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EQUATIONS, TABLES, AND FIGURES FOR USE IN THE ANALYSIS OF HELIUM FLOW AT SUPERSONIC AND HYPERSONIC SPEEDS

By James N. Mueller

Langley Aeronautical Laboratory
Langley Field, Va.

Washington
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EQUATIONS, TABLES, AND FIGURES FOR USE IN THE ANALYSIS OF HELIUM FLOW AT SUPERSONIC AND HYPERSONIC SPEEDS

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SUMMARY

This report presents equations, tables, and figures for use in the analysis of helium flow at supersonic and hypersonic speeds. The contents of the report and presentation of the data parallel that of a similar reference work (NACA Rep. 1135) prepared for air flow.

The perfect-gas relations for continuous one-dimensional flow, normal- and oblique-shock waves, and Prandtl-Meyer expansions are the same as for air but are presented here for completeness. The tables present the values of useful dimensionless ratios for continuous one-dimensional flow and for normal-shock waves as functions of Mach number. The helium viscosity relation as a function of temperature, mass-flow rates as a function of Mach number and temperature, and the Reynolds number as a function of Mach number and stagnation temperature are plotted. The oblique-shock characteristics of wedges and cones in helium at Mach numbers of 12, 16, 20, and 24 are presented in a series of plots. Throughout all the computations, helium is considered to be a perfect gas.

INTRODUCTION

The use of helium as a flow medium in wind-tunnel investigations has proved to be feasible for the purpose of attaining test Mach numbers much higher than is now possible in air. (See ref. 1.) Test results (refs. 2 and 3) have shown the usefulness of helium tunnels in fundamental gas-dynamics studies, and the use of helium in conventional aerodynamic studies appears to be promising (ref. 4). In reference 4, the results of a study of the inviscid effects of the difference in the ratio of specific heats for helium and air have indicated that the conversion of experimental force data obtained in helium to equivalent data obtained in air might not be overly complex. The potentiality, then, of the increased use of helium test facilities has produced the need for a reference work containing the flow properties of helium and related information.

The purpose of the present report is to compile a reference work for helium similar to that of reference 5 which is for air. The form of the report follows, in general, that of reference 5; however, derivations of the various fundamental thermodynamic and compressible-flow relationships included in reference 5, which are also applicable for helium, are omitted in the present work and only perfect-gas effects are considered. Maximum use of the tabular form of data presentation is made in order to present the various flow quantities as accurately as possible. Figures are used to present viscosity-temperature relations; mass-flow rates; Reynolds number, Mach number, and temperature relations; and illustrations of two- and three-dimensional oblique-shock relations. The Mach number range covered by the tables and figures is from 1 to 40. Also included is a short bibliography of several sources of information pertaining to the characteristics of helium gas.

SYMBOLS

A	cross-sectional area of stream tube or channel, sq in.
a	speed of sound, ft/sec
c_p	specific heat at constant pressure, $ft^2/sec^2\text{-}^oR$
c_v	specific heat at constant volume, $ft^2/sec^2\text{-}^oR$
l	characteristic reference length, ft
M	Mach number, V/a
N_{Re}	Reynolds number, $\rho V l/\eta$
p	pressure, lb/sq ft
q	dynamic pressure, $\frac{\gamma}{2} pM^2$
R	gas constant
T	absolute temperature, ^oR
t	temperature, ^oF
V	speed of flow, ft/sec
V_0	maximum speed obtainable by expanding to zero absolute pressure

γ ratio of specific heats, c_p/c_v

δ angle of flow deflection across an oblique-shock wave or wedge angle, deg

ϵ shock-wave angle measured from upstream flow direction, deg

η absolute viscosity, slugs/ft-sec

μ Mach angle, $\sin^{-1}\frac{1}{M}$

ν Prandtl-Meyer angle (angle through which a supersonic stream is turned to expand from $M = 1$ to $M > 1$), deg

ρ mass density, slugs/cu ft

σ semivertex angle of cone, deg

Subscripts and superscripts:

c conditions on surface of cone

t total conditions (that is, conditions that would exist if the gas were brought to rest isentropically)

1 condition just upstream of shock wave

2 condition just downstream of shock wave

∞ free-stream conditions

* critical conditions (that is, conditions where local speed is equal to local speed of sound)

FUNDAMENTAL FLOW EQUATIONS

The fundamental flow equations are applicable for all perfect gases and have been given in many other publications (for example, ref. 5); however, they are presented herein for completeness.

Continuous One-Dimensional Flow

The basic equations for the continuous flow of an inviscid perfect gas along a streamline are given in reference 5, along with useful relations expressing various dimensionless ratios as functions of a single

parameter. These dimensionless relations are given below with the Mach number used as the independent variable. In each case the second form of the equation applies for $\gamma = 5/3$.

The notation in brackets [ ] after the equations signifies that the equation is valid only within certain limitations. For example,

[perf] the equation is restricted to a gas which is both thermally and calorically perfect

[isen] the flow process must take place isentropically

[adiab] the only restriction on the flow process is that it must take place adiabatically - that is, without heat transfer.

$$\frac{p}{p_t} = \left(1 + \frac{\gamma - 1}{2} M^2\right)^{-\frac{\gamma}{\gamma-1}} = \left(1 + \frac{M^2}{3}\right)^{-5/2} \qquad \text{[isen, perf]} \qquad (1)$$

$$\frac{\rho}{\rho_t} = \left(1 + \frac{\gamma - 1}{2} M^2\right)^{-\frac{\gamma}{\gamma-1}} = \left(1 + \frac{M^2}{3}\right)^{-3/2} \qquad \text{[isen, perf]} \qquad (2)$$

$$\frac{T}{T_t} = \left(1 + \frac{\gamma - 1}{2} M^2\right)^{-1} = \left(1 + \frac{M^2}{3}\right)^{-1} \qquad \text{[adiab, perf]} \qquad (3)$$

$$\frac{a}{a_t} = \left(1 + \frac{\gamma - 1}{2} M^2\right)^{-1/2} = \left(1 + \frac{M^2}{3}\right)^{-1/2} \qquad \text{[adiab, perf]} \qquad (4)$$

$$\frac{q}{p_t} = \frac{\gamma}{2} M^2\left(1 + \frac{\gamma - 1}{2} M^2\right)^{-\frac{\gamma}{\gamma-1}} = \frac{5}{6} M^2\left(1 + \frac{M^2}{3}\right)^{-5/2} \qquad \text{[isen, perf]} \qquad (5)$$

$$\frac{A^*}{A} = \left(\frac{\gamma + 1}{2}\right)^{\frac{\gamma+1}{2(\gamma-1)}} M\left(1 + \frac{\gamma - 1}{2} M^2\right)^{-\frac{\gamma+1}{2(\gamma-1)}} = \frac{16}{9} M\left(1 + \frac{M^2}{3}\right)^{-2} \qquad \text{[isen, perf]}$$

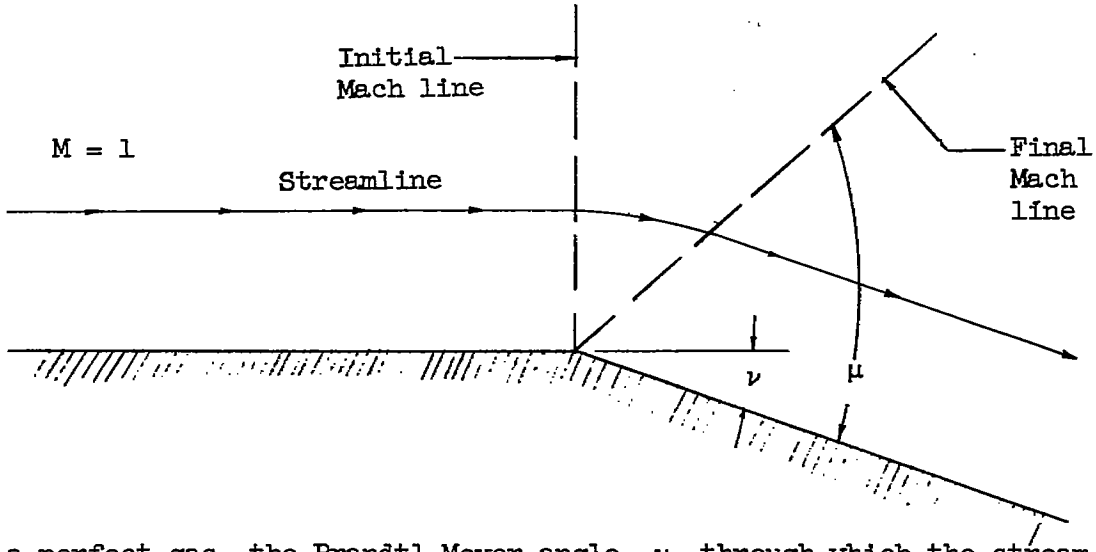
(6)

$$\left(\frac{V}{V_0}\right)^2 = \frac{\gamma - 1}{2} M^2\left(1 + \frac{\gamma - 1}{2} M^2\right)^{-1} = \frac{M^2}{3}\left(1 + \frac{M^2}{3}\right)^{-1} \qquad \text{[adiab, perf]} \quad (7)$$

$$\left(\frac{V}{a^*}\right)^2 = \frac{\gamma + 1}{2} M^2\left(1 + \frac{\gamma - 1}{2} M^2\right)^{-1} = \frac{4M^2}{3}\left(1 + \frac{M^2}{3}\right)^{-1} \qquad \text{[adiab, perf]} \quad (8)$$

Prandtl-Meyer Expansion

A uniform two-dimensional supersonic stream flowing over a convex bend expands isentropically. A convenient relation for the Prandtl-Meyer angle ν through which the stream turns can be found by considering the special case of a stream at a Mach number of 1 flowing around a corner. See the following sketch of the Prandtl-Meyer expansion:



For a perfect gas, the Prandtl-Meyer angle ν through which the stream turns in expanding from a Mach number of 1 to a supersonic Mach number is

$$\nu = \sqrt{\frac{\gamma + 1}{\gamma - 1}} \tan^{-1}\sqrt{\frac{\gamma - 1}{\gamma + 1}\left(M^2 - 1\right)} - \tan^{-1}\sqrt{M^2 - 1} = \tan^{-1}\frac{\left(M^2 - 1\right)^{3/2}}{3M^2 + 1} \qquad (9a)$$

As a matter of interest an analytic inversion of the Prandtl-Meyer equation (eq. (9a)) is possible for values of specific-heat ratio of 5/3 and 5/4; and the Langley Laboratory has used the inverted equation for $\gamma = 5/3$ in the form

$$\tan \mu = \frac{1}{2}\left[\left(\frac{\cos \nu + 1}{\sin \nu}\right)^{1/3} + \left(\frac{\cos \nu - 1}{\sin \nu}\right)^{1/3}\right] \tag{9b}$$

for some time. Recently, a formal presentation of the analytic inversion of equation (9a) for $\gamma = 5/3$ and $\gamma = 5/4$ by Probstein (ref. 6) has become available. For $\gamma = 5/3$, the inverted equation is given in the form

$$M = \frac{1 + \left(\tan \frac{\nu}{2}\right)^{2/3}}{1 - \left(\tan \frac{\nu}{2}\right)^{2/3}} \tag{9c}$$

The usefulness of the inverted equation is readily seen in that it allows the local Mach number to be expressed explicitly as a function of the turning angle. The Mach angle of the flow μ is given, of course, by the relation

$$\mu = \sin^{-1} \frac{1}{M} \tag{10}$$

Normal-Shock-Wave Relations

Many of the more useful relations for normal-shock waves are conveniently expressed in terms of upstream Mach number M_1. The following relations, using M_1 as the independent variable, apply to adiabatic flow of a perfect fluid:

$$M_2^2 = \frac{(\gamma - 1)M_1^2 + 2}{2\gamma M_1^2 - (\gamma - 1)} = \frac{M_1^2 + 3}{5M_1^2 - 1} \tag{11}$$

$$\frac{p_2}{p_1} = \frac{2\gamma M_1^2 - (\gamma - 1)}{\gamma + 1} = \frac{5M_1^2 - 1}{4} \tag{12}$$

$$\frac{\rho_2}{\rho_1} = \frac{(\gamma + 1)M_1^2}{(\gamma - 1)M_1^2 + 2} = \frac{4M_1^2}{M_1^2 + 3} \tag{13}$$

$$\frac{T_2}{T_1} = \frac{\left[2\gamma M_1^2 - (\gamma - 1)\right]\left[(\gamma - 1)M_1^2 + 2\right]}{(\gamma + 1)^2 M_1^2} = \frac{5M_1^4 + 14M_1^2 - 3}{16M_1^2} \tag{14}$$

$$\frac{p_{t,2}}{p_{t,1}} = \left[\frac{(\gamma + 1)M_1^2}{(\gamma - 1)M_1^2 + 2}\right]^{\frac{\gamma}{\gamma-1}}\left[\frac{\gamma + 1}{2\gamma M_1^2 - (\gamma - 1)}\right]^{\frac{1}{\gamma-1}} = \left(\frac{4M_1^2}{M_1^2 + 3}\right)^{5/2}\left(\frac{4}{5M_1^2 - 1}\right)^{3/2} \tag{15}$$

$$\frac{p_{t,2}}{p_1} = \left[\frac{(\gamma + 1)M_1^2}{2}\right]^{\frac{\gamma}{\gamma-1}}\left[\frac{\gamma + 1}{2\gamma M_1^2 - (\gamma - 1)}\right]^{\frac{1}{\gamma-1}} = \left(\frac{4M_1^2}{3}\right)^{5/2}\left(\frac{4}{5M_1^2 - 1}\right)^{3/2} \tag{16}$$

(Equation (16) is known as the supersonic pitot-tube equation or Rayleigh's formula.)

The values of the ratios presented in equations (1) to (16) are given in table I for the Mach number range 1 to 40 in 0.01 increments of Mach number.

Oblique-Shock-Wave Relations

An oblique-shock wave acts as a normal shock to the flow perpendicular to it; therefore, the pressure relations for normal-shock waves $\left(\text{except for the ratio of static pressure to total pressure } p_1/p_{t,2}\right)$ apply to oblique shocks if M_1 and M_2 are replaced by their normal components, $M_1 \sin \epsilon$ and $M_2 \sin (\epsilon - \delta)$ as shown below:

$$\frac{p_2}{p_1} = \frac{2\gamma M_1^2 \sin^2\epsilon - (\gamma - 1)}{\gamma + 1} = \frac{5M_1^2 \sin^2\epsilon - 1}{4} \tag{17}$$

$$\frac{\rho_2}{\rho_1} = \frac{(\gamma + 1)M_1^2 \sin^2\epsilon}{(\gamma - 1)M_1^2 \sin^2\epsilon + 2} = \frac{4M_1^2 \sin^2\epsilon}{M_1^2 \sin^2\epsilon + 3} \tag{18}$$

$$\frac{T_2}{T_1} = \frac{\left[2\gamma M_1^2 \sin^2\epsilon - (\gamma - 1)\right]\left[(\gamma - 1)M_1^2 \sin^2\epsilon + 2\right]}{(\gamma + 1)^2 M_1^2 \sin^2\epsilon}$$

$$= \frac{\left(5M_1^2 \sin^2\epsilon - 1\right)\left(M_1^2 \sin^2\epsilon + 3\right)}{16M_1^2 \sin^2\epsilon} \tag{19}$$

$$M_2^2\sin^2(\epsilon - \delta) = \frac{(\gamma - 1)M_1^2\sin^2\epsilon + 2}{2\gamma M_1^2\sin^2\epsilon - (\gamma - 1)} = \frac{M_1^2\sin^2\epsilon + 3}{5M_1^2\sin^2\epsilon - 1} \tag{20}$$

The deviation of the flow δ across an oblique shock is obtainable from the relation

$$\frac{1}{\tan\delta} = \left(\frac{\gamma + 1}{2}\frac{M_1^2}{M_1^2\sin^2\epsilon - 1} - 1\right)\tan\epsilon = \left(\frac{4}{3}\frac{M_1^2}{M_1^2\sin^2\epsilon - 1} - 1\right)\tan\epsilon \tag{21}$$

VISCOSITY RELATION AND THERMODYNAMIC CONSTANTS

Viscosity Relation

The equation for the determination of the viscosity of helium was taken from reference 7 and is as follows:

$$\eta = 8.315T^{0.647} \times 10^{-4} \tag{22}$$

where

η viscosity, lb(Mass)/hr-ft

T absolute temperature, $^{\circ}R$

$T = t + 459.69$

t temperature, $^{\circ}F$

The helium viscosity relation, converted to units of slugs per foot-second, is plotted in figure 1 for a range of temperature from 10° R to $1,300^{\circ}$ R. The converted equation is

$$\eta = 7.173T^{0.647} \times 10^{-9} \tag{22a}$$

where

T absolute temperature, $^{\circ}R$

η viscosity, slugs/ft-sec

Thermodynamic Constants

The value of the ratio of specific heats for helium is $\gamma = 5/3$ when it is treated as a completely perfect gas. Values of c_p, c_v, and R for helium are

$$c_p = 31{,}089 \text{ ft}^2/\text{sec}^2\text{-}^\circ\text{R}$$

$$c_v = 18{,}651 \text{ ft}^2/\text{sec}^2\text{-}^\circ\text{R}$$

$$R = 12{,}438 \text{ ft}^2/\text{sec}^2\text{-}^\circ\text{R}$$

REYNOLDS NUMBER

The Reynolds number is defined as:

$$N_{Re} = \frac{\rho V l}{\eta}$$

This parameter can be put into the form

$$\frac{N_{Re}}{l} = \frac{1.938 M_\infty \times 10^7}{T_t^{1.147}\left(1 + \frac{M_\infty^2}{3}\right)^{1.353}} p_t \tag{23}$$

through use of the helium viscosity equation and other fundamental relationships. In equation (23) p_t is in pounds per square inch absolute, the characteristic length l is in inches, and T_t is in degrees Rankine. The graph of equation (23) is shown in figure 2. It should be pointed out that the curves shown in figure 2 are based on a value of p_t of unity to facilitate their use.

MASS-FLOW RATE

The following equations, combined with equations (2) and (4), are used to obtain the mass-flow rate per unit area ρV along a stream tube as a function of Mach number, total temperature, and total pressure.

$$\rho A V = \text{Constant} = \rho^* A^* V^* \tag{24}$$

$$\frac{p}{\rho} = RT \tag{25}$$

$$a = \sqrt{\gamma \frac{p}{\rho}} = \sqrt{\gamma RT} \tag{26}$$

Numerical values can be obtained from figure 3 where the variation with Mach number of the mass-flow rate per unit cross-sectional area is presented for various total temperatures and a total pressure of 1 pound per square inch absolute.

OBLIQUE-SHOCK CHARACTERISTICS OF WEDGES AND CONES

The oblique-shock characteristics of wedges and cones are presented in figures 4 to 9 and figures 10 to 15, respectively, for Mach numbers of 12, 16, 20, and 24. The figures for the wedge characteristics (figs. 4 to 9) show the dependence of shock-wave angle, Mach number behind the shock, and pressure ratio through the oblique shock on wedge angle; whereas the cone figures (figs. 10 to 15) show the dependence of shock-wave angle, limiting velocity ratio along the surface of the cone, and cone surface pressure on cone semivertex angle. The method of calculation used to obtain the conical-flow solutions presented in figures 10 to 15 is given in detail in reference 8. The equations presented in reference 8 are readily adaptable to automatic computing procedure and were solved mechanically.

CONCLUDING REMARKS

Equations, tables, and figures for use in the analysis of helium flow at supersonic and hypersonic flow have been presented. This paper parallels NACA Report 1135 which was prepared for air flow. The tables present the values of useful dimensionless ratios for continuous one-dimensional flow and for normal-shock waves as functions of Mach number. The helium viscosity relation as a function of temperature, mass-flow rates, and the Reynolds number as a function of Mach number and stagnation temperature are plotted. The oblique-shock characteristics of wedges and cones in helium at Mach numbers of 12, 16, 20, and 24 are presented. Throughout all the computations, helium is considered to be a perfect gas.

Langley Aeronautical Laboratory,
National Advisory Committee for Aeronautics,
Langley Field. Va., May 1, 1957.

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TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
1.00	.4871	.6495	.7500	.8660	.4059	1.0000	.5000	1.00000
1.01	.4811	.6447	.7463	.8639	.4090	.9999	.5037	1.00747
1.02	.4751	.6398	.7425	.8617	.4119	.9997	.5074	1.01489
1.03	.4691	.6350	.7388	.8595	.4147	.9993	.5111	1.02225
1.04	.4632	.6301	.7350	.8573	.4175	.9988	.5148	1.02955
1.05	.4573	.6253	.7313	.8551	.4201	.9982	.5184	1.03680
1.06	.4515	.6205	.7275	.8529	.4227	.9974	.5220	1.04399
1.07	.4457	.6158	.7238	.8508	.4252	.9965	.5256	1.05113
1.08	.4399	.6110	.7200	.8486	.4276	.9955	.5291	1.05821
1.09	.4343	.6063	.7163	.8464	.4300	.9943	.5326	1.06524
1.10	.4286	.6015	.7126	.8441	.4322	.9930	.5361	1.07221
1.11	.4231	.5968	.7089	.8419	.4344	.9916	.5396	1.07913
1.12	.4178	.5921	.7052	.8397	.4365	.9901	.5430	1.08600
1.13	.4121	.5875	.7014	.8375	.4385	.9884	.5464	1.09281
1.14	.4067	.5828	.6977	.8353	.4404	.9867	.5498	1.09956
1.15	.4013	.5782	.6940	.8331	.4423	.9848	.5531	1.10627
1.16	.3960	.5736	.6904	.8309	.4440	.9828	.5565	1.11292
1.17	.3907	.5690	.6867	.8287	.4457	.9808	.5598	1.11951
1.18	.3855	.5645	.6830	.8264	.4473	.9786	.5630	1.12606
1.19	.3804	.5599	.6793	.8242	.4489	.9763	.5663	1.13255
1.20	.3753	.5554	.6757	.8220	.4503	.9739	.5695	1.13899
1.21	.3702	.5509	.6720	.8198	.4517	.9715	.5727	1.14538
1.22	.3652	.5464	.6684	.8176	.4530	.9689	.5759	1.15171
1.23	.3603	.5420	.6648	.8153	.4542	.9663	.5790	1.15800
1.24	.3554	.5376	.6611	.8131	.4554	.9636	.5821	1.16423
1.25	.3506	.5332	.6575	.8109	.4565	.9608	.5852	1.17041
1.26	.3458	.5288	.6539	.8087	.4575	.9579	.5883	1.17654
1.27	.3411	.5245	.6504	.8064	.4585	.9549	.5913	1.18262
1.28	.3364	.5202	.6468	.8042	.4593	.9519	.5943	1.18866
1.29	.3318	.5159	.6432	.8020	.4601	.9488	.5973	1.19464
1.30	.3272	.5116	.6397	.7998	.4609	.9456	.6003	1.20057
1.31	.3227	.5073	.6361	.7976	.4615	.9424	.6032	1.20645
1.32	.3183	.5031	.6326	.7954	.4621	.9391	.6061	1.21229
1.33	.3139	.4989	.6291	.7931	.4627	.9357	.6090	1.21807
1.34	.3095	.4948	.6256	.7909	.4632	.9383	.6119	1.22381
1.35	.3052	.4907	.6221	.7887	.4636	.9288	.6147	1.22950
1.36	.3010	.4865	.6186	.7865	.4639	.9252	.6176	1.23514
1.37	.2968	.4825	.6151	.7843	.4642	.9216	.6204	1.24073
1.38	.2926	.4784	.6117	.7821	.4644	.9180	.6231	1.24628
1.39	.2886	.4744	.6083	.7799	.4646	.9143	.6259	1.25178
1.40	.2845	.4704	.6048	.7777	.4647	.9105	.6286	1.25724
1.41	.2805	.4664	.6014	.7755	.4648	.9067	.6313	1.26265
1.42	.2766	.4625	.5980	.7733	.4647	.9029	.6340	1.26801
1.43	.2727	.4586	.5947	.7711	.4647	.8990	.6367	1.27333
1.44	.2689	.4547	.5913	.7690	.4646	.8951	.6393	1.27860
1.45	.2651	.4508	.5879	.7668	.4644	.8911	.6419	1.28383
1.46	.2613	.4470	.5846	.7646	.4642	.8871	.6445	1.28901
1.47	.2576	.4432	.5813	.7624	.4639	.8831	.6471	1.29415
1.48	.2540	.4394	.5780	.7603	.4636	.8790	.6496	1.29925
1.49	.2504	.4357	.5747	.7581	.4632	.8749	.6521	1.30430
1.50	.2468	.4320	.5714	.7559	.4628	.8707	.6547	1.30931
1.51	.2433	.4283	.5682	.7538	.4623	.8666	.6571	1.31427
1.52	.2399	.4246	.5649	.7516	.4618	.8624	.6596	1.31920
1.53	.2365	.4210	.5617	.7495	.4613	.8582	.6620	1.32408
1.54	.2331	.4174	.5585	.7473	.4607	.8540	.6645	1.32892
1.55	.2298	.4138	.5553	.7452	.4600	.8497	.6669	1.33372
1.56	.2265	.4103	.5521	.7430	.4594	.8454	.6692	1.33848
1.57	.2233	.4067	.5490	.7409	.4586	.8411	.6716	1.34319
1.58	.2201	.4032	.5458	.7388	.4579	.8368	.6739	1.34787
1.59	.2170	.3998	.5427	.7367	.4571	.8325	.6763	1.35251
1.60	.2139	.3963	.5396	.7346	.4562	.8281	.6786	1.35710
1.61	.2108	.3929	.5365	.7324	.4553	.8238	.6808	1.36166
1.62	.2078	.3896	.5334	.7303	.4544	.8194	.6831	1.36618
1.63	.2048	.3862	.5303	.7282	.4535	.8150	.6853	1.37066
1.64	.2019	.3829	.5273	.7261	.4525	.8106	.6875	1.37510
1.65	.1990	.3796	.5242	.7240	.4515	.8062	.6897	1.37950
1.66	.1961	.3763	.5212	.7220	.4504	.8018	.6919	1.38386
1.67	.1933	.3731	.5182	.7199	.4493	.7973	.6941	1.38819
1.68	.1906	.3699	.5153	.7178	.4482	.7929	.6962	1.39248
1.69	.1878	.3667	.5123	.7157	.4471	.7885	.6984	1.39673
1.70	.1851	.3635	.5093	.7137	.4459	.7840	.7005	1.40095
1.71	.1825	.3604	.5064	.7116	.4447	.7796	.7026	1.40512
1.72	.1799	.3573	.5035	.7096	.4435	.7752	.7046	1.40927
1.73	.1773	.3542	.5006	.7075	.4422	.7707	.7067	1.41338
1.74	.1748	.3511	.4977	.7055	.4409	.7663	.7087	1.41745
1.75	.1723	.3481	.4948	.7035	.4396	.7618	.7107	1.42148
1.76	.1698	.3451	.4920	.7014	.4383	.7574	.7127	1.42549
1.77	.1674	.3421	.4892	.6994	.4369	.7529	.7147	1.42945
1.78	.1650	.3392	.4863	.6974	.4355	.7485	.7167	1.43339
1.79	.1626	.3363	.4836	.6954	.4341	.7441	.7186	1.43729
1.80	.1603	.3334	.4808	.6934	.4327	.7396	.7206	1.44115
1.81	.1580	.3305	.4780	.6914	.4313	.7352	.7225	1.44499
1.82	.1557	.3276	.4753	.6894	.4298	.7308	.7244	1.44879
1.83	.1535	.3248	.4725	.6874	.4283	.7264	.7263	1.45255
1.84	.1513	.3220	.4698	.6854	.4268	.7220	.7281	1.45629
1.85	.1491	.3192	.4671	.6838	.4253	.7176	.7300	1.45999
1.86	.1470	.3165	.4644	.6815	.4238	.7132	.7318	1.46366
1.87	.1449	.3138	.4618	.6795	.4222	.7088	.7336	1.46730
1.88	.1428	.3111	.4591	.6776	.4207	.7045	.7355	1.47091
1.89	.1408	.3084	.4565	.6756	.4191	.7001	.7372	1.47448
1.90	.1388	.3058	.4539	.6737	.4175	.6958	.7390	1.47803
1.91	.1368	.3031	.4513	.6718	.4159	.6914	.7408	1.48154
1.92	.1348	.3005	.4487	.6698	.4142	.6871	.7425	1.48503
1.93	.1329	.2980	.4461	.6679	.4126	.6828	.7442	1.48848
1.94	.1310	.2954	.4436	.6660	.4109	.6785	.7460	1.49191
1.95	.1292	.2929	.4410	.6641	.4093	.6742	.7477	1.49531
1.96	.1273	.2904	.4385	.6622	.4076	.6700	.7493	1.49867
1.97	.1255	.2879	.4360	.6603	.4059	.6657	.7510	1.50201
1.98	.1237	.2854	.4335	.6584	.4042	.6615	.7527	1.50532
1.99	.1220	.2830	.4310	.6565	.4025	.6573	.7543	1.50860

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_1	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
90.00	.00000	1.0000	1.000	1.000	1.000	1.0000	2.053	1.00
81.93	.04021	.9901	1.025	1.015	1.010	1.0000	2.079	1.01
78.64	.11289	.9806	1.051	1.030	1.020	1.0000	2.105	1.02
76.14	.20587	.9713	1.076	1.045	1.030	1.0000	2.132	1.03
74.06	.31463	.9623	1.102	1.060	1.040	.9999	2.159	1.04
72.25	.43649	.9535	1.128	1.075	1.049	.9999	2.187	1.05
70.63	.56961	.9450	1.155	1.090	1.059	.9998	2.215	1.06
69.16	.71259	.9367	1.181	1.105	1.069	.9996	2.243	1.07
67.81	.86434	.9286	1.208	1.120	1.079	.9995	2.272	1.08
66.55	1.0240	.9207	1.235	1.135	1.088	.9992	2.301	1.09
65.38	1.1907	.9131	1.263	1.150	1.098	.9990	2.331	1.10
64.28	1.3639	.9056	1.290	1.165	1.108	.9987	2.361	1.11
63.23	1.5431	.8983	1.318	1.179	1.118	.9983	2.391	1.12
62.25	1.7277	.8912	1.346	1.194	1.127	.9979	2.422	1.13
61.31	1.9173	.8843	1.375	1.209	1.137	.9974	2.453	1.14
60.41	2.1115	.8776	1.403	1.224	1.147	.9969	2.484	1.15
59.55	2.3099	.8710	1.432	1.239	1.156	.9963	2.516	1.16
58.73	2.5123	.8646	1.461	1.253	1.166	.9957	2.548	1.17
57.94	2.7183	.8583	1.491	1.268	1.175	.9950	2.581	1.18
57.18	2.9277	.8522	1.520	1.283	1.185	.9942	2.614	1.19
56.44	3.1402	.8462	1.550	1.297	1.195	.9933	2.647	1.20
55.74	3.3556	.8404	1.580	1.312	1.204	.9924	2.681	1.21
55.05	3.5737	.8347	1.611	1.326	1.214	.9915	2.715	1.22
54.39	3.7943	.8291	1.641	1.341	1.224	.9904	2.749	1.23
53.75	4.0172	.8237	1.672	1.355	1.234	.9893	2.784	1.24
53.13	4.2422	.8184	1.703	1.370	1.243	.9882	2.819	1.25
52.53	4.4692	.8132	1.735	1.384	1.253	.9869	2.854	1.26
51.94	4.6980	.8081	1.766	1.399	1.263	.9856	2.890	1.27
51.38	4.9286	.8031	1.798	1.413	1.273	.9842	2.926	1.28
50.82	5.1606	.7982	1.830	1.427	1.282	.9828	2.962	1.29
50.28	5.3941	.7934	1.863	1.441	1.292	.9813	2.999	1.30
49.76	5.6290	.7888	1.895	1.456	1.302	.9797	3.036	1.31
49.25	5.8650	.7842	1.928	1.470	1.312	.9781	3.073	1.32
48.75	6.1021	.7797	1.961	1.484	1.322	.9763	3.111	1.33
48.27	6.3402	.7753	1.995	1.498	1.332	.9746	3.149	1.34
47.79	6.5792	.7710	2.028	1.512	1.342	.9727	3.187	1.35
47.33	6.8191	.7668	2.062	1.526	1.352	.9708	3.226	1.36
46.88	7.0596	.7627	2.096	1.539	1.362	.9689	3.265	1.37
46.44	7.3009	.7586	2.131	1.553	1.372	.9668	3.304	1.38
46.01	7.5427	.7546	2.165	1.567	1.382	.9648	3.343	1.39
45.58	7.7850	.7508	2.200	1.581	1.392	.9626	3.383	1.40
45.17	8.0277	.7469	2.235	1.594	1.402	.9604	3.424	1.41
44.77	8.2708	.7432	2.271	1.608	1.412	.9581	3.464	1.42
44.37	8.5142	.7395	2.306	1.621	1.422	.9558	3.508	1.43
43.98	8.7579	.7359	2.342	1.635	1.433	.9534	3.546	1.44
43.60	9.0018	.7324	2.378	1.648	1.443	.9510	3.588	1.45
43.23	9.2458	.7289	2.415	1.662	1.453	.9485	3.630	1.46
42.86	9.4899	.7255	2.451	1.675	1.464	.9460	3.672	1.47
42.51	9.7340	.7222	2.488	1.688	1.474	.9434	3.714	1.48
42.16	9.9781	.7189	2.525	1.701	1.484	.9407	3.757	1.49
41.81	10.222	.7157	2.563	1.714	1.495	.9380	3.800	1.50
41.47	10.466	.7125	2.600	1.727	1.505	.9353	3.844	1.51
41.14	10.710	.7094	2.638	1.740	1.516	.9325	3.887	1.52
40.81	10.954	.7064	2.676	1.753	1.526	.9296	3.931	1.53
40.49	11.197	.7034	2.715	1.766	1.537	.9267	3.976	1.54
40.18	11.440	.7004	2.753	1.779	1.548	.9238	4.020	1.55
39.87	11.683	.6975	2.792	1.792	1.558	.9208	4.065	1.56
39.56	11.926	.6947	2.831	1.804	1.569	.9178	4.111	1.57
39.27	12.168	.6919	2.871	1.817	1.580	.9148	4.156	1.58
38.97	12.410	.6891	2.910	1.829	1.591	.9117	4.202	1.59
38.68	12.652	.6864	2.950	1.842	1.602	.9085	4.248	1.60
38.40	12.893	.6838	2.990	1.854	1.613	.9053	4.295	1.61
38.12	13.134	.6812	3.031	1.866	1.624	.9021	4.342	1.62
37.84	13.374	.6786	3.071	1.879	1.635	.8989	4.389	1.63
37.57	13.613	.6761	3.112	1.891	1.646	.8956	4.436	1.64
37.31	13.853	.6736	3.153	1.903	1.657	.8923	4.484	1.65
37.04	14.091	.6711	3.195	1.915	1.668	.8889	4.532	1.66
36.78	14.329	.6687	3.236	1.927	1.679	.8855	4.580	1.67
36.53	14.567	.6664	3.278	1.939	1.691	.8821	4.629	1.68
36.28	14.804	.6640	3.320	1.951	1.702	.8787	4.678	1.69
36.03	15.040	.6618	3.363	1.963	1.713	.8752	4.727	1.70
35.79	15.276	.6595	3.405	1.974	1.725	.8717	4.777	1.71
35.55	15.511	.6573	3.448	1.986	1.736	.8682	4.827	1.72
35.31	15.745	.6551	3.491	1.998	1.748	.8646	4.877	1.73
35.08	15.979	.6529	3.535	2.009	1.759	.8611	4.927	1.74
34.85	16.212	.6508	3.578	2.021	1.771	.8575	4.978	1.75
34.62	16.444	.6487	3.622	2.032	1.782	.8539	5.029	1.76
34.40	16.676	.6467	3.666	2.043	1.794	.8502	5.080	1.77
34.18	16.907	.6447	3.711	2.055	1.806	.8466	5.132	1.78
33.96	17.137	.6427	3.755	2.066	1.818	.8429	5.184	1.79
33.75	17.366	.6407	3.800	2.077	1.830	.8392	5.236	1.80
33.54	17.595	.6388	3.845	2.088	1.842	.8355	5.289	1.81
33.33	17.823	.6369	3.891	2.099	1.854	.8318	5.342	1.82
33.12	18.050	.6350	3.936	2.110	1.866	.8280	5.395	1.83
32.92	18.276	.6332	3.982	2.121	1.878	.8243	5.449	1.84
32.72	18.502	.6314	4.028	2.132	1.890	.8205	5.502	1.85
32.52	18.727	.6296	4.075	2.142	1.902	.8167	5.556	1.86
32.33	18.951	.6278	4.121	2.153	1.914	.8130	5.611	1.87
32.13	19.174	.6260	4.168	2.164	1.926	.8092	5.666	1.88
31.94	19.396	.6243	4.215	2.174	1.939	.8053	5.721	1.89
31.76	19.618	.6226	4.263	2.185	1.951	.8015	5.776	1.90
31.57	19.838	.6210	4.310	2.195	1.964	.7977	5.831	1.91
31.39	20.058	.6193	4.358	2.205	1.976	.7939	5.887	1.92
31.21	20.277	.6177	4.406	2.216	1.989	.7900	5.944	1.93
31.03	20.495	.6161	4.455	2.226	2.001	.7862	6.000	1.94
30.85	20.713	.6145	4.503	2.236	2.014	.7823	6.057	1.95
30.68	20.929	.6130	4.552	2.246	2.027	.7785	6.114	1.96
30.51	21.145	.6114	4.601	2.256	2.039	.7746	6.171	1.97
30.33	21.360	.6099	4.651	2.266	2.052	.7707	6.229	1.98
30.17	21.574	.6084	4.700	2.276	2.065	.7669	6.287	1.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
2.00	.1202	.2806	.4286	.6547	.4008	.6531	.7559	1.51186
2.01	.1185	.2782	.4261	.6528	.3991	.6489	.7575	1.51508
2.02	.1169	.2758	.4237	.6509	.3974	.6447	.7591	1.51828
2.03	.1152	.2735	.4213	.6491	.3956	.6405	.7607	1.52145
2.04	.1136	.2711	.4189	.6472	.3939	.6364	.7623	1.52460
2.05	.1120	.2688	.4165	.6454	.3921	.6323	.7639	1.52771
2.06	.1104	.2665	.4142	.6436	.3904	.6282	.7654	1.53081
2.07	.1088	.2643	.4118	.6417	.3886	.6241	.7669	1.53387
2.08	.1073	.2620	.4095	.6399	.3868	.6200	.7685	1.53691
2.09	.1058	.2598	.4072	.6381	.3851	.6160	.7700	1.53992
2.10	.1043	.2576	.4049	.6363	.3833	.6119	.7715	1.54291
2.11	.1028	.2554	.4026	.6345	.3815	.6079	.7729	1.54587
2.12	.1014	.2533	.4003	.6327	.3797	.6039	.7744	1.54881
2.13	.9996-1	.2511	.3980	.6309	.3779	.5999	.7759	1.55172
2.14	.9856-1	.2490	.3958	.6291	.3761	.5960	.7773	1.55461
2.15	.9718-1	.2469	.3936	.6274	.3743	.5921	.7787	1.55747
2.16	.9582-1	.2448	.3914	.6256	.3725	.5881	.7802	1.56031
2.17	.9448-1	.2428	.3892	.6238	.3707	.5842	.7816	1.56312
2.18	.9316-1	.2407	.3870	.6221	.3689	.5804	.7830	1.56592
2.19	.9186-1	.2387	.3848	.6203	.3671	.5765	.7843	1.56868
2.20	.9058-1	.2367	.3827	.6186	.3653	.5727	.7857	1.57143
2.21	.8931-1	.2347	.3805	.6169	.3635	.5689	.7871	1.57415
2.22	.8807-1	.2328	.3784	.6151	.3617	.5651	.7884	1.57685
2.23	.8685-1	.2308	.3763	.6134	.3599	.5613	.7898	1.57953
2.24	.8564-1	.2289	.3742	.6117	.3581	.5575	.7911	1.58218
2.25	.8446-1	.2270	.3721	.6100	.3563	.5538	.7924	1.58481
2.26	.8329-1	.2251	.3700	.6083	.3545	.5501	.7937	1.58742
2.27	.8213-1	.2232	.3680	.6066	.3527	.5464	.7950	1.59001
2.28	.8100-1	.2214	.3659	.6049	.3509	.5427	.7963	1.59258
2.29	.7988-1	.2195	.3639	.6032	.3491	.5391	.7976	1.59512
2.30	.7878-1	.2177	.3619	.6016	.3473	.5355	.7988	1.59765
2.31	.7770-1	.2159	.3599	.5999	.3455	.5319	.8001	1.60015
2.32	.7663-1	.2141	.3579	.5982	.3437	.5283	.8013	1.60263
2.33	.7557-1	.2123	.3559	.5966	.3419	.5247	.8025	1.60509
2.34	.7454-1	.2106	.3540	.5949	.3401	.5212	.8038	1.60754
2.35	.7352-1	.2088	.3520	.5933	.3383	.5177	.8050	1.60996
2.36	.7251-1	.2071	.3501	.5917	.3365	.5142	.8062	1.61236
2.37	.7152-1	.2054	.3482	.5900	.3348	.5107	.8074	1.61474
2.38	.7054-1	.2037	.3462	.5884	.3330	.5072	.8086	1.61710
2.39	.6958-1	.2021	.3443	.5868	.3312	.5038	.8097	1.61945
2.40	.6863-1	.2004	.3425	.5852	.3294	.5004	.8109	1.62177
2.41	.6770-1	.1988	.3406	.5836	.3277	.4970	.8120	1.62407
2.42	.6678-1	.1971	.3387	.5820	.3259	.4937	.8132	1.62636
2.43	.6588-1	.1955	.3369	.5804	.3242	.4903	.8143	1.62863
2.44	.6498-1	.1939	.3351	.5788	.3224	.4870	.8154	1.63088
2.45	.6411-1	.1924	.3332	.5773	.3207	.4837	.8166	1.63311
2.46	.6324-1	.1908	.3314	.5757	.3189	.4804	.8177	1.63532
2.47	.6239-1	.1893	.3296	.5741	.3172	.4771	.8188	1.63751
2.48	.6155-1	.1877	.3279	.5726	.3154	.4739	.8198	1.63969
2.49	.6072-1	.1862	.3261	.5710	.3137	.4707	.8209	1.64185
2.50	.5990-1	.1847	.3243	.5695	.3120	.4675	.8220	1.64399
2.51	.5910-1	.1832	.3226	.5680	.3103	.4643	.8231	1.64611
2.52	.5831-1	.1817	.3208	.5664	.3086	.4612	.8241	1.64822
2.53	.5753-1	.1803	.3191	.5649	.3069	.4580	.8252	1.65031
2.54	.5676-1	.1788	.3174	.5634	.3052	.4549	.8262	1.65238
2.55	.5600-1	.1774	.3157	.5619	.3035	.4518	.8272	1.65444
2.56	.5526-1	.1760	.3140	.5604	.3018	.4488	.8282	1.65648
2.57	.5452-1	.1746	.3123	.5589	.3001	.4457	.8293	1.65850
2.58	.5380-1	.1732	.3107	.5574	.2984	.4427	.8303	1.66051
2.59	.5308-1	.1718	.3090	.5559	.2967	.4397	.8313	1.66250
2.60	.5238-1	.1704	.3074	.5544	.2951	.4367	.8322	1.66448
2.61	.5169-1	.1691	.3057	.5529	.2934	.4337	.8332	1.66644
2.62	.5101-1	.1677	.3041	.5515	.2918	.4308	.8342	1.66838
2.63	.5033-1	.1664	.3025	.5500	.2901	.4279	.8352	1.67031
2.64	.4967-1	.1651	.3009	.5486	.2885	.4250	.8361	1.67223
2.65	.4902-1	.1638	.2993	.5471	.2869	.4221	.8371	1.67412
2.66	.4838-1	.1625	.2977	.5457	.2852	.4192	.8380	1.67601
2.67	.4774-1	.1612	.2962	.5442	.2836	.4164	.8389	1.67788
2.68	.4712-1	.1599	.2946	.5428	.2820	.4136	.8399	1.67973
2.69	.4650-1	.1587	.2931	.5414	.2804	.4108	.8408	1.68157
2.70	.4589-1	.1574	.2915	.5399	.2788	.4080	.8417	1.68340
2.71	.4530-1	.1562	.2900	.5385	.2772	.4052	.8426	1.68521
2.72	.4471-1	.1550	.2885	.5371	.2756	.4025	.8435	1.68700
2.73	.4413-1	.1538	.2870	.5357	.2741	.3998	.8444	1.68878
2.74	.4356-1	.1526	.2855	.5343	.2725	.3971	.8453	1.69055
2.75	.4299-1	.1514	.2840	.5329	.2709	.3944	.8462	1.69231
2.76	.4244-1	.1502	.2825	.5316	.2694	.3917	.8470	1.69405
2.77	.4189-1	.1490	.2811	.5302	.2678	.3891	.8479	1.69578
2.78	.4135-1	.1479	.2796	.5288	.2663	.3865	.8487	1.69749
2.79	.4082-1	.1467	.2782	.5274	.2648	.3838	.8496	1.69919
2.80	.4029-1	.1456	.2768	.5261	.2632	.3813	.8504	1.70088
2.81	.3978-1	.1445	.2753	.5247	.2617	.3787	.8513	1.70255
2.82	.3927-1	.1434	.2739	.5234	.2602	.3761	.8521	1.70422
2.83	.3877-1	.1423	.2725	.5220	.2587	.3736	.8529	1.70586
2.84	.3827-1	.1412	.2711	.5207	.2572	.3711	.8538	1.70750
2.85	.3778-1	.1401	.2697	.5193	.2557	.3686	.8546	1.70912
2.86	.3730-1	.1390	.2683	.5180	.2543	.3661	.8554	1.71074
2.87	.3683-1	.1379	.2670	.5167	.2528	.3637	.8562	1.71233
2.88	.3636-1	.1369	.2656	.5154	.2513	.3612	.8570	1.71392
2.89	.3590-1	.1359	.2643	.5141	.2499	.3588	.8577	1.71550
2.90	.3545-1	.1348	.2629	.5128	.2484	.3564	.8585	1.71706
2.91	.3500-1	.1338	.2616	.5115	.2470	.3540	.8593	1.71861
2.92	.3456-1	.1328	.2603	.5102	.2456	.3517	.8601	1.72015
2.93	.3412-1	.1318	.2590	.5089	.2441	.3493	.8608	1.72168
2.94	.3370-1	.1308	.2577	.5076	.2427	.3470	.8616	1.72319
2.95	.3327-1	.1298	.2564	.5063	.2413	.3447	.8623	1.72470
2.96	.3286-1	.1288	.2551	.5050	.2399	.3424	.8631	1.72619
2.97	.3245-1	.1279	.2538	.5038	.2385	.3401	.8638	1.72767
2.98	.3204-1	.1269	.2525	.5025	.2371	.3378	.8646	1.72914
2.99	.3164-1	.1259	.2513	.5013	.2357	.3356	.8653	1.73060

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
30.00	21.787	.6070	4.750	2.286	2.078	.7630	6.345	2.00
29.84	21.999	.6055	4.800	2.295	2.091	.7591	6.404	2.01
29.67	22.210	.6041	4.851	2.305	2.104	.7552	6.463	2.02
29.51	22.421	.6027	4.901	2.315	2.117	.7514	6.522	2.03
29.35	22.631	.6013	4.952	2.324	2.130	.7475	6.582	2.04
29.20	22.839	.5999	5.003	2.334	2.144	.7436	6.641	2.05
29.04	23.047	.5986	5.055	2.343	2.157	.7397	6.701	2.06
28.89	23.254	.5972	5.106	2.353	2.170	.7359	6.762	2.07
28.74	23.460	.5959	5.158	2.362	2.184	.7320	6.822	2.08
28.59	23.666	.5946	5.210	2.371	2.197	.7281	6.883	2.09
28.44	23.870	.5933	5.263	2.381	2.211	.7243	6.945	2.10
28.29	24.074	.5920	5.315	2.390	2.224	.7204	7.006	2.11
28.14	24.276	.5908	5.368	2.399	2.238	.7166	7.068	2.12
28.00	24.478	.5896	5.421	2.408	2.251	.7127	7.130	2.13
27.86	24.679	.5883	5.475	2.417	2.265	.7089	7.193	2.14
27.72	24.879	.5871	5.528	2.426	2.279	.7051	7.256	2.15
27.58	25.078	.5859	5.582	2.435	2.293	.7012	7.319	2.16
27.44	25.277	.5848	5.636	2.443	2.307	.6974	7.382	2.17
27.30	25.474	.5836	5.691	2.452	2.321	.6936	7.446	2.18
27.17	25.671	.5825	5.745	2.461	2.335	.6898	7.510	2.19
27.04	25.866	.5813	5.800	2.469	2.349	.6860	7.574	2.20
26.90	26.061	.5802	5.855	2.478	2.363	.6822	7.638	2.21
26.77	26.255	.5791	5.911	2.486	2.377	.6784	7.703	2.22
26.64	26.448	.5780	5.966	2.495	2.391	.6747	7.768	2.23
26.51	26.641	.5769	6.022	2.503	2.406	.6709	7.834	2.24
26.39	26.832	.5759	6.078	2.512	2.420	.6672	7.900	2.25
26.26	27.023	.5748	6.135	2.520	2.434	.6634	7.966	2.26
26.14	27.212	.5738	6.191	2.528	2.449	.6597	8.032	2.27
26.01	27.401	.5727	6.248	2.536	2.463	.6560	8.099	2.28
25.89	27.589	.5717	6.305	2.544	2.478	.6523	8.166	2.29
25.77	27.776	.5707	6.363	2.552	2.493	.6486	8.233	2.30
25.65	27.962	.5697	6.420	2.560	2.507	.6449	8.300	2.31
25.53	28.148	.5688	6.478	2.568	2.522	.6412	8.368	2.32
25.42	28.333	.5678	6.536	2.576	2.537	.6376	8.436	2.33
25.30	28.516	.5668	6.595	2.584	2.552	.6339	8.505	2.34
25.18	28.699	.5659	6.653	2.592	2.567	.6303	8.573	2.35
25.07	28.881	.5650	6.712	2.600	2.582	.6267	8.642	2.36
24.96	29.063	.5640	6.771	2.607	2.597	.6230	8.712	2.37
24.85	29.243	.5631	6.831	2.615	2.612	.6195	8.781	2.38
24.73	29.423	.5622	6.890	2.623	2.627	.6159	8.851	2.39
24.62	29.601	.5613	6.950	2.630	2.642	.6123	8.921	2.40
24.52	29.779	.5605	7.010	2.638	2.658	.6088	8.992	2.41
24.41	29.957	.5596	7.071	2.645	2.673	.6052	9.063	2.42
24.30	30.133	.5587	7.131	2.652	2.689	.6017	9.134	2.43
24.19	30.308	.5579	7.192	2.660	2.704	.5982	9.205	2.44
24.09	30.483	.5570	7.253	2.667	2.720	.5947	9.277	2.45
23.99	30.657	.5562	7.315	2.674	2.735	.5912	9.349	2.46
23.88	30.830	.5554	7.376	2.681	2.751	.5877	9.421	2.47
23.78	31.002	.5546	7.438	2.689	2.767	.5843	9.493	2.48
23.68	31.174	.5538	7.500	2.696	2.782	.5808	9.566	2.49
23.58	31.345	.5530	7.563	2.703	2.798	.5774	9.639	2.50
23.48	31.515	.5522	7.625	2.710	2.814	.5740	9.713	2.51
23.38	31.684	.5514	7.688	2.717	2.830	.5706	9.787	2.52
23.28	31.852	.5506	7.751	2.724	2.846	.5673	9.861	2.53
23.18	32.020	.5499	7.815	2.731	2.862	.5639	9.935	2.54
23.09	32.186	.5491	7.878	2.737	2.878	.5606	10.01	2.55
22.99	32.352	.5484	7.942	2.744	2.894	.5572	10.08	2.56
22.90	32.518	.5477	8.006	2.751	2.911	.5539	10.16	2.57
22.81	32.682	.5469	8.071	2.757	2.927	.5506	10.24	2.58
22.71	32.846	.5462	8.135	2.764	2.943	.5474	10.31	2.59
22.62	33.009	.5455	8.200	2.770	2.960	.5441	10.39	2.60
22.53	33.171	.5448	8.265	2.777	2.976	.5408	10.46	2.61
22.44	33.332	.5441	8.331	2.784	2.993	.5376	10.54	2.62
22.35	33.493	.5434	8.396	2.790	3.009	.5344	10.62	2.63
22.26	33.653	.5427	8.462	2.796	3.026	.5312	10.69	2.64
22.17	33.812	.5420	8.528	2.803	3.043	.5280	10.77	2.65
22.08	33.971	.5414	8.595	2.809	3.060	.5249	10.85	2.66
22.00	34.128	.5407	8.661	2.815	3.076	.5217	10.93	2.67
21.91	34.285	.5401	8.728	2.821	3.093	.5186	11.01	2.68
21.82	34.442	.5394	8.795	2.828	3.110	.5155	11.09	2.69
21.74	34.597	.5388	8.863	2.834	3.127	.5124	11.16	2.70
21.65	34.752	.5381	8.930	2.840	3.145	.5093	11.24	2.71
21.57	34.906	.5375	8.998	2.846	3.162	.5062	11.32	2.72
21.49	35.059	.5369	9.066	2.852	3.179	.5032	11.40	2.73
21.41	35.212	.5363	9.135	2.858	3.196	.5002	11.48	2.74
21.32	35.364	.5357	9.203	2.864	3.213	.4972	11.56	2.75
21.24	35.515	.5351	9.272	2.870	3.231	.4942	11.64	2.76
21.16	35.666	.5345	9.341	2.876	3.248	.4912	11.73	2.77
21.08	35.816	.5339	9.411	2.881	3.266	.4882	11.81	2.78
21.00	35.965	.5333	9.480	2.887	3.283	.4853	11.89	2.79
20.92	36.113	.5327	9.550	2.893	3.301	.4823	11.97	2.80
20.85	36.261	.5321	9.620	2.899	3.319	.4794	12.05	2.81
20.77	36.408	.5316	9.691	2.904	3.337	.4765	12.14	2.82
20.69	36.554	.5310	9.761	2.910	3.354	.4737	12.22	2.83
20.62	36.700	.5304	9.832	2.916	3.372	.4708	12.30	2.84
20.54	36.845	.5299	9.903	2.921	3.390	.4680	12.39	2.85
20.47	36.990	.5293	9.975	2.927	3.408	.4651	12.47	2.86
20.39	37.133	.5288	10.05	2.932	3.426	.4623	12.55	2.87
20.32	37.276	.5283	10.12	2.938	3.444	.4595	12.64	2.88
20.24	37.419	.5277	10.19	2.943	3.463	.4568	12.72	2.89
20.17	37.560	.5272	10.26	2.948	3.481	.4540	12.81	2.90
20.10	37.702	.5267	10.34	2.954	3.499	.4512	12.89	2.91
20.03	37.842	.5262	10.41	2.959	3.518	.4485	12.98	2.92
19.96	37.982	.5257	10.48	2.964	3.536	.4458	13.06	2.93
19.89	38.121	.5252	10.55	2.969	3.554	.4431	13.15	2.94
19.81	38.259	.5247	10.63	2.975	3.573	.4404	13.24	2.95
19.75	38.397	.5242	10.70	2.980	3.592	.4378	13.32	2.96
19.68	38.534	.5237	10.78	2.985	3.610	.4351	13.41	2.97
19.61	38.671	.5232	10.85	2.990	3.629	.4325	13.50	2.98
19.54	38.807	.5227	10.93	2.995	3.648	.4299	13.59	2.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
3.00	.3125-1	.1250	.2500	.5000	.2344	.3333	.8660	1.73205
3.01	.3086-1	.1241	.2488	.4988	.2330	.3311	.8667	1.73349
3.02	.3048-1	.1231	.2475	.4975	.2317	.3289	.8675	1.73492
3.03	.3010-1	.1222	.2463	.4963	.2303	.3267	.8682	1.73633
3.04	.2973-1	.1213	.2451	.4950	.2290	.3246	.8689	1.73774
3.05	.2936-1	.1204	.2439	.4938	.2276	.3224	.8696	1.73913
3.06	.2900-1	.1195	.2426	.4926	.2263	.3203	.8703	1.74052
3.07	.2865-1	.1186	.2415	.4914	.2250	.3182	.8709	1.74189
3.08	.2830-1	.1178	.2403	.4902	.2237	.3161	.8716	1.74326
3.09	.2795-1	.1169	.2391	.4890	.2224	.3140	.8723	1.74461
3.10	.2761-1	.1160	.2379	.4878	.2211	.3119	.8730	1.74596
3.11	.2727-1	.1152	.2367	.4866	.2198	.3099	.8736	1.74729
3.12	.2694-1	.1143	.2356	.4854	.2185	.3078	.8743	1.74862
3.13	.2661-1	.1135	.2344	.4842	.2172	.3058	.8750	1.74994
3.14	.2629-1	.1127	.2333	.4830	.2160	.3038	.8756	1.75124
3.15	.2597-1	.1119	.2322	.4818	.2147	.3018	.8763	1.75254
3.16	.2565-1	.1110	.2310	.4807	.2135	.2998	.8769	1.75382
3.17	.2534-1	.1102	.2299	.4795	.2122	.2979	.8776	1.75510
3.18	.2504-1	.1094	.2288	.4783	.2110	.2959	.8782	1.75637
3.19	.2474-1	.1086	.2277	.4772	.2098	.2940	.8788	1.75763
3.20	.2444-1	.1079	.2266	.4760	.2085	.2921	.8794	1.75888
3.21	.2415-1	.1071	.2255	.4749	.2073	.2902	.8801	1.76012
3.22	.2386-1	.1063	.2244	.4737	.2061	.2883	.8807	1.76135
3.23	.2357-1	.1055	.2233	.4726	.2049	.2864	.8813	1.76258
3.24	.2329-1	.1048	.2223	.4714	.2037	.2845	.8819	1.76379
3.25	.2301-1	.1040	.2212	.4703	.2026	.2827	.8825	1.76500
3.26	.2274-1	.1033	.2201	.4692	.2014	.2809	.8831	1.76619
3.27	.2247-1	.1026	.2191	.4681	.2002	.2790	.8837	1.76738
3.28	.2220-1	.1018	.2180	.4670	.1990	.2772	.8843	1.76856
3.29	.2194-1	.1011	.2170	.4658	.1979	.2754	.8849	1.76973
3.30	.2168-1	.1004	.2160	.4647	.1967	.2737	.8854	1.77090
3.31	.2142-1	.9966-1	.2150	.4636	.1956	.2719	.8860	1.77205
3.32	.2117-1	.9896-1	.2139	.4625	.1945	.2702	.8866	1.77320
3.33	.2092-1	.9826-1	.2129	.4614	.1933	.2684	.8872	1.77434
3.34	.2068-1	.9756-1	.2119	.4604	.1922	.2667	.8877	1.77547
3.35	.2043-1	.9688-1	.2109	.4593	.1911	.2650	.8883	1.77659
3.36	.2020-1	.9619-1	.2099	.4582	.1900	.2633	.8889	1.77770
3.37	.1996-1	.9552-1	.2090	.4571	.1889	.2616	.8894	1.77881
3.38	.1973-1	.9485-1	.2080	.4560	.1878	.2599	.8900	1.77991
3.39	.1950-1	.9419-1	.2070	.4550	.1867	.2583	.8905	1.78100
3.40	.1927-1	.9353-1	.2060	.4539	.1856	.2566	.8910	1.78208
3.41	.1905-1	.9288-1	.2051	.4529	.1846	.2550	.8916	1.78316
3.42	.1883-1	.9223-1	.2041	.4518	.1835	.2534	.8921	1.78423
3.43	.1861-1	.9159-1	.2032	.4508	.1824	.2517	.8926	1.78529
3.44	.1839-1	.9095-1	.2022	.4497	.1814	.2501	.8932	1.78634
3.45	.1818-1	.9032-1	.2013	.4487	.1803	.2486	.8937	1.78739
3.46	.1797-1	.8970-1	.2004	.4476	.1793	.2470	.8942	1.78843
3.47	.1777-1	.8908-1	.1995	.4466	.1783	.2454	.8947	1.78946
3.48	.1756-1	.8846-1	.1985	.4456	.1773	.2439	.8952	1.79049
3.49	.1736-1	.8786-1	.1976	.4446	.1762	.2423	.8958	1.79151
3.50	.1716-1	.8725-1	.1967	.4435	.1752	.2408	.8963	1.79252
3.51	.1697-1	.8665-1	.1958	.4425	.1742	.2393	.8968	1.79352
3.52	.1678-1	.8606-1	.1949	.4415	.1732	.2378	.8973	1.79452
3.53	.1659-1	.8547-1	.1940	.4405	.1722	.2363	.8978	1.79551
3.54	.1640-1	.8489-1	.1932	.4395	.1712	.2348	.8982	1.79649
3.55	.1621-1	.8431-1	.1923	.4385	.1703	.2333	.8987	1.79747
3.56	.1603-1	.8374-1	.1914	.4375	.1693	.2319	.8992	1.79844
3.57	.1585-1	.8317-1	.1905	.4365	.1683	.2304	.8997	1.79940
3.58	.1567-1	.8261-1	.1897	.4355	.1673	.2290	.9002	1.80036
3.59	.1549-1	.8205-1	.1888	.4345	.1664	.2275	.9007	1.80131
3.60	.1532-1	.8150-1	.1880	.4336	.1654	.2261	.9011	1.80225
3.61	.1515-1	.8095-1	.1871	.4326	.1645	.2247	.9016	1.80319
3.62	.1498-1	.8040-1	.1863	.4316	.1636	.2233	.9021	1.80412
3.63	.1481-1	.7986-1	.1854	.4306	.1626	.2219	.9025	1.80505
3.64	.1465-1	.7933-1	.1846	.4297	.1617	.2206	.9030	1.80597
3.65	.1448-1	.7880-1	.1838	.4287	.1608	.2192	.9034	1.80688
3.66	.1432-1	.7827-1	.1830	.4278	.1599	.2178	.9039	1.80779
3.67	.1416-1	.7775-1	.1822	.4268	.1590	.2165	.9043	1.80869
3.68	.1401-1	.7723-1	.1814	.4259	.1581	.2152	.9048	1.80958
3.69	.1385-1	.7672-1	.1805	.4249	.1572	.2138	.9052	1.81047
3.70	.1370-1	.7621-1	.1797	.4240	.1563	.2125	.9057	1.81135
3.71	.1355-1	.7570-1	.1790	.4230	.1554	.2112	.9061	1.81223
3.72	.1340-1	.7520-1	.1782	.4221	.1545	.2099	.9066	1.81310
3.73	.1325-1	.7471-1	.1774	.4212	.1536	.2086	.9070	1.81397
3.74	.1311-1	.7421-1	.1766	.4202	.1528	.2074	.9074	1.81483
3.75	.1296-1	.7373-1	.1758	.4193	.1519	.2061	.9078	1.81568
3.76	.1282-1	.7324-1	.1751	.4184	.1511	.2048	.9083	1.81653
3.77	.1268-1	.7276-1	.1743	.4175	.1502	.2036	.9087	1.81737
3.78	.1254-1	.7229-1	.1735	.4166	.1494	.2023	.9091	1.81821
3.79	.1241-1	.7181-1	.1728	.4157	.1485	.2011	.9095	1.81904
3.80	.1227-1	.7134-1	.1720	.4148	.1477	.1999	.9099	1.81987
3.81	.1214-1	.7088-1	.1713	.4138	.1469	.1987	.9103	1.82069
3.82	.1201-1	.7042-1	.1705	.4130	.1460	.1975	.9108	1.82151
3.83	.1188-1	.6996-1	.1698	.4121	.1452	.1963	.9112	1.82232
3.84	.1175-1	.6951-1	.1691	.4112	.1444	.1951	.9116	1.82312
3.85	.1162-1	.6906-1	.1683	.4103	.1436	.1939	.9120	1.82392
3.86	.1150-1	.6861-1	.1676	.4094	.1428	.1928	.9124	1.82472
3.87	.1138-1	.6817-1	.1669	.4085	.1420	.1916	.9128	1.82551
3.88	.1125-1	.6773-1	.1662	.4076	.1412	.1905	.9131	1.82629
3.89	.1113-1	.6730-1	.1655	.4068	.1404	.1893	.9135	1.82707
3.90	.1102-1	.6687-1	.1647	.4059	.1396	.1882	.9139	1.82785
3.91	.1090-1	.6644-1	.1640	.4050	.1389	.1871	.9143	1.82862
3.92	.1078-1	.6602-1	.1633	.4042	.1381	.1859	.9147	1.82938
3.93	.1067-1	.6559-1	.1626	.4033	.1373	.1848	.9151	1.83014
3.94	.1056-1	.6518-1	.1620	.4024	.1366	.1837	.9154	1.83090
3.95	.1044-1	.6476-1	.1613	.4016	.1358	.1826	.9158	1.83165
3.96	.1033-1	.6435-1	.1606	.4007	.1350	.1815	.9162	1.83239
3.97	.1023-1	.6394-1	.1599	.3999	.1343	.1805	.9166	1.83313
3.98	.1012-1	.6354-1	.1592	.3990	.1336	.1794	.9169	1.83387
3.99	.1001-1	.6314-1	.1586	.3982	.1328	.1783	.9173	1.83460

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
19.47	38.942	.5222	11.00	3.000	3.667	.4273	13.67	3.00
19.40	39.077	.5218	11.08	3.005	3.686	.4247	13.76	3.01
19.34	39.211	.5213	11.15	3.010	3.705	.4221	13.85	3.02
19.27	39.345	.5208	11.23	3.015	3.724	.4196	13.94	3.03
19.20	39.478	.5204	11.30	3.020	3.743	.4171	14.03	3.04
19.14	39.610	.5199	11.38	3.025	3.762	.4145	14.12	3.05
19.07	39.742	.5195	11.45	3.029	3.781	.4120	14.21	3.06
19.01	39.873	.5190	11.53	3.034	3.800	.4095	14.30	3.07
18.95	40.003	.5186	11.61	3.039	3.820	.4071	14.39	3.08
18.88	40.133	.5181	11.69	3.044	3.839	.4046	14.48	3.09
18.82	40.263	.5177	11.76	3.048	3.859	.4022	14.57	3.10
18.76	40.391	.5173	11.84	3.053	3.878	.3998	14.66	3.11
18.69	40.519	.5168	11.92	3.058	3.898	.3973	14.75	3.12
18.63	40.647	.5164	12.00	3.062	3.917	.3950	14.84	3.13
18.57	40.774	.5160	12.07	3.067	3.937	.3926	14.93	3.14
18.51	40.900	.5156	12.15	3.071	3.957	.3902	15.03	3.15
18.45	41.026	.5152	12.23	3.076	3.977	.3879	15.12	3.16
18.39	41.152	.5148	12.31	3.080	3.997	.3855	15.21	3.17
18.33	41.276	.5144	12.39	3.085	4.017	.3832	15.31	3.18
18.27	41.400	.5140	12.47	3.089	4.037	.3809	15.40	3.19
18.21	41.524	.5136	12.55	3.094	4.057	.3786	15.49	3.20
18.15	41.647	.5132	12.63	3.098	4.077	.3764	15.59	3.21
18.09	41.770	.5128	12.71	3.102	4.097	.3741	15.68	3.22
18.03	41.891	.5124	12.79	3.107	4.117	.3719	15.78	3.23
17.98	42.013	.5120	12.87	3.111	4.138	.3696	15.87	3.24
17.92	42.134	.5116	12.95	3.115	4.158	.3674	15.97	3.25
17.86	42.254	.5112	13.03	3.119	4.178	.3652	16.06	3.26
17.81	42.374	.5109	13.12	3.124	4.199	.3630	16.16	3.27
17.75	42.493	.5105	13.20	3.128	4.220	.3609	16.25	3.28
17.70	42.612	.5101	13.28	3.132	4.240	.3587	16.35	3.29
17.64	42.730	.5098	13.36	3.136	4.261	.3566	16.45	3.30
17.58	42.848	.5094	13.45	3.140	4.282	.3544	16.54	3.31
17.53	42.965	.5091	13.53	3.144	4.302	.3523	16.64	3.32
17.48	43.081	.5087	13.61	3.148	4.323	.3502	16.74	3.33
17.42	43.198	.5083	13.69	3.152	4.344	.3481	16.84	3.34
17.37	43.313	.5080	13.78	3.156	4.365	.3461	16.94	3.35
17.31	43.428	.5077	13.86	3.160	4.385	.3440	17.03	3.36
17.26	43.543	.5073	13.95	3.164	4.408	.3420	17.13	3.37
17.21	43.657	.5070	14.03	3.168	4.429	.3399	17.23	3.38
17.16	43.770	.5066	14.12	3.172	4.450	.3379	17.33	3.39
17.10	43.884	.5063	14.20	3.176	4.471	.3359	17.43	3.40
17.05	43.996	.5060	14.29	3.180	4.493	.3339	17.53	3.41
17.00	44.108	.5056	14.37	3.183	4.514	.3319	17.63	3.42
16.95	44.220	.5053	14.46	3.187	4.536	.3300	17.73	3.43
16.90	44.331	.5050	14.54	3.191	4.557	.3280	17.83	3.44
16.85	44.442	.5047	14.63	3.195	4.579	.3261	17.93	3.45
16.80	44.552	.5043	14.71	3.198	4.600	.3241	18.03	3.46
16.75	44.661	.5040	14.80	3.202	4.622	.3222	18.14	3.47
16.70	44.771	.5037	14.89	3.206	4.644	.3203	18.24	3.48
16.65	44.879	.5034	14.98	3.209	4.666	.3184	18.34	3.49
16.60	44.988	.5031	15.06	3.213	4.688	.3166	18.44	3.50
16.55	45.095	.5028	15.15	3.217	4.710	.3147	18.55	3.51
16.50	45.203	.5025	15.24	3.220	4.732	.3129	18.65	3.52
16.46	45.310	.5022	15.33	3.224	4.754	.3110	18.75	3.53
16.41	45.416	.5019	15.41	3.227	4.776	.3092	18.86	3.54
16.36	45.522	.5016	15.50	3.231	4.798	.3074	18.96	3.55
16.31	45.627	.5013	15.59	3.234	4.821	.3056	19.07	3.56
16.27	45.732	.5010	15.68	3.238	4.843	.3038	19.17	3.57
16.22	45.837	.5007	15.77	3.241	4.865	.3020	19.27	3.58
16.17	45.941	.5004	15.86	3.245	4.888	.3002	19.38	3.59
16.13	46.045	.5002	15.95	3.248	4.911	.2985	19.49	3.60
16.08	46.148	.4999	16.04	3.252	4.933	.2968	19.59	3.61
16.04	46.251	.4996	16.13	3.255	4.956	.2950	19.70	3.62
15.99	46.353	.4993	16.22	3.258	4.979	.2933	19.80	3.63
15.95	46.455	.4990	16.31	3.262	5.001	.2916	19.91	3.64
15.90	46.557	.4988	16.40	3.265	5.024	.2899	20.02	3.65
15.86	46.658	.4985	16.49	3.268	5.047	.2882	20.13	3.66
15.81	46.758	.4982	16.59	3.271	5.070	.2866	20.23	3.67
15.77	46.858	.4980	16.68	3.275	5.093	.2849	20.34	3.68
15.72	46.958	.4977	16.77	3.278	5.116	.2832	20.45	3.69
15.68	47.058	.4974	16.86	3.281	5.139	.2816	20.56	3.70
15.64	47.157	.4972	16.96	3.284	5.163	.2800	20.67	3.71
15.59	47.255	.4969	17.05	3.287	5.186	.2784	20.78	3.72
15.55	47.353	.4967	17.14	3.290	5.209	.2768	20.88	3.73
15.51	47.451	.4964	17.23	3.294	5.233	.2752	20.99	3.74
15.47	47.548	.4962	17.33	3.297	5.256	.2736	21.10	3.75
15.42	47.645	.4959	17.42	3.300	5.280	.2720	21.21	3.76
15.38	47.742	.4957	17.52	3.303	5.303	.2704	21.33	3.77
15.34	47.838	.4954	17.61	3.306	5.327	.2689	21.44	3.78
15.30	47.933	.4952	17.71	3.309	5.351	.2673	21.55	3.79
15.26	48.029	.4949	17.80	3.312	5.375	.2658	21.66	3.80
15.22	48.124	.4947	17.90	3.315	5.398	.2643	21.77	3.81
15.18	48.218	.4944	17.99	3.318	5.422	.2628	21.88	3.82
15.14	48.312	.4942	18.09	3.321	5.446	.2613	21.99	3.83
15.09	48.406	.4940	18.19	3.324	5.470	.2598	22.11	3.84
15.05	48.499	.4937	18.28	3.327	5.494	.2583	22.22	3.85
15.01	48.592	.4935	18.37	3.330	5.519	.2568	22.33	3.86
14.98	48.685	.4933	18.47	3.332	5.543	.2554	22.45	3.87
14.94	48.777	.4930	18.57	3.335	5.567	.2539	22.56	3.88
14.90	48.869	.4928	18.67	3.338	5.591	.2525	22.68	3.89
14.86	48.960	.4926	18.76	3.341	5.616	.2511	22.79	3.90
14.82	49.051	.4924	18.86	3.344	5.640	.2496	22.90	3.91
14.78	49.142	.4921	18.96	3.347	5.665	.2482	23.02	3.92
14.74	49.232	.4919	19.06	3.349	5.689	.2468	23.13	3.93
14.70	49.322	.4917	19.15	3.352	5.714	.2454	23.25	3.94
14.66	49.412	.4915	19.25	3.355	5.739	.2440	23.37	3.95
14.63	49.501	.4913	19.35	3.358	5.764	.2427	23.48	3.96
14.59	49.590	.4910	19.45	3.360	5.788	.2413	23.60	3.97
14.55	49.678	.4908	19.55	3.363	5.813	.2399	23.72	3.98
14.51	49.766	.4906	19.65	3.366	5.838	.2386	23.83	3.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
4.00	.9906-2	.6274-1	.1579	.3974	.1321	.1773	.9177	1.83533
4.01	.9803-2	.6235-1	.1572	.3965	.1314	.1762	.9180	1.83605
4.02	.9700-2	.6195-1	.1566	.3957	.1306	.1752	.9184	1.83677
4.03	.9599-2	.6157-1	.1559	.3949	.1299	.1742	.9187	1.83748
4.04	.9499-2	.6118-1	.1553	.3940	.1292	.1731	.9191	1.83819
4.05	.9401-2	.6080-1	.1546	.3932	.1285	.1721	.9194	1.83889
4.06	.9303-2	.6042-1	.1540	.3924	.1278	.1711	.9198	1.83959
4.07	.9207-2	.6004-1	.1533	.3916	.1271	.1701	.9201	1.84029
4.08	.9112-2	.5967-1	.1527	.3908	.1264	.1691	.9205	1.84098
4.09	.9018-2	.5930-1	.1521	.3900	.1257	.1681	.9208	1.84167
4.10	.8925-2	.5893-1	.1514	.3892	.1250	.1672	.9212	1.84235
4.11	.8833-2	.5857-1	.1508	.3883	.1243	.1662	.9215	1.84303
4.12	.8742-2	.5821-1	.1502	.3875	.1237	.1652	.9219	1.84370
4.13	.8653-2	.5785-1	.1496	.3867	.1230	.1643	.9222	1.84437
4.14	.8564-2	.5749-1	.1490	.3860	.1223	.1633	.9225	1.84504
4.15	.8476-2	.5714-1	.1483	.3852	.1217	.1624	.9228	1.84570
4.16	.8390-2	.5679-1	.1477	.3844	.1210	.1614	.9232	1.84636
4.17	.8305-2	.5644-1	.1471	.3836	.1203	.1605	.9235	1.84701
4.18	.8220-2	.5610-1	.1465	.3828	.1197	.1596	.9238	1.84766
4.19	.8137-2	.5575-1	.1459	.3820	.1190	.1587	.9242	1.84831
4.20	.8054-2	.5541-1	.1453	.3812	.1184	.1577	.9245	1.84895
4.21	.7973-2	.5508-1	.1448	.3805	.1178	.1568	.9248	1.84958
4.22	.7892-2	.5474-1	.1442	.3797	.1171	.1559	.9251	1.85022
4.23	.7813-2	.5441-1	.1436	.3789	.1165	.1550	.9254	1.85085
4.24	.7734-2	.5408-1	.1430	.3782	.1159	.1542	.9257	1.85148
4.25	.7656-2	.5375-1	.1424	.3774	.1152	.1533	.9260	1.85210
4.26	.7580-2	.5343-1	.1419	.3766	.1146	.1524	.9264	1.85272
4.27	.7504-2	.5311-1	.1413	.3759	.1140	.1515	.9267	1.85333
4.28	.7429-2	.5279-1	.1407	.3751	.1134	.1507	.9270	1.85394
4.29	.7355-2	.5247-1	.1402	.3744	.1128	.1498	.9273	1.85455
4.30	.7281-2	.5216-1	.1396	.3736	.1122	.1490	.9276	1.85516
4.31	.7209-2	.5185-1	.1390	.3729	.1116	.1481	.9279	1.85576
4.32	.7137-2	.5154-1	.1385	.3721	.1110	.1473	.9282	1.85635
4.33	.7067-2	.5123-1	.1379	.3714	.1104	.1465	.9285	1.85695
4.34	.6997-2	.5093-1	.1374	.3707	.1098	.1456	.9288	1.85754
4.35	.6928-2	.5062-1	.1368	.3699	.1092	.1448	.9291	1.85812
4.36	.6859-2	.5032-1	.1363	.3692	.1087	.1440	.9294	1.85870
4.37	.6792-2	.5002-1	.1358	.3685	.1081	.1432	.9296	1.85928
4.38	.6725-2	.4973-1	.1352	.3677	.1075	.1424	.9299	1.85986
4.39	.6659-2	.4944-1	.1347	.3670	.1069	.1416	.9302	1.86043
4.40	.6594-2	.4914-1	.1342	.3663	.1064	.1408	.9305	1.86100
4.41	.6529-2	.4886-1	.1336	.3656	.1058	.1400	.9308	1.86157
4.42	.6465-2	.4857-1	.1331	.3649	.1053	.1392	.9311	1.86213
4.43	.6402-2	.4828-1	.1326	.3641	.1047	.1385	.9313	1.86269
4.44	.6340-2	.4800-1	.1321	.3634	.1042	.1377	.9316	1.86325
4.45	.6278-2	.4772-1	.1316	.3627	.1036	.1369	.9319	1.86380
4.46	.6217-2	.4744-1	.1311	.3620	.1031	.1362	.9322	1.86435
4.47	.6157-2	.4717-1	.1305	.3613	.1025	.1354	.9324	1.86489
4.48	.6098-2	.4689-1	.1300	.3606	.1020	.1347	.9327	1.86544
4.49	.6039-2	.4662-1	.1295	.3599	.1015	.1339	.9330	1.86598
4.50	.5981-2	.4635-1	.1290	.3592	.1009	.1332	.9333	1.86651
4.51	.5923-2	.4608-1	.1285	.3585	.1004	.1325	.9335	1.86705
4.52	.5866-2	.4582-1	.1280	.3578	.9987-1	.1317	.9338	1.86758
4.53	.5810-2	.4555-1	.1275	.3571	.9935-1	.1310	.9341	1.86810
4.54	.5754-2	.4529-1	.1271	.3564	.9884-1	.1303	.9343	1.86863
4.55	.5699-2	.4503-1	.1266	.3558	.9832-1	.1296	.9346	1.86915
4.56	.5645-2	.4477-1	.1261	.3551	.9781-1	.1289	.9348	1.86967
4.57	.5591-2	.4451-1	.1256	.3544	.9731-1	.1282	.9351	1.87018
4.58	.5538-2	.4426-1	.1251	.3537	.9680-1	.1275	.9353	1.87070
4.59	.5485-2	.4401-1	.1246	.3531	.9630-1	.1268	.9356	1.87121
4.60	.5433-2	.4376-1	.1242	.3524	.9581-1	.1261	.9359	1.87171
4.61	.5382-2	.4351-1	.1237	.3517	.9531-1	.1254	.9361	1.87222
4.62	.5331-2	.4326-1	.1232	.3510	.9482-1	.1247	.9364	1.87272
4.63	.5281-2	.4301-1	.1228	.3504	.9433-1	.1241	.9366	1.87322
4.64	.5231-2	.4277-1	.1223	.3497	.9385-1	.1234	.9369	1.87371
4.65	.5182-2	.4253-1	.1218	.3491	.9337-1	.1227	.9371	1.87420
4.66	.5133-2	.4229-1	.1214	.3484	.9289-1	.1221	.9373	1.87469
4.67	.5085-2	.4205-1	.1209	.3477	.9241-1	.1214	.9376	1.87518
4.68	.5037-2	.4181-1	.1205	.3471	.9194-1	.1207	.9378	1.87566
4.69	.4990-2	.4158-1	.1200	.3464	.9147-1	.1201	.9381	1.87615
4.70	.4944-2	.4135-1	.1196	.3458	.9101-1	.1195	.9383	1.87663
4.71	.4898-2	.4111-1	.1191	.3451	.9054-1	.1188	.9386	1.87710
4.72	.4852-2	.4088-1	.1187	.3445	.9008-1	.1182	.9388	1.87757
4.73	.4807-2	.4066-1	.1182	.3439	.8962-1	.1176	.9390	1.87805
4.74	.4762-2	.4043-1	.1178	.3432	.8917-1	.1169	.9393	1.87851
4.75	.4718-2	.4020-1	.1174	.3426	.8872-1	.1163	.9395	1.87898
4.76	.4675-2	.3998-1	.1169	.3419	.8827-1	.1157	.9397	1.87944
4.77	.4632-2	.3976-1	.1165	.3413	.8782-1	.1151	.9400	1.87990
4.78	.4589-2	.3954-1	.1161	.3407	.8738-1	.1145	.9402	1.88036
4.79	.4547-2	.3932-1	.1156	.3400	.8694-1	.1139	.9404	1.88082
4.80	.4505-2	.3910-1	.1152	.3394	.8650-1	.1133	.9406	1.88127
4.81	.4464-2	.3889-1	.1148	.3388	.8606-1	.1127	.9409	1.88172
4.82	.4423-2	.3867-1	.1144	.3382	.8563-1	.1121	.9411	1.88217
4.83	.4382-2	.3846-1	.1139	.3376	.8520-1	.1115	.9413	1.88261
4.84	.4343-2	.3825-1	.1135	.3369	.8477-1	.1109	.9415	1.88305
4.85	.4303-2	.3804-1	.1131	.3363	.8435-1	.1103	.9417	1.88350
4.86	.4264-2	.3783-1	.1127	.3357	.8392-1	.1097	.9420	1.88393
4.87	.4225-2	.3763-1	.1123	.3351	.8351-1	.1092	.9422	1.88437
4.88	.4187-2	.3742-1	.1119	.3345	.8309-1	.1086	.9424	1.88480
4.89	.4149-2	.3722-1	.1115	.3339	.8267-1	.1080	.9426	1.88523
4.90	.4111-2	.3702-1	.1111	.3333	.8226-1	.1075	.9428	1.88566
4.91	.4074-2	.3682-1	.1107	.3327	.8185-1	.1069	.9430	1.88609
4.92	.4038-2	.3662-1	.1103	.3321	.8145-1	.1064	.9433	1.88651
4.93	.4001-2	.3642-1	.1099	.3315	.8104-1	.1058	.9435	1.88693
4.94	.3965-2	.3622-1	.1095	.3309	.8064-1	.1053	.9437	1.88735
4.95	.3930-2	.3603-1	.1091	.3303	.8024-1	.1047	.9439	1.88777
4.96	.3895-2	.3583-1	.1087	.3297	.7985-1	.1042	.9441	1.88819
4.97	.3860-2	.3564-1	.1083	.3291	.7945-1	.1036	.9443	1.88860
4.98	.3825-2	.3545-1	.1079	.3285	.7906-1	.1031	.9445	1.88901
4.99	.3791-2	.3526-1	.1075	.3279	.7867-1	.1026	.9447	1.88942

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
14.48	49.854	.4904	19.75	3.368	5.863	.2373	23.95	4.00
14.44	49.941	.4902	19.85	3.371	5.888	.2359	24.07	4.01
14.40	50.029	.4900	19.95	3.374	5.914	.2346	24.19	4.02
14.37	50.115	.4898	20.05	3.376	5.939	.2333	24.30	4.03
14.33	50.202	.4896	20.15	3.379	5.964	.2320	24.42	4.04
14.29	50.288	.4894	20.25	3.382	5.989	.2307	24.54	4.05
14.26	50.373	.4892	20.35	3.384	6.015	.2294	24.66	4.06
14.22	50.459	.4890	20.46	3.387	6.040	.2281	24.78	4.07
14.19	50.544	.4888	20.56	3.389	6.066	.2269	24.90	4.08
14.15	50.628	.4886	20.66	3.392	6.091	.2256	25.02	4.09
14.12	50.713	.4884	20.76	3.394	6.117	.2244	25.14	4.10
14.08	50.797	.4882	20.87	3.397	6.143	.2231	25.26	4.11
14.05	50.880	.4880	20.97	3.399	6.168	.2219	25.38	4.12
14.01	50.964	.4878	21.07	3.402	6.194	.2207	25.50	4.13
13.98	51.047	.4876	21.17	3.404	6.220	.2194	25.62	4.14
13.94	51.129	.4874	21.28	3.407	6.246	.2188	25.74	4.15
13.91	51.212	.4873	21.38	3.409	6.272	.2170	25.87	4.16
13.88	51.294	.4871	21.49	3.411	6.298	.2158	25.99	4.17
13.84	51.375	.4869	21.59	3.414	6.324	.2146	26.11	4.18
13.81	51.457	.4867	21.70	3.416	6.351	.2135	26.23	4.19
13.77	51.538	.4865	21.80	3.419	6.377	.2123	26.36	4.20
13.74	51.618	.4863	21.91	3.421	6.403	.2111	26.48	4.21
13.71	51.699	.4862	22.01	3.423	6.430	.2100	26.61	4.22
13.67	51.779	.4860	22.12	3.426	6.456	.2088	26.73	4.23
13.64	51.859	.4858	22.22	3.428	6.483	.2077	26.85	4.24
13.61	51.938	.4856	22.33	3.430	6.509	.2066	26.98	4.25
13.58	52.017	.4854	22.43	3.433	6.536	.2054	27.10	4.26
13.54	52.096	.4853	22.54	3.435	6.562	.2043	27.23	4.27
13.51	52.175	.4851	22.65	3.437	6.589	.2032	27.35	4.28
13.48	52.253	.4849	22.76	3.439	6.616	.2021	27.48	4.29
13.45	52.331	.4848	22.86	3.442	6.643	.2010	27.61	4.30
13.42	52.408	.4846	22.97	3.444	6.670	.1999	27.73	4.31
13.38	52.486	.4844	23.08	3.446	6.697	.1988	27.86	4.32
13.35	52.563	.4843	23.19	3.448	6.724	.1978	27.99	4.33
13.32	52.640	.4841	23.29	3.450	6.751	.1967	28.11	4.34
13.29	52.716	.4839	23.40	3.453	6.778	.1956	28.24	4.35
13.26	52.792	.4838	23.51	3.455	6.806	.1946	28.37	4.36
13.23	52.868	.4836	23.62	3.457	6.833	.1935	28.50	4.37
13.20	52.944	.4834	23.73	3.459	6.860	.1925	28.63	4.38
13.17	53.019	.4833	23.84	3.461	6.888	.1915	28.75	4.39
13.14	53.094	.4831	23.95	3.463	6.915	.1904	28.88	4.40
13.11	53.169	.4830	24.06	3.465	6.943	.1894	29.01	4.41
13.08	53.243	.4828	24.17	3.468	6.971	.1884	29.14	4.42
13.05	53.317	.4826	24.28	3.470	6.998	.1874	29.27	4.43
13.02	53.391	.4825	24.39	3.472	7.026	.1864	29.40	4.44
12.99	53.465	.4823	24.50	3.474	7.054	.1854	29.53	4.45
12.96	53.538	.4822	24.61	3.476	7.082	.1844	29.66	4.46
12.93	53.611	.4820	24.73	3.478	7.110	.1835	29.80	4.47
12.90	53.684	.4819	24.84	3.480	7.138	.1825	29.93	4.48
12.87	53.756	.4817	24.95	3.482	7.166	.1815	30.06	4.49
12.84	53.829	.4816	25.06	3.484	7.194	.1806	30.19	4.50
12.81	53.901	.4814	25.18	3.486	7.222	.1796	30.32	4.51
12.78	53.972	.4813	25.29	3.488	7.250	.1787	30.46	4.52
12.75	54.044	.4811	25.40	3.490	7.279	.1777	30.59	4.53
12.72	54.115	.4810	25.51	3.492	7.307	.1768	30.72	4.54
12.70	54.186	.4808	25.63	3.494	7.335	.1759	30.86	4.55
12.67	54.256	.4807	25.74	3.496	7.364	.1749	30.99	4.56
12.64	54.327	.4806	25.86	3.498	7.393	.1740	31.12	4.57
12.61	54.397	.4804	25.97	3.500	7.421	.1731	31.26	4.58
12.58	54.467	.4803	26.09	3.501	7.450	.1722	31.39	4.59
12.56	54.536	.4801	26.20	3.503	7.479	.1713	31.53	4.60
12.53	54.605	.4800	26.32	3.505	7.507	.1704	31.66	4.61
12.50	54.674	.4799	26.43	3.507	7.536	.1695	31.80	4.62
12.47	54.743	.4797	26.55	3.509	7.565	.1686	31.93	4.63
12.45	54.812	.4796	26.66	3.511	7.594	.1678	32.07	4.64
12.42	54.880	.4795	26.78	3.513	7.623	.1669	32.21	4.65
12.39	54.948	.4793	26.89	3.514	7.652	.1660	32.34	4.66
12.36	55.016	.4792	27.01	3.516	7.682	.1652	32.48	4.67
12.34	55.084	.4791	27.13	3.518	7.711	.1643	32.62	4.68
12.31	55.151	.4789	27.25	3.520	7.740	.1635	32.76	4.69
12.28	55.218	.4788	27.36	3.522	7.770	.1626	32.89	4.70
12.26	55.285	.4787	27.48	3.524	7.799	.1618	33.03	4.71
12.23	55.351	.4785	27.60	3.525	7.829	.1609	33.17	4.72
12.21	55.418	.4784	27.72	3.527	7.858	.1601	33.31	4.73
12.18	55.484	.4783	27.83	3.529	7.888	.1593	33.45	4.74
12.15	55.550	.4781	27.95	3.531	7.917	.1585	33.59	4.75
12.13	55.615	.4780	28.07	3.532	7.947	.1577	33.73	4.76
12.10	55.681	.4779	28.19	3.534	7.977	.1569	33.87	4.77
12.08	55.746	.4778	28.31	3.536	8.007	.1561	34.01	4.78
12.05	55.811	.4776	28.43	3.537	8.037	.1553	34.15	4.79
12.02	55.875	.4775	28.55	3.539	8.067	.1545	34.29	4.80
12.00	55.940	.4774	28.67	3.541	8.097	.1537	34.43	4.81
11.97	56.004	.4773	28.79	3.543	8.127	.1529	34.57	4.82
11.95	56.068	.4771	28.91	3.544	8.157	.1521	34.71	4.83
11.92	56.132	.4770	29.03	3.546	8.187	.1514	34.85	4.84
11.90	56.195	.4769	29.15	3.548	8.218	.1506	35.00	4.85
11.87	56.259	.4768	29.27	3.549	8.248	.1498	35.14	4.86
11.85	56.322	.4767	29.40	3.551	8.279	.1491	35.28	4.87
11.82	56.384	.4766	29.52	3.552	8.309	.1483	35.43	4.88
11.80	56.447	.4764	29.64	3.554	8.340	.1476	35.57	4.89
11.78	56.510	.4763	29.76	3.556	8.370	.1468	35.71	4.90
11.75	56.572	.4762	29.89	3.557	8.401	.1461	35.86	4.91
11.73	56.634	.4761	30.01	3.559	8.432	.1454	36.00	4.92
11.70	56.695	.4760	30.13	3.561	8.463	.1446	36.15	4.93
11.68	56.757	.4759	30.25	3.562	8.493	.1439	36.29	4.94
11.66	56.818	.4757	30.38	3.564	8.524	.1432	36.44	4.95
11.63	56.879	.4756	30.50	3.565	8.555	.1425	36.58	4.96
11.61	56.940	.4755	30.63	3.567	8.586	.1418	36.73	4.97
11.58	57.001	.4754	30.75	3.568	8.618	.1411	36.87	4.98
11.56	57.061	.4753	30.88	3.570	8.649	.1404	37.02	4.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
5.00	.3758-2	.3507-1	.1071	.3273	.7828-1	.1080	.9449	1.88982
5.01	.3724-2	.3488-1	.1068	.3267	.7790-1	.1015	.9451	1.89023
5.02	.3691-2	.3470-1	.1064	.3262	.7752-1	.1010	.9453	1.89063
5.03	.3658-2	.3451-1	.1060	.3256	.7714-1	.1005	.9455	1.89103
5.04	.3626-2	.3433-1	.1056	.3250	.7676-1	.9997-1	.9457	1.89143
5.05	.3594-2	.3415-1	.1053	.3244	.7638-1	.9946-1	.9459	1.89182
5.06	.3562-2	.3397-1	.1049	.3239	.7601-1	.9895-1	.9461	1.89221
5.07	.3531-2	.3379-1	.1045	.3233	.7564-1	.9845-1	.9463	1.89260
5.08	.3500-2	.3361-1	.1041	.3227	.7527-1	.9795-1	.9465	1.89299
5.09	.3469-2	.3343-1	.1038	.3221	.7490-1	.9745-1	.9467	1.89338
5.10	.3439-2	.3326-1	.1034	.3216	.7454-1	.9696-1	.9469	1.89377
5.11	.3409-2	.3308-1	.1030	.3210	.7418-1	.9647-1	.9471	1.89415
5.12	.3379-2	.3291-1	.1027	.3205	.7382-1	.9598-1	.9473	1.89453
5.13	.3350-2	.3273-1	.1023	.3199	.7346-1	.9550-1	.9475	1.89491
5.14	.3321-2	.3256-1	.1020	.3193	.7311-1	.9502-1	.9476	1.89529
5.15	.3292-2	.3239-1	.1016	.3188	.7275-1	.9454-1	.9478	1.89566
5.16	.3263-2	.3222-1	.1013	.3182	.7240-1	.9407-1	.9480	1.89603
5.17	.3235-2	.3206-1	.1009	.3177	.7205-1	.9360-1	.9482	1.89641
5.18	.3207-2	.3189-1	.1006	.3171	.7171-1	.9313-1	.9484	1.89677
5.19	.3179-2	.3172-1	.1002	.3166	.7136-1	.9266-1	.9486	1.89714
5.20	.3152-2	.3156-1	.9987-1	.3160	.7102-1	.9220-1	.9488	1.89751
5.21	.3125-2	.3140-1	.9952-1	.3155	.7068-1	.9174-1	.9489	1.89787
5.22	.3098-2	.3123-1	.9918-1	.3149	.7034-1	.9128-1	.9491	1.89823
5.23	.3071-2	.3107-1	.9884-1	.3144	.7000-1	.9083-1	.9493	1.89859
5.24	.3045-2	.3091-1	.9850-1	.3138	.6967-1	.9038-1	.9495	1.89895
5.25	.3019-2	.3075-1	.9816-1	.3133	.6934-1	.8993-1	.9497	1.89931
5.26	.2993-2	.3060-1	.9782-1	.3128	.6901-1	.8948-1	.9498	1.89966
5.27	.2967-2	.3044-1	.9749-1	.3122	.6868-1	.8904-1	.9500	1.90001
5.28	.2942-2	.3028-1	.9716-1	.3117	.6835-1	.8860-1	.9502	1.90036
5.29	.2917-2	.3013-1	.9682-1	.3112	.6803-1	.8817-1	.9504	1.90071
5.30	.2892-2	.2997-1	.9649-1	.3106	.6771-1	.8773-1	.9505	1.90106
5.31	.2868-2	.2982-1	.9617-1	.3101	.6738-1	.8730-1	.9507	1.90140
5.32	.2844-2	.2967-1	.9584-1	.3096	.6707-1	.8687-1	.9509	1.90175
5.33	.2819-2	.2952-1	.9551-1	.3091	.6675-1	.8645-1	.9510	1.90209
5.34	.2796-2	.2937-1	.9519-1	.3085	.6643-1	.8602-1	.9512	1.90243
5.35	.2772-2	.2922-1	.9487-1	.3080	.6612-1	.8560-1	.9514	1.90277
5.36	.2749-2	.2907-1	.9455-1	.3075	.6581-1	.8518-1	.9516	1.90310
5.37	.2726-2	.2893-1	.9423-1	.3070	.6550-1	.8477-1	.9517	1.90344
5.38	.2703-2	.2878-1	.9391-1	.3065	.6519-1	.8436-1	.9519	1.90377
5.39	.2680-2	.2863-1	.9360-1	.3059	.6489-1	.8395-1	.9521	1.90410
5.40	.2658-2	.2849-1	.9328-1	.3054	.6458-1	.8354-1	.9522	1.90443
5.41	.2636-2	.2835-1	.9297-1	.3049	.6428-1	.8313-1	.9524	1.90476
5.42	.2614-2	.2821-1	.9266-1	.3044	.6398-1	.8273-1	.9525	1.90509
5.43	.2592-2	.2806-1	.9235-1	.3039	.6368-1	.8233-1	.9527	1.90541
5.44	.2570-2	.2792-1	.9204-1	.3034	.6339-1	.8193-1	.9529	1.90574
5.45	.2549-2	.2779-1	.9174-1	.3029	.6309-1	.8154-1	.9530	1.90606
5.46	.2528-2	.2765-1	.9143-1	.3024	.6280-1	.8114-1	.9532	1.90638
5.47	.2507-2	.2751-1	.9113-1	.3019	.6251-1	.8075-1	.9533	1.90670
5.48	.2486-2	.2737-1	.9083-1	.3014	.6222-1	.8037-1	.9535	1.90701
5.49	.2466-2	.2724-1	.9052-1	.3009	.6193-1	.7998-1	.9537	1.90733
5.50	.2445-2	.2710-1	.9023-1	.3004	.6164-1	.7960-1	.9538	1.90764
5.51	.2425-2	.2697-1	.8993-1	.2999	.6136-1	.7922-1	.9540	1.90795
5.52	.2405-2	.2683-1	.8963-1	.2994	.6107-1	.7884-1	.9541	1.90826
5.53	.2385-2	.2670-1	.8934-1	.2989	.6079-1	.7846-1	.9543	1.90857
5.54	.2366-2	.2657-1	.8904-1	.2984	.6051-1	.7809-1	.9544	1.90888
5.55	.2347-2	.2644-1	.8875-1	.2979	.6023-1	.7772-1	.9546	1.90919
5.56	.2327-2	.2631-1	.8846-1	.2974	.5996-1	.7735-1	.9547	1.90949
5.57	.2308-2	.2618-1	.8817-1	.2969	.5968-1	.7698-1	.9549	1.90980
5.58	.2290-2	.2605-1	.8788-1	.2965	.5941-1	.7662-1	.9550	1.91010
5.59	.2271-2	.2593-1	.8760-1	.2960	.5914-1	.7625-1	.9552	1.91040
5.60	.2253-2	.2580-1	.8731-1	.2955	.5887-1	.7589-1	.9553	1.91070
5.61	.2234-2	.2567-1	.8703-1	.2950	.5860-1	.7553-1	.9555	1.91099
5.62	.2216-2	.2555-1	.8674-1	.2945	.5833-1	.7518-1	.9556	1.91129
5.63	.2198-2	.2542-1	.8646-1	.2940	.5806-1	.7483-1	.9558	1.91158
5.64	.2180-2	.2530-1	.8618-1	.2936	.5780-1	.7447-1	.9559	1.91188
5.65	.2163-2	.2518-1	.8590-1	.2931	.5754-1	.7412-1	.9561	1.91217
5.66	.2146-2	.2506-1	.8563-1	.2926	.5728-1	.7378-1	.9562	1.91246
5.67	.2128-2	.2494-1	.8535-1	.2921	.5702-1	.7343-1	.9564	1.91275
5.68	.2111-2	.2481-1	.8508-1	.2917	.5676-1	.7309-1	.9565	1.91303
5.69	.2094-2	.2470-1	.8480-1	.2912	.5650-1	.7275-1	.9567	1.91332
5.70	.2077-2	.2458-1	.8453-1	.2907	.5625-1	.7241-1	.9568	1.91360
5.71	.2061-2	.2446-1	.8426-1	.2903	.5599-1	.7207-1	.9569	1.91389
5.72	.2044-2	.2434-1	.8399-1	.2898	.5574-1	.7174-1	.9571	1.91417
5.73	.2028-2	.2423-1	.8372-1	.2893	.5549-1	.7140-1	.9572	1.91445
5.74	.2012-2	.2411-1	.8345-1	.2889	.5524-1	.7107-1	.9574	1.91473
5.75	.1996-2	.2399-1	.8319-1	.2884	.5499-1	.7074-1	.9575	1.91501
5.76	.1980-2	.2388-1	.8292-1	.2880	.5475-1	.7041-1	.9576	1.91528
5.77	.1964-2	.2377-1	.8266-1	.2875	.5450-1	.7009-1	.9578	1.91556
5.78	.1949-2	.2365-1	.8240-1	.2871	.5426-1	.6977-1	.9579	1.91583
5.79	.1934-2	.2354-1	.8214-1	.2866	.5402-1	.6944-1	.9581	1.91610
5.80	.1918-2	.2343-1	.8188-1	.2861	.5378-1	.6913-1	.9582	1.91637
5.81	.1903-2	.2332-1	.8162-1	.2857	.5354-1	.6881-1	.9583	1.91664
5.82	.1888-2	.2321-1	.8136-1	.2852	.5330-1	.6849-1	.9585	1.91691
5.83	.1873-2	.2310-1	.8111-1	.2848	.5306-1	.6818-1	.9586	1.91718
5.84	.1859-2	.2299-1	.8085-1	.2843	.5283-1	.6787-1	.9587	1.91745
5.85	.1844-2	.2288-1	.8060-1	.2839	.5259-1	.6756-1	.9589	1.91771
5.86	.1830-2	.2277-1	.8034-1	.2834	.5236-1	.6725-1	.9590	1.91797
5.87	.1815-2	.2267-1	.8009-1	.2830	.5213-1	.6694-1	.9591	1.91824
5.88	.1801-2	.2256-1	.7984-1	.2826	.5190-1	.6664-1	.9592	1.91850
5.89	.1787-2	.2245-1	.7959-1	.2821	.5167-1	.6633-1	.9594	1.91876
5.90	.1773-2	.2235-1	.7934-1	.2817	.5144-1	.6603-1	.9595	1.91902
5.91	.1760-2	.2225-1	.7910-1	.2812	.5121-1	.6573-1	.9596	1.91927
5.92	.1746-2	.2214-1	.7885-1	.2808	.5099-1	.6544-1	.9598	1.91953
5.93	.1732-2	.2204-1	.7861-1	.2804	.5077-1	.6514-1	.9599	1.91979
5.94	.1719-2	.2194-1	.7836-1	.2799	.5054-1	.6485-1	.9600	1.92004
5.95	.1706-2	.2183-1	.7812-1	.2795	.5032-1	.6455-1	.9601	1.92029
5.96	.1693-2	.2173-1	.7788-1	.2791	.5010-1	.6426-1	.9603	1.92054
5.97	.1680-2	.2163-1	.7764-1	.2786	.4988-1	.6397-1	.9604	1.92079
5.98	.1667-2	.2153-1	.7740-1	.2782	.4967-1	.6369-1	.9605	1.92104
5.99	.1654-2	.2143-1	.7716-1	.2778	.4945-1	.6340-1	.9606	1.92129

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
11.54	57.122	.4752	31.00	3.571	8.680	.1397	37.17	5.00
11.51	57.182	.4751	31.13	3.573	8.711	.1390	37.31	5.01
11.49	57.242	.4750	31.25	3.574	8.743	.1383	37.46	5.02
11.47	57.301	.4749	31.38	3.576	8.774	.1376	37.61	5.03
11.44	57.361	.4748	31.50	3.577	8.806	.1369	37.76	5.04
11.42	57.420	.4747	31.63	3.579	8.837	.1362	37.90	5.05
11.40	57.479	.4745	31.75	3.580	8.869	.1356	38.05	5.06
11.38	57.538	.4744	31.88	3.582	8.900	.1349	38.20	5.07
11.35	57.596	.4743	32.01	3.583	8.932	.1342	38.35	5.08
11.33	57.655	.4742	32.14	3.585	8.964	.1336	38.50	5.09
11.31	57.713	.4741	32.26	3.586	8.996	.1329	38.65	5.10
11.29	57.771	.4740	32.39	3.588	9.028	.1323	38.80	5.11
11.26	57.829	.4739	32.52	3.589	9.060	.1316	38.95	5.12
11.24	57.886	.4738	32.65	3.591	9.092	.1310	39.10	5.13
11.22	57.944	.4737	32.77	3.592	9.124	.1303	39.25	5.14
11.20	58.001	.4736	32.90	3.594	9.156	.1297	39.40	5.15
11.17	58.058	.4735	33.03	3.595	9.188	.1291	39.55	5.16
11.15	58.115	.4734	33.16	3.596	9.221	.1284	39.71	5.17
11.13	58.171	.4733	33.29	3.598	9.253	.1278	39.86	5.18
11.11	58.228	.4732	33.42	3.599	9.286	.1272	40.01	5.19
11.09	58.284	.4731	33.55	3.601	9.318	.1266	40.16	5.20
11.07	58.340	.4730	33.68	3.602	9.351	.1260	40.32	5.21
11.04	58.396	.4729	33.81	3.603	9.383	.1254	40.47	5.22
11.02	58.452	.4728	33.94	3.605	9.416	.1248	40.62	5.23
11.00	58.507	.4727	34.07	3.606	9.449	.1242	40.78	5.24
10.98	58.562	.4726	34.20	3.607	9.481	.1236	40.93	5.25
10.96	58.618	.4725	34.33	3.609	9.514	.1230	41.08	5.26
10.94	58.672	.4725	34.47	3.610	9.547	.1224	41.24	5.27
10.92	58.727	.4724	34.60	3.611	9.580	.1218	41.39	5.28
10.90	58.782	.4723	34.73	3.613	9.613	.1212	41.55	5.29
10.88	58.836	.4722	34.86	3.614	9.646	.1206	41.71	5.30
10.85	58.890	.4721	35.00	3.615	9.680	.1200	41.86	5.31
10.83	58.944	.4720	35.13	3.617	9.713	.1195	42.02	5.32
10.81	58.998	.4719	35.26	3.618	9.746	.1189	42.17	5.33
10.79	59.052	.4718	35.39	3.619	9.780	.1183	42.33	5.34
10.77	59.105	.4717	35.53	3.621	9.813	.1178	42.49	5.35
10.75	59.159	.4716	35.66	3.622	9.846	.1172	42.64	5.36
10.73	59.212	.4715	35.80	3.623	9.880	.1167	42.80	5.37
10.71	59.265	.4715	35.93	3.624	9.914	.1161	42.96	5.38
10.69	59.318	.4714	36.07	3.626	9.947	.1156	43.12	5.39
10.67	59.370	.4713	36.20	3.627	9.981	.1150	43.28	5.40
10.65	59.423	.4712	36.34	3.628	10.01	.1145	43.44	5.41
10.63	59.475	.4711	36.47	3.629	10.05	.1139	43.59	5.42
10.61	59.527	.4710	36.61	3.631	10.08	.1134	43.75	5.43
10.59	59.579	.4709	36.74	3.632	10.12	.1129	43.91	5.44
10.57	59.631	.4708	36.88	3.633	10.15	.1123	44.07	5.45
10.55	59.682	.4708	37.01	3.634	10.18	.1118	44.23	5.46
10.53	59.734	.4707	37.15	3.635	10.22	.1113	44.39	5.47
10.51	59.785	.4706	37.29	3.637	10.25	.1108	44.55	5.48
10.49	59.836	.4705	37.43	3.638	10.29	.1103	44.72	5.49
10.48	59.887	.4704	37.56	3.639	10.32	.1097	44.88	5.50
10.46	59.938	.4703	37.70	3.640	10.36	.1092	45.04	5.51
10.44	59.988	.4703	37.84	3.641	10.39	.1087	45.20	5.52
10.42	60.039	.4702	37.98	3.643	10.43	.1082	45.36	5.53
10.40	60.089	.4701	38.11	3.644	10.46	.1077	45.53	5.54
10.38	60.139	.4700	38.25	3.645	10.49	.1072	45.69	5.55
10.36	60.189	.4699	38.39	3.646	10.53	.1067	45.85	5.56
10.34	60.239	.4699	38.53	3.647	10.56	.1062	46.02	5.57
10.32	60.288	.4698	38.67	3.648	10.60	.1057	46.19	5.58
10.31	60.338	.4697	38.81	3.650	10.63	.1052	46.34	5.59
10.29	60.387	.4696	38.95	3.651	10.67	.1048	46.51	5.60
10.27	60.436	.4695	39.09	3.652	10.70	.1043	46.67	5.61
10.25	60.485	.4695	39.23	3.653	10.74	.1038	46.84	5.62
10.23	60.534	.4694	39.37	3.654	10.77	.1033	47.00	5.63
10.21	60.583	.4693	39.51	3.655	10.81	.1029	47.17	5.64
10.19	60.631	.4692	39.65	3.656	10.84	.1024	47.33	5.65
10.18	60.680	.4692	39.79	3.657	10.88	.1019	47.50	5.66
10.16	60.728	.4691	39.94	3.659	10.92	.1014	47.67	5.67
10.14	60.776	.4690	40.08	3.660	10.95	.1010	47.83	5.68
10.12	60.824	.4689	40.22	3.661	10.99	.1005	48.00	5.69
10.10	60.872	.4689	40.36	3.662	11.02	.1001	48.17	5.70
10.09	60.919	.4688	40.51	3.663	11.06	.9961-1	48.34	5.71
10.07	60.967	.4687	40.65	3.664	11.09	.9916-1	48.50	5.72
10.05	61.014	.4686	40.79	3.665	11.13	.9871-1	48.67	5.73
10.03	61.061	.4686	40.93	3.666	11.17	.9827-1	48.84	5.74
10.02	61.108	.4685	41.08	3.667	11.20	.9788-1	49.01	5.75
9.998	61.155	.4684	41.22	3.668	11.24	.9738-1	49.18	5.76
9.980	61.202	.4683	41.37	3.669	11.27	.9694-1	49.35	5.77
9.963	61.248	.4683	41.51	3.670	11.31	.9650-1	49.52	5.78
9.946	61.295	.4682	41.66	3.671	11.35	.9607-1	49.69	5.79
9.928	61.341	.4681	41.80	3.672	11.38	.9564-1	49.86	5.80
9.911	61.387	.4681	41.95	3.674	11.42	.9521-1	50.03	5.81
9.894	61.433	.4680	42.09	3.675	11.45	.9478-1	50.20	5.82
9.877	61.479	.4679	42.24	3.676	11.49	.9436-1	50.37	5.83
9.860	61.525	.4678	42.38	3.677	11.53	.9394-1	50.54	5.84
9.842	61.570	.4678	42.53	3.678	11.56	.9352-1	50.71	5.85
9.826	61.616	.4677	42.67	3.679	11.60	.9310-1	50.88	5.86
9.809	61.661	.4676	42.82	3.680	11.64	.9269-1	51.06	5.87
9.792	61.706	.4676	42.97	3.681	11.67	.9228-1	51.23	5.88
9.775	61.751	.4675	43.12	3.682	11.71	.9187-1	51.40	5.89
9.758	61.796	.4674	43.26	3.683	11.75	.9146-1	51.58	5.90
9.742	61.841	.4674	43.41	3.684	11.78	.9105-1	51.75	5.91
9.725	61.885	.4673	43.56	3.685	11.82	.9065-1	51.92	5.92
9.708	61.930	.4672	43.71	3.686	11.86	.9025-1	52.10	5.93
9.692	61.974	.4672	43.85	3.687	11.90	.8985-1	52.27	5.94
9.675	62.018	.4671	44.00	3.688	11.93	.8946-1	52.45	5.95
9.659	62.062	.4670	44.15	3.688	11.97	.8906-1	52.62	5.96
9.643	62.106	.4670	44.30	3.689	12.01	.8867-1	52.80	5.97
9.626	62.150	.4669	44.45	3.690	12.04	.8828-1	52.97	5.98
9.610	62.194	.4668	44.60	3.691	12.08	.8789-1	53.15	5.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A*/A	V/V_0	V/a*
6.00	.1641-2	.2133-1	.7698-1	.2774	.4923-1	.6312-1	.9608	1.92154
6.01	.1629-2	.2124-1	.7669-1	.2769	.4902-1	.6283-1	.9609	1.92178
6.02	.1616-2	.2114-1	.7645-1	.2765	.4881-1	.6255-1	.9610	1.92203
6.03	.1604-2	.2104-1	.7622-1	.2761	.4860-1	.6227-1	.9611	1.92227
6.04	.1592-2	.2095-1	.7598-1	.2757	.4838-1	.6200-1	.9613	1.92251
6.05	.1579-2	.2085-1	.7575-1	.2752	.4818-1	.6172-1	.9614	1.92276
6.06	.1567-2	.2075-1	.7552-1	.2748	.4797-1	.6145-1	.9615	1.92300
6.07	.1556-2	.2066-1	.7529-1	.2744	.4776-1	.6117-1	.9616	1.92323
6.08	.1544-2	.2057-1	.7506-1	.2740	.4755-1	.6090-1	.9617	1.92347
6.09	.1532-2	.2047-1	.7484-1	.2736	.4735-1	.6063-1	.9619	1.92371
6.10	.1520-2	.2038-1	.7461-1	.2731	.4715-1	.6036-1	.9620	1.92395
6.11	.1509-2	.2029-1	.7438-1	.2727	.4694-1	.6010-1	.9621	1.92418
6.12	.1498-2	.2019-1	.7416-1	.2723	.4674-1	.5983-1	.9622	1.92441
6.13	.1486-2	.2010-1	.7393-1	.2719	.4654-1	.5957-1	.9623	1.92465
6.14	.1475-2	.2001-1	.7371-1	.2715	.4634-1	.5931-1	.9624	1.92488
6.15	.1464-2	.1992-1	.7349-1	.2711	.4614-1	.5905-1	.9626	1.92511
6.16	.1453-2	.1983-1	.7327-1	.2707	.4595-1	.5879-1	.9627	1.92534
6.17	.1442-2	.1974-1	.7305-1	.2703	.4575-1	.5853-1	.9628	1.92557
6.18	.1431-2	.1965-1	.7283-1	.2699	.4556-1	.5827-1	.9629	1.92579
6.19	.1421-2	.1957-1	.7261-1	.2695	.4536-1	.5802-1	.9630	1.92602
6.20	.1410-2	.1948-1	.7239-1	.2691	.4517-1	.5777-1	.9631	1.92625
6.21	.1400-2	.1939-1	.7218-1	.2687	.4498-1	.5751-1	.9632	1.92647
6.22	.1389-2	.1930-1	.7196-1	.2683	.4479-1	.5726-1	.9633	1.92669
6.23	.1379-2	.1922-1	.7175-1	.2679	.4460-1	.5701-1	.9635	1.92692
6.24	.1369-2	.1913-1	.7153-1	.2675	.4441-1	.5677-1	.9636	1.92714
6.25	.1359-2	.1905-1	.7132-1	.2671	.4422-1	.5652-1	.9637	1.92736
6.26	.1348-2	.1896-1	.7111-1	.2667	.4404-1	.5628-1	.9638	1.92758
6.27	.1339-2	.1888-1	.7090-1	.2663	.4385-1	.5603-1	.9639	1.92780
6.28	.1329-2	.1880-1	.7069-1	.2659	.4367-1	.5579-1	.9640	1.92801
6.29	.1319-2	.1871-1	.7048-1	.2655	.4348-1	.5555-1	.9641	1.92823
6.30	.1309-2	.1863-1	.7027-1	.2651	.4330-1	.5531-1	.9642	1.92845
6.31	.1300-2	.1855-1	.7007-1	.2647	.4312-1	.5507-1	.9643	1.92866
6.32	.1290-2	.1847-1	.6986-1	.2643	.4294-1	.5484-1	.9644	1.92887
6.33	.1281-2	.1838-1	.6966-1	.2639	.4276-1	.5460-1	.9645	1.92909
6.34	.1271-2	.1830-1	.6945-1	.2635	.4258-1	.5437-1	.9646	1.92930
6.35	.1262-2	.1822-1	.6925-1	.2632	.4240-1	.5413-1	.9648	1.92951
6.36	.1253-2	.1814-1	.6905-1	.2628	.4223-1	.5390-1	.9649	1.92972
6.37	.1244-2	.1806-1	.6884-1	.2624	.4205-1	.5367-1	.9650	1.92993
6.38	.1234-2	.1798-1	.6864-1	.2620	.4187-1	.5344-1	.9651	1.93014
6.39	.1226-2	.1791-1	.6844-1	.2616	.4170-1	.5322-1	.9652	1.93034
6.40	.1217-2	.1783-1	.6824-1	.2612	.4153-1	.5299-1	.9653	1.93055
6.41	.1208-2	.1775-1	.6805-1	.2609	.4136-1	.5276-1	.9654	1.93076
6.42	.1199-2	.1767-1	.6785-1	.2605	.4118-1	.5254-1	.9655	1.93096
6.43	.1190-2	.1760-1	.6765-1	.2601	.4101-1	.5232-1	.9656	1.93116
6.44	.1182-2	.1752-1	.6746-1	.2597	.4084-1	.5210-1	.9657	1.93137
6.45	.1173-2	.1744-1	.6726-1	.2593	.4068-1	.5188-1	.9658	1.93157
6.46	.1165-2	.1737-1	.6707-1	.2590	.4051-1	.5166-1	.9659	1.93177
6.47	.1156-2	.1729-1	.6687-1	.2586	.4034-1	.5144-1	.9660	1.93197
6.48	.1148-2	.1722-1	.6668-1	.2582	.4018-1	.5122-1	.9661	1.93217
6.49	.1140-2	.1714-1	.6649-1	.2579	.4001-1	.5101-1	.9662	1.93237
6.50	.1132-2	.1707-1	.6630-1	.2575	.3985-1	.5079-1	.9663	1.93256
6.51	.1124-2	.1700-1	.6611-1	.2571	.3968-1	.5058-1	.9664	1.93276
6.52	.1116-2	.1692-1	.6592-1	.2567	.3952-1	.5037-1	.9665	1.93296
6.53	.1108-2	.1685-1	.6573-1	.2564	.3936-1	.5016-1	.9666	1.93315
6.54	.1100-2	.1678-1	.6554-1	.2560	.3920-1	.4995-1	.9667	1.93335
6.55	.1092-2	.1671-1	.6536-1	.2556	.3904-1	.4974-1	.9668	1.93354
6.56	.1084-2	.1664-1	.6517-1	.2553	.3888-1	.4953-1	.9669	1.93373
6.57	.1077-2	.1657-1	.6498-1	.2549	.3872-1	.4932-1	.9670	1.93392
6.58	.1069-2	.1650-1	.6480-1	.2546	.3857-1	.4912-1	.9671	1.93411
6.59	.1061-2	.1643-1	.6462-1	.2542	.3841-1	.4892-1	.9672	1.93431
6.60	.1054-2	.1636-1	.6443-1	.2538	.3825-1	.4871-1	.9672	1.93449
6.61	.1046-2	.1629-1	.6425-1	.2535	.3810-1	.4851-1	.9673	1.93468
6.62	.1039-2	.1622-1	.6407-1	.2531	.3795-1	.4831-1	.9674	1.93487
6.63	.1032-2	.1615-1	.6389-1	.2528	.3779-1	.4811-1	.9675	1.93506
6.64	.1024-2	.1608-1	.6371-1	.2524	.3764-1	.4791-1	.9676	1.93524
6.65	.1017-2	.1601-1	.6353-1	.2520	.3749-1	.4771-1	.9677	1.93543
6.66	.1010-2	.1595-1	.6335-1	.2517	.3734-1	.4752-1	.9678	1.93561
6.67	.1003-2	.1588-1	.6317-1	.2513	.3719-1	.4732-1	.9679	1.93580
6.68	.9960-3	.1581-1	.6300-1	.2510	.3704-1	.4713-1	.9680	1.93598
6.69	.9891-3	.1574-1	.6282-1	.2506	.3689-1	.4693-1	.9681	1.93616
6.70	.9822-3	.1568-1	.6264-1	.2503	.3674-1	.4674-1	.9682	1.93634
6.71	.9753-3	.1561-1	.6247-1	.2499	.3659-1	.4655-1	.9683	1.93652
6.72	.9686-3	.1555-1	.6229-1	.2496	.3645-1	.4636-1	.9684	1.93670
6.73	.9618-3	.1548-1	.6212-1	.2492	.3630-1	.4617-1	.9684	1.93688
6.74	.9551-3	.1542-1	.6195-1	.2489	.3616-1	.4598-1	.9685	1.93706
6.75	.9485-3	.1535-1	.6178-1	.2485	.3601-1	.4580-1	.9686	1.93724
6.76	.9420-3	.1529-1	.6160-1	.2482	.3587-1	.4561-1	.9687	1.93742
6.77	.9355-3	.1523-1	.6143-1	.2479	.3573-1	.4542-1	.9688	1.93759
6.78	.9290-3	.1516-1	.6126-1	.2475	.3559-1	.4524-1	.9689	1.93777
6.79	.9226-3	.1510-1	.6109-1	.2472	.3545-1	.4506-1	.9690	1.93794
6.80	.9162-3	.1504-1	.6093-1	.2468	.3531-1	.4487-1	.9691	1.93812
6.81	.9099-3	.1498-1	.6076-1	.2465	.3517-1	.4469-1	.9691	1.93829
6.82	.9037-3	.1491-1	.6059-1	.2462	.3503-1	.4451-1	.9692	1.93846
6.83	.8975-3	.1485-1	.6042-1	.2458	.3489-1	.4433-1	.9693	1.93863
6.84	.8913-3	.1479-1	.6026-1	.2455	.3475-1	.4415-1	.9694	1.93881
6.85	.8852-3	.1473-1	.6009-1	.2451	.3461-1	.4398-1	.9695	1.93898
6.86	.8792-3	.1467-1	.5993-1	.2448	.3448-1	.4380-1	.9696	1.93915
6.87	.8732-3	.1461-1	.5976-1	.2445	.3434-1	.4362-1	.9697	1.93931
6.88	.8672-3	.1455-1	.5960-1	.2441	.3421-1	.4345-1	.9697	1.93948
6.89	.8613-3	.1449-1	.5944-1	.2438	.3407-1	.4327-1	.9698	1.93965
6.90	.8555-3	.1443-1	.5928-1	.2435	.3394-1	.4310-1	.9699	1.93982
6.91	.8497-3	.1437-1	.5912-1	.2431	.3381-1	.4293-1	.9700	1.93998
6.92	.8439-3	.1431-1	.5895-1	.2428	.3368-1	.4276-1	.9701	1.94015
6.93	.8382-3	.1426-1	.5879-1	.2425	.3355-1	.4259-1	.9702	1.94031
6.94	.8325-3	.1420-1	.5864-1	.2421	.3341-1	.4242-1	.9702	1.94048
6.95	.8269-3	.1414-1	.5848-1	.2418	.3328-1	.4225-1	.9703	1.94064
6.96	.8213-3	.1408-1	.5832-1	.2415	.3316-1	.4208-1	.9704	1.94081
6.97	.8158-3	.1403-1	.5816-1	.2412	.3303-1	.4192-1	.9705	1.94097
6.98	.8103-3	.1397-1	.5800-1	.2408	.3290-1	.4175-1	.9706	1.94113
6.99	.8049-3	.1391-1	.5785-1	.2405	.3277-1	.4158-1	.9706	1.94129

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
9.594	62.237	.4668	44.75	3.692	12.12	.8751-1	53.32	6.00
9.578	62.281	.4667	44.90	3.693	12.16	.8713-1	53.50	6.01
9.562	62.324	.4666	45.05	3.694	12.19	.8675-1	53.68	6.02
9.546	62.367	.4666	45.20	3.695	12.23	.8637-1	53.85	6.03
9.530	62.410	.4665	45.35	3.696	12.27	.8599-1	54.03	6.04
9.514	62.453	.4665	45.50	3.697	12.31	.8562-1	54.21	6.05
9.498	62.496	.4664	45.65	3.698	12.35	.8524-1	54.39	6.06
9.482	62.538	.4663	45.81	3.699	12.38	.8487-1	54.56	6.07
9.467	62.581	.4663	45.96	3.700	12.42	.8451-1	54.74	6.08
9.451	62.623	.4662	46.11	3.701	12.46	.8414-1	54.92	6.09
9.435	62.665	.4661	46.26	3.702	12.50	.8378-1	55.10	6.10
9.420	62.707	.4661	46.42	3.702	12.54	.8341-1	55.28	6.11
9.404	62.749	.4660	46.57	3.703	12.57	.8305-1	55.46	6.12
9.389	62.791	.4660	46.72	3.704	12.61	.8270-1	55.64	6.13
9.373	62.833	.4659	46.87	3.705	12.65	.8234-1	55.82	6.14
9.358	62.875	.4658	47.03	3.706	12.69	.8199-1	56.00	6.15
9.343	62.916	.4658	47.18	3.707	12.73	.8163-1	56.18	6.16
9.327	62.957	.4657	47.34	3.708	12.77	.8128-1	56.36	6.17
9.312	62.999	.4657	47.49	3.709	12.81	.8094-1	56.54	6.18
9.297	63.040	.4656	47.65	3.710	12.84	.8059-1	56.72	6.19
9.282	63.081	.4655	47.80	3.710	12.88	.8024-1	56.91	6.20
9.267	63.122	.4655	47.96	3.711	12.92	.7990-1	57.09	6.21
9.252	63.162	.4654	48.11	3.712	12.96	.7956-1	57.27	6.22
9.237	63.203	.4654	48.27	3.713	13.00	.7922-1	57.45	6.23
9.222	63.244	.4653	48.42	3.714	13.04	.7889-1	57.64	6.24
9.207	63.284	.4653	48.58	3.715	13.08	.7855-1	57.82	6.25
9.192	63.324	.4652	48.73	3.716	13.12	.7822-1	58.00	6.26
9.177	63.364	.4651	48.89	3.716	13.16	.7789-1	58.19	6.27
9.163	63.404	.4651	49.05	3.717	13.19	.7756-1	58.37	6.28
9.148	63.444	.4650	49.21	3.718	13.23	.7723-1	58.56	6.29
9.133	63.484	.4650	49.36	3.719	13.27	.7690-1	58.74	6.30
9.119	63.524	.4649	49.52	3.720	13.31	.7658-1	58.93	6.31
9.104	63.563	.4649	49.68	3.721	13.35	.7626-1	59.11	6.32
9.090	63.603	.4648	49.84	3.721	13.39	.7594-1	59.30	6.33
9.075	63.642	.4648	49.99	3.722	13.43	.7562-1	59.49	6.34
9.061	63.682	.4647	50.15	3.723	13.47	.7530-1	59.67	6.35
9.046	63.721	.4647	50.31	3.724	13.51	.7498-1	59.86	6.36
9.032	63.760	.4646	50.47	3.725	13.55	.7467-1	60.05	6.37
9.018	63.799	.4645	50.63	3.725	13.59	.7436-1	60.23	6.38
9.003	63.837	.4645	50.79	3.726	13.63	.7405-1	60.42	6.39
8.989	63.876	.4644	50.95	3.727	13.67	.7374-1	60.61	6.40
8.975	63.915	.4644	51.11	3.728	13.71	.7343-1	60.80	6.41
8.961	63.953	.4643	51.27	3.729	13.75	.7312-1	60.99	6.42
8.947	63.991	.4643	51.43	3.729	13.79	.7282-1	61.17	6.43
8.933	64.030	.4642	51.59	3.730	13.83	.7252-1	61.36	6.44
8.919	64.068	.4642	51.75	3.731	13.87	.7222-1	61.55	6.45
8.905	64.106	.4641	51.91	3.732	13.91	.7192-1	61.74	6.46
8.891	64.144	.4641	52.08	3.733	13.95	.7162-1	61.93	6.47
8.877	64.181	.4640	52.24	3.733	13.99	.7133-1	62.12	6.48
8.864	64.219	.4640	52.40	3.734	14.03	.7103-1	62.31	6.49
8.850	64.257	.4639	52.56	3.735	14.07	.7074-1	62.50	6.50
8.836	64.294	.4639	52.73	3.736	14.11	.7045-1	62.69	6.51
8.823	64.332	.4638	52.89	3.736	14.16	.7016-1	62.89	6.52
8.809	64.369	.4638	53.05	3.737	14.20	.6987-1	63.08	6.53
8.795	64.406	.4637	53.21	3.738	14.24	.6958-1	63.27	6.54
8.782	64.443	.4637	53.38	3.739	14.28	.6930-1	63.46	6.55
8.768	64.480	.4636	53.54	3.739	14.32	.6901-1	63.65	6.56
8.755	64.517	.4636	53.71	3.740	14.36	.6873-1	63.85	6.57
8.741	64.554	.4635	53.87	3.741	14.40	.6845-1	64.04	6.58
8.728	64.590	.4635	54.04	3.742	14.44	.6817-1	64.23	6.59
8.715	64.627	.4634	54.20	3.742	14.48	.6790-1	64.43	6.60
8.701	64.663	.4634	54.37	3.743	14.52	.6762-1	64.62	6.61
8.688	64.700	.4633	54.53	3.744	14.57	.6734-1	64.82	6.62
8.675	64.736	.4633	54.70	3.744	14.61	.6707-1	65.01	6.63
8.662	64.772	.4632	54.86	3.745	14.65	.6680-1	65.20	6.64
8.649	64.808	.4632	55.03	3.746	14.69	.6653-1	65.40	6.65
8.636	64.844	.4631	55.19	3.747	14.73	.6626-1	65.60	6.66
8.623	64.880	.4631	55.36	3.747	14.77	.6599-1	65.79	6.67
8.610	64.916	.4630	55.53	3.748	14.82	.6573-1	65.99	6.68
8.597	64.951	.4630	55.70	3.749	14.86	.6546-1	66.18	6.69
8.584	64.987	.4629	55.86	3.749	14.90	.6520-1	66.38	6.70
8.571	65.022	.4629	56.03	3.750	14.94	.6494-1	66.58	6.71
8.558	65.057	.4629	56.20	3.751	14.98	.6467-1	66.77	6.72
8.545	65.093	.4628	56.37	3.752	15.02	.6442-1	66.97	6.73
8.532	65.128	.4628	56.53	3.752	15.07	.6416-1	67.17	6.74
8.520	65.163	.4627	56.70	3.753	15.11	.6390-1	67.37	6.75
8.507	65.198	.4627	56.87	3.754	15.15	.6365-1	67.57	6.76
8.494	65.233	.4626	57.04	3.754	15.19	.6339-1	67.77	6.77
8.482	65.268	.4626	57.21	3.755	15.24	.6314-1	67.96	6.78
8.469	65.302	.4625	57.38	3.756	15.28	.6289-1	68.16	6.79
8.457	65.337	.4625	57.55	3.756	15.32	.6264-1	68.36	6.80
8.444	65.371	.4624	57.72	3.757	15.36	.6239-1	68.56	6.81
8.432	65.406	.4624	57.89	3.758	15.41	.6214-1	68.76	6.82
8.419	65.440	.4624	58.06	3.758	15.45	.6189-1	68.96	6.83
8.407	65.474	.4623	58.23	3.759	15.49	.6165-1	69.16	6.84
8.394	65.508	.4623	58.40	3.760	15.53	.6141-1	69.37	6.85
8.382	65.542	.4622	58.57	3.760	15.58	.6116-1	69.57	6.86
8.370	65.576	.4622	58.75	3.761	15.62	.6092-1	69.77	6.87
8.357	65.610	.4621	58.92	3.762	15.66	.6068-1	69.97	6.88
8.345	65.644	.4621	59.09	3.762	15.71	.6044-1	70.17	6.89
8.333	65.677	.4621	59.26	3.763	15.75	.6021-1	70.38	6.90
8.321	65.711	.4620	59.44	3.764	15.79	.5997-1	70.58	6.91
8.309	65.744	.4620	59.61	3.764	15.84	.5973-1	70.78	6.92
8.297	65.778	.4619	59.78	3.765	15.88	.5950-1	70.99	6.93
8.285	65.811	.4619	59.95	3.765	15.92	.5927-1	71.19	6.94
8.273	65.844	.4618	60.13	3.766	15.97	.5904-1	71.39	6.95
8.261	65.877	.4618	60.30	3.767	16.01	.5880-1	71.60	6.96
8.249	65.910	.4618	60.48	3.767	16.05	.5858-1	71.80	6.97
8.237	65.943	.4617	60.65	3.768	16.10	.5835-1	72.01	6.98
8.225	65.976	.4617	60.83	3.769	16.14	.5812-1	72.21	6.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
7.00	.7995-3	.1386-1	.5769-1	.2402	.3264-1	.4142-1	.9707	1.94145
7.01	.7941-3	.1380-1	.5754-1	.2399	.3258-1	.4126-1	.9708	1.94161
7.02	.7888-3	.1375-1	.5738-1	.2395	.3239-1	.4109-1	.9709	1.94177
7.03	.7835-3	.1369-1	.5723-1	.2392	.3227-1	.4093-1	.9710	1.94193
7.04	.7783-3	.1364-1	.5708-1	.2389	.3214-1	.4077-1	.9710	1.94209
7.05	.7731-3	.1358-1	.5692-1	.2386	.3202-1	.4061-1	.9711	1.94224
7.06	.7679-3	.1353-1	.5677-1	.2383	.3190-1	.4045-1	.9712	1.94240
7.07	.7628-3	.1347-1	.5662-1	.2379	.3177-1	.4029-1	.9713	1.94256
7.08	.7578-3	.1342-1	.5647-1	.2376	.3165-1	.4014-1	.9714	1.94271
7.09	.7527-3	.1337-1	.5632-1	.2373	.3153-1	.3998-1	.9714	1.94287
7.10	.7477-3	.1331-1	.5617-1	.2370	.3141-1	.3982-1	.9715	1.94302
7.11	.7428-3	.1326-1	.5602-1	.2367	.3129-1	.3967-1	.9716	1.94317
7.12	.7379-3	.1321-1	.5587-1	.2364	.3117-1	.3951-1	.9717	1.94333
7.13	.7330-3	.1316-1	.5572-1	.2361	.3105-1	.3936-1	.9717	1.94348
7.14	.7282-3	.1310-1	.5558-1	.2357	.3093-1	.3921-1	.9718	1.94363
7.15	.7234-3	.1305-1	.5543-1	.2354	.3082-1	.3905-1	.9719	1.94378
7.16	.7186-3	.1300-1	.5528-1	.2351	.3070-1	.3890-1	.9720	1.94393
7.17	.7139-3	.1295-1	.5514-1	.2348	.3058-1	.3875-1	.9720	1.94408
7.18	.7092-3	.1290-1	.5499-1	.2345	.3047-1	.3860-1	.9721	1.94423
7.19	.7046-3	.1285-1	.5485-1	.2342	.3035-1	.3845-1	.9722	1.94438
7.20	.6999-3	.1279-1	.5470-1	.2339	.3024-1	.3831-1	.9723	1.94453
7.21	.6954-3	.1274-1	.5456-1	.2336	.3018-1	.3816-1	.9723	1.94467
7.22	.6908-3	.1269-1	.5442-1	.2333	.3001-1	.3801-1	.9724	1.94482
7.23	.6863-3	.1264-1	.5428-1	.2330	.2990-1	.3786-1	.9725	1.94497
7.24	.6818-3	.1260-1	.5413-1	.2327	.2978-1	.3772-1	.9726	1.94511
7.25	.6774-3	.1255-1	.5399-1	.2324	.2967-1	.3757-1	.9726	1.94526
7.26	.6730-3	.1250-1	.5385-1	.2321	.2956-1	.3743-1	.9727	1.94540
7.27	.6686-3	.1245-1	.5371-1	.2318	.2945-1	.3729-1	.9728	1.94555
7.28	.6643-3	.1240-1	.5357-1	.2315	.2934-1	.3714-1	.9728	1.94569
7.29	.6600-3	.1235-1	.5343-1	.2312	.2923-1	.3700-1	.9729	1.94583
7.30	.6557-3	.1230-1	.5330-1	.2309	.2912-1	.3686-1	.9730	1.94597
7.31	.6515-3	.1226-1	.5316-1	.2306	.2901-1	.3672-1	.9731	1.94612
7.32	.6473-3	.1221-1	.5302-1	.2303	.2890-1	.3658-1	.9731	1.94626
7.33	.6431-3	.1216-1	.5288-1	.2300	.2880-1	.3644-1	.9732	1.94640
7.34	.6390-3	.1211-1	.5275-1	.2297	.2869-1	.3630-1	.9733	1.94654
7.35	.6349-3	.1207-1	.5261-1	.2294	.2858-1	.3617-1	.9733	1.94668
7.36	.6308-3	.1202-1	.5248-1	.2291	.2848-1	.3603-1	.9734	1.94682
7.37	.6268-3	.1197-1	.5234-1	.2288	.2837-1	.3589-1	.9735	1.94696
7.38	.6227-3	.1193-1	.5221-1	.2285	.2826-1	.3576-1	.9735	1.94709
7.39	.6188-3	.1188-1	.5207-1	.2282	.2816-1	.3562-1	.9736	1.94723
7.40	.6148-3	.1184-1	.5194-1	.2279	.2806-1	.3549-1	.9737	1.94737
7.41	.6109-3	.1179-1	.5181-1	.2276	.2795-1	.3536-1	.9738	1.94750
7.42	.6070-3	.1175-1	.5167-1	.2273	.2785-1	.3522-1	.9738	1.94764
7.43	.6031-3	.1170-1	.5154-1	.2270	.2775-1	.3509-1	.9739	1.94778
7.44	.5993-3	.1166-1	.5141-1	.2267	.2764-1	.3496-1	.9740	1.94791
7.45	.5955-3	.1161-1	.5128-1	.2265	.2754-1	.3483-1	.9740	1.94805
7.46	.5917-3	.1157-1	.5115-1	.2262	.2744-1	.3470-1	.9741	1.94818
7.47	.5880-3	.1152-1	.5102-1	.2259	.2734-1	.3457-1	.9742	1.94831
7.48	.5842-3	.1148-1	.5089-1	.2256	.2724-1	.3444-1	.9742	1.94845
7.49	.5805-3	.1144-1	.5076-1	.2253	.2714-1	.3431-1	.9743	1.94858
7.50	.5769-3	.1139-1	.5063-1	.2250	.2704-1	.3418-1	.9744	1.94871
7.51	.5732-3	.1135-1	.5050-1	.2247	.2694-1	.3406-1	.9744	1.94884
7.52	.5696-3	.1132-1	.5038-1	.2244	.2684-1	.3393-1	.9745	1.94897
7.53	.5660-3	.1126-1	.5025-1	.2242	.2675-1	.3380-1	.9746	1.94910
7.54	.5625-3	.1122-1	.5012-1	.2239	.2665-1	.3368-1	.9746	1.94923
7.55	.5590-3	.1118-1	.5000-1	.2236	.2655-1	.3355-1	.9747	1.94936
7.56	.5555-3	.1114-1	.4987-1	.2233	.2646-1	.3343-1	.9747	1.94949
7.57	.5520-3	.1110-1	.4975-1	.2230	.2636-1	.3331-1	.9748	1.94962
7.58	.5485-3	.1105-1	.4962-1	.2228	.2626-1	.3318-1	.9749	1.94975
7.59	.5451-3	.1101-1	.4950-1	.2225	.2617-1	.3306-1	.9749	1.94987
7.60	.5417-3	.1097-1	.4937-1	.2222	.2607-1	.3294-1	.9750	1.95000
7.61	.5383-3	.1093-1	.4925-1	.2219	.2598-1	.3282-1	.9751	1.95013
7.62	.5350-3	.1089-1	.4913-1	.2216	.2589-1	.3270-1	.9751	1.95025
7.63	.5316-3	.1086-1	.4901-1	.2214	.2579-1	.3258-1	.9752	1.95038
7.64	.5283-3	.1081-1	.4888-1	.2211	.2570-1	.3246-1	.9753	1.95050
7.65	.5251-3	.1077-1	.4876-1	.2208	.2561-1	.3234-1	.9753	1.95063
7.66	.5218-3	.1073-1	.4864-1	.2205	.2552-1	.3222-1	.9754	1.95075
7.67	.5186-3	.1069-1	.4852-1	.2203	.2542-1	.3210-1	.9754	1.95088
7.68	.5154-3	.1065-1	.4840-1	.2200	.2533-1	.3198-1	.9755	1.95100
7.69	.5122-3	.1061-1	.4828-1	.2197	.2524-1	.3187-1	.9756	1.95112
7.70	.5090-3	.1057-1	.4816-1	.2195	.2515-1	.3175-1	.9756	1.95124
7.71	.5059-3	.1053-1	.4804-1	.2192	.2506-1	.3164-1	.9757	1.95137
7.72	.5028-3	.1049-1	.4792-1	.2189	.2497-1	.3152-1	.9757	1.95149
7.73	.4997-3	.1045-1	.4781-1	.2186	.2488-1	.3141-1	.9758	1.95161
7.74	.4966-3	.1041-1	.4769-1	.2184	.2479-1	.3129-1	.9759	1.95173
7.75	.4936-3	.1038-1	.4757-1	.2181	.2471-1	.3118-1	.9759	1.95185
7.76	.4906-3	.1034-1	.4746-1	.2178	.2462-1	.3107-1	.9760	1.95197
7.77	.4876-3	.1030-1	.4734-1	.2176	.2453-1	.3096-1	.9760	1.95209
7.78	.4846-3	.1026-1	.4722-1	.2173	.2444-1	.3084-1	.9761	1.95221
7.79	.4816-3	.1022-1	.4711-1	.2170	.2436-1	.3073-1	.9762	1.95232
7.80	.4787-3	.1019-1	.4699-1	.2168	.2427-1	.3062-1	.9762	1.95244
7.81	.4758-3	.1015-1	.4688-1	.2165	.2418-1	.3052-1	.9763	1.95256
7.82	.4729-3	.1011-1	.4676-1	.2162	.2410-1	.3040-1	.9763	1.95268
7.83	.4700-3	.1008-1	.4665-1	.2160	.2401-1	.3029-1	.9764	1.95279
7.84	.4672-3	.1004-1	.4654-1	.2157	.2393-1	.3018-1	.9765	1.95291
7.85	.4643-3	.1000-1	.4642-1	.2155	.2385-1	.3008-1	.9765	1.95302
7.86	.4615-3	.9966-2	.4631-1	.2152	.2376-1	.2997-1	.9766	1.95314
7.87	.4587-3	.9930-2	.4620-1	.2149	.2368-1	.2986-1	.9766	1.95326
7.88	.4560-3	.9894-2	.4609-1	.2147	.2359-1	.2975-1	.9767	1.95337
7.89	.4532-3	.9858-2	.4598-1	.2144	.2351-1	.2965-1	.9767	1.95348
7.90	.4505-3	.9822-2	.4586-1	.2142	.2343-1	.2954-1	.9768	1.95360
7.91	.4478-3	.9787-2	.4575-1	.2139	.2335-1	.2944-1	.9769	1.95371
7.92	.4451-3	.9752-2	.4564-1	.2136	.2327-1	.2933-1	.9769	1.95382
7.93	.4424-3	.9716-2	.4553-1	.2134	.2318-1	.2923-1	.9770	1.95394
7.94	.4398-3	.9681-2	.4542-1	.2131	.2310-1	.2913-1	.9770	1.95405
7.95	.4371-3	.9647-2	.4532-1	.2129	.2302-1	.2902-1	.9771	1.95416
7.96	.4345-3	.9612-2	.4521-1	.2126	.2294-1	.2892-1	.9771	1.95427
7.97	.4319-3	.9577-2	.4510-1	.2124	.2286-1	.2882-1	.9772	1.95438
7.98	.4293-3	.9543-2	.4499-1	.2121	.2278-1	.2872-1	.9772	1.95449
7.99	.4268-3	.9509-2	.4488-1	.2119	.2271-1	.2861-1	.9773	1.95460

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
8.213	66.009	.4616	61.00	3.769	16.18	.5789-1	72.42	7.00
8.201	66.042	.4616	61.18	3.770	16.23	.5767-1	72.62	7.01
8.190	66.074	.4616	61.35	3.770	16.27	.5745-1	72.83	7.02
8.178	66.107	.4615	61.53	3.771	16.32	.5722-1	73.04	7.03
8.166	66.139	.4615	61.70	3.772	16.36	.5700-1	73.24	7.04
8.155	66.171	.4614	61.88	3.772	16.40	.5678-1	73.45	7.05
8.143	66.204	.4614	62.05	3.773	16.45	.5656-1	73.66	7.06
8.131	66.236	.4614	62.23	3.774	16.49	.5634-1	73.86	7.07
8.120	66.268	.4613	62.41	3.774	16.54	.5613-1	74.07	7.08
8.108	66.300	.4613	62.59	3.775	16.58	.5591-1	74.28	7.09
8.097	66.332	.4612	62.76	3.775	16.62	.5570-1	74.49	7.10
8.085	66.364	.4612	62.94	3.776	16.67	.5548-1	74.70	7.11
8.074	66.395	.4612	63.12	3.777	16.71	.5527-1	74.91	7.12
8.062	66.427	.4611	63.30	3.777	16.76	.5506-1	75.12	7.13
8.051	66.459	.4611	63.47	3.778	16.80	.5485-1	75.32	7.14
8.040	66.490	.4611	63.65	3.778	16.85	.5464-1	75.53	7.15
8.028	66.522	.4610	63.83	3.779	16.89	.5443-1	75.75	7.16
8.017	66.553	.4610	64.01	3.779	16.94	.5422-1	75.96	7.17
8.006	66.584	.4609	64.19	3.780	16.98	.5402-1	76.17	7.18
7.995	66.615	.4609	64.37	3.781	17.03	.5381-1	76.38	7.19
7.984	66.646	.4609	64.55	3.781	17.07	.5361-1	76.59	7.20
7.972	66.677	.4608	64.73	3.782	17.12	.5340-1	76.80	7.21
7.961	66.708	.4608	64.91	3.782	17.16	.5320-1	77.01	7.22
7.950	66.739	.4607	65.09	3.783	17.21	.5300-1	77.22	7.23
7.939	66.770	.4607	65.27	3.783	17.25	.5280-1	77.44	7.24
7.928	66.801	.4607	65.45	3.784	17.30	.5260-1	77.65	7.25
7.917	66.831	.4606	65.63	3.785	17.34	.5240-1	77.86	7.26
7.906	66.862	.4606	65.82	3.785	17.39	.5220-1	78.08	7.27
7.895	66.892	.4606	66.00	3.786	17.43	.5201-1	78.29	7.28
7.884	66.922	.4605	66.18	3.786	17.48	.5181-1	78.50	7.29
7.873	66.953	.4605	66.36	3.787	17.52	.5162-1	78.72	7.30
7.863	66.983	.4605	66.55	3.787	17.57	.5142-1	78.93	7.31
7.852	67.013	.4604	66.73	3.788	17.62	.5123-1	79.15	7.32
7.841	67.043	.4604	66.91	3.788	17.66	.5104-1	79.36	7.33
7.830	67.073	.4604	67.09	3.789	17.71	.5085-1	79.58	7.34
7.820	67.103	.4603	67.28	3.790	17.75	.5066-1	79.79	7.35
7.809	67.133	.4603	67.46	3.790	17.80	.5047-1	80.01	7.36
7.798	67.163	.4602	67.65	3.791	17.85	.5028-1	80.23	7.37
7.788	67.192	.4602	67.83	3.791	17.89	.5010-1	80.44	7.38
7.777	67.222	.4602	68.02	3.792	17.94	.4991-1	80.66	7.39
7.766	67.251	.4601	68.20	3.792	17.98	.4972-1	80.88	7.40
7.756	67.281	.4601	68.39	3.793	18.03	.4954-1	81.10	7.41
7.745	67.310	.4601	68.57	3.793	18.08	.4936-1	81.31	7.42
7.735	67.340	.4600	68.76	3.794	18.12	.4917-1	81.53	7.43
7.724	67.369	.4600	68.94	3.794	18.17	.4899-1	81.75	7.44
7.714	67.398	.4600	69.13	3.795	18.22	.4881-1	81.97	7.45
7.704	67.427	.4599	69.31	3.795	18.26	.4863-1	82.19	7.46
7.693	67.456	.4599	69.50	3.796	18.31	.4845-1	82.41	7.47
7.683	67.485	.4599	69.69	3.796	18.36	.4827-1	82.63	7.48
7.673	67.514	.4598	69.88	3.797	18.40	.4810-1	82.85	7.49
7.662	67.543	.4598	70.06	3.797	18.45	.4792-1	83.07	7.50
7.652	67.571	.4598	70.25	3.798	18.50	.4774-1	83.29	7.51
7.642	67.600	.4597	70.44	3.798	18.54	.4757-1	83.51	7.52
7.632	67.628	.4597	70.63	3.799	18.59	.4739-1	83.73	7.53
7.621	67.657	.4597	70.81	3.800	18.64	.4722-1	83.95	7.54
7.611	67.685	.4596	71.00	3.800	18.68	.4705-1	84.17	7.55
7.601	67.714	.4596	71.19	3.801	18.73	.4688-1	84.39	7.56
7.591	67.742	.4596	71.38	3.801	18.78	.4671-1	84.62	7.57
7.581	67.770	.4595	71.57	3.802	18.83	.4654-1	84.84	7.58
7.571	67.798	.4595	71.76	3.802	18.87	.4637-1	85.06	7.59
7.561	67.827	.4595	71.95	3.803	18.92	.4620-1	85.28	7.60
7.551	67.855	.4594	72.14	3.803	18.97	.4603-1	85.51	7.61
7.541	67.882	.4594	72.33	3.803	19.02	.4586-1	85.73	7.62
7.531	67.910	.4594	72.52	3.804	19.06	.4570-1	85.96	7.63
7.521	67.938	.4593	72.71	3.804	19.11	.4553-1	86.18	7.64
7.511	67.966	.4593	72.90	3.805	19.16	.4537-1	86.40	7.65
7.501	67.994	.4593	73.09	3.805	19.21	.4520-1	86.63	7.66
7.491	68.021	.4593	73.29	3.806	19.26	.4504-1	86.85	7.67
7.482	68.049	.4592	73.48	3.806	19.30	.4488-1	87.08	7.68
7.472	68.076	.4592	73.67	3.807	19.35	.4472-1	87.31	7.69
7.462	68.104	.4592	73.86	3.807	19.40	.4456-1	87.53	7.70
7.452	68.131	.4591	74.06	3.808	19.45	.4440-1	87.76	7.71
7.443	68.158	.4591	74.25	3.808	19.50	.4424-1	87.98	7.72
7.433	68.185	.4591	74.44	3.809	19.54	.4408-1	88.21	7.73
7.423	68.212	.4590	74.63	3.809	19.59	.4392-1	88.44	7.74
7.414	68.239	.4590	74.83	3.810	19.64	.4377-1	88.67	7.75
7.404	68.266	.4590	75.02	3.810	19.69	.4361-1	88.89	7.76
7.394	68.293	.4590	75.22	3.811	19.74	.4345-1	89.12	7.77
7.385	68.320	.4589	75.41	3.811	19.79	.4330-1	89.35	7.78
7.375	68.347	.4589	75.61	3.812	19.84	.4315-1	89.58	7.79
7.366	68.374	.4589	75.80	3.812	19.88	.4299-1	89.81	7.80
7.356	68.400	.4588	76.00	3.812	19.93	.4284-1	90.04	7.81
7.347	68.427	.4588	76.19	3.813	19.98	.4269-1	90.27	7.82
7.338	68.454	.4588	76.39	3.813	20.03	.4254-1	90.50	7.83
7.328	68.480	.4587	76.58	3.814	20.08	.4239-1	90.73	7.84
7.319	68.507	.4587	76.78	3.814	20.13	.4224-1	90.96	7.85
7.309	68.533	.4587	76.97	3.815	20.18	.4209-1	91.19	7.86
7.300	68.559	.4587	77.17	3.815	20.23	.4194-1	91.42	7.87
7.291	68.585	.4586	77.37	3.816	20.28	.4179-1	91.65	7.88
7.281	68.612	.4586	77.57	3.816	20.33	.4164-1	91.88	7.89
7.272	68.638	.4586	77.76	3.817	20.38	.4150-1	92.11	7.90
7.263	68.664	.4585	77.96	3.817	20.42	.4135-1	92.35	7.91
7.254	68.690	.4585	78.16	3.817	20.47	.4121-1	92.58	7.92
7.244	68.716	.4585	78.36	3.818	20.52	.4106-1	92.81	7.93
7.235	68.741	.4585	78.55	3.818	20.57	.4092-1	93.04	7.94
7.226	68.767	.4584	78.75	3.819	20.62	.4078-1	93.28	7.95
7.217	68.793	.4584	78.95	3.819	20.67	.4063-1	93.51	7.96
7.208	68.819	.4584	79.15	3.820	20.72	.4049-1	93.75	7.97
7.199	68.844	.4583	79.35	3.820	20.77	.4035-1	93.98	7.98
7.190	68.870	.4583	79.55	3.820	20.82	.4021-1	94.21	7.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
8.00	.4242-3	.9475-2	.4478-1	.2116	.2263-1	.2851-1	.9774	1.95471
8.01	.4217-3	.9441-2	.4467-1	.2114	.2255-1	.2841-1	.9774	1.95482
8.02	.4192-3	.9407-2	.4456-1	.2111	.2247-1	.2831-1	.9775	1.95493
8.03	.4167-3	.9374-2	.4446-1	.2108	.2239-1	.2821-1	.9775	1.95504
8.04	.4143-3	.9340-2	.4435-1	.2106	.2232-1	.2812-1	.9776	1.95515
8.05	.4118-3	.9307-2	.4425-1	.2103	.2224-1	.2802-1	.9776	1.95525
8.06	.4094-3	.9274-2	.4414-1	.2101	.2216-1	.2792-1	.9777	1.95536
8.07	.4069-3	.9241-2	.4404-1	.2098	.2209-1	.2782-1	.9777	1.95547
8.08	.4045-3	.9208-2	.4393-1	.2096	.2201-1	.2772-1	.9778	1.95557
8.09	.4022-3	.9176-2	.4383-1	.2094	.2193-1	.2763-1	.9778	1.95568
8.10	.3998-3	.9143-2	.4373-1	.2091	.2186-1	.2753-1	.9779	1.95579
8.11	.3974-3	.9111-2	.4362-1	.2089	.2178-1	.2744-1	.9779	1.95589
8.12	.3951-3	.9079-2	.4352-1	.2086	.2171-1	.2734-1	.9780	1.95600
8.13	.3928-3	.9047-2	.4342-1	.2084	.2163-1	.2725-1	.9781	1.95610
8.14	.3905-3	.9015-2	.4332-1	.2081	.2156-1	.2715-1	.9781	1.95621
8.15	.3882-3	.8983-2	.4321-1	.2079	.2149-1	.2706-1	.9782	1.95631
8.16	.3859-3	.8952-2	.4311-1	.2076	.2141-1	.2696-1	.9782	1.95641
8.17	.3837-3	.8920-2	.4301-1	.2074	.2134-1	.2687-1	.9783	1.95652
8.18	.3814-3	.8889-2	.4291-1	.2071	.2127-1	.2678-1	.9783	1.95662
8.19	.3792-3	.8858-2	.4281-1	.2069	.2120-1	.2668-1	.9784	1.95672
8.20	.3770-3	.8827-2	.4271-1	.2067	.2112-1	.2659-1	.9784	1.95682
8.21	.3748-3	.8796-2	.4261-1	.2064	.2105-1	.2650-1	.9785	1.95693
8.22	.3726-3	.8765-2	.4251-1	.2062	.2098-1	.2641-1	.9785	1.95703
8.23	.3705-3	.8735-2	.4241-1	.2059	.2091-1	.2632-1	.9786	1.95713
8.24	.3683-3	.8704-2	.4231-1	.2057	.2084-1	.2623-1	.9786	1.95723
8.25	.3662-3	.8674-2	.4222-1	.2055	.2077-1	.2614-1	.9787	1.95733
8.26	.3641-3	.8644-2	.4212-1	.2052	.2070-1	.2605-1	.9787	1.95743
8.27	.3620-3	.8614-2	.4202-1	.2050	.2063-1	.2596-1	.9788	1.95753
8.28	.3599-3	.8584-2	.4192-1	.2048	.2056-1	.2587-1	.9788	1.95763
8.29	.3578-3	.8554-2	.4183-1	.2045	.2049-1	.2578-1	.9789	1.95773
8.30	.3557-3	.8525-2	.4173-1	.2043	.2042-1	.2570-1	.9789	1.95782
8.31	.3537-3	.8495-2	.4163-1	.2040	.2035-1	.2561-1	.9790	1.95792
8.32	.3517-3	.8466-2	.4154-1	.2038	.2029-1	.2552-1	.9790	1.95802
8.33	.3496-3	.8437-2	.4144-1	.2036	.2022-1	.2543-1	.9791	1.95812
8.34	.3476-3	.8408-2	.4135-1	.2033	.2015-1	.2535-1	.9791	1.95822
8.35	.3456-3	.8379-2	.4125-1	.2031	.2008-1	.2526-1	.9792	1.95831
8.36	.3437-3	.8350-2	.4116-1	.2029	.2002-1	.2518-1	.9792	1.95841
8.37	.3417-3	.8321-2	.4106-1	.2026	.1995-1	.2509-1	.9793	1.95851
8.38	.3398-3	.8293-2	.4097-1	.2024	.1988-1	.2501-1	.9793	1.95860
8.39	.3378-3	.8264-2	.4088-1	.2022	.1982-1	.2492-1	.9793	1.95870
8.40	.3359-3	.8236-2	.4078-1	.2019	.1975-1	.2484-1	.9794	1.95879
8.41	.3340-3	.8208-2	.4069-1	.2017	.1968-1	.2475-1	.9794	1.95889
8.42	.3321-3	.8180-2	.4060-1	.2015	.1962-1	.2467-1	.9795	1.95898
8.43	.3302-3	.8152-2	.4051-1	.2013	.1955-1	.2459-1	.9795	1.95908
8.44	.3283-3	.8124-2	.4041-1	.2010	.1949-1	.2451-1	.9796	1.95917
8.45	.3265-3	.8097-2	.4032-1	.2008	.1943-1	.2442-1	.9796	1.95926
8.46	.3246-3	.8069-2	.4023-1	.2006	.1936-1	.2434-1	.9797	1.95936
8.47	.3228-3	.8042-2	.4014-1	.2003	.1930-1	.2426-1	.9797	1.95945
8.48	.3210-3	.8014-2	.4005-1	.2001	.1923-1	.2418-1	.9798	1.95954
8.49	.3191-3	.7987-2	.3996-1	.1999	.1917-1	.2410-1	.9798	1.95964
8.50	.3173-3	.7960-2	.3987-1	.1997	.1911-1	.2402-1	.9799	1.95973
8.51	.3156-3	.7933-2	.3978-1	.1994	.1904-1	.2394-1	.9799	1.95982
8.52	.3138-3	.7906-2	.3969-1	.1992	.1898-1	.2386-1	.9800	1.95991
8.53	.3120-3	.7880-2	.3960-1	.1990	.1892-1	.2378-1	.9800	1.96000
8.54	.3103-3	.7853-2	.3951-1	.1988	.1886-1	.2370-1	.9800	1.96009
8.55	.3085-3	.7827-2	.3942-1	.1985	.1880-1	.2362-1	.9801	1.96018
8.56	.3068-3	.7800-2	.3933-1	.1983	.1873-1	.2354-1	.9801	1.96027
8.57	.3051-3	.7774-2	.3924-1	.1981	.1867-1	.2346-1	.9802	1.96036
8.58	.3034-3	.7748-2	.3916-1	.1979	.1861-1	.2339-1	.9802	1.96045
8.59	.3017-3	.7722-2	.3907-1	.1977	.1855-1	.2331-1	.9803	1.96054
8.60	.3000-3	.7696-2	.3898-1	.1974	.1849-1	.2323-1	.9803	1.96063
8.61	.2983-3	.7671-2	.3889-1	.1972	.1843-1	.2316-1	.9804	1.96072
8.62	.2967-3	.7645-2	.3881-1	.1970	.1837-1	.2308-1	.9804	1.96081
8.63	.2950-3	.7619-2	.3872-1	.1968	.1831-1	.2300-1	.9804	1.96090
8.64	.2934-3	.7594-2	.3864-1	.1966	.1825-1	.2293-1	.9805	1.96098
8.65	.2918-3	.7569-2	.3855-1	.1963	.1819-1	.2285-1	.9805	1.96107
8.66	.2902-3	.7544-2	.3846-1	.1961	.1813-1	.2278-1	.9806	1.96116
8.67	.2885-3	.7518-2	.3838-1	.1959	.1807-1	.2270-1	.9806	1.96125
8.68	.2870-3	.7494-2	.3829-1	.1957	.1802-1	.2263-1	.9807	1.96133
8.69	.2854-3	.7469-2	.3821-1	.1955	.1796-1	.2255-1	.9807	1.96142
8.70	.2838-3	.7444-2	.3812-1	.1953	.1790-1	.2248-1	.9808	1.96151
8.71	.2822-3	.7419-2	.3804-1	.1950	.1784-1	.2241-1	.9808	1.96159
8.72	.2807-3	.7395-2	.3796-1	.1948	.1779-1	.2233-1	.9808	1.96168
8.73	.2791-3	.7370-2	.3787-1	.1946	.1773-1	.2226-1	.9809	1.96176
8.74	.2776-3	.7346-2	.3779-1	.1944	.1767-1	.2219-1	.9809	1.96185
8.75	.2761-3	.7322-2	.3771-1	.1942	.1761-1	.2212-1	.9810	1.96193
8.76	.2746-3	.7298-2	.3762-1	.1940	.1756-1	.2204-1	.9810	1.96202
8.77	.2731-3	.7274-2	.3754-1	.1938	.1750-1	.2197-1	.9811	1.96210
8.78	.2716-3	.7250-2	.3746-1	.1936	.1745-1	.2190-1	.9811	1.96218
8.79	.2701-3	.7226-2	.3738-1	.1933	.1739-1	.2183-1	.9811	1.96227
8.80	.2686-3	.7202-2	.3729-1	.1931	.1733-1	.2176-1	.9812	1.96235
8.81	.2671-3	.7179-2	.3721-1	.1929	.1728-1	.2169-1	.9812	1.96243
8.82	.2657-3	.7155-2	.3713-1	.1927	.1722-1	.2162-1	.9813	1.96252
8.83	.2642-3	.7132-2	.3705-1	.1925	.1717-1	.2155-1	.9813	1.96260
8.84	.2628-3	.7109-2	.3697-1	.1923	.1711-1	.2148-1	.9813	1.96268
8.85	.2614-3	.7085-2	.3689-1	.1921	.1706-1	.2141-1	.9814	1.96276
8.86	.2600-3	.7062-2	.3681-1	.1919	.1701-1	.2134-1	.9814	1.96284
8.87	.2586-3	.7039-2	.3673-1	.1917	.1695-1	.2127-1	.9815	1.96293
8.88	.2572-3	.7016-2	.3665-1	.1914	.1690-1	.2121-1	.9815	1.96301
8.89	.2558-3	.6994-2	.3657-1	.1912	.1684-1	.2114-1	.9815	1.96309
8.90	.2544-3	.6971-2	.3649-1	.1910	.1679-1	.2107-1	.9816	1.96317
8.91	.2530-3	.6948-2	.3641-1	.1908	.1674-1	.2100-1	.9816	1.96325
8.92	.2516-3	.6926-2	.3633-1	.1906	.1669-1	.2094-1	.9817	1.96333
8.93	.2503-3	.6904-2	.3626-1	.1904	.1663-1	.2087-1	.9817	1.96341
8.94	.2489-3	.6881-2	.3618-1	.1902	.1658-1	.2080-1	.9817	1.96349
8.95	.2476-3	.6859-2	.3610-1	.1900	.1653-1	.2074-1	.9818	1.96357
8.96	.2463-3	.6837-2	.3602-1	.1898	.1648-1	.2067-1	.9818	1.96365
8.97	.2450-3	.6815-2	.3594-1	.1896	.1642-1	.2060-1	.9819	1.96373
8.98	.2436-3	.6793-2	.3587-1	.1894	.1637-1	.2054-1	.9819	1.96380
8.99	.2423-3	.6771-2	.3579-1	.1892	.1632-1	.2047-1	.9819	1.96388

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
7.181	68.895	.4583	79.75	3.821	20.87	.4007-1	94.45	8.00
7.172	68.921	.4583	79.93	3.821	20.92	.3993-1	94.68	8.01
7.163	68.946	.4582	80.15	3.822	20.97	.3979-1	94.92	8.02
7.154	68.971	.4582	80.35	3.822	21.02	.3965-1	95.16	8.03
7.145	68.997	.4582	80.55	3.823	21.07	.3952-1	95.39	8.04
7.136	69.022	.4582	80.75	3.823	21.12	.3938-1	95.63	8.05
7.127	69.047	.4581	80.95	3.823	21.17	.3924-1	95.87	8.06
7.118	69.072	.4581	81.16	3.824	21.22	.3911-1	96.10	8.07
7.109	69.097	.4581	81.36	3.824	21.27	.3897-1	96.34	8.08
7.100	69.122	.4580	81.56	3.825	21.32	.3884-1	96.58	8.09
7.092	69.147	.4580	81.76	3.825	21.38	.3871-1	96.81	8.10
7.083	69.172	.4580	81.97	3.826	21.43	.3857-1	97.05	8.11
7.074	69.196	.4580	82.17	3.826	21.48	.3844-1	97.29	8.12
7.065	69.221	.4579	82.37	3.826	21.53	.3831-1	97.53	8.13
7.057	69.246	.4579	82.57	3.827	21.58	.3818-1	97.77	8.14
7.048	69.270	.4579	82.78	3.827	21.63	.3805-1	98.01	8.15
7.039	69.295	.4579	82.98	3.828	21.68	.3792-1	98.25	8.16
7.031	69.319	.4578	83.19	3.828	21.73	.3779-1	98.49	8.17
7.022	69.344	.4578	83.39	3.828	21.78	.3766-1	98.73	8.18
7.013	69.368	.4578	83.60	3.829	21.83	.3753-1	98.97	8.19
7.005	69.393	.4578	83.80	3.829	21.88	.3740-1	99.21	8.20
6.996	69.417	.4577	84.01	3.830	21.94	.3727-1	99.45	8.21
6.988	69.441	.4577	84.21	3.830	21.99	.3715-1	99.69	8.22
6.979	69.465	.4577	84.42	3.830	22.04	.3708-1	99.93	8.23
6.971	69.489	.4577	84.62	3.831	22.09	.3690-1	100.2	8.24
6.962	69.513	.4576	84.83	3.831	22.14	.3677-1	100.4	8.25
6.954	69.537	.4576	85.03	3.832	22.19	.3665-1	100.7	8.26
6.945	69.561	.4576	85.24	3.832	22.25	.3652-1	100.9	8.27
6.937	69.585	.4576	85.45	3.832	22.30	.3640-1	101.1	8.28
6.928	69.609	.4575	85.66	3.833	22.35	.3628-1	101.4	8.29
6.920	69.633	.4575	85.86	3.833	22.40	.3615-1	101.6	8.30
6.912	69.656	.4575	86.07	3.833	22.45	.3603-1	101.9	8.31
6.903	69.680	.4575	86.28	3.834	22.50	.3591-1	102.1	8.32
6.895	69.704	.4574	86.49	3.834	22.56	.3579-1	102.4	8.33
6.887	69.727	.4574	86.69	3.835	22.61	.3567-1	102.6	8.34
6.878	69.751	.4574	86.90	3.835	22.66	.3555-1	102.9	8.35
6.870	69.774	.4574	87.11	3.835	22.71	.3543-1	103.1	8.36
6.862	69.797	.4573	87.32	3.836	22.77	.3531-1	103.3	8.37
6.854	69.821	.4573	87.53	3.836	22.82	.3520-1	103.6	8.38
6.845	69.844	.4573	87.74	3.836	22.87	.3508-1	103.8	8.39
6.837	69.867	.4573	87.95	3.837	22.92	.3496-1	104.1	8.40
6.829	69.890	.4572	88.16	3.837	22.97	.3484-1	104.3	8.41
6.821	69.914	.4572	88.37	3.838	23.03	.3473-1	104.6	8.42
6.813	69.937	.4572	88.58	3.838	23.08	.3461-1	104.8	8.43
6.805	69.960	.4572	88.79	3.838	23.13	.3450-1	105.1	8.44
6.796	69.983	.4572	89.00	3.839	23.19	.3438-1	105.3	8.45
6.788	70.006	.4571	89.21	3.839	23.24	.3427-1	105.6	8.46
6.780	70.028	.4571	89.43	3.839	23.29	.3416-1	105.8	8.47
6.772	70.051	.4571	89.64	3.840	23.34	.3404-1	106.1	8.48
6.764	70.074	.4571	89.85	3.840	23.40	.3393-1	106.3	8.49
6.756	70.097	.4570	90.06	3.841	23.45	.3382-1	106.6	8.50
6.748	70.119	.4570	90.28	3.841	23.50	.3371-1	106.8	8.51
6.740	70.142	.4570	90.49	3.841	23.56	.3360-1	107.1	8.52
6.732	70.165	.4570	90.70	3.842	23.61	.3349-1	107.3	8.53
6.725	70.187	.4569	90.91	3.842	23.66	.3338-1	107.6	8.54
6.717	70.209	.4569	91.13	3.842	23.72	.3327-1	107.8	8.55
6.709	70.232	.4569	91.34	3.843	23.77	.3316-1	108.1	8.56
6.701	70.254	.4569	91.56	3.843	23.82	.3305-1	108.3	8.57
6.693	70.277	.4569	91.77	3.843	23.88	.3294-1	108.6	8.58
6.685	70.299	.4568	91.99	3.844	23.93	.3283-1	108.8	8.59
6.677	70.321	.4568	92.20	3.844	23.98	.3273-1	109.1	8.60
6.670	70.343	.4568	92.42	3.844	24.04	.3262-1	109.3	8.61
6.662	70.365	.4568	92.63	3.845	24.09	.3251-1	109.6	8.62
6.654	70.387	.4567	92.85	3.845	24.15	.3241-1	109.8	8.63
6.646	70.409	.4567	93.06	3.845	24.20	.3230-1	110.1	8.64
6.639	70.431	.4567	93.28	3.846	24.25	.3220-1	110.3	8.65
6.631	70.453	.4567	93.49	3.846	24.31	.3209-1	110.6	8.66
6.623	70.475	.4567	93.71	3.846	24.36	.3199-1	110.9	8.67
6.616	70.497	.4566	93.93	3.847	24.42	.3188-1	111.1	8.68
6.608	70.519	.4566	94.15	3.847	24.47	.3178-1	111.4	8.69
6.600	70.540	.4566	94.36	3.848	24.53	.3168-1	111.6	8.70
6.593	70.562	.4566	94.58	3.848	24.58	.3157-1	111.9	8.71
6.585	70.584	.4566	94.80	3.848	24.63	.3147-1	112.1	8.72
6.578	70.605	.4565	95.02	3.849	24.69	.3137-1	112.4	8.73
6.570	70.627	.4565	95.23	3.849	24.74	.3127-1	112.6	8.74
6.562	70.648	.4565	95.45	3.849	24.80	.3117-1	112.9	8.75
6.555	70.670	.4565	95.67	3.850	24.85	.3107-1	113.2	8.76
6.547	70.691	.4564	95.89	3.850	24.91	.3097-1	113.4	8.77
6.540	70.712	.4564	96.11	3.850	24.96	.3087-1	113.7	8.78
6.532	70.734	.4564	96.33	3.850	25.02	.3077-1	113.9	8.79
6.525	70.755	.4564	96.55	3.851	25.07	.3067-1	114.2	8.80
6.518	70.776	.4564	96.77	3.851	25.13	.3057-1	114.4	8.81
6.510	70.797	.4563	96.99	3.851	25.18	.3048-1	114.7	8.82
6.503	70.819	.4563	97.21	3.852	25.24	.3038-1	115.0	8.83
6.495	70.840	.4563	97.43	3.852	25.29	.3028-1	115.2	8.84
6.488	70.861	.4563	97.65	3.852	25.35	.3019-1	115.5	8.85
6.481	70.882	.4563	97.87	3.853	25.40	.3009-1	115.7	8.86
6.473	70.903	.4562	98.10	3.853	25.46	.2999-1	116.0	8.87
6.466	70.923	.4562	98.32	3.853	25.51	.2990-1	116.3	8.88
6.459	70.944	.4562	98.54	3.854	25.57	.2980-1	116.5	8.89
6.451	70.965	.4562	98.76	3.854	25.63	.2971-1	116.8	8.90
6.444	70.986	.4562	98.99	3.854	25.68	.2962-1	117.1	8.91
6.437	71.007	.4561	99.21	3.855	25.74	.2952-1	117.3	8.92
6.430	71.027	.4561	99.43	3.855	25.79	.2943-1	117.6	8.93
6.422	71.048	.4561	99.65	3.855	25.85	.2934-1	117.8	8.94
6.415	71.068	.4561	99.88	3.856	25.90	.2924-1	118.1	8.95
6.408	71.089	.4561	100.1	3.856	25.96	.2915-1	118.4	8.96
6.401	71.109	.4560	100.3	3.856	26.02	.2906-1	118.6	8.97
6.394	71.130	.4560	100.6	3.857	26.07	.2897-1	118.9	8.98
6.386	71.150	.4560	100.8	3.857	26.13	.2888-1	119.2	8.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
9.00	.2410-3	.6749-2	.3571-1	.1890	.1687-1	.2041-1	.9820	1.96396
9.01	.2398-3	.6728-2	.3564-1	.1888	.1682-1	.2034-1	.9820	1.96404
9.02	.2385-3	.6706-2	.3556-1	.1886	.1617-1	.2028-1	.9821	1.96412
9.03	.2372-3	.6685-2	.3549-1	.1884	.1612-1	.2022-1	.9821	1.96419
9.04	.2359-3	.6663-2	.3541-1	.1882	.1607-1	.2015-1	.9821	1.96427
9.05	.2347-3	.6642-2	.3533-1	.1880	.1602-1	.2009-1	.9822	1.96435
9.06	.2334-3	.6621-2	.3526-1	.1878	.1597-1	.2002-1	.9822	1.96442
9.07	.2322-3	.6600-2	.3518-1	.1876	.1592-1	.1996-1	.9823	1.96450
9.08	.2310-3	.6579-2	.3511-1	.1874	.1587-1	.1990-1	.9823	1.96458
9.09	.2298-3	.6558-2	.3504-1	.1872	.1582-1	.1984-1	.9823	1.96465
9.10	.2285-3	.6537-2	.3496-1	.1870	.1577-1	.1977-1	.9824	1.96473
9.11	.2273-3	.6516-2	.3489-1	.1868	.1572-1	.1971-1	.9824	1.96480
9.12	.2261-3	.6496-2	.3481-1	.1866	.1567-1	.1965-1	.9824	1.96488
9.13	.2249-3	.6475-2	.3474-1	.1864	.1563-1	.1959-1	.9825	1.96495
9.14	.2238-3	.6454-2	.3467-1	.1862	.1558-1	.1953-1	.9825	1.96503
9.15	.2226-3	.6434-2	.3459-1	.1860	.1553-1	.1947-1	.9826	1.96510
9.16	.2214-3	.6414-2	.3452-1	.1858	.1548-1	.1941-1	.9826	1.96518
9.17	.2202-3	.6393-2	.3445-1	.1856	.1543-1	.1934-1	.9826	1.96525
9.18	.2191-3	.6373-2	.3438-1	.1854	.1539-1	.1928-1	.9827	1.96532
9.19	.2179-3	.6353-2	.3430-1	.1852	.1534-1	.1922-1	.9827	1.96540
9.20	.2168-3	.6333-2	.3423-1	.1850	.1529-1	.1916-1	.9827	1.96547
9.21	.2157-3	.6313-2	.3416-1	.1848	.1524-1	.1911-1	.9828	1.96554
9.22	.2145-3	.6294-2	.3409-1	.1846	.1520-1	.1905-1	.9828	1.96562
9.23	.2134-3	.6274-2	.3402-1	.1844	.1515-1	.1899-1	.9828	1.96569
9.24	.2123-3	.6254-2	.3395-1	.1842	.1510-1	.1893-1	.9829	1.96576
9.25	.2112-3	.6235-2	.3387-1	.1840	.1506-1	.1887-1	.9829	1.96583
9.26	.2101-3	.6215-2	.3380-1	.1839	.1501-1	.1881-1	.9830	1.96591
9.27	.2090-3	.6196-2	.3373-1	.1837	.1497-1	.1875-1	.9830	1.96598
9.28	.2079-3	.6176-2	.3366-1	.1835	.1492-1	.1870-1	.9830	1.96605
9.29	.2068-3	.6157-2	.3359-1	.1833	.1488-1	.1864-1	.9831	1.96612
9.30	.2058-3	.6138-2	.3352-1	.1831	.1483-1	.1858-1	.9831	1.96619
9.31	.2047-3	.6119-2	.3345-1	.1829	.1479-1	.1852-1	.9831	1.96626
9.32	.2036-3	.6100-2	.3338-1	.1827	.1474-1	.1847-1	.9832	1.96633
9.33	.2026-3	.6081-2	.3332-1	.1825	.1470-1	.1841-1	.9832	1.96640
9.34	.2015-3	.6062-2	.3325-1	.1823	.1465-1	.1835-1	.9832	1.96647
9.35	.2005-3	.6043-2	.3318-1	.1821	.1461-1	.1830-1	.9833	1.96654
9.36	.1995-3	.6024-2	.3311-1	.1820	.1456-1	.1824-1	.9833	1.96661
9.37	.1984-3	.6006-2	.3304-1	.1818	.1452-1	.1819-1	.9833	1.96668
9.38	.1974-3	.5987-2	.3297-1	.1816	.1447-1	.1813-1	.9834	1.96675
9.39	.1964-3	.5969-2	.3290-1	.1814	.1443-1	.1807-1	.9834	1.96682
9.40	.1954-3	.5950-2	.3284-1	.1812	.1439-1	.1802-1	.9834	1.96689
9.41	.1944-3	.5932-2	.3277-1	.1810	.1434-1	.1796-1	.9835	1.96696
9.42	.1934-3	.5914-2	.3270-1	.1808	.1430-1	.1791-1	.9835	1.96703
9.43	.1924-3	.5896-2	.3264-1	.1807	.1426-1	.1786-1	.9835	1.96709
9.44	.1914-3	.5878-2	.3257-1	.1805	.1422-1	.1780-1	.9836	1.96716
9.45	.1904-3	.5860-2	.3250-1	.1803	.1417-1	.1775-1	.9836	1.96723
9.46	.1895-3	.5842-2	.3244-1	.1801	.1413-1	.1769-1	.9836	1.96730
9.47	.1885-3	.5824-2	.3237-1	.1799	.1409-1	.1764-1	.9837	1.96736
9.48	.1875-3	.5806-2	.3230-1	.1797	.1405-1	.1759-1	.9837	1.96743
9.49	.1866-3	.5788-2	.3224-1	.1795	.1400-1	.1753-1	.9837	1.96750
9.50	.1856-3	.5770-2	.3217-1	.1794	.1396-1	.1748-1	.9838	1.96757
9.51	.1847-3	.5753-2	.3211-1	.1792	.1392-1	.1743-1	.9838	1.96763
9.52	.1838-3	.5735-2	.3204-1	.1790	.1388-1	.1737-1	.9838	1.96770
9.53	.1828-3	.5718-2	.3198-1	.1788	.1384-1	.1732-1	.9839	1.96776
9.54	.1819-3	.5700-2	.3191-1	.1786	.1380-1	.1727-1	.9839	1.96783
9.55	.1810-3	.5683-2	.3185-1	.1785	.1376-1	.1722-1	.9839	1.96790
9.56	.1801-3	.5666-2	.3178-1	.1783	.1371-1	.1717-1	.9840	1.96796
9.57	.1792-3	.5649-2	.3172-1	.1781	.1367-1	.1712-1	.9840	1.96803
9.58	.1783-3	.5632-2	.3165-1	.1779	.1363-1	.1706-1	.9840	1.96809
9.59	.1774-3	.5615-2	.3159-1	.1777	.1359-1	.1701-1	.9841	1.96816
9.60	.1765-3	.5598-2	.3153-1	.1776	.1355-1	.1696-1	.9841	1.96822
9.61	.1756-3	.5581-2	.3146-1	.1774	.1351-1	.1691-1	.9841	1.96829
9.62	.1747-3	.5564-2	.3140-1	.1772	.1347-1	.1686-1	.9842	1.96835
9.63	.1738-3	.5547-2	.3134-1	.1770	.1343-1	.1681-1	.9842	1.96841
9.64	.1730-3	.5530-2	.3127-1	.1768	.1339-1	.1676-1	.9842	1.96848
9.65	.1721-3	.5514-2	.3121-1	.1767	.1335-1	.1671-1	.9843	1.96854
9.66	.1712-3	.5497-2	.3115-1	.1765	.1331-1	.1666-1	.9843	1.96861
9.67	.1704-3	.5481-2	.3109-1	.1763	.1328-1	.1661-1	.9843	1.96867
9.68	.1695-3	.5464-2	.3102-1	.1761	.1324-1	.1656-1	.9844	1.96873
9.69	.1687-3	.5448-2	.3096-1	.1760	.1320-1	.1651-1	.9844	1.96880
9.70	.1678-3	.5432-2	.3090-1	.1758	.1316-1	.1646-1	.9844	1.96886
9.71	.1670-3	.5415-2	.3084-1	.1756	.1312-1	.1642-1	.9845	1.96892
9.72	.1662-3	.5399-2	.3078-1	.1754	.1308-1	.1637-1	.9845	1.96898
9.73	.1653-3	.5383-2	.3071-1	.1753	.1304-1	.1632-1	.9845	1.96905
9.74	.1645-3	.5367-2	.3065-1	.1751	.1301-1	.1627-1	.9846	1.96911
9.75	.1637-3	.5351-2	.3059-1	.1749	.1297-1	.1622-1	.9846	1.96917
9.76	.1629-3	.5335-2	.3053-1	.1747	.1293-1	.1617-1	.9846	1.96923
9.77	.1621-3	.5319-2	.3047-1	.1746	.1289-1	.1613-1	.9846	1.96929
9.78	.1613-3	.5303-2	.3041-1	.1744	.1286-1	.1608-1	.9847	1.96935
9.79	.1605-3	.5288-2	.3035-1	.1742	.1282-1	.1603-1	.9847	1.96942
9.80	.1597-3	.5272-2	.3029-1	.1740	.1278-1	.1599-1	.9847	1.96948
9.81	.1589-3	.5256-2	.3023-1	.1739	.1274-1	.1594-1	.9848	1.96954
9.82	.1581-3	.5241-2	.3017-1	.1737	.1271-1	.1589-1	.9848	1.96960
9.83	.1573-3	.5225-2	.3011-1	.1735	.1267-1	.1585-1	.9848	1.96966
9.84	.1566-3	.5210-2	.3005-1	.1734	.1263-1	.1580-1	.9849	1.96972
9.85	.1558-3	.5194-2	.2999-1	.1732	.1260-1	.1575-1	.9849	1.96978
9.86	.1550-3	.5179-2	.2993-1	.1730	.1256-1	.1571-1	.9849	1.96984
9.87	.1543-3	.5164-2	.2988-1	.1728	.1252-1	.1566-1	.9849	1.96990
9.88	.1535-3	.5149-2	.2982-1	.1727	.1249-1	.1562-1	.9850	1.96996
9.89	.1528-3	.5133-2	.2976-1	.1725	.1245-1	.1557-1	.9850	1.97002
9.90	.1520-3	.5118-2	.2970-1	.1723	.1242-1	.1552-1	.9850	1.97008
9.91	.1513-3	.5103-2	.2964-1	.1722	.1238-1	.1548-1	.9851	1.97014
9.92	.1505-3	.5088-2	.2958-1	.1720	.1234-1	.1543-1	.9851	1.97019
9.93	.1498-3	.5074-2	.2953-1	.1718	.1231-1	.1539-1	.9851	1.97025
9.94	.1491-3	.5059-2	.2947-1	.1717	.1227-1	.1535-1	.9852	1.97031
9.95	.1483-3	.5044-2	.2941-1	.1715	.1224-1	.1530-1	.9852	1.97037
9.96	.1476-3	.5029-2	.2935-1	.1713	.1220-1	.1526-1	.9852	1.97043
9.97	.1469-3	.5014-2	.2930-1	.1712	.1217-1	.1521-1	.9852	1.97049
9.98	.1462-3	.5000-2	.2924-1	.1710	.1213-1	.1517-1	.9853	1.97054
9.99	.1455-3	.4985-2	.2918-1	.1708	.1210-1	.1513-1	.9853	1.97060

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
6.379	71.171	.4560	101.0	3.857	26.19	.2879-1	119.4	9.00
6.372	71.191	.4560	101.2	3.857	26.24	.2870-1	119.7	9.01
6.365	71.211	.4559	101.5	3.858	26.30	.2861-1	119.9	9.02
6.358	71.231	.4559	101.7	3.858	26.35	.2852-1	120.2	9.03
6.351	71.252	.4559	101.9	3.858	26.41	.2843-1	120.5	9.04
6.344	71.272	.4559	102.1	3.859	26.47	.2834-1	120.7	9.05
6.337	71.292	.4559	102.4	3.859	26.52	.2825-1	121.0	9.06
6.330	71.312	.4558	102.6	3.859	26.58	.2816-1	121.3	9.07
6.323	71.332	.4558	102.8	3.860	26.64	.2807-1	121.5	9.08
6.316	71.352	.4558	103.0	3.860	26.69	.2799-1	121.8	9.09
6.309	71.372	.4558	103.3	3.860	26.75	.2790-1	122.1	9.10
6.302	71.392	.4558	103.5	3.860	26.81	.2781-1	122.3	9.11
6.295	71.412	.4558	103.7	3.861	26.86	.2773-1	122.6	9.12
6.288	71.431	.4557	103.9	3.861	26.92	.2764-1	122.9	9.13
6.281	71.451	.4557	104.2	3.861	26.98	.2756-1	123.2	9.14
6.274	71.471	.4557	104.4	3.862	27.04	.2747-1	123.4	9.15
6.267	71.491	.4557	104.6	3.862	27.09	.2738-1	123.7	9.16
6.261	71.510	.4557	104.9	3.862	27.15	.2730-1	124.0	9.17
6.254	71.530	.4556	105.1	3.862	27.21	.2722-1	124.2	9.18
6.247	71.549	.4556	105.3	3.863	27.27	.2713-1	124.5	9.19
6.240	71.569	.4556	105.6	3.863	27.32	.2705-1	124.8	9.20
6.233	71.588	.4556	105.8	3.863	27.38	.2697-1	125.0	9.21
6.227	71.608	.4556	106.0	3.864	27.44	.2688-1	125.3	9.22
6.220	71.627	.4556	106.2	3.864	27.50	.2680-1	125.6	9.23
6.213	71.647	.4555	106.5	3.864	27.55	.2672-1	125.9	9.24
6.206	71.666	.4555	106.7	3.865	27.61	.2664-1	126.1	9.25
6.200	71.685	.4555	106.9	3.865	27.67	.2655-1	126.4	9.26
6.193	71.704	.4555	107.2	3.865	27.73	.2647-1	126.7	9.27
6.186	71.724	.4555	107.4	3.865	27.78	.2639-1	126.9	9.28
6.179	71.743	.4554	107.6	3.866	27.84	.2631-1	127.2	9.29
6.173	71.762	.4554	107.9	3.866	27.90	.2623-1	127.5	9.30
6.166	71.781	.4554	108.1	3.866	27.96	.2615-1	127.8	9.31
6.159	71.800	.4554	108.3	3.866	28.02	.2607-1	128.0	9.32
6.153	71.819	.4554	108.6	3.867	28.08	.2599-1	128.3	9.33
6.146	71.838	.4554	108.8	3.867	28.13	.2591-1	128.6	9.34
6.140	71.857	.4553	109.0	3.867	28.19	.2584-1	128.9	9.35
6.133	71.876	.4553	109.3	3.868	28.25	.2576-1	129.1	9.36
6.126	71.895	.4553	109.5	3.868	28.31	.2568-1	129.4	9.37
6.120	71.913	.4553	109.7	3.868	28.37	.2560-1	129.7	9.38
6.113	71.932	.4553	110.0	3.868	28.43	.2552-1	130.0	9.39
6.107	71.951	.4553	110.2	3.869	28.49	.2545-1	130.2	9.40
6.100	71.969	.4552	110.4	3.869	28.54	.2537-1	130.5	9.41
6.094	71.988	.4552	110.7	3.869	28.60	.2529-1	130.8	9.42
6.087	72.007	.4552	110.9	3.869	28.66	.2522-1	131.1	9.43
6.081	72.025	.4552	111.1	3.870	28.72	.2514-1	131.3	9.44
6.074	72.044	.4552	111.4	3.870	28.78	.2507-1	131.6	9.45
6.068	72.062	.4552	111.6	3.870	28.84	.2499-1	131.9	9.46
6.062	72.081	.4551	111.9	3.871	28.90	.2492-1	132.2	9.47
6.055	72.099	.4551	112.1	3.871	28.96	.2484-1	132.4	9.48
6.049	72.118	.4551	112.3	3.871	29.02	.2477-1	132.7	9.49
6.042	72.136	.4551	112.6	3.871	29.08	.2469-1	133.0	9.50
6.036	72.154	.4551	112.8	3.872	29.14	.2462-1	133.3	9.51
6.030	72.173	.4551	113.0	3.872	29.19	.2454-1	133.6	9.52
6.023	72.191	.4550	113.3	3.872	29.25	.2447-1	133.8	9.53
6.017	72.209	.4550	113.5	3.872	29.31	.2440-1	134.1	9.54
6.011	72.227	.4550	113.8	3.873	29.37	.2433-1	134.4	9.55
6.004	72.245	.4550	114.0	3.873	29.43	.2425-1	134.7	9.56
5.998	72.263	.4550	114.2	3.873	29.49	.2418-1	135.0	9.57
5.992	72.281	.4550	114.5	3.873	29.55	.2411-1	135.2	9.58
5.985	72.299	.4549	114.7	3.874	29.61	.2404-1	135.5	9.59
5.979	72.317	.4549	115.0	3.874	29.67	.2397-1	135.8	9.60
5.973	72.335	.4549	115.2	3.874	29.73	.2390-1	136.1	9.61
5.967	72.353	.4549	115.4	3.874	29.79	.2382-1	136.4	9.62
5.960	72.371	.4549	115.7	3.875	29.85	.2375-1	136.7	9.63
5.954	72.389	.4549	115.9	3.875	29.91	.2368-1	136.9	9.64
5.948	72.407	.4548	116.2	3.875	29.97	.2361-1	137.2	9.65
5.942	72.425	.4548	116.4	3.875	30.03	.2354-1	137.5	9.66
5.936	72.442	.4548	116.6	3.876	30.09	.2348-1	137.8	9.67
5.930	72.460	.4548	116.9	3.876	30.15	.2341-1	138.1	9.68
5.923	72.478	.4548	117.1	3.876	30.22	.2334-1	138.4	9.69
5.917	72.495	.4548	117.4	3.876	30.28	.2327-1	138.6	9.70
5.911	72.513	.4548	117.6	3.877	30.34	.2320-1	138.9	9.71
5.905	72.530	.4547	117.8	3.877	30.40	.2313-1	139.2	9.72
5.899	72.548	.4547	118.1	3.877	30.46	.2306-1	139.5	9.73
5.893	72.565	.4547	118.3	3.877	30.52	.2300-1	139.8	9.74
5.887	72.583	.4547	118.6	3.878	30.58	.2293-1	140.1	9.75
5.881	72.600	.4547	118.8	3.878	30.64	.2286-1	140.4	9.76
5.875	72.618	.4547	119.1	3.878	30.70	.2280-1	140.6	9.77
5.869	72.635	.4546	119.3	3.878	30.76	.2273-1	140.9	9.78
5.863	72.652	.4546	119.6	3.879	30.82	.2266-1	141.2	9.79
5.857	72.670	.4546	119.8	3.879	30.89	.2260-1	141.5	9.80
5.851	72.687	.4546	120.0	3.879	30.95	.2253-1	141.8	9.81
5.845	72.704	.4546	120.3	3.879	31.01	.2247-1	142.1	9.82
5.839	72.721	.4546	120.5	3.880	31.07	.2240-1	142.4	9.83
5.833	72.738	.4546	120.8	3.880	31.13	.2234-1	142.7	9.84
5.827	72.756	.4545	121.0	3.880	31.19	.2227-1	143.0	9.85
5.821	72.773	.4545	121.3	3.880	31.25	.2221-1	143.2	9.86
5.815	72.790	.4545	121.5	3.880	31.32	.2214-1	143.5	9.87
5.809	72.807	.4545	121.8	3.881	31.38	.2208-1	143.8	9.88
5.803	72.824	.4545	122.0	3.881	31.44	.2202-1	144.1	9.89
5.797	72.841	.4545	122.3	3.881	31.50	.2195-1	144.4	9.90
5.791	72.858	.4545	122.5	3.881	31.56	.2189-1	144.7	9.91
5.786	72.874	.4544	122.8	3.882	31.63	.2183-1	145.0	9.92
5.780	72.891	.4544	123.0	3.882	31.69	.2176-1	145.3	9.93
5.774	72.908	.4544	123.3	3.882	31.75	.2170-1	145.6	9.94
5.768	72.925	.4544	123.5	3.882	31.81	.2164-1	145.9	9.95
5.762	72.942	.4544	123.8	3.883	31.87	.2158-1	146.2	9.96
5.756	72.958	.4544	124.0	3.883	31.94	.2151-1	146.4	9.97
5.751	72.975	.4544	124.3	3.883	32.00	.2145-1	146.7	9.98
5.745	72.992	.4543	124.5	3.883	32.06	.2139-1	147.0	9.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A*/A	V/V_0	V/a*
10.00	.1448-3	.4971-2	.2913-1	.1707	.1207-1	.1508-1	.9853	1.97066
10.01	.1441-3	.4956-2	.2907-1	.1705	.1203-1	.1504-1	.9854	1.97072
10.02	.1434-3	.4948-2	.2901-1	.1703	.1200-1	.1499-1	.9854	1.97077
10.03	.1427-3	.4928-2	.2896-1	.1702	.1196-1	.1493-1	.9854	1.97083
10.04	.1420-3	.4913-2	.2890-1	.1700	.1193-1	.1491-1	.9854	1.97089
10.05	.1413-3	.4899-2	.2885-1	.1698	.1189-1	.1487-1	.9855	1.97094
10.06	.1406-3	.4885-2	.2879-1	.1697	.1186-1	.1482-1	.9855	1.97100
10.07	.1400-3	.4871-2	.2873-1	.1695	.1183-1	.1478-1	.9855	1.97106
10.08	.1393-3	.4857-2	.2868-1	.1693	.1179-1	.1474-1	.9856	1.97111
10.09	.1386-3	.4843-2	.2862-1	.1692	.1176-1	.1470-1	.9856	1.97117
10.10	.1380-3	.4829-2	.2857-1	.1690	.1173-1	.1465-1	.9856	1.97122
10.11	.1373-3	.4815-2	.2851-1	.1689	.1169-1	.1461-1	.9856	1.97128
10.12	.1366-3	.4801-2	.2846-1	.1687	.1166-1	.1457-1	.9857	1.97134
10.13	.1360-3	.4787-2	.2840-1	.1685	.1163-1	.1453-1	.9857	1.97139
10.14	.1353-3	.4773-2	.2835-1	.1684	.1160-1	.1449-1	.9857	1.97145
10.15	.1347-3	.4760-2	.2830-1	.1682	.1156-1	.1445-1	.9858	1.97150
10.16	.1340-3	.4746-2	.2824-1	.1681	.1153-1	.1441-1	.9858	1.97156
10.17	.1334-3	.4733-2	.2819-1	.1679	.1150-1	.1437-1	.9858	1.97161
10.18	.1328-3	.4719-2	.2813-1	.1677	.1147-1	.1432-1	.9858	1.97167
10.19	.1321-3	.4705-2	.2808-1	.1676	.1143-1	.1428-1	.9859	1.97172
10.20	.1315-3	.4692-2	.2803-1	.1674	.1140-1	.1424-1	.9859	1.97177
10.21	.1309-3	.4679-2	.2797-1	.1673	.1137-1	.1420-1	.9859	1.97183
10.22	.1303-3	.4665-2	.2792-1	.1671	.1134-1	.1416-1	.9859	1.97188
10.23	.1296-3	.4652-2	.2787-1	.1669	.1131-1	.1412-1	.9860	1.97194
10.24	.1290-3	.4639-2	.2781-1	.1668	.1127-1	.1408-1	.9860	1.97199
10.25	.1284-3	.4626-2	.2776-1	.1666	.1124-1	.1404-1	.9860	1.97204
10.26	.1278-3	.4618-2	.2771-1	.1665	.1121-1	.1400-1	.9860	1.97210
10.27	.1272-3	.4599-2	.2766-1	.1663	.1118-1	.1397-1	.9861	1.97215
10.28	.1266-3	.4586-2	.2760-1	.1661	.1115-1	.1393-1	.9861	1.97220
10.29	.1260-3	.4573-2	.2755-1	.1660	.1112-1	.1389-1	.9861	1.97226
10.30	.1254-3	.4560-2	.2750-1	.1658	.1109-1	.1385-1	.9862	1.97231
10.31	.1248-3	.4548-2	.2745-1	.1657	.1106-1	.1381-1	.9862	1.97236
10.32	.1242-3	.4535-2	.2740-1	.1655	.1103-1	.1377-1	.9862	1.97241
10.33	.1237-3	.4522-2	.2735-1	.1654	.1100-1	.1373-1	.9862	1.97247
10.34	.1231-3	.4509-2	.2729-1	.1652	.1097-1	.1369-1	.9863	1.97252
10.35	.1225-3	.4496-2	.2724-1	.1651	.1093-1	.1366-1	.9863	1.97257
10.36	.1219-3	.4484-2	.2719-1	.1649	.1090-1	.1362-1	.9863	1.97262
10.37	.1213-3	.4471-2	.2714-1	.1647	.1087-1	.1358-1	.9863	1.97267
10.38	.1208-3	.4459-2	.2709-1	.1646	.1084-1	.1354-1	.9864	1.97272
10.39	.1202-3	.4446-2	.2704-1	.1644	.1081-1	.1350-1	.9864	1.97278
10.40	.1197-3	.4434-2	.2699-1	.1643	.1078-1	.1347-1	.9864	1.97283
10.41	.1191-3	.4421-2	.2694-1	.1641	.1076-1	.1343-1	.9864	1.97288
10.42	.1185-3	.4409-2	.2689-1	.1640	.1073-1	.1339-1	.9865	1.97293
10.43	.1180-3	.4397-2	.2684-1	.1638	.1070-1	.1335-1	.9865	1.97298
10.44	.1174-3	.4384-2	.2679-1	.1637	.1067-1	.1332-1	.9865	1.97303
10.45	.1169-3	.4372-2	.2674-1	.1635	.1064-1	.1328-1	.9865	1.97308
10.46	.1164-3	.4360-2	.2669-1	.1634	.1061-1	.1324-1	.9866	1.97313
10.47	.1158-3	.4348-2	.2664-1	.1632	.1058-1	.1321-1	.9866	1.97318
10.48	.1153-3	.4336-2	.2659-1	.1631	.1055-1	.1317-1	.9866	1.97323
10.49	.1147-3	.4323-2	.2654-1	.1629	.1052-1	.1314-1	.9866	1.97328
10.50	.1142-3	.4311-2	.2649-1	.1628	.1049-1	.1310-1	.9867	1.97333
10.51	.1137-3	.4299-2	.2644-1	.1626	.1046-1	.1306-1	.9867	1.97338
10.52	.1132-3	.4288-2	.2639-1	.1625	.1044-1	.1303-1	.9867	1.97343
10.53	.1126-3	.4276-2	.2634-1	.1623	.1041-1	.1299-1	.9867	1.97348
10.54	.1121-3	.4264-2	.2629-1	.1622	.1038-1	.1296-1	.9868	1.97353
10.55	.1116-3	.4252-2	.2625-1	.1620	.1035-1	.1292-1	.9868	1.97358
10.56	.1111-3	.4240-2	.2620-1	.1619	.1032-1	.1288-1	.9868	1.97363
10.57	.1106-3	.4229-2	.2615-1	.1617	.1030-1	.1285-1	.9868	1.97368
10.58	.1101-3	.4217-2	.2610-1	.1616	.1027-1	.1281-1	.9869	1.97373
10.59	.1096-3	.4205-2	.2605-1	.1614	.1024-1	.1278-1	.9869	1.97377
10.60	.1091-3	.4194-2	.2601-1	.1613	.1021-1	.1274-1	.9869	1.97382
10.61	.1086-3	.4182-2	.2596-1	.1611	.1018-1	.1271-1	.9869	1.97387
10.62	.1081-3	.4171-2	.2591-1	.1610	.1016-1	.1267-1	.9870	1.97392
10.63	.1076-3	.4159-2	.2586-1	.1608	.1013-1	.1264-1	.9870	1.97397
10.64	.1071-3	.4148-2	.2582-1	.1607	.1010-1	.1261-1	.9870	1.97402
10.65	.1066-3	.4136-2	.2577-1	.1605	.1007-1	.1257-1	.9870	1.97406
10.66	.1061-3	.4125-2	.2572-1	.1604	.1005-1	.1254-1	.9871	1.97411
10.67	.1056-3	.4114-2	.2567-1	.1602	.1002-1	.1250-1	.9871	1.97416
10.68	.1051-3	.4103-2	.2563-1	.1601	.9994-2	.1247-1	.9871	1.97421
10.69	.1047-3	.4091-2	.2558-1	.1599	.9967-2	.1244-1	.9871	1.97425
10.70	.1042-3	.4080-2	.2553-1	.1598	.9940-2	.1240-1	.9872	1.97430
10.71	.1037-3	.4069-2	.2549-1	.1596	.9913-2	.1237-1	.9872	1.97435
10.72	.1032-3	.4058-2	.2544-1	.1595	.9887-2	.1234-1	.9872	1.97439
10.73	.1028-3	.4047-2	.2540-1	.1594	.9860-2	.1230-1	.9872	1.97444
10.74	.1023-3	.4036-2	.2535-1	.1592	.9834-2	.1227-1	.9872	1.97449
10.75	.1018-3	.4025-2	.2530-1	.1591	.9808-2	.1224-1	.9873	1.97453
10.76	.1014-3	.4014-2	.2526-1	.1589	.9782-2	.1220-1	.9873	1.97458
10.77	.1009-3	.4003-2	.2521-1	.1588	.9756-2	.1217-1	.9873	1.97463
10.78	.1005-3	.3992-2	.2517-1	.1586	.9730-2	.1214-1	.9873	1.97467
10.79	.1000-3	.3981-2	.2512-1	.1585	.9704-2	.1210-1	.9874	1.97472
10.80	.9957-4	.3971-2	.2508-1	.1584	.9678-2	.1207-1	.9874	1.97477
10.81	.9912-4	.3960-2	.2503-1	.1582	.9652-2	.1204-1	.9874	1.97481
10.82	.9867-4	.3949-2	.2498-1	.1581	.9627-2	.1201-1	.9874	1.97486
10.83	.9823-4	.3939-2	.2494-1	.1579	.9601-2	.1198-1	.9875	1.97490
10.84	.9779-4	.3928-2	.2490-1	.1578	.9576-2	.1194-1	.9875	1.97495
10.85	.9735-4	.3917-2	.2485-1	.1576	.9550-2	.1191-1	.9875	1.97499
10.86	.9691-4	.3907-2	.2481-1	.1575	.9525-2	.1188-1	.9875	1.97504
10.87	.9648-4	.3896-2	.2476-1	.1574	.9500-2	.1185-1	.9875	1.97508
10.88	.9605-4	.3886-2	.2472-1	.1572	.9475-2	.1182-1	.9876	1.97513
10.89	.9562-4	.3875-2	.2467-1	.1571	.9450-2	.1179-1	.9876	1.97517
10.90	.9519-4	.3865-2	.2463-1	.1569	.9425-2	.1175-1	.9876	1.97522
10.91	.9477-4	.3855-2	.2458-1	.1568	.9400-2	.1172-1	.9876	1.97526
10.92	.9434-4	.3844-2	.2454-1	.1567	.9375-2	.1169-1	.9877	1.97531
10.93	.9392-4	.3834-2	.2450-1	.1565	.9350-2	.1166-1	.9877	1.97535
10.94	.9351-4	.3824-2	.2445-1	.1564	.9326-2	.1163-1	.9877	1.97540
10.95	.9309-4	.3814-2	.2441-1	.1562	.9301-2	.1160-1	.9877	1.97544
10.96	.9268-4	.3803-2	.2437-1	.1561	.9277-2	.1157-1	.9877	1.97548
10.97	.9226-4	.3793-2	.2432-1	.1560	.9253-2	.1154-1	.9878	1.97553
10.98	.9186-4	.3783-2	.2428-1	.1558	.9228-2	.1151-1	.9878	1.97557
10.99	.9145-4	.3773-2	.2424-1	.1557	.9204-2	.1148-1	.9878	1.97561

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
5.739	73.008	.4543	124.8	3.883	32.12	.2133-1	147.3	10.00
5.733	73.025	.4543	125.0	3.884	32.19	.2127-1	147.6	10.01
5.728	73.041	.4543	125.3	3.884	32.25	.2121-1	147.9	10.02
5.722	73.058	.4543	125.5	3.884	32.32	.2115-1	148.2	10.03
5.716	73.074	.4543	125.8	3.884	32.37	.2109-1	148.5	10.04
5.711	73.091	.4543	126.0	3.885	32.44	.2103-1	148.8	10.05
5.705	73.107	.4542	126.3	3.885	32.50	.2097-1	149.1	10.06
5.699	73.124	.4542	126.5	3.885	32.56	.2091-1	149.4	10.07
5.693	73.140	.4542	126.8	3.885	32.63	.2085-1	149.7	10.08
5.688	73.156	.4542	127.0	3.886	32.69	.2079-1	150.0	10.09
5.682	73.173	.4542	127.3	3.886	32.75	.2073-1	150.3	10.10
5.677	73.189	.4542	127.5	3.886	32.81	.2067-1	150.6	10.11
5.671	73.205	.4542	127.8	3.886	32.88	.2061-1	150.9	10.12
5.665	73.221	.4541	128.0	3.886	32.94	.2056-1	151.2	10.13
5.660	73.238	.4541	128.3	3.887	33.00	.2050-1	151.5	10.14
5.654	73.254	.4541	128.5	3.887	33.07	.2044-1	151.8	10.15
5.648	73.270	.4541	128.8	3.887	33.13	.2038-1	152.1	10.16
5.643	73.286	.4541	129.0	3.887	33.19	.2033-1	152.4	10.17
5.637	73.302	.4541	129.3	3.887	33.26	.2027-1	152.7	10.18
5.632	73.318	.4541	129.5	3.888	33.32	.2021-1	153.0	10.19
5.626	73.334	.4541	129.8	3.888	33.39	.2015-1	153.3	10.20
5.621	73.350	.4540	130.1	3.888	33.45	.2010-1	153.6	10.21
5.615	73.366	.4540	130.3	3.888	33.51	.2004-1	153.9	10.22
5.610	73.382	.4540	130.6	3.889	33.58	.1999-1	154.2	10.23
5.604	73.398	.4540	130.8	3.889	33.64	.1993-1	154.5	10.24
5.599	73.414	.4540	131.1	3.889	33.71	.1987-1	154.8	10.25
5.593	73.429	.4540	131.3	3.889	33.77	.1982-1	155.1	10.26
5.588	73.445	.4540	131.6	3.889	33.83	.1976-1	155.4	10.27
5.582	73.461	.4539	131.8	3.890	33.90	.1971-1	155.7	10.28
5.577	73.477	.4539	132.1	3.890	33.96	.1965-1	156.0	10.29
5.571	73.492	.4539	132.4	3.890	34.03	.1960-1	156.3	10.30
5.566	73.508	.4539	132.6	3.890	34.09	.1954-1	156.6	10.31
5.561	73.524	.4539	132.9	3.890	34.16	.1949-1	156.9	10.32
5.555	73.539	.4539	133.1	3.891	34.22	.1944-1	157.2	10.33
5.550	73.555	.4539	133.4	3.891	34.28	.1938-1	157.5	10.34
5.544	73.570	.4539	133.7	3.891	34.35	.1933-1	157.8	10.35
5.539	73.586	.4538	133.9	3.891	34.41	.1927-1	158.1	10.36
5.534	73.601	.4538	134.2	3.891	34.48	.1922-1	158.4	10.37
5.528	73.617	.4538	134.4	3.892	34.54	.1917-1	158.7	10.38
5.523	73.632	.4538	134.7	3.892	34.61	.1912-1	159.0	10.39
5.518	73.648	.4538	135.0	3.892	34.67	.1906-1	159.3	10.40
5.512	73.663	.4538	135.2	3.892	34.74	.1901-1	159.6	10.41
5.507	73.679	.4538	135.5	3.892	34.80	.1896-1	159.9	10.42
5.502	73.694	.4538	135.7	3.893	34.87	.1891-1	160.2	10.43
5.497	73.709	.4537	136.0	3.893	34.93	.1885-1	160.5	10.44
5.491	73.724	.4537	136.3	3.893	35.00	.1880-1	160.8	10.45
5.486	73.740	.4537	136.5	3.893	35.06	.1875-1	161.2	10.46
5.481	73.755	.4537	136.8	3.893	35.13	.1870-1	161.5	10.47
5.475	73.770	.4537	137.0	3.894	35.20	.1865-1	161.8	10.48
5.470	73.785	.4537	137.3	3.894	35.26	.1860-1	162.1	10.49
5.465	73.800	.4537	137.6	3.894	35.33	.1855-1	162.4	10.50
5.460	73.815	.4537	137.8	3.894	35.39	.1850-1	162.7	10.51
5.455	73.830	.4536	138.1	3.894	35.46	.1844-1	163.0	10.52
5.449	73.845	.4536	138.4	3.895	35.52	.1839-1	163.3	10.53
5.444	73.860	.4536	138.6	3.895	35.59	.1834-1	163.6	10.54
5.439	73.875	.4536	138.9	3.895	35.66	.1829-1	163.9	10.55
5.434	73.890	.4536	139.1	3.895	35.72	.1824-1	164.2	10.56
5.429	73.905	.4536	139.4	3.895	35.79	.1820-1	164.6	10.57
5.424	73.920	.4536	139.7	3.896	35.85	.1815-1	164.9	10.58
5.418	73.935	.4536	139.9	3.896	35.92	.1810-1	165.2	10.59
5.413	73.950	.4535	140.2	3.896	35.99	.1805-1	165.5	10.60
5.408	73.965	.4535	140.5	3.896	36.05	.1800-1	165.8	10.61
5.403	73.980	.4535	140.7	3.896	36.12	.1795-1	166.1	10.62
5.398	73.994	.4535	141.0	3.897	36.18	.1790-1	166.4	10.63
5.393	74.009	.4535	141.3	3.897	36.25	.1785-1	166.7	10.64
5.388	74.024	.4535	141.5	3.897	36.32	.1780-1	167.0	10.65
5.383	74.038	.4535	141.8	3.897	36.38	.1776-1	167.4	10.66
5.378	74.053	.4535	142.1	3.897	36.45	.1771-1	167.7	10.67
5.373	74.068	.4535	142.3	3.897	36.52	.1766-1	168.0	10.68
5.368	74.082	.4534	142.6	3.898	36.58	.1761-1	168.3	10.69
5.363	74.097	.4534	142.9	3.898	36.65	.1757-1	168.6	10.70
5.358	74.112	.4534	143.1	3.898	36.72	.1752-1	168.9	10.71
5.353	74.126	.4534	143.4	3.898	36.79	.1747-1	169.2	10.72
5.348	74.141	.4534	143.7	3.898	36.85	.1743-1	169.6	10.73
5.343	74.155	.4534	143.9	3.899	36.92	.1738-1	169.9	10.74
5.338	74.169	.4534	144.2	3.899	36.99	.1733-1	170.2	10.75
5.333	74.184	.4534	144.5	3.899	37.05	.1729-1	170.5	10.76
5.328	74.198	.4534	144.7	3.899	37.12	.1724-1	170.8	10.77
5.323	74.213	.4533	145.0	3.899	37.19	.1719-1	171.1	10.78
5.318	74.227	.4533	145.3	3.900	37.26	.1715-1	171.5	10.79
5.313	74.241	.4533	145.6	3.900	37.32	.1710-1	171.8	10.80
5.308	74.256	.4533	145.8	3.900	37.39	.1706-1	172.1	10.81
5.303	74.270	.4533	146.1	3.900	37.46	.1701-1	172.4	10.82
5.298	74.284	.4533	146.4	3.900	37.53	.1697-1	172.7	10.83
5.293	74.298	.4533	146.6	3.900	37.59	.1692-1	173.0	10.84
5.288	74.313	.4533	146.9	3.901	37.66	.1688-1	173.4	10.85
5.283	74.327	.4533	147.2	3.901	37.73	.1683-1	173.7	10.86
5.278	74.341	.4532	147.4	3.901	37.80	.1679-1	174.0	10.87
5.274	74.355	.4532	147.7	3.901	37.87	.1674-1	174.3	10.88
5.269	74.369	.4532	148.0	3.901	37.93	.1670-1	174.6	10.89
5.264	74.383	.4532	148.3	3.901	38.00	.1665-1	175.0	10.90
5.259	74.397	.4532	148.5	3.902	38.07	.1661-1	175.3	10.91
5.254	74.411	.4532	148.8	3.902	38.14	.1657-1	175.6	10.92
5.249	74.425	.4532	149.1	3.902	38.21	.1652-1	175.9	10.93
5.245	74.439	.4532	149.4	3.902	38.27	.1648-1	176.2	10.94
5.240	74.453	.4532	149.6	3.902	38.34	.1644-1	176.6	10.95
5.235	74.467	.4531	149.9	3.903	38.41	.1639-1	176.9	10.96
5.230	74.481	.4531	150.2	3.903	38.48	.1635-1	177.2	10.97
5.225	74.495	.4531	150.5	3.903	38.55	.1631-1	177.5	10.98
5.221	74.509	.4531	150.7	3.903	38.62	.1626-1	177.9	10.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
11.00	.9104-4	.3763-2	.2419-1	.1555	.9180-2	.1145-1	.9878	1.97566
11.01	.9064-4	.3753-2	.2415-1	.1554	.9156-2	.1142-1	.9879	1.97570
11.02	.9024-4	.3743-2	.2411-1	.1553	.9132-2	.1139-1	.9879	1.97575
11.03	.8984-4	.3733-2	.2407-1	.1551	.9109-2	.1136-1	.9879	1.97579
11.04	.8945-4	.3723-2	.2402-1	.1550	.9085-2	.1133-1	.9879	1.97583
11.05	.8905-4	.3713-2	.2398-1	.1549	.9061-2	.1130-1	.9879	1.97587
11.06	.8866-4	.3704-2	.2394-1	.1547	.9038-2	.1127-1	.9880	1.97592
11.07	.8827-4	.3694-2	.2390-1	.1546	.9014-2	.1124-1	.9880	1.97596
11.08	.8788-4	.3684-2	.2385-1	.1544	.8991-2	.1121-1	.9880	1.97600
11.09	.8749-4	.3674-2	.2381-1	.1543	.8967-2	.1118-1	.9880	1.97604
11.10	.8711-4	.3665-2	.2377-1	.1542	.8944-2	.1115-1	.9880	1.97609
11.11	.8673-4	.3655-2	.2373-1	.1540	.8921-2	.1112-1	.9881	1.97613
11.12	.8635-4	.3645-2	.2369-1	.1539	.8898-2	.1109-1	.9881	1.97617
11.13	.8597-4	.3636-2	.2364-1	.1538	.8875-2	.1106-1	.9881	1.97621
11.14	.8559-4	.3626-2	.2360-1	.1536	.8852-2	.1103-1	.9881	1.97626
11.15	.8522-4	.3617-2	.2356-1	.1535	.8829-2	.1100-1	.9881	1.97630
11.16	.8485-4	.3607-2	.2352-1	.1534	.8806-2	.1098-1	.9882	1.97634
11.17	.8448-4	.3598-2	.2348-1	.1532	.8783-2	.1095-1	.9882	1.97638
11.18	.8411-4	.3588-2	.2344-1	.1531	.8761-2	.1092-1	.9882	1.97642
11.19	.8374-4	.3579-2	.2340-1	.1530	.8738-2	.1089-1	.9882	1.97646
11.20	.8338-4	.3570-2	.2336-1	.1528	.8716-2	.1086-1	.9883	1.97650
11.21	.8302-4	.3560-2	.2332-1	.1527	.8693-2	.1083-1	.9883	1.97655
11.22	.8265-4	.3551-2	.2328-1	.1526	.8671-2	.1081-1	.9883	1.97659
11.23	.8230-4	.3542-2	.2324-1	.1524	.8649-2	.1078-1	.9883	1.97663
11.24	.8194-4	.3533-2	.2320-1	.1523	.8627-2	.1075-1	.9883	1.97667
11.25	.8158-4	.3523-2	.2315-1	.1522	.8605-2	.1072-1	.9884	1.97671
11.26	.8123-4	.3514-2	.2311-1	.1520	.8583-2	.1070-1	.9884	1.97675
11.27	.8088-4	.3505-2	.2307-1	.1519	.8561-2	.1067-1	.9884	1.97679
11.28	.8053-4	.3496-2	.2303-1	.1518	.8539-2	.1064-1	.9884	1.97683
11.29	.8018-4	.3487-2	.2299-1	.1516	.8517-2	.1061-1	.9884	1.97687
11.30	.7984-4	.3478-2	.2296-1	.1515	.8495-2	.1059-1	.9885	1.97691
11.31	.7949-4	.3469-2	.2292-1	.1514	.8474-2	.1056-1	.9885	1.97695
11.32	.7915-4	.3460-2	.2288-1	.1512	.8452-2	.1053-1	.9885	1.97699
11.33	.7881-4	.3451-2	.2284-1	.1511	.8430-2	.1050-1	.9885	1.97703
11.34	.7847-4	.3442-2	.2280-1	.1510	.8409-2	.1048-1	.9885	1.97707
11.35	.7813-4	.3433-2	.2276-1	.1509	.8388-2	.1045-1	.9886	1.97711
11.36	.7780-4	.3424-2	.2272-1	.1507	.8366-2	.1042-1	.9886	1.97715
11.37	.7746-4	.3416-2	.2268-1	.1506	.8345-2	.1040-1	.9886	1.97719
11.38	.7713-4	.3407-2	.2264-1	.1505	.8324-2	.1037-1	.9886	1.97723
11.39	.7680-4	.3398-2	.2260-1	.1503	.8303-2	.1034-1	.9886	1.97727
11.40	.7647-4	.3389-2	.2256-1	.1502	.8282-2	.1032-1	.9887	1.97731
11.41	.7614-4	.3381-2	.2252-1	.1501	.8261-2	.1029-1	.9887	1.97735
11.42	.7582-4	.3372-2	.2249-1	.1500	.8240-2	.1027-1	.9887	1.97739
11.43	.7550-4	.3363-2	.2245-1	.1498	.8219-2	.1024-1	.9887	1.97743
11.44	.7517-4	.3355-2	.2241-1	.1497	.8199-2	.1021-1	.9887	1.97746
11.45	.7485-4	.3346-2	.2237-1	.1496	.8178-2	.1019-1	.9888	1.97750
11.46	.7453-4	.3337-2	.2233-1	.1494	.8157-2	.1016-1	.9888	1.97754
11.47	.7422-4	.3329-2	.2229-1	.1493	.8137-2	.1014-1	.9888	1.97758
11.48	.7390-4	.3320-2	.2226-1	.1492	.8116-2	.1011-1	.9888	1.97762
11.49	.7359-4	.3312-2	.2222-1	.1491	.8096-2	.1008-1	.9888	1.97766
11.50	.7328-4	.3304-2	.2218-1	.1489	.8076-2	.1006-1	.9888	1.97769
11.51	.7296-4	.3295-2	.2214-1	.1488	.8055-2	.1003-1	.9889	1.97773
11.52	.7266-4	.3287-2	.2211-1	.1487	.8035-2	.1001-1	.9889	1.97777
11.53	.7235-4	.3278-2	.2207-1	.1486	.8015-2	.9983-2	.9889	1.97781
11.54	.7204-4	.3270-2	.2203-1	.1484	.7995-2	.9958-2	.9889	1.97785
11.55	.7174-4	.3262-2	.2199-1	.1483	.7975-2	.9932-2	.9889	1.97788
11.56	.7143-4	.3253-2	.2196-1	.1482	.7955-2	.9907-2	.9890	1.97792
11.57	.7113-4	.3245-2	.2192-1	.1481	.7935-2	.9883-2	.9890	1.97796
11.58	.7083-4	.3237-2	.2188-1	.1479	.7915-2	.9858-2	.9890	1.97800
11.59	.7053-4	.3229-2	.2185-1	.1478	.7896-2	.9833-2	.9890	1.97803
11.60	.7024-4	.3221-2	.2181-1	.1477	.7876-2	.9808-2	.9890	1.97807
11.61	.6994-4	.3213-2	.2177-1	.1476	.7856-2	.9784-2	.9891	1.97811
11.62	.6965-4	.3204-2	.2174-1	.1474	.7837-2	.9759-2	.9891	1.97815
11.63	.6936-4	.3196-2	.2170-1	.1473	.7817-2	.9735-2	.9891	1.97818
11.64	.6907-4	.3188-2	.2166-1	.1472	.7798-2	.9710-2	.9891	1.97822
11.65	.6878-4	.3180-2	.2163-1	.1471	.7779-2	.9686-2	.9891	1.97826
11.66	.6849-4	.3172-2	.2159-1	.1469	.7759-2	.9662-2	.9891	1.97829
11.67	.6820-4	.3164-2	.2155-1	.1468	.7740-2	.9638-2	.9892	1.97833
11.68	.6792-4	.3156-2	.2152-1	.1467	.7721-2	.9614-2	.9892	1.97837
11.69	.6763-4	.3148-2	.2148-1	.1466	.7702-2	.9590-2	.9892	1.97840
11.70	.6735-4	.3141-2	.2145-1	.1464	.7683-2	.9566-2	.9892	1.97844
11.71	.6707-4	.3133-2	.2141-1	.1463	.7664-2	.9542-2	.9892	1.97847
11.72	.6679-4	.3125-2	.2137-1	.1462	.7645-2	.9519-2	.9893	1.97851
11.73	.6651-4	.3117-2	.2134-1	.1461	.7626-2	.9495-2	.9893	1.97855
11.74	.6623-4	.3109-2	.2130-1	.1460	.7607-2	.9471-2	.9893	1.97858
11.75	.6596-4	.3101-2	.2127-1	.1458	.7589-2	.9448-2	.9893	1.97862
11.76	.6568-4	.3094-2	.2123-1	.1457	.7570-2	.9424-2	.9893	1.97865
11.77	.6541-4	.3086-2	.2120-1	.1456	.7551-2	.9401-2	.9893	1.97869
11.78	.6514-4	.3078-2	.2116-1	.1455	.7533-2	.9378-2	.9894	1.97873
11.79	.6487-4	.3071-2	.2113-1	.1453	.7514-2	.9355-2	.9894	1.97876
11.80	.6460-4	.3063-2	.2109-1	.1452	.7496-2	.9332-2	.9894	1.97880
11.81	.6434-4	.3055-2	.2106-1	.1451	.7478-2	.9309-2	.9894	1.97883
11.82	.6407-4	.3048-2	.2102-1	.1450	.7459-2	.9286-2	.9894	1.97887
11.83	.6380-4	.3040-2	.2099-1	.1449	.7441-2	.9263-2	.9895	1.97890
11.84	.6354-4	.3033-2	.2095-1	.1447	.7423-2	.9240-2	.9895	1.97894
11.85	.6328-4	.3025-2	.2092-1	.1446	.7405-2	.9217-2	.9895	1.97897
11.86	.6302-4	.3018-2	.2088-1	.1445	.7387-2	.9195-2	.9895	1.97901
11.87	.6276-4	.3010-2	.2085-1	.1444	.7369-2	.9172-2	.9895	1.97904
11.88	.6250-4	.3003-2	.2081-1	.1443	.7351-2	.9150-2	.9895	1.97908
11.89	.6224-4	.2995-2	.2078-1	.1442	.7333-2	.9127-2	.9896	1.97911
11.90	.6199-4	.2988-2	.2075-1	.1440	.7315-2	.9105-2	.9896	1.97915
11.91	.6173-4	.2981-2	.2071-1	.1439	.7297-2	.9083-2	.9896	1.97918
11.92	.6148-4	.2973-2	.2068-1	.1438	.7280-2	.9060-2	.9896	1.97921
11.93	.6123-4	.2966-2	.2064-1	.1437	.7262-2	.9038-2	.9896	1.97925
11.94	.6098-4	.2959-2	.2061-1	.1436	.7244-2	.9016-2	.9896	1.97928
11.95	.6073-4	.2951-2	.2058-1	.1434	.7227-2	.8994-2	.9897	1.97932
11.96	.6048-4	.2944-2	.2054-1	.1433	.7209-2	.8972-2	.9897	1.97935
11.97	.6023-4	.2937-2	.2051-1	.1432	.7192-2	.8950-2	.9897	1.97939
11.98	.5999-4	.2930-2	.2047-1	.1431	.7174-2	.8929-2	.9897	1.97942
11.99	.5974-4	.2923-2	.2044-1	.1430	.7157-2	.8907-2	.9897	1.97945

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
5.216	74.522	.4531	151.0	3.903	38.69	.1622-1	178.2	11.00
5.211	74.536	.4531	151.3	3.903	38.75	.1618-1	178.5	11.01
5.206	74.550	.4531	151.6	3.904	38.82	.1614-1	178.8	11.02
5.202	74.564	.4531	151.8	3.904	38.89	.1609-1	179.1	11.03
5.197	74.577	.4531	152.1	3.904	38.96	.1605-1	179.5	11.04
5.192	74.591	.4530	152.4	3.904	39.03	.1601-1	179.8	11.05
5.188	74.605	.4530	152.7	3.904	39.10	.1597-1	180.1	11.06
5.183	74.618	.4530	152.9	3.904	39.17	.1593-1	180.4	11.07
5.178	74.632	.4530	153.2	3.905	39.24	.1589-1	180.8	11.08
5.173	74.646	.4530	153.5	3.905	39.31	.1584-1	181.1	11.09
5.169	74.659	.4530	153.8	3.905	39.38	.1580-1	181.4	11.10
5.164	74.673	.4530	154.0	3.905	39.45	.1576-1	181.7	11.11
5.159	74.686	.4530	154.3	3.905	39.52	.1572-1	182.1	11.12
5.155	74.700	.4530	154.6	3.905	39.59	.1568-1	182.4	11.13
5.150	74.713	.4530	154.9	3.906	39.65	.1564-1	182.7	11.14
5.146	74.727	.4529	155.2	3.906	39.72	.1560-1	183.1	11.15
5.141	74.740	.4529	155.4	3.906	39.79	.1556-1	183.4	11.16
5.136	74.754	.4529	155.7	3.906	39.86	.1552-1	183.7	11.17
5.132	74.767	.4529	156.0	3.906	39.93	.1548-1	184.0	11.18
5.127	74.780	.4529	156.3	3.906	40.00	.1544-1	184.4	11.19
5.123	74.794	.4529	156.6	3.907	40.07	.1540-1	184.7	11.20
5.118	74.807	.4529	156.8	3.907	40.14	.1536-1	185.0	11.21
5.113	74.820	.4529	157.1	3.907	40.21	.1532-1	185.4	11.22
5.109	74.834	.4529	157.4	3.907	40.28	.1528-1	185.7	11.23
5.104	74.847	.4529	157.7	3.907	40.35	.1524-1	186.0	11.24
5.100	74.860	.4528	158.0	3.907	40.42	.1520-1	186.3	11.25
5.095	74.873	.4528	158.2	3.908	40.49	.1516-1	186.7	11.26
5.091	74.886	.4528	158.5	3.908	40.57	.1512-1	187.0	11.27
5.086	74.900	.4528	158.8	3.908	40.64	.1509-1	187.3	11.28
5.082	74.913	.4528	159.1	3.908	40.71	.1505-1	187.7	11.29
5.077	74.926	.4528	159.4	3.908	40.78	.1501-1	188.0	11.30
5.073	74.939	.4528	159.6	3.908	40.85	.1497-1	188.3	11.31
5.068	74.952	.4528	159.9	3.908	40.92	.1493-1	188.7	11.32
5.064	74.965	.4528	160.2	3.909	40.99	.1489-1	189.0	11.33
5.059	74.978	.4528	160.5	3.909	41.06	.1486-1	189.3	11.34
5.055	74.991	.4527	160.8	3.909	41.13	.1482-1	189.7	11.35
5.050	75.004	.4527	161.1	3.909	41.20	.1478-1	190.0	11.36
5.046	75.017	.4527	161.3	3.909	41.27	.1474-1	190.3	11.37
5.041	75.030	.4527	161.6	3.909	41.34	.1471-1	190.7	11.38
5.037	75.043	.4527	161.9	3.910	41.41	.1467-1	191.0	11.39
5.032	75.056	.4527	162.2	3.910	41.49	.1463-1	191.3	11.40
5.028	75.069	.4527	162.5	3.910	41.56	.1459-1	191.7	11.41
5.024	75.081	.4527	162.8	3.910	41.63	.1456-1	192.0	11.42
5.019	75.094	.4527	163.1	3.910	41.70	.1452-1	192.3	11.43
5.015	75.107	.4527	163.3	3.910	41.77	.1448-1	192.7	11.44
5.010	75.120	.4526	163.6	3.911	41.84	.1445-1	193.0	11.45
5.006	75.133	.4526	163.9	3.911	41.91	.1441-1	193.3	11.46
5.002	75.145	.4526	164.2	3.911	41.99	.1437-1	193.7	11.47
4.997	75.158	.4526	164.5	3.911	42.06	.1434-1	194.0	11.48
4.993	75.171	.4526	164.8	3.911	42.13	.1430-1	194.4	11.49
4.989	75.183	.4526	165.1	3.911	42.20	.1427-1	194.7	11.50
4.984	75.196	.4526	165.4	3.911	42.27	.1423-1	195.0	11.51
4.980	75.209	.4526	165.6	3.912	42.35	.1420-1	195.4	11.52
4.976	75.221	.4526	165.9	3.912	42.42	.1416-1	195.7	11.53
4.971	75.234	.4526	166.2	3.912	42.49	.1412-1	196.1	11.54
4.967	75.246	.4526	166.5	3.912	42.56	.1409-1	196.4	11.55
4.963	75.259	.4525	166.8	3.912	42.63	.1405-1	196.7	11.56
4.958	75.271	.4525	167.1	3.912	42.71	.1402-1	197.1	11.57
4.954	75.284	.4525	167.4	3.912	42.78	.1398-1	197.4	11.58
4.950	75.296	.4525	167.7	3.913	42.85	.1395-1	197.8	11.59
4.945	75.309	.4525	168.0	3.913	42.92	.1391-1	198.1	11.60
4.941	75.321	.4525	168.2	3.913	43.00	.1388-1	198.4	11.61
4.937	75.334	.4525	168.5	3.913	43.07	.1384-1	198.8	11.62
4.933	75.346	.4525	168.8	3.913	43.14	.1381-1	199.1	11.63
4.928	75.359	.4525	169.1	3.913	43.21	.1378-1	199.5	11.64
4.924	75.371	.4525	169.4	3.913	43.29	.1374-1	199.8	11.65
4.920	75.383	.4525	169.7	3.914	43.36	.1371-1	200.1	11.66
4.916	75.396	.4524	170.0	3.914	43.43	.1367-1	200.5	11.67
4.911	75.408	.4524	170.3	3.914	43.51	.1364-1	200.8	11.68
4.907	75.420	.4524	170.6	3.914	43.58	.1361-1	201.2	11.69
4.903	75.432	.4524	170.9	3.914	43.65	.1357-1	201.5	11.70
4.899	75.445	.4524	171.2	3.914	43.72	.1354-1	201.9	11.71
4.895	75.457	.4524	171.4	3.915	43.80	.1350-1	202.2	11.72
4.890	75.469	.4524	171.7	3.915	43.87	.1347-1	202.5	11.73
4.886	75.481	.4524	172.0	3.915	43.94	.1344-1	202.9	11.74
4.882	75.493	.4524	172.3	3.915	44.02	.1341-1	203.2	11.75
4.878	75.505	.4524	172.6	3.915	44.09	.1337-1	203.6	11.76
4.874	75.518	.4524	172.9	3.915	44.17	.1334-1	203.9	11.77
4.870	75.530	.4523	173.2	3.915	44.24	.1331-1	204.3	11.78
4.866	75.542	.4523	173.5	3.915	44.31	.1327-1	204.6	11.79
4.861	75.554	.4523	173.8	3.916	44.39	.1324-1	205.0	11.80
4.857	75.566	.4523	174.1	3.916	44.46	.1321-1	205.3	11.81
4.853	75.578	.4523	174.4	3.916	44.53	.1318-1	205.7	11.82
4.849	75.590	.4523	174.7	3.916	44.61	.1314-1	206.0	11.83
4.845	75.602	.4523	175.0	3.916	44.68	.1311-1	206.4	11.84
4.841	75.614	.4523	175.3	3.916	44.76	.1308-1	206.7	11.85
4.837	75.626	.4523	175.6	3.916	44.83	.1305-1	207.1	11.86
4.833	75.638	.4523	175.9	3.917	44.90	.1302-1	207.4	11.87
4.829	75.649	.4523	176.2	3.917	44.98	.1298-1	207.7	11.88
4.825	75.661	.4523	176.5	3.917	45.05	.1295-1	208.1	11.89
4.820	75.673	.4522	176.8	3.917	45.13	.1292-1	208.4	11.90
4.816	75.685	.4522	177.1	3.917	45.20	.1289-1	208.8	11.91
4.812	75.697	.4522	177.4	3.917	45.28	.1286-1	209.1	11.92
4.808	75.709	.4522	177.7	3.917	45.35	.1283-1	209.5	11.93
4.804	75.720	.4522	178.0	3.918	45.42	.1280-1	209.8	11.94
4.800	75.732	.4522	178.3	3.918	45.50	.1277-1	210.2	11.95
4.796	75.744	.4522	178.6	3.918	45.57	.1273-1	210.6	11.96
4.792	75.756	.4522	178.9	3.918	45.65	.1270-1	210.9	11.97
4.788	75.767	.4522	179.2	3.918	45.72	.1267-1	211.3	11.98
4.784	75.779	.4522	179.5	3.918	45.80	.1264-1	211.6	11.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
12.00	.5950-4	.2915-2	.2041-1	.1429	.7140-2	.8885-2	.9897	1.97949
12.01	.5986-4	.2908-2	.2037-1	.1427	.7123-2	.8864-2	.9898	1.97952
12.02	.5902-4	.2901-2	.2034-1	.1426	.7106-2	.8842-2	.9898	1.97955
12.03	.5878-4	.2894-2	.2031-1	.1425	.7088-2	.8821-2	.9898	1.97959
12.04	.5854-4	.2887-2	.2028-1	.1424	.7071-2	.8799-2	.9898	1.97962
12.05	.5830-4	.2880-2	.2024-1	.1423	.7054-2	.8778-2	.9898	1.97965
12.06	.5806-4	.2873-2	.2021-1	.1422	.7037-2	.8757-2	.9898	1.97969
12.07	.5783-4	.2866-2	.2018-1	.1420	.7021-2	.8736-2	.9899	1.97972
12.08	.5759-4	.2859-2	.2014-1	.1419	.7004-2	.8715-2	.9899	1.97975
12.09	.5736-4	.2852-2	.2011-1	.1418	.6987-2	.8693-2	.9899	1.97979
12.10	.5713-4	.2845-2	.2008-1	.1417	.6970-2	.8673-2	.9899	1.97982
12.11	.5690-4	.2838-2	.2005-1	.1416	.6953-2	.8652-2	.9899	1.97985
12.12	.5667-4	.2831-2	.2001-1	.1415	.6937-2	.8631-2	.9899	1.97988
12.13	.5644-4	.2825-2	.1998-1	.1414	.6920-2	.8610-2	.9900	1.97992
12.14	.5621-4	.2818-2	.1995-1	.1412	.6904-2	.8589-2	.9900	1.97995
12.15	.5599-4	.2811-2	.1992-1	.1411	.6887-2	.8569-2	.9900	1.97998
12.16	.5576-4	.2804-2	.1989-1	.1410	.6871-2	.8548-2	.9900	1.98001
12.17	.5554-4	.2797-2	.1985-1	.1409	.6855-2	.8528-2	.9900	1.98005
12.18	.5531-4	.2791-2	.1982-1	.1408	.6838-2	.8507-2	.9900	1.98008
12.19	.5509-4	.2784-2	.1979-1	.1407	.6822-2	.8487-2	.9901	1.98011
12.20	.5487-4	.2777-2	.1976-1	.1406	.6806-2	.8467-2	.9901	1.98014
12.21	.5465-4	.2770-2	.1973-1	.1404	.6790-2	.8446-2	.9901	1.98018
12.22	.5443-4	.2764-2	.1969-1	.1403	.6773-2	.8426-2	.9901	1.98021
12.23	.5421-4	.2757-2	.1966-1	.1402	.6757-2	.8406-2	.9901	1.98024
12.24	.5400-4	.2751-2	.1963-1	.1401	.6741-2	.8386-2	.9901	1.98027
12.25	.5378-4	.2744-2	.1960-1	.1400	.6725-2	.8366-2	.9902	1.98030
12.26	.5357-4	.2737-2	.1957-1	.1399	.6710-2	.8346-2	.9902	1.98033
12.27	.5335-4	.2731-2	.1954-1	.1398	.6694-2	.8326-2	.9902	1.98037
12.28	.5314-4	.2724-2	.1951-1	.1397	.6678-2	.8306-2	.9902	1.98040
12.29	.5293-4	.2718-2	.1947-1	.1396	.6662-2	.8287-2	.9902	1.98043
12.30	.5272-4	.2711-2	.1944-1	.1394	.6646-2	.8267-2	.9902	1.98046
12.31	.5251-4	.2705-2	.1941-1	.1393	.6631-2	.8247-2	.9902	1.98049
12.32	.5230-4	.2698-2	.1938-1	.1392	.6615-2	.8228-2	.9903	1.98052
12.33	.5209-4	.2692-2	.1935-1	.1391	.6600-2	.8208-2	.9903	1.98055
12.34	.5189-4	.2686-2	.1932-1	.1390	.6584-2	.8189-2	.9903	1.98059
12.35	.5168-4	.2679-2	.1929-1	.1389	.6569-2	.8170-2	.9903	1.98062
12.36	.5148-4	.2673-2	.1926-1	.1388	.6553-2	.8150-2	.9903	1.98065
12.37	.5127-4	.2666-2	.1923-1	.1387	.6538-2	.8131-2	.9903	1.98068
12.38	.5107-4	.2660-2	.1920-1	.1386	.6522-2	.8112-2	.9904	1.98071
12.39	.5087-4	.2654-2	.1917-1	.1384	.6507-2	.8093-2	.9904	1.98074
12.40	.5067-4	.2647-2	.1914-1	.1383	.6492-2	.8074-2	.9904	1.98077
12.41	.5047-4	.2641-2	.1911-1	.1382	.6477-2	.8055-2	.9904	1.98080
12.42	.5027-4	.2635-2	.1908-1	.1381	.6462-2	.8036-2	.9904	1.98083
12.43	.5007-4	.2629-2	.1905-1	.1380	.6447-2	.8017-2	.9904	1.98086
12.44	.4987-4	.2622-2	.1902-1	.1379	.6432-2	.7998-2	.9904	1.98089
12.45	.4968-4	.2616-2	.1899-1	.1378	.6417-2	.7979-2	.9905	1.98092
12.46	.4948-4	.2610-2	.1896-1	.1377	.6402-2	.7961-2	.9905	1.98095
12.47	.4929-4	.2604-2	.1893-1	.1376	.6387-2	.7942-2	.9905	1.98098
12.48	.4909-4	.2598-2	.1890-1	.1375	.6372-2	.7923-2	.9905	1.98101
12.49	.4890-4	.2592-2	.1887-1	.1374	.6357-2	.7905-2	.9905	1.98104
12.50	.4871-4	.2586-2	.1884-1	.1373	.6342-2	.7886-2	.9905	1.98107
12.51	.4852-4	.2580-2	.1881-1	.1371	.6328-2	.7868-2	.9906	1.98110
12.52	.4833-4	.2573-2	.1878-1	.1370	.6313-2	.7849-2	.9906	1.98113
12.53	.4814-4	.2567-2	.1875-1	.1369	.6298-2	.7831-2	.9906	1.98116
12.54	.4795-4	.2561-2	.1872-1	.1368	.6284-2	.7813-2	.9906	1.98119
12.55	.4776-4	.2555-2	.1869-1	.1367	.6269-2	.7795-2	.9906	1.98122
12.56	.4758-4	.2549-2	.1866-1	.1366	.6255-2	.7777-2	.9906	1.98125
12.57	.4739-4	.2543-2	.1863-1	.1365	.6240-2	.7758-2	.9906	1.98128
12.58	.4721-4	.2538-2	.1860-1	.1364	.6226-2	.7740-2	.9907	1.98131
12.59	.4702-4	.2532-2	.1857-1	.1363	.6211-2	.7722-2	.9907	1.98134
12.60	.4684-4	.2526-2	.1855-1	.1362	.6197-2	.7705-2	.9907	1.98137
12.61	.4666-4	.2520-2	.1852-1	.1361	.6183-2	.7687-2	.9907	1.98140
12.62	.4648-4	.2514-2	.1849-1	.1360	.6169-2	.7669-2	.9907	1.98143
12.63	.4630-4	.2508-2	.1846-1	.1359	.6154-2	.7651-2	.9907	1.98145
12.64	.4612-4	.2502-2	.1843-1	.1358	.6140-2	.7633-2	.9907	1.98148
12.65	.4594-4	.2496-2	.1840-1	.1357	.6126-2	.7616-2	.9908	1.98151
12.66	.4576-4	.2491-2	.1837-1	.1356	.6112-2	.7598-2	.9908	1.98154
12.67	.4558-4	.2485-2	.1835-1	.1354	.6098-2	.7581-2	.9908	1.98157
12.68	.4541-4	.2479-2	.1832-1	.1353	.6084-2	.7563-2	.9908	1.98160
12.69	.4523-4	.2473-2	.1829-1	.1352	.6070-2	.7546-2	.9908	1.98163
12.70	.4506-4	.2468-2	.1826-1	.1351	.6056-2	.7528-2	.9908	1.98166
12.71	.4488-4	.2462-2	.1823-1	.1350	.6042-2	.7511-2	.9908	1.98168
12.72	.4471-4	.2456-2	.1820-1	.1349	.6029-2	.7494-2	.9909	1.98171
12.73	.4454-4	.2450-2	.1818-1	.1348	.6015-2	.7477-2	.9909	1.98174
12.74	.4437-4	.2445-2	.1815-1	.1347	.6001-2	.7459-2	.9909	1.98177
12.75	.4420-4	.2439-2	.1812-1	.1346	.5987-2	.7442-2	.9909	1.98180
12.76	.4403-4	.2434-2	.1809-1	.1345	.5974-2	.7425-2	.9909	1.98183
12.77	.4386-4	.2428-2	.1806-1	.1344	.5960-2	.7408-2	.9909	1.98185
12.78	.4369-4	.2422-2	.1804-1	.1343	.5947-2	.7391-2	.9909	1.98188
12.79	.4352-4	.2417-2	.1801-1	.1342	.5933-2	.7374-2	.9910	1.98191
12.80	.4336-4	.2411-2	.1798-1	.1341	.5920-2	.7357-2	.9910	1.98194
12.81	.4319-4	.2406-2	.1795-1	.1340	.5906-2	.7341-2	.9910	1.98196
12.82	.4303-4	.2400-2	.1793-1	.1339	.5893-2	.7324-2	.9910	1.98199
12.83	.4286-4	.2395-2	.1790-1	.1338	.5879-2	.7307-2	.9910	1.98202
12.84	.4270-4	.2389-2	.1787-1	.1337	.5866-2	.7291-2	.9910	1.98205
12.85	.4253-4	.2384-2	.1784-1	.1336	.5853-2	.7274-2	.9910	1.98208
12.86	.4237-4	.2378-2	.1782-1	.1335	.5840-2	.7257-2	.9911	1.98210
12.87	.4221-4	.2373-2	.1779-1	.1334	.5826-2	.7241-2	.9911	1.98213
12.88	.4205-4	.2367-2	.1776-1	.1333	.5813-2	.7224-2	.9911	1.98216
12.89	.4189-4	.2362-2	.1774-1	.1332	.5800-2	.7208-2	.9911	1.98219
12.90	.4173-4	.2357-2	.1771-1	.1331	.5787-2	.7192-2	.9911	1.98221
12.91	.4157-4	.2351-2	.1768-1	.1330	.5774-2	.7175-2	.9911	1.98224
12.92	.4141-4	.2346-2	.1765-1	.1329	.5761-2	.7159-2	.9911	1.98227
12.93	.4126-4	.2340-2	.1763-1	.1328	.5748-2	.7143-2	.9911	1.98229
12.94	.4110-4	.2335-2	.1760-1	.1327	.5735-2	.7127-2	.9912	1.98232
12.95	.4095-4	.2330-2	.1757-1	.1326	.5722-2	.7111-2	.9912	1.98235
12.96	.4079-4	.2325-2	.1755-1	.1325	.5709-2	.7095-2	.9912	1.98237
12.97	.4064-4	.2319-2	.1752-1	.1324	.5697-2	.7079-2	.9912	1.98240
12.98	.4048-4	.2314-2	.1749-1	.1323	.5684-2	.7063-2	.9912	1.98243
12.99	.4033-4	.2309-2	.1747-1	.1322	.5671-2	.7047-2	.9912	1.98245

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
4.780	75.791	.4522	179.8	3.918	45.87	.1261-1	212.0	12.00
4.776	75.802	.4522	180.1	3.919	45.95	.1258-1	212.3	12.01
4.772	75.814	.4521	180.4	3.919	46.03	.1255-1	212.7	12.02
4.768	75.826	.4521	180.7	3.919	46.10	.1252-1	213.0	12.03
4.764	75.837	.4521	181.0	3.919	46.17	.1249-1	213.4	12.04
4.760	75.849	.4521	181.3	3.919	46.25	.1246-1	213.7	12.05
4.756	75.860	.4521	181.6	3.919	46.32	.1243-1	214.1	12.06
4.752	75.872	.4521	181.9	3.919	46.40	.1240-1	214.4	12.07
4.748	75.883	.4521	182.2	3.919	46.48	.1237-1	214.8	12.08
4.745	75.895	.4521	182.5	3.920	46.55	.1234-1	215.1	12.09
4.741	75.906	.4521	182.8	3.920	46.63	.1231-1	215.5	12.10
4.737	75.918	.4521	183.1	3.920	46.70	.1228-1	215.9	12.11
4.733	75.929	.4521	183.4	3.920	46.78	.1225-1	216.2	12.12
4.729	75.941	.4521	183.7	3.920	46.85	.1222-1	216.6	12.13
4.725	75.952	.4520	184.0	3.920	46.93	.1219-1	216.9	12.14
4.721	75.963	.4520	184.3	3.920	47.01	.1216-1	217.3	12.15
4.717	75.975	.4520	184.6	3.920	47.08	.1214-1	217.6	12.16
4.713	75.986	.4520	184.9	3.921	47.16	.1211-1	218.0	12.17
4.709	75.997	.4520	185.2	3.921	47.23	.1208-1	218.4	12.18
4.706	76.009	.4520	185.5	3.921	47.31	.1205-1	218.7	12.19
4.702	76.020	.4520	185.8	3.921	47.39	.1202-1	219.1	12.20
4.698	76.031	.4520	186.1	3.921	47.46	.1199-1	219.4	12.21
4.694	76.043	.4520	186.4	3.921	47.54	.1196-1	219.8	12.22
4.690	76.054	.4520	186.7	3.921	47.62	.1193-1	220.1	12.23
4.686	76.065	.4520	187.0	3.921	47.69	.1191-1	220.5	12.24
4.682	76.076	.4520	187.3	3.922	47.77	.1188-1	220.9	12.25
4.679	76.087	.4520	187.6	3.922	47.84	.1185-1	221.2	12.26
4.675	76.099	.4519	187.9	3.922	47.92	.1182-1	221.6	12.27
4.671	76.110	.4519	188.2	3.922	48.00	.1179-1	221.9	12.28
4.667	76.121	.4519	188.6	3.922	48.08	.1177-1	222.3	12.29
4.663	76.132	.4519	188.9	3.922	48.15	.1174-1	222.7	12.30
4.660	76.143	.4519	189.2	3.922	48.23	.1171-1	223.0	12.31
4.656	76.154	.4519	189.5	3.922	48.31	.1168-1	223.4	12.32
4.650	76.165	.4519	189.8	3.923	48.38	.1166-1	223.8	12.33
4.648	76.176	.4519	190.1	3.923	48.46	.1163-1	224.1	12.34
4.644	76.187	.4519	190.4	3.923	48.54	.1160-1	224.5	12.35
4.641	76.198	.4519	190.7	3.923	48.61	.1157-1	224.8	12.36
4.637	76.209	.4519	191.0	3.923	48.69	.1155-1	225.2	12.37
4.633	76.220	.4519	191.3	3.923	48.77	.1152-1	225.6	12.38
4.629	76.231	.4519	191.6	3.923	48.85	.1149-1	225.9	12.39
4.626	76.242	.4518	192.0	3.923	48.92	.1147-1	226.3	12.40
4.622	76.253	.4518	192.3	3.924	49.00	.1144-1	226.7	12.41
4.618	76.264	.4518	192.6	3.924	49.08	.1141-1	227.0	12.42
4.614	76.275	.4518	192.9	3.924	49.16	.1139-1	227.4	12.43
4.611	76.286	.4518	193.2	3.924	49.23	.1136-1	227.8	12.44
4.607	76.297	.4518	193.5	3.924	49.31	.1133-1	228.1	12.45
4.603	76.307	.4518	193.8	3.924	49.39	.1131-1	228.5	12.46
4.600	76.318	.4518	194.1	3.924	49.47	.1128-1	228.9	12.47
4.596	76.329	.4518	194.4	3.924	49.55	.1125-1	229.2	12.48
4.592	76.340	.4518	194.8	3.925	49.62	.1123-1	229.6	12.49
4.589	76.351	.4518	195.1	3.925	49.70	.1120-1	230.0	12.50
4.585	76.361	.4518	195.4	3.925	49.78	.1117-1	230.3	12.51
4.581	76.372	.4518	195.7	3.925	49.86	.1115-1	230.7	12.52
4.578	76.383	.4518	196.0	3.925	49.94	.1112-1	231.1	12.53
4.574	76.393	.4517	196.3	3.925	50.01	.1110-1	231.4	12.54
4.570	76.404	.4517	196.6	3.925	50.09	.1107-1	231.8	12.55
4.567	76.415	.4517	196.9	3.925	50.17	.1105-1	232.2	12.56
4.563	76.425	.4517	197.3	3.925	50.25	.1102-1	232.5	12.57
4.559	76.436	.4517	197.6	3.926	50.33	.1099-1	232.9	12.58
4.556	76.447	.4517	197.9	3.926	50.41	.1097-1	233.3	12.59
4.552	76.457	.4517	198.2	3.926	50.49	.1094-1	233.6	12.60
4.548	76.468	.4517	198.5	3.926	50.57	.1092-1	234.0	12.61
4.545	76.478	.4517	198.8	3.926	50.64	.1089-1	234.4	12.62
4.541	76.489	.4517	199.1	3.926	50.72	.1087-1	234.8	12.63
4.538	76.500	.4517	199.5	3.926	50.80	.1084-1	235.1	12.64
4.534	76.510	.4517	199.8	3.926	50.88	.1082-1	235.5	12.65
4.530	76.521	.4517	200.1	3.927	50.96	.1079-1	235.9	12.66
4.527	76.531	.4517	200.4	3.927	51.04	.1077-1	236.2	12.67
4.523	76.542	.4516	200.7	3.927	51.12	.1074-1	236.6	12.68
4.520	76.552	.4516	201.0	3.927	51.20	.1072-1	237.0	12.69
4.516	76.562	.4516	201.4	3.927	51.28	.1069-1	237.4	12.70
4.513	76.573	.4516	201.7	3.927	51.36	.1067-1	237.7	12.71
4.509	76.583	.4516	202.0	3.927	51.44	.1065-1	238.1	12.72
4.505	76.594	.4516	202.3	3.927	51.52	.1062-1	238.5	12.73
4.502	76.604	.4516	202.6	3.927	51.59	.1060-1	238.8	12.74
4.498	76.614	.4516	203.0	3.928	51.67	.1057-1	239.2	12.75
4.495	76.625	.4516	203.3	3.928	51.75	.1055-1	239.6	12.76
4.491	76.635	.4516	203.6	3.928	51.83	.1052-1	240.0	12.77
4.488	76.645	.4516	203.9	3.928	51.91	.1050-1	240.3	12.78
4.484	76.656	.4516	204.2	3.928	51.99	.1048-1	240.7	12.79
4.481	76.666	.4516	204.6	3.928	52.07	.1045-1	241.1	12.80
4.477	76.676	.4516	204.9	3.928	52.15	.1043-1	241.5	12.81
4.474	76.686	.4516	205.2	3.928	52.23	.1041-1	241.9	12.82
4.470	76.697	.4515	205.5	3.928	52.31	.1038-1	242.2	12.83
4.467	76.707	.4515	205.8	3.929	52.39	.1036-1	242.6	12.84
4.463	76.717	.4515	206.2	3.929	52.47	.1034-1	243.0	12.85
4.460	76.727	.4515	206.5	3.929	52.55	.1031-1	243.4	12.86
4.456	76.737	.4515	206.8	3.929	52.64	.1029-1	243.7	12.87
4.453	76.748	.4515	207.1	3.929	52.72	.1027-1	244.1	12.88
4.449	76.758	.4515	207.4	3.929	52.80	.1024-1	244.5	12.89
4.446	76.768	.4515	207.8	3.929	52.88	.1022-1	244.9	12.90
4.443	76.778	.4515	208.1	3.929	52.96	.1020-1	245.3	12.91
4.439	76.788	.4515	208.4	3.929	53.04	.1017-1	245.6	12.92
4.436	76.798	.4515	208.7	3.929	53.12	.1015-1	246.0	12.93
4.432	76.808	.4515	209.1	3.930	53.20	.1013-1	246.4	12.94
4.429	76.818	.4515	209.4	3.930	53.28	.1010-1	246.8	12.95
4.425	76.828	.4515	209.7	3.930	53.36	.1008-1	247.2	12.96
4.422	76.838	.4515	210.0	3.930	53.44	.1006-1	247.5	12.97
4.419	76.848	.4514	210.4	3.930	53.52	.1004-1	247.9	12.98
4.415	76.858	.4514	210.7	3.930	53.61	.1001-1	248.3	12.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A*/A	V/V_0	V/a*
13.00	.4018-4	.2304-2	.1744-1	.1321	.5658-2	.7031-2	.9912	1.98248
13.01	.4003-4	.2298-2	.1742-1	.1320	.5646-2	.7015-2	.9913	1.98251
13.02	.3988-4	.2293-2	.1739-1	.1319	.5633-2	.6999-2	.9913	1.98253
13.03	.3972-4	.2288-2	.1736-1	.1318	.5620-2	.6983-2	.9913	1.98256
13.04	.3958-4	.2283-2	.1734-1	.1317	.5608-2	.6968-2	.9913	1.98259
13.05	.3943-4	.2278-2	.1731-1	.1316	.5595-2	.6952-2	.9913	1.98261
13.06	.3928-4	.2272-2	.1728-1	.1315	.5583-2	.6937-2	.9913	1.98264
13.07	.3913-4	.2267-2	.1726-1	.1314	.5570-2	.6921-2	.9913	1.98267
13.08	.3898-4	.2262-2	.1723-1	.1313	.5558-2	.6906-2	.9913	1.98269
13.09	.3884-4	.2257-2	.1721-1	.1312	.5546-2	.6890-2	.9914	1.98272
13.10	.3869-4	.2252-2	.1718-1	.1311	.5533-2	.6875-2	.9914	1.98274
13.11	.3855-4	.2247-2	.1716-1	.1310	.5521-2	.6859-2	.9914	1.98277
13.12	.3840-4	.2242-2	.1713-1	.1309	.5509-2	.6844-2	.9914	1.98280
13.13	.3826-4	.2237-2	.1710-1	.1308	.5497-2	.6829-2	.9914	1.98282
13.14	.3812-4	.2232-2	.1708-1	.1307	.5484-2	.6814-2	.9914	1.98285
13.15	.3798-4	.2227-2	.1705-1	.1306	.5472-2	.6798-2	.9914	1.98287
13.16	.3783-4	.2222-2	.1703-1	.1305	.5460-2	.6783-2	.9914	1.98290
13.17	.3769-4	.2217-2	.1700-1	.1304	.5448-2	.6768-2	.9915	1.98293
13.18	.3755-4	.2212-2	.1698-1	.1303	.5436-2	.6753-2	.9915	1.98295
13.19	.3741-4	.2207-2	.1695-1	.1302	.5424-2	.6738-2	.9915	1.98298
13.20	.3727-4	.2202-2	.1693-1	.1301	.5412-2	.6723-2	.9915	1.98300
13.21	.3713-4	.2197-2	.1690-1	.1300	.5400-2	.6708-2	.9915	1.98303
13.22	.3700-4	.2192-2	.1688-1	.1299	.5388-2	.6693-2	.9915	1.98305
13.23	.3686-4	.2187-2	.1685-1	.1298	.5376-2	.6679-2	.9915	1.98308
13.24	.3672-4	.2183-2	.1683-1	.1297	.5365-2	.6664-2	.9916	1.98310
13.25	.3659-4	.2178-2	.1680-1	.1296	.5353-2	.6649-2	.9916	1.98313
13.26	.3645-4	.2173-2	.1678-1	.1295	.5341-2	.6634-2	.9916	1.98315
13.27	.3632-4	.2168-2	.1675-1	.1294	.5329-2	.6620-2	.9916	1.98318
13.28	.3618-4	.2163-2	.1673-1	.1293	.5318-2	.6605-2	.9916	1.98320
13.29	.3605-4	.2158-2	.1670-1	.1292	.5306-2	.6590-2	.9916	1.98323
13.30	.3592-4	.2154-2	.1668-1	.1291	.5294-2	.6576-2	.9916	1.98325
13.31	.3578-4	.2149-2	.1665-1	.1290	.5283-2	.6561-2	.9916	1.98328
13.32	.3565-4	.2144-2	.1663-1	.1289	.5271-2	.6547-2	.9917	1.98330
13.33	.3552-4	.2139-2	.1660-1	.1289	.5260-2	.6533-2	.9917	1.98333
13.34	.3539-4	.2135-2	.1658-1	.1288	.5248-2	.6518-2	.9917	1.98335
13.35	.3526-4	.2130-2	.1655-1	.1287	.5237-2	.6504-2	.9917	1.98338
13.36	.3513-4	.2125-2	.1653-1	.1286	.5225-2	.6490-2	.9917	1.98340
13.37	.3500-4	.2121-2	.1651-1	.1285	.5214-2	.6475-2	.9917	1.98343
13.38	.3487-4	.2116-2	.1648-1	.1284	.5202-2	.6461-2	.9917	1.98345
13.39	.3474-4	.2111-2	.1646-1	.1283	.5191-2	.6447-2	.9917	1.98347
13.40	.3462-4	.2107-2	.1643-1	.1282	.5180-2	.6433-2	.9917	1.98350
13.41	.3449-4	.2102-2	.1641-1	.1281	.5169-2	.6419-2	.9918	1.98352
13.42	.3436-4	.2097-2	.1638-1	.1280	.5157-2	.6405-2	.9918	1.98355
13.43	.3424-4	.2093-2	.1636-1	.1279	.5146-2	.6391-2	.9918	1.98357
13.44	.3411-4	.2088-2	.1634-1	.1278	.5135-2	.6377-2	.9918	1.98360
13.45	.3399-4	.2084-2	.1631-1	.1277	.5124-2	.6363-2	.9918	1.98362
13.46	.3386-4	.2079-2	.1629-1	.1276	.5113-2	.6349-2	.9918	1.98364
13.47	.3374-4	.2074-2	.1627-1	.1275	.5102-2	.6335-2	.9918	1.98367
13.48	.3362-4	.2070-2	.1624-1	.1274	.5091-2	.6322-2	.9918	1.98369
13.49	.3350-4	.2065-2	.1622-1	.1273	.5080-2	.6308-2	.9919	1.98372
13.50	.3337-4	.2061-2	.1619-1	.1273	.5069-2	.6294-2	.9919	1.98374
13.51	.3325-4	.2056-2	.1617-1	.1272	.5058-2	.6280-2	.9919	1.98376
13.52	.3313-4	.2052-2	.1615-1	.1271	.5047-2	.6267-2	.9919	1.98379
13.53	.3301-4	.2047-2	.1612-1	.1270	.5036-2	.6253-2	.9919	1.98381
13.54	.3289-4	.2043-2	.1610-1	.1269	.5025-2	.6240-2	.9919	1.98383
13.55	.3277-4	.2038-2	.1608-1	.1268	.5014-2	.6226-2	.9919	1.98386
13.56	.3265-4	.2034-2	.1605-1	.1267	.5003-2	.6213-2	.9919	1.98388
13.57	.3254-4	.2030-2	.1603-1	.1266	.4993-2	.6199-2	.9920	1.98390
13.58	.3242-4	.2025-2	.1601-1	.1265	.4982-2	.6186-2	.9920	1.98393
13.59	.3230-4	.2021-2	.1598-1	.1264	.4971-2	.6173-2	.9920	1.98395
13.60	.3218-4	.2016-2	.1596-1	.1263	.4961-2	.6159-2	.9920	1.98397
13.61	.3207-4	.2012-2	.1594-1	.1262	.4950-2	.6146-2	.9920	1.98400
13.62	.3195-4	.2008-2	.1591-1	.1262	.4939-2	.6133-2	.9920	1.98402
13.63	.3184-4	.2003-2	.1589-1	.1261	.4929-2	.6120-2	.9920	1.98404
13.64	.3172-4	.1999-2	.1587-1	.1260	.4918-2	.6106-2	.9920	1.98407
13.65	.3161-4	.1995-2	.1585-1	.1259	.4908-2	.6093-2	.9920	1.98409
13.66	.3149-4	.1990-2	.1582-1	.1258	.4897-2	.6080-2	.9921	1.98411
13.67	.3138-4	.1986-2	.1580-1	.1257	.4887-2	.6067-2	.9921	1.98414
13.68	.3127-4	.1982-2	.1578-1	.1256	.4876-2	.6054-2	.9921	1.98416
13.69	.3116-4	.1978-2	.1575-1	.1255	.4866-2	.6041-2	.9921	1.98418
13.70	.3104-4	.1973-2	.1573-1	.1254	.4856-2	.6028-2	.9921	1.98421
13.71	.3093-4	.1969-2	.1571-1	.1253	.4845-2	.6015-2	.9921	1.98423
13.72	.3082-4	.1965-2	.1569-1	.1252	.4835-2	.6002-2	.9921	1.98425
13.73	.3071-4	.1961-2	.1566-1	.1252	.4825-2	.5990-2	.9921	1.98427
13.74	.3060-4	.1956-2	.1564-1	.1251	.4814-2	.5977-2	.9921	1.98430
13.75	.3049-4	.1952-2	.1562-1	.1250	.4804-2	.5964-2	.9922	1.98432
13.76	.3038-4	.1948-2	.1560-1	.1249	.4794-2	.5951-2	.9922	1.98434
13.77	.3028-4	.1944-2	.1558-1	.1248	.4784-2	.5939-2	.9922	1.98436
13.78	.3017-4	.1940-2	.1555-1	.1247	.4774-2	.5926-2	.9922	1.98439
13.79	.3006-4	.1935-2	.1553-1	.1246	.4764-2	.5913-2	.9922	1.98441
13.80	.2995-4	.1931-2	.1551-1	.1245	.4754-2	.5901-2	.9922	1.98443
13.81	.2985-4	.1927-2	.1549-1	.1244	.4743-2	.5888-2	.9922	1.98445
13.82	.2974-4	.1923-2	.1546-1	.1244	.4733-2	.5876-2	.9922	1.98448
13.83	.2963-4	.1919-2	.1544-1	.1243	.4723-2	.5863-2	.9922	1.98450
13.84	.2953-4	.1915-2	.1542-1	.1242	.4713-2	.5851-2	.9923	1.98452
13.85	.2942-4	.1911-2	.1540-1	.1241	.4704-2	.5838-2	.9923	1.98454
13.86	.2932-4	.1907-2	.1538-1	.1240	.4694-2	.5826-2	.9923	1.98456
13.87	.2922-4	.1903-2	.1535-1	.1239	.4684-2	.5814-2	.9923	1.98459
13.88	.2911-4	.1899-2	.1533-1	.1238	.4674-2	.5801-2	.9923	1.98461
13.89	.2901-4	.1895-2	.1531-1	.1237	.4664-2	.5789-2	.9923	1.98463
13.90	.2891-4	.1891-2	.1529-1	.1237	.4654-2	.5777-2	.9923	1.98465
13.91	.2880-4	.1887-2	.1527-1	.1236	.4644-2	.5765-2	.9923	1.98467
13.92	.2870-4	.1883-2	.1525-1	.1235	.4635-2	.5753-2	.9923	1.98469
13.93	.2860-4	.1879-2	.1522-1	.1234	.4625-2	.5740-2	.9924	1.98472
13.94	.2850-4	.1875-2	.1520-1	.1233	.4615-2	.5728-2	.9924	1.98474
13.95	.2840-4	.1871-2	.1518-1	.1232	.4606-2	.5716-2	.9924	1.98476
13.96	.2830-4	.1867-2	.1516-1	.1231	.4596-2	.5704-2	.9924	1.98478
13.97	.2820-4	.1863-2	.1514-1	.1230	.4586-2	.5692-2	.9924	1.98480
13.98	.2810-4	.1859-2	.1512-1	.1230	.4577-2	.5680-2	.9924	1.98482
13.99	.2800-4	.1855-2	.1510-1	.1229	.4567-2	.5668-2	.9924	1.98485

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
4.412	76.868	.4514	211.0	3.930	53.69	.9991-2	248.7	13.00
4.408	76.878	.4514	211.3	3.930	53.77	.9969-2	249.1	13.01
4.405	76.888	.4514	211.7	3.930	53.85	.9947-2	249.4	13.02
4.402	76.898	.4514	212.0	3.931	53.93	.9924-2	249.8	13.03
4.398	76.908	.4514	212.3	3.931	54.01	.9902-2	250.2	13.04
4.395	76.918	.4514	212.6	3.931	54.09	.9880-2	250.6	13.05
4.391	76.928	.4514	213.0	3.931	54.18	.9858-2	251.0	13.06
4.388	76.938	.4514	213.3	3.931	54.26	.9836-2	251.4	13.07
4.385	76.947	.4514	213.6	3.931	54.34	.9814-2	251.7	13.08
4.381	76.957	.4514	213.9	3.931	54.42	.9792-2	252.1	13.09
4.378	76.967	.4514	214.3	3.931	54.50	.9770-2	252.5	13.10
4.375	76.977	.4514	214.6	3.931	54.58	.9749-2	252.9	13.11
4.371	76.987	.4514	214.9	3.931	54.67	.9727-2	253.3	13.12
4.368	76.996	.4513	215.2	3.932	54.75	.9705-2	253.7	13.13
4.365	77.006	.4513	215.6	3.932	54.83	.9684-2	254.1	13.14
4.361	77.016	.4513	215.9	3.932	54.91	.9662-2	254.4	13.15
4.358	77.026	.4513	216.2	3.932	54.99	.9641-2	254.8	13.16
4.355	77.035	.4513	216.6	3.932	55.08	.9620-2	255.2	13.17
4.351	77.045	.4513	216.9	3.932	55.16	.9598-2	255.6	13.18
4.348	77.055	.4513	217.2	3.932	55.24	.9577-2	256.0	13.19
4.345	77.065	.4513	217.6	3.932	55.32	.9556-2	256.4	13.20
4.341	77.074	.4513	217.9	3.932	55.41	.9535-2	256.8	13.21
4.338	77.084	.4513	218.2	3.932	55.49	.9514-2	257.2	13.22
4.335	77.093	.4513	218.5	3.933	55.57	.9493-2	257.5	13.23
4.332	77.103	.4513	218.9	3.933	55.65	.9472-2	257.9	13.24
4.328	77.113	.4513	219.2	3.933	55.74	.9451-2	258.3	13.25
4.325	77.122	.4513	219.5	3.933	55.82	.9430-2	258.7	13.26
4.322	77.132	.4513	219.9	3.933	55.90	.9410-2	259.1	13.27
4.319	77.141	.4513	220.2	3.933	55.99	.9389-2	259.5	13.28
4.315	77.151	.4513	220.5	3.933	56.07	.9368-2	259.9	13.29
4.312	77.161	.4512	220.9	3.933	56.15	.9348-2	260.3	13.30
4.309	77.170	.4512	221.2	3.933	56.24	.9327-2	260.7	13.31
4.306	77.180	.4512	221.5	3.933	56.32	.9307-2	261.1	13.32
4.302	77.189	.4512	221.9	3.934	56.40	.9286-2	261.4	13.33
4.299	77.199	.4512	222.2	3.934	56.49	.9266-2	261.8	13.34
4.296	77.208	.4512	222.5	3.934	56.57	.9246-2	262.2	13.35
4.293	77.217	.4512	222.9	3.934	56.65	.9226-2	262.6	13.36
4.289	77.227	.4512	223.2	3.934	56.74	.9206-2	263.0	13.37
4.286	77.236	.4512	223.5	3.934	56.82	.9185-2	263.4	13.38
4.283	77.246	.4512	223.9	3.934	56.90	.9165-2	263.8	13.39
4.280	77.255	.4512	224.2	3.934	56.99	.9145-2	264.2	13.40
4.277	77.265	.4512	224.5	3.934	57.07	.9126-2	264.6	13.41
4.273	77.274	.4512	224.9	3.934	57.15	.9106-2	265.0	13.42
4.270	77.283	.4512	225.2	3.935	57.24	.9086-2	265.4	13.43
4.267	77.293	.4512	225.5	3.935	57.32	.9066-2	265.8	13.44
4.264	77.302	.4512	225.9	3.935	57.41	.9047-2	266.2	13.45
4.261	77.311	.4512	226.2	3.935	57.49	.9027-2	266.6	13.46
4.258	77.321	.4511	226.6	3.935	57.57	.9007-2	267.0	13.47
4.254	77.330	.4511	226.9	3.935	57.66	.8988-2	267.3	13.48
4.251	77.339	.4511	227.2	3.935	57.74	.8968-2	267.7	13.49
4.248	77.348	.4511	227.6	3.935	57.83	.8949-2	268.1	13.50
4.245	77.358	.4511	227.9	3.935	57.91	.8930-2	268.5	13.51
4.242	77.367	.4511	228.2	3.935	58.00	.8910-2	268.9	13.52
4.239	77.376	.4511	228.6	3.936	58.08	.8891-2	269.3	13.53
4.235	77.385	.4511	228.9	3.936	58.17	.8872-2	269.7	13.54
4.232	77.394	.4511	229.3	3.936	58.25	.8853-2	270.1	13.55
4.229	77.404	.4511	229.6	3.936	58.33	.8834-2	270.5	13.56
4.226	77.413	.4511	229.9	3.936	58.42	.8815-2	270.9	13.57
4.223	77.422	.4511	230.3	3.936	58.50	.8796-2	271.3	13.58
4.220	77.431	.4511	230.6	3.936	58.59	.8777-2	271.7	13.59
4.217	77.440	.4511	231.0	3.936	58.67	.8758-2	272.1	13.60
4.214	77.449	.4511	231.3	3.936	58.76	.8739-2	272.5	13.61
4.211	77.458	.4511	231.6	3.936	58.84	.8720-2	272.9	13.62
4.207	77.467	.4511	232.0	3.936	58.93	.8702-2	273.3	13.63
4.204	77.477	.4510	232.3	3.937	59.01	.8683-2	273.7	13.64
4.201	77.486	.4510	232.7	3.937	59.10	.8665-2	274.1	13.65
4.198	77.495	.4510	233.0	3.937	59.19	.8646-2	274.5	13.66
4.195	77.504	.4510	233.3	3.937	59.27	.8627-2	274.9	13.67
4.192	77.513	.4510	233.7	3.937	59.36	.8609-2	275.3	13.68
4.189	77.522	.4510	234.0	3.937	59.44	.8591-2	275.7	13.69
4.186	77.531	.4510	234.4	3.937	59.53	.8572-2	276.1	13.70
4.183	77.540	.4510	234.7	3.937	59.61	.8554-2	276.5	13.71
4.180	77.549	.4510	235.0	3.937	59.70	.8536-2	276.9	13.72
4.177	77.558	.4510	235.4	3.937	59.78	.8518-2	277.3	13.73
4.174	77.567	.4510	235.7	3.937	59.87	.8500-2	277.7	13.74
4.171	77.576	.4510	236.1	3.938	59.96	.8482-2	278.1	13.75
4.168	77.584	.4510	236.4	3.938	60.04	.8463-2	278.6	13.76
4.165	77.593	.4510	236.8	3.938	60.13	.8446-2	279.0	13.77
4.162	77.602	.4510	237.1	3.938	60.21	.8428-2	279.4	13.78
4.159	77.611	.4510	237.5	3.938	60.30	.8410-2	279.8	13.79
4.156	77.620	.4510	237.8	3.938	60.39	.8392-2	280.2	13.80
4.152	77.629	.4510	238.1	3.938	60.47	.8374-2	280.6	13.81
4.149	77.638	.4509	238.5	3.938	60.56	.8356-2	281.0	13.82
4.146	77.647	.4509	238.8	3.938	60.65	.8339-2	281.4	13.83
4.143	77.655	.4509	239.2	3.938	60.73	.8321-2	281.8	13.84
4.140	77.664	.4509	239.5	3.938	60.82	.8304-2	282.2	13.85
4.137	77.673	.4509	239.9	3.938	60.91	.8286-2	282.6	13.86
4.135	77.682	.4509	240.2	3.939	60.99	.8269-2	283.0	13.87
4.132	77.690	.4509	240.6	3.939	61.08	.8251-2	283.4	13.88
4.129	77.699	.4509	240.9	3.939	61.17	.8234-2	283.8	13.89
4.126	77.708	.4509	241.3	3.939	61.25	.8216-2	284.2	13.90
4.123	77.717	.4509	241.6	3.939	61.34	.8199-2	284.6	13.91
4.120	77.725	.4509	242.0	3.939	61.43	.8182-2	285.1	13.92
4.117	77.734	.4509	242.3	3.939	61.51	.8165-2	285.5	13.93
4.114	77.743	.4509	242.7	3.939	61.60	.8148-2	285.9	13.94
4.111	77.752	.4509	243.0	3.939	61.69	.8131-2	286.3	13.95
4.108	77.760	.4509	243.4	3.939	61.77	.8114-2	286.7	13.96
4.105	77.769	.4509	243.7	3.939	61.86	.8097-2	287.1	13.97
4.102	77.778	.4509	244.1	3.940	61.95	.8080-2	287.5	13.98
4.099	77.786	.4509	244.4	3.940	62.04	.8063-2	287.9	13.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
14.00	.2790-4	.1851-2	.1508-1	.1228	.4558-2	.5656-2	.9924	1.98487
14.01	.2781-4	.1847-2	.1505-1	.1227	.4548-2	.5645-2	.9924	1.98489
14.02	.2771-4	.1843-2	.1503-1	.1226	.4539-2	.5633-2	.9925	1.98491
14.03	.2761-4	.1839-2	.1501-1	.1225	.4529-2	.5621-2	.9925	1.98493
14.04	.2751-4	.1835-2	.1499-1	.1224	.4520-2	.5609-2	.9925	1.98495
14.05	.2742-4	.1832-2	.1497-1	.1224	.4510-2	.5597-2	.9925	1.98497
14.06	.2732-4	.1828-2	.1495-1	.1223	.4501-2	.5586-2	.9925	1.98499
14.07	.2723-4	.1824-2	.1493-1	.1222	.4492-2	.5574-2	.9925	1.98502
14.08	.2713-4	.1820-2	.1491-1	.1221	.4482-2	.5562-2	.9925	1.98504
14.09	.2704-4	.1816-2	.1489-1	.1220	.4473-2	.5551-2	.9925	1.98506
14.10	.2694-4	.1812-2	.1487-1	.1219	.4464-2	.5539-2	.9925	1.98508
14.11	.2685-4	.1809-2	.1484-1	.1218	.4455-2	.5528-2	.9925	1.98510
14.12	.2676-4	.1805-2	.1482-1	.1218	.4445-2	.5516-2	.9926	1.98512
14.13	.2666-4	.1801-2	.1480-1	.1217	.4436-2	.5505-2	.9926	1.98514
14.14	.2657-4	.1797-2	.1478-1	.1216	.4427-2	.5493-2	.9926	1.98516
14.15	.2648-4	.1794-2	.1476-1	.1215	.4418-2	.5482-2	.9926	1.98518
14.16	.2639-4	.1790-2	.1474-1	.1214	.4409-2	.5471-2	.9926	1.98520
14.17	.2629-4	.1786-2	.1472-1	.1213	.4400-2	.5459-2	.9926	1.98522
14.18	.2620-4	.1782-2	.1470-1	.1212	.4390-2	.5448-2	.9926	1.98524
14.19	.2611-4	.1779-2	.1468-1	.1212	.4381-2	.5437-2	.9926	1.98527
14.20	.2602-4	.1775-2	.1466-1	.1211	.4372-2	.5425-2	.9926	1.98529
14.21	.2593-4	.1771-2	.1464-1	.1210	.4363-2	.5414-2	.9927	1.98531
14.22	.2584-4	.1768-2	.1462-1	.1209	.4354-2	.5403-2	.9927	1.98533
14.23	.2575-4	.1764-2	.1460-1	.1208	.4345-2	.5392-2	.9927	1.98535
14.24	.2566-4	.1760-2	.1458-1	.1207	.4337-2	.5381-2	.9927	1.98537
14.25	.2557-4	.1757-2	.1456-1	.1207	.4328-2	.5370-2	.9927	1.98539
14.26	.2549-4	.1753-2	.1454-1	.1206	.4319-2	.5358-2	.9927	1.98541
14.27	.2540-4	.1749-2	.1452-1	.1205	.4310-2	.5347-2	.9927	1.98543
14.28	.2531-4	.1746-2	.1450-1	.1204	.4301-2	.5336-2	.9927	1.98545
14.29	.2522-4	.1742-2	.1448-1	.1203	.4292-2	.5325-2	.9927	1.98547
14.30	.2514-4	.1739-2	.1446-1	.1202	.4284-2	.5314-2	.9927	1.98549
14.31	.2505-4	.1735-2	.1444-1	.1202	.4275-2	.5304-2	.9928	1.98551
14.32	.2496-4	.1731-2	.1442-1	.1201	.4266-2	.5293-2	.9928	1.98553
14.33	.2488-4	.1728-2	.1440-1	.1200	.4257-2	.5282-2	.9928	1.98555
14.34	.2479-4	.1724-2	.1438-1	.1199	.4249-2	.5271-2	.9928	1.98557
14.35	.2471-4	.1721-2	.1436-1	.1198	.4240-2	.5260-2	.9928	1.98559
14.36	.2462-4	.1717-2	.1434-1	.1197	.4231-2	.5249-2	.9928	1.98561
14.37	.2454-4	.1714-2	.1432-1	.1197	.4223-2	.5239-2	.9928	1.98563
14.38	.2446-4	.1710-2	.1430-1	.1196	.4214-2	.5228-2	.9928	1.98565
14.39	.2437-4	.1707-2	.1428-1	.1195	.4206-2	.5217-2	.9928	1.98567
14.40	.2429-4	.1703-2	.1426-1	.1194	.4197-2	.5207-2	.9928	1.98569
14.41	.2421-4	.1700-2	.1424-1	.1193	.4188-2	.5196-2	.9929	1.98571
14.42	.2412-4	.1696-2	.1422-1	.1193	.4180-2	.5185-2	.9929	1.98573
14.43	.2404-4	.1693-2	.1420-1	.1192	.4171-2	.5175-2	.9929	1.98575
14.44	.2396-4	.1689-2	.1418-1	.1191	.4163-2	.5164-2	.9929	1.98577
14.45	.2388-4	.1686-2	.1416-1	.1190	.4155-2	.5154-2	.9929	1.98579
14.46	.2380-4	.1682-2	.1414-1	.1189	.4146-2	.5143-2	.9929	1.98580
14.47	.2371-4	.1679-2	.1413-1	.1189	.4138-2	.5133-2	.9929	1.98582
14.48	.2363-4	.1675-2	.1411-1	.1188	.4129-2	.5122-2	.9929	1.98584
14.49	.2355-4	.1672-2	.1409-1	.1187	.4121-2	.5112-2	.9929	1.98586
14.50	.2347-4	.1669-2	.1407-1	.1186	.4113-2	.5102-2	.9929	1.98588
14.51	.2339-4	.1665-2	.1405-1	.1185	.4104-2	.5091-2	.9930	1.98590
14.52	.2331-4	.1662-2	.1403-1	.1184	.4096-2	.5081-2	.9930	1.98592
14.53	.2324-4	.1658-2	.1401-1	.1184	.4088-2	.5071-2	.9930	1.98594
14.54	.2316-4	.1655-2	.1399-1	.1183	.4080-2	.5060-2	.9930	1.98596
14.55	.2308-4	.1652-2	.1397-1	.1182	.4072-2	.5050-2	.9930	1.98598
14.56	.2300-4	.1648-2	.1395-1	.1181	.4063-2	.5040-2	.9930	1.98600
14.57	.2292-4	.1645-2	.1394-1	.1180	.4055-2	.5030-2	.9930	1.98602
14.58	.2285-4	.1642-2	.1392-1	.1180	.4047-2	.5020-2	.9930	1.98604
14.59	.2277-4	.1638-2	.1390-1	.1179	.4039-2	.5010-2	.9930	1.98605
14.60	.2269-4	.1635-2	.1388-1	.1178	.4031-2	.4999-2	.9930	1.98607
14.61	.2262-4	.1632-2	.1386-1	.1177	.4023-2	.4989-2	.9930	1.98609
14.62	.2254-4	.1628-2	.1384-1	.1176	.4015-2	.4979-2	.9931	1.98611
14.63	.2246-4	.1625-2	.1382-1	.1176	.4007-2	.4969-2	.9931	1.98613
14.64	.2239-4	.1622-2	.1380-1	.1175	.3999-2	.4959-2	.9931	1.98615
14.65	.2231-4	.1619-2	.1379-1	.1174	.3991-2	.4949-2	.9931	1.98617
14.66	.2224-4	.1615-2	.1377-1	.1173	.3983-2	.4939-2	.9931	1.98619
14.67	.2216-4	.1612-2	.1375-1	.1173	.3975-2	.4930-2	.9931	1.98620
14.68	.2209-4	.1609-2	.1373-1	.1172	.3967-2	.4920-2	.9931	1.98622
14.69	.2201-4	.1606-2	.1371-1	.1171	.3959-2	.4910-2	.9931	1.98624
14.70	.2194-4	.1602-2	.1369-1	.1170	.3951-2	.4900-2	.9931	1.98626
14.71	.2187-4	.1599-2	.1367-1	.1169	.3943-2	.4890-2	.9931	1.98628
14.72	.2179-4	.1596-2	.1366-1	.1169	.3935-2	.4880-2	.9931	1.98630
14.73	.2172-4	.1593-2	.1364-1	.1168	.3927-2	.4871-2	.9932	1.98632
14.74	.2165-4	.1589-2	.1362-1	.1167	.3980-2	.4861-2	.9932	1.98633
14.75	.2158-4	.1586-2	.1360-1	.1166	.3912-2	.4851-2	.9932	1.98635
14.76	.2150-4	.1583-2	.1358-1	.1165	.3904-2	.4842-2	.9932	1.98637
14.77	.2143-4	.1580-2	.1357-1	.1165	.3896-2	.4832-2	.9932	1.98639
14.78	.2136-4	.1577-2	.1355-1	.1164	.3889-2	.4822-2	.9932	1.98641
14.79	.2129-4	.1574-2	.1353-1	.1163	.3881-2	.4813-2	.9932	1.98642
14.80	.2122-4	.1570-2	.1351-1	.1162	.3873-2	.4803-2	.9932	1.98644
14.81	.2115-4	.1567-2	.1349-1	.1162	.3866-2	.4794-2	.9932	1.98646
14.82	.2108-4	.1564-2	.1348-1	.1161	.3858-2	.4784-2	.9932	1.98648
14.83	.2101-4	.1561-2	.1346-1	.1160	.3850-2	.4775-2	.9932	1.98650
14.84	.2094-4	.1558-2	.1344-1	.1159	.3843-2	.4765-2	.9933	1.98652
14.85	.2087-4	.1555-2	.1342-1	.1159	.3835-2	.4756-2	.9933	1.98653
14.86	.2080-4	.1552-2	.1340-1	.1158	.3827-2	.4746-2	.9933	1.98655
14.87	.2073-4	.1549-2	.1339-1	.1157	.3820-2	.4737-2	.9933	1.98657
14.88	.2066-4	.1546-2	.1337-1	.1156	.3812-2	.4727-2	.9933	1.98659
14.89	.2059-4	.1543-2	.1335-1	.1155	.3805-2	.4718-2	.9933	1.98660
14.90	.2053-4	.1539-2	.1333-1	.1155	.3797-2	.4709-2	.9933	1.98662
14.91	.2046-4	.1536-2	.1332-1	.1154	.3790-2	.4699-2	.9933	1.98664
14.92	.2039-4	.1533-2	.1330-1	.1153	.3783-2	.4690-2	.9933	1.98666
14.93	.2032-4	.1530-2	.1328-1	.1152	.3775-2	.4681-2	.9933	1.98668
14.94	.2026-4	.1527-2	.1326-1	.1152	.3768-2	.4672-2	.9933	1.98669
14.95	.2019-4	.1524-2	.1324-1	.1151	.3760-2	.4662-2	.9934	1.98671
14.96	.2012-4	.1521-2	.1323-1	.1150	.3753-2	.4653-2	.9934	1.98673
14.97	.2006-4	.1518-2	.1321-1	.1149	.3746-2	.4644-2	.9934	1.98675
14.98	.1999-4	.1515-2	.1319-1	.1149	.3738-2	.4635-2	.9934	1.98676
14.99	.1992-4	.1512-2	.1318-1	.1148	.3731-2	.4626-2	.9934	1.98678

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
4.096	77.795	.4509	244.8	3.940	62.12	.8046-2	288.3	14.00
4.093	77.803	.4508	245.1	3.940	62.21	.8029-2	288.8	14.01
4.090	77.812	.4508	245.5	3.940	62.30	.8012-2	289.2	14.02
4.087	77.821	.4508	245.8	3.940	62.39	.7996-2	289.6	14.03
4.084	77.829	.4508	246.2	3.940	62.47	.7979-2	290.0	14.04
4.081	77.838	.4508	246.5	3.940	62.56	.7962-2	290.4	14.05
4.079	77.846	.4508	246.9	3.940	62.65	.7946-2	290.8	14.06
4.076	77.855	.4508	247.2	3.940	62.74	.7929-2	291.2	14.07
4.073	77.863	.4508	247.6	3.940	62.83	.7913-2	291.6	14.08
4.070	77.872	.4508	247.9	3.940	62.91	.7896-2	292.1	14.09
4.067	77.880	.4508	248.3	3.941	63.00	.7880-2	292.5	14.10
4.064	77.889	.4508	248.6	3.941	63.09	.7864-2	292.9	14.11
4.061	77.897	.4508	249.0	3.941	63.18	.7847-2	293.3	14.12
4.058	77.906	.4508	249.3	3.941	63.27	.7831-2	293.7	14.13
4.055	77.914	.4508	249.7	3.941	63.36	.7815-2	294.1	14.14
4.053	77.923	.4508	250.0	3.941	63.44	.7799-2	294.5	14.15
4.050	77.931	.4508	250.4	3.941	63.53	.7783-2	295.0	14.16
4.047	77.939	.4508	250.7	3.941	63.62	.7766-2	295.4	14.17
4.044	77.948	.4508	251.1	3.941	63.71	.7750-2	295.8	14.18
4.041	77.956	.4508	251.4	3.941	63.80	.7734-2	296.2	14.19
4.038	77.965	.4508	251.8	3.941	63.89	.7718-2	296.6	14.20
4.035	77.973	.4507	252.2	3.941	63.98	.7703-2	297.0	14.21
4.033	77.981	.4507	252.5	3.942	64.06	.7687-2	297.5	14.22
4.030	77.990	.4507	252.9	3.942	64.15	.7671-2	297.9	14.23
4.027	77.998	.4507	253.2	3.942	64.24	.7655-2	298.3	14.24
4.024	78.006	.4507	253.6	3.942	64.33	.7639-2	298.7	14.25
4.021	78.015	.4507	253.9	3.942	64.42	.7624-2	299.1	14.26
4.018	78.023	.4507	254.3	3.942	64.51	.7608-2	299.6	14.27
4.016	78.031	.4507	254.6	3.942	64.60	.7592-2	300.0	14.28
4.013	78.040	.4507	255.0	3.942	64.69	.7577-2	300.4	14.29
4.010	78.048	.4507	255.4	3.942	64.78	.7561-2	300.8	14.30
4.007	78.056	.4507	255.7	3.942	64.87	.7546-2	301.2	14.31
4.004	78.064	.4507	256.1	3.942	64.96	.7530-2	301.7	14.32
4.002	78.073	.4507	256.4	3.942	65.05	.7515-2	302.1	14.33
3.999	78.081	.4507	256.8	3.942	65.14	.7500-2	302.5	14.34
3.996	78.089	.4507	257.2	3.943	65.22	.7484-2	302.9	14.35
3.993	78.097	.4507	257.5	3.943	65.31	.7469-2	303.3	14.36
3.990	78.105	.4507	257.9	3.943	65.40	.7454-2	303.8	14.37
3.988	78.114	.4507	258.2	3.943	65.49	.7439-2	304.2	14.38
3.985	78.122	.4507	258.6	3.943	65.58	.7424-2	304.6	14.39
3.982	78.130	.4507	259.0	3.943	65.67	.7409-2	305.0	14.40
3.979	78.138	.4506	259.3	3.943	65.76	.7393-2	305.4	14.41
3.977	78.146	.4506	259.7	3.943	65.85	.7378-2	305.9	14.42
3.974	78.154	.4506	260.0	3.943	65.94	.7363-2	306.3	14.43
3.971	78.162	.4506	260.4	3.943	66.03	.7348-2	306.7	14.44
3.968	78.171	.4506	260.8	3.943	66.12	.7334-2	307.1	14.45
3.966	78.179	.4506	261.1	3.943	66.22	.7319-2	307.6	14.46
3.963	78.187	.4506	261.5	3.943	66.31	.7304-2	308.0	14.47
3.960	78.195	.4506	261.8	3.944	66.40	.7289-2	308.4	14.48
3.957	78.203	.4506	262.2	3.944	66.49	.7274-2	308.8	14.49
3.955	78.211	.4506	262.6	3.944	66.58	.7260-2	309.3	14.50
3.952	78.219	.4506	262.9	3.944	66.67	.7245-2	309.7	14.51
3.949	78.227	.4506	263.3	3.944	66.76	.7230-2	310.1	14.52
3.946	78.235	.4506	263.7	3.944	66.85	.7216-2	310.5	14.53
3.944	78.243	.4506	264.0	3.944	66.94	.7201-2	311.0	14.54
3.941	78.251	.4506	264.4	3.944	67.03	.7187-2	311.4	14.55
3.938	78.259	.4506	264.7	3.944	67.12	.7172-2	311.8	14.56
3.936	78.267	.4506	265.1	3.944	67.21	.7158-2	312.3	14.57
3.933	78.275	.4506	265.5	3.944	67.30	.7143-2	312.7	14.58
3.930	78.283	.4506	265.8	3.944	67.40	.7129-2	313.1	14.59
3.927	78.291	.4506	266.2	3.944	67.49	.7115-2	313.5	14.60
3.925	78.299	.4506	266.6	3.945	67.58	.7101-2	314.0	14.61
3.922	78.307	.4506	266.9	3.945	67.67	.7086-2	314.4	14.62
3.919	78.315	.4505	267.3	3.945	67.76	.7072-2	314.8	14.63
3.917	78.322	.4505	267.7	3.945	67.85	.7058-2	315.3	14.64
3.914	78.330	.4505	268.0	3.945	67.94	.7044-2	315.7	14.65
3.911	78.338	.4505	268.4	3.945	68.04	.7030-2	316.1	14.66
3.909	78.346	.4505	268.8	3.945	68.13	.7016-2	316.6	14.67
3.906	78.354	.4505	269.1	3.945	68.22	.7002-2	317.0	14.68
3.903	78.362	.4505	269.5	3.945	68.31	.6988-2	317.4	14.69
3.901	78.370	.4505	269.9	3.945	68.40	.6974-2	317.8	14.70
3.898	78.377	.4505	270.2	3.945	68.49	.6960-2	318.3	14.71
3.895	78.385	.4505	270.6	3.945	68.59	.6946-2	318.7	14.72
3.893	78.393	.4505	271.0	3.945	68.68	.6932-2	319.1	14.73
3.890	78.401	.4505	271.3	3.946	68.77	.6918-2	319.6	14.74
3.887	78.409	.4505	271.7	3.946	68.86	.6905-2	320.0	14.75
3.885	78.416	.4505	272.1	3.946	68.95	.6891-2	320.4	14.76
3.882	78.424	.4505	272.4	3.946	69.05	.6877-2	320.9	14.77
3.880	78.432	.4505	272.8	3.946	69.14	.6864-2	321.3	14.78
3.877	78.440	.4505	273.2	3.946	69.23	.6850-2	321.7	14.79
3.874	78.447	.4505	273.6	3.946	69.32	.6836-2	322.2	14.80
3.872	78.455	.4505	273.9	3.946	69.42	.6823-2	322.6	14.81
3.869	78.463	.4505	274.3	3.946	69.51	.6809-2	323.1	14.82
3.866	78.470	.4505	274.7	3.946	69.60	.6796-2	323.5	14.83
3.864	78.478	.4505	275.0	3.946	69.69	.6782-2	323.9	14.84
3.861	78.486	.4504	275.4	3.946	69.79	.6769-2	324.4	14.85
3.859	78.494	.4504	275.8	3.946	69.88	.6756-2	324.8	14.86
3.856	78.501	.4504	276.1	3.946	69.97	.6742-2	325.2	14.87
3.853	78.509	.4504	276.5	3.947	70.07	.6729-2	325.7	14.88
3.851	78.516	.4504	276.9	3.947	70.16	.6716-2	326.1	14.89
3.848	78.524	.4504	277.3	3.947	70.25	.6703-2	326.5	14.90
3.846	78.532	.4504	277.6	3.947	70.35	.6689-2	327.0	14.91
3.843	78.539	.4504	278.0	3.947	70.44	.6676-2	327.4	14.92
3.841	78.547	.4504	278.4	3.947	70.53	.6663-2	327.9	14.93
3.838	78.554	.4504	278.8	3.947	70.63	.6650-2	328.3	14.94
3.835	78.562	.4504	279.1	3.947	70.72	.6637-2	328.7	14.95
3.833	78.570	.4504	279.5	3.947	70.81	.6624-2	329.2	14.96
3.830	78.577	.4504	279.9	3.947	70.91	.6611-2	329.6	14.97
3.828	78.585	.4504	280.3	3.947	71.00	.6598-2	330.1	14.98
3.825	78.592	.4504	280.6	3.947	71.09	.6585-2	330.5	14.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
15.00	.1986-4	.1509-2	.1316-1	.1147	.3724-2	.4617-2	.9934	1.98680
15.01	.1979-4	.1506-2	.1314-1	.1146	.3716-2	.4608-2	.9934	1.98682
15.02	.1973-4	.1503-2	.1312-1	.1146	.3709-2	.4599-2	.9934	1.98683
15.03	.1966-4	.1500-2	.1311-1	.1145	.3702-2	.4590-2	.9934	1.98685
15.04	.1960-4	.1497-2	.1309-1	.1144	.3695-2	.4581-2	.9934	1.98687
15.05	.1954-4	.1495-2	.1307-1	.1143	.3687-2	.4572-2	.9934	1.98689
15.06	.1947-4	.1492-2	.1305-1	.1143	.3680-2	.4563-2	.9935	1.98690
15.07	.1941-4	.1489-2	.1304-1	.1142	.3673-2	.4554-2	.9935	1.98692
15.08	.1934-4	.1486-2	.1302-1	.1141	.3666-2	.4545-2	.9935	1.98694
15.09	.1928-4	.1483-2	.1300-1	.1140	.3659-2	.4536-2	.9935	1.98695
15.10	.1922-4	.1480-2	.1299-1	.1140	.3652-2	.4527-2	.9935	1.98697
15.11	.1916-4	.1477-2	.1297-1	.1139	.3645-2	.4518-2	.9935	1.98699
15.12	.1909-4	.1474-2	.1295-1	.1138	.3638-2	.4510-2	.9935	1.98701
15.13	.1903-4	.1471-2	.1294-1	.1137	.3631-2	.4501-2	.9935	1.98702
15.14	.1897-4	.1468-2	.1292-1	.1137	.3623-2	.4492-2	.9935	1.98704
15.15	.1891-4	.1465-2	.1290-1	.1136	.3616-2	.4483-2	.9935	1.98706
15.16	.1885-4	.1463-2	.1289-1	.1135	.3609-2	.4475-2	.9935	1.98707
15.17	.1879-4	.1460-2	.1287-1	.1134	.3602-2	.4466-2	.9935	1.98709
15.18	.1872-4	.1457-2	.1285-1	.1134	.3596-2	.4457-2	.9936	1.98711
15.19	.1866-4	.1454-2	.1283-1	.1133	.3589-2	.4449-2	.9936	1.98712
15.20	.1860-4	.1451-2	.1282-1	.1132	.3582-2	.4440-2	.9936	1.98714
15.21	.1854-4	.1448-2	.1280-1	.1131	.3575-2	.4431-2	.9936	1.98716
15.22	.1848-4	.1446-2	.1279-1	.1131	.3568-2	.4423-2	.9936	1.98717
15.23	.1842-4	.1443-2	.1277-1	.1130	.3561-2	.4414-2	.9936	1.98719
15.24	.1836-4	.1440-2	.1275-1	.1129	.3554-2	.4406-2	.9936	1.98721
15.25	.1830-4	.1437-2	.1274-1	.1129	.3547-2	.4397-2	.9936	1.98722
15.26	.1824-4	.1434-2	.1272-1	.1128	.3540-2	.4389-2	.9936	1.98724
15.27	.1819-4	.1432-2	.1270-1	.1127	.3534-2	.4380-2	.9936	1.98726
15.28	.1813-4	.1429-2	.1269-1	.1126	.3527-2	.4372-2	.9936	1.98727
15.29	.1807-4	.1426-2	.1267-1	.1126	.3520-2	.4363-2	.9936	1.98729
15.30	.1801-4	.1423-2	.1265-1	.1125	.3513-2	.4355-2	.9937	1.98731
15.31	.1795-4	.1421-2	.1264-1	.1124	.3507-2	.4347-2	.9937	1.98732
15.32	.1789-4	.1418-2	.1262-1	.1123	.3500-2	.4338-2	.9937	1.98734
15.33	.1784-4	.1415-2	.1260-1	.1123	.3493-2	.4330-2	.9937	1.98736
15.34	.1778-4	.1412-2	.1259-1	.1122	.3487-2	.4322-2	.9937	1.98737
15.35	.1772-4	.1410-2	.1257-1	.1121	.3480-2	.4313-2	.9937	1.98739
15.36	.1767-4	.1407-2	.1256-1	.1121	.3473-2	.4305-2	.9937	1.98740
15.37	.1761-4	.1404-2	.1254-1	.1120	.3467-2	.4297-2	.9937	1.98742
15.38	.1755-4	.1402-2	.1252-1	.1119	.3460-2	.4288-2	.9937	1.98744
15.39	.1750-4	.1399-2	.1251-1	.1118	.3453-2	.4280-2	.9937	1.98745
15.40	.1744-4	.1396-2	.1249-1	.1118	.3447-2	.4272-2	.9937	1.98747
15.41	.1738-4	.1393-2	.1248-1	.1117	.3440-2	.4264-2	.9937	1.98749
15.42	.1733-4	.1391-2	.1246-1	.1116	.3434-2	.4256-2	.9938	1.98750
15.43	.1727-4	.1388-2	.1244-1	.1116	.3427-2	.4248-2	.9938	1.98752
15.44	.1722-4	.1385-2	.1243-1	.1115	.3421-2	.4240-2	.9938	1.98753
15.45	.1716-4	.1383-2	.1241-1	.1114	.3414-2	.4231-2	.9938	1.98755
15.46	.1711-4	.1380-2	.1240-1	.1113	.3408-2	.4223-2	.9938	1.98757
15.47	.1705-4	.1378-2	.1238-1	.1113	.3401-2	.4215-2	.9938	1.98758
15.48	.1700-4	.1375-2	.1236-1	.1112	.3395-2	.4207-2	.9938	1.98760
15.49	.1695-4	.1372-2	.1235-1	.1111	.3388-2	.4199-2	.9938	1.98761
15.50	.1689-4	.1370-2	.1233-1	.1111	.3382-2	.4191-2	.9938	1.98763
15.51	.1684-4	.1367-2	.1232-1	.1110	.3375-2	.4183-2	.9938	1.98764
15.52	.1678-4	.1364-2	.1230-1	.1109	.3369-2	.4175-2	.9938	1.98766
15.53	.1673-4	.1362-2	.1229-1	.1108	.3363-2	.4167-2	.9938	1.98768
15.54	.1668-4	.1359-2	.1227-1	.1108	.3356-2	.4160-2	.9938	1.98769
15.55	.1663-4	.1357-2	.1225-1	.1107	.3350-2	.4152-2	.9939	1.98771
15.56	.1657-4	.1354-2	.1224-1	.1106	.3344-2	.4144-2	.9939	1.98772
15.57	.1652-4	.1351-2	.1222-1	.1106	.3337-2	.4136-2	.9939	1.98774
15.58	.1647-4	.1349-2	.1221-1	.1105	.3331-2	.4128-2	.9939	1.98775
15.59	.1642-4	.1346-2	.1219-1	.1104	.3325-2	.4120-2	.9939	1.98777
15.60	.1636-4	.1344-2	.1218-1	.1104	.3319-2	.4112-2	.9939	1.98779
15.61	.1631-4	.1341-2	.1216-1	.1103	.3312-2	.4105-2	.9939	1.98780
15.62	.1626-4	.1339-2	.1215-1	.1102	.3306-2	.4097-2	.9939	1.98782
15.63	.1621-4	.1336-2	.1213-1	.1101	.3300-2	.4089-2	.9939	1.98783
15.64	.1616-4	.1334-2	.1212-1	.1101	.3294-2	.4082-2	.9939	1.98785
15.65	.1611-4	.1331-2	.1210-1	.1100	.3287-2	.4074-2	.9939	1.98786
15.66	.1606-4	.1329-2	.1209-1	.1099	.3281-2	.4066-2	.9939	1.98788
15.67	.1601-4	.1326-2	.1207-1	.1099	.3275-2	.4058-2	.9939	1.98789
15.68	.1596-4	.1324-2	.1205-1	.1098	.3269-2	.4051-2	.9940	1.98791
15.69	.1591-4	.1321-2	.1204-1	.1097	.3263-2	.4043-2	.9940	1.98792
15.70	.1586-4	.1319-2	.1202-1	.1097	.3257-2	.4036-2	.9940	1.98794
15.71	.1581-4	.1316-2	.1201-1	.1096	.3251-2	.4028-2	.9940	1.98795
15.72	.1576-4	.1314-2	.1199-1	.1095	.3245-2	.4021-2	.9940	1.98797
15.73	.1571-4	.1311-2	.1198-1	.1094	.3239-2	.4013-2	.9940	1.98798
15.74	.1566-4	.1309-2	.1196-1	.1094	.3233-2	.4006-2	.9940	1.98800
15.75	.1561-4	.1306-2	.1195-1	.1093	.3226-2	.3998-2	.9940	1.98801
15.76	.1556-4	.1304-2	.1193-1	.1092	.3220-2	.3990-2	.9940	1.98803
15.77	.1551-4	.1301-2	.1192-1	.1092	.3214-2	.3983-2	.9940	1.98805
15.78	.1546-4	.1299-2	.1190-1	.1091	.3208-2	.3975-2	.9940	1.98806
15.79	.1541-4	.1296-2	.1189-1	.1090	.3203-2	.3968-2	.9940	1.98808
15.80	.1537-4	.1294-2	.1187-1	.1090	.3197-2	.3961-2	.9940	1.98809
15.81	.1532-4	.1292-2	.1186-1	.1089	.3191-2	.3953-2	.9941	1.98810
15.82	.1527-4	.1289-2	.1184-1	.1088	.3185-2	.3946-2	.9941	1.98812
15.83	.1522-4	.1287-2	.1183-1	.1088	.3179-2	.3939-2	.9941	1.98813
15.84	.1517-4	.1284-2	.1182-1	.1087	.3173-2	.3931-2	.9941	1.98815
15.85	.1513-4	.1282-2	.1180-1	.1086	.3167-2	.3924-2	.9941	1.98816
15.86	.1508-4	.1280-2	.1179-1	.1086	.3161-2	.3917-2	.9941	1.98818
15.87	.1503-4	.1277-2	.1177-1	.1085	.3155-2	.3909-2	.9941	1.98819
15.88	.1499-4	.1275-2	.1176-1	.1084	.3149-2	.3902-2	.9941	1.98821
15.89	.1494-4	.1272-2	.1174-1	.1084	.3144-2	.3895-2	.9941	1.98822
15.90	.1489-4	.1270-2	.1173-1	.1083	.3138-2	.3888-2	.9941	1.98824
15.91	.1485-4	.1268-2	.1171-1	.1082	.3132-2	.3880-2	.9941	1.98825
15.92	.1480-4	.1265-2	.1170-1	.1082	.3126-2	.3873-2	.9941	1.98827
15.93	.1476-4	.1263-2	.1168-1	.1081	.3120-2	.3866-2	.9941	1.98828
15.94	.1471-4	.1261-2	.1167-1	.1080	.3115-2	.3859-2	.9941	1.98830
15.95	.1466-4	.1258-2	.1165-1	.1080	.3109-2	.3852-2	.9942	1.98831
15.96	.1462-4	.1256-2	.1164-1	.1079	.3103-2	.3845-2	.9942	1.98833
15.97	.1457-4	.1254-2	.1163-1	.1078	.3097-2	.3837-2	.9942	1.98834
15.98	.1453-4	.1251-2	.1161-1	.1078	.3092-2	.3830-2	.9942	1.98835
15.99	.1448-4	.1249-2	.1160-1	.1077	.3086-2	.3823-2	.9942	1.98837

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
3.823	78.600	.4504	281.0	3.947	71.19	.6572-2	330.9	15.00
3.820	78.607	.4504	281.4	3.947	71.28	.6559-2	331.4	15.01
3.817	78.615	.4504	281.8	3.948	71.37	.6547-2	331.8	15.02
3.815	78.622	.4504	282.1	3.948	71.47	.6534-2	332.3	15.03
3.812	78.630	.4504	282.5	3.948	71.56	.6521-2	332.7	15.04
3.810	78.637	.4504	282.9	3.948	71.66	.6508-2	333.1	15.05
3.807	78.645	.4504	283.3	3.948	71.75	.6496-2	333.6	15.06
3.805	78.652	.4504	283.6	3.948	71.84	.6483-2	334.0	15.07
3.802	78.660	.4504	284.0	3.948	71.94	.6470-2	334.5	15.08
3.800	78.667	.4503	284.4	3.948	72.03	.6458-2	334.9	15.09
3.797	78.675	.4503	284.8	3.948	72.13	.6445-2	335.4	15.10
3.795	78.682	.4503	285.1	3.948	72.22	.6433-2	335.8	15.11
3.792	78.689	.4503	285.5	3.948	72.32	.6420-2	336.2	15.12
3.790	78.697	.4503	285.9	3.948	72.41	.6408-2	336.7	15.13
3.787	78.704	.4503	286.3	3.948	72.51	.6395-2	337.1	15.14
3.785	78.712	.4503	286.7	3.948	72.60	.6383-2	337.6	15.15
3.782	78.719	.4503	287.0	3.948	72.69	.6371-2	338.0	15.16
3.780	78.726	.4503	287.4	3.949	72.79	.6358-2	338.5	15.17
3.777	78.734	.4503	287.8	3.949	72.88	.6346-2	338.9	15.18
3.775	78.741	.4503	288.2	3.949	72.98	.6334-2	339.4	15.19
3.772	78.748	.4503	288.6	3.949	73.07	.6321-2	339.8	15.20
3.770	78.756	.4503	288.9	3.949	73.17	.6309-2	340.3	15.21
3.767	78.763	.4503	289.3	3.949	73.26	.6297-2	340.7	15.22
3.765	78.770	.4503	289.7	3.949	73.36	.6285-2	341.1	15.23
3.762	78.778	.4503	290.1	3.949	73.45	.6273-2	341.6	15.24
3.760	78.785	.4503	290.5	3.949	73.55	.6261-2	342.0	15.25
3.757	78.792	.4503	290.8	3.949	73.65	.6249-2	342.5	15.26
3.755	78.799	.4503	291.2	3.949	73.74	.6237-2	342.9	15.27
3.752	78.807	.4503	291.6	3.949	73.84	.6225-2	343.4	15.28
3.750	78.814	.4503	292.0	3.949	73.93	.6213-2	343.8	15.29
3.747	78.821	.4503	292.4	3.949	74.03	.6201-2	344.3	15.30
3.745	78.828	.4503	292.7	3.949	74.12	.6189-2	344.7	15.31
3.743	78.836	.4503	293.1	3.950	74.22	.6177-2	345.2	15.32
3.740	78.843	.4503	293.5	3.950	74.31	.6165-2	345.6	15.33
3.738	78.850	.4502	293.9	3.950	74.41	.6153-2	346.1	15.34
3.735	78.857	.4502	294.3	3.950	74.51	.6142-2	346.5	15.35
3.733	78.864	.4502	294.7	3.950	74.60	.6130-2	347.0	15.36
3.730	78.872	.4502	295.0	3.950	74.70	.6118-2	347.4	15.37
3.728	78.879	.4502	295.4	3.950	74.79	.6106-2	347.9	15.38
3.726	78.886	.4502	295.8	3.950	74.89	.6095-2	348.3	15.39
3.723	78.893	.4502	296.2	3.950	74.99	.6083-2	348.8	15.40
3.721	78.900	.4502	296.6	3.950	75.08	.6071-2	349.2	15.41
3.718	78.907	.4502	297.0	3.950	75.18	.6060-2	349.7	15.42
3.716	78.914	.4502	297.4	3.950	75.28	.6048-2	350.2	15.43
3.713	78.921	.4502	297.7	3.950	75.37	.6037-2	350.6	15.44
3.711	78.929	.4502	298.1	3.950	75.47	.6025-2	351.1	15.45
3.709	78.936	.4502	298.5	3.950	75.57	.6014-2	351.5	15.46
3.706	78.943	.4502	298.9	3.950	75.66	.6003-2	352.0	15.47
3.704	78.950	.4502	299.3	3.951	75.76	.5991-2	352.4	15.48
3.701	78.957	.4502	299.7	3.951	75.86	.5980-2	352.9	15.49
3.699	78.964	.4502	300.1	3.951	75.95	.5968-2	353.3	15.50
3.697	78.971	.4502	300.5	3.951	76.05	.5957-2	353.8	15.51
3.694	78.978	.4502	300.8	3.951	76.15	.5946-2	354.2	15.52
3.692	78.985	.4502	301.2	3.951	76.24	.5935-2	354.7	15.53
3.690	78.992	.4502	301.6	3.951	76.34	.5923-2	355.2	15.54
3.687	78.999	.4502	302.0	3.951	76.44	.5912-2	355.6	15.55
3.685	79.006	.4502	302.4	3.951	76.53	.5901-2	356.1	15.56
3.682	79.013	.4502	302.8	3.951	76.63	.5890-2	356.5	15.57
3.680	79.020	.4502	303.2	3.951	76.73	.5879-2	357.0	15.58
3.678	79.027	.4502	303.6	3.951	76.83	.5868-2	357.4	15.59
3.675	79.034	.4501	304.0	3.951	76.92	.5857-2	357.9	15.60
3.673	79.041	.4501	304.3	3.951	77.02	.5846-2	358.4	15.61
3.671	79.048	.4501	304.7	3.951	77.12	.5835-2	358.8	15.62
3.668	79.055	.4501	305.1	3.951	77.22	.5824-2	359.3	15.63
3.666	79.062	.4501	305.5	3.952	77.31	.5813-2	359.7	15.64
3.664	79.069	.4501	305.9	3.952	77.41	.5802-2	360.2	15.65
3.661	79.076	.4501	306.3	3.952	77.51	.5791-2	360.7	15.66
3.659	79.083	.4501	306.7	3.952	77.61	.5780-2	361.1	15.67
3.657	79.089	.4501	307.1	3.952	77.71	.5769-2	361.6	15.68
3.654	79.096	.4501	307.5	3.952	77.80	.5758-2	362.0	15.69
3.652	79.103	.4501	307.9	3.952	77.90	.5748-2	362.5	15.70
3.650	79.110	.4501	308.3	3.952	78.00	.5737-2	363.0	15.71
3.647	79.117	.4501	308.6	3.952	78.10	.5726-2	363.4	15.72
3.645	79.124	.4501	309.0	3.952	78.20	.5715-2	363.9	15.73
3.643	79.131	.4501	309.4	3.952	78.30	.5705-2	364.3	15.74
3.640	79.137	.4501	309.8	3.952	78.39	.5694-2	364.8	15.75
3.638	79.144	.4501	310.2	3.952	78.49	.5683-2	365.3	15.76
3.636	79.151	.4501	310.6	3.952	78.59	.5673-2	365.7	15.77
3.633	79.158	.4501	311.0	3.952	78.69	.5662-2	366.2	15.78
3.631	79.165	.4501	311.4	3.952	78.79	.5652-2	366.7	15.79
3.629	79.172	.4501	311.8	3.953	78.89	.5641-2	367.1	15.80
3.626	79.178	.4501	312.2	3.953	78.99	.5631-2	367.6	15.81
3.624	79.185	.4501	312.6	3.953	79.08	.5620-2	368.1	15.82
3.622	79.192	.4501	313.0	3.953	79.18	.5610-2	368.5	15.83
3.620	79.199	.4501	313.4	3.953	79.28	.5599-2	369.0	15.84
3.617	79.205	.4501	313.8	3.953	79.38	.5589-2	369.5	15.85
3.615	79.212	.4501	314.2	3.953	79.48	.5579-2	369.9	15.86
3.613	79.219	.4500	314.6	3.953	79.58	.5568-2	370.4	15.87
3.610	79.226	.4500	315.0	3.953	79.68	.5558-2	370.9	15.88
3.608	79.232	.4500	315.4	3.953	79.78	.5548-2	371.3	15.89
3.606	79.239	.4500	315.8	3.953	79.88	.5537-2	371.8	15.90
3.604	79.246	.4500	316.2	3.953	79.98	.5527-2	372.3	15.91
3.601	79.252	.4500	316.6	3.953	80.08	.5517-2	372.7	15.92
3.599	79.259	.4500	317.0	3.953	80.18	.5507-2	373.2	15.93
3.597	79.266	.4500	317.4	3.953	80.28	.5497-2	373.7	15.94
3.595	79.272	.4500	317.8	3.953	80.38	.5486-2	374.1	15.95
3.592	79.279	.4500	318.2	3.953	80.47	.5476-2	374.6	15.96
3.590	79.286	.4500	318.6	3.953	80.57	.5466-2	375.1	15.97
3.588	79.292	.4500	319.0	3.954	80.67	.5456-2	375.5	15.98
3.586	79.299	.4500	319.4	3.954	80.77	.5446-2	376.0	15.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
16.00	.1444-4	.1247-2	.1158-1	.1076	.3080-2	.3816-2	.9942	1.98838
16.01	.1440-4	.1244-2	.1157-1	.1076	.3075-2	.3809-2	.9942	1.98840
16.02	.1435-4	.1242-2	.1155-1	.1075	.3069-2	.3802-2	.9942	1.98841
16.03	.1431-4	.1240-2	.1154-1	.1074	.3064-2	.3795-2	.9942	1.98843
16.04	.1426-4	.1237-2	.1153-1	.1074	.3058-2	.3788-2	.9942	1.98844
16.05	.1422-4	.1235-2	.1151-1	.1073	.3052-2	.3781-2	.9942	1.98845
16.06	.1417-4	.1233-2	.1150-1	.1072	.3047-2	.3774-2	.9942	1.98847
16.07	.1413-4	.1231-2	.1148-1	.1072	.3041-2	.3767-2	.9942	1.98848
16.08	.1409-4	.1228-2	.1147-1	.1071	.3036-2	.3760-2	.9942	1.98850
16.09	.1404-4	.1226-2	.1146-1	.1070	.3030-2	.3754-2	.9943	1.98851
16.10	.1400-4	.1224-2	.1144-1	.1070	.3024-2	.3747-2	.9943	1.98853
16.11	.1396-4	.1222-2	.1143-1	.1069	.3019-2	.3740-2	.9943	1.98854
16.12	.1392-4	.1219-2	.1141-1	.1068	.3013-2	.3733-2	.9943	1.98855
16.13	.1387-4	.1217-2	.1140-1	.1068	.3008-2	.3726-2	.9943	1.98857
16.14	.1383-4	.1215-2	.1139-1	.1067	.3002-2	.3719-2	.9943	1.98858
16.15	.1379-4	.1213-2	.1137-1	.1066	.2997-2	.3713-2	.9943	1.98860
16.16	.1375-4	.1210-2	.1136-1	.1066	.2992-2	.3706-2	.9943	1.98861
16.17	.1370-4	.1208-2	.1134-1	.1065	.2986-2	.3699-2	.9943	1.98862
16.18	.1366-4	.1206-2	.1133-1	.1064	.2981-2	.3692-2	.9943	1.98864
16.19	.1362-4	.1204-2	.1132-1	.1064	.2975-2	.3685-2	.9943	1.98865
16.20	.1358-4	.1202-2	.1130-1	.1063	.2970-2	.3679-2	.9943	1.98867
16.21	.1354-4	.1199-2	.1129-1	.1062	.2964-2	.3672-2	.9943	1.98868
16.22	.1350-4	.1197-2	.1127-1	.1062	.2959-2	.3665-2	.9943	1.98869
16.23	.1346-4	.1195-2	.1126-1	.1061	.2954-2	.3659-2	.9944	1.98871
16.24	.1342-4	.1193-2	.1125-1	.1061	.2948-2	.3652-2	.9944	1.98872
16.25	.1337-4	.1191-2	.1123-1	.1060	.2943-2	.3645-2	.9944	1.98873
16.26	.1333-4	.1188-2	.1122-1	.1059	.2938-2	.3639-2	.9944	1.98875
16.27	.1329-4	.1186-2	.1121-1	.1059	.2932-2	.3632-2	.9944	1.98876
16.28	.1325-4	.1184-2	.1119-1	.1058	.2927-2	.3626-2	.9944	1.98878
16.29	.1321-4	.1182-2	.1118-1	.1057	.2922-2	.3619-2	.9944	1.98879
16.30	.1317-4	.1180-2	.1117-1	.1057	.2917-2	.3612-2	.9944	1.98880
16.31	.1313-4	.1178-2	.1115-1	.1056	.2911-2	.3606-2	.9944	1.98882
16.32	.1309-4	.1176-2	.1114-1	.1055	.2906-2	.3599-2	.9944	1.98883
16.33	.1305-4	.1173-2	.1112-1	.1055	.2901-2	.3593-2	.9944	1.98884
16.34	.1301-4	.1171-2	.1111-1	.1054	.2896-2	.3586-2	.9944	1.98886
16.35	.1297-4	.1169-2	.1110-1	.1053	.2890-2	.3580-2	.9944	1.98887
16.36	.1294-4	.1167-2	.1108-1	.1053	.2885-2	.3573-2	.9944	1.98888
16.37	.1290-4	.1165-2	.1107-1	.1052	.2880-2	.3567-2	.9944	1.98890
16.38	.1286-4	.1163-2	.1106-1	.1052	.2875-2	.3561-2	.9945	1.98891
16.39	.1282-4	.1161-2	.1104-1	.1051	.2870-2	.3554-2	.9945	1.98893
16.40	.1278-4	.1159-2	.1103-1	.1050	.2864-2	.3548-2	.9945	1.98894
16.41	.1274-4	.1156-2	.1102-1	.1050	.2859-2	.3541-2	.9945	1.98895
16.42	.1270-4	.1154-2	.1100-1	.1049	.2854-2	.3535-2	.9945	1.98897
16.43	.1267-4	.1152-2	.1099-1	.1048	.2849-2	.3529-2	.9945	1.98898
16.44	.1263-4	.1150-2	.1098-1	.1048	.2844-2	.3522-2	.9945	1.98899
16.45	.1259-4	.1148-2	.1096-1	.1047	.2839-2	.3516-2	.9945	1.98901
16.46	.1255-4	.1146-2	.1095-1	.1047	.2834-2	.3510-2	.9945	1.98902
16.47	.1251-4	.1144-2	.1094-1	.1046	.2829-2	.3503-2	.9945	1.98903
16.48	.1248-4	.1142-2	.1093-1	.1045	.2824-2	.3497-2	.9945	1.98904
16.49	.1244-4	.1140-2	.1091-1	.1045	.2819-2	.3491-2	.9945	1.98906
16.50	.1240-4	.1138-2	.1090-1	.1044	.2814-2	.3485-2	.9945	1.98907
16.51	.1236-4	.1136-2	.1089-1	.1043	.2809-2	.3478-2	.9945	1.98908
16.52	.1233-4	.1134-2	.1087-1	.1043	.2804-2	.3472-2	.9945	1.98910
16.53	.1229-4	.1132-2	.1086-1	.1042	.2799-2	.3466-2	.9946	1.98911
16.54	.1225-4	.1130-2	.1085-1	.1041	.2794-2	.3460-2	.9946	1.98912
16.55	.1222-4	.1128-2	.1083-1	.1041	.2789-2	.3454-2	.9946	1.98914
16.56	.1218-4	.1126-2	.1082-1	.1040	.2784-2	.3447-2	.9946	1.98915
16.57	.1214-4	.1124-2	.1081-1	.1040	.2779-2	.3441-2	.9946	1.98916
16.58	.1211-4	.1122-2	.1080-1	.1039	.2774-2	.3435-2	.9946	1.98918
16.59	.1207-4	.1120-2	.1078-1	.1038	.2769-2	.3429-2	.9946	1.98919
16.60	.1204-4	.1118-2	.1077-1	.1038	.2764-2	.3423-2	.9946	1.98920
16.61	.1200-4	.1116-2	.1076-1	.1037	.2759-2	.3417-2	.9946	1.98921
16.62	.1197-4	.1114-2	.1074-1	.1037	.2754-2	.3411-2	.9946	1.98923
16.63	.1193-4	.1112-2	.1073-1	.1036	.2749-2	.3405-2	.9946	1.98924
16.64	.1189-4	.1110-2	.1072-1	.1035	.2744-2	.3399-2	.9946	1.98925
16.65	.1186-4	.1108-2	.1071-1	.1035	.2740-2	.3393-2	.9946	1.98927
16.66	.1182-4	.1106-2	.1069-1	.1034	.2735-2	.3387-2	.9946	1.98928
16.67	.1179-4	.1104-2	.1068-1	.1033	.2730-2	.3381-2	.9946	1.98929
16.68	.1175-4	.1102-2	.1067-1	.1033	.2725-2	.3375-2	.9947	1.98930
16.69	.1172-4	.1100-2	.1066-1	.1032	.2720-2	.3369-2	.9947	1.98932
16.70	.1168-4	.1098-2	.1064-1	.1032	.2716-2	.3363-2	.9947	1.98933
16.71	.1165-4	.1096-2	.1063-1	.1031	.2711-2	.3357-2	.9947	1.98934
16.72	.1162-4	.1094-2	.1062-1	.1030	.2706-2	.3351-2	.9947	1.98935
16.73	.1158-4	.1092-2	.1060-1	.1030	.2701-2	.3345-2	.9947	1.98937
16.74	.1155-4	.1090-2	.1059-1	.1029	.2696-2	.3339-2	.9947	1.98938
16.75	.1151-4	.1088-2	.1058-1	.1029	.2692-2	.3333-2	.9947	1.98939
16.76	.1148-4	.1086-2	.1057-1	.1028	.2687-2	.3327-2	.9947	1.98940
16.77	.1145-4	.1084-2	.1055-1	.1027	.2682-2	.3321-2	.9947	1.98942
16.78	.1141-4	.1082-2	.1054-1	.1027	.2678-2	.3315-2	.9947	1.98943
16.79	.1138-4	.1081-2	.1053-1	.1026	.2673-2	.3310-2	.9947	1.98944
16.80	.1134-4	.1079-2	.1052-1	.1026	.2668-2	.3304-2	.9947	1.98945
16.81	.1131-4	.1077-2	.1051-1	.1025	.2664-2	.3298-2	.9947	1.98947
16.82	.1128-4	.1075-2	.1049-1	.1024	.2659-2	.3292-2	.9947	1.98948
16.83	.1124-4	.1073-2	.1048-1	.1024	.2654-2	.3286-2	.9947	1.98949
16.84	.1121-4	.1071-2	.1047-1	.1023	.2650-2	.3281-2	.9948	1.98950
16.85	.1118-4	.1069-2	.1046-1	.1023	.2645-2	.3275-2	.9948	1.98952
16.86	.1115-4	.1067-2	.1044-1	.1022	.2640-2	.3269-2	.9948	1.98953
16.87	.1111-4	.1065-2	.1043-1	.1021	.2636-2	.3263-2	.9948	1.98954
16.88	.1108-4	.1064-2	.1042-1	.1021	.2631-2	.3258-2	.9948	1.98955
16.89	.1105-4	.1062-2	.1041-1	.1020	.2626-2	.3252-2	.9948	1.98957
16.90	.1102-4	.1060-2	.1039-1	.1020	.2622-2	.3246-2	.9948	1.98958
16.91	.1098-4	.1058-2	.1038-1	.1019	.2617-2	.3241-2	.9948	1.98959
16.92	.1095-4	.1056-2	.1037-1	.1018	.2613-2	.3235-2	.9948	1.98960
16.93	.1092-4	.1054-2	.1036-1	.1018	.2608-2	.3229-2	.9948	1.98961
16.94	.1089-4	.1052-2	.1035-1	.1017	.2604-2	.3224-2	.9948	1.98963
16.95	.1086-4	.1051-2	.1033-1	.1017	.2599-2	.3218-2	.9948	1.98964
16.96	.1082-4	.1049-2	.1032-1	.1016	.2595-2	.3212-2	.9948	1.98965
16.97	.1079-4	.1047-2	.1031-1	.1015	.2590-2	.3207-2	.9948	1.98966
16.98	.1076-4	.1045-2	.1030-1	.1015	.2586-2	.3201-2	.9948	1.98968
16.99	.1073-4	.1043-2	.1029-1	.1014	.2581-2	.3196-2	.9948	1.98969

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
3.583	79.306	.4500	319.8	3.954	80.87	.5436-2	376.5	16.00
3.581	79.312	.4500	320.2	3.954	80.97	.5426-2	376.9	16.01
3.579	79.319	.4500	320.6	3.954	81.07	.5416-2	377.4	16.02
3.577	79.325	.4500	321.0	3.954	81.17	.5406-2	377.9	16.03
3.574	79.332	.4500	321.4	3.954	81.27	.5396-2	378.4	16.04
3.572	79.339	.4500	321.8	3.954	81.38	.5386-2	378.8	16.05
3.570	79.345	.4500	322.2	3.954	81.48	.5376-2	379.3	16.06
3.568	79.352	.4500	322.6	3.954	81.58	.5367-2	379.8	16.07
3.565	79.358	.4500	323.0	3.954	81.68	.5357-2	380.2	16.08
3.563	79.365	.4500	323.4	3.954	81.78	.5347-2	380.7	16.09
3.561	79.371	.4500	323.8	3.954	81.88	.5337-2	381.2	16.10
3.559	79.378	.4500	324.2	3.954	81.98	.5327-2	381.7	16.11
3.557	79.385	.4500	324.6	3.954	82.08	.5318-2	382.1	16.12
3.554	79.391	.4500	325.0	3.954	82.18	.5308-2	382.6	16.13
3.552	79.398	.4500	325.4	3.954	82.28	.5298-2	383.1	16.14
3.550	79.404	.4500	325.8	3.955	82.38	.5289-2	383.6	16.15
3.548	79.411	.4499	326.2	3.955	82.48	.5279-2	384.0	16.16
3.546	79.417	.4499	326.6	3.955	82.58	.5269-2	384.5	16.17
3.543	79.424	.4499	327.0	3.955	82.68	.5260-2	385.0	16.18
3.541	79.430	.4499	327.4	3.955	82.79	.5250-2	385.5	16.19
3.539	79.437	.4499	327.8	3.955	82.89	.5241-2	385.9	16.20
3.537	79.443	.4499	328.2	3.955	82.99	.5231-2	386.4	16.21
3.535	79.449	.4499	328.6	3.955	83.09	.5222-2	386.9	16.22
3.532	79.456	.4499	329.0	3.955	83.19	.5212-2	387.4	16.23
3.530	79.462	.4499	329.4	3.955	83.29	.5203-2	387.8	16.24
3.528	79.469	.4499	329.8	3.955	83.39	.5193-2	388.3	16.25
3.526	79.475	.4499	330.2	3.955	83.50	.5184-2	388.8	16.26
3.524	79.482	.4499	330.6	3.955	83.60	.5175-2	389.3	16.27
3.522	79.488	.4499	331.0	3.955	83.70	.5165-2	389.7	16.28
3.519	79.494	.4499	331.5	3.955	83.80	.5156-2	390.2	16.29
3.517	79.501	.4499	331.9	3.955	83.90	.5147-2	390.7	16.30
3.515	79.507	.4499	332.3	3.955	84.00	.5137-2	391.2	16.31
3.513	79.514	.4499	332.7	3.955	84.11	.5128-2	391.7	16.32
3.511	79.520	.4499	333.1	3.956	84.21	.5119-2	392.1	16.33
3.509	79.526	.4499	333.5	3.956	84.31	.5110-2	392.6	16.34
3.507	79.533	.4499	333.9	3.956	84.41	.5100-2	393.1	16.35
3.504	79.539	.4499	334.3	3.956	84.51	.5091-2	393.6	16.36
3.502	79.545	.4499	334.7	3.956	84.62	.5082-2	394.1	16.37
3.500	79.552	.4499	335.1	3.956	84.72	.5073-2	394.5	16.38
3.498	79.558	.4499	335.5	3.956	84.82	.5064-2	395.0	16.39
3.496	79.564	.4499	336.0	3.956	84.92	.5055-2	395.5	16.40
3.494	79.571	.4499	336.4	3.956	85.03	.5046-2	396.0	16.41
3.492	79.577	.4499	336.8	3.956	85.13	.5037-2	396.5	16.42
3.489	79.583	.4499	337.2	3.956	85.23	.5028-2	397.0	16.43
3.487	79.589	.4499	337.6	3.956	85.33	.5019-2	397.4	16.44
3.485	79.596	.4499	338.0	3.956	85.44	.5010-2	397.9	16.45
3.483	79.602	.4498	338.4	3.956	85.54	.5001-2	398.4	16.46
3.481	79.608	.4498	338.8	3.956	85.64	.4992-2	398.9	16.47
3.479	79.614	.4498	339.2	3.956	85.75	.4983-2	399.4	16.48
3.477	79.621	.4498	339.7	3.956	85.85	.4974-2	399.9	16.49
3.475	79.627	.4498	340.1	3.956	85.95	.4965-2	400.3	16.50
3.472	79.633	.4498	340.5	3.956	86.06	.4956-2	400.8	16.51
3.470	79.639	.4498	340.9	3.957	86.16	.4947-2	401.3	16.52
3.468	79.646	.4498	341.3	3.957	86.26	.4938-2	401.8	16.53
3.466	79.652	.4498	341.7	3.957	86.37	.4930-2	402.3	16.54
3.464	79.658	.4498	342.1	3.957	86.47	.4921-2	402.8	16.55
3.462	79.664	.4498	342.5	3.957	86.57	.4912-2	403.3	16.56
3.460	79.670	.4498	343.0	3.957	86.68	.4903-2	403.7	16.57
3.458	79.677	.4498	343.4	3.957	86.78	.4895-2	404.2	16.58
3.456	79.683	.4498	343.8	3.957	86.88	.4886-2	404.7	16.59
3.454	79.689	.4498	344.2	3.957	86.99	.4877-2	405.2	16.60
3.452	79.695	.4498	344.6	3.957	87.09	.4869-2	405.7	16.61
3.449	79.701	.4498	345.0	3.957	87.19	.4860-2	406.2	16.62
3.447	79.707	.4498	345.4	3.957	87.30	.4851-2	406.7	16.63
3.445	79.713	.4498	345.9	3.957	87.40	.4843-2	407.2	16.64
3.443	79.720	.4498	346.3	3.957	87.51	.4834-2	407.6	16.65
3.441	79.726	.4498	346.7	3.957	87.61	.4826-2	408.1	16.66
3.439	79.732	.4498	347.1	3.957	87.71	.4817-2	408.6	16.67
3.437	79.738	.4498	347.5	3.957	87.82	.4809-2	409.1	16.68
3.435	79.744	.4498	347.9	3.957	87.92	.4800-2	409.6	16.69
3.433	79.750	.4498	348.4	3.957	88.03	.4792-2	410.1	16.70
3.431	79.756	.4498	348.8	3.957	88.13	.4783-2	410.6	16.71
3.429	79.762	.4498	349.2	3.958	88.24	.4775-2	411.1	16.72
3.427	79.768	.4498	349.6	3.958	88.34	.4766-2	411.6	16.73
3.425	79.774	.4498	350.0	3.958	88.45	.4758-2	412.1	16.74
3.423	79.780	.4498	350.5	3.958	88.55	.4750-2	412.5	16.75
3.421	79.787	.4498	350.9	3.958	88.65	.4741-2	413.0	16.76
3.419	79.793	.4498	351.3	3.958	88.76	.4733-2	413.5	16.77
3.417	79.799	.4497	351.7	3.958	88.86	.4725-2	414.0	16.78
3.415	79.805	.4497	352.1	3.958	88.97	.4716-2	414.5	16.79
3.412	79.811	.4497	352.6	3.958	89.07	.4708-2	415.0	16.80
3.410	79.817	.4497	353.0	3.958	89.18	.4700-2	415.5	16.81
3.408	79.823	.4497	353.4	3.958	89.28	.4692-2	416.0	16.82
3.406	79.829	.4497	353.8	3.958	89.39	.4683-2	416.5	16.83
3.404	79.835	.4497	354.2	3.958	89.49	.4675-2	417.0	16.84
3.402	79.841	.4497	354.7	3.958	89.60	.4667-2	417.5	16.85
3.400	79.847	.4497	355.1	3.958	89.71	.4659-2	418.0	16.86
3.398	79.853	.4497	355.5	3.958	89.81	.4651-2	418.5	16.87
3.396	79.859	.4497	355.9	3.958	89.92	.4643-2	419.0	16.88
3.394	79.864	.4497	356.3	3.958	90.02	.4634-2	419.5	16.89
3.392	79.870	.4497	356.8	3.958	90.13	.4626-2	420.0	16.90
3.390	79.876	.4497	357.2	3.958	90.23	.4618-2	420.5	16.91
3.388	79.882	.4497	357.6	3.959	90.34	.4610-2	421.0	16.92
3.386	79.888	.4497	358.0	3.959	90.44	.4602-2	421.5	16.93
3.384	79.894	.4497	358.5	3.959	90.55	.4594-2	422.0	16.94
3.382	79.900	.4497	358.9	3.959	90.66	.4586-2	422.4	16.95
3.380	79.906	.4497	359.3	3.959	90.76	.4578-2	422.9	16.96
3.378	79.912	.4497	359.7	3.959	90.87	.4570-2	423.4	16.97
3.376	79.918	.4497	360.2	3.959	90.97	.4562-2	423.9	16.98
3.374	79.924	.4497	360.6	3.959	91.08	.4554-2	424.4	16.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
17.00	.1070-4	.1041-2	.1027-1	.1014	.2577-2	.3190-2	.9948	1.98970
17.01	.1067-4	.1040-2	.1026-1	.1013	.2573-2	.3185-2	.9949	1.98971
17.02	.1064-4	.1038-2	.1025-1	.1012	.2568-2	.3179-2	.9949	1.98972
17.03	.1061-4	.1036-2	.1024-1	.1012	.2563-2	.3173-2	.9949	1.98974
17.04	.1058-4	.1034-2	.1023-1	.1011	.2559-2	.3168-2	.9949	1.98975
17.05	.1054-4	.1032-2	.1021-1	.1011	.2554-2	.3162-2	.9949	1.98976
17.06	.1051-4	.1031-2	.1020-1	.1010	.2550-2	.3157-2	.9949	1.98977
17.07	.1048-4	.1029-2	.1019-1	.1009	.2546-2	.3152-2	.9949	1.98978
17.08	.1045-4	.1027-2	.1018-1	.1009	.2541-2	.3146-2	.9949	1.98980
17.09	.1042-4	.1025-2	.1017-1	.1008	.2537-2	.3141-2	.9949	1.98981
17.10	.1039-4	.1023-2	.1016-1	.1008	.2533-2	.3135-2	.9949	1.98982
17.11	.1036-4	.1022-2	.1014-1	.1007	.2528-2	.3130-2	.9949	1.98983
17.12	.1033-4	.1020-2	.1013-1	.1007	.2524-2	.3124-2	.9949	1.98984
17.13	.1030-4	.1018-2	.1012-1	.1006	.2519-2	.3119-2	.9949	1.98985
17.14	.1027-4	.1016-2	.1011-1	.1005	.2515-2	.3114-2	.9949	1.98987
17.15	.1024-4	.1015-2	.1010-1	.1005	.2511-2	.3108-2	.9949	1.98988
17.16	.1021-4	.1013-2	.1009-1	.1004	.2506-2	.3103-2	.9949	1.98989
17.17	.1018-4	.1011-2	.1007-1	.1004	.2502-2	.3098-2	.9950	1.98990
17.18	.1016-4	.1009-2	.1006-1	.1003	.2498-2	.3092-2	.9950	1.98991
17.19	.1013-4	.1008-2	.1005-1	.1003	.2494-2	.3087-2	.9950	1.98992
17.20	.1010-4	.1006-2	.1004-1	.1002	.2489-2	.3082-2	.9950	1.98994
17.21	.1007-4	.1004-2	.1003-1	.1001	.2485-2	.3076-2	.9950	1.98995
17.22	.1004-4	.1002-2	.1002-1	.1001	.2481-2	.3071-2	.9950	1.98996
17.23	.1001-4	.1001-2	.1000-1	.1000	.2477-2	.3066-2	.9950	1.98997
17.24	.9982-5	.9989-3	.9993-2	.9996-1	.2472-2	.3060-2	.9950	1.98998
17.25	.9953-5	.9972-3	.9981-2	.9991-1	.2468-2	.3055-2	.9950	1.98999
17.26	.9925-5	.9955-3	.9970-2	.9985-1	.2464-2	.3050-2	.9950	1.99001
17.27	.9896-5	.9938-3	.9958-2	.9979-1	.2460-2	.3045-2	.9950	1.99002
17.28	.9868-5	.9921-3	.9947-2	.9973-1	.2455-2	.3040-2	.9950	1.99003
17.29	.9840-5	.9904-3	.9936-2	.9968-1	.2451-2	.3034-2	.9950	1.99004
17.30	.9812-5	.9887-3	.9924-2	.9962-1	.2447-2	.3029-2	.9950	1.99005
17.31	.9784-5	.9870-3	.9913-2	.9956-1	.2443-2	.3024-2	.9950	1.99006
17.32	.9756-5	.9853-3	.9902-2	.9951-1	.2439-2	.3019-2	.9950	1.99007
17.33	.9728-5	.9836-3	.9890-2	.9945-1	.2435-2	.3014-2	.9950	1.99009
17.34	.9700-5	.9819-3	.9879-2	.9939-1	.2430-2	.3008-2	.9950	1.99010
17.35	.9673-5	.9802-3	.9868-2	.9934-1	.2426-2	.3003-2	.9951	1.99011
17.36	.9645-5	.9785-3	.9856-2	.9928-1	.2422-2	.2998-2	.9951	1.99012
17.37	.9617-5	.9769-3	.9845-2	.9922-1	.2418-2	.2993-2	.9951	1.99013
17.38	.9590-5	.9752-3	.9834-2	.9917-1	.2414-2	.2988-2	.9951	1.99014
17.39	.9563-5	.9735-3	.9823-2	.9911-1	.2410-2	.2983-2	.9951	1.99015
17.40	.9536-5	.9719-3	.9812-2	.9905-1	.2406-2	.2978-2	.9951	1.99016
17.41	.9509-5	.9702-3	.9800-2	.9900-1	.2402-2	.2973-2	.9951	1.99018
17.42	.9482-5	.9686-3	.9789-2	.9894-1	.2398-2	.2968-2	.9951	1.99019
17.43	.9455-5	.9669-3	.9778-2	.9888-1	.2394-2	.2963-2	.9951	1.99020
17.44	.9428-5	.9653-3	.9767-2	.9883-1	.2390-2	.2958-2	.9951	1.99021
17.45	.9401-5	.9636-3	.9756-2	.9877-1	.2386-2	.2953-2	.9951	1.99022
17.46	.9375-5	.9620-3	.9745-2	.9872-1	.2382-2	.2948-2	.9951	1.99023
17.47	.9348-5	.9604-3	.9734-2	.9866-1	.2378-2	.2943-2	.9951	1.99024
17.48	.9322-5	.9587-3	.9723-2	.9860-1	.2374-2	.2938-2	.9951	1.99025
17.49	.9295-5	.9571-3	.9712-2	.9855-1	.2369-2	.2933-2	.9951	1.99026
17.50	.9269-5	.9555-3	.9701-2	.9849-1	.2366-2	.2928-2	.9951	1.99028
17.51	.9243-5	.9539-3	.9690-2	.9844-1	.2362-2	.2923-2	.9951	1.99029
17.52	.9217-5	.9522-3	.9679-2	.9838-1	.2358-2	.2918-2	.9951	1.99030
17.53	.9191-5	.9506-3	.9668-2	.9833-1	.2354-2	.2913-2	.9952	1.99031
17.54	.9165-5	.9490-3	.9657-2	.9827-1	.2350-2	.2908-2	.9952	1.99032
17.55	.9139-5	.9474-3	.9646-2	.9822-1	.2346-2	.2903-2	.9952	1.99033
17.56	.9113-5	.9458-3	.9635-2	.9816-1	.2342-2	.2898-2	.9952	1.99034
17.57	.9087-5	.9442-3	.9624-2	.9810-1	.2338-2	.2893-2	.9952	1.99035
17.58	.9062-5	.9426-3	.9614-2	.9805-1	.2334-2	.2889-2	.9952	1.99036
17.59	.9036-5	.9410-3	.9603-2	.9799-1	.2330-2	.2884-2	.9952	1.99037
17.60	.9011-5	.9394-3	.9592-2	.9794-1	.2326-2	.2879-2	.9952	1.99038
17.61	.8986-5	.9378-3	.9581-2	.9788-1	.2322-2	.2874-2	.9952	1.99040
17.62	.8961-5	.9363-3	.9570-2	.9783-1	.2318-2	.2869-2	.9952	1.99041
17.63	.8935-5	.9347-3	.9560-2	.9777-1	.2314-2	.2864-2	.9952	1.99042
17.64	.8910-5	.9331-3	.9549-2	.9772-1	.2311-2	.2860-2	.9952	1.99043
17.65	.8885-5	.9315-3	.9538-2	.9766-1	.2307-2	.2855-2	.9952	1.99044
17.66	.8860-5	.9300-3	.9528-2	.9761-1	.2303-2	.2850-2	.9952	1.99045
17.67	.8836-5	.9284-3	.9517-2	.9755-1	.2299-2	.2845-2	.9952	1.99046
17.68	.8811-5	.9269-3	.9506-2	.9750-1	.2295-2	.2840-2	.9952	1.99047
17.69	.8786-5	.9253-3	.9496-2	.9745-1	.2291-2	.2836-2	.9952	1.99048
17.70	.8762-5	.9237-3	.9485-2	.9739-1	.2287-2	.2831-2	.9952	1.99049
17.71	.8737-5	.9222-3	.9474-2	.9734-1	.2284-2	.2826-2	.9953	1.99050
17.72	.8713-5	.9207-3	.9464-2	.9728-1	.2280-2	.2821-2	.9953	1.99051
17.73	.8689-5	.9191-3	.9453-2	.9723-1	.2276-2	.2817-2	.9953	1.99052
17.74	.8664-5	.9176-3	.9443-2	.9717-1	.2272-2	.2812-2	.9953	1.99054
17.75	.8640-5	.9160-3	.9432-2	.9712-1	.2268-2	.2807-2	.9953	1.99055
17.76	.8616-5	.9145-3	.9422-2	.9706-1	.2265-2	.2803-2	.9953	1.99056
17.77	.8592-5	.9130-3	.9411-2	.9701-1	.2261-2	.2798-2	.9953	1.99057
17.78	.8568-5	.9115-3	.9401-2	.9696-1	.2257-2	.2793-2	.9953	1.99058
17.79	.8544-5	.9099-3	.9390-2	.9690-1	.2253-2	.2789-2	.9953	1.99059
17.80	.8521-5	.9084-3	.9380-2	.9685-1	.2250-2	.2784-2	.9953	1.99060
17.81	.8497-5	.9069-3	.9369-2	.9679-1	.2246-2	.2779-2	.9953	1.99061
17.82	.8473-5	.9054-3	.9359-2	.9674-1	.2242-2	.2775-2	.9953	1.99062
17.83	.8450-5	.9039-3	.9348-2	.9669-1	.2239-2	.2770-2	.9953	1.99063
17.84	.8426-5	.9024-3	.9338-2	.9663-1	.2235-2	.2766-2	.9953	1.99064
17.85	.8403-5	.9009-3	.9328-2	.9658-1	.2231-2	.2761-2	.9953	1.99065
17.86	.8380-5	.8994-3	.9317-2	.9653-1	.2227-2	.2756-2	.9953	1.99066
17.87	.8357-5	.8979-3	.9307-2	.9647-1	.2224-2	.2752-2	.9953	1.99067
17.88	.8333-5	.8964-3	.9297-2	.9642-1	.2220-2	.2747-2	.9953	1.99068
17.89	.8310-5	.8949-3	.9286-2	.9637-1	.2216-2	.2743-2	.9953	1.99069
17.90	.8287-5	.8934-3	.9276-2	.9631-1	.2213-2	.2738-2	.9954	1.99070
17.91	.8265-5	.8919-3	.9266-2	.9626-1	.2209-2	.2734-2	.9954	1.99071
17.92	.8242-5	.8905-3	.9256-2	.9621-1	.2205-2	.2729-2	.9954	1.99072
17.93	.8219-5	.8890-3	.9245-2	.9615-1	.2202-2	.2725-2	.9954	1.99073
17.94	.8196-5	.8875-3	.9235-2	.9610-1	.2198-2	.2720-2	.9954	1.99074
17.95	.8174-5	.8860-3	.9225-2	.9605-1	.2195-2	.2716-2	.9954	1.99075
17.96	.8151-5	.8846-3	.9215-2	.9599-1	.2191-2	.2711-2	.9954	1.99076
17.97	.8129-5	.8831-3	.9205-2	.9594-1	.2187-2	.2707-2	.9954	1.99077
17.98	.8106-5	.8816-3	.9195-2	.9589-1	.2184-2	.2702-2	.9954	1.99078
17.99	.8084-5	.8802-3	.9184-2	.9584-1	.2180-2	.2698-2	.9954	1.99079

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
3.372	79.930	.4497	561.0	3.959	91.19	.4546-2	424.9	17.00
3.370	79.935	.4497	561.4	3.959	91.29	.4539-2	425.4	17.01
3.368	79.941	.4497	561.9	3.959	91.40	.4531-2	425.9	17.02
3.366	79.947	.4497	562.3	3.959	91.51	.4523-2	426.4	17.03
3.364	79.953	.4497	562.7	3.959	91.61	.4515-2	426.9	17.04
3.362	79.959	.4497	563.1	3.959	91.72	.4507-2	427.4	17.05
3.360	79.965	.4497	563.6	3.959	91.83	.4499-2	427.9	17.06
3.358	79.971	.4497	564.0	3.959	91.93	.4492-2	428.4	17.07
3.356	79.976	.4497	564.4	3.959	92.04	.4484-2	428.9	17.08
3.355	79.982	.4497	564.8	3.959	92.15	.4476-2	429.4	17.09
3.353	79.988	.4497	565.3	3.959	92.25	.4468-2	430.0	17.10
3.351	79.994	.4497	565.7	3.959	92.36	.4461-2	430.5	17.11
3.349	80.000	.4496	566.1	3.959	92.47	.4453-2	431.0	17.12
3.347	80.005	.4496	566.5	3.960	92.57	.4445-2	431.5	17.13
3.345	80.011	.4496	567.0	3.960	92.68	.4438-2	432.0	17.14
3.343	80.017	.4496	567.4	3.960	92.79	.4430-2	432.5	17.15
3.341	80.023	.4496	567.8	3.960	92.89	.4423-2	433.0	17.16
3.339	80.028	.4496	568.3	3.960	93.00	.4415-2	433.5	17.17
3.337	80.034	.4496	568.7	3.960	93.11	.4407-2	434.0	17.18
3.335	80.040	.4496	569.1	3.960	93.22	.4400-2	434.5	17.19
3.333	80.046	.4496	569.6	3.960	93.32	.4392-2	435.0	17.20
3.331	80.051	.4496	570.0	3.960	93.43	.4385-2	435.5	17.21
3.329	80.057	.4496	570.4	3.960	93.54	.4377-2	436.0	17.22
3.327	80.063	.4496	570.8	3.960	93.65	.4370-2	436.5	17.23
3.325	80.069	.4496	571.3	3.960	93.75	.4362-2	437.0	17.24
3.323	80.074	.4496	571.7	3.960	93.86	.4355-2	437.5	17.25
3.321	80.080	.4496	572.1	3.960	93.97	.4347-2	438.0	17.26
3.320	80.086	.4496	572.6	3.960	94.08	.4340-2	438.5	17.27
3.318	80.091	.4496	573.0	3.960	94.19	.4332-2	439.0	17.28
3.316	80.097	.4496	573.4	3.960	94.29	.4325-2	439.5	17.29
3.314	80.103	.4496	573.9	3.960	94.40	.4318-2	440.1	17.30
3.312	80.108	.4496	574.3	3.960	94.51	.4310-2	440.6	17.31
3.310	80.114	.4496	574.7	3.960	94.62	.4303-2	441.1	17.32
3.308	80.120	.4496	575.2	3.960	94.73	.4296-2	441.6	17.33
3.306	80.125	.4496	575.6	3.960	94.84	.4288-2	442.1	17.34
3.304	80.131	.4496	576.0	3.961	94.94	.4281-2	442.6	17.35
3.302	80.137	.4496	576.5	3.961	95.05	.4274-2	443.1	17.36
3.300	80.142	.4496	576.9	3.961	95.16	.4267-2	443.6	17.37
3.298	80.148	.4496	577.3	3.961	95.27	.4259-2	444.1	17.38
3.297	80.154	.4496	577.8	3.961	95.38	.4252-2	444.6	17.39
3.295	80.159	.4496	578.2	3.961	95.49	.4245-2	445.2	17.40
3.293	80.165	.4496	578.6	3.961	95.60	.4238-2	445.7	17.41
3.291	80.170	.4496	579.1	3.961	95.70	.4230-2	446.2	17.42
3.289	80.176	.4496	579.5	3.961	95.81	.4223-2	446.7	17.43
3.287	80.182	.4496	579.9	3.961	95.92	.4216-2	447.2	17.44
3.285	80.187	.4496	580.4	3.961	96.03	.4209-2	447.7	17.45
3.283	80.193	.4496	580.8	3.961	96.14	.4202-2	448.2	17.46
3.281	80.198	.4496	581.3	3.961	96.25	.4195-2	448.7	17.47
3.280	80.204	.4496	581.7	3.961	96.36	.4188-2	449.3	17.48
3.278	80.210	.4495	582.1	3.961	96.47	.4181-2	449.8	17.49
3.276	80.215	.4495	582.6	3.961	96.58	.4174-2	450.3	17.50
3.274	80.221	.4495	583.0	3.961	96.69	.4167-2	450.8	17.51
3.272	80.226	.4495	583.4	3.961	96.80	.4160-2	451.3	17.52
3.270	80.232	.4495	583.9	3.961	96.91	.4153-2	451.8	17.53
3.268	80.237	.4495	584.3	3.961	97.02	.4146-2	452.3	17.54
3.266	80.243	.4495	584.8	3.961	97.13	.4139-2	452.9	17.55
3.265	80.248	.4495	585.2	3.961	97.23	.4132-2	453.4	17.56
3.263	80.254	.4495	585.6	3.962	97.34	.4125-2	453.9	17.57
3.261	80.259	.4495	586.1	3.962	97.45	.4118-2	454.4	17.58
3.259	80.265	.4495	586.5	3.962	97.56	.4111-2	454.9	17.59
3.257	80.270	.4495	587.0	3.962	97.67	.4104-2	455.4	17.60
3.255	80.276	.4495	587.4	3.962	97.78	.4097-2	456.0	17.61
3.253	80.281	.4495	587.8	3.962	97.89	.4090-2	456.5	17.62
3.252	80.287	.4495	588.3	3.962	98.00	.4083-2	457.0	17.63
3.250	80.292	.4495	588.7	3.962	98.11	.4077-2	457.5	17.64
3.248	80.298	.4495	589.2	3.962	98.23	.4070-2	458.0	17.65
3.246	80.303	.4495	589.6	3.962	98.34	.4063-2	458.5	17.66
3.244	80.309	.4495	590.0	3.962	98.45	.4056-2	459.1	17.67
3.242	80.314	.4495	590.5	3.962	98.56	.4049-2	459.6	17.68
3.241	80.319	.4495	590.9	3.962	98.67	.4043-2	460.1	17.69
3.239	80.325	.4495	591.4	3.962	98.78	.4036-2	460.6	17.70
3.237	80.330	.4495	591.8	3.962	98.89	.4029-2	461.1	17.71
3.235	80.336	.4495	592.2	3.962	99.00	.4023-2	461.7	17.72
3.233	80.341	.4495	592.7	3.962	99.11	.4016-2	462.2	17.73
3.231	80.346	.4495	593.1	3.962	99.22	.4009-2	462.7	17.74
3.230	80.352	.4495	593.6	3.962	99.33	.4002-2	463.2	17.75
3.228	80.357	.4495	594.0	3.962	99.44	.3996-2	463.7	17.76
3.226	80.363	.4495	594.5	3.962	99.55	.3989-2	464.3	17.77
3.224	80.368	.4495	594.9	3.962	99.66	.3982-2	464.8	17.78
3.222	80.373	.4495	595.4	3.962	99.78	.3976-2	465.3	17.79
3.221	80.379	.4495	595.8	3.962	99.89	.3969-2	465.8	17.80
3.219	80.384	.4495	596.2	3.963	100.0	.3963-2	466.4	17.81
3.217	80.389	.4495	596.7	3.963	100.1	.3956-2	466.9	17.82
3.215	80.395	.4495	597.1	3.963	100.2	.3950-2	467.4	17.83
3.213	80.400	.4495	597.6	3.963	100.3	.3943-2	467.9	17.84
3.212	80.406	.4495	598.0	3.963	100.4	.3936-2	468.5	17.85
3.210	80.411	.4495	598.5	3.963	100.6	.3930-2	469.0	17.86
3.208	80.416	.4495	598.9	3.963	100.7	.3923-2	469.5	17.87
3.206	80.422	.4494	599.4	3.963	100.8	.3917-2	470.0	17.88
3.204	80.427	.4494	599.8	3.963	100.9	.3910-2	470.6	17.89
3.203	80.432	.4494	600.3	3.963	101.0	.3904-2	471.1	17.90
3.201	80.437	.4494	600.7	3.963	101.1	.3898-2	471.6	17.91
3.199	80.443	.4494	601.2	3.963	101.2	.3891-2	472.1	17.92
3.197	80.448	.4494	601.6	3.963	101.3	.3885-2	472.7	17.93
3.195	80.453	.4494	602.1	3.963	101.5	.3878-2	473.2	17.94
3.194	80.459	.4494	602.5	3.963	101.6	.3872-2	473.7	17.95
3.192	80.464	.4494	603.0	3.963	101.7	.3866-2	474.2	17.96
3.190	80.469	.4494	603.4	3.963	101.8	.3859-2	474.8	17.97
3.188	80.474	.4494	603.9	3.963	101.9	.3853-2	475.3	17.98
3.187	80.480	.4494	604.3	3.963	102.0	.3847-2	475.8	17.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A*/A	V/V_0	V/a*
18.00	.8062-5	.8787-3	.9174-2	.9578-1	.2177-2	.2693-2	.9954	1.99080
18.01	.8040-5	.8773-3	.9164-2	.9573-1	.2173-2	.2689-2	.9954	1.99081
18.02	.8018-5	.8758-3	.9154-2	.9568-1	.2170-2	.2685-2	.9954	1.99082
18.03	.7996-5	.8744-3	.9144-2	.9564-1	.2166-2	.2680-2	.9954	1.99083
18.04	.7974-5	.8730-3	.9134-2	.9557-1	.2162-2	.2676-2	.9954	1.99085
18.05	.7952-5	.8715-3	.9124-2	.9552-1	.2159-2	.2671-2	.9954	1.99086
18.06	.7930-5	.8701-3	.9114-2	.9547-1	.2155-2	.2667-2	.9954	1.99087
18.07	.7908-5	.8687-3	.9104-2	.9541-1	.2152-2	.2663-2	.9954	1.99088
18.08	.7887-5	.8672-3	.9094-2	.9536-1	.2148-2	.2658-2	.9954	1.99089
18.09	.7865-5	.8558-3	.9084-2	.9531-1	.2145-2	.2654-2	.9954	1.99090
18.10	.7844-5	.8644-3	.9074-2	.9526-1	.2141-2	.2650-2	.9955	1.99091
18.11	.7822-5	.8630-3	.9064-2	.9521-1	.2138-2	.2645-2	.9955	1.99092
18.12	.7801-5	.8616-3	.9054-2	.9515-1	.2134-2	.2641-2	.9955	1.99093
18.13	.7779-5	.8601-3	.9044-2	.9510-1	.2131-2	.2637-2	.9955	1.99094
18.14	.7758-5	.8587-3	.9035-2	.9505-1	.2127-2	.2632-2	.9955	1.99095
18.15	.7737-5	.8573-3	.9025-2	.9500-1	.2124-2	.2628-2	.9955	1.99095
18.16	.7716-5	.8559-3	.9015-2	.9495-1	.2121-2	.2624-2	.9955	1.99096
18.17	.7695-5	.8545-3	.9005-2	.9489-1	.2117-2	.2619-2	.9955	1.99097
18.18	.7674-5	.8531-3	.8995-2	.9404-1	.2114-2	.2615-2	.9955	1.99098
18.19	.7653-5	.8517-3	.8985-2	.9479-1	.2110-2	.2611-2	.9955	1.99099
18.20	.7632-5	.8503-3	.8976-2	.9474-1	.2107-2	.2607-2	.9955	1.99100
18.21	.7612-5	.8490-3	.8966-2	.9469-1	.2103-2	.2602-2	.9955	1.99101
18.22	.7591-5	.8476-3	.8956-2	.9464-1	.2100-2	.2598-2	.9955	1.99102
18.23	.7570-5	.8462-3	.8946-2	.9459-1	.2097-2	.2594-2	.9955	1.99103
18.24	.7550-5	.8448-3	.8937-2	.9453-1	.2093-2	.2590-2	.9955	1.99104
18.25	.7529-5	.8434-3	.8927-2	.9448-1	.2090-2	.2585-2	.9955	1.99105
18.26	.7509-5	.8421-3	.8917-2	.9443-1	.2086-2	.2581-2	.9955	1.99106
18.27	.7489-5	.8407-3	.8908-2	.9438-1	.2083-2	.2577-2	.9955	1.99107
18.28	.7468-5	.8393-3	.8898-2	.9433-1	.2080-2	.2573-2	.9955	1.99108
18.29	.7448-5	.8380-3	.8888-2	.9428-1	.2076-2	.2569-2	.9955	1.99109
18.30	.7428-5	.8366-3	.8879-2	.9423-1	.2073-2	.2565-2	.9956	1.99110
18.31	.7408-5	.8352-3	.8869-2	.9418-1	.2070-2	.2560-2	.9956	1.99111
18.32	.7388-5	.8339-3	.8859-2	.9412-1	.2066-2	.2556-2	.9956	1.99112
18.33	.7368-5	.8325-3	.8850-2	.9407-1	.2063-2	.2552-2	.9956	1.99113
18.34	.7348-5	.8312-3	.8840-2	.9402-1	.2060-2	.2549-2	.9956	1.99114
18.35	.7328-5	.8298-3	.8831-2	.9397-1	.2056-2	.2544-2	.9956	1.99115
18.36	.7308-5	.8285-3	.8821-2	.9392-1	.2053-2	.2540-2	.9956	1.99116
18.37	.7289-5	.8272-3	.8812-2	.9387-1	.2050-2	.2536-2	.9956	1.99117
18.38	.7269-5	.8258-3	.8802-2	.9382-1	.2046-2	.2532-2	.9956	1.99118
18.39	.7249-5	.8245-3	.8793-2	.9377-1	.2043-2	.2528-2	.9956	1.99119
18.40	.7230-5	.8232-3	.8783-2	.9372-1	.2040-2	.2524-2	.9956	1.99120
18.41	.7211-5	.8218-3	.8774-2	.9367-1	.2037-2	.2519-2	.9956	1.99121
18.42	.7191-5	.8205-3	.8764-2	.9362-1	.2033-2	.2515-2	.9956	1.99122
18.43	.7172-5	.8192-3	.8755-2	.9357-1	.2030-2	.2511-2	.9956	1.99123
18.44	.7153-5	.8179-3	.8745-2	.9352-1	.2027-2	.2507-2	.9956	1.99124
18.45	.7133-5	.8165-3	.8736-2	.9347-1	.2024-2	.2503-2	.9956	1.99124
18.46	.7114-5	.8152-3	.8727-2	.9342-1	.2020-2	.2499-2	.9956	1.99125
18.47	.7095-5	.8139-3	.8717-2	.9337-1	.2017-2	.2495-2	.9956	1.99126
18.48	.7076-5	.8126-3	.8708-2	.9332-1	.2014-2	.2491-2	.9956	1.99127
18.49	.7057-5	.8113-3	.8699-2	.9327-1	.2011-2	.2487-2	.9956	1.99128
18.50	.7038-5	.8100-3	.8689-2	.9322-1	.2007-2	.2483-2	.9956	1.99129
18.51	.7019-5	.8087-3	.8680-2	.9317-1	.2004-2	.2479-2	.9957	1.99130
18.52	.7001-5	.8074-3	.8671-2	.9312-1	.2001-2	.2475-2	.9957	1.99131
18.53	.6982-5	.8061-3	.8661-2	.9307-1	.1998-2	.2471-2	.9957	1.99132
18.54	.6963-5	.8048-3	.8652-2	.9302-1	.1995-2	.2467-2	.9957	1.99133
18.55	.6945-5	.8035-3	.8643-2	.9297-1	.1991-2	.2463-2	.9957	1.99134
18.56	.6926-5	.8022-3	.8634-2	.9293-1	.1988-2	.2460-2	.9957	1.99135
18.57	.6908-5	.8009-3	.8625-2	.9287-1	.1985-2	.2456-2	.9957	1.99136
18.58	.6889-5	.7997-3	.8615-2	.9282-1	.1982-2	.2452-2	.9957	1.99137
18.59	.6871-5	.7984-3	.8606-2	.9277-1	.1979-2	.2448-2	.9957	1.99138
18.60	.6853-5	.7971-3	.8597-2	.9272-1	.1976-2	.2444-2	.9957	1.99138
18.61	.6835-5	.7958-3	.8588-2	.9267-1	.1973-2	.2440-2	.9957	1.99139
18.62	.6816-5	.7946-3	.8579-2	.9262-1	.1969-2	.2436-2	.9957	1.99140
18.63	.6798-5	.7933-3	.8570-2	.9257-1	.1966-2	.2432-2	.9957	1.99141
18.64	.6780-5	.7920-3	.8560-2	.9252-1	.1963-2	.2428-2	.9957	1.99142
18.65	.6762-5	.7908-3	.8551-2	.9247-1	.1960-2	.2425-2	.9957	1.99143
18.66	.6744-5	.7895-3	.8542-2	.9242-1	.1957-2	.2421-2	.9957	1.99144
18.67	.6726-5	.7883-3	.8533-2	.9238-1	.1954-2	.2417-2	.9957	1.99145
18.68	.6708-5	.7870-3	.8524-2	.9233-1	.1951-2	.2413-2	.9957	1.99146
18.69	.6691-5	.7857-3	.8515-2	.9228-1	.1948-2	.2409-2	.9957	1.99147
18.70	.6673-5	.7845-3	.8506-2	.9223-1	.1945-2	.2405-2	.9957	1.99148
18.71	.6655-5	.7833-3	.8497-2	.9218-1	.1941-2	.2402-2	.9957	1.99148
18.72	.6638-5	.7820-3	.8488-2	.9213-1	.1938-2	.2398-2	.9957	1.99149
18.73	.6620-5	.7808-3	.8479-2	.9208-1	.1935-2	.2394-2	.9958	1.99150
18.74	.6603-5	.7795-3	.8470-2	.9203-1	.1932-2	.2390-2	.9958	1.99151
18.75	.6585-5	.7783-3	.8461-2	.9198-1	.1929-2	.2386-2	.9958	1.99152
~~18.76~~	~~.6568-5~~	.7771-3	.8452-2	.9194-1	.1926-2	.2383-2	.9958	1.99153
18.77	.6551-5	.7758-3	.8443-2	.9189-1	.1923-2	.2379-2	.9958	1.99154
18.78	.6533-5	.7746-3	.8434-2	.9184-1	.1920-2	.2375-2	.9958	1.99155
18.79	.6516-5	.7734-3	.8425-2	.9179-1	.1917-2	.2371-2	.9958	1.99156
18.80	.6499-5	.7722-3	.8417-2	.9174-1	.1914-2	.2368-2	.9958	1.99157
18.81	.6482-5	.7709-3	.8408-2	.9169-1	.1911-2	.2364-2	.9958	1.99157
18.82	.6465-5	.7697-3	.8399-2	.9165-1	.1908-2	.2360-2	.9958	1.99158
18.83	.6448-5	.7685-3	.8390-2	.9160-1	.1905-2	.2356-2	.9958	1.99159
18.84	.6431-5	.7673-3	.8381-2	.9155-1	.1902-2	.2353-2	.9958	1.99160
18.85	.6414-5	.7661-3	.8372-2	.9150-1	.1899-2	.2349-2	.9958	1.99161
18.86	.6397-5	.7649-3	.8364-2	.9145-1	.1896-2	.2345-2	.9958	1.99162
18.87	.6380-5	.7637-3	.8355-2	.9140-1	.1893-2	.2342-2	.9958	1.99163
18.88	.6363-5	.7625-3	.8346-2	.9136-1	.1890-2	.2338-2	.9958	1.99164
18.89	.6347-5	.7613-3	.8337-2	.9131-1	.1887-2	.2334-2	.9958	1.99165
18.90	.6330-5	.7601-3	.8328-2	.9126-1	.1884-2	.2331-2	.9958	1.99165
18.91	.6314-5	.7589-3	.8320-2	.9121-1	.1881-2	.2327-2	.9958	1.99166
18.92	.6297-5	.7577-3	.8311-2	.9116-1	.1878-2	.2323-2	.9958	1.99167
18.93	.6281-5	.7565-3	.8302-2	.9112-1	.1876-2	.2320-2	.9958	1.99168
18.94	.6264-5	.7553-3	.8294-2	.9107-1	.1873-2	.2316-2	.9958	1.99169
18.95	.6248-5	.7541-3	.8285-2	.9102-1	.1870-2	.2312-2	.9958	1.99170
18.96	.6231-5	.7529-3	.8276-2	.9097-1	.1867-2	.2309-2	.9959	1.99171
18.97	.6215-5	.7517-3	.8268-2	.9093-1	.1864-2	.2305-2	.9959	1.99172
18.98	.6199-5	.7506-3	.8259-2	.9088-1	.1861-2	.2302-2	.9959	1.99172
18.99	.6183-5	.7494-3	.8250-2	.9083-1	.1858-2	.2298-2	.9959	1.99173

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
3.185	80.485	.4494	404.8	3.963	102.1	.3840-2	476.4	18.00
3.183	80.490	.4494	405.2	3.963	102.2	.3834-2	476.9	18.01
3.181	80.495	.4494	405.7	3.963	102.3	.3828-2	477.4	18.02
3.179	80.501	.4494	406.1	3.963	102.5	.3821-2	477.9	18.03
3.178	80.506	.4494	406.6	3.963	102.6	.3815-2	478.5	18.04
3.176	80.511	.4494	407.0	3.964	102.7	.3809-2	479.0	18.05
3.174	80.516	.4494	407.5	3.964	102.8	.3803-2	479.5	18.06
3.172	80.522	.4494	407.9	3.964	102.9	.3796-2	480.1	18.07
3.171	80.527	.4494	408.4	3.964	103.0	.3790-2	480.6	18.08
3.169	80.532	.4494	408.8	3.964	103.1	.3784-2	481.1	18.09
3.167	80.537	.4494	409.3	3.964	103.3	.3778-2	481.7	18.10
3.165	80.542	.4494	409.7	3.964	103.4	.3772-2	482.2	18.11
3.164	80.547	.4494	410.2	3.964	103.5	.3766-2	482.7	18.12
3.162	80.553	.4494	410.6	3.964	103.6	.3759-2	483.3	18.13
3.160	80.558	.4494	411.1	3.964	103.7	.3753-2	483.8	18.14
3.158	80.563	.4494	411.5	3.964	103.8	.3747-2	484.3	18.15
3.157	80.568	.4494	412.0	3.964	103.9	.3741-2	484.9	18.16
3.155	80.573	.4494	412.4	3.964	104.0	.3735-2	485.4	18.17
3.153	80.578	.4494	412.9	3.964	104.2	.3729-2	485.9	18.18
3.151	80.584	.4494	413.3	3.964	104.3	.3723-2	486.5	18.19
3.150	80.589	.4494	413.8	3.964	104.4	.3717-2	487.0	18.20
3.148	80.594	.4494	414.3	3.964	104.5	.3711-2	487.5	18.21
3.146	80.599	.4494	414.7	3.964	104.6	.3705-2	488.1	18.22
3.145	80.604	.4494	415.2	3.964	104.7	.3699-2	488.6	18.23
3.143	80.609	.4494	415.6	3.964	104.8	.3693-2	489.1	18.24
3.141	80.614	.4494	416.1	3.964	105.0	.3687-2	489.7	18.25
3.139	80.619	.4494	416.5	3.964	105.1	.3681-2	490.2	18.26
3.138	80.625	.4494	417.0	3.964	105.2	.3675-2	490.7	18.27
3.136	80.630	.4494	417.4	3.964	105.3	.3669-2	491.3	18.28
3.134	80.635	.4493	417.9	3.964	105.4	.3663-2	491.8	18.29
3.132	80.640	.4493	418.4	3.964	105.5	.3657-2	492.3	18.30
3.131	80.645	.4493	418.8	3.965	105.6	.3651-2	492.9	18.31
3.129	80.650	.4493	419.3	3.965	105.8	.3645-2	493.4	18.32
3.127	80.655	.4493	419.7	3.965	105.9	.3639-2	494.0	18.33
3.126	80.660	.4493	420.2	3.965	106.0	.3634-2	494.5	18.34
3.124	80.665	.4493	420.7	3.965	106.1	.3628-2	495.0	18.35
3.122	80.670	.4493	421.1	3.965	106.2	.3622-2	495.6	18.36
3.121	80.675	.4493	421.6	3.965	106.3	.3616-2	496.1	18.37
3.119	80.680	.4493	422.0	3.965	106.4	.3610-2	496.7	18.38
3.117	80.685	.4493	422.5	3.965	106.6	.3604-2	497.2	18.39
3.115	80.690	.4493	423.0	3.965	106.7	.3599-2	497.7	18.40
3.114	80.695	.4493	423.4	3.965	106.8	.3593-2	498.3	18.41
3.112	80.700	.4493	423.9	3.965	106.9	.3587-2	498.8	18.42
3.110	80.705	.4493	424.3	3.965	107.0	.3581-2	499.4	18.43
3.109	80.710	.4493	424.8	3.965	107.1	.3576-2	499.9	18.44
3.107	80.715	.4493	425.3	3.965	107.3	.3570-2	500.4	18.45
3.105	80.720	.4493	425.7	3.965	107.4	.3564-2	501.0	18.46
3.104	80.725	.4493	426.2	3.965	107.5	.3558-2	501.5	18.47
3.102	80.730	.4493	426.6	3.965	107.6	.3553-2	502.1	18.48
3.100	80.735	.4493	427.1	3.965	107.7	.3547-2	502.6	18.49
3.099	80.740	.4493	427.6	3.965	107.8	.3541-2	503.2	18.50
3.097	80.745	.4493	428.0	3.965	107.9	.3536-2	503.7	18.51
3.095	80.750	.4493	428.5	3.965	108.1	.3530-2	504.2	18.52
3.094	80.755	.4493	429.0	3.965	108.2	.3524-2	504.8	18.53
3.092	80.760	.4493	429.4	3.965	108.3	.3519-2	505.3	18.54
3.090	80.765	.4493	429.9	3.965	108.4	.3513-2	505.9	18.55
3.089	80.770	.4493	430.3	3.965	108.5	.3508-2	506.4	18.56
3.087	80.775	.4493	430.8	3.966	108.6	.3502-2	507.0	18.57
3.085	80.780	.4493	431.3	3.966	108.8	.3496-2	507.5	18.58
3.084	80.785	.4493	431.7	3.966	108.9	.3491-2	508.1	18.59
3.082	80.790	.4493	432.2	3.966	109.0	.3485-2	508.6	18.60
3.080	80.795	.4493	432.7	3.966	109.1	.3480-2	509.2	18.61
3.079	80.800	.4493	433.1	3.966	109.2	.3474-2	509.7	18.62
3.077	80.804	.4493	433.6	3.966	109.3	.3469-2	510.3	18.63
3.075	80.809	.4493	434.1	3.966	109.5	.3463-2	510.8	18.64
3.074	80.814	.4493	434.5	3.966	109.6	.3458-2	511.3	18.65
3.072	80.819	.4493	435.0	3.966	109.7	.3452-2	511.9	18.66
3.070	80.824	.4493	435.5	3.966	109.8	.3447-2	512.4	18.67
3.069	80.829	.4493	435.9	3.966	109.9	.3441-2	513.0	18.68
3.067	80.834	.4493	436.4	3.966	110.0	.3436-2	513.5	18.69
3.065	80.839	.4493	436.9	3.966	110.2	.3431-2	514.1	18.70
3.064	80.844	.4493	437.3	3.966	110.3	.3425-2	514.6	18.71
3.062	80.848	.4493	437.8	3.966	110.4	.3420-2	515.2	18.72
3.060	80.853	.4492	438.3	3.966	110.5	.3414-2	515.7	18.73
3.059	80.858	.4492	438.7	3.966	110.6	.3409-2	516.3	18.74
3.057	80.863	.4492	439.2	3.966	110.7	.3404-2	516.8	18.75
3.056	80.868	.4492	439.7	3.966	110.9	.3398-2	517.4	18.76
3.054	80.873	.4492	440.1	3.966	111.0	.3393-2	517.9	18.77
3.052	80.877	.4492	440.6	3.966	111.1	.3387-2	518.5	18.78
3.051	80.882	.4492	441.1	3.966	111.2	.3382-2	519.0	18.79
3.049	80.887	.4492	441.6	3.966	111.3	.3377-2	519.6	18.80
3.047	80.892	.4492	442.0	3.966	111.4	.3371-2	520.1	18.81
3.046	80.897	.4492	442.5	3.966	111.6	.3366-2	520.7	18.82
3.044	80.902	.4492	443.0	3.966	111.7	.3361-2	521.3	18.83
3.043	80.906	.4492	443.4	3.966	111.8	.3356-2	521.8	18.84
3.041	80.911	.4492	443.9	3.967	111.9	.3350-2	522.4	18.85
3.039	80.916	.4492	444.4	3.967	112.0	.3345-2	522.9	18.86
3.038	80.921	.4492	444.8	3.967	112.1	.3340-2	523.5	18.87
3.036	80.925	.4492	445.3	3.967	112.3	.3335-2	524.0	18.88
3.035	80.930	.4492	445.8	3.967	112.4	.3329-2	524.6	18.89
3.033	80.935	.4492	446.3	3.967	112.5	.3324-2	525.1	18.90
3.031	80.940	.4492	446.7	3.967	112.6	.3319-2	525.7	18.91
3.030	80.945	.4492	447.2	3.967	112.7	.3314-2	526.2	18.92
3.028	80.949	.4492	447.7	3.967	112.9	.3309-2	526.8	18.93
3.027	80.954	.4492	448.2	3.967	113.0	.3303-2	527.4	18.94
3.025	80.959	.4492	448.6	3.967	113.1	.3298-2	527.9	18.95
3.023	80.963	.4492	449.1	3.967	113.2	.3293-2	528.5	18.96
3.022	80.968	.4492	449.6	3.967	113.3	.3288-2	529.0	18.97
3.020	80.973	.4492	450.1	3.967	113.4	.3283-2	529.6	18.98
3.019	80.978	.4492	450.5	3.967	113.6	.3278-2	530.1	18.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
19.00	.6167-5	.7482-3	.8242-2	.9078-1	.1855-2	.2294-2	.9959	1.99174
19.01	.6151-5	.7471-3	.8233-2	.9074-1	.1852-2	.2291-2	.9959	1.99175
19.02	.6135-5	.7459-3	.8225-2	.9069-1	.1849-2	.2287-2	.9959	1.99176
19.03	.6119-5	.7447-3	.8216-2	.9064-1	.1846-2	.2284-2	.9959	1.99177
19.04	.6103-5	.7436-3	.8207-2	.9059-1	.1844-2	.2280-2	.9959	1.99178
19.05	.6087-5	.7424-3	.8199-2	.9055-1	.1841-2	.2277-2	.9959	1.99178
19.06	.6071-5	.7412-3	.8190-2	.9050-1	.1838-2	.2273-2	.9959	1.99179
19.07	.6055-5	.7401-3	.8182-2	.9045-1	.1835-2	.2270-2	.9959	1.99180
19.08	.6039-5	.7389-3	.8173-2	.9041-1	.1832-2	.2266-2	.9959	1.99181
19.09	.6024-5	.7378-3	.8165-2	.9036-1	.1829-2	.2262-2	.9959	1.99182
19.10	.6008-5	.7366-3	.8156-2	.9031-1	.1827-2	.2259-2	.9959	1.99183
19.11	.5993-5	.7355-3	.8148-2	.9027-1	.1824-2	.2255-2	.9959	1.99184
19.12	.5977-5	.7343-3	.8139-2	.9022-1	.1821-2	.2252-2	.9959	1.99184
19.13	.5962-5	.7332-3	.8131-2	.9017-1	.1818-2	.2248-2	.9959	1.99185
19.14	.5946-5	.7321-3	.8123-2	.9013-1	.1815-2	.2245-2	.9959	1.99186
19.15	.5931-5	.7309-3	.8114-2	.9008-1	.1812-2	.2241-2	.9959	1.99187
19.16	.5915-5	.7298-3	.8106-2	.9003-1	.1810-2	.2238-2	.9959	1.99188
19.17	.5900-5	.7287-3	.8097-2	.8999-1	.1807-2	.2235-2	.9959	1.99189
19.18	.5885-5	.7275-3	.8089-2	.8994-1	.1804-2	.2231-2	.9959	1.99189
19.19	.5870-5	.7264-3	.8081-2	.8989-1	.1801-2	.2228-2	.9960	1.99190
19.20	.5855-5	.7253-3	.8072-2	.8985-1	.1799-2	.2224-2	.9960	1.99191
19.21	.5839-5	.7241-3	.8064-2	.8980-1	.1796-2	.2221-2	.9960	1.99192
19.22	.5824-5	.7230-3	.8056-2	.8975-1	.1793-2	.2217-2	.9960	1.99193
19.23	.5809-5	.7219-3	.8047-2	.8971-1	.1790-2	.2214-2	.9960	1.99194
19.24	.5794-5	.7208-3	.8039-2	.8966-1	.1787-2	.2211-2	.9960	1.99194
19.25	.5780-5	.7197-3	.8031-2	.8961-1	.1785-2	.2207-2	.9960	1.99195
19.26	.5765-5	.7186-3	.8023-2	.8957-1	.1782-2	.2204-2	.9960	1.99196
19.27	.5750-5	.7175-3	.8014-2	.8952-1	.1779-2	.2200-2	.9960	1.99197
19.28	.5735-5	.7163-3	.8006-2	.8948-1	.1777-2	.2197-2	.9960	1.99198
19.29	.5720-5	.7152-3	.7998-2	.8943-1	.1774-2	.2194-2	.9960	1.99199
19.30	.5706-5	.7141-3	.7990-2	.8938-1	.1771-2	.2190-2	.9960	1.99199
19.31	.5691-5	.7130-3	.7981-2	.8934-1	.1768-2	.2187-2	.9960	1.99200
19.32	.5676-5	.7119-3	.7973-2	.8929-1	.1766-2	.2183-2	.9960	1.99201
19.33	.5662-5	.7108-3	.7965-2	.8925-1	.1763-2	.2180-2	.9960	1.99202
19.34	.5647-5	.7098-3	.7957-2	.8920-1	.1760-2	.2177-2	.9960	1.99203
19.35	.5633-5	.7087-3	.7949-2	.8916-1	.1758-2	.2173-2	.9960	1.99204
19.36	.5619-5	.7076-3	.7941-2	.8911-1	.1755-2	.2170-2	.9960	1.99204
19.37	.5604-5	.7065-3	.7933-2	.8906-1	.1752-2	.2167-2	.9960	1.99205
19.38	.5590-5	.7054-3	.7924-2	.8902-1	.1750-2	.2163-2	.9960	1.99206
19.39	.5576-5	.7043-3	.7916-2	.8897-1	.1747-2	.2160-2	.9960	1.99207
19.40	.5561-5	.7032-3	.7908-2	.8893-1	.1744-2	.2157-2	.9960	1.99208
19.41	.5547-5	.7022-3	.7900-2	.8888-1	.1742-2	.2154-2	.9960	1.99208
19.42	.5533-5	.7011-3	.7892-2	.8884-1	.1739-2	.2150-2	.9960	1.99209
19.43	.5519-5	.7000-3	.7884-2	.8879-1	.1736-2	.2147-2	.9961	1.99210
19.44	.5505-5	.6989-3	.7876-2	.8875-1	.1734-2	.2144-2	.9961	1.99211
19.45	.5491-5	.6979-3	.7868-2	.8870-1	.1731-2	.2140-2	.9961	1.99212
19.46	.5477-5	.6968-3	.7860-2	.8866-1	.1728-2	.2137-2	.9961	1.99212
19.47	.5463-5	.6957-3	.7852-2	.8861-1	.1726-2	.2134-2	.9961	1.99213
19.48	.5449-5	.6947-3	.7844-2	.8856-1	.1723-2	.2131-2	.9961	1.99214
19.49	.5435-5	.6936-3	.7836-2	.8852-1	.1720-2	.2127-2	.9961	1.99215
19.50	.5421-5	.6926-3	.7828-2	.8847-1	.1718-2	.2124-2	.9961	1.99216
19.51	.5407-5	.6915-3	.7820-2	.8843-1	.1715-2	.2121-2	.9961	1.99216
19.52	.5394-5	.6905-3	.7812-2	.8838-1	.1713-2	.2118-2	.9961	1.99217
19.53	.5380-5	.6894-3	.7804-2	.8834-1	.1710-2	.2115-2	.9961	1.99218
19.54	.5366-5	.6884-3	.7796-2	.8830-1	.1707-2	.2111-2	.9961	1.99219
19.55	.5353-5	.6873-3	.7788-2	.8825-1	.1705-2	.2108-2	.9961	1.99220
19.56	.5339-5	.6863-3	.7780-2	.8821-1	.1702-2	.2105-2	.9961	1.99220
19.57	.5326-5	.6852-3	.7772-2	.8816-1	.1700-2	.2102-2	.9961	1.99221
19.58	.5312-5	.6842-3	.7764-2	.8812-1	.1697-2	.2099-2	.9961	1.99222
19.59	.5299-5	.6831-3	.7757-2	.8807-1	.1695-2	.2095-2	.9961	1.99223
19.60	.5285-5	.6821-3	.7749-2	.8803-1	.1692-2	.2092-2	.9961	1.99224
19.61	.5272-5	.6811-3	.7741-2	.8798-1	.1689-2	.2089-2	.9961	1.99224
19.62	.5259-5	.6800-3	.7733-2	.8794-1	.1687-2	.2086-2	.9961	1.99225
19.63	.5245-5	.6790-3	.7725-2	.8789-1	.1684-2	.2083-2	.9961	1.99226
19.64	.5232-5	.6780-3	.7717-2	.8785-1	.1682-2	.2080-2	.9961	1.99227
19.65	.5219-5	.6769-3	.7710-2	.8780-1	.1679-2	.2076-2	.9961	1.99228
19.66	.5206-5	.6759-3	.7702-2	.8776-1	.1677-2	.2073-2	.9961	1.99228
19.67	.5193-5	.6749-3	.7694-2	.8772-1	.1674-2	.2070-2	.9961	1.99229
19.68	.5180-5	.6739-3	.7686-2	.8767-1	.1672-2	.2067-2	.9961	1.99230
19.69	.5167-5	.6729-3	.7679-2	.8763-1	.1669-2	.2064-2	.9962	1.99231
19.70	.5154-5	.6718-3	.7671-2	.8758-1	.1667-2	.2061-2	.9962	1.99231
19.71	.5141-5	.6708-3	.7663-2	.8754-1	.1664-2	.2058-2	.9962	1.99232
19.72	.5128-5	.6698-3	.7655-2	.8750-1	.1662-2	.2055-2	.9962	1.99233
19.73	.5115-5	.6688-3	.7648-2	.8745-1	.1659-2	.2051-2	.9962	1.99234
19.74	.5102-5	.6678-3	.7640-2	.8741-1	.1657-2	.2048-2	.9962	1.99235
19.75	.5089-5	.6668-3	.7632-2	.8736-1	.1654-2	.2045-2	.9962	1.99235
19.76	.5076-5	.6658-3	.7625-2	.8732-1	.1652-2	.2042-2	.9962	1.99236
19.77	.5064-5	.6648-3	.7617-2	.8728-1	.1649-2	.2039-2	.9962	1.99237
19.78	.5051-5	.6638-3	.7609-2	.8723-1	.1647-2	.2036-2	.9962	1.99238
19.79	.5038-5	.6628-3	.7602-2	.8719-1	.1644-2	.2033-2	.9962	1.99238
19.80	.5026-5	.6618-3	.7594-2	.8714-1	.1642-2	.2030-2	.9962	1.99239
19.81	.5013-5	.6608-3	.7587-2	.8710-1	.1639-2	.2027-2	.9962	1.99240
19.82	.5001-5	.6598-3	.7579-2	.8706-1	.1637-2	.2024-2	.9962	1.99241
19.83	.4988-5	.6588-3	.7571-2	.8701-1	.1635-2	.2021-2	.9962	1.99241
19.84	.4976-5	.6578-3	.7564-2	.8697-1	.1632-2	.2018-2	.9962	1.99242
19.85	.4963-5	.6568-3	.7556-2	.8693-1	.1630-2	.2015-2	.9962	1.99243
19.86	.4951-5	.6559-3	.7549-2	.8688-1	.1627-2	.2012-2	.9962	1.99244
19.87	.4939-5	.6549-3	.7541-2	.8684-1	.1625-2	.2009-2	.9962	1.99244
19.88	.4926-5	.6539-3	.7534-2	.8680-1	.1622-2	.2006-2	.9962	1.99245
19.89	.4914-5	.6529-3	.7526-2	.8675-1	.1620-2	.2003-2	.9962	1.99246
19.90	.4902-5	.6519-3	.7519-2	.8671-1	.1618-2	.2000-2	.9962	1.99247
19.91	.4889-5	.6510-3	.7511-2	.8667-1	.1615-2	.1997-2	.9962	1.99247
19.92	.4877-5	.6500-3	.7504-2	.8662-1	.1613-2	.1994-2	.9962	1.99248
19.93	.4865-5	.6490-3	.7496-2	.8658-1	.1610-2	.1991-2	.9962	1.99249
19.94	.4853-5	.6481-3	.7489-2	.8654-1	.1608-2	.1988-2	.9962	1.99250
19.95	.4841-5	.6471-3	.7481-2	.8649-1	.1606-2	.1985-2	.9963	1.99250
19.96	.4829-5	.6461-3	.7474-2	.8645-1	.1603-2	.1982-2	.9963	1.99251
19.97	.4817-5	.6452-3	.7466-2	.8641-1	.1601-2	.1979-2	.9963	1.99252
19.98	.4805-5	.6442-3	.7459-2	.8637-1	.1598-2	.1976-2	.9963	1.99253
19.99	.4793-5	.6432-3	.7452-2	.8632-1	.1596-2	.1973-2	.9963	1.99253

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
3.017	80.982	.4492	451.0	3.967	113.7	.3273-2	530.7	19.00
3.015	80.987	.4492	451.5	3.967	113.8	.3268-2	531.3	19.01
3.014	80.992	.4492	452.0	3.967	113.9	.3262-2	531.8	19.02
3.012	80.997	.4492	452.4	3.967	114.0	.3257-2	532.4	19.03
3.011	81.001	.4492	452.9	3.967	114.2	.3252-2	532.9	19.04
3.009	81.006	.4492	453.4	3.967	114.3	.3247-2	533.5	19.05
3.007	81.011	.4492	453.9	3.967	114.4	.3242-2	534.1	19.06
3.006	81.015	.4492	454.3	3.967	114.5	.3237-2	534.6	19.07
3.004	81.020	.4492	454.8	3.967	114.6	.3232-2	535.2	19.08
3.003	81.025	.4492	455.3	3.967	114.8	.3227-2	535.7	19.09
3.001	81.029	.4492	455.8	3.967	114.9	.3222-2	536.3	19.10
3.000	81.034	.4492	456.2	3.967	115.0	.3217-2	536.9	19.11
2.998	81.039	.4492	456.7	3.967	115.1	.3212-2	537.4	19.12
2.996	81.043	.4492	457.2	3.967	115.2	.3207-2	538.0	19.13
2.995	81.048	.4492	457.7	3.968	115.4	.3202-2	538.5	19.14
2.993	81.053	.4492	458.2	3.968	115.5	.3197-2	539.1	19.15
2.992	81.057	.4492	458.6	3.968	115.6	.3192-2	539.7	19.16
2.990	81.062	.4492	459.1	3.968	115.7	.3187-2	540.2	19.17
2.989	81.066	.4492	459.6	3.968	115.8	.3183-2	540.8	19.18
2.987	81.071	.4492	460.1	3.968	116.0	.3178-2	541.4	19.19
2.986	81.076	.4492	460.6	3.968	116.1	.3173-2	541.9	19.20
2.984	81.080	.4491	461.0	3.968	116.2	.3168-2	542.5	19.21
2.982	81.085	.4491	461.5	3.968	116.3	.3163-2	543.1	19.22
2.981	81.090	.4491	462.0	3.968	116.4	.3158-2	543.6	19.23
2.979	81.094	.4491	462.5	3.968	116.6	.3153-2	544.2	19.24
2.978	81.099	.4491	463.0	3.968	116.7	.3148-2	544.7	19.25
2.976	81.103	.4491	463.4	3.968	116.8	.3144-2	545.3	19.26
2.975	81.108	.4491	463.9	3.968	116.9	.3139-2	545.9	19.27
2.973	81.113	.4491	464.4	3.968	117.0	.3134-2	546.4	19.28
2.972	81.117	.4491	464.9	3.968	117.2	.3129-2	547.0	19.29
2.970	81.122	.4491	465.4	3.968	117.3	.3124-2	547.6	19.30
2.968	81.126	.4491	465.8	3.968	117.4	.3120-2	548.1	19.31
2.967	81.131	.4491	466.3	3.968	117.5	.3115-2	548.7	19.32
2.965	81.135	.4491	466.8	3.968	117.6	.3110-2	549.3	19.33
2.964	81.140	.4491	467.3	3.968	117.8	.3105-2	549.8	19.34
2.962	81.144	.4491	467.8	3.968	117.9	.3100-2	550.4	19.35
2.961	81.149	.4491	468.3	3.968	118.0	.3096-2	551.0	19.36
2.959	81.154	.4491	468.7	3.968	118.1	.3091-2	551.6	19.37
2.958	81.158	.4491	469.2	3.968	118.2	.3086-2	552.1	19.38
2.956	81.163	.4491	469.7	3.968	118.4	.3082-2	552.7	19.39
2.955	81.167	.4491	470.2	3.968	118.5	.3077-2	553.3	19.40
2.953	81.172	.4491	470.7	3.968	118.6	.3072-2	553.8	19.41
2.952	81.176	.4491	471.2	3.968	118.7	.3067-2	554.4	19.42
2.950	81.181	.4491	471.7	3.968	118.9	.3063-2	555.0	19.43
2.949	81.185	.4491	472.1	3.968	119.0	.3058-2	555.5	19.44
2.947	81.190	.4491	472.6	3.969	119.1	.3053-2	556.1	19.45
2.946	81.194	.4491	473.1	3.969	119.2	.3049-2	556.7	19.46
2.944	81.199	.4491	473.6	3.969	119.3	.3044-2	557.3	19.47
2.943	81.203	.4491	474.1	3.969	119.5	.3040-2	557.8	19.48
2.941	81.208	.4491	474.6	3.969	119.6	.3035-2	558.4	19.49
2.940	81.212	.4491	475.1	3.969	119.7	.3030-2	559.0	19.50
2.938	81.217	.4491	475.6	3.969	119.8	.3026-2	559.5	19.51
2.937	81.221	.4491	476.0	3.969	119.9	.3021-2	560.1	19.52
2.935	81.226	.4491	476.5	3.969	120.1	.3017-2	560.7	19.53
2.934	81.230	.4491	477.0	3.969	120.2	.3012-2	561.3	19.54
2.932	81.235	.4491	477.5	3.969	120.3	.3007-2	561.8	19.55
2.931	81.239	.4491	478.0	3.969	120.4	.3003-2	562.4	19.56
2.929	81.243	.4491	478.5	3.969	120.6	.2998-2	563.0	19.57
2.928	81.248	.4491	479.0	3.969	120.7	.2994-2	563.6	19.58
2.926	81.252	.4491	479.5	3.969	120.8	.2989-2	564.1	19.59
2.925	81.257	.4491	480.0	3.969	120.9	.2985-2	564.7	19.60
2.923	81.261	.4491	480.4	3.969	121.0	.2980-2	565.3	19.61
2.922	81.266	.4491	480.9	3.969	121.2	.2976-2	565.9	19.62
2.920	81.270	.4491	481.4	3.969	121.3	.2971-2	566.4	19.63
2.919	81.274	.4491	481.9	3.969	121.4	.2967-2	567.0	19.64
2.917	81.279	.4491	482.4	3.969	121.5	.2962-2	567.6	19.65
2.916	81.283	.4491	482.9	3.969	121.7	.2958-2	568.2	19.66
2.914	81.288	.4491	483.4	3.969	121.8	.2953-2	568.8	19.67
2.913	81.292	.4491	483.9	3.969	121.9	.2949-2	569.3	19.68
2.911	81.296	.4491	484.4	3.969	122.0	.2945-2	569.9	19.69
2.910	81.301	.4491	484.9	3.969	122.2	.2940-2	570.5	19.70
2.908	81.305	.4491	485.4	3.969	122.3	.2936-2	571.1	19.71
2.907	81.310	.4491	485.8	3.969	122.4	.2931-2	571.7	19.72
2.905	81.314	.4490	486.3	3.969	122.5	.2927-2	572.2	19.73
2.904	81.318	.4490	486.8	3.969	122.6	.2922-2	572.8	19.74
2.902	81.323	.4490	487.3	3.969	122.8	.2918-2	573.4	19.75
2.901	81.327	.4490	487.8	3.970	122.9	.2914-2	574.0	19.76
2.899	81.331	.4490	488.3	3.970	123.0	.2909-2	574.6	19.77
2.898	81.336	.4490	488.8	3.970	123.1	.2905-2	575.1	19.78
2.896	81.340	.4490	489.3	3.970	123.3	.2901-2	575.7	19.79
2.895	81.345	.4490	489.8	3.970	123.4	.2896-2	576.3	19.80
2.893	81.349	.4490	490.3	3.970	123.5	.2892-2	576.9	19.81
2.892	81.353	.4490	490.8	3.970	123.6	.2888-2	577.5	19.82
2.891	81.358	.4490	491.3	3.970	123.8	.2883-2	578.0	19.83
2.889	81.362	.4490	491.8	3.970	123.9	.2879-2	578.6	19.84
2.888	81.366	.4490	492.3	3.970	124.0	.2875-2	579.2	19.85
2.886	81.371	.4490	492.8	3.970	124.1	.2870-2	579.8	19.86
2.885	81.375	.4490	493.3	3.970	124.3	.2866-2	580.4	19.87
2.883	81.379	.4490	493.8	3.970	124.4	.2862-2	581.0	19.88
2.882	81.383	.4490	494.3	3.970	124.5	.2858-2	581.5	19.89
2.880	81.388	.4490	494.8	3.970	124.6	.2853-2	582.1	19.90
2.879	81.392	.4490	495.3	3.970	124.8	.2849-2	582.7	19.91
2.878	81.396	.4490	495.8	3.970	124.9	.2845-2	583.3	19.92
2.876	81.401	.4490	496.3	3.970	125.0	.2841-2	583.9	19.93
2.875	81.405	.4490	496.8	3.970	125.1	.2836-2	584.5	19.94
2.873	81.409	.4490	497.3	3.970	125.3	.2832-2	585.1	19.95
2.872	81.414	.4490	497.8	3.970	125.4	.2828-2	585.6	19.96
2.870	81.418	.4490	498.3	3.970	125.5	.2824-2	586.2	19.97
2.869	81.422	.4490	498.8	3.970	125.6	.2820-2	586.8	19.98
2.867	81.426	.4490	499.3	3.970	125.7	.2815-2	587.4	19.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
20.00	.4781-5	.6423-3	.7444-2	.8628-1	.1594-2	.1970-2	.9963	1.99254
20.01	.4769-5	.6413-3	.7437-2	.8624-1	.1591-2	.1967-2	.9963	1.99255
20.02	.4758-5	.6404-3	.7429-2	.8619-1	.1589-2	.1964-2	.9963	1.99256
20.03	.4746-5	.6394-3	.7422-2	.8615-1	.1587-2	.1962-2	.9963	1.99256
20.04	.4734-5	.6385-3	.7415-2	.8611-1	.1584-2	.1959-2	.9963	1.99257
20.05	.4722-5	.6375-3	.7407-2	.8607-1	.1582-2	.1956-2	.9963	1.99258
20.06	.4711-5	.6366-3	.7400-2	.8602-1	.1580-2	.1953-2	.9963	1.99259
20.07	.4699-5	.6356-3	.7393-2	.8598-1	.1577-2	.1950-2	.9963	1.99259
20.08	.4687-5	.6347-3	.7385-2	.8594-1	.1575-2	.1947-2	.9963	1.99260
20.09	.4676-5	.6337-3	.7378-2	.8590-1	.1573-2	.1944-2	.9963	1.99261
20.10	.4664-5	.6328-3	.7371-2	.8585-1	.1570-2	.1941-2	.9963	1.99262
20.11	.4653-5	.6319-3	.7364-2	.8581-1	.1568-2	.1938-2	.9963	1.99262
20.12	.4641-5	.6309-3	.7356-2	.8577-1	.1566-2	.1936-2	.9963	1.99263
20.13	.4630-5	.6300-3	.7349-2	.8573-1	.1563-2	.1933-2	.9963	1.99264
20.14	.4619-5	.6291-3	.7342-2	.8568-1	.1561-2	.1930-2	.9963	1.99264
20.15	.4607-5	.6281-3	.7335-2	.8564-1	.1559-2	.1927-2	.9963	1.99265
20.16	.4596-5	.6272-3	.7327-2	.8560-1	.1557-2	.1924-2	.9963	1.99266
20.17	.4585-5	.6263-3	.7320-2	.8556-1	.1554-2	.1921-2	.9963	1.99267
20.18	.4573-5	.6254-3	.7313-2	.8552-1	.1552-2	.1919-2	.9963	1.99267
20.19	.4562-5	.6244-3	.7306-2	.8547-1	.1550-2	.1916-2	.9963	1.99268
20.20	.4551-5	.6235-3	.7299-2	.8543-1	.1547-2	.1913-2	.9963	1.99269
20.21	.4540-5	.6226-3	.7291-2	.8539-1	.1545-2	.1910-2	.9963	1.99270
20.22	.4529-5	.6217-3	.7284-2	.8535-1	.1543-2	.1907-2	.9964	1.99270
20.23	.4517-5	.6208-3	.7277-2	.8531-1	.1541-2	.1905-2	.9964	1.99271
20.24	.4506-5	.6199-3	.7270-2	.8526-1	.1538-2	.1902-2	.9964	1.99272
20.25	.4495-5	.6190-3	.7263-2	.8522-1	.1536-2	.1899-2	.9964	1.99272
20.26	.4484-5	.6180-3	.7256-2	.8518-1	.1534-2	.1896-2	.9964	1.99273
20.27	.4473-5	.6171-3	.7249-2	.8514-1	.1532-2	.1893-2	.9964	1.99274
20.28	.4462-5	.6162-3	.7242-2	.8510-1	.1529-2	.1891-2	.9964	1.99275
20.29	.4452-5	.6153-3	.7234-2	.8506-1	.1527-2	.1888-2	.9964	1.99275
20.30	.4441-5	.6144-3	.7227-2	.8501-1	.1525-2	.1885-2	.9964	1.99276
20.31	.4430-5	.6135-3	.7220-2	.8497-1	.1523-2	.1882-2	.9964	1.99277
20.32	.4419-5	.6126-3	.7213-2	.8493-1	.1521-2	.1880-2	.9964	1.99277
20.33	.4408-5	.6117-3	.7206-2	.8489-1	.1518-2	.1877-2	.9964	1.99278
20.34	.4397-5	.6108-3	.7199-2	.8485-1	.1516-2	.1874-2	.9964	1.99279
20.35	.4387-5	.6099-3	.7192-2	.8481-1	.1514-2	.1871-2	.9964	1.99279
20.36	.4376-5	.6090-3	.7185-2	.8477-1	.1512-2	.1869-2	.9964	1.99280
20.37	.4365-5	.6082-3	.7178-2	.8472-1	.1509-2	.1866-2	.9964	1.99281
20.38	.4355-5	.6073-3	.7171-2	.8468-1	.1507-2	.1863-2	.9964	1.99282
20.39	.4344-5	.6064-3	.7164-2	.8464-1	.1505-2	.1860-2	.9964	1.99282
20.40	.4334-5	.6055-3	.7157-2	.8460-1	.1503-2	.1858-2	.9964	1.99283
20.41	.4323-5	.6046-3	.7150-2	.8456-1	.1501-2	.1855-2	.9964	1.99284
20.42	.4313-5	.6037-3	.7143-2	.8452-1	.1499-2	.1852-2	.9964	1.99284
20.43	.4302-5	.6029-3	.7136-2	.8448-1	.1496-2	.1850-2	.9964	1.99285
20.44	.4292-5	.6020-3	.7129-2	.8444-1	.1494-2	.1847-2	.9964	1.99286
20.45	.4281-5	.6011-3	.7122-2	.8439-1	.1492-2	.1844-2	.9964	1.99286
20.46	.4272-5	.6002-3	.7116-2	.8435-1	.1490-2	.1842-2	.9964	1.99287
20.47	.4261-5	.5994-3	.7109-2	.8431-1	.1488-2	.1839-2	.9964	1.99288
20.48	.4250-5	.5985-3	.7102-2	.8427-1	.1486-2	.1836-2	.9964	1.99289
20.49	.4240-5	.5976-3	.7095-2	.8423-1	.1483-2	.1834-2	.9964	1.99289
20.50	.4230-5	.5967-3	.7088-2	.8419-1	.1481-2	.1831-2	.9964	1.99290
20.51	.4219-5	.5959-3	.7081-2	.8415-1	.1479-2	.1828-2	.9965	1.99291
20.52	.4209-5	.5950-3	.7074-2	.8411-1	.1477-2	.1826-2	.9965	1.99291
20.53	.4199-5	.5941-3	.7067-2	.8407-1	.1475-2	.1823-2	.9965	1.99292
20.54	.4189-5	.5933-3	.7061-2	.8403-1	.1473-2	.1820-2	.9965	1.99293
20.55	.4179-5	.5924-3	.7054-2	.8399-1	.1471-2	.1818-2	.9965	1.99293
20.56	.4169-5	.5916-3	.7047-2	.8395-1	.1469-2	.1815-2	.9965	1.99294
20.57	.4159-5	.5907-3	.7040-2	.8391-1	.1466-2	.1813-2	.9965	1.99295
20.58	.4149-5	.5899-3	.7033-2	.8387-1	.1464-2	.1810-2	.9965	1.99295
20.59	.4139-5	.5890-3	.7027-2	.8382-1	.1462-2	.1807-2	.9965	1.99296
20.60	.4129-5	.5882-3	.7020-2	.8378-1	.1460-2	.1805-2	.9965	1.99297
20.61	.4119-5	.5873-3	.7013-2	.8374-1	.1458-2	.1802-2	.9965	1.99297
20.62	.4109-5	.5865-3	.7006-2	.8370-1	.1456-2	.1799-2	.9965	1.99298
20.63	.4099-5	.5856-3	.7000-2	.8366-1	.1454-2	.1797-2	.9965	1.99299
20.64	.4089-5	.5848-3	.6993-2	.8362-1	.1452-2	.1794-2	.9965	1.99299
20.65	.4079-5	.5839-3	.6986-2	.8358-1	.1450-2	.1792-2	.9965	1.99300
20.66	.4070-5	.5831-3	.6979-2	.8354-1	.1448-2	.1789-2	.9965	1.99301
20.67	.4060-5	.5822-3	.6973-2	.8350-1	.1446-2	.1787-2	.9965	1.99302
20.68	.4050-5	.5814-3	.6966-2	.8346-1	.1443-2	.1784-2	.9965	1.99302
20.69	.4040-5	.5806-3	.6959-2	.8342-1	.1441-2	.1781-2	.9965	1.99303
20.70	.4031-5	.5797-3	.6953-2	.8338-1	.1439-2	.1779-2	.9965	1.99304
20.71	.4021-5	.5789-3	.6946-2	.8334-1	.1437-2	.1776-2	.9965	1.99304
20.72	.4011-5	.5781-3	.6939-2	.8330-1	.1435-2	.1774-2	.9965	1.99305
20.73	.4002-5	.5772-3	.6933-2	.8326-1	.1433-2	.1771-2	.9965	1.99306
20.74	.3992-5	.5764-3	.6926-2	.8322-1	.1431-2	.1769-2	.9965	1.99306
20.75	.3983-5	.5756-3	.6919-2	.8318-1	.1429-2	.1766-2	.9965	1.99307
20.76	.3973-5	.5748-3	.6913-2	.8314-1	.1427-2	.1764-2	.9965	1.99308
20.77	.3964-5	.5739-3	.6906-2	.8310-1	.1425-2	.1761-2	.9965	1.99308
20.78	.3954-5	.5731-3	.6900-2	.8306-1	.1423-2	.1759-2	.9965	1.99309
20.79	.3945-5	.5723-3	.6893-2	.8302-1	.1421-2	.1756-2	.9965	1.99310
20.80	.3935-5	.5715-3	.6886-2	.8298-1	.1419-2	.1754-2	.9966	1.99310
20.81	.3926-5	.5706-3	.6880-2	.8294-1	.1417-2	.1751-2	.9966	1.99311
20.82	.3917-5	.5698-3	.6873-2	.8291-1	.1415-2	.1749-2	.9966	1.99311
20.83	.3907-5	.5690-3	.6867-2	.8287-1	.1413-2	.1746-2	.9966	1.99312
20.84	.3898-5	.5682-3	.6860-2	.8283-1	.1411-2	.1744-2	.9966	1.99313
20.85	.3889-5	.5674-3	.6854-2	.8279-1	.1409-2	.1741-2	.9966	1.99313
20.86	.3879-5	.5666-3	.6847-2	.8275-1	.1407-2	.1739-2	.9966	1.99314
20.87	.3870-5	.5658-3	.6841-2	.8271-1	.1405-2	.1736-2	.9966	1.99315
20.88	.3861-5	.5650-3	.6834-2	.8267-1	.1403-2	.1734-2	.9966	1.99315
20.89	.3852-5	.5642-3	.6828-2	.8263-1	.1401-2	.1731-2	.9966	1.99316
20.90	.3843-5	.5634-3	.6821-2	.8259-1	.1399-2	.1729-2	.9966	1.99317
20.91	.3834-5	.5626-3	.6815-2	.8255-1	.1397-2	.1726-2	.9966	1.99317
20.92	.3825-5	.5618-3	.6808-2	.8251-1	.1395-2	.1724-2	.9966	1.99318
20.93	.3815-5	.5610-3	.6802-2	.8247-1	.1393-2	.1721-2	.9966	1.99319
20.94	.3806-5	.5602-3	.6795-2	.8243-1	.1391-2	.1719-2	.9966	1.99319
20.95	.3797-5	.5594-3	.6789-2	.8239-1	.1389-2	.1717-2	.9966	1.99320
20.96	.3788-5	.5586-3	.6782-2	.8236-1	.1387-2	.1714-2	.9966	1.99321
20.97	.3779-5	.5578-3	.6776-2	.8232-1	.1385-2	.1712-2	.9966	1.99321
20.98	.3771-5	.5570-3	.6770-2	.8228-1	.1383-2	.1709-2	.9966	1.99322
20.99	.3762-5	.5562-3	.6763-2	.8224-1	.1381-2	.1707-2	.9966	1.99323

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
2.866	81.431	.4490	499.8	3.970	125.9	.2811-2	588.0	20.00
2.865	81.435	.4490	500.3	3.970	126.0	.2807-2	588.6	20.01
2.863	81.439	.4490	500.8	3.970	126.1	.2803-2	589.2	20.02
2.862	81.443	.4490	501.3	3.970	126.2	.2799-2	589.8	20.03
2.860	81.448	.4490	501.8	3.970	126.4	.2795-2	590.3	20.04
2.859	81.452	.4490	502.3	3.970	126.5	.2791-2	590.9	20.05
2.857	81.456	.4490	502.8	3.970	126.6	.2786-2	591.5	20.06
2.856	81.460	.4490	503.3	3.970	126.8	.2782-2	592.1	20.07
2.855	81.465	.4490	503.8	3.970	126.9	.2778-2	592.7	20.08
2.853	81.469	.4490	504.3	3.970	127.0	.2774-2	593.3	20.09
2.852	81.473	.4490	504.8	3.971	127.1	.2770-2	593.9	20.10
2.850	81.477	.4490	505.3	3.971	127.3	.2766-2	594.5	20.11
2.849	81.481	.4490	505.8	3.971	127.4	.2762-2	595.1	20.12
2.847	81.486	.4490	506.3	3.971	127.5	.2758-2	595.6	20.13
2.846	81.490	.4490	506.8	3.971	127.6	.2754-2	596.2	20.14
2.845	81.494	.4490	507.3	3.971	127.8	.2750-2	596.8	20.15
2.843	81.498	.4490	507.8	3.971	127.9	.2746-2	597.4	20.16
2.842	81.502	.4490	508.3	3.971	128.0	.2742-2	598.0	20.17
2.840	81.507	.4490	508.8	3.971	128.1	.2738-2	598.6	20.18
2.839	81.511	.4490	509.3	3.971	128.3	.2734-2	599.2	20.19
2.838	81.515	.4490	509.8	3.971	128.4	.2730-2	599.8	20.20
2.836	81.519	.4490	510.3	3.971	128.5	.2726-2	600.4	20.21
2.835	81.523	.4490	510.8	3.971	128.6	.2722-2	601.0	20.22
2.833	81.527	.4490	511.3	3.971	128.8	.2718-2	601.6	20.23
2.832	81.532	.4490	511.8	3.971	128.9	.2714-2	602.2	20.24
2.831	81.536	.4490	512.3	3.971	129.0	.2710-2	602.8	20.25
2.829	81.540	.4490	512.8	3.971	129.1	.2706-2	603.4	20.26
2.828	81.544	.4490	513.3	3.971	129.3	.2702-2	604.0	20.27
2.826	81.548	.4490	513.8	3.971	129.4	.2698-2	604.6	20.28
2.825	81.552	.4489	514.4	3.971	129.5	.2694-2	605.1	20.29
2.824	81.557	.4489	514.9	3.971	129.7	.2690-2	605.7	20.30
2.822	81.561	.4489	515.4	3.971	129.8	.2686-2	606.3	20.31
2.821	81.565	.4489	515.9	3.971	129.9	.2682-2	606.9	20.32
2.819	81.569	.4489	516.4	3.971	130.0	.2678-2	607.5	20.33
2.818	81.573	.4489	516.9	3.971	130.2	.2674-2	608.1	20.34
2.817	81.577	.4489	517.4	3.971	130.3	.2670-2	608.7	20.35
2.815	81.581	.4489	517.9	3.971	130.4	.2666-2	609.3	20.36
2.814	81.585	.4489	518.4	3.971	130.5	.2663-2	609.9	20.37
2.813	81.589	.4489	518.9	3.971	130.7	.2659-2	610.5	20.38
2.811	81.594	.4489	519.4	3.971	130.8	.2655-2	611.1	20.39
2.810	81.598	.4489	520.0	3.971	130.9	.2651-2	611.7	20.40
2.808	81.602	.4489	520.5	3.971	131.1	.2647-2	612.3	20.41
2.807	81.606	.4489	521.0	3.971	131.2	.2643-2	612.9	20.42
2.806	81.610	.4489	521.5	3.971	131.3	.2639-2	613.5	20.43
2.804	81.614	.4489	522.0	3.971	131.4	.2636-2	614.1	20.44
2.803	81.618	.4489	522.5	3.972	131.6	.2632-2	614.7	20.45
2.801	81.622	.4489	523.0	3.972	131.7	.2628-2	615.3	20.46
2.800	81.626	.4489	523.5	3.972	131.8	.2624-2	615.9	20.47
2.799	81.630	.4489	524.0	3.972	131.9	.2620-2	616.5	20.48
2.797	81.634	.4489	524.6	3.972	132.1	.2617-2	617.1	20.49
2.796	81.638	.4489	525.1	3.972	132.2	.2613-2	617.7	20.50
2.795	81.642	.4489	525.6	3.972	132.3	.2609-2	618.3	20.51
2.793	81.647	.4489	526.1	3.972	132.5	.2605-2	618.9	20.52
2.792	81.651	.4489	526.6	3.972	132.6	.2602-2	619.5	20.53
2.791	81.655	.4489	527.1	3.972	132.7	.2598-2	620.1	20.54
2.789	81.659	.4489	527.6	3.972	132.8	.2594-2	620.7	20.55
2.788	81.663	.4489	528.1	3.972	133.0	.2590-2	621.4	20.56
2.787	81.667	.4489	528.7	3.972	133.1	.2587-2	622.0	20.57
2.785	81.671	.4489	529.2	3.972	133.2	.2583-2	622.6	20.58
2.784	81.675	.4489	529.7	3.972	133.4	.2579-2	623.2	20.59
2.782	81.679	.4489	530.2	3.972	133.5	.2575-2	623.8	20.60
2.781	81.683	.4489	530.7	3.972	133.6	.2572-2	624.4	20.61
2.780	81.687	.4489	531.2	3.972	133.7	.2568-2	625.0	20.62
2.778	81.691	.4489	531.7	3.972	133.9	.2564-2	625.6	20.63
2.777	81.695	.4489	532.3	3.972	134.0	.2561-2	626.2	20.64
2.776	81.699	.4489	532.8	3.972	134.1	.2557-2	626.8	20.65
2.774	81.703	.4489	533.3	3.972	134.3	.2553-2	627.4	20.66
2.773	81.707	.4489	533.8	3.972	134.4	.2550-2	628.0	20.67
2.772	81.711	.4489	534.3	3.972	134.5	.2546-2	628.6	20.68
2.770	81.715	.4489	534.8	3.972	134.6	.2542-2	629.2	20.69
2.769	81.719	.4489	535.4	3.972	134.8	.2539-2	629.8	20.70
2.768	81.723	.4489	535.9	3.972	134.9	.2535-2	630.4	20.71
2.766	81.727	.4489	536.4	3.972	135.0	.2531-2	631.1	20.72
2.765	81.731	.4489	536.9	3.972	135.2	.2528-2	631.7	20.73
2.764	81.735	.4489	537.4	3.972	135.3	.2524-2	632.3	20.74
2.762	81.739	.4489	538.0	3.972	135.4	.2521-2	632.9	20.75
2.761	81.743	.4489	538.5	3.972	135.6	.2517-2	633.5	20.76
2.760	81.747	.4489	539.0	3.972	135.7	.2513-2	634.1	20.77
2.758	81.750	.4489	539.5	3.972	135.8	.2510-2	634.7	20.78
2.757	81.754	.4489	540.0	3.972	135.9	.2506-2	635.3	20.79
2.756	81.758	.4489	540.6	3.972	136.1	.2503-2	635.9	20.80
2.754	81.762	.4489	541.1	3.972	136.2	.2499-2	636.5	20.81
2.753	81.766	.4489	541.6	3.973	136.3	.2495-2	637.2	20.82
2.752	81.770	.4489	542.1	3.973	136.5	.2492-2	637.8	20.83
2.750	81.774	.4489	542.6	3.973	136.6	.2488-2	638.4	20.84
2.749	81.778	.4489	543.2	3.973	136.7	.2485-2	639.0	20.85
2.748	81.782	.4489	543.7	3.973	136.9	.2481-2	639.6	20.86
2.746	81.786	.4489	544.2	3.973	137.0	.2478-2	640.2	20.87
2.745	81.790	.4489	544.7	3.973	137.1	.2474-2	640.8	20.88
2.744	81.794	.4489	545.2	3.973	137.2	.2471-2	641.4	20.89
2.742	81.798	.4488	545.8	3.973	137.4	.2467-2	642.1	20.90
2.741	81.802	.4488	546.3	3.973	137.5	.2464-2	642.7	20.91
2.740	81.805	.4488	546.8	3.973	137.6	.2460-2	643.3	20.92
2.739	81.809	.4488	547.3	3.973	137.8	.2457-2	643.9	20.93
2.737	81.813	.4488	547.9	3.973	137.9	.2453-2	644.5	20.94
2.736	81.817	.4488	548.4	3.973	138.0	.2450-2	645.1	20.95
2.735	81.821	.4488	548.9	3.973	138.2	.2446-2	645.7	20.96
2.733	81.825	.4488	549.4	3.973	138.3	.2443-2	646.4	20.97
2.732	81.829	.4488	550.0	3.973	138.4	.2439-2	647.0	20.98
2.731	81.833	.4488	550.5	3.973	138.6	.2436-2	647.6	20.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
21.00	.3753-5	.5554-3	.6757-2	.8220-1	.1379-2	.1704-2	.9966	1.99323
21.01	.3744-5	.5546-3	.6750-2	.8216-1	.1377-2	.1702-2	.9966	1.99324
21.02	.3735-5	.5538-3	.6744-2	.8212-1	.1375-2	.1700-2	.9966	1.99324
21.03	.3726-5	.5530-3	.6738-2	.8208-1	.1373-2	.1697-2	.9966	1.99325
21.04	.3717-5	.5523-3	.6731-2	.8204-1	.1371-2	.1695-2	.9966	1.99326
21.05	.3709-5	.5515-3	.6725-2	.8201-1	.1369-2	.1692-2	.9966	1.99326
21.06	.3700-5	.5507-3	.6719-2	.8197-1	.1368-2	.1690-2	.9966	1.99327
21.07	.3691-5	.5499-3	.6712-2	.8193-1	.1366-2	.1688-2	.9966	1.99328
21.08	.3683-5	.5491-3	.6706-2	.8189-1	.1364-2	.1685-2	.9966	1.99328
21.09	.3674-5	.5484-3	.6700-2	.8185-1	.1362-2	.1683-2	.9966	1.99329
21.10	.3665-5	.5476-3	.6693-2	.8181-1	.1360-2	.1681-2	.9966	1.99330
21.11	.3657-5	.5468-3	.6687-2	.8177-1	.1358-2	.1678-2	.9967	1.99330
21.12	.3648-5	.5461-3	.6681-2	.8174-1	.1356-2	.1676-2	.9967	1.99331
21.13	.3639-5	.5453-3	.6674-2	.8170-1	.1354-2	.1673-2	.9967	1.99331
21.14	.3631-5	.5445-3	.6668-2	.8166-1	.1352-2	.1671-2	.9967	1.99332
21.15	.3622-5	.5437-3	.6662-2	.8162-1	.1350-2	.1669-2	.9967	1.99333
21.16	.3614-5	.5430-3	.6656-2	.8158-1	.1348-2	.1666-2	.9967	1.99333
21.17	.3605-5	.5422-3	.6649-2	.8154-1	.1347-2	.1664-2	.9967	1.99334
21.18	.3597-5	.5415-3	.6643-2	.8151-1	.1345-2	.1662-2	.9967	1.99335
21.19	.3589-5	.5407-3	.6637-2	.8147-1	.1343-2	.1659-2	.9967	1.99335
21.20	.3580-5	.5399-3	.6631-2	.8143-1	.1341-2	.1657-2	.9967	1.99336
21.21	.3572-5	.5392-3	.6625-2	.8139-1	.1339-2	.1655-2	.9967	1.99336
21.22	.3563-5	.5384-3	.6618-2	.8135-1	.1337-2	.1652-2	.9967	1.99337
21.23	.3555-5	.5377-3	.6612-2	.8131-1	.1335-2	.1650-2	.9967	1.99338
21.24	.3547-5	.5369-3	.6606-2	.8128-1	.1333-2	.1648-2	.9967	1.99338
21.25	.3538-5	.5362-3	.6600-2	.8124-1	.1332-2	.1645-2	.9967	1.99339
21.26	.3530-5	.5354-3	.6594-2	.8120-1	.1330-2	.1643-2	.9967	1.99340
21.27	.3522-5	.5347-3	.6587-2	.8116-1	.1328-2	.1641-2	.9967	1.99340
21.28	.3514-5	.5339-3	.6581-2	.8113-1	.1326-2	.1639-2	.9967	1.99341
21.29	.3506-5	.5332-3	.6575-2	.8109-1	.1324-2	.1636-2	.9967	1.99341
21.30	.3497-5	.5324-3	.6569-2	.8105-1	.1322-2	.1634-2	.9967	1.99342
21.31	.3489-5	.5317-3	.6563-2	.8101-1	.1320-2	.1632-2	.9967	1.99343
21.32	.3481-5	.5309-3	.6557-2	.8097-1	.1319-2	.1629-2	.9967	1.99343
21.33	.3473-5	.5302-3	.6551-2	.8094-1	.1317-2	.1627-2	.9967	1.99344
21.34	.3465-5	.5294-3	.6545-2	.8090-1	.1315-2	.1625-2	.9967	1.99344
21.35	.3457-5	.5287-3	.6538-2	.8086-1	.1313-2	.1623-2	.9967	1.99345
21.36	.3449-5	.5280-3	.6532-2	.8082-1	.1311-2	.1620-2	.9967	1.99346
21.37	.3441-5	.5272-3	.6526-2	.8079-1	.1309-2	.1618-2	.9967	1.99346
21.38	.3433-5	.5265-3	.6520-2	.8075-1	.1308-2	.1616-2	.9967	1.99347
21.39	.3425-5	.5258-3	.6514-2	.8071-1	.1306-2	.1614-2	.9967	1.99348
21.40	.3417-5	.5250-3	.6508-2	.8067-1	.1304-2	.1611-2	.9967	1.99348
21.41	.3409-5	.5243-3	.6502-2	.8064-1	.1302-2	.1609-2	.9967	1.99349
21.42	.3401-5	.5236-3	.6496-2	.8060-1	.1300-2	.1607-2	.9967	1.99349
21.43	.3393-5	.5228-3	.6490-2	.8056-1	.1299-2	.1605-2	.9967	1.99350
21.44	.3385-5	.5221-3	.6484-2	.8052-1	.1297-2	.1602-2	.9968	1.99351
21.45	.3378-5	.5214-3	.6478-2	.8049-1	.1295-2	.1600-2	.9968	1.99351
21.46	.3370-5	.5207-3	.6472-2	.8045-1	.1293-2	.1598-2	.9968	1.99352
21.47	.3362-5	.5199-3	.6466-2	.8041-1	.1291-2	.1596-2	.9968	1.99352
21.48	.3354-5	.5192-3	.6460-2	.8037-1	.1290-2	.1594-2	.9968	1.99353
21.49	.3347-5	.5185-3	.6454-2	.8034-1	.1288-2	.1591-2	.9968	1.99354
21.50	.3339-5	.5178-3	.6448-2	.8030-1	.1286-2	.1589-2	.9968	1.99354
21.51	.3331-5	.5171-3	.6442-2	.8026-1	.1284-2	.1587-2	.9968	1.99355
21.52	.3323-5	.5164-3	.6436-2	.8023-1	.1283-2	.1585-2	.9968	1.99355
21.53	.3316-5	.5156-3	.6430-2	.8019-1	.1281-2	.1583-2	.9968	1.99356
21.54	.3308-5	.5149-3	.6424-2	.8015-1	.1279-2	.1580-2	.9968	1.99357
21.55	.3300-5	.5142-3	.6418-2	.8012-1	.1277-2	.1578-2	.9968	1.99357
21.56	.3293-5	.5135-3	.6413-2	.8008-1	.1276-2	.1576-2	.9968	1.99358
21.57	.3285-5	.5128-3	.6407-2	.8004-1	.1274-2	.1574-2	.9968	1.99358
21.58	.3278-5	.5121-3	.6401-2	.8000-1	.1272-2	.1572-2	.9968	1.99359
21.59	.3270-5	.5114-3	.6395-2	.7997-1	.1270-2	.1570-2	.9968	1.99359
21.60	.3263-5	.5107-3	.6389-2	.7993-1	.1269-2	.1567-2	.9968	1.99360
21.61	.3255-5	.5100-3	.6383-2	.7989-1	.1267-2	.1565-2	.9968	1.99361
21.62	.3248-5	.5093-3	.6377-2	.7986-1	.1265-2	.1563-2	.9968	1.99361
21.63	.3240-5	.5086-3	.6371-2	.7982-1	.1263-2	.1561-2	.9968	1.99362
21.64	.3233-5	.5079-3	.6366-2	.7978-1	.1262-2	.1559-2	.9968	1.99362
21.65	.3225-5	.5072-3	.6360-2	.7975-1	.1260-2	.1557-2	.9968	1.99363
21.66	.3218-5	.5065-3	.6354-2	.7971-1	.1258-2	.1555-2	.9968	1.99364
21.67	.3211-5	.5058-3	.6348-2	.7967-1	.1256-2	.1552-2	.9968	1.99364
21.68	.3203-5	.5051-3	.6342-2	.7964-1	.1255-2	.1550-2	.9968	1.99365
21.69	.3196-5	.5044-3	.6336-2	.7960-1	.1253-2	.1548-2	.9968	1.99365
21.70	.3189-5	.5037-3	.6331-2	.7956-1	.1251-2	.1546-2	.9968	1.99366
21.71	.3181-5	.5030-3	.6325-2	.7953-1	.1250-2	.1544-2	.9968	1.99367
21.72	.3174-5	.5023-3	.6319-2	.7949-1	.1248-2	.1542-2	.9968	1.99367
21.73	.3167-5	.5016-3	.6313-2	.7946-1	.1246-2	.1540-2	.9968	1.99368
21.74	.3160-5	.5009-3	.6307-2	.7942-1	.1244-2	.1538-2	.9968	1.99368
21.75	.3152-5	.5002-3	.6302-2	.7938-1	.1243-2	.1536-2	.9968	1.99369
21.76	.3145-5	.4996-3	.6296-2	.7935-1	.1241-2	.1533-2	.9968	1.99369
21.77	.3138-5	.4989-3	.6290-2	.7931-1	.1239-2	.1531-2	.9968	1.99370
21.78	.3131-5	.4982-3	.6284-2	.7927-1	.1238-2	.1529-2	.9969	1.99371
21.79	.3124-5	.4975-3	.6279-2	.7924-1	.1236-2	.1527-2	.9969	1.99371
21.80	.3117-5	.4968-3	.6273-2	.7920-1	.1234-2	.1525-2	.9969	1.99372
21.81	.3110-5	.4962-3	.6267-2	.7917-1	.1233-2	.1523-2	.9969	1.99372
21.82	.3102-5	.4955-3	.6262-2	.7913-1	.1231-2	.1521-2	.9969	1.99373
21.83	.3095-5	.4948-3	.6256-2	.7909-1	.1229-2	.1519-2	.9969	1.99373
21.84	.3088-5	.4941-3	.6250-2	.7906-1	.1228-2	.1517-2	.9969	1.99374
21.85	.3081-5	.4935-3	.6245-2	.7902-1	.1226-2	.1515-2	.9969	1.99375
21.86	.3074-5	.4928-3	.6239-2	.7899-1	.1224-2	.1513-2	.9969	1.99375
21.87	.3067-5	.4921-3	.6233-2	.7895-1	.1223-2	.1511-2	.9969	1.99376
21.88	.3060-5	.4914-3	.6227-2	.7891-1	.1221-2	.1509-2	.9969	1.99376
21.89	.3054-5	.4908-3	.6222-2	.7888-1	.1219-2	.1506-2	.9969	1.99377
21.90	.3047-5	.4901-3	.6216-2	.7884-1	.1218-2	.1504-2	.9969	1.99377
21.91	.3040-5	.4894-3	.6211-2	.7881-1	.1216-2	.1502-2	.9969	1.99378
21.92	.3033-5	.4888-3	.6205-2	.7877-1	.1214-2	.1500-2	.9969	1.99379
21.93	.3026-5	.4881-3	.6199-2	.7874-1	.1213-2	.1498-2	.9969	1.99379
21.94	.3019-5	.4874-3	.6194-2	.7870-1	.1211-2	.1496-2	.9969	1.99380
21.95	.3013-5	.4868-3	.6188-2	.7866-1	.1209-2	.1494-2	.9969	1.99380
21.96	.3005-5	.4861-3	.6182-2	.7863-1	.1208-2	.1492-2	.9969	1.99381
21.97	.2999-5	.4855-3	.6177-2	.7859-1	.1206-2	.1490-2	.9969	1.99381
21.98	.2992-5	.4848-3	.6171-2	.7856-1	.1205-2	.1488-2	.9969	1.99382
21.99	.2985-5	.4841-3	.6166-2	.7852-1	.1203-2	.1486-2	.9969	1.99382

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
2.729	81.836	.4488	551.0	3.973	138.7	.2433-2	648.2	21.00
2.728	81.840	.4488	551.5	3.973	138.8	.2429-2	648.8	21.01
2.727	81.844	.4488	552.1	3.973	138.9	.2426-2	649.4	21.02
2.726	81.848	.4488	552.6	3.973	139.1	.2422-2	650.1	21.03
2.724	81.852	.4488	553.1	3.973	139.2	.2419-2	650.7	21.04
2.723	81.856	.4488	553.6	3.973	139.3	.2415-2	651.3	21.05
2.722	81.860	.4488	554.2	3.973	139.5	.2412-2	651.9	21.06
2.720	81.863	.4488	554.7	3.973	139.6	.2409-2	652.5	21.07
2.719	81.867	.4488	555.2	3.973	139.7	.2405-2	653.2	21.08
2.718	81.871	.4488	555.7	3.973	139.9	.2402-2	653.8	21.09
2.716	81.875	.4488	556.3	3.973	140.0	.2398-2	654.4	21.10
2.715	81.879	.4488	556.8	3.973	140.1	.2395-2	655.0	21.11
2.714	81.883	.4488	557.3	3.973	140.3	.2392-2	655.6	21.12
2.713	81.886	.4488	557.8	3.973	140.4	.2388-2	656.3	21.13
2.711	81.890	.4488	558.4	3.973	140.5	.2385-2	656.9	21.14
2.710	81.894	.4488	558.9	3.973	140.7	.2382-2	657.5	21.15
2.709	81.898	.4488	559.4	3.973	140.8	.2378-2	658.1	21.16
2.707	81.902	.4488	560.0	3.973	140.9	.2375-2	658.7	21.17
2.706	81.905	.4488	560.5	3.973	141.1	.2372-2	659.4	21.18
2.705	81.909	.4488	561.0	3.973	141.2	.2368-2	660.0	21.19
2.704	81.913	.4488	561.6	3.973	141.3	.2365-2	660.6	21.20
2.702	81.917	.4488	562.1	3.974	141.5	.2362-2	661.2	21.21
2.701	81.921	.4488	562.6	3.974	141.6	.2358-2	661.9	21.22
2.700	81.924	.4488	563.1	3.974	141.7	.2355-2	662.5	21.23
2.699	81.928	.4488	563.7	3.974	141.9	.2352-2	663.1	21.24
2.697	81.932	.4488	564.2	3.974	142.0	.2349-2	663.7	21.25
2.696	81.936	.4488	564.7	3.974	142.1	.2345-2	664.3	21.26
2.695	81.940	.4488	565.3	3.974	142.3	.2342-2	665.0	21.27
2.693	81.943	.4488	565.8	3.974	142.4	.2339-2	665.6	21.28
2.692	81.947	.4488	566.3	3.974	142.5	.2336-2	666.2	21.29
2.691	81.951	.4488	566.9	3.974	142.7	.2332-2	666.9	21.30
2.690	81.955	.4488	567.4	3.974	142.8	.2329-2	667.5	21.31
2.688	81.958	.4488	567.9	3.974	142.9	.2326-2	668.1	21.32
2.687	81.962	.4488	568.5	3.974	143.1	.2323-2	668.7	21.33
2.686	81.966	.4488	569.0	3.974	143.2	.2319-2	669.4	21.34
2.685	81.970	.4488	569.5	3.974	143.3	.2316-2	670.0	21.35
2.683	81.973	.4488	570.1	3.974	143.5	.2313-2	670.6	21.36
2.682	81.977	.4488	570.6	3.974	143.6	.2310-2	671.2	21.37
2.681	81.981	.4488	571.1	3.974	143.7	.2306-2	671.9	21.38
2.680	81.985	.4488	571.7	3.974	143.9	.2303-2	672.5	21.39
2.678	81.988	.4488	572.2	3.974	144.0	.2300-2	673.1	21.40
2.677	81.992	.4488	572.7	3.974	144.1	.2297-2	673.8	21.41
2.676	81.996	.4488	573.3	3.974	144.3	.2294-2	674.4	21.42
2.675	81.999	.4488	573.8	3.974	144.4	.2291-2	675.0	21.43
2.673	82.003	.4488	574.3	3.974	144.5	.2287-2	675.6	21.44
2.672	82.007	.4488	574.9	3.974	144.7	.2284-2	676.3	21.45
2.671	82.011	.4488	575.4	3.974	144.8	.2281-2	676.9	21.46
2.670	82.014	.4488	576.0	3.974	144.9	.2278-2	677.5	21.47
2.668	82.018	.4488	576.5	3.974	145.1	.2275-2	678.2	21.48
2.667	82.022	.4488	577.0	3.974	145.2	.2272-2	678.8	21.49
2.666	82.025	.4488	577.6	3.974	145.3	.2268-2	679.4	21.50
2.665	82.029	.4488	578.1	3.974	145.5	.2265-2	680.1	21.51
2.663	82.033	.4488	578.6	3.974	145.6	.2262-2	680.7	21.52
2.662	82.036	.4488	579.2	3.974	145.7	.2259-2	681.3	21.53
2.661	82.040	.4488	579.7	3.974	145.9	.2256-2	682.0	21.54
2.660	82.044	.4488	580.3	3.974	146.0	.2253-2	682.6	21.55
2.658	82.047	.4488	580.8	3.974	146.1	.2250-2	683.2	21.56
2.657	82.051	.4487	581.3	3.974	146.3	.2247-2	683.9	21.57
2.656	82.055	.4487	581.9	3.974	146.4	.2244-2	684.5	21.58
2.655	82.058	.4487	582.4	3.974	146.5	.2240-2	685.1	21.59
2.654	82.062	.4487	583.0	3.974	146.7	.2237-2	685.8	21.60
2.652	82.066	.4487	583.5	3.974	146.8	.2234-2	686.4	21.61
2.651	82.069	.4487	584.0	3.974	146.9	.2231-2	687.0	21.62
2.650	82.073	.4487	584.6	3.975	147.1	.2228-2	687.7	21.63
2.649	82.077	.4487	585.1	3.975	147.2	.2225-2	688.3	21.64
2.647	82.080	.4487	585.7	3.975	147.4	.2222-2	688.9	21.65
2.646	82.084	.4487	586.2	3.975	147.5	.2219-2	689.6	21.66
2.645	82.088	.4487	586.7	3.975	147.6	.2216-2	690.2	21.67
2.644	82.091	.4487	587.3	3.975	147.8	.2213-2	690.8	21.68
2.643	82.095	.4487	587.8	3.975	147.9	.2210-2	691.5	21.69
2.641	82.098	.4487	588.4	3.975	148.0	.2207-2	692.1	21.70
2.640	82.102	.4487	588.9	3.975	148.2	.2204-2	692.8	21.71
2.639	82.106	.4487	589.4	3.975	148.3	.2201-2	693.4	21.72
2.638	82.109	.4487	590.0	3.975	148.4	.2198-2	694.0	21.73
2.636	82.113	.4487	590.5	3.975	148.6	.2195-2	694.7	21.74
2.635	82.117	.4487	591.1	3.975	148.7	.2192-2	695.3	21.75
2.634	82.120	.4487	591.6	3.975	148.8	.2189-2	695.9	21.76
2.633	82.124	.4487	592.2	3.975	149.0	.2186-2	696.6	21.77
2.632	82.127	.4487	592.7	3.975	149.1	.2183-2	697.2	21.78
2.630	82.131	.4487	593.3	3.975	149.3	.2180-2	697.9	21.79
2.629	82.135	.4487	593.8	3.975	149.4	.2177-2	698.5	21.80
2.628	82.138	.4487	594.3	3.975	149.5	.2174-2	699.1	21.81
2.627	82.142	.4487	594.9	3.975	149.7	.2171-2	699.8	21.82
2.626	82.145	.4487	595.4	3.975	149.8	.2168-2	700.4	21.83
2.624	82.149	.4487	596.0	3.975	149.9	.2165-2	701.1	21.84
2.623	82.152	.4487	596.5	3.975	150.1	.2162-2	701.7	21.85
2.622	82.156	.4487	597.1	3.975	150.2	.2159-2	708.4	21.86
2.621	82.160	.4487	597.6	3.975	150.3	.2156-2	703.0	21.87
2.620	82.163	.4487	598.2	3.975	150.5	.2153-2	703.6	21.88
2.618	82.167	.4487	598.7	3.975	150.6	.2151-2	704.3	21.89
2.617	82.170	.4487	599.3	3.975	150.8	.2148-2	704.9	21.90
2.616	82.174	.4487	599.8	3.975	150.9	.2145-2	705.6	21.91
2.615	82.177	.4487	600.4	3.975	151.0	.2142-2	706.2	21.92
2.614	82.181	.4487	600.9	3.975	151.2	.2139-2	706.9	21.93
2.612	82.184	.4487	601.5	3.975	151.3	.2136-2	707.5	21.94
2.611	82.188	.4487	602.0	3.975	151.4	.2133-2	708.1	21.95
2.610	82.192	.4487	602.6	3.975	151.6	.2130-2	708.8	21.96
2.609	82.195	.4487	603.1	3.975	151.7	.2127-2	709.4	21.97
2.608	82.199	.4487	603.7	3.975	151.8	.2124-2	710.1	21.98
2.606	82.202	.4487	604.2	3.975	152.0	.2122-2	710.7	21.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
22.00	.2978-5	.4835-3	.6160-2	.7849-1	.1201-2	.1484-2	.9969	1.99383
22.01	.2972-5	.4828-3	.6155-2	.7845-1	.1200-2	.1482-2	.9969	1.99384
22.02	.2965-5	.4822-3	.6149-2	.7842-1	.1198-2	.1480-2	.9969	1.99384
22.03	.2958-5	.4815-3	.6144-2	.7838-1	.1196-2	.1478-2	.9969	1.99385
22.04	.2952-5	.4809-3	.6138-2	.7835-1	.1195-2	.1476-2	.9969	1.99385
22.05	.2945-5	.4802-3	.6132-2	.7831-1	.1193-2	.1474-2	.9969	1.99386
22.06	.2938-5	.4796-3	.6127-2	.7827-1	.1192-2	.1472-2	.9969	1.99386
22.07	.2932-5	.4789-3	.6121-2	.7824-1	.1190-2	.1470-2	.9969	1.99387
22.08	.2925-5	.4783-3	.6116-2	.7820-1	.1188-2	.1468-2	.9969	1.99387
22.09	.2919-5	.4776-3	.6110-2	.7817-1	.1187-2	.1466-2	.9969	1.99388
22.10	.2912-5	.4770-3	.6105-2	.7813-1	.1185-2	.1464-2	.9969	1.99389
22.11	.2905-5	.4764-3	.6099-2	.7810-1	.1184-2	.1462-2	.9969	1.99389
22.12	.2899-5	.4757-3	.6094-2	.7806-1	.1182-2	.1460-2	.9969	1.99390
22.13	.2892-5	.4751-3	.6088-2	.7803-1	.1180-2	.1458-2	.9970	1.99390
22.14	.2886-5	.4744-3	.6083-2	.7799-1	.1179-2	.1456-2	.9970	1.99391
22.15	.2879-5	.4738-3	.6078-2	.7796-1	.1177-2	.1454-2	.9970	1.99391
22.16	.2873-5	.4732-3	.6072-2	.7792-1	.1176-2	.1453-2	.9970	1.99392
22.17	.2867-5	.4725-3	.6067-2	.7789-1	.1174-2	.1451-2	.9970	1.99392
22.18	.2860-5	.4719-3	.6061-2	.7785-1	.1173-2	.1449-2	.9970	1.99393
22.19	.2854-5	.4713-3	.6056-2	.7782-1	.1171-2	.1447-2	.9970	1.99394
22.20	.2847-5	.4706-3	.6050-2	.7778-1	.1169-2	.1445-2	.9970	1.99394
22.21	.2841-5	.4700-3	.6045-2	.7775-1	.1168-2	.1443-2	.9970	1.99395
22.22	.2835-5	.4694-3	.6040-2	.7771-1	.1166-2	.1441-2	.9970	1.99395
22.23	.2828-5	.4687-3	.6034-2	.7768-1	.1165-2	.1439-2	.9970	1.99396
22.24	.2822-5	.4681-3	.6029-2	.7764-1	.1163-2	.1437-2	.9970	1.99396
22.25	.2816-5	.4675-3	.6023-2	.7761-1	.1162-2	.1435-2	.9970	1.99397
22.26	.2809-5	.4668-3	.6018-2	.7758-1	.1160-2	.1433-2	.9970	1.99397
22.27	.2803-5	.4662-3	.6013-2	.7754-1	.1159-2	.1431-2	.9970	1.99398
22.28	.2797-5	.4656-3	.6007-2	.7751-1	.1157-2	.1428-2	.9970	1.99398
22.29	.2791-5	.4650-3	.6002-2	.7747-1	.1155-2	.1427-2	.9970	1.99399
22.30	.2785-5	.4644-3	.5997-2	.7744-1	.1154-2	.1426-2	.9970	1.99399
22.31	.2778-5	.4637-3	.5991-2	.7740-1	.1152-2	.1424-2	.9970	1.99400
22.32	.2772-5	.4631-3	.5986-2	.7737-1	.1151-2	.1422-2	.9970	1.99401
22.33	.2766-5	.4625-3	.5981-2	.7733-1	.1149-2	.1420-2	.9970	1.99401
22.34	.2760-5	.4619-3	.5975-2	.7730-1	.1148-2	.1418-2	.9970	1.99402
22.35	.2754-5	.4613-3	.5970-2	.7727-1	.1146-2	.1416-2	.9970	1.99402
22.36	.2748-5	.4606-3	.5965-2	.7723-1	.1145-2	.1414-2	.9970	1.99403
22.37	.2741-5	.4600-3	.5959-2	.7720-1	.1143-2	.1412-2	.9970	1.99403
22.38	.2735-5	.4594-3	.5954-2	.7716-1	.1142-2	.1410-2	.9970	1.99404
22.39	.2729-5	.4588-3	.5949-2	.7713-1	.1140-2	.1409-2	.9970	1.99404
22.40	.2723-5	.4582-3	.5943-2	.7709-1	.1139-2	.1407-2	.9970	1.99405
22.41	.2717-5	.4576-3	.5938-2	.7706-1	.1137-2	.1405-2	.9970	1.99405
22.42	.2711-5	.4570-3	.5933-2	.7703-1	.1136-2	.1403-2	.9970	1.99406
22.43	.2705-5	.4564-3	.5928-2	.7699-1	.1134-2	.1401-2	.9970	1.99406
22.44	.2699-5	.4558-3	.5922-2	.7696-1	.1133-2	.1399-2	.9970	1.99407
22.45	.2693-5	.4552-3	.5917-2	.7692-1	.1131-2	.1397-2	.9970	1.99407
22.46	.2687-5	.4546-3	.5912-2	.7689-1	.1130-2	.1396-2	.9970	1.99408
22.47	.2681-5	.4540-3	.5907-2	.7685-1	.1128-2	.1394-2	.9970	1.99408
22.48	.2675-5	.4534-3	.5901-2	.7682-1	.1127-2	.1392-2	.9970	1.99409
22.49	.2670-5	.4528-3	.5896-2	.7679-1	.1125-2	.1390-2	.9970	1.99410
22.50	.2664-5	.4522-3	.5891-2	.7675-1	.1124-2	.1388-2	.9971	1.99410
22.51	.2658-5	.4516-3	.5886-2	.7672-1	.1122-2	.1386-2	.9971	1.99411
22.52	.2652-5	.4510-3	.5881-2	.7669-1	.1121-2	.1384-2	.9971	1.99411
22.53	.2646-5	.4504-3	.5875-2	.7665-1	.1119-2	.1383-2	.9971	1.99412
22.54	.2640-5	.4498-3	.5870-2	.7662-1	.1118-2	.1381-2	.9971	1.99412
22.55	.2634-5	.4492-3	.5865-2	.7658-1	.1116-2	.1379-2	.9971	1.99413
22.56	.2629-5	.4486-3	.5860-2	.7655-1	.1115-2	.1377-2	.9971	1.99413
22.57	.2623-5	.4480-3	.5855-2	.7652-1	.1113-2	.1375-2	.9971	1.99414
22.58	.2617-5	.4474-3	.5850-2	.7648-1	.1112-2	.1374-2	.9971	1.99414
22.59	.2611-5	.4468-3	.5844-2	.7645-1	.1110-2	.1372-2	.9971	1.99415
22.60	.2606-5	.4462-3	.5839-2	.7642-1	.1109-2	.1370-2	.9971	1.99415
22.61	.2600-5	.4456-3	.5834-2	.7638-1	.1108-2	.1368-2	.9971	1.99416
22.62	.2594-5	.4450-3	.5829-2	.7635-1	.1106-2	.1366-2	.9971	1.99416
22.63	.2588-5	.4445-3	.5824-2	.7631-1	.1105-2	.1365-2	.9971	1.99417
22.64	.2583-5	.4439-3	.5819-2	.7628-1	.1103-2	.1363-2	.9971	1.99417
22.65	.2577-5	.4433-3	.5814-2	.7625-1	.1102-2	.1361-2	.9971	1.99418
22.66	.2571-5	.4427-3	.5809-2	.7621-1	.1100-2	.1359-2	.9971	1.99418
22.67	.2566-5	.4421-3	.5804-2	.7618-1	.1099-2	.1357-2	.9971	1.99419
22.68	.2560-5	.4415-3	.5798-2	.7615-1	.1097-2	.1356-2	.9971	1.99419
22.69	.2555-5	.4410-3	.5793-2	.7611-1	.1096-2	.1354-2	.9971	1.99420
22.70	.2549-5	.4404-3	.5788-2	.7608-1	.1095-2	.1352-2	.9971	1.99420
22.71	.2543-5	.4398-3	.5783-2	.7605-1	.1093-2	.1350-2	.9971	1.99421
22.72	.2538-5	.4392-3	.5778-2	.7601-1	.1092-2	.1349-2	.9971	1.99421
22.73	.2532-5	.4386-3	.5773-2	.7598-1	.1090-2	.1347-2	.9971	1.99422
22.74	.2527-5	.4381-3	.5768-2	.7595-1	.1089-2	.1345-2	.9971	1.99422
22.75	.2521-5	.4375-3	.5763-2	.7591-1	.1087-2	.1343-2	.9971	1.99423
22.76	.2516-5	.4369-3	.5758-2	.7588-1	.1086-2	.1341-2	.9971	1.99423
22.77	.2510-5	.4363-3	.5753-2	.7585-1	.1085-2	.1340-2	.9971	1.99424
22.78	.2505-5	.4358-3	.5748-2	.7582-1	.1083-2	.1338-2	.9971	1.99424
22.79	.2499-5	.4352-3	.5743-2	.7578-1	.1082-2	.1336-2	.9971	1.99425
22.80	.2494-5	.4346-3	.5738-2	.7575-1	.1080-2	.1334-2	.9971	1.99425
22.81	.2488-5	.4341-3	.5733-2	.7572-1	.1079-2	.1333-2	.9971	1.99426
22.82	.2483-5	.4335-3	.5728-2	.7568-1	.1078-2	.1331-2	.9971	1.99426
22.83	.2478-5	.4329-3	.5723-2	.7565-1	.1076-2	.1329-2	.9971	1.99427
22.84	.2472-5	.4324-3	.5718-2	.7562-1	.1075-2	.1328-2	.9971	1.99427
22.85	.2467-5	.4318-3	.5713-2	.7558-1	.1073-2	.1326-2	.9971	1.99428
22.86	.2462-5	.4312-3	.5708-2	.7555-1	.1072-2	.1324-2	.9971	1.99428
22.87	.2456-5	.4307-3	.5703-2	.7552-1	.1071-2	.1322-2	.9971	1.99429
22.88	.2451-5	.4301-3	.5698-2	.7549-1	.1069-2	.1321-2	.9971	1.99429
22.89	.2446-5	.4296-3	.5693-2	.7545-1	.1068-2	.1319-2	.9971	1.99430
22.90	.2440-5	.4290-3	.5688-2	.7542-1	.1066-2	.1317-2	.9972	1.99430
22.91	.2435-5	.4284-3	.5683-2	.7539-1	.1065-2	.1316-2	.9972	1.99431
22.92	.2430-5	.4279-3	.5678-2	.7535-1	.1064-2	.1314-2	.9972	1.99431
22.93	.2424-5	.4273-3	.5673-2	.7532-1	.1062-2	.1312-2	.9972	1.99432
22.94	.2419-5	.4268-3	.5668-2	.7529-1	.1061-2	.1310-2	.9972	1.99432
22.95	.2414-5	.4262-3	.5664-2	.7526-1	.1060-2	.1309-2	.9972	1.99433
22.96	.2409-5	.4257-3	.5659-2	.7522-1	.1058-2	.1307-2	.9972	1.99433
22.97	.2403-5	.4251-3	.5654-2	.7519-1	.1057-2	.1305-2	.9972	1.99434
22.98	.2398-5	.4246-3	.5649-2	.7516-1	.1055-2	.1304-2	.9972	1.99434
22.99	.2393-5	.4240-3	.5644-2	.7513-1	.1054-2	.1302-2	.9972	1.99435

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
2.605	82.206	.4487	604.8	3.975	152.1	.2119-2	711.4	22.00
2.604	82.209	.4487	605.3	3.975	152.3	.2116-2	712.0	22.01
2.603	82.213	.4487	605.9	3.975	152.4	.2113-2	712.7	22.02
2.602	82.216	.4487	606.4	3.975	152.5	.2110-2	713.3	22.03
2.601	82.220	.4487	607.0	3.975	152.7	.2107-2	714.0	22.04
2.599	82.223	.4487	607.5	3.975	152.8	.2104-2	714.6	22.05
2.598	82.227	.4487	608.1	3.975	153.0	.2102-2	715.3	22.06
2.597	82.230	.4487	608.6	3.976	153.1	.2099-2	715.9	22.07
2.596	82.234	.4487	609.2	3.976	153.2	.2096-2	716.6	22.08
2.595	82.237	.4487	609.7	3.976	153.4	.2093-2	717.2	22.09
2.593	82.241	.4487	610.3	3.976	153.5	.2090-2	717.8	22.10
2.592	82.244	.4487	610.8	3.976	153.6	.2088-2	718.5	22.11
2.591	82.248	.4487	611.4	3.976	153.8	.2085-2	719.1	22.12
2.590	82.251	.4487	611.9	3.976	153.9	.2082-2	719.8	22.13
2.589	82.255	.4487	612.5	3.976	154.1	.2079-2	720.4	22.14
2.588	82.258	.4487	613.0	3.976	154.2	.2076-2	721.1	22.15
2.586	82.262	.4487	613.6	3.976	154.3	.2074-2	721.7	22.16
2.585	82.265	.4487	614.1	3.976	154.5	.2071-2	722.4	22.17
2.584	82.269	.4487	614.7	3.976	154.6	.2068-2	723.1	22.18
2.583	82.272	.4487	615.2	3.976	154.7	.2065-2	723.7	22.19
2.582	82.276	.4487	615.8	3.976	154.9	.2063-2	724.4	22.20
2.581	82.279	.4487	616.4	3.976	155.0	.2060-2	725.0	22.21
2.579	82.283	.4487	616.9	3.976	155.2	.2057-2	725.7	22.22
2.578	82.286	.4487	617.5	3.976	155.3	.2054-2	726.3	22.23
2.577	82.289	.4487	618.0	3.976	155.4	.2052-2	727.0	22.24
2.576	82.293	.4487	618.6	3.976	155.6	.2049-2	727.6	22.25
2.575	82.296	.4487	619.1	3.976	155.7	.2046-2	728.3	22.26
2.574	82.300	.4487	619.7	3.976	155.9	.2043-2	728.9	22.27
2.572	82.303	.4487	620.2	3.976	156.0	.2041-2	729.6	22.28
2.571	82.307	.4487	620.8	3.976	156.1	.2038-2	730.2	22.29
2.570	82.310	.4487	621.4	3.976	156.3	.2035-2	730.9	22.30
2.569	82.313	.4486	621.9	3.976	156.4	.2032-2	731.5	22.31
2.568	82.317	.4486	622.5	3.976	156.6	.2030-2	732.2	22.32
2.567	82.320	.4486	623.0	3.976	156.7	.2027-2	732.9	22.33
2.566	82.324	.4486	623.6	3.976	156.8	.2024-2	733.5	22.34
2.564	82.327	.4486	624.2	3.976	157.0	.2022-2	734.2	22.35
2.563	82.331	.4486	624.7	3.976	157.1	.2019-2	734.8	22.36
2.562	82.334	.4486	625.3	3.976	157.3	.2016-2	735.5	22.37
2.561	82.337	.4486	625.8	3.976	157.4	.2014-2	736.1	22.38
2.560	82.341	.4486	626.4	3.976	157.5	.2011-2	736.8	22.39
2.559	82.344	.4486	627.0	3.976	157.7	.2008-2	737.5	22.40
2.558	82.348	.4486	627.5	3.976	157.8	.2006-2	738.1	22.41
2.556	82.351	.4486	628.1	3.976	158.0	.2003-2	738.8	22.42
2.555	82.354	.4486	628.6	3.976	158.1	.2000-2	739.4	22.43
2.554	82.358	.4486	629.2	3.976	158.2	.1998-2	740.1	22.44
2.553	82.361	.4486	629.8	3.976	158.4	.1995-2	740.8	22.45
2.552	82.365	.4486	630.3	3.976	158.5	.1992-2	741.4	22.46
2.551	82.368	.4486	630.9	3.976	158.7	.1990-2	742.1	22.47
2.550	82.371	.4486	631.4	3.976	158.8	.1987-2	742.7	22.48
2.548	82.375	.4486	632.0	3.976	158.9	.1985-2	743.4	22.49
2.547	82.378	.4486	632.6	3.976	159.1	.1982-2	744.1	22.50
2.546	82.381	.4486	633.1	3.976	159.2	.1979-2	744.7	22.51
2.545	82.385	.4486	633.7	3.976	159.4	.1977-2	745.4	22.52
2.544	82.388	.4486	634.3	3.976	159.5	.1974-2	746.0	22.53
2.543	82.392	.4486	634.8	3.977	159.6	.1971-2	746.7	22.54
2.542	82.395	.4486	635.4	3.977	159.8	.1969-2	747.4	22.55
2.541	82.398	.4486	635.9	3.977	159.9	.1966-2	748.0	22.56
2.539	82.402	.4486	636.5	3.977	160.1	.1964-2	748.7	22.57
2.538	82.405	.4486	637.1	3.977	160.2	.1961-2	749.4	22.58
2.537	82.408	.4486	637.6	3.977	160.3	.1959-2	750.0	22.59
2.536	82.412	.4486	638.2	3.977	160.5	.1956-2	750.7	22.60
2.535	82.415	.4486	638.8	3.977	160.6	.1953-2	751.3	22.61
2.534	82.418	.4486	639.3	3.977	160.8	.1951-2	752.0	22.62
2.533	82.422	.4486	639.9	3.977	160.9	.1948-2	752.7	22.63
2.532	82.425	.4486	640.5	3.977	161.1	.1946-2	753.3	22.64
2.530	82.428	.4486	641.0	3.977	161.2	.1943-2	754.0	22.65
2.529	82.432	.4486	641.6	3.977	161.3	.1941-2	754.7	22.66
2.528	82.435	.4486	642.2	3.977	161.5	.1938-2	755.3	22.67
2.527	82.438	.4486	642.7	3.977	161.6	.1936-2	756.0	22.68
2.526	82.442	.4486	643.3	3.977	161.8	.1933-2	756.7	22.69
2.525	82.445	.4486	643.9	3.977	161.9	.1930-2	757.3	22.70
2.524	82.448	.4486	644.4	3.977	162.0	.1928-2	758.0	22.71
2.523	82.452	.4486	645.0	3.977	162.2	.1925-2	758.7	22.72
2.522	82.455	.4486	645.6	3.977	162.3	.1923-2	759.3	22.73
2.520	82.458	.4486	646.1	3.977	162.5	.1920-2	760.0	22.74
2.519	82.461	.4486	646.7	3.977	162.6	.1918-2	760.7	22.75
2.518	82.465	.4486	647.3	3.977	162.8	.1915-2	761.3	22.76
2.517	82.468	.4486	647.8	3.977	162.9	.1913-2	762.0	22.77
2.516	82.471	.4486	648.4	3.977	163.0	.1910-2	762.7	22.78
2.515	82.475	.4486	649.0	3.977	163.2	.1908-2	763.3	22.79
2.514	82.478	.4486	649.6	3.977	163.3	.1905-2	764.0	22.80
2.513	82.481	.4486	650.1	3.977	163.5	.1903-2	764.7	22.81
2.512	82.485	.4486	650.7	3.977	163.6	.1900-2	765.4	22.82
2.510	82.488	.4486	651.3	3.977	163.8	.1898-2	766.0	22.83
2.509	82.491	.4486	651.8	3.977	163.9	.1895-2	766.7	22.84
2.508	82.494	.4486	652.4	3.977	164.0	.1893-2	767.4	22.85
2.507	82.498	.4486	653.0	3.977	164.2	.1891-2	768.0	22.86
2.506	82.501	.4486	653.5	3.977	164.3	.1888-2	768.7	22.87
2.505	82.504	.4486	654.1	3.977	164.5	.1886-2	769.4	22.88
2.504	82.507	.4486	654.7	3.977	164.6	.1883-2	770.1	22.89
2.503	82.511	.4486	655.3	3.977	164.8	.1881-2	770.7	22.90
2.502	82.514	.4486	655.8	3.977	164.9	.1878-2	771.4	22.91
2.501	82.517	.4486	656.4	3.977	165.0	.1876-2	772.1	22.92
2.500	82.520	.4486	657.0	3.977	165.2	.1873-2	772.7	22.93
2.498	82.524	.4486	657.6	3.977	165.3	.1871-2	773.4	22.94
2.497	82.527	.4486	658.1	3.977	165.5	.1869-2	774.1	22.95
2.496	82.530	.4486	658.7	3.977	165.6	.1866-2	774.8	22.96
2.495	82.533	.4486	659.3	3.977	165.8	.1864-2	775.4	22.97
2.494	82.537	.4486	659.9	3.977	165.9	.1861-2	776.1	22.98
2.493	82.540	.4486	660.4	3.977	166.0	.1859-2	776.8	22.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
23.00	.2388-5	.4235-3	.5639-2	.7509-1	.1053-2	.1300-2	.9972	1.99435
23.01	.2383-5	.4229-3	.5634-2	.7506-1	.1051-2	.1299-2	.9972	1.99436
23.02	.2378-5	.4224-3	.5629-2	.7503-1	.1050-2	.1297-2	.9972	1.99436
23.03	.2373-5	.4218-3	.5624-2	.7500-1	.1049-2	.1295-2	.9972	1.99437
23.04	.2367-5	.4213-3	.5620-2	.7496-1	.1047-2	.1294-2	.9972	1.99437
23.05	.2362-5	.4207-3	.5615-2	.7493-1	.1046-2	.1292-2	.9972	1.99438
23.06	.2357-5	.4202-3	.5610-2	.7490-1	.1045-2	.1290-2	.9972	1.99438
23.07	.2352-5	.4196-3	.5605-2	.7487-1	.1043-2	.1289-2	.9972	1.99439
23.08	.2347-5	.4191-3	.5600-2	.7484-1	.1042-2	.1287-2	.9972	1.99439
23.09	.2342-5	.4186-3	.5595-2	.7480-1	.1041-2	.1285-2	.9972	1.99440
23.10	.2337-5	.4180-3	.5591-2	.7477-1	.1039-2	.1284-2	.9972	1.99440
23.11	.2332-5	.4175-3	.5586-2	.7474-1	.1038-2	.1282-2	.9972	1.99441
23.12	.2327-5	.4169-3	.5581-2	.7471-1	.1037-2	.1280-2	.9972	1.99441
23.13	.2322-5	.4164-3	.5576-2	.7467-1	.1035-2	.1279-2	.9972	1.99442
23.14	.2317-5	.4159-3	.5571-2	.7464-1	.1034-2	.1277-2	.9972	1.99442
23.15	.2312-5	.4153-3	.5567-2	.7461-1	.1033-2	.1275-2	.9972	1.99443
23.16	.2307-5	.4148-3	.5562-2	.7458-1	.1031-2	.1274-2	.9972	1.99443
23.17	.2302-5	.4143-3	.5557-2	.7455-1	.1030-2	.1272-2	.9972	1.99444
23.18	.2297-5	.4137-3	.5552-2	.7451-1	.1029-2	.1270-2	.9972	1.99444
23.19	.2292-5	.4132-3	.5548-2	.7448-1	.1027-2	.1269-2	.9972	1.99444
23.20	.2287-5	.4127-3	.5543-2	.7445-1	.1026-2	.1267-2	.9972	1.99445
23.21	.2282-5	.4121-3	.5538-2	.7442-1	.1025-2	.1266-2	.9972	1.99445
23.22	.2278-5	.4116-3	.5533-2	.7439-1	.1023-2	.1264-2	.9972	1.99446
23.23	.2273-5	.4111-3	.5529-2	.7435-1	.1022-2	.1262-2	.9972	1.99446
23.24	.2268-5	.4105-3	.5524-2	.7432-1	.1021-2	.1261-2	.9972	1.99447
23.25	.2263-5	.4100-3	.5519-2	.7429-1	.1019-2	.1259-2	.9972	1.99447
23.26	.2258-5	.4095-3	.5514-2	.7426-1	.1018-2	.1257-2	.9972	1.99448
23.27	.2253-5	.4090-3	.5510-2	.7423-1	.1017-2	.1256-2	.9972	1.99448
23.28	.2249-5	.4084-3	.5505-2	.7420-1	.1015-2	.1254-2	.9972	1.99449
23.29	.2244-5	.4079-3	.5500-2	.7416-1	.1014-2	.1253-2	.9972	1.99449
23.30	.2239-5	.4074-3	.5496-2	.7413-1	.1013-2	.1251-2	.9972	1.99450
23.31	.2234-5	.4069-3	.5491-2	.7410-1	.1012-2	.1249-2	.9973	1.99450
23.32	.2229-5	.4064-3	.5486-2	.7407-1	.1010-2	.1248-2	.9973	1.99451
23.33	.2225-5	.4058-3	.5482-2	.7404-1	.1009-2	.1246-2	.9973	1.99451
23.34	.2220-5	.4053-3	.5477-2	.7401-1	.1008-2	.1245-2	.9973	1.99452
23.35	.2215-5	.4048-3	.5472-2	.7397-1	.1006-2	.1243-2	.9973	1.99452
23.36	.2210-5	.4043-3	.5468-2	.7394-1	.1005-2	.1241-2	.9973	1.99452
23.37	.2206-5	.4038-3	.5463-2	.7391-1	.1004-2	.1240-2	.9973	1.99453
23.38	.2201-5	.4033-3	.5458-2	.7388-1	.1003-2	.1238-2	.9973	1.99453
23.39	.2196-5	.4027-3	.5454-2	.7385-1	.1001-2	.1237-2	.9973	1.99454
23.40	.2192-5	.4022-3	.5449-2	.7382-1	.1000-2	.1235-2	.9973	1.99454
23.41	.2187-5	.4017-3	.5444-2	.7379-1	.9988-3	.1234-2	.9973	1.99455
23.42	.2182-5	.4012-3	.5440-2	.7375-1	.9976-3	.1232-2	.9973	1.99455
23.43	.2178-5	.4007-3	.5435-2	.7372-1	.9963-3	.1230-2	.9973	1.99456
23.44	.2173-5	.4002-3	.5431-2	.7369-1	.9950-3	.1229-2	.9973	1.99456
23.45	.2169-5	.3997-3	.5426-2	.7366-1	.9938-3	.1227-2	.9973	1.99457
23.46	.2164-5	.3992-3	.5421-2	.7363-1	.9925-3	.1226-2	.9973	1.99457
23.47	.2159-5	.3987-3	.5417-2	.7360-1	.9913-3	.1224-2	.9973	1.99458
23.48	.2155-5	.3982-3	.5412-2	.7357-1	.9900-3	.1223-2	.9973	1.99458
23.49	.2150-5	.3976-3	.5408-2	.7354-1	.9887-3	.1221-2	.9973	1.99459
23.50	.2146-5	.3971-3	.5403-2	.7350-1	.9875-3	.1220-2	.9973	1.99459
23.51	.2141-5	.3966-3	.5398-2	.7347-1	.9862-3	.1218-2	.9973	1.99459
23.52	.2137-5	.3961-3	.5394-2	.7344-1	.9850-3	.1216-2	.9973	1.99460
23.53	.2132-5	.3956-3	.5389-2	.7341-1	.9838-3	.1215-2	.9973	1.99460
23.54	.2128-5	.3951-3	.5385-2	.7338-1	.9825-3	.1213-2	.9973	1.99461
23.55	.2123-5	.3946-3	.5380-2	.7335-1	.9813-3	.1212-2	.9973	1.99461
23.56	.2119-5	.3941-3	.5376-2	.7332-1	.9800-3	.1210-2	.9973	1.99462
23.57	.2114-5	.3936-3	.5371-2	.7329-1	.9788-3	.1209-2	.9973	1.99462
23.58	.2110-5	.3931-3	.5367-2	.7326-1	.9776-3	.1207-2	.9973	1.99463
23.59	.2105-5	.3926-3	.5362-2	.7323-1	.9763-3	.1206-2	.9973	1.99463
23.60	.2101-5	.3921-3	.5358-2	.7320-1	.9751-3	.1204-2	.9973	1.99464
23.61	.2097-5	.3916-3	.5353-2	.7316-1	.9739-3	.1203-2	.9973	1.99464
23.62	.2092-5	.3912-3	.5349-2	.7313-1	.9727-3	.1201-2	.9973	1.99464
23.63	.2088-5	.3907-3	.5344-2	.7310-1	.9714-3	.1200-2	.9973	1.99465
23.64	.2083-5	.3902-3	.5340-2	.7307-1	.9702-3	.1198-2	.9973	1.99465
23.65	.2079-5	.3897-3	.5335-2	.7304-1	.9690-3	.1197-2	.9973	1.99466
23.66	.2075-5	.3892-3	.5331-2	.7301-1	.9678-3	.1195-2	.9973	1.99466
23.67	.2070-5	.3887-3	.5326-2	.7298-1	.9666-3	.1194-2	.9973	1.99467
23.68	.2066-5	.3882-3	.5322-2	.7295-1	.9653-3	.1192-2	.9973	1.99467
23.69	.2062-5	.3877-3	.5317-2	.7292-1	.9641-3	.1191-2	.9973	1.99468
23.70	.2057-5	.3872-3	.5313-2	.7289-1	.9629-3	.1189-2	.9973	1.99468
23.71	.2053-5	.3867-3	.5308-2	.7286-1	.9617-3	.1188-2	.9973	1.99468
23.72	.2049-5	.3863-3	.5304-2	.7283-1	.9605-3	.1186-2	.9973	1.99469
23.73	.2044-5	.3858-3	.5299-2	.7280-1	.9593-3	.1185-2	.9973	1.99469
23.74	.2040-5	.3853-3	.5295-2	.7277-1	.9581-3	.1183-2	.9973	1.99470
23.75	.2036-5	.3848-3	.5290-2	.7274-1	.9569-3	.1182-2	.9974	1.99470
23.76	.2031-5	.3843-3	.5286-2	.7270-1	.9557-3	.1180-2	.9974	1.99471
23.77	.2027-5	.3838-3	.5282-2	.7267-1	.9545-3	.1179-2	.9974	1.99471
23.78	.2023-5	.3834-3	.5277-2	.7264-1	.9533-3	.1177-2	.9974	1.99472
23.79	.2019-5	.3829-3	.5273-2	.7261-1	.9521-3	.1176-2	.9974	1.99472
23.80	.2015-5	.3824-3	.5268-2	.7258-1	.9509-3	.1174-2	.9974	1.99472
23.81	.2010-5	.3819-3	.5264-2	.7255-1	.9498-3	.1173-2	.9974	1.99473
23.82	.2006-5	.3814-3	.5260-2	.7252-1	.9486-3	.1171-2	.9974	1.99473
23.83	.2002-5	.3810-3	.5255-2	.7249-1	.9474-3	.1170-2	.9974	1.99474
23.84	.1998-5	.3805-3	.5251-2	.7246-1	.9462-3	.1168-2	.9974	1.99474
23.85	.1994-5	.3800-3	.5246-2	.7243-1	.9450-3	.1167-2	.9974	1.99475
23.86	.1990-5	.3795-3	.5242-2	.7240-1	.9439-3	.1166-2	.9974	1.99475
23.87	.1985-5	.3791-3	.5238-2	.7237-1	.9427-3	.1164-2	.9974	1.99476
23.88	.1981-5	.3786-3	.5233-2	.7234-1	.9415-3	.1163-2	.9974	1.99476
23.89	.1977-5	.3781-3	.5229-2	.7231-1	.9403-3	.1161-2	.9974	1.99476
23.90	.1973-5	.3776-3	.5225-2	.7228-1	.9392-3	.1160-2	.9974	1.99477
23.91	.1969-5	.3772-3	.5220-2	.7225-1	.9380-3	.1158-2	.9974	1.99477
23.92	.1965-5	.3767-3	.5216-2	.7222-1	.9368-3	.1157-2	.9974	1.99478
23.93	.1961-5	.3762-3	.5212-2	.7219-1	.9357-3	.1155-2	.9974	1.99478
23.94	.1957-5	.3758-3	.5207-2	.7216-1	.9345-3	.1154-2	.9974	1.99479
23.95	.1953-5	.3753-3	.5203-2	.7213-1	.9333-3	.1153-2	.9974	1.99479
23.96	.1949-5	.3748-3	.5199-2	.7210-1	.9322-3	.1151-2	.9974	1.99479
23.97	.1945-5	.3744-3	.5194-2	.7207-1	.9310-3	.1150-2	.9974	1.99480
23.98	.1940-5	.3739-3	.5190-2	.7204-1	.9299-3	.1148-2	.9974	1.99480
23.99	.1936-5	.3734-3	.5186-2	.7201-1	.9287-3	.1147-2	.9974	1.99481

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
2.498	82.543	.4486	661.0	3.977	166.2	.1857-2	777.5	23.00
2.491	82.546	.4486	661.6	3.977	166.3	.1854-2	778.1	23.01
2.490	82.550	.4486	662.2	3.977	166.5	.1852-2	778.8	23.02
2.489	82.553	.4486	662.7	3.978	166.6	.1849-2	779.5	23.03
2.488	82.556	.4486	663.3	3.978	166.8	.1847-2	780.2	23.04
2.486	82.559	.4486	663.9	3.978	166.9	.1845-2	780.9	23.05
2.485	82.562	.4486	664.5	3.978	167.1	.1843-2	781.5	23.06
2.484	82.566	.4486	665.0	3.978	167.2	.1840-2	782.2	23.07
2.483	82.569	.4486	665.6	3.978	167.3	.1837-2	782.9	23.08
2.482	82.572	.4486	666.2	3.978	167.5	.1835-2	783.6	23.09
2.481	82.575	.4486	666.8	3.978	167.6	.1833-2	784.2	23.10
2.480	82.578	.4486	667.3	3.978	167.8	.1830-2	784.9	23.11
2.479	82.582	.4486	667.9	3.978	167.9	.1828-2	785.6	23.12
2.478	82.585	.4485	668.5	3.978	168.1	.1826-2	786.3	23.13
2.477	82.588	.4485	669.1	3.978	168.2	.1823-2	787.0	23.14
2.476	82.591	.4485	669.7	3.978	168.4	.1821-2	787.6	23.15
2.475	82.594	.4485	670.2	3.978	168.5	.1819-2	788.3	23.16
2.474	82.598	.4485	670.8	3.978	168.6	.1816-2	789.0	23.17
2.473	82.601	.4485	671.4	3.978	168.8	.1814-2	789.7	23.18
2.471	82.604	.4485	672.0	3.978	168.9	.1812-2	790.4	23.19
2.470	82.607	.4485	672.6	3.978	169.1	.1809-2	791.0	23.20
2.469	82.610	.4485	673.1	3.978	169.2	.1807-2	791.7	23.21
2.468	82.613	.4485	673.7	3.978	169.4	.1805-2	792.4	23.22
2.467	82.617	.4485	674.3	3.978	169.5	.1802-2	793.1	23.23
2.466	82.620	.4485	674.9	3.978	169.7	.1800-2	793.8	23.24
2.465	82.623	.4485	675.5	3.978	169.8	.1798-2	794.5	23.25
2.464	82.626	.4485	676.0	3.978	169.9	.1796-2	795.1	23.26
2.463	82.629	.4485	676.6	3.978	170.1	.1793-2	795.8	23.27
2.462	82.632	.4485	677.2	3.978	170.2	.1791-2	796.5	23.28
2.461	82.636	.4485	677.8	3.978	170.4	.1789-2	797.2	23.29
2.460	82.639	.4485	678.4	3.978	170.5	.1786-2	797.9	23.30
2.459	82.642	.4485	678.9	3.978	170.7	.1784-2	798.6	23.31
2.458	82.645	.4485	679.5	3.978	170.8	.1782-2	799.2	23.32
2.457	82.648	.4485	680.1	3.978	171.0	.1780-2	799.9	23.33
2.456	82.651	.4485	680.7	3.978	171.1	.1777-2	800.6	23.34
2.455	82.654	.4485	681.3	3.978	171.3	.1775-2	801.3	23.35
2.453	82.657	.4485	681.9	3.978	171.4	.1773-2	802.0	23.36
2.452	82.661	.4485	682.4	3.978	171.5	.1771-2	802.7	23.37
2.451	82.664	.4485	683.0	3.978	171.7	.1768-2	803.4	23.38
2.450	82.667	.4485	683.6	3.978	171.8	.1766-2	804.0	23.39
2.449	82.670	.4485	684.2	3.978	172.0	.1764-2	804.7	23.40
2.448	82.673	.4485	684.8	3.978	172.1	.1762-2	805.4	23.41
2.447	82.676	.4485	685.4	3.978	172.3	.1759-2	806.1	23.42
2.446	82.679	.4485	686.0	3.978	172.4	.1757-2	806.8	23.43
2.445	82.682	.4485	686.5	3.978	172.6	.1755-2	807.5	23.44
2.444	82.686	.4485	687.1	3.978	172.7	.1753-2	808.2	23.45
2.443	82.689	.4485	687.7	3.978	172.9	.1750-2	808.9	23.46
2.442	82.692	.4485	688.3	3.978	173.0	.1748-2	809.6	23.47
2.441	82.695	.4485	688.9	3.978	173.2	.1746-2	810.2	23.48
2.440	82.698	.4485	689.5	3.978	173.3	.1744-2	810.9	23.49
2.439	82.701	.4485	690.1	3.978	173.5	.1742-2	811.6	23.50
2.438	82.704	.4485	690.7	3.978	173.6	.1739-2	812.3	23.51
2.437	82.707	.4485	691.2	3.978	173.7	.1737-2	813.0	23.52
2.436	82.710	.4485	691.8	3.978	173.9	.1735-2	813.7	23.53
2.435	82.713	.4485	692.4	3.978	174.0	.1733-2	814.4	23.54
2.434	82.716	.4485	693.0	3.978	174.2	.1731-2	815.1	23.55
2.433	82.720	.4485	693.6	3.978	174.3	.1728-2	815.8	23.56
2.432	82.723	.4485	694.2	3.979	174.5	.1726-2	816.5	23.57
2.431	82.726	.4485	694.8	3.979	174.6	.1724-2	817.2	23.58
2.430	82.729	.4485	695.4	3.979	174.8	.1722-2	817.8	23.59
2.429	82.732	.4485	696.0	3.979	174.9	.1720-2	818.5	23.60
2.427	82.735	.4485	696.5	3.979	175.1	.1718-2	819.2	23.61
2.426	82.738	.4485	697.1	3.979	175.2	.1715-2	819.9	23.62
2.425	82.741	.4485	697.7	3.979	175.4	.1713-2	820.6	23.63
2.424	82.744	.4485	698.3	3.979	175.5	.1711-2	821.3	23.64
2.423	82.747	.4485	698.9	3.979	175.7	.1709-2	822.0	23.65
2.422	82.750	.4485	699.5	3.979	175.8	.1707-2	822.7	23.66
2.421	82.753	.4485	700.1	3.979	176.0	.1705-2	823.4	23.67
2.420	82.756	.4485	700.7	3.979	176.1	.1702-2	824.1	23.68
2.419	82.759	.4485	701.3	3.979	176.3	.1700-2	824.8	23.69
2.418	82.762	.4485	701.9	3.979	176.4	.1698-2	825.5	23.70
2.417	82.765	.4485	702.5	3.979	176.6	.1696-2	826.2	23.71
2.416	82.768	.4485	703.0	3.979	176.7	.1694-2	826.9	23.72
2.415	82.772	.4485	703.6	3.979	176.8	.1692-2	827.6	23.73
2.414	82.775	.4485	704.2	3.979	177.0	.1690-2	828.3	23.74
2.413	82.778	.4485	704.8	3.979	177.1	.1688-2	829.0	23.75
2.412	82.781	.4485	705.4	3.979	177.3	.1685-2	829.7	23.76
2.411	82.784	.4485	706.0	3.979	177.4	.1683-2	830.4	23.77
2.410	82.787	.4485	706.6	3.979	177.6	.1681-2	831.1	23.78
2.409	82.790	.4485	707.2	3.979	177.7	.1679-2	831.8	23.79
2.408	82.793	.4485	707.8	3.979	177.9	.1677-2	832.5	23.80
2.407	82.796	.4485	708.4	3.979	178.0	.1675-2	833.2	23.81
2.406	82.799	.4485	709.0	3.979	178.2	.1673-2	833.9	23.82
2.405	82.802	.4485	709.6	3.979	178.3	.1671-2	834.6	23.83
2.404	82.805	.4485	710.2	3.979	178.5	.1669-2	835.3	23.84
2.403	82.808	.4485	710.8	3.979	178.6	.1667-2	836.0	23.85
2.402	82.811	.4485	711.4	3.979	178.8	.1665-2	836.7	23.86
2.401	82.814	.4485	712.0	3.979	178.9	.1662-2	837.4	23.87
2.400	82.817	.4485	712.6	3.979	179.1	.1660-2	838.1	23.88
2.399	82.820	.4485	713.2	3.979	179.2	.1658-2	838.8	23.89
2.398	82.823	.4485	713.8	3.979	179.4	.1656-2	839.5	23.90
2.397	82.826	.4485	714.4	3.979	179.5	.1654-2	840.2	23.91
2.396	82.829	.4485	715.0	3.979	179.7	.1652-2	840.9	23.92
2.395	82.832	.4485	715.6	3.979	179.8	.1650-2	841.6	23.93
2.394	82.835	.4485	716.2	3.979	180.0	.1648-2	842.3	23.94
2.393	82.838	.4485	716.8	3.979	180.1	.1646-2	843.0	23.95
2.392	82.841	.4485	717.4	3.979	180.3	.1644-2	843.7	23.96
2.391	82.844	.4485	718.0	3.979	180.4	.1642-2	844.4	23.97
2.390	82.847	.4485	718.6	3.979	180.6	.1640-2	845.1	23.98
2.389	82.850	.4485	719.2	3.979	180.7	.1638-2	845.8	23.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
24.00	.1932-5	.3730-3	.5181-2	.7198-1	.9276-3	.1145-2	.9974	1.99481
24.01	.1928-5	.3725-3	.5177-2	.7195-1	.9264-3	.1144-2	.9974	1.99482
24.02	.1924-5	.3720-3	.5173-2	.7192-1	.9253-3	.1143-2	.9974	1.99482
24.03	.1920-5	.3716-3	.5168-2	.7189-1	.9241-3	.1141-2	.9974	1.99482
24.04	.1917-5	.3711-3	.5164-2	.7186-1	.9230-3	.1140-2	.9974	1.99483
24.05	.1913-5	.3707-3	.5160-2	.7183-1	.9218-3	.1138-2	.9974	1.99483
24.06	.1909-5	.3702-3	.5156-2	.7180-1	.9207-3	.1137-2	.9974	1.99484
24.07	.1905-5	.3697-3	.5151-2	.7177-1	.9196-3	.1136-2	.9974	1.99484
24.08	.1901-5	.3693-3	.5147-2	.7174-1	.9184-3	.1134-2	.9974	1.99485
24.09	.1897-5	.3688-3	.5143-2	.7171-1	.9173-3	.1133-2	.9974	1.99485
24.10	.1893-5	.3684-3	.5139-2	.7168-1	.9162-3	.1131-2	.9974	1.99485
24.11	.1889-5	.3679-3	.5134-2	.7165-1	.9150-3	.1130-2	.9974	1.99486
24.12	.1885-5	.3675-3	.5130-2	.7163-1	.9139-3	.1129-2	.9974	1.99486
24.13	.1881-5	.3670-3	.5126-2	.7160-1	.9128-3	.1127-2	.9974	1.99487
24.14	.1877-5	.3665-3	.5122-2	.7157-1	.9117-3	.1126-2	.9974	1.99487
24.15	.1873-5	.3661-3	.5118-2	.7154-1	.9105-3	.1124-2	.9974	1.99488
24.16	.1870-5	.3656-3	.5113-2	.7151-1	.9094-3	.1123-2	.9974	1.99488
24.17	.1866-5	.3652-3	.5109-2	.7148-1	.9083-3	.1122-2	.9974	1.99488
24.18	.1862-5	.3647-3	.5105-2	.7145-1	.9072-3	.1120-2	.9974	1.99489
24.19	.1858-5	.3643-3	.5101-2	.7142-1	.9061-3	.1119-2	.9974	1.99489
24.20	.1854-5	.3638-3	.5096-2	.7139-1	.9050-3	.1117-2	.9974	1.99490
24.21	.1850-5	.3634-3	.5092-2	.7136-1	.9038-3	.1116-2	.9975	1.99490
24.22	.1847-5	.3629-3	.5088-2	.7133-1	.9027-3	.1115-2	.9975	1.99491
24.23	.1843-5	.3625-3	.5084-2	.7130-1	.9016-3	.1113-2	.9975	1.99491
24.24	.1839-5	.3620-3	.5080-2	.7127-1	.9005-3	.1112-2	.9975	1.99491
24.25	.1835-5	.3616-3	.5076-2	.7124-1	.8994-3	.1111-2	.9975	1.99492
24.26	.1832-5	.3612-3	.5071-2	.7121-1	.8983-3	.1109-2	.9975	1.99492
24.27	.1828-5	.3607-3	.5067-2	.7118-1	.8972-3	.1108-2	.9975	1.99493
24.28	.1824-5	.3603-3	.5063-2	.7116-1	.8961-3	.1107-2	.9975	1.99493
24.29	.1820-5	.3598-3	.5059-2	.7113-1	.8950-3	.1105-2	.9975	1.99493
24.30	.1817-5	.3594-3	.5055-2	.7110-1	.8939-3	.1104-2	.9975	1.99494
24.31	.1813-5	.3589-3	.5051-2	.7107-1	.8928-3	.1102-2	.9975	1.99494
24.32	.1809-5	.3585-3	.5047-2	.7104-1	.8917-3	.1101-2	.9975	1.99495
24.33	.1806-5	.3581-3	.5042-2	.7101-1	.8906-3	.1100-2	.9975	1.99495
24.34	.1802-5	.3576-3	.5038-2	.7098-1	.8896-3	.1098-2	.9975	1.99496
24.35	.1798-5	.3572-3	.5034-2	.7095-1	.8885-3	.1097-2	.9975	1.99496
24.36	.1794-5	.3568-3	.5030-2	.7092-1	.8874-3	.1096-2	.9975	1.99496
24.37	.1791-5	.3563-3	.5026-2	.7089-1	.8863-3	.1094-2	.9975	1.99497
24.38	.1787-5	.3559-3	.5022-2	.7087-1	.8852-3	.1093-2	.9975	1.99497
24.39	.1784-5	.3554-3	.5018-2	.7084-1	.8841-3	.1092-2	.9975	1.99498
24.40	.1780-5	.3550-3	.5014-2	.7081-1	.8831-3	.1090-2	.9975	1.99498
24.41	.1776-5	.3546-3	.5010-2	.7078-1	.8820-3	.1089-2	.9975	1.99498
24.42	.1773-5	.3541-3	.5006-2	.7075-1	.8809-3	.1088-2	.9975	1.99499
24.43	.1769-5	.3537-3	.5001-2	.7072-1	.8798-3	.1086-2	.9975	1.99499
24.44	.1765-5	.3533-3	.4997-2	.7069-1	.8788-3	.1085-2	.9975	1.99500
24.45	.1762-5	.3528-3	.4993-2	.7066-1	.8777-3	.1084-2	.9975	1.99500
24.46	.1758-5	.3524-3	.4989-2	.7063-1	.8766-3	.1082-2	.9975	1.99500
24.47	.1755-5	.3520-3	.4985-2	.7061-1	.8756-3	.1081-2	.9975	1.99501
24.48	.1751-5	.3516-3	.4981-2	.7058-1	.8745-3	.1080-2	.9975	1.99501
24.49	.1748-5	.3511-3	.4977-2	.7055-1	.8735-3	.1078-2	.9975	1.99502
24.50	.1744-5	.3507-3	.4973-2	.7052-1	.8724-3	.1077-2	.9975	1.99502
24.51	.1741-5	.3503-3	.4969-2	.7049-1	.8713-3	.1076-2	.9975	1.99502
24.52	.1737-5	.3498-3	.4965-2	.7046-1	.8703-3	.1075-2	.9975	1.99503
24.53	.1733-5	.3494-3	.4961-2	.7043-1	.8692-3	.1073-2	.9975	1.99503
24.54	.1730-5	.3490-3	.4957-2	.7041-1	.8682-3	.1072-2	.9975	1.99504
24.55	.1726-5	.3486-3	.4953-2	.7038-1	.8671-3	.1071-2	.9975	1.99504
24.56	.1723-5	.3481-3	.4949-2	.7035-1	.8661-3	.1069-2	.9975	1.99505
24.57	.1719-5	.3477-3	.4945-2	.7032-1	.8650-3	.1068-2	.9975	1.99505
24.58	.1716-5	.3473-3	.4941-2	.7029-1	.8640-3	.1067-2	.9975	1.99505
24.59	.1713-5	.3469-3	.4937-2	.7026-1	.8629-3	.1065-2	.9975	1.99506
24.60	.1709-5	.3465-3	.4933-2	.7023-1	.8619-3	.1064-2	.9975	1.99506
24.61	.1706-5	.3460-3	.4929-2	.7021-1	.8608-3	.1063-2	.9975	1.99507
24.62	.1702-5	.3456-3	.4925-2	.7018-1	.8598-3	.1062-2	.9975	1.99507
24.63	.1699-5	.3452-3	.4921-2	.7015-1	.8588-3	.1060-2	.9975	1.99507
24.64	.1695-5	.3448-3	.4917-2	.7012-1	.8577-3	.1059-2	.9975	1.99508
24.65	.1692-5	.3444-3	.4913-2	.7009-1	.8567-3	.1058-2	.9975	1.99508
24.66	.1688-5	.3440-3	.4909-2	.7006-1	.8557-3	.1056-2	.9975	1.99508
24.67	.1685-5	.3435-3	.4905-2	.7004-1	.8546-3	.1055-2	.9975	1.99509
24.68	.1682-5	.3431-3	.4901-2	.7001-1	.8536-3	.1054-2	.9975	1.99509
24.69	.1678-5	.3427-3	.4897-2	.6998-1	.8526-3	.1053-2	.9975	1.99510
24.70	.1675-5	.3423-3	.4893-2	.6995-1	.8515-3	.1051-2	.9976	1.99510
24.71	.1672-5	.3419-3	.4889-2	.6992-1	.8505-3	.1050-2	.9976	1.99510
24.72	.1668-5	.3415-3	.4885-2	.6990-1	.8495-3	.1049-2	.9976	1.99511
24.73	.1665-5	.3411-3	.4881-2	.6987-1	.8485-3	.1048-2	.9976	1.99511
24.74	.1661-5	.3406-3	.4878-2	.6984-1	.8475-3	.1046-2	.9976	1.99512
24.75	.1658-5	.3402-3	.4874-2	.6981-1	.8464-3	.1045-2	.9976	1.99512
24.76	.1655-5	.3398-3	.4870-2	.6978-1	.8454-3	.1044-2	.9976	1.99512
24.77	.1651-5	.3394-3	.4866-2	.6976-1	.8444-3	.1043-2	.9976	1.99513
24.78	.1648-5	.3390-3	.4862-2	.6973-1	.8434-3	.1041-2	.9976	1.99513
24.79	.1645-5	.3386-3	.4858-2	.6970-1	.8424-3	.1040-2	.9976	1.99514
24.80	.1642-5	.3382-3	.4854-2	.6967-1	.8414-3	.1039-2	.9976	1.99514
24.81	.1638-5	.3378-3	.4850-2	.6964-1	.8404-3	.1038-2	.9976	1.99514
24.82	.1635-5	.3374-3	.4846-2	.6962-1	.8393-3	.1036-2	.9976	1.99515
24.83	.1632-5	.3370-3	.4842-2	.6959-1	.8383-3	.1035-2	.9976	1.99515
24.84	.1628-5	.3366-3	.4839-2	.6956-1	.8373-3	.1034-2	.9976	1.99516
24.85	.1625-5	.3362-3	.4835-2	.6953-1	.8363-3	.1033-2	.9976	1.99516
24.86	.1622-5	.3358-3	.4831-2	.6950-1	.8353-3	.1031-2	.9976	1.99516
24.87	.1619-5	.3354-3	.4827-2	.6948-1	.8343-3	.1030-2	.9976	1.99517
24.88	.1615-5	.3350-3	.4823-2	.6945-1	.8333-3	.1029-2	.9976	1.99517
24.89	.1612-5	.3345-3	.4819-2	.6942-1	.8323-3	.1028-2	.9976	1.99518
24.90	.1609-5	.3341-3	.4815-2	.6939-1	.8313-3	.1026-2	.9976	1.99518
24.91	.1606-5	.3337-3	.4811-2	.6936-1	.8304-3	.1025-2	.9976	1.99518
24.92	.1603-5	.3333-3	.4808-2	.6934-1	.8294-3	.1024-2	.9976	1.99519
24.93	.1599-5	.3329-3	.4804-2	.6931-1	.8284-3	.1023-2	.9976	1.99519
24.94	.1596-5	.3326-3	.4800-2	.6928-1	.8274-3	.1022-2	.9976	1.99519
24.95	.1593-5	.3322-3	.4796-2	.6925-1	.8264-3	.1020-2	.9976	1.99520
24.96	.1590-5	.3318-3	.4792-2	.6923-1	.8254-3	.1019-2	.9976	1.99520
24.97	.1587-5	.3314-3	.4789-2	.6920-1	.8244-3	.1018-2	.9976	1.99521
24.98	.1584-5	.3310-3	.4785-2	.6917-1	.8234-3	.1017-2	.9976	1.99521
24.99	.1580-5	.3306-3	.4781-2	.6914-1	.8225-3	.1015-2	.9976	1.99521

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
2.388	82.852	.4485	719.8	3.979	180.9	.1636-2	846.5	24.00
2.387	82.855	.4485	720.4	3.979	181.0	.1634-2	847.2	24.01
2.386	82.858	.4485	721.0	3.979	181.2	.1632-2	847.9	24.02
2.385	82.861	.4485	721.6	3.979	181.3	.1630-2	848.6	24.03
2.384	82.864	.4485	722.2	3.979	181.5	.1628-2	849.3	24.04
2.383	82.867	.4484	722.8	3.979	181.6	.1626-2	850.0	24.05
2.382	82.870	.4484	723.4	3.979	181.8	.1624-2	850.7	24.06
2.381	82.873	.4484	724.0	3.979	181.9	.1622-2	851.4	24.07
2.380	82.876	.4484	724.6	3.979	182.1	.1620-2	852.2	24.08
2.379	82.879	.4484	725.2	3.979	182.2	.1618-2	852.9	24.09
2.378	82.882	.4484	725.8	3.979	182.4	.1616-2	853.6	24.10
2.377	82.885	.4484	726.4	3.979	182.5	.1614-2	854.3	24.11
2.376	82.888	.4484	727.0	3.979	182.7	.1612-2	855.0	24.12
2.375	82.891	.4484	727.6	3.979	182.8	.1610-2	855.7	24.13
2.374	82.894	.4484	728.2	3.980	183.0	.1608-2	856.4	24.14
2.373	82.897	.4484	728.8	3.980	183.1	.1606-2	857.1	24.15
2.372	82.900	.4484	729.4	3.980	183.3	.1604-2	857.8	24.16
2.371	82.903	.4484	730.0	3.980	183.4	.1602-2	858.5	24.17
2.370	82.905	.4484	730.6	3.980	183.6	.1600-2	859.2	24.18
2.369	82.908	.4484	731.2	3.980	183.7	.1598-2	860.0	24.19
2.368	82.911	.4484	731.8	3.980	183.9	.1596-2	860.7	24.20
2.367	82.914	.4484	732.4	3.980	184.0	.1594-2	861.4	24.21
2.366	82.917	.4484	733.0	3.980	184.2	.1592-2	862.1	24.22
2.365	82.920	.4484	733.6	3.980	184.3	.1590-2	862.8	24.23
2.364	82.923	.4484	734.2	3.980	184.5	.1588-2	863.5	24.24
2.363	82.926	.4484	734.8	3.980	184.6	.1586-2	864.2	24.25
2.362	82.929	.4484	735.4	3.980	184.8	.1584-2	864.9	24.26
2.361	82.932	.4484	736.0	3.980	184.9	.1582-2	865.7	24.27
2.360	82.935	.4484	736.6	3.980	185.1	.1580-2	866.4	24.28
2.359	82.937	.4484	737.3	3.980	185.3	.1578-2	867.1	24.29
2.359	82.940	.4484	737.9	3.980	185.4	.1576-2	867.8	24.30
2.358	82.943	.4484	738.5	3.980	185.6	.1575-2	868.5	24.31
2.357	82.946	.4484	739.1	3.980	185.7	.1573-2	869.2	24.32
2.356	82.949	.4484	739.7	3.980	185.9	.1571-2	869.9	24.33
2.355	82.952	.4484	740.3	3.980	186.0	.1569-2	870.6	24.34
2.354	82.955	.4484	740.9	3.980	186.2	.1567-2	871.4	24.35
2.353	82.958	.4484	741.5	3.980	186.3	.1565-2	872.1	24.36
2.352	82.961	.4484	742.1	3.980	186.5	.1563-2	872.8	24.37
2.351	82.963	.4484	742.7	3.980	186.6	.1561-2	873.5	24.38
2.350	82.966	.4484	743.3	3.980	186.8	.1559-2	874.2	24.39
2.349	82.969	.4484	744.0	3.980	186.9	.1557-2	874.9	24.40
2.348	82.972	.4484	744.6	3.980	187.1	.1555-2	875.7	24.41
2.347	82.975	.4484	745.2	3.980	187.2	.1554-2	876.4	24.42
2.346	82.978	.4484	745.8	3.980	187.4	.1552-2	877.1	24.43
2.345	82.981	.4484	746.4	3.980	187.5	.1550-2	877.8	24.44
2.344	82.984	.4484	747.0	3.980	187.7	.1548-2	878.5	24.45
2.343	82.986	.4484	747.6	3.980	187.8	.1546-2	879.3	24.46
2.342	82.989	.4484	748.2	3.980	188.0	.1544-2	880.0	24.47
2.341	82.992	.4484	748.8	3.980	188.1	.1542-2	880.7	24.48
2.340	82.995	.4484	749.5	3.980	188.3	.1540-2	881.4	24.49
2.339	82.998	.4484	750.1	3.980	188.5	.1538-2	882.1	24.50
2.338	83.001	.4484	750.7	3.980	188.6	.1537-2	882.8	24.51
2.337	83.003	.4484	751.3	3.980	188.8	.1535-2	883.6	24.52
2.336	83.006	.4484	751.9	3.980	188.9	.1533-2	884.3	24.53
2.335	83.009	.4484	752.5	3.980	189.1	.1531-2	885.0	24.54
2.334	83.012	.4484	753.1	3.980	189.2	.1529-2	885.7	24.55
2.334	83.015	.4484	753.7	3.980	189.4	.1527-2	886.5	24.56
2.333	83.018	.4484	754.4	3.980	189.5	.1525-2	887.2	24.57
2.332	83.020	.4484	755.0	3.980	189.7	.1524-2	887.9	24.58
2.331	83.023	.4484	755.6	3.980	189.8	.1522-2	888.6	24.59
2.330	83.026	.4484	756.2	3.980	190.0	.1520-2	889.3	24.60
2.329	83.029	.4484	756.8	3.980	190.1	.1518-2	890.1	24.61
2.328	83.032	.4484	757.4	3.980	190.3	.1516-2	890.8	24.62
2.327	83.035	.4484	758.0	3.980	190.4	.1514-2	891.5	24.63
2.326	83.037	.4484	758.7	3.980	190.6	.1513-2	892.2	24.64
2.325	83.040	.4484	759.3	3.980	190.8	.1511-2	893.0	24.65
2.324	83.043	.4484	759.9	3.980	190.9	.1509-2	893.7	24.66
2.323	83.046	.4484	760.5	3.980	191.1	.1507-2	894.4	24.67
2.322	83.049	.4484	761.1	3.980	191.2	.1505-2	895.1	24.68
2.321	83.051	.4484	761.7	3.980	191.4	.1504-2	895.9	24.69
2.320	83.054	.4484	762.4	3.980	191.5	.1502-2	896.6	24.70
2.319	83.057	.4484	763.0	3.980	191.7	.1500-2	897.3	24.71
2.318	83.060	.4484	763.6	3.980	191.8	.1498-2	898.0	24.72
2.317	83.063	.4484	764.2	3.980	192.0	.1496-2	898.8	24.73
2.317	83.065	.4484	764.8	3.980	192.1	.1494-2	899.5	24.74
2.316	83.068	.4484	765.5	3.981	192.3	.1493-2	900.2	24.75
2.315	83.071	.4484	766.1	3.981	192.5	.1491-2	900.9	24.76
2.314	83.074	.4484	766.7	3.981	192.6	.1489-2	901.7	24.77
2.313	83.077	.4484	767.3	3.981	192.8	.1487-2	902.4	24.78
2.312	83.079	.4484	767.9	3.981	192.9	.1486-2	903.1	24.79
2.311	83.082	.4484	768.6	3.981	193.1	.1484-2	903.9	24.80
2.310	83.085	.4484	769.2	3.981	193.2	.1482-2	904.6	24.81
2.309	83.088	.4484	769.8	3.981	193.4	.1480-2	905.3	24.82
2.308	83.090	.4484	770.4	3.981	193.5	.1478-2	906.0	24.83
2.307	83.093	.4484	771.0	3.981	193.7	.1477-2	906.8	24.84
2.306	83.096	.4484	771.7	3.981	193.9	.1475-2	907.5	24.85
2.305	83.099	.4484	772.3	3.981	194.0	.1473-2	908.2	24.86
2.304	83.102	.4484	772.9	3.981	194.2	.1471-2	909.0	24.87
2.304	83.104	.4484	773.5	3.981	194.3	.1470-2	909.7	24.88
2.303	83.107	.4484	774.1	3.981	194.5	.1468-2	910.4	24.89
2.302	83.110	.4484	774.8	3.981	194.6	.1466-2	911.2	24.90
2.301	83.113	.4484	775.4	3.981	194.8	.1464-2	911.9	24.91
2.300	83.115	.4484	776.0	3.981	194.9	.1463-2	912.6	24.92
2.299	83.118	.4484	776.6	3.981	195.1	.1461-2	913.3	24.93
2.298	83.121	.4484	777.3	3.981	195.3	.1459-2	914.1	24.94
2.297	83.124	.4484	777.9	3.981	195.4	.1457-2	914.8	24.95
2.296	83.126	.4484	778.5	3.981	195.6	.1456-2	915.5	24.96
2.295	83.129	.4484	779.1	3.981	195.7	.1454-2	916.3	24.97
2.294	83.132	.4484	779.8	3.981	195.9	.1452-2	917.0	24.98
2.293	83.135	.4484	780.4	3.981	196.0	.1450-2	917.7	24.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A*/A	V/V_0	V/a*
25.00	.1577-5	.3308-3	.4777-2	.6918-1	.8215-3	.1014-2	.9976	1.99522
25.01	.1574-5	.3298-3	.4773-2	.6909-1	.8205-3	.1013-2	.9976	1.99522
25.02	.1571-5	.3294-3	.4769-2	.6906-1	.8195-3	.1012-2	.9976	1.99522
25.03	.1568-5	.3290-3	.4766-2	.6903-1	.8186-3	.1011-2	.9976	1.99523
25.04	.1565-5	.3286-3	.4762-2	.6901-1	.8176-3	.1009-2	.9976	1.99523
25.05	.1562-5	.3282-3	.4758-2	.6898-1	.8166-3	.1008-2	.9976	1.99524
25.06	.1559-5	.3278-3	.4754-2	.6895-1	.8157-3	.1007-2	.9976	1.99524
25.07	.1555-5	.3274-3	.4751-2	.6892-1	.8147-3	.1006-2	.9976	1.99524
25.08	.1552-5	.3270-3	.4747-2	.6890-1	.8137-3	.1005-2	.9976	1.99525
25.09	.1549-5	.3267-3	.4743-2	.6887-1	.8128-3	.1003-2	.9976	1.99525
25.10	.1546-5	.3263-3	.4739-2	.6884-1	.8118-3	.1002-2	.9976	1.99526
25.11	.1543-5	.3259-3	.4736-2	.6882-1	.8108-3	.1001-2	.9976	1.99526
25.12	.1540-5	.3255-3	.4732-2	.6879-1	.8099-3	.9999-3	.9976	1.99526
25.13	.1537-5	.3251-3	.4728-2	.6876-1	.8089-3	.9987-3	.9976	1.99527
25.14	.1534-5	.3247-3	.4724-2	.6873-1	.8080-3	.9975-3	.9976	1.99527
25.15	.1531-5	.3243-3	.4721-2	.6871-1	.8070-3	.9963-3	.9976	1.99527
25.16	.1528-5	.3239-3	.4717-2	.6868-1	.8060-3	.9951-3	.9976	1.99528
25.17	.1525-5	.3236-3	.4713-2	.6865-1	.8051-3	.9940-3	.9976	1.99528
25.18	.1522-5	.3232-3	.4709-2	.6862-1	.8041-3	.9928-3	.9976	1.99529
25.19	.1519-5	.3228-3	.4706-2	.6860-1	.8032-3	.9916-3	.9976	1.99529
25.20	.1516-5	.3224-3	.4702-2	.6857-1	.8022-3	.9904-3	.9976	1.99529
25.21	.1513-5	.3220-3	.4698-2	.6854-1	.8013-3	.9893-3	.9976	1.99530
25.22	.1510-5	.3216-3	.4694-2	.6852-1	.8003-3	.9881-3	.9977	1.99530
25.23	.1507-5	.3213-3	.4691-2	.6849-1	.7994-3	.9869-3	.9977	1.99530
25.24	.1504-5	.3209-3	.4687-2	.6846-1	.7985-3	.9858-3	.9977	1.99531
25.25	.1501-5	.3205-3	.4683-2	.6844-1	.7975-3	.9846-3	.9977	1.99531
25.26	.1498-5	.3201-3	.4680-2	.6841-1	.7966-3	.9834-3	.9977	1.99531
25.27	.1495-5	.3198-3	.4676-2	.6838-1	.7956-3	.9823-3	.9977	1.99532
25.28	.1492-5	.3194-3	.4672-2	.6835-1	.7947-3	.9811-3	.9977	1.99532
25.29	.1489-5	.3190-3	.4669-2	.6833-1	.7938-3	.9800-3	.9977	1.99533
25.30	.1486-5	.3186-3	.4665-2	.6830-1	.7928-3	.9788-3	.9977	1.99533
25.31	.1483-5	.3182-3	.4661-2	.6827-1	.7919-3	.9777-3	.9977	1.99533
25.32	.1481-5	.3179-3	.4658-2	.6825-1	.7910-3	.9765-3	.9977	1.99534
25.33	.1478-5	.3175-3	.4654-2	.6822-1	.7900-3	.9754-3	.9977	1.99534
25.34	.1475-5	.3171-3	.4650-2	.6819-1	.7891-3	.9742-3	.9977	1.99534
25.35	.1472-5	.3167-3	.4647-2	.6817-1	.7882-3	.9731-3	.9977	1.99535
25.36	.1469-5	.3164-3	.4643-2	.6814-1	.7873-3	.9719-3	.9977	1.99535
25.37	.1466-5	.3160-3	.4639-2	.6811-1	.7863-3	.9708-3	.9977	1.99536
25.38	.1463-5	.3156-3	.4636-2	.6809-1	.7854-3	.9696-3	.9977	1.99536
25.39	.1460-5	.3153-3	.4632-2	.6806-1	.7845-3	.9685-3	.9977	1.99536
25.40	.1457-5	.3149-3	.4628-2	.6803-1	.7836-3	.9674-3	.9977	1.99537
25.41	.1455-5	.3145-3	.4625-2	.6801-1	.7827-3	.9662-3	.9977	1.99537
25.42	.1452-5	.3142-3	.4621-2	.6798-1	.7817-3	.9651-3	.9977	1.99537
25.43	.1449-5	.3138-3	.4618-2	.6795-1	.7808-3	.9640-3	.9977	1.99538
25.44	.1446-5	.3134-3	.4614-2	.6793-1	.7799-3	.9628-3	.9977	1.99538
25.45	.1443-5	.3130-3	.4610-2	.6790-1	.7790-3	.9617-3	.9977	1.99538
25.46	.1440-5	.3127-3	.4607-2	.6787-1	.7781-3	.9606-3	.9977	1.99539
25.47	.1438-5	.3123-3	.4603-2	.6785-1	.7772-3	.9595-3	.9977	1.99539
25.48	.1435-5	.3119-3	.4600-2	.6782-1	.7763-3	.9583-3	.9977	1.99540
25.49	.1432-5	.3116-3	.4596-2	.6779-1	.7754-3	.9572-3	.9977	1.99540
25.50	.1429-5	.3112-3	.4592-2	.6777-1	.7745-3	.9561-3	.9977	1.99540
25.51	.1426-5	.3109-3	.4589-2	.6774-1	.7736-3	.9550-3	.9977	1.99541
25.52	.1424-5	.3105-3	.4585-2	.6771-1	.7727-3	.9539-3	.9977	1.99541
25.53	.1421-5	.3101-3	.4582-2	.6769-1	.7718-3	.9527-3	.9977	1.99541
25.54	.1418-5	.3098-3	.4578-2	.6766-1	.7709-3	.9516-3	.9977	1.99542
25.55	.1415-5	.3094-3	.4575-2	.6764-1	.7700-3	.9505-3	.9977	1.99542
25.56	.1413-5	.3090-3	.4571-2	.6761-1	.7691-3	.9494-3	.9977	1.99542
25.57	.1410-5	.3087-3	.4567-2	.6758-1	.7682-3	.9483-3	.9977	1.99543
25.58	.1407-5	.3083-3	.4564-2	.6756-1	.7673-3	.9472-3	.9977	1.99543
25.59	.1404-5	.3080-3	.4560-2	.6753-1	.7664-3	.9461-3	.9977	1.99543
25.60	.1402-5	.3076-3	.4557-2	.6750-1	.7655-3	.9450-3	.9977	1.99544
25.61	.1399-5	.3072-3	.4553-2	.6748-1	.7646-3	.9439-3	.9977	1.99544
25.62	.1396-5	.3069-3	.4550-2	.6745-1	.7637-3	.9428-3	.9977	1.99545
25.63	.1394-5	.3065-3	.4546-2	.6743-1	.7628-3	.9417-3	.9977	1.99545
25.64	.1391-5	.3062-3	.4543-2	.6740-1	.7619-3	.9406-3	.9977	1.99545
25.65	.1388-5	.3058-3	.4539-2	.6737-1	.7611-3	.9395-3	.9977	1.99546
25.66	.1385-5	.3055-3	.4536-2	.6735-1	.7602-3	.9384-3	.9977	1.99546
25.67	.1383-5	.3051-3	.4532-2	.6732-1	.7593-3	.9373-3	.9977	1.99546
25.68	.1380-5	.3047-3	.4529-2	.6729-1	.7584-3	.9363-3	.9977	1.99547
25.69	.1377-5	.3044-3	.4525-2	.6727-1	.7575-3	.9352-3	.9977	1.99547
25.70	.1375-5	.3040-3	.4522-2	.6724-1	.7567-3	.9341-3	.9977	1.99547
25.71	.1372-5	.3037-3	.4518-2	.6722-1	.7558-3	.9330-3	.9977	1.99548
25.72	.1369-5	.3033-3	.4515-2	.6719-1	.7549-3	.9319-3	.9977	1.99548
25.73	.1367-5	.3030-3	.4511-2	.6716-1	.7540-3	.9308-3	.9977	1.99548
25.74	.1364-5	.3026-3	.4508-2	.6714-1	.7532-3	.9298-3	.9977	1.99549
25.75	.1361-5	.3023-3	.4504-2	.6711-1	.7523-3	.9287-3	.9977	1.99549
25.76	.1359-5	.3019-3	.4501-2	.6709-1	.7514-3	.9276-3	.9977	1.99549
25.77	.1356-5	.3016-3	.4497-2	.6706-1	.7506-3	.9265-3	.9977	1.99550
25.78	.1354-5	.3012-3	.4494-2	.6703-1	.7497-3	.9255-3	.9978	1.99550
25.79	.1351-5	.3009-3	.4490-2	.6701-1	.7488-3	.9244-3	.9978	1.99550
25.80	.1348-5	.3005-3	.4487-2	.6698-1	.7480-3	.9233-3	.9978	1.99551
25.81	.1346-5	.3002-3	.4483-2	.6696-1	.7471-3	.9223-3	.9978	1.99551
25.82	.1343-5	.2998-3	.4480-2	.6693-1	.7462-3	.9212-3	.9978	1.99552
25.83	.1341-5	.2995-3	.4476-2	.6691-1	.7454-3	.9201-3	.9978	1.99552
25.84	.1338-5	.2991-3	.4473-2	.6688-1	.7445-3	.9191-3	.9978	1.99552
25.85	.1335-5	.2988-3	.4469-2	.6685-1	.7437-3	.9180-3	.9978	1.99553
25.86	.1333-5	.2985-3	.4466-2	.6683-1	.7428-3	.9170-3	.9978	1.99553
25.87	.1330-5	.2981-3	.4463-2	.6680-1	.7420-3	.9159-3	.9978	1.99553
25.88	.1328-5	.2978-3	.4459-2	.6678-1	.7411-3	.9148-3	.9978	1.99554
25.89	.1325-5	.2974-3	.4456-2	.6675-1	.7402-3	.9138-3	.9978	1.99554
25.90	.1323-5	.2971-3	.4452-2	.6673-1	.7394-3	.9127-3	.9978	1.99554
25.91	.1320-5	.2967-3	.4449-2	.6670-1	.7385-3	.9117-3	.9978	1.99555
25.92	.1318-5	.2964-3	.4445-2	.6667-1	.7377-3	.9106-3	.9978	1.99555
25.93	.1315-5	.2961-3	.4442-2	.6665-1	.7369-3	.9096-3	.9978	1.99555
25.94	.1313-5	.2957-3	.4439-2	.6662-1	.7360-3	.9085-3	.9978	1.99556
25.95	.1310-5	.2954-3	.4435-2	.6660-1	.7352-3	.9075-3	.9978	1.99556
25.96	.1308-5	.2950-3	.4432-2	.6657-1	.7343-3	.9065-3	.9978	1.99556
25.97	.1305-5	.2947-3	.4428-2	.6655-1	.7335-3	.9054-3	.9978	1.99557
25.98	.1303-5	.2944-3	.4425-2	.6652-1	.7326-3	.9044-3	.9978	1.99557
25.99	.1300-5	.2940-3	.4422-2	.6650-1	.7318-3	.9033-3	.9978	1.99557

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
2.292	83.137	.4484	781.0	3.981	196.2	.1449-2	918.5	25.00
2.292	83.140	.4484	781.6	3.981	196.3	.1447-2	919.2	25.01
2.291	83.143	.4484	782.3	3.981	196.5	.1445-2	920.0	25.02
2.290	83.145	.4484	782.9	3.981	196.7	.1444-2	920.7	25.03
2.289	83.148	.4484	783.5	3.981	196.8	.1442-2	921.4	25.04
2.288	83.151	.4484	784.1	3.981	197.0	.1440-2	922.2	25.05
2.287	83.154	.4484	784.8	3.981	197.1	.1438-2	922.9	25.06
2.286	83.156	.4484	785.4	3.981	197.3	.1437-2	923.6	25.07
2.285	83.159	.4484	786.0	3.981	197.4	.1435-2	924.4	25.08
2.284	83.162	.4483	786.6	3.981	197.6	.1433-2	925.1	25.09
2.283	83.165	.4483	787.3	3.981	197.8	.1432-2	925.8	25.10
2.282	83.167	.4483	787.9	3.981	197.9	.1430-2	926.6	25.11
2.281	83.170	.4483	788.5	3.981	198.1	.1428-2	927.3	25.12
2.281	83.173	.4483	789.1	3.981	198.2	.1426-2	928.1	25.13
2.280	83.175	.4483	789.8	3.981	198.4	.1425-2	928.8	25.14
2.279	83.178	.4483	790.4	3.981	198.5	.1423-2	929.5	25.15
2.278	83.181	.4483	791.0	3.981	198.7	.1421-2	930.3	25.16
2.277	83.183	.4483	791.7	3.981	198.9	.1420-2	931.0	25.17
2.276	83.186	.4483	792.3	3.981	199.0	.1418-2	931.7	25.18
2.275	83.189	.4483	792.9	3.981	199.2	.1416-2	932.5	25.19
2.274	83.192	.4483	793.6	3.981	199.3	.1415-2	933.2	25.20
2.273	83.194	.4483	794.2	3.981	199.5	.1413-2	934.0	25.21
2.272	83.197	.4483	794.8	3.981	199.6	.1411-2	934.7	25.22
2.272	83.200	.4483	795.4	3.981	199.8	.1410-2	935.5	25.23
2.271	83.202	.4483	796.1	3.981	200.0	.1408-2	936.2	25.24
2.270	83.205	.4483	796.7	3.981	200.1	.1406-2	936.9	25.25
2.269	83.208	.4483	797.3	3.981	200.3	.1405-2	937.7	25.26
2.268	83.210	.4483	798.0	3.981	200.4	.1403-2	938.4	25.27
2.267	83.213	.4483	798.6	3.981	200.6	.1401-2	939.2	25.28
2.266	83.216	.4483	799.2	3.981	200.7	.1400-2	939.9	25.29
2.265	83.218	.4483	799.9	3.981	200.9	.1398-2	940.6	25.30
2.264	83.221	.4483	800.5	3.981	201.1	.1396-2	941.4	25.31
2.263	83.224	.4483	801.1	3.981	201.2	.1395-2	942.1	25.32
2.263	83.226	.4483	801.8	3.981	201.4	.1393-2	942.9	25.33
2.262	83.229	.4483	802.4	3.981	201.5	.1392-2	943.6	25.34
2.261	83.232	.4483	803.0	3.981	201.7	.1390-2	944.4	25.35
2.260	83.234	.4483	803.7	3.981	201.9	.1388-2	945.1	25.36
2.259	83.237	.4483	804.3	3.981	202.0	.1387-2	945.9	25.37
2.258	83.240	.4483	804.9	3.981	202.2	.1385-2	946.6	25.38
2.257	83.242	.4483	805.6	3.981	202.3	.1383-2	947.3	25.39
2.256	83.245	.4483	806.2	3.981	202.5	.1382-2	948.1	25.40
2.255	83.248	.4483	806.8	3.982	202.6	.1380-2	948.8	25.41
2.255	83.250	.4483	807.5	3.982	202.8	.1379-2	949.6	25.42
2.254	83.253	.4483	808.1	3.982	203.0	.1377-2	950.3	25.43
2.253	83.256	.4483	808.7	3.982	203.1	.1375-2	951.1	25.44
2.252	83.258	.4483	809.4	3.982	203.3	.1374-2	951.8	25.45
2.251	83.261	.4483	810.0	3.982	203.4	.1372-2	952.6	25.46
2.250	83.263	.4483	810.7	3.982	203.6	.1371-2	953.3	25.47
2.249	83.266	.4483	811.3	3.982	203.8	.1369-2	954.1	25.48
2.248	83.269	.4483	811.9	3.982	203.9	.1367-2	954.8	25.49
2.247	83.271	.4483	812.6	3.982	204.1	.1366-2	955.6	25.50
2.247	83.274	.4483	813.2	3.982	204.2	.1364-2	956.3	25.51
2.246	83.277	.4483	813.8	3.982	204.4	.1363-2	957.1	25.52
2.245	83.279	.4483	814.5	3.982	204.6	.1361-2	957.8	25.53
2.244	83.282	.4483	815.1	3.982	204.7	.1359-2	958.6	25.54
2.243	83.285	.4483	815.8	3.982	204.9	.1358-2	959.3	25.55
2.242	83.287	.4483	816.4	3.982	205.0	.1356-2	960.1	25.56
2.241	83.290	.4483	817.0	3.982	205.2	.1355-2	960.8	25.57
2.240	83.292	.4483	817.7	3.982	205.4	.1353-2	961.6	25.58
2.240	83.295	.4483	818.3	3.982	205.5	.1351-2	962.3	25.59
2.239	83.298	.4483	819.0	3.982	205.7	.1350-2	963.1	25.60
2.238	83.300	.4483	819.6	3.982	205.8	.1348-2	963.8	25.61
2.237	83.303	.4483	820.2	3.982	206.0	.1347-2	964.6	25.62
2.236	83.305	.4483	820.9	3.982	206.2	.1345-2	965.3	25.63
2.235	83.308	.4483	821.5	3.982	206.3	.1344-2	966.1	25.64
2.234	83.311	.4483	822.2	3.982	206.5	.1342-2	966.8	25.65
2.233	83.313	.4483	822.8	3.982	206.6	.1341-2	967.6	25.66
2.233	83.316	.4483	823.4	3.982	206.8	.1339-2	968.3	25.67
2.232	83.318	.4483	824.1	3.982	207.0	.1337-2	969.1	25.68
2.231	83.321	.4483	824.7	3.982	207.1	.1336-2	969.9	25.69
2.230	83.324	.4483	825.4	3.982	207.3	.1334-2	970.6	25.70
2.229	83.326	.4483	826.0	3.982	207.4	.1333-2	971.4	25.71
2.228	83.329	.4483	826.6	3.982	207.6	.1331-2	972.1	25.72
2.227	83.331	.4483	827.3	3.982	207.8	.1330-2	972.9	25.73
2.227	83.334	.4483	827.9	3.982	207.9	.1328-2	973.6	25.74
2.226	83.336	.4483	828.6	3.982	208.1	.1327-2	974.4	25.75
2.225	83.339	.4483	829.2	3.982	208.2	.1325-2	975.1	25.76
2.224	83.342	.4483	829.9	3.982	208.4	.1324-2	975.9	25.77
2.223	83.344	.4483	830.5	3.982	208.6	.1322-2	976.7	25.78
2.222	83.347	.4483	831.2	3.982	208.7	.1321-2	977.4	25.79
2.221	83.349	.4483	831.8	3.982	208.9	.1319-2	978.2	25.80
2.220	83.352	.4483	832.4	3.982	209.0	.1317-2	978.9	25.81
2.220	83.354	.4483	833.1	3.982	209.2	.1316-2	979.7	25.82
2.219	83.357	.4483	833.7	3.982	209.4	.1314-2	980.5	25.83
2.218	83.360	.4483	834.4	3.982	209.5	.1313-2	981.2	25.84
2.217	83.362	.4483	835.0	3.982	209.7	.1311-2	982.0	25.85
2.216	83.365	.4483	835.7	3.982	209.9	.1310-2	982.7	25.86
2.215	83.367	.4483	836.3	3.982	210.0	.1308-2	983.5	25.87
2.214	83.370	.4483	837.0	3.982	210.2	.1307-2	984.2	25.88
2.214	83.372	.4483	837.6	3.982	210.3	.1305-2	985.0	25.89
2.213	83.375	.4483	838.3	3.982	210.5	.1304-2	985.8	25.90
2.212	83.377	.4483	838.9	3.982	210.7	.1302-2	986.5	25.91
2.211	83.380	.4483	839.6	3.982	210.8	.1301-2	987.3	25.92
2.210	83.383	.4483	840.2	3.982	211.0	.1299-2	988.1	25.93
2.209	83.385	.4483	840.9	3.982	211.2	.1298-2	988.8	25.94
2.208	83.388	.4483	841.5	3.982	211.3	.1296-2	989.6	25.95
2.208	83.390	.4483	842.2	3.982	211.5	.1295-2	990.3	25.96
2.207	83.393	.4483	842.8	3.982	211.6	.1293-2	991.1	25.97
2.206	83.395	.4483	843.5	3.982	211.8	.1292-2	991.9	25.98
2.205	83.398	.4483	844.1	3.982	212.0	.1290-2	992.6	25.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
26.00	.1298-5	.2937-3	.4418-2	.6647-1	.7310-3	.9023-3	.9978	1.99558
26.01	.1295-5	.2933-3	.4415-2	.6644-1	.7301-3	.9015-3	.9978	1.99558
26.02	.1293-5	.2930-3	.4412-2	.6642-1	.7293-3	.9008-3	.9978	1.99558
26.03	.1290-5	.2927-3	.4408-2	.6639-1	.7285-3	.8998-3	.9978	1.99559
26.04	.1288-5	.2923-3	.4405-2	.6637-1	.7276-3	.8988-3	.9978	1.99559
26.05	.1285-5	.2920-3	.4401-2	.6634-1	.7268-3	.8978-3	.9978	1.99559
26.06	.1283-5	.2917-3	.4398-2	.6632-1	.7260-3	.8961-3	.9978	1.99560
26.07	.1280-5	.2913-3	.4395-2	.6629-1	.7251-3	.8951-3	.9978	1.99560
26.08	.1278-5	.2910-3	.4391-2	.6627-1	.7243-3	.8941-3	.9978	1.99560
26.09	.1275-5	.2907-3	.4388-2	.6624-1	.7235-3	.8931-3	.9978	1.99561
26.10	.1273-5	.2903-3	.4385-2	.6622-1	.7227-3	.8920-3	.9978	1.99561
26.11	.1271-5	.2900-3	.4381-2	.6619-1	.7218-3	.8910-3	.9978	1.99561
26.12	.1268-5	.2897-3	.4378-2	.6617-1	.7210-3	.8900-3	.9978	1.99562
26.13	.1266-5	.2893-3	.4375-2	.6614-1	.7202-3	.8890-3	.9978	1.99562
26.14	.1263-5	.2890-3	.4371-2	.6612-1	.7194-3	.8880-3	.9978	1.99562
26.15	.1261-5	.2887-3	.4368-2	.6609-1	.7185-3	.8870-3	.9978	1.99563
26.16	.1259-5	.2883-3	.4365-2	.6607-1	.7177-3	.8859-3	.9978	1.99563
26.17	.1256-5	.2880-3	.4361-2	.6604-1	.7169-3	.8849-3	.9978	1.99563
26.18	.1254-5	.2877-3	.4358-2	.6601-1	.7161-3	.8839-3	.9978	1.99564
26.19	.1251-5	.2874-3	.4355-2	.6599-1	.7153-3	.8829-3	.9978	1.99564
26.20	.1249-5	.2870-3	.4351-2	.6596-1	.7145-3	.8819-3	.9978	1.99564
26.21	.1247-5	.2867-3	.4348-2	.6594-1	.7137-3	.8809-3	.9978	1.99565
26.22	.1244-5	.2864-3	.4345-2	.6591-1	.7128-3	.8799-3	.9978	1.99565
26.23	.1242-5	.2861-3	.4341-2	.6589-1	.7120-3	.8789-3	.9978	1.99565
26.24	.1240-5	.2857-3	.4338-2	.6586-1	.7112-3	.8779-3	.9978	1.99566
26.25	.1237-5	.2854-3	.4335-2	.6584-1	.7104-3	.8769-3	.9978	1.99566
26.26	.1235-5	.2851-3	.4332-2	.6581-1	.7096-3	.8759-3	.9978	1.99566
26.27	.1233-5	.2848-3	.4328-2	.6579-1	.7088-3	.8749-3	.9978	1.99567
26.28	.1230-5	.2844-3	.4325-2	.6576-1	.7080-3	.8739-3	.9978	1.99567
26.29	.1228-5	.2841-3	.4322-2	.6574-1	.7072-3	.8729-3	.9978	1.99567
26.30	.1226-5	.2838-3	.4318-2	.6572-1	.7064-3	.8720-3	.9978	1.99568
26.31	.1223-5	.2835-3	.4315-2	.6569-1	.7056-3	.8710-3	.9978	1.99568
26.32	.1221-5	.2831-3	.4312-2	.6567-1	.7048-3	.8700-3	.9978	1.99568
26.33	.1219-5	.2828-3	.4309-2	.6564-1	.7040-3	.8690-3	.9978	1.99569
26.34	.1216-5	.2825-3	.4305-2	.6562-1	.7032-3	.8680-3	.9978	1.99569
26.35	.1214-5	.2822-3	.4302-2	.6559-1	.7024-3	.8670-3	.9978	1.99569
26.36	.1212-5	.2819-3	.4299-2	.6557-1	.7016-3	.8660-3	.9978	1.99570
26.37	.1209-5	.2815-3	.4296-2	.6554-1	.7008-3	.8651-3	.9978	1.99570
26.38	.1207-5	.2812-3	.4292-2	.6552-1	.7000-3	.8641-3	.9979	1.99570
26.39	.1205-5	.2809-3	.4289-2	.6549-1	.6993-3	.8631-3	.9979	1.99571
26.40	.1203-5	.2806-3	.4286-2	.6547-1	.6985-3	.8621-3	.9979	1.99571
26.41	.1200-5	.2803-3	.4283-2	.6544-1	.6977-3	.8612-3	.9979	1.99571
26.42	.1198-5	.2800-3	.4280-2	.6542-1	.6969-3	.8602-3	.9979	1.99572
26.43	.1196-5	.2796-3	.4276-2	.6539-1	.6961-3	.8592-3	.9979	1.99572
26.44	.1194-5	.2793-3	.4273-2	.6537-1	.6953-3	.8583-3	.9979	1.99572
26.45	.1191-5	.2790-3	.4270-2	.6534-1	.6945-3	.8573-3	.9979	1.99573
26.46	.1189-5	.2787-3	.4267-2	.6532-1	.6938-3	.8563-3	.9979	1.99573
26.47	.1187-5	.2784-3	.4263-2	.6529-1	.6930-3	.8554-3	.9979	1.99573
26.48	.1185-5	.2781-3	.4260-2	.6527-1	.6922-3	.8544-3	.9979	1.99574
26.49	.1182-5	.2778-3	.4257-2	.6525-1	.6914-3	.8534-3	.9979	1.99574
26.50	.1180-5	.2774-3	.4254-2	.6522-1	.6906-3	.8525-3	.9979	1.99574
26.51	.1178-5	.2771-3	.4251-2	.6520-1	.6899-3	.8515-3	.9979	1.99574
26.52	.1176-5	.2768-3	.4247-2	.6517-1	.6891-3	.8506-3	.9979	1.99575
26.53	.1174-5	.2765-3	.4244-2	.6515-1	.6883-3	.8496-3	.9979	1.99575
26.54	.1171-5	.2762-3	.4241-2	.6512-1	.6876-3	.8486-3	.9979	1.99575
26.55	.1169-5	.2759-3	.4238-2	.6510-1	.6868-3	.8477-3	.9979	1.99576
26.56	.1167-5	.2756-3	.4235-2	.6507-1	.6860-3	.8467-3	.9979	1.99576
26.57	.1165-5	.2753-3	.4232-2	.6505-1	.6852-3	.8458-3	.9979	1.99576
26.58	.1163-5	.2750-3	.4228-2	.6503-1	.6845-3	.8448-3	.9979	1.99577
26.59	.1160-5	.2746-3	.4225-2	.6500-1	.6837-3	.8439-3	.9979	1.99577
26.60	.1158-5	.2743-3	.4222-2	.6498-1	.6829-3	.8429-3	.9979	1.99577
26.61	.1156-5	.2740-3	.4219-2	.6495-1	.6822-3	.8420-3	.9979	1.99578
26.62	.1154-5	.2737-3	.4216-2	.6493-1	.6814-3	.8411-3	.9979	1.99578
26.63	.1152-5	.2734-3	.4213-2	.6490-1	.6807-3	.8401-3	.9979	1.99578
26.64	.1150-5	.2731-3	.4209-2	.6488-1	.6799-3	.8392-3	.9979	1.99579
26.65	.1147-5	.2728-3	.4206-2	.6486-1	.6791-3	.8382-3	.9979	1.99579
26.66	.1145-5	.2725-3	.4203-2	.6483-1	.6784-3	.8373-3	.9979	1.99579
26.67	.1143-5	.2722-3	.4200-2	.6481-1	.6776-3	.8364-3	.9979	1.99580
26.68	.1141-5	.2719-3	.4197-2	.6478-1	.6769-3	.8354-3	.9979	1.99580
26.69	.1139-5	.2716-3	.4194-2	.6476-1	.6761-3	.8345-3	.9979	1.99580
26.70	.1137-5	.2713-3	.4191-2	.6473-1	.6753-3	.8336-3	.9979	1.99581
26.71	.1135-5	.2710-3	.4187-2	.6471-1	.6746-3	.8326-3	.9979	1.99581
26.72	.1133-5	.2707-3	.4184-2	.6469-1	.6738-3	.8317-3	.9979	1.99581
26.73	.1130-5	.2704-3	.4181-2	.6466-1	.6731-3	.8308-3	.9979	1.99581
26.74	.1128-5	.2701-3	.4178-2	.6464-1	.6723-3	.8298-3	.9979	1.99582
26.75	.1126-5	.2698-3	.4175-2	.6461-1	.6716-3	.8289-3	.9979	1.99582
26.76	.1124-5	.2695-3	.4172-2	.6459-1	.6708-3	.8280-3	.9979	1.99582
26.77	.1122-5	.2692-3	.4169-2	.6457-1	.6701-3	.8271-3	.9979	1.99583
26.78	.1120-5	.2689-3	.4166-2	.6454-1	.6694-3	.8262-3	.9979	1.99583
26.79	.1118-5	.2686-3	.4163-2	.6452-1	.6686-3	.8252-3	.9979	1.99583
26.80	.1116-5	.2683-3	.4160-2	.6449-1	.6679-3	.8243-3	.9979	1.99584
26.81	.1114-5	.2680-3	.4156-2	.6447-1	.6671-3	.8234-3	.9979	1.99584
26.82	.1112-5	.2677-3	.4153-2	.6445-1	.6664-3	.8225-3	.9979	1.99584
26.83	.1110-5	.2674-3	.4150-2	.6442-1	.6656-3	.8216-3	.9979	1.99585
26.84	.1108-5	.2671-3	.4147-2	.6440-1	.6649-3	.8207-3	.9979	1.99585
26.85	.1106-5	.2668-3	.4144-2	.6437-1	.6642-3	.8197-3	.9979	1.99585
26.86	.1103-5	.2665-3	.4141-2	.6435-1	.6634-3	.8188-3	.9979	1.99585
26.87	.1101-5	.2662-3	.4138-2	.6433-1	.6627-3	.8179-3	.9979	1.99586
26.88	.1099-5	.2659-3	.4135-2	.6430-1	.6620-3	.8170-3	.9979	1.99586
26.89	.1097-5	.2656-3	.4132-2	.6428-1	.6612-3	.8161-3	.9979	1.99586
26.90	.1095-5	.2653-3	.4129-2	.6426-1	.6605-3	.8152-3	.9979	1.99587
26.91	.1093-5	.2650-3	.4126-2	.6423-1	.6598-3	.8143-3	.9979	1.99587
26.92	.1091-5	.2647-3	.4123-2	.6421-1	.6590-3	.8134-3	.9979	1.99587
26.93	.1089-5	.2644-3	.4120-2	.6418-1	.6583-3	.8125-3	.9979	1.99588
26.94	.1087-5	.2641-3	.4117-2	.6416-1	.6576-3	.8116-3	.9979	1.99588
26.95	.1085-5	.2638-3	.4114-2	.6414-1	.6569-3	.8107-3	.9979	1.99588
26.96	.1083-5	.2635-3	.4110-2	.6411-1	.6561-3	.8098-3	.9979	1.99589
26.97	.1081-5	.2632-3	.4107-2	.6409-1	.6554-3	.8089-3	.9979	1.99589
26.98	.1079-5	.2630-3	.4104-2	.6407-1	.6547-3	.8080-3	.9979	1.99589
26.99	.1077-5	.2627-3	.4101-2	.6404-1	.6540-3	.8071-3	.9979	1.99589

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
2.204	83.400	.4483	844.8	3.982	212.1	.1289-2	993.4	26.00
2.203	83.403	.4483	845.4	3.982	212.3	.1288-2	994.2	26.01
2.203	83.405	.4483	846.1	3.982	212.4	.1286-2	994.9	26.02
2.202	83.408	.4483	846.7	3.982	212.6	.1285-2	995.7	26.03
2.201	83.410	.4483	847.4	3.982	212.8	.1283-2	996.5	26.04
2.200	83.413	.4483	848.0	3.982	212.9	.1282-2	997.2	26.05
2.199	83.415	.4483	848.7	3.982	213.1	.1280-2	998.0	26.06
2.198	83.418	.4483	849.3	3.982	213.3	.1279-2	998.7	26.07
2.197	83.421	.4483	850.0	3.982	213.4	.1277-2	999.5	26.08
2.197	83.423	.4483	850.6	3.982	213.6	.1276-2	1000.	26.09
2.196	83.426	.4483	851.3	3.982	213.8	.1274-2	1001.	26.10
2.195	83.428	.4483	851.9	3.982	213.9	.1273-2	1002.	26.11
2.194	83.431	.4483	852.6	3.982	214.1	.1271-2	1003.	26.12
2.193	83.433	.4483	853.2	3.983	214.2	.1270-2	1003.	26.13
2.192	83.436	.4483	853.9	3.983	214.4	.1269-2	1004.	26.14
2.192	83.438	.4483	854.5	3.983	214.6	.1267-2	1005.	26.15
2.191	83.441	.4483	855.2	3.983	214.7	.1266-2	1006.	26.16
2.190	83.443	.4483	855.8	3.983	214.9	.1264-2	1006.	26.17
2.189	83.446	.4483	856.5	3.983	215.1	.1263-2	1007.	26.18
2.188	83.448	.4483	857.1	3.983	215.2	.1261-2	1008.	26.19
2.187	83.451	.4483	857.8	3.983	215.4	.1260-2	1009.	26.20
2.187	83.453	.4483	858.5	3.983	215.6	.1258-2	1009.	26.21
2.186	83.456	.4483	859.1	3.983	215.7	.1257-2	1010.	26.22
2.185	83.458	.4483	859.8	3.983	215.9	.1256-2	1011.	26.23
2.184	83.460	.4483	860.4	3.983	216.0	.1254-2	1012.	26.24
2.183	83.463	.4483	861.1	3.983	216.2	.1253-2	1013.	26.25
2.182	83.465	.4483	861.7	3.983	216.4	.1251-2	1013.	26.26
2.182	83.468	.4482	862.4	3.983	216.5	.1250-2	1014.	26.27
2.181	83.470	.4482	863.0	3.983	216.7	.1249-2	1015.	26.28
2.180	83.473	.4482	863.7	3.983	216.9	.1247-2	1016.	26.29
2.179	83.475	.4482	864.4	3.983	217.0	.1246-2	1016.	26.30
2.178	83.478	.4482	865.0	3.983	217.2	.1244-2	1017.	26.31
2.177	83.480	.4482	865.7	3.983	217.4	.1243-2	1018.	26.32
2.177	83.483	.4482	866.3	3.983	217.5	.1241-2	1019.	26.33
2.176	83.485	.4482	867.0	3.983	217.7	.1240-2	1020.	26.34
2.175	83.488	.4482	867.7	3.983	217.9	.1239-2	1020.	26.35
2.174	83.490	.4482	868.3	3.983	218.0	.1237-2	1021.	26.36
2.173	83.493	.4482	869.0	3.983	218.2	.1236-2	1022.	26.37
2.172	83.495	.4482	869.6	3.983	218.3	.1234-2	1023.	26.38
2.172	83.498	.4482	870.3	3.983	218.5	.1233-2	1023.	26.39
2.171	83.500	.4482	871.0	3.983	218.7	.1232-2	1024.	26.40
2.170	83.502	.4482	871.6	3.983	218.8	.1230-2	1025.	26.41
2.169	83.505	.4482	872.3	3.983	219.0	.1229-2	1026.	26.42
2.168	83.507	.4482	872.9	3.983	219.2	.1228-2	1027.	26.43
2.168	83.510	.4482	873.6	3.983	219.3	.1226-2	1027.	26.44
2.167	83.512	.4482	874.3	3.983	219.5	.1225-2	1028.	26.45
2.166	83.515	.4482	874.9	3.983	219.7	.1223-2	1029.	26.46
2.165	83.517	.4482	875.6	3.983	219.8	.1222-2	1030.	26.47
2.164	83.520	.4482	876.2	3.983	220.0	.1221-2	1030.	26.48
2.163	83.522	.4482	876.9	3.983	220.2	.1219-2	1031.	26.49
2.163	83.524	.4482	877.6	3.983	220.3	.1218-2	1032.	26.50
2.162	83.527	.4482	878.2	3.983	220.5	.1217-2	1033.	26.51
2.161	83.529	.4482	878.9	3.983	220.7	.1215-2	1034.	26.52
2.160	83.532	.4482	879.6	3.983	220.8	.1214-2	1034.	26.53
2.159	83.534	.4482	880.2	3.983	221.0	.1212-2	1035.	26.54
2.159	83.537	.4482	880.9	3.983	221.2	.1211-2	1036.	26.55
2.158	83.539	.4482	881.5	3.983	221.3	.1210-2	1037.	26.56
2.157	83.541	.4482	882.2	3.983	221.5	.1208-2	1037.	26.57
2.156	83.544	.4482	882.9	3.983	221.7	.1207-2	1038.	26.58
2.155	83.546	.4482	883.5	3.983	221.8	.1206-2	1039.	26.59
2.154	83.549	.4482	884.2	3.983	222.0	.1204-2	1040.	26.60
2.154	83.551	.4482	884.9	3.983	222.2	.1203-2	1041.	26.61
2.153	83.554	.4482	885.5	3.983	222.3	.1202-2	1041.	26.62
2.152	83.556	.4482	886.2	3.983	222.5	.1200-2	1042.	26.63
2.151	83.558	.4482	886.9	3.983	222.7	.1199-2	1043.	26.64
2.150	83.561	.4482	887.5	3.983	222.8	.1198-2	1044.	26.65
2.150	83.563	.4482	888.2	3.983	223.0	.1196-2	1044.	26.66
2.149	83.566	.4482	888.9	3.983	223.2	.1195-2	1045.	26.67
2.148	83.568	.4482	889.5	3.983	223.3	.1194-2	1046.	26.68
2.147	83.570	.4482	890.2	3.983	223.5	.1192-2	1047.	26.69
2.146	83.573	.4482	890.9	3.983	223.7	.1191-2	1048.	26.70
2.146	83.575	.4482	891.5	3.983	223.8	.1190-2	1048.	26.71
2.145	83.578	.4482	892.2	3.983	224.0	.1188-2	1049.	26.72
2.144	83.580	.4482	892.9	3.983	224.2	.1187-2	1050.	26.73
2.143	83.582	.4482	893.5	3.983	224.3	.1186-2	1051.	26.74
2.142	83.585	.4482	894.2	3.983	224.5	.1184-2	1052.	26.75
2.142	83.587	.4482	894.9	3.983	224.7	.1183-2	1052.	26.76
2.141	83.590	.4482	895.5	3.983	224.8	.1182-2	1053.	26.77
2.140	83.592	.4482	896.2	3.983	225.0	.1180-2	1054.	26.78
2.139	83.594	.4482	896.9	3.983	225.2	.1179-2	1055.	26.79
2.138	83.597	.4482	897.6	3.983	225.3	.1178-2	1055.	26.80
2.138	83.599	.4482	898.2	3.983	225.5	.1176-2	1056.	26.81
2.137	83.601	.4482	898.9	3.983	225.7	.1175-2	1057.	26.82
2.136	83.604	.4482	899.6	3.983	225.8	.1174-2	1058.	26.83
2.135	83.606	.4482	900.2	3.983	226.0	.1172-2	1059.	26.84
2.134	83.609	.4482	900.9	3.983	226.2	.1171-2	1059.	26.85
2.134	83.611	.4482	901.6	3.983	226.3	.1170-2	1060.	26.86
2.133	83.613	.4482	902.2	3.983	226.5	.1169-2	1061.	26.87
2.132	83.616	.4482	902.9	3.983	226.7	.1167-2	1062.	26.88
2.131	83.618	.4482	903.6	3.983	226.8	.1166-2	1063.	26.89
2.130	83.620	.4482	904.3	3.983	227.0	.1165-2	1063.	26.90
2.130	83.623	.4482	904.9	3.983	227.2	.1163-2	1064.	26.91
2.129	83.625	.4482	905.6	3.984	227.3	.1162-2	1065.	26.92
2.128	83.628	.4482	906.3	3.984	227.5	.1161-2	1066.	26.93
2.127	83.630	.4482	907.0	3.984	227.7	.1160-2	1066.	26.94
2.126	83.632	.4482	907.6	3.984	227.8	.1158-2	1067.	26.95
2.126	83.635	.4482	908.3	3.984	228.0	.1157-2	1068.	26.96
2.125	83.637	.4482	909.0	3.984	228.2	.1156-2	1069.	26.97
2.124	83.639	.4482	909.7	3.984	228.3	.1154-2	1070.	26.98
2.123	83.642	.4482	910.3	3.984	228.5	.1153-2	1070.	26.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
27.00	.1075-5	.2624-3	.4098-2	.6402-1	.6532-3	.8062-3	.9979	1.99590
27.01	.1073-5	.2621-3	.4095-2	.6399-1	.6525-3	.8053-3	.9980	1.99590
27.02	.1071-5	.2618-3	.4092-2	.6397-1	.6518-3	.8045-3	.9980	1.99590
27.03	.1069-5	.2615-3	.4089-2	.6395-1	.6511-3	.8036-3	.9980	1.99591
27.04	.1067-5	.2612-3	.4086-2	.6392-1	.6504-3	.8027-3	.9980	1.99591
27.05	.1065-5	.2609-3	.4083-2	.6390-1	.6496-3	.8018-3	.9980	1.99591
27.06	.1063-5	.2606-3	.4080-2	.6388-1	.6489-3	.8009-3	.9980	1.99592
27.07	.1062-5	.2603-3	.4077-2	.6385-1	.6482-3	.8000-3	.9980	1.99592
27.08	.1060-5	.2601-3	.4074-2	.6383-1	.6475-3	.7991-3	.9980	1.99592
27.09	.1058-5	.2598-3	.4071-2	.6381-1	.6468-3	.7983-3	.9980	1.99592
27.10	.1056-5	.2595-3	.4068-2	.6378-1	.6461-3	.7974-3	.9980	1.99593
27.11	.1054-5	.2592-3	.4065-2	.6376-1	.6454-3	.7965-3	.9980	1.99593
27.12	.1052-5	.2589-3	.4062-2	.6374-1	.6447-3	.7956-3	.9980	1.99593
27.13	.1050-5	.2586-3	.4059-2	.6371-1	.6440-3	.7948-3	.9980	1.99594
27.14	.1048-5	.2583-3	.4056-2	.6369-1	.6432-3	.7939-3	.9980	1.99594
27.15	.1046-5	.2581-3	.4053-2	.6367-1	.6425-3	.7930-3	.9980	1.99594
27.16	.1044-5	.2578-3	.4050-2	.6364-1	.6418-3	.7921-3	.9980	1.99595
27.17	.1042-5	.2575-3	.4047-2	.6362-1	.6411-3	.7913-3	.9980	1.99595
27.18	.1040-5	.2572-3	.4044-2	.6360-1	.6404-3	.7904-3	.9980	1.99595
27.19	.1038-5	.2569-3	.4042-2	.6357-1	.6397-3	.7895-3	.9980	1.99595
27.20	.1036-5	.2566-3	.4039-2	.6355-1	.6390-3	.7887-3	.9980	1.99596
27.21	.1035-5	.2564-3	.4036-2	.6353-1	.6383-3	.7878-3	.9980	1.99596
27.22	.1033-5	.2561-3	.4033-2	.6350-1	.6376-3	.7869-3	.9980	1.99596
27.23	.1031-5	.2558-3	.4030-2	.6348-1	.6369-3	.7861-3	.9980	1.99597
27.24	.1029-5	.2555-3	.4027-2	.6346-1	.6362-3	.7852-3	.9980	1.99597
27.25	.1027-5	.2552-3	.4024-2	.6343-1	.6355-3	.7844-3	.9980	1.99597
27.26	.1025-5	.2550-3	.4021-2	.6341-1	.6348-3	.7835-3	.9980	1.99598
27.27	.1023-5	.2547-3	.4018-2	.6339-1	.6342-3	.7827-3	.9980	1.99598
27.28	.1021-5	.2544-3	.4015-2	.6336-1	.6335-3	.7818-3	.9980	1.99598
27.29	.1020-5	.2541-3	.4012-2	.6334-1	.6328-3	.7809-3	.9980	1.99598
27.30	.1018-5	.2538-3	.4009-2	.6332-1	.6321-3	.7801-3	.9980	1.99599
27.31	.1016-5	.2536-3	.4006-2	.6329-1	.6314-3	.7792-3	.9980	1.99599
27.32	.1014-5	.2533-3	.4003-2	.6327-1	.6307-3	.7784-3	.9980	1.99599
27.33	.1012-5	.2530-3	.4000-2	.6325-1	.6300-3	.7775-3	.9980	1.99600
27.34	.1010-5	.2527-3	.3997-2	.6323-1	.6293-3	.7767-3	.9980	1.99600
27.35	.1008-5	.2525-3	.3995-2	.6320-1	.6286-3	.7758-3	.9980	1.99600
27.36	.1007-5	.2522-3	.3992-2	.6318-1	.6280-3	.7750-3	.9980	1.99600
27.37	.1005-5	.2519-3	.3989-2	.6316-1	.6273-3	.7741-3	.9980	1.99601
27.38	.1003-5	.2516-3	.3986-2	.6313-1	.6266-3	.7733-3	.9980	1.99601
27.39	.1001-5	.2514-3	.3983-2	.6311-1	.6259-3	.7725-3	.9980	1.99601
27.40	.9994-6	.2511-3	.3980-2	.6309-1	.6252-3	.7716-3	.9980	1.99602
27.41	.9975-6	.2508-3	.3977-2	.6306-1	.6246-3	.7708-3	.9980	1.99602
27.42	.9957-6	.2505-3	.3974-2	.6304-1	.6239-3	.7699-3	.9980	1.99602
27.43	.9939-6	.2503-3	.3971-2	.6302-1	.6232-3	.7691-3	.9980	1.99602
27.44	.9921-6	.2500-3	.3968-2	.6300-1	.6225-3	.7683-3	.9980	1.99603
27.45	.9903-6	.2497-3	.3966-2	.6297-1	.6218-3	.7674-3	.9980	1.99603
27.46	.9885-6	.2495-3	.3963-2	.6295-1	.6212-3	.7666-3	.9980	1.99603
27.47	.9867-6	.2492-3	.3960-2	.6293-1	.6205-3	.7658-3	.9980	1.99604
27.48	.9850-6	.2489-3	.3957-2	.6290-1	.6198-3	.7649-3	.9980	1.99604
27.49	.9832-6	.2486-3	.3954-2	.6288-1	.6192-3	.7641-3	.9980	1.99604
27.50	.9814-6	.2484-3	.3951-2	.6286-1	.6185-3	.7633-3	.9980	1.99604
27.51	.9796-6	.2481-3	.3948-2	.6284-1	.6178-3	.7625-3	.9980	1.99605
27.52	.9778-6	.2478-3	.3946-2	.6281-1	.6171-3	.7616-3	.9980	1.99605
27.53	.9761-6	.2476-3	.3943-2	.6279-1	.6165-3	.7608-3	.9980	1.99605
27.54	.9743-6	.2473-3	.3940-2	.6277-1	.6158-3	.7600-3	.9980	1.99606
27.55	.9726-6	.2470-3	.3937-2	.6275-1	.6151-3	.7592-3	.9980	1.99606
27.56	.9708-6	.2468-3	.3934-2	.6272-1	.6145-3	.7583-3	.9980	1.99606
27.57	.9690-6	.2465-3	.3931-2	.6270-1	.6138-3	.7575-3	.9980	1.99606
27.58	.9673-6	.2462-3	.3928-2	.6268-1	.6131-3	.7567-3	.9980	1.99607
27.59	.9655-6	.2460-3	.3926-2	.6265-1	.6125-3	.7559-3	.9980	1.99607
27.60	.9638-6	.2457-3	.3923-2	.6263-1	.6118-3	.7551-3	.9980	1.99607
27.61	.9621-6	.2454-3	.3920-2	.6261-1	.6112-3	.7542-3	.9980	1.99608
27.62	.9603-6	.2452-3	.3917-2	.6259-1	.6105-3	.7534-3	.9980	1.99608
27.63	.9586-6	.2449-3	.3914-2	.6256-1	.6098-3	.7526-3	.9980	1.99608
27.64	.9569-6	.2446-3	.3911-2	.6254-1	.6092-3	.7518-3	.9980	1.99608
27.65	.9552-6	.2444-3	.3909-2	.6252-1	.6085-3	.7510-3	.9980	1.99609
27.66	.9534-6	.2441-3	.3906-2	.6250-1	.6079-3	.7502-3	.9980	1.99609
27.67	.9517-6	.2438-3	.3903-2	.6247-1	.6072-3	.7494-3	.9980	1.99609
27.68	.9500-6	.2436-3	.3900-2	.6245-1	.6066-3	.7486-3	.9980	1.99610
27.69	.9483-6	.2433-3	.3897-2	.6243-1	.6059-3	.7478-3	.9980	1.99610
27.70	.9466-6	.2431-3	.3895-2	.6241-1	.6053-3	.7469-3	.9981	1.99610
27.71	.9449-6	.2428-3	.3892-2	.6238-1	.6046-3	.7461-3	.9981	1.99610
27.72	.9432-6	.2425-3	.3889-2	.6236-1	.6040-3	.7453-3	.9981	1.99611
27.73	.9415-6	.2423-3	.3886-2	.6234-1	.6033-3	.7445-3	.9981	1.99611
27.74	.9398-6	.2420-3	.3883-2	.6232-1	.6027-3	.7437-3	.9981	1.99611
27.75	.9381-6	.2417-3	.3881-2	.6230-1	.6020-3	.7429-3	.9981	1.99612
27.76	.9365-6	.2415-3	.3878-2	.6227-1	.6014-3	.7421-3	.9981	1.99612
27.77	.9348-6	.2412-3	.3875-2	.6225-1	.6007-3	.7413-3	.9981	1.99612
27.78	.9331-6	.2410-3	.3872-2	.6223-1	.6001-3	.7405-3	.9981	1.99612
27.79	.9314-6	.2407-3	.3870-2	.6221-1	.5994-3	.7398-3	.9981	1.99613
27.80	.9298-6	.2404-3	.3867-2	.6218-1	.5988-3	.7390-3	.9981	1.99613
27.81	.9281-6	.2402-3	.3864-2	.6216-1	.5982-3	.7382-3	.9981	1.99613
27.82	.9264-6	.2399-3	.3861-2	.6214-1	.5975-3	.7374-3	.9981	1.99614
27.83	.9248-6	.2397-3	.3858-2	.6212-1	.5969-3	.7366-3	.9981	1.99614
27.84	.9231-6	.2394-3	.3856-2	.6209-1	.5962-3	.7358-3	.9981	1.99614
27.85	.9215-6	.2392-3	.3853-2	.6207-1	.5956-3	.7350-3	.9981	1.99614
27.86	.9198-6	.2389-3	.3850-2	.6205-1	.5950-3	.7342-3	.9981	1.99615
27.87	.9182-6	.2386-3	.3847-2	.6203-1	.5943-3	.7334-3	.9981	1.99615
27.88	.9166-6	.2384-3	.3845-2	.6201-1	.5937-3	.7326-3	.9981	1.99615
27.89	.9149-6	.2381-3	.3842-2	.6198-1	.5931-3	.7319-3	.9981	1.99615
27.90	.9133-6	.2379-3	.3839-2	.6196-1	.5924-3	.7311-3	.9981	1.99616
27.91	.9117-6	.2376-3	.3836-2	.6194-1	.5918-3	.7303-3	.9981	1.99616
27.92	.9100-6	.2374-3	.3834-2	.6192-1	.5912-3	.7295-3	.9981	1.99616
27.93	.9084-6	.2371-3	.3831-2	.6190-1	.5905-3	.7287-3	.9981	1.99617
27.94	.9068-6	.2369-3	.3828-2	.6187-1	.5899-3	.7280-3	.9981	1.99617
27.95	.9052-6	.2366-3	.3826-2	.6185-1	.5893-3	.7272-3	.9981	1.99617
27.96	.9036-6	.2364-3	.3823-2	.6183-1	.5886-3	.7264-3	.9981	1.99617
27.97	.9020-6	.2361-3	.3820-2	.6181-1	.5880-3	.7256-3	.9981	1.99618
27.98	.9004-6	.2359-3	.3817-2	.6178-1	.5874-3	.7249-3	.9981	1.99618
27.99	.8988-6	.2356-3	.3815-2	.6176-1	.5868-3	.7241-3	.9981	1.99618

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
2.123	83.644	.4482	911.0	3.984	228.7	.1152-2	1071.	27.00
2.122	83.646	.4482	911.7	3.984	228.9	.1151-2	1072.	27.01
2.121	83.649	.4482	912.4	3.984	229.0	.1149-2	1073.	27.02
2.120	83.651	.4482	913.0	3.984	229.2	.1148-2	1074.	27.03
2.119	83.653	.4482	913.7	3.984	229.4	.1147-2	1074.	27.04
2.119	83.656	.4482	914.4	3.984	229.5	.1146-2	1075.	27.05
2.118	83.658	.4482	915.1	3.984	229.7	.1144-2	1076.	27.06
2.117	83.660	.4482	915.7	3.984	229.9	.1143-2	1077.	27.07
2.116	83.663	.4482	916.4	3.984	230.0	.1142-2	1078.	27.08
2.115	83.665	.4482	917.1	3.984	230.2	.1141-2	1078.	27.09
2.115	83.667	.4482	917.8	3.984	230.4	.1139-2	1079.	27.10
2.114	83.670	.4482	918.4	3.984	230.5	.1138-2	1080.	27.11
2.113	83.672	.4482	919.1	3.984	230.7	.1137-2	1081.	27.12
2.112	83.674	.4482	919.8	3.984	230.9	.1136-2	1082.	27.13
2.112	83.677	.4482	920.5	3.984	231.1	.1134-2	1082.	27.14
2.111	83.679	.4482	921.2	3.984	231.2	.1133-2	1083.	27.15
2.110	83.681	.4482	921.8	3.984	231.4	.1132-2	1084.	27.16
2.109	83.684	.4482	922.5	3.984	231.6	.1131-2	1085.	27.17
2.108	83.686	.4482	923.2	3.984	231.7	.1129-2	1086.	27.18
2.108	83.688	.4482	923.9	3.984	231.9	.1128-2	1086.	27.19
2.107	83.691	.4482	924.6	3.984	232.1	.1127-2	1087.	27.20
2.106	83.693	.4482	925.2	3.984	232.2	.1126-2	1088.	27.21
2.105	83.695	.4482	925.9	3.984	232.4	.1124-2	1089.	27.22
2.105	83.697	.4482	926.6	3.984	232.6	.1123-2	1090.	27.23
2.104	83.700	.4482	927.3	3.984	232.8	.1122-2	1090.	27.24
2.103	83.702	.4482	928.0	3.984	232.9	.1121-2	1091.	27.25
2.102	83.704	.4482	928.6	3.984	233.1	.1119-2	1092.	27.26
2.102	83.707	.4482	929.3	3.984	233.3	.1118-2	1093.	27.27
2.101	83.709	.4482	930.0	3.984	233.4	.1117-2	1094.	27.28
2.100	83.711	.4482	930.7	3.984	233.6	.1116-2	1094.	27.29
2.099	83.714	.4482	931.4	3.984	233.8	.1115-2	1095.	27.30
2.098	83.716	.4482	932.0	3.984	233.9	.1113-2	1096.	27.31
2.098	83.718	.4482	932.7	3.984	234.1	.1112-2	1097.	27.32
2.097	83.720	.4482	933.4	3.984	234.3	.1111-2	1098.	27.33
2.096	83.723	.4482	934.1	3.984	234.5	.1110-2	1098.	27.34
2.095	83.725	.4482	934.8	3.984	234.6	.1109-2	1099.	27.35
2.095	83.727	.4482	935.5	3.984	234.8	.1107-2	1100.	27.36
2.094	83.730	.4482	936.1	3.984	235.0	.1106-2	1101.	27.37
2.093	83.732	.4482	936.8	3.984	235.1	.1105-2	1102.	27.38
2.092	83.734	.4482	937.5	3.984	235.3	.1104-2	1102.	27.39
2.092	83.736	.4482	938.2	3.984	235.5	.1102-2	1103.	27.40
2.091	83.739	.4482	938.9	3.984	235.7	.1101-2	1104.	27.41
2.090	83.741	.4482	939.6	3.984	235.8	.1100-2	1105.	27.42
2.089	83.743	.4482	940.3	3.984	236.0	.1099-2	1106.	27.43
2.089	83.746	.4482	940.9	3.984	236.2	.1098-2	1106.	27.44
2.088	83.748	.4482	941.6	3.984	236.3	.1097-2	1107.	27.45
2.087	83.750	.4482	942.3	3.984	236.5	.1095-2	1108.	27.46
2.086	83.752	.4482	943.0	3.984	236.7	.1094-2	1109.	27.47
2.085	83.755	.4482	943.7	3.984	236.9	.1093-2	1110.	27.48
2.085	83.757	.4482	944.4	3.984	237.0	.1092-2	1110.	27.49
2.084	83.759	.4482	945.1	3.984	237.2	.1091-2	1111.	27.50
2.083	83.761	.4482	945.8	3.984	237.4	.1089-2	1112.	27.51
2.082	83.764	.4482	946.4	3.984	237.5	.1088-2	1113.	27.52
2.082	83.766	.4482	947.1	3.984	237.7	.1087-2	1114.	27.53
2.081	83.768	.4482	947.8	3.984	237.9	.1086-2	1115.	27.54
2.080	83.770	.4482	948.5	3.984	238.1	.1085-2	1115.	27.55
2.079	83.773	.4482	949.2	3.984	238.2	.1084-2	1116.	27.56
2.079	83.775	.4482	949.9	3.984	238.4	.1082-2	1117.	27.57
2.078	83.777	.4482	950.6	3.984	238.6	.1081-2	1118.	27.58
2.077	83.779	.4482	951.3	3.984	238.8	.1080-2	1119.	27.59
2.076	83.782	.4482	952.0	3.984	238.9	.1079-2	1119.	27.60
2.076	83.784	.4482	952.6	3.984	239.1	.1078-2	1120.	27.61
2.075	83.786	.4482	953.3	3.984	239.3	.1077-2	1121.	27.62
2.074	83.788	.4482	954.0	3.984	239.4	.1075-2	1122.	27.63
2.073	83.791	.4481	954.7	3.984	239.6	.1074-2	1123.	27.64
2.073	83.793	.4481	955.4	3.984	239.8	.1073-2	1123.	27.65
2.072	83.795	.4481	956.1	3.984	240.0	.1072-2	1124.	27.66
2.071	83.797	.4481	956.8	3.984	240.1	.1071-2	1125.	27.67
2.070	83.800	.4481	957.5	3.984	240.3	.1070-2	1126.	27.68
2.070	83.802	.4481	958.2	3.984	240.5	.1068-2	1127.	27.69
2.069	83.804	.4481	958.9	3.984	240.7	.1067-2	1127.	27.70
2.068	83.806	.4481	959.6	3.984	240.8	.1066-2	1128.	27.71
2.067	83.809	.4481	960.2	3.984	241.0	.1065-2	1129.	27.72
2.067	83.811	.4481	960.9	3.984	241.2	.1064-2	1130.	27.73
2.066	83.813	.4481	961.6	3.984	241.3	.1063-2	1131.	27.74
2.065	83.815	.4481	962.3	3.984	241.5	.1062-2	1132.	27.75
2.064	83.817	.4481	963.0	3.984	241.7	.1060-2	1132.	27.76
2.064	83.820	.4481	963.7	3.984	241.9	.1059-2	1133.	27.77
2.063	83.822	.4481	964.4	3.985	242.0	.1058-2	1134.	27.78
2.062	83.824	.4481	965.1	3.985	242.2	.1057-2	1135.	27.79
2.061	83.826	.4481	965.8	3.985	242.4	.1056-2	1136.	27.80
2.061	83.829	.4481	966.5	3.985	242.6	.1055-2	1136.	27.81
2.060	83.831	.4481	967.2	3.985	242.7	.1054-2	1137.	27.82
2.059	83.833	.4481	967.9	3.985	242.9	.1052-2	1138.	27.83
2.058	83.835	.4481	968.6	3.985	243.1	.1051-2	1139.	27.84
2.058	83.837	.4481	969.3	3.985	243.3	.1050-2	1140.	27.85
2.057	83.840	.4481	970.0	3.985	243.4	.1049-2	1141.	27.86
2.056	83.842	.4481	970.7	3.985	243.6	.1048-2	1141.	27.87
2.056	83.844	.4481	971.4	3.985	243.8	.1047-2	1142.	27.88
2.055	83.846	.4481	972.1	3.985	244.0	.1046-2	1143.	27.89
2.054	83.848	.4481	972.8	3.985	244.1	.1045-2	1144.	27.90
2.053	83.851	.4481	973.5	3.985	244.3	.1044-2	1145.	27.91
2.053	83.853	.4481	974.2	3.985	244.5	.1042-2	1145.	27.92
2.052	83.855	.4481	974.9	3.985	244.7	.1041-2	1146.	27.93
2.051	83.857	.4481	975.6	3.985	244.8	.1040-2	1147.	27.94
2.050	83.859	.4481	976.3	3.985	245.0	.1039-2	1148.	27.95
2.050	83.862	.4481	977.0	3.985	245.2	.1038-2	1149.	27.96
2.049	83.864	.4481	977.7	3.985	245.4	.1037-2	1150.	27.97
2.048	83.866	.4481	978.4	3.985	245.5	.1036-2	1150.	27.98
2.047	83.868	.4481	979.1	3.985	245.7	.1035-2	1151.	27.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
28.00	.8972-6	.2354-3	.3812-2	.6174-1	.5861-3	.7233-3	.9981	1.99618
28.01	.8956-6	.2351-3	.3809-2	.6172-1	.5855-3	.7225-3	.9981	1.99619
28.02	.8940-6	.2349-3	.3807-2	.6170-1	.5849-3	.7218-3	.9981	1.99619
28.03	.8924-6	.2346-3	.3804-2	.6168-1	.5843-3	.7210-3	.9981	1.99619
28.04	.8908-6	.2344-3	.3801-2	.6165-1	.5837-3	.7202-3	.9981	1.99620
28.05	.8892-6	.2341-3	.3798-2	.6163-1	.5830-3	.7195-3	.9981	1.99620
28.06	.8876-6	.2339-3	.3796-2	.6161-1	.5824-3	.7187-3	.9981	1.99620
28.07	.8861-6	.2336-3	.3793-2	.6159-1	.5818-3	.7179-3	.9981	1.99620
28.08	.8845-6	.2334-3	.3790-2	.6157-1	.5812-3	.7172-3	.9981	1.99621
28.09	.8829-6	.2331-3	.3788-2	.6154-1	.5806-3	.7164-3	.9981	1.99621
28.10	.8814-6	.2329-3	.3785-2	.6152-1	.5799-3	.7157-3	.9981	1.99621
28.11	.8798-6	.2326-3	.3782-2	.6150-1	.5793-3	.7149-3	.9981	1.99621
28.12	.8782-6	.2324-3	.3780-2	.6148-1	.5787-3	.7141-3	.9981	1.99622
28.13	.8767-6	.2321-3	.3777-2	.6146-1	.5781-3	.7134-3	.9981	1.99622
28.14	.8751-6	.2319-3	.3774-2	.6143-1	.5775-3	.7126-3	.9981	1.99622
28.15	.8736-6	.2316-3	.3772-2	.6141-1	.5769-3	.7119-3	.9981	1.99622
28.16	.8720-6	.2314-3	.3769-2	.6139-1	.5763-3	.7111-3	.9981	1.99623
28.17	.8705-6	.2311-3	.3766-2	.6137-1	.5757-3	.7104-3	.9981	1.99623
28.18	.8690-6	.2309-3	.3764-2	.6135-1	.5750-3	.7096-3	.9981	1.99623
28.19	.8674-6	.2306-3	.3761-2	.6133-1	.5744-3	.7089-3	.9981	1.99624
28.20	.8659-6	.2304-3	.3758-2	.6130-1	.5738-3	.7081-3	.9981	1.99624
28.21	.8644-6	.2302-3	.3756-2	.6128-1	.5732-3	.7074-3	.9981	1.99624
28.22	.8629-6	.2299-3	.3753-2	.6126-1	.5726-3	.7066-3	.9981	1.99624
28.23	.8613-6	.2297-3	.3750-2	.6124-1	.5720-3	.7059-3	.9981	1.99625
28.24	.8598-6	.2294-3	.3748-2	.6122-1	.5714-3	.7051-3	.9981	1.99625
28.25	.8583-6	.2292-3	.3745-2	.6120-1	.5708-3	.7044-3	.9981	1.99625
28.26	.8568-6	.2289-3	.3742-2	.6118-1	.5702-3	.7036-3	.9981	1.99625
28.27	.8553-6	.2287-3	.3740-2	.6115-1	.5696-3	.7029-3	.9981	1.99626
28.28	.8538-6	.2285-3	.3737-2	.6113-1	.5690-3	.7021-3	.9981	1.99626
28.29	.8523-6	.2282-3	.3734-2	.6111-1	.5684-3	.7014-3	.9981	1.99626
28.30	.8508-6	.2280-3	.3732-2	.6109-1	.5678-3	.7007-3	.9981	1.99626
28.31	.8493-6	.2277-3	.3729-2	.6107-1	.5672-3	.6999-3	.9981	1.99627
28.32	.8478-6	.2275-3	.3727-2	.6105-1	.5666-3	.6992-3	.9981	1.99627
28.33	.8463-6	.2273-3	.3724-2	.6102-1	.5660-3	.6985-3	.9981	1.99627
28.34	.8448-6	.2270-3	.3721-2	.6100-1	.5654-3	.6977-3	.9981	1.99628
28.35	.8433-6	.2268-3	.3719-2	.6098-1	.5648-3	.6970-3	.9981	1.99628
28.36	.8418-6	.2265-3	.3716-2	.6096-1	.5642-3	.6963-3	.9981	1.99628
28.37	.8404-6	.2263-3	.3714-2	.6094-1	.5636-3	.6955-3	.9981	1.99628
28.38	.8389-6	.2261-3	.3711-2	.6092-1	.5631-3	.6948-3	.9981	1.99629
28.39	.8374-6	.2258-3	.3708-2	.6090-1	.5625-3	.6941-3	.9981	1.99629
28.40	.8360-6	.2256-3	.3706-2	.6087-1	.5619-3	.6933-3	.9981	1.99629
28.41	.8345-6	.2253-3	.3703-2	.6085-1	.5613-3	.6926-3	.9981	1.99629
28.42	.8330-6	.2251-3	.3701-2	.6083-1	.5607-3	.6919-3	.9981	1.99630
28.43	.8316-6	.2249-3	.3698-2	.6081-1	.5601-3	.6911-3	.9981	1.99630
28.44	.8301-6	.2246-3	.3695-2	.6079-1	.5595-3	.6904-3	.9982	1.99630
28.45	.8287-6	.2244-3	.3693-2	.6077-1	.5589-3	.6897-3	.9982	1.99630
28.46	.8272-6	.2242-3	.3690-2	.6075-1	.5583-3	.6890-3	.9982	1.99631
28.47	.8258-6	.2239-3	.3688-2	.6073-1	.5578-3	.6883-3	.9982	1.99631
28.48	.8243-6	.2237-3	.3685-2	.6070-1	.5572-3	.6875-3	.9982	1.99631
28.49	.8229-6	.2235-3	.3682-2	.6068-1	.5566-3	.6868-3	.9982	1.99631
28.50	.8214-6	.2232-3	.3680-2	.6066-1	.5560-3	.6861-3	.9982	1.99632
28.51	.8200-6	.2230-3	.3677-2	.6064-1	.5554-3	.6854-3	.9982	1.99632
28.52	.8186-6	.2228-3	.3675-2	.6062-1	.5549-3	.6847-3	.9982	1.99632
28.53	.8171-6	.2225-3	.3672-2	.6060-1	.5543-3	.6839-3	.9982	1.99632
28.54	.8157-6	.2223-3	.3670-2	.6058-1	.5537-3	.6832-3	.9982	1.99633
28.55	.8143-6	.2221-3	.3667-2	.6056-1	.5531-3	.6825-3	.9982	1.99633
28.56	.8129-6	.2218-3	.3664-2	.6053-1	.5525-3	.6818-3	.9982	1.99633
28.57	.8115-6	.2216-3	.3662-2	.6051-1	.5520-3	.6811-3	.9982	1.99633
28.58	.8100-6	.2214-3	.3659-2	.6049-1	.5514-3	.6804-3	.9982	1.99634
28.59	.8086-6	.2211-3	.3657-2	.6047-1	.5508-3	.6797-3	.9982	1.99634
28.60	.8072-6	.2209-3	.3654-2	.6045-1	.5502-3	.6790-3	.9982	1.99634
28.61	.8058-6	.2207-3	.3652-2	.6043-1	.5497-3	.6782-3	.9982	1.99635
28.62	.8044-6	.2204-3	.3649-2	.6041-1	.5491-3	.6775-3	.9982	1.99635
28.63	.8030-6	.2202-3	.3647-2	.6039-1	.5485-3	.6768-3	.9982	1.99635
28.64	.8016-6	.2200-3	.3644-2	.6037-1	.5479-3	.6761-3	.9982	1.99635
28.65	.8002-6	.2198-3	.3642-2	.6035-1	.5474-3	.6754-3	.9982	1.99636
28.66	.7988-6	.2195-3	.3639-2	.6032-1	.5468-3	.6747-3	.9982	1.99636
28.67	.7975-6	.2193-3	.3637-2	.6030-1	.5462-3	.6740-3	.9982	1.99636
28.68	.7961-6	.2191-3	.3634-2	.6028-1	.5457-3	.6733-3	.9982	1.99636
28.69	.7947-6	.2188-3	.3631-2	.6026-1	.5451-3	.6726-3	.9982	1.99637
28.70	.7933-6	.2186-3	.3629-2	.6024-1	.5445-3	.6719-3	.9982	1.99637
28.71	.7919-6	.2184-3	.3626-2	.6022-1	.5440-3	.6712-3	.9982	1.99637
28.72	.7906-6	.2182-3	.3624-2	.6020-1	.5434-3	.6705-3	.9982	1.99637
28.73	.7892-6	.2179-3	.3621-2	.6018-1	.5428-3	.6698-3	.9982	1.99638
28.74	.7878-6	.2177-3	.3619-2	.6016-1	.5423-3	.6691-3	.9982	1.99638
28.75	.7865-6	.2175-3	.3616-2	.6014-1	.5417-3	.6684-3	.9982	1.99638
28.76	.7851-6	.2172-3	.3614-2	.6012-1	.5412-3	.6677-3	.9982	1.99638
28.77	.7837-6	.2170-3	.3611-2	.6009-1	.5406-3	.6670-3	.9982	1.99639
28.78	.7824-6	.2168-3	.3609-2	.6007-1	.5400-3	.6664-3	.9982	1.99639
28.79	.7810-6	.2166-3	.3606-2	.6005-1	.5395-3	.6657-3	.9982	1.99639
28.80	.7797-6	.2163-3	.3604-2	.6003-1	.5389-3	.6650-3	.9982	1.99639
28.81	.7783-6	.2161-3	.3601-2	.6001-1	.5384-3	.6643-3	.9982	1.99640
28.82	.7770-6	.2159-3	.3599-2	.5999-1	.5378-3	.6636-3	.9982	1.99640
28.83	.7757-6	.2157-3	.3596-2	.5997-1	.5372-3	.6629-3	.9982	1.99640
28.84	.7743-6	.2155-3	.3594-2	.5995-1	.5367-3	.6622-3	.9982	1.99640
28.85	.7730-6	.2152-3	.3591-2	.5993-1	.5361-3	.6615-3	.9982	1.99641
28.86	.7716-6	.2150-3	.3589-2	.5991-1	.5356-3	.6609-3	.9982	1.99641
28.87	.7703-6	.2148-3	.3586-2	.5989-1	.5350-3	.6602-3	.9982	1.99641
28.88	.7690-6	.2146-3	.3584-2	.5987-1	.5345-3	.6595-3	.9982	1.99641
28.89	.7677-6	.2143-3	.3582-2	.5985-1	.5339-3	.6588-3	.9982	1.99642
28.90	.7663-6	.2141-3	.3579-2	.5983-1	.5334-3	.6581-3	.9982	1.99642
28.91	.7650-6	.2139-3	.3577-2	.5980-1	.5328-3	.6575-3	.9982	1.99642
28.92	.7637-6	.2137-3	.3574-2	.5978-1	.5323-3	.6568-3	.9982	1.99642
28.93	.7624-6	.2135-3	.3572-2	.5976-1	.5317-3	.6561-3	.9982	1.99643
28.94	.7611-6	.2132-3	.3569-2	.5974-1	.5312-3	.6554-3	.9982	1.99643
28.95	.7598-6	.2130-3	.3567-2	.5972-1	.5306-3	.6547-3	.9982	1.99643
28.96	.7585-6	.2128-3	.3564-2	.5970-1	.5301-3	.6541-3	.9982	1.99643
28.97	.7572-6	.2126-3	.3562-2	.5968-1	.5295-3	.6534-3	.9982	1.99644
28.98	.7559-6	.2124-3	.3559-2	.5966-1	.5290-3	.6527-3	.9982	1.99644
28.99	.7546-6	.2121-3	.3557-2	.5964-1	.5285-3	.6520-3	.9982	1.99644

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
2.047	83.870	.4481	979.8	3.985	245.9	.1034-2	1152.	28.00
2.046	83.872	.4481	980.5	3.985	246.0	.1032-2	1153.	28.01
2.045	83.875	.4481	981.2	3.985	246.2	.1031-2	1154.	28.02
2.045	83.877	.4481	981.9	3.985	246.4	.1030-2	1154.	28.03
2.044	83.879	.4481	982.6	3.985	246.6	.1029-2	1155.	28.04
2.043	83.881	.4481	983.3	3.985	246.8	.1028-2	1156.	28.05
2.042	83.883	.4481	984.0	3.985	246.9	.1027-2	1157.	28.06
2.042	83.886	.4481	984.7	3.985	247.1	.1026-2	1158.	28.07
2.041	83.888	.4481	985.4	3.985	247.3	.1025-2	1159.	28.08
2.040	83.890	.4481	986.1	3.985	247.5	.1024-2	1159.	28.09
2.039	83.892	.4481	986.8	3.985	247.6	.1023-2	1160.	28.10
2.039	83.894	.4481	987.5	3.985	247.8	.1022-2	1161.	28.11
2.038	83.896	.4481	988.2	3.985	248.0	.1020-2	1162.	28.12
2.037	83.899	.4481	988.9	3.985	248.2	.1019-2	1163.	28.13
2.037	83.901	.4481	989.6	3.985	248.3	.1018-2	1164.	28.14
2.036	83.903	.4481	990.3	3.985	248.5	.1017-2	1164.	28.15
2.035	83.905	.4481	991.0	3.985	248.7	.1016-2	1165.	28.16
2.034	83.907	.4481	991.7	3.985	248.9	.1015-2	1166.	28.17
2.034	83.909	.4481	992.4	3.985	249.0	.1014-2	1167.	28.18
2.033	83.911	.4481	993.1	3.985	249.2	.1013-2	1168.	28.19
2.032	83.914	.4481	993.8	3.985	249.4	.1012-2	1169.	28.20
2.031	83.916	.4481	994.5	3.985	249.6	.1011-2	1169.	28.21
2.031	83.918	.4481	995.2	3.985	249.7	.1010-2	1170.	28.22
2.030	83.920	.4481	995.9	3.985	249.9	.1009-2	1171.	28.23
2.029	83.922	.4481	996.6	3.985	250.1	.1008-2	1172.	28.24
2.029	83.924	.4481	997.3	3.985	250.3	.1007-2	1173.	28.25
2.028	83.927	.4481	998.0	3.985	250.4	.1005-2	1174.	28.26
2.027	83.929	.4481	998.7	3.985	250.6	.1004-2	1174.	28.27
2.026	83.931	.4481	999.4	3.985	250.8	.1003-2	1175.	28.28
2.826	83.933	.4481	1000.	3.985	251.0	.1002-2	1176.	28.29
2.025	83.935	.4481	1001.	3.985	251.2	.1001-2	1177.	28.30
2.024	83.937	.4481	1002.	3.985	251.3	.1000-2	1178.	28.31
2.024	83.939	.4481	1002.	3.985	251.5	.9991-3	1179.	28.32
2.023	83.941	.4481	1003.	3.985	251.7	.9981-3	1179.	28.33
2.022	83.944	.4481	1004.	3.985	251.9	.9970-3	1180.	28.34
2.021	83.946	.4481	1004.	3.985	252.0	.9960-3	1181.	28.35
2.021	83.948	.4481	1005.	3.985	252.2	.9949-3	1182.	28.36
2.020	83.950	.4481	1006.	3.985	252.4	.9939-3	1183.	28.37
2.019	83.952	.4481	1007.	3.985	252.6	.9928-3	1184.	28.38
2.019	83.954	.4481	1007.	3.985	252.7	.9918-3	1184.	28.39
2.018	83.956	.4481	1008.	3.985	252.9	.9907-3	1185.	28.40
2.017	83.958	.4481	1009.	3.985	253.1	.9897-3	1186.	28.41
2.016	83.961	.4481	1009.	3.985	253.3	.9887-3	1187.	28.42
2.016	83.963	.4481	1010.	3.985	253.5	.9876-3	1188.	28.43
2.015	83.965	.4481	1011.	3.985	253.6	.9866-3	1189.	28.44
2.014	83.967	.4481	1012.	3.985	253.8	.9856-3	1189.	28.45
2.014	83.969	.4481	1012.	3.985	254.0	.9845-3	1190.	28.46
2.013	83.971	.4481	1013.	3.985	254.2	.9835-3	1191.	28.47
2.012	83.973	.4481	1014.	3.985	254.3	.9825-3	1192.	28.48
2.011	83.975	.4481	1014.	3.985	254.5	.9814-3	1193.	28.49
2.011	83.978	.4481	1015.	3.985	254.7	.9804-3	1194.	28.50
2.010	83.980	.4481	1016.	3.985	254.9	.9794-3	1194.	28.51
2.009	83.982	.4481	1016.	3.985	255.1	.9784-3	1195.	28.52
2.009	83.984	.4481	1017.	3.985	255.2	.9773-3	1196.	28.53
2.008	83.986	.4481	1018.	3.985	255.4	.9763-3	1197.	28.54
2.007	83.988	.4481	1019.	3.985	255.6	.9753-3	1198.	28.55
2.007	83.990	.4481	1019.	3.985	255.8	.9743-3	1199.	28.56
2.006	83.992	.4481	1020.	3.985	256.0	.9733-3	1199.	28.57
2.005	83.994	.4481	1021.	3.985	256.1	.9722-3	1200.	28.58
2.004	83.996	.4481	1021.	3.985	256.3	.9712-3	1201.	28.59
2.004	83.999	.4481	1022.	3.985	256.5	.9702-3	1202.	28.60
2.003	84.001	.4481	1023.	3.985	256.7	.9692-3	1203.	28.61
2.002	84.003	.4481	1024.	3.985	256.8	.9682-3	1204.	28.62
2.002	84.005	.4481	1024.	3.985	257.0	.9672-3	1204.	28.63
2.001	84.007	.4481	1025.	3.985	257.2	.9662-3	1205.	28.64
2.000	84.009	.4481	1026.	3.985	257.4	.9652-3	1206.	28.65
2.000	84.011	.4481	1026.	3.985	257.6	.9642-3	1207.	28.66
1.999	84.013	.4481	1027.	3.985	257.7	.9632-3	1208.	28.67
1.998	84.015	.4481	1028.	3.985	257.9	.9622-3	1209.	28.68
1.997	84.017	.4481	1029.	3.985	258.1	.9612-3	1209.	28.69
1.997	84.019	.4481	1029.	3.985	258.3	.9602-3	1210.	28.70
1.996	84.021	.4481	1030.	3.985	258.5	.9592-3	1211.	28.71
1.995	84.024	.4481	1031.	3.986	258.6	.9582-3	1212.	28.72
1.995	84.026	.4481	1032.	3.986	258.8	.9572-3	1213.	28.73
1.994	84.028	.4481	1032.	3.986	259.0	.9562-3	1214.	28.74
1.993	84.030	.4481	1033.	3.986	259.2	.9552-3	1215.	28.75
1.993	84.032	.4481	1034.	3.986	259.4	.9542-3	1215.	28.76
1.992	84.034	.4481	1034.	3.986	259.5	.9532-3	1216.	28.77
1.991	84.036	.4481	1035.	3.986	259.7	.9522-3	1217.	28.78
1.991	84.038	.4481	1036.	3.986	259.9	.9512-3	1218.	28.79
1.990	84.040	.4481	1037.	3.986	260.1	.9503-3	1219.	28.80
1.989	84.042	.4481	1037.	3.986	260.3	.9493-3	1220.	28.81
1.988	84.044	.4481	1038.	3.986	260.4	.9483-3	1220.	28.82
1.988	84.046	.4481	1039.	3.986	260.6	.9473-3	1221.	28.83
1.987	84.048	.4481	1039.	3.986	260.8	.9463-3	1222.	28.84
1.986	84.050	.4481	1040.	3.986	261.0	.9454-3	1223.	28.85
1.986	84.052	.4481	1041.	3.986	261.2	.9444-3	1224.	28.86
1.985	84.054	.4481	1042.	3.986	261.3	.9434-3	1225.	28.87
1.984	84.057	.4481	1042.	3.986	261.5	.9424-3	1226.	28.88
1.984	84.059	.4481	1043.	3.986	261.7	.9415-3	1226.	28.89
1.983	84.061	.4481	1044.	3.986	261.9	.9405-3	1227.	28.90
1.982	84.063	.4481	1044.	3.986	262.1	.9395-3	1228.	28.91
1.982	84.065	.4481	1045.	3.986	262.2	.9386-3	1229.	28.92
1.981	84.067	.4481	1046.	3.986	262.4	.9376-3	1230.	28.93
1.980	84.069	.4481	1047.	3.986	262.6	.9366-3	1231.	28.94
1.980	84.071	.4481	1047.	3.986	262.8	.9357-3	1232.	28.95
1.979	84.073	.4481	1048.	3.986	263.0	.9347-3	1232.	28.96
1.978	84.075	.4481	1049.	3.986	263.1	.9337-3	1233.	28.97
1.977	84.077	.4481	1050.	3.986	263.3	.9328-3	1234.	28.98
1.977	84.079	.4481	1050.	3.986	263.5	.9318-3	1235.	28.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
29.00	.7533-6	.2119-3	.3555-2	.5962-1	.5279-3	.6514-3	.9982	1.99644
29.01	.7520-6	.2117-3	.3552-2	.5960-1	.5274-3	.6507-3	.9982	1.99644
29.02	.7507-6	.2115-3	.3550-2	.5958-1	.5268-3	.6500-3	.9982	1.99645
29.03	.7494-6	.2113-3	.3547-2	.5956-1	.5263-3	.6494-3	.9982	1.99645
29.04	.7481-6	.2110-3	.3545-2	.5954-1	.5257-3	.6487-3	.9982	1.99645
29.05	.7468-6	.2108-3	.3542-2	.5952-1	.5252-3	.6480-3	.9982	1.99645
29.06	.7455-6	.2106-3	.3540-2	.5950-1	.5247-3	.6474-3	.9982	1.99646
29.07	.7443-6	.2104-3	.3537-2	.5948-1	.5241-3	.6467-3	.9982	1.99646
29.08	.7430-6	.2102-3	.3535-2	.5946-1	.5236-3	.6460-3	.9982	1.99646
29.09	.7417-6	.2100-3	.3533-2	.5944-1	.5231-3	.6454-3	.9982	1.99646
29.10	.7405-6	.2097-3	.3530-2	.5942-1	.5225-3	.6447-3	.9982	1.99647
29.11	.7392-6	.2095-3	.3528-2	.5940-1	.5220-3	.6441-3	.9982	1.99647
29.12	.7379-6	.2093-3	.3525-2	.5937-1	.5215-3	.6434-3	.9982	1.99647
29.13	.7367-6	.2091-3	.3523-2	.5935-1	.5209-3	.6427-3	.9982	1.99647
29.14	.7354-6	.2089-3	.3521-2	.5933-1	.5204-3	.6421-3	.9982	1.99648
29.15	.7341-6	.2087-3	.3518-2	.5931-1	.5199-3	.6414-3	.9982	1.99648
29.16	.7329-6	.2085-3	.3516-2	.5929-1	.5193-3	.6408-3	.9982	1.99648
29.17	.7316-6	.2082-3	.3513-2	.5927-1	.5188-3	.6401-3	.9982	1.99648
29.18	.7304-6	.2080-3	.3511-2	.5925-1	.5183-3	.6395-3	.9982	1.99649
29.19	.7291-6	.2078-3	.3509-2	.5923-1	.5177-3	.6388-3	.9982	1.99649
29.20	.7279-6	.2076-3	.3506-2	.5921-1	.5172-3	.6381-3	.9982	1.99649
29.21	.7267-6	.2074-3	.3504-2	.5919-1	.5167-3	.6375-3	.9982	1.99649
29.22	.7254-6	.2072-3	.3501-2	.5917-1	.5161-3	.6368-3	.9982	1.99650
29.23	.7242-6	.2070-3	.3499-2	.5915-1	.5156-3	.6362-3	.9982	1.99650
29.24	.7230-6	.2068-3	.3497-2	.5913-1	.5151-3	.6355-3	.9983	1.99650
29.25	.7217-6	.2065-3	.3494-2	.5911-1	.5146-3	.6349-3	.9983	1.99650
29.26	.7205-6	.2063-3	.3492-2	.5909-1	.5140-3	.6342-3	.9983	1.99651
29.27	.7193-6	.2061-3	.3489-2	.5907-1	.5135-3	.6336-3	.9983	1.99651
29.28	.7181-6	.2059-3	.3487-2	.5905-1	.5130-3	.6330-3	.9983	1.99651
29.29	.7168-6	.2057-3	.3485-2	.5903-1	.5125-3	.6323-3	.9983	1.99651
29.30	.7156-6	.2055-3	.3482-2	.5901-1	.5120-3	.6317-3	.9983	1.99651
29.31	.7144-6	.2053-3	.3480-2	.5899-1	.5114-3	.6310-3	.9983	1.99652
29.32	.7132-6	.2051-3	.3478-2	.5897-1	.5109-3	.6304-3	.9983	1.99652
29.33	.7120-6	.2049-3	.3475-2	.5895-1	.5104-3	.6297-3	.9983	1.99652
29.34	.7108-6	.2047-3	.3473-2	.5893-1	.5099-3	.6291-3	.9983	1.99652
29.35	.7096-6	.2045-3	.3471-2	.5891-1	.5094-3	.6285-3	.9983	1.99653
29.36	.7084-6	.2042-3	.3468-2	.5889-1	.5088-3	.6278-3	.9983	1.99653
29.37	.7072-6	.2040-3	.3466-2	.5887-1	.5083-3	.6272-3	.9983	1.99653
29.38	.7060-6	.2038-3	.3463-2	.5885-1	.5078-3	.6265-3	.9983	1.99653
29.39	.7048-6	.2036-3	.3461-2	.5883-1	.5073-3	.6259-3	.9983	1.99654
29.40	.7036-6	.2034-3	.3459-2	.5881-1	.5068-3	.6253-3	.9983	1.99654
29.41	.7024-6	.2032-3	.3456-2	.5879-1	.5063-3	.6246-3	.9983	1.99654
29.42	.7012-6	.2030-3	.3454-2	.5877-1	.5058-3	.6240-3	.9983	1.99654
29.43	.7000-6	.2028-3	.3452-2	.5875-1	.5052-3	.6234-3	.9983	1.99655
29.44	.6988-6	.2026-3	.3449-2	.5873-1	.5047-3	.6227-3	.9983	1.99655
29.45	.6976-6	.2024-3	.3447-2	.5871-1	.5042-3	.6221-3	.9983	1.99655
29.46	.6965-6	.2022-3	.3445-2	.5869-1	.5037-3	.6215-3	.9983	1.99655
29.47	.6953-6	.2020-3	.3442-2	.5867-1	.5032-3	.6208-3	.9983	1.99655
29.48	.6941-6	.2018-3	.3440-2	.5865-1	.5027-3	.6202-3	.9983	1.99656
29.49	.6929-6	.2016-3	.3438-2	.5863-1	.5022-3	.6196-3	.9983	1.99656
29.50	.6918-6	.2014-3	.3435-2	.5861-1	.5017-3	.6190-3	.9983	1.99656
29.51	.6906-6	.2012-3	.3433-2	.5859-1	.5012-3	.6183-3	.9983	1.99656
29.52	.6894-6	.2010-3	.3431-2	.5857-1	.5007-3	.6177-3	.9983	1.99657
29.53	.6883-6	.2007-3	.3428-2	.5855-1	.5002-3	.6171-3	.9983	1.99657
29.54	.6871-6	.2005-3	.3426-2	.5853-1	.4996-3	.6165-3	.9983	1.99657
29.55	.6859-6	.2003-3	.3424-2	.5851-1	.4991-3	.6158-3	.9983	1.99657
29.56	.6848-6	.2001-3	.3422-2	.5849-1	.4986-3	.6152-3	.9983	1.99658
29.57	.6836-6	.1999-3	.3419-2	.5847-1	.4981-3	.6146-3	.9983	1.99658
29.58	.6825-6	.1997-3	.3417-2	.5845-1	.4976-3	.6140-3	.9983	1.99658
29.59	.6813-6	.1995-3	.3415-2	.5843-1	.4971-3	.6134-3	.9983	1.99658
29.60	.6802-6	.1993-3	.3412-2	.5842-1	.4966-3	.6127-3	.9983	1.99658
29.61	.6791-6	.1991-3	.3410-2	.5840-1	.4961-3	.6121-3	.9983	1.99659
29.62	.6779-6	.1989-3	.3408-2	.5838-1	.4956-3	.6115-3	.9983	1.99659
29.63	.6768-6	.1987-3	.3405-2	.5836-1	.4951-3	.6109-3	.9983	1.99659
29.64	.6756-6	.1985-3	.3403-2	.5834-1	.4946-3	.6103-3	.9983	1.99659
29.65	.6745-6	.1983-3	.3401-2	.5832-1	.4941-3	.6097-3	.9983	1.99660
29.66	.6734-6	.1981-3	.3399-2	.5830-1	.4936-3	.6090-3	.9983	1.99660
29.67	.6722-6	.1979-3	.3396-2	.5828-1	.4931-3	.6084-3	.9983	1.99660
29.68	.6711-6	.1977-3	.3394-2	.5826-1	.4927-3	.6078-3	.9983	1.99660
29.69	.6700-6	.1975-3	.3392-2	.5824-1	.4922-3	.6072-3	.9983	1.99661
29.70	.6689-6	.1973-3	.3389-2	.5822-1	.4917-3	.6066-3	.9983	1.99661
29.71	.6677-6	.1971-3	.3387-2	.5820-1	.4912-3	.6060-3	.9983	1.99661
29.72	.6666-6	.1969-3	.3385-2	.5818-1	.4907-3	.6054-3	.9983	1.99661
29.73	.6655-6	.1967-3	.3383-2	.5816-1	.4902-3	.6048-3	.9983	1.99661
29.74	.6644-6	.1965-3	.3380-2	.5814-1	.4897-3	.6042-3	.9983	1.99662
29.75	.6633-6	.1963-3	.3378-2	.5812-1	.4892-3	.6036-3	.9983	1.99662
29.76	.6622-6	.1961-3	.3376-2	.5810-1	.4887-3	.6030-3	.9983	1.99662
29.77	.6611-6	.1959-3	.3374-2	.5808-1	.4882-3	.6023-3	.9983	1.99662
29.78	.6600-6	.1958-3	.3371-2	.5806-1	.4877-3	.6017-3	.9983	1.99663
29.79	.6588-6	.1956-3	.3369-2	.5804-1	.4872-3	.6011-3	.9983	1.99663
29.80	.6577-6	.1954-3	.3367-2	.5802-1	.4868-3	.6005-3	.9983	1.99663
29.81	.6567-6	.1952-3	.3365-2	.5801-1	.4863-3	.5999-3	.9983	1.99663
29.82	.6556-6	.1950-3	.3362-2	.5799-1	.4858-3	.5993-3	.9983	1.99663
29.83	.6545-6	.1948-3	.3360-2	.5797-1	.4853-3	.5987-3	.9983	1.99664
29.84	.6534-6	.1946-3	.3358-2	.5795-1	.4848-3	.5981-3	.9983	1.99664
29.85	.6523-6	.1944-3	.3356-2	.5793-1	.4843-3	.5975-3	.9983	1.99664
29.86	.6512-6	.1942-3	.3353-2	.5791-1	.4838-3	.5969-3	.9983	1.99664
29.87	.6501-6	.1940-3	.3351-2	.5789-1	.4834-3	.5963-3	.9983	1.99665
29.88	.6490-6	.1938-3	.3349-2	.5787-1	.4829-3	.5958-3	.9983	1.99665
29.89	.6479-6	.1936-3	.3347-2	.5785-1	.4824-3	.5952-3	.9983	1.99665
29.90	.6469-6	.1934-3	.3344-2	.5783-1	.4819-3	.5946-3	.9983	1.99665
29.91	.6458-6	.1932-3	.3342-2	.5781-1	.4814-3	.5940-3	.9983	1.99666
29.92	.6447-6	.1930-3	.3340-2	.5779-1	.4810-3	.5934-3	.9983	1.99666
29.93	.6436-6	.1928-3	.3338-2	.5777-1	.4805-3	.5928-3	.9983	1.99666
29.94	.6426-6	.1926-3	.3336-2	.5775-1	.4800-3	.5922-3	.9983	1.99666
29.95	.6415-6	.1924-3	.3333-2	.5773-1	.4795-3	.5916-3	.9983	1.99666
29.96	.6404-6	.1923-3	.3331-2	.5772-1	.4790-3	.5910-3	.9983	1.99667
29.97	.6394-6	.1921-3	.3329-2	.5770-1	.4786-3	.5904-3	.9983	1.99667
29.98	.6383-6	.1919-3	.3327-2	.5768-1	.4781-3	.5898-3	.9983	1.99667
29.99	.6372-6	.1917-3	.3324-2	.5766-1	.4776-3	.5892-3	.9983	1.99667

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
1.976	84.081	.4481	1051.	3.986	263.7	.9309-3	1236.	29.00
1.975	84.083	.4481	1052.	3.986	263.9	.9299-3	1237.	29.01
1.975	84.085	.4481	1052.	3.986	264.0	.9289-3	1237.	29.02
1.974	84.087	.4481	1053.	3.986	264.2	.9280-3	1238.	29.03
1.973	84.089	.4481	1054.	3.986	264.4	.9270-3	1239.	29.04
1.973	84.091	.4481	1055.	3.986	264.6	.9261-3	1240.	29.05
1.972	84.093	.4481	1055.	3.986	264.8	.9251-3	1241.	29.06
1.971	84.095	.4481	1056.	3.986	265.0	.9242-3	1242.	29.07
1.971	84.097	.4481	1057.	3.986	265.1	.9232-3	1243.	29.08
1.970	84.099	.4481	1058.	3.986	265.3	.9223-3	1243.	29.09
1.969	84.101	.4481	1058.	3.986	265.5	.9213-3	1244.	29.10
1.969	84.103	.4481	1059.	3.986	265.7	.9204-3	1245.	29.11
1.968	84.105	.4481	1060.	3.986	265.9	.9195-3	1246.	29.12
1.967	84.107	.4481	1060.	3.986	266.0	.9185-3	1247.	29.13
1.967	84.109	.4481	1061.	3.986	266.2	.9176-3	1248.	29.14
1.966	84.111	.4481	1062.	3.986	266.4	.9166-3	1249.	29.15
1.965	84.113	.4481	1063.	3.986	266.6	.9157-3	1249.	29.16
1.965	84.115	.4481	1063.	3.986	266.8	.9148-3	1250.	29.17
1.964	84.117	.4481	1064.	3.986	267.0	.9138-3	1251.	29.18
1.963	84.119	.4481	1065.	3.986	267.1	.9129-3	1252.	29.19
1.963	84.121	.4481	1066.	3.986	267.3	.9120-3	1253.	29.20
1.962	84.123	.4481	1066.	3.986	267.5	.9110-3	1254.	29.21
1.961	84.125	.4481	1067.	3.986	267.7	.9101-3	1255.	29.22
1.961	84.128	.4481	1068.	3.986	267.9	.9092-3	1255.	29.23
1.960	84.130	.4480	1068.	3.986	268.1	.9082-3	1256.	29.24
1.959	84.132	.4480	1069.	3.986	268.2	.9073-3	1257.	29.25
1.959	84.134	.4480	1070.	3.986	268.4	.9064-3	1258.	29.26
1.958	84.136	.4480	1071.	3.986	268.6	.9055-3	1259.	29.27
1.957	84.138	.4480	1071.	3.986	268.8	.9045-3	1260.	29.28
1.957	84.140	.4480	1072.	3.986	269.0	.9036-3	1261.	29.29
1.956	84.141	.4480	1073.	3.986	269.2	.9027-3	1261.	29.30
1.955	84.143	.4480	1074.	3.986	269.3	.9018-3	1262.	29.31
1.955	84.145	.4480	1074.	3.986	269.5	.9009-3	1263.	29.32
1.954	84.147	.4480	1075.	3.986	269.7	.9000-3	1264.	29.33
1.953	84.149	.4480	1076.	3.986	269.9	.8990-3	1265.	29.34
1.953	84.151	.4480	1077.	3.986	270.1	.8981-3	1266.	29.35
1.952	84.153	.4480	1077.	3.986	270.3	.8972-3	1267.	29.36
1.951	84.155	.4480	1078.	3.986	270.4	.8963-3	1267.	29.37
1.951	84.157	.4480	1079.	3.986	270.6	.8954-3	1268.	29.38
1.950	84.159	.4480	1079.	3.986	270.8	.8945-3	1269.	29.39
1.949	84.161	.4480	1080.	3.986	271.0	.8936-3	1270.	29.40
1.949	84.163	.4480	1081.	3.986	271.2	.8927-3	1271.	29.41
1.948	84.165	.4480	1082.	3.986	271.4	.8918-3	1272.	29.42
1.947	84.167	.4480	1082.	3.986	271.5	.8909-3	1273.	29.43
1.947	84.169	.4480	1083.	3.986	271.7	.8900-3	1274.	29.44
1.946	84.171	.4480	1084.	3.986	271.9	.8891-3	1274.	29.45
1.945	84.173	.4480	1085.	3.986	272.1	.8882-3	1275.	29.46
1.945	84.175	.4480	1085.	3.986	272.3	.8873-3	1276.	29.47
1.944	84.177	.4480	1086.	3.986	272.5	.8864-3	1277.	29.48
1.943	84.179	.4480	1087.	3.986	272.6	.8855-3	1278.	29.49
1.943	84.181	.4480	1088.	3.986	272.8	.8846-3	1279.	29.50
1.942	84.183	.4480	1088.	3.986	273.0	.8837-3	1280.	29.51
1.941	84.185	.4480	1089.	3.986	273.2	.8828-3	1280.	29.52
1.941	84.187	.4480	1090.	3.986	273.4	.8819-3	1281.	29.53
1.940	84.189	.4480	1091.	3.986	273.6	.8810-3	1282.	29.54
1.939	84.191	.4480	1091.	3.986	273.8	.8801-3	1283.	29.55
1.939	84.193	.4480	1092.	3.986	273.9	.8792-3	1284.	29.56
1.938	84.195	.4480	1093.	3.986	274.1	.8783-3	1285.	29.57
1.937	84.197	.4480	1093.	3.986	274.3	.8775-3	1286.	29.58
1.937	84.199	.4480	1094.	3.986	274.5	.8766-3	1287.	29.59
1.936	84.201	.4480	1095.	3.986	274.7	.8757-3	1287.	29.60
1.935	84.203	.4480	1096.	3.986	274.9	.8748-3	1288.	29.61
1.935	84.205	.4480	1096.	3.986	275.0	.8739-3	1289.	29.62
1.934	84.207	.4480	1097.	3.986	275.2	.8730-3	1290.	29.63
1.933	84.209	.4480	1098.	3.986	275.4	.8722-3	1291.	29.64
1.933	84.210	.4480	1099.	3.986	275.6	.8713-3	1292.	29.65
1.932	84.212	.4480	1099.	3.986	275.8	.8704-3	1293.	29.66
1.931	84.214	.4480	1100.	3.986	276.0	.8695-3	1293.	29.67
1.931	84.216	.4480	1101.	3.986	276.2	.8687-3	1294.	29.68
1.930	84.218	.4480	1102.	3.986	276.3	.8678-3	1295.	29.69
1.930	84.220	.4480	1102.	3.986	276.5	.8669-3	1296.	29.70
1.929	84.222	.4480	1103.	3.986	276.7	.8660-3	1297.	29.71
1.928	84.224	.4480	1104.	3.986	276.9	.8652-3	1298.	29.72
1.928	84.226	.4480	1105.	3.986	277.1	.8643-3	1299.	29.73
1.927	84.228	.4480	1105.	3.986	277.3	.8634-3	1300.	29.74
1.926	84.230	.4480	1106.	3.986	277.5	.8626-3	1300.	29.75
1.926	84.232	.4480	1107.	3.986	277.6	.8617-3	1301.	29.76
1.925	84.234	.4480	1108.	3.987	277.8	.8608-3	1302.	29.77
1.924	84.236	.4480	1108.	3.987	278.0	.8600-3	1303.	29.78
1.924	84.238	.4480	1109.	3.987	278.2	.8591-3	1304.	29.79
1.923	84.240	.4480	1110.	3.987	278.4	.8583-3	1305.	29.80
1.922	84.241	.4480	1111.	3.987	278.6	.8574-3	1306.	29.81
1.922	84.243	.4480	1111.	3.987	278.8	.8565-3	1307.	29.82
1.921	84.245	.4480	1112.	3.987	278.9	.8557-3	1307.	29.83
1.920	84.247	.4480	1113.	3.987	279.1	.8548-3	1308.	29.84
1.920	84.249	.4480	1114.	3.987	279.3	.8540-3	1309.	29.85
1.919	84.251	.4480	1114.	3.987	279.5	.8531-3	1310.	29.86
1.919	84.253	.4480	1115.	3.987	279.7	.8523-3	1311.	29.87
1.918	84.255	.4480	1116.	3.987	279.9	.8514-3	1312.	29.88
1.917	84.257	.4480	1117.	3.987	280.1	.8506-3	1313.	29.89
1.917	84.259	.4480	1117.	3.987	280.3	.8497-3	1314.	29.90
1.916	84.261	.4480	1118.	3.987	280.4	.8489-3	1314.	29.91
1.915	84.263	.4480	1119.	3.987	280.6	.8480-3	1315.	29.92
1.915	84.264	.4480	1120.	3.987	280.8	.8472-3	1316.	29.93
1.914	84.266	.4480	1120.	3.987	281.0	.8463-3	1317.	29.94
1.913	84.268	.4480	1121.	3.987	281.2	.8455-3	1318.	29.95
1.913	84.270	.4480	1122.	3.987	281.4	.8447-3	1319.	29.96
1.912	84.272	.4480	1123.	3.987	281.6	.8438-3	1320.	29.97
1.911	84.274	.4480	1123.	3.987	281.7	.8430-3	1321.	29.98
1.911	84.276	.4480	1124.	3.987	281.9	.8421-3	1322.	29.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
30.00	.6362-6	.1915-3	.3328-2	.5764-1	.4771-3	.5887-3	.9983	1.99668
30.01	.6351-6	.1913-3	.3320-2	.5762-1	.4767-3	.5881-3	.9983	1.99668
30.02	.6341-6	.1911-3	.3318-2	.5760-1	.4762-3	.5875-3	.9983	1.99668
30.03	.6330-6	.1909-3	.3316-2	.5758-1	.4757-3	.5869-3	.9983	1.99668
30.04	.6320-6	.1907-3	.3313-2	.5756-1	.4752-3	.5863-3	.9983	1.99668
30.05	.6309-6	.1905-3	.3311-2	.5754-1	.4748-3	.5857-3	.9983	1.99669
30.06	.6299-6	.1904-3	.3309-2	.5752-1	.4743-3	.5852-3	.9983	1.99669
30.07	.6288-6	.1902-3	.3307-2	.5751-1	.4738-3	.5846-3	.9983	1.99669
30.08	.6278-6	.1900-3	.3305-2	.5749-1	.4734-3	.5840-3	.9983	1.99669
30.09	.6268-6	.1898-3	.3302-2	.5747-1	.4729-3	.5834-3	.9983	1.99669
30.10	.6257-6	.1896-3	.3300-2	.5745-1	.4724-3	.5828-3	.9983	1.99670
30.11	.6247-6	.1894-3	.3298-2	.5743-1	.4720-3	.5823-3	.9983	1.99670
30.12	.6237-6	.1892-3	.3296-2	.5741-1	.4715-3	.5817-3	.9984	1.99670
30.13	.6226-6	.1890-3	.3294-2	.5739-1	.4710-3	.5811-3	.9984	1.99670
30.14	.6216-6	.1888-3	.3292-2	.5737-1	.4706-3	.5805-3	.9984	1.99671
30.15	.6206-6	.1887-3	.3289-2	.5735-1	.4701-3	.5800-3	.9984	1.99671
30.16	.6195-6	.1885-3	.3287-2	.5733-1	.4696-3	.5794-3	.9984	1.99671
30.17	.6185-6	.1883-3	.3285-2	.5732-1	.4692-3	.5788-3	.9984	1.99671
30.18	.6175-6	.1881-3	.3283-2	.5730-1	.4687-3	.5782-3	.9984	1.99671
30.19	.6165-6	.1879-3	.3281-2	.5728-1	.4682-3	.5777-3	.9984	1.99672
30.20	.6155-6	.1877-3	.3279-2	.5726-1	.4678-3	.5771-3	.9984	1.99672
30.21	.6144-6	.1875-3	.3276-2	.5724-1	.4673-3	.5765-3	.9984	1.99672
30.22	.6134-6	.1874-3	.3274-2	.5722-1	.4669-3	.5760-3	.9984	1.99672
30.23	.6124-6	.1872-3	.3272-2	.5720-1	.4664-3	.5754-3	.9984	1.99673
30.24	.6114-6	.1870-3	.3270-2	.5718-1	.4659-3	.5748-3	.9984	1.99673
30.25	.6104-6	.1868-3	.3268-2	.5716-1	.4655-3	.5742-3	.9984	1.99673
30.26	.6094-6	.1866-3	.3266-2	.5715-1	.4650-3	.5737-3	.9984	1.99673
30.27	.6084-6	.1864-3	.3263-2	.5713-1	.4646-3	.5731-3	.9984	1.99673
30.28	.6074-6	.1862-3	.3261-2	.5711-1	.4641-3	.5726-3	.9984	1.99674
30.29	.6064-6	.1861-3	.3259-2	.5709-1	.4636-3	.5720-3	.9984	1.99674
30.30	.6054-6	.1859-3	.3257-2	.5707-1	.4632-3	.5714-3	.9984	1.99674
30.31	.6044-6	.1857-3	.3255-2	.5705-1	.4627-3	.5709-3	.9984	1.99674
30.32	.6034-6	.1855-3	.3253-2	.5703-1	.4623-3	.5703-3	.9984	1.99674
30.33	.6024-6	.1853-3	.3251-2	.5701-1	.4618-3	.5697-3	.9984	1.99675
30.34	.6014-6	.1851-3	.3248-2	.5700-1	.4614-3	.5692-3	.9984	1.99675
30.35	.6005-6	.1850-3	.3246-2	.5698-1	.4609-3	.5686-3	.9984	1.99675
30.36	.5995-6	.1848-3	.3244-2	.5696-1	.4605-3	.5681-3	.9984	1.99675
30.37	.5985-6	.1846-3	.3242-2	.5694-1	.4600-3	.5675-3	.9984	1.99676
30.38	.5975-6	.1844-3	.3240-2	.5692-1	.4596-3	.5669-3	.9984	1.99676
30.39	.5965-6	.1842-3	.3238-2	.5690-1	.4591-3	.5664-3	.9984	1.99676
30.40	.5955-6	.1841-3	.3236-2	.5688-1	.4587-3	.5658-3	.9984	1.99676
30.41	.5946-6	.1839-3	.3234-2	.5686-1	.4582-3	.5653-3	.9984	1.99676
30.42	.5936-6	.1837-3	.3231-2	.5685-1	.4578-3	.5647-3	.9984	1.99677
30.43	.5926-6	.1835-3	.3229-2	.5683-1	.4573-3	.5642-3	.9984	1.99677
30.44	.5917-6	.1833-3	.3227-2	.5681-1	.4569-3	.5636-3	.9984	1.99677
30.45	.5907-6	.1832-3	.3225-2	.5679-1	.4564-3	.5631-3	.9984	1.99677
30.46	.5897-6	.1830-3	.3223-2	.5677-1	.4560-3	.5625-3	.9984	1.99677
30.47	.5888-6	.1828-3	.3221-2	.5675-1	.4555-3	.5620-3	.9984	1.99678
30.48	.5878-6	.1826-3	.3219-2	.5673-1	.4551-3	.5614-3	.9984	1.99678
30.49	.5868-6	.1824-3	.3217-2	.5672-1	.4546-3	.5609-3	.9984	1.99678
30.50	.5859-6	.1823-3	.3215-2	.5670-1	.4542-3	.5603-3	.9984	1.99678
30.51	.5849-6	.1821-3	.3212-2	.5668-1	.4537-3	.5598-3	.9984	1.99678
30.52	.5840-6	.1819-3	.3210-2	.5666-1	.4533-3	.5592-3	.9984	1.99679
30.53	.5830-6	.1817-3	.3208-2	.5664-1	.4528-3	.5587-3	.9984	1.99679
30.54	.5821-6	.1815-3	.3206-2	.5662-1	.4524-3	.5581-3	.9984	1.99679
30.55	.5811-6	.1814-3	.3204-2	.5660-1	.4520-3	.5576-3	.9984	1.99679
30.56	.5802-6	.1812-3	.3202-2	.5659-1	.4515-3	.5570-3	.9984	1.99680
30.57	.5792-6	.1810-3	.3200-2	.5657-1	.4511-3	.5565-3	.9984	1.99680
30.58	.5783-6	.1808-3	.3198-2	.5655-1	.4506-3	.5559-3	.9984	1.99680
30.59	.5773-6	.1807-3	.3196-2	.5653-1	.4502-3	.5554-3	.9984	1.99680
30.60	.5764-6	.1805-3	.3194-2	.5651-1	.4498-3	.5549-3	.9984	1.99680
30.61	.5755-6	.1803-3	.3192-2	.5649-1	.4493-3	.5543-3	.9984	1.99681
30.62	.5745-6	.1801-3	.3190-2	.5648-1	.4489-3	.5538-3	.9984	1.99681
30.63	.5736-6	.1800-3	.3187-2	.5646-1	.4485-3	.5532-3	.9984	1.99681
30.64	.5727-6	.1798-3	.3185-2	.5644-1	.4480-3	.5527-3	.9984	1.99681
30.65	.5717-6	.1796-3	.3183-2	.5642-1	.4476-3	.5522-3	.9984	1.99681
30.66	.5708-6	.1794-3	.3181-2	.5640-1	.4471-3	.5516-3	.9984	1.99682
30.67	.5699-6	.1793-3	.3179-2	.5638-1	.4467-3	.5511-3	.9984	1.99682
30.68	.5689-6	.1791-3	.3177-2	.5637-1	.4463-3	.5505-3	.9984	1.99682
30.69	.5680-6	.1789-3	.3175-2	.5635-1	.4458-3	.5500-3	.9984	1.99682
30.70	.5671-6	.1787-3	.3173-2	.5633-1	.4454-3	.5495-3	.9984	1.99682
30.71	.5662-6	.1786-3	.3171-2	.5631-1	.4450-3	.5489-3	.9984	1.99683
30.72	.5653-6	.1784-3	.3169-2	.5629-1	.4445-3	.5484-3	.9984	1.99683
30.73	.5643-6	.1782-3	.3167-2	.5627-1	.4441-3	.5479-3	.9984	1.99683
30.74	.5634-6	.1780-3	.3165-2	.5626-1	.4437-3	.5473-3	.9984	1.99683
30.75	.5625-6	.1779-3	.3163-2	.5624-1	.4432-3	.5468-3	.9984	1.99683
30.76	.5616-6	.1777-3	.3161-2	.5622-1	.4428-3	.5463-3	.9984	1.99684
30.77	.5607-6	.1775-3	.3159-2	.5620-1	.4424-3	.5457-3	.9984	1.99684
30.78	.5598-6	.1773-3	.3157-2	.5618-1	.4420-3	.5452-3	.9984	1.99684
30.79	.5589-6	.1772-3	.3154-2	.5616-1	.4415-3	.5447-3	.9984	1.99684
30.80	.5580-6	.1770-3	.3152-2	.5615-1	.4411-3	.5442-3	.9984	1.99685
30.81	.5571-6	.1768-3	.3150-2	.5613-1	.4407-3	.5436-3	.9984	1.99685
30.82	.5562-6	.1767-3	.3148-2	.5611-1	.4403-3	.5431-3	.9984	1.99685
30.83	.5553-6	.1765-3	.3146-2	.5609-1	.4398-3	.5426-3	.9984	1.99685
30.84	.5544-6	.1763-3	.3144-2	.5607-1	.4394-3	.5421-3	.9984	1.99685
30.85	.5535-6	.1761-3	.3142-2	.5606-1	.4390-3	.5415-3	.9984	1.99686
30.86	.5526-6	.1760-3	.3140-2	.5604-1	.4386-3	.5410-3	.9984	1.99686
30.87	.5517-6	.1758-3	.3138-2	.5602-1	.4381-3	.5405-3	.9984	1.99686
30.88	.5508-6	.1756-3	.3136-2	.5600-1	.4377-3	.5400-3	.9984	1.99686
30.89	.5499-6	.1755-3	.3134-2	.5598-1	.4373-3	.5394-3	.9984	1.99686
30.90	.5490-6	.1753-3	.3132-2	.5597-1	.4369-3	.5389-3	.9984	1.99687
30.91	.5482-6	.1751-3	.3130-2	.5595-1	.4364-3	.5384-3	.9984	1.99687
30.92	.5473-6	.1750-3	.3128-2	.5593-1	.4360-3	.5379-3	.9984	1.99687
30.93	.5464-6	.1748-3	.3126-2	.5591-1	.4356-3	.5374-3	.9984	1.99687
30.94	.5455-6	.1746-3	.3124-2	.5589-1	.4352-3	.5368-3	.9984	1.99687
30.95	.5446-6	.1744-3	.3122-2	.5588-1	.4348-3	.5363-3	.9984	1.99688
30.96	.5438-6	.1743-3	.3120-2	.5586-1	.4343-3	.5358-3	.9984	1.99688
30.97	.5429-6	.1741-3	.3118-2	.5584-1	.4339-3	.5353-3	.9984	1.99688
30.98	.5420-6	.1739-3	.3116-2	.5582-1	.4335-3	.5348-3	.9984	1.99688
30.99	.5411-6	.1738-3	.3114-2	.5580-1	.4331-3	.5343-3	.9984	1.99688

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
1.910	84.278	.4480	1125.	3.987	282.1	.8413-3	1322.	30.00
1.910	84.280	.4480	1126.	3.987	282.3	.8405-3	1323.	30.01
1.909	84.282	.4480	1126.	3.987	282.5	.8396-3	1324.	30.02
1.908	84.284	.4480	1127.	3.987	282.7	.8388-3	1325.	30.03
1.908	84.285	.4480	1128.	3.987	282.9	.8380-3	1326.	30.04
1.907	84.287	.4480	1129.	3.987	283.1	.8371-3	1327.	30.05
1.906	84.289	.4480	1129.	3.987	283.3	.8363-3	1328.	30.06
1.906	84.291	.4480	1130.	3.987	283.4	.8355-3	1329.	30.07
1.905	84.293	.4480	1131.	3.987	283.6	.8346-3	1329.	30.08
1.904	84.295	.4480	1132.	3.987	283.8	.8338-3	1330.	30.09
1.904	84.297	.4480	1132.	3.987	284.0	.8330-3	1331.	30.10
1.903	84.299	.4480	1133.	3.987	284.2	.8322-3	1332.	30.11
1.903	84.301	.4480	1134.	3.987	284.4	.8313-3	1333.	30.12
1.902	84.302	.4480	1135.	3.987	284.6	.8305-3	1334.	30.13
1.901	84.304	.4480	1135.	3.987	284.8	.8297-3	1335.	30.14
1.901	84.306	.4480	1136.	3.987	284.9	.8289-3	1336.	30.15
1.900	84.308	.4480	1137.	3.987	285.1	.8281-3	1337.	30.16
1.899	84.310	.4480	1138.	3.987	285.3	.8272-3	1337.	30.17
1.899	84.312	.4480	1138.	3.987	285.5	.8264-3	1338.	30.18
1.898	84.314	.4480	1139.	3.987	285.7	.8256-3	1339.	30.19
1.898	84.316	.4480	1140.	3.987	285.9	.8248-3	1340.	30.20
1.897	84.318	.4480	1141.	3.987	286.1	.8240-3	1341.	30.21
1.896	84.319	.4480	1141.	3.987	286.3	.8232-3	1342.	30.22
1.896	84.321	.4480	1142.	3.987	286.5	.8223-3	1343.	30.23
1.895	84.323	.4480	1143.	3.987	286.6	.8215-3	1344.	30.24
1.894	84.325	.4480	1144.	3.987	286.8	.8207-3	1345.	30.25
1.894	84.327	.4480	1144.	3.987	287.0	.8199-3	1345.	30.26
1.893	84.329	.4480	1145.	3.987	287.2	.8191-3	1346.	30.27
1.893	84.331	.4480	1146.	3.987	287.4	.8183-3	1347.	30.28
1.892	84.332	.4480	1147.	3.987	287.6	.8175-3	1348.	30.29
1.891	84.334	.4480	1147.	3.987	287.8	.8167-3	1349.	30.30
1.891	84.336	.4480	1148.	3.987	288.0	.8159-3	1350.	30.31
1.890	84.338	.4480	1149.	3.987	288.2	.8151-3	1351.	30.32
1.889	84.340	.4480	1150.	3.987	288.3	.8143-3	1352.	30.33
1.889	84.342	.4480	1150.	3.987	288.5	.8135-3	1353.	30.34
1.888	84.344	.4480	1151.	3.987	288.7	.8127-3	1353.	30.35
1.888	84.346	.4480	1152.	3.987	288.9	.8119-3	1354.	30.36
1.887	84.347	.4480	1153.	3.987	289.1	.8111-3	1355.	30.37
1.886	84.349	.4480	1153.	3.987	289.3	.8103-3	1356.	30.38
1.886	84.351	.4480	1154.	3.987	289.5	.8095-3	1357.	30.39
1.885	84.353	.4480	1155.	3.987	289.7	.8087-3	1358.	30.40
1.884	84.355	.4480	1156.	3.987	289.9	.8079-3	1359.	30.41
1.884	84.357	.4480	1156.	3.987	290.1	.8071-3	1360.	30.42
1.883	84.358	.4480	1157.	3.987	290.2	.8063-3	1361.	30.43
1.883	84.360	.4480	1158.	3.987	290.4	.8055-3	1361.	30.44
1.882	84.362	.4480	1159.	3.987	290.6	.8047-3	1362.	30.45
1.881	84.364	.4480	1160.	3.987	290.8	.8040-3	1363.	30.46
1.881	84.366	.4480	1160.	3.987	291.0	.8032-3	1364.	30.47
1.880	84.368	.4480	1161.	3.987	291.2	.8024-3	1365.	30.48
1.880	84.370	.4480	1162.	3.987	291.4	.8016-3	1366.	30.49
1.879	84.371	.4480	1163.	3.987	291.6	.8008-3	1367.	30.50
1.878	84.373	.4480	1163.	3.987	291.8	.8000-3	1368.	30.51
1.878	84.375	.4480	1164.	3.987	292.0	.7992-3	1369.	30.52
1.877	84.377	.4480	1165.	3.987	292.2	.7985-3	1370.	30.53
1.876	84.379	.4480	1166.	3.987	292.3	.7977-3	1370.	30.54
1.876	84.381	.4480	1166.	3.987	292.5	.7969-3	1372.	30.55
1.875	84.382	.4480	1167.	3.987	292.7	.7961-3	1372.	30.56
1.875	84.384	.4480	1168.	3.987	292.9	.7953-3	1373.	30.57
1.874	84.386	.4480	1169.	3.987	293.1	.7946-3	1374.	30.58
1.873	84.388	.4480	1169.	3.987	293.3	.7938-3	1375.	30.59
1.873	84.390	.4480	1170.	3.987	293.5	.7930-3	1376.	30.60
1.872	84.392	.4480	1171.	3.987	293.7	.7923-3	1377.	30.61
1.872	84.393	.4480	1172.	3.987	293.9	.7915-3	1378.	30.62
1.871	84.395	.4480	1172.	3.987	294.1	.7907-3	1379.	30.63
1.870	84.397	.4480	1173.	3.987	294.3	.7899-3	1379.	30.64
1.870	84.399	.4480	1174.	3.987	294.4	.7892-3	1380.	30.65
1.869	84.401	.4480	1175.	3.987	294.6	.7884-3	1381.	30.66
1.868	84.403	.4480	1176.	3.987	294.8	.7876-3	1382.	30.67
1.868	84.404	.4480	1176.	3.987	295.0	.7869-3	1383.	30.68
1.867	84.406	.4480	1177.	3.987	295.2	.7861-3	1384.	30.69
1.867	84.408	.4480	1178.	3.987	295.4	.7853-3	1385.	30.70
1.866	84.410	.4480	1179.	3.987	295.6	.7846-3	1386.	30.71
1.865	84.412	.4480	1179.	3.987	295.8	.7838-3	1387.	30.72
1.865	84.413	.4480	1180.	3.987	296.0	.7831-3	1388.	30.73
1.864	84.415	.4480	1181.	3.987	296.2	.7823-3	1388.	30.74
1.864	84.417	.4480	1182.	3.987	296.4	.7815-3	1389.	30.75
1.863	84.419	.4480	1182.	3.987	296.6	.7808-3	1390.	30.76
1.862	84.421	.4480	1183.	3.987	296.7	.7800-3	1391.	30.77
1.862	84.422	.4480	1184.	3.987	296.9	.7793-3	1392.	30.78
1.861	84.424	.4480	1185.	3.987	297.1	.7785-3	1393.	30.79
1.861	84.426	.4480	1186.	3.987	297.3	.7778-3	1394.	30.80
1.860	84.428	.4480	1186.	3.987	297.5	.7770-3	1395.	30.81
1.859	84.430	.4480	1187.	3.987	297.7	.7762-3	1396.	30.82
1.859	84.432	.4480	1188.	3.987	297.9	.7755-3	1397.	30.83
1.858	84.433	.4480	1189.	3.987	298.1	.7747-3	1397.	30.84
1.858	84.435	.4480	1189.	3.987	298.3	.7740-3	1398.	30.85
1.857	84.437	.4480	1190.	3.987	298.5	.7732-3	1399.	30.86
1.856	84.439	.4480	1191.	3.987	298.7	.7725-3	1400.	30.87
1.856	84.440	.4480	1192.	3.987	298.9	.7718-3	1401.	30.88
1.855	84.442	.4480	1192.	3.987	299.1	.7710-3	1402.	30.89
1.855	84.444	.4480	1193.	3.987	299.3	.7703-3	1403.	30.90
1.854	84.446	.4480	1194.	3.987	299.4	.7695-3	1404.	30.91
1.853	84.448	.4480	1195.	3.987	299.6	.7688-3	1405.	30.92
1.853	84.449	.4480	1196.	3.987	299.8	.7680-3	1406.	30.93
1.852	84.451	.4480	1196.	3.988	300.0	.7673-3	1407.	30.94
1.852	84.453	.4480	1197.	3.988	300.2	.7666-3	1407.	30.95
1.851	84.455	.4480	1198.	3.988	300.4	.7658-3	1408.	30.96
1.850	84.457	.4480	1199.	3.988	300.6	.7651-3	1409.	30.97
1.850	84.458	.4480	1199.	3.988	300.8	.7643-3	1410.	30.98
1.849	84.460	.4480	1200.	3.988	301.0	.7636-3	1411.	30.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
31.00	.5403-6	.1736-3	.3112-2	.5579-1	.4327-3	.5337-3	.9984	1.99689
31.01	.5394-6	.1734-3	.3110-2	.5577-1	.4322-3	.5332-3	.9984	1.99689
31.02	.5385-6	.1733-3	.3108-2	.5575-1	.4318-3	.5327-3	.9984	1.99689
31.03	.5377-6	.1731-3	.3106-2	.5573-1	.4314-3	.5322-3	.9984	1.99689
31.04	.5368-6	.1729-3	.3104-2	.5571-1	.4310-3	.5317-3	.9984	1.99689
31.05	.5359-6	.1728-3	.3102-2	.5570-1	.4306-3	.5312-3	.9984	1.99690
31.06	.5351-6	.1726-3	.3100-2	.5568-1	.4302-3	.5307-3	.9984	1.99690
31.07	.5342-6	.1724-3	.3098-2	.5566-1	.4298-3	.5302-3	.9984	1.99690
31.08	.5334-6	.1723-3	.3096-2	.5564-1	.4294-3	.5296-3	.9985	1.99690
31.09	.5325-6	.1721-3	.3094-2	.5562-1	.4289-3	.5291-3	.9985	1.99690
31.10	.5317-6	.1719-3	.3092-2	.5561-1	.4285-3	.5286-3	.9985	1.99691
31.11	.5308-6	.1718-3	.3090-2	.5559-1	.4281-3	.5281-3	.9985	1.99691
31.12	.5300-6	.1716-3	.3088-2	.5557-1	.4277-3	.5276-3	.9985	1.99691
31.13	.5291-6	.1714-3	.3086-2	.5555-1	.4273-3	.5271-3	.9985	1.99691
31.14	.5283-6	.1713-3	.3084-2	.5554-1	.4269-3	.5266-3	.9985	1.99691
31.15	.5274-6	.1711-3	.3082-2	.5552-1	.4265-3	.5261-3	.9985	1.99692
31.16	.5266-6	.1710-3	.3080-2	.5550-1	.4261-3	.5256-3	.9985	1.99692
31.17	.5257-6	.1708-3	.3078-2	.5548-1	.4257-3	.5251-3	.9985	1.99692
31.18	.5249-6	.1706-3	.3076-2	.5546-1	.4253-3	.5246-3	.9985	1.99692
31.19	.5241-6	.1705-3	.3074-2	.5545-1	.4248-3	.5241-3	.9985	1.99692
31.20	.5232-6	.1703-3	.3072-2	.5543-1	.4244-3	.5236-3	.9985	1.99693
31.21	.5224-6	.1701-3	.3070-2	.5541-1	.4240-3	.5231-3	.9985	1.99693
31.22	.5216-6	.1700-3	.3068-2	.5539-1	.4236-3	.5226-3	.9985	1.99693
31.23	.5207-6	.1698-3	.3067-2	.5538-1	.4232-3	.5221-3	.9985	1.99693
31.24	.5199-6	.1696-3	.3065-2	.5536-1	.4228-3	.5216-3	.9985	1.99693
31.25	.5191-6	.1695-3	.3063-2	.5534-1	.4224-3	.5211-3	.9985	1.99694
31.26	.5182-6	.1693-3	.3061-2	.5532-1	.4220-3	.5206-3	.9985	1.99694
31.27	.5174-6	.1692-3	.3059-2	.5531-1	.4216-3	.5201-3	.9985	1.99694
31.28	.5166-6	.1690-3	.3057-2	.5529-1	.4212-3	.5196-3	.9985	1.99694
31.29	.5158-6	.1688-3	.3055-2	.5527-1	.4208-3	.5191-3	.9985	1.99694
31.30	.5149-6	.1687-3	.3053-2	.5525-1	.4204-3	.5186-3	.9985	1.99694
31.31	.5141-6	.1685-3	.3051-2	.5523-1	.4200-3	.5181-3	.9985	1.99695
31.32	.5133-6	.1684-3	.3049-2	.5522-1	.4196-3	.5176-3	.9985	1.99695
31.33	.5125-6	.1682-3	.3047-2	.5520-1	.4192-3	.5171-3	.9985	1.99695
31.34	.5117-6	.1680-3	.3045-2	.5518-1	.4188-3	.5166-3	.9985	1.99695
31.35	.5109-6	.1679-3	.3043-2	.5516-1	.4184-3	.5161-3	.9985	1.99695
31.36	.5101-6	.1677-3	.3041-2	.5515-1	.4180-3	.5156-3	.9985	1.99696
31.37	.5092-6	.1676-3	.3039-2	.5513-1	.4176-3	.5151-3	.9985	1.99696
31.38	.5084-6	.1674-3	.3037-2	.5511-1	.4172-3	.5147-3	.9985	1.99696
31.39	.5076-6	.1672-3	.3035-2	.5509-1	.4168-3	.5142-3	.9985	1.99696
31.40	.5068-6	.1671-3	.3033-2	.5508-1	.4164-3	.5137-3	.9985	1.99696
31.41	.5060-6	.1669-3	.3032-2	.5506-1	.4160-3	.5132-3	.9985	1.99697
31.42	.5052-6	.1668-3	.3030-2	.5504-1	.4156-3	.5127-3	.9985	1.99697
31.43	.5044-6	.1666-3	.3028-2	.5502-1	.4152-3	.5122-3	.9985	1.99697
31.44	.5036-6	.1664-3	.3026-2	.5501-1	.4148-3	.5117-3	.9985	1.99697
31.45	.5028-6	.1663-3	.3024-2	.5499-1	.4144-3	.5112-3	.9985	1.99697
31.46	.5020-6	.1661-3	.3022-2	.5497-1	.4141-3	.5108-3	.9985	1.99698
31.47	.5012-6	.1660-3	.3020-2	.5495-1	.4137-3	.5103-3	.9985	1.99698
31.48	.5004-6	.1658-3	.3018-2	.5494-1	.4133-3	.5098-3	.9985	1.99698
31.49	.4996-6	.1657-3	.3016-2	.5492-1	.4129-3	.5093-3	.9985	1.99698
31.50	.4989-6	.1655-3	.3014-2	.5490-1	.4125-3	.5088-3	.9985	1.99698
31.51	.4981-6	.1653-3	.3012-2	.5489-1	.4121-3	.5083-3	.9985	1.99699
31.52	.4973-6	.1652-3	.3011-2	.5487-1	.4117-3	.5079-3	.9985	1.99699
31.53	.4965-6	.1650-3	.3009-2	.5485-1	.4113-3	.5074-3	.9985	1.99699
31.54	.4957-6	.1649-3	.3007-2	.5483-1	.4109-3	.5069-3	.9985	1.99699
31.55	.4949-6	.1647-3	.3005-2	.5482-1	.4105-3	.5064-3	.9985	1.99699
31.56	.4941-6	.1646-3	.3003-2	.5480-1	.4102-3	.5059-3	.9985	1.99699
31.57	.4934-6	.1644-3	.3001-2	.5478-1	.4098-3	.5055-3	.9985	1.99700
31.58	.4926-6	.1642-3	.2999-2	.5476-1	.4094-3	.5050-3	.9985	1.99700
31.59	.4918-6	.1641-3	.2997-2	.5475-1	.4090-3	.5045-3	.9985	1.99700
31.60	.4910-6	.1639-3	.2995-2	.5473-1	.4086-3	.5040-3	.9985	1.99700
31.61	.4903-6	.1638-3	.2993-2	.5471-1	.4082-3	.5035-3	.9985	1.99700
31.62	.4895-6	.1636-3	.2992-2	.5470-1	.4078-3	.5031-3	.9985	1.99701
31.63	.4887-6	.1635-3	.2990-2	.5468-1	.4074-3	.5026-3	.9985	1.99701
31.64	.4879-6	.1633-3	.2988-2	.5466-1	.4071-3	.5021-3	.9985	1.99701
31.65	.4872-6	.1632-3	.2986-2	.5464-1	.4067-3	.5017-3	.9985	1.99701
31.66	.4864-6	.1630-3	.2984-2	.5463-1	.4063-3	.5012-3	.9985	1.99701
31.67	.4856-6	.1629-3	.2982-2	.5461-1	.4059-3	.5007-3	.9985	1.99702
31.68	.4849-6	.1627-3	.2980-2	.5459-1	.4055-3	.5002-3	.9985	1.99702
31.69	.4841-6	.1625-3	.2978-2	.5457-1	.4052-3	.4998-3	.9985	1.99702
31.70	.4834-6	.1624-3	.2977-2	.5456-1	.4048-3	.4993-3	.9985	1.99702
31.71	.4826-6	.1622-3	.2975-2	.5454-1	.4044-3	.4988-3	.9985	1.99702
31.72	.4818-6	.1621-3	.2973-2	.5452-1	.4040-3	.4984-3	.9985	1.99703
31.73	.4811-6	.1619-3	.2971-2	.5451-1	.4036-3	.4979-3	.9985	1.99703
31.74	.4803-6	.1618-3	.2969-2	.5449-1	.4032-3	.4974-3	.9985	1.99703
31.75	.4796-6	.1616-3	.2967-2	.5447-1	.4029-3	.4969-3	.9985	1.99703
31.76	.4788-6	.1615-3	.2965-2	.5445-1	.4025-3	.4965-3	.9985	1.99703
31.77	.4781-6	.1613-3	.2963-2	.5444-1	.4021-3	.4960-3	.9985	1.99703
31.78	.4773-6	.1612-3	.2962-2	.5442-1	.4017-3	.4955-3	.9985	1.99704
31.79	.4766-6	.1610-3	.2960-2	.5440-1	.4014-3	.4951-3	.9985	1.99704
31.80	.4758-6	.1609-3	.2958-2	.5439-1	.4010-3	.4946-3	.9985	1.99704
31.81	.4751-6	.1607-3	.2956-2	.5437-1	.4006-3	.4941-3	.9985	1.99704
31.82	.4743-6	.1606-3	.2954-2	.5435-1	.4002-3	.4937-3	.9985	1.99704
31.83	.4736-6	.1604-3	.2952-2	.5434-1	.3999-3	.4932-3	.9985	1.99705
31.84	.4729-6	.1603-3	.2950-2	.5432-1	.3995-3	.4928-3	.9985	1.99705
31.85	.4721-6	.1601-3	.2949-2	.5430-1	.3991-3	.4923-3	.9985	1.99705
31.86	.4714-6	.1600-3	.2947-2	.5428-1	.3987-3	.4918-3	.9985	1.99705
31.87	.4706-6	.1598-3	.2945-2	.5427-1	.3984-3	.4914-3	.9985	1.99705
31.88	.4699-6	.1597-3	.2943-2	.5425-1	.3980-3	.4909-3	.9985	1.99705
31.89	.4692-6	.1595-3	.2941-2	.5423-1	.3976-3	.4905-3	.9985	1.99706
31.90	.4684-6	.1594-3	.2939-2	.5422-1	.3972-3	.4900-3	.9985	1.99706
31.91	.4677-6	.1592-3	.2938-2	.5420-1	.3969-3	.4895-3	.9985	1.99706
31.92	.4670-6	.1591-3	.2936-2	.5418-1	.3965-3	.4891-3	.9985	1.99706
31.93	.4662-6	.1589-3	.2934-2	.5417-1	.3961-3	.4886-3	.9985	1.99706
31.94	.4655-6	.1588-3	.2932-2	.5415-1	.3958-3	.4882-3	.9985	1.99707
31.95	.4648-6	.1586-3	.2930-2	.5413-1	.3954-3	.4877-3	.9985	1.99707
31.96	.4641-6	.1585-3	.2928-2	.5411-1	.3950-3	.4873-3	.9985	1.99707
31.97	.4633-6	.1583-3	.2927-2	.5410-1	.3946-3	.4868-3	.9985	1.99707
31.98	.4626-6	.1582-3	.2925-2	.5408-1	.3943-3	.4863-3	.9985	1.99707
31.99	.4619-6	.1580-3	.2923-2	.5406-1	.3939-3	.4859-3	.9985	1.99707

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
1.849	84.462	.4480	1201.	3.988	301.2	.7629-3	1412.	31.00
1.848	84.464	.4480	1202.	3.988	301.4	.7621-3	1413.	31.01
1.847	84.466	.4480	1203.	3.988	301.6	.7614-3	1414.	31.02
1.847	84.467	.4480	1203.	3.988	301.8	.7607-3	1415.	31.03
1.846	84.469	.4480	1204.	3.988	302.0	.7599-3	1416.	31.04
1.846	84.471	.4480	1205.	3.988	302.2	.7592-3	1417.	31.05
1.845	84.473	.4480	1206.	3.988	302.4	.7585-3	1417.	31.06
1.844	84.474	.4480	1206.	3.988	302.5	.7578-3	1418.	31.07
1.844	84.476	.4480	1207.	3.988	302.7	.7570-3	1419.	31.08
1.843	84.478	.4480	1208.	3.988	302.9	.7563-3	1420.	31.09
1.843	84.480	.4480	1209.	3.988	303.1	.7556-3	1421.	31.10
1.842	84.481	.4480	1210.	3.988	303.3	.7548-3	1422.	31.11
1.841	84.483	.4480	1210.	3.988	303.5	.7541-3	1423.	31.12
1.841	84.485	.4480	1211.	3.988	303.7	.7534-3	1424.	31.13
1.840	84.487	.4480	1212.	3.988	303.9	.7527-3	1425.	31.14
1.840	84.489	.4480	1213.	3.988	304.1	.7520-3	1426.	31.15
1.839	84.490	.4480	1213.	3.988	304.3	.7512-3	1427.	31.16
1.838	84.492	.4479	1214.	3.988	304.5	.7505-3	1428.	31.17
1.838	84.494	.4479	1215.	3.988	304.7	.7498-3	1428.	31.18
1.837	84.496	.4479	1216.	3.988	304.9	.7491-3	1429.	31.19
1.837	84.497	.4479	1217.	3.988	305.1	.7484-3	1430.	31.20
1.836	84.499	.4479	1217.	3.988	305.3	.7477-3	1431.	31.21
1.836	84.501	.4479	1218.	3.988	305.5	.7469-3	1432.	31.22
1.835	84.503	.4479	1219.	3.988	305.7	.7462-3	1433.	31.23
1.834	84.504	.4479	1220.	3.988	305.9	.7455-3	1434.	31.24
1.834	84.506	.4479	1220.	3.988	306.1	.7448-3	1435.	31.25
1.833	84.508	.4479	1221.	3.988	306.2	.7441-3	1436.	31.26
1.833	84.510	.4479	1222.	3.988	306.4	.7434-3	1437.	31.27
1.832	84.511	.4479	1223.	3.988	306.6	.7427-3	1438.	31.28
1.831	84.513	.4479	1224.	3.988	306.8	.7420-3	1439.	31.29
1.831	84.515	.4479	1224.	3.988	307.0	.7413-3	1439.	31.30
1.830	84.517	.4479	1225.	3.988	307.2	.7405-3	1440.	31.31
1.830	84.518	.4479	1226.	3.988	307.4	.7398-3	1441.	31.32
1.829	84.520	.4479	1227.	3.988	307.6	.7391-3	1442.	31.33
1.829	84.522	.4479	1227.	3.988	307.8	.7384-3	1443.	31.34
1.828	84.524	.4479	1228.	3.988	308.0	.7377-3	1444.	31.35
1.827	84.525	.4479	1229.	3.988	308.2	.7370-3	1445.	31.36
1.827	84.527	.4479	1230.	3.988	308.4	.7363-3	1446.	31.37
1.826	84.529	.4479	1231.	3.988	308.6	.7356-3	1447.	31.38
1.826	84.531	.4479	1231.	3.988	308.8	.7349-3	1448.	31.39
1.825	84.532	.4479	1232.	3.988	309.0	.7342-3	1449.	31.40
1.824	84.534	.4479	1233.	3.988	309.2	.7335-3	1450.	31.41
1.824	84.536	.4479	1234.	3.988	309.4	.7328-3	1451.	31.42
1.823	84.538	.4479	1235.	3.988	309.6	.7321-3	1451.	31.43
1.823	84.539	.4479	1235.	3.988	309.8	.7314-3	1452.	31.44
1.822	84.541	.4479	1236.	3.988	310.0	.7307-3	1453.	31.45
1.822	84.543	.4479	1237.	3.988	310.2	.7301-3	1454.	31.46
1.821	84.544	.4479	1238.	3.988	310.4	.7294-3	1455.	31.47
1.820	84.546	.4479	1238.	3.988	310.6	.7287-3	1456.	31.48
1.820	84.548	.4479	1239.	3.988	310.8	.7280-3	1457.	31.49
1.819	84.550	.4479	1240.	3.988	311.0	.7273-3	1458.	31.50
1.819	84.551	.4479	1241.	3.988	311.1	.7266-3	1459.	31.51
1.818	84.553	.4479	1242.	3.988	311.3	.7259-3	1460.	31.52
1.817	84.555	.4479	1242.	3.988	311.5	.7252-3	1461.	31.53
1.817	84.557	.4479	1243.	3.988	311.7	.7245-3	1462.	31.54
1.816	84.558	.4479	1244.	3.988	311.9	.7239-3	1463.	31.55
1.816	84.560	.4479	1245.	3.988	312.1	.7232-3	1463.	31.56
1.815	84.562	.4479	1246.	3.988	312.3	.7225-3	1464.	31.57
1.815	84.563	.4479	1246.	3.988	312.5	.7218-3	1465.	31.58
1.814	84.565	.4479	1247.	3.988	312.7	.7211-3	1466.	31.59
1.813	84.567	.4479	1248.	3.988	312.9	.7204-3	1467.	31.60
1.813	84.569	.4479	1249.	3.988	313.1	.7198-3	1468.	31.61
1.812	84.570	.4479	1250.	3.988	313.3	.7191-3	1469.	31.62
1.812	84.572	.4479	1250.	3.988	313.5	.7184-3	1470.	31.63
1.811	84.574	.4479	1251.	3.988	313.7	.7177-3	1471.	31.64
1.811	84.575	.4479	1252.	3.988	313.9	.7170-3	1472.	31.65
1.810	84.577	.4479	1253.	3.988	314.1	.7164-3	1473.	31.66
1.809	84.579	.4479	1253.	3.988	314.3	.7157-3	1474.	31.67
1.809	84.581	.4479	1254.	3.988	314.5	.7150-3	1475.	31.68
1.808	84.582	.4479	1255.	3.988	314.7	.7143-3	1476.	31.69
1.808	84.584	.4479	1256.	3.988	314.9	.7137-3	1476.	31.70
1.807	84.586	.4479	1257.	3.988	315.1	.7130-3	1477.	31.71
1.807	84.587	.4479	1257.	3.988	315.3	.7123-3	1478.	31.72
1.806	84.589	.4479	1258.	3.988	315.5	.7117-3	1479.	31.73
1.805	84.591	.4479	1259.	3.988	315.7	.7110-3	1480.	31.74
1.805	84.592	.4479	1260.	3.988	315.9	.7103-3	1481.	31.75
1.804	84.594	.4479	1261.	3.988	316.1	.7097-3	1482.	31.76
1.804	84.596	.4479	1261.	3.988	316.3	.7090-3	1483.	31.77
1.803	84.598	.4479	1262.	3.988	316.5	.7083-3	1484.	31.78
1.803	84.599	.4479	1263.	3.988	316.7	.7077-3	1485.	31.79
1.802	84.601	.4479	1264.	3.988	316.9	.7070-3	1486.	31.80
1.801	84.603	.4479	1265.	3.988	317.1	.7063-3	1487.	31.81
1.801	84.604	.4479	1265.	3.988	317.3	.7057-3	1488.	31.82
1.800	84.606	.4479	1266.	3.988	317.5	.7050-3	1489.	31.83
1.800	84.608	.4479	1267.	3.988	317.7	.7043-3	1490.	31.84
1.799	84.609	.4479	1268.	3.988	317.9	.7037-3	1490.	31.85
1.799	84.611	.4479	1269.	3.988	318.1	.7030-3	1491.	31.86
1.798	84.613	.4479	1269.	3.988	318.3	.7024-3	1492.	31.87
1.798	84.614	.4479	1270.	3.988	318.5	.7017-3	1493.	31.88
1.797	84.616	.4479	1271.	3.988	318.7	.7011-3	1494.	31.89
1.796	84.618	.4479	1272.	3.988	318.9	.7004-3	1495.	31.90
1.796	84.620	.4479	1273.	3.988	319.1	.6997-3	1496.	31.91
1.795	84.621	.4479	1273.	3.988	319.3	.6991-3	1497.	31.92
1.795	84.623	.4479	1274.	3.988	319.5	.6984-3	1498.	31.93
1.794	84.625	.4479	1275.	3.988	319.7	.6978-3	1499.	31.94
1.794	84.626	.4479	1276.	3.988	319.9	.6971-3	1500.	31.95
1.793	84.628	.4479	1277.	3.988	320.1	.6965-3	1501.	31.96
1.792	84.630	.4479	1277.	3.988	320.3	.6958-3	1502.	31.97
1.792	84.631	.4479	1278.	3.988	320.5	.6952-3	1503.	31.98
1.791	84.633	.4479	1279.	3.988	320.7	.6945-3	1504.	31.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
32.00	.4612-6	.1579-3	.2921-2	.5405-1	.3935-3	.4854-3	.9985	1.99708
32.01	.4605-6	.1577-3	.2919-2	.5403-1	.3932-3	.4850-3	.9985	1.99708
32.02	.4598-6	.1576-3	.2917-2	.5401-1	.3928-3	.4845-3	.9985	1.99708
32.03	.4590-6	.1574-3	.2916-2	.5400-1	.3924-3	.4841-3	.9985	1.99708
32.04	.4583-6	.1573-3	.2914-2	.5398-1	.3921-3	.4836-3	.9985	1.99708
32.05	.4576-6	.1571-3	.2912-2	.5396-1	.3917-3	.4832-3	.9985	1.99709
32.06	.4569-6	.1570-3	.2910-2	.5395-1	.3914-3	.4827-3	.9985	1.99709
32.07	.4562-6	.1569-3	.2908-2	.5393-1	.3910-3	.4823-3	.9985	1.99709
32.08	.4555-6	.1567-3	.2907-2	.5391-1	.3906-3	.4818-3	.9985	1.99709
32.09	.4548-6	.1566-3	.2905-2	.5390-1	.3903-3	.4814-3	.9985	1.99709
32.10	.4541-6	.1564-3	.2903-2	.5388-1	.3899-3	.4809-3	.9985	1.99709
32.11	.4534-6	.1563-3	.2901-2	.5386-1	.3895-3	.4805-3	.9985	1.99710
32.12	.4527-6	.1561-3	.2899-2	.5388-1	.3892-3	.4800-3	.9985	1.99710
32.13	.4520-6	.1560-3	.2898-2	.5383-1	.3888-3	.4796-3	.9986	1.99710
32.14	.4513-6	.1558-3	.2896-2	.5381-1	.3885-3	.4791-3	.9986	1.99710
32.15	.4506-6	.1557-3	.2894-2	.5380-1	.3881-3	.4787-3	.9986	1.99710
32.16	.4499-6	.1555-3	.2892-2	.5378-1	.3877-3	.4783-3	.9986	1.99711
32.17	.4492-6	.1554-3	.2890-2	.5376-1	.3874-3	.4778-3	.9986	1.99711
32.18	.4485-6	.1553-3	.2889-2	.5375-1	.3870-3	.4774-3	.9986	1.99711
32.19	.4478-6	.1551-3	.2887-2	.5373-1	.3867-3	.4769-3	.9986	1.99711
32.20	.4471-6	.1550-3	.2885-2	.5371-1	.3863-3	.4765-3	.9986	1.99711
32.21	.4464-6	.1548-3	.2883-2	.5370-1	.3859-3	.4760-3	.9986	1.99711
32.22	.4457-6	.1547-3	.2881-2	.5368-1	.3856-3	.4756-3	.9986	1.99712
32.23	.4450-6	.1545-3	.2880-2	.5366-1	.3852-3	.4752-3	.9986	1.99712
32.24	.4443-6	.1544-3	.2878-2	.5365-1	.3849-3	.4747-3	.9986	1.99712
32.25	.4436-6	.1542-3	.2876-2	.5363-1	.3845-3	.4743-3	.9986	1.99712
32.26	.4430-6	.1541-3	.2874-2	.5361-1	.3842-3	.4738-3	.9986	1.99712
32.27	.4423-6	.1540-3	.2873-2	.5360-1	.3838-3	.4734-3	.9986	1.99713
32.28	.4416-6	.1538-3	.2871-2	.5358-1	.3834-3	.4730-3	.9986	1.99713
32.29	.4409-6	.1537-3	.2869-2	.5356-1	.3831-3	.4725-3	.9986	1.99713
32.30	.4402-6	.1535-3	.2867-2	.5355-1	.3827-3	.4721-3	.9986	1.99713
32.31	.4395-6	.1534-3	.2866-2	.5353-1	.3824-3	.4716-3	.9986	1.99713
32.32	.4389-6	.1532-3	.2864-2	.5351-1	.3820-3	.4712-3	.9986	1.99713
32.33	.4382-6	.1531-3	.2862-2	.5350-1	.3817-3	.4708-3	.9986	1.99714
32.34	.4375-6	.1530-3	.2860-2	.5348-1	.3813-3	.4703-3	.9986	1.99714
32.35	.4368-6	.1528-3	.2858-2	.5346-1	.3810-3	.4699-3	.9986	1.99714
32.36	.4362-6	.1527-3	.2857-2	.5345-1	.3806-3	.4695-3	.9986	1.99714
32.37	.4355-6	.1525-3	.2855-2	.5343-1	.3803-3	.4690-3	.9986	1.99714
32.38	.4348-6	.1524-3	.2853-2	.5342-1	.3799-3	.4686-3	.9986	1.99714
32.39	.4342-6	.1523-3	.2851-2	.5340-1	.3796-3	.4682-3	.9986	1.99715
32.40	.4335-6	.1521-3	.2850-2	.5338-1	.3792-3	.4677-3	.9986	1.99715
32.41	.4328-6	.1520-3	.2848-2	.5337-1	.3789-3	.4673-3	.9986	1.99715
32.42	.4322-6	.1518-3	.2846-2	.5335-1	.3785-3	.4669-3	.9986	1.99715
32.43	.4315-6	.1517-3	.2844-2	.5333-1	.3782-3	.4664-3	.9986	1.99715
32.44	.4308-6	.1516-3	.2843-2	.5332-1	.3778-3	.4660-3	.9986	1.99716
32.45	.4302-6	.1514-3	.2841-2	.5330-1	.3775-3	.4656-3	.9986	1.99716
32.46	.4295-6	.1513-3	.2839-2	.5328-1	.3771-3	.4652-3	.9986	1.99716
32.47	.4289-6	.1511-3	.2837-2	.5327-1	.3768-3	.4647-3	.9986	1.99716
32.48	.4282-6	.1510-3	.2836-2	.5325-1	.3764-3	.4643-3	.9986	1.99716
32.49	.4275-6	.1509-3	.2834-2	.5323-1	.3761-3	.4639-3	.9986	1.99716
32.50	.4269-6	.1507-3	.2832-2	.5322-1	.3757-3	.4635-3	.9986	1.99717
32.51	.4262-6	.1506-3	.2830-2	.5320-1	.3754-3	.4630-3	.9986	1.99717
32.52	.4256-6	.1504-3	.2829-2	.5319-1	.3751-3	.4626-3	.9986	1.99717
.2.53	.4249-6	.1503-3	.2827-2	.5317-1	.3747-3	.4622-3	.9986	1.99717
32.54	.4243-6	.1502-3	.2825-2	.5315-1	.3744-3	.4618-3	.9986	1.99717
32.55	.4236-6	.1500-3	.2824-2	.5314-1	.3740-3	.4613-3	.9986	1.99717
32.56	.4230-6	.1499-3	.2822-2	.5312-1	.3737-3	.4609-3	.9986	1.99718
32.57	.4223-6	.1498-3	.2820-2	.5310-1	.3733-3	.4605-3	.9986	1.99718
32.58	.4217-6	.1496-3	.2818-2	.5309-1	.3730-3	.4601-3	.9986	1.99718
32.59	.4210-6	.1495-3	.2817-2	.5307-1	.3727-3	.4596-3	.9986	1.99718
32.60	.4204-6	.1493-3	.2815-2	.5306-1	.3723-3	.4592-3	.9986	1.99718
32.61	.4197-6	.1492-3	.2813-2	.5304-1	.3720-3	.4588-3	.9986	1.99718
32.62	.4191-6	.1491-3	.2811-2	.5302-1	.3716-3	.4584-3	.9986	1.99719
32.63	.4185-6	.1489-3	.2810-2	.5301-1	.3713-3	.4580-3	.9986	1.99719
32.64	.4178-6	.1488-3	.2808-2	.5299-1	.3710-3	.4575-3	.9986	1.99719
32.65	.4172-6	.1487-3	.2806-2	.5297-1	.3706-3	.4571-3	.9986	1.99719
32.66	.4166-6	.1485-3	.2805-2	.5296-1	.3703-3	.4567-3	.9986	1.99719
32.67	.4159-6	.1484-3	.2803-2	.5294-1	.3699-3	.4563-3	.9986	1.99720
32.68	.4153-6	.1483-3	.2801-2	.5293-1	.3696-3	.4559-3	.9986	1.99720
32.69	.4147-6	.1481-3	.2799-2	.5291-1	.3693-3	.4554-3	.9986	1.99720
32.70	.4140-6	.1480-3	.2798-2	.5289-1	.3689-3	.4550-3	.9986	1.99720
32.71	.4134-6	.1478-3	.2796-2	.5288-1	.3686-3	.4546-3	.9986	1.99720
32.72	.4128-6	.1477-3	.2794-2	.5286-1	.3683-3	.4542-3	.9986	1.99720
32.73	.4121-6	.1476-3	.2793-2	.5285-1	.3679-3	.4538-3	.9986	1.99721
32.74	.4115-6	.1474-3	.2791-2	.5283-1	.3676-3	.4534-3	.9986	1.99721
32.75	.4109-6	.1473-3	.2789-2	.5281-1	.3672-3	.4530-3	.9986	1.99721
32.76	.4103-6	.1472-3	.2788-2	.5280-1	.3669-3	.4525-3	.9986	1.99721
32.77	.4096-6	.1470-3	.2786-2	.5278-1	.3666-3	.4521-3	.9986	1.99721
32.78	.4090-6	.1469-3	.2784-2	.5277-1	.3662-3	.4517-3	.9986	1.99721
32.79	.4084-6	.1468-3	.2782-2	.5275-1	.3659-3	.4513-3	.9986	1.99722
32.80	.4078-6	.1466-3	.2781-2	.5273-1	.3656-3	.4509-3	.9986	1.99722
32.81	.4071-6	.1465-3	.2779-2	.5272-1	.3652-3	.4505-3	.9986	1.99722
32.82	.4065-6	.1464-3	.2777-2	.5270-1	.3649-3	.4501-3	.9986	1.99722
32.83	.4059-6	.1462-3	.2776-2	.5268-1	.3646-3	.4497-3	.9986	1.99722
32.84	.4053-6	.1461-3	.2774-2	.5267-1	.3642-3	.4493-3	.9986	1.99722
32.85	.4047-6	.1460-3	.2772-2	.5265-1	.3639-3	.4489-3	.9986	1.99723
32.86	.4041-6	.1458-3	.2771-2	.5264-1	.3636-3	.4484-3	.9986	1.99723
32.87	.4035-6	.1457-3	.2769-2	.5262-1	.3633-3	.4480-3	.9986	1.99723
32.88	.4028-6	.1456-3	.2767-2	.5261-1	.3629-3	.4476-3	.9986	1.99723
32.89	.4022-6	.1454-3	.2766-2	.5259-1	.3626-3	.4472-3	.9986	1.99723
32.90	.4016-6	.1453-3	.2764-2	.5257-1	.3623-3	.4468-3	.9986	1.99723
32.91	.4010-6	.1452-3	.2762-2	.5256-1	.3619-3	.4464-3	.9986	1.99724
32.92	.4004-6	.1450-3	.2761-2	.5254-1	.3616-3	.4460-3	.9986	1.99724
32.93	.3998-6	.1449-3	.2759-2	.5253-1	.3613-3	.4456-3	.9986	1.99724
32.94	.3992-6	.1448-3	.2757-2	.5251-1	.3610-3	.4452-3	.9986	1.99724
32.95	.3986-6	.1446-3	.2756-2	.5249-1	.3606-3	.4448-3	.9986	1.99724
32.96	.3980-6	.1445-3	.2754-2	.5248-1	.3603-3	.4444-3	.9986	1.99724
32.97	.3974-6	.1444-3	.2752-2	.5246-1	.3600-3	.4440-3	.9986	1.99725
32.98	.3968-6	.1443-3	.2751-2	.5245-1	.3596-3	.4436-3	.9986	1.99725
32.99	.3962-6	.1441-3	.2749-2	.5243-1	.3593-3	.4432-3	.9986	1.99725

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
1.791	84.635	.4479	1280.	3.988	320.9	.6939-3	1505.	32.00
1.790	84.636	.4479	1281.	3.988	321.1	.6932-3	1505.	32.01
1.790	84.638	.4479	1281.	3.988	321.3	.6926-3	1506.	32.02
1.789	84.640	.4479	1282.	3.988	321.5	.6919-3	1507.	32.03
1.789	84.641	.4479	1283.	3.988	321.7	.6913-3	1508.	32.04
1.788	84.643	.4479	1284.	3.988	321.9	.6907-3	1509.	32.05
1.787	84.645	.4479	1285.	3.988	322.1	.6900-3	1510.	32.06
1.787	84.646	.4479	1285.	3.988	322.3	.6894-3	1511.	32.07
1.786	84.648	.4479	1286.	3.988	322.5	.6887-3	1512.	32.08
1.786	84.650	.4479	1287.	3.988	322.7	.6881-3	1513.	32.09
1.785	84.651	.4479	1288.	3.988	322.9	.6874-3	1514.	32.10
1.785	84.653	.4479	1289.	3.988	323.1	.6868-3	1515.	32.11
1.784	84.655	.4479	1289.	3.988	323.3	.6862-3	1516.	32.12
1.784	84.656	.4479	1290.	3.988	323.5	.6855-3	1517.	32.13
1.783	84.658	.4479	1291.	3.988	323.7	.6849-3	1518.	32.14
1.782	84.660	.4479	1292.	3.988	323.9	.6843-3	1519.	32.15
1.782	84.661	.4479	1293.	3.988	324.1	.6836-3	1520.	32.16
1.781	84.663	.4479	1293.	3.988	324.3	.6830-3	1521.	32.17
1.781	84.665	.4479	1294.	3.988	324.5	.6824-3	1522.	32.18
1.780	84.666	.4479	1295.	3.988	324.7	.6817-3	1522.	32.19
1.780	84.668	.4479	1296.	3.988	324.9	.6811-3	1523.	32.20
1.779	84.670	.4479	1297.	3.988	325.1	.6805-3	1524.	32.21
1.779	84.671	.4479	1297.	3.988	325.3	.6798-3	1525.	32.22
1.778	84.673	.4479	1298.	3.988	325.5	.6792-3	1526.	32.23
1.777	84.674	.4479	1299.	3.988	325.7	.6786-3	1527.	32.24
1.777	84.676	.4479	1300.	3.988	325.9	.6779-3	1528.	32.25
1.776	84.678	.4479	1301.	3.989	326.1	.6773-3	1529.	32.26
1.776	84.679	.4479	1301.	3.989	326.3	.6767-3	1530.	32.27
1.775	84.681	.4479	1302.	3.989	326.5	.6761-3	1531.	32.28
1.775	84.683	.4479	1303.	3.989	326.7	.6754-3	1532.	32.29
1.774	84.684	.4479	1304.	3.989	326.9	.6748-3	1533.	32.30
1.774	84.686	.4479	1305.	3.989	327.1	.6742-3	1534.	32.31
1.773	84.688	.4479	1305.	3.989	327.3	.6736-3	1535.	32.32
1.773	84.689	.4479	1306.	3.989	327.5	.6729-3	1536.	32.33
1.772	84.691	.4479	1307.	3.989	327.7	.6723-3	1537.	32.34
1.771	84.693	.4479	1308.	3.989	327.9	.6717-3	1538.	32.35
1.771	84.694	.4479	1309.	3.989	328.1	.6711-3	1539.	32.36
1.770	84.696	.4479	1310.	3.989	328.3	.6705-3	1540.	32.37
1.770	84.697	.4479	1310.	3.989	328.5	.6698-3	1540.	32.38
1.769	84.699	.4479	1311.	3.989	328.7	.6692-3	1541.	32.39
1.769	84.701	.4479	1312.	3.989	328.9	.6686-3	1542.	32.40
1.768	84.702	.4479	1313.	3.989	329.1	.6680-3	1543.	32.41
1.768	84.704	.4479	1314.	3.989	329.3	.6674-3	1544.	32.42
1.767	84.706	.4479	1314.	3.989	329.5	.6668-3	1545.	32.43
1.766	84.707	.4479	1315.	3.989	329.7	.6662-3	1546.	32.44
1.766	84.709	.4479	1316.	3.989	329.9	.6655-3	1547.	32.45
1.765	84.710	.4479	1317.	3.989	330.1	.6649-3	1548.	32.46
1.765	84.712	.4479	1318.	3.989	330.3	.6643-3	1549.	32.47
1.764	84.714	.4479	1318.	3.989	330.5	.6637-3	1550.	32.48
1.764	84.715	.4479	1319.	3.989	330.7	.6631-3	1551.	32.49
1.763	84.717	.4479	1320.	3.989	331.0	.6625-3	1552.	32.50
1.763	84.719	.4479	1321.	3.989	331.2	.6619-3	1553.	32.51
1.762	84.720	.4479	1322.	3.989	331.4	.6613-3	1554.	32.52
1.762	84.722	.4479	1323.	3.989	331.6	.6607-3	1555.	32.53
1.761	84.723	.4479	1323.	3.989	331.8	.6601-3	1556.	32.54
1.761	84.725	.4479	1324.	3.989	332.0	.6595-3	1557.	32.55
1.760	84.727	.4479	1325.	3.989	332.2	.6589-3	1558.	32.56
1.759	84.728	.4479	1326.	3.989	332.4	.6582-3	1559.	32.57
1.759	84.730	.4479	1327.	3.989	332.6	.6576-3	1560.	32.58
1.758	84.732	.4479	1327.	3.989	332.8	.6570-3	1561.	32.59
1.758	84.733	.4479	1328.	3.989	333.0	.6564-3	1561.	32.60
1.757	84.735	.4479	1329.	3.989	333.2	.6558-3	1562.	32.61
1.757	84.736	.4479	1330.	3.989	333.4	.6552-3	1563.	32.62
1.756	84.738	.4479	1331.	3.989	333.6	.6546-3	1564.	32.63
1.756	84.740	.4479	1331.	3.989	333.8	.6540-3	1565.	32.64
1.755	84.741	.4479	1332.	3.989	334.0	.6534-3	1566.	32.65
1.755	84.743	.4479	1333.	3.989	334.2	.6528-3	1567.	32.66
1.754	84.744	.4479	1334.	3.989	334.4	.6522-3	1568.	32.67
1.754	84.746	.4479	1335.	3.989	334.6	.6517-3	1569.	32.68
1.753	84.748	.4479	1336.	3.989	334.8	.6511-3	1570.	32.69
1.752	84.749	.4479	1336.	3.989	335.0	.6505-3	1571.	32.70
1.752	84.751	.4479	1337.	3.989	335.2	.6499-3	1572.	32.71
1.751	84.752	.4479	1338.	3.989	335.4	.6493-3	1573.	32.72
1.751	84.754	.4479	1339.	3.989	335.6	.6487-3	1574.	32.73
1.750	84.756	.4479	1340.	3.989	335.8	.6481-3	1575.	32.74
1.750	84.757	.4479	1340.	3.989	336.1	.6475-3	1576.	32.75
1.749	84.759	.4479	1341.	3.989	336.3	.6469-3	1577.	32.76
1.749	84.760	.4479	1342.	3.989	336.5	.6463-3	1578.	32.77
1.748	84.762	.4479	1343.	3.989	336.7	.6457-3	1579.	32.78
1.748	84.764	.4479	1344.	3.989	336.9	.6451-3	1580.	32.79
1.747	84.765	.4479	1345.	3.989	337.1	.6446-3	1581.	32.80
1.747	84.767	.4479	1345.	3.989	337.3	.6440-3	1582.	32.81
1.746	84.768	.4479	1346.	3.989	337.5	.6434-3	1583.	32.82
1.745	84.770	.4479	1347.	3.989	337.7	.6428-3	1584.	32.83
1.745	84.772	.4479	1348.	3.989	337.9	.6422-3	1585.	32.84
1.744	84.773	.4479	1349.	3.989	338.1	.6416-3	1586.	32.85
1.744	84.775	.4479	1349.	3.989	338.3	.6410-3	1586.	32.86
1.743	84.776	.4479	1350.	3.989	338.5	.6405-3	1587.	32.87
1.743	84.778	.4479	1351.	3.989	338.7	.6399-3	1588.	32.88
1.742	84.780	.4479	1352.	3.989	338.9	.6393-3	1589.	32.89
1.742	84.781	.4479	1353.	3.989	339.1	.6387-3	1590.	32.90
1.741	84.783	.4479	1354.	3.989	339.3	.6381-3	1591.	32.91
1.741	84.784	.4479	1354.	3.989	339.5	.6376-3	1592.	32.92
1.740	84.786	.4479	1355.	3.989	339.7	.6370-3	1593.	32.93
1.740	84.787	.4479	1356.	3.989	340.0	.6364-3	1594.	32.94
1.739	84.789	.4479	1357.	3.989	340.2	.6358-3	1595.	32.95
1.739	84.791	.4479	1358.	3.989	340.4	.6353-3	1596.	32.96
1.738	84.792	.4479	1359.	3.989	340.6	.6347-3	1597.	32.97
1.738	84.794	.4479	1359.	3.989	340.8	.6341-3	1598.	32.98
1.737	84.795	.4479	1360.	3.989	341.0	.6335-3	1599.	32.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A*/A	V/V_0	V/a*
33.00	.3956-6	.1440-3	.2747-2	.5241-1	.3590-3	.4428-3	.9986	1.99725
33.01	.3950-6	.1439-3	.2746-2	.5240-1	.3587-3	.4424-3	.9986	1.99725
33.02	.3944-6	.1437-3	.2744-2	.5238-1	.3583-3	.4420-3	.9986	1.99725
33.03	.3938-6	.1436-3	.2742-2	.5237-1	.3580-3	.4416-3	.9986	1.99726
33.04	.3932-6	.1435-3	.2741-2	.5235-1	.3577-3	.4412-3	.9986	1.99726
33.05	.3926-6	.1433-3	.2739-2	.5234-1	.3574-3	.4408-3	.9986	1.99726
33.06	.3920-6	.1432-3	.2737-2	.5232-1	.3571-3	.4404-3	.9986	1.99726
33.07	.3914-6	.1431-3	.2736-2	.5230-1	.3567-3	.4400-3	.9986	1.99726
33.08	.3908-6	.1430-3	.2734-2	.5229-1	.3564-3	.4396-3	.9986	1.99726
33.09	.3903-6	.1428-3	.2732-2	.5227-1	.3561-3	.4392-3	.9986	1.99727
33.10	.3897-6	.1427-3	.2731-2	.5226-1	.3558-3	.4388-3	.9986	1.99727
33.11	.3891-6	.1426-3	.2729-2	.5224-1	.3554-3	.4384-3	.9986	1.99727
33.12	.3885-6	.1424-3	.2727-2	.5222-1	.3551-3	.4380-3	.9986	1.99727
33.13	.3879-6	.1423-3	.2726-2	.5221-1	.3548-3	.4376-3	.9986	1.99727
33.14	.3873-6	.1422-3	.2724-2	.5219-1	.3545-3	.4372-3	.9986	1.99727
33.15	.3867-6	.1421-3	.2723-2	.5218-1	.3542-3	.4368-3	.9986	1.99728
33.16	.3862-6	.1419-3	.2721-2	.5216-1	.3539-3	.4364-3	.9986	1.99728
33.17	.3856-6	.1418-3	.2719-2	.5215-1	.3535-3	.4360-3	.9986	1.99728
33.18	.3850-6	.1417-3	.2718-2	.5213-1	.3532-3	.4356-3	.9986	1.99728
33.19	.3844-6	.1415-3	.2716-2	.5212-1	.3529-3	.4352-3	.9986	1.99728
33.20	.3839-6	.1414-3	.2714-2	.5210-1	.3526-3	.4349-3	.9986	1.99728
33.21	.3833-6	.1413-3	.2713-2	.5208-1	.3523-3	.4345-3	.9986	1.99729
33.22	.3827-6	.1412-3	.2711-2	.5207-1	.3519-3	.4341-3	.9986	1.99729
33.23	.3821-6	.1410-3	.2709-2	.5205-1	.3516-3	.4337-3	.9986	1.99729
33.24	.3816-6	.1409-3	.2708-2	.5204-1	.3513-3	.4333-3	.9986	1.99729
33.25	.3810-6	.1408-3	.2706-2	.5202-1	.3510-3	.4329-3	.9986	1.99729
33.26	.3804-6	.1407-3	.2705-2	.5201-1	.3507-3	.4325-3	.9986	1.99729
33.27	.3798-6	.1405-3	.2703-2	.5199-1	.3504-3	.4321-3	.9986	1.99730
33.28	.3793-6	.1404-3	.2701-2	.5197-1	.3501-3	.4317-3	.9986	1.99730
33.29	.3787-6	.1403-3	.2700-2	.5196-1	.3497-3	.4314-3	.9986	1.99730
33.30	.3781-6	.1401-3	.2698-2	.5194-1	.3494-3	.4310-3	.9987	1.99730
33.31	.3776-6	.1400-3	.2696-2	.5193-1	.3491-3	.4306-3	.9987	1.99730
33.32	.3770-6	.1399-3	.2695-2	.5191-1	.3488-3	.4302-3	.9987	1.99730
33.33	.3764-6	.1398-3	.2693-2	.5190-1	.3485-3	.4298-3	.9987	1.99730
33.34	.3759-6	.1396-3	.2692-2	.5188-1	.3482-3	.4294-3	.9987	1.99731
33.35	.3753-6	.1395-3	.2690-2	.5187-1	.3479-3	.4290-3	.9987	1.99731
33.36	.3748-6	.1394-3	.2688-2	.5185-1	.3476-3	.4287-3	.9987	1.99731
33.37	.3742-6	.1393-3	.2687-2	.5183-1	.3472-3	.4283-3	.9987	1.99731
33.38	.3736-6	.1391-3	.2685-2	.5182-1	.3469-3	.4279-3	.9987	1.99731
33.39	.3731-6	.1390-3	.2684-2	.5180-1	.3466-3	.4275-3	.9987	1.99731
33.40	.3725-6	.1389-3	.2682-2	.5179-1	.3463-3	.4271-3	.9987	1.99732
33.41	.3720-6	.1388-3	.2680-2	.5177-1	.3460-3	.4267-3	.9987	1.99732
33.42	.3714-6	.1386-3	.2679-2	.5176-1	.3457-3	.4264-3	.9987	1.99732
33.43	.3709-6	.1385-3	.2677-2	.5174-1	.3454-3	.4260-3	.9987	1.99732
33.44	.3703-6	.1384-3	.2676-2	.5173-1	.3451-3	.4256-3	.9987	1.99732
33.45	.3698-6	.1383-3	.2674-2	.5171-1	.3448-3	.4252-3	.9987	1.99732
33.46	.3692-6	.1382-3	.2672-2	.5170-1	.3445-3	.4248-3	.9987	1.99733
33.47	.3687-6	.1380-3	.2671-2	.5168-1	.3442-3	.4245-3	.9987	1.99733
33.48	.3681-6	.1379-3	.2669-2	.5166-1	.3438-3	.4241-3	.9987	1.99733
33.49	.3676-6	.1378-3	.2668-2	.5165-1	.3435-3	.4237-3	.9987	1.99733
33.50	.3670-6	.1377-3	.2666-2	.5163-1	.3432-3	.4233-3	.9987	1.99733
33.51	.3665-6	.1375-3	.2664-2	.5162-1	.3429-3	.4229-3	.9987	1.99733
33.52	.3659-6	.1374-3	.2663-2	.5160-1	.3426-3	.4226-3	.9987	1.99734
33.53	.3654-6	.1373-3	.2661-2	.5159-1	.3423-3	.4222-3	.9987	1.99734
33.54	.3648-6	.1372-3	.2660-2	.5157-1	.3420-3	.4218-3	.9987	1.99734
33.55	.3643-6	.1370-3	.2658-2	.5156-1	.3417-3	.4214-3	.9987	1.99734
33.56	.3638-6	.1369-3	.2657-2	.5154-1	.3414-3	.4211-3	.9987	1.99734
33.57	.3632-6	.1368-3	.2655-2	.5153-1	.3411-3	.4207-3	.9987	1.99734
33.58	.3627-6	.1367-3	.2653-2	.5151-1	.3408-3	.4203-3	.9987	1.99734
33.59	.3621-6	.1366-3	.2652-2	.5150-1	.3405-3	.4199-3	.9987	1.99735
33.60	.3616-6	.1364-3	.2650-2	.5148-1	.3402-3	.4196-3	.9987	1.99735
33.61	.3611-6	.1363-3	.2649-2	.5147-1	.3399-3	.4192-3	.9987	1.99735
33.62	.3605-6	.1362-3	.2647-2	.5145-1	.3396-3	.4188-3	.9987	1.99735
33.63	.3600-6	.1361-3	.2646-2	.5143-1	.3393-3	.4184-3	.9987	1.99735
33.64	.3595-6	.1360-3	.2644-2	.5142-1	.3390-3	.4181-3	.9987	1.99735
33.65	.3589-6	.1358-3	.2642-2	.5140-1	.3387-3	.4177-3	.9987	1.99736
33.66	.3584-6	.1357-3	.2641-2	.5139-1	.3384-3	.4173-3	.9987	1.99736
33.67	.3579-6	.1356-3	.2639-2	.5137-1	.3381-3	.4170-3	.9987	1.99736
33.68	.3573-6	.1355-3	.2638-2	.5136-1	.3378-3	.4166-3	.9987	1.99736
33.69	.3568-6	.1354-3	.2636-2	.5134-1	.3375-3	.4162-3	.9987	1.99736
33.70	.3563-6	.1352-3	.2635-2	.5133-1	.3372-3	.4159-3	.9987	1.99736
33.71	.3558-6	.1351-3	.2633-2	.5131-1	.3369-3	.4155-3	.9987	1.99737
33.72	.3552-6	.1350-3	.2631-2	.5130-1	.3366-3	.4151-3	.9987	1.99737
33.73	.3547-6	.1349-3	.2630-2	.5128-1	.3363-3	.4147-3	.9987	1.99737
33.74	.3542-6	.1348-3	.2628-2	.5127-1	.3360-3	.4144-3	.9987	1.99737
33.75	.3537-6	.1346-3	.2627-2	.5125-1	.3357-3	.4140-3	.9987	1.99737
33.76	.3531-6	.1345-3	.2625-2	.5124-1	.3354-3	.4136-3	.9987	1.99737
33.77	.3526-6	.1344-3	.2624-2	.5122-1	.3351-3	.4133-3	.9987	1.99737
33.78	.3521-6	.1343-3	.2622-2	.5121-1	.3348-3	.4129-3	.9987	1.99738
33.79	.3516-6	.1342-3	.2621-2	.5119-1	.3345-3	.4125-3	.9987	1.99738
33.80	.3511-6	.1340-3	.2619-2	.5118-1	.3342-3	.4122-3	.9987	1.99738
33.81	.3505-6	.1339-3	.2618-2	.5116-1	.3339-3	.4118-3	.9987	1.99738
33.82	.3500-6	.1338-3	.2616-2	.5115-1	.3336-3	.4115-3	.9987	1.99738
33.83	.3495-6	.1337-3	.2614-2	.5113-1	.3333-3	.4111-3	.9987	1.99738
33.84	.3490-6	.1336-3	.2613-2	.5112-1	.3330-3	.4107-3	.9987	1.99739
33.85	.3485-6	.1334-3	.2611-2	.5110-1	.3327-3	.4104-3	.9987	1.99739
33.86	.3480-6	.1333-3	.2610-2	.5109-1	.3324-3	.4100-3	.9987	1.99739
33.87	.3474-6	.1332-3	.2608-2	.5107-1	.3322-3	.4096-3	.9987	1.99739
33.88	.3469-6	.1331-3	.2607-2	.5106-1	.3319-3	.4093-3	.9987	1.99739
33.89	.3464-6	.1330-3	.2605-2	.5104-1	.3316-3	.4089-3	.9987	1.99739
33.90	.3459-6	.1329-3	.2604-2	.5103-1	.3313-3	.4086-3	.9987	1.99739
33.91	.3454-6	.1327-3	.2602-2	.5101-1	.3310-3	.4082-3	.9987	1.99740
33.92	.3449-6	.1326-3	.2601-2	.5100-1	.3307-3	.4078-3	.9987	1.99740
33.93	.3444-6	.1325-3	.2599-2	.5098-1	.3304-3	.4075-3	.9987	1.99740
33.94	.3439-6	.1324-3	.2598-2	.5097-1	.3301-3	.4071-3	.9987	1.99740
33.95	.3434-6	.1323-3	.2596-2	.5095-1	.3298-3	.4068-3	.9987	1.99740
33.96	.3429-6	.1322-3	.2595-2	.5094-1	.3295-3	.4064-3	.9987	1.99740
33.97	.3424-6	.1320-3	.2593-2	.5092-1	.3292-3	.4060-3	.9987	1.99741
33.98	.3419-6	.1319-3	.2591-2	.5091-1	.3290-3	.4057-3	.9987	1.99741
33.99	.3414-6	.1318-3	.2590-2	.5089-1	.3287-3	.4053-3	.9987	1.99741

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
1.737	84.797	.4479	1361.	3.989	341.2	.6330-3	1600.	33.00
1.736	84.798	.4479	1362.	3.989	341.4	.6324-3	1601.	33.01
1.735	84.800	.4479	1363.	3.989	341.6	.6318-3	1602.	33.02
1.735	84.802	.4479	1363.	3.989	341.8	.6312-3	1603.	33.03
1.734	84.803	.4479	1364.	3.989	342.0	.6307-3	1604.	33.04
1.734	84.805	.4479	1365.	3.989	342.2	.6301-3	1605.	33.05
1.733	84.806	.4479	1366.	3.989	342.4	.6295-3	1606.	33.06
1.733	84.808	.4479	1367.	3.989	342.6	.6290-3	1607.	33.07
1.732	84.809	.4479	1368.	3.989	342.8	.6284-3	1608.	33.08
1.732	84.811	.4479	1368.	3.989	343.0	.6278-3	1609.	33.09
1.731	84.813	.4479	1369.	3.989	343.3	.6273-3	1610.	33.10
1.731	84.814	.4479	1370.	3.989	343.5	.6267-3	1611.	33.11
1.730	84.816	.4479	1371.	3.989	343.7	.6261-3	1612.	33.12
1.730	84.817	.4479	1372.	3.989	343.9	.6256-3	1613.	33.13
1.729	84.819	.4479	1373.	3.989	344.1	.6250-3	1614.	33.14
1.729	84.820	.4479	1373.	3.989	344.3	.6244-3	1615.	33.15
1.728	84.822	.4479	1374.	3.989	344.5	.6239-3	1616.	33.16
1.728	84.823	.4479	1375.	3.989	344.7	.6233-3	1617.	33.17
1.727	84.825	.4479	1376.	3.989	344.9	.6228-3	1618.	33.18
1.727	84.827	.4479	1377.	3.989	345.1	.6222-3	1619.	33.19
1.726	84.828	.4479	1378.	3.989	345.3	.6216-3	1619.	33.20
1.726	84.830	.4479	1378.	3.989	345.5	.6211-3	1620.	33.21
1.725	84.831	.4479	1379.	3.989	345.7	.6205-3	1621.	33.22
1.724	84.833	.4479	1380.	3.989	345.9	.6200-3	1622.	33.23
1.724	84.834	.4479	1381.	3.989	346.2	.6194-3	1623.	33.24
1.723	84.836	.4479	1382.	3.989	346.4	.6189-3	1624.	33.25
1.723	84.837	.4479	1383.	3.989	346.6	.6183-3	1625.	33.26
1.722	84.839	.4479	1383.	3.989	346.8	.6177-3	1626.	33.27
1.722	84.841	.4479	1384.	3.989	347.0	.6172-3	1627.	33.28
1.721	84.842	.4479	1385.	3.989	347.2	.6166-3	1628.	33.29
1.721	84.844	.4479	1386.	3.989	347.4	.6161-3	1629.	33.30
1.720	84.845	.4479	1387.	3.989	347.6	.6155-3	1630.	33.31
1.720	84.847	.4479	1388.	3.989	347.8	.6150-3	1631.	33.32
1.719	84.848	.4479	1388.	3.989	348.0	.6144-3	1632.	33.33
1.719	84.850	.4479	1389.	3.989	348.2	.6139-3	1633.	33.34
1.718	84.851	.4479	1390.	3.989	348.4	.6133-3	1634.	33.35
1.718	84.853	.4479	1391.	3.989	348.7	.6128-3	1635.	33.36
1.717	84.854	.4479	1392.	3.989	348.9	.6122-3	1636.	33.37
1.717	84.856	.4479	1393.	3.989	349.1	.6117-3	1637.	33.38
1.716	84.858	.4479	1393.	3.989	349.3	.6111-3	1638.	33.39
1.716	84.859	.4479	1394.	3.989	349.5	.6106-3	1639.	33.40
1.715	84.861	.4479	1395.	3.989	349.7	.6100-3	1640.	33.41
1.715	84.862	.4479	1396.	3.989	349.9	.6095-3	1641.	33.42
1.714	84.864	.4479	1397.	3.989	350.1	.6090-3	1642.	33.43
1.714	84.865	.4479	1398.	3.989	350.3	.6084-3	1643.	33.44
1.713	84.867	.4479	1398.	3.989	350.5	.6079-3	1644.	33.45
1.713	84.868	.4479	1399.	3.989	350.7	.6073-3	1645.	33.46
1.712	84.870	.4479	1400.	3.989	351.0	.6068-3	1646.	33.47
1.712	84.871	.4479	1401.	3.989	351.2	.6062-3	1647.	33.48
1.711	84.873	.4479	1402.	3.989	351.4	.6057-3	1648.	33.49
1.711	84.874	.4479	1403.	3.989	351.6	.6058-3	1649.	33.50
1.710	84.876	.4479	1403.	3.989	351.8	.6046-3	1650.	33.51
1.710	84.877	.4479	1404.	3.989	352.0	.6041-3	1651.	33.52
1.709	84.879	.4478	1405.	3.989	352.2	.6035-3	1652.	33.53
1.709	84.880	.4478	1406.	3.989	352.4	.6030-3	1653.	33.54
1.708	84.882	.4478	1407.	3.989	352.6	.6025-3	1654.	33.55
1.708	84.884	.4478	1408.	3.989	352.8	.6019-3	1655.	33.56
1.707	84.885	.4478	1408.	3.989	353.0	.6014-3	1656.	33.57
1.706	84.887	.4478	1409.	3.989	353.3	.6009-3	1657.	33.58
1.706	84.888	.4478	1410.	3.989	353.5	.6003-3	1658.	33.59
1.705	84.890	.4478	1411.	3.989	353.7	.5998-3	1659.	33.60
1.705	84.891	.4478	1412.	3.989	353.9	.5993-3	1660.	33.61
1.704	84.893	.4478	1413.	3.989	354.1	.5987-3	1661.	33.62
1.704	84.894	.4478	1413.	3.989	354.3	.5982-3	1662.	33.63
1.703	84.896	.4478	1414.	3.989	354.5	.5977-3	1663.	33.64
1.703	84.897	.4478	1415.	3.989	354.7	.5971-3	1664.	33.65
1.702	84.899	.4478	1416.	3.989	354.9	.5966-3	1665.	33.66
1.702	84.900	.4478	1417.	3.989	355.1	.5961-3	1666.	33.67
1.701	84.902	.4478	1418.	3.989	355.4	.5955-3	1667.	33.68
1.701	84.903	.4478	1419.	3.989	355.6	.5950-3	1668.	33.69
1.700	84.905	.4478	1419.	3.989	355.8	.5945-3	1669.	33.70
1.700	84.906	.4478	1420.	3.989	356.0	.5940-3	1670.	33.71
1.699	84.908	.4478	1421.	3.989	356.2	.5934-3	1671.	33.72
1.699	84.909	.4478	1422.	3.989	356.4	.5929-3	1672.	33.73
1.698	84.911	.4478	1423.	3.989	356.6	.5924-3	1673.	33.74
1.698	84.912	.4478	1424.	3.989	356.8	.5919-3	1674.	33.75
1.697	84.914	.4478	1424.	3.989	357.0	.5913-3	1675.	33.76
1.697	84.915	.4478	1425.	3.990	357.3	.5908-3	1676.	33.77
1.696	84.917	.4478	1426.	3.990	357.5	.5903-3	1677.	33.78
1.696	84.918	.4478	1427.	3.990	357.7	.5898-3	1678.	33.79
1.695	84.920	.4478	1428.	3.990	357.9	.5893-3	1679.	33.80
1.695	84.921	.4478	1429.	3.990	358.1	.5887-3	1680.	33.81
1.694	84.923	.4478	1429.	3.990	358.3	.5882-3	1681.	33.82
1.694	84.924	.4478	1430.	3.990	358.5	.5877-3	1682.	33.83
1.693	84.926	.4478	1431.	3.990	358.7	.5872-3	1683.	33.84
1.693	84.927	.4478	1432.	3.990	358.9	.5867-3	1683.	33.85
1.692	84.929	.4478	1433.	3.990	359.2	.5861-3	1684.	33.86
1.692	84.930	.4478	1434.	3.990	359.4	.5856-3	1685.	33.87
1.691	84.932	.4478	1435.	3.990	359.6	.5851-3	1686.	33.88
1.691	84.933	.4478	1435.	3.990	359.8	.5846-3	1687.	33.89
1.690	84.935	.4478	1436.	3.990	360.0	.5841-3	1688.	33.90
1.690	84.936	.4478	1437.	3.990	360.2	.5836-3	1689.	33.91
1.689	84.938	.4478	1438.	3.990	360.4	.5830-3	1690.	33.92
1.689	84.939	.4478	1439.	3.990	360.6	.5825-3	1691.	33.93
1.688	84.941	.4478	1440.	3.990	360.9	.5820-3	1692.	33.94
1.688	84.942	.4478	1441.	3.990	361.1	.5815-3	1693.	33.95
1.687	84.944	.4478	1441.	3.990	361.3	.5810-3	1694.	33.96
1.687	84.945	.4478	1442.	3.990	361.5	.5805-3	1695.	33.97
1.686	84.947	.4478	1443.	3.990	361.7	.5800-3	1696.	33.98
1.686	84.948	.4478	1444.	3.990	361.9	.5795-3	1697.	33.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A*/A	V/V_0	V/a*
34.00	.3409-6	.1317-3	.2588-2	.5088-1	.3284-3	.4050-3	.9987	1.99741
34.01	.3404-6	.1316-3	.2587-2	.5086-1	.3281-3	.4046-3	.9987	1.99741
34.02	.3399-6	.1315-3	.2585-2	.5085-1	.3278-3	.4043-3	.9987	1.99741
34.03	.3394-6	.1313-3	.2584-2	.5083-1	.3275-3	.4039-3	.9987	1.99741
34.04	.3389-6	.1312-3	.2582-2	.5082-1	.3272-3	.4036-3	.9987	1.99742
34.05	.3384-6	.1311-3	.2581-2	.5080-1	.3269-3	.4032-3	.9987	1.99742
34.06	.3379-6	.1310-3	.2579-2	.5079-1	.3267-3	.4028-3	.9987	1.99742
34.07	.3374-6	.1309-3	.2578-2	.5077-1	.3264-3	.4025-3	.9987	1.99742
34.08	.3369-6	.1308-3	.2576-2	.5076-1	.3261-3	.4021-3	.9987	1.99742
34.09	.3364-6	.1307-3	.2575-2	.5074-1	.3258-3	.4018-3	.9987	1.99742
34.10	.3359-6	.1305-3	.2573-2	.5073-1	.3255-3	.4014-3	.9987	1.99743
34.11	.3354-6	.1304-3	.2572-2	.5071-1	.3252-3	.4011-3	.9987	1.99743
34.12	.3349-6	.1303-3	.2570-2	.5070-1	.3249-3	.4007-3	.9987	1.99743
34.13	.3344-6	.1302-3	.2569-2	.5068-1	.3247-3	.4004-3	.9987	1.99743
34.14	.3340-6	.1301-3	.2567-2	.5067-1	.3244-3	.4000-3	.9987	1.99743
34.15	.3335-6	.1300-3	.2566-2	.5065-1	.3241-3	.3997-3	.9987	1.99743
34.16	.3330-6	.1299-3	.2564-2	.5064-1	.3238-3	.3993-3	.9987	1.99743
34.17	.3325-6	.1297-3	.2563-2	.5062-1	.3235-3	.3990-3	.9987	1.99744
34.18	.3320-6	.1296-3	.2561-2	.5061-1	.3232-3	.3986-3	.9987	1.99744
34.19	.3315-6	.1295-3	.2560-2	.5059-1	.3230-3	.3983-3	.9987	1.99744
34.20	.3310-6	.1294-3	.2558-2	.5058-1	.3227-3	.3979-3	.9987	1.99744
34.21	.3306-6	.1293-3	.2557-2	.5057-1	.3224-3	.3976-3	.9987	1.99744
34.22	.3301-6	.1292-3	.2555-2	.5055-1	.3221-3	.3972-3	.9987	1.99744
34.23	.3296-6	.1291-3	.2554-2	.5054-1	.3218-3	.3969-3	.9987	1.99744
34.24	.3291-6	.1289-3	.2552-2	.5052-1	.3215-3	.3966-3	.9987	1.99745
34.25	.3286-6	.1288-3	.2551-2	.5051-1	.3213-3	.3962-3	.9987	1.99745
34.26	.3282-6	.1287-3	.2549-2	.5049-1	.3210-3	.3959-3	.9987	1.99745
34.27	.3277-6	.1286-3	.2548-2	.5048-1	.3207-3	.3955-3	.9987	1.99745
34.28	.3272-6	.1285-3	.2546-2	.5046-1	.3204-3	.3952-3	.9987	1.99745
34.29	.3267-6	.1284-3	.2545-2	.5045-1	.3201-3	.3948-3	.9987	1.99745
34.30	.3263-6	.1283-3	.2543-2	.5043-1	.3199-3	.3945-3	.9987	1.99745
34.31	.3258-6	.1282-3	.2542-2	.5042-1	.3196-3	.3941-3	.9987	1.99746
34.32	.3253-6	.1281-3	.2541-2	.5040-1	.3193-3	.3938-3	.9987	1.99746
34.33	.3248-6	.1279-3	.2539-2	.5039-1	.3190-3	.3935-3	.9987	1.99746
34.34	.3244-6	.1278-3	.2538-2	.5037-1	.3188-3	.3931-3	.9987	1.99746
34.35	.3239-6	.1277-3	.2536-2	.5036-1	.3185-3	.3928-3	.9987	1.99746
34.36	.3234-6	.1276-3	.2535-2	.5035-1	.3182-3	.3924-3	.9987	1.99746
34.37	.3230-6	.1275-3	.2533-2	.5033-1	.3179-3	.3921-3	.9987	1.99747
34.38	.3225-6	.1274-3	.2532-2	.5032-1	.3177-3	.3917-3	.9987	1.99747
34.39	.3220-6	.1273-3	.2530-2	.5030-1	.3174-3	.3914-3	.9987	1.99747
34.40	.3216-6	.1272-3	.2529-2	.5029-1	.3171-3	.3911-3	.9987	1.99747
34.41	.3211-6	.1271-3	.2527-2	.5027-1	.3168-3	.3907-3	.9987	1.99747
34.42	.3206-6	.1269-3	.2526-2	.5026-1	.3166-3	.3904-3	.9987	1.99747
34.43	.3202-6	.1268-3	.2524-2	.5024-1	.3163-3	.3900-3	.9987	1.99747
34.44	.3197-6	.1267-3	.2523-2	.5023-1	.3160-3	.3897-3	.9987	1.99748
34.45	.3192-6	.1266-3	.2521-2	.5021-1	.3157-3	.3894-3	.9987	1.99748
34.46	.3188-6	.1265-3	.2520-2	.5020-1	.3155-3	.3890-3	.9987	1.99748
34.47	.3183-6	.1264-3	.2519-2	.5018-1	.3152-3	.3887-3	.9987	1.99748
34.48	.3179-6	.1263-3	.2517-2	.5017-1	.3149-3	.3884-3	.9987	1.99748
34.49	.3174-6	.1262-3	.2516-2	.5016-1	.3146-3	.3880-3	.9987	1.99748
34.50	.3169-6	.1261-3	.2514-2	.5014-1	.3144-3	.3877-3	.9987	1.99748
34.51	.3165-6	.1260-3	.2513-2	.5013-1	.3141-3	.3873-3	.9987	1.99749
34.52	.3160-6	.1258-3	.2511-2	.5011-1	.3138-3	.3870-3	.9987	1.99749
34.53	.3156-6	.1257-3	.2510-2	.5010-1	.3135-3	.3867-3	.9987	1.99749
34.54	.3151-6	.1256-3	.2508-2	.5008-1	.3133-3	.3863-3	.9987	1.99749
34.55	.3147-6	.1255-3	.2507-2	.5007-1	.3130-3	.3860-3	.9987	1.99749
34.56	.3142-6	.1254-3	.2505-2	.5005-1	.3127-3	.3857-3	.9987	1.99749
34.57	.3138-6	.1253-3	.2504-2	.5004-1	.3125-3	.3853-3	.9987	1.99749
34.58	.3133-6	.1252-3	.2503-2	.5003-1	.3122-3	.3850-3	.9987	1.99750
34.59	.3128-6	.1251-3	.2501-2	.5001-1	.3119-3	.3847-3	.9987	1.99750
34.60	.3124-6	.1250-3	.2500-2	.5000-1	.3117-3	.3843-3	.9987	1.99750
34.61	.3119-6	.1249-3	.2498-2	.4998-1	.3114-3	.3840-3	.9988	1.99750
34.62	.3115-6	.1248-3	.2497-2	.4997-1	.3111-3	.3837-3	.9988	1.99750
34.63	.3110-6	.1247-3	.2495-2	.4995-1	.3109-3	.3833-3	.9988	1.99750
34.64	.3106-6	.1245-3	.2494-2	.4994-1	.3106-3	.3830-3	.9988	1.99750
34.65	.3102-6	.1244-3	.2492-2	.4992-1	.3103-3	.3827-3	.9988	1.99751
34.66	.3097-6	.1243-3	.2491-2	.4991-1	.3100-3	.3824-3	.9988	1.99751
34.67	.3093-6	.1242-3	.2490-2	.4990-1	.3098-3	.3820-3	.9988	1.99751
34.68	.3088-6	.1241-3	.2488-2	.4988-1	.3095-3	.3817-3	.9988	1.99751
34.69	.3084-6	.1240-3	.2487-2	.4987-1	.3092-3	.3814-3	.9988	1.99751
34.70	.3079-6	.1239-3	.2485-2	.4985-1	.3090-3	.3810-3	.9988	1.99751
34.71	.3075-6	.1238-3	.2484-2	.4984-1	.3087-3	.3807-3	.9988	1.99751
34.72	.3070-6	.1237-3	.2482-2	.4982-1	.3084-3	.3804-3	.9988	1.99752
34.73	.3066-6	.1236-3	.2481-2	.4981-1	.3082-3	.3801-3	.9988	1.99752
34.74	.3062-6	.1235-3	.2480-2	.4980-1	.3079-3	.3797-3	.9988	1.99752
34.75	.3057-6	.1234-3	.2478-2	.4978-1	.3077-3	.3794-3	.9988	1.99752
34.76	.3053-6	.1233-3	.2477-2	.4977-1	.3074-3	.3791-3	.9988	1.99752
34.77	.3049-6	.1232-3	.2475-2	.4975-1	.3071-3	.3788-3	.9988	1.99752
34.78	.3044-6	.1230-3	.2474-2	.4974-1	.3069-3	.3784-3	.9988	1.99752
34.79	.3040-6	.1229-3	.2473-2	.4972-1	.3066-3	.3781-3	.9988	1.99753
34.80	.3035-6	.1228-3	.2471-2	.4971-1	.3063-3	.3778-3	.9988	1.99753
34.81	.3031-6	.1227-3	.2470-2	.4970-1	.3061-3	.3775-3	.9988	1.99753
34.82	.3027-6	.1226-3	.2468-2	.4968-1	.3058-3	.3771-3	.9988	1.99753
34.83	.3022-6	.1225-3	.2467-2	.4967-1	.3055-3	.3768-3	.9988	1.99753
34.84	.3018-6	.1224-3	.2465-2	.4965-1	.3053-3	.3765-3	.9988	1.99753
34.85	.3014-6	.1223-3	.2464-2	.4964-1	.3050-3	.3762-3	.9988	1.99753
34.86	.3009-6	.1222-3	.2463-2	.4962-1	.3048-3	.3758-3	.9988	1.99754
34.87	.3005-6	.1221-3	.2461-2	.4961-1	.3045-3	.3755-3	.9988	1.99754
34.88	.3001-6	.1220-3	.2460-2	.4960-1	.3042-3	.3752-3	.9988	1.99754
34.89	.2997-6	.1219-3	.2458-2	.4958-1	.3040-3	.3749-3	.9988	1.99754
34.90	.2992-6	.1218-3	.2457-2	.4957-1	.3037-3	.3745-3	.9988	1.99754
34.91	.2988-6	.1217-3	.2456-2	.4955-1	.3035-3	.3742-3	.9988	1.99754
34.92	.2984-6	.1216-3	.2454-2	.4954-1	.3032-3	.3739-3	.9988	1.99754
34.93	.2980-6	.1215-3	.2453-2	.4953-1	.3029-3	.3736-3	.9988	1.99755
34.94	.2975-6	.1214-3	.2451-2	.4951-1	.3027-3	.3733-3	.9988	1.99755
34.95	.2971-6	.1213-3	.2450-2	.4950-1	.3024-3	.3729-3	.9988	1.99755
34.96	.2967-6	.1212-3	.2449-2	.4948-1	.3022-3	.3726-3	.9988	1.99755
34.97	.2963-6	.1211-3	.2447-2	.4947-1	.3019-3	.3723-3	.9988	1.99755
34.98	.2958-6	.1210-3	.2446-2	.4945-1	.3017-3	.3720-3	.9988	1.99755
34.99	.2954-6	.1209-3	.2444-2	.4944-1	.3014-3	.3717-3	.9988	1.99756

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
1.685	84.950	.4478	1445.	3.990	362.1	.5790-3	1698.	34.00
1.685	84.951	.4478	1446.	3.990	362.3	.5784-3	1699.	34.01
1.684	84.953	.4478	1446.	3.990	362.5	.5779-3	1700.	34.02
1.684	84.954	.4478	1447.	3.990	362.8	.5774-3	1701.	34.03
1.683	84.956	.4478	1448.	3.990	363.0	.5769-3	1702.	34.04
1.683	84.957	.4478	1449.	3.990	363.2	.5764-3	1703.	34.05
1.682	84.958	.4478	1450.	3.990	363.4	.5759-3	1704.	34.06
1.682	84.960	.4478	1451.	3.990	363.6	.5754-3	1705.	34.07
1.681	84.961	.4478	1452.	3.990	363.8	.5749-3	1706.	34.08
1.681	84.963	.4478	1453.	3.990	364.0	.5744-3	1707.	34.09
1.680	84.964	.4478	1453.	3.990	364.3	.5739-3	1708.	34.10
1.680	84.966	.4478	1454.	3.990	364.5	.5734-3	1709.	34.11
1.679	84.967	.4478	1455.	3.990	364.7	.5729-3	1710.	34.12
1.679	84.969	.4478	1456.	3.990	364.9	.5724-3	1711.	34.13
1.678	84.970	.4478	1457.	3.990	365.1	.5719-3	1712.	34.14
1.678	84.972	.4478	1458.	3.990	365.3	.5714-3	1713.	34.15
1.678	84.973	.4478	1458.	3.990	365.5	.5709-3	1714.	34.16
1.677	84.975	.4478	1459.	3.990	365.7	.5704-3	1715.	34.17
1.677	84.976	.4478	1460.	3.990	366.0	.5699-3	1716.	34.18
1.676	84.978	.4478	1461.	3.990	366.2	.5694-3	1717.	34.19
1.676	84.979	.4478	1462.	3.990	366.4	.5689-3	1718.	34.20
1.675	84.981	.4478	1463.	3.990	366.6	.5684-3	1719.	34.21
1.675	84.982	.4478	1464.	3.990	366.8	.5679-3	1720.	34.22
1.674	84.983	.4478	1464.	3.990	367.0	.5674-3	1721.	34.23
1.674	84.985	.4478	1465.	3.990	367.2	.5669-3	1723.	34.24
1.673	84.986	.4478	1466.	3.990	367.5	.5664-3	1724.	34.25
1.673	84.988	.4478	1467.	3.990	367.7	.5659-3	1725.	34.26
1.672	84.989	.4478	1468.	3.990	367.9	.5654-3	1726.	34.27
1.672	84.991	.4478	1469.	3.990	368.1	.5649-3	1727.	34.28
1.671	84.992	.4478	1470.	3.990	368.3	.5645-3	1728.	34.29
1.671	84.994	.4478	1470.	3.990	368.5	.5640-3	1729.	34.30
1.670	84.995	.4478	1471.	3.990	368.7	.5635-3	1730.	34.31
1.670	84.997	.4478	1472.	3.990	369.0	.5630-3	1731.	34.32
1.669	84.998	.4478	1473.	3.990	369.2	.5625-3	1732.	34.33
1.669	84.999	.4478	1474.	3.990	369.4	.5620-3	1733.	34.34
1.668	85.001	.4478	1475.	3.990	369.6	.5615-3	1734.	34.35
1.668	85.002	.4478	1476.	3.990	369.8	.5610-3	1735.	34.36
1.667	85.004	.4478	1476.	3.990	370.0	.5605-3	1736.	34.37
1.667	85.005	.4478	1477.	3.990	370.2	.5600-3	1737.	34.38
1.666	85.007	.4478	1478.	3.990	370.5	.5596-3	1738.	34.39
1.666	85.008	.4478	1479.	3.990	370.7	.5591-3	1739.	34.40
1.665	85.010	.4478	1480.	3.990	370.9	.5586-3	1740.	34.41
1.665	85.011	.4478	1481.	3.990	371.1	.5581-3	1741.	34.42
1.664	85.013	.4478	1482.	3.990	371.3	.5576-3	1742.	34.43
1.664	85.014	.4478	1482.	3.990	371.5	.5571-3	1743.	34.44
1.663	85.015	.4478	1483.	3.990	371.8	.5567-3	1744.	34.45
1.663	85.017	.4478	1484.	3.990	372.0	.5562-3	1745.	34.46
1.662	85.018	.4478	1485.	3.990	372.2	.5557-3	1746.	34.47
1.662	85.020	.4478	1486.	3.990	372.4	.5552-3	1747.	34.48
1.661	85.021	.4478	1487.	3.990	372.6	.5547-3	1748.	34.49
1.661	85.023	.4478	1488.	3.990	372.8	.5542-3	1749.	34.50
1.660	85.024	.4478	1488.	3.990	373.0	.5538-3	1750.	34.51
1.660	85.026	.4478	1489.	3.990	373.3	.5533-3	1751.	34.52
1.660	85.027	.4478	1490.	3.990	373.5	.5528-3	1752.	34.53
1.659	85.028	.4478	1491.	3.990	373.7	.5523-3	1753.	34.54
1.659	85.030	.4478	1492.	3.990	373.9	.5519-3	1754.	34.55
1.658	85.031	.4478	1493.	3.990	374.1	.5514-3	1755.	34.56
1.658	85.033	.4478	1494.	3.990	374.3	.5509-3	1756.	34.57
1.657	85.034	.4478	1494.	3.990	374.6	.5504-3	1757.	34.58
1.657	85.036	.4478	1495.	3.990	374.8	.5500-3	1758.	34.59
1.656	85.037	.4478	1496.	3.990	375.0	.5495-3	1759.	34.60
1.656	85.038	.4478	1497.	3.990	375.2	.5490-3	1760.	34.61
1.655	85.040	.4478	1498.	3.990	375.4	.5485-3	1761.	34.62
1.655	85.041	.4478	1499.	3.990	375.6	.5481-3	1762.	34.63
1.654	85.043	.4478	1500.	3.990	375.9	.5476-3	1763.	34.64
1.654	85.044	.4478	1501.	3.990	376.1	.5471-3	1764.	34.65
1.653	85.046	.4478	1501.	3.990	376.3	.5466-3	1765.	34.66
1.653	85.047	.4478	1502.	3.990	376.5	.5462-3	1766.	34.67
1.652	85.048	.4478	1503.	3.990	376.7	.5457-3	1767.	34.68
1.652	85.050	.4478	1504.	3.990	376.9	.5452-3	1768.	34.69
1.651	85.051	.4478	1505.	3.990	377.2	.5448-3	1769.	34.70
1.651	85.053	.4478	1506.	3.990	377.4	.5443-3	1770.	34.71
1.650	85.054	.4478	1507.	3.990	377.6	.5438-3	1771.	34.72
1.650	85.056	.4478	1507.	3.990	377.8	.5434-3	1772.	34.73
1.650	85.057	.4478	1508.	3.990	378.0	.5429-3	1773.	34.74
1.649	85.058	.4478	1509.	3.990	378.2	.5424-3	1774.	34.75
1.649	85.060	.4478	1510.	3.990	378.5	.5420-3	1775.	34.76
1.648	85.061	.4478	1511.	3.990	378.7	.5415-3	1776.	34.77
1.648	85.063	.4478	1512.	3.990	378.9	.5410-3	1777.	34.78
1.647	85.064	.4478	1513.	3.990	379.1	.5406-3	1778.	34.79
1.647	85.065	.4478	1514.	3.990	379.3	.5401-3	1779.	34.80
1.646	85.067	.4478	1514.	3.990	379.5	.5396-3	1780.	34.81
1.646	85.068	.4478	1515.	3.990	379.8	.5392-3	1781.	34.82
1.645	85.070	.4478	1516.	3.990	380.0	.5387-3	1782.	34.83
1.645	85.071	.4478	1517.	3.990	380.2	.5382-3	1783.	34.84
1.644	85.073	.4478	1518.	3.990	380.4	.5378-3	1784.	34.85
1.644	85.074	.4478	1519.	3.990	380.6	.5373-3	1785.	34.86
1.643	85.075	.4478	1520.	3.990	380.8	.5369-3	1786.	34.87
1.643	85.077	.4478	1521.	3.990	381.1	.5364-3	1787.	34.88
1.642	85.078	.4478	1521.	3.990	381.3	.5359-3	1789.	34.89
1.642	85.080	.4478	1522.	3.990	381.5	.5355-3	1790.	34.90
1.641	85.081	.4478	1523.	3.990	381.7	.5350-3	1791.	34.91
1.641	85.082	.4478	1524.	3.990	381.9	.5346-3	1792.	34.92
1.641	85.084	.4478	1525.	3.990	382.2	.5341-3	1793.	34.93
1.640	85.085	.4478	1526.	3.990	382.4	.5337-3	1794.	34.94
1.640	85.087	.4478	1527.	3.990	382.6	.5332-3	1795.	34.95
1.639	85.088	.4478	1528.	3.990	382.8	.5327-3	1796.	34.96
1.639	85.089	.4478	1528.	3.990	383.0	.5323-3	1797.	34.97
1.638	85.091	.4478	1529.	3.990	383.2	.5318-3	1798.	34.98
1.638	85.092	.4478	1530.	3.990	383.5	.5314-3	1799.	34.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
35.00	.2950-6	.1207-3	.2443-2	.4943-1	.3011-3	.3714-3	.9988	1.99756
35.01	.2946-6	.1206-3	.2442-2	.4941-1	.3009-3	.3710-3	.9988	1.99756
35.02	.2942-6	.1205-3	.2440-2	.4940-1	.3006-3	.3707-3	.9988	1.99756
35.03	.2937-6	.1204-3	.2439-2	.4938-1	.3004-3	.3704-3	.9988	1.99756
35.04	.2933-6	.1203-3	.2437-2	.4937-1	.3001-3	.3701-3	.9988	1.99756
35.05	.2929-6	.1202-3	.2436-2	.4936-1	.2999-3	.3698-3	.9988	1.99756
35.06	.2925-6	.1201-3	.2435-2	.4934-1	.2996-3	.3695-3	.9988	1.99756
35.07	.2921-6	.1200-3	.2433-2	.4933-1	.2993-3	.3691-3	.9988	1.99757
35.08	.2916-6	.1199-3	.2432-2	.4931-1	.2991-3	.3688-3	.9988	1.99757
35.09	.2912-6	.1198-3	.2431-2	.4930-1	.2988-3	.3685-3	.9988	1.99757
35.10	.2908-6	.1197-3	.2429-2	.4929-1	.2986-3	.3682-3	.9988	1.99757
35.11	.2904-6	.1196-3	.2428-2	.4927-1	.2983-3	.3679-3	.9988	1.99757
35.12	.2900-6	.1195-3	.2426-2	.4926-1	.2981-3	.3676-3	.9988	1.99757
35.13	.2896-6	.1194-3	.2425-2	.4924-1	.2978-3	.3673-3	.9988	1.99757
35.14	.2892-6	.1193-3	.2424-2	.4923-1	.2976-3	.3670-3	.9988	1.99757
35.15	.2888-6	.1192-3	.2422-2	.4922-1	.2973-3	.3666-3	.9988	1.99758
35.16	.2884-6	.1191-3	.2421-2	.4920-1	.2971-3	.3663-3	.9988	1.99758
35.17	.2879-6	.1190-3	.2419-2	.4919-1	.2968-3	.3660-3	.9988	1.99758
35.18	.2875-6	.1189-3	.2418-2	.4917-1	.2966-3	.3657-3	.9988	1.99758
35.19	.2871-6	.1188-3	.2417-2	.4916-1	.2963-3	.3654-3	.9988	1.99758
35.20	.2867-6	.1187-3	.2415-2	.4915-1	.2961-3	.3651-3	.9988	1.99758
35.21	.2863-6	.1186-3	.2414-2	.4913-1	.2958-3	.3648-3	.9988	1.99758
35.22	.2859-6	.1185-3	.2413-2	.4912-1	.2956-3	.3645-3	.9988	1.99759
35.23	.2855-6	.1184-3	.2411-2	.4910-1	.2953-3	.3642-3	.9988	1.99759
35.24	.2851-6	.1183-3	.2410-2	.4909-1	.2950-3	.3638-3	.9988	1.99759
35.25	.2847-6	.1182-3	.2409-2	.4908-1	.2948-3	.3635-3	.9988	1.99759
35.26	.2843-6	.1181-3	.2407-2	.4906-1	.2945-3	.3632-3	.9988	1.99759
35.27	.2839-6	.1180-3	.2406-2	.4905-1	.2943-3	.3629-3	.9988	1.99759
35.28	.2835-6	.1179-3	.2404-2	.4904-1	.2941-3	.3626-3	.9988	1.99759
35.29	.2831-6	.1178-3	.2403-2	.4902-1	.2938-3	.3623-3	.9988	1.99760
35.30	.2827-6	.1177-3	.2402-2	.4901-1	.2936-3	.3620-3	.9988	1.99760
35.31	.2823-6	.1176-3	.2400-2	.4899-1	.2933-3	.3617-3	.9988	1.99760
35.32	.2819-6	.1175-3	.2399-2	.4898-1	.2931-3	.3614-3	.9988	1.99760
35.33	.2815-6	.1174-3	.2398-2	.4897-1	.2928-3	.3611-3	.9988	1.99760
35.34	.2811-6	.1173-3	.2396-2	.4895-1	.2926-3	.3608-3	.9988	1.99760
35.35	.2807-6	.1172-3	.2395-2	.4894-1	.2923-3	.3605-3	.9988	1.99760
35.36	.2803-6	.1171-3	.2394-2	.4892-1	.2921-3	.3602-3	.9988	1.99760
35.37	.2799-6	.1170-3	.2392-2	.4891-1	.2918-3	.3599-3	.9988	1.99761
35.38	.2795-6	.1169-3	.2391-2	.4890-1	.2916-3	.3596-3	.9988	1.99761
35.39	.2791-6	.1168-3	.2390-2	.4888-1	.2913-3	.3593-3	.9988	1.99761
35.40	.2787-6	.1167-3	.2388-2	.4887-1	.2911-3	.3589-3	.9988	1.99761
35.41	.2783-6	.1166-3	.2387-2	.4886-1	.2908-3	.3586-3	.9988	1.99761
35.42	.2780-6	.1165-3	.2386-2	.4884-1	.2906-3	.3583-3	.9988	1.99761
35.43	.2776-6	.1164-3	.2384-2	.4883-1	.2903-3	.3580-3	.9988	1.99761
35.44	.2772-6	.1163-3	.2383-2	.4881-1	.2901-3	.3577-3	.9988	1.99762
35.45	.2768-6	.1162-3	.2382-2	.4880-1	.2899-3	.3574-3	.9988	1.99762
35.46	.2764-6	.1161-3	.2380-2	.4879-1	.2896-3	.3571-3	.9988	1.99762
35.47	.2760-6	.1160-3	.2379-2	.4877-1	.2894-3	.3568-3	.9988	1.99762
35.48	.2756-6	.1159-3	.2377-2	.4876-1	.2891-3	.3565-3	.9988	1.99762
35.49	.2752-6	.1158-3	.2376-2	.4875-1	.2889-3	.3562-3	.9988	1.99762
35.50	.2748-6	.1157-3	.2375-2	.4873-1	.2886-3	.3559-3	.9988	1.99762
35.51	.2745-6	.1156-3	.2373-2	.4872-1	.2884-3	.3556-3	.9988	1.99763
35.52	.2741-6	.1155-3	.2372-2	.4870-1	.2882-3	.3553-3	.9988	1.99763
35.53	.2737-6	.1154-3	.2371-2	.4869-1	.2879-3	.3550-3	.9988	1.99763
35.54	.2733-6	.1153-3	.2369-2	.4868-1	.2877-3	.3547-3	.9988	1.99763
35.55	.2729-6	.1152-3	.2368-2	.4866-1	.2874-3	.3544-3	.9988	1.99763
35.56	.2725-6	.1151-3	.2367-2	.4865-1	.2872-3	.3541-3	.9988	1.99763
35.57	.2722-6	.1151-3	.2366-2	.4864-1	.2869-3	.3538-3	.9988	1.99763
35.58	.2718-6	.1150-3	.2364-2	.4862-1	.2867-3	.3535-3	.9988	1.99763
35.59	.2714-6	.1149-3	.2363-2	.4861-1	.2865-3	.3532-3	.9988	1.99764
35.60	.2710-6	.1148-3	.2362-2	.4860-1	.2862-3	.3530-3	.9988	1.99764
35.61	.2706-6	.1147-3	.2360-2	.4858-1	.2860-3	.3527-3	.9988	1.99764
35.62	.2703-6	.1146-3	.2359-2	.4857-1	.2857-3	.3524-3	.9988	1.99764
35.63	.2699-6	.1145-3	.2358-2	.4855-1	.2855-3	.3521-3	.9988	1.99764
35.64	.2695-6	.1144-3	.2356-2	.4854-1	.2853-3	.3518-3	.9988	1.99764
35.65	.2691-6	.1143-3	.2355-2	.4853-1	.2850-3	.3515-3	.9988	1.99764
35.66	.2687-6	.1142-3	.2354-2	.4851-1	.2848-3	.3512-3	.9988	1.99765
35.67	.2684-6	.1141-3	.2352-2	.4850-1	.2845-3	.3509-3	.9988	1.99765
.5.68	.2680-6	.1140-3	.2351-2	.4849-1	.2843-3	.3506-3	.9988	1.99765
35.69	.2676-6	.1139-3	.2350-2	.4847-1	.2841-3	.3503-3	.9988	1.99765
35.70	.2672-6	.1138-3	.2348-2	.4846-1	.2838-3	.3500-3	.9988	1.99765
35.71	.2669-6	.1137-3	.2347-2	.4845-1	.2836-3	.3497-3	.9988	1.99765
35.72	.2665-6	.1136-3	.2346-2	.4843-1	.2834-3	.3494-3	.9988	1.99765
35.73	.2661-6	.1135-3	.2344-2	.4842-1	.2831-3	.3491-3	.9988	1.99765
35.74	.2658-6	.1134-3	.2343-2	.4841-1	.2829-3	.3488-3	.9988	1.99766
35.75	.2654-6	.1133-3	.2342-2	.4839-1	.2826-3	.3485-3	.9988	1.99766
35.76	.2650-6	.1132-3	.2340-2	.4838-1	.2824-3	.3483-3	.9988	1.99766
35.77	.2646-6	.1131-3	.2339-2	.4837-1	.2822-3	.3480-3	.9988	1.99766
35.78	.2643-6	.1130-3	.2338-2	.4835-1	.2819-3	.3477-3	.9988	1.99766
35.79	.2639-6	.1129-3	.2337-2	.4834-1	.2817-3	.3474-3	.9988	1.99766
35.80	.2635-6	.1129-3	.2335-2	.4832-1	.2815-3	.3471-3	.9988	1.99766
35.81	.2632-6	.1128-3	.2334-2	.4831-1	.2812-3	.3468-3	.9988	1.99766
35.82	.2628-6	.1127-3	.2333-2	.4830-1	.2810-3	.3465-3	.9988	1.99767
35.83	.2624-6	.1126-3	.2331-2	.4828-1	.2808-3	.3462-3	.9988	1.99767
35.84	.2621-6	.1125-3	.2330-2	.4827-1	.2805-3	.3459-3	.9988	1.99767
35.85	.2617-6	.1124-3	.2329-2	.4826-1	.2803-3	.3456-3	.9988	1.99767
35.86	.2613-6	.1123-3	.2327-2	.4824-1	.2801-3	.3454-3	.9988	1.99767
35.87	.2610-6	.1122-3	.2326-2	.4823-1	.2798-3	.3451-3	.9988	1.99767
35.88	.2606-6	.1121-3	.2325-2	.4822-1	.2796-3	.3448-3	.9988	1.99767
35.89	.2603-6	.1120-3	.2324-2	.4820-1	.2794-3	.3445-3	.9988	1.99768
35.90	.2599-6	.1119-3	.2322-2	.4819-1	.2791-3	.3442-3	.9988	1.99768
35.91	.2595-6	.1118-3	.2321-2	.4818-1	.2789-3	.3439-3	.9988	1.99768
35.92	.2592-6	.1117-3	.2320-2	.4816-1	.2787-3	.3436-3	.9988	1.99768
35.93	.2588-6	.1116-3	.2318-2	.4815-1	.2784-3	.3433-3	.9988	1.99768
35.94	.2585-6	.1115-3	.2317-2	.4814-1	.2782-3	.3431-3	.9988	1.99768
35.95	.2581-6	.1114-3	.2316-2	.4812-1	.2780-3	.3428-3	.9988	1.99768
35.96	.2577-6	.1114-3	.2315-2	.4811-1	.2777-3	.3425-3	.9988	1.99768
35.97	.2574-6	.1113-3	.2313-2	.4810-1	.2775-3	.3422-3	.9988	1.99769
35.98	.2570-6	.1112-3	.2312-2	.4808-1	.2773-3	.3419-3	.9988	1.99769
35.99	.2567-6	.1111-3	.2311-2	.4807-1	.2771-3	.3416-3	.9988	1.99769

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
1.637	85.094	.4478	1531.	3.990	383.7	.5309-3	1800.	35.00
1.637	85.095	.4478	1532.	3.990	383.9	.5305-3	1801.	35.01
1.636	85.096	.4478	1533.	3.990	384.1	.5300-3	1802.	35.02
1.636	85.098	.4478	1534.	3.990	384.3	.5296-3	1803.	35.03
1.635	85.099	.4478	1535.	3.990	384.6	.5291-3	1804.	35.04
1.635	85.101	.4478	1535.	3.990	384.8	.5287-3	1805.	35.05
1.634	85.102	.4478	1536.	3.990	385.0	.5282-3	1806.	35.06
1.634	85.103	.4478	1537.	3.990	385.2	.5278-3	1807.	35.07
1.634	85.105	.4478	1538.	3.990	385.4	.5273-3	1808.	35.08
1.633	85.106	.4478	1539.	3.990	385.7	.5269-3	1809.	35.09
1.633	85.108	.4478	1540.	3.990	385.9	.5264-3	1810.	35.10
1.632	85.109	.4478	1541.	3.990	386.1	.5260-3	1811.	35.11
1.632	85.110	.4478	1542.	3.990	386.3	.5255-3	1812.	35.12
1.631	85.112	.4478	1542.	3.990	386.5	.5251-3	1813.	35.13
1.631	85.113	.4478	1543.	3.990	386.8	.5246-3	1814.	35.14
1.630	85.115	.4478	1544.	3.990	387.0	.5242-3	1815.	35.15
1.630	85.116	.4478	1545.	3.990	387.2	.5237-3	1816.	35.16
1.629	85.117	.4478	1546.	3.990	387.4	.5233-3	1817.	35.17
1.629	85.119	.4478	1547.	3.990	387.6	.5228-3	1818.	35.18
1.628	85.120	.4478	1548.	3.990	387.9	.5224-3	1819.	35.19
1.628	85.121	.4478	1549.	3.990	388.1	.5220-3	1820.	35.20
1.627	85.123	.4478	1549.	3.990	388.3	.5215-3	1821.	35.21
1.627	85.124	.4478	1550.	3.990	388.5	.5211-3	1822.	35.22
1.627	85.126	.4478	1551.	3.990	388.7	.5206-3	1824.	35.23
1.626	85.127	.4478	1552.	3.990	389.0	.5202-3	1825.	35.24
1.626	85.128	.4478	1553.	3.990	389.2	.5197-3	1826.	35.25
1.625	85.130	.4478	1554.	3.990	389.4	.5193-3	1827.	35.26
1.625	85.131	.4478	1555.	3.990	389.6	.5189-3	1828.	35.27
1.624	85.132	.4478	1556.	3.990	389.8	.5184-3	1829.	35.28
1.624	85.134	.4478	1556.	3.990	390.1	.5180-3	1830.	35.29
1.623	85.135	.4478	1557.	3.990	390.3	.5176-3	1831.	35.30
1.623	85.137	.4478	1558.	3.990	390.5	.5171-3	1832.	35.31
1.622	85.138	.4478	1559.	3.990	390.7	.5167-3	1833.	35.32
1.622	85.139	.4478	1560.	3.990	390.9	.5162-3	1834.	35.33
1.621	85.141	.4478	1561.	3.990	391.2	.5158-3	1835.	35.34
1.621	85.142	.4478	1562.	3.990	391.4	.5154-3	1836.	35.35
1.621	85.143	.4478	1563.	3.990	391.6	.5149-3	1837.	35.36
1.620	85.145	.4478	1564.	3.990	391.8	.5145-3	1838.	35.37
1.620	85.146	.4478	1564.	3.990	392.0	.5141-3	1839.	35.38
1.619	85.148	.4478	1565.	3.990	392.3	.5136-3	1840.	35.39
1.619	85.149	.4478	1566.	3.990	392.5	.5132-3	1841.	35.40
1.618	85.150	.4478	1567.	3.990	392.7	.5128-3	1842.	35.41
1.618	85.152	.4478	1568.	3.990	392.9	.5123-3	1843.	35.42
1.617	85.153	.4478	1569.	3.990	393.2	.5119-3	1844.	35.43
1.617	85.154	.4478	1570.	3.990	393.4	.5115-3	1845.	35.44
1.616	85.156	.4478	1571.	3.990	393.6	.5110-3	1846.	35.45
1.616	85.157	.4478	1572.	3.990	393.8	.5106-3	1847.	35.46
1.616	85.158	.4478	1572.	3.990	394.0	.5102-3	1848.	35.47
1.615	85.160	.4478	1573.	3.990	394.3	.5097-3	1849.	35.48
1.615	85.161	.4478	1574.	3.990	394.5	.5093-3	1851.	35.49
1.614	85.163	.4478	1575.	3.991	394.7	.5089-3	1852.	35.50
1.614	85.164	.4478	1576.	3.991	394.9	.5085-3	1853.	35.51
1.613	85.165	.4478	1577.	3.991	395.1	.5080-3	1854.	35.52
1.613	85.167	.4478	1578.	3.991	395.4	.5076-3	1855.	35.53
1.612	85.168	.4478	1579.	3.991	395.6	.5072-3	1856.	35.54
1.612	85.169	.4478	1580.	3.991	395.8	.5068-3	1857.	35.55
1.611	85.171	.4478	1580.	3.991	396.0	.5063-3	1858.	35.56
1.611	85.172	.4478	1581.	3.991	396.3	.5059-3	1859.	35.57
1.611	85.173	.4478	1582.	3.991	396.5	.5055-3	1860.	35.58
1.610	85.175	.4478	1583.	3.991	396.7	.5051-3	1861.	35.59
1.610	85.176	.4478	1584.	3.991	396.9	.5046-3	1862.	35.60
1.609	85.177	.4478	1585.	3.991	397.1	.5042-3	1863.	35.61
1.609	85.179	.4478	1586.	3.991	397.4	.5038-3	1864.	35.62
1.608	85.180	.4478	1587.	3.991	397.6	.5034-3	1865.	35.63
1.608	85.182	.4478	1588.	3.991	397.8	.5029-3	1866.	35.64
1.607	85.183	.4478	1588.	3.991	398.0	.5025-3	1867.	35.65
1.607	85.184	.4478	1589.	3.991	398.3	.5021-3	1868.	35.66
1.606	85.186	.4478	1590.	3.991	398.5	.5017-3	1869.	35.67
1.606	85.187	.4478	1591.	3.991	398.7	.5013-3	1870.	35.68
1.606	85.188	.4478	1592.	3.991	398.9	.5008-3	1871.	35.69
1.605	85.190	.4478	1593.	3.991	399.2	.5004-3	1872.	35.70
1.605	85.191	.4478	1594.	3.991	399.4	.5000-3	1874.	35.71
1.604	85.192	.4478	1595.	3.991	399.6	.4996-3	1875.	35.72
1.604	85.194	.4478	1596.	3.991	399.8	.4992-3	1876.	35.73
1.603	85.195	.4478	1596.	3.991	400.0	.4987-3	1877.	35.74
1.603	85.196	.4478	1597.	3.991	400.3	.4983-3	1878.	35.75
1.602	85.198	.4478	1598.	3.991	400.5	.4979-3	1879.	35.76
1.602	85.199	.4478	1599.	3.991	400.7	.4975-3	1880.	35.77
1.602	85.200	.4478	1600.	3.991	400.9	.4971-3	1881.	35.78
1.601	85.202	.4478	1601.	3.991	401.2	.4967-3	1882.	35.79
1.601	85.203	.4478	1602.	3.991	401.4	.4962-3	1883.	35.80
1.600	85.204	.4478	1603.	3.991	401.6	.4958-3	1884.	35.81
1.600	85.206	.4478	1604.	3.991	401.8	.4954-3	1885.	35.82
1.599	85.207	.4478	1604.	3.991	402.1	.4950-3	1886.	35.83
1.599	85.208	.4478	1605.	3.991	402.3	.4946-3	1887.	35.84
1.598	85.210	.4478	1606.	3.991	402.5	.4942-3	1888.	35.85
1.598	85.211	.4478	1607.	3.991	402.7	.4938-3	1889.	35.86
1.598	85.212	.4478	1608.	3.991	403.0	.4934-3	1890.	35.87
1.597	85.214	.4478	1609.	3.991	403.2	.4929-3	1891.	35.88
1.597	85.215	.4478	1610.	3.991	403.4	.4925-3	1892.	35.89
1.596	85.216	.4478	1611.	3.991	403.6	.4921-3	1894.	35.90
1.596	85.218	.4478	1612.	3.991	403.9	.4917-3	1895.	35.91
1.595	85.219	.4478	1613.	3.991	404.1	.4913-3	1896.	35.92
1.595	85.220	.4478	1613.	3.991	404.3	.4909-3	1897.	35.93
1.594	85.222	.4478	1614.	3.991	404.5	.4905-3	1898.	35.94
1.594	85.223	.4478	1615.	3.991	404.8	.4901-3	1899.	35.95
1.594	85.224	.4478	1616.	3.991	405.0	.4897-3	1900.	35.96
1.593	85.226	.4478	1617.	3.991	405.2	.4893-3	1901.	35.97
1.593	85.227	.4478	1618.	3.991	405.4	.4889-3	1902.	35.98
1.592	85.228	.4478	1619.	3.991	405.6	.4885-3	1903.	35.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
36.00	.2563-6	.1110-3	.2309-2	.4806-1	.2768-3	.3414-3	.9988	1.99769
36.01	.2560-6	.1109-3	.2308-2	.4804-1	.2766-3	.3411-3	.9988	1.99769
36.02	.2556-6	.1108-3	.2307-2	.4803-1	.2764-3	.3408-3	.9988	1.99769
36.03	.2553-6	.1107-3	.2306-2	.4802-1	.2761-3	.3405-3	.9988	1.99769
36.04	.2549-6	.1106-3	.2304-2	.4800-1	.2759-3	.3402-3	.9988	1.99769
36.05	.2546-6	.1105-3	.2303-2	.4799-1	.2757-3	.3399-3	.9988	1.99770
36.06	.2542-6	.1104-3	.2302-2	.4798-1	.2754-3	.3397-3	.9988	1.99770
36.07	.2538-6	.1103-3	.2301-2	.4796-1	.2752-3	.3394-3	.9988	1.99770
36.08	.2535-6	.1103-3	.2299-2	.4795-1	.2750-3	.3391-3	.9988	1.99770
36.09	.2531-6	.1102-3	.2298-2	.4794-1	.2748-3	.3388-3	.9989	1.99770
36.10	.2528-6	.1101-3	.2297-2	.4792-1	.2745-3	.3385-3	.9989	1.99770
36.11	.2524-6	.1100-3	.2295-2	.4791-1	.2743-3	.3383-3	.9989	1.99770
36.12	.2521-6	.1099-3	.2294-2	.4790-1	.2741-3	.3380-3	.9989	1.99770
36.13	.2518-6	.1098-3	.2293-2	.4788-1	.2739-3	.3377-3	.9989	1.99771
36.14	.2514-6	.1097-3	.2292-2	.4787-1	.2736-3	.3374-3	.9989	1.99771
36.15	.2511-6	.1096-3	.2290-2	.4786-1	.2734-3	.3371-3	.9989	1.99771
36.16	.2507-6	.1095-3	.2289-2	.4784-1	.2732-3	.3369-3	.9989	1.99771
36.17	.2504-6	.1094-3	.2288-2	.4783-1	.2730-3	.3366-3	.9989	1.99771
36.18	.2500-6	.1093-3	.2287-2	.4782-1	.2727-3	.3363-3	.9989	1.99771
36.19	.2497-6	.1093-3	.2285-2	.4781-1	.2725-3	.3360-3	.9989	1.99771
36.20	.2493-6	.1092-3	.2284-2	.4779-1	.2723-3	.3357-3	.9989	1.99771
36.21	.2490-6	.1091-3	.2283-2	.4778-1	.2721-3	.3355-3	.9989	1.99772
36.22	.2486-6	.1090-3	.2282-2	.4777-1	.2718-3	.3352-3	.9989	1.99772
36.23	.2483-6	.1089-3	.2280-2	.4775-1	.2716-3	.3349-3	.9989	1.99772
36.24	.2480-6	.1088-3	.2279-2	.4774-1	.2714-3	.3346-3	.9989	1.99772
36.25	.2476-6	.1087-3	.2278-2	.4773-1	.2712-3	.3344-3	.9989	1.99772
36.26	.2473-6	.1086-3	.2277-2	.4771-1	.2709-3	.3341-3	.9989	1.99772
36.27	.2469-6	.1085-3	.2275-2	.4770-1	.2707-3	.3338-3	.9989	1.99772
36.28	.2466-6	.1084-3	.2274-2	.4769-1	.2705-3	.3335-3	.9989	1.99772
36.29	.2463-6	.1084-3	.2273-2	.4767-1	.2703-3	.3333-3	.9989	1.99773
36.30	.2459-6	.1083-3	.2272-2	.4766-1	.2700-3	.3330-3	.9989	1.99773
36.31	.2456-6	.1082-3	.2270-2	.4765-1	.2698-3	.3327-3	.9989	1.99773
36.32	.2452-6	.1081-3	.2269-2	.4763-1	.2696-3	.3324-3	.9989	1.99773
36.33	.2449-6	.1080-3	.2268-2	.4762-1	.2694-3	.3322-3	.9989	1.99773
36.34	.2446-6	.1079-3	.2267-2	.4761-1	.2692-3	.3319-3	.9989	1.99773
36.35	.2442-6	.1078-3	.2265-2	.4760-1	.2689-3	.3316-3	.9989	1.99773
36.36	.2439-6	.1077-3	.2264-2	.4758-1	.2687-3	.3313-3	.9989	1.99773
36.37	.2436-6	.1076-3	.2263-2	.4757-1	.2685-3	.3311-3	.9989	1.99774
36.38	.2432-6	.1076-3	.2262-2	.4756-1	.2683-3	.3308-3	.9989	1.99774
36.39	.2429-6	.1075-3	.2260-2	.4754-1	.2681-3	.3305-3	.9989	1.99774
36.40	.2426-6	.1074-3	.2259-2	.4753-1	.2678-3	.3303-3	.9989	1.99774
36.41	.2422-6	.1073-3	.2258-2	.4752-1	.2676-3	.3300-3	.9989	1.99774
36.42	.2419-6	.1072-3	.2257-2	.4750-1	.2674-3	.3297-3	.9989	1.99774
36.43	.2416-6	.1071-3	.2255-2	.4749-1	.2672-3	.3294-3	.9989	1.99774
36.44	.2412-6	.1070-3	.2254-2	.4748-1	.2670-3	.3292-3	.9989	1.99774
36.45	.2409-6	.1069-3	.2253-2	.4746-1	.2667-3	.3289-3	.9989	1.99775
36.46	.2406-6	.1068-3	.2252-2	.4745-1	.2665-3	.3286-3	.9989	1.99775
36.47	.2403-6	.1068-3	.2250-2	.4744-1	.2663-3	.3284-3	.9989	1.99775
36.48	.2399-6	.1067-3	.2249-2	.4743-1	.2661-3	.3281-3	.9989	1.99775
36.49	.2396-6	.1066-3	.2248-2	.4741-1	.2659-3	.3278-3	.9989	1.99775
36.50	.2393-6	.1065-3	.2247-2	.4740-1	.2656-3	.3276-3	.9989	1.99775
36.51	.2389-6	.1064-3	.2246-2	.4739-1	.2654-3	.3273-3	.9989	1.99775
36.52	.2386-6	.1063-3	.2244-2	.4737-1	.2652-3	.3270-3	.9989	1.99775
36.53	.2383-6	.1062-3	.2243-2	.4736-1	.2650-3	.3268-3	.9989	1.99776
36.54	.2380-6	.1061-3	.2242-2	.4735-1	.2648-3	.3265-3	.9989	1.99776
36.55	.2376-6	.1061-3	.2241-2	.4734-1	.2646-3	.3262-3	.9989	1.99776
36.56	.2373-6	.1060-3	.2239-2	.4732-1	.2643-3	.3260-3	.9989	1.99776
36.57	.2370-6	.1059-3	.2238-2	.4731-1	.2641-3	.3257-3	.9989	1.99776
36.58	.2367-6	.1058-3	.2237-2	.4730-1	.2639-3	.3254-3	.9989	1.99776
36.59	.2364-6	.1057-3	.2236-2	.4728-1	.2637-3	.3252-3	.9989	1.99776
36.60	.2360-6	.1056-3	.2235-2	.4727-1	.2635-3	.3249-3	.9989	1.99776
36.61	.2357-6	.1055-3	.2233-2	.4726-1	.2633-3	.3246-3	.9989	1.99777
36.62	.2354-6	.1055-3	.2232-2	.4725-1	.2631-3	.3244-3	.9989	1.99777
36.63	.2351-6	.1054-3	.2231-2	.4723-1	.2628-3	.3241-3	.9989	1.99777
36.64	.2347-6	.1053-3	.2230-2	.4722-1	.2626-3	.3238-3	.9989	1.99777
36.65	.2344-6	.1052-3	.2228-2	.4721-1	.2624-3	.3236-3	.9989	1.99777
36.66	.2341-6	.1051-3	.2227-2	.4719-1	.2622-3	.3233-3	.9989	1.99777
36.67	.2338-6	.1050-3	.2226-2	.4718-1	.2620-3	.3230-3	.9989	1.99777
36.68	.2335-6	.1049-3	.2225-2	.4717-1	.2618-3	.3228-3	.9989	1.99777
36.69	.2332-6	.1049-3	.2224-2	.4716-1	.2616-3	.3225-3	.9989	1.99778
36.70	.2328-6	.1048-3	.2222-2	.4714-1	.2613-3	.3222-3	.9989	1.99778
36.71	.2325-6	.1047-3	.2221-2	.4713-1	.2611-3	.3220-3	.9989	1.99778
36.72	.2322-6	.1046-3	.2220-2	.4712-1	.2609-3	.3217-3	.9989	1.99778
36.73	.2319-6	.1045-3	.2219-2	.4710-1	.2607-3	.3215-3	.9989	1.99778
36.74	.2316-6	.1044-3	.2218-2	.4709-1	.2605-3	.3212-3	.9989	1.99778
36.75	.2313-6	.1043-3	.2216-2	.4708-1	.2603-3	.3209-3	.9989	1.99778
36.76	.2309-6	.1043-3	.2215-2	.4707-1	.2601-3	.3207-3	.9989	1.99778
36.77	.2306-6	.1042-3	.2214-2	.4705-1	.2599-3	.3204-3	.9989	1.99778
36.78	.2303-6	.1041-3	.2213-2	.4704-1	.2596-3	.3202-3	.9989	1.99779
36.79	.2300-6	.1040-3	.2212-2	.4703-1	.2594-3	.3199-3	.9989	1.99779
36.80	.2297-6	.1039-3	.2210-2	.4701-1	.2592-3	.3196-3	.9989	1.99779
36.81	.2294-6	.1038-3	.2209-2	.4700-1	.2590-3	.3194-3	.9989	1.99779
36.82	.2291-6	.1038-3	.2208-2	.4699-1	.2588-3	.3191-3	.9989	1.99779
36.83	.2288-6	.1037-3	.2207-2	.4698-1	.2586-3	.3189-3	.9989	1.99779
36.84	.2285-6	.1036-3	.2206-2	.4696-1	.2584-3	.3186-3	.9989	1.99779
36.85	.2281-6	.1035-3	.2204-2	.4695-1	.2582-3	.3183-3	.9989	1.99779
36.86	.2278-6	.1034-3	.2203-2	.4694-1	.2580-3	.3181-3	.9989	1.99780
36.87	.2275-6	.1033-3	.2202-2	.4693-1	.2578-3	.3178-3	.9989	1.99780
36.88	.2272-6	.1032-3	.2201-2	.4691-1	.2575-3	.3176-3	.9989	1.99780
36.89	.2269-6	.1032-3	.2200-2	.4690-1	.2573-3	.3173-3	.9989	1.99780
36.90	.2266-6	.1031-3	.2198-2	.4689-1	.2571-3	.3171-3	.9989	1.99780
36.91	.2263-6	.1030-3	.2197-2	.4687-1	.2569-3	.3168-3	.9989	1.99780
36.92	.2260-6	.1029-3	.2196-2	.4686-1	.2567-3	.3165-3	.9989	1.99780
36.93	.2257-6	.1028-3	.2195-2	.4685-1	.2565-3	.3163-3	.9989	1.99780
36.94	.2254-6	.1027-3	.2194-2	.4684-1	.2563-3	.3160-3	.9989	1.99781
36.95	.2251-6	.1027-3	.2192-2	.4682-1	.2561-3	.3158-3	.9989	1.99781
36.96	.2248-6	.1026-3	.2191-2	.4681-1	.2559-3	.3155-3	.9989	1.99781
36.97	.2245-6	.1025-3	.2190-2	.4680-1	.2557-3	.3153-3	.9989	1.99781
36.98	.2242-6	.1024-3	.2189-2	.4679-1	.2555-3	.3150-3	.9989	1.99781
36.99	.2239-6	.1023-3	.2188-2	.4677-1	.2553-3	.3147-3	.9989	1.99781

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
1.592	85.230	.4478	1620.	3.991	405.9	.4881-3	1904.	36.00
1.591	85.231	.4478	1621.	3.991	406.1	.4876-3	1905.	36.01
1.591	85.232	.4478	1622.	3.991	406.3	.4872-3	1906.	36.02
1.590	85.234	.4478	1622.	3.991	406.6	.4868-3	1907.	36.03
1.590	85.238	.4478	1623.	3.991	406.8	.4864-3	1908.	36.04
1.590	85.236	.4478	1624.	3.991	407.0	.4860-3	1909.	36.05
1.589	85.238	.4478	1625.	3.991	407.2	.4856-3	1910.	36.06
1.589	85.239	.4478	1626.	3.991	407.5	.4852-3	1911.	36.07
1.588	85.240	.4478	1627.	3.991	407.7	.4848-3	1913.	36.08
1.588	85.242	.4478	1628.	3.991	407.9	.4844-3	1914.	36.09
1.587	85.243	.4478	1629.	3.991	408.1	.4840-3	1915.	36.10
1.587	85.244	.4478	1630.	3.991	408.4	.4836-3	1916.	36.11
1.586	85.245	.4478	1631.	3.991	408.6	.4832-3	1917.	36.12
1.586	85.247	.4478	1631.	3.991	408.8	.4828-3	1918.	36.13
1.586	85.248	.4478	1632.	3.991	409.0	.4824-3	1919.	36.14
1.585	85.249	.4478	1633.	3.991	409.3	.4820-3	1920.	36.15
1.585	85.251	.4478	1634.	3.991	409.5	.4816-3	1921.	36.16
1.584	85.252	.4478	1635.	3.991	409.7	.4812-3	1922.	36.17
1.584	85.253	.4478	1636.	3.991	409.9	.4808-3	1923.	36.18
1.583	85.255	.4478	1637.	3.991	410.2	.4804-3	1924.	36.19
1.583	85.256	.4478	1638.	3.991	410.4	.4800-3	1925.	36.20
1.583	85.257	.4478	1639.	3.991	410.6	.4796-3	1926.	36.21
1.582	85.259	.4478	1640.	3.991	410.8	.4792-3	1927.	36.22
1.582	85.260	.4478	1641.	3.991	411.1	.4789-3	1928.	36.23
1.581	85.261	.4478	1641.	3.991	411.3	.4785-3	1930.	36.24
1.581	85.262	.4478	1642.	3.991	411.5	.4781-3	1931.	36.25
1.580	85.264	.4478	1643.	3.991	411.7	.4777-3	1932.	36.26
1.580	85.265	.4478	1644.	3.991	412.0	.4773-3	1933.	36.27
1.579	85.266	.4478	1645.	3.991	412.2	.4769-3	1934.	36.28
1.579	85.268	.4478	1646.	3.991	412.4	.4765-3	1935.	36.29
1.579	85.269	.4478	1647.	3.991	412.7	.4761-3	1936.	36.30
1.578	85.270	.4478	1648.	3.991	412.9	.4757-3	1937.	36.31
1.578	85.272	.4478	1649.	3.991	413.1	.4753-3	1938.	36.32
1.577	85.273	.4478	1650.	3.991	413.3	.4749-3	1939.	36.33
1.577	85.274	.4478	1650.	3.991	413.6	.4745-3	1940.	36.34
1.576	85.275	.4478	1651.	3.991	413.8	.4741-3	1941.	36.35
1.576	85.277	.4478	1652.	3.991	414.0	.4738-3	1942.	36.36
1.576	85.278	.4478	1653.	3.991	414.2	.4734-3	1943.	36.37
1.575	85.279	.4478	1654.	3.991	414.5	.4730-3	1944.	36.38
1.575	85.281	.4478	1655.	3.991	414.7	.4726-3	1946.	36.39
1.574	85.282	.4478	1656.	3.991	414.9	.4722-3	1947.	36.40
1.574	85.283	.4478	1657.	3.991	415.2	.4718-3	1948.	36.41
1.573	85.285	.4478	1658.	3.991	415.4	.4714-3	1949.	36.42
1.573	85.286	.4478	1659.	3.991	415.6	.4710-3	1950.	36.43
1.573	85.287	.4478	1660.	3.991	415.8	.4706-3	1951.	36.44
1.572	85.288	.4478	1661.	3.991	416.1	.4703-3	1952.	36.45
1.572	85.290	.4478	1661.	3.991	416.3	.4699-3	1953.	36.46
1.571	85.291	.4478	1662.	3.991	416.5	.4695-3	1954.	36.47
1.571	85.292	.4478	1663.	3.991	416.7	.4691-3	1955.	36.48
1.570	85.294	.4478	1664.	3.991	417.0	.4687-3	1956.	36.49
1.570	85.295	.4478	1665.	3.991	417.2	.4683-3	1957.	36.50
1.570	85.296	.4478	1666.	3.991	417.4	.4680-3	1958.	36.51
1.569	85.297	.4477	1667.	3.991	417.7	.4676-3	1959.	36.52
1.569	85.299	.4477	1668.	3.991	417.9	.4672-3	1961.	36.53
1.568	85.300	.4477	1669.	3.991	418.1	.4668-3	1962.	36.54
1.568	85.301	.4477	1670.	3.991	418.3	.4664-3	1963.	36.55
1.567	85.303	.4477	1671.	3.991	418.6	.4661-3	1964.	36.56
1.567	85.304	.4477	1671.	3.991	418.8	.4657-3	1965.	36.57
1.567	85.305	.4477	1672.	3.991	419.0	.4653-3	1966.	36.58
1.566	85.306	.4477	1673.	3.991	419.3	.4649-3	1967.	36.59
1.566	85.308	.4477	1674.	3.991	419.5	.4645-3	1968.	36.60
1.565	85.309	.4477	1675.	3.991	419.7	.4641-3	1969.	36.61
1.565	85.310	.4477	1676.	3.991	419.9	.4638-3	1970.	36.62
1.564	85.312	.4477	1677.	3.991	420.2	.4634-3	1971.	36.63
1.564	85.313	.4477	1678.	3.991	420.4	.4630-3	1972.	36.64
1.564	85.314	.4477	1679.	3.991	420.6	.4626-3	1973.	36.65
1.563	85.315	.4477	1680.	3.991	420.9	.4623-3	1975.	36.66
1.563	85.317	.4477	1681.	3.991	421.1	.4619-3	1976.	36.67
1.562	85.318	.4477	1682.	3.991	421.3	.4615-3	1977.	36.68
1.562	85.319	.4477	1682.	3.991	421.5	.4611-3	1978.	36.69
1.561	85.320	.4477	1683.	3.991	421.8	.4608-3	1979.	36.70
1.561	85.322	.4477	1684.	3.991	422.0	.4604-3	1980.	36.71
1.561	85.323	.4477	1685.	3.991	422.2	.4600-3	1981.	36.72
1.560	85.324	.4477	1686.	3.991	422.5	.4596-3	1982.	36.73
1.560	85.326	.4477	1687.	3.991	422.7	.4593-3	1983.	36.74
1.559	85.327	.4477	1688.	3.991	422.9	.4589-3	1984.	36.75
1.559	85.328	.4477	1689.	3.991	423.2	.4585-3	1985.	36.76
1.558	85.329	.4477	1690.	3.991	423.4	.4581-3	1986.	36.77
1.558	85.331	.4477	1691.	3.991	423.6	.4578-3	1987.	36.78
1.558	85.332	.4477	1692.	3.991	423.8	.4574-3	1989.	36.79
1.557	85.333	.4477	1693.	3.991	424.1	.4570-3	1990.	36.80
1.557	85.334	.4477	1693.	3.991	424.3	.4566-3	1991.	36.81
1.556	85.336	.4477	1694.	3.991	424.5	.4563-3	1992.	36.82
1.556	85.337	.4477	1695.	3.991	424.8	.4559-3	1993.	36.83
1.555	85.338	.4477	1696.	3.991	425.0	.4555-3	1994.	36.84
1.555	85.339	.4477	1697.	3.991	425.2	.4552-3	1995.	36.85
1.555	85.341	.4477	1698.	3.991	425.5	.4548-3	1996.	36.86
1.554	85.342	.4477	1699.	3.991	425.7	.4544-3	1997.	36.87
1.554	85.343	.4477	1700.	3.991	425.9	.4541-3	1998.	36.88
1.553	85.345	.4477	1701.	3.991	426.1	.4537-3	1999.	36.89
1.553	85.346	.4477	1702.	3.991	426.4	.4533-3	2000.	36.90
1.553	85.347	.4477	1703.	3.991	426.6	.4530-3	2002.	36.91
1.552	85.348	.4477	1704.	3.991	426.8	.4526-3	2003.	36.92
1.552	85.350	.4477	1705.	3.991	427.1	.4523-3	2004.	36.93
1.551	85.351	.4477	1705.	3.991	427.3	.4519-3	2005.	36.94
1.551	85.352	.4477	1706.	3.991	427.5	.4515-3	2006.	36.95
1.550	85.353	.4477	1707.	3.991	427.8	.4511-3	2007.	36.96
1.550	85.355	.4477	1708.	3.991	428.0	.4508-3	2008.	36.97
1.550	85.356	.4477	1709.	3.991	428.2	.4504-3	2009.	36.98
1.549	85.357	.4477	1710.	3.991	428.5	.4500-3	2010.	36.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A^*/A	V/V_0	V/a^*
37.00	.2236-6	.1028-3	.2187-2	.4676-1	.2551-3	.3145-3	.9989	1.99781
37.01	.2233-6	.1028-3	.2185-2	.4675-1	.2549-3	.3148-3	.9989	1.99781
37.02	.2230-6	.1021-3	.2184-2	.4674-1	.2546-3	.3140-3	.9989	1.99781
37.03	.2227-6	.1020-3	.2183-2	.4672-1	.2544-3	.3137-3	.9989	1.99782
37.04	.2224-6	.1019-3	.2182-2	.4671-1	.2542-3	.3135-3	.9989	1.99782
37.05	.2221-6	.1018-3	.2181-2	.4670-1	.2540-3	.3132-3	.9989	1.99782
37.06	.2218-6	.1018-3	.2180-2	.4669-1	.2538-3	.3130-3	.9989	1.99782
37.07	.2215-6	.1017-3	.2178-2	.4667-1	.2536-3	.3127-3	.9989	1.99782
37.08	.2212-6	.1016-3	.2177-2	.4666-1	.2534-3	.3125-3	.9989	1.99782
37.09	.2209-6	.1015-3	.2176-2	.4665-1	.2532-3	.3122-3	.9989	1.99782
37.10	.2206-6	.1014-3	.2175-2	.4664-1	.2530-3	.3120-3	.9989	1.99782
37.11	.2203-6	.1013-3	.2174-2	.4662-1	.2528-3	.3117-3	.9989	1.99783
37.12	.2200-6	.1013-3	.2173-2	.4661-1	.2526-3	.3115-3	.9989	1.99783
37.13	.2197-6	.1012-3	.2171-2	.4660-1	.2524-3	.3112-3	.9989	1.99783
37.14	.2194-6	.1011-3	.2170-2	.4659-1	.2522-3	.3110-3	.9989	1.99783
37.15	.2191-6	.1010-3	.2169-2	.4657-1	.2520-3	.3107-3	.9989	1.99783
37.16	.2188-6	.1009-3	.2168-2	.4656-1	.2518-3	.3105-3	.9989	1.99783
37.17	.2185-6	.1009-3	.2167-2	.4655-1	.2516-3	.3102-3	.9989	1.99783
37.18	.2182-6	.1008-3	.2166-2	.4654-1	.2514-3	.3100-3	.9989	1.99783
37.19	.2179-6	.1007-3	.2164-2	.4652-1	.2512-3	.3097-3	.9989	1.99783
37.20	.2176-6	.1006-3	.2163-2	.4651-1	.2510-3	.3095-3	.9989	1.99784
37.21	.2173-6	.1005-3	.2162-2	.4650-1	.2508-3	.3092-3	.9989	1.99784
37.22	.2171-6	.1004-3	.2161-2	.4649-1	.2506-3	.3090-3	.9989	1.99784
37.23	.2168-6	.1004-3	.2160-2	.4647-1	.2504-3	.3087-3	.9989	1.99784
37.24	.2165-6	.1003-3	.2159-2	.4646-1	.2502-3	.3085-3	.9989	1.99784
37.25	.2162-6	.1002-3	.2157-2	.4645-1	.2500-3	.3082-3	.9989	1.99784
37.26	.2159-6	.1001-3	.2156-2	.4644-1	.2498-3	.3080-3	.9989	1.99784
37.27	.2156-6	.1000-3	.2155-2	.4642-1	.2496-3	.3077-3	.9989	1.99784
37.28	.2153-6	.9997-4	.2154-2	.4641-1	.2494-3	.3075-3	.9989	1.99784
37.29	.2150-6	.9989-4	.2153-2	.4640-1	.2492-3	.3072-3	.9989	1.99785
37.30	.2147-6	.9980-4	.2152-2	.4639-1	.2490-3	.3070-3	.9989	1.99785
37.31	.2145-6	.9972-4	.2150-2	.4637-1	.2488-3	.3067-3	.9989	1.99785
37.32	.2142-6	.9964-4	.2149-2	.4636-1	.2486-3	.3065-3	.9989	1.99785
37.33	.2139-6	.9957-4	.2148-2	.4635-1	.2484-3	.3063-3	.9989	1.99785
37.34	.2136-6	.9949-4	.2147-2	.4634-1	.2482-3	.3060-3	.9989	1.99785
37.35	.2133-6	.9941-4	.2146-2	.4632-1	.2480-3	.3058-3	.9989	1.99785
37.36	.2130-6	.9933-4	.2145-2	.4631-1	.2478-3	.3055-3	.9989	1.99785
37.37	.2127-6	.9925-4	.2144-2	.4630-1	.2476-3	.3053-3	.9989	1.99786
37.38	.2125-6	.9917-4	.2142-2	.4629-1	.2474-3	.3050-3	.9989	1.99786
37.39	.2122-6	.9909-4	.2141-2	.4627-1	.2472-3	.3048-3	.9989	1.99786
37.40	.2119-6	.9901-4	.2140-2	.4626-1	.2470-3	.3045-3	.9989	1.99786
37.41	.2116-6	.9893-4	.2139-2	.4625-1	.2468-3	.3043-3	.9989	1.99786
37.42	.2113-6	.9885-4	.2138-2	.4624-1	.2466-3	.3041-3	.9989	1.99786
37.43	.2110-6	.9877-4	.2137-2	.4622-1	.2464-3	.3038-3	.9989	1.99786
37.44	.2108-6	.9869-4	.2136-2	.4621-1	.2462-3	.3036-3	.9989	1.99786
37.45	.2105-6	.9861-4	.2134-2	.4620-1	.2460-3	.3033-3	.9989	1.99786
37.46	.2102-6	.9853-4	.2133-2	.4619-1	.2458-3	.3031-3	.9989	1.99787
37.47	.2099-6	.9846-4	.2132-2	.4618-1	.2456-3	.3028-3	.9989	1.99787
37.48	.2096-6	.9838-4	.2131-2	.4616-1	.2454-3	.3026-3	.9989	1.99787
37.49	.2094-6	.9830-4	.2130-2	.4615-1	.2452-3	.3024-3	.9989	1.99787
37.50	.2091-6	.9822-4	.2129-2	.4614-1	.2450-3	.3021-3	.9989	1.99787
37.51	.2088-6	.9814-4	.2128-2	.4613-1	.2448-3	.3019-3	.9989	1.99787
37.52	.2085-6	.9806-4	.2127-2	.4611-1	.2446-3	.3016-3	.9989	1.99787
37.53	.2083-6	.9799-4	.2125-2	.4610-1	.2444-3	.3014-3	.9989	1.99787
37.54	.2080-6	.9791-4	.2124-2	.4609-1	.2442-3	.3012-3	.9989	1.99787
37.55	.2077-6	.9783-4	.2123-2	.4608-1	.2441-3	.3009-3	.9989	1.99788
37.56	.2074-6	.9775-4	.2122-2	.4607-1	.2439-3	.3007-3	.9989	1.99788
37.57	.2072-6	.9767-4	.2121-2	.4605-1	.2437-3	.3004-3	.9989	1.99788
37.58	.2069-6	.9760-4	.2120-2	.4604-1	.2435-3	.3002-3	.9989	1.99788
37.59	.2066-6	.9752-4	.2119-2	.4603-1	.2433-3	.3000-3	.9989	1.99788
37.60	.2063-6	.9744-4	.2118-2	.4602-1	.2431-3	.2997-3	.9989	1.99788
37.61	.2061-6	.9736-4	.2116-2	.4600-1	.2429-3	.2995-3	.9989	1.99788
37.62	.2058-6	.9729-4	.2115-2	.4599-1	.2427-3	.2992-3	.9989	1.99788
37.63	.2055-6	.9721-4	.2114-2	.4598-1	.2425-3	.2990-3	.9989	1.99788
37.64	.2052-6	.9713-4	.2113-2	.4597-1	.2423-3	.2988-3	.9989	1.99789
37.65	.2050-6	.9705-4	.2112-2	.4596-1	.2421-3	.2985-3	.9989	1.99789
37.66	.2047-6	.9698-4	.2111-2	.4594-1	.2419-3	.2983-3	.9989	1.99789
37.67	.2044-6	.9690-4	.2110-2	.4593-1	.2417-3	.2981-3	.9989	1.99789
37.68	.2042-6	.9682-4	.2109-2	.4592-1	.2415-3	.2978-3	.9989	1.99789
37.69	.2039-6	.9675-4	.2107-2	.4591-1	.2414-3	.2976-3	.9989	1.99789
37.70	.2036-6	.9667-4	.2106-2	.4589-1	.2412-3	.2973-3	.9989	1.99789
37.71	.2033-6	.9659-4	.2105-2	.4588-1	.2410-3	.2971-3	.9989	1.99789
37.72	.2031-6	.9651-4	.2104-2	.4587-1	.2408-3	.2969-3	.9989	1.99789
37.73	.2028-6	.9644-4	.2103-2	.4586-1	.2406-3	.2966-3	.9989	1.99790
37.74	.2025-6	.9636-4	.2102-2	.4585-1	.2404-3	.2964-3	.9989	1.99790
37.75	.2023-6	.9629-4	.2101-2	.4583-1	.2402-3	.2962-3	.9989	1.99790
37.76	.2020-6	.9621-4	.2100-2	.4582-1	.2400-3	.2959-3	.9989	1.99790
37.77	.2017-6	.9613-4	.2099-2	.4581-1	.2398-3	.2957-3	.9990	1.99790
37.78	.2015-6	.9606-4	.2097-2	.4580-1	.2396-3	.2955-3	.9990	1.99790
37.79	.2012-6	.9598-4	.2096-2	.4579-1	.2394-3	.2952-3	.9990	1.99790
37.80	.2009-6	.9590-4	.2095-2	.4577-1	.2393-3	.2950-3	.9990	1.99790
37.81	.2007-6	.9583-4	.2094-2	.4576-1	.2391-3	.2948-3	.9990	1.99790
37.82	.2004-6	.9575-4	.2093-2	.4575-1	.2389-3	.2945-3	.9990	1.99791
37.83	.2001-6	.9568-4	.2092-2	.4574-1	.2387-3	.2943-3	.9990	1.99791
37.84	.1999-6	.9560-4	.2091-2	.4573-1	.2385-3	.2941-3	.9990	1.99791
37.85	.1996-6	.9553-4	.2090-2	.4571-1	.2383-3	.2938-3	.9990	1.99791
37.86	.1994-6	.9545-4	.2089-2	.4570-1	.2381-3	.2936-3	.9990	1.99791
37.87	.1991-6	.9538-4	.2087-2	.4569-1	.2379-3	.2934-3	.9990	1.99791
37.88	.1988-6	.9530-4	.2086-2	.4568-1	.2378-3	.2931-3	.9990	1.99791
37.89	.1986-6	.9522-4	.2085-2	.4566-1	.2376-3	.2929-3	.9990	1.99791
37.90	.1983-6	.9515-4	.2084-2	.4565-1	.2374-3	.2927-3	.9990	1.99791
37.91	.1980-6	.9507-4	.2083-2	.4564-1	.2372-3	.2924-3	.9990	1.99792
37.92	.1978-6	.9500-4	.2082-2	.4563-1	.2370-3	.2922-3	.9990	1.99792
37.93	.1975-6	.9492-4	.2081-2	.4562-1	.2368-3	.2920-3	.9990	1.99792
37.94	.1973-6	.9485-4	.2080-2	.4560-1	.2366-3	.2918-3	.9990	1.99792
37.95	.1970-6	.9477-4	.2079-2	.4559-1	.2364-3	.2915-3	.9990	1.99792
37.96	.1967-6	.9470-4	.2078-2	.4558-1	.2363-3	.2913-3	.9990	1.99792
37.97	.1965-6	.9463-4	.2077-2	.4557-1	.2361-3	.2911-3	.9990	1.99792
37.98	.1962-6	.9455-4	.2075-2	.4556-1	.2359-3	.2908-3	.9990	1.99792
37.99	.1960-6	.9448-4	.2074-2	.4554-1	.2357-3	.2906-3	.9990	1.99792

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
1.549	85.358	.4477	1711.	3.991	428.7	.4497-3	2011.	37.00
1.548	85.360	.4477	1712.	3.991	428.9	.4493-3	2012.	37.01
1.548	85.361	.4477	1713.	3.991	429.1	.4489-3	2013.	37.02
1.547	85.362	.4477	1714.	3.991	429.4	.4486-3	2015.	37.03
1.547	85.363	.4477	1715.	3.991	429.6	.4482-3	2016.	37.04
1.547	85.365	.4477	1716.	3.991	429.8	.4479-3	2017.	37.05
1.546	85.366	.4477	1717.	3.991	430.1	.4475-3	2018.	37.06
1.546	85.367	.4477	1717.	3.991	430.3	.4471-3	2019.	37.07
1.545	85.368	.4477	1718.	3.991	430.5	.4468-3	2020.	37.08
1.545	85.370	.4477	1719.	3.991	430.8	.4464-3	2021.	37.09
1.545	85.371	.4477	1720.	3.991	431.0	.4461-3	2022.	37.10
1.544	85.372	.4477	1721.	3.991	431.2	.4457-3	2023.	37.11
1.544	85.373	.4477	1722.	3.991	431.5	.4453-3	2024.	37.12
1.543	85.375	.4477	1723.	3.991	431.7	.4450-3	2025.	37.13
1.543	85.376	.4477	1724.	3.991	431.9	.4446-3	2027.	37.14
1.542	85.377	.4477	1725.	3.991	432.2	.4443-3	2028.	37.15
1.542	85.378	.4477	1726.	3.991	432.4	.4439-3	2029.	37.16
1.542	85.380	.4477	1727.	3.991	432.6	.4436-3	2030.	37.17
1.541	85.381	.4477	1728.	3.991	432.9	.4432-3	2031.	37.18
1.541	85.382	.4477	1729.	3.991	433.1	.4428-3	2032.	37.19
1.540	85.383	.4477	1730.	3.991	433.3	.4425-3	2033.	37.20
1.540	85.385	.4477	1730.	3.991	433.6	.4421-3	2034.	37.21
1.540	85.386	.4477	1731.	3.991	433.8	.4418-3	2035.	37.22
1.539	85.387	.4477	1732.	3.991	434.0	.4414-3	2036.	37.23
1.539	85.388	.4477	1733.	3.991	434.3	.4411-3	2037.	37.24
1.538	85.389	.4477	1734.	3.991	434.5	.4407-3	2039.	37.25
1.538	85.391	.4477	1735.	3.991	434.7	.4404-3	2040.	37.26
1.538	85.392	.4477	1736.	3.991	435.0	.4400-3	2041.	37.27
1.537	85.393	.4477	1737.	3.991	435.2	.4397-3	2042.	37.28
1.537	85.394	.4477	1738.	3.991	435.4	.4393-3	2043.	37.29
1.536	85.396	.4477	1739.	3.991	435.7	.4389-3	2044.	37.30
1.536	85.397	.4477	1740.	3.991	435.9	.4386-3	2045.	37.31
1.535	85.398	.4477	1741.	3.991	436.1	.4382-3	2046.	37.32
1.535	85.399	.4477	1742.	3.991	436.4	.4379-3	2047.	37.33
1.535	85.401	.4477	1743.	3.991	436.6	.4375-3	2048.	37.34
1.534	85.402	.4477	1744.	3.991	436.8	.4372-3	2050.	37.35
1.534	85.403	.4477	1744.	3.991	437.1	.4368-3	2051.	37.36
1.533	85.404	.4477	1745.	3.991	437.3	.4365-3	2052.	37.37
1.533	85.405	.4477	1746.	3.991	437.5	.4361-3	2053.	37.38
1.533	85.407	.4477	1747.	3.991	437.8	.4358-3	2054.	37.39
1.532	85.408	.4477	1748.	3.991	438.0	.4354-3	2055.	37.40
1.532	85.409	.4477	1749.	3.991	438.2	.4351-3	2056.	37.41
1.531	85.410	.4477	1750.	3.991	438.5	.4348-3	2057.	37.42
1.531	85.412	.4477	1751.	3.991	438.7	.4344-3	2058.	37.43
1.531	85.413	.4477	1752.	3.991	438.9	.4341-3	2059.	37.44
1.530	85.414	.4477	1753.	3.991	439.2	.4337-3	2061.	37.45
1.530	85.415	.4477	1754.	3.991	439.4	.4334-3	2062.	37.46
1.529	85.416	.4477	1755.	3.991	439.6	.4330-3	2063.	37.47
1.529	85.418	.4477	1756.	3.991	439.9	.4327-3	2064.	37.48
1.528	85.419	.4477	1757.	3.991	440.1	.4323-3	2065.	37.49
1.528	85.420	.4477	1758.	3.991	440.3	.4320-3	2066.	37.50
1.528	85.421	.4477	1759.	3.991	440.6	.4316-3	2067.	37.51
1.527	85.423	.4477	1759.	3.991	440.8	.4313-3	2068.	37.52
1.527	85.424	.4477	1760.	3.991	441.0	.4310-3	2069.	37.53
1.526	85.425	.4477	1761.	3.992	441.3	.4306-3	2070.	37.54
1.526	85.426	.4477	1762.	3.992	441.5	.4303-3	2072.	37.55
1.526	85.427	.4477	1763.	3.992	441.7	.4299-3	2073.	37.56
1.525	85.429	.4477	1764.	3.992	442.0	.4296-3	2074.	37.57
1.525	85.430	.4477	1765.	3.992	442.2	.4292-3	2075.	37.58
1.524	85.431	.4477	1766.	3.992	442.4	.4289-3	2076.	37.59
1.524	85.432	.4477	1767.	3.992	442.7	.4286-3	2077.	37.60
1.524	85.434	.4477	1768.	3.992	442.9	.4282-3	2078.	37.61
1.523	85.435	.4477	1769.	3.992	443.1	.4279-3	2079.	37.62
1.523	85.436	.4477	1770.	3.992	443.4	.4275-3	2080.	37.63
1.522	85.437	.4477	1771.	3.992	443.6	.4272-3	2081.	37.64
1.522	85.438	.4477	1772.	3.992	443.9	.4269-3	2083.	37.65
1.522	85.440	.4477	1773.	3.992	444.1	.4265-3	2084.	37.66
1.521	85.441	.4477	1774.	3.992	444.3	.4262-3	2085.	37.67
1.521	85.442	.4477	1774.	3.992	444.6	.4258-3	2086.	37.68
1.520	85.443	.4477	1775.	3.992	444.8	.4255-3	2087.	37.69
1.520	85.444	.4477	1776.	3.992	445.0	.4252-3	2088.	37.70
1.520	85.446	.4477	1777.	3.992	445.3	.4248-3	2089.	37.71
1.519	85.447	.4477	1778.	3.992	445.5	.4245-3	2090.	37.72
1.519	85.448	.4477	1779.	3.992	445.7	.4242-3	2091.	37.73
1.518	85.449	.4477	1780.	3.992	446.0	.4238-3	2093.	37.74
1.518	85.450	.4477	1781.	3.992	446.2	.4235-3	2094.	37.75
1.518	85.452	.4477	1782.	3.992	446.4	.4232-3	2095.	37.76
1.517	85.453	.4477	1783.	3.992	446.7	.4228-3	2096.	37.77
1.517	85.454	.4477	1784.	3.992	446.9	.4225-3	2097.	37.78
1.516	85.455	.4477	1785.	3.992	447.2	.4222-3	2098.	37.79
1.516	85.456	.4477	1786.	3.992	447.4	.4218-3	2099.	37.80
1.516	85.458	.4477	1787.	3.992	447.6	.4215-3	2100.	37.81
1.515	85.459	.4477	1788.	3.992	447.9	.4211-3	2101.	37.82
1.515	85.460	.4477	1789.	3.992	448.1	.4208-3	2103.	37.83
1.514	85.461	.4477	1790.	3.992	448.3	.4205-3	2104.	37.84
1.514	85.462	.4477	1791.	3.992	448.6	.4202-3	2105.	37.85
1.514	85.464	.4477	1791.	3.992	448.8	.4198-3	2106.	37.86
1.513	85.465	.4477	1792.	3.992	449.0	.4195-3	2107.	37.87
1.513	85.466	.4477	1793.	3.992	449.3	.4192-3	2108.	37.88
1.512	85.467	.4477	1794.	3.992	449.5	.4188-3	2109.	37.89
1.512	85.468	.4477	1795.	3.992	449.8	.4185-3	2110.	37.90
1.512	85.470	.4477	1796.	3.992	450.0	.4182-3	2111.	37.91
1.511	85.471	.4477	1797.	3.992	450.2	.4178-3	2113.	37.92
1.511	85.472	.4477	1798.	3.992	450.5	.4175-3	2114.	37.93
1.510	85.473	.4477	1799.	3.992	450.7	.4172-3	2115.	37.94
1.510	85.474	.4477	1800.	3.992	450.9	.4169-3	2116.	37.95
1.510	85.476	.4477	1801.	3.992	451.2	.4165-3	2117.	37.96
1.509	85.477	.4477	1802.	3.992	451.4	.4162-3	2118.	37.97
1.509	85.478	.4477	1803.	3.992	451.6	.4159-3	2119.	37.98
1.508	85.479	.4477	1804.	3.992	451.9	.4155-3	2120.	37.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A*/A	V/V_0	V/a*
38.00	.1957-6	.9440-4	.2073-2	.4553-1	.2358-3	.2904-3	.9990	1.99793
38.01	.1955-6	.9433-4	.2072-2	.4552-1	.2353-3	.2902-3	.9990	1.99793
38.02	.1952-6	.9426-4	.2071-2	.4551-1	.2351-3	.2899-3	.9990	1.99793
38.03	.1949-6	.9418-4	.2070-2	.4550-1	.2350-3	.2897-3	.9990	1.99793
38.04	.1947-6	.9410-4	.2069-2	.4549-1	.2348-3	.2895-3	.9990	1.99793
38.05	.1944-6	.9403-4	.2068-2	.4547-1	.2346-3	.2892-3	.9990	1.99793
38.06	.1942-6	.9396-4	.2067-2	.4546-1	.2344-3	.2890-3	.9990	1.99793
38.07	.1939-6	.9388-4	.2066-2	.4545-1	.2342-3	.2888-3	.9990	1.99793
38.08	.1937-6	.9381-4	.2065-2	.4544-1	.2340-3	.2885-3	.9990	1.99793
38.09	.1934-6	.9374-4	.2063-2	.4543-1	.2339-3	.2883-3	.9990	1.99794
38.10	.1932-6	.9366-4	.2062-2	.4541-1	.2337-3	.2881-3	.9990	1.99794
38.11	.1929-6	.9359-4	.2061-2	.4540-1	.2335-3	.2879-3	.9990	1.99794
38.12	.1927-6	.9351-4	.2060-2	.4539-1	.2333-3	.2877-3	.9990	1.99794
38.13	.1924-6	.9344-4	.2059-2	.4538-1	.2331-3	.2874-3	.9990	1.99794
38.14	.1922-6	.9337-4	.2058-2	.4537-1	.2329-3	.2872-3	.9990	1.99794
38.15	.1919-6	.9329-4	.2057-2	.4535-1	.2328-3	.2870-3	.9990	1.99794
38.16	.1917-6	.9322-4	.2056-2	.4534-1	.2326-3	.2868-3	.9990	1.99794
38.17	.1914-6	.9315-4	.2055-2	.4533-1	.2324-3	.2865-3	.9990	1.99794
38.18	.1912-6	.9308-4	.2054-2	.4532-1	.2322-3	.2863-3	.9990	1.99795
38.19	.1909-6	.9300-4	.2053-2	.4531-1	.2320-3	.2861-3	.9990	1.99795
38.20	.1907-6	.9293-4	.2052-2	.4530-1	.2318-3	.2859-3	.9990	1.99795
38.21	.1904-6	.9286-4	.2051-2	.4528-1	.2317-3	.2856-3	.9990	1.99795
38.22	.1902-6	.9278-4	.2050-2	.4527-1	.2315-3	.2854-3	.9990	1.99795
38.23	.1899-6	.9271-4	.2048-2	.4526-1	.2313-3	.2852-3	.9990	1.99795
38.24	.1897-6	.9264-4	.2047-2	.4525-1	.2311-3	.2850-3	.9990	1.99795
38.25	.1894-6	.9257-4	.2046-2	.4524-1	.2309-3	.2847-3	.9990	1.99795
38.26	.1892-6	.9249-4	.2045-2	.4522-1	.2308-3	.2845-3	.9990	1.99795
38.27	.1889-6	.9242-4	.2044-2	.4521-1	.2306-3	.2843-3	.9990	1.99795
38.28	.1887-6	.9235-4	.2043-2	.4520-1	.2304-3	.2841-3	.9990	1.99796
38.29	.1884-6	.9228-4	.2042-2	.4519-1	.2302-3	.2838-3	.9990	1.99796
38.30	.1882-6	.9221-4	.2041-2	.4518-1	.2300-3	.2836-3	.9990	1.99796
38.31	.1879-6	.9213-4	.2040-2	.4517-1	.2299-3	.2834-3	.9990	1.99796
38.32	.1877-6	.9206-4	.2039-2	.4515-1	.2297-3	.2832-3	.9990	1.99796
38.33	.1875-6	.9199-4	.2038-2	.4514-1	.2295-3	.2830-3	.9990	1.99796
38.34	.1872-6	.9192-4	.2037-2	.4513-1	.2293-3	.2827-3	.9990	1.99796
38.35	.1870-6	.9185-4	.2036-2	.4512-1	.2291-3	.2825-3	.9990	1.99796
38.36	.1867-6	.9177-4	.2035-2	.4511-1	.2290-3	.2823-3	.9990	1.99796
38.37	.1865-6	.9170-4	.2034-2	.4509-1	.2288-3	.2821-3	.9990	1.99797
38.38	.1862-6	.9163-4	.2033-2	.4508-1	.2286-3	.2819-3	.9990	1.99797
38.39	.1860-6	.9156-4	.2031-2	.4507-1	.2284-3	.2816-3	.9990	1.99797
38.40	.1858-6	.9149-4	.2030-2	.4506-1	.2283-3	.2814-3	.9990	1.99797
38.41	.1855-6	.9142-4	.2029-2	.4505-1	.2281-3	.2812-3	.9990	1.99797
38.42	.1853-6	.9135-4	.2028-2	.4504-1	.2279-3	.2810-3	.9990	1.99797
38.43	.1850-6	.9127-4	.2027-2	.4502-1	.2277-3	.2808-3	.9990	1.99797
38.44	.1848-6	.9120-4	.2026-2	.4501-1	.2275-3	.2805-3	.9990	1.99797
38.45	.1846-6	.9113-4	.2025-2	.4500-1	.2274-3	.2803-3	.9990	1.99797
38.46	.1843-6	.9106-4	.2024-2	.4499-1	.2272-3	.2801-3	.9990	1.99797
38.47	.1841-6	.9099-4	.2023-2	.4498-1	.2270-3	.2799-3	.9990	1.99798
38.48	.1838-6	.9092-4	.2022-2	.4497-1	.2268-3	.2797-3	.9990	1.99798
38.49	.1836-6	.9085-4	.2021-2	.4495-1	.2267-3	.2795-3	.9990	1.99798
38.50	.1834-6	.9078-4	.2020-2	.4494-1	.2265-3	.2792-3	.9990	1.99798
38.51	.1831-6	.9071-4	.2019-2	.4493-1	.2263-3	.2790-3	.9990	1.99798
38.52	.1829-6	.9064-4	.2018-2	.4492-1	.2261-3	.2788-3	.9990	1.99798
38.53	.1826-6	.9057-4	.2017-2	.4491-1	.2260-3	.2786-3	.9990	1.99798
38.54	.1824-6	.9050-4	.2016-2	.4490-1	.2258-3	.2784-3	.9990	1.99798
38.55	.1822-6	.9043-4	.2015-2	.4488-1	.2256-3	.2782-3	.9990	1.99798
38.56	.1819-6	.9036-4	.2014-2	.4487-1	.2254-3	.2779-3	.9990	1.99799
38.57	.1817-6	.9029-4	.2013-2	.4486-1	.2253-3	.2777-3	.9990	1.99799
38.58	.1815-6	.9022-4	.2012-2	.4485-1	.2251-3	.2775-3	.9990	1.99799
38.59	.1812-6	.9015-4	.2010-2	.4484-1	.2249-3	.2773-3	.9990	1.99799
38.60	.1810-6	.9008-4	.2009-2	.4483-1	.2247-3	.2771-3	.9990	1.99799
38.61	.1808-6	.9001-4	.2008-2	.4482-1	.2246-3	.2769-3	.9990	1.99799
38.62	.1805-6	.8994-4	.2007-2	.4480-1	.2244-3	.2767-3	.9990	1.99799
38.63	.1803-6	.8987-4	.2006-2	.4479-1	.2242-3	.2764-3	.9990	1.99799
38.64	.1801-6	.8980-4	.2005-2	.4478-1	.2240-3	.2762-3	.9990	1.99799
38.65	.1798-6	.8973-4	.2004-2	.4477-1	.2239-3	.2760-3	.9990	1.99799
38.66	.1796-6	.8966-4	.2003-2	.4476-1	.2237-3	.2758-3	.9990	1.99800
38.67	.1794-6	.8959-4	.2002-2	.4475-1	.2235-3	.2756-3	.9990	1.99800
38.68	.1791-6	.8952-4	.2001-2	.4473-1	.2234-3	.2754-3	.9990	1.99800
38.69	.1789-6	.8945-4	.2000-2	.4472-1	.2232-3	.2752-3	.9990	1.99800
38.70	.1787-6	.8938-4	.1999-2	.4471-1	.2230-3	.2749-3	.9990	1.99800
38.71	.1784-6	.8931-4	.1998-2	.4470-1	.2228-3	.2747-3	.9990	1.99800
38.72	.1782-6	.8924-4	.1997-2	.4469-1	.2227-3	.2745-3	.9990	1.99800
38.73	.1780-6	.8917-4	.1996-2	.4468-1	.2225-3	.2743-3	.9990	1.99800
38.74	.1778-6	.8911-4	.1995-2	.4467-1	.2223-3	.2741-3	.9990	1.99800
38.75	.1775-6	.8904-4	.1994-2	.4465-1	.2221-3	.2739-3	.9990	1.99801
38.76	.1773-6	.8897-4	.1993-2	.4464-1	.2220-3	.2737-3	.9990	1.99801
38.77	.1771-6	.8890-4	.1992-2	.4463-1	.2218-3	.2735-3	.9990	1.99801
38.78	.1768-6	.8883-4	.1991-2	.4462-1	.2216-3	.2733-3	.9990	1.99801
38.79	.1766-6	.8876-4	.1990-2	.4461-1	.2215-3	.2730-3	.9990	1.99801
38.80	.1764-6	.8869-4	.1989-2	.4460-1	.2213-3	.2728-3	.9990	1.99801
38.81	.1762-6	.8862-4	.1988-2	.4458-1	.2211-3	.2726-3	.9990	1.99801
38.82	.1759-6	.8856-4	.1987-2	.4457-1	.2210-3	.2724-3	.9990	1.99801
38.83	.1757-6	.8849-4	.1986-2	.4456-1	.2208-3	.2722-3	.9990	1.99801
38.84	.1755-6	.8842-4	.1985-2	.4455-1	.2206-3	.2720-3	.9990	1.99801
38.85	.1753-6	.8835-4	.1984-2	.4454-1	.2204-3	.2718-3	.9990	1.99802
38.86	.1750-6	.8828-4	.1983-2	.4453-1	.2203-3	.2716-3	.9990	1.99802
38.87	.1748-6	.8822-4	.1982-2	.4452-1	.2201-3	.2714-3	.9990	1.99802
38.88	.1746-6	.8815-4	.1981-2	.4450-1	.2199-3	.2712-3	.9990	1.99802
38.89	.1744-6	.8808-4	.1980-2	.4449-1	.2198-3	.2709-3	.9990	1.99802
38.90	.1741-6	.8801-4	.1979-2	.4448-1	.2196-3	.2707-3	.9990	1.99802
38.91	.1739-6	.8794-4	.1978-2	.4447-1	.2194-3	.2705-3	.9990	1.99802
38.92	.1737-6	.8788-4	.1977-2	.4446-1	.2193-3	.2703-3	.9990	1.99802
38.93	.1735-6	.8781-4	.1976-2	.4445-1	.2191-3	.2701-3	.9990	1.99802
38.94	.1733-6	.8774-4	.1975-2	.4444-1	.2189-3	.2699-3	.9990	1.99802
38.95	.1730-6	.8767-4	.1974-2	.4442-1	.2188-3	.2697-3	.9990	1.99803
38.96	.1728-6	.8761-4	.1973-2	.4441-1	.2186-3	.2695-3	.9990	1.99803
38.97	.1726-6	.8754-4	.1972-2	.4440-1	.2184-3	.2693-3	.9990	1.99803
38.98	.1724-6	.8747-4	.1971-2	.4439-1	.2183-3	.2691-3	.9990	1.99803
38.99	.1721-6	.8741-4	.1970-2	.4438-1	.2181-3	.2689-3	.9990	1.99803

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
1.508	85.480	.4477	1805.	3.992	452.1	.4152-3	2121.	38.00
1.508	85.481	.4477	1806.	3.992	452.4	.4149-3	2123.	38.01
1.507	85.483	.4477	1807.	3.992	452.6	.4146-3	2124.	38.02
1.507	85.484	.4477	1808.	3.992	452.8	.4142-3	2125.	38.03
1.506	85.485	.4477	1809.	3.992	453.1	.4139-3	2126.	38.04
1.506	85.486	.4477	1810.	3.992	453.3	.4136-3	2127.	38.05
1.506	85.487	.4477	1810.	3.992	453.6	.4133-3	2128.	38.06
1.505	85.489	.4477	1811.	3.992	453.8	.4129-3	2129.	38.07
1.505	85.490	.4477	1812.	3.992	454.0	.4126-3	2130.	38.08
1.504	85.491	.4477	1813.	3.992	454.3	.4123-3	2132.	38.09
1.504	85.492	.4477	1814.	3.992	454.5	.4120-3	2133.	38.10
1.504	85.493	.4477	1815.	3.992	454.7	.4116-3	2134.	38.11
1.503	85.495	.4477	1816.	3.992	455.0	.4113-3	2135.	38.12
1.503	85.496	.4477	1817.	3.992	455.2	.4110-3	2136.	38.13
1.502	85.497	.4477	1818.	3.992	455.5	.4107-3	2137.	38.14
1.502	85.498	.4477	1819.	3.992	455.7	.4104-3	2138.	38.15
1.502	85.499	.4477	1820.	3.992	455.9	.4100-3	2139.	38.16
1.501	85.500	.4477	1821.	3.992	456.2	.4097-3	2141.	38.17
1.501	85.502	.4477	1822.	3.992	456.4	.4094-3	2142.	38.18
1.500	85.503	.4477	1823.	3.992	456.6	.4091-3	2143.	38.19
1.500	85.504	.4477	1824.	3.992	456.9	.4087-3	2144.	38.20
1.500	85.505	.4477	1825.	3.992	457.1	.4084-3	2145.	38.21
1.499	85.506	.4477	1826.	3.992	457.4	.4081-3	2146.	38.22
1.499	85.507	.4477	1827.	3.992	457.6	.4078-3	2147.	38.23
1.498	85.509	.4477	1828.	3.992	457.8	.4075-3	2148.	38.24
1.498	85.510	.4477	1829.	3.992	458.1	.4072-3	2149.	38.25
1.498	85.511	.4477	1830.	3.992	458.3	.4068-3	2151.	38.26
1.497	85.512	.4477	1830.	3.992	458.6	.4065-3	2152.	38.27
1.497	85.513	.4477	1831.	3.992	458.8	.4062-3	2153.	38.28
1.497	85.514	.4477	1832.	3.992	459.0	.4059-3	2154.	38.29
1.496	85.516	.4477	1833.	3.992	459.3	.4056-3	2155.	38.30
1.496	85.517	.4477	1834.	3.992	459.5	.4052-3	2156.	38.31
1.495	85.518	.4477	1835.	3.992	459.8	.4049-3	2157.	38.32
1.495	85.519	.4477	1836.	3.992	460.0	.4046-3	2158.	38.33
1.495	85.520	.4477	1837.	3.992	460.2	.4043-3	2160.	38.34
1.494	85.521	.4477	1838.	3.992	460.5	.4040-3	2161.	38.35
1.494	85.523	.4477	1839.	3.992	460.7	.4037-3	2162.	38.36
1.493	85.524	.4477	1840.	3.992	461.0	.4034-3	2163.	38.37
1.493	85.525	.4477	1841.	3.992	461.2	.4030-3	2164.	38.38
1.493	85.526	.4477	1842.	3.992	461.4	.4027-3	2165.	38.39
1.492	85.527	.4477	1843.	3.992	461.7	.4024-3	2166.	38.40
1.492	85.528	.4477	1844.	3.992	461.9	.4021-3	2167.	38.41
1.491	85.530	.4477	1845.	3.992	462.2	.4018-3	2169.	38.42
1.491	85.531	.4477	1846.	3.992	462.4	.4015-3	2170.	38.43
1.491	85.532	.4477	1847.	3.992	462.6	.4012-3	2171.	38.44
1.490	85.533	.4477	1848.	3.992	462.9	.4009-3	2172.	38.45
1.490	85.534	.4477	1849.	3.992	463.1	.4005-3	2173.	38.46
1.490	85.535	.4477	1850.	3.992	463.4	.4002-3	2174.	38.47
1.489	85.537	.4477	1851.	3.992	463.6	.3999-3	2175.	38.48
1.489	85.538	.4477	1852.	3.992	463.8	.3996-3	2177.	38.49
1.488	85.539	.4477	1853.	3.992	464.1	.3993-3	2178.	38.50
1.488	85.540	.4477	1854.	3.992	464.3	.3990-3	2179.	38.51
1.488	85.541	.4477	1854.	3.992	464.6	.3987-3	2180.	38.52
1.487	85.542	.4477	1855.	3.992	464.8	.3984-3	2181.	38.53
1.487	85.544	.4477	1856.	3.992	465.0	.3981-3	2182.	38.54
1.486	85.545	.4477	1857.	3.992	465.3	.3977-3	2183.	38.55
1.486	85.546	.4477	1858.	3.992	465.5	.3974-3	2184.	38.56
1.486	85.547	.4477	1859.	3.992	465.8	.3971-3	2186.	38.57
1.485	88.548	.4477	1860.	3.992	466.0	.3968-3	2187.	38.58
1.485	85.549	.4477	1861.	3.992	466.2	.3965-3	2188.	38.59
1.485	85.550	.4477	1862.	3.992	466.5	.3962-3	2189.	38.60
1.484	85.552	.4477	1863.	3.992	466.7	.3959-3	2190.	38.61
1.484	85.553	.4477	1864.	3.993	467.0	.3956-3	2191.	38.62
1.483	85.554	.4477	1865.	3.992	467.2	.3953-3	2192.	38.63
1.483	85.555	.4477	1866.	3.992	467.5	.3950-3	2194.	38.64
1.483	85.556	.4477	1867.	3.992	467.7	.3947-3	2195.	38.65
1.482	85.557	.4477	1868.	3.992	467.9	.3944-3	2196.	38.66
1.482	85.558	.4477	1869.	3.992	468.2	.3941-3	2197.	38.67
1.481	85.560	.4477	1870.	3.992	468.4	.3938-3	2198.	38.68
1.481	85.561	.4477	1871.	3.992	468.7	.3935-3	2199.	38.69
1.481	85.562	.4477	1872.	3.992	468.9	.3932-3	2200.	38.70
1.480	85.563	.4477	1873.	3.992	469.1	.3929-3	2201.	38.71
1.480	85.564	.4477	1874.	3.992	469.4	.3926-3	2203.	38.72
1.480	85.565	.4477	1875.	3.992	469.6	.3923-3	2204.	38.73
1.479	85.566	.4477	1876.	3.992	469.9	.3919-3	2205.	38.74
1.479	85.568	.4477	1877.	3.992	470.1	.3916-3	2206.	38.75
1.478	85.569	.4477	1878.	3.992	470.4	.3913-3	2207.	38.76
1.478	85.570	.4477	1879.	3.992	470.6	.3910-3	2208.	38.77
1.478	85.571	.4477	1880.	3.992	470.8	.3907-3	2209.	38.78
1.477	85.572	.4477	1881.	3.992	471.1	.3904-3	2211.	38.79
1.477	85.573	.4477	1882.	3.992	471.3	.3901-3	2212.	38.80
1.476	85.574	.4477	1883.	3.992	471.6	.3898-3	2213.	38.81
1.476	85.576	.4477	1883.	3.992	471.8	.3895-3	2214.	38.82
1.476	85.577	.4477	1884.	3.992	472.1	.3892-3	2215.	38.83
1.475	85.578	.4477	1885.	3.992	472.3	.3889-3	2216.	38.84
1.475	85.579	.4477	1886.	3.992	472.5	.3886-3	2217.	38.85
1.475	85.580	.4477	1887.	3.992	472.8	.3883-3	2219.	38.86
1.474	85.581	.4477	1888.	3.992	473.0	.3880-3	2220.	38.87
1.474	85.582	.4477	1889.	3.992	473.3	.3877-3	2221.	38.88
1.473	85.584	.4477	1890.	3.992	473.5	.3874-3	2222.	38.89
1.473	85.585	.4477	1891.	3.992	473.8	.3871-3	2223.	38.90
1.473	85.586	.4477	1892.	3.992	474.0	.3868-3	2224.	38.91
1.472	85.587	.4477	1893.	3.992	474.2	.3865-3	2225.	38.92
1.472	85.588	.4477	1894.	3.992	474.5	.3863-3	2227.	38.93
1.472	85.589	.4477	1895.	3.992	474.7	.3860-3	2228.	38.94
1.471	85.590	.4477	1896.	3.992	475.0	.3857-3	2229.	38.95
1.471	85.591	.4477	1897.	3.992	475.2	.3854-3	2230.	38.96
1.470	85.593	.4477	1898.	3.992	475.5	.3851-3	2231.	38.97
1.470	85.594	.4477	1899.	3.992	475.7	.3848-3	2232.	38.98
1.470	85.595	.4477	1900.	3.992	475.9	.3845-3	2233.	38.99

TABLE I.- VALUES FOR RATIOS OF

M	p/p_t	ρ/ρ_t	T/T_t	a/a_t	q/p_t	A*/A	V/V_0	V/a*
39.00	.1719-6	.8734-4	.1969-2	.4437-1	.2179-3	.2687-3	.9990	1.99803
39.01	.1717-6	.8727-4	.1967-2	.4436-1	.2177-3	.2685-3	.9990	1.99803
39.02	.1715-6	.8720-4	.1966-2	.4435-1	.2176-3	.2683-3	.9990	1.99803
39.03	.1713-6	.8714-4	.1965-2	.4433-1	.2174-3	.2680-3	.9990	1.99803
39.04	.1710-6	.8707-4	.1964-2	.4432-1	.2172-3	.2678-3	.9990	1.99803
39.05	.1708-6	.8700-4	.1963-2	.4431-1	.2171-3	.2676-3	.9990	1.99804
39.06	.1706-6	.8694-4	.1962-2	.4430-1	.2169-3	.2674-3	.9990	1.99804
39.07	.1704-6	.8687-4	.1961-2	.4429-1	.2168-3	.2672-3	.9990	1.99804
39.08	.1702-6	.8680-4	.1960-2	.4428-1	.2166-3	.2670-3	.9990	1.99804
39.09	.1700-6	.8674-4	.1959-2	.4427-1	.2164-3	.2668-3	.9990	1.99804
39.10	.1697-6	.8667-4	.1958-2	.4425-1	.2163-3	.2666-3	.9990	1.99804
39.11	.1695-6	.8660-4	.1957-2	.4424-1	.2161-3	.2664-3	.9990	1.99804
39.12	.1693-6	.8654-4	.1956-2	.4423-1	.2159-3	.2662-3	.9990	1.99804
39.13	.1691-6	.8647-4	.1955-2	.4422-1	.2158-3	.2660-3	.9990	1.99804
39.14	.1689-6	.8641-4	.1954-2	.4421-1	.2156-3	.2658-3	.9990	1.99804
39.15	.1687-6	.8634-4	.1953-2	.4420-1	.2154-3	.2656-3	.9990	1.99805
39.16	.1684-6	.8627-4	.1952-2	.4419-1	.2153-3	.2654-3	.9990	1.99805
39.17	.1682-6	.8621-4	.1951-2	.4418-1	.2151-3	.2652-3	.9990	1.99805
39.18	.1680-6	.8614-4	.1950-2	.4416-1	.2149-3	.2650-3	.9990	1.99805
39.19	.1678-6	.8608-4	.1950-2	.4415-1	.2148-3	.2648-3	.9990	1.99805
39.20	.1676-6	.8601-4	.1949-2	.4414-1	.2146-3	.2646-3	.9990	1.99805
39.21	.1674-6	.8595-4	.1948-2	.4413-1	.2144-3	.2644-3	.9990	1.99805
39.22	.1672-6	.8588-4	.1947-2	.4412-1	.2143-3	.2642-3	.9990	1.99805
39.23	.1670-6	.8581-4	.1946-2	.4411-1	.2141-3	.2640-3	.9990	1.99805
39.24	.1667-6	.8575-4	.1945-2	.4410-1	.2140-3	.2638-3	.9990	1.99805
39.25	.1665-6	.8568-4	.1944-2	.4409-1	.2138-3	.2636-3	.9990	1.99806
39.26	.1663-6	.8562-4	.1943-2	.4407-1	.2136-3	.2634-3	.9990	1.99806
39.27	.1661-6	.8555-4	.1942-2	.4406-1	.2135-3	.2632-3	.9990	1.99806
39.28	.1659-6	.8549-4	.1941-2	.4405-1	.2133-3	.2630-3	.9990	1.99806
39.29	.1657-6	.8542-4	.1940-2	.4404-1	.2131-3	.2628-3	.9990	1.99806
39.30	.1655-6	.8536-4	.1939-2	.4403-1	.2130-3	.2626-3	.9990	1.99806
39.31	.1653-6	.8529-4	.1938-2	.4402-1	.2128-3	.2624-3	.9990	1.99806
39.32	.1651-6	.8523-4	.1937-2	.4401-1	.2127-3	.2622-3	.9990	1.99806
39.33	.1648-6	.8516-4	.1936-2	.4400-1	.2125-3	.2620-3	.9990	1.99806
39.34	.1646-6	.8510-4	.1935-2	.4399-1	.2123-3	.2618-3	.9990	1.99806
39.35	.1644-6	.8503-4	.1934-2	.4397-1	.2122-3	.2616-3	.9990	1.99807
39.36	.1642-6	.8497-4	.1933-2	.4396-1	.2120-3	.2614-3	.9990	1.99807
39.37	.1640-6	.8490-4	.1932-2	.4395-1	.2118-3	.2612-3	.9990	1.99807
39.38	.1638-6	.8484-4	.1931-2	.4394-1	.2117-3	.2610-3	.9990	1.99807
39.39	.1636-6	.8477-4	.1930-2	.4393-1	.2115-3	.2608-3	.9990	1.99807
39.40	.1634-6	.8471-4	.1929-2	.4392-1	.2114-3	.2606-3	.9990	1.99807
39.41	.1632-6	.8465-4	.1928-2	.4391-1	.2112-3	.2604-3	.9990	1.99807
39.42	.1630-6	.8458-4	.1927-2	.4390-1	.2110-3	.2602-3	.9990	1.99807
39.43	.1628-6	.8452-4	.1926-2	.4388-1	.2109-3	.2600-3	.9990	1.99807
39.44	.1626-6	.8445-4	.1925-2	.4387-1	.2107-3	.2598-3	.9990	1.99807
39.45	.1624-6	.8439-4	.1924-2	.4386-1	.2106-3	.2596-3	.9990	1.99808
39.46	.1622-6	.8433-4	.1923-2	.4385-1	.2104-3	.2594-3	.9990	1.99808
39.47	.1619-6	.8426-4	.1922-2	.4384-1	.2102-3	.2592-3	.9990	1.99808
39.48	.1617-6	.8420-4	.1921-2	.4383-1	.2101-3	.2590-3	.9990	1.99808
39.49	.1615-6	.8413-4	.1920-2	.4382-1	.2099-3	.2588-3	.9990	1.99808
39.50	.1613-6	.8407-4	.1919-2	.4381-1	.2098-3	.2586-3	.9990	1.99808
39.51	.1611-6	.8401-4	.1918-2	.4380-1	.2096-3	.2584-3	.9990	1.99808
39.52	.1609-6	.8394-4	.1917-2	.4379-1	.2095-3	.2582-3	.9990	1.99808
39.53	.1607-6	.8388-4	.1916-2	.4377-1	.2093-3	.2580-3	.9990	1.99808
39.54	.1605-6	.8382-4	.1915-2	.4376-1	.2091-3	.2578-3	.9990	1.99808
39.55	.1603-6	.8375-4	.1914-2	.4375-1	.2090-3	.2576-3	.9990	1.99809
39.56	.1601-6	.8369-4	.1913-2	.4374-1	.2088-3	.2574-3	.9990	1.99809
39.57	.1599-6	.8363-4	.1912-2	.4373-1	.2087-3	.2573-3	.9990	1.99809
39.58	.1597-6	.8356-4	.1911-2	.4372-1	.2085-3	.2571-3	.9990	1.99809
39.59	.1595-6	.8350-4	.1910-2	.4371-1	.2083-3	.2569-3	.9990	1.99809
39.60	.1593-6	.8344-4	.1909-2	.4370-1	.2082-3	.2567-3	.9990	1.99809
39.61	.1591-6	.8337-4	.1908-2	.4369-1	.2080-3	.2565-3	.9990	1.99809
39.62	.1589-6	.8331-4	.1907-2	.4367-1	.2079-3	.2563-3	.9990	1.99809
39.63	.1587-6	.8325-4	.1907-2	.4366-1	.2077-3	.2561-3	.9990	1.99809
39.64	.1585-6	.8318-4	.1906-2	.4365-1	.2076-3	.2559-3	.9990	1.99809
39.65	.1583-6	.8312-4	.1905-2	.4364-1	.2074-3	.2557-3	.9990	1.99809
39.66	.1581-6	.8306-4	.1904-2	.4363-1	.2073-3	.2555-3	.9990	1.99810
39.67	.1579-6	.8300-4	.1903-2	.4362-1	.2071-3	.2553-3	.9990	1.99810
39.68	.1577-6	.8293-4	.1902-2	.4361-1	.2069-3	.2551-3	.9990	1.99810
39.69	.1575-6	.8287-4	.1901-2	.4360-1	.2068-3	.2549-3	.9990	1.99810
39.70	.1573-6	.8281-4	.1900-2	.4359-1	.2066-3	.2547-3	.9990	1.99810
39.71	.1571-6	.8275-4	.1899-2	.4358-1	.2065-3	.2545-3	.9991	1.99810
39.72	.1569-6	.8268-4	.1898-2	.4357-1	.2063-3	.2544-3	.9991	1.99810
39.73	.1567-6	.8262-4	.1897-2	.4355-1	.2062-3	.2542-3	.9991	1.99810
39.74	.1565-6	.8256-4	.1896-2	.4354-1	.2060-3	.2540-3	.9991	1.99810
39.75	.1563-6	.8250-4	.1895-2	.4353-1	.2059-3	.2538-3	.9991	1.99810
39.76	.1561-6	.8243-4	.1894-2	.4352-1	.2057-3	.2536-3	.9991	1.99811
39.77	.1559-6	.8237-4	.1893-2	.4351-1	.2055-3	.2534-3	.9991	1.99811
39.78	.1557-6	.8231-4	.1892-2	.4350-1	.2054-3	.2532-3	.9991	1.99811
39.79	.1556-6	.8225-4	.1891-2	.4349-1	.2052-3	.2530-3	.9991	1.99811
39.80	.1554-6	.8219-4	.1890-2	.4348-1	.2051-3	.2528-3	.9991	1.99811
39.81	.1552-6	.8212-4	.1889-2	.4347-1	.2049-3	.2526-3	.9991	1.99811
39.82	.1550-6	.8206-4	.1888-2	.4346-1	.2048-3	.2524-3	.9991	1.99811
39.83	.1548-6	.8200-4	.1887-2	.4345-1	.2046-3	.2523-3	.9991	1.99811
39.84	.1546-6	.8194-4	.1887-2	.4343-1	.2045-3	.2521-3	.9991	1.99811
39.85	.1544-6	.8188-4	.1886-2	.4342-1	.2043-3	.2519-3	.9991	1.99811
39.86	.1542-6	.8182-4	.1885-2	.4341-1	.2042-3	.2517-3	.9991	1.99811
39.87	.1540-6	.8176-4	.1884-2	.4340-1	.2040-3	.2515-3	.9991	1.99812
39.88	.1538-6	.8169-4	.1883-2	.4339-1	.2038-3	.2513-3	.9991	1.99812
39.89	.1536-6	.8163-4	.1882-2	.4338-1	.2037-3	.2511-3	.9991	1.99812
39.90	.1534-6	.8157-4	.1881-2	.4337-1	.2035-3	.2509-3	.9991	1.99812
39.91	.1532-6	.8151-4	.1880-2	.4336-1	.2034-3	.2507-3	.9991	1.99812
39.92	.1530-6	.8145-4	.1879-2	.4335-1	.2032-3	.2506-3	.9991	1.99812
39.93	.1529-6	.8139-4	.1878-2	.4334-1	.2031-3	.2504-3	.9991	1.99812
39.94	.1527-6	.8133-4	.1877-2	.4333-1	.2029-3	.2502-3	.9991	1.99812
39.95	.1525-6	.8127-4	.1876-2	.4331-1	.2028-3	.2500-3	.9991	1.99812
39.96	.1523-6	.8120-4	.1875-2	.4330-1	.2026-3	.2498-3	.9991	1.99812
39.97	.1521-6	.8114-4	.1874-2	.4329-1	.2025-3	.2496-3	.9991	1.99812
39.98	.1519-6	.8108-4	.1873-2	.4328-1	.2023-3	.2494-3	.9991	1.99813
39.99	.1517-6	.8102-4	.1872-2	.4327-1	.2022-3	.2493-3	.9991	1.99813
40.00	.1515-6	.8096-4	.1871-2	.4326-1	.2020-3	.2491-3	.9991	1.99813

FUNDAMENTAL FLOW EQUATIONS

μ	ν	M_2	p_2/p_1	ρ_2/ρ_1	T_2/T_1	$p_{t,2}/p_{t,1}$	$p_{t,2}/p_1$	M
1.469	85.596	.4477	1901.	3.992	476.2	.3842-3	2235.	39.00
1.469	85.597	.4477	1902.	3.992	476.4	.3839-3	2236.	39.01
1.469	85.598	.4477	1903.	3.992	476.7	.3836-3	2237.	39.02
1.468	85.599	.4477	1904.	3.992	476.9	.3833-3	2238.	39.03
1.468	85.601	.4477	1905.	3.992	477.2	.3830-3	2239.	39.04
1.467	85.602	.4477	1906.	3.992	477.4	.3827-3	2240.	39.05
1.467	85.603	.4477	1907.	3.992	477.7	.3824-3	2241.	39.06
1.467	85.604	.4477	1908.	3.992	477.9	.3821-3	2243.	39.07
1.466	85.605	.4477	1909.	3.992	478.1	.3818-3	2244.	39.08
1.466	85.606	.4477	1910.	3.992	478.4	.3815-3	2245.	39.09
1.466	85.607	.4477	1911.	3.992	478.6	.3813-3	2246.	39.10
1.465	85.608	.4477	1912.	3.992	478.9	.3810-3	2247.	39.11
1.465	85.609	.4477	1913.	3.992	479.1	.3807-3	2248.	39.12
1.464	85.611	.4477	1914.	3.992	479.4	.3804-3	2250.	39.13
1.464	85.612	.4477	1915.	3.992	479.6	.3801-3	2251.	39.14
1.464	85.613	.4477	1916.	3.992	479.9	.3798-3	2252.	39.15
1.463	85.614	.4477	1917.	3.992	480.1	.3795-3	2253.	39.16
1.463	85.615	.4477	1918.	3.992	480.3	.3792-3	2254.	39.17
1.463	85.616	.4477	1919.	3.992	480.6	.3789-3	2255.	39.18
1.462	85.617	.4477	1920.	3.992	480.8	.3786-3	2256.	39.19
1.462	85.618	.4477	1921.	3.992	481.1	.3784-3	2258.	39.20
1.461	85.620	.4477	1922.	3.992	481.3	.3781-3	2259.	39.21
1.461	85.621	.4477	1923.	3.992	481.6	.3778-3	2260.	39.22
1.461	85.622	.4477	1923.	3.992	481.8	.3775-3	2261.	39.23
1.460	85.623	.4477	1924.	3.992	482.1	.3772-3	2262.	39.24
1.460	85.624	.4477	1925.	3.992	482.3	.3769-3	2263.	39.25
1.460	85.625	.4477	1926.	3.992	482.5	.3766-3	2264.	39.26
1.459	85.626	.4477	1927.	3.992	482.8	.3763-3	2266.	39.27
1.459	85.627	.4477	1928.	3.992	483.0	.3761-3	2267.	39.28
1.458	85.628	.4477	1929.	3.992	483.3	.3758-3	2268.	39.29
1.458	85.630	.4477	1930.	3.992	483.5	.3755-3	2269.	39.30
1.458	85.631	.4477	1931.	3.992	483.8	.3752-3	2270.	39.31
1.457	85.632	.4477	1932.	3.992	484.0	.3749-3	2271.	39.32
1.457	85.633	.4477	1933.	3.992	484.3	.3746-3	2273.	39.33
1.457	85.634	.4477	1934.	3.992	484.5	.3743-3	2274.	39.34
1.456	85.635	.4477	1935.	3.992	484.8	.3741-3	2275.	39.35
1.456	85.636	.4477	1936.	3.992	485.0	.3738-3	2276.	39.36
1.455	85.637	.4477	1937.	3.992	485.2	.3735-3	2277.	39.37
1.455	85.638	.4477	1938.	3.992	485.5	.3732-3	2278.	39.38
1.455	85.640	.4477	1939.	3.992	485.7	.3729-3	2279.	39.39
1.454	85.641	.4477	1940.	3.992	486.0	.3726-3	2281.	39.40
1.454	85.642	.4477	1941.	3.992	486.2	.3724-3	2282.	39.41
1.454	85.643	.4477	1942.	3.992	486.5	.3721-3	2283.	39.42
1.453	85.644	.4477	1943.	3.992	486.7	.3718-3	2284.	39.43
1.453	85.645	.4477	1944.	3.992	487.0	.3715-3	2285.	39.44
1.453	85.646	.4477	1945.	3.992	487.2	.3712-3	2286.	39.45
1.452	85.647	.4477	1946.	3.992	487.5	.3709-3	2288.	39.46
1.452	85.648	.4477	1947.	3.992	487.7	.3707-3	2289.	39.47
1.451	85.649	.4477	1948.	3.992	488.0	.3704-3	2290.	39.48
1.451	85.651	.4477	1949.	3.992	488.2	.3701-3	2291.	39.49
1.451	85.652	.4477	1950.	3.992	488.5	.3698-3	2292.	39.50
1.450	85.653	.4477	1951.	3.992	488.7	.3695-3	2293.	39.51
1.450	85.654	.4477	1952.	3.992	488.9	.3693-3	2295.	39.52
1.450	85.655	.4477	1953.	3.992	489.2	.3690-3	2296.	39.53
1.449	85.656	.4477	1954.	3.992	489.4	.3687-3	2297.	39.54
1.449	85.657	.4477	1955.	3.992	489.7	.3684-3	2298.	39.55
1.448	85.658	.4477	1956.	3.992	489.9	.3681-3	2299.	39.56
1.448	85.659	.4477	1957.	3.992	490.2	.3679-3	2300.	39.57
1.448	85.660	.4477	1958.	3.992	490.4	.3676-3	2302.	39.58
1.447	85.662	.4477	1959.	3.992	490.7	.3673-3	2303.	39.59
1.447	85.663	.4477	1960.	3.992	490.9	.3670-3	2304.	39.60
1.447	85.664	.4477	1961.	3.992	491.2	.3668-3	2305.	39.61
1.446	85.665	.4477	1962.	3.992	491.4	.3665-3	2306.	39.62
1.446	85.666	.4477	1963.	3.992	491.7	.3662-3	2307.	39.63
1.446	85.667	.4477	1964.	3.992	491.9	.3659-3	2309.	39.64
1.445	85.668	.4477	1965.	3.992	492.2	.3657-3	2310.	39.65
1.445	85.669	.4477	1966.	3.992	492.4	.3654-3	2311.	39.66
1.444	85.670	.4477	1967.	3.992	492.7	.3651-3	2312.	39.67
1.444	85.671	.4477	1968.	3.992	492.9	.3648-3	2313.	39.68
1.444	85.672	.4477	1969.	3.992	493.2	.3646-3	2314.	39.69
1.443	85.674	.4477	1970.	3.992	493.4	.3643-3	2316.	39.70
1.443	85.675	.4477	1971.	3.992	493.7	.3640-3	2317.	39.71
1.443	85.676	.4477	1972.	3.992	493.9	.3637-3	2318.	39.72
1.442	85.677	.4477	1973.	3.992	494.1	.3635-3	2319.	39.73
1.442	85.678	.4477	1974.	3.992	494.4	.3632-3	2320.	39.74
1.442	85.679	.4477	1975.	3.992	494.6	.3629-3	2321.	39.75
1.441	85.680	.4477	1976.	3.992	494.9	.3626-3	2323.	39.76
1.441	85.681	.4477	1977.	3.992	495.1	.3624-3	2324.	39.77
1.440	85.682	.4477	1978.	3.992	495.4	.3621-3	2325.	39.78
1.440	85.683	.4477	1979.	3.992	495.6	.3618-3	2326.	39.79
1.440	85.684	.4477	1980.	3.992	495.9	.3615-3	2327.	39.80
1.439	85.685	.4477	1981.	3.992	496.1	.3613-3	2328.	39.81
1.439	85.687	.4477	1982.	3.992	496.4	.3610-3	2330.	39.82
1.439	85.688	.4477	1983.	3.992	496.6	.3607-3	2331.	39.83
1.438	85.689	.4477	1984.	3.992	496.9	.3605-3	2332.	39.84
1.438	85.690	.4477	1985.	3.992	497.1	.3602-3	2333.	39.85
1.438	85.691	.4477	1986.	3.992	497.4	.3599-3	2334.	39.86
1.437	85.692	.4477	1987.	3.992	497.6	.3597-3	2335.	39.87
1.437	85.693	.4477	1988.	3.992	497.9	.3594-3	2337.	39.88
1.436	85.694	.4477	1989.	3.992	498.1	.3591-3	2338.	39.89
1.436	85.695	.4477	1990.	3.992	498.4	.3588-3	2339.	39.90
1.436	85.696	.4477	1991.	3.992	498.6	.3586-3	2340.	39.91
1.435	85.697	.4477	1992.	3.992	498.9	.3583-3	2341.	39.92
1.435	85.698	.4477	1993.	3.992	499.1	.3580-3	2342.	39.93
1.435	85.700	.4477	1994.	3.992	499.4	.3578-3	2344.	39.94
1.434	85.701	.4477	1995.	3.992	499.6	.3575-3	2345.	39.95
1.434	85.702	.4477	1996.	3.992	499.9	.3572-3	2346.	39.96
1.434	85.703	.4477	1997.	3.993	500.1	.3570-3	2347.	39.97
1.433	85.704	.4477	1998.	3.993	500.4	.3567-3	2348.	39.98
1.433	85.705	.4477	1999.	3.993	500.6	.3564-3	2349.	39.99
1.433	85.706	.4477	2000.	3.993	500.9	.3562-3	2351.	40.00

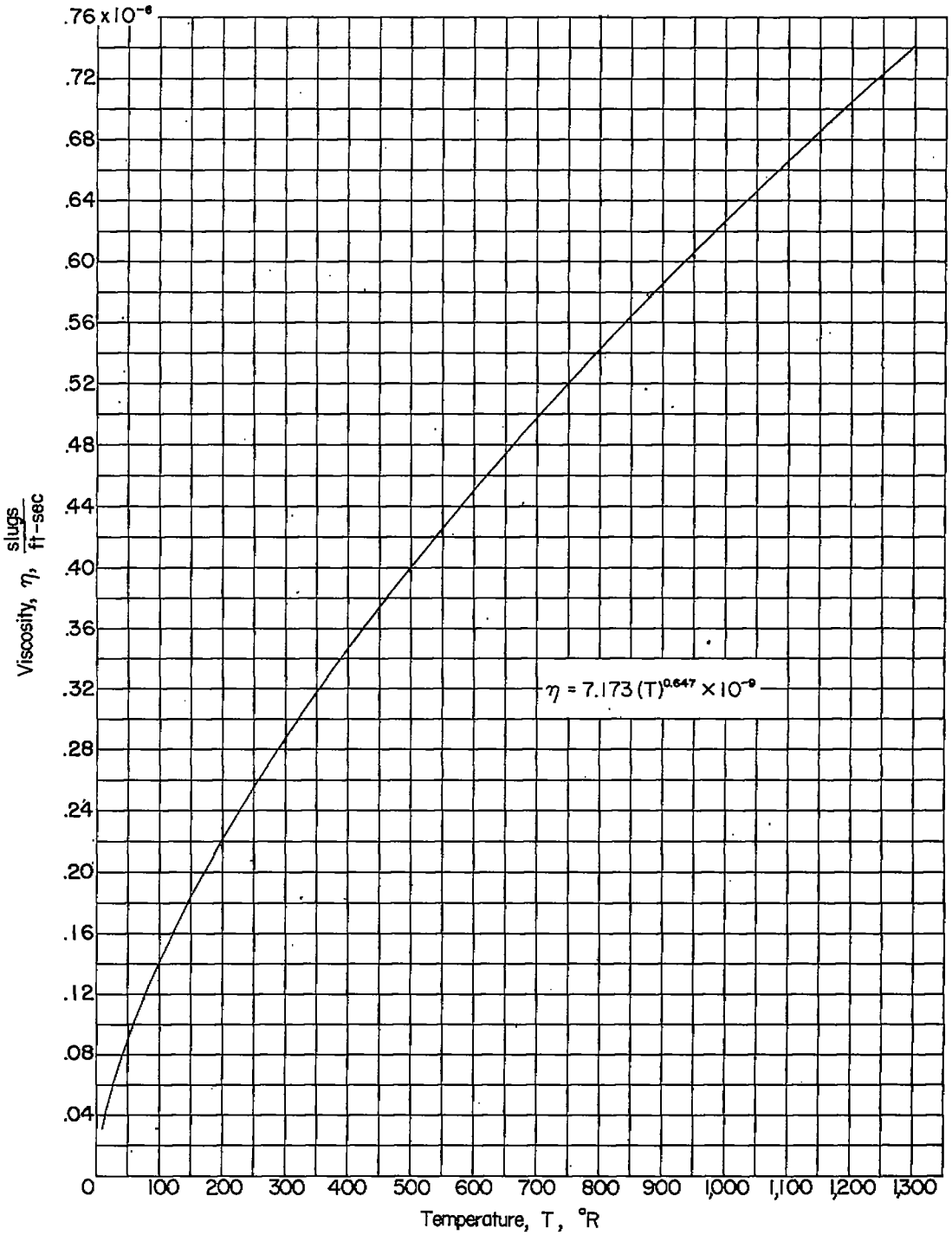
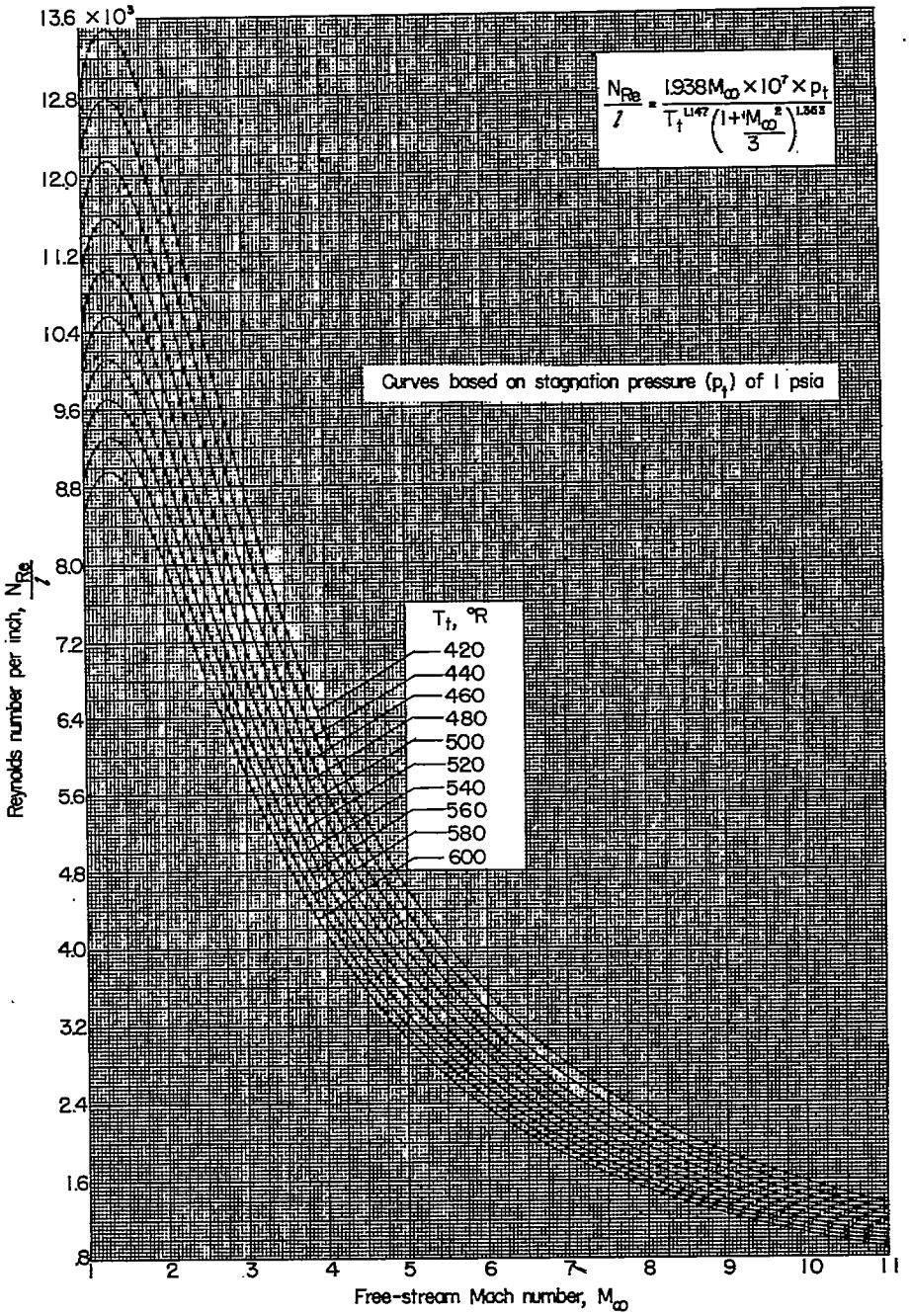
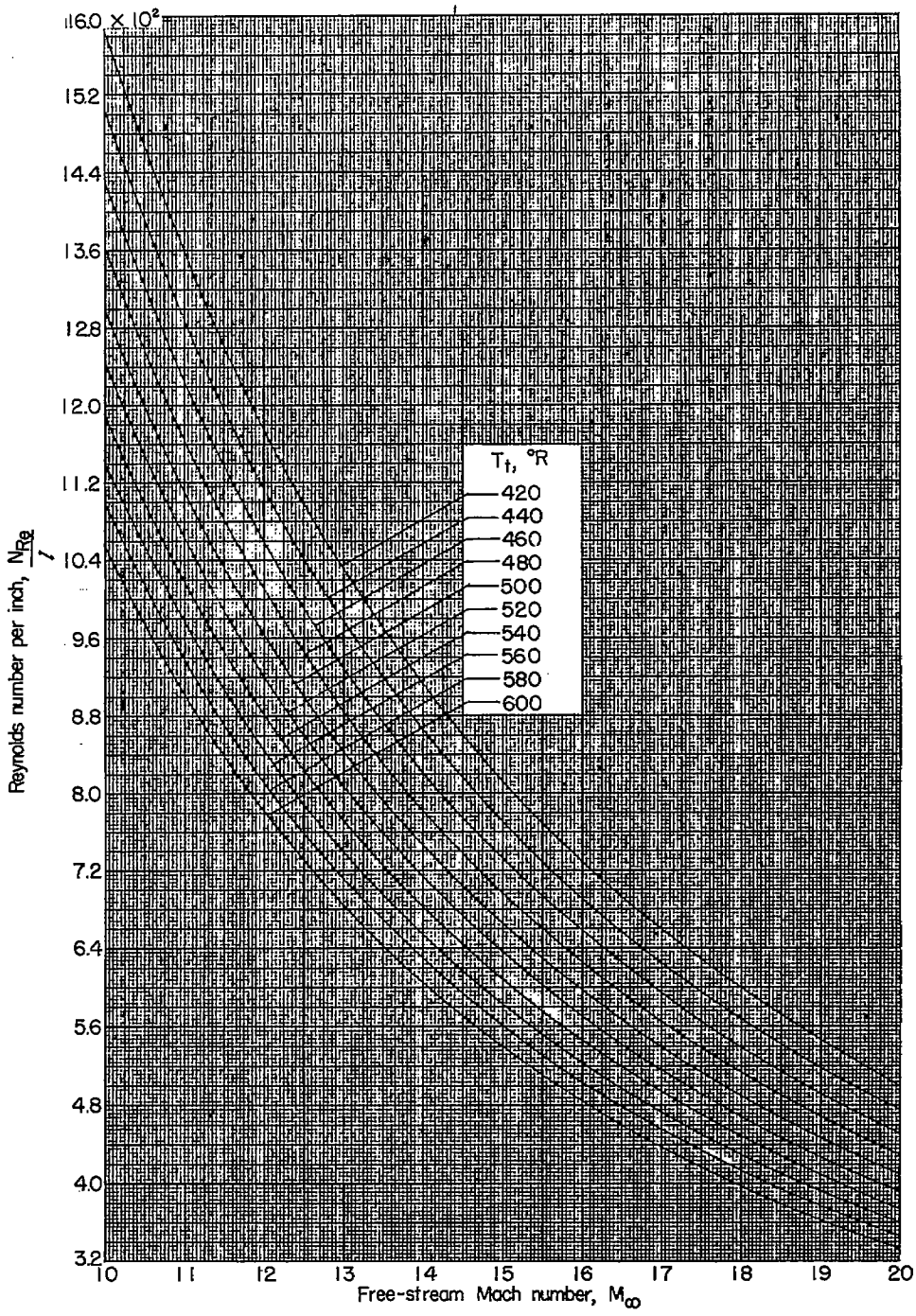


Figure 1.- Viscosity of helium as a function of temperature.



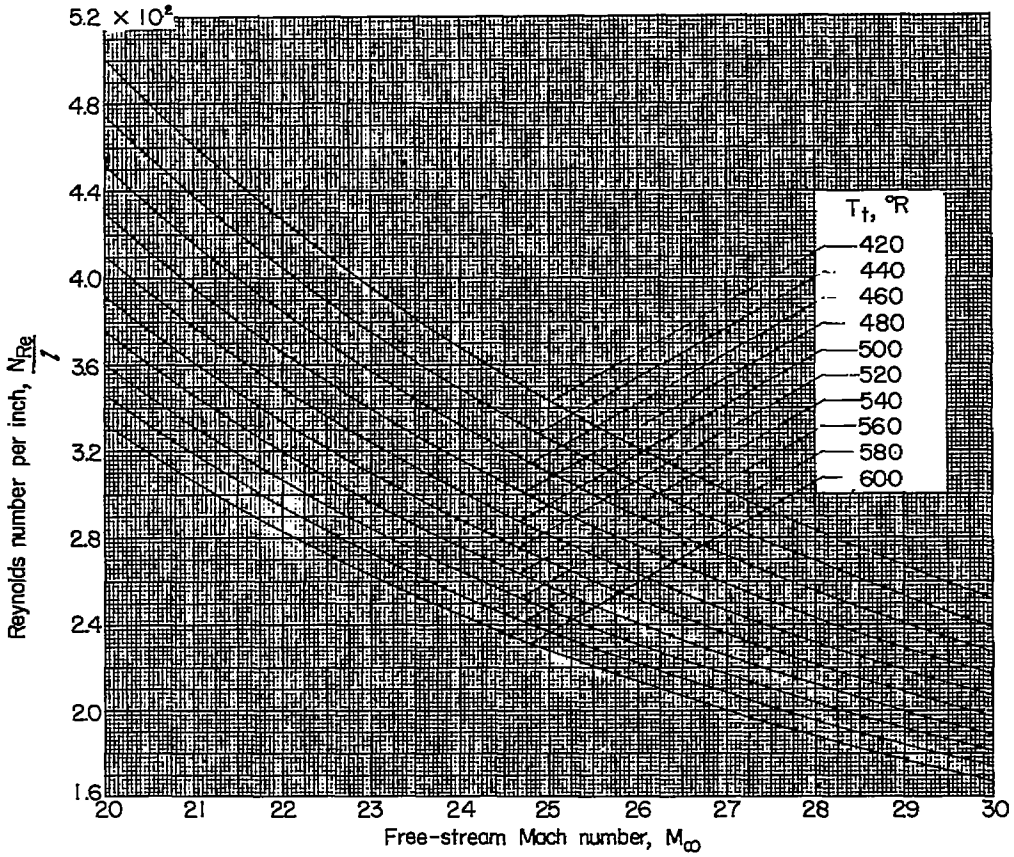
(a) M_∞ = 1 to 11.

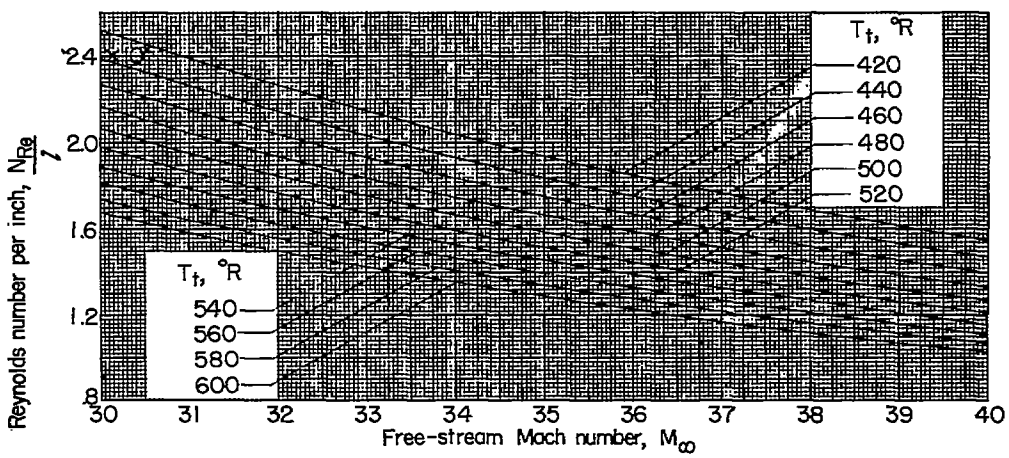
Figure 2.- Reynolds number per inch as a function of free-stream Mach number and stagnation temperature.



(b) M_∞ = 10 to 20.

Figure 2.- Continued.





(c) M_∞ = 20 to 40.

Figure 2.- Concluded.

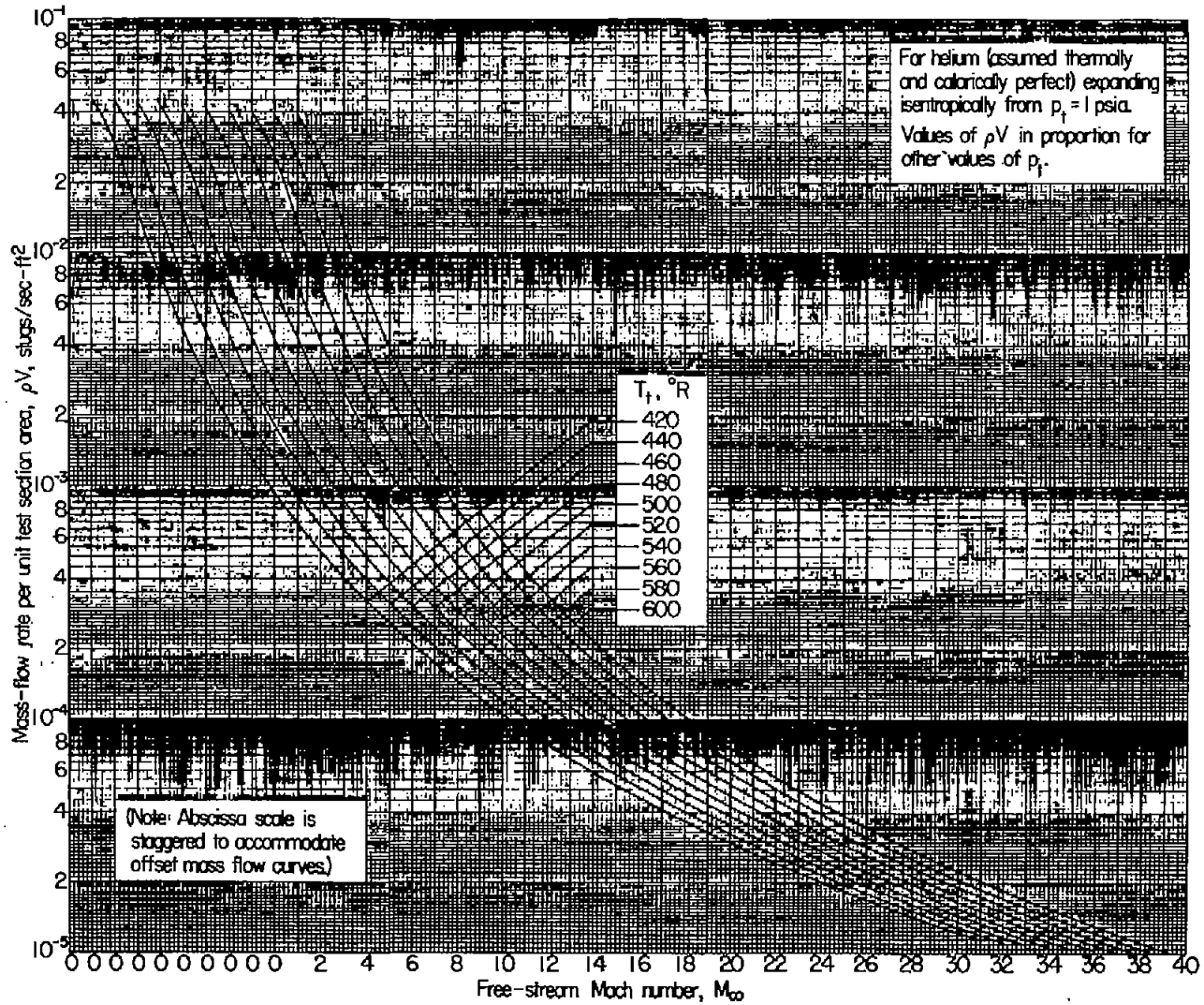
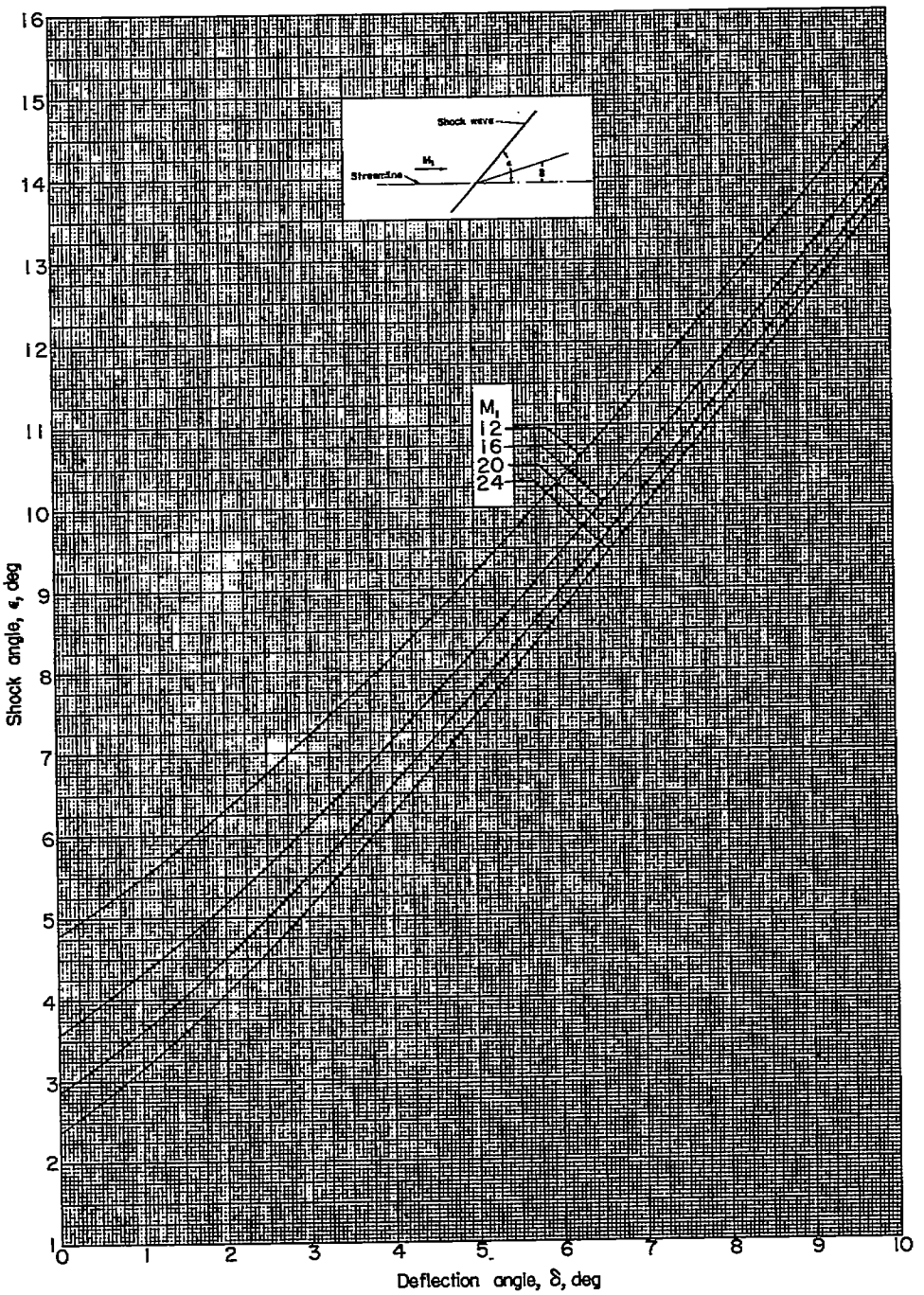
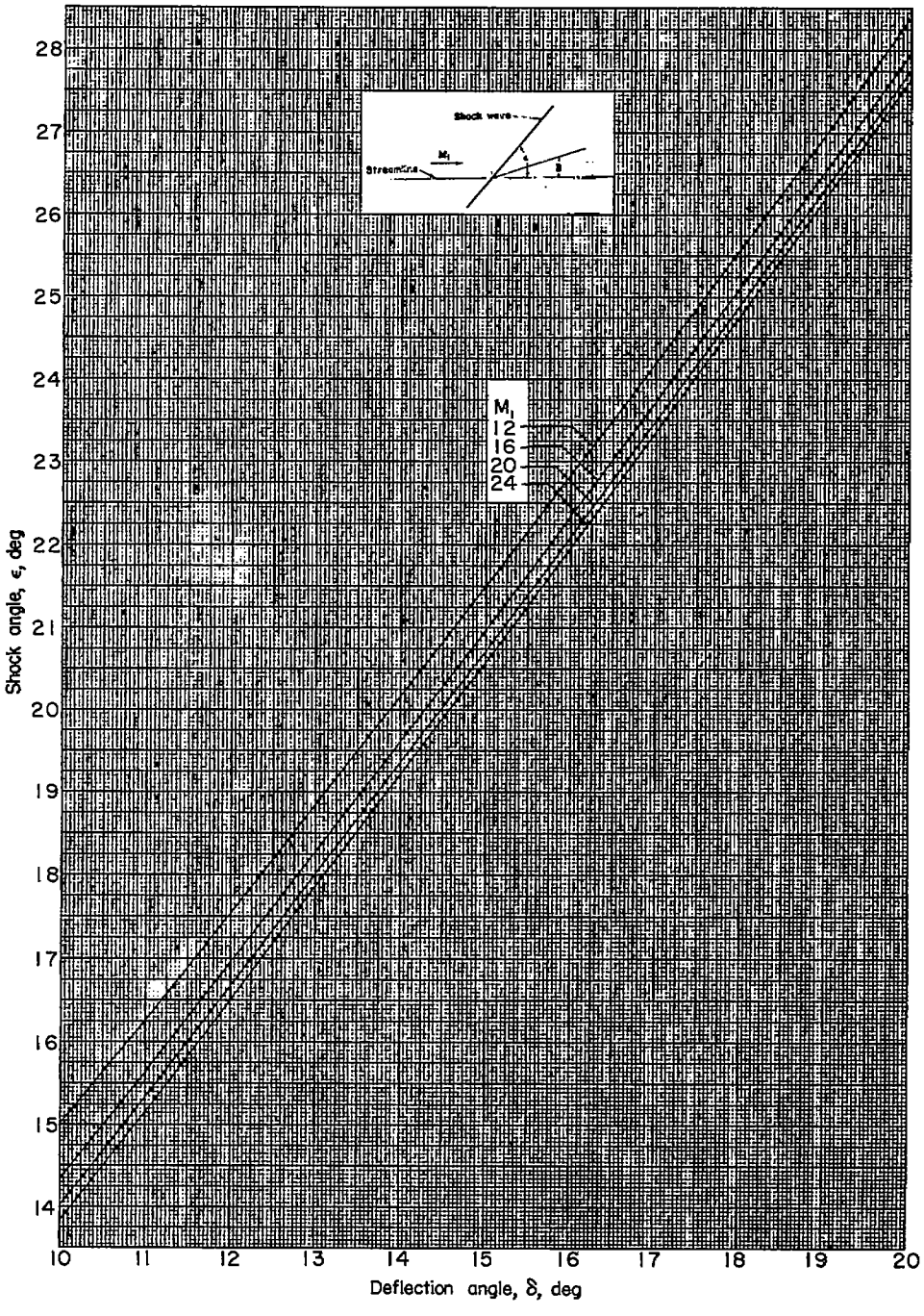


Figure 3.- Variation of mass-flow rate per unit test section area with Mach number.



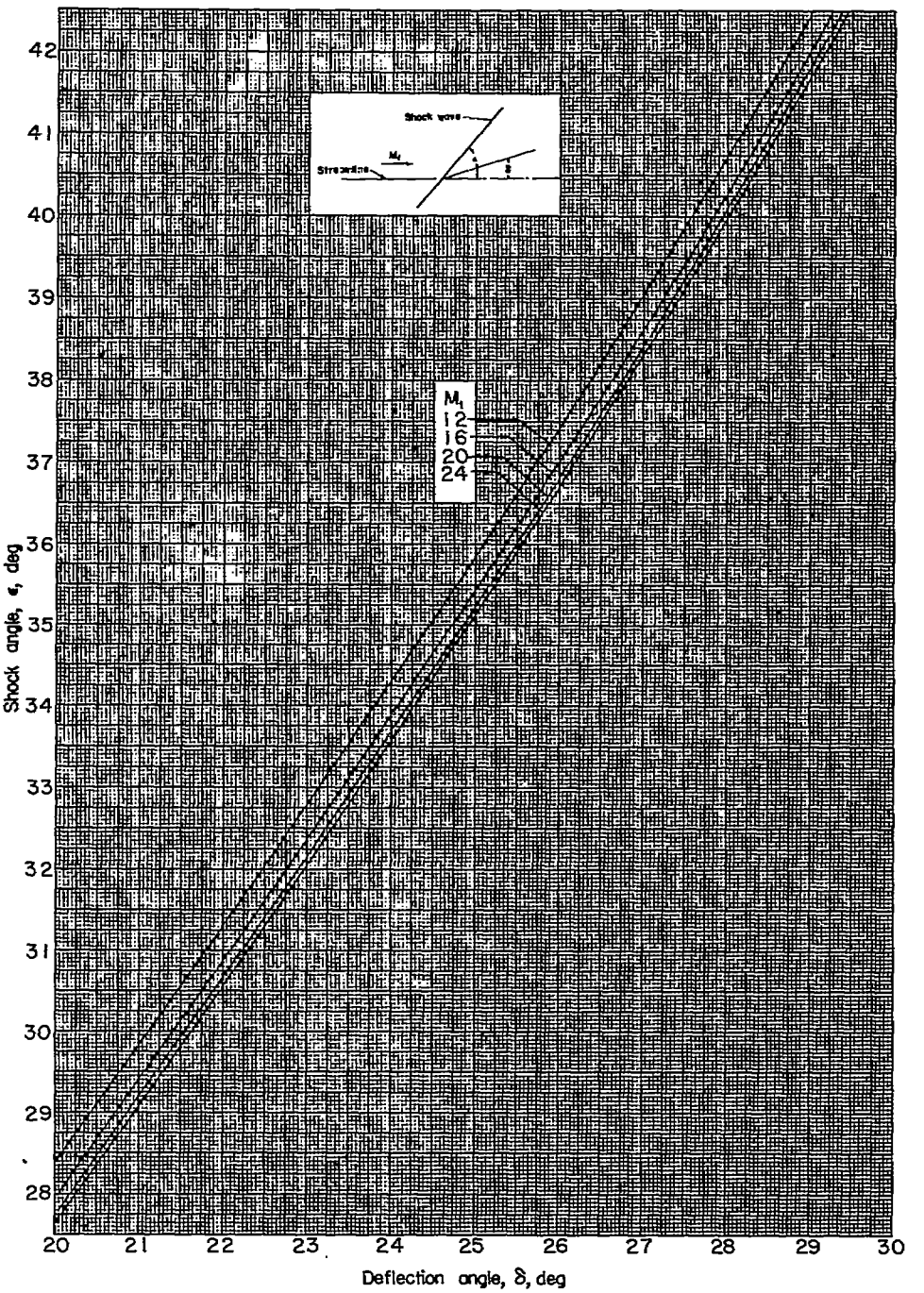
(a) $\delta = 0^{\circ}$ to 10°.

Figure 4.- Variation of the shock-wave angle with flow deflection angle.



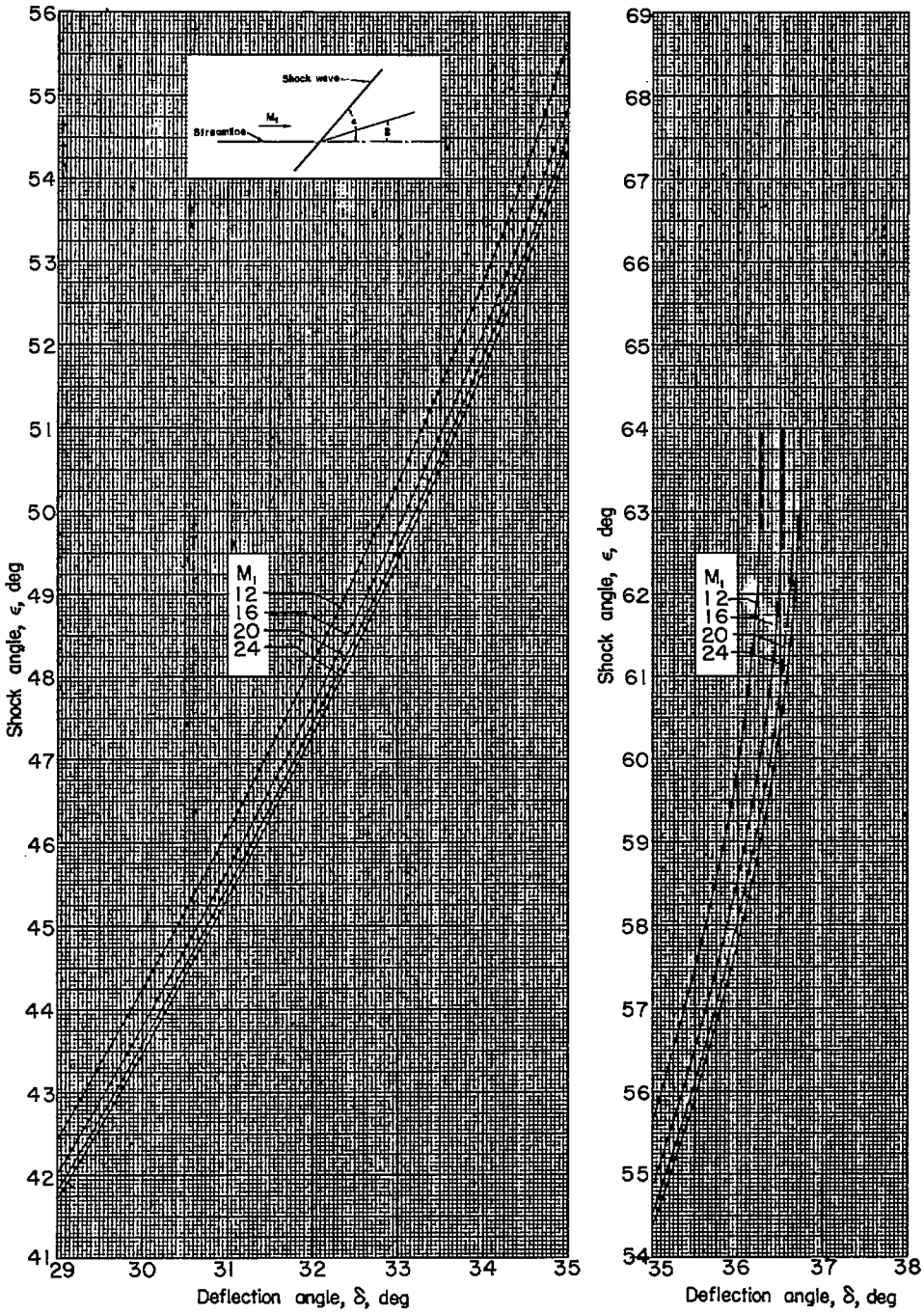
(b) $\delta = 10^{\circ}$ to 20°.

Figure 4.- Continued.



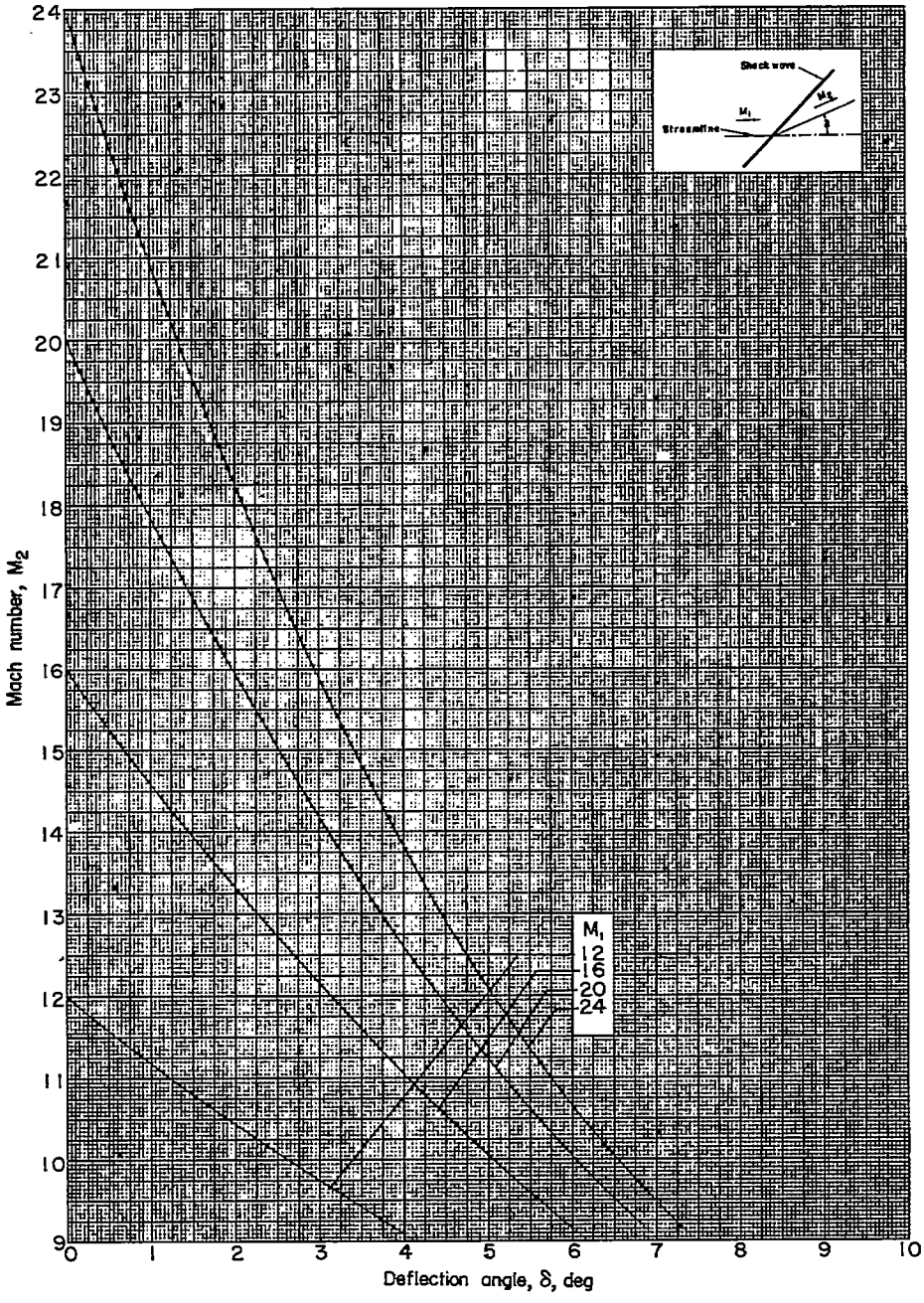
(c) $\delta = 20^{\circ}$ to 30°.

Figure 4.- Continued.



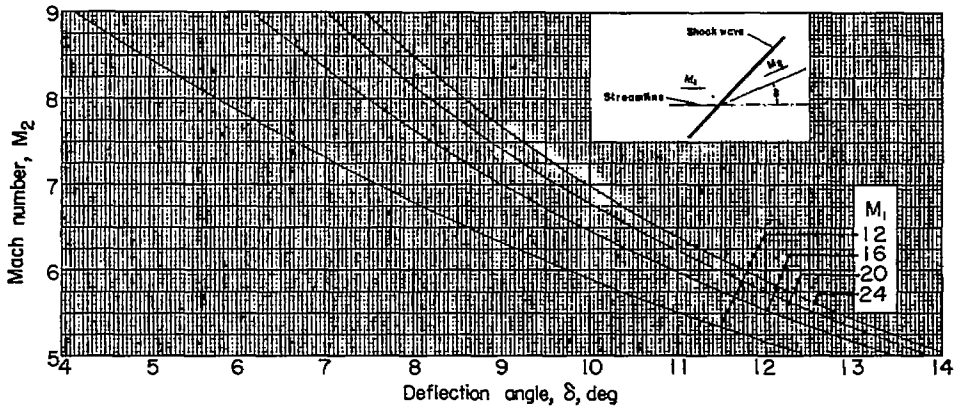
(d) $\delta = 29^{\circ}$ to 38°.

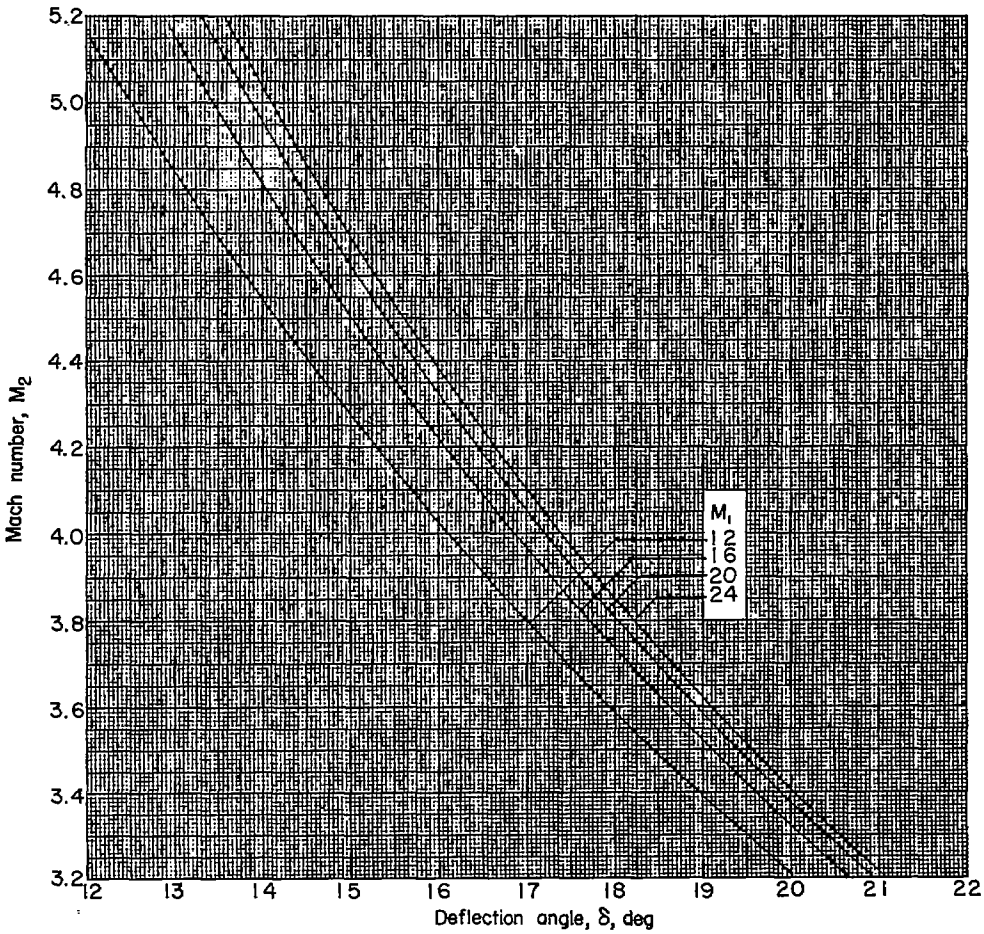
Figure 4.- Concluded.



(a) $\delta = 0^{\circ}$ to 10°.

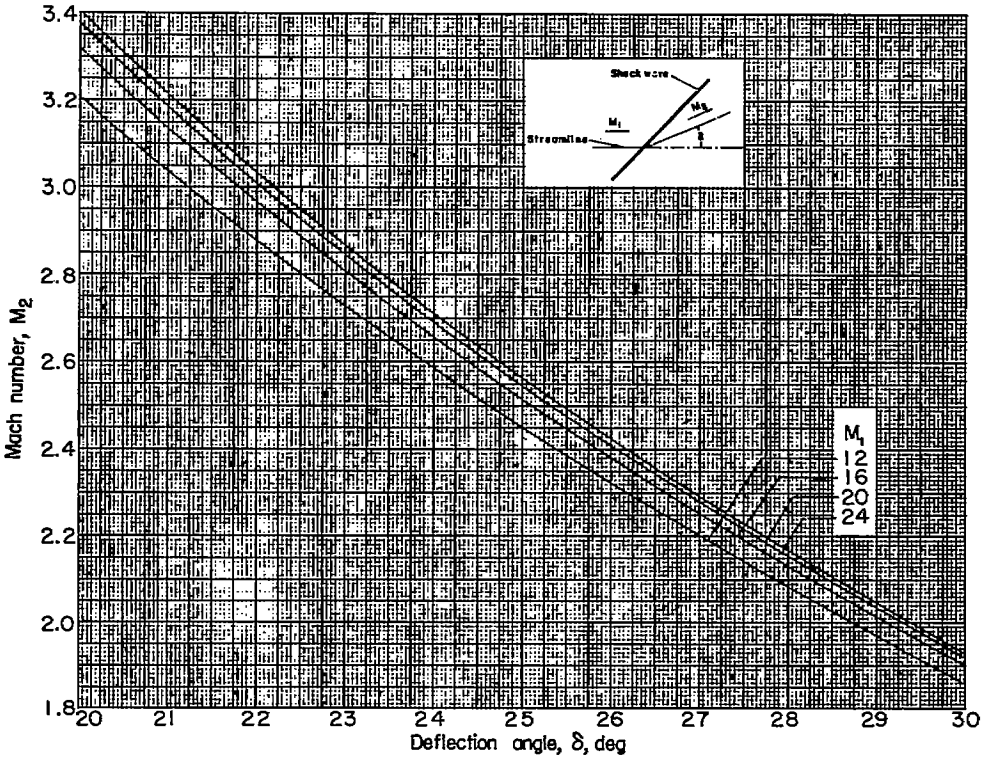
Figure 5.- Variation of the Mach number through an oblique shock as a function of wedge angle.

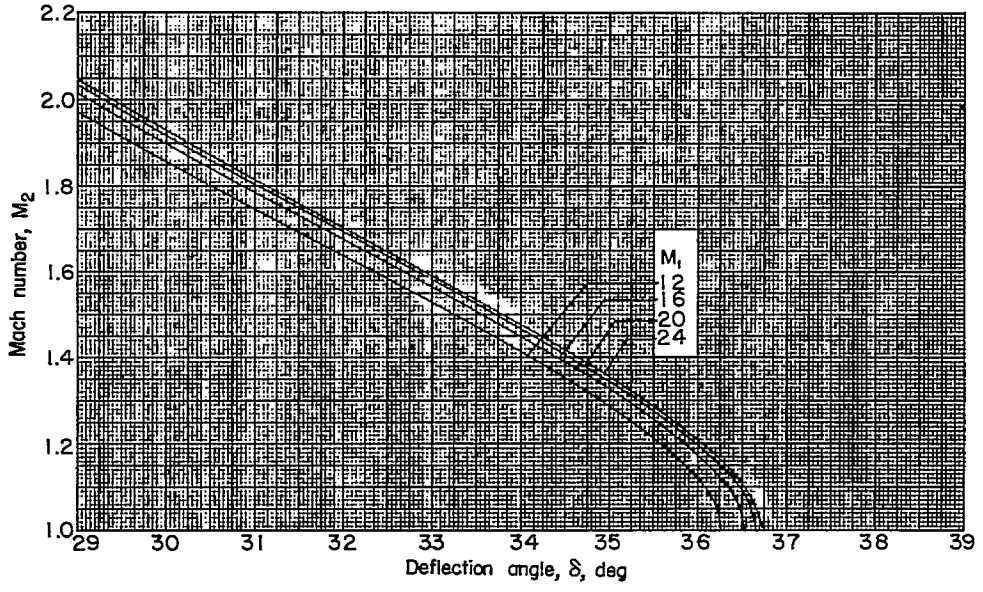




(b) $\delta = 4^{\circ}$ to 22°.

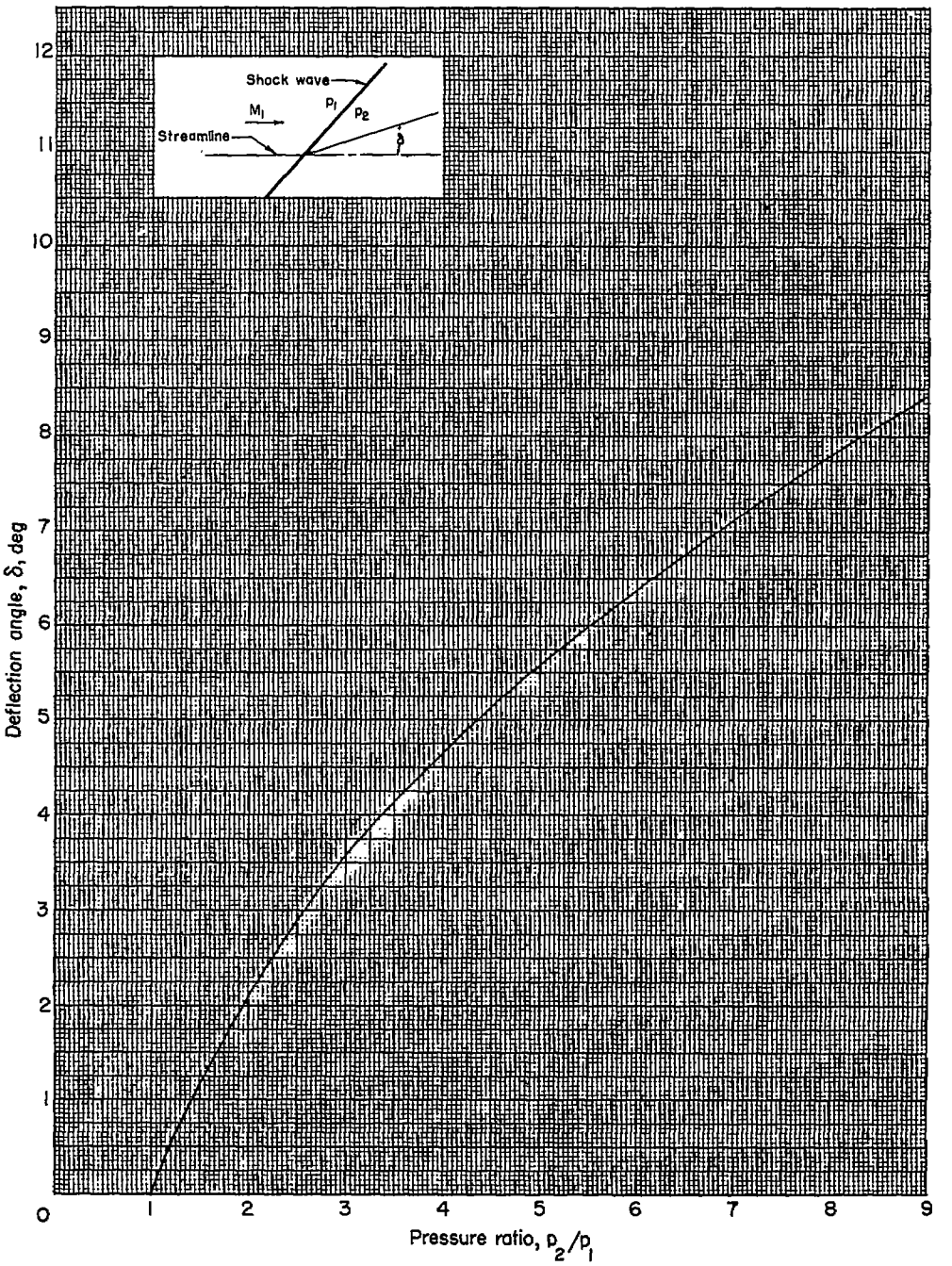
Figure 5.- Continued.





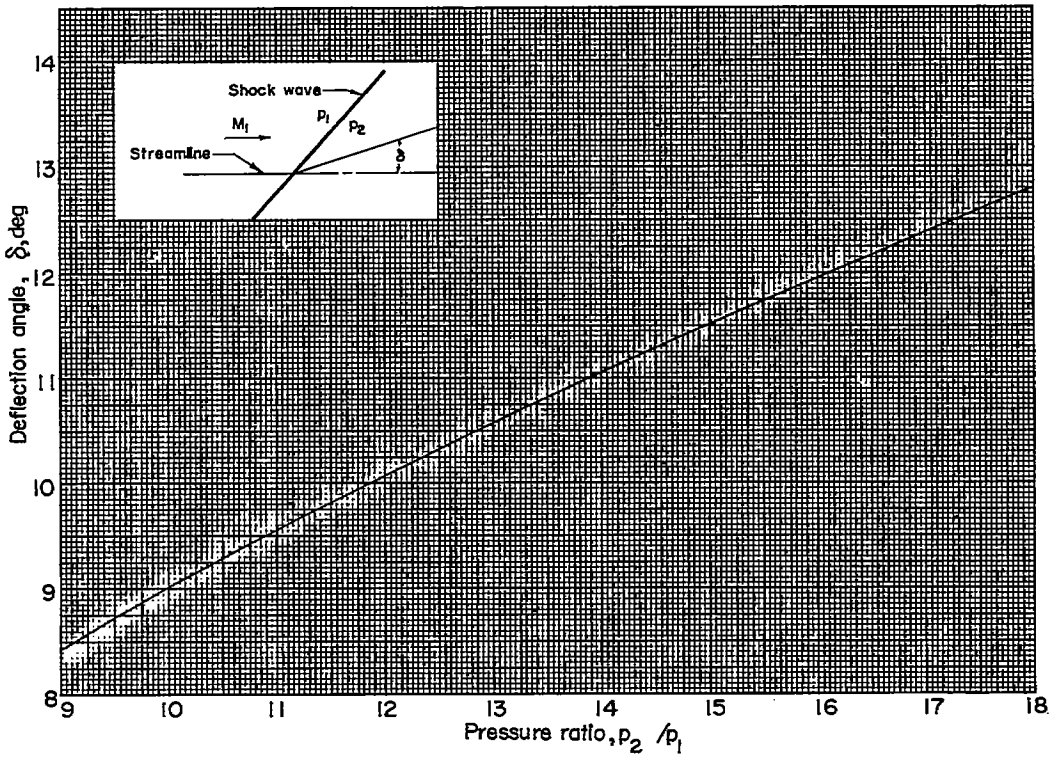
(c) $\delta = 20^{\circ}$ to 39°.

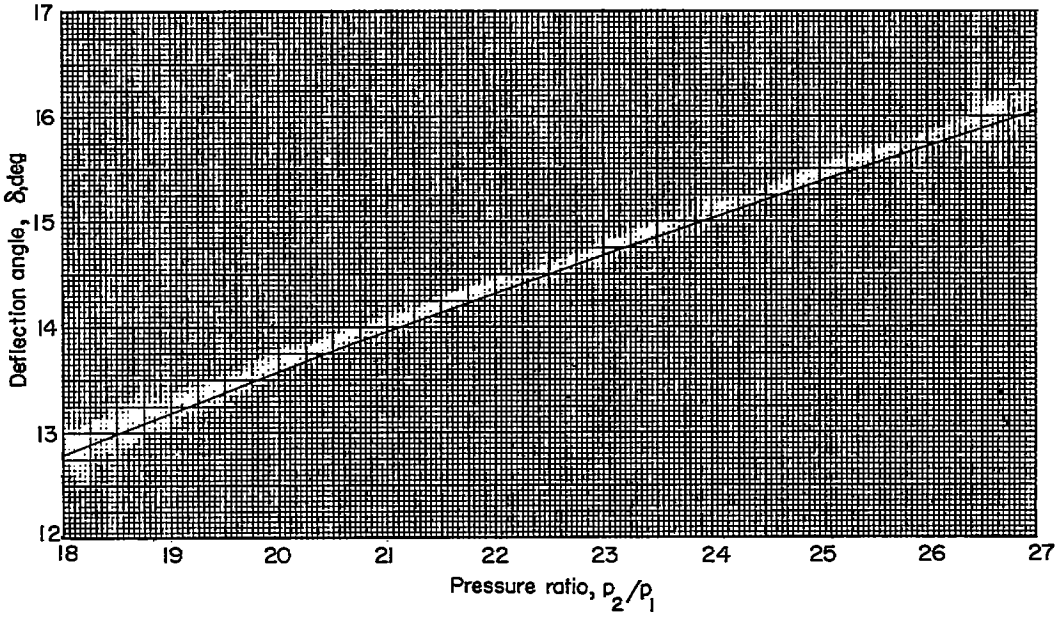
Figure 5.- Concluded.



(a) $p_2/p_1 = 0$ to 9.

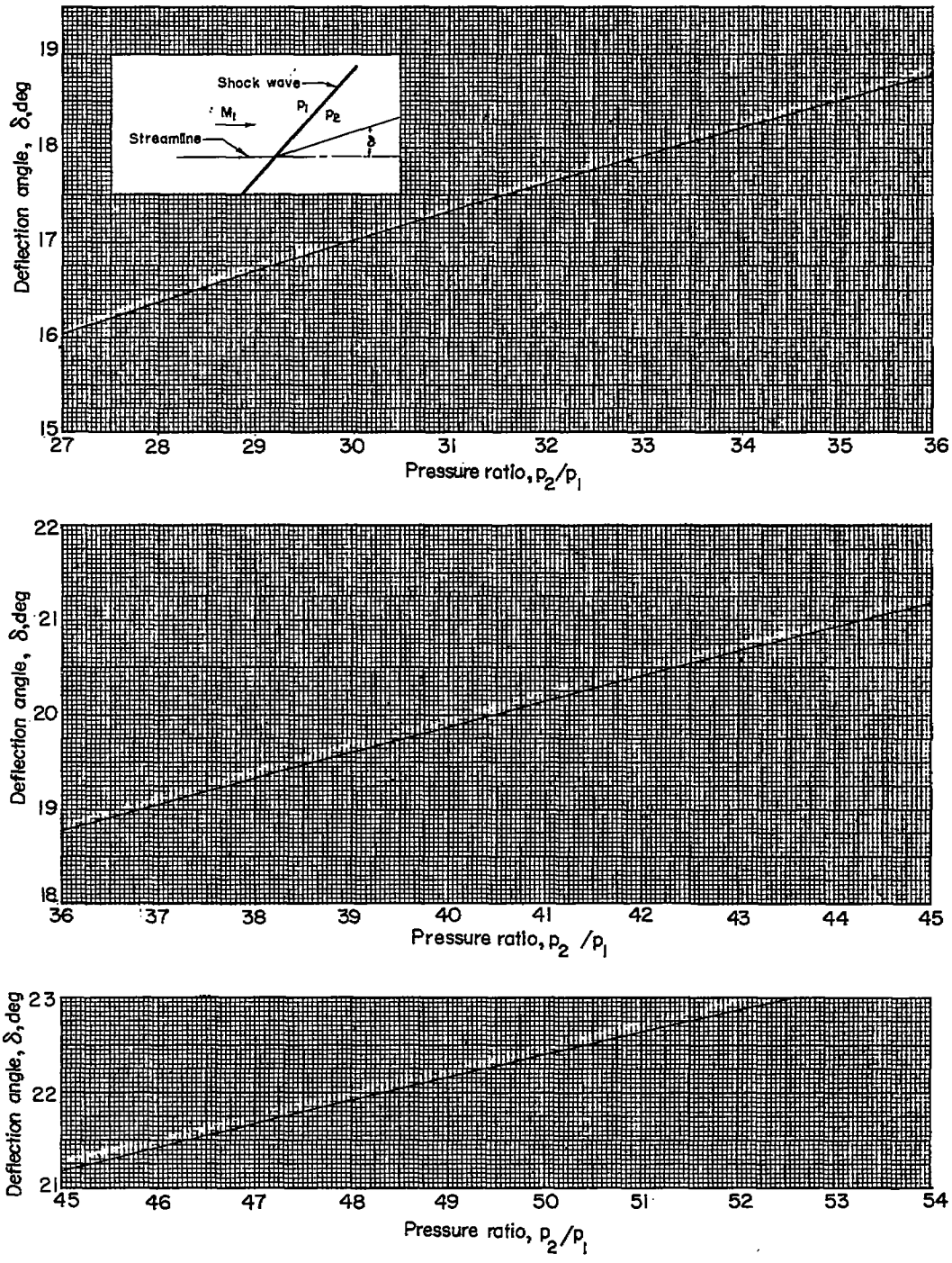
Figure 6.- Variation of the pressure ratio through an oblique shock wave as a function of the angle of flow deviation. $M_1 = 12$; $\gamma = 5/3$.





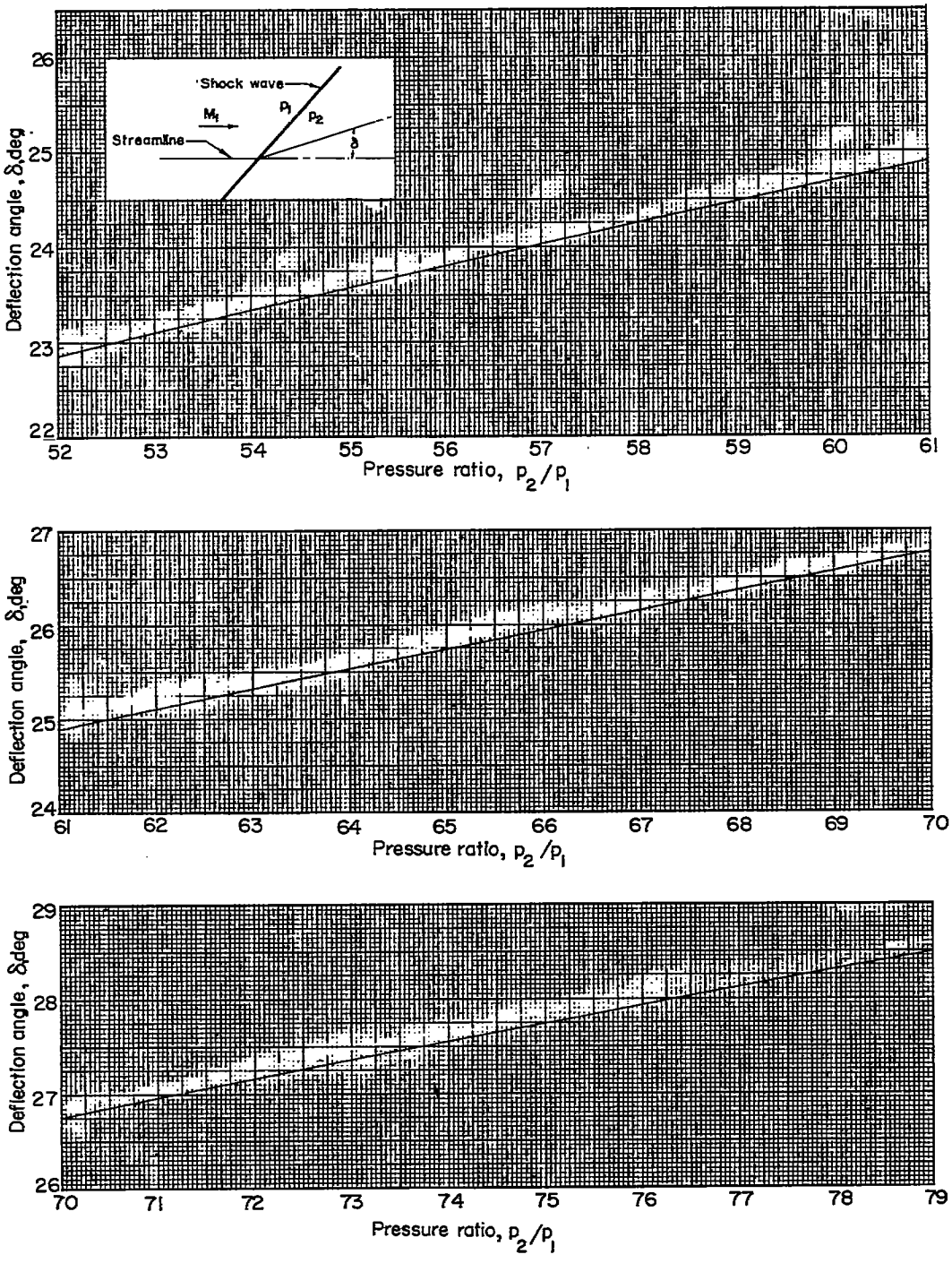
(b) p_2/p_1 = 9 to 27.

Figure 6.- Continued.



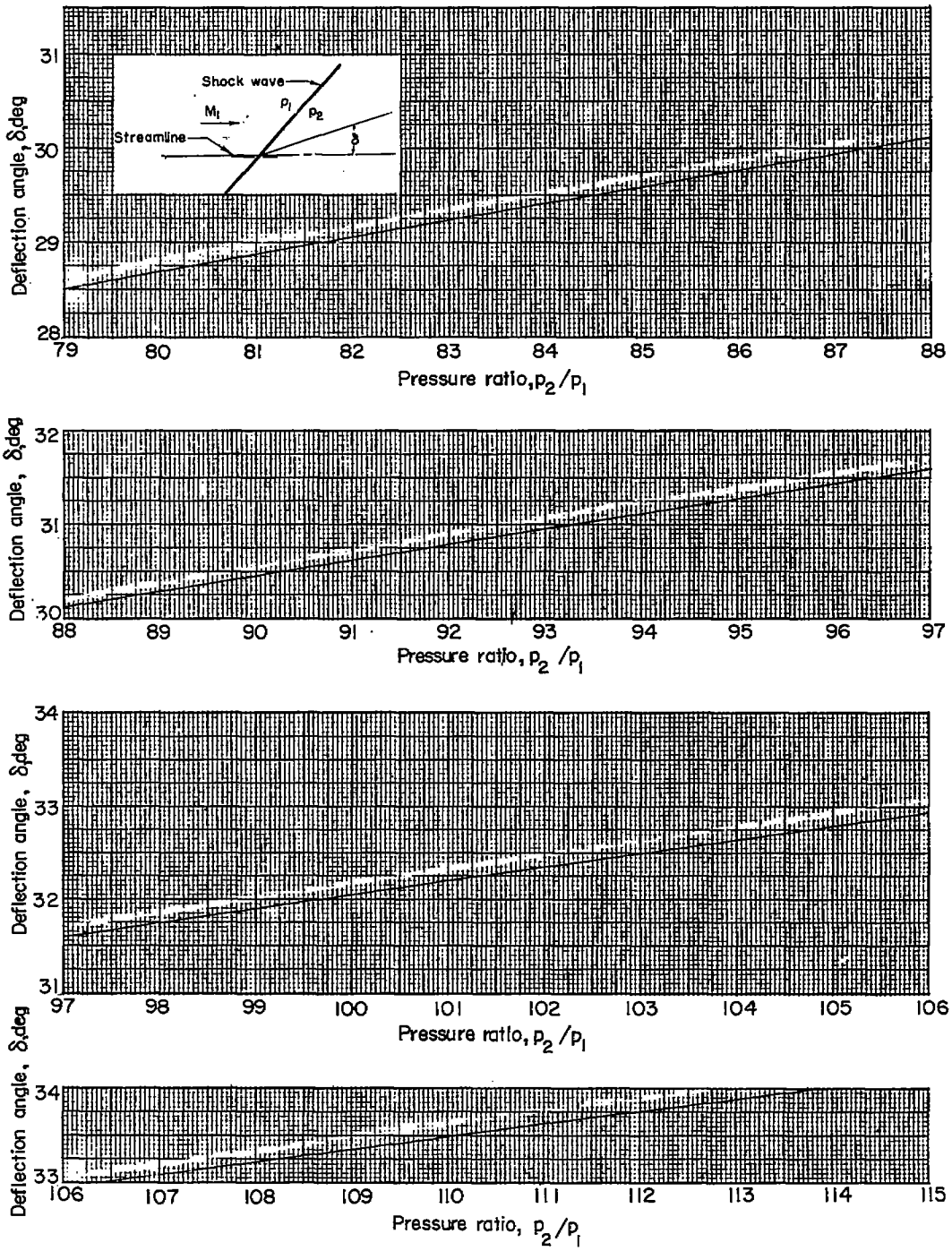
(c) p_2/p_1 = 27 to 54.

Figure 6.- Continued.



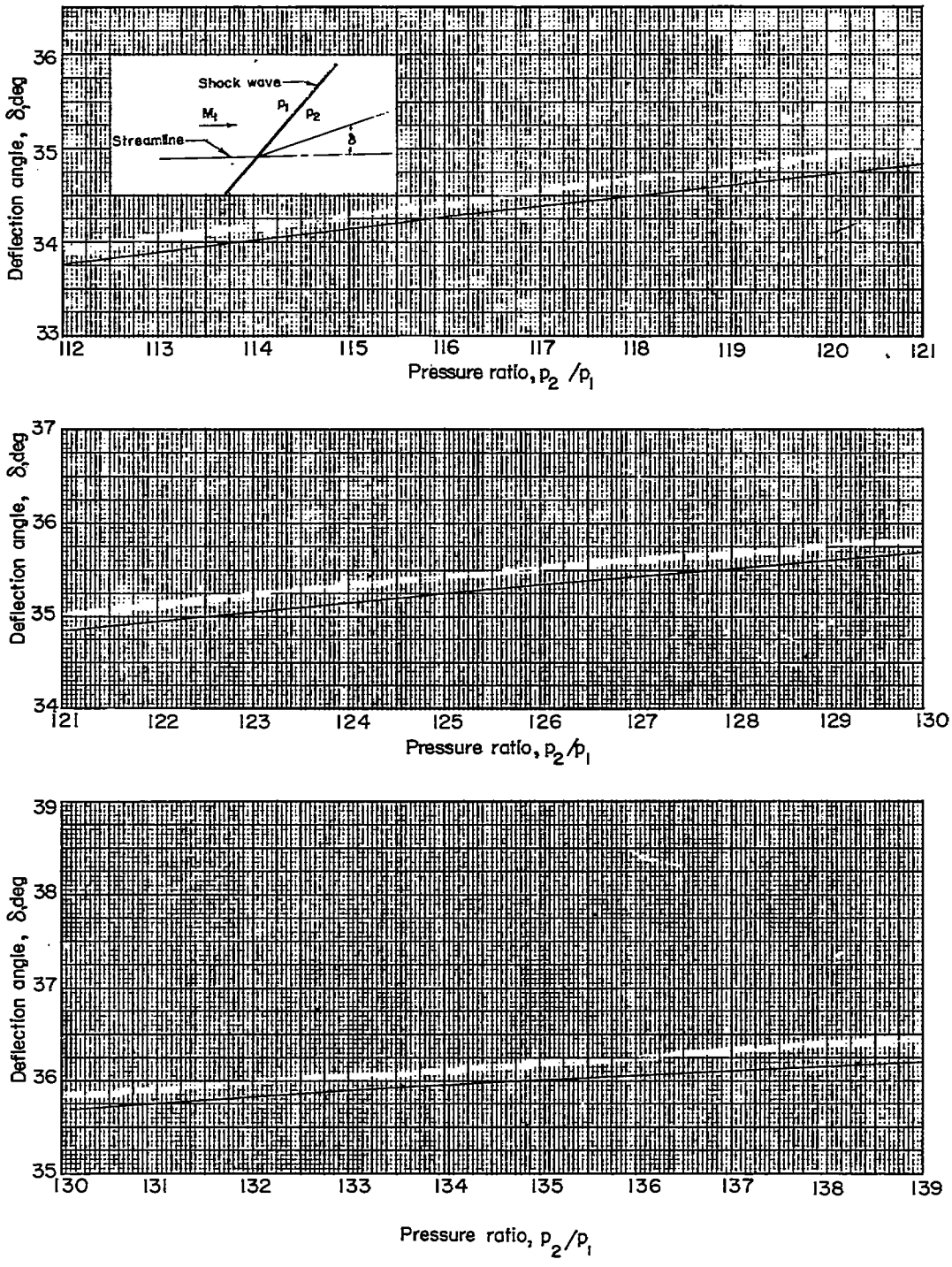
(d) p_2/p_1 = 54 to 79.

Figure 6.- Continued.



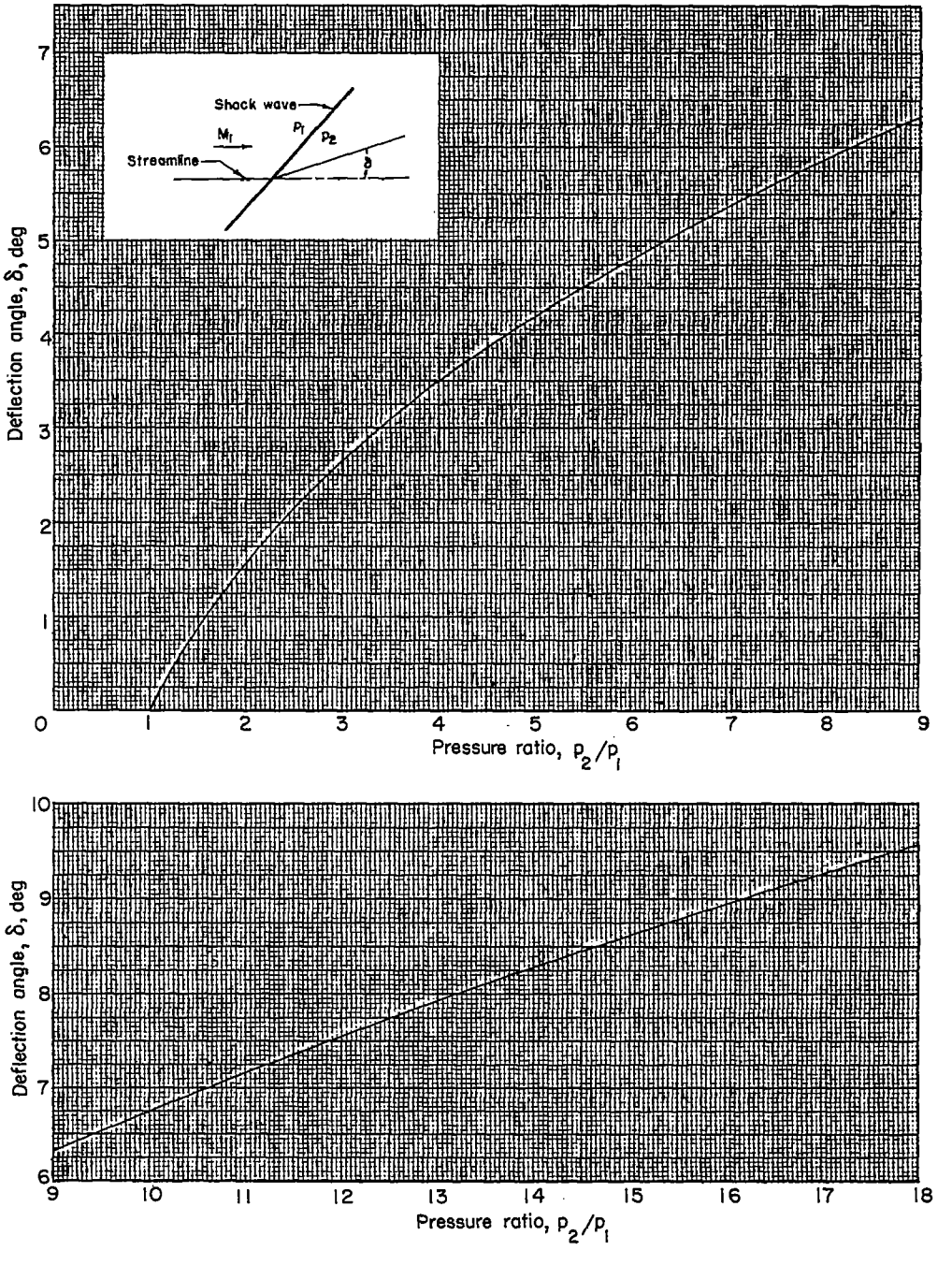
(e) p_2/p_1 = 79 to 115.

Figure 6.- Continued.



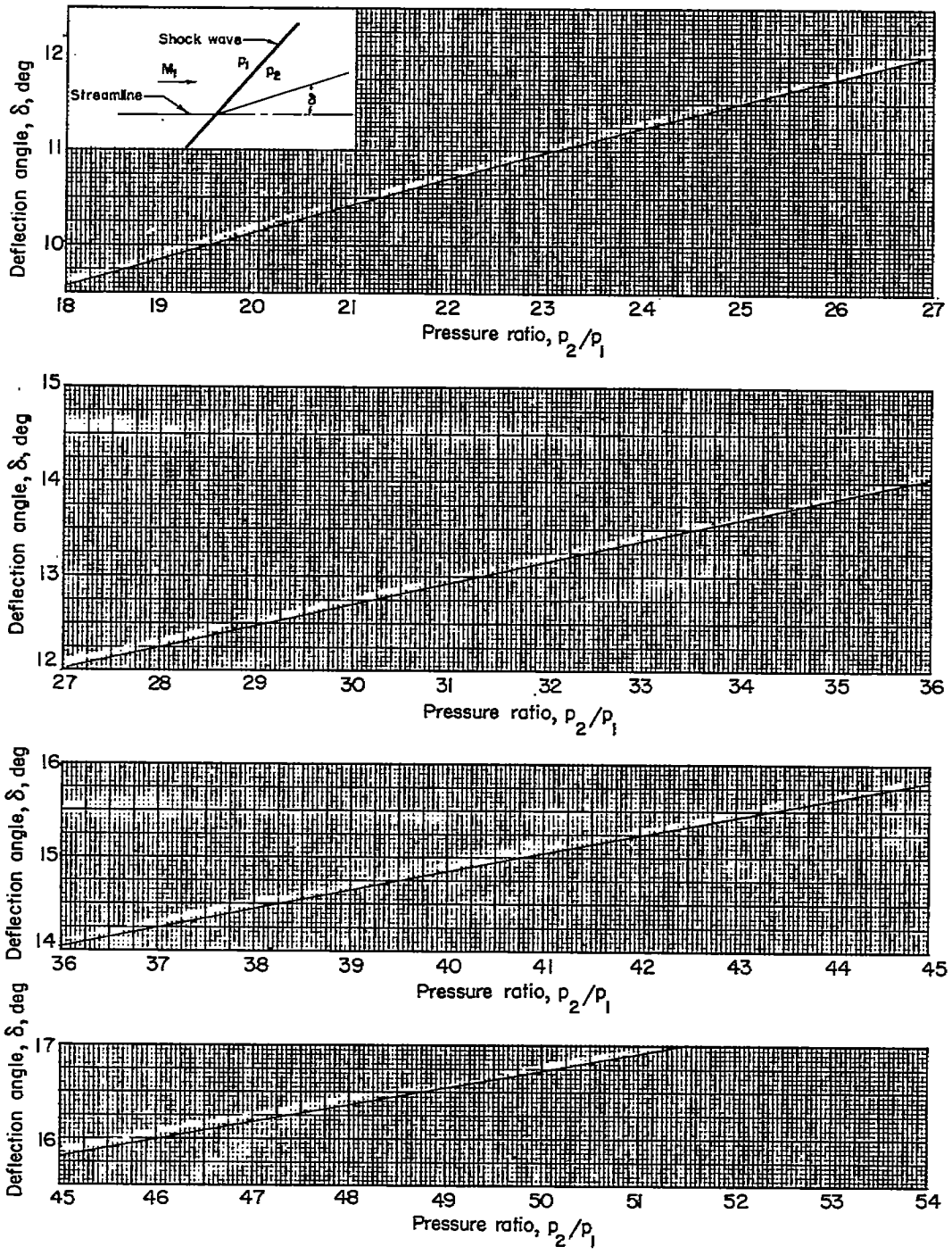
(f) p_2/p_1 = 112 to 139.

Figure 6.- Concluded.



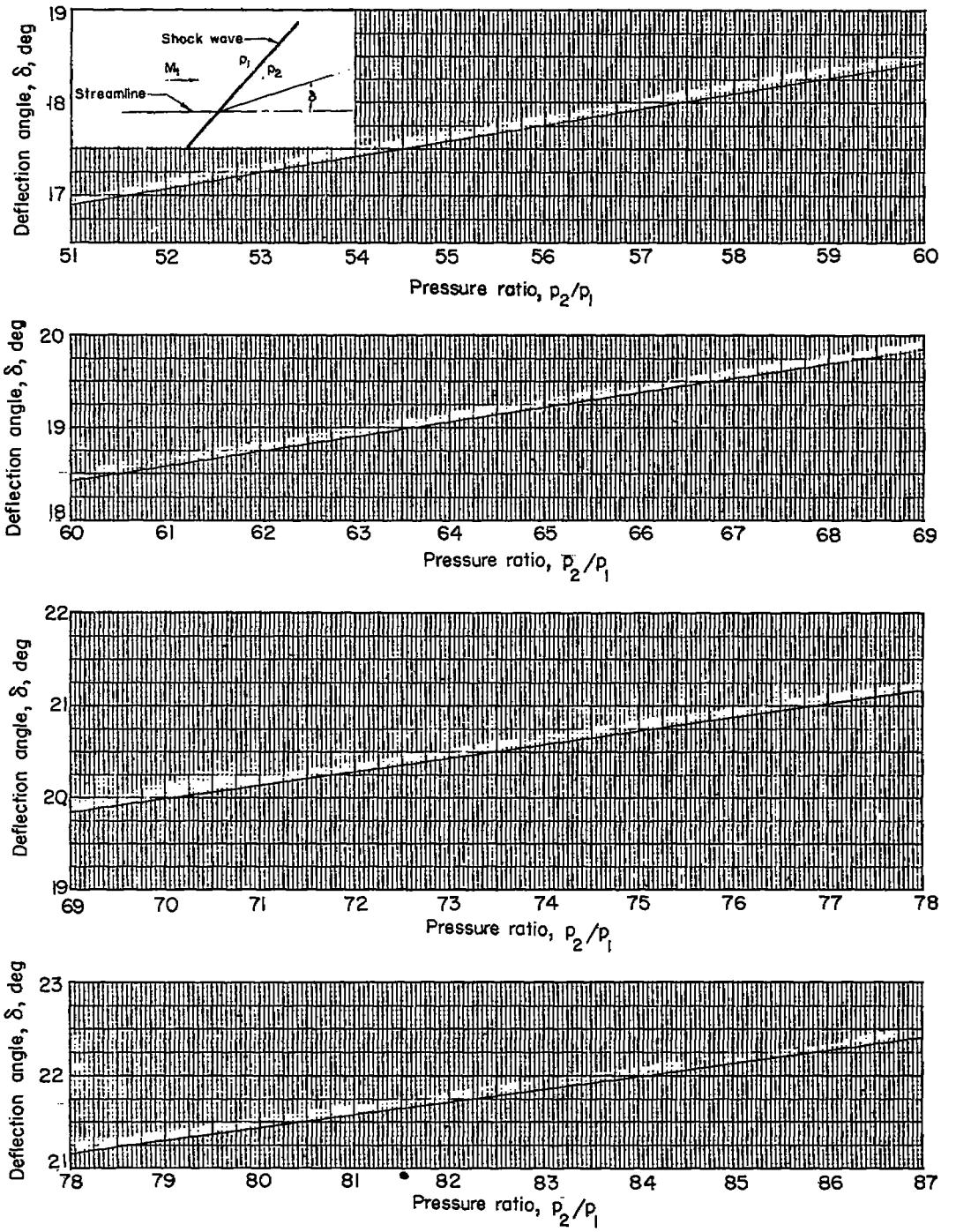
(a) p_2/p_1 = 0 to 18.

Figure 7.- Variation of the pressure ratio through an oblique shock wave as a function of the angle of flow deviation. $M_1 = 16$; $\gamma = 5/3$.



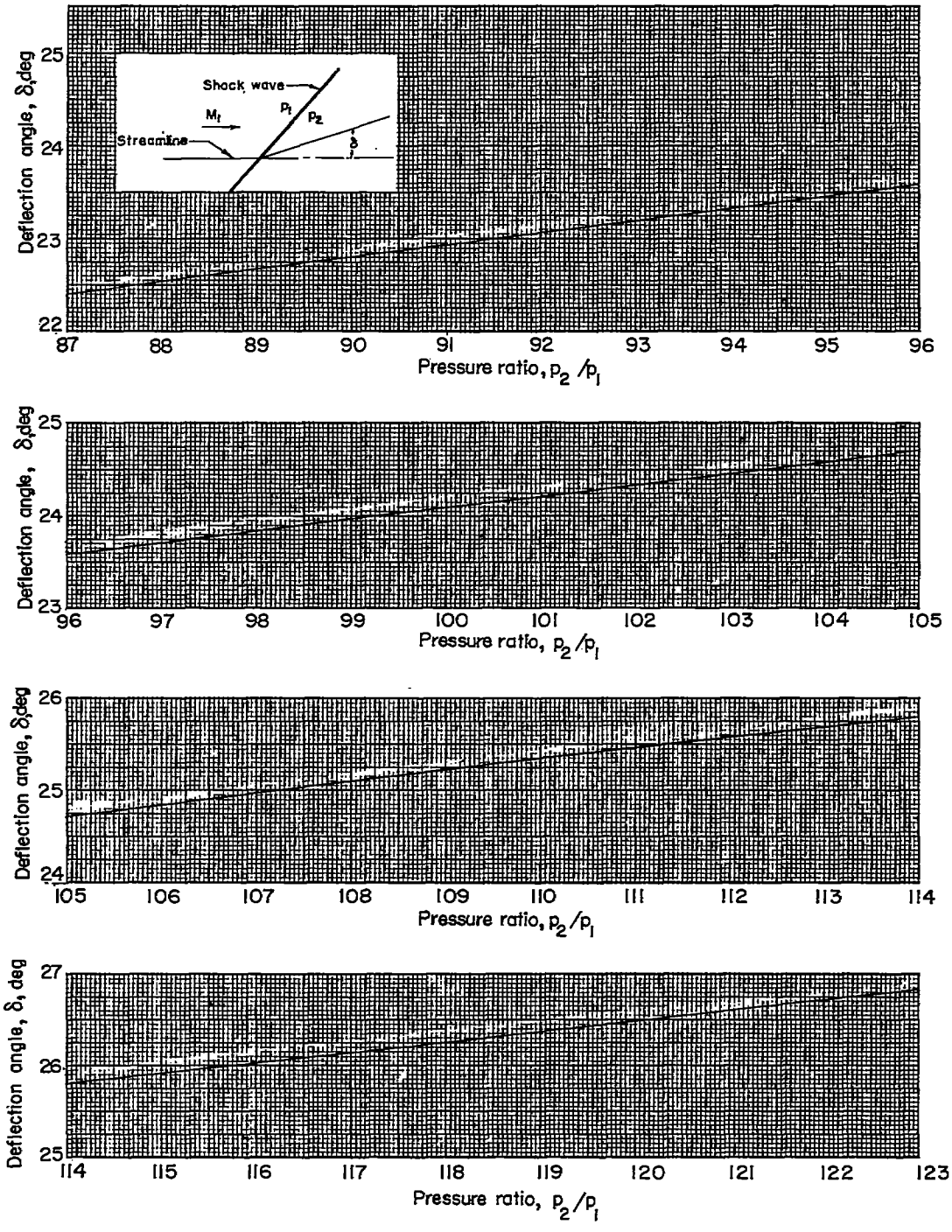
(b) p_2/p_1 = 18 to 54.

Figure 7.- Continued.



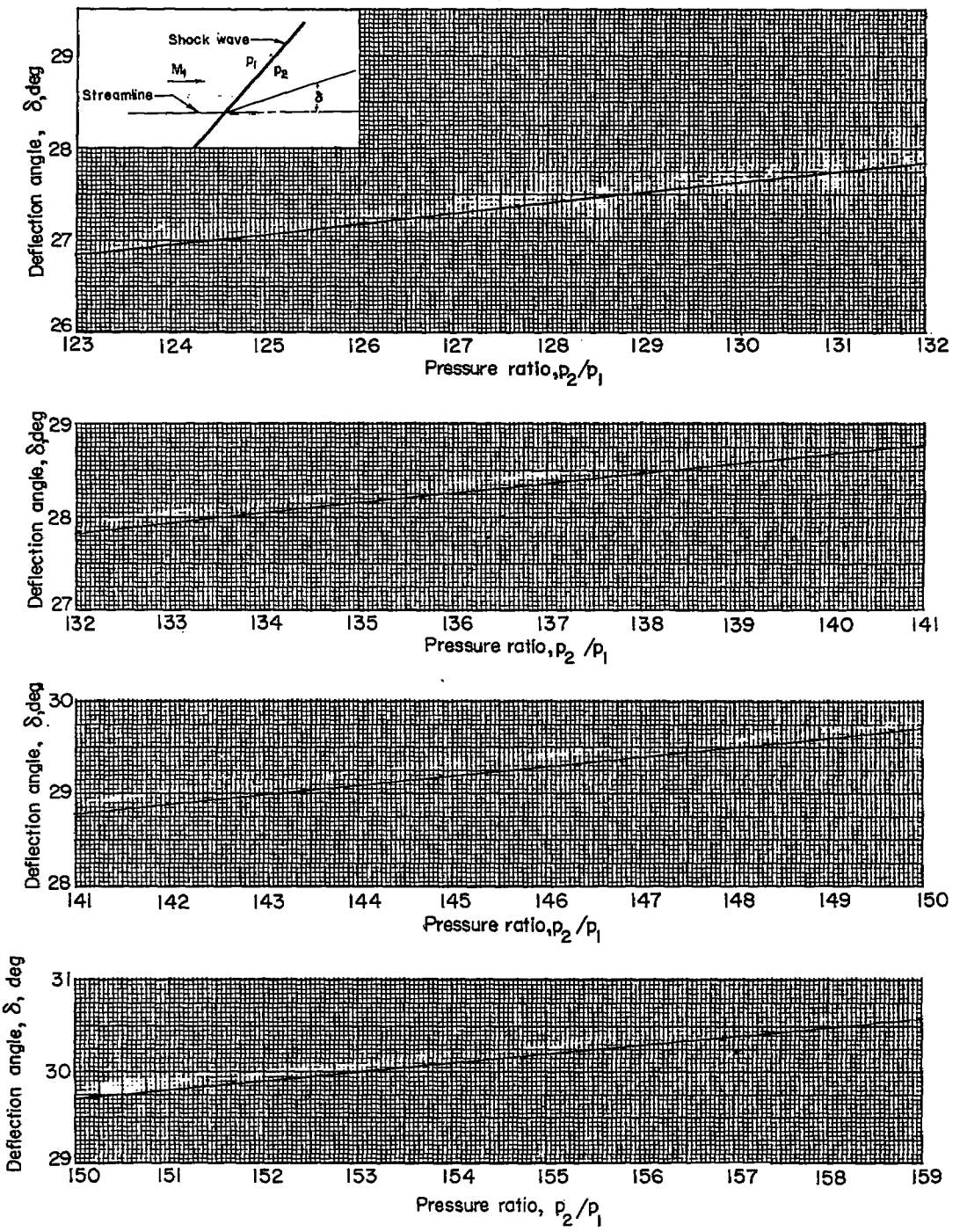
(c) p_2/p_1 = 51 to 87.

Figure 7.- Continued.



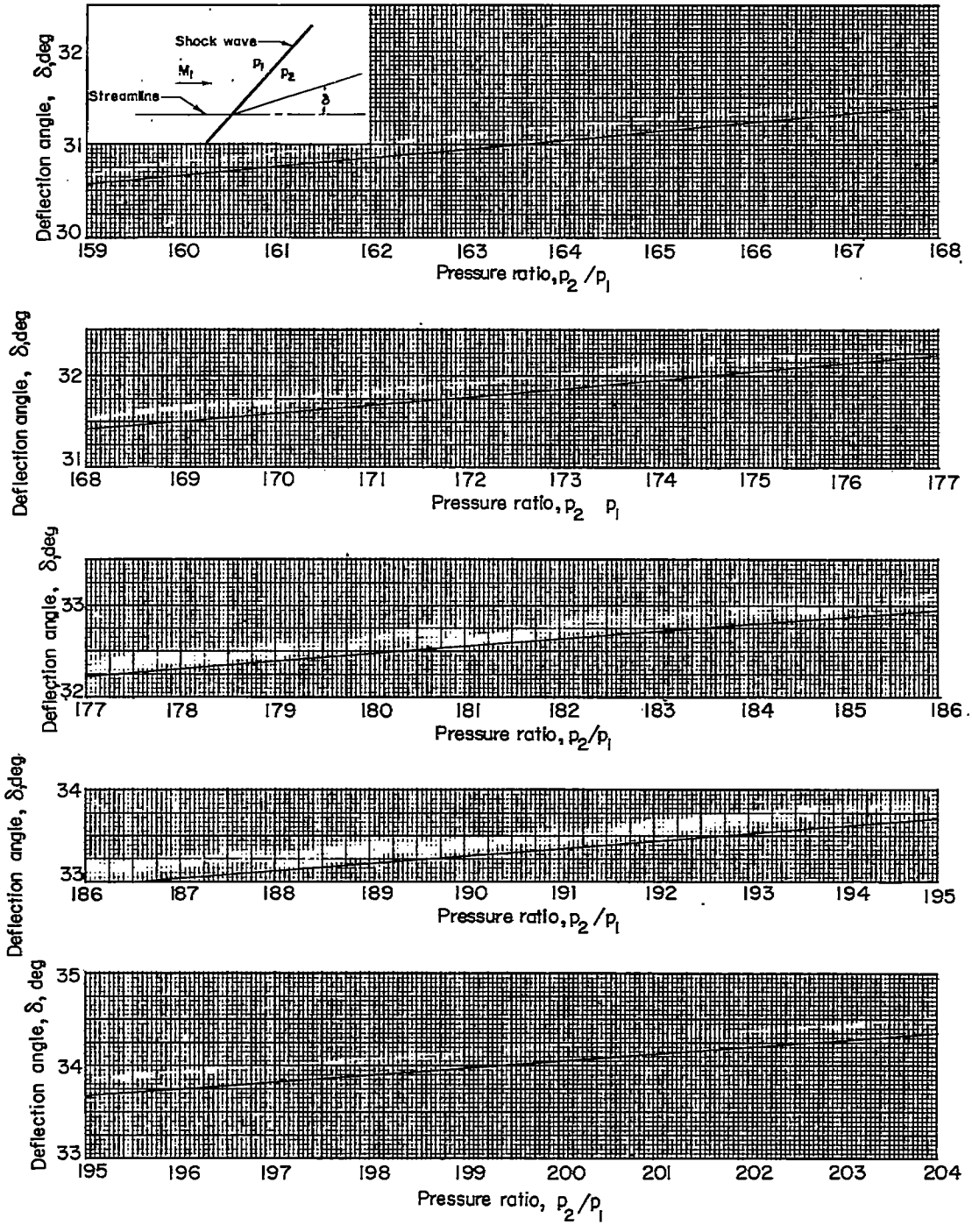
(d) p_2/p_1 = 87 to 123.

Figure 7.- Continued.



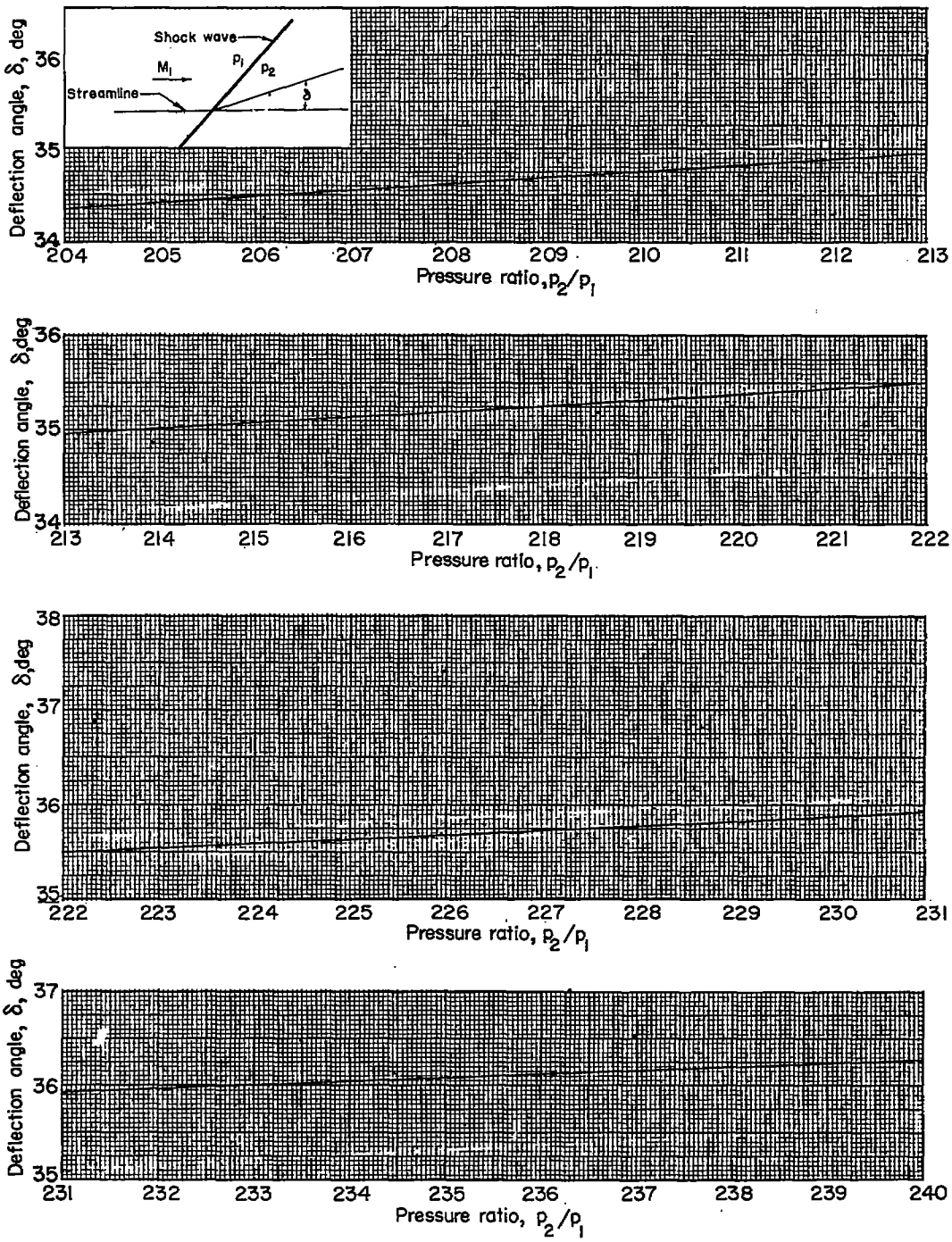
(e) p_2/p_1 = 123 to 159.

Figure 7.- Continued.



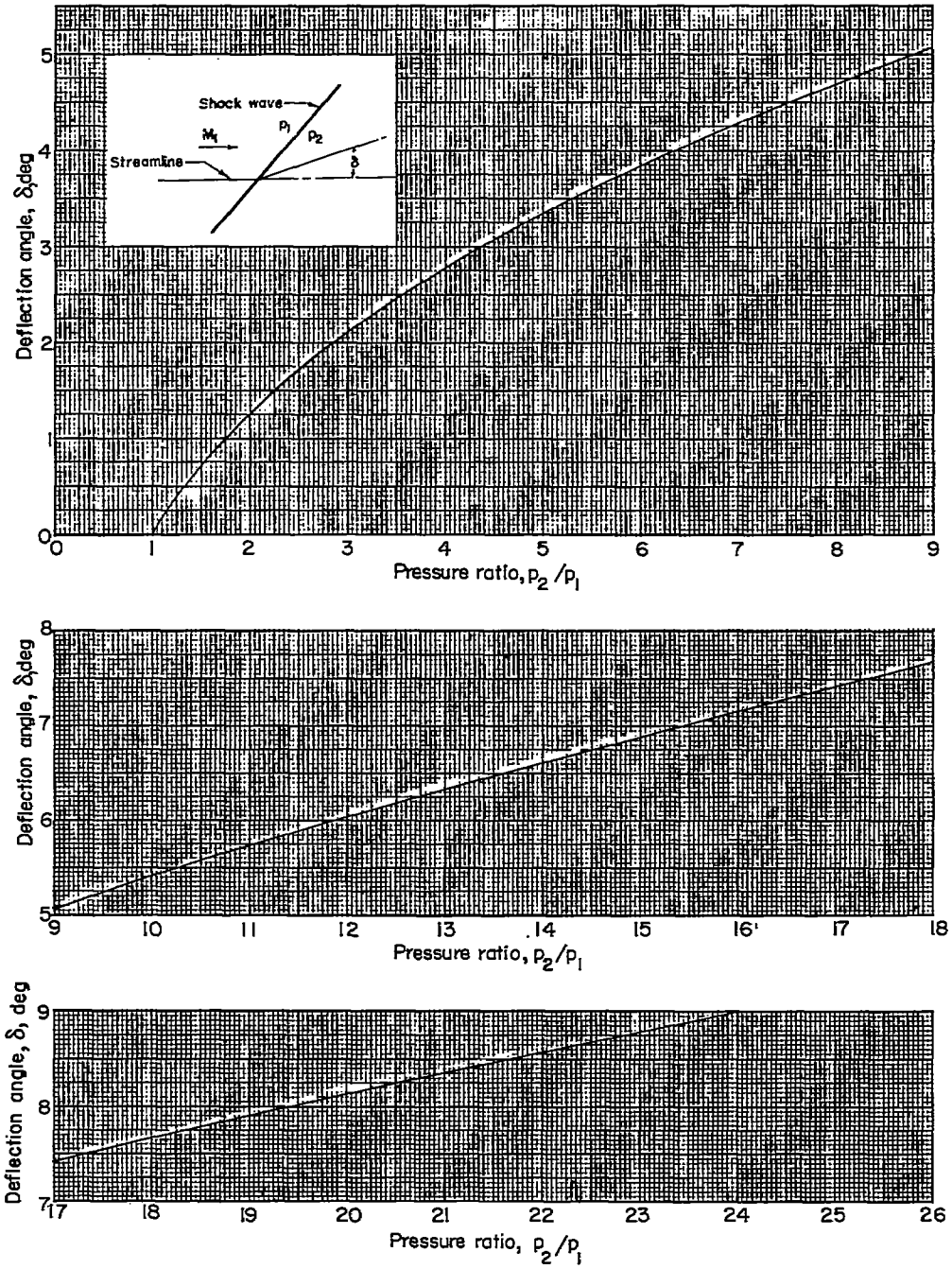
(f) p_2/p_1 = 159 to 204.

Figure 7.- Continued.



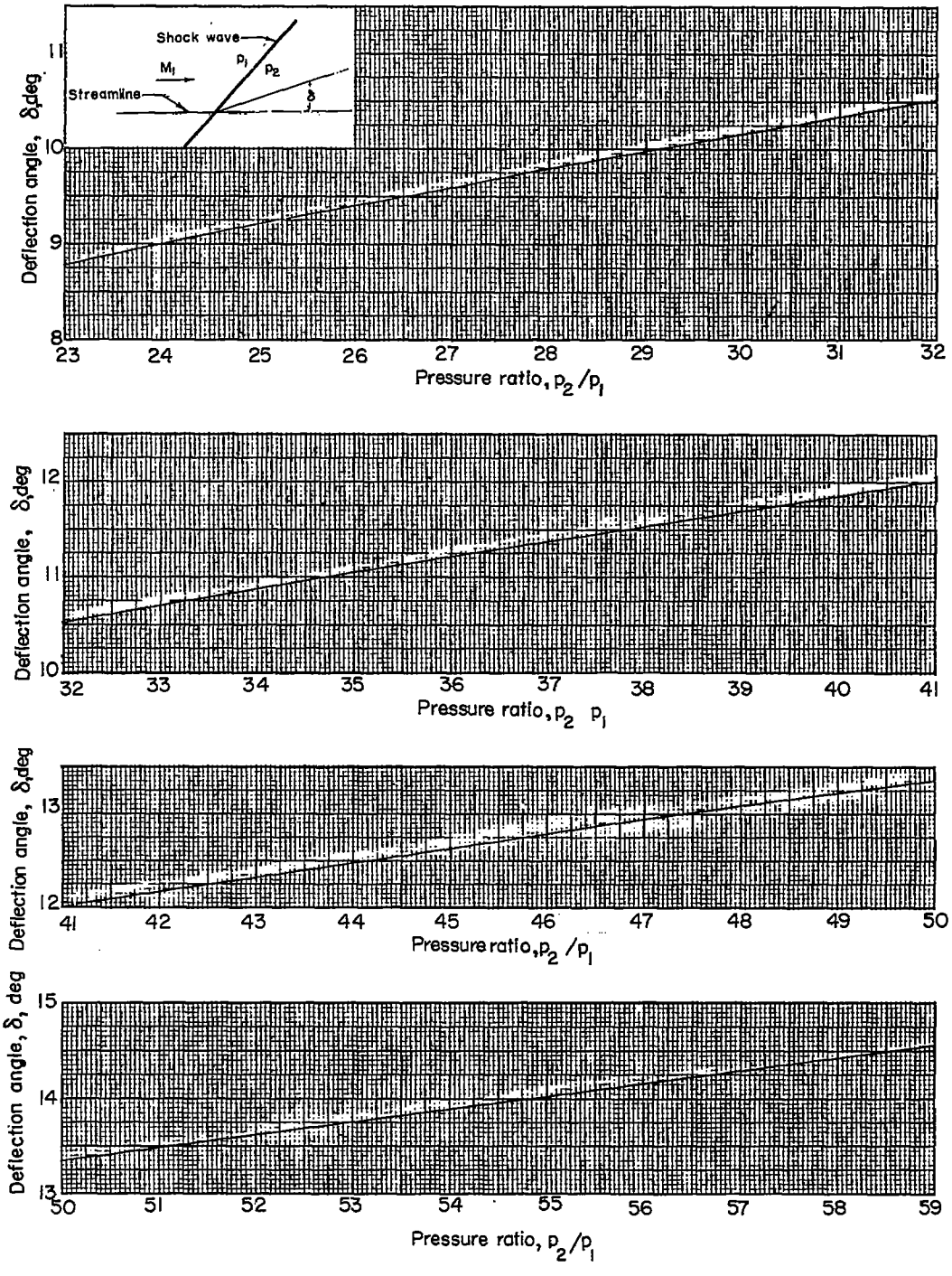
(g) p_2/p_1 = 204 to 240.

Figure 7.- Concluded.



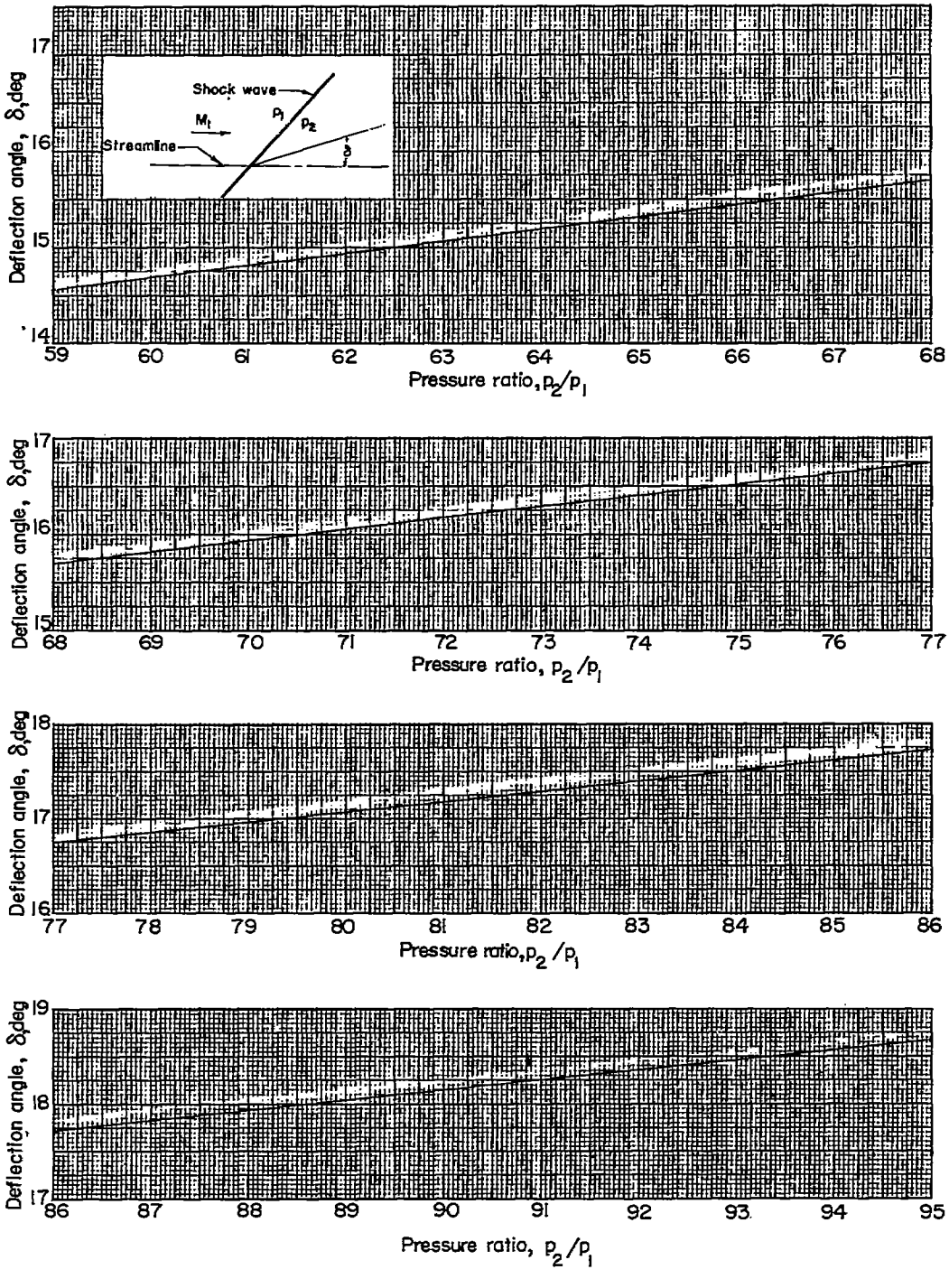
(a) p_2/p_1 = 0 to 26.

Figure 8.- Variation of the pressure ratio through an oblique shock wave as a function of the angle of flow deviation. $M_1 = 20$; $\gamma = 5/3$.



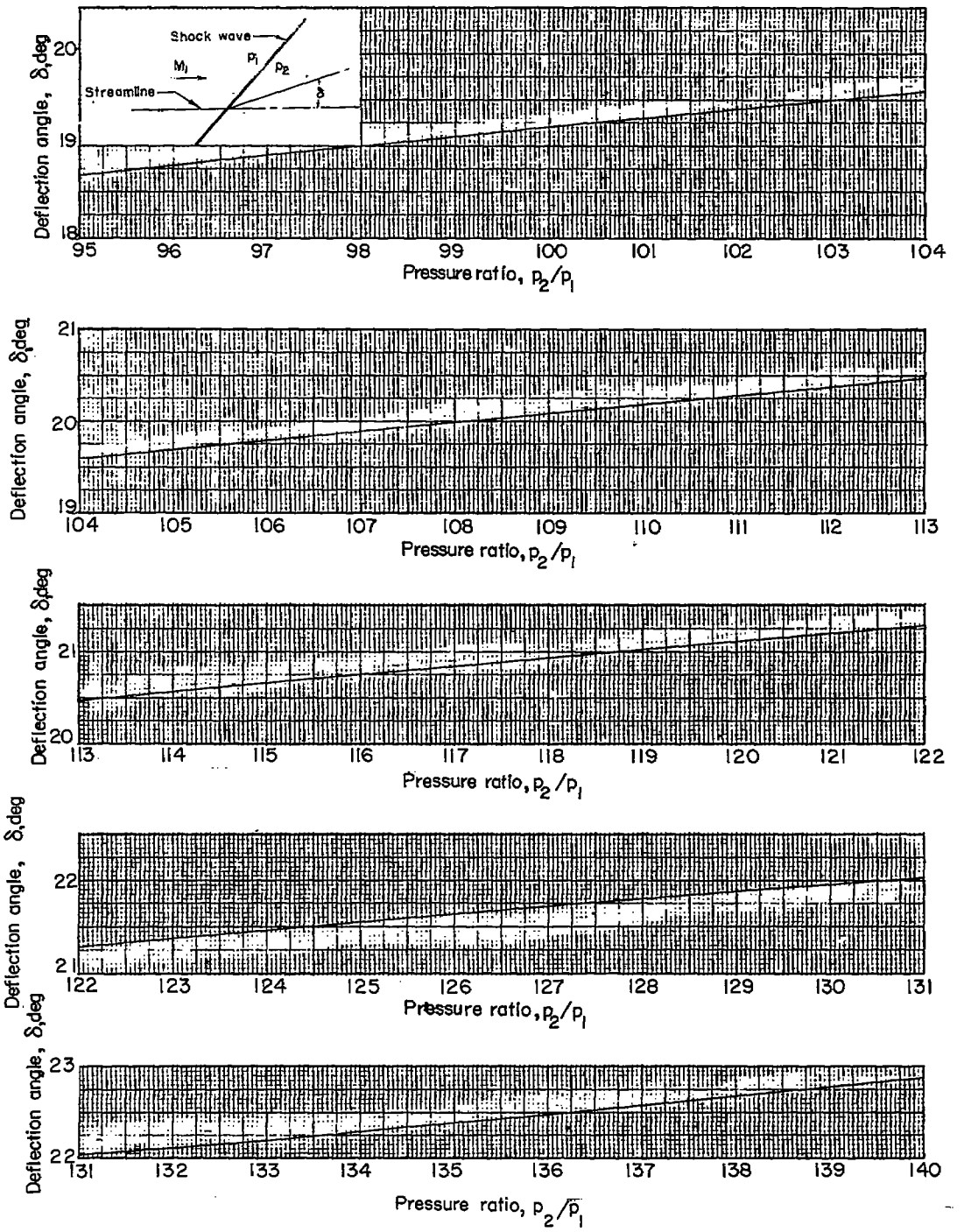
(b) p_2/p_1 = 23 to 59.

Figure 8.- Continued.



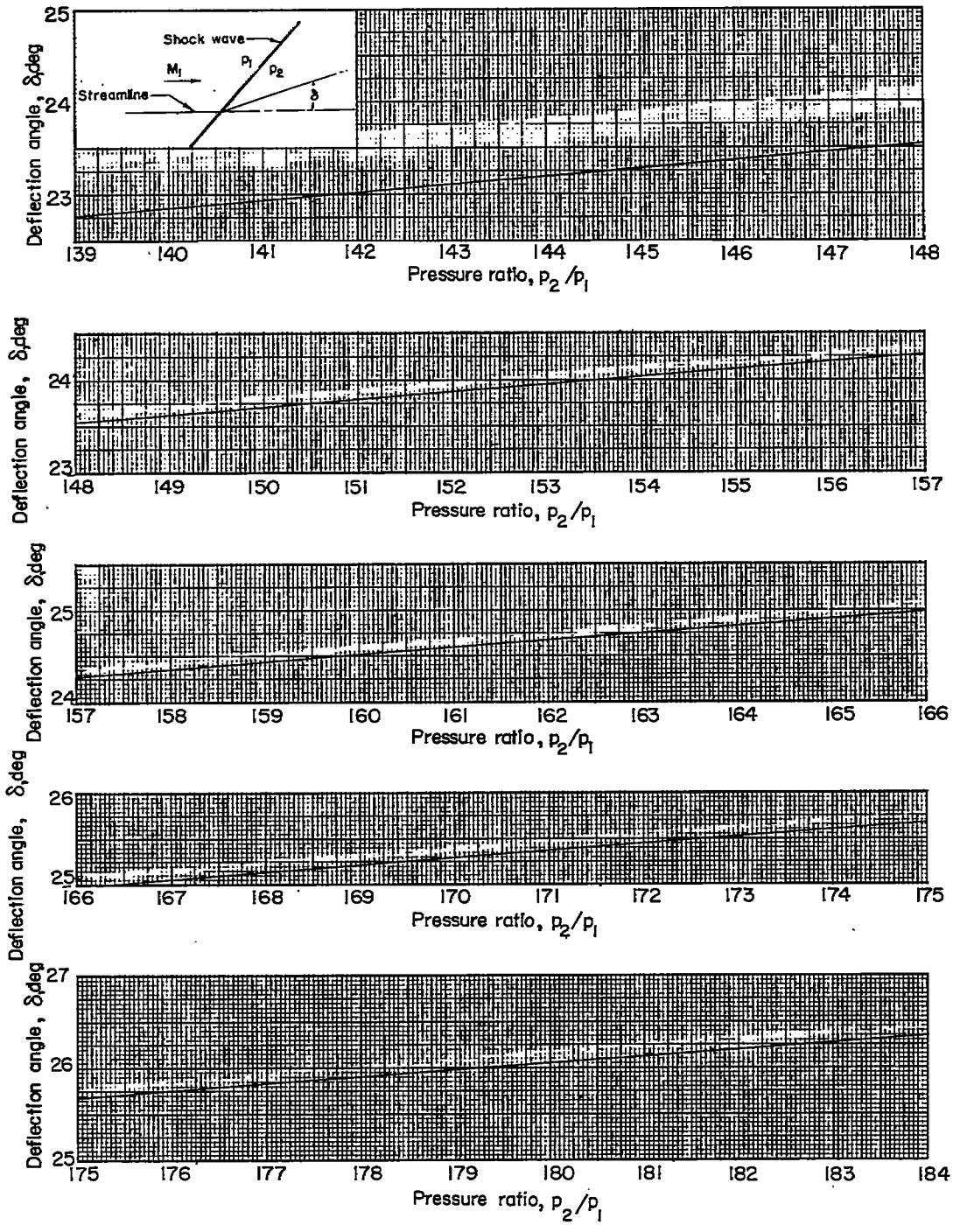
(c) p_2/p_1 = 59 to 95.

Figure 8.- Continued.



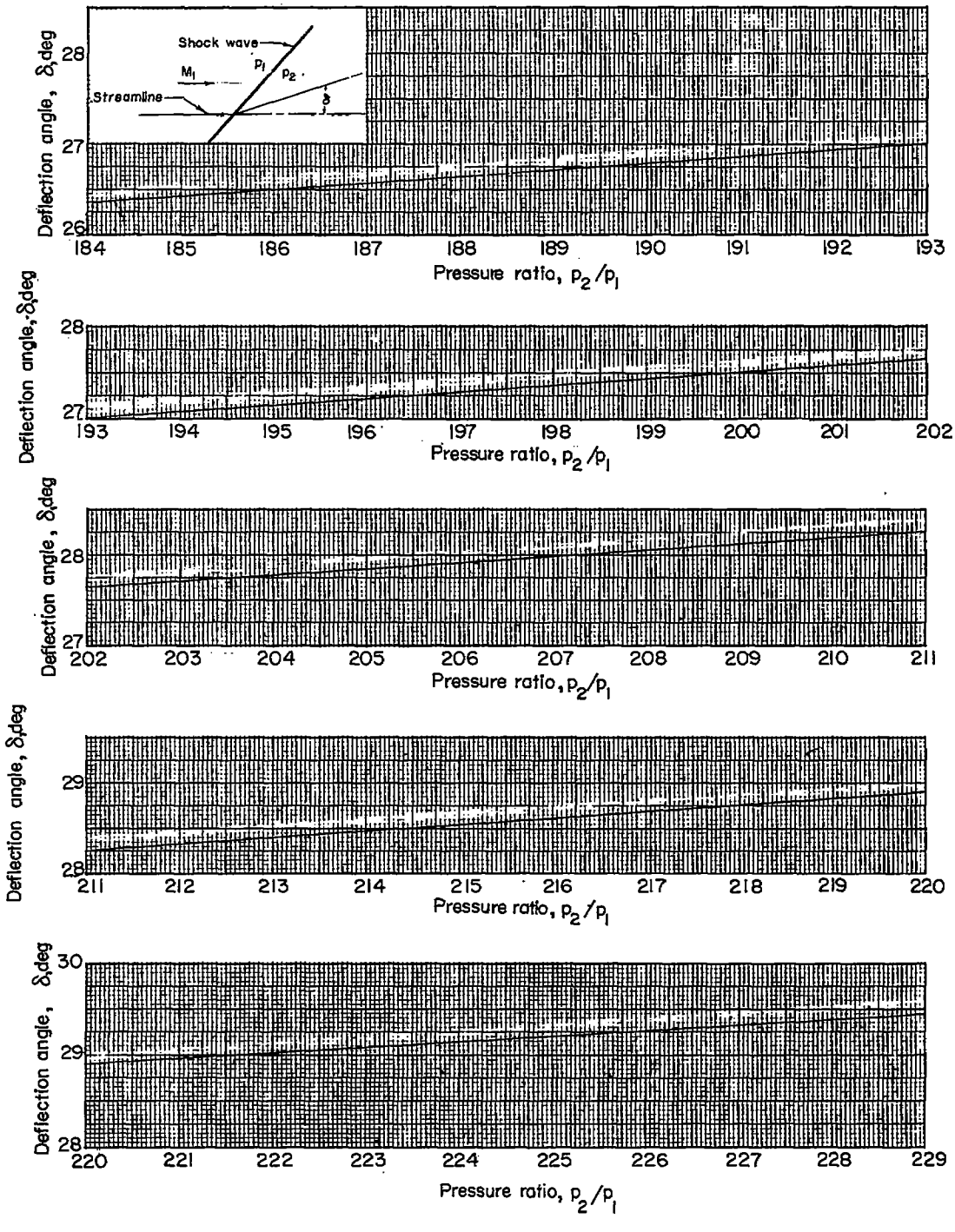
(d) p_2/p_1 = 95 to 140.

Figure 8.- Continued.



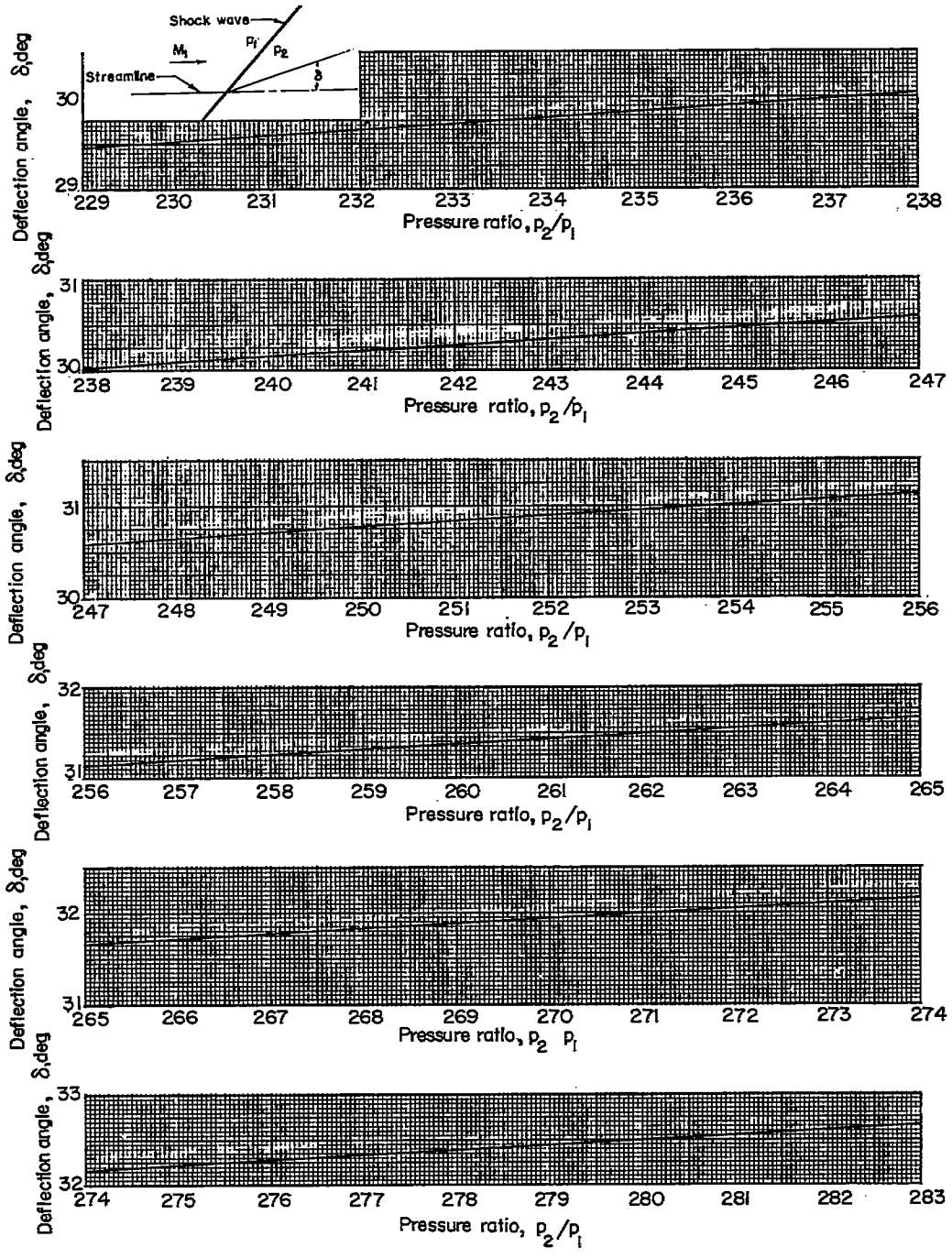
(e) p_2/p_1 = 139 to 184.

Figure 8.- Continued.



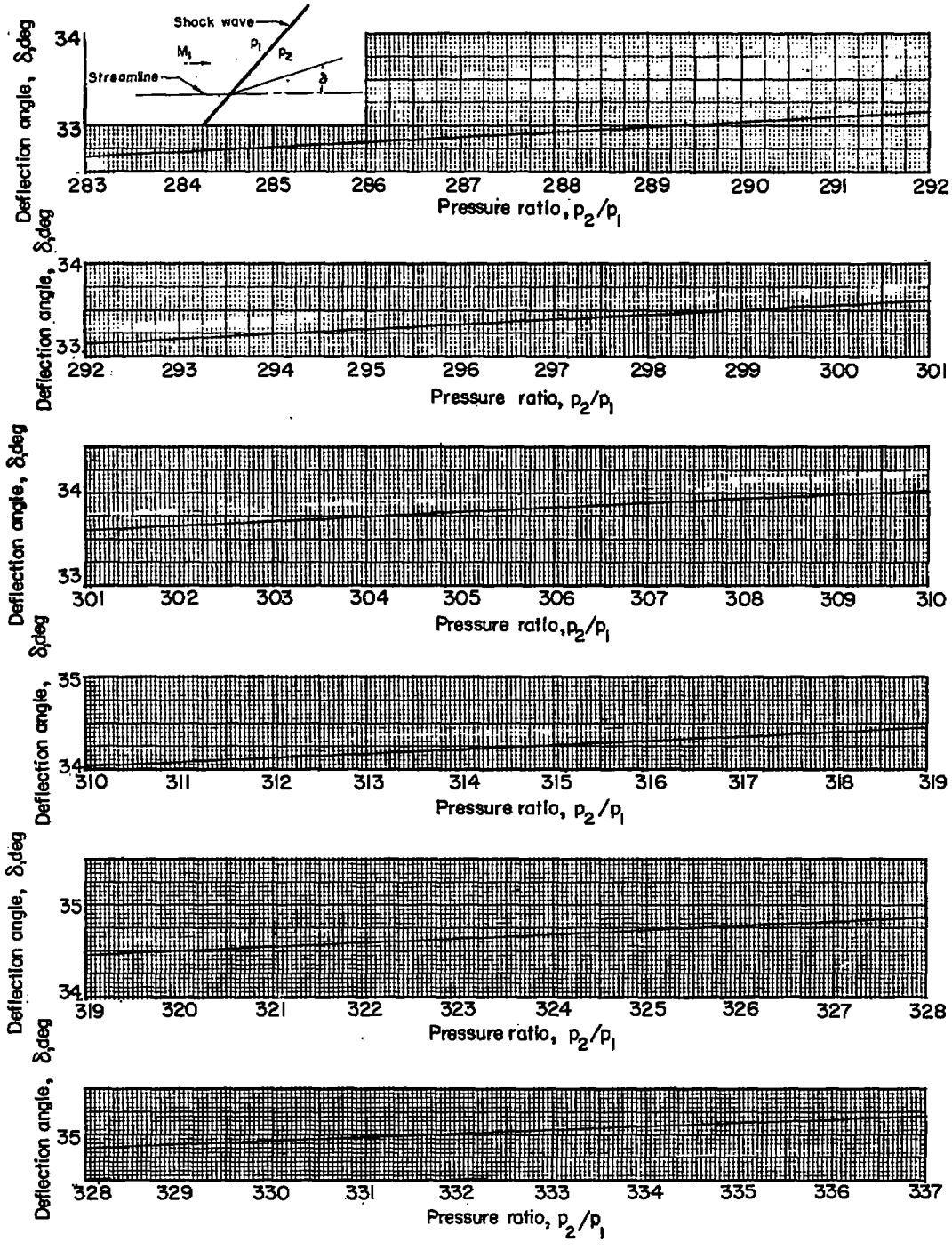
(f) p_2/p_1 = 184 to 229.

Figure 8.- Continued.



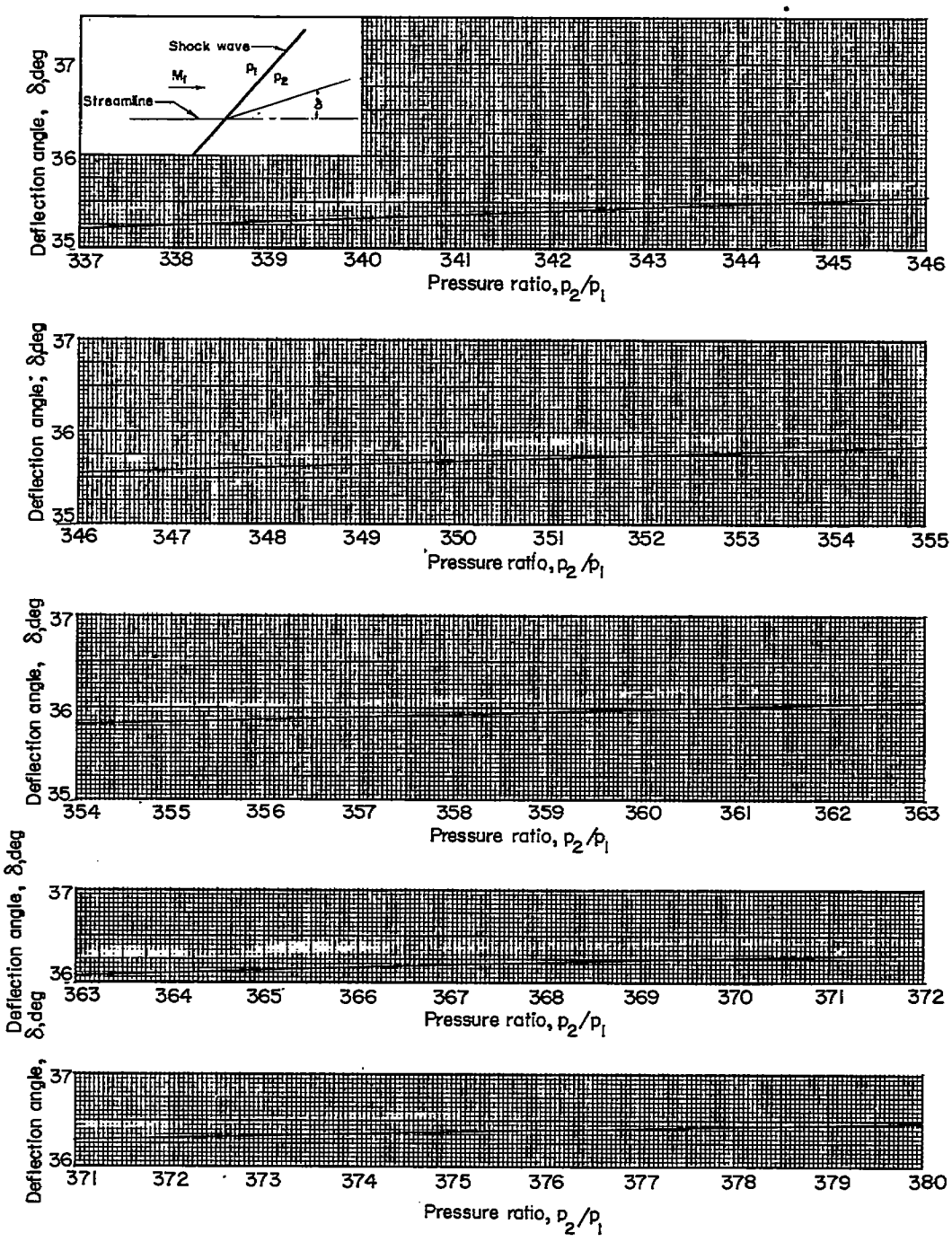
(g) p_2/p_1 = 229 to 283.

Figure 8.- Continued.



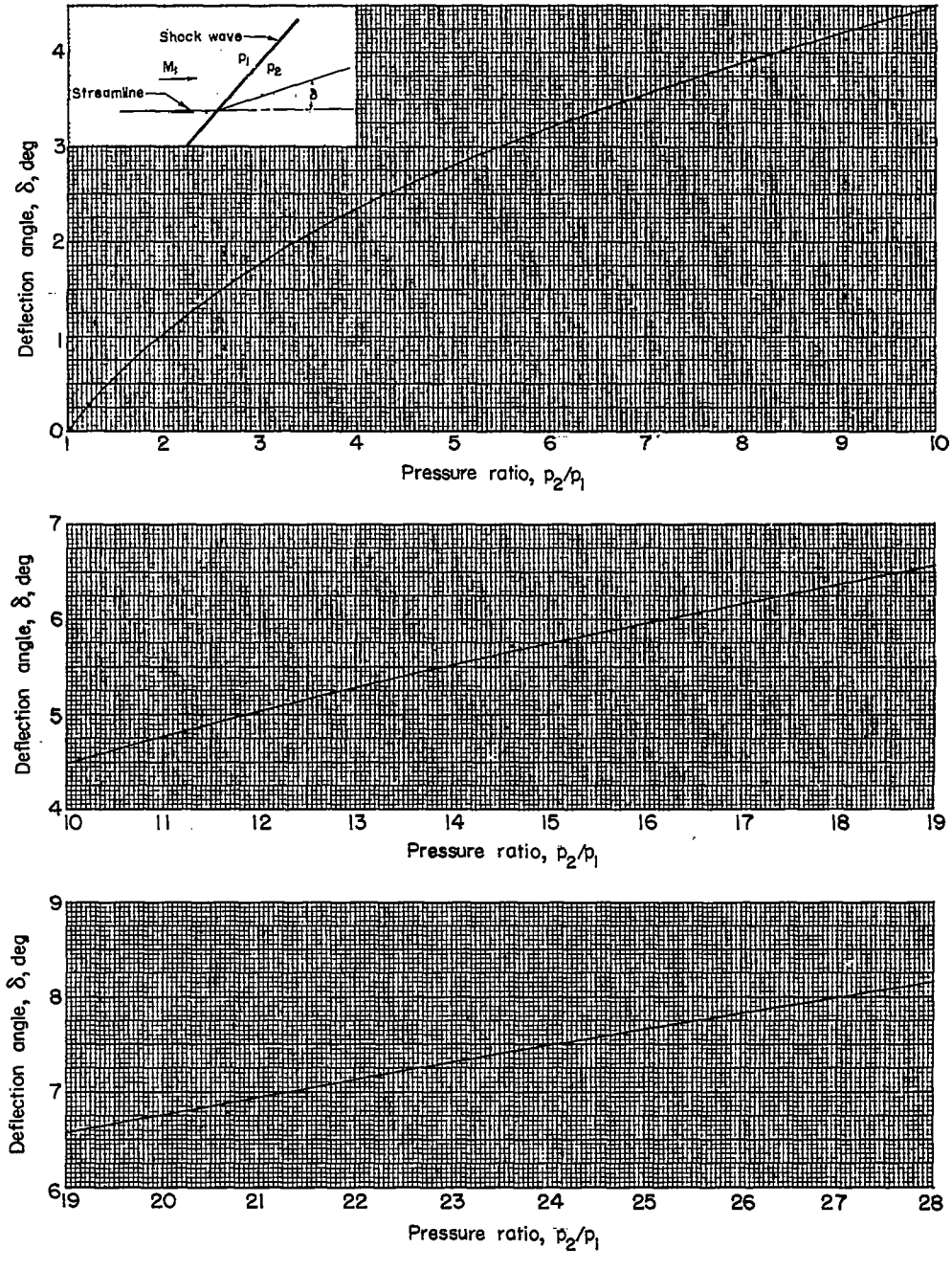
(h) p_2/p_1 = 283 to 337.

Figure 8.- Continued.



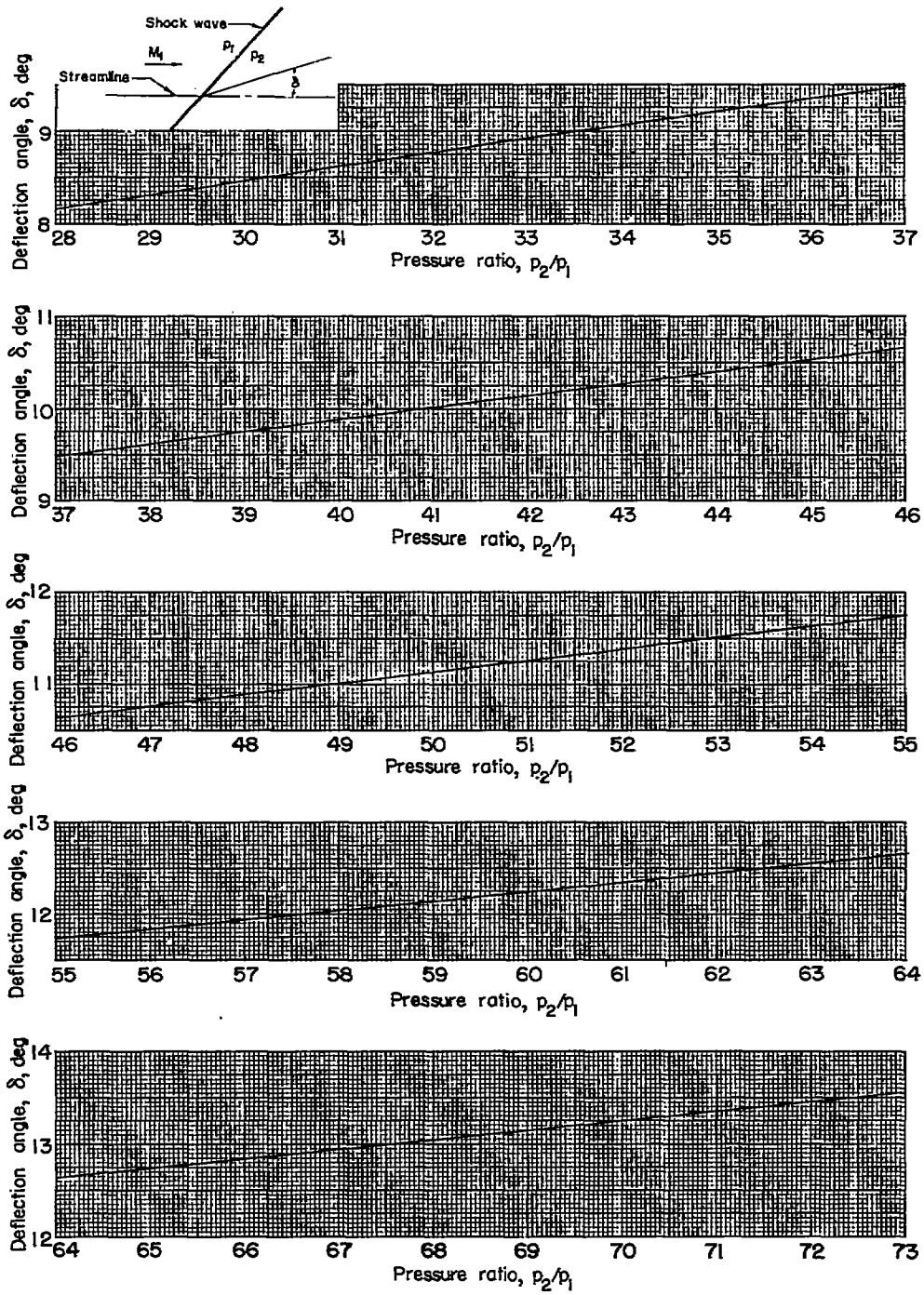
(i) p_2/p_1 = 337 to 380.

Figure 8.- Concluded.



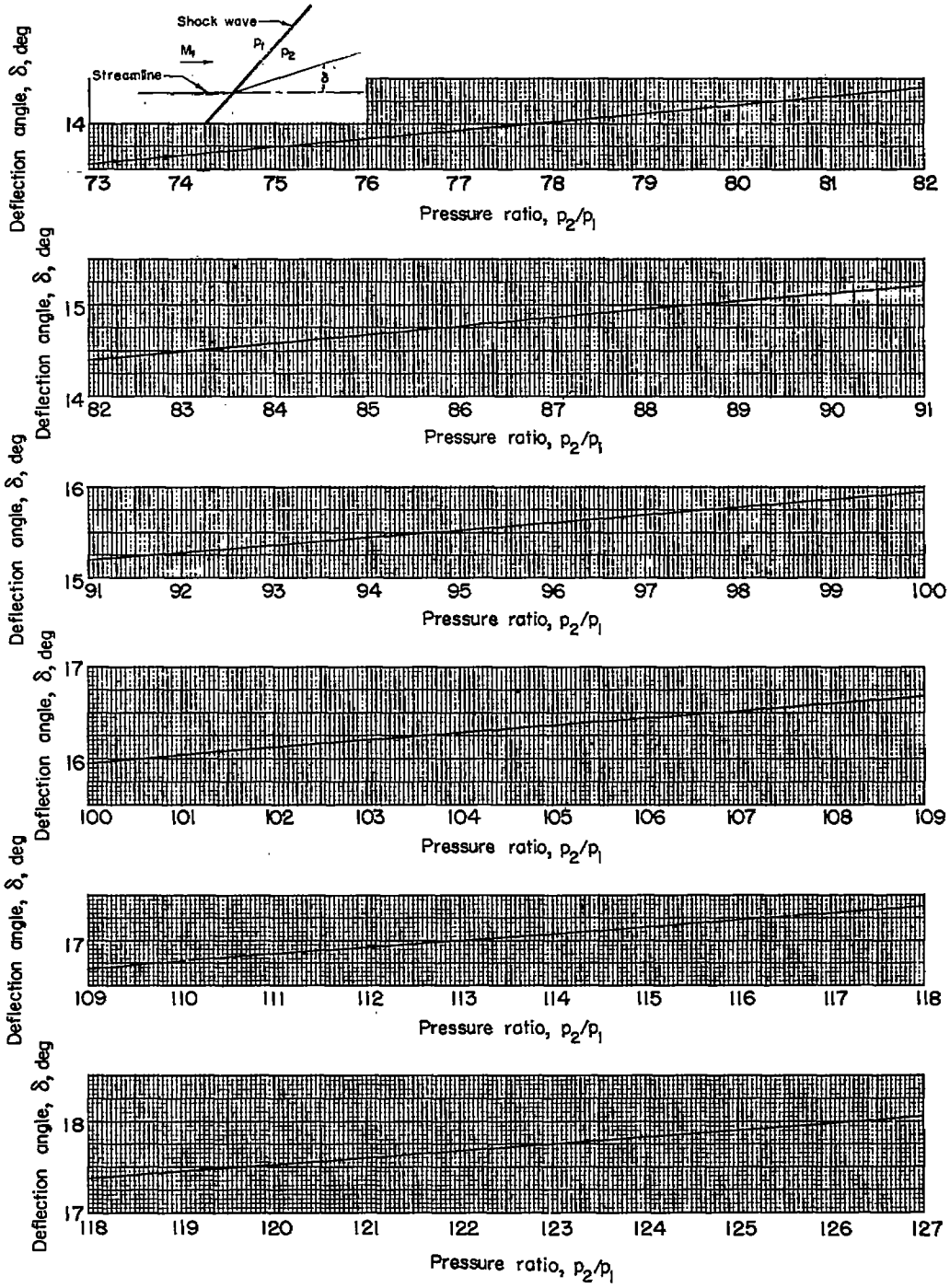
(a) p_2/p_1 = 1 to 28.

Figure 9.- Variation of the pressure ratio through an oblique shock wave as a function of wedge angle of flow deviation. $M_1 = 24$; $\gamma = 5/3$.



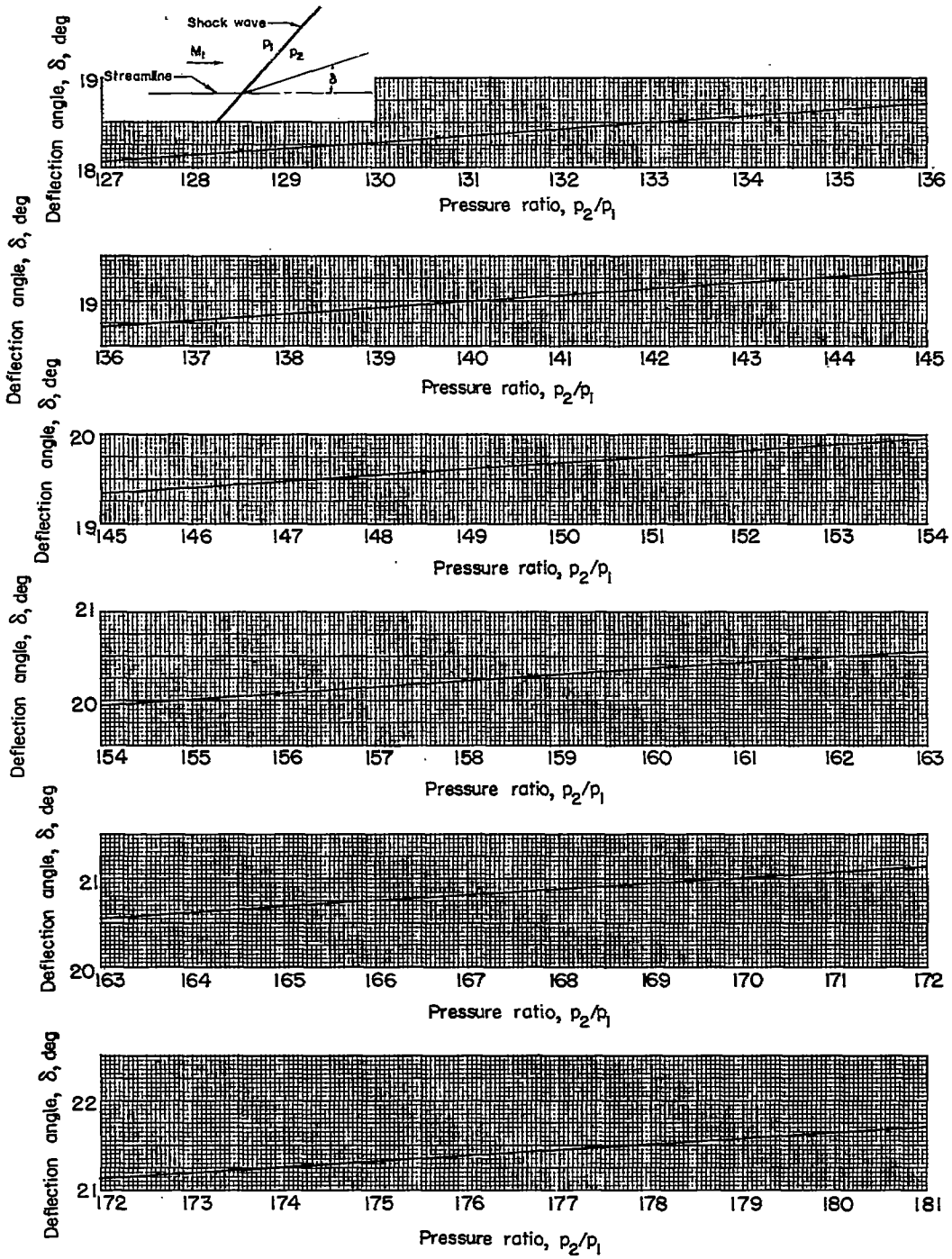
(b) p_2/p_1 = 28 to 73.

Figure 9.- Continued.



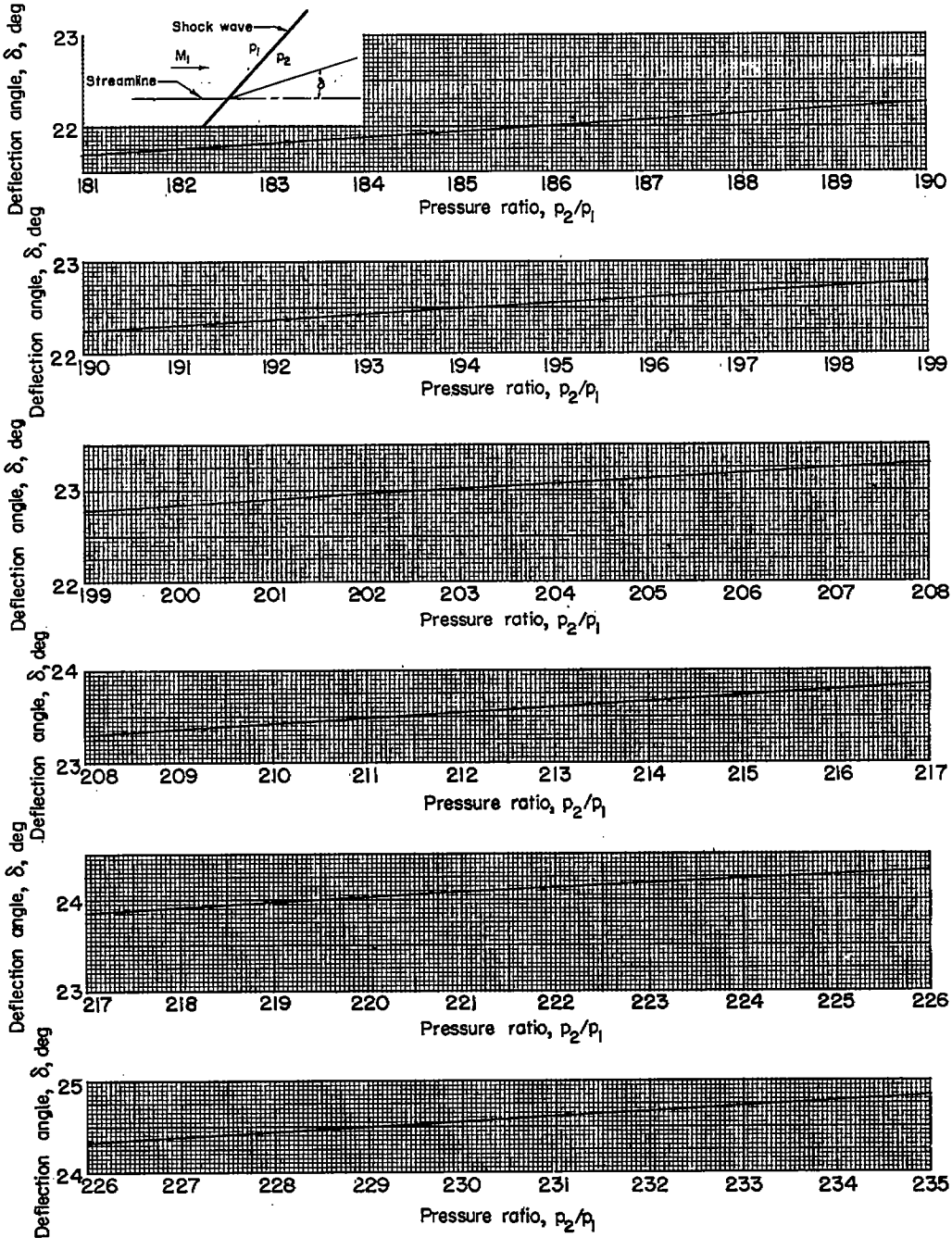
(c) p_2/p_1 = 73 to 127.

Figure 9.- Continued.



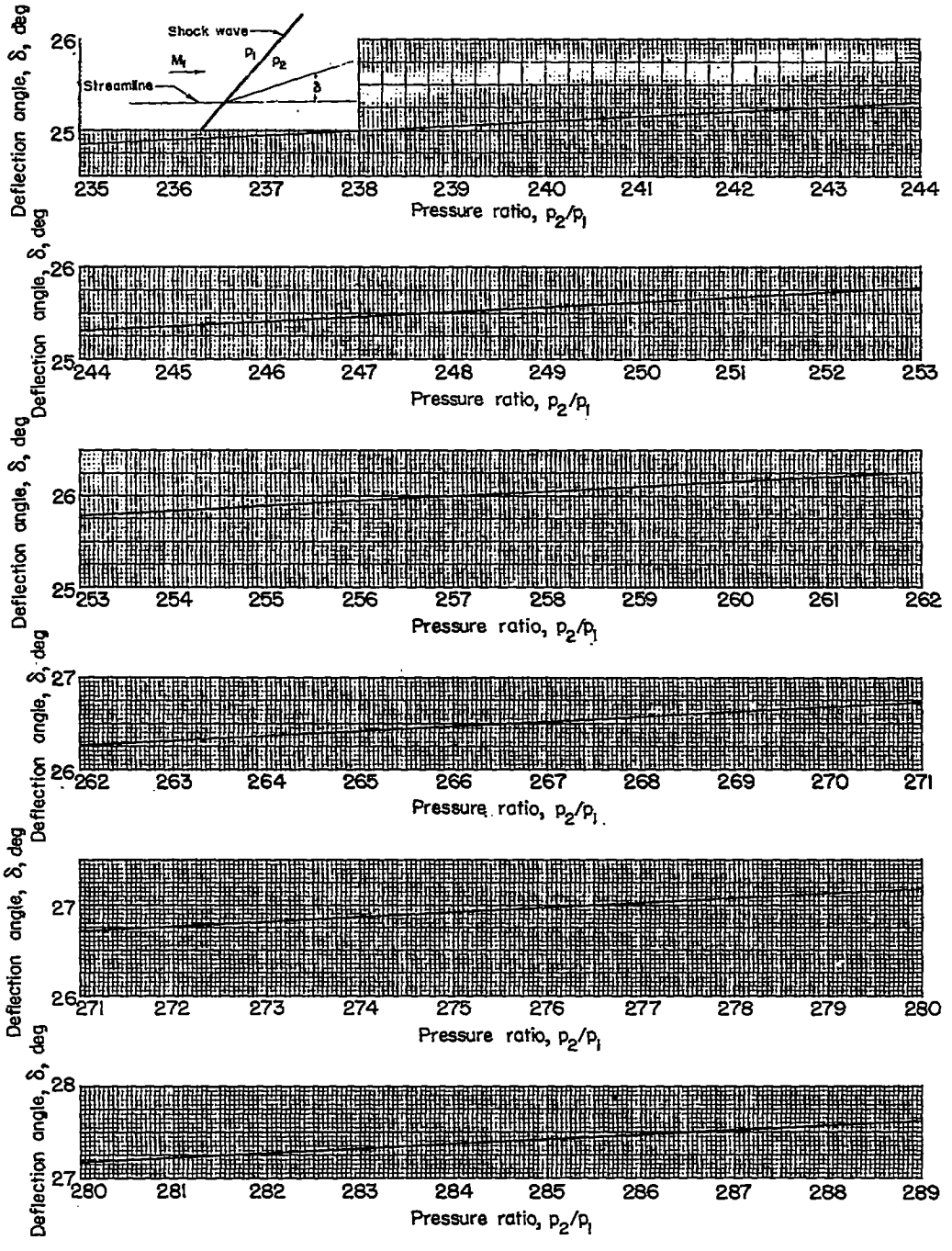
(d) p_2/p_1 = 127 to 181.

Figure 9.- Continued.



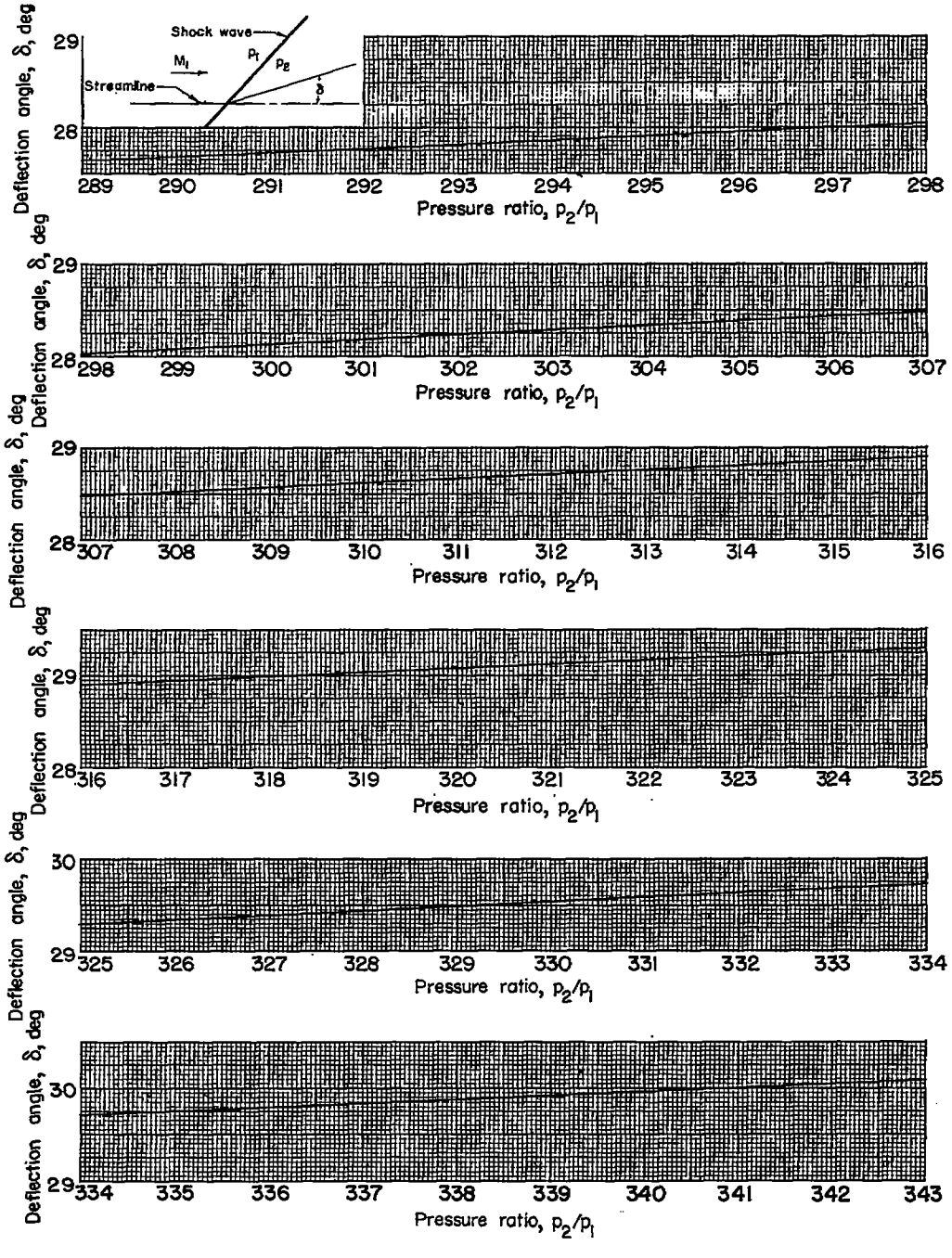
(e) p_2/p_1 = 181 to 235.

Figure 9.- Continued.



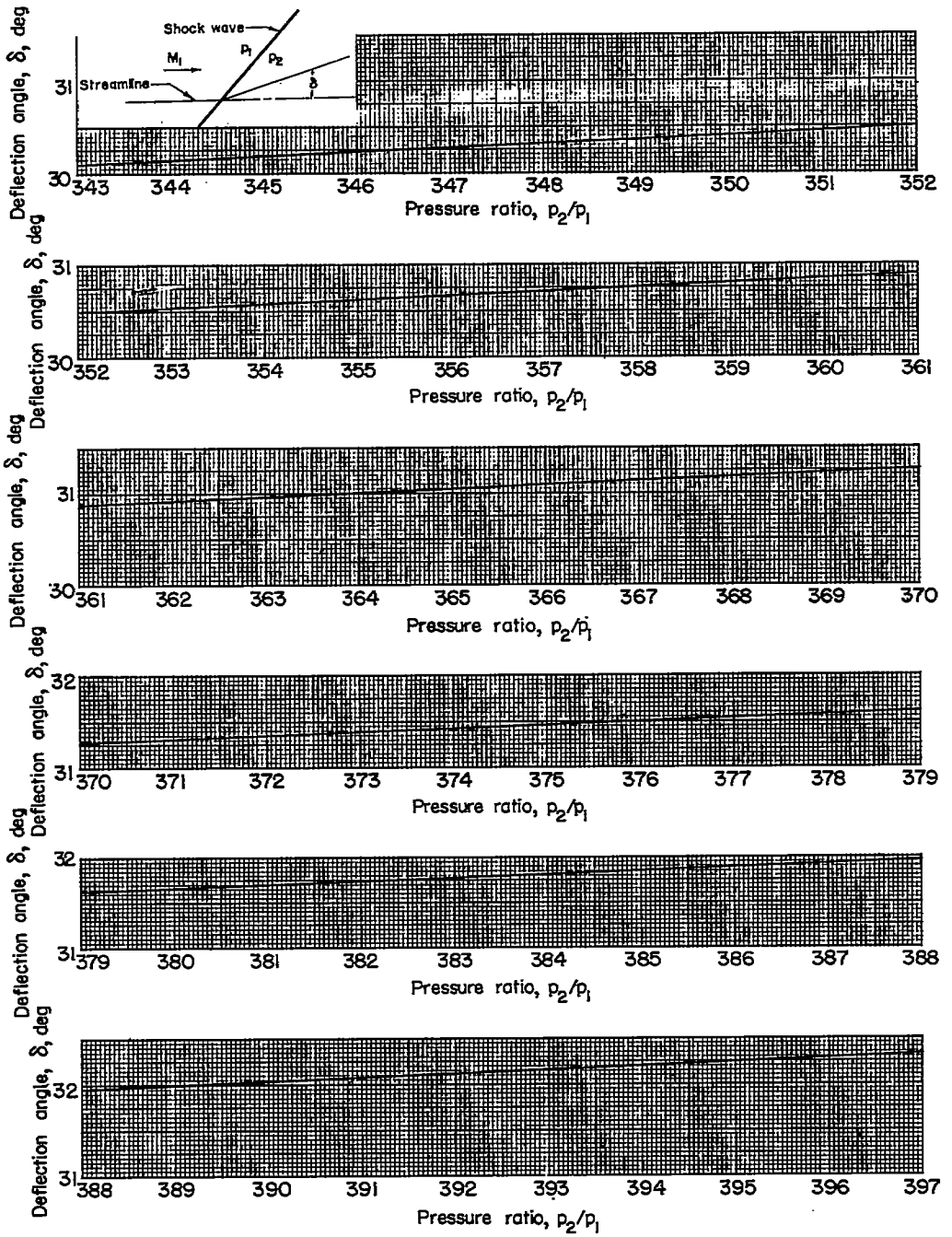
(f) p_2/p_1 = 235 to 289.

Figure 9.- Continued.



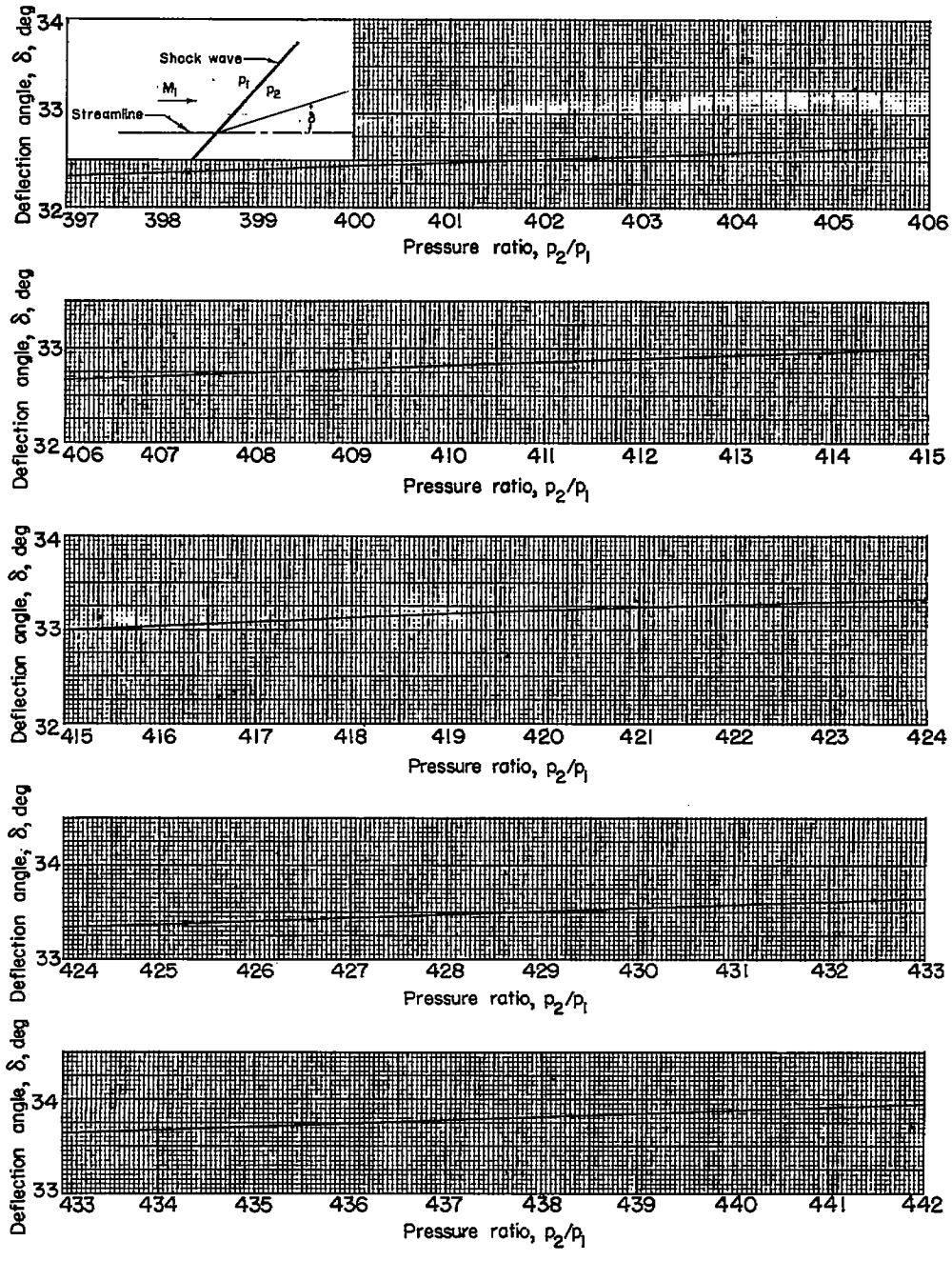
(g) p_2/p_1 = 289 to 343.

Figure 9.- Continued.



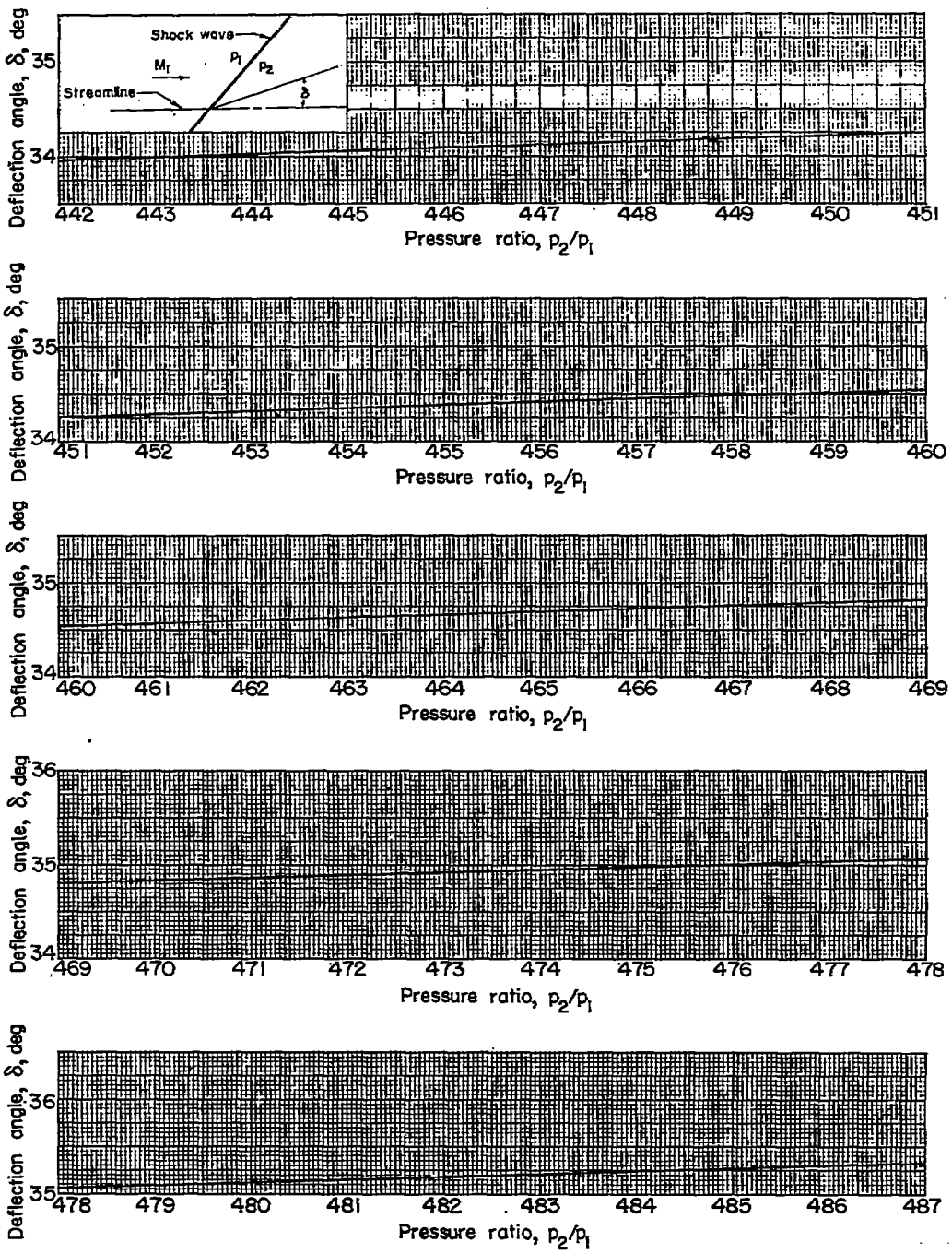
(h) p_2/p_1 = 343 to 397.

Figure 9.- Continued.



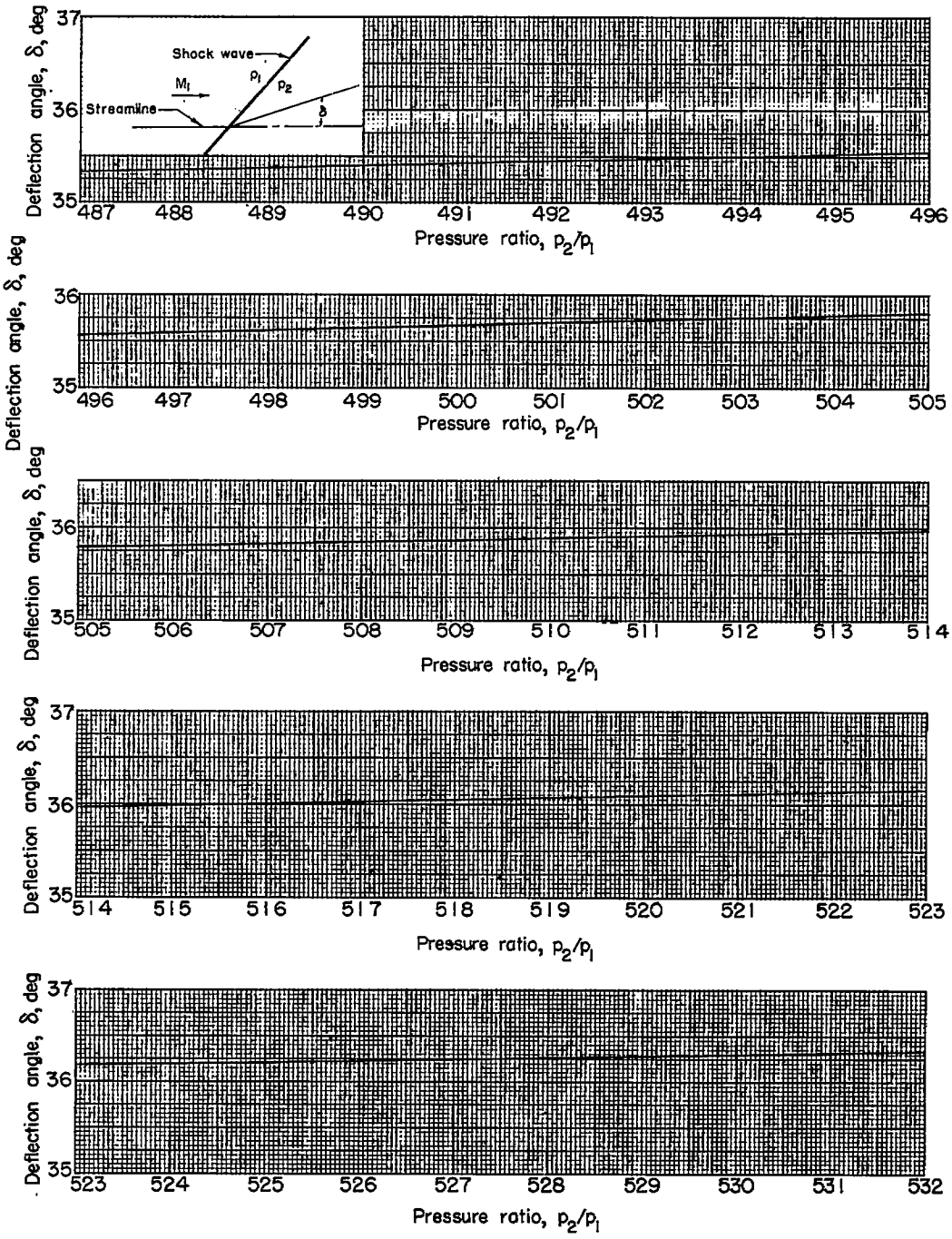
(i) p_2/p_1 = 397 to 442.

Figure 9.- Continued.



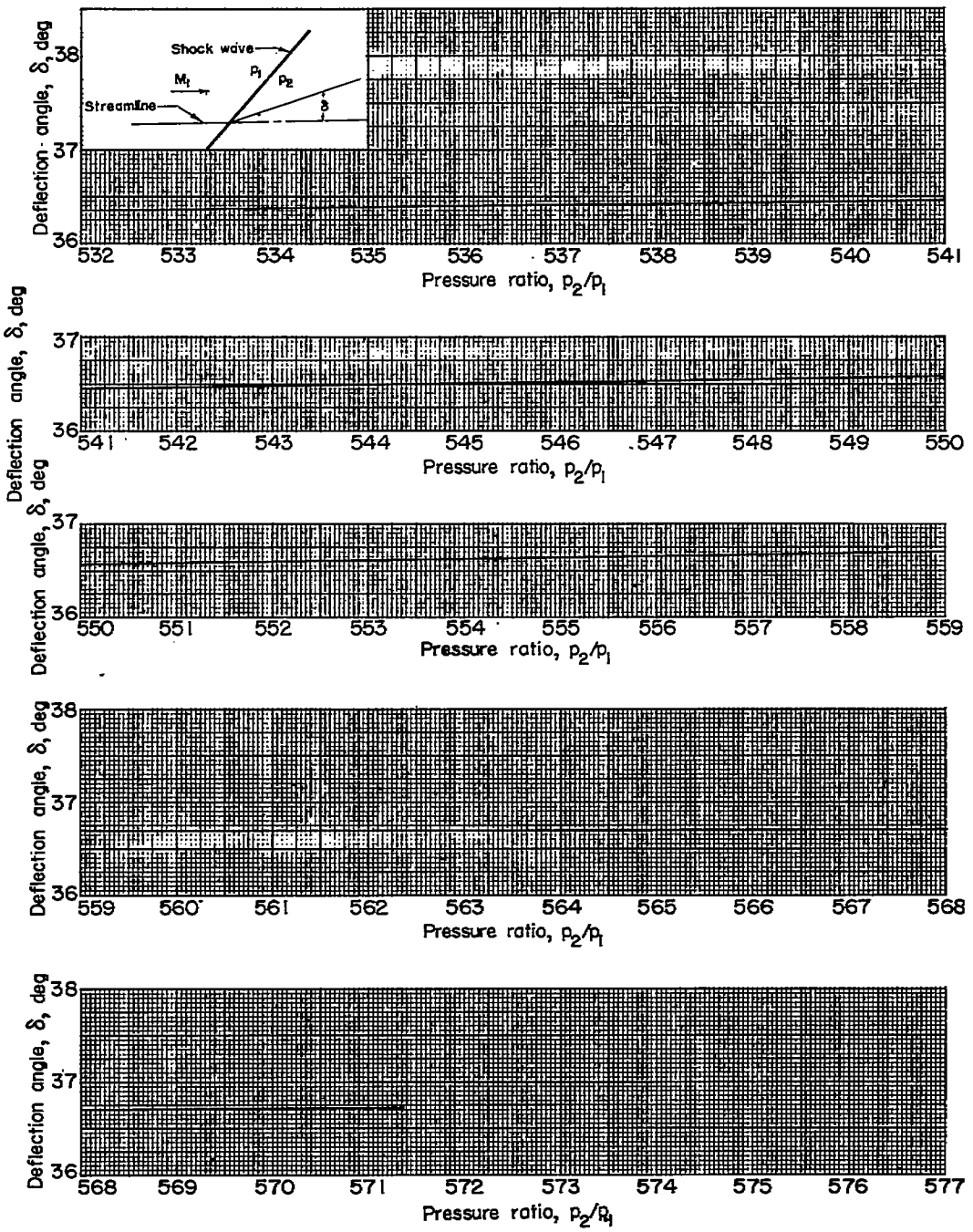
(j) p_2/p_1 = 442 to 487.

Figure 9.- Continued.



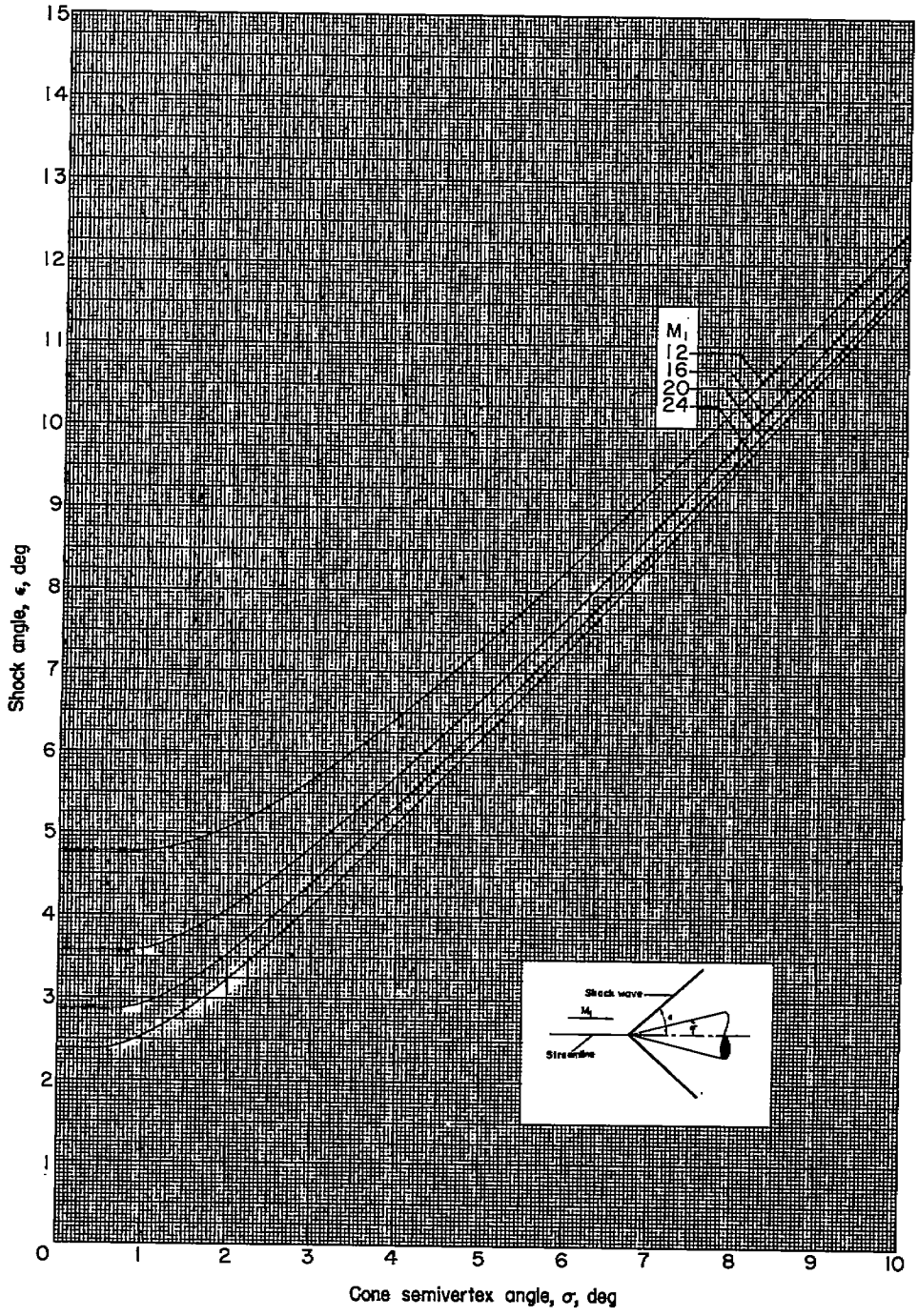
(k) p_2/p_1 = 487 to 532.

Figure 9.- Continued.



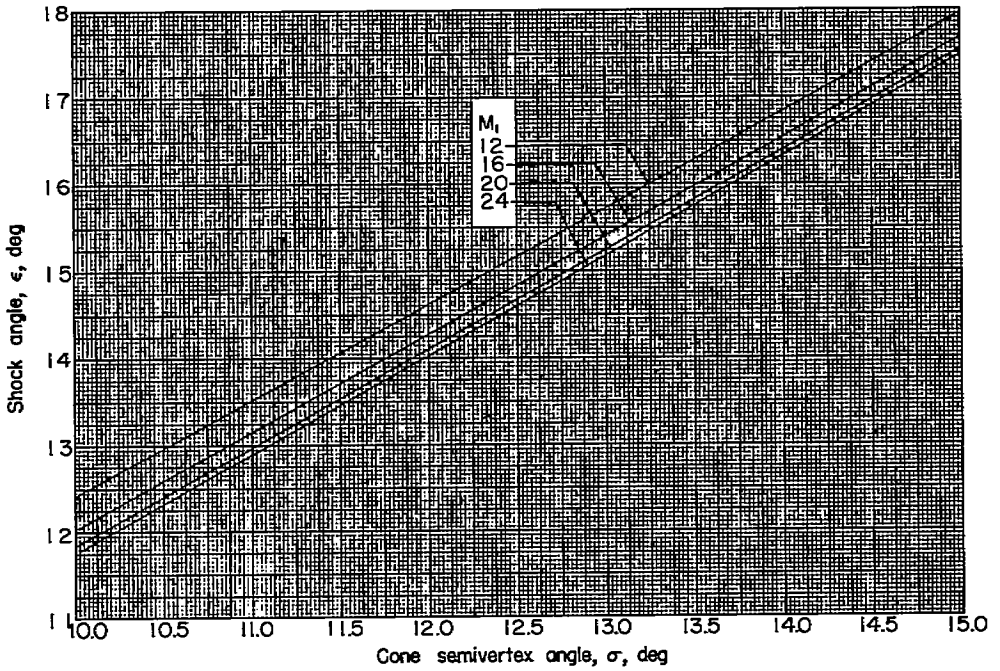
(l) p_2/p_1 = 532 to 577.

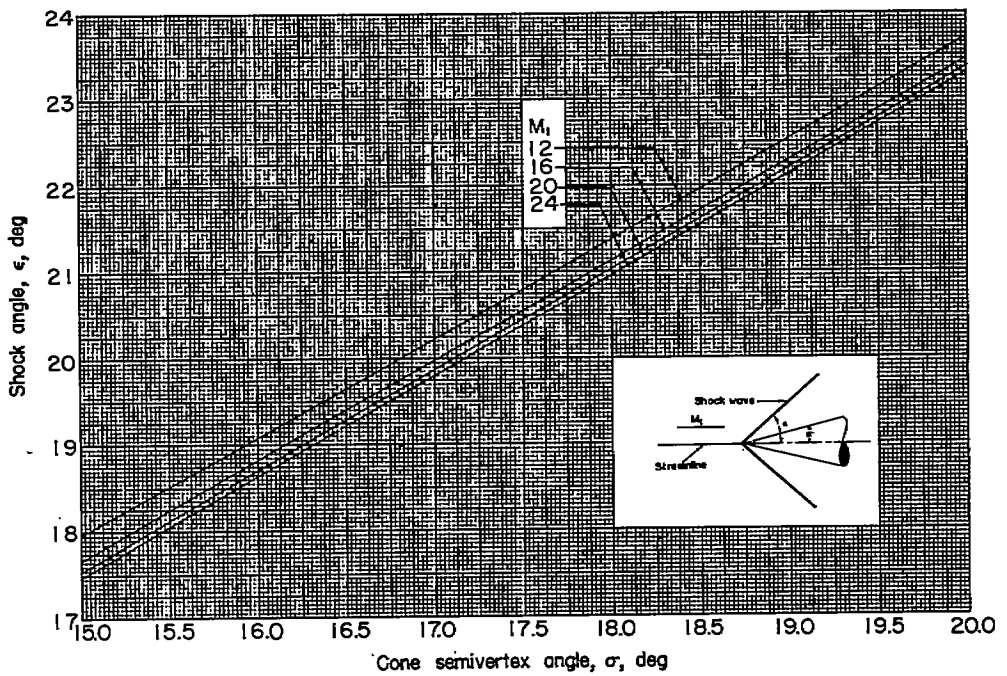
Figure 9.- Concluded.



(a) $\sigma = 0^{\circ}$ to 10°.

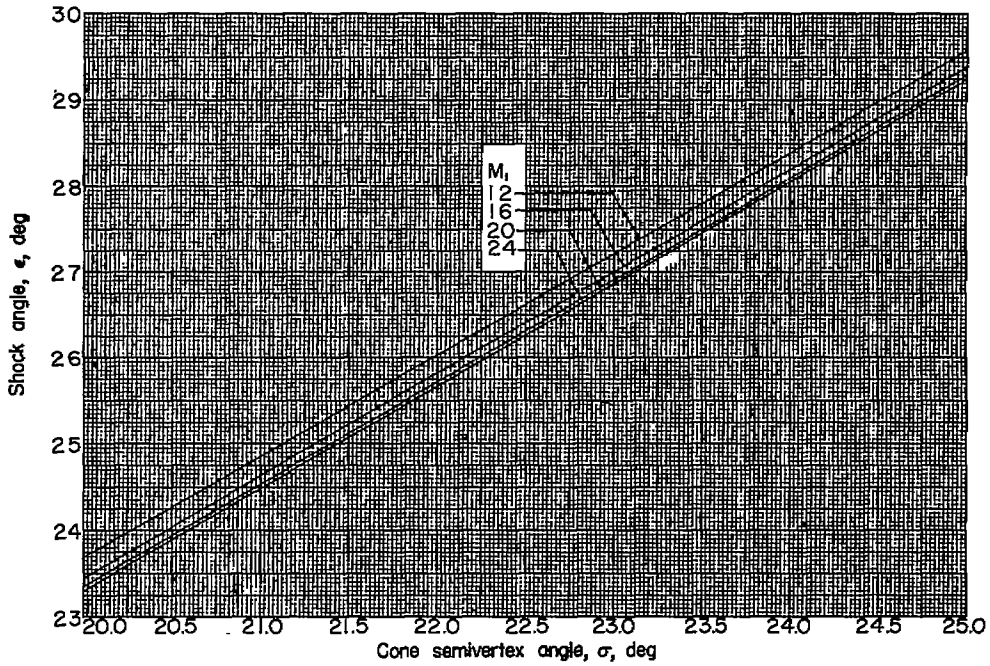
Figure 10.- Variation of the shock-wave angle with cone semivertex angle.

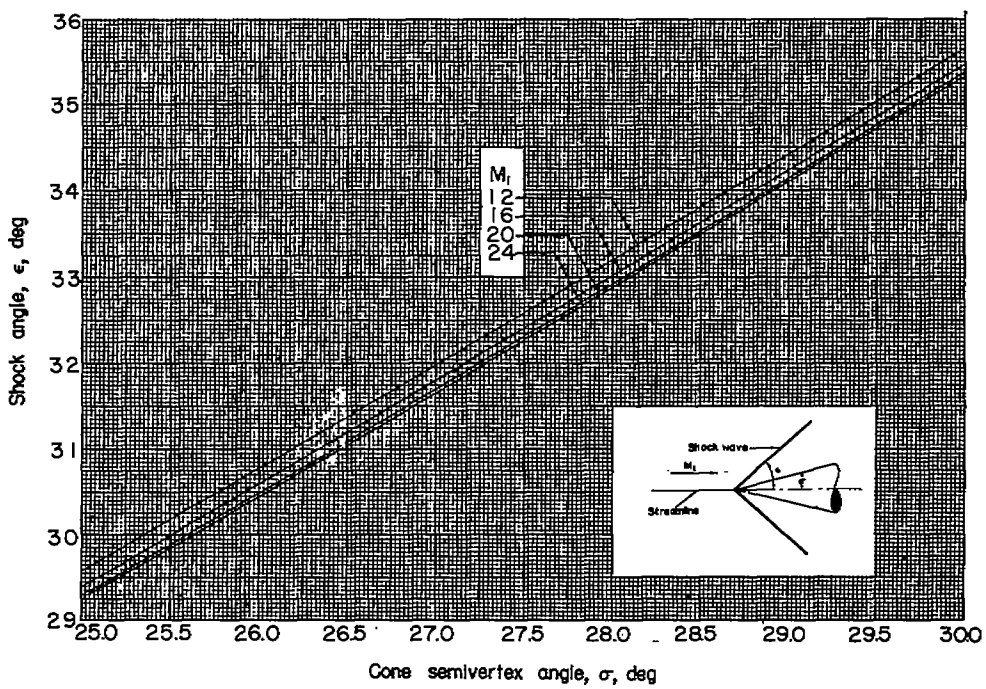




(b) $\sigma = 10^{\circ}$ to 20°.

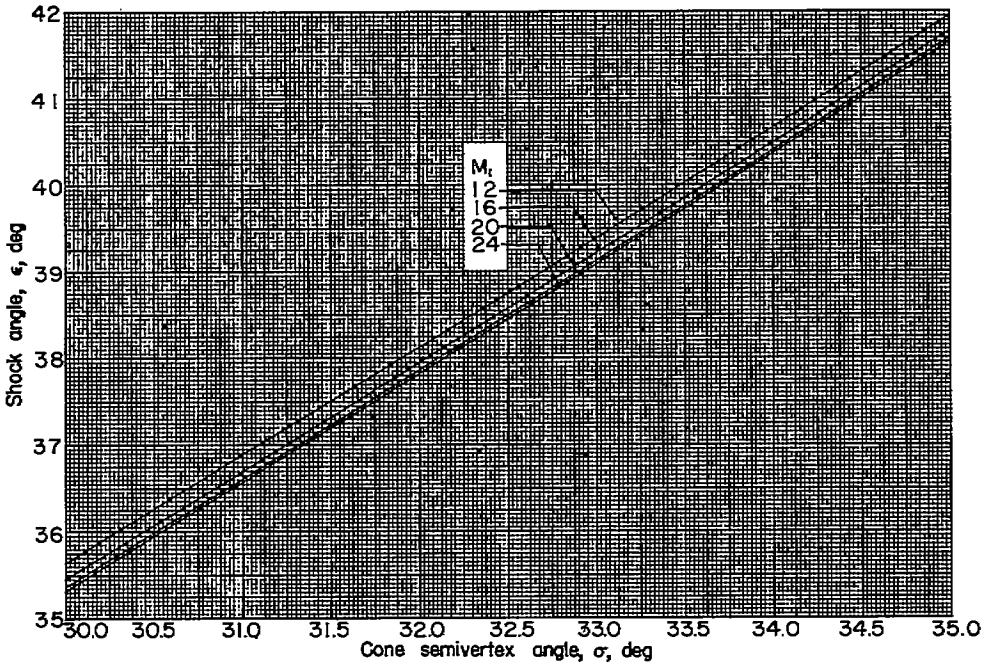
Figure 10.- Continued. (Note change in abscissa scale.)

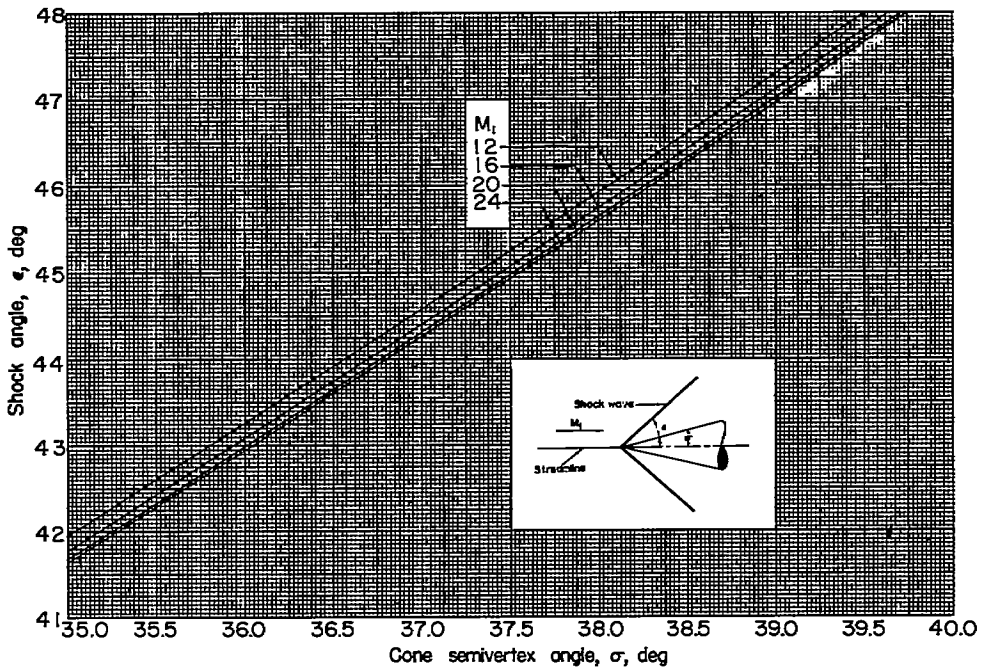




(c) $\sigma = 20^{\circ}$ to 30°.

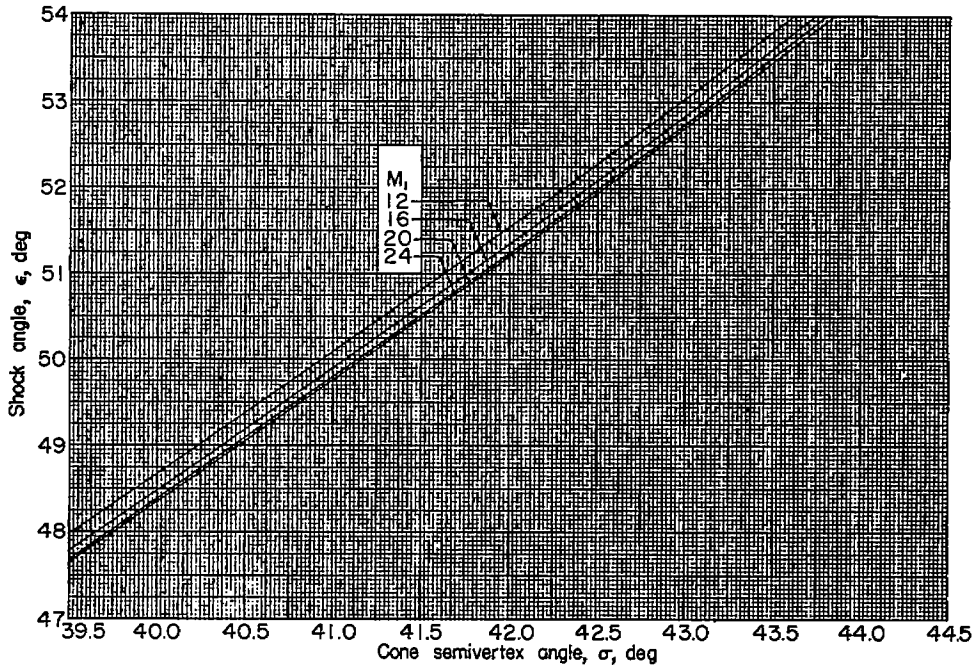
Figure 10.- Continued.

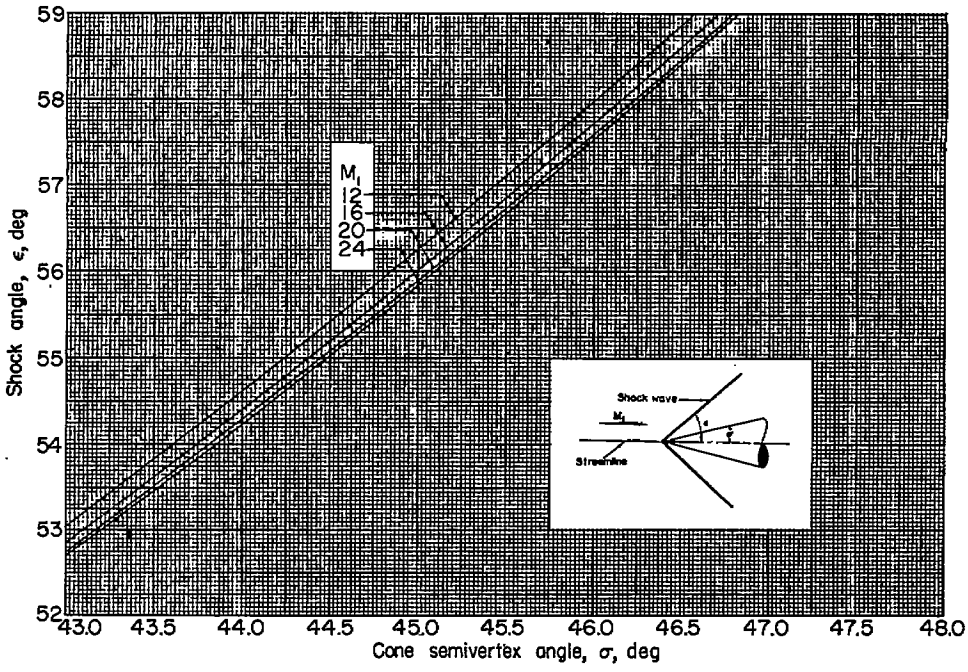




(d) $\sigma = 30^{\circ}$ to 40°.

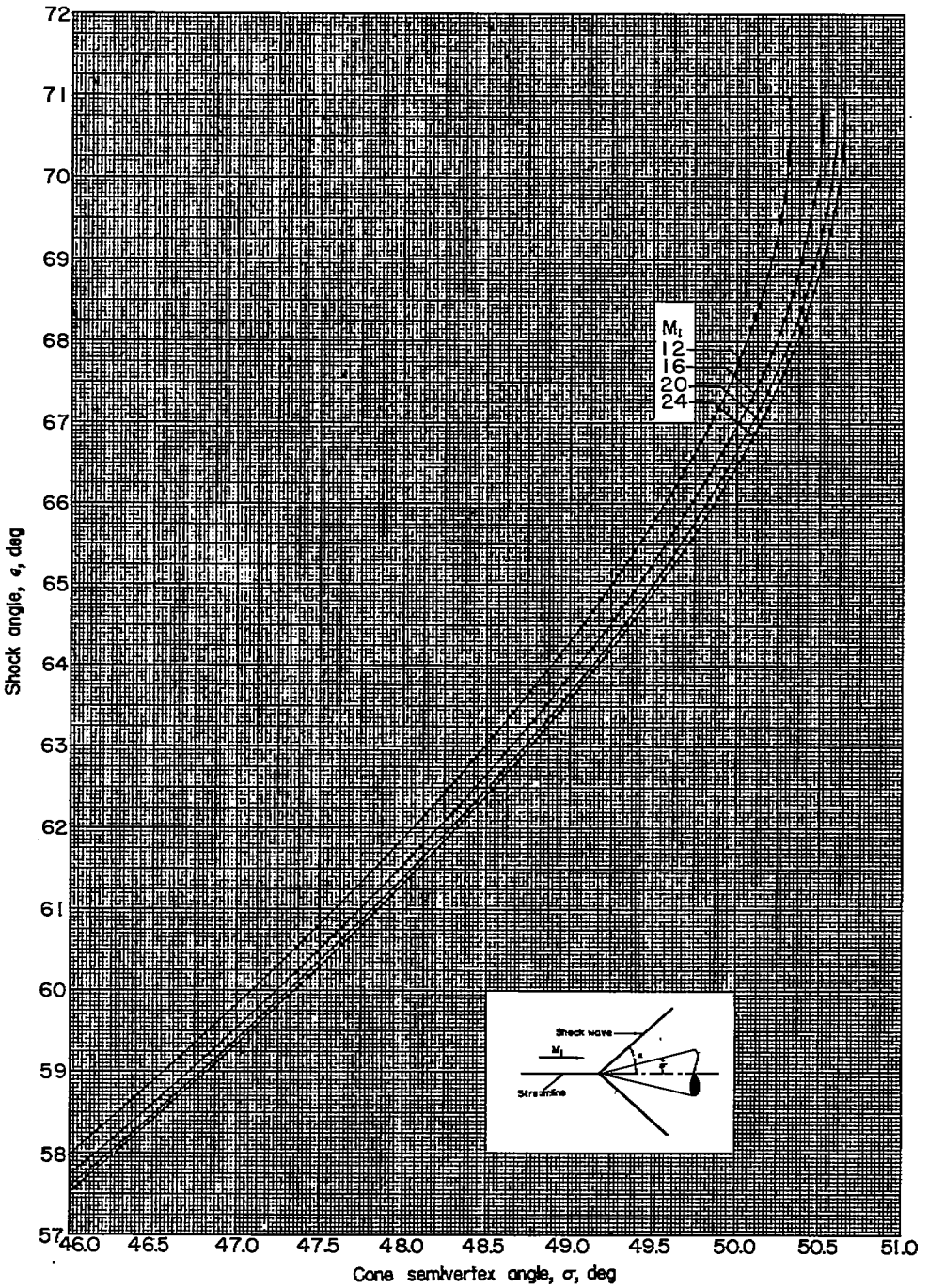
Figure 10.- Continued.





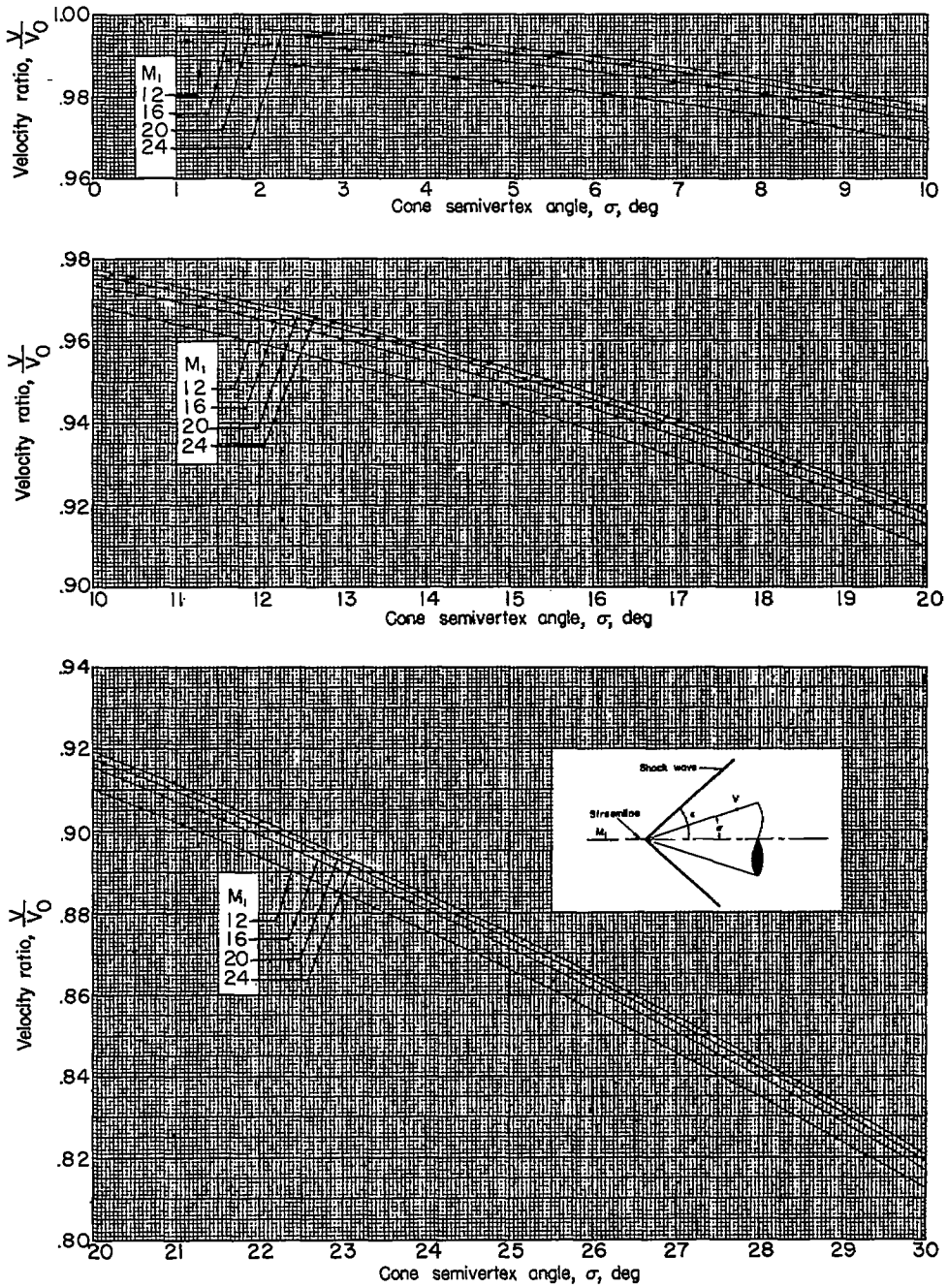
(e) $\sigma = 39.5^{\circ}$ to 48°.

Figure 10.- Continued.



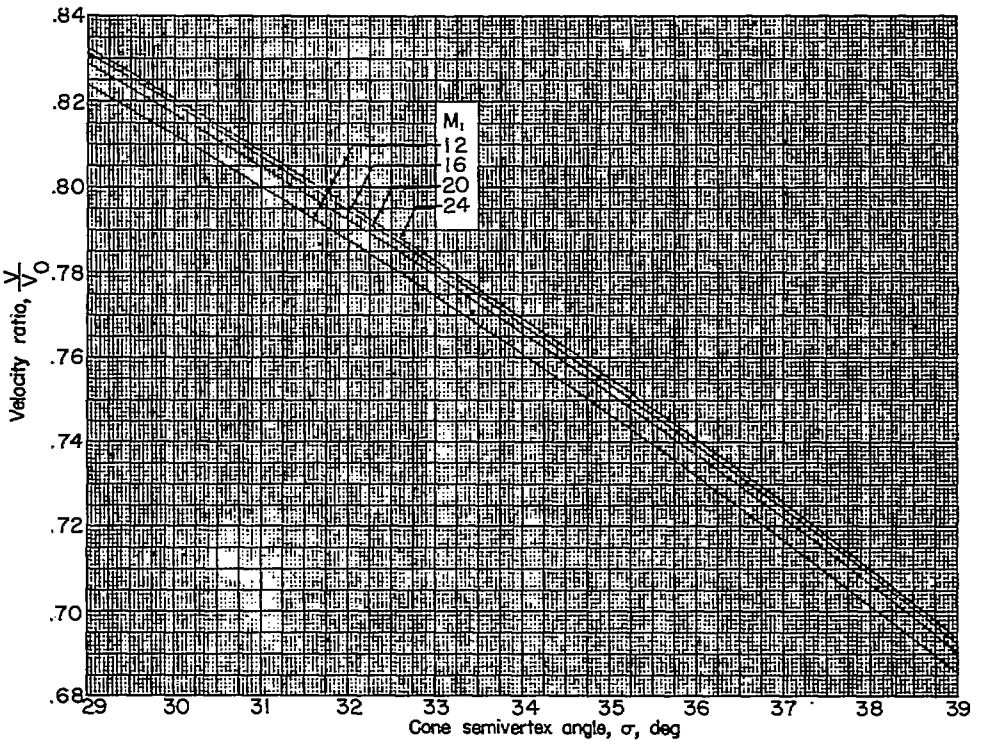
(f) $\sigma = 46^{\circ}$ to 51°.

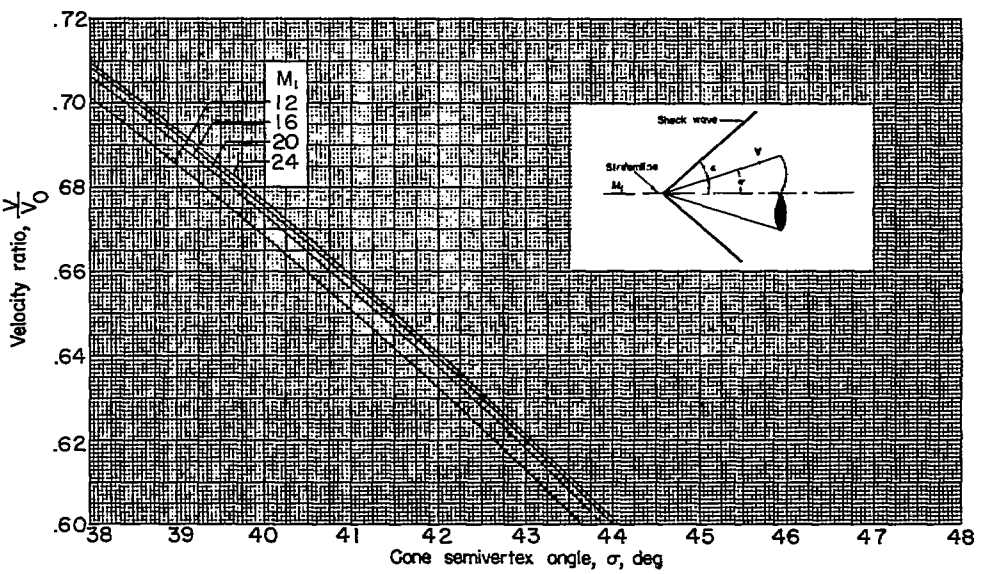
Figure 10.- Concluded.



(a) $\sigma = 0^{\circ}$ to 30°.

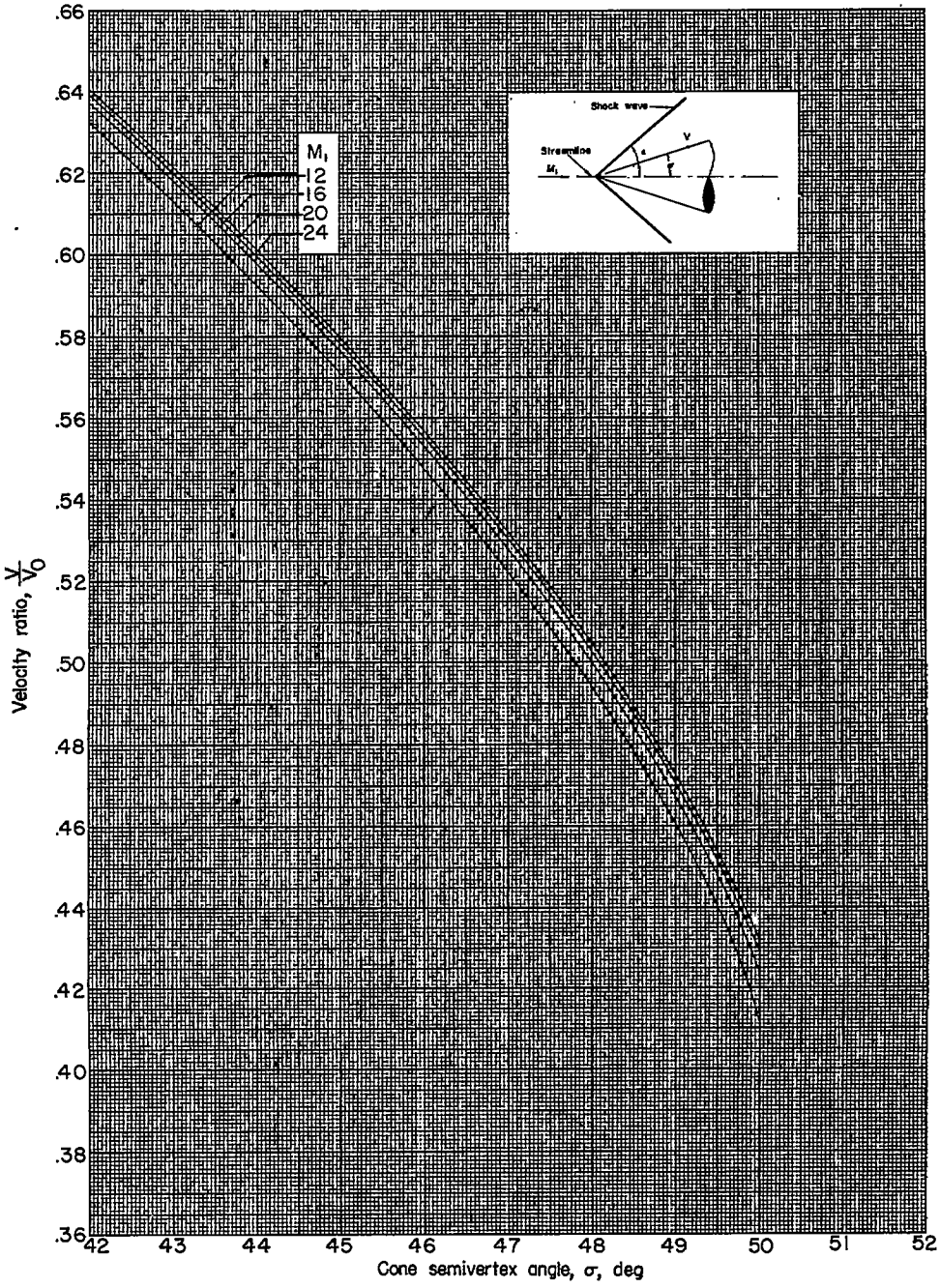
Figure 11.- Variation of the velocity at the surface of the cones expressed as a limiting velocity ratio V/V_0 with cone semivertex angle.





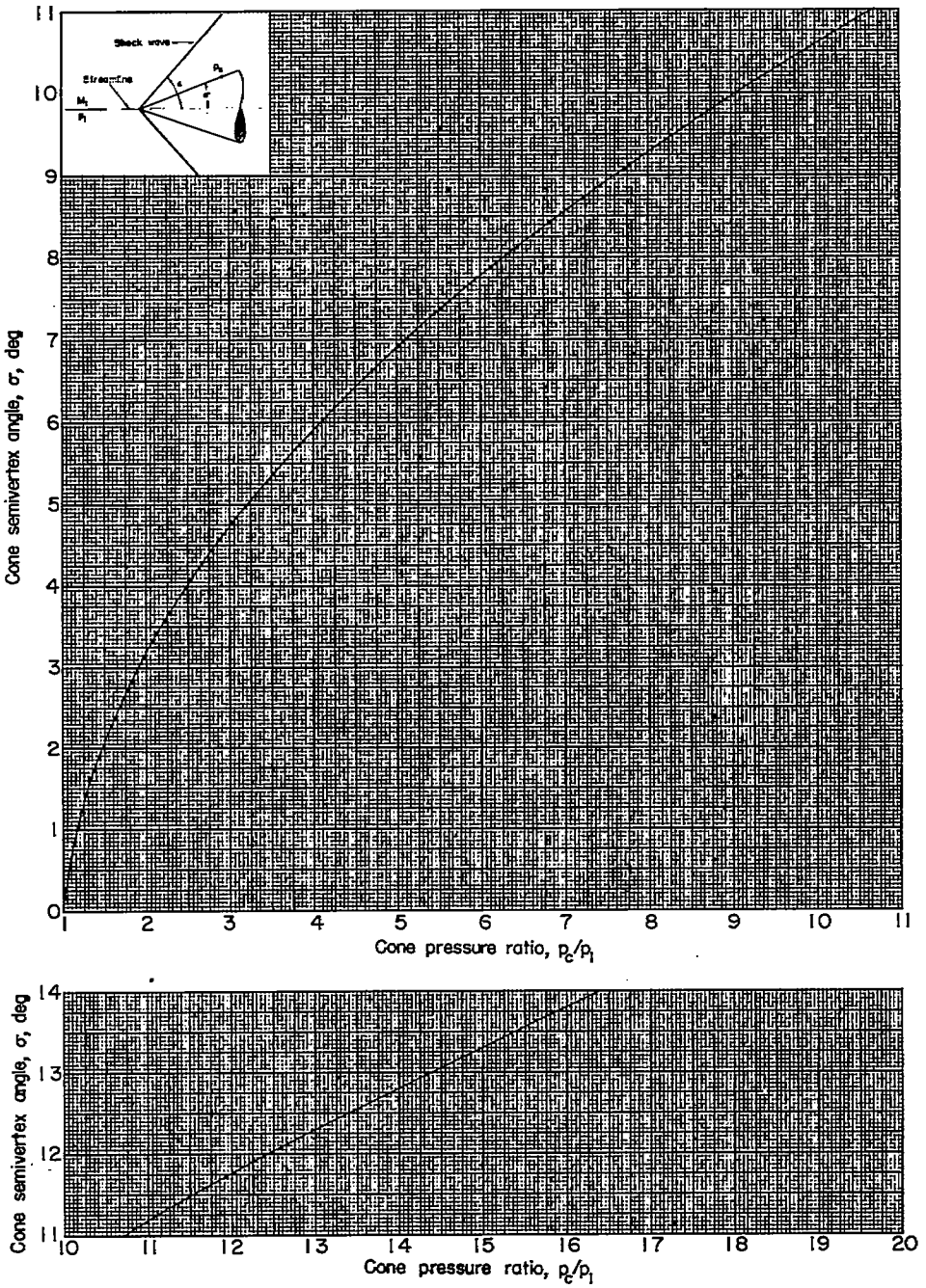
(b) $\sigma = 29^{\circ}$ to 48°.

Figure 11.- Continued.



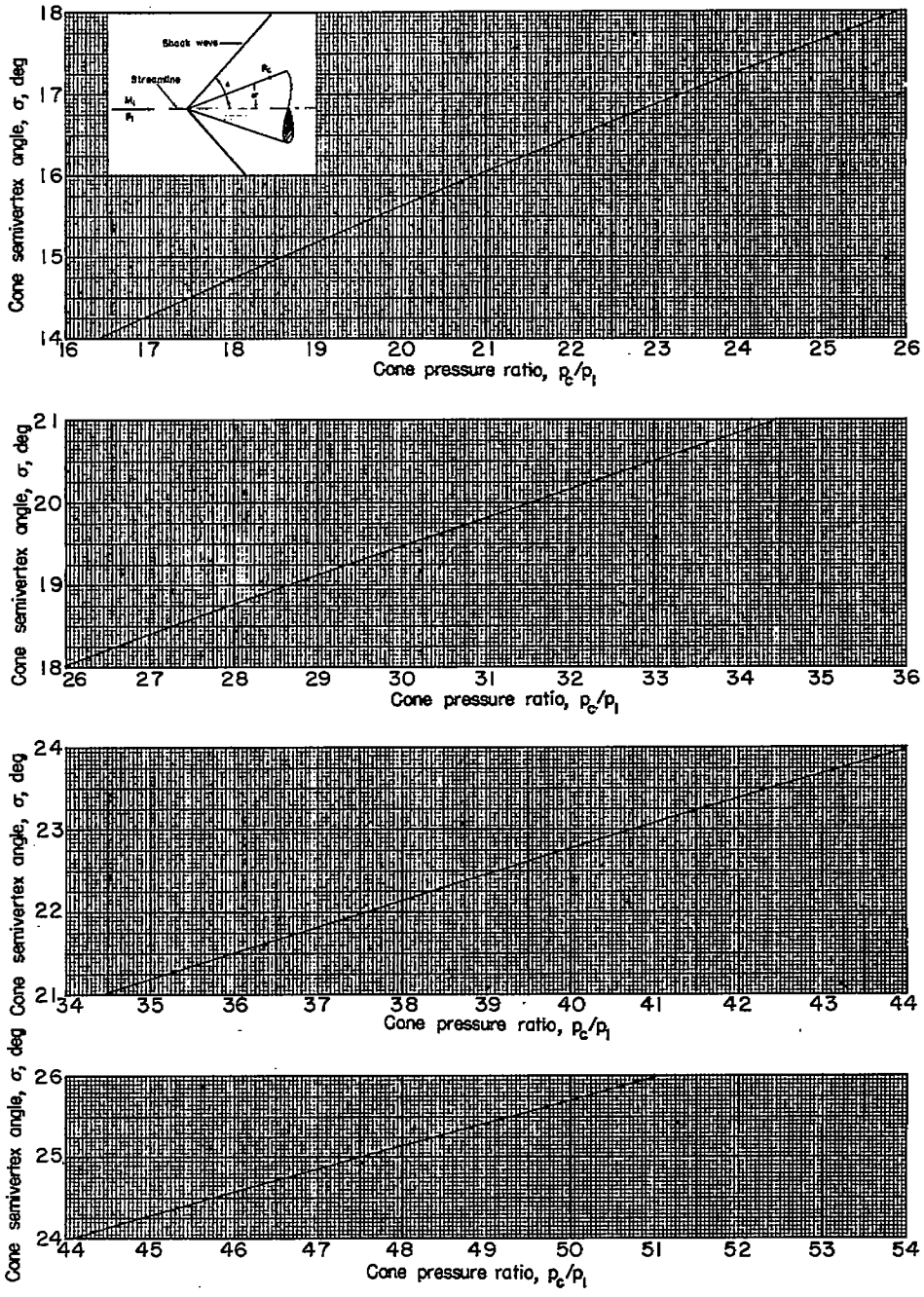
(c) σ = 42° to 52°.

Figure 11.- Concluded.



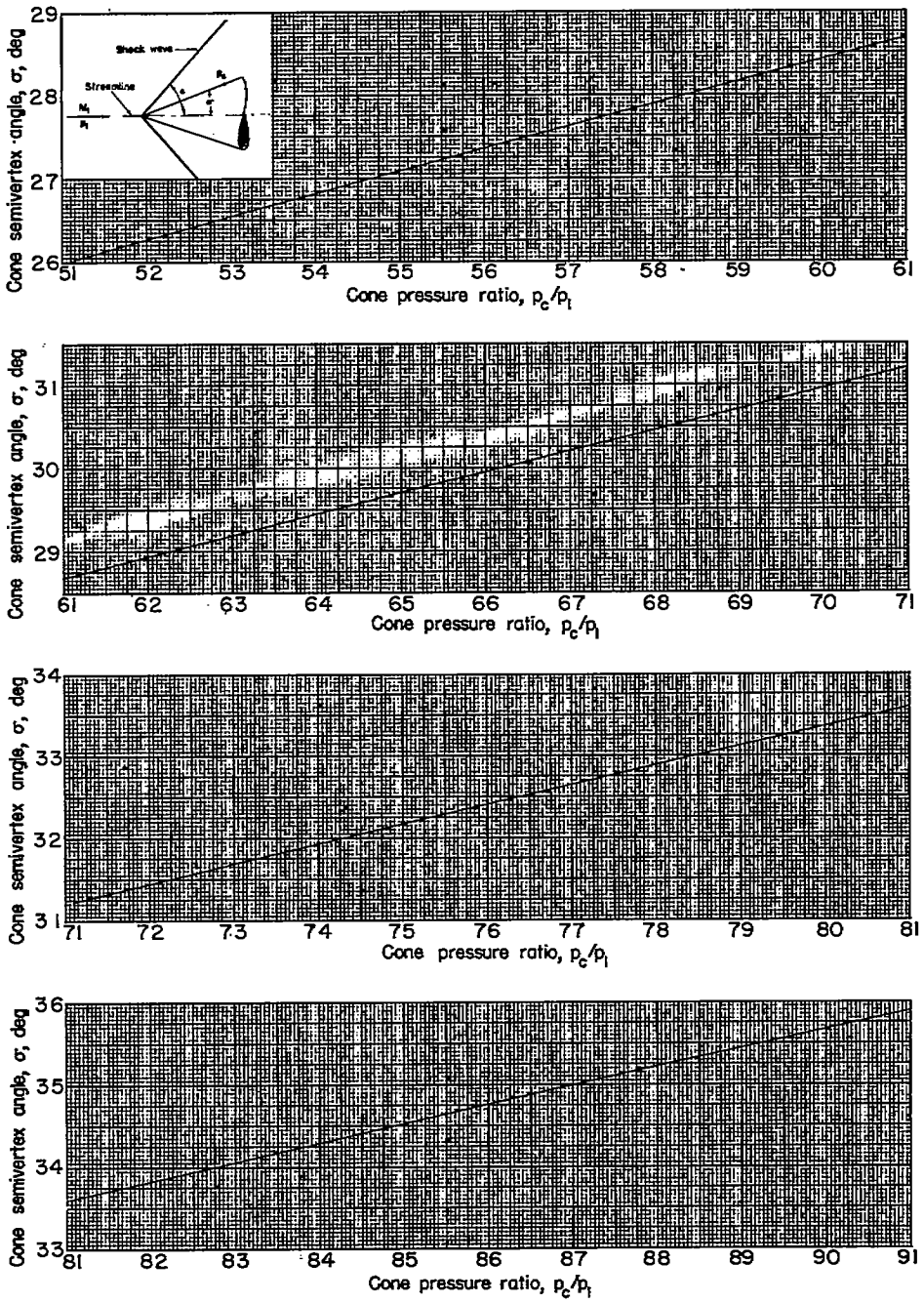
(a) p_c/p_1 = 1 to 20.

Figure 12.- Variation of the cone pressure ratio p_c/p_1 with cone semivertex angle. $M_1 = 12$; $\gamma = 5/3$.



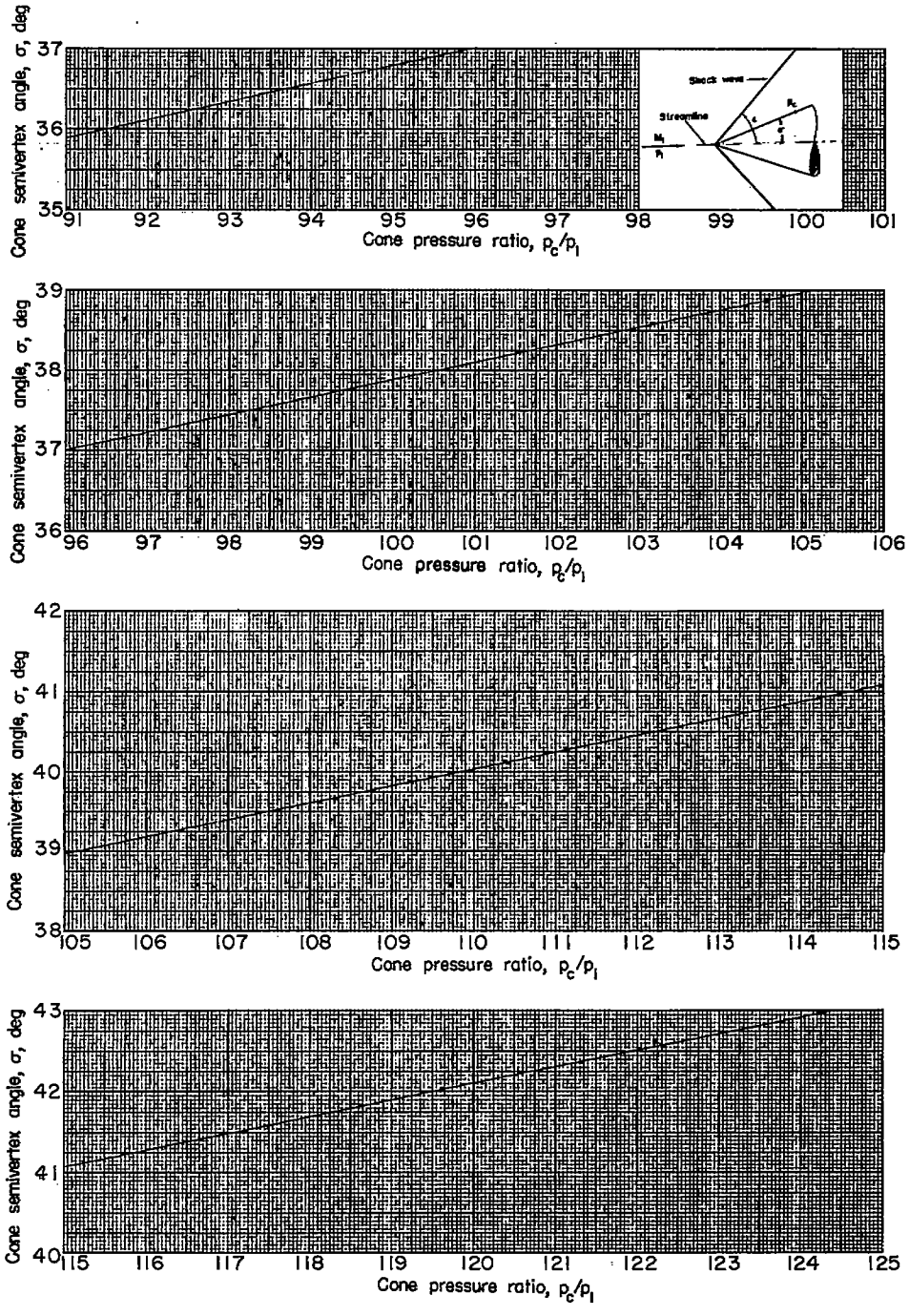
(b) p_c/p_1 = 16 to 54.

Figure 12.- Continued.



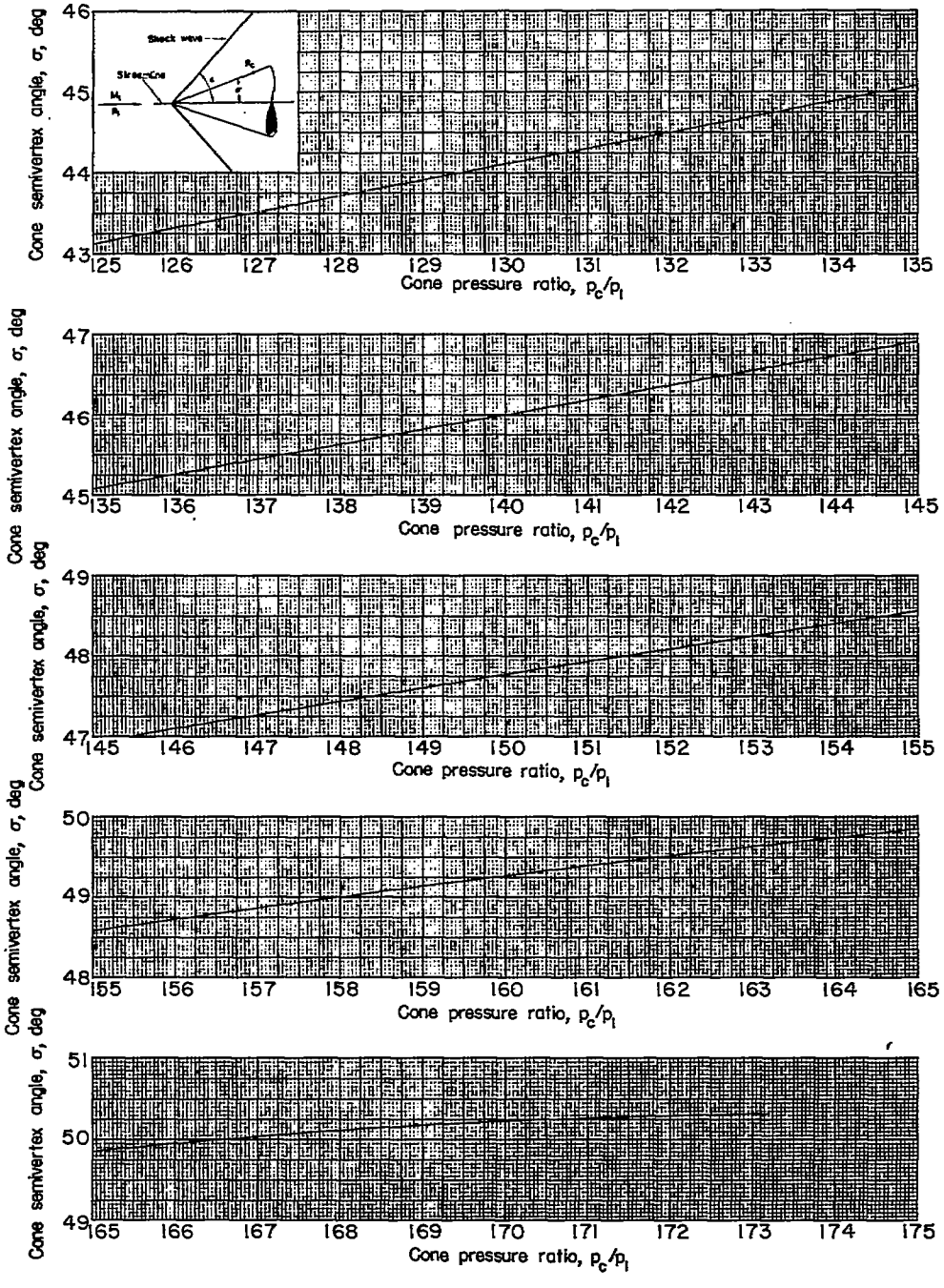
(c) p_c/p_1 = 51 to 91.

Figure 12.- Continued.



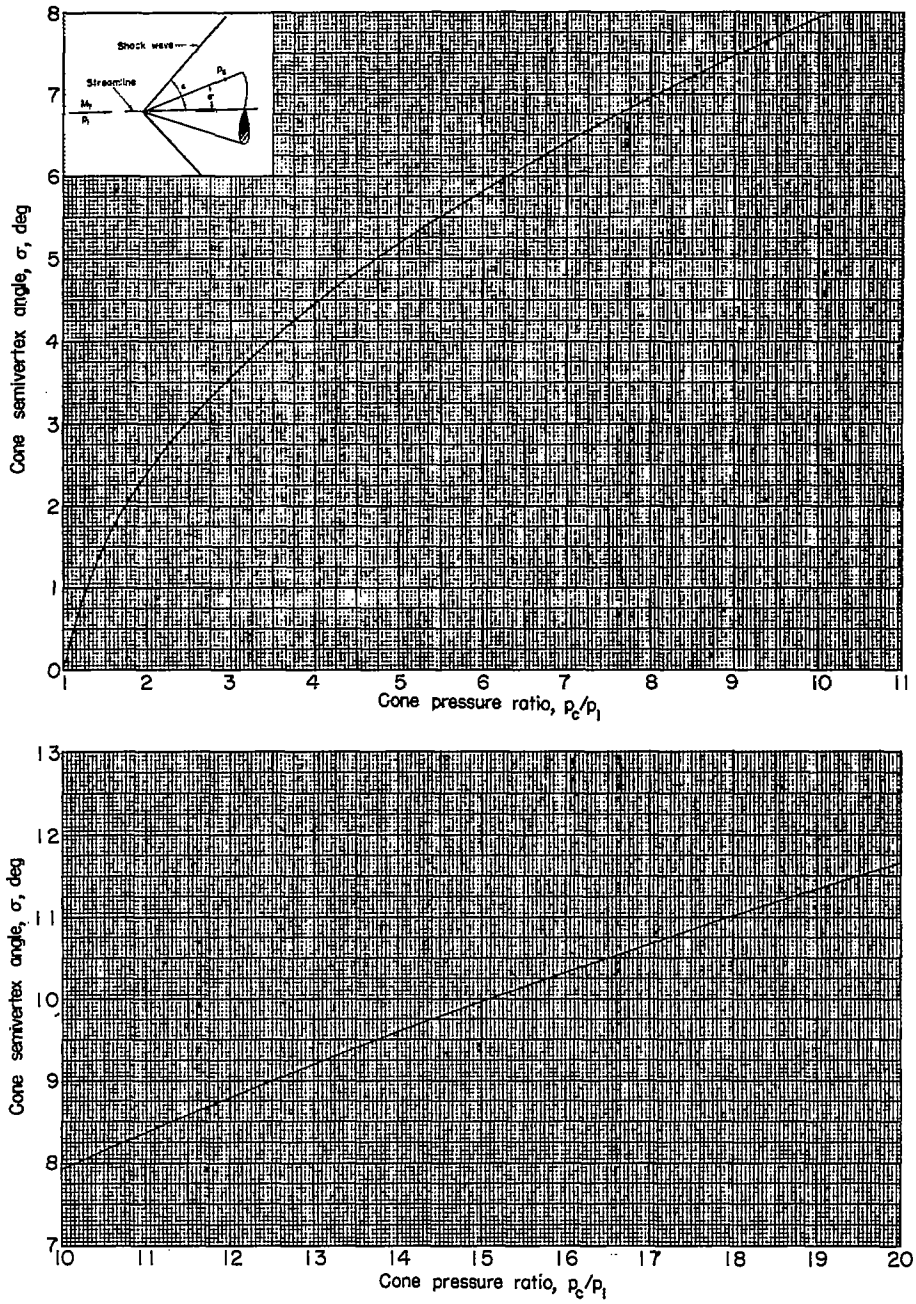
(d) p_c/p_1 = 91 to 125.

Figure 12.- Continued.



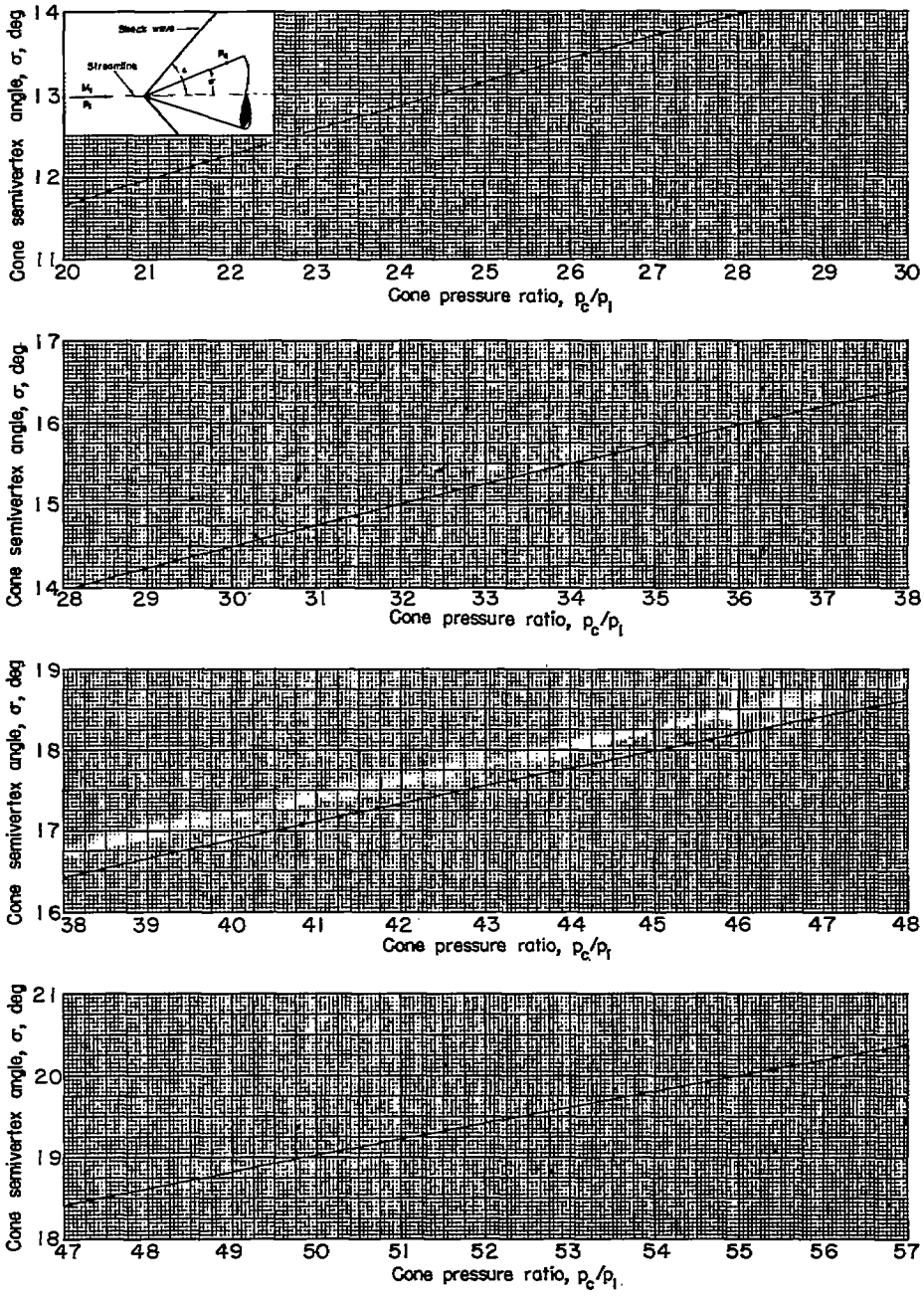
(e) p_c/p_1 = 125 to 175.

Figure 12.- Concluded.



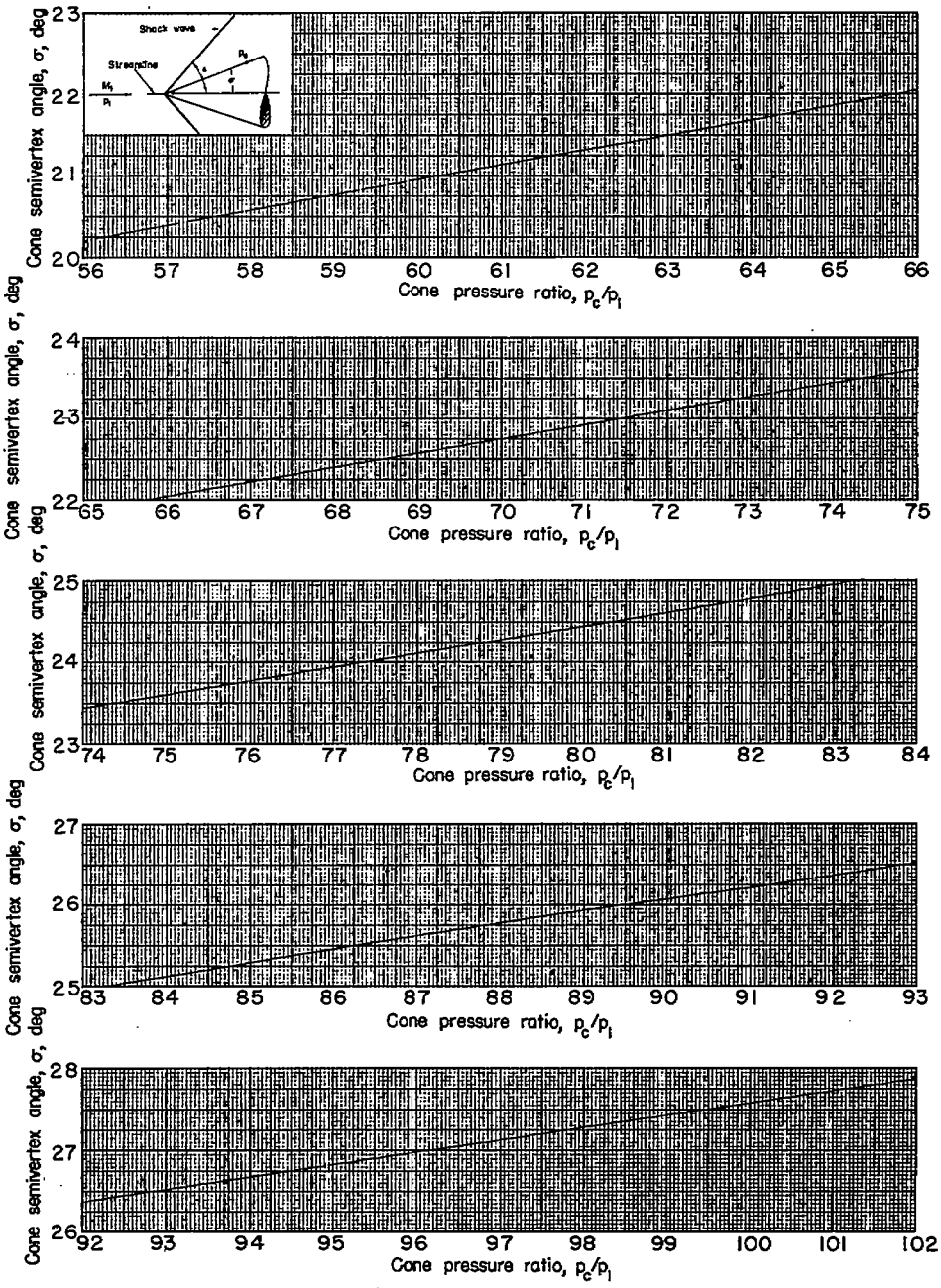
(a) p_c/p_1 = 1 to 20.

Figure 13.- Variation of the cone pressure ratio p_c/p_1 with cone semivertex angle. $M_1 = 16$; $\gamma = 5/3$.



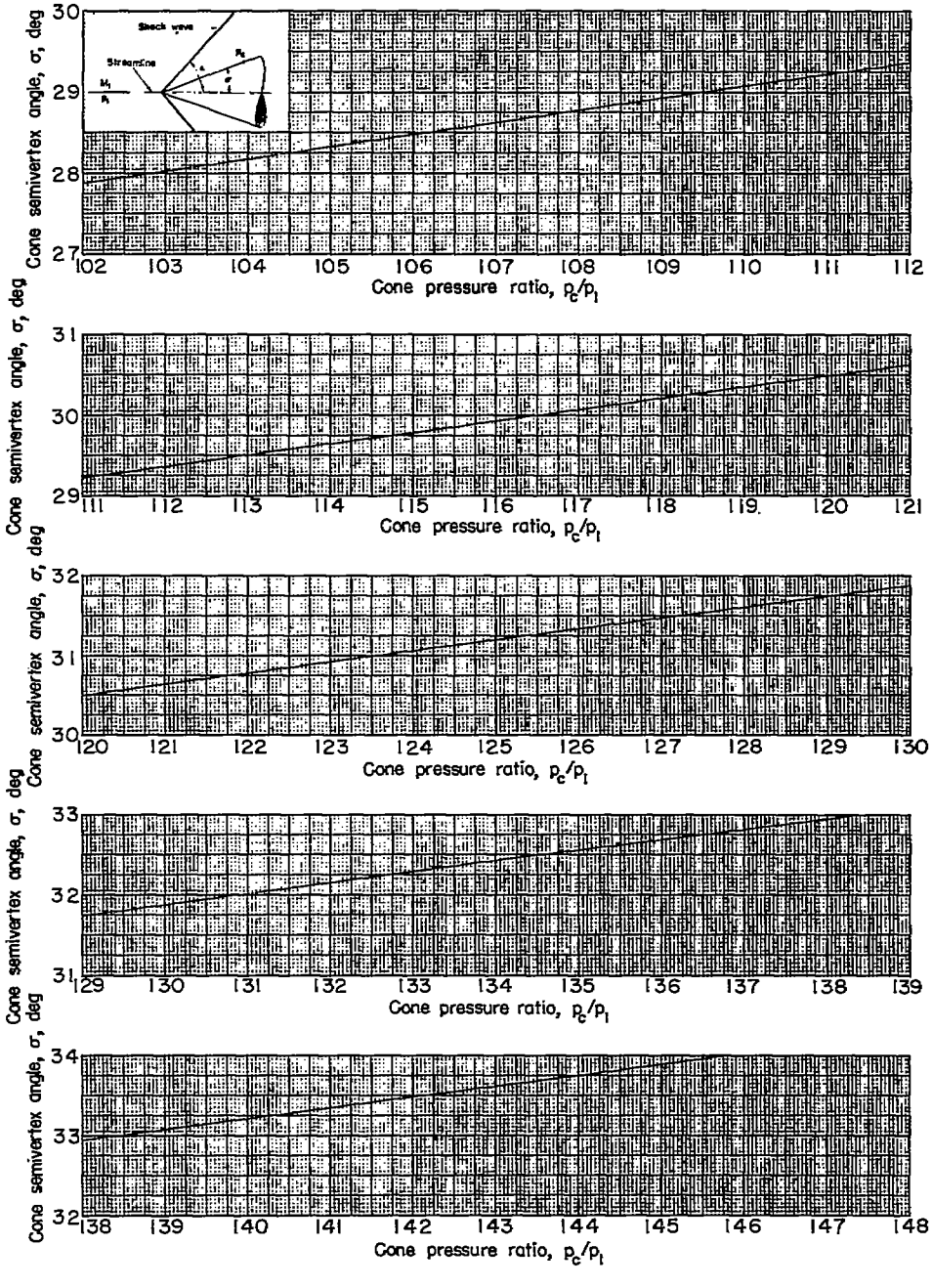
(b) p_c/p_1 = 20 to 57.

Figure 13.- Continued.



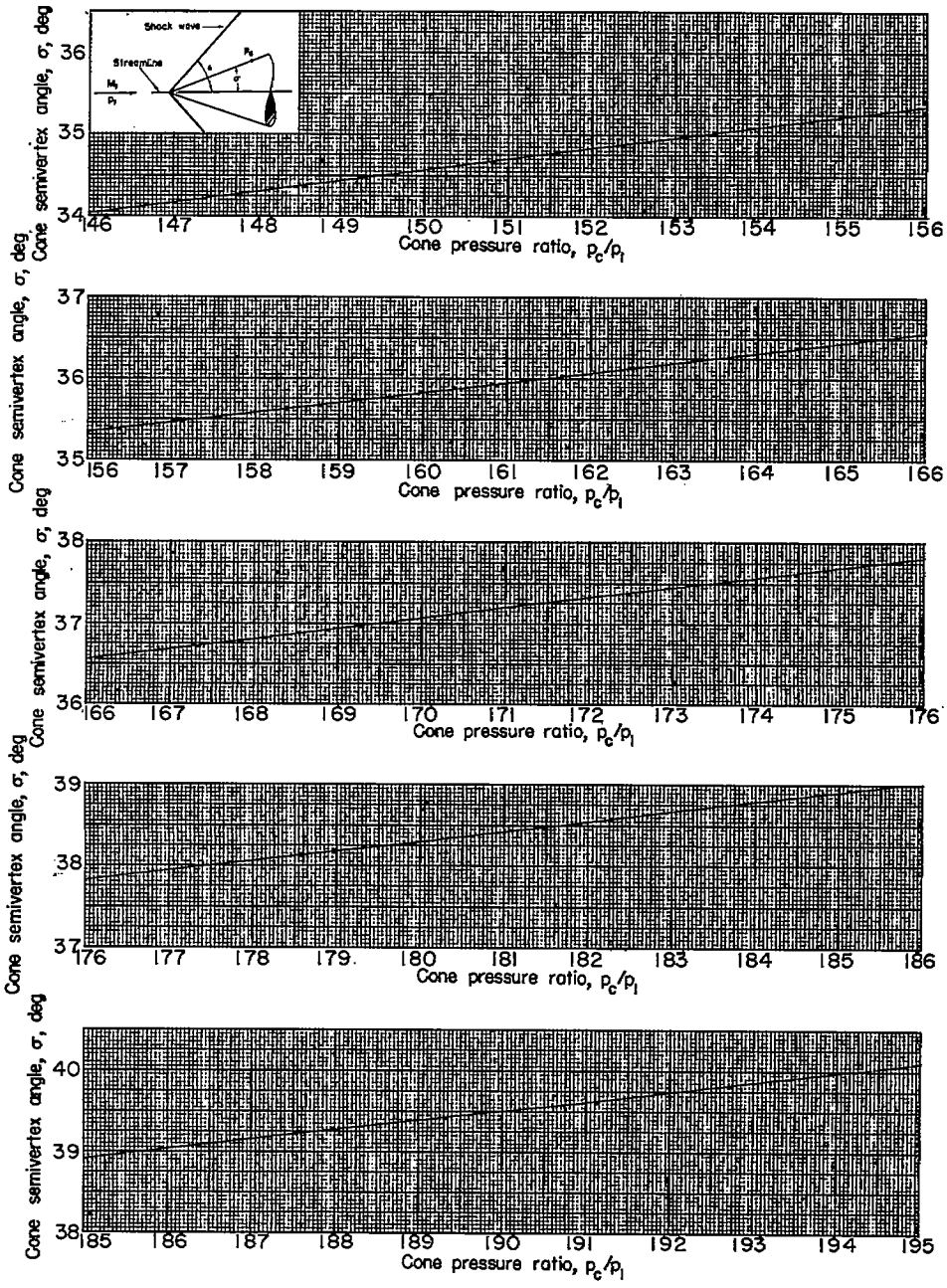
(c) p_c/p_1 = 56 to 102.

Figure 13.- Continued.



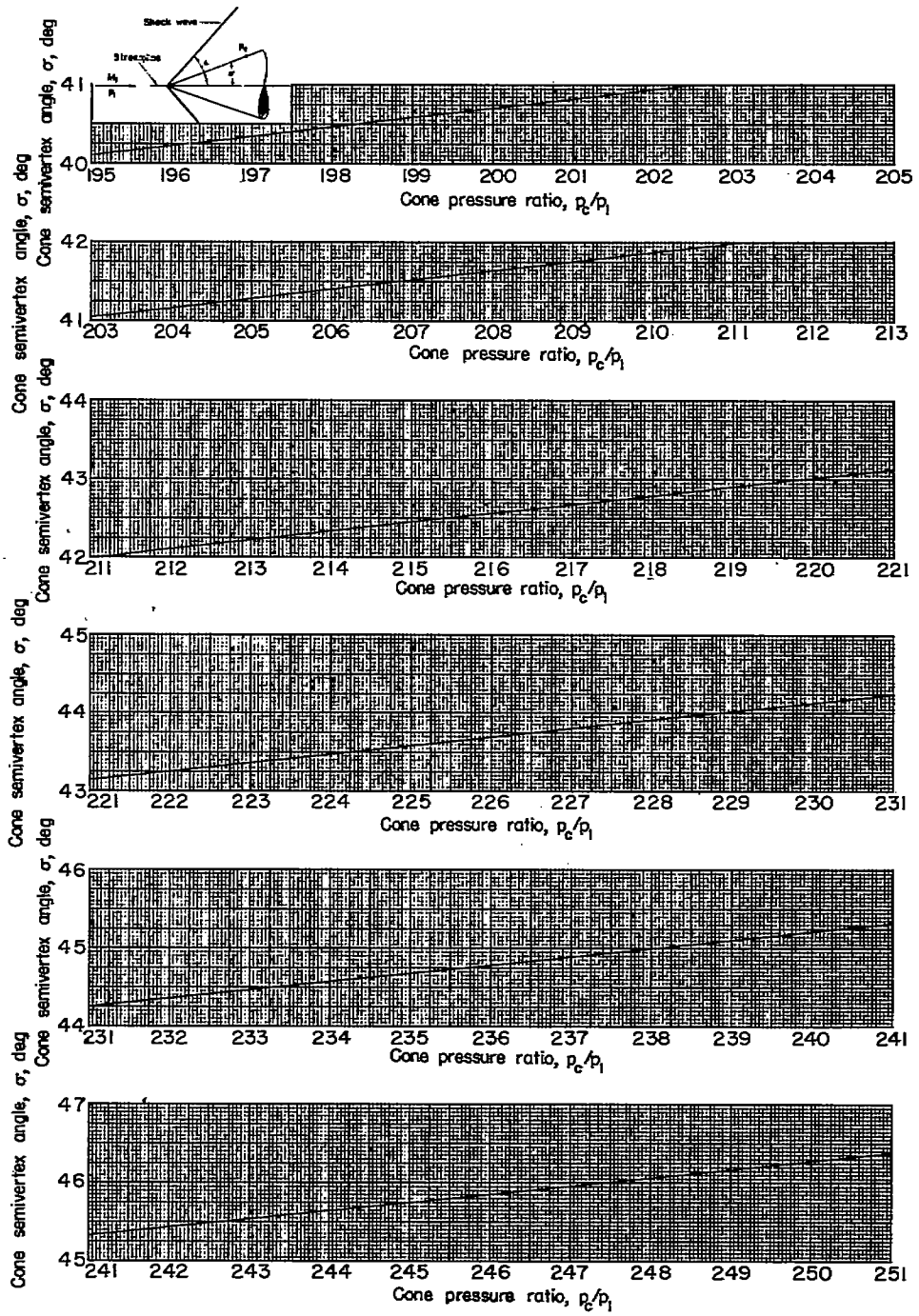
(d) p_c/p_1 = 102 to 148.

Figure 13.- Continued.



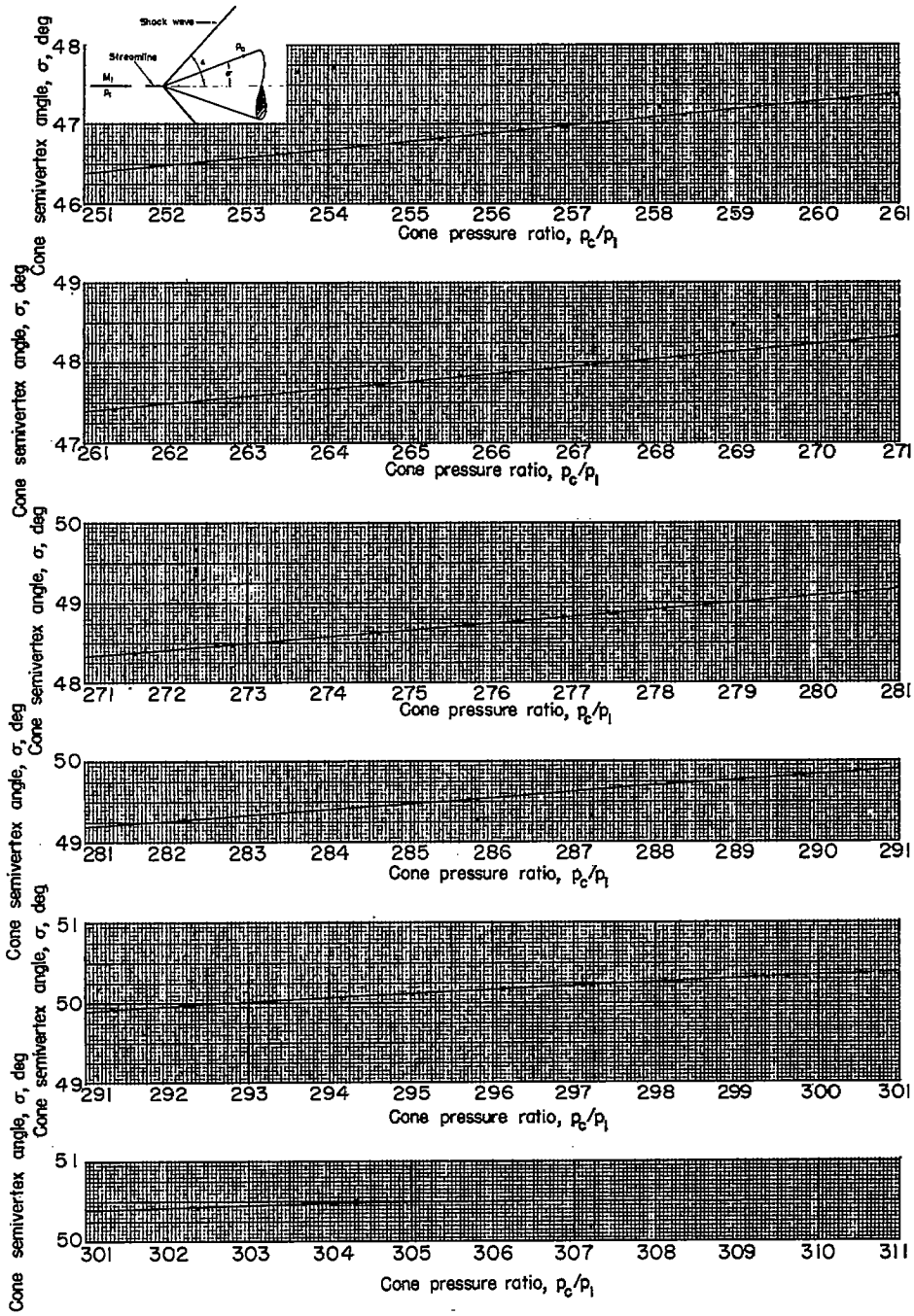
(e) p_c/p_1 = 146 to 195.

Figure 13.- Continued.



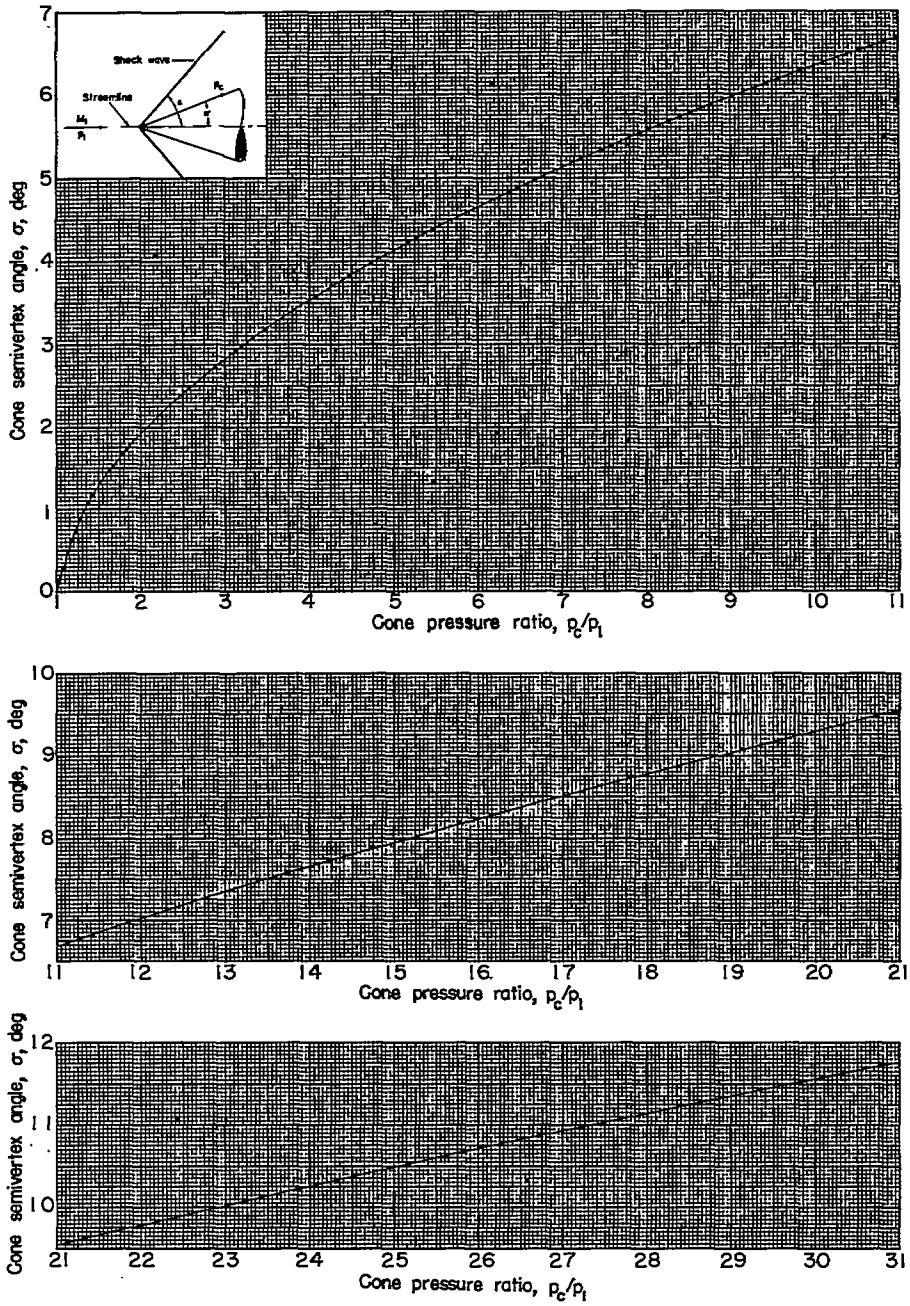
(f) p_c/p_1 = 195 to 251.

Figure 13.- Continued.



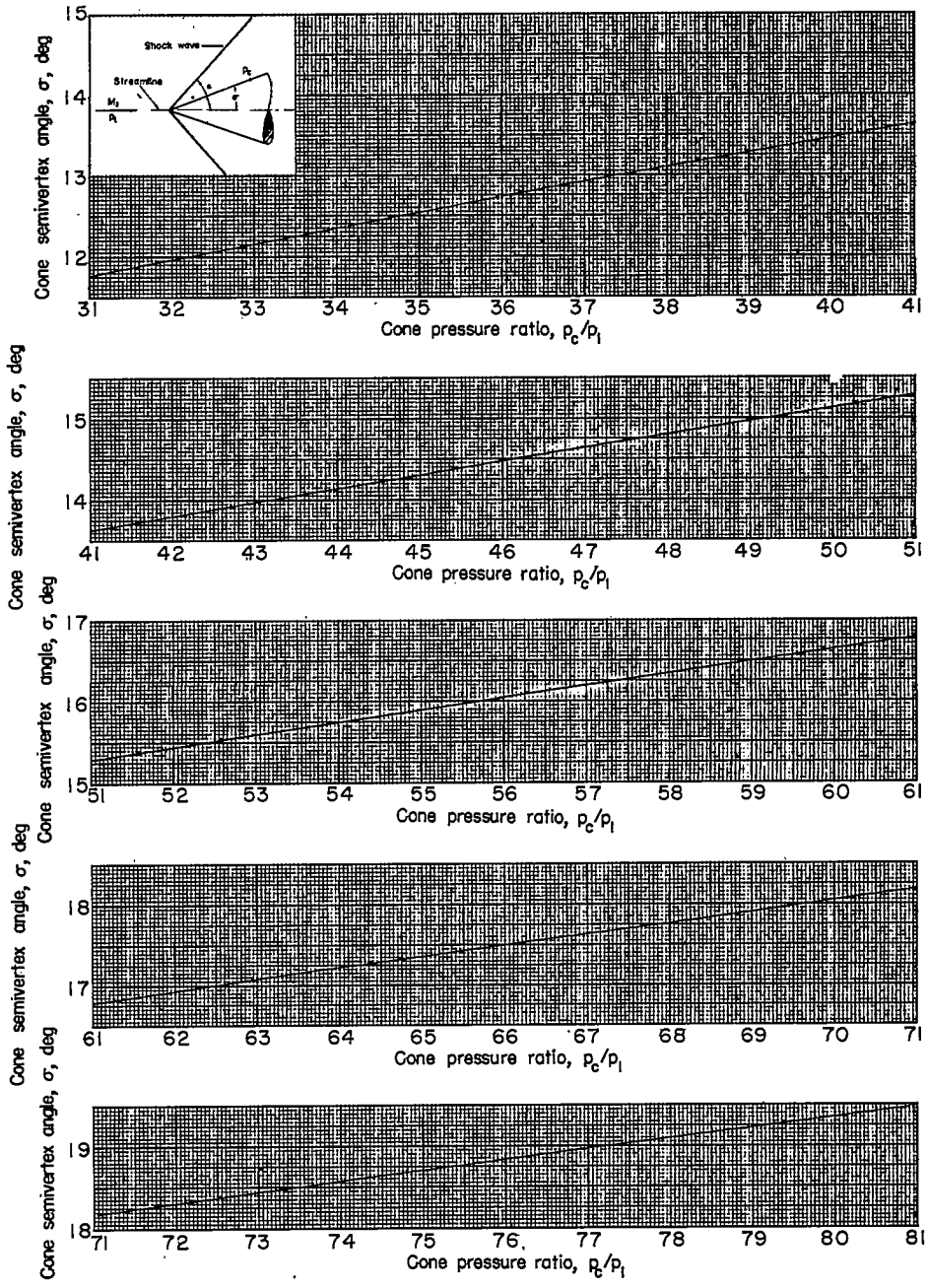
(g) p_c/p_1 = 251 to 311.

Figure 13.- Concluded.



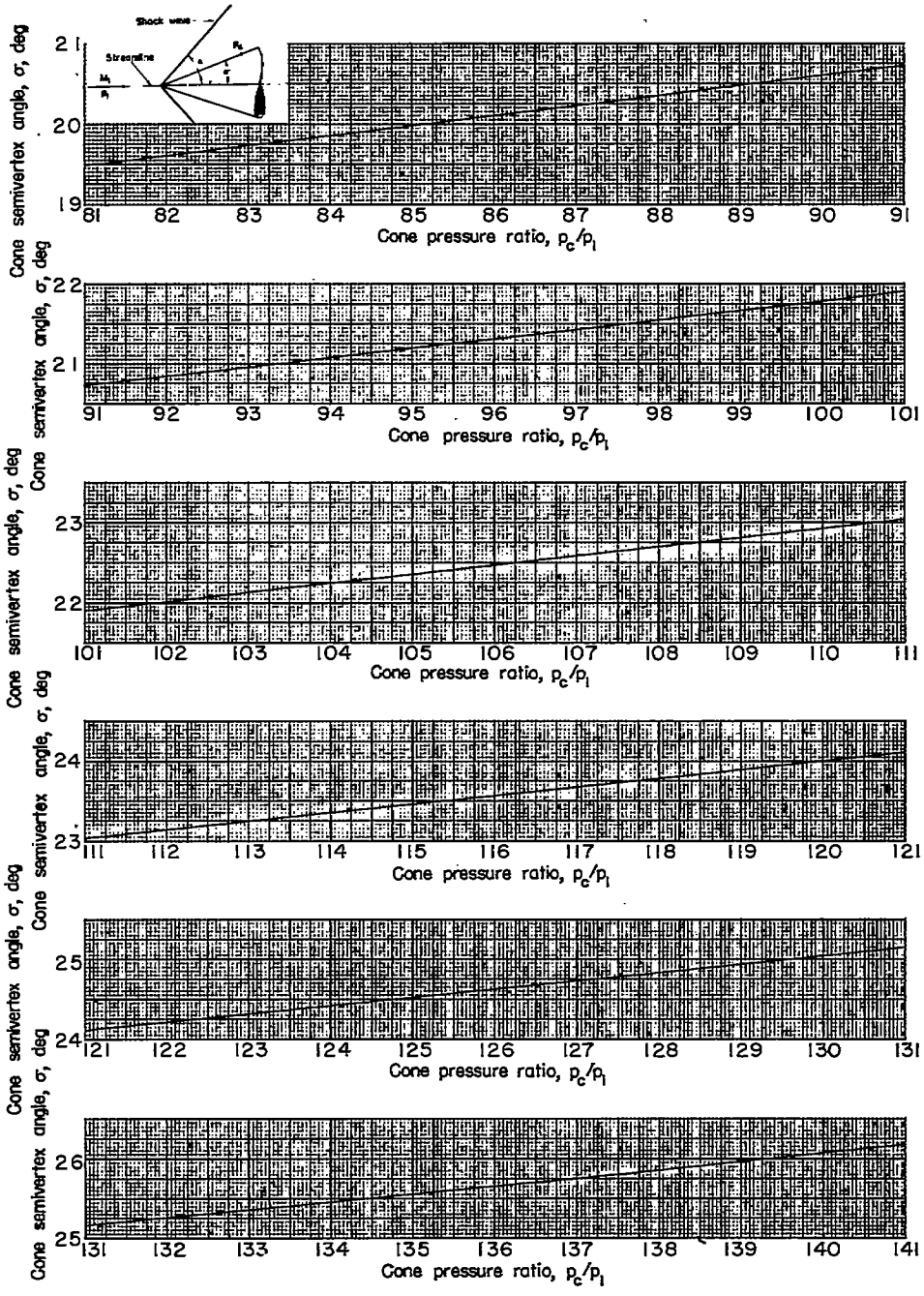
(a) $p_c/p_1 = 1$ to 31.

Figure 14.- Variation of the cone pressure ratio p_c/p_1 with cone semivertex angle. $M_1 = 20$; $\gamma = 5/3$.



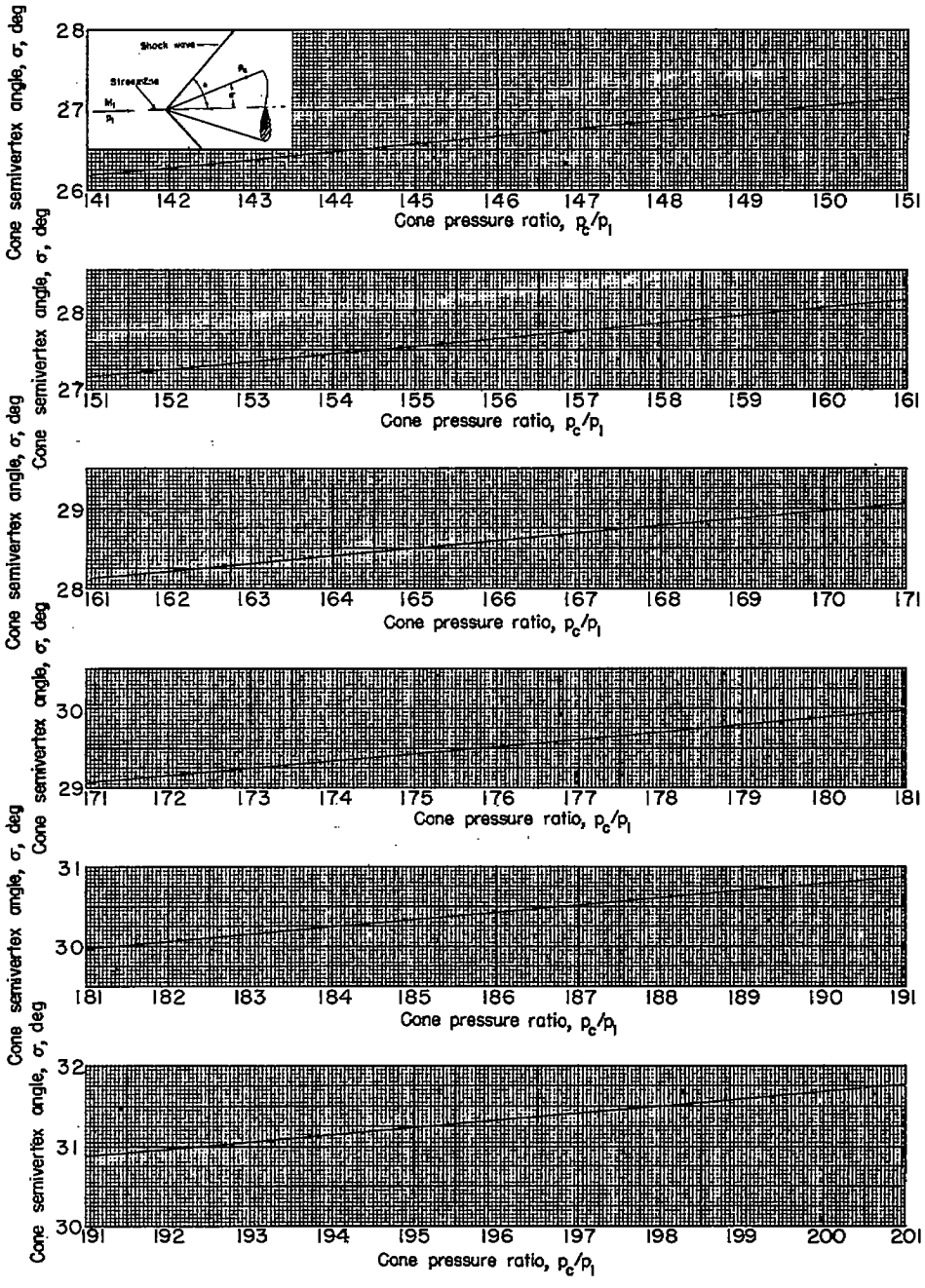
(b) p_c/p_1 = 31 to 81.

Figure 14.- Continued.



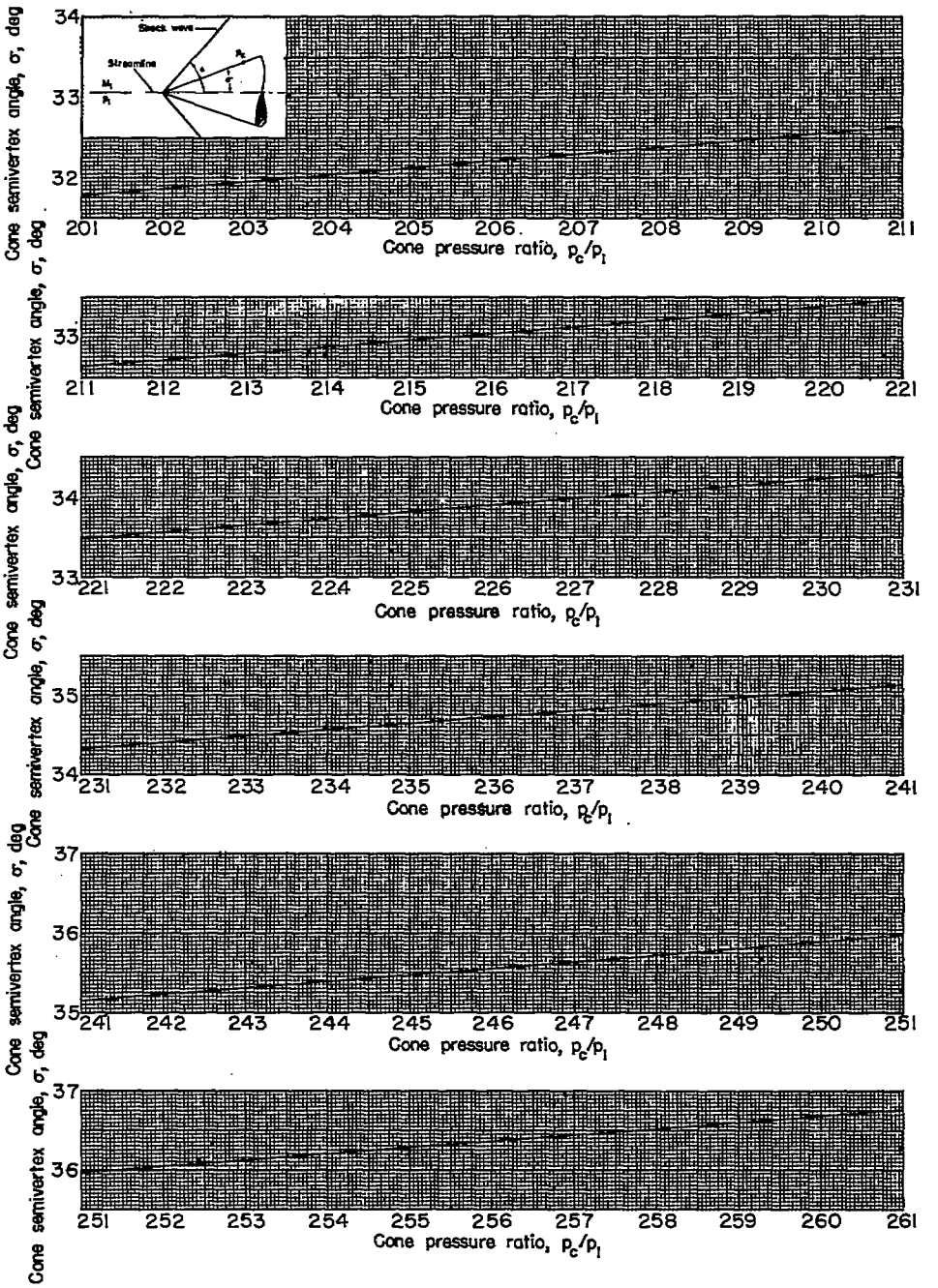
(c) p_c/p_1 = 81 to 141.

Figure 14.- Continued.



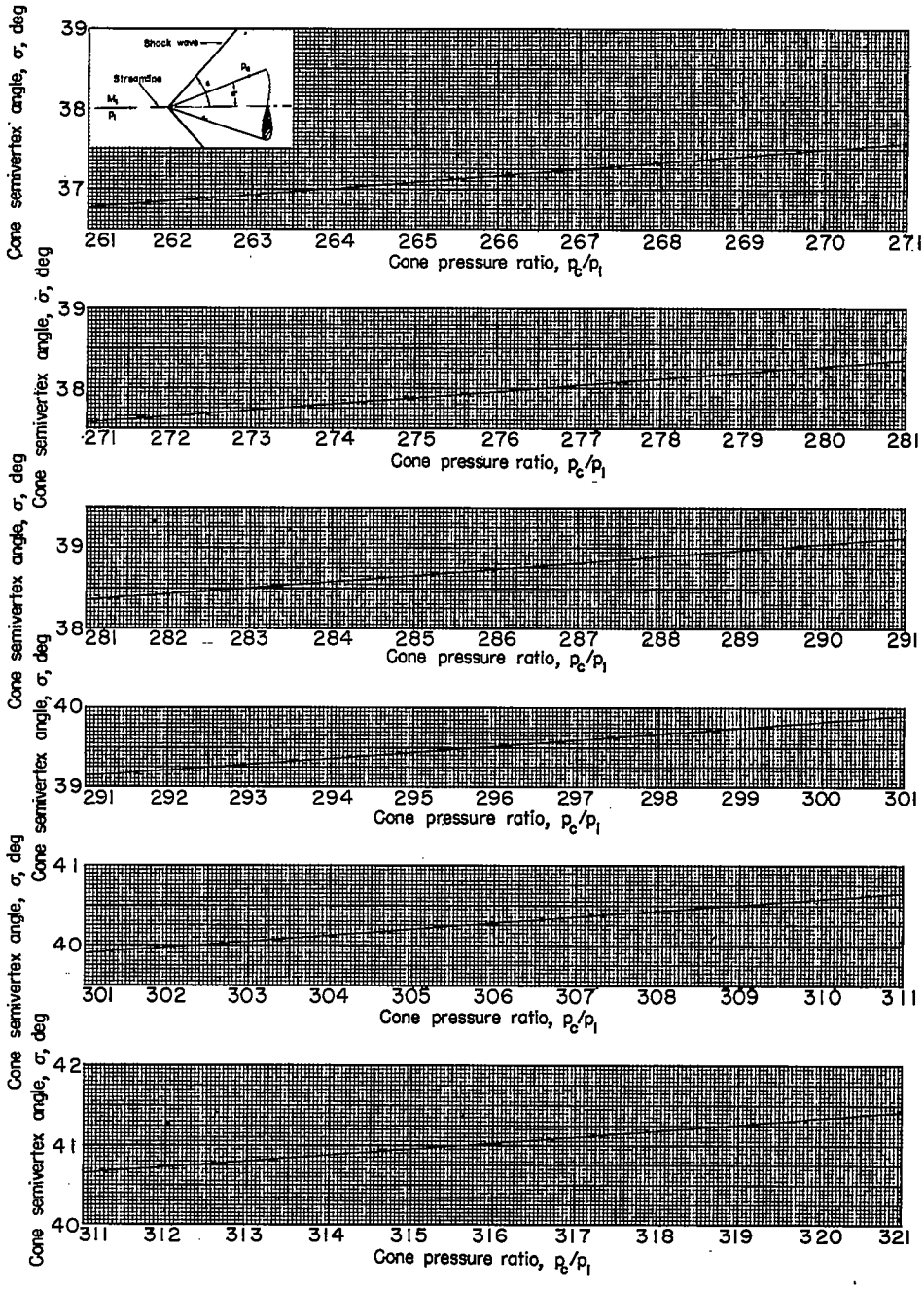
(d) p_c/p_1 = 141 to 201.

Figure 14.- Continued.



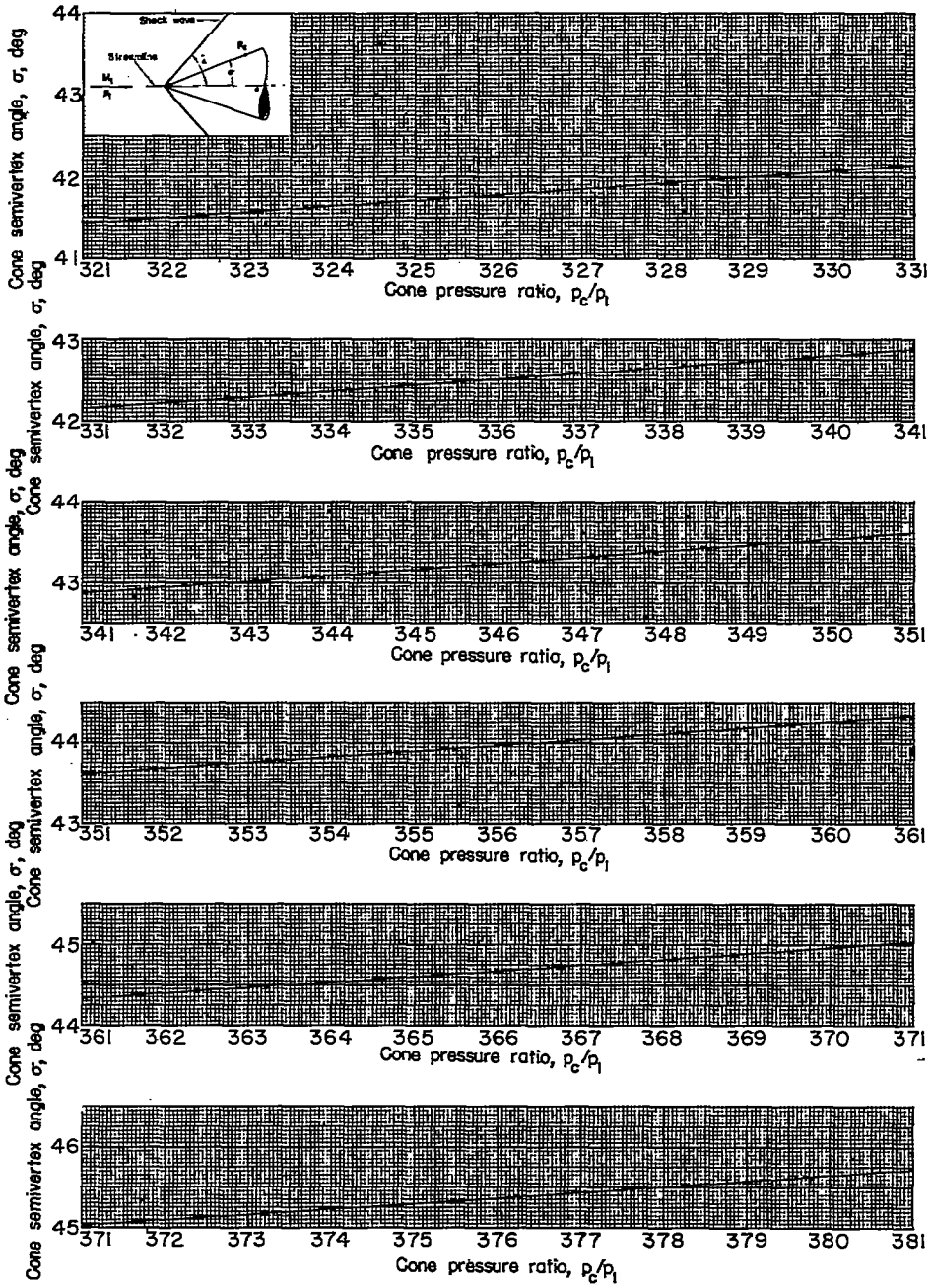
(e) p_c/p_1 = 201 to 261.

Figure 14.- Continued.



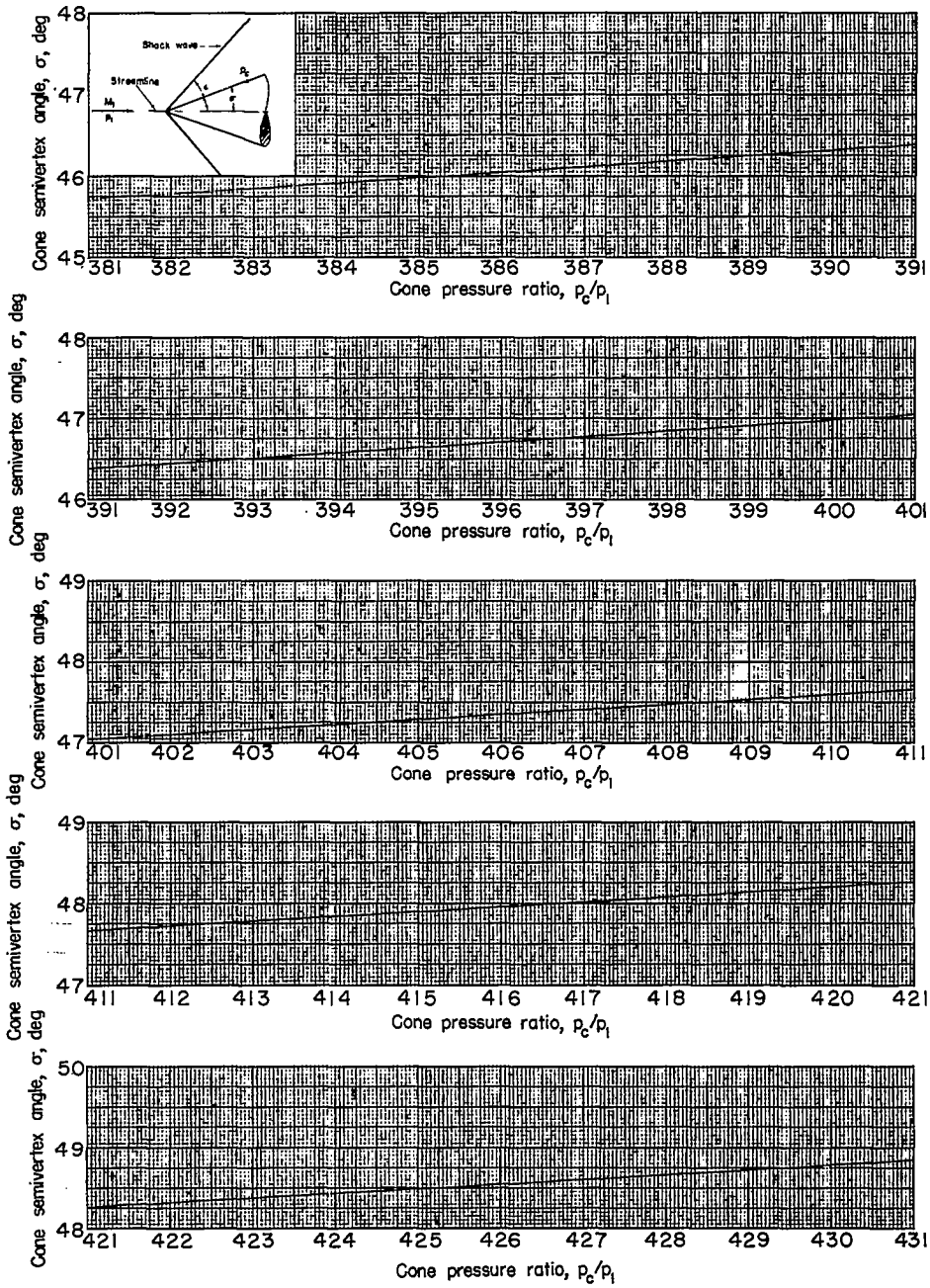
(f) p_c/p_l = 261 to 321.

Figure 14.- Continued.



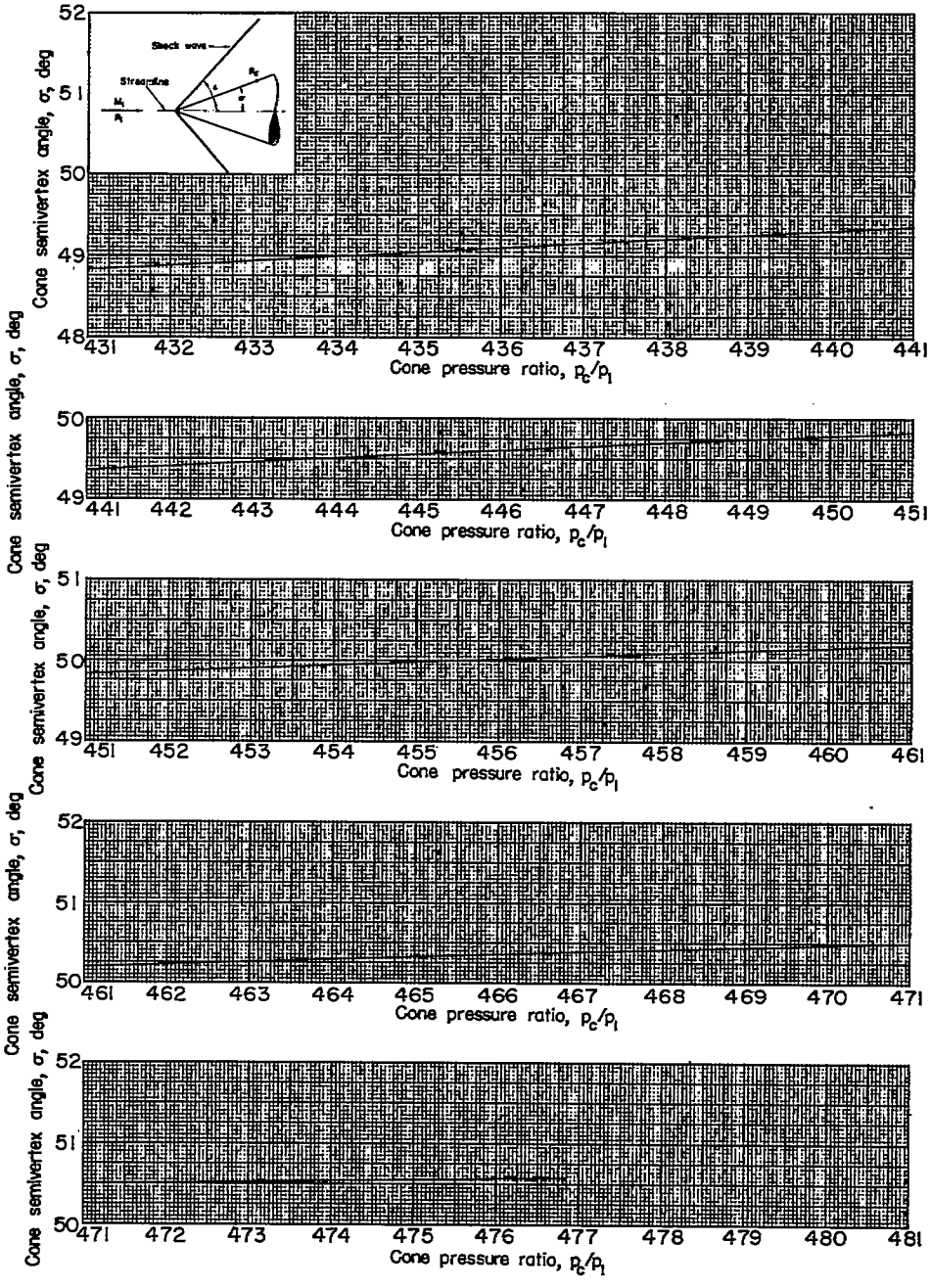
(g) p_c/p_1 = 321 to 381.

Figure 14.- Continued.



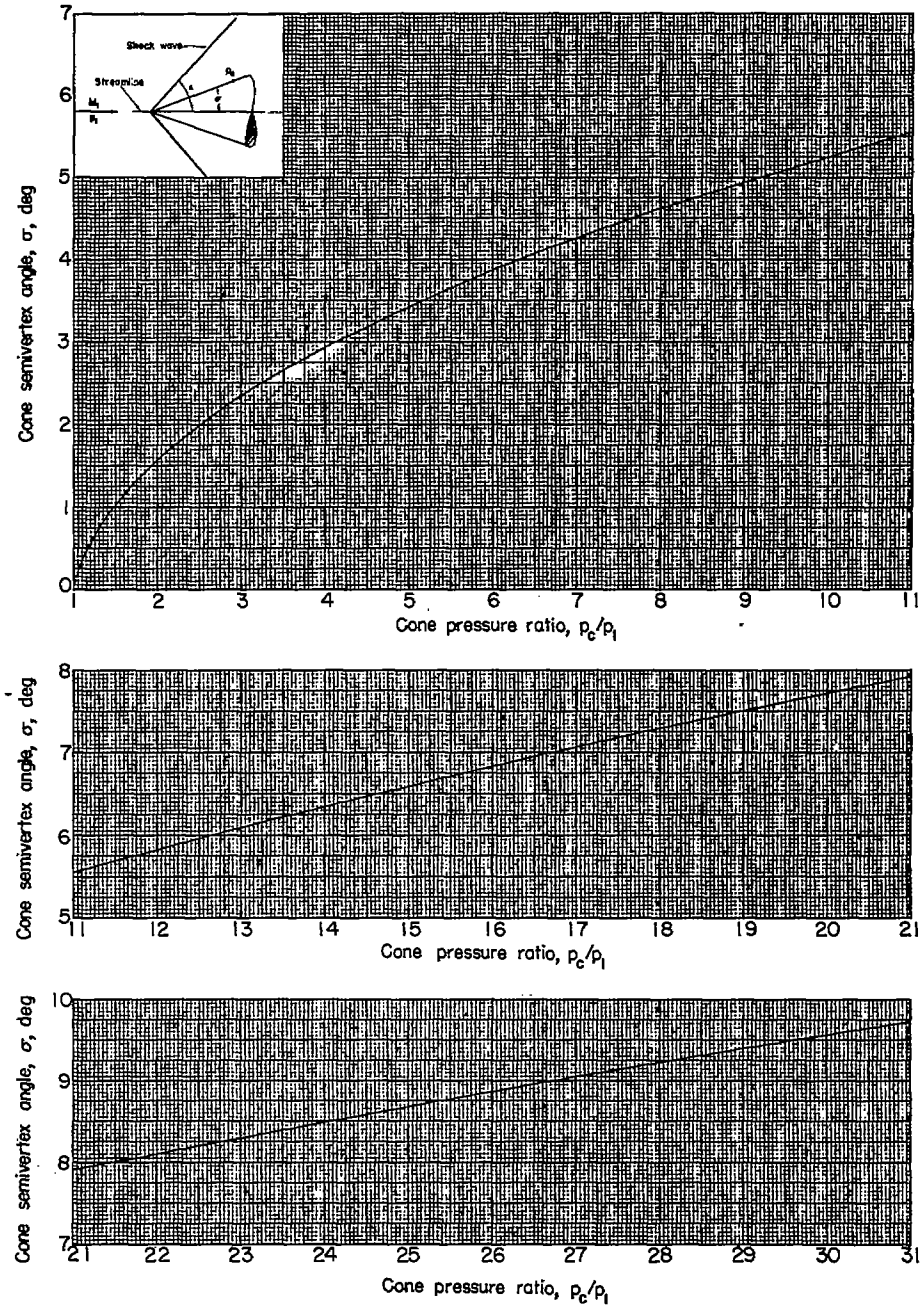
(h) p_c/p_1 = 381 to 431.

Figure 14.- Continued.



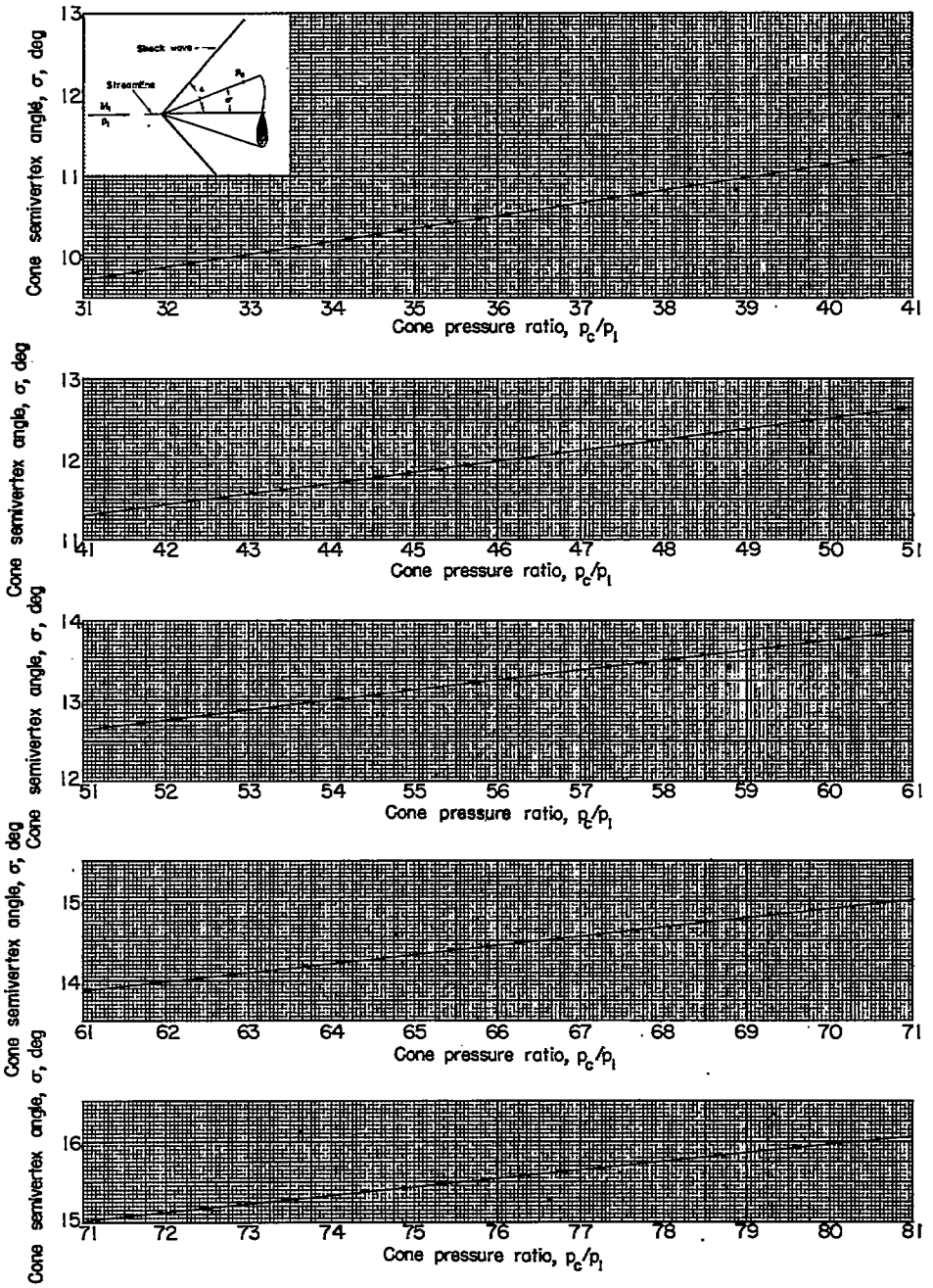
(i) p_c/p_1 = 431 to 481.

Figure 14.- Concluded.



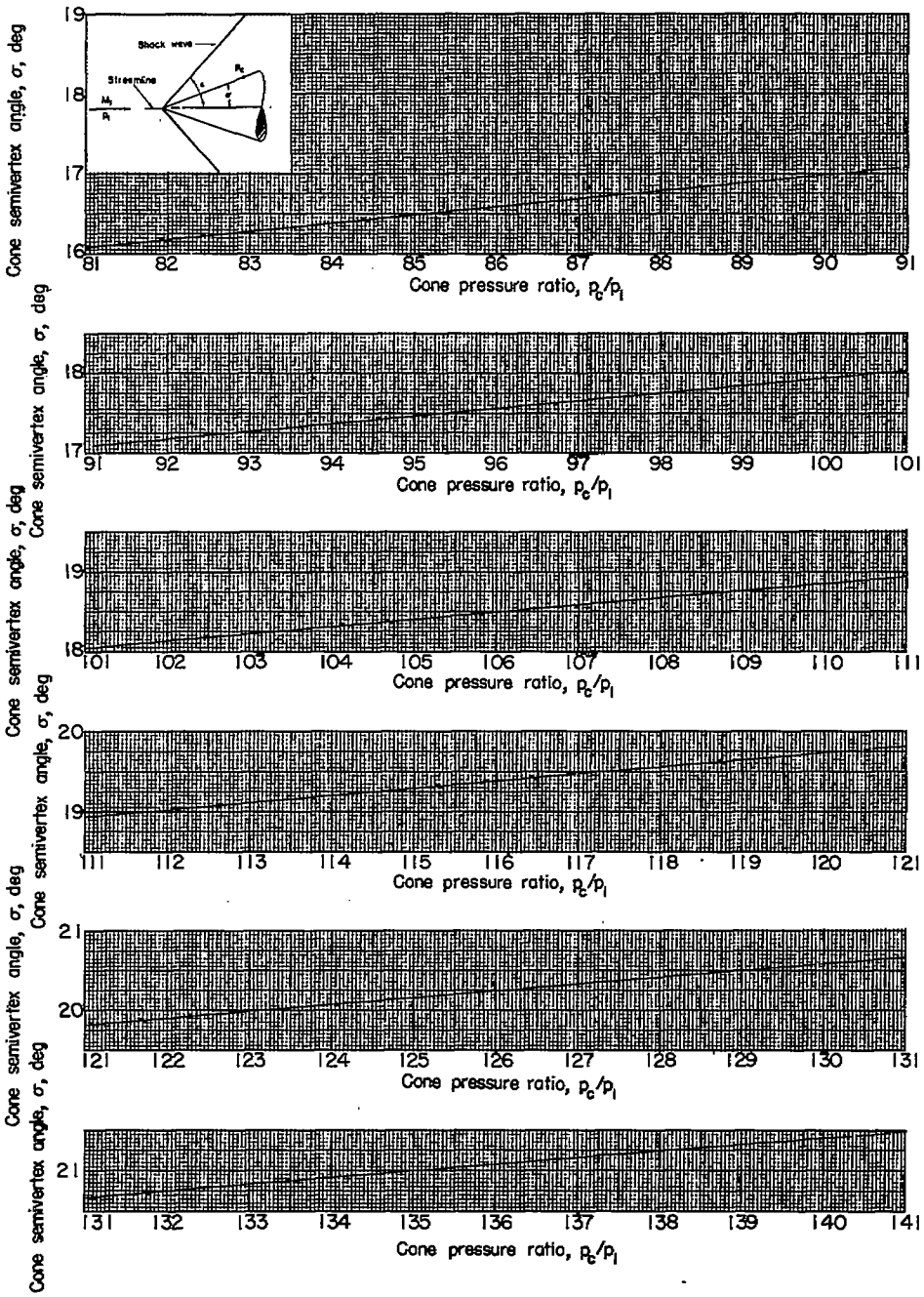
(a) p_c/p_1 = 1 to 31.

Figure 15.- Variation of the cone pressure ratio p_c/p_1 with cone semivertex angle. $M_1 = 24$; $\gamma = 5/3$.



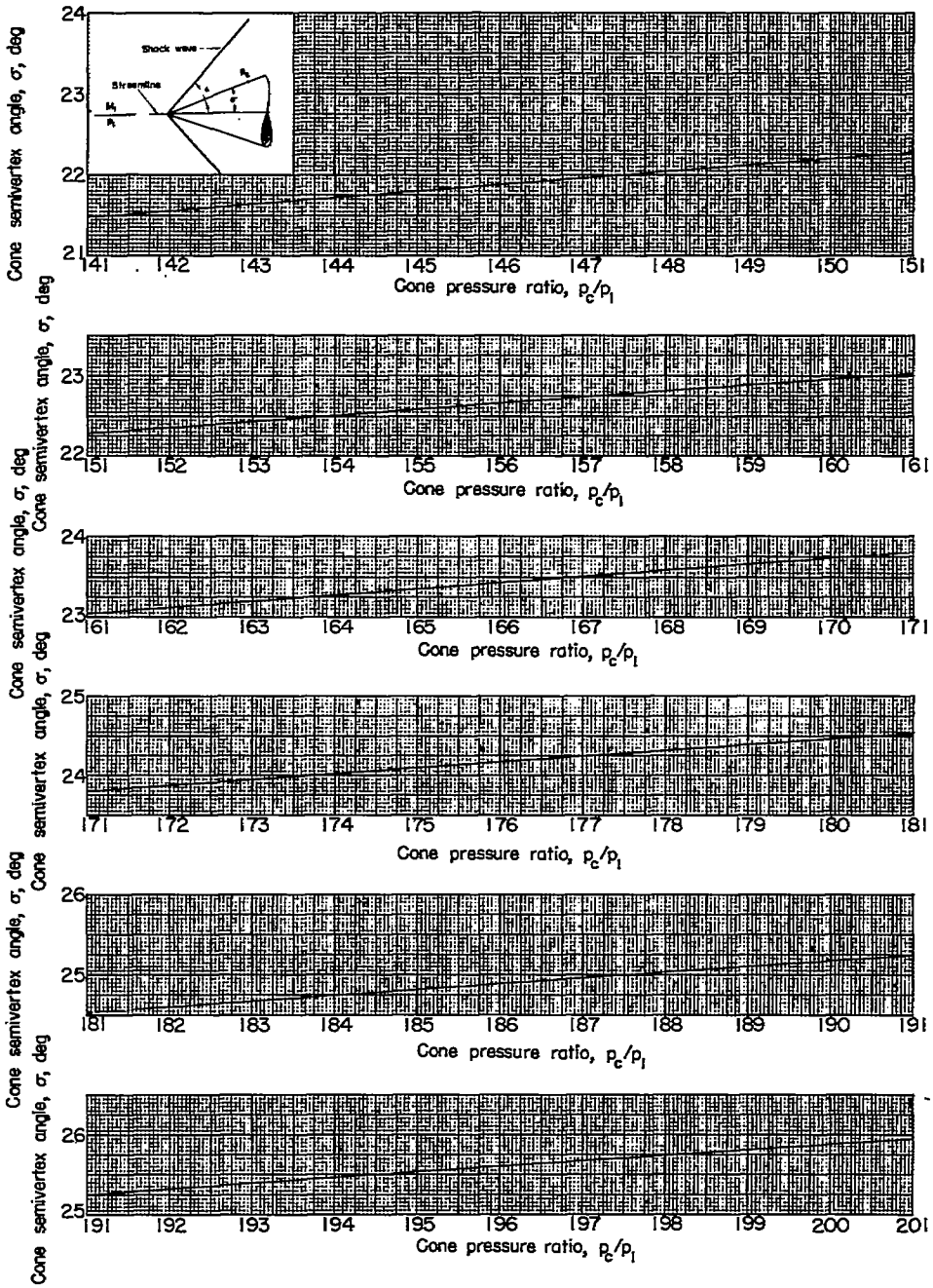
(b) p_c/p_1 = 31 to 81.

Figure 15.- Continued.



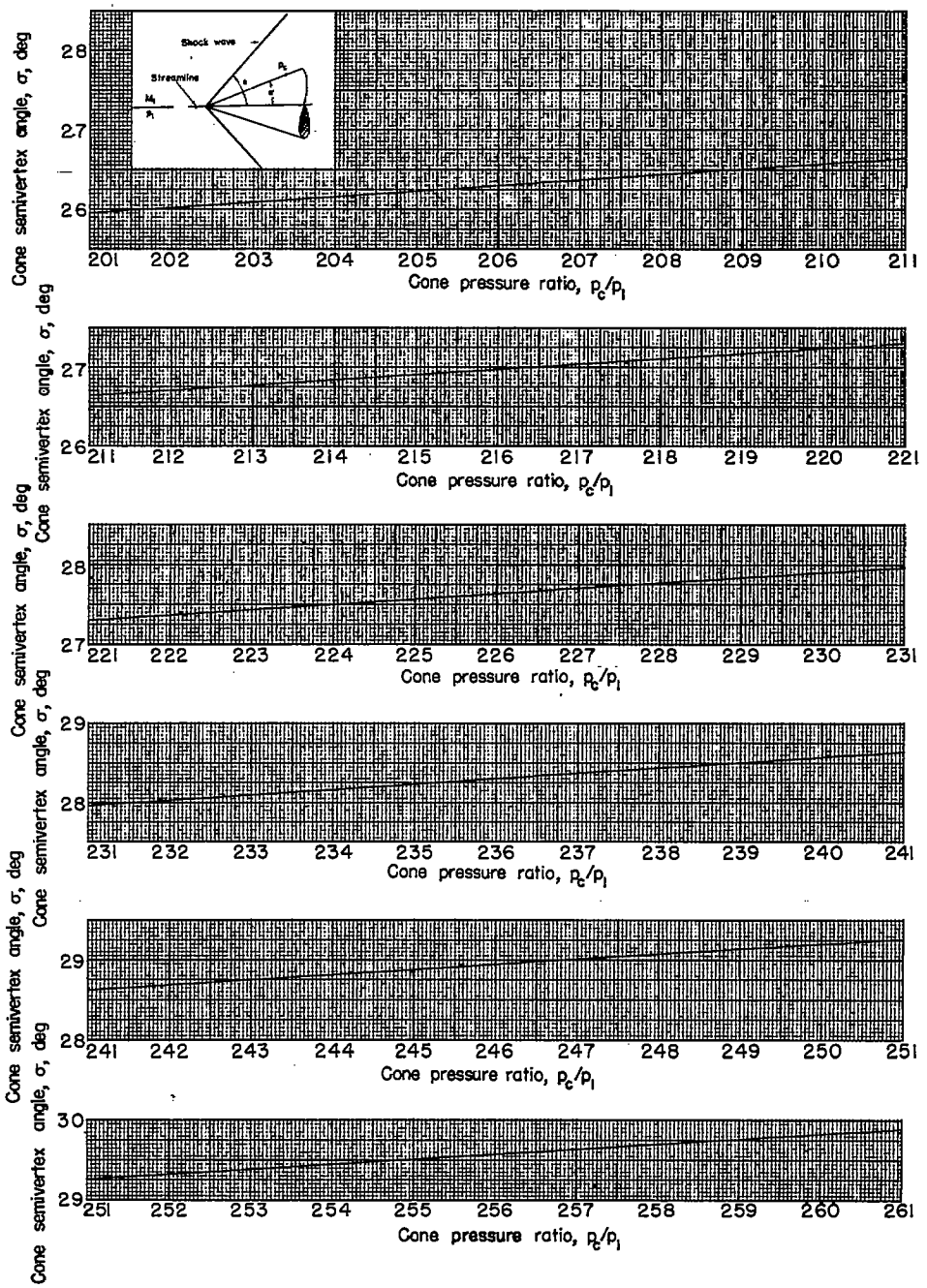
(c) p_c/p_1 = 81 to 141.

Figure 15.- Continued.



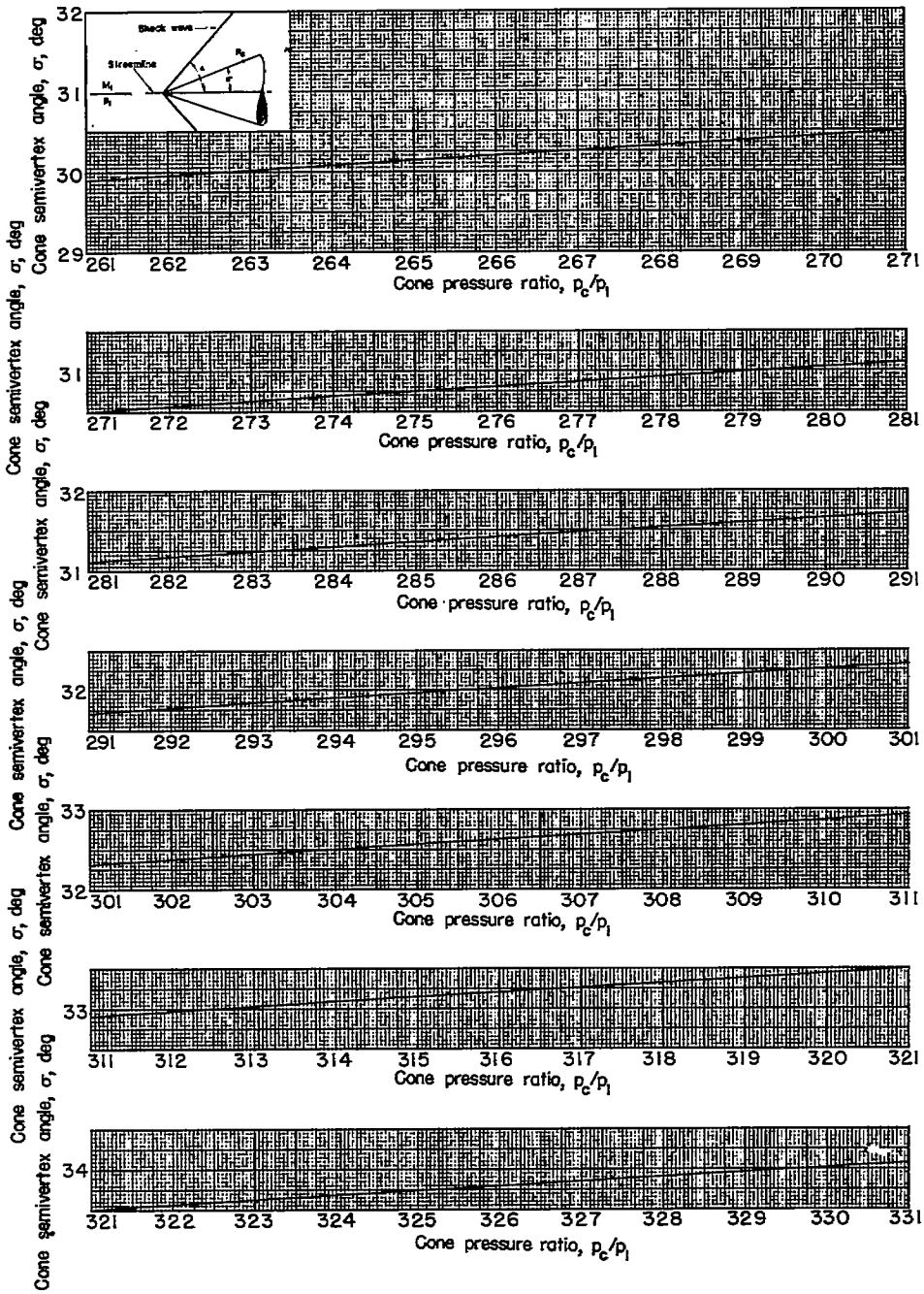
(d) p_c/p_1 = 141 to 201.

Figure 15.- Continued.



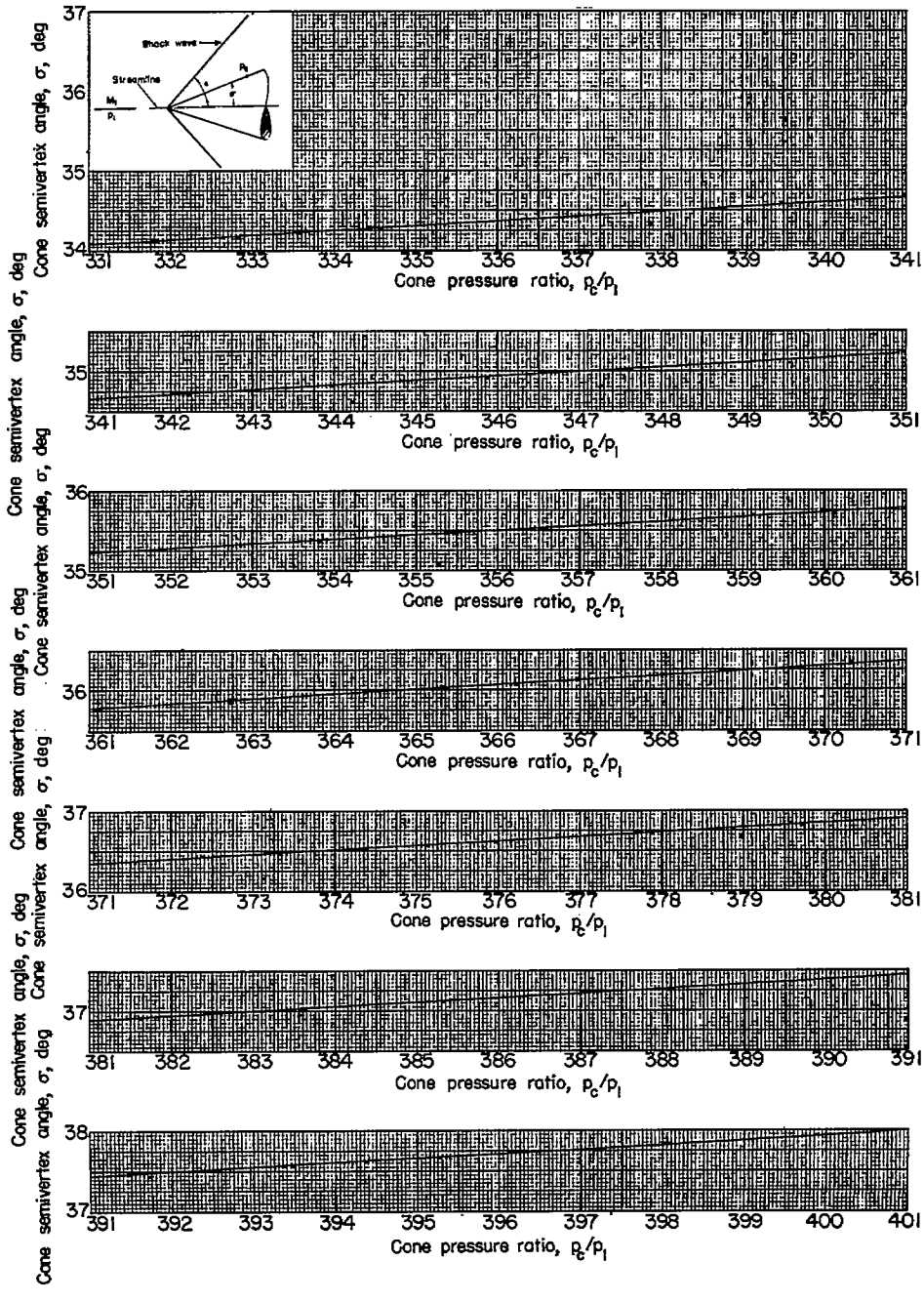
(e) p_c/p_1 = 201 to 261.

Figure 15.- Continued.



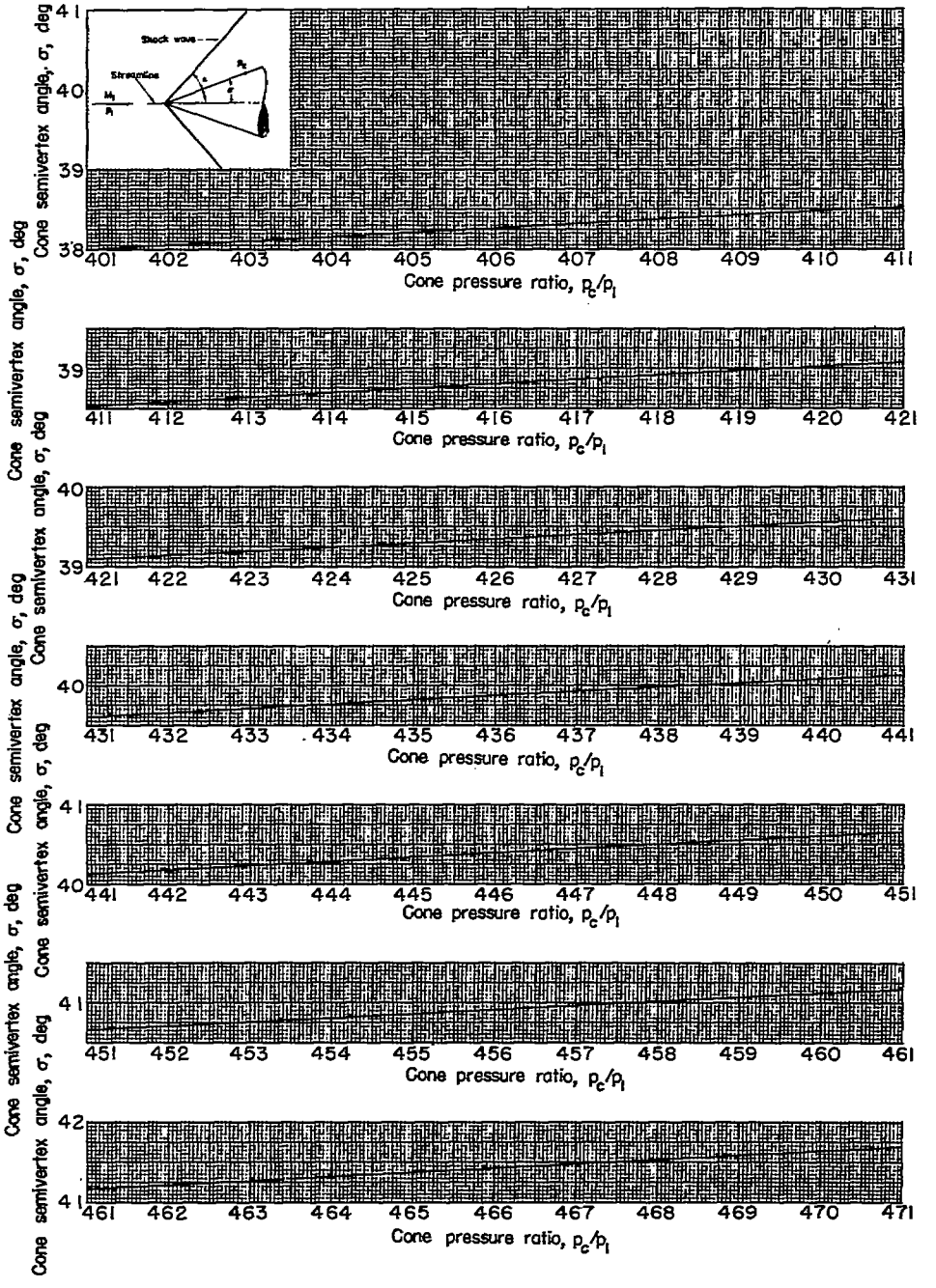
(f) p_c/p_1 = 261 to 331.

Figure 15.- Continued.



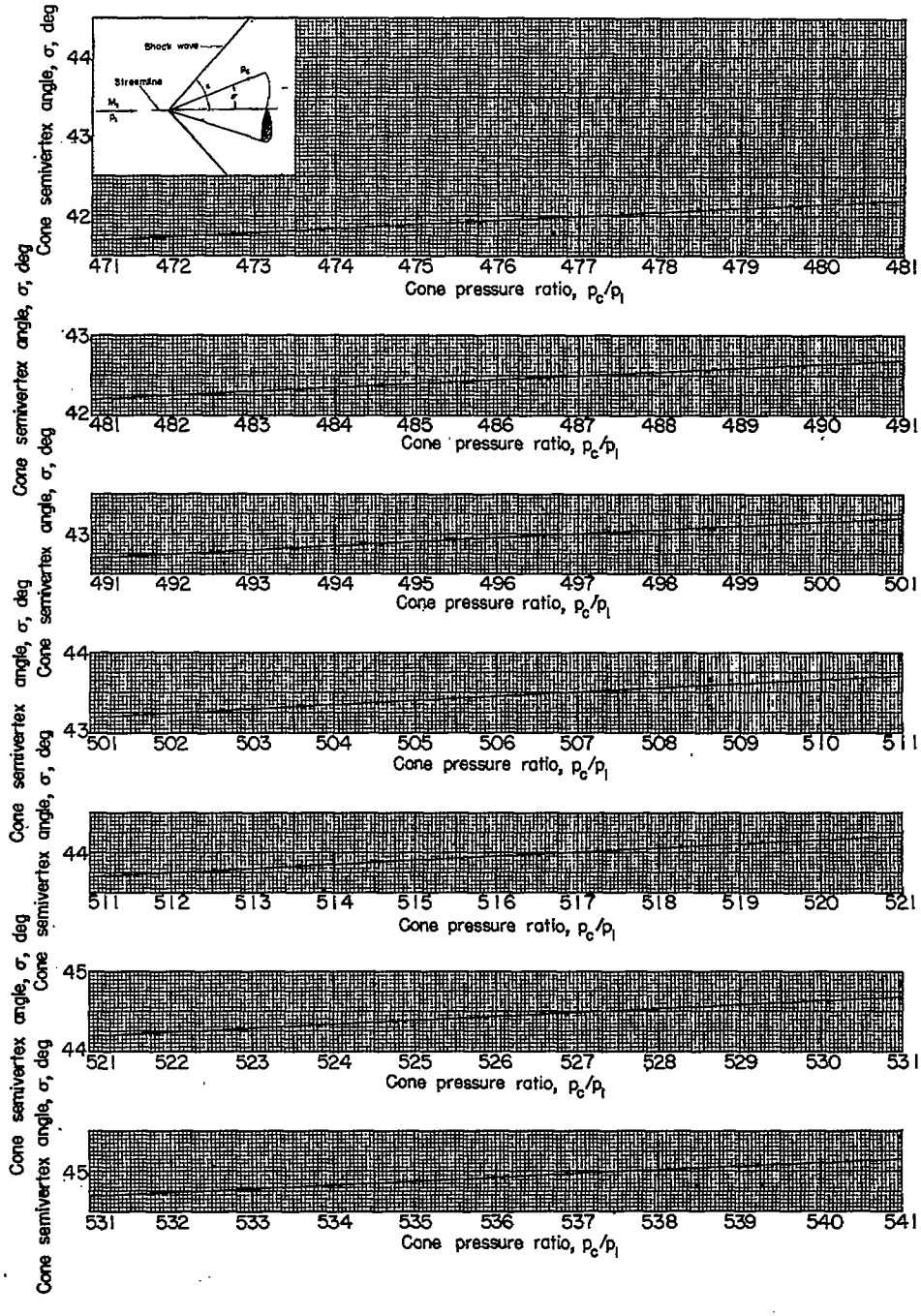
(g) p_c/p_1 = 331 to 401.

Figure 15.- Continued.



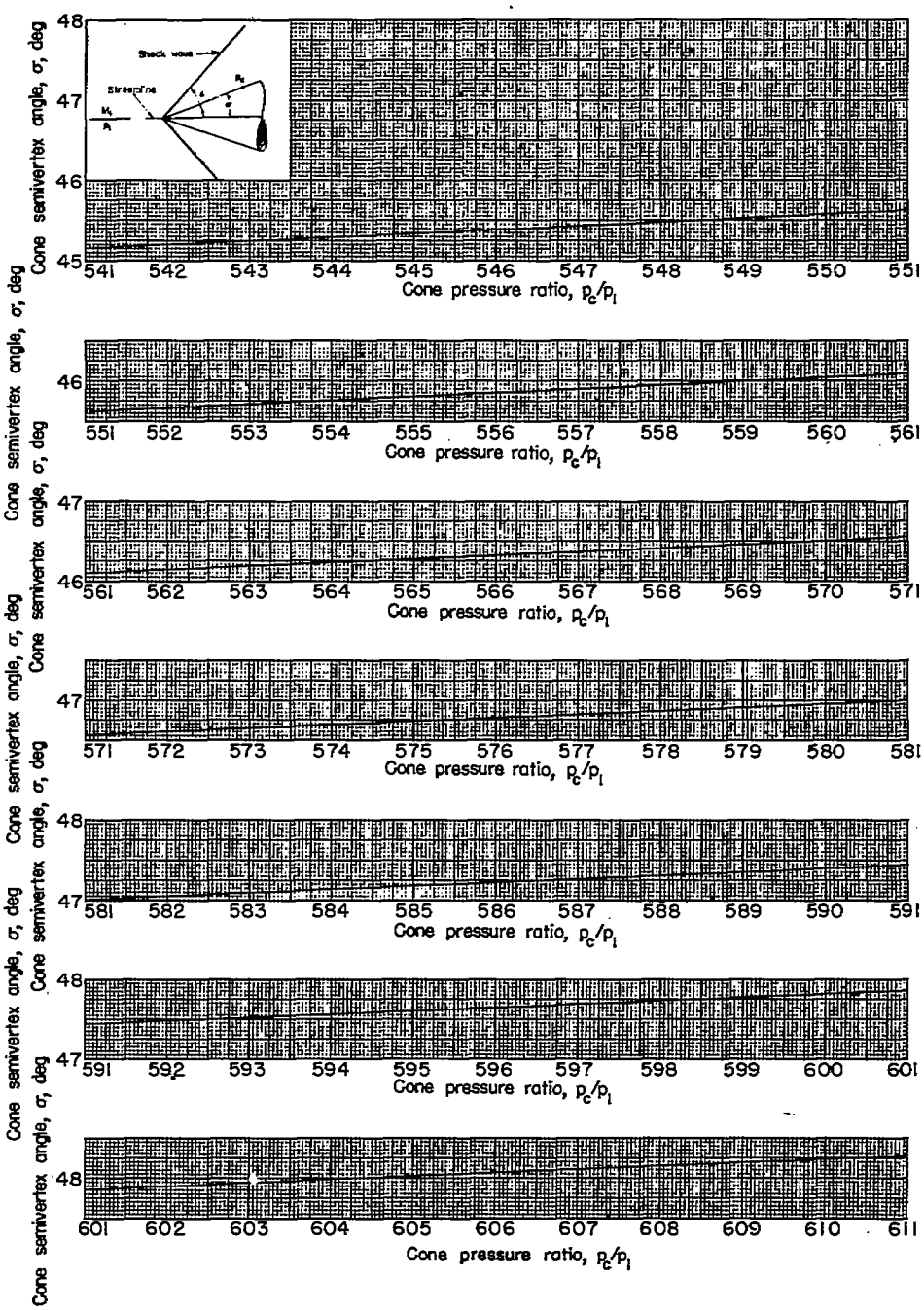
(h) p_c/p_1 = 401 to 471.

Figure 15.- Continued.



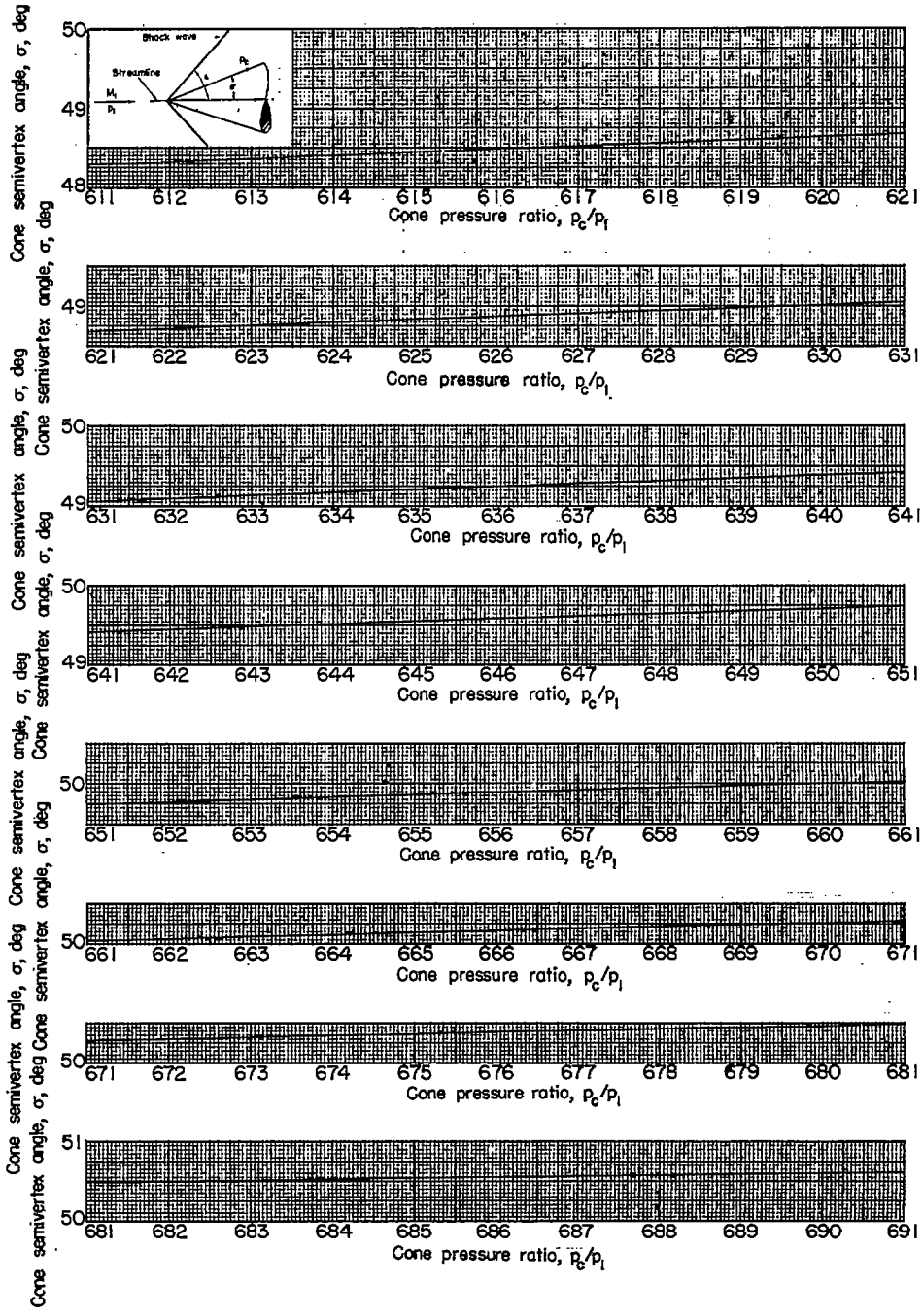
(i) p_c/p_1 = 471 to 541.

Figure 15.- Continued.



(j) p_c/p_1 = 541 to 611.

Figure 15.- Continued.



(k) p_c/p_l = 611 to 691.

Figure 15.- Concluded.

TABLE II.- TABULATION OF THE FUNCTION $\frac{\sin z \sin(2n - 1)z}{z}$ - Concluded

n	Value of the function $\frac{\sin z \sin(2n - 1)z}{z}$ at values of z of -															n
	4.80	4.82	4.84	4.86	4.88	4.90	4.92	4.94	4.96	4.98	5.00	5.02	5.04	5.06	5.08	
76	-.1638	.1770	-.1873	.1946	-.1990	.2002	-.1984	.1937	-.1860	.1758	-.1630	.1481	-.1312	.1126	-.0928	76
77	.1391	-.1502	.1602	-.1689	.1763	-.1824	.1870	-.1903	.1922	-.1927	.1917	-.1895	.1859	-.1812	.1752	77
78	-.1101	.1166	-.1228	.1286	-.1341	.1392	-.1439	.1482	-.1521	.1557	-.1588	.1615	-.1637	.1656	-.1670	78
79	.0777	-.0776	.0774	-.0771	.0769	-.0766	.0763	-.0759	.0755	-.0751	.0747	-.0742	.0737	-.0732	.0726	79
80	-.0430	.0350	-.0270	.0190	-.0111	.0034	.0043	-.0118	.0192	-.0264	.0334	-.0402	.0468	-.0532	.0593	80
81	.0070	.0092	-.0252	.0408	-.0558	.0703	-.0841	.0972	-.1093	.1206	-.1308	.1399	-.1480	.1549	-.1606	81
82	.0293	-.0530	.0757	-.0970	.1166	-.1342	.1497	-.1627	.1732	-.1810	.1860	-.1883	.1879	-.1847	.1789	82
83	-.0647	.0944	-.1213	.1449	-.1644	.1795	-.1898	.1951	-.1954	.1908	-.1814	.1677	-.1499	.1288	-.1048	83
84	.0980	-.1314	.1591	-.1802	.1939	-.1997	.1977	-.1878	.1707	-.1473	.1184	-.0855	.0499	-.0131	-.0234	84
85	-.1284	.1623	-.1865	.1999	-.2018	.1922	-.1719	.1422	-.1050	.0625	-.0173	-.0280	.0708	-.1087	.1396	85
86	.1549	-.1857	.2019	-.2024	.1872	-.1579	.1170	-.0677	.0141	.0397	-.0894	.1312	-.1622	.1800	-.1836	86
87	-.1766	.2006	-.2042	.1873	-.1518	.1017	-.0422	-.0206	.0803	-.1308	.1673	-.1863	.1864	-.1678	.1328	87
88	.1929	-.2062	.1933	-.1560	.0996	-.0313	-.0398	.1048	-.1553	.1854	-.1914	.1731	-.1334	.0777	-.0134	88
89	-.2033	.2023	-.1698	.1113	-.0362	-.0494	.1150	-.1675	.1930	-.1881	.1539	-.0964	.0252	.0485	-.1130	89
90	.2075	-.1891	.1354	-.0569	-.0312	.1122	-.1707	.1962	-.1844	.1382	-.0668	-.0156	.0935	-.1521	.1810	90
91	-.2053	.1672	-.0922	-.0024	.0952	-.1653	.1974	-.1849	.1314	-.0496	-.0417	.1220	-.1734	.1852	-.1554	91
92	.1968	-.1375	.0430	.0615	-.1485	.1954	-.1905	.1360	-.0469	-.0528	.1368	-.1836	.1815	-.1323	.0496	92
93	-.1823	.1015	.0090	-.1153	.1853	-.1983	.1512	-.0593	-.0489	.1404	-.1879	.1779	-.1145	.0180	.0818	93
94	.1623	-.0608	-.0604	.1591	-.2015	.1736	-.0863	-.0294	.1329	-.1888	.1785	-.1069	.0000	.1047	-.1710	94
95	-.1372	.0173	.1079	-.1892	.1952	-.1248	.0067	.1121	-.1851	.1844	-.1117	-.0032	.1145	-.1787	.1718	95
96	.1080	.0270	-.1484	.2028	-.1673	.0586	.0741	-.1720	.1927	-.1284	.0089	.1122	-.1815	.1698	-.0839	96
97	-.0754	-.0700	.1793	-.1989	.1207	.0157	-.1422	.1969	-.1541	.0365	.0968	-.1800	.1734	-.0821	-.0474	97
98	.0406	.1098	-.1985	.1779	-.0606	-.0879	.1862	-.1817	.0784	.0656	-.1713	.1818	-.0935	-.0437	.1542	98
99	-.0045	-.1446	.2049	-.1414	-.0061	.1478	-.1986	.1294	.0161	-.1494	.1907	-.1170	-.0252	.1493	-.1266	99
100	-.0318	.1727	-.1981	.0927	.0722	-.1872	.1772	-.0509	-.1067	.1913	-.1487	.0000	.0000	.0000	.0000	100

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