



# The Night Sky

The Newsletter of  
The Astronomy Club of Akron

www.acaoh.org

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September 2008

## RAMBLINGS OF THE PRESIDENT

*by Glenn R. Cameron*

Ramblings of the President  
by Glenn R. Cameron

Hello to all of my astronomy friends. I think I'm going to ramble more than usual this time. We've had a good summer without too many clouds. I've enjoyed more eyepiece time with a new dolly system.

The club's observatory is getting a new brick patio surface under the roof roll-off area. We are in need of help at the observatory to "pave" the way. We've already removed the weeds and gravel, and part of the dirt. We still need to remove more dirt down to a depth of about six inches. Please don't leave this work, and so much more work, to the usual folks. We could use some more involvement from more members. We can accomplish more together.

We had quite a windy night on September 14<sup>th</sup>. The result was a power outage that lasted until Tuesday morning at 3 AM. I was hoping to see an unusually dark sky due to the lack of local light pollution, but alas, cloud power was still on full.

There were two especially interesting, to me, astronomy related stories in the news this week. One was the possible photograph of an extra-solar planet around a "sun"-like star.

[http://www.space.com/php/multimedia/imagedisplay/img\\_display.php?pic=080915-exoplanet-02.jpg&cap=Gemini+adaptive+optics+image%2C+taken+in+infrared+light%2C+of+IRSX+J160929.1-210524+and+its+likely+%7E8+Jupiter-mass+companion+%28within+red+circle%29.+All+images+obtained+with+the+Gemini+Altair+adaptive+optics+system+and+the+Near-Infrared+Imager+%28NIRI%29+on+the+Gemini+North+telescope.+Credit%3A+Gemini+Observatory+](http://www.space.com/php/multimedia/imagedisplay/img_display.php?pic=080915-exoplanet-02.jpg&cap=Gemini+adaptive+optics+image%2C+taken+in+infrared+light%2C+of+IRSX+J160929.1-210524+and+its+likely+%7E8+Jupiter-mass+companion+%28within+red+circle%29.+All+images+obtained+with+the+Gemini+Altair+adaptive+optics+system+and+the+Near-Infrared+Imager+%28NIRI%29+on+the+Gemini+North+telescope.+Credit%3A+Gemini+Observatory+)

Okay, it's a huge planet and it's in a huge orbit. It's eight times the mass of Jupiter and 330 times as far from the sun as the Earth. If this is confirmed as a planet though, it won't be any time at all before we chalk up a hundred pictures of extra-solar planets. That's what happened when we started the indirect

detection of planets through eclipses and Doppler shift.

The second fascinating story in the astronomy world was the discovery that tiny eight legged critters called tartigrades, which were taken into space and exposed to vacuum and radiation for ten days, survived!

<http://www.space.com/scienceastronomy/080916-st-space-life.html>

This leads to the possibility that life on Earth could indeed have arrived from another planet in or out of our own solar system. Even if that's not what happened here, it's interesting to know that it could have happened elsewhere.

I have updated the club web site, specifically the Join page, <http://www.acaoh.org/join.htm>, to include links to PayPal. The page also shows the slightly higher dues fee when paying by PayPal, to compensate for the fee. It's just another option you may choose. It's always your choice.

Outreach requests:

- A Cub Scout pack from Sharon Township would like a tour of the observatory and a talk about astronomy sometime in November.
- Minerva Public Library would like a speaker some time in 2009 as part of an astronomy exhibit they are planning for the International Year of Astronomy.
- The Akron Audubon Society would like a speaker on the subject of light pollution at one of their monthly meetings.
- A 5<sup>th</sup> grade science class in Coventry would like a presentation about solar system astronomy basics.

Please let me know if any of you can help out with any of these outreach requests.

Okay, I've rambled enough. Please let me know how I can help you to help me keep our club great!

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Lou Poda		

## Activities Calendar

Club	,Celestial:
September 26- Membership Meeting, Kiwanis Hall, 8:00 PM	Jupiter high in the south at Sunset
September 27- Maintenance Day, Observatory 9:00 AM	September 29- New Moon
September 27- Star Party, Observatory, Globular Clusters, 7:00 PM	October 7- 1st quarter moon
October 4, Star Party, Observatory, Double Stars, 7:00 PM	October 14- Ful moon (Hunter's Moon)
October 18, Star Party Stars, 7:00 PM	October 21-22- Orionid Meteor shower

# Observatory Report

*Ron Kalinoski*

August 23rd was a busy day for the Astronomy Club of Akron. We started with a maintenance day at the observatory at 9:00am. Mark Kochheiser concentrated on pulling weeds at the roof roll-off area so it would look good for our star party that evening. Rob Watkins scrapped, sanded and repainted the door frames of the observatory building. Fred Huffman and I sanded, primed, and repainted the double doors. We took a break at noon to grill some hotdogs for lunch. After lunch, we continued to work until about 1:30pm. The forecast for Saturday night called for increasing clouds and by early afternoon we already had significant cloud cover. However by 4:00pm, the clouds dissipated and clear blue skies prevailed. Satellite images showed the leading edge of the front forecasted to move into the area Saturday night was slowing moving north-east into Canada. It looked like the trailing edge of the front would arrive at the observatory about 10pm. That would give us about an hour to observe the star party's featured celestial object - Jupiter. At star party time the skies were still cloudless and we gathered around the roof roll-off area for a presentation on Jupiter by Jason Shinn. Jason gave a top-notch presentation including actual data he collected from his radio telescope. After Jason's talk, at least fifty members and public lined up behind our telescopes to see images of Jupiter. Dave Jessie informed the group one of the eclipsed Galilean moons IO was going to emerge from behind the disk of Jupiter and exit the shadow of the planet at 9:17pm. Dave also stated in his 51 years of observing the night sky as an amateur astronomer, he never witnessed this event occur and he hoped to see it take place. As star party attendees observed Jupiter through the 14" telescope, Dave Jessie set up his laptop in the observatory to provide us with real-time updates of the positions of the Galilean moons with respect to Jupiter. As we approached 9:17pm, there was excitement in the air. At 9:17pm a young "to be" amateur astronomer named Gracelin was at the eyepiece to observe the event. However, being so young, it is doubtful she knew what she was

looking at and probably missed observing the magical appearance of IO as it emerged from the shadow of the planet. Dave Jessie missed the event entirely and only saw IO some time after it emerged from the planet's shadow. We continued observing and to our satisfaction the skies remained clear with good seeing for the rest of the night. We treated the public to a variety of celestial objects from our observing list including planetary nebulae, globular clusters, open clusters, double stars, and some galaxies. The public asked many interesting questions. One in particular, "What is the farthest object this telescope can see?" sparked an interesting conversation. The answer to the question is 3C273, a quasar 2.5 billion light years distance in the constellation Virgo shining at magnitude 12.7. Gregg Crenshaw and I took turns explaining quasars, black holes, the cosmic background radiation, and the origins of the Universe. It was 1:00am before the last of the public attendees decided to go home. This star party turned out to have a sweet surprise. What started out as a hope for clear skies until 10pm, turned into a beautiful night for observing and a great time.

The weather for our August 30th star party was perfect as a high-pressure system moved into the area delivering 35% humidity and clear skies. Dave Jessie started the star party with a presentation on Comets to a group of public and members numbering about 50. Dave's discussion included images of past comets highlighting 17P Holmes, the comet that sent a shock wave of excitement through the club last year. After the presentation, many members had their equipment set up to show the public the wonders of the night sky. And amazingly, we had one more chance to see eclipsed IO emerge from behind the disk of Jupiter and exit the planet's shadow. At 11:12pm, IO magically appeared about 30 arc seconds from the western limb of Jupiter. Many members witnessed the event including Dave Jessie who viewed the event through Nick Mihiylov's LX200R. As IO exited Jupiter's shadow, sunlight was able to reflect off the moon to illuminate its surface. Initially IO was dimly lit by sunlight, but after

## Observatory Report, cont'd

about a minute, the moon was almost fully illuminated. The event lasted about three minutes. This was a fine conclusion to a great month of stargazing including two star parties at our observatory and one star party at Cortese Observatory.

The installation of the brick pad at the roof roll-off area has commenced. Our purpose for installing the brick pad is to provide an aesthetically appealing area beneath the roof roll-off structure, eliminate maintenance to this area (weed removal), and eliminate water entering the observatory from the north wall during heavy rain. The first step of this project was to meet with Bruce Carpenter to get his approval. Mark Kochheiser set up a meeting with Bruce and we explained our plan and he gave us approval to start the project. On Saturday September 6th, a group of eight members met at the observatory to begin work. Our first task was to remove gravel and plastic sheeting from the proposed pad area. Members present to handle the task included Ian, Emily, and Glenn Cameron, Rob Watkins, Nick Mihiylov, Mark Kochheiser, and Ray Hyer. We worked for about 3 hours to transfer gravel to a location approved by the park service. I brought samples of brick so members could choose brick type and brick color. The brick selected was Belden Lighthouse Gray with a tapered edge. On Saturday September 13th, John, Pat, and Justin Phillips, Nick Mihiylov, and Rob Watkins came out to the observatory to continue work on the pad installation. The weather was poor with constant rain throughout the work period. John Phillips brought a tiller to the site to loosen up the ground. Although the weather was poor, we did manage to get a good start on the removal of soil from the pad area. We'll continue the work next week.

A goal of our club is intended to enhance the observing experience by honing observing skills. There are 65 double star and multiple star systems in the The ACA Observatory Staff has put together a Double Star Observing Program. The program is designed for observers of all skill levels and program, some challeng-

ing. A Double Star Observing Certificate will be awarded to any member observing all 65 star systems. An Honorary Double Star Observing Certificate will be awarded to any member observing 50 star systems. For program details, please contact one of the ACA Observatory Staff members. And remember, if you do not own a telescope, our club has loaner telescopes available to use as a benefit of your membership.

### Treasurer's Report: 8/1/08 - 8/31/08

Glenn Cameron, Acting Treasurer

Total Beginning Assets	\$10,141.24
Income	
Interest on balances	\$1.25
Dues	\$30.00
Expenses	
Dues Prorated Refunds	\$5.00
Food for Hot Dog Roast	\$103.29
Observatory Upkeep	\$13.01
Total Ending Assets	\$10,051.19

## SOLAR FOLLIES- John Crilly

9-15-2008

Although solar sunspot activity has been near the minimum of its 11 year cycle, narrowband solar observing equipment news has been popping in the last year or so. Of particular interest to me are the activities of the two major players in the economy end of the business – Coronado and Lunt.

### The players

Coronado is the oldtimer in this segment, having offered the most economical, yet high-performance, gear for narrowband solar observing for many years. They came pretty close to sinking a few years ago at the death of their founder, but were saved when Meade stepped in and resurrected the brand name and most of the product line. Meade even stepped up to bat when the original design of the most popular model (the PST) proved to be fatally flawed. Meade redesigned the product and provided a no-cost upgrade to all owners (even though NONE of them had purchased from Meade).

Lunt is the newcomer, first announcing products last year and just now beginning to ship. The designer is the son of Coronado's designer, and financing has been provided by Markus Ludes (APM Telescopes) and Alan Traino of NEAF fame, among others. Their pricing is much more aggressive than that of Coronado, and this has stirred a great deal of interest.

### Recent Coronado Events

Coronado's California facility has been relocated, along with all of Meade's other domestic production, to Mexico. It's not known whether this will have an impact on product performance – in fact, it can't have any effect right away, as there was a large backlog of etalons on the shelf so for some time the Mexican-produced units will be supplied with domestic etalons.

More excitingly, Coronado had a summer sale (now over) on several products. The PST was offered at a good price of \$500 – but the excitement came from their reduction on their 60mm and 90mm dedicated Ha models. The 60mm dropped from nearly \$4000 to \$2000 – and the 90mm dropped from about \$10,000 to \$5,000! That attracted some attention, as it had clearly been intended to do. The sale is over, but new pricing nearly as attractive is now in effect. The 60mm dedicated scope is \$2500. The double, internal/external etalon model (previously \$5000) is now \$3100. An externally doublestacked model is now available for \$3600. Proportionally good prices are in effect on the various 90mm models. All of this is surely the result of price pressure caused by Lunt's entry into the market.

### What's up with Lunt?

Lunt hit the market last year with the announcement of a product with both a brand new design and a brand new price point. Their primary new product was to be a 60mm dedicated Ha telescope providing the ultra-narrow pass-band previously available only from expensive, dual-etalon systems, at a price of about \$1200. As Coronado's least expensive 60mm ultra-narrow model cost \$5000 (and everybody else's cost much more), this attracted attention. It also attracted a great many deposits for pre-orders. The design sounded both clever and tricky to execute. The plan was to pass the light through a single etalon TWICE, thus attaining the performance of two etalons for the price of one. Though intrigued, I was also skeptical. I decided to wait to see how this thing looked at NEAF in March (then many months away) and then decide.

NEAF came, and Lunt was there. They had lots of models on display inside. But - none outside? I inquired and was told that they had decided not to demo their units due to some clouds. Hmmm. I had, of course, been outside playing with my new Coronado 60mm scope and had enjoyed some fine views. There were dozens of Ha setups out in the courtyard for the annual NEAF Solar star party and a good time was being had by all out there. I said nothing, but I'm sure I wasn't alone in realizing that this product was not ready for production and sale, though they were still actively soliciting orders.

A few weeks after NEAF, it was announced that the situation was worse than that. They had finally accepted that the product was not feasible to produce. Oops – just how many orders (with mandatory deposits) had they taken for this non-product in the previous twelve months? And did this mean that they had lied to me previously?

All was not lost, they announced. All of those who had ordered the double-pass model for \$1200 would, instead, receive an internal/external dual etalon 60mm system. Wow – that could be comparable to the \$5000 Coronado unit! I am sure that I was not the only one to spot the flaw in this plan, though. Lunt had not mentioned any plans for producing a 60mm external etalon! I said nothing, but I knew that another announcement would be forthcoming. Sure enough, about a week later they announced that those who had ordered the 60mm doublepass system would receive an internal/external dual etalon system – but with only a 50mm external etalon. OK; still a very good deal at \$1200 but not at all what had been promised.

### How do they work?

I dunno. It appears that a few have found their way into

the hands of favored dealers but I'm not aware that any of the initial orders (now over a year old) have been filled. A buddy of mine ordered one at NEAF in March and has just received word that they expect to ship his in February. I haven't asked him his response to Lunt's latest announcement.

### What announcement?

Lunt is now offering a 35mm external-etalon solar telescope. At first glance, it might seem that this would mildly irritate those who have been waiting a year for products – they might well prefer that production capabilities were focused on catching up. It's worse than that, though – the 35mm etalon is the one USED by the 60mm internal/external system. This means that every 35mm scope sold uses an etalon that can't then be used to produce the backordered units. Why would Lunt cripple their capabilities to catch up by introducing this model? One possibility is that, because substantial deposits were taken with each such order, the remaining balance received won't cover the costs of producing the 60mm model. If so, they won't actually make any money until all back orders are filled (sometime next year, maybe?). In that scenario, the 35mm scopes will bring in the cash needed to operate, at the cost of delaying the filling of current orders even more. I hope that's not the case.

John C

john@urbanobservatory.com

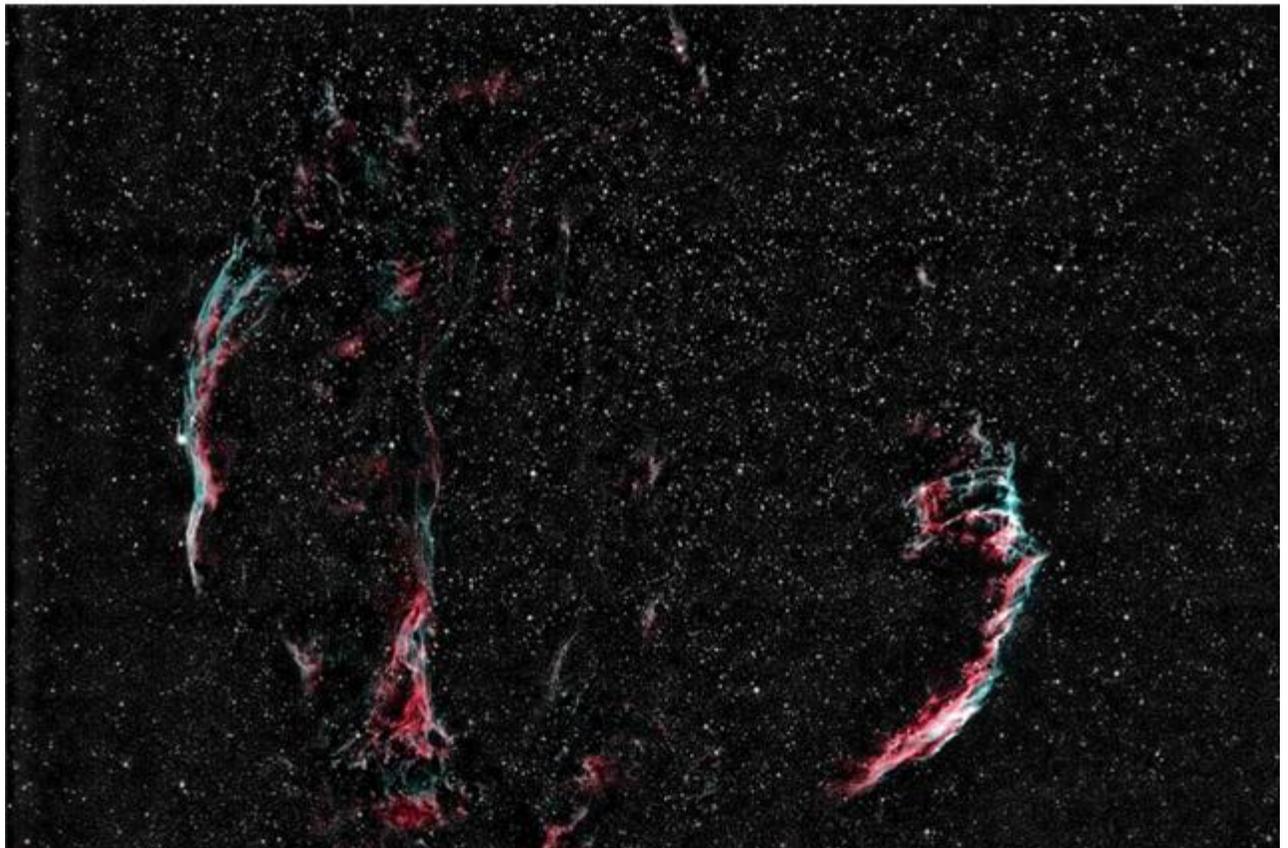
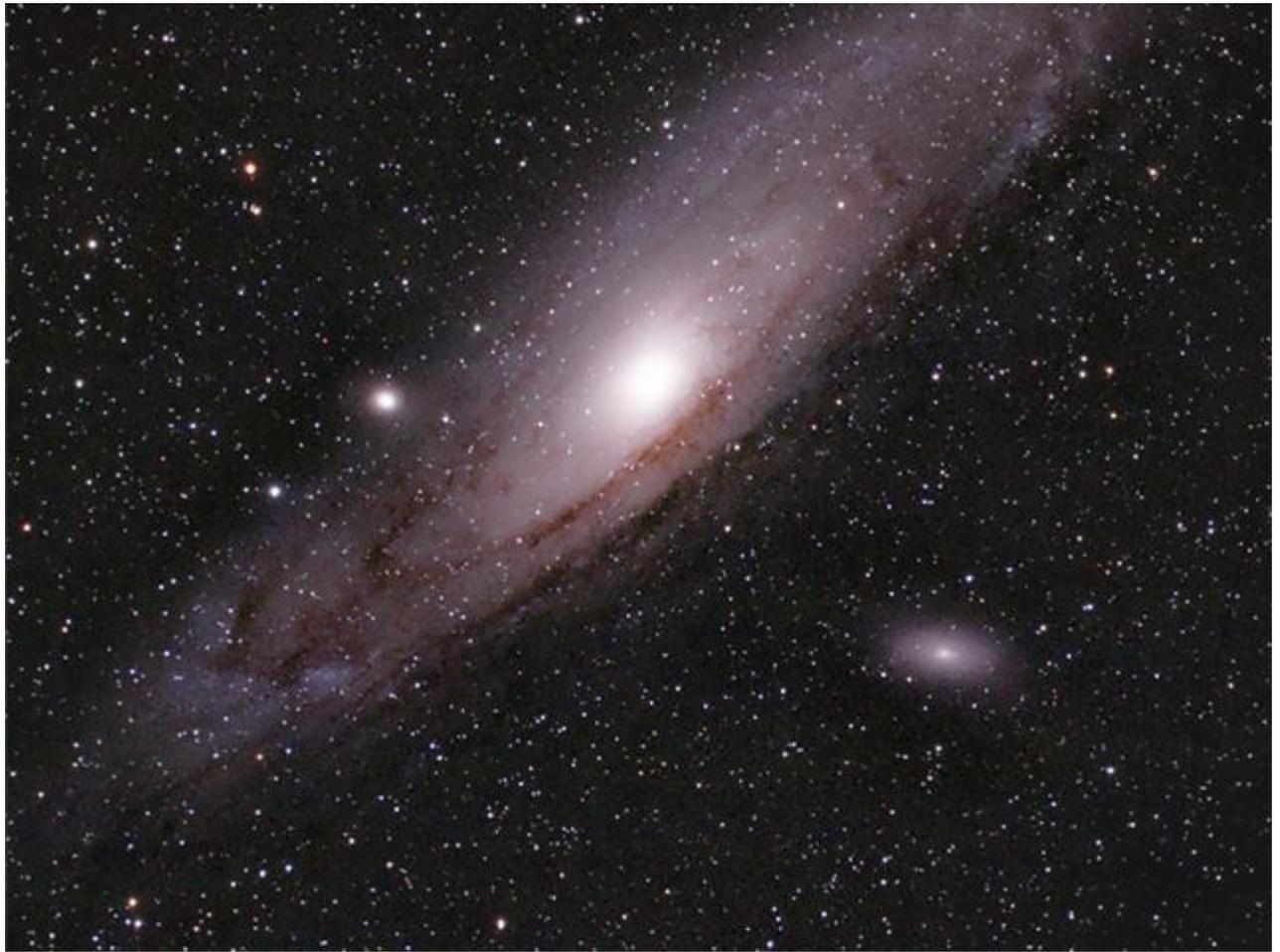
The pictures on the next pages were taken and submitted by John Crilly. Great work, John! (ed)

The deadline for article submission is **the second Tuesday of the month**. (Oct 14th) All word processing files should be saved in straight ASCII text files or any version of Word to minimize import problems. We will not turn away **any** submission, as long as the article's subject is astronomy or a related topic. If you don't have access to a computer, don't hesitate to write something out long hand. As long as it is legible, we will get it published.

### PLEASE SEND IN YOUR ARTICLES!!!!

Send your articles, items for sale, and comments to: Tom Alexander, 270 Harmony Hills Dr. Akron Ohio 44321 email: hana\_aloha@hotmail.com

Congratulations to **Dave Jessie** who was recently honored by the city of Stow for his contributions to astronomy. Dave, as many of you know, hosts observing sessions at Fish Creek and provides observing and educational opportunities for all. Thanks to Dave Burger for the information.





# *The Night Sky*

*Newsletter of the Astronomy Club of Akron*

c/o Tom/Leigh Alexander, Editors

270 Harmony Hills Dr

Akron, OH 44321-1111

To join the ACA, **or to renew your membership**, please fill out the form below, place in an envelope and mail to

the address shown in the return address area of the form.

*Please be sure to enclose payment for the membership level desired.*

**The Astronomy Club of Akron**

**c/o Glenn Cameron**

8019 Glendevan St. NW

Massillon, OH 44646

Yes! I want to become a member of the Astronomy Club of Akron

[www.acaoh.org](http://www.acaoh.org)

(PLEASE PRINT)

NAME: PHONE:

ADDRESS:

CITY: STATE: ZIP:

EMAIL ADDRESS:

**Astronomy Club of Akron** annual memberships renew in the month of May.

ADULT (ages 18 and older)..... \$30.00 JUNIOR (ages 12 to 17) .....\$15.00

ADDITIONAL ADULT member ..... \$15.00 FAMILY MEMBERSHIP .....\$40.00

I realize the full color version of *The Night Sky* newsletter is available for download by members from our web page at [www.acaoh.org](http://www.acaoh.org), but I would rather have the B&W version mailed to my address via USPS.