

National Capital Astronomers, Inc.

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September Speaker: Steve Robinson, Amateur Astronomer Submitted by Jeff Guerber

Steve Robinson will present the featured talk at the September 11 meeting of the National Capital Astronomers.

The meeting will be held at 7:30 P.M. in the University of Maryland Astronomy Observatory on Metzerott Road in College Park. MD.

Mr. Robinson has been an amateur astronomer for over 25 years, and has been active with the American Association of Variable Star Observers (AAVSO) for the past six. During that time, Mr. Robinson has become involved with the NASA/ AAVSO collaboration to detect and measure Gamma Ray Burst Transients. More recently, he has observed and measured over 1500 cataclysmic variables, and has contributed his findings to the international database managed by AAVSO. This effort is conducted at his home in Rockville, Maryland, using an 18 inch equatorial telescope and an SBIG ST-9E camera. Mr. Robinson operates the web-site www.

The President's Letter

Welcome to a new NCA meeting year. I hope you all had a pleasant summer and were able to get in some observing. I know that if you stayed around here, the weather was somewhat of a hindrance. I have a confession to make. Since I bring my 6" f/8 refractor to Exploring the Sky and other NCA outreach events I decided to get a Go To mount which would be easier to tote around than my Losmandy G11. It makes it faster to find some of the faint fuzzies. At last Saturday's Exploring the Sky I was easily able to show people M13 and the Ring Nebula.

In today's Washington Post (August 11) there was an article about tonight's

Perseids. I was interviewed and they used some of what I told them, but NOVAC got the publicity. Not only are they much larger, but they also have a club observing site. While it might take a while to reach their 800-1000 members, we should have our own observing site. Fortunately, there are members looking into this.

Members who have given us their email addresses will receive a PDF file of Star Dust as well as the printed copy. If you do not have the required free Adobe Reader, you can download it from their web site, www.adobe.com/products/acrobat/

(Continueod on page 4)

highenergyastro.homestead.com. It is on this web-site that Mr. Robinson describes his work and that of the world-wide group of amateurs conducting these measurement efforts.

Mr. Robinson has described the techniques used, and results of his efforts during talks given at the Mid-Atlantic Star Party, Mason-Dixon, NOVAC, The University of Maryland Summer Program, the Texas Star Party, and NCA.

Elections at June 12 Meeting

The results of the NCA election for 2004-2005 are as follows:

President:	Jay H. Miller
Vice-president	Jeffrey R. Guerber
Secretary:	Dr. Nancy Grace Roman
Treasurer:	Jeffrey B. Norman
Trustee:	Guy F. Brandenburg,
Submitted by Jac ing Committee.	ck Gaffey for the Nominat-

The September NCA Meeting is on the 11th, the <u>2nd</u> Saturday in September!

NCA Events This Month The Public is Welcome!

NCA Home Page: http://capitalastronomers.org

Fridays, September 3, 10, 17, and 24, 6:30 to 9:30 P.M. NCA mirror- and telescope-making classes at the Chevy Chase Community Center, at the northeast corner of the intersection of McKinley Street and Connecticut Avenue, N.W. Contact instructor Guy Brandenburg at 202-635-1860 or email him at gfbrandenburg @yahoo.com.

Some Fridays or Saturdays in September Observing with NCA's 14-inch telescope in Chevy Chase, MD. For more information, see article this page.

Saturday, September 11 at 7:30 P.M. NCA meeting at the University of Mary-

land Astronomy Observatory on Metzerott Road in College Park, MD. Speaker: Steve Robinson, amateur astronomer. See map and directions on Page 5.

Saturday, September 11 at 5:30 P.M.,

preceding the meeting, dinner with the speaker and NCA members will be at 5:30 p.m. at the Garden Restaurant at the UMD University College Inn and Conference Center. See map and directions on Page 5.

Upcoming NCA Meetings

2004: October 2, November 6, December 4; 2005: January 8, February 12, March 12, April 2, May 7, and June 4

Observing with the NCA C-14 *Mike McNeal*

On some Friday or Saturday evenings, in Mike McNeal's backyard, 5410 Grove St, Chevy Chase, MD, (Friendship Heights Metro). Call by 10 p.m. the Friday before to find out if an evening is available and to make a reservation if it is. Call Mike at 301-907-9449 or email him at mcnealmi@verizon.net to let him know you are coming.

> Join the International Dark-Sky Association

3225 N. First Avenue Tucson, AZ 85719-2103

www.darksky.org

http://capitalastronomers.org

National Capital Astronomers, Inc.

Jay H. Miller, NCA President, rigel1@starpower.net, 301-530-7942 (home).

Jeff Guerber, NCA Vice-president, jeff.guerber@gsfc.nasa.gov, 703-281-4980 (home).

Dr. Nancy Grace Roman, NCA Secretary, nancy.roman6@verizon.net, 301-656-6092 (home).

Jeffrey Norman, NCA Treasurer, jefffrey.norman@att.net, 5410 Connecticut Avenue, NW, Apt. #717,

Washington, DC 20015-2837, 202-966-0739

Trustees: Guy Brandenburg, Gladys Fuller, Gary Joaquin, Dr. Wayne H. Warren,

NCA Webmaster, Dr. Harold Williams, hwilliam@mc.cc.md.us, 301-650-1463 (planetarium), 301-565-3709 (home).

Elliott Fein, NCA *Star Dust* Editor, elliott.fein@erols.com, 301-762-6261 (home), 5 Carter Ct. Rockville, MD 20852-1005. NCA Web Page: http://capitalastronomers.org/.

Appointed Officers and Committee Heads: Exploring the Sky - Joseph C. Morris; Meeting Facilities - Jay H. Miller; Observing - Michael McNeal, mcnealmi@verizon.net; Telescope Making - Guy Brandenburg; *Star Dust* Editor - Elliott Fein

SERVING SCIENCE & SOCIETY SINCE 1937

NCA is a nonprofit, membership-supported, volunteer-run, public-service corporation dedicated to advancing astronomy, space technology, and related sciences through information, participation, and inspiration, via research, lectures, presentations, publications, expeditions, tours, public interpretation, and education. NCA is the astronomy affiliate of the Washington Academy of Sciences. All are welcome to join NCA.

SERVICES & ACTIVITIES:

Monthly Meetings feature presentations of current work by researchers at the horizons of their fields. All are welcome; there is no charge. *See* monthly *Star Dust* for time and location.

NCA Volunteers serve in a number of capacities. Many members serve as teachers, clinicians, and science fair judges. Some members observe total or graze occultations of stars occulted by the Moon or asteroids. Most of these NCA members are also members of the International Occultation Timing Association (IOTA). **Publications** received by members include the

monthly newsletter of NCA, *Star Dust*, and an optional discount subscription to *Sky & Telescope* magazine.

Consumer Clinics: Some members serve as clinicians and provide advice for the selection, use, and care of binoculars and telescopes and their accessories. One such clinic is the semiannual event held at the Smithsonian Institution National Air and Space Museum.

Fighting Light Pollution: NCA is concerned about light pollution and is interested in the technology for reducing or eliminating it. To that purpose, NCA is an Organization Member of the International Dark Sky Association (IDA). Some NCA members are also individual members of IDA.

Classes: Some NCA members are available for educational programs for schools and other organizations. The instruction settings include star parties, classroom instruction, and schoolteacher training programs that provide techniques for teaching astronomy. NCA sponsors a telescope-making class, which is described in

the *Star Dust* "Calendar of Monthly Events." **Tours:** On several occasions, NCA has sponsored tours of astronomical interest, mainly to observatories (such as the National Radio Astronomy Observatory) and to the solar eclipses of 1998 and 1999.

Discounts are available to members on many publications, products, and services, including *Sky & Telescope* magazine.

Public Sky Viewing Programs are offered jointly with the National Park Service, and others. Contact: Joe Morris, joemorris@erols.com or (703) 620-0996.

Members-Only Viewing Programs periodically, at a dark-sky site.

NCA Juniors Program fosters children's and young adults' interest in astronomy, space technology, and related sciences through discounted memberships, mentoring from dedicated members, and NCA's annual Science Fair Awards. Fine Quality Telescope, 14-inch aperture, see "Calendar of Monthly Events."

Star Dust is published ten times yearly, September through June, by the National Capital Astronomers, Inc. (NCA). Editor: Elliott Fein, Co-editor: Adele Fein, Editorial Advisor: Nancy Byrd. Consultant: Jeffrey Norman *Star Dust* © 2004. *Star Dust* may be reproduced with credit to National Capital Astronomers, Inc.

Travel Opportunities & NSN Telecon

Nancy Grace Roman

1. Two travel opportunities with the Astronomical Society of the Pacific:

Join us in Iceland in 2005 for the Northern Lights.

ASP Executive Director, Mike Bennett, will be a special guest and lecturer with the Stargaze Team on our 5th trip to Iceland in search of the Aurora Borealis February 14-21, 2005. Visit our website for details and information on how to sign up. Proceeds on tours booked through the ASP provide support for our ongoing education programs.

http://m1e.net/c?7938799b7TGuqCycPqOE%40611104bArqjIU5UgNCc

Last Chance...A Few Spaces Still Available for Our April 2005 Total Eclipse Cruise

There are still a few spaces available for the 2005 Total Eclipse Cruise. Join us on the 320-passenger Seven Seas Paul Gauguin and sail to the great South Pacific eclipse. View the eclipse from the point of maximum totality on April 8th, experience incredible dark-sky stargazing each night on deck, and enjoy lectures and discussions with the distinguished Stargaze Team, including Alex Filippenko, noted research astronomer and professor from U. C., Berkeley, ASP Executive Director Mike Bennett, SETI Institute Astronomer Seth Shostak, and well-known photographer Dennis Mammana. Points of contact include infamous Pitcairn Island, and the stunning Marquesas Islands. Round-trip air fare to and from Papeete, Tahiti included.

Visit our website for more information and itinerary.

http://m1e.net/c?7938799-8rPgS0rqEo0L2%40611105-D3BsAupAB/vDU

2. I just received the following announcement

NCA TREASURER'S REPORT Jeffrey Norman

July 1, 2003 to June 30, 2004

INCOME Dues Gifts Interest Telescope-making Classes Total Income	$\begin{array}{c} \$ & 6430. \ 50 \\ 1084. \ 00 \\ 56. \ 89 \\ \underline{810. \ 00} \\ \$ & 8381. \ 39 \end{array}$
EXPENSES	
Dues (AL - 902.56 + IDA - 100.00) Miscellaneous (includes \$75 D.C. report form fee)	\$ 1002.56 100.44
Secretary	228, 91
Sky & Telescope Subscriptions	3061.35
Speakers' Dinners	382.17
Star Dust	4494.50
Total Expenses	\$ <u>9269.93</u>
Balance – July 1, 2003 Excess Expenses over Income Balance – June 30, 2004	$\begin{array}{c} \$ 12451.80 \\ \underline{888.54} \\ \$ 11563.26 \end{array} *$
<pre>Total number of paying members joining or from 7-1-02 to 6-30-03 Total number of paying members joining or from 7-1-03 to 6-30-04 Decrease in Membership (7.5%)</pre>	146 **

MEMBERSHIP REVIEW

Total Paying Memberships as of 6-30 of Each Fiscal Year

1992 - 223	1995 - 201	1998 - 169	2001 - 162	2004 - 135
1993 - 184	1996 - 179	1999 - 173	2002 - 154	
1994 - 163	1997 - 194	2000 - 174	2003 - 146	

 $\ast\,$ The Balance includes \$ 4740.93 from the NCA Travel account.

** This does not include life members or science fair winners because they receive free memberships.

Exclusive NSN Telecon: Prepare for Nova Origins Miniseries

Has the universe always existed? How did it become a place that could harbor life? Are we alone, or are there alien worlds waiting to be discovered? NOVA presents some startling new answers in Origins, a groundbreaking four-part NOVA miniseries airing on PBS television stations September 28 and 29, 2004.

Details On The NSN Telecon

Notice: The date of the telecon has been changed to Wednesday, September 8 at 9 P.M.

NASA has arranged for Night Sky Network club members to participate in this exclusive Telecon with the producer, Tom Levenson, and the host, Dr. Neil Tyson, of this NOVA series.

Here is the call-in information: Wednesday, September 8 at 9 P.M. Call toll-free: 1-888-791-1856 anytime after 8:45 P.M. on Wednesday. You will be asked for the passcode: Night Sky Network. You will be asked for the call leader: Michael Greene. You will be asked to give your name and the club you belong to.

Mid-Atlantic Occultations and Expeditions by David Dunham

Asteroidal Occultations

							aur.	Ap.
Date	Day	EDT	Star	Mag	Asteroi d	dmag	\mathbf{S}	in. Location
Sep 4	Sat	5:16	TYC24130137	11.7	Lumen	1.5	5	8 Pennsyl vani a
Sep 8	Wed	2:11	TYC00080346	10.5	(577) Rhea	2.9	4	6 SC, s. N. Car.
Sep 12	Sun	1:09	SA0 36280 A	7.2	Pal i sana	2.2	13	2 NY, nwPA, n. Ohi o
Sep 16	Thu	0:24	SA0 94339	8.8	Moira	6.7	6	3 cen. VA, s. e. MD
Sep 29	Wed	2:36	TYC58140435	11.1	Rosa	3.6	9	7 SC, e. N. Car.

Grazing Occultations

DATE	Day	EDT	Star	Mag	% a	al t	CA	Location
Sep 4	1 Sat	3: 52	ZC 0429	7. Ŏ	72-	62	18N	Frederick, MD & York, PA
Sep 4	1 Sat	5:07	rho Ari	5.6	72-	70	16N	Yorktown & New Church, VA
Sep 7	7 Tue	4:26	SA0 77207	9.9	43-	50	15N	SilverSpring &Beltsville, MD
Sep 9) Thu	4:38	SA0 79256	7.8	25-	32	14N	Urbana & Mt.Airy, MD; NYC
Sep 21	l Tue	22:04	SA0 186672	7.4	54 +	13	5S	Hazelton, WW & Somerset, PA
								Morgantown, WV & Ithaca, NY

Total Lunar Occultations

DATE	Day	EDT	Ph Star	Mag % a	alt CA Sp. Notes
Sep 9	Thu	4:27	R ZC 1105	6.5 25- 3	31 24S G7 close double
Sep 9	Thu	6: 02	R ZC 1108	7.0 24- 4	49 56S G8 Sun - 9; close double?
Sep 20	Mon	19:42	D ZC 2470	6.1 42+ 2	21 79S B9 Sun alt8 deg.
Sep 21	Tue	20:11	D ZC 2645	6.2 54+ 2	21 45N A5
Sep 22	Wed	21:20	D ZC 2831	6.0 65+ 2	22 64N B2
Sep 24	Fri	21:25	D 35 Cap	5.8 85+ 2	29 85S K3 ZC 3141
Sep 25	Sat	2:09	D 37 Cap		11 85N F5 ZC 3158; Az. 233 deg.
Sep 26	Sun	23: 50	D psi 2 Aqr	4.4 97+ 4	42 78N B5 ZC 3425; close double?
Sep 30	Thu	6: 55	R 54 (Ceti)	5.9 96- 2	23 81N F2 ZC272/Ari dbl. WA 279
0ct 2	Sat	23: 20	R SA0 76475	7.7 79- 2	24 59S A3 secondary of ZC 612
0ct 2	Sat	23: 21	R ZC 612	7.6 79- 2	24 59S A3 9s after above; sep. 5"

David Dunham, e-mail dunham@erols.com, more info. http://iota.jhuapl.edu Phone home 301-474-4722; office 240-228-5609; car 301-526-5590

The President's Letter, continued

(Continued from page 1)

readstep2.html.

You will have several options. You can continue to get both, you can request to receive only the PDF, or you can contact our secretary, Nancy Grace Roman, and discontinue the email copy. If enough opt to receive the PDF we can print fewer and reduce our printing and mailing costs, NCA's greatest expense.

I will now make my request for assistance. Any volunteer organization such as ours relies on its members to perform various functions. If enough assist, no one is burdened with any job. In NCA not every job requires a knowledge of astronomy. It would be nice to have someone assist the secretary by contacting those who don't renew and find out why and maybe encourage them to reconsider. We presently have someone contacting some of the local newspapers about our meetings. I would like to expand this. If any of you have ideas on how we could publicize NCA let me know. We need reviewers for the talks. You could either review a talk yourself or assist the V.P. in getting reviewers. I can supply a video tape to aid the reviewer. If you have an idea for a Star Dust article give it to Elliott Fein, our editor. I'd like to see articles from the members on astronomy-related topics to make Stardust more personal and interesting. Recently, on our Yahoo newsgroup, I suggested articles on basic aspects of astronomy. If you have a

topic you would like to see discussed, contact me.

For our June meeting we had a mini star party for the membership at the UMD observatory with telescopes and pizza. It was successful enough that we will repeat it this year. Now if we can arrange for a dark NCA observing site it would be even better. As I said above, this is one of NOVAC's perks.

Lastly, if you have any complaints or concerns about NCA please let me know. We want to make our organization more responsive to our membership and make sure we meet your needs.

Jay Miller, President NCA

Getting to the NCA Monthly Meeting Jeff Guerber

NCA meetings are now held at 7:30 p.m. at the University of Maryland Observatory, in College Park on Metzerott Rd. between University Blvd. (MD-193) and Adelphi Rd. To get there from the Capital Beltway (I-495), either take US Rt. 1 south about a mile, turning right onto MD-193 West, then at the first light turn right onto Metzerott; or, take New Hampshire Ave. (MD-650) south, turn left at the second light onto Adelphi Rd., two more lights, turn left onto Metzerott, and proceed about a mile to the observatory. The observatory is on the south side of Metzerott Rd., directly opposite the UM System Administration building; you can park there if the observatory lot is full, but be careful crossing Metzerott Rd.

At 5:30 p.m. before the meeting,

please join us for dinner at the Garden Restaurant in the UMD University College Inn and Conference Center, 3501 University Blvd. East at Adelphi Rd. From the Beltway, either take New Hampshire Ave. south, turn left onto Adelphi, and at the third light (passing Metzerott) turn left onto University then immediately right into the garage; or, take US-1 south, turn right onto University Blvd. west, and take it to the intersection with Adelphi Rd. Park either in the garage (costs), or in Lot 1 nearby (free). To get to the Observatory, exit to the right onto University Blvd. (MD-193) east, and at the second light turn left onto Metzerott Rd.

Reserve your Ride

Please contact Jay Miller, 301-530-7942, if you need a ride from the metro to the meeting at the observatory. (Please try to let him know in advance by email at jhmiller@os2bbs.com)

Come See the Stars! by Joe Morris

Exploring the Sky 2004-2005 Schedule

Date	Time
9/18	8:00 F
10/16	7:30 F
11/13	7:00 F

8:00 P.M. 7:30 P.M. 7:00 P.M.

Exploring the Sky is an informal program jointly sponsored by National Capital Astronomers and the National Park Service that for nearly fifty years has offered monthly opportunities for anyone in the Washington area to see the stars and planets through telescopes from a location within the District of Columbia.

Sessions are held in Rock Creek Park once each month on a Saturday night from April through November, starting shortly after sunset. We meet in the field just south of the intersection of Military and Notes Equinox 9/22 Orionid meteor shower 10/2-11/7 Leonid meteor shower 11/14-11/21

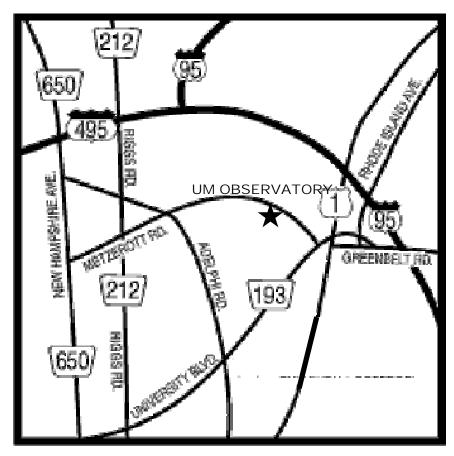
Glover Roads NW, near the Nature Center. A parking lot is located immediately next to the field.

Beginners (including children) and experienced stargazers are all welcome—and it's free!

Questions? Call the Nature Center at (202) 895-6070. or check the Internet sites: http://www.nps.gov/rocr/planetarium or http://www.capitalastronomers.org

Observing after the Meeting Elizabeth Warner

Following the meeting, members and guests are welcome to tour through the Observatory. Weather permitting, several of the telescopes will also be setup for viewing.



Getting to the NCA Meeting

National Capital Astronomers, Inc.



If undeliverable, return to NCA c/o Nancy Roman 4620 N. Park Ave., #306W Chevy Chase, MD 20815-4551

FIRST CLASS DATED MATERIAL

The September NCA Meeting is on the 11th, the <u>2nd</u> Saturday in September!

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