Ref.	DAWN SLL		
EPLat	53 °	10.2'	(N)/S
EPLong	000 °	50.6'	(E)/W

GDate	Y 2021	M JUN	D 07
DWT	Hr	m	s
DWE -F/+S	Hr	m	s
UT	Hr 03	m 35	s 45

Table 4	*M*	*D*	*Hr*	
.a(Y)				+/-
Int(UTHr)				+
=OT				

0330'
0545"

	AIR	Almanac	diff
	232 °	47.3	( )
	1 °	26.3	
	°	'	
	°	'	
	°	'	+
gha	234 °	13.6	
*sha	°	'	+
gha*	°	'	
0/360	°	'	-
GHA	234 °	13.6	

HoE	2	
Horizon	Hazy	
Shades etc		
Sky		

Hs		00 °	00'	
IE			'	-On/+Off
ArcC			'	+/-
		00 °	00'	
HOE	2 *m*	Dip -	2.5	~~Short~~ ~~NM~~
Ha	-	00 °	02.5	
Refr			34.5	-
	-	00	37.0	
PIA		°	'	+
		°	'	
SD		°	15.7	+LL/-UL
Ho		- 00 °	21.3	

			diff
dec	22 °	45.8'	⊠
corr		'	
DEC	22 °	45.8'	(N)/S

GPAlmNo1Mk4

Sight Reduction (by Haversine Version of Doniol Formula)

t(a.m.)	359 °	59 ' ten	
EPLong	°	50.6	W+/(E-)
	359 °	09.4	
GHA	234 °	13.6	-
	°	'	
0/360	°		-
t	124°	55.8	
	124	56	

ZD	EPLat	53 °	10.2	
~ +	DEC	22 °	45.8	
S C		30 °	24.4	(X)
A O				
M N	EPLat	53 °	10.2	
+ ~	DEC	22 °	45.8	
		75 °	56.0	y

hv(x) = n	0687	
hv(y) = p	3785	+
n+p=q	4472	
1-q	5528	
hav(t)	7863	*
	.4346	
n	.0687	+
hv(ZD)	5033	
ZD =	90°	23'

Logs
7425
8956
.6381

t(p.m.)

GHA	°	'	
EPLong	°	'	W-/E+
0/360			-
t	°	'	

Zn

Use **t** for LHA on Hanno Ix graph to get Z
[IF **t** > 90 THEN Use (180 - **t**)] 180 00
124 56-
55 04

Z

Zn is (N)/S 49 (E)/W = 049°T

90°	89 °	60'	
ZD	90°	23'	-
Hc	- 00 °	23'	
Ho	- 00 °	21'	~
Intercept		2'	
Intercept	2'	(T)/A	049°T

ASTRAN 1.5' T 049.1°T