



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
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Officers

President: Mike Bruno
Vice President: John McGill
Secretary: Cheri Grissom
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.

President's Corner

by Mike Bruno

We had planned our first in over a year Club member observing night on Saturday May 15th, well actually it took place on the 14th, because as you know planning an astronomy event brings cloudy skies! Thanks to Liam for working with the park to create the Covid action plan and all who attended. I know everyone is looking forward to seeing other club members in person and hopefully we will be able to do this again soon especially as restrictions are being eased.

June is around the corner and the nights are getting shorter, but that also means the weather is getting warmer. I hope everyone gets a chance to do more observing this upcoming summer. Make sure you share your observing experiences with everyone.

Save this date, June 5th 8:30 pm, for another Virtual Beginner's Night. Our April event was such a success that it only seemed right to hold another one. We will discuss at our upcoming general meeting and details will be posted in the Groups.io chat.

I hope everyone has a safe and Happy Memorial weekend & I look forward to seeing everyone at 7pm on May 27th for our Virtual General Meeting. Clear skies!

Secretary's Report

by Cheri Grissom

FAAC General Meeting – April 22, 2021

Our videoconference meeting was called to order by President Mike Bruno at approximately 7:07 p.m. All board members present except Cheri Grissom, who joined later. During the meeting, a total of 28 people were listed as being in attendance.

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 Experiences:

Weather has been unfavorable, skies have been cloudy, it's been a quiet month for most of us. Pat Mog did some observing and imaging in Pinckney and had previously shared those images on Groups.io. We had a discussion about Lutz Park in Livingston County. They had extended their hours for International Dark Sky Week, which has already passed, but Liam is in contact with the park manager, trying to get better access for our club.

What's Up:

Gordon Hansen gave the presentation. He went over our calendar of events, which can be accessed on our website or social media sites. Our asterism of the month is the Little Dipper, part of the constellation Ursa Minor. Mercury, Venus, and Mars are setting early in the west this month. Jupiter and Saturn are rising in the east and are viewable before sunrise. Comet C/2020 R4 (Atlas) can currently be seen in the sky, although it is now magnitude 9.5 and dimming. It is still well-positioned below M13.

Club Reports:

Secretary's Report: Cheri was absent for the business portion of this meeting but arrived in time for our guest speaker. She prepared these minutes based on the recording of the Zoom meeting. Thank you, Tim Campbell!

Treasurer's Report: Arica reports that our current balance is \$10,343. She is working on the FERA tax report that we are required to turn in each year.

Mike mentioned that Astronomy at the Beach will be September 24 and 25, 2021, and at this time is expected to be a virtual event again. The Great Lakes Star Gaze is to be held September 9 through 12, in person, with Covid precautions similar to last year. Mike also wanted to thank everyone who helped bring together our first-ever Virtual Beginners' Night on April 10. Liam reports that we had 111 people viewing at various times, which was a great success. Bob McFarland told us about a presentation being put on by Seven Ponds Astronomy Club on April 24, on the subject of double-star observing. Our members are invited. We again discussed the possibility of a members-only live observing night at Island Lake. We are allowed to use the Spring Mill Pond site if we follow their Covid rules. Liam will put something together soon and send it to Island Lake for approval. If approved, we will then post the information on Groups.io and

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

our media sites. We will discuss having a second Virtual Beginners' Night at our next board meeting.

Speaker:

Don Klaser, long-time FAAC member, past president of the club, past Sirius Award winner, host of our YouTube channel, "Astronomy for Everyone," and Planetarium Presenter for Michigan Science Center and Cranbrook, gave a presentation on "Sky Lore and Mythology of the Spring and Summer Sky."

What is mythology as it relates to our night skies? Stories have been passed down throughout history. Sometimes, the stories about a particular constellation or asterism are very similar, and, sometimes, they differ. Don covered the major spring and summer constellations, including the Great Bear or Big Dipper, the Little Bear or Little Dipper, Draco, Leo, Virgo, Corona Borealis, Scorpius, Orion, Libra, Lyra, Sagittarius, and Hercules, as well as the Moon, and the stories associated with each, originating from different cultures and time periods, including Greco-Roman, Egyptian, Arab, Persian, Babylonian, Sumerian, Assyrian, Indian, Chinese, Scandinavian, Aztec, Mayan, Native American, and Australian Aborigine. He talked about the similarities and differences in the stories, and the possible reasons for that. It was a wide-ranging topic, with a lot to cover, so Don will be back later in the year to discuss the fall/winter constellations.

The business meeting adjourned at approximately 9:00 p.m. Additional miscellaneous discussion followed. Doug Bock shared some live lunar images from his backyard. We talked about the historic flights of Ingenuity on Mars.

Board Meeting – May 6, 2021

(Videoconference meeting.) All board members present. (Cheri Grissom joined late.) Ten additional members attended.

Doug Bauer advised that the members who have not renewed for 2021 have been moved to the inactive list, and they have been removed from the Groups.io site. If they renew at a later time, they will be restored to that site. Jeff Gorman will be sending out emails to our equipment caretakers to verify that they are still in possession of the club equipment.

We talked about having an upcoming in-person, members-only event at

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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).

Astrophotography With Your Smartphone

by David Prosper



Have you ever wanted to take night time photos like you've seen online, with the Milky Way stretched across the sky, a blood-red Moon during a total eclipse, or a colorful nebula?

Many astrophotos take hours of time, expensive equipment, and travel, which can intimidate beginners to astrophotography. However, anyone with a camera can take astrophotos; even if you have a just smartphone, you can do astrophotography. Seriously!

Don't expect Hubble-level images starting out! However, you can take surprisingly impressive shots by practicing several basic techniques: steadiness, locked focus, long exposure, and processing. First, steady your smartphone to keep your subjects sharp. This is especially important in low light conditions. A small tripod is ideal, but an improvised stand, like a rock or block of wood, works in a pinch. Most camera apps offer timer options to delay taking a photo by a few seconds, which reduces the vibration of your fingers when taking a shot. Next, lock your focus. Smartphones use autofocus, which is not ideal for low-light photos, especially if the camera readjusts focus mid-session. Tap the phone's screen to focus on a distant bright star or streetlight, then check for options to fine-tune and lock it. Adjusting your camera's exposure time is also essential. The longer your camera is open, the more light it gathers - essential for low-light astrophotography. Start by setting your exposure time to a few seconds. With those options set, take a test photo of your target! If your phone's camera app doesn't offer these options, you can download apps that do. While some phones offer an "astrophotography" setting, this is still rare as of 2021. Finally, process your photos using an app on your phone or computer to bring out additional detail! Post-processing is the secret of all astrophotography.

You now have your own first astrophotos! Wondering what you can do next? Practice: take lots of photos using different settings, especially before deciding on any equipment upgrades. Luckily, there are many amazing resources for budding astrophotographers. NASA has a free eBook with extensive tips for smartphone astrophotography at bit.ly/smartastrophoto, and you can also join the Smartphone Astrophotography project at bit.ly/smartphoneastroproject. Members of astronomy clubs

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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
June	19th	8:12pm	Island Lake
July	17th	8:00pm	Island Lake
August	14th	7:35pm	Island Lake
September	11th (Tentative)	6:49pm	Island Lake
October	9th	6:00pm	Maybury State Park

Upcoming Club Meeting Topics & Speakers

Meeting	Speaker	Topic
May 27th	Jeffery (Buddy) Stark	Brahe & Kepler
June 24th	Elinor Gates	What's Up at Lick Observatory
July 22nd	Dr. Rajib Ganguly	The Universe Through Superman's Eyes

May Talk Details

Brahe (1500s) and Kepler (Brahe's Apprentice)

Jeffery (Buddy) Stark

*Planetarium Manager at Longway Planetarium,
Great Lakes Planetarium Association Fellow*

As the title suggests this is a historical account of Brahe and Kepler's relationship and perspectives.

Bio:

Buddy Stark is a Ph.D. student at Western Michigan University and manager of Longway Planetarium in Flint, Michigan. He has worked in planetaria since 2008 when he began as a student operator at his undergraduate university. He currently holds a master's degree in science education and has research interests of scientific literacy among the general public.

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Smartphone Astrophotography (Cont'd from page 4)

often offer tips or even lessons on astrophotography; you can find a club near you by searching the “Clubs and Events” map on the Night Sky Network’s website at nightsky.jpl.nasa.gov. May you have clear skies!



A small tripod for a smartphone. They are relatively inexpensive – the author found this at a local dollar store!



The Moon is large and bright, making it a great target for beginners. The author took both of these photos using an iPhone 6s. The crescent moon at sunset (lower-left) was taken with a phone propped on the roof rack of a car; the closeup shot of lunar craters (above) was taken through the eyepiece of a friend’s Celestron C8 telescope.

March Talk (Cont'd from page 5)

Buddy has taught a range of science courses from middle school through the college level. His hobbies include woodworking and computer programming.

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	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 Spectroscope	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)	George Korody

Secretary's Report (Cont'd from page 3)

Island Lake. We will have to follow all Covid restrictions in effect at the park. A date of May 15 was decided upon. More information will be published on our club sites. Likewise, we discussed having a second Virtual Beginners' Night. The date for this will be June 5, again with more information to follow on our sites.

The board voted to pay for a Zoom membership to be put in Gordon Hansen's name, and he will allow the club to use this account for our board and general meetings for the coming year. Ed Halash will be publishing our Spring Observing Challenge soon. Watch the newsletter and Groups.io. Thanks to Gordon Hansen for recording this meeting so Cheri could prepare minutes.