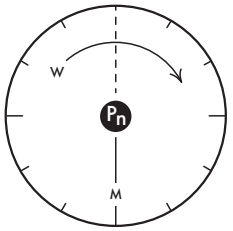
Sight no. _____ **Navigator** _____

Date / /

Celestial Body _____

SIGHT DATA

AL assumed latitude N S	° ′ .	Aλ assumed longitude E W	° ′ .
ZT zone time	: :	GMT Greenwich mean time	: :
H_S sextant altitude	° ′ .		
+ off / - on IC index corr.	° ′ .		
- Dip 0.97 x √eye height in ft.	′ .		
= H_a apparent altitude	° ′ .		
+ / - ACT alt. corr. tables	° ′ .		
= H_o observed altitude	° ′ .		



ALMANAC DATA

sun, moon, planet		star	
☉ ☽ ♀ ♂ ♃ ♄		SHA ★ sidereal hr. angle	° ′ .
GHA Greenwich hour angle	° ′ .	+ GHA♈ GHA Aries	° ′ .
+ / - GHA increments min. sec.	° ′ .	+ GHA♈ increments min. sec.	° ′ .
= GHA total h.m.s.	° ′ .	= GHA★ total h.m.s.	° ′ .
d declination N S	° ′ .	GHA of body	° ′ .
+ / - d corr. min. sec.	′ .	if GHA < West λ then add 360	+ 360°
= d total h.m.s. N S	° ′ .	+ E / - W Aλ	° ′ .

if GHA > 360 subtract 360

MERIDIAN ANGLE

= LHA local hr. angle	° ′ .
if LHA > 180 then subtract from 360°	360°
- LHA	° ′ .
= t meridian angle E W	° ′ .

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1. tan (d declination) ÷ cos (t meridian angle) = tan (α)

if t < 90° then t = tδ
if t > 90° then 180 - t = tδ

180° - (t) ____ ° ____ ′ = (tδ) ____ ° ____ ′

Center the slide, and position cursor over tan (d) ____ ° ____ ′

Move cos (tδ) ____ ° ____ ′ under cursor in order to divide. Move cursor to slide index.

Read tan (α) off appropriate *T* scale of stator. α = ____ ° ____ ′

2. when t < 90°

(90° - AL assumed latitude) ± α = β

use [+ α] if (dec.) has the same name as lat.
use [– α] if (dec.) has contrary name

89 ° 60 ′
- AL ____ ° ____ ′
= ____ ° ____ ′
± α ____ ° ____ ′

2. when t > 90°

(90° - AL assumed latitude) - α = β
or
(AL assumed latitude) + α - 90° = β

AL ____ ° ____ ′
+ α ____ ° ____ ′
= ____ ° ____ ′
- 90 ° 00 ′

β = ____ ° ____ ′ **or** β = ____ ° ____ ′

3. if β > 90° then 180 - β = γ but if β < 90° then β = γ

180° - (β) ____ ° ____ ′

γ = ____ ° ____ ′

4. [cos (α) ÷ cos (γ)] • tan (t meridian angle) = tan (Az azimuth angle)

Center the slide, and position cursor over cos (α) ____ ° ____ ′

Move cos (γ) ____ ° ____ ′ under cursor in order to divide.

Move cursor over tan (t) ____ ° ____ ′ on slide to multiply.

Read tan (Az) off appropriate *T* scale of stator.

GP bearing = N, S, E, W

Az = N / S ____ ° ____ ′ E / W

North Latitude	South Latitude
LHA > 180°; Z_n = Z	LHA > 180°; Z_n = 180° - Z
LHA < 180°; Z_n = 360° - Z	LHA < 180°; Z_n = 180° + Z

Z_n = ____ ° ____ ′

5. cos (Az azimuth angle) • tan (γ) = tan (H_c computed altitude)

Center the slide, and position cursor over cos (Az) ____ ° ____ ′

Move slide index under cursor. Move cursor over tan (γ) ____ ° ____ ′ on slide to multiply.

Read tan (H_c) off appropriate *T* scale of stator.

H_c = ____ ° ____ ′

- H_o ____ ° ____ ′

= a altitude intercept ____ ′ + away / - toward