.11906-04	1.19888-09	1.22659-10	7.09663-04	1.11683+00
1.85636+04	8.98832-04	3.28321-04	1.19800-09	1.32633-10	6.92536-04	1.11485+00
1.86557+04	9.11912-04	3.44102-04	1.19500-09	1.43081-10	6.76914-04	1.11174+00
1.87503+04	9.23280-04	3.60428-04	1.19139-09	1.53628-10	6.61611-04	1.10985+00
1.88469+04	9.31003-04	3.79690-04	1.19303-09	1.64553-10	6.46226-04	1.10798+00
1.89452+04	9.32548-04	4.03025-04	1.19906-09	1.75245-10	6.29948-04	1.10603+00
1.90440+04	9.29129-04	4.32807-04	1.21086-09	1.86818-10	6.11925-04	1.10390+00
1.91427+04	9.26763-04	4.67253-04	1.22528-09	2.00659-10	5.90984-04	1.12000+00
1.92411+04	9.28306-04	5.01611-04	1.23772-09	2.16133-10	5.69734-04	1.12625+00

TABLE 35 (Cont.)

J15	SERIES	7 PROBLEM 82			PAGE 3	
T= 6.00000+06	SHAKES					
RADIUS(CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
1.93399+04	9.35010-04	5.36537-04	1.24180-09	2.34539-10	5.47632-04	1.12433+00
1.94392+04	9.47580-04	5.72717-04	1.23814-09	2.57139-10	5.24465-04	1.12223+00
1.95393+04	9.63110-04	6.10192-04	1.23363-09	2.83022-10	4.99688-04	1.17907+00
1.96402+04	9.74810-04	6.50893-04	1.23645-09	3.09261-10	4.76427-04	1.17801+00
1.97414+04	9.76580-04	6.99441-04	1.25063-09	3.33533-10	4.54734-04	1.17727+00
1.98425+04	9.72099-04	7.53751-04	1.27051-09	3.56142-10	4.34364-04	1.17673+00
1.99432+04	9.70561-04	8.13601-04	1.28964-09	3.83202-10	4.15100-04	1.17694+00
2.00439+04	9.79242-04	8.72426-04	1.29973-09	4.18316-10	3.96643-04	1.17432+00
2.01452+04	9.97603-04	9.27100-04	1.29952-09	4.61385-10	3.79191-04	1.17182+00
2.02480+04	1.01511-03	9.80391-04	1.29684-09	5.05146-10	3.63249-04	1.16949+00
2.03519+04	1.02243-03	1.04627-03	1.31347-09	5.46865-10	3.49503-04	1.16731+00
2.04563+04	1.02175-03	1.12245-03	1.34623-09	5.85907-10	3.37564-04	1.17122+00
2.05610+04	1.02192-03	1.19960-03	1.37823-09	6.26378-10	3.26272-04	1.17056+00
2.06671+04	1.03445-03	1.26497-03	1.39108-09	6.76889-10	3.14912-04	1.16970+00
2.07757+04	1.05691-03	1.32048-03	1.39058-09	7.37612-10	3.03868-04	1.16716+00
2.08871+04	1.07224-03	1.39689-03	1.40195-09	7.97262-10	2.93680-04	1.16633+00
2.10001+04	1.07461-03	1.48208-03	1.44248-09	8.55738-10	2.84508-04	1.16587+00
2.11133+04	1.07744-03	1.59186-03	1.46870-09	9.23997-10	2.75051-04	1.16547+00
2.12274+04	1.09519-03	1.68345-03	1.50290-09	1.00976-09	2.64307-04	1.16472+00
2.13431+04	1.11642-03	1.78730-03	1.50924-09	1.11390-09	2.51042-04	1.24016+00
2.14590+04	1.12503-03	1.93223-03	1.54660-09	1.22280-09	2.38234-04	1.24027+00
2.15734+04	1.12726-03	2.11831-03	1.61364-09	1.34589-09	2.26939-04	1.24051+00
2.16865+04	1.14046-03	2.28020-03	1.64871-09	1.48302-09	2.15581-04	1.24066+00
2.18002+04	1.16309-03	2.42265-03	1.66009-09	1.63879-09	2.04475-04	1.24076+00
2.19142+04	1.17554-03	2.61570-03	1.71466-09	1.80732-09	1.95749-04	1.24101+00
2.20272+04	1.17955-03	2.84998-03	1.79796-09	1.98263-09	1.88481-04	1.24136+00
2.21398+04	1.19500-03	3.03755-03	1.84457-09	2.16910-09	1.81494-04	1.24160+00
2.22543+04	1.21606-03	3.18747-03	1.86195-09	2.35691-09	1.74669-04	1.24174+00
2.23697+04	1.22193-03	3.44546-03	1.94463-09	2.57222-09	1.68711-04	1.29720+00
2.24842+04	1.22601-03	3.74000-03	2.03349-09	2.81085-09	1.62340-04	1.29687+00
2.25990+04	1.24379-03	3.96597-03	2.06630-09	3.06799-09	1.55356-04	1.29665+00
2.27150+04	1.25749-03	4.22233-03	2.11947-09	3.33838-09	1.49512-04	1.29645+00
2.28306+04	1.26152-03	4.61717-03	2.25467-09	3.67394-09	1.45286-04	1.29620+00
2.29454+04	1.27660-03	4.94229-03	2.33262-09	4.02769-09	1.40224-04	1.29604+00
2.30615+04	1.29587-03	5.22171-03	2.38300-09	4.38448-09	1.35424-04	1.29594+00
2.31778+04	1.30174-03	5.68256-03	2.53208-09	4.81466-09	1.32073-04	1.29577+00
2.32933+04	1.31327-03	6.11896-03	2.65996-09	5.27700-09	1.28674-04	1.29565+00
2.34128+04	1.29111-03	6.12577-03	2.72453-09	5.10925-09	1.22695-04	1.29573+00
2.36158+04	8.73490-04	2.85261-03	2.17062-09	1.29831-09	7.25591-05	1.37010+00
2.40473+04	2.63972-04	1.45712-03	3.73549-10	8.78965-11	2.57856-05	1.37012+00
2.46735+04	1.98266-05	1.30106-03	1.13084-10	4.75883-13	2.35989-05	1.36992+00
2.53566+04	7.38501-07	1.29324-03	1.02164-10	6.61917-16	2.35417-05	1.36972+00
2.60609+04	2.41338-08	1.29299-03	1.01778-10	7.12481-19	2.35400-05	1.36972+00
2.67849+04	6.77697-10	1.29299-03	1.01766-10	5.79309-22	2.35400-05	1.36972+00
2.75289+04	8.39311-12	1.29299-03	1.01766-10	9.10839-26	2.35400-05	1.36972+00

TABLE 36

J15 SERIES 7 PROBLEM 82
T= 6.20000+06 SHAKES

PAGE 1

RADIUS(CM)	VEL(CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
8.14825+02	3.22547-05	3.70756-05	1.13313-09	3.85723-14	4.50442-03	1.15541+00
1.79672+03	4.70297-05	3.65581-05	1.11619-09	4.60145-14	4.49655-03	1.15506+00
2.05763+03	2.34366-05	3.67814-05	1.12100-09	1.07888-14	4.49386-03	1.15508+00
2.21134+03	1.34011-05	3.69444-05	1.12510-09	3.60157-15	4.49202-03	1.15509+00
2.31160+03	7.12323-06	3.70512-05	1.12748-09	1.04280-15	4.49071-03	1.15509+00
2.38014+03	3.24233-06	3.71164-05	1.12884-09	2.38268-16	4.48977-03	1.15509+00
2.42025+03	6.45634-07	3.71575-05	1.12967-09	2.90751-17	4.48908-03	1.15509+00
2.51359+03	-4.26156-06	1.15012-05	1.13030-09	1.89041-16	4.48775-03	1.16257+00
2.64306+03	-1.12711-05	1.15164-05	1.13074-09	7.89513-16	4.48553-03	1.16254+00
2.77042+03	-1.67205-05	1.15318-05	1.13109-09	1.64186-15	4.48320-03	1.16252+00
2.89643+03	-2.03160-05	1.15480-05	1.13144-09	2.39322-15	4.48075-03	1.16249+00
3.02168+03	-2.21106-05	1.15648-05	1.13181-09	2.82819-15	4.47818-03	1.16246+00
3.14667+03	-2.23833-05	1.15820-05	1.13218-09	2.90161-15	4.47548-03	1.16243+00
3.27182+03	-2.14420-05	1.15994-05	1.13253-09	2.66964-15	4.47265-03	1.16240+00
3.39747+03	-1.92903-05	1.16161-05	1.13283-09	2.17284-15	4.46969-03	1.16236+00
3.52396+03	-1.55428-05	1.16320-05	1.13302-09	1.43675-15	4.46658-03	1.16232+00
3.65156+03	-9.17641-06	1.16462-05	1.13299-09	5.84970-16	4.46333-03	1.16227+00
3.78057+03	1.17643-06	1.16567-05	1.13256-09	2.40987-16	4.45994-03	1.16222+00
3.91126+03	1.56716-05	1.16625-05	1.13164-09	1.82171-15	4.45644-03	1.16216+00
4.04386+03	3.25015-05	1.16650-05	1.13038-09	6.59823-15	4.45283-03	1.16210+00
4.17858+03	4.89728-05	1.16677-05	1.12909-09	1.45479-14	4.44912-03	1.16203+00
4.31559+03	6.39283-05	1.16726-05	1.12795-09	2.41495-14	4.44529-03	1.16197+00
4.45505+03	7.85726-05	1.16776-05	1.12678-09	3.63756-14	4.44133-03	1.16190+00
4.59713+03	9.32161-05	1.16819-05	1.12547-09	5.10510-14	4.43724-03	1.16183+00
4.74199+03	1.06384-04	1.16878-05	1.12426-09	6.63515-14	4.43300-03	1.16175+00
4.88975+03	1.17737-04	1.16955-05	1.12314-09	8.12272-14	4.42860-03	1.16168+00
5.04057+03	1.27404-04	1.17045-05	1.12207-09	9.51022-14	4.42403-03	1.16160+00
5.19455+03	1.35311-04	1.17161-05	1.12115-09	1.07330-13	4.41926-03	1.16153+00
5.35184+03	1.41603-04	1.17298-05	1.12033-09	1.17642-13	4.41427-03	1.16145+00
5.51253+03	1.45836-04	1.17474-05	1.11976-09	1.24937-13	4.40905-03	1.16137+00
5.67673+03	1.47992-04	1.17690-05	1.11944-09	1.28883-13	4.40356-03	1.16129+00
5.84453+03	1.48111-04	1.17945-05	1.11936-09	1.29369-13	4.39778-03	1.16121+00
6.01602+03	1.45769-04	1.18247-05	1.11954-09	1.25650-13	4.39167-03	1.16113+00
6.19128+03	1.40464-04	1.18600-05	1.12003-09	1.17072-13	4.38519-03	1.16104+00
6.37039+03	1.32506-04	1.19009-05	1.12094-09	1.04596-13	4.37828-03	1.16096+00
6.55344+03	1.23486-04	1.19450-05	1.12187-09	9.11971-14	4.37089-03	1.16086+00
6.74055+03	1.14451-04	1.19926-05	1.12285-09	7.86657-14	4.36299-03	1.16077+00
6.93180+03	1.05846-04	1.20434-05	1.12381-09	6.75656-14	4.35452-03	1.16066+00
7.12733+03	9.81542-05	1.20974-05	1.12473-09	5.83515-14	4.34544-03	1.16055+00
7.32723+03	9.17472-05	1.21543-05	1.12557-09	5.12038-14	4.33572-03	1.16042+00
7.53164+03	8.79362-05	1.22132-05	1.12628-09	4.72267-14	4.32529-03	1.16029+00
7.74074+03	8.96089-05	1.22684-05	1.12640-09	4.92988-14	4.31415-03	1.16013+00
7.95476+03	9.71299-05	1.23198-05	1.12587-09	5.82606-14	4.30232-03	1.15996+00
8.17389+03	1.08175-04	1.23711-05	1.12500-09	7.26181-14	4.28979-03	1.15978+00
8.39830+03	1.21679-04	1.24233-05	1.12388-09	9.23034-14	4.27655-03	1.15958+00
8.62812+03	1.36515-04	1.24774-05	1.12258-09	1.16618-13	4.26260-03	1.15937+00
8.86347+03	1.51052-04	1.25367-05	1.12137-09	1.43334-13	4.24790-03	1.15915+00
9.10441+03	1.64589-04	1.26019-05	1.12029-09	1.70957-13	4.23242-03	1.15892+00
9.35101+03	1.76832-04	1.26743-05	1.11940-09	1.98368-13	4.21610-03	1.15868+00
9.60329+03	1.87005-04	1.27552-05	1.11879-09	2.23157-13	4.19888-03	1.15843+00

TABLE 36 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 6.20000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA Z
9.86125+03	1.94237-04	1.28476-05	1.11864-09	2.42409-13	4.18068-03	1.15817+00
1.01248+04	1.98193-04	1.29533-05	1.11896-09	2.54415-13	4.16139-03	1.16120+00
1.03940+04	1.98821-04	1.30760-05	1.11988-09	2.58448-13	4.14090-03	1.16089+00
1.06685+04	1.96572-04	1.32142-05	1.12130-09	2.55323-13	4.11902-03	1.16055+00
1.09483+04	1.92746-04	1.33669-05	1.12299-09	2.48327-13	4.09556-03	1.16020+00
1.12335+04	1.89700-04	1.35322-05	1.12469-09	2.43490-13	4.07031-03	1.15981+00
1.15239+04	1.90756-04	1.37066-05	1.12598-09	2.49405-13	4.04308-03	1.15939+00
1.18198+04	1.98694-04	1.38863-05	1.12648-09	2.74355-13	4.01374-03	1.15893+00
1.21212+04	2.14572-04	1.40705-05	1.12606-09	3.24607-13	3.98219-03	1.15842+00
1.24203+04	2.37642-04	1.42621-05	1.12487-09	4.03947-13	3.94836-03	1.15788+00
1.27411+04	2.65918-04	1.44656-05	1.12315-09	5.13111-13	3.91220-03	1.15729+00
1.30597+04	2.96829-04	1.46860-05	1.12112-09	6.48797-13	3.87348-03	1.15665+00
1.33836+04	3.27315-04	1.49394-05	1.11926-09	8.01889-13	3.83097-03	1.15595+00
1.37125+04	3.54626-04	1.52372-05	1.11785-09	9.59315-13	3.78404-03	1.15518+00
1.40454+04	3.76845-04	1.55944-05	1.11724-09	1.10802-12	3.73177-03	1.15432+00
1.43814+04	3.93186-04	1.60295-05	1.11765-09	1.23940-12	3.67289-03	1.15334+00
1.47192+04	4.04268-04	1.65648-05	1.11907-09	1.35377-12	3.60558-03	1.15222+00
1.50570+04	4.10937-04	1.72372-05	1.12164-09	1.45546-12	3.52725-03	1.15092+00
1.53925+04	4.18646-04	1.80949-05	1.12474-09	1.58597-12	3.43362-03	1.14934+00
1.57221+04	4.38023-04	1.93093-05	1.12634-09	1.85426-12	3.31763-03	1.17344+00
1.60408+04	4.70981-04	2.10141-05	1.12650-09	2.33450-12	3.16775-03	1.17009+00
1.63411+04	5.17762-04	2.37685-05	1.12642-09	3.19507-12	2.95722-03	1.16531+00
1.66104+04	5.82258-04	2.88390-05	1.12481-09	4.90800-12	2.64293-03	1.15797+00
1.68395+04	6.58347-04	3.65925-05	1.12335-09	7.95832-12	2.28625-03	1.14951+00
1.70227+04	7.39814-04	5.11075-05	1.12221-09	1.40315-11	1.89467-03	1.17816+00
1.71623+04	8.03579-04	7.15764-05	1.12044-09	2.31266-11	1.58975-03	1.16208+00
1.72759+04	8.32673-04	8.69754-05	1.11997-09	3.01544-11	1.44259-03	1.15322+00
1.73798+04	8.42586-04	9.78268-05	1.12050-09	3.47265-11	1.36339-03	1.14567+00
1.74801+04	8.43935-04	1.07476-04	1.12057-09	3.82738-11	1.30382-03	1.14182+00
1.75781+04	8.41649-04	1.16096-04	1.12296-09	4.18282-11	1.24380-03	1.14509+00
1.76736+04	8.38057-04	1.30505-04	1.12713-09	4.58297-11	1.17837-03	1.15337+00
1.77664+04	8.31268-04	1.44311-04	1.13003-09	4.98613-11	1.10623-03	1.17348+00
1.78568+04	8.25857-04	1.58676-04	1.13455-09	5.41119-11	1.03649-03	1.17070+00
1.79455+04	8.25516-04	1.73246-04	1.13922-09	5.90316-11	9.73154-04	1.19387+00
1.80332+04	8.29006-04	1.87932-04	1.14375-09	6.45788-11	9.19189-04	1.19028+00
1.81203+04	8.35054-04	2.02356-04	1.14631-09	7.05539-11	8.73192-04	1.18683+00
1.82074+04	8.42638-04	2.17744-04	1.14708-09	7.73054-11	8.34225-04	1.15540+00
1.82947+04	8.52731-04	2.33088-04	1.14503-09	8.47490-11	8.00271-04	1.15222+00
1.83827+04	8.63957-04	2.47897-04	1.14284-09	9.25214-11	7.71802-04	1.12384+00
1.84714+04	8.74875-04	2.84929-04	1.14000-09	1.01393-10	7.46967-04	1.12111+00
1.85609+04	8.83947-04	2.81536-04	1.13824-09	1.09993-10	7.25279-04	1.11868+00
1.86516+04	8.89658-04	2.90212-04	1.13941-09	1.18017-10	7.06280-04	1.11651+00
1.87437+04	8.91374-04	3.15184-04	1.14408-09	1.25215-10	6.89606-04	1.11458+00
1.88374+04	8.89754-04	3.33393-04	1.15258-09	1.31967-10	6.74627-04	1.11108+00
1.89325+04	8.86822-04	3.53017-04	1.16281-09	1.38816-10	6.59994-04	1.10939+00
1.90290+04	8.86080-04	3.74427-04	1.17263-09	1.46989-10	6.44867-04	1.10763+00
1.91267+04	8.89587-04	3.97609-04	1.17801-09	1.57328-10	6.26348-04	1.10564+00
1.92254+04	8.97641-04	4.23760-04	1.17799-09	1.70731-10	6.09559-04	1.10330+00
1.93250+04	9.10962-04	4.51100-04	1.17419-09	1.87187-10	5.87587-04	1.12679+00
1.94257+04	9.24567-04	4.78889-04	1.17077-09	2.04691-10	5.65690-04	1.12466+00

TABLE 36 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 6.20000+06 SHAKES

PAGE 3

RAD1US (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
1.95272+04	9.33652-04	5.11212-04	1.17204-09	2.22816-10	5.43718-04	1.12268+00
1.96289+04	9.36004-04	5.51852-04	1.18391-09	2.41740-10	5.21512-04	1.12092+00
1.97300+04	9.33087-04	5.96238-04	1.20228-09	2.59559-10	4.98489-04	1.17847+00
1.98308+04	9.30391-04	6.41673-04	1.21771-09	2.77725-10	4.75938-04	1.17765+00
1.99317+04	9.33782-04	6.86862-04	1.22555-09	2.99460-10	4.53807-04	1.17678+00
2.00334+04	9.46942-04	7.30840-04	1.22604-09	3.27702-10	4.32452-04	1.17584+00
2.01361+04	9.64738-04	7.77712-04	1.22322-09	3.61945-10	4.12361-04	1.17698+00
2.02397+04	9.76971-04	8.28893-04	1.22478-09	3.95583-10	3.93842-04	1.17438+00
2.03437+04	9.78198-04	8.89998-04	1.24070-09	4.25809-10	3.77355-04	1.17191+00
2.04476+04	9.74653-04	9.59606-04	1.26695-09	4.55790-10	3.62584-04	1.16957+00
2.05515+04	9.76387-04	1.02920-03	1.29016-09	4.90590-10	3.48981-04	1.16737+00
2.06563+04	9.88778-04	1.08705-J3	1.29763-09	5.31441-10	3.35995-04	1.17046+00
2.07636+04	1.00943-03	1.13726-03	1.29450-09	5.79473-10	3.23406-04	1.16920+00
2.08734+04	1.02512-03	1.19692-03	1.30408-09	6.28913-10	3.12191-04	1.16830+00
2.09849+04	1.02780-C3	1.27187-03	1.33174-09	6.71785-10	3.02298-04	1.16781+00
2.10972+04	1.02770-03	1.36033-03	1.37139-09	7.18369-10	2.92970-04	1.16599+00
2.12107+04	1.03976-03	1.43694-03	1.39102-09	7.76813-10	2.83135-04	1.16530+00
2.13263+04	1.06192-03	1.50242-03	1.39098-09	8.47219-10	2.72613-04	1.16439+00
2.14450+04	1.07648-03	1.59556-03	1.41095-09	9.24490-10	2.62122-04	1.16371+00
2.15630+04	1.07865-03	1.73860-03	1.45961-09	1.01142-09	2.49618-04	1.23998+00
2.16795+04	1.08397-03	1.88915-03	1.50493-09	1.10990-09	2.37103-04	1.24012+00
2.17958+04	1.10283-03	2.01138-03	1.51368-09	1.22333-09	2.24207-04	1.24016+00
2.19130+04	1.12142-03	2.14993-03	1.53335-09	1.35188-09	2.12688-04	1.24026+00
2.20295+04	1.12627-03	2.34312-03	1.59372-09	1.48609-09	2.02998-04	1.24053+00
2.21447+04	1.13220-03	2.54170-03	1.65504-09	1.62912-09	1.94449-04	1.24081+00
2.22600+04	1.15305-03	2.69913-03	1.68074-09	1.79456-09	1.86048-04	1.24099+00
2.23768+04	1.17213-03	2.85885-03	1.71112-09	1.96391-09	1.78927-04	1.24118+00
2.24938+04	1.17674-03	3.10276-03	1.80086-09	2.14822-09	1.73573-04	1.24156+00
2.26101+04	1.18632-03	3.34045-03	1.86814-09	2.35078-09	1.67116-04	1.29730+00
2.27273+04	1.20597-03	3.53571-03	1.89088-09	2.57126-09	1.59620-04	1.29704+00
2.28453+04	1.21575-03	3.79690-03	1.95313-09	2.80598-09	1.53370-04	1.29678+00
2.29625+04	1.21825-03	4.13865-03	2.06525-09	3.07119-09	1.48619-04	1.29651+00
2.30797+04	1.23348-03	4.38787-03	2.11035-09	3.33837-09	1.43049-04	1.29635+00
2.31983+04	1.25091-03	4.66032-03	2.16137-09	3.64622-09	1.37777-04	1.29621+00
2.33168+04	1.25630-03	5.08513-03	2.30237-09	4.01292-09	1.34354-04	1.29601+00
2.34345+04	1.26891-03	5.45636-03	2.40179-09	4.39310-09	1.30442-04	1.29588+00
2.35535+04	1.28893-03	5.74110-03	2.44829-09	4.76917-09	1.26218-04	1.29582+00
2.36730+04	1.29525-03	6.25146-03	2.60943-09	5.24400-09	1.23399-04	1.29568+00
2.38164+04	1.11365-03	4.71659-03	2.67480-09	3.00096-09	1.05739-04	1.29632+00
2.41279+04	5.47947-04	1.04413-03	1.03536-09	4.14201-10	3.69611-05	1.37017+00
2.46827+04	8.48445-05	1.33336-03	1.59111-10	8.76649-12	2.38871-05	1.36998+00
2.53570+04	3.98802-06	1.29455-03	1.03949-10	1.92263-14	2.35508-05	1.36991+00
2.60609+04	1.40934-07	1.29302-03	1.01840-10	2.41662-17	2.35402-05	1.36972+00
2.67849+04	4.40474-09	1.29299-03	1.01768-10	2.38279-20	2.35400-05	1.36972+00
2.75289+04	1.13393-10	1.29299-03	1.01766-10	1.66252-23	2.35400-05	1.36972+00

TABLE 37

J15 SERIFS 7 PROBLEM 82
T= 6.40000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO (GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
8.19023+02	-1.56750-05	3.64963-05	1.09065-09	8.96739-15	4.42999-03	1.15353+00
1.80168+03	-2.41137-05	3.71286-05	1.09972-09	1.17667-14	4.41819-03	1.15346+00
2.05903+03	-5.85566-06	3.72293-05	1.10121-09	2.89949-15	4.41458-03	1.15341+00
2.21037+03	1.93265-05	3.71405-05	1.09770-09	1.06600-14	4.41234-03	1.15333+00
2.31051+03	4.15062-05	3.70119-05	1.09336-09	3.30715-14	4.41089-03	1.15326+00
2.37932+03	5.45622-05	3.69341-05	1.09069-09	5.54456-14	4.40990-03	1.15321+00
2.42778+03	6.28087-05	3.68818-05	1.08889-09	7.29382-14	4.40921-03	1.15318+00
2.51391+03	7.47511-05	1.13951-05	1.08746-09	3.22709-14	4.40796-03	1.16097+00
2.64466+03	9.11593-05	1.13902-05	1.08624-09	4.76620-14	4.40602-03	1.16093+00
2.77339+03	1.06444-04	1.13854-05	1.08503-09	6.48299-14	4.40410-03	1.16088+00
2.90086+03	1.20071-04	1.13809-05	1.08384-09	8.22449-14	4.40217-03	1.16084+00
3.02766+03	1.29555-04	1.13772-05	1.08272-09	9.55492-14	4.40022-03	1.16080+00
3.15430+03	1.34891-04	1.13744-05	1.08166-09	1.03501-13	4.39822-03	1.16076+00
3.28118+03	1.38222-04	1.13736-05	1.08075-09	1.08660-13	4.39614-03	1.16072+00
3.40866+03	1.40588-04	1.13737-05	1.07990-09	1.12406-13	4.39399-03	1.16068+00
3.53703+03	1.41676-04	1.13773-05	1.07932-09	1.14182-13	4.39175-03	1.16064+00
3.66653+03	1.41411-04	1.13840-05	1.07899-09	1.13825-13	4.38941-03	1.16061+00
3.79739+03	1.40117-04	1.13938-05	1.07889-09	1.11851-13	4.38695-03	1.16057+00
3.92980+03	1.37446-04	1.14068-05	1.07902-09	1.07765-13	4.38436-03	1.16054+00
4.06396+03	1.32976-04	1.14230-05	1.07937-09	1.01034-13	4.38163-03	1.16050+00
4.20003+03	1.26369-04	1.14423-05	1.07994-09	9.14520-14	4.37873-03	1.16047+00
4.33816+03	1.17743-04	1.14648-05	1.08086-09	7.95947-14	4.37563-03	1.16044+00
4.47851+03	1.08252-04	1.14889-05	1.08178-09	6.74500-14	4.37232-03	1.16040+00
4.62123+03	9.87718-05	1.15152-05	1.08273-09	5.62949-14	4.36877-03	1.16036+00
4.76648+03	8.98817-05	1.15432-05	1.08369-09	4.67308-14	4.36496-03	1.16032+00
4.91440+03	8.19551-05	1.15728-05	1.08463-09	3.89440-14	4.36089-03	1.16028+00
5.06513+03	7.51513-05	1.16039-05	1.08558-09	3.28239-14	4.35654-03	1.16023+00
5.21881+03	6.94936-05	1.16363-05	1.08652-09	2.81357-14	4.35189-03	1.16018+00
5.37558+03	6.49686-05	1.16702-05	1.08743-09	2.46523-14	4.34692-03	1.16012+00
5.53557+03	6.16588-05	1.17046-05	1.08831-09	2.22597-14	4.34162-03	1.16006+00
5.69893+03	6.03222-05	1.17395-05	1.08909-09	2.13587-14	4.33596-03	1.15999+00
5.86582+03	6.21775-05	1.17733-05	1.08961-09	2.27785-14	4.32995-03	1.15991+00
6.03643+03	6.84657-05	1.18031-05	1.08963-09	2.77794-14	4.32358-03	1.15982+00
6.21096+03	7.90937-05	1.18287-05	1.08913-09	3.72266-14	4.31686-03	1.15972+00
6.38960+03	9.14736-05	1.18528-05	1.08835-09	4.98149-14	4.30981-03	1.15961+00
6.57249+03	1.03406-04	1.18788-05	1.08758-09	6.37052-14	4.30241-03	1.15950+00
6.75976+03	1.15322-04	1.19055-05	1.08672-09	7.93927-14	4.29464-03	1.15938+00
6.95155+03	1.27251-04	1.19327-05	1.08572-09	9.68097-14	4.28649-03	1.15926+00
7.14799+03	1.37831-04	1.19634-05	1.08486-09	1.13776-13	4.27793-03	1.15912+00
7.34916+03	1.46750-04	1.19979-05	1.08413-09	1.29291-13	4.26893-03	1.15899+00
7.55517+03	1.54180-04	1.20368-05	1.08357-09	1.43132-13	4.25946-03	1.15885+00
7.76609+03	1.59933-04	1.20801-05	1.08315-09	1.54532-13	4.24948-03	1.15870+00
7.98020+03	1.63375-04	1.21294-05	1.08300-09	1.61081-13	4.23094-03	1.15855+00
8.20297+03	1.64043-04	1.21855-05	1.08314-09	1.63957-13	4.22778-03	1.15840+00
8.42902+03	1.61981-04	1.22493-05	1.08360-09	1.60716-13	4.21593-03	1.15824+00
8.66019+03	1.57536-04	1.23208-05	1.08437-09	1.52932-13	4.20331-03	1.15807+00
8.89652+03	1.51412-04	1.24004-05	1.08538-09	1.42215-13	4.18981-03	1.15789+00
9.13806+03	1.44714-04	1.24876-05	1.08657-09	1.30827-13	4.17535-03	1.15770+00
9.38485+03	1.39123-04	1.25807-05	1.08774-09	1.21783-13	4.15982-03	1.15750+00
9.63701+03	1.36274-04	1.26780-05	1.08868-09	1.17722-13	4.14313-03	1.15726+00

TABLE 37 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 6.40000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
9.89466+03	1.37819-04	1.27777-05	1.08922-09	1.21379-13	4.12521-03	1.15703+00
1.01580+04	1.44670-04	1.28777-05	1.08914-09	1.35292-13	4.10601-03	1.15676+00
1.04272+04	1.57736-04	1.29795-05	1.08844-09	1.61876-13	4.08550-03	1.15985+00
1.07024+04	1.75474-04	1.30839-05	1.08720-09	2.02065-13	4.06369-03	1.15950+00
1.09837+04	1.96322-04	1.31927-05	1.08561-09	2.55040-13	4.04056-03	1.15913+00
1.12713+04	2.18767-04	1.33089-05	1.08390-09	3.19344-13	4.01609-03	1.15873+00
1.15651+04	2.41224-04	1.34358-05	1.08225-09	3.91727-13	3.99023-03	1.15831+00
1.18651+04	2.62150-04	1.35775-05	1.08091-09	4.67207-13	3.96291-03	1.15787+00
1.21711+04	2.79958-04	1.37391-05	1.08016-09	5.30842-13	3.93404-03	1.15740+00
1.24850+04	2.93636-04	1.39235-05	1.08009-09	6.00487-13	3.90346-03	1.15691+00
1.28004+04	3.02375-04	1.41356-05	1.08076-09	6.46276-13	3.87070-03	1.15639+00
1.31229+04	3.06386-04	1.43836-05	1.08221-09	6.75122-13	3.83482-03	1.15581+00
1.34499+04	3.07567-04	1.46705-05	1.08418-09	6.93898-13	3.79513-03	1.15518+00
1.37810+04	3.09308-04	1.50001-05	1.08633-09	7.17560-13	3.75073-03	1.15446+00
1.41156+04	3.17337-04	1.53715-05	1.08784-09	7.74293-13	3.70053-03	1.15364+00
1.44533+04	3.36478-04	1.57853-05	1.08789-09	8.94858-13	3.64332-03	1.15269+00
1.47934+04	3.64604-04	1.62636-05	1.08684-09	1.08294-12	3.57766-03	1.15158+00
1.51348+04	3.97692-04	1.68473-05	1.08548-09	1.33490-12	3.50125-03	1.15028+00
1.54754+04	4.34987-04	1.75937-05	1.08339-09	1.66787-12	3.41049-03	1.14748+00
1.58117+04	4.73026-04	1.86602-05	1.08141-09	2.09080-12	3.30023-03	1.14724+00
1.61387+04	5.09585-04	2.01855-05	1.08041-09	2.62419-12	3.15974-03	1.14692+00
1.64487+04	5.46384-04	2.26226-05	1.08062-09	3.38076-12	2.96587-03	1.14679+00
1.67296+04	5.89014-04	2.70489-05	1.08264-09	4.69992-12	2.68022-03	1.14615+00
1.69716+04	6.38807-04	3.38706-05	1.08558-09	6.92214-12	2.34626-03	1.15024+00
1.71690+04	6.98975-04	4.58517-05	1.08976-09	1.12278-11	1.97485-03	1.14824+00
1.73203+04	7.55698-04	6.58215-05	1.09346-09	1.88111-11	1.63703-03	1.14613+00
1.74390+04	7.85701-04	8.36461-05	1.09700-09	2.58209-11	1.45408-03	1.14427+00
1.75441+04	7.95967-04	9.59515-05	1.09889-09	3.0396E-11	1.36182-03	1.14523+00
1.76442+04	9.00137-04	1.06059-04	1.09991-09	3.39507-11	1.29919-03	1.14119+00
1.77416+04	8.04633-04	1.16656-04	1.10028-09	3.77642-11	1.23720-03	1.14411+00
1.78366+04	8.09642-04	1.20763-04	1.09960-09	4.22036-11	1.16925-03	1.14821+00
1.79292+04	8.14089-04	1.41658-04	1.09742-09	4.69418-11	1.09671-03	1.17272+00
1.80199+04	8.21059-04	1.54937-04	1.09540-09	5.22261-11	1.02712-03	1.19642+00
1.81094+04	8.28205-04	1.67914-04	1.09323-09	5.75888-11	9.64968-04	1.19375+00
1.81985+04	8.34160-04	1.81015-04	1.09093-09	6.29781-11	9.11527-04	1.19136+00
1.82875+04	8.41323-04	1.94191-04	1.09074-09	6.87280-11	8.66407-04	1.18803+00
1.83766+04	8.45839-04	2.08914-04	1.09185-09	7.47333-11	8.28839-04	1.15609+00
1.84658+04	8.46382-04	2.23980-04	1.09451-09	8.02254-11	7.96354-04	1.15292+00
1.85554+04	8.45890-04	2.39582-04	1.09963-09	8.57142-11	7.69138-04	1.12360+00
1.86451+04	8.45296-04	2.58124-04	1.10798-09	9.22180-11	7.45329-04	1.12097+00
1.87349+04	8.45056-04	2.76415-04	1.11625-09	9.86965-11	7.24361-04	1.11860+00
1.88253+04	8.45991-04	2.93953-04	1.12247-09	1.05191-10	7.05673-04	1.11647+00
1.89171+04	8.50091-04	3.10508-04	1.12591-09	1.12197-10	6.88828-04	1.11257+00
1.90108+04	8.58158-04	3.26502-04	1.12536-09	1.20228-10	6.73084-04	1.11065+00
1.91066+04	8.69274-04	3.42676-04	1.12283-09	1.29476-10	6.57563-04	1.10874+00
1.92047+04	8.82300-04	3.59841-04	1.11851-09	1.40068-10	6.41598-04	1.10673+00
1.93048+04	8.93376-04	3.80388-04	1.11697-09	1.51001-10	6.24692-04	1.10462+00
1.94059+04	8.98945-04	4.06730-04	1.12015-09	1.64340-10	6.06021-04	1.10231+00
1.95073+04	8.98942-04	4.36716-04	1.12994-09	1.76455-10	5.84849-04	1.12573+00
1.96086+04	8.94168-04	4.69769-04	1.14373-09	1.87802-10	5.63952-04	1.12402+00

TABLE 37 (Cont.)

J15 SERIES 7 PROBLEM 82
 T= 6.40000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.97098+04	8.90193-04	5.05570-04	1.15525-09	2.00318-10	5.42432-04	1.12224+00
1.98109+04	8.92844-04	5.43661-04	1.16153-09	2.16698-10	5.19960-04	1.12034+00
1.99124+04	9.02717-04	5.79092-04	1.16124-09	2.35964-10	4.96028-04	1.17762+00
2.00150+04	9.18415-04	6.15168-04	1.15843-09	2.59467-10	4.72664-04	1.17643+00
2.01186+04	9.34214-04	6.55074-04	1.15967-09	2.85875-10	4.50604-04	1.17542+00
2.02229+04	9.41680-04	7.00591-04	1.16843-09	3.10629-10	4.30199-04	1.17974+00
2.03273+04	9.38721-04	7.55879-04	1.18539-09	3.33043-10	4.11285-04	1.17707+00
2.04312+04	9.34636-04	8.16459-04	1.20574-09	3.56607-10	3.93575-04	1.17446+00
2.05349+04	9.38874-04	8.75824-04	1.21918-09	3.86022-10	3.76802-04	1.17197+00
2.06393+04	9.52344-04	9.29942-04	1.22177-09	4.21745-10	3.60970-04	1.16962+00
2.07455+04	9.69708-04	9.78817-04	1.21675-09	4.60244-10	3.46355-04	1.16743+00
2.08539+04	9.82300-04	1.03176-03	1.22206-09	4.97789-10	3.33498-04	1.16922+00
2.09637+04	9.84730-04	1.09882-03	1.24543-09	5.32762-10	3.22084-04	1.16841+00
2.10743+04	9.83000-04	1.17273-03	1.27484-09	5.66599-10	3.11502-04	1.16783+00
2.11862+04	9.91252-04	1.24205-03	1.29345-09	6.10254-10	3.01180-04	1.16721+00
2.13004+04	1.01122-03	1.29664-03	1.29652-09	6.63038-10	2.90840-04	1.16512+00
2.14178+04	1.02872-03	1.35800-03	1.30219-09	7.18590-10	2.80783-04	1.16427+00
2.15369+04	1.03361-03	1.45032-03	1.33518-09	7.74725-10	2.71275-04	1.16375+00
2.16561+04	1.03476-03	1.56364-03	1.37728-09	8.37114-10	2.61221-04	1.16332+00
2.17750+04	1.04787-03	1.67901-03	1.39844-09	9.21897-10	2.47645-04	1.23974+00
2.18947+04	1.06925-03	1.78405-03	1.40261-09	1.01996-09	2.34026-04	1.23974+00
2.20146+04	1.08024-03	1.92505-03	1.43483-09	1.12319-09	2.22104-04	1.23987+00
2.21333+04	1.08112-03	2.10047-03	1.49064-09	1.22753-09	2.11652-04	1.24011+00
2.22508+04	1.09205-03	2.26546-03	1.52890-09	1.35098-09	2.01417-04	1.24030+00
2.23690+04	1.11367-03	2.39991-03	1.54158-09	1.48841-09	1.91842-04	1.24042+00
2.24882+04	1.12615-03	2.56576-03	1.57891-09	1.62697-09	1.83903-04	1.24063+00
2.26070+04	1.12965-03	2.79236-03	1.66218-09	1.78170-09	1.77962-04	1.24101+00
2.27255+04	1.14492-03	2.97378-03	1.70703-09	1.94935-09	1.71640-04	1.29779+00
2.28454+04	1.16610-03	3.15020-03	1.73166-09	2.14191-09	1.64209-04	1.29748+00
2.29656+04	1.17407-03	3.41245-03	1.80622-09	2.35194-09	1.57967-04	1.29715+00
2.30845+04	1.17869-03	3.71755-03	1.90049-09	2.58243-09	1.52402-04	1.29684+00
2.32036+04	1.19589-03	3.92968-03	1.93092-09	2.81030-09	1.46299-04	1.29665+00
2.33243+04	1.21015-03	4.17764-03	1.98012-09	3.05699-09	1.40970-04	1.29648+00
2.34447+04	1.21258-03	4.55563-03	2.09861-09	3.34919-09	1.36847-04	1.29627+00
2.35646+04	1.22574-03	4.86487-03	2.17353-09	3.65499-09	1.32549-04	1.29613+00
2.36860+04	1.24570-03	5.13672-03	2.22045-09	3.98563-09	1.28090-04	1.29604+00
2.38077+04	1.25232-03	5.58377-03	2.36140-09	4.37851-09	1.25175-04	1.29589+00
2.39286+04	1.26284-03	6.01781-03	2.48285-09	4.79891-09	1.21951-04	1.29578+00
2.40540+04	1.23941-03	5.99507-03	2.54135-09	4.60824-09	1.16275-04	1.29587+00
2.42670+04	8.33105-04	2.79853-03	1.99515-09	1.16430-09	6.81617-05	1.37021+00
2.47144+04	2.49082-04	1.45261-03	3.50458-10	7.78629-11	2.36316-05	1.37012+00
2.53589+04	1.90001-05	1.30107-03	1.12608-10	4.35590-13	2.35987-05	1.36992+00
2.60610+04	7.41474-07	1.29326-03	1.02167-10	6.65243-16	2.35418-05	1.36972+00
2.67849+04	2.54232-08	1.29299-03	1.01779-10	7.88723-19	2.35400-05	1.36972+00
2.75289+04	7.46477-10	1.29299-03	1.01766-10	7.00648-22	2.35400-05	1.36972+00
2.82832+04	1.04246-11	1.29299-03	1.01766-10	1.40512-25	2.35400-05	1.36972+00

TABLE 38

J1⁴ SERIES 7 PROBLEM 82
 T = 6.60000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SW)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
8.18693+02	5.26484-05	3.65577-05	1.05791-09	1.01333-13	4.35470-03	1.15182+00
1.80675+03	1.05497-04	3.56725-05	1.02992-09	1.98512-13	4.34787-03	1.15137+00
2.07147+03	1.06418-04	3.57275-05	1.03074-09	2.02314-13	4.34591-03	1.15135+00
2.22760+03	1.03015-04	3.58639-05	1.03414-09	1.90600-13	4.34464-03	1.15136+00
2.32937+03	9.45279-05	3.59603-05	1.03684-09	1.61004-13	4.34372-03	1.15137+00
2.39891+03	8.62817-05	3.60226-05	1.03861-09	1.34357-13	4.34304-03	1.15138+00
2.44770+03	7.93937-05	3.60711-05	1.03976-09	1.13847-13	4.34254-03	1.15138+00
2.53424+03	6.67081-05	1.11548-05	1.04067-09	2.53421-14	4.34161-03	1.15945+00
2.66550+03	4.92754-05	1.11734-05	1.04155-09	1.39006-14	4.34003-03	1.15944+00
2.79450+03	3.58347-05	1.11946-05	1.04254-09	7.36882-15	4.33831-03	1.15943+00
2.92202+03	2.61313-05	1.12177-05	1.04368-09	3.92032-15	4.33647-03	1.15942+00
3.04865+03	1.92590-05	1.12417-05	1.04491-09	2.13074-15	4.33451-03	1.15941+00
3.17492+03	1.43194-05	1.12659-05	1.04615-09	1.17941-15	4.33242-03	1.15940+00
3.30125+03	1.07590-05	1.12901-05	1.04735-09	6.65805-16	4.33021-03	1.15939+00
3.42801+03	8.37886-06	1.13142-05	1.04849-09	4.01752-16	4.32787-03	1.15937+00
3.55551+03	7.16015-06	1.13384-05	1.04955-09	2.91220-16	4.32539-03	1.15935+00
3.68405+03	7.09943-06	1.13617-05	1.05056-09	2.86700-16	4.32276-03	1.15933+00
3.81389+03	8.29538-06	1.13849-05	1.05150-09	3.96736-16	4.31999-03	1.15930+00
3.94526+03	1.09824-05	1.14075-05	1.05233-09	7.05372-16	4.31705-03	1.15927+00
4.07839+03	1.60222-05	1.14277-05	1.05287-09	1.52872-15	4.31396-03	1.15923+00
4.21353+03	2.47202-05	1.14431-05	1.05293-09	3.66359-15	4.31072-03	1.15919+00
4.35090+03	3.67300-05	1.14536-05	1.05251-09	7.97571-15	4.30733-03	1.15913+00
4.49072+03	4.98273-05	1.14627-05	1.05192-09	1.44713-14	4.30382-03	1.15908+00
4.63316+03	6.25881-05	1.14719-05	1.05126-09	2.26945-14	4.30016-03	1.15902+00
4.77838+03	7.43185-05	1.14809-05	1.05054-09	3.18772-14	4.29636-03	1.15896+00
4.92653+03	8.43824-05	1.14914-05	1.04987-09	4.10332-14	4.29238-03	1.15889+00
5.07774+03	9.36246-05	1.15024-05	1.04917-09	5.05363-14	4.28823-03	1.15882+00
5.23217+03	1.02528-04	1.15129-05	1.04836-09	6.06160-14	4.28369-03	1.15873+00
5.38996+03	1.10246-04	1.15258-05	1.04767-09	7.01125-14	4.27934-03	1.15868+00
5.55122+03	1.16234-04	1.15416-05	1.04714-09	7.80024-14	4.27457-03	1.15861+00
5.71605+03	1.20798-04	1.15611-05	1.04683-09	8.43747-14	4.26956-03	1.15853+00
5.88457+03	1.24483-04	1.15826-05	1.04658-09	8.97580-14	4.26429-03	1.15846+00
6.05688+03	1.26892-04	1.16073-05	1.04649-09	9.34504-14	4.25873-03	1.15838+00
6.23309+03	1.27432-04	1.16359-05	1.04660-09	9.44764-14	4.25286-03	1.15829+00
6.41328+03	1.26086-04	1.16686-05	1.04691-09	9.27594-14	4.24664-03	1.15821+00
6.59755+03	1.23009-04	1.17059-05	1.04745-09	8.85837-14	4.24003-03	1.15813+00
6.78597+03	1.18594-04	1.17482-05	1.04824-09	8.26526-14	4.23299-C3	1.15804+00
6.97863+03	1.13368-04	1.17949-05	1.04918-09	7.58409-14	4.22549-03	1.15794+00
7.17562+03	1.07853-04	1.18462-05	1.05029-09	6.89438-14	4.21746-03	1.15784+00
7.37703+03	1.02834-04	1.19013-05	1.05148-09	6.29574-14	4.20886-03	1.15774+00
7.58297+03	9.91971-05	1.19592-05	1.05262-09	5.88510-14	4.19966-03	1.15762+00
7.79357+03	9.78807-05	1.20188-05	1.05361-09	5.75737-14	4.18981-03	1.15750+00
8.00899+03	9.96225-05	1.20783-05	1.05429-09	5.99537-14	4.17928-03	1.15736+00
8.22941+03	1.04737-04	1.21370-05	1.05457-09	6.66416-14	4.16804-03	1.15720+00
8.45501+03	1.13404-04	1.21939-05	1.05438-09	7.85772-14	4.15607-03	1.15703+00
8.68601+03	1.25394-04	1.22492-05	1.05372-09	9.65805-14	4.14337-03	1.15684+00
8.92260+03	1.39920-04	1.23043-05	1.05271-09	1.20816-13	4.12992-03	1.15664+00
9.16494+03	1.56084-04	1.23608-05	1.05146-09	1.51002-13	4.11571-G3	1.15642+00
9.41316+03	1.72933-04	1.24203-05	1.05010-09	1.86163-13	4.10073-03	1.15619+00
9.66737+03	1.89277-04	1.24849-05	1.04877-09	2.24029-13	4.08493-03	1.15594+00

TABLE 38 (Cont.)

115 SERIES 7 PROBLEM 82
T= 6.60000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
9.92763+03	2.04138-04	1.25564-05	1.04760-09	2.61932-13	4.06829-03	1.15569+00
1.01940+04	2.16892-04	1.26362-05	1.04666-09	2.97428-13	4.05075-03	1.15543+00
1.04664+04	2.26545-04	1.27266-05	1.04608-09	3.26677-13	4.03224-03	1.15516+00
1.07449+04	2.32547-04	1.28309-05	1.04606-09	3.46966-13	4.01267-03	1.15488+00
1.10293+04	2.35337-04	1.29497-05	1.04650-09	3.58601-13	3.99190-03	1.15814+00
1.13195+04	2.35565-04	1.30871-05	1.04749-09	3.63107-13	3.96982-03	1.15779+00
1.16153+04	2.33980-04	1.32409-05	1.04889-09	3.62454-13	3.94624-03	1.15742+00
1.19168+04	2.32273-04	1.34089-05	1.05044-09	3.61714-13	3.92096-03	1.15703+00
1.22237+04	2.33368-04	1.35877-05	1.05172-09	3.70015-13	3.89379-03	1.15660+00
1.25363+04	2.40248-04	1.37765-05	1.05240-09	3.97773-13	3.86411-03	1.15612+00
1.28545+04	2.55318-04	1.39731-05	1.05206-09	4.56109-13	3.83147-03	1.15559+00
1.31785+04	2.78222-04	1.41809-05	1.05075-09	5.50066-13	3.79554-03	1.15500+00
1.35080+04	3.05388-04	1.44120-05	1.04905-09	6.73475-13	3.75596-03	1.15434+00
1.38428+04	3.33911-04	1.46778-05	1.04736-09	8.19790-13	3.71214-03	1.15361+00
1.41823+04	3.62903-04	1.49862-05	1.04566-09	9.88420-13	3.66332-03	1.15279+00
1.45257+04	3.89126-04	1.53546-05	1.04440-09	1.16354-12	3.60859-03	1.15186+00
1.48719+04	4.08472-04	1.58135-05	1.04439-09	1.31970-12	3.54647-03	1.15082+00
1.52190+04	4.21297-04	1.63898-05	1.04555-09	1.45474-12	3.47473-03	1.14960+00
1.55647+04	4.28703-04	1.71630-05	1.04780-09	1.57721-12	3.38998-03	1.17391+00
1.59052+04	4.34821-04	1.82288-05	1.05079-09	1.72339-12	3.28683-03	1.17165+00
1.62360+04	4.47205-04	1.96990-05	1.05364-09	1.97054-12	3.15540-03	1.16871+00
1.65508+04	4.73292-04	2.19397-05	1.05557-09	2.46069-12	2.97527-03	1.16461+00
1.68390+04	5.18338-04	2.58082-05	1.05621-09	3.47676-12	2.71297-03	1.15848+00
1.70913+04	5.80366-04	3.17410-05	1.05608-09	5.36449-12	2.39886-03	1.15096+00
1.73023+04	6.57114-04	4.14459-05	1.05536-09	8.98510-12	2.04799-03	1.18624+00
1.74671+04	7.33326-04	5.93427-05	1.05420-09	1.59906-11	1.69227-03	1.16871+00
1.75943+04	7.83075-04	7.84832-05	1.05321-09	2.40729-11	1.46760-03	1.15576+00
1.77031+04	8.04805-04	9.20301-05	1.05172-09	2.98061-11	1.35709-03	1.14418+00
1.78053+04	8.13619-04	1.02393-04	1.05119-09	3.38914-11	1.28968-03	1.14605+00
1.79042+04	8.17790-04	1.12974-04	1.05149-09	3.77775-11	1.22592-03	1.14216+00
1.80004+04	8.18711-04	1.25112-04	1.05255-09	4.19305-11	1.15655-03	1.15575+00
1.80938+04	8.16579-04	1.38025-04	1.05512-09	4.60178-11	1.08570-03	1.17177+00
1.81850+04	8.13451-04	1.51413-04	1.05943-09	5.00952-11	1.01850-03	1.19625+00
1.82749+04	8.09425-04	1.64534-04	1.06356-09	5.38994-11	9.59199-04	1.19366+00
1.83640+04	8.05673-04	1.78019-04	1.06840-09	5.77772-11	9.08264-04	1.19186+00
1.84527+04	8.03200-04	1.91434-04	1.07349-09	6.17502-11	8.64934-04	1.18848+00
1.85415+04	8.02430-04	2.06220-04	1.07637-09	6.63920-11	8.27767-04	1.15634+00
1.86303+04	8.05232-04	2.20797-04	1.07854-09	7.15827-11	7.95667-04	1.15322+00
1.87197+04	8.10700-04	2.35262-04	1.07808-09	7.73123-11	7.67991-04	1.12350+00
1.88099+04	8.19674-04	2.51390-04	1.07596-09	8.44542-11	7.43481-04	1.12080+00
1.89008+04	8.31529-04	2.67044-04	1.07386-09	9.23274-11	7.21832-04	1.11838+00
1.89932+04	8.43196-04	2.81929-04	1.07074-09	1.00227-10	7.02568-04	1.11618+00
1.90875+04	8.54098-04	2.96531-04	1.06850-09	1.08162-10	6.85504-04	1.11165+00
1.91836+04	8.62642-04	3.12739-04	1.07105-09	1.16364-10	6.69926-04	1.10977+00
1.92815+04	8.66144-04	3.30810-04	1.07768-09	1.24088-10	6.54900-04	1.10799+00
1.93807+04	8.63807-04	3.51353-04	1.08691-09	1.31085-10	6.39601-04	1.10618+00
1.94807+04	8.58095-04	3.75324-04	1.09747-09	1.38182-10	6.23143-04	1.10424+00
1.95811+04	8.54738-04	4.03046-04	1.10507-09	1.47228-10	6.04515-04	1.10198+00
1.96820+04	8.58351-04	4.29781-04	1.10777-09	1.58327-10	5.83165-04	1.12517+00
1.97837+04	8.68379-04	4.57357-04	1.10682-09	1.72451-10	5.61395-04	1.12310+00

TABLE 38 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 6.60000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.98864+04	8.82498-04	4.67152-04	1.10444-09	1.89713-10	5.39256-04	1.12098+00
1.99897+04	8.95838-04	5.21298-04	1.10398-09	2.09185-10	5.16535-04	1.17763+00
2.00936+04	9.02779-04	5.56402-04	1.10857-09	2.26737-10	4.93199-04	1.17652+00
2.01979+04	9.01956-04	5.96869-04	1.11988-09	2.42786-10	4.71092-04	1.17563+00
2.03022+04	8.96452-04	6.42228-04	1.13553-09	2.58059-10	4.50036-04	1.17493+00
2.04064+04	8.95289-04	6.89480-04	1.14856-09	2.76325-10	4.29709-04	1.17980+00
2.05109+04	9.04914-04	7.39005-04	1.15530-09	3.02597-10	4.10127-04	1.17711+00
2.06160+04	9.21771-04	7.87567-04	1.15634-09	3.34615-10	3.91568-04	1.17451+00
2.07222+04	9.37818-04	8.35164-04	1.15372-09	3.67285-10	3.74264-04	1.17204+00
2.08297+04	9.46694-04	8.87919-04	1.15874-09	3.97892-10	3.58792-04	1.16971+00
2.09380+04	9.47195-04	9.50476-04	1.17820-09	4.26374-10	3.45406-04	1.16754+00
2.10467+04	9.45148-04	1.01551-03	1.20235-09	4.53580-10	3.33288-04	1.16894+00
2.11566+04	9.50370-04	1.07552-03	1.21601-09	4.85725-10	3.21280-04	1.16793+00
2.12686+04	9.67175-04	1.12695-03	1.21699-09	5.27159-10	3.09563-04	1.16684+00
2.13837+04	9.84719-04	1.17728-03	1.21684-09	5.70813-10	2.98675-04	1.16585+00
2.15013+04	9.91618-04	1.24379-03	1.23520-09	6.11151-10	2.89034-04	1.16530+00
2.16200+04	9.91428-04	1.33046-03	1.27192-09	6.53872-10	2.80041-04	1.16391+00
2.17396+04	9.98303-04	1.41547-03	1.29763-09	7.05373-10	2.70266-04	1.16331+00
2.18608+04	1.01769-03	1.49248-03	1.30307-09	7.72981-10	2.59207-04	1.16243+00
2.19835+04	1.03461-03	1.59313-03	1.31187-09	8.52686-10	2.44880-04	1.23939+00
2.21058+04	1.03794-03	1.73033-03	1.35205-09	9.32061-10	2.32631-04	1.23954+00
2.22265+04	1.04117-03	1.88409-03	1.39799-09	1.02124-09	2.21107-04	1.23973+00
2.23467+04	1.05782-03	2.01635-03	1.41738-09	1.12827-09	2.09650-04	1.23983+00
2.24677+04	1.07675-03	2.14198-03	1.42697-09	1.24175-09	1.98860-04	1.23992+00
2.25891+04	1.08344-03	2.31255-03	1.47304-09	1.35729-09	1.90271-04	1.24016+00
2.27094+04	1.08729-03	2.51560-03	1.54113-09	1.48700-09	1.83086-04	1.24050+00
2.28300+04	1.10507-03	2.65636-03	1.56230-09	1.62219-09	1.75841-04	1.24066+00
2.29525+04	1.12377-03	2.81101-03	1.58720-09	1.77499-09	1.68791-04	1.29796+00
2.30752+04	1.12953-03	3.05673-03	1.66568-09	1.94996-09	1.62769-04	1.29757+00
2.31965+04	1.13785-03	3.31947-03	1.74274-09	2.14897-09	1.56654-04	1.29723+00
2.33180+04	1.15813-03	3.51797-03	1.76925-09	2.35954-09	1.49883-04	1.29699+00
2.34406+04	1.17131-03	3.75996-03	1.82357-09	2.57926-09	1.44398-04	1.29677+00
2.35626+04	1.17380-03	4.09896-03	1.93188-09	2.82378-09	1.40169-04	1.29653+00
2.36843+04	1.18729-03	4.36728-03	1.98652-09	3.07849-09	1.35099-04	1.29637+00
2.38077+04	1.20449-03	4.60104-03	2.02155-09	3.33767-09	1.30348-04	1.29627+00
2.39316+04	1.20956-03	4.99955-03	2.14368-09	3.65724-09	1.27060-04	1.29610+00
2.40547+04	1.22066-03	5.30564-03	2.25287-09	4.01269-09	1.23797-04	1.29598+00
2.41790+04	1.24151-03	5.66262-03	2.29372-09	4.36425-09	1.19727-04	1.29592+00
2.43041+04	1.24735-03	6.13891-03	2.43433-09	4.77576-09	1.17074-04	1.29581+00
2.44572+04	1.05424-03	4.48826-03	2.48446-09	2.57488-09	9.90186-05	1.29640+00
2.47890+04	5.03165-04	1.79275-03	9.03319-10	3.44016-10	3.46653-05	1.37021+00
2.53672+04	7.43088-05	1.32928-03	1.50742-10	6.69432-12	2.38430-05	1.36997+00
2.60613+04	3.55352-06	1.29443-03	1.03712-10	1.52187-14	2.35500-05	1.36991+00
2.67849+04	1.31179-07	1.29302-03	1.01835-10	2.08857-17	2.35402-05	1.36972+00
2.75289+04	4.26966-09	1.29299-03	1.01768-10	2.23333-20	2.35400-05	1.36972+00
2.82832+04	1.15226-10	1.29299-03	1.01766-10	1.71670-23	2.35400-05	1.36972+00

TABLE 39

J15 SERIES 7 PROBLEM 82
T= 6.80000+06 SHAKES

PAGE 1

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
8.31754+02	1.10719-05	3.48523-05	9.85780-10	4.27247-15	4.29221-03	1.14982+00
1.82745+03	1.83908-05	3.60230-05	1.01608-09	6.34560-15	4.28505-03	1.15005+00
2.08401+03	1.30477-05	3.63348-05	1.02374-09	3.13879-15	4.28236-03	1.15009+00
2.23600+03	1.16569-05	3.64395-05	1.02565-09	2.47647-15	4.28048-03	1.15008+00
2.33559+03	1.29041-05	3.64623-05	1.02577-09	3.05577-15	4.27915-03	1.15006+00
2.40390+03	1.51495-05	3.64541-05	1.02517-09	4.20940-15	4.27819-03	1.15003+00
2.45197+03	1.75526-05	3.64397-05	1.02451-09	5.63987-15	4.27750-03	1.15001+00
2.53749+03	2.52567-05	1.12605-05	1.02359-09	3.82931-15	4.27631-03	1.15833+00
2.66749+03	3.82451-05	1.12458-05	1.02160-09	8.46134-15	4.27449-03	1.15828+00
2.79574+03	4.78795-05	1.12343-05	1.01990-09	2.9326-14	4.27265-03	1.15823+00
2.92292+03	5.42678-05	1.12261-05	1.01846-09	1.65895-14	4.27075-03	1.15819+00
3.04959+03	6.01436-05	1.12181-05	1.01701-09	2.03283-14	4.26881-03	1.15814+00
3.17623+03	6.49825-05	1.12122-05	1.01573-09	2.37004-14	4.26680-03	1.15810+00
3.30322+03	6.96713-05	1.12084-05	1.01459-09	2.72378-14	4.26472-03	1.15805+00
3.43088+03	7.42805-05	1.12065-05	1.01360-09	3.09419-14	4.26258-03	1.15801+00
3.55952+03	7.90383-05	1.12063-05	1.01272-09	3.50418-14	4.26035-03	1.15797+00
3.68938+03	8.32351-05	1.12084-05	1.01202-09	3.88403-14	4.25805-03	1.15793+00
3.82069+03	8.56095-05	1.12141-05	1.01158-09	4.10975-14	4.25565-03	1.15789+00
3.95363+03	8.67034-05	1.12225-05	1.01133-09	4.21829-14	4.25315-03	1.15785+00
4.08840+03	8.68108-05	1.12313-05	1.01107-09	4.23204-14	4.25052-03	1.15781+00
4.22520+03	8.59479-05	1.12418-05	1.01091-09	4.15245-14	4.24776-03	1.15777+00
4.36419+03	8.38537-05	1.12542-05	1.01085-09	3.95779-14	4.24486-03	1.15772+00
4.50552+03	8.04344-05	1.12691-05	1.01093-09	3.64765-14	4.24179-03	1.15768+00
4.64934+03	7.60219-05	1.12877-05	1.01126-09	3.26502-14	4.23853-03	1.15764+00
4.79576+03	7.12575-05	1.13099-05	1.01182-09	2.87454-14	4.23508-03	1.15760+00
4.94491+03	6.64702-05	1.13355-05	1.01261-09	2.50750-14	4.23141-03	1.15756+00
5.09691+03	6.16641-05	1.13645-05	1.01361-09	2.16388-14	4.22750-03	1.15751+00
5.25167+03	5.72392-05	1.13961-05	1.01465-09	1.86926-14	4.22333-03	1.15747+00
5.40392+03	5.35590-05	1.14295-05	1.01569-09	1.64084-14	4.21889-03	1.15742+00
5.57120+03	5.09377-05	1.14641-05	1.01677-09	1.48782-14	4.21416-03	1.15737+00
5.73584+03	4.92731-05	1.15001-05	1.01784-09	1.39629-14	4.20912-03	1.15731+00
5.90398+03	4.85994-05	1.15369-05	1.01884-09	1.36245-14	4.20375-03	1.15725+00
6.07577+03	4.97460-05	1.15734-05	1.01966-09	1.43277-14	4.19802-03	1.15718+00
6.25138+03	5.35922-05	1.16080-05	1.02016-09	1.67123-14	4.19193-03	1.15710+00
6.43099+03	5.99463-05	1.16405-05	1.02034-09	2.09929-14	4.18547-03	1.15701+00
6.61478+03	6.80362-05	1.16711-05	1.02020-09	2.71275-14	4.17863-03	1.15691+00
6.80294+03	7.79841-05	1.16995-05	1.01970-09	3.57527-14	4.17140-03	1.15680+00
6.99564+03	8.96483-05	1.17263-05	1.01891-09	4.73434-14	4.16377-03	1.15668+00
7.19306+03	1.02529-04	1.17530-05	1.01794-09	6.20399-14	4.15574-03	1.15655+00
7.39535+03	1.16043-04	1.17803-05	1.01685-09	7.95888-14	4.14730-03	1.15642+00
7.60263+03	1.29654-04	1.18097-05	1.01576-09	9.95358-14	4.13844-03	1.15628+00
7.81504+03	1.42805-04	1.18417-05	1.01469-09	1.20984-13	4.12913-03	1.15613+00
8.03267+03	1.54833-04	1.18776-05	1.01374-09	1.42565-13	4.11936-03	1.15598+00
8.25562+03	1.65201-04	1.19184-05	1.01297-09	1.62925-13	4.10910-03	1.15582+00
8.48394+03	1.73770-04	1.19650-05	1.01244-09	1.80731-13	4.09829-03	1.15566+00
8.71771+03	1.80138-04	1.20184-05	1.01221-09	1.95039-13	4.08691-03	1.15550+00
8.95695+03	1.84083-04	1.20802-05	1.01236-09	2.04690-13	4.07488-03	1.15533+00
9.20166+03	1.85590-04	1.21515-05	1.01294-09	2.09270-13	4.06214-03	1.15515+00
9.45186+03	1.85186-04	1.22320-05	1.01308-09	2.09742-13	4.04860-03	1.15497+00
9.70756+03	1.83449-04	1.23211-05	1.01505-09	2.07333-13	4.03418-03	1.15478+00

TABLE 39 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 6.80000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/SH)	RHO (GM/CC)	P (JERKS/CC)	DYN P (JERKS/CC)	TEMP (KV)	GAMMA 2
9.96879+03	1.80838-04	1.24182-05	1.01646-09	2.03065-13	4.01876-03	1.15458+00
1.02356+04	1.78615-04	1.25217-05	1.01780-09	1.99747-13	4.00224-03	1.15436+00
1.05081+04	1.78624-04	1.26209-05	1.01885-09	2.01476-13	3.98451-03	1.15412+00
1.07865+04	1.82699-04	1.27384-05	1.01944-09	2.12667-13	3.96549-03	1.15385+00
1.10709+04	1.92489-04	1.28473-05	1.01933-09	2.38280-13	3.94512-03	1.15355+00
1.13615+04	2.08716-04	1.29570-05	1.01853-09	2.82835-13	3.92339-03	1.15689+00
1.16587+04	2.30129-04	1.30686-05	1.01708-09	3.46941-13	3.90035-03	1.15651+00
1.19624+04	2.53387-04	1.31876-05	1.01543-09	4.24240-13	3.87583-03	1.15610+00
1.22726+04	2.75822-04	1.33212-05	1.01390-09	5.07507-13	3.84943-03	1.15567+00
1.25892+04	2.96662-04	1.34732-05	1.01260-09	5.93549-13	3.82094-03	1.15159+00
1.29120+04	3.14931-04	1.36483-05	1.01172-09	6.77295-13	3.79011-03	1.15469+00
1.32406+04	3.27952-04	1.38556-05	1.01163-09	7.45256-13	3.75659-03	1.15414+00
1.35743+04	3.33896-04	1.41047-05	1.01262-09	7.86252-13	3.71985-03	1.15354+00
1.39125+04	3.34538-04	1.43993-05	1.01442-09	8.05757-13	3.67910-03	1.15287+00
1.42546+04	3.52924-04	1.47430-05	1.01663-09	8.17050-13	3.63341-03	1.15121+00
1.45997+04	3.32718-04	1.51435-05	1.01890-09	8.38210-13	3.58152-03	1.15126+00
1.49470+04	3.39376-04	1.56071-05	1.02050-09	8.99047-13	3.52180-03	1.15026+00
1.52954+04	3.56425-04	1.61502-05	1.02095-09	1.02687-12	3.45220-03	1.14907+00
1.56432+04	3.82499-04	1.68639-05	1.02027-09	1.23550-12	3.36966-03	1.17305+00
1.59873+04	4.15261-04	1.78029-05	1.01884-09	1.53785-12	3.26969-03	1.17078+00
1.63238+04	4.53621-04	1.90954-05	1.01714-09	1.96863-12	3.14377-02	1.16788+00
1.66464+04	4.95983-04	2.10672-05	1.01565-09	2.59632-12	2.97436-03	1.16394+00
1.69450+04	5.43309-04	2.44368-05	1.01496-09	3.61456-12	2.73272-03	1.15824+00
1.72097+04	5.95642-04	2.96276-05	1.01547-09	5.26653-12	2.44005-03	1.15123+00
1.74351+04	6.56375-04	3.76609-05	1.01723-09	8.13590-12	2.11302-03	1.18964+00
1.76143+04	7.18956-04	5.34250-05	1.02022-09	1.38298-11	1.75536-03	1.17255+00
1.77506+04	7.59919-04	7.36649-05	1.02405-09	2.12754-11	1.49153-03	1.15767+00
1.78627+04	7.73427-04	8.94340-05	1.02739-09	2.67493-11	1.35869-03	1.14389+00
1.79652+04	7.73344-04	1.00878-04	1.03052-09	3.01656-11	1.28512-03	1.14524+00
1.80636+04	7.70069-04	1.12007-04	1.03369-09	3.32106-11	1.21952-03	1.14130+00
1.81587+04	7.67341-04	1.24252-04	1.03551-09	3.65807-11	1.14919-03	1.15472+00
1.82513+04	7.67134-04	1.36819-04	1.03640-09	4.02586-11	1.07835-03	1.17124+00
1.83420+04	7.70133-04	1.49308-04	1.03651-09	4.42779-11	1.01198-03	1.19610+00
1.84318+04	7.75771-04	1.61337-04	1.03554-09	4.85489-11	9.53427-04	1.19357+00
1.85214+04	7.84307-04	1.73527-04	1.03443-09	5.33739-11	9.02903-04	1.19263+00
1.86113+04	7.94769-04	1.85303-04	1.03237-09	5.85266-11	8.59940-04	1.16035+00
1.87016+04	8.05921-04	1.98867-04	1.03107-09	6.45863-11	8.23102-04	1.15698+00
1.87923+04	8.16662-04	2.12128-04	1.03018-09	7.07404-11	7.91374-04	1.15395+00
1.88838+04	8.25299-04	2.26143-04	1.03033-09	7.70165-11	7.64624-04	1.12319+00
1.89758+04	8.30393-04	2.42373-04	1.03271-09	8.34934-11	7.40796-04	1.12056+00
1.90682+04	8.30255-04	2.58762-04	1.03712-09	8.91853-11	7.19785-04	1.11819+00
1.91615+04	8.27236-04	2.75300-04	1.04363-09	9.41973-11	7.01287-04	1.11607+00
1.92559+04	8.21893-04	2.91688-04	1.04993-09	9.85203-11	6.84751-04	1.11138+00
1.93518+04	8.18547-04	3.08874-04	1.05639-09	1.03476-10	6.69194-04	1.10954+00
1.94492+04	8.20438-04	3.26181-04	1.05977-09	1.09780-10	6.53721-04	1.10767+00
1.95485+04	8.27480-04	3.43952-04	1.05887-09	1.17760-10	6.37611-04	1.10567+00
1.96493+04	8.39402-04	3.64125-04	1.05694-09	1.20289-10	6.20285-04	1.10349+00
1.97515+04	8.53175-04	3.88665-04	1.05617-09	1.41538-10	6.00591-04	1.12589+00
1.98544+04	8.65178-04	4.13077-04	1.05613-09	1.54607-10	5.79565-04	1.12386+00
1.99582+04	8.70923-04	4.41072-04	1.05972-09	1.67278-10	5.58352-04	1.12191+00

TABLE 39 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 6.80000+06 SHAKES

PAGE 3

RADIUS (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
2.00623+04	8.68321-04	4.74125-04	1.06837-09	1.78743-10	5.36884-04	1.12006+00
2.01661+04	8.62040-04	5.12192-04	1.08018-09	1.90311-10	5.14734-04	1.17710+00
2.02698+04	8.58878-04	5.48775-04	1.09165-09	2.02408-10	4.92462-04	1.17617+00
2.03739+04	8.64346-04	5.86703-04	1.09835-09	2.19169-10	4.70093-04	1.17518+00
2.04788+04	8.77883-04	6.24435-04	1.09926-09	2.40640-10	4.48230-04	1.17415+00
2.05848+04	8.93622-04	6.62986-04	1.09733-09	2.64736-10	4.27362-04	1.17984+00
2.06919+04	9.05585-04	7.06201-04	1.09645-09	2.89579-10	4.07698-04	1.17718+00
2.07998+04	9.10193-04	7.55058-04	1.10246-09	3.12765-10	3.89639-04	1.17461+00
2.09077+04	9.09483-04	8.13116-04	1.12058-09	3.36289-10	3.73401-04	1.17214+00
2.10155+04	9.09697-04	8.75228-04	1.14182-09	3.62148-10	3.58594-04	1.16980+00
2.11237+04	9.16430-04	9.31613-04	1.15267-09	3.91219-10	3.44743-04	1.16762+00
2.12337+04	9.31436-04	9.78028-04	1.15161-09	4.24299-10	3.31517-04	1.16807+00
2.13464+04	9.48301-04	1.02511-03	1.15057-09	4.60955-10	3.19069-04	1.16680+00
2.14614+04	9.55904-04	1.08145-03	1.16119-09	4.94090-10	3.07909-04	1.16587+00
2.15780+04	9.54442-04	1.1515-03	1.18667-09	5.24326-10	2.97929-04	1.16533+00
2.16958+04	9.55957-04	1.22416-03	1.21295-09	5.59357-10	2.88419-04	1.16491+00
2.18155+04	9.69433-04	1.28359-03	1.21946-09	6.03226-10	2.78477-04	1.16420+00
2.19382+04	9.89149-04	1.34358-03	1.22074-09	6.57348-10	2.68153-04	1.16235+00
2.20629+04	9.98410-04	1.43229-03	1.23917-09	7.13869-10	2.56989-04	1.23912+00
2.21870+04	9.98423-04	1.56248-03	1.28264-09	7.78778-10	2.44134-04	1.23926+00
2.23098+04	1.00685-03	1.68683-03	1.31092-09	8.55077-10	2.31364-04	1.23936+00
2.24329+04	1.02572-03	1.79398-03	1.31634-09	9.43823-10	2.18671-04	1.23940+00
2.25568+04	1.04037-03	1.91785-03	1.33298-09	1.03794-09	2.07332-04	1.23950+00
2.26801+04	1.04370-03	2.08993-03	1.38509-09	1.13829-09	1.97854-04	1.23975+00
2.28020+04	1.04964-03	2.26100-03	1.43285-09	1.24558-09	1.89300-04	1.24001+00
2.29247+04	1.06911-03	2.38343-03	1.44159-09	1.36233-09	1.80774-04	1.24013+00
2.30492+04	1.08452-03	2.53049-03	1.47131-09	1.48817-09	1.73874-04	1.24033+00
2.31737+04	1.08740-03	2.75000-03	1.54302-09	1.62587-09	1.67722-04	1.29802+00
2.32974+04	1.09696-03	2.95741-03	1.59588-09	1.77950-09	1.61148-04	1.29766+00
2.34219+04	1.11792-03	3.13438-03	1.61786-09	1.95881-09	1.53978-04	1.29738+00
2.35471+04	1.13013-03	3.37456-03	1.67652-09	2.15497-09	1.48062-04	1.29710+00
2.36711+04	1.13442-03	3.68691-03	1.77776-09	2.37237-09	1.43549-04	1.29682+00
2.37947+04	1.15038-03	3.91708-03	1.82119-09	2.59217-09	1.38246-04	1.29664+00
2.39200+04	1.16756-03	4.14813-03	1.85800-09	2.82741-09	1.33033-04	1.29650+00
2.40454+04	1.17140-03	4.50326-03	1.96592-09	3.08965-09	1.29518-04	1.29632+00
2.41703+04	1.18050-03	4.83407-03	2.05176-09	3.36859-09	1.25760-04	1.29618+00
2.42968+04	1.20010-03	5.06967-03	2.08230-09	3.65101-09	1.21556-04	1.29611+00
2.44242+04	1.20864-03	5.49576-03	2.20611-09	4.01415-09	1.18662-04	1.29599+00
2.45505+04	1.21743-03	5.95791-03	2.34089-09	4.41546-09	1.15987-04	1.29588+00
2.46828+04	1.18159-03	5.78949-03	2.39473-09	4.04752-09	1.09944-04	1.29600+00
2.49165+04	7.64605-04	2.59660-03	1.73669-09	9.38210-10	6.00418-05	1.37024+00
2.53943+04	2.11267-04	1.42681-03	2.95945-10	5.54269-11	2.51266-05	1.37010+00
2.60630+04	1.53181-05	1.29972-03	1.10436-10	2.82165-13	2.35884-05	1.36992+00
2.67649+04	6.17260-07	1.29322-03	1.02100-10	4.59881-16	2.35415-05	1.36972+00
2.75289+04	2.19771-08	1.29299-03	1.01777-10	5.87763-19	2.35400-05	1.36972+00
2.82832+04	6.74495-10	1.29299-03	1.01766-10	5.74807-22	2.35400-05	1.36972+00
2.90375+04	7.79021-12	1.29299-03	1.01766-10	7.84683-26	2.35400-05	1.36972+00

TABLE 40

J15 SER1ES 7 PROBLEM 82
T= 7.00000+06 SHAKES

PAGE 1

RAD1US (CM)	VEL (CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
8.25876+02	-1.81125-05	3.55948-05	9.90732-10	1.16774-14	4.23466-03	1.14875+00
1.82016+03	-7.09749-06	3.53546-05	9.74059-10	1.50882-14	4.22323-03	1.14840+00
2.08385+03	2.52125-05	3.53257-05	9.72286-10	1.14067-14	4.22058-03	1.14833+00
2.24018+03	2.65171-05	3.53048-05	9.71102-10	1.24747-14	4.21892-03	1.14829+00
2.34248+03	2.51731-05	3.53386-05	9.71590-10	1.12018-14	4.21776-03	1.14827+00
2.41247+03	2.55978-05	3.53840-05	9.72520-10	1.15928-14	4.21694-03	1.14827+00
2.46160+03	2.60536-05	3.54269-05	9.73522-10	1.20301-14	4.21635-03	1.14827+00
2.54872+03	2.89624-05	1.09591-05	9.74560-10	4.62644-15	4.21536-03	1.15683+00
2.68082+03	3.01875-05	1.09800-05	9.75762-10	5.00983-15	4.21384-03	1.15682+00
2.81061+03	2.78791-05	1.10019-05	9.77016-10	4.20336-15	4.21225-03	1.15682+00
2.93888+03	2.65765-05	1.10264-05	9.78468-10	3.89409-15	4.21059-03	1.15681+00
3.06623+03	2.70425-05	1.10534-05	9.80089-10	4.04351-15	4.20885-03	1.15681+00
3.19318+03	2.74318-05	1.10798-05	9.81637-10	4.16900-15	4.20703-03	1.15680+00
3.32017+03	2.66524-05	1.11048-05	9.83017-10	3.94607-15	4.20511-03	1.15680+00
3.44757+03	2.61887-05	1.11310-05	9.84456-10	3.81718-15	4.20308-03	1.15679+00
3.57571+03	2.62768-05	1.11566-05	9.85800-10	3.85166-15	4.20093-03	1.15677+00
3.70487+03	2.55699-05	1.11804-05	9.86938-10	3.65750-15	4.19865-03	1.15676+00
3.83534+03	2.50163-05	1.12035-05	9.87957-10	3.50575-15	4.19623-03	1.15674+00
3.96734+03	2.53356-05	1.12271-05	9.88953-10	3.60353-15	4.19366-03	1.15671+00
4.10110+03	2.54897-05	1.12486-05	9.89719-10	3.65426-15	4.19092-03	1.15668+00
4.23682+03	2.53280-05	1.12685-05	9.90276-10	3.61449-15	4.18801-03	1.15665+00
4.37473+03	2.51522-05	1.12870-05	9.90639-10	3.57029-15	4.18491-03	1.15661+00
4.51501+03	2.57715-05	1.13039-05	9.90785-10	3.75649-15	4.18162-03	1.15657+00
4.65787+03	2.91291-05	1.13166-05	9.90503-10	4.84154-15	4.17812-03	1.15651+00
4.80352+03	3.50144-05	1.13246-05	9.89754-10	7.00041-15	4.17443-03	1.15645+00
4.95215+03	4.14117-05	1.14334-05	9.89002-10	9.77551-15	4.17054-03	1.15638+00
5.10391+03	4.89523-05	1.13412-05	9.88083-10	1.36962-14	4.16646-03	1.15631+00
5.25896+03	5.80912-05	1.13477-05	9.86902-10	1.92768-14	4.16217-03	1.15624+00
5.41746+03	6.80608-05	1.13551-05	9.85871-10	2.64526-14	4.15769-03	1.15616+00
5.57955+03	7.83400-05	1.13627-05	9.84705-10	3.50147-14	4.15301-03	1.15608+00
5.74535+03	8.85642-05	1.13723-05	9.83620-10	4.47495-14	4.14811-03	1.15599+00
5.91501+03	9.83614-05	1.13826-05	9.82510-10	5.51870-14	4.14300-03	1.15590+00
6.08863+03	1.07349-04	1.13954-05	9.81513-10	6.57649-14	4.13766-03	1.15582+00
6.26635+03	1.15558-04	1.14106-05	9.80622-10	7.60007-14	4.13207-03	1.15572+00
6.44825+03	1.22236-04	1.14289-05	9.79875-10	8.54415-14	4.12621-03	1.15563+00
6.63445+03	1.27993-04	1.14517-05	9.79377-10	9.38389-14	4.12007-03	1.15553+00
6.82503+03	1.32559-04	1.14791-05	9.79131-10	1.00877-13	4.11362-03	1.15544+00
7.02003+03	1.35866-04	1.15113-05	9.79143-10	1.06257-13	4.10684-03	1.15534+00
7.21960+03	1.37859-04	1.15496-05	9.79490-10	1.09753-13	4.09968-03	1.15524+00
7.42373+03	1.38417-04	1.15937-05	9.80135-10	1.11063-13	4.09212-03	1.15514+00
7.63251+03	1.37453-04	1.16436-05	9.81049-10	1.09964-13	4.08411-03	1.15504+00
7.84601+03	1.35448-04	1.16985-05	9.82154-10	1.07319-13	4.07558-03	1.15494+00
8.06432+03	1.32921-04	1.17579-05	9.83368-10	1.03880-13	4.06650-03	1.15482+00
8.28755+03	1.30063-04	1.18204-05	9.84561-10	9.99907-14	4.05679-03	1.15470+00
8.51582+03	1.27569-04	1.18852-05	9.85647-10	9.67157-14	4.04641-03	1.15456+00
8.74928+03	1.26697-04	1.19509-05	9.86476-10	9.59192-14	4.03530-03	1.15441+00
8.98812+03	1.28872-04	1.20163-05	9.86942-10	9.98084-14	4.02342-03	1.15425+00
9.23254+03	1.34949-04	1.20806-05	9.86967-10	1.10101-13	4.01075-03	1.15407+00
9.48274+03	1.45298-04	1.21435-05	9.86535-10	1.28424-13	3.99727-03	1.15387+00
9.73893+03	1.59738-04	1.22051-05	9.85633-10	1.56119-13	3.98299-03	1.15365+00

TABLE 40 (Cont.)

J15 SERIES 7 PROBLEM 82
T= 7.00000+06 SHAKES

PAGE 2

RADIUS (CM)	VEL (CM/S)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP (KV)	GAMMA 2
1.00014+04	1.77007-04	1.22671-05	9.84414-10	1.92681-13	3.96792-03	1.15341+00
1.02701+04	1.95424-04	1.23326-05	9.83100-10	2.36026-13	3.95205-03	1.15317+00
1.05453+04	2.13299-04	1.24047-05	9.81917-10	2.82640-13	3.93536-03	1.15291+00
1.08270+04	2.29673-04	1.24867-05	9.81087-10	3.29715-13	3.91783-03	1.15264+00
1.11150+04	2.44733-04	1.25784-05	9.80553-10	3.77020-13	3.89940-03	1.15237+00
1.14095+04	2.56858-04	1.26831-05	9.80471-10	4.18543-13	3.87990-03	1.15208+00
1.17103+04	2.64172-04	1.28061-05	9.81071-10	4.46887-13	3.85901-03	1.15178+00
1.20171+04	2.66155-04	1.29494-05	9.82303-10	4.58659-13	3.83650-03	1.15527+00
1.23296+04	2.64069-04	1.31177-05	9.84114-10	4.57384-13	3.81205-03	1.15488+00
1.26477+04	2.61098-04	1.33059-05	9.86135-10	4.53558-13	3.78529-03	1.15446+00
1.29711+04	2.59707-04	1.35110-05	9.87927-10	4.55645-13	3.75580-03	1.15398+00
1.32998+04	2.62643-04	1.37329-05	9.89201-10	4.73718-13	3.72310-03	1.15345+00
1.36337+04	2.72997-04	1.39700-05	9.89547-10	5.20951-13	3.68667-03	1.15285+00
1.39727+04	2.91657-04	1.42254-05	9.88858-10	6.05937-13	3.64598-03	1.15217+00
1.43167+04	3.16766-04	1.45106-05	9.87478-10	7.29387-13	3.60040-03	1.15140+00
1.46650+04	3.45651-04	1.48402-05	9.85754-10	8.88196-13	3.54906-03	1.15052+00
1.50169+04	3.75694-04	1.52336-05	9.84042-10	1.07679-12	3.49071-03	1.14952+00
1.53710+04	4.01835-04	1.57236-05	9.82716-10	1.27043-12	3.42361-03	1.17371+00
1.57246+04	4.21918-04	1.64159-05	9.82631-10	1.46179-12	3.34519-03	1.17194+00
1.60744+04	4.36667-04	1.73261-05	9.83619-10	1.65215-12	3.25089-03	1.16981+00
1.64163+04	4.47009-04	1.85832-05	9.85708-10	1.85681-12	3.13276-03	1.16713+00
1.67442+04	4.58544-04	2.04657-05	9.88692-10	2.15209-12	2.97494-03	1.16351+00
1.70490+04	4.80807-04	2.35542-05	9.91789-10	2.72531-12	2.75231-03	1.15831+00
1.73217+04	5.21579-04	2.82174-05	9.93968-10	3.84739-12	2.47908-03	1.15178+00
1.75578+04	5.77357-04	3.50045-05	9.94375-10	5.85022-12	2.17250-03	1.14435+00
1.77496+04	6.46934-04	4.85746-05	9.96410-10	1.02024-11	1.82144-03	1.17631+00
1.78958+04	7.09204-04	6.85602-05	9.96942-10	1.72599-11	1.52580-03	1.16003+00
1.80125+04	7.42111-04	8.59853-05	9.96315-10	2.36816-11	1.36178-03	1.14359+00
1.81168+04	7.57767-04	9.80787-05	9.95125-10	2.81605-11	1.27828-03	1.14391+00
1.82162+04	7.67769-04	1.09091-04	9.94188-10	3.21540-11	1.20928-03	1.13961+00
1.83124+04	7.75531-04	1.20856-04	9.92988-10	3.63451-11	1.13742-03	1.15245+00
1.84060+04	7.81995-04	1.32822-04	9.92543-10	4.06120-11	1.06718-03	1.17024+00
1.84980+04	7.87354-04	1.44693-04	9.92630-10	4.48498-11	1.00205-03	1.19593+00
1.85891+04	7.90908-04	1.56268-04	9.93177-10	4.88756-11	9.45486-04	1.19704+00
1.86800+04	7.92152-04	1.68182-04	9.95407-10	5.27674-11	8.97194-04	1.19361+00
1.87710+04	7.90736-04	1.80199-04	9.98515-10	5.63360-11	8.56228-04	1.16086+00
1.88621+04	7.87123-04	1.94081-04	1.00314-09	6.01231-11	8.20762-04	1.15746+00
1.89533+04	7.83192-04	2.07748-04	1.00778-09	6.37156-11	7.90136-04	1.15438+00
1.90449+04	7.80209-04	2.22615-04	1.01299-09	6.77556-11	7.63721-04	1.12311+00
1.91367+04	7.80184-04	2.38821-04	1.01690-09	7.26838-11	7.40141-04	1.12051+00
1.92291+04	7.85060-04	2.54521-04	1.01922-09	7.84347-11	7.18992-04	1.11813+00
1.93226+04	7.94853-04	2.69359-04	1.01907-09	8.50941-11	6.99953-04	1.11595+00
1.94178+04	8.07554-04	2.83817-04	1.01812-09	9.25510-11	6.82889-04	1.11086+00
1.95150+04	8.20760-04	2.98612-04	1.01609-09	1.00586-10	6.66705-04	1.10886+00
1.96143+04	8.32340-04	3.14425-04	1.01516-09	1.08919-10	6.50887-04	1.10690+00
1.97155+04	8.39154-04	3.31891-04	1.01459-09	1.16856-10	6.34695-04	1.10488+00
1.98180+04	8.39970-04	3.53225-04	1.01742-09	1.24609-10	6.17386-04	1.10274+00
1.99211+04	8.35141-04	3.79593-04	1.02487-09	1.32378-10	5.97977-04	1.12505+00
2.00243+04	8.28196-04	4.06007-04	1.03369-09	1.39244-10	5.77789-04	1.12326+00
2.01279+04	8.25281-04	4.35555-04	1.04260-09	1.48326-10	5.56878-04	1.12144+00

TABLE 40 (Cont.)

J15	SERIES	7	PROBLEM	82		PAGE 3
T=	7.00000+06		SHAKES			
RA01US(CM)	VEL(CM/SH)	RHO(GM/CC)	P(JERKS/CC)	DYN P(JERKS/CC)	TEMP(KV)	GAMMA 2
2.02316+04	8.30181-04	4.67535-04	1.04867-09	1.61118-10	5.35132-04	1.11950+00
2.03356+04	8.41796-04	5.00799-04	1.05003-09	1.77451-10	5.12172-04	1.17641+00
2.04405+04	8.55521-04	5.30488-04	1.04799-09	1.94149-10	4.89483-04	1.17519+00
2.05468+04	8.67406-04	5.62729-04	1.04617-09	2.11704-10	4.67183-04	1.17403+00
2.06543+04	8.74779-04	5.98796-04	1.04798-09	2.29113-10	4.45854-04	1.17302+00
2.07625+04	8.76525-04	6.41498-04	1.05759-09	2.46430-10	4.25898-04	1.17993+00
2.08706+04	8.74969-04	6.92551-04	1.07404-09	2.63099-10	4.07225-04	1.17728+00
2.09783+04	8.76054-04	7.45935-04	1.08903-09	2.86243-10	3.89511-04	1.17469+00
2.10862+04	8.83717-04	7.96002-04	1.09451-09	3.10833-10	3.72580-04	1.17221+00
2.11955+04	8.97335-04	8.41443-04	1.09125-09	3.38797-10	3.56656-04	1.16988+00
2.13066+04	9.12926-04	8.87543-04	1.09056-09	3.69860-10	3.42445-04	1.16837+00
2.14196+04	9.22411-04	9.39427-04	1.10081-09	3.99654-10	3.29957-04	1.16719+00
2.15339+04	9.22203-04	1.00105-03	1.12156-09	4.25680-10	3.18479-04	1.16632+00
2.16491+04	9.21830-04	1.06612-03	1.14363-09	4.52980-10	3.07590-04	1.16558+00
2.17660+04	9.31245-04	1.12353-03	1.15402-09	4.87204-10	2.96914-04	1.16475+00
2.18658+04	9.48265-04	1.17036-03	1.15070-09	5.26248-10	2.86384-04	1.16377+00
2.20088+04	9.61455-04	1.22712-03	1.15693-09	5.67182-10	2.76564-04	1.16305+00
2.21338+04	9.62673-04	1.30735-03	1.18241-09	6.05790-10	2.67099-04	1.16186+00
2.22589+04	9.63176-04	1.41205-03	1.21689-09	6.54992-10	2.55991-04	1.23901+00
2.23839+04	9.76620-04	1.50654-03	1.22694-09	7.18542-10	2.42205-04	1.23901+00
2.25100+04	9.95533-04	1.60279-03	1.23162-09	7.94308-10	2.28797-04	1.23902+00
2.26363+04	1.00500-03	1.72772-03	1.25771-09	8.72522-10	2.16980-04	1.23914+00
2.27614+04	1.00576-03	1.88393-03	1.30484-09	9.52847-10	2.06623-04	1.23938+00
2.28855+04	1.01936-03	2.02673-03	1.33386-09	1.04463-09	1.96478-04	1.23955+00
2.30105+04	1.03619-03	2.14209-03	1.34043-09	1.15011-09	1.86943-04	1.23964+00
2.31367+04	1.04712-03	2.29150-03	1.37368-09	1.25626-09	1.79203-04	1.23986+00
2.32625+04	1.04870-03	2.48238-03	1.43685-09	1.36504-09	1.73101-04	1.24020+00
2.33882+04	1.06096-03	2.65341-03	1.47321-09	1.49354-09	1.65919-04	1.29812+00
2.35151+04	1.08044-03	2.80484-03	1.49011-09	1.63722-09	1.58622-04	1.29780+00
2.36429+04	1.08889-03	3.02299-03	1.54402-09	1.79214-09	1.52365-04	1.29747+00
2.37693+04	1.09336-03	3.30405-03	1.63131-09	1.97494-09	1.47130-04	1.29715+00
2.38954+04	1.11148-03	3.50674-03	1.66571-09	2.16640-09	1.41385-04	1.29694+00
2.40229+04	1.12949-03	3.72631-03	1.70685-09	2.37695-09	1.36199-04	1.29676+00
2.41502+04	1.13406-03	4.06011-03	1.80702-09	2.61084-09	1.32191-04	1.29654+00
2.42767+04	1.14418-03	4.35931-03	1.88449-09	2.85375-09	1.28237-04	1.29639+00
2.44047+04	1.16331-03	4.57539-03	1.91000-09	3.09609-09	1.23691-04	1.29630+00
2.45340+04	1.17012-03	4.92908-03	2.00745-09	3.37440-09	1.20543-04	1.29617+00
2.46625+04	1.17677-03	5.34472-03	2.12740-09	3.70084-09	1.17654-04	1.29605+00
2.47919+04	1.19747-03	5.61685-03	2.16768-09	4.02748-09	1.13930-04	1.29600+00
2.49228+04	1.20345-03	6.02041-03	2.27135-09	4.35979-09	1.11258-04	1.29593+00
2.50918+04	9.76170-04	4.06536-03	2.28915-09	2.03635-09	9.03647-05	1.29648+00
2.54578+04	4.31373-04	1.69412-03	7.14042-10	2.46365-10	3.12914-05	1.37024+00
2.60694+04	5.64249-05	1.32078-03	1.37338-10	3.83869-12	2.37613-05	1.36996+00
2.67852+04	2.67450-06	1.29411-03	1.03229-10	8.59733-15	2.35477-05	1.36991+00
2.75289+04	1.02286-07	1.29301-03	1.01820-10	1.26647-17	2.35401-05	1.36972+00
2.82832+04	3.47139-09	1.29299-03	1.01768-10	1.47389-20	2.35400-05	1.36972+00
2.90375+04	9.65243-11	1.29299-03	1.01766-10	1.20467-23	2.35400-05	1.36972+00

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