



**July 2019 - Volume 14, Number 7**

We welcome your comments on the *Bulletin*.  
Email them to the Editor, David Garner at  
[bulletin@rasc.ca](mailto:bulletin@rasc.ca)

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## **Landing On The Moon**

by **Clarence Underwood**

*Fifty years ago, everybody was in the know!  
The world waited in anticipation, dignitaries  
made their reservations. The rocket was  
ready to go, we all gathered to watch the show.  
5-4-3-2-1, lift off. They were on their way, at the  
TV people did stay. Houston, the Eagle has landed.  
And the rest is written in our history. Time to return  
to the Moon. This time to stay! Perhaps we will  
grow and maybe Mankind will finally find its way!*



Everyone look up this month. July 20th will mark the 50th anniversary of mankind's first landing on the Moon.

## **News from the Society Office**

by **Randy Attwood**, RASC Executive Director

## **2019 General Assembly Wrap-Up**

The 2019 General Assembly was held on the campus of York University in Toronto June 13 – 16. This year, the American Association of Variable Star Observers held

their spring meeting along with the RASC's GA. It was a pleasure to host them at the GA and to meet the many members of the AAVSO.

Thursday was reserved for business meetings. The RASC Board and National Council held meetings. That evening, many members had a chance to get caught up with friends from across the country at the Wine and Cheese party (thanks again to the anonymous sponsors!)

On the Friday, a line-up of nine excellent speakers made presentations on various topics: Canadian astronomy history, the James Webb Space Telescope, the atmospheres of Solar System planets, space illustrator Chesley Bonestell, Canadian scientific nanosatellites, and the Zooniverse, to name a few. Friday night we celebrated RASC member David Levy's career with a rollout of his autobiography "*A Nightwatchman's Journey.*" David was interviewed by *Globe and Mail* Science Writer and RASC member Ivan Semeniuk and then met with attendees and signed books.

On Saturday, members of the RASC and AAVSO gave short talks during paper sessions. That evening, we celebrated the upcoming 50th anniversary of Apollo 11 with a special presentation by James Hansen – the author of Neil Armstrong's biography "*First Man.*"

Sunday's schedule included RASC and AAVSO Annual Meetings and then workshops in the afternoon which included: Running RASC Centres, Education Outreach, Inclusivity and Diversity, Light Pollution Abatement and Youth in the RASC. The Awards Banquet included the awarding of 21 Society Awards and a special AAVSO presentation to RASC and AAVSO member Dr. John Percy, who addressed the attendees with a talk on his 50 years of astronomy outreach.

To cap off the General Assembly, a tour of the David Dunlap Observatory in Richmond Hill took place on Monday.

A big thank you to everyone who made the General Assembly a resounding success. Plans are underway to find a site for the 2020 GA. Stay tuned.

Thanks to the following for their help:

GA Committee: Randy Attwood (Chair), Andrew Opala, Allan Connery, Kirsten Vanstone , Gavin Hill, Catherine Carr.

RASC Staff: Renata Koziol, Madison Chilvers, Jenna Hinds, Miguel Del Rio and Maria Kalsatos.

Program was organized by Randall Rosenfeld.

York University Astronomy Department contacts: Charissa Campbell, Paul Delaney.

Web site: Roger Nelson.

Photography: Peter Visima.

AV recording and live streaming – Andrew Reid, Elizabeth Reid, Ward LeGrow, Blake Nancarrow, Ennio Cellucci.

Workshops: Jenna Hinds, Kirsten Vanstone, Lauri Roche, Collen O’Hare, Robert Dick, Charles Ennis, Randy Attwood.

Ticket checking: Hudson Lytle, Bryon Czarnik, Phil Chow, Gavin Hill, Katrina Ince-Lum, Tom Luton, Jack Pennings.

Outreach and Observatory Tours: Cassandra Withers, Palvisha Sharma, Elham Rahimi, Anita Nasiri, James Pascutto, Gaganpreet Sidhu, Colin Mundy, Quinton Weyrich, Ariella Sapers, Jessica Vaughan, Artash Nath, Arushi Nath, Max Hill, Gabby Gamsby, Ralph Chou, John Read, Karim Jaffer, Julien da Silva, Sabrina Albert.

A special thanks to Mary Samuel – the events coordinator at York University!



*GA 2019 Group Photo Friday 2019 June 14. Photo by Peter Visima.*



*Nicole and James Hansen:  
RASC member and CBC Journalist Nicole Mortillaro interviews Neil Armstrong biographer James Hansen,  
author of "First Man" after he gave the Ruth Northcott Lecture. Photo by Sharmin Chowdhury.*



*Ivan and David:*

*RASC member and Globe and Mail Science journalist Ivan Semeniuk interviews David Levy as part of the rollout of David's biography "A Nightwatchman's Journey – A Road Not Taken". Photo by Sharmin Chowdhury.*

## **Welcome Sudbury Centre!**

I am pleased to announce that the RASC has a new centre – the Sudbury Centre.

My wife Betty and I were honoured to attend a meeting of the Sudbury Astronomical Society (SAS) May 3 at Laurentian University in Sudbury where members of the SAS voted to apply to become the Society's 29th Centre.

At the RASC Board meeting May 15, the motion to accept the Sudbury Astronomical Society's application was approved.

On behalf of the Society, I welcome the new members of the Sudbury Centre to the RASC.

Randy Attwood, Executive Director

## **Green Laser Update**

by **Dennis Lyons**, GLP Committee Chair

In June we met again with Transport Canada and here is the latest information. First off, after the RASC makes a few changes we will be applying for a “global permit” for RASC approved GLP activities conducted by trained and authorized members. Our plan is to have the application into TC within a month and once approved it will be good for one year. For those Centres that conduct activities within 10 km of certified airports, you will need a permit. However, we will be working to provide you with a simplified process. You will be able to apply for multiple days for one location. The reason you have to apply for each location is that Transport Canada has to conduct a risk assessment on how the event could impact approach paths, etc.

The GLP committee will be working on updating the information on the website, developing a training program and proposing any policy changes to the Board that may be required. Speaking of the website you will notice that the IT committee has put a hyperlink on the top of all the pages to make it easier to find GLP information.

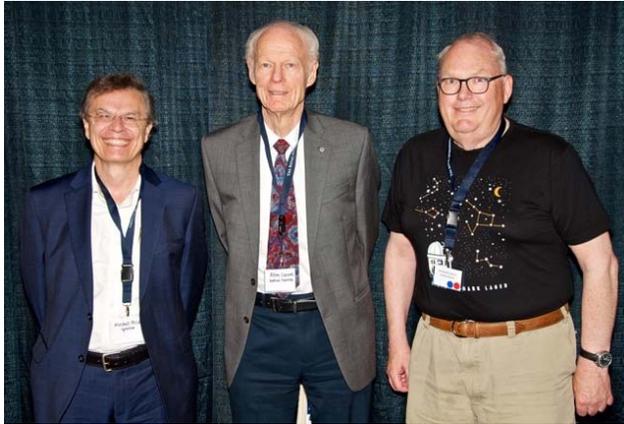
A big thank you goes out to the IT committee for this. I will continue to provide updates through the National Newsletter and other means as required. If you have any questions please contact me at [dennis.lyons.3@gmail.com](mailto:dennis.lyons.3@gmail.com)

## **RASC Fundraising Forum**

by **Lisa Di Veto**, RASC Fundraising Associate

Two significant funding announcements were made at the 2019 General Assembly. Marshall McCall, Chair of York University’s Department of Physics and Astronomy, opened the ceremonies by introducing Dr. Allan Carswell, a world renowned physicist who developed LiDAR systems and applications for airborne surveying, 3D imaging, atmospheric measurements and space systems. Dr. Carswell, President of the Carswell Family Foundation, spoke of “Philanthropic

Approaches to Community Outreach" and announced the Foundation's funding of \$100,000 a year for 3 years for astronomy education and outreach. This significant grant will allow RASC to engage a Marketing and Communications Coordinator to provide vital support for Centre and committee astronomy initiatives. The funding is matched meaning RASC must raise an additional \$100,000 which will in fact, double the value of this generous gift.



*Allen Carswell (centre) with Marshall McCall (left) and Chris Gainor (right).*

The following day, RASC Kitchener-Waterloo member Rudolph Dorner made a stunning announcement to GA attendees. Mr. Dorner pledged a \$1.5 million bequest to establish the Dorner Telescope Museum. The museum's mission is to showcase the remarkable and largely unknown story of astronomical optics in Canada from the beginnings to the present by forming a world-class institution to "tell the story" of the instruments, their makers and their users. Mr. Dorner envisions an artifact rich museum that will offer a robust interactive aspect to visitors. R. A. Rosenfeld has been named Director. Kindly contact Mr. Rosenfeld if you have museum quality artifacts to donate to the Dorner Telescope Museum. He can be reached at [rosenfel@chass.utoronto.ca](mailto:rosenfel@chass.utoronto.ca)

In advance of Mr. Dorner's will being in effect, Mr. Dorner has thoughtfully committed annual support of \$25,000.



*Rudolph Dorner (centre) with Paul Mortfield (left) and Randall Rosenfeld (right).*

We are extremely grateful to Allan Carswell and Rudolph Dorner for their visionary and exceedingly generous contributions to The Royal Astronomical Society of Canada. Their gifts will allow the Society to continue delivering its important mandate of astronomy education and outreach and support the further expansion of RASC's astronomical endeavours!

## **Observing Committee Update**

by **Blair Stunder**, Chair, Observing Committee

### **Observing Certificates**

Currently in 2019, nine members have earned a RASC Observing Certificate.

Explore the Moon - Telescope: Henry Leparskas (London)

Messier: Westcott Loudon (Calgary)

Explore the Universe: Cole Beselaera (Sarnia) and Berta Beltran (Edmonton)

Explore the Moon - Telescope: Randy Enkin (Victoria) and Larissa Awad (Mississauga)

Messier: Ingrid G. de Bude (Ottawa) and Chris Vaughan (Toronto)

Isabel Williamson Lunar: Kirby Alguire (Unattached)

The announcements of earned certificates will continue to be posted online on the respective RASC Observing page, in the Bulletin, in the National Newsletter, in the RASC section of the SkyNews, on the @RASC Twitter account and the @theRoyalAstronomicalSocietyofCanada FaceBook page.

Currently there are twenty-six centres that are local Certification Centres for the *Explore the Universe Program*. It would be advantageous to have all RASC Centres as certification centres. I will be contacting the centres not listed *convincing* them to participate in the certification program. I have been in contact the remaining centres and hopefully by late fall all RASC Centres will be able to provide certification for the *Explore the Universe Program*.

The current centres for the *Explore the Universe* can be found on the RASC website at: <http://rasc.ca/participating-centres>

Any RASC Centre with an active observing group should consider becoming a **Local Certification Centre**: The Centre must identify a member who will review and approve applications for the *Explore the Universe* certificate (ideally, that member would be an active observer who promotes RASC Observing Programs and mentors beginning observers). Send the name to the RASC Observing Chair for inclusion in the above list.

### **Observing Program Videos**

There are three Observing Videos that have been added to the RASC website: <http://rasc.ca/certificate-programs>

Thanks goes out to the Halifax Centre for their work on this project. It's a great addition to the RASC website.

## **Double Star Observing Program**

By fall 2019, we should have a Double Star observing program. Many thanks to Blake Nancarrow for the work he has put into this project.

## **Open Clusters - Binoculars Only Program**

This is just in the discussion stage but if Centres are looking to add a different twist to members viewing nights over the year, try the Open Clusters - Binoculars Program. Contact me through the RASC Observing webpage and I'll send the file out. It's in constellation sequence and sorted by magnitude. It's currently compiled as a Fall, Winter and Spring list as the more northern regions don't really have dark skies in the summer.

## **Mi'kmaw Moons Language Videos**

by **Dave Chapman**, Halifax Centre

The Mi'kmaw Moons Project has created a series of very short videos teaching viewers how to spell and sound out the names of the Moon Times in the Mi'kmaw language, along with their meaning in English, and when to look for the corresponding full Moon.

These names are unique to the land of the Mi'kma'ki, comprising the eastern Canadian provinces of Nova Scotia, (much of) New Brunswick, Prince Edward Island, and Newfoundland. They correspond to the more familiar names popularized by the Old Farmer's Almanac, which are based on the Algonquin tradition. One of the goals of the Project is to revitalize the use of the Mi'kmaw names in Mi'kma'ki.

We are grateful for the collaboration of respected Mi'kmaw language teacher Curtis Michael, who has taught us much about his language. We also shot the video in the "man cave" at his home in Sipekne'katik First Nation (sib-beg-gun-ay-gah-dee).

Halley Davies looked after preparing the set, lighting, video (2 cameras), audio, and editing. She is a real pro! As she is an in-demand worker in the local cinema and TV industry, we had to wait until she had free time for the editing. She has also worked on previous video projects for RASC.

The seasonal graphics are by Autumn McDonald, an emerging teenage artist from Acadia First Nation.

Many thanks to the Special Projects Fund of The Royal Astronomical Society of Canada for supporting this initiative.

To view the short (30 s) videos, visit our YouTube page:

[YouTube.com/c/Mi'kmawMoons](https://www.youtube.com/c/Mi'kmawMoons)

To learn more about the Mi'kmaw Moons Project, visit our Facebook Page (no account required): [www.facebook.com/www.MikmawMoons](https://www.facebook.com/www.MikmawMoons).



*Mi'kmaw language teacher Curtis Michael, at his home in Sipekne'katik with RASC Halifax member Dave Chapman.*

## Nova East Star Party

by **Judy Black**, Chair, Nova East Star Party Planning Committee

**Get Drawn In! Come to Nova East!**



It's the Nova Scotia event you have all been waiting for and registration has begun! This year's logo depicts all the elements of our Star Party encircled by a black hole emission ring. Get drawn in! So much to see and do. Come to Smiley's Provincial Park on August 30 – September 2!

(<https://novaeast.rasc.ca/index.php/schedule/schedule>)

The Nova East Star Party has a speaker series that will intrigue astronomers of all interests. Our Public Talk on Saturday evening is being presented by Tiffany Fields, an M.Sc. student at St. Mary's University in Halifax. Dr. Roy Bishop will address the large Fundy Tides and lead us on a road trip to view the tidal bore as it arrives on two rivers. The potluck BBQ, Astronomer's Lounge, and the Astronomers' breakfasts on Saturday and Sunday morning will satisfy everyone's appetite. Telescope Medics will again assist with telescope woes. The sky tour and the binocular table will once again star in the evening agenda, along with this year's addition of a telescope plaza.

The Halifax Centre Astrophotography Contest and People's Choice Award will be hosted by Nova East. Prizes? Of course, there will be prizes – door prizes for all ages and for the Astrophotography Contest and People's Choice Award. For the new photography contest format, go to:

<https://novaeast.rasc.ca/index.php/contest>.

Not a camper? You can still register to attend the events! Take up residence for the week-end in a B&B or motel in the area. Or perhaps come to enjoy the daytime presentations. Join in the camaraderie. Hope to see you there!

### ***How do you Register?***

Go to our site: <https://novaeast.rasc.ca/index.php/registration>

Payment can be made:

- By cheque or money order *if mailed in with the completed registration form,*  
or
- By cash, cheque, or money order *if pre-arranged with the Registrar to pay upon arrival at NE.*
- By e-Transfer to [treasurer@halifax.rasc.ca](mailto:treasurer@halifax.rasc.ca)

### ***2019 Deadlines?***

July 19 T-Shirt & Fleece Hoodie orders (Nova East Logo on both these items)

August 9 Submissions to Astrophotography Contest

August 17 Mail-In Registration

August 29 Email Registration (by midnight)

A thank you is extended to my fellow NEPC members for their ongoing work behind the scenes to ensure another successful Nova East – Dave Chapman, Melody Hamilton, Gregg Dill, Chris Young, Liz Greenough and consultants Pat Kelly, Paul Gray, John Read, and Mary Lou Whitehorne. A special thank you to John Read for a great job designing this year's logo.

## **RASC Centre Newsletter Roundup**

by **Eric Briggs**, Toronto Centre

In the interest of better spreading of information between different Centres and units of the RASC, here is a summary of the most recent newsletters that have been shared over the most recent month by 16 of the RASC's 29 Centres on our national website <https://rasc.ca/centre-newsletters>. Access to this part of the RASC website is for RASC members only. At the above link, you might find some other Centre newsletters that are spinning some novel ideas.

You may find you can use this part of the RASC website to impress members of other Centres with your local Centre's work. For example, the Picture of the Month in the July *Focus* Newsletter from the Okanagan Centre is "*Noctilucent Clouds*" by Dave Whalley.

The new RASC Sudbury Centre has a newsletter with a long history of what was until now the Sudbury Astronomy Club. The most recent issue features Stargazer Steve Dodson, who has been building and selling very large and inexpensive telescopes for many years.

## **CASCA, June 2019 Solstice Newsletter, Cassiopeia**

by **Eric Briggs**, Toronto Centre

<https://casca.ca/?p=12068>

Canada's academic astronomers are proceeding in drafting their Long Range Plan 2020, which will provide guidance to government investment in astrophysics to meet the primary needs of the Canadian academic community for the period from 2020-2029. The CASCA President's message by Professor Rob Thacker also describes the Coalition for Canadian Astronomy by which Canadian scientists and industry can more effectively discuss plans with government.

## Montreal Centre Upcoming Events

by [Carl Jorgensen](#), Secretary, Montreal Centre

Wednesday, July 3, 7:30 – 11:00 pm: Members observing at McEwen Field, next to John Abbott College, MacDonald Campus, McGill University. A special group of students from the Shad Valley Camp (McGill University) will be joining us. Group contact member is Prof. Karim Jaffer. We need members to bring telescopes and/or binoculars to setup on the field. Karim will issue a GO / NOGO on Wednesday. If it is a GO, a map will be provided.

Saturday, July 6, 7:30 – 11:00 pm: Arbo Public Talk: *Apollo 11 - 50<sup>th</sup> Anniversary* by David Shuman at the Arboretum Conservation Center. Celebrate the most spectacular adventure on its 50th anniversary. A look back at *Apollo 11* via amazing images, its accomplishments and the future of human space exploration. After the talk, if clear, the Moon, Jupiter, and Saturn will be observable. The Bellevue Observatory will be open, but members can also bring their own telescopes or binoculars for public viewing.

Wednesday July 10, 7:30 – 11:00 pm: Members observing at the Morgan Arboretum Conservation Center. The Bellevue Observatory is open. You can also bring your own telescope or binoculars to observe. If you do not have a telescope or binoculars, come and enjoy the views through your fellow RASCals instruments (weather permitting).

Saturday, July 13, 9:00 – 11:00 pm: Members off-site observing at Thompson Park. Bring your binoculars or telescope and enjoy observing at one of our dark off-site locations.

Wednesday, July 17, 7:30 – 11:00pm: Members observing at the Morgan Arboretum Conservation Center. The Bellevue Observatory is open. Bring your own telescope or binoculars to observe.

Saturday, July 20, 7:30 – 11:00 pm: Members Arbo Clubhouse at the Morgan Arboretum Conservation Center. RASC members only. Talk with other members, show & tell, etc.. Maybe a short presentation by a member. The Bellevue

Observatory will be open but you can bring your own telescope or binoculars to observe, if you wish (weather permitting).

Wednesday, July 24, 7:30 – 11:00 pm: Members observing at the Morgan Arboretum Conservation Center. The Bellevue Observatory is open. You can also bring your own telescope or binoculars to observe.

Saturday, July 27, 7:30 – 11:00 pm: Members off-site observing at Woolly Woods 45 Rang Saint-Antoine, Saint-Chrysostome. Watch for the GO / NOGO on Saturday. Bring your binoculars or telescope and enjoy observing at our darkest off-site location. Members are welcome to take a view of astronomical objects through the Montréal Centre's 16" Dobsonian telescope.

Wednesday, July 31, 7:30 – 11:00 pm: Members observing at the Morgan Arboretum Conservation Center. The Bellevue Observatory is open. Bring your own telescope or binoculars to observe.

All RASC members across Canada are welcome at our members events – email [info@rascmontreal.org](mailto:info@rascmontreal.org)

## **Thank You to our Sponsors!**

by [Madison Chilvers](#), RASC Marketing Coordinator

The Royal Astronomical Society of Canada has a unique partnership with our friends in the astronomy industry. We are now offering companies the distinction of becoming a charter sponsor of the RASC, Canada's pre-eminent amateur astronomy organization. This offer is available only to those industry leaders who recognize the value in being associated with the amateur astronomy community. [www.rasc.ca/rasc-sponsors](http://www.rasc.ca/rasc-sponsors).





## What's New in the Sky

Members are encouraged to check out the [Northern Skies](#) section of the RASC website. Thanks to Gary Boyle for keeping us all in the know.



**The Royal Astronomical Society of Canada**  
**203 – 4920 Dundas St W, Toronto ON M9A 1B7 CANADA**  
**Tel: (416) 924-7973, Fax: (416) 924-2911**

Member Service: [nationaloffice@rasc.ca](mailto:nationaloffice@rasc.ca)

Visit Us at: [www.rasc.ca](http://www.rasc.ca)

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