

Navigating beyond sight of land

Ranger Hope ©2016 (View as Pdf)

Amplitude tables form:

From Almanac

Date.....Heavenly bodyCompass bearing.....**(C)**

Latitude.....**(N) (S)** Longitude.....**(E) (W)**

Average local time of rising **(E)** or setting **(W)**.....

Time correction (if required to < 1 degree)

Time difference from UT **(-E)** or **(+W)** hours

Time difference from UT **(-E)** or **(+W)** mins

..... hours & mins

UT (GMT) (Local +/- Long) Date hours & mins

UT tabulated declination (hours) hours

d correction (minutes) **+ or -** mins

Heavenly body declination at chosen long. **(N)** or **(S)**

From amplitude/azimuth tables or calculator

Enter with declination and latitude (apply same name as declination)

Tabulated/calc. Amplitude **(E) (W)**.....**(N) (S)**
 or Azimuth **(N) (S)**.....**(E) (W)**

(T) True Azimuth

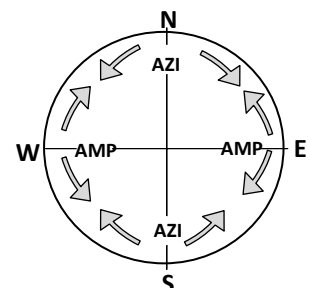
(T) True bearing.....

W+ **(V)** Variation

(M) Magnetic

E- **(D)** Deviation

(C) Compass



From calculator

Sin Amp=Sin Dec ÷ Cos Lat=

ABC tables form:

1	Date Ship		Smt Ship mean time		HB Heavenly body		
2	DR Lat. CP		N / S	DR Long. CP		E / W	
	Variation Local		E / W	Bearing of HB		°C	
3	Convert SMT to UTC (GMT)			4	Extract GHA (almanac) & Calculate LHA		
	Smt				UT/GHA hour		
	Zone Time - east + west				UT/GHA min & sec		
	UT				UT/GHA		
	UT Date			DR long + E - W			
				LHA			
5	Calculate Declination						
	Dec. at hour		N / S				
	'd' minute correction		+ or - as table trends				
	Dec.		N / S 'd'				
6	Enter ABC tables			10	Compass error check		
	LHA/Latitude	A=	N / S name opp. to Lat except LHAs 90- 270		T		
LHA/Dec	B=	N / S name same as Dec	V				
A+or-B		N / S name same as greatest	M				
A+or-B /lat	C=		D				
Quadrant notation =	N / S E / W	W if LHA 000-180 E if LHA 180-360	C				
9	Convert to 360°T notation						