

NOVAC

The Newsletter of the Northern Virginia Astronomy Club

Issue Number 35

Volume 11

May/June, 1991

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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
Bill Burton
Al Boldt
Kevin Jones
George Uhl

Programs At NOVAC Meetings

by Brent Archinal

If you haven't been to any NOVAC meetings lately, you've missed some really good talks! In March, Al Schumann gave us a tour of no less than the entire universe! Al has put together a marvelous slide presentation describing astronomy and amateur astronomy and NOVAC in particular, for use by members to present to various groups. He's still improving it however, so if you have any contributions in the way of slides, or suggestions if you were there, please give Al a call (at 703-971-3257). And in April, we again had an extremely well attended meeting, with Bob Bunge giving us a complete presentation on the subject of Light Pollution. There was quite a bit of information presented, particularly on how we as amateurs or as a club could start to fight this tremendously wasteful use of our resources, our tax dollars, and most importantly, our night skies.

The May 15th meeting of NOVAC will be a special one, with a general free for all being planned on the upcoming event, centered on 3:06 PM EDT, Thursday, July 11, 1991. Yes, we're talking BIG TIME TOTAL SOLAR ECLIPSE here, as (another!) "eclipse of the century" will occur.

Totality will stretch across the Pacific, covering the entire island of Hawaii, and then will arc down across Baha and mainland Mexico, and on into central and South America. Much of the central path will have on the order of 4-6 minutes of totality, with the best weather prospects being for the Baha area and the western side of Hawaii. This eclipse will cover some of the most heavily populated areas in modern times and will be the last "good" easily accessible total eclipse for the next 10 years or more. For those of you not trying for totality, you won't be totally (pun intended) disappointed. Assuming (and a big assumption it is) that skies will be clear here, a 10 percent or so partial eclipse will be seen from this area.

Anyway, we'd like to have everyone come to this meeting, and not only describe their plans for observing this eclipse, but also to display any material, slides, or photos they may have of past eclipses. For example, some of us will probably be talking of our plans to make it to Baha or Hawaii, we'll at least try to have information available on observing the partial eclipse here, and I'm sure there'll be some coverage of the most recent solar eclipse seen from this area, the May 1985, very rare, broken annular eclipse. So come on out and here the eclipse

news, and bring whatever you've got on this eclipse or others to "show and tell"!

As to future meetings, we still are trying to plan a particular program for the June 19th meeting. If you'd like to volunteer or have any ideas, please let us know. As always, we need your help and input as a member to keep this fine series of programs going. The June and July meetings will also see some further final discussion of our new Articles of Incorporation, with a final vote on them to be made at the July or August meeting. We also have our long time member John Huggins on tap for the July 17th meeting, to speak on the USNO/NRL Optical Interferometer. So the schedule looks good - see you at the meeting!

These regular meetings of the Northern Virginia Astronomy Club are currently held the third Wednesday of

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each month at 7:30 PM, at the Arlington County Planetarium, 1426 N. Quincy Street, Arlington, VA 22207. Admission is free and open to the public. Call the NOVAC hotline (703-256-8359) for schedule changes, cancelation, or leave a message to obtain further information.

Looking Back

by *George Uhl*

This newsletter marks the beginning of my second year as the editor. After a year of performing the chore, I thought I ought to stand on the soap box and bore you with unamusing anecdotes. Here goes...

You probably have noticed that the newsletter format has remained virtually unchanged since I took the job over from Bob Ridgely. There is a reason for this: I don't have a production quality laser printer to print out the newsletter (Bob still does this part). Thus, I feel experimentation is out of the question. If I'm still the editor (any volunteers?!?) when the club achieves non-profit corporate status, perhaps we can have a printer donated to the club.

For those of you who wonder why you receive the newsletter "late" in the month of issue, its because the club wants it that way. The idea goes like this - if we publish the newsletter during the second week of the month it will act as a reminder to club members to come to the monthly meeting. This is why the monthly programs article is always the first in the newsletter.

I'd like to extend a special thanks to several members of the club who regularly go over and beyond the call of duty on behalf of the newsletter. Bob Ridgely is the unsung hero of this publication. After I'm done with the editing, Bob prints it out on his laser printer (and undoubtedly fixes all my mistakes). He then takes the master copy to the printer and gets the 150 or so

copies made up. After this he schleps back to his house, folds and staples (by hand!) each copy, sticks the address label and the stamp on each one, and hauls them all to the post office. Unfortunately, the P.O. has not handled our newsletters with care and we have had more than a few shredded in the past. But don't blame Bob or myself! Bob gets the NOVAC Medal of Honor for all his efforts (don't forget he is the Treasurer too)!

Brent Archinal and Al Schumann both get the NOVAC Distinguished Service Cross for exactly that - distinguished service. Besides being a recognized leader in club affairs, Brent makes sure that we have a program for each of our monthly meetings. He produces an informative NOVAC Meeting program article for each newsletter, and also writes other articles of interest. Brent has volunteered his time and energy to draft the articles of incorporation and by-laws for the club. As I write this, I think I'll nominate him for the NOVAC M.O.H.. Thanks Brent for all your efforts.

Al is another earth-mover and ground-shaker. Al regularly types up the monthly meeting notes and always has an enertaining article or two to include in the newsletter. Besides being the Secretary, Al hosts 90% of the executive board meetings, which means he feeds us board members with cheese, crackers cookies, sodas and beer - an onerous burden on anybody's bank account! Al, here's your NOVAC D.S.C. to go with the real medals you earned in the Air Force.

NOVAC Silver Stars go to NOVAC Prez Blaine Korcel and young stud Kevin Jones. Presidents are expected to go over and beyond the call of duty, so you might think that our intrepid leader has not earned any accolades. WRONG! Blaine maintains the NOVAC RBBS (computer bulletin

board) which is the cardiovascular system for this newsletter. I get 90% of all articles from the bulletin board and maintain correspondence with club members through it. Without the RBBS, I would resign as editor! Blaine even writes a President's Column every now and then.

Kevin is our Sky Sweep author. He always writes about interesting objects to observe. I like to review his article before I go out on a night's session - just to check if there is something that I can view that I haven't already seen. I assume that Mr. Jones has observed everything he writes about, and composes his article out of his own head rather than plagiarizing from somebody else's observing notes!

I'd like to award Bill Burton the Bronze Star for his excellent articles and drawings from his Jupiter observing program. Bill demonstrates that an amateur astronomer can the most out of his/her telescope by developing an observing program. I wanted to do a Mars program, but I sent my mount back to Celestron for repair during the last opposition. Oh well, there is always next time. Bill has written other informative articles in the past. When Bill gets the bug to write, he cranks out a lot.

For those of you who have submitted an article or two in the past year, you are hereby awarded NOVAC Campaign Medals. I'd list all of your names, but I don't have my old newsletters in front of me, and my fingers are beginning to cramp from pecking at the keyboard. I just want to say thank-you, and please don't hesitate to write another article. For those of you sitting on the fence, write that article you've been putting off for so long. If its legible, it will get printed.

President's Column

by *Blaine Korcel*

Here it is again, time for another newsletter. I'll use Kevin's excuse and

claim my brain has been on a siesta lately. Too many business meetings at El Torito's lately! Now with a tall glass of iced tea in hand, laptop computer on laptop and enough caffeine to keep the cows up all night, I'll give you a run down on what is going on these days with the club and myself.

As mentioned at the January meeting, we held elections on March 20th for the Board of Directors. Brenda Jones dropped her nomination and by unanimous acclamation (that's the word) we adopted the five remaining nominees as the 1991 Board of Directors. They are as follows:

Brent Archinal re-elect
 Bill Burton
 Kevin Jones re-elect
 Herschel Payne
 George Uhl re-elect

I'm sure these guys will do a fantastic job during the upcoming year. Congratulations to all.

Many if not all of you have been aware of our attempt to become a non-profit organization. Barring any major setbacks, 1992 will be our first year as a registered non-profit organization. The above mentioned Board members will hammer out the details, sharpen their pencils, and fill in the blanks so to speak to achieve this goal.

Once a non-profit status is attained, I feel NOVAC will grow on a scale unlike anything we've seen since this club was founded 11 years ago. Already we have exceeded the expectations of our founding members in both goals, membership, organization and enthusiasm and we will continue to exceed those expectations in the years to come.

Already, an 8" F/6 mirror has been donated to the club by Steve Smith of the Arlington Planetarium. Both Herschel Payne and Jerry Wolanski, our resident telescope making experts [Look out John Dobson!], have volun-

teered their valuable observing time to build us a scope. Incidentally, if anyone has any spare telescope parts (focuser, viewfinder, eyepieces, spiders, worms, mosquitos, etc.) you would like to contribute to the cause, they would be greatly appreciated. Whatever we don't have will need to be purchased by the club later on.

Also, we may soon have another observing sight out at the Arlington Outdoor Lab complete with observatory to house our new scope were building. The details right now on this are sparse but I'm sure an excellent agreement will be reached very soon between NOVAC and the Arlington Planetarium and School Board.

Now that the summer months are coming, my schedule will lighten a bit and I'll be able to concentrate on one of my favorite hobbies, astronomy! I'm tired of hearing people say "Hey where were you Saturday night? It was REALLY clear!" or "Wow! You should have seen those cops roll in. What a light show! Beats the best aurora any night!"

Sometimes I think this is a job more than hobby and this year I'm out to reaffirm myself that it is truly a hobby and I should make some serious time for it. The wind has it that a demo CCD camera is on the way in for me to play around with and I'm going to get the most out of it while I can. I've no idea what type it is or if it's cooled or not. None the less, it's a CCD and that's what counts, right? There is some serious prestige in saying, "Well, guess I'll go out and work with the CCD tonight!" Isn't that right Brent? All I know is that it is a new generation COLOR model.

Well, I guess that's it for now. Don't forget to stock up on the insect repellent and go buy yourself that eyepiece you've been drueelling over for the past six months. You'll be happy you did!

Clear skies,

Blaine

Blaine Korcel, President

Minis Can Be Fun

by Al Schumann

George Uhl came up with the idea. We were putting the finishing touches on telescope polar alignment and waiting for full dark when he blurted, "This would be a great night for a Messier Marathon; new moon, good skies and close to the equinox...what do you say?"

For the briefest moment there was dead silence. Chuck stopped sighting in the new Telrad on his Astro Physics turbo charged Belchfire V-8 refractor. Steve almost dumped hot coffee down the tube of his new 13 inch Dobsonian. Stunned, I reeled against the tailgate of the old Green Hornet. Gus the Dog dropped his frisbee.

The moment passed. What a great idea. Saturday night. March 16 was a beauty at Crockett Park. There was even a slight breeze to keep the dew monster at bay. So, as soon as twilight began to fade, the race was on.

The first few objects in a Messier marathon are a real challenge because you are still fighting the last bit of twilight. Also, the objects are getting low in the western sky and there is a lot of atmosphere to peer through. If you start looking for the wrong thing first, your whole program might be doomed before you really get going. Therefore, we used Brent Archinal's March 1982 Deep Sky article "The Messier Marathon" as our guide for the best sequence of objects to observe. Averted vision and lots of luck are also required.

M-74, a spiral galaxy in Pisces, was number one on the hit parade. I was very lucky and found it straight away;

just the faintest patch of light which moved a bit in the eyepiece when I tapped the telescope. George struggled with it for quite a while before nailing that one down. M-77 was next; a spiral galaxy in Cetus, and a little easier to see.

Then it was dark, and the early panic subsided. M-79, the first globular cluster, fell into the bag. Three galaxies in Andromeda were big confidence builders as we raced through M-31, 32 and 110 (NGC 205).

Omigod! The panic returned with M-33 in Triangulum. That face-on spiral galaxy looks so pretty in photographs, but because of its low surface brightness it can be a tricky target even when high in the sky. When low down in the west, it's a real corker. I have looked at M-33 hundreds of times, so I knew it was dead center in the eyepiece. It took averted vision, putting a coat over my head to eliminate all stray light, rolling the declination knob up and down and a touch of imagination to nail that sucker down. I didn't think of it at the time, but it probably would have been easier to see that little rascal in the 8 X 50 finder scope.

After that, we went wild. The next two dozen items went into the bag faster than the Iraqi army could surrender. We roared through Perseus, Orion, Canis Major, Puppis, Monoceros, Hydra, Gemini and Cancer. Auriga was great; M-37, 36, & 38, three open clusters, bang, bang, bang. Leo was fantastic. Five galaxies in almost as many minutes plus NGC 2903 (off the tip of the sickle) for a bonus...no extra charge.

Brent's schedule called for Ursa Major next, and that is always agony for me. A fork mounted Schmidt-Cassegrain is no fun when you are working to the north. It takes a contortionist to twist around and crawl through the fork in order to get to the eyepiece. But nobody ever said this was easy. M-81 and 82 were splendid together in a

low power field of view. M-108 & 97 were nice challenges, but sort of hum to look at. M-40, that celebrated double star. What a joke. Then came M101. George found it right away and rubbed my nose in the dirt by finding the spurious M-102 as well. Ultimately, I found a slight smudge where 101 was supposed to be. I passed on the new M-102 (NGC5866).

Midnight. We sneaked into the Coma and Virgo clusters of galaxies. We were really on a roll. And then came the big mistake. We took a break. As a career soldier I should have known better. You NEVER stop advancing when you reach the river; you ALWAYS cross the river first. After a sandwich and a cup of coffee it was all over. The Virgo river was still in front of us. The cold had started to dull our senses, and the wearies took charge. George mumbled something about high clouds, and I agreed wholeheartedly. We started packing it in.

What was the count? My tally came to 47. George, who picked off the extra M-102, ended up with 48. Not bad for an unplanned, spur of the moment piece of business. And perhaps it was a good place to stop. Later in the spring we just might pick up where we left off...when Virgo is up at a more decent hour. Then, too, we won't be struggling with morning twilight to get M-30, the last jewel in the crown.

Overall, it was a fine exercise. Marathonizing has a way of focusing your attention, pushing your telescope handling techniques and honing one's observing skills. Beyond that, of course, minis can be fun.

May/June Sky Sweep

by Kevin Jones

You don't need to take your bulky, cumbersome telescope with you every time you go out to observe the stars. Many beautiful objects can be viewed using only a common pair of binoculars. This issue's Sky Sweep will spot-

light some prominent deep sky objects visible in the northern and southern skies using only a pair of binoculars.

Starting high in the northern sky, the pair of galaxies M81 and M82 can be found in Ursa Major. These 8th magnitude galaxies, one a spiral and the other unusually formed, are an easy target for binoculars. They are found near a little asterism that forms a near perfect 30-60-90 degree right triangle. While in Ursa Major, aim your instrument toward Merak (Beta Ursae Majoris). Nearby lies M97, the Owl Nebula. This planetary nebula is faint but is quite large, and is therefore a good target for larger pairs of binoculars. It appears as an evenly illuminated grey disk.

Moving towards the southwest, Canes Venatici contains some superb objects for binocular viewing. M51, the Whirlpool Galaxy, is very large and can be found with only minor difficulty. It is located a few degrees southwest of Alkaid, the end star in the handle of the Big Dipper. This galaxy should appear as a softly glowing ellipse, almost circular due to its face-on orientation.

Sliding southwards, the globular star cluster M3 can be easily located between Canes Venatici and Bootes. This sixth magnitude cluster is large and bright, and therefore is quite an impressive sight in even the smallest pair of binoculars.

Just east of the zenith, in the constellation Hercules, the great Hercules globular cluster, M13, waits to be noticed. It is located along the side of the Keystone of Hercules nearest to Bootes. This 5th magnitude cluster is very easy to locate as it stands out fairly well from its surroundings. It is closely flanked by two stars. Often overlooked in favor of M13 is M92, also in Hercules. This bright globular is located north of the Keystone and is magnitude 6.2. It is another easy globular to find simply by scanning the area and looking for a non-stellar object.

Dropping into the southern sky, M5 can be found in Serpens Caput near the star 5 Serpentis. This is another showpiece globular cluster which is easily noticeable in even a small pair of binoculars. The region just east of here, in Ophiuchus, contains many globular clusters. An interesting activity is to simply sweep Ophiuchus and see how many globular clusters (they look like round fuzzy things) you can find. It may seem easy to pass off these clusters as simply "round fuzzy things," but as you observe them, try to remember that each one of these globulars contains about one hundred thousand stars, so distant that they cannot be seen without some form of optical aid. Gee, and if THAT makes you feel small, think about the galaxies you observed earlier. Millions of stars so far away that their light has taken millions of years to reach your eyes.

But, as I was saying before this tour began, binoculars are a wonderful tool to use to explore the nighttime sky. If you don't want to bother with lugging your entire telescopic entourage next time you get the urge to do a little observing, why not pick up that pair of binoculars you haven't used in awhile! Their extreme portability and ease of use make them ideal for an impromptu observing session or an entire night out under the starry sky. Hope to see you observing!

Arlington Planetarium Schedule

Weekend Show - "StellarTapestry: An Adventure In Star Lore:

What are the origins of some of the constellations? What of the stories we've heard of creatures and critters in the sky? Civilization has woven a stellar tapestry of mythology, curiosity and religion twisted through history. Let the Planetarium instrument be your guide on a trip through space and time. The program will be presented weekends through May 19. Program times are Friday and Saturday evenings at 7:30 and Sunday matinees at

1:30 and 3:00. Admission is \$2.00 for adults and \$1.00 for children 12 and under and sr. citizens. Reservations are recommended. Call (703) 358-6070 for reservations.

May 6 - "Stars Tonight...For May" - 7:30 P.M.

Take a look at constellations, planets and other visible objects for the month. Weather permitting, telescopes will be set up outside for actual observing. Program is held rain or shine!! Seats are available on a first-come, first-serve basis. Admission is \$2.00 for adults, \$1.00 for children 12 and under and sr. citizens.

May 15 - NOVAC Meeting - 7:30 P.M.

May 29 - "The Magellan Mission to Venus" - 7:30 P.M.

James R. Zimelman, Geologist, Center for Earth and Planetary Studies, NASM, and Curator for "Magellan" exhibit at the Air and Space Museum, will be the guest speaker. The lecture will include the main elements of the Magellan spacecraft, a mission profile, followed by a review of some of the Magellan images and information released to date. Admission is \$2.00 for adults and \$1.00 for all students and sr. citizens. Call (703) 358-6070 for reservations.

June 3 - "Stars Tonight...For June" - 7:30 P.M.

June 19 - NOVAC Meeting - 7:30 P.M.

The Arlington Public Schools Planetarium is located at 1426 North Quincy Street, Arlington, Virginia. For questions or to make reservations call (703) 358-6070.

March 1991 NOVAC Meeting Minutes

The meeting was called to order at 7:35PM with Blaine Korcel presiding. Thirty one members and guests were

present. The minutes of the previous meeting were accepted as printed in the latest edition of the newsletter.

OLD BUSINESS:

1. Brenda Jones reported that the March 16 open house at the Arlington Outdoor Lab went well.

2. Brent Archinal gave an update on the new articles of incorporation and by-laws. A number of comments and recommendations have been received thus far. Brent will consolidate the comments and present them to the executive committee for review.

3. Steve Smith gave a recap of the 1992 planetarium budget.

NEW BUSINESS:

1. Astronomy Day will be celebrated on April 20, 1991. Interested NOVAC members have been invited to assist at two locations:

a. The Arlington Planetarium will put on two programs the evening of April 20 and will steer attendees to Bluemont Park where telescopes will be set up. The park is at 4th and Manchester in Arlington. Hours are from 8:00 to 11:30pm. Steve Smith has details at the planetarium.

b. The Air and Space Museum will have an area set aside for telescopes behind the building. Brent Archinal has additional information on time and location.

2. Blaine opened the floor for nominations for the 1991/92 board of directors. No additional nominations were forthcoming. Since we had five candidates for five positions on the board, a motion was made, seconded and passed that the candidates be elected by acclamation. The new board is as follows: Brent Archinal, Bill Burton, Kevin Jones, Herschel Payne and George Uhl.

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3. Brent noted that the Loudon County astronomers will be holding their next observation on April 13 at Foxcroft School near Middleburg. Contact Brent for directions.

4. Blaine stated that an 8-inch f/6 mirror has been donated to the club by the planetarium. Jerry Wolczanski is figuring and polishing the mirror. The executive committee will decide how best to use it.

5. The next club meeting will be held on April 17. Light pollution will be the subject for a talk and discussion.

The meeting was adjourned at 8:00pm at which time Al Schumann premiered the new NOVAC slide program and briefing.

Respectfully submitted, Al Schumann,
Secretary

April 1991 NOVAC Meeting Minutes

The meeting was called to order at 7:30PM with Al Schumann presiding. The minutes of the previous meeting were read and accepted.

OLD BUSINESS:

1. Brent Archinal gave a status update on the proposed Articles of Incorporation and NOVAC By-Laws.

2. Astronomy Day programs at the planetarium and Air and Space Museum were discussed. Brent suggested that we hand out NOVAC fliers at the Air and Space Museum on April 20.

NEW BUSINESS:

1. Bill Burton will be holding an all-nighter at Big Meadows on May 11. He issued an invitation to bring a telescope and join the group.

2. Steve Smith made mention of the new planetarium program entitled "Star Lore." Reservations are re-

quired. Call the planetarium for show dates and times.

3. Bill Burton suggested the club purchase the video tape of "The Astronomers." As an alternative, it was suggested that one of us tape the program and duplicate the cassette for the club.

4. George Uhl gave an update on the October 4/5 Northern Virginia Telescope Meet. The quest for a speaker goes on.

5. George Uhl announced that April 26 is the deadline for the next newsletter.

6. Al Schumann requested that we get fliers for the telescope meet printed up at the earliest convenience so they can be included in the pre-event mailings.

7. It was noted that NOVAC was listed in Astronomy magazine's 1991 Activity Guide. Also listed was the NVTM in the Astronomy events section.

8. Bill Burton made mention of an antique telescope auction to be held in Vestal, New York on May 18.

9. Brent Archinal had some information about the American Astronomical Society meeting in Richmond. Contact Brent for details.

10. The next meeting of the executive committee will be on May 7 at Al & Lynn Schumann's house.

The meeting was adjourned at 7:55PM at which time Bob Bunge gave a comprehensive talk on light pollution.

Respectfully submitted Al Schumann,
Secretary

NOVAC Membership Addresses

Please note that telephone numbers have been omitted. This will assure the privacy of our members. Telephone numbers listed on the membership application forms will not be re-

leased to anyone! - Bob Ridgley

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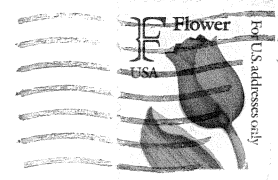
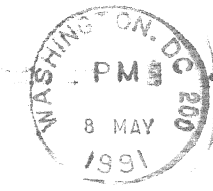
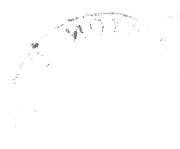
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