



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

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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

Another month of quarantine is almost over and hopefully the end is near and we will all be able to get out among our friends and families, especially as the weather is improving as we head towards Summer.

Unfortunately though the quarantine has impacted Meteors and S'mores in August and Island Lake has had to cancel the event. The department that manages the parks has put a cap of 250 participants for park events in the summer of 2020. But! That will not stop our technical wizards who are working on an alternative solution and building an all sky camera. Once done it can be used to look for meteors and it is planned to be setup to stream live! We will keep you posted as we get closer to that date.

FAAC Observer's Award Announcement

I would like to share with everyone our long awaited observing program (details posted in [groups.io](https://groups.io/g/FordAstronomyClub/files/FAAC%20Observers%20Award) see: <https://groups.io/g/FordAstronomyClub/files/FAAC%20Observers%20Award>). Observing the night sky is more times than not a solitary pursuit for many of us, so why not have some fun and learn (or re-learn) a few things about the night sky or test your existing knowledge. This program has been developed for everyone, whether you are a beginner to observing or a more seasoned member of our Club.

There are Five categories: Naked Eye, Binocular & Telescopic Observing, along with General Knowledge and Club Participation / Outreach. You will be exposed to the Moon, Constellations and the Stars along with the Planets, Meteors and the deep-sky Messier objects.

You can take as long as you need to complete the observing but it begins now, not with your historical observations. You are allowed to use any equipment or method, work on your own or with a friend or two. Fulfilling

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

the requirements is based on the honor system, this is meant to be a fun and hopefully add to your enjoyment of observing the night sky. I hope everyone gives it a try and shares their experiences with all of us.

Depending on the participation we could add additional levels to the program too. Let me know if you have any questions or need any clarification by emailing info@fordastronomyclub.com. Clear skies and happy observing.

Secretary's Report

by Cheri Grissom

FAAC General Meeting – April 23, 2020

Our April general meeting was again held by videoconference. Meeting called to order by President Mike Bruno at 7:06 p.m. All board members present. A total of approximately 26 people were listed as being in attendance, and over the course of the meeting, a few others joined.

Member Observing Experiences:

Several members mentioned observing Venus, which is putting on a particularly bright and beautiful display this month. Venus is a crescent right now, and it was mentioned that seeing this crescent is often easier to do in the daytime. Members are observing with telescopes, binoculars, and naked eye. A couple members reported having some good imaging sessions. The suggestion was made to make use of Groups.io to share observing experiences, ideas, suggestions, etc. It's a way we can try to stay connected in lieu of in-person observing events.

What's Up:

Gordon Hansen did our "What's Up" segment. The Eta Aquariid meteor shower will be peaking May 5. Gordon discussed the constellation Ursa Major and the many names it has been given by different cultures throughout history. The Big Dipper, of course, is an asterism within that constellation. Gordon is going to try to talk about a different asterism each month. Comet ATLAS has, unfortunately, disintegrated into pieces. Comet PANSTARRS is dimming.

Projects, Committees, & Events:

Everything is currently on hold with no plans for rescheduling at this time, but the membership will be kept in the loop as things change.

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

We discussed the new club observing program that is in the works. More information will be shared through Groups.io.

Our guest speaker was Jenny Pon, who gave a nice presentation on "Our Place in Space." We took a virtual trip from Earth to the end of the universe.

Meeting was adjourned at 9:12 p.m.

February 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.)

Once again, our board meeting was held via video-conference. As always, board meetings are open to all FAAC members. Each month, an invitation is sent out through Groups.io with instructions on how to participate. This month, in addition to our four board members, we had eleven additional members present.

Gordon Hansen will be doing "What's Up" at our upcoming general meeting. In addition to the usual upcoming astronomical attractions and events, Gordon will be featuring a particular asterism each month.

We have a number of members who have not yet renewed their memberships for 2020. Doug Bauer will send out one more communication to those members.

GLAAC will be making a final decision sometime in August as to whether AATB will be held this year. On the FAAC annual picnic, we will wait and see what happens. We can always put it together pretty quickly at the last minute if the situation turns favorable.

We had a discussion about our "Astronomy for Everyone" presentations, which can be found on YouTube.

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.

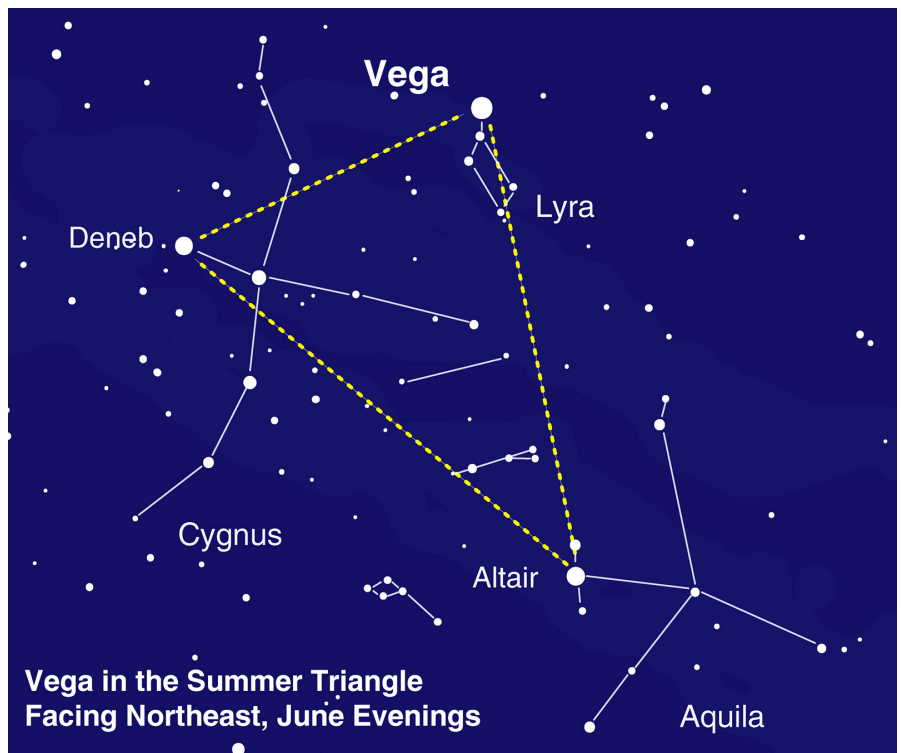
Call (313) 444-5850 to learn when the observatory is opening (or request an opening).

Summer Triangle Corner: Vega

by David Prosper & Vivian White

If you live in the Northern Hemisphere and look up during June evenings, you'll see the brilliant star Vega shining overhead. Did you know that Vega is one of the most studied stars in our skies? As one of the brightest summer stars, Vega has fascinated astronomers for thousands of years.

Vega is the brightest star in the small Greek constellation of Lyra, the harp. It's also one of the three points of the large "Summer Triangle" asterism, making Vega one of the easiest stars to find for novice



Caption: Can you spot Vega? You may need to look straight up to find it, especially if observing after midnight.

stargazers. Ancient humans from 14,000 years ago likely knew Vega for another reason: it was the Earth's northern pole star! Compare Vega's current position with that of the current north star, Polaris, and you can see how much the direction of Earth's axis changes over thousands of years. This slow movement of axial rotation is called precession, and in 12,000 years Vega will return to the northern pole star position. Bright Vega has been observed closely since the beginning of modern astronomy

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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
May	30th	9:02pm EDT	Island Lake
June	27th	9:13pm EDT	Island Lake
July	25th	8:59pm EDT	Island Lake
August	8th Club Picnic Meteors & S'mores	8:43pm EDT	Island Lake
August	22nd	8:22pm EDT	Island Lake
September	25th & 26th Astronomy at the Beach	7:24pm EDT 7:22pm EDT	Island Lake
October	24th	6:36pm EDT	Maybury State Park

Upcoming Club Meeting Topics & Speakers

Meeting	Speaker	Topic
May 28th	Don Klaser	Antikythera Mechanism
June 25th	Jim Shedklowsky	The LSST: Faster, Wider, Deeper

April Talk Details

Antikythera Mechanism

Don Klaser
FAAC Club Member

We will examine possibly the worlds' first computer. Although an analog mechanism, it was able to make a number of calculations, including the positions of the 5 planets, the rising of prominent stars and the lunar orbital period of 27.321 days. We'll look at its construction and see if it supports the geocentric or heliocentric model.

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Vega (Cont'd from page 4)

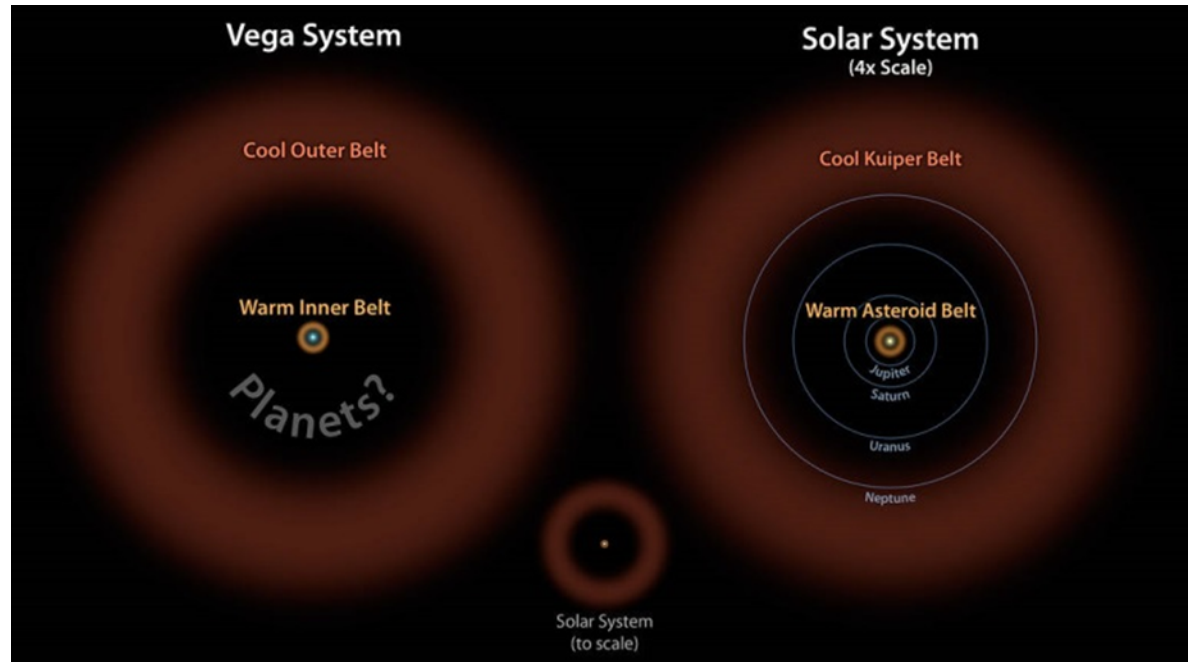
and even helped to set the standard for the current magnitude scale used to categorize the brightness of stars. Polaris and Vega have something else in common, besides being once and future pole stars: their brightness varies over time, making them variable stars.

Variable stars' light can change for many different reasons. Dust, smaller stars, or even planets may block the light we see from the star. Or the star itself might be unstable with active sunspots, expansions, or eruptions changing its brightness. Most stars are so far away that we only record the change in light, and can't see their surface.

NASA's TESS

satellite has ultra-sensitive light sensors primed to look for the tiny dimming of starlight caused by transits of extrasolar planets. Their sensitivity also allowed TESS to observe much smaller pulsations in a certain type of variable star's light than previously observed. These observations of Delta Scuti variable stars will help astronomers model their complex interiors and make sense of their distinct, seemingly chaotic, pulsations. This is a major contribution towards the field of

astroseismology: the study of stellar interiors via observations of how sound waves “sing” as they travel through stars. The findings may help settle the debate over what kind of variable star Vega is. Find more details on this research, including a sonification demo that lets you “hear” the heartbeat of one of these stars, at: bit.ly/DeltaScutiTESS



Vega possesses two debris fields, similar to our own solar system's asteroid and Kuiper belts. Astronomers continue to hunt for planets orbiting Vega, but as of May 2020 none have been confirmed. More info: bit.ly/VegaSystem Credit: NASA/JPL-Caltech

Interested in learning more about variable stars? Want to observe their changing brightness? Check out the website for the American Association of Variable Star Observers (AAVSO) at aavso.org. You can also find the latest news about Vega and other fascinating stars at nasa.gov.

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 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	Sandra Macika
TAK1 Night Vision Image Intensifier for telescopes (2" barrel size)	George Korody

Meeting Topics & Speakers (cont'd from page 5)

Bio:

Don is a 25-year member and past President of our club and has been interested in both the sky and history for more years than he cares to count. He is employed at both the Michigan Science Center and Cranbrook Institute of Science where he gives presentations in the Planetariums.

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