



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:	Arica Flores
Vice President:	Sean Pickard
Secretary:	Cheri Grissom
Treasurer:	Joseph Bostic

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 Arica Flores, President

Astronomy at the Beach

This year's event will take place at Maybury State Park (49601 8 Mile) due to construction at Island Lake Recreation Area. Dates are September 20th and 21st.

Our club is one of the founders of this event, which has taken place for 28 years. This is a 2-day event, held on a Friday and Saturday in September, hosted by the Great Lakes Association of Astronomy Clubs (GLAAC). Astronomy at the Beach is more than just a star party. In one of the two large tents are the presentations. These demonstrations and presentations take place throughout both evenings. In the other large tent are the club tables and small presentation tables. The tables are a source of club information and enrichment.

If you have not ever been to this event, I highly recommend it. I want to thank all the people who have so far signed up to help at the club table and/or with the club's 20" Dob telescope. We have many openings still and need volunteers if we want to be able to represent our club well at AATB. Time slots are for just two hours, so that leaves a lot of time to enjoy the rest of the event. A great big thanks to all of you who bring your telescopes out every year for the public to look through. We will be having the scavenger hunt for the kids again this year, so bring your pens to sign off. Extras will be at the club table if you need them. GLAAC will have the chalk boards again; however, the astronomers will need to pick them up and put them in the ground themselves.

If Astronomy at the beach is something you feel strongly about and would like it to continue as the wonderful quality event it has been for many years, GLAAC can use your help. This event takes a whole year to plan and needs plenty of volunteers. Your commitment to this

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

organization can work within your personal availability. GLAAC meetings are once a month online, so no driving. To volunteer, you would not need to be at every meeting, but maybe you have a skill that GLAAC could benefit from. If you would like to learn more about GLAAC see Tim Campbell, Liam Finn, or myself.

Secretary's Report

by Cheri Grissom, Secretary

FAAC General Meeting – July 25, 2024

Meeting called to order at 7:04 p.m. by President Arica Flores. All board members present, a total of 32 attendees all together. Members and guests introduced themselves.

Member Observing Reports

Sean gave a report on our most recent Beginners' Night at Spring Mill Pond. That evening, the moon occulted Spica, with a little bit of cloud interference. We also observed M13, M27, M51, M57, and M94, among other targets. We had a total of 14 different telescopes there, with about twice that number of people.

Gary Gibson recently attended an event for the Girl Scouts put on at Maybury State Park. Sandra Macika, John McGill, and Jim Barnes were also there. Skies were not great, so they mostly looked at the moon, but when you've never seen the moon before in a telescope, it can make for a very enjoyable experience!

Jeff Anderson had a question about photographing T Coronae Borealis, which prompted a discussion with input from our more experienced imagers.

Kristie Wittington was on vacation in Florida recently, where she went kayaking at night and was able to observe bioluminescence in the ocean. It was quite a beautiful experience!

Liam and Tim C. will be at the U of M Dearborn observatory tomorrow night, if anyone else is interested in joining them, from 10 p.m. to midnight. Do not bring telescopes for this event. The university provides the equipment.

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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

September Night Sky Notes: Marvelous Moons

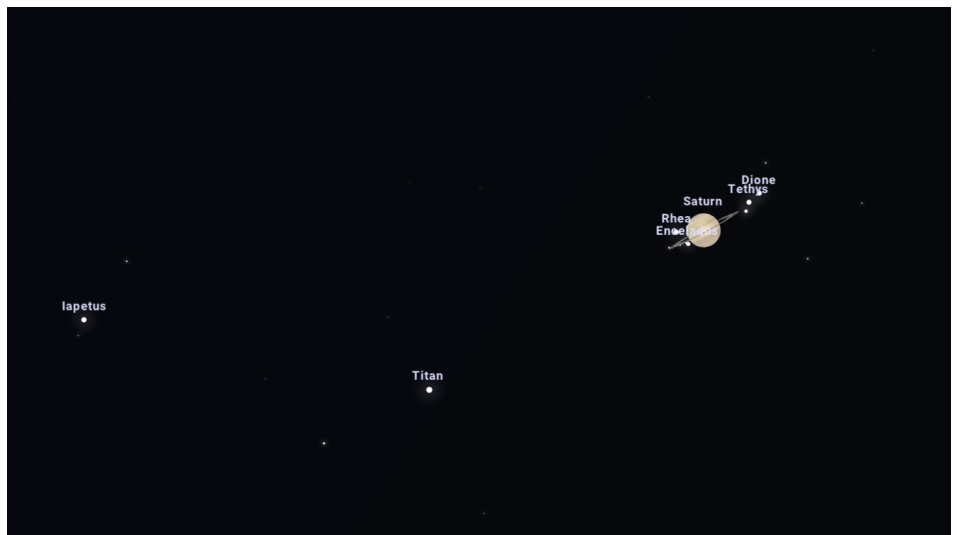
by Kat Troche



September brings the gas giants Jupiter and Saturn back into view, along with their satellites. And while we organize celebrations to observe our own Moon this month, be sure to grab a telescope or binoculars to see other moons within our Solar System! We recommend observing these moons (and planets!) when they are at their highest in the night sky, to get the best possible unobstructed views.

The More the Merrier

As of September 2024, the ringed planet Saturn has 146 identified moons in its orbit. These celestial bodies range in size; the smallest being a few hundred feet across, to Titan, the second largest moon in our solar system.



The Saturnian system along with various moons around the planet Saturn: Iapetus, Titan, Enceladus, Rhea, Tethys, and Dione. Credit: Stellarium Web

Even at nearly 900 million miles away, Titan can be easily spotted next to Saturn with a 4-inch telescope, under urban and suburban skies, due to its sheer size. With an atmosphere of mostly nitrogen with traces of hydrogen and methane, Titan was briefly explored in 2005 with the Huygens probe as part of the Cassini-Huygens mission, providing more information about the surface of Titan. NASA's mission Dragonfly is set to explore the surface of Titan in the 2030s.

Saturn's moon Enceladus was also explored by the Cassini mission, revealing plumes of ice that erupt from below the surface, adding to the brilliance of Saturn's rings. Much like our own Moon, Enceladus remains

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.

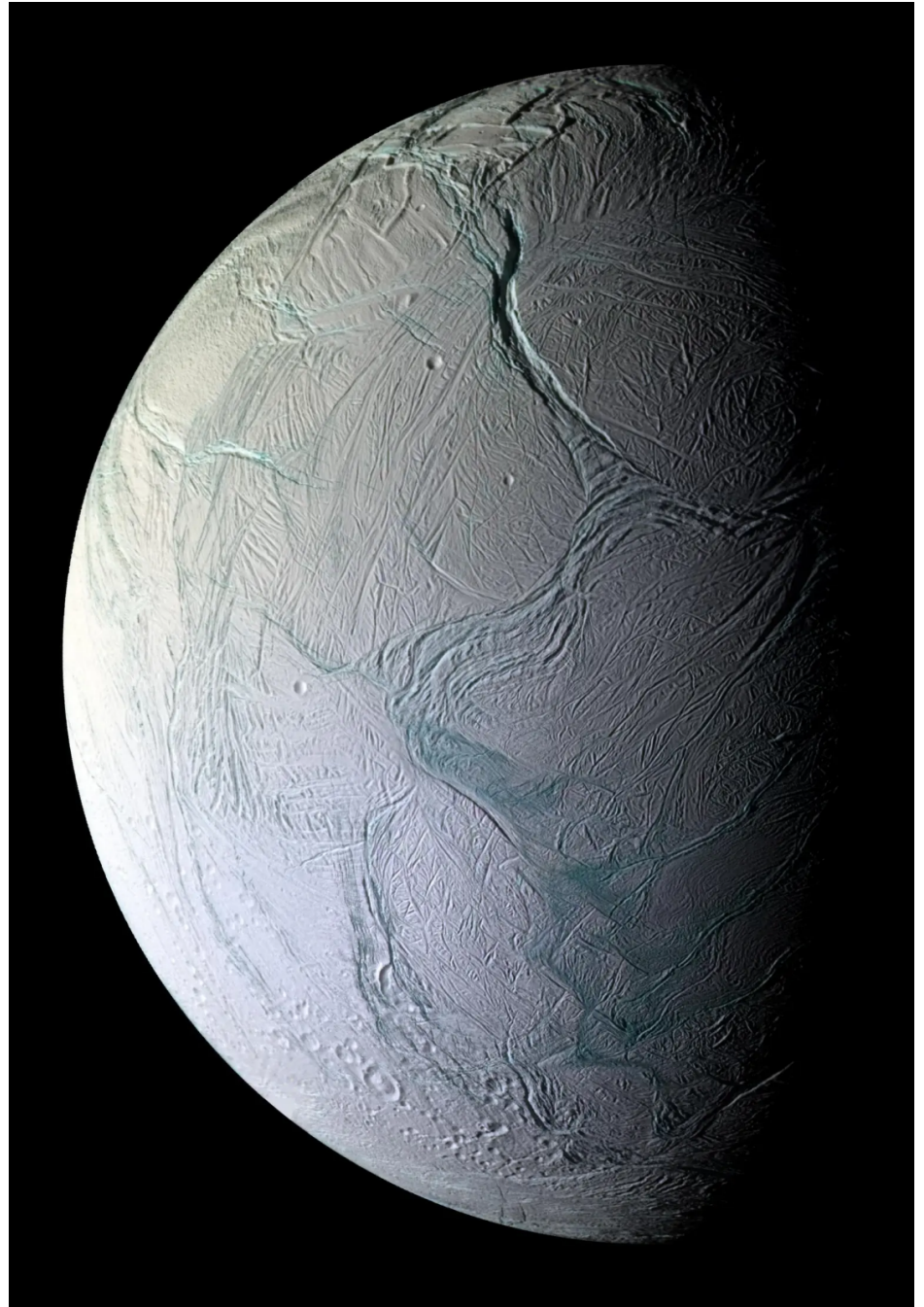
The observatory is adjacent to the athletic field situated between the Lincoln Park Middle School and High School buildings near

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).

tidally locked with Saturn, presenting the same side towards its host planet at all times.



This mosaic of Saturn's moon Enceladus was created with images captured by NASA's Cassini spacecraft on Oct. 9, 2008, after the spacecraft came within about 16 miles (25 kilometers) of the surface of Enceladus. Credit: NASA/JPL/Space Science Institute

The Galilean Gang

The King of the Planets might not have the most moons, but four of Jupiter's 95 moons are definitely the easiest to see with a small pair of binoculars or a small telescope because they form a clear line. The Galilean

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 the third Wednesday of each month at 7:00pm. 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

Discord

<https://discord.gg/RH6rhAPWb8>

Scheduled Club Events

Month	Date	Sunset	Location
September	20 & 21st	7:32pm	Maybury State Park Astronomy at the Beach

Hammond Planetarium

Date	Time	Topic
September 13th	7:30pm	The Wonderful Webb (James Webb Space Telescope Show)
September 18th	7:30pm	Fall Seasonal Planetarium Show
October 11th	7:30pm	Fall Seasonal Planetarium Show
November 8th	7:30pm	Fall Seasonal Planetarium Show
November 13th	7:30pm	Fall Seasonal Planetarium Show
December 13th	7:30pm	Winter Solstice Show

Club Meeting Topics & Speakers

Meeting	Speaker	Topic
August 22nd	Club Members	Open Forum
September 26th	Jonathan Kade	Alternatives to the Big Bang
October 24th	Tim Campbell	The Wonderful Webb
December 5th	Club Members	Club Social (Combined Nov/Dec)

August Talk Details

Open Forum

Club Members

Description:

At the request of membership, club meetings will occasionally not have a featured speaker or talk. This provides time for club members to ask questions and discuss topics of interest as well as greater opportunity to socialize.

The August meeting will not have a featured speaker.

Tim Campbell will give a short talk (not a featured talk) on Astrospheric and how to take advantage of its advanced astronomy forecasts.

*Secretary's Report (Con't from Page 2)**What's Up in the Night Sky*

Gordon went through our events calendar. Don't forget our club picnic and observing event on August 10. It has been changed to Maybury State Park, for this year only, due to construction at Island Lake.

The Perseid Meteor Shower will be peaking August 11 and 12. Comet C/2023 A3 is magnitude 10 right now, but should be near magnitude 5 by fall. Unfortunately, it will be in the morning sky and probably hard to see. Comet 13P/Olbers, a periodic comet, is currently about magnitude 6. All of the planets can be seen in the skies right now, depending on what time you want to observe. Some are better in the morning, others late at night. On August 1, Saturn will be transited by its moon Titan. Also, the rings of Saturn are gradually appearing thinner to us as earth passes through Saturn's ring plane. This happens approximately every 15 years from our vantage point. The peak will be March of 2025, at which point they will start to gradually appear larger again. On August 14, there will be a conjunction of Jupiter and Mars, though it occurs in the early morning and may be difficult to see with the sky brightening.

Deep Sky Objects: Looking to the south, the red giant Antares, in Scorpius, is a beautiful sight. In the same vicinity are several Messier objects, including M4. Not too far away is the famous M16, the Eagle Nebula, home of the Pillars of Creation. To the east of Scorpius is Sagittarius, which is rich in Messier objects. When we are looking toward Sagittarius, we are looking in the direction of the center of our galaxy.

Club Business

We had very brief secretary, treasurer, and website reports. All are up to date. A reminder from Arica that all members are welcome to attend our board meetings, which are held online via Webex. Any member who would like to receive a copy of our board

meeting minutes is welcome to; just contact secretary@fordastronomyclub.com.

AATB: Gordon Hansen gave a committee report. The event is being held at Maybury State Park this year, due to construction at Island Lake. Typically, we were getting around 3,000 visitors over the two nights. We aren't sure what attendance will be like at the new location, but we are certainly hoping to see a lot of people! There will be plenty of telescopes out on the field, tables from various astronomy clubs under the tent, astronomy-themed talks, etc. Our club table is looking for volunteers to staff it on Friday and Saturday evenings. We will be providing a sign-up sheet both online and in person at our our meetings between now and then. You do not have to be an experienced astronomer to help staff the table! All club members are welcome to volunteer. There will be others to help you out if you're new to this. In addition to staffing the table under the tent, we are also looking for volunteers to help Ed Halash with operating the club's 20" Dobsonian telescope out on the field. Ed will do most of the hands-on telescope work but he's going to need help with managing the line of visitors, etc.

Arica reminded us that Astronomy at the Beach is put on each year by the Great Lakes Association of Astronomy Clubs (GLAAC), a consortium of astronomy and science-related clubs and organizations in Michigan. This is an all-volunteer organization, and in order to make sure they can bring this event to the public each year, help is needed! Please consider becoming a part of GLAAC. For more information, contact president@fordastronomyclub.com.

Reminder that our annual Club Picnic will be August 10, also at Maybury State Park this year only. We will combine this with our monthly observing night. The picnic will start at 4:00. Please bring chairs if you have them, tables if possible. We also need a large

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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, 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	Jerry Jamula	Astronomy Event Signs 18x24" (x8)	Liam Finn
TK6 8" Orion XT8i Dobsonian	Dan Smith	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
TKn Celestron 6" Refractor & AGT Mount		Banner - Large (32" x 16')	George Korody
TKn Meade 8" f/5 Newtonian & LX-70 Mount		Tri-Fold Presentation Boards	George Korody
Zhumell 20x80 Binoculars		Other	
Presentation Tools		Canopy (10' x 10')	Liam Finn
Projector (older)	Jim Frisbie	Pop Cooler	Sean Pickard
Projector (newer)	Gordon Hansen	TA Sky Quality Meter	Liam Finn
Projection Screen 8'	John McGill	Demonstration Tools	
Projection Screen 6'	Liam Finn	Weigh on Planets Scale	Liam Finn
Bullhorn	Liam Finn	Lunar Phase Kit	Bob MacFarland
Speaker System w/Wireless Mic	Liam Finn	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
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 Macica
TAK1 Night Vision Image Intensifier for telescopes (2" barrel size)	Tim Dey
Lunt 100mm H-alpha Solar Telescope with Celestron CG-5 equatorial mount	Tim Campbell

Secretary's Report (Con't from Page 6)

grill, if someone can volunteer to bring one. And of course, we invite everyone to bring a dish to pass.

The Wayne Downtown Developmental Authority has reached out to our club about putting on an observing event. Arica is talking with them to get more information.

Gary Gibson mentioned that he would like to be part of opening up the HJRO again soon. Is August 24 a possibility? We will discuss this in more detail at our upcoming board meeting.

Guest Speaker

Sandra introduced our guest speaker, Andrew Macica, Imaging Science Engineer, Lick Observatory Volunteer Telescope Operator. While the observatory has ten telescopes all together, Andy's talk this evening centered on three of them, the Great Lick 36" refractor, the Crossley 35" reflector, and the Shane 3-meter telescope.

Andy gave us the historical background of the observatory, which was constructed between 1876 and 1887, with a bequest from James Lick. Shortly after its completion, the observatory became the property of the University of California. It is located atop Mt. Hamilton, east of San Jose, CA.

Andy provided photographs and narration explaining the history and progress of the observatory, specifically the three telescopes mentioned, their significant discoveries, and the ways in which they have been used over the decades.

Lick Observatory is open to the public and would be well worth a visit for any of us amateur astronomers!

A question-and-answer period followed. Meeting adjourned at 9:18 p.m.

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Marvelous Moons (Con't from Page 4)

Moons – Ganymede, Callisto, Io, and Europa – were first discovered in 1610 and they continue to amaze stargazers across the globe.

- **Ganymede:** largest moon in our solar system, and larger than the planet Mercury, Ganymede has its own magnetic field and a possible saltwater ocean beneath the surface.
- **Callisto:** this heavily cratered moon is the third largest in our solar system. Although Callisto is the furthest away of the Galilean moons, it only takes 17 days to complete an orbit around Jupiter.
- **Io:** the closest moon and third largest in this system, Io is an extremely active world, due to the push and pull of Jupiter's gravity. The volcanic activity of this rocky world is so intense that it can be seen from some of the largest telescopes here on Earth.



- **Europa:** Jupiter's smallest moon also happens to be the strongest candidate for a liquid ocean beneath the surface. NASA's [Europa Clipper](#) is set to launch October 2024 and will determine if this moon has conditions suitable to support life. Want to learn more? Rewatch the July 2023 Night Sky Network webinar about Europa Clipper [here](#).

Secretary's Report (Con't from Page 8)

August 1, 2024 Board Meeting Summary

(Videoconference meeting.) All board members present, along with seven other members. Our August General Meeting will be an open forum/social hour type of meeting. Sean will bring something special for our food table. We had discussion about what format the meeting should take. There was interest in doing a planetarium show, but it was decided to save this for a later date. The upcoming meeting will feature Tim Campbell giving a presentation on how to use various astronomy software apps, followed, if there's time,

with an Ask the Astronomer question-and-answer session.

Brief secretary, treasurer, social media, and equipment reports were given.

Membership/Club Picnic: Doug Bauer reported we recently had a new member join. The club picnic is coming up fast, August 10. Tim Campbell has acquired a large griddle/grill, which he will loan to the club for the picnic. It is large enough that we won't need any others. Gordon Hansen will provide a propane tank for it that day.

AATB Committee: Gordon gave us an update on the tablecloths the committee is looking into. We had

some discussion about size, color, design, and price. These will be able to be used for other club events besides just AATB.

Kristie Whittington is working on the redesign of our tri-fold brochures. Things are coming along fine, and she showed us some examples. Discussion followed with input from those present.

Joe Bostic made a motion, seconded by Cheri Grissom, to pre-approve a total expenditure of \$600 for the tablecloths and tri-fold brochures. Passed unanimously.

Outreach: We talked about plans for the second outreach committee, which is currently headed by Gary Gibson, with Arica helping. Gary proposed doing an event at HJRO on August 24. A few details

would need to be worked out, but if this is a go, Arica will get notifications out to the membership. Still thinking of what to call this second outreach committee. Gary suggested City Stargazing, which seems to fit the type of events this committee will be promoting.

The club's Coronado PST needs repair. Kristie is the current borrower and has discovered the problem, which involves the ITF filter. Kristie presented three different options for repair, and after discussion, a motion was made by Arica, seconded by Joe, to approve an expenditure of up to \$100 for Kristie to proceed with obtaining the needed part for repair.