USE OF CORRECTING TABLES

As indicated above, corrections are required for the following, in addition to parallax (for the Moon) and refraction

Coriolis acceleration. This correction, given in Table **7** on the inside back cover, may be applied either to each indi vidual observation or to the fix deduced from several observations. When applied to individual observations, either the po sition line or the assumed position from which it is constructed must be shifted by the distance *Z* miles perpendicular to th track. The rule for applying this correction is given at the foot of Table **7**.

Motion of the observer (MOO). If it is desired to get a fix from two or more observations, the resulting position line must be reduced to a common time, usually the time of one of them. This may be done in two ways: the position lines o observations made earlier or later than this time may be transferred on the plotting chart by the motion of the aircraft in th time-interval concerned, or the corrected sextant altitudes (or intercepts) may be adjusted to allow for the motion of th aircraft.

In the first case, the shift may be applied to the position line or to the assumed position from which it is constructed

In the second case, the adjustment to corrected sextant altitude may be taken from Table **1** on the inside front cover interpolating where necessary. Table **1** gives, in the upper part, the correction for a time-interval of 4 minutes, while th lower part enables this to be extended to any time-interval. By reversing the sign of this correction, it may be applied to th tabulated altitude instead of to the corrected sextant altitude, or it may be applied directly to the intercept by the rules given

Usually, sights of several stars will be taken in rapid succession to give a fix. The example below illustrates the us of the tables for the reduction of a typical set of observations.

Example. On 1978 January 1, the following observations are obtained when flying at 385 knots on track 117°T. Th observations chosen are for illustration only and are not the most suitable for a fix.

Body	GMT	Sextant altitude	Instrument error, etc.
	h m s	° ′	′
Moon	02 26 55	58 34	−6
Jupiter	02 30 55	26 25	−9
Adhara	02 35 17	45 55	−7

The DR position at GMT $02^h\ 30^m$ is S 9° 42′, E 7° 28′, height 24,000 ft., temperature −47°C.

From the *Air Almanac,*	Moon			Jupiter			*Adhara* (No.**19**)		
	GMT	GHA	Dec.	GMT	GHA	Dec.	GMT	GHA	Dec.
	h m s	° ′	° ′	h m s	° ′	° ′	h m s	° ′	° ′
AM page for Jan. 1	02 20 00	321 57	N 1 14	02 30 00	48 03	N 23 12	02 30 00	137 54	
flap, increment for	6 55	1 40		0 55	0 14		5 17	1 19	
flap, SHA and Dec. of star	—	—		—	—		—	255 33	S 28 5
Sum = GHA at	02 26 55	323 37		02 30 55	48 17		02 35 17	394 46	
Assumed longitude, added because east		+7 23			+7 43			+7 14	
Sum = LHA (less 360° if necessary)		331			56			42	
		° ′			° ′			° ′	
Sextant altitude		58 34			26 25			45 55	
Sextant error, etc.		−6			−9			−7	
Refraction (Table **6**)		0			−1			0	
P. in A. (Moon)		+29			—			—	
Corrected sextant altitude (Ho)		58 57			26 15			45 48	