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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

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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

FAAC Observing Award with Mike Bruno

In May of 2020, while president, Mike introduced us to his FAAC Observing Award. I asked him what prompted him to put this together. His response was, "Observing the night sky is, more times than not, a solitary pursuit for many of us, so why not have some fun and learn (or re-learn) a few things about the night sky or test your existing knowledge. This program has been developed for everyone, whether you are a beginner to observing or a more seasoned member of our club."

When asked what his favorite part of the award was, "It is a sample of different things people can do with amateur astronomy to keep and grow their interest."

Mike would like to see this develop into a way to motivate people and be a good way to become familiar with the night sky as well as their equipment. He also hopes that this could be used as part of club experience to get together and share, or as talking points during member observations to share what they saw on their own.

There are five categories: Naked Eye, Binocular Observing, Telescope Observing, along with General Knowledge, and Club Participation/ Outreach. You will be exposed to the moon, constellations, and the stars, along with the planets, meteors, and the deep sky Messier objects. Anyone who is a member of Groups.io can bring it up. Click on the "Files" tab, and when you open that, scroll down and you will see it. There are two files, one has the overall goals, the larger one has the sheets that you can print out and record your achievements.

You can take as long as you need to complete the observations, but it begins now, not with your historical observations. You are allowed to use any equipment or method, work on your own or with a friend or two.

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

Fulfilling the requirements is based on the honor system. This is meant to be fun and hopefully add to your enjoyment of observing the night sky. I hope everyone gives it a try and shares their experiences with all of us.

Secretary's Report

by Cheri Grissom, Secretary

FAAC General Meeting – March 28, 2024

Meeting called to order at 7:03 p.m. by President Arica Flores. All board members present (Cheri Grissom attended online). Twenty-five members and/or guests were present in person and seven online.

Member Introduction & Observing Reports

Everyone introduced themselves. Gary Gibson's stepdaughter was visiting from Texas recently, and the family was able to enjoy some night sky viewing. Jeff Gorman got some observing in this past month. Ed Halash was on a cruise in Australia and was able to see the Southern Cross and Omega Centauri but not the Large or Small Magellanic Clouds. The ship in general was too well-lit up at night. Ed commented on how strange familiar constellations look when you are seeing them "upside-down." Kristie Whittington went out one night to try to see the comet, and while she didn't see it, she did get a good view of Mercury and the Leo triplet galaxies. My apologies to those who gave a report that I couldn't hear or didn't catch in its entirety. I was online for this meeting and had difficulty picking up everyone's voices clearly.

What's Up in the Night Sky

Gordon Hansen started by listing our upcoming meeting dates, which can also be found in our club events calendar. April 8, of course, is the much-anticipated date of the total solar eclipse. April 13 will be the club's first public observing event of the year, at Island Lake. On April 14, the Lunar X should be visible.

Comet 12P/Pons-Brooks is still getting brighter but is currently only 17 degrees above the horizon. This comet should be visible the day of the eclipse, in the darkness of totality, about 25 degrees E/NE from the sun, that is if anyone would want to divert their attention from the sun! Evening planets in March will be Mercury, Jupiter, and Uranus.

Continued on Page 6

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

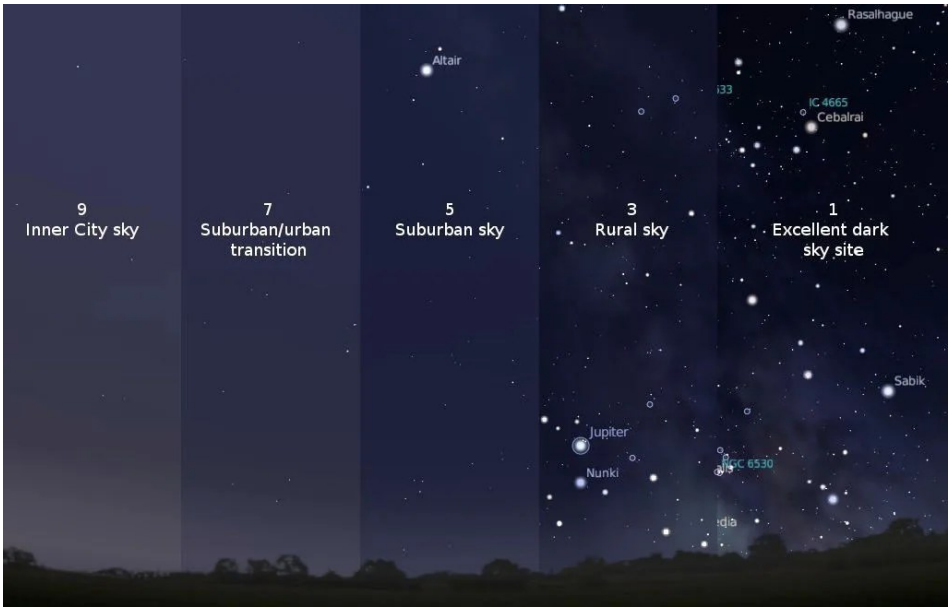
Stargazing for Beginners

by Kat Troche

Millions were able to experience the solar eclipse on April 8, 2024, inspiring folks to become amateur astronomers – hooray! Now that you've been 'bitten by the bug', and you've decided to join your local astronomy club, here are some stargazing tips!

The Bortle Scale

Before you can stargaze, you'll want to find a site with dark skies. It's helpful learn what your Bortle scale is. But what is the Bortle scale? The Bortle scale is a numeric scale from 1-9, with 1 being darkest and 9 being extremely light polluted; that rates your night sky's darkness. For example, New York City would be a Bortle 9, whereas Cherry Springs State Park in Pennsylvania is a Bortle 2.



The Bortle scale helps amateur astronomers and stargazers to know how much light pollution is in the sky where they observe. Credit: International Dark Sky Association

Determining the Bortle scale of your night sky will help narrow down what you can expect to see after sunset. Of course, other factors such as weather (clouds namely) will impact seeing conditions, so plan ahead. Find Bortle ratings near you here: www.lightpollutionmap.info

No Equipment? No Problem!

There's plenty to see with your eyes alone. Get familiar with the night sky by studying star maps in books, or with a planisphere. These are great to

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.

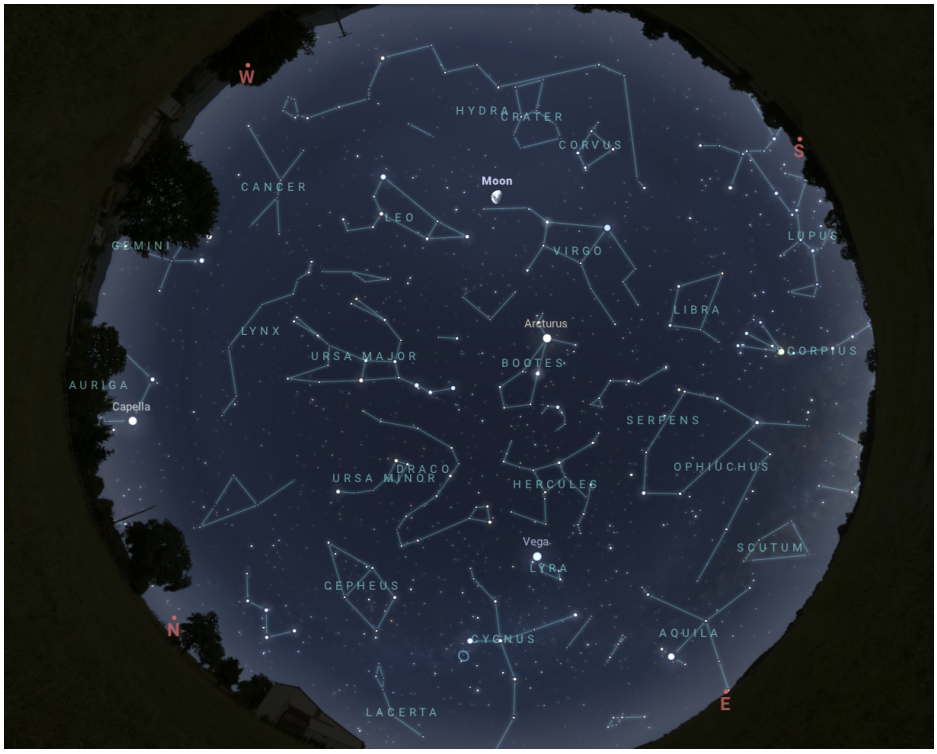
The observatory is adjacent to the athletic field situated between the Lincoln Park Middle School and High School buildings near

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).

begin identifying the overall shapes of constellations, and what is visible during various months.



A full view of the northern hemisphere night sky in mid-May. Credit: Stellarium Web.

Interactive sky maps, such as Stellarium Web, work well with mobile and desktop browsers, and are also great for learning the constellations in your hemisphere. There are also several astronomy apps on the market today that work with the GPS of your smartphone to give an accurate map of the night sky.

Keep track of Moon phases. Both the interactive sky maps and apps will also let you know when planets and our Moon are out! This is especially important because if you are trying to look for bright deep sky objects, like the Andromeda Galaxy or the Perseus Double Cluster, you want to avoid the Moon as much as possible. Moonlight in a dark sky area will be as bright as a streetlight, so plan accordingly! And if the Moon is out, check out this Skywatcher's Guide to the Moon: bit.ly/MoonHandout

Put On That Red Light

If you're looking at your phone, you won't be able to see as much. Our eyes take approximately 30 minutes to get dark sky adapted, and a bright light can ruin our night vision temporarily. The easiest way to stay dark sky adapted is to avoid any bright lights from car headlights or your smartphone. To avoid this, simply use red lights, such as a red flashlight or

Continued on Page 6

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
May	11th	8:44pm	Spring Mill Pond
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
April 27th	2:00pm	Nothing Gold Can Stay (Spring Show)
May 15th	7:00pm	Nothing Gold Can Stay (Spring Show)
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
April 25th	N/A	Open Forum
May 23rd	Samer Hariri	Volcanoes of our Solar System
June 27th	Peter Michaud	Virtual Visit to the Gemini Observatory Control Room

April Talk Details

Eclipse Stories & Astro Jeopardy

Club Members

Description:

This month's meeting is an open forum with no featured speaker.

The meeting will feature imagery and stories from club member experiences at the recent total solar eclipse. It will *also* feature a game of Astro Jeopardy hosted by Gordon Hansen.

Stargazing (Con't from Page 2)

headlamp. **The reason:** white light constricts the pupils of your eyes, making it hard to see in the dark, whereas red light allows your pupils to stay dilated for longer. Most smartphones come with adaptability shortcuts that allow you to make your screen red, but if you don't have that feature, use red cellophane on your screen and flashlight.

Up next: why binoculars can sometimes be the best starter telescope, with Night Sky Network's upcoming mid-month article through NASA's website!

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

Deep sky objects: The "Blaze Star," is the popular nickname for T Coronae Borealis, a recurrent nova in the constellation Corona Borealis. Current estimates indicate it could be at its best anytime between now and September.

Spring is galaxy season, with an abundance of galaxies to be seen in Virgo, Leo, and elsewhere. This is a popular time to attempt the Messier Marathon, and if your own property is too bright, try our observing site at Island Lake. While it's not ideal, it's better than the average suburban backyard.

Club Business

Secretary, Treasurer, StarStuff, Club Equipment, Social Media. Very brief reports were given, with nothing new or noteworthy at this time.

Sean reminded all of us that banquet tickets are for sale at this time. Please get your reservations in, as we will soon need to let the venue know how many will be attending. Next month's general meeting will be one of our social nights, so no guest speaker, but we will have pizza or some other special food in addition to our usual snacks.

Guest Speaker

Robert Reeves, coming to us from Texas via video presentation, gave a talk entitled "Postcards From the Moon." He is a book author and science/astronomy writer for several different magazines. He began exploring the night sky in 1958, and took his first lunar photograph in 1959. He still images the moon frequently from his own backyard observatory. We learned that a selenophile is a person who loves the moon. The moon is unique in our night sky in that it is easily accessible from our own backyards, and light pollution is no problem!

In the mid-1970s, the introduction of the 8" SCT telescope caused a fundamental shift in amateur astronomy. With many deep sky objects now easily viewable by anyone who owned one of these new telescopes, interest in the moon waned until today it is considered boring by many amateur astronomers; but when one understands the history, the significance, and the many fascinating features of the moon, it's easy to rekindle your interest!

Robert took us through what is currently understood about the moon's creation. In short, it is believed that a proto-planet called Theia collided with proto-Earth early in the development of the solar system. The collision left a ring of debris around Earth that eventually coalesced into our moon. Robert also described the five lunar epochs that have given us the moon we know today. He also described the main types of surface features that we see, including basins, maria, mountains, etc. Interestingly, all lunar mountains are named after mountain ranges on Earth.

The moon is well-known for its craters, and there are numerous types. We learned that the easily seen crater rays come from pulverized glassy material thrown far distances by the impact. These rays will fade after about one billion years. There are also wrinkle ridges, which are sheets of basalt crushed together. There are rilles, which are long grooves or channels. These and

Continued on Page 8

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
Telescopes	
TK1 Coronado Personal Solar Telescope (Doublestack) w/Meade Autostar Goto Mount	Jessica Edwards
TK5 4.5" Reflector on Fitz GEM mount	Jerry Jamula
TK6 8" Orion XT8i Dobsonian	Dan Smith
TK7 TPO 8" f/4 Newtownian Astrograph (OTA Only - no mount)	Gary Gibson
TK8 20" f/5 Obsession Dob, Ladder & EP Kit	Liam Finn
Presentation Tools	
Projector (older)	Jim Frisbie
Projector (newer)	Gordon Hansen
Projection Screen 8'	John McGill
Projection Screen 6'	Liam Finn
Bullhorn	Liam Finn
Speaker System w/Wireless Mic	Liam Finn

Item	Held by
Display Items	
Astronomy Event Sign (3' x 6')	Gordon Hansen
Astronomy Event Signs 18x24" (x8)	Liam Finn
PVC Display Board - Folding	Sandra Macika
Banner - Small (24" x 32")	George Korody
Banner - Medium (24" x 72")	Sandra Macika
Banner - Large (32" x 16')	George Korody
Tri-Fold Presentation Boards	George Korody
Other	
Canopy (10' x 10')	Liam Finn
Pop Cooler	Sean Pickard
TA Sky Quality Meter	Liam Finn
Demonstration Tools	
Weigh on Planets Scale	Liam Finn
Lunar Phase Kit	Bob MacFarland
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 Spectrascope	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)

other types of features were discussed and observed through beautiful photographs.

Robert then took us on a tour of some well-known favorites: Plato Crater, Tycho Crater, Copernicus Crater, among others. He concluded by showing us some of the more well-known nicknamed features on the moon.

A question-and-answer period followed.

Meeting adjourned at 8:54 p.m.

April 11, 2024 Board Meeting Summary

(Videoconference meeting.) All board members present, along with nine other members. We had a lengthy and productive board meeting, covering a lot of topics, so this is a summary of the highlights.

We started with a reminder that our next general meeting, on April 25, will not have a guest speaker but will be a club Social Hour format. We will have pizza and other delicious food. There will be a slideshow of members' eclipse adventures. Since we had to cancel our banquet this year, Gordon Hansen will conduct a game of Astro Jeopardy, a banquet tradition, at this month's meeting instead. For the same reason, our Sirius Award winner will be announced at this meeting. Also, if you're new to the club and have questions about what equipment you should buy or about equipment you have already bought, or astronomy questions in general, this is a good place for that.

Ed Halash has been in contact with Mama Mia's restaurant about our banquet cancellation due to inadequate ticket sales. We had previously paid a non-refundable $150 deposit. They advised that that amount could be held for a future date, but Ed wasn't sure how long they would hold it. He will look into that and let us know. We discussed alternate dates. It

was agreed that there is no time later this year that makes sense and that we should look ahead to a 2025 Banquet perhaps sometime in May.

Arica talked about public outreach. We have been contacted by a particular local municipality, but there are no definite plans yet. Arica will follow up on this and share with the club if this event will be happening for us.

We have talked informally at previous board meetings over the last several months about whether we need to form some committees to handle various aspects of club business. In addition to our regular events and usual activities, there are needs for volunteers in several areas to keep things moving along smoothly and to encourage growth in the club. While many different types of committee have been proposed, we realize we will need to start slowly and address just a few at a time. If all goes well and we have members stepping up to volunteer, we can address more needs in the near future.

Several specific committees were discussed at this meeting. Look for announcements and more specific requests for volunteers in the near future. For now, one decision that was made was to try out an additional social media platform called Discord. Sean Pickard is heading this up, with Liam Finn as additional moderator. Sean will be sending a notification out on Groups.io for anyone interested in joining. The club's official communication platform has been, and will still be, Groups.io.

We talked briefly about our very nice club newsletter called "Star Stuff," which of course you are reading at this moment. It is published by Tim Campbell, who generously volunteers his time. Each month's issue has important club information, a president's and secretary's report, a list of dates of upcoming events, descriptions of speakers for upcoming meetings, a club inventory list of borrowable equipment, and a couple articles of general interest. This is an excellent resource if you want to keep up to date on what's happening in the club! Tim emails a link to "Star Stuff" each month to everyone on the Groups.io list.

Finally, a reminder that our monthly board meetings, which are typically held on the first Thursday of each month, online via WebEx, are open to all members. While our general meetings focus on the social aspects of our club, the board meetings focus on the business side of things. Input and participation from all club members is always welcome. Please think about joining us!