



The Night Sky

The Newsletter of The Astronomy Club of Akron

October 2000
Volume 22 Number 9

PRESIDENT'S COLUMN

By Frank Koby

It's almost Halloween Again. Boy the time has flown. I would like to take this space and remind everyone that in order for our club to grow all of us have to do more public programs. This does not mean just the ones at the observatory. I'm talking about the Metro Parks Scouts, Schools, Churches and so forth. It doesn't take a rocket scientist to do a program (or to help out at one).

The last two weekends (October 7th and 14th) the Astronomy Club of Akron could have been exposed to more than 3,000 people. Why do I say that? The Metro Parks had a family night at Goodyear and Silver Creek parks. Each of the nights more than 1500 people attended. Unfortunately, we only had representation at the Silver Creek Park event. The Goodyear Park event was iffy because of the rain. (Thanks to Gregg, Rich and Myself). Therefore when we have an event we need to turn out and help.

The next time it just might be your group that you would want the extra people for. Just to bring a telescope or even a pair of binoculars, show the public and hand out literature would help to increase the membership in the ACA.

FROM THE VP

– Gregg Crenshaw

I have not been able to secure a speaker for the October meeting, no body is ever home. So if you have any good astronomical video tapes or have astronomical information you have been dying to share with someone, give me a call, drop me an E-Mail, or just bring them to the October meeting on

the 27th. I have some solar videos I will show if no one brings something better.

Joe Nieberding has committed for the November meeting to be held November 17. It will be great to see Joe again. That is a week earlier than normal due to the Thanksgiving holiday.

Members have begun work on the 17.5 inch Dobsonian telescope owned by Summit County Metro Parks. The telescope is stored at Seiberling Naturealm. The work will include modifying the ground board, cleaning the optics - no small job (a 17.5 inch mirror is NOT light), remounting the finder and focuser and, the installation of a Tech 2000 Dob Driver II. The Dob Driver will facilitate public programs by tracking celestial objects. Thanks to Rich Ruggels and Rob Baugher for helping me with this project. The first work day was September 23. We worked on modifying the ground board and preparing it for installing the azimuth drive. If you would like to be included in this project see me (Gregg) at the next meeting, give me a call or drop me an E-Mail. Our next work day will probably be a Saturday early in November.

The ACA helped out at the Summit County Metro Parks Fall Family Outing at Silver Creek Park October 14. Thanks go out to Rich Ruggels and Frank Kolby for assisting me with that program. It was a bit cloudy, but we were able to show members of the public M31, Albireo, Mizar and Alcor, and the Moon. We also had some great conversations with people.

Thanks to everyone who ordered roses from the Kiwanis for Rose Remembrance Day. The ACA owes the Kiwanis of Portage Lakes a tremendous debt for all the years we have met at the Kiwanis Civic Center. See you at the meeting on October 27.

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CLUB ACTIVITIES CALENDAR

- ◆ **MONTHLY MEETINGS**
Friday, October 27, 2000
Friday, November 17, 2000
- ◆ **OBSERVATORY PUBLIC PROGRAM**
Saturday, October 28, 2000, Random observing
- ◆ **FALL STAR PARTY**
October 28, Rt.22

The deadline for article submission is **two weeks before the next 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!!!!

The newsletter (and the club) will be much richer with your contribution. Thanks to all who have used their valuable time to author or collect material for the Night Sky. (Editor)

Send your articles, items for sale, and comments to:

Ray Hyer, 725 Brewer St. Akron, OH 44305

Email: rhyer@neo.rr.com

NOTES FROM RICH RUGGLES

HELP WANTED REVISITED

Last month I asked if anyone would like to help out with the merchandise at meetings and some observatory agents. I knew you really wanted to but figured someone else would call, This is your lucky day. No one called and you now have a chance to eagerly volunteer. I sure could use the help. Call me 330 644-5912 or email Astronomylon1@cs.com.

YOUR ORDERS ARE IN

Those of you who ordered jackets, telrads, and skyspot books- your order is in. I will bring them to the Oct. 27th meeting. If you want them sooner, call me 330 644-5912 or email Astronomylon1@cs.com.

COMING SOON

I have ordered the 2001 Observer's HandBook (a must have) and The Sky & Space Weekly Planner. These items go fast so if you're interested, call me or see me at the meeting. I will put you on the list so when they come in, yours will be reserved.

These are in limited quantities and once they are gone-they are gone. Reserve yours now! 330 644-5912 or email Astronomylon1@cs.com.

The ACA 2000 Fall Star Party

The All Night Star Party is on for Saturday the 28th. Those of you that are going –PLEASE DRESS VERY WARM with several layers. It will get cold! We will have a fire and if you stop at my house you can pick up a box of fire wood. If each of us takes a box of wood down, we will have enough for the entire night. Bring your own snacks and beverages. A camp stove will be fine to make coffee if you like.

Those of you who are planning on going please call me so I'll have an idea on how many to plan on. The directions again are: Rt 77 south to Rt 250 east to Rt. 800 south to Rt 22 west. At this point, turn right on Rt 22. (Rt. 800 will cut off to the left but you will stay on Rt 22. After approximately ½ mile you will see a sign that will be placed at the access road. You will turn left into the property off 22. I will place an ACA sign at Rt. 22 and at the access road to the site. I will be leaving at approximately 5:00pm.

If anyone needs a ride or wants to caravan down, please let me know.

EDITOR'S NOTES

By Ray Hyer

Producing this newsletter each month can be really fun. It can also be hours and hours of work, which we all know is a four letter word. So I am going to offer you, dear members of the Astronomy Club of Akron, two choices:

Choice 1: I can produce and write the entire newsletter myself each month. Actually, I do get help from Frank, Greg and Rich each month. (Especially Rich. One of these months I am going to run a contest to guess how many times his phone number appears in each issue!) But most of the newsletter should be fun and informative articles that will help us learn more about our club and hobby. As I said, I am willing to do all that. The problem is 1) I would like to have a life besides writing for the newsletter and most importantly 2) I am a creationist and most of you would not want to read what I would write. That leads us to

Choice 2: Some of you talented and many of you not-so-talented members out there could contribute to the monthly outpouring of useful information.

In my never-ending effort to make this the best club newsletter on the planet, I want to try some ideas for columns that many of you could easily contribute, many of which appear in this issue. How about helping with one of these soon to be monthly features:

Caught In the Web, a review of an astronomy related web site.

Lost in Space, a description of an unusual or difficult sky object for the month.

Dark Secrets, where we reveal our favorite observing sites or techniques.

Astro Novices, a column for those just starting the hobby.

Observers Notebook, a monthly rambling about experiences under the stars.

Meet a Member, a profile of one member so we can get to know each other better.

How to..., instructions on performing some astronomy activity.

Satellite Search, information about visibility of satellites.

Cartoon, for the artist out there to draw a cartoon each month on an astronomy theme.

These are just some of my ideas. They provide plenty of opportunity for club members to contribute. None of the articles would need to be more than a couple paragraphs long, and could be illustrated with photos or drawings. If you are interested, contact me and we can work together to make this newsletter something to look forward to each month.

Until then, I will keep typing on my own!

STARGAZER TAKES AMAZING SHOT



This article, forwarded to the newsletter by James Wood, tells the story of an amateur astronomer on Mount Ranier who captured a photo that has been seen around the world. It shows the Perseids meteor shower, Jupiter, Saturn, and the aurora all in one picture. The picture can be seen in color at http://science.nasa.gov/headlines/y2000/ast14aug_1.htm

The picture was taken on Kodak Max 800 film, a Minolta 35mm camera, with an exposure of 30 seconds at f3.5. The photographer, Daniel Hershman, took the picture at about 3am as he was observing the annual meteor shower.

It's nice to know you do not need thousands of dollars worth of fancy equipment to take a great astrophoto.

OBSERVER'S NOTEBOOK

By Ray Hyer

It was a dark and stormy night... Oops! Wrong story, I'll keep that one for the campfire. Actually it was a dark (read "light polluted") and clear (read "somewhat hazy") night. I decided to add to my growing list of completed Y2K ACA Observers List items. To most experienced observers, this is no big deal. But for some of us observationally challenged people, the air is heavy with adventure. Not to mention my 200 lb. scope.

The first step is to go to the PC, because nothing can be done in this country without Bill Gates being involved. I fired up my old version of TheSky, which still shows Pluto as the 8th planet. I set the date and time right down to the exact second I expected to be ready to observe. After all, one needs an accurate map, right? I zoomed in on Ophiuchus (which is out in the desert, just west of Roswell), hoping to bag item 36, the M10 globular cluster. I printed three different star charts, each with a different field of view. I then moved to Pegasus for item 39, the M15 globular.

Not wishing to be an over-achiever, I decided my two objects would be enough for one night's effort. Armed with my treasure maps, I headed outside.

For some of the more fortunate observers, their telescopes are tucked away in a cozy little observatory. Not me. Mine has to be dragged one piece at a time from the garage to the observing site 150 feet away. So I pick up the tripod (humorously described as "portable") and half-carry half-drag it across the yard. Back for the second trip, the steamer trunk with the OTA (that's the optical tube assembly, for those of you lucky enough not to have one of these monsters). I set one corner of the refrigerator size box into the groove the tripod made and drag it across the yard. Trip three is easier, just a toolbox containing eyepieces, power packs and chocolate bars. Now I'm getting excited, only one more trip to go, taking the maps, dew shield and red flashlight to the pile of astronomical hardware now piled in the yard. The red flashlight is just there because astronomers are supposed to have a red light. The light pollution is bright enough to read my maps without any problems.

After half an hour of assembly the scope is set up and ready to gather some starlight. My polar alignment technique is simple, I just point the wedge towards the house, the north star is somewhere in that direction.

Since the light pollution at my house is so bad, any star below second magnitude is not visible. But I know the stars are out there somewhere, so I take my 80 mm finder scope and just start sweeping back and forth looking for something that resembles the dots on my map.

Quite unexpectedly I spot my first globular! There it is, a ball of stars swirling around each other in the darkness. Wait a minute, these stars should not be moving! I look up and realize I was looking at a swarm of mosquitoes. What's worse, the mosquitoes look down on me and decide to get a before-bed snack. Instead of bagging a couple globulars, I get bagged by the bugs.

Not to be outdone by a couple thousand little brainless insects, I decide to continue. I search for more stars and realize that the sky is now covered by clouds.

Four more trips back to the house and I am finished with my observing for the night. But I'll be back. The observers list has plenty of objects left to explore.

CAUGHT IN THE WEB

The web site featured this month is not one site, but actually 438 sites. One of my favorite astronomy web sites is Stargazer's Personal Pages of Astronomers, found at <http://my.voyager.net/stargazer/personal.html>.

There, in alphabetical order, you will find links to personal web pages of astronomers from all over the world. There is astrophotography, observatory construction, observing notes, planet observing and many other topics of interest. Some of the pages are professionals at universities, and some are individuals like us who just want to share their experiences. So check it out, you will surely find something that will interest you.

LAST TIME WE MET

The September 22 meeting featured an excellent talk by NASA engineer Geoffry Landis. His program about Mars exploration included beautiful images of the planet showing evidence for water, and, of course, the necessary images of the Face. He also had a copy of his fiction book “Mars Crossing” which is scheduled for release in December.



In the photo above, Geoffry Landis shows the club a wheel prototype from the Mars Sojourner Rover.

The business portion of the meeting featured the following discussions:

Membership Card – we discussed the issuance of a membership card.

Phone Tree – the idea was discussed to form a phone tree to notify club members of special events.

Star Party – the idea was put forth to have two members only observing sessions per year. More information will be coming in the future.

Monthly Meetings – the question was brought up of having meetings every month, including the

summer months. It would be possible to combine the business meeting with a regularly scheduled event. All items will be discussed again at future meetings.



Could there possibly be an explanation for this picture? Aren't you sorry you were not there to experience it???

LOST IN SPACE

This column will usually explore challenging or strange objects, but this month I am going to answer a question that I answered for somebody at work the other day – “Where did the planets go?” It seems ages since we were able to view them, and I, for one, miss my good-night visit with Jupiter or Saturn.

Well, guess what! They're back from their sunbathing vacation. They should have a real nice warm glow.

During November (if we are blessed with some clear skies) Venus will be shining brightly in the west. It's already there, it's just so low that a clear horizon is needed to see it.

Jupiter rises about two hours after sunset early in the month but reaches opposition by the end of the month and will be visible all night.

Saturn is about 10 degrees west of Jupiter, so it will be rising earlier and will reach opposition on the 19th. With its rings tilted towards us the most since 1990 it will be a spectacular object to view.

So put on a warm coat and go outside to get reacquainted with some old friends.

DARK SECRETS

by Ray Hyer

On the night of September 29, I found myself at a cabin at Atwood Lake. I would have rather been at the Hidden Hollow Star Party, but my wife, well, you know...

After the "business" of our group activities I went outside for a stroll to see what the sky looked like without the light pollution I enjoy so much at home. I expected a better view than I have here in Akron, but I was not ready for what the darkness had waiting for me.

The cabins at Atwood are snuggled inside a forest of tall pines. Yet even through the canopy of twisted branches, pine cones and needles I could see many bright lights. What constellation was that bright this time of year? I hurried down the road looking for a better opening to see the sky.

When I finally came to an open area I was so shocked that I stood motionless for several minutes. Above me was a sky so filled with lights that I could hardly make out the familiar constellations!

The bright lights I had seen was Cassiopeia, shining as if every star was first magnitude, with dozens of other stars peppered between the bright ones, and the Milky Way glowed across the entire sky.

What really amazed me was that I could see all this from a place only 50 miles from home. I did not need to travel to a remote mountain top. Right here, in my own state, was the sky I remembered so well from many years ago.

So, here I am, back at home. Once again I am looking at the Milky Mud of light pollution instead of the Milky Way of our galaxy.

Yet I remember that clear, dark sky that is still just a few miles away. For me, it was not a trip across miles of highway. It was a trip back in time, to the sky I remember looking at as a teenager. The sky I fell in love with. The sky I will always look forward to an all-too-infrequent reunion with.

May your trips be as memorable.

This Week on Galileo, October 16-22, 2000

Did you know that Galileo's radio transmitter puts out about 20 watts of power? That is slightly less than the power of a refrigerator light bulb.

Nevertheless, the Deep Space Network's 70-meter (230-foot) diameter antennas are able to extract Galileo's spectacular science data from a signal which, when received on Earth amounts to only about one part in 10 to the 20th watt, in other words 0.00000000000000000001 watt. Impressive!

This is the second to last week Galileo dedicates to the return of data stored from previous encounters on its onboard tape recorder. The data returned this week was acquired during the spacecraft's February flyby of Jupiter's volcanic moon Io. Starting mid-next week, Galileo moves on to a campaign dedicated to maintaining the integrity of the Fields and Particles instruments' low-resolution survey of Jupiter's magnetosphere. Stay tuned for details!

Four observations are processed and transmitted to Earth this week. Playback is interrupted once. On Tuesday, the spacecraft performs a standard test of its attitude control system's gyroscopes. All four of this week's observations are returned by the Solid-State Imaging camera (SSI).

SSI's first observation consists of images of Tohil Mons, one of the mountains on Io. The origin, history, and geological structure of Tohil Mons and other mountains are not well known. These images will also be combined with an observation of the same region taken in October 1999 in order to produce stereo views.

Next, SSI returns portions of a color mosaic of Io's Prometheus volcanic region. This is followed by the return of portions of a 12-frame mosaic covering the Camaxtli Patera hot spot and nearby regions to the west, including the Chaac Patera region. This Chaac Patera coverage will also be combined with previous observations to produce stereo views. Last, but not least, SSI returns a small part of an observation consisting of color images of Io's Amirani volcanic region.

So, what's got Galileo halting the return of data two months before its next encounter? Come back next week for all the details!