



March-April 2003

Volume XXXIII, Issue 3

Executive Board

PRESIDENT

Bob Vanson '03
Radio Astronomy Chair
631-218-2350
bvanson@aol.com

VICE PRESIDENT

George Lomaga '03
Jamboree Chair
631-298-4857

TREASURER

Barbara Lebkuecher '03
631-722-3850
barbaraleb@aol.com

SECRETARY

Anna Verticchio '03
631-727-8393

FINANCE CHAIR

Warren Hamburger '03
631-563-6106

DIRECTORS

Jim Eagan '04
Observatory Chair
631-369-4517
James.L.Eagan@compuserve.com

Chas. Cardona III '04
631-727-6769

Duff Williamson '03
631-744-9434

Alarico Verticchio '03
631-727-8393

In this Issue

Stargazers Get Special Week to Enjoy Sky

Dark Sky Week, April 1-8, 2003. See article by Susan Harder, inside.
Bob Chapin's Heavenly Events for April;
Another great review by Ed Furey.

Special Announcements

Custer's First Telescope Mirror Making Class

Come one, come all to Custer's first telescope mirror making class! Our first day for the class is slated for April 26 at Custer and will be held in Custer's optical shop in the Observatory basement. All participants will get the opportunity to produce their own 6", 8" or 10" mirrors. If you're interested, show up at 10AM on Saturday, April 26th. A final schedule and other details will be worked out then. The class will be conducted by Tom Madigan and Ralf Wubbenhorst.

Learn to play the Baroque Recorder

Custer's own Charles Cardona, the former Director of Music at Riverhead Schools, will start a music program including instruction on playing the recorder. The first class is Saturday, April 26, 7:00 pm. Attendees will receive their very own beginner Baroque Recorder, instrument bag and music along with the program.

Annual Custer Family Astronomy Day

May 10th, 2003 is the next annual Custer Family Astronomy Day. A full program is on book so bring the whole family for what promises to be a great day for family astronomy. A special treat is in store. Br. Guy Consolmagno, author and astronomer at the Vatican Observatory, will be the guest speaker and will discuss his recent book "Why does the Pope need an Astronomer?".

Table of Contents

March-April 2003 Volume XXXIII, Issue 3 1

 Executive Board..... 1

PRESIDENT..... 1

VICE PRESIDENT..... 1

TREASURER..... 1

SECRETARY..... 1

FINANCE CHAIR..... 1

DIRECTORS..... 1

In this Issue 1

 Stargazers Get Special Week to Enjoy Sky 1

Special Announcements..... 1

 Custer’s First Telescope Mirror Making Class..... 1

 Learn to play the Baroque Recorder 1

 Annual Custer Family Astronomy Day 1

 Table of Contents..... 2

 Editor's Column 3

 Gift Corner 3

 HEAVENLY EVENTS TO WATCH FOR..... 4

 WELCOME TO OUR NEW OR RETURNING MEMBERS: 5

PRESIDENT’S MESSAGE 5

 ANNOUNCEMENTS: 5

 PRESS RELEASE - "National Dark Sky Week: April 1 - 8"..... 6

Stargazers Get Special Week to Enjoy Sky 7

 Boldly Go A Little Slower, Please..... 9

Editor's Column

<p>Tom Madigan, Editor Tom Madigan 99 North Summit Ave. Patchogue, NY 11772-2226 tmadigan@optonline.net 631-447-5339</p> <p>Cutoff for submissions is the 15th of the month preceding publication</p> <p>Visit the new Custer Website at http://www.custerobservatory.org</p>	<p>The Custer Comment is published monthly by</p> <p>Custer Institute P.O. Box 1204 Main Bayview Road Southold, NY 11971 631-765-2626</p>
--	--

I hope everyone enjoyed the last issue of the Comment. This issue, although not as extensive as the last, is packed with great content. I've heard from the regulars since the last Comment was published and would welcome any others who would like to submit an article for consideration or would like to let me know "How I'm doing".

Best,
 Tom
Tom Madigan

Gift Corner

<p>We have meteorites.</p> <p>Great sets mounted in beautiful display cases. Perfect for gifts.</p> <p>New Custer logo coffee cups ONLY \$4 EACH</p>	<p>The Gift Shop still has a dwindling number of copies of ASTRONOMY FOR ALL AGES, by Philip Harrington & Edward Pascuzzi just \$20. As an added bonus, copies are signed by Ed Pascuzzi. We also have copies of PARALLAX, the book that was referred to in the recent lecture. Quantities are limited so hurry and add to your collection while supplies last.</p>	<p>For Sale 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. 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 & 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-adapter-\$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.</p>
---	---	---

HEAVENLY EVENTS TO WATCH FOR

APRIL, 2003

“How do you know that the pilgrim track
Along the belting zodiac
Swept by the sun in his seeming rounds
Is traced by now to the Fishes’ bounds
And into the Ram, when weeks of cloud
Have wrapt the sky in a clammy shroud,
And never as yet a tinct of spring
Has shown in the Earth’s appareling;
O vespering bird, how do you know,
How do you know?”

-Thomas Hardy

During the 2nd and 3rd week of April MERCURY makes its best showing in the evening sky. Don’t miss this opportunity to find it if you haven’t seen it before. (See below for details.) VENUS is no longer seen in dark morning skies, but can still be found very low in the east ½ hour before sunrise. By midmonth MARS can be seen rising along the east-southeast horizon around 3 AM (EDT). By month’s end Mars will have brightened to 0.0 magnitude, adding lustre to the dim diadems of Capricornus in the predawn hours. For the spring season it can claim the title of “morning star”. Now due south (but very high) by nightfall, JUPITER remains your “evening star”. All month it washes its light across the nearby Beehive Cluster of Cancer. They sit together in the west around 3:30 AM at midmonth.

SATURN is well up in the western sky at dusk, and sets along the west-northwest horizon around midnight. Now moving prograde (eastward) between the horn-tips of Taurus, Saturn passes just to the north of M1, the Crab Nebula, on the evening of the 10th.

- 1 New Moon.
- 3 Retrograde ends for Jupiter tonight. The -2.3 magnitude gas giant stalls just off the southeast edge of M44, the Beehive Cluster, and will now begin its long eastward journey deep into Leo.
- 5 Daylight Saving (or Darkness Squandering) Time begins tonight. Set your clocks ahead an hour.
- 7 The fat crescent Moon, Saturn and ζ (Zeta) Tauri form a tight triangle of very different magnitudes
- 10 Jupiter and the waxing gibbous Moon are side-by-side after dark.
- 16 Mercury is at greatest elongation east of the Sun. Find it low over the west-northwest horizon about an hour after sunset, say, after 8:30 PM. It sets shortly after the end of twilight. In the east rises the Full Pink Moon, large as life because it’s also at perigee tonight. (Beware of coastal flooding in the event of a bad storm.)
- 21 Tonight and tomorrow night a few meteors may be seen streaking away from the bright star Vega. They would belong to the annual Lyrid meteor display which, this year, has to contend with a third quarter Moon low in the southeast.
- 23 Mars is found above the third quarter Moon in the predawn hours.
- 26 April 26, 1803: On this spring day, 200 years ago, the residents of the quiet little town of L’Aigle, France, were surprised by a pelting barrage of stones falling out of the sky. Eventually more than two thousand of them were found. This fall of meteorites put to rest all doubts the French Academy of Sciences had about the cosmic origin of meteorites.
- 28 Spot the slender crescent Moon just to the right of Venus along the eastern horizon a half hour before sunrise. Binoculars will help.

Prepared by Robert Chapin

WELCOME TO OUR NEW OR RETURNING MEMBERS:

Tom Madigan of Patchogue, NY, Maggie Woods of Riverhead, NY, Michael Pontacolone of Holbrook, NY and Life Member Ray Gurriere of Mattituck, NY. A cordial welcome, also, to Steve Orlando, the latest addition to our observatory staff. Welcome one and all!

PRESIDENT'S MESSAGE

Thank you to all who have answered our call for donations so far and to Sue Rose for asking AOS members to get involved and help Custer if they can. Custer still faces a huge repair bill to ultimately replace the dome. Your generosity continues to be necessary.

Custer's new Celestron CGE-1400 14" Goto Schmidt-Cassegrain Telescope, with its Goto control system, German Equatorial Mount and Fastar compatible optics, has arrived. Keep an eye open for the announcement, later this spring, of the Dedication and First Light Ceremony Day to celebrate this wonderful donation by members Frank and Joanne Gumper.

Chuck Cardona, our Programs Chair, has been busy and a number of events and programs are taking form at this very moment. Ruth Makofske, our Art Director, arranged a wonderful photography art show in March. The opening on Saturday March 8th, accompanied by wine, cheese and more, was very well attended and a number of pieces were sold. The March 15th St. Patrick's Day Corned Beef & Cabbage Dinner was also a huge success and Chef Chuck O'Cardona out did himself. April, May and June are be busy months with several events scheduled. Mark you calendars and be sure you attend. Also, let me congratulate and welcome Steve Orlando, our latest volunteer, who has passed the training and is now a member of the Observatory Staff Committee.

George Vratos has volunteered to Chair the Nominating Committee. If you would like to help or wish to run for office, contact George at 631-224-4753 ASAP. See you out at Custer!

Bob Vanson

ANNOUNCEMENTS:

YOU STILL HAVE TIME TO VOLUNTEER! The new year is here and March should finally see an improvement in the weather. There is a lot of fixing up, cleaning up, indoor, and outdoor work that needs doing around Custer this month and next. We need lots of members to volunteer for a work party day or two to make it happen. There is no one else to get it done, just you our members and friends. So far, the response by members has been disappointing. We need many more members to volunteer a 10 AM to 5 PM Saturday. **Don't let your organization down.** Give Bob a call at 631-218-2350 or Email him at chaz@owlnet.com.

INTERESTED IN SERVING AS AN OBSERVATORY STAFF MEMBER?

Jim Eagan, the Observatory Chair, continues to look for volunteers who would like to take the next Observatory Staff course and become working Observatory Staff Members. For more information, call Jim at 631-369-4517 evenings or email: James_L_Eagan@compuserve.com.

PRESS RELEASE - "National Dark Sky Week: April 1 - 8"

DARK SKY SOCIETY
Susan Harder, East Hampton

"National Dark Sky Week: April 1 - 8"

Citizens can celebrate the second annual National Dark Sky Week, from April 1 - 8th, by going outside on clear nights with their families and friends, to appreciate our beautiful star-filled sky. Since stray light will obscure the stars in the sky, it is suggested that we turn off non-essential outdoor night lights, re-aim lights which are "off target", and re-evaluate the necessary wattage needed for the intended purpose. Ask your neighbors to do the same.

National Dark Sky Week was initiated last year by Jennifer Barlow, a high school student from Virginia, because she said: "the beauty of the Night Sky has been forgotten by many." She hopes that NDSW will encourage people to look up into the night sky to appreciate our celestial canopy as a resource to be preserved, and to spread the word, as she has done, through this grassroots campaign. Learning the constellations, observing the planets, wondering about the stars and the Milky Way are one of the most basic of human experiences and should be enjoyed by all.

As people reconnect with the night sky, they will have more reason to encourage implementation of better lighting practices at their homes, businesses, and in their communities. Properly designed lighting systems provide safety and convenience without polluting one of our greatest natural assets: the night sky.

The New York State "light pollution" bill has just been introduced in the legislature, and is entitled: The Healthy, Safe and Energy Efficient Outdoor Lighting Act (A6950/S3003). This bill provides for the management of outdoor night lighting to protect the nighttime environment, enhance safety and security, and conserve energy by setting standards for outdoor lighting; providing for the designation of dark-sky preserves; defining light trespass; and providing for distribution to customers by electric corporations or municipalities providing electric service of an informational pamphlet relating to outdoor lighting. For more information about this bill, see the NYState affiliate of the International Dark Sky Association: <http://www.selene-ny.org/>

For useful information about the keeping the sky clear from "light pollution", and more about National Dark Sky Week: <http://www.nationaldarkskyweek.htmlplanet.com/>

Susan Harder
East Hampton
Dark Sky Society

Image of the East Coast at night by satellite, showing light patterns:
ftp://ftp.SkyandTelescope.com/lightpollution/east_us.tif

Stargazers Get Special Week to Enjoy Sky

By LARRY O'DELL
Associated Press Writer

March 27, 2003, 2:19 AM EST

RICHMOND, Va. -- Wouldn't it be great if an evening could be set aside for people to go outdoors, turn off unnecessary lights, look up and savor the wondrous beauty of the night sky?

When the suggestion popped up on an Internet message board for astronomy buffs in February 2002, most of the stargazers reading dismissed it as impossible to pull off. But a 15-year-old girl is making it happen.

Jennifer Barlow, a high school freshman surfing the Web at her suburban Richmond home, proved the skeptics wrong by organizing National Dark-Sky Night just two months after the idea appeared on the message board.

This year, her event has grown into a National Dark-Sky Week, endorsed by major astronomy organizations.

"She's always been strong-willed," said Jennifer's mother, Beth Barlow. "She said she was going to do it, and she's done it all herself. I'm really quite proud."

The American Astronomical Society, the Astronomical League and the International Dark-Sky Association have joined Jennifer in encouraging Americans to enjoy the night sky during this year's National Dark-Sky Week, set for April 1-8.

Jennifer, now a sophomore, said she hopes to foster appreciation for the cosmos and raise awareness of light pollution caused by unnecessary or poorly designed artificial illumination.

"I'm glad people are starting to recognize the problem and are wanting to do something about it," she said. "Turning out lights for one week won't solve the problem, but it can help show the need for better lighting systems."

Adults who have worked with Jennifer to organize the special week are impressed by her focus and work ethic.

"We're all kind of floored to find that kind of enthusiasm from a high school student -- and not just the eagerness, but the follow-through," said Elizabeth Alvarez, associate director of the International Dark-Sky Association.

She noted that Jennifer organized the weeklong observance on her own -- not for school credit or to earn a scout badge, but "just for the love of astronomy."

Kevin Marvel, deputy executive director of the American Astronomical Society, also lauded Jennifer for her efforts, which included setting up a Web page, writing a press release and soliciting the support of his organization and others. The society voted to endorse Dark-Sky Week and is asking members to participate.

"She's got the right spirit and the right drive," Marvel said. "She's just got to find the right college and the right graduate school, and she's on her way."

This year's Dark-Sky observance will last a week to address a problem Jennifer ran into last year. Cloudy weather got in the way on the night she chose for the 2002 event, April 12, so she expanded the observance to provide a wider window for clear skies.

The astronomy organizations are helping publicize the event through news releases and Web postings. Jennifer said she spends more than an hour a day organizing and promoting the observance, mostly by responding to e-mails from visitors to her Web site.

Astronomy is a relatively new passion for Jennifer. She also swims competitively, sings in the Midlothian High School chorus and has advanced to the green belt level after eight months of karate lessons.

Jennifer said she "wasn't that big into science" until her freshman year, when she was captivated by the astronomy segment in an earth science course.

"It was just the greatness of the universe," she said. "It's just so big."

Jennifer enjoyed astronomy so much that she asked for a telescope for Christmas. She began looking at the stars and planets from her front yard, where glare from a nearby industrial park and a bowling alley gave her an understanding of light pollution.

One of the first people to hear about Jennifer's idea for National Dark-Sky Night was her friend and Earth science class lab partner, Sarah Hassmer.

"I thought it was a great idea," said Sarah, now a sophomore at Nelson County High School. "It would make it so tons of people would get to see the brilliance that the night sky has to offer."

Kristin Fleischhauer, who taught the Earth science class, helped Jennifer distribute fliers about National Dark-Sky Night. Fleischhauer quit teaching and moved to Top Sail Beach, N.C., but remains in touch with Jennifer by e-mail.

"Jennifer is a driven young woman," Fleischhauer said. "She told me last year that she wanted to be an astrophysicist, and I just smiled and nodded. I have no doubt she will get whatever she wants."

* ___

On the Net:

Dark-Sky Week: <http://www.nationaldarkskyweek.htmlplanet.com>

International Dark-Sky Association: <http://www.darksky.org>

American Astronomical Society: <http://www.aas.org>

Astronomical League: <http://www.astroleague.org>

Copyright © 2003, The Associated Press

Boldly Go A Little Slower, Please

A review by Ed Furey

Space Odyssey, by Serge Brenier, Cambridge University Press, 2002, 333 pages.

Even a casual glance through the array of photographs in Space Odyssey will give space travel a more French aspect than most Americans are used to. This tribute to the home side becomes less surprising when the title page is consulted and the notation “Translated from the French” is observed. And indeed, although we tend to think of space exploration as primarily an American and Soviet/Russian show, the list of space travelers (as of early 2001) in Appendix I names almost 400 men and women from 29 countries. Indeed, we even notice such Cold War anomalies as the curious fact that cosmonauts from Afghanistan and Vietnam preceded the British into orbit. Space, it seems, is not only the New Ocean proclaimed by President Kennedy, but a rather strange sea.

Space Odyssey will appeal no less to the American ear and eye than the French. The pictures are both lovely and well-reproduced in a book assembled to last, a rarity these days. There is little special pleading in the text. Indeed, Brenier goes out of his way to note some of the remarkable, but lesser known aspects of space travel. He starts with the under-appreciated achievements of American astronaut John Young, who flew on Gemini twice, Apollo twice (once to moon orbit, once to walk on its surface), and the Space Shuttle twice, for six flights into space – seven if you count the liftoff from the moon. His space experience, in many respects, outstrips that of better known heroes Yuri Gagarin, John Glenn and Neil Armstrong.

Although it recounts the first four-plus decades of space exploration, the text and photos are organized thematically, rather than sequentially. So we start with a trip on the contemporary space shuttle to upgrade yet another tool of space exploration – the Hubble Space telescope. From there follows a more general discussion of the shuttle operations, rendered particularly poignant in the wake of the *Columbia* disaster. The classic space station, *Mir* and its troubles get a quick review, along with the early stages of the International Space Station.

A discussion Apollo follows, well illustrated with pictures both familiar and a little obscure – to the extent any Apollo pictures would be obscure to the Custer audience – summing up the discussion of human operations in space. Although the text doesn't mention it, one trait that jumps out of the many photographs of astronauts and cosmonauts is the curious fact that space travel seems to bring out everyone's inner Krusty. Whether they are American, Russian, French, “other,” male or female, space travelers can't resist the urge to clown around in the module.

The photographs also suggest, but do not prove, that women in space seem bound by the some of same conventions of terrestrial fashion, baring their legs in shorts. This extraterrestrial cheesecake may be an artifact of photo selection, but the men generally seem content with their interplanetary Dockers. Readers with longer memories will recall the strange headgear, designed to keep their hair in check, worn by the space stewardesses in “2001 – A Space Odyssey.” This “Odyssey,” however, demonstrates that the a little Dippity – Do or simply not minding a little more bouffant look than customary on earth solves the “problem” of women's hair styles in orbit.

Although Brenier's enthusiasm for space flight is manifest throughout, his estimate of the prospects for manned exploration is grimmer than might be expected in a book of this nature. In the wake of the Columbia tragedy, his pessimism about the future of manned space travel seems only the stronger. The immense costs, combined with the immense distances make any further manned exploration of even the moon, let alone Mars, seem most unlikely. Psychologists are doubtful that a crew could endure the loneliness of even the relatively short trip to Mars in space ships of the kind that could be built in the foreseeable future.

Russians have stayed in space for over a year, but always in near earth orbit, with home right out the window and a Soyuz lifeboat ensuring a return in a couple of hours. That is vastly different from a year in a vessel en route to Mars, when earth (and Mars) is no more than a bright star, if visible at all, with no prospect of return for months or even years. That trip would be closer to a stay in a high-tech maximum security prison, with no visitors, no walks in the courtyard and even less alteration in the daily routine. And most of the cost of space flight is simply to keep the astronaut alive. The superb robot explorers – our electronic surrogate eyes and ears – have done even better than expected in exploring the solar system. All the most interesting scientific work in space is being done by machines. Few of us who watched the last Apollo mission lift off from the moon in 1972 imagined that no one would set foot on the moon again in our lifetimes, but that seems the likely prospect. There is neither plan, nor will, nor money for any manned mission beyond low earth orbit.

The little parochialism Brenier displays is more amusing that off-putting to the American ear. “Dollar figures” for the cost of programs and pieces of hardware are given in Euros. However, with the dollar and Euro close to parity, the mental arithmetic required is minimal. And who is French aviation pioneer Clement Ader, a name for which there is no entry in the Encyclopedia Britannica? With a little research, one learns he is credited with the first powered ‘hop’ in 1890, which actually went further than Wright Brothers first flight (165 feet), in a bat-like mechanism that did not achieve true, maneuverable flight. Ader did win what was perhaps the first military airplane contract, from the French Ministry of War. In 1898, his new machine made several unsuccessful attempts to fly and finally crashed, prompting the War Ministry to make what may be the first cancellation of an airplane contract. In contrast, the Wright Brothers not only were able to control their aircraft once aloft, but made three more flights on December 17, 1903, one lasting almost a minute.

Space Odyssey is a graceful *homage* to the men and women of all nations who have flown in space, waited on the ground the them to return and eagerly analyzed the bytes of data flowing in from the robot ambassadors our race has sent hither and yon through the Solar System.

This Issue of the Custer Comment was professionally printed by our friends at

Patchogue Printing
23 Havens Avenue
Patchogue, NY 11772
631-447-1506 Fax. 631-447-1508

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; Apr 5th 12th 19th and 26th.

The Custer Comment

TOM MADIGAN, Editor

CUSTER COMMENT

99 North Summit Avenue

PATCHOGUE, NY

11772

FORWARDING AND ADDRESS CORRECTION REQUESTED

FIRST CLASS