

# 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: Mike Bruno
Vice President: Ed Halash
Secretary: Jesse Godsey
Treasurer: Arica Flores

# **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.

# Secretary's Report

by Jesse Godsey

# FAAC General Meeting - October 27, 2022

The meeting was called to order by our club President, Mike Bruno. Twenty three club members were in attendance as well as our guest speaker, Trevor Jones of AstroBackyard.

The meeting started with a discussion of the recent and tragic loss of our dear friend and longstanding club member, Greg Knekleian. We discussed doing something in his memory and communicating that to club members.

# Member Observing

Several members discussed the past weekend event viewing at Island Lake as well as the attendance and speakers. Jesse mentioned how nice it was to see other people and their equipment.

# What's Up

Gordon H. presented the upcoming events for November 2022. The highlights include: Plymouth astrophotography meeting on the 1st; board meeting is on the 3rd; full moon is on the 8th; new moon on the 23rd. The next General Membership meeting is on December 1st — due to Thanksgiving occurring not the 4th Thursday (the normal date for the club meeting). Daylight Saving Time ends November 6th. The Leonid meteor shower is November 17 & 18. The Northern and Southern Taurus peaks November 5th for the Southern and November 12th for the North.

On November 8th there is a total Lunar eclipse starting at 5:16am. The moon will be 21° above the horizon. Comet C/2022 E3 is expected to peak around February at 5th magnitude — but in November it is at magnitude 10.

#### **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 Mars, Jupiter, Saturn, Uranus, and Neptune are all visible during the month of November during the evening. Look toward Taurus for many nice Deep Sky Objects including Messier 36, 37, and 38 — these open clusters are all viewable in this area of the sky.

#### Club Business

Jesse announced that the Secretary's Report is published in Star Stuff. The election of new club officers will occur in January. Some officers are term-limited. Please consider offering your time for one of the board positions.

### Social Media

No updates.

# Projects & Special Events

U of M Dearborn observatory will be open this Friday — weather permitting. They appreciate club volunteers to help to offer assistance at these public events.

# Speaker

The featured speaker was Trevor Jones — AstroBackyard on YouTube. The topic was Deep Sky Astrophotography and how he got started despite city light pollution. Trevor discussed what he did and the equipment he uses as well as his methods, tools, and examples with best practices. This was an awesome presentation from a well-known person in the astrophotography community.

# FAAC Board Meeting Summary – November 03, 2022

Meeting called to order Club President Mike Bruno at 7pm. Seventeen additional club members were in attendance.

# Next Meeting

December 1st is the next General Membership meeting. While all meetings for the past few years have been remote meetings via Zoom or Webex, this next meeting will be in-person back in the Berry Amphitheater at Henry Ford College — our usual meeting location pre-COVID. We will broadcast this meeting via Webex for those who cannot attend in-person. The meeting will include pizza and beverages.

Continued on Page 6

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

# Binoculars: A Great First Telescope

# by David Prosper



Do you want to peer deeper into the night sky? Are you feeling the urge to buy a telescope? There are so many options for budding astronomers that choosing one can be overwhelming. A first telescope should be easy to use and

provide good quality views while being affordable. As it turns out, those requirements make the first telescope of choice for many stargazers something unexpected: a good pair of binoculars!

Binoculars are an excellent first instrument because they are generally easy to use and more versatile than most telescopes. Binoculars can be used for activities like stargazing and birdwatching, and work great in the field at a star party, along the hiking trail, and anywhere else where you can see the



The two most popular types of binocular designs are shown here: roof-prism binoculars (left) and porro-prism binoculars (right). Roof prisms tend to be more compact, lighter, and a bit more portable, while porro-prisms tend to be heavier but often offer wider views and greater magnification. What should you choose? Many birders and frequent fliers often choose roof-prism models for their portability. Many observers who prefer to observe fainter deep-sky objects or who use a tripod with their observing choose larger porro-prism designs. There is no right answer, so if you can, try out both designs and see which works better for you.

sky. Binoculars also travel well, since they easily fit into carry-on luggage – a difficult feat for most telescopes! A good pair of binoculars, ranging in specifications from 7x35 to 10x50, will give you great views of the Moon, large open star clusters like the Pleiades (M45), and, from dark skies, larger bright galaxies like the Andromeda Galaxy (M31) and large nebulae like the Orion Nebula (M42). While you likely won't be able to see Saturn's rings, as you practice your observing skills you may be able to spot Jupiter's moons, along with some globular clusters and fainter nebulae from dark sites, too.

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.

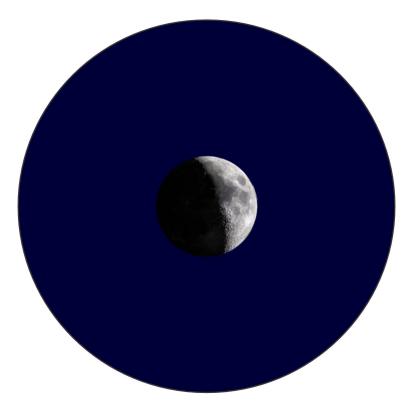
The observatory houses a 14" Celestron C14 Schmidt Cassegrain Telescope as well as other instruments and can be used by club members.

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). What do the numbers on those binocular specs actually mean? The first number is the magnification, while the second number is the size in millimeters (mm) of the lenses. So, a 7x35 pair of binoculars means that they will magnify 7 times using lenses 35 mm in diameter. It can be tempting to get the biggest binoculars you can find, but try not to get anything much more powerful than a 10x50 pair at first. Larger binoculars with more power often have narrower fields of vision and are heavier; while technically more powerful, they are also more difficult to hold steadily in your hands and "jiggle" quite a bit unless you buy much more expensive binoculars with image stabilization, or mount them to a tripod.



A pair of good binoculars can show craters on the Moon around 6 miles (10 km) across and larger. How large is that? It would take you about two hours to hike across a similar-sized crater on Earth. The "Can You See the Flag On the Moon?" handout showcases the levels of detail that different instruments can typically observe on the Moon, available at bit.ly/flagmoon. Moon image courtesy Jay Tanner

Would it surprise you that amazing views of some astronomical objects can be found not just from giant telescopes, but also from seemingly humble binoculars? Binoculars are able to show a much larger field of view of the sky compared to most telescopes. For example, most telescopes are unable to keep the entirety of the Pleiades or Andromeda Galaxy entirely inside the view of most eyepieces. Binoculars are also a great investment for more

## **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 offered each Wednesday at 7:30pm and every 2nd Saturday at 3:00pm – however there are some exceptions. 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
April	20th	8:30pm	Spring Mill Pond
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	Торіс
December 1	Tim Campbell & Liam Finn	The Science of the Solstice

#### October Talk Details

#### The Science of the Solstice

Tim Campbell & Liam Finn Ford Astronomy Club & NASA/JPL Solar System Ambassadors

From time immemorial, humans have been marking the solstices with magnificent structures and celebrations. The winter solstice was particularly revered and in some cultures marked by festivals that would last for days. This year the winter solstice falls on Wednesday, December 21st. Join NASA solar system ambassadors Tim Campbell and Liam Finn for a special presentation on the astronomy of solstices and seasons. During this talk, we'll learn what solstices and equinoxes are, we'll discover how the real motions of Earth dictate the apparent motions of the Sun, and we'll see how different cultures, ancient and modern, commemorate winter solstice.

#### Bio:

Tim & Liam are long-time members of the Ford Amateur Astronomy Club, planetarium operators/presenters at Henry Ford College and also volunteer their time as NASA/JPL Solar System Ambassadors. You can find them numerous outreach events sharing their passion of the night sky.

#### Binoculars (Cont'd from Page 4)

advanced observing, as later on they are useful for hunting down objects to then observe in more detail with a telescope.

If you are able to do so, real-world advice and experience is still the best for something you will be spending a lot of time with! Going to an in-person star party hosted by a local club is a great way to get familiar with telescopes and binoculars of all kinds – just ask permission before taking a closer look! You can find clubs and star parties near you on the Night Sky Network's Clubs & Events page at bit.ly/nsnclubsandevents, and inspire your binocular stargazing sessions with NASA's latest discoveries at nasa.gov.

#### Secretary's Report (Cont'd from Page 2)

This final meeting of 2022 is traditionally a social event. Tim Campbell and Liam Finn will provide a short presentation (not a traditional hour-long talk) on the Solstice.

# Club Equipment

Jeff Gorman confirmed that the equipment inventory is verified and complete.

# Membership

Membership renewals reminders for the 2023 year are going out (members who joined in September of 2022 or later do not need to renew until the 2024 membership year.)

#### Old Business

- Doug B reserved our meeting room dates at Henry Ford College for the 2023 year.
- Jim Frisbie is willing to organize our annual SWAP meet as long as we are having in-person meetings.

## New Business

• Ed brought up the annual club banquet for 2023. He'll get a venue reserved soon for a full-moon date in the spring. The banquet will include a meat, fish, and vegetarian meal option — likely in May 6.

#### General Discussion

• We discussed the passing of our dear friend and long-time member, Greg Knekleian. The family is not planning a memorial or funeral — but the club discussed having our own gathering in Greg's memory at the Hector J. Robinson Observatory (HJRO — aka the Lincoln Park Observatory) in remembrance of Greg. We are making and presenting a plaque in Greg's honor which will be mounted and displayed in the observatory on November 6 at 5 p.m..

# **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)	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
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	George Korody	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

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			