

CORRECTION REQUIRED to CONVERT a RADIO GREAT CIRCLE BEARING to MERCATORIAL BEARING.

Mean Lat.	DIFFERENCE OF LONGITUDE OF SHIP AND RADIO STATION.															Mean Lat.
	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	
84	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	9.9	10.9	11.9	12.9	13.9	14.9	84
81	1.0	2.0	2.9	4.0	4.9	5.9	6.9	7.9	8.9	9.9	10.9	11.9	12.8	13.8	14.8	81
78	1.0	2.0	2.9	3.9	4.9	5.9	6.8	7.8	8.8	9.8	10.8	11.7	12.7	13.7	14.7	78
75	1.0	1.9	2.9	3.9	4.8	5.8	6.8	7.7	8.7	9.7	10.7	11.6	12.6	13.5	14.4	75
72	1.0	1.9	2.9	3.8	4.8	5.7	6.7	7.6	8.6	9.5	10.5	11.4	12.4	13.3	14.3	72
69	0.9	1.9	2.8	3.7	4.7	5.6	6.5	7.5	8.4	9.3	10.3	11.2	12.1	13.1	14.0	69
66	0.9	1.8	2.8	3.7	4.6	5.5	6.4	7.3	8.2	9.1	10.0	11.0	11.9	12.8	13.7	66
63	0.9	1.8	2.7	3.6	4.5	5.4	6.3	7.1	8.0	8.9	9.8	10.7	11.6	12.5	13.3	63
60	0.9	1.7	2.6	3.5	4.3	5.2	6.1	6.9	7.8	8.6	9.5	10.4	11.2	12.1	12.9	60
57	0.8	1.7	2.5	3.4	4.2	5.0	5.9	6.7	7.5	8.4	9.2	10.0	10.9	11.7	12.5	57
54	0.8	1.6	2.4	3.3	4.1	4.9	5.7	6.5	7.3	8.1	8.9	9.7	10.5	11.3	12.1	54
51	0.8	1.6	2.3	3.1	3.9	4.7	5.5	6.2	7.0	7.8	8.5	9.3	10.1	10.8	11.6	51
48	0.8	1.5	2.2	3.0	3.7	4.5	5.2	5.9	6.7	7.4	8.2	8.9	9.6	10.4	11.1	48
45	0.7	1.4	2.1	2.8	3.5	4.2	4.9	5.6	6.3	7.1	7.8	8.5	9.2	9.9	10.6	45
42	0.7	1.4	2.0	2.7	3.4	4.0	4.7	5.4	6.0	6.7	7.4	8.0	8.7	9.4	10.0	42
39	0.6	1.3	1.9	2.5	3.2	3.8	4.4	5.0	5.7	6.3	6.9	7.5	8.1	8.8	9.4	39
36	0.6	1.2	1.8	2.4	3.0	3.5	4.1	4.7	5.3	5.9	6.4	7.0	7.6	8.2	8.7	36
33	0.5	1.1	1.6	2.2	2.7	3.3	3.8	4.4	4.9	5.4	6.0	6.5	7.1	7.6	8.1	33
30	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.4	30
27	0.5	0.9	1.4	1.8	2.3	2.7	3.2	3.6	4.1	4.5	5.0	5.4	5.9	6.3	6.8	27
24	0.4	0.8	1.2	1.6	2.1	2.4	2.9	3.3	3.6	4.0	4.4	4.8	5.2	5.6	6.0	24
21	0.3	0.7	1.1	1.4	1.8	2.2	2.5	2.9	3.2	3.6	3.9	4.3	4.6	5.0	5.3	21
18	0.3	0.6	0.9	1.2	1.6	1.9	2.2	2.5	2.8	3.1	3.4	3.7	4.0	4.3	4.6	18
15	0.3	0.5	0.8	1.0	1.3	1.6	1.8	2.1	2.3	2.6	2.8	3.1	3.3	3.6	3.8	15
12	0.2	0.4	0.6	0.8	1.0	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.7	2.9	3.1	12
9	0.2	0.3	0.5	0.6	0.8	1.0	1.1	1.2	1.4	1.6	1.7	1.9	2.0	2.2	2.3	9
6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.5	1.6	6
3	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	3
	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	

In both North and South latitudes always allow the above corrections towards the Equator from the Radio Great Circle bearing to obtain the corresponding Mercatorial line of bearing.

N.B.—The Bearings must always be laid off, on the chart, from the Radio Station.

EXAMPLE 1. A ship in D.R. position Lat. 39° 37' N., Long. 56° 25' W., receives from a Radio Station in Lat. 35° 14' N., Long. 75° 32' W., the Radio bearing 074°. Find the correction and the corresponding Mercatorial bearing.

Mean Lat. is $\frac{1}{2}$ (39° 37' + 35° 14') or $\frac{1}{2}$ (74° 51') = 37° 4.

D. Long. is 75° 32' - 56° 25' = 19° 1.

For Mean Lat. 37° 4 and D. Long. 19° 1 the Table gives a correction of 6° (approx.).

Allowing this correction towards the Equator the corresponding Mercatorial bearing is found to be 074° + 6° = 080°.

EXAMPLE 2. A ship in D.R. position Lat. 37° 26' S., Long. 84° 35' W., finds, with her own apparatus, the Radio bearing of a station in Lat. 36° 37' S., Long. 73° 03' W., to be 089°. Find the correction and the corresponding Mercatorial bearing.

For Mean Lat. 37° and D. Long. 11° 5 the Table gives a correction of 3° 5 (approx.).

Allowing this correction towards the Equator the corresponding Mercatorial bearing is found to be 089° - 3° 5 = 085° 5.