



DeVORKIN: EARLY HISTORY OF V2 ROCKET ASTRONOMY



DAVID DeVORKIN

David DeVorkin of the National Air and Space Museum will open the 1983-1984 lecture series of National Capital Astronomers on September 10. He will recount the World-War-II capture and use of the German V2 rockets for scientific research.

Note the date: the *second* Saturday rather than the first, because of Labor-Day weekend.

When the captured V2 rockets were brought to the United States for testing and evaluation, several groups of scientists at NRL, APL, the University of Michigan, and Princeton, exploited them by designing UV spectrographs, cosmic ray counters, and other devices to explore the upper regions of the Earth's atmosphere, near space, and the Sun. Who these scientists were, what their goals were, how they gained access to the V2 rockets, and how they organized them-

selves into research teams will be reviewed.

David DeVorkin holds degrees in both astronomy and the history of science. He has participated in the project, "Sources for History of Modern Astronomy" at the American Institute of Physics, and is now Associate Curator of History of Astronomy at NASM. He has contributed a number of papers in stellar evolution and spectral classification, and is the author of the recently published book, *The History of Astronomy and Astrophysics: A Selected and Annotated Bibliographical Guide*.

SEPTEMBER CALENDAR — *The public is welcome.*

Friday, September 2, 9, 16, 23, 30, 7:30 pm — Telescope-making classes at American University, McKinley Hall basement. Information: Jerry Schnall, 362-8872.

Saturday, September 3, 8:30 pm — *Exploring the Sky*, presented jointly by NCA and the National Park Service. Glover Road south of Military Road, NW, near Rock Creek Nature Center. Planetarium if cloudy. Information: John Lohman, 820-4194.

Tuesday, September 6, 13, 26, 27, 7:30 pm — Telescope-making classes at Chevy Chase Community Center, Connecticut Avenue and McKinley Street, NW. Information: Jerry Schnall, 362-8872.

Friday, September 9, 16, 8:30 pm — NCA 14-inch telescope open nights with Bob Bolster, 6007 Ridgeview Drive, south of Alexandria off Franconia Road between Telegraph Road and Rose Hill Drive. Call Bob at 960-9126.

Saturday, September 10, 6:15 pm — Dinner with the speaker at the Thai Room II, 527 13th Street, NW. Reservations unnecessary.

Saturday, September 10, 8:15 pm — NCA monthly meeting at the Department of Commerce Auditorium, 14th and E Streets, NW. David DeVorkin speaks.

Saturday, September 17, 8:00 pm — Discussion group with Jim Trexler at the Department of Commerce, Conference Room D, 14th and E Streets, NW. The NCA Galactic Cluster Validation Program will be discussed.

Dear NCA Member:

Enclosed with this issue is your opportunity to enhance your membership in either or both of two ways: to make known what you want National Capital Astronomers to do for you, and to share in the gratification and edification derived from active participation with those who plan and provide NCA services and activities.

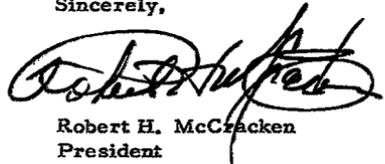
I don't like questionnaires, but I know of no more direct way to give you access to our planning and to participation in our operations. It is my policy to provide, to the extent practicable, for all of our wide range of membership, and to science, the maximum benefit NCA can offer. Whether you are interested in research, observation and data reduction, or simply learning the constellations or planning picnics, your active participation can make things happen.

We need teachers — elementary, intermediate, and advanced; we need tour and travel planners, researchers, occasional legal counsel, speakers to fill requests by other organizations, a public information officer, telescope-making class assistants, publication workers (writers, editors, word processors, typesetter, printer, distributor, etc) and other services you might wish to volunteer.

Communication is vital; the questionnaire is your personal pipeline. Any further comments or suggestions will be welcomed by the Advance Planning Committee.

We thank NCA Secretary Stanley G. Cawelti for preparing the questionnaire. Its value? You're standing in the end zone and here comes the ball!

Sincerely,

A handwritten signature in black ink, appearing to read "Robert H. McCracken", written in a cursive style. The signature is positioned above the printed name and title.

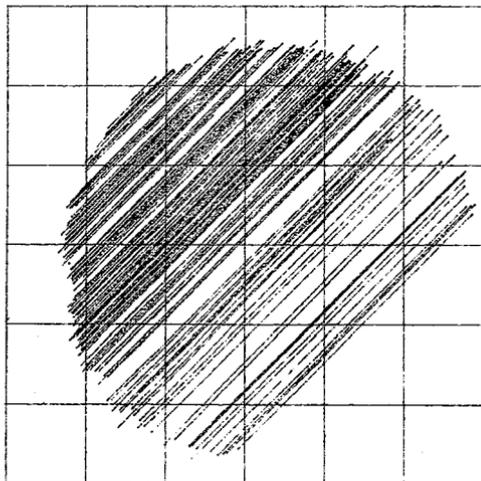
Robert H. McCracken
President

OCCULTATION EXPEDITIONS PLANNED

Dr. David Dunham is organizing observers for the following grazing lunar and asteroidal occultations. For information call Dave at 585-0989.

UT		Place	Vis	Pcnt	Cusp	Min
Date	Time		Mag	Sunlit	Angle	Aper
09-30-83	06:14	Ladysmith, VA	7.0	45	13N	5 cm
09-30-83	10:44	DeWitt, VA	7.2	43	7N	5 cm
10-01-83	07:02	Myersville, VA	6.4	33	13N	5 cm
ASTEROIDAL:			Star Mag	Delta Mag	Name	
09-09-83	04:07	Midwest USA	9.5	3	(53) Kalyppo	5 cm
09-11-83	07:45	SE VA, NC, SC	5.9	5	(51) Nemausa	2 cm
09-14-83	02:33	Midwest ?	10.8	2	(451) Patientia	20 cm
09-30-83	05:25	Mid Atlantic US	8.3	6	(786) Bredichina	20 cm

PALLAS/1 VULPECULAE OCCULTATION EXPEDITION RESULTS



Dr. David Dunham reports the results of the 29 May occultation of the star 1 Vulpeculae by the asteroid Pallas. Data from more than 125 observers stationed across the path from southern Florida to Baja California are plotted here. They clearly show the previously unknown profile of the asteroid, the first to be shown in detail.

A roughly similar case, an occultation by Melpomene over Washington, DC in 1978, was observed to yield fewer than a dozen chords which suggested a sphere. The star was discovered to be a close double by the same observations (*Star Dust*, January 1979).

The diameter of Pallas is also rather accurately measured by these observations: about 530 km. The star, a very close spectroscopic binary, was separated for a fraction of a second, allowing the separate component magnitudes to be measured. The University of Arizona reports magnitude differences of 0.9 in the blue channel, 0.6 in the red.

Members of the NCA occultation team, stationed in south Florida, were Drs. David and Joan Dunham, Walter Nissen, Richard Taibe, and Jared Zitwer.

North is up, east to the left. Scale is 100 km per division. Clouds prevented south limb completion. We thank Dr. Thomas Van Flandern for plotting the data.

FIEKOWSKI DONATES TELESCOPES

Former NCA member Peter Fiekowski, now living on the west coast, has donated to NCA two nearly complete Newtonian telescopes of 4- and 6-inch aperture. These will be completed and made available for the use of members. We thank Peter for his thoughtful generosity which will surely bring pleasure to many who have no telescopes of their own.

EXCERPTS FROM THE IAU CIRCULARS

1. July 11 — J. Davies, University of Leicester, reported that another comet (1983k) had been discovered by the Infrared Astronomical Satellite in Centaurus. Comet IRAS was of 17th magnitude, and the orbital elements by Marsden indicate that it was at perihelion in April.

2. July 19 — K. Cernis, Vilnius Observatory, USSR, discovered a comet (1983l) of 12th magnitude in Eridanus visually with a 48-cm reflector. The orbital elements by Marsden indicate that Comet Cernis passed perihelion on July 24, but is still approaching the Earth, and may reach 10th magnitude in September.

3. August 9 — Watson and Smith, University of Leicester, and the EXOSAT Observatory Team discovered a 351-s periodicity in the former nova GK Persei, which has recently brightened optically. The observations were made with the medium-energy X-ray experiment aboard EXOSAT. R. N. Bolster

LARRY WHITE RECOVERING FROM HEART ATTACK

Alexander L. (Larry) White, a member for many years and a past trustee of NCA, should be at home by this reading, recovering from his second heart attack. Larry has been responsible for instructing members and approving their use of the NCA Alvan Clarke telescope at the Naval Observatory. He has led a number of discussion groups on archaeoastronomy.

We wish you a rapid and complete recovery, Larry!

Members wishing a checkout on the NCA refractor may call Bob McCracken at 229-8321.

STAR DUST may be reproduced with proper credit to National Capital Astronomers.

★ S T A R D U S T

WASHINGTON, D. C.



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