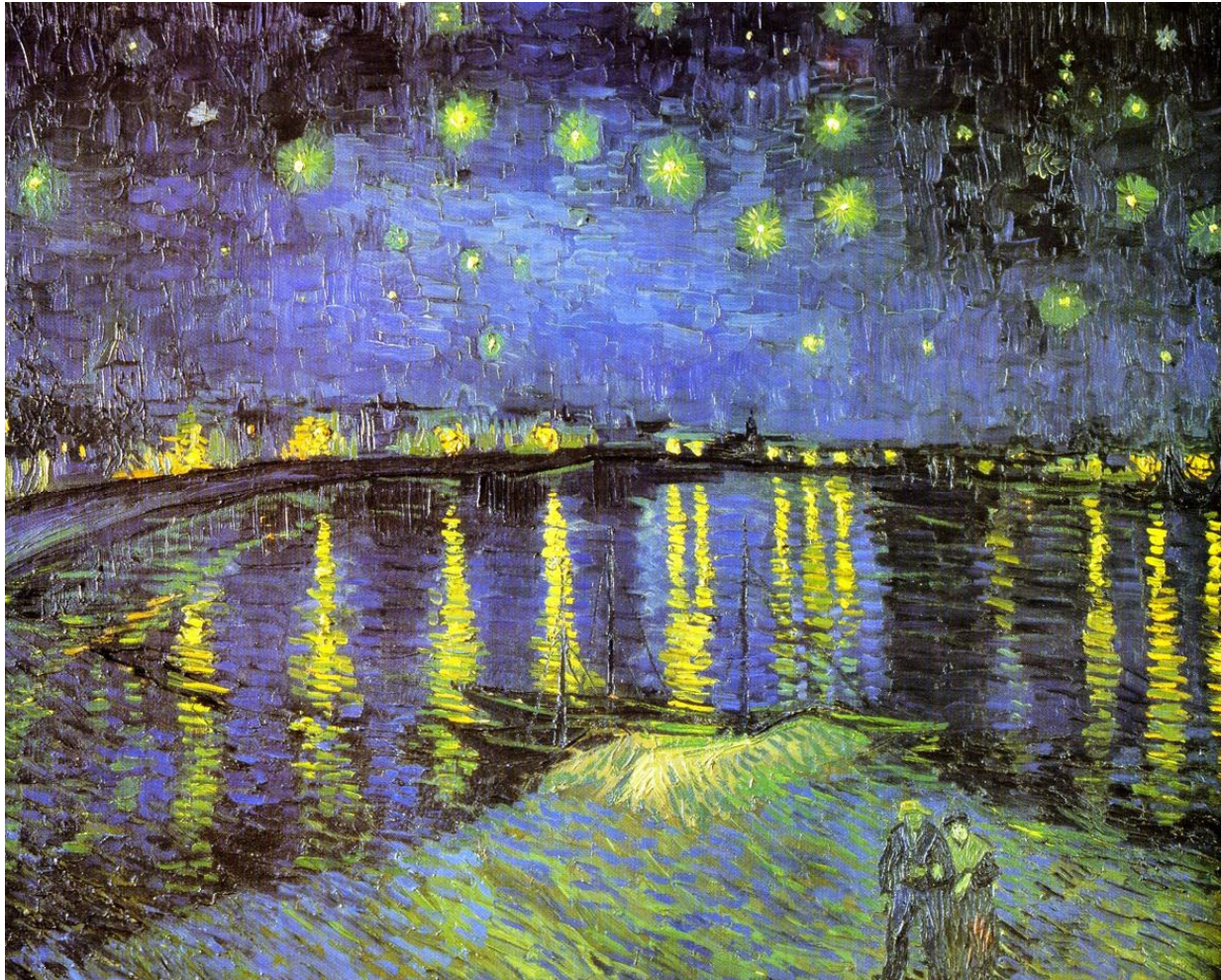


Astronomy Club of Tulsa
Observer



September 2009

Picture of the Month



“Starry Night over the Rhone” / Artist: Vincent van Gogh (1888)

Inside This Issue:

September Calendar ---- p2	Word Search ----- p5
Land’s Tidbits ----- p2	News & Notes ----- p6
President’s Message ---- p3	Observing Pages ----- pp 7-9
September Stars ----- p4	Planetarium News ----- p10

Important ACT Upcoming Dates:

- ACT Monthly Meeting @ TCC... Fri, Sep 4, 2009
- Public Star Party... Fri, Sep 11, 2009 (p11)
- Member Star Party... Fri, Sep 18, 2009
- Sidewalk Astronomy... Fri, Sep 25, 2009
- WOOLAROC...** Sat, Sep 26, 2009

September 2009

Tulsa, Oklahoma

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Sunrise: 6:55am Sunset: 7:52pm Moonrise: 6:18pm Moonset: 4:01am	2 Sunrise: 6:56am Sunset: 7:51pm Moonrise: 6:46pm Moonset: 4:59am	3 Sunrise: 6:57am Sunset: 7:49pm Moonrise: 7:12pm Moonset: 5:58am	4 ACT MEETING Sunrise: 6:57am Sunset: 7:48pm Moonrise: 7:38pm Moonset: 6:56am Full Moon: 10:03am	5 Sunrise: 6:58am Sunset: 7:47pm Moonrise: 8:03pm Moonset: 7:55am
6 Sunrise: 6:59am Sunset: 7:45pm Moonrise: 8:29pm Moonset: 8:55am	7 Sunrise: 7:00am Sunset: 7:44pm Moonrise: 8:59pm Moonset: 9:57am	8 Sunrise: 7:00am Sunset: 7:42pm Moonrise: 9:32pm Moonset: 11:01am	9 Sunrise: 7:01am Sunset: 7:41pm Moonrise: 10:11pm Moonset: 12:07pm	10 Sunrise: 7:02am Sunset: 7:39pm Moonrise: 10:59pm Moonset: 1:14pm	11 RMCC PUBLIC Sunrise: 7:03am Sunset: 7:38pm Moonrise: 11:55pm Moonset: 2:19pm Last Qtr: 8:16pm	12 OKIE-TEX Sunrise: 7:03am Sunset: 7:36pm Moonrise: none Moonset: 3:18pm
13 OKIE-TEX Sunrise: 7:04am Sunset: 7:35pm Moonrise: 1:00am Moonset: 4:11pm	14 OKIE-TEX Sunrise: 7:05am Sunset: 7:32pm Moonrise: 2:10am Moonset: 4:56pm	15 OKIE-TEX Sunrise: 7:06am Sunset: 7:32pm Moonrise: 3:23am Moonset: 5:34pm	16 OKIE-TEX Sunrise: 7:07am Sunset: 7:30pm Moonrise: 4:37am Moonset: 6:08pm	17 OKIE-TEX Sunrise: 7:07am Sunset: 7:29pm Moonrise: 5:49am Moonset: 6:40pm	18 OKIE-TEX MEMBERS Sunrise: 7:08am Sunset: 7:27pm Moonrise: 6:59am Moonset: 7:10pm New Moon: 12:45pm	19 OKIE-TEX Sunrise: 7:09am Sunset: 7:26pm Moonrise: 8:08am Moonset: 7:40pm
20 OKIE-TEX Sunrise: 7:10am Sunset: 7:24pm Moonrise: 9:17am Moonset: 8:13pm	21 Sunrise: 7:10am Sunset: 7:23pm Moonrise: 10:25am Moonset: 8:48pm	22 Sunrise: 7:11am Sunset: 7:21pm Moonrise: 11:31am Moonset: 9:28pm	23 Sunrise: 7:12am Sunset: 7:20pm Moonrise: 12:34pm Moonset: 10:13pm	24 Sunrise: 7:13am Sunset: 7:19pm Moonrise: 1:31pm Moonset: 11:03pm	25 SIDEWALK BASS PRO & RIVERWALK 7:30-10 PM Sunrise: 7:14am Sunset: 7:17pm Moonrise: 2:23pm Moonset: 11:57pm First Qtr: 10:50pm	26 SIDEWALK WOOLAROC 7-10 PM Sunrise: 7:14am Sunset: 7:16pm Moonrise: 3:07pm Moonset: none
27 Sunrise: 7:15am Sunset: 7:14pm Moonrise: 3:45pm Moonset: 12:54am	28 Sunrise: 7:16am Sunset: 7:13pm Moonrise: 4:19pm Moonset: 1:52am	29 Sunrise: 7:17am Sunset: 7:11pm Moonrise: 4:48pm Moonset: 2:50am	30 Sunrise: 7:18am Sunset: 7:10pm Moonrise: 5:15pm Moonset: 3:48am			

Lands Tidbits – by John Land

Regional Astronomy Observing events: MOST REQUIRE EARLY REGISTRATION or offer DISCOUNTS for early registration.

Sept 12–20 Okie-Tex Star Party (<http://www.okie-tex.com/>) This annual gathering in the tip of the Oklahoma panhandle is attended by 300 plus astronomers including dozens from our club.

October 15–18 Heart of American Star Party in Butler Missouri (<http://www.hoasp.com/>) There is an excellent article on this event and its origins in the June AL Reflector.

Welcome Recent New Members: BLAKE ETTER, JULIE OSTROWSKI, RICARDO MORENO, SCOTT GREENAWALT, ALLEN MARTIN, TERRA FORREST, TRACY WILSON, NATHAN GREENBURG, SHAYNA GREENBURG

Our membership rates for 2009 – 2010 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 Astronomical League membership)

Students - \$20 (with Astronomical 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, and/or additional Astronomical 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"

Sky & Telescope is \$33 / year. 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 in your check to:

**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 (<http://www.astrotulsa.com/>) 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 email.

President's Message September 2009

Is summer over already? It seems like it was only a couple of weeks long for me – I hope all of you had an enjoyable summer, though.

As we return from our summer break, there are a number of items that we will need to discuss at our September meeting. The most important of these items, obviously, is the update that the Board has done to the club's By-Laws, which must now be approved by the membership. This is a very important piece of business for the club. This update addresses some deficiencies in our current By-Laws as well as updates some things in light of the advance of technology (the Internet, for example).

We also have a major IYA event coming in late September at Woolaroc which could be a very important event for our club. Rick and Peg Walker have been working very hard on this event, and we will need more support from the members for this event than we have for any event up to now this year. Rick and Peg will be talking about this event at the meeting.

We have had a number of successful and well-attended public events over the summer, and for that I am most grateful to those club members who have made it happen. We are seeing new members coming to the club, and some exciting new possibilities are emerging as a result.

Additionally, over the summer, the club telescope has been re-installed in the dome, and the leak in the roof over the classroom has been fixed. And the restroom ceiling has undergone a very interesting – and wonderfully artistic – makeover! There are still several items that need attention, though, and we need as many members as possible to help with Observatory work days.

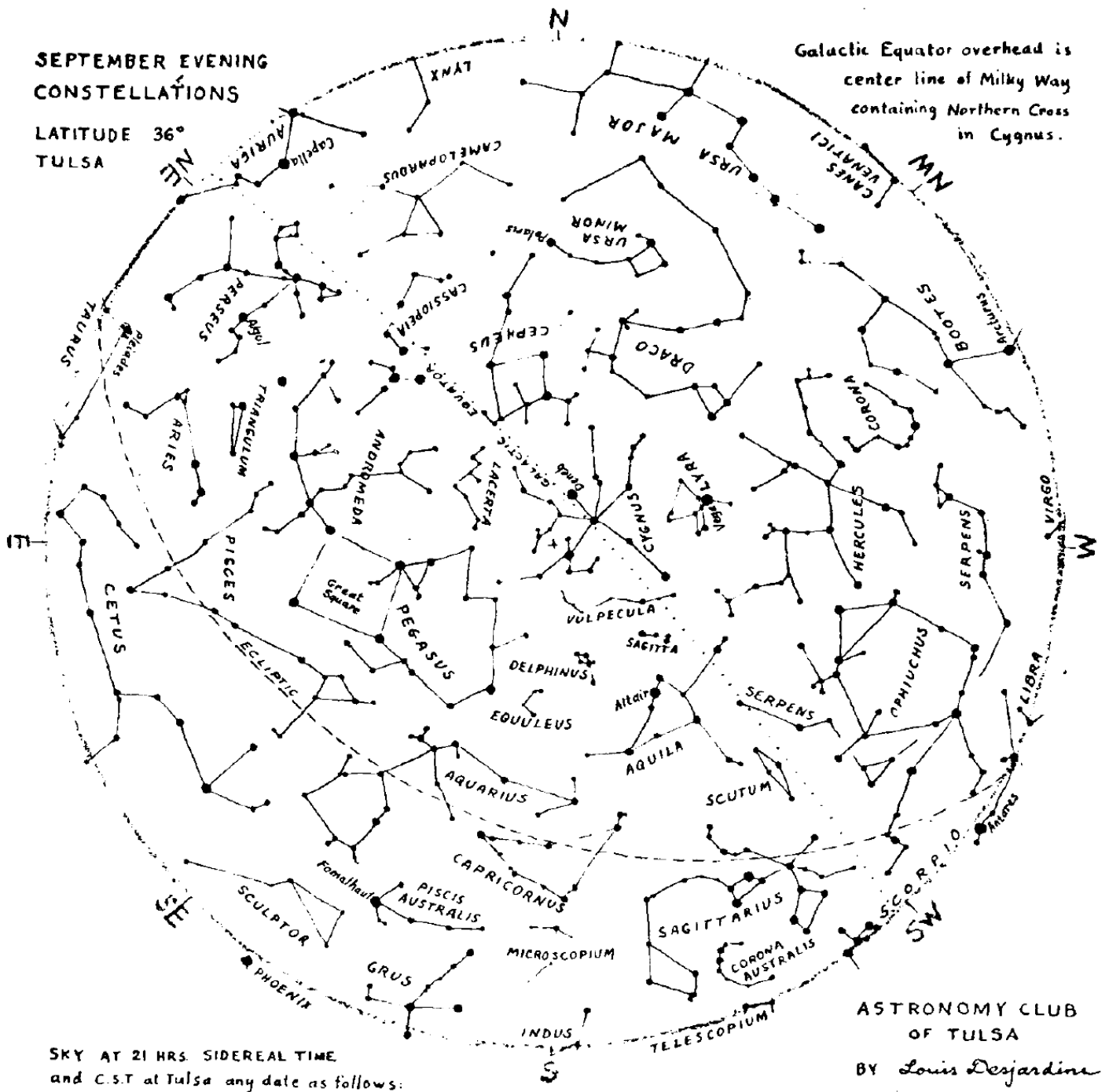
We've made great strides this year as a club, and there are more in our future.

I look forward to seeing each one of you at the September meeting.

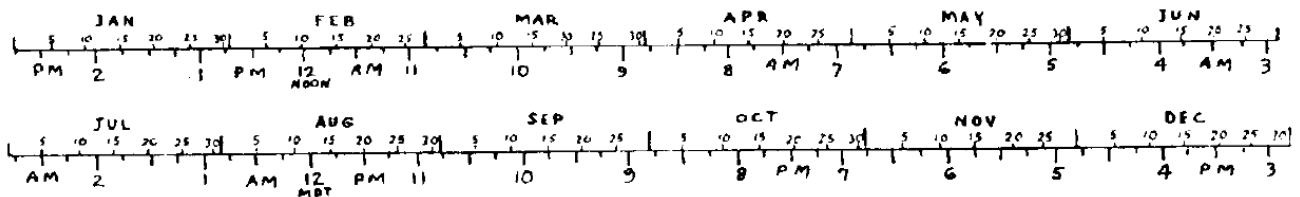
Clear Skies,

Tony White

President, ACT



SKY AT 21 HRS. SIDEREAL TIME
 and C.S.T. at Tulsa any date as follows:



Full Moon.....September 5th
 Last Quarter..... September 11th
 New Moon..... September 18th
 First Quarter..... September 26th

September 2nd – Juno at opposition
 September 17th – Uranus at opposition
 September 22nd – Autumn Equinox
 Evening – Jupiter / Morning – Venus & Mars

Word Search – by Rick & Peg Walker

45 Asterisms Astronomy Club of Tulsa

Small star patterns for telescopes

```

EMT5RENOU18NGABKELAGTC - FAPM
AOGS ' PINALTSOO ' HCTCLFOEWABA
EANDHINA - LAIRPLANE EFPREEQD '
UMIRTPISCRASELPAHC ' I7YKCULU
MNSAAMBCERSNKTHECOATHANGERL
AAUWEUARDTENKPEREDNECKEDEMUS
UAEKRAMNOITSEUQS IMSOCEHTNCS
MKLCWHIRHKHLMCAFYELIMSK ' GT
NHEASCNETKEMBLE ' SKITEUIHSEA
UNTB ' SISISFNLT7AUECDLPGEKHH
TWA8BR - O ' HLAEEUEZRUCIESRINS
LGLOBECNOEYW ' NEIOTTLMCETP '
REPEEEARGDINSRGNRAELRMHGETN
' CEAWMS3AGN ' CZIAOEPIEOBNORO
KBMEPESSVSAGGAMNBGKATLKGAOLE
IDOAS ' IHPAMGSTLPRETTDADHFEL
PNHHNSOGUPIUCILAIIMLGSSTROO
ECOA ' HPOMGNTADHFEA IET ' MANPP
WEKSTGELPINSDFS FPL3MONI POMS A
EADSATIFHTOEEEEATGEORNTICPN
POTCAIAPANWHLTEANLOINAR - SUN
GPETGDLUNLTTTHIATAC - OEHFIHSV
EDAPSEHTDAOGRHRGICRNLNENNTI
OUNEDEJTLWGNAPIPNRFRUBYRINGA
DARKLANEEPEINAUOTADBMALMAEH
DAEHWORRANNGCBSOSLTATEEQAE P
FLCSRWNT ' ERIGSSSYEASGWCAONS
  
```

Davis's Dog
Smiley Face
Airplane
Lucky 7
Stargate
Meerschaum Pipe
Chaples Arc
Ruby Ring
Webb's Wreath
Unicorn's Horn
Lambda
Napoleon's Hat
Gas Pump Handle
Engagement Ring
Jaws

Home Plate
The Flying Minnow
Queen's Kite
Star
Dark Lane
Red Necked Emu
Toadstool
Backwards 5
Triangle
Pakan's 3
Delphinus Minor
Renou 18
Broken Engagement Ring
Mini-Coathanger
The Coathanger

Golf Putter
Kemble's Cascade
Kemble's Kite
The Cosmis Question Mark
Little Orion
Horseshoe
Mini-Cassiopeia
Zig Zag
Sailboat Cluster
Arrow Head
Mini-Cross
Eiffel Tower
The Spade
The Shark
Chapman's Elephant

(Answers in October 2009 ACT Observer...)

Predicted MAXIMA of long period variables - September 2009
 North of -55° Declination ~ Tulsa, OK Viewing Limit
 (Predicted Maxima > 8.0 - Easy Binocular Range)

Designation	Name	Code	Range	Est Max Date
0231+33	R Tri		<6.2-11.7>	Sep 6
0652-08	X Mon		<7.4-9.1>	Sep 7
1344+40	R CVn		<7.7-11.9>	Sep 11
0942+11	R Leo		<5.8-10.0>	Sep 14

Codes:

- needs more observations
 & - needs more observations urgently
 @ - needs more observations very urgently
 % - has good CCDV or multicolor photometry, but more visual observations are needed (usually more visual observations are needed very urgently)

Source: AAVSO Bulletin 71

WOOLAROC

“SUN” DAY ON SATURDAY IS FAST APPROACHING

Saturday, September 26th, 2009

Details at 9/4/09 TCC Meeting

Questions: contact - peg@astrotulsa.com

The 2010 Astronomical Calendar: specially priced for Astronomical League members

The Astronomical League is pleased to announce a special offer for our members from the Universal Workshop, the producers of Guy Ottewill's popular Astronomical Calendar. They are making the 2010 edition of the Calendar available at a discounted price.

There are plenty of good reasons why it has been published for over thirty years. The 2010 edition will not disappoint! Packed throughout the Astronomical Calendar's 84 pages are monthly sky charts; daily celestial highlights; charts, tables, and explanations of planetary movements; eclipse times and paths; and lunar occultation specifics. There are extensive descriptions of the year's meteor showers and periodic comets, as well. This calendar tells, in clear language, what events occur and when they happen.

League members can order this incredible compilation of the year's celestial events for \$19.95, shipping included. (It is normally priced at \$24.95 with another \$7 added for shipping.) Volume discounts (a minimum of 15 copies) for clubs are available.

But, to take advantage of the free shipping offer, you must order by Friday October 31, and either use the special website, www.universalworkshop.com/clubs.htm, or call 800-533-5083. The League's special low price of \$19.95 expires on December 31, 2009. Universalworkshop.com accepts Mastercard, Visa, Discover, American Express and PayPal.

CALLING ALL ASTRONOMICAL ARTISTS!

Peggy Walker

After much talk, a plan for an Astronomy Club of Tulsa, 2010 calendar is in the works. This is an all call for any photos, deep sky and other, artwork of any sort, by any one in the membership. What is needed is the name of the object, date and place taken and what form of process, watercolor, photo, paint, as well as your name and how long you have been in the club, etc.

Please understand for a twelve month calendar, we would like to focus on that month's observable objects. It can be meteors, planetary, etc. If you could please include some astronomical information on that subject it will present a concise and valuable education and fundraising tool for the public. Also bear in mind, that since it is a twelve month calendar, not everything will be put in the calendar but can be used for 2011.

Since we will be doing the layout in house, it should be a straight copy on to the paper for the printer. So for us to streamline the process we ask that you submit your artwork on c.d. If you have anything in particular for us to know, make sure you convey that to us as we plot and scheme on the layout. If we need to alter the size for any reason, we appreciate your freedom to do so.

We are also scheduling ACT events for next year that will be published in the calendar. I know it is early, but you can see why we are hopping the bandwagon as soon as we can.

If you have any questions or artwork to submit, please get it to me before the 30th of September.

TIME TO TALLY

Peggy Walker

Every member who has participated in any of the International Year of Astronomy's events are encouraged to attend the first meeting back at T.C.C. Philip's Petroleum Auditorium on 9th Street in downtown Tulsa on Friday, September 4th. We will discuss the Astronomical League's Outreach Program and how all you hard-working, well-deserving astronomers can get your certificate. Forms and the instructions will be handed out to all who desire an A.L. certificate for outreach. We will see you there.

CHANGING OF THE GUARD

It's that time of year where the membership will be asked to vote on the leadership for A.C.T. for the year of 2010. Elections are held at the October meeting at T.C.C. in the Philip' Petroleum Auditorium on 9th. So get started on what you would like to see A.C.T. do for 2010 and the people you would like to get you there.

A.C.T. T-SHIRTS

Astronomy Club of Tulsa T-shirts are in the works with samples (fingers-crossed) for the September 4th meeting. I will start taking orders at the Sept. 4th meeting. Prices have not been given to me yet; the break down is in process. I will have a price by September 4th so thanks for your patience. We have already asked about getting them done before Okie-Tex and that is not a realistic turn-around time for Designs 4 You in Broken Arrow. But they are still going to be way cool and we can show them off in countless other places!

Observing Pages

Information Exchange

The Astronomy Club of Tulsa has started a new Yahoo Group for the club. For those of you who are unfamiliar with Yahoo groups, it is a forum that allows for messages, photos and files that can be shared among the group's members. As stated in the group's description, "This group is for the members of the Astronomy Club of Tulsa to ask questions, share ideas, get information, plan observing sessions, or just communicate in general. Informal club business communications may also be announced here." This group can be found on the web at <http://tech.groups.yahoo.com/group/AstroTulsa/>. It is open to all club members so be sure to check it out! Tony White, our new Club President is the group's moderator.

September 2009 Observing List

	Double Star	Galaxy	Star Clusters		Nebula		
			Globular	Open	Bright	Planetary	Dark
1	8 Lacertae	NGC6946		IC5146 *	IC5146 *	IC5217	Barnard 168
2	52 Cygni	NGC7331		IC1434	IC1318	NGC6803	
3	Struve 2894			M29 (NGC6913)	NGC6979	NGC6804	
4				M39 (NGC7092)	NGC7000	NGC6826	
5				NGC6811	IC5070	NGC6894	
6				NGC6819	NGC6992-95	PK45-2.1	
7				NGC6866	NGC6960	PK52-2.2	
8				NGC6871		PK52-4.1	
9				NGC6910			
10				NGC6997			
11				NGC7209			
12				NGC7243			
13				NGC7245			
14				NGC7296			
15				NGC7394			

* - IC5146 (Cocoon Nebula) is an Open Cluster within a Bright Nebula

Details of this list are located in the folder, "ACT Observing Lists" in the AstroTulsa Yahoo group's files section. This list contains too many objects to "observe" in one evening, but we will recognize anyone who observes 20 or more of these objects. The reason there are many objects is to give the observer a variety of objects that can also be used for completion of a Astronomical League (AL) Observing Club. For more information on the Astronomical League and the observing clubs, check them out at <http://www.astroleague.org/observing.html>.

All of the objects cross the meridian between 8 PM and midnight. For this month, we are starting a new list of objects. These objects are based on the book, "Deep-Sky Wonders" by Walter Scott Houston. For those who may not know, Walter Scott Houston had the monthly column "Deep-Sky Wonders" in Sky and Telescope. This book is adapted from his many years of information contained within that column. It is a great book and I highly recommend it for those who want to find out more information about these objects, how to find them and especially how to observe them. Sue French authors the present column in Sky & Telescope. For the month of September, the Milky Way is dominant overhead and most of these objects are contained within the galaxy. The dust of the Milky Way obscures the more distant objects, so the list contains almost no galaxies but mainly consists of open clusters and nebula. For those who get the opportunity to go to a dark sky site this month, you should be able to observe some objects naked eye. One of these objects where that is possible is NGC7000, the North American Nebula. Try it out!

I made an error in the column last month, after 13 months of Observing Lists we now have included all of the objects from six not five of the AL observing clubs.

- Double Star
- Messier
- Binocular Messier
- Deep Sky Binocular
- Caldwell
- Herschel 1

I plan on leaving these lists in the file section of the AstroTulsa Yahoo group in an archive folder so that anyone who is still working on these lists can work to complete them.

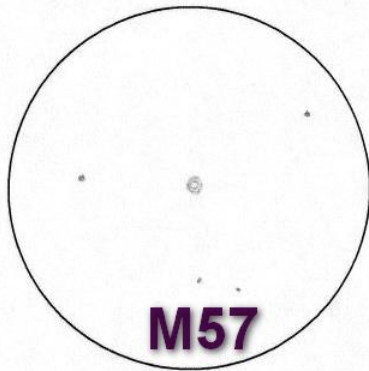
Please take a look and give feedback to either Ann Bruun or Rod Gallagher. Also, please provide a copy of your observing logs to Ann Bruun.

Thanks – Rod Gallagher

What The.....?!

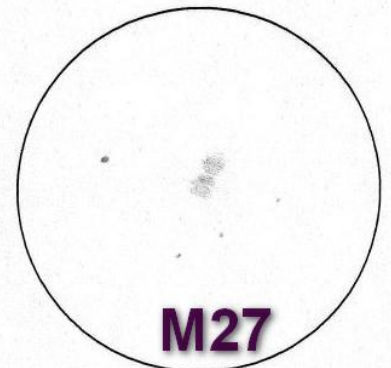
By Ann Bruun – ACT Observing Chairperson

The trouble with finding objects you have never seen before is, well, you've never seen them before so you have no idea what the objects are going to look like through your telescope. When I was first starting out in astronomy I was always looking for a book that would show me what the objects were going to look like in my scope. Most astronomy books, even observing books, tend to show photographs. A camera can never show me the view I would see at the eyepiece. I found a few books that had sketches which were much more useful but still not always a good representation of what I would see. I now realize there is no such book. Each observer has to create his or her own "book". Even if I lined up side by side with another observer using the exact same equipment, looking at the same object our descriptions of what we see would certainly differ. Visual observing is very subjective which is why descriptions of objects can be misleading. Big and bright could mean a lot of different things depending on the observer. It is also true that as you gain experience what you see will change. So how do you find the objects in the first place so you can gain experience?



If all open clusters looked alike and all galaxies looked alike and all planetary nebula looked alike there would be no problem. You could simply find one of each object and then know just what every other object of that type was going to look like. The trouble is, they don't look the same, each object is unique and their appearance even among the same type can be quite different.

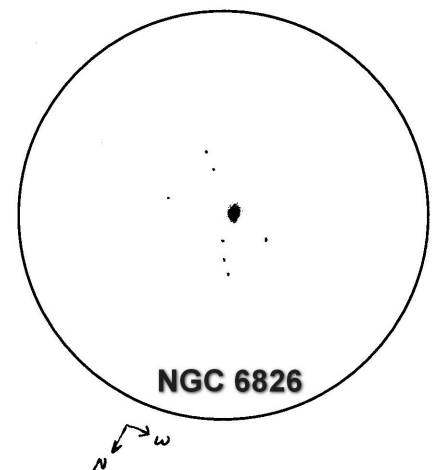
I would like to use planetary nebulae as an example since they gave me quite a bit of trouble at last year's Okie Tex. First let's look at M57 – The Ring in Lyra, very nice, a definite ring shape and easy to locate, my first deep sky object. Then you've got M27 – The Dumbbell in Cygnus. Another nice one but very different than M57. It is a bow tie shaped cloud. Not quite as easy to find as the Ring since it is not located between two bright stars but still fairly easy to pick out using a wide field eyepiece. Then you've got NGC 6826 – The Blinking Planetary, also in Cygnus. This is where the "What the..." comes in. My search for the Blinker went something like this: "Where is it? It should be right next to that bright



star. Is that the right bright star? Yes. Are you looking the correct direction from the bright star? Yes. Are you sure? Yes. Check again". Forty-five minutes later still nothing. "Well this is just crazy, I know I'm there." If I couldn't find this object in a beautiful Okie Tex sky I would never be able to find it. The apparent magnitude was listed as 8.8, the same as for the Ring, so it should be nice and bright. I needed help. Once again Steve Chapman to the rescue. (He always gets me back on track when I derail.) He looked through my scope for several minutes, going back over the steps of finding the correct location. He agreed I was looking at the right field. Then he asked for higher magnification and zeroed in on the nebula. The trouble was it did not look like a nebula to me, in the wider view it looked like a star. I had seen the magnitude and expected something different. Once Steve had pointed it out to me I put on the lower magnification eyepiece and could still pick out the planetary easily. Now that I knew what it looked like it stood out among the star field as something special.

Magnitude is misleading if you don't also look at the size of the object. The magnitude listed is the total light from the object. If an object is more spread out the light will be less concentrated, it will have lower surface brightness and appear dimmer to the eye. The Ring and the Blinking nebula are listed with the same apparent magnitude of brightness but the Blinking looks much brighter because all the light is concentrated into a much smaller object. The Ring's light is a lot more spread out. Checking the sizes; 25" (arc seconds) for the Blinking, 71" for the Ring, which means from our vantage point the light from the Ring is spread out in a three times wider area.

The same is true when looking for galaxies. A galaxy might have a bright magnitude listed but you can barely see it in your scope. If you check the size it will probably be very spread out. Look up the magnitude and size of a galaxy you are familiar with then compare the numbers with the galaxy you are looking for. This will give you some idea what to expect. After you do this a few times you start to get a sense of what is big and what is small in your scope. It is much easier to pick out an object if you have some idea what it will look like. And the more objects you observe the easier it becomes to find them. Before you know it you will be well on your way to writing your own "What objects look like through my scope" book.



Garrett Optical® stocks over 50 astronomy binoculars from six different manufacturers, and we're based right here in south Tulsa.

Visit our websites
www.GarrettOptical.com
www.AstronomyBinoculars.com
 for more information!

Special Notice:
TASM Holiday Closing
 Sept. 7th



Planetarium Shows

September 1st – 30th, 2009
 Presentation Schedule Changes Monthly



Doors open 10 minutes prior to show time for general seating.
 Admission applies to one show.

Monday PLANETARIUM CLOSED

Tuesday through Friday

11:00 AM	Secret of the Cardboard Rocket
12:00 Noon	BIG
1:00 PM	Extreme Planets
2:00 PM	Secret of the Cardboard Rocket
3:00 PM	Night Skies over Green Country
4:15 PM	BIG

BIG: The Universe is Big, but how Big is Big? Journey to the farthest observable reaches of the universe to find out! Computer animation, claymation, laser graphics and a surround sound musical score bring a really BIG subject down to Earth.

Secret of the Cardboard Rocket:

Join two children, Bonnie and Marcus, on a magical journey through the Solar System, aided by a talking astronomy book, a cardboard rocket, and a vivid imagination. Take an up close look at all of our planets and learn the secret that makes this entire journey possible. Great for young children and their families.

Saturday

10:00 AM	Extreme Planets
11:00 AM	Secret of the Cardboard Rocket
12:00 Noon	BIG
1:00 PM	Extreme Planets
2:00 PM	Secret of the Cardboard Rocket
3:00 PM	Night Skies over Green Country
4:15 PM	BIG

Extreme Planets: For ages, humanity has wondered whether we are alone in the Universe. Fifteen years ago we were unaware of planets outside our solar system, but today these "extrasolar" planets appear to be quite common. As the search continues, the possibility exists that one day we might find life elsewhere in the Universe, born in the light of another sun. Join us in the adventure as we explore Extreme Planets.

Sunday

1:00 PM	Extreme Planets
2:00 PM	Secret of the Cardboard Rocket
3:00 PM	Night Skies over Green Country
4:15 PM	BIG

Night Skies over Green Country: Live Planetarium presentation takes the audience on a journey of the current local night sky. Visual demonstrations will include what constellations and planets are visible that night and include upcoming celestial events like comets, meteor showers, and eclipses. Program changes as the night sky changes.

Notice: Shows are subject to change. Seating is for 110. Admission and seating is on the basis of first-come, first-served. Seating may not be available for all showings. Visitors must be seated before presentation begins. No entry after doors are closed, late arrivals attend next presentation. No food or drinks allowed in Planetarium. Please contact the Planetarium to confirm shows and information at (918) 834-9900 x400.

ASTRONOMY CLUB STAR PUBLIC PARTY

FRIDAY SEPTEMBER 11TH - ALTERNATE DATE WILL BE SATURDAY SEPTEMBER 12TH IF SKY IS CLOUDY ON FRIDAY.

GATES OPEN AT ~7:00 PM SUNSET 7:37 P.M. / END CIVIL TWILIGHT - 8:02 P.M.

LAST QUARTER MOON ON 11 SEPTEMBER 2009 AT 9:16 P.M. CENTRAL DAYLIGHT TIME

Due to the uncertain weather reports, always check your local weather reports for sky conditions. Our club has excellent resources for predictions of cloud cover on the observe section of our website <http://www.astrotulsa.com/Observe/observe.asp>, or check the AstroTulsa Yahoo Page <http://tech.groups.yahoo.com/group/AstroTulsa/> for cancellations if weather is uncertain!

- Beginners Telescope Set Up on Center Pad: Several of our new members and guests have new telescopes they are trying to learn how to use. We would like to invite you to set up your equipment near the center concrete observing pad. Members let's all take time to meet these novice astronomers and help them get a good start with their equipment.
- Wireless Internet now available at the Observatory: For laptop users - Rod Gallagher has made arrangements for wireless Internet to be broadcast on the observing field. Details for log on are available at the observatory. This is available for members to use for astronomy, observing and weather information and should not be abused for other types of browsing and gaming.
- 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. You don't have to own a telescope to enjoy an observing night. Our members are eager to share their views with others. There will be plenty of people willing to share the view 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.
- Children are always 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 light jacket as needed.
- We would like to encourage our new members and guests to join us
- 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!

PARKING MAY BE AT A PREMIUM. Reserve Parking is available next door in old ATT 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.

SAFETY ISSUE: When large groups are present it is better to turn on your park lights or headlights on low beam rather than to 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.

A donation of \$1.00 per guest would be appreciated to help us maintain the observatory.



CLUB OFFICERS

POSITION	NAME	PHONE
President	Tony White	918-258-1221
Vice-President	Tom McDonough	918-665-1853
Co-Treasurers	John Land Jim Miller	918-357-1759 918-627-4551
Secretary	Teresa Kincannon	918-637-1477

BOARD MEMBERS AT LARGE

NAME	PHONE
Ann Bruun	918-834-0757
Steve Chapman	918-342-1643
Rod Gallagher	918-369-3827
Bill Steen	918-251-3062
Chris Proctor	918-810-6210
Rick Walker	918-451-9235
Dennis Karcher	918-619-7097

APPOINTED STAFF

POSITION	NAME	PHONE
RMCC Facility Manager	Chris Proctor	918-810-6210
Membership Chairman	John Land	918-357-1759
Observing Chairman	Ann Bruun	918-834-0757
New Members (co-Chairmen)	Owen Green Rick Walker	918-851-1213 918-451-9235
Observatory Director	Teresa Kincannon	918-637-1477
Webmaster	Tom McDonough	918-665-1853
Newsletter Editor	Dennis Karcher	918-619-7097
Night Sky Network	Peggy Walker	918-640-0832

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



Night Sky Network

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 Newsletter@astrotulsa.com

Deadline for October Article submissions: September 25, 2009
Target Publication for October Observer = September 30, 2009
eMail article submissions to: djkarcher@cox.net