



February 2019 - Volume 14, Number 2

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

► [News @ RASC.ca](#)

Editor's Corner

by [David Garner](#), Bulletin/NNL Editor

We would like to form an Editorial Panel made up from your Centre Newsletter Editors (and any other interested RASC members) to provide regular and timely articles for the Bulletin and National Newsletter (NNL).

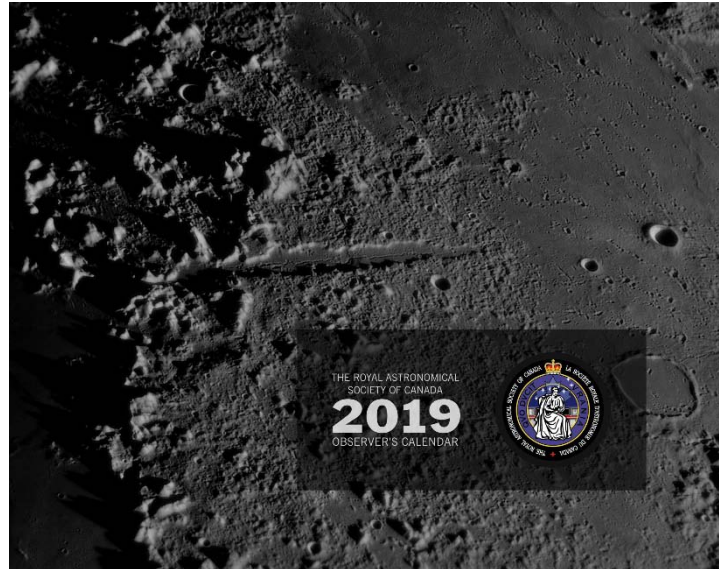
As a national organization it is important that we are aware of the activities in other Centres. It not only unites us but also gives us ideas about outreach events that we could hold in our own Centres.

I look forward to hearing from you so, if this is something you would like to be a part of please contact me (bulletin@rasc.ca) and/or Randy Attwood (attwood@rasc.ca) .

Clear Skies,
Dave Garner

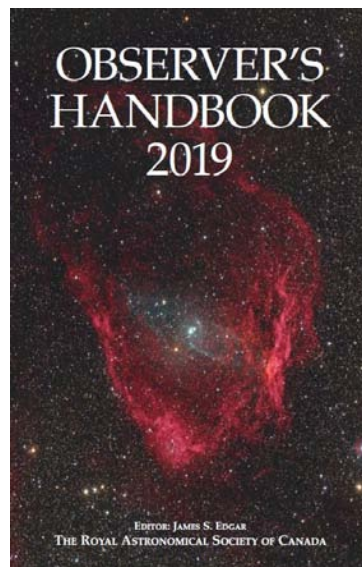
News from the Society Office

by **Randy Attwood**, RASC Executive Director



Observer's Calendar 2019 Editor: Paul Gray

A beautiful calendar showcasing RASC members' astro-images with information on what's-up in the sky tonight. A perfect gift for the beginner and a must-have for the experienced observer. **Now 30% discount!** **Available for order!**



Observer's Handbook 2019 Editor: James Edgar

The Observer's Handbook: a 352-page guide published annually by The Royal Astronomical Society of Canada, has come to be regarded as the standard North American reference for data on the sky. The Handbook material is of interest to astronomers, scientists, teachers, students, science writers, campers, Scout and Guide leaders, and interested readers. The Handbook forms the basis of many secondary and university astronomy courses, and it should be in every library. Also available: US Edition. [Order Here!](#)

Product Discounts

150th Anniversary Value Pack – 40% off – RASC 150th anniversary pin, decal and cloth crest.

Score this amazing RASC 150th Value Pack: Our150th Sticker, 150th lapel pin and 150th crest. Makes an amazing gift for a budding astronomer, or treat yourself!

****Hurry while supplies last!**** Price: **\$12.50 (Over \$20 value!).**

<https://secure.rasc.ca/ItemDetail?iProductCode=8150>



Hoodies – 50% off! (Sizes in stock - 3XL and Small)

<https://secure.rasc.ca/ItemDetail?iProductCode=8011>



Annual Report 2018 and Secretary Reports

A note to Centre Treasurers and Secretaries: the deadline for reports to the AR2018 is **2019 February 28**. Please send Treasurer reports to mempub@rasc.ca and Secretary reports to James Edgar jedgar@rasc.ca.

Please include the number of participants reached through outreach events and number of youth 21 and under reached (if tracked, or an estimate) in the Secretary reports.

2019 General Assembly Update



The web site for the June General Assembly will be up in February. The theme of the June 14-16 event is Education, Public Outreach and Citizen Science. Members of the American Association of Variable Star Observers will be attending this joint RASC/AAVSO event.

A half day in the schedule has been reserved for workshops on various topics – planning public outreach programs, running education programs for youth, running an RASC Centre (including how to retain members). There will also be sessions run by the Light Pollution Abatement and Inclusion and Equity Committees.

A special presentation will be made by David Levy – who will be unveiling his new autobiography “*A Nightwatchman’s Journey*,” to be published in 2019 by the RASC.

The Ruth Northcott speaker will highlight an evening dedicated to the 50th anniversary of the first Moon landing. James Hansen, author of “*First Man*”, the biography of Neil Armstrong on which the film of the same name was based.

A special weekend of Father’s Day Astronomy Activities will be offered for members of the public – let’s show off our hobby!

Robotic Telescope Report

Progress is being made on the Robotic Telescope project – the telescope operators and astrophotographers are finishing up their training. Educational materials are being prepared to provide background for members.

Look for an announcement in the coming months on how members can subscribe to the astrophotography or science programs.

A reminder that both DSLR and CCD images are being posted on google drive.

<https://drive.google.com/open?id=1mrXIt3l6j5KZ6xpYgJsWuXmWjaMx99aI>

We've also begun to create a robotic telescope science team. At this point, we're looking for experienced members in this area to help develop and guide this aspect of telescope use. If you have experience at doing CCD photometry or astrometry and would like to help this program, kindly contact Paul Mortfield (paul@backyardastronomer.com)

Deadline Extended for CASTOR!

by **Chris Gainor**, RASC, President

Last month the Bulletin contained news about a contest to create a logo for a proposed new Canadian space telescope, CASTOR, the *Cosmological Advanced Survey Telescope for Optical and ultraviolet Research*. The deadline for entries has been extended to March 1.

The Canadian Space Agency is conducting a study of CASTOR that Canadian astronomers hope will lead to approval of the mission. CASTOR would provide unique data in the ultraviolet part of the spectrum to complement data from other space telescopes, assisting in the search for dark energy.

Members of The Royal Astronomical Society of Canada and the Fédération des astronomes amateurs du Québec are invited to submit their designs for a CASTOR logo.

Entries can be sent before March 1, to: RASC National Office at 203-4920 Dundas St W, Toronto ON M9A 1B7 or nationaloffice@rasc.ca

Entries will be judged by a panel of astronomers selected by mission scientists, RASC and FAAQ.

The winner will receive a prize of merchandise from Ingenium: Canada's Museums of Science and Innovation.

<https://www.castormission.org>

Professor Lisa Randall Elected as RASC Honorary Member

by **Chris Gainor**, RASC, President

The Royal Astronomical Society of Canada is pleased to welcome its newest Honorary Member, Dr. Lisa Randall. Dr. Randall was born in New York City and attended the Stuyvesant High School, where she was a winner in the 1980 Westinghouse Science Talent Search. Dr. Randall went on to study at Harvard University where she earned a BA in 1983 and a PhD in 1987. She has since acquired numerous honorary degrees. After appointments at the Massachusetts Institute of Technology and Princeton University, Dr. Randall returned to Harvard, where she is now Frank B. Baird, Jr., Professor of Science. Her research involves connections between high-energy physics and cosmology, with an emphasis on gravity, dark matter and the possible role of extra dimensions in our Universe. Honours for Dr Randall include:

- An Alfred P. Sloan Foundation Research Fellowship;
- A National Science Foundation Young Investigator Award;
- A Department of Energy Outstanding Junior Investigator Award;
- The Premio Caterina Tomassoni e Felice Pietro Chisesi Award (University of Rome, 2003);
- The Klopsteg Award (American Association of Physics Teachers, 2006) for teaching; and
- The Julius Lilienfeld Prize (American Physical Society, 2007) for her research and for outreach.

Dr. Randall is well known to the public through her lectures, radio and television appearances, and her writing. She has received recognition as an influential scientist from SEED magazine, Newsweek, TIME and Esquire. Dr Randall's books for a popular audience include "*Warped Passages*" (2005), "*Knocking on Heaven's Door*" (2011), "*Higgs Discovery*" (2013) and "*Dark Matter and the Dinosaurs*" (2015).

An Honorary Member is a person upon whom lifetime honorary membership in the RASC has been conferred by the Board in recognition of noteworthy contributions to astronomy. Honorary Members have the right to attend all meetings of the Society and to receive the publications of the Society that may be determined from time to time by the Board of Directors.

The RASC has only fifteen Honorary Members at any one time. The RASC Board and Nominating Committee elected Dr. Randall to fill the vacancy in the ranks of RASC Honorary Members created when Dr. Stephen Hawking passed away last year.

For more on RASC Honorary Members, see <https://www.rasc.ca/honorary-members>.

Youth Committee and Lunar Eclipse Updates

by [Jenna Hinds](#), RASC Youth Outreach Coordinator

The RASC Youth Committee had its first meeting in December, in which we discussed youth attendance at centre meetings and social media use. I am happy to report that committee members Marina and Meredith Miller have been working together with RASC Vancouver Events Coordinator Hayley Miller to start up an Instagram account for Vancouver Centre. Follow them at @RASCVancouver if you don't already! Kudos to @RASCEdmonton as well, as they too have been very active on Instagram.

We are planning on hosting an online seminar about Instagram use in the coming months. If you are interested in joining, please email me at jenna.hinds@rasc.ca.

Randy Attwood and I visited his old middle school where Randy gave presentations to the grade 6 students. He included a screenshot of the RASC Instagram page and that garnered us 10 followers from one presentation. If you are giving presentations to youth, including screenshots of your own Instagram (or National's, if you're feeling generous, @royalastronomicalsocietycanada) may be a good way to boost followers and engage youth.

The plan for the lunar eclipse had been to post photos from our robotic telescope in California. First, thank you to those who volunteered to process these images on the night of! Even though it rained in California, many of you (especially those in Calgary, Edmonton and Vancouver) posted lots of great photos using the #rasclunareclipse tag on social media. It was great to see all the RASC activity online.

A big thank you to all of you who have been so supportive and helpful throughout my time at the RASC so far! You all make my job so rewarding and enjoyable.

Call for Images 2020

by **Paul Gray**, Editor, *Observer's Calendar*

Astronomical images and sketches of all types are invited for consideration for publication in the 2020 RASC Observer's Calendar including: deep sky, wide field, Solar System, astronomical sketches, and dramatic astronomically themed landscapes.

Images can be prime focus, piggyback, eyepiece projection, or fixed tripod; and recorded on a digital/CCD camera, film, or webcam. Submitted images must be of sufficient quality and resolution to reproduce well at 9.5" x 12" and must be compatible with the "**landscape**" orientation of the calendar images. Generally, this will mean a resolution of at least 3825 x 3028 pixels for the print ready tiff. We will also consider making a quilt or mosaic of lunar/planetary webcam captured images (so as not to over magnify an individual image for publication).

If you already have a gallery of images on your website, send me the link, but **please also direct me to your recent favourites**. Both well-known and obscure objects are published in the calendar, so to avoid having the same objects used too often, I will be screening for those that may have appeared in the past 3 years.

Please email submissions to me at snpgray@gmail.com. While I have a bottomless email box, it's best to send me jpegs first. If your image is selected, we will request a full resolution tiff version. Full resolution tiffs will be required for use in print. The deadline for submissions is March 31. If you have any questions, please don't hesitate to contact me at the above mentioned email address.

Observing News

by [Dave Chapman](#), Chair, RASC Observing Committee

In January 2019, Chris Vaughan of the RASC Toronto Centre earned his Messier Certificate—congratulations Chris!

In 2018, the RASC awarded a total of 27 observing certificates: 13 Explore the Universe, 5 Explore the Moon-Binocular, 3 Explore the Moon-Telescope, 4 Messier, 1 Finest NGC, and 1 Deep-Sky Challenge. This is the best year for RASC members earning observing certificates since 2007, but still down overall compared to the early 2000s. The Observing Committee hopes that their efforts to revive structured observing in the RASC will continue to bear fruit into 2019.

Speaking of promotion, the Observing Committee completed a major project for 2018: creating three short videos to promote the RASC Observing Programs. These are available at www.rasc.ca/certificate-programs for sharing. We hope that RASC Centres will use these videos for promoting observing at their meetings (and elsewhere!). Since they were released starting January 5, there has been much appreciation received from members across Canada. The creative team (illustrated below) was based in Halifax, and consisted of Dave Chapman (producer, writer), John Read (presenter, editor), and Halley Davies (videographer, editor).



The Halifax-based creative team for the RASC observing videos: Dave Chapman, John Read, and Halley Davies.

On Twitter, please follow @RASC using the hashtag #RASCobserving for announcements of earned observing certificates and special observing opportunities.

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

Education and Public Outreach News

by **Curt Nason**, Chair, RASC Education and Public Outreach Committee

Mission of the RASC: To enhance understanding of and inspire curiosity about the Universe, through public outreach, education, and support for astronomical research.

Many of our Society members are involved in astronomy outreach events through public observing, observatory tours, school talks, and presentations to youth and

other groups. Bravo to all who participate. However, there is one aspect of outreach that needs improvement, in that the job is never finished until the paperwork is done. When public outreach is performed by RASC members we ask that these events be reported through the Outreach Event Reporting link near the bottom of the RASC website home page.

A review of the event reports filed in 2018 revealed a rather shocking result: Only half of the 28 RASC Centres reported outreach events, and half of those reported fewer than ten events. Some of those Centres that did not file reports maintain outreach records, compile reports for their meetings, and summarize outreach statistics in their Annual Secretary's Reports. Commendable, but filing reports to the Society database results in a consistent structure among all Centres that is useful to the Society as a whole. For example, one of the required fields on the reporting form is the number of volunteer hours expended by RASC members for an event or series of similar events. This includes time spent preparing and performing the event, as well as two-way travel time. The thousands of hours we expend on public outreach annually looks very impressive on applications for grant money.

Some Centres rely on an Outreach Coordinator to submit reports, which places a burden on that person and might result in reports being delayed or not being submitted at all. It takes only a few minutes to submit a report, and you receive a confirmation email immediately that includes all the information you entered. If a member performing the event also submits the report to the Society database, the confirmation email could be forwarded to the Outreach Coordinator for the Centre's records.

Please, make outreach event reporting a necessary part of your outreach activities. Share your successes with the rest of the Society.

Experts and Newcomers Find Each Other

by **Alister Ling**, RASC, Edmonton Centre

A great way for a beginner to transform into an expert who then helps more beginners is to get together.

If you are new and struggling with your equipment, join an RASC Centre or astronomy club — don't let frustration take over. Often it is not you: more likely it's a faulty hand-controller, a junky 5x finder, a shaky/crude equatorial, or you simply don't know that the Ring Nebula is just outside the field of view and faint in a 100mm scope from the suburbs.

Over the past year, I have begun holding free 1 hour "clinic appointments" at the local science centre and star parties. People sign up via Facebook and bring their scope to me (a public spot addresses mutual safety concerns), then I help them over their initial hurdles.

In return, I feel a warm fuzzy and a wonderful resurgence of memories from my own early forays into the night. Experts: by lending a hand you might be the key in developing someone who later volunteers to help the next generation of observers and imagers.

If your Centre already has a similar program, great! If not, starting one may help to reduce the number of members who join for only one year.

For nurturing me, my deep appreciation goes to Gary Boyle and the supporting cast of the Montreal RASC in the late 70s.

A Lunar Eclipse

by **Nicole Mortillaro**, Editor, *Journal* of the RASC

I thought I would like to share a few images!



Before ...



During ...



And finally!

RASC Montreal Centre Upcoming Events

by **Carl Jorgensen**, Secretary, Montreal Centre

Saturday, February 2, 7:30 – 11:00 pm: Members Arbo Clubhouse at the Morgan Arboretum Conservation Centre, 150 Chemin des Pins, Sainte-Anne-de-Bellevue. Talk with other members, show & tell, etc.. Maybe a short presentation by a member. Observing with your own telescope or binoculars(weather permitting). The Bellevue Observatory is closed.

Wednesday, February 6, 7:30 – 11:00 pm: Members observing at the Morgan Arboretum Conservation Centre. The Bellevue Observatory will be closed, but you can bring your own telescope or binoculars (weather permitting).

Friday February 8, 7:30 – 9:30 pm: Members observing at the Morgan Arboretum Conservation Centre. Talk with other members, show & tell, etc.. Maybe a short presentation by a member. Observing with your own telescope or binoculars(weather permitting). The Bellevue Observatory is closed.

Wednesday, February 13, 7:30 – 11:00 pm: Members observing at the Morgan Arboretum Conservation Centre. The Bellevue Observatory will be closed, but you can bring your own telescope or binoculars (weather permitting).

Saturday, February 16, 7:30 – 9:30 pm: Members observing at the Morgan Arboretum Conservation Centre. Talk with other members, show & tell, etc.. Maybe a short presentation by a member. Observing with your own telescope or binoculars (weather permitting). The Bellevue Observatory is closed.

Wednesday, February 20, 7:00 – 9:30 pm: Members Library Clubhouse at John Abbott College, H-355, 21275 Rue Lake-shore, Saint-Anne-de-Bellevue. RASC members only. Can borrow & return books. Talk with other members, show & tell, etc.. May be a presentation by a member.

Friday, February 22, 8:00 – 9:30 pm: Public Event, Location TBA. Doors open at 7:30 pm. Presentation by Christopher Patterson "Colonizing Mars - Lava Tubes, A Possible Habitat?" 8:00 pm.

Saturday, February 23, 7:30 – 11:00 pm: Members Arbo Clubhouse at the Morgan Arboretum Conservation Centre, Talk with other members, show & tell, etc.. Maybe a short presentation by a member. Observing with your own telescope or binoculars (weather permitting). The Bellevue Observatory is closed.

Wednesday, February 27, 7:30 – 11: 00 pm: Members Observing at the Morgan Arboretum Conservation Centre. The Bellevue Observatory will be closed, but you can bring your own telescope or binoculars (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.



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