



# 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*

August was a nice easy relaxing month. We had our board meeting and a not so crazy picnic and Meteors & S'Mores event.

## Club Picnic

The picnic was fun; lots of food for everyone. I would like to extend a special thank you to Doug Bauer who puts on the picnic each year and is the reason it goes flawlessly. We had a great turnout and we hope everyone enjoyed the picnic.



## Meteors & S'Mores

The Meteors & Smores numbers were approximately 2000+ turned out. It was not as crazy as last year but that's OK. 2000 is plenty of people to

## Club Information

Refer to our website for a map and directions:

[www.fordastronomyclub.com](http://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](mailto: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

keep us busy and it did. We had lots of telescopes and lots of lines at the telescopes to keep everyone busy. The park was happy for the decrease in numbers because they were pushed to the limit last year. Let's look forward to next year's event which is expected to be Wednesday August 12th and Thursday 13th with a last quarter moon.

## August 2-4 - Dearborn Homecoming

This was our first year participating at the Dearborn Homecoming festival. We did urban astronomy for planets and the moon at this annual festival. Thousands attend each day and we had long lines at the telescopes with attendees who were very excited to see the Moon, Jupiter and Saturn.

## August 22nd - Monthly General Meeting

This month's meeting will be in the Furfa Auditorium because we have Dr. Karen Collins joining us over Webex to talk about the TESS mission.

September is when we get really busy.

## September 7th - Island Lake Star Party

This is the Beginner's Night event to take advantage of the 1st Quarter Moon of September as it is not being used by GLAAC. This should be a busy event so please bring out your scopes. It should be a fun night.

## September 13-14 - Astronomy at the Beach

Astronomy at the Beach is at Kent Lake Beach in Island Lake State Recreational Area. This is a full moon weekend but it is a busy weekend so add it to your calendars and bring a scope. It is a fun event. It is typically has about 5000 attendees across both nights.

## September 21st - PlaneWave Star Party

PlaneWave have moved to Adrian Michigan and have asked the FAAC to put on a Star Party with them at their new Headquarters in Adrian Michigan.

The event is going to be an open house at the new PlaneWave HQ which will include tours of the facility, great opportunity to ask lots of questions. The event starts at 6pm and runs until 10:30pm. Anyone wanting to bring their own telescopes you can do so and setup on the baseball field area

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](mailto: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](http://LLBeanBusiness.com)

See the [groups.io](http://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

starting around 5pm. PlaneWave will also have some of their larger telescopes on the observing field that you can look through.

PlaneWave's new address is:

PlaneWave Instruments  
1375 N Main Street  
Adrian, MI 49221

## September 26-29th - Great Lakes Star Gaze

September 26-29 GLSG; the Great Lakes Star Gaze is late in September this year. If you have not reserved your spot, now is a good time to do so. While it is not an FAAC event it is a purely astronomers event. Three days three nights in great skies (weather permitting). If you have not attended this, it is well worth doing so.

Visit [www.GreatLakesStarGaze.com](http://www.GreatLakesStarGaze.com) for more information and event registration.

## Secretary's Report

*by Cheri Grissom*

### FAAC General Meeting – July 25, 2019

Meeting called to order at 7:00 p.m. by President Liam Finn. Officers absent: John McGill, Mike Bruno. Guests were introduced, then regular members. There were approximately 44 people in attendance. Liam explained our mentoring program and how new members can get help with their equipment from experienced people who share their particular interests, for example, astrophotography, etc.

### *Member Observing Experiences:*

Jessica Edwards had a visit from her sister and her sister's six children and introduced them all to Jupiter and Saturn. Doug Bauer and friend Bob from Seven Ponds Astronomy Club brought telescopes to an observing event at the Oxford Library. Tim Dey and Greg Knekleian had an opportunity to do some spontaneous sidewalk astronomy together at Greg's house one evening. Frank Ancona was in Swedesboro, NJ recently where he gave a talk on the sun and had two solar scopes for people to look through. Milton French had the opportunity to observe a close conjunction of the moon and Saturn. Sandra Macika reports that there

weather permits), equipment 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](mailto: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).

was a huge crowd at the recent Farmington Community Stargazers event, where she displayed her meteorite collection. Diane Hall, guest from WAS, observed a Ganymede transit. Liam Finn and Tim Campbell gave a presentation for the Dearborn Library at the HFCC Planetarium. Liam also put on a presentation for kids at the Wixom Library.

## Club Equipment:

Dennis Salliotte advises that Sean Pickard is the new caretaker of our Orion XT8i Dob, and Liam Finn is the caretaker of our 20" Obsession Dob.

## What's Up:

Tim Campbell presented the upcoming calendar of events. The Delta Aquariids will be peaking the end of July. The Perseids will peak between August 12 - 14. Of course, meteors are likely to be seen for quite a while before and after predicted peak dates. August 9, Mercury will be at its greatest western elongation. There will be an Io transit July 27 and August 12, and a Europa transit August 24.

## Club Business/Projects/Committees/Events:

Liam reminded everyone that our board meetings, which are normally held the first Thursday of each month, at 7 p.m., at Senate Coney Island, in Dearborn, are open to all members. Our annual club picnic will be August 10, at Spring Mill Pond, Island Lake State Recreation Area, starting at 5 p.m. Doug Bauer will be getting there around 2 p.m. to save tables. Anyone wanting to help with that is welcome to join him. The club will provide hamburgers, hot dogs, and veggie burgers. Please bring a dish to pass.

Our August 22 general club meeting will be held in the Forfa Auditorium across the hall from our usual location and will feature Dr. Karen Collins, speaking about the TESS Mission. September will be a busy month, with our Beginners' Night September 7, Astronomy at the Beach September 13 and 14, the star party at PlaneWave, in Adrian, on September 21, and Great Lakes Star Gaze, in Gladwin, September 26 - 29.

Diane Hall advised that the Warren Astronomical Society (WAS), is having their annual party this coming Saturday, and everyone is invited. You don't have to be a member of WAS. Bob Clubb advised us that anyone interested in learning to run the planetarium program at HFCC should get in touch with him.

*Cont'd on page 8*



## 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](http://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](https://facebook.com/FordAstronomyClub)

### Twitter

[twitter.com/Ford\\_Astro](https://twitter.com/Ford_Astro)

### MeetUp

[meetup.com/Ford-Amateur-Astronomy-Club](https://meetup.com/Ford-Amateur-Astronomy-Club)

## Scheduled Club Events

Month	Date	Sunset	Location
September	7th Island Lake Star Party	7:57pm	Island Lake Spring Mill Pond
September	13-14th Astronomy at the Beach	7:46pm	Island Lake Kent Lake Beach
October	5th Int'l Astronomy Day	7:08pm	Mayberry State Park
November	11th Mercury Transit	7:20am-1pm	Lincoln Park Observatory

## Upcoming Club Meeting Topics & Speakers

Meeting	Speaker	Topic
August 22nd	Dr. Karen Collins	TESS Mission
September 26th	Jim Shedlowsky	The Evolution of Giant Telescopes
October 24th	Jon Blum	Astronomy Tourism

## August Talk Details

### Transiting Exoplanet Survey Satellite (TESS): Mission, Goals, Status, and Results so Far

*Dr. Karen Collins*

*Harvard-Smithsonian Center for Astrophysics & TESS Mission Team*

The Transiting Exoplanet Survey Satellite (TESS) launched on April 18, 2018 atop a Falcon 9 rocket. It started science operations on July 25, 2018 and is surveying most of the sky over a period of two years, divided into 26 sectors that are each observed for ~27 days. The main mission objective is to search the brightest stars near Earth for transiting exoplanets. The primary science goal is to measure the masses of 50 planets having radius less than four times that of Earth. The TESS data are already producing 50-100 quality transiting planet candidates (PCs) per month, and they are

*Cont'd on page 7*

## 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](mailto:equipment@fordastronomyclub.com)

Item	Held by	Item	Held by
<b>Telescopes</b>		<b>Display Items</b>	
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
<b>Presentation Tools</b>		Banner - Large (32" x 16')	George Korody
Projector (older)	Jim Frisbie	Tri-Fold Presentation Boards	George Korody
Projector (newer)	Gordon Hansen	<b>Other</b>	
Projection Screen 8'	John McGill	Canopy (10' x 10')	Liam Finn
Projection Screen 6'	Liam Finn	Pop Cooler	Nickai Gulley
Bullhorn	George Korody	TA Sky Quality Meter	Liam Finn
Speaker System w/Wireless Mic	Liam Finn	<b>Demonstration Tools</b>	
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
<b>Imaging Cameras</b>	
C2 Meade Deep Sky Imager Pro III w/Autostar Suite	Gordon Hansen
C6 Canon 60Da Astrophotography DSLR and accessories	Tim Dey
<b>Other Imaging Equipment</b>	
CA1 Rigel Systems Spectrascopes	Gordon Hansen
CA2 Celestron 1.25" to T-Adapter (male) #93625	Tim Dey
C7 Canon EOS EF 70-200mm f/1.4L IS USM lens & tripod mounting ring (for Canon EOS cameras)	Gordon Hansen
Rokinon 8mm Wide-Angle Lens (Canon EOS Mount)	John McGill
<b>Special Event Items - Not available for Loan Out</b>	
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

### *August Talk Details (continued from page 5)*

expected to produce thousands over the two-year nominal mission. TESS has large 21 arcsec pixels and photometric apertures with radius  $\sim 1$  arcmin, which are often contaminated with multiple stars. Therefore, large ground-based photometric, spectroscopic, and high-resolution imaging TESS Follow-up Observing program (TFOP) teams are required to reject false positives and confirm and characterize bona fide planets. An overview of the TESS mission and an introduction to TFOP will be presented, followed by a mission status update. A description of the publicly available TESS data products will be provided, along with a summary of the most interesting TESS discoveries so far. Finally, we will look ahead to a possible extended TESS mission, and other upcoming missions.

### **Bio:**

Karen Collins is an astronomer at the Harvard-Smithsonian Center for Astrophysics and is currently

part of the Transiting Exoplanet Survey Satellite (TESS) mission team. Her roles include leading the global TESS Follow-up Observing Program (TFOP) time-series photometry team and analysis of TESS light curves as part of the TESS Objects of Interest (TOI) team to produce quality planet candidates for follow-up confirmation and characterization. Collins is also a member of the KELT transit survey science team and is the lead developer of AstroImageJ (AIJ), a graphical user interface-based astronomical image data reduction and precision photometry open source program. She obtained her PhD in Physics and Astronomy at the University of Louisville. Astronomy is a second career for Collins, following an engineering career in the telecommunications industry. She also holds a MSEE and BSEE from the Georgia Institute of Technology.

*Secretary's Report (Cont'd from page 4)***Main Speaker:**

Mike O'Dowd, from the Warren Astronomical Society, gave a presentation on "Simulating the First Moon Landing." Throughout

history, humans have always sought to go higher, literally. Mike detailed the evolution of rockets through technological advances in both the USA and the USSR programs. Rockets were used not only to propel bombs and missiles, but also for the purpose of space missions. Finally, on July 16, 1969, the historic Apollo 11 mission was launched on a Saturn V rocket. Mike finished his presentation with a demonstration of a user-controlled simulation video of the landing of the lunar module. Questions and answers followed.

**August 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.)

Our board meeting was held on August 1, 2019. All board members were present, as well as ten additional members. Our August general meeting speaker, Dr. Karen Collins, will be discussing the TESS Mission (Transiting Exoplanet Survey Satellite).

Mike Bruno reported no significant change in our treasury, still holding at around \$10,000. Four new members joined at our last meeting.

We had discussion about our club picnic on August 10. We need to send out invitations to our fellow astronomy clubs, as they are welcome to attend, also. PlaneWave Instruments is planning to attend and bring one of their observatory-class telescopes, with three-inch eyepieces! Also, regarding PlaneWave, they are on track with their public outreach/star party event planned for September 21, at their headquarters in Adrian. Members of our club are invited to bring telescopes.

Our Search Committee has two candidates so far who have agreed to run for the two open positions, president and treasurer, that we will have in 2020. Anyone else who is interested should contact Jim Frisbie, Dennis Salliotte, or Gordon Hansen.

Astronomy at the Beach is approaching fast, and a lot of help is needed to ensure a successful event. They are having a meeting via telephone on August 8, and Sandra Macika has asked all interested persons to please participate with ideas and suggestions or if you are willing to help in any way. Sandra advised that there are lots and lots of little jobs that need volunteers.

During the month of September, there will be astronomy events every weekend in Michigan. See our Calendar of Events for details.

**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](mailto:starstuff@fordastronomyclub.com)