

NOVAC

THE NEWSLETTER OF THE NORTHERN VIRGINIA ASTRONOMY CLUB • NO. 97 • VOL. 21 • SEPTEMBER/OCTOBER 2001

Eclipse Trip Report: June 14 - July 4, 2001

By Jack Rankin

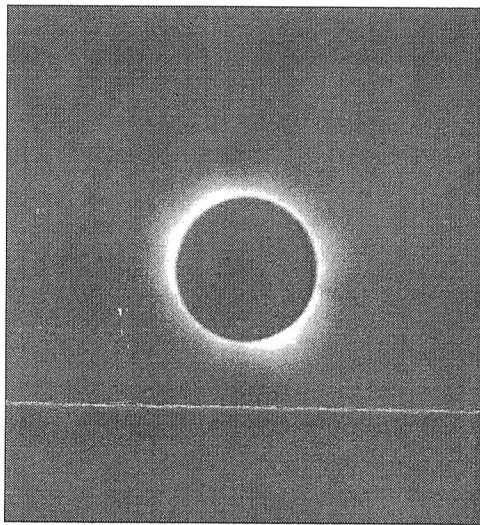
After a few eclipses (this is our fifth), one might think that the anticipation and thrill may fade somewhat - But it doesn't!

We were with the Sky & Telescope/Scientific Expedition group for all of three weeks. It was a large group of 269 people, but seldom together at any one time. Mostly, we went on separate sub-excursions or stayed at different hotels. It was an opportunity to

renew old friendships from previous eclipses and review intervening events in each others lives and careers since last we met. There were also several first timers to meet and introduce to eclipse chasing.

Our first get together was in Johannesburg, South Africa for an introductory meeting with the attending editorial staff of Sky & Telescope. The following morning we split up and flew to Skukuza to visit one of the numerous South African wild game lodges reserved for our use. My wife and I spent two days at the Main camp of the MalaMala private game preserve bordering on the Kruger National Park.

There was much to see. A most memorable aspect of the whole affair was in just how close we came to the Lions, Leopards, Elephants, Rhinos, Cape Buffaloes, and more while seeming to be absolute transparent to the animals. We were constantly reminded to stay inside the Land Rovers and not even to stand up (there was no need) so that the "profile" of the vehicles would not change. We literally drove in the midst of a buffalo herd of about 250 head, at night, while they were being stalked by a pride of about 6 to 8 Lions. We were completely ignored! Can you imagine a female Leopard strolling down the dirt road (animals seem to prefer the easy going road, leaving much of the brush



MESSAGE FROM THE PRESIDENT

Get Ready For Winter!

By Ed Karch

Here it is: three Code Red days in a row: seeing steady as a rock, transparency like



President Karch

trying to see through a rock, air you can wear but don't try breathing it. Now is the time to start getting your winter observing wardrobe together. The stores are shifting to fleece and down. Autumn is but a month or two away when we start getting our best viewing of the year. Spring is often wet but autumn is usually the best it gets here. I got a catalogue today with boots rated down to -40 degrees. I for one am planning on making observing a year around hobby. In the words of Iron Man Dietz: "Observing ain't nice till you are covered in ice". *

NOVAC
Star Gaze

September 22, 2001
At Franklin Park
See page 8

(Continued on page 4)

So You Want To Buy A Telescope?

By Alan Figgatt

Q : I want to buy a telescope. What telescope should I get?

This is a commonly asked question, but not one that is easily answered. I am not going to attempt to provide a comprehensive answer here, but will make a few points and steer you to a few books and web sites that you may find helpful.

The right way to start is to read up on amateur astronomy and telescopes, and ask for advice before buying from other amateurs. You will find a diversity of opinions on what the right scope to get is. That is because there is no single perfect telescope, all scopes are compromises between light gathering capacity, optical design tradeoffs, budget limits, and portability. Many amateurs have several telescopes: a main scope with larger aperture which takes a while to set up and a smaller quick setup scope for short observing sessions.

What we do recommend against is going to a department store and plunking down \$100 to \$200 on a 60 mm refractor that states a power of 625x on the box. First, true telescopes are never advertised by power, but by their aperture. The cheap department store scopes also come on flimsy mounts which will never provide a steady view through the eyepiece. These scopes are sold for the Christmas buying season as well as the impulse buyer who thinks it would make a good present for their child. The vast majority of such telescopes are destined to gather dust in the closet, after one failed and frustrating attempt to see anything with it. There are good beginner scopes on the market, but you need to understand the limitations and tradeoffs of the particular scope before deciding what to buy.

In recent years, the major manufacturers have introduced a large selection of computer controlled scopes, called goto scopes. Some of the low cost goto scopes suffer from the same drawbacks as the omnipresent department store 60mm refractors by having flimsy mounts. The better models of these scopes will provide for a more positive experience, but you may find you prefer a simple scope such as a 6" Dobsonian over a scope with a lot of electronics which requires fresh batteries and time spent reading the instruction manual (usually in the dark).

Before buying your first telescopes, you need to consider the following issues:

- What is your budget?
- Any area of observing you are particularly interested in - planets, double stars, general deep sky, the faintest of fuzzies?

- Ease of use?
- Goto or not goto?
- Portability?
- Setup time?
- Are you interested in building your own scope?

Portability and setup time, especially for a beginner, can be very important. A scope that is a hassle to carry outside to the backyard, takes 20 minutes to set up and an hour to properly cool down may not get used very often. A widely stated truism goes "The best scope is the one you use the most".

One point that is often overlooked by beginners is that you don't need a telescope to start observing. A simple pair of binoculars is an excellent way to start learning the nighttime sky. Many of the Messier objects can be observed in 35 to 50 mm binoculars.

The best single thing you can do is to come out to NOVAC's observing sites, check out member's scopes, and ask questions. You will find club members out at Mickie Gordon Park, Savage Farm, and Mason Neck Park observing sites on clear nights around the new moon. Don't be afraid to ask questions; you will find NOVAC members are always willing to help somebody else get started.

It can not be overstated just how useful it is to look at and through all types of scopes, eyepieces, and filters at many different celestial objects. One of the most frequent comments one will hear from a new member upon actually seeing the telescopes and mounts is how much bigger they are than they looked in the glossy ads in the magazines. New members are also often surprised at the variety of telescopes they find, many of which are not to be found in those same full-page glossy ads.

Rather than get into an extended discussion of the different types of telescopes, I will simply point you in the direction of some useful web sites on the net and starter books.

A few web sites to check out:

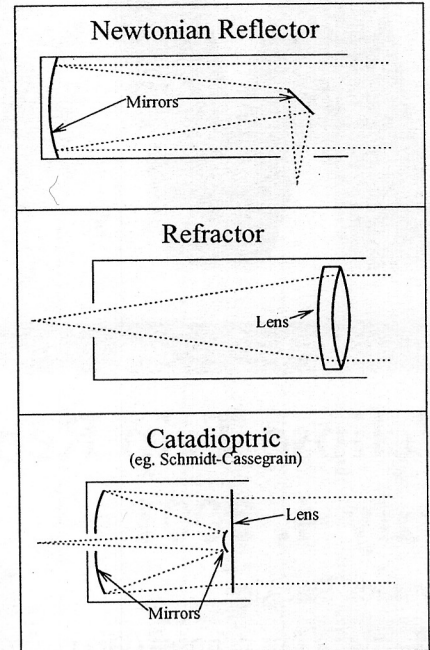
<http://www.scopereviews.com> - Ed Ting's fine review web site. Check out his Beginner's Advice page. This is one of the best sites on the net to go to just to get an idea of the variety of gear you can get.

<http://www.cloudynights.com> - This site has reviews from many people, so it varies considerably in terms of quality and accuracy of the reviews, but has a number of useful reviews and articles.

<http://www.weatherman.com> - Todd Gross's review site.

<http://www.skypub.com/tips/tips.shtml> - Sky and Telescope site with Tips for Beginners.

<http://www.astromart.com> - widely read



Three common optical designs: a Newtonian reflector uses only mirrors to bring light to focus; a refractor uses only lenses; a catadioptric uses a combination of mirrors and lenses.

online classified ads for used telescopes and equipment.

Recommended Starter and Equipment Books:

Nightwatch: A Practical Guide to Viewing the Universe by Terence Dickinson; Firefly Books, ISBN: 1552093026. One of the best beginners books available.

Turn Left At Orion by Guy Consolmagno, Dan M. Davis; Cambridge Univ Pr (Trd), ISBN: 0521781906.

Star Ware: The Amateur Astronomer's Ultimate Guide to Choosing, Buying, and Using Telescopes, 2nd Edition, by Philip S Harrington; John Wiley & Sons, ISBN: 0471183113. Getting a bit dated, but this is the book for equipment discussions. *

How I Got Into Astronomy

By John Nusbaum

My interest in amateur astronomy began with a philosophical interest in cosmology about a decade ago. I studied theology in college and have always been interested in the "big questions". As a result, I found myself naturally attracted to astronomy and cosmology.

While you don't have to get out under the stars to think about cosmological issues, I became intrigued with the idea of actually observing very distant and very old objects.

My very first telescope was a Tasco (yes, a Tasco!) 4.5" reflector that I purchased at a pawnshop in early summer of 1995. The scope was pretty beat up, but I managed to get it working. The views through it were not too bad once I bought a couple of decent eyepieces.

That first year I learned to find my way around the sky. I was able to find many of the brighter Messier objects and also enjoyed reasonably good views of Jupiter and Saturn. Each new moon weekend, I would look forward to heading out to Savage and learning more and more about the night sky and the treasures it held.

I was fortunate to observe with Bill Bryson on many of those weekends. Everyone should be so fortunate to have a person like Bill as an observing buddy! I watched what he did and did the same thing!

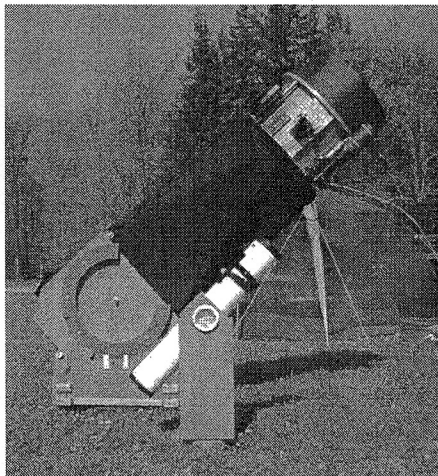
After a year or so of observing with my pawnshop telescope, I was ready for a larger scope. I had decided that a 14.5" Starsplitter or 15" Obsession was just about the perfect telescope for a guy like me ... but then I saw an ad in the old Starry Messenger for a used 20" F4 dob with Galaxy Optics for about the same price. A couple of days later I was on my way to Birmingham, Alabama to pick up the scope!

I have to confess, I was pretty embarrassed to go from a Tasco to having one of the largest scopes in the club! I sure didn't know what I was doing at first! A couple of you out there witnessed the struggles.

But with persistence and a little help from my friends, I managed to go where only a few others have gone before ... Hickson Compact Galaxy Clusters, Palomar Globular Clusters, Abell Galaxy Groups, faint and obscure Planetary

Nebulae, Supernovae, and even globular clusters in the Andromeda Galaxy!

The biggest change that has taken place in my observing in the last 2 or 3 years has been the transition from astronomy as a hobby to astronomy as a lifestyle.



The author's first two telescopes. The big one has about 20 times the light grasp of the small one!

My buddy Tom Deitz and I have become astronomical gypsies in search of clear dark skies. These days we are much more likely to be observing from Spruce Knob (WV) or Cherry Springs (PA) than Mickie Gordon or Savage.

The reason we call it a lifestyle is because it takes a good deal of planning to make the trips to dark skies and it requires special arrangements with work and family. Planning your schedule around the phase of the moon can be done, but not everyone is able to do it.

It is hard to say where this hobby will ultimately take me. For now, I find observing to be a very practical way to stay engaged in thinking about the big issues.

I continue to be very interested in stellar evolution (planetary nebula and supernovae) and the large-scale structure of the universe (galaxy clusters and superclusters).

I find that the reality behind what I see in the eyepiece informs the way I think about life: The elements from which we are made were forged inside of stars and the universe is unimaginably vast.

That certainly is a lot to think about. ✨

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to us) with her two cubs while two noisy diesel powered Land Rovers with 15 to 18 people were crashing through the brush on either side no more than about fifteen feet from them? She was leading her cubs to a fresh Impala kill she had hidden and was, all the while, being followed by a hungry Hyena longing to steal her cache. The Hyena got it after all but that's another story. An amazing, exciting two days.

The group then flew to Lusaka, Zambia to prepare for the eclipse show on June 21st. On the night of the 20th we visited the site for a look-see and a stargaze. Beautiful black skies, bright Milky Way and no moon, naturally. The Southern Cross was nearly halfway up from the horizon showing off the Coalsack. Musca (the fly) was tucked neatly beneath the Southern Cross while Alpha and Beta Centauri blazed away. Had a great time with Mr. Leif Robinson the retiring editor-in-chief of Sky & Telescope magazine who stayed with our subgroup for the entire trip. Leif had his ETX along and brought up Omega Centauri, the Carina nebula and other Southern sky sights that most of us had never seen before.

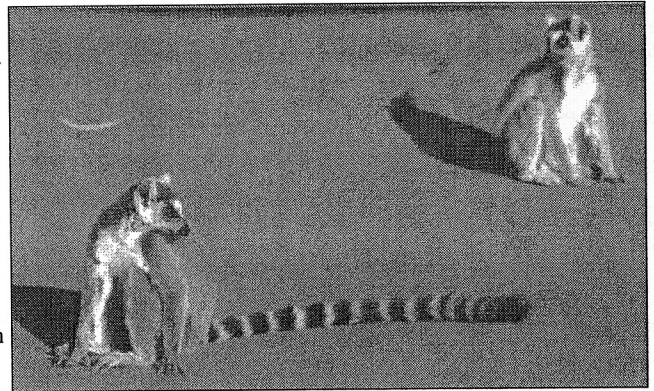
Eclipse day dawned absolutely clear and bright (weather for entire tour was outstanding); Southern Africa is at the beginning of Winter and the dry season. We arrived at the site about an hour prior to 1st contact (when the moon begins covering the sun) to set up our equipment and establish small observing groups. We had plenty of space, delightfully unlike the crowded deck of a cruise ship. It didn't take long to set up, then the circulating visits began. Can you spare a little Duct tape? Anybody need rubber bands? People were pouring over written eclipse scenarios, most of which will be forgotten when totality begins and wondering "what did I forget?" The anticipation and tension mounted when first contact was announced and now we realized for the first time that the eclipse is really happening, and soon. It can take ninety minutes or so for the moon to reach 2nd contact indicating the beginning of the total solar eclipse. All the while observers are looking for a breeze increase and dimming of day-

light. Finally, the light begins to rapidly fade and the excitement mounts as totality rushes towards us. Different people watch for different events immediately prior to or at full eclipse: Baileys Beads, the approaching moon shadow, the diamond ring and of course shadow bands. Nobody sees it all! I like to photograph diamond rings and watch for the moon shadow (missed it, again).

During totality, some observers with binoculars or telescopes were watching for prominences (several were seen) which should be abundant due to the high solar activity this year. Some took pictures with disposable cameras, choosing to just gawk at the sight. I had two tripods; one with my trusty old Pentax and the other with a Panasonic camcorder.

Totality lasted about three and a half minutes by the clock, we were all surprised when it ended so quickly and would swear that the whole thing couldn't have endured more than 27 seconds! I didn't complete half the bracketing exposures I had planned and the camcorder drifted off center. I simply stared and marveled at the most fantastic sight that nature has to offer. Planets and stars appeared that are not visible in daylight. I saw coronal activity extending out about one solar diameter, jagged but rather uniform all the way around the sun. Hugh coronal plumes extending out several solar diameters and seen in earlier eclipses were not seen, at least by me, and may have been weakened or suppressed by the high solar activity this year.

The terminating diamond ring, ushering 3rd contact and the end of totality reminds everyone to stop looking directly at the sun - it's over. There is a 4th contact, taking another ninety minutes or so as the moon completely uncovers the sun, but few if any pay much attention to it. This is the time to celebrate, share observing experiences, pack up and promise to meet again at the next "Total Solar". The bus ride back to



roughly enjoyed it and bought a lot of African craft "stuff" at the native market down the street.

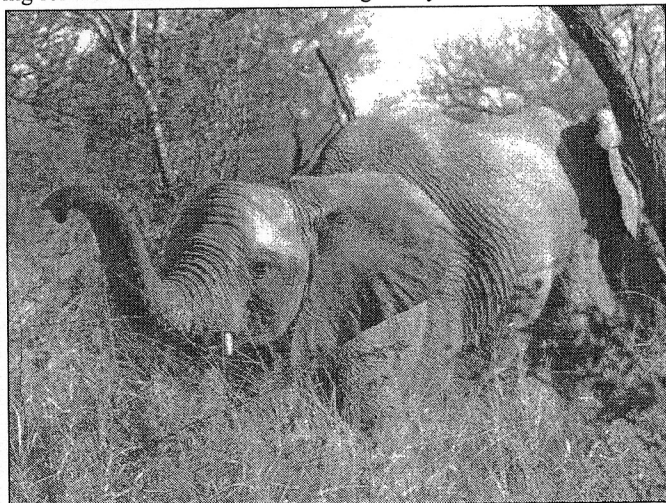
Our next stop was Madagascar. A two day visit to the Perinet Rain Forest Reserve on the East coast was quite unique. Naturally enough, we experienced some (our only) rain but saw all kinds of interesting plants and animals. Chameleons 12 to 15 inches long were abundant and were handled. The Indri Lemurs were watched playing and feeding in the treetops. The Indris are the largest Lemurs, black and white and can weigh up to about forty pounds. Apparently they cannot be kept in captivity because their diet requires the vegetation from thirty different plants.

The next and final stop was the Berenty Reserve in the "spiny desert" region at the Southern tip of Madagascar near Fort Dauphin. A larger variety of Lemurs wandered through these forests with better pathways to follow and see. The hit of the show was the Ring Tailed Lemurs that apparently own the lodge, they were everywhere, could almost be petted and seemed to gather for posing as cameras were displayed. Signs not to feed the Lemurs and admonishments when many did, prevailed. A rather humorous aside at The Berenty Reserve was the seeming army of Japanese student researchers following the ring tails around noting everything they did - as if they were observing the Lemurs in the wild. Right! Practicing research and data recording techniques I imagine.

The African/Madagascar eclipse trip of July, 2001 stands out as one of the best eclipse trips we have experienced. All of them have been great, but this trip definitely lists up with the '99 trip to Greece and Turkey and the '95 China Sea excursion.

There is another eclipse next year through the same region albeit further South and a bit shorter. We decided to definitely skip that one following our 36 hour return trip!

How about joining us sometime? *



the hotel was indeed a happy and satisfying one. Following the big event we flew to Victoria Falls for two days. Quite a sight. The falls are currently running at about 95% capacity. The walk along the Zimbabwe side is about 2km, we had umbrellas and were issued ponchos but it was a chore to protect cameras and still get interesting photos. Mist, haze and rain coming straight up from the 300 foot deep gorge made the path wet and somewhat slippery. We stayed at the Victoria Falls Hotel, thor-

Northern Virginia Astronomy Club
 Statement of Cash Received and Disbursed
 For the period January 1, 2001 through July 31, 2001

CASH RECEIVED:

Membership Dues:

Regular and Additional:

Renewals	\$3,264.00	
New Members	2,043.00	
Patron-New Member	100.00	\$5,407.00

Interest Income		231.11
Dept. Store Telescope Making Kits		165.00
Donation by Smithsonian for NOVAC Picnic		250.00
Swap Meet Sales		46.00
Donation		6.05
Kalmbach Book Discount		0.00
Total Cash Received		<u>6,105.16</u>

CASH DISBURSED:

Newsletter:

Printing & Assembly	1,994.86	
Postage	265.14	
Postage	35.52	2,295.52

Astronomical League

Astronomical League Dues		1,686.50
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Astronomy Day

Publicity		15.68
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Observing Site Expenses:

NOVAC Picnic:

Baroque Food & Supplies		190.77
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Observing Site Improvements:

Mason Neck Park

Lock for Gate	18.02	
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Savage Farm

Porta-Jon Rental	512.05	530.07
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10" Dept Store Telescope Project-Shipping		102.81
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Telescope Storage Locker for Loaner Scope		41.77
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Webpage Expenses		316.84
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NOVAC's ATM Group:

Dept. Store Telescope Making Kits-Resale		453.60
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Mirror Kit Donated for Classroom Use		50.40
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International Dark-Sky Association (IDA)		100.00
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Hotline Expense		90.00
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Administrative:

Printing -Membership Applications	0.00	
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Printing - Administrative	109.73	
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Postage	227.30	
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Supplies	76.54	
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Bank Service Charges	0.00	413.57
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Total Cash Disbursed

6,287.53

DEFICIT OF CASH RECEIVED OVER CASH DISBURSED

(182.37)

Cash at beginning of period:

11,334.48

CASH AT END OF PERIOD

11,152.11

Cash At End Of Period

Checks Received, Undeposited		0.00
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Checking Account		1,188.39
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Certificate of Deposit Due 1/4/2002		2,771.75
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Certificate of Deposit Due 11/2/2001		2,954.51
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Certificate of Deposit Due 5/2/2002	1,972.50	<u>11,152.11</u>
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Respectfully Submitted,

/s/

Pedro Martinez

Treasurer

ANNOUNCEMENTS

19th Annual NOVAC Star Gaze September 22, 2001

Franklin Park, Virginia again welcomes NOVAC members, their guests, and especially the general public for an afternoon and evening of celestial exploration. Events begin 4 pm with a series of quick talks on a huge variety of amateur astronomy topics. Then stay for an evening of every kind of observing under the stars!

JOIN US AT 4:00 PM IN THE AFTERNOON (bring a blanket to sit on) TO LEARN ABOUT:

- Recognizing the Constellations
- Buying, making & using telescopes
- Light Pollution (with slide show)
- Observing the sun & moon!
- Review of telescopes accessories
- Photo, video, CCD & radio astronomy

THEN STAY FOR EVENING OBSERVING WHICH INCLUDES:

- 200 TELESCOPES & BINOCULARS...bring your own or use ours!
- Sky Tours every hour...See what's up & learn to starhop through the heavens
- Live Sightings of Satellites and other objects orbiting the Earth
- Drive the Solar System on the scale-model of our local solar neighborhood
- Personal help with your own equipment (yes, bring it!)
- Live TV views through the telescope of Jupiter, Saturn, Mars & the Moon
- Observing Stations where you learn to quickly identify & compare celestial objects, including the MOON, SUN, PLANETS, GALAXIES, NEBULAE, STAR CLUSTERS, ASTEROIDS, METEORS...all using TELESCOPES, BINOCULARS, CCD IMAGING COMPUTERS, CAMERAS, CAMCORDERS, AND EVEN JUST YOUR VERY OWN NAKED EYES!

Franklin Park is located on Business Route 7 in Purcellville, VA.

See <http://www.novac.com> for full details.

NOVAC's Access to Crockett Park Ending October 31

As of November 1, Crockett Park will no longer be one of NOVAC's regular observing sites. Several factors influenced the board to end our access agreement with Fauquier County. These factors include:

1. Encroaching development and light pollution has diminished Crockett's usefulness as a dark sky site.
2. The county requires that there be a primary and secondary coordinator for every observing session. There has not been sufficient participation to provide two coordinators for every observing session.
3. NOVAC understood public access to the observing sessions to be informal, rather than a structured public education program. However, the county has been widely advertising NOVAC's Friday night sessions as public astronomy programs.

NOVAC members will continue to have many options for good observing sites. It is hoped that Mickie Gordon Park, Savage Farm, and Mason Neck park will be convenient observing locations for those members who made regular trips to Crockett Park. Also, we are currently working out an observing agreement with Legacy Farms which is southwest of Warrenton.

Interim Volunteer Membership Director

Joe Pierson, NOVAC's Membership Director, will be on an extended trip for the months of September and October. During that time, Beckie Campbell will be the Acting Membership Director.

Beckie's contact info is:
4732 Harrison Rd
Fredricksburg, VA 22408
beckyshome@aol.com

Joe will be resuming his duties when he returns in early November.

ANNOUNCEMENTS

Winning T-Shirt Designs Chosen

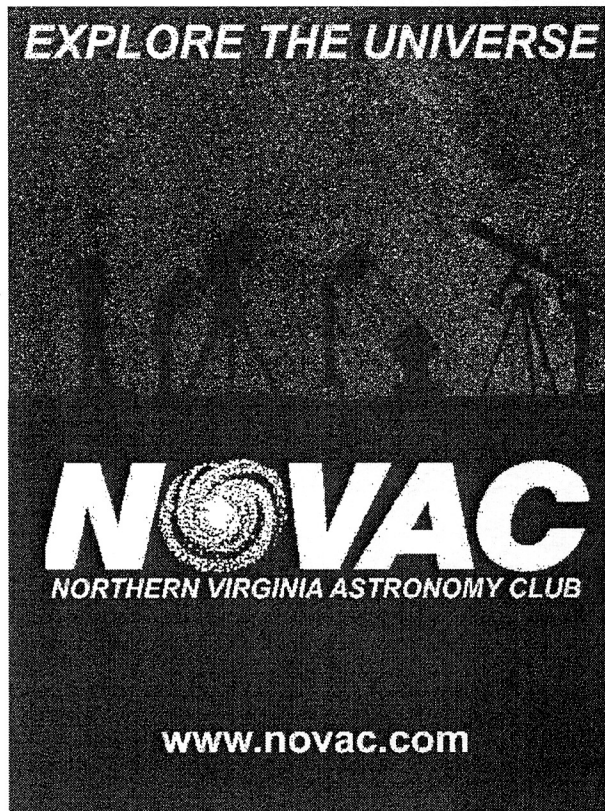
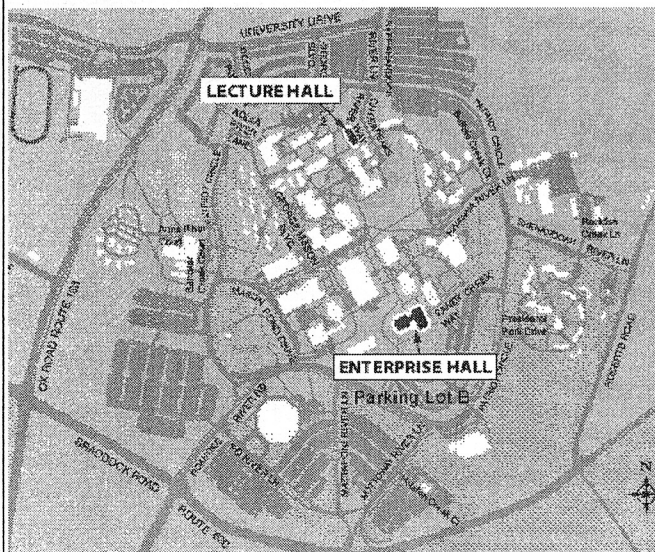
Seven NOVAC members submitted a total of 11 designs to the t-shirt design contest. After several rounds of contentious voting at the August 7 board meeting, three winners were chosen. Third place, and a \$25 gift certificate to Hands On Optics, went to Bob Traube. Second place was won by Wolfgang Schubert, who received a \$50 gift certificate. The winning design, which will be printed in white on navy blue t-shirts, was drawn by Bill Burton. Bill will receive a \$75 gift certificate and a free t-shirt. Everyone else can get their shirts when they go on sale September 22 at the NOVAC Stargaze at Franklin Park.

Family Night at Oakton High School Planetarium, October 17

Jack Stieffer, the planetarium teacher at Oakton High School, is going to put on a planetarium show for NOVAC families on October 17, at 7:30 PM. It will be a great opportunity for all NOVAC members and their families to see for themselves what a great educational resource the Fairfax County Schools' planetariums are. Everyone is encouraged to attend. Oakton High School is a short walk from the Vienna Metro station.

Permanent change for Meeting Location

George Mason has offered to let NOVAC hold its general meetings in room 80 of the Enterprise building on an ongoing basis. Since this will ease some of the burden on GMU's Astronomy department, the board has elected to permanently change the monthly meetings' venue to the Enterprise building, effective in



The winning design

New Club Loaner Scope Donated

By Pete Johnson

Merrick E. Krause, of Springfield Virginia, has kindly donated to NOVAC a Celestron C-8 with accessories. Merrick contacted me in an effort to find a good home for the telescope he has had for many years saying, "Perhaps some students will find use for my scope, or it might appear at star parties. Since it was a gift from my parents, it has sentimental value as well as being a great instrument." So, our goal is to direct the use of this telescope towards students and youth activities where possible.

Upon inspection of the telescope it was found to be a classic C-8 from the early 80's, complete with orange tube and gray/brown frame and tripod. This is the telescope that started the amateur astronomy Schmidt-Cassegrain revolution. It is a real piece of history and still a fine instrument.

At present the telescope is with the ATM group for evaluation to recommend additions/modification to make it a complete operational package ready for club use. When complete it will be entered into the NOVAC loaner scope program or directed towards specific youth activities. At that time a notice will be posted on the web site and on the e-mail list.

Our many thanks go out to Mr. Krause for his thoughtful donation.

Crockett Park Observing Schedule, May-June 2001

Below are listed the coordinators and backup coordinators for NOVAC's scheduled observing sessions at C.M. Crockett Park. For full details about observing at Crockett Park, see the club webpage or your Membership Guide. To volunteer as observing coordinator, please contact Tilly Smith (smithwt@navsea.navy.mil). **NOTE: After October 31, 2001, Crockett Park will no longer be an official NOVAC observing site. See page 8 for more information.**

Date	Primary Observing Coordinator	Phone	Secondary Observing Coordinator	Phone
Sep. 14	Christopher Bortz	703-897-0245	Allan Mayer	703-403-0926
Sep. 15	Allan Mayer	703-403-0926	TBD	-
Sep. 21	Allan Mayer	703-403-0926	TBD	-
Sep. 22	TBD	-	TBD	-
Oct. 12	TBD	-	TBD	-
Oct. 13	Renee Pleasant	unlisted	TBD	-
Oct. 19	TBD	-	TBD	-
Oct. 20	Allan Mayer	703-403-0926	TBD	-

Jeff's Observing Report

Jeff Stetekluh

Jeff's astronomical calculations are made for the Northern Virginia area. See <http://www.novac.com/jeff/jrefs.html> for calculation references.

Principle Club Observing Nights

Sep 14,15,21,22,
Oct 12,13,19,20

Jupiter Eclipse Events on Principle Club Observing Nights

Sep 16 2:59 AM Europa Eclipse Start (S -41 J 84 21)
Sep 23 5:33 AM Europa Eclipse Start (S -17 J 115 56)

The Sun

Sep 9 rises at 6:44 AM, sets at 7:26 PM
Oct 14 rises at 7:17 AM, sets at 6:31 PM

The Moon

Sep 10 Last Quarter
Sep 17 New Moon
Sep 24 First Quarter
Oct 2 Full Moon
Oct 10 Last Quarter
Oct 16 New Moon
Oct 23 First Quarter

Events

Sep 18 Mercury at Greatest Elong: 26.5°E
Sep 22 Autumnal Equinox
Oct 13 Mercury at Inferior Conjunction
Oct 21 The Orionid meteor shower peaks (active Oct 02 to Nov 07)
Oct 28 EST starts
Oct 29 Mercury at Greatest Elong: 18.6°W

The Planets

Sep 9	Rises	Transits	Sets	Mag	Diam	Notes
Mercury	8:51 AM	2:35 PM	8:18 PM	0.0	6.1"	WSW, 9*
Venus	4:10 AM	11:08 AM	6:06 PM	-4.0	12.2"	
Mars	3:28 PM	7:55 PM	12:23 AM	-0.7	12.4"	S, 24*
Jupiter	1:22 AM	8:43 AM	4:04 AM	-2.2	36.1"	
Saturn	11:31 PM	6:48 AM	2:02 PM	2.4	18.4"	
Oct 14	Rises	Transits	Sets	Mag	Diam	Notes
Mercury	7:16 AM	12:47 PM	6:19 PM	5.1	10.0"	
Venus	5:25 AM	11:34 AM	5:42 PM	-3.9	10.9"	
Mars	2:30 PM	7:09 PM	11:47 PM	-0.2	9.8"	S, 26*
Jupiter	11:18 PM	6:42 AM	2:01 PM	-2.4	39.9"	
Saturn	9:14 PM	4:31 AM	11:44 AM	2.2	19.6"	

(* degrees elevation at sunset taking into account atmospheric refraction)
(Mag = apparent magnitude, Diam = apparent equatorial angular diameter)

Highlights of NOVAC Meetings

Renee Pleasant



Board Meeting July 3, 2001, Arlington Planetarium

Due to the proximity to the July 4 holiday, this months board meeting was lightly attended by John, Pedro, Alan, Sean and Ed K. As there were only 5 attending no decisions were made.

Alan gave a good report on the loaner scopes and showed a photo of the two cases he purchased for the one with the worn out box. He also downloaded a manual for a similar scope to go with it.

There may be a mall observation in the fall but no help from Air and Space. If we do it we will need to rent toilets.

There will be a fall Almost All Messier Marathon for the marathoners to practice on. Draft any bye law changes you think we need for review and discussion at the next meeting.

We will be having a NOVAC family planetarium night at Oakton HS. This is a nice facility that can seat up to 85+. Time to be arranged. Programs are set through November.

Note to Ed W. order the filter with a mask for a short tube 80.

Written by Ed Karch.

Edited by Renee Pleasant.

General Meeting, July 8, 2001, George Mason University.

Meeting called to order at 7:45. 55 members and 15 visitors in attendance.

Announcements included a Family Night at Oakton Planetarium, organized by John Avellone. Date to be announced.

Reminder September 22, 2001 is this years date for Star Gaze. Mike Mills announced the T-shirt contest, submissions are due by August 1, 2001. Pete Johnson reported on the ATM meetings and invited members to attend.

Dark Sky announcement for trips to Cherry Springs and Spruce Knob are made on the listserv.

AL coordinator John Avellone announced that three members have recently received their Messier Awards. The Messier awards and the AL were explained for NOVAC guests attending this months meeting. John reminded members of the upcoming ALCON July 24-28, 2001 in Frederick, Maryland.

Ian Keith presented the Sky Tour for July.

Featured Speakers Bob Stewart and Tony Cook on Video Astronomy Adventures and more.

Meeting adjourned at 10:15 p.m.

Board Meeting ,August 7, 2001, Arlington

Planetarium

Meeting called to order by Ed Karch at 7:30 p.m.

Minutes of previous meeting approved as posted to NOVAC board list.

Joe Pierson, membership director, gave monthly report on members. 20 new households, 24 renewals, with a total of 484 households. While Joe is out of the country in September and October, Beckie Campbell will temporarily take over membership duties.

August monthly meeting will have Alan Figgat for Sky Tour, as Ian Keith is unavailable. September's meeting topic will be ATM. October will be John Nusbaum and the Astronomy Lifestyle. November Tom Dietz and Purchasing a Telescope.

Star Gaze update. Jeff was unable to attend the board meeting, but Renee conveyed his notice that he expects to move out of the area and will be unavailable for next years Star Gaze. Announcement for volunteers need to go onto the NOVAC announce list to ensure it reaches all NOVAC members.

The Liberty Buffalo Ranch agreement is nearly completed, Ed Witkowski was unable to attend tonight's meeting, but Joe Pierson volunteered to contact Ed on the final agreement.

Ed Witkowski has ordered the filter and it is on its way.

New Members Mentoring. Arrangements are being made to provide NOVACs newest members with additional orientation and mentors.

The observing agreement with Crockett Park will be terminated as of October due to lack of volunteers.

Make announcement at August meeting for September vote to change NOVAC bylaws to allow one signature for newsletter checks and to remove term limit for treasurer.

Mike Mills presented several entries for the T-shirt contest. After voting winner and runners up were determined and will be announced at August monthly meeting.

Club insurance is being cancelled due to the company no longer providing that type of insurance. Replacement insurance will be found.

Meeting adjourned at 9:05 p.m.

General Meeting, August 12, 2001. George Mason University.

Meeting called to order 7:30 p.m. 55 members and visitors in attendance.

NOVAC President Ed Karch made announcements regarding a by-laws change that will be

voted on at the September monthly meeting. Members will vote to change the signature requirements of two signatures for checks over \$300. This change has become necessary because of the current cost of the newsletter. It will end the necessity for the newsletter editor to pay out of pocket for the newsletter while waiting for two NOVAC officers to sign the needed check. Second, members will vote to end the term limit of 4 years for the Treasurer, so that our current Treasurer, Pedro Martinez, can continue his service as NOVAC Treasurer.

NOVAC will be ending its current relationship with Crockett Park in Fauquier county, this is due to continued difficulty in obtaining the number of Observing Coordinators that is required by the agreement with Fauquier County Parks Department.

An upcoming Family Night at the Oakton Planetarium is being scheduled for October, with the exact date to be announced.

Next months monthly meeting program ATMs, with John Avellone presenting an update on NOVACs newest ATM, the Sweet 16.

Pete Johnson then gave an ATM report, inviting members to attend the next ATM meeting with the meeting details to be announced on the listserv.

Jonathan Baine then reported on the Committee recently formed to arrange services for NOVACs newest members. Individual contact after joining, and assigning a mentor are some of the ideas the committee has implemented. More information in the newlsetter.

Mike Mills then announced the winners of the T-shirt contest Bill Burton 1st place, Wolf Schubert 2nd place and Bob Traube 3rd place. The winning T-shirt design will make it's debut at the Star Gaze. These T-shirts will be available for sale at the club table.

Alan Figgat then presented the Sky Tour, featuring Scorpius, Sagittarius and Scutum Messiers.

John Avellone, our Astonomical League Coordinator, then gave a report on the AL's recent convention. John then presented the AL's Mabel Stern Award to our newsletter editor Mike Mills.

The featured speaker, Dr. Rita Sambruna, then made her presentation on Relativistic Fireworks from Black Holes.

Meeting adjourned 9:21 p.m.

New Members - June 21 through August 27

Joe Pierson

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WELCOME!

Upcoming NOVAC Meeting Programs

Sean O'Brien

September 9

Amateur Telescope Making

This is the annual ATM meeting where everyone who wants to displays their home built telescopes and equipment. There will also be a presentation on the 16" scope being built by the Sweet Sixteen ATM group. If you have a telescope project you'd like to show off, bring it to the meeting!

October 14

The Astronomy Lifestyle

John Nusbaum

What it takes to be an amateur astronomer for you and your family—from newbie to dark sky freak.

November 11

How to Buy a Telescope

Tom Dietz

Tom will describe different types of telescopes and describe how to choose the one that is right for you.

PLEASE NOTE: the schedule of speakers is subject to change. Please check at <http://www.novac.com/meeting.html> for the latest info prior to the meeting. What's YOUR interest? Let sean.o'brien@nasm.si.edu know. Come share and learn about YOUR favorite topic!

National Capital Astronomers Meetings

The National Capital Astronomers are taking their usual summer hiatus, so there will be no NCA meetings in July or August. Also, since Saturday, September 2 falls on Labor Day weekend, there will be no meeting in September. Regular meetings will resume in October. See <http://www.capitalastronomers.org/> for more information.

NCA has regular monthly meeting September through June on the first Saturday of the month (unless it is a holiday weekend like September 2 is this year) at 7:30PM. at the Clinical Building in the Lipsett auditorium at the National Institutes of Health in Bethesda, Montgomery County, Maryland, just a little north of Washington, D.C. You can get to their meeting by exiting at the Bethesda Medical Center stop on the Red Line of the Metro.

Einstein Planetarium Public Observing Nights 2001

Sky Meadows State Park, near Paris, Virginia

Sean O'Brien

Join Sean O'Brien, staff astronomer of the Albert Einstein Planetarium, and other local amateur astronomers, for public telescopic observing under dark, star-filled skies, away from city lights. The evening begins with a short night sky orientation at dusk, followed by telescopic observing of various astronomical objects.

Sky Meadows State Park is west of Washington, D.C. on US Route 17 North, 1 mile south of US Route 50, or 7 miles north of Interstate 66, Exit 23. The park contact phone number is (540) 592-3556. There is a \$2 parking fee per car. Please cover flashlights with a red filter or a brown paper bag. Dress warmly. In case of clouds or rain, a park ranger will lead a short alternate program.

Observers with telescopes are most welcome. These programs are enjoyable. Kathy Budnie works most of these programs. She is a wonderful ranger to work with.

Sky Meadows State Park is at the the foot of the eastern side of the Blue Ridge. Remember, telescope volunteers don't pay the \$2 parking fee, and get to stay until 1am. Some nights are before New Moon, others have a waxing crescent Moon. We can park in the field behind the visitor center house. We observe from the "backyard". More info & reminders as these dates approach.

<u>Date</u>	<u>Comments</u>
Saturday, Sept. 15	No Moon (2 days before New).
Saturday, Oct. 20	4 day old Moon, sets 9:11 pm (for DC).
Saturday, Nov. 17	Eastern Standard Time. 2 day old Moon. Leonid meteor shower (storm?) peaks 5 am 11/18, may catch some during program. More meteors perhaps during observing time, 11 pm-1 am.

Vote on Bylaws Change Set for September 9 Meet- ing

In the September general meeting that will be held September 9, 2001, your vote is needed for a bylaw change that will increase the level at which two signatures are required for club checks. Please read the following two paragraphs and decide if you want to raise that level.

Currently, checks for more than \$300.00 require two signatures, while checks that are less than \$300.00 require only one signature. This has worked well in the past, but due to rising costs (such as newsletter printing costs) and increases in NOVAC's membership, the \$300.00 level does not meet today's needs. After a careful evaluation of past invoices I propose that the level be increased to \$800.00.

I want to pay the invoices as soon as I receive them to help NOVAC develop & maintain a good credit rating. This will help NOVAC get credit applications approved. Also, NOVAC has filed a credit application with the local printing shop for the company to invoice us for the newsletter printing costs, which are normally more than \$300.00. Raising the level at which two signatures are required, will allow me to pay the printer directly, greatly simplifying the newsletter printing process. This will become our first major credit reference and this will help NOVAC to build better credit references in the future.

Pedro Martinez, Jr.
Treasurer

"To observe, and to help others observe"

NOVAC is a non-profit, all-volunteer organization chartered to advance amateur astronomy in Northern Virginia. Members benefit from:

Access to dark sky observing sites:

NOVAC maintains agreements that provide club members with year-round access to three observing sites away from city lights

Monthly Meetings

Monthly meetings are held at 7 p.m. on the second Sunday of each month in the Lecture Hall on the campus of George Mason University. Each meeting features a lecture on an interesting topic by a local expert. See the web page or upcoming Newsletters for a schedule of speakers.

Bimonthly Newsletter

The NOVAC Newsletter provides information specifically for NOVAC members, as well as general interest articles on such topics as observing reports, equipment reviews, upcoming events, ATM projects, and more.

Four high quality telescopes

NOVAC members may borrow one of the clubs four telescopes at no charge. Members may choose from among three 6" reflectors of different focal lengths and one 10" f/6 reflector. Also available for loan is a 7x50 binocular.

Large club library

NOVAC maintains a well stocked library in the Lecture Hall at GMU. At a monthly meeting, club members may check out books and observing guides and use them until the next meeting.

Club website

Up to date information about club events and activities is maintained on the club website at www.novac.com.

Private e-mail listserve

Members keep up with current club information by subscribing to the NOVAC e-mail list, without fear of flame wars or spam e-mails.

Public outreach opportunities

Several times each year, volunteers from NOVAC present astronomy programs to schools, churches, Scout troops, and other public groups.

Membership in the Astronomical League

Through NOVAC's membership in the Astronomical League, NOVAC members gain access to the AL's newsletter, services, and observing programs.

Discounts on astronomy magazines and books

Subscriptions to *Sky & Telescope* and *Astronomy* magazines are offered to club members at a considerable discount. Also, astronomy books purchased through the club are eligible for a 10-25% discount.

See your *Membership Guide* for more details about these benefits!

The NOVAC Newsletter is the official publication of the **Northern Virginia Astronomy Club** and is published six times per year.

The *NOVAC Newsletter* is sent to members of NOVAC as a regular membership benefit.

Membership in the Northern Virginia Astronomy Club is \$25.00 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 \$5.00 per person. Contact Joe Pierson 15091 Jarrell Place Woodbridge, VA 22193 703-680-6343 jmpierson@home.com

All notices of change of address should be sent to Joe Pierson. 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. Send article submissions to the Editor, Michael Mills, at mjmills@fpcc.net. **(The deadline for submissions is two weeks in advance of publication: October 12 for the November/December newsletter.)**

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