



# Star Stuff

## Ford Amateur Astronomy Club Newsletter

Volume 27, Number 9

September 2017

### Cassini Says Goodbye

By Teagan Wall

On September 15th, the Cassini spacecraft will have its final mission. It will dive into the planet Saturn, gathering information and sending it back to Earth for as long as possible. As it dives, it will burn up in the atmosphere, much like a meteor. Cassini's original mission was supposed to last four years, but it has now been orbiting Saturn for more than 13 years!

The spacecraft has seen and discovered so many things in that time. In 2010, Cassini saw a massive storm in Saturn's northern hemisphere. During this storm, scientists learned that Saturn's atmosphere has water vapor, which rose to the surface. Cassini also looked at the giant storm at Saturn's north pole. This storm is shaped like a hexagon. NASA used pictures and other data from Cassini to learn how the storm got its six-sided shape.

Cassini also looked at some of Saturn's moons, such as Titan and Enceladus. Titan is Saturn's largest moon. Cassini carried a lander to Titan. The lander, called Huygens, parachuted from Cassini down to the surface of the moon. It turns out, Titan is quite an exciting place! It has seas, rivers, lakes and rain. This means that in some ways, Titan's landscape looks a bit like Earth. However, its seas and rivers aren't made of water—they're made of a chemical called methane.

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### Presidents Article

By Liam Finn

#### *Astronomy at the Beach*

As the nights are supposed to be cooling off and fall begins this is when the annual Astronomy at the Beach event happens. September 29<sup>th</sup> and 30<sup>th</sup> starting at 6PM.

This year will be different as the event is being held at Kent Lake Beach in Island Lake State Recreational Area. The events success is dependent on two items, the weather and the astronomers.

While there is nothing we can do about the weather, the astronomer turnout falls on each of us to make this event successful. Without you, the members, AATB would not be the renowned public outreach event it is today.

So, it is time for me to climb on my soap box and call on each of the Ford Amateur Astronomy Club members to meet me and your fellow astronomers on Kent Lake Beach on the 29<sup>th</sup> and 30<sup>th</sup> of September from 6pm until midnight and lets show the public why they should get interested in astronomy, why they should join our club. Seeing as this is the first year in a long time at Island Lake, we don't know what to expect regarding the public headcount so I ask that as many of you, my fellow astronomers, to come out with telescopes and put on a strong showing and support GLAAC and each other and let's make this another amazing event, one to write home about.

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## Presidents Article

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### *Beginner's night*

While we have no beginners night in September our next will be October 27<sup>th</sup> and it will be held in Maybury State Park, Livonia, South of 8 Mile between Beck and Napier.

## Secretary's Report

By Jessica Edwards

### *24 August General Meeting*

Due to the Total Solar Eclipse that happened on 21 August, this meeting did not follow the regular format. Discussion of Solar Eclipse experiences were shared. Several members were still traveling home, others had just returned early in the morning.

Members has clear skies for the whole Eclipse in Madres, Oregon, as well as in Casper and Douglas, Wyoming, and in Agate, Nebraska. Thousands of people came to these locations and traffic leaving was very heavy. Clouds were present in Beatrice, Nebraska during totality, but the Ring of Fire (360° sunset) was seen. Several locations in Tennessee, including Sparta and Nashville) also had clear skies for totality.

Observers in Marion, Illinois also enjoyed clear skies. Members who stayed in Michigan had events at HJRO that included 300 people and at least 1500 cam to observe the partial eclipse at Cranbrook Institute of Science.

## Cassini Says Goodbye

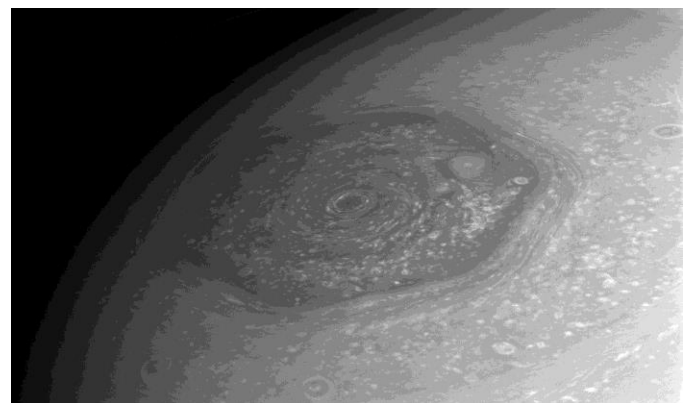
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Cassini also helped us learn that Saturn's moon Enceladus is covered in ice. Underneath the ice is a giant liquid ocean that covers the whole moon. Tall geysers from this ocean spray out of cracks in the ice and into space, like a giant sneeze. Cassini flew through one of these geysers. We learned that the ocean is made of very salty water, along with some of the chemicals that living things need.

If there is life on Enceladus, NASA scientists don't want life from Earth getting mixed in. Tiny living things may have hitched a ride on Cassini when it left Earth. If these germs are still alive, and they land on Enceladus, they could grow and spread. We want to protect Enceladus, so that if we find life, we can be sure it didn't come from Earth. This idea is called planetary protection.

Scientists worry that when Cassini runs out of fuel, it could crash into Titan or Enceladus. So years ago, they came up with a plan to prevent that from happening. Cassini will complete its exploration by diving into Saturn—on purpose. The spacecraft will burn up and become part of the planet it explored. During its final plunge, Cassini will tell us more about Saturn's atmosphere, and protect the moons at the same time. What an exciting way to say goodbye!

To learn more about Saturn, check out NASA Space Place: <https://spaceplace.nasa.gov/all-about-saturn>



*Caption: This image of the hexagonal storm on Saturn's north pole was taken by Cassini in 2013. Image credit: NASA/JPL-Caltech/Space Science Institute*

## 2017 Beginner's Nights Calendar

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

## Treasurers Report

September 2017

By Mike Bruno

*Going forward, the financial report will be available at all the club meetings and on request to the treasurer. You can submit a request for a copy to [treasurer@fordastronomyclub.com](mailto:treasurer@fordastronomyclub.com)*

## FAAC Equipment Holders Report

By Dennis Salliotte

### FAAC Equipment Report 9/19/17

<u>Item</u>	<u>Currently Held By:</u>	<u>Date Last Verified</u>
<b><u>Telescopes</u></b>		
4" Dobsonian (Harold's donation)	George Korody	1/20/17
<b><u>Presentation Tools</u></b>		
Projector (older)	Jim Frisbie	1/15/17
Projection Screen 8'	Bob MacFarland	9/19/17
Speaker System w/wireless mic	Bob MacFarland	9/19/17
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	9/19/17
<b><u>Demonstration Tools</u></b>		
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	9/19/17
<b><u>Display Items</u></b>		
Astronomy Event Sign (3' X 6')	Gordon Hansen	9/19/17
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 Photos)	George Korody	5/25/17
<b><u>Other</u></b>		
Canopy (10' X 10')	Liam Finn	9/19/17
Equipment Etching Tool	Greg Ozimek	9/19/17
Pop Cooler	Hayden Barrett	7/27/17
<b><u>EQUIPMENT KITS</u></b>		
<b><u>Telescopes</u></b>	<b><u>CARETAKER</u></b>	

TK3 Celstrn 130 Newt Goto mount	Liam Finn	9/19/17
TK4 Clstrn 90 Refrctr w/man mount	Liam Finn	9/19/17
TK5 4 ½ “ Reflector, on Fitz GEM mount	Bob MacFarland	9/19/17
TK6 8” Orion 8XTi Dobsonian	Jed Datema CARETAKERSHIP IS AVAILABLE	3/29/17
TK1 Coronado PST solar scope w/double stack, Meade Autostar Goto mount & tripod and accessories	John McGill	1/15/17
TK7 TPO 8” f/4 Imaging Newtonian Telescope (OTA)	Jim Barnes	1/16/17
<b><u>Binoculars</u></b>		
BK3 15x70 binocs, monopod mount	Bob MacFarland	9/19/17
BK4 20x80 binocs,altaz goto mount	Sandra Macika	1/23/17
BK5 25x70 binocs w/tripod adaptor	Tim Dey	4/20/17
<b><u>Eyepiece Kit</u></b>		
EPK1 Eyepieces, filters & accesories	Liam Finn	9/19/17
<b><u>Other</u></b>		
TA Sky Quality Meter	Liam Finn	9/19/17
TA Sky Atlas 2000.0	Tim Dey	4/20/17
TA Orion telescope binoviewer	Liam Finn	9/19/17
<b><u>Lincoln Park Observatory</u></b>		
LPO Celestron binoviewer #93691	Tim Dey	4/20/17
LPO Celestron 2X 1.25” Barlow	Tim Dey	4/20/17
<b><u>Imaging SIG</u></b>		
C1 Celestron NexImage Solar System Imager model #93712	Gordon Hansen	9/19/17
C2 Meade Deep Sky Imager PRO III w/AutoStar Suite	Gordon Hansen	9/19/17
C3 Orion StarShoot Deep Space Video Camera NTSC #52185 w/video capture device #52178	Gordon Hansen	9/19/17
C4 Meade Electronic Eyepiece w/cable to a video monitor, VCR or TV. Pairw#43 AND Meade 3.5” LCD Color Monitor Kit # 07700 Complete (unused). Pair	Gordon Hansen	9/19/17

w#34		
C5 Orion StarShoot Deep Space Video Camera II #52195 AND Orion StarShoot iPhone Control for Deep Space Video Camera II #52195	Gordon Hansen	9/19/17
C6 Canon 60 DA and accessories	Tim Dey	4/20/17
CA1 Rigel Systems Spectroscope	Gordon Hansen	9/19/17
CA2 Celestron 1.25" to T-Adapter(male thread) Model #93625	Gordon Hansen	9/19/17
CA3 Canon EOS deluxe astrophoto kit FOR Canon bayonet T-thread adapter and variable 1.25" extender	Gordon Hansen	9/19/17
CA4 Orion StarShoot LCD-DVR #58125 2.5" LCD screen	Gordon Hansen	9/19/17
CA5 Celestron Canon EOS T-ring adapter #93419	Gordon Hansen	9/19/17
<b><u>Special Event Use Only- Not Available For Loan Out</u></b>		
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	9/19/17
BK2 Zhumell 25x100 binoculars, hard case & Zhumell TRH-16 tripod w/soft fabric bag	Sandra Macika	1/23/17
TAK1 Night Vision Intensification binocular unit	George Korody	1/20/17
Dennis Salliotte equipment@fordastronomyclub.com		

## 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. [www.fordastronomyclub.com](http://www.fordastronomyclub.com)

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](mailto: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: [StarStuff@fordastronomyclub.com](mailto:StarStuff@fordastronomyclub.com) 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.