



# 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: Ed Halash  
Secretary: Jesse Godsey  
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*

### Outreach and Activities

I'm happy to report that the club has now had our annual Conference and swap meet as well as our Banquet for the first time since COVID. Both events were a huge success. This is all thanks to the wonderful helpers we have in the club. The banquet speaker was full of information; Astro Jeopardy was a hoot as usual; and the food was delicious; we ended with fun and somewhat funny prizes for all.

We have done outreach at several schools in the last few months, including Lincoln Park Middle school, Miller elementary in Dearborn, Archive Charter Academy in Canton, and soon Taylor. This would not be possible without the efforts of the members who come and give their time to share what is past our planet with others.

Our Next Public outreach event is scheduled for May 27th at Spring Mill Pond. Here is to hoping for a cloudless night and that the haze from the Canadian Wildfires is gone by then. If you haven't made an outreach event but would like to, they are posted on groups.io and I believe with next years eclipse there will be more to come. If you didn't make the banquet, the picnic in August is awesome. My favorite part is that I don't have to cook.

## Secretary's Report

*by Jesse Godsey, Secretary*

### FAAC General Meeting – April 27, 2023

(Minutes prepared by Cheri Grissom, filling in for Jesse Godsey.) Meeting called to order at 7:10 p.m. by president, Arica Flores. Treasurer, Joe Bostic, present. VP, Ed Halash, present online. Secretary, Jesse Godsey,

## Club Information

Refer to our website for a map and directions:

[www.fordastronomyclub.com](http://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](mailto: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

absent.. We had twenty members and guests attending in person and nine online. Everyone introduced themselves.

## Member Observing Reports

Milton French has been observing Venus and the Pleiades. Arica has been trying out her new solar filter. Several members enjoyed watching the live-streaming of the recent solar eclipse from Australia. Ed recently observed the Southern Cross constellation from a cruise ship in the South Pacific. He noted the that skies, which one would expect to be inky black from that location, were actually quite washed out from the lights of the ship.

## What's Up in the Night Sky

Gordon was absent, so Tim Campbell presented, going over our calendar of upcoming events. The Eta Aquariids meteor shower is currently occurring and will peak May 5, 6. Tim covered all of our familiar spring-time constellations, Ursa Major, Boötes, Coma Berenices, Corona Borealis, Virgo, and Leo, and reminded us that this is prime galaxy-viewing season. Venus and Mars are prominent in the evening sky.

## Club Business

Secretary's report is in StarStuff. Joe gave a treasurer's report. Our social media sites are up to date.

Liam talked about plans for the April 2024 eclipse. He has been in contact with a campground in Ennis, Texas, which is south of Dallas, and has made tentative arrangements to have available sites there for club members. Others are planning to drive only as far as Ohio. More information will be shared as the event gets closer and plans firm up. Beware, though, that campgrounds and motels will fill up far in advance of the date.

Ed reminded everyone of the upcoming banquet, May 6. Tickets are still available. Arica has been contacted by a number of schools, asking for astronomy presentations. Keep an eye on Groups.io for more information as it comes up.

## Speaker

Dennis Conti, Chair of the American Association of Variable Star Observers (AAVSO) Exoplanet Division, gave a talk entitled "The Whacky World of Exoplanets and How We Discover Them."

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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](mailto: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](http://LLBeanBusiness.com)

See the [groups.io](https://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.)

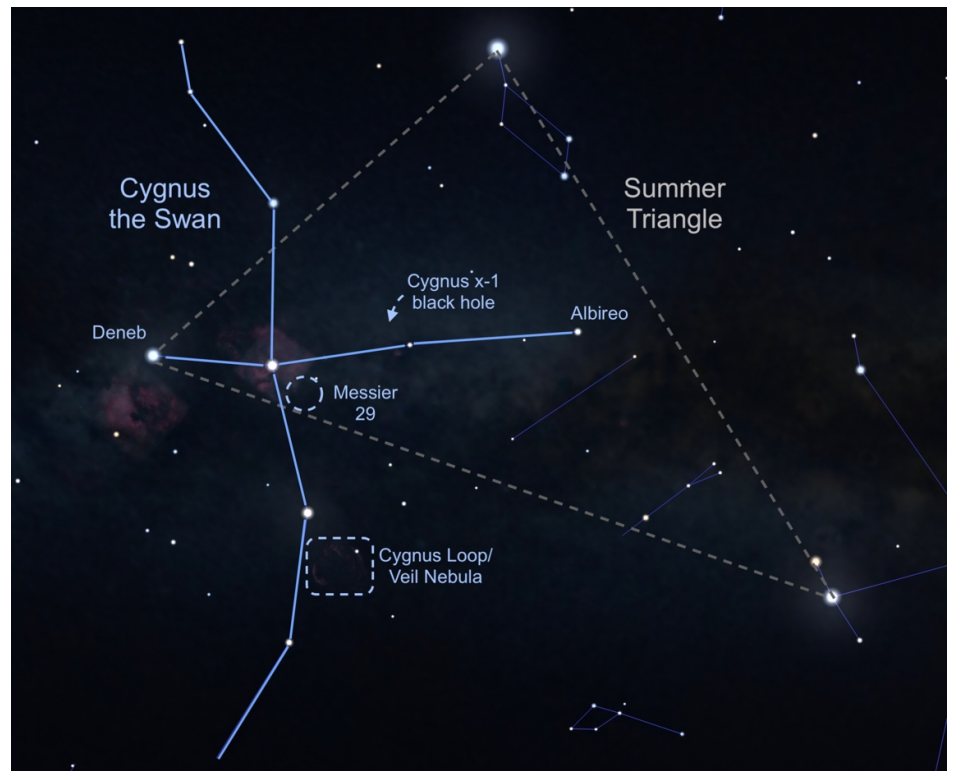
Observing nights & locations (scheduled and unscheduled as weather permits), equipment

# Look up in the Sky — It's a Bird

by Theresa Summer



Bird constellations abound in the night sky, including Cygnus, the majestic swan. Easy to find with its dazzling stars, it is one of the few constellations that look like its namesake and it is full of treasures. Visible in the Northern Hemisphere all summer long, there's so much to see and even some things that can't be seen. To locate Cygnus, start with the brightest star, Deneb, also the northeastern most and dimmest star of the Summer Triangle. The Summer Triangle is made up of three bright stars from three different constellations – read more about it in the September 2022 issue of Night Sky Notes. "Deneb" is an Arabic word meaning the tail. Then travel into the triangle until you see the star Albireo, sometimes called the "beak star" in the center of the summer triangle. Stretching out perpendicular from this line are two stars that mark the crossbar, or the wings, and there are also faint stars that extend the swan's wings.



Look up after sunset during summer months to find Cygnus! Along the swan's neck find the band of our Milky Way Galaxy. Use a telescope to resolve the colorful stars of Albireo or search out the open cluster of stars in Messier 29. Image created with assistance from Stellarium: [stellarium.org](http://stellarium.org)

From light-polluted skies, you may only see the brightest stars, sometimes called the Northern Cross. In a darker sky, the line of stars marking the neck of the swan travels along the band of the Milky Way. A pair of

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](mailto: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).

binoculars will resolve many stars along that path, including a sparkling open cluster of stars designated Messier 29, found just south of the swan's torso star. This grouping of young stars may appear to have a reddish hue due to nearby excited gas.

Let's go deeper. While the bright beak star Albireo is easy to pick out, a telescope will let its true beauty shine! Like a jewel box in the sky, magnification shows a beautiful visual double star, with a vivid gold star and a brilliant blue star in the same field of view. There's another marvel to be seen with a telescope or strong binoculars – the Cygnus Loop. Sometimes known as the Veil Nebula, you can find this supernova remnant (the gassy leftovers blown off of a large dying star) directly above the final two stars of the swan's eastern wing. It will look like a faint ring of illuminated gas about three degrees across (six times the diameter of the Moon).



*While the black hole Cygnus x-1 is invisible with even the most powerful Optical telescope, in X-ray, it shines brightly. On the left is the optical view of that region with the location of Cygnus x-1 shown in the red box as taken by the Digitized Sky Survey. On the right is an artist's conception of the black hole pulling material from its massive blue companion star.*

*(Credit: NASA/CXC chandra.harvard.edu/photo/2011/cygx1/)*

Speaking of long-dead stars, astronomers have detected a high-energy X-ray source in Cygnus that we can't see with our eyes or backyard telescopes, but that is detectable by NASA's Chandra X-ray Observatory. Discovered in 1971 during a rocket flight, Cygnus x-1 is the first X-ray source to be widely accepted as a black hole. This black hole is the final stage of a giant star's life, with a mass of about 20 Suns. Cygnus x-1 is spinning at a phenomenal rate – more than 800 times a second – while devouring a nearby star. Astronomically speaking, this black hole is in our neighborhood, 6,070 light years away. But it poses no threat to us, just offers a new way to study the universe.

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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](http://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](https://facebook.com/FordAstronomyClub)

### Twitter

[twitter.com/Ford\\_Astro](https://twitter.com/Ford_Astro)

## Scheduled Club Events

Month	Date	Sunset	Location
May	27th	8:59pm	Spring Mill Pond
June	24th	9:13pm	Spring Mill Pond
July	22nd	9:02pm	Spring Mill Pond
August	26th	8:17pm	Spring Mill Pond

## Upcoming Club Meeting Topics & Speakers

Meeting	Speaker	Topic
May 25	Thomas Drummond	Using the ISS to Engage in STEM
June 22	TBD	TBD
July 27	Michael Poxon	Tantrums in the Stellar Nursery
August 24	Andy Macica	Lick Historical Collections

## May Talk Details

### Using the International Space Station to Engage Students in Authentic STEM Research

*Chief Operating Officer – Orion's Quest*

Bio:

Thomas Drummond joined Orion's Quest following a 36 year career in public education as a middle school science teacher and administrator in two different districts in Michigan. Mr. Drummond holds a Bachelor's degree in Geology and Astronomy and a Master's Degree in Science Education and School Administration from the University of Michigan. Thomas also received an Educational Specialist Degree in Science Education from Wayne State University.



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

Dennis talked about what would allow an exoplanet to support life. It would need to be rocky, with liquid water, an atmosphere. Meeting that criteria, we would then need to discover reliable biosignatures. Most stars are now believed to have one or more planets orbiting them. Exoplanets are everywhere! It is a rigorous process, but over 5300 have been confirmed so far. They come in all sizes, compositions, and orbital orientations. Most so far are hot Jupiters, as they are the easiest to discover. The TRAPPIST-1 system has seven confirmed planets, most in the star's habitable zone. Some exoplanets orbit multiple stars. They may be rocky, gas giants, or ice giants. Some are free-floating.

Dennis discussed the TESS mission and how amateur astronomers are helping by doing follow-up observations to determine false positives, which can be caused by different circumstances. He discussed NASA's past, current, and future exoplanet missions. The Roman Space Telescope, with a launch planned later in the 2020s, is designed to, among other things, search for and directly image exoplanets.

A question-and-answer period followed.

Meeting adjourned at 9:10 p.m.

**May 4, 2023 Board Meeting Summary**

(Videoconference meeting.) (Report prepared by Cheri Grissom, substituting for Jesse who was absent.) All other board members present. Nine additional members were present.

Secretary: Cheri is willing to sub for Jesse as long as needed. Treasurer: Joe is working on the annual FERA report. Membership: We have had two new members recently. Equipment: Bob McFarland has agreed to become the new caretaker of Kit 5. We have also added to our inventory a High Performance Array

Microphone for our general meetings in the auditorium.

We had extensive discussion about our club banquet, our first since 2019! As of this date, tickets are still available.

We had a lengthy discussion about the upcoming 2024 eclipse. Liam has a tentative agreement with a park in Ennis, Texas where members from our club will be able to set up for observing. Overnight accommodations will still be up to the individuals. More information will be forthcoming over the next few months.

We have a couple speaker openings this year for our general meetings. Suggestions were made and discussed.

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*Cygnus (Con't from Page 4)*

Check out the beautiful bird in your sky this evening, and you will be delighted to add Cygnus to your go-to summer viewing list. Find out NASA's latest methods for studying black holes at [www.nasa.gov/black-holes](http://www.nasa.gov/black-holes).

## 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](mailto:equipment@fordastronomyclub.com)

Item	Held by	Item	Held by
<b>Telescopes</b>		<b>Display Items</b>	
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)	Bhru Patel	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
<b>Presentation Tools</b>		Banner - Large (32" x 16')	George Korody
Projector (older)	Jim Frisbie	Tri-Fold Presentation Boards	George Korody
Projector (newer)	Gordon Hansen	<b>Other</b>	
Projection Screen 8'	John McGill	Canopy (10' x 10')	Liam Finn
Projection Screen 6'	Liam Finn	Pop Cooler	Sean Pickard
Bullhorn	George Korody	TA Sky Quality Meter	Liam Finn
Speaker System w/Wireless Mic	Liam Finn	<b>Demonstration Tools</b>	
		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
<b>Imaging Cameras</b>	
C2 Meade Deep Sky Imager Pro III w/Autostar Suite	Gordon Hansen
C6 Canon 60Da Astrophotography DSLR and accessories	Tim Dey
<b>Other Imaging Equipment</b>	
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
<b>Special Event Items - Not available for Loan Out</b>	
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