## **Okie-Tex Star Party 2016**

Arrived at the OTSP on Friday, Sept 23, 2016 about 10 am. Left work in Aurora Thursday afternoon and drove to Boise City and spent the night on a side street. I helped setup the road for painting the lines on the ground by putting out orange flags and then marked the power outlets with white flags to keep people from driving on them.

Thought Friday night was going to be clear, but a hellish wind persisted, too much for my scope and it rained. By 11 pm, cleared off nicely with lightning flashes from over the horizon.

Sketched 3 of 4 constellations I needed. Phoenix doesn't stick up much above the mesa to the south. Just upper ½ stars is all. Hope it's enough for the certificate.

Tonight looks to be clear and very little wind.

# Saturday, September 24, 2016

Clear. Light breeze from SE about sunset. 74 degrees. Clear Sky Clock says sky will go after midnight. Moonrise about 2 am.

Min 1-61 8:59 PM 17mm – A pale red star. Responds well to O3. With O3 looks a bit like an out of focus star with tiny bit of extended halo.

Sky and transparency good. Stars steady.

NGC 6698	9:06 PM	17mm – Not sure which 6 star asterism it is. One is circular, short and fat, and other is linear, longer and slender.
PK 3-14.1	9:13 PM	13mm – A very small glow with hare brighter central star seen. O3 shows it nicely. See extended halo around central star. White colored planetary nebulae.
PK 1-6.2	9:30 PM	13mm – A bright, pale white out of focus star. With O3 see even more halo around a brighter central star.
NGC 6561	9:34 PM	13mm – Around a dim field star is a hint of a halo glow. This is what must have caught William Herschel's eye for there is nothing else in FOV that would.

Seeing and transparency OK low in the south.

NGC 6839	9:41 PM	13mm – 20-23 blue white stars for a long, thin wedge and then arcs
		to 3 lone stars. Approx. ¾ FOV long. Very obvious it is a
		grouping.

(PGC 65282)	10:11 PM	13mm – A very faint star. Nailed star field with charts.
NGC 6985	10:11 PM	13mm - Below and to left of MRK 509 and a 'L' asterism is a small, <u>very faint</u> , uniformly lit glow.

IC 5148 10:39 PM 13mm – A small, round, bright bluish colored halo glow.

Can see central star in center of halo glow. With O3 and without filter can see central star. Very low above mesa in south.

Seeing and Transparency Fair here now.

Sky is weird. Spent past 30 minutes looking for two 14<sup>th</sup> magnitude galaxies with no luck. Sky too bright in eyepiece.

NGC 7450 NGC 7443 NGC 7444	12:47 AM	13mm – 3 galaxies in FOV. N7450 is a tiny oval. Very dim. Has tiny, stellar core. Then below is a longer, very dim oval with 2 cores on glow. N7443 on lower right and N7444 to upper left of center.
IC 1368	1:03 AM	13mm – A small, round, <u>extremely faint</u> ghostly glow. Uniformly lit.

Seeing and Transparency OK. 52 degrees.

NGC 863	1:50 AM	13mm – A small, round, very dim glow with larger, hare brighter core.
IC 184	2:07 AM	13mm – A small, round, uniformly lit, dim glow.

#### 2:43 AM. Moonrise on eastern horizon.

The sky was good, then slipped into OK. It did this 3 times throughout the night. When it was good, found 14<sup>th</sup> magnitude galaxies. When it was OK, no contrast in eyepiece. Someone pointed out the anti-gegenschein to me as I was trying to find a faint galaxy in Pegasus. It went right thru area and I saw no contrast in eyepiece in this part of the sky.

Visited old favorites. M57, M13, M31, M32, M110 and M42. Light wind came and went all night and wind direction seemed to switch directions each time. Sometimes a cool wind and other times it was warm.

## Sunday, September 25, 2016

61 degrees at sunset. Scattered high cirrus moving W to E. Some thick clouds low along E horizon. Wind gone. Gentle breeze now and then from NE. Jet contrails disappear almost immediately. It's dry up there.

8:10 PM. Getting dark. All collimated. 58 degrees. Calm. Almost all clear. Clear overhead. Finder and Telrad aligned.

UGC 12149 8:54 PM 13mm – A faint, almost stellar looking galaxy. Nailed star

field with chart I had. Has a tiny bit of halo around it. Very small. I drew a 1 degree field picture from my Deepsky Astronomy Software this afternoon which was the key to finding it in a chain

of stars.

Seeing and Transparency good. 54 degrees.

3C 271.0	9:08 PM	13mm – A stellar galaxy. 685 million light years away. Faint, yet easy to see. Matches star field exactly. With AV, see it brighter, yet easy to see with DV.
Ter 5	9:17 PM	13mm – A small, oval knot of <u>extremely faint</u> stars. Maybe 10 or so. My eye is drawn to the faint glow of these stars. Nice. Put finder scope on star field and it was there in the eyepiece.
Pal 6	9:22 PM	13mm – Small, roundish to oval shape. 10 or so <u>very faint</u> stars of approx. same magnitude. Different from other stars in FOV.
Pal 13	9:27 PM	13mm – A very small, round, <u>very faint</u> glow. Has small, brighter core. Maybe see speckling on glow. This one looks like a globular.
NGC 7469	9:34 PM	13mm – A very small, faint oval with brighter, stellar core.

Seeing and Transparency good. Stars steady. 53 degrees.

MRK 926 (PGC 70409)	10:04 PM	13mm – A brighter, stellar galaxy.
NGC 6240	10:22 PM	13mm – A very small, <u>very faint</u> , uniformly lit oval glow. Above and to left and very near a dim field star.

Pal 15	10:30 PM	13mm – An <u>extremely faint</u> , small, roundish ghostly glow of a hint of stars. Very loose. Almost not there it's so faint yet my eye is easily drawn to it.
NGC 6384	10:36 PM	13mm – A small, round, faint glow. Has larger, hare brighter core area.
PK 102-2.1	11:06 PM	13mm – An off colored, almost orange star. Responds well to O3. Almost stellar with maybe a hint of halo, a tiny bit though if it's really there.
Min 2-51	11:18 PM	13mm – Between 2 bright field stars. More near lower one is a splotchiness in area. Best seen with Deepsky filter. No response to O3. Very subtle.
Lots of Taurio	d meteors tonig	tht and last night. Long, fast, faint streaks of light.
NGC 1050	11:28 PM	13mm – A small, very dim, uniformly lit glow.
Seeing and tra	ansparency goo	od. 47 degrees.
NGC 660	11:35 PM	13mm – A larger, long narrow glow. <u>Very faint</u> with long linear, hare brighter core down center of glow.
NGC 447	12:09 AM	13mm – A long, thin glow. Very dim. Has brighter stellar core in center and another field star below center on glow.
NGC 812	12:55 AM	13mm – A long, thin, 3:1 oval. Very faint. Uniformly lit.
NGC 968	1:01 AM	13mm – A very small, very faint fat oval. Has a lot going on in core. Core seemed textured.
NGC 917	1:05 AM	13mm – An <u>extremely faint</u> tilted oval. Uniformly lit.
NGC 50	1:18 AM	13mm – A small, fat, 2:1 oval. Very faint. Has a brighter core area and maybe a bar. There was something linear

seen once. Short but more than a bright core.

Seeing seems to be going. Great night.

1:28 AM. 43 degrees.

Meteor count way down from count earlier tonight and last night.

## Monday September 26, 2016

7:10 PM. Some high cirrus in W. Clear overhead. 72 degrees. Predicted to get down to 40 degrees tonight like last night. Already have long johns on under my jeans.

7:53 PM. 65 degrees. Clear and calm. Some cirrus to north and moving away. Saturn awesome. Rotated my eyepiece and secondary cage 90 degrees so it's to the side now instead of above scope. Had not setup my scope in over a year and forgot. With it on the top of scope, made it hard to use. Collimated and Saturn nice. Mars seems to be in a gibbous phase.

A wide thin cloud has formed overhead and stretches from W horizon to E horizon. Antares twinkling a bit in SW, but Deneb overhead is not.

Pal 5 9:19 PM 13mm – To lower right and near a dim field star is this roundish group of 6-8 extremely faint stars with 2 brighter ones.

Seems to be a hint of a glow under these stars of maybe fainter members not seen.

Seeing and Transparency OK. 60 degrees.

Not finding any galaxies in NW.

NGC 6482	9:45 PM	13mm – Under a brighter field star is this dim, very small, long narrow glow. Has bright stellar core just under field star in center of glow. Galaxy below field star. A bit of the upper part of halo glow under this star. Made it very hard to find.
UGC 12221	9:55 PM	13mm – An <u>extremely faint</u> ghostly smudge of light. Think it's a very small, long galaxy. Saw it good once for an instant. Uniformly lit.

Seeing and Transparency still OK. Not seeing faint galaxies or it would be a good rating. 61 degrees.

NGC 7097	10:41 PM	13mm – Very low in south. A small, roundish or fat oval dim glow. Has larger, hare brighter core area.
NGC 7097A	10:43 PM	13mm – Then below N7097 and near is this very small, roundish, very dim glow with tiny, brighter stellar core.
NGC 7421	10:57 PM	13mm – A medium sized, long fat oval. Dim. Has a complex speckled longer core in center of halo glow.
IC 1459	11:08 PM	13mm – A medium sized fat oval. Uniformly lit. Dim.

NGC 7632	11:15 PM	13mm – To left and near a dim field star is this small, very faint oval, uniformly lit glow.
NGC 7412	11:19 PM	13mm – A small, <u>very faint</u> , roundish, uniformly lit glow. Maybe a hint of a hare brighter core seen.
NGC 7412A	11:19 PM	13mm – Above and near N7412 is this tiny, roundish, extremely faint smudge of light. Barely there but my eye sees 2 glows in eyepiece of each galaxy.
NGC 7070	11:25 PM	13mm – A very small oval, dim halo glow with brighter stellar core.
NGC 7070A	11:25 PM	13mm – Then above and to right and near N7070 is an almost identical galaxy to N7070. A very small, dim oval glow with brighter stellar core. Can tell center line of ovals (cores) different from each other.
IC 5325	11:34 PM	13mm – To upper right and touching a brighter field star is this very dim, very small, thin oval, uniformly lit glow.
NGC 7713		
NGC 7713	11:45 PM	13mm – A long, fat, ¼ FOV long tilted oval. Dim. Uniformly lit. Didn't see any brightening in the core area. A nice surprise. Maybe most of what's seen is core and dimmer to tapered arms top and bottom.
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	ransparency go	lit. Didn't see any brightening in the core area. A nice surprise.  Maybe most of what's seen is core and dimmer to tapered arms top and bottom.
Seeing and Tr	ransparency go	lit. Didn't see any brightening in the core area. A nice surprise.  Maybe most of what's seen is core and dimmer to tapered arms top and bottom.  od this low above southern horizon.  13mm – Above and to right of N7713 is this very small, extremely faint smudge of light. It's there but it's dimness makes it hard to find. Where it should be in FOV with respect to RA and

Sky is soft now. Milky Way not crisp and other stars seems only brighter ones shining.

tiny stellar core in center of glow.

13mm – A very small, very faint, tiny edge on. Has brighter,

stellar core.

PGC 474 12:14 AM

G73 in M110 12:31 AM 13mm – Followed the picture I had. G73 is a tiny, very faint *star* seen with DV and even better with AV.

Sky is too soft to find galaxies. Tried to find 2 and not there. Tried to find C39 in M33. Couldn't find the stars I wanted that point at it. Will try again tomorrow night when it's lower in east sky.

I was pleased I found all my Arp Galaxies in Grus, Phoenix, Sculptor and Fornax I wanted to see. They were hard to find because stars in that part of sky were a bit bloated and I was looking just above the mesa to the south.

56 degrees when I turned in at 1:50 AM. Saw 3 nice meteors too boot.

### Tuesday September 27, 2016

Clear and calm at sunset. Relative humidity predicted to be approx. 40% till 2 AM when it's up to 55%. Will see. 78 degrees.

8:52 PM. 70 degrees. M13 is awesome and Sky Commander is pointing nicely. Light breeze from SSW. Polaris didn't focus well nor Saturn. But Altair did.

NGC 4331 8:58 PM

13mm – It popped into view once. A very faint, wound, uniformly lit glow. Waited and it tried to come in again. Almost did.

Seeing and Transparency OK in north. Not finding galaxies easily here. Moving to Cygnus which is overhead.

NGC 7116 9:29 PM

13mm – A faint, tilted oval, 3:1. Has hint of a larger, hare brighter core area in center. Took a bit to find this one.

Seeing and Transparency good. Brisk wind now from SSW. 71 degrees.

NGC 6764 9:37 PM

13mm – It's under a brighter field star. It is a dim, medium sized, tapered oval. The glow is lopsided to the upper right and below star but star on halo glow to lower left of center. Pretty uniformly lit. Maybe a hint of a hare brighter core to right of field star. Glow definitely not symmetric around field star.

NGC 7288 10:02 PM

13mm – A very small, thin oval glow. Extremely faint. Has tiny stellar core on glow.

Seeing and Transparency good. 65 degrees.

NGC 7292 10:09 PM

13mm – A medium sized tilted oval. Dim. Has a larger, hare brighter complex core area.

MGC +03-54-002 10:19 PM

13mm – A <u>very faint</u> circular glow that almost fills entire FOV. The glow is splotchy. Maybe hint of CCW arm over right hand side and top. Seems a brighter area, a bit left of center with 3 very faint field stars and maybe the core underneath this area. Very subtle but definitely the glow has an edge around it.

NGC 7664 10:28 PM 13mm – A small, thin tilted oval. 4:1. Pretty uniformly lit. Very dim.

Seeing and transparency good. 59 degrees. Wind gone.

NGC 7722 10:33 PM 13mm – A small oval. Very dim. Has brighter, larger core area. More than just a stellar core. Maybe tiny bar.

Refueling plan just flew overhead going to the NW.

UGC 12281	10:47 PM	13mm – An <u>extremely faint</u> , very small ghostly glow. Tiny, <u>extremely faint</u> stellar core in center of an almost not there halo glow. Near a field star it's supposed to be to the left of.
C39 in M33	11:19 PM	13mm – M33 is awesome. C39 is an <u>extremely faint star</u> that is barely there and pops into view now and then. Stars bloated a bit so I'll come back to it.
NGC 605	11:25 PM	13mm – A very small, <u>extremely faint glow</u> . Hard to tell if fat oval or circular in shape. Has a hare brighter core.

Wind is warm, then cold, then warm again and now colder. 57 degrees.

UGC 2034	11:32 PM	13mm – A small, think oval, 3:1. Very dim. Has hare brighter,
		larger core area. Has a dim field star to upper right and near but not
		touching.

Seeing and transparency good although the stars are a bit bloated.

NGC 968	11:40 PM	13mm – A very small, extremely faint oval. Has larger, hare
		brighter core area with lots of detail. Not just a stellar core but
		more complex.

Just watched a slow moving, tumbling something move thru FOV. Winks pretty fast as it moves slowly from lower left to upper right in FOV.

C39 in M33 1:23 AM 13mm – It's <u>extremely faint</u> but I can see it where it's supposed to be.

Had to realign Sky Commander.

NGC 59	1:35 AM	13mm – A small, <u>very faint</u> , fat to almost circular shaped galaxy. Has larger, hare brighter core area.
NGC 885	1:41 AM	13mm – A small, very faint, lens shaped galaxy. Has maybe a bar in core.

Seeing and Transparency OK. 54 degrees. Sky is a bit soft.

NGC 1320	2:03 AM	13mm – A small, very dim, lens shaped galaxy with hare brighter core.
NGC 1103	2:13 AM	13mm – Under a dim field star that is a bit to right of core and on glow, is this long, thin, 3:1, <u>very faint glow</u> . Has tiny, brighter stellar core in center of halo glow. To left of dim field star and very near.
NGC 1590	2:25 AM	13mm – A very small, <u>very faint</u> , thin oval that has a tiny hare brighter core area.

Stars all bloated real good around Orion area. 49 degrees. Sky soft.

Went down to see Mike Prochoda and Bernie Poskus to wait out sky but by 3:30 AM, stars still very bloated around Orion. Put scope away, took my shower and hit my pillow about 4 AM.

Saw few nice meteors. Count seems to have picked up. One really <u>bright</u>, greenish one low in SE. Very nice.

## Wednesday September 28, 2016

Sky predicted to be soft by 2 AM. If so, I'll get to bed early.

Clear overhead. Calm at sunset. 71 degrees. Clouds low along N and S horizons.

Added Argo Navis tonight. First align and found M13. Then onto M22. Was way off. Going CCW in AZ. Saw slippage in AZ counter that way. 2<sup>nd</sup> align and M13 way off. Back to Sky Commander and M13 found easily.

NGC 3735	9:08 PM	13mm – A long thin 5:1, medium sized edge on. See central glow broken into 2-3 pieces. Not uniformly lit thru core. Very dim.
NGC 3397	9:11 PM	13mm – A very small lens shaped dim glow. Has large, brighter core that seems to have central area then a bit dimmer next to each side. Maybe a bar.
NGC 3465	9:26 PM	13mm – A <u>very faint</u> glow. Very small. Under a bright field star that hides it nicely.

Seeing and transparency good. 66 degrees. Stars steady.

NGC 3218 9:31 PM 13mm – A medium sized tilted oval. Longer. Pretty uniformly lit. Very dim.

Seeing soft. M33 doesn't look very good. Only see core.

PK 33-5.1	9:55 PM	13mm – A brighter, off white colored star. With O3, see it real bright and now can see a small out of focus looking star planetary nebulae.
PK 40-0.1	10:04 PM	13mm – The lower star of a close pair is this white colored star that responds very well to the O3 filter.
PK 47+4.1	10:09 PM	13mm – A pale white star that responds well to the O3 filter.

10:29 PM. High thin haze has taken over the sky. Only brighter stars shining thru this.

### Thursday September 29, 2016

Brisk wind from SW. Clear but seeing and transparency not good. M33 is soft.

Tried to test Argo Navis again tonight. Did Alt Ref. Align Altair, then Polaris with WARP 0.00. Tried to find M33 in east but AN wanted me to slew west. On M33 but AN wanted me to go 134-> and 8.9 down. M13 in west and AN wanted me to go east to find it. All settings seem OK. (Found my sign on AS was + and should have been -. I changed this from last night thinking it was the issue). Need to test the AN at home in the driveway.

Way too windy to put Sky Commander in and use. M33 was soft and not showing much detail like other nights.

Used Bernie's 16", f/4.5 with a 13mm eyepiece.

Galaxy cluster in Pegasus/Pisces border.

NGC 7623 11:30 PM A very small, very faint oval. Uniformly lit glow.

NGC 7626 A very small, dim oval with tiny, brighter core.

NGC 7619 A small, dim oval with brighter core.

NGC 7617 A tiny, extremely faint oval with tiny, hare brighter core.

Above 4 galaxies all in same FOV.

Then in next FOV below above 4 are 2 more galaxies.

NGC 7611 A very faint, round, uniformly lit glow.

IC 5309 Below and to right of N7611 and in same FOV is this

tiny, extremely faint, round, uniformly lit glow.

The in next FOV above first 4 galaxies:

NGC 7631 A very small, very faint oval uniformly lit glow.

Then in next FOV to above first 4:

NGC 7612 A very faint, tiny, uniformly lit glow.

Spent some time with high school students from Norman Oklahoma. Bernie and others showed them the eye candy in the sky.

Took my shower and headed to bed.

## Friday September 30, 2016

Put the upper cage and truss poles away this afternoon because of tonight's predicted wind that didn't happen.

Went to hang out with Mike and Bernie. Mike uses a SkyFi plugged into his Sky Command ServoCat port and connects his scope to SkySafari. Put the Telrad marker on the stars in SkySafari and when he pushes his scope around, the Telrad bullseye follows the sky and he can push the scope to objects on the SkySafari display. Way cool.

Bernard's Galaxy 9:40 PM 17mm in Mike's 18" f/4.5 scope – Fills FOV with very faint, large oval glow. Nice.

Looked at the same galaxy cluster in Bernie's scope as last night. Then clouds started moving in from west. They lingered over the mesa but when lightening started to flash from over the horizon, they moved in quickly. Everyone covered their scopes and it soon started to rain.

# Saturday October 1, 2016

I have my scope all packed in the motorhome. Won a nice door prize as the last pick before the grand prizes. The first 3 volumes of the Annals of the Deep Sky. Now I'll have to buy the entire set.

Hung out with Jim Alwine from 3RF and John, a marine from Texas. It rained while we were listening to the speaker but cleared. Looked at a couple of things in John's scope and then went to bed.

Left Okie-Tex about 7 am Sunday morning and headed home. A nice break and saw some cool stuff.