

TABLE 1
Conversion Angle
Great-circle Sailing and Radio Bearings

Latitude of Departure—35°—Latitude of Receiver

DL _o	Latitude of destination—Latitude of transmitter																		DL _o	
	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°		90°
Same Name																				
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
5	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	5
10	2.0	2.2	2.3	2.4	2.4	2.5	2.7	2.9	3.1	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.2	2.9	0.0	10
15	3.1	3.2	3.4	3.6	3.7	3.9	4.1	4.3	4.5	4.7	4.8	4.9	5.0	5.0	4.9	4.8	4.4	4.3	0.0	15
20	4.1	4.4	4.6	4.8	5.0	5.3	5.5	5.8	6.0	6.2	6.4	6.5	6.6	6.6	6.6	6.5	6.3	5.8	0.0	20
25	5.2	5.5	5.8	6.1	6.4	6.7	7.0	7.3	7.5	7.8	8.0	8.1	8.2	8.3	8.3	8.2	7.9	7.3	0.0	25
30	6.3	6.7	7.0	7.4	7.7	8.1	8.4	8.7	9.0	9.3	9.6	9.7	9.9	10.0	10.0	9.8	9.5	8.7	0.0	30
35	7.4	7.9	8.3	8.7	9.1	9.5	9.9	10.3	10.6	10.9	11.2	11.4	11.6	11.6	11.5	11.1	10.2	0.0	0.0	35
40	8.6	9.1	9.6	10.0	10.5	11.0	11.4	11.8	12.2	12.5	12.8	13.1	13.2	13.3	13.3	13.2	12.7	11.6	0.0	40
45	9.7	10.3	10.9	11.4	11.9	12.5	12.9	13.4	13.8	14.2	14.5	14.8	15.0	15.1	15.1	14.9	14.3	13.1	0.0	45
50	10.9	11.6	12.2	12.8	13.4	14.0	14.5	15.0	15.4	15.8	16.2	16.5	16.7	16.8	16.8	16.6	16.0	14.6	0.0	50
55	12.2	12.9	13.6	14.3	14.9	15.5	16.1	16.6	17.1	17.6	18.2	18.5	18.6	18.6	18.5	18.3	17.6	16.0	0.0	55
60	13.5	14.3	15.1	15.8	16.5	17.2	17.8	18.3	18.9	19.3	19.7	20.0	20.3	20.4	20.3	20.0	19.2	17.5	0.0	60
65	14.8	15.7	16.5	17.3	18.1	18.8	19.5	20.1	20.6	21.1	21.6	21.9	22.1	22.2	22.1	21.7	20.9	19.0	0.0	65
70	16.2	17.2	18.1	19.0	19.9	20.5	21.3	21.9	22.5	23.0	23.4	23.8	24.0	24.1	24.0	23.5	22.5	20.4	0.0	70
75	17.6	18.7	19.7	20.6	21.5	22.3	23.1	23.8	24.4	24.9	25.4	25.7	25.9	26.0	25.8	25.3	24.2	21.9	0.0	75
80	19.2	20.3	21.4	22.4	23.3	24.2	25.0	25.7	26.3	26.9	27.4	27.7	27.9	27.9	27.7	27.1	25.9	23.4	0.0	80
85	20.8	22.0	23.2	24.2	25.2	26.2	27.0	27.7	28.4	29.0	29.4	29.7	29.9	29.9	29.6	28.9	27.6	24.8	0.0	85
90	22.5	23.8	25.0	26.2	27.3	28.2	29.1	29.8	30.5	31.1	31.5	31.8	32.0	31.9	31.5	30.8	29.3	26.3	0.0	90
95	24.3	25.7	27.0	28.3	29.4	30.4	31.3	32.1	32.7	33.3	33.7	34.0	34.1	34.0	33.5	32.6	31.0	27.8	0.0	95
100	26.2	27.7	29.1	30.4	31.6	32.6	33.6	34.4	35.0	35.6	36.0	36.2	36.3	36.1	35.5	34.5	32.7	29.2	0.0	100
105	28.2	29.9	31.4	32.8	34.0	35.0	36.0	36.8	37.4	38.0	38.3	38.5	38.5	38.2	37.6	36.4	34.4	30.7	0.0	105
110	30.5	32.2	33.8	35.2	36.5	37.6	38.5	39.3	40.0	40.5	40.8	40.9	40.8	40.4	39.6	38.3	36.2	32.2	0.0	110
115	32.9	34.8	36.4	37.9	39.2	40.3	41.2	42.0	42.6	43.0	43.3	43.3	43.1	42.6	41.7	40.3	37.9	33.6	0.0	115
120	35.6	37.5	39.3	40.8	42.1	43.2	44.1	44.8	45.4	45.7	45.9	45.5	44.9	43.9	42.3	39.7	35.1	0.0	0.0	120
Contrary Name																				
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
5	1.0	1.0	0.9	0.8	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
10	2.0	1.9	1.8	1.7	1.5	1.4	1.2	1.0	0.8	0.6	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	10
15	3.1	2.9	2.7	2.5	2.2	2.0	1.8	1.5	1.2	0.9	0.6	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	15
20	4.1	3.9	3.6	3.3	3.0	2.7	2.4	2.0	1.7	1.3	0.8	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	20
25	5.2	4.9	4.5	4.2	3.8	3.4	3.0	2.6	2.1	1.6	1.0	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	25
30	6.3	5.9	5.5	5.1	4.6	4.1	3.6	3.1	2.5	1.9	1.2	0.5	0.3	0.2	0.1	0.0	0.0	0.0	0.0	30
35	7.4	6.9	6.5	6.0	5.4	4.8	4.2	3.6	2.9	2.2	1.4	0.5	0.4	0.3	0.2	0.1	0.0	0.0	0.0	35
40	8.6	8.0	7.5	6.9	6.2	5.6	4.9	4.1	3.3	2.5	1.6	0.6	0.5	0.4	0.3	0.2	0.1	0.0	0.0	40
45	9.7	9.1	8.5	7.8	7.1	6.3	5.5	4.7	3.7	2.8	1.7	0.6	0.6	0.5	0.4	0.3	0.2	0.1	0.0	45
50	10.9	10.2	9.5	8.8	7.9	7.1	6.2	5.2	4.2	3.0	1.9	0.6	0.8	0.8	0.7	0.6	0.5	0.4	0.0	50
55	12.2	11.4	10.6	9.7	8.8	7.9	6.8	5.7	4.6	3.3	2.0	0.8	1.0	0.9	0.8	0.7	0.6	0.5	0.0	55
60	13.5	12.6	11.7	10.7	9.7	8.7	7.5	6.3	5.0	3.6	2.1	0.5	1.2	1.1	1.0	0.9	0.8	0.7	0.0	60
65	14.8	13.9	12.9	11.8	10.7	9.5	8.2	6.9	5.4	3.9	2.2	0.4	1.4	1.3	1.2	1.1	1.0	0.9	0.0	65
70	16.2	15.2	14.1	12.9	11.6	10.3	8.9	7.4	5.8	4.1	2.3	0.3	1.7	1.6	1.5	1.4	1.3	1.2	0.0	70
75	17.6	16.5	15.3	14.0	12.7	11.2	9.6	8.0	6.2	4.3	2.3	0.2	2.1	2.0	1.9	1.8	1.7	1.6	0.0	75
80	19.2	17.9	16.6	15.2	13.7	12.1	10.4	8.6	6.6	4.5	2.3	0.0	2.5	2.4	2.3	2.2	2.1	2.0	0.0	80
85	20.8	19.4	18.0	16.5	14.8	13.0	11.2	9.1	7.0	4.7	2.3	0.3	3.0	2.9	2.8	2.7	2.6	2.5	0.0	85
90	22.5	21.0	19.4	17.8	16.0	14.0	11.9	9.7	7.4	4.8	2.2	0.6	3.5	3.4	3.3	3.2	3.1	3.0	0.0	90
95	24.3	22.7	21.0	19.2	17.2	15.1	12.8	10.3	7.7	4.9	2.0	1.0	4.2	4.1	4.0	3.9	3.8	3.7	0.0	95
100	26.2	24.5	22.7	20.6	18.5	16.2	13.6	10.9	8.1	5.0	1.8	1.5	4.9	4.8	4.7	4.6	4.5	4.4	0.0	100
105	28.2	26.4	24.4	22.3	19.9	17.3	14.5	11.6	8.4	5.0	1.5	2.1	5.8	5.7	5.6	5.5	5.4	5.3	0.0	105
110	30.5	28.5	26.4	24.0	21.4	18.6	15.5	12.2	8.7	4.9	1.1	2.0	6.9	6.8	6.7	6.6	6.5	6.4	0.0	110
115	32.9	30.8	28.5	25.9	23.0	19.9	16.5	12.8	8.9	4.8	0.5	3.8	8.1	8.0	7.9	7.8	7.7	7.6	0.0	115
120	35.6	33.3	30.8	28.0	24.8	21.4	17.6	13.5	9.1	4.5	0.2	4.0	9.5	9.4	9.3	9.2	9.1	9.0	0.0	120

DL _o	Latitude of destination—Latitude of transmitter					DL _o
	0°	5°	10°	15°	20°	
0	0.0	0.0	0.0	0.0	0.0	0
5	1.2	1.2	1.3	1.3	1.3	5
10	2.4	2.5	2.6	2.7	2.7	10
15	3.6	3.8	3.9	4.1	4.1	15
20	4.8	5.0	5.3	5.5	5.5	20
25	6.1	6.3	6.6	6.9	7.0	25
30	7.3	7.7	8.0	8.3	8.3	30
35	8.6	9.0	9.4	9.8	9.8	35
40	9.9	10.4	10.9	11.3	11.3	40
45	11.3	11.8	12.3	12.8	12.8	45
50	12.7	13.3	13.9	14.4	14.4	50
55	14.1	14.8	15.4	16.0	16.0	55
60	15.6	16.3	17.0	17.7	17.7	60
65	17.1	17.9	18.7	19.4	19.4	65
70	18.7	19.6	20.4	21.2	21.2	70
75	20.3	21.3	22.2	23.1	23.1	75
80	22.1	23.1	24.1	25.0	25.0	80
85	23.9	25.0	26.0	27.0	27.0	85
90	25.8	27.0	28.1	29.1	29.1	90
95	27.8	29.1	30.3	31.3	31.3	95
100	30.0	31.4	32.6	33.7	33.7	100
105	32.3	33.7	35.0	36.2	36.2	105
110	34.7	36.3	37.6	38.8	38.8	110
115	37.4	39.0	40.4	41.6	41.6	115
120	40.3	42.0	43.4	44.6	44.6	120

Great-circle sailing			Radio bearings		
Latitude departure	Destination	Correction sign	Latitude receiver	Transmitter	Correction sign
N	Eastward	-	N	Eastward	+
N	Westward	+	N	Westward	-
S	Eastward	+	S	Eastward	+
S	Westward	-	S	Westward	-

Reverse sign of correction for *italic* figures

TABLE 1
Conversion Angle
Great-circle Sailing and Radio Bearings

Latitude of Departure—40°—Latitude of Receiver

DL _o	Latitude of destination—Latitude of transmitter																		DL _o	
	Same Name																			
	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°		90°
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
5	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.6	1.7	1.7	1.7	1.8	1.8	1.7	1.7	1.6	1.5	1.5	5
10	2.4	2.5	2.6	2.7	2.8	2.9	2.9	3.0	3.2	3.4	3.4	3.5	3.5	3.5	3.4	3.3	3.0	3.0	3.0	10
15	3.6	3.8	3.9	4.1	4.2	4.3	4.5	4.6	4.8	5.0	5.1	5.2	5.2	5.2	5.1	4.9	4.5	4.5	4.5	15
20	4.8	5.0	5.3	5.5	5.7	5.8	6.0	6.3	6.5	6.7	6.8	6.9	7.0	7.0	6.8	6.6	6.0	6.0	6.0	20
25	6.1	6.3	6.6	6.9	7.1	7.4	7.6	7.9	8.1	8.3	8.5	8.6	8.7	8.7	8.6	8.2	7.5	7.5	7.5	25
30	7.3	7.7	8.0	8.3	8.6	8.9	9.2	9.5	9.8	10.0	10.2	10.4	10.5	10.5	10.4	10.3	9.9	9.0	9.0	30
35	8.6	9.0	9.4	9.8	10.2	10.5	10.8	11.2	11.5	11.7	12.0	12.1	12.3	12.3	12.2	12.0	11.5	10.5	10.5	35
40	9.9	10.4	10.9	11.3	11.7	12.1	12.5	12.9	13.2	13.5	13.7	13.9	14.0	14.1	14.0	13.8	13.2	12.0	12.0	40
45	11.3	11.8	12.3	12.8	13.3	13.7	14.2	14.6	14.9	15.2	15.5	15.7	15.9	15.9	15.8	15.5	14.9	13.5	13.5	45
50	12.7	13.3	13.9	14.4	14.9	15.4	15.9	16.3	16.7	17.0	17.3	17.6	17.7	17.6	17.3	16.6	15.0	15.0	15.0	50
55	14.1	14.8	15.4	16.0	16.6	17.1	17.6	18.1	18.5	18.9	19.2	19.4	19.6	19.6	19.4	19.0	18.2	16.8	16.8	55
60	15.6	16.3	17.0	17.7	18.3	18.9	19.4	19.9	20.4	20.7	21.1	21.3	21.5	21.4	21.3	20.8	19.9	18.0	18.0	60
65	17.1	17.9	18.7	19.4	20.1	20.7	21.3	21.8	22.3	22.7	23.0	23.3	23.4	23.4	23.2	22.6	21.6	19.5	19.5	65
70	18.7	19.6	20.4	21.2	21.9	22.6	23.2	23.8	24.2	24.7	25.0	25.2	25.3	25.3	25.0	24.5	23.3	21.0	21.0	70
75	20.3	21.3	22.2	23.1	23.8	24.5	25.2	25.8	26.3	26.7	27.0	27.3	27.3	27.3	27.0	26.3	25.1	22.5	22.5	75
80	22.1	23.1	24.1	25.0	25.8	26.6	27.2	27.8	28.4	28.8	29.1	29.3	29.4	29.3	28.9	28.2	26.8	24.1	24.1	80
85	23.9	25.0	26.0	27.0	27.9	28.7	29.4	30.0	30.5	30.9	31.3	31.4	31.5	31.3	30.9	30.0	28.5	25.6	25.6	85
90	25.8	27.0	28.1	29.1	30.0	30.9	31.6	32.2	32.7	33.2	33.5	33.6	33.6	33.4	32.9	31.9	30.3	27.1	27.1	90
95	27.8	29.1	30.3	31.3	32.3	33.1	33.9	34.5	35.1	35.5	35.7	35.7	35.8	35.5	34.9	33.9	32.0	28.6	28.6	95
100	30.0	31.4	32.6	33.7	34.7	35.6	36.3	37.0	37.5	37.8	38.1	38.2	38.0	37.7	37.0	35.8	33.8	30.1	30.1	100
105	32.3	33.7	35.0	36.2	37.2	37.9	38.1	38.8	39.5	40.0	40.3	40.5	40.5	40.3	39.9	39.1	37.7	35.6	31.6	105
110	34.7	36.3	37.6	38.8	39.9	40.8	41.5	42.1	42.6	42.9	43.0	42.9	42.7	42.1	41.2	39.7	37.8	33.1	33.1	110
115	37.4	39.0	40.4	41.6	42.7	43.6	44.3	44.9	45.3	45.5	45.6	45.4	45.1	44.4	43.3	41.7	39.1	34.6	34.6	115
120	40.3	42.0	43.4	44.6	45.7	46.5	47.2	47.7	48.1	48.2	48.0	47.5	46.7	45.5	43.7	40.9	36.1	36.1	120	

DL _o	Contrary Name																		DL _o	
	Same Name																			
	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°		90°
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
5	1.2	1.1	1.1	1.0	0.9	0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.1	0.0	0.2	0.4	0.6	0.7	0.0	5
10	2.4	2.3	2.1	2.0	1.9	1.7	1.6	1.4	1.2	1.0	0.8	0.5	0.2	0.0	0.4	0.7	1.1	1.5	0.0	10
15	3.6	3.4	3.2	3.0	2.8	2.6	2.3	2.1	1.8	1.5	1.1	0.8	0.4	0.1	0.6	1.1	1.7	2.3	0.0	15
20	4.8	4.6	4.3	4.0	3.8	3.5	3.1	2.8	2.4	2.0	1.5	1.0	0.5	0.1	0.8	1.5	2.3	3.0	0.0	20
25	6.1	5.7	5.4	5.1	4.7	4.3	3.9	3.5	3.0	2.5	1.9	1.3	0.6	0.2	1.0	1.9	2.9	3.8	0.0	25
30	7.3	6.9	6.6	6.1	5.7	5.2	4.7	4.2	3.6	3.0	2.3	1.5	0.7	0.2	1.2	2.3	3.5	4.6	0.0	30
35	8.6	8.2	7.7	7.2	6.7	6.1	5.5	4.9	4.2	3.4	2.6	1.7	0.8	0.3	1.5	2.8	4.1	5.4	0.0	35
40	9.9	9.4	8.9	8.3	7.7	7.1	6.4	5.6	4.8	3.9	3.0	2.0	0.8	0.4	1.8	3.2	4.8	6.2	0.0	40
45	11.3	10.7	10.1	9.4	8.7	8.0	7.2	6.4	5.4	4.4	3.3	2.2	0.9	0.5	2.1	3.7	5.4	7.0	0.0	45
50	12.7	12.0	11.3	10.6	9.8	9.0	8.1	7.1	6.1	4.9	3.7	2.4	0.9	0.7	2.4	4.3	6.2	7.9	0.0	50
55	14.1	13.4	12.6	11.8	10.9	10.0	8.9	7.9	6.7	5.4	4.0	2.5	0.9	0.9	2.8	4.8	6.9	8.8	0.0	55
60	15.6	14.8	13.9	13.0	12.0	11.0	9.8	8.6	7.3	5.9	4.4	2.7	0.9	1.1	3.2	5.4	7.7	9.8	0.0	60
65	17.1	16.2	15.3	14.3	13.2	12.0	10.8	9.4	8.0	6.4	4.7	2.8	0.8	1.3	3.6	6.1	8.5	10.5	0.0	65
70	18.7	17.7	16.7	15.6	14.4	13.1	11.7	10.2	8.6	6.9	5.0	2.9	0.7	1.6	4.1	6.7	9.3	11.5	0.0	70
75	20.3	19.3	18.1	16.9	15.6	14.2	12.7	11.0	9.3	7.3	5.3	3.0	0.6	2.0	4.7	7.5	10.2	12.4	0.0	75
80	22.1	20.9	19.7	18.4	16.9	15.4	13.7	11.9	9.9	7.8	5.5	3.0	0.4	2.4	5.3	8.3	11.2	13.4	0.0	80
85	23.9	22.6	21.3	19.9	18.3	16.6	14.8	12.8	10.6	8.3	5.7	3.0	0.1	2.9	6.1	9.2	12.2	14.5	0.0	85
90	25.8	24.5	23.0	21.4	19.7	17.9	15.9	13.7	11.3	8.7	5.9	3.0	0.2	3.5	6.9	10.2	13.3	15.5	0.0	90
95	27.8	26.4	24.8	23.1	21.3	19.2	17.0	14.6	12.0	9.1	6.1	2.8	0.6	4.2	7.7	11.2	14.4	16.6	0.0	95
100	30.0	28.5	26.8	24.9	22.9	20.7	18.2	15.6	12.7	9.5	6.2	2.6	1.1	4.9	8.8	12.4	16.6	17.7	0.0	100
105	32.3	30.7	28.8	26.8	24.6	22.2	19.5	16.6	13.4	9.9	6.2	2.3	1.7	5.9	9.9	13.7	16.9	18.8	0.0	105
110	34.7	33.0	31.1	28.9	26.5	23.8	20.9	17.6	14.1	10.3	6.2	1.9	2.5	6.9	11.2	15.0	18.2	20.0	0.0	110
115	37.4	35.6	33.5	31.2	28.6	25.6	22.4	18.8	14.8	10.6	6.0	1.3	3.5	8.2	12.6	16.5	19.6	21.2	0.0	115
120	40.3	38.4	36.2	33.7	30.8	27.6	24.0	20.0	15.6	10.8	5.8	0.6	4.6	9.6	14.2	18.1	21.2	22.5	0.0	120

Great-circle sailing			Radio bearings		
Latitude departure	Destination	Correction sign	Latitude receiver	Transmitter	Correction sign
N	Eastward	-	N	Eastward	+
N	Westward	+	N	Westward	-
S	Eastward	-	S	Eastward	+
S	Westward	+	S	Westward	-

Reverse sign of correction for *italic* figures

90°	DL _o
0.0	0
0.0	5
0.0	10
0.0	15
0.0	20
0.0	25
0.0	30
0.0	35
0.0	40
0.0	45
0.0	50
0.0	55
0.0	60
0.0	65
0.0	70
0.0	75
0.0	80
0.0	85
0.0	90
0.0	95
0.0	100
0.0	105
0.0	110
0.0	115
0.0	120

DL _o	DL _o
0	0
5	5
10	10
15	15
20	20
25	25
30	30
35	35
40	40
45	45
50	50
55	55
60	60
65	65
70	70
75	75
80	80
85	85
90	90
95	95
100	100
105	105
110	110
115	115
120	120

