

# The Custer Comment

★ For The Curious ★

May 04

Volume XXXIV, Issue 5

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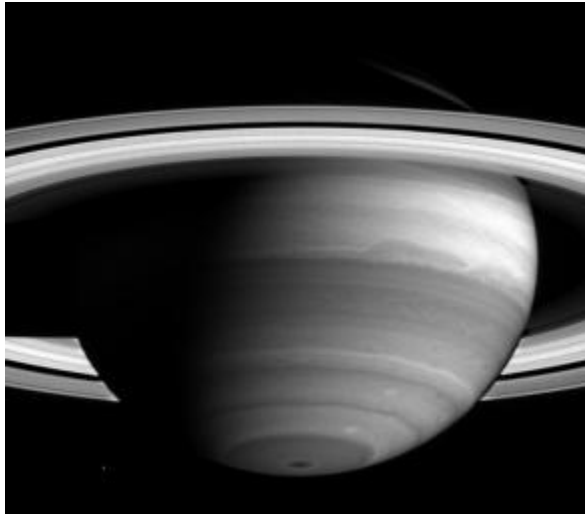
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## ***Cassini Nearing Rendezvous with Saturn***



Image, courtesy NASA/JPL

As the intrepid Cassini approaches Saturn, fine details and disturbances in Saturn's cloud decks are becoming clearly visible. NASA scientists are eagerly awaiting a flyby of Phoebe on June 12<sup>th</sup> with Saturnian orbital insertion on July 1<sup>st</sup>. This event completes a full schedule at Custer for that date. It's a Grand Slam for Custer, Science and Astronomy! See inside for more details. For the latest updates and images, browse to <http://cassini-huygens.jpl.nasa.gov>.

## ***Mars Rovers Extended through September, 2004***

Both Mars rovers, Spirit and Opportunity, have had their missions extended through September, 2004. This decision was made after their brilliant performance that exceeded all expectations.

- Spirit is "rolling" towards "Columbia Hills and is only 936 meters (.6 miles) away from the base. It's roving ahead and is expected to reach them by sol 160.
- Opportunity is busy circling the edge of "Endurance Crater," stopping to grind and scuff rocks along the way. Opportunity has driven a total of 1,170 meters (3,839 feet or 0.7 miles).

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### **Announcements & General Interest**

**\*\* ANNUAL MEMBERSHIP MEETING & ELECTIONS \*\***

<b>Jun. 12 Sat.</b>	<b>10:30AM</b>	<b>WORK PARTY - WE NEED ALL HANDS!</b>
	<b>3:00 PM</b>	<b>ANNUAL B-B-Q &amp; COVERED DISH DINNER Members only!</b>
	<b>6:00 PM</b>	<b><u>** ANNUAL MEMBERSHIP MEETING &amp; ELECTIONS **</u></b>
	<b>9:00 PM</b>	<b>PUBLIC OBSERVING</b> weather permitting.

#### **Light Pollution mailer**

Link for the "light pollution" mailer that was just sent to 19,000 residents and businesses on the East End:  
<http://www.darksksociety.org/ehflyer/ehflyer.pdf> . It can be tailored for any municipality.

## Editor's Column

### Tom Madigan, Editor

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Cutoff for submissions is the 15<sup>th</sup> of the month preceding publication

Visit the new Custer Website at  
<http://www.custerobservatory.org>

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It has come to my attention that there are members who have suggestions concerning our modest "Classifieds" column. There are 2 points I would like to make. Since I'm the editor and have direct control of what gets put in that column, I must assume that the items listed are still available and for sale because I haven't been contacted to the contrary; secondly, what gets put in there is between me, the editor, and the seller, the person who is selling the item. If you have a comment or suggestion about this, direct it to me. In addition, if you are listing an item that is no longer available, has been sold or otherwise should be removed from the column, let me know and I will remove it, as space is at a premium.

Tom Madigan,  
Editor, Custer Comment

## Gift Corner & Classifieds

<p><b>We have meteorites.</b></p> <p><b>Great sets mounted in beautiful display cases. Perfect for gifts.</b></p> <p><b>New Custer logo coffee cups ONLY \$4 EACH</b></p>	<p>The Gift Shop still has a dwindling number of copies of <b>ASTRONOMY FOR ALL AGES</b>, by Philip Harrington &amp; Edward Pascuzzi just \$20. As an added bonus, copies are signed by Ed Pascuzzi. We also have copies of <b>PARALLAX</b>, the book that was referred to in the recent lecture. Quantities are limited so hurry and add to your collection while supplies last. Back by popular demand, we again have the <i>exclusive Custer Astronomical Pocket Diary</i> still just \$9. Quantities are limited.</p>	<p><b>For Sale</b> Super C-8 Telescope, Richfield Finder, Tripod Wedge, Polaris Pointer, Polar Axis Finder, Case liner, Handle, Handbook-\$1307. No-tool knob set for C-8- \$12. Illuminated Reticule ocular assembly for C-8 including 12.5MM ocular rheostat-\$66. 2 inch Premium grade Deep Sky filter and 1 1/4 inch ocular adaptor-\$121. Observer's Chair with adjustable height-\$47. Rubber eyeguards (4)-12. Vernon mounted glass filters- neutral density, blue 80A, violet 47, light red-\$23A, green 58, orange- \$51. Adapter for Celestron 1 1/4 inch non-threaded oculars-\$10. <b>Rich Field Adaptor with TeleCompressor and 20mm Erfle ocular-\$150. 8mm Brandon-\$69. 12mm Brandon-\$59. 2.4X Dakin Barlow- \$59. 25mm Kellner-\$28. 40mm Kelner-\$28. Declination Motor &amp; Accutrack Telescope Drive Corrector, Dual Axis-\$199. Counter Weight set-\$30. Astronomer's Flashlight-\$7. Omni-axis Camera Mount-\$ 50. Accessory tray-\$30. Accessory Case-\$25. Helical Focuser-\$28. Dewcap-\$40. T-adaptor-\$20. Eyepiece projection adapter: teleextende-\$20. Best offer or \$1600 for the whole. Original cost \$2468. Contact Bill Richards at 631-957-2032, 98 Laurel Road, Lindenhurst, NY 11757-1705.</b></p>
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## Editorial

### NASA is Wrong to Scuttle Future Servicing Missions to HST (revised)

By Tom Madigan, Editor

Amid the excitement and success of the brilliant landings and performance of NASA's Mars rovers, there is one less-than-brilliant development that may have been overlooked. NASA has decided to cancel all future servicing missions to the Hubble Space Telescope including the originally planned and final one scheduled for later this year. On January 16<sup>th</sup>, against the backdrop of President Bush's 'new vision' for US Space exploration and while citing safety concerns raised by the Columbia Accident Investigation Board, NASA administrator Sean O'Keefe made the announcement to cancel the final HST servicing mission.

Instead of servicing the pioneer orbiting 2.4 meter observatory, NASA, as directed by President Bush during his 'New Vision' address, has decided that all future Space Shuttle missions, including the Return to Flight mission, will be centered on support and construction of the International Space Station. In his remarks, Administrator O'Keefe cited a physical 'safe haven' provided by the ISS in case another flight-ending, life-threatening catastrophe is detected, something not afforded by HST's orbital trajectory. It's been well established that catastrophic mission failures such as occurred during the Challenger and Columbia STS-107 tragedies are centered around or are caused by the mechanical stresses of launch. The loss of the protective ceramic tiles during the launch of STS-107 and the subsequent breach of Columbia's hull during reentry notwithstanding, this rationale is a red herring. Once aloft, the Space Shuttle is in the continuous free-fall of orbit and whether it visits HST or the ISS, its destination is irrelevant. The 'safe haven' scenario envisioned by O'Keefe and the CAIB calls for a crippled shuttle to orbit to the ISS while NASA prepares a 'rescue' shuttle flight, to be launched and retrieve the crew of the crippled shuttle waiting on the ISS.

Considerable pressure has been brought to bear on Administrator O'Keefe and NASA to revisit the decision scuttling HST's final servicing mission. Among those applying the pressure is Senator Barbara Mikulski (D-MD), lead Democrat on the NASA appropriations subcommittee who represents the constituency of the Goddard Space Flight Center. If you would like to add your voice to the voices of those calling for a reconsideration and possible reversal of NASA's decision, please visit <http://savethehubble.org>. One possibility for reversal could center on the assembly of a crew, chosen out of a pool of specific volunteers, *per se*. If the requisite number is obtained and successfully trained, then the mission is a go and the decision is reversed. It beggars belief in the president's sincerity when, citing danger as a reason for not proceeding forward with the HST servicing mission, he correctly articulates 'all dangers associated with space flight' as the reason for *not* completing HST's mission while, at the same time, embarking on some grandiose, swashbuckling Hollywood action movie to the moon and Mars.

Throughout history, exploration of the unknown and discovery have been fraught with danger. The same dangers and perils still exist now as they did when the HST was first launched. It existed in all shuttle servicing missions and will still exist if NASA's decision is reversed. It will exist in any future shuttle mission, whether that mission is to assist in the building of the ISS or a servicing mission to the HST. It will exist in any future manned missions, be they to the moon, Mars or beyond. Perhaps we've become too accustomed to the dazzling successes of the Space Shuttle, the HST and now, the Mars rovers. Perhaps these brilliant achievements have masked the danger lurking in so many places. What we've gained at such a terrible price is a healthy respect for what these intrepid souls who brave the infinite unknowns of space exploration face. We should not shrink from the challenge; we must proceed forward, not with carelessness but with caution and vigilance, a resolve built on experience and tragedy alike.

For the administration to use the Columbia tragedy as a political lever and an instrument to further a specific agenda or to promote a particular vision of space exploration for the country or the world, while binding the United States to a specific path or schedule is wrong and should be rejected out-of-hand. Discovery and space exploration is not the purview of politicians or presidents but of scientists, engineers, astronauts and explorers. We have a functioning, orbiting observatory that has pushed back the frontiers of astronomy and discovery to a heretofore unimagined point and that has contributed immeasurably to our understanding of the universe while at the same time returning spectacular images undreamed of and unimaginable during the time of Edwin Hubble. We shouldn't be reaching for pie-in-the-sky manned missions to the moon or Mars at the expense of what is real, here and now.

To cancel the final HST servicing mission is an exercise not in leadership, but in cowardice and capitulation. It dishonors the memory of those gallant crews who went aloft to touch the Face of God.

The views expressed in this editorial are those of this editor and may not reflect the official position of Custer Institute or its Board of Directors.

## HEAVENLY EVENTS TO WATCH FOR May 04

“ If you should ask him what he sees,  
His talk would be of rocket ships  
And minus-ninety-four degrees  
And interplanetary trips.  
Then there would be a wordless space,  
For even scientists of nine  
Are sometimes humble face to face  
With mighty galaxies that shine! “

- Grace V. Watkins

Though it's at greatest elongation west of the Sun on the 14<sup>th</sup> of May, MERCURY would be very difficult to find very low over the eastern horizon shortly before sunrise. After sunset, VENUS is quite another matter; brilliant as ever, she plunges down toward the western horizon during the month, displaying her ever-narrowing crescent phase for telescope users. (We're all wishing for clear skies at sunrise on June 8, in order to experience the first transit of Venus across the face of the Sun since 1882.) Above and to the left of Venus, MARS and SATURN pair up low in the west at nightfall. And higher up in the southwest, JUPITER gleams in Leo.

- 4 Full Flower Moon. (A total lunar eclipse, best seen in Africa and the Middle East, will be completely over before moonrise here.)
- 5 Venus, still at greatest brilliancy (-4.5 magnitude,) is also farthest north for the year, +27° 49' declination. Also, retrograde motion ends for Jupiter today beneath the bright stars of Leo. By the end of twilight, pick up the bright star Sirius low in the west-southwest and, using binoculars, scan about 10° to its left for a glimpse of Comet C/2001 Q4 (NEAT). This fine comet may (we hope) give us quite a good show as it vaults into our evening sky during the rest of May.
- 9 Enjoy Venus and Saturn low in the west this evening, with Mars about halfway between them. Well to Saturn's left is the 1<sup>st</sup> magnitude star Procyon, and 8° farther to the left you may find the glow of Comet NEAT with binoculars (or, if we're lucky, without them.)
- 12 Now Comet NEAT can be found about 12° above Procyon and in the dark sky after nightfall.
- 15 Comet NEAT reaches perihelion, its closest approach to the Sun today. Use binoculars or telescope to find M44, the Beehive Cluster in Cancer and, hopefully, you'll find Comet NEAT about 2° to its right. (Flashback to May 11, 1983! From a dark schoolyard in Babylon, some of us saw Comet IRAS-Araki-Alcock - the gee-whiz comet of my lifetime - bearing down on the Beehive Cluster. Missing us by a scant 3 million miles, the head of this little comet appeared larger than the cluster and its movement could be detected minute-to-minute that night!)
- 16 Around 5 AM the thin waning crescent Moon can be found very low over the eastern horizon, with Mercury not far below and to its left. Binoculars may be needed, and a clear sky to the horizon will be. Sunrise comes about half an hour later.
- 19 Sunset comes at about 7:10 PM. Check the west-northwest horizon above the set sun for the razor-thin crescent Moon, less than 19 hours past new moon. It'll be tough to see, even with crystal-clear sky conditions and binoculars.
- 21 This evening and tomorrow evening before dark, check out the thin waxing crescent Moon as it visits Venus, Mars and Saturn.
- 24 Mars and Saturn are in conjunction, just 1½ ° apart. Look for Comet NEAT near • Lynxis, a 3<sup>rd</sup> magnitude star north of the “Sickle” of Leo.
- 26 The first quarter Moon forms a triangle with Jupiter and the star Regulus in Leo.
- June 2 Full Strawberry Moon tonight is near perigee. Large tides are possible.

Prepared by Robert Chapin

## **PRESIDENT'S MESSAGE**

The April 17<sup>th</sup> Wine and Cheese Reception after the Ardesco Concert at the Southold H.S. was a wonderful success. Everyone I talked to commented how wonderful the concert was. Several of the pieces performed towards the end of the program were compositions that had been written by local school students and they were simply outstanding. We have some very talented music student/composers in the surrounding school systems.

Even though the weather was excellent on April 24<sup>th</sup> afternoon for Family Astronomy Day, attendance was somewhat poor. However the evenings program was rather well attended. Due to the last minute loss of the scheduled guest lecturer, it fell to George Lomaga and Barbara Lebkuecher to create a presentation. They set up a true/false astronomy contest complete with slides which was well received and lots of fun. And lots of contest prizes and raffle prizes were awarded.

AOS members continue to actively prepare the grounds for their mini dome. And they have graciously cleared the trees and brush that has been a growing, no pun intended, problem around the shed, thank you. It will not be too long before their observatory will be ready. The Annual Membership Meeting and Nominations will be held on June 12, 2004 so mark your calendars now. This is the ideal time for members to have voice in the running of the Institute. I hope to see you all there.

*Bob Vanson*

## **WELCOME TO OUR NEW OR RETURNING MEMBERS**

Mary McCabe & David Krumenacker of Greenport, Dr. Jeffrey Katz & Donna McCormick of Selden, Samuel Kortchmar of Southold and David & Carmella Cohn of New York City.

Welcome one and all!

## ***NOMINATING COMMITTEE REPORT***

Your Nominating Committee offers the following proposed slate of Officers and Directors for your consideration at the June, 2004 Annual Membership and Election Meeting. In addition, any Regular Member in good standing will have the opportunity to nominate any other Regular Member in good standing from the floor of the meeting for any of the open positions.

### **OFFICERS - ONE YEAR TERM (7/1/04 - 6/30/05):**

<u>PRESIDENT:</u>	Bob Vanson 37 Valley Forge Drive Bohemia, NY 11716
<u>VICE PRESIDENT:</u>	Charles Cardona III 17 Sunnyline Drive Calverton, NY 11933
<u>SECRETARY:</u>	Ann Verticchio 346C South River Road Calverton, NY 11933
<u>TREASURER:</u>	Barbara Lebkuecher PO Box 645 - Herricks Lane Jamesport, NY 11947
<u>FINANCE DIRECTOR:</u>	Warren Hamburger 43 Harp Lane Sayville, NY 11782

### **DIRECTORS - TWO POSITIONS TO BE ELECTED FOR TWO-YEAR TERM (7/1/04 - 6/30/06), ONE POSITION TO BE ELECTED FOR REPLACEMENT OF DUFF WILLIAMS FOR REMAINING YEAR OF TERM ENDING 6/30/05:**

Kurt Massey  
9 River Avenue  
Eastport, NY 11941

Jeff Johns  
167 Skidmore Road  
North Babylon, NY 11703

To fill Duff Williamson's term:  
George Lomaga  
P.O. Box 909  
Mattituck, NY 11941

Chairwoman, Ruth Makofske

## **Action Alert**

### **Action needed to insure passage of A6950 / S3003, The Healthy, Safe and Energy Efficient Outdoor Lighting Act**

Monday, May 3<sup>rd</sup>, 2004

Today the New York State Assembly passed A6950, The Healthy, Safe and Energy Efficient Outdoor Lighting Act. The vote was 126-19. This result was not unexpected, since the Assembly passed a similar version of the bill last year, but it is nonetheless gratifying.

Action now shifts to the Senate, which last year allowed the bill to die in the Rules Committee at the end of the session. Opponents of the bill (principally the utilities, manufacturers who have been slow to design good outdoor fixtures, and New York City's Department of Transportation) will be pressing the Senate to again kill the legislation.

To counter this lobbying, it essential that the Senate receive a LOT of mail in support of the Senate version, S3003. Here's how you can help, with an assist from the SELENE Website ( <http://www.selene-ny.org> ). If you click on "write your State senator" on the home page, you'll be taken to Call to Action, which provides important addresses and other useful information.

- Write to your senator. A link from the Call to Action page enables you to find out who that is if you're not sure, and mailing addresses are easy to find on the Senate Website. Use the sample letter or, much better, write your own. Mentioning one or two reasons you personally are concerned about light pollution will make for an effective letter...for example, glare from unshielded streetlights or light trespassing onto your property. Ask your senator to urge Environmental Conservation Committee Chair Carl Marcellino to act promptly on S3003.
- A dozen senators are co-sponsoring S3003 along with Senator Marcellino. If your senator is one of these, be sure to thank him/her as well as asking that s/he urge prompt action by the EnCon Committee.
- Send a copy of your letter to Senator Marcellino so he will know the public is weighing in with support.
- Please also send copies to Senate Majority Leader Bruno and Governor Pataki. The Senate may be hesitant to act if the leadership thinks the Gov would veto again, so it's helpful to show that you are cc-ing these people.
- If you have a little energy left over, send a copy of your letter to Assemblyman Grannis, who has been sponsoring this legislation since 1999. It's a nice courtesy to show him that you are carrying the battle to the Senate.
- The LP Legislation page offers text for a postcard that you can download and print. You can pass these cards out to your friends, relatives, and co-workers, urging them to send to their State senator and to the Governor.

Check the SELENE site ( <http://www.selene-ny.org> ) regularly over the next few days; we'll be updating it with details of the voting, including a breakdown by party affiliation, as the information becomes available.

Our thanks to Assemblyman Grannis for his leadership on this issue. Now it's up to us to get the job finished.

The Legislature is scheduled to adjourn for the year in just over two months. Ready, set, WRITE!

**Editor:** I had recently distributed a packet to the entire membership concerning this very important legislation. The time to act is NOW. If you need additional materials or another packet, please, PLEASE contact me via email or telephone. Thanks.



## Saturday, June 12

All hands on deck! Come and lend your hand;  
Work party, 10:30 AM.

Custer Annual Barbeque & Covered Dish Dinner;  
3:00 PM; Members only!

### Upcoming Programs

Sat, July 10: 7:30 PM Alyce Giorgi Herbalist Local Medicinal Plants;  
765-0033

Fri – Sun, July 16, 17, 18 SHELTER ISLAND STAR PARTY AND PIRATES OF  
THE PECONIC KIDS ADVENTURE CRUISE

**Directions:** LIE (495) Exit 73 east Route 58 becomes Rt. 25. Follow 17 miles east,  
make sharp right at Gulf gas onto Main Bayview Rd. Custer is ¼ mile down on left.



### Custer Institute

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Southold, NY 11971  
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[www.custerobservatory.org](http://www.custerobservatory.org)

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## CUSTER EVENTS CALENDAR

### **OBSERVATORY DUTY**

Any staff on hand will be more than glad to assist in the operation of the telescope.

### **AT THE INSTITUTE**

Public observing every Saturday night, weather permitting.

**The Custer Comment**

**TOM MADIGAN, Editor  
CUSTER COMMENT**

99 North Summit Avenue  
PATCHOGUE, NY

**11772**

FOWARDING AND ADDRESS CORRECTION REQUESTED

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