



Astronomy Club of Tulsa

# OBSERVER

April 2005

<http://www.AstroTulsa.com>

ACT, Inc. has been meeting continuously since 1937 and was incorporated in 1986. It is a nonprofit; tax deductible organization dedicated to promoting, to the public, the art of viewing and the scientific aspect of astronomy.

## **What**

The Astronomy Club of Tulsa Meeting

## **When**

22 April 2005 at 7:30 P.M.

## **Where**

Room M1 inside Keplinger Hall, the Science & Engineering Building at TU. Enter the parking lot on the East Side of Keplinger Hall from Harvard and 5th Street. This will take you directly toward the staircase to enter the building. Room M1 is the first room on the left.

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## **President's Message**

**Craig Davis**

Spring has sprung and we are getting closer and closer to an event that in a way is "just around the corner". Prairie Thunder is scheduled for the weekend of the 4th & 5th of June. Even though it's still a ways off it's going to be coming up on all of us quicker than we may expect. But even so it will most definitely be a time that will be greatly enjoyed by so many of our club members.

With that I would like to let everyone know that we shall be learning much more detail of this event at our next club meeting, Friday, April 22nd. Not only this but also of the events and guest speakers that will be at TASM-Tulsa Air & Space Museum on May 1st. This would be something that I'm quite sure that several club members would like to attend. Judy Adair will be at our meeting to fill all of us in on exactly what, when, where and who will be at the TASM.

I would like to relay a special "Thank You" to both Ron and Maura Wood of Tuva Astronomy Club, Muskogee, for the special awards that they presented to Rod Gallagher, David Stine & Tom McDonough at our last club meeting. Now we know who has the Big Toe and who has the Little Toe! It's great that Rod, David and Tom have done so extremely well at the Messier Marathon not only this year but overall the past two years in a row. Now we know, in more

ways than one, that the annual Messier Marathon, hosted each year by Tuva can be very rewarding.

There are several club issues that must be brought up at our club meeting that everyone should be aware of, and in so doing, I seek your input. As I mentioned in last months newsletter, there are many large and small projects that must be attended to at our observatory. These of course will be completed by the end of this summer. But it would still be very helpful to get most everyone's thoughts on the variety of things to be accomplished. Also, there shall be other issues that must be brought before the club for a vote and to allow anyone to voice their opinion on whatever any of these may be. It would be too much of a problem to bring them forward in this manner so we will sit them aside for the moment and delve into them in a much more detailed fashion at the April club meeting. I will assure you that you will honestly see the importance as to why they must be brought before all of you.

I'm not sure if any of you have ever been down to Atoka, OK for some very good observing. If not, then you very well may wish to check that area out. Vice President Tim Davis and club member Jerry Mullenix zipped down last Saturday night and had a magnificent clear sky, with near next to zero sky glow/light pollution. Break out your state map and take a look at where Atoka is located. It's only a couple hours away, which doesn't put it way out of reach. Then give it some thought about making a jaunt down on a weekend. I believe that you may be very much pleased with the reward of the dark skies that will be opened up to you.

So, we have many things to look forward to at our next club meeting. Information will be openly relayed concerning the upcoming local affair at TASM-Tulsa Air & Space Museum. As mentioned before, Judy Adair will be at our meeting to speak to us concerning this. This alone would be a very informative and first-rate "family night out" program to attend. Neta Apple will fill everybody in on the progress and stage of planning and detail of Prairie Thunder. This will undoubtedly be a lot of fun for everyone. Shoot, how often do you attend a star party and you get to watch who knows how many rocket launches before it gets good and dark? Standby, you'll find out plenty next Friday. And finally, of course, the club issues that we will need to address. Your thoughts and input on these matters is very important! I'm looking forward to seeing all of you at the meeting.

Clear skies to all,

Craig D. Davis President Astronomy Club of Tulsa

## Night Sky Network

By Neta Apple

The first planning meeting for Prairie Thunder was well attended. For anyone new to ACT, Prairie Thunder is an event that we are participating in with the Tulsa Rocket Club. They have invited us to participate in their regional launch event in Pawhuska on June 4th by setting up during the day to educate the public about astronomy and to do a star party that night for the public. We have a pretty good outline of what we want to do, but are still looking for more ideas and more people to be involved. The copies of Night Sky Magazine that Sky Publishing is donating for us to give away were delivered to my home last week- three hundred copies of the May/ June issue. With the permission of the rocket club those of us at the planning meeting agreed to invite the Oklahoma City Astronomy Club to come participate in the star party with us that night and an invitation has been sent to them through their observing chairman, Dan Lessman. No response has been received as yet, but at least one of their members who owns a 25" truss dob will be coming for sure.

We have run into a snag with using the Star Lab planetarium. The rocket club has located a hangar owner who is willing to let us use his hangar, but we have learned that there is no power in any of the hangars. The first thought is to see if we can find someone that has a generator that we might be able to use, assuming the power output is compatible with the needs of the planetarium. If anyone has a generator or knows of one we might be able to borrow, please let us know.

We have so far planned several activities for kids of all ages and adults including solar observations, making planispheres, distance models of the solar system using beads and string, and modeling the relative sizes of objects in the solar system, and paper drinking straw powered rockets. We also agreed that we will set up a solar system model on the grounds to lead guests from the launch area to our area, which for safety reasons will be about 1800-2000 ft away. We will need club members to help out with these activities and to just be available to talk to the public about ACT and telescopes. We will also be using some of the activities from the NSN kits at times during the day. We need to find sources to make inexpensive copies on both plain paper and on card stock, as well as a source of card stock. If you have any ideas on this, or would like to help out at the event, please let us know. It has been proposed to have a sort of "treasure hunt" type activity for kids. With this they would receive a passport that they would get punched when they did an activity at the site. By getting a certain number of punches they would then be eligible for something such as an extra drawing ticket for the door prizes. Details have not been worked out on this as yet.

Lou Mayo of GSFC will be attending and participating in Prairie Thunder on June 4th. He will be speaking in the old restored theater in Pawhuska this eve-

ning before the star party. I do not yet know about what Lou will speak, but we can be sure it will be interesting. He will be choosing his own topic. The day's events and the star party will be at the airport about four miles away, but there is not a place there that will accommodate a speaker so the theater will be used. For those unable to go to Pawhuska on June 4th, do not forget that Lou will be in Tulsa the night of June 3rd, which is the night of our regularly scheduled star party, and he will be attending that as well.

We will be allowed to camp out at the airport both Friday and Saturday nights. That way no one has to try to pack up and drive home sleepy after the star party and we can have people there early on Saturday morning to help with set up.

The mailing date for the latest NSN kit on Black Holes has been changed to May 4 instead of April. We will have to wait a bit longer to see what we are getting in that box, and if there is anything we might like to use at Prairie Thunder. Black holes are a really hot topic. Startling new information has just come to light about them from data obtained by the Chandra X-ray telescope.

Last month I attended the AAVSO 3rd High Energy Astrophysics Workshop in Las Cruces, NM. What a wonderful experience! We heard researchers talk about cutting edge information on GRBs, magnetars, AGNs, blazars, polars, and more. I was asked to prepare a poster paper about my educational outreach activities for the poster session and did so. Unexpectedly, there was time and they asked if anyone would like to speak briefly about their paper. I addressed the meeting telling them about what I do on my own at the local school, about what ACT does, the Night Sky Network, and another group called After School Astronomy Clubs, with which I also work. The response was overwhelming! The NASA people, audience members, and even the professional astronomers who were present and heard me speak made a point of coming during the poster session and during the remaining days of the meeting to share ideas and to tell me how very important educational outreach is and how they were so glad that we are involved. We are not alone in our endeavor to bring science and astronomy to the public and to schools. We are part of a growing network of people and groups who see a very real and dire need to do what we of ACT are doing in educational public outreach. Thanks to all of you who enjoy this and are willing to help, we are making a difference!

Prairie Thunder is yet one more chance, a very big one, to introduce the public to the wonders of astronomy and to perhaps change the way a few people in our own little corner of the world think about the universe and space. Through events like this we have the chance to share our own love of the night sky and its wonders with many who would otherwise perhaps never have the chance to experience it. There is nothing like the feeling that one gets from someone looking in the telescope for the first time and saying, "WOW!" at what you

have shown them. This is also a chance to see rockets the size of which most of us have never seen launched. (The rocket club has an FAA waiver for the event for a ceiling of 20,000 feet.) So don't miss out on the fun! Mark June 4th on your calendar for a day of fun in the sun, and a night of great astronomy after dark.

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## ASTRONOMY EVENTS

Gerry Andries  
Observatory Group Director

NOTE: Tentatively scheduled dates below are bracketed with question marks. The number of persons expected is in parenthesis.

### EVENTS AT RMCC OBSERVATORY:

#### APR

19 Tue 07:30 CS Pack 199 (40)

#### MAY

06 Fri 07:30 Club Star Party

? 07 Sat 07:30 Back Up for 05/06 ?

14 Sat 06:30 Model T Club (20)

#### JUN

03 Fri 08:00 Club Star Party

? 04 Sat 08:00 Back Up for 06/03 ?

### EVENTS AWAY FROM OBSERVATORY

#### APR

15 Fri 07:00 Chouteau School (100) at the school (see Neta Apple)

18 Mon 07:30 Collinsville School (100) at the High School west of town on Hwy 20

22 Fri 07:30 Regular Club Meeting at TU Keplinger Hall

#### MAY

20 Fri 07:30 Regular Club Meeting at TU Keplinger Hall

#### JUN

04 Sat 09:00 Prairie Thunder Rocket Launch (1000+) at Pawhuska Airport

05 Sun ??:?? Prairie Thunder Rocket Launch at Pawhuska Airport

## DARK QUEST

By Jerry Mullennix

"Dark Quest" sounds like a new video game for a group of thirteen year olds and say those two words to anyone not associated with astronomy and that's the response you will probably get. In fact, it is just the ever-expanding lengths we will go, so we can find a dark spot to setup our telescopes and hence derive the maximum product from the night sky. The ever encroachment of lights continues to drive us further into the wilderness and forces us to become more creative in our dark quest. Many times I have found myself a little closer to the other creatures we share our planet with, then is my own personal comfort zone.

It was on one of these dark quests that this adventure takes place. A few weeks back while exploring the TAS (Texas Astronomical Society) newsletter it came to my attention that they had a dark sky site just south of Atoka. After evaluating the entire site and the benefits I decided to join so I could take advantage of the site. My thinking was it offered a site in a somewhat different weather path, which could mean cloudy here but clear there and vice versa. I still had some apprehension as to what folks in Dallas considered a dark sky given the fact I spent many years in Dallas and am well aware the night sky offers only Jupiter, Venus, the Moon, Vega and Sirius and never all together.

After some coxing I convinced Tim Davis to venture down as my guest and explore the facilities. Our own star party was not very good given very poor skies clouds and a short viewing window (the crowd we had made it nice anyway) and the prospects looked identical for Saturday night as well, so we went more to check it out than anything else. It was about a 2 ½ hour drive and the directions TAS provided were very good. The sky on the drive down continued to clear as we got closer and by the time we arrived there was not one cloud in the sky.

Because you cannot see the facility from the road or the gate we very surprised when we got in to find about 20 to 30 people already there but it was no problem to find a place to setup as the site is 40 acres and there were plenty of vacant pads, and most with electricity. Once the sun went down our jaws dropped when we realized how dark it was. There are trees around the perimeter of the site which block about 15 to 20 degrees above the horizon all the way around. You could see a very slight light dome from Atoka to the North and a little dome to the west from some of the county inhabitants who use mercury vapor lights. Neither dome shined more than a few degrees above the tree line and we barley noticed it.

Tim and I both quickly made friends and the TAS folks are very pleasant and welcoming. It was so dark that when you went back and forth to the car to

change eye pieces or get additional equipment you had to turn a red light on to keep from stumbling and even the dimmest red lights were too bright for our eyes. We just could not believe our luck as the sky and atmosphere were perfectly clear and when the Coyotes began to howl we felt right at home. If I had to say there was any disappointment it would be the tree line in the south made Omega Centauri (NGC 5139) out of the question. However, one club member did offer to show it to me in the observatory, which he claimed was high enough to get over the tree line with the 16" and catch a peak. Not wanting to seem a burden or impose I declined the offer but secretly regretted it.

One of the first objects Tim and I both went for was M-51 as most of our interest lie to the North, because this is the direction we are often restricted from viewing because of the lights of Tulsa. We each viewed about 30 to 40 objects through the night and all were fantastic but M-51 and M-4 was probably the star of the show this night. M-51 actually showed the spiral arms with resolution and showed views that I usually only see in pictures.

At about 3am we began to get around without our red lights because the Milky Way came up and was so distinctive we heard remarks that we were losing our sky to the southwest because of clouds. This prompted a resurgence in our viewing as we began to pan through the Milky Way at objects I normally reserve for summer as I am rarely out at 3am. The list was huge and we stargazed from dark until 4am when the wind picked up and we finally had to say enough.

Now should your own dark quest drive you to repeat parts of this adventure there are a few things to keep in mind. Of all of the TAS people onsite about 50% were doing CCD and not once during the night did I see a white light from anybody. Even when Tim and I left no one was doing photography but they still insisted on walking us to the gate to keep us from turning on our parking lights. If you go, get there before dark and take your tent so you can stay the whole night. A few people had their children with them and they seemed to love the whole camp out experience with the added bonus of astronomy. My impression was that children were more than welcome. Outside of the white light rule it was very much like one of our own star parties, friendly people, great discussions and general comradely around astronomy.

Astronomy Club of Tulsa membership (\$25/year) includes membership in the Astronomical League and subscription to ACT's "Observer" and AL's "Reflector". "Astronomy" (\$29/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.

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