

# **The Night Sky**

### The Newsletter of The Astronomy Club of Akron

www.acaoh.org

Volume 29 Number 8

### **RAMBLINGS OF THE PRESIDENT**

Item 1 - What a great ACA picnic we had! On Sunday July 22, 2007 at 2:00pm, the ACA held our member picnic at the Big Oak Shelter in the Portage Lakes State Park...and what a great time we had! Chef Freddy cooked up the hotdogs and hamburgers, and those in attendance brought the most delicious side dishes I believe I've ever experienced at a Club function. Nobody left hungry, that's for sure. For a pleasant change, the weather was perfect temperature in the 70s, low humidity, blue sky and sunshine. You couldn't possibly have had better conditions for a great time. Several members brought equipment to sell or trade, and it was a lot of fun watching the bartering going on. It reminded me of the street vendors in Mexico! Chef Freddy sold about everything he brought to sell and left a few dollars richer. Our illustrious Editor picked up a great telescope for a not-so-large price. Since the temperature was so pleasant, and since we had use of the entire shelter, folks didn't leave until 7:00pm or so. All in all, a great time was had by all. Since the Sun was cooperating, we had a chance to use the H- $\alpha$  PST and were treated to several large prominences and some surface detail as well.

### by Dave Jessie

August 2007

Jacob Oravecz took advantage of the perfect conditions to 'catch some rays' as only we astronomers know how to do! Special thanks to Chef Freddy, and also to Vic Saker and Rosaelena Villaseñor for organizing the event. Thanks as well to all those who attended, brought all that delicious food, and made this a really special event. I can't wait for next year!

**Item 2 - Imaging competition amongst members:** I recently received an email from Jason Shinn who, among other invaluable duties, maintains the Club's imaging displays. Jason's idea is to have an ongoing 'Imaging Competition' for our members. While not everybody is an astro-imager (I'm certainly not), I believe the idea has merit since many of our members \*are\* avid astro-imagers. Jason's idea is to have three categories - novice, intermediate, or advanced - with participants competing against similarly experienced fellow members. A certificate, or something similar, would be awarded to the winners in each of these categories by a vote of club members. I'd really like to hear your thoughts on this is-*(Continued on page 3)* 





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Activities Ca	alendar
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Club	Celestial	
Aug. 18, Open House and Star Party 8:30 pm	August 12, New Moon	
Sept. 1, Open House and Star Party 8:00 pm	August 12-13, Perseid Meteor Shower August 28, Total Lunar Eclipse	
Sept. 8, Open House and Star Party 7:30 pm		
Sept. 28, ACA General Membership Meeting		
8:00 pm	September 11, New Moon	

The deadline for article submission is **the second Tuesday after each meeting**. 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, I will slave over the keyboard and get it published.

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

Send your articles, items for sale, and comments to: Justin Phillips 402 Crystal St. Akron Ohio email phillipsaca@gmail.com

#### (Continued from page 1)

sue. We could discuss this at our first meeting after the summer break, which occurs on the fourth Friday of September, 9/28/07 at 8:00pm at the Portage Lakes Kiwanis Civic Center.

Item 3 - Speaking of Jason...Rosaelena and I ventured to the Hoover-Price Planetarium in Canton to catch one of Jason's planetarium shows. For one thing, we were blown away by the museum! It's a wonderful facility worthy of a Sunday afternoon (or two, or three) with lots of hands-on science displays for children of all ages (we had a ball!). The planetarium is much nicer than we imagined. Jason's presentation was loaded with information and was presented in a truly professional manner, as we ex-

<b>Treasurer's Report: 7/1/07 - 7/31/07</b> Steve Rohweder, Treasurer				
Total Beginning Assets	\$8,580.08			
Income				
Interest on balances Magazine Subscriptions Dues	\$2.00 \$32.95 \$260.50			
Expenses				
Magazine Subscriptions	(\$32.95)			
Total Ending Assets	\$8,842.08			

# Observatory Report

July 14th and August 4th star parties were cancelled due to weather conditions. We did perform some of our scheduled maintenance this month. Fred and I installed the new roof cable at the observatory. We chose a slightly larger cable diameter with the same strand configuration, increasing from 1/8" to 5/32" diameter. It took a bit of trial and error to equalize the winch drums with the right amount of cable so the effective diameter of the pulling drum matched the effective diameter of the releasing drum. If the drum diameters are not matched, the cable will be subjected to high tension and the roof will deflect. The larger diameter cable freely wraps more uniformly around the drums and that should result in less wear.

John Phillips, Justin Phillips, Ray Hyer, Jason

pected. We should all venture down and enjoy such a fantastic venue in our own backyard. I highly encourage you to do so—you won't be disappointed!

**Item 4** - **Observatory Events** - Ron has worked diligently to schedule, and re-schedule public events at the observatory. Please try to make an effort to come out and support his hard work. Don't forget to bring a telescope or binoculars (if you have them) and help us show the public what we do!



#### Ron Kalinoski

Shinn, and I gathered at the observatory last week to pull weeds. The roof rolloff area and area between the building and sidewalk exploded with weeds after the heavy rains we recently experienced. But the weeds didn't stand a chance against this weed removal team. These guys were weed pulling machines. They didn't leave one weed standing. Impressive!

We recently purchased a 4'x6' white board as a replacement for our aging projection screen. The white board has the same usable area as the projection screen and will remain steady during star party presentations. The smooth white surface will maximize image quality. The white board will be put to work on August 18th when Jason Shinn presents his Jupiter program at our next star party.

## My Beginnings in Astronomy

When I was five years old my Dad brought my sister and I out to the back porch one night. After a brief wait he pointed out a pinpoint of light moving across the sky. Afterwards, he explained that it was a satellite (Sputnik) and told us something of what a satellite was. He had expressed no interest in such matters before, so I presume that the local newspaper had published an article pointing out that it would be visible and describing when and where to look. As the first manmade object ever placed in orbit it was surely newsworthy.

I was an early reader and a frequent visitor to the local library, so I sought out more Information about such things. I found nothing factual in the books available to me, but I did find a rich trove of science fiction by Heinlein, Asimov, Clarke, and others and I devoured all that I could find. My Dad made sure that I saw subsequent newspaper articles regarding later Soviet and US launches so I was very aware of Telstar, Laika, Yuri Gagarin, and (at last) Alan Shepard.

I borrowed a set of binoculars from my father and set out to become a stargazer but ran into problems. There was no Internet at that time, and I never found the correct books to get me started in the right way. Apparently, kids my age were supposed to be reading about ponies and clowns rather than about science or astronomy. I spent quite a few nights looking about the sky in an undirected way but after a while I realized that all the stars looked pretty much alike. I had no idea that there were other kinds of objects available to a casual stargazer. After a time I lost interest.

Much later, as a teenager, I dug out the binoculars a few more times but was still too ignorant to discover the literature that would at that point have been available to me. I did learn to recognize the major constellations but learned nothing about the celestial wonders framed within. Having no friends or family interested in astronomy, I simply had no immediate information sources to take me farther and my interest lapsed again.

Then came the distractions of high school, college, marriage, parenthood, single parenthood, and work. For the next few decades I was always working at least one fulltime job and nearly always attending school at night. While in high school I became involved in amateur radio as a hobby (Extra Class li-

cense W8TD) and barely had time to pursue that, so astronomy was forgotten. During this period it became obvious that I was attracted to technical topics; during the day I troubleshot complex electronics gear (power line carrier, microwave radio, VHF radio, analog and digital multiplexers, and fiber optics) and at night I fiddled with satellite communications, transmitting video signals, teletype, packet radio, and such things.

Eventually there came a time when both of my children were away at college, and time became a little more available. When I finally completed graduate school, I realized that nothing would ever make me take classes again. Suddenly, I had only one job to occupy my time. I considered reactivating my amateur radio gear, but I had already done pretty much everything in that area that sounded interesting. I was not going to be working in a technical field any more either, so I decided to simply move away from electronics and telecommunications for good. At that time it struck me that I had what seemed like all the time in the world to finally investigate the possibilities offered by amateur astronomy.

I began to accumulate and read books and magazines on the subject. The Internet was another great resource. I realized that there were all kinds of objects out there to see and at which to wonder. I found an advertisement placed by a fellow in the next town, offering to sell a modest telescope at what, according to my research, was a reasonable price. I went to see it and came home a proud telescope owner. It was an 8" Newtonian reflector on a simple Dobsonian mount.

I had a ball with that thing! My inner-city location is quite poor as an astronomical observing location, but since I had never seen any of the objects before I felt no disappointment – I was stargazing. Still, it didn't take long for me to discover that as much as I enjoyed observational astronomy, what truly fascinated me was the optics and hardware and how it all worked.

My next acquisition was another Newtonian reflector – smaller, but equipped with a computerized, equatorial mount. This meant that it could, on its own (and after being properly aligned) slew itself to astronomical targets selected from a huge list in its memory – and then keep them in view as the earth rotated beneath them all by itself. What a great toy! I was hooked on technology all over again.

I began what turned out to be a very long series of equipment acquisitions and dispositions. I wanted to own one of everything, at least for a while, so I would be familiar with all the equipment in common use. I began to buy new gear as soon as it came out, test it, write a review, and resell it. This was fun and the reviews (published online by the premier amateur astronomy website) earned me some minor recognition. It was, however, expensive as each piece of equipment was purchased new and resold as used.

After a time I became sufficiently well-known as an equipment reviewer that vendors began to send me new products to review and return. This was the best of both worlds. I had the opportunity to see and use the new gear as it came out, but I didn't lose any money doing it. Being familiar with such a broad range of equipment permits me to offer technical support to users of the equipment, and I spend a lot of time on the astronomy websites doing just that. It's very rewarding.

Meanwhile, I was becoming frustrated by the poor observing conditions at my home. I discovered a local astronomy club with a site slightly better than mine, so I began to take portable equipment out to their site on weekends. I also discovered star parties. These are get-togethers at really dark sites where stargazers gather with their telescopes to get the terrific views that are possible from such places. My current star party telescope is yet another Newtonian reflector – but this one has an aperture of 20". It has to be broken down for transport and reassembled at the observing site. It's well worth it for two nights of observing, but not for only one so it gets used only at weekend star parties.

The gadget-lover in me wanted to explore the possibilities of digitally imaging astronomical objects. Of course, I also wanted to experience the various astronomical imaging systems available. This was very frustrating at first because of the time and effort involved in setting up and tearing down all the equipment required. I decided to add a dormer with a roll-off roof section to my pole barn to use as an observatory. This would permit me to leave everything set up and ready to go; slide the roof open to do my observing or imaging and simply slide it shut again when finished. I hired a local carpenter and the project began. He got most of the interior work done but then had serious health problems and had to abandon the project.

While wondering what I was going to do about this half-completed project, I continued my practice of changing equipment regularly, buying and selling various bits of gear. I advertised a couple of telescope eyepieces and a local fellow responded with interest. He mentioned that he had built a roll-off roof observatory shed for himself so I went on over to see his to get some ideas. He bought the eyepieces – and in the end he agreed to complete my observatory project for me! It turned out that he had built a few for other local folks and was considering switching to observatory construction as his primary business.

The results were wonderful. I have my dream observatory (Urban Observatory, completed in 2002 and in continuous use from that time), and he is now the leading vendor of observatories for amateur astronomers. The observatory permitted me to finally take imaging seriously, and to my delight I find that despite the horrific light pollution at my location I can take images that please me greatly. I still travel to star parties when I can for the visual experience offered but when at home I'm an imager. In the observatory I have a permanently mounted equatorially aligned telescope mount on which I can place a variety of optical tubes and imaging devices. Each has its preferred use; the apparent size and apparent brightness of astronomical objects varies to an extreme degree so the equipment of choice for a given night depends on the target objects chosen. The cameras and the mount are connected to a computer in the observatory. I control that computer remotely from the one in my home office via my wireless network, so that once everything is set up I can complete a series of exposures on an object, slew the telescope to the next, and begin another imaging sequence without the need to go back out.

It's been quite a long road, but I've derived tremendous satisfaction and enjoyment from my participation in the hobby. I can recommend it highly to anyone interested in the sciences.

Anyone wishing to learn more of amateur astronomy will quickly find a variety of internet websites loaded with useful information. I can recommend <u>www.cloudynights.com</u> and <u>www.sflorg.com</u> for general interest. More information about my observatory, equipment, and images can be found at <u>www.urbanobservatory.com</u>.

# Astrophotography Event at the ACA Observatory

The rather informal astrophotography seminar held on Tuesday, July 31, was a great success. While only a few of us gathered I think we all learned a little something from each other. John Shulan did some deep space imaging while I focused on planetary. Many thanks to Peter Clausen for bringing his expertise to help us beginners and intermediates improve our craft. A special thanks to Ron for opening the observatory and sticking around to observe with us. More information sharing events like this will definitely be held in the future.

Aside from the learning experience, a few exciting events were observed. Europa put on a show for us as it came out of transit and cast its shadow across the face of Jupiter. We had no idea the event was to occur that evening, and it wasn't noticed until I took my first image of Jupiter through a brand new Orion Starshoot Solar System video camera. After processing the video file, we noticed a persistent black dot on the planet and immediately went to the 14 inch to confirm that it was the shadow of a moon. This is the first such event I have ever witnessed.



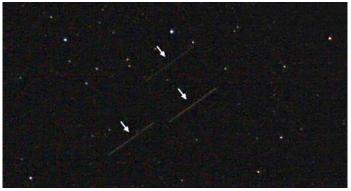
Waiting for a dark sky. Faces visible from left to right are Jason Shinn, Ray Hyer, John Shulan

### Jason Shinn

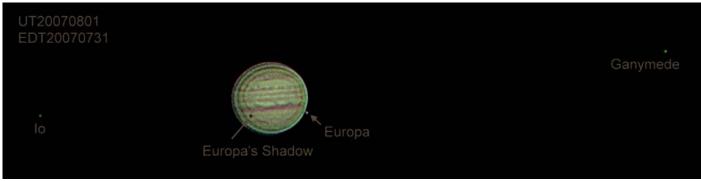
Also observed were three faint satellites traveling relatively close to each other in a formation of sorts. I was able to take several camera and tripod photos of them passing from the north-northwest to the southern horizon. A final and exciting end to it all was a brilliant orange bolide dropping down on the western horizon. Join us for the next astrophotography seminar. Even if you don't have imaging equipment, you can still observe and learn. Who knows, you might be inspired to buy a new toy!



The attendees of the astrophotography seminar pose for a red light photo. (left to right) Jason Shinn, Peter Clausen, Ron Kalinoski, John Shulan, Jeff Kreidler, Sherry Welch, Tom Welch



A ten second exposure captures three faint satellites orbiting in formation.



This image of Jupiter alerted us to the transit of Europa's shadow.

### **OTAA Events In My Opinion**

For any new people interested in amateur astronomy who don't know what "OTAA" stands for or what an OTAA event entails, I will tell you. Ohio Turnpike Astronomers Association and similar events were intended to inspire interested people and to spread the word about what a great hobby amateur astronomy can be. It linked the old seasoned and new young amateur astronomer together so old and new interests in astronomy could be cultured. It also allowed people to see what new equipment and ATM (Amateur Telescope Maker) equipment is out there to buy or build. A speaker or two was invited to present an interesting lecture or demonstration to be enjoyed by all. Ah yes, the drawings or raffles for astronomy equipment were great fun.

The reason I am writing this article is that I am concerned about the whole state of amateur astronomy, by this I mean that less and less young or old people are interested in the hobby. With this in mind, we, as amateur astronomers, owe to our hobby the time and effort it takes to get people interested. OTAA events are great places to do this, if we don't limit the number of people that can attend and price them out of the event. I know that such things cost money to organize, but think of the young person who wants to attend, but needs his family to get him there and accompany him to the event. It can get expensive! Then we have to think of retired people, who are the back bone of the

## (Non-ACA) Astronomy Events in August/September:

**Currently Showing at the Hoover-Price Planetarium:** *Eclipse!*—July 14th thru September 16th— Saturdays at 1pm, Sundays at 2pm http://www.mckinleymuseum.org/hoover\_price\_planetarium

NASA Glenn Third Saturday Series Event: Voyager: The Grandest Tour. Celebrate the 30th anniversary of the Voyager space missions and learn what they have taught us about our solar system. August 18, 2007 at NASA Glenn Research Center http://www.nasa.gov/centers/glenn/home/index.html

**OTAA Event:** BRAS (Black River Astronomical Society) - Saturday Sept 15, 2007

hobby. They are on fixed incomes and can't afford the price of admission.

With all this being said, how can you put on such an event with minimum cost? First let me say that there are many good speakers out there that don't charge a cent to talk about amateur astronomy topics. They have a lot to say and can keep the young and old alike interested. "Where are they?" you might ask; you can find them here Ohio's astronomy clubs, we are blessed with them and they are good. After hearing them and upon leaving the event you won't be scratching your head and asking "what did he say?" As for the money to help defer the cost of the event, put out a donation box. If people like what they see and hear they will donate. It is ok to charge for food and drink, books, hats, and shirts, but keep admission affordable to all.

There is nothing more fun or interesting than a gathering of young and seasoned amateur astronomers talking about the hobby I love.

Freddy Huffman

The ACA would like to extend a warm welcome to the new members...

But we don't HAVE ANY this month!

Come on, get out there and recruit. If we don't get folks out from behind those television sets and under the stars, who will?!

### FOR SALE

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### The Night Sky

Newsletter of the Astronomy Club of Akron

c/o Justin Phillips, Editor 402 Crystal St Akron, OH 44305-3116

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.

The Astronomy Club of Akron c/o Steve Rohweder, Treasurer 3981 Meadow Wood Ln Uniontown, OH 44685-7785					
Yes! I want to become a member of the Astronomy Club of Akron					
www.acaoh.org					
(PLEASE PRINT)					
NAME:		_ PHONE:			
Address:					
Сіту:	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 <i>The Night Sky</i> newsletter is available for download by members from our web page at www.acaoh.org, but I would rather have the B&W version mailed to my address via USPS.					

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