

APPENDIX III

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In Chapter 7 it was noted that mercury barometers were being progressively phased out and therefore the practice of including a section on the corrections to mercury barometers was being discontinued in this edition. This policy eliminates several tables which were included in previous editions of this handbook. Observers who still have a requirement for correction tables applicable to mercury barometers will need to retain their 3rd editions or be able to refer to the first edition of the *Handbook of meteorological instruments*, Part I (1956).

Table I gives the correction (M) in millibars for the reduction of pressure from barometer level. These corrections allow the calculation of the pressure at aerodrome level (QFE—see 7.5 on page 105) or, in conjunction with the table in 7.6 on page 106, the altimeter pressure setting (QNH), and are applicable to aneroid barometers. The values of M are derived from the following formula:

$$M = 1000(10^m - 1)$$

$$\text{where } m = \frac{h}{18429.1 + 67.53 T + 0.003 h}$$

and h = height of the station above sea level, in metres

T = temperature at the station level, in degrees Celsius.

Table I. Reduction of pressure in millibars from barometer level to another level

Pressure at barometer level, 1000 mb*

Values are positive for reduction to a level below that of the barometer

Height	AIR TEMPERATURE (°C) (Dry bulb in screen)											
	-15	-10	-5	0	5	10	15	20	25	30	35	40
<i>metres</i>	<i>millibars</i>											
5	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
10	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1
15	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.6
20	2.6	2.6	2.5	2.5	2.5	2.4	2.4	2.3	2.3	2.3	2.2	2.2
25	3.3	3.2	3.2	3.1	3.1	3.0	3.0	2.9	2.9	2.8	2.8	2.7
30	4.0	3.9	3.8	3.8	3.7	3.6	3.6	3.5	3.4	3.4	3.3	3.3
35	4.6	4.5	4.5	4.4	4.3	4.2	4.2	4.1	4.0	3.9	3.9	3.8
40	5.3	5.2	5.1	5.0	4.9	4.8	4.7	4.7	4.6	4.5	4.4	4.4
45	6.0	5.9	5.7	5.6	5.5	5.4	5.3	5.3	5.2	5.1	5.0	4.9
50	6.6	6.5	6.4	6.3	6.2	6.0	5.9	5.8	5.7	5.6	5.6	5.5
55	7.3	7.2	7.0	6.9	6.8	6.7	6.5	6.4	6.3	6.2	6.1	6.0
60	8.0	7.8	7.7	7.5	7.4	7.3	7.1	7.0	6.9	6.8	6.7	6.6
65	8.6	8.5	8.3	8.2	8.0	7.9	7.7	7.6	7.5	7.3	7.2	7.1
70	9.3	9.1	8.9	8.8	8.6	8.5	8.3	8.2	8.0	7.9	7.8	7.7
75	10.0	9.8	9.6	9.4	9.2	9.1	8.9	8.8	8.6	8.5	8.3	8.2
80	10.6	10.4	10.2	10.0	9.9	9.7	9.5	9.4	9.2	9.0	8.9	8.8
85	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.8	9.6	9.5	9.3
90	12.0	11.7	11.5	11.3	11.1	10.9	10.7	10.5	10.4	10.2	10.0	9.9
95	12.6	12.4	12.2	11.9	11.7	11.5	11.3	11.1	10.9	10.8	10.6	10.4
100	13.3	13.1	12.8	12.6	12.3	12.1	11.9	11.7	11.5	11.3	11.1	11.0
105	14.0	13.7	13.5	13.2	13.0	12.7	12.5	12.3	12.1	11.9	11.7	11.5
110	14.6	14.4	14.1	13.8	13.6	13.3	13.1	12.9	12.7	12.5	12.3	12.1
115	15.3	15.0	14.7	14.5	14.2	14.0	13.7	13.5	13.2	13.0	12.8	12.6
120	16.0	15.7	15.4	15.1	14.8	14.6	14.3	14.1	13.8	13.6	13.4	13.2
125	16.7	16.3	16.0	15.7	15.5	15.2	14.9	14.7	14.4	14.2	13.9	13.7
130	17.3	17.0	16.7	16.4	16.1	15.8	15.5	15.2	15.0	14.7	14.5	14.3
135	18.0	17.7	17.3	17.0	16.7	16.4	16.1	15.8	15.6	15.3	15.1	14.8
140	18.7	18.3	18.0	17.6	17.3	17.0	16.7	16.4	16.2	15.9	15.6	15.4
145	19.4	19.0	18.6	18.3	17.9	17.6	17.3	17.0	16.7	16.5	16.2	15.9
150	20.0	19.6	19.3	18.9	18.6	18.2	17.9	17.6	17.3	17.0	16.7	16.5
155	20.7	20.3	19.9	19.6	19.2	18.9	18.5	18.2	17.9	17.6	17.3	17.0
160	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2	17.9	17.6
165	22.1	21.6	21.2	20.8	20.5	20.1	19.7	19.4	19.1	18.7	18.4	18.1
170	22.7	22.3	21.9	21.5	21.1	20.7	20.3	20.0	19.6	19.3	19.0	18.7
175	23.4	23.0	22.5	22.1	21.7	21.3	20.9	20.6	20.2	19.9	19.6	19.3
180	24.1	23.6	23.2	22.7	22.3	21.9	21.5	21.2	20.8	20.5	20.1	19.8
185	24.8	24.3	23.8	23.4	23.0	22.5	22.2	21.8	21.4	21.0	20.7	20.4
190	25.4	24.9	24.5	24.0	23.6	23.2	22.8	22.4	22.0	21.6	21.3	20.9
195	26.1	25.6	25.1	24.7	24.2	23.8	23.4	23.0	22.6	22.2	21.8	21.5
200	26.8	26.3	25.8	25.3	24.8	24.4	24.0	23.6	23.2	22.8	22.4	22.0
205	27.5	26.9	26.4	25.9	25.5	25.0	24.6	24.2	23.7	23.3	23.0	23.6
210	28.2	27.6	27.1	26.6	26.1	25.6	25.2	24.7	24.3	23.9	23.5	23.1
215	28.8	28.3	27.7	27.2	26.7	26.3	25.8	25.3	24.9	24.5	24.1	23.7
220	29.5	28.9	28.4	27.9	27.4	26.9	26.4	25.9	25.5	25.1	24.7	24.3
225	30.2	29.6	29.0	28.5	28.0	27.5	27.0	26.5	26.1	25.7	25.2	24.8
230	30.9	30.3	29.7	29.2	28.6	28.1	27.6	27.1	26.7	26.2	25.8	25.4
235	31.6	30.9	30.4	29.8	29.3	28.7	28.2	27.7	27.3	26.8	26.4	25.9
240	32.2	31.6	31.0	30.4	29.9	29.3	28.8	28.3	27.8	27.4	26.9	26.5
245	32.9	32.3	31.7	31.1	30.5	30.0	29.4	28.9	28.4	28.0	27.5	27.1
250	33.6	33.0	32.3	31.7	31.1	30.6	30.0	29.5	29.0	28.5	28.1	27.6

*For other pressures the corrections to be applied are in proportion.

Table II(a). Height (in metres) of cloud base measured by vertical searchlight

 $L = 300$ metres

E	$300 \tan E$	E	$300 \tan E$	E	$300 \tan E$	E	$300 \tan E$
<i>deg</i>	<i>m</i>	<i>deg</i>	<i>m</i>	<i>deg</i>	<i>m</i>	<i>deg</i>	<i>m</i>
		25	140	50	358	74	1046
1	5	26	146	51	370	74.5	1082
2	10	27	153	52	384	75	1120
3	16	28	160	53	398	75.5	1160
4	21	29	166	54	413	76	1203
5	26	30	173	55	428	76.5	1250
6	32	31	180	56	445	77	1299
7	37	32	187	57	462	77.5	1353
8	42	33	195	58	480	78	1411
9	48	34	202	59	499	78.5	1475
10	53	35	210	60	520	79	1543
11	58	36	218	61	541	79.5	1619
12	64	37	226	62	564	80	1701
13	69	38	234	63	589	80.5	1793
14	75	39	243	64	615	81	1894
15	80	40	252	65	643	81.5	2007
16	86	41	261	66	674	82	2135
17	92	42	270	67	707	82.5	2279
18	97	43	280	68	743	83	2443
19	103	44	290	69	782	83.5	2633
20	109	45	300	70	824	84	2854
21	115	46	311	71	871	84.5	3116
22	121	47	322	72	923	85	3429
23	127	48	333	73	981	85.5	3812
24	134	49	345	73.5	1013	86	4290

The tabulated values show the height in metres of the cloud base for given values of E , the angle of elevation of the spot of light observed from a point 300 m away.

A table for any other length of base-line L metres may be constructed by multiplying the values in the table by $L/300$.

Table II(b). Height (in feet) of cloud base measured by vertical searchlight

 $L = 1000$ feet

E	$1000 \tan E$	E	$1000 \tan E$	E	$100 \tan E$	E	$1000 \tan E$
<i>deg</i>	<i>ft</i>	<i>deg</i>	<i>ft</i>	<i>deg</i>	<i>ft</i>	<i>deg</i>	<i>ft</i>
		25	466	50	1192	74	3487
1	17	26	488	51	1235	74.5	3606
2	35	27	510	52	1280	75	3732
3	52	28	532	53	1327	75.5	3867
4	70	29	554	54	1376	76	4011
5	87	30	577	55	1428	76.5	4165
6	105	31	601	56	1483	77	4331
7	123	32	625	57	1540	77.5	4511
8	141	33	649	58	1600	78	4705
9	158	34	675	59	1664	78.5	4915
10	176	35	700	60	1732	79	5145
11	194	36	727	61	1804	79.5	5396
12	213	37	754	62	1881	80	5671
13	231	38	781	63	1963	80.5	5976
14	249	39	810	64	2050	81	6314
15	268	40	839	65	2145	81.5	6691
16	287	41	869	66	2246	82	7115
17	306	42	900	67	2356	82.5	7596
18	325	43	932	68	2475	83	8144
19	344	44	966	69	2605	83.5	8777
20	364	45	1000	70	2747	84	9514
21	384	46	1036	71	2904	84.5	10385
22	404	47	1072	72	3078	85	11430
23	424	48	1111	73	3271	85.5	12706
24	445	49	1150	73.5	3376	86	14301

The tabulated values show the height in feet of the cloud base for given values of E , the angle of elevation of the spot of light observed from a point 1000 feet away.

A table for any other length of base-line L feet may be constructed by multiplying the values in the table by $L/1000$.

Table III. Value (to the nearest minute) of the 'equation of time' for each day of the year to give time of local noon (GMT)

The value of the 'equation of time' is used in the relationship:

Time (GMT) of local noon = 1200 - 'equation of time' \pm longitude correction of four minutes per degree.

Longitude correction is plus for every degree west of Greenwich and minus for every degree east of Greenwich; for example, for 18 March at a location 3°W:
Time (GMT) of local noon = 1200 + 8 + 12 = 1220 hours.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-3	-14	-13	-4	+3	+2	-4	-6	0	+10	+16	+11
2	-4	-14	-12	-4	+3	+2	-4	-6	0	+10	+16	+11
3	-4	-14	-12	-4	+3	+2	-4	-6	0	+11	+16	+11
4	-5	-14	-12	-3	+3	+2	-4	-6	+1	+11	+16	+10
5	-5	-14	-12	-3	+3	+2	-4	-6	+1	+11	+16	+10
6	-6	-14	-12	-3	+3	+2	-4	-6	+1	+12	+16	+9
7	-6	-14	-11	-2	+3	+1	-5	-6	+2	+12	+16	+9
8	-6	-14	-11	-2	+3	+1	-5	-6	+2	+12	+16	+8
9	-7	-14	-11	-2	+4	+1	-5	-6	+2	+12	+16	+8
10	-7	-14	-11	-2	+4	+1	-5	-5	+3	+13	+16	+8
11	-8	-14	-10	-1	+4	+1	-5	-5	+3	+13	+16	+7
12	-8	-14	-10	-1	+4	0	-5	-5	+3	+13	+16	+7
13	-8	-14	-10	-1	+4	0	-6	-5	+4	+14	+16	+6
14	-9	-14	-10	-1	+4	0	-6	-5	+4	+14	+16	+6
15	-9	-14	-9	0	+4	0	-6	-5	+4	+14	+15	+5
16	-9	-14	-9	0	+4	0	-6	-4	+5	+14	+15	+5
17	-10	-14	-9	0	+4	-1	-6	-4	+5	+14	+15	+4
18	-10	-14	-8	0	+4	-1	-6	-4	+6	+15	+15	+4
19	-11	-14	-8	+1	+4	-1	-6	-4	+6	+15	+15	+3
20	-11	-14	-8	+1	+4	-1	-6	-4	+6	+15	+14	+3
21	-11	-14	-8	+1	+4	-1	-6	-3	+7	+15	+14	+2
22	-11	-14	-7	+1	+3	-2	-6	-3	+7	+15	+14	+2
23	-12	-14	-7	+2	+3	-2	-6	-3	+7	+15	+14	+1
24	-12	-13	-7	+2	+3	-2	-6	-3	+8	+16	+14	+1
25	-12	-13	-6	+2	+3	-2	-6	-2	+8	+16	+13	0
26	-12	-13	-6	+2	+3	-3	-6	-2	+8	+16	+13	0
27	-13	-13	-6	+2	+3	-3	-6	-2	+9	+16	+13	-1
28	-13	-13	-5	+2	+3	-3	-6	-2	+9	+16	+12	-1
29	-13	-13	-5	+3	+3	-3	-6	-1	+9	+16	+12	-2
30	-13	-13	-5	+3	+3	-3	-6	-1	+10	+16	+12	-2
31	-13	-13	-4	+3	+3	-3	-6	-1		+16	+12	-3

Table IV. Conversion of degrees Celsius to Fahrenheit

°C	.0	.2	.5	.8	°C	.0	.2	.5	.8
	<i>degrees Fahrenheit</i>					<i>degrees Fahrenheit</i>			
40	104	104	105	105	0	32	32	33	33
39	102	103	103	104	- 0	32	32	31	31
38	100	101	101	102	- 1	30	30	29	29
37	99	99	99	100	- 2	28	28	27	27
36	97	97	98	98	- 3	27	26	26	25
					- 4	25	24	24	23
35	95	95	96	96	- 5	23	23	22	22
34	93	94	94	95	- 6	21	21	20	20
33	91	92	92	93	- 7	19	19	19	18
32	90	90	91	91	- 8	18	17	17	16
31	88	88	89	89	- 9	16	15	15	14
30	86	86	87	87	-10	14	14	13	13
29	84	85	85	86	-11	12	12	11	11
28	82	83	83	84	-12	10	10	9	9
27	81	81	81	82	-13	9	8	8	7
26	79	79	80	80	-14	7	6	6	5
25	77	77	78	78	-15	5	5	4	4
24	75	75	76	77	-16	3	3	2	2
23	73	74	74	75	-17	1	1	1	0
22	72	72	73	73	-18	0	- 1	- 1	- 2
21	70	70	71	71	-19	- 2	- 3	- 3	- 4
20	68	68	69	69	-20	- 4	- 4	- 5	- 5
19	66	67	67	68	-21	- 6	- 6	- 7	- 7
18	64	65	65	66	-22	- 8	- 8	- 9	- 9
17	63	63	63	64	-23	- 9	-10	-10	-11
16	61	61	62	62	-24	-11	-12	-12	-13
15	59	59	60	60	-25	-13	-13	-14	-14
14	57	58	58	59	-26	-15	-15	-16	-16
13	55	56	56	57	-27	-17	-17	-17	-18
12	54	54	55	55	-28	-18	-19	-19	-20
11	52	52	53	53	-29	-20	-21	-21	-22
10	50	50	51	51	-30	-22	-22	-23	-23
9	48	49	49	50	-31	-24	-24	-25	-25
8	46	47	47	48	-32	-26	-26	-27	-27
7	45	45	45	46	-33	-27	-28	-28	-29
6	43	43	44	44	-34	-29	-30	-30	-31
5	41	41	42	42	-35	-31	-31	-32	-32
4	39	40	40	41	-36	-33	-33	-34	-34
3	37	38	38	39	-37	-35	-35	-35	-36
2	36	36	37	37	-38	-36	-37	-37	-38
1	34	34	35	35	-39	-38	-39	-39	-40

Table V. Conversion of inches (0.00 to 4.99) to millimetres and tenths

Inches	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
	<i>millimetres</i>									
0.0	0.0	0.3	0.5	0.8	1.0	1.3	1.5	1.8	2.0	2.3
0.1	2.5	2.8	3.0	3.3	3.6	3.8	4.1	4.3	4.6	4.8
0.2	5.1	5.3	5.6	5.8	6.1	6.4	6.6	6.9	7.1	7.4
0.3	7.6	7.9	8.1	8.4	8.6	8.9	9.1	9.4	9.7	9.9
0.4	10.2	10.4	10.7	10.9	11.2	11.4	11.7	11.9	12.2	12.4
0.5	12.7	13.0	13.2	13.5	13.7	14.0	14.2	14.5	14.7	15.0
0.6	15.2	15.5	15.7	16.0	16.3	16.5	16.8	17.0	17.3	17.5
0.7	17.8	18.0	18.3	18.5	18.8	19.1	19.3	19.6	19.8	20.1
0.8	20.3	20.6	20.8	21.1	21.3	21.6	21.8	22.1	22.4	22.6
0.9	22.9	23.1	23.4	23.6	23.9	24.1	24.4	24.6	24.9	25.1
1.0	25.4	25.7	25.9	26.2	26.4	26.7	26.9	27.2	27.4	27.7
1.1	27.9	28.2	28.4	28.7	29.0	29.2	29.5	29.7	30.0	30.2
1.2	30.5	30.7	31.0	31.2	31.5	31.8	32.0	32.3	32.5	32.8
1.3	33.0	33.3	33.5	33.8	34.0	34.3	34.5	34.8	35.1	35.3
1.4	35.6	35.8	36.1	36.3	36.6	36.8	37.1	37.3	37.6	37.8
1.5	38.1	38.4	38.6	38.9	39.1	39.4	39.6	39.9	40.1	40.4
1.6	40.6	40.9	41.1	41.4	41.7	41.9	42.2	42.4	42.7	42.9
1.7	43.2	43.4	43.7	43.9	44.2	44.5	44.7	45.0	45.2	45.5
1.8	45.7	46.0	46.2	46.5	46.7	47.0	47.2	47.5	47.8	48.0
1.9	48.3	48.5	48.8	49.0	49.3	49.5	49.8	50.0	50.3	50.5
2.0	50.8	51.1	51.3	51.6	51.8	52.1	52.3	52.6	52.8	53.1
2.1	53.3	53.6	53.8	54.1	54.4	54.6	54.9	55.1	55.4	55.6
2.2	55.9	56.1	56.4	56.6	56.9	57.2	57.4	57.7	57.9	58.2
2.3	58.4	58.7	58.9	59.2	59.4	59.7	59.9	60.2	60.5	60.7
2.4	61.0	61.2	61.5	61.7	62.0	62.2	62.5	62.7	63.0	63.2
2.5	63.5	63.8	64.0	64.3	64.5	64.8	65.0	65.3	65.5	65.8
2.6	66.0	66.3	66.5	66.8	67.1	67.3	67.6	67.8	68.1	68.3
2.7	68.6	68.8	69.1	69.3	69.6	69.9	70.1	70.4	70.6	70.9
2.8	71.1	71.4	71.6	71.9	72.1	72.4	72.6	72.9	73.2	73.4
2.9	73.7	73.9	74.2	74.4	74.7	74.9	75.2	75.4	75.7	75.9
3.0	76.2	76.5	76.7	77.0	77.2	77.5	77.7	78.0	78.2	78.5
3.1	78.7	79.0	79.2	79.5	79.8	80.0	80.3	80.5	80.8	81.0
3.2	81.3	81.5	81.8	82.0	82.3	82.6	82.8	83.1	83.3	83.6
3.3	83.8	84.1	84.3	84.6	84.8	85.1	85.3	85.6	85.9	86.1
3.4	86.4	86.6	86.9	87.1	87.4	87.6	87.9	88.1	88.4	88.6
3.5	88.9	89.2	89.4	89.7	89.9	90.2	90.4	90.7	90.9	91.2
3.6	91.4	91.7	91.9	92.2	92.5	92.7	93.0	93.2	93.5	93.7
3.7	94.0	94.2	94.5	94.7	95.0	95.3	95.5	95.8	96.0	96.3
3.8	96.5	96.8	97.0	97.3	97.5	97.8	98.0	98.3	98.6	98.8
3.9	99.1	99.3	99.6	99.8	100.1	100.3	100.6	100.8	101.1	101.3
4.0	101.6	101.9	102.1	102.4	102.6	102.9	103.1	103.4	103.6	103.9
4.1	104.1	104.4	104.6	104.9	105.2	105.4	105.7	105.9	106.2	106.4
4.2	106.7	106.9	107.2	107.4	107.7	108.0	108.2	108.5	108.7	109.0
4.3	109.2	109.5	109.7	110.0	110.2	110.5	110.7	111.0	111.3	111.5
4.4	111.8	112.0	112.3	112.5	112.8	113.0	113.3	113.5	113.8	114.0
4.5	114.3	114.6	114.8	115.1	115.3	115.6	115.8	116.1	116.3	116.6
4.6	116.8	117.1	117.3	117.6	117.9	118.1	118.4	118.6	118.9	119.1
4.7	119.4	119.6	119.9	120.1	120.4	120.7	120.9	121.2	121.4	121.7
4.8	121.9	122.2	122.4	122.7	122.9	123.2	123.4	123.7	124.0	124.2
4.9	124.5	124.7	125.0	125.2	125.5	125.7	126.0	126.2	126.5	126.7

Table V (continued). Conversion of inches (5.00 to 9.99) to millimetres and tenths

Inches	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
	<i>millimetres</i>									
5.0	127.0	127.3	127.5	127.8	128.0	128.3	128.5	128.8	129.0	129.3
5.1	129.5	129.8	130.1	130.3	130.6	130.8	131.1	131.3	131.6	131.8
5.2	132.0	132.3	132.6	132.8	133.1	133.3	133.6	133.9	134.1	134.4
5.3	134.6	134.9	135.1	135.4	135.6	135.9	136.1	136.4	136.7	136.9
5.4	137.2	137.4	137.7	137.9	138.2	138.4	138.7	138.9	139.2	139.5
5.5	139.7	139.9	140.2	140.5	140.7	141.0	141.2	141.5	141.7	142.0
5.6	142.2	142.5	142.7	143.0	143.3	143.5	143.8	144.0	144.3	144.5
5.7	144.8	145.0	145.3	145.5	145.8	146.1	146.3	146.6	146.8	147.1
5.8	147.3	147.6	147.8	148.1	148.3	148.6	148.8	149.1	149.3	149.6
5.9	149.9	150.1	150.4	150.6	150.9	151.1	151.4	151.6	151.9	152.1
6.0	152.4	152.7	152.9	153.2	153.4	153.7	153.9	154.2	154.4	154.7
6.1	154.9	155.2	155.5	155.7	156.0	156.2	156.5	156.7	157.0	157.2
6.2	157.4	157.7	158.0	158.2	158.5	158.7	159.0	159.3	159.5	159.8
6.3	160.0	160.3	160.5	160.8	161.0	161.3	161.5	161.8	162.1	162.3
6.4	162.6	162.8	163.1	163.3	163.6	163.8	164.1	164.3	164.6	164.9
6.5	165.1	165.3	165.6	165.9	166.1	166.4	166.6	166.9	167.1	167.4
6.6	167.6	167.9	168.1	168.4	168.7	168.9	169.2	169.4	169.7	169.9
6.7	170.2	170.4	170.7	170.9	171.2	171.5	171.7	172.0	172.2	172.5
6.8	172.7	173.0	173.3	173.5	173.7	174.0	174.2	174.5	174.7	175.0
6.9	175.3	175.5	175.8	176.0	176.3	176.5	176.8	177.0	177.3	177.5
7.0	177.8	178.1	178.3	178.6	178.8	179.1	179.3	179.6	179.8	180.1
7.1	180.3	180.6	180.9	181.1	181.4	181.6	181.9	182.1	182.4	182.6
7.2	182.9	183.1	183.4	183.6	183.9	184.1	184.4	184.7	184.9	185.2
7.3	185.4	185.7	185.9	186.2	186.4	186.7	186.9	187.2	187.5	187.7
7.4	188.0	188.2	188.5	188.7	189.0	189.2	189.5	189.7	190.0	190.3
7.5	190.5	190.7	191.0	191.3	191.5	191.8	192.0	192.3	192.5	192.8
7.6	193.0	193.3	193.5	193.8	194.1	194.3	194.6	194.8	195.1	195.3
7.7	195.6	195.8	196.1	196.3	196.6	196.9	197.1	197.4	197.6	197.9
7.8	198.1	198.4	198.6	198.9	199.1	199.4	199.6	199.9	200.1	200.4
7.9	200.7	200.9	201.2	201.4	201.7	201.9	202.2	202.4	202.7	202.9
8.0	203.2	203.5	203.7	204.0	204.2	204.5	204.7	205.0	205.2	205.5
8.1	205.7	206.0	206.3	206.5	206.8	207.0	207.3	207.5	207.8	208.0
8.2	208.3	208.5	208.8	209.0	209.3	209.5	209.8	210.1	210.3	210.6
8.3	210.8	211.1	211.3	211.6	211.8	212.1	212.3	212.6	212.9	213.1
8.4	213.3	213.6	213.9	214.1	214.4	214.6	214.9	215.1	215.4	215.7
8.5	215.9	216.1	216.4	216.7	216.9	217.2	217.4	217.7	217.9	218.2
8.6	218.4	218.7	218.9	219.2	219.5	219.7	220.0	220.2	220.5	220.7
8.7	221.0	221.2	221.5	221.7	222.0	222.3	222.5	222.8	223.0	223.3
8.8	223.5	223.8	224.0	224.3	224.5	224.8	225.0	225.3	225.5	225.8
8.9	226.1	226.3	226.6	226.8	227.1	227.3	227.6	227.8	228.1	228.3
9.0	228.6	228.9	229.1	229.4	229.6	229.9	230.1	230.4	230.6	230.9
9.1	231.1	231.4	231.7	231.9	232.2	232.4	232.7	232.9	233.2	233.4
9.2	233.7	233.9	234.2	234.4	234.7	234.9	235.2	235.5	235.7	236.0
9.3	236.2	236.5	236.7	237.0	237.2	237.5	237.7	238.0	238.3	238.5
9.4	238.8	239.0	239.3	239.5	239.8	240.0	240.3	240.5	240.8	241.1
9.5	241.3	241.5	241.8	242.1	242.3	242.6	242.8	243.1	243.3	243.6
9.6	243.8	244.1	244.3	244.6	244.9	245.1	245.4	245.6	245.9	246.1
9.7	246.4	246.6	246.9	247.1	247.4	247.7	247.9	248.2	248.4	248.7
9.8	248.9	249.2	249.4	249.7	249.9	250.2	250.4	250.7	250.9	251.2
9.9	251.5	251.7	252.0	252.2	252.5	252.7	253.0	253.2	253.5	253.7

For values between 10 and 20 inches add 254.0 to the numbers above. Thus 15.32 inches (10 + 5.32) = 254.0 + 135.1 = 389.1 mm.

For amounts between 20 and 30 inches add 508.0; between 30 and 40 inches add 762.0; between 40 and 50 inches add 1016.0 to the numbers above.

Table VI. Conversion of metres to feet

1 metre = 3·280 839 9 feet = 39·370 079 inches

Metres	Feet	Metres	Feet	Metres	Feet	Metres	Feet
1	3·3	10	32·8	100	328·1	1 000	3 280·8
2	6·6	20	65·6	200	656·2	2 000	6 561·7
3	9·8	30	98·4	300	984·3	3 000	9 842·5
4	13·1	40	131·2	400	1312·3	4 000	13 123·4
5	16·4	50	164·0	500	1640·4	5 000	16 404·2
6	19·7	60	196·9	600	1968·5	6 000	19 685·0
7	23·0	70	229·7	700	2296·6	7 000	22 965·9
8	26·2	80	262·5	800	2624·7	8 000	26 246·7
9	29·5	90	295·3	900	2952·8	9 000	29 527·6
						10 000	32 808·4

m	0·1	0·2	0·3	0·4	0·5	0·6	0·7	0·8	0·9
ft	0·33	0·66	0·98	1·31	1·64	1·97	2·30	2·62	2·95

Table VII. Conversion of knots* to miles per hour and metres per second

1 knot = 1·15078 miles per hour = 0·51444 metres per second

Knots	0	1	2	3	4	5	6	7	8	9
	<i>miles per hour</i>									
0	0·0	1·2	2·3	3·5	4·6	5·8	6·9	8·1	9·2	10·4
10	11·5	12·7	13·8	15·0	16·1	17·3	18·4	19·6	20·7	21·9
20	23·0	24·2	25·3	26·5	27·6	28·8	29·9	31·1	32·2	33·4
30	34·5	35·7	36·8	38·0	39·1	40·3	41·4	42·6	43·7	44·9
40	46·0	47·2	48·3	49·5	50·6	51·8	52·9	54·1	55·2	56·4
50	57·5	58·7	59·8	61·0	62·1	63·3	64·4	65·6	66·7	67·9
60	69·0	70·2	71·3	72·5	73·6	74·8	76·0	77·1	78·3	79·4
70	80·6	81·7	82·9	84·0	85·2	86·3	87·5	88·6	89·8	90·9
80	92·1	93·2	94·4	95·6	96·7	97·8	99·0	100·1	101·3	102·4
90	103·6	104·7	105·9	107·0	108·2	109·3	110·5	111·6	112·8	113·9
100	115·1	116·2	117·4	118·6	119·7	120·8	122·0	123·1	124·3	125·4
	<i>metres per second</i>									
0	0·0	0·5	1·0	1·5	2·1	2·6	3·1	3·6	4·1	4·6
10	5·1	5·7	6·2	6·7	7·2	7·7	8·2	8·7	9·3	9·8
20	10·3	10·8	11·3	11·8	12·3	12·9	13·4	13·9	14·4	14·9
30	15·4	15·9	16·5	17·0	17·5	18·0	18·5	19·0	19·6	20·1
40	20·6	21·1	21·6	22·1	22·6	23·1	23·7	24·2	24·7	25·2
50	25·7	26·2	26·8	27·3	27·8	28·3	28·8	29·3	29·8	30·3
60	30·9	31·4	31·9	32·4	32·9	33·4	34·0	34·5	35·0	35·5
70	36·0	36·5	37·0	37·6	38·1	38·6	39·1	39·6	40·1	40·6
80	41·2	41·7	42·2	42·7	43·2	43·7	44·2	44·8	45·3	45·8
90	46·3	46·8	47·3	47·8	48·4	48·9	49·4	49·9	50·4	50·9
100	51·4	52·0	52·5	53·0	53·5	54·0	54·5	55·0	55·6	56·1

*The United Kingdom in 1970 adopted the International Nautical Mile of 1852 metres in place of the Admiralty Mile of 6080 feet (1853·18 metres); this table therefore differs slightly from that in previous editions of the handbook.