



STAR STUFF

The Newsletter of the Ford Amateur Astronomy Club

Volume 20, Number 4

April 2011

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President's Corner

On Saturday, April 16th we had our annual club dinner. I believe everyone had a great time despite NOBODY getting the Final Jeopardy question.

"This planetary pair will exhibit a rare closeness, Tuesday, next (April 19th,) appearing a mere 2 degrees apart in the dawn sky."

How many of you would have known the answer? Remember, you didn't have access to any sources! All of the tables, except one, bet ALL their points. That table bet only \$1 leaving them as this year's champions: Rosie & Jon Blum, Barb & Chuck Jones, Sherrie & Larry Goodsell, and Susan Hansen.

Thanks to our Alex Trebex, aka Dale Ochelak for pulling together, once again, this year's Astro Jeopardy.

I also want to thank Jim Frisbie for his dinner talk "A Wedding and the Stars." Jim recounted his trip to India for a friend's wedding and his side-trip to the Jantar Mantar observatory in Jaipur. Jantar Mantar is a stone observatory built in the 18th century before optical telescopes made their way there. The observatory was built before light pollution was even a thought (a

good thing) and when astronomy and astrology were still linked.



The highlight of the evening was the presentation of our annual Sirius Award. The Sirius Award is the way we recognize a person who, like Sirius outshines the other stars in the heavens, shines brightly on our club - our shining star.

There is no one more deserving of this honor than this year's recipient George Korody. George has been a member of the club since 1993 and is always there to support the club and our members. The following is an incomplete list of everything George does for the club:

- Doing many presentations for the club at the general meetings
- Participation in outreach events

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STAR STUFF

April 2011 - Vol. 20 No 4

STAR STUFF is published eleven times each year by:

FORD AMATEUR ASTRONOMY CLUB
P.O. Box 7527
Dearborn MI 48121-7527

PRESIDENT: Gordon Hansen
VICE PRESIDENT: Jon Blum
SECRETARY: Doug Bauer
TREASURER: Chuck Jones
WEBMASTER: Greg Ozimek
NEWSLETTER EDITOR: Jennifer Zdanowski

Club Information:

The Ford Amateur Astronomy Club (FAAC) meets on the fourth Thursday each month, except for the combined November/December meeting on the first Thursday of December - at Henry Ford Community College Administration Services and Conference Center in Dearborn. Refer to our website for a map and directions (www.boonhill.net/faac).

The FAAC observes at Spring Mill Pond within the Island Lake State Recreation Area near Brighton, Michigan. The club maintains an after-hours permit, and observes on Friday and Saturday nights, and nights before holidays, weather permitting. The FAAC also has use a private observing site near Gregory Michigan and Lake Erie Metro Park. See the FAAC Yahoo Group* for more information.

Observing schedules and additional info are available on our website, or via the FAAC Yahoo Group.* Or call the FAAC Hotline, for info and leave a message, or ask questions: 248-207-2075. or send email inquiries to fordastronomy@comcast.net.

Membership in the FAAC is open to anyone with an interest in amateur astronomy. The FAAC is an affiliate of the Ford Employees Recreation Association (F.E.R.A.). Membership fees:

Annual - New Members: \$30 (\$15 after July 1)
Annual - Renewal: \$25 (\$30 after January 31)

Membership includes the STAR STUFF newsletter, discounts on magazines, discounts at selected area equipment retailers, and after-hours access to the Island Lake observing site.

Astronomy or Sky & Telescope Magazine Discounts

Obtain the required form from the FAAC club treasurer for a \$10 discount. Send the completed form directly to the respective publisher with your subscriptions request and payment. Do not send any money directly to the FAAC for this.

Star Stuff Newsletter Submissions

Your submissions to STAR STUFF are welcome! Send your story and/or images to the editor at jenzdanowski@yahoo.com. Email text or MS Word is fine. STAR STUFF will usually go to press the weekend prior to each general meeting. Submissions received prior to the 15th can be included in that issue.

* FAAC Members are welcome to join our Ford Astronomy Club Yahoo!Group. Messages photos, files, online discussions, and more! URL: groups.yahoo.com/group/FordAstronomyClub.

This months background photos of the moon Page 1 courtesy of John Kirchhoff. See more of John's photos at:

<http://www.flickr.com/photos/33926475@N06/with/4311533997/>

Presidents Corner

(continued from Page 1)

- Attending and participating in Board Meeting
- Participating in planning of the GLAAC Astronomy at the Beach event
- Participated in organizing the Island Lake Star parties
- Helping with the annual Astronomy Expo and Swap Meet
- Acting as mentor to anyone who asked for help in any area of astronomy
- Helping people make telescopes
- Participating and running the Astrophotography SIG and sharing his knowledge of imaging
- Running the FAAC Table at AATB every year
- Working with the team on the HJR Observatory to get equipment setup and working properly and working to ensure its future use
- Bringing plates, collection jars and napkins to the FAAC General Meetings
- Organizing the door-prize raffle at the annual banquet

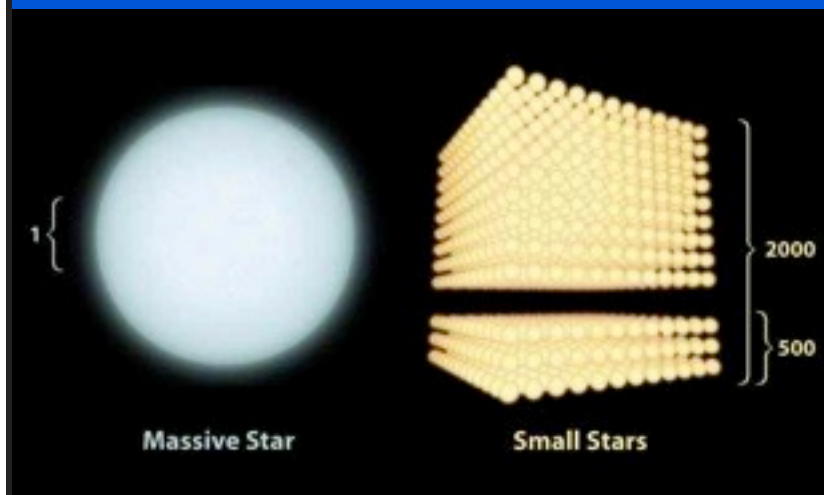
Congratulations and thank you George for all of your contributions!

Upcoming events:

The Plymouth Astrophotography Club will hold its second meeting on Tuesday, April 26th at the Plymouth library starting at 6 PM. This club sound like competition for our own Astrophotography SIG, but, it's really a great complimentary meeting. The Plymouth meetings are open to all with an interest in astrophotography and being on Tuesday evenings and in a different part of town provides an opportunity for those who can't attend our meetings. I urge anyone who has an interest in astrophotography to attend either or both of these meetings (the FAAC Astro SIG meeting is held on the 2nd Thursday of each month.)

Astronomy Day 2011 is on Saturday, May 7th. We will participate in events at the Detroit Science Center during the day. Our May Beginner's Night will follow that evening at Island Lake starting at 7 PM. This month's demo will be "Star Hopping" led by Doug Bauer.

Gordon Hansen
ghansen@comcast.net



Astronomers have recently found that some galaxies have as many as 2000 small stars for every 1 massive star. They used to think all galaxies had only about 500 small stars for every 1 massive star.

Cosmic Recount

News flash: The Census Bureau has found a way to save time and money. Just count the biggest people. For every NBA star like Shaquille O'Neal or Yao Ming, there are about a million ordinary citizens far below the rim. So count the Shaqs, multiply by a million, and the census is done.

Could the Bureau really get away with a scheme like that? Not likely. Yet this is just what astronomers have been doing for decades.

Astronomers are census-takers, too. They often have to estimate the number and type of stars in a distant galaxy. The problem is, when you look into the distant reaches of the cosmos, the only stars you can see are the biggest and brightest. There's no alternative. To figure out the total population, you count the supermassive Shaqs and multiply by some correction factor to estimate the number of little guys.

The correction factor astronomers use comes from a function called the "IMF"—short for "initial mass function." The initial mass function tells us the relative number of stars of different masses. For example, for every 20-solar-mass giant born in an interstellar cloud, there ought to be about 100 ordinary sun-like stars. This kind of ratio allows astronomers to conduct a census of all stars even when they can see only the behemoths.

Now for the real news flash: The initial mass function astronomers have been using for years might be wrong.

NASA's Galaxy Evolution Explorer, an ultraviolet space telescope dedicated to the study of galaxies, has found proof that small stars are more numerous than previously believed.

"Some of the standard assumptions that we've had—that the brightest stars tell you about the whole population—don't seem to work, at least not in a constant way," says Gerhard R. Meurer who led the study as a research scientist at Johns Hopkins University, Baltimore, Md. (Meurer is now at the University of Western Australia.)

Meurer says that the discrepancy could be as high as a factor of four. In other words, the total mass of small stars in some galaxies could be four times greater than astronomers thought. Take that, Shaq!

The study relied on data from Galaxy Evolution Explorer to sense UV radiation from the smaller stars in distant galaxies, and data from telescopes at the Cerro Tololo Inter-American Observatory to sense the "H-alpha" (red light) signature of larger stars. Results apply mainly to galaxies where stars are newly forming, cautions Meurer.

"I think this is one of the more important results to come out of the Galaxy Evolution Explorer mission," he says. Indeed, astronomers might never count stars the same way again.

Find out about some of the other important discoveries of the Galaxy Evolution Explorer at <http://www.galex.caltech.edu/>. For an easy-to-understand answer for kids to "How many solar systems are in our galaxy?" go to The Space Place at: <http://tiny.cc/I2KMa>.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

Treasurer's Report

March 31, 2011

By Chuck Jones

Ford Amateur Astronomy Club Balance Sheet As of March 31, 2011

	Mar 31, 11
ASSETS	
Current Assets	
Checking/Savings	
CD 200599272	1,052.66
CD 89265268	1,096.96
Checking	2,393.11
FAAC Savings	1,710.58
Petty Cash Account	124.25
Total Checking/Savings	6,377.56
Total Current Assets	6,377.56
Other Assets	
Equipment	1,472.97
GLAAC	1,904.58
Scholarship	556.80
Total Other Assets	3,934.35
TOTAL ASSETS	10,311.91
LIABILITIES & EQUITY	
Equity	
Opening Balance Equity	8,439.30
Retained Earnings	-276.33
Net Income	2,148.94
Total Equity	10,311.91
TOTAL LIABILITIES & EQUITY	10,311.91

Club Wear

To our "New and Current Members" Our club has "FAAC" Official Club Wear with our Logo Embroidered.

Anyone with an interest or need in FAAC Club Wear, I will be placing an order in the next few months, for more information please call me - Diane at 248 980-7832. The FILES section in the Yahoo group has a form noting each ITEM with PRICES. The listing name - "FAAC Club Wear" - please do not hesitate to call me.

Diane Worth

Meeting Agenda - April 28

HFCC – Berry Auditorium -Admin. Services & Conference Center <http://www.boonhill.net/faac>
5:30

Opening/Introduction/Member Observing

2010 Club Recognition

- Sirius Award – George Korody
- Recognition Certificates

Main presentation:

Astronomy Village, Georgia Dave Lacko

Tech Talk:

Android Astronomy Aps Mo Mroue

Club Projects/Committees/Member Support

- May 7th - Astronomy Day
 - Detroit Science Center (9 AM – 4 PM)
 - Beginner's Night – Island Lake (7 PM)
 - Star Hopping – Doug Bauer
- May 13th – Howell Girl Scouts
- June 4th – Allen Park Cub Scouts
- Open Discussion

Club Business/Secretary/Treasurer/ Equipment Reports

Astro Imaging SIG

Gordon Hansen

The April meeting was held at HFCC in the Berry Amphitheater in Dearborn

All are invited to join us in the Astro Imaging SIG meetings, to share and discuss images, experiences, and techniques.

We always have a good time, with lively discussion, and sharing of valuable information.

Next meeting is May 12th. The meeting room location – HFCC Admin. Services and Conference Center (same building), Berry Amphitheater Auditorium.

Topics invited. Pizza served.

FAAC Events 2011

Apr 28 - General Meeting

May 7 - Astronomy Day

May 7 - Beginner's Night - Island Lake

May 12 - Astrophotography SIG Meeting

Background Photo from Lunt Solar Scope Image taken at the Hector J Robinson Observatory, June 28, 2010

One FAAC members blog

<http://hjrobservatory.blogspot.com/>

A few updates on the observatory, quick articles and photos. I'll try to improve my writing on this blog. Also, I try to keep daily updates on this blog. - Greg Knekleian, HJRO volunteer.

Items For Sale

****NEW AD****

Orion 100 mm Achromat refractor, F6, with older CG4 equatorial mount. Diagonal and finder included. Asking \$250

Miscellaneous eyepieces and filters for beginners also available. Ask for \$\$

Call Tom Blaszak at 313.585.3351.

key_string_guy@yahoo.com

Meade Lightbridge Deluxe 12" – F/5, 1524mm focal length. Purchased new last year. Perfect condition mechanically, optically and cosmetically. Big, clear deep sky views. Built-in battery powered cooling fan, two-speed Crayford focuser (1.25 / 2-inch). Easy to transport, set up collimate and use - smooth as silk. Upgraded with Bob's knobs and heavier collimation springs. Includes shroud, cover, Telrad and secondary mirror heater. Over \$1000 invested, will sell for \$650.

Contact John Johnson at
jjohnsonpub@yahoo.com

or (248) 515-0014.

MEADE Telescope and Tripod 6 years old - in excellent shape **LXD 75** - Series Schmidt - Cassegrain 8" f/10 SC-8AT (Super Coated, Autostar Guided) - Focal Length 2000 mm Telescope weight = 24 lbs - with MEADE EMC Super Multi-Coatings and with optional Ultra-High Transmission Coating Tripod weight = 45 lbs - Die cast Aluminum German-Type Equatorial Mount with Variable-Height Field Adjustments Autostar Controller guides to 30,223 objects

Includes a Sun Filter, Overnight Protective Cover, Transportation Containers. Contact phone no.

248-851-5053, e-mail

robertboswell@comcast.net

Spotlight On Our Boardmembers: Secretary, Doug Bauer



Our club Secretary for 2011 is Doug Bauer. He was club Vice-President in 2007 and President for the past 3 years. Doug became interested in Astronomy during a trip to Ayers Rock in Australia in 1995. As a side trip, he went with a local astronomer to view the southern skies. It was a moonless night and the Milky Way was so bright that it would cast the shadow of your hand on the ground. He was hooked.

A year or so after he returned from Australia, he went to the Nature Store and bought a Meade ETX150 telescope. After a few weeks of not finding anything in the Troy skies but the Moon, he exchanged the scope for a Meade 10" LX200 with GoTo capabilities. He asked the salesperson if there was someplace that would help him learn how to use the new telescope. They asked where he worked, and when he said Ford Motor Company in Dearborn, they said that the Ford Amateur Astronomy Club was one of the best clubs in the area.

Doug joined FAAC and found that everyone was very eager to help him learn about astronomy and how to use the telescope. He subscribes to Sky and Telescope, Astronomy Magazine, and Astronomy Technology Today. As with many in the club, he likes gadgets.

After about 10 years of using the LX200, Bob MacFarland was showing Doug his big Dobsonian and started teaching Doug how to find objects without the aid of a GoTo telescope. It seems that after using the GoTo scope for 10 years, Doug really didn't know how to locate much in the sky and now, thanks to Bob, had aperture fever. He bought his 16" Lightbridge and with Bob's mentoring has developed a much better knowledge of the sky and really enjoys being able to hunt down objects sans computer controls.

Doug still has his 10" LX200 and uses it mainly for star parties, as it will locate and track objects so that the line of people doesn't have to wait for him re-center things before the next person looks at it. He has along the way acquired a 16" Lightbridge, 25X100 binoculars and parallelogram, and a Coronado PST for solar observing and numerous other astronomy related gadgets. His favorite part of astronomy is letting others look through the telescope and see the many wonders that are there in the sky.

FAAC General Meeting Minutes March 24th, 2011

By Jim Frisbie, for Doug Bauer, Secretary

Opening:

The meeting was called to order in the Berry Auditorium at 5:30 pm by Jon B., Vice President. All attendees introduced themselves. Members contributed their observing experiences. Jon welcomed new members & guests, discussed the Mentoring Program, and suggested interested individuals contact a Board Member.

Business Meeting:

- Secretary's Report as published in StarStuff was presented by Jim F.
- Treasurer's Report was presented by Chuck J. via Balance and Profit & Loss.

Projects and Events:

- GLAAC Astronomy At The Beach, planned September 9 and 10, 2011 is still searching for a Key Note Speaker.
- Bill Beers is having a Memorial Day weekend Star Party near Cadillac.
- Larry Halstead is hosting an outreach at the Hartland at the Crounse Library.
- There will be a Club sponsored outreach at Metro Beach on March 26.
- There will be a Club sponsored outreach at the Farmington Hill Nature Center on March 26.
- Earth Day is March 26.
- FAAC Banquet, April 16 at Karl's Kabin, price \$30/person. The can still use door prize donations. Please contact George or Pat K.
- The Plymouth Astro SIG Group has formed and is meeting in the Plymouth Public Library on the 4th Tuesday of each month at 6:00pm. Please contact Mike R. or Jim F. for details.
- The HJRO SIG Group had it's first meeting.

Yahoo Site.

- The Astro SIG Meeting was held on Thursday, March 10.
- Club apparel options were presented by Diane.
- Howell Girl Scouts - Club Outreach, Friday, May 13
- The first Beginners Night is scheduled for Saturday, April 9 at Spring Mill Pond.
- Astronomy Day, May 7th, at the Detroit Science Center, Beginners Night at Island Lake Follows.

The meeting was adjourned at 6:30pm and everyone moved to the HFCC Planetarium.

Main Program:

- A Planetarium Show of the Spring and Summer Sky was conducted by Dennis S.

2011 Astronomy Swap Meet and Expo



FAAC Outreach at Abbeville, South Carolina

by Doug Bauer

This winter, while DeeAnn and I were in McCormick, South Carolina to escape the Michigan weather, we met Jim Kinsler, the minister at the Lutheran Church by the lake, and his wife, Martha. In talking to them, I mentioned my interest in astronomy and invited them to our house one night to take a look at the sky. Since the house is in an area that is surrounded by national and state forests and not close to any major city, it is pretty dark. They came over with their adult daughter, Laura, and spent two and half hours looking at various objects through my 16 inch Lightbridge. They said they had a great time.



A couple of days later after church services, I saw Martha and Laura sitting in the front row of the church and went over to introduce myself to their daughter in the daylight. She laughed and said that she had just asked her mother to point me out since we met in the dark of night and didn't really see each other's faces. Her brother-in-law, Jared, was also seated with them and said that they just couldn't stop talking about how much fun they had had, so I invited him to join me that night. Jim, Jared, and Laura all came over for another two hour session.



Martha, who is a chemistry teacher at Abbeville High School, mentioned that when she told her class about the experience, many of them were very interested in looking through a telescope and wondered if I would be willing to set up after school some night.

I thought that was a great idea. We arranged to do a star gazing event after school on Thursday, March 23rd at 8:30 PM on the football field. I had told Martha that with only one telescope it might be hard to have a lot of people waiting to look through the scope.

Martha polled her two classes to see who would want to attend. She told her students that she only wanted those who were really interested to come and any horse play would not be tolerated. When they asked if they would get extra credit for going, she said, "No, this is a privilege to go and not some way to score points."



(Continued on page 9)

FAAC Outreach at Abbeville, South Carolina

(Continued from page 8)

She was sure that her remarks would weed the attendance down to just a few serious students. When she asked who would be there, all but 6 students raised their hands. Several of those who had not raised their hands, came up after class and said that they would like to go, but they had a track meet that night and asked if we were still there when their track meet was over. If we were there, could they come? Another asked if she could bring her aunt and another said she had to baby sit and wanted to know if she could bring her little brother. The High School Principal, Dr. Steve Glenn, said he was bringing his wife and two sons.



At 8:00PM on Thursday, March 23rd we set up my 16" Lightbridge in the middle of the football field, accompanied by Martha, Jim, Jared and my wife, DeeAnn. There were already three students (one with her aunt) waiting for us. About 40 students, the Principal, his wife, their sons, and the brother who was being babysat by his sister, all showed up.

I pointed out a few constellations with my laser pointer, showed the Orion Nebula, an open cluster in Auriga, the Crab Nebula, looked at Betelgeuse, Sirius, Mizar & Alcor, and Saturn. I also pointed out Polaris and how to find it and used some binoculars to look at the Pleiades. Additionally I showed how to use a planisphere. The students were extremely well behaved and very interested in what they were seeing. A few stayed until we packed up at 10:45 PM. Just as we started packing it up, four students came running across the field. They were the students on the track team and their bus had just gotten back from a track meet and wanted to know if they could still look through the telescope. Of course they could and did.

Everyone seemed to have a great time and the Principal said that anytime I would like to set up another star gazing, just let him know. It was a very rewarding experience. I wish I had brought a few astronomers from the Ford Astronomy Club in Dearborn, Michigan down with me. A few more telescopes would have been great. Maybe next time.

Doug Bauer

DougBauer@Comcast.Net



HJR Observatory Report

by Greg Knekleian

Observatory SIG - O Sig

This month we are having the O-Sig meeting at the observatory. We will be going over the operation of the mount and some of the basics of "The Sky" software. We may also go over Stellacam webcam imaging and stacking software on the computer with a new dazzle card setup for the observatory computer, depending on the time.

By the time you read this the April O-Sig meeting will be history and we'll be planning the May O-Sig meeting. We'll announce these meetings on the FAAC message boards and calendar. April's date will be set according to the weather, since we'll be observing during part of the meeting.

After Beginners night

Within a few days of beginners night, we announced that we'd open up the observatory.

Eight visitors showed up, all FAAC members. Tim Dey, Tim Campbell, Art Parent, Brian Kutcher, Rick Arzdon, Jennifer Zdanowski, Jeff Fox and I were present. We had a great time. We setup three telescopes outside, a 10 inch Newtonian, a BT-80 binocular telescope and Brian's Celestron C-8.

Some brought cameras and much of the time was spent viewing the moon and Saturn which is near opposition. I spent most of my time outside the observatory that night.

Tim Campbell brought a really nice wide angle Canon 14mm f/2.8 L II lens and that coupled with Brian's DSLR camera allowed us to take a pretty stunning wide angle shot inside the observatory of many of the FAAC members that night.

(Thanks to Brian (camera) and Tim (lens) and to Tim Campbell for doing some photoshop level adjustments to reduce some glare in the photo from that white light.)

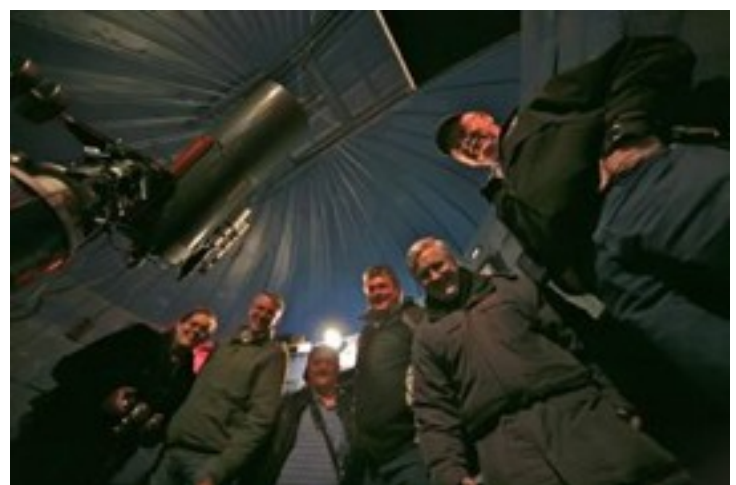


A photograph of the Observatory and telescopes. An iPhone APP called "Super Camera" processed the photos using a "sketch filter".



Above: Rick Arzdon looks at the moon through the 10 inch Schmidt Newtonian outside HJRO.

Below: Super Wide Angle photo of some of the FAAC members who visited HJRO. (left to right) Jennifer Zdanowski, Tim Campbell, Rick Arzdon, Tim Dey, Brian Kutcher, Art Parent.



The Super Moon and more

by Greg Knekleian

SuperMoon

March 19th FAAC members in various locations looked at the super moon event. The full moon appeared as much as 14% larger as it's closer to the earth once every 20 years. Tim Dey took a few photos near Lake Erie Metro Park before joining us at the airport. Sean Swisz works at the airport and he received permission to observe from this location.

I arrived and met Sean and we quickly setup our telescopes. As the reddish/orange moon rose over the low tree line, others started to arrive. Sean setup his 10 inch Orion Dob. I added a Nexstar 4SE and Vixen BT-80 binoculars. At times we could see birds flying past the moon as it rose. We also saw a couple of jets fly past it. Trying to capture the jet path over the moon, I was foiled by my camera's self timer.

Viewing Mercury

I spent three nights in a row looking at Mercury. Twice from Allen Park on the hill where the new mall is located. Tim Dey, Art Parent and I met one night and tried to photograph Mercury. As Mercury chased the setting sun, we could see it even as low as 2 degrees above the "true horizon". From the hill side, Mercury appeared to be 3 degrees higher than tracking software stated.

Island Lake Beginner's night

The first beginner's night was a pretty nice outing. We had a dozen club members attend. One new member, Tim Campbell brought out his 14 inch Meade SCT. There was a crowd of astronomers waiting in line to look through the large Meade. There were plenty of Dob Newtonian's there. Mostly 8 and 10 inch Orion scopes were present at beginner's night. The lesson on aligning the mirrors in a Newtonian given by Gordon Hanson was a big hit.

Additional author memories: (I also spent some time playing with a Fujix 3d Camera, and played a bit with a "dazzle capture setup" at HJRO. One night for four hours I checked out Saturn in the C14, taking dozens of iphone photos of the planet. I sent two photos to Tim Dey and he returned a really nice processed photo of Saturn. Ed Brzozoski and I did some solar observing of the sun, and then Venus at HJRO one afternoon. Greg Ozimek showed me the iPhone "Super Camera" app that has a nice fast sketch filter. What a great month.)



Above: AFocal handheld photo of Super Moon event, through 32mm Nexstar 4SE. Shadows are due to lack of ideal lens positioning of the camera.

Below: (At Grosse Ile Airport)

Greg Knekleian, Sean Swisz, Tabatha Mendez, Tim Dey, Rick Arzdon



Below: An airport employee Tabatha Mendez views the "Super Moon" through Sean's 10 inch Newtonian.



Ford Amateur Astronomy Club
Star Stuff Newsletter
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