



STAR STUFF

Ford Amateur Astronomy Club Newsletter

Star Stuff

This newsletter is published eleven times per year by:

Ford Amateur Astronomy Club
P.O. Box 7527
Dearborn, MI 48121-7527

Officers

President: Arica Flores
Vice President: Sean Pickard
Secretary: Cheri Grissom
Treasurer: Joseph Bostic

Departments

Webmaster: Liam Finn
Membership: Doug Bauer
Newsletter: Tim Campbell
Equipment: Jeff Gorman
Speakers: Sandra Macika

Club Information

The Ford Amateur Astronomy Club meets on the fourth Thursday of each month, except for the combined November/December meeting which meets on the first Thursday of December – at Henry Ford College Administration Services and Conference Center in Dearborn.

President's Corner

by Arica Flores, President

Aurora Borealis- The Northern Lights

This month the lights extended down to our area. I did not get to see them but very much enjoyed the pictures and videos. The best night was Friday before our beginner's night, but our group tried again on Saturday to see them, and some did.

So what causes this phenomenon? When a solar storm comes toward us, some of the energy and small particles can travel down the magnetic field lines at the north and south poles into Earth's atmosphere. These particles collide with gases in our atmosphere resulting in beautiful displays of light in the sky. Why the waves you ask. They are caused by the lines of force in the Earth's magnetic field. The colors are caused by specific gases. Oxygen equals red. The blues and purples are caused by nitrogen.

If we miss our chance, will we get another one? The Sun is at or near Solar maximum so our chances are good this year.

Secretary's Report

by Cheri Grissom, Secretary

FAAC General Meeting – April 25, 2024

Meeting called to order at 7:06 p.m. by President Arica Flores. All board members present, 21 attendees all together. We did not have an online option this month. With this meeting, we are starting a new style of meeting that we hope to have several times a year. Instead of a guest speaker, we will have a more social format, an idea which has been suggested by many members, so we will see how it works out going forward and hopefully have many more.

Club Information

Refer to our website for a map and directions:

www.fordastronomyclub.com

Observing

The FAAC primary observing location is Spring Mill Pond located within the Island Lake State Recreation Area near Brighton, Michigan. The Club maintains an after-hours permit. Club members can contact any club officer for procedures to enter or exit the park when the main gate is locked.

The club also has use of a private observing site near Gregory Michigan. See the FAAC Groups.io Group for more information.

Inquiries can be directed to info@fordastronomyclub.com

Membership

Membership is open to anyone with an interest in amateur astronomy. The FAAC is an affiliate of the Ford Employees Recreation Association (FERA).

Fees

Annual - New Members: \$30
Annual - Renewals: \$25
(\$30 if not renewed by Jan 31)

Benefits

Membership includes the Star Stuff newsletter, discounts on magazines, discounts at selected

Members and guests introduced themselves. We had a few new members tonight and others interested in joining. Joe Bostic let us know we have another new membership that he recently received in the mail.

Club Business & Upcoming Events

No formal reports given tonight. Jeff Gorman was absent but had let Arica know that he will be sending out the annual forms to caretakers of our club equipment to verify the inventory. Secretary, Treasurer, Social Media/Website, all going well.

Arica spent a few minutes highlighting our monthly newsletter, "Star Stuff" and thanked editor Tim Campbell for all the time and effort he puts into this. Our newsletter is the first place members can look for upcoming events and club information. In fact, since it is on our public website, non-members have access to it, also.

Arica also talked about our club's FAAC Observer's Award. This was developed several years ago by Mike Bruno and is a fun thing that any member can try for. There are several categories in which a member can record their observations: Naked Eye, Binoculars, Telescope, General Knowledge, and Club Participation/Outreach. The overview and logs for recording your observations can be printed off from our Groups.io site. See the President's Report in the April "Star Stuff" for instructions.

Our next Beginners/Public Observing Night will be May 11, at Island Lake, Spring Mill Pond. We had a great turn out this month, and we are hoping to see even more people in May.

On May 18, there will be a Dark Sky Observing Night at Lake Hudson State Recreation Area in Lenawee County, from 8:30 p.m. to 11:00 p.m. Though this is not a FAAC-sponsored event, quite a few of our members have expressed an interest in attending and bringing telescopes.

Astronomy at the Beach will have a new location this year. The annual event, happening this year on September 20 and 21, from 4 p.m. to midnight, will be held at Maybury State Park, in Northville, Michigan. This is due to major construction projects happening throughout this year at Island Lake State Recreation Area.

Arica talked about our club's decision to form several new committees to help foster club growth and improvements in serving our membership. Committees will be comprised of member volunteers. Look for more information to follow with details about particular committees, their goals, and how you, our members, can get involved.

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area equipment retailers, and after-hours access to the Island Lake observing site and private observing sites.

Astronomy or Sky & Telescope magazine discounts are available by contacting the FAAC club treasurer treasurer@fordastronomyclub.com for the discount form. The form should be sent to the respective publisher with your subscription request and payment. Do not send money directly to FAAC.

The FAAC has a pool of equipment including telescopes, cameras, and other gear used for outreach. Much of the gear can be borrowed for personal use in the interest of furthering your knowledge and experience in astronomy.

Please see the equipment list for further information.

Club Wear

Club logo-wear (embroidered with club logo) can be ordered directly through LLBeanBusiness.com

See the groups.io files section for ordering information and instructions on how to request the correct logo.

Communication

The FAAC uses Groups.io for our email distribution list (both formal and informal discussion.)

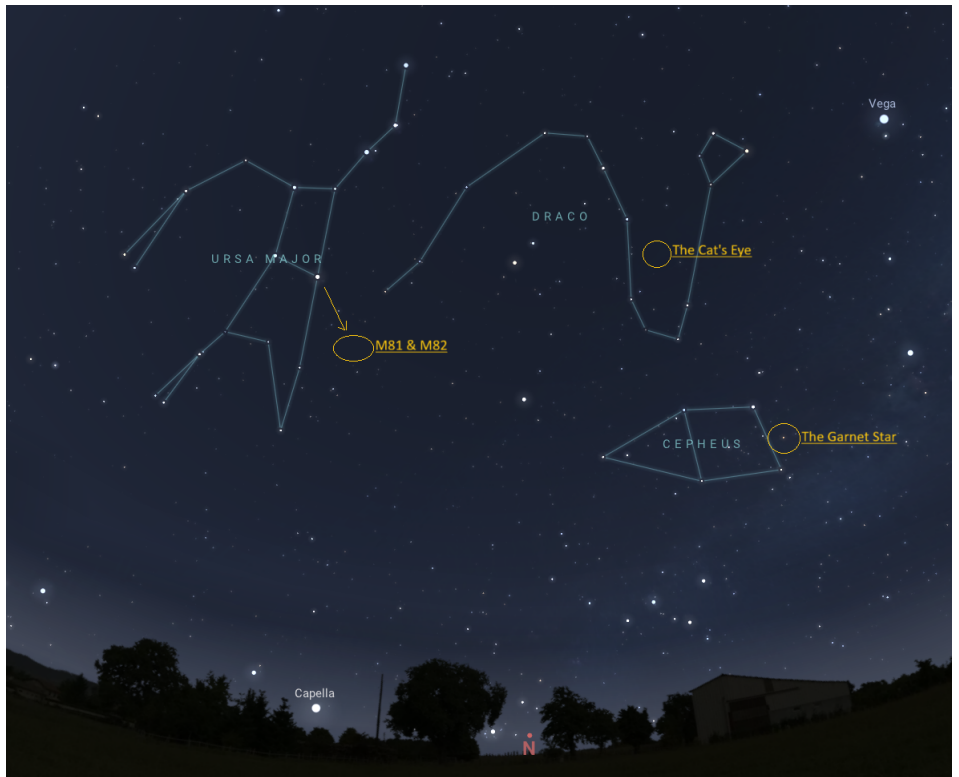
Observing nights & locations (scheduled and unscheduled as weather permits), equipment

Constant Companions: Circumpolar Constellations, Part III

by Kat Troche



In our final installment of the stars around the North Star, we look ahead to the summer months, where depending on your latitude, the items in these circumpolar constellations are nice and high. Today, we'll discuss Cepheus, Draco, and Ursa Major. These objects can all be spotted with a medium to large-sized telescope under dark skies.



From left to right: Ursa Major, Draco, and Cepheus. Credit: Stellarium Web.

Herschel's Garnet Star: Mu Cephei is a deep-red hypergiant known as The Garnet Star, or Erakis. While the star is not part of the constellation pattern, it sits within the constellation boundary of Cepheus, and is more than 1,000 times the size of our Sun. Like its neighbor Delta Cephei, this star is variable, but is not a reliable Cepheid variable. Rather, its brightness can vary anywhere between 3.4 to 5.1 in visible magnitude, over the course of 2-12 years.

The Cat's Eye Nebula: Labeled a planetary nebula, there are no planets to be found at the center of this object. Observations taken with NASA's Chandra X-ray Observatory and Hubble Space Telescopes give astronomers

questions, events, outreaches, etc. are normally discussed via this list.

Join by visiting <https://groups.io/g/FordAstronomyClub> to request membership.

Articles & Submissions

Your submissions to Star Stuff are welcome! Send your story and/or images to the editor at: starstuff@fordastronomyclub.com

Observatory

The FAAC maintains and operates the Hector J Robinson Observatory (HJRO) at Lincoln Park Schools.

The observatory houses a 14" Celestron C14 Schmidt Cassegrain Telescope as well as other instruments and can be used by club members.

The observatory is adjacent to the athletic field situated between the Lincoln Park Middle School and High School buildings near

1701 Champaign Rd.
Lincoln Park, MI 48146

The school system has designated four "key-holders" within the club who have the ability to open the observatory.

Call (313) 444-5850 to learn when the observatory is opening (or request an opening).

a better understanding of this complex, potential binary star, and how its core ejected enough mass to produce the rings of dust. When searching for this object, look towards the 'belly' of Draco with a medium-sized telescope.



This composite of data from NASA's Chandra X-ray Observatory and Hubble Space Telescope gives astronomers a new look for NGC 6543, better known as the Cat's Eye nebula. This planetary nebula represents a phase of stellar evolution that our sun may well experience several billion years from now. Credit: X-ray: NASA/CXC/SAO; Optical: NASA/STScI

Bode's Galaxy and the Cigar Galaxy: Using the arrow on the star map, look diagonal from the star Dubhe in Ursa Major. There you will find Bode's Galaxy (Messier 81) and the Cigar Galaxy (Messier 82). Sometimes referred to as Bode's Nebula, these two galaxies can be spotted with a small to medium-sized telescope. Bode's Galaxy is a classic spiral shape, similar to our own Milky Way galaxy and our neighbor, Andromeda. The Cigar Galaxy, however, is known as a starburst galaxy type, known to have a high star formation rate and incredible shapes. This image composite from 2006 combines the power of three great observatories: the Hubble Space Telescope imaged hydrogen in orange, and visible light in yellow

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Planetarium

FAAC members are volunteer operators for the Hammond Planetarium at Henry Ford College.

Planetarium shows are free and open to the public.

Four seasonal planetarium shows are offered per year with the stars and constellations of the current season as well as a multi-media presentation featuring select planets.

Public planetarium shows are normally the third Wednesday of each month at 7:00pm. Please see the planetarium schedule for specific times. It is posted here:

fordastronomyclub.com/hfc-planetarium

Social Media

The FAAC has several social media accounts. Members are encouraged to join and follow them.

Facebook

facebook.com/FordAstronomyClub

Twitter

twitter.com/Ford_Astro

Scheduled Club Events

Month	Date	Sunset	Location
June	15th	9:11pm	Spring Mill Pond
July	13th	9:08pm	Spring Mill Pond
August	10th	8:40pm	Spring Mill Pond
September	20 & 21st	7:32pm	Maybury State Park Astronomy at the Beach

Hammond Planetarium

Date	Time	Topic
May 25th	2:00pm	Nothing Gold Can Stay (Spring Show)
June 29th	7:00pm	The Wonderful Webb (James Webb Space Telescope Show)

Club Meeting Topics & Speakers

Meeting	Speaker	Topic
May 23rd	Samer Hariri	Volcanoes of our Solar System
June 27th	Peter Michaud	Virtual Visit to the Gemini Observatory Control Room
July 25th	Andy Macica	Lick Observatory Telescope
August 22nd	Club Members	Open Forum

May Talk Details

Volcanoes of our Solar System

Samer Hariri, Planetary Scientist

Description:

This presentation takes us through a pictorial journey of our Solar System's volcanic wonders and compares volcanic formations on other planetary bodies to Earth's most blazing volcanoes.

Description:

Samer Hariri is a professor of Earth and Environmental Sciences at Schoolcraft College. He teaches geology, environmental science,

astronomy, and physics. He is also the co-founder of the Farmington Community Stargazers astronomy club. His academic interests include comparative planetary geology; a field where geologic processes on Earth are compared to those on other planetary bodies and vice versa.

Constant Companions (Con't from Page 2)

green; Chandra X-Ray Observatory portrayed X-ray in blue; Spitzer Space Telescope captured infrared light in red.



Up next, we celebrate the solstice with our upcoming mid-month article on the Night Sky Network page through NASA's website!

Secretary's Report (Con't from Page 2)

Sirius Award

(From our club's website): "Beginning in 2009, the Ford Amateur Astronomy Club Sirius Award — for the brightest star in the Ford Amateur Astronomy Club community — is awarded annually to one Ford Amateur Astronomy Club member who has been nominated by the Ford Amateur Astronomy Club membership for his/her extraordinary efforts in

supporting our Ford Amateur Astronomy Club activities throughout the year. At the end of the year, the nominations are reviewed by the Ford Amateur Astronomy Club Board and the most deserving individual is selected to receive the award at the annual Ford Amateur Astronomy Club Banquet."

Since we were forced to cancel our banquet this year, it was decided that we would give out the Sirius Award at tonight's meeting. ***Congratulations to our 2024 Sirius Award winner, Gary Gibson!***

Gordon Hansen went over our upcoming meeting and event dates, which can be found in our club events calendar at either fordastronomyclub.com or groups.io.

Astro Jeopardy!

A game of Astro Jeopardy is also a tradition at our banquet. Not to be deterred, Gordon Hanson put the game together to be played at tonight's meeting. Some of the questions were quite challenging -- and some required doing quick math in our head! Congratulations to Vahan Kazandjian, our Astro Jeopardy winner.

Member Observing Reports

This month, everyone present was asked to share their eclipse (or other) viewing experiences. Here is a summary: Joe Bostic and Brenda Elinburg shared views with others at their apartment complex. Dan Sanquist and his family had good views in Lima, Ohio. Tim Dey was at the Toledo Zoo, where he estimated there were about 1500 people. He said the view was not the best but everyone had a great time. In other observing, Tim recently caught transits of both Io and Europa across Jupiter. He has also used the club's solar telescope on a few occasions recently with very good results.

Vahan Kazandjian observed the eclipse from Grand Lake, Ohio. Gordon Hansen, along with Dennis

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Equipment

The FAAC maintain an equipment pool of telescopes, binoculars, cameras, and other equipment used for special events. Much of this equipment is available to members.

Each piece of equipment is either stored by a club volunteer who offers to be the caretaker of the item, or by the person who last borrowed the item.

Most equipment can be borrowed for one-month durations. At the end of the month, the borrower can extend the loan if no other members have requested it.

Some items are reserved for special events use and are not normally available to be borrowed.

If you are interested in borrowing an item, please contact either the current holder of the equipment, or contact the club equipment manager, Jeff Gorman, at equipment@fordastronomyclub.com

Item	Held by	Item	Held by
Telescopes		Display Items	
TK1 Coronado Personal Solar Telescope (Doublestack) w/Meade Autostar Goto Mount	Jessica Edwards	Astronomy Event Sign (3' x 6')	Gordon Hansen
TK5 4.5" Reflector on Fitz GEM mount	Jerry Jamula	Astronomy Event Signs 18x24" (x8)	Liam Finn
TK6 8" Orion XT8i Dobsonian	Dan Smith	PVC Display Board - Folding	Sandra Macika
TK7 TPO 8" f/4 Newtownian Astrograph (OTA Only - no mount)	Gary Gibson	Banner - Small (24" x 32")	George Korody
TK8 20" f/5 Obsession Dob, Ladder & EP Kit	Liam Finn	Banner - Medium (24" x 72")	Sandra Macika
TKn Celestron 6" Refractor & AGT Mount		Banner - Large (32" x 16')	George Korody
TKn Meade 8" f/5 Newtonian & LX-70 Mount		Tri-Fold Presentation Boards	George Korody
Zhumell 20x80 Binoculars		Other	
Presentation Tools		Canopy (10' x 10')	Liam Finn
Projector (older)	Jim Frisbie	Pop Cooler	Sean Pickard
Projector (newer)	Gordon Hansen	TA Sky Quality Meter	Liam Finn
Projection Screen 8'	John McGill	Demonstration Tools	
Projection Screen 6'	Liam Finn	Weigh on Planets Scale	Liam Finn
Bullhorn	Liam Finn	Lunar Phase Kit	Bob MacFarland
Speaker System w/Wireless Mic	Liam Finn	100' Scale Model Solar System Kit	Bob MacFarland
		NSN Meteorite (Outreach) kit	Sandra Macika

Item	Held by
Imaging Cameras	
C2 Meade Deep Sky Imager Pro III w/Autostar Suite	Gordon Hansen
C6 Canon 60Da Astrophotography DSLR and accessories	Tim Dey
Other Imaging Equipment	
CA1 Rigel Systems Spectrascopes	Gordon Hansen
C7 Canon EOS EF 70-200mm f/1.4L IS USM lens & tripod mounting ring (for Canon EOS cameras)	Gordon Hansen
Rokinon 8mm f/3.5 Fish-Eye Lens (Canon EOS Mount)	John McGill
Special Event Items - Not available for Loan Out	
BK2 Zhumell 25x100 Binoculars, hard case, & Zhumell TRH-16 tripod w/soft fabric bag	Sandra Macika
TAK1 Night Vision Image Intensifier for telescopes (2" barrel size)	Tim Dey
Lunt 100mm H-alpha Solar Telescope with Celestron CG-5 equatorial mount	Tim Campbell

Secretary's Report (Con't from Page 6)

Salliotte, Chuck Jones, Jeff Gorman, and Mike Olson were at a park in Norwalk, Ohio where they had good skies and very few people. Tim Campbell watched from the backyard of a friend's house in Dallas, Texas. Gary Gibson observed from his home in Michigan, where he set up two telescopes and invited the neighbors over. Jill Manning was in Dayton, Ohio, at Wright-Patterson AFB, where there were thousands of people.

Dan Smith and Sean Pickard had gone to Gatesville, Texas, but concerned about the weather forecast, they drove to a location a couple hours away where they set up at a Bucky's restaurant. At 9:30 a.m., Sean got a call from his wife who advised that their new baby, scheduled to be delivered on April 10, was going to arrive a day early. So Sean had to scramble to get a flight home, and while he unfortunately didn't have a great vantage point in the plane, he did manage to see C1 and C4 during the trip. Mom and baby are doing great! Dan, unfortunately, had trouble with his Seestar

and did not get the images he hoped for but still had a great view of the eclipse. Aside from the memorable eclipse adventure, Sean attended our Public Observing Night at Island Lake and has also been doing some imaging from home.

Liam Finn and Arica Flores shared a 24-hour non-stop drive to Gatesville, Texas, where Liam put on several talks for the public. They also put up a solar projector for the enjoyment of the spectators. As the time for the eclipse approached, the skies were a bit worrisome, but they ended up having a very nice view, except for about 30 seconds during totality when a cloud passed over the sun. Liam also attended our Public Observing Night at Island Lake and was able to help a couple of people with new telescopes. Arica also enjoyed the club's first observing night of the season at Island Lake and counted fourteen or so different telescopes.

Joanne Apaza and her husband watched the eclipse from a NASA facility in Cleveland, Ohio. Kristie Whittington watched the eclipse from Wapakoneta,

Ohio, where she had five different recording devices set up. There were high cirrus clouds, but the view was still nice. She also was able to capture an image of a Lyrid meteor from home last Monday. Scott Shields watched from Lake Monroe, Indiana, where he had clear skies and got some very beautiful photos.

Pat Nixon was at a rest area on the Ohio Turnpike west of Sandusky where he had set up several pieces of equipment and got a gorgeous photo of the diamond ring. Pat also attended our Public Observing Night at Island Lake, where he had a great time doing some binocular viewing and also got a good image with his Seestar of M51, the Whirlpool Galaxy. Dennis Salliotte watched the eclipse from Norwalk, Ohio, with Gordon and several others. Though he accidentally left the solar filters for his binoculars at home, he still got great views through his TV-85 refractor and a 35 mm Panoptic.

Chris Strang, who normally winters in Texas, went to his daughter's house in Austin, where it was initially foggy but cleared a bit. Still some high altitude clouds, but had a pretty good view of the eclipse. Jessica Edwards and her family changed their plans several times, first thinking of going to Texas, then Tennessee, then Vermont, but finally ended up in a state park in Lima, Ohio. She got great video of the event. Cheri Grissom and her husband observed from their yard in Michigan, where there were some high cirrus clouds, but they were still able to see the 99.3 percent totality with their eclipse glasses. Cheri also mentioned going to our Public Observing Night and having a very nice time. She especially enjoyed viewing Comet 12P/Pons-Brooks through Gordon's 5" refractor.

Arica finished up by reminding everyone about our Beginners/Public Observing Nights, which are scheduled once a month at Island Lake, Spring Mill Pond. Please see our calendar for exact dates. If weather is bad, the event may be held on a different night. Up to date notices will go out on Groups.io. While these events are put on by FAAC, they are open

to the public, so it's a great chance to share views (only if you wish) with people who may never have looked through a telescope before. Or, if you are someone with a new telescope and need help learning how to use it, there will be people there to help. Likewise, if you are thinking of buying a telescope but you're not sure exactly what kind to get, you will have a chance to see several different types and ask questions about them.

Meeting adjourned at 9:00 p.m.

May 2, 2024 Board Meeting Summary

(Videoconference meeting.) All board members present, along with seven other members. The speaker for our May meeting will be Samer Hariri, giving a talk on "Volcanoes of our Solar System." This will be a video presentation. We talked briefly about a few ongoing issues with our sound system and how we can improve it.

Club Business: Brief secretary, treasurer, and membership reports given. We currently have 71 members. Social Media/Website: Liam is still working on trying to get our club calendar dates corrected on our web page. They are correct on Groups.io. Arica is making a point to post on our Facebook page on a regular basis so that visitors can see it is up to date.

Club Equipment: We had discussion about what equipment the club owns and what is borrowable at this time and listed in Star Stuff. Some items still need work, but those that are available now will be included in the list in Star Stuff. If you are a caretaker, please be sure to get your annual verification letter back to Jeff soon.

Committees: We verified the people who have already volunteered for certain committees. At this time, the committees that have at least a couple volunteers are: Astronomy at the Beach and Outreach. The Outreach committee will have a couple different sub-committees, as we will need people to work on FAAC

member outreach events, as well as other events we are asked to participate in by other groups or municipalities, i.e., libraries, schools, etc. We still need additional volunteers for these and other committees that will be announced soon. If you are a member reading this, please consider volunteering to help.

Tim Campbell talked about the event at Selfridge AFB on June 8 and 9. This should be a huge, crowded event. It's daytime, so of course the only telescope observing we can offer will be solar. Volunteers are needed.