



# The Astronomy Club of Tulsa Observer



## MARCH 2010 EDITION



NGC1999 Relection Nebula

PRC00-01 Space Telescope Science Institute NASAand The Hubble Heritage Team (STScI)

Send your astronomy image to [ACT\\_PM@astrotulsa.com](mailto:ACT_PM@astrotulsa.com) to have it featured here in future issues!

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### March at a Glance

- Meeting 26<sup>th</sup>
- Member's star party 12<sup>th</sup>
- Sidewalk Astronomy 27<sup>th</sup>
- International Sidewalk Astronomy Night 20<sup>th</sup>

Meeting Date	Scheduled Speaker
Friday, March 26, 2010	Neta Apple – Former ACT Member
Friday, April 30 ,2010	To Be Determined
Friday, May 28, 2010	To Be Determined
Friday, June 04, 2010	* <i>Summer Series</i> - Speaker TBD
Friday, July 02, 2010	* <i>Summer Series</i> - John Land
Friday, August 13, 2010	* <i>Summer Series</i> - Speaker TBD
Friday, September 24, 2010	Dr. Peter Shull – OSU
Friday, October 22, 2010	Tom McDonough – Club Elections
Friday, November 19, 2010	2011 Club President – Dinner Meeting
Friday, December 17, 2010	Dr. Aaron Coyner – Goddard Space Center

## Guest Speaker for March Meeting



The Astronomy Club of Tulsa is excited to announce that our March 26th meeting at TCC Metro Campus will have Neta Apple as our featured speaker. Former ACT member, Neta Apple has recently completed a MS degree in Astronomy from Swinburne University of Technology, Melbourne, Australia, which ranks as one of the top 500 universities in the world and in the top four in Australia.

<http://xmm.sonoma.edu/ambassadors/neta.html>

The Subject of Neta's talk will be:

*“Active Galactic Nuclei: Many Models or One?”*

What are the most long-lived and powerful objects in the Universe, continuously emitting more energy than the Sun will in its entire lifetime, and have masses equal to millions or billions of Suns, yet may be smaller in size than our own solar system? Active Galactic Nuclei!

Known variously by such names as quasars, radio galaxies, blazars, to name just a few, AGN appear to be highly diverse objects based on what can be seen of them from our perspective on Earth. But observations in radio wavelengths and from space-based telescopes such as NASA's Fermi and XMM-Newton seem to show otherwise. In this program it will be shown how Fermi and XMM-Newton contribute to the study of AGN, and how publicly available radio and optical data from AGN stack up against current theories of AGN.

*When:*           **Friday, March 26, 2010 7:00 PM**

*Where:*          **TCC Metro Campus - Philips Auditorium**

- Located in Building 2 at the corner of 9th and Cincinnati. Park on NORTH side in Lot 5 on 9th and Boston Ave. From the BA Expressway – take the Detroit Exit and go north to 9th St and then turn left. The meeting room is on the NE corner of the buildings

Currently living in Adrian, Missouri (not by choice- Tulsa is still home!) with her husband and two sons, Neta is an active visual observer (when the lousy Missouri weather permits!). Neta is highly interested and active in public education and outreach, and she has been actively involved in the Night Sky Network formerly with ACT and now in the Astronomical Society of Kansas City. Neta is also a member of the American Association of Variable Star Observers, the American Astronomical Society, and the National Science Teachers Association.

In 2008 Neta was invited to become a NASA High-Energy Astrophysics Educator Ambassador. As one of 18 EAs in the US and Canada, Neta helps develop and evaluate educational materials, leads teacher workshops, does classroom visits, and gives public talks. The group is administered from the NASA E/PO group at Sonoma State University located about an hour north of San Francisco. The group does E/PO work for several missions including Swift, XMM-Newton, and Fermi.

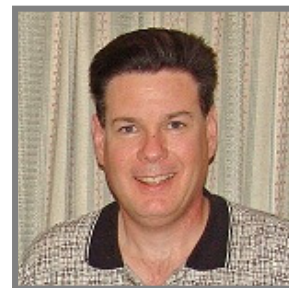
## President's Message

Now that the weather is beginning to warm up it's time to whip the observatory into shape for the summer observing season. On Saturday, March 20<sup>th</sup>, we will have a work day to clean out the building and do some grounds maintenance. We need all the help we can get, since the continued use of the facility depends on volunteer labor. Contact Chris Proctor our Facility Manager to get more details and to sign up! In the near future, we will also be changing the locks on the observatory in order get control of the access. A nominal fee will be charged for new keys to help defray the cost.

We've had disappointing news; we will not have John Dobson for our guest speaker at the April meeting. He is having some health issues and is not traveling. So, as it stands now, we do not have a speaker for April or May. If anyone is interested in presenting a topic, please let me know.

It is time to make a push to sell our remaining calendars. The price is now \$6 and we still have plenty left. Contact any board member to request some.

We still have four positions open on the board and are looking to fill the Program Director and Webmaster positions. If anyone is interested in serving, please let any club officer know.



*Tom McDonough*  
*ACT President*

***Keep Looking Up!***

***Tom McDonough***

**The Astronomy Club of Tulsa would like to welcome its most recent new members,  
Vincent Adams and James Dewey**

Please visit the clubs website at [www.astrotulsa.com](http://www.astrotulsa.com) for valuable information regarding observing, basic night sky lessons, useful links, club contacts and archived editions of this newsletter.



**Globe at Night 2010 - March 3 to March 16**

<http://www.globeatnight.org/>

GLOBE at Night is an annual 2-week campaign in March. People all over the world record the brightness of their night sky by matching its appearance toward the constellation Orion with star maps of progressively fainter stars. They submit their measurements on-line and a few weeks later, organizers release a map of light-pollution levels worldwide.

# Logging Logging Logging

By Ann Bruun

Binocular Observing Sheet			
Object: <u>M52 open</u>	Date: <u>9-30-2008</u>		
Constellation: <u>Cassiopeia</u>	Time: <u>8:45p</u>		
Instrument: <u>10x50</u>	Seeing: <u>7/10</u>		
Observer: <u>Ann Bruun</u>	Transparency: <u>5.0</u>		
Notes: <u>Nice haze of fine stars. Not very large but it sticks out even in the sea of stars in that area. Kenton, Oklahoma</u>			
Object: <u>M81 Galaxy</u>	Date: <u>9-30-2008</u>		
Constellation: <u>Ursa Major</u>	Time: <u>9:02p</u>		
Instrument: <u>10x50</u>	Seeing: <u>7/10</u>		
Observer: <u>Ann Bruun</u>	Transparency: <u>5.0</u>		
Notes: <u>Beautiful bright galaxy. Kenton, Oklahoma</u>			

When it comes to logging your observing sessions, there really is no “right” way to do it. If you are pursuing an Astronomical League certificate, there are certain requirements about what must be logged, but how you do it is really up to you. Your log should, above all else, be meaningful to you. The League offers observing sheets, which can be downloaded and used for observations at [www.astroleague.org](http://www.astroleague.org). Also, there are computer programs you can use for logging or you can simply record all the information in a notebook. Any of these methods will work. I like to use a two-pronged approach to logging.



Ann Bruun  
ACT Vice President

Object: <u>Alpha Leonis</u>	Date: <u>5-31-09</u>	Time: <u>9:28p</u>	N
Instrument: <u>12" Lightbridge</u>	Seeing: <u>6/10</u>	Power: <u>123X</u>	• •
Description: <u>My first double star list observations</u>			
Object: <u>Gamma Leonis</u>	Date: <u>5-31-09</u>	Time: <u>9:49p</u>	N
Instrument: <u>12" Lightbridge</u>	Seeing: <u>6/10</u>	Power: <u>123X</u>	• •
Description: <u>Close pair, very cool</u>			
Object: <u>54 Leonis</u>	Date: <u>5-31-09</u>	Time: <u>9:49p</u>	N
Instrument: <u>12" Lightbridge</u>	Seeing: <u>6/10</u>	Power: <u>123X</u>	• •
Description:			
Object: <u>Zeta Ursa Major</u>	Date: <u>5-31-09</u>	Time: <u>10:09p</u>	N
Instrument: <u>12" Lightbridge</u>	Seeing: <u>6/10</u>	Power: <u>59X</u>	• •
Description:			
Object: <u>Kappa Bootes</u>	Date: <u>5-31-09</u>	Time: <u>10:16p</u>	N
Instrument: <u>12" Lightbridge</u>	Seeing: <u>6/10</u>	Power: <u>59X</u>	• •
Description:			
Object: <u>Iota Bootes</u>	Date: <u>5-31-09</u>	Time: <u>10:25p</u>	N
Instrument: <u>12" Lightbridge</u>	Seeing: <u>6/10</u>	Power: <u>59X</u>	• •
Description:			

## Personal Log

I keep a spiral notebook in which I write about all my observing sessions. I record where, when, who was there, what we looked at and descriptions or rough drawings of anything we saw that was really exciting. I keep brief notes during the session but I don't write this summary up until the next day. It is really a personal log because it comes down to who was there and what did we share.

## Astronomical League Logging

When it comes to logging objects for an A. L. list I am more formal. During my observing sessions I use the observing sheets offered by the league. This way I know I am recording all the required information. You can create your own sheets or just use a notebook as I said. The requirements for the League observing clubs can be different for each club so you must check the website to

find out what you must log. Most lists require: Object, Date, Time, Seeing, Transparency, Instrument used, magnification and a brief description or drawing or both.

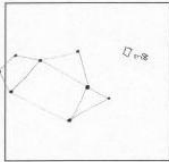

## Logging Logging Logging -continued

### Seeing and Transparency

All the requirements are self-explanatory except *seeing* and *transparency*. What is seeing? It is simply how much the stars are shimmering. The more they shimmer, the worse the seeing. The shimmer is caused by different temperature layers moving around in the atmosphere. I grade seeing on a scale of 1 to 10. 10/10 being excellent seeing, no shimmer at all and 1/10 being – the stars look like colored disco balls. So 5/10 would be so-so seeing.

Transparency is a measure of the contrast of the sky. You pick out the faintest star you can see naked eye. So if the faintest star you can pick out is a 5<sup>th</sup> magnitude star you would log 5.0 under transparency. This figure will be different for different people. Transparency is sort of an eyesight test, it is personal the same way “seeing” is a matter of opinion. Even so, they give other people an idea of what kind of night it was when you made your observations. You need to recheck seeing and transparency throughout the evening because conditions usually will change.

Unfortunately, that’s not quite all there is to logging. The first few sheets you fill out may seem complicated but you will quickly get used to gathering the required information. Probably the hardest part about logging is the fact that you are outside, in the dark and there might be wind or freezing cold, dew or you might be getting eaten alive by mosquitoes. Everyone struggles with this. It is one of the things that bond us together as amateur astronomers. All of these things make it more difficult to record your observations and you never know what the night is going to throw at you. That is why looking over your sheets the next day is such a thrill, only you know what you had to go through to capture those objects. So hang in there and keep on logging.

Observing Log			
Object: <u>M 8 Lagoon Nebula</u>	Date: <u>9-15-06</u>	UTC/civil	
Right Ascension: <u>18° 55' 78"</u>	Time: <u>10:15 P</u>	UTC/std/ds	
Declination: <u>-24° 23'</u>	Seeing: <u>Transparency: 4.0</u>		
Constellation: <u>Sagittarius</u>	Steadiness: <u>9/10</u>		
Magnitude: <u>3.6</u>	Temperature: <u>72°</u>		
Size: <u>40' x 40'</u>	Telescope: <u>6" 1XDS5 SN</u>		
	Eye-piece/Magnification: <u>32mm / 25X</u>		
	Filters:		
Notes: <u>The nebula surrounds a nice cluster of stars. It is very pretty and bright. RMCC observatory.</u>			
Finder Chart: <u>Sagittarius</u>	Field Size: <u>2.18°</u>		
			
Observer: <u>Paul Bruner</u>			

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[www.AstronomyBinoculars.com](http://www.AstronomyBinoculars.com)  
for more information!

## What's going on with the Sun?

By John Land



John Land  
ACT Treasurer

The sun has been exceptionally inactive for the past two years. The year 2008 had 266 days without sunspots and 2009 was close behind with 260 days. The last time the sun was this quiet was in 1913 which went 311 days without a sunspot. Scientists were beginning to write dire articles – The Solar Wind Had dropped 20% - Solar Radio emissions were the lowest in 55 years – Solar irradiance had dropped 6% in the UV. Were we headed for another mini-ice age like the one that occurred when the sun mysteriously went quiet for 70 years from 1645 to 1715? After the record snowfalls of the winter of 2009, it seemed like something was wrong.

[http://science.nasa.gov/headlines/y2009/01apr\\_deepsolarminimum.htm](http://science.nasa.gov/headlines/y2009/01apr_deepsolarminimum.htm)

Well just like Oklahoma weather forecasts, nothing stays the same for long. Without warning, Solar Cycle 24 started reviving its engines. Since Mid-December 2009 there have only been 3 days without sunspots. February 2010 was the first month since 2007 to have sunspots everyday. There have been numerous images of northern lights on the Internet and space satellites have recorded several strong solar flares and coronal mass ejections (CME's).

**So, its time to start watching the sun again!**

The Astronomical League has a special observing program called the "Sun Spotters Club" just to get you started.

<http://astroleague.org/al/obsclubs/sunspot/sunsptcl.html>

Now, the first **WARNING** you see on every telescope says **NEVER LOOK DIRECTLY AT THE SUN**. Duh! Anyone who has ever burned a leaf with the sun and a magnifying glass knows that lenses and the sun don't mix. So how am I to observe the sun safely?

**Observe the Sun on the Internet.** [www.SpaceWeather.com](http://www.SpaceWeather.com) has daily images of the sun, the official sunspot counts and lots of other information on the sun. In addition, there are frequent articles about Aurora displays, comets, interesting cloud phenomena and other things of interest. At the bottom of the page is a running count of **PHA's** or **Potentially Hazardous Asteroids** that get close enough to the Earth to present a hazard. The count is now over 1100 and rising. A small one even hit the earth last year.

### Make your own SAFE SOLAR FILTER.



**Note-** The little solar filters that screw into an eyepiece that come with some cheap telescopes are hazardous and can crack violently when overheated. **THROW THEM AWAY !!!** **The only safe kind of solar filter is one that fits over the front of the telescope and blocks all forms of harmful radiation** (light, infrared and ultraviolet radiation). You can find advertising for several different kinds solar filters, but they are often expensive.

A few years ago BAADER AstroSolar™, developed a solar filter material that has revolutionized high-resolution solar observing. This is a specially coated polymer that reflects 99.99% of the suns light – but retains high resolution when used as a solar filter. In fact, several of the commercial solar filters use this material. You can buy this material in sheets and make your own filter. I have made several of them from the same sheet. I also made some for my binoculars. On the next page are some images of one I made for my 63mm telephoto lens.

## What's Going on with the Sun -Continued

The material can be purchased from:

[http://astro-physics.biz/index.htm?products/accessories/solar\\_acc/astrosolar](http://astro-physics.biz/index.htm?products/accessories/solar_acc/astrosolar)

Be sure to buy the **VISUAL DENSITY TYPE** of material.

I also found another company that sells it a bit cheaper but its website seems out of date.

<http://www.company7.com/astrophy/options/apasolar.html>

### How I made My Solar Filter

1. I cut a one inch thick square of Styrofoam about 3 inches wider than the lens objective.
2. I carefully cut a hole a little smaller than the outer diameter of the tube so the filter would fit on snugly. It needs to fit tight so the wind won't blow it off.
3. I then cut a thick OPAQUE sheet of cardboard the size of the Styrofoam square.
4. Next, I carefully cut a square of the Solar Filter material at least an inch wider than the lens opening.
5. I taped the solar material on the inside of the cardboard using painters tape. The main thing is to tape it all the way around but not have any of the tape overlapping into the visual area.
6. I then placed the cardboard - **filter side down** - over the Styrofoam and taped it securely all the way around.
7. I also made a second cardboard square to put over the top as a cover when not in use. That completes the filter.
8. Now you must test the filter. Take it outside – hold it in front of your face – look though it at the sun. Move it around and be sure there are no holes in it. If there are holes, you must start over.

NOTE\* *If you have a reflecting telescope, you don't need a full aperture filter. Make the cover the full size of your scope but the filter area only needs to be 3 or 4 inches across. Cut the hole for the filter **off axis** – not dead center on the scope – since there is secondary mirror in the middle. See image 1.*

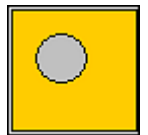
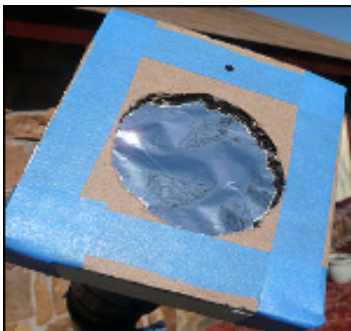


Image 1

**AIMING** your solar scope presents a problem. You can't look through your finder scope at the sun. In fact you need to cover any finders (I learned this the hard way – when I forgot and left my hand at the focal plane of the finder on my six inch scope while viewing the sun. OUCH!) To aim my scope I took an ice pick and pressed it all the way through the cardboard and Styrofoam - well away from the filter material. I had to twist it some to make a nice hole (a cut-off small straw through the hole also works well). Using the telescope's shadow I lined it up closely with the sun. I then placed the filter over the scope and moved it around until it was exactly on the sun. Lastly I made a folded tab of tape and place it on the tube so the sun shone through onto the tape. Last I made a small circle on the tab to mark where to line up the scope. I also have a reference mark to align the filter when I put it on. ( Rick – I know what you're thinking! This definitely IS "Red Neck Astronomy" )



## Groups Announcement

-from Teresa Kincannon

### St. Catherine's School Group coming out to the observatory on Friday, April 23.

Any member that would like to come out to this event, please reply with an email and let me know. I will put your email on the volunteer list for this event and you will get emails to let you know about events in the future. Groups that visit the observatory are most interested in the big objects that are easy to find. This is a good way to get some help from some of us to: set up your telescope, guidance for finding a few interesting objects for the public, sometimes we find out what eye pieces the other astronomers are using and other tips.

The students and parents will all be grateful for anything we can show them. We haven't had many groups sessions for the past year, due to our emphasizing the sidewalk astronomy, and of course having the telescope at the observatory serviced. We should not have a problem with the muddy roads by this date so let's all plan to come out and enjoy working with eager beginning observers.

The sunset will set on that date at 8:03pm. I can be at the observatory by 6:30pm and the group will come to have a picnic time. This group likes to come out each year and have a hot dog cook out with pot luck on the baked beans and cookies. This group was the one our good friend Vince Moore was involved with over the years as his kids went to the Catholic school and they were part of the church. This is a fun group of around 50 or so. If the observatory dome is not working, we can have this on the grounds with volunteers with telescopes. The moon will be first quarter which is a nice time to have a moon filter for observing the craters and more details at the terminator.

Green laser pointers help with showing constellations or pointing to the objects in the sky that you have focused in the eye piece.

Hoping for clear skies soon,  
Teresa Kincannon  
*Astronomy Club of Tulsa Group Director*  
[act\\_direct@astrotulsa.com](mailto:act_direct@astrotulsa.com)

## Becoming an Amateur Astronomer

-by Allen Martin



There are many times throughout our lives when we begin something new. The little things we now take for granted, have long escaped our mind's list of what is important to figure out. How to *not* fall over on your bicycle, keep your eyes open when trying to catch that pop fly ball, a little *more* gas- a little *less* clutch and telling her, "I'm sorry", regardless of whether not I feel I did anything to apologize *for*, are just a few of the things I remember getting VERY "worked-up" about, but now seem so trivial and second nature.

I am very new to the universe of astronomical observing. Despite being embarrassed by some of the things you will read here, I decided to write these articles because it may be of assistance to someone experiencing similar frustrations. The "Greek" I got when I asked questions to the *average* experienced observer flew through my noggin and became accelerated by the lack of resistance it met before exiting the other ear. So "*Greek-free*" is my purpose and total honesty is my promise.

**Buying my telescope** was no easy decision. I joined the *Astronomy Club of Tulsa* for the purpose of learning enough to make an educated decision. I sorted through most of the "Greek" and came up with some questions I had to ask myself. *What do I want to look at? Am I going to take pictures? How much can I afford? And How much room is this thing going to take up in my home and vehicle?* The short answers to the previous questions

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## Becoming an Amateur Astronomer- continued

were, “Everything, Yes, Depends on what Taylor says is okay, and A LOT, but I can take the seats out of the van.” I worried about *f-ratio* for a while, but found, through lots of research, that aperture size was more important. *f-ratio* can be confusing but, in a nutshell, It is the length that the light has to travel from the objective (*the front lens or primary mirror*) until it reaches the focal point - divided by the size of the objective. Generally, the lower the *f* number, the brighter the image will be. The higher the *f* number the more detail and greater contrast will be possible. *f-ratio* is meaningless; however, if the aperture (*the hole in the front*) isn't big enough to gather sufficient light. The general “rule of thumb”, you have probably read, is to “buy the biggest aperture you can afford”. Here's why; a lot of things up there are DIM. By getting a large aperture telescope you are allowing more light to be gathered and it will make stuff brighter and easier to see. You're not buying more “magnification” here, you're buying brightness. Magnification is accomplished with eyepieces. *f-ratio* effects magnification but, *100x* is *100x* regardless of what eyepieces you used to get it. Viewing planets is relatively easy with almost any telescope and, in fact, most agree, best done with a refracting telescope. Refractors don't use mirrors. When you think “telescope”, a refractor is what comes to most people's minds. The problem though, is that lenses are heavy and expensive. To make the “hole” in the front big enough to gather enough light to see more distant things, like galaxies and nebula, you are going to have to spend **A LOT** of money.

Enter the Reflector. Reflectors use mirrors and limit the lenses to your eyepieces. A big honkin' mirror can be made relatively inexpensively, thus giving you a better bang for your buck.

**The mount** is where most of your money can, potentially, go. In your quest, you're going to read and hear things like “German equatorial”, “ALT-AZ”, “Dobsonian”, “Newtonian”, “Go-To” and “Schmidt-Cassegrain”. Here's the simplification; A Dobsonian **IS** a Newtonian; however, the Dobsonian is mounted to a swiveling contraption that sits on the ground. If you remove it from this mount, SURPRISE, it becomes a Newtonian again. Dobsonians, Newtonians, and Schmidt-Cassegrains are ALL reflector type telescopes. There are a few variations in the Cassegrain family, but, simplified, they use MORE mirrors to accomplish the same task, but in a shorter, more manageable, package. A “Go-To” mount means that, *once it is aligned*, you can enter an object into a keypad and it will “Go-To” it, for you. I know this sounds fantastic and seemingly eliminates the need to know constellations or stars or where the heck M51 is. But, as I am quickly learning and will get more in depth about next month, this is not the case. Dobsonians use a form of “Alt-Az” mount. It is a simple 2 axis design that normally does not have tracking ability, though a few do have “Go-To” capability, but most are of the “muscle it were you want to look and keep moving it every couple minutes to manually compensate for the rotation of the Earth” kind. Some “Alt-Az” mounts can be found atop tripods in scaled down versions, but most tripods you will see have an “equatorial” mount holding the telescope to the tripod. “Equatorial” mounts are a little more complex, but have smoother movement. *Tracking* “equatorial” mounts make long exposure photography possible, which I plan to do in the future and was the basis behind my decision to purchase a tracking equatorial mount. I decided on a 10in Newtonian reflector as well, because I followed the rule of thumb and that was the biggest I was *authorized* to purchase AND it is possible to BUILD my own Dobsonian mount for it and go “manual” in the future if I so choose to do so (Rick Walker and other club members occasionally hold these workshops).

**Brand** is less important when you educate yourself on what you are buying. I talked to a lot of people with different brands and ALL have been more than happy with their scopes, as long as they educated themselves before buying and knew what to expect from their purchase. I heard a lot of good things regarding Celestron, Orion and others but saw FANTASTIC views at star parties in other branded telescopes. I did end up choosing a Celestron. Not because I thought it was better than other brands, but because it fit ALL of the criteria I desired and came packaged with a VERY GOOD tracking equatorial mount. Well, the opposite is most likely true. The mount came packaged with a very good 10in Newtonian.

Stay tuned for next month's edition “*The hilarious adventures of a guy who has no clue*”

## Upcoming 2010 Events

- Texas Star Party**                      May 9 to 16    <http://www.texasstarparty.org>
- Messier Marathon**                      April 17        *See ACT's Yahoo group for latest info*
- Grand Canyon Star Party**            June 5 to 12    <http://www.tucsonastronomy.org/gcsp.html>



*MidStates Regional convention*  
**June 4- 5, 2010 Lincoln, Nebraska**  
<http://msral.org/>



*National Astronomical League Convention*  
**June 25–26, 2010 Tucson, AZ**  
 Side trips include tours of Kitt Peak  
 national observatory  
<http://alcon2010.astroleague.org/>

- Adam's Ranch**                              July 9 and 10    *See ACT's Yahoo group for latest info*
- Nebraska Star Party**                      Aug 8 to 13     <http://www.nebraskastarparty.org/>
- Heart of America Star Party**            Sept 2 to 9      <http://www.hoasp.org/>  
 In west central Missouri
- Okie-Tex Star Party**                      Oct 2 to 10      <http://www.okie-tex.org/>

*If you know of an upcoming event not listed here that may be of interest to club members, Please email relevant information to [act\\_pm@astrotulsa.com](mailto:act_pm@astrotulsa.com)*

**ASTRONOMY CLUB OF TULSA**  
**– MINUTES –**  
**GENERAL MEETING FRI, FEB 26, 2010**

**Location:** Tulsa Community College, Metro Campus

**Present, Officers:** President Tom McDonough, Vice President Ann Bruun, Secretary Tamara Green.

**Present, Board:** Chris Proctor, Teresa Kincannon, Denny Mishler.

**Not Present, Officers:** Treasurer John Land

**Not Present, Board:** Catherine Kahbi, Steve Chapman

President Tom McDonough called the meeting to order at 7:04 PM. He then welcomed the guests to the club, and gave a brief introduction about the program for the evening. The floor was then turned over to Dr. Eddie Baron, University of Oklahoma, whose presentation was "Measuring the Universe with Supernovae".

The presentation was fun and informative.

Following the presentation, Mr. McDonough discussed the upcoming events, which are as follows:

Feb. 27 – Sidewalk Astronomy at Bass Pro

March 5 – Public Star Party

March 12 – Members Only Observing Night (M.O.O.N.)

March 13 – Messier Marathon at TUVVA *(date changed to April 17)*

March 26 – General Meeting at TCC – Guest Speaker, Neta Apple, Astronomical Society of Kansas City

March 27 – Sidewalk Astronomy at Bass Pro

Peggy Walker then made an announcement about March 20th being International Sidewalk Astronomy Night, and April being Sidewalk Astronomy Month.

Tom then welcomed Allen Martin as the new Newsletter Editor. After that, he announced the four board vacancies and made a call for nominations for same.

Following that were the **Department Reports**.

**Treasurer:** John Land was absent, Denny Mishler filled in for him. Anyone wishing to pay dues, buy a calendar, etc could see him after the meeting.

**Groups:** Teresa Kincannon had no group activities planned so far.

**Secretary:** Tamara announced that the January general meeting was cancelled due to weather, but offered to read the December meeting minutes. Tom said that was not necessary, much to Tamara's relief due to her suffering from a nasty cold and unable to speak much anyhow.

## *Meeting Minutes - continued*

**Facilities:** Chris Proctor offered an apology for the closure of the observatory due to impassable roads, mushy observing field, and bad weather. He then gave a report of his reaching out to ODOT about a sign to be displayed on the highway giving directions to our observatory, and the “official” route to the observatory being changed to 251<sup>st</sup> Street from 241<sup>st</sup> Street, due to the deteriorating condition of 241<sup>st</sup> and Okmulgee County not having the funds needed to repair the road. He also made a call for volunteers to help him on March 5, by coming to the observatory early to help put the dome back on its track, after coming partially off due to someone apparently trying to move the dome with the J-bolts still in place. He also needs volunteers with carpentry and/or framing skills to help replace about 6-7 steps on the staircase leading up to the dome. This summer, he will need volunteers to direct traffic at the observatory. Anyone interested needs to contact him.

**Observing:** Ann Bruun announced that highlights for the Sidewalk event would include the Moon, Mars, and later in the evening, Saturn. She then discussed the most recent Astronomical League Observing Club awardees: Rick and Peg Walker – Master’s Outreach, Rick Walker – Messier and Binocular Deep Sky, John Land – Galileo, Brad Young – Galileo, Bob Boston – Basic Outreach. She then announced that there will be a caravan to TUVVA for the Messier Marathon, to meet at the Burger King, located at Elm Place and the BA Expressway in Broken Arrow. Time will be announced on the Yahoo groups.

**Public Relations:** Owen Green announced the Sidewalk Astronomy event, to take place at Bass Pro Shops in Broken Arrow, to start at 7:00 PM on Saturday, Feb 27.

Following the Department Reports, the Astronomy 101 topic was the Messier Marathon, given by Ron Wood, TUVVA Observatory. He gave an interesting talk on the Messier Marathon, including the Messier Catalog and how it came to be. He then explained the awards TUVVA gives every year to participants in the marathon. The David Stine Award is for the winner, the one who observed the most objects. All other participants get the Little TOE (Tuva Observer Extraordinaire) award. Awardees for last year are as follows: Little TOE: Rick and Peg Walker, Ann Bruun, Owen and Tamara Green.

David Stine Award: Tom McDonough.

Mr. McDonough adjourned the meeting at 8:48 PM and several of us went to Hideaway Pizza on Cherry Street for dinner following the meeting.



*Tamara Green  
ACT Secretary*

**Past meeting minutes are archived within the newsletter archives on the Astronomy Club’s website. Please visit <http://www.astrotulsa.com/Archive/archive.asp> to view previous month’s newsletters.**

# Telescope Equipment for Sale

## Many Items:

- Astronomy Technologies AT11EDT, with case. Like new. \$1500
- Astronomy Technologies AT66ED, with case. Very good condition. \$275
- Celestron 11" SC, carbon fiber tube, JMI focuser (needs work) with tripod. \$1200
- Celestron 6" SC, with tripod. Set up for terrestrial observation. Good condition. \$500
- Alpen Spotting scope, 20x50, with tripod. \$50
- Ioptron Mini-Tower go-to system with software. \$450
- Orion Starshoot color imaging system. \$125
- Russian 20x50mm spotting telescope. \$35

Eyepieces – all are 1.25" diameter

AstroTech Paradigm 12mm and 25mm

TeleVue Panoptic 15 mm Plossl 32 mm 2.5X Powermate Barlow

Burgess Optical TMB 8 mm Wide Angle WA 20mm

University optics 16 mm Konig 18mm Ortho 5mm Ortho  
10mm Wide screen 20mm Wide screen

Cameras

Orion Star shoot Solar System Color imaging III w CD

Super Circuits PC 35C Digital video camera that fits into 1.25" focuser tube

DSP Color Hi-Res CCD camera

75 milliwatt Green Laser Pointer

Multi-retical Red Dot Finder

Two very nice eyepiece cases.

Contact: **James Dewey** **918.510.0193**

[justjed@hotmail.com](mailto:justjed@hotmail.com)

## Orion Sirius 8-inch Schmidt-Cassegrain,

including:

Optical telescope assembly

Tripod and German equatorial mount

Goto computer Synscan hand controller version 3.24 updatable

Two counterweights

Eyepiece Orion Sirius Plossl 26 mm

Finder scope 6x30

Padded cases for the OTA and for the telescope-tripod assembly and finder scope.

Dew shield. Instruction manuals for telescope and for Synscan controller v. 3.24 updatable

Also available:

Battery power supply

For information and demo,

**Bob McCallum** **918.749.9445**

# Land's Tidbits *for March 2010*

– by John Land

Our membership rates for 2010 – 2011 will be as follows.

**Adults** - \$ 35 per year includes Astronomical League Membership

**Sr. Adult** – discount \$25 per year for those 65 or older includes Astronomical League Membership

**Students** - \$ 15 without League membership.

**Students \$ 20 with League membership.**

The regular membership allows all members in the family to participate in club events but only ONE voting membership and one Astronomical League membership.

If an **additional member of the family** would like to join with voting rights the additional cost is \$15.

Additional League memberships within a family are \$ 5 each.

**Magazine Subscriptions:** If your magazines are coming up for renewal, try to **save the mailing label** or renewal form you get in the mail. Do NOT mail renewals back to the magazine!

To get the club discount you must go through the club group rate.

**Astronomy is \$ 34 for 1 year or \$ 60 for 2 years.** [www.astronomy.com](http://www.astronomy.com)

**Sky & Telescope** is **\$33 / yr** [www.skyandtelescope.com](http://www.skyandtelescope.com)

Sky and Telescope also offers a 10% discount on their products.

**Note:** You may **renew** your **Sky & Telescope subscription** directly with out having to mail in the subscriptions to the club.

**NEW SUBSCRIPTIONS** must still be sent to the club treasurer. Forms are available on the website.

We now have an automated on line registration form on the website for new AND renewal memberships plus magazine subscriptions. You simply type in your information and hit send to submit the information.

<http://www.astrotulsa.com/Club/join.asp>

You can then **print a copy of the form and mail it with your check.**

Astronomy Club of Tulsa - 25209 E 62nd St – Broken Arrow, OK 74014

## **Address Corrections- Email changes – Questions:**

**You may forward questions to the club** by going to our club website and filling out an online form or just click on John Land and send an email. Please leave a clear subject line and message with your name, phone number, your question – along with email

## OFFICERS

President: Tom McDonough 918-851-2653

Vice-President: Ann Bruun 918-231-0301

New Members :Owen Green 918-851-8171 Observing Chairman: Ann Bruun 918-231-0301

Membership questions: John Land 918-695-3195 Secretary Tamara Green 918.851.1213

Observatory Caretaker: Chris Proctor 918-810-6210

Contact Chris to volunteer to help with observatory projects

## Observatory Spring Cleanup Day **Saturday March 20th**

Contact Chris Proctor to volunteer 918-810-6210 [act\\_maint@astrotulsa.com](mailto:act_maint@astrotulsa.com)

The Astronomy Club of Tulsa is made of about 150 members who share a common love of astronomy. Unfortunately most of us live under light polluted skies. Our Observatory gives us a retreat to gather under darker skies but we can only continue to enjoy its use if we **VOLUNTEER OUR TIME AND EFFORTS TO MAINTAIN THE BUILDING AND ITS GROUNDS.** The harsh winter of 2009 has taken a toll on the facility and lots of work is needed to get it ready for the spring and summer observing seasons. So, bring your outdoor work tools such as weed eaters and tree pruning equipment or help out indoors with cleaning – painting – stair repair.

Your club dues only pay the bills – we need some SWEAT EQUITY to keep the observatory and grounds in good shape. Also, if you are willing to volunteer to help with mowing and trimming this summer let Chris know.

For all the scheduled club events for 2010 you may wish to purchase the first edition ACT calendar. Prices now reduced to \$ 6 each. This calendar includes club events, plus a wealth of other astronomical data.

Details are on the website at [www.AstroTulsa.com](http://www.AstroTulsa.com)

**PARKING AT OBSERVATORY MAY BE LIMITED.** Extra parking is available next door in the old AT&T lot for those without equipment or planning to leave early. Please do not park vehicles near the center observing pad blocking the view and traffic access. If you arrive late, please park near the gate and avoid driving through the crowd after dark.

**SAFETY ISSUE:** When large groups are present, it is better to turn on your parking lights rather than try driving in or out without lights, especially, if those groups include children. Just warn everyone when you are getting ready to leave. NEVER try driving down the hill without lights.

#### Beginners Telescope Set Up on Center Pad

Several of our new members and guests have new telescopes that they are trying to learn how to use. Additionally, the club has several telescope in the classroom you can take out to use if you don't have a telescope. We would like to invite you to set up your equipment near the center concrete observing pad. Members, lets all take time to meet these novice astronomers and help them get a good start with their equipment.

**Wireless Internet is No longer available at the Observatory.**

#### Things to Bring to a Star party.

Of course, a telescope or binoculars are great for observing, but you don't have to have one to enjoy the evening. Our members are eager to share their views with others if you just ask. Also, bring a red colored or covered flashlight to see your way around. We have plenty of folding chairs and a clean restroom. You'll probably want to bring something to drink and a snack or two to boost your energy for late night viewing. Children are welcome but must be supervised and must stay on observatory grounds. It's always wise to have an alternate activity such as a favorite book or tapes for younger children who may tire early. Closed toed shoes are preferred and a jacket or heavy coat as needed. Insect repellent is beneficial in the warmer months.

We would like to encourage our new members and guests to join us for a brief orientation to the club's observatory shortly after sunset.

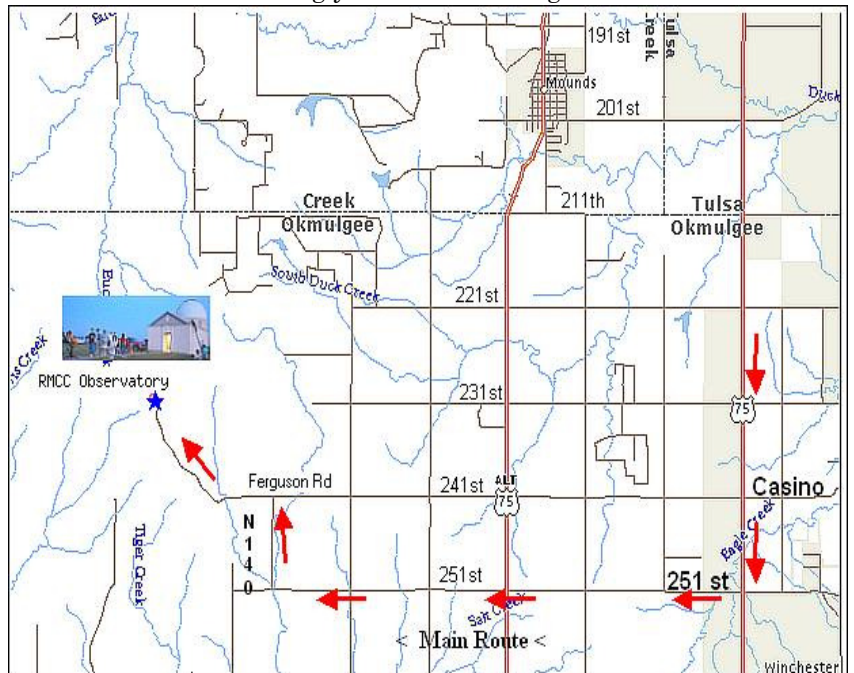
#### Directions to Club Observing Nights at Mounds Observatory –

Plan to arrive before dark. We have plenty of chairs and a classroom area.

We have a microwave and you can bring your own snacks. You need to bring your own drinking water!

#### Recommended Driving Route using 251st S to Observatory. ( See map below )

To get there take Highway 75 South toward Okmulgee. Watch out for GLENPOOL SPEED TRAPS. This route provides a wider well-paved road and avoids about 3 miles of dirt and gravel as well. It's a little tricky to find so watch your turns. Go one mile south of 241st (Duck Creek Indian Casino) Look for small green sign that says "Winchester" You will TURN RIGHT ( WEST ) on 251st. **It's not well marked and easy to miss.** You'll have 3 miles of wide well paved road to old 75 highway. When you cross old 75 highway, note your odometer reading. Go exactly 3 more miles west. Look for N 140 Rd. It's just before a turn and a small bridge. Turn Right – Go 1 mile north on N 140 Rd Turn Left and proceed west to the road up the hill to the observatory. Stay to the Right at the "Y" and follow the asphalt road 1 mile to the observatory. If you get lost call a club officer.



**CLUB OFFICERS**

POSITION	NAME	PHONE
<b>President</b>	Tom McDonough	918-851-2653
<b>Vice-President</b>	Ann Bruun	918-834-0757
<b>Treasurer</b>	John Land	918-357-1759
<b>Secretary</b>	Tamara Green	918-851-1213

**BOARD MEMBERS AT LARGE**

NAME	PHONE
Steve Chapman	918-342-1643
Catherine Kahbi	918-409-1867
Teresa Kincannon	918-637-1477
Denny Mishler	918-274-4772
Chris Proctor	918-810-6210

**APPOINTED STAFF**

POSITION	NAME	PHONE
<b>RMCC Facility Manager</b>	Chris Proctor	918-810-6210
<b>Membership Chair</b>	John Land	918-357-1759
<b>Observing Chair</b>	Ann Bruun	918-834-0757
<b>New Members</b>	Owen Green	918-851-1213
<b>Group Director</b>	Teresa Kincannon	918-637-1477
<b>Webmaster</b>	Tom McDonough	918-851-2653
<b>Newsletter Editor</b>	Allen Martin	918-407-9706
<b>Night Sky Network</b>	Peggy Walker	918-640-0832
<b>Program Director</b>	Vacant	

**MEMBERSHIP INFORMATION**

Astronomy Club of Tulsa membership (\$35/year) includes membership in the Astronomical League and subscription to ACT's "Observer" and AL's "Reflector". "Astronomy" (\$34/year) and "Sky and Telescope" (\$33/year) are also available through the club. For more information contact John Land at 918-357-1759. Permission is hereby granted to reprint from this publication provided credit is given to the original author and the Astronomy Club of Tulsa "Observer" is identified as the source.

The Astronomy Club of Tulsa is a proud member of the Astronomical League and the Night Sky Network



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Astronomy Clubs bringing the wonders of the universe to the public



<http://www.astroleague.org>

<http://nightsky.jpl.nasa.gov>

ACT welcomes your questions, suggestions, comments and submissions for publication.  
Please send all inquiries to [act\\_pm@astrotulsa.com](mailto:act_pm@astrotulsa.com)