

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: $\alpha_{1,2} \text{ Cyg}$	Date: 9/2/11	Time: 2:30	N •• ← SAME WIDE FIELD
Instrument: 12X60 HH TRANS. III	Seeing: II	Power: 12	
Description: VERY WIDE E COMP > 2Y B'S Y-O			

Object: $\beta_{1,2} \text{ Cap}$	Date: 9/2/11	Time: 2:40	N ••
Instrument: 12X60 HH TRANS. III	Seeing: II	Power: 12	
Description: WIDE A > B (3,6) sl. Y & sl. B			

Object: $\rho \text{ Cap}$	Date: 9/2/11	Time: 2:50	N ••
Instrument: 12X60 HH TRANS. III	Seeing: II	Power: 12	
Description: EASY, 587, whites 0 not split			

Object: $\rho \text{ Cas} *$	Date: 9/27/11	Time: 5:15	N ••
Instrument: 12X60 HH TRANS. III	Seeing: III	Power: 12x	
Description: Magnificent easy + glowish 2 or 3 to N			

Object: $\delta \text{ Cap} *$	Date: 9/27/11	Time: 5:20	N ••
Instrument: 12X60 HH TRANS. III	Seeing: III	Power: 12	
Description: Hard pair but helps that δ at mm.			

Object: $\alpha \text{ UMa} *$	Date: 9/27/11	Time: 5:10	N ••
Instrument: 12X60 HH TRANS. III	Seeing: III	Power: 12x	
Description: Nice & easy, m=2&7			

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2 _____

TULSA 1 = 36°N 96°W
Okretex = 37°N 102°W

Exc * - Okretex Star
Party - Kenton OK

BINOCULAR DOUBLE STAR CLUB

LOG SHEET (UT)

Object: <u>α Lib</u>	Date: <u>9/3/11</u>	Time: <u>2:50</u>	N ••	
Instrument: <u>12x60 HH</u>	TRANS. <u>III</u>	Seeing: <u>II</u>		Power: <u>12</u>
Description: <u>Low - moon 6° to SE. wide, no color</u>				

Object: <u>W_{1,2} Sco</u>	Date: <u>"</u>	Time: <u>2:55</u>	N •••	
Instrument: <u>12x60 HH</u>	TRANS. <u>"</u>	Seeing: <u>"</u>		Power: <u>"</u>
Description: <u>Very wide, bluish</u>				

Object: <u>V Sco</u>	Date: <u>"</u>	Time: <u>3:00</u>	N •	
Instrument: <u>12x60 HH</u>	TRANS. <u>"</u>	Seeing: <u>"</u>		Power: <u>"</u>
Description: <u>Hair's brush split, Δm=3, no color</u>				

Object: <u>ρ Oph</u>	Date: <u>"</u>	Time: <u>3:05</u>	N ••	
Instrument: <u>12x60 HH</u>	TRANS. <u>"</u>	Seeing: <u>"</u>		Power: <u>"</u>
Description: <u>Nice split for these 2 5, 7, 7</u>				

Object: <u>M_{1,2} Sco</u>	Date: <u>"</u>	Time: <u>3:10</u>	N ••	
Instrument: <u>12x60 HH</u>	TRANS. <u>"</u>	Seeing: <u>"</u>		Power: <u>"</u>
Description: <u>Wide & easy though low</u>				

Object: <u>δ Crv</u>	Date: <u>"</u>	Time: <u>4:50</u>	N •	
Instrument: <u>12x60 HH</u>	TRANS. <u>"</u>	Seeing: <u>"</u>		Power: <u>"</u>
Description: <u>Barely split</u>				

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2

~~(13) Pick feet on~~

TULSA 2 = 35°N 96°W

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: γ Eri	Date: 9/2/11	Time: 5:00	N .	
Instrument: 12x60 HH	TRANS. III	Seeing: II		Power: 12
Description: Nice, very whites DM < 1				

Object: ϵ Lyr	Date: "	Time: "	N :	
Instrument: 12x60 HH	TRANS. "	Seeing: "		Power: "
Description: Beautiful pair - blue whites				

Object: δ Lyr	Date: "	Time: "	N ..	
Instrument: 12x60 HH	TRANS. "	Seeing: "		Power: "
Description: So wide a 8m is between them				

Object: ζ Lyr	Date: "	Time: "	N .	
Instrument: 12x60 HH	TRANS. "	Seeing: "		Power: "
Description: Difficult but split				

Object: θ Sge	Date: "	Time: "	N .	
Instrument: 12x60 HH	TRANS. "	Seeing: "		Power: "
Description: A bit of a challenge but neat				

Object: ζ UMa	Date: 9/27/11	Time: 5:15	N .	
Instrument: 12x60 HH	TRANS. III	Seeing: III		Power: 12x
Description: Also 1x				

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2

EXC. * = Olwe Tex

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

UT

Object: β Lyr	Date: 9/5/11	Time: 3:40	N •
Instrument: 12X60 HH	TRANS. II	Seeing: III	
Description: Family easy - β in eclipse?			

Object: θ Ser	Date: 11	Time: 4:00	N •
Instrument: 12X60 HH	TRANS. "	Seeing: " Power: "	
Description: Very hard to split close yellow pair			

Object: 56 And *	Date: 9/27/11	Time: 5:20	N • • •
Instrument: 12X60 HH	TRANS. IV	Seeing: III Power: 12x	
Description: Easy split - nice field			

Object: 15 Tri *	Date: 9/27/11	Time: 5:30	N • •
Instrument: 12X60 HH	TRANS. IV	Seeing: III Power: 12	
Description: Easy, $\Delta m \approx 1$			

Object: 19, 21+22 ^{Tag} * (m M45)	Date: 9/27/11	Time: 6:15	N • • • • • ?
Instrument: 12X60 HH	TRANS. IV	Seeing: III Power: 12	
Description: Very difficult - m M45			

Object: K Tr *	Date: "	Time: 6:20	N • • •
Instrument: 12X60 HH	TRANS.	Seeing: " Power: "	
Description: Nice double in great atmosphere			

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2

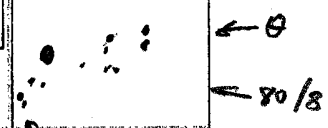
HVLAH

EXC, * = Ours - Tex

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

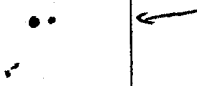
Object: ϕ Tau	Date: 9/27/11	Time: 6:50 AM	N 	
Instrument: 12x60 HH	TRANS. <u>TRANS.</u>	Seeing: <u>III</u>		Power: 12x
Description: <u>near pair + 1</u>				

Object: θ_2 Tau + 80/81	Date: "	Time: 7:40 AM	N 	
Instrument: 12x60 HH	TRANS. <u>IV</u>	Seeing: <u>III</u>		Power: 12
Description: <u>Hyades</u>				

Object: χ Cet	Date: "	Time: 7:30 AM	N 	
Instrument: 12x60 HH	TRANS. <u>IV</u>	Seeing: "		Power: "
Description: <u>Easy</u>				

Object: μ Cet	Date: "	Time: 7:45 AM	N 	
Instrument: 12x60 HH	TRANS. <u>IV</u>	Seeing: "		Power: 12
Description: <u>quite a field!</u>				

Object: ϵ Peg	Date: 9/28/11	Time: 3:15 AM	N 	
Instrument: 12x60 HH	TRANS. <u>II</u>	Seeing: <u>II</u>		Power: "
Description: <u>large Amg</u>				

Object: π Peg	Date: "	Time: 3:20	N 	
Instrument: 12x60 HH	TRANS. <u>"</u>	Seeing: "		Power: "
Description: <u>with other wide dpls</u>				

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2 OUIS-TEX

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: 33 Peg	Date: 9/28/11	Time: 3:25	N •	
Instrument: 12X60 HH	TRANS. II	Seeing: III		Power: 12
Description: Not too hard				

Object: 8 Cap	Date: 9/28/11	Time: 3:30	N •	
Instrument: 12X60 HH	TRANS. II	Seeing: ↓		Power: "
Description: Easy once focused! 2 near m.m.				

Object: P Bsc	Date: 11	Time: 5:05	N •	
Instrument: 12X60 HH	TRANS. III	Seeing: II		Power: 12
Description:				

Object: 59 And	Date: 9/28/11	Time: 5:10	N •	
Instrument: 12X60 HH	TRANS. "	Seeing: ↓		Power: "
Description: Nice Δ below w. 7				

Object: ψ, Psc	Date: 9/28/11	Time: 5:15	N •	
Instrument: 12X60 HH	TRANS. "	Seeing: ↓		Power: "
Description: Wow 5:12 split				

Object: 67 Oph	Date: 9/29/11	Time: 2:50	N •	
Instrument: 12X60 HH	TRANS. II	Seeing: II		Power: 12
Description: just split				

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2 OKLAHOMA

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: <i>P Cyg</i>	Date: <i>10/4/11</i>	Time: <i>3:00UT</i>	N •	
Instrument: <i>12X60 HH</i>	TRANS. <i>I-</i>	Seeing: <i>II</i>		Power: <i>12</i>
Description: <i>Nice - golden primary, hints of blue (secondary?)</i>				

Object: <i>α V1 +</i>	Date: <i>"</i>	Time: <i>3:05UT</i>	N <i>2 m fld</i> <i>6/10</i> •	
Instrument: <i>12X60 HH</i>	TRANS. <i>"</i>	Seeing: <i>"</i>		Power: <i>"</i>
Description: <i>Very dim 1st star dbl to SW of it</i>				

Object: <i>37 Cet</i>	Date: <i>"</i>	Time: <i>5:00</i>	N •	
Instrument: <i>12X60 HH</i>	TRANS. <i>"</i>	Seeing: <i>"</i>		Power: <i>"</i>
Description:				

Object: <i>ν Dra</i>	Date: <i>"</i>	Time: <i>5:05</i>	N •	
Instrument: <i>12X60 HH</i>	TRANS. <i>"</i>	Seeing: <i>"</i>		Power: <i>16</i>
Description: <i>Beautiful, nearly =</i>				

Object: <i>16, 17 Dra</i>	Date: <i>↙</i>	Time: <i>5:10</i>	N •	
Instrument: <i>12X60 HH</i>	TRANS. <i>"</i>	Seeing: <i>↙</i>		Power: <i>"</i>
Description: <i>wide</i>				

Object: <i>ν Dra</i>	Date: <i>↙</i>	Time: <i>5:15</i>	N •	
Instrument: <i>12X60 HH</i>	TRANS. <i>"</i>	Seeing: <i>↙</i>		Power: <i>"</i>
Description: <i>16° is on wider part? other not seen</i>				

GEOGRAPHIC LOCATION: TULSA TULSA2 _____

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: 39 Da	Date: 10/2/11	Time: 5:20	N .	
Instrument: 12X60 HH	TRANS. I-	Seeing: II		Power: 12
Description: WLe				

Object: E Sge	Date: "	Time: 5:25	N .	
Instrument: 12X60 HH	TRANS. "	Seeing: }		Power: "
Description: NV for 8m				

Object: 16 Cyg	Date: "	Time: 5:30	N .	
Instrument: 12X60 HH	TRANS. "	Seeing: }		Power: "
Description: nice field				

Object: 15 Sge	Date: }	Time: 5:35	N . 13 ←	
Instrument: 12X60 HH	TRANS. "	Seeing: }		Power: "
Description: W/13 nearby				

Object: O, Cyg	Date: }	Time: 5:40	N . O ₂ ←	
Instrument: 12X60 HH	TRANS. "	Seeing: }		Power: "
Description: Y&b primary pair				

Object: 29 Cyg	Date: }	Time: 5:45	N .	
Instrument: 12X60 HH	TRANS. "	Seeing: }		Power: "
Description: Easy				

GEOGRAPHIC LOCATION: TULSA1 TULSA2 _____

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: 75 Dra	Date: 10/2/11	Time: 5:50	N ••	
Instrument: 12X60 HH	TRANS. I-	Seeing: II		Power: 12
Description: wide				

Object: 48 Cys	Date: }	Time: 5:55	N •	
Instrument: 12X60 HH	TRANS. "	Seeing: }		Power: "
Description: Nice dbl to NNW.				

Object: 61 Cys	Date: }	Time: 6:00	N •	
Instrument: 12X60 HH	TRANS. "	Seeing: }		Power: "
Description: Hard, orangeish				

Object: 79 Cys	Date: }	Time: 6:05	N •	
Instrument: 12X60 HH	TRANS. "	Seeing: }		Power: "
Description: Another dbl near 79 Cys				

Object: 14 Cys	Date: }	Time: 6:10	N •	
Instrument: 12X60 HH	TRANS. "	Seeing: }		Power: "
Description: w/ another dbl in field				

Object: 57 Per	Date: }	Time: 6:15	N •	
Instrument: 12X60 HH	TRANS. "	Seeing: }		Power: "
Description: wide				

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2 _____

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: <u>5 Sco</u>	Date: <u>10/3/11</u>	Time: <u>0:55</u>	N ••	
Instrument: <u>12x60 HH</u>	TRANS. <u>I-</u>	Seeing: <u>II</u>		Power: <u>12</u>
Description: <u>Just 2' up in twilight horizon!</u>				

Object: <u>K, C Dra</u>	Date: <u>"</u>	Time: <u>1:00</u>	N •	
Instrument: <u>12x60 HH</u>	TRANS. <u>"</u>	Seeing: <u>"</u>		Power: <u>12</u>
Description: <u>Very wide</u>				

Object: <u>ε 1950 (Boo)</u>	Date: <u>"</u>	Time: <u>1:10</u>	N •	
Instrument: <u>12x60 HH</u>	TRANS. <u>"</u>	Seeing: <u>"</u>		Power: <u>"</u>
Description: <u>Only bulge - no split only looking up after PA</u>				

Object: <u>γ Boo</u>	Date: <u>"</u>	Time: <u>1:15</u>	N •	
Instrument: <u>12x60 HH</u>	TRANS. <u>"</u>	Seeing: <u>"</u>		Power: <u>"</u>
Description: <u>γ prim</u>				

Object: <u>15 Aql</u>	Date: <u>"</u>	Time: <u>1:20</u>	N •	
Instrument: <u>12x60 HH</u>	TRANS. <u>"</u>	Seeing: <u>"</u>		Power: <u>"</u>
Description: <u>E257</u>				

Object: <u>μ Boo</u>	Date: <u>"</u>	Time: <u>1:25</u>	N •	
Instrument: <u>12x60 HH</u>	TRANS. <u>"</u>	Seeing: <u>"</u>		Power: <u>"</u>
Description: <u>E257</u>				

GEOGRAPHIC LOCATION: TULSA1 TULSA2 _____

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: ν CrB	Date: 10/4/11	Time: 1:30	N • •	
Instrument: 12x60 HH	TRANS. I-	Seeing: II		Power: 12
Description: Very wide				

Object: α Cas	Date: 10/4/11	Time: 1:00	N •	
Instrument: 12x60 HH	TRANS. I-	Seeing: II		Power: 12
Description: Very difficult - 3rd attempt				

Object: 36837 Her	Date:	Time: 1:05	N •	
Instrument: 12x60 HH	TRANS. "	Seeing: ↓		Power: "
Description: Nice				

Object: κ Her	Date:	Time: 1:10	N •	
Instrument: 12x60 HH	TRANS. "	Seeing: ↓		Power: "
Description: Nice! image widening, orange				

Object: ϵ I 33 (Her)	Date:	Time: 1:15	N • • • •	
Instrument: 12x60 HH	TRANS. "	Seeing: ↓		Power: "
Description: "the sweet" asterism				

Object: 530ph	Date:	Time: 1:20	N •	
Instrument: 12x60 HH	TRANS. "	Seeing: ↓		Power: "
Description: Not easy				

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2 _____

BINOCULAR DOUBLE STAR LOG SHEET TWA 1

Object: 54251 (Obj)	Date: 10/4/11	Time: 1:25	N .
Instrument: 12X60 HH	Seeing: I -	Power: 12X	
Description: SPRING II			

Object: 055178 (Apl)	Date: }	Time: 1:30	N ." ;
Instrument: Tr. 4	Seeing: ↓	Power: "	
Description: Prim reddish			

Object: 28 Apl	Date: }	Time: 1:35	N .
Instrument: tra. "	Seeing: ↓	Power: "	
Description: Not envy			

Object: V 9m	Date: 10/7/11	Time: 0:55	N .
Instrument: tra. II	Seeing: III	Power: 12	
Description: Nice			

Object: 57 Apl	Date: }	Time: 1:00	N .
Instrument: tra. "	Seeing: ↓	Power: "	
Description: Just split			

Object: 545gr	Date: }	Time: 1:05	N .
Instrument: tra. "	Seeing: ↓	Power: "	
Description: Very difficult			

TULSA 1

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: S 752 (Del)	Date: 10/7/11	Time: 1:10 AM	N ←	
Instrument: 12x60 HH	TRANS. II	Seeing: III		Power: 12
Description: In rich field				

Object: 360 ph	Date: ↓	Time: 1:15	N . .	
Instrument: 12x60 HH	TRANS. "	Seeing: ↓		Power: "
Description: Wide				

Object: 32 Cam	Date: ↓	Time: 1:20	N .	
Instrument: 12x60 HH	TRANS. "	Seeing: ↓		Power: "
Description: Not quite a gap but obviously double				

Object: Not Listed	Date: 10/8/11	Time: 0:45	N .	
Instrument: 12x60 HH	TRANS. II	Seeing: II		Power: 12
Description: 16h30 +19 Not in program				

Object:	Date:	Time:	N	
Instrument: 12x60 HH	TRANS.	Seeing:		Power:
Description:				

Object:	Date:	Time:	N	
Instrument: 12x60 HH	TRANS.	Seeing:		Power:
Description:				

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2 _____

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: α Cap	Date: 11/5/11	Time: 0:15 UT	N •
Instrument: 12x60HH TRANS. II	Seeing: II	Power: 1X	
Description: Easy, $\Delta m \approx 0.5$			

Object: β UMa	Date: 11/5/11	Time: 0:30 UT	N •
Instrument: 12x60HH TRANS. II	Seeing: II	Power: 1X	
Description: Easy, even very low in NW			

Object: ϵ Lyr	Date: 11/5/11	Time: 0:45 UT	N •
Instrument: (2x60HH) TRANS. II	Seeing: II	Power: 1X	
Description: Confirmed with Very difficult but confirmed w/ b/s			

Object: ν Cyg	Date: 11/5/11	Time: 1:10 UT	N •
Instrument: 12x60HH TRANS. II	Seeing: II	Power: 1X	
Description: 1X wide pair easy, closer pair just split			

Object: θ Tau	Date: 11/5/11	Time: 2:45 UT	N • •
Instrument: 12x60HH TRANS. II -	Seeing: II	Power: 1X	
Description: 1X Easy, though low, in Hyades			

Object:	Date:	Time:	N
Instrument: 12x60HH TRANS.	Seeing:	Power:	
Description:			

GEOGRAPHIC LOCATION: (TULSA 1) TULSA 2 _____

ADDENDUM FOR 5 NAKED
EYE DOUBLE STARS - BRAD YOUNG

BINOCULAR DOUBLE STAR CLUB

42/45 LOG SHEET

Object: $\theta_2 + \theta_1$	Date: 12/28/11	Time: 2:00 ^{PM}	N ...
Instrument: 20x80 MT TRANS. II 12x60 HH	Seeing: II	Power: 20	
Description: Hint at 4.m θ_1 (3 hrs. sec)			

Object: 88 Tau	Date: 12/30/11	Time: 1:00	N .
Instrument: 20x80 MT TRANS. I- 12x60 HH	Seeing: II	Power: 20	
Description: 528 ^{W+} 1.0			

Object: 62 Eri	Date: "	Time: 1:05	N .
Instrument: 20x80 MT TRANS. I- 12x60 HH	Seeing: II	Power: 20	
Description: 528 closer & no color			

Object: π Tau	Date: "	Time: 1:10	N .
Instrument: 20x80 MT TRANS. I- 12x60 HH	Seeing: II	Power: 20	
Description: 20x80 MT 427 B12m			

Object: 59 Eri	Date: "	Time: 1:40	N . .
Instrument: 20x80 MT TRANS. I- 12x60 HH	Seeing: II	Power: 20	
Description: 20x80 MT Easy, wide			

Object: γ Lep	Date: "	Time: 1:50	N .
Instrument: 20x80 MT TRANS. II	Seeing: II	Power: 20	
Description: 20x80 MT Yellow & orange			

program
↓
WHILE
NEAR!
• 80R1

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: $\beta + 1/12$ Cam	Date: 12/30/11	Time: 1:55	N •
Instrument: 20x80MT TRANS. II	Seeing: II	Power: 20	
Description: Orange + hmt + blue for N pair White & yellow for S			

Object: η CMa	Date: 1/28/12	Time: 3:45	N •
Instrument: 20x80MT TRANS. II	Seeing: IV	Power: 12x	
Description: Easy, wide icy blue + white			

Object: $\Delta 47$ (CMa)	Date: 1/28/12	Time: 3:50	N ••••
Instrument: 20x80MT TRANS. II	Seeing: IV	Power: 12	
Description: w/ham Cr 140 Orange + whitish			

Object: $\kappa 3945$ (CMa)	Date: 1/28/12	Time: 4:00	N •
Instrument: 20x80MT TRANS. II	Seeing: IV	Power: 12	
Description: 20x80MT Both orange No gap $\Delta m < 1$ Very difficult, mainly due to wind			

Object: $\kappa + 4$ (Pup)	Date: 1/28/12	Time: 4:10	N ••
Instrument: 20x80MT TRANS. II	Seeing: IV	Power: 12	
Description: 20x80MT Very evenly matched & orange. wide			

Object: ζ Leo	Date: 1/28/12	Time: 4:20	N ••
Instrument: 20x80MT TRANS. II	Seeing: IV	Power: 12	
Description: 20x80MT icy blue & whites			

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2 _____

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: γ Gem	Date: 1/29/12	Time: 1:05	N . . . ←
Instrument: 12x60HH TRANS. II	Seeing: II	Power: 20	
Description: 20x80MT White & white DMV3			

Object: 20 Gem	Date: 1/29/12	Time: 1:55	N . .
Instrument: 12x60HH TRANS. II	Seeing: II	Power: 20	
Description: 20x80MT Nice yellows - sh. & between			

Object: δ Gem	Date: 1/29/12	Time: 2:00	N . .
Instrument: 12x60HH TRANS. II	Seeing: II	Power: 20	
Description: 20x80MT Yellow & sl. blue			

Object: 65+64 Gem	Date: 1/29/12	Time: 2:10	N . . ↙ ↘ ↑ Am
Instrument: 12x60HH TRANS. II	Seeing: II	Power: 20	
Description: 20x80MT Great field			

Object: 14 CM:	Date: 1/29/12	Time: 2:30	N . .
Instrument: 12x60HH TRANS. II	Seeing: II	Power: 20	
Description: 20x80MT Easy, wide			

Object: ϵ Cnc	Date: 1/29/12	Time: 2:45	N . .
Instrument: 12x60HH TRANS. II	Seeing: II	Power: 20	
Description: 20x80MT Gold & hint of green			

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2 _____

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: 5 Lyn + ?	Date: 2/1/12	Time: 1:10	N • ↑ 15
Instrument: 2x80MT TRANS. I-	Seeing: II	Power: 20	
Description: 2x80MT Orange & white other wide dbl not listed			

Object: 35 Cam (Aur)	Date: 11	Time: 1:15	N • ↑ 15
Instrument: 2x80MT TRANS. I-	Seeing: II	Power: 20	
Description: 2x80MT Bluish white Amv4			

Object: 19 Lyn + ?	Date: 1	Time: 1:35	N • ↑ 15
Instrument: 2x80MT TRANS. I-	Seeing: II	Power: 20	
Description: 2x80MT Beautiful field other dbls not listed			

Object: 8 Leo	Date: 2/22/12	Time: 2:30	N • ↑ 15
Instrument: 2x80MT TRANS. II	Seeing: III	Power: 20	
Description: 2x80MT Adv only, then confirmed			

Object: 33 Ari	Date: 2/25/12	Time: 3:45	N • ↑ 15
Instrument: 2x80MT TRANS. I	Seeing: II	Power: 20	
Description: 2x80MT RCAN required			

Object: F Hyd	Date: 3/2/12	Time: 1:40	N • ↑ 15
Instrument: 2x80MT TRANS. II	Seeing: II	Power: 20	
Description: 2x80MT Yellow & hint of blue			

GEOGRAPHIC LOCATION: TULSA TULSA2 _____

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: 27 Hyd	Date: 3/2/12	Time: 4:15	N . :
Instrument: 12x60 PH TRANS. II	Seeing: III	Power: 20	
Description: 20x80 MT Nice, wide 5+7 mag			

Object: I' Hyd	Date: 11	Time: 4:20	N . :
Instrument: 12x60 PH TRANS. II	Seeing: III	Power: 20	
Description: 20x80 MT Nice wide dbl, sl. y & white			

Tim Hyda
nice PH

Object: 1 Leo + ?	Date: /	Time: 4:30	N . :
Instrument: 12x60 PH TRANS. II	Seeing: ↓	Power: 11	
Description: 20x80 MT not listed. Y = Y & W ↓ = y-o & white & nice			

← ?
← 7

Object: 83 Leo	Date: /	Time: 4:35	N . :
Instrument: 12x60 PH TRANS. II	Seeing: ↓	Power: 11	
Description: 20x80 MT JUST split			

Object: 93 Leo	Date: /	Time: 4:40	N . :
Instrument: 12x60 PH TRANS. II	Seeing: ↓	Power: 20	
Description: 20x80 MT sl. B & white 9m diff. H & L			

Object: 42 LM:	Date: 3/4/12	Time: 2:55	N . :
Instrument: 12x60 PH TRANS. II	Seeing: II	Power: 20	
Description: 20x80 MT W & orange sh, nice Δ			

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: 65 UMa	Date: 3/4/12	Time: 3:00	N ..
Instrument: 12x60HA TRANS. II	Seeing: III	Power: 20	
Description: 20x80MT Beautiful, new green whites			

Object: 67 UMa	Date: ↓	Time: 3:05	N ..
Instrument: 12x60HA TRANS. II	Seeing: ↓	Power: 20	
Description: 20x80MT Nice, actually a wide triple			

Object: $\Sigma 1474$ (Hyd)	Date: ↓	Time: 4:30	N ..
Instrument: 12x60HA TRANS. II	Seeing: ↓	Power: 20	
Description: 20x80MT EXCELLENT FIELD LAMINATE TRIP. Wow! STAR, NOT ONLY 1ST CLOSEST RING NO GAP BETWEEN SEC, ALL WHITES			

Object: 12 Com	Date: ↓	Time: 4:40	N ..
Instrument: 12x60HA TRANS. II	Seeing: ↓	Power: "	
Description: 20x80MT Easy, 588m			

← $\Sigma 1639$
Hint of 9m
@ 1900

Object: 17 Com	Date: ↓	Time: 4:45	N ..
Instrument: 12x60HA TRANS. II	Seeing: ↓	Power: "	
Description: 20x80MT Wide, corner stone to 45656 the rest			

Object: L Boo	Date: ↓	Time: 4:50	N ..
Instrument: 12x60HA TRANS. II	Seeing: ↓	Power: 20	
Description: 20x80MT W 2 sl. blue			

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2 _____

BINOCULAR DOUBLE STAR CLUB

LOG SHEET

Object: 70 Vir	Date: 3/1/12	Time: 3:20	N •
Instrument: 12x60HH	TRANS. II	Seeing: II- Power: 20	
Description: 20x80MT Very wide 589mW visible			

Object: $\Sigma 1740$ (Vir)	Date: "	Time: 3:45	N •
Instrument: 12x60HH	TRANS. "	Seeing: " Power: 20	
Description: 20x80MT both yellowish $\Delta m < 0.5$			

Object: 40,41 Dra	Date: 4/1/12	Time: 3:30	N •
Instrument: 12x60HH	TRANS. II-	Seeing: II Power: 20	
Description: 20x80MT Nice split, not mag with 2nd			

Object: $\Sigma 2273$ (Dra)	Date: 4/1/12	Time: 3:40	N •
Instrument: 12x60HH	TRANS. II-	Seeing: II Power: 20	
Description: 20x80MT Nice little pair, $\Delta m \approx 1$, nearly split			

Object: 14 Ari	Date: 4/2/12	Time: 1:35	N ↓ • •
Instrument: 12x60HH	TRANS. II	Seeing: III Power: 20	
Description: 20x80MT LOW BUT SEEN one 8m @ 280° easy other @ 35° DIFFICULT			

Object: $\sigma_{1,2}$ Tau	Date: //	Time: 1:50	N • •
Instrument: 12x60HH	TRANS. II	Seeing: III Power: 20	
Description: 20x80MT Easy & bright bluish-whites			

* or Tau

GEOGRAPHIC LOCATION: TULSA 1 TULSA 2 _____

ADDITIONAL BINOC PBL STARS

OBJECT	NOTES		
	DATE 10/16/14	TIME	W-y-r STF 2993 + S 826 C (Aqr) Low
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE 10/16/14	TIME	H 5 38 (CrB)
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE "	TIME	K _{Boo} (STF 1821)
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE "	TIME	H 5 127 (Her) W+lg
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
13.	DATE 11/7/14	TIME 0155	Σ 39 AB-C (Cet)
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE "	TIME 1:00	H 5 17 (T And) LW 86
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE "	TIME 3:40	H 3 1992 (Cxi) Easy
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE "	TIME 3:50	H 3 1968 (Cet) seems a little < PA b + arc.
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE 11/8/14	TIME 2:15	STF 2273 AB WLT 53
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE 4	TIME	STF 2278 ABC
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	

A Beginner's Guide

11/10/14

S 398 (Psc)

W+sl. b

STF 136 (Psc)

11/10/14

①

ADDITIONAL BINOC PBL STARS

OBJECT	NOTES		
	DATE 11/8/14	TIME	E2549 ASD (Draco) Y-w-b (nw)
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE	TIME	E2578 (Cep) s18, w
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE	TIME	E2769 (Vul) B, s12
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE 11/10/14	TIME 5:10	Ho 465 (Peg) Pa ~ 60 or 210 tone, Am < 18m/s
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE "	TIME	7 Peg gold + w (SDV)
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE	TIME	STF 2816 ASD nice! Sketch m Fox sketch club
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE	TIME	HJ1735 ASD 7209 million (Ar only) 7243 on way before
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE	TIME	STF 2985 (And) B+w (s1)
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE	TIME	STF 2973 (Cep) Image w. gy s1. B24
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	
	DATE	TIME	STF 90 Y's.
	POWER	SEEING	
	INSTRUMENT:	TYPE F/	

HJ 2052 (cer)

11/10/14

HJ 3511 (cer)

hard!

STF 231

new

A
MIRA
C>A
B
rel

STF 274 TTE no steady gap, but 2 distinct blobs