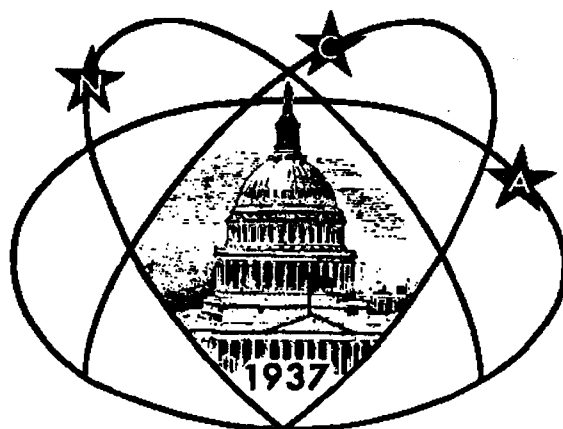




Star



Dust

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Washington, DC (301) 320-3621

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Brad Schaefer to Present "Crescents and History"

An Excursion into the Effects of Major Astronomical Events on the Course of History

By Nancy Byrd

The next meeting of National Capital Astronomers, on June 5, 1993, will be held at 7:30 PM at the National Institutes of Health (in the Lippsett Amphitheater, room 1C114, of the Clinical Center, Building 10). At this colloquium, we are delighted to present Dr. Bradley E. Schaefer of NASA Goddard SpaceFlight Center's Laboratory for High Astrophysics, who will talk to NCA and its guests on an interesting amalgam of issues, featuring lunar crescents and their impact on human history, which occur even in modern times.

By training, Dr. Schaefer is an astrophysicist, having obtained his PhD from MIT with a dissertation on gamma ray bursts, a topic occupying much of his professional attention today. But, as is often the case, behind the successful professional, there lurks an enthusiastic amateur astronomer. The professional - amateur connection is a special one in astronomy, a topic Dr. Schaefer also will explore with NCA. His astronomical pursuits are varied and many, including astronomical computing and a unique green flash observation, as well as his lunar eclipse and lunar crescent activities. Many of us feel we know him well through his numerous and interesting contributions to *Sky and Telescope* magazine.

NCA to honor this year's Science Fair winners

The June 5th meeting will feature the winners of NCA's 1993 Science Fair Awards, presented for excellent contributions in the field of astronomy. This year's winners include Brian Newbury of Gaithersburg, MD; Charles Tahan of McLean, VA; Melanie Diez of Woodbridge, VA; and Kapil Dandekar of Springfield, VA. These accomplished students will display and discuss their projects at the meeting.

June Calendar

The Public is Welcome!

Saturday, June 5, 5:30 PM - Dinner with the speaker and Science Fair winners will be at Shakey's on East-West Highway (see map on back page).

Saturday, June 5, 7:30 PM - Brad Schaefer (NASA), "Crescents and History." Winners of NCA's 1993 Science Fair Awards will be presented. Meeting will be held in the Lippsett Amphitheater, room 1C114, of the Clinical Center (bear left as you enter). This change is to accommodate the Science Fair displays.

Tuesday, June 1, 8, 15, 22, 29, at 7:30 PM - Telescope making classes at Chevy Chase Community Center, Connecticut Avenue and McKinley Street, NW. Information: Jerry Schnall, 202/362-8872.

Friday, June 4, 11, 18, 25, at 7:30 PM - Telescope making classes at American University, McKinley Hall Basement. Information: Jerry Schnall, 202/362-8872.

Friday, June 11, 18, 25, 10:00 PM - Open nights with NCA's Celestron-14 telescope with Bob Bolster, 6007 Ridgeview Drive, south of Alexandria off Franconia Road between Telegraph Road and Rose Hill Drive. Call Bob for details at (703) 960-9126.

Saturday, June 19, 9:00 PM - "Exploring the Sky." See the planets, stars and other astronomical objects in the night through telescopes. Information can be obtained by telephoning (202) 426-6829 (the Rock Creek Park Nature Center) or (301) 320-3621 (National Capital Astronomers).

DR. GOETZ OERTEL DISCUSSES ASTRONOMY AT THE NATIONAL CENTERS

By Benson J. Simon

Dr. Goetz Oertel, President of the Association of Universities for Research in Astronomy (AURA), discussed the Association, its three centers, and their roles, missions, and recent results at the May 1, 1993 colloquium of National Capital Astronomers.

AURA makes it possible for the astronomy community, rather than the government agencies that contribute much of its support, to manage its own research programs. The "customers" of the AURA consortium have traditionally been U.S. astronomers, but increasing international support and participation are expanding the challenges of management. Twenty-three American universities and two foreign affiliates now comprise the consortium, which provides "world-class" observing facilities to its members.

The Space Telescope Science Institute, the National Optical Astronomy Observatories (NOAO), and the Gemini Project are the organizational units of AURA. NOAO serves the U.S. science community, while Gemini serves its six international investors, of whom the U.S., with a 50% share, is the largest.

AURA has had a substantial role in pre- and post-flight problem solving for the Hubble Space Telescope through its management of the Space Telescope Science Institute. Ingenious compensations for the mirror flaw have made possible significant results from Hubble. A major maintenance and repair mission to Hubble scheduled for December should correct the optical problem; replace the failed gyros, flapping solar pan-

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Excerpts from The IAU Circulars

By R.N. Bolster

1. April 14 - P.J. Camilleri, Cobrum, Vic., Australia, discovered a nova of magnitude 9.5 in Ophiuchus on T-Max patrol films taken with an 85-mm focal length camera.
2. April 30 - R. Evans, Hazelbrook, New South Wales, Australia, discovered a supernova of 14th magnitude in galaxy IC 5270.
3. May 1 - Slight polarization of the light from supernova 1993J in M81 was observed with the 4-m Mayall telescope at Kitt Peak and the 2.7-m telescope at McDonald Observatory, possibly due to asymmetrical geometry of the explosion. Intensive radio and optical observations are continuing.



NCA's New Officers for 1993 - 1994

The StarDust would like to congratulate NCA's new Officers for the 1993 - 1994 year. They were elected on May 1, 1993.

<i>President:</i>	<i>John A. Graham, PhD</i>
<i>Vice President:</i>	<i>Wayne H. Warren, PhD</i>
<i>Secretary:</i>	<i>Leith Holloway</i>
<i>Treasurer:</i>	<i>Jeffrey B. Norman</i>
<i>Chief A/V Engineer:</i>	<i>Jeffrey R. Guerber</i>
<i>Trustee:</i>	<i>Nancy Byrd</i>

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els, and computer memory; and add an advanced wide-field planetary camera.

NOAO is presently placing small telescopes around the earth for continuous solar observation. They will monitor acoustical oscillations in the sun: the only means of observing phenomena of the solar interior other than the inconclusive neutrino monitors.

A Wisconsin-Indiana-Yale-NOAO 3.5-meter telescope is being built with funds from the three universities. NOAO will operate it. The venture represents a creative new way of doing business: a productive pooling of university and National Observatories resources.

The U.S. participation in the Gemini project, a pair of 8-meter telescopes, was proposed by NOAO. Gemini will be overseen by a joint International Gemini-AURA committee, acting through the National Science Foundation (NSF). NSF has engaged AURA to build and operate the facilities for the international science community. The northern telescope, in Hawaii, will be infra-red optimized. The southern telescope, in Chile, will be infra-red capable and optical. The complexity of the international management task is formidable, as evidenced by Dr. Oertel's description of the mirror design review that is under way.

NCA WELCOMES THESE NEW MEMBERS!

Carmen Sarah Alejandro
38 Garden Drive
Alexandria VA 22304-4928

Guy F. Brandenburg
1316 Randolph St., NE
Washington, DC 20017-2618

Ted Joseph Breyere
15115 Interlachen Dr., #904
Silver Spring, MD 20906-5643

John James Cormack
10263 Gainsborough Road
Potomac, MD 20854-4038

Kenneth Frith
(Junior member)
305 D Street, SE
Washington, DC 20003

David R. Nordin
121 - 4th Street, NE
Washington, DC 20002

Jerry G. Persall
13356 Triadelphia Road
Ellicott City, MD 21042

Yannis Savvidis
10016 Raeburn Court
Fairfax, VA 22032-2751

Emily Beth Zamkoff
(Junior member)
10944 Harmel Drive
Columbia, MD 21044

Attention All NCA Junior Members

Now that school is out, you will have more time to devote to your astronomy hobby. Let me remind you that the NCA has a mentor program for Juniors. If you need help on your astronomical projects this summer, please call me and I will try to find a mentor whom you may contact when you need assistance. All juniors, including youngsters in homes with NCA family memberships, qualify for this help. Please call me for more details.

Leith Holloway
Director of NCA Junior Division
Telephone: (301) 564-6061

Resource pooling to support and manage astronomical research domestically and internationally is essential, as the scale, complexity, and cost of instrumentation grow. With the pooling comes new managerial challenges. Dr. Oertel exemplifies a critical blending of scientific and managerial talent critical to the success of these difficult new approaches to "big science."

National Capital Astronomers, Inc.

is a non-profit, public-service corporation for advancement of the astronomical sciences and is the astronomy affiliate of the Washington Academy of Sciences. For information, call NCA: (301) 320-3621.

SERVICES AND ACTIVITIES:

A Forum for dissemination of the status and results of current work by scientists at the horizons of their fields is provided through the monthly NCA Meeting. (See monthly *Stardust* for time and location.) All interested persons are welcome; there is no charge.

Expeditions frequently go to many parts of the world to acquire observational data from occultations and eclipses which contribute significantly to refinement of orbital parameters, the coordinate system, navigation tables and timekeeping. Other results of this work under continuing study include the discovery of apparent satellites of some asteroids, discovery of apparent small variations in the solar radius, and profiles of asteroids.

Discussion Groups provide opportunities for participants to exchange information, ideas, and questions on preselected topics, moderated by a member or guest expert.

Publications received by members include the monthly newsletter of NCA, *Star Dust*, and an optional discount subscription to *Sky & Telescope* magazine.

The NCA Public Information Service answers many astronomy-related questions, provides predictions of the

paths and times of eclipses and occultations, schedules of expeditions and resulting data, assistance in developing programs, and locating references.

Astronomical Telescope & Binocular - Public Seminar, for Selection, Use, and Care, held annually in November, offers the public guidance for those contemplating the acquisition of a first telescope, and dispels the many common misconceptions which often leads to disappointment.

Working Groups support areas such as computer science and software, photographic materials and techniques, instrumentation, and others.

Telescope-Making Classes teach the student to grind and polish, by hand, the precise optical surface that becomes the heart of a fine astronomical telescope.

NCA Travel offers occasional tours, local and world-wide, to observatories, laboratories, and other points of interest. NCA sponsored tours for comet Halley to many parts of the southern hemisphere.

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

Public Programs are offered jointly with the National Park Service, the Smithsonian Institution, the U.S. Naval Observatory, and others.

PLEASE ENROLL ME IN NATIONAL CAPITAL ASTRONOMERS MEMBERSHIP

Regular

Sky & Telescope and *Star Dust*. (\$46 per year)

Star Dust only (\$24 per year)

Junior (Only open to those under age 18) Date of birth: _____

Junior members pay a reduced rate.

Sky & Telescope and *Star Dust*. (\$32 per year)

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First name	Middle	Last name	Telephone
_____	_____	_____	_____
Street or Box	Apartment	City	State Zip

If family membership, list names of additional participating immediate family members in same household, with birthdates of all those under 18 years old: _____

Note: If you already subscribe to *Sky & Telescope*, please attach a recent mailing label. You may renew this subscription through NCA for \$22 when it expires.

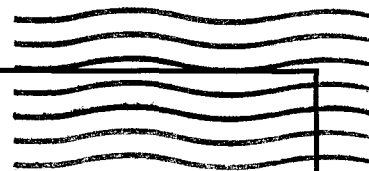
Make check payable to National Capital Astronomers, Inc., and send with this form to:

Leith Holloway 10500 Rockville Pike Apt. M-10, Rockville, MD 20852.

The following information is optional. Please indicate briefly any special interests, skills, vocation, education, experience, or other qualifications which you might contribute to NCA.

Thank you, and welcome!

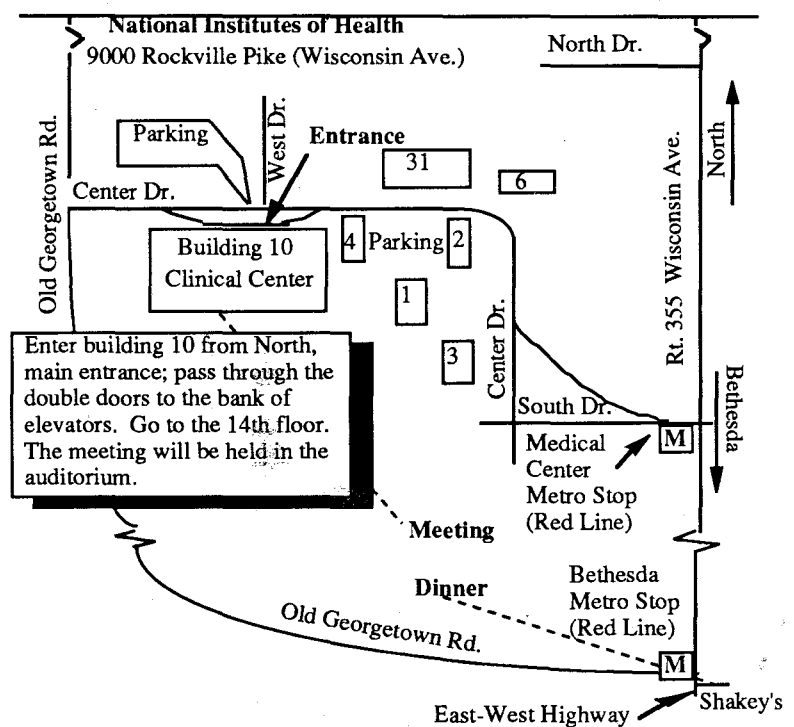
Getting to the NCA Monthly Meeting



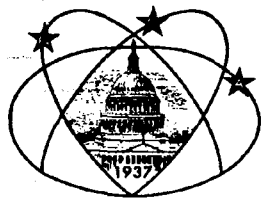
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•Subway Riders - To get to the meeting from Medical Center Metro Stop: Walk down the hill, pass the bus stops and turn right at the anchor (onto Center Drive). Continue uphill to building 10, the largest building on campus. Also the J2 bus line connects the Bethesda (7:16PM) and NIH (7:23PM) metro stops with building 10 (7:25PM).

•To Shakey's - Shakey's is located at East West Highway and Wisconsin Avenue, one half block South of the Bethesda Metro Stop..



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National Capital Astronomers, Inc.

c/o Nicoletta Stepanz
1511 17th Street, NW #5
Washington, D.C. 20036



Dr. Wayne H Warren, Jr
8001 Brett Place
Greenbelt, MD 20770-3001