

# 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

#### **Elections**

Club officer elections are conducted each year at the January general membership meeting. The nomination committee has provided a slate of members who have agreed to run for club office.

The nominees are:

- Arica Flores President (Incumbent)
- Sean Pickard Vice President (Incumbent)
- Cheri Grissom Secretary (Incumbent)
- Jameson Sullivan Treasurer

Nominees are not limited to only those proposed by the nomination committee. Any qualifying club member may be nominated to run for any club office office as detailed in the club bylaws.

### **Sirius Award Nominations**

The board is currently accepting nominations for the club Sirius Award. Sirius is the brightest star in the night-time sky. Each year, the officers accept nominations for this award and select the brightest member of our club. This is a member who goes above and beyond for our club and club mission.

Eligibility extends to any club member *except* current club officers and <u>previous winners</u> of the Sirius Award.

Please submit your nominations (you may submit more than one) to <a href="mailto:president@fordastronomyclub.com">president@fordastronomyclub.com</a> with a note including the name and reasons for selecting each of your nominees.

# **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 <a href="mailto:info@fordastronomyclub.com">info@fordastronomyclub.com</a>

# **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

# **Annual Astronomy Conference & Swap Meet**

The date has been set for the Annual Astronomy Conference & Swap Meet on Saturday, April 5th from 9am - 3pm at Henry Ford College. The event includes presentations on general astronomy, technical topics, planetarium shows, and of course the swap meet.

The club invites all astronomers and the general public.

# **Annual Banquet: Save the Date**

The club's annual banquet will take place at:

Mama Mia's 27770 Plymouth Road, Livonia MI on Saturday, May 10th at 6pm

More details will follow including the menu options and prices. All club members as well as their spouses/significant others are encouraged to attend.

# **Monthly Speakers**

Sandra Macika organizes the presenters for our club's monthly general membership meetings and is seeking speakers willing to present.

If you, or someone you know, is willing to be a speaker, please contact Sandra.

# Secretary's Report

by Cheri Grissom, Secretary

# FAAC General Meeting & Holiday Potluck – December 5, 2024

Meeting called to order at 7:09 p.m. by Vice President Sean Pickard. Secretary, Cheri Grissom, also present. Officers absent: Arica Flores, Joe Bostic. Since tonight's combined November/December General Meeting was also our annual Holiday Potluck, we did not offer an online attendance option tonight. We had a total of seventeen members present. Members introduced themselves.

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area equipment retailers, and afterhours 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 <u>groups.io</u> 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

# January's Night Sky Notes: The Red Planet

by Kat Troche

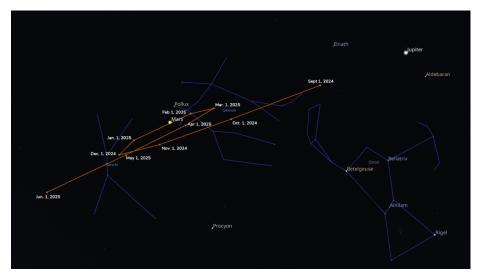


Have you looked up at the night sky this season and noticed a bright object sporting a reddish hue to the left of Orion? This is none other than the planet Mars! January will be an excellent opportunity to spot this planet and some of its

details with a medium-sized telescope. Be sure to catch these three events this month.

# Martian Retrograde

Mars entered retrograde (or backward movement relative to its usual direction) on December 7, 2024, and will continue throughout January into February 23, 2025. You can track the planet's progress by sketching or photographing Mars' position relative to nearby stars. Be consistent with your observations, taking them every few nights or so as the weather



This mid-January chart shows the path of Mars from September 2024 to June 2025 as it enters and then exits in retrograde motion. Mars appears to change its direction of motion in the sky because Earth is passing the slower-moving Mars in its orbit. Credit: Stellarium

permits. You can use free software like Stellarium or Stellarium Web (the browser version) to help you navigate the night as Mars treks around the sky. You can find Mars above the eastern horizon after 8:00 PM local time.

#### Hide and Seek

On the night of January 13th, you can watch Mars 'disappear' behind the Moon during an occultation. An occultation is when one celestial object passes directly in front of another, hiding the background object from view.

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

Join by visiting <a href="https://groups.io/g/FordAstronomyClub">https://groups.io/g/FordAstronomyClub</a> 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 simulated view of the Moon as Mars begins its occultation on January 13, 2025. Credit: Stellarium

This can happen with planets and stars in our night sky, depending on the orbit of an object and where you are on Earth, similar to eclipses.

Depending on where you are within the contiguous United States, you can watch this event with the naked eye, binoculars, or a small telescope. The occultation will happen for over an hour in some parts of the US. You can use websites like <u>Stellarium Web</u> or the Astronomical League's '<u>Moon</u> Occults Mars' chart to calculate the best time to see this event.

#### Closer and Closer

As you observe Mars this month to track its retrograde movement, you will notice that it will increase in brightness. This is because Mars will reach **opposition** by the evening of January 18th. Opposition happens when a planet is directly opposite the Sun, as seen from Earth. You don't need to be in any specific city to observe this event; you only need clear skies to observe that it gets brighter. It's also when Mars is closest to Earth, so you'll see more details in a telescope.

Want a quick and easy way to illustrate what opposition is for Jupiter, Saturn, Mars, or other outer worlds? Follow the instructions on our Toolkit Hack: Illustrating Opposition with Exploring the Solar System page using our Exploring Our Solar System activity!

Mars has fascinated humanity for centuries, with its earliest recorded observations dating back to the Bronze Age. By the 17th century,

#### **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/hfcplanetarium

#### **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

#### Discord

https://discord.gg/RH6rhAPWb8

# **Scheduled Club Events**

Month	Date	Sunset	Location
April	5th	8:03pm	Spring Mill Pond
May	3rd	8:35pm	Spring Mill Pond
May	31st	9:02pm	Spring Mill Pond
June	28th	9:13pm	Spring Mill Pond
July	19th	9:11pm	Spring Mill Pond
August	2nd	8:50pm	Spring Mill Pond
August	30th	8:09pm	Spring Mill Pond

# **Hammond Planetarium**

Date	Time	Торіс
February 7th	7:30pm	Winter Planetarium Show
February 12th	7:30pm	Winter Planetarium Show
March 14th	7:30pm	How it's really made (Spectroscopy)
March 19th	7:30pm	Spring Planetarium Show

# **Club Meeting Topics & Speakers**

Meeting	Speaker	Topic
January 23rd	Gordon Hansen	Astronomy Eye-Pieces (Short Talk)
February 27th	Dr. Brian Kloppenborg	Stellar Variability Across the HR Diagram
March 27th	Club Members	Open Forum
April 24th	Jeff Macleod	1962 Apollo Program Planning

# **January Meeting**

Astronomy Eye-pieces (Short Talk)

Gordon Hansen, Ford Amateur Astronomy Club

#### Description:

Gordon will provide a short-talk on the types and uses of astronomy eyepieces.

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

# Member Observing Reports

Since the Michigan Nebula has been prominent for much of the past month, there isn't a lot to report. Kristie has been observing the Sun when it is observable. Jameson Sullivan has been getting to know the many interesting sights in Orion. Sean has been imaging Jupiter, Saturn, and the Andromeda Galaxy.

#### Club Business

Secretary's Report is in "Star Stuff." Cheri reminded those present to see her if you need an ID badge holder and/or lanyard. Treasurer: No report. Club Equipment: Jeff Gorman reports no changes. Social Media/Website: Liam Finn has nothing new.

Nominating Committee: Tim Campbell gave a report for Gordon Hansen, who was absent. We have a slate of nominees for the 2025 officers. They are: President, Arica Flores; Vice President, Sean Pickard; Secretary, Cheri Grissom; Treasurer, Jameson Sullivan. Tim reminded everyone that any member in good standing may run for any of the four officer positions. You just need to be nominated, or nominate yourself, and a second is required. The election will be at the January General Meeting, and nominations can be taken from the floor that night. We thank Gordon, Tim, and Dennis Salliotte for being our Nominating Committee this year.

Beginners' Nights for 2025 are now listed in Star Stuff. The dates might look a little strange this year. We always schedule our Beginners' Nights for the Saturday closest to the first quarter moon each month. It just so happens that, this year, a couple of the months have two Beginners' Nights scheduled, and a couple months have none. Rest assured, we are having the same number of events as always, with the same approximate time span between each.

Tim also reminded everyone he will do a planetarium show this evening if enough people are interested.

Monthly Guest Speakers: Sandra Macika reported she has been working on confirming speakers for our 2025 meetings. Several have not gotten back to her yet. Sandra requested that any member with speaker suggestions please get in touch with her.

# What's Up in the Night Sky

Sean Pickard did our presentation. He went through our club events calendar for upcoming meeting dates, etc., and then presented some upcoming astronomical events that will be coming up in December and January. Highlights: Jupiter will be at opposition on December 7. Earth will be at perihelion on January 4. Sean provided dates and times for a number of ISS transits that will be viewable from Island Lake. There will be a solar transit on December 24, and a lunar transit on December 27. Transit-finder.com is a good site to see when ISS transits are viewable from your particular location.

That finished up the business portion of our meeting, and we proceeded to our potluck. We had lots of good eats! Following the food, a number of members proceeded to the planetarium where Tim put on a planetarium show.

# January 2, 2025 Board Meeting Summary

(Videoconference meeting.) Board members present: Arica Flores, Sean Pickard, Cheri Grissom, Joe Bostic. Four other members present. Tonight's meeting was brief. Arica gave the treasurer's report as she has been transitioning the records from Joe over the last couple of months. She has also purchased the Quicken software to use to do our books going forward. She

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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.

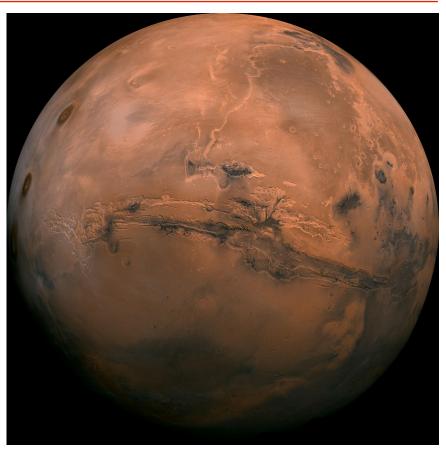
If you are interested in borrowing an item, please contact either the current holder of the equipment, or contact the club equipment manager, Jeff Gorman, at equipment@fordastronomyclub.com

ltem	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

ltem	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			

## Mars (Con't from Page 4)

astronomers were able to identify features of the Martian surface, such as its ice caps and darker regions. Since the 1960s, exploration of the Red Planet has intensified with robotic missions from various space organizations. Currently, NASA has five active missions, including rovers and orbiters, with the future focused on human exploration and habitation. Mars will always fill us with a sense of wonder and adventure as we reach for its soil through initiatives such as the Moon to Mars Architecture and the Mars Sample Return campaign.



A mosaic of the Valles Marineris hemisphere of Mars projected into point perspective, a view similar to that which one would see from a spacecraft. The mosaic is composed of 102 Viking Orbiter images of Mars. Credit: NASA/JPL-Caltech

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

will reach out to Jameson soon to ensure the transition to a new treasurer for 2025.

We currently have 34 members from last year who have not renewed. That's about average for this time of year. Doug will send another notice mid-January.

We still have some telescopes and/or mounts needing repair. This is being worked on, waiting for parts in some cases. We still have a need for additional keyholders for the HJRO. Gordon reports we are all set to go for this month's election.

The possibility of a Club Banquet date in the spring was discussed. Mama Mia's in Livonia is still holding our deposit from last year. Hopefully, we will have enough ticket buyers this year to have a banquet. April 26 was mentioned as a possibility, but there will need to be more discussion.

So far, we only have two commitments for monthly speakers for our 2025 meetings. Arica asked that we

all try to come up with some ideas and to let her or Sandra know. For the January meeting coming up, Gordon Hansen will give a brief talk on eyepieces, and we will fill the remainder of the time with something like "Ask the Astronomer."

We discussed Beginners' Nights for the coming year. The dates have been posted in Star Stuff. Gary Gibson proposed a bonus night on July 19, which was agreed to by those present. We will also have to decide on a date for our Club Picnic in August.