# Skynews



Chris Gainor's book "Arrow's to the Moon" on the space program found a fan on the ISS, Canadian Astronaut Bob Thirsk

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## Guest Speaker

Dr. Walter Hilse

#### June 9, 2010 - A Tour of Select Constellations

Dr. Walter Hilse is a RASC Victoria Centre member who lives in New York City.



As anyone who has attended TravelQuest's Costa Rica Southern Sky Party over the past few years will attest, Walter's tours of the constellations are not to be missed. Walter's encyclopedic knowledge of the night sky is legendary, and for this one time only, he will give Victoria Centre members a constellation tour they will not soon forget!

## Presidents Message

Our Light Pollution Abatement Committee has been developing a strategy for addressing the tricky issue of engaging the community in the need to address the overuse of lighting. The idea it to focus our efforts, make them clearly understood and lay out achievable goals.





REDUCE - Reduce artificial sky glow in the Greater Victoria area by a perceptible level over the next 5 years (end of 2015).

RECORD - Establish the first Dark Sky Preserve (DSP) or Urban Star Park (USP) in Greater Victoria or the Gulf Islands by the end of 2011.

REWARD - Recognize and reward the efforts of local area businesses and organizations to reduce artificial sky glow in the Greater Victoria area.

Without doubt, it will take a serious effort on all our parts to accomplish these goals but we may never have as good an opportunity as we have

now given the public interest generated during the IYA. We will also be in step with a renewal of interest in light pollution abatement all over the world.

We need your help!! Please take a moment to examine the job descriptions for volunteers on the LPA page http://victoria.rasc.ca/LPA/Default. htm of our website. Then pick one that suits your interests and get involved.

John McDonald

## Historic Book Makes for Light Reading

Many Victoria Centre members are familiar with my book, "Arrows to the Moon: Avro's Engineers and the Space Race," which tells the story of the



Canadian and British engineers who helped NASA put astronauts on the Moon after losing their jobs at Avro Canada in Toronto when the Canadian government cancelled the CF-105 Avro Arrow.

One of the more interested readers of that book was Canadian astronaut Bob Thirsk, who has spoken about how Canadian explorers and aviation pioneers have inspired him.

Early last year Thirsk asked me for a copy of the book, which he hoped to take into space with him. But he stressed that he could make no promises. On May 27, 2009, he blasted off aboard a Soyuz spacecraft to become the first Canadian to go to the International Space Station for a long duration stay. Thirsk remained on the ISS for more than six months, returning on December 1.

On May 13 this year, Thirsk and Frank De Winne, a Belgian astronaut who also flew on the ISS last year, appeared in Nanaimo, and gave me back my book with autographs from 13 astronauts, six from Thirsk and De Winne's Expedition 20 ISS crew and seven from the STS-127 Endeavour shuttle crew, which visited the ISS last July. They all signed the book on July 20, the 40th anniversary of Apollo 11's historic landing on the Moon.

Thirsk also gave me two photos of the book in the station, and a certificate. Needless to say, I was delighted to get such an unusual honour.

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Although I didn't have time to ask, I believe that my book was delivered to the ISS and back to Earth aboard Endeavour, which has a much greater cargo capacity than the Soyuz ferry that Thirsk used to get into space and back home.

One of the members of the STS-127 crew was Canadian astronaut Julie Payette, and her flight marked the first time two Canadians had been in space at the same time.

Anyone who looked up and saw the ISS pass over during the Island Star Party last July saw the ISS during the visit of Endeavour - and my book - to the station.

## Astrophotography Workshop

#### Imaging workshops this summer

These will be aimed at those who would like to get into astro imaging as well as those who have some experience and want to learn more. Now that Astro Cafe is off for the summer, Monday evenings are available for this. Weather permitting we will meet at the VCO and spend some time on the techniques for using different kinds of cameras ranging from point and shoot to digital single lens reflex (DSLR) and Charge Coupled Device (CCD) astro cameras. On theose very odd occasion when the skies were cloudy (rare in Victoria) we will spend the time indoors looking at camera gear and some of the ways images are processed.

If you are interested contact John McDonald wjmcd.mcdonald@gmail.ca

## Find us on-line

Web Site New Members General Inquiries www.victoria.rasc.ca

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### Summer Events

#### **Star Parties**

RASCals Star Party - August 13-15, 2010

Victoria Centre has held successful RASCals Star Parties annually from 2000 through to present. The new location is the Metchosin Cricket Field, located a few kilometres west of Victoria in a dark rural area.

Website <a href="http://victoria.rasc.ca/events/StarParty/Default.htm">http://victoria.rasc.ca/events/StarParty/Default.htm</a>

Island Star Party - September 3-5, 2010

Our good friends at the Cowichan Valley Starfinders host this star party each year. This is the 15th annual ISP, so come help to celebrate this milestone event!. The new location is Bright Angel Park located south of Duncan in a dark rural area.

Website <a href="http://www.starfinders.ca/starparty.htm">http://www.starfinders.ca/starparty.htm</a>

Mount Kobau - August 7 - 15 http://www.mksp.ca/

Saskatchewan - August 12 - 15

## HUBBLE at the National Geographic IMAX Theatre, Victoria, BC.

Narrated by Leonardo DiCaprio and vividly captured with IMAX technology, HUBBLE recounts the amazing journey of the most important scientific instru-



ment since Galileo's original telescope and the greatest success in space since the Moon Landing - the Hubble Space Telescope. HUBBLE will also reveal the cosmos as never before, allowing viewers of all ages to explore the grandeur of the nebulae and galaxies, the birth and death of stars, and some of the greatest mysteries of our celestial surroundings, all in amazing IMAX.

### Public outreach activities

#### **Annual Beaveree 2010**

Many thanks to the volunteers who braved the dismal weather conditions at Camp Barnard, shared their enthusiasm of astronomy with about 200 Beavers and their leaders at their Annual Beaveree.

To be ready for the visitors by 10:00am, Stephen Courtin and I arrived at the site around 8:00am and were greeted by a misty rain. This is the third annual participation by Victoria Centre at this event and have always experienced great weather. In the past we have had four to five telescopes for viewing the Sun and planets, however this year the mighty Sole stayed hidden behind lowly water vapour.

After some discussion we decided to go ahead with the setup of the Solar System scale model. Bill Weir and Constantine Thomas arrived and we were ready to entertain the crowd. Considering the absence of telescopes, the scale model of the Solar System provided plenty of opportunity for us to engage with the visitors.

There were moments when we could have used some additional volunteers, especially at the handouts display table. All in all it was a very successful day; we were able to connect with 200 plus Beavers and parents.

Many thanks to Stephen, Bill and Contantine for making this day a memorable event.

Sid Sidhu 250 391 0540

## The future of the RASC

Lauri Roche and I are participating in a panel discussion on the future of the RASC at the GA in Fredericton, and would welcome Victoria Centre member's ideas for provocative and constructive discussion in that forum. As a fairly loose federation of amazingly creative and active local clubs in the process of hiring its first Executive Director, what could the RASC do better, for instance:

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- to remain an appealing organization for its members?
- to attract more diverse participation, including youth?
- to sustain or enhance the education and public outreach activities carried on throughout Canada?

Bring your ideas to the meeting or email us with topics you suggest be raised at the GA.

Jim Hesser

### Latest News

#### **SOMETHING HAS JUST HIT JUPITER**

Veteran amateur astronomers Anthony Wesley of Australia and Christopher Go of the Philippines have independently observed an impact event on Jupiter. The strike occurred at 20:31 UT on June 3rd and produced a bright flash of light in the giant planet's cloudtops. Visit http://spaceweather.com for images and video.

#### RASC IYA Effort Acknowledged by IAU

On 2010 May 5 the RASC was presented with an International Year of Astronomy 2009 Certificate of Appreciation by the International Astronomical Union, signed by the president of the IAU, Professor Robert Williams, former director of the Cerro Tololo Inter-American Observatory (CTIO), and of the Space Telescope Science Institute (STScI), and Professor Catherine Cesarsky, IAU past president and former Director General of the European Southern Observatory (ESO).

This certificate is a public acknowledgement of the energetic and impressive effort of the RASC working as a national organization composed of centres and individuals to make IYA2009 such a success. All RASC members can feel proud of their national effort, which contributed to the impressive figure of nearly 2 million Galileo moments, achieved in partnership with the FAAQ, CASCA, and unaffiliated astronomy clubs and amateur astronomers.

Many individual RASC members also received IYA2009 Certificates of Appreciation from the IAU, and to all we offer our thanks and congratulations. The Canadian achievement on the 400th anniversary of Galileo's

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epochal telescopic discoveries provides a firm foundation upon which to further our education and public outreach.

This following link will take you the RASC Web site to view and/or download the PDF certificate. http://www.rasc.ca/im/education/IYA2009\_Certificate\_RASC.pdf

#### **Crew Embarks on 520-Day Mock Mission to Mars**

Six men from Europe, Russia and China embarked on a 520-day mock mission to Mars, heading out to a crew module in a warehouse in Moscow and locking the hatches behind them today. The mission runs from June 2010 to November 2011, and like a real Mars mission, the crew will live and work like astronauts, eating special food and exercising the same way as crews aboard the International Space Station. Additionally their communications with their mission control and anyone else from the rest of the world will have a delay of up to 40 minutes.

A joint project between the Russian space agency and ESA, officials said the mood was serious, intense but very determined in the Mars500 facility at the Institute of Biomedical Problems in Moscow as the crew talked to the press and then walked into the modules. Diego Urbina and Romain Charles from Europe, Sukhrob Kamolov, Alexey Sitev, Alexandr Smoleevskiy and Mikhail Sinelnikov from Russia and Wang Yue from China will have a mission that is as 'real' as possible. Their mission is to 'fly to Mars' in 250 days, divide in two groups, 'land on and explore Mars' for a month and 'return to Earth' in 230 days, in their special facility imitating an interplanetary spacecraft, lander and Martian terrain.

"It will be trying for all of us. We cannot see our family, we cannot see our friends, but I think it is all a glorious time in our lives," said Chinese participant Wang Yue, 27, ahead of the experiment. In addition to evaluating many new technologies, Mars500 will test of human endurance and psychological issues of being confined in a small space and being away from family and friends and a normal Earth-life. The crew will be keeping online diaries and provide video updates to ESA's Mars500 site. http://www.esa.int/SPECIALS/Mars500/index.html

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#### Moon rocks from 1969 disappearing at high rate

by Mike Tolson khou.com Posted on May 7, 2010

Neil Armstrong took his biggest step for all mankind, and as if to underscore the point his employer decided to share a small token of his lunar booty with nations of the planet. It was not much, at least by size, but the offering of small chunks of lunar rock to the head of every government was a symbolic gesture intended to promote goodwill. More than 130 nations received inscribed plaques adorned with small replicas of their official flags — which had made the trip to the moon and back — along with a thumb-sized bit of black igneous rock beneath a Lucite shield. In mineralogical terms, the pebbles had no real value. But there was no beating them for rarity.

Years later, the fate of those Apollo 11 moon rocks, as well as a second goodwill offering in 1973 that followed the Apollo 17 mission, is in many cases an embarrassing mystery. Some likely are in archives and cannot easily be located. But others have disappeared with deposed dictators, aging government officials or crooked former bureaucrats. Every once in a while, one shows up in the shadowy recesses of illicit private commerce accompanied by a multimillion-dollar price tag and a noquestions proviso.

Joe Gutheinz, a retired investigator with NASA's Office of Inspector General, has spent a fair portion of his adult life chasing missing moon rocks, determined to restore them to their rightful owners. The 54-year-old Gutheinz, who teaches an online class in investigative techniques for the University of Phoenix, has repeatedly used the missing rocks as an assignment for his students. They have been able to determine that 90 or so nations cannot account for the precious pebbles.

"The moon rocks are disappearing," Gutheinz said. "Most of the ones that are now truly gone will probably be gone forever."

A few victories

It's been a fascinating pursuit, and mostly fruitless. But every so often he managed a hit. In 1998, for instance, he set up a successful sting operation to recover the moon rock from Honduras.

"We formed a company called John's Estate Sales and took out a quarter-page ad in USA Today saying 'Moon Rocks Wanted,'" Gutheinz recalled. www.collectspace.com, put together a list of nations and the status of their moon rocks. In an e-mail, he said that a fair number of the rocks currently unaccounted for will, in time, be located in archives or storage. Unlike Gutheinz, Pearlman is optimistic of the eventual return of many of those that were purloined.

A response led to a website where pictures of the plaque and rock were posted. After two months of prompting, the owner went to Miami. "He thought we might be undercover agents from the beginning," Gutheinz said, "but the lure of \$5 million was too much."

More recently, Gutheinz played a role in flushing out the owner of the goodwill moon rock that was intended to go to the government of Cyprus in 1973. The official presentation never happened because of the sectarian strife that wracked the island nation at the time. Rather than return the rock to NASA or the U.S. State Department for safekeeping until order was restored, an American diplomat kept it for years, then gave it to one of his children, Gutheinz said.

The world's leading authority on space-related artifacts, Robert Pearlman, reported to NASA in 2003 that the Cyprus rock had been offered for sale.

Pearlman believes that the diplomat who originally had it probably had no ill intent in keeping it. Embassy personnel had been evacuated from the island, and he may have simply been at a loss at whom to give it to, he said. Apparently, later governments of the divided nation were not aware that such a gift had been offered.

Last September, Gutheinz made a formal request for a Congressional inquiry into the missing rock and why it had not been turned over to the government of Cyprus. He said he had two reasons for the request. "First, to get our government to commit to recovering the moon rock, and by publicizing the inquiry place pressure on the person who had the moon rock to do the right thing and turn it over to either Cyprus or the U.S.," he said. "Chess is one of my favorite games, and I simply positioned my chess pieces. He started to realize he needed to give it back."

The rock's owner, who has not been named publicly, recently told NASA that he is willing to return the goodwill plaque. Now, Gutheinz is on the trail of two other rocks, one stolen from a museum in Malta in 2004 and one that had been in the possession of the late Romanian dictator Nicolae Ceausescu.

Hopeful for recovery

With the help of Gutheinz, Pearlman, who operates the website "Unlike in the art world, for example, where there are reports of collectors content with possessing the art for their eyes only or as investment pieces, those who tend to desire space artifacts, and specifically moon rocks, are often keen to show off their prized pieces," Pearlman said. Although Gutheinz no longer has an official role to play in chasing down the lunar rocks, he has no plan to stop.

"We gave them away, and they weren't taken care of like they should have been," he said. "They belong to the people."

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### Free to a Good Home

At our June 2nd. meeting, the RASC Victoria Centre Council decided that it was time to part with the G. Ball Observatory building. In April



2004, George's observatory was donated to the centre for what was hoped that a possible permanent site and home could be found. Efforts were made to address it's future, including a membership survey and the possibility of finding a permanent site. At that time, our finances and options limited the development of this concept.

In 2007, a land use agreement with NRC was reached, giving full access to Observatory Hill by RASC members. This was followed by in 2008, with a further agreement that the RASC Victoria Centre was permitted to build an observatory at the old 16" site. Plans and proposals were developed including the permanent placement of the G. Ball observatory on this site. In the end, a more practical approach for a larger roll-off roof design was adopted.

It is hoped that a member or local group can make full use of this amazingly well constructed rotating structure. Mr. George Ball built it back in the mid-sixties using the best of materials and design, to this day the dome is very sound and solid with many good years of usage remaining. The exterior walls and dome will required some maintenance and care involving sanding and painting. The interior would only require a good cleaning and a fresh coat of paint at the owners choice.

The 10 foot dome is in Gordon Head. Due to it's size and weight a commercial crane and trailer assembly will be required to lift and deliver it to a new site at the new owners expense. The Society is offering this astronomical observatory at NO COST to a good home. The building will require a proper concrete foundation and slab. Crane costs and construction work are estimated to be in the \$2,500 to \$3,000 range. Serious inquiries are welcomed.

For an appointment to view please contact: Bruno Quenneville at (250) 477-2257

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## Second wednesday of the month

#### **Monthly Meeting**

7:30 PM, Elliott Lecture Theatre, Rm 061, UVic.

#### As sky and interest dictate

#### **New Observers Group**

Hosted by Sid Sidhu. 1642 Davies Road, Highlands. Call 250.391-0540 for information and directions.

### By email

#### Observer/CU Volunteers/ Members email lists

Contact Joe Carr to subscribe.