



December 2018 - Volume 13, Number 12

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

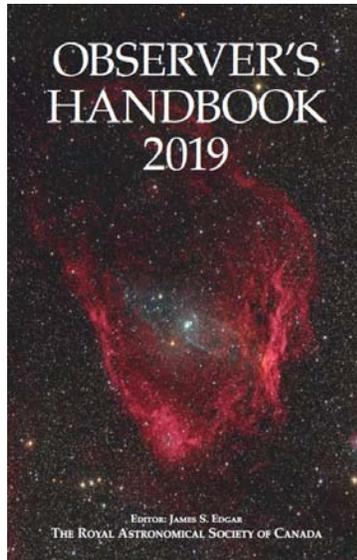
December Holiday- Society Office Hours

Please note: the RASC Society Office will be closed **Tuesday, December 25, for Christmas. It will re-open 2019, January 2.** Have a safe & happy holiday and clear skies!



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. IN STOCK. [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!](#)

Explore the [Universe Holiday](#) giftpack: Available until [December 10 only!](#)

Score this amazing RASC Holiday Gift pack: Our 150th Sticker, 150th lapel pin, 150th crest + RASC lapel pin. Makes an amazing gift for a budding astronomer or treat yourself!



Only \$19.95 or while supplies last. (\$30 value)

SkyNews For Christmas

Every member received an email recently from SkyNews inviting them to give a SkyNews subscription for Christmas. This is at a discounted price of \$17 a subscription. Why not give the gift of astronomy this year – to a family member, a friend, a local school or library. If everyone gave one gift subscription, it would provide valuable support for our magazine.

Annual Report 2018

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

Awards Deadline Reminder

The deadline to submit award nominations is fast approaching.

Here is an outline of the awards and their criteria:

CHANT MEDAL The Chant Medal is awarded based on a significant body of work of lasting value to the astronomical community and is named after C.A. Chant, a noted astronomer at the University of Toronto who helped to found the David Dunlap Observatory there.

KEN CHILTON PRIZE Established in memory of Ken Chilton, this prize is awarded for a specific piece of astronomical research or work carried out or published recently.

SERVICE AWARD The Service Award, established in 1959, is awarded to RASC members who have made significant contributions at the National and/or the Centre levels.

SIMON NEWCOMB AWARD The Simon Newcomb Award was established in 1979 for excellence in astronomical writing by an RASC member.

QILAK AWARD Established in 2011, this award is intended to recognize individual Canadian residents or teams of residents who have made an outstanding contribution during a particular time period either to the public understanding and appreciation of astronomy in Canada or to informal astronomy education in Canada and to promote such activities among the members of the sponsoring organizations.

FELLOW OF THE RASC Established in 2013, this award is given to recognize long-term commitment to the Society.

Please note: the deadline for submitting awards is 2018 December 31 not November 30.

Nominations for awards should be sent to the Awards Committee at awards20000@rasc.ca. For more information on the awards nominations, see [RASC Awards](#).

Colin Haig
Awards Committee Chair

Robotic Telescope Update

Progress is being made on setting up the Robotic Telescope Program. The operator and Astrophotography teams are being trained and are setting up their programs. The telescope is taking images as well as the piggyback DSLR with a

200-mm lens. Some of the latest processed images taken with the telescope can be seen on <https://rasc.ca/telescope-news>



Pacman Nebula photo from <https://rasc.ca/telescope-news>

To get everyone involved and excited about the project, we are making images taken by the DSLR available now!

Here is the link:

<https://drive.google.com/open?id=1mrXlt3I6j5KZ6xpYgJsWuXmWjaMx99aI>

Open the notes file to read about the various files available. These images can be used to create a finished product. Guidance on how to process these images will be provided within the Astrophotography group when the program starts. Check out online astronomy tutorials for the basics.

And check back from time to time as more data will be uploaded as the Moon and California weather permits.

Paul Mortfield

Robotic Telescope Program Manager.

Plan to be at the 2019 General Assembly in Toronto next June!



The 2019 General Assembly will be held in Toronto at York University 2019 June 13–16. The theme of the General Assembly will be *Education and Public Outreach*.

Background

In August 2018, the Carswell Family Foundation made a \$3 million donation to York University to create the Allan I. Carswell Chair for Public Understanding of Astronomy.

Thought to be the first of its kind in North America, it will be dedicated to science engagement and outreach. It will benefit students and the public through education and activities, involving telescopes at the Allan I. Carswell Observatory, as well as novel technologies such as virtual reality. The endowment will also support the York Science Communicator in Residence program to enhance student learning opportunities in science communications. A new 1 metre telescope will be installed in the observatory in early 2019.

York University was the site of the 2008 General Assembly held by the Toronto, Mississauga and Hamilton Centres. Recently, two subway stations were opened at York — at the north and south ends of the campus making it accessible from all over the city. This also means that downtown Toronto is a short subway ride from the campus.

Program Schedule

Thursday June 13

RASC

Board Meeting – morning

National Council Meeting – afternoon

AAVSO

Council Meeting – all day

Welcome event – 7 pm

Evening: Observing at York Observatory

Friday June 14

Meals – Breakfast, Lunch – people are on their own

Dinner – possible BBQ event

RASC – all day paper sessions

AAVSO – all day paper sessions

Evening: Observing at York Observatory

Saturday June 15

During the weekend, a program will be run for 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.

Meals – Breakfast, Lunch, Dinner – people are on their own

RASC, AAVSO - Joint presentations all day

A highlight of this day will be the introduction of a new book – an autobiography of RASC member David Levy. David will be on hand to preview his book.

8 pm: Ruth Northcott / Celebration of *Apollo 11* 50th anniversary

Speaker: **James Hansen , Author of “First Man”** First Man is in theatres now. It is a biography of *Apollo 11* astronaut Neil Armstrong. James Hansen worked with Armstrong to publish the biography in 2005.

Evening: Observing at York Observatory

Sunday June 16

Meals – Breakfast, Lunch – people are on their own

Dinner – Awards Banquet

Morning

RASC – Annual Meeting 9:00 am

RASC – National Council Meeting 11:00 am

AAVSO – Papers sessions 9:00 am

Afternoon

RASC – Workshops on various aspects of Society activities – Education, Public Outreach, Light Pollution Abatement, Member Retention, Running a Centre

AAAVSO – Paper Sessions

5:00 – free time

6:00 Pre-banquet

7:00 Awards Banquet

Evening - Observing at York Observatory

Monday June 17

Tours to local sites – possible David Dunlap observatory, Ontario Science Centre
Accommodation will be available on campus in student residences or offsite at a hotel on the Toronto Subway

Look for registration information early in 2019! See you in Toronto next June!

Randy Attwood

Executive Director and Publisher, *SkyNews*

From the President

by **Chris Gainor**, RASC, President

I'm delighted to celebrate the 150th year of the Royal Astronomical Society of Canada (RASC) with you! Podcasts documenting the Victorian beginnings of the Society and construction of the first Canadian observatory are featured on our website. The Royal Canadian Mint and Canada Post both issued popular products to commemorate this remarkable achievement and a coast to coast National Star Party was hosted.

You may have heard about our exciting new anniversary initiative - the Robotic Telescope Project! A 0.4-m (16-inch) telescope housed in an observatory in the Sierra Nevada Mountains in California has been purchased. At an altitude of 1,400

metres, the site has very dark, steady skies, providing over 200 clear nights a year —much better than is possible in most areas in Canada.

The telescope will be a major addition to our educational programming and members will have online access to the images and data collected through a program now in development. Imagine being able to view the astro-photos and spectacular images from home. Groups will be able to team up for fun science missions that could include daily monitoring of a comet as it moves through the inner Solar System, supernova hunting or just seeing how deep the telescope can go.

As a member, you'll be aware there's a cost to creating vital new programming. The projected start-up expenditure for this initiative including telescope, equipment, annual site fee, programming and data storage is approaching \$100,000.

We're excited about this project and hope you are too. As President of RASC, I'm inviting you to join me in financially supporting this remarkable venture with a contribution. Please make a generous donation to the Robotic Telescope!

https://secure.rasc.ca/RASC/Fundraising/Give_Now_Robotic_Telescope.aspx

Your gift will be greatly appreciated and a charitable tax receipt will be issued.

Thank you for your support.

Clear skies,

Chris Gainor, President

Youth Outreach Update

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

Hello everyone!

A few updates on the outreach front this month. There have been lots of updates to the website, mostly in the Education/Outreach tab. Walter and I have also got an Instagram button going for the Centre Social Media page, and those of you

whose Instagrams I've found one way or another (Edmonton, Niagara, Hamilton, Yukon and Toronto) I have put links to those on that page. If any other Centres have Instagrams (or other social media accounts that are not on the website for that matter), please send me the link and I'll put it up!

In January, we will be sending out a handout for the lunar eclipse on January 20th. It has information about what an eclipse is, and details about timing. You will be able to print it out at your Centres and use it for any outreach you are doing surrounding the eclipse, including dropping it off with schools if you like.

Science Rendezvous is a nation-wide day of science. Many small science outreach groups get together to deliver their content to the public on the same day, to maximize audience size. This year it is happening the same day as Astronomy Day, on May 11th. I know some Centres already pair with Science Rendezvous to deliver space programming. If your Centre does not, you may want to consider getting in touch with local S.R. groups delivering science content! Vancouver Centre already does this, and they received a shoutout in the steering committee meeting last week for their engaging and fun activities! Good work Vancouver!

Talk to you next month!

Jenna Hinds, Youth Outreach Coordinator

jenna.hinds@rasc.ca

RASC 150 Final Report

by [Randall Rosenfeld](#), Chair, History Committee

The RASC 150 Working Group would like to hear of any and all RASC 150 activities that Centres have engaged in, through brief written accounts, as well as any local press coverage Centres may have received, or collaborations they've formed with other groups in their community. By all means send images, or other electronic media if available (to: rosenfel@chass.utoronto.ca). We plan on compiling these into a final report of the RASC's sesquicentennial year.

"Imagining the Skies"

The RASC 150th astrophotography, sketching and creative arts contest, "Imagining the Skies", is still running, and will be open for entries till 2018 December 31. Please consider submitting some of your imaging efforts, and encouraging others to do the same. And, if you haven't already done so, please exercise your right to vote for your favourite works on the site: <https://imaginingtheskies.ca> (submitting entries to the contest doesn't preclude your voting on other peoples' work!). The RASC 150 Working Group also asks that Centres consider making a short announcement about the contest at their December meetings.

Observing News

by **Dave Chapman**, Chair, RASC Observing Committee



In the last three months of 2018, RASC awarded the following observing certificates: Explore the Moon to Rod Devries (Calgary—Eagle Butte), Explore the Universe to Murray Campbell (Ottawa), and Explore the Universe to Karol Socander (Kitchener-Waterloo). In the first 11 months of this 150th Anniversary year, RASC has awarded 23 observing certificates—keep them coming! If you've finished an observing program, but just haven't made the application yet, we'd love to hear from you!

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/certificate-programs

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.

'Clara'

by [Eric Briggs](#), National Council Co-chair

The upcoming film 'Clara' will be released on Friday, November 30. It was shot in Toronto, including at the University of Toronto, written and directed by Akash Sherman.

www.facebook.com/CLARATheFilm/

<https://youtu.be/7eIbm4cfA8M>

Synopsis: CLARA tells the story of Isaac Bruno (Patrick J. Adams, SUITS), an astronomer consumed by the search for life beyond Earth. Convinced that the Universe is a dark and lonely place, Isaac meets Clara (Troian Bellisario, PRETTY LITTLE LIARS), an artist who shares a fascination for the wonders of space. Their unlikely collaboration leads to a deep connection, and a profound astronomical discovery as they detect patterns in stellar data.

RASC Montreal Centre Upcoming Events

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

Saturday, December 1, 7:30 – 11:00 pm: Members Arbo Clubhouse at the Morgan Arboretum Conservation Center, 150 Chemin des Pins, Sainte-Anne-de-Bellevue. Observing afterwards (weather permitting). The Bellevue Observatory will be closed, but you can bring your own telescope or binoculars.

Wednesday, December 5, 7:30 – 11:00 pm: Members Observing at the Morgan Arboretum Conservation Center. The Bellevue Observatory will be closed, but you can bring your own telescope or binoculars (weather permitting).

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

Thursday, December 13, 7:30 – 11:00 pm: Public Event “The Geminids Meteor Shower” at The Morgan Arboretum Conservation Center. Doors Open at 7:30 pm. Public Talk 8:00 pm. After the talk, if the sky is clear, come on out to view the Geminids meteor shower. No Special equipment is needed, just a lawn chair, blanket and some hot chocolate.

Saturday, December 15, 7:30 – 11:00 pm: Members observing at the Morgan Arboretum Conservation Centre. The Bellevue Observatory will be open, but you can also bring your own telescope or binoculars (weather permitting).

Friday, December 21, 7:30 – 11:00 pm: Members Arbo Clubhouse at the Morgan Arboretum Conservation Center. Observing afterwards (weather permitting). The Bellevue Observatory will be closed, but you can bring your own telescope or binoculars.

Saturday, December 29, 7:30 – 11:00 pm: Members Arbo Clubhouse at the Morgan Arboretum Conservation Center. Observing afterwards (weather permitting). The Bellevue Observatory will be closed, but you can bring your own telescope or binoculars.

Thank You to our Sponsors!

by [Julia Neeser](#), 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.

© 2018 Royal Astronomical Society of Canada