

# Sight Planning Form

Navigator \_\_\_\_\_  
Date LMT \_\_\_\_\_

## 1. DR Position

A DR Lat 

deg	min

 N/S  
DR Lng 

deg	min

 E/W *Find DR position on universal plotting sheet.*

## 2. GMT Civil Twilight (CT)

CT  
ATT  
Lng Arc To Time Deg 

hour	min

  
Arc To Time Min 

--	--

 +  
Civil Twilight LMT 

--	--

  
Arc To Time 

--	--

 +W/-E  
GMT Time at DR 

--	--

 =  
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)

LHA Y Hrs 

deg	min

  
LHA Y Mins 

--	--

 +  
LHA Y 

--	--

 =

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

## 3.2. LHA Y (Normal Method)

M  
A  
L  
L  
GHA Y Hrs 

deg	min

  
GHA Y Mins 

--	--

 +  
GHA Y 

--	--

 =  
DR Long 

--	--

 -W / +E  
LHA Y 

--	--

 =  
LHA Y 

--	--

 % 360

*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*

## 4. MOON (Optional)

N  
GHA Hrs 

deg	min

  
GHA Mins 

--	--

 +  
GHA Moon 

--	--

 =

*3.2 & 4 - only if you want to planning Moon as well.*

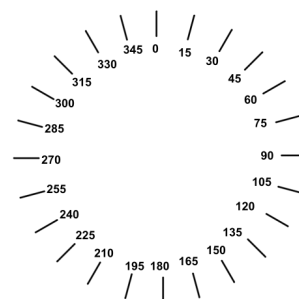
## 5 & 6. RIGHT ASCENSIONS

	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
Decl Hrs															
360°	359°	60°		359°	60°		359°	60°		359°	60°				
- SHA															
RA															

*GHA Y (M)  
- 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 off 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.*