Celestial Navigation Estimation of Sun GHA & Dec. Name:_____

1 ZT of 15 56 DR L 28° 55.0' S
Observation 20-Oct λ 155° 15.4' W

CT	02 04 28		ZT	15 56	20-Oct
CE	8 14 f		ZD		
GMT			GMT		

GHA _____ Dec. _____

2 ZT of 17 55 DR L 21° 57.1' N
Observation 18-Mar λ 110° 44.4' E

CT	10 58 11		ZT	17 55	18-Mar
CE	2 58 f		ZD		
GMT			GMT		

GHA _____ Dec. _____

3 ZT of 17 23 DR L 29° 53.7' N
Observation 21-Aug λ 137° 14.5' E

CT	08 23 55		ZT	17 23	21-Aug
CE	0 34 f		ZD		
GMT			GMT		

GHA _____ Dec. _____

4 ZT of 16 28 DR L 26° 09.8' S
Observation 29-Jul λ 172° 17.8' E

CT	05 20 33		ZT	16 28	29-Jul
CE	7 21 s		ZD		
GMT			GMT		

GHA _____ Dec. _____

5 ZT of 16 48 DR L 29° 11.7' N
Observation 20-Dec λ 114° 30.8' E

CT	08 41 59		ZT	16 48	20-Dec
CE	6 09 s		ZD		
GMT			GMT		

GHA _____ Dec. _____

6 ZT of 08 40 DR L 25° 50.1' N
Observation 18-Feb λ 078° 04.4' E

CT	03 37 20		ZT	08 40	18-Feb
CE	2 23 s		ZD		
GMT			GMT		

GHA _____ Dec. _____

7 ZT of 11 55 DR L 29° 20.8' N
Observation 6-May λ 139° 28.3' E

CT	02 44 28		ZT	11 55	6-May
CE	10 39 s		ZD		
GMT			GMT		

GHA _____ Dec. _____

8 ZT of 08 35 DR L 27° 10.5' N
Observation 29-Mar λ 148° 33.7' W

CT	06 46 25		ZT	08 35	29-Mar
CE	11 23 f		ZD		
GMT			GMT		

GHA _____ Dec. _____

9 ZT of 06 01 DR L 28° 51.5' N
Observation 8-Jan λ 102° 11.2' W

CT	01 07 11		ZT	06 01	8-Jan
CE	5 52 f		ZD		
GMT			GMT		

GHA _____ Dec. _____

10 ZT of 04 30 DR L 28° 14.7' S
Observation 21-Oct λ 038° 11.9' W

CT	07 17 54		ZT	04 30	21-Oct
CE	11 48 s		ZD		
GMT			GMT		

GHA _____ Dec. _____

11 ZT of 23 31 DR L 23° 09.6' S
Observation 7-Feb λ 152° 25.6' W

CT	09 31 16		ZT	23 31	7-Feb
CE	0 37 f		ZD		
GMT			GMT		

GHA _____ Dec. _____

12 ZT of 07 52 DR L 27° 47.0' N
Observation 21-Jul λ 164° 52.9' E

CT	08 57 31		ZT	07 52	21-Jul
CE	5 47 f		ZD		
GMT			GMT		

GHA _____ Dec. _____

Solutions on Back

1

ZT of Observation: 15 56, 20-Oct

DR L: 28° 55.0' S

λ: 155° 15.4' W

CT	02 04 28	ZT	15 56	20-Oct
CE	8 14 f	ZD	+ 10	
GMT	01 56 13	GMT	01 56	21-Oct

GHA ~ 195° Dec. ~S 11°

2

ZT of Observation: 17 55, 18-Mar

DR L: 21° 57.1' N

λ: 110° 44.4' E

CT	10 58 11	ZT	17 55	18-Mar
CE	2 58 f	ZD	- 7	
GMT	10 55 13	GMT	10 55	18-Mar

GHA ~ 330° Dec. ~0°

3

ZT of Observation: 17 23, 21-Aug

DR L: 29° 53.7' N

λ: 137° 14.5' E

CT	08 23 55	ZT	17 23	21-Aug
CE	0 34 f	ZD	- 9	
GMT	08 23 20	GMT	08 23	21-Aug

GHA ~ 300° Dec. ~N 12°

4

ZT of Observation: 16 28, 29-Jul

DR L: 26° 09.8' S

λ: 172° 17.8' E

CT	05 20 33	ZT	16 28	29-Jul
CE	7 21 s	ZD	- 11	
GMT	05 27 54	GMT	05 28	29-Jul

GHA ~ 255° Dec. ~N 20°

5

ZT of Observation: 16 48, 20-Dec

DR L: 29° 11.7' N

λ: 114° 30.8' E

CT	08 41 59	ZT	16 48	20-Dec
CE	6 09 s	ZD	- 8	
GMT	08 48 08	GMT	08 48	20-Dec

GHA ~ 300° Dec. ~S 23°

6

ZT of Observation: 08 40, 18-Feb

DR L: 25° 50.1' N

λ: 078° 04.4' E

CT	03 37 20	ZT	08 40	18-Feb
CE	2 23 s	ZD	- 5	
GMT	03 39 43	GMT	03 40	18-Feb

GHA ~ 225° Dec. ~S 10°

7

ZT of Observation: 11 55, 6-May

DR L: 29° 20.8' N

λ: 139° 28.3' E

CT	02 44 28	ZT	11 55	6-May
CE	10 39 s	ZD	- 9	
GMT	02 55 07	GMT	02 55	6-May

GHA ~ 210° Dec. ~N 20°

8

ZT of Observation: 08 35, 29-Mar

DR L: 27° 10.5' N

λ: 148° 33.7' W

CT	06 46 25	ZT	08 35	29-Mar
CE	11 23 f	ZD	+ 10	
GMT	18 35 01	GMT	18 35	29-Mar

GHA ~ 90° Dec. ~0°

9

ZT of Observation: 06 01, 8-Jan

DR L: 28° 51.5' N

λ: 102° 11.2' W

CT	01 07 11	ZT	06 01	8-Jan
CE	5 52 f	ZD	+ 7	
GMT	13 01 19	GMT	13 01	8-Jan

GHA ~ 15° Dec. ~S 23°

10

ZT of Observation: 04 30, 21-Oct

DR L: 28° 14.7' S

λ: 038° 11.9' W

CT	07 17 54	ZT	04 30	21-Oct
CE	11 48 s	ZD	+ 3	
GMT	07 29 42	GMT	07 30	21-Oct

GHA ~ 285° Dec. ~S 11°

11

ZT of Observation: 23 31, 7-Feb

DR L: 23° 09.6' S

λ: 152° 25.6' W

CT	09 31 16	ZT	23 31	7-Feb
CE	0 37 f	ZD	+ 10	
GMT	09 30 38	GMT	09 31	8-Feb

GHA ~ 315° Dec. ~S 10°

12

ZT of Observation: 07 52, 21-Jul

DR L: 27° 47.0' N

λ: 164° 52.9' E

CT	08 57 31	ZT	07 52	21-Jul
CE	5 47 f	ZD	- 11	
GMT	20 51 43	GMT	20 52	20-Jul

GHA ~ 120° Dec. ~N 20°

Problems on Front