

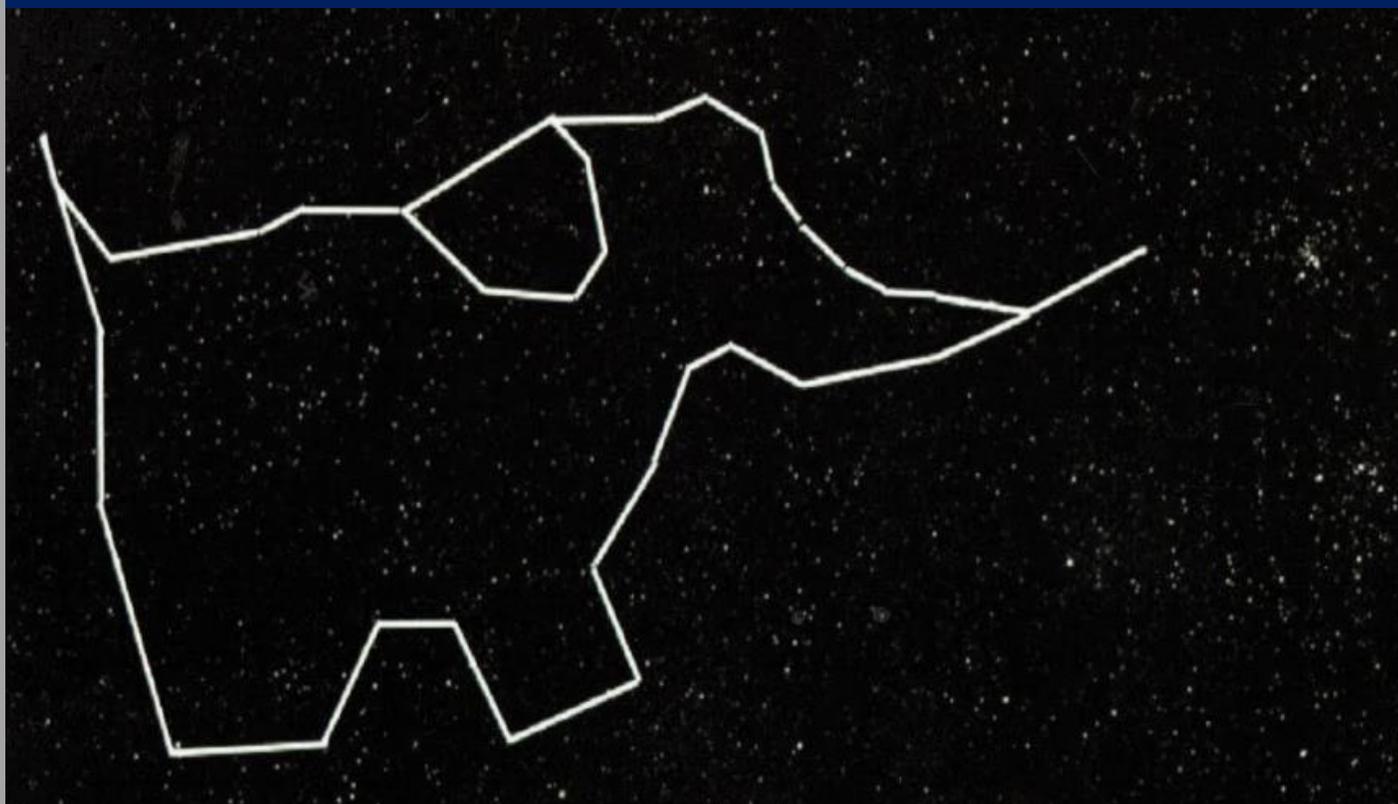


OBSERVER

NOVEMBER 2020

Bringing Stars to the eyes of Tulsa since 1937

Editor – John Land



The Elephant Asterism - created by Steve Chapman

Our minds love to see shapes and pictures in the stars. Constellations are “officially” recognized patterns we use to identify regions of the sky. Asterisms are simple patterns among the stars with various popular names. Our Big Dipper is one such asterism.

Member, Steve Chapman, recounts how he discovered his Elephant Asterism.

“I first spotted it when attending the Okie-Tex Star Party in 2003. I had just purchased a pair of binoculars and was wandering around the night sky and decided to look at the Double Cluster in Perseus. I remembered how years before when I was quite new to astronomy, that I had mistakenly thought that the Double Cluster was comprised of “Stock 2” (cluster of stars that make up the body of the elephant), the line of stars that leads from Stock 2 (elephant’s trunk) and the Double cluster itself. It wasn’t till years later that someone pointed out my mistake to me (much to my embarrassment). Since then I have always figured that most people just look at the Double Cluster and go on to other objects missing the Elephant. It’s a wide asterism (about 4 degrees) and its best seen in binoculars. | | |”

The image above is a composite image made by Rod Gallagher. The Elephant Asterism resides to the LEFT of the Perseus Double Cluster. It is best seen high in the NE in October and November when the “Elephant” is standing on its feet. It first appeared in an Astronomical League Calendar.

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Astronomy Club Events

Check our website www.AstroTulsa.com events section for updates

**Members ONLY Events continue
with Social Distancing Guidelines in Effect**

We are limiting our Observatory nights to our MEMBERS ONLY. Please observe Social Distancing and we strongly recommend wearing a mask when around other people. PLEASE WEAR a MASK when in the heated CLASSROOM. Please keep minor family members within your observing area.

With the return to Central Standard Time, Sunset is very early in winter months. We have CHANGED the START TIME to 6:30 making our opening time AFTER DARK. Be sure to review the map directions carefully. When you arrive be aware of people on the field and telescopes set up. If a backup date on Saturday is used due to weather cancellation, the Start Time will move closer to sunset. Check website for changes.

Friday, Nov 6, 6:30 PM
Saturday, Nov 7, 5:15 PM (backup)

Friday, Nov 13, 6:30 PM
Saturday, Nov 14, 5:15 PM (backup)

Friday, Dec 4, 6:30 PM
Saturday, Dec 5, 5:15 PM (backup)

Friday, Dec 11, 6:30 PM
Saturday, Dec 12, 5:15 PM (backup)

Check our website www.AstroTulsa.com events section for updates

Observatory ONLY OPEN for SCHEDULED EVENTS. [Click for Observatory Map](#)

CAUTION: DO NOT use GPS it will likely send you on some nearly impassible back roads.

Guidelines for Members Only Observing Night

No guests – other than immediate family – no large family groups.

Additional details will be sent via membership emails

These guidelines are in place to protect our members while also enjoying observing

Looking for Virtual Sky Events !!

Chabot Science center live and recorded streaming events.

Try the Videos and Facebook Live sessions from Chabot Space & Science Center

https://www.facebook.com/pg/ChabotSpace/videos/?ref=page_internal

Lowell Observatory – Flagstaff, AZ live and recorded streaming events.

<https://lowell.edu/giovale-open-deck-observatory/>

PRESIDENT'S MESSAGE

BY TAMARA GREEN



Hey Y'all !!

Thank you so very much to those of you who participated in last week's vote, and for re-electing me as your President for next year! I hope that we can all have a much better year next year! I'm looking forward to 2020 being over.

I want to congratulate the following people who have been elected as officers and board for 2021:

Daniel Smith, VP; Richard Brady, Secretary; John Newton, Treasurer; and your Board for next year: John Land, Skip Whitehurst, James Taggart, Jerry Cassity, Michael Blaylock, Bryan Kyle, Adam Koloff, Jim Danforth, and Don Bradford. I look forward to working with you guys to get some great things done in the club!

The Holiday Season will soon be here, and I hope that all of you and your families have a happy Holiday Season. I can't believe it's almost Thanksgiving! I hope all of you have a safe time as well.

Here's hoping 2021 will be FANTASTIC!

Clear Skies, Tamara Green

Our First Two Zoom Meetings have gone well.

If you missed our meetings you can watch the recordings of them

Sept 22 - [Electronically Assisted Astronomy](#) - Presenter – Robbin Jones

**Oct 26 - [Understanding the Active Sun through satellite observations](#)
Presenter – Dr. Aaron Coyner**

November Zoom meeting DATE has not been set yet.



Note from John Newton.

Again, thank you for taking time to respond to the ballot by casting your votes and sending them back. As of Oct.25th, the polls are closed. Ballot submissions have been handled confidentially while maintaining namelessness. Overall, we had a healthy response. 39 of our members sent in ballots with the final tabulated figures sent to Tamara Green (Club President) and John Land (Editor) who will publish the new officers and board in our November Newsletter. Congratulations to the new ACT elected officials of 2020-2021.



PREORDER YOUR 2021 ASTRONOMY CALENDAR @ \$10 each

Each month features a stunning space photo to adorn your wall along with the month's astronomical highlights and interesting historical references.

Contact John Newton at astrotulsa.tres@gmail.com

Welcome Officers and Board members for 2020 – 2021



New Board Members



Returning Board Members



Member Ron Coats shared this poem entitled Telescope by Louise Gluck

Ron says *"I was listening to National Public Radio the other day, and I heard this poem read.. I wish I could find the poet reading it aloud. She reads it so well.*

Yes, I have had the feelings she expressed in the poem, where you realize just how REAL the things out in space really are.

My wife and I were in New York City on 9/11...we had never made that trek before, I wanted to go to the Rose Museum and the Hayden Planetarium.

Even while the twin towers were still smoldering, it occurred to me just how insignificant things happening here on Earth really are, in the "grand scheme of things".

<https://thefloatinglibrary.com/2009/07/30/telescope-louise-gluck/>

Telescope – by Louise Gluck

There is a moment after you move your eye away
when you forget where you are
because you've been living, it seems,
somewhere else, in the silence of the night sky.

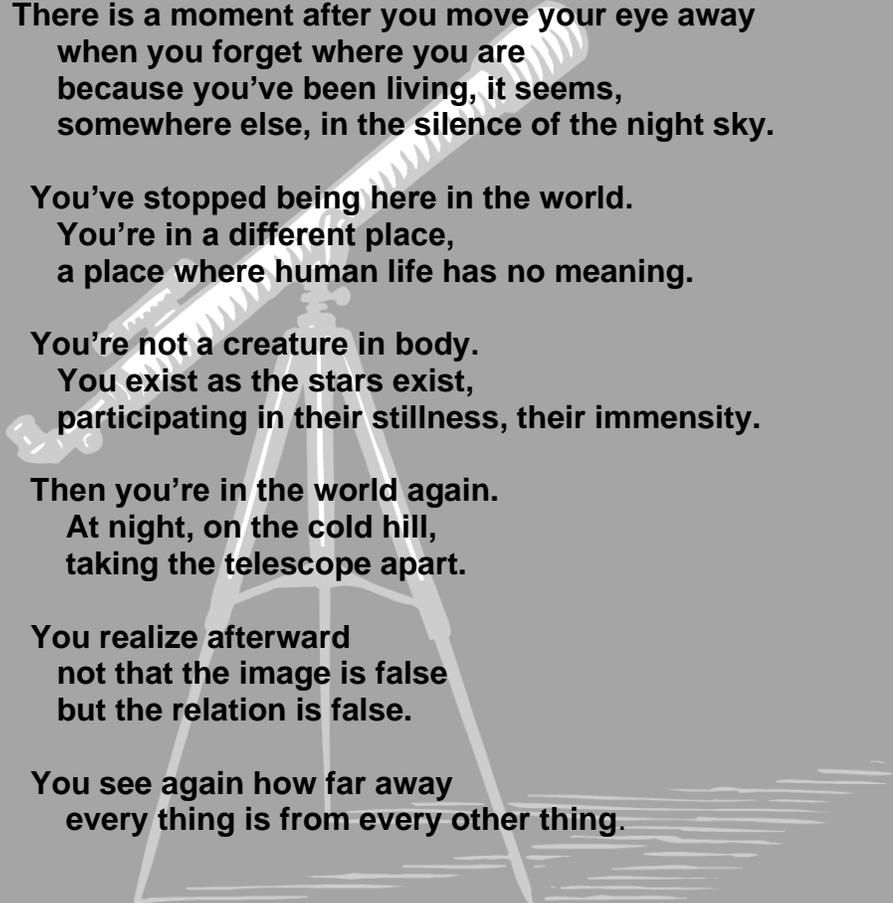
You've stopped being here in the world.
You're in a different place,
a place where human life has no meaning.

You're not a creature in body.
You exist as the stars exist,
participating in their stillness, their immensity.

Then you're in the world again.
At night, on the cold hill,
taking the telescope apart.

You realize afterward
not that the image is false
but the relation is false.

You see again how far away
every thing is from every other thing.



2020 has be a strange and often disappointing year.
But This year's Mars Fall Mars Opposition did not disappoint.
Here are some images from several of our members.



Bryan Kyle

I took that particular shot on Wednesday Oct /7 at 12:43 AM in Teton Pines, Wyoming, through a Celestron Nexstar 6SE. Using a Meade 5mm Ultra Wide Angle eyepiece and a Celestron phone clamp. The phone model is an iPhone X. Just used the default camera app and cranked the brightness to minimum using the slider that pops up when you tap to focus the image. Image enhanced with in phone photo editor.



John Land

Mars image Oct 14 00:26 from Broken Arrow
Image was taken with a Meade LX 90 scope. I used a cell phone adaptor to take an afocal image through a 20mm Erfle eyepiece and 2X barlow. Image was made with the NightCap app on my iPhone X at 1/6 sec ISO 24. I enhanced the contrast of the image with the very powerful image processing that is part of the iPhone software.



Michael Lunsford

Took these images on Oct 17 and Oct 21st

Equipment: Celestron Powerseeker 80EQ @ F/11 (no barlow) + SV305 Software: Sharpcap, PIPP, Autostakkert, Registaxx (and Gimp 2nd attempts")

Michael shares this account of his Oct 17 imaging. *"I just got a SVBONY SV305 camera for my telescope and took it out for a spin last night and pointed my scope at Jupiter, Saturn and Mars from my back yard. I'm an absolute beginner at this and the color is off (will work on those settings more next time), but overall, I'm pretty happy with my first attempt, especially since conditions weren't great (it was windy and by the time I got to Mars, seeing was so bad that it mostly looked like a blob in most frames) and the fact I'm at the "extreme budget" end of the spectrum right now."*



Adam Koloff

**Posted this image on our members Facebook page
Mars Oct 1 about 22:50**

**Zwo 120mc-s camera and a
Celestron Omni XLT 127 Schmidt Cassegrain.**



Daniel Smith

This was my first time to image Mars, and I'm blown away at how it turned out. Deep sky imaging is more my thing, but I thought I would give planetary a go and broaden my horizons. This scope has a focal length of 4700 mm. So at f/20 it only works well on bright objects. It really excites me to think that we walk on Mars in the next 10-15 years.

Captured with a Celestron C9.25, ASI224mc,
and a 2x Barlow.
Processed with AutoStakkert3, Registax6, and Photoshop.

Using the Mars Profiler from Sky & Telescope indicates that the large dark region in Daniel's photo is Mare Acidalium. You can use the profiler to determine what you are observing on Mars. Just search for Mars Profiler or use the full link below.

https://skyandtelescope.org/wp-content/plugins/observing-tools/mars_profiler/mars.html

To see a great Full Rotation of Mars Video from <https://youtu.be/HKHEki1p2OY>
Made on 9 non-consecutive nights from Metepec, Mexico from Sept. 25th to Oct 26th.
Each night session had a duration of 3 to 4 hours. Pictures were captured at 5 minute intervals. Celestron SCT 2350mm QHY 5III 290 color camera.



See a great series of 10 images of Mars from March to Late September
<https://apod.nasa.gov/apod/ap201006.html>

To see more great Mars Images see -
<https://spaceweathergallery.com/index.php>

What's Going on in the Night Sky this month? By John Land



Our friends from the Bartlesville Astronomical Society passed along this great resource night to night things to see and even a video link.

<https://www.beckstromobservatory.com/whats-up-in-tonights-sky-2/>

Also Sky and Telescope has an audio podcast you can listen to while under the night sky. <https://skyandtelescope.org/observing/sky-tour-astronomy-podcast/>

Both websites renew information each month

November is here and Central STARLIGHT Time has finally returned !

The Sunsets before 5:30 and we can begin observing soon after supertime.

Mars is rising before sunset and is high in the sky for observing. It reached opposition in October and is rapidly shrinking as we move away from it so don't miss the last few weeks on good observing.

Jupiter and **Saturn** are still observable in the SW but set around 9:30 in early November and 8:30 by month's end. They are now 5 degs apart and fit within the same binocular field of view. By Dec 1 they will close to just 2 degs. **On Dec 21st the two great planets will be only 1/10 of a degree apart and easily visible in the same telescope view.** You'll need to find an observing spot with a clean view to the low SW horizon. The pair will set less than two hours after sunset. Don't miss this Grand Conjunction the last one this close was 1644 ! The next Grand Junction will be Oct 30, 2040 a little over 1 degree apart.

Venus and **Mercury** are morning planets in the SE before sunrise. Mercury reaches its greatest western elongation 19 degrees from the sun on Tuesday November 10. A thin waning crescent moon joins the pair of planets on Nov 12 & 13. Venus will sink lower in the SE each day and hang around until about Valentine's day.

Neptune was at opposition Sept 14 and is now well placed for observing to the South in Aquarius. **Uranus** reached opposition October 31 and should be visible in binoculars to the determined observer. You find more tips for observing these Ice giants in our Sept and Oct Newsletters. Detailed finder charts <https://skyandtelescope.org/observing/ice-giants-neptune-and-uranus/>



Member John Moore sent us a link to an amazing video of the Occultation by Uranus' moon Umbriel of a distant star. John is VP of the Planetary Occultation services of IOTA (International Occultation Timing Association) For the Sept 21, 2020 Umbriel events Some 20 members of IOTA set up telescopes along the board path of the occultation shadow. Voyager II took closeup images on Umbriel in January 1986 showing it to be 1162 Km wide. (722 mi) For this event Umbriel took a bit over 66 seconds to occult a magnitude 13.5 star. Umbriel was 14.9 magnitude.

You can watch for yourself as the star dims then reappears.

Jerry Bardecker used a 12" Meade telescope with a focal length of 3000mm to make this high-resolution video. https://www.youtube.com/watch?v=Rub0hGI_FGc

If you are interested in learning more about IOTA and the valuable citizen science contributions that can be made by asteroid occultations go to <http://occultations.org/>

The Leonid Meteor shower peaks the night on Nov 16-17 after midnight in moonless skies with a dark sky peak of about 15 meteors per hour. See tips on Observing Meteor Showers.

<https://eyesonthesky.com/tutorials/meteor-shower-observing/>



Finally **Comet ATLAS (C/2020 M3)** makes its closest approach on Nov. 14th at 0.358 AU (54 million km) away. Amateur astronomers with small telescopes will find it to be an easy target glowing like a tiny 7th or 8th fuzzy glow. Look for it passing through the body of Orion to the left of M42.

<http://astro.vanbuitenen.nl/comet/2020M3>

Telescopes for Sale – The Holidays are near. Does Santa may have stars on his list?

Orion SkyQuest XT 8” Classic Dob with accessories- \$275.00

Excellent condition, purchased May 2019



Accessories Included: Orion 9x50 Rt. Angle CI Finder scope, Dual Finder Scope Mounting Bracket, *Instruction manual, *Telescope Observer’s guide, 4 Eyepieces- (*25mm Orion Sirius Plossl, 32mm Super Plossl, 12.5mm Plossl, 6mm Plossl), *Orion Shorty 2X Barlow Len, Astromania Next Generation Laser Collimator, 1.25 Filter Set, GoSky Telescope Quick Adapter for Cell phones, Astrogizmos Telescope Cover and custom-designed wheel base for telescope
Call or email - Don Hamilton 918-855-4683 dhamilton721@cox.net



The LX200 utilizes 33 bright and well known stars to facilitate the telescope's C and POLAR alignments. The stars were selected to allow observers from any given night to be able to quickly make precision alignments. The LX and Star Charts also...

STAR NAME	RA	DEC	CONSTELL	MAG
ACHERNAR			ERIDANUS	0.1
ACRUX A			CRUX	1.2
ALBIREO	21	45	CYGNUS	1.9
ALCAID	146	55	ORION MAJOR	1.3
ALDEBARAN	33	16	ORION	0.4
ALNILAM	50	23	ORION	0.5
ALPHARD	95	55	HYDRA	0.9
ALPHEKA	165	55	CORONA BOR.	1.5
ALTAIR	228	28	AQUILA	1.5
ANTARES	177	0.8	SCORPIUS	1.6
ARCTURUS	147	0.0	BOOTES	1.0
BETELGEUSE	56	0.4	ORION	0.0
BOGARDUS	56	2.6	AURIGA	0.0
CANOPUS	63	-0.7	CARINA	0.0
	42	0.1	ORION	0.0
	78	1.0	ORION	0.0
	232	1.3	ORION	2.0
	114	2.0	ORION	2.0
	8	2.0		
	238	2.4		
	247	1.2		
	144	0.6		
	17	2.0		
	249	2.5	PEGASUS	
	20	2.1	CETUS	
POLARIS	19	2.0	URSA MINOR	
	81	1.1	GEMINI	

**Meade Schmidt-Cassegrain LX 200 8 inch f/6.3 -1995 telescope with carrying case. Meade adjustable height field tripod stand. The telescope and accessories are in excellent condition. At f/ 6.3 its focal length is 1260 mm
 Plossol Eyepieces 12.4 mm (102x) and 6.4 mm (197x) plus a 2X barlow**

**CALL: Dale Hardesty 918-340-0201 I do better at communicating over the phone
 EMAIL : dhardesty503@gmail.com**

TREASURER'S and MEMBERSHIP Report

BY JOHN NEWTON



As of October 25th, we have added **9** new members bringing the total to **193** members. We welcome this month our newest members since my last monthly report, including **Mark Parker, Chase Bates, Shawdy Saheb, Steven Loder, Hunter Zimmerman, Robert Brokaw, Michael Baker, William Gilder and Esteban Corral**. Hello and welcome to ACT!

In addition, we want to recognize our long-term prominent and well-respected members who continue to renew their memberships with the club, even during these restricted times. We look forward to seeing you all at meetings, even if virtual by Zoom, and at club events throughout the year when possible.

Accounts as of October 25, 2020

Checking: \$ 4,791.27 < \$ 3,000 moved t from checking to savings

Savings: \$ 10,784.91

Investments: \$ 25,451.53 (Value tends to fluctuate with markets).

The club now has **PayPal** available for you to start or renew memberships and subscriptions using your credit or debit cards. Fill out the registration form at <https://astrotulsa.com/page.aspx?pageid=16> **Click Submit** and you will be given the choice of either **mailing in your dues** with a check or using **PayPal** which accepts most major credit cards. A modest processing fee is added to PayPal transactions.

You may also renew your membership or join at one of our club events using your credit card by seeing one of our officers. We can take payments with the Square card reader. A small fee is also added on to these transactions.

ALSO NOTE: For our current members who are renewing their memberships, you can now go to a new link on the website to start your renewal process. On the home page, hover over the "Member" tab on the ribbon menu near the top of the page. Then select the "Membership Renewal" link and this will take to a page to fill out your information. Fill this out, submit it, then pay your dues by the method you choose.

NEWS NOTE: Both Sky & Telescope and Astronomy have free Digital subscriptions available with print subscriptions, or Digital subscriptions may be purchased separately. Details - Contact their websites

Membership rates for **2020** are as follows:

Adults: \$ 45 per year, includes Astronomical League Membership.

Sr. Adult: \$ 35 per year for those 65 or older, includes Astro League Membership.

Students: \$ 30 with League membership; Students: \$ 25 without League membership.

Additional Family membership: \$ 20 with voting rights and League membership.

\$ 15 with voting rights but without 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.

Join Online – Add or renew magazine subscriptions.

<https://www.astrotulsa.com/page.aspx?pageid=16>

Magazine Subscriptions: If your magazines are coming up for renewal, try to save the mailing label or renewal form you get in the mail. Forms are available on the club website.

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

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

Sky & Telescope is \$ 33 per year <https://skyandtelescope.org/>

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

You may renew Sky & Telescope subscriptions directly by calling their number -**be sure to ask for the club rate**

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NIGHT SKY NETWORK –
Open Position

Public FaceBook Page Coordinator
Open Position

WEBMASTER JENNIFER JONES

Help and Suggestions Wanted

Do you have an idea for one of our Club Zoom Meetings?

We are looking for people to do short 5 – 10 minutes sections on an astronomical topic of interest. Some place you've visited or a new piece of equipment you could review etc.

Also we would welcome someone doing a full length 40 min presentation. Or Contact referrals for someone you know who might be willing to be our club guest presenter.

Contact John Land
Tulsaastrobiz@gmail.com

Create a Cartoon or Funny line with an Astronomy theme and Send in your Best Ones !

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