

**NEXT MEETING: TUESDAY, April 19, 2005**

**Main Program: "The Beauty of Auroras" – by Sara Baird**

**Talks by Tom Sidowski (Traveling with your Telescope) and Greg Lee (Constellation Virgo)**

**Mt. Cuba Astronomical Observatory (MCAO), 8 PM**

**DAS Board of Directors Meeting precedes at 7:15 PM.; all members are invited**

**Vol. 50 No. 4**  
**April, 2005**

**PRESIDENT'S MESSAGE – Billie Westergard**

The March meeting was well attended and Don Surles, President of the Delmarva Star Gazers, brought us up to date on all of the programs, events, and activities of the DSG. Several members of the DSG attended our meeting and the DAS was happy to have them. Don Surles is a very good man and has done outstanding work to bring the joy of observational astronomy to many people throughout the tri state area. Many of you may not know that Don Surles suffered a heart attack on March 28<sup>th</sup> and had by-pass surgery March 30<sup>th</sup>. I visited him at Christiana Hospital on April 2<sup>nd</sup> and he is making good progress in his recovery. All of the members of the DAS and DSG wish him a strong recovery and good seeing very soon.

Greg Lee gave another fine talk on our "Constellation Of The Month" and Lynn King introduced us to her favorite 'Centerfolds' Thank you Lynn and Greg.

One word of caution! Emil reported to me that we left MCAO in a rather messy condition after the last meeting and that we will not be able to have refreshments at future meetings unless we do a better job of keeping MCAO clean during and after our meetings. Please be careful with food and drink during the meetings and clean up after yourself if you have an accident.

The April meeting will feature a talk by Sarah Baird entitled 'The Beauty of Auroras'. I know that Sarah has put a lot of time into her presentation and I can't wait to attend this meeting. The Constellation Virgo will be the topic of Greg Lee's talk and Tom Sidowski will present our Mini Talk about 'Traveling With Your Telescope'. Refreshments will be served at 9:30, so enjoy the program, have fun, and get to know each other after the meeting. And remember to keep the facilities clean!

Mount Cuba Astronomical Observatory has agreed to fund a portion of our Annual Dinner Meeting cost which has allowed us to have an outstanding Keynote Speaker from Goddard Space Flight Center and to reduce your dinner cost. I have also been able to arrange a reduction of \$2.50 per entree in the cost of our dinner at Lambertis Cucina. Please see the reservation form below, which now shows a reduction of \$7.50 per person. For those of you that have already sent in your payment please see Bob Mentzer for a \$7.50 refund for each person in your party.

The Keynote Speaker will be Dr. H. John Wood, Optics Lead Engineer on the Hubble Space Telescope, the engineer who fixed the telescope. The title of his talk will be "The Best From Hubble". Dr. Wood attended Swarthmore College and received his PhD from Indiana. He is an Astronomer and was Assistant Director of Cerro Tololo Observatory in Chile.

The Dinner Meeting will be Tuesday, May 17th this year at Lambertis Cucina, which is located at 1300 Centerville Rd. (adjacent to the Acme Supermarket behind the Prices Corner Shopping Center). The Banquet Room will be available from 6 to 10:30 P.M. Dinner will be served at 7:00 P.M. and the presentation by Dr. Wood will begin about 8:30 P.M. We will announce the winner of the Luther Porter Award and the Astronomer of the Year Award after dinner. I think all of you will like Lambertis menu, pricing, and facilities very much. Please fill out the Dinner Reservation Form below, indicate your choice of entrée, and return it to Bob Mentzer. This will be a very good dinner meeting and I look forward to a full house in May. Space is limited to 75 people so send in your reservation soon.

Nominations for the Astronomer Of The Year Award are still open. Please give your recommendation to one of the following members of the Award Committee:

Glen Bentley, 163 E Avondale-New London Rd., West Grove, PA 19390

Phone #610-869-0706

Robert Karcha, 4420 Sharon Dr., Wilmington, DE 19808-5619

Phone #302-999-9509

Carolyn Stankiewicz, 1001 Woodstream Dr., Wilmington, DE 19810

Phone #302-475-2484

All nominees must be DAS Members.

#### LUTHER PORTER AWARD -- Warren Jacobs

Billie Westergard has asked me to Chair the committee, and I need others to help select the awardee and help plan the program. If you would like to become more involved with DAS, this is a good opportunity to help us. Please call me at 610-255-5247.

#### DAS STAR PARTIES -- Tom Sidowski

Springtime is observing time! Saturn and Jupiter are at their best right now, and your chance to catch these and thousands of other celestial sights are at DAS star parties at Mt. Cuba:

Friday May 13th 7:30p - 9:00pm @ Woodside Hill Creamery (see below),

(rain date will be Saturday May 14)

Saturday June 4th 8:00pm

Friday July 8th 8:00pm

Saturday July 30th 8:00pm

Friday Sept 9th 8:00pm

#### OBSERVING SESSIONS AT WOODSIDE HILL CREAMERY : Tom Sidowski

The DAS will hold four observing sessions at the Woodside Hill Creamery in Hockessin this summer. The creamery is located at the intersection of NorthStar Road and Little Baltimore Road. It's a great place to connect with the public and show a few celestial sights to some folks who never get a chance to view through a telescope. They have good ice cream too! We'll hold two evening sessions (star, moon and planet viewing), and two afternoon sessions (solar observing). The evening sessions will end at 9:00pm when the creamery closes. The scheduled dates, and rain dates, follow. Please note the first is also the May DAS star party:

Friday May 13th 7:30pm - 9:00pm (rain date Saturday May 14th)

Saturday June 19th 1:00pm - 2:30pm (no rain date)

Saturday July 16th 1:00pm - 2:30pm (rain date Sunday July 17th)

Friday August 12th 7:30pm - 9:00pm (rain date Saturday Aug. 13th)

#### LIBRARY NEWS -- Glenn Bentley

At last months meeting DAS member Dan Chester kindly donated a copy of "The Backyard Astronomer's Guide" by Terrence Dickinson and Alan Dyer to the DAS library. This is the best introductory guide to amateur astronomy that I have ever come across. The guide opens with beginning observation with binoculars and concludes with CCD imaging.

The text is concise, but comprehensive and is supported by a wealth of photographs and illustrations. In the chapter on telescopes, the authors make specific recommendations on models of scopes that should meet the needs of aspiring amateurs, and equally specific recommendations of models to avoid. I would highly recommend "The Backyard Astronomer's Guide" to both newcomers and seasoned observers, who should find it helpful for answering the kinds of questions that are commonly posed at star parties. We would like to thank Dan Chester for his contribution to the library

**"GALACTIC PURSUIT" (astro-trivia question of the month) – Sheila Vincent**

A thousand apologies for the inadvertent – and lengthy – cliffhanger status of the previous question (What is the oldest man-made object still in space – remember?), and a thousand thanks to the four members Tom DeMott, Homi Bhedwar, Valentino De Rocili, and the Galactic Pursuer) who faithfully replied so long ago. Though the G.P. himself lays claim to the distinction in question, he also recalls being nearly hit by a 3.5 lb., soccer ball-sized object that proved to be the second U.S.-launched satellite: Vanguard I. Launched on March 17, 1958, this mercury and solar battery-powered mechanism's transmissions "used to interfere with [the G.P.'s] AM Galactic Radio reception...", while sending data that, as Homi notes, "provided information on air density and micrometeorite impacts", as well as "establishing beyond a doubt that Earth was pear-shaped". Of course, Sputniks I and II, launched one month apart by the Soviets in 1958, were the *first* man-made objects in space, but, as Homi says, "Both are fried."

Valentino figured Pioneer 10 was the answer, logically assuming that "space" meant "deep space", and not Earth orbit. As an interesting aside, Pioneer 10 is not even the most distant human creation any more. On 2/17/98, Voyager I's heliocentric radial distance equaled Pioneer 10's at 69.4 AU, and thereafter exceeded it at the rate of 1.02 AU/year. Much closer to home, Vanguard continues its now-silent, slow fall toward Earth, and may remain so for another 600 years. Tom tells us that "while its batteries failed years ago, preventing direct communication, Vanguard is still visible and tracked by fans".

Ever the purist, Tom presents the intriguing notion that it is possible that Vanguard is not the oldest thing up there. "Maybe a fleck of paint from Sputniks I & 2, or a bolt from Explorer I, which predate Vanguard, are still out there... Could radio waves be considered man-made objects?..." What do you think?

For this month's question, I'd like to keep to the same sort of theme: What is the most distant *natural* object yet identified in the solar system (not counting comets or the Oort Cloud)?

As usual, please send answers to Sheila Vincent at: 903 Pennsylvania Ave, New Castle, DE 19720

Or e-mail at [sheila@dnsashland.org](mailto:sheila@dnsashland.org)

**ALMOST HEAVEN STAR PARTY: June 2-5**

There's a new Star Party this year and it will be in one of the darkest places on the east coast. It's run by the Northern Virginia Astronomy Club (NOVAC) of Fairfax, VA and will be held at Spruce Knob, WV at The Mountain Institute where the elevation is 4200 ft and the familiar constellations are almost lost among thousands of stars we don't see in Northern Delaware. It truly is "almost heaven" for amateur astronomers. The Mid-East Region of the Astronomical League (MERAL) is also planning to hold their annual meeting at the event. The dates are June 2-5, 2005 and registration can be done on-line at [www.novac.com](http://www.novac.com). NOVAC says that all proceeds from this event will go to the Virginia Outdoor Lighting Taskforce ([www.volt.org](http://www.volt.org)) to support their efforts in fighting light pollution.

**MEMBERSHIP EXPIRATION NOTICES:** If the mailing label on the envelope containing your *FOCUS* is marked with Red Marker, your membership is expiring or has expired. To continue to receive the *Focus* and *Reflector*, send the renewal form on the back of this page with your check to:

DAS, c/o Robert Mentzer

605 River Road

Wilmington, DE 19809

**UPCOMING MEETINGS**

April 19, 2005:

Beauty of Auroras - Sarah Baird

Constellation – Virgo – Greg Lee.

Mini talk – Traveling with your telescope                      -- Tom Sidowski.

May 17, 2005: Annual Dinner – "The Best From Hubble" by Dr. H. John Wood of NASA-Goddard Space Center;  
Luther Porter Award;  
Amateur Astronomer Of The Year Award;

--- Meeting at Lamberti's Cucina – make reservations on the form below.

**June 21, 2005 Space Probe Spectrographs – Jerry Truitt;  
Constellation – Scorpius – Greg Lee;  
Mini talk-The Messier Catalog - Robert Karcha.**

**June 25, 2005 -- Picnic at MCAO with a cookout and other activities.**

**FROM THE (substitute) EDITOR'S DESK**

**Our real editor, Lee Kaser, is in Europe this month. Greg Lee is trying to fill his shoes. Blame Greg, not Lee, for any errors in this issue. If those names are confusing don't blame either of us.**

DAS CONTACTS

Membership: Any of the following:

President: Billie Westergard ----- 302-622-7253  
Home --- 302-366-0938

Vice President: John Case ----- 302-836-4888  
Secretary: Lynn King ----- 302-764-8816  
Treasurer: Bob Mentzer----- 302-764-1926

Chairman, Observatory Committee and Manager,  
Mt. Cuba Observatory: Emil Volcheck-- 610-388-1581  
Messier Club: Lynn King ----- 302-764-8816  
Observing: Greg Lee ----- --- 302-762-5358  
Archivist: Rene Van Caneghem ----- 410-392-3718  
By-Laws: Henry Bouchelle ----- 302-655-3230

Board Members at-large:  
Carolyn Stankiewicz ----- 302-475-2484  
ATM and AP SIGs: Bill Hanagan ----- 302-239-0949  
Friday Night Star Parties:Tom Sidowski 302-239-1844  
Light Pollution Strategist; Greg Weaver 302-239-1338  
Library Chair: Glenn Bentley ----- 610-869-0706  
Ad Hoc Star Parties: Sheila Vincent - --- 302-322-4739  
Porter Award Chrman: Warren Jacobs- 610-255-5247

MCAO Web Page: [www.physics.udel.edu/MCAO](http://www.physics.udel.edu/MCAO)

DAS Web Page: <http://delastro.org/>

Focus Editor: Lee Kaser, Phone 302-995-6251

E-mail:kaserlo@msn.com

**MEMBERSHIP APPLICATION AND RENEWAL FORM**

**If you have questions, call any of the member representatives listed above. Otherwise, just check the appropriate boxes and complete this form. Cut it off (after reading the other side, hopefully) and send it with your check to Bob Mentzer at his address above. The magazine prices are group rates to DAS members. Thanks, and welcome to the DAS if you're just joining us for the first time.**

<b>New Member</b>	<b>Senior/Family Membership</b>	<b>\$20.00</b>
<b>Renewal</b>	<b>Junior membership (16/under)</b>	<b>\$10.00</b>
	<b>Sky and Telescope Magazine</b>	<b>\$33.00</b>

NAME \_\_\_\_\_ Astronomy Magazine \$29.00

\$ _____
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STREET ADDRESS \_\_\_\_\_ Total Submitted -----

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_ TELEPHONE \_\_\_\_\_

**MAY DINNER MEETING RESERVATION FORM**

6:30 P.M., May 17, 2005

Lamberti's Cucina, 1300 Centerville Rd, Prices Corner

(Adjacent to the ACME Supermarket behind Prices Corner Shopping Center)

**DINNER**

Please Select One of The Following Entrees For Each Person In Your Party:

- 1) Ravioli Siciliano – Sliced eggplant sautéed in a garlic white wine sauce with a touch of marinara and chopped tomatoes - \$20.50
- 2) Chicken Marsala – Sautéed in imported marsala wine and topped with mushrooms and sun-dried tomatoes - \$20. 50
- 3) Salmon Scampi – Sautéed in garlic and olive oil in a white wine blush sauce - \$20.50
- 4) Elaborate Chefs Salad - \$11.50

All entrees include: Appetizers served Family Style, Homemade Italian Bread, Red & White Focaccia, Garden Salad, Coffee, Hot Tea, Iced Tea, Soda, and Dessert

Your Name: \_\_\_\_\_

Number Of People In Your Party: \_\_\_\_\_

Entrée Selections: \_\_\_\_\_

Amount Enclosed: \_\_\_\_\_

Make check payable to DAS and mail to Bob Mentzer at 605 River Rd., Wilmington, DE 19809

**SPEAKER**

Dr. H. John Wood is an astronomer and serves as an optical engineer for the Optics Branch at NASA's Goddard Space Flight Center. Since June 1990 he has been Optics Lead Engineer on the Hubble Space Telescope Project. He led the team that successfully determined the optical prescription of HST while on orbit. He then led NASA's effort to develop and test the corrective optics for HST. In addition to his work on Hubble, he currently serves as Science Liaison in the Instrument Synthesis & Analysis Laboratory for new Earth Science and Space instrument engineering design at Goddard.

A graduate of Swarthmore College, Dr. Wood earned the M.A. and Ph.D. in Astronomy from Indiana University. He has been at Goddard Space Flight Center for 20 years. In addition to the Hubble Project, he has been Lead Optical Engineer on other Goddard projects: the Mars Observer Laser Altimeter and the Diffuse Infrared Background Experiment aboard the Cosmic Background Explorer (COBE). Earlier he was assistant to the director at Cerro Tololo Interamerican Observatory (Chile) for two years. He held a Fulbright Research Fellowship for two years at the University Observatory in Vienna, Austria. He also served five years as a staff astronomer at the European Southern Observatory in Chile. His career began with six years on the astronomy faculty of the University of Virginia at Charlottesville.

**Winner of the 1992 NASA exceptional service medal and the 1994 NASA exceptional achievement medal for his work on COBE and HST, he is the author of 50 research papers in astronomy and space optics. He was invited by the Optical Society of America to edit special editions of Applied Optics and Optics and Photonics News on the HST first servicing mission. He was co-chair of the HST Independent Optical Review Panel that was charged with the determination of the optical parameters for the HST while on orbit.**