

# The Spectrum

The Newsletter for the Buffalo Astronomical

September / October 2014

Volume 16, Issue 5

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### From the Editor's Desk,

Hi Everybody

Welcome to the first issue of the Spectrum with me as the editor. I hope I can be as entertaining and informative as Cheri has been since she held the helm. She volunteered to take on the publication because she wanted an opportunity to meet more of the club members and give something back to the club. I am here because I really enjoy this hobby and like to share my interest with others. Astronomy is an interesting endeavor because it allows anyone the opportunity to participate at what ever level they choose. Who among us will say we are disappointed when someone looks up and says, "What is that little point of light?" and you know the answer. It's uninteresting to note that whenever someone shows photos of an astronomy related event, most everyone is smiling. I, like many of you, like to share. While this newsletter is one way for me to do that, ultimately this is not my newsletter, it is yours. Let me know what you would like to see and I'll do what I can to find it. If you have questions, comments, and especially submissions, please direct them to me, Mike Humphrey, at [jetpac@iname.com](mailto:jetpac@iname.com). Put "spectrum" in the subject line so I can grab your email from the rest. I wish Cheri good luck and give her my support as she takes on the reins as VP. and if you are reading this, I'm looking forward to your email!

Clear Skies!

Mike Humphrey





## BAA Schedule of Astronomy Fun for 2014

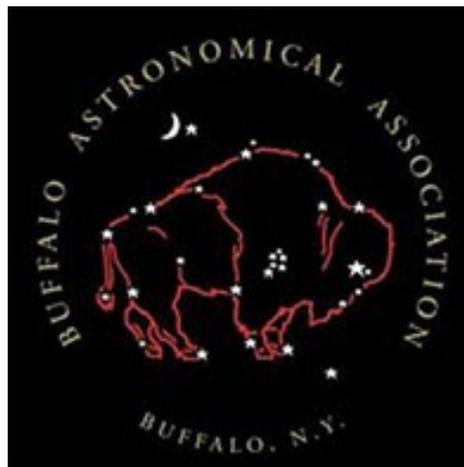


### Tentative BAA Schedule of Astronomy Fun for 2014

Sep 6	Homestead Festival 10am-4pm and Public Night BMO
Sep 12	BAA Meeting at Buffalo State 7:30pm
Sep 13	Beaver Meadow Fall Festival 11am to 5pm Solar viewing
Oct 4	Public Night BMO – last one for the season
Oct 7/8	Total Lunar Eclipse
Oct 10	BAA Meeting at Buffalo State 7:30pm
Oct 23	Very partial Solar Eclipse at sunset
Nov 14?15?	BAA Meeting - location and time TBA
Dec 12	BAA Meeting at Buffalo State 7:30pm – Holiday Party

Looking forward to Seeing you at the Observatory!

Daniel Marcus



## Observatory Report By Dan Marcus

Well I thought I'd change the format of the column a bit. I'll try to give running dialog of the "Monday Night" events. I started out trying to upgrade the USB2 active extension cables. We had one that looked to be questionable, one that worked (?) and an USB1 that was problematic. I ordered two more active USB2 cables that will work with powered USB2 hubs. Mike P and I proceeded to install them, and ran into trouble with the drivers for the ST-9 and my QHY5L-ii cameras. After much cursing and multiple bad words I gave up. Mike H and Rick G beat the computer back into submission in a later session. Hopefully, now that we have a dedicated cable for the ST-9, the driver issues will be solved. There is now one cable (cable #2 that goes to the left hand imaging/telescope computer – dedicated for the use of the ST-9) another that goes to the right hand computer (cable #3), and a third (cable #4) that goes to a powered hub next to the NP101is robo-focuser and has the other end curled up on top of the filing cabinet to the left of the warming room computer cabinet (can be plugged into either computer's front USB2 port). If you use your own camera, I suggest you use the new #4 cable and the powered hub on the NP101is and plug it into your favorite computer or your own laptop. PLEASE NOTE: The USB2 cable #1 does not to work properly with anything. When I get a chance to remove it from the wire harness I'll do so. Things seem to be up and running smoothly at the present. We installed the new version of PHD (PHD2) which has upgraded features for figuring out how your guiding is doing. It seems to work well. We have tried my Canon T3i with Orion's thin off axis guider, my field flattener, and QHY5L-ii guide camera on the C-14 and have been able to take 10 minute exposures of M-57.



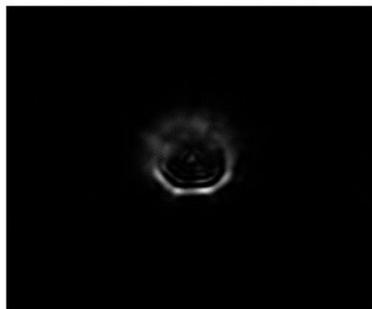
Please note: My QHY5L-ii camera has the opposite ST-4 autoguider pin out that the ST-9 has. If you use a QHY camera you will have to use the adapter in the ST-9 case to get you guider to work on the mounts ST-4 autoguider port using the existing ST-4 cable, or you can bring your own cable. Just a heads up.

We are now waiting for a CLEAR Moonless night to play. Also upgraded the 12V cable to 14 gauge wire for the dew heaters, and have removed the control box to see if we can eliminate the dewing of the C-14 and NP101. We haven't had a clear night to really give it a test. It seems better, but my guess is we need to get new dew strips. On the

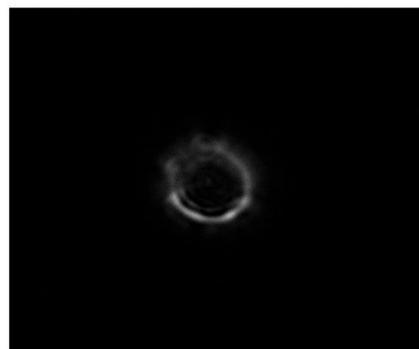
last public night – was rainy as usual, Mike H brought his laser collimator and we re-collimated the C-14. On the following “Monday Night at the Obs” Mike P and I used his web camera to star test.



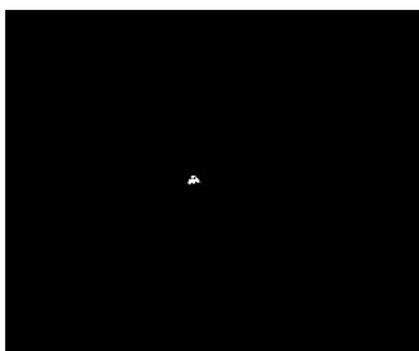
start of test



1st adjustment



still tweaking!



at focus



inside focus



outside of focus

To get the images of the star we slightly put the star out of focus and used registax6 to stack the best 70% of the images. We only SLIGHTLY tweaked the adjustments. Upon gazing at our image of at focus, I get the feeling we still need to tweak the collimation just a little. The bottom 3 are where we stopped. The star still looks a little seagully to me in the image, but much better than it was- maybe how we stacked it? We might have played with the adjustment some more, but ran out of time. Will have to try it on the Moon or Planets and see if our images improve. The next time there is a cloudy night when we hold “Monday Night at the Obs” we will start looking at what we have to do to get the 20” Obsession back up to smooth working condition. If clear the night is clear of course, we will be imaging and getting PHD2 working with my off axis guider. If we get good results, I will be asking the board for permission to get one and an autoguider camera so we can narrow band image with the ST-9. When we get the chance, we will try LRGB images with the ST-9 as it looks like we can bin the autoguider 3x3 and take 10 sec integrations for guiding? If so we should start getting LRGB images with the ST-9. As usual, all I need are more clear nights that I can make it out to the Obs!! Stay tuned to E-groups for when the time and day of the “Monday Night at the Obs” will be.

Hopefully by the time you read this, we will be back from the Black Forest Star Party Rain Fest, if not I will see you there!

I will be needing help for the Home Stead Festival on Saturday Sept 6. The Observatory will be open from 10am to 4pm. As usual we will need Solar scopes, and people to man the Obs. Please note: the parking lot behind the Observatory will not be accessible that day from 10am to 5pm, so plan accordingly. We will also be open for public night. Will be a good night for a bring a dish to pass picnic between events.

## Ghosts, Anyone?

I don't know what you think about ghosts, but I usually don't put any stock in them. However, I suppose this may be an exception. Sometime in the late 1980s our president, Doris Koestler, called me (I was vice-president) on a Tuesday night to tell me that our guest speaker for Friday couldn't come. "What to do?" she asked. We decided we would have to hold the meeting sans speaker and hope for the best.

The next day it occurred to me that I could give a talk on elementary astrophotography that I had given before to non-astronomical groups. While the photos were not anywhere near on par with the photos taken by our more advanced members, I hoped that with a little injection of humor this simplified approach to astrophotography might suffice for the meeting, since nothing else was available on such short notice.

I added a bit to the talk because it was related to a former member of the BAA, Dale Hankin, who died while in his late thirties, a dozen or so years earlier. He gave a talk on astrophotography sometime around 1973 or 1974 in which he explained how one could start out taking simple photos with a camera mounted on a tripod and then, perhaps, advancing to taking longer exposure shots with the camera mounted piggy-back on a clock driven telescope. I told the audience that this is essentially what I did, having been inspired by Dale's talk. Dale was a great enthusiast for astronomy; he even started his own astronomy magazine to which BAA members contributed articles to get the publication off to a quick start. Unfortunately, his untimely death terminated this enterprise.

When the meeting ended three people whom I had never seen before (or since) approached me: one was an older man, another was middle aged and the third was a boy who may have been about fifteen. They introduced themselves to me as Dale's father, his widow's new husband, and Dale's son. They told me that they had decided to attend their one and only BAA meeting because Dale had spoken so fondly of the club, and they wanted to see what went on there. Well, they did!

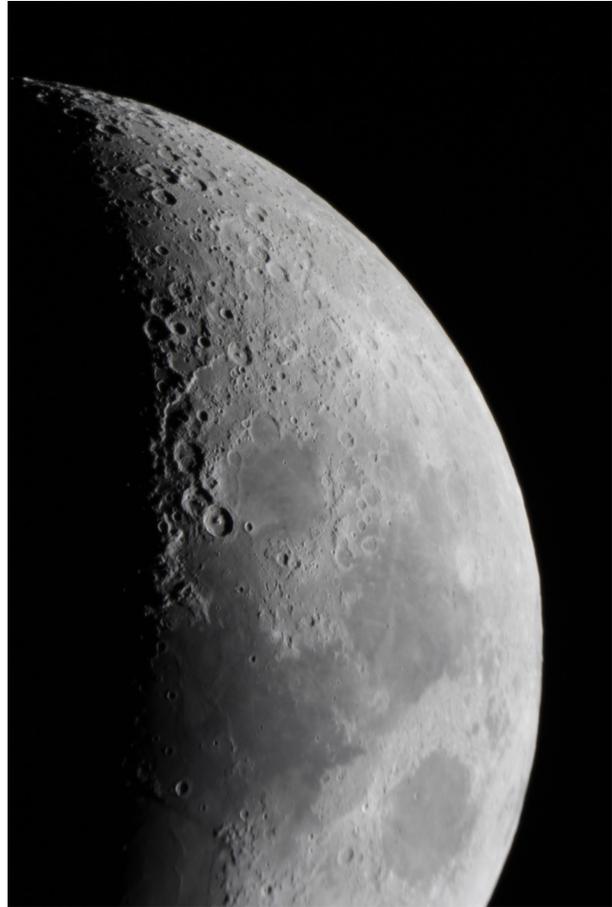
How odd. That night I substituted at the last minute, talked at fair length about Dale Hankin, with his family in the audience because of their one time decision to attend a BAA meeting. Surely this was a coincidence of rare correlation - a bit of a spooky experience!

Rowland A. Rupp

## Lunar Photography

I'm just getting into photography, and I'm not good with deep sky stuff yet, but I did take a picture of the supermoon on August 10, 2014 that I thought turned out well. The picture was taken with a Cannon T4i through a Skywatcher Pro 120 ED refractor at prime (900 mm) focal length. That focal length seems to do a nice job framing the full moon on the sensor chip.

Last year I took a picture of the moon on March 17 (2013) with my Celestron 11" Edge HD Schmidt-Cassegrain. At the 2800 mm focal length, I couldn't get the whole moon on the chip, but I love seeing the surface detail at the terminator.

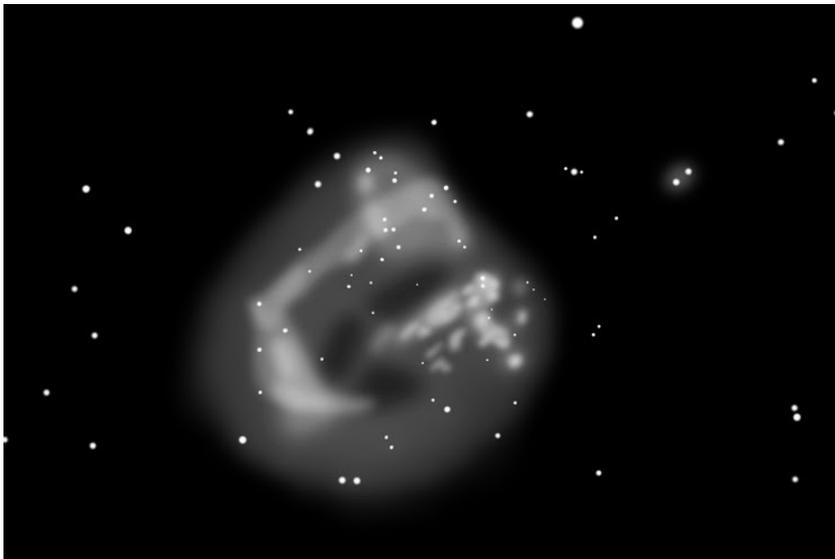


Most of the time the moon appears gray through a clear sky, but the local meteorologist on TWC news said that the moon might appear colored due to a thin layer of smoke in the upper atmosphere from the wildfires in Northwestern Canada. I do believe I detect a bit of color on the full moon pic when compared to the 2013 photo.

Jim Taylor

(this is the cover shot too . Thanks Jim!)

# *Sketches* by Ivan Maly

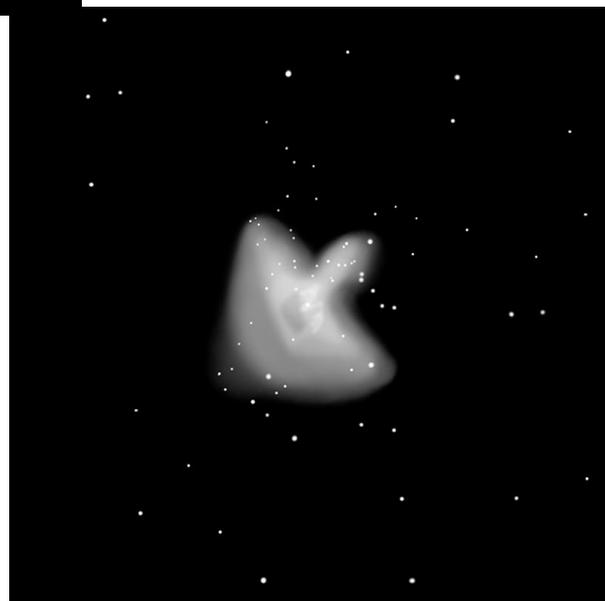


*M17*

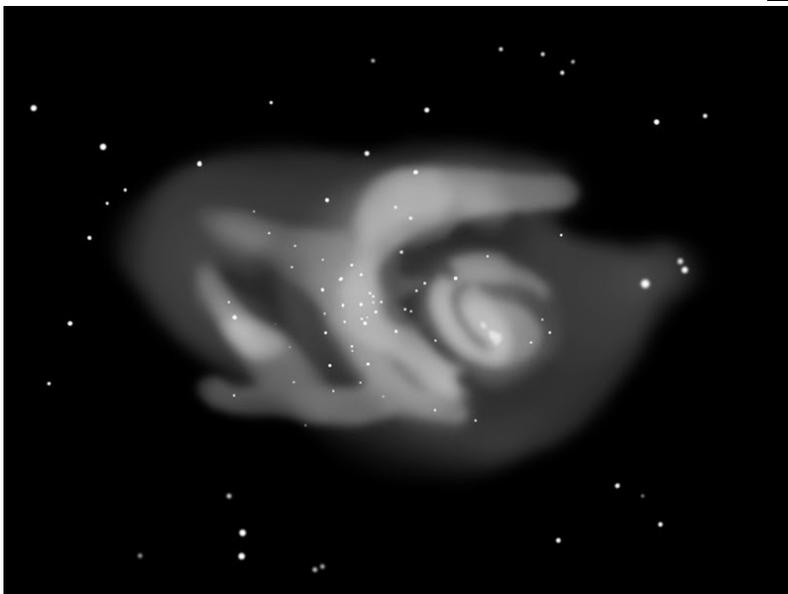
Presented for your consideration are three sketches made by Ivan Maly. He made these using his 16" during an observing session from the BMO this summer. Magnifications between 45 and 230x were used, along with OIII filters.

Nice work, Ivan!

*M16*



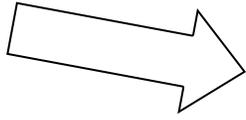
*M8*



What is this?

<http://nightsky.jpl.nasa.gov/index.cfm>

...and why is it on  
our website



?

(very soon)

During many of the meetings I have mentioned the Night Sky Network and the resources found there, but there is never enough time to fully discuss the scope of the organization. I thought this would be a good time to grab some info from the Night Sky website and print that here.

**The Night Sky Network** is a partnership of amateur astronomy clubs, Astronomical Society of the Pacific, and other organizations. Amateur astronomers regularly share their knowledge, time, and telescopes to bring amazing aspects of astronomy to the public. In ongoing research by the **Astronomical Society of the Pacific** and the **Institute for Learning Innovation**, amateur astronomers express the need for support of their outreach efforts. The main requests were:

- Materials on themed topics
- Training in the use of the materials
- Effective ways to communicate with varied audiences
- Providing services to clubs to expand and support their outreach programs
- Networking with other amateurs doing outreach

The Night Sky Network was inaugurated and has been expanded to help meet these needs.

Amateur astronomers have an interest in providing the public with entertaining, engaging ways to learn basic astronomy concepts. It is one of the NASA education goals as well to improve the American public understanding of astronomy.



## What are the Night Sky Outreach Toolkits?

Each Outreach Toolkit includes the materials you need to support a variety of activities, as well as a training video on DVD showing ways you might use the materials, a manual of suggested activities, PowerPoint presentations, and video clips. Examples of the toolkits are:

[PlanetQuest Outreach ToolKit](#) on the search for planets around other stars.

[Our Galaxy, Our Universe Outreach ToolKit](#) on scale and distance in our Solar System, Galaxy, and universe.

[Black Hole Survival ToolKit](#) on gravity and black holes.

[Telescopes: Eyes on the Universe](#) on how telescopes work and common questions heard at the eyepiece.

[Shadows & Silhouettes](#) on phases, eclipses, transits, and the NASA *Kepler Mission*.

[Exploring the Solar System](#) on sizes, distances, and the NASA Solar System Exploration Missions.

[SUPERNOVA!](#) on the lives of stars, cosmic radiation, and the role of supernovae in the universe.

[Glass & Mirrors: an Inside Look at Telescopes](#) demonstrates how refractors and reflectors work

[Space Rocks: Asteroids, Comets, and Meteorites](#)

[Life in the Universe: Are We Alone?](#)

[Our Magnetic Sun](#)

Toolkits are not the only benefit we receive.

The best way to see what is available is to check the website and see what's there. Look around and see if there is something that sparks your interest. Want to do a lecture for a school, group, or organization? Look here to see what tools are available to turn up your presentation! Just remember to let me know about any presentation you do. That way I can log them into the website. Also, if you see a kit you would like, let me know and I'll try and get it for you. Give me enough lead time and I'll see what we can do!

<http://nightsky.jpl.nasa.gov/>



## BAA Officers and General Information

President: Mike Anzalone  
 AstronomyRocks@roadrunner.com

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Treasurer: Jeff Gardner

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 Neal Ginsberg ngpilsung@gmail.com  
 Irene Ziarnowski

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 (716) 839-1842

Spectrum Editor: Michael Humphrey  
 jetpac@iname.com

Star Parties: Dan Marcus

BAA Yahoo E Group: Dennis Hohman

BAA Website Webmaster: Chris Elliott  
 www.buffaloastronomy.com

BAA voice mail box: (716) 629-3098

Location / Time of Meetings: BAA meetings are held on the 2nd Friday of the month from September to June starting at 7:30pm. Our meetings are held in room C122 of the Classroom Building at the Buffalo State Campus. See map below, building 35.

