

## THE W. A. S. P. NEWSLETTER

The Warren Astronomical Society paper

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<http://www.warrenastro.org>

### 2010 WAS Officers

President: Gary M. Ross [president@warrenastro.org](mailto:president@warrenastro.org)  
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Publications: Stephen Uitti [publications@warrenastro.org](mailto:publications@warrenastro.org)  
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Entire board: [board@warrenastro.org](mailto:board@warrenastro.org)

### Other contact info:

Announcements: Dick Gala

[announcements@warrenastro.org](mailto:announcements@warrenastro.org)

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[discussion@warrenastro.org](mailto:discussion@warrenastro.org)

Webmaster: Jonathan Kade:

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[solar@warrenastro.org](mailto:solar@warrenastro.org)

Lunar/Planetary SIG: Riyad Matti:

[planetary@warrenastro.org](mailto:planetary@warrenastro.org)

Star Party Organizer: Bill Beers:

[starparty@warrenastro.org](mailto:starparty@warrenastro.org)

### Update from the Treasurer

#### *Returning members*

Welcome to returning members Bob Halsall and Andy Khula! Thanks to all who have renewed their memberships recently as well.

#### *Change to membership renewals*

Membership dates have changed: annual membership now goes from January 1 to December 31. If your membership was current as of 1/1/2010, you are eligible for prorated dues in 2010. Renewal letters have been delayed a bit, but will be mailed out the first full week of March. You will be able to renew your membership and renew or subscribe to any of the three astronomy magazines we have special discounts for. Cost to print and mail the booklets out (to 250 current and former members) will be around \$150. This will most likely not be an annual mailing.

### *Non-profit status*

We have received our new Certificate of Good Standing from the state! I am making sure we're registered with the Attorney General as we get closer to 501(c)(3) application.

### *Insurance*

The club's property and liability insurance is being renewed. This cost \$559, down \$60 from the last time. Many thanks to Ken Bertin for his work in getting the new insurance policy together.

### *Events*

We paid \$15 for a table at the Ford Club's Astronomy Expo March 6. We will be selling glow tape, merchandise, and memberships. If you would like to help at the table, please contact me.

### *Miscellany*

We donated \$50 to the Clear Sky Clock website to sponsor the Stargate CSC. (At a recent meeting, somebody called the Clear Sky Clock "Cloudy Nights"... which says a lot about astronomy in this state.) We also purchased a 10.4" digital photo frame for public outreach and internal club events; it cost \$80. We did extensive research to get the best bang for our buck.

### *Accounting*

Our funds increased by \$243.67 in February to \$4115.24 across all holdings.

### *February cash flow:*

Credits: \$994.04

Debits: \$750.37

*Jonathan Kade*

### **COUNTDOWN 3, 2, 1 - Troy School District**

On February 1, 2010, 500 students from Smith, Leonard, Wass, and Athens schools from Troy School District participated in a video conference with the International Space Station where select students asked astronauts questions live from space!

Members of the Warren Astronomical Society volunteered for the day while students were treated to science demonstrations and experiments, competed in a feat of physics, learned about STEM career possibilities (Science, Technology, Engineering, and Math), investigated space facts, and walked through a scale floor plan of the International Space Station constructed by students. Members of our astronomy club and Ford Astronomy Club volunteered with their telescopes to make observations of the Sun and assisted with the evening activities.

Many thanks to the members who participated in our educational outreach. It was an engaging day with many science enthusiasts, universities, science centers and other technological institutes!

*Therese Oldani*

### **Seven Ponds Astronomy Club: Open Invitation**

The Seven Ponds Astronomy Club extends its invitation to the Oakland Astronomy Club, Ford Amateur Astronomy Club, and Warren Astronomical Society members to our monthly meetings. Our club website is: <http://bhmich.com/sevenpondsac/> and has all the information about our upcoming meetings, maps to Seven Ponds Nature Center, etc. Please let me know if you might be attending the meetings so that I can make appropriate plans to handle the expected crowd. If you have any questions, please contact me.

*John Lines*

### **Oakland Astronomy Club newsletter**

<http://oaklandastronomy.ulmb.com/oacnews.html>

*Clear skies,*

*Bill MacIntosh*

### **The WASP**

The Warren Astronomical Society Paper (WASP) is the official monthly publication of the Society. Each new issue of the WASP and/or is available online at the <http://www.warrenastro.org/> website. Requests by other astronomy clubs to receive the WASP, and all other correspondence should be addressed to the Publications Director, Stephen Uitti, at [publications@warrenastro.org](mailto:publications@warrenastro.org). Articles for inclusion in the WASP are strongly encouraged and should be submitted to the editor by the 28<sup>th</sup> day of each month. Any format of submission is accepted, however, plain text files are the easiest form to use. Most popular graphics formats are acceptable. The preferred method of submission is electronically via email with attachment to the editor. Alternative submissions include printed form delivered in person, or via US mail. Disclaimer: The articles presented herein represent the opinions of the authors and are not necessarily the opinions of the WAS or the editor.

The WASP reserves the right to deny publication of any submission. *Stephen Uitti*

### **WAS on Facebook**

The Warren club has a presence on Facebook. Recent wall posts refer to space debris, getting a look at Vesta, a new eyepiece mini-review, cub scout outreach, rotating HST Pluto image, and an upcoming ISS/Shuttle pass overhead. On Facebook? Join the fun! Check it out by clicking here: <http://www.facebook.com/warrenastro>.





## The SWAP SHOP

This column is for those interested in buying, trading or selling. Ads run for six months. The month and year the ad will be removed is shown. Submit ads to Stephen Uitti, 313 389-5609

[publications@warrenastro.org](mailto:publications@warrenastro.org).

**FOR SALE:** Meade 8" LX-90 UTHC with 8X50 finder, matching blue dew shield, 26mm eyepiece, diagonal, tripod, bobs knobs, counter weights, and piggy-back camera mount. \$700 or best offer.

Call Bill Kippen at 586-202-6484 or email [billkip@comcast.net](mailto:billkip@comcast.net) for more information and pictures. Other accessories are available. [7-2010]

**FOR SALE:** Celestron Optima 2000, an 8" Schmidt-Cass go-to scope. It's in good shape, works well, and has fine optics. It comes with a hard case. Asking \$900. Contact Bob Zinke, 586-264-0884, email: [r1d3z@yahoo.com](mailto:r1d3z@yahoo.com) [6-2010]

**FOR SALE:** I have a few parts left over from my now defunct LX200 telescope, as follows:

*Tripod* for a Meade scope – will take best offer. Still in good condition.

*Fork arms w/ drive base* for an LX200. Circuit boards are bad, but gear systems work. Hand controller included – Any decent offer not refused.

*Finderscope*, 8x50, straight thru design, non-illuminated - \$20.

Email [Saxon1066@comcast.net](mailto:Saxon1066@comcast.net) or call Fred Judd after 4 pm on my cell: (586) 489-0245 [2-2010]

**FOR SALE:** Blaine McCullough's Telescope for sale! Mary Lou McCollough wishes to find Blaine's telescope a good home. Hand built by Blaine and Steve Greene, this 13" mirror, beautifully crafted truss dob has excellent optics. Finder scope and telrad included. \$1000 or best offer. Contact Bill Beers for details at [BEEZOLL@AOL.COM](mailto:BEEZOLL@AOL.COM) or 586-321-8207 [7-2010]

**FOR SALE:** 1977 *Dynascope* RV-6. Original owner. Includes pier and finder, painted blue. Motor drive and housing are missing (drive never worked). Otherwise in good working order. Mirrors cleaned a few times, so the coating may be OK. Replaced the primary cell. Asking \$200 for scope and mount.

Homemade 10" F/5.5-ish Dobsonian. The primary is a Coulter thin mirror, purchased around 1993. Cleaned only a few times. The primary cell is a classic thin mirror multi-point support. The tube is a Sonotube and the mount is plywood with teflon bearings. Someone could use this as-is, fix it up, or use the components for something new. I'm asking \$300 for this 1 scope minus the finder.

I'm selling both to use the money toward a new Omni XXLT 127 refractor. Mark Sortzi [mark\\_sortzi@hotmail.com](mailto:mark_sortzi@hotmail.com) [3-2010]

**FOR SALE:** Turn your 2x Barlow into a 2.5, 3, 4, or 5x device with my Barlow amplifier. Use it with your lowest power eyepiece and keep that eye relief and apparent field, no matter how much you magnify your image. No more squinting with a 4 or 6mm eyepiece. The Barlow amplifier is a simple extension tube available for \$4. A 40 power eyepiece becomes a 200 power eyepiece with my 5x amplifier. Call at 586-776-9720 or email [cometman@mybluelight.com](mailto:cometman@mybluelight.com) and I'll bring your amplifier choice to the next meeting. If you buy the set of four amplifiers, I'll take \$4 off the total price. For mail delivery to your home address, add \$1.50 for shipping. [4-2010]

**FOR SALE:** 18" F/4.5 Obsession #445 by original owner. Excellent condition, always stored indoors. Lots of extras, including Sky Commander & digital setting circles, heated telrad, Astrocrumb filter slide, 12 volt power supplies, AstroSystems light shroud, Wheelbarrow handles w/pneumatic tires. \$5,000.00. 248-396-3232 John Lines [8-2010]

## WAS Club logo wear at WAS meetings



(Photos and modeling by  
Jon Blum)

Club logo clothing (hats, shirts, sweatshirts, jackets) are still available from Diane Worth, 248-980-7832, or if not at a meeting, email [dianesky-night@yahoo.com](mailto:dianesky-night@yahoo.com). Stephen Uitti, who currently brings WAS goods for sale also brings a notebook to meetings and has “a reasonable catalog of available items”.

### ***Astronomical Phenomena - March 2010***

#### **Day Event**

3	Spica 3.0° N of Moon
4	Venus 0.6° S of Uranus
7	Antares 1.3° S of Moon
7	LAST QUARTER
7	Moon furthest South (-25.6)
8	Mercury 1.1° S of Jupiter
11	Mars stationary
12	Moon at apogee
13	Neptune 3.6° S of Moon
14	Mercury superior conjunction
14	Jupiter 5.0° S of Moon
15	Mercury 0.6 S of Uranus
15	NEW MOON
15	Uranus 5.4° S of Moon
17	Uranus at conjunction
20	Equinox
22	Saturn at opposition
22	Moon furthest North (25.4°)
23	FIRST QUARTER
25	Mars 4.4° N of Moon
27	Regulus 3.9° N of Moon
28	Moon at perigee
30	FULL MOON
31	Spica 2.9° N of Moon



### **2010 Stargate Observatory Open House**

**Dates:** Mar 27, Apr 24, May 22, June 19, July 17, Aug 21, Sept 11, Oct 16, Nov 13, Dec 11

#### **Observatory Rules**

1. Normal closing time will depend on events, weather, and other variables.
2. The observatory may be closed one hour after opening time if no members arrive within the first hour.
3. Contact the 2<sup>nd</sup> VP for other arrangements, such as late arrival time.
4. An alternative person will be appointed to open the observatory if the 2<sup>nd</sup> VP cannot attend a scheduled date or opening time.
5. Members may arrive before or stay after the scheduled open house time.
6. Dates are subject to change or cancellation depending on weather or staffing availability.
7. An email will be posted no later than 2 hours before starting time in case of date change or cancellation.
8. It is best to email the 2<sup>nd</sup> VP up to 2 hours before the posted opening with any questions you may have. Later emails will not be receivable.
9. Generally, only strong rain or snow will prevent the open house... the plan is to be there even if it is clouded over. Often, the weather is cloudy, but it clears up as the evening progresses.

*2nd VP*

## What's Up in Outreach

The year has kicked off with some very exciting developments.

On February 1st, the W.A.S. sent a delegation to a special NASA-affiliated event at Athens High School in Troy that included a live downlink to the ISS; Second V.P. Bob Berta, Recording Secretary Therese Oldani, and I participated along with members Lee Hartwell, Ken Bertin, and Stephen Harvath. We were able to mobilize a team to participate in this in the span of a week, which speaks well of the dedication of this club to serving the community. The W.A.S. participants showed off their club pride and an array of telescopes and multimedia presentations, though the Michigan weather didn't allow for observing.

On February 2nd, Second V.P. Berta and I took part in a joint W.A.S./Seven Ponds/FAAC meeting with Michelle Serryn of Metro Beach Metro Park to plan our activities for Astronomy Day this April 24th. We want to build on last year's success to make this an annual treat for the east side of the Metro area, and this year's program will feature presentations, observing, a planet walk, and more.

On February 3rd, Treasurer Jonathan Kade and Publications Director Stephen Uitti joined Cub Scout Pack 1520 to help the scouts obtain their Astronomy badges; it is the first time this pack has worked with us and we are happy to expand our service territory!

Thanks to a tip from Recording Secretary Oldani, we may soon have some events coming up with 4-H of Oakland County-- stay tuned for developments there.

Other events to look forward to include the FAAC Annual Expo and Swap Meet at Holy Cross Church Gymnasium in Livonia on March 6th and the Multi-Club Messier Marathon hosted by the Seven Ponds Astronomy Club at their observing site on March 13th. Show up, have fun, and represent!  
*Diane Hall Outreach Director*

## WAS 2010 Upcoming Presentations

1 Mar	Ken Bertin	Christian Huygens
18 Mar	Larry Phipps	Won't You Be My Neighbor?
5 Apr	Stephen Uitti	Cassini
15 Apr	Gross Pointe North Radio Astronomy Team	Return to Grosse Pointe North / TBD
3 May	Jeff Dickerman	Optec Inc
20 May	Jonathan Kade	Last Venus Transit

## WAS Meetings scheduled for 2010

**Cranbrook Meetings:** *Every 1<sup>st</sup> Monday*

Mar 1, Apr 5, May 3, June 7, July 5, Aug 2, Sept 13 (not Labor Day), Oct 4, Nov 1, Dec 6.

**Macomb Meetings:** *Every 3<sup>rd</sup> Thursday*

Mar 18, Apr 15, May 20, June 17, July 15, Aug 19, Sept 16 (Same week as Cranbrook), October 21, Nov 18, Banquet Dec 16

## Ken Bertin's Cristiaan Huygens Presentation

Ken Bertin has been an astronomy hobbyist since 1951. He organized an astronomy club in High School and has been both a past President and 1st Veep of the WAS. Ken is a world class eclipse chaser, including 10 Total Solar Eclipses. He has written nearly 20 presentations on Astronomy. Recently, these included biographies of Galileo and George Ellery Hale.

This month's talk covers Dutchman Christiaan Huygens, who lived from 1629 to 1695, and was a great mathematician and physicist. He played a key role in the 'scientific revolution', and the Huygens Principle on the wave theory of light helped establish his reputation. The discovery of Saturn's rings and it's moon Titan plus the invention of the pendulum clock made him so famous that he was invited to be the first director of the French Academy of Science.

### **April 15th Meeting – New Location!**

Ardis Herrold and her Grosse Pointe North High School Radio Astronomy Team will present the program for the Warren Astronomical Society meeting on April 15, 2010. This meeting will be held at that high school, and not at our normal Macomb location. We will meet in Room SCI 301 at Grosse Pointe North. That's in the new Science Building. 707 Vernier Road, Grosse Pointe Woods, Mi 48236

Ardis is the planetarium director, astronomy teacher, and co-chair of the science dept. at Grosse Pointe North HS. She also is the advisor for the RATs. The Radio Astronomy Team (the RATs) is an after school astronomy club that does both radio and optical astronomy. The RATs have been in existence for 20 years. Membership is open to all students in both of the high schools in our district.

The plan for the evening is this: A tour for those who have not seen the system before. This involves going on the roof. For those interested, it's advised to wear sturdy shoes since we have to ascend some steep metal stairs.

A few of our students will do presentations on the research they have been doing. One group will talk about identifying previously unknown planetary nebulae. Another will talk about the temperature compensation project with our radio telescope. Maybe more.

We will forego the usual WAS business meeting.

### **LARGER PRIZE AT RAFFLES IN MAY!!!**

A gift certificate from Lumicon will be raffled at the Warren Astronomical Society meetings in May to help celebrate Astronomy Day.

The certificates are in the sizes of \$25 and \$50 and will be raffled on May 3rd and May 20th club meetings, (one per meeting).

Thanks to Lumicon for their generous donations!

### **Larry Phipps - Would You Be My Neighbor Presentation – March 18th**

Larry Phipps has been a Recreation Therapist for over 25 years. Part of his job entails helping others discover leisure and recreation activities that may help them to better meet their needs, as well as improve their quality of life. Larry has given many informative and entertaining presentations. He has the unusual distinction of repeating his presentation, *Tube hopping on the Interplanetary Superhighway* at the WAS.

His presentation at MCC on the Milky Way taps into his creative side and will share information about observers and researchers, evolution, physical and chemical structure, and the future of our galaxy, in an interesting and creative way.

### **Cranbrook February 1 meeting minutes**

#### ***Upcoming events summary:***

March 6, FAAC Astronomy Expo & Swap Meet.

March 13, Messier Marathon at Seven Ponds.

April 24, Astronomy Day at Cranbrook, Stargate open house, Metro Beach star party with FAAC and Seven Ponds.

*Library:* Stephen reported that the library is still in building B at Macomb. Materials can be checked out by request or returned to Stephen.

*Hands On:* (Planetary/double stars): Observing meeting scheduled for Feb 20th at Stargate.

*Solar:* (Sunspots 2009 80%)

*Discussion Group:* On January 28th, 9 people attended. The group featured a half hour DVD featuring Dr. Michiu Kaku on human spaceflight.

Members shared their enthusiasm around observation of Mars. Nine members observed Mars for five hours at opposition from Stargate using the Big Dob. Riyadh reported that, observing on his own, he saw clouds near the limb using a blue filter.

Jerry Kuchera presented "*Mars 4.0.*"

There were 46 in attendance.

*Therese Oldani*

## Feb 1 Board Meeting minutes

*Attendance:* Gary Ross, Therese Oldani, Jonathan Kade, Jon Blum (via Skype), Stephen Uitti. Guests: Marty Kunz, Bob Watt, Dave Bailey and several members.

*Officers' reports:*

*President:* All WAS members are not expected to serve outreach. Often the same members seem to be the ones volunteering. We need to make sure we do not make too many official commitments and burn out the volunteer force. We may be spreading ourselves too thin.

*1<sup>st</sup> VP:* Jon reported all presentation slots are filled for 2010. Speaker info and presentation summaries will be emailed to members ahead of presentation date.

*2<sup>nd</sup> VP:* On behalf of Bob Berta, Jonathan Kade reported that work on Stargate's floor continued. Marty Kunz reported that he filled the propane tank for the heater. We are still working on weather-stripping for the doors, finishing leak-proofing, and rebuilding the floor. The next open house is February 20.

*Treasurer:* Jonathan reported looking into the W.A.S.'s liability and property insurance. He and Gary worked on State of Michigan reincorporation papers and submitted them. He provided the latest treasury balances.

*Secretary:* Therese Oldani reported that Lumicon donated \$25 and \$50 gift certificates for the December 2009 Annual Banquet and suggested we raffle them at a regular meeting. We also received three shirts from Planetary society and plan to raffle them at upcoming events.

*Publications:* February WASP coming soon! Would like to move the deadline for submission back a few days to allow first of the month publications.

*Outreach:* On behalf of Diane Hall, Therese reported that today at Athens High School in Troy District, several of our members along with Seven

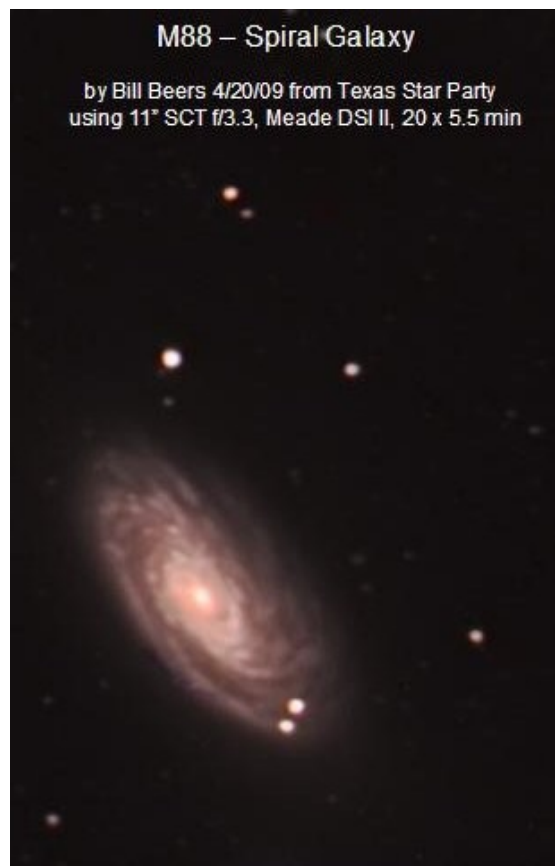
Ponds and FAAC are volunteering. During the day: Ken Bertin, Steve Harvath, Bob Berta, Therese Oldani, and Lee Hartwell. During the evening: Diane Hall, Stephen Uitti, Bob Berta, Ken Bertin and Steve Harvath.

Jonathan reported that April 24th, Astronomy Day, is the second annual Metro Beach star party in cooperation with Ford Amateur Astronomy Club and Seven Ponds Astronomy Club. This is the same date as Cranbrook daytime observing and a Stargate open house that Wolcott Mill is promoting heavily. Diane is working on an event with the Oakland County 4-H as well.

*New Business:* Jonathan requested \$150 to cover expenses on member renewal letters, of which he will spend as little as possible. Therese motioned to approve, Gary seconded. Motion passed unanimously.

There will be a special board meeting at Bob Berta's on Feb 20th to discuss by-laws.

*Therese Oldani*



## What's In The Future For Cassini?

At the February Cranbrook meeting, Dale Partin asked the question of what will be done with the Cassini spacecraft when its mission ends. Dale sent email to Linda Spilker.

from: Dale Partin (Delphi)  
to: Linda Spilker (JPL)  
date: Wed, Feb 10, 2010 at 12:37 PM  
subject: Future of Cassini mission

Dear Linda,

I just heard that the Cassini mission has received another mission extension for seven years, but I am concerned about the even longer-term future of this fantastic spacecraft.

What if there is a future major "event" on Saturn or one of its moons, after the "normal" mission of Cassini ends? For example, a comet may be discovered that is on a collision course with Saturn. In that case, if the Cassini spacecraft is waiting in a "hibernation" orbit, and if NASA retains enough expertise to reawaken the spacecraft, some spectacular, on site data could be obtained.

A more probable event would be a comet or other object that is attracted by Saturn's gravity to pass near it. Cassini could be "repurposed" to obtain some data on the object, and conceivably could be boosted out of Saturn's gravity well to pass near the object.

Is any of this feasible at low budget while such an event is awaited? Has any one looked at the trajectories of known comets, etc. to see if anything predictable is going to pass by the vicinity of Saturn in the next decade or so?

Thanks much,

Dale L. Partin, Ph.D.

Principal Technical Fellow

Advanced Electronics Packaging  
and Integration

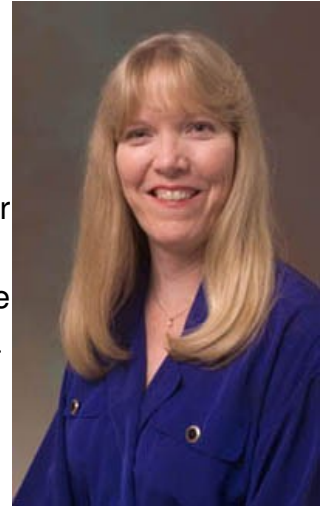
Delphi Electronics and Safety



from: Linda Spilker  
to: Dale Partin  
date: Wed, Feb 10, 2010 at 3:12 PM  
subject: Re: Future of Cassini mission

Dear Dale,

Thanks for your suggestion. We could possibly put Cassini in a hibernation mode. However, NASA is looking at a number of options for the end of the Cassini Solstice mission. We need to end the mission in a way that would protect Titan and Enceladus, which, if they contain liquid water, might have the potential for life.



One option is to place Cassini in a large orbit, well outside the orbit of Titan, that would allow it to collect data for many years to come. Another option is to impact an icy moon like Mimas. A third option is to burn up the spacecraft in the atmosphere of Saturn to protect any potential habitats for life in the Saturn system (similar to what was done with Galileo at Jupiter to protect Europa).

In this third option we would hop into an orbit where Cassini flies between the innermost ring (D ring) and top of Saturn's atmosphere. After a number of orbits -- where we have the opportunity to get spectacular views of the rings and planet and unprecedented measurements of Saturn's gravity and magnetic fields -- we would burn up the Cassini spacecraft in Saturn's atmosphere. This end of mission scenario is the equivalent of a new mission in its own right and could provide new, groundbreaking science.

More on Cassini:

<http://jpl.nasa.gov/missions/missiondetails.cfm?mission=Cassini>