



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:	Liam Finn
Vice President:	John McGill
Secretary:	Cheri Grissom
Treasurer:	Mike Bruno

Departments

Webmaster:	Liam Finn
Membership:	Doug Bauer
Newsletter:	Tim Campbell
Equipment:	Dennis Salliotte
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 Liam Finn

The year is slowly winding down. After having a crazy busy September and a much slower start to October with our SSA astronomy night which went well, even though we only had sucker holes to work with, to a cancelled beginners night due to the wonderful Michigan Nebula.

Astronomy Night for Scouts

We have an astronomy night on Friday October 25th at the Sandhill Soaring Club (i.e. Richmond Field) on Friday, October 25, 2019, for the purposes of having a Pack Meeting centered around aviation, star-gazing party and having a bonfire. The event would take place from 6:00 PM to 11:00 PM; I expect a total of about 50-60 people to be in attendance. This is a great option to help at a final astronomy event for 2019 and to get acquainted with our observing site at Richmond Airfield.

November 7th – Board Meeting

As always our Board meeting is open to the members to attend, new members or old and your input on the club operations is always welcomed.

No November Meeting - December 5th Meeting

Each year we combine our November and December meetings into one. There is no November monthly meeting; the combined meeting will be December 5th. This meeting is more of a meet and greet social event and a potluck so remember to bring a dish to pass. We try to keep this as more finger foods as they cause less of a mess.

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

Sirius Award

The Sirius Award is awarded to a member of the club who has gone above and beyond to help with any and all aspects of the club to make it successful, be that through outreach, volunteering at events, being an officer in the club or being a good ambassador for the FAAC and astronomy.

If you have someone in mind please send your nominations to president@fordastronomyclub.com. Please include the person's name and a list of the reasons why you think they deserve this award. This is your one time a year that you can recognize an outstanding member of the club.

All submissions need to be in by the January club meeting. Once the nominations are closed the officers of the club will meet and review the submissions.

Please note that existing officers for 2019 and elected officers for 2020 cannot be included as well as anyone who has received the award in the past. If any of these members are nominated the nomination will be ignored

Get your thinking caps on and help the club recognize an outstanding member who has gone above and beyond to highlight our club and bring the love of astronomy and science to the public.

2020 Officer Positions

Two officer positions are being vacated for 2020. I as president am term limited and will be stepping down as president at the January meeting to whomever the lucky person is to take up the reigns and bring the club to new heights for the future. We also have the Treasurer position which is again term limited, Mike Bruno has done an astounding job as treasurer but needs to step aside and let someone else take over the clubs finances. We have a search committee searching for possible nominees but if any club member is interested in running for any position please feel free to attend our elections in January and submit your name. If only one person is interested then there will be no need for a ballot at the election but if there are more than one person interested in a position then a ballot will be held.

Any member of the club can run for any of the officer positions so even though the Treasurer and President are open positions it is still OK for someone to put their name into any of the club officer positions.

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

Secretary's Report

by Cheri Grissom

FAAC General Meeting – September 26, 2019

Meeting called to order at 7:01 p.m. by President Liam Finn. VP John McGill was absent. Introduction of members and guests. We had approximately 27 present. Explanation of our mentoring program. A reminder that we have just two more general meetings this year, October, and then the combined November/December meeting.

Member Observing Experiences:

Sean Pickard took delivery of his new refractor and had the opportunity to observe Jupiter, Saturn, the Hercules Cluster, and the Andromeda Galaxy. Arica Flores has been enjoying learning more of the features of the Moon. Gary Gibson reported that, for his first time ever, he was able to observe all four of our gas giant outer planets in one night, at Astronomy at the Beach. Manny, a guest tonight, reported observing Jupiter, Saturn, and Epsilon Lyrae. Tim Dey has been enjoying Jupiter for at least five or ten minutes on every clear night. Cheri and Rick Grissom set up a scope out in their former horse pasture (the best views from their location), and were able to observe Jupiter, Saturn, Neptune and several DSOs one night. Frank Ancona brought to the meeting a precious original copy of "The Detroit News" with the headline of the 1969 Moon landing.

Club Equipment:

Dennis Salliotte was absent, so Liam provided information about our equipment loaner program.

Secretary's Report:

Cheri reminded everyone that she is the person to see if you need a plastic sleeve and lanyard for your membership ID, and also asked everyone to remember to sign and pass around the member sign-up sheet during our main speaker presentation.

Treasurer's Report:

Mike was assisting our guest speaker and unable to give a report.

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).

Social Media and Website:

At the last board meeting, it was decided to discontinue our membership on Meet-Up. The cost far outweighs the low level of interest we were getting from the site.

Club Business/Projects/Committees/Events:

Liam reminded everyone that now is the time to start getting your nominations in for the Sirius Award to be presented at our banquet in the spring. Nominations must be received by our January meeting. Any member in good standing is entitled to nominate a member they feel is deserving of the award. Nominees must not have received the award previously, and they must not be 2019 or 2020 board members. Submit your nominee, along with a summation of your reasons for choosing that person, to Liam, at president@fordastronomyclub.com.

Our next board meeting is October 3. We have an observing event at Spiritus Sanctus Academy, October 4. Our last Beginners' Night of the year will be October 5, at Maybury State Park. Our first-ever event at the Edsel and Eleanor Ford House will be September 28. Liam will be giving a talk before the observing. We will need members willing to bring telescopes. (See our Calendar of Events for details on all of these events.)

What's Up:

Mike Bruno gave the presentation tonight. He again reviewed our upcoming meetings and events. The Orionids meteor shower will peak about October 21. Uranus is at opposition October 28. Mike talked about some of the highlights of the Moon. The gas giants are all still well-positioned for viewing in the evenings. Venus is rising in the morning. Fall is a good time to try to spot the zodiacal light in the east just before dawn. Mike also mentioned some DSOs that might be easy this month.

Main Speaker:

Jim Shedlowsky, on "The Evolution of Giant Telescopes." From the time that Galileo first pointed his tiny refractor toward the skies, astronomers have realized the need for larger aperture and better designs. For a very long time, refractors dominated the scene, until reflectors came into wider use, and later on, technologies like photography and spectroscopy further enhanced the rise of cosmology. With the building of George Ellery Hale's

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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 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

MeetUp

meetup.com/Ford-Amateur-Astronomy-Club

Scheduled Club Events

Month	Date	Sunset	Location
November	11th Mercury Transit	7:20am-1pm	U of M Dearborn

Upcoming Club Meeting Topics & Speakers

Meeting	Speaker	Topic
October 24th	Jon Blum	Astronomy Tourism

October Talk Details

Astronomy Tourism

Jon Blum

FAAC... and every other astronomy club

The universe is large, and getting larger, so it is hard to decide where to go on an astronomy vacation. Jon Blum will discuss his suggestions for sights to see in the United States and elsewhere, for all of us amateur astronomers.

Bio:

Jon has been interested in astronomy since childhood and still has his first cardboard telescope. However, he did not have time for a real telescope, and never heard of astronomy clubs, until he retired at the end of 2001, and joined the FAAC soon thereafter. He first belonged to learn to use his telescope, then to learn about astronomy from the talks at our meetings, and now just to socialize with fellow astronomers.

The Messenger Crosses the Sun: Mercury Transit 2019

by David Prosper

The Messenger Crosses the Sun: Mercury Transit 2019

By David Prosper

Did you know that there are two other objects in our skies that have phases like the Moon? They're the inner planets, found between Earth and the Sun: Mercury and Venus. You can see their phases if you observe them through a telescope. Like our Moon, you can't see the planets in their "new" phase, unless they are lined up perfectly between us Earthlings and the Sun. In the case of the Moon, this alignment results in a solar eclipse; in the case of Mercury and Venus, this results in a transit, where the small disc of the planet travels across the face of the Sun. Skywatchers are in for a treat this month, as Mercury transits the Sun the morning of November 11!

You may have seen the transit of Venus in 2012; you may have even watched it through eclipse glasses! However, this time you'll need a solar telescope to see anything, since eclipse glasses will only reveal the Sun's blank face. Why is that? Mercury is the smallest planet in our solar system, and closer to the Sun (and further away from Earth) during its transit than Venus was in its 2012 transit. This makes Mercury's disc too small to see without the extra power of a telescope. Make absolutely certain that you view the transit via a telescope equipped with a safe solar filter or projection setup. Do NOT combine binoculars with your eclipse glasses; this will instantly burn a hole through the glasses – and your eyes! While most people don't have solar telescopes handy, many astronomy clubs do! Look for clubs hosting Mercury transit observing events near you at bit.ly/findnsn (USA) or at bit.ly/awbtransit (worldwide).

What a fun opportunity to see another planet during the day! This transit is expected to last over five hours. Folks on the East Coast will be able to watch the entire transit, weather permitting, from approximately 7:35 am EST until around approximately 1:04 pm EST. Folks located in the middle of North America to the west coast will see the transit already in progress at sunrise. The transit takes hours, so if your weather is cloudy, don't despair; there will be plenty of time for skies to clear! You can find timing details and charts via eclipse guru Fred Espenak's website: bit.ly/mercurytransit2019



Photo of the May 9, 2016 transit of Mercury. Mercury is the small dot on the center right. Note how tiny it is, even compared to the small sunspot on the center left.

Credit: Dave Huntz

Mercury's orbit is small and swift, and so its position in our skies quickly changes; that's why it was named after the fleet-footed messenger god of Roman mythology. In fact, if you have a clear view of the eastern horizon, you'll be able to catch Mercury again

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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.

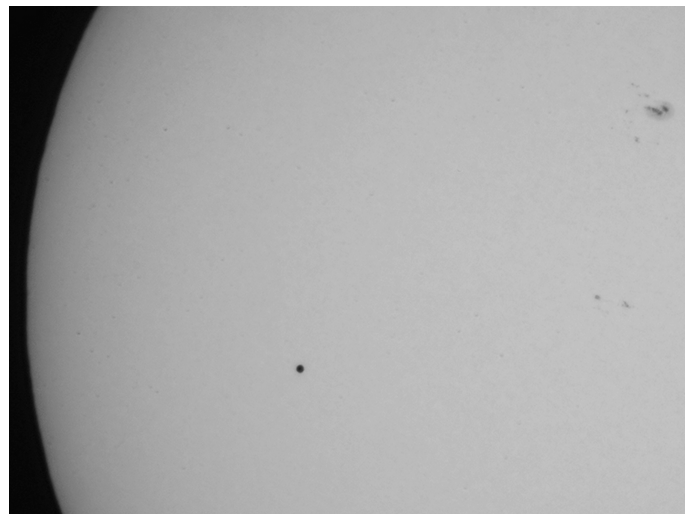
If you are interested in borrowing an item, please contact either the current holder of the equipment, or contact the club equipment manager, Dennis Salliotte, at equipment@fordastronomyclub.com

Item	Held by	Item	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	Bob MacFarland	Astronomy Event Signs 18x24" (x8)	Liam Finn
TK6 8" Orion XT8i Dobsonian	Sean Pickard	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	George Korody	TA Sky Quality Meter	Liam Finn
Speaker System w/Wireless Mic	Liam Finn	Demonstration Tools	
DVD Player	Dennis Salliotte	Weigh on Planets Scale	George Korody
		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 Spectrascopes	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	Sandar Macika
TAK1 Night Vision Image Intensifier for telescopes (2" barrel size)	George Korody

Mercury Transit (Cont'd from page 6)

this month! Look for it before dawn during the last week of November, just above the eastern horizon and below red Mars. Wake up early the morning of November 24th to see Mars, the Moon, and Mercury form a loose triangle right before sunrise.



This photo from the same 2016 transit event shows Mercury a bit larger, as it should; it was taken at a higher magnification through a large 16 inch telescope! Credit: J. A. Blackwell

Discover more about Mercury and the rest of our solar system at nasa.gov

Secretary's Report (Cont'd from page 4)

60" telescope atop Mt. Wilson in 1908, the era of modern mega-reflectors began. From about 1895 to 1948, the US dominated the field of large telescopes. Since that time, other nations have participated in advancing the technology and supporting the efforts to look deeper into our universe. In 1948, the 200" Hale telescope atop Mt. Palomar was completed, and it remained the largest telescope in the world for 45 years. Kitt Peak National Observatory (Arizona) was established in 1958. The invention of CCD in 1969 had a tremendous influence on astrophotography. The first MMT (multi-mirror telescope) came to be in 1979, and the march toward even larger telescopes began. With the building of the 10-meter Keck telescope in 1993, the modern era of giant telescopes arrived. New technologies like adaptive optics and infrared detector arrays were other advancements. Currently, there are three different types of primary mirror technology in use: meniscus mirrors; spun-cast honeycomb mirrors; and segmented mirrors. Jim then gave us a listing of all of the existing giant telescopes now in use, as well as a few that are in the process and will be the next generation of these types of research facilities. As always, Jim ended his presentation with an astronomy-related song, and then took questions from the audience.

October Board Meeting Summary

(Please note that these summaries published each month are a condensed and abbreviated form of the full slate of topics and discussions that take place at our board meetings. Full board meeting minutes are taken each month and kept for club records.)

Classifieds

StarStuff will run classified advertisements for club members. Each classified advertisement will be run in up to two consecutive editions of the StarStuff Newsletter. Submit your listing to starstuff@fordastronomyclub.com

Mike Bruno gave the financial report. We currently have approximately \$6,900. We had three new members join at our September meeting. There was a question about how new members are finding the club. It is believed to be mostly through Facebook. We will revise our membership form to ask that question.

Our search committee reports that, while we have one nominee for each of the four board positions, all positions are still open to any member wishing to run for office. If you are interested, please contact someone on the committee.

Our last public observing event of the year is scheduled for October 5, at Maybury. A suggestion was made to possibly look into an additional event at this location.

Our November and December meetings will be combined and held on December 5. We will have a potluck and social time in lieu of a guest speaker. Please bring a dish to pass.

We had a discussion about the upcoming Mercury transit on November 11. Several schools have invited our club, but we need to find out how many volunteers we have to bring solar equipment before we can make any commitments. A sign-up sheet will be sent around to the membership.

We had a discussion about the club's Groups.io site, with a reminder that the site is intended as a communication tool for club members, and you must be a club member to join the group.. If you are not currently a club member, or you have let your membership lapse, please pay your dues so you can remain on the site.