

NOVAC

The Newsletter of the Northern Virginia Astronomy Club

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March/April, 1990

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The star is not extinguished when it sets
Upon the dull horizon; it but goes
To shine in other skies, then reappear
In ours, as fresh as when it first arose.
- *Horatius Bonar, Life After Death*

Board of Directors:
Brent Archinal
Al Boldt
Kevin Jones
Don Larson
George Uhl

Programs At NOVAC

Meetings

by Brent Archinal

There actually seems to be some interest in going to NOVAC meetings now! Our meetings so far this year have been fairly well attended. My contribution was an astronomical tour of portions of Scotland and England in January. In February Steve Robinson told us about his PC program that allows searches of the Yale Bright Star Catalogue.

Our upcoming program on March 21st will be given by Kevin Jones of the Arlington Planetarium. After meeting there for more than a year we thought it might be time to actually take advantage of the fact that we were in a planetarium and do a planetarium show! The title of the show is "The Voyager Encounters", and it includes a photographic tour of the 4 giant planets visited by the two Voyager spacecraft, including many of the photos recently taken at Neptune. Be sure not to miss this "grand tour" of the gas giants and bring your knowledge of your home solar system up to date! We'd also like to take this opportunity to thank Kevin and Steve Smith of the Arlington Planetarium in advance for the chance to see this show.

Our next program on April 18 will feature two speakers taking us along on their latest "grand tours". Geoff Chester, of the Albert Einstein Planetarium of the National Air and Space Museum, will be filling us in on his recent trip to the observatories on Mauna Kea on the island of Hawaii,

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and his experiences there as a professional astronomer - see elsewhere in this issue of the newsletter for further details. Don Larson will also soon be attending the Tampa Star Party in Florida, so he'll hopefully be able to let us in on observing and telescopes from another southern site.

More details will appear in the next newsletter, but our May 16th program promises again to be a double header, with Bob Ridgley and Kevin Jones as our speakers. Bob, our illustrious treasurer, in a program delayed since

last October, will finally fill us in on his computerized Meade 10-inch telescope. And Kevin will again be with us to talk about his (by then!) award winning science fair project, a "jam jar magnetometer", a device discussed in [Sky and Telescope](#) a few months ago. So if you need to do any checks on the Earth's magnetic field, don't miss that meeting!

These regular meetings of the Northern Virginia Astronomy Club are currently held the third Wednesday of each month at 7:30 p.m., at the Arlington County Planetarium, 1426 North Quincy Street, Arlington. Admission is free and open to the public, but seating is limited so arrive early. Call the NOVAC hotline (703-256-8395) for

schedule changes, cancellation, or further information.

Comet Austin Update

by Bill Burton

Comet Austin continues its approach to Earth as excitement mounts about this potentially great comet. It is now visible in the southwest sky just after sunset. At the February 21st NOVAC meeting Brent Archinal reported that he and Geoff Chester had sighted Comet Austin the night before and it

was keeping up with magnitude predictions. This comet is promising not only because it appears to be intrinsically bright but because its orbit after perihelion carries the comet just outside Earth's orbit and very close to our planet, so that we will be treated to views of it well-placed in our nighttime skies.

In the last newsletter I dealt with the appearance of Comet Austin before and at perihelion, when it will be low in the evening sky. This time I will give positions for two favorable weekends in April and May (courtesy of the Voyager computer program.) During this period the comet's brightness should change little; the decrease in absolute magnitude caused by its retreat from the sun is counterbalanced by its approach to Earth and increase in apparent size. Figure 1 shows the east-northeast sky at 4 a.m. on Sunday, April 29. The circled "A" is the predicted position of the comet on this date (with the other A's marking positions at 5-day increments before and after.) The view is in the azimuth direction 60 degrees, and Comet Austin at this time will be about 12 degrees above the horizon, having risen at 2:30 a.m. It is predicted to be at magnitude 1.4 on this date. Before sunrise (6:12 a.m.) two solar system companions join the comet in the sky to the south: Mars, rising at 3:45, and Venus, rising at 4:30. The moon will be down (a thin waxing crescent.)

A second favorable date is the early morning of Saturday, May 26 (late Friday night) -- another moonless night. Figure 2 shows the east-southeast sky (azimuth 120 degrees) at 2 a.m., and the predicted position of the comet is the circle between the two "A's." It will be about 40 degrees above the horizon at this time, having risen at about 10:25. The predicted magnitude is about 2. Saturn is below and to the right.

These are perhaps the two best weekend nights to organize public comet-

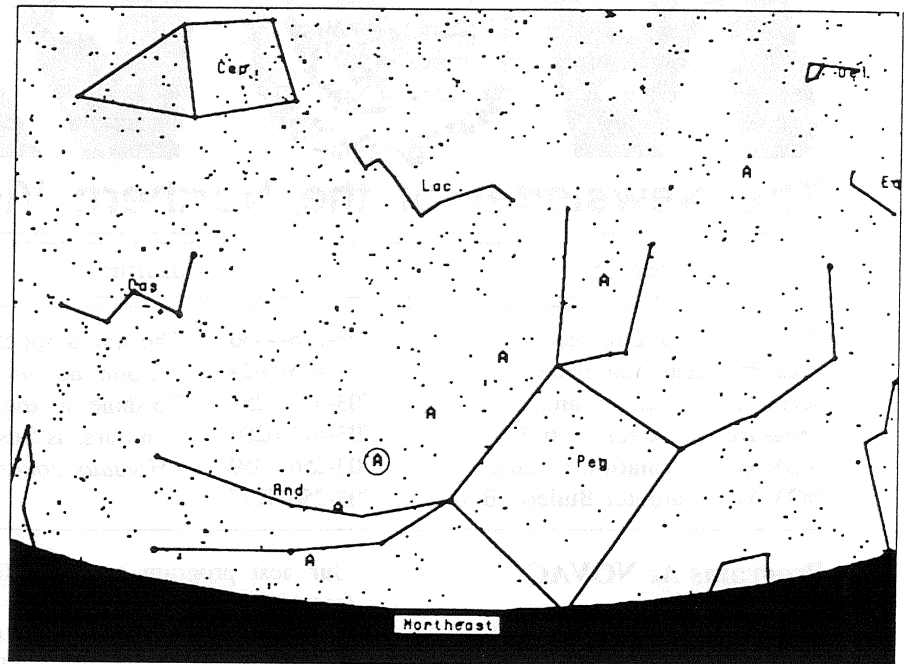


FIGURE 1 Chart Center: RA 20h,36.8m Dec -05deg, 44m
 Universal Time: 06:00 on 05/26/1990
 Local Mean Time: 02:00 a.m. on 05/26/1990
 Field: 83degs x 57degs

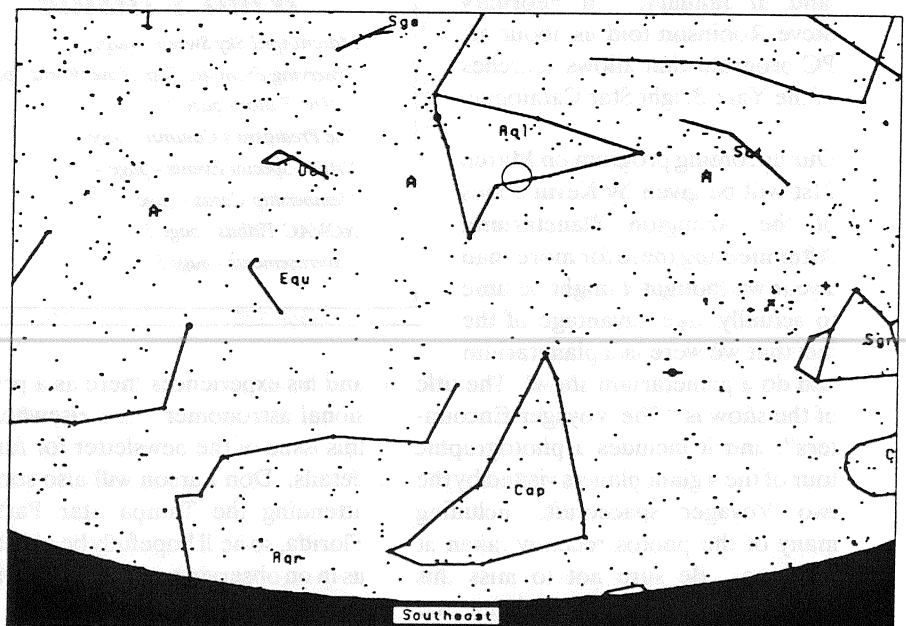


FIGURE 2 Chart Center: RA 23h,19.9m Dec 36deg, 35m
 Universal Time: 08:00 on 04/29/1990
 Local Mean Time: 04:00 a.m. on 04/29/1990
 Field: 83degs x 57degs

watching events (they are scheduled NOVAC observation nights.) I unfortunately will be out of town both times, but I will be running a class at NOVA (Loudoun Campus) based on Comet Austin, with the following schedule: lecture Monday, April 16, 7-9 p.m.; observation Saturday, April 21, 4 a.m. at the campus (cloud date next morning); second observation Friday evening, May 18, at Crockett Park (cloud date next night.) If the comet is bright, and media coverage right, this could be another major opportunity for interaction with the public. Let's make the most of it!

March/April Sky Sweep

by Kevin Jones

In March and April evenings, the impressive winter Milky Way is setting in the west earlier and earlier, and the regions which are star-poor but galaxy-rich are approaching the meridian. Some of the open clusters and nebulae of winter do linger long enough for some good intragalactic observing early, however.

After taking that first quick peek at Jupiter, nudge the telescope over a couple of degrees to the open cluster M35 in Gemini. This cluster is visible in binoculars and is an excellent target for telescopes. In telescopes, another small and rich cluster may be visible in the same field, NGC 2158. This cluster is 11th magnitude and will most likely not be resolved into stars (the brightest stars are 16th magnitude).

Higher in Gemini is the bright planetary nebula NGC 2392, more commonly known as the Eskimo Nebula. This 8th magnitude nebula has a sizeable disk, 2/3 of a degree across and a 10th magnitude central star. On dark and steady nights an outer ring of nebulosity may be glimpsed (the Eskimo's "parka") giving the object (with some imagination) the appearance of an eskimo's (or a bundled up

observer's) face.

Moving still higher in the sky and into Cancer, you will encounter the Beehive cluster, M44. This cluster is easily visible with the naked eye from a reasonably dark site and is impressive in binoculars and finders. Telescopes show too small a portion of the cluster to be useful. After taking in the Beehive, move a few degrees southward to find the smaller and fainter cluster M67. This 8th magnitude open cluster is often overlooked due to its proximity to M44. M67 is one of the oldest open clusters known, similar to the ancient cluster NGC 188 in Cepheus.

Now for some extragalactic observing. The pair of galaxies M81 and M82 in Ursa Major are best placed for observing in the evening during this time of year. They are located about 20 degrees toward the zenith from Polaris in March and April evenings. M81 is a beautiful spiral galaxy on photographs, but through the telescope no swirling spiral arms should be seen, since they have an extremely low surface brightness. Its companion, M82, is an odd galaxy; it is undergoing a burst of star formation near its nucleus and material is being ejected from the galaxy at high speed. Through the telescope it sometimes appears mottled, due to its thick dust lanes.

Moving to the other end of Ursa Major, the Whirlpool Galaxy, M51, is encountered. It has a small lenticular companion galaxy at the end of one of its spiral arms. Through a large telescope, the spiral arms are conspicuous, giving M51 a strikingly Whirlpoolish appearance.

The galaxies in Leo can not be overlooked. M65 and M66 form a nice pair below the tail of Leo, and spiral structure can be detected in M66 on steady nights. In larger scopes the pair is expanded to a triangle by the faint edge - on galaxy NGC 3628. The M95-M96-M105 trio of spirals is located below the body of Leo, and the three

galaxies are easily visible in telescopes as three mainly round and smooth fuzzy blobs. If you're really into observing fuzzy blobs, hop on over to the Virgo Cluster of Galaxies. I'll talk more about the Virgo Cluster next month, but suffice it to say, you won't run out of galaxies to observe in the Virgo Cluster for a long time!

Observing From The Top Of The World

by Geoff Chester

Over the eclipse of the New Year I was invited to participate in a Venus observing run at the Mauna Kea Observatory's NASA Infra-Red Telescope Facility on the Big Island of Hawaii. The objective of the run was to look for evidence of anti-solar to sub-solar wind patterns in the mesosphere and thermosphere layers in the Venusian atmosphere. I will describe this experience at the General Membership meeting on April 18th. The Mauna Kea Observatory is atop a 14,000-foot high windswept peak far removed from the Paradise that most folks think of as Hawaii.

I would also like to mention the following special events that we'll need telescopes for in April and May...I'll present more details at the April meeting.

First, Loudoun County is celebrating the 20th anniversary of Earth Day on April 21, 1990 at Oatlands Plantation. I'll be conducting a stargazing program that night and need telescopes. The more the merrier! There'll be space for camping, etc. so plan to stay all night. I'll need to know how many folks might plan on attending so we can arrange for more camping space, etc. Comet Austin will be up before dawn! Call me at 357-1529 for information.

On May 26th. I'm planning the first of this season's Sky Meadows programs. Austin will be the highlight for this one

and I plan to plug the hell out of it and expect BIG crowds if the weather's good...so mobilize those scopes and be sociable!

A New Editor

by Bob Ridgley

I am pleased to announce that with the next issue (May/June) the NOVAC Newsletter will have a new editor. George Uhl will be taking on this awesome task! He has agreed, under some duress, to take over the duties of assembling, editing, and composing the newsletter. I will be his assistant editor, and responsible for reproduction and mailing. All material should be sent to George or posted to his attention on the BBS. Any problems or questions about circulation or dues should continue to be brought to my attention.

Thanks to all those who have contributed material over these fourteen months; please continue to do so. To those of you who have not yet tried your hand...what are you waiting for? This is your newsletter, let us all know what's on your mind.

The President's Column

I hope that everyone has had a clear and prosperous season this year, in spite of all that cold weather we've had.

At the last meeting, we held our 1990 elections for the Board of Directors seats. I am happy to announce that the following people now make up our Board of Directors for this coming year:

Brent Archinal
Al Boldt
Kevin Jones
Don Larson
George Uhl

Congratulations! I'm sure we'll have

plenty of things to do this year to keep everyone busy until next February.

Dues have been slowly coming in this year since the increase to \$18 per year became effective on January 1st. I want to point out that up until this year our organization has survived based on a \$10 per year membership. Believe it or not we have gone 10 YEARS without an increase of any kind. Each year our year-end savings became lower and lower. The increase was warranted due to a number of new expenses we have incurred including the increased costs of publishing the newsletter.

Before you forget, take the time NOW to check your membership expiration on the front of the newsletter. Adjacent to the date in the upper right hand corner of the label is a figure which is the amount you owe to bring your membership up to date. If your dues are due (highlighted in some fashion), please send Bob Ridgley a check for the amount shown.

There is a possibility that we will be holding a few public observing sessions for comet Austin (1989c1) this spring. We will notify everyone by mail, either by newsletter or a separate mailing, when we have more information to give you. Please keep posted on upcoming events by calling our hotline, 256-8359. Any new developments will be announced on the recording.

I guess that about wraps it up for now. Clear skies and happy comet hunting to all.



Blaine Korcel
President, NOVAC

NASM Special Events

by Bob Ridgley

March and April will bring several interesting events to the Smithsonian's National Air & Space Museum (NASM). Plan a trip to the Mall to see them!

The Monthly Sky Lecture for March will be "The Wide Field Planetary Camera." The lecture will be given by Ken Seidelman on Saturday, March 10th., at 9:30 a.m., at the Albert Einstein Planetarium.

The Monthly Sky Lecture for April will be "Comet Austin." The lecture will be given by Dan Costanzo on Saturday, April 7th., at 9:30 a.m., at the Albert Einstein Planetarium.

The Exploring Space Lecture Series selection for March will be "Black Holes", by Menas Kafatos, acting chairman of the physics department of George Mason University in Fairfax, Virginia. It will be held at the Albert Einstein Planetarium on Wednesday, March 14th. at 7:30 p.m.

The Exploring Space Lecture Series selection for April will be "The Great Attractor", by Alan Dressler, astronomer with the Carnegie Institution of Washington. It will be held at the Albert Einstein Planetarium on Wednesday, April 11th. at 7:30 p.m.

The Annual "Wings and Things" Open House at the National Air & Space Museum's Paul E. Garber Preservation, Restoration and Storage Facility, in Suitland Maryland, will be held on Saturday, April 28th, and Sunday, April 29th, from 10:00 a.m. to 3:00 p.m.

The National Air & Space Museum is located at Independence Avenue and Sixth Street, S.W., is open seven days a week. Normal hours are 10:00 a.m. to 5:30 p.m. Admission is free.

For additional information about

Smithsonian public programs, please call (202)-357-2700 or 357-1729 (non-voice TDD). For prerecorded information about events in a specific museum (Dial-A-Museum) call (202)-357-2020. For prerecorded information about the night sky (Dial-A-Phenomenon) call (202)-357-2000.

Membership Cards

by Bob Ridgley

Members who have paid their dues thru the end of this year will receive a NOVAC membership card. It will be stapled (sorry about that; but it does save on mailing costs!) inside this issue of the newsletter. New members, or members who pay their due after this date, will receive a membership card at the next scheduled general membership meeting.

These cards were made possible by a generous contribution from the vice-president Jim Schaeffer. Thank you Jim!

NOVAC Tidbits

by Bob Ridgley

The 1990 observing schedule, which was posted in the last issue, contains an error. The December dates should be corrected to read:

December 7*, 8*, 14, 15.

The membership renewal rate for this year has been rather low. NOVAC membership is now at 120, of which 18 are complementary. It is unfortunate that of those 102 members only 68 are current in their dues. That leaves 38 members who are past due. The amount of your dues and the membership expiration date is listed in the upper left hand corner of the mailing label. If it is highlighted in red this will be your last issue. So please take a minute to check the status of your dues. If you are past due send a check to me as soon as you can. To those of

you who's membership expires before the end of the year please consider paying the amount shown before you become "past due." This will help with both bookkeeping and with planning the club expenditures thru this year. As of March 10th. the NOVAC treasury contained \$964.68.

We would like to welcome the following people who joined the club since the last newsletter issue:

Walter J. Nissen, Jr.

Bruce Stein

Richard Lawson

Samuel K. Brown

The following NOVAC activities are scheduled in March and April:

Board of Directors Meetings:

March 15

April 12

General Membership Meetings:

March 21

April 18

Observing at Crockett Park:

March 16, 17, 23, 24

April 20, 21, 27, 28

Although not an official NOVAC activity all members are invited to join Bill Burton at the Loudoun Campus of NOVA on April 16. He will be giving a lecture on Comet Austin. Observations will be held on April 21.

Advertisements

For Sale, contact Jim Schaeffer at 476-5624 (home) or 281-6363 (office): CAPS, baseball type, mesh back, adjustable, NOVAC logo, \$5.95 (you pick-up), \$7.75 (UPS ship); JACKETS, nylon/satin, NOVAC logo on front & back, elastic at sleeves, neck, and bottom, very good quality, sizes S, M, L, XL, \$34.95; TELRAD finders, \$38.00.

For Sale, contact Jim Schaeffer at 476-

5624 (home) or 281-6363 (office): 17.5-inch Coulter Odyssey II, f/4.5, with Telrad finder. Base unit has a handy shelf for eyepieces, flashlight, etc. Tube assembly has a 2-inch low profile eyepiece holder with an 1 1/4-inch adapter and a 32mm Konig eyepiece is included. Tube and base have plenty of carrying handles. Also included is a Lumicon tube cover and a 6-inch off axis mask. Price: \$950.00. Will deliver within 150 miles of Washington, D.C.

For Sale, contact Al Boldt at 379-5721; 9x63 Orion binoculars, lightweight, armored with 6.2 degree field. Price \$125.00 money back if not satisfied.

For Sale, contact Bob Ridgley at 681-0286 (home) or 287-3441 (work): official NOVAC logo tee shirts. Available in black or white, sizes: S, M, XL, price \$9.95. All profit goes to NOVAC.

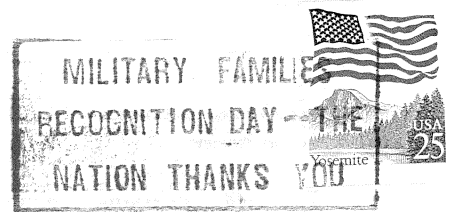
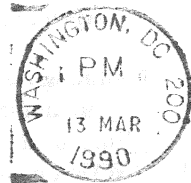
For Sale, contact Herbert Gundelsheimer, at 703-347-4744 (home), 703-347-7726 (office), or 631-1175 (metro): UNITRON 4-INCH PHOTO EQUATORIAL, model 166V, complete with pier and original shipping boxes, brand new, original owner, price \$2,000.00.

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NOVAC

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12/90 - \$0.00

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