



Sight Reduction Form
Pub. No. 249, Air Navigation, Vol 2 and 3
Sun, Moon, Planets, Individual Stars

Observation details:				
1	Celestial body			
2	Date	/ /	/ /	/ /
3	DR latitude	°	°	°
4	DR longitude	°	°	°
5	Watch time	: :	: :	: :
6	Hs (sextant altitude)	°	°	°
Greenwich Mean Time (GMT):				
7	Watch error (-fast, +slow)	+/- :	+/- :	+/- :
8	Zone time (line 5 +/- 7)	: :	: :	: :
9	Zone description (time zone, -E, +W)	+/-	+/-	+/-
10	GMT (line 8 +/- 9)	: :	: :	: :
11	Greenwich date	/ /	/ /	/ /
Local Hour Angle (LHA) and Declination (Dec) from Nautical Almanac:				
12	GHA for hour of GMT (14, 19, 20, 23 same page)	°	°	°
13	GHA (time after hour "Increments & Corrections")	°	°	°
14	v (planets/moon only, usually +)	+/-	+/-	+/-
15	v correction applied to GHA (or star's SHA)	+/-	+/-	+/-
16	GHA (sum 12, 13, 15)	°	°	°
17	Assumed Long (+E/-W, fudged for zero min LHA)	°	°	°
18	LHA (line 16 +/- 17, minutes should cancel)	° 00.0'	° 00.0'	° 00.0'
19	Declination (hours of GMT only, N or S)	N/S °	N/S °	N/S °
20	d (sun/planets/moon, simply dec change per hour)	+/-	+/-	+/-
21	d correction applied to final dec	+/-	+/-	+/-
22	Dec (sum of 19, 21, N or S)	N/S	N/S	N/S
23	H.P. Horizontal Paralax (moon only)			
Observed Sextant Altitude (Ho) using yellow sheet (back of Almanac for moon):				
24	Index correction (sextant specific +off or -on arc)	+/-	+/-	+/-
25	Dip correction (height of eye, always -)	-	-	-
26	Ha (Apparent Altitude, sum of 6, 24, 25)	°	°	°
27	Altitude correction	+/-	+/-	+/-
28	Additional correction (planets/moon)	+/-	+/-	+/-
29	Ho (Observed Altitude, sum 26, 27, 28)	°	°	°
Computed Altitude (Hc) & Azimuth (Zn) using assumed lat, LHA, Dec in Pub 249:				
30	Assumed Lat (round DR lat to nearest degree)	° 00.0'	° 00.0'	° 00.0'
31	Table Hc	°	°	°
32	Table d (for Dec minutes unaccounted for, 22)	+/-	+/-	+/-
33	Table Z	°	°	°
34	d corr (cross 32 by min of 22, Table 5 last page)	+/-	+/-	+/-
35	Hc (Computed Altitude, sum 31, 34)			
36	Assumed Latitude (copy line 30)	° 00.0'	° 00.0'	° 00.0'
37	Assumed Longitude (copy line 17)	°	°	°
38	Zn (azimuth or direction, formulae in Pub 249)	°	°	°
39	a (altitude difference between Ho & Hc, 29 & 35, known as the intercept, which is equivalent to nautical miles from AP)	°	°	°
40	Toward/Away (HoMoTow, if Ho>Hc then toward)	Toward/Away	Toward/Away	Toward/Away