

NOVA

NEWSLETTER OF THE VANCOUVER CENTRE RASC | VOLUME 2007 ISSUE 3 | MAY/JUNE 2007

CGRT – May Update	1
Comet McNaught	2
President’s Message	3
Observing Sites	4
For Sale	5
Upcoming Events	6
CAROp Report	7

Looking Ahead

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

May 10: Dr. Levon Pogolian, SFU Physics: Cosmology for Curious Minds: how we know what we know, what we do not know, and what we can hope to know about our universe.

Jun. 14: Mel Bartels: Universe-Designed Telescopes.

Jul. 7: Ray Villard of the Space Telescope Science Institute on the latest from Hubble. Meeting to be held at SFU.

Next Issue Deadline

Material for the July Nova should be submitted by Monday, July 2, 2007. Please send submissions to:

Gordon Farrell (gfarrell@shaw.ca)

Title image: Jason Rickerby

The Chris Graham Robotic Telescope

by Craig Breckenridge

Progress on the operations procedures for the CGRT have reached a point where they are substantially complete and tested thoroughly. While we still get an occasional glitch while operating,

most of the time we know the solution. The procedures for both scripted operation and manual imaging are quite well defined and the procedures for guided imaging

continued on page 6



M97 (unprocessed) with several “faint fuzzies” to the left of it

• IMPORTANT NOTICE •

The July meeting will be held on Saturday, July 7 at SFU, room C9001 at 7:30pm. There will be NO MEETING on July 12.

In a recent astronomy magazine article I read, the author wrote about a few of last year's brightest comets. He wrote of Comet Bernard (177P) and Comet Faye (4P) and his enjoyment of seeing these interlopers of our solar system. He also wrote, "The important thing is to grab your scope and get as far away from town as you can." What amused me was that I had been at the Mount Kobau Star Party and the Merritt Star Quest and I had attempted to observe the same comets but without success.

On October 20, 2006, I did manage to observe Comet Swan (C/2006 M4) at a viewing site twenty minutes from my home. And my log book shows that on May 3, 2006, I managed to get a glimpse of Comet Schwassmann-Wachmann (73P) from my back yard just before midnight. These faint fuzz balls were hunted down with the use of some good computer-generated star charts.

In early January of this year, we were treated with a visit by another traveller of our solar system, Comet McNaught (C/2006 P1). The constant change in our night sky makes it important to be in touch with what is happening and take advantage of new events when they occur. Comet McNaught was a surprise—a delightful surprise. I was totally unaware of its presence until I made a call to another Vancouver Centre member and learned that he was out tracking down this invader from the Oort cloud. I was a little

disappointed because it was too late for me to get to the observing site but at least I knew it was there.

I planned to head out the next night but cloud cover stopped that observing session. On January 13, 2007, the skies cleared up and I was determined to locate this comet. I knew I had to be at the site about half an hour before sunset and I knew this would be my last opportunity to observe McNaught from my northern location. I got all of my equipment ready and then I had to wait for my car to get home. My wife had gone shopping up town and I was without transportation. She arrived home just at 16:30 and I hurriedly threw everything into the car and headed to my observing site in Pitt Meadows.

I arrived at the site at 16:40 just as the Sun was setting and rushed to set up a small, 150mm reflector I had brought along to observe my target. In my rush to get to the site I had left my eye-pieces in the carport at home. Fortunately I did have my binoculars and tripod and I quickly set up to search for the comet.

It was easy to locate Venus about ten degrees above the horizon at about 230° azimuth and I knew the Comet would be somewhere between Venus and the setting Sun. Sure enough I located it with the binoculars about one degree above the horizon. I noted that a tail was fanning out from both sides of the nucleus. I was even able to observe a bright speck

in the sky with an unaided eye. With twilight just beginning and the past experience of finding comets in dark skies I understood how bright this comet really was. I continued to watch this bright spot in the sky until it disappeared in a band of cloud about half a degree above the horizon.

It isn't necessary to make a long trip to observe the night sky. There are many interesting objects that can be observed from your own back yard or at a nearby dark site in your own community. Experiences learned in your back yard will make those few times that you can get away to a really good observing site much more rewarding.

Next time I will go back to basics and start my session with an equipment checklist, at least until I become an experienced observer.

While I will agree that you will find many more dark-sky wonders at remote, secluded locations, there are many factors that make up a successful observing session. The author of the article on comets I spoke of earlier has forty years of experience hunting deep sky objects. That is an important part of observing. I think it is just as important to get out and take advantage of any observing opportunities available at locations with quick and easy access, even your own back yard. ★

President's Message

It's hard to believe that we are nearly half-way into the year and have barely been out observing! The skies have not been great and our two planned sidewalk astronomy events (March 17 and April 14) were clouded out. Thankfully, the skies in New Mexico were clear, so thanks to Chris Graham and Craig Breckenridge who imaged most of the Messier objects with the CGRT. Now we need image processors! If you can help, please see Craig for details.

Our last member meeting featured Dr. Dennis Danielson from UBC who told us about the early influences on Copernicus and how this helped shape our early understanding of the universe.

Vancouver had a very successful Astronomy Day 2007! We had lots of families with kids turn out for a day of fun at the H.R. MacMillan Space Centre where all of our activities were held. While the sun was out, there were no sun spots to be seen! The evening was clouded, so we didn't get any night sky observing, but we did show the public a live demo of our Chris Graham Robotic Scope and did some imaging in the dark New Mexico skies.

Throughout the afternoon, we had presentations on telescope basics, solar eclipses, light pollution issues, our universe in general, what's in our night sky and amateur observatories around the world. We also had various activi-

continued on page 4

2007 Vancouver Centre Officers

President Pomponia Martinez
604-215-8844 pomponia@telus.net

Vice-President Brian Morse
604-267-6717 bmorse@napiere.com

Past President Ron Jerome
604-298-3292 jerome3292@shaw.ca

Treasurer Bruce MacDonald
604-882-3820 brumac@gmail.com

Public Relations David Dodge
604-739-3281 astronomyguy@shaw.ca

Nat'l Rep./Secretary Jason Rickerby
604-502-8158 rickerby@dccnet.com

Director of Telescopes Bob Parry
604-215-8844 robpar@telus.net

Nat'l Rep./Merch. Doug Montgomery
604-322-3345 moondoug@home.com

Librarian William Fearon
604-317-9027 williamfearon147@hotmail.com

Membership Suzanna Nagy
604-682-5111 suzannan@slatervecchio.com

CAROp Cmte. Wayne Lyons
604-467-2956 lyonsw@shaw.ca

Nova Editor Gordon Farrell
604-734-0326 gfarrell@shaw.ca

Webmaster Simon Johnston
604-616-7009 simonjohnston@shaw.ca

Speakers Barry Shanko
604-271-0615 barryshanko@telus.net

LPA Cmte. Chris Dolman
604-707-0089 cdolman@telus.net

CGRT Cmte. Craig Breckenridge
604-437-3103 craig.breckenridge@shaw.ca

Trustees
Sally Baker 604-324-3309
Karl Miller jkmiller@direct.ca

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 Thursday of every month. Guests are always welcome. In addition, the Centre has an observing site where star parties are regularly scheduled.

Membership is currently \$58.00 per year (\$34.25 for persons under 21 years of age) and can be obtained by writing to the Treasurer at the address on page 5. 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 or mailed to the address on page 5.

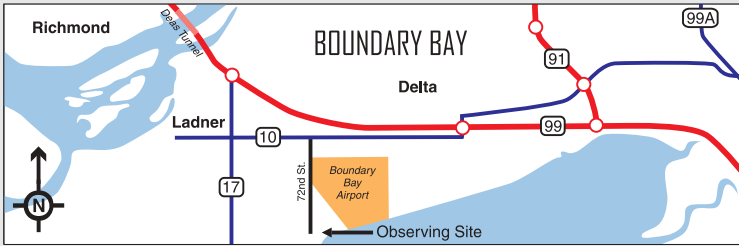
Advertising

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.

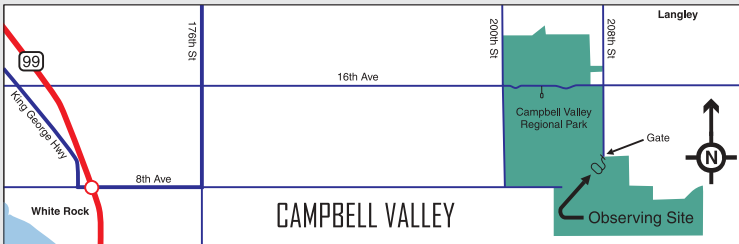
Commerical Rates

1/4 Page: \$15.00 per issue
1/2 Page: \$25.00 per issue
Full Page: \$40.00 per issue
Rates are for electronic or camera-ready files. Payment, by cheque, must accompany ad material. Make cheque payable to:
RASC Vancouver Centre.

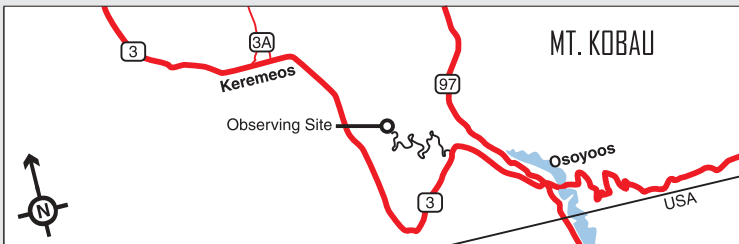
OBSERVING SITES



Site of the regular Saturday night star party. On the dike at the foot of 72nd St.



Our alternate observing site. Contact Bruce MacDonald (604-882-3820) to see if this site is in use.



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

continued from page 3

ties and displays of moon missions and a variety of astronomical curiosities including mars rock. Our keynote speaker was Dr. David McKay from NASA's Johnson Space Centre. He spoke about the evidence of microbial life on Mars. Sandwiches and chilli fuelled our two dozen volunteers who worked enthusiastically throughout the day. Their help was greatly appreciated.

Our June 14th members' meeting will feature Mel Bartels who

will tell us about "Universe-Designed Telescopes – Innovation in amateur telescope design." If you are thinking of developing or modifying your scope or are just interested in the latest new designs, please join us. Mel has also enthusiastically agreed to join us for a workshop that is being organized by Craig Breckenridge for designing telescope mounts for the camera lenses that were donated by Global TV. The workshop will happen at the GMSO on Friday, June 15th from 9:00am to noon. Please

sign up with Craig.

On June 28 to July 1, the Astronomy Roundup will take place in Calgary. The event will host the RASC General Assembly as well as delegates from the American Association of Variable Star Observers (AAVSO) and the Association of Lunar and Planetary Observers (ALPO). Check details out on the www.rasc.ca site. This promises to be a very exciting event.

Our July 12th meeting is going to be cancelled and we will be

continued on page 5

For Sale

FOR SALE--14.5" Night Sky Dobsonian Scope, in like new condition, used very little. Has Pegasus mirror, Sky Commander setting circles, Feathertouch focuser, primary fan, 14ah electrical package, equatorial platform and much more. Have \$7000 invested, asking \$5000.

Keith Eisler
604-539-8690
email: k.eisler@shaw.ca

FOR SALE--Konus 120mm F/8.3 refractor in very good condition, includes 6x30 finder & mounting rings, also EQ3 mount complete with RA & Dec motors, hand controller, battery pack, polar scope & heavy duty tripod. Asking \$450.

Keith Eisler
604-539-8690
email: k.eisler@shaw.ca

continued from page 4

hosting Ray Villard, PR director for the Hubble Telescope, on Saturday, July 7, 2007 instead. This will be dedicated to the first Paul Sykes Annual Memorial Lecture. This year's lecture will take place at SFU in Burnaby.

Our next planned sidewalk astronomy is for May 26th, so let's hope for a clear night sky!

Best wishes,
Pomponia ★

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.

RASC-VC on the Internet

<http://www.pcis.com/rascvan/> or
<http://www.rasc.ca/vancouver>

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, \$80 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.hrmacmillanspacecentre.com/>

MEMBERSHIP HAS ITS PRIVILEGES!

New members, did you know? The Vancouver Centre has 8 telescopes available for loan free of charge! We have telescopes ranging from 60mm to 10" diameter. For more information see Bob Parry, Director of Telescopes in the meeting room of the GSO after the members meeting. All telescopes are to be picked up and returned at the GSO. The loaner period is for one month, to be returned after the next meeting. Telescopes are not allowed to circulate outside of these meetings. You can now reserve two different telescopes per year and use what is left at the end of the meeting anytime. Bob can be reached at 604-215-8844.

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 Boundary Bay on the dike at the south end of 72nd St. in Delta (see map on p. 4). We are there most clear Friday/Saturday nights. Contact Jason Rickerby at 604-502-8158.

RASC
1100 Chestnut Street
Vancouver, B.C.
V6J 3J9
604-738-2855

May

26 – Sidewalk Astronomy at David Lam Park in Yaletown

August

11 – Perseid meteor shower
11-19 – Mt. Kobau Star Party

December

13 – AGM

June

18-22 – Astronomy Roundup (GA 2006) in Calgary
23 – CARO tour

September

8-16 – Merritt Star Quest
22 – Sidewalk Astronomy at the Inukshuk at Sunset Beach

continued from page 1
are next on the list.

The operations team has a huge number of colour images on the FTP server that are available for the processing team to work on.

We took over 500 images during the 2007 Messier Marathon opportunities through Red, Green and Blue filters. This allows the image processing team to produce colour images of the objects targeted. Any one who wishes to get involved with processing the images or learn-

ing how to do so can get in touch with Vice President, Brian Morse, head of the processing team.

I've been working with a couple of members from Maple Ridge who are learning the art of computer-controlled telescope operation and imaging. One of the things that they have been quite interested in is the depth of magnitude the

CGRT telescope and camera can capture. We have several images only 30 seconds in length that are reaching star magnitudes in excess of 19 or 20. It's getting hard to identify these as we are running



M105 (centre), NGC3384 (lower left) and NGC3389 (upper left)

out of catalogues that go that faint. Currently we have been comparing our images to the USNO database.

As I've been playing around with the images Chris and I have been taking, I have come across many delightful surprises around familiar objects. I will include a couple of images with this article

that have only been calibrated and had no further processing. Look around M97 and M105 for some of the faint fuzzies that I was pleased to discover captured in these images. Some of these im-

ages should be spectacular when processed by someone who knows how to do this properly. I've also included an image of M57 which shows the elusive IC1296 galaxy that is in the same telescopic field as the popular planetary. Those of you who were at Kobau this year

may remember Lee and I going on a hunt for this challenge object.

The last item to report on is the status of the move to SFU for the CGRT Control Room. SFU is currently installing a second internet connection for us so we can have our own FTP server for transferring images rather than having to pay

continued on page 7

This month has been disappointing with progress at the telescope. We have only been able to have one session and have put in about 14 person-hours at the observatory. We have taken a few images and need to attend a few sessions with the CGRT Group to learn more about processing.

The caulking on the skirt seems to be keeping the rain out of the dome although the current rains are not as heavy as those throughout the winter.

Work parties at the observatory did not happen and it is get-

ting difficult to get the time to get up there. I am still hoping to get up there soon.

The Loon Lake Research and Education Centre is still interested in presentations to non-profit groups at their site and are asking for an outline of what we could offer. I need to have a list of members interested in putting on a talk about astronomy. There would also be an observing session to accompany the talk. Please contact me with information about how you can help out.

There will be an Open House/

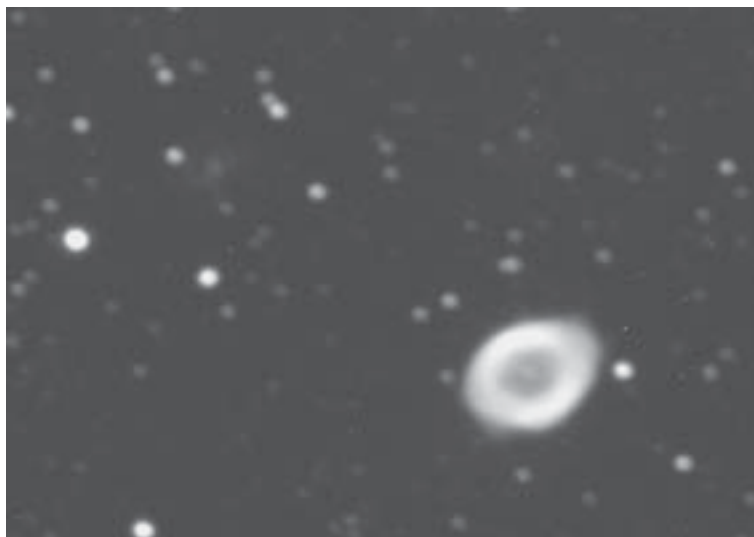
picnic at CAROp, or actually my home, on Saturday, June 23 at 13:00. To help plan for the day, registration will be taken at the May 11 General Meeting. Any other members interested in attending this event may contact me before May 31, 2007 to be included. More information is posted on the website under CAROp.

★

Wayne Lyons,
Chairperson, CAROp
Tel: (604) 467-2956

continued from page 6

for hosting by a commercial server. Once that is done we shall make the move and relocate the control room to the Burnaby Campus. This move is part of our desire to expand the contacts the centre is making throughout the lower mainland and increase the opportunities for membership participation. It also allows us to provide access to the students of SFU who can participate in science projects with the telescope. We are very excited to be partnering with SFU's Department of Physics and thankful to them for the use of the office and connections. *[Editor's note: all images for this article are unprocessed]* ★



M57 (lower right) and IC1296 (upper left)

Proud To Serve Vancouver's Astronomical Community



Vancouver Telescope Centre

3303 West 4th Avenue, Vancouver, BC, V6R 1N6, Canada

Phone: (604) 737 4303 Fax: (604) 738 5717

Web: www.vancouvertelescope.com