

# ***THE TEXAS STAR PARTY***

## ***2005 TELESCOPE OBSERVING CLUB***

**BY JOHN WAGONER**  
**TEXAS ASTRONOMICAL SOCIETY OF DALLAS**

### **RULES AND REGULATIONS**

Welcome to the Texas Star Party's Telescope Observing Club. The purpose of this club is not to test your observing skills by throwing the toughest objects at you that are hard to see under any conditions, but to give you an opportunity to observe 25 showcase objects under the ideal conditions of these pristine West Texas skies, thus displaying them to their best advantage. This year we are going to get a little wild and wooly. If you thought you can observe all night and sleep all day, you are wrong. This year we will be observing 24/7. That's right, Clayton Jeter of the Houston Astronomical Society has provided us with a daytime observing program. It is called the Bright Sky Observing Program and details are below. The regular observing program is "**Eye in the Sky**". This program is a mixture of all the things that you have requested in an observing program. Brad Schaefer of Austin, Tx. wanted Naked Eye objects while Barbara Wilson of Houston, Tx. suggested Reflection Nebula. Someone else wanted Dark Nebula while still another idea was to bring back those pesky planetaries. To this end, I have listed ten Naked Eye objects. They are marked with an "NE" next to the catalog number. If for some reason your tired old eyes just can't pull them out, then you may use binoculars. Also, if you have trouble with any object on the list, make an effort and then go to the next one. I will give you credit for it. Finally, last year's program "Starlight, Starbright" is available for those that were not able to do it. So, just observe the 25 objects on either list.

That's it. Any size telescope can be used. All observations must be made at the Texas Star Party to qualify. All objects are within range of small (6") to medium sized (10") telescopes, and are available for observation between 10:00PM and 3:00AM any time during the TSP. Each person completing this list will receive an official Texas Star Party Telescope Observing Club lapel pin. These pins are not sold at the TSP and can only be acquired by completing the program, so wear them proudly.

To receive your pin, turn in your observations to ***John Wagoner - TSP Observing Chairman*** any time during the Texas Star Party. I will be at the outside door leading into the TSP Meeting Hall each day between 1:00 PM and 2:30 PM. If you finish the list the last night of TSP, or I am not available to give you your pin, just mail your observations to me at 1409 Sequoia Dr., Plano, Tx. 75023, and I will see that you get a pin.

Good luck and good observing. Now, let's get out there and **observe!!!**

P.S. If you would like to see some of your favorite objects on a future TSP program, or have any ideas for a new program, let me know during TSP or email me at [astrowagon@comcast.net](mailto:astrowagon@comcast.net)

## “Eye On The Sky”

Object	Type	R.A.	Dec	Con	Size	Mag	Date	Time
NGC 2632 NE	OCI	08 40.1	+19 59	Cnc	95	3.1		
Me1 111 NE	OCI	12 26.9	+28 16	Com	275	1.8		
NGC 5139 NE	Glb	13 26.8	-47 29	Cen	36.3	3.5		
NGC 5286	Glb	13 46.4	-51 22	Cen	9.1	7.2		
NGC 5460	OCI	14 07.6	-48 19	Cen	64	5.6		
IC 4406	PIN	14 22.4	-44 09	Lup	30"	10.2		
B 228	DkNeb	15 45.5	-34 24	Lup	240	Op 6		
NGC 5986	Glb	15 46.1	-37 47	Lup	9.8	7.5		
NGC 6231 NE	OCI	16 54.0	-41 48	Sco	14	2.6		
NGC 6405 NE	OCI	17 40.1	-32 13	Sco	33	4.2		
NGC 6475 NE	OCI	17 53.9	-34 49	Sco	80	3.3		
NGC 6523 NE	Neb	18 03.8	-24 23	Sgr	45	3.6		
NGC 6572	PIN	18 12.1	+06 51	Oph	9"	8.1		
M 24 NE	OCI	18 16.5	-18 50	Sgr	95	4.6		
NGC 6633	OCI	18 27.7	+06 34	Oph	27	4.6		
NGC 6723	Glb	18 59.6	-36 38	Sgr	11	7.2		
Be 157	DkNeb	19 02.9	-37 08	CrA	55	Op 6		
NGC 6726	Neb	19 01.7	-36 53	CrA	9	7.2		
Cr 399 NE	OCI	19 25.4	+20 11	Vul	60	3.6		
NGC 6802	OCI	19 30.6	+20 16	Vul	3.2	8.8		
NGC 6823	OCI	19 43.1	+23 18	Vul	12	7.1		
NGC 6830	OCI	19 51.0	+23 04	Vul	12	7.9		
NGC 6834	OCI	19 52.2	+29 25	Vul	5	7.8		
NGC 6940	OCI	20 34.6	+28 18	Vul	31	6.3		
NGC 7000 NE	Neb	20 58.8	+44 20	Cyg	120	4.2		

# "Bright Sky" Observing Program

By Clayton L. Jeter  
Houston Astronomical Society

With the popularity of new technologies, like go-to systems, digital setting circles, etc., that are available with amateur telescopes, it is now possible to observe during the daylight hours. With these technologies, it's no longer impossible to locate stars and planets during the daylight. Many go-to scopes have a "hibernate mode" that allows the observer to "wake up" the telescope and use the setup that was made during the previous night to observe objects during daylight hours.

Here is a challenge list of 25 stars and planets that are observable at TSP-2005 during the day light hours. The faintest object (Merak) is Magnitude +2.31, which is not that difficult in an 8" telescope. You'll notice that it is much easier to observe away from the sun. If the sun is in the western quadrant, then observe to the east for a needed object. When the telescope is correctly pointed to the desired object, let your eyes move around the field of view in the eyepiece for several seconds and soon the object will pop into view. An observer can usually see star color to some degree. The light blue color of the daylight background sky helps add contrast for viewing these objects.

Locate and log 20 of the 25 objects listed for a beautiful badge given at TSP-2005 from the observing program coordinator, John Wagoner. Good luck.

**CAUTION:** When the telescope slews (or you manually move it), cap the tube assembly and finder scope to prevent eye and telescope damage from the bright and dangerous sun.

Object	Constellation	RA.	Dec.	Mag	Date	Time
Moon	Capricornus			-11.9		
Fomalhaut	Piscis Austrinus	22h57m	-29.35	1.15		
Mars	Aquarius			0.062		
Polaris	Ursa Major	2h36m	89.17	1.96		
Capella	Auriga	5h17m	46	0.06		
Mirfak	Perseus	3h24m	49.52	1.78		
Aldebaran	Taurus	4h36m	16.31	0.84		
Vega	Lyra	18h37m	38.4	0		
Altair	Aquila	19h51m	8.52	0.75		
Schedar	Cassiopeia	0h40m	56.33	2.21		
Caph	Cassiopeia	0h9m	59.1	2.25		
Mercury	Pisces			0.25		
Dubhe	Ursa Major	11h4m	61	1.78		
Sirius	Canis Major	6h45m	-16.4	-1.47		
Rigel	Orion	5h14m	-8.11	0.15		
Procyon	Canis Minor	7h39m	5.12	0.37		
Regulus	Leo	10h8m	11.5	1.34		
Jupiter	Virgo			-2.38		
Denebola	Leo	11h49m	14.3	2.12		
Alphard	Hydra	9h27m	-8.4	1.96		
Merak	Ursa Major	11h2m	56.2	2.31		
Saturn	Gemini			0.18		
Pollux	Gemini	7h45m	28.1	1.15		
Castor	Gemini	7h34m	31.8	1.56		
Deneb	Cygnus	20h41m	45.2	1.25		

## “Starlight, Starbright”

Object	Type	R.A.	Dec	Con	Size	Mag	Date	Time
NGC 2784	Gal	09 12.3	-24 10	Hya	5.5	10.0		
NGC 2859	Gal	09 24.3	+34 31	LMi	4.6	10.9		
NGC 3109	Gal	10 03.1	-26 09	Hya	16.0	9.8		
NGC 3115	Gal	10 05.2	-07 43	Sex	8.1	8.9		
NGC 3166	Gal	10 13.8	+03 26	Sex	4.6	10.4		
NGC 3169	Gal	10 14.2	+03 28	Sex	5.0	10.2		
NGC 3175	Gal	10 14.7	-28 52	Ant	5.0	11.3		
NGC 3309	Gal	10 36.6	-27 31	Hya	4.4	11.0		
NGC 3311	Gal	10 36.7	-27 32	Hya	4.0	10.9		
NGC 3344	Gal	10 43.5	+24 55	LMi	6.9	9.9		
NGC 3432	Gal	10 52.5	+36 37	LMi	6.9	11.2		
NGC 3585	Gal	11 13.3	-26 45	Hya	6.9	9.7		
NGC 3962	Gal	11 54.7	-13 58	Crt	2.6	10.7		
NGC 4105	Gal	12 06.7	-29 46	Hya	3.7	10.4		
NGC 4106	Gal	12 06.8	-29 46	Hya	4.0	10.6		
NGC 5061	Gal	13 18.1	-26 50	Hya	4.1	10.2		
NGC 5078	Gal	13 19.8	-27 24	Hya	4.8	10.6		
NGC 5101	Gal	13 21.8	-27 26	Hya	6.0	10.4		
NGC 5102	Gal	13 22.0	-36 38	Cen	9.8	8.8		
NGC 5248	Gal	13 37.5	+08 53	Boo	6.2	10.3		
NGC 5253	Gal	13 39.9	-31 39	Cen	5.1	10.2		
NGC 5466	Glb	14 05.5	+28 32	Boo	11.0	9.0		
NGC 5676	Gal	14 32.8	+49 28	Boo	3.7	11.2		
NGC 5694	Glb	14 39.6	-26 32	Hya	3.6	9.2		
NGC 6503	Gal	17 49.4	+70 09	Dra	7.3	10.2		