



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
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

Astronomy Conference and Swap Meet

For the 16th year in a row the FAAC has put on our annual conference and Swap Meet. This year was our second year hosting the event at Henry Ford College and it has been another successful event.

General Astronomy Talks

- NASA/JPL Are We There Yet? - John McGill
- Mars Rovers – Shannon Murphy
- Beginning Astrophotography – Dr. Axel Mellinger
- Search for Extra Terrestrials – Dr. Dale Partin

Technical Astronomy Talks

- Foraging for Refractors – Clay Kessler
- HDR and Why? – Gordon Hansen
- Video Time Inserter – Jeff Thrush
- Astronomy PI – Campbell & Finn

All talks were enjoyed by all and initiated much discussion around the content. Some even made others consider how they do astrophotography and time-lapse photography.

If you missed it, you better plan on attending in 2020

Special thanks to Jim Frisbie and all he cajoled into making this event a success and also to Steve Murrell and Henry Ford College for hosting the event.

BIG Announcement for the Club at March Meeting

We have a BIG announcement at the March club meeting so if you want to hear it first hand, be at the March meeting on 28th.

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. Contact the club for information on how to enter or exit the park in the event that 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

The Quiet Before the Storm

March has been a fairly quiet month for us with the exception of the Astronomy Conference. Don't get used to the quiet, it's about to change.

April is the real start to our public observing and it is going to be a busy one. We will need all hands on board to make it successful.

Friday April 12: We have TWO events on the same night:

1. Spiritus Santus Academy in Plymouth Astronomy Night – We will need some Astronomers with scopes for this. Four or five telescopes would be ideal for this event.
2. SWAN Night at HFC – We will need a few telescopes here on the roof of the science building. Tim Campbell, Sandra Macika, John McGill and I will be doing science presentational at this event so we won't be available with telescopes. Four or 5 telescopes would be ideal for this event.

Saturday April 13: Beginners night at Spring Mill Pond, starting at 7pm

This is our first beginner's night at Spring Mill Pond for 2019. As always Island Lake State Recreational Area has been our home observing location and have always been super cooperative in working with us to not only make our public nights successful but also allowing club members access to the park 24*7 to observe when we see fit. Our Beginner Nights have been gaining popularity so let's show them how it is done and get as many scopes out there as we can.

Friday April 26: Beacon Park Detroit

FIRST Championship, it is a robotics competition where kids from around the globe compete in various robotics competitions. The goal is to promote STEM education and participation.

We have been asked to do some urban astronomy for the event. We will setup around 7pm in Beacon Park. We are expecting a very high turnout for this event so the more scopes we can get the better.

FIRST Championship will advertise the event extensively so expect it to be busy. We can park on Grand River to offload then they will have parking reserved for us nearby, they will also have security and people there to assist us with managing crowds and lines.

Stuff newsletter, discounts on magazines, discounts at selected 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 Yahoo Group 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.)

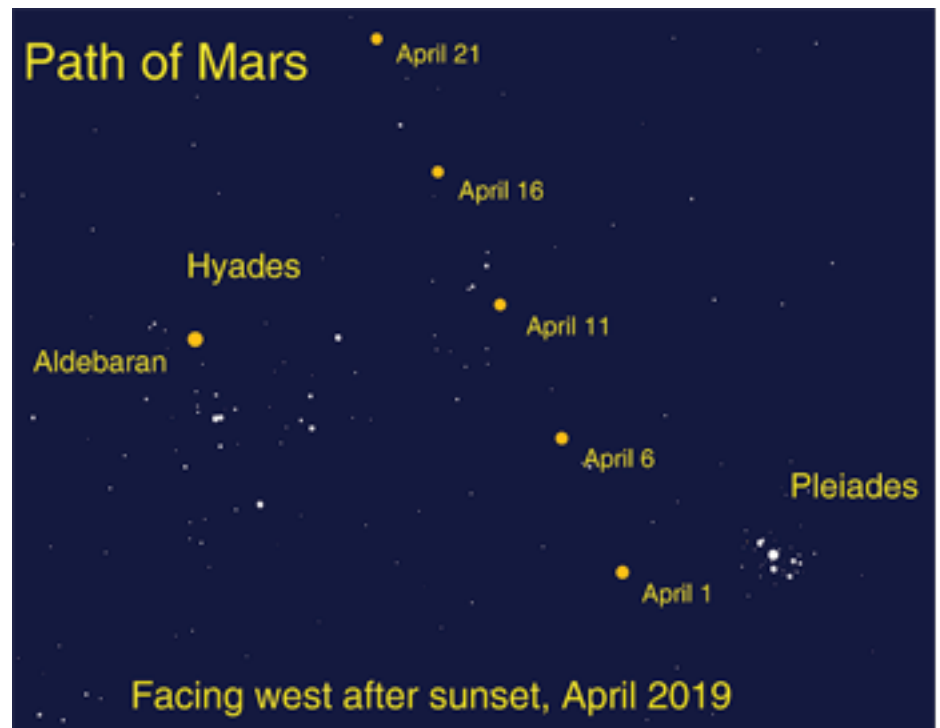
Observing nights & locations (scheduled and unscheduled as weather permits), equipment

Mars the Wanderer

by David Prosper

April's skies find Mars traveling between star clusters after sunset, and a great gathering of planets just before sunrise.

Mars shows stargazers exactly what the term "planet" originally meant with its rapid movement across the evening sky this month. The ancient Greeks used the term *planete*, meaning wanderer, to label the bright star-like objects that travelled between the constellations of the zodiac year after year.



Caption: The path of Mars between the Pleiades and Hyades in April
Image created with assistance from Stellarium.

You can watch Mars as it wanders through the sky throughout April, visible in the west for several hours after sunset. Mars travels past two of the most famous star clusters in our night sky: the Pleiades and Hyades. Look for the red planet next to the tiny but bright Pleiades on April 1st. By the second week in April, it has moved eastward in Taurus towards the larger V-shaped Hyades. Red Mars appears to the right of the slightly brighter red-orange star Aldebaran on April 11th. We see only the brightest stars in these clusters with our unaided eyes; how many additional stars can you observe through binoculars?

continued on page 7

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).

Scheduled Club Events

Month	Date	Sunset	Location
April	12th Statewide Astronomy Night	8:11pm 7-11pm Talks, Planetarium, & Viewing	Henry Ford College Science Building
April	12th School Outreach	8:11pm 7:00pm Setup	Spiritus Sanctus Academy Outreach
April	13th Observing Night	8:12pm	Island Lake Spring Mill Pond
April	14th Indoor Exhibit	12noon-1:30pm	Michigan Outdoor Adventure Center
May	11th Int'l Astronomy Day	8:43pm	Island Lake Spring Mill Pond
May	17th Annual Club Banquet	6:00pm	Tanglewood Golf Club
June	8th Observing Night	9:07pm	Island Lake Spring Mill Pond
July	6th Observing Night	9:12pm	Island Lake Spring Mill Pond
August	10th FAAC Club Picnic Meteors & S'mores	8:41pm	Island Lake Spring Mill Pond
September	TBD Astronomy at the Beach		Island Lake Kent Lake Beach
October	5th Int'l Astronomy Day	7:08pm	Mayberry State Park?
November	11th Mercury Transit	7:20am-1pm	TBD

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

Upcoming Club Meeting Topics & Speakers

Meeting	Speaker	Topic
March 28th	Dr. Jerry Dunifer, Prof. Emeritus at Wayne State University Dept. of Physics	A Tour of Chile with Sky & Telescope Magazine
April 25th	Diane Hall	Soviet Moon Program
May 23rd	Jim Shedlowsky	Arizona - A Great Place for Astronomy
June 26th	Dr. Nour Raoiafi NASA Chief Scientist Parker Solar Probe	Parker Solar Probe
July 25th	Mike O'Dowd	Grumman's Lunar Module and Simulating the first moon landing
August 22nd	Dr. Karen Collins	TESS Mission
September 26th	Jim Shedlowsky	The Evolution of Giant Telescopes
October 24th	Jenny Pon	Space Ghosts

March Talk Details

A Tour of Chile with Sky & Telescope by Jerry Dunnifer

In March 2017 Sky & Telescope arranged a tour to several sites in Chile, including Cerro Tololo Inter-American Observatory, La Silla Observatory, Gemini South Observatory, and the ALMA Observatory. ALMA (Atacama Large Millimeter / Submillimeter Array) is a linked array of dozens of individual telescopes, which constitutes the largest and most-sensitive radio telescope in the World. The talk will also describe some side-trips to visit some unique sites of interest in Chile.

Bio:

Jerry Dunifer is a Professor Emeritus at Wayne State University. He was a member of the faculty in the Department of Physics & Astronomy for 35 years. Since retirement, one of Jerry's hobbies has been visiting a number of the major and historic astronomy observatories around the World.

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	Jed & Jacob Datema	PVC Display Board - Folding	Sandra Macika
TK7 TPO 8" f/4 Newtownian Astrograph (OTA Only - no mount)	Jim Barnes	Banner - Small (24" x 32")	George Korody
Presentation Tools		Banner - Medium (24" x 72")	Sandra Macika
Projector (older)	Jim Frisbie	Banner - Large (32" x 16')	George Korody
Projector (newer)	Gordon Hansen	Tri-Fold Presentation Boards	George Korody
Projection Screen 8'	John McGill	Other	
Projection Screen 6'	Liam Finn	Canopy (10' x 10')	Liam Finn
Bullhorn	George Korody	Pop Cooler	Hayden Barrett
Speaker System w/Wireless Mic	Liam Finn	TA Sky Quality Meter	Liam Finn
DVD Player	Dennis Salliotte	Demonstration Tools	
Eye Pieces		Weigh on Planets Scale	George Korody
EPK1 Eyepieces, Filters & Accessories	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
CA2 Celestron 1.25" to T-Adapter (male) #93625	Tim Dey
CA3 Canon EOS Deluxe Astrophoto kit for Canon EOS mount, T-thread adapter and variable 1.25" extender	Tim Dey
CA5 Celestron Canon EOS T-ring adapter #93419	Tim Dey
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

Mars the Wanderer (continued from page 3)

Open clusters are made up of young stars born from the same “star nursery” of gas and dust. These two open clusters are roughly similar in size. The Pleiades appears much smaller as they are 444 light years away, roughly 3 times the distance of the Hyades, at 151 light years distant. Aldebaran is in the same line of sight as the Hyades, but is actually not a member of the cluster; it actually shines just 65 light years away! By comparison, Mars is practically next door to us, this month just a mere 18 light minutes from Earth - that’s about almost 200 million miles. Think of the difference between how long it takes the light to travel from these bodies: 18 minutes vs. 65 years!

The rest of the bright planets rise before dawn, in a loose lineup starting from just above the eastern horizon to high above the south: Mercury, Venus, Saturn, and Jupiter. Watch this month as the apparent gap widens considerably between the gas giants and terrestrial planets. Mercury hugs the horizon all month, with Venus racing down morning after morning to join its dimmer inner solar system companion right before sunrise. In contrast, the giants Jupiter and Saturn move away from the horizon and rise earlier all month long, with Jupiter rising before midnight by the end of April.

The Lyrids meteor shower peaks on April 22nd, but sadly all but the brightest meteors will be washed out by the light of a bright gibbous Moon.

You can catch up on all of NASA’s current and future missions at [nasa.gov](https://www.nasa.gov)

Secretary's Report

by Cheri Grissom

[Editor's Note: The February General Meeting Summary is not available in this edition.]

March Board Meeting Summary

Our board meeting was held on March 7, 2019. All board members present, four additional members present.

Financial report was provided by Mike Bruno. We had one new member join at our February general meeting.

The Conference and Swap Meet is ready to go. March 23, 2019, 9 a.m. to 3 p.m., HFCC (the same location where we have our monthly meetings).

Club equipment report was provided by Dennis Salliotte. A couple of changes to the wording of the loan-out form were approved by the board.

Everything is set for our banquet on May 17, 2019, at Tanglewood Golf and Country Club, in South Lyon.

We have quite a few events coming up where we have been asked to participate either with telescopes or with some kind of informative presentation. Some of these events are on the same date, but we have enough members willing to do public outreach that we should be able to cover them. SWAN (State-Wide Astronomy Night) is April 12. That same evening, we have been requested to provide telescopes at Spiritus Sanctus Academy, in Plymouth. The DNR Outdoor Adventure Center has asked us to put on an indoor presentation on April 14. We have been asked to participate at a robotics championship at Cobo

Center the weekend of April 24 - 27. Finally, the Dearborn Public Library has asked us to participate in an event, but no firm date is set.

There was discussion about the club having an observing award for members. Mike has put together some preliminary suggestions and will get back to us with more information.

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



FAAC Annual Banquet

Friday May 17, 2019 — 6:00 pm - 11:00 pm

Schedule

6:00 pm Social Hour with Cash Bar
 7:30 pm Dinner
 8:30 pm Keynote Presentation
 Sky Lore with Don Klaser
 9:30 pm Sirius Award — Liam Finn
 9:45 pm Astro Jeopardy — Gordon Hansen
 10:30 pm Door Prizes - Steve Flessa & Sandra Macika

Tanglewood Golf Course
22805 Country Club Dr
South Lyon, MI 48178

**Golf cart will be available to take guests
 to dining area in lieu of stairs.**

Entrée Choices

All plated dinners include tossed salad, hot rolls with butter, soft drinks, coffee & tea.

New York Strip Steak \$45

10 oz. grilled choice New York strip steak
 served with baked potato and fresh vegetable medley

Sautéed Chicken Breast \$35

Sautéed chicken breasts topped with a wild mushroom demi-glace
 served with herb-buttered redskin potatoes and fresh vegetable medley

Char-grilled Atlantic Salmon Filet \$35

6 oz. Atlantic Salmon filet topped with dill Chardonnay cream sauce
 served with herb buttered redskin potatoes and fresh vegetable medley

Special Dietary Menu Options Available Upon Request \$35

Contact John McGill 248 982-8966 jaymcgil19@comcast.net

Included Dessert Selections

New York Cheesecake Plain or topped with raspberry or caramel sauce
 Mixed Berry Parfait Low-fat yogurt with fresh berries and topped with crunchy granola

R.S.V.P. by April By April 25

For more information, contact
 Mike Bruno - 313-730-8752
treasurer@fordastronomyclub.com

Make checks payable to: **FAAC**

Send payment to: Ford Amateur Astronomy Club
 PO Box 7527
 Dearborn, MI 48121-7527