# REPORT No. 246

## TABLES FOR CALIBRATING ALTIMETERS AND COMPUTING ALTITUDES BASED ON THE STANDARD ATMOSPHERE

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### SUMMARY

This report was prepared by the Aeronautic Instruments Section of the Bureau of Standards under research authorization formulated and recommended by the subcommittee on aerodynamics and approved by the National Advisory Committee for Aeronautics.

During 1925 the assumption of an isothermal atmosphere which was in general use as the standard for the calibration of altimeters in the United States was replaced by a standard atmosphere which assumes an altitude-temperature relation closely corresponding to the average of upper air observations at latitude 40° in this country. The same standard atmosphere had already been adopted somewhat earlier in the United States as the aircraft performance standard.

National Advisory Committee for Aeronautics Technical Reports Nos. 147 and 218 give necessary constants, tables, and information. However, neither of these reports includes all of the tables required for the computation of actual altitudes nor those readily suitable for use in calibrating altimeters, since the altitude intervals for which data are given are not sufficiently small. The present report has been prepared specifically for these purposes.

The formulas which define the standard atmosphere are given in this report, together with other formulas giving the corrections to be applied to the standard altitude in order to obtain the actual altitude when the necessary observations of pressure and temperature are available.

The tables necessary for the use of this standard atmosphere in calibrating altimeters and in computing altitudes form the principal part of this report. In Table I are given the standard altitudes at pressure intervals of 0.1 millimeter of mercury in the range 87 to 200 millimeters of mercury and at intervals of 0.2 millimeter of mercury in the range 200 to 790 millimeters of mercury. In Table II standard altitudes are given at intervals of 0.01 inch of mercury in the range 3.4 to 31.09 inches of mercury. In Table III are given the pressure in inches and millimeters of mercury, the temperature, the mean temperature, and the corresponding isothermal altitude at every 500-foot interval of standard altitude in the range −1,000 to +50,000 feet. Temperature corrections for use in computing altitudes from observed pressures and temperatures are given in Table IV.

An example of the computation of actual altitude from the necessary observations of pressure and temperature is also included.


### INTRODUCTION

In the isothermal atmosphere which had been used for calibrating altimeters in the United States previous to 1925 the air is assumed to be at a temperature of +10° C. at all altitudes. (Reference 1.) This atmosphere represents average atmospheric conditions quite accurately up to an altitude of approximately 12,000 feet, and hence, as long as aircraft did not exceed this altitude, the altimeter reading was an approximate measure of the actual altitude. The ceiling of aircraft now far exceeds 12,000 feet, and on account of the low temperatures corresponding to these altitudes the assumption of an isothermal atmosphere at +10° C. no longer even approximates the actual average conditions, so that altimeters calibrated to this atmosphere no longer closely approximate the actual conditions.

A new altimeter calibration standard approximating average atmospheric conditions up to at least 50,000 feet was proposed at a conference held in December, 1924, at which the following organizations were represented: Bureau of Aeronautics of the United States Navy, Air Service of the United States Army, National Advisory Committee for Aeronautics, Bureau of Standards, United States Weather Bureau, and the National Aeronautic Association. The standard atmosphere which was proposed by this conference for use as an altimeter calibration standard has since been adopted by the organizations represented at this conference.

## THE NEW STANDARD ATMOSPHERE

The standard atmosphere adopted as the new altimeter calibration standard has also been adopted as the standard for aircraft performance in the United States. The standard atmosphere is defined by an altitude-temperature-pressure relation in which an arbitrary altitude-temperature relation is assumed. The altitude-temperature assumption of this standard, a slight modification of that proposed by Toussaint (Reference 2), is extremely simple and approximates the average observed variation of temperature with altitude at latitude 40° in the United States (Reference 3). The standard atmosphere is defined completely in National Advisory Committee for Aeronautics Technical Report No. 218, "Standard Atmosphere—Tables and Data," by W. S. Diehl. The important formulas in this last report are also given here for the sake of completeness, together with the expression for the temperature correction to be used in computing actual altitudes from pressure and temperature observations. Absolute temperatures are equal to centigrade temperatures plus 273.

*Symbols relating to the standard atmosphere:*

$Z$=Standard altitude.
$Z_{55}$=Altitude at the lower limit of the isothermal layer.
$T$=Absolute temperature of the air at altitude $Z$.
$T_o$=Standard sea level temperature in degrees absolute.
$T_m$=Mean temperature of the air column below altitude $Z$ in degrees absolute.
$T_{m55}$=Mean temperature in degrees absolute for $Z_{55}$.
$p$=Pressure of the air at altitude $Z$.
$p_o$=Standard sea level pressure.

*Symbols relating to actual observations:*

$H$=Actual altitude.
$T_{ma}$=The mean temperature, computed from observations, in degrees absolute.
$C$=Altitude correction due to deviation of the actual from the standard mean temperature.
$p$=Pressure of the air at altitude $H$.
$p_o$=Standard sea level pressure.

*Formulas relating to standard atmosphere:*

(*a*) Up to the isothermal layer—

$$T=288-aZ \tag{1}$$

$$T_o=288^\circ \text{ absolute}$$

$$T_m=\frac{aZ}{\log_e \frac{T_o}{T_o-aZ}} \tag{2}$$

$a$=0.0065000 for $Z$ in meters,
=0.0019812 for $Z$ in feet.

(*b*) At the lower limit of the isothermal layer—

$$T=-55^\circ \text{ C.}=218^\circ \text{ absolute,} \tag{3}$$

$Z_{55}$=35,332 feet=10,769 meters,
$T_{m55}$=251.378° absolute.

*Formulas relating to standard atmosphere*—Continued.

(*c*) In the isothermal layer—

$$T=-55^\circ \text{ C.}=218^\circ \text{ absolute.} \tag{4}$$

$$T_m=\frac{Z}{\frac{Z_{55}}{T_{m55}}+\frac{Z-Z_{55}}{218}} \tag{5}$$

(*d*) For all standard altitudes—

$$Z=K\frac{T_m}{T_o}\log_{10}\frac{p_o}{p} \tag{6}$$

(*e*) For computing actual altitudes—

$$H=Z+C \tag{7}$$

$$H=K\frac{T_{ma}}{T_o}\log\frac{p_o}{p} \tag{8}$$

$$C=K\frac{T_{ma}-T_m}{T_o}\log\frac{p_o}{p}$$

$$=63{,}691.8\frac{T_{ma}-T_m}{T_o}\log\frac{p_o}{p}\text{ feet.} \tag{9}$$

$$=\frac{T_{ma}-T_m}{T_m}Z.$$

(*f*) For formulas (6) and (8)—

$K$[1]$=19{,}413.3$ for $Z$ in meters.

$=63{,}691.8$ for $Z$ in feet.

$p_o=760$ mm of Hg.$=29.921$ in Hg.

$p$ is in same unit of pressure as $p_o$.

Attention should be called to the fact that whether the mean temperature $T_{ma}$ in formula (8) is an harmonic or an arithmetic mean depends entirely on the data from which $T_{ma}$ is to be computed. If the air temperatures are available for different *actual altitudes* then the harmonic mean temperature must be computed (Reference 4). This case occurs only infrequently. *When the actual altitude is to be computed from the following data obtained in flight, the arithmetic mean is invariably used.* If the air temperatures corresponding to various pressures are observed, then the temperatures may be plotted against $\log p$ or $\log\frac{p_o}{p}$ for determining the mean. If instead, the altitudes indicated by an altimeter calibrated to an isothermal calibration standard are available, then the temperatures may be plotted against these altitudes directly. An example of this method of computation is given under the heading "Computation of Altitude from Pressure and Temperature Observations." If altitudes indicated by an altimeter calibrated to the new calibration standard are given, these altitudes should be converted to isothermal altitudes by means of Table III and the temperatures plotted against these isothermal altitudes.

## DESCRIPTION OF THE TABLES

The method of computing the tables was as follows: For even standard altitudes differing by 500 feet in the range $-1{,}000$ to $+50{,}000$ feet, the air temperatures, mean temperatures, and then the pressures were computed to six significant figures. The results were checked by

[1] The values of $K$ adopted for the altimeter calibration standard differ in the last place from the values given in N. A. C. A. Technical Report No. 218, but the differences are small enough to be ignored.

the method of differences. The standard altitude was then computed to one digit beyond those given in the table for the pressure range of Table I for every millimeter of mercury. The mean temperatures corresponding to every millimeter of mercury were secured from graphs of the computations of the mean temperatures and pressures for the 500-foot intervals of altitude. The altitudes corresponding to the values of pressure in tenths millimeters of mercury were found by interpolation. The altitude-pressure table with the pressures in inches of mercury was obtained by conversion and interpolation. All tables were checked by the method of differences. The accuracy of computation of Tables I and II is within 1 foot at the lower altitudes and 2 feet at the higher altitudes.

*Table I.*—Altitudes are given at pressure intervals of 0.1 millimeter of mercury in the range 87 to 200 millimeters of mercury and at intervals of 0.2 millimeter of mercury in the range 200 to 790 millimeters of mercury.

*Table II.*—Altitudes are given at pressure intervals of 0.01 inch of mercury in the range 3.4 to 31.09 inches of mercury.

*Table III.*—The pressures in inches of mercury and millimeters of mercury are given for every 500-foot interval for the range $-1{,}000$ to $+50{,}000$ feet. The temperature of the air at the altitude and the mean temperature of the air column below the altitude are also given for each altitude. Furthermore, the altitudes corresponding to the pressures are also given for an isothermal atmosphere at a temperature of $+10°$ C. The values of the latter are rounded off to the nearest 10 feet. Since the values of the pressures are rounded off from computations extending to six significant figures, it will be found that the pressures in inches and in millimeters do not always exactly correspond.

*Table IV.*—The temperature corrections (to be added algebraically to a standard altitude $Z$ to give actual altitude $H$ when the actual mean temperature differs from that of the standard atmosphere) are given for a useful range of mean temperature for each 2,000-foot interval of standard altitude up to 50,000 feet.

## COMPUTATION OF ALTITUDE FROM PRESSURE AND TEMPERATURE OBSERVATIONS

*Standard altitude.*—The atmospheric pressure is measured simultaneously by suitable means at the surface of the earth and at the level of the aircraft. The standard altitude above the ground level is obtained by subtracting the altitude corresponding to the pressure at the surface from that corresponding to the free air pressure at the aircraft level, as given in either Table I or II.

*Temperature correction.*—The actual mean temperature of the air column extending from the ground to the level of the aircraft will rarely be the same as the corresponding mean temperature for the standard atmosphere. In computing altitudes accurately it is necessary to determine the actual mean temperature and to apply a correction to the indicated or standard altitude depending on this temperature. (Reference 5.)

To obtain the actual mean temperature of the air column the temperature of the free air at successive levels should be plotted against corresponding values of $\log \frac{p_o}{p}$ (or $\log p$) If the observations of temperature correspond to values of $p$ obtained from an aneroid barometer, it is convenient to plot values of $\log p$ as abscissas. The altitudes indicated by an altimeter calibrated to the old isothermal standard are proportional to $\log \frac{p_o}{p}$, and so if such altimeter readings form part of the observations they can be plotted directly. If altitudes indicated by an altimeter calibrated to the new standard given in this paper form part of the observations, these altitudes should be converted to isothermal altitudes by means of Table III of this report (or more easily by either Table I or Table II of this report and Bureau of Standards Aeronautic Instruments Circular No. 3) before being plotted. The curve thus obtained is subdivided into equal divisions of isothermal altitude (or $\log p$). The number of divisions is determined largely by the number of observations and the accuracy of the data. The arithmetic mean of the air temperatures at the middle of each altitude division gives the actual

mean temperature. The correction in Table IV corresponding to the mean temperature thus found and to the standard altitude is the desired temperature correction. *The correction must be obtained by interpolation between the next higher and the next lower altitudes in Table IV.*

*Actual altitude.*—The actual altitude $H$ is the sum of the standard altitude and the temperature correction, proper attention being given to the sign of the latter. See equation (7).

EXAMPLE OF THE COMPUTATION OF ACTUAL ALTITUDE

*Data.*—Pressure of air at surface: 29.54 inches of mercury.
Elevation of surface above sea level= 800 feet.
Pressure of air at level of aircraft: 12.22 inches of mercury.
Temperature observations (from the log of a flight).

| Isothermal altitude | Free air temperature | Isothermal altitude | Free air temperature |
|---|---|---|---|
| *Feet* | ° *C.* | *Feet* | ° *C.* |
| 0 | +28 | 12, 000 | 5 |
| 1, 000 | 23 | 13, 000 | 2. 5 |
| 2, 000 | 20 | 14, 000 | +2 |
| 3, 000 | 18 | 15, 000 | −1 |
| 4, 000 | 15 | 16, 000 | −1 |
| 5, 000 | 12 | 17, 000 | −4 |
| 6, 000 | 11 | 18, 000 | −6 |
| 7, 000 | 11 | 21, 000 | −11 |
| 8, 000 | 11 | 22, 000 | −13 |
| 9, 000 | 9 | 23, 000 | −14 |
| 10, 000 | 8 | 24, 000 | −17 |
| 11, 000 | 7 | 24, 200 | −18 |

*Computations.*—The temperatures have been plotted against isothermal altitude in Figure 1. The graph has been divided into 2,000 foot intervals and the mean temperature of the intervals determined by inspection and listed below:

| Isothermal altitude interval | Mean temperature of interval | Isothermal altitude interval | Mean temperature of interval |
|---|---|---|---|
| *Thousand feet* | ° *C.* | *Thousand feet* | ° *C.* |
| 0–2 | +23. 5 | 14–16 | 0. 0 |
| 2–4 | 17. 5 | 16–18 | −4. 0 |
| 4–6 | 12. 5 | 18–20 | −7. 5 |
| 6–8 | 11. 0 | 20–22 | −11. 0 |
| 8–10 | 9. 5 | 22–24 | −14. 5 |
| 10–12 | 7. 0 | 24–24. 2 | −17. 5 |
| 12–14 | +3. 0 | | |

| | |
|---|---|
| Sum of the mean temperatures of the intervals 0–24,000 feet | +47. 0 |
| Mean temperature of air column below 24,000 feet, in °C$=\frac{47.0}{12}$ | +3. 9 |
| Mean temperature of air column below 24,200 feet=+3.9, in °C$-\frac{0.2\times17.5}{24.2}$ | +3. 8 |
| Altitude corresponding to 12.22 in. Hg. (Table II) | 22, 775 |
| Altitude corresponding to 29.54 in. Hg. (Table II) | +354 |
| Standard altitude, in feet | 22, 421 |
| Temperature correction corresponding to +3.8° C. and 22,421 feet (Table IV) | +986 |
| Actual altitude above surface | 23, 407 |
| Elevation of ground surface | +800 |
| Actual altitude above sea level, in feet | 24, 207 |

## REFERENCES

1. Bureau of Standards: "Altitude-Pressure Tables." Aeronautic Instruments Circular No. 3, Third Edition, 1920.

2. Toussaint, A.: "Study of the Performance of an Airplane Fitted with a Supercharged Engine." L'Aeronautique, October, 1919.

3. Gregg, W. R.: "Standard Atmosphere." N. A. C. A. Technical Report No. 147, 1922. See this reference for comparison of the standard temperatures and observed temperatures.

4. Brombacher, W. G.: "The Determination of Altitude of Aircraft." Journal of the Optical Society of America and Review of Scientific Instruments, page 739, volume 7, 1923.

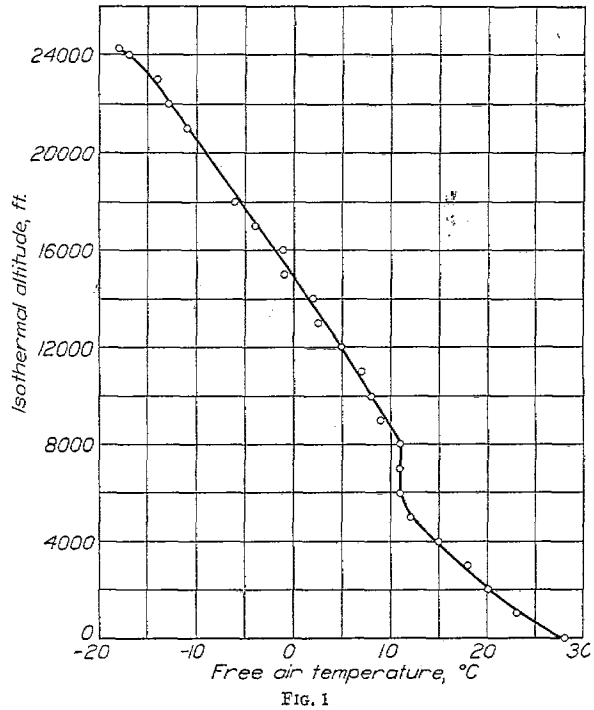


FIG. 1

5. Aeronautic Instruments Section, Bureau of Standards: "Aircraft Instruments." The Ronald Press Co., New York, 1926.

TABLE I

ALTITUDE-PRESSURE TABLE—FEET-MILLIMETERS

| *p* mm. | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
|---|---|---|---|---|---|---|---|---|---|---|
| 87 | 50073 | 50049 | 50025 | 50001 | 49977 | 49953 | 49929 | 49905 | 49881 | 49857 |
| 88 | 49833 | 49810 | 49786 | 49762 | 738 | 715 | 691 | 667 | 644 | 620 |
| 89 | 596 | 573 | 550 | 526 | 503 | 479 | 456 | 433 | 409 | 386 |
| 90 | 362 | 339 | 316 | 293 | 270 | 247 | 49223 | 49200 | 49177 | 49154 |
| 91 | 49131 | 49108 | 49085 | 49062 | 49039 | 49016 | 48994 | 48971 | 48948 | 48925 |
| 92 | 48902 | 48879 | 48857 | 48834 | 48812 | 48789 | 766 | 744 | 721 | 698 |
| 93 | 676 | 653 | 631 | 609 | 586 | 564 | 541 | 519 | 497 | 474 |
| 94 | 452 | 430 | 407 | 385 | 363 | 341 | 319 | 297 | 275 | 252 |
| 95 | 230 | 48208 | 48186 | 48164 | 48143 | 48121 | 48099 | 48077 | 48055 | 48033 |
| 96 | 48011 | 47989 | 47968 | 47946 | 47924 | 47902 | 47881 | 47859 | 47837 | 47816 |
| 97 | 47794 | 773 | 751 | 730 | 708 | 687 | 665 | 644 | 622 | 601 |
| 98 | 579 | 558 | 537 | 516 | 494 | 473 | 452 | 431 | 409 | 388 |
| 99 | 367 | 346 | 325 | 304 | 283 | 262 | 241 | 220 | 47199 | 47178 |

TABLE I—Continued

ALTITUDE-PRESSURE TABLE—FEET-MILLIMETERS—Continued

| p mm. | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
|---|---|---|---|---|---|---|---|---|---|---|
| 100 | 47156 | 47136 | 47115 | 47094 | 47073 | 47052 | 47032 | 47011 | 46990 | 46969 |
| 101 | 46948 | 46928 | 46907 | 46886 | 46866 | 46845 | 46824 | 46804 | 783 | 763 |
| 102 | 742 | 721 | 701 | 681 | 660 | 640 | 619 | 599 | 579 | 558 |
| 103 | 538 | 517 | 497 | 477 | 457 | 436 | 416 | 396 | 376 | 355 |
| 104 | 335 | 315 | 295 | 275 | 255 | 235 | 215 | 46195 | 46175 | 46155 |
| 105 | 46135 | 46115 | 46095 | 46075 | 46055 | 46036 | 46016 | 45996 | 45976 | 45956 |
| 106 | 45936 | 45917 | 45897 | 45877 | 45858 | 45838 | 45819 | 799 | 779 | 760 |
| 107 | 740 | 721 | 701 | 682 | 662 | 643 | 623 | 604 | 584 | 565 |
| 108 | 545 | 526 | 507 | 487 | 468 | 449 | 430 | 410 | 391 | 372 |
| 109 | 352 | 333 | 314 | 295 | 276 | 257 | 238 | 218 | 199 | 45180 |
| 110 | 45161 | 45142 | 45123 | 45104 | 45085 | 45066 | 45047 | 45028 | 45010 | 44991 |
| 111 | 44972 | 44953 | 44934 | 44915 | 44896 | 44878 | 44859 | 44840 | 44821 | 803 |
| 112 | 784 | 765 | 747 | 728 | 709 | 691 | 672 | 654 | 635 | 616 |
| 113 | 598 | 579 | 561 | 542 | 524 | 506 | 487 | 469 | 450 | 432 |
| 114 | 413 | 395 | 377 | 358 | 340 | 322 | 304 | 285 | 267 | 249 |
| 115 | 230 | 212 | 194 | 44176 | 44158 | 44140 | 44122 | 44103 | 44085 | 44067 |
| 116 | 44049 | 44031 | 44013 | 43995 | 43977 | 43959 | 43941 | 43923 | 43905 | 43887 |
| 117 | 43869 | 43851 | 43834 | 816 | 798 | 780 | 762 | 744 | 727 | 709 |
| 118 | 691 | 673 | 656 | 638 | 620 | 603 | 585 | 567 | 550 | 532 |
| 119 | 514 | 497 | 479 | 462 | 444 | 427 | 409 | 392 | 374 | 357 |
| 120 | 339 | 322 | 304 | 287 | 270 | 252 | 235 | 217 | 200 | 183 |
| 121 | 43165 | 43148 | 43131 | 43113 | 43096 | 43079 | 43062 | 43044 | 43027 | 43010 |
| 122 | 42993 | 42976 | 42958 | 42941 | 42924 | 42907 | 42890 | 42873 | 42856 | 42839 |
| 123 | 822 | 805 | 788 | 771 | 754 | 737 | 720 | 703 | 686 | 669 |
| 124 | 652 | 635 | 618 | 602 | 585 | 568 | 551 | 534 | 517 | 501 |
| 125 | 484 | 467 | 450 | 434 | 417 | 400 | 384 | 367 | 350 | 334 |
| 126 | 317 | 300 | 284 | 267 | 251 | 234 | 218 | 201 | 184 | 168 |
| 127 | 42151 | 42135 | 42118 | 42102 | 42086 | 42069 | 42053 | 42036 | 42020 | 42004 |
| 128 | 41987 | 41971 | 41954 | 41938 | 41922 | 41906 | 41889 | 41873 | 41857 | 41840 |
| 129 | 824 | 808 | 792 | 776 | 759 | 743 | 727 | 711 | 695 | 679 |
| 130 | 662 | 646 | 630 | 614 | 598 | 582 | 566 | 550 | 534 | 518 |
| 131 | 502 | 486 | 470 | 454 | 438 | 422 | 406 | 390 | 375 | 359 |
| 132 | 343 | 327 | 311 | 295 | 279 | 264 | 248 | 232 | 216 | 200 |
| 133 | 185 | 169 | 41153 | 41138 | 41122 | 41106 | 41091 | 41075 | 41059 | 41043 |
| 134 | 41028 | 41012 | 40997 | 40981 | 40966 | 40950 | 40934 | 40919 | 40903 | 40888 |
| 135 | 40872 | 40857 | 841 | 826 | 811 | 795 | 780 | 764 | 749 | 733 |
| 136 | 718 | 703 | 687 | 672 | 657 | 641 | 626 | 611 | 595 | 580 |
| 137 | 565 | 549 | 534 | 519 | 504 | 488 | 473 | 458 | 443 | 428 |
| 138 | 412 | 397 | 382 | 367 | 352 | 337 | 322 | 307 | 292 | 276 |
| 139 | 261 | 246 | 231 | 216 | 201 | 186 | 171 | 156 | 40141 | 40126 |
| 140 | 40111 | 40096 | 40081 | 40067 | 40052 | 40037 | 40022 | 40007 | 39992 | 39977 |
| 141 | 39962 | 39947 | 39933 | 39918 | 39903 | 39888 | 39873 | 39859 | 844 | 829 |
| 142 | 814 | 800 | 785 | 770 | 755 | 741 | 726 | 711 | 697 | 682 |
| 143 | 667 | 653 | 638 | 623 | 609 | 594 | 580 | 565 | 550 | 536 |
| 144 | 521 | 507 | 492 | 478 | 463 | 449 | 434 | 420 | 405 | 391 |
| 145 | 376 | 362 | 348 | 333 | 319 | 304 | 290 | 276 | 261 | 247 |
| 146 | 232 | 218 | 204 | 190 | 175 | 161 | 147 | 39132 | 39118 | 39104 |
| 147 | 39090 | 39075 | 39061 | 39047 | 39033 | 39018 | 39004 | 38990 | 38976 | 38962 |
| 148 | 38948 | 38933 | 38919 | 38905 | 38891 | 38877 | 38863 | 849 | 835 | 821 |
| 149 | 806 | 792 | 778 | 764 | 750 | 736 | 722 | 708 | 694 | 680 |
| 150 | 666 | 652 | 639 | 625 | 611 | 597 | 583 | 569 | 555 | 541 |
| 151 | 527 | 514 | 500 | 486 | 472 | 458 | 444 | 431 | 417 | 403 |
| 152 | 389 | 376 | 362 | 348 | 334 | 321 | 307 | 293 | 280 | 266 |
| 153 | 252 | 238 | 225 | 211 | 198 | 184 | 170 | 157 | 143 | 38129 |
| 154 | 38116 | 38102 | 38089 | 38075 | 38062 | 38048 | 38035 | 38021 | 38007 | 37994 |
| 155 | 37980 | 37967 | 37953 | 37940 | 37927 | 37913 | 37900 | 37886 | 37873 | 859 |
| 156 | 846 | 832 | 819 | 806 | 792 | 779 | 765 | 752 | 739 | 725 |
| 157 | 712 | 699 | 685 | 672 | 659 | 646 | 632 | 619 | 606 | 592 |
| 158 | 579 | 566 | 553 | 539 | 526 | 513 | 500 | 487 | 473 | 460 |
| 159 | 447 | 434 | 421 | 408 | 394 | 381 | 368 | 355 | 342 | 329 |
| 160 | 316 | 303 | 290 | 276 | 263 | 250 | 237 | 224 | 211 | 198 |
| 161 | 185 | 172 | 159 | 146 | 133 | 37120 | 37107 | 37094 | 37081 | 37068 |
| 162 | 37056 | 37043 | 37030 | 37017 | 37004 | 36991 | 36978 | 36965 | 36952 | 36939 |
| 163 | 36927 | 36914 | 36901 | 36888 | 36875 | 863 | 850 | 837 | 824 | 811 |
| 164 | 799 | 786 | 773 | 760 | 748 | 735 | 722 | 710 | 697 | 684 |
| 165 | 671 | 659 | 646 | 633 | 621 | 608 | 596 | 583 | 570 | 558 |
| 166 | 545 | 532 | 520 | 507 | 495 | 482 | 469 | 457 | 444 | 432 |
| 167 | 419 | 407 | 394 | 382 | 369 | 357 | 344 | 332 | 319 | 307 |
| 168 | 294 | 282 | 269 | 257 | 245 | 232 | 220 | 207 | 195 | 183 |
| 169 | 170 | 158 | 145 | 133 | 36121 | 36108 | 36096 | 36084 | 36071 | 36059 |

TABLE I—Continued

ALTITUDE-PRESSURE TABLE—FEET-MILLIMETERS—Continued

| $p$ mm. | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
|---|---|---|---|---|---|---|---|---|---|---|
| 170 | 36046 | 36034 | 36022 | 36010 | 35997 | 35985 | 35973 | 35961 | 35948 | 35936 |
| 171 | 35924 | 35911 | 35899 | 35887 | 875 | 862 | 850 | 838 | 826 | 814 |
| 172 | 801 | 789 | 777 | 765 | 753 | 741 | 728 | 716 | 704 | 692 |
| 173 | 680 | 668 | 656 | 644 | 632 | 620 | 607 | 595 | 583 | 571 |
| 174 | 559 | 547 | 535 | 523 | 511 | 499 | 487 | 475 | 463 | 451 |
| 175 | 439 | 427 | 415 | 403 | 391 | 379 | 367 | 356 | 344 | 332 |
| 176 | 320 | 308 | 296 | 284 | 272 | 260 | 248 | 237 | 225 | 213 |
| 177 | 201 | 189 | 177 | 165 | 154 | 142 | 130 | 118 | 35106 | 35095 |
| 178 | 35083 | 35071 | 35059 | 35048 | 35036 | 35024 | 35012 | 35000 | 34989 | 34977 |
| 179 | 34965 | 34954 | 34942 | 34930 | 34918 | 34907 | 34895 | 34883 | 872 | 860 |
| 180 | 848 | 837 | 825 | 813 | 802 | 790 | 778 | 767 | 755 | 743 |
| 181 | 732 | 720 | 708 | 697 | 685 | 674 | 662 | 650 | 639 | 627 |
| 182 | 616 | 604 | 592 | 581 | 569 | 558 | 546 | 535 | 523 | 511 |
| 183 | 500 | 488 | 477 | 465 | 454 | 442 | 431 | 419 | 408 | 396 |
| 184 | 385 | 373 | 362 | 351 | 339 | 328 | 316 | 305 | 293 | 282 |
| 185 | 270 | 259 | 248 | 236 | 225 | 213 | 202 | 190 | 179 | 168 |
| 186 | 156 | 145 | 134 | 122 | 34111 | 34099 | 34088 | 34077 | 34065 | 34054 |
| 187 | 34043 | 34031 | 34020 | 34009 | 33997 | 33986 | 33975 | 33964 | 33952 | 33941 |
| 188 | 33930 | 33918 | 33907 | 33896 | 885 | 873 | 862 | 851 | 840 | 828 |
| 189 | 817 | 806 | 795 | 783 | 772 | 761 | 750 | 739 | 727 | 716 |
| 190 | 705 | 694 | 683 | 671 | 660 | 649 | 638 | 627 | 616 | 604 |
| 191 | 593 | 582 | 571 | 560 | 549 | 538 | 527 | 516 | 504 | 493 |
| 192 | 482 | 471 | 460 | 449 | 438 | 427 | 416 | 405 | 394 | 383 |
| 193 | 372 | 361 | 350 | 339 | 328 | 317 | 306 | 294 | 283 | 272 |
| 194 | 261 | 250 | 239 | 228 | 218 | 207 | 196 | 185 | 174 | 163 |
| 195 | 152 | 141 | 130 | 119 | 33108 | 33097 | 33086 | 33075 | 33064 | 33054 |
| 196 | 33043 | 33032 | 33021 | 33010 | 32999 | 32988 | 32977 | 32966 | 32956 | 32945 |
| 197 | 32934 | 32923 | 32912 | 32901 | 890 | 880 | 869 | 858 | 847 | 836 |
| 198 | 825 | 815 | 804 | 793 | 782 | 771 | 761 | 750 | 739 | 728 |
| 199 | 717 | 707 | 696 | 685 | 674 | 664 | 653 | 642 | 631 | 621 |

| $p$ mm. | 0 | 0.2 | 0.4 | 0.6 | 0.8 | $p$ mm. | 0 | 0.2 | 0.4 | 0.6 | 0.8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 200 | 32610 | 32588 | 32567 | 32546 | 32524 | 230 | 29571 | 29552 | 29533 | 29514 | 29495 |
| 201 | 503 | 482 | 460 | 439 | 418 | 231 | 476 | 457 | 438 | 419 | 400 |
| 202 | 396 | 375 | 354 | 332 | 311 | 232 | 380 | 361 | 342 | 323 | 304 |
| 203 | 290 | 269 | 248 | 226 | 205 | 233 | 285 | 267 | 248 | 229 | 210 |
| 204 | 184 | 163 | 142 | 121 | 32100 | 234 | 191 | 171 | 153 | 134 | 115 |
| 205 | 32079 | 32058 | 32037 | 32016 | 31995 | 235 | 096 | 29077 | 29059 | 29040 | 29021 |
| 206 | 31974 | 31953 | 31932 | 31911 | 890 | 236 | 29002 | 28983 | 28965 | 28946 | 28927 |
| 207 | 869 | 848 | 828 | 807 | 786 | 237 | 28909 | 890 | 871 | 853 | 834 |
| 208 | 765 | 744 | 724 | 703 | 682 | 238 | 815 | 797 | 778 | 760 | 741 |
| 209 | 661 | 641 | 620 | 599 | 579 | 239 | 722 | 704 | 685 | 667 | 648 |
| 210 | 558 | 538 | 517 | 496 | 476 | 240 | 630 | 611 | 593 | 574 | 556 |
| 211 | 455 | 435 | 414 | 394 | 373 | 241 | 537 | 519 | 500 | 482 | 464 |
| 212 | 353 | 332 | 312 | 292 | 271 | 242 | 445 | 427 | 408 | 390 | 372 |
| 213 | 251 | 230 | 210 | 190 | 169 | 243 | 353 | 335 | 317 | 298 | 280 |
| 214 | 149 | 129 | 109 | 31088 | 31068 | 244 | 262 | 244 | 225 | 207 | 189 |
| 215 | 31048 | 31028 | 31007 | 30987 | 30967 | 245 | 171 | 153 | 134 | 116 | 098 |
| 216 | 30947 | 30927 | 30907 | 886 | 866 | 246 | 28080 | 28062 | 28044 | 28026 | 28008 |
| 217 | 846 | 826 | 806 | 786 | 766 | 247 | 27989 | 27971 | 27953 | 27935 | 27917 |
| 218 | 746 | 726 | 706 | 686 | 666 | 248 | 899 | 881 | 863 | 845 | 827 |
| 219 | 646 | 626 | 606 | 586 | 567 | 249 | 809 | 791 | 773 | 755 | 737 |
| 220 | 547 | 527 | 507 | 487 | 467 | 250 | 719 | 702 | 684 | 666 | 648 |
| 221 | 447 | 428 | 408 | 388 | 368 | 251 | 630 | 612 | 594 | 576 | 559 |
| 222 | 349 | 329 | 309 | 290 | 270 | 252 | 541 | 523 | 505 | 487 | 470 |
| 223 | 250 | 231 | 211 | 191 | 172 | 253 | 452 | 434 | 416 | 399 | 381 |
| 224 | 152 | 133 | 113 | 30093 | 30074 | 254 | 363 | 346 | 328 | 310 | 293 |
| 225 | 30054 | 30035 | 30015 | 29996 | 29976 | 255 | 275 | 257 | 240 | 222 | 204 |
| 226 | 29957 | 29938 | 29918 | 899 | 879 | 256 | 187 | 169 | 152 | 134 | 111 |
| 227 | 860 | 841 | 821 | 802 | 783 | 257 | 099 | 27082 | 27064 | 27047 | 27029 |
| 228 | 763 | 744 | 725 | 706 | 687 | 258 | 27012 | 26994 | 26977 | 26959 | 26942 |
| 229 | 667 | 648 | 629 | 610 | 590 | 259 | 26924 | 907 | 890 | 872 | 855 |

TABLE I—Continued

ALTITUDE-PRESSURE TABLE—FEET-MILLIMETERS—Continued

| $p$ mm. | 0 | 0.2 | 0.4 | 0.6 | 0.8 | $p$ mm. | 0 | 0.2 | 0.4 | 0.6 | 0.8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 260 | 26838 | 26820 | 26803 | 26786 | 26768 | 330 | 21337 | 21323 | 21308 | 21294 | 21280 |
| 261 | 751 | 734 | 716 | 699 | 682 | 331 | 266 | 251 | 237 | 223 | 209 |
| 262 | 665 | 647 | 630 | 613 | 596 | 332 | 194 | 180 | 166 | 152 | 138 |
| 263 | 579 | 561 | 544 | 527 | 510 | 333 | 123 | 109 | 095 | 081 | 21067 |
| 264 | 493 | 476 | 458 | 441 | 424 | 334 | 21052 | 21038 | 21024 | 21010 | 20996 |
| 265 | 407 | 390 | 373 | 356 | 339 | 335 | 20982 | 20968 | 20953 | 20939 | 925 |
| 266 | 322 | 305 | 288 | 271 | 254 | 336 | 911 | 897 | 883 | 869 | 855 |
| 267 | 237 | 220 | 203 | 186 | 169 | 337 | 841 | 827 | 813 | 799 | 784 |
| 268 | 152 | 135 | 118 | 102 | 085 | 338 | 770 | 756 | 742 | 728 | 714 |
| 269 | 26068 | 26051 | 26034 | 26017 | 26000 | 339 | 700 | 686 | 672 | 658 | 644 |
| 270 | 25984 | 25967 | 25950 | 25933 | 25916 | 340 | 630 | 616 | 603 | 589 | 575 |
| 271 | 900 | 883 | 866 | 849 | 833 | 341 | 561 | 547 | 533 | 519 | 505 |
| 272 | 816 | 799 | 782 | 766 | 749 | 342 | 491 | 477 | 463 | 450 | 436 |
| 273 | 732 | 716 | 699 | 682 | 666 | 343 | 422 | 408 | 394 | 380 | 366 |
| 274 | 649 | 632 | 616 | 599 | 583 | 344 | 352 | 339 | 325 | 311 | 297 |
| 275 | 566 | 550 | 533 | 516 | 500 | 345 | 283 | 270 | 256 | 242 | 228 |
| 276 | 483 | 467 | 450 | 434 | 417 | 346 | 215 | 201 | 187 | 173 | 160 |
| 277 | 401 | 384 | 368 | 351 | 335 | 347 | 146 | 132 | 118 | 105 | 091 |
| 278 | 318 | 302 | 286 | 269 | 253 | 348 | 077 | 20064 | 20050 | 20036 | 20023 |
| 279 | 236 | 220 | 204 | 187 | 171 | 349 | 20009 | 19995 | 19982 | 19968 | 19954 |
| 280 | 154 | 138 | 122 | 106 | 089 | 350 | 19941 | 927 | 913 | 900 | 886 |
| 281 | 25073 | 25057 | 25040 | 25024 | 25008 | 351 | 872 | 859 | 845 | 832 | 818 |
| 282 | 24992 | 24975 | 24959 | 24943 | 24927 | 352 | 804 | 791 | 777 | 764 | 750 |
| 283 | 911 | 894 | 878 | 862 | 846 | 353 | 737 | 723 | 701 | 696 | 683 |
| 284 | 830 | 813 | 797 | 781 | 765 | 354 | 669 | 656 | 642 | 629 | 615 |
| 285 | 749 | 733 | 717 | 701 | 685 | 355 | 602 | 588 | 575 | 561 | 548 |
| 286 | 669 | 653 | 637 | 620 | 604 | 356 | 534 | 521 | 507 | 494 | 481 |
| 287 | 588 | 572 | 556 | 540 | 524 | 357 | 467 | 454 | 440 | 427 | 413 |
| 288 | 509 | 493 | 477 | 461 | 445 | 358 | 400 | 387 | 373 | 360 | 346 |
| 289 | 429 | 413 | 397 | 381 | 365 | 359 | 333 | 320 | 306 | 293 | 280 |
| 290 | 349 | 334 | 318 | 302 | 286 | 360 | 266 | 253 | 240 | 226 | 213 |
| 291 | 270 | 254 | 238 | 223 | 207 | 361 | 200 | 186 | 173 | 160 | 147 |
| 292 | 191 | 175 | 159 | 144 | 128 | 362 | 133 | 120 | 107 | 094 | 080 |
| 293 | 112 | 096 | 081 | 24065 | 24049 | 363 | 067 | 19054 | 19041 | 19027 | 19014 |
| 294 | 24033 | 24018 | 24002 | 23986 | 23971 | 364 | 19001 | 18988 | 18974 | 18961 | 18948 |
| 295 | 23955 | 23939 | 23924 | 908 | 892 | 365 | 18935 | 922 | 909 | 895 | 882 |
| 296 | 877 | 861 | 845 | 830 | 814 | 366 | 869 | 856 | 843 | 830 | 817 |
| 297 | 799 | 783 | 768 | 752 | 737 | 367 | 803 | 790 | 777 | 764 | 751 |
| 298 | 721 | 706 | 690 | 674 | 659 | 368 | 738 | 725 | 712 | 699 | 685 |
| 299 | 643 | 628 | 612 | 597 | 581 | 369 | 672 | 659 | 646 | 633 | 620 |
| 300 | 566 | 551 | 535 | 520 | 504 | 370 | 607 | 594 | 581 | 568 | 555 |
| 301 | 489 | 473 | 458 | 443 | 427 | 371 | 542 | 529 | 516 | 503 | 490 |
| 302 | 412 | 397 | 381 | 366 | 351 | 372 | 477 | 464 | 451 | 438 | 425 |
| 303 | 335 | 320 | 305 | 289 | 274 | 373 | 412 | 399 | 386 | 373 | 361 |
| 304 | 259 | 243 | 228 | 213 | 198 | 374 | 348 | 335 | 322 | 309 | 296 |
| 305 | 182 | 167 | 152 | 137 | 122 | 375 | 283 | 270 | 257 | 244 | 232 |
| 306 | 106 | 091 | 076 | 23061 | 23046 | 376 | 219 | 206 | 193 | 180 | 167 |
| 307 | 23031 | 23015 | 23000 | 22985 | 22970 | 377 | 154 | 141 | 129 | 116 | 103 |
| 308 | 22955 | 22940 | 22925 | 909 | 894 | 378 | 090 | 077 | 065 | 18052 | 18039 |
| 309 | 879 | 864 | 849 | 834 | 819 | 379 | 18026 | 18013 | 18001 | 17988 | 17975 |
| 310 | 804 | 789 | 774 | 759 | 744 | 380 | 17962 | 17950 | 17937 | 924 | 911 |
| 311 | 729 | 714 | 699 | 684 | 669 | 381 | 899 | 886 | 873 | 860 | 848 |
| 312 | 654 | 639 | 624 | 609 | 594 | 382 | 835 | 822 | 810 | 797 | 784 |
| 313 | 579 | 564 | 546 | 534 | 519 | 383 | 772 | 759 | 746 | 734 | 721 |
| 314 | 504 | 490 | 475 | 460 | 445 | 384 | 708 | 696 | 683 | 670 | 658 |
| 315 | 430 | 415 | 400 | 385 | 371 | 385 | 645 | 632 | 620 | 607 | 595 |
| 316 | 356 | 341 | 326 | 311 | 296 | 386 | 582 | 569 | 557 | 544 | 532 |
| 317 | 282 | 267 | 252 | 237 | 223 | 387 | 519 | 507 | 494 | 481 | 469 |
| 318 | 208 | 193 | 178 | 164 | 149 | 388 | 456 | 444 | 431 | 419 | 406 |
| 319 | 134 | 120 | 105 | 090 | 076 | 389 | 394 | 381 | 369 | 356 | 344 |
| 320 | 22061 | 22046 | 22032 | 22017 | 22002 | 390 | 331 | 319 | 306 | 294 | 281 |
| 321 | 21988 | 21973 | 21959 | 21944 | 21929 | 391 | 269 | 256 | 244 | 231 | 219 |
| 322 | 915 | 900 | 886 | 871 | 856 | 392 | 206 | 194 | 182 | 169 | 157 |
| 323 | 842 | 827 | 813 | 798 | 784 | 393 | 144 | 132 | 119 | 107 | 095 |
| 324 | 769 | 755 | 740 | 726 | 711 | 394 | 082 | 070 | 17057 | 17045 | 17033 |
| 325 | 697 | 682 | 668 | 653 | 639 | 395 | 17020 | 17008 | 16996 | 16983 | 16971 |
| 326 | 625 | 610 | 596 | 581 | 567 | 396 | 16958 | 16946 | 934 | 921 | 909 |
| 327 | 552 | 538 | 524 | 509 | 495 | 397 | 897 | 885 | 872 | 860 | 848 |
| 328 | 481 | 466 | 452 | 437 | 423 | 398 | 835 | 823 | 811 | 798 | 786 |
| 329 | 409 | 394 | 380 | 366 | 351 | 399 | 774 | 762 | 749 | 737 | 725 |

TABLE I—Continued

ALTITUDE-PRESSURE TABLE—FEET-MILLIMETERS—Continued

| p mm. | 0 | 0.2 | 0.4 | 0.6 | 0.8 | p mm. | 0 | 0.2 | 0.4 | 0.6 | 0.8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 400 | 16713 | 16700 | 16688 | 16676 | 16664 | 470 | 12704 | 12693 | 12682 | 12671 | 12661 |
| 401 | 652 | 639 | 627 | 615 | 603 | 471 | 650 | 639 | 629 | 618 | 607 |
| 402 | 591 | 578 | 566 | 554 | 542 | 472 | 596 | 586 | 575 | 564 | 554 |
| 403 | 530 | 518 | 505 | 493 | 481 | 473 | 543 | 532 | 522 | 511 | 500 |
| 404 | 469 | 457 | 445 | 432 | 420 | 474 | 490 | 479 | 468 | 458 | 447 |
| 405 | 408 | 396 | 384 | 372 | 360 | 475 | 436 | 426 | 415 | 404 | 394 |
| 406 | 348 | 336 | 324 | 312 | 299 | 476 | 383 | 372 | 362 | 351 | 341 |
| 407 | 287 | 275 | 263 | 251 | 239 | 477 | 330 | 319 | 309 | 298 | 288 |
| 408 | 227 | 215 | 203 | 191 | 179 | 478 | 277 | 266 | 256 | 245 | 235 |
| 409 | 167 | 155 | 143 | 131 | 119 | 479 | 224 | 213 | 203 | 192 | 182 |
| 410 | 107 | 095 | 083 | 071 | 16059 | 480 | 171 | 161 | 150 | 140 | 129 |
| 411 | 16047 | 16035 | 16023 | 16011 | 15999 | 481 | 118 | 108 | 097 | 087 | 076 |
| 412 | 15987 | 15975 | 15963 | 15951 | 940 | 482 | 066 | 055 | 12045 | 12034 | 12024 |
| 413 | 928 | 916 | 904 | 892 | 880 | 483 | 12013 | 12003 | 11992 | 11982 | 11971 |
| 414 | 868 | 856 | 844 | 832 | 820 | 484 | 11961 | 11950 | 940 | 929 | 919 |
| 415 | 809 | 797 | 785 | 773 | 761 | 485 | 908 | 898 | 887 | 877 | 866 |
| 416 | 749 | 737 | 725 | 714 | 702 | 486 | 856 | 845 | 835 | 825 | 814 |
| 417 | 690 | 678 | 666 | 654 | 643 | 487 | 804 | 793 | 783 | 772 | 762 |
| 418 | 631 | 619 | 607 | 595 | 584 | 488 | 752 | 741 | 731 | 720 | 710 |
| 419 | 572 | 560 | 548 | 536 | 525 | 489 | 700 | 689 | 679 | 668 | 658 |
| 420 | 513 | 501 | 489 | 478 | 466 | 490 | 648 | 637 | 627 | 616 | 606 |
| 421 | 454 | 442 | 431 | 419 | 407 | 491 | 596 | 585 | 575 | 565 | 554 |
| 422 | 395 | 384 | 372 | 360 | 348 | 492 | 544 | 534 | 523 | 513 | 503 |
| 423 | 337 | 325 | 313 | 302 | 290 | 493 | 492 | 482 | 472 | 461 | 451 |
| 424 | 278 | 267 | 255 | 243 | 232 | 494 | 441 | 430 | 420 | 410 | 399 |
| 425 | 220 | 208 | 197 | 185 | 174 | 495 | 389 | 379 | 368 | 358 | 348 |
| 426 | 162 | 150 | 139 | 127 | 115 | 496 | 337 | 327 | 317 | 307 | 296 |
| 427 | 104 | 092 | 081 | 069 | 057 | 497 | 286 | 276 | 266 | 255 | 245 |
| 428 | 15046 | 15034 | 15023 | 15011 | 15000 | 498 | 235 | 225 | 214 | 204 | 194 |
| 429 | 14988 | 14976 | 14965 | 14953 | 14942 | 499 | 184 | 173 | 163 | 153 | 143 |
| 430 | 930 | 919 | 907 | 896 | 884 | 500 | 132 | 122 | 112 | 102 | 092 |
| 431 | 872 | 861 | 849 | 838 | 826 | 501 | 081 | 071 | 061 | 051 | 11041 |
| 432 | 815 | 803 | 792 | 780 | 769 | 502 | 11030 | 11020 | 11010 | 11000 | 10990 |
| 433 | 757 | 746 | 735 | 723 | 711 | 503 | 10980 | 10969 | 10959 | 10949 | 939 |
| 434 | 700 | 689 | 679 | 666 | 654 | 504 | 929 | 919 | 909 | 898 | 888 |
| 435 | 643 | 631 | 620 | 609 | 597 | 505 | 878 | 868 | 858 | 848 | 838 |
| 436 | 586 | 574 | 563 | 552 | 540 | 506 | 827 | 817 | 807 | 797 | 787 |
| 437 | 529 | 517 | 506 | 495 | 483 | 507 | 777 | 767 | 757 | 747 | 736 |
| 438 | 472 | 460 | 449 | 438 | 426 | 508 | 726 | 716 | 706 | 696 | 687 |
| 439 | 415 | 404 | 392 | 381 | 370 | 509 | 676 | 666 | 656 | 646 | 636 |
| 440 | 358 | 347 | 336 | 324 | 313 | 510 | 626 | 616 | 606 | 596 | 586 |
| 441 | 302 | 290 | 279 | 268 | 256 | 511 | 576 | 565 | 555 | 545 | 535 |
| 442 | 245 | 234 | 223 | 211 | 200 | 512 | 525 | 515 | 505 | 495 | 485 |
| 443 | 189 | 178 | 166 | 155 | 144 | 513 | 475 | 465 | 455 | 445 | 435 |
| 444 | 132 | 121 | 110 | 099 | 088 | 514 | 425 | 415 | 405 | 395 | 385 |
| 445 | 076 | 065 | 14054 | 14043 | 14031 | 515 | 375 | 365 | 355 | 345 | 336 |
| 446 | 14020 | 14009 | 13998 | 13987 | 13975 | 516 | 326 | 316 | 306 | 296 | 286 |
| 447 | 13964 | 13953 | 942 | 931 | 920 | 517 | 276 | 266 | 256 | 246 | 236 |
| 448 | 908 | 897 | 886 | 875 | 864 | 518 | 226 | 216 | 206 | 196 | 186 |
| 449 | 853 | 841 | 830 | 819 | 808 | 519 | 176 | 167 | 157 | 147 | 137 |
| 450 | 13797 | 786 | 775 | 763 | 752 | 520 | 127 | 117 | 107 | 097 | 087 |
| 451 | 741 | 730 | 719 | 708 | 697 | 521 | 078 | 068 | 058 | 10048 | 10038 |
| 452 | 686 | 675 | 664 | 653 | 641 | 522 | 10028 | 10018 | 10008 | 9999 | 9989 |
| 453 | 630 | 619 | 608 | 597 | 586 | 523 | 9979 | 9969 | 9959 | 9949 | 9940 |
| 454 | 575 | 564 | 553 | 542 | 531 | 524 | 9930 | 9920 | 9910 | 9900 | 9890 |
| 455 | 520 | 509 | 498 | 487 | 476 | 525 | 9881 | 9871 | 9861 | 9851 | 9841 |
| 456 | 465 | 454 | 443 | 432 | 421 | 526 | 9831 | 9822 | 9812 | 9802 | 9792 |
| 457 | 410 | 399 | 388 | 377 | 366 | 527 | 9782 | 9773 | 9763 | 9753 | 9743 |
| 458 | 355 | 344 | 333 | 322 | 311 | 528 | 9734 | 9724 | 9714 | 9704 | 9695 |
| 459 | 300 | 289 | 278 | 267 | 256 | 529 | 9685 | 9675 | 9665 | 9656 | 9646 |
| 460 | 245 | 234 | 224 | 213 | 202 | 530 | 9636 | 9626 | 9617 | 9607 | 9597 |
| 461 | 191 | 180 | 169 | 158 | 147 | 531 | 9587 | 9578 | 9568 | 9558 | 9548 |
| 462 | 136 | 125 | 115 | 104 | 093 | 532 | 9539 | 9529 | 9519 | 9510 | 9500 |
| 463 | 082 | 071 | 060 | 13049 | 13039 | 533 | 9490 | 9480 | 9471 | 9461 | 9451 |
| 464 | 13028 | 13017 | 13006 | 12995 | 12984 | 534 | 9442 | 9432 | 9422 | 9413 | 9403 |
| 465 | 12974 | 12963 | 12952 | 941 | 930 | 535 | 9393 | 9384 | 9374 | 9364 | 9355 |
| 466 | 919 | 908 | 898 | 887 | 876 | 536 | 9345 | 9335 | 9326 | 9316 | 9306 |
| 467 | 865 | 854 | 844 | 833 | 822 | 537 | 9297 | 9287 | 9277 | 9268 | 9258 |
| 468 | 811 | 801 | 790 | 779 | 768 | 538 | 9248 | 9239 | 9229 | 9220 | 9210 |
| 469 | 758 | 747 | 736 | 725 | 714 | 539 | 9200 | 9191 | 9181 | 9172 | 9162 |

TABLE I—Continued

ALTITUDE-PRESSURE TABLE—FEET-MILLIMETERS—Continued

| $p$ mm. | 0 | 0.2 | 0.4 | 0.6 | 0.8 | $p$ mm. | 0 | 0.2 | 0.4 | 0.6 | 0.8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 540 | 9152 | 9143 | 9133 | 9124 | 9114 | 610 | 5956 | 5947 | 5939 | 5930 | 5921 |
| 541 | 9104 | 9095 | 9085 | 9076 | 9066 | 611 | 5913 | 5904 | 5895 | 5887 | 5878 |
| 542 | 9056 | 9047 | 9037 | 9028 | 9018 | 612 | 5869 | 5861 | 5852 | 5843 | 5835 |
| 543 | 9009 | 8999 | 8990 | 8980 | 8970 | 613 | 5826 | 5817 | 5809 | 5800 | 5791 |
| 544 | 8961 | 8951 | 8942 | 8932 | 8923 | 614 | 5783 | 5774 | 5765 | 5757 | 5748 |
| 545 | 8913 | 8904 | 8894 | 8885 | 8875 | 615 | 5739 | 5731 | 5722 | 5713 | 5705 |
| 546 | 8866 | 8856 | 8847 | 8837 | 8828 | 616 | 5696 | 5687 | 5679 | 5670 | 5662 |
| 547 | 8818 | 8809 | 8799 | 8790 | 8780 | 617 | 5653 | 5644 | 5636 | 5627 | 5619 |
| 548 | 8771 | 8761 | 8752 | 8742 | 8733 | 618 | 5610 | 5601 | 5593 | 5584 | 5576 |
| 549 | 8723 | 8714 | 8704 | 8695 | 8685 | 619 | 5567 | 5558 | 5550 | 5541 | 5533 |
| 550 | 8676 | 8666 | 8657 | 8647 | 8638 | 620 | 5524 | 5515 | 5507 | 5498 | 5490 |
| 551 | 8629 | 8619 | 8610 | 8600 | 8591 | 621 | 5481 | 5473 | 5464 | 5455 | 5447 |
| 552 | 8581 | 8572 | 8563 | 8553 | 8544 | 622 | 5438 | 5430 | 5421 | 5413 | 5404 |
| 553 | 8534 | 8525 | 8516 | 8506 | 8497 | 623 | 5396 | 5387 | 5378 | 5370 | 5361 |
| 554 | 8487 | 8478 | 8468 | 8459 | 8450 | 624 | 5353 | 5344 | 5336 | 5327 | 5319 |
| 555 | 8440 | 8431 | 8422 | 8412 | 8403 | 625 | 5310 | 5302 | 5293 | 5285 | 5276 |
| 556 | 8393 | 8384 | 8375 | 8365 | 8356 | 626 | 5267 | 5259 | 5250 | 5242 | 5233 |
| 557 | 8347 | 8337 | 8328 | 8318 | 8309 | 627 | 5225 | 5216 | 5208 | 5199 | 5191 |
| 558 | 8300 | 8290 | 8281 | 8272 | 8262 | 628 | 5182 | 5174 | 5165 | 5157 | 5148 |
| 559 | 8253 | 8244 | 8234 | 8225 | 8216 | 629 | 5140 | 5132 | 5123 | 5115 | 5106 |
| 560 | 8206 | 8197 | 8188 | 8178 | 8169 | 630 | 5098 | 5089 | 5081 | 5072 | 5064 |
| 561 | 8160 | 8150 | 8141 | 8132 | 8123 | 631 | 5055 | 5047 | 5038 | 5030 | 5021 |
| 562 | 8113 | 8104 | 8095 | 8085 | 8076 | 632 | 5013 | 5005 | 4996 | 4988 | 4979 |
| 563 | 8067 | 8058 | 8048 | 8039 | 8030 | 633 | 4971 | 4962 | 4954 | 4945 | 4937 |
| 564 | 8020 | 8011 | 8002 | 7993 | 7983 | 634 | 4929 | 4920 | 4912 | 4903 | 4895 |
| 565 | 7974 | 7965 | 7956 | 7946 | 7937 | 635 | 4886 | 4878 | 4870 | 4861 | 4853 |
| 566 | 7928 | 7919 | 7910 | 7900 | 7891 | 636 | 4844 | 4836 | 4828 | 4819 | 4811 |
| 567 | 7882 | 7873 | 7863 | 7854 | 7845 | 637 | 4802 | 4794 | 4786 | 4777 | 4769 |
| 568 | 7836 | 7826 | 7817 | 7808 | 7799 | 638 | 4760 | 4752 | 4744 | 4735 | 4727 |
| 569 | 7790 | 7780 | 7771 | 7762 | 7753 | 639 | 4718 | 4710 | 4702 | 4693 | 4685 |
| 570 | 7744 | 7734 | 7725 | 7716 | 7707 | 640 | 4677 | 4668 | 4660 | 4652 | 4643 |
| 571 | 7698 | 7689 | 7679 | 7670 | 7661 | 641 | 4635 | 4626 | 4618 | 4610 | 4601 |
| 572 | 7652 | 7643 | 7634 | 7624 | 7615 | 642 | 4593 | 4585 | 4576 | 4568 | 4560 |
| 573 | 7606 | 7597 | 7588 | 7579 | 7570 | 643 | 4551 | 4543 | 4535 | 4526 | 4518 |
| 574 | 7560 | 7551 | 7542 | 7533 | 7524 | 644 | 4510 | 4501 | 4493 | 4485 | 4476 |
| 575 | 7515 | 7506 | 7497 | 7487 | 7478 | 645 | 4468 | 4460 | 4452 | 4443 | 4435 |
| 576 | 7469 | 7460 | 7451 | 7442 | 7433 | 646 | 4427 | 4418 | 4410 | 4402 | 4393 |
| 577 | 7424 | 7415 | 7405 | 7396 | 7387 | 647 | 4385 | 4377 | 4369 | 4360 | 4352 |
| 578 | 7378 | 7369 | 7360 | 7351 | 7342 | 648 | 4344 | 4335 | 4327 | 4319 | 4311 |
| 579 | 7333 | 7324 | 7315 | 7306 | 7296 | 649 | 4302 | 4294 | 4286 | 4278 | 4269 |
| 580 | 7287 | 7278 | 7269 | 7260 | 7251 | 650 | 4261 | 4253 | 4244 | 4236 | 4228 |
| 581 | 7242 | 7233 | 7224 | 7215 | 7206 | 651 | 4220 | 4211 | 4203 | 4195 | 4187 |
| 582 | 7197 | 7188 | 7179 | 7170 | 7161 | 652 | 4178 | 4170 | 4162 | 4154 | 4146 |
| 583 | 7152 | 7143 | 7134 | 7125 | 7116 | 653 | 4137 | 4129 | 4121 | 4113 | 4104 |
| 584 | 7107 | 7098 | 7089 | 7080 | 7071 | 654 | 4096 | 4088 | 4080 | 4072 | 4063 |
| 585 | 7062 | 7053 | 7044 | 7035 | 7026 | 655 | 4055 | 4047 | 4039 | 4030 | 4022 |
| 586 | 7017 | 7008 | 6999 | 6990 | 6981 | 656 | 4014 | 4006 | 3998 | 3990 | 3981 |
| 587 | 6972 | 6963 | 6954 | 6945 | 6936 | 657 | 3973 | 3965 | 3957 | 3949 | 3940 |
| 588 | 6927 | 6918 | 6909 | 6900 | 6891 | 658 | 3932 | 3924 | 3916 | 3908 | 3899 |
| 589 | 6882 | 6873 | 6864 | 6855 | 6847 | 659 | 3891 | 3883 | 3875 | 3867 | 3859 |
| 590 | 6838 | 6829 | 6820 | 6811 | 6802 | 660 | 3850 | 3842 | 3834 | 3826 | 3818 |
| 591 | 6793 | 6784 | 6775 | 6766 | 6757 | 661 | 3810 | 3802 | 3793 | 3785 | 3777 |
| 592 | 6748 | 6739 | 6730 | 6722 | 6713 | 662 | 3769 | 3761 | 3753 | 3745 | 3736 |
| 593 | 6704 | 6695 | 6686 | 6677 | 6668 | 663 | 3728 | 3720 | 3712 | 3704 | 3696 |
| 594 | 6659 | 6650 | 6642 | 6633 | 6624 | 664 | 3688 | 3680 | 3671 | 3663 | 3655 |
| 595 | 6615 | 6606 | 6597 | 6588 | 6579 | 665 | 3647 | 3639 | 3631 | 3623 | 3615 |
| 596 | 6571 | 6562 | 6553 | 6544 | 6535 | 666 | 3607 | 3598 | 3590 | 3582 | 3574 |
| 597 | 6526 | 6517 | 6509 | 6500 | 6491 | 667 | 3566 | 3558 | 3550 | 3542 | 3534 |
| 598 | 6482 | 6473 | 6464 | 6456 | 6447 | 668 | 3526 | 3518 | 3509 | 3501 | 3493 |
| 599 | 6438 | 6429 | 6420 | 6411 | 6403 | 669 | 3485 | 3477 | 3469 | 3461 | 3453 |
| 600 | 6394 | 6385 | 6376 | 6367 | 6359 | 670 | 3445 | 3437 | 3429 | 3421 | 3413 |
| 601 | 6350 | 6341 | 6332 | 6323 | 6315 | 671 | 3405 | 3397 | 3389 | 3381 | 3372 |
| 602 | 6306 | 6297 | 6288 | 6279 | 6271 | 672 | 3364 | 3356 | 3348 | 3340 | 3332 |
| 603 | 6262 | 6253 | 6244 | 6236 | 6227 | 673 | 3324 | 3316 | 3308 | 3300 | 3292 |
| 604 | 6218 | 6209 | 6200 | 6192 | 6183 | 674 | 3284 | 3276 | 3268 | 3260 | 3252 |
| 605 | 6174 | 6165 | 6157 | 6148 | 6139 | 675 | 3244 | 3236 | 3228 | 3220 | 3212 |
| 606 | 6130 | 6122 | 6113 | 6104 | 6096 | 676 | 3204 | 3196 | 3188 | 3180 | 3172 |
| 607 | 6087 | 6078 | 6069 | 6061 | 6052 | 677 | 3164 | 3156 | 3148 | 3140 | 3132 |
| 608 | 6043 | 6034 | 6026 | 6017 | 6008 | 678 | 3124 | 3116 | 3108 | 3100 | 3092 |
| 609 | 6000 | 5991 | 5982 | 5974 | 5965 | 679 | 3084 | 3076 | 3068 | 3060 | 3052 |

TABLE I—Continued

ALTITUDE-PRESSURE TABLE—FEET-MILLIMETERS—Continued

| *p* mm. | 0 | 0.2 | 0.4 | 0.6 | 0.8 | *p* mm. | 0 | 0.2 | 0.4 | 0.6 | 0.8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 680 | 3044 | 3036 | 3028 | 3020 | 3012 | 740 | 736 | 728 | 721 | 714 | 706 |
| 681 | 3004 | 2996 | 2989 | 2981 | 2973 | 741 | 699 | 691 | 684 | 676 | 669 |
| 682 | 2965 | 2957 | 2949 | 2941 | 2933 | 742 | 662 | 654 | 647 | 639 | 632 |
| 683 | 2925 | 2917 | 2909 | 2901 | 2893 | 743 | 624 | 617 | 610 | 602 | 595 |
| 684 | 2885 | 2877 | 2869 | 2862 | 2854 | 744 | 587 | 580 | 573 | 565 | 558 |
| 685 | 2846 | 2838 | 2830 | 2822 | 2814 | 745 | 550 | 543 | 536 | 528 | 521 |
| 686 | 2806 | 2798 | 2790 | 2782 | 2775 | 746 | 513 | 506 | 499 | 491 | 484 |
| 687 | 2767 | 2759 | 2751 | 2743 | 2735 | 747 | 476 | 469 | 462 | 454 | 447 |
| 688 | 2727 | 2719 | 2711 | 2704 | 2696 | 748 | 440 | 432 | 425 | 417 | 410 |
| 689 | 2688 | 2680 | 2672 | 2664 | 2656 | 749 | 403 | 395 | 388 | 381 | 373 |
| 690 | 2648 | 2640 | 2633 | 2625 | 2617 | 750 | 366 | 359 | 351 | 344 | 336 |
| 691 | 2609 | 2601 | 2593 | 2585 | 2578 | 751 | 329 | 322 | 314 | 307 | 300 |
| 692 | 2570 | 2562 | 2554 | 2546 | 2538 | 752 | 292 | 285 | 278 | 270 | 263 |
| 693 | 2531 | 2523 | 2515 | 2507 | 2499 | 753 | 256 | 248 | 241 | 234 | 226 |
| 694 | 2491 | 2483 | 2476 | 2468 | 2460 | 754 | 219 | 212 | 204 | 197 | 190 |
| 695 | 2452 | 2444 | 2437 | 2429 | 2421 | 755 | 182 | 175 | 168 | 161 | 153 |
| 696 | 2413 | 2405 | 2397 | 2390 | 2382 | 756 | 146 | 139 | 131 | 124 | 117 |
| 697 | 2374 | 2366 | 2358 | 2351 | 2343 | 757 | 109 | 102 | 95 | 87 | 80 |
| 698 | 2335 | 2327 | 2319 | 2312 | 2304 | 758 | 73 | 66 | 58 | 51 | 44 |
| 699 | 2296 | 2288 | 2280 | 2273 | 2265 | 759 | 36 | 29 | 22 | 15 | 7 |
| 700 | 2257 | 2249 | 2242 | 2234 | 2226 | 760 | 0 | −7 | −15 | −22 | −29 |
| 701 | 2218 | 2210 | 2203 | 2195 | 2187 | 761 | −36 | 44 | 51 | 58 | 65 |
| 702 | 2179 | 2172 | 2164 | 2156 | 2148 | 762 | −73 | 80 | 87 | 94 | 102 |
| 703 | 2141 | 2133 | 2125 | 2117 | 2110 | 763 | −109 | 116 | 124 | 131 | 138 |
| 704 | 2102 | 2094 | 2086 | 2079 | 2071 | 764 | −145 | 153 | 160 | 167 | 174 |
| 705 | 2063 | 2055 | 2048 | 2040 | 2032 | 765 | −181 | 189 | 196 | 203 | 210 |
| 706 | 2024 | 2017 | 2009 | 2001 | 1994 | 766 | −218 | 225 | 232 | 239 | 247 |
| 707 | 1986 | 1978 | 1970 | 1963 | 1955 | 767 | −254 | 261 | 268 | 275 | 283 |
| 708 | 1947 | 1940 | 1932 | 1924 | 1916 | 768 | −290 | 297 | 304 | 312 | 319 |
| 709 | 1909 | 1901 | 1893 | 1886 | 1878 | 769 | −326 | 333 | 340 | 348 | 355 |
| 710 | 1870 | 1863 | 1855 | 1847 | 1840 | 770 | −362 | 369 | 376 | 384 | 391 |
| 711 | 1832 | 1824 | 1817 | 1809 | 1801 | 771 | −398 | 405 | 412 | 420 | 427 |
| 712 | 1793 | 1786 | 1778 | 1770 | 1763 | 772 | −434 | 441 | 448 | 456 | 463 |
| 713 | 1755 | 1747 | 1740 | 1732 | 1724 | 773 | −470 | 477 | 484 | 491 | 499 |
| 714 | 1717 | 1709 | 1702 | 1694 | 1686 | 774 | −506 | 513 | 520 | 527 | 534 |
| 715 | 1679 | 1671 | 1663 | 1656 | 1648 | 775 | −542 | 549 | 556 | 563 | 570 |
| 716 | 1640 | 1633 | 1625 | 1617 | 1610 | 776 | −577 | 585 | 592 | 599 | 606 |
| 717 | 1602 | 1595 | 1587 | 1579 | 1572 | 777 | −613 | 620 | 627 | 635 | 642 |
| 718 | 1564 | 1556 | 1549 | 1541 | 1534 | 778 | −649 | 656 | 663 | 670 | 677 |
| 719 | 1526 | 1518 | 1511 | 1503 | 1496 | 779 | −685 | 692 | 699 | 706 | 713 |
| 720 | 1488 | 1480 | 1473 | 1465 | 1458 | 780 | −720 | 727 | 735 | 742 | 749 |
| 721 | 1450 | 1442 | 1435 | 1427 | 1420 | 781 | −756 | 763 | 770 | 777 | 784 |
| 722 | 1412 | 1404 | 1397 | 1389 | 1382 | 782 | −791 | 799 | 806 | 813 | 820 |
| 723 | 1374 | 1366 | 1359 | 1351 | 1344 | 783 | −827 | 834 | 841 | 848 | 855 |
| 724 | 1336 | 1329 | 1321 | 1313 | 1306 | 784 | −863 | 870 | 877 | 884 | 891 |
| 725 | 1298 | 1291 | 1283 | 1276 | 1268 | 785 | −898 | 905 | 912 | 919 | 926 |
| 726 | 1261 | 1253 | 1245 | 1238 | 1230 | 786 | −933 | 941 | 948 | 955 | 962 |
| 727 | 1223 | 1215 | 1208 | 1200 | 1193 | 787 | −969 | 976 | 983 | 990 | 997 |
| 728 | 1185 | 1178 | 1170 | 1162 | 1155 | 788 | −1004 | 011 | 018 | 025 | 032 |
| 729 | 1147 | 1140 | 1132 | 1125 | 1117 | 789 | −1040 | 1047 | 1054 | 1061 | 1068 |
| 730 | 1110 | 1102 | 1095 | 1087 | 1080 | 790 | −1075 | | | | |
| 731 | 1072 | 1065 | 1057 | 1050 | 1042 | | | | | | |
| 732 | 1035 | 1027 | 1020 | 1012 | 1005 | | | | | | |
| 733 | 997 | 990 | 982 | 975 | 967 | | | | | | |
| 734 | 960 | 952 | 945 | 937 | 930 | | | | | | |
| 735 | 922 | 915 | 907 | 900 | 892 | | | | | | |
| 736 | 885 | 877 | 870 | 863 | 855 | | | | | | |
| 737 | 848 | 840 | 833 | 825 | 818 | | | | | | |
| 738 | 810 | 803 | 795 | 788 | 780 | | | | | | |
| 739 | 773 | 766 | 758 | 751 | 743 | | | | | | |

## TABLE II

ALTITUDE-PRESSURE TABLE—FEET-INCHES

| $p$ inches | 0.00 | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 |
|---|---|---|---|---|---|---|---|---|---|---|
| 3.4 | 50228 | 50167 | 50104 | 50044 | 49982 | 49922 | 49862 | 49801 | 49741 | 49680 |
| 3.5 | 49620 | 49561 | 49501 | 49442 | 49382 | 49323 | 49264 | 49206 | 49147 | 49089 |
| 3.6 | 49030 | 48972 | 48915 | 48857 | 48799 | 48741 | 48684 | 48627 | 48570 | 48513 |
| 3.7 | 48456 | 48400 | 48344 | 48288 | 48232 | 48175 | 48120 | 48065 | 48009 | 47954 |
| 3.8 | 47898 | 47843 | 47789 | 47734 | 47679 | 47624 | 47570 | 47516 | 47462 | 47408 |
| 3.9 | 47354 | 47301 | 47248 | 47194 | 47141 | 47088 | 47035 | 46982 | 46930 | 46877 |
| 4.0 | 46824 | 46772 | 46720 | 46668 | 46616 | 46564 | 46513 | 46461 | 46410 | 463 8 |
| 4.1 | 46307 | 46256 | 46206 | 46155 | 46104 | 46053 | 46003 | 45953 | 45903 | 45853 |
| 4.2 | 45803 | 45753 | 45704 | 45654 | 45605 | 45555 | 45506 | 45458 | 45408 | 45359 |
| 4.3 | 45310 | 45262 | 45213 | 45165 | 45117 | 45068 | 45020 | 44973 | 44925 | 44877 |
| 4.4 | 44829 | 44782 | 44734 | 44687 | 44640 | 44592 | 44546 | 44499 | 44452 | 44405 |
| 4.5 | 44358 | 44312 | 44266 | 44220 | 44173 | 44127 | 44081 | 44036 | 43990 | 43944 |
| 4.6 | 43898 | 43853 | 43808 | 43762 | 43717 | 43672 | 43627 | 43582 | 43537 | 43492 |
| 4.7 | 43448 | 43403 | 43359 | 43315 | 43270 | 43226 | 43182 | 43138 | 43094 | 43050 |
| 4.8 | 43007 | 42963 | 42920 | 42876 | 42833 | 42790 | 42747 | 42704 | 42661 | 42618 |
| 4.9 | 42575 | 532 | 490 | 447 | 42404 | 42362 | 42320 | 42278 | 42236 | 42193 |
| 5.0 | 42151 | 42110 | 42068 | 42026 | 41985 | 41943 | 41902 | 41861 | 41819 | 41778 |
| 5.1 | 41737 | 41696 | 41655 | 41614 | 573 | 532 | 492 | 451 | 411 | 41370 |
| 5.2 | 41330 | 41290 | 41250 | 41210 | 41170 | 41130 | 41090 | 41050 | 41011 | 40971 |
| 5.3 | 40931 | 40892 | 40853 | 40813 | 40774 | 40735 | 40696 | 40657 | 40618 | 579 |
| 5.4 | 540 | 502 | 463 | 425 | 386 | 40347 | 40309 | 40271 | 40233 | 40195 |
| 5.5 | 40156 | 40118 | 40080 | 40043 | 40005 | 39967 | 39929 | 39892 | 39854 | 39816 |
| 5.6 | 39779 | 39742 | 39704 | 39667 | 39630 | 593 | 556 | 519 | 482 | 445 |
| 5.7 | 408 | 372 | 39335 | 39298 | 39262 | 39225 | 39189 | 39153 | 39117 | 39080 |
| 5.8 | 39044 | 39008 | 38972 | 38936 | 38900 | 38864 | 38829 | 38793 | 38757 | 38722 |
| 5.9 | 38686 | 38651 | 615 | 580 | 545 | 509 | 474 | 439 | 404 | 369 |
| 6.0 | 38343 | 38300 | 38265 | 38230 | 38200 | 38161 | 38126 | 38092 | 38057 | 38023 |
| 6.1 | 37989 | 37954 | 37920 | 37886 | 37852 | 37818 | 37784 | 37750 | 37716 | 37682 |
| 6.2 | 648 | 615 | 581 | 547 | 514 | 480 | 447 | 413 | 380 | 346 |
| 6.3 | 37313 | 37280 | 37247 | 37214 | 37181 | 37147 | 37115 | 37082 | 37049 | 37016 |
| 6.4 | 36983 | 36951 | 36918 | 36886 | 36853 | 36820 | 36788 | 36756 | 36723 | 36691 |
| 6.5 | 659 | 627 | 595 | 563 | 531 | 498 | 467 | 435 | 403 | 371 |
| 6.6 | 339 | 36308 | 36276 | 36245 | 36213 | 36181 | 36150 | 36119 | 36087 | 36056 |
| 6.7 | 36024 | 35993 | 35962 | 35931 | 35900 | 35869 | 35838 | 35807 | 35776 | 35745 |
| 6.8 | 35714 | 683 | 653 | 622 | 591 | 560 | 530 | 499 | 469 | 438 |
| 6.9 | 408 | 378 | 347 | 317 | 35287 | 35257 | 35227 | 35197 | 35167 | 35136 |
| 7.0 | 35106 | 35077 | 35047 | 35017 | 34987 | 34957 | 34927 | 34898 | 34868 | 34838 |
| 7.1 | 34809 | 34779 | 34749 | 34720 | 690 | 661 | 631 | 602 | 573 | 543 |
| 7.2 | 514 | 485 | 455 | 426 | 397 | 368 | 339 | 310 | 34281 | 34251 |
| 7.3 | 34222 | 34194 | 34165 | 34136 | 34107 | 34078 | 34049 | 34020 | 33992 | 33963 |
| 7.4 | 33934 | 33906 | 33877 | 33848 | 33820 | 33791 | 33763 | 33734 | 706 | 678 |
| 7.5 | 649 | 621 | 593 | 564 | 536 | 508 | 480 | 452 | 424 | 395 |
| 7.6 | 367 | 339 | 311 | 283 | 33255 | 33227 | 33200 | 33172 | 33144 | 33116 |
| 7.7 | 33088 | 33061 | 33033 | 33005 | 32978 | 32950 | 32922 | 32895 | 32867 | 32840 |
| 7.8 | 32812 | 32785 | 32758 | 32730 | 703 | 676 | 648 | 621 | 594 | 567 |
| 7.9 | 539 | 512 | 485 | 458 | 431 | 404 | 377 | 350 | 323 | 296 |
| 8.0 | 269 | 32242 | 32215 | 32188 | 32161 | 32135 | 32108 | 32081 | 32054 | 32028 |
| 8.1 | 32001 | 31975 | 31948 | 31921 | 31895 | 31868 | 31842 | 31815 | 31789 | 31763 |
| 8.2 | 31736 | 710 | 684 | 657 | 631 | 605 | 578 | 552 | 526 | 500 |
| 8.3 | 474 | 448 | 422 | 396 | 370 | 344 | 318 | 292 | 266 | 31240 |
| 8.4 | 31214 | 31188 | 31163 | 31137 | 31111 | 31085 | 31060 | 31034 | 31008 | 30983 |
| 8.5 | 30957 | 30931 | 30906 | 30880 | 30855 | 30829 | 30804 | 30778 | 30753 | 728 |
| 8.6 | 702 | 677 | 652 | 626 | 601 | 576 | 550 | 525 | 500 | 475 |
| 8.7 | 449 | 424 | 399 | 374 | 349 | 324 | 299 | 274 | 249 | 30224 |
| 8.8 | 30199 | 30174 | 30149 | 30125 | 30100 | 30075 | 30050 | 30025 | 30001 | 29976 |
| 8.9 | 29951 | 29927 | 29902 | 29877 | 29853 | 29828 | 29804 | 29779 | 29755 | 730 |
| 9.0 | 706 | 681 | 657 | 633 | 608 | 584 | 560 | 535 | 511 | 487 |
| 9.1 | 462 | 438 | 414 | 390 | 366 | 342 | 317 | 293 | 269 | 245 |
| 9.2 | 29221 | 29197 | 29173 | 29149 | 29125 | 29101 | 29077 | 29053 | 29029 | 29005 |
| 9.3 | 28982 | 28958 | 28934 | 28910 | 28887 | 28863 | 28839 | 28816 | 28792 | 28768 |
| 9.4 | 745 | 721 | 698 | 674 | 650 | 627 | 603 | 580 | 556 | 533 |
| 9.5 | 510 | 486 | 463 | 439 | 416 | 393 | 369 | 346 | 323 | 300 |
| 9.6 | 276 | 253 | 230 | 28207 | 28184 | 28161 | 28138 | 28115 | 28092 | 28069 |
| 9.7 | 28046 | 28023 | 28000 | 27977 | 27954 | 27931 | 27908 | 27885 | 27862 | 27839 |
| 9.8 | 27816 | 27794 | 27771 | 748 | 725 | 702 | 680 | 657 | 634 | 612 |
| 9.9 | 589 | 566 | 544 | 521 | 499 | 476 | 453 | 431 | 408 | 386 |

TABLE II—Continued

ALTITUDE-PRESSURE TABLE—FEET-INCHES—Continued

| $p$ inches | 0.00 | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 |
|---|---|---|---|---|---|---|---|---|---|---|
| 10. 0 | 27363 | 27341 | 27318 | 27296 | 27274 | 27251 | 27229 | 27206 | 27184 | 27162 |
| 10. 1 | 27140 | 27117 | 27095 | 27073 | 27050 | 27028 | 27006 | 26984 | 26962 | 26940 |
| 10. 2 | 26917 | 26895 | 26873 | 26851 | 26829 | 26807 | 26785 | 763 | 741 | 719 |
| 10. 3 | 697 | 676 | 654 | 632 | 610 | 588 | 566 | 544 | 523 | 501 |
| 10. 4 | 479 | 457 | 436 | 414 | 392 | 371 | 349 | 327 | 306 | 284 |
| 10. 5 | 262 | 241 | 219 | 26198 | 26176 | 26155 | 26133 | 26112 | 26090 | 26069 |
| 10. 6 | 26048 | 26026 | 26005 | 25984 | 25962 | 25941 | 25919 | 25898 | 25877 | 25856 |
| 10. 7 | 25834 | 25813 | 25792 | 771 | 749 | 728 | 707 | 686 | 665 | 644 |
| 10. 8 | 622 | 601 | 580 | 559 | 538 | 517 | 496 | 475 | 454 | 433 |
| 10. 9 | 412 | 391 | 370 | 350 | 329 | 308 | 287 | 266 | 245 | 224 |
| 11. 0 | 25204 | 25183 | 25162 | 25141 | 25121 | 25100 | 25079 | 25059 | 25038 | 25017 |
| 11. 1 | 24996 | 24976 | 24955 | 24935 | 24914 | 24894 | 24873 | 24852 | 24832 | 24811 |
| 11. 2 | 791 | 770 | 750 | 730 | 709 | 689 | 668 | 648 | 628 | 607 |
| 11. 3 | 587 | 567 | 546 | 526 | 506 | 486 | 465 | 445 | 425 | 405 |
| 11. 4 | 384 | 364 | 344 | 324 | 304 | 284 | 263 | 243 | 223 | 203 |
| 11. 5 | 24183 | 24163 | 24143 | 24123 | 24103 | 24083 | 24063 | 24043 | 24023 | 24003 |
| 11. 6 | 23983 | 23963 | 23944 | 23924 | 23904 | 23884 | 23864 | 23844 | 23824 | 23805 |
| 11. 7 | 785 | 765 | 745 | 726 | 706 | 686 | 666 | 647 | 627 | 607 |
| 11. 8 | 588 | 568 | 549 | 529 | 509 | 490 | 470 | 451 | 431 | 412 |
| 11. 9 | 392 | 373 | 353 | 334 | 314 | 295 | 275 | 256 | 237 | 217 |
| 12. 0 | 198 | 23178 | 23159 | 23140 | 23121 | 23101 | 23082 | 23063 | 23043 | 23024 |
| 12. 1 | 23005 | 22986 | 22966 | 22947 | 22928 | 22909 | 22890 | 22870 | 22851 | 22832 |
| 12. 2 | 22813 | 794 | 775 | 756 | 737 | 718 | 698 | 679 | 660 | 641 |
| 12. 3 | 622 | 603 | 584 | 565 | 547 | 528 | 509 | 490 | 471 | 452 |
| 12. 4 | 433 | 414 | 395 | 377 | 358 | 339 | 320 | 301 | 282 | 264 |
| 12. 5 | 245 | 226 | 207 | 189 | 22170 | 22151 | 22133 | 22114 | 22095 | 22077 |
| 12. 6 | 22058 | 22040 | 22021 | 22002 | 21984 | 21965 | 21947 | 21928 | 21910 | 21891 |
| 12. 7 | 21872 | 21854 | 21836 | 21817 | 799 | 780 | 762 | 743 | 725 | 706 |
| 12. 8 | 688 | 670 | 651 | 633 | 615 | 596 | 578 | 560 | 542 | 523 |
| 12. 9 | 505 | 487 | 469 | 450 | 432 | 414 | 396 | 377 | 359 | 341 |
| 13. 0 | 323 | 305 | 287 | 268 | 250 | 232 | 214 | 196 | 21178 | 21160 |
| 13. 1 | 21142 | 21124 | 21106 | 21088 | 21070 | 21052 | 21034 | 21016 | 20998 | 20980 |
| 13. 2 | 20962 | 20944 | 20926 | 20908 | 20890 | 20873 | 20855 | 20837 | 819 | 801 |
| 13. 3 | 783 | 765 | 748 | 730 | 712 | 694 | 677 | 659 | 641 | 623 |
| 13. 4 | 605 | 588 | 570 | 552 | 535 | 517 | 499 | 482 | 464 | 446 |
| 13. 5 | 429 | 411 | 394 | 376 | 358 | 341 | 323 | 306 | 288 | 271 |
| 13. 6 | 253 | 236 | 218 | 201 | 183 | 20166 | 20149 | 20131 | 20114 | 20096 |
| 13. 7 | 20079 | 20061 | 20044 | 20027 | 20009 | 19992 | 19975 | 19957 | 19940 | 19922 |
| 13. 8 | 19905 | 19888 | 19871 | 19853 | 19836 | 819 | 802 | 784 | 767 | 750 |
| 13. 9 | 733 | 715 | 698 | 681 | 664 | 647 | 630 | 613 | 595 | 578 |
| 14. 0 | 561 | 544 | 527 | 510 | 493 | 476 | 459 | 442 | 425 | 408 |
| 14. 1 | 391 | 374 | 357 | 340 | 323 | 306 | 289 | 272 | 255 | 238 |
| 14. 2 | 221 | 204 | 187 | 170 | 19154 | 19137 | 19120 | 19103 | 19086 | 19069 |
| 14. 3 | 19052 | 19036 | 19019 | 19002 | 18985 | 18969 | 18952 | 18935 | 18918 | 18902 |
| 14. 4 | 18885 | 18868 | 18852 | 18835 | 818 | 802 | 785 | 768 | 752 | 735 |
| 14. 5 | 718 | 702 | 685 | 668 | 652 | 635 | 619 | 602 | 586 | 569 |
| 14. 6 | 553 | 536 | 520 | 503 | 487 | 470 | 454 | 437 | 421 | 404 |
| 14. 7 | 388 | 371 | 355 | 339 | 322 | 306 | 289 | 273 | 257 | 240 |
| 14. 8 | 224 | 208 | 191 | 175 | 18159 | 18142 | 18126 | 18110 | 18093 | 18077 |
| 14. 9 | 18061 | 18045 | 18028 | 18012 | 17996 | 17980 | 17963 | 17947 | 17931 | 17915 |
| 15. 0 | 17899 | 17882 | 17866 | 17850 | 834 | 818 | 802 | 786 | 770 | 754 |
| 15. 1 | 737 | 721 | 705 | 689 | 673 | 657 | 641 | 625 | 609 | 593 |
| 15. 2 | 577 | 561 | 545 | 529 | 513 | 497 | 481 | 465 | 449 | 433 |
| 15. 3 | 417 | 402 | 386 | 370 | 354 | 338 | 322 | 306 | 290 | 275 |
| 15. 4 | 259 | 243 | 227 | 211 | 196 | 180 | 164 | 17148 | 17132 | 17117 |
| 15. 5 | 17101 | 17085 | 17069 | 17054 | 17038 | 17022 | 17007 | 16991 | 16975 | 16959 |
| 15. 6 | 16944 | 16928 | 16912 | 16897 | 16881 | 16866 | 16850 | 834 | 819 | 803 |
| 15. 7 | 787 | 772 | 756 | 741 | 725 | 710 | 694 | 679 | 663 | 648 |
| 15. 8 | 632 | 617 | 601 | 586 | 570 | 555 | 539 | 524 | 508 | 493 |
| 15. 9 | 477 | 462 | 447 | 431 | 416 | 400 | 385 | 370 | 354 | 339 |
| 16. 0 | 324 | 308 | 293 | 278 | 262 | 247 | 232 | 216 | 201 | 186 |
| 16. 1 | 171 | 155 | 16140 | 16125 | 16110 | 16094 | 16079 | 16064 | 16049 | 16034 |
| 16. 2 | 16018 | 16003 | 15988 | 15973 | 15958 | 15943 | 15927 | 15912 | 15897 | 15882 |
| 16. 3 | 15867 | 15852 | 837 | 822 | 806 | 791 | 776 | 761 | 746 | 731 |
| 16. 4 | 716 | 701 | 686 | 671 | 656 | 641 | 626 | 611 | 596 | 581 |
| 16. 5 | 566 | 551 | 536 | 521 | 506 | 491 | 476 | 461 | 446 | 431 |
| 16. 6 | 416 | 402 | 387 | 372 | 357 | 342 | 327 | 312 | 298 | 283 |
| 16. 7 | 268 | 253 | 238 | 224 | 209 | 194 | 179 | 164 | 150 | 15135 |
| 16. 8 | 15120 | 15105 | 15091 | 15076 | 15061 | 15047 | 15032 | 15017 | 15002 | 14988 |
| 16. 9 | 14973 | 14958 | 14944 | 14929 | 14914 | 14900 | 14885 | 14870 | 14856 | 841 |

TABLE II—Continued

ALTITUDE-PRESSURE TABLE—FEET-INCHES—Continued

| P inches | 0.00 | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 |
|---|---|---|---|---|---|---|---|---|---|---|
| 17.0 | 14826 | 14812 | 14797 | 14783 | 14768 | 14753 | 14739 | 14724 | 14710 | 14695 |
| 17.1 | 681 | 666 | 652 | 637 | 622 | 608 | 594 | 579 | 564 | 550 |
| 17.2 | 536 | 521 | 507 | 492 | 478 | 463 | 449 | 434 | 420 | 406 |
| 17.3 | 391 | 377 | 362 | 348 | 334 | 319 | 305 | 291 | 276 | 262 |
| 17.4 | 247 | 233 | 219 | 204 | 190 | 176 | 162 | 147 | 14133 | 14119 |
| 17.5 | 14104 | 14090 | 14076 | 14062 | 14047 | 14033 | 14019 | 14005 | 13990 | 13976 |
| 17.6 | 13962 | 13948 | 13934 | 13919 | 13905 | 13891 | 13877 | 13863 | 849 | 834 |
| 17.7 | 820 | 806 | 792 | 778 | 764 | 750 | 736 | 722 | 707 | 693 |
| 17.8 | 679 | 665 | 651 | 637 | 623 | 609 | 595 | 581 | 567 | 553 |
| 17.9 | 539 | 525 | 511 | 497 | 483 | 469 | 455 | 441 | 427 | 413 |
| 18.0 | 399 | 385 | 371 | 357 | 343 | 329 | 315 | 301 | 287 | 274 |
| 18.1 | 260 | 246 | 232 | 218 | 204 | 190 | 176 | 163 | 149 | 13135 |
| 18.2 | 13121 | 13107 | 13094 | 13080 | 13066 | 13052 | 13038 | 13025 | 13011 | 12997 |
| 18.3 | 12983 | 12970 | 12956 | 12942 | 12928 | 12915 | 12901 | 12887 | 12873 | 860 |
| 18.4 | 846 | 832 | 819 | 805 | 791 | 778 | 764 | 750 | 736 | 723 |
| 18.5 | 709 | 695 | 682 | 668 | 655 | 641 | 627 | 614 | 600 | 587 |
| 18.6 | 573 | 559 | 546 | 532 | 519 | 505 | 492 | 478 | 464 | 451 |
| 18.7 | 437 | 424 | 410 | 397 | 383 | 370 | 356 | 343 | 329 | 316 |
| 18.8 | 302 | 289 | 275 | 262 | 249 | 235 | 222 | 208 | 195 | 181 |
| 18.9 | 168 | 155 | 141 | 12128 | 12114 | 12101 | 12088 | 12074 | 12061 | 12048 |
| 19.0 | 12034 | 12021 | 12008 | 11994 | 11981 | 11968 | 11954 | 11941 | 11928 | 11914 |
| 19.1 | 11901 | 11888 | 11874 | 861 | 848 | 835 | 821 | 808 | 795 | 781 |
| 19.2 | 768 | 755 | 742 | 729 | 715 | 702 | 689 | 676 | 663 | 649 |
| 19.3 | 636 | 623 | 610 | 597 | 584 | 570 | 557 | 544 | 531 | 518 |
| 19.4 | 505 | 491 | 478 | 465 | 452 | 439 | 426 | 413 | 400 | 387 |
| 19.5 | 374 | 360 | 347 | 334 | 321 | 308 | 295 | 282 | 269 | 256 |
| 19.6 | 243 | 230 | 217 | 204 | 191 | 178 | 165 | 152 | 139 | 11126 |
| 19.7 | 11113 | 11100 | 11087 | 11074 | 11061 | 11048 | 11035 | 11023 | 11010 | 10997 |
| 19.8 | 10984 | 10971 | 10958 | 10945 | 10932 | 10919 | 10906 | 10894 | 10881 | 868 |
| 19.9 | 855 | 842 | 829 | 816 | 804 | 791 | 778 | 765 | 752 | 739 |
| 20.0 | 726 | 714 | 701 | 688 | 675 | 662 | 650 | 637 | 624 | 611 |
| 20.1 | 599 | 586 | 573 | 560 | 548 | 535 | 522 | 509 | 497 | 484 |
| 20.2 | 471 | 459 | 446 | 433 | 421 | 408 | 395 | 383 | 370 | 357 |
| 20.3 | 344 | 332 | 319 | 307 | 294 | 281 | 269 | 256 | 243 | 231 |
| 20.4 | 218 | 206 | 193 | 180 | 168 | 155 | 143 | 130 | 10117 | 10105 |
| 20.5 | 10092 | 10080 | 10067 | 10055 | 10042 | 10030 | 10017 | 10005 | 9992 | 9980 |
| 20.6 | 9967 | 9955 | 9942 | 9930 | 9917 | 9905 | 9892 | 9880 | 9867 | 9855 |
| 20.7 | 9842 | 9830 | 9817 | 9805 | 9793 | 9780 | 9768 | 9755 | 9743 | 9730 |
| 20.8 | 9718 | 9706 | 9693 | 9681 | 9668 | 9656 | 9644 | 9631 | 9619 | 9607 |
| 20.9 | 9594 | 9582 | 9570 | 9557 | 9545 | 9532 | 9520 | 9508 | 9495 | 9483 |
| 21.0 | 9471 | 9458 | 9446 | 9434 | 9422 | 9409 | 9397 | 9385 | 9372 | 9360 |
| 21.1 | 9348 | 9336 | 9323 | 9311 | 9299 | 9287 | 9274 | 9262 | 9250 | 9238 |
| 21.2 | 9225 | 9213 | 9201 | 9189 | 9176 | 9164 | 9154 | 9140 | 9128 | 9116 |
| 21.3 | 9103 | 9091 | 9079 | 9067 | 9055 | 9043 | 9030 | 9018 | 9006 | 8994 |
| 21.4 | 8982 | 8970 | 8958 | 8946 | 8933 | 8921 | 8909 | 8897 | 8885 | 8873 |
| 21.5 | 8861 | 8849 | 8837 | 8825 | 8813 | 8801 | 8789 | 8776 | 8764 | 8752 |
| 21.6 | 8740 | 8728 | 8716 | 8704 | 8692 | 8680 | 8668 | 8656 | 8644 | 8632 |
| 21.7 | 8620 | 8608 | 8596 | 8584 | 8572 | 8560 | 8548 | 8536 | 8524 | 8512 |
| 21.8 | 8500 | 8489 | 8477 | 8465 | 8453 | 8441 | 8429 | 8417 | 8405 | 8393 |
| 21.9 | 8381 | 8369 | 8357 | 8346 | 8334 | 8322 | 8310 | 8298 | 8286 | 8274 |
| 22.0 | 8262 | 8250 | 8239 | 8227 | 8215 | 8203 | 8191 | 8179 | 8168 | 8156 |
| 22.1 | 8144 | 8132 | 8120 | 8109 | 8097 | 8085 | 8073 | 8061 | 8050 | 8038 |
| 22.2 | 8026 | 8014 | 8003 | 7991 | 7979 | 7967 | 7956 | 7944 | 7932 | 7920 |
| 22.3 | 7909 | 7897 | 7885 | 7873 | 7862 | 7850 | 7838 | 7827 | 7815 | 7803 |
| 22.4 | 7791 | 7780 | 7768 | 7756 | 7745 | 7733 | 7721 | 7710 | 7698 | 7686 |
| 22.5 | 7675 | 7663 | 7652 | 7640 | 7628 | 7617 | 7605 | 7593 | 7582 | 7570 |
| 22.6 | 7559 | 7547 | 7535 | 7524 | 7512 | 7501 | 7489 | 7478 | 7466 | 7454 |
| 22.7 | 7443 | 7431 | 7420 | 7408 | 7397 | 7385 | 7374 | 7362 | 7350 | 7339 |
| 22.8 | 7327 | 7316 | 7304 | 7293 | 7281 | 7270 | 7258 | 7247 | 7235 | 7224 |
| 22.9 | 7212 | 7201 | 7189 | 7178 | 7167 | 7155 | 7144 | 7132 | 7121 | 7109 |
| 23.0 | 7098 | 7086 | 7075 | 7064 | 7052 | 7041 | 7029 | 7018 | 7006 | 6995 |
| 23.1 | 6984 | 6972 | 6961 | 6949 | 6938 | 6927 | 6915 | 6904 | 6893 | 6881 |
| 23.2 | 6870 | 6858 | 6847 | 6836 | 6824 | 6813 | 6802 | 6790 | 6779 | 6768 |
| 23.3 | 6756 | 6745 | 6734 | 6722 | 6711 | 6700 | 6688 | 6677 | 6666 | 6655 |
| 23.4 | 6643 | 6632 | 6621 | 6610 | 6598 | 6587 | 6576 | 6564 | 6553 | 6542 |
| 23.5 | 6531 | 6519 | 6508 | 6497 | 6486 | 6475 | 6463 | 6452 | 6441 | 6430 |
| 23.6 | 6418 | 6407 | 6396 | 6385 | 6374 | 6363 | 6351 | 6340 | 6329 | 6318 |
| 23.7 | 6307 | 6296 | 6284 | 6273 | 6262 | 6251 | 6240 | 6229 | 6218 | 6206 |
| 23.8 | 6195 | 6184 | 6173 | 6162 | 6151 | 6140 | 6129 | 6118 | 6106 | 6095 |
| 23.9 | 6084 | 6073 | 6062 | 6051 | 6040 | 6029 | 6018 | 6007 | 5996 | 5985 |

TABLE II—Continued

ALTITUDE-PRESSURE TABLE—FEET-INCHES—Continued

| p inches | 0.00 | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 |
|---|---|---|---|---|---|---|---|---|---|---|
| 24. 0 | 5974 | 5962 | 5951 | 5940 | 5929 | 5918 | 5907 | 5896 | 5885 | 5874 |
| 24. 1 | 5863 | 5852 | 5841 | 5830 | 5819 | 5808 | 5797 | 5786 | 5775 | 5764 |
| 24. 2 | 5753 | 5742 | 5731 | 5720 | 5709 | 5698 | 5687 | 5676 | 5666 | 5655 |
| 24. 3 | 5644 | 5633 | 5622 | 5611 | 5600 | 5589 | 5578 | 5567 | 5555 | 5545 |
| 24. 4 | 5534 | 5524 | 5513 | 5502 | 5491 | 5480 | 5469 | 5458 | 5447 | 5436 |
| 24. 5 | 5425 | 5415 | 5404 | 5393 | 5382 | 5371 | 5360 | 5350 | 5339 | 5328 |
| 24. 6 | 5317 | 5306 | 5295 | 5285 | 5274 | 5263 | 5252 | 5241 | 5230 | 5220 |
| 24. 7 | 5209 | 5198 | 5187 | 5176 | 5166 | 5155 | 5144 | 5133 | 5123 | 5112 |
| 24. 8 | 5101 | 5090 | 5080 | 5069 | 5058 | 5047 | 5037 | 5026 | 5015 | 5004 |
| 24. 9 | 4994 | 4983 | 4972 | 4961 | 4951 | 4940 | 4929 | 4919 | 4908 | 4897 |
| 25. 0 | 4886 | 4876 | 4865 | 4854 | 4844 | 4833 | 4822 | 4812 | 4801 | 4790 |
| 25. 1 | 4780 | 4769 | 4758 | 4748 | 4737 | 4726 | 4716 | 4705 | 4695 | 4684 |
| 25. 2 | 4673 | 4663 | 4652 | 4642 | 4631 | 4620 | 4610 | 4599 | 4588 | 4578 |
| 25. 3 | 4567 | 4557 | 4546 | 4536 | 4525 | 4514 | 4504 | 4493 | 4483 | 4472 |
| 25. 4 | 4462 | 4451 | 4440 | 4430 | 4419 | 4409 | 4398 | 4388 | 4377 | 4367 |
| 25. 5 | 4356 | 4346 | 4335 | 4325 | 4314 | 4304 | 4293 | 4283 | 4272 | 4262 |
| 25. 6 | 4251 | 4241 | 4230 | 4220 | 4209 | 4199 | 4188 | 4178 | 4167 | 4157 |
| 25. 7 | 4146 | 4136 | 4125 | 4115 | 4105 | 4094 | 4084 | 4073 | 4063 | 4052 |
| 25. 8 | 4042 | 4032 | 4021 | 4011 | 4000 | 3990 | 3980 | 3969 | 3959 | 3948 |
| 25. 9 | 3938 | 3928 | 3917 | 3907 | 3896 | 3886 | 3876 | 3865 | 3855 | 3845 |
| 26. 0 | 3834 | 3824 | 3814 | 3803 | 3793 | 3782 | 3772 | 3762 | 3751 | 3741 |
| 26. 1 | 3731 | 3720 | 3710 | 3700 | 3689 | 3679 | 3669 | 3659 | 3648 | 3638 |
| 26. 2 | 3628 | 3617 | 3607 | 3597 | 3586 | 3576 | 3566 | 3556 | 3545 | 3535 |
| 26. 3 | 3525 | 3515 | 3504 | 3494 | 3484 | 3474 | 3463 | 3453 | 3443 | 3433 |
| 26. 4 | 3422 | 3412 | 3402 | 3392 | 3382 | 3371 | 3361 | 3351 | 3341 | 3331 |
| 26. 5 | 3320 | 3310 | 3300 | 3290 | 3279 | 3269 | 3259 | 3249 | 3239 | 3229 |
| 26. 6 | 3218 | 3208 | 3198 | 3188 | 3178 | 3168 | 3157 | 3147 | 3137 | 3127 |
| 26. 7 | 3117 | 3107 | 3097 | 3086 | 3076 | 3066 | 3056 | 3046 | 3036 | 3026 |
| 26. 8 | 3016 | 3005 | 2995 | 2985 | 2975 | 2965 | 2955 | 2945 | 2935 | 2925 |
| 26. 9 | 2915 | 2905 | 2895 | 2884 | 2874 | 2864 | 2854 | 2844 | 2834 | 2824 |
| 27. 0 | 2814 | 2804 | 2794 | 2784 | 2774 | 2764 | 2754 | 2744 | 2734 | 2724 |
| 27. 1 | 2714 | 2704 | 2694 | 2684 | 2674 | 2664 | 2654 | 2644 | 2634 | 2624 |
| 27. 2 | 2614 | 2604 | 2594 | 2584 | 2574 | 2564 | 2554 | 2544 | 2534 | 2524 |
| 27. 3 | 2514 | 2504 | 2494 | 2484 | 2474 | 2464 | 2454 | 2444 | 2434 | 2425 |
| 27. 4 | 2415 | 2405 | 2395 | 2385 | 2375 | 2365 | 2355 | 2345 | 2335 | 2325 |
| 27. 5 | 2315 | 2306 | 2296 | 2286 | 2276 | 2266 | 2256 | 2246 | 2236 | 2226 |
| 27. 6 | 2217 | 2207 | 2197 | 2187 | 2177 | 2167 | 2158 | 2148 | 2138 | 2128 |
| 27. 7 | 2118 | 2108 | 2098 | 2089 | 2079 | 2069 | 2059 | 2049 | 2040 | 2030 |
| 27. 8 | 2020 | 2010 | 2000 | 1990 | 1981 | 1971 | 1961 | 1951 | 1942 | 1932 |
| 27. 9 | 1922 | 1912 | 1902 | 1893 | 1883 | 1873 | 1863 | 1854 | 1844 | 1834 |
| 28. 0 | 1824 | 1814 | 1805 | 1795 | 1785 | 1776 | 1766 | 1756 | 1746 | 1737 |
| 28. 1 | 1727 | 1717 | 1707 | 1698 | 1688 | 1678 | 1668 | 1659 | 1649 | 1639 |
| 28. 2 | 1630 | 1620 | 1610 | 1601 | 1591 | 1581 | 1572 | 1562 | 1552 | 1542 |
| 28. 3 | 1533 | 1523 | 1513 | 1504 | 1494 | 1484 | 1475 | 1465 | 1456 | 1446 |
| 28. 4 | 1436 | 1427 | 1417 | 1407 | 1398 | 1388 | 1378 | 1369 | 1359 | 1350 |
| 28. 5 | 1340 | 1330 | 1321 | 1311 | 1302 | 1292 | 1282 | 1273 | 1263 | 1254 |
| 28. 6 | 1244 | 1234 | 1225 | 1215 | 1206 | 1196 | 1186 | 1177 | 1167 | 1158 |
| 28. 7 | 1148 | 1139 | 1129 | 1120 | 1110 | 1100 | 1091 | 1081 | 1072 | 1062 |
| 28. 8 | 1053 | 1043 | 1034 | 1024 | 1015 | 1005 | 995 | 986 | 976 | 967 |
| 28. 9 | 957 | 948 | 938 | 929 | 919 | 910 | 900 | 891 | 881 | 872 |
| 29. 0 | 863 | 853 | 844 | 834 | 825 | 815 | 806 | 796 | 787 | 777 |
| 29. 1 | 768 | 758 | 749 | 739 | 730 | 721 | 711 | 702 | 692 | 683 |
| 29. 2 | 673 | 664 | 655 | 645 | 636 | 626 | 617 | 607 | 598 | 589 |
| 29. 3 | 579 | 570 | 560 | 551 | 542 | 532 | 523 | 514 | 504 | 495 |
| 29. 4 | 485 | 476 | 467 | 457 | 448 | 439 | 429 | 420 | 410 | 401 |
| 29. 5 | 392 | 382 | 373 | 364 | 354 | 345 | 336 | 326 | 318 | 308 |
| 29. 6 | 298 | 289 | 280 | 270 | 261 | 252 | 242 | 233 | 224 | 215 |
| 29. 7 | 205 | 196 | 187 | 177 | 168 | 159 | 149 | 140 | 131 | 122 |
| 29. 8 | 112 | 103 | 94 | 85 | 75 | 66 | 57 | 47 | 38 | 29 |
| 29. 9 | 20 | 10 | +1 | −8 | −17 | −26 | −36 | −45 | −54 | −63 |

TABLE II—Continued

ALTITUDE-PRESSURE TABLE—FEET-INCHES—Continued

| $p$ inches | 0.00 | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 |
|---|---|---|---|---|---|---|---|---|---|---|
| 30.0 | −73 | −82 | −91 | −100 | −110 | −119 | −128 | −137 | −146 | −156 |
| 30.1 | −165 | 174 | 183 | 192 | 202 | 211 | 220 | 229 | 238 | 248 |
| 30.2 | −257 | 266 | 275 | 284 | 293 | 303 | 312 | 321 | 330 | 339 |
| 30.3 | −348 | 358 | 367 | 376 | 385 | 394 | 403 | 412 | 421 | 431 |
| 30.4 | −440 | 449 | 458 | 467 | 476 | 485 | 494 | 504 | 513 | 522 |
| 30.5 | −531 | 540 | 549 | 558 | 567 | 576 | 585 | 594 | 604 | 613 |
| 30.6 | −622 | 631 | 640 | 649 | 658 | 667 | 676 | 685 | 694 | 703 |
| 30.7 | −712 | 721 | 730 | 740 | 749 | 758 | 767 | 776 | 785 | 794 |
| 30.8 | −803 | 812 | 821 | 830 | 839 | 848 | 857 | 866 | 875 | 884 |
| 30.9 | −893 | 902 | 911 | 920 | 929 | 938 | 947 | 956 | 965 | 974 |
| 31.0 | −983 | 992 | 1001 | 1010 | 1019 | 1028 | 1037 | 1046 | 1055 | 1064 |

TABLE III

ALTITUDE-PRESSURE-TEMPERATURE TABLE

| Altitude, feet | Pressure | | Temperature, °C. | Mean temperature, °C. | Isothermal altitude (+10° C.), feet |
|---|---|---|---|---|---|
| | in. Hg. | mm. Hg. | | | |
| −1000 | 31.02 | 787.9 | +17.0 | +16.0 | −1010 |
| −500 | 30.47 | 773.8 | 16.0 | 15.5 | −510 |
| 0 | 29.921 | 760.0 | 15.0 | 15.0 | −10 |
| +500 | 29.38 | 746.4 | 14.0 | 14.5 | +480 |
| +1,000 | 28.86 | 732.9 | 13.0 | 14.0 | +980 |
| 1,500 | 28.33 | 719.7 | 12.0 | 13.5 | 1,480 |
| 2,000 | 27.82 | 706.6 | 11.0 | 13.0 | 1,980 |
| 2,500 | 27.31 | 693.8 | 10.0 | 12.5 | 2,470 |
| 3,000 | 26.81 | 681.1 | 9.1 | 12.0 | 2,980 |
| 3,500 | 26.32 | 668.6 | 8.1 | 11.5 | 3,480 |
| 4,000 | 25.84 | 656.3 | 7.1 | 11.0 | 3,990 |
| 4,500 | 23.36 | 644.2 | 6.1 | 10.5 | 4,500 |
| 5,000 | 24.89 | 632.3 | 5.1 | 10.0 | 5,020 |
| 5,500 | 24.43 | 620.6 | 4.1 | 9.5 | 5,520 |
| 6,000 | 23.98 | 609.0 | 3.1 | 9.0 | 6,040 |
| 6,500 | 23.53 | 597.6 | 2.1 | 8.5 | 6,550 |
| 7,000 | 23.09 | 586.4 | 1.1 | 8.0 | 7,070 |
| 7,500 | 22.65 | 575.3 | +0.1 | 7.5 | 7,600 |
| 8,000 | 22.22 | 564.4 | −0.8 | 7.0 | 8,110 |
| 8,500 | 21.80 | 553.7 | −1.8 | 6.5 | 8,640 |
| 9,000 | 21.38 | 543.2 | −2.8 | 6.0 | 9,160 |
| 9,500 | 20.98 | 532.8 | −3.8 | 5.5 | 9,690 |
| 10,000 | 20.58 | 522.6 | −4.8 | 5.0 | 10,220 |
| 10,500 | 20.18 | 512.5 | −5.8 | 4.5 | 10,750 |
| 11,000 | 19.79 | 502.6 | −6.8 | 4.0 | 11,280 |
| 11,500 | 19.40 | 492.8 | −7.8 | 3.5 | 11,820 |
| 12,000 | 19.03 | 483.3 | −8.8 | 2.9 | 12,360 |
| 12,500 | 18.65 | 473.8 | −9.8 | 2.4 | 12,890 |
| 13,000 | 18.29 | 464.5 | −10.8 | 1.9 | 13,440 |
| 13.500 | 17.93 | 455.4 | −11.7 | 1.4 | 13,980 |
| 14,000 | 17.57 | 446.4 | −12.7 | 0.9 | 14,520 |
| 14,500 | 17.22 | 437.5 | −13.7 | +0.4 | 15,070 |
| 15,000 | 16.88 | 428.8 | −14.7 | −0.1 | 15,620 |
| 15,500 | 16.54 | 420.2 | −15.7 | −0.6 | 16,170 |
| 16,000 | 16.21 | 411.8 | −16.7 | −1.2 | 16,730 |
| 16,500 | 15.89 | 403.5 | −17.7 | −1.7 | 17,280 |
| 17,000 | 15.56 | 395.3 | −18.7 | −2.2 | 17,830 |
| 17,500 | 15.25 | 387.3 | −19.7 | −2.7 | 18,400 |
| 18,000 | 14.94 | 379.4 | −20.7 | −3.2 | 18,960 |
| 18,500 | 14.63 | 371.7 | −21.7 | −3.7 | 19,520 |
| 19,000 | 14.33 | 364.0 | −22.6 | −4.3 | 20,100 |
| 19,500 | 14.04 | 356.5 | −23.6 | −4.8 | 20,660 |

## TABLE III—Continued

ALTITUDE-PRESSURE-TEMPERATURE TABLE—Continued

| Altitude, feet | Pressure | | Temperature, °C. | Mean temperature, °C. | Isothermal altitude (+10° C.), feet |
|---|---|---|---|---|---|
| | in. Hg. | mm Hg. | | | |
| 20, 000 | 13. 75 | 349. 1 | −24. 6 | −5. 3 | 21, 240 |
| 20, 500 | 13. 46 | 341. 9 | −25. 6 | −5. 8 | 21, 800 |
| 21, 000 | 13. 18 | 334. 7 | −26. 6 | −6. 3 | 22, 380 |
| 21, 500 | 12. 90 | 327. 7 | −27. 6 | −6. 9 | 22, 960 |
| 22, 000 | 12. 63 | 320. 8 | −28. 6 | −7. 4 | 23, 550 |
| 22, 500 | 12. 36 | 314. 1 | −29. 6 | −7. 9 | 24, 120 |
| 23, 000 | 12. 10 | 307. 4 | −30. 6 | −8. 4 | 24, 710 |
| 23, 500 | 11. 84 | 300. 9 | −31. 6 | −9. 0 | 25, 300 |
| 24, 000 | 11. 59 | 294. 4 | −32. 5 | −9. 5 | 25, 890 |
| 24, 500 | 11, 34 | 288. 1 | −33. 5 | −10. 0 | 26, 480 |
| 25, 000 | 11. 10 | 281. 9 | −34. 5 | −10. 5 | 27, 080 |
| 25, 500 | 10. 86 | 275. 8 | −35. 5 | −11. 1 | 27, 680 |
| 26, 000 | 10. 62 | 269. 8 | −36. 5 | −11. 6 | 28, 280 |
| 26, 500 | 10. 39 | 263. 9 | −37. 5 | −12. 1 | 28, 880 |
| 27, 000 | 10. 16 | 258. 1 | −38. 5 | −12. 7 | 29, 490 |
| 27, 500 | 9. 94 | 252. 5 | −39. 5 | −13. 2 | 30, 090 |
| 28, 000 | 9. 72 | 246. 9 | −40. 5 | −13. 7 | 30, 700 |
| 28, 500 | 9. 50 | 241. 4 | −41. 5 | −14. 3 | 31, 310 |
| 29, 000 | 9. 29 | 236. 0 | −42. 5 | −14. 8 | 31, 930 |
| 29, 500 | 9. 08 | 230. 7 | −43. 4 | −15. 3 | 32, 550 |
| 30, 000 | 8. 88 | 225. 6 | −44. 4 | −15. 9 | 33, 160 |
| 30, 500 | 8. 68 | 220. 5 | −45. 4 | −16. 4 | 33, 790 |
| 31, 000 | 8. 48 | 215. 5 | −46. 4 | −16. 9 | 34, 420 |
| 31, 500 | 8. 29 | 210. 6 | −47. 4 | −17. 5 | 35, 040 |
| 32, 000 | 8. 10 | 205. 8 | −48. 4 | −18. 0 | 35, 680 |
| 32, 500 | 7. 91 | 201. 0 | −49. 4 | −18. 6 | 36, 320 |
| 33, 000 | 7. 73 | 196. 4 | −50. 4 | −19. 1 | 36, 950 |
| 33, 500 | 7. 55 | 191. 8 | −51. 4 | −19. 6 | 37, 590 |
| 34, 000 | 7. 38 | 187. 4 | −52. 4 | −20. 2 | 38. 220 |
| 34, 500 | 7. 20 | 183. 0 | −53. 4 | −20. 7 | 38, 870 |
| 35, 000 | 7. 04 | 178. 7 | −54. 3 | −21. 3 | 39, 520 |
| 35, 332 | 6. 93 | 175. 9 | −55. 0 | −21. 6 | 39, 960 |
| 35, 500 | 6. 87 | 174. 5 | −55. 0 | −21. 8 | 40, 160 |
| 36, 000 | 6. 71 | 170. 4 | −55. 0 | −22. 3 | 40, 820 |
| 36, 500 | 6. 55 | 166. 4 | −55. 0 | −22. 8 | 41, 470 |
| 37, 000 | 6. 39 | 162. 4 | −55. 0 | −23. 3 | 42, 130 |
| 37, 500 | 6. 24 | 158. 6 | −55. 0 | −23. 8 | 42, 780 |
| 38, 000 | 6. 10 | 154. 9 | −55. 0 | −24. 3 | 43, 440 |
| 38, 500 | 5. 95 | 151. 2 | −55. 0 | −24. 8 | 44, 090 |
| 39, 000 | 5. 81 | 147. 6 | −55. 0 | −25. 2 | 44, 750 |
| 39, 500 | 5. 68 | 144. 1 | −55. 0 | −25. 6 | 45, 410 |
| 40, 000 | 5. 54 | 140. 7 | −55. 0 | −26. 0 | 46, 060 |
| 40, 500 | 5. 41 | 137. 4 | −55. 0 | −26. 4 | 46, 710 |
| 41, 000 | 5. 28 | 134. 2 | −55. 0 | −26. 8 | 47, 350 |
| 41, 500 | 5. 16 | 131. 0 | −55. 0 | −27. 2 | 48, 010 |
| 42, 000 | 5. 04 | 127. 9 | −55. 0 | −27. 6 | 48, 670 |
| 42, 500 | 4. 92 | 124. 9 | −55. 0 | −28. 0 | 49, 320 |
| 43, 000 | 4. 80 | 122. 0 | −55. 0 | −28. 3 | 49, 960 |
| 43, 500 | 4. 69 | 119. 1 | −55. 0 | −28. 6 | 50, 610 |
| 44, 000 | 4. 58 | 116. 3 | −55. 0 | −29. 0 | 51, 260 |
| 44, 500 | 4. 47 | 113. 5 | 55. 0 | −29. 3 | 51, 930 |
| 45, 000 | 4. 36 | 110. 8 | −55. 0 | −29. 6 | 52, 590 |
| 45, 500 | 4. 26 | 108. 2 | −55. 0 | −29. 9 | 53, 240 |
| 46, 000 | 4. 16 | 105. 7 | −55. 0 | −30. 2 | 53, 870 |
| 46, 500 | 4. 06 | 103. 2 | −55. 0 | −30. 5 | 54, 530 |
| 47. 000 | 3. 97 | 100. 7 | −55. 0 | −30. 8 | 55, 200 |
| 47, 500 | 3. 87 | 98. 4 | −55. 0 | −31. 1 | 55, 830 |
| 48, 000 | 3. 78 | 96. 1 | −55. 0 | −31. 4 | 56, 480 |
| 48, 500 | 3. 69 | 93. 8 | −55. 0 | −31. 7 | 57, 140 |
| 49, 000 | 3. 61 | 91. 6 | −55. 0 | −31. 9 | 57, 790 |
| 49, 500 | 3. 52 | 89. 4 | −55. 0 | −32. 2 | 58, 450 |
| 50, 000 | 3. 44 | 87. 3 | −55. 0 | −32. 4 | 59, 100 |

## TABLE IV

### TEMPERATURE CORRECTION TABLE

| Mean temperature, °C. | Standard altitude, in feet | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2,000 | 4,000 | 6,000 | 8,000 | 10,000 | 12,000 | 14,000 | 16,000 | 18,000 | 20,000 |
| −35 | | | | | | | | | 2,120 | 2,219 |
| −34 | | | | | | | | | 2,053 | 2,144 |
| −33 | | | | | | | | | 1,987 | 2,069 |
| −32 | | | | | | | | | 1,920 | 1,994 |
| −31 | | | | | | | | | 1,853 | 1,920 |
| −30 | | | | 1,057 | 1,258 | 1,433 | 1,579 | 1,698 | 1,786 | 1,845 |
| −29 | | | | 1,029 | 1,222 | 1,389 | 1,528 | 1,639 | 1,720 | 1,770 |
| −28 | | | | 1,000 | 1,186 | 1,346 | 1,477 | 1,580 | 1,653 | 1,696 |
| −27 | | | | 971 | 1,150 | 1,302 | 1,426 | 1,521 | 1,586 | 1,621 |
| −26 | | | | 943 | 1,114 | 1,259 | 1,375 | 1,462 | 1,520 | 1,546 |
| −25 | 266 | 507 | 724 | 914 | 1,078 | 1,215 | 1,324 | 1,403 | 1,453 | 1,472 |
| −24 | 259 | 493 | 702 | 886 | 1,042 | 1,172 | 1,273 | 1,344 | 1,386 | 1,397 |
| −23 | 252 | 479 | 681 | 857 | 1,006 | 1,128 | 1,221 | 1,286 | 1,319 | 1,322 |
| −22 | 245 | 465 | 660 | 829 | 970 | 1,085 | 1,170 | 1,227 | 1,253 | 1,247 |
| −21 | 238 | 451 | 639 | 800 | 934 | 1,041 | 1,119 | 1,168 | 1,186 | 1,173 |
| −20 | 231 | 437 | 617 | 771 | 898 | 998 | 1,068 | 1,109 | 1,119 | 1,098 |
| −19 | 224 | 423 | 596 | 743 | 862 | 954 | 1,017 | 1,050 | 1,053 | 1,023 |
| −18 | 217 | 409 | 575 | 714 | 826 | 911 | 966 | 991 | 986 | 949 |
| −17 | 210 | 395 | 553 | 686 | 790 | 867 | 915 | 932 | 919 | 874 |
| −16 | 203 | 381 | 532 | 657 | 755 | 824 | 864 | 874 | 852 | 799 |
| −15 | 196 | 367 | 511 | 629 | 719 | 780 | 813 | 815 | 786 | 725 |
| −14 | 189 | 353 | 490 | 600 | 683 | 737 | 761 | 756 | 719 | 650 |
| −13 | 182 | 338 | 468 | 571 | 647 | 693 | 710 | 697 | 652 | 575 |
| −12 | 175 | 324 | 447 | 543 | 611 | 650 | 659 | 638 | 585 | 500 |
| −11 | 168 | 310 | 426 | 514 | 575 | 606 | 608 | 579 | 519 | 426 |
| −10 | 161 | 296 | 405 | 486 | 539 | 563 | 557 | 520 | 452 | 351 |
| −9 | 154 | 282 | 383 | 457 | 503 | 519 | 506 | 462 | 385 | 276 |
| −8 | 147 | 268 | 362 | 429 | 467 | 476 | 455 | 403 | 319 | 202 |
| −7 | 140 | 254 | 341 | 400 | 431 | 432 | 404 | 344 | 252 | 127 |
| −6 | 133 | 240 | 319 | 371 | 395 | 389 | 353 | 285 | 185 | 52 |
| −5 | 126 | 226 | 298 | 343 | 359 | 345 | 301 | 226 | 118 | 22 |
| −4 | 119 | 212 | 277 | 314 | 323 | 302 | 250 | 167 | 52 | 97 |
| −3 | 112 | 197 | 256 | 286 | 287 | 258 | 199 | 108 | 15 | 172 |
| −2 | 105 | 183 | 234 | 257 | 251 | 215 | 148 | 50 | 82 | 247 |
| −1 | 98 | 169 | 213 | 229 | 215 | 171 | 97 | 9 | 148 | 321 |

Values above the zigzag line are to be subtracted; those below, to be added.

## TABLE IV—Continued

TEMPERATURE CORRECTION TABLE—Continued

| Mean temperature, °C. | Standard altitude, in feet | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2,000 | 4,000 | 6,000 | 8,000 | 10,000 | 12,000 | 14,000 | 16,000 | 18,000 | 20,000 |
| 0 | 91 | 155 | 192 | 200 | 179 | 128 | 46 | 68 | 215 | 396 |
| 1 | 84 | 141 | 171 | 171 | 143 | 84 | 5 | 127 | 282 | 471 |
| 2 | 77 | 127 | 149 | 143 | 107 | 41 | 56 | 186 | 349 | 545 |
| 3 | 70 | 113 | 128 | 114 | 71 | 3 | 107 | 245 | 415 | 620 |
| 4 | 63 | 99 | 107 | 86 | 35 | 46 | 159 | 304 | 482 | 695 |
| 5 | 56 | 85 | 85 | 57 | 1 | 90 | 210 | 362 | 549 | 769 |
| 6 | 49 | 71 | 64 | 29 | 37 | 133 | 261 | 421 | 616 | 844 |
| 7 | 42 | 57 | 43 | 0 | 73 | 177 | 312 | 480 | 682 | 919 |
| 8 | 35 | 43 | 22 | 29 | 109 | 220 | 363 | 539 | 749 | 994 |
| 9 | 28 | 28 | 0 | 57 | 145 | 263 | 414 | 598 | 816 | 1,068 |
| 10 | 21 | 14 | 21 | 86 | 181 | 307 | 465 | 657 | 882 | 1,143 |
| 11 | 14 | 0 | 42 | 114 | 217 | 350 | 516 | 716 | 949 | 1,218 |
| 12 | 7 | 14 | 64 | 143 | 253 | 394 | 568 | 774 | 1,016 | 1,292 |
| 13 | 0 | 28 | 85 | 171 | 289 | 437 | 619 | 833 | 1,083 | 1,367 |
| 14 | 7 | 42 | 106 | 200 | 325 | 481 | 670 | 892 | 1,149 | 1,442 |
| 15 | 14 | 58 | 127 | 229 | 361 | 524 | 721 | 951 | ---- | ---- |
| 16 | 21 | 70 | 149 | 257 | 397 | 568 | 772 | 1,010 | ---- | ---- |
| 17 | 28 | 84 | 170 | 286 | 432 | 611 | 823 | 1,069 | ---- | ---- |
| 18 | 35 | 98 | 191 | 314 | 468 | 655 | 874 | 1,128 | ---- | ---- |
| 19 | 42 | 112 | 212 | 343 | 504 | 698 | 925 | 1,186 | ---- | ---- |
| 20 | 49 | 126 | 234 | 371 | 540 | 742 | ---- | ---- | ---- | ---- |
| 21 | 56 | 141 | 255 | 400 | 576 | 785 | ---- | ---- | ---- | ---- |
| 22 | 63 | 155 | 276 | 429 | 612 | 829 | ---- | ---- | ---- | ---- |
| 23 | 70 | 169 | 298 | 457 | 648 | 872 | ---- | ---- | ---- | ---- |
| 24 | 77 | 183 | 319 | 486 | 684 | 916 | ---- | ---- | ---- | ---- |
| 25 | 84 | 197 | 340 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 26 | 91 | 211 | 361 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 27 | 98 | 225 | 383 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 28 | 105 | 239 | 404 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 29 | 112 | 253 | 425 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 30 | 119 | 267 | 446 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

Values above the zigzag line are to be subtracted; those below, to be added.

## TABLE IV—Continued

TEMPERATURE CORRECTION TABLE—Continued

| Mean temperature, °C. | Standard altitud in feet | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 22,000 | 24,000 | 26,000 | 28,000 | 30,000 | 32,000 | 34,000 | 36,000 | 38,000 | 40,000 |
| −35 | 2,287 | 2,323 | 2,327 | 2,297 | 2,233 | 2,132 | 1,994 | 1,819 | 1,635 | 1,452 |
| −34 | 2,204 | 2,232 | 2,227 | 2,189 | 2,116 | 2,006 | 1,859 | 1,675 | 1,483 | 1,290 |
| −33 | 2,121 | 2,141 | 2,128 | 2,082 | 1,999 | 1,881 | 1,725 | 1,532 | 1,330 | 1,128 |
| −32 | 2,038 | 2,050 | 2,029 | 1,974 | 1,883 | 1,755 | 1,590 | 1,388 | 1,177 | 966 |
| −31 | 1,956 | 1,959 | 1,929 | 1,866 | 1,766 | 1,630 | 1,456 | 1,244 | 1,024 | 804 |
| −30 | 1,873 | 1,868 | 1,830 | 1,758 | 1,649 | 1,504 | 1,321 | 1,101 | 872 | 642 |
| −29 | 1,790 | 1,777 | 1,730 | 1,650 | 1,533 | 1,379 | 1,187 | 957 | 719 | 480 |
| −28 | 1,707 | 1,686 | 1,631 | 1,542 | 1,416 | 1,253 | 1,052 | 814 | 566 | 318 |
| −27 | 1,624 | 1,595 | 1,531 | 1,434 | 1,299 | 1,128 | 918 | 670 | 413 | 156 |
| −26 | 1,541 | 1,504 | 1,432 | 1,326 | 1,183 | 1,002 | 783 | 526 | 260 | 6 |
| −25 | 1,459 | 1,413 | 1,332 | 1,218 | 1,066 | 877 | 649 | 383 | 108 | 168 |
| −24 | 1,376 | 1,322 | 1,233 | 1,110 | 949 | 751 | 514 | 239 | 45 | 330 |
| −23 | 1,293 | 1,230 | 1,134 | 1,002 | 833 | 626 | 380 | 96 | 198 | 492 |
| −22 | 1,210 | 1,139 | 1,034 | 894 | 716 | 500 | 245 | 48 | 351 | 654 |
| −21 | 1,127 | 1,048 | 935 | 786 | 599 | 375 | 111 | 192 | 504 | 816 |
| −20 | 1,044 | 957 | 835 | 678 | 483 | 249 | 24 | 335 | 656 | 978 |
| −19 | 962 | 866 | 736 | 570 | 366 | 124 | 158 | 479 | 809 | 1,140 |
| −18 | 879 | 775 | 636 | 462 | 249 | 2 | 292 | 623 | 962 | 1,302 |
| −17 | 796 | 684 | 537 | 354 | 133 | 127 | 427 | 766 | 1,115 | 1,463 |
| −16 | 713 | 593 | 437 | 246 | 16 | 252 | 561 | 910 | 1,268 | 1,625 |
| −15 | 630 | 502 | 338 | 138 | 101 | 378 | 696 | 1,053 | 1,420 | 1,787 |
| −14 | 548 | 411 | 239 | 30 | 217 | 503 | 830 | 1,197 | 1,573 | 1,949 |
| −13 | 465 | 320 | 139 | 78 | 334 | 629 | 965 | 1,341 | 1,726 | 2,111 |
| −12 | 382 | 229 | 40 | 186 | 451 | 754 | 1,099 | 1,484 | 1,879 | 2,273 |
| −11 | 299 | 138 | 60 | 294 | 567 | 880 | 1,234 | 1,628 | 2,031 | 2,435 |
| −10 | 216 | 46 | 159 | 402 | 684 | 1,005 | 1,368 | 1,772 | 2,184 | 2,597 |
| −9 | 133 | 45 | 259 | 510 | 801 | 1,131 | 1,503 | 1,915 | 2,337 | 2,759 |
| −8 | 51 | 136 | 358 | 618 | 917 | 1,256 | 1,637 | 2,059 | 2,490 | 2,921 |
| −7 | 32 | 227 | 458 | 726 | 1,034 | 1,382 | 1,772 | 2,202 | 2,643 | 3,083 |
| −6 | 115 | 318 | 557 | 834 | 1,151 | 1,507 | 1,906 | 2,346 | 2,795 | 3,245 |
| −5 | 198 | 409 | 656 | 942 | 1,267 | 1,633 | 2,041 | 2,490 | ---- | ---- |
| −4 | 281 | 500 | 756 | 1,050 | 1,384 | 1,758 | 2,175 | 2,633 | ---- | ---- |
| −3 | 364 | 591 | 855 | 1,158 | 1,501 | 1,884 | 2,310 | 2,777 | ---- | ---- |
| −2 | 446 | 682 | 955 | 1,266 | 1,617 | 2,009 | 2,444 | 2,921 | ---- | ---- |
| −1 | 529 | 773 | 1,054 | 1,374 | 1,734 | 2,135 | 2,579 | 3,064 | ---- | ---- |
| 0 | 612 | 864 | 1,154 | 1,482 | 1,851 | 2,260 | ---- | ---- | ---- | ---- |
| +1 | 695 | 955 | 1,253 | 1,590 | 1,967 | 2,386 | ---- | ---- | ---- | ---- |
| 2 | 778 | 1,047 | 1,353 | 1,698 | 2,084 | 2,511 | ---- | ---- | ---- | ---- |
| 3 | 861 | 1,138 | 1,452 | 1,806 | 2,201 | 2,637 | ---- | ---- | ---- | ---- |
| 4 | 943 | 1,229 | 1,551 | 1,914 | 2,317 | 2,762 | ---- | ---- | ---- | ---- |
| 5 | 1,026 | 1,320 | 1,651 | 2,022 | ---- | ---- | ---- | ---- | ---- | ---- |
| 6 | 1,109 | 1,411 | 1,750 | 2,130 | ---- | ---- | ---- | ---- | ---- | ---- |
| 7 | 1,192 | 1,502 | 1,850 | 2,238 | ---- | ---- | ---- | ---- | ---- | ---- |
| 8 | 1,275 | 1,593 | 1,949 | 2,346 | ---- | ---- | ---- | ---- | ---- | ---- |
| 9 | 1,358 | 1,684 | 2,049 | 2,454 | ---- | ---- | ---- | ---- | ---- | ---- |
| 10 | 1,440 | 1,775 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 11 | 1,523 | 1,866 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 12 | 1,606 | 1,957 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 13 | 1,689 | 2,048 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 14 | 1,772 | 2,139 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

Values above the zigzag line are to be subtracted; those below to be added.

TABLE IV—Continued

TEMPERATURE CORRECTION TABLE—Continued

| Mean temperature, °C. | Standard altitude, in feet | | | | | |
|---|---|---|---|---|---|---|
| | 40,000 | 42,000 | 44,000 | 46,000 | 48,000 | 50,000 |
| −40 | 2, 262 | 2, 124 | 1, 987 | 1, 849 | 1, 711 | 1, 574 |
| −39 | 2, 100 | 1, 953 | 1, 806 | 1, 659 | 1, 513 | 1, 366 |
| −38 | 1, 938 | 1, 782 | 1, 626 | 1, 470 | 1, 314 | 1, 158 |
| −37 | 1, 776 | 1, 611 | 1, 446 | 1, 280 | 1, 115 | 950 |
| −36 | 1, 614 | 1, 440 | 1, 265 | 1, 091 | 917 | 742 |
| −35 | 1, 452 | 1, 269 | 1, 085 | 901 | 718 | 535 |
| −34 | 1, 290 | 1, 097 | 905 | 712 | 519 | 327 |
| −33 | 1, 128 | 926 | 724 | 522 | 321 | 119 |
| −32 | 966 | 755 | 544 | 333 | 122 | 89 |
| −31 | 804 | 584 | 364 | 143 | 77 | 297 |
| −30 | 642 | 413 | 183 | 46 | 275 | 505 |
| −29 | 480 | 242 | 3 | 236 | 474 | 712 |
| −28 | 318 | 71 | 177 | 425 | 673 | 920 |
| −27 | 156 | 101 | 357 | 615 | 871 | 1, 128 |
| −26 | 6 | 272 | 538 | 804 | 1, 070 | 1, 336 |
| −25 | 168 | 443 | 718 | 993 | 1, 269 | 1, 544 |
| −24 | 330 | 614 | 898 | 1, 183 | 1, 467 | 1, 752 |
| −23 | 492 | 785 | 1, 079 | 1, 372 | 1, 666 | 1, 959 |
| −22 | 654 | 956 | 1, 259 | 1, 562 | 1, 865 | 2, 167 |
| −21 | 816 | 1, 128 | 1, 439 | 1, 751 | 2, 063 | 2, 375 |
| −20 | 978 | 1, 299 | 1, 620 | 1, 941 | 2, 262 | 2, 583 |
| −19 | 1, 140 | 1, 470 | 1, 800 | 2, 130 | 2, 461 | 2, 791 |
| −18 | 1, 302 | 1, 641 | 1, 980 | 2, 320 | 2, 659 | 2, 999 |
| −17 | 1, 463 | 1, 812 | 2, 161 | 2, 509 | 2, 858 | 3, 206 |
| −16 | 1, 625 | 1, 983 | 2, 341 | 2, 699 | 3, 057 | 3, 414 |
| −15 | 1, 787 | 2, 154 | 2, 521 | 2, 888 | 3, 255 | 3, 622 |
| −14 | 1, 949 | 2, 326 | 2, 702 | 3, 078 | 3, 454 | 3, 830 |
| −13 | 2, 111 | 2, 497 | 2, 882 | 3, 267 | 3, 653 | 4, 038 |
| −12 | 2, 273 | 2, 668 | 3, 062 | 3, 457 | 3, 851 | 4, 246 |
| −11 | 2, 435 | 2, 839 | 3, 243 | 3, 646 | 4, 050 | 4, 453 |
| −10 | 2, 597 | 3, 010 | | | | |
| −9 | 2, 759 | 3, 181 | | | | |
| −8 | 2, 921 | 3, 352 | | | | |
| −7 | 3, 083 | 3, 524 | | | | |
| −6 | 3, 245 | 3, 695 | | | | |
| −5 | 3, 407 | 3, 866 | | | | |

Values above the zigzag line are to be substracted; those below, to be added.