

June 2019 - Volume 14, Number 6

We welcome your comments on the *Bulletin*. Email them to the Editor, David Garner at bulletin@rasc.ca

➤ News @ RASC.ca

News from the Society Office

by Randy Attwood, RASC Executive Director

2019 General Assembly





Register Now!

Make sure you don't miss your chance to register for the upcoming 2019 General Assembly. **The deadline to register is Sunday, June 9th.**

Highlights of the 2019 General Assembly include:

• Two days of paper sessions by invited speakers and RASC and AAVSO members.

Talks from invited speakers include:

Dr. L. Clifton Johnson, Center for Interdisciplinary Exploration and Research in Astrophysics (CIERA), Northwestern University – Zooniverse and Citizen Science.

Gregg Wade, Head of the Dept. of Physics and Space Science, Royal Military College – The BRITE-Constellation mission.

Catherine L. Newell, College of Arts and Sciences, Religious Studies, University of Miami, on "Faith, the Future, and America's Final Frontier" and the persuasiveness of Chesley Bonestell's art.

John E. Moores, Dept. of Earth and Space Science and Engineering, York University, on probing planetary atmospheres.

Jan Cami, Department of Physics and Astronomy, Western University, and Director of the Cronyn Observatory, on repurposing a historic installation for successful EPO.

Nathalie Ouellette, Coordinator, Institut de recherche sur les exoplanètes (iREx), Université de Montréal, and JWST Canadian Outreach Scientist, on the Canadian contribution to the JWST, and citizen science opportunities.

Maria Cahill, College of Science and Humanities, Husson University, presentation on Helen Hogg as a communicator of astronomy, and the roles she played within both the RASC and the AAVSO.

Don Morton, emeritus Director General of the Herzberg Institute of Astrophysics (NRC), and second Director of the Anglo-Australian Observatory, on working at the DDO during the 1950s and 1960s.

Alan McConnachie, NRC Herzberg (Dominion Astrophysical Observatory), and Dept. of Physics & Astronomy, University of Victoria, plenary on the Maunakea Spectroscopic Explorer (MSE).

Banquet Speaker – Dr John Percy – RASC and AAVSO – on his experiences with Education and Public Outreach.

• A half day of workshops for members to discuss various outreach and astronomy activities: Education; Public Outreach; Citizen Science; Light Pollution Abatement; Member Retention; Running a Centre; and more.

- The Ruth Northcott lecture will be given by James Hansen, author of *First Man: The Life of Neil A. Armstrong* (2005). It is a biography of the first man to walk on the Moon. A movie based on the book was released in 2018.
- Longtime RASC member David Levy's autobiography, A Nightwatchman's Journey, will be introduced.
- During the weekend, a program will be offered to members of the public. Families will be invited to attend hands-on astronomy activities and introductory lectures as part of a Father's Day Weekend Astronomy Adventure.
- Evening observing at York University's Allan I. Carswell Observatory.
- After the General Assembly, there will be tours to local sites, such as the David Dunlap Observatory.

Look for registration information this month on the 2019 General Assembly website: https://rasc.ca/ga2019

See you in Toronto in June!

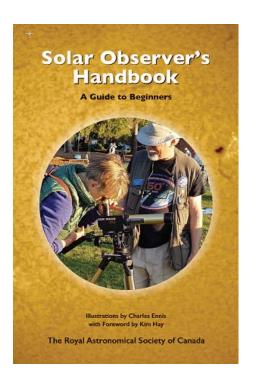
2018 Annual Reports now available!

The 2018 Essential Annual Report is now available in print and as a PDF. Click here to view. To access the 2018 Extended Annual Report, click here. Don't forget to log into the National site before you click the links!

The Extended report contains reports from Centres about the various outreach activities and progress throughout last year, and much more!

The Solar Observers Handbook is Back!

Copies will soon be for sale on the RASC website! Stay tuned!



We Need Solar Telescope Volunteers!

The GA will host a weekend full of hands-on outreach activities, including solar observing (weather permitting). We still need volunteers on Saturday and Sunday from 10 am to 5 pm to show the public some lovely views of the sun! If you would like to volunteer, please email Jenna and jenna.hinds@rasc.ca.

Green Laser Update

by **Dennis Lyons**, GLP Committee Chair

On May 29 my colleagues at the FAAQ and I met with Transport Canada to continue discussions on Green Laser usage. TC confirmed again that the Interim Order does not apply to the RASC or FAAQ. What applies are the Canadian Aviation Regulations and the requirement to apply and hold a permit. I am pleased to inform you that once a few details are finalized the RASC will apply and be issued a permit for all the Centres. It will likely only apply to areas outside of the 10 Km zones identified in the Interim Order. It is expected that a simpler form

will be developed for those areas within the 10 Km zone to deal with the increased risk of an aircraft being hit inadvertently. The FAAQ and RASC will be working through the committees to standardize our information to simplify the applications to TC. It will be very similar to what is on the website now. There is still a fair amount of work to be done but the building blocks are in place.

What also is important to understand is that Health Canada has regulations in place that restrict "public" use of laser to 5 mW or less as anything larger has been determined to be a public health hazard. This is outside of TC and can be enforced.

I want to thank all the Centres who on short notice provided me with the information on how many outreach programs we do as a Society in a year. It was very useful for all parties.

We will update you once we have the details worked out and the RASC policies and procedures in place.

RASC Fundraising Forum

by Lisa Di Veto, RASC Fundraising Associate

In addition to RASC's national office, fifteen Centres are registered charities. This allows these organizations to issue charitable tax receipts for donations of cash, bequests, gifts of life insurance, shares, property and equipment. In addition, some Centres may be eligible to apply for foundation and government grants. In many instances funding can be sought for programs, educational resources and volunteer honoraria. The income could support current activities, allow for program expansion or the introduction of new initiatives. Several Centres currently receive casino revenue they can access because they're a charity. In my opinion, the benefit of being able to generate additional revenue outweighs the tasks of administering tax receipts and submitting an annual financial report to Canada Revenue Agency (CRA).

On the subject of that annual report (called a T3010), it's due six months after the charity's fiscal year end. For many Centres, that deadline is June 30th. Please ensure your Centre's report is submitted on time as charitable status can be revoked for failure to file.

CRA posts these reports online for anyone to view. Potential funders and donors can access this financial snapshot so it's important that they're favourable and accurate. The T3010 offers an opportunity to promote the work of the charity in the program description. Here's a good example from Edmonton Centre's 2017 report:

RASC Edmonton Centre provides astronomy related, free educational programs, public star parties, support for educational activities, science fairs, funding for scholarships, astronomy related public speakers and astronomy and science related events. RASC Edmonton Centre continued to grow in 2017, most significantly with construction underway of the largest publicly accessible telescope in Western Canada at the Black Nugget Lake dark sky observing site. By supplying volunteer astronomers and their equipment, RASC Edmonton Centre continues with participation and support of the Tourism Jasper "Jasper Dark Sky Festival", the Beaver Hills Dark Sky Preserve celebrations, as well as promoting many other public astronomy events and celebrations hosted by municipalities throughout Alberta. New guest speakers, predominant in the forefront of astronomy science, continue to be scheduled for public events. Implementation of hosted "Astro Cafe's" events are directed at helping amateur astronomers develop and refine specialized astronomical skills. Activities continue to refine RASC Edmonton Centre's role in the restoration and re-purposing of the Historical Edmonton Queen Elizabeth Planetarium facility.

Regarding expenditure, CRA, with just a few defined requirements, allows the charity to determine what it identifies as charitable expenditure. For most charities, the amount described as charitable programming is between 70% and 100%, as the majority of expenses nearly always support the work of the charity. Some of our centres are well below this threshold – in fact the National Office earlier reported only 11% as charitable. This year, the amount is closer to 70%.

Please contact me if you'd like to review your Centre's calculation of this expenditure. If you'd like to see your centre's T3010, it can be found here: https://apps.cra-arc.gc.ca/ebci/hacc/srch/pub/dsplyAdvncdSrchSimply write in the name and click enter. It should bring up your Centre although sometimes there are variations on the name as registered.

In closing, if you'd like to explore your Centre's options to increase revenue from individuals, foundations and government funders or if your Centre would like to apply for charitable status, please contact me at 519-754-1803 or email ldiveto@rasc.ca. Thank you!

Helen Sawyer Hogg Free Public Lecture

by Eric Briggs, Toronto Centre

6:00 pm, Wednesday, June 19 Adams Auditorium, FDA building, McGill University, Montréal.

Sera Markoff (U. Amsterdam)
Professor of Theoretical High Energy Astrophysics
Anton Pannekoek Institute for Astronomy/GRAPPA

Prof. Markoff works at the interface of Astrophysics and Astroparticle Physics, and is interested in a variety of problems relating to the accretion process especially around black holes, both big and small.

The Helen Sawyer Hogg Prize Lecture was initiated in 1985 by the Canadian Astronomical Society with the participation of the Royal Astronomical Society of Canada, the Planetarium Association of Canada, and the Royal Canadian Institute. It continues as an annual public lecture co-sponsored by Cascatrust and the RASC, given alternately at the annual meetings of both societies, in recognition of the sustained and diverse contributions of Helen Sawyer Hogg to public appreciation of the universe around us. Selection of the Lecturer is made by a committee consisting of the Presidents of CASCA and the RASC, and the chairman of the Local

Organizing Committee hosting the meeting (either CASCA or RASC). 2019 being an odd-numbered year, CASCA is hosting this year's lecture at their annual conference at McGill University in Montréal.

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 also find you can use this part of the RASC website to impress members of other Centres with your local Centre's work.

- The Okanagan Centre's new *Focus* newsletter features several images from the RASC's Zenfolio site that promotes members' astrophotography. Both Okanagan and the Victoria Centre, and also the RASC AstroImaging Certificate program, all have separate Zenfolio sites. (https://rascoc.zenfolio.com, https://rascoc.zenfolio.com, https://rascoc.zenfolio.com, https://rascoc.zenfolio.com, https://rascoc.zenfolio.com)
- Vance Petriew from the Regina Centre has a column in their Stargazer newsletter about CCD imaging efficiency, comparing some of his own deepest images with results from the the Space Telescope Science Institute Digitized Sky Survey.

Great Image!

by Emile Cormier, New Brunswick Centre

M51, Whirlpool Galaxy

Location: Sainte-Anne-de-Kent, New Brunswick

Imaging Train: ZWO ASI1600MM-Cool imaging camera, ZWO EFW, 36mm Baader

LRGB filters, ZWO OAG, ZWO ASI194MM-Mini guide camera

Mount: iOptron CEM60

Telescope: Astro-Tech AT8RC 8" f/8 Richey-Chrétien

Exposures: 25x3min luminance, 5x5min red, 5x5min green, 5x5min blue. 2.5

hours total.



Montreal Centre Upcoming Events

by Carl Jorgensen, Secretary, Montreal Centre

Saturday, June 1, 8:00 – 11:00 pm: Members off-site observing at Wooly 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, June 5, 7:30 - 11:00 pm: Members observing at the Morgan Arboretum Conservation Centre. The Bellevue Observatory is open. You can also bring your own telescope and/ or binoculars to observe. If you do not have a telescope or binoculars, come and enjoy the views through your fellow members instruments (weather permitting).

Saturday June 8, 7:30 – 11:00 pm: Public Event (talk by Youssef Bestavros) at the Morgan Arboretum Conservation Centre. Doors open 7:30 pm. Talk by Youssef Bestavros "The Summer Night Sky" 8:00 pm. If clear, public observing after the talk. The Bellevue Observatory will be open, but members can also bring their own telescopes and binoculars for public viewing.

Wednesday, June 12, 7:30 – 11:00 pm: Members observing at the Morgan Arboretum Conservation Center. The Bellevue Observatory is open, but 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, June 15, 7:30 – 11:00pm: Members Arbo Clubhouse at the Morgan Arboretum Conservation Center. RASC members only. Talk with other members, show and 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, June 19, 7:00 – 9: 30 pm: Members Library Clubhouse at John Abbott College, H-355, 21275 Rue Lake-shore, Saint-Anne-de-Bellevue. Members only. Can borrow and return books. Talk with other members, show and tell, etc..

Saturday, June 22, 9:00 – 11: 00 pm: Members off-site observing at Thompson Park, 726 Rue Main Hudson. Bring your binoculars or telescope and enjoy observing at one of our dark off-site locations. If you do not have a telescope or binoculars, come and enjoy the views through your fellow RASCals instruments (weather permitting).

Wednesday, June 26, 7:30 – 11:00 pm: Members observing at the Morgan Arboretum Conservation Center. 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 members instruments (weather permitting).

Saturday, June 29, 8:00 – 11:00 pm: Members off-site observing at Wooly 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.

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.













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.



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Visit Us at: www.rasc.ca

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