

# NOVAC

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Arlington Planetarium 703 358-6070

## NOVAC's Web Page

<http://astro.gmu.edu/~novac>

## President's Column

### Brenda Clements Jones

NOVAC will be holding elections at the general membership meeting in December. The nominating committee has come up with the following slate: President - Tilly Smith, Vice President - Pete Johnson, Secretary - Ron Cook, and Treasurer - Pedro Martinez. There are also three trustee positions that will be open, and running for those slots are Craig Tupper, Jeff Stetekluh and John Avellone. It looks to me as though it is going to be another productive and fun year for NOVAC.

Nominations are welcome until the day of the elections. Please notify me or any of the other trustees if you'd like to toss your hat into the ring. If you're not feeling quite that ambitious, there are many other smaller tasks that need tending to! Just let one of us know that you're willing to work, and we'll find you a job! I've been amazed since the first NOVAC meetings I attended back in 1988, at how willing our members are to pitch in to help. That friendly, helpful spirit continues to this day.

## Official Notice

The Annual Meeting of the Northern Virginia Astronomy Club (NOVAC) will be held on January 14, 1998 at 7:30 P.M. EST, at the Arlington Planetarium, 1426 North Quincy Street, Arlington Virginia.

Whether the task be simply to return our welcome sign to the workroom at the planetarium after a meeting, or going to Crockett on short notice on a questionable-forecast night to entertain throngs of Young Astronauts, I can always count on someone to answer the call for help. The entire club deserves a round of applause! Thanks for all the help!  
Brenda

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January 21, 1998

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## What's Up ?

Al Schumann

I think God had amateur astronomers in mind when He invented autumn. The first legitimate cool fronts in several months come through like new brooms, sweeping before them the oppressive heat, humidity, and haze that drastically reduce the limiting magnitude and make life under the stars generally miserable. The change in climate comes at a time when we can still catch many of the summer constellations before they set, and we can see the wondrous things in those constellations far better than we could in July or August. And so, on a lovely night near the end of September, I took the 13-inch telescope to a nearby park and reveled in the night sky. The observing plan? There was none. I had my trusty dog-eared copy of the Edmund Scientific Mag. 6 Star Atlas, and I was just going to go through it as the spirit moved me. I like that atlas, because everything is attainable. You don't waste a lot of time trying to find objects that are beyond the capability of a modest sized telescope - or its operator.

Cassiopeia was well up in the northern sky, and it was on Chart No. 1 in the atlas, so off I went. There are a lot of beautiful open clusters up there. We mostly think of M-52, M-103, and the Double Cluster next door in Perseus. However, Cassiopeia has a whole lot more to offer. There are a number of other clusters well worth the time to seek out and enjoy. For example, there are three very nice NGC clusters a mere Telrad circle away from Beta Cassiopeiae. They are: NGC 7789, 103, and 129. They are nice bright clusters and are easy to find. NGC 7789 is especially impressive. Later, I checked it out in Burnham's *Celestial Handbook* and found it has about 900 stars. No wonder it was impressive. NGC 103 and 129 are smaller with 35 and 50 stars respectively. There are a couple of other nice clusters within a Telrad circle of Delta Cassiopeiae. NGC 457 is about 10' across and contains 100 stars. The other is NGC 663, and it sports 80 stars in its 11' size. In addition to the clusters just mentioned, the whole region around Cassiopeia is in a beautiful part of the Milky Way. It is very pleasant just to go with the flow and relish that incredibly rich star field.

After having worked over Cassiopeia, I sort of let one thing lead to another. I edged down to M-76, the Peanut Nebula, in Perseus. I hadn't looked at that tiny planetary nebula in years, but it is very easy to find. It lies smack dab in the middle of a line between Delta Cassiopeiae and Almach (Gamma Andromedae). There is a nice 4th magnitude star nearby, which is a big help. As long as I was in the neighborhood, I made a side trip to M-34, an open cluster between the aforementioned Almach and Algol, the famous variable star in Perseus.

The great square of Pegasus was well up, so it was time for a little galaxy fix. M-31 never fails to impress me. No matter how many times I look at it, the sheer size of that object is awesome. M-32 was nice and bright and visible in the same low power field-of-view. NGC 205 (M-110) was pretty well washed out, as was

M-33 in Triangulum. You had to know they were there in order to see them. Apparently, the sky wasn't quite as dark as I thought. In the northwest corner of the square, I went to NGC 7331, a lovely, 10th magnitude spiral galaxy. It is surprising that it is so bright when one considers that it is 50 million light years from us. NGC 7331 is the gateway to Stephen's Quintet. That cluster of galaxies is only half a degree from 7331. Even though the skies were not nearly dark enough to see the quintet, I had to make a perfunctory stab at them. It was no go. A few years ago, I asked Brent Archinal to take a look through the 13-inch scope to see if a trained eye could spot something. Brent allowed as how it would take extremely dark skies and a fair amount of power to detect them. We did not have the darkness at Crockett Park then, and I don't have it now, but I'm going to keep trying.

I got a hankering for globular clusters next. I started with M-15, just northwest of Enif. I then moved south to M-2 which is on a direct line between Enif and Beta Aquarii. Satisfied that it was still there, I went to M-71 in Sagittarius and M-56 in Lyra. The latter can be a tricky little devil, and sometimes it seems dimmer than its 8th magnitude rating would suggest. It is easy enough to find, once you know where to look. It's pretty much on a line connecting the Ring Nebula (M-57) with that grand double star, Albireo, in Cygnus. Hercules was getting low in the west, so I swung over for a look at M-13 and M-92. I spent a bit of time on M-13 with a few different eyepieces and a Barlow, as that cluster is always a treat to the eye. Then, I put in the UHC filter and worked over the Dumbbell and the Ring Nebulae. I've never yet been able to see the central star in the Ring, but like the quest for Stephen's Quintet, I'll keep trying. The Dumbbell was pretty as always. The best I could ever see of it is a rectangle with an ever so slight pinch in the middle of the long axis.

Cygnus had moved westward from the zenith, so it was easier to look at. It's tough to track something at the zenith with a Dobsonian. Not only does the telescope balance goes awry, but you sometimes get to feeling like a dog chasing its tail. It's a lot easier to wait for the object to move down a bit. Anyhow, I took a look at the Veil Nebula. Surprisingly, the western part (through 52 Cygni) showed up better than the eastern segment. Usually, the eastern arc stands out beautifully, and with low power and a UHC filter you can follow the arc a long way around. Next, I went after the Crescent Nebula, NGC 6888, which is located only a degree or so from Sadr (Gamma Cygni). No dice. Al Boldt pointed it out one night at Crockett Park. He, Brent, and I studied it for a good while, and I thought I could find that sucker anytime I wanted to. Wrong! Wait 'til next time.

It was going to be a while before the Crab Nebula came up through the trees. So, I went after a couple more galaxies, M-74 in Pisces and M-77 in Cetus. I found the former right away but struck out on the brighter M-77. I did everything short of standing on one leg and whistling Dixie, but I couldn't see that damned thing or its companion, NGC 1055. There is

## Fan Mountain Open House

Jim Fitzgerald

Would you like to see M57 through a 40-inch telescope? Or, how about looking at Jupiter and its moons through a 30-inch reflector? Welcome to Fan Mountain Open House!

On Friday, October 3, the Astronomy Department of the University of Virginia held its biannual open house at Fan Mountain Observatory. Fan Mountain is located sixteen miles south of Charlottesville, Virginia off Rt. 29.

The facilities include a 40-inch telescope with a 43-inch diameter primary mirror, a 29-inch diameter secondary mirror, and a 40-inch diameter corrector lens to provide a stable, large-field telescope for precise measurements of the motions and distance of nearby stars. It has also been used for studies of galaxies and quasars. Its field of view is about 2/3 of a degree with photographic plates. It is mainly used with a solid state digital camera system.

The 30-inch telescope is a standard Cassegrain reflector with a 30-inch primary mirror and an 8 1/2 inch secondary mirror. It is primarily used for measuring the brightness of stars and galaxies.

The 10-inch astrograph is a wide-field camera for photographing large sections of the sky at one time. Its field of view is about 5 degrees. Over 900 red dwarf stars have been discovered with this instrument.

We were greeted with a narrated slide show while waiting for our tour of the telescopes. An explanation of the moon's phases and theories about its origin started the presentation. This was followed with a depiction of solar and lunar eclipses. During a review of the Pathfinder Mission, it was time for our group to tour the 30-inch reflector.

The 30-inch telescope was aimed at Jupiter. The colorful cloud bands covered the surface as the Galilean moons orbited the planet. After a few moments and lots of questions, we were off to the 40-inch reflector.

The 40-inch telescope is located in a three-story dome, and is supported by an enormous fork mount. It was pointed at M57, the Ring Nebula. A small central star was visible in the "smoke ring" of hydrogen and helium gas. Impressive!!!!

Gale and I completed a wonderful evening by enjoying the rest of the slide show, and a romantic walk under the Milky Way. The next open house for Fan Mountain Observatory will be held in April of 1998. If you would like tickets for the tour, call 804-924-7494. The University of Virginia Department of Astronomy may be found on the World Wide Web at <http://www.astro.virginia.edu>.

never a sure thing in astronomy. Finally, the Crab rose higher, and it showed up quite nicely even without a filter. I wanted to hold out for Orion, but the wearies got me. I packed up and set out on the long five-minute drive home. It was great fun to visit some old friends and meet a few new ones. Thank God for autumn.

# Musings of a Determined Messier Hunter

Ralph Marple

This article is intended for those of you who haven't yet earned their Messier Certificate. It started as an observing report for distribution via the NOVAC e-mail exploder, but when I saw how long it had gotten, I thought it would be good for the newsletter.

My hat is off to those of you who have earned your Messier Certificate. Although I've been chasing Messier objects for years, I've never kept decent observing notes, so I'm not sure how many I've actually hunted down.

I first started observing in 1979, with a pair of 7x35 binoculars that I received for Christmas. Since then, I've upgraded to a set of bifocal eyeglasses, a pair of 10x50 binoculars and a 4.5" Newtonian scope with a 6x30 finder scope. I've had the scope for nearly ten years, but it's only been the last two, after I upgraded the optics (eyepieces) and built a Dobsonian mount, that I've been truly happy with it. Now I spend my time using it instead of cursing it. I have the following star charts: *A Field Guide to the Stars and Planets* (Peterson Field Guide Series), *Sky Atlas 2000.0*, and *Uranometria 2000.0*. The Field Guide was my first star guide, and because of its compactness, I still use it when I go out with just binoculars. This is often frustrating because it only goes to magnitude 5, and you can see a lot more with binoculars. I use the Sky Atlas during my observing sessions because its sky charts are large, it spreads out nicely, and it goes to magnitude 8, which includes nearly all the stars I can see in binoculars. *Uranometria* goes to magnitude 9.5, which covers most of the stars I can see through my scope. I use it when I'm trying to find something dim like Neptune.

I do most of my observing from my front yard in Fairfax because it's easy to grab my stuff and get outside to spend an hour or so observing. I often use a copy of *Astronomy* or *Sky and Telescope* to get the general layout of the constellations at the start of an observing session. I always use binoculars to orient myself with a particular area before I start with the scope.

This summer has been pretty crummy, and I was excited by the relatively clear skies on Saturday (8/31), so I went to Crockett. I hadn't been there in quite a while and was amazed at the improvements and number of observers. I guessed nearly a hundred, although upon reflection, I suspect the 35 - 45 estimate distributed via the NOVAC e-mail exploder was closer. I made a major goof on this trip. I didn't have any observing plan, so all I did was gawk at the darker-than-my-front-yard skies. The thing that really caught my attention was the milky way. Imagine! There are places you can still see it! Unfortunately, although I chatted with some other observers, and tried some new eyepieces, I didn't do any observing.

I returned somewhat frustrated by my loss of an evening at Crockett, so when Wednesday night (9/3) promised to be clear, I got organized (relatively speaking). I pulled out my copy of the Astronomical League's Binocular Messier Club guidelines (a GREAT aide which has the

objects grouped by difficulty and season), looked at the list for late summer, grabbed my glasses, binoculars, scope, red light, and star charts, and headed into my light-polluted front yard. I was ecstatic! By the end of the evening I'd bagged 8 objects, some I'd never found before. At the end of the evening, I spent a few minutes and wrote down what I'd seen and how I located them.

I'd had a tough time with M24. The Sky Atlas showed it as a small cluster, and I had searched for a long time with no success. Then I checked *Uranometria* and discovered that it was the large cluster of stars that I'd searching through for the indicated small cluster!

The next night (9/4), I went out again to review my accomplishments of the night before, and was surprised to discover that although the night appeared to be as clear, conditions were definitely not as good. I found the objects I'd seen the previous night, plus some new ones, but M26 proved to be more of a challenge. On 9/3 I had had no trouble finding and observing M26 through binoculars and scope. In fact, I had found it interesting enough to observe it at high power (100x). However, on 9/4 it was barely visible through binoculars, and I couldn't find it in the scope.

Friday night I went out again. This time to Parsells. Parsells isn't as dark as Crockett. The milky way isn't as obvious, but it's lots better than my front yard, and I could see M4 (I've never seen M4 from Fairfax). I observed the objects I'd seen the previous two nights, and was pleased to see that M26 was back. Now that I know what to look for, I'll be able to identify the cluster by the brighter stars, even if I can't see the dimmer ones.

Over these nights, I came to realize that binoculars work incredibly well for the brighter Messier objects. For example, the nebulosity of M20 is visible through my binoculars, but it disappears in the scope. I discovered that my previous observations of M20 were actually M21. I use the binoculars to spot an object of interest, and to get a handle on the star fields around it, before I try and locate it through the scope. Of course, the smaller, dimmer objects can only be found through the scope.

I also use the binoculars to get oriented when I want to star-hop from a readily visible star to an object of interest. Once I've located a star to use as the start for the hop, I note where the object is relative to the starting star -- for example "up and to the left". I use this direction to move my scope which keeps me from getting confused by the inverted view in the scope.

At Parsells, I completed the list of late summer group, so I started looking for some of the mid-summer group in Ophiuchus. I'd never explored Ophiuchus before, so I scanned the sky without optical aid, using the finder chart at the beginning of the Sky Atlas. I was quickly able to locate M9 by hopping down from Xi Ser, which was easy to locate in the finder scope. Then I tried to locate M10 and M12 by hopping up from Zeta Oph. I had no luck!

Partly, because I had trouble trying to confirm that I was actually viewing Zeta Oph through the scope. (It had gotten down into the haze near the horizon). In addition, the two objects were a long way from Zeta Oph, without any stars to support the hop. Then, I found I could make the hop from Beta Oph. By this time M12 was close to the horizon, and I couldn't locate it. I learned a lesson from this.

Sometimes what appears to be a good place to start a star hop, really isn't. One needs to select a star (or combination of stars) that are easily identified for the beginning of the hop, and pick a direction to approach the target (from above, below, left, or right) that has useful stars to aid the hop. Keeping in mind that with a Dobsonian mount, "up, down, right, and left" are not the same as increasing/ decreasing declination or right ascension, I orient my star chart so it's aligned with the horizon and reflects the actual alt/az motion of the Dobsonian mount.

I really enjoyed those several gorgeous summer nights. I observed some new Messier objects, and I wrote them down! Also, I found a very good web site for Messier hunters: <http://seds.lpl.arizona.edu/messier>.

I'd like to correspond with others who are working their way through the Messier catalog and share tips for locating the elusive objects. (I'm at [rmr@erols.com](mailto:rmr@erols.com) or 5027 Kenerson Drive, Fairfax, VA 22032)

Finally, here's a list of the objects I attempted to find during the enjoyable evenings of September 3, 4, and 5:

Object	Scope	Binoculars
M11	x	x
M26	x	x
M16	x	x
M17	x	x
M18	x	x
M23	x	x
M24	x	x
M25	x	x
M 8	x	x
M20	-	x
M21	x	x
M22	x	x
M28	x	-
M80	x	-
M 7	x	x
M 4	x	x
M54	x	x
M55	x	x
M69	x	-
M70	x	-
M75	x	-
M 9	x	-
M10	-	-
M12	-	-

# Perseids in Wyoming

## I: The observing

**Bill Burton**

When you have two young children, as I have, you have to make the most of your viewing opportunities. This summer I realized that I would be vacationing with my family in Wyoming during the annual Perseid meteor shower in August. My last good look at the shower was in 1994, on vacation in Colorado, when two friends and I counted 300 Perseids in 6 hours. We submitted our data to the International Meteor Organization, including not only hourly totals, but actual times of meteors. But the data were tainted because we had pooled our observations, making it impossible to compute a proper Zenithal Hourly Rate (ZHR), which is the normalized standard to which all observations are converted. I also had to look at my notebook when recording meteors, taking my eyes off the sky. Thin high clouds came and went during the night, so the sky wasn't perfectly clear, although the limiting magnitude was almost 7.

This time I resolved to do it right. Taking my cue from the article on Perseid-watching in the August issue of *Sky and Telescope*, I borrowed a mini tape recorder from a friend. My plan was to voice-record all my observations and play the tape back later, with a stopwatch, in order to get the hourly totals and time for each meteor. I wanted to determine the precise peak of the shower, and was also interested in whether the meteors came in spurts, which seemed to be the case in the 1994 observations.

Another thing I was going to try was recording the magnitude and direction for each meteor. I couldn't recall ever reading a report discussing meteor directions — did they pass from the radiant equally in all directions? I devised a compass-like coordinate system with the radiant of the shower in the center, the direction towards Polaris as 0 degrees, West at 90°, etc.

We arrived in Laramie, Wyoming on August 9 during a heavy thunderstorm, and discovered that the state was having its wettest summer in many years. It rained the next two days as well, and August 12 didn't look any more promising. But the clouds started to lift late in the day, and around 6:30 I made my move and went to Walmart to buy a critical piece of equipment: a reclining lawn chair. After a fitful attempt at a nap that evening (the Moon wouldn't set until after midnight), I got up at 11:30 and looked out. The sky was clear, with a russet half-moon descending towards the western horizon.

The observation site was just a 20-minute drive north from downtown Laramie, which has a population of 15,000 when the university isn't in session. I headed up Rogers Canyon, and pulled off on a wide gravel shoulder, along the broad gentle crest of the southern Laramie Range, at an elevation of 8000 feet. The sky was perfectly clear, with only dim glows on the horizon from Laramie, and farther but larger, Cheyenne. The horizon was nearly flat, with no trees. Several bright Perseids streaked across the sky as I opened my lawn chair and prepared

my viewing bed of sleeping bag and Thermarest pad, with my feet facing east. After determining that the limiting magnitude was around 6.5, I settled back, turned on the tape recorder and noted the exact time, and aimed my gaze towards the zenith. Having two 120-minute cassettes (60 minutes a side), I had decided to do four uninterrupted observing runs of slightly less than an hour each, which would carry me to dawn.

How do you describe a night where all you do is constantly stare at the sky with the naked eye, for four hours? It consisted of a rhythm with two different tempos: the slow, stately wheeling across the sky of the Milky Way and her constellar companions, punctuated by the swift and sometimes breathtakingly bright streak of a meteor. As the minutes and hours passed, I watched, and occasionally, or sometimes frequently, spoke into the tape recorder, identifying the meteor as Perseid or non-Perseid, and giving my guess as to magnitude and direction. Since I wouldn't know until playing back the tape, what the meteor count was, I had no idea how many meteors I was seeing, but could tell around 1:30 that the action was picking up. One to two a minute was becoming the norm, and several times I saw three or four a minute. During a break between the second and third observing sessions, at 2:40, I was standing up and moving around when I saw in one minute no less than ten meteors! (Murphy's law, of course, dictating that this would not be part of the official count.)

Some of the meteors during the evening were truly dazzling, with the brightest being about magnitude -4.

Around 3:00, well before dawn, I noticed a curious, whitish glow on the eastern horizon, and realized that it could only be the zodiacal light. The light slowly spread up as a broad band along the ecliptic, until at dawn, at 4:30, it extended 50 degrees in length. By this time the meteor peak was clearly over, even without knowing the count, because just before twilight began, they were coming at less than one a minute. As dawn slowly conquered the sky, I got up from my seat and walked down the road to stretch my legs. In the distance several coyotes started to howl, as if to greet the day, and then quickly silenced. In the paling blue sky, several last bright Perseids streaked towards the eastern horizon. I got in the car and drove back down the canyon, stopping at the bottom where the canyon empties onto a broad plain, to observe some pronghorn antelope grazing out on the prairie.

Half dead from lack of sleep, I arrived back at Cousin Joe's house just as everyone else was brightly beginning their day, after a refreshing night's slumber. Joe was an AOL subscriber and therefore had e-mail. I raggedly tapped out a message to the NOVAC list, and a copy to *Sky and Telescope* that summarized the night's observations. It could only include a guess for the number of Perseids seen as "over 150".

Only weeks later would I have the time to play back the tapes and determine the true results, which I will report in the next newsletter.

# Our Day at VAAS '97

**Jim Fitzgerald**

Gale and I were so excited about going to VAAS '97 that we awoke before the sun and headed towards Ashland, Virginia. We were greeted with a beautiful sunrise, which was only the beginning of a day of celestial wonders.

A full slate of presentations filled the morning hours. Dr. George Spagna, Department of Physics Director at Randolph-Macon College, started the presentations with "Astronomy from the Trenches." A comparison between astronomy and astrology web pages was used to exhibit our misplaced priorities. Dr. Spagna encouraged us to expose others to science through astronomy.

Dr. Marc Sher, Associate Professor of Physics at the College of William and Mary, followed with "The Big Bang and the Evolving Universe." He talked about the beginnings of our universe, its expansion, and the possibility of alternate universes.

After lunch, Ken Wilson of the Science Museum of Virginia gave us an "Update on the Mars Pathfinder Mission." Images from the red planet revealed the progress of the rover Sojourner as it traversed the Martian landscape and analyzed rock with a spectrometer. The lander's weather instruments have recorded temperatures as low as -110 degrees F., gentle breezes, and a dust devil.

Dr. Philip Ianna, Professor of Astronomy at the University of Virginia, completed the presentations with "How Far do You Have to Go?" He gave an informative talk on light pollution and the International Dark Sky Association. Dr. Ianna encouraged us to get involved in reducing light pollution in our local communities. He suggested we work to pass lighting ordinances that will help control the quality and number of lights that developers are allowed to use. Dr. Ianna closed his presentation by offering us a discount on the yearly dues for the IDA. The IDA can be found on the Internet at <http://www.darksky.org>.

That evening, we drove out to Poor Farm Park for a cookout and a night of sky observing. We ate dinner with Bill Jensen and Brent Archinal. Poor guys, we asked them so many questions about telescopes and getting started in astronomy. They were good sports, and answered all our questions between bites of hot dogs and hamburgers.

Bill and Brent took us on a tour of the sky. We saw Jupiter and its moons for the first time through a telescope! In Bill's 8-inch Dobsonian, you could see the surface features on Jupiter. As Saturn rose over the trees, we could actually see the rings! Then Bill did a brave thing and let us use his telescope to find M13 in Hercules. What a sight! It was a perfect ending to a wonderful day.

The Richmond Astronomical Society did a first class job of hosting VAAS '97. Special thanks to Josh Lief, Terry Barker, and all those that made VAAS '97 a great success.

# My Favorite Astronomy Book: *Starlight Nights*, by Leslie C. Peltier

Robert Bunge

There have been many books written that deal with amateur astronomy: books about telescopes, telescope making, observing deep-sky objects, observing the Moon, observing the planets and even how to build electronic cameras to use on a telescope. But, in my opinion, there has only been a single book written about amateur astronomy. Or more precisely, about what it is to be an amateur astronomer.

Even if someone else did try to write about what it means to have a full life of experiencing astronomy, I doubt that anyone else could begin to match the legendary job that Leslie Peltier did in his autobiography, *Starlight Nights*.

To make it harder, there are few, if any living amateur astronomers who can boast the level of achievement and experience that Peltier had. Born in 1900 on a Ohio farm, Peltier contributed monthly reports on dozens, if not hundreds, of variable stars for more than 40 years. On top of that, he also visually discovered a dozen comets — all from a person who didn't finish high school. Even the great astronomer Harlow Shapley was awestruck; calling him "the world's greatest nonprofessional astronomer."

And one of the great nonprofessional astronomers of our day was equally in awe. Comet discoverer David Levy regularly carries a copy of *Starlight Nights* on his travels around the country, quoting from the book anytime that he lectures about astronomy. Last I heard, David had recorded, in the inside covers of his copy, more than a hundred instances of quoting Peltier during a lecture.

Perhaps what separates *Starlight Nights* from other books on amateur astronomy, is that it deals with lots of non-astronomical things. In *Starlight Nights*, Peltier presents a beautiful, heartwarming, and charming account of growing up on a rural farm, in the early part of this century. Peltier walks us through the introduction of the automobile, household electricity, and other inventions that we all take for granted today. From Peltier, we learn about what one did to entertain in the days before radio and TV — just how important the small, but carefully chosen family library was. Peltier wrote about protecting the environment, long before it was popular. About the beauty of nature — birds, flowers and insects. About exercising the imagination. About understanding the history of the land that you live on. And about the basic meaning of life and our relationship to the universe.

But most of all, Peltier introduces us to astronomy. He bought his first 2-inch telescope from money earned by picking strawberries — at two cents per quart. Later, Princeton University loaned Peltier the use of a 6-inch f/8 refractor that Zaccheus Daniel had used to dis-

# 1997 VAAS Meeting Program Alert

Bill Jensen

Several NOVAC members invaded the 1997 Virginia Association of Astronomical Societies (VAAS) Meeting at Randolph-Macon College on September 27, 1997. Hosted by the Richmond Astronomical Society, the meeting consisted of several talks by local professors and amateurs, a cookout, a tour of the college observatory, and some limited observing at a nearby park at night. NOVAC had probably the largest contingent of attendees. Brent Archinal was good enough to ask me to join him for the ride there and back.

Once there, Roberto Flores was busy taking pictures of the event. Sandy Sanders, who has moved to the Richmond area, attempted to raise some interest in the Mideast Region of the Astronomical League, but was thwarted somewhat by being allowed to gather interested people only during the lunch break. Brent hosted a video and a discussion concerning occultations. John Avellone and I joined the International Dark Sky Association (IDA) after a slide show by Dr. Phil Ianna of UVA on the effects of light pollution. Other talks included an overview of cosmology, where I learned that the entire universe may have been formed from a few grams of matter cooling from 1029 degrees K. to 1028 degrees K. in something like 10 - 35 seconds. Pretty hot and fast for me, no wonder there was a huge bang. More to current events, there was a summary of the Mars missions with highlights of the Pathfinder accomplishments. There were workshops on mirror grinding and CCD imaging as well. During one of the breaks I was able to sign up for the Mid-Atlantic Star Party on October 30-November 3, 1997 in Moore county, NC, approximately a 6-hour drive from our area. I also was able to look at several drafts of the Willmann-Bell publications soon to be available for sale, especially a slick Messier guide.

Part of the attraction of events like this is meeting new people from around the state. Brent introduced me to the owners of Willmann-Bell, and it was interesting to learn a little of the background of folks who combine the publishing business with a love for or hobby. I was able to become acquainted with Jim and Gale Fitzgerald who have joined NOVAC despite the distance to their home near Charlottesville. After they put up with my poor sense of humor at the cookout, I was glad to

cover three comets. Respectful of the telescope's history, Peltier started to hunt comets himself. With Peltier's dozen discoveries, I often wonder if his little telescope discovered more comets visually than any other telescope. Later, Peltier built a unique observatory for this telescope that allowed him to observe anywhere in the sky without getting out of his chair! He later received the gift of a dream telescope — a 12-inch Alan Clark refractor, complete with observatory.

Do I like this book? No, I love this book. In the 17 years since I discovered it, I've worn out

Tilly Smith

The September meeting marked the start of a five-program series by NOVAC members to discuss the fundamentals of amateur astronomy. The schedule is as follows:

September	Getting Started in Astronomy Jon Stewart-Taylor
October	Choosing and Using Binoculars Bob L'Hommedieu & Brenda Jones
November	Telescopes Bill Burton & Bob Bunge
December	Deep Sky Observing Techniques Brent Archinal
January	Eyepieces & Practical Hints Al Boldt

This should be an interesting and informative series of programs. Jon Stewart-Taylor set the stage with a terrific program in September that provided some insights on just how easy it is to get started. The most important point is to "Just Do It"; just get out and observe. One does not need a lot of fancy equipment; just your eyes. I am sure NOVAC members are looking forward to the remainder of the series.

In 1998, there are several topics under consideration: Collimation and Polar Alignment, Advanced Deep Sky Observing, Cosmic Orienteering, 1997 Stellafane, 1998 Solar Eclipse, Beginning Astrophotography, Telescope Making and Mirror Grinding.

Stay tuned — 1998 should be an interesting year at NOVAC.

have them push around my new 8-inch Dob until the clouds sent us packing up. Before leaving, we got a chance to chat with Myron Wasuta, our former president, and his wife.

Driving home, I think we all got our money's worth (an outrageous \$8, which even paid for the cookout meal). I just wish the event had greater attendance (only around 50 people gathered) but perhaps better planning and a bit more publicity with the member clubs would have helped. The organizers cannot rely on e-mail alone to a few people to generate interesting a statewide meeting. I can also tell that I have changed — 20 years ago you would not have found me willing to drive 90 minutes on a Saturday morning to listen to some lectures at college! Unlike then, the purpose now was to make friends, learn a little, and have fun without an exam.

two copies of the Sky Publishing paperback edition. I typically will re-read it about once a year. The prose is beautiful, yet simple and easy to read. Peltier died in 1980. It's said that during his final hospital stay, Peltier asked that his bed be moved beside the window so that he could record the variations of his beloved bright, naked-eye variable stars. This man was clearly dedicated to the stars.

*Starlight Nights* by Leslie C. Peltier, 1965. Sky Publishing Corporation, Cambridge, Massachusetts ISBN 0-933346-02-6.

## Dinner Before the Meetings

**Brent A. Archinal**

Would you like to meet your fellow NOVAC members? Would you like to be able to recognize them other than by voice? Do you want to do so in an uncrowded, unhurried atmosphere? Do you like to discuss astronomy - or for that matter anything else? Then come on out to NOVAC's regular dinner before our regular meetings. The upcoming dates will be on Wednesdays November 19 and December 17. At the regular meetings for those nights, the topics will be binocular observing and deep sky observing (the latter covered by yours truly!), and the dinner would certainly be a good place to start the discussions off early. So try to make it, and bring a friend - the dinners are open to all. The place to meet continues to be the *Santa Fe Cafe* in Rosslyn. You should plan to arrive at about 5:45 PM, in order to have time to make it to the regular meeting at the Arlington Planetarium at 7:30 PM. This is particularly true as we've been having larger and larger groups of members attending lately. The *Santa Fe Cafe* is a nice Mexican restaurant with good food, usually some worthwhile specials (crab cake quesadillas!), and reasonable prices, although credit cards are not accepted. Smoking is allowed in one part of this (large) one-room restaurant, but so far NOVAC members have not been smoking and the few others dining at that time have rarely smoked. If you do arrive first, we would appreciate it if you'd try to sit in the front in the non-smoking section. Directions: The *Santa Fe Cafe* is located at 1500 Wilson Blvd, in Rosslyn, with entrances off of both Wilson Blvd. and Clarendon Blvd. This restaurant is easily found, just west of "downtown Rosslyn", on the southwest corner of Wilson Blvd. and N. Oak Street, where Wilson splits becoming Wilson one-way west and Clarendon one-way east. From I-66 east, take the Rosslyn exit to Lee Highway, and turn right at the second light onto Fort Myer Drive. Go two blocks and turn right onto Wilson, and the restaurant will be one block ahead on your left (on the corner across Oak/Clarendon from a big outdoor sculpture). On-street parking is usually available in front of the restaurant, on the other side of the street up the hill, or around the long block (make two left turns) on Clarendon just before it ends by the restaurant. However, be sure to feed any parking meter if you arrive before 6 PM. This location is also quite close to the Rosslyn metroraill station. Reservations are not necessary, although it helps a lot to know who's coming so we'll know how big a table to get. We've been filling a pretty large table lately, so this information does prove useful. Also should it be necessary to cancel (which it never has by the way), I can let you know. So if you know you're coming or if you need a ride to the meeting and back to the metro, or just for more information or directions please give me a call (evenings) at 703-237-0201. You can also e-mail me at [baa@casa.usno.navy.mil](mailto:baa@casa.usno.navy.mil). See you at dinner!

## Astronomy Increases Price of Subscription

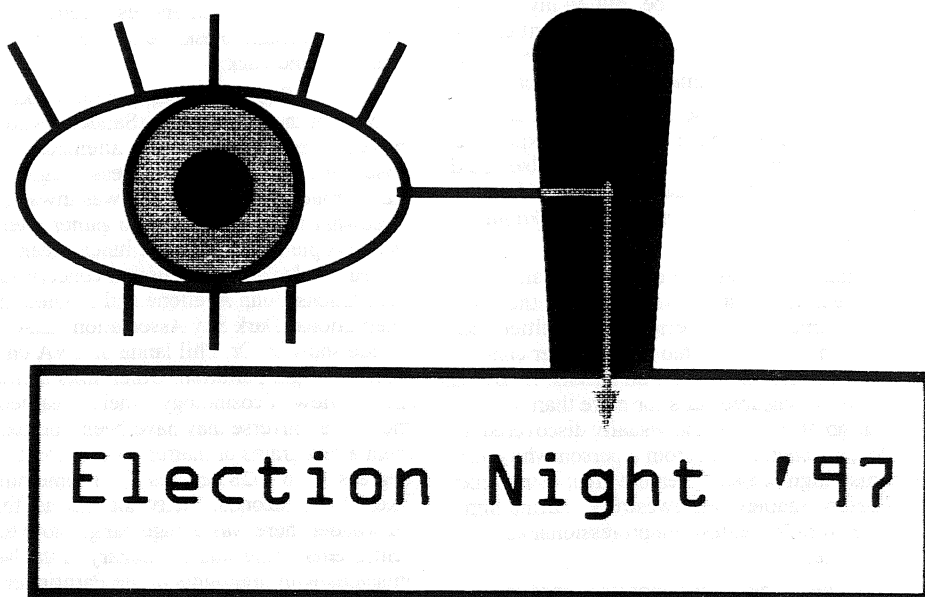
**Pedro Martinez**

Astronomy magazine has increased the cost of a subscription through NOVAC. It has increased from \$20.00 to \$24.00.

## Membership Listing Changes

Ken and Margot Pettijohn  
[pettijohn@erols.com](mailto:pettijohn@erols.com)

Bruce E. Miller  
10561 Sirocco Circle NW  
Silverdale, WA 98383



**You must be present to vote!**  
**December 17, 1997 meeting**  
**starting at 7:30.**  
**Vote for Officers and 3 Trustees.**  
**Nominations as of 10/15/97:**

**For President: Tilly Smith**  
**For Vice-President: Pete Johnson**  
**For Secretary: Ron Cook**  
**For Treasurer: Pedro Martinez**  
**For Board Members: John Avellone**  
**Jeff Stetekluh**  
**Craig Tupper**

Northern Virginia Astronomy Club  
 Statement of Cash Received and Disbursed  
 For the period January 1, 1997 through October 14, 1997

CASH RECEIVED:

Membership Dues:		
Regular and Additional:		
Renewals	\$2,598.00	
New Members	1,740.00	
Patron (New Member)	50.00	
Supporting (New Member)	100.00	\$4,488.00
Interest Income		237.13
Hat Sales		70.00
Astronomical League Book Sales (Net)		51.00
Donation		16.00
Answer Machine Sale		7.00
Total Cash Received		\$4,869.13

CASH DISBURSED:

Telescope Mount		1,800.00
Newsletter		
Printing & Assembly	637.32	
Postage	460.82	1,098.14
Astronomical League		
Dues	703.00	
Astronomical League Books (Net)	67.50	770.50
Library		
Books	291.98	
Doors & Lock	13.72	305.70
Observing Site Expenses		
Portable Toilet	135.86	
Picnic Permit	45.00	
Lock	19.95	
Lumination	4.07	204.88
Hotline Expense		145.77
Publicity (Printing)		50.68
Administrative:		
Liability Insurance	368.00	
Printing -		
Membership Applications	31.35	
Printing - Administrative	30.36	
Postage	146.50	
Supplies	84.84	
Flowers	36.85	
State Registration Fee	25.00	
Personal Property Tax	18.05	
Bank Service Charge	10.00	750.95
Total Cash Disbursed		5,126.62

DEFICIT OF CASH RECEIVED OVER CASH DISBURSED (257.49)

Cash at beginning of period: 8,622.77  
 CASH AT END OF PERIOD 8,365.28

Cash At End Of Period:  
 Checks Received, Undeposited 54.00  
 Checking Account 1,201.99  
 Savings Account 7,109.29 8,365.28

Respectfully submitted,

/s/

Pedro Martinez,  
 Treasurer (6/21/97 to Present)

## Editor's Note

I would like to express my gratitude and thanks to our outgoing President Brenda Jones.

Brenda, I enjoyed working with you these past two years. I was impressed by your dedication to and hard work for NOVAC and what it represents.

Elliott

## How Do I Get to Parsells?

A big thank you to Steve Blake and Ron Cook who collaborated to produce a new set of directions to our observing site at Parsells. The updated directions to Parsells appear on Page 11.

## Coming, next issue, to a your mailbox near you,

a newsletter containing the conclusion of Bill Burton's "Perseids in Wyoming", and two reports by Bill Jensen: "Cloudy Night Astronomy", and a report on the Oregon Star Party of last August.

# Minutes of the September and October Meetings

Pete Johnson

## Minutes of the Sept. 10, 1997, Board meeting of the Northern Virginia Astronomy Club.

The meeting was called to order at 7:45 p.m. at the home of Club President Brenda Jones.

### Announcements:

Brenda said that we missed the due date for getting the Telescope Meet announced in the Washington Post. We will have to wait and see what type of turnout we get.

The lock is back at Crockett. To open it you have to push in, before pulling out.

Pete suggested renaming the Telescope Meet to "Star Party" or something like that, because people are confused about what a telescope meet is.

The consensus was that it was a good idea.

Pedro said he was anticipating the club's personal property tax and insurance bills, and thought it may go to the Corporate Agent (Nicole), and advised that we keep an eye out for it.

For tax purposes, it was determined that the new club telescope was valued at \$450.00 for the telescope and \$1800.00 for the mount.

Elections – Pedro will be running for Treasurer and John Avellone has agreed to run for Secretary or Trustee. John does not have a computer, but Bob L'Hommedieu said he had one he would give him. Pete said he could give him a modem and printer if he needed them.

Tilly said that Al Boldt wants to do a program "Observing Tips or the Real Stuff". Tilly will look at scheduling the presentation at an upcoming meeting.

Pedro said that he was having problems with getting mailing labels out of his database by zip code. The database is Microsoft Access and he is looking for assistance.

Brenda said that Elliott was having problems getting people to submit articles for the newsletter. Brenda said she would ask for articles at the next membership meeting.

Pete suggested that NOVAC consider supporting Special Interest Groups (SIGS). Possible topics include amateur telescope making, novice observing, Deep Sky observing etc. It was agreed that Pete would open the issue at the next meeting, and compose an article for the newsletter.

Craig raised the issue of the club library borrowing policy. Members are not returning books on time. Brenda suggested a fine or a meteor through the window. Other suggestions included:

A deposit on books.

A deposit on expensive books.

A limit on the number of books.

Include a mailing label with the book for the return mail.

Bob Bunge said he would like to talk about the light pollution workshop at the next meeting.

The meeting adjourned at 8:58

Respectfully submitted

Pete Johnson

Secretary

## Minutes of the September 1997 General Meeting of the Northern Virginia Astronomy Club

The meeting was called to order at 7:40 p.m. by Club President Brenda Jones at the Arlington Planetarium. There were 39 members in attendance.

### Announcements:

The lock at Crockett has been replaced. It has the same combination as before. To unlock, push in, then pull out.

Brenda announced the candidates for the elections:

President - Tilly Smith

Vice President - Pete Johnson

Secretary - John Avellone

Treasurer - Pedro Martinez

Trustees - Craig Tupper and Jeff Stetekluh, leaving one opening.

We are looking for volunteers to help out at a star party for 6th graders at Camp Highroads on October 6. Please help if you can.

We are looking for a programmer to help out with the membership program written in Microsoft Access. This is a one-time task. Contact Pedro if you are interested.

Astronomical League - Lee Polikoff is looking for someone to fill in for him as the NOVAC's AL representative at the Mid-east Astronomy Conference, in Ashland Va., on September 27. Contact Lee if you are interested.

Lee also gave out two Messier certificates.

Brenda said the e-mail system has gone weird, and we are looking at how to prevent problems in the future. All the members have been getting errors about undeliverable mail.

Nicole announced that the next order period for book orders will start next month.

Brent announced the following events:

1. The VAAS conference September 27.

2. Salisbury MD Star Party October 4/5.

3. IDA (International Dark Skies) conference here at the Arlington Planetarium November 1.

The event hours are 9:30 to 5:00.

## Officers' Reports

Vice President - Tilly Smith

We are starting a new series tonight:

September - Jon Stewart-Taylor - "Getting started in Astronomy"

October - Bob L'Hommedieu and Brenda - "Choosing and using Binoculars"

November - Brent - "Deep Sky observing".

Treasurer Pedro Martinez circulated a membership list, and asked members to verify their information. If there is an error, let Pedro know.

Jeff Stetekluh presented the observing report.

Jon Stewart-Taylor did the sky tour.

The night's program, "How to Get Started in Astronomy", was presented by Jon Stewart-Taylor.

The meeting adjourned at 9:45 p.m.

Respectfully submitted,

Pete Johnson

Secretary

## Minutes of the October 8, 1997, Board meeting of the Northern Virginia Astronomy Club.

The meeting was called to order at 7:37 p.m. at the home of Club President Brenda Jones.

### Announcements:

Pedro (Treasurer) announced that the club subscription rate for *Astronomy* magazine was going up, from \$20 to \$24 per year. He will announce it at the next meeting.

Tilly requested a list of the new members from Pedro. Pedro agreed.

Brenda announced that we are set for the upcoming elections. The candidates are:

President - Tilly Smith

Vice President - Pete Johnson

Secretary - Ron Cook

Treasurer - Pedro Martinez

Trustee- Jeff Stetekluh

Craig Tupper

John Avellone

Bill Burton noted that there have been a lot of errors on the club's e-mail mailing list. Everybody got the errors and he asked what we could do about them. Craig said that Cheyning Toulmin maintains the list. Tilly said he would call him to discuss the options.

Pete reported that he had several inquiries about starting a telescope-making SIG (Special Interest Group). We will meet to try to define how we want the SIG to function.

(Continued on page 9)

## Minutes of the September and October Meetings, continued

(Continued from page 8)

Pete announced that the new *Starry-Messenger Calendar* was available at a club discount. A sample calendar was circulated. It will be presented at the next meeting. Tilly suggested announcing it via e-mail and do a pay-before-we-order policy with orders.

Science Fair - Bill Burton said that there was nothing new, but we would be doing something. He is looking at the Fairfax Regional Science & Engineering Fair.

Tilly said that NOVAC is out-growing the Arlington Planetarium, noting that we frequently had more attendees than we had seats. He said that we should seek a new facility rather than stop advertising the meetings. Brenda argued that the planetarium offers facilities and resources that we need, such as slide projectors, overhead projectors, the dome, and noted that it was free.

Pete said that Dr. Wallins at George Mason University will not need the club's assistance with student observing this year because the university has obtained a telescope of their own. He thanks us for our past assistance and will still suggest that students attend NOVAC events.

Nicole said there was concern with using bulk mail for the newsletters because of possible delivery delays. The post office said that it takes three days on the average. A long discussion took place. Tilly suggested that we were not ready to do bulk mail yet. Those attending agreed.

Brenda said that we need someone to set up an observing schedule for next year, and suggested we ask John Stewart-Taylor to do it.

Craig said he had gotten a laptop for his CCD equipment, but was having trouble with the color options. Craig said that we had an offer of a Byer 612 mount as a club gift. Craig suggested we stick with the mount we have for now, because we are unsure about the Crockett facilities.

Tilly and Craig will go to Crockett and check out the power options for the telescope mount.

The meeting adjourned at 9:35 p.m.

Respectfully submitted

Pete Johnson

Secretary

### Minutes of the October 1997 General Meeting of the Northern Virginia Astronomy Club

The meeting was called to order at 7:35 p.m. by Club President Brenda Jones at the Arlington Planetarium. There were 45 members in attendance.

#### Announcements:

Brenda said that the last newsletter published the membership list and that there were a lot of errors. Check your entries and send corrections to Pedro.

Brenda wanted the membership to understand that when you submit your application, it does not mean that you are automatically placed on the NOVAC e-mail list. To get on the mailing list, you must e-mail majordomo@his.com and in the body of the message include "subscribe NOVAC". You will receive a message back saying you have been added to the mailing list.

Pete announced that *Starry-Messenger Press* has 1998 calendars for sale through the club. The price is \$8.95 if we get more than 10 orders. Checks should be mailed to Pete Johnson using the envelopes provided at the meeting or contact Pete for details. Orders will be sent in on October 25. Contact Pete if you want to place an order.

Lee Polikoff is leaving the area in January. We need a new AL representative. Let Brenda know if you are interested.

Brenda said that we need articles for the newsletter. Please send your entries in.

We need a Microsoft Access programmer to help with the club database and mailing list. It is a one-time fix. Anybody interested should see Brenda.

Craig announced that we need an electrician to help wire power at Crockett Park for the club telescope mount. See Craig if you can help.

Nicole announced that we are beginning a new order period for books. There is a 25% discount and shipping is free. Book lists were distributed. Contact Nicole about orders.

Elections - We do not have people for all available positions. If you are interested in running for a position contact a trustee. The current candidates are:

President - Tilly Smith

Vice President - Pete Johnson

Secretary - Ron Cook

Treasurer - Pedro Martinez

Three trustee positions are open - Jeff Stetekluh, Craig Tupper, Jon Avellone.

Nominations will remain open until the elections. If you are interested, let a trustee know.

#### Officers' Reports:

Vice President - Tilly Smith

The upcoming programs are:

Tonight — Binoculars, Choosing and Using

November — Telescopes and Eyepieces

December — Deep Sky Observing

Secretary — Pete Johnson

We have had a number of people who are interested in starting an amateur telescope-making special interest group (SIG). If you are interested in joining, contact Pete Johnson or Nicole Mastej.

Treasurer - Pedro Martinez

The club subscription rate for *Astronomy* has gone up, from \$20.00 per year to \$24.00.

Pedro also said that a financial statement will be published in the next newsletter.

#### Other Business

Brent spoke about the IDA (International Dark Sky Association) Conference at the Arlington Planetarium on November 1. Brent said there would be numerous interesting speakers. Please plan to attend.

Tilly announced that Crockett Park has 80 to 100 kids coming out on October 21 and requested members to come out with their telescopes and show the sky to the kids.

The Air and Space museum would like members to come out and display their telescopes to the public on November 8. Contact Don Costanza (703) 841-4765 for details.

Jeff Stetekluh presented the observing report.

Craig Tupper gave the sky tour.

The night's program, "Choosing and Using Binoculars" was presented.

The meeting adjourned at 9:45 p.m.

Respectfully submitted,

Pete Johnson

Secretary

**NOVAC Notices and Benefits****Discounts on *Sky & Telescope* and *Astronomy*.**

As a member of NOVAC, you can get astronomy magazine subscriptions at a discount. To obtain *Sky & Telescope* for \$27.00 (instead of the standard \$36.00), make your check out to "Sky Publishing Co." You can subscribe to *Astronomy Magazine* for \$24.00 (one year). Make your check payable to "Kalmbach Publishing Company". In each case, note on the check: "new subscription" or "renewal." If a renewal, include your customer number. Send your check to Treasurer Pedro Martinez, Jr., 6319 Anneliese Dr., Falls Church VA 22044.

The treasurer will send the checks in to Sky Publishing and Kalmbach once a month, on the first of each month. To have your renewal included, be sure to have it in his hands by the last day of the preceding month.

You can also order any publication directly from Sky Publishing at a 10% discount. Just mention the Club Discount Plan and that you are a member of NOVAC.

There are no special 10% discounts offered on publications from Kalmbach Publishing, but read what follows.

**Discount on Books**

NOVAC is participating in the discount book sales program offered by Kalmbach Publishing. They will sell our members any astronomy-related book in their catalog for 25% off the list price when we send in a group order. Nicole Mastej is coordinating the sales. If you are interested, please see her at a meeting, or call her at home (703) 435-8724 to place an order. Make your check payable to "NOVAC" for the price of the book minus the discount, when you place the order. We anticipate doing this 3 - 4 times a year if demand warrants.

**Club Telescopes Available for Use**

NOVAC makes available two six-inch (f75) Newtonian reflectors for club members to check out, free of charge, and use for a limited time.

One telescope is a Celestron model SP-C6 on a Super Polaris German equatorial mount and wood tripod. It will readily fit disassembled in any car, is easily transported, and can be set up quickly at remote observing sites. The telescope comes with Orion Ultrascope 10mm and Meade MA 25mm eyepieces with 1.25-inch barrel sizes.

The other telescope is a home-made six-inch reflector on a Dobsonian mount, and comes with a 25mm Kellner eyepiece. It is easy to transport to dark sky sites, and easy to use.

To borrow a telescope you will need to show your NOVAC observing pass and leave a \$500 (for the Celestron) or \$250.00 (for the Dobson) security deposit. To borrow the Celestron, contact Doug Mistler at (703) 437-0513; for the Dobson, contact Bob L'Hommedieu at (703) 978-0946. Note: Checks must be made payable to "NOVAC". Checks used as security deposits on telescopes are not deposited, and will be returned to the originator when the telescope is returned in the same condition it was checked out. The scopes may be checked out for two to four weeks at a time, depending on demand.

**NOVAC Library**

NOVAC has established a library at the Arlington Planetarium for use by NOVAC members. Books may be checked out and returned only at the monthly meetings. Members may check out books for one month at a time. To borrow books, see NOVAC Librarians Pedro Martinez or Craig Tupper at the monthly meeting.

The NOVAC library seeks book donations to the library. If you have any astronomy books or materials you are thinking of discarding, please consider a donation to the NOVAC library.

A complete list of all library holdings is available upon request.

**NOVAC Observing Schedule for 1997**

Observing at Savage Farm, C.M. Crockett Park and Nichlason site: see the back cover of this newsletter.

Observing at Parsells Field: any evening.

**General Membership Meetings**

General Membership Meetings are held at the Arlington Planetarium, 1426 N. Quincy Street, Arlington, VA, on the third Wednesday of every month. To reach the Planetarium, take Interstate 66 to exit 71 West, North Fairfax Dr. (Rt. 237). Go east on Rt. 237 to the 5th stoplight, N. Quincy Street (about 0.8 miles). Turn left onto N. Quincy Street (at the funeral home). Go 6 blocks (about 0.5 miles). The planetarium is the low white domed building on the left.

Trustee Meetings are held the Wednesday before the week of the General Membership Meeting. Non-trustees interested in attending

should contact a club officer or board member for further information.

**NOVAC On-line**

NOVAC maintains an e-mail mailing list. Messages sent to the list include reminders about scheduled observing sessions, announcements for unscheduled sessions, requests for quick observing session summaries, MIR observability predictions, etc. For more information, send a message to Chewning Toulmin, pct@his.com.

**NOVAC Observing Site Rules**

**C. M. Crockett Park:** Any night that NOVAC observes at Crockett Park, the observing session will be open to the public. The gate will be locked and will not be unlocked unless a NOVAC member enters the park, at which time the gate should remain unlocked until 10 o'clock (or some other prearranged time), when the Assistant Park Manager will come out and ask members of the public to leave. The gate will then be locked, and should remain locked through the rest of the evening. NOVAC members may remain until they are finished with their observing session. There is now a 2-week lead time requirement for permission to observe at Crockett Park on nights other than those listed on our schedule at the back of this newsletter. Gary Kwolek recommends that anyone interested in observing in that area on unscheduled nights drive out to the Crockett Park gatehouse, turn left and drive down to the cul-de-sac, where you can set up your telescope on the public road.

If any NOVAC member out observing at Crockett Park notices any member of the public violating park policy, he or she is requested to notify the Assistant Park Manager, who lives in the house adjacent to the end of the parking lot.

During EDT, set up on the large field to the left. During EST, set up on the paved cul-de-sac 200 yds. past the gate. No loud radios, alcoholic beverages, or loose pets. Do not leave trash or debris behind. We are guests of the park; park management may revoke our observing privileges at any time due to the carelessness of one person.

**Parsells Field:** In addition to scheduled nights, NOVAC members may observe at Parsells field ANY evening, with no prior notice. See directions to Parsells Field, next page, for parking instructions. The usual NOVAC observing site rules apply: no loud noise,

(Continued on page 11)

(Continued from page 10)

alcohol, or loose dogs, and pick up after yourself. We are guests of the Dulles Little League, and could have our access to this site revoked at any time if it is abused.

**Savage Farm Site:** The Savage Farm site is reserved for NOVAC use on the same nights as Crockett Park, plus all the major meteor showers. For non-scheduled observing sessions, call the park manager, Paul McCray, at (703) 729-0596 at least 24 hours in advance, and leave a message with your phone number. You may use the site for that session unless you receive a call from Mr. McCray stating otherwise. No loud radios, alcoholic beverages, or loose pets. Pick up after yourself, and do not leave any trash behind. Make sure the gate is locked whenever you are in the park, and when you leave. We are guests of the NVRP and could have our access to this site revoked at any time if it is abused.

**Nichlason Site:** The same rules apply as for the Savage Farm Site except that in seeking permission to use the site for non-scheduled observing, call Smokey Jacobs (Northern Virginia Regional Park Authority) at 703-250-9124 and follow the same procedure as with the Savage Farm Site.

#### Directions to NOVAC Observing Sites

**C. M. Crockett Park:** From the Washington DC/Northern Virginia area, go west on I-66 21.7 miles from I-495 to Exit 43A in Gainesville onto Rt. 29 South toward Warrenton. After 11.8 miles on Rt. 29, stay left (towards Culpeper), to bypass Warrenton (but still on Rt. 29 S.) Go about 1 mile to Rt. 643 exit, Meetze Road. At top of ramp, turn left to go East on Rt. 643. Go 7.5 miles on Rt. 643. Watch for the C.M.Crockett Park sign on your right, and turn right into the Park Entrance Road. Once on the park entrance road, go one-half mile to the park gate.

**Parsells Field:** (Steve Blake/Ron Cook) From the Northern Virginia area go West on the Dulles Toll Road until you reach Route 28. Go North on Rt. 28 for 2.8 miles to Route 625, Waxpool Road. (You may also take Route 7 West to 28, then go South to Waxpool.) Turn left (West) on to Waxpool Road (Route 28), and go 1.8 miles to the Waxpool/Farmwell intersection. (The intersection has a small sign on the right pointing the way to the Broadlands development on the left.) Turn left on to Route 625, Waxpool Road (!), heading towards the Broadlands and go 1.6 miles to the Waxpool/Ryan/Shelhome intersection. Continue straight on Waxpool, through the more developed part of the Broadlands on the right, for about 1.4 miles watching for a left turn on to Waxpool Road (!) which is a gravel road. Once on gravel go only about 200 yards straight ahead. You will pass a sign showing kids on a seesaw. Parsells field is right where

the road turns right. As you round the turn, go into the gravel parking area instead of completing the turn. Note: there are no signs marking the field at this time.

**Savage Site:** Use some combination of Routes 7, 267 (Dulles toll road), and 28 to get to the Route 7 Leesburg bypass. Go around Leesburg on the bypass until you reach "regular" Route 7 again. From the intersection of the bypass and "regular" Route 7, continue on Route 7 west 18.5 miles to Route 601, at the top of Snicker's Gap.

Turn left onto Route 601 south and go 2.4 miles to the park entrance. The park entrance is past the driveway on the left whose gatepost reads *Ben Lomand*. The park entrance is the next driveway on your left. There will be a sign on a tree saying *Wildlife Sanctuary*. If you come to gateposts on the left that say *Belle Allee* and *Ball Alley 1875*, you have gone too far.

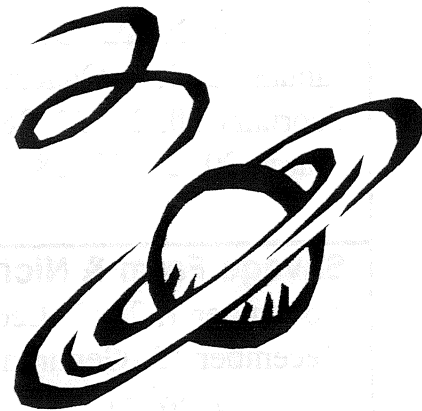
You may also take I-66 west to Route 17 North. Stay on Route 17 North until it intersects with Route 50 at Ashby Gap. Turn left onto Route 50 and go 1.0 mile and turn right on Route 601. Continue on Route 601 (Blue Ridge Mountain Road) and go two miles past the main gate of the FEMA installation. Turn right at the park entrance after passing the gateposts with *Belle Allee* and *Ball Alley 1875* on your right.

The park entrance on Route 601 is marked by a small brown and white NOVAC sign. The neighbors periodically pull up the sign, so it may not be there. As you turn into the park, go straight ahead until you reach the gate, which is secured by both a keyed padlock and a combination lock. These locks are located to your left behind the gate as you face it from the outside. The combination is on your NOVAC observing pass. **Always** lock the gate behind you. The NOVAC lock **must be locked to the keyed lock, not to the chain**, to allow emergency access by the fire department. Drive to the observing area (the stone patio next to the house). There is very limited parking at the observing area itself, so please park in the parking area on the right as you face the patio.

**Nichlason Site:** I-66 to Rt. 7100 (Fairfax County Parkway) south to Ox Road (Rt. 123) south to second right on Chapel Road to immediate left onto Wolf Run Shoals Road (Rt. 610). Continue on Wolf Run Shoals Road (watch signs carefully at twists and turns in the road) for 3.9 miles to the site. It is immediately after a yellow house with white picket fence on the right. Nichlason Site is on the left marked by "Wildlife Sanctuary" signs on utility poles. After third "Wildlife" sign there is a dirt/gravel lane into the site.

From Springfield/Burke area: go north on the Fairfax County Parkway (Rt. 7100) to left onto

Burke Lake Road. Burke Lake Road becomes Clifton Road just after the intersection with Rt. 123. Continuing on Clifton Road, turn left at the Citgo station onto Wolf Run Shoals Road. Follow Wolf Run Shoals Road as above to site.



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Membership in the Northern Virginia Astronomy Club is \$18.00 per year and is open to anyone interested in astronomy or the sciences. Additional memberships at the same address without additional copies of the newsletter are \$6.00 per person. Contact Treasurer Pedro Martinez, Jr., 6319 Anneliese Dr., Falls Church VA 22044. All notices of change of address should be sent to Pedro Martinez, Jr. Please include both old and new addresses.

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NOVAC members are invited to submit articles for publication in the *NOVAC Newsletter*. The editor reserves the right to edit all materials submitted.

Article submissions, in ASCII please, may be sent to Elliott Fein at [edfein@cpcug.org](mailto:edfein@cpcug.org), or to Elliott's address in Rockville, given above. Questions? Call (301) 762-6261, or send e-mail.

Deadline for submissions is three weeks in advance of publication, e.g., October 10 for the November/December Newsletter

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## 1997-1998 NOVAC Observing Schedule (Subject to change)

### C. M. Crockett Park

November 1, 17 (Leonid meteor shower), 21, 22, 29

December 13 (Geminid meteor shower),

19, 20, 22 (Ursid meteor shower)

January 2, 3, 4 (Quadrantid meteor shower), 23, 24, 30, 31

February 20, 21, 27, 28

March 20, 21, 27, 28

### Savage Farm & Nichlason Site

November 1, 2, 17 (Leonid meteor shower), 21, 22, 23, 28, 29, 30

December 13 (Geminid meteor shower),

19, 20, 21, 22 (Ursid meteor shower), 26, 27, 28

January 2, 3, 4 (Quadrantid meteor shower), 23, 24, 25, 30, 31

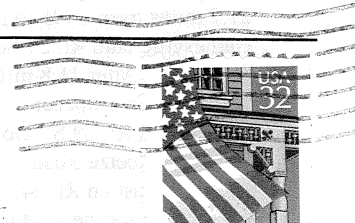
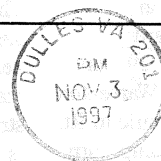
February 1, 20, 21, 22, 27, 28

March 1, 20, 21, 22, 27, 28, 29

# NOVAC

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### Inside:

- What's Up?
- Fan Mountain Report,
- Observing Reports,
- and much, much more!