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

Back in Person

We have lots of in-person events scheduled for this year beginning with our FAAC Conference and Swap Meet on April 1st at Henry Ford Community College, from 9am to 3pm. We co-host this event with the STEM School at HFC. Admission is $5. It is so nice to be having this event again after our multi-year COVID break.

There will be eight presentations on both general astronomy and technical talks, as well as several planetarium show times. There will be a variety of used astronomy equipment for sale, usually including a number of telescopes. The best part is being able to visit and share with fellow astronomy enthusiasts. Come and join us for this event! I will be looking forward to seeing people in person again and not just their little window on the computer. See our flyer on the Groups.io site for more information. Visit our club website and check out the calendar for more information on our upcoming events.

[Editors note: Here is the link for the Conference & Swap flyer and event schedule.]

Secretary's Report

by Jesse Godsey

FAAC General Meeting – February 23, 2023

The meeting was called to order by our club President, Arica Flores. Eighteen people were present including all officers. This event took place via Webex due to widespread ice-storm damage and power outages making travel difficult.

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

The "Green Comet" — C/2022 E3 (ZTF) — is still visible and getting attention, though members noted it is getting difficult to spot. It was challenging to find it with binoculars but was still visible through telescopes. Members also discussed the the ice-storm damage, downed trees, and power outages.

Club Equipment

There was nothing new to report regarding club equipment. Members are reminded that they can borrow club-equipment. Equipment is typically loaned for a one month duration unless nobody else has requested the equipment, in which case the loan can be extended for longer periods. The custodian of the item will help you become familiar with how to use an item when you borrow it.

What's Up in February

Gordon Hansen presented the upcoming events for March 2023. **Meetings:** There is a Board meeting on the 3/2. The General Meeting is on 3/23. The Astronomy Conference & Swap Meet is Saturday April 1 from 9am to 3pm at our regular meeting location on the Henry Ford College campus. **Moon:** The full moon is on March 7. The new Moon is March 21. As a reminder, Daylight Saving Time begins on March 12. **Comets:** Comet C/2022 V2 will be around until June. Also, C/2022 A2 is located near Triangulum but currently about magnitude 10. **Planets:** The evening sky will be filled with five planets: Mercury, Venus, Mars, Jupiter, and Uranus. On March 1, Jupiter and Venus will be about 1° apart at dusk. **Deep sky:** Orion is still visible in the evening sky if you want a last look at it in the evening. M42, M43, and M78 are all in the area for viewing (M78 is a dark nebula and difficult to spot).

Club Business

The Sirius award is up and we are looking for nominations. The secretary's report is in the Star Stuff. Our public observing schedule is now on our club calendar. GLAAC officer elections took place in January. Tim Campbell was elected as GLAAC president and Liam Finn was elected as Vice President. Other officer positions were renewed and did not change. GLAAC is looking for companies to sponsor Astronomy at the Beach.

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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 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 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

Solar Eclipses are Coming!

by David Prosper

Have you ever witnessed a total solar eclipse? What about an annular solar eclipse? If not, then you are in luck if you live in North America: the next twelve months will see two solar eclipses darken the skies for observers in the continental United States, Mexico, and Canada!

Solar eclipse fans get a chance to witness an annular eclipse this fall. On Saturday, October 14, 2023, the Moon will move exactly in front of the Sun from the point of view of observers along a narrow strip of land stretching across the United States from Oregon to Texas and continuing on to Central and South America. Since the Moon will be at its furthest point in its orbit from Earth at that time (known as apogee), it won't completely

This detailed solar eclipse map shows the paths of where and when the Moon's shadow will cross the USA for the upcoming 2023 annular solar eclipse and 2024 total solar eclipse, made using data compiled from multiple NASA missions. Where will you be? This map is very detailed, so if you would like to download a larger copy of the image, you can do so and find out more about its features at: https://svs.gsfc.nasa.gov/5073 Credits: NASA/Scientific Visualization Studio/Michala Garrison; eclipse calculations by Ernie Wright, NASA Goddard Space Flight Center.

block the Sun; instead, a dramatic "ring" effect will be seen as the bright edge of the Sun will be visible around the black silhouette of the Moon. The distinct appearance of this style of eclipse is why it's called an annular eclipse, as annular means ring-like. If you are standing under a tree or behind a screen you will see thousands of ring-like shadows projected everywhere during maximum eclipse, and the light may take on a wan note, but it won't actually get dark outside; it will be similar to the brightness of a cloudy day. This eclipse must only be observed with properly certified eclipse glasses, or other safe observation methods like pinhole projection

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.

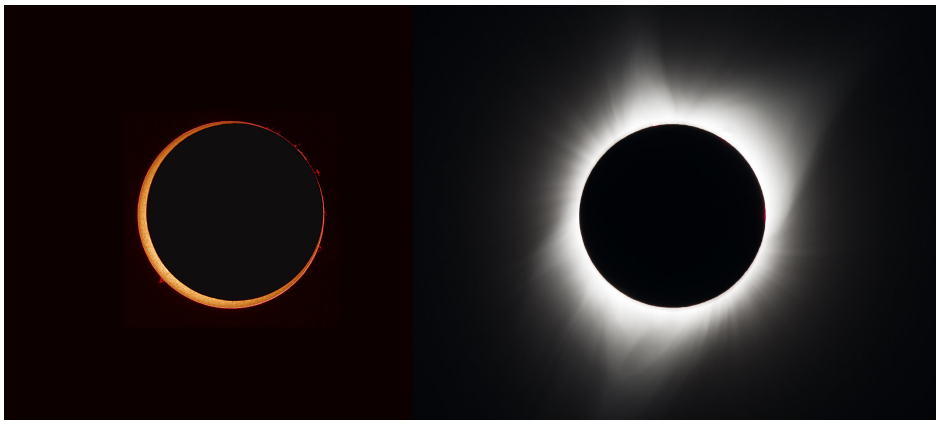
The observatory is adjacent to the athletic field situated between the Lincoln Park Middle School and High School buildings near

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).

or shielded solar telescopes. Even during the peak of the eclipse, the tiny bit of the Sun seen via the "ring" can damage your retinas and even blind you.



Photos of an annular total solar eclipse (left) and a total solar eclipse (right). Note that the annular eclipse is shown with a dark background, as it is only safe to view with protection – you can see how a small portion of the Sun is still visible as the ring around the Moon. On the right, you can see the Sun's wispy corona, visible only during totality itself, when the Moon completely – or totally - hides the Sun from view. A total solar eclipse is only safe to view without protection during totality itself; it is absolutely necessary to protect your eyes throughout the rest of the eclipse! Credits: Left, Annular Eclipse: Stefan Seip (Oct 3, 2005). Right, Total Eclipse, NASA/Aubrey Gemignani (August 21, 2017)

Just six months later, a dramatic total solar eclipse will darken the skies from Mexico to northeast Canada, casting its shadow across the USA in a strip approximately 124 miles (200 km) wide, on Monday, April 8, 2024. While protection must be worn to safely observe most of this eclipse, it's not needed to witness totality itself, the brief amount of time when the Moon blocks the entire surface of the Sun from view. And if you try to view totality through your eclipse viewer, you won't actually be able to see anything! The Moon's shadow will dramatically darken the skies into something resembling early evening, confusing animals and delighting human observers. You will even be able to see bright stars and planets - provided you are able to take your eyes off the majesty of the total eclipse! While the darkness and accompanying chilly breeze will be a thrill, the most spectacular observation of all will be the Sun's magnificent corona! Totality is the only time you can observe the corona, which is actually the beautiful outer fringes of the Sun's atmosphere. For observers in the middle of the path, they will get to experience the deepest portion of the eclipse, which will last over four minutes - twice as long as 2017's total solar eclipse over North America.

While some folks may be lucky enough to witness both eclipses in full – especially the residents of San Antonio, Texas, whose city lies at the

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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

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	29th	7:30pm	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	Topic
March 23	Ken Bertin	Edward Emerson Barnard
April 27	Dennis Conti	Whacky World of Exoplanets
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

March Talk Details

Edward Emerson Barnard

Ken Bertin, Warren Astronomical Society

Edward Emerson Barnard (December 16, 1857 – February 6, 1923) was an American astronomer. He was commonly known as E. E. Barnard and was recognized as a gifted observational astronomer. He is best known for his discovery of the high proper motion of Barnard's Star in 1916, which is named in his honor. Ken will discuss his personal life and numerous contributions to the field of Astronomy.

Bio:

Ken Bertin is a registered financial planner by trade and a sports official. A hobbyist astronomer for 70 years, he is Past President and VEEP of

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Eclipses (Con't from Page 4)

crossroads of both paths – everyone off the paths of maximum eclipse can still catch sight of beautiful partial eclipses if the skies are clear. The Eclipse Ambassadors program is recruiting volunteers across the USA to prepare communities off the central paths in advance of this amazing cosmic ballet. Find more information and apply to share the excitement at eclipseambassadors.org. NASA has published a fantastic Solar Eclipse Safety Guide which can help you plan your viewing at bit.ly/nasaeclipsesafety. And you can find a large collection of solar eclipse resources, activities, visualizations, photos, and more from NASA at solarsystem.nasa.gov/eclipses

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

Projects & Special Events

Arica reminded everyone that we have the upcoming Conference & Swap meet on April 1. There is a $5 cover charge to attend. If you want to sell items and would like a table, tables are $15 in advance or $45 at the door (based on available) but the table fee includes the entry fee. In addition to gear, there will be two rooms with astronomy talks — a total of eight different talks. There will also be several planetarium shows. Food and refreshments will also be available.

Ed Halash reminded us that the club's annual banquet will be Saturday May 6 from 5pm to 10pm at Logan's Steakhouse, 13305 Eureka Road in Southgate. Banquet tickets are $35 per person and includes includes an soup or salad, entrée, side, and dessert. Non-alcoholic beverages are also included. Alcoholic beverages are available but not included. Seating is limited, reserve seats for you and your better-half early!

Speaker

The featured was unable to attend due to power outage. Tim Campbell offered to give his Spacetime presentation (last given several back) as few people in attendance had seen it.

FAAC Board Meeting Summary March 03, 2023

Meeting called to order Club President Arica Flores. A total of fourteen club members were in attendance — including all officers.

Next Meeting

March 23rd at 7pm at Henry Ford College and also online via Webex. The speaker is Ken Berton of the Warren Astronomical Society on Edward Emerson Barnard.

Social Media & Meeting & Events Info

Gordon H. will handle the meeting updates on the web site calendar and Tim C. will update the other information on other events, I.e. observing nights, etc.. Liam is handling the primary admin on the Facebook site and Tim C. is the secondary. Cheri will keep the NightSky Events (nightsky.ipl.nasa.gov) site up to date. The COVID notice has been removed from the club website and replaced with the FAAC Conference & Swap announcement.

Old Business

Ed brought up the banquet for this year and it will be at Logans restaurant. We are looking for a speaker and brought up the idea of eclipses as a possible topic.

The SWAP meet was also discussed, it is on April 1st between 9:00 am and 3:00 pm. All the essential information is on the flyer which will be sent out. We approved a $400.00 expense for the SWAP meet as well.

New Business

Gordon H. will do the "What's Up" moving forward.

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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

Item	Held by
Telescopes	
TK1 Coronado Personal Solar Telescope (Doublestack) w/Meade Autostar Goto Mount	Jessica Edwards
TK5 4.5" Reflector on Fitz GEM mount	Jerry Jamula
TK6 8" Orion XT8i Dobsonian	Dan Smith
TK7 TPO 8" f/4 Newtownian Astrograph (OTA Only - no mount)	Bhru Patel
TK8 20" f/5 Obsession Dob, Ladder & EP Kit	Liam Finn
Presentation Tools	
Projector (older)	Jim Frisbie
Projector (newer)	Gordon Hansen
Projection Screen 8'	John McGill
Projection Screen 6'	Liam Finn
Bullhorn	George Korody
Speaker System w/Wireless Mic	Liam Finn

Item	Held by
Display Items	
Astronomy Event Sign (3' x 6')	Gordon Hansen
Astronomy Event Signs 18x24" (x8)	Liam Finn
PVC Display Board - Folding	Sandra Macika
Banner - Small (24" x 32")	George Korody
Banner - Medium (24" x 72")	Sandra Macika
Banner - Large (32" x 16')	George Korody
Tri-Fold Presentation Boards	George Korody
Other	
Canopy (10' x 10')	Liam Finn
Pop Cooler	Sean Pickard
TA Sky Quality Meter	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
Lunt 100mm H-alpha Solar Telescope with Celestron CG-5 equatorial mount	Tim Campbell

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

We have two open spots for speakers this year and the rest have been filled for upcoming meetings. We present speakers with a gift (FAAC coffee mug) and Sandra mentioned she has about 5 gifts left. Arica is going to look into new mugs for speakers (and potentially also members.)

Tim Campbell discussed the the status of the astronomy equipment collection owned by our late member, Greg Knekleian. Timothy Dey, Tim Campbell performed inventory of Greg's astronomy gear and Liam Finn used that list to find fair market value. This was provided to Greg's surviving sisters who will use it to list the equipment for sale.

Greg owned a Lunt Hydrogen-alpha Solar Telescope (Lunt 100mm Ha DS) with an estimated used value of about $5000. Greg's sister Trudy wanted to offer something as a donation to the club with a value of about $2500. Tim Campbell matched the donation with an additional $2500. The telescope also includes a Celestron CG-5 German Equatorial mount. The telescope needed a few maintenance items and is now available for outreach events.

The club officers voted to donate $500 to GLAAC for Astronomy at the Beach.

Speaker (Con't from Page 5)

Warren Astronomical Society, Searle Award recipient and awarded a Lifetime WAS membership. He has travelled to observe 12 Total Solar Eclipses, 4 Annular eclipses, 6 Transits of Mercury, 2 transits of Venus, and 17 Lunar eclipses. He has written over a hundred presentations (mostly about historical figures in astronomy). He has and is also presenting to many astronomy clubs and organizations(such as senior groups, Mensa society and other type clubs), also to schools at all levels and libraries and is currently presenting online.