Newsletter of the Quad Cities Astronomical Society www.qcas.org





Presidential Ramblings

We are now approaching the end of another calendar year anticipating "viewing" the new but always faithfully emerging winter skies. The change in skies and viewing is predictably and pleasingly approaching – as I was walking outside early the other morning, looked up as I always do, and was rewarded by the sight of Orion and Sirius and Aldeberan and the Pleiades. So now we look forward to clear, crisp nights with good viewing while knowing that there will not be enough "woolies" to stave off the cold that creeps up our bodies from the earth beneath our feet.

A time for change is also approaching as we are in the process of nominating and electing new officers to the Board. And with these changes we can anticipate changes in points of view, focus and how we conduct our business. Change always brings new and different approaches and though change can be unsettling oft times, the end result is usually something, well, better and different.

Alison and I are experiencing change at home as we are renovating a couple of rooms which has resulted in my stumbling into things that have "moved" from where they have been since we moved into this home nearly 25 years ago. I also have been having trouble with something as simple as grabbing the clock key which fits two of my many clocks. It is now all of 7 feet removed from where it has been for years and I have to turn around to find it and as slow as I am on the uptake, I am beginning to accommodate myself to it.

OCTOBER 2016

OCAS Mission Statement:

To stimulate an interest in the science of astronomy in the Quad Cities Area, to nurture an ongoing desire by Quad Cities Astronomical Society members to study the cosmos and to provide members of our community opportunities to experience the beauty and joy of Astronomy.

Ramblings (cont'd)

And so it is with the upcoming change in the QCAS. What will that change be, how will it affect us? I don't know but I am looking forward to it and I know that our membership – both our new and more seasoned – will embrace it and continue to do what we like, what we share and why we are QCAS members – viewing the glorious skies, taking more gorgeous photos and sharing our astronomy and viewing experiences in our conversations.

Ad Astra!!

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Lunar Rille versus Lunar Rima

What's the difference?

Well, they are different languages for the same thing!

From Wikipedia:

Rille (German for 'groove') is typically used to describe any of the long, narrow depressions in the lunar surface that resemble channels.

The Latin term is rima, plural rimae.

Typically a rille can be up to several kilometers wide and hundreds of kilometers in length. However, the term has also been used loosely to describe similar structures on a number of planets in the Solar System, including Mars, Venus, and on a number of moons. All bear a structural resemblance to each other.

Lunar maps are typically in Latin, so it's Rima Hadley there and Hadley Rille for Apollo 15.

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The following articles are about the star party itself.

by Karl Adlon

Friday night I was at the Eastern Iowa Star Party (EISP) until about 1:10 AM Saturday when I sneaked out.

I had my 18" Dob and really enjoyed the view of M92. I had looked at M13 and was considering what else to look at when M92 came to mind. This globular cluster isn't quite as impressive as M13 but I found the chains of stars that the eye and brain connect to be entrancing. I spent quite some time looking at it. So did Al Sheidler.

I looked at quite a few objects but the other one that I found interesting was the Swan Nebula. The orientation was right and it really resembled a swan. The surprise to me was how well my Lumicon Deep Sky filter reduced the light pollution while letting the Swan's light come through. I've used it before this on the Veil Nebula, but on the Swan it was just amazing. The CAA President and his family also had a look and enjoyed the view - agreeing it looked like a swan.

Earlier in the evening I set my camera on the car roof and took this picture.



I have just a quick update and debrief on the 2016 EISP through Saturday evening. The skies were crystal clear for the Friday night viewing. Set up started well before sundown and the prep work for the arrival of guests/viewers started at 10 AM. Jeff ensured that there was sufficient "wattage" was available for all the scopes and computers. From the lack of complaints/feedback heard from those who were hooked up there was no lack of energy. Jeff Struve was the lead on this event and all his planning and support from the EISP support group seems to have paid off. The Owl's Nest lodging was

available and used by some – nice to have bunks, showers and clean bathrooms for crashing and relieving and cleaning up. I don't know how many used these facilities Saturday evening but the load was light on Friday. Plenty of drink and snacks and the chili was the hit – one young visitor deemed it "awesome". Sounds right.

For a great and animated story ask Mike Ombrello



about the Bubble Nebula and a 20 minute unguided exposure. Quite the buzz Saturday morning and Friday night.

I haven't had much feedback yet but wanted you all to see at least some of the set up around the Menke site – it was busy and controlled and, well, "awesome". Saturday there were three presentations in a row and they were all outstanding.

CAA presentation was informative and impressive. They have quite the set up and resources up there. Some have visited and more probably should, including me.

PAC was well represented and Alan Scheidler gave one of the presentations that included a challenging and enlightening piece on gravity waves. Hope we can have that presentation to hold it for all our members.

All details of preparation assumed by the Scott County Conservation Board were taken care of well.

I'll send more photos later and hopefully they will all be posted on our web site. The only clouds we experienced were the loss of Mitch White and the

passing of Dana's father. They were honored and will be missed.

For Jeff - "BZ" Well done.





by Jeff Struve

This past Labor Day Weekend was celebrated by over 30 amateur astronomers attending the 2016 Eastern Iowa Star Party. Along with great music, lots of munchies, and a lot of comingling between the members of four astronomy clubs, The Cedar Amateur Astronomers, The Naperville Astronomical Association, The Popular Astronomy Club, and The Quad Cities Astronomical Society, we had lots of door prizes and 3 great presentations and overall, very nice weather for the viewing, imaging, video and spectral astronomy being done those nights.

With the exception of a bit of humidity, Friday night was a great night to be out doing astronomy... Saturday was a bit cloudy, but still did afford lots of opportunity. For those that hung in through Sunday night, we again had a fairly nice night. Friday night also was quite special in that we had a spectacular guest appearance by the Aurora Borealis... everyone stopped to watch the display... you'll need to check out Matt's Video on line!

As alluded to in the first paragraph, we had a lot of support by other clubs... attendees included the President of CAA and his family and the CAA Facilities Director, the Media Coordinator from NAA,

the President of PAC and his family along with the PAC Secretary... of course we had a complimentary selection from our QCAS Board and Officers.

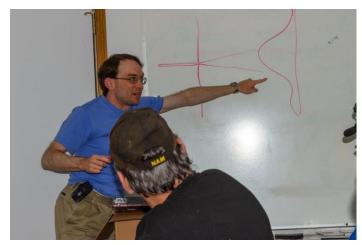
All in attendance have either commented and/or written as to how they enjoyed the event and hope that this type of event will continue in the future... we have received dozens of photos of the event and the work done over the 3 nights. We have also received a handful of surveys giving a few helpful tips on future endeavors.



Dr. Mitchell gave a presentation on spectroscopy on Saturday afternoon.



A spectroscopic image taken by Dr. Robert Mitchell.





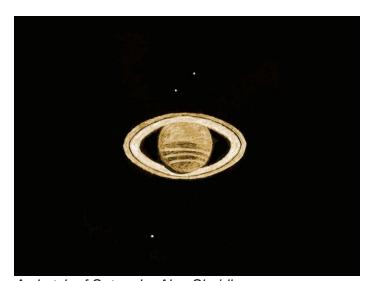
Using video equipment, Terry Dufek took this image of M51, The Whirlpool.



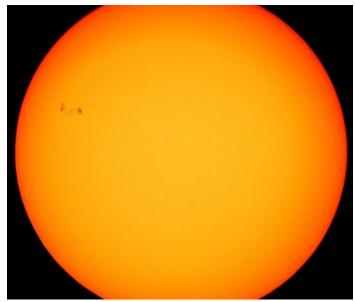
The Witch's Broom, part of the Veil Nebula, taken by Mike Ombrello.



Mike also took this inmage, which includes the Bubble Nebula (below and left of center).



A sketch of Saturn by Alan Sheidler.



Also by Alan, the Sun with sunspots.



An image of the Pacman Nebula by Eric Cleays.

The following pictures, as well as some of the earlier pictures in this section, show the observing field and equipment set-ups used by attendees.









Well, I'll attempt a summary, knowing that I can't do justice to all the work and results. Here I go: Was EISP a success? A resounding "Yes". And it was the first of many, I hope, and I expect even better ones in the future. These few images show a bit of the accomplishments of the attendees but they don't show the fun discussions and enjoyment of the evenings under the stars and the days of discussions and presentations. Or the door prizes awarded to lucky winners.

Certainly a lot of work went into making EISP a success. Since I don't know what all was required or who did what, from planning, to gathering supplies to cleaning up after the event, I'll just say: If you were involved in a small way or a bigger way: **THANK YOU!**

And to Jeff, a BIG THANK YOU and a hearty handshake!

Aug 13 @ Menke Observatory

by Karl Adlon

It was a comfortable night that was pretty clear, the Moon was up and, later, dew covered the cars and my C11 corrector plate.

Supporting Dr. Mitchell for the star party were Mike Ombrello, Jeff Struve and myself. Jeff reports that about 18 people signed the guest book.

In the dome, people were able to view various objects thru the 14" SCT, including the Moon, Jupiter and the 4 Galilean moons, Saturn, Mars, the Hercules cluster, the Ring Nebula and Dumbbell Nebula, Alberio, the Andromeda Galaxy, the Double Cluster, and various other clusters.

Also in the dome, Jeff worked with Dr. Mitchell to show him the process used by EQMOD to increase goto accuracy using the EQMOD multistar alignment process. He also set up and configured a game pad controller that will make it easier for a person by themselves to use EQMOD to do the alignment process.

I had my G11 mounted C11 on a concrete pad to the south and showed people the Moon; Mars; Saturn; M13; M51; M15; M27; Double Cluster and M31. The typical summer targets in direction of the Milky Way center were drowned out by the light of the silvery moon. It took me several tries to get the GoTo working. It was working very well until I tripped on the power supply, unplugging it, and ending my night at about 11:30 PM.

While people were observing the Moon, I pointed out that the rays from Tycho could be seen and that Tycho was a more recent crater than the majority of craters. Someone asked how we knew that and I explained that, using Clavius as an example, we knew it was older because is had soft edges worn by subsequent meteor strikes. Also, two crater on its edge were obviously later – they had knocked down the crater wall.

This was the weekend closest to the Perseid meteor shower and several people were watching for those. One guest noted 2 meteors, but they were both overhead and headed north, so they weren't Perseids. I happened to be looking north when a fairly bright Perseid passed below Polaris headed west. A faint short trail followed behind that disappeared quickly.

I'm told that the star party ended about 1:30 AM when the last of the die-hards left.

I was a good and enjoyable night.

Aug 15 Membership Meeting Notes

Attendees: Karl Adlon, Dale Hendricks, Jim Rutenbeck, Tom Bullock, Jeff Struve, Robert Mitchell, Mike Ombrello, George Bailey, Bruce Brooker, Matt Neilssen, Dave Ruddy & Craig Cox; (12 total attendees)

Business Topics

Ian Spangenberg at Pleasant Valley High School (PVHS) emailed Dale Hendricks to say that they are forming a student astronomy club and asked if we were willing to mentor their club. Several members voiced support for our involvement. Dale will tell them we are interested.

Eastern Iowa Star Party (EISP):

- ★ Dates: Sept 2 Sept 4
- ★ By now, you should have registered with Jeff Struve
- ★ QCAS has a contract with Wapsi which includes a lodge with 14 beds and shower facilities.
- ★ Club members from Cedar Amateur Astronomers (CAA), Popular Astronomy Club (PAC) and others plan to attend.
- ★ EISP will kick off on Friday with greetings from Dale Hendricks (QCAS President), Vince Vella (CAA President), Alan Sheidler (PAC) and Dr. Mitchell (SAU-Menke Observatory Director and QCAS member).
- ★ Talks on Saturday will be given by Dr. Mitchell, John Leeson (CAA Observatory Committee Director) and Alan Scheidler.
- ★ Some door prizes have been and more may be received.
- ★ There is an EISP Committee Meeting on Tuesday, Aug 30.

Several members committed to support the August Open House.

Contact Bruce Brooker if you are willing to run for Office.

There will be a Board Meeting next Wednesday, August 24 at Dale Hendricks' house. All members are welcome to attend and provide input.

Bruce Brooker noted that several item on the 20" observatory need attention soon:

- ★ 20" mirror needs cleaning
- ★ Trim on door needs repair
- ★ Some trim on siding needs repair and painting
- ★ Some siding needs to be replaced

Astronomy Topics

While there were no astronomy presentations, several groups gathered to discuss topics of interest that were equipment related, EISP related or observing or imaging related.

Aug 24 Board Meeting Notes

The Board Meeting was held Wednesday, August 24 at Dale Hendricks' house.

Attendees were President Dale Hendricks, Vice President Bruce Brooker, Treasurer John Baker and Secretary Karl Adlon. Director Dane Taylor was unable to attend. No non-Board club members attended.

John Baker informed us that the current treasury balance is \$2113.17.

Regarding our mentoring of a PVHS student astronomy club, the following points were made:

- ★ Should QCAS have an Open House for the students at our observatory, transportation will need to be arranged by the school, parents or students.
- ★ Dale sent an email and left a voicemail for lan Spangenberg at PVHS to obtain more information on their wishes and needs.
- ★ We are waiting to hear more from PVHS.

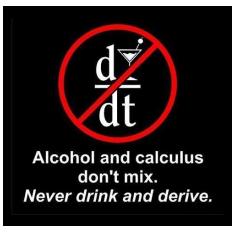
EISP was briefly discussed:

- ★ Payment for the lodge and a damage deposit has been made with Wapsi.
- ★ Beds are currently available contact Jeff Struve – bring you own bedding.
- ★ There is an EISP Committee Meeting on Tuesday, Aug 30.

Nominating Committee (Bruce Brooker) reported no change since the Membership Meeting report.

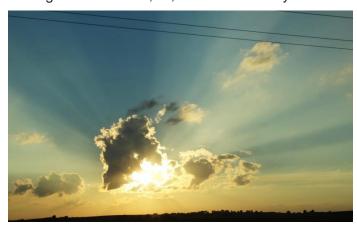
2004 Bylaws Revision

- ★ Karl Adlon reported that he found a pdf copy of the 2004 Bylaws on an external hard drive.
- ★ The file was authored by Mike Valdez, the Secretary at that time.
- ★ The Board agreed that the 2004 Revision is the current revision and that the website should be updated with this revision. Karl will send a copy to Dana for this purpose.



Aug 27 Open House

Driving north to Dixon, IA, I shot this out my window:



Members attending the Open House were Craig Cox, Mike Ombrello, Hale Hendricks, Dr. Robert Mitchell and Karl Adlon. Two visitors showed up – perhaps clouds earlier in the morning and most of the afternoon scared them away.



The sky had patches of clouds (some hazy, some thick) with brightened intermittently by distant flashes of lightning. Objects viewed though the 20" included Mars, Saturn; Globular Cluster M4 and the ET cluster - an Open Cluster. It was a pretty good night.

Having brought my Canon T3i, I aimed it in the eyepiece and got this image:



2017 Eclipse Page

This page contains the current QCAS plans (sketchy right now) and general information for the August 21, 2017 Total Solar Eclipse.

Members have various thoughts on where to observe the event, which is understandable at this early date.

Eclipse duration decreases when you are off the track center line. For instance, in Creve Coeur, Mo (about 35 miles from center line) totality lasts 55 sec while in Luebbering, MO it is 2 min 40 sec (almost 3 times longer).

The NASA interactive map is good for identifying start, end and duration times for almost any location. A click on the map brings up the eclipse particulars for that location. Also note that NASA may change the predicted track by up to 20 kilometers, so be sure to check closer to the eclipse.

Dr. Mitchell plans to webcast the eclipse from somewhere along the center line. Grand Island, NE is one possibility. Dale Hendricks plans to help out at SAU on the receiving end of the webcast.

I bet we talk about this eclipse at every meeting, so if you have thoughts and/or different information, be sure to share them with the other members.

General Information

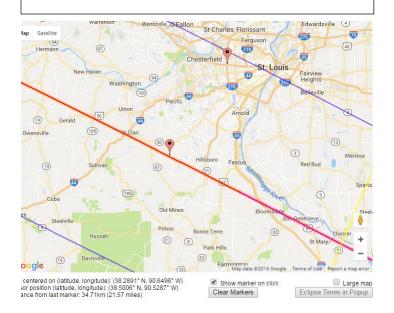
http://nationaleclipse.com/overview.html

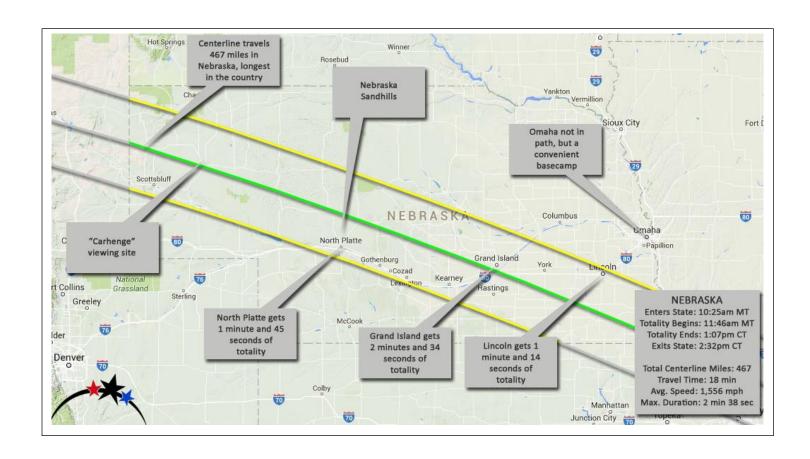
NASA Interactive Map:

http://eclipse.gsfc.nasa.gov/SEgoogle/SEgoogle2001/S E2017Aug21Tgoogle.html

Grand Island, NE

https://www.facebook.com/2017Totality http://tinyurl.com/h8lohqq -Convention Bureau





Calendar of Opportunities

+ + + September + + +

Monday, September 19
QCAS Monthly Meeting
at the Credit Island
Lodge, 6:30 PM -

Nominations Due

Saturday, Sept. 24
QCAS Observatory
Open House

+ + + October + + +

Monday, October 17

QCAS Monthly Meeting
at the Credit Island
Lodge, 6:30 PM –

Elections

+ + + November + + +

Friday, November 18
Putnam Museum
Family Night

Monday, November 21

QCAS Monthly Meeting
at the Bettendorf

Public Library, 6:30 PM

+ + + December + + +

Monday, December 19
QCAS Monthly Meeting
at the Bettendorf
Public Library, 6:30 PM

Sunday, December 25 A newer, bigger telescope "under" the tree! Merry Christmas!

Letter from the Editor

Change is a comin'.

Right now is what I consider to be the best time of year to observe in the Midwest. But change is a comin'. In a month or two, based on previous years' weather as I remember it, the air will turn chilly and the skies cloudy. You'll reminisce about the better weather you had in mid-September. So, get out and do some astronomy now! If you take some images or record your observations electronically pen and paper now, you can relive these better times when the snow, ice and clouds keep you inside.

Change is a comin'.

Change is a comin' to QCAS's Board. While others might use astrology, a crystal ball, tea leaves or something similar, I have no way to foretell all that will happen other than: there will be a new Meridian Editor and a new QCAS Secretary. There may also be a new QCAS Treasurer. I predict that . . . that's all I'm going to say about that.

Change is a comin'.

"Embrace change!" You probably heard that before. I always cringe when I hear that because I expect that it will negatively affect me. My favorite saying?: "Things will get worse before they get better." Well, maybe. But this is a prime opportunity for you to step up and provide your opinions and efforts to make QCAS better that I think I helped make it. See? This should be easy for you!

Change is a comin'.

For a couple years I've been doing imaging and not much observing. Then, when it came time for EISP, I had commitments for Saturday and since I was limited to Friday night I decided to bring my 18" Dobsonian. In the past several years I've only used it sporadically. In fact, I forgot that I that I started to install a diagonal heater and hadn't collimated it, so when I got to IESP and had problems with the image, I took a step back. Then I saw the problem, turned the diagonal so it was positioned better (but not great) and went from there. As hopefully you've already read, I really enjoyed observing the Swan Nebula nd Globular Cluster M92. Really enjoyed them. So, I guess change is sometimes good.

Apologies if you contributed but don't see your name here.

THANK YOU to all who provided input directly or not for this issue: Dale, Jeff, Matt, Mike, Alan Sheidler, Robert (Dr. Mitchell), Eric Cleays and, if I missed you, YOU! **Thanks again!!**

QCAS Correspondence:

Please contact the society at: P.O. Box 3706, Davenport, IA, 52808.

Members are welcome and encouraged to submit articles for The Meridian. Submit any and all interesting items (via e-mail) to: Karl Adlon, Secretary.

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