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### **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 Ray Whittick Lounge.

**May 13:** Bob Parry describes his Tupperware Observatory at Cultus Lake.

June 10: TBA.

#### **Next Issue Deadline**

Material for the July Nova should be submitted by Monday, Jun. 28, 2010. Please send submissions to:

Gordon Farrell (gfarrell@shaw.ca)

Title image: Jason Rickerby

### **Astronauts & Helicoptors?**

by Wayne Lyons

Last March, the RASC-Vancouver Centre selected a group of seventeen people to attend a Safety Symposium sponsored by the CHC Helicopter do astronauts and helicopters have in common?

Captain Cernan talked about professionalism and paying atten-



Captain Eugene Cernan (centre) and special guests from RASC-Van

Corporation. They were local students and astronomy enthusiasts chosen for their dedication to the advancement of Astronomy. I was fortunate to be one of six lucky raffle ticket winners allowed to accompany the group. We were all invited to attend the opening lecture of the Symposium, a talk by Captain Eugene Cernan, the Last Man on the Moon. I did have to ask myself, what

tion to every detail of the vocation that you may be involved with. In situations where split second decisions can mean success or failure, it is important that a simple thing like an instrument indicator light does mean the same thing to every pilot operating an aircraft. Even the direction a switch is turned on (up or down) can lead to disaster.

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AOMO Report by Wayne Lyons

It seems like forever since my last report on our observatory and I would like to say there has been much accomplished at AOMO. Unfortunately, on the few good evenings that were available in April, I was unable to make use of our observatory.

We did manage to have two Tuesday evening training sessions at the observatory and worked on getting familiar with the equipment. It is now time to get out on those clear evenings and find the limit of our equipment.

In my March report, I had an image taken by Masoud Rafiei with his DSLR camera & tripod. His image of our observatory taken at that time is included in this report. If you look closely in the upper right section of the image, the laser pointer from the UBC Liquid Mirror Project is visible in this image. Masoud did come out

to our observing site at Pitt Lake in March and has taken more images that I am hoping he will submit to our Newsletter.

I am hoping to hold an observing session at a lookout site deep in the Research Forest soon. The planned dates are Saturday, May 15<sup>th</sup> and Saturday, June 12<sup>th</sup> and if there are any members interested in attending, please contact me as soon as possible. ★



### President's Message

Anne & I had the pleasure of spending the first three months travelling in warm and sunny climates which included Nicaragua, Ecuador and Mexico. We enjoyed our Spanish lessons and family stays in Nicaragua, but were especially looking forward to Ecuador and a visit to the Galapagos. Remarkably, this is a place where wildlife and people do coexist comparatively well. Predatory human behaviour has been minimized and it is possible to stand nose-to-nose with an adult sea lion, except the rules demand that visitors keep their distance from the local inhabitants.

On our last evening in the area, our boat was anchored in a bay near Puerto Ayora, home to the Charles Darwin Research Station. It is also a supply station for boats as well as an excursion point for tourists. The nineteen passengers on our vessel were lounging on the foredeck under a comparatively dark sky. The prow of the boat was pointed toward the south and the stern toward the north, so in a matter of moments it was possible to visit both celestial hemispheres. At Anne's suggestion, I offered to give an impromptu introduction to the night sky. There was a preponderance of young adults who were as keen to learn about the stars as they were the geology and biology of the islands. Their enthusiasm was certainly inspiring and I pointed out as many things as I was able. It turns out that there is a "false" southern cross that rises earlier than the "real" one and we all left thinking we had continued on page 4

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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 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 \$70.00 per year (\$41.00 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.

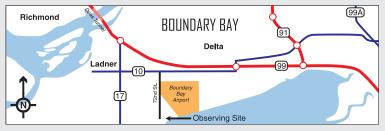
### **Advertising**

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.

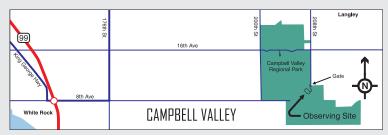
### **Commerical Rates**

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 cameraready files. Payment, by cheque,
must accompany ad material. Make
cheque payable to:
RASC Vancouver Centre.

# OBSEKAING SILES



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

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seen the real one (I should have remembered my first sighting of the legitimate one at 3:00am on another trip). I did see a rather large, hazy patch that I thought was a transitory cloud but its stability and uniqueness finally led me to conclude it was a cloud of a different sort—the Large Magellanic Cloud. That was a first.

In Quito, Ecuador's capital, I had sighted an observatory as we travelled through the city but was told that it was only used by the military. It turns out there is a second, El Observatorio Astronomico, only a half hour walk from our hotel. Anne and I visited the site on a Sunday morning the day before we left. It is a beautiful three-turreted building in a Victorian style, constructed in the 1870s and reported to be the oldest observatory on the continent. It stands in Alameda Park along with commemorative statues honouring members of the 1736-44 French Académie des Sciences expedition that surveyed Ecuador. It is reported to house the original telescope equipment as well as the surveying

instruments from that expedition. Unfortunately, it was closed on our visit but I understand on clear evenings that it is open for viewing. With a surrounding population of some 1.5 million, I am sure the light pollution has overwhelmed the seeing, much as it does in Vancouver. The city also sits at the bottom of a bowl with an occasionally active volcano on its western flank.

Our travels in Mexico included a visit to the famous Mayan site of Chichén Itzá. One interesting

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feature is the Observatory, also called El Caracol. The building is named after the Spanish word for conch, due to its interior winding staircase leading up to the top. The 10th century observatory is quite unique in Mayan architecture and one of Chichén Itzá's most important buildings. Stones could be removed from the dome, enabling the Mayans to better isolate and study the stars. The Observatory was built over several centuries and is thought to be more Toltec, although the base is originally Mayan.

The most important temple there, El Castillo, was originally built before 900 AD. It was more calendar than observatory. Many of you may know that the number of steps on each of the four sides is 91, adding up to 364, which together with the top platform equals the number of days in a year. On the days of spring and fall equinox, the edge of the shadow from the sun falls exactly on the corner of the pyramid, leaving one side in total sunlight and the other in total shadow. Furthermore there is a shadow running down the north staircase taking the form of a snake; hence the carved snakeheads at the bottom of the staircase as well as the pyramid's Mayan name Kukulkán, the plumed serpent god.

The remarkable astronomical knowledge of the Mayans, the Aztecs and the Incas continues to raise a multitude of questions but it clearly points to human fascination with the earth, the heavens and the relationship between them. My modest foray into astronomy has been made more continued on page 6

### LIBRARY

The centre has a large library of books, magazines and old NOVAs for your enjoyment at the GMSO. 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://rasc-vancouver/ or http://www.rasc.ca/vancouver

Details of upcoming meetings and events can be found at our Meetup group at:

http://astronomy.meetup.com/131/

### 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 GMSO after the members meeting. All telescopes are to be picked up and returned at the GMSO. 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

21 – Dunbar Star Party at Chaldecott Park @ 9:30pm.

### **August**

7-15 – Mt. Kobau Star Party 12 – Perseid meteor shower 21 – Starry Night at Deas Park (7pm to 10 pm).

### September

4-11 - Merritt Star Quest

### October

11-17 – International Astronomy Week II

#### December

9 – AGM

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interesting by the opportunity to integrate it with history and culture—a great reason to travel.

In my absence, the Centre has performed quite nicely. While this year has been much less hectic than the IYA, we continue to look for ways to raise our public profile. We helped sponsor a Night Sky exhibit at UBC and found a home for some of the images at the Space Centre. Craig Breckenridge generously opened up his new telescope manufacturing facility to the membership in February. Our chance to share the visit of Astronaut Eugene Cernan with some of our members as well as a number of students was very gratifying. Ed



The observatory in Quito

Hanlan wowed an audience at the



The pyramid at Chichén Itzá

Roundhouse with his Aurora show and helped strengthen our relationship there. The fine speakers from UBC and the anniversary visit of Ray Villard from Hubble continue to draw members and the public to our events. The SuperNova crew completed the final episodes of a great educational series now posted on our website. We are grateful to all the contributors to all our activities.

"Thank you!"

- Ron Jerome ₩

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He also talked about the risks involved in order to progress. Final decisions are made on acceptable risks. Once you have learned and have the skills to complete your task, there will still be some decisions to be made based on risk. A passion for your occupation and a desire for success are essential.

I found it very interesting that this highly trained, scientifically minded Commander of the Apollo 17 Spacecraft was able to look back at his home planet suspended in space and find it difficult not to believe that the scene he was viewing had not been designed be a creator.

At the conclusion to his talk, Captain Cernan was questioned about the future of the Space Program under President Obama. Even without any words, his position on the question was quite obvious. What was important was his certainty that the Space Program would continue even if temporarily slowed down. The desire to reach the stars has provided challenges to motivate and inspire progress in the human race.

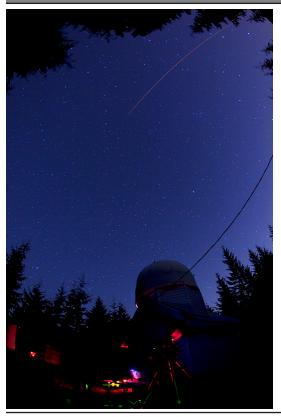
Another question asked was his opinion of a one-way trip to Mars as advocated by Buzz Aldrin (Apollo 11, Pilot). His short answer was, "Is that the same Buzz Aldrin who is on Dancing With the Stars?" Captain

Cernan had no doubts that any human missions into space will have a return option.

The talk by Captain Eugene Cernan was inspirational for all who attended. Astronauts, helicopter personnel or in fact people of any occupation need to share a common desire to be professional about their work habits and passionate about a positive outcome.

Thanks again to the RASC-Vancouver Centre and Adrienne White, the Conference organizer with CHC, for providing the opportunity to attend this talk. \*

### **Members' Gallery**



### AOMO Masoud Rafiei

The orange laser beam of UBC's Liquid Mirror Telescope aims toward the Big Dipper on a starry night at the AOMO Observatory in Maple Ridge. In the foreground, Leigh

Cummings, an RASC member, has set up his telescope for the celestial part of "Terrestrial/Celestial Nature Forays." Proud To Serve Vancouver's Astronomical Community



# Vancouver Telescope Centre

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