

Star Stuff

Ford Amateur Astronomy Club Newsletter

August 2017

Volume 27, Number 8

The 2017 Solar Eclipse Across America By Teagan Wall

On August 21st, the sky will darken, the temperature will drop and all fifty United States will be able to see the Moon pass—at least partially—in front of the Sun. It's a solar eclipse!

A solar eclipse happens when the Moon passes between the Sun and Earth, casting its shadow on Earth. Sometimes the Moon only covers up part of the Sun. That is called a partial solar eclipse. When the Moon covers up the Sun completely, it's called a total solar eclipse. As our planet rotates, the Moon's shadow moves across Earth's surface. The path of the inner part of this shadow, where the Moon totally covers the Sun, is called the path of totality.

The path of totality on August 21 stretches from Oregon to South Carolina. If you happen to be in that path, you will be able to experience a total solar eclipse! If you're in any of the 50 United States during this time, you can see a partial solar eclipse.

No matter where you'll be for the eclipse, remember that SAFETY is very important. Never look at the Sun when any part of it is exposed, like during a partial eclipse! It can hurt your eyes very badly. If you want to view the eclipse, you can buy special eclipse glasses. Go the <u>NASA 2017 Eclipse Safety</u> website to learn more about what glasses to buy.

If you are in the path of the total eclipse, you may look directly at the eclipse only when the Moon has completely covered the Sun. This is called totality, and it lasts a very short time. You must be sure to put your eclipse glasses back on before the Sun peeks out from behind the Moon.

Presidents Article By Liam Finn

Dy Liain Finn

Meteors & S'mores

On August 12th we held the Meteors & Smores event at Island Lake in conjunction with the park to observe the Perseids . This is the third year of this event and it has grown year on year. This year was no exception. Starting with questionable weather earlier in the day which included regular rain showers the skies started to clear after 6pm and by 8pm the skies had cleared.

On a normal sunny day, the beach at Spring Mill Pond is somewhat busy but as 8PM came and went, the crowds started to build and build and build. The parking lot filled, people parking along the road, by the beach. Then the field by the entrance became a parking lot and overflowed. The road through the park was next to build up lines of cars parked along the roads edge. Finally, the rangers started redirecting the public to other areas in the park as the beach was crowded.

The few telescopes we had were busy, queues 10 or more deep lined up to see Jupiter, then Saturn and as the darkness closed in, the Hercules cluster, ring nebula, dumbbell nebula and Albireo became the targets to the awe of those who came to see the meteor shower.

While the telescope observing was in full swing so the meteors started. While the count of meteors was not as some, not to be named, social media sources advertised, the few that were visible were impressive to the oohh's and aahh's of the crowds.

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Presidents Article Continued from page 1

This continued until 12:30 when the crowds started to thin and by 1am the members of the public had gone and the few astronomers were left behind.

By 2am we packed up. This was one of the most successful events to date. Based on the feedback from the park management, they estimate 2000+ attendees.

If this is any sign of how this event will grow, I'm really looking forward to next year's Meteors & Smores.

Next Club Meeting

Our next clubs meeting on August 24th will not follow our usual club agenda. It will be our members ability to decompress and share our eclipse experiences. Not everyone will be back from their travels but those of us that are can meet and share our experiences.

Beginners Night

Our next Beginners night is on August 26th. Taking advantage of the warm summer nights should be taken advantage of for some observing with your fellow club members as these warm nights won't be here much longer. I look forward to seeing you all at Island Lake on August 26th

The 2017 Solar Eclipse Across America Continued from page 1

You won't be the only one watching this event! NASA scientists will use this eclipse to study our Sun. During a total solar eclipse, we can see the Sun's atmosphere, called the corona. Usually the Sun is so bright that we can't see the corona. However, when the Moon blocks out most of the Sun's light, we can get a glimpse of the corona.

The surface of the Sun is about 10,000 degrees Fahrenheit, but the corona is much hotter. It's about 2 million degrees Fahrenheit! The eclipse gives NASA researchers the chance to learn more about why the corona is so hot. In fact, while the eclipse will only last about two to three minutes in one place, scientists have found a way to have more time to study it.

NASA will use two research jets to chase the eclipse as it crosses the country. The jets will fly very high, and spend seven minutes in the shadow of the Moon. Researchers are using jets to help look for small explosions on the Sun, called nanoflares. These nanoflares may help to explain the corona's extreme heat.

Whether you're watching with eclipse glasses from the ground, or in a NASA jet from the sky, the 2017 eclipse should be quite a show! It's a fun reminder of our place in the solar system, and how much we still have to learn.

To learn about what eclipse glasses to buy and other eclipse safety guidelines, visit: <u>https://eclipse2017.nasa.gov/safety</u>

To learn more about solar eclipses, check out this NASA Space Place video: https://spaceplace.nasa.gov/eclipse-snap

2017 Beginner's Nights Calendar

| Month | 1st Quarter | Beginner's Night | Sunset | Location | | |
|-----------|---|-------------------------|---------------|---------------------------|--|--|
| April | Monday, April 3rd | Saturday, April 1st | 7:58pm | Island Lake | | |
| | | | | | | |
| April/May | Tuesday, May 2nd | Saturday, April 29th | 8:30pm | Island Lake | | |
| | | ^^Int'l Astronomy Day^^ | | | | |
| | | | | | | |
| June | Thursday, June 1st | Saturday, June 3rd | 9:04pm | Island Lake | | |
| July | Friday, June 30th | Saturday, July 1st | 9:12pm | Island Lake | | |
| July II | Sunday, July 30th | Saturday, July 22th | 8:54pm | Island Lake (Club Picnic) | | |
| August | Tuesday, August 29th | Saturday, August 26th | 8:15pm | Island Lake | | |
| | | | | | | |
| | **Solar Eclipse is on 21st** - Head for totality! | | | | | |
| September | Friday, September 9th | Fri-Sat Sept 29, 30 | 7:17pm 7:14pm | (AATB / Island Lake) | | |
| October | Sunday, October 27th | Saturday, October 28th | 6:30pm | Maybury State Park | | |

Treasurers Report

July 2017 By Mike Bruno

Ford Amateur Astronomy Club Balance Sheet 7/24/2017

ASSETS **Checking / Savings** Checking \$ 322.99 FAAC Savings General 2,806.00 2,376.87 Equipment Scholarship 158.26 **Total FAAC Savings** 5,341.13 **Petty Cash** 79.75 Total CD's 3,193.30 **Total Checking / Savings** 8,937.17 TOTAL ASSETS \$ 8,937.17 TOTAL EQUITY \$ 8,937.17 INCOME Membership Dues \$ 1,375.00 AL Dues \$ 37.50 Equipment Fund 75.00 Scholarship Fund 116.00 181.00 Merchandise 2,591.63 Club Events Miscellaneous 100.00 Interest 4.98 Total Income 4,481.11 **EXPENSES** 193.05 Merchandise Scholarship 300.00 **Club Events** 3,036.19 Office expense 158.52 **Total Expenses** 3,687.76 **NET INCOME** \$ 793.35

FAAC Equipment Holders Report By Dennis Salliotte

FAAC Equipment Report 8/11/17

| Item | <u>Currently Held By:</u> | Date Last Verified |
|-------------------------------------|----------------------------------|---------------------------|
| <u>Telescopes</u> | | |
| 4" Dobsonian (Harold's donation) | George Korody | 1/20/17 |
| | | |
| Presentation Tools | | |
| Projector (older) | Jim Frisbie | 1/15/17 |
| Projection Screen 8' | Bob MacFarland | 7/18/17 |
| Speaker System w/wireless mic | Bob MacFarland | 7/18/17 |
| Bullhorn | George Korody | 1/20/17 |
| DVD Player | Jim Frisbie | 1/15/17 |
| Projection Screen 6' | Hayden Barrett | 8/4/17 |
| Projector, ViewSonic | Gordon Hansen | 7/18/17 |
| | | |
| Demonstration Tools | | |
| Weight On Planets Scale | George Korody | 1/20/17 |
| Lunar Phase Kit | Bob MacFarland | 7/18/17 |
| 100 ft Scale Model Solar System Kit | Bob MacFarland | 7/18/17 |
| | | |
| Display Items | | |
| Astronomy Event Sign (3' X 6') | Gordon Hansen | 7/18/17 |
| PVC Display Board - Folding | Sandra Macika | 1/23/17 |
| Banner – Small (24" X 32") | George Korody | 1/20/17 |
| Banner – Medium (24" X 72") | Sandra Macika | 1/23/17 |
| Banner – Large (32" X 16') | George Korody | 1/20/17 |
| Tri-Fold Presentation Boards | Don Klaser | 1/26/17 |
| Tri-Fold Poster Board (Early Club | George Korody | 5/25/17 |
| Photos) | | |
| | | |
| <u>Other</u> | | |
| Canopy (10' X 10') | Liam Finn | 7/27/17 |
| Equipment Etching Tool | Greg Ozimek | 4/20/17 |
| Pop Cooler | Hayden Barrett | 7/27/17 |
| | | |
| EQUIPMENT KITS | CARETAKER | |
| <u>Telescopes</u> | | |
| TK3 Celstrn 130 Newt Goto mount | Liam Finn | 7/17/17 |

| Liam Finn | 7/17/17 |
|---|--|
| Bob MacFarland | 7/18/17 |
| Jed Datema CARETAKERSHIP IS AVAILABLE | 3/29/17 |
| John McGill | 1/15/17 |
| Jim Barnes | 1/16/17 |
| | |
| Bob MacFarland | 7/18/17 |
| Sandra Macika | 1/23/17 |
| Tim Dey | 4/20/17 |
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| Liom Einn | 7/17/17 |
| Liam Finn | //1//1/ |
| | |
| Liam Finn | 8/9/17 |
| Tim Dey | 4/20/17 |
| Liam Finn | 7/17/17 |
| | |
| Tim Dey | 4/20/17 |
| Tim Dey | 4/20/17 |
| | |
| Gordon Hansen | 7/18/17 |
| | Bob MacFarland Jed Datema CARETAKERSHIP IS AVAILABLE John McGill John McGill Jim Barnes Bob MacFarland Sandra Macika Tim Dey Liam Finn Liam Finn I Gordon Hansen Gordon Hansen |

| C5 Orion StarShoot Deep Space Video Camera II #52195 AND Orion StarShoot iPhone Control for Deep Space Video Camera II #52195 | Gordon Hansen | 7/18/17 |
|--|-------------------------------|--------------------|
| C6 Canon 60 DA and accessories | Tim Dey | 4/20/17 |
| CA1 Rigel Systems Spectroscope | Gordon Hansen | 7/18/17 |
| CA2 Celestron 1.25" to T- Adapter(male thread) Model #93625 | Gordon Hansen | 7/18/17 |
| CA3 Canon EOS deluxe astrophoto kit FOR Canon bayonet T-thread adapter ans variable 1.25" extender | Gordon Hansen | 7/18/17 |
| CA4 Orion StarShoot LCD-DVR #58125 2.5" LCD screen | Gordon Hansen | 7/18/17 |
| CA5 Celestron Canon EOS T-ring adapter #93419 | Gordon Hansen | 7/18/17 |
| | | |
| | | |
| <u>Special Event Use Only-</u> Not Available For Loan Out | | |
| | | |
| TK2 Meade 8" ETX-LS-ACF w/tripod, voice assist, computerized GPS plus MANY (35+) accessories | Tim Dey | 4/20/17 |
| BK1 Orion BT-100 binocular | | |
| telescope w/hard case, Orion VersaGo h.d. man altaz mount w/Vixen dovetail head and Vixen style binocular holder bracket | Ken Anderson | 8/10/17 |
| VersaGo h.d. man altaz mount w/Vixen dovetail head and Vixen | Ken Anderson Sandra Macika | 8/10/17 1/23/17 |
| VersaGo h.d. man altaz mount w/Vixen dovetail head and Vixen style binocular holder bracket BK2 Zhumell 25x100 binoculars, hard case & Zhumell TRH-16 | | |
| VersaGo h.d. man altaz mount w/Vixen dovetail head and Vixen style binocular holder bracket BK2 Zhumell 25x100 binoculars, hard case & Zhumell TRH-16 tripod w/soft fabric bag TAK1 Night Vision Intensification binocular unit | Sandra Macika | 1/23/17 |
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STAR STUFF

This Newsletter is published eleven times each year by: FORD AMATEUR ASTRONOMY CLUB P.O. Box 7527 Dearborn MI 48121-7527

PRESIDENT: Liam Finn VICE PRESIDENT: Tim Dey SECRETARY: Jessica Edwards TREASURER: Mike Bruno WEBMASTER: Greg Ozimek NEWSLETTER EDITOR: Syed Saifullah

Club Information:

The Ford Amateur Astronomy Club (FAAC) meets on the fourth Thursday each month, except for the combined November/ December meeting on the first Thursday of December - at Henry Ford College Administration Services and Conference Center in Dearborn. Refer to our website for a map and directions. <u>www.fordastronomyclub.com</u>

The FAAC observes at Spring Mill Pond within the Island Lake State Recreation Area near Brighton, Michigan. The club maintains an after-hours permit and observes on Friday and Saturday nights, and nights before holidays, weather permitting.

The FAAC also has use of a private observing site near Gregory Michigan and Lake Erie Metro Park. See the FAAC Yahoo Group* for more information.

Observing schedules and additional info are available on our website, or via the FAAC Yahoo Group.* Or call the FAAC Hotline, for info and leave a message, or ask questions: 313-757-2582. You may also send email inquiries to info@fordastronomyclub.com.

Membership in the FAAC is open to anyone with an interest in amateur astronomy. The FAAC is an affiliate of the Ford Employees Recreation Association (F.E.R.A.).

Membership fees:

Annual - New Members: \$30 (\$15 after July 1)

Annual - Renewal: \$25 (\$30 after January 31)

Membership includes the STAR STUFF newsletter, discounts on magazines, discounts at selected area equipment retailers, and after-hours access to the Island Lake observing site.

Astronomy or Sky & Telescope Magazine Discounts Obtain the required form from the FAAC club treasurer for a \$10 discount.

Send the completed form directly to the respective publisher with your subscriptions request and payment. Do not send any money directly to the FAAC for this.

Star Stuff Newsletter Submissions Your submissions to STAR STUFF are welcome! Send your story and/or images to the editor: <u>StarStuff@fordastronomyclub.com</u> Email text or MS Word is fine. STAR STUFF will usually go to press the weekend prior to each general meeting.

Submissions received prior to the 15th can be included in that month's issue.

* FAAC Members are welcome to join our Ford Astronomy Club Yahoo! Group. Messages photos, files, online discussions.