

Sight Planning Form

Navigator _____
Date LMT _____

1. DR Position

	deg	min	
A DR Lat			N/S
B DR Lng			E/W

Find DR position on universal plotting sheet.

2. GMT Civil Twilight (CT)

	hour	min	
C Lng Arc To Time Deg			
D Arc To Time Min			+
CT Civil Twilight LMT			
E Arc To Time			+W-E
F GMT Time at DR			=
G GMT Date at DR			

Arc to time (hr+min) is added (west) or subtracted (east) from local time.
Keep Twilight to sunrise-sunset timespan in mind.

3.1. LHA Y (Gray Method)

	deg	min	
H LHA Y Hrs			
I LHA Y Mins			+
LHA Y			=

On daily page, lookup GHA Hr Y using the Civil Twilight LMT (cell CT), add minutes increment. This gives the LHA Y used to lookup selected stars.

3.2. LHA Y (Normal Method)

	deg	min	
J GHA Y Hrs			
K GHA Y Mins			+
GHA Y			=
=B DR Long			-W / +E
LHA Y			=
LHA Y			% 360

4. MOON (Optional)

	deg	min	
L GHA Hrs			
M GHA Mins			+
N GHA Moon			=

3.2 & 4 - only needed for Moon planning

Use 3.2 when planning moon to get GHA Y. Subtract DR Lon from GHA Y (-W / +E) to determine LHA Y. You'll need GHA Y for Moon. Otherwise just use step 3.1

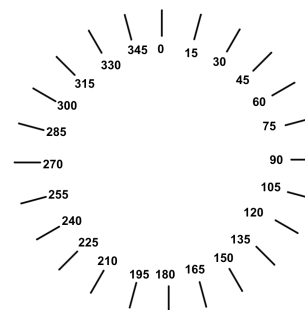
5 & 6. RIGHT ASCENSIONS

	VENUS			MARS			JUPITER			SATURN			MOON		
	deg	min	N/S	deg	min	N/S	deg	min	N/S	deg	min	N/S	deg	min	N/S
P Decl Hrs															
360°	359°	60°		359°	60°		359°	60°		359°	60°				
S - SHA															
RA = RA															

*GHA Y (GHA)
- GHA Moon (N)
RA*

7. SIGHT PLAN HO 249 Vol1 & Finder (step 7-12)

	+	Name	Hc	Zn	Mag	Seq
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12		VENUS				
13		MARS				
14		JUPITER				
15		SATURN				
16		Moon				



Step 8-10 for planets

Step 8: Draw in planets; use red plate on disk (mind the N/S lat sides).

Step 9: Dial in RA for planet (moon optional).

Step 10: In slot mark, mark planet, mind the NS direction (see note below).

Step 11-13 for stars (and planets)

Step 11: Switch to blue plate matching latitude (mind the N/S)

Step 12: Dial in LHA Y (result L)

Step 13: Red off Hc (Alt) & Zn (Az)

RA = Right Ascension = 360° - SHA

Hc = Alt = angle over horizon

Zn = Azimuth = direction on horizon

Color Key

- Navigator Entry
- Almanac
- HO 249 Vol 1
- =X Copy from other

Note reg. red disk; When marking the body in the slot on the red disk, match the latitude. Towards center for same latitude, away for opposite. Eg. in North latitude, a N decl goes toward center, a S decl goes out.