



Astronomy Club of Tulsa

OBSERVER

December 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

16 December 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.



President's Message

Tim Davis

Hello everyone. As I begin my term as your President, I would like to thank everyone for your support and vote of confidence. I will continue to try and make this a club that everyone will be welcome in and will try to make it as interesting and as fun as the night sky we love. Those of you that know me know I love to just get out and observe. And that is what I would like to encourage in everyone in the club, just get out and observe. Even if you don't have a telescope, you should try and come out with us and look through someone else's, they are more than happy to let others have a look. And even if you can't make it out to the observatory with us, find some time to just get out in your back yard and enjoy the night sky. Even in the city, with all the light pollution, you can still see some wonderful things with your telescope or binoculars.

Please join me in welcoming some new people to some of our elected offices. Jerry Mullennix is now Vice President, along with still being our Night Sky Network coordinator. Tony White and Tamara Green are now Board Members-at-large. If you see them around, give them some words of encouragement and congratulations.

I would like to thank everyone who had a hand in putting on another successful Mars Watch out at Mohawk Park in November. And thanks to everyone who brought a telescope and helped in showing the public what we like to do. A special thanks goes out to Donna Horton and Oxley

Nature Center for their tremendous help in hosting this event at their park. While we did not have the massive crowds that we had for the first Mars Watch in 2003, we did have a good turnout on Friday night of approximately 400 people, with a slightly smaller turnout on Saturday night

Also, many thanks to our outgoing President, Craig Davis. He has served the last two years as President and has done a great job and has helped the club in many ways. He will continue duties as the observatory Facility Manager. He does a great job with that as well, in keeping the observatory looking great and in good working order.

I'd like to point out some interesting astronomical highlights for you to watch for this month. Venus will start its decent toward the sun later this month after being with us in the evening sky for over half the year. It also reaches its peak magnitude of -4.6 during the first part of the month. It will also be interesting to watch its crescent fade from 33 percent at the start of the month to 6 percent by months end.

Mars will fade one full magnitude by months end, from -1.6 to -0.6, but will still be a nice sight in the evening sky.

Saturn will rise by 7:30 at months end, so will be better and better as the month goes by and be easier to catch in the evening sky.

Jupiter and Mercury are still early morning planets this month, so you'll have to get up early to see them.

Winter Solstice is on December 21, at 12:35 PM CST.

Geminid meteor shower is on Dec 13-14.

Please join us at our December general meeting for an interesting presentation. Our outgoing President, Craig Davis, will show us what it took to rebuild one of the club's 6 inch Astrola telescopes. He did an outstanding job rebuilding it, and it looks like a brand new scope now.

Volunteer needed for Club position

The club needs a volunteer to come forward and take over managing and scheduling our group events. These are the events where we host a group at our observatory, such as a scout troop, school class, or other organization that would like a private star party. I have been doing this job this past year after the previous person abruptly left the club. While I was Vice President, it was not a problem to do both jobs, as the VP position required little of my time. However, now that I am President, this will require more of my time, and it will be a burden to try to handle both of these jobs myself. The position also entails picking up messages on the club voice mail, and having a thorough knowledge of how to open and close the observatory. If you don't know how to do these things yet, we can show you how. So, if you are someone that wants to help the club, and enjoy helping with these group events, please contact me, Tim Davis, about this position.



Lands Tidbits

By John Land

Welcome Recent New Members: Lydia McDaniel, Mike Martin, Mindy Wood, S. A. Wofford, Lori Roye, Alexander Kuyper, Steve Loder, James Beauchamp, Robert Hart

Put a bundle of Starlight under your Christmas tree.

2006 Deep Space Mysteries Wall Calendars from Astronomy magazine are here. Twelve stunning Astronomy photos plus all the major astronomy events for the year. As club members you can get yours for \$ 8.00 each a 38% discount over the cover price. Contact John Land to reserve yours. We only have about 20 left.

2006 Royal Canadian Observers Handbooks - will be available this year at \$18.00 each. We only have 1 unspoken for copy left . Those who pre-reserved copies need to be ready to pay for them at the meeting.

NEW RATE CHANGES in ASTRORNOLOGY magazine rates. As of August 1st the rates went up to \$ 34 / year or \$ 60 for two years.

DON'T LET YOUR MEMBERSHIP or Subscriptions LAPSE !! Check your MAILING LABEL for membership expiration date. Those receiving Email should get a reminder when your membership is up for renewal or you may contact John Land.

Please NOTE CHANGES in Annual Dues and magazine rates on membership form. You may also renew magazine subscriptions through the club for substantial discounts.

A NEW GUEST SIGN IN SECTION on the Website is already bringing the club new contacts for potential new members.

Changing EMAIL - When you change your email or mailing address be sure to send me the new information so I can update the club records. You can use the Join feature on the club web page to make changes.

ON LINE Club Memberships and Renewals:

Adults - \$ 35 per year includes Astronomical League Membership

Students \$ 15 without League membership.

Students \$ 20 with League membership.

* Student shall be defined as a person 25 or younger actively taking courses at a college or trade school or persons still in High school or below. Adult Students over 25 may join at the student rate for one year if enrolled in an Astronomy course in an area college.

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 in your check. Astronomy Club of Tulsa - 25209 E 62nd St - Broken Arrow, OK 74014

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.

NEW RATE Astronomy is \$ 34 for 1 year or \$ 60 for 2 years. www.astronomy.com

Sky & Telescope is \$33 / yr www.skyandtelescope.com Sky and Telescope also offers a 10% discount on their products.

NIGHT SKY is \$18 / yr A exciting new bi-monthly magazine for beginning or casual astronomers. <http://nightskymag.com/>

Address Corrections- Email changes - Questions: You may forward questions to the club call our message line at 918-688-MARS (6277) Or go to the club website and Fill 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 address or email

2006 SCHEDULE OF EVENYS

Dec 30, 2005 Star party
Jan 13, 2006, TU meeting
Jan 27, Star party
Feb 10, TU meeting
Feb 24, Star party
Mar 10, TU meeting
Mar 31, Star party
Apr 14, TU meeting
Apr 28, Star party
May 12, TU meeting
May 26, Star party
June 23, Star party
July 21, Star party
Aug 25, Star party
Sep 8, TU meeting
Sep 15, Star party
Oct 6, TU meeting
Oct 20, Star party
Nov 3, Dinner meeting
Nov 17, Star party
Dec 1, TU meeting
Dec 15, Star party

November 18, 2005
Astronomy Club of Tulsa
Annual Dinner Meeting and
Election of Officers
Location: Ryan's Steak House
8110 E. 74th Place South

Official Secretary's Minutes from the Election Meeting:

At 7:30 the club president, Craig Davis, called the meeting to order. He explained that all positions are open and we can take nominations. He then began by nominating Tim Davis our current Vice President for the position of President. Member Rick Ryan seconded the nomination. No other nominations were presented. All the present members voted unanimously for Tim Davis and none opposed.

Craig Davis continued the elections asking for nominations for Vice President. Tim Davis nominated Jerry Mullennix for Vice President. Member Steve Chapman seconded the nomination. No other nominations were presented. All were in favor and none opposed Jerry Mullennix for Vice President.

Craig Davis continued by asking nominations for Secretary. Teresa Kincannon the current Secretary was nominated and all voted in favor as no one presented any other nominations for Secretary.

Craig Davis continued the election process asking for nominations for Treasurer. Sheldon Padawer nominated John Land our current Treasurer. No one else presented a nomination. All voted in favor and none opposed.

Discussion of the duties of Observatory Director was presented. The members were

asked to carefully consider this duty. We voted to table this appointed position. Members were asked to submit any interest to one of the board members for our consideration.

John Land gave a report of money received for the Mars Watch. We received 400.00 on Friday and around 150.00 on Saturday. The total came to 550.00. (This amount will be split with our co sponsor: Oxley Nature Center.) Suggestions were made to include these donations in the telescope fund. Everyone was in agreement. Also Members were encouraged to donate to the telescope fund and a tax number would be presented to them for a tax write off.

Tim Davis asked Craig Davis to continue with the elections of the Board Members at Large.

Several nominations were given and none opposed the positions. The following members were voted in by the club members on this election night as Board Members at Large:

Steve Chapman, Craig Davis, Rod Gallagher, Tamara Green, Dan Lamoreaux, Jim Miller, Denny Mishler, Tony White

This completes our voting members of the board.

Tickets were drawn for door prizes. Astronomy Hacks, a book donated to the club was given. Also a small 10X35 pair of opera binoculars were given away through this drawing.

Tim Davis accepted his new position as President and adjourned the meeting.

Signed by the Secretary: Teresa Kincannon
And the newly elected President: Tim Davis

David's Astro Corner

By David Stine

Newly Discovered Meteor Shower May be From An Undiscovered Potentially Earth Threatening Comet!

A burst of meteors on October 5th came unexpectedly from the direction of the border between the constellations Draco and Camelopardalis. Several observers reported the activity including Esko Lyytinen. It has since been determined that the outburst was caused by the 1-revolution dust trail of a yet unidentified possibly Earth-threatening Halley type or Intermediate Long-Period Comet with orbital elements similar to those of the meteoroids. The shower has now been named the October Camelopardalids. From the radar and video counts, it was concluded that the peak of the shower was at 19.7 hUT with an endurance of 3.6 hours. The forward meteor scatter and radar observations confirm that this was brief flurry of bright meteors, global in scale, as expected for a dust trail crossing. This confirms that the event was a meteor outburst, rather than annual activity of a minor shower. The RA for the radiant was determined to be 164.1 and the Dec +78.9. No comet is known with similar orbital elements. The only comet with orbital elements close to the ones calculated is comet C/1825 P1 (PONS). However the authors do not believe that this is the comet that created the debris. If the shower was produced by a yet un-discovered comet, this comet could be Earth-threatening if when the comet returns and it and the Earth are in the same position in their orbit around the SUN. The conclusion from Esko is that an outburst of meteors identified as the debris of yet an unknown long period comet passing close to Earth's orbit. This is the first time a new shower was identified since understand-

ing how the 1-revolution dust trails of intermediate long-period comets can wander on occasion in Earth's path. The orbital elements of the meteoroids, derived from low-light level TV observations, provide a first indication of the orbit of this Earth-threatening comet. The predicted future encounters in 2018 and 2038 with this dust trail may provide further insight into the comet orbit and identify whether the comet is approaching. The undiscovered comet depending on the type has been determined to have an orbit somewhere between 200-10,000 years. So the research continues to find this comet before it finds us. You may even turn out to be the lucky or should I say un-lucky discoverer. I am sure that the October Camelopardalids will become a meteor shower that will be watched closely each year from now on.

Is the Next Bright Comet Just Around the Corner!

It has been several years since we were visited by a bright comet. Well the long drought may be over. According to Seiichi Yoshinda, 73P/Schwassmann-Wachmann 3 may just be that comet. The comet passes extremely close to the Earth in May only 0.076AU from earth. Yoshinda's light curve of the comet show's 73P brightening to naked eye brightness by March or Early April and then going from Mg.6 to as bright as Mg. 2 in May. This comet broke into several pieces on its journey around the Sun in 1995. Several of its components have survived and were seen on its return in 2001. The main component called C is the piece that may brighten to Mg. 2. The B component may reach naked eye brightness also but just

barely 6.5Mg. The E component faded before the perihelion passage in 2001 so it may have already vanished. The comet in January will be rising by Midnight and be in the sky in Virgo all night. In February it is up earlier and in the sky all night not too far away from Arcturus. Then in March the comet stays near Arcturus but even closer rising by 8p.m. April is when everything could start getting exciting, rising by 7p.m. and between Corona Borealis and Bootes, this is the month the comet will brighten rapidly, then in May the comet will fly across the sky between April and May 15th from Bootes to Pegasus and be in the morning sky rising at 1a.m.. This will be the time it should be making headlines if the comet produces like it is expected to. Unfortunately, an after midnight comet is not too inviting for the general public, so any public comet viewing probably won't happen, but for us comet lovers it could be an exciting time. This will be great timing for the Texas Star Party and I am sure there will be more than normal observing sessions at the observatory also. Let's keep our fingers crossed that this is the next bright comet.

2006 - The Pleiades and Moon meet... several times!

The moon will be moving in front of the Pleiades several times this year and future years to come. This is called an occult when the moon passes in front of an object. The last occultations of the Pleiades took place between 1986 and 1992. The cluster lies 4 degrees north of the ecliptic and it can only be occulted when the ascending node of the Moon's orbit is in the Pisces to Sagittarius part of the ecliptic. This situation repeats every 18.6 years. A new season of Pleiades occultations has begun and will continue until the year 2010. The last time that I saw the moon occult the Pleiades, it was a beautiful

sight and I was able to take several photos of the event. Now everyone will be able to several times in 2006. Your first opportunity comes on January 9th when the moon will be 83% waxing. Then on October 9th and December 3 with both moons almost full. There will be several other times that the moon will make a nice pair with the Pleiades but not quite occult them in our time zone. These dates are February 6 (Western US), April 2 (Eastern US), July 20th (Eastern US), and December 31st (NW US) These dates will also make for a photo minute. When the moon is waxing the stars will disappear along the Moon's dark limb and reappear along the bright limb. Mark your calendars and get out and watch this pretty dance of the Moon and Pleiades this coming year.

That's it from my corner this month, I hope everyone has an Astronomical Christmas and a Great New Year.



EVENTS AT RMCC OBSERVATORY:

DEC

- 9 Fri 5:00 PM Scout Troop (25)
- 10 Sat 5:00 PM Scout Troop (15)
- 17 Sat 5:00 PM Jenks school class (30)
- 30 Fri 5:00 PM Club Star party, members and guests

JAN

- 27 Fri 5:30 PM Club Star party, members and guests
- 28 Sat 5:30 PM Backup for star party if cancelled on Friday

FEB

- 11 Fri 6:00 PM Scout Troop 945 (25)
- 24 Fri 6:00 PM Club Star party, members and guests
- 25 Sat 6:00 PM Backup for star party if cancelled on Friday

EVENTS AWAY FROM OBSERVATORY

DEC

- 16 Fri 7:30 PM General Meeting at TU, Keplinger Hall

JAN

- 13 Fri 7:30 PM General Meeting at TU, Keplinger Hall

FEB

- 10 Fri 7:30 PM General Meeting at TU, Keplinger Hall

We are always looking for volunteers to help at our group events. If you would like to volunteer to help at one of these events, please let me know at least a week in advance. We are happy to have help from anyone who wants to help, no matter what your experience level is.

Tim Davis
President, ACT
dtimothy14@cox.net
918-665-8134



Astronomy Club of Tulsa

Membership Application/Renewal Form
PLEASE PRINT

Name: _____ Phone: (918) _____ - _____

Address: _____

City / State / Zip _____ / _____ OK _____ / _____

E-mail address - print clearly _____

Check Lines below : For faster economical delivery you are notified by email when the Club newsletter is posted on the web. Email saves the club mailing expenses. Of course if you do not have email we can mail you a copy of the monthly newsletter.

New Membership Renewal Membership

Adult Membership (\$35) includes Astronomical League membership.
See <http://astroleague.org/> for benefits of being a League Member.

Student Member (\$20)* includes Astronomical League membership.

Student Member only(\$15)* - without League membership.

* Student - Persons 25 or younger actively taking courses at college, trade school, high school, or below.

* Adult Student - Persons over 25 may join at the student rate for one year if enrolled in an astronomy course at an area college.

Check Lines below for YES

I would prefer to receive E-mail notification when club newsletter is posted to the web.
Notice of club events and newsletters are usually sent by email.
This helps assure you will be informed of late breaking news.
I choose to receive my newsletter by E-mail ONLY instead of postal mail.

Check here if you also require a postal copy of the monthly newsletter.
Note: Using email newsletter saves the club about \$5 per year

Magazine subscriptions: Magazine rates may change. Prices available with membership only.

Sky & Telescope Subscription (\$33) / year _____ Renewal Include Subscription Number. Also includes 10% discount on most Sky & Telescope products.

Astronomy Subscription (\$ 34) / year (\$ 60) / two years _____ Renewal Include Subscription Number.

NightSky for 6 issues for \$18 see www.NightSkymag.com Issues come out bi-Monthly This is an excellent choice for the novice astronomer and youth just starting out in astronomy.

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

Or go to the club website and fill out an online form or just click on John Land and send an email.

How did you hear of the Astronomy Club of Tulsa? _____

How long have you been interested or active in astronomy? _____

Do you have a telescope? _____ Type _____

What astronomy club activities would you like to participate in?

Have you been a member of other astronomy clubs? _____

Where / when _____

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.

OFFICERS

President:

Tim Davis
918.665.8134

Vice-President:

Jerry Mullennix
918.712.9776

Treasure:

John Land
918.357.1759

Secretary:

Teresa Kincannon
918.637.1477

BOARD MEMBERS AT LARGE

Steve Chapman
Craig Davis
Rod Gallagher
Tamara Green
Dan Lamoreaux
Jim Miller
Denny Mishler
Tony White

APPOINTED STAFF

RMCC Observatory Director:

Tim Davis—918.665.8134

RMCC Facility Manager:

Craig Davis—918.252.1781

Membership Chairman:

John Land—918.357.1759

Observing Chairman:

David Stine—918.834.1310

New Members:

Denny Mishler—918.274.4772

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Webmaster:

Tom McDonough—918.665.1853

Astronomy Club of Tulsa

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<http://www.AstroTulsa.com>

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