

June 1998

3) a) 15 30 LMT 13th August
2 37 W LIT
18 07 GMT 13th August

Posⁿ: 27° 24' S 39° 17' W

GHA 18hr 88° 49' 3
Inc 07 1 45' 0
GHA. 90° 34' 3
Long. 39 17.0 W
LHA. 50° 17' 3

Declⁿ 14° 28' 2 N
d. 0.8 -0.1
Declⁿ 14° 28' 1 N

A = 41545 N
B = 33067 N
C = 74612 N

$$A = \frac{\tan \text{lat}}{\tan \text{LHA}} = \frac{\tan 27^\circ 24' S}{\tan 50^\circ 17' 3}$$

$$B = \frac{\tan \text{dec}}{\sin \text{LHA}} = \frac{\tan 14^\circ 28' 1}{\sin 50^\circ 17' 3}$$

303.5 (T)

303.5 (G)

0° Gyro error

$$\tan A_2 = \frac{1}{C \times \cos \text{lat}} = \frac{1}{0.74612 \times \cos 27^\circ 24'}$$
$$= N 56.47884 W$$

A₂ = 303.5 (T)

303.5 (T)

327° 0 (C)

23.5 W Compass error

22.0 W Var.

1.5 W Deviation

Azimuths

advantages

- 1) Accurate time from Chronometer
- 2) Mod altitude body gives best result and allows reasonable error in own D.R. without error in Azimuth.
- 3) High altitude gives small Zx and azimuth error for small error in D.R. and difficulty in measuring on azimuth mirror

Amplitude.

Amplitude is bearing at rising or setting occurs when centre of sun is on rational horizon

Rational horizon is parallel to sensible horizon so amplitude should be taken when centre of sun is on sensible horizon.

