

# 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**

STAR STUF

Ford Amateur Astronomy Club Newsletter

# by Arica Flores, President

# FAAC 2024 Board

Officer elections were held at the January meeting. I would like to introduce this year's board:

President	-	Arica Flores
Vice President	-	Sean Pickard
Secretary	-	Cheri Grissom
Treasurer	-	Joe Bostic

I would also like to thank last year's board as well as all of our committee members and those of you who attend our outreach events for all you do to make the club the success it is.

# Annual Astronomy Conference & Swap Meet

The annual swap meet will be held at Henry Ford community college on March 23rd from 9am to 3pm at Henry Ford College. The event will include general talks, tech talks, planetarium shows, and of course the swap meet. [*Editor's note: Event flyer included in this issue of StarStuff.*]

### **Annual Banquet**

Save the date for the banquet which will be held April 20 at Mamma Mia's in Livonia. More information to come.

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# **Sirius Award Nominations**

This award began in 2009, and is awarded annually to one club member for his or her extraordinary efforts and supporting the club.

# **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 We are looking for the brightest star of our club just like Sirius is the brightest star in our night sky. Please send nominations to president@fordastronomyclub.com.

# **Secretary's Report**

by Cheri Grissom, Secretary

# FAAC General Meeting – January 25, 2024

Meeting called to order at 7:05 p.m. by President, Arica Flores. Other officers present: Ed Halash, Joe Bostic. We had twenty-two in-person attendees and four online.

### Member Introduction & Observing Reports

We started with member introductions and went right into observing experiences, which were few and far between, but just to show how determined we can all be to see the sky and make the best of it: Gary Gibson was bringing in his trash can recently, looked up at the sky as he so often does, and was lucky enough to catch a nice pairing of Jupiter and the Moon from the naked-eye vantage point of his driveway. This brought back memories for him of seeing Jupiter from the very same driveway roughly sixty years ago, when he lived in the same house as a child and was first developing his love of the night sky.

Milton French shared that he also had a very nice view of Jupiter and the Moon recently, in spite of the mostly horrible January weather. Sean Pickard happened to be out one evening when there was high ice in the atmosphere and he was able to view a lovely 22-degree halo around the Moon. Kristie Whittington, with one of the club's loaner telescopes she had borrowed at our last meeting, was very pleased to get a great view of the Moon, as well as Jupiter and a few of its moons, one evening from her home, and Saturn again on another evening. Doug Bauer had the opportunity to do some binocular viewing in South Carolina and had nice views of Jupiter, M42 (the Orion Nebula), and M31 (the Andromeda Galaxy).

### Club Business

We didn't have much in the way of department or committee reports this month. It's very early in the year and there is not a lot going on. Briefly, Cheri reminded everyone that the general meeting minutes appear each month in "StarStuff" under the title of "Secretary's Report," and that 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 <u>treasurer@fordastronomyclub.com</u> 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 <u>LLBeanBusiness.com</u>

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

# Constant Companions — Circumpolar Constellations, Part II





As the seasons shift from Winter to Spring, heralding in the promise of warmer weather here in the northern hemisphere, our circumpolar constellations remain the same. Depending on your latitude, you will be able to see up to nine

circumpolar constellations. This month, we'll focus on: Lynx, Camelopardalis, and Perseus. The objects within these constellations can all be spotted with a pair of binoculars or a small to medium-sized telescope, depending on your Bortle scale – the darkness of your night skies.



In the appearance of left to right: constellations Perseus, Camelopardalis, and Lynx in the night sky. Also featured: Cassiopeia as a guide constellation, and Capella as a guide star.

Credit: Stellarium Web

- **Double Stars:** The area that comprises the constellation Lynx is famous for its multiple star systems, all of which can be separated with a telescope under dark skies. Some of the notable stars in Lynx are the following:
  - 12 Lyncis a triple star that can be resolved with a medium-sized telescope.
  - 10 Ursae Majoris a double star that was once a part of Ursa Major.
  - 38 Lyncis a double star that is described as blue-white and lilac.

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

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

## Articles & Submissions

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

### **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). • **Kemble's Cascade:** This asterism located in Camelopardalis, has over 20 stars, ranging in visible magnitude (brightness) and temperature. The stars give the appearance of flowing in a straight line leading to the Jolly Roger Cluster (NGC 1502). On the opposite side of this constellation, you find the asterism Kemble's Kite. All three objects can be spotted with a pair of binoculars or a telescope and require moderate dark skies.

# DOUBLE CLUSTER IN PERSEUS



A ground-based image from the Digitized Sky Survey (DSS) in the upper left shows Caldwell 14, the Double Cluster in Perseus, with an outline of the region imaged by Hubble's Wide Field and Planetary Camera 2 (WFPC2).

Ground-based image: Digitized Sky Survey (DSS); Hubble image: NASA, ESA, and S. Casertano (Space Telescope Science Institute); Processing: Gladys Kober (NASA/Catholic University of America)

• **Double Cluster:** The constellation Perseus contains the beautiful Double Cluster, two open star clusters (NGC 869 and 884) approximately 7,500 light-years from Earth. This object can be spotted with a small telescope or binoculars and is photographed by amateur and professional photographers alike. It can even be seen with the naked eye

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# **Scheduled Club Events**

Month	Date	Sunset	Location
April	8th		Total Solar Eclipse
April	13th	8:13pm	Spring Mill Pond

### Planetarium

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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

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	Kent Lake Beach Astronomy at the Beach

# Hammond Planetarium

Date	Time	Торіс
February 21st	7:00pm	On a Snowy Evening (Winter Show)
March 6th	7:00pm	The Science of the Solar Eclipse
March 20th	7:00pm	Nothing Gold Can Stay (Spring Show)
March 23rd	2:00pm	The Science of the Solar Eclipse
April 17th	7:00pm	Nothing Gold Can Stay (Spring Show)
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	Торіс
February 22nd	Liam Finn	Science of Solar Eclipses
March 28th	TBD	

# **February Talk Details**

### The Science of Solar Eclipse

Liam Finn, NASA/JPL Solar System Ambassador & Ford Amateur Astronomy Club

#### Description:

This presentation explores the upcoming total solar eclipse gracing North America on April 8th, 2024. We'll delve into the science behind eclipses,

exploring different types - total, annular, and partial - and their unique characteristics.

Discover how modern science has shed light on these celestial phenomena.

Most importantly, learn safe and effective ways to witness this awe-inspiring astronomical event, making you ready to embark on an unforgettable cosmic journey.

#### Bio:

Liam Finn, a resident of Michigan and NASA/JPL Solar System Ambassador, Vice president of the Great

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

minutes from the monthly board meetings are condensed down to a summary for the purpose of "StarStuff," but any member may, if they wish, ask to be emailed a copy of the full monthly board meeting minutes.

Tim Campbell reminded us that our Swap Meet and Conference has a firm date now, March 23, 2024, from 9 a.m. to 3 p.m. Jim Frisbie is heading this committee. There will be a \$5.00 donation per person at the door. Tables may be rented for \$15 in advance, or \$20 the day of. If you have just a few things you are wanting to sell, why not check with the membership to see if someone wants to share a table with you?

Regarding the total solar eclipse happening on April 8, 2024, Arica asked to let her know if you're staying in Michigan and wanting to do something with other club members or members of the public. A few ideas are being floated.

### What's Up in the Night Sky

Gordon Hanson started by listing our upcoming meeting dates, which can also be found in our club events calendar. He then gave us a summary of some of the more interesting objects to keep an eye out for Lakes Association Of Astronomy Clubs, Planetarian at Henry Ford College and avid astronomer. He is passionate about STEM outreach and enjoys explaining the workings of the cosmos. While you can still find Liam looking through telescopes, these days he wants to know more about how these things work... so cool geeky science experiments are often done at home just for fun. Liam does numerous outreach events and talks both under the night sky and indoors with NASA/JPL, his local astronomy club, local colleges and universities as well as being a little obsessed with 3D printing.

on these cold winter nights. Evening's visible planets are Jupiter, Saturn, Uranus, and Neptune. Mornings, you may catch Mercury, Venus, and Mars. This is the best time of the year to have a good look at the constellation Canis Major, where you will see Sirius, the brightest star in the night sky. Canis Major is also home to M41, a nice open cluster, and several other DSOs can be found in the area.

There are two comets visible on a clear night with either binoculars or a small telescope: 62P/Tsuchinshan and 12P/Pons-Brooks (which has a known period of 71.3 years). Gordon finished by asking the members present if there were any suggestions for what kind of information we would like to get from him in these monthly segments.

#### Elections

January is the month when we choose our new club officers for the coming year. Gordon headed up our nominating committee this year, with assistance from Dennis Salliotte and Tim Campbell. Proper procedure was followed as laid out in our bylaws, and Gordon proceeded through each office one at a time, asked for any additional nominations from the floor, and hearing none, declared the single nominee elected by acclamation. The results are: President, Arica Flores *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 <u>equipment@fordastronomyclub.com</u>

ltem	Held by	ltem	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
Presentation Tools		Banner - Large (32″ x 16′)	George Korody
Projector (older)	Jim Frisbie	Tri-Fold Presentation Boards	George Korody
Projector (newer)	Gordon Hansen	Other	
Projection Screen 8'	John McGill	Canopy (10' x 10')	Liam Finn
Projection Screen 6'	Liam Finn	Pop Cooler	Sean Pickard
Bullhorn	Liam Finn	TA Sky Quality Meter	Liam Finn
Speaker System w/Wireless Mic	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

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

#### Secretary's Report (Con't from Page 8)

(incumbent); Vice President, Sean Pickard; Secretary, Cheri Grissom (has been serving as interim secretary for most of the past year during Jesse Godsey's absence); and Treasurer, Joe Bostic (incumbent.) A motion was made and seconded (Tim C./Sean P.) to dissolve the nominating committee. Passed unanimously. Arica thanked the outgoing board and welcomed the new board for 2024.

### Guest Speaker

Tim Campbell, a life-long amateur astronomer, longtime FAAC member and former president, as well as a NASA/JPL Solar System Ambassador, gave a detailed and informative talk entitled "Photographing a Total Solar Eclipse." First and foremost, Tim spoke about the safety protocols that must be followed when viewing the sun, whether with the naked eye, through a telescope, or through a camera. Safety is the most important aspect!

There will be different features connected with the solar eclipse that you may want to capture with your

camera. They include: the chromosphere, shadow bands, the diamond ring effect, Baily's beads, the solar corona, and of course, the reactions from the crowds around you, and you yourself!

To best enjoy the day of the eclipse, take the time well beforehand to practice with your equipment, familiarize yourself, and gain experience. Learn to use automation. You don't want to waste those precious few minutes of totality having to worry about or readjust your equipment. Tim discussed two popular and well-regarded software programs that can take care of the automation for you, one for Windows and one for Mac. He explained in detail how these programs work.

Some of the equipment you will need: camera, memory cards, batteries, tethering cables, a laptop computer (and you might need an auxiliary power source for it), GPS for the computer (he recommends the Garmin 18X USB GPS), a USB hub, solar filters, a tracking mount. Tim went on to talk about details of choosing your focal length and many other

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parameters. Sean Pickard assisted by demonstrating a couple of tracking mounts of his own that he brought to the meeting tonight.

Tim continued with a lot of information about the software features, script format, practical tips for planning, rehearsing, keeping an inventory, rules about courtesy toward others, etc.

A question-and-answer period followed.

Meeting adjourned at 9:30 p.m.

# February 1, 2024 Board Meeting Summary

(Videoconference meeting.) Board members Arica Flores, Sean Pickard, Cheri Grissom, and Joe Bostic present, along with ten other members. Our guest speaker for the February general meeting will be Liam Finn, "Exploring the Science of a Solar Eclipse."

We discussed the possibility of bringing other club equipment to our meetings, like we did for the Holiday Party Potluck, so that members can have a chance to see items and ask questions. This went over well at that meeting and doing this more often may encourage more borrowing of club equipment. Our social media and website will be updated soon with new 2024 officers, our latest Sirius award winner, and correct dates for the 2024 meetings. Also, it is time to think about nominating a member for the 2024 Sirius Award. Look for a Groups.io notification soon.

Our 2024 Swap Meet and Conference will be on March 23, at the Henry Ford College. See the file in Groups.io for detailed information. This is a great place to sell equipment you no longer use or need, buy something new-to-you, listen to a tech talk, see a planetarium show, and socialize with fellow astronomers. Tables can be rented for \$15 in advance or \$20 at the door.

Our 2024 Banquet will be April 20, at Mama Mia Livonia. Look for more information soon on ticket prices.

The new video camera we recently purchased for the online portion of our general meetings worked very well at our last meeting, so we will keep it. Also, Gordon Hansen is donating a speaker of his to our club kit for our sound system. Thank you, Gordon!

#### Circumpolar Constellations (Cont'd from page 4)

in very dark skies. Also in Perseus lies Algol, the Demon Star. Algol is a triple-star system that contains an eclipsing binary, meaning two of its three stars constantly orbit each other. Because of this orbit, you can watch the brightness dim every two days, 20 hours, 49 minutes – for 10-hour periods at a time. For a visual representation of this, revisit NASA's What's Up: November 2019.

From constellations you can see all year to a once in a lifetime event! Up next, find out how you can partner with NASA volunteers for the April 8, 2024, total solar

eclipse with our upcoming mid-month article on the <u>Night Sky Network</u> page through NASA's website!



**Telescope Support Systems** 





# FAAC Astronomy Conference & Swap Meet

# Saturday, March 23, 2024 9:00 am - 3:00 pm

**General Astronomy** 

9:30 am: Eclipse Photography – Tim Campbell 10:45 am: Rehabbing Old Equipment – Gary Gibson 12 N Starship/Starbase – John McGill 1:30 pm: TBD Technical Talks

9:30 am: Photometry & Spectroscopy - Jeff Thrush
10:45 am: Star Exterminator Suite – Gordon Hansen
12 N: Observatory Automation - Sean Pickard
1:30 pm: James Webb Telescope – Tim Campbell

#### Planetarium Shows 10:00am, 11:30am & 2:00pm FAAC Members

Swap Meet

All Day...Earn Cash by Selling Those Items Sitting Around Collecting Dust! Telescopes, Eyepieces, Cameras, Binoculars, Mounts, Software, Books, and Accessories, etc.

Admission: \$5.00 (children 15 and younger – Free / must be accompanied by an adult)

**Sales Table:** \$15 in advance, or \$20 at the door as available, (one admission ticket included).

Advanced Table Registration ends Mar 1, 2024

Doors Open: 8:00am for setup.

Make Checks Payable: to FAAC for advance table registration.

Send payment to: Ford Amateur Astronomy Club, P.O. Box 7527, Dearborn, MI 48121-7527

Location: Henry Ford College, 5101 Evergreen Rd, Dearborn, MI 48128 (Andrew A. Mazzara Admin. & Conference Center... See X on map, Staff Parking Lots 11 & 12 will be open)



For More Information: Contact Jim via email: <u>w8tu@comcast.net</u> or call (734) 751-6280