

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

Perseid Meteor Showers & Club Picnic

Well, it is that time of year again for the Perseid Meteor Showers which are active every year from mid-July to late August. This event happens when the Earth passes through the debris left behind from Comet 109P/Swift-Tuttle. The peak this year will be around August 12th. According to NASA, you may see as many as 100 meteors in an hour at peak on a clear night with dark skies. The Perseids radiate from the Perseus constellation in the northeastern sky. This year, however, we will have the moon 50% illuminated at peak until midnight. So, if you want to get the best observing you may need a nap because it is going to be a late night. So, grab your blanket or gravity chair and sit back and enjoy the show. Come join us at our annual picnic on August 10th and hopefully you will get to see a few meteors if you stay long enough.

Speaking of the picnic, the location is **changed this year**. Island Lake park construction will have completely closed the Kent Lake Beach area and this means Spring Mill Pond will be much busier — making it more difficult to find parking near our usual set-up location.

We've decided to move the picnic (this year only) over to Maybury State Park located just west of downtown Northville on 8 Mile Road between Beck and Napier roads: 49601 8 Mile Rd, Northville, MI 48167

Secretary's Report

by Cheri Grissom, Secretary

FAAC General Meeting – June 27, 2024

Meeting called to order at 7:01 p.m. by President Arica Flores. All board members present, a total of 29 attendees all together. Members and guests introduced themselves.

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

Member Observing Reports

John McGill has been having a good time in Florida, observing several launches, including NOAA satellites. He's also watched some hurricane-hunting planes taking off. John Lines says Colorado has had some clouds (!) so a shortage of clear skies lately. Still, they are getting crowds of 80 or so people at the national park observing nights. Kevin Zepp has been keeping busy with solar observing. Doug Bauer went observing with the Seven Ponds club. Skies were a bit cloudy, but they still had good views of the moon. He's also been using his Seestar telescope and got nice shots of the Veil and Dumbbell Nebulas from the Detroit area.

Gary Gibson reported on the recent Selfridge event. There was a good turnout from our club, with several members bringing telescopes or just showing up to help. They had a great time, with huge crowds attending. Tim Campbell had the honor of working in the NASA trailer and showing spectators a large moon rock.

Jameson Sullivan had the opportunity to take a trip to the Upper Peninsula, where he had great observing in dark skies. John McGill gave a report on our most recent Beginners' Night at Island Lake, where we had at least ten members of the public show up to share the views. We also had several people who are either new club members or thinking about joining who brought their telescopes to get help setting them up. That same night, Liam and Tim C. were at U of M-Dearborn for one of their regular astronomy nights.

What's Up in the Night Sky

Gordon went through our events calendar. A reminder that the July board meeting is on July 11, since the first Thursday of the month is a holiday. Our next Beginners' Night is July 13. The peak of the Delta Aquariids Meteor Shower is July 31.

We are still keeping an eye on Comet C/2023 A3, which is still brightening. Unfortunately, it will be in daylight skies. Comet 13P/Olbers is low on the western horizon in the evenings. The star T Coronae Borealis, a recurring nova, nicknamed the Blaze Star, is expected to reach magnitude 2.3 by September. Mercury and Venus are evening planets now. Morning planets are Mars, Jupiter, Saturn, Uranus, and Neptune.

Deep sky objects to look for in Sagittarius, Scorpius, and Aquarius: M6 and M7, open clusters; M55 and M72, globular clusters; and M73 the only asterism in the Messier catalog (four stars close together).

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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

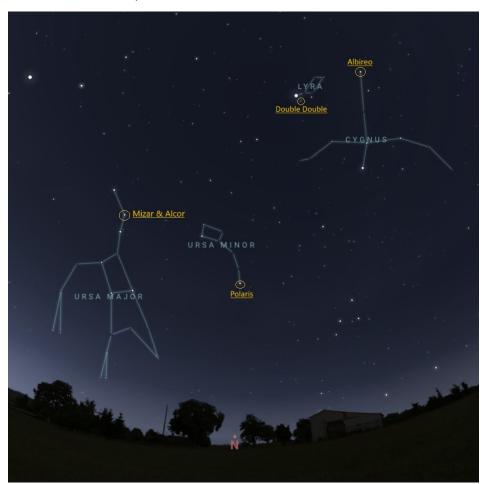
August Night Sky Notes: Seeing Double

by Kat Troche



During the summer months, we tend to miss the views of Saturn, Jupiter and other heavenly bodies. But it can be a great time to look for other items, like globular star clusters such as Messier 13, open star clusters such as the Coma Star

Cluster (Melotte 111), but also double stars!



Mid-August night sky constellations with the following multiple star systems highlighted: the Double Double in Lyra, Albireo in Cygnus, Polaris in Ursa Minor, Mizar and Alcor in Ursa Major. Credit: Stellarium Web

What Are Double Stars?

If you have seen any movies or read any books that refer to having two suns in the sky, that would be a double star system. These star systems typically come in two types – binary and optical doubles. Binary stars are two stars that are gravitationally bound and orbit each other, and optical double stars only appear to be close together when viewed from Earth, but

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.

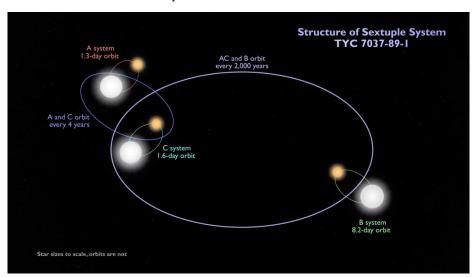
The observatory is adjacent to the athletic field situated between the Lincoln Park Middle School and High School buildings near

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). in reality, are extremely far apart from another, and are not affected by each other's gravity. With a small telescope, in moderately light polluted skies, summer offers great views of these stellar groupings from the Northern Hemisphere:

- **Double Double**: also known by its technical name, Epsilon Lyrae, this multiple star system appears as one star with naked eye observing. But with a small telescope, it can be split into 'two' stars. A large telescope reveals Epsilon Lyrae's secret what looks like a single star is actually a quadruple star system!
- **Albireo**: a gorgeous double star set one blue, one yellow in the constellation Cygnus.
- **Polaris**: while technically a multiple star system, our North Star can easily be separated from one star to two with a modest telescope.
- **Mizar and Alcor**: located in the handle of the Big Dipper, this pair can be seen with the naked eye.



This schematic shows the configuration of the sextuple star system TYC 7037-89-1. The inner quadruple is composed of two binaries, A and C, which orbit each other every four years or so. An outer binary, B, orbits the quadruple roughly every 2,000 years. All three pairs are eclipsing binaries. The orbits shown are not to scale. Credit: NASA's Goddard Space Flight Center

Aside from looking incredible in a telescope or binoculars, double stars help astronomers learn about measuring the mass of stars, and about stellar evolution. Some stars orbit each other a little too closely, and things can become disastrous, but overall, these celestial bodies make for excellent targets and are simple crowd pleasers.

Up next, learn about the Summer Triangle's hidden treasures on our midmonth article on the Night Sky Network page.

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
August	10th	8:40pm	Maybury State Park Club Picnic
September	20 & 21st	7:32pm	Maybury State Park Astronomy at the Beach

Hammond Planetarium

Date	Time	Торіс
September 14th	7:00pm	The Wonderful Webb (James Webb Space Telescope Show)

Club Meeting Topics & Speakers

Meeting	Speaker	Topic
July 25th	Andy Macica	Lick Observatory Telescope
August 22nd	Club Members	Open Forum
October 24th	Tim Campbell	The Wonderful Webb

July Talk Details

Lick Observatory Telescopes

Andy Macica, Imaging Science Engineer, Lick Observatory Volunteer Telescope Operator

Description:

The presentation will include a section on each of the telescopes on the mount, its uses and contributions. This includes a brief history of the Lick Observatory, the 36" Great Refractor, the Crossley Reflector, and the Shane 3 Meter.

Bio:

Andy Macica is an imaging Science Engineer. He has 30+ years' experience in Astronomical Observing and twenty years in Astrophotography. His experience in Astrophotography is with Hypersensitized Film Photography, CCD Imaging, Planetary Video

Imaging, Spectroscopy and H-alpha and Calcium-K Solar Imaging.

Andy has been a volunteer for Lick Observatory for twenty years, has been the 36" Great Refractor Telescope Operator for five years and has been a staff member at Lick Observatory for two years.

Andy detected a transiting exoplanet around HD209458 and has performed Nova searches in M31

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

Guest Speaker

Sandra Macika introduced Peter Michaud, Education and Engagement Manager/CEE Deputy at University of Hawaii, Institute for Astronomy. "Live From Gemini – Virtual Visit to Gemini Observatory Control Room."

It is approximately 1:30 p.m. as Peter is speaking to us live from Hilo, Hawaii. The Gemini North Observatory is high above him near the summit of the nearly 14,000 foot high Maunakea. Peter walked around with his laptop and gave us a visual tour of the control room. Unlike in the past, when astronomers had to actually be at the top of the mountain, observations are now controlled remotely from a near-sea-level location, which is much more comfortable and efficient and reduces the carbon footprint. A sister observatory, Gemini South, is located in Chile.

Peter has been an amateur astronomer as long as he can remember. He and a junior high school friend started an astronomy club way back then. It is still an active club in New Hampshire. He is a self-admitted solar eclipse addict and has seen eight so far.

The Gemini Observatory has an 8.1 meter mirror, on an alt-az mount. It is optimized for infrared observing, but they do visual as well. The observatory has been a pioneer in que-based viewing, meaning observations defined by the investigators are carried out on their behalf by the Gemini scientific staff.

An interesting tidbit: In the Hawaiian language, the North Star is called Hokupa'a, meaning "fixed star."

A question-and-answer period followed.

Club Business

We had a brief business discussion following our speaker, who was presented a little bit earlier than usual due to another time commitment he had. Brief secretary and treasurer reports were given. Equipment: Jeff advised that the club inventory has been completed.

Arica advised new members that we have a club website, fordastronomyclub.com, and our official member communication platform is Groups.io. New members receive an invitation to join. There is also an email list that anyone, including non-members, can join through the website for up-to-date information. Sean advised that the Discord chat room is up and running and going well. If you are interested in joining that, please contact Sean at VP@fordastronomyclub.com.

Tim Campbell talked about our monthly publication, "Star Stuff." He welcomes member input of articles and other submissions. If you have anything you think would be of interest to other club members, please contact Tim at StarStuff@fordastronomyclub.com.

A reminder that our annual Club Picnic will be August 10, at Spring Mill Pond, Island Lake.

Liam made a plea for more volunteers to help with outreach and other club events. New members, please don't hesitate. Your input is welcome! Please reach out to Liam Finn, Tim Campbell, Arica Flores, or any board member with questions on how to get more involved. A message to the club through Groups.io will work, too.

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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	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
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 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)

Meeting adjourned at 9:05 p.m.

July 11, 2024 Board Meeting Summary

(Videoconference meeting.) All board members present, along with seven other members. The speaker for our July meeting will be Andy Macica, giving a talk about Lick Observatory. This will be a video presentation.

Brief secretary and treasurer reports given. We voted unanimously to pay the renewal fee to the company that hosts our website.

Social Media/Website: Liam and Arica are working on bringing our Sirius Award winners up to date on our website.

Equipment: Jeff reports the annual inventory list is complete. A few of our club's scopes or mounts have

recently had issues which have been repaired or are awaiting repair.

AATB Committee: Gordon Hansen gave us an update. Remember, it's at Mayberry State Park this year only! Jessica Edwards has volunteered to be in charge of the Scavenger Hunt for kids. Thank you, Jessica! We had discussion about what type of tablecloths and/or table runners we should go with. The next committee meeting is July 22, so they will discuss and make a decision then. We learned that our club's computer does not have the power to operate two separate monitors on the table.

Publicity: Sean reports we have had a couple more members join Discord. An invitation is required, so contact Sean if you think this is something you might be interested in.

Outreach: We talked about an additional outreach committee, name yet to be determined, but will focus on additional club-sponsored observing events. Gary

Gibson has volunteered to head this committee. Arica volunteered to help. More volunteers are welcome!

Club Picnic: Doug Bauer is heading this up and planning is ongoing. The date is August 10, at Spring Mill Pond. Our monthly Beginners' Night will follow later that evening. There is some concern about the construction that will be going on in the park, and we are wondering if the Spring Mill Pond parking lot and picnic area may be very crowded since Kent Lake Beach is not open. We talked about possible alternate locations but nothing has been changed at this point. Watch your club communications just in case, though!