



# NOVA

NEWSLETTER OF THE VANCOUVER CENTRE RASC

VOLUME 2001 ISSUE 5

SEPTEMBER/OCTOBER 2001

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## Looking Ahead

Remember, you are always welcome to attend meetings of Council, held on the first Tuesday of every month at 7:30pm in the G.S.O.

**September:** Dr. Sun Kwok of the University of Calgary: "Cosmic Butterflies"

**October:** Dr. Alan Hildebrand of the University of Calgary on the meteor that wiped out the dinosaurs

**November:** Dr. Chris Waltham of the UBC Physics dept. and member of the SNO neutrino detector on the early results

## Next Issue Deadline

Material for the November Nova should be submitted by Monday, Nov. 5, 2001. Please send submissions to:

Gordon Farrell  
(gfarrell@home.com)

or Bob Parry  
(robpar@ballard.com)

## Mount Kobau 2001

by Craig Breckenridge

To say that this year's Mount Kobau Star Party got off to a cloudy start would be an understatement. I arrived on top of the mountain on Wednesday afternoon after spending about half an hour making my way

been crowded before, just imagine two women and five kids in a 13-foot trailer! At least Dana and her kids were able to dry out a bit and it was a good chance for them to get acquainted with Teague, Dar and Jill. Jason and I have



Gary Seronik's 8-inch f/4 Dobsonian

through what appeared to be a solid wall of fog. Arriving on top and quickly seeing that the spot I used last year was taken, I pulled the trailer in beside Doug Montgomery and proceeded to set up camp. Just as we got started the rain decided to put in an appearance. It wasn't long before Doug and I were sitting under the awning, not even bothering to wring ourselves out, and Dana Rickerby and her children were warming themselves inside with Jill and my two boys. If you think you have

been starting to chum around a bit and enjoying ourselves thoroughly so it was time for the wives to meet. Doug and I wanted to discuss what we were going to observe that night anyhow. It didn't clear up so Doug, Jill and I talked until the wee small hours of the morning.

The next morning dawned dry and cloudy but with hints of clear skies to come. It was kind of unusual to arise at 7:30 and find other astronomers

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## Mars

by Marc Verschueren

This was the glorious summer of Mars. I sat on the deck at the back of the house and enjoyed a warm summer evening (from time to time...) and stared at the big planet. It is about all there is to see for me in that direction that low above the horizon. I look out over the big city of Vancouver and its glaring light pollution. I can never actually see the planet as red, but that could be caused by the bright sky around it. It would be somewhat of a stupid thing to say that Mars is my favourite planet, but Mars connects me in a special way with astronomy. No doubt it does the same for many others. Looking at Mars, we look back at very intense astronomical history. Mars is the planet of Tycho Brahe and Johannes Kepler. Brahe measured and recorded with great care positions of the mysterious planet and could not make sense of its erratic orbit. The problem was then handed over to Kepler.

When I look at Mars I have to think of Kepler. Kepler is a fascinating character. He literally lived and thought in two ages at the same time, the late middle ages and the new modern scientific era. He made the incredibly bold step of giving up the idea of trying to describe the orbit of Mars as a set of circles superimposed on one another. He came up with this one simple ellipse after years of hard work of endless calculating. This requires real intellectual courage since the circle was supposed to be perfect and in the image of God, and this must not have been easy for Kepler. In his books, he still uses arguments, in another context, that something has to be a straight line, for example, because the straight line is a symbol of a creature in contrast with the perfect divinity reflected in the circle. And somewhere else he says that

a polyhedron is less perfect than the sphere but it approaches the sphere as the number of faces increases and as such becomes more perfect and divine. And this kind of argument is used time and time again as real evidence and proof to make statements about astronomical facts. With this kind of argument, he thought he could prove that there could only be six planets. It is all a very strange mixture of astrological fantasy, philosophical prejudices and some real astronomy. But the right solution is there—his ellipses; his law of equal areas; his power  $2/3$  law. While I am sitting here watching Mars, it moves along Kepler's famous ellipse. Kepler's ellipses were my first contact with astronomy. I first read about Kepler in a book about the revolution of Copernicus given to me by my father many years ago. I still have the book and reread part of it once in a while. It really looks old now—it's lost part of its cover during my travels. It looks now almost as old as the stories it tells. It has become a revered relic. We now know so much. But I sometimes ask myself how long it would take me, measuring positions of Mars, to get sufficient evidence to support that it indeed describes an ellipse. Without the use of some fancy computer program of course. Kepler did not even have a slide rule.

It was very essential that Mars was the object of Kepler's study because the orbit of Mars has a large eccentricity and as such it is a very pronounced ellipse. But this is only the beginning of the story. Kepler's laws gave very strong support to Newton and his general theory of gravitation and mechanics. It made a very deep impression on me that a planet describes this elegant orbit around the sun. It was even more formidable that my book claimed that

one could actually calculate this orbit from the inverse square law of gravitation. It was a great inspiration to try to find out how Newton did this. Kepler was at the beginning of the long, winding, complicated road of scientific discoveries of mankind leading to relativity and dark energy and neutrinos that change their individuality on their way down from the sun. If Tycho Brahe had not given his beloved measurements of Mars to Kepler the history of science could have been very different. I am quite sure we would still have made the same discoveries. Maybe the timing of the historical development would have been different, maybe we would be behind where we are now or maybe we would be way ahead.

Mars has always had more mystery connected with it than the other planets. It is the planet of the canals. It was always the planet thought to be the most likely one populated by beings with a very advanced civilization. Fifty years ago this was still considered a real possibility, even by some astronomers. This expectation had to come to an end when the first interplanetary space probes let us have a much closer look at the red planet. But the mystery is not entirely gone. Today one still hopes to find some remnant of life on the planet, or maybe some unknown underground version of life.

Today's astronomy is a complex, magnificent, intellectual and aesthetic building. We are very privileged that we can visit it. Its original foundation is closely connected with that red planet I can sit here looking at from the deck behind the house. I do not need an optical instrument tonight to look at Mars. I can see all kind of things just by weaving my memories and my imagination around it. It is the planet Brahe and Kepler saw. ✨

## **President's Message**

If all went well, quite a few of you should have received this issue of NOVA via a link to our website. The electronic issue of NOVA is in full colour and can be printed out or saved as you see fit. The benefit of this new format is the huge reduction in labour required to get everything folded and stuffed into an envelope. There is also some cost savings which we are trying to pass on to our membership by only increasing the membership fees by half the amount that was approved at the June General Assembly. I also think this shows some of our concern for our environment by reducing the amount of paper we use. Every little bit helps.

Since the last issue of NOVA in July, we have been quite busy attending various events and have had a high profile at a number of public events. In July, Angela Squires gave a talk to about 200 campers who were in Manning Park. This is the second or third time she has performed this talk and it was very well received by the attendees and park staff. After the talk, many of the campers made a short drive up to a parking lot on the way to the Cascades Lookout. We had 8 telescopes set up in the parking lot with the hope of showing off the night sky. Unfortunately the clouds rolled in quite soon after we started but we were still able to show off a number of objects including Mars which was so predominant in the south. I would like to thank all those who made the trip up to Manning Park, and I would like to thank the park for the free camping which we were given in the volunteer campground. If we keep this up maybe we can get permission to observe from within the park.

In August, I gave a short talk to about 30 people at Aldergrove Lake Park. This was the second of two events we attend to fulfil our commitment to the GVRD. They let us keep out telescope at the park in exchange for these events. After my talk, I quickly drove up to the observing site and set up while the talk attendees hiked up with their park interpreters. We had 10

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## **2000 Vancouver Centre Officers**

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Tony Overton Deceased

## **Web Site**

<http://hrmacmillanspacecentre.com/fr11.htm> and follow the link to Astronomy Clubs  
or <http://www.rasc.ca/vancouver>.

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## **About RASC**

The Vancouver Centre, RASC meets at 7:30 PM, in the auditorium of the H.R. MacMillan Space Centre at 1100 Chestnut St., Vancouver, on the second Tuesday of every month. Guests are always welcome. In addition, the Centre has an observing site where star parties are regularly scheduled.

Membership is currently \$49.00 per year (\$25.00 for persons under 21 years of age) and can be obtained by writing to the Treasurer at the address below. Annual membership includes the invaluable Observer's Handbook, six issues of the RASC Journal, and, of course, access to all of the club events and projects.

For more information regarding the Centre and its activities, please contact our P.R. Director.

NOVA, the newsletter of the Vancouver Centre, RASC, is published on odd numbered months. Opinions expressed herein are not necessarily those of the Vancouver Centre.

Material on any aspect of astronomy should be e-mailed to the editor, mailed to the address below, or uploaded to SpaceBase™ at 604-473-9358, 59.

## **Advertising**

Nova encourages free use of its classified ads for members with items for sale or swap. Notify the Editor if you wish your ad to run in more than one issue.

## **Commerical Rates**

1/2 Page: \$25.00 per issue  
Full Page: \$40.00 per issue  
Rates are for camera-ready, or electronic files. Payment, by cheque, must accompany ad material. Make cheque payable to: RASC Vancouver Centre.

## Annual General Meeting 2001

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by Bob Parry

During the long weekend of July 1<sup>st</sup> 2001, I attended the RASC's annual meeting. During this meeting, there is a three-ring circus atmosphere with many things happening at once. The National Council meeting was split between Friday and Sunday with the General Meeting Sunday morning before the final half of the National Council Meeting. Between these events was that fun stuff. This included talks featuring David Levy, William Hartmen, "Triple" Nickel, David Crawford, and Robert Jedicke; unfortunately, because of the schedule of the Council Meeting, I was not able to attend all the talks. I did however listen in on David Levy's talk on his favorite faint fuzzies, and Triple Nickel's talk on training the Space Shuttle pilots to land the Shuttle. I will return to these topics later and will brief you on the business end of the GA.

The most contentious issue on the table at the Council Meeting was that of the fee increase. Vancouver Council members have mentioned this at our monthly meetings and collected your proxies for the vote that was held on the Sunday. Our club had the second largest number of proxies at the meeting next to Halifax. Unfortunately the motion passed. There will be a \$4.00 price increase as of renewal time this fall. The vote was close—171 for, 126 against—with the deciding votes coming through proxies. This has some implications for us here in Vancouver. There was a motion in the local Council meeting of July third that was discussed at the July 10<sup>th</sup> members' meeting; this will involve changes to the surcharge that is added to the basic cost of being a member of the RASC.

During the debate around the price increase, it was apparent that the way this was handled was not widely appreciated. The larger clubs were divided on the need for an increase at this time and were concerned about two increases back-to-back. In conversation with reps after the meeting, there was concern for the costs of various services provided and these concerns

will be brought forward at future meetings. These concerns have been voiced in the past but need further discussion in order for expenses to remain in control and have services provided that members want and are willing to pay for. The discussion on decoupling will occur at the October National Council meeting. At this time, the ground work will be set and it is important that this be done correctly. On the surface, this appears quite harmless; however, there are concerns that if not planned and implemented properly there could be divisive problems that are not intended. Pomponia has had experience with a similar decision made by a club that she was involved with that had serious implications that were not foreseen or intended. To this end, it is important that Pomponia be at the October meeting to insure that decoupling does not have any adverse effects on the RASC. There will be some form of revenue sharing changes that are necessary for the health of the RASC as a whole. It is important to make certain that these changes are to the benefit of all. There have been some feelings of them vs. us happening that need to be avoided. There is no doubt in my mind, or of anyone that I talked to, that all of the council members are working diligently for the betterment of the RASC.

Council approved the new observing certificate. This is a very nice package that I mentioned after returning from the March meeting. This will be available to all members and to outreach programs as well. The administration will be done at the local centre level. There was some concern about how much administration this will entail, but the general consensus was that this would not be a big problem. This observing certificate involves finding 55 of 110 objects. These objects are visible from the city either naked eye or with binoculars. There are other objects for which a small scope (80mm or so) is required. The objects are some Messier objects, double stars, constellations, phase and features on the moon and other objects that are interesting and challenging.

The program will be finalized and available by September of this year. I am looking forward to this program and think that it will be of benefit to all our members as well as help recruit new people to the beauty and splendour of the night skies.

On Sunday, Craig presented our bid for the 2003 GA. This was well received and passed unanimously. So we are now committed to the GA and will have to live up to the standard that was set by London at the 2001 GA. This will not be easy but I believe that we can put on as good a show as London and perhaps surpass the fun that was had by all at this year's GA.

Now for the really fun part of the GA. There was a Hospitality Room where everyone met at some time during the GA. This was where the really important happenings happened. These included meeting and socializing with members from all over the country, drinking copious amounts of beer and practising sleep deprivation. This was where one went to learn about what astronomers are really like. It turns out that astronomers are great party people and some can actually sing. Well, sort of sing. There was, at previous GA's, a song contest; this was ended a while ago because of excessive competition I am told. That is a shame as this was one of the most memorable parts of the GA. Seeing David Levy, and Peter Jedicke singing was a truly moving experience. I hope that for our GA we can resurrect the tradition as this was just too much fun. The hospitality suite ran around the clock with more than a few attendees never getting more than 2 hours sleep a night. One of these people was Triple Nickel, the speaker from NASA who described the training of the Shuttle pilots in great detail. Triple was very impressed with the festivities and will be joining the RASC as soon as he gets home and recovers.

Other highlights were the many talks and discussions that happened Saturday and Sunday. I was only able to make it two of these. One was the

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## Why?

by Dan Collier

In everyone's soul there is a dark-starred realm that is opened by a difficult stage in life, whose door can never be closed again. A job ends suddenly, a long friendship dissolves, a family member passes on. If a dark night sky is accessible at that time, a new life can begin.

*Why?*

Perhaps a dusty childhood memory of star-studded skies, lying latent for many years, is brought back to the surface and permanently burned in by the watershed episode. However the process works, it deserves respect. It is wonderfully human.

Why are there no completely ordinary persons among amateur astronomers? Maybe a kind of Rubicon separates ordinary personalities from the extraordinary. For many amateurs I've known, passage to the extraordinary was made in the presence of a telescope, almost always a modest one. But no one can make the passage without revealing some measure of vulnerability. It is little wonder that some go on to acquire larger and larger telescopes.

Much as I dislike my own person-

ality, I know there is no turning back. We all must accept ourselves for what we are. If peeking at the machinery of Nature forced me to give up the illusions of my childhood, it was worth it.

But don't overdo it. Don't look at every galaxy. Don't buy the biggest telescope. Don't rush to build the observatory of your dreams and stock it with the finest equipment. Seek out mentors and ask them to show you a little of what they've found up there in the sky. Savour these experiences, and share them with anyone who will listen.

Seek out nighttime skies even if it means leaving your telescope at home. If the Moon is full, no matter. Enjoy the view of the moonlit landscape around you, as I once did during a Christmas train ride in the mountains.

Visit an observatory whenever your travels take you near one. You may not meet the next Tombaugh or Levy there, but you will always find a friend.

Try to find the name of the star which peeked at you through the gap in your bedroom curtains. Imagine living long ago when the heavens were utterly beyond human fathom. Would

you fear that star?

Do suffer the cold to visit the winter stars. Contrary to what many of its own inhabitants believe, Canada is more than a few acres of snow. We have the best winter skies anywhere, and the people to appreciate them. My father was one of them. He showed me many things, but the most precious was to appreciate a starry night on its own terms. He was more successful than he can ever know.

When I contemplate the stars in the sky I seem to be reaching out to my father, a lonely man who died in a profound depression before his son could articulate such words as would have made his life meaningful. Here they are.

*During one of those unbelievably cold, silent prairie evenings, an eleven-year old boy was walking by himself through a field. On an impulse he threw himself into the snow and looked up. Castor and Pollux were up there but the boy did not know their names yet. The stars were so beautiful, so beautiful. \**

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## CARO Update

by Eric Fuller

The CARO open house on June 2 went well. We had almost 30 people—a great turn out. Thanks to all the volunteers who manned the front gate, talked with visitors, provided coffee and munchies, etc. On July 19, we had the Fraser Valley Astronomical Society up for a visit as well. There were 12 of us up in the dome... very cozy! The equipment was not working due to hardware problems, but everyone was very interested to see how we do things.

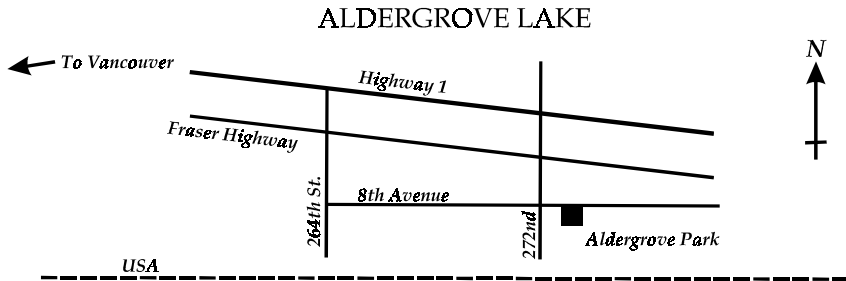
Also in July, Bob Parry and I made modifications to the telescope. We dis-

mantled the telescope and installed ball bearing set screws on the optical system. This greatly reduces the amount of movement in the mirror when focussing and when moving from one object to another in the sky. Last week, Bob and I installed a motorised Crayford style focuser from JMI. Since the CARO camera is still under repair, we used Bob's Meade 416XTE. We snapped a few pictures and looked at various objects all over the sky. Focussing goes much faster now and the reliability of the telescope pointing is better. Some of these images will be available on the web site.

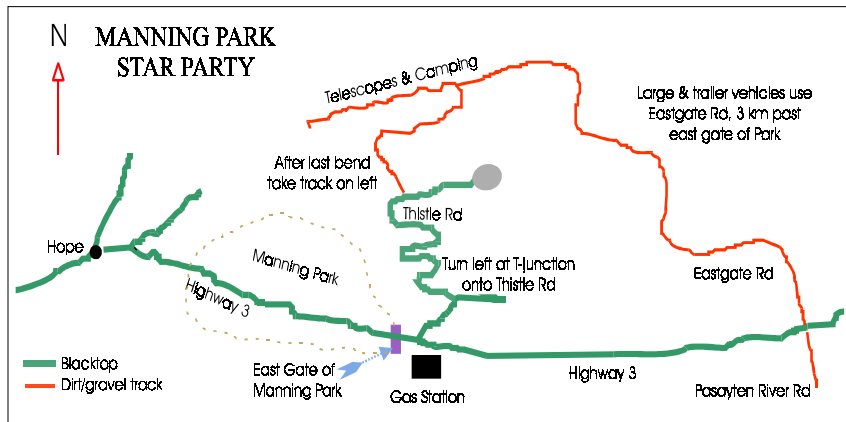
The final fix for CARO this year has to do with the dome. We had some rings made up from 4" angle iron to replace the existing plywood rings, which are deteriorating. We have new steel rollers and supports so the rolling friction will be much less than before. Apart from a coat of paint next year, the dome will likely not need maintenance for a number of years.

We have two Cookbook 245 cameras. One is under construction and the other is under repair. By the end of September, we should have a working camera and hopefully some new images. See you then. \*

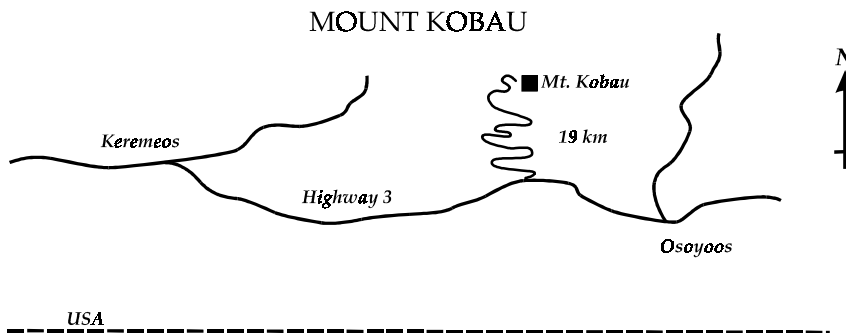
## Observing Sites



Dale McNabb Observatory in Aldergrove Lake Park (RASC Vancouver Centre's regular viewing site)  
 Contact Mike Penndelton (604-888-1505) or Howard Morgan (604-856-9186)



Site of the annual star party organized by the RASC Vancouver Centre



Site of the annual Mt. Kobau Star Party organized by the Mount Kobau Astronomical Society

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 faint fuzzies with David Levy. Of his list, the one that surprised everyone was the Sun, yes our Sun. Now one would not normally think of the Sun as a faint fuzzy, but David Levy had just returned from Africa where he viewed the total eclipse of the Sun. He was referring to the Corona that is visible only during totality. He described how a member of his party noticed that before totality if he blocked the sun with a branch from a nearby tree he was able to see the corona before totality. They tried this technique before and after totality and found that they were able to see the corona for a total of about 6 minutes. The other talk I saw was Triple Nickel's on "flying" the

Space Shuttle. It turns out that the Shuttle flies only somewhat better than a rock, with extremely steep approach angles and only one chance to get it right. So they practice and practice in an extensively modified Gulfstream business jet. For the other talks I was either in council meetings or trying to recover some sleep time. The one I missed that I wanted to hear was the report of the SNO observatory. There is a chance that it was video taped and that this might be released for those that missed it.

I will remember this event for a long time. Events that will stick in my mind are the Sunday night observing session in the courtyard looking at the moon with David Levy and large group

of fellow Rascals. There were two scopes set up, one on the moon and one on Mars. Mars unfortunately has not been great for viewing. The best views I have had were from light polluted downtown Vancouver through a 100 mm refractor. Oh well, we will have to wait until 2003 for the next close pass. Unfortunately the close approach will not be until after the GA. Oh well, one cannot have everything.

I greatly enjoyed my time at the GA and would urge any member that is in the Montreal area for the GA next year to attend, as the fun and camaraderie is worth it. Please note that Montreal will be over the May long weekend and not the traditional July 1<sup>st</sup> date.

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## 2002 RASC Calendars Now Available!

The new calendars are here! If you'd like to purchase one, please see Doug at the GSO after the meetings \*

## ASTROCOMPUTING

**SpaceBase™** (604-473-9358). Affiliated since 1992 with RASC Vancouver, our link to RASC Net, RASC Members only chat area. Future data distribution hub for CARO Project. Features include latest HST images, current world space news and astronomy programs. Provides a file uploading facility for submitting articles and imagery to Nova.

## LIBRARY

The centre has a large library of books, magazines and old Nova's for your enjoyment at the GSO. Please take advantage of this club service and visit often to check out the new purchases. Suggestions for future library acquisitions are appreciated.

**RASCVC on the Internet**  
<http://members.home.net/rascvc/index.html>

## H.R. MACMILLAN SPACE CENTRE

The Pacific Space Centre Society is a non-profit organization which operates the H.R. MacMillan Space Centre and Gordon M. Southam Observatory. Annual Membership (\$30 Individual, \$65 Family) includes a newsletter, Discounts on Space Camps, special programs and lectures, Vancouver Museum Discounts, and free admission to the Space Centre. Admission to the Space Centre includes: Astronomy shows, Motion Simulator rides, multimedia shows in GroundStation Canada, and access to the Cosmic Courtyard Exhibit Gallery. For Membership information, call Mahi Jordao at 604-738-7827, local 237 for information. You can also reach them on the Internet at <http://www.hmacmillanspacecentre.com/>

## MEMBERSHIP HAS ITS PRIVILEGES!

New members, did you know? The Vancouver Centre has 6 telescopes available for loan free of charge! We have telescopes ranging from 3" to 10" diameter. For more information call Phil Morris, Director of Telescopes at 604-734-8708, or see him in the lobby of the GSO after the members meeting. The loaner period is for one month only. All telescopes are to be picked up and returned after the members meeting. No telescope will be allowed to circulate outside of these meetings!

Your greatest opportunity as a member of the R.A.S.C. is to take advantage of the company of other enthusiasts to increase your knowledge, enjoyment and skill in astronomy.

The best thing you can do to gain the most from your membership is to get active! Take in the club meetings; engage other members with questions; come out to observing sessions (also known as "star parties"), and, by all means, volunteer to take part in our many public events.

Observing takes place at the Dale McNabb Observatory in the Aldergrove Lake Park, located in Langley, on 8th Avenue, just east of 272nd Street. We are there most clear nights. Contact Mike Penndelton at 604-888-1505 or Howard Morgan at 604-856-9186.

## Manning Park Star Party

by Angela Squires

The weather gods did not smile on our July star party or the previous weekend's Outreach Astronomy. Many thanks to those who came up Saturday 14<sup>th</sup>—Bob & Pomponia, Craig, Jim, Rene & Nicole, Jason, Bill and Marcellus. We encountered

talk/slide show went well, Bob and myself doing our usual tag team. Two people make it more interesting for the audience and hopefully can troll a double knowledge pool.

A fair size crowd did guerrilla astronomy on the following Friday night for more than an hour total.

They found the hard core of Mike Pendleton, Hoon Hiu and myself. Dark, clear skies prevailed all night much to our delight. My personal thrill Friday was finding at first go the large but faint Pinwheel Galaxy, M101. While the skies were uncooperative, the camaraderie was superb with wit and quips flying back and forth. My new digital camera got a good workout as you can see! Check out: <http://members.fortunecity.com/eclecticsquire/stargazer/>



Jack (Wally's friend), Victor, Paul, Pomponia, Rene, Alex and Chuck on "telescope heights".

Pomponia started the discussion with her plea for us to level and make telescope pads there as it is the best viewing spot. This evolved at the urging of Paul to look into leasing this piece of Crown Land. We could then do some serious landscaping without bothering the Eastgate residents. Trees and bushes are impeding our view from the road level and on the heights we would be away from the dusty road. Maybe we are in Gordie's good books as I did email him applauding their opposition to the SE2 power plant proposal!

Chuck Webb of FVAS who had the club's beautiful 10" Dob with 'Tudor' style ribs. Unfortunately, the public only got about 30 minutes viewing before the clouds rolled in. If you are ever lost in fog, Bill Fearon's the man to find you. He located Comet Linear near the murky horizon just like that! Our

On Saturday more optimists arrived but the night was almost completely clouded up. The socializing was fired up by Paul Greenhalgh of FVAS who arrived with Victor Pollock, FVAS President. The little sky that Paul saw inspired him to drive up again from Abby with Dennis and his 8" SCT on Sunday

by Paul Greenhalgh

Manning Park (East Gate) What an experience! First of all I would like to thank everyone affiliated with the RASC for their welcome and warmth upon our arrival. I won't list the names, you know who you all are! And I know who you all are. You all were truly Awesome Hosts! Although the skies were cloudy and not looking very promising, the entire time we spent there



View from the Cascade Lookout down to Lightning Lakes.

We held our Outreach Astronomy viewing the previous Saturday at the Lookout but the clouds rolled in after half an hour. Bill Fearon formidably found Comet Linear in the murk and gets my vote as Guerilla Astronomy champion of the month!

with you all was a total hoot! There's just no better way of saying it! As members of the Fraser Valley As-

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besides myself were up. Doug started packing up having been there for a couple of days and being required back at work on Friday. We spent the morning visiting with old friends and wandering around to see who was there and who was missing. It was great to see old friends like the Paulsons from Edmonton and Mr. and Mrs. Claus from their summer home on Whigby Island. Lee Johnson started the talks off on Thursday afternoon with a discourse on what we might observe from the site of the Queen Elizabeth II Observatory if it had been built. I followed with a talk about the process of a large dome's life cycle using slides from Gemini North and South. Thursday night came

before noon. This was turning out to be a different sort of star party. I did not attend Friday's talks but from the smiles on the attendee's faces as they walked past the trailer, I must assume they enjoyed them. I was trying to nap for the big night observing and Jill and the boys were doing their best to keep me awake. Friday night was again spotty but we managed about an hour and a half viewing between clouds. Jason and I spent some of this on a fruitless search for Comet Pettigrew. This wasn't turning out to be the relaxing vacation spent viewing the stars that I had planned.

Saturday I had promised Jill and the boys that we could go down to Osooyoos and shop in our favourite

have to admit though, I did have far too much fun with Craig McCaw going over the plans for the new telescope at the planetarium to really miss any talks.

Saturday night finally broke clear and we wandered around the mountain waiting for the sky to get dark. We were treated to a meteor around 9:30 that was probably the most impressive I have seen in my life. I was standing talking to Jill, Bryan, his wife Verna, Jason and Jill Failes when it streaked down from Ursa Major to Capricorn. Jim and I estimated it to be around mag  $-4$  or  $5$ , easily brighter than the moon that night. It seemed to last around 5 or 6 seconds and we saw it change from yellow to green and



with several suckerholes popping in and out of view but we only got about an hour of that in before the sky socked up fully. Jason and I spent some time with his CCD and located Comet Linear at mag 9 before the clouds closed in and I confirmed its location later with Murray Paulson. Jason, Bob Parry, Bryan Kelso and I sat on the old concrete slab for the generator shed and talked until around 2:00. Bob and Bryan wandered off to their sleeping bags and Jason and I made a couple of trips around the mountain before calling it quits.

Friday also dawned dry and again I was greeted by fellow astronomers

store, the Home Hardware. If you ever go to Mount Kobau you should be aware that that store has one of the best selections of camping supplies short of Mountain Coop or Three Vets. We always find something of interest and I was hard pressed not to pick up another parafoil that I found on a rack. Jill said one was enough and couldn't seem to understand that this one was bigger, thus meaning I needed it. Just as we were to go the battery on the van kicked out and we had a mad panic to buy a new one. After hurrying back up the mountain we then proceeded to miss the talks I would have liked to hear: Alan Dyer and Gary Seronik. I

back again. Very impressive! Once viewing got underway Bryan, Jason and I observed until the morning started to lighten in the east. Bryan and I packed it in first with Jason gathering material with his CCD for later processing. I really enjoyed Saturday night as I spent a fair bit of time learning how he makes his images. He took a couple of images that showed some very difficult objects like the Cocoon Nebula and the central star in M57 popped out in just a fifteen second exposure. Saturday night made my entire trip worthwhile. ★

## Your Current E-Mail Address is Important to Us!

by Dan Collier

Recent National fee increases are forcing Vancouver Centre to change the way we deliver our services. Most importantly, the Centre is trying to reduce our largest budget item, publication costs, by using electronic mail to distribute *NOVA*.

“But I don’t have e-mail!”

Please do not be alarmed. If you don’t have an e-mail address, you will continue to receive *NOVA* through the mail. As always, we will print a set of postal address labels just before publication (i.e. in time for the January, March, May, July, September and November regular meetings). After the meeting, *NOVA* will be stuffed into envelopes and mailed to those who did not pick up their copies in person.

The difference is this. If you have submitted your e-mail address to the RASC for inclusion in our national database, a mailing label will not be printed for you. Instead, instructions will be e-mailed to you telling you how to download your *Enhanced Electronic NOVA*. Enhanced? Yes!

- It’s in full colour.
- It’s easier to dispose of.
- And you can print your own copy, leaving out the pages you don’t need.

So if you haven’t already received September’s issue of the *Enhanced Electronic NOVA*, just submit your current e-mail address to RASC National Office at:

rasc@rasc.ca

We’ve noticed that some of you haven’t kept their e-mail addresses up

to date. Now you have a reason to update it! Or, maybe you did have an e-mail account once, but techno-frustration has caused you to blow up your computer and take up Luddism. Just kidding. If that’s the case, you should ask someone who *does* have e-mail to ask National Office to remove your old e-mail address from the database.

Extra copies of *NOVA* will be printed for members who show up at the meeting who insist on the printed version. The money saved by this measure will be made available to those services which you value most: the monthly lectures and the loaner scope program. ★

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tronomers Society, Victor Pollock, Chuck Webb, Paul Greenhalgh and myself, we thank you. You wel-



Bob giving a cowboy's V for victory salute?

Like any good Mum, Pomponia had brought everything bar the kitchen sink. Fortunately we had no need of her first-aid kit but it occurred to me that this is an item the club should consider purchasing to have available at all club events.

comed us in high regard, with almost everyone coming in from all around to greet and meet. I’m still grinning from ear to ear; you all were so EXCELLENT. The laughs, belly laughs, jokes, stories, likes and dislikes, and special moments kept

the evening full of enthusiasm and excitement. Personally, after spouting off that the skies will open up so that we can see the stars at some point, I was relieved that the prediction came true! (as all of you were holding me personally responsible... well, kinda sorta.) Actually, it was a fun joke, played on myself if anything. But when the skies did open for those brief but welcomed times, HOLY SMOKES! It almost brought tears to my eyes! M13 looked 3D; M51 in an 8 inch revealed spiral arms that I have never been able to see from down here in the Valley. M31 revealed dark lanes— WOOOOO HOOOOOOO! It was almost like winning the lotto and this wasn’t even a good viewing night. BUT DID I CARE? Not on your life! SPECTACULAR! Absolutely Spectacular! Thank you everyone for everything, even if the clouds had decided not to part. In all honesty, the evening still would have been stellar and an absolute hoot! You all are stars in your own right! Blinkin’ Bloody Fantastic!

Clear Skies!  
Paul Greenhalgh (Director)  
Fraser Valley Astronomers Society  
British Columbia Canada  
<http://www.fvas.net> ★



Cooking for Wally requires concentration and a cigarette to stimulate the brain. He cooked Jack and I a wonderful omelette for breakfast, in a saucepan to boot. No way would I try that!

## Upcoming Events

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### Manning Star Party #2 September 14-15

See map on page 6 of this issue for directions.

### Apollo: Thirty Years Later September 16

Edgar Mitchell, Apollo 14 Astronaut, will be in Vancouver, September 16th giving a talk at the H.R. MacMillan Space Centre entitled Apollo: Thirty Years Later in which he describes his personal journey from outer space to inner space. It is open to the public at a ticket price of \$55.00.

### Fall Sidewalk Astronomy Evening

October 5 or 6

English Bay, (foot of Denman St.) - meet at the bathhouse approximately 1/2 hour before sunset. ★

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scopes set up and the 30 people were broken up into 2 groups, half learning how to find constellations and the other half viewing through the scopes. Viewing was quite good and we were treated to an excellent view of the space station as it passed overhead. Again I would like to thank all who attended. Next year the GVRD is considering hosting a large event with possibly 200 to 300 people. If they go ahead then we will have to be a bit more organized and get more of our scopes out. We are waiting to hear what they are planning but this could become a very good event.

At the August meeting, after David Dodge had shown his video of his Panama Canal cruise, we were treated to another appearance of the space station, this time with the shuttle attached to it. It rose above the trees in the west, gaining in brightness until it passed Altair. It was so close we were sure the station was going to occult the star. It was amazing to see the two objects so bright and so close. A collective 'ooh' came from the 20 or so members who had stayed to watch.

After passing Altair we were able to follow the station until it entered the Earth's shadow and dimmed until it winked out. The space station is definitely worth a look so make sure you check it out.

At the Mount Kobau Star Party this year, the speaker list included two Vancouver Centre members and one past member to entertain. Lee Johnson started the talks off with a description of the objects we could see in the night sky (provided they had been clear). I followed Lee with a short talk on the process of designing, manufacturing and building a large aperture telescope using slides of the Gemini projects. Gary Seronik spoke on Friday about the process of life at Sky and Telescope magazine. It is always a treat to see Gary again and this year he brought along his newest travelling telescope, a 8" f/4 dobsonian which collapses down to a box 15" x 14" x 10". The views through this scope were awesome and we should all be looking for the upcoming article. On Saturday night we were finally able to see some stars and most of us stayed up until very late in the morning. We were

treated to what is probably the most spectacular meteor I have seen in my life around 9:30 Saturday night. I spoke with Gary afterwards and he agreed that it was the brightest and longest he has ever seen. We were treated to clear skies the rest of the night and I know Jason was able to get some good data with his CCD. We might be treated to some of the images he took at an upcoming meeting. It was very interesting learning how the process of taking these images was done and I would like to thank him for a great time.

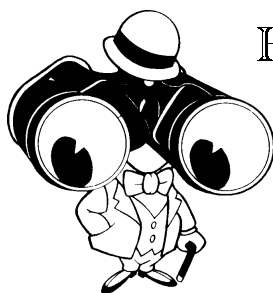
This month we have Dr. Sun Kwok as a guest speaker. Dr. Kwok will speak on planetary nebulae. Next month we will be treated to a talk by Dr. Alan Hildebrand on impact craters. I am sure mention will be made of the crater in the Yucatan which ended the life of the dinosaurs. I look forward to seeing you all at upcoming meetings.

“’Tis the stars which beckon  
man's spirit and set our souls adrift”  
— Oliver Wendel Jones, *Berke  
Breathed*, *Penguin Dreams*, 1986. ★

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