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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



The Registration Fee for the 2019 GA is Going Up!

On May 1st, 2019, the registration price for the General Assembly will be increasing to \$150.00. Hurry up and register now!

Register Now!

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.

Recently, two subway stations were opened at the north and south ends of the campus, making York University accessible from all over the city. This also means that downtown Toronto is a short subway ride from the campus.

Accommodation will be available in student residences on campus and at a hotel off-site on the Toronto subway line.

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

See you in Toronto in June!

Volunteers Needed –GA 2019

Jenna Hinds, Youth Outreach Coordinator

At the 2019 GA, we are focusing on outreach. We will be running outreach activities for the public all day Saturday June 15th and Sunday June 16th. We are looking for volunteers to help with these outreach activities. There will be 7-8

different activities and demonstrations running all weekend and we will host a training event at the National Office a couple weeks prior to the GA. If you cannot attend, we will also be sharing the meeting on Webex. Further details to come. High school students can receive volunteer hours for their time.

Please contact Jenna **atjenna.hinds@rasc.ca** or 416.924.7973 ext 4 if you would like to volunteer for any part of the outreach events!

Other Society Office News

Summer Students

The Society has been granted funding to hire two summer students for 9 weeks starting May 1. Their duties will include assisting with the organization and running of the General Assembly, administrative work, assisting with fundraising activities, assisting our Youth Outreach Coordinator Jenna Hinds and various duties using social media to promote Society activities.

Assistant Executive Director

The Board and National Office have been dealing with an increasing workload as they try to make sure that RASC committees work in an effective manner and as we seek more revenues from sources outside of membership dues. The Board has decided to hire an assistant executive director to assist Randy Attwood in his work as executive director. The appointment will be on a temporary basis while funding is sought to support the position.

Green Light Laser Update

Last year Transport Canada issued new regulations affecting the use of lasers near airports, including lasers used by amateur astronomers. The new regulations came out without warning or the full measure of consultation that the RASC was promised. In response, the RASC Board of Directors created a Green Laser Pointer Task Force, which began to work on RASC's response to these new regulations. Earlier this year, Dennis Lyons of the Winnipeg Centre was appointed chair of the task force.

In April Dennis represented the RASC in a teleconference with Transport Canada and the Fédération des astronomes amateurs du Québec that reviewed some issues with the government's current Interim Order for the possession of lasers.

The meeting was productive in that it clarified that members of an astronomical association do not need a permit to use a laser for public outreach. Second is that the 10 km zones where lasers are restricted only applies to the airports that are on the interactive map http://www.tc.gc.ca/en/services/transportation-security/aviation/hand-held-lasers-legally-safely/hand-held-lasers-prohibited-map.html .

Further discussions are scheduled to discuss the outstanding issue of Transport Canada's requirement for a permit. The challenge is that the requirement for a permit actually falls under the Canadian Aviation Regulations, and Transport Canada needs to discuss the issues both associations raised in this area.

We will provide updates on this matter when there is news. In the interim Dennis suggests https://rasc.ca/laser-pointer-usage for great information on safe laser use that all members should be using already.

The GLP Task Force will review our current procedures to improve them, and work with Transport Canada to ensure that compliance with their regulations is easy and well understood. It is important to remember is that improper use of lasers around aircraft does cause safety issues, and everyone is working to keep the astronomy and its public outreach alive and well in Canada.

Society's Meteorite Collection Renamed

The Board of Directors approved the renaming and upgrading of the RASC Archives' meteoritics collection to the "Peter Millman Meteorite Collection", to honour Dr Millman's sixty-five-year active commitment to the Society.

Call for Papers and Posters for the 2019 GA! by Scientific Program Committee RASC 2019 GA

The committee in charge of the scientific program for the GA invites submissions for the Society's paper sessions on Saturday June 15, as well as posters.

Presentations on any aspects of your astronomical research (program design, data acquisition, reduction, and results), experiments and innovations in education & public outreach (EPO), collaborative programs of any sort, instrumentation, and cultural and historical astronomy are welcome. The special themes of the 2019 GA are EPO, citizen science, and the 50th anniversary of the Apollo XI Moon landing, and proposed presentations on any of these are encouraged—but it is important to note that you are not limited to those themes.

Proposals for papers and posters should include your name, affiliation (if any), title of your paper or poster, an abstract not exceeding 150 words, and any AV requirements. Please submit your proposals to papers@rascga2019.ca, with the subject line "paper proposal RASC GA 2019", or "poster proposal RASC GA 2019", on or before May 4.

RASC Fundraising Forum

by Lisa Di Veto, RASC Fundraising Associate

The National Office just received notification of Canada Summer Jobs' funding for two students for nine weeks, a subsidy worth \$7,560! Candidates will be assisting

with membership renewal, direct mail solicitations, website updates and social media postings as well as helping with General Assembly tasks. We received this funding last year and the students were invaluable in supporting an increasing roster of duties and responsibilities in the Society office.

I'm mentioning this in advance for centres with charitable or not-for-profit incorporated status to consider. The application typically comes out in December with a late January deadline. It's federal government funding so having a relationship with your Member of Parliament is helpful. In fact, the funding must serve local priorities in your centre's federal riding which will be listed online. Priorities are often linked to an organization's intent to host festivals or special events and other ways your group may serve the broader community.

This is a competitive process as businesses are also eligible to apply for funding. Points are awarded for how the job fits local priorities and benefits the candidate might gain from the experience. Employment must be offered for a minimum of thirty hours a week for six weeks. Centre tasks might include website updates, reporting event attendance to national, newsletter or brochure development or assisting at star parties. In some situations, cutting grass and doing maintenance work at observatories may qualify. Supervision is required. However, engaging a member's child or grand-child could accommodate supervising work done online from home or onsite.

I'll circulate the announcement for 2020 funding later this year. I'll also share information on how to generate maximum points and I can assist you with your application.

In the meantime, you can register for the government's online grant application process called GCOS which takes a few weeks to confirm. Please take a look at how to do so on the website link below. You may also wish to review last year's guidelines in advance to give you an idea of what's required. Here's the website: https://www.canada.ca/en/employment-socialdevelopment/services/funding/canada-summer-jobs.html Finally, please don't hesitate to contact me directly at 519-754-1803 or **Idiveto@rasc.ca** if you have any questions about this or any other funding opportunity. Thank you for your consideration and good luck!

Victoria Centre Astronomy Day

by Chris Gainor, RASC, President

While most RASC Centres mark International Astronomy Day on May 11, Victoria held their Astronomy Day on April 27. The activities started during the day at the Royal BC Museum in downtown Victoria with telescopes outside and exhibits inside the museum. In the evening, activities took place at the Dominion Astrophysical Observatory with telescope observing, talks in the Centre of the Universe visitors' centre, and tours of the historic Plaskett Telescope. The events at the DAO marked the beginning of Saturday night public outreach activities at the DAO that will continue through the spring and summer until the Labour Day weekend.



Astronomy Day activities at the Royal BC Museum. Photo by Chris Gainor.



Astronomy Day activities at the DAO. Photo by Chris Gainor.

Observing Committee News

by Dave Chapman, Chair, RASC Observing Committee

Observing Certificates

The RASC has over 600 members who have distinguished themselves by earning observing certificates. See **www.rasc.ca/certificate-programs** for more details.

Recently, the following observing certificates have been awarded:

- Messier Catalogue (Traditional): Chris Vaughan (Toronto), Ingrid G. de Buda (Ottawa)
- Explore the Moon—Telescope: Randy Enkin (Victoria)
- Explore the Universe: Berta Beltran (Edmonton)

To date in 2019, the Observing Committee has awarded 5 certificates.

RASC Observing Tips & Expectations

The Observing Committee has been hard at work updating the Observing web page **www.rasc.ca/certificate-programs**. Along with a playlist of videos outlining the goals and requirements of the 7 observing programs with certificates (5 with pins), there is more guidance on how RASC is expecting applicants to record their observations, plus tips on details to look for while observing. The new submenu Tips & Expectations covers that. Have a look, and be aware that this is a work in progress as we think of additional material to include.

General Announcements

Occasionally, communications to the Observing Committee go astray because people are using old application forms and observing lists. Please ensure that you are using the latest versions when you apply, see www.rasc.ca/certificateprograms

On Twitter, please follow @RASC using the hashtag #RASCobserving for announcements of earned observing certificates and special observing opportunities. RASC also has a Facebook Page where we announce observing news.

Also, please let us know of RASC members earning observing distinctions from other societies, such as the Astronomical League, AAVSO, and so on.

Just a final note: Blair Stunder will be taking my place as Observing Committee Chair on June 1.

Canadian Astrophotography School (CAPS)

by Eric Briggs, Toronto Centre

http://hamiltonrasc.ca/CAPS/

The CAPS course will be a 2 day Introduction to DSLR Astrophotography course being held May 4 and 5 at the Fennell Campus of Mohawk College in Hamilton. Please see the tentative schedule for details.

This year, CAPS is pleased to announce Trevor Jones of AstroBackyard.com as our course instructor!

How much is it?

\$350 per person, plus tax;

50% off for Hamilton RASC members (\$175);

30% off for other RASC members (\$245);

30% off for students (\$245)

To reserve your place, please register."

Asteroids with Canadian Connections

by Eric Briggs, Toronto Centre

The following have been added to the list of asteroids with Canadian connections:

(50719) Elizabethgriffin = 2000 EG140

Discovered 2000 Mar. 1 by the Catalina Sky Survey.

Elizabeth Griffin (b. 1942) is a Canadian astronomer specializing in the spectroscopic study of binary stars. She has been a staunch advocate globally for the digitization and preservation of photographic plates and using legacy science data of all kinds. https://rasc.ca/asteroid/50719

(249300) Karenmortfield = 2008 UY

Discovered 2008 Oct. 18 at Auberry.

Karen Mortfield (b. 1958) is a Canadian public affairs specialist. As a volunteer, she played a leadership role in the renaissance of the David Dunlap Observatory in Canada, working from 2009–2017 to repurpose the 80-year old Observatory as a space science campus. https://rasc.ca/asteroid/249300

RASC Centre Newsletter Roundup

by Eric Briggs, Toronto Centre

In the interest of better spreading of information between different centre and units of the RASC, here is a summary of the most recent newsletters that have been shared by 16 of the RASC's 29 centres on our national website, and also the AstroInfo newsletter from the Fédération des astronomes amateurs du Québec.

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 Belleville Centre's new 'What's Up?' newsletter announces that the Belleville Centre will sponsor a fun weekend of stargazing and astronomical fellowship near South Bay in Prince Edward County between May 31st and June 2nd.
- The Calgary Centre's Starseeker newsletter reports that the location and timing of Calgary Centre meetings is changing, and that the new host will be the Central Branch of the Calgary Public Library in the Performance Hall.
- The Edmonton Centre's most recent Stardust newsletter profiled Dr. Berta Beltran of the University of Alberta, who has completed the RASC's Explore the Universe observing certificate.
- La Fédération des astronomes amateurs du Québec a décerné son prix Qilak 2018 à Hugues Lacombe, fondateur du Club d'astronomie de Charlevoix en mars 2018. Les trois prix Qilak sont décernés chaque année

par les trois sociétés canadiennes pour reconnaitre la contribution et les efforts bénévoles à promouvoir l'astronomie auprès des jeunes ou du public durant l'année.

- The most recent Halifax Centre Nova Notes newsletter includes the proceedings of the Halifax Centre's 2018 annual meeting.
- According to the Hamilton Centre's most recent Orbit Newsletter, the Hamilton Centre council has unanimously adopted a motion to claim the right of origin for the naming of Algol as the Hallowe'en Star, but not for any proprietary ownership of the term.
- The Kingston Centre's new Regulus newsletter includes a report from Kim Hay and Kevin Kell about a production of the play 'Silent Sky' about the life of Henrietta Swan Leavitt in Oshawa.
- The most recent Polaris newsletter from the London Centre includes a description of Kepler's Laws of Planetary Motion.
- The New Brunswick Centre's most recent Horizon newsletter promotes the Centre's telescope borrowing program.
- The Okanagan Centre's new Focus newsletter promotes the Okanagan Centre's upcoming Dinner, Speaker and Silent Auction event coming up in Kelowna on Saturday, May 25th featuring Alan Dyer on the subject 'Chasing the Northern Lights' to raise funds for the Okanagan Observatory.
- The Ottawa Centre's Astro-Notes newsletter includes a review of the book 'We Have No Idea: A Guide to the Unknown Universe' by Jorge Cham and Daniel Whiteson, reviewed by Patrick Brewer.
- The Regina Centre's Stargazer newsletter presents the Regina Centre's Telescope Borrowing Program.
- The Saskatoon Centre's new Saskatoon Skies newsletter includes a call from Rick Huziak for non-observer volunteers to participate in this year's Saskatchewan Summer Star Party at Cypress Hills Interprovincial Park between August 28th and September 2nd.
- The most recent Toronto Centre's SCOPE newsletter links to YouTube videos of several recent meetings that were also streamed live on the Internet.

- The Vancouver Centre's Nova newsletter heavily features coverage of the January 20th Total Lunar Eclipse, including contributions by Karl Miller and Hayley Miller, describing the public outreach event at the H.R. MacMillan Space Centre and at the Trottier Observatory at Simon Fraser University.
- The new Victoria Centre Skynews newsletter begins with a feature about several centre members' observing expedition to Southern Arizona.
- > The Windsor Centre's 'Aurora' flyer features minutes of monthly meetings.

Calgary Centre News

by Neel Roberts, Calgary Centre

Sundogs Over Vulcan, Alberta



Photo by Neel Roberts

Monthly Open House at Calgary's Rothney Observatory near Priddis

"How to Astronomy" for all visitors. Book ahead and you can bring your telescope. We will be helping new astronomers learn about the how, they when and the what to look for in the sky. This is a hands-on experience to help you get started with Astronomy. The evening will kick off with an observatory check-in, then a presentation on what's up the sky by the RASC Calgary Centre. You will have the opportunity to look through the telescopes, indoor presentation and astronomers will be on hand to answer questions on Saturday May 4 from 8:00 to 11:00 pm. The entrance fee \$30 per car. For further information, contact Jennifer Howse at **jhowse@phas.ucalgary.ca**, (403) 931-2366. Their website https://www.ucalgary.ca/rao/is updated regularly.

RASC Montreal Centre Upcoming Events

by Carl Jorgensen, Secretary, Montreal Centre

Saturday, May 4, 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 RASC Montréal Centre's 16" Dobsonian telescope.

Wednesday, May 8, 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 May 11, 11:00am – 11:00 pm: Public Event (International Astronomy Day) at the Rio Tinto Alcan Planetarium, 4801 Avenue Pierre-De Coubertin, Montréal. Co-host Mont Magantic AstroLab, presentations including Women in Astronomy (3hrs), youth activities, activities for all, exhibitions, Kiosk, solar and night-time viewing (weather permitting). Wednesday, May 15, 7:00 – 9:30 pm: Members Library Clubhouse at John Abbott College, RASC members only. Can borrow and return books. Talk with other members, show & tell, etc..

Saturday, May 18, 9:00 – 5:00pm: Public Event (MAM Family Fun Day)at The Montreal Aviation Museum, Saint-Ann-de-Bellevue. RASC Montreal Centre Members are encouraged to bring their solar telescopes for public solar observing (weather permitting).

Wednesday, May 22, 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, May 25, 7:30 – 11: 00 pm: Members off-site observing at Wooly Woods. Watch for the Go/NoGo on Saturday. Bring your binoculars and/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, May29, 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).

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.



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 Visit Us at: www.rasc.ca The *Bulletin* of the Royal Astronomical Society of Canada is a benefit of membership in the Society. © 2019 Royal Astronomical Society of Canada