President’s Corner

As I near the end of my presidency my thoughts are filled with all that has been accomplished in the past two years and all that has yet to come. We’ve taken great strides in development of our programs, those offered to our members and to the public. Our observing endeavors continue to thrive in the areas of our telescope loaner program and the purchase of new equipment and last year’s acquisition of the 25” dobsonian. The beginning of this year has been a whirlwind of events for outreach, and member services has some big plans on the horizon for the practical astronomy series and future members star party events.

This past month we’ve witnessed the beginning of a legacy in the form of the new Texas Museum of Science & Technology, showcasing the world renowned exhibit Body Worlds. Executive Director Torvald Hessel will present at our April monthly meeting on the museum’s history, progress and plans for the future.

For those of you who plan on attending the Texas Star Party (TSP) in May, our Practical Astronomy session this month will focus on a roundtable discussion for new attendees as well as advice from seasoned TSP’ers.

While this year’s Messier marathon was thwarted by Mother Nature, there are high hopes for this month’s Central Texas Star Party (CTSP), April 17-19. Come Friday and bring a dish to share for the potluck and/or join the group on Saturday for the BBQ dinner. Saturday we hope to have a training session on the solar scope. Stay tuned for more details.
Most importantly and not to go forgotten, is our election of new Executive Committee members, taking place during our April monthly meeting. While all positions have individuals in place, nominations are still accepted via email to the nominating committee, or they can be declared from the floor at the meeting on April 10.

Lastly, thank you to all who joined us at Sputnik for our third Astronomy Off the Field. We had a great turnout, new members in attendance and good food to boot. April’s AOTF will take place in the far reaches of North Austin on Thursday, April 30 from 7p – 9p at Inca Chicken off Wells Branch Parkway.

Hope to see you all at these upcoming functions.

Here is to dark and starry skies!

---

**JOIN US FOR APRIL’S MEETINGS**

**When**  
April 10  
Practical Astronomy at 6:30 PM  
GA meeting at 7:30 PM

**Where**  
ETC 2.136 - UT Campus  
Engineering Teaching Center

**Torvald Hessel, Director**

**Texas Museum of Science & Technology**

The Austin Planetarium is now the Texas Museum of Science & Technology. The interim location in Cedar Park opened on March 20 and will host traveling exhibitions as it works to increase its permanent collections and add a planetarium before the end of the year. Director Torvald Hessel will provide an update on the museum and its activities.

**Practical Astronomy--Texas Star Party Roundtable Discussion**

What is it? How do I participate? What are the best resources and tools for having the most fun? Dawn Davies will give a short presentation and then lead a roundtable discussion. Whether you’re a rookie or a veteran of TSP, join us for a discussion of resources, techniques and past experiences. Share your triumphs and disasters.
2015-16 Executive Committee Nominees

The Nominating Committee has presented the following slate of nominees for the Executive Committee for next year:

President       David Mathias
Vice-President   Terry Phillips
Secretary        Domingo Rochin
Treasurer        ***
Communications Chair       David Lynch
Outreach Chair     Dawn Davies
Equipment Chair    Steve Means
Member Services Chair       Jim Spigelmire
Members-at-Large    Alan Carruth
                      Brian Lippincott
                      Katie Raney

*** Ani DeGroot has agreed to be nominated for Treasurer from the floor at the election meeting.

The election will take place at the April 10 General Assembly meeting. Nominations for all positions will be taken from the floor.

ASTRONOMY OFF THE FIELD – THURSDAY, APRIL 30
7:00 PM – 9:00 PM
Inca Chicken, 1707 Wells Branch Parkway, Austin, TX 78728

Put down the telescope and come Off the Field.

Are you looking for a bit of mid-week astronomical socializing? Are you tired of trying to discern one astronomer’s voice from another on the observing field in the pitch dark? Want to get to know your fellow AAS members and other Austin astronomers?

Join us for Astronomy Off the Field on the last Thursday of the month. Meet up with fellow astronomers to talk shop and then some. Get to know their other interests, alternative hobbies, relax with a drink and food and have a little fun, if not a lot.

All ages are welcome.
Executive Committee Minutes
By David Lynch, Secretary

March 2, 2015

The meeting was called to order at 7:17 PM. Present were President Dawn Davies, Vice-President Terry Phillips, Secretary David Lynch, Treasurer Mark Lyon, Outreach Chair Larry Martin, Equipment Chair James Hall, Members-at-Large Alan Carruth, David Mathias, and Jim Spigelmire, and newsletter editor Joyce Lynch.

Officer and Chair Reports

Vice-President  Vice-President Terry Phillips will be speaking in March, Torvald Hessel is tentatively planned for April, Phil Kelton is planned for May, and Don Olson is planned for June.


Equipment  Observatory training will be held on 3/14 and 3/28. The weather station at COE needs to be replaced.

Business

March Members Only Star Party  COE would like to have the observatory open on March 21, which is part of spring break and a members only star party. Staff will be in the observatory building, which will close at 10:00. Members participating in the Messier Marathon are encouraged to set up at the southern end of the observing field.

Meeting venue  Hyde Park Christian Church has been reserved for May, when our UT meeting room has traditionally been unavailable due to final exams. The cost is $100 for four hours. Discount parking at UT is available if purchased in bulk, but per-meeting costs of paying for UT parking for the club will probably run more than $100.

25” Dob  We are still waiting on approval from Calibre and LCRA to expand the concrete apron around the Ruof Observatory.

Auction  Planned for April 1-9.

COE Agreement  The agreement has been signed by Calibre. The agreement requires a monthly submission of a list of members and observatory operators. For COE fees to be waived, members should have a hangtag, but names may be checked from the membership list. The agreement will require AAS to begin insuring the contents of the observatory.

Nominating Committee  Two commitments have been received. A third member is still needed.

Scope clinic  April or May is being considered. The ideal event would offer a 1:1 ratio of trainers to trainees and be held at a location with no entrance fees.

ESP Fund  The Executive Committee agreed to return the club’s share of the proceeds from last year’s Eldorado Star Party to the current year’s plans, in the amount of $390.14.

Planetarium donation link  The EC voted to change the second donation link from the Austin Planetarium to Astronomy on Tap. The organizers of AoT have personally been paying for venues and equipment.

The meeting was adjourned at 8:18 PM.

Calendar of Events

10 April 2015
General Assembly Meeting
7:30 PM (Practical Astronomy 6:30)
ETC 2.136 - UT Campus

17-19 April 2015
Central Texas Star Party
Canyon of the Eagles

25 April 2015
Outreach Opportunity
Public Star Party
6:00 PM
Canyon of the Eagles

30 April 2015
Astronomy Off the Field
7:00 PM - 9 PM
Inca Chicken
1707 Wells Branch Parkway

4 May 2015
Executive Committee Meeting

8 May 2015
General Assembly Meeting
7:30 PM
Hyde Park Christian Church

For outreach events, see Page 6

Please see the AAS Calendar of Events webpage for more details: http://www.austinastro.org/events
The meeting was called to order at 7:38. A quorum was present.

The minutes of the February 13, 2015 meeting were approved.

**OFFICER AND CHAIR REPORTS**

In addition to what is noted here, officers and chairs summarized their jobs to provide information for members who might wish to join the Executive Committee. The incumbents from the following positions have indicated that they will not be continuing in the next term: President, Treasurer, Communications Chair, Equipment Chair, Member Services Chair, Secretary.

**Vice-President** Due to concerns about parking and room configurations, the Society is going to be experimenting with holding a meeting in a different location in May, when our usual meeting room on the University of Texas campus is typically unavailable due to final exams. The May 8 meeting will be at Hyde Park Christian Church near 45th and Duval. The Executive Committee will be conducting surveys about meeting days and locations. In April, Torvald Hessel from the Texas Museum of Science & Technology (formerly the Austin Planetarium) will be speaking about their new temporary facility.

**Outreach** Upcoming events include the public star party at the Eagle Eye Observatory on March 14, Art.Science. Gallery on March 18, and Wells Branch Community Library on March 20.

**Member Services** CTSP will be held on April 17-18. Friday night supper will be a potluck, Saturday night supper will be BBQ (cost $5 per person, payment through the AAS website will be available soon.)

**BUSINESS**

**Auction** An auction is planned for April 1-9. The format will be similar to the previous auction with bidding occurring through the discussion groups on the AAS website.

**Nominating Committee** Rodney Macias, Domingo Rochin, and Tara Krzywonski have been appointed to serve as the nominating committee for the April 2015 Executive Committee elections.

**Upcoming Events** Astronomy on Tap will be at Scholz Garden on March 17. Nerd Nite will be at the North Door at 8:00 on March 17, with a focus on Neil DeGrasse Tyson’s new TV show. Astronomy Off the Field will be at Sputnik Burger Bar on March 26. The 2015 Messier Marathon will be held at Eagle Eye Observatory during the members-only star party on March 21.

**PRESENTATIONS**

**Brian Lippincott: “What’s Happening in Astronomy”** New solid rocket booster is the largest ever built; SpaceX attempts landing; Dawn approaches Ceres; identical astronaut twins Mark and Scott Kelly compare effects of microgravity; new satellite (SMAP) measures soil moisture; ESA makes Mars Express orbiter imager available to the public for three days in May.

**Terry Phillips: “Whence Came the Sun”**

The meeting was adjourned at 9:40 PM.
March was a slow month with only two (2) Outreach events. Eagle Eye’s Public Star Party on the 14th had well over 80 guests. Although Saturday afternoon skies were about 80% obstructed, the setup crew arrived early for observatory training and solar observing. I hesitated setting up the Coronado SolarMax since the overcast just wasn’t too promising. Students from Austin Community College began arriving in the late afternoon with the hope of being able to observe the Sun. Cloud cover at EEO is often surprising as the skies began to open late in the day. Scrambling to set up the solar scope, about half dozen students were able to complete their solar observing requirements as the Sun darted in and out of the clouds before dropping below the horizon.

Sunset welcomed many other visitors including the local Scout troop. As the evening progressed, the sky cover dissipated as predicted by NOAA’s weather site. Probably half a dozen AAS volunteers provided guests with a variety of telescopes and binoculars. Both James Hall and Jim Sheets provided a wealth of eye candy using EEO’s telescopes. Stranded at the registration desk, I could only catch a glimpse of the results of Jim’s Mallincam Xterminator CCD camera with the HyperStar lens for his C-11. This mod converts the Celestron 11-inch SCT from f/10 to f/2 (25 times faster). He was able to capture the Orion Nebula and project it to the flat screen monitor. From a distance, the image showed amazing detail. Back at my telescope, guests were stacked up to get a glimpse of Jupiter and the Galilean moons. However, in the darkness I could see that other field astronomers were inundated with guests. Several sets of binoculars grabbed the attention of some observers and helped shorten the wait time at telescopes.

The star party ended just as the skies began to close. Sheets and I waited for the last to leave before taking advantage of the quiet time to talk astronomy, finish packing and quietly drive away.

Wells Branch Community Library held a science night on the 20th with 102 guests and the Austin Planetarium’s portable setup. As usual since last October, the skies were overcast with a slight drizzle. David Mathias joined me to welcome local families and students to the telescope demo. David posted a large photo of the Moon on a distant wall for viewing. At least we had clear skies ‘Indoors’. NASA handouts, games, puzzles and giveaways are always a hit with the youngsters. Still, adults and senior students were able to sample what could have been a good look at the Moon, if there hadn’t been a cloud covered sky.

Want to give a hand with Outreach? Watch for April’s developing calendar, and we can always use the extra help. Don’t have a telescope? Not a problem! Bring along a set of binoculars, a sky map and enthusiasm. Guests are always interested to hear about what’s in the sky.

Outreach Events

11 April 2015
Science Saturday
Meridian World School
1:00 PM - 5:00 PM

16 April 2015
Student Stargazing
Wild Basin Creative Research Center
7:30 PM - 9:30 PM

22 April 2015
Earth Day
ATX Science Extravaganza
Art.Science.Gallery
6:00 PM - 8:00 PM

25 April 2015
Public Star Party
Canyon of the Eagles
6:00 PM

30 April 2015
Night of the Planets
Central Market North

1 May 2015
Belterra Community Star Party
Belterra Recreation Center
6:00 PM - 8:00 PM
February 2015 Treasury Report
By Mark Lyon, Treasurer

Deposits

*Dues payments*

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**Total other income**  $0

**Deposit Totals February 1 - 28, 2015**  $501.72

Expenses

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**Expense Totals February 1 - 28, 2015**  $138.79

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**Total Cash**  $31,644.77

*Total of 338 AAS members as of March 25, 2015*
CENTRAL TEXAS STAR PARTY
April 17 and 18
Eagle Eye Observatory at Canyon of the Eagles

Friday 6:30PM--Potluck dinner and observing
   Bring a dish to share and your choice of drink.

Saturday--Solar scope certification
   Details to be announced.

Saturday 6:00PM--Barbecue dinner and observing
   Pay $5 per person for the barbecue dinner by April 11. Sign in to our website and go to the CTSP and BBQ signup pages.

All weekend--Lots of fun and socializing

Come on out!

Questions? Contact Tim Brown tbrown@timobrown.com
April 2015 Observing Targets
By Brian Cuthbertson

Time for Virgo. The Virgo galaxy cluster, one of the most massive structures in the nearby universe, dominates spring skies, and we'd be remiss not to poke around in it. Starting with an appropriate marker star, this month's targets offer a couple of interesting galaxies located somewhat out of the Virgo cluster core. Apart from these, there's endless fodder for additional observing. If you can't get your fill of galaxies in Virgo, you aren't looking. Enjoy!

Porrima rating EASY
double star in Virgo
RA 12h 41.7m Dec -01d 26.9’ (2000)
Magnitude 2.9

Porrima, named in honor of the "Goddess of Prophecy" and also known as Gamma Virginis, is a good star to know for novice galaxy hunters. This is because it marks the bottom of the "bowl" of Virgo. 2.8-magnitude Epsilon Virgo marks the eastern lip of the bowl, whose outline then drops through 3rd-magnitude Delta Virgo down to Porrima and then moves west, up past 3rd-magnitude Eta and Beta Virgo to 4th-magnitude Nu Virgo, which marks the bowl's west rim. If you're dining on the deepsky, this bowl holds the Virgo galaxy cluster as a grand dessert, filled with galaxies piled high above its edges. Delicious!

Porrima itself is a visual binary whose separation varies from about 0.3” to 6.2” in a comet-like orbit over a 168-year period. After it was discovered to be double in 1718, Sir John Herschel calculated its orbit in 1833. This was only the second stellar orbit calculation on record at the time, the first being the orbit of Xi UMa calculated by M. Savary in 1828. Herschel calculated that periastron (minimum separation) would occur in 1836. This occurred as predicted, when even Herschel could not split Porrima with his large scope at the Cape of Good Hope. Then in 1920 Porrima attained its greatest separation. As late as the early 1990s it remained an easy split for small scopes, with a separation of over 2”. But periastron occurred for the second observed time in 2008, and small scopes won't be able to easily split the star again until about 2020. The two components are almost identical in type, brightness and color, each pale yellow star being about magnitude 3.6. And when the components are separable, Porrima is considered a beautiful double.

Because Porrima is close to the ecliptic, it can be occulted by the Moon and (rarely) by planets. There are at least two interesting accounts of occultations of Porrima by the Moon in the 1700s. In an occultation observed in Paris in March, 1780, the two components were seen to disappear 10 seconds apart. And Cassini reported a similar observation during a 1720 occultation.

Finally, befitting its position at the bottom of the bowl holding the Virgo galaxy cluster, Porrima shares its field with several faint galaxies. Elongated spiral NGC 4592 is about a degree NNW, and nearly edge-on spiral NGC 4666 is just over a degree NE. So take a look at Porrima, but be patient if you want to split it; 2020 is still a few years away!

NGC 4261 rating MEDIUM
Galaxy in Virgo
RA 12h 19.4m Dec +05d 49.6’ (2000)
Magnitude 11.2

Located almost in the middle of the "bowl" of Virgo (see Porrima), NGC 4261 is a giant elliptical galaxy 45 million light years away that's one of the 12 brightest Virgo cluster galaxies. The galaxy is perhaps best known for its AGN (active galactic nucleus) which contains a 400 million solar mass black hole.

Chandra X-ray images of NGC 4261 show a spectacular structure totally unlike the conventional elliptical seen visually. The X-ray view reveals dozens of black holes and neutron stars strung out across thousands of light years like beads on a necklace. This structure is thought to be the remains of a collision between NGC 4261 and a smaller galaxy a few billion years ago. As the smaller galaxy fell into 4261, large streams of gas were pulled into long tidal tails. Shock waves in these tails triggered the formation of many massive stars, which eventually became the bright X-ray sources visible in the Chandra images. Comparison of the optical and X-ray images suggests that, while optical evidence of collisions fades relatively quickly into the starry background of galaxies, a collision's X-ray signature can linger for hundreds of millions of years.

For those of us without orbiting observatories, NGC 4261 appears simply as a very faint spot in a 6-inch scope.
A 10-inch can pick up some elongation (1x0.75'), with a small circular core in the faint halo but no distinct nucleus. A 12-inch or larger scope is needed to pull in that.

NGC 4261 is about 60-thousand light years across, and the span of its radio jets is roughly 88-thousand light years.

NGC 4666 rating HARD
Galaxy in Virgo
RA 12h 45.2m Dec -00d 27.4’ (2000)
Magnitude 11.4

Located about a degree NE of Porrima, NGC 4666 is a nearly edge-on 3.9x0.7’ starburst spiral galaxy that’s remarkable for an unusual “superwind” of out-flowing gas. The starburst activity and superwind are thought to be caused by gravitational interactions between NGC 4666 and nearby galaxies like NGC 4668.

A combination of supernova explosions and strong winds from massive stars in the central starburst region drives a vast flow of gas from the galaxy into space—the so-called “superwind.” The superwind is huge in scale, coming from the bright central region of the galaxy and extending for tens of thousands of light-years. The superwind gas is very hot and emits radiation mostly as X-rays and in the radio part of the spectrum, so it cannot be seen in visible light images.

If you have a 6-inch class scope, at 50x the galaxy will appear elongated with a size of 3x0.5’. A 10-inch shows 4x0.5’ object with a thin 1’ long core, and a 12-inch will show a nearly stellar nucleus in a 45x5” inner core that fades smoothly to a 4x1’ halo. Galaxy 4668 lies 7.8’ to the SE.

As you might expect for such an active system, NGC 4666 has hosted one recorded supernova. A type Ia explosion was detected 12” from the center on 9 December 2014. At 11th magnitude, it was the second-brightest supernova of 2014. NGC 4666 is about 80 million light years away.

Go to http://www.astrobin.com/167339/C/ for technical information.

Image of the Month

Congratulations!

ANIS ABDUL

SUNFLOWER GALAXY M63
Soul Nebula
By Bob Van Gulick
This is taken with my modded Canon T2i and contains 2 hours of data. It was stacked with Deep Sky Stacker and processed in Photoshop.

Rob Pettengill: It looks like Nova Sagittarius 2015 No. 2 will be around a little longer. I took this shot from the Spicewood Golf course early around 6:30 AM on March 27. It takes averted vision to pick it out by eye as it is just a little brighter than 6th magnitude, but it's an easy binocular object with nothing of comparable brightness nearby. Sony NEX-5N with 12mm lens, 4 sec at ISO 400.
My 90% totality shot of the solar eclipse from Trinity College in Dublin is just too blurry, although it was a thrill to see the little sliver of the Sun for a few seconds and hear the gasp from the 1000+ people watching in the entrance square. Near the end of the eclipse the clouds started breaking up, and I caught this shot using the thinning clouds as a filter for my Sony RX100 from the Sean O’Casey bridge over the River Liffey.

Photos by Rob Pettengill

Jupiter with Ganymede, Europa (about to transit), and Io on the right. 2015-03-29 03:15 UT from NW Austin. Questar 3.5 with 2x2x Dakin Barlows and Sony NEX-5N. Best 70 of 99 images stacked in Nebulosity and deconvolved in Lynkeos. Post-processing stretching and curves in Photoshop. I'm pleased to have some detail from the whirls near the GRS.
For those of us in the northern hemisphere, winter brings long, cold nights, which are often excellent for sky watchers (so long as there’s a way to keep warm!). But there’s often an added bonus that comes along when conditions are just right: the polar lights, or the Aurora Borealis around the North Pole. Here on our world, a brilliant green light often appears for observers at high northern latitudes, with occasional, dimmer reds and even blues lighting up a clear night.

We had always assumed that there was some connection between particles emitted from the Sun and the aurorae, as particularly intense displays were observed around three days after a solar storm occurred in the direction of Earth. Presumably, particles originating from the Sun—ionized electrons and atomic nuclei like protons and alpha particles—make up the vast majority of the solar wind and get funneled by the Earth’s magnetic field into a circle around its magnetic poles. They’re energetic enough to knock electrons off atoms and molecules at various layers in the upper atmosphere—particles like molecular nitrogen, oxygen and atomic hydrogen. And when the electrons fall back either onto the atoms or to lower energy levels, they emit light of varying but particular wavelengths—oxygen producing the most common green signature, with less common states of oxygen and hydrogen producing red and the occasional blue from nitrogen.

But it wasn’t until the 2000s that this picture was directly confirmed! NASA’s Imager for Magnetopause-to-Aurora Global Exploration (IMAGE) satellite (which ceased operations in December 2005) was able to find out how the magnetosphere responded to solar wind changes, how the plasmas were energized, transported and (in some cases) lost, and many more properties of our magnetosphere. Planets without significant magnetic fields such as Venus and Mars have much smaller, weaker aurorae than we do, and gas giant planets like Saturn have aurorae that primarily shine in the ultraviolet rather than the visible. Nevertheless, the aurorae are a spectacular sight in the evening, particularly for observers in Alaska, Canada and the Scandinavian countries. But when a solar storm comes our way, keep your eyes towards the north at night; the views will be well worth braving the cold!

Image credit: NASA Earth Observatory (Goddard Space Flight Center) / Blue Marble team.
This year’s vernal equinox brought a solar eclipse that was visible across northern Eurasia. To view totality, you had to be on the Faroe Islands, 62° north between Scotland and Iceland, or the Svalbard group between Norway and the North Pole at 74° to 81° north. I missed it entirely, and only saw the news the next day. But I kept my head, unlike the drunken astronomers of ancient China.

The stories vary and are often retold, especially by skygazers, but the teaching point is easy. Hsi (also given as Hi) and Ho were the court astronomers. Among their duties, they were responsible for predicting eclipses so that people could beat gongs, shoot arrows, and otherwise scare off the dragon that was eating the sun. However, they spent most of their time drinking rice wine, so they not only failed to predict an eclipse, but they also slept through it. Fortunately for all of us, the common people rallied and chased the demon away. Hsi and Ho were executed.

The story comes from an ancient manuscript known as The Book of Documents, which has been variously rendered as Shu-king, Shu Ching, Shujing, and Shangshu. (Wikipedia has an entry, of course: Book of Documents.) The story of Hsi and Ho comes from the fourth part, fifth book, thirteenth chapter. There, the chancellor, prime minister, or “prince” Yi Ying exhorts government officials not to be derelict in their duties as were Hsi and Ho. All of that happened in legendary times.

The earliest attested date in Chinese history is equivalent to 831 BCE. The most likely date for the eclipse in question is October 22, 2137 BCE. You can find some reliable modern detail at the Astronomy Today website. Put “ancient eclipses” in the search box and it should come up first after the Google ads. The story of Hsi and Ho is in Part I. The story is embellished in Totality: Eclipses of the Sun, by Mark Littmann, Fred Espenak, and Ken Willcox (Oxford 1991; also on Google Books). A brief note ending with a poem appeared in The Journal of the Astronomical Society of India, vol. 4. No. 3, Jan. 1914, which cited it as coming from The Observatory for December 1913 (most likely The Observatory: A Review of Astronomy, which was published by the Royal Observatory at Greenwich from 1880 to 1956).

Here rest the bones of Ho and Hi
Whose fate, though sad, was risible;
Being hung, because they could not spy
The eclipse, that was invisible.
Heigho! ’tis said a love of drink
Occasioned all their trouble;
But this is hardly true, I think,
As drunken men see double.

-- Mr. O. Edgar Thomas

By Michael E. Marotta
In last month’s newsletter there was a brief item about Ed’s work with a dark skies group in Colorado, where he moved upon retirement. Ed sent this note to add to that.

I was an AAS member from 1990 to 2000 when my wife and I decided to give up a lifetime of heat/humidity for the cool/dry air of the Colorado Rockies at 9,000’. We purchased a log-sided home in a rural area about 50 miles due west of Pueblo in the Wet Mountain Valley, mostly contained in Custer County. We’re out from the only towns, Westcliffe and Silver Cliff that share an east/west boundary, by about 10 miles in a rural subdivision near the old mining town of Rosita (rose).

Some of the unexpected things that have occurred is how much I miss the AAS members and socializing the astronomy experience. It gets very lonely out in the driveway in absolute darkness all alone. I organized a local club, Sangre Stargazers, but no one seems interested in having group star parties. Second, we traded endless summer for endless winter. I find it very difficult to get all suited up in winter gear only to have eyepieces constantly fog up from sub-freezing temps. Dew is never a problem but the possibility of bears is! Once scared myself when my stomach growled unexpectedly. Third, I love living in a Ponderosa pine tree forest but observing through gaps in the huge black shapes is frustrating. Can’t bring myself to cut them down, so I’ve mostly turned into an armchair astronomer.

One very pleasant memory of my time with the AAS was cutting the cedar strips for the Harlan Telescope on my table saw back in mid-1990s. Another member, Tom Robichaux, and I used the description in the 50th-anniversary issue of S&T to build a form to glue up the strips into the tube. Then, it sat for a year or more while we tried to find someone knowledgeable in fiberglassing that could help us complete the tube. That got done while I was traveling so don’t know what that adventure was like.

Besides having skies so dark that the summer Milky Way will cast a shadow, I was drawn here because a group called Dark Skies, Inc., formed in 1999, which promised that the darkness would remain. The details of that are in the link below in the application that we filed with the IDA. My contribution was my skills in digital publications that I had taught at ACC (charter faculty member from 1973-2000).

Here’s a summary of our work: Westcliffe and Silver Cliff, CO, have been certified by the International Dark-Sky Assn. (IDA) as the ninth in the world and first in Colorado International Dark Sky Community. It was a 15-year effort by a small group of volunteers of the local Dark Skies organization to change the mindset of two adjoining old west towns to protect their heritage and the environment by adopting downward directed (shielded) lighting fixtures. By demonstrating strong community support, numerous retrofitting projects of unshielded lighting to shielded, and lighting ordinances past by both towns, the IDA Board voted unanimously to give the two towns this prestigious designation.

The IDA press release is available here: http://darksky.org/assets/Night_Sky_Conservation/Communities/WSC_IDSC_press_release_FINAL.pdf

More detail in the story comes from the Dark Skies application: http://darksky.org/assets/Night_Sky_Conservation/Communities/Application_Westcliffe_SilverCliff.pdf

Finally, additional photos and logo image: http://wetmtdarkskies.org/images/
Astronomical League News
By Lauren Gonzalez, ALCor

We have two new awards in the works this month. Larry Martin has just completed his master level outreach award. It’s amazing how much work you do as Outreach Chair. The AL has a new outreach award coordinator, and Larry’s is only the fourth award processed by the new director. We still have a couple awards being processed by the previous coordinators, so there is a little delay with the changeover, but hopefully we can get these awards presented at a meeting soon. The man now in charge of the award was very impressed by Larry and his master award write up. He is very enthusiastic and was very complimentary of the AAS and how many outreach awards our club has received. Keep it up!

In addition to Larry’s outreach award, I have also (finally!) finished my telescopic double star list. I have done a couple binocular lists recently. They were fun too, but it was definitely nice to be back at the scope. Hopefully we have a clear spring and summer ahead of us!

McDonald Observatory News

Each month news and images such as the one below are available from McDonald Observatory. Go to http://sites.utexas.edu/mcdonald-observatory-news/
JOINING AAS OR RENEWING MEMBERSHIP

To join or renew your membership to AAS, please visit: http://www.austinastro.org/JoinAAS

AAS memberships run from 9/1 to 8/31 and there are five membership levels to choose from:

Household $40.00 (USD)
Bundle (up to 6 members)
Subscription period: 1 year on September 1st
No recurring payments. For members of a household living at the same address.

Junior $15.00 (USD)
Subscription period: 1 year on September 1st
No recurring payments. For members up to age 18.

Students $15.00 (USD)
Subscription period: 1 year on September 1st
No recurring payments. For members age 18 and older.

Regular $25.00 (USD)
Subscription period: 1 year on September 1st
No recurring payments. For individual members.

Seniors $15.00 (USD)
Subscription period: 1 year on September 1st
No recurring payments. For members 65 years of age or older.

The Society’s elected officers for June 2014 through May 2015

President Dawn Davies dawnmunroedavies@gmail.com
Vice-President Terry Phillips terjo@TaoSETI.com
Secretary David Lynch djlynch@gmail.com
Treasurer Mark Lyon sones27@yahoo.com
Communications Chair Rob Pettengill rcpettengill@gmail.com
Outreach Chair Larry Martin dlarrymartin@gmail.com
Equipment Chair James Hall jameshallrn@hotmail.com
Member Services Chair Tim Brown tbrown@timobrown.com
Member-at-Large Alan Carruth racurncher@sbcglobal.net
Member-at-Large David Mathias dmathias@mygrande.net
Member-at-Large Jim Spigelmire jspigelmire@ymail.com

Appointed positions

Historians Brian Cuthbertson b_cuthbertson@yahoo.com
Kelley Knight kelleyknight@yahoo.com
Parliamentarian Jim Chandler jimchandler@isp.com
ALCor (Astronomical League) Lauren Gonzalez lsrogers16@gmail.com
IDA Rep (Dark Skies) Janilee Contreras janilee.c@gmail.com
Newsletter Editor Joyce Lynch joycedelynch@gmail.com

Monthly deadline for Sidereal Times submissions is the 25th. Please send submissions to joycedelynch@gmail.com